LOW-IMPACT HYDROPOWER POWER INSTITUTE CERTIFICATION APPLICATION

EMERYVILLE HYDROELECTRIC PROJECT
(FERC NO. 2850)

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1.0 FACILITY DESCRIPTION

The Emeryville Hydroelectric Project (FERC No. 2850) (Project) is located at river mile (RM) 70 on the Oswegatchie River in the town of Fowler, St. Lawrence County, New York and is the ninth hydroelectric development location upstream from the confluence with the St. Lawrence River. The Project's hydroelectric facilities are owned by KE Emeryville LLC and operated by the KEI (USA) Power Management Inc. (KEI (USA) or Licensee).

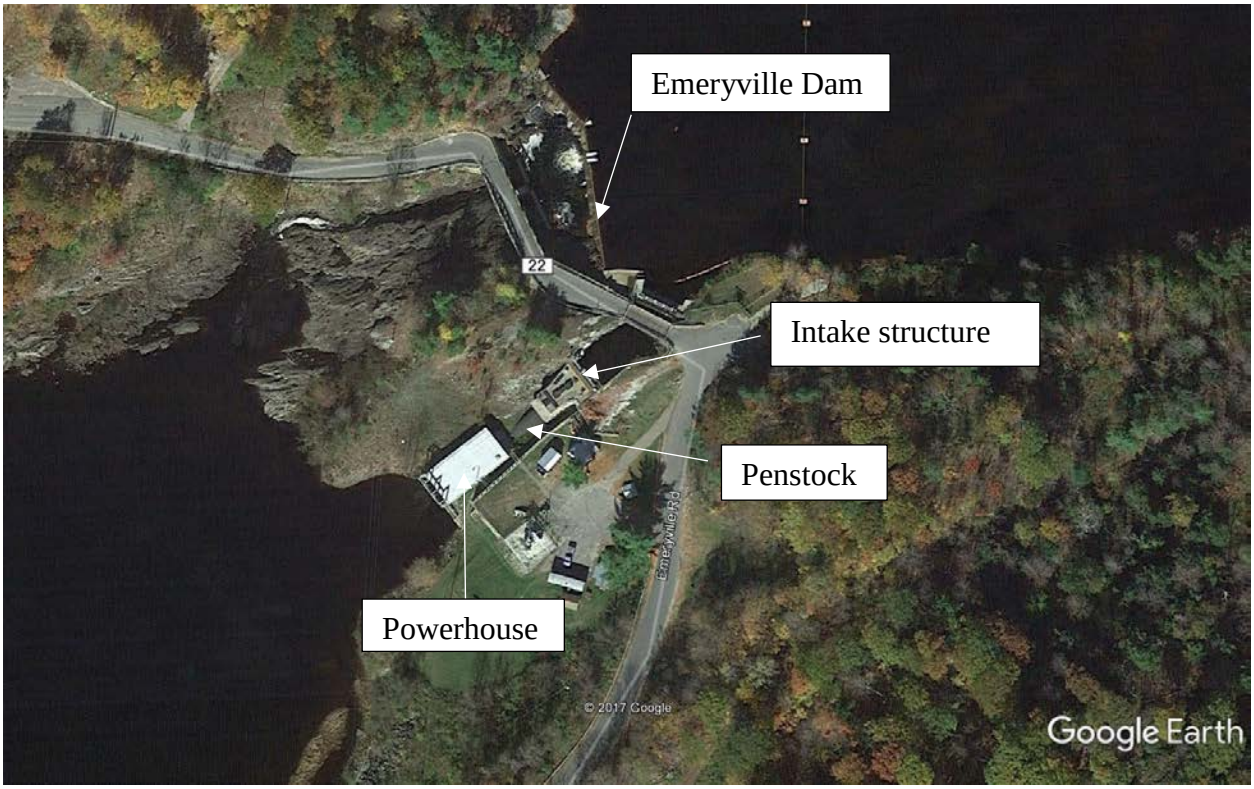

FIGURE 1 PHOTO OF PROJECT/IDENTIFICATION OF PROJECT PARTS

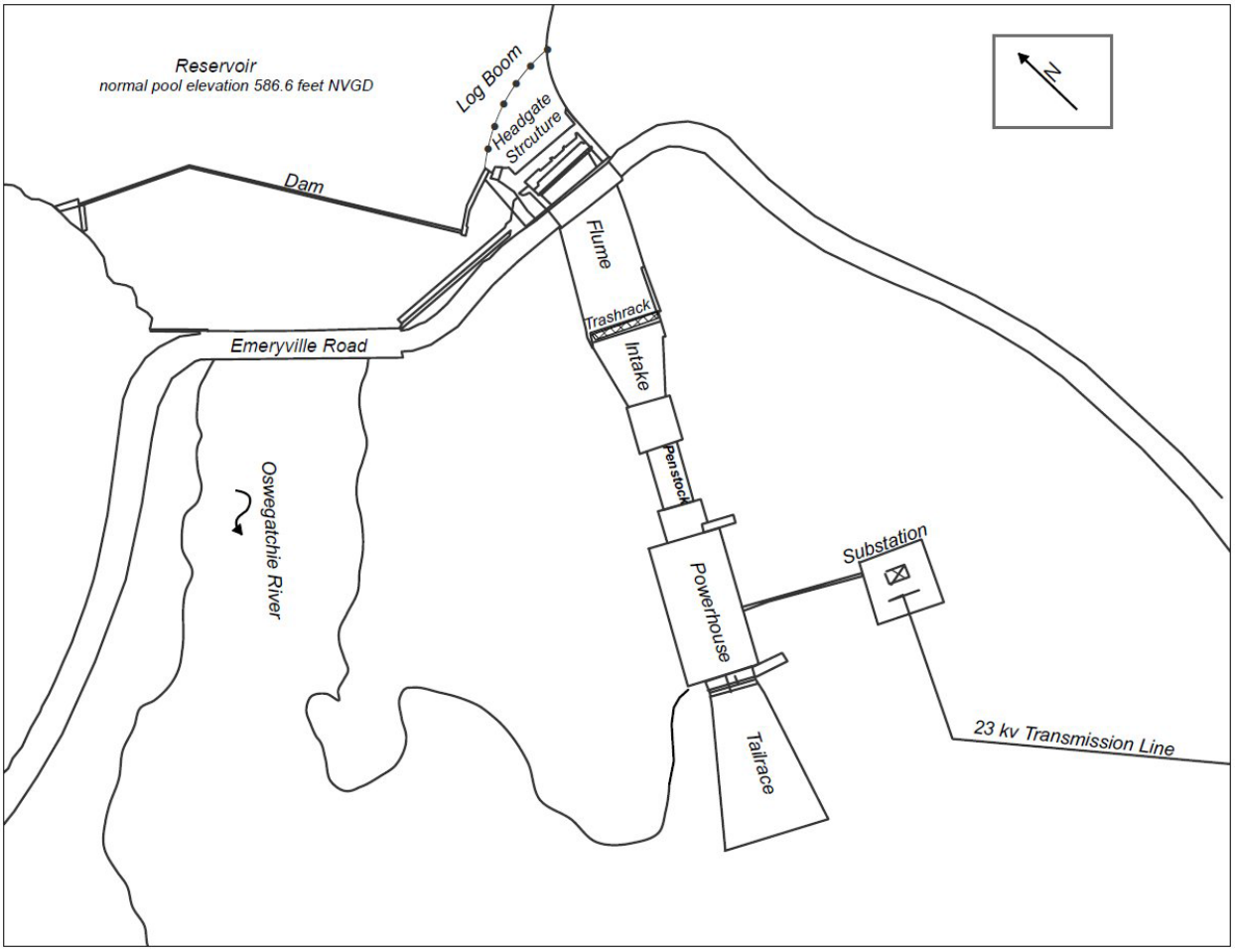

FIGURE 2 EXISTING EMERYVILLE HYDROELECTRIC PROJECT

FIGURE 3 GEOGRAPHIC OVERVIEW OF PROJECT LOCATION

1.1 PROJECT DESCRIPTION

The Emeryville Project is located on the Oswegatchie River at RM 70 in the town of Fowler, New York and is the ninth hydroelectric development located upstream from the confluence with the St. Lawrence River. The project consists of: (1) an existing 16.7-foot-high, 185-foot-long, concrete-capped timber and earth fill gravity dam with a 176-foot-long concrete spillway equipped with 2.4-foot-high flashboards and a 4-foot-wide, 0.5-foot-deep minimum flow weir with a crest elevation of 584.2 feet National Geodetic Vertical Datum (NGVD); (2) an existing 35-acre impoundment with a normal water surface elevation of 586.6 feet NGVD; (3) an existing 140-foot-long by 30-foot-wide reinforced concrete headgate flume and intake structure equipped with four headgates and trashracks with 5-inch clear bar spacing; (4) an existing 60-foot-long by 14-foot-diameter steel penstock leading to; (5) an existing 67-foot-long by 32-foot wide concrete powerhouse containing a horizontal axial flow turbine with a rated capacity of 3,449 kilowatts (kW), a maximum hydraulic capacity of 1,470 cubic feet per second (cfs), and a net head of 32 feet, directly connected to a horizontal generator unit with a rated capacity of 3,481 kW; (6) an existing tailrace (7) an existing 80-foot-long, 23-kilovolt transmission line; and (8) appurtenant facilities.

The project boundary includes 45.86 acres and extends approximately 1-mile upstream of the dam. Downstream of the project dam, the project boundary includes the bypassed reach and tailrace section of the river to a point approximately 360 feet downstream of the powerhouse.

The project creates a 229-foot-long bypassed reach. Licensee operates and maintains recreational facilities at the project, including two parking lots, two boat ramps that provide access to the impoundment and tailrace, a canoe portage trail, a picnic area, and signage.

Licensee operates the project in a run-of-river mode by monitoring the impoundment elevation with a headpond sensor and automatically adjusting turbine discharge to maintain a normal impoundment elevation of 586.6 feet NGVD. A year-round minimum flow of 20 cfs is released into the bypassed reach. Flows between 166 cfs (the project's minimum hydraulic capacity of 150 cfs plus the minimum flow release) and the project's maximum hydraulic capacity (1,470 cfs) are released through four headgates into a concrete power flume. From the power flume, water passes through the trashracks and enters the intake. The intake transfers water via a single steel penstock directly to the powerhouse. Flows above the project's maximum hydraulic capacity are spilled over the crest of the wooden flashboards into the bypassed reach.

After the winter ice-out period, Licensee annually replaces the wooden struts that support the flashboards. During this procedure, the impoundment is lowered two feet below the spillway crest (582.2 NGVD), raises the flashboards, and replaces the wooden struts supporting the flashboards. Upon completion, the impoundment is gradually refilled to the normal operating elevation.

The culmination of the consultation efforts between the Project Stakeholders is the collaborative development of a settlement document entitled: Emeryville Project Settlement Agreement (Settlement Agreement).

The Settlement Agreement and this license application reflect the Applicant's efforts, in complete collaboration with agencies and NGOs, to balance consideration of power and nonpower resources associated with the Emeryville Hydroelectric Project. The measures proposed by the Applicant within this application are summarizations of the detailed agreements and proposals contained within the Settlement Agreement. Since the Settlement Agreement is a complete description of all existing and/or proposed measures and facilities recommended by resource agencies, NGOs, and the Applicant, the proposals presented in this application are

consistent with, and representative of, the recommendations of all signators to the Settlement Agreement.

Those stakeholders that participated in negotiation of the project Settlement Agreement include the United States Fish and Wildlife Service (USFWS), New York State Department of Environmental Conservation (NYSDEC), New York Council of Trout Unlimited (TU) and St. Lawrence County. All parties were signatories to the final Settlement Agreement with the exception of St. Lawrence County who declined to sign due to their concern regarding the ownership of the bridge over the intake. Execution of the Settlement Agreement was completed on April 2, 2010. The final signed Settlement Agreement was submitted to FERC on May 14, 2010. Interested parties (stakeholders) were concurrently served.

TABLE 1 FACILITY DESCRIPTION INFORMATION FOR EMERYVILLE HYDROELECTRIC PROJECT

INFORMATION TYPE	VARIABLE DESCRIPTION	RESPONSE (AND REFERENCE TO FURTHER DETAILS)
Name of the Facility	Facility name (use FERC project name if possible)	Emeryville Hydroelectric Project (FERC No. 2850) (Project).
Location	River name (USGS proper name)	Oswegatchie River
	River basin name	Oswegatchie River basin
	Nearest town, county, and state	Town of Fowler, St. Lawrence County, New York
	River mile of dam above next major river	River Mile (RM) 70
	Geographic latitude	44°17'49.83"N
	Geographic longitude	75°21'57.64"W
Facility Owner	Application contact names (IMPORTANT: you must also complete the Facilities Contact Form):	Sherri Loon – KEI (USA) Andy Qua – Kleinschmidt Associates Kayla Easler – Kleinschmidt Associates Please see Section 4.0 for the Facility Contacts Form.
	- Facility owner (individual and company names)	KE Emeryville LLC
	- Operating affiliate (if different from owner)	KEI (USA) Power Management Inc.
	- Representative in LIHI certification	Sherri Loon, KEI (USA)
Regulatory Status	FERC Project Number (e.g., P-xxxxx), issuance and expiration dates	FERC No. 2850. 40-year License issued on January 6, 2012, February 25, 2009,

INFORMATION TYPE	VARIABLE DESCRIPTION	RESPONSE (AND REFERENCE TO FURTHER DETAILS)
		effective June 1, 2012 and expires on May 31, 2052.
	FERC License type or special classification (e.g., "qualified conduit")	Major License
	Water Quality Certificate identifier and issuance date, plus source agency name	-A WQC was issued by the New York State Department of Environmental Conservation (NYSDEC) on June 2, 2011
	Hyperlinks to key electronic records on FERC e-library website (e.g., most recent Commission Orders, WQC, ESA documents, etc.)	2010 Settlement Agreement https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12349183 Environmental Assessment https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12655927 2012 License: 2016 License Transfer: https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14440878
Power Plant Character-istics	Date of initial operation (past or future for operational applications)	The history of the site dates back to the 1800s, when the waterpower was originally used to drive pulp grinders. In 1938, Rushmore Paper Mills, Inc. demolished the pulp mill and replaced it with a hydroelectric plant. Hampshire Paper Company (HPC) purchased the site from Rushmore Paper Mills in 1953. In 1987, HPC undertook a major renovation program by removing and replacing the powerhouse, turbine-generator equipment, switchyard and portions of the intake. Minor improvements were made to the generator building in 1998 due to flooding.
	Total name-plate capacity (MW)	The powerhouse contains one horizontal axial flow turbine with a rated capacity of 3,449 kW, a maximum hydraulic capacity of 1,470 cfs and a horizontal generator unit with a rated capacity of 3,481 kW.
	Average annual generation (MWh)	18761 MWh. This is the average taken from the annual generation reports from 2012-2016.

