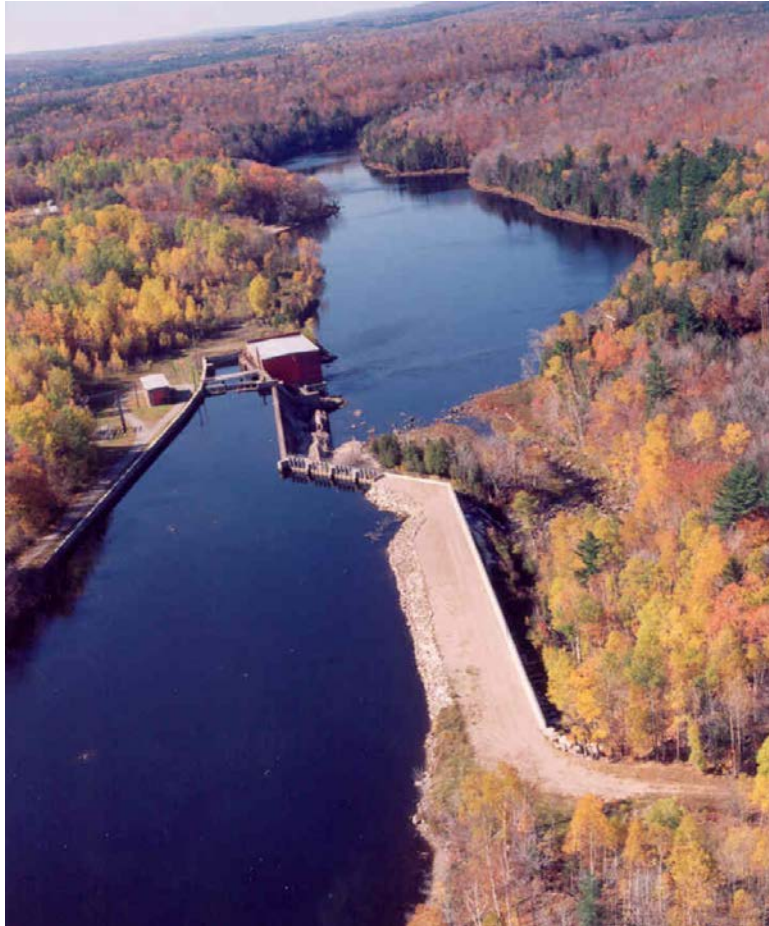


**REVIEW OF APPLICATION FOR CERTIFICATION
BY THE LOW IMPACT HYDROPOWER INSTITUTE
OF THE PIERCEFIELD HYDROELECTRIC FACILITY (FERC No. 7387)**



Prepared by:

Peter Drown

Cleantech Analytics LLC

July 8, 2019



Table of Contents

I.	INTRODUCTION.....	3
II.	PROJECT GEOGRAPHIC LOCATION.....	3
III.	PROJECT AND IMMEDIATE SITE CHARACTERISTICS.....	5
IV.	ZONES OF EFFECT.....	5
V.	REGULATORY AND COMPLIANCE STATUS.....	7
VI.	PUBLIC COMMENTS RECEIVED OR SOLICITED BY LIHI.....	7
VII.	DETAILED CRITERIA REVIEW	7
VIII.	GENERAL CONCLUSIONS AND REVIEWER RECOMMENDATIONS.....	15
	APPENDIX A AGENCY COMMUNICATIONS.....	16

Table of Figures

Figure 1 - Raquette River Dams (Piercefield is southernmost/furthest upstream dam).....	4
Figure 2 - Project Area and Zones of Effect.....	5
Figure 3 - Downstream face of spillway with 20 cfs fish movement facility	11
Figure 4 - Big Tupper Conservation Easement	12

I. INTRODUCTION

This report reviews the application received by the Low Impact Hydropower Institute (LIHI) for Low Impact Hydropower Certification of the Piercefield Hydroelectric Facility (“Piercefield” or “Facility.”) The Facility is owned and operated by Erie Boulevard Hydropower, L.P. a subsidiary of Brookfield Renewable Energy Group. The Facility is located on the Raquette River in northern New York near the town of Piercefield. The Facility consists of a low-head, 22-foot-high concrete and timber dam approximately 300 feet long with 2-foot inflatable flashboards, and an integral powerhouse with three Francis turbines with a total nameplate capacity of 2.7 MW.

The applicant submitted an initial Certification Application on February 12, 2019. I completed a review of the Project using LIHI’s intake review process and noted only a minor amount of additional information was missing. The applicant submitted a revised Certification Application on April 15, 2019 and the application was posted for 60-day public comment period on May 1, 2019. I have conducted a review of this application and all supporting materials, the project record on FERC e-library, and agency comments, and conclude that the Piercefield Hydroelectric Facility meets the LIHI Criteria contained in the 2nd edition handbook.

