

Glens Falls Project

Certification Application to the Low Impact Hydropower Institute

FERC Project No. 2385



Prepared by:
FH OPCO, LLC
Potsdam, New York

April 20, 2020

TABLE OF CONTENTS

| | |
|---|----|
| INTRODUCTION | 1 |
| PART I. FACILITY DESCRIPTION..... | 2 |
| PART II. STANDARD MATRICES..... | 9 |
| PART III. SUPPORTING INFORMATION..... | 11 |
| PART IV. SWORN STATEMENT AND WAIVER | 27 |
| PART V. CONTACTS | 28 |

APPENDICES

APPENDIX A GLENS FALLS PROJECT ZONES OF EFFECT

APPENDIX B PHOTOS OF KEY PROJECT FEATURES

APPENDIX C PROJECT MAPS AND AERIALS

APPENDIX D 401 WATER QUALITY CERTIFICATION CONSULTATION

APPENDIX E RARE, THREATENED AND ENDANGERED SPECIES CONSULTATION

INTRODUCTION

Brookfield Renewable, on behalf of FH OPCO, LLC (FH OPCO) (Licensee), is providing this application to the Low Impact Hydropower Institute (LIHI) for certification of the Glens Falls Project (Project). The Project is located on the Hudson River in Saratoga and Warren Counties, New York. This facility is licensed with the Federal Energy Regulatory Commission (FERC) (Project No. P-2385).

Glens Falls Project Certification Application

PART I. FACILITY DESCRIPTION

The key features of the Glens Falls Project are described in Table I-1.

Table I-1. Facility Description Information for the Glens Falls Project.

| <i>Item</i> | <i>Information Requests</i> | <i>Response (and references to further details)</i> |
|------------------------------------|---|--|
| <i>Name of the Facility</i> | Facility name (use FERC project name if possible) | Glens Falls Project (FERC No. 2385) |
| <i>Location</i> | River name (USGS proper name) | Hudson River |
| | Watershed name | Hudson River Basin HUC-02020003 |
| | Nearest town(s), county(ies), and state(s) to dam | Town of Moreau, Saratoga County, NY Town of Glens Falls, Warren County, NY |
| | River mile of dam above next major river | 200.7 |
| | Geographic latitude of dam | 43°18'20.07"N |
| | Geographic longitude of dam | 73°38'29.52"W |
| <i>Facility Owner</i> | Application contact names | See Part V of LIHI certification application for more information |
| | Facility owner company and authorized owner representative name. | Brookfield Renewable Daniel J. Maguire |
| | FERC licensee company name (if different from owner) | Same as above |
| <i>Regulatory Status</i> | FERC Project Number (e.g., P-xxxxx), issuance and expiration dates, or date of exemption | FERC Project Number 2385 New license issued November 21, 2001, with an effective date of November 1, 2001. License expires on October 31, 2041. |
| | FERC license type (major, minor, exemption) or special classification (e.g., "qualified conduit", "non-jurisdictional") | License for a Major Project |
| | Water Quality Certificate identifier, issuance date, and issuing agency name. Include information on amendments. | The Section 401 Water Quality Certificate was issued by the New York State Department of Environmental Conservation (NYSDEC) on May 5, 1995 and adopted into the FERC license. The NYSDEC DEC I.D. 5-5205-00048/00001-9. |
| | Hyperlinks to key electronic records on FERC e-library website or other publicly accessible data repositories | November 21, 2001 Order Issuing License: https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=13707264 The May 5, 1995 Water Quality Certificate (appended to Order Issuing License): https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=13707264 |