INFORMATION TYPE	VARIABLE DESCRIPTION	RESPONSE (AND REFERENCE TO FURTHER DETAILS)
	Number, type, and size of turbines, including maximum and minimum hydraulic capacity of each unit	The powerhouse contains one horizontal axial flow turbine with a rated capacity of 3,449 kW, a maximum hydraulic capacity of 1,470 cfs and a horizontal generator unit with a rated capacity of 3,481 kW. Turbine: -Manufacturer = Allis-Chalmers (Voith) -Maximum hydraulic capacity = 1,470 cfs Generator: -Manufacturer = Seimens -Nameplate capacity: 3,481 kW
	Modes of operation (run-of-river, peaking, pulsing, seasonal storage, etc.)	The Project operates in a run-of-river mode
	Dates and types of major equipment upgrades	N/A
	Dates, purpose, and type of any recent operational changes	N/A
	Plans, authorization, and regulatory activities for any facility upgrades	There are no plans at this time for Project upgrades.
Character-istics of Dam, Diversion, or Conduit	Date of construction	In 1938, Rushmore Paper Mills, Inc. demolished the pulp mill and replaced it with a hydroelectric plant.
	Dam height	The concrete gravity dam (584.2 feet), with 2.4 feet of flashboards (586.6 feet), rests entirely on granite rock and is 185 feet long. A rectangular weir in the dam allows approximately 16 cfs flow release year-round. The concrete was poured over the original timber and earth-filled dam. The face of the dam is approximately 16.7 feet tall (granite at 567.5 feet and top of concrete level at 584.2 feet).
	Spillway elevation and hydraulic capacity	584.2 feet elevation Approximate Capacity = 5,900 cfs (588.9 feet – top of the upstream concrete wall on river right.
	Tailwater elevation	Normal tail water elevation is 555.5 ft.

INFORMATION TYPE	VARIABLE DESCRIPTION	RESPONSE (AND REFERENCE TO FURTHER DETAILS)
	Length and type of all penstocks and water conveyance structures between reservoir and powerhouse	The penstock is an existing 60-foot-long by 14-foot-diameter steel penstock
	Dates and types of major, generation-related infrastructure improvements	No new infrastructure improvements have occurred since the 2012 License Order.
	Designated facility purposes (e.g., power, navigation, flood control, water supply, etc.)	The purpose of this facility is to generate power to be supplied to the local grid.
	Water source	Oswegatchie River
	Water discharge location or facility	Oswegatchie River
Character-istics of Reservoir and Watershed	Gross volume and surface area at full pool	The project has a surface area of 35 acres, net storage capacity of 150 acre feet and a gross storage capacity of 457 acre feet.
	Maximum water surface elevation (ft. MSL)	The maximum water surface elevation within the impoundment is 586.6 NGVD.
	Maximum and minimum volume and water surface elevations for designated power pool, if available	No power pool present. Run-of-river Project.
	Upstream dam(s) by name, ownership, FERC number (if applicable), and river mile	Upstream of Emeryville Dam: Talcville (FERC 4402) – Erie Boulevard Hydropower, L.P. RM 75 Niagara Mohawk Power Dam – Brookfield Renewable Energy Group RM 85 South Edwards – Erie Boulevard Hydropower, L.P. RM 86 Flat Rock – Erie Boulevard hydropower, L.P. RM 95
	Downstream dam(s) by name, ownership, FERC number (if applicable), and river mile	Starting from confluence with St. Lawrence River: Ogdensburg (FERC 9821)– City of Ogdensburg RM 1 Eel Weir (FERC 2984) – Erie boulevard Hydropower, L.P. RM 5 Heuvelton – Erie Boulevard Hydropower, L.P. RM 11 Gouverneur – Village of Gouverneur, NY RM 64 Hailsboro Mill #3 Dam – Enel Green Power North America Inc RM 67 Hailesboro #4 Plant Dam (FERC 6058) – Hydro Development Group Inc RM 67

INFORMATION TYPE	VARIABLE DESCRIPTION	RESPONSE (AND REFERENCE TO FURTHER DETAILS)
		Hailesboro Mill #6 Dam – Enel Engineering and Regulatory Affairs RM 68
	Operating agreements with upstream or downstream reservoirs that affect water availability, if any, and facility operation	No operating agreements are in effect with other surrounding facilities.
	Area inside FERC project boundary, where appropriate	The project boundary includes 45.86 acres and extends approximately 1-mile upstream of the dam. Downstream of the project dam, the project boundary includes the bypassed reach and tailrace section of the river to a point approximately 360 feet downstream of the powerhouse The area inside the FERC Project boundary is approximately 89.7 acres.
Hydrologic Setting	Average annual flow at the dam	Average annual flow at the dam is 1353 cfs (POR=1988-2017) as measured and prorated at the two upstream gages.
	Average monthly flows	Average monthly flows (POR=1988-2017) as measured and prorated at the two upstream gages: Jan: 1544 cfs Feb: 1178 cfs March: 1769 cfs April: 2647 cfs May: 1596 cfs June: 1086 cfs July: 777 cfs Aug: 615 cfs Sept: 637 cfs Oct: 1201 cfs Nov: 1621 cfs Dec: 1564 cfs
	Location and name of relevant stream gauging stations above and below the facility	USGS Gage No. 04262500 – West Branch Oswegatchie River near Harrisville, NY and USGS Gage No. 04262000 – Oswegatchie River near Oswegatchie, NY
	Watershed area at the dam	The drainage area of the river at the dam is 630 square miles.
Designated Zones of Effect	Number of zones of effect	There are three zones of effect: 1) Impoundment, 2) Bypassed Reach, and 3) Downstream.

INFORMATION TYPE	VARIABLE DESCRIPTION	RESPONSE (AND REFERENCE TO FURTHER DETAILS)
		The Impoundment ZOE inundates approximately 81.7 acres The Project Bypassed Reach ZOE is approximately 0.7 acres The Downstream ZOE is approximately 57.8 acres
	Upstream and downstream locations by river miles	The Impoundment ZOE stretches from RM 70 to RM 69 upstream o Emeryville dam. The Bypassed Reach ZOE stretches from RM 70 approximately 229 feet downstream from the Emeryville dam. The Downstream ZOE stretches from RM 70 to approximately 1.25 miles downstream of the powerhouse.
	Type of waterbody (river, impoundment, by-passed reach, etc.)	The waters located within the Impoundment ZOE, are classified as lake and riverine. Bypassed Reach ZOE, and the Downstream ZOE are classified as Riverine by the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (USFWS 2017). There is one forested/shrub wetland within the project boundaries. This palustrine emergent wetland covers all of a small, low island in the Oswegatchie River upstream of the Emeryville dam approximately 0.81 mile from the dam (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12655927)
	Delimiting structures	The Impoundment ZOE includes waters stretching from Rm 70 to RM 69 where the river begins to rifle in front of a large island that splits the river. The Bypassed Reach ZOE includes waters stretching from the RM 70 to approximately 229 feet downstream from the Emeryville dam.

INFORMATION TYPE	VARIABLE DESCRIPTION	RESPONSE (AND REFERENCE TO FURTHER DETAILS)
		The Downstream ZOE stretches from the powerhouse downstream approximately 1.25 miles where the river starts to rifle in a bend of the river.
	Designated uses by state water quality agency	The Oswegatchie River is designated as Class A. Designated use by the NYDEC include source of water as supply for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing.
Additional Contact Information	Names, addresses, phone numbers, and e-mail for local state and federal resource agencies	Please see section 4.0 for the Project Contacts Form
	Names, addresses, phone numbers, and e-mail for local non-governmental stakeholders	Please see section 4.0 for the Project Contacts Form
Photographs and Maps	Photographs of key features of the facility and each of the designated zones of effect	Please see Appendix A for photographs of key features of the facility and identification of each ZOE, and for project drawings.
	Maps, aerial photos, and/or plan view diagrams of facility area and river basin	Please see Appendix B for aerial photos of facility area and river basin.

2.0 STANDARDS MATRICES

2.1 IMPOUNDMENT ZOE

		ALTERNATIVE STANDARDS				
	CRITERION	*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*			

2.2 BYPASSED REACH ZOE

		ALTERNATIVE STANDARDS				
	CRITERION	*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*			

2.3 DOWNSTREAM ZOE

		ALTERNATIVE STANDARDS				
	CRITERION	*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*			

3.0 SUPPORTING INFORMATION

3.1 ECOLOGICAL FLOWS STANDARDS: IMPOUNDMENT ZOE

CRITERION	STANDARD	INSTRUCTIONS
A	1	Not Applicable / De Minimis Effect: • Confirm the location of the powerhouse relative to other dam/diversion structures to establish that there are no bypassed reaches at the facility. • If Run-of-River operation, provide details on how flows, water levels, and operation are monitored to ensure such an operational mode is maintained. • In a conduit project, identify the water source and discharge points for the conduit system within which the hydropower plant is located. • For impoundment zones only, explain how fish and wildlife habitat within the zone is evaluated and managed – ***NOTE:*** this is required information, but it will not be used to determine whether the Ecological Flows criterion has been satisfied. All impoundment zones can apply Criterion A-1 to pass this criterion.

-
- New York DEC issued a Project WQC on June 2, 2011[1], (Appendix A of 2012 License (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12861098)). As prescribed under the Condition 8 of the WQC (Article 401 of the 2012 license and 2010 Agreement), the project is run in a run-of-rive mode (ROR) where the project is maintaining instantaneous outflow from the impoundment equal to the instantaneous inflow to the impoundment for the protection of aquatic resources.
- Section 3.4 of the Settlement (Condition 10 of the WQC) requires that the certificate holder agrees to install, within 18 months of issuance of the FERC license, bypass flow monitoring gages/monuments. In accordance with Section 3.4 of the settlement, the Licensee developed a stream flow and water level monitoring plan in consultation with NYDEC (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13122559) which was approved by FERC on April 21, 2013 (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13211491). Under the stream flow and water monitoring plan the Licensee monitors the impoundment level for a target water level of elevation 586.6 NGVD29. The gauge shows elevations to within 0.1 foot. Each spring the gauge is installed after winter "ice out" and removed each fall prior to the impoundment ice cover. In addition, to the staff gauge, Hampshire Paper Company also monitors the water elevation at the powerhouse intake just upstream from the trashracks. This is performed by a level sensor and transducer whose primary function is to provide upstream water elevation data to the turbine programmable controller. KEI (Maine) operations personnel record this elevation three times per day (8 hr. intervals). Per the requirement of Section 3.4 of the Settlement Agreement, Hampshire Paper Company makes this information available to the NYDEC.

[1] NYDEC 401 Water Quality Certification issued June 2, 2011 can be found in Appendix C of this application

- The Project's run-of-river operations create a stable impoundment environment. To protect wetlands and wildlife during occasional impoundment drawdowns greater than 2 feet, the Licensee undergoes agency consultation prior to drawdowns to ensure protection of the upstream resources.

3.2 ECOLOGICAL FLOWS STANDARDS: BYPASSED REACH ZOE

CRITERION	STANDARD	INSTRUCTIONS
A	2	Agency Recommendation (see Appendix A for definitions): • Identify the proceeding and source, date, and specifics of the agency recommendation applied (NOTE: there may be more than one; identify and explain which is most environmentally stringent). • Explain the scientific or technical basis for the agency recommendation, including methods and data used. This is required regardless of whether the recommendation is or is not part of a Settlement Agreement. • Explain how the recommendation relates to agency management goals and objectives for fish and wildlife. • Explain how the recommendation provides fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking rate conditions, and seasonal and episodic instream flow variations).

- New York DEC issued a Project WQC on June 2, 2011[2], (Appendix A of 2012 License (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12861098)). As prescribed under the Condition 8 of the WQC (Article 401 of the 2012 license and 2010 Agreement), the project is run in a run-of-rive mode (ROR) where the project is maintaining instantaneous outflow from the impoundment equal to the instantaneous inflow to the impoundment for the protection of aquatic resources.
- Section 3.4 of the Settlement (Condition 10 of the WQC) requires that the certificate holder agrees to install, within 18 months of issuance of the FERC license, bypass flow monitoring gages/monuments. In accordance with Section 3.4 of the settlement, the Licensee developed a stream flow and water level monitoring plan in consultation with NYDEC (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13122559) which was approved by FERC on April 21, 2013 (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13211491).
- Under Condition 9 of the WQC and Settlement Section 3.2, the Licensee maintains a minimum flow of 20 cfs (or inflow to the Emeryville impoundment, whichever is less). The flow is controlled through a plunge pool discharged weir (trapezoidal weir with bottom width of 5 feet, 0 inches and sides sloped at IH:IV, bottom be set at elev. 563.40 N6VD29 with a resultant normal plunge pool elevation calculated to be approximately

  564.60). The licensee calibrates the weir and verifies that the minimum flow is being released by visually inspecting the reference water level elevations via benchmarks in the plunge pool and the minimum flow channel.
- The New York DEC recommendations provide refugia and enhancement of habitat for local salmonid (brown and rainbow trout) and a variety of non-game fishes.

[2] NYDEC 401 Water Quality Certification issued June 2, 2011 can be found in Appendix A of this application

3.3 ECOLOGICAL FLOWS STANDARDS: DOWNSTREAM ZOE

CRITERION	STANDARD	INSTRUCTIONS
A	2	Agency Recommendation: • Identify the proceeding and source, date, and specifics of the agency recommendation applied (NOTE: there may be more than one; identify and explain which is most environmentally stringent). • Explain the scientific or technical basis for the agency recommendation, including methods and data used. This is required regardless of whether the recommendation is or is not part of a Settlement Agreement. • Explain how the recommendation relates to agency management goals and objectives for fish and wildlife. • • Explain how the recommendation provides fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking rate conditions, and seasonal and episodic instream flow

- New York DEC issued a Project WQC on June 2, 2011, (Appendix A of 2012 License (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12861098)). As prescribed under the Condition 8 of the WQC (Article 401 of the 2012 license and 2010 Agreement), the project is run in a run-of-rive mode (ROR) where the project is maintaining instantaneous outflow from the impoundment equal to the instantaneous inflow to the impoundment for the protection of aquatic resources.
- Ordering Paragraph (D) of the project license states that the license is subject to water quality certification (WQC) conditions set forth by the New York Department of Environmental Conservation (DEC) under section 401 of the Clean Water Act. Condition 10 of the WQC was derived from Section 3.4 of the settlement. Section 3.4 of the Settlement (Condition 10 of the WQC) requires that the certificate holder agrees to install, within 18 months of issuance of the FERC license, bypass flow monitoring gages/monuments. In accordance with Section 3.4 of the settlement, the Licensee developed a stream flow and water level monitoring plan in consultation with NYDEC. (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13122559) which was approved by FERC on April 21, 2013 (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13211491).
- The licensee installed a level reference mark in the downstream minimum flow channel to visually confirm that the minimum bypass flow is being met.
- The licensee also installed a reference elevation pin in the bypass minimum flow channel downstream of the plunge pool and weir that should act as a visual backup validation of the minimum flow. The licensee proposes to install a steel pin in a rock in the minimum flow channel approximately 60 feet downstream of the minimum flow weir that would be visible from the shore. The licensee proposes to establish this point after the weir calibration is conducted and it has confirmed that the water level in the bypass reach is relative to the 20 cfs minimum flow release from the weir.