II. PROJECT GEOGRAPHIC LOCATION

The Facility is located on River Mile (RM) 88 of the Raquette River, the 2nd longest river in New York State. The Raquette River basin drains approximately 1,269 square miles in upper New York, from the headwaters in the Adirondack Mountains to the confluence with the St. Lawrence River, passing 19 hydroelectric projects on the way. The Piercefield Facility is the southernmost and furthest upstream dam on the river, located near the border of St. Lawrence and Franklin Counties. The Project boundary is located partially within the Big Tupper Conservation Easement, a 4,851-acre tract of land purchased by New York in 2007 to protect it from development and provide public recreational opportunities. The impoundment is also known as the “Piercefield Flow”, and that portion of the river is designated a Recreational River under the Wild, Scenic and Recreational Rivers act of New York.

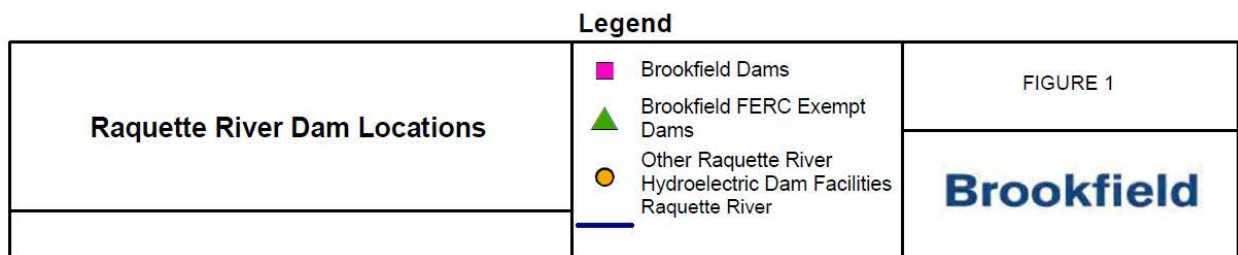
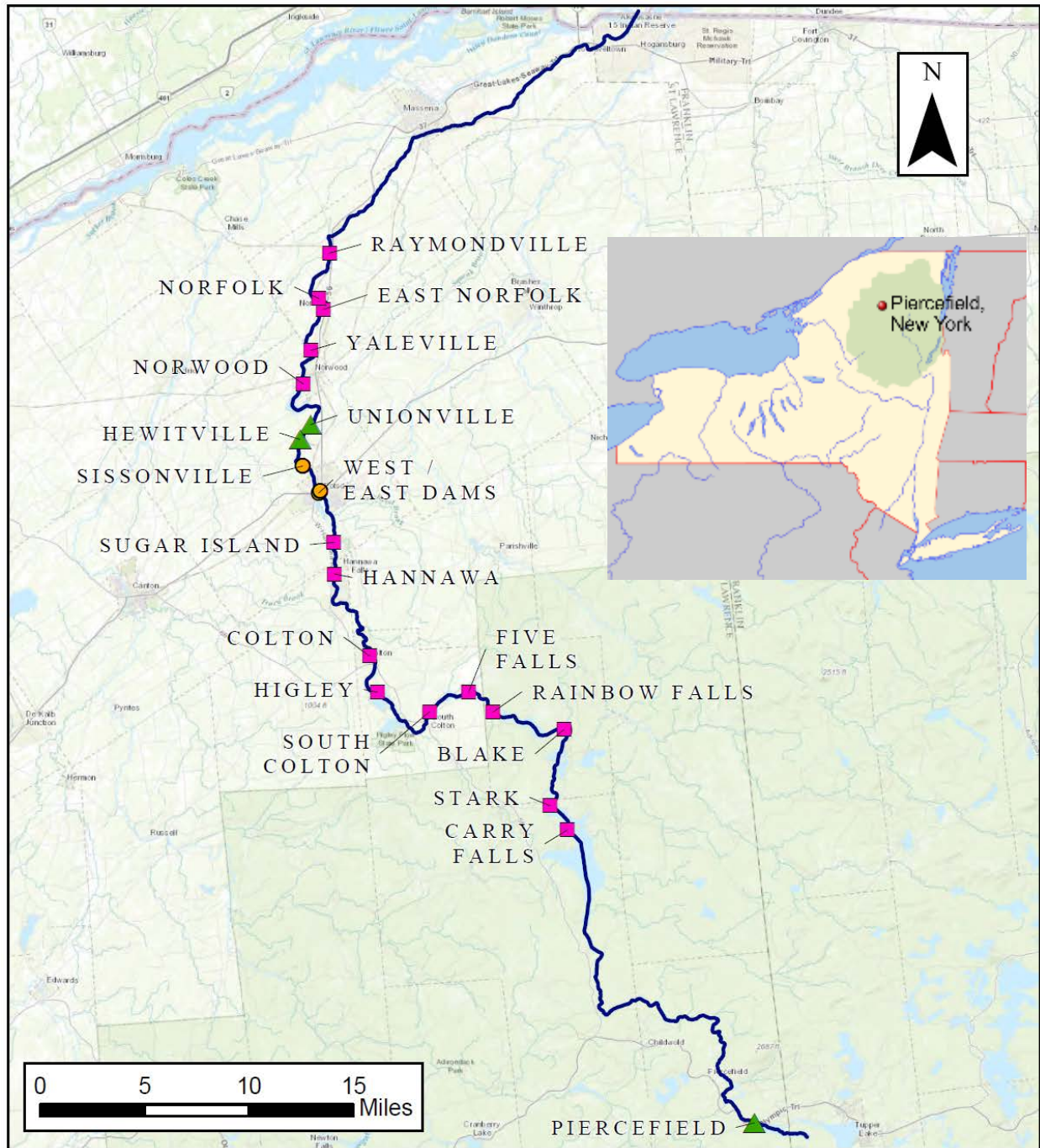