Glens Falls Project Certification Application

| <i>Item</i> | <i>Information Requests</i> | <i>Response (and references to further details)</i> |
|-------------------|---|--|
| | | <p>September 21, 2001 Environmental Assessment: https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=6005334</p> <p>The January 02, 2014 Environmental Inspection Report: https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=13428954</p> |
| Powerhouse | Date of initial operation (past or future for pre-operational applications) | The Glens Falls Project was initially constructed and operated in 1906. |
| | Total installed capacity (MW) | 12.1 MW |
| | Average annual generation (MWh) and period of record used | Actual annual generation is filed with FERC each year. The average generation from 2014-2019 is 56,149.824 MWh. |
| | Mode of operation (run-of-river, peaking, pulsing, seasonal storage, diversion, etc.) | FH OPCO currently operates the project in run-of-river mode. |
| | Number, type, and size of turbines, including maximum and minimum hydraulic capacity of each unit | <p>Generating Units: 5</p> <p>Type: Unit 1: Seagull by American Hydro Corporation Unit 2-5: Horizontal Francis</p> <p>Description:</p> <p>Unit 1: Turbine with rotational speed of 225 rotations per minute (rpm) at 46 feet gross head.</p> <p>Unit 2: Four runner turbine with rotational speed of 225 rpm at 46 feet gross head.</p> <p>Unit 3: Four runner turbine with rotational speed of 225 rpm at 46 feet gross head.</p> <p>Unit 4: Four runner turbine with rotational speed of 225 rpm at 46 feet gross head.</p> <p>Unit 5: Four runner turbine with rotational speed of 225 rpm at 46 feet gross head.</p> <p>Maximum Hydraulic Capacity: Unit 1: 840 cubic feet per second (cfs) Unit 2: 840 cfs Unit 3: 840 cfs Unit 4: 840 cfs Unit 5: 840 cfs</p> |

Glens Falls Project Certification Application

| <i>Item</i> | <i>Information Requests</i> | <i>Response (and references to further details)</i> |
|--------------------------------|--|--|
| | | Minimum Hydraulic Capacity Unit 1: 250 cfs Unit 2: 110 cfs Unit 3: 120 cfs Unit 4: 125 cfs Unit 5: 180 cfs |
| | Trashrack clear spacing (inches), for each trashrack | 1.0 inch clear spacing |
| | Dates and types of major equipment upgrades | There have been no major equipment upgrades. |
| | Dates, purpose, and type of any recent operational changes | There have been no recent operational changes. |
| | Plans, authorization, and regulatory activities for any facility upgrades or license or exemption amendments | There are no plans or upcoming regulatory activities for facility upgrades. |
| <i>Dam or Diversion</i> | Date of original construction and description and dates of subsequent dam or diversion structure modifications | <p>1913-1915: Rebuilt the wooden dam as a concrete structure. Removed bridge pier from middle of forebay.</p> <p>1923-1924: Raised the top of the dam to its present elevation.</p> <p>1924: Gunite power canal walls and grouted cracks; raised level of power canal, and headgate structure by 5 feet.</p> <p>1949: Installed concrete buttresses at power canal walls. Repaired dam.</p> <p>1975: Repaired the leaks in the power canal floor.</p> <p>1976: Grouted and repaired forebay headwall.</p> <p>1989-1990: Anchored the power canal headwall and south forebay wall.</p> <p>1992: Resurfaced the downstream face of the south forebay wall.</p> <p>1993: Rehabilitation of dam. Flashboard system was replaced with crest gates.</p> |
| | Dam or diversion structure height including separately, the height of any flashboards, inflatable dams, etc. | Dam height: 9-11 feet |