3.4 WATER QUALITY STANDARDS: IMPOUNDMENT ZOE

CRITERION	STANDARD	INSTRUCTIONS
B	2	Agency Recommendation: • If facility is located on a Water Quality Limited river reach, provide an agency letter stating that the facility is not a cause of such limitation. • Provide a copy of the most recent Water Quality Certificate, including the date of issuance. • Identify any other agency recommendations related to water quality and explain their scientific or technical basis. • Describe all compliance activities related to the water quality related agency recommendations for the facility, including on-going monitoring, and how those are integrated into facility operations.

- The Oswegatchie River in the Project-affected reach is designated as Class A waters.
- Class A waters are suitable for fish propagation and survival. New York DEC lists the best uses of Class A waters as source of water as supply for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing. Numeric water quality standards that pertain to Class A waters include: pH between 6.5 and 8.5, minimum daily average dissolved oxygen (DO) concentration of not less than 6.0 milligrams per liter (mg/l), and an instantaneous minimum DO concentration of 5.0 mg/l (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12655927).
- Water quality monitoring at the facility was done from May through August 2008, which included continuous monitoring of temperature, DO, and pH in the impoundment and tailrace. The results of the monitoring demonstrated that water quality conditions throughout the project area on the dates of sampling were in compliance with state water quality standards. Temperature and pH were essentially the same upstream and downstream of the project and DO was generally about 0.2 mg/l higher in the tailrace than at the impoundment sampling site (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12010374).
- The project received a Water Quality Certification from NYDEC on June 2, 2011 (Attachment C).

3.5 WATER QUALITY STANDARDS: BYPASSED REACH ZOE

CRITERION	STANDARD	INSTRUCTIONS
B	2	Agency Recommendation: • If facility is located on a Water Quality Limited river reach, provide an agency letter stating that the facility is not a cause of such limitation. • Provide a copy of the most recent Water Quality Certificate, including the date of issuance. • Identify any other agency recommendations related to water quality and explain their scientific or technical basis. • Describe all compliance activities related to the water quality related agency recommendations for the facility, including on-going monitoring, and how those are integrated into facility operations.

- See answer to Impoundment ZOE above.

3.6 WATER QUALITY STANDARDS: DOWNSTREAM ZOE

CRITERION	STANDARD	INSTRUCTIONS
B	2	Agency Recommendation: • If facility is located on a Water Quality Limited river reach, provide an agency letter stating that the facility is not a cause of such limitation. • Provide a copy of the most recent Water Quality Certificate, including the date of issuance. • Identify any other agency recommendations related to water quality and explain their scientific or technical basis. • Describe all compliance activities related to the water quality related agency recommendations for the facility, including on-going monitoring, and how those are integrated into facility operations.

- See answer to Impoundment ZOE above.

3.7 UPSTREAM FISH PASSAGE STANDARDS: IMPOUNDMENT ZOE

CRITERION	STANDARD	INSTRUCTIONS
C	1	Not Applicable/De Minimis Effect: • The facility does not create a barrier to upstream passage, or • There are no migratory fish in the vicinity of the facility and the facility is nor the cause of extirpation of such species if they had been present historically

- The Project does not currently create a barrier for migratory upstream fish passage, because there are no anadromous species in the project vicinity. Upstream passage to the Oswegatchie River is currently blocked by the downstream Ogdensburg Dam (FERC No. 9821) locate on the Oswegatchie River. NYSDEC's *Coastal Fish & Wildlife Habitat Rating Form* for the Oswegatchie River notes that the agency's "future management plans include potential reestablishment of anadromous fish runs above Ogdensburg Dam" but until that occurs anadromous fish do not have the ability to access the Emeryville facility. The rating form also indicates that records of sturgeon and mooneye exist in the area of the lower Oswegatchie River but the extent of use of the area "has not been adequately documented." Therefore, it *cannot* be concluded that the Emeryville Project is the cause of species extirpation in this reach of the river. (https://www.dos.ny.gov/opd/programs/consistency/Habitats/GreatLakes/Oswagatchie_River.pdf)
- Although there is no federal mandatory prescription for the upstream passage of fish at the Project, License Article 403 and WQC Condition 11 reserve future authority to order such fishways.
- The Parties of the settlement agreement further agreed that no upstream fish passage facilities are required or were recommended.
- The fishery of the Oswegatchie River in the project vicinity consists of a mix of warm and coolwater species. Hampshire Paper conducted fish surveys in May and August 2008, using gillnets, boat and backpack electrofishing, and seining. The most abundant species captured during the surveys were blacknose dace, yellow perch, lake chub, and pumpkinseed (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12655927).

3.8 UPSTREAM FISH PASSAGE STANDARDS: BYPASSED REACH ZOE

CRITERION	STANDARD	INSTRUCTIONS
C	1	Not Applicable/De Minimis Effect: • The facility does not create a barrier to upstream passage, or • There are no migratory fish in the vicinity of the facility and the facility is nor the cause of extirpation of such species if they had been present historically

- Please see answer to Impoundment ZOE above. The Project does not currently create a barrier for migratory upstream fish passage, because there are no anadromous species in the project vicinity. Upstream passage to the Oswegatchie River is currently blocked by the downstream Ogdensburg Dam (FERC No. 9821) locate on the Oswegatchie River. NYSDEC's *Coastal Fish & Wildlife Habitat Rating Form* for the Oswegatchie River notes that the agency's "future management plans include potential reestablishment of anadromous fish runs above Ogdensburg Dam" but until that occurs anadromous fish do not have the ability to access the Emeryville facility. The rating form also indicates that records of sturgeon and mooneye exist in the area of the lower Oswegatchie River but the extent of use of the area "has not been adequately documented." Therefore, it *cannot* be concluded that the Emeryville Project is the cause of species extirpation in this reach of the river. (https://www.dos.ny.gov/opd/programs/consistency/Habitats/GreatLakes/Oswagatchie_River.pdf)

3.9 UPSTREAM FISH PASSAGE STANDARDS: DOWNSTREAM ZOE

CRITERION	STANDARD	INSTRUCTIONS
C	1	Not Applicable/De Minimis Effect: • The facility does not create a barrier to upstream passage, or • There are no migratory fish in the vicinity of the facility and the facility is nor the cause of extirpation of such species if they had been present historically

- Please see answer to Impoundment ZOE above. The Project does not currently create a barrier for migratory upstream fish passage, because there are no anadromous species in the project vicinity. Upstream passage to the Oswegatchie River is currently blocked by the downstream Ogdensburg Dam (FERC No. 9821) locate on the Oswegatchie River. NYSDEC's *Coastal Fish & Wildlife Habitat Rating Form* for the Oswegatchie River notes that the agency's "future management plans include potential reestablishment of anadromous fish runs above Ogdensburg Dam" but until that occurs anadromous fish do not have the ability to access the Emeryville facility. The rating form also indicates that records of sturgeon and mooneye exist in the area of the lower Oswegatchie River but the extent of use of the area "has not been adequately documented." Therefore, it *cannot* be concluded that the Emeryville Project is the cause of species extirpation in this reach of the river. (https://www.dos.ny.gov/opd/programs/consistency/Habitats/GreatLakes/Oswagatchie_River.pdf)

3.10 DOWNSTREAM FISH PASSAGE AND PROTECTION STANDARDS: IMPOUNDMENT ZOE

CRITERION	STANDARD	INSTRUCTIONS
D	2	Agency Recommendation: • Identify the proceeding and source, date, and specifics of the agency recommendation applied (NOTE: there may be more than one; identify and explain which is most environmentally stringent). • Explain the scientific or technical basis for the agency recommendation, including methods and data used. This is required regardless of whether the recommendation is part of a Settlement Agreement or not. • Describe any provisions for fish passage monitoring or effectiveness determinations that are part of the agency recommendation, and how these are being implemented.

- As a condition under the settlement agreement (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12349183), the Licensee installs overlay trashracks with 1.0-inch clear spacing over the full length and width and over the upstream face of the existing trashracks seasonally. The seasonal overlays are placed for a period of March 15 through November 30 of each year.
- After the first 5 years of the license term, the need for permanent trashracks with 1-inch clear spacing would be evaluated in consultation with the New York DEC and USFWS. This proposal is consistent with Section 3.3 of the Settlement (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12349183).
- The existing trashracks have clear spacing of 5 inches. The estimated maximum approach velocity in front of the trashracks is 2.2 feet per second. Based on the swimming speeds of fish species that occur in the impoundment, most fish should be able to avoid impingement on the existing racks, although because of the 5-inch clear spacing between bars, it is unlikely that the current trashracks are effective at preventing entrainment of fish, including adult gamefish.
- By installing the seasonal overlays with 1-inch clear spacing, fewer fish would be vulnerable to entrainment, because most fish that are 9 inches or longer would be too large to fit through the 1-inch clear spacing and would be physically excluded from passing through the racks. The 1-inch spacing may also result in some behavioral avoidance of the trashracks by smaller fish that may be able to physically pass through the bars. Although site specific turbine survival data do not exist, studies at other similar sites suggest that survival of fish that pass through the project's horizontal propeller turbine is likely to be approximately 60 to 80 percent. Although there is nothing in the record to suggest that current levels of fish entrainment, and related mortality, are having an adverse effect on the fish community in the project vicinity, the proposed seasonal overlays with 1-inch clear spacing would reduce project related entrainment and benefit fish communities in the project vicinity (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12655927).

- Under the Proposed environmental measures of the biological assessment (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12655927), the Licensee proposed to replace the existing minimum flow weir with a downstream fish passage flume, designed to enhance downstream fish passage as well as release the minimum flow; increase the size and depth of the existing plunge pool by installing a new weir across the bypassed reach approximately 50 feet downstream of the existing spillway; and excavate the bypassed reach to enhance downstream fish passage. Designs were in consultation with the New York DEC and the FWS based on recommendations #6 and #7 filed under section 10(j) of the FPA.
- Under the provisions of section 10(j) of the FPA, each hydroelectric license issued by the Commission shall include conditions based on recommendations provided by federal and state fish and wildlife agencies for the protection, mitigation, or enhancement of fish and wildlife resources affected by the project. Section 10(j) of the FPA states that whenever the Commission finds that any fish and wildlife agency recommendation is inconsistent with the purposes and the requirements of the FPA or other applicable law, the Commission and the agency shall attempt to resolve such inconsistency, giving due weight to the recommendations, expertise, and statutory responsibilities of the agency. In response to FERC's REA notice, Interior filed seven section 10(j) recommendations for the Emeryville Hydroelectric Project on January 11, 2011.
    - Recommendation #6
        - Provide a downstream fish passage facility and an adequate plunge pool with 18 months of license issuance.
    - Recommendation #7
        - Excavate a channel in the bypassed reach to facilitate downstream fish movement.

    Recommendations by the agencies were made based on flow demonstration study results indicating that releasing 20 cfs through a new downstream fish passage flume could improve survival of resident species that may attempt to pass downstream and potentially improve macroinvertebrate habitat in the bypass reach below. FERC's EA[3] concluded that while resident species upstream of the project do not need to pass downstream for life-cycle purposes, providing fish passage and protection measures could reduce mortality of resident species in the impoundment and increase recruitment of fish to downstream habitat.
- The new flume would be located on the crest of the existing spillway approximately 25 feet from the existing minimum flow weir. A minimum year-round flow of 20 cfs or inflow, whichever is less, would be passed through the proposed downstream fish passage flume into the bypassed reach. In addition, the Licensee would install a weir across the bypassed reach approximately 50 feet downstream from the existing spillway to increase the depth and area of the plunge pool. Hampshire Paper would also excavate certain areas in the bypassed reach to facilitate downstream fish movements. This proposal is consistent with sections 3.2 and 3.3 of the Settlement (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12349183).

[3] https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=12655927

- The 5-inch-wide racks are still in place behind the 1inch wide racks. The Licensee can use the 5 inch racks in the winter and reinstall the 1 inch in March; however, it has been found that weather conditions sometimes can prevent this; therefore, the Licensee has decided to leave the 1 inch overlays up all year.

3.11 DOWNSTREAM FISH PASSAGE STANDARDS: BYPASSED REACH ZOE

CRITERION	STANDARD	INSTRUCTIONS
D	2	Agency Recommendation: • Identify the proceeding and source, date, and specifics of the agency recommendation applied (NOTE: there may be more than one; identify and explain which is most environmentally stringent). • Explain the scientific or technical basis for the agency recommendation, including methods and data used. This is required regardless of whether the recommendation is part of a Settlement Agreement or not. • Describe any provisions for fish passage monitoring or effectiveness determinations that are part of the agency recommendation, and how these are being implemented.

- Please see answer to Impoundment ZOE above.
- The fishery of the Oswegatchie River in the project vicinity consists of a mix of warm and coolwater species. Hampshire Paper conducted fish surveys in May and August 2008, using gillnets, boat and backpack electrofishing, and seining. The most abundant species captured during the surveys were blacknose dace, yellow perch, lake chub, and pumpkinseed (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12655927).
- Although the resident species that occur above the project dam do not need to pass downstream to complete any life-history requirements, the presence of the downstream fish passage flume could increase recruitment of fish to suitable habitat areas downstream of the project.
- To enhance downstream fish passage the project maintains a downstream fish passage flume, which is located in the bypassed reach approximately 50 feet downstream of the existing spillway.
- Modifications to the downstream end of the bypass reach were conducted as part of fisheries mitigation as part of the project relicensing. The intent of the modifications is to improve survivorship of downstream-moving fish in an area where protruding bedrock may result in strike injuries.
- The Licensee maintains a minimum year-round flow of 20 cfs or inflow, whichever is less, to the bypassed reach. This flow is released through the downstream fish passage flume. This is consistent with sections 3.2 and 3.3 of the Settlement and Interior's recommendations #4 and #6 filed under section 10(j) of the FPA.
- A weir across the bypassed reach approximately 50 feet downstream from the existing spillway was constructed to increase the depth and area of the plunge pool. As well as, certain areas in the bypassed reach were excavated to facilitate downstream fish movements. This is consistent with sections 3.2 and 3.3 of the Settlement and Interior's recommendations #6 and #7 filed under section 10(j) of the FPA.
- According to the EA, the combination of reduced mortality and increased recruitment to downstream areas may improve fish communities in the project vicinity (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12655927).