Figure 1 - Raquette River Dams (Piercefield is southernmost/furthest upstream dam)

III. PROJECT AND IMMEDIATE SITE CHARACTERISTICS

The immediate site area (see Figure 2) within the Project boundary is very rural, primarily undeveloped land in the Adirondack State Park. The Hamlet of Piercefield (population ~300) is located immediately below the dam and powerhouse, and Route 3 crosses the impoundment just upstream. The impoundment is also known as the “Piercefield Flow,” and is a popular fishing and recreational location. Nearly the entire shoreline surrounding all zones of effect is undeveloped and forested, with the exception of some private lots and access points. The relatively steep slopes of the shoreline along the Raquette River have by and large prevented the formation of wetlands, although there are some limited wetlands along the impoundment (Palustrine Forested, Scrub/Shrub, and Emergent.) No significant ecological communities were identified during the environmental review of the 2003 re-licensing process.

IV. ZONES OF EFFECT

The Applicant designated three zones of effect. Zone 1 consists of the Project impoundment (the “Piercefield Flow”) extending approximately 2 miles upstream from the dam. Zone 2 consists of the 550-foot bypassed reach from the base of the dam to the powerhouse. Zone 3 extends from the powerhouse downstream approximately 1.6 miles, where the Raquette River is divided by Sols Island, altering its hydraulic characteristics.



Figure 2 - Project Area and Zones of Effect

Table 1 - Impoundment Zone (Zone 1) Standard Selection

Criterion		Alternative Standards				
		1	2	3	4	Plus
A	Ecological Flow Regimes	X				
B	Water Quality		X			
C	Upstream Fish Passage	X				
D	Downstream Fish Passage		X			
E	Watershed and Shoreline Protection		X			
F	Threatened and Endangered Species Protection			X		
G	Cultural and Historic Resources Protection		X			
H	Recreational Resources		X			

Table 2 - Bypassed Reach (Zone 2) Standard Selection

Criterion		Alternative Standards				
		1	2	3	4	Plus
A	Ecological Flow Regimes		X			
B	Water Quality		X			
C	Upstream Fish Passage	X				
D	Downstream Fish Passage		X			
E	Watershed and Shoreline Protection		X			
F	Threatened and Endangered Species Protection			X		
G	Cultural and Historic Resources Protection		X			
H	Recreational Resources		X			

Table 3 - Downstream Reach (Zone 3) Standard Selection

Criterion		Alternative Standards				
		1	2	3	4	Plus
A	Ecological Flow Regimes		X			
B	Water Quality		X			
C	Upstream Fish Passage	X				
D	Downstream Fish Passage	X				
E	Watershed and Shoreline Protection		X			
F	Threatened and Endangered Species Protection			X		
G	Cultural and Historic Resources Protection		X			
H	Recreational Resources		X			

V. REGULATORY AND COMPLIANCE STATUS

Construction of the Piercefield Facility began in 1899 by the International Paper Company to provide mechanical power to the paper-making process. The station was converted to an electric generating station in 1926. The Project was eventually acquired by Niagara Mohawk, a former New York state utility company which was acquired by National Grid in 2000. The Project received its first FERC license (No. 7387) on November 25, 1985 which expired on October 31, 2005. The current owner, Erie Boulevard Hydropower L.P. (“Owner”) acquired the facility on July 26, 1999 in a purchase of several other regional hydropower facilities. The Owner relicensed the Project using a collaborative process which included resource agencies and NGOs, and the effort resulted in a successful settlement agreement in June 2003. FERC incorporated the terms of this agreement along with the terms of the Water Quality Certificate issued by the New York Department of Environmental Conservation (NYSDEC) into a new 40-year project license issued on October 27, 2005.¹ The most recent licensing proceeding consisted of a request by the Owner to reduce the Project licensing term from 40 years to 30 years, in order to match the terms of other facilities on the Raquette River. The rationale for this was to align the license expiration date of the Project with those of the EBH’s other hydro assets on the Raquette River (the Upper, Middle, and Lower Raquette River Projects, Yaleville Project, and the Carry Falls Project) facilitate a basin-wide agreement and coordinate licensing activities among the various projects.