3.12 DOWNSTREAM FISH PASSAGE STANDARDS: DOWNSTREAM ZOE

CRITERION	STANDARD	INSTRUCTIONS
D	1	Not Applicable / De Minimis Effect: • Explain why the facility does not impose a barrier to downstream fish passage in the designated zone, considering both physical obstruction and increased mortality relative to natural downstream movement (e.g., entrainment into hydropower turbines). • For riverine fish populations that are known to move downstream, explain why the facility does not contribute adversely to the sustainability of these populations or to their access to habitat necessary for successful completion of their life cycles. • Document available fish distribution data and the lack of migratory fish species in the vicinity. • If migratory fish species have been extirpated from the area, explain why the facility is or was not the cause of this.

- Please see answer to Impoundment and Bypass Reach ZOE above, which describes downstream fish passage measures for the project. There are no barriers to downstream fish passage in the Downstream ZOE.

3.13 SHORELINE AND WATERSHED PROTECTION STANDARDS: IMPOUNDMENT, BYPASSED REACH, & DOWNSTREAM ZOE

CRITERION	STANDARD	INSTRUCTIONS
E	2	Not Applicable / De Minimis Effect: • The facility is in compliance with all government agency recommendations in a license or certificate, such as an approved shoreline management plan or equivalent regarding protection, mitigation or enhancement of shoreline surrounding the project.

- The area surrounding the Impoundment, Bypass Reach, and Downstream ZOEs is forested, with the only development being in the immediate vicinity of the dam. Deciduous and mixed forests are the dominant habitat along the shores of the impoundment. Common tree species in these forests include American basswood (*Tilia americana*), American elm (*Ulmus americana*) black cherry (*Prunus serotina*), box elder (*Acer negundo*), eastern hemlock (*Tsuga canadensis*), sugar maple (*Acer saccharum*), and white pine (*Pinus strobus*). Common native shrub species found in the understory of the forest are common buttonbush (*Cephalanthus occidentalis*), American highbush cranberry (*Viburnum trilobum*), silky dogwood (*Cornus amomum*), staghorn sumac (*Rhus typhina*), and willows (*Salix spp.*). Common forbs in the project area include eastern poison ivy (*Toxicodendron radicans*), goldenrod (*Solidago spp.*), riverbank grape (*Vitis riparia*), sensitive fern (*Onoclea sensibilis),* and Virginia creeper (*Parthenocissus quinquefolia*) (https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12655927).

- Land cover units identified in the vicinity of the Project can be found in Table 2 as identified within the National Land Cover Database, 2011 (http://www.mrlc.gov/nlcd11_leg.php):

TABLE 2 PROJECT LAND COVER CLASSIFICATION

CLASS \ VALUE	CLASSIFICATION DESCRIPTION
11	Open Water- areas of open water, generally with less than 25% cover of vegetation or soil
21	Developed, Open Space- areas with a mixture of some constructed materials, but mostly vegetation in the form of lawn grasses. Impervious surfaces account for less than 20% of total cover. These areas most commonly include large-lot single-family housing units, parks, golf courses, and vegetation planted in developed settings for recreation, erosion control, or aesthetic purposes.
22	Developed, Low Intensity- areas with a mixture of constructed materials and vegetation. Impervious surfaces account for 20% to 49% percent of total cover. These areas most commonly include single-family housing units.
41	Deciduous Forest- areas dominated by trees generally greater than 5 meters tall, and greater than 20% of total vegetation cover. More than 75% of the tree species shed foliage simultaneously in response to seasonal change
42	Evergreen Forest- areas dominated by trees generally greater than 5 meters tall, and greater than 20% of total vegetation cover. More than 75% of the tree species maintain their leaves all year. Canopy is never without green foliage.
43	Mixed Forest- areas dominated by trees generally greater than 5 meters tall, and greater than 20% of total vegetation cover. Neither deciduous nor evergreen species are greater than 75% of total tree cover.
52	Shrub/Scrub- areas dominated by shrubs; less than 5 meters tall with shrub canopy typically greater than 20% of total vegetation. This class includes true shrubs, young trees in an early successional stage or trees stunted from environmental conditions.

- FERC's EA[4] indicates that the land around the project was previously cleared for farmland and is reverting back to forest. No special status or designated botanical or wildlife species were identified at the project. One small wetland area within the river was identified, which is not adversely affected by operations. No agencies made recommendations regarding shoreline resources and no shoreline management measures were recommended. The licensee did develop an invasive species management plan in consultation with NYSDEC.
- Article 406 of the FERC license governs the Licensee's authority to grant permissions for certain types of use and occupancy of lands within the project boundary, with prior approval from FERC.

[4] https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=12655157

3.14 THREATENED AND ENDANGERED SPECIES STANDARDS: IMPOUNDMENT ZOE

CRITERION	STANDARD	INSTRUCTIONS
F	1	Not Applicable/De Minimis Effect: • There are no listed species in the facility area or the downstream reach. • The facility was not responsible for extirpation of the listed species if they were previously there.

- Based on an official U.S. Fish and Wildlife Service Species List populated on July 17, 2017 (Appendix B), the federally threatened Northern long-eared bat (*Myotis septentrionalis*) may occur within the Project Vicinity, but has not been documented in the project area.
- According to the Environmental Assessment, the endangered Indiana Bat (*Myotis sodalis*) is the only Federally-listed species with the potential to occur in the project vicinity. The project is approximately 36 miles from known nesting areas. There are no designated critical habitats in the project area.
- A list of state of New York Listed species can be found at http://www.dec.ny.gov/animals/7494.html.
- Based on the License application (https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=12369572) the NYSDEC found that Fernald's sedge (*Carex merritt-fernaldii*) occurs within one mile of the Project Area. Fernald's sedge habitat is characterized by dry, open meadows, sandy hillsides, and borders of woods. It is often found in highly disturbed settings, such as gravel pits, sand mines, and roadsides. Continued project operations and the proposed in-river weir construction will not affect Fernald's sedge habitat. State-threatened bald eagles (*Haliaeetus leucocephalus*) could occur in the project area as transient individuals to feed at the impoundment. The proposed in-river weir construction may benefit the bald eagle by improving conditions for fishes, an important resource base for eagles.

  Three state-listed fish species are known to occur in the Oswegatchie River below the Emeryville Project. The state threatened lake sturgeon (*Acipenser fulvescens*) prefers clean, large rivers with sandy, gravely, or rocky bottoms and abundant food; foods include leeches, snails, clams, mussels, small fish, and some algae. The lake sturgeon is threatened in all states where it occurs. Over-fishing in the past reduced lake sturgeon numbers significantly. Dams and pollution continue to threaten lake sturgeon. Although dams keep sturgeon from reaching key upstream spawning grounds, there is a dam downstream of the Emeryville project, precluding upstream fish passage and historic use of the Oswegatchie River by the species is not well documented (see Section 3.9).

  The eastern sand darter (*Ammocrypta pellucida*) is a small fish that occurs in streams possessing a sandy bottom and abundant aquatic insects. The eastern sand darter is threatened in all states where it occurs. The NYSDEC has attributed eastern sand darter declines primarily to habitat loss and degradation. Siltation in streams with clean, sandy substrate has degraded habitat conditions for the sand darter. On streams and rivers with suitable habitat, dam construction may have led to sand darter population fragmentation. Additionally, impoundments associated with dams also create siltation problems. Stream

pollution and channelization have also caused losses is eastern sand darter habitat. The threatened mooneye (*Hiodon tergisus*) can be found in clear water habitats of large streams, rivers, and lakes. This medium-sized fish eats a wide variety of insects, crustaceans, small fish, and mollusks. Mooneye populations are decreasing in both numbers of individuals and population localities wherever they occur. Population declines are believed to be due in part to increased siltation occurring in clear water areas that would normally support habitat for mooneye. Competition with introduced species may also be a contributing factor.

The known populations of threatened lake sturgeon, eastern sand darter, and mooneye have been located in the Oswegatchie River downstream of the Emeryville Project. Continuing project operations and the proposed weir improvements along with the downstream passage will not affect known populations of state threatened fishes. Should project plans change, or if additional information on state listed species or their habitats becomes available, consultation with the NYSDEC will be renewed.

- The Licensee believes that NYSDEC's issuance of a water quality certificate (Appendix C) and the fact that NYSDEC and USFWS are both parties to the settlement agreement, that is sufficient to demonstrate that the agencies have concluded that the project will not adversely affect rare, threatened, or endangered species or critical habitats.
- As part of the settlement agreement of May 18, 2010, an Invasive Species Management Plan (ISMP) was developed in consultation with agencies to prevent the introduction and/or spread of invasive species. (https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=13021714).

3.15 CULTURAL AND HISTORIC RESOURCES STANDARDS: ALL ZOES

Criterion	*Standard*	*Instructions*
G	1	Not Applicable / De Minimis Effect: • Document that there are no cultural or historic resources located on facility lands that can be affected by construction or operations of the facility. • Document that the facility construction and operation have not in the past adversely affected any cultural or historic resources that are present on facility lands.

- KEI (USA) is aware of its consultation requirements under Article 404 of the 2012 Licensee and is in compliance with requirements related to cultural resources.
- Pursuant to section 106, and as the Commission's designated non-federal representative, Hampshire Paper consulted with the State Historic Preservation Office (SHPO) and affected Indian tribes to locate, determine National Register eligibility, and assess potential adverse effects to historic properties associated with the project.
- The construction permit issued by the U.S. Army Corps of Engineers Buffalo District in 1984 stated that no registered historic properties or properties listed as being eligible for inclusion in the National Register would be affected by renovations to the project. Renovations were performed in 1987. Further, in a letter dated February 7, 2007 (see Attachment E), the SHPO concluded that the project would have "no effect" upon properties in or eligible for inclusion in the National Register.
- KEI (USA) does not propose any specific protection, mitigation, or enhancement measures for cultural resources at the project.

3.16 RECREATIONAL RESOURCES STANDARDS: IMPOUNDMENT ZOE

CRITERION	STANDARD	INSTRUCTIONS
H	2	Agency Recommendation: • Document any comprehensive resource agency recommendations and enforceable recreation plan that is in place for recreational access or accommodations. • Document that the facility is in compliance with all such recommendations and plans.

- In accordance with Article 401, Condition 12 and with section 3.5 of the Settlement, the License submitted a Recreation Management Plan in accordance with section 3.5 of the Settlement. Article 401 and Condition 13 requires the licensee to submit an Invasive Species Management Plan in accordance with section 2.9 of the Settlement.
- Invasive Species Management Plan and Recreation Management Plan were submitted on March 8, 2010 (https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=12292689).
- Section 3.5 of the Settlement required Licensee to prepare a Recreation Management Plan describing its responsibilities for maintaining the existing project recreational facilities, however, the water quality certification issued by New York DEC includes a condition requiring Licensee to develop a Recreation Management Plan in consultation with New York DEC. Because New York DEC's review could result in changes to the Recreation Management Plan filed on March 8, 2010, Article 401 of this license requires Licensee to file a Recreation Management Plan for Commission approval within 6 months of the effective date of the 2012 license. The Plans were resubmitted on June 26, 2012 (https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=13021714).
- The recreation facilities and structures include warning signs, boat restraining barrier, boat/ canoe ramp, security fencing and gate, portage trail, and portage sign in the Impoundment ZOE.
- For security purposes, the gravel boat impoundment access ramp is secured by a chain link fence with two 5-foot-wide gates which are locked from approximately November 30 to April 1. The gates are locked to prevent snowmobiles, ATV's, vehicles from driving onto the ice at this location. People can still walk out to the impoundment while the gates are locked.
- The canoe portage can be made around the end of the security fencing and therefore does not require plant operator assistance. Canoe portage signs have been placed along the length of the portage path to assist canoeists.
- As part of the FERC re-licensing effort a recreational usage survey was performed at the site in 2002 and 2014 Form 80 (2002) (https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=10442824) Form 80 (2014) (https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=13779881).
- The Invasive Species Management Plan includes measures to prevent the introduction and spread of invasive plant species, and monitoring and reporting requirements. This includes signs indicating that boats, trailers, waders and other fishing and boating equipment must be properly cleaned, dried or disinfected after use. Additionally, the upstream small boat launch area provides an invasive species disposal station.

3.17 RECREATIONAL RESOURCES STANDARDS: BYPASSED REACH ZOE

CRITERION	STANDARD	INSTRUCTIONS
H	2	Agency Recommendation: • Document any comprehensive resource agency recommendations and enforceable recreation plan that is in place for recreational access or accommodations. • Document that the facility is in compliance with all such recommendations and plans.

- In accordance with Article 401, Condition 12 and with section 3.5 of the Settlement, the License submitted a Recreation Management Plan in accordance with section 3.5 of the Settlement. Article 401 and Condition 13 requires the licensee to submit an Invasive Species Management Plan in accordance with section 2.9 of the Settlement.
- Invasive Species Management Plan and Recreation Management Plan were submitted on March 8, 2010 (https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=12292689).
- Section 3.5 of the Settlement required Licensee to prepare a Recreation Management Plan describing its responsibilities for maintaining the existing project recreational facilities, however, the water quality certification issued by New York DEC includes a condition requiring Licensee to develop a Recreation Management Plan in consultation with New York DEC. Because New York DEC's review could result in changes to the Recreation Management Plan filed on March 8, 2010, Article 401 of this license requires Licensee to file a Recreation Management Plan for Commission approval within 6 months of the effective date of the 2012 license. The Plans were resubmitted on June 26, 2012 (https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=13021714).
- The recreation facilities and structures include warning signs and parking areas (2) in the Bypassed Reach ZOE.
- Parking areas adjacent to the power plant headworks is provided for the small car top boat launch. This launch provides access to the impoundment. This facility also serves as the upstream terminus of the canoe portage. An additional parking area is located adjacent to the Emeryville Road near the Field Office.
- As part of the FERC re-licensing effort a recreational usage survey was performed at the site in 2002 and 2014 Form 80 (2002) (https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=10442824) Form 80 (2014) (https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=13779881).
- The Invasive Species Management Plan includes measures to prevent the introduction and spread of invasive plant species, and monitoring and reporting requirements. This includes signs indicating that boats, trailers, waders and other fishing and boating equipment must be properly cleaned, dried or disinfected after use. Additionally, the upstream small boat launch area provides an invasive species disposal station.

3.18 RECREATIONAL RESOURCES STANDARDS: DOWNSTREAM ZOE

CRITERION	STANDARD	INSTRUCTIONS
H	2	Agency Recommendation: • Document any comprehensive resource agency recommendations and enforceable recreation plan that is in place for recreational access or accommodations. • Document that the facility is in compliance with all such recommendations and plans.

- In accordance with Article 401, Condition 12 and with section 3.5 of the Settlement, the License submitted a Recreation Management Plan in accordance with section 3.5 of the Settlement. Article 401 and Condition 13 requires the licensee to submit an Invasive Species Management Plan in accordance with section 2.9 of the Settlement.
- Invasive Species Management Plan and Recreation Management Plan were submitted on March 8, 2010 (https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=12292689).
- Section 3.5 of the Settlement required Licensee to prepare a Recreation Management Plan describing its responsibilities for maintaining the existing project recreational facilities, however, the water quality certification issued by New York DEC includes a condition requiring Licensee to develop a Recreation Management Plan in consultation with New York DEC. Because New York DEC's review could result in changes to the Recreation Management Plan filed on March 8, 2010, Article 401 of this license requires Licensee to file a Recreation Management Plan for Commission approval within 6 months of the effective date of the 2012 license. The Plans were resubmitted on June 26, 2012 (https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=13021714).
- The recreation facilities and structures include warning signs, boat/ canoe ramp, portage trail, and portage sign, and picnic tables in the Downstream ZOE.
- Picnic tables have been made available at the lower portion of the facility for canoeists to "take a break" at.
- As part of the FERC re-licensing effort a recreational usage survey was performed at the site in 2002 and 2014 Form 80 (2002) (https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=10442824) Form 80 (2014) (https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=13779881).
- The Invasive Species Management Plan includes measures to prevent the introduction and spread of invasive plant species, and monitoring and reporting requirements. This includes signs indicating that boats, trailers, waders and other fishing and boating equipment must be properly cleaned, dried or disinfected after use. Additionally, the upstream small boat launch area provides an invasive species disposal station.

4.0 CONTACTS FORMS

1. **All applications for LIHI Certification must include complete contact information to be reviewed.**

Project Owner:	
Name and Title	Lewis C. Loon, General Manager
Company	KEI (USA) Power Management Inc.
Phone	207-203-3027
Email Address	Lewis.Loon@kruger.com
Mailing Address	423 Brunswick Avenue, Gardiner Maine 04345
Consulting Firm / Agent for LIHI Program (if different from above):	
Name and Title	Andy Qua and Kayla Easler
Company	Kleinschmidt Associates
Phone	207-487-3328
Email Address	Andrew.Qua@KleinschmidtGroup.com, Kayla.Easler@KleinschmidtGroup.com
Mailing Address	P.O. Box 650, Pittsfield, Maine 04967
Compliance Contact (responsible for LIHI Program requirements):	
Name and Title	Sherri Loon, Coordinator Operations
Company	KEI (USA) Power Management Inc.
Phone	207-203-3026
Email Address	Sherri.Loon@kruger.com
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Party responsible for accounts payable:	
Name and Title	Nicole Burgess
Company	KEI (USA) Power Management Inc.
Phone	207-203-3030
Email Address	Nicole.Burgess@kruger.com
Mailing Address	423 Brunswick Avenue, Gardiner, ME 04345

2. **Applicant must identify the most current and relevant state, federal, provincial, and tribal resource agency contacts (copy and repeat the following table as needed).**

Agency Contact (Check area of responsibility: Flows_**X**_, Water Quality _**X**_, Fish/Wildlife Resources __, Watersheds _**X**_, T/E Spp. __, Cultural/Historic Resources __, Recreation _**X**_):	
Agency Name	
Name and Title	
Phone	
Email address	
Mailing Address	
Agency Contact (Check area of responsibility: Flows_**X**_, Water Quality _**X**_, Fish/Wildlife Resources __, Watersheds _**X**_, T/E Spp. __, Cultural/Historic Resources __, Recreation _**X**_):	
Agency Name	
Name and Title	
Phone	
Email address	
Mailing Address	

Agency Contact (Check area of responsibility: Flows__, Water Quality __, Fish/Wildlife Resources __, Watersheds __, T/E Spp. __, Cultural/Historic Resources _**X**_, Recreation __):	
Agency Name	
Name and Title	
Phone	
Email address	
Mailing Address	

Agency Contact (Check area of responsibility: Flows__, Water Quality __, Fish/Wildlife Resources _**X**_, Watersheds __, T/E Spp. _**X**_, Cultural/Historic Resources __, Recreation __):	
Agency Name	
Name and Title	
Phone	
Email address	
Mailing Address	

Agency Contact (Check area of responsibility: Flows__, Water Quality __, Fish/Wildlife Resources _**X**_, Watersheds __, T/E Spp. _**X**_, Cultural/Historic Resources __, Recreation __):	
Agency Name	
Name and Title	
Phone	
Email address	
Mailing Address	

Agency Contact (Check area of responsibility: Flows__, Water Quality __, Fish/Wildlife Resources _**X**_, Watersheds __, T/E Spp. _**X**_, Cultural/Historic Resources __, Recreation __):	
Agency Name	
Name and Title	
Phone	
Email address	
Mailing Address	

Agency Contact (Check area of responsibility: Flows__, Water Quality __, Fish/Wildlife Resources _**X**_, Watersheds __, T/E Spp. _**X**_, Cultural/Historic Resources __, Recreation __):	
Agency Name	
Name and Title	
Phone	
Email address	
Mailing Address	

B.3 Sworn Statement and Waiver Form

All applications for LIHI Certification must include the following sworn statement before they can be reviewed by LIHI:

SWORN STATEMENT

As an Authorized Representative of KÉ Emeryville LLC, the Undersigned attests that the material presented in the application is true and complete.

The Undersigned acknowledges that the primary goal of the Low Impact Hydropower Institute's Certification Program is public benefit, and that the LIHI Governing Board and its agents are not responsible for financial or other private consequences of its certification decisions.

The undersigned further acknowledges that if certification of the applying facility is issued, the LIHI Certification Mark License Agreement must be executed prior to marketing the electricity product as LIHI Certified.

The undersigned Applicant further agrees to hold the Low Impact Hydropower Institute, the Governing Board and its agents harmless for any decision rendered on this or other applications, from any consequences of disclosing or publishing any submitted certification application materials to the public, or on any other action pursuant to the Low Impact Hydropower Institute's Certification Program.

PLEASE INSERT FOR PRE-OPERATIONAL CERTIFICATIONS:

For applications for pre-operational certification of a "new" facility (see Section 4.5.3), the applicant must also acknowledge that the Institute may suspend or revoke the certification should the impacts of the project, once operational, fail to comply with the certification criteria.

Company Name: KÉ Emeryville LLC

Authorized Representative Name: Pierre Janelle

Title: Vice President, Operations & Asset Management

Signature: [signature]

Date: February 20, 2018.

6.0 REFERENCES

USFWS (U.S. Fish and Wildlife Service). 2017. National Wetlands Inventory. https://www.fws.gov/wetlands/Data/Mapper.html. Accessed July 17, 2017.