The parties consulted on this request included NYSDEC, U.S. Fish and Wildlife Service (USFWS,) the Adirondack Mountain Club and all concurred with the approach. FERC approved the request by Order issued on October 11, 2017², so the new expiration date for the Project is October 27, 2035. There are a variety of other regulatory proceedings that impact each of LIHI’s criteria and these are discussed under the relevant criteria below.

VI. PUBLIC COMMENTS RECEIVED OR SOLICITED BY LIHI

There were no public comments received, however I solicited and received comments from resource agencies and the Applicant as I conducted the review. The agencies include New York Department of Environmental Protection and the New York Natural Heritage Program. Agency comments are included in Appendix A.

VII. DETAILED CRITERIA REVIEW

A. Ecological Flow Regimes

Goal: The flow regimes in riverine reaches that are affected by the facility support habitat and other conditions suitable for healthy fish and wildlife resources.

The Owner selected Standard A-1, Not Applicable/De Minimis for Zone 1, and A-2, Agency Recommendation, for Zones 2 and 3. The Project is required to operate in a run-of-river mode, with the reservoir fluctuation maintained within a 1-foot band from the top of the flashboards (or crest of dam when flashboards not in place,) and a minimum flow of 150 cfs provided continuously into the Project

¹ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10863007>

² <https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=14708633>

tailrace. The requirements are contained in the FERC License, the Water Quality Certificate, and the 2003 Settlement, and are designed to protect fish habitat in the impoundment and downstream reach. The impoundment levels were developed using an impoundment fluctuation Delphi assessment in collaboration with the NYSDEC, USFWS, Adirondack Park Agency and New York Rivers United. The 2005 Environmental Assessment (EA)³ stated that this level of fluctuation would provide adequate wetted habitat, maintain a stable vegetative buffer around the reservoir and not disturb terrestrial species' habitat, such as bird nesting areas.

The bypassed reach is roughly comprised of two sections – the upper portion is rocky and steep, with cobble/boulder habitat while the lower section includes a 75-foot-wide pool and a lower gradient, and aquatic species are primarily amphibians and macroinvertebrates. Prior to relicensing, the Project provided 8 cfs into the upper portion of the bypassed reach but that reach does not provide suitable habitat (EA, 2005; Settlement Agreement, 2003). Based on agency consultation and various in-field flow release observations, the Project now provides 20 cfs at a point lower in the bypassed reach, closer to the backwatered section to provide fish habitat. This location was chosen since it provides the best opportunity for downstream fish movement. It provides attraction flows located away from the intakes (to minimize entrainment) and to allow for creation of a plunge pool and access channel to the backwater area. The 20 cfs is provided through a downstream passage facility in the stanchion spillway. This flow and its location protect fish from becoming stranded in the upper half of the bypassed reach and ensures that the better habitat in the lower bypass reach remains wetted. The tailrace's 150-cfs minimum base flow requirement was determined to support fishery resources downstream of the Project.

As part of the Settlement Agreement and FERC License, the Owner was required to develop a Stream Flow and Water Level Monitoring Plan (SFWLMP). FERC approved the Plan on January 16, 2008. Downstream base flow requirements are monitored by using USGS gage No. 04266500, located 0.5 miles downstream of the Project. Bypassed reach flows are monitored through an orifice fabricated with a new slide gate that was installed in the stanchion spillway section of the dam. Impoundment levels are monitored by remote gaging equipment that records impoundment levels each minute and sends hourly averages to the Owner's control center in Liverpool, NY. FERC noted that the *"The Flow and Water Level Monitoring Plan proposed by the licensee, should provide for the accurate monitoring and recording of flow-related requirements of the license, and should be approved."* (SFWLMP, 2008.)

There was one instance of a flow excursion in the Project record, caused by a line trip from the local power company, which was not in the Owner's control. On February 25, 2013, FERC determined this excursion was not a violation. Based on the application materials and supporting documentation, the Project satisfies the Ecological Flow Regimes criterion.

B. Water Quality

Goal: Water quality is protected in waterbodies directly affected by the facility, including downstream reaches, bypassed reaches, and impoundments above dams and diversions.

The Owner selected Standard B-2, Agency Recommendation, for all zones. The Raquette River upstream of the impoundment is Class A water and is not included on New York's most recent 303d impaired

³ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10630816>

waters list. Approximately 0.5 miles above the Piercefield dam, the Raquette River changes to Class C waters. However, there is no impairment and the river is attaining all designated uses. Water quality protection requirements are contained in the Water Quality Certificate, issued on April 12, 2004.⁴ The WQC included 17 conditions. All water quality operating conditions are discussed in detail in the Ecological Flows criterion and Fish Passage criterion, above and below, and the Owner appears to be in compliance with each of these requirements. The remaining conditions are related to Project maintenance and construction, and include provisions for turbidity control structures during maintenance, erosion control measures, limitations on drawdowns and refill rates, and notification procedures for NYSDEC, among others.

Water quality was monitored at the Project in 1996, including water temperature, dissolved oxygen levels (DO), pH, conductivity, and total dissolved solids. Results were “typical of an Adirondack Mountain headwater stream,” according to the EA, and the most recent 2014 Water Quality Assessment Status for the river characterized the overall status as “Good”, meeting every designated use group⁵. The Applicant contacted the NYSDEC as part of the LIHI application (Appendix D of the application) and NYSDEC confirmed that the WQC is still in effect and valid.

Even though the WQC is more than 10 years old, based on the recent water quality assessment, the application materials and supporting documentation, the Project appears to satisfy the Water Quality criterion.

C. Upstream Fish Passage

Goal: The facility allows for the safe, timely, and effective upstream passage of migratory fish. This criterion is intended to ensure that migratory species can successfully complete their life cycles and maintain healthy, sustainable fish and wildlife resources in areas affected by the facility.

The Owner selected Standard C-1, Not Applicable/De Minimis, for all zones, stating that there are no anadromous fish in this section of the Raquette River. The EA confirms this, citing the natural downstream waterfalls and water features as the reason no anadromous fish species are found in the Project area. In the riverine reach impacted by the Project, the Raquette River currently supports a fish community that includes yellow perch, walleye, rock bass, smallmouth bass, lake whitefish, fallfish, and golden shiners. The Owner also states that fish mortality is a “limited issue” at the Project. This statement is explicitly confirmed in the EA and the Settlement Agreement. Walleye generally do swim upstream for the completion of their life cycle but will stop at any structure they encounter to lay eggs, whether it is a man-made or natural structure. The EA states that walleye are abundant during the spring spawning season. The dam does not prevent the successful completion of this species life cycle, but rather represents an area where they can deposit eggs. There were several measures required in the most recent Project license designed to protect aquatic resources, but these are all designed to protect fish movement downstream, and are covered in Criterion D, below.

In my opinion, the Owner meets Standard C-1, Not Applicable/De Minimis for all zones, and therefore, the Project satisfies the upstream fish passage criterion.

⁴ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10119889>

⁵ https://ofmpub.epa.gov/waters10/attains_waterbody.control?p_ad=NY0903-0074&p_cycle=2014

D. Downstream Fish Passage

Goal: The facility allows for the safe, timely, and effective downstream passage of migratory fish. For riverine (resident) fish, the facility minimizes loss of fish from reservoirs and upstream river reaches affected by facility operations. All migratory species can successfully complete their life cycles and to maintain healthy, sustainable fish and wildlife resources in the areas affected by the facility.

The Owner selected Standard D-2, Agency Recommendation, for Zones 1 and 2, and Standard D-1, Not Applicable/De Minimis for Zone 3. The Settlement Agreement, FERC License and Water Quality Certificate required the following measures to minimize loss of fish from upstream river reaches affected by facility operations:

- 150 CFS minimum base flow requirement
- Limited reservoir fluctuations
- Installation of 20 cfs downstream fish movement release from project spillway (see Figure 3)
- Replacing existing 2.125" and 2.5" trashracks with 1" clear spacing trashracks

The 150 cfs minimum base flow requirement was determined to support fishery resources downstream of the Project. The 20 cfs bypass release (Figure 3) was determined to eliminate some potential entrainment issues by providing an alternate path for fish to move downstream without passing through the turbines. The 1-inch clear spacing trashracks are fastened to each of the three turbine intakes and prohibit larger fish from entering the turbine. The final trashrack design was approved by NYSDEC and USFWS, and FERC approved the design on June 12, 2012.⁶

Based on the application materials and supporting documentation, the Project satisfies the Downstream Fish Passage criterion.

⁶ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13005928>



Figure 3 - Downstream face of spillway with 20 cfs fish movement facility

E. Shoreline and Watershed Protection

Goal: The facility has demonstrated that sufficient action has been taken to protect, mitigate or enhance the condition of soils, vegetation and ecosystem functions on shoreline and watershed lands associated with the facility.

The Owner selected Standard E-2, Agency Recommendation, for all zones. The Facility is located entirely within the Adirondack State Park, a protected park that encompasses one-third of the entire land area of New York State. The immediate Project area is primarily undeveloped, except for the small Hamlet of Piercefield (population ~300) and the Project works. The Facility runs adjacent to the Big Tupper Conservation Easement Track (Figure 4), which includes 300 feet of the Project impoundment (see Figure 2 above.) According to the NYSDEC's website, the easement terms "*limit future development, require sustainable forestry practices, and provide specific public recreation opportunities on the property.*"⁷ These recreational opportunities are included in Criterion H, below.