APPENDIX A

PROJECT ZOE, DRAWINGS, AND PHOTOS

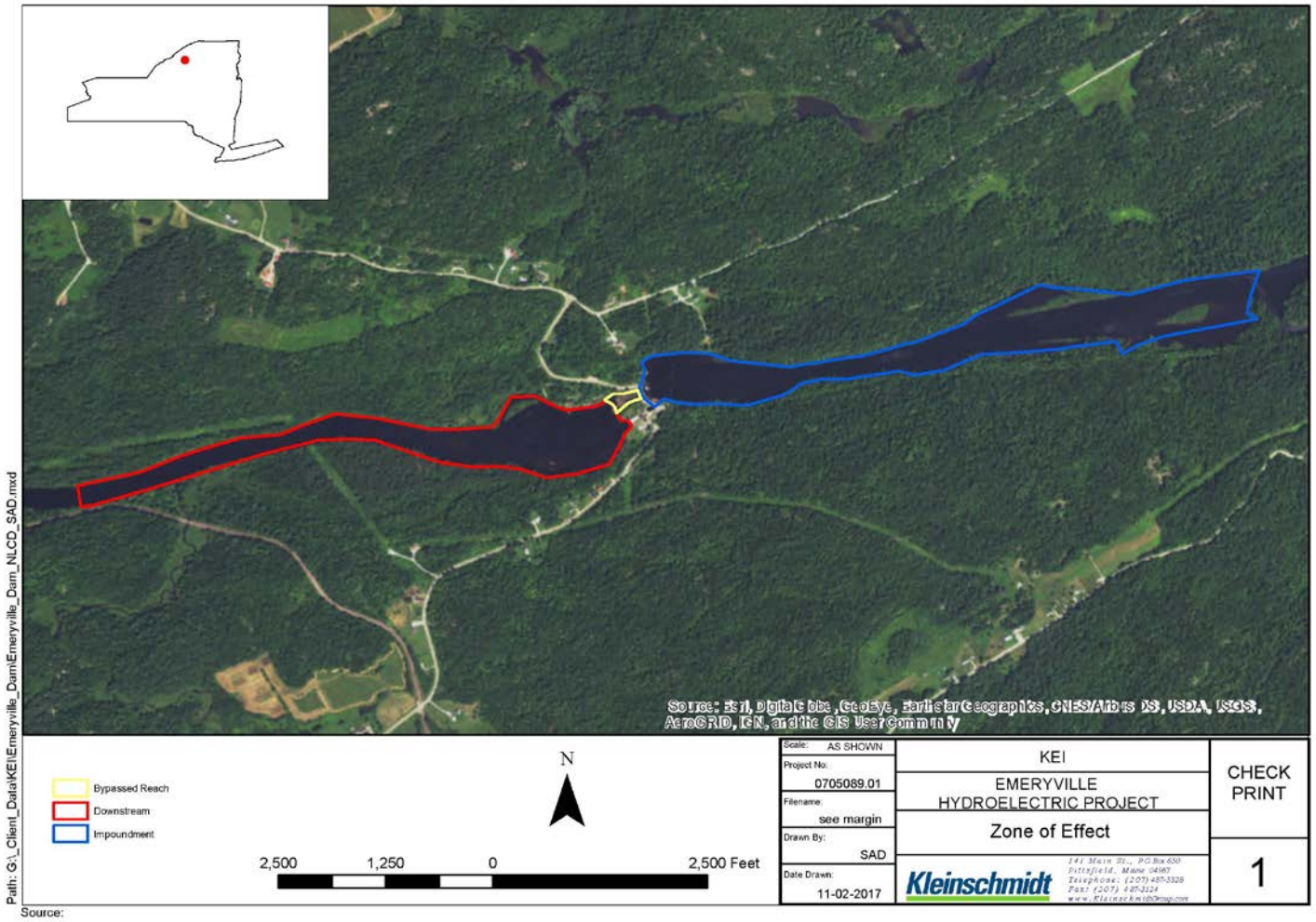


FIGURE 4 ZONE OF EFFECT

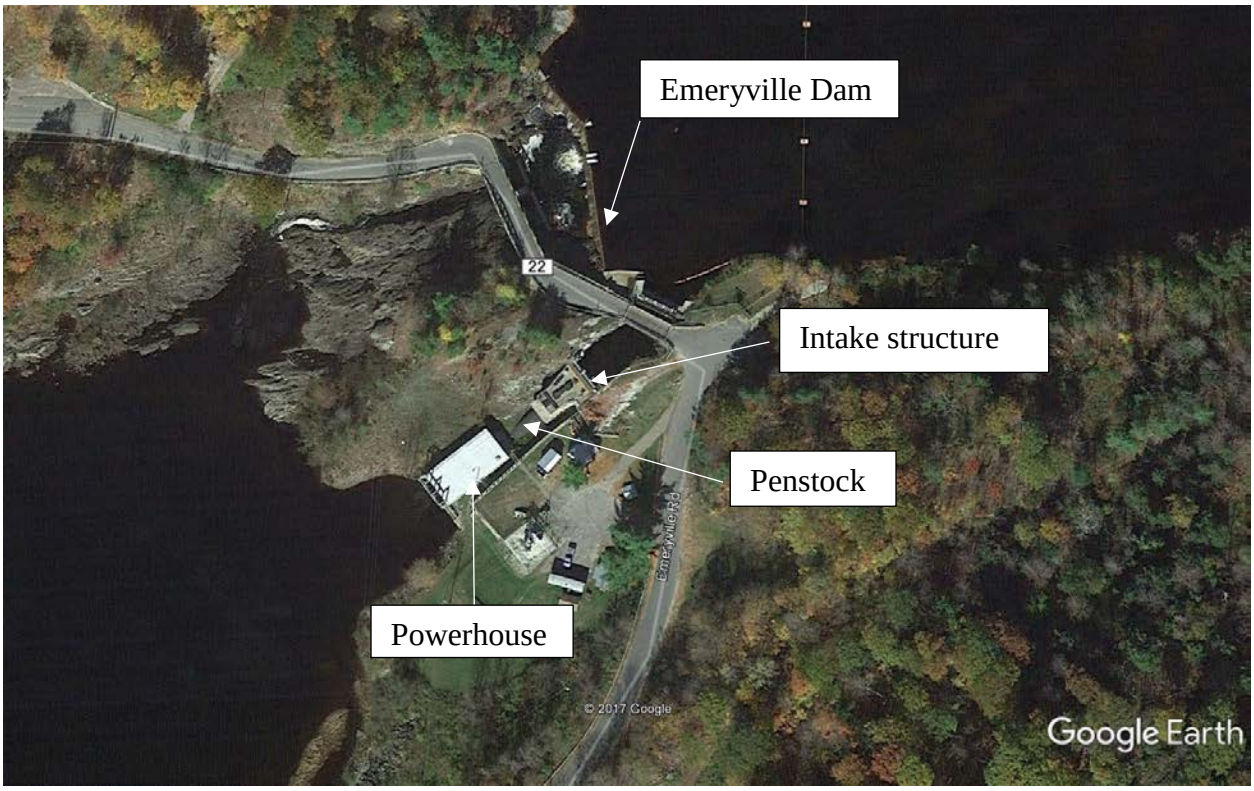


PHOTO 1 OVERVIEW OF EMERYVILLE PROJECT

PHOTO 2 EMERYVILLE PROJECT LOOKING DOWNSTREAM

PHOTO 3 EMERYVILLE PROJECT LOOKING UPSTREAM

PHOTO 4 VIEW OF PENSTOCK AND POWERHOUSE

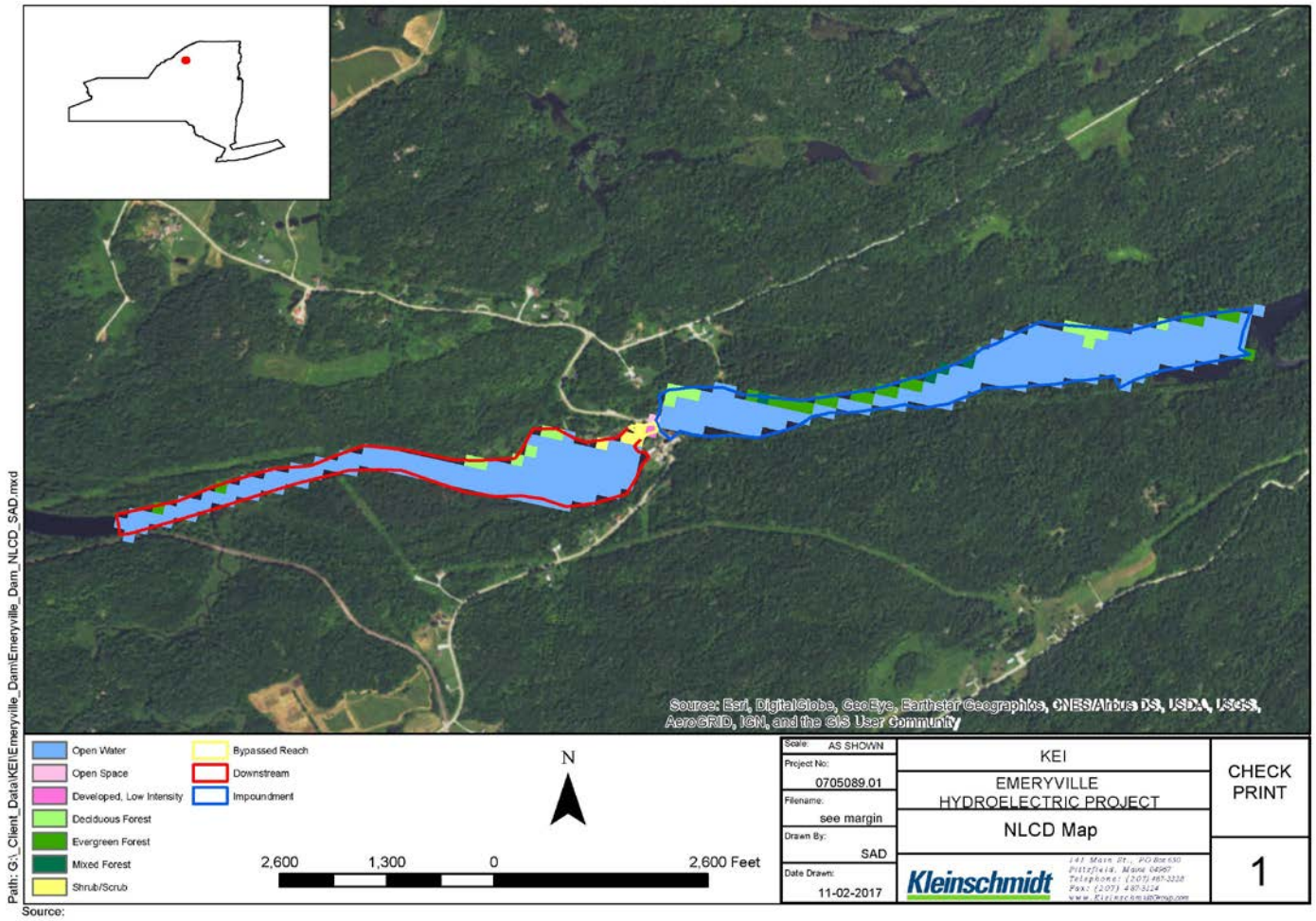


FIGURE 5 NLCD MAP

APPENDIX B

FACILITY AREA RIVER BASIN

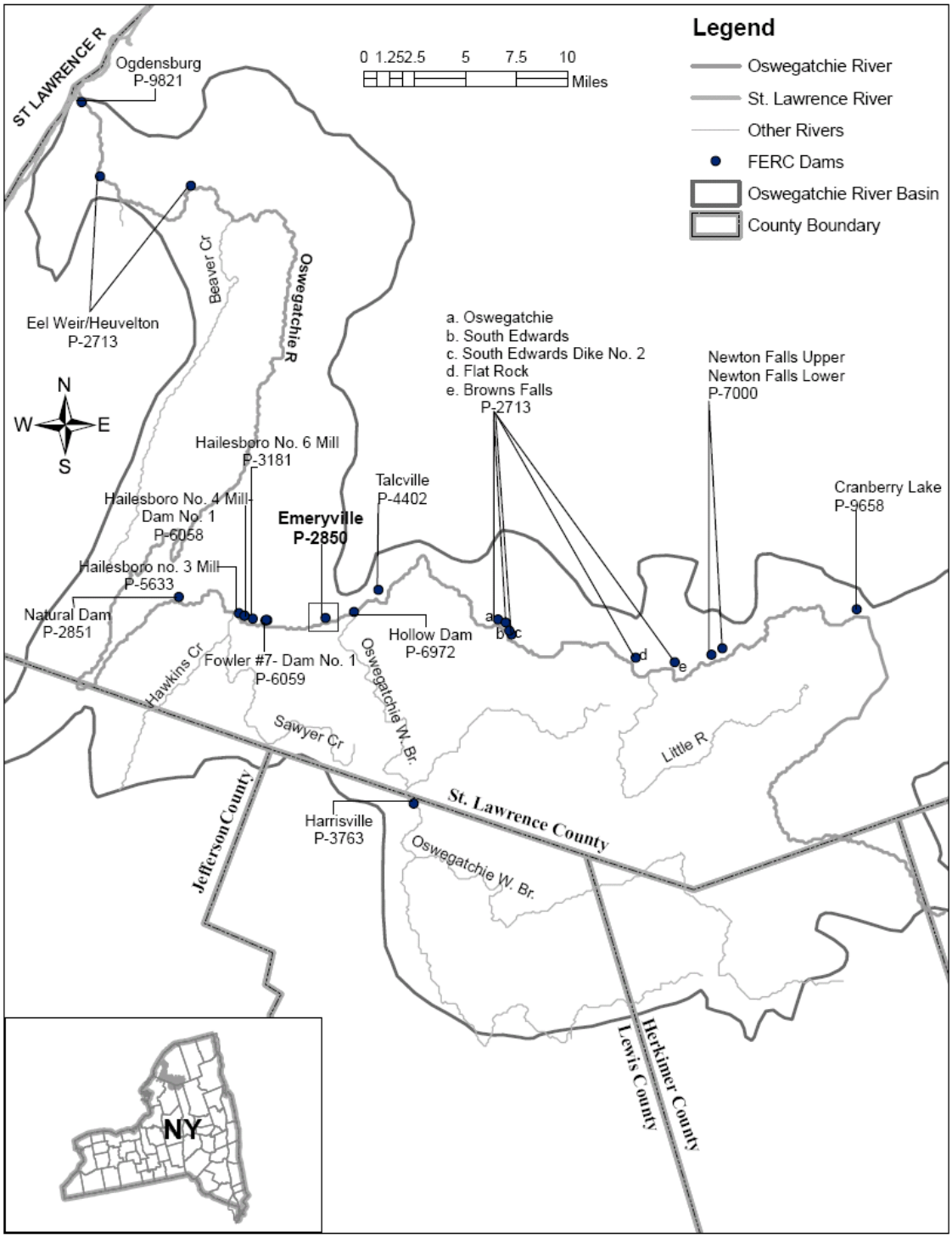


FIGURE 6 OSWEGATCHIE RIVER BASIN

APPENDIX C

WATER QUALITY

New York State Department of Environmental Conservation
Division of Environmental Permits
Dulles State Office Building
317 Washington Street, Watertown, New York 13601-3787
Phone: (315) 785-2245 • **Fax:** (315) 785-2242
Website: www.dec.ny.gov

Joe Martens
Commissioner

ORIGINAL

June 2, 2011

Michael McDonald
Hampshire Paper Company, Inc.
PO Box 339
Gouverneur, NY 13642

RE: 401 Water Quality Certification
Emeryville Hydroelectric Facility
DEC I.D. # 6-4038-00078/00001
FERC #2850

Dear Mr. McDonald:

Enclosed please find the Water Quality Certification for the Emeryville Hydroelectric Facility. The certificate is being issued pursuant to Section 401 of the Federal Water Pollution Control Act (33 USC 1341) and Section 608.9 of the New York Department of Environmental Conservation's regulations pertaining to the Use and Protection of Waters (6 NYCRR, Part 608).

Should you have any questions regarding the Water Quality Certificate, please contact me.

Sincerely,

Lawrence R. Ambeau
Regional Permit Administrator
Region 6

LRA:dli

Enclosure

cc: Kimberly D. Bose, Secretary
Service List

ec: Dana Dougherty, Stantec Consulting
William Little, DEC

Facility DEC ID 6-4038-00078/00001

PERMIT
Under the Environmental Conservation Law (ECL)

Certificate Holder and Facility Information

Permit Issued To:
HAMPSHIRE PAPER COMPANY
1827 COUNTY ROUTE 22
GOUVERNEUR, NY 13642
(315) 287-1990

Facility:
EMERYVILLE HYDROELECTRIC PROJECT
OSWEGATCHIE RIVER
EMERYVILLE, COUNTY RT. 22

Facility Location: Town of FOWLER in ST. LAWRENCE County

Facility Principal Reference Point: NYTM-E: 470.818 NYTM-N: 4904.963

Project Location: Located 5 miles east of the Village of Gouverneur on County Route 22 (Emeryville Rd.) in the hamlet of Emeryville, (Town of Fowler, St. Lawrence County) at approximately river mile 70 on the Oswegatchie River.

Authorized Activity: Operation and maintenance of the Emeryville Hydroelectric facility (FERC No. 2850), a 3,500 kW hydroelectric facility in accordance with the attached conditions and the applicable provisions, of the Emeryville Hydroelectric Offer of Settlement, dated March 2010.

Permit Authorizations

Water Quality Certification - Under Section 401 - Clean Water Act

Permit ID 6-4038-00078/00001 (FERC 2850)

New Permit Effective Date: 6/2/11 Expiration Date: coincident with expiration date of the License issued by the Federal Energy Regulatory Commission (FERC) for FERC project #2850

NYSDEC Approval

By acceptance of this permit, the Certificate Holder agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, all conditions included as part of this certificate, and the provisions of the Emeryville Hydroelectric Project Offer of Settlement (Settlement) dated March 2010. This Certificate and the conditions herein are based upon those documents and the application for a water quality certification submitted on June 2, 2010, including supporting attachments, reports, appendices, and studies filed by the applicant with the Department to obtain this Certificate.

Facility DEC ID 6-4038-00078/00001

Permit Administrator: New York State Department of Environmental Conservation
Regional Permit Administrator
Address: 317 Washington St.
Watertown, NY 13601

Authorized Signature: Laurence R Rambam Date: 6/2/2011

Distribution List

Settlement parties

Permit Components

NATURAL RESOURCE PERMIT CONDITIONS

WATER QUALITY CERTIFICATION SPECIFIC CONDITIONS

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER Certificate Holder OBLIGATIONS

Permit Attachments

NATURAL RESOURCE PERMIT CONDITIONS - Apply to the Following Permits: WATER QUALITY CERTIFICATION

1. Conformance with Plans All activities authorized by this permit shall be in strict conformance with the approved plans submitted by the applicant or his agent as part of the permit application and licensing Settlement.

2. State Not Liable for Damage The State of New York shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the State for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.

3. Precautions Against Contamination of Waters All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.

4. No Interference with Navigation There shall be no unreasonable interference with navigation by the work herein authorized.

5. State May Require Site Restoration If any work authorized by this certificate has not been completed, the applicant shall, without expense to the State, and to such extent and in such time and manner as the New York State Department of Environmental Conservation (the Department) may with appropriate authority require, remove all or any portion of the uncompleted structure or fill and restore the site to its former condition. No claim shall be made against the State of New York on account of any such removal or alteration.

6. Notification Requirements for Emergencies Except for the emergency provisions described in the Settlement (see subsections 3.2.3, and 3.3.2.2), the following procedures shall apply to all activities conducted at the project in response to an emergency:

Prior to commencement of emergency activities, Certificate Holder shall notify the Department and receive approval in advance of the work commencing. If circumstances require that emergency activities be taken immediately such that prior notice to the Department is not possible, then the Department shall be notified by the Certificate Holder within 24 hours of commencement of the emergency activities. In either case, notification shall be by certified mail or other written form of communication, including fax and electronic mail. This notification shall be followed within 24 hours by submission of the following information:

a. a description of the action;
b. location map and plan of the proposed action;
c. reasons why the situation is an emergency.

All notifications, requests for emergency authorizations and information submitted to support such requests shall be sent to the contacts listed in Special Condition 25.

7. Offer of Settlement This Certificate includes and incorporates the Emeryville Hydroelectric Project's Offer of Settlement ("Settlement") dated March 2010, to the extent that the Settlement provides for or requires the certificate holder's compliance with New York State water quality standards and the conditions of this certificate.

OPERATING CONDITIONS

8. Project Operations and Impoundment Fluctuations Project reservoir shall be operated in a run-of-river mode in accordance with the Settlement (see Section 3.1). Prior to being implemented, all alternate impoundment operation plans (including, but not limited to impoundment drawdown, refilling rates and procedures) shall be reviewed and approved by the Department in writing. Emergencies shall be dealt with in accordance with Natural Resource Permit Condition #6 of this Certificate.

9. Bypassed Flows The certificate holder shall maintain a bypassed flow of 20 cubic feet per second (or inflow to the Emeryville impoundment, whichever is less) in accordance with the Settlement (see Section 3.2). The Certificate Holder will consult with and obtain the written approval of the Department prior to conducting any routine maintenance or construction activities that cause the bypass flow to be suspended or modified. Emergencies shall be addressed pursuant to Natural Resource Permit Condition

#6 of this Certificate.

10. Flow and Water Level Monitoring Section 3.4 of the Settlement requires that the certificate holder agrees to install, within 18 months of issuance of the FERC license, bypass flow monitoring gages/monuments. Section 3.4 requirements are incorporated as a condition of this certificate. Prior to and as a condition for installation, the certificate holder shall develop and submit to the Department an approvable stream flow and water level monitoring plan. Upon receiving the Department's written approval of that plan the certificate holder shall install, maintain and operate all water level and flow monitoring equipment consistent with the Settlement and this Certificate.

11. Fish Protection and Downstream Fish Movement Within 18 months of license issuance and acceptance, the certificate holder shall install fish protection measures (e.g. 1" clear spaced trashracks), downstream fish passage facilities, and appropriate channel excavation (modifications) to facilitate downstream fish passage in accordance with the Settlement (see Sections 3.2 and 3.3). At least 6 months prior to commencing installation of the downstream fish passage structures and performing bypassed reach channel modifications, the licensee shall submit for the Department's approval a construction plan that includes an erosion and sediment control plan consistent with **Conditions #20 and #21** of this water quality certificate. The certificate holder shall obtain the Department's written approval of the construction plan before commencing work.