Given that the Project boundary includes private land that is within Adirondack State Park and in a Wild, Scenic and Recreational River, the Project is governed by Part 577 "Special Provisions for Relating to Wild, Scenic and Recreational Rivers"⁸. This law includes a number of provisions that also restrict development of any new structures, promote forest management and restrict vegetative removal, and provide a buffer zone from the mean high water mark and the exterior boundary of the river (in addition to other requirements.) I contacted Jessica Hart from the Region 6 office of NYDEP to determine whether the Facility was in compliance with these requirements. She responded that since the Facility was built

⁷ <https://www.dec.ny.gov/lands/96843.html>

⁸ [https://govt.westlaw.com/nycrr/Browse/Home/NewYork/NewYorkCodesRulesandRegulations?guid=lae081e60b72a11ddb5e846354f3a78d&originationContext=documenttoc&transitionType=Default&contextData=\(sc.Default\)](https://govt.westlaw.com/nycrr/Browse/Home/NewYork/NewYorkCodesRulesandRegulations?guid=lae081e60b72a11ddb5e846354f3a78d&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default))

before the regulations went into effect, it is grandfathered in under according to 6 NYCRR 666 (see Appendix A.)

The Owner also referenced provisions from the SFWLMP (described in Criterion A, above,) as evidence of compliance with shoreline and watershed protection standards. The specific provisions referenced were designed to minimize impoundment fluctuations, which was determined to provide an adequate vegetative buffer on the shoreline, minimize the potential of erosion, and benefit emergent and submergent aquatic macrophytes.

Based on the application materials and supporting documentation, the Project satisfies the Shoreline and Watershed Protection criterion.

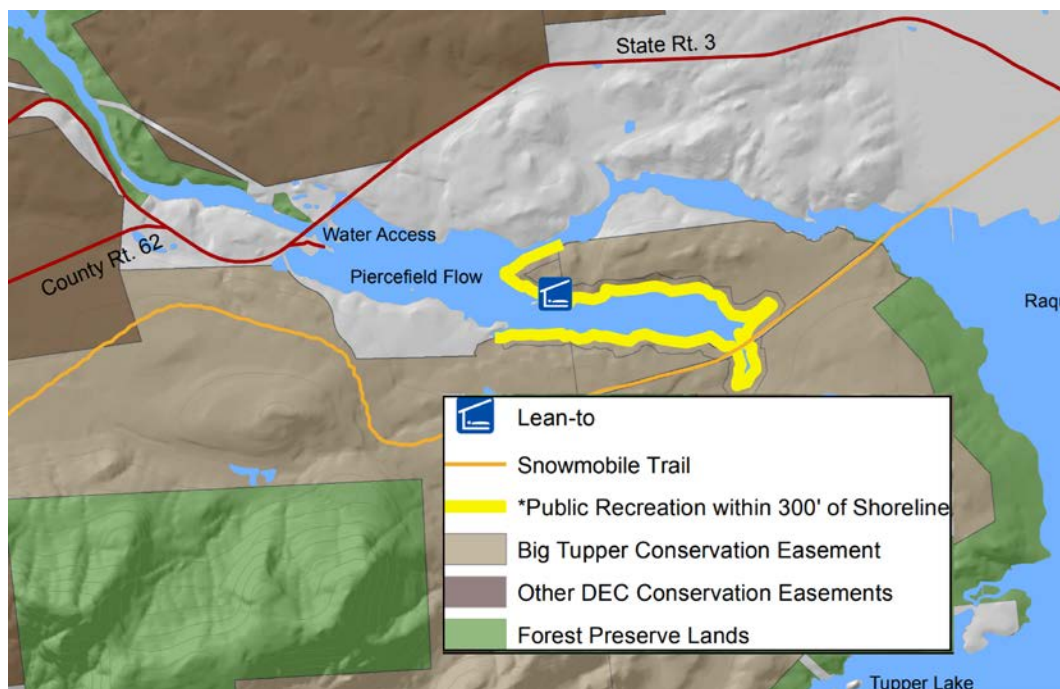


Figure 4 - Big Tupper Conservation Easement

F. Threatened and Endangered Species Protection

Goal: The facility does not negatively impact federal or state listed species.

The Owner selected Standard F-3, Recovery Planning and Action, for all zones. The Owner consulted with the USFWS and the NYSDEC to determine the presence of federal and state-listed species in the vicinity of the Project. The Owner provided a map to the agencies showing the zones of effect used in the LIHI application. On February 1, 2019, the USFWS responded with a threatened and endangered species list, which included the Northern Long-eared bat as the only federally-listed species. The Owner stated that operations at the Project adhere to the 4(d) rule for the protection of this bat species published by the USFWS. The protection requirements are primarily focused on prohibition of tree-clearing from June 1 through July 31.

On February 7, 2019, the NYSDEC responded with a report of rare or state-listed species, which included the Bald Eagle (state-Threatened) and Spruce Grouse (state-Endangered) as both occurring in the Project vicinity. The NYSDEC developed a Conservation Plan for the Bald Eagle in 2016, which provides guidelines for management actions⁹. The Owner states that their activities are consistent with the plan, by avoiding tree clearing during nesting season which preserves essential breeding and wintering habitats. During a 2018 LIHI review of the Newton Falls Hydropower Project, also located in Region 6 in Upper New York, I contacted Region 6 to determine whether that Project was in compliance with the Conservation Plan for Bald Eagles, and was informed that the eagle population was “doing very well” in the state of New York, and that operations of an existing hydroelectric project would not pose any significant threat to the existing population¹⁰.

The NYSDEC developed a Conservation Plan for the Spruce Grouse in 2013¹¹. The Plan notes that damming of rivers historically led to the decline of the Spruce Grouse populations, however recent studies show the population continues to decline even though no new dams have been constructed and softwood logging practices have been significantly reduced, along with a ban on hunting the species. The Plan notes that: *“Given that extensive logging and damming does not occur to the same extent in the Adirondacks as it did historically, and given that spruce grouse hunting is no longer legal and therefore not likely to be a significant threat, contemporary subpopulation extirpations are likely the result of other factors.”*

The management recommendations in the plan are primarily focused on experimental techniques for promoting habitat and re-introduction of the species, and the operations of the Piercefield Project do not appear to conflict with those actions. The Owner stated that their activities are consistent with the recovery plan, by avoiding tree clearing and limiting impoundment fluctuations. I contacted the NYSDEC to determine any potential impacts on Spruce Grouse populations and was informed that the Project would not have any impact (Appendix A.)

Based on the application materials and supporting documentation, the Project satisfies the Threatened and Endangered Species Protection criterion.

G. Cultural and Historic Resource Protection

Goal: The facility does not unnecessarily impact cultural or historic resources that are associated with the facility’s lands and waters, including resources important to local indigenous populations, such as Native Americans.

The Owner selected Standard G-2, Approved Plan for all zones. The Piercefield dam and powerhouse were built in 1899 by the International Paper Company to produce newsprint and these structures have cultural and historic significance. On January 18, 2005 the Owner entered into a Programmatic Agreement with the FERC, the Advisory Council on Historic Preservation, and the New York State Historic Preservation Officer (SHPO) for managing the property. On August 26, 2009, the Owner submitted the Historic Properties Management Plan (HPMP), which was approved by FERC on

⁹ http://www.dec.ny.gov/docs/wildlife_pdf/nybaldeagleplan.pdf

¹⁰ https://lowimpacthydro.org/wp-content/uploads/2018/06/Newton-Falls-Recertification-Report_2018_05_31.pdf

¹¹ https://www.dec.ny.gov/docs/wildlife_pdf/sprucegrouserecplan2013.pdf

November 12, 2010. This Plan was developed in consultation with the SHPO, and included provisions for identifying historic properties, providing protective maintenance and operations, and facilitating improvements and public access. Based on the 2010 annual site inspection and consultation with the SHPO, it was concluded that the Mill No. 17 historic architectural site (consisting of architectural ruins) does not appear to be adversely affected by the project, and there is little potential for the site to be affected by routine project operations. As a result, on December 6, 2011, the Owner submitted a request to amend the plan to avoid the need to have “qualified cultural resource professionals” conduct annual visits to the property, and instead use their operational staff to provide this monitoring function three times per week after they had been properly trained, and for the professional staff to visit the site on a 10-year cycle (next due in 2020). The SHPO concurred with this plan, and FERC authorized it by order on October 4, 2012, finding the reasons proposed by the Owner were “reasonable and justify the changes.”¹²

The Owner files annual reports of activities under the HPMP and a review of the FERC elibrary indicates no violations or concerns. Based on the application materials and supporting documentation in the above-referenced licensing documents, the Project satisfies the Cultural and Historic Resources Protection criterion.

H. Recreational Resources

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.

The Owner selected Standard H-2, Agency Recommendation for all zones. Recreational access provisions are shown in Figure 4, under Criterion E, above. Zone 1, the “Piercefield Flow,” is designated as a Recreational River under the New York State Wild, Scenic and Recreational Rivers Act. The Project’s recreational facilities consist of a boat launch, canoe put-in and take-out areas, and two designated bank fishing areas. On the last Saturday in June, the Project Owner is required to provide a 750 cfs recreational release from the turbines or spillway discharge, lasting five hours. The Owner maintains a public website - <https://www.safewaters.com/facility/40> - which includes information on the release schedule and provides facility and safety information updates to the public. The most recent release was provided on June 29, 2019 from 9:00 AM to 2:00 PM.