12. Public Access and Recreation Public access and recreational opportunities shall be provided in conformance with the **Settlement,** (see Section 3.5). The Licensee shall draft a Recreation Management Plan (RMP) that is consistent with the Settlement and submit it to the Department for its review and approval. Once the RMP is approved by the Department, it will become part of this certificate.

13. Invasive Species Management In conformance with the Settlement (see Section 2.9), the Certificate Holder shall submit an Invasive Species Management Plan (ISMP) to the Department for review and approval. The ISMP shall include provisions to prevent the introduction and spread both aquatic and terrestrial invasive species that may be introduced as a result of activities authorized under the operation, maintenance and construction of the project and include monitoring and reporting provisions. Once the ISMP has been accepted by the Department it shall be incorporated into this certificate.

PROJECT MAINTENANCE AND CONSTRUCTION

14. NOTE: All matters pertaining to "Project Maintenance and Construction" work affecting water quality, compliance with water quality standards, and this certificate shall be addressed to:

Regional Natural Resources Supervisor
New York State Department of Environmental Conservation
317 Washington Street
Watertown, NY 13601

15. In-Water Work Restriction In-water maintenance activities (including but not limited to dredging, cofferdam construction or removal, etc.) involving the potential disturbance of the bed and/or banks of the Oswegatchie River, **shall not** occur from **March 15 to July 15,** in order to minimize impacts to fish spawning activities.

16. Impoundment Drawdowns/dewatering activities Impoundment drawdowns (the operation of drawing down the impoundment) for maintenance or construction purposes shall be allowed between July 16 to September 30. Impoundment drawdowns **shall not** occur from **October 1 to July 15**, to protect hibernating amphibians and reptiles and to protect fish spawning activities in the impoundment. However impoundment drawdowns may be allowed for flashboard installation or dam safety inspections during the October 1 to July 15 period, provided the certificate holder consults with and receives the Department's written approval to commence with a drawdown within this restricted timeframe. Consultation shall include, but not be limited to, establishing acceptable timing of drawdown and refilling rates.

Prior to **any** drawdown or dewatering activities, the certificate holder shall provide the Department with a written proposal including engineering and design details (if applicable) for the Department's review. Impoundment drawdowns or dewatering activities shall not commence until the certificate holder consults with and receive the Department's written approval regarding timing of drawdown and refilling rates as well as acceptance of any submitted designs. The certificate holder shall also provide proper prior notification to the Department as per **Condition #25** before any work commences.

Drawdown elevations for routine spillway maintenance activities shall be consistent with provisions identified in Section 3.1 and Table 3.1 of the Settlement. Emergencies shall be addressed pursuant to Natural Resource Permit Condition #6 of this Certificate.

Impoundment drawdown and refilling operations shall occur at a gradual rate (pursuant to the foresaid consultation and approval) in order not to strand aquatic species. The certificate holder shall monitor areas affected by the drawdown, refilling operations or dewatering activities and return any stranded fish back to adequate water conditions.

17. Maintenance Dredging The certificate holder shall install and maintain appropriate turbidity control structures while conducting any maintenance dredging activities in associated with the Project. Refer to **Condition #15** for in-water work restrictions.

Appropriate turbidity control structures (such as, but not limited to filter fabric (turbidity) curtains weighted across the bottom and suspended at the top by floats) shall be positioned to enclose the work site before commencing dredging. The containment method shall remain in place and in functional condition during all phases of dredging operations and remain in place until after dredging has terminated and turbidity inside the containment area no longer exceeds ambient levels. During any portion of the dredging operation or prior to containment removal, if noticeable turbidity occurs outside the containment area, work shall cease until the containment method is repaired or reinforced and is functioning properly.

18. Sediment Analysis and Disposal The certificate holder shall sample any sediment which will be disturbed by the work or removed from the project's waters and test them for contaminants. Sampling and testing shall be accomplished according to a protocol that is consistent with the Department's Technical and Operations Guidance 5.1.9 or applicable guidelines/regulations. The sampling protocol shall include a disposal protocol based on analytical sediment sampling results and current applicable regulations/guidelines. The sampling results are required to be submitted to the Department at least 60 days prior to the commencement of dredging or work that will disturb sediment in the project waters. Dredging or other excavation cannot commence until the certificate holder also secures the Department's

approval for the disposal or interim holding locations for any sediments to be removed from the project waters.

19. Placement of cofferdams, construction of temporary access roads or ramps, or other temporary structures which encroach upon the bed or banks of the Oswegatchie River or project reservoir At least 60 days prior commencing work on the installation of cofferdam or other temporary structures which encroaches on the bed or banks of the Oswegatchie River, the Certificate holder shall submit NY State certified engineered designs to the Department for review. The certificate holder shall not commence work until the Department grants written approval of the proposed design of all such structures as they pertain to water quality, and to compliance with water quality standards and this certificate . The Department will conduct its review of the proposed design within 60 days after receipt of all materials it determines are necessary for completing such review.

20. Erosion and Sediment Control Plan At least 60 days prior to commencing any major construction or maintenance activities within the project boundary which could adversely affect water quality, the certificate holder shall submit to the Department for review and approval, an erosion and sediment control plan (the Plan). The Plan and work proposed therein shall meet the erosion and sediment control goals and performance standards set forth in **Condition #21**. Work shall not commence until the certificate holder receives the Department's written approval of the Plan.

21. Erosion and Sediment Control Goals and Performance Standards At a minimum, the certificate holder shall ensure that the following erosion and sediment/contaminant control measures, are adhered to during operation, construction and/or maintenance that may result in sediments/contaminants entering any wetland or waterbody:

a) All erosion and sediment controls measures shall be properly installed prior to work. Site preparation work shall not be undertaken until all required erosion control measures have been installed and are functioning properly. Siltation prevention measures (e.g. silt fencing, sediment traps or settling basins) shall be installed and maintained during the project to prevent movement of silt and turbid waters from the project site and into any watercourse, stream, water body or wetland.

b) Install effective erosion control measures on the downslope of all disturbed areas (including, but not limited to construction/maintenance equipment staging areas, driveways, roads ramps or other areas where runoff would reach a waterbody) to prevent eroded material from entering any waterbody or wetland. Erosion control measures shall be maintained in fully functional condition until the disturbed areas are fully stabilized. These erosion control measures are to be installed before commencing any other activities involving soil disturbance, equipment staging or major construction/maintenance activities commence.

c) Isolate in-stream work from the flow of water and prevent discolored (turbid) discharges and sedimentation caused by excavation, dewatering and construction/maintenance activities from entering any waterbody or wetland.

d) Exclude the use of heavy construction equipment below the mean high water line until the work area is protected by an approved structure and dewatered.

e) Stabilize any disturbed banks by grading to an appropriate slope, followed by armoring or vegetating as appropriate, to prevent erosion and sedimentation into any waterbody or wetland.

f) Minimize soil disturbance, provide appropriate grading and temporary and permanent re-vegetation of stockpiles and other disturbed areas to minimize erosion/sedimentation potential.

g) All areas of soil disturbance resulting from project operation, construction or maintenance shall be seeded with an appropriate perennial grass, and mulched with straw immediately upon completion of the activity. Mulch shall be maintained until suitable vegetation cover is established to the Department's satisfaction.

h) Protect all waters from contamination by deleterious materials such as wet concrete, gasoline, solvents, epoxy resins or other materials used in the construction, maintenance and operation of the project.

i) Ensure the immediate and complete removal of all dredged and excavated material, debris or excess materials from operation, construction, or maintenance from the bed and banks of all water areas to a Department approved upland disposal site.

j) Ensure that all temporary fill and other materials placed in the waters of the river are completely removed, immediately upon completion of construction, unless otherwise directed by the Department.

22. Turbidity Monitoring During maintenance or construction related activities in or near the Oswegatchie River or project reservoir, the certificate holder will monitor the waters of the river at a point immediately upstream of project activities and at a second point no more than 100 feet downstream from any discharge point or other potential source of turbidity. The certificate holder specifically agrees that if, at any time, turbidity measurements from the downstream locations exceed the measurements from the locations upstream of the work areas, all related construction on the project will cease until the source of the turbidity is discovered and the situation is corrected. The certificate holder is required to report any events where turbidity measurements for the downstream locations exceed the measurements from the upstream locations to the Department's Region 6 Natural Resources contact person (as specified in **Condition #25**), within 24 hours of the incident.

23. Maintenance of River Flows During all periods of maintenance and construction activities, the certificate holder shall continuously maintain adequate flows immediately downstream of the work site consistent with the provisions of this certificate. If adequate river flows are not maintained, the certificate holder is required to notify the Department's Region 6 office in Watertown, within 24 hours of the incident.

24. Stormwater SPDES All activities at the project requiring the disturbance of greater than one acre shall obtain coverage under the SPDES General Permit for Stormwater Discharges from Construction Activities (GP-02-01).

25. Notifications and Department Authorizations The Regional Natural Resources Supervisor, or other appointed Natural Resources staff shall be notified in writing at least 60 days prior to commencing any project maintenance or construction work pertaining to water quality, compliance with water quality

standards or to this certificate. Additionally, the certificate holder shall contact the assigned Region 6 Natural Resources staff within 7 days prior to the activity commencing (including but not limited to all drawdowns, flashboard replacements requiring drawdowns or disruptions of flows, and all construction or maintenance activities pertaining to water quality, compliance with water quality standards or this certificate) and within 7 days after it is finished (start notification/end notification). The Department will provide the certificate holder with the Region 6 Natural Resources contact information.

The Department reserves the authority to temporarily prohibit the project operator from commencing impoundment releases or drawdowns, or conducting in-water maintenance work (including dredging) due to the Department's determination that such actions will cause the project or facility to be out of compliance with applicable water quality standards or the Water Quality Certificate issued for the hydropower license. The project operator shall contact the Department Natural Resources staff contact person as soon as the project operator finds that water quality conditions permit the release, drawdown or in-water work to be conducted without being out of compliance with water quality standards or the Water Quality Certificate. The Department Natural Resources staff person will then advise the project operator if conditions permit commencing releases or drawdowns.

WATER QUALITY CERTIFICATION SPECIFIC CONDITIONS

1. Water Quality Certification The New York State Department of Environmental Conservation ("Department" or "NYS DEC") hereby certifies:

- the Department has reviewed the certificate holder's Application for Federal Hydroelectric License (hereafter referred to as "the Application") and all other available pertinent information, including the **Settlement**;
- the project will comply with Sections 301, 302, 303, 306 and 307 of the Federal Water Pollution Control Act as amended and as implemented by the limitations, standards and criteria of the state statutory and regulatory requirements set forth in 6NYCRR Section 608.9(a); and
- the project will comply with applicable New York State effluent limitations, water quality standards and thermal discharge criteria set forth in 6NYCRR Parts 700-706.

This Water Quality Certification is issued pursuant to Section 401 of the Federal Water Pollution Control Act (33 USC 1341).

GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. Facility Inspection by the Department The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the Certificate Holder is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

The Certificate Holder shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this certification, including the Settlement Agreement, as well as the FERC license and all pertinent maps, drawings and special conditions shall be available for inspection by Department staff at all times during such inspections at the project site or facility. Failure to produce a copy of the certification upon request by a Department representative is a violation of this permit.

2. Relationship of this Permit to Other Department Orders and Determinations Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. Applications for Permit Renewals or Modifications The Certificate Holder shall submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application shall include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department shall be in writing.

4. Department Contacts All contacts with the concerning this certificate, including submission of the information required by the above Natural Resource Permit Conditions and all applications for permit modification or renewal are to be submitted to:

Regional Permit Administrator
New York State Department of Environmental Conservation
317 Washington Street
Watertown, NY 13601

5. Permit Modifications, Suspensions and Revocations by the Department The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

a. materially false or inaccurate statements in the permit application or supporting papers;

b. failure by the Certificate Holder to comply with any terms or conditions of the certificate;

c. exceeding the scope of the project as described in the permit application;

d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing certificate;

e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

6. Permit Transfers Permits are transferrable unless specifically prohibited by statute, regulation or

another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER CERTIFICATE HOLDER OBLIGATIONS

Item A: Certificate Holder Accepts Legal Responsibility and Agrees to Indemnification
The Certificate Holder expressly agrees to indemnify and hold harmless the DEC, its representatives, employees, and agents for all claims, suits, actions, and damages, to the extent attributable to the Certificate Holder's acts or omissions in connection with the Certificate Holder's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Certificate Holder's Contractors to Comply with Permit
The Certificate Holder is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the Certificate Holder's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the Certificate Holder.

Item C: Certificate Holder Responsible for Obtaining Other Required Permits
The Certificate Holder is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights
This permit does not convey to the Certificate Holder any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

APPENDIX D

THREATENED AND ENDANGERED SPECIES

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9349
Phone: (607) 753-9334 Fax: (607) 753-9699
http://www.fws.gov/northeast/nyfo/es/section7.htm

In Reply Refer To: November 17, 2017
Consultation Code: 05E1NY00-2018-SLI-0425
Event Code: 05E1NY00-2018-E-01268
Project Name: Emeryville Hydroelectric Project FERC No. 2850

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: http://www.fws.gov/northeast/nyfo/es/section7.htm

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (

http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the Services wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9349
(607) 753-9334

Project Summary

Consultation Code: 05E1NY00-2018-SLI-0425

Event Code: 05E1NY00-2018-E-01268

Project Name: Emeryville Hydroelectric Project FERC No. 2850

Project Type: DAM

Project Description: Emeryville Hydroelectric Project FERC No. 2850, project going through the LIHI Certification process

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/44.29720437945565N75.36401938242969W

Counties: St. Lawrence, NY

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis*	Threatened

No critical habitat has been designated for this species.

Species profile: https://ecos.fws.gov/ecp/species/9045

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

New York State Department of Environmental Conservation
Division of Environmental Permits, Region 6
Dulles State Office Building, 5th Floor
317 Washington St, Watertown, NY 13601
Phone: (315) 785-2245 • **Fax:** (315) 785-2242
Website: www.dec.ny.gov

Alexander B. Grannis
Commissioner

October 5, 2009

Elizabeth M. Annand
Project Manager
Stantec Consulting Services Inc.
30 Park Dr
Topsham, ME 04086

Re: Threatened and Endangered Species Review
Emeryville Hydroelectric Project
Town of Fowler, St. Lawrence County

Dear Ms. Annand:

As per your request dated October 2, 2009, on behalf of the New York State Department of Environmental Conservation, I have reviewed the New York Natural Heritage Program database and have identified the following species as having a current record within one mile of the project area:

Carex meritt-fernaldii or Fernald's Sedge – Threatened species

Please note that though the species you listed in your letter to us (Indiana bat, lake sturgeon, mooneye, eastern sand darter and bald eagle) were not identified within one mile of the hydro facility, they may be present at the site. Only a thorough inspection of the location by experts in the field can confirm or deny the presence of threatened or endangered species. Please contact me with any further questions you may have regarding this letter.

Sincerely,

Jessica Hart
Environmental Analyst Trainee II
jjhart@gw.dec.state.ny.us

New York State Department of Environmental Conservation
Division of Environmental Permits, Region 6
Dulles State Office Building, 317 Washington Street, Watertown, New York 13601-3787
Phone: (315) 785-2245 • FAX: (315) 785-2242
Website: www.dec.state.ny.us

Denise M. Sheehan
Commissioner

October 5, 2006

Ms. Demetria Janus
STANTEC CONSULTING
3959 Research Park Drive
Ann Arbor, MI 48108-2216

RE: FERC PROJECT NO. 2850
EMERYVILLE HYDROELECTRIC PROJECT

Dear Ms. Janus:

In response to your recent request, we have reviewed our program databases with respect to the above stated project. The site is not located in or near mapped State regulated wetlands. There is a protected stream on the project site. You should contact the U.S. Army Corps of Engineers for Federal regulated wetland information.

A review of the New York Natural Heritage Program databases showed we have no records of known occurrences of rare of State-listed animals or plants, significant natural communities, or other significant habitats on or in the immediate vicinity of your site. The absence of data does not mean, however, that rare or State-listed species, natural communities, or other significant habitats do not exist on, or adjacent to the proposed site, but rather that our files currently do not contain any information which indicated their presence. For most sites, comprehensive field surveys have not been conducted. For these reasons, we cannot provide a definitive statement on the presence or absence of rare or State-listed species, or of significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

Our databases also did not show an archeological significant area in or near the proposed project site. You should contact the New York State Office of Parks, Recreation and Historic Preservation at 518-237-8643 for more information. A map showing all of the above is attached for your information.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

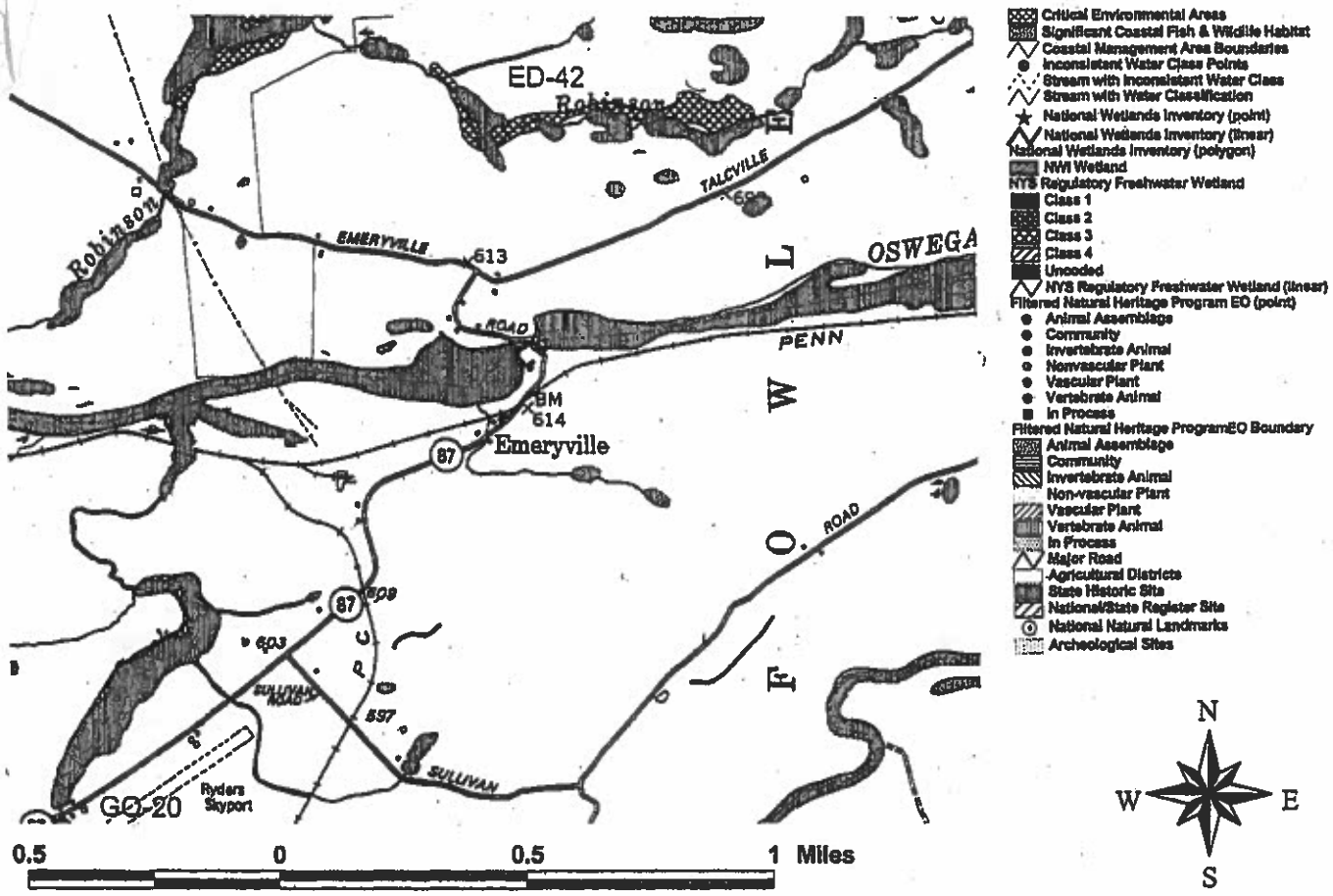
If you have any questions or require more information, you should call me at 315-785-2247.

Sincerely,

Lawrence R. Ambeau

Lawrence R. Ambeau
Environmental Analyst 2
Region 6

LRA:sgs
Enclosure


ED-42
Robinson
TALCVILLE
EMERYVILLE
613
OSWEGA
ROAD
PENN
BM
614
Emeryville
87
ROAD
609
603
SULLIVAN ROAD
597
SULLIVAN
GO-20
Ryders Skyport
0.5
0
0.5
1 Miles
Critical Environmental Areas
Significant Coastal Fish & Wildlife Habitat
Coastal Management Area Boundaries
Inconsistent Water Class Points
Stream with Inconsistent Water Class
Stream with Water Classification
National Wetlands Inventory (point)
National Wetlands Inventory (linear)
National Wetlands Inventory (polygon)
NWI Wetland
NYS Regulatory Freshwater Wetland
Class 1
Class 2
Class 3
Class 4
Uncoded
NYS Regulatory Freshwater Wetland (linear)
Filtered Natural Heritage Program EO (point)
Animal Assemblage
Community
Invertebrate Animal
Nonvascular Plant
Vascular Plant
Vertebrate Animal
In Process
Filtered Natural Heritage ProgramEO Boundary
Animal Assemblage
Community
Invertebrate Animal
Non-vascular Plant
Vascular Plant
Vertebrate Animal
In Process
Major Road
Agricultural Districts
State Historic Site
National/State Register Site
National Natural Landmarks
Archeological Sites
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United States Department of the Interior

FISH AND WILDLIFE SERVICE
3817 Luker Road
Cortland, NY 13045

RECEIVED
NOV 13 2006
STANTEC CONSULTING

November 8, 2006

Ms. Demetria Janus
Environmental Scientist
Stantec Consulting
3959 Research Park Drive
Ann Arbor, MI 48108-2216

Dear Ms. Janus:

This responds to your October 2, 2006, letter requesting information on the presence of endangered or threatened species within the vicinity of the Hampshire Paper Company's Emeryville Hydroelectric Project located in the Town of Fowler, St. Lawrence County, New York.

As you are aware, Federal agencies, such as the Federal Energy Regulatory Commission (FERC) have responsibilities under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to consult with the U.S. Fish and Wildlife Service (Service) regarding projects that may affect Federally-listed species or "critical habitat," and confer with the Service regarding projects that may affect Federally-proposed species or proposed "critical habitat." As the FERC is the appropriate agency to consult with the Service on the Project, we recommend that the Hampshire Paper Company request that FERC designate the Hampshire Paper Company (and/or the Hampshire Paper Company's representatives) as their non-Federal representative for the purposes of conducting informal consultation (50 CFR § 402.07). The following comments pertaining to endangered species under our jurisdiction are provided as technical assistance pursuant to the ESA. This response does not preclude additional Service comments under other legislation.

There is potential for the Federally- and State-listed endangered Indiana bat (*Myotis sodalis*) to occur within the proposed project area, which is approximately 36 miles from a known hibernaculum in Jefferson County. Please visit our website for more information on Indiana bats.*

Except the potential for Indiana bat and occasional transient individuals, no other Federally-listed or proposed endangered or threatened species under our jurisdiction are known to exist in the project action area. In addition, no habitat in the project area is currently designated or proposed "critical habitat" in accordance with provisions of the ESA. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. The most recent compilation of Federally-listed and proposed endangered and threatened species in New York is available for your information.* Until the proposed project is complete, we recommend that you check our website every 90 days

from the date of this letter to ensure that listed species presence/absence information for the proposed project is current.*

As stated above, the Indiana bat is listed as endangered by the State of New York. Any additional information regarding the project and its potential to impact listed species should be coordinated with both this office and with the New York State Department of Environmental Conservation (NYSDEC). The NYSDEC contact for the Endangered Species Program is Mr. Peter Nye, Endangered Species Unit, 625 Broadway, Albany, NY 12233 (telephone: [518] 402-8859).

For additional information on fish and wildlife resources or State-listed species, we suggest you contact the appropriate NYSDEC regional office(s) and the New York Natural Heritage Program Information Services.*

Work in certain waters of the United States, including wetlands and streams, may require a permit from the U.S. Army Corps of Engineers (Corps). If a permit is required, in reviewing the application pursuant to the Fish and Wildlife Coordination Act, the Service may concur, with or without recommending additional permit conditions, or recommend denial of the permit depending upon potential adverse impacts on fish and wildlife resources associated with project construction or implementation. The need for a Corps permit may be determined by contacting the appropriate Corps office(s).*

Thank you for your time. If you require additional information please contact Robyn Niver at (607) 753-9334. Future correspondence with us on this project should reference project file 70001.

Sincerely,

David A. Stilwell
Field Supervisor

*Additional information referred to above may be found on our website at: http://www.fws.gov/northeast/nyfo/es/section7.htm

cc: NYSDEC, Watertown, NY (Env. Permits)
NYSDEC, Albany, NY (Endangered Species; Attn: P. Nye)
NYSDEC, Albany, NY (Natural Heritage)
FERC, Washington, DC (Attn: Magalie R. Salas)

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New York Field Office
3817 Luker Road
Cortland, NY 13045
Phone: (607) 753-9334 Fax: (607) 753-9699
http://www.fws.gov/northeast/nyfo

roject Number: 70001

To: Elizabeth Annand Date: Oct 27, 2009

Town/County: Town of Fowler / St. Lawrence County

We have received your request for information regarding occurrences of Federally-listed threatened and endangered species within the vicinity of the above-referenced project/property. Due to increasing workload and reduction of staff, we are no longer able to reply to endangered species list requests in a timely manner. In an effort to streamline project reviews, we are shifting the majority of species list requests to our website at http://www.fws.gov/northeast/nyfo/es/section7.htm. Please go to our website and print the appropriate portions of our county list of endangered, threatened, proposed, and candidate species, and the official list request response. Step-by-step instructions are found on our website.

As a reminder, Section 9 of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1631 *et seq.*) prohibits unauthorized taking* of listed species and applies to Federal and non-Federal activities. Additionally, endangered species and their habitats are protected by Section 7(a)(2) of the ESA, which requires Federal agencies, in consultation with the U.S. Fish and Wildlife Service (Service), to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. An assessment of the potential direct, indirect, and cumulative impacts is required for all Federal actions that may affect listed species. For projects not authorized, funded, or carried out by a Federal agency, consultation with the Service pursuant to Section 7(a)(2) of the ESA is not required. However, no person is authorized to "take"* any listed species without appropriate authorizations from the Service. Therefore, we provide technical assistance to individuals and agencies to assist with project planning to avoid the potential for "take," or when appropriate, to provide assistance with their application for an incidental take permit pursuant to Section 10(a)(1)(B) of the ESA.

Project construction or implementation should not commence until all requirements of the ESA have been fulfilled. If you have any questions or require further assistance regarding threatened or endangered species, please contact the Endangered Species Program at (607) 753-9334. Please refer to the above document control number in any future correspondence.

Endangered Species Biologist: Robyn A. Niver

*Under the Act and regulations, it is illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import or export, ship in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any endangered fish or wildlife species and most threatened fish and wildlife species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. "Harm" includes any act which actually kills or injures fish or wildlife, and case law has clarified that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New York Field Office
3817 Luker Road
Cortland, NY 13045
Phone: (607) 753-9334 Fax: (607) 753-9699
http://www.fws.gov/northeast/nyfo

To: Elizabeth Annand Date: Nov 13, 2009

USFWS File No: 70001

Regarding your: ☒ Letter ☐ FAX ☐ Email Dated: October 29, 2009

For project: Emeryville Hydroelectric Project, FERC No 2850

Located:

In Town/County: Town of Fowler / St. Lawrence County

Pursuant to the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), the U.S. Fish and Wildlife Service:

☐ Acknowledges receipt of your "no effect" and/or no impact determination. No further ESA coordination or consultation is required.

☒ Acknowledges receipt of your determination. Please provide a copy of your determination and supporting materials to any involved Federal agency for their final ESA determination.

☐ Is taking no action pursuant to ESA or any other legislation at this time but would like to be kept informed of project developments.

As a reminder, until the proposed project is complete, we recommend that you check our website (http://www.fws.gov/northeast/nyfo/es/section7.htm) every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed project area is current. Should project plans change or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered.

USFWS Contact(s): Robyn Allen

Supervisor: [signature] Date: 11-13-2009

APPENDIX E

SHPO CORRESPONDENCE

New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189 518-237-8643

February 07, 2007

Demetria R. Janus
Santec
3959 Research Park Drive
Ann Arbor, Michigan 48108-2216

Re: FERC
Emeryville Hydroelectric Project Relicensing
FERC No. 2850
Oswegatchie River
FOWLER, St Lawrence County
07PR00581

Dear Ms. Janus:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966.

Based upon this review, it is the SHPO's opinion that your project will have No Effect upon cultural resources in or eligible for inclusion in the National Registers of Historic Places.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Ruth L. Pierpont
Director