In accordance with the FERC License and Settlement, the Owner was required to prepare a Recreation Management Plan in consultation with the NYSDEC and the Adirondack Mountain Club. The final Plan was approved by FERC on December 14, 2006 and included provisions for improving physical access to the site (specifically access signs and maintenance provisions) and provide the recreational release listed above. The Adirondack Mountain Club commented the release was an “excellent level” after observing the project release on June 24, 2006.

Based on the application materials, supporting documentation and the public website, the Project satisfies the Recreational Resources criterion.

¹² <https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=13111372>

VIII. GENERAL CONCLUSIONS AND REVIEWER RECOMMENDATIONS

Based on this review, the Piercefield Hydroelectric Project meets the LIHI criteria for certification as a Low Impact Hydropower facility and a new 5-year term with no conditions is recommended.

APPENDIX A AGENCY COMMUNICATIONS

Date: June 24, 2019

Contact: Angelena M. Ross, Ph.D., Wildlife Biologist

Agency: New York Department of Environmental Conservation, Division of Fish & Wildlife

Criteria Affected: Threatened and Endangered Species

6/25/2019

Gmail - Spruce Grouse - Piercefield Hydroelectric Project



Peter Drown <peter.drown@gmail.com>

Spruce Grouse - Piercefield Hydroelectric Project

Ross, Angelena M (DEC) <angelena.ross@dec.ny.gov>
To: Peter Drown <peter.drown@cleantechanalytics.com>
Cc: "MacDuff, Andrew (DEC)" <andrew.macduff@dec.ny.gov>

Mon, Jun 24, 2019 at 8:19 AM

Hi Peter,

You are in the clear with regard to spruce grouse in the immediate area. I've also confirmed that my records indicate that are no other T/E species concerns in that immediate area.

Thanks for reaching out.

Cheers,

Angie

Angelena M. Ross, Ph.D.

Wildlife Biologist, Division of Fish & Wildlife

New York State Department of Environmental Conservation

190 Outer Main St., Suite 103, Potsdam, NY 13676

P: (315) 274-3333 | F: (315) 265-2167 | angelena.ross@dec.ny.gov

www.dec.ny.gov |  |  | 

From: Peter Drown <peter.drown@cleantechanalytics.com>
Sent: Friday, June 21, 2019 3:37 PM
To: Ross, Angelena M (DEC) <angelena.ross@dec.ny.gov>
Subject: Spruce Grouse - Piercefield Hydroelectric Project

<https://mail.google.com/mail/u/0/?ik=4642cf9445&view=pt&search=all&permmsgid=msg-f%3A1637224289401817224&simpl=msg-f%3A16372242894...> 1/2

Date: June 18, 2019

Contact: Jessica Hart, Deputy Regional Permit Administrator

Agency: New York Department of Environmental Conservation, Division of Environmental Permits

Criteria Affected: Watershed and Shoreline Protection

6/25/2019

Gmail - Piercefield Hydropower Project - LIHI review



Peter Drown <peter.drown@gmail.com>

Piercefield Hydropower Project - LIHI review

Hart, Jessica J (DEC) <jessica.hart@dec.ny.gov>

Tue, Jun 18, 2019 at 10:37 AM

To: "peter.drown@cleantechanalytics.com" <peter.drown@cleantechanalytics.com>, "Balk, Christopher J (DEC)" <christopher.balk@dec.ny.gov>

Peter,

The Raquette River in the stretch where the Piercefield Project is located is considered a Scenic River (<https://www.dec.ny.gov/permits/6033.html>). As such according to 6 NYCRR 666, the existence of the project would be grandfathered in as it was built before the regulations went into effect. Also according to Part 666.11(b)(4)(ii) and the language in the settlement agreement (attached, Mode of Operation, paragraph #16, page 3) the project would "maintain a downstream baseflow that will provide appropriate protection, perpetuation and enhancement of the riverine biota and the natural, scenic and recreational values of the designated river segment" as required in the regulations. I don't handle enforcement, so I don't know if they have been following their 401 and the settlement. Chris Balk, copied on this email, may be able to help with that portion.

Jessica Hart

Deputy Regional Permit Administrator, Division of Environmental Permits

New York State Department of Environmental Conservation

317 Washington St, Watertown, NY 13601

P: (315) 785-2246 | F: (315) 785-2242 | jessica.hart@dec.ny.gov

www.dec.ny.gov |  | 

From: dec.sm.DEP.R6

Sent: Tuesday, June 18, 2019 8:49 AM

To: Hart, Jessica J (DEC) <jessica.hart@dec.ny.gov>

Subject: FW: Piercefield Hydropower Project - LIHI review

<https://mail.google.com/mail/u/0?ik=4642cf9445&view=pt&search=all&permmsgid=msg-f%3A1636689401338232997&simpl=msg-f%3A16366894013...> 1/2