Glens Falls Project Certification Application

| <i>Item</i> | <i>Information Requests</i> | <i>Response (and references to further details)</i> |
|----------------------------------|---|--|
| | Spillway elevation and hydraulic capacity | Minimum spillway elevation: 268.6 National Geodetic Vertical Datum (NGVD) Normal spillway elevation: 269.1 NGVD Maximum spillway elevation: 269.6 NGVD Spillway hydraulic capacity: 32,000 cfs with all 7 gates down, water level at normal pool (only 2 of the 7 gates are owned by the Licensee). |
| | Tailwater elevation (provide normal range if available) | 224.4 feet (normal) |
| | Length and type of all penstocks and water conveyance structures between the impoundment and powerhouse | The 80 feet wide, 550 feet long power canal conveys water towards the powerhouse. |
| | Dates and types of major infrastructure changes | 1913-1915: Rebuilt the wooden dam as a concrete structure. Removed bridge pier from middle of forebay. 1923-1924: Raised the top of the dam to its present elevation (El. 269 NGVD). |
| | Designated facility purposes (e.g., power, navigation, flood control, water supply, etc.) | The purpose of the project is for power generation. |
| | Source water | Hudson River |
| | Receiving water and location of discharge | Hudson River at RM 200.7 |
| Conduit | Date of conduit construction and primary purpose of conduit | There are no conduit structures at the Glens Falls Project. |
| Impoundment and Watershed | Authorized maximum and minimum water surface elevations | Minimum elevation: 268.6 NGVD Normal elevation: 269.1 NGVD Maximum elevation: 269.6 NGVD |
| | Normal operating elevations and normal fluctuation range | Minimum elevation: 268.6 NGVD Normal elevation: 269.1 NGVD Maximum elevation: 269.6 NGVD |
| | Gross storage volume and surface area at full pool | Gross volume: 1,083 acre-feet Surface area: 167 acres |
| | Usable storage volume and surface area | Usable: 560 acre-feet Surface area: 167 acres |
| | Describe requirements related to impoundment inflow, outflow, up/down ramping and refill rate restrictions. | The Glens Falls Project operates in run-of-river mode with a 6-inch impoundment fluctuation limit. Year-round minimum bypass flows of 5 cfs are required. |
| | Upstream dams by name, ownership and river mile. If FERC licensed or exempt, please provide FERC Project number of these dams. Indicate which upstream dams have downstream fish passage. | Warren Curtis, Curtis Palmer Hydroelectric Company, P-2609, RM 218 Palmer Falls, Curtis Palmer Hydroelectric Company, P-2609, RM 217 |

Glens Falls Project Certification Application

| <i>Item</i> | <i>Information Requests</i> | <i>Response (and references to further details)</i> |
|-------------|--|---|
| | | <p>Spier Falls Development, Erie Boulevard Hydropower, LLC, P-2482, RM 212</p> <p>Sherman Island, Erie Boulevard Hydropower, P-2482, RM 209</p> <p>Feeder Dam, Erie Boulevard Hydropower, P-2554, RM 203</p> <p>* No upstream dams provide downstream fish passage.</p> |
| | Downstream dams by name, ownership, river mile and FERC number if FERC licensed or exempt. Indicate which downstream dams have upstream fish passage | <p>Hudson Falls, Boralex Operations, Inc. P-5276, RM 198</p> <p>Thompson Island, Albany Engineering Corporation , P-12741, RM 133</p> <p>Fort Miller, Fort Miller Associates, P-4226, RM 180</p> <p>Northumberland, Northumberland Hydro Partners L.P., P-4244, RM 175</p> <p>Stillwater, Stillwater Hydro Partners, P-4684, RM 165</p> <p>Upper Mechanicville, NYSEG, P-2934, RM 160</p> <p>Mechanicville, Albany Engineering Corporation, P-6032, RM 163</p> <p>Waterford, Albany Engineering Corporation, P-10648</p> <p>Green Island, Green Island Power Authority, P-13, RM 149</p> <p>* No downstream dams provide upstream fish passage.</p> |
| | Operating agreements with upstream or downstream facilities that affect water availability and facility operation | <p>The Licensee has a water sharing and monitoring agreement with the South Glens Falls Project (No. 5461); the Licensee's monitoring system interfaces with the South Glens Falls Project, communicating inflow and water elevation data. Generally, both Licensees have agreed to equally share inflow to the reservoir (50 percent split) when flows are less than 8,400 cfs.</p> |

Glens Falls Project Certification Application

| <i>Item</i> | <i>Information Requests</i> | <i>Response (and references to further details)</i> |
|-----------------------------------|--|---|
| | Area of land (acres) and area of water (acres) inside FERC project boundary or under facility control. | The FERC project boundary covers 220 acres (50 acres of land and 170 acres of water). |
| Hydrologic Setting | Average annual flow at the dam, and period of record used | The approximately average annual flow at the Glens Falls Project based on flow data from 2001 through 2019 at the USGS gage 01327750 Hudson River at Fort Edward, NY is 5,841 cfs. |
| | Average annual flow at the dam, and period of record used | The approximate average monthly flows at the Glens Falls Project based on flow data from 2001 through 2019 at the USGS gage 01327750 Hudson River at Fort Edward, NY are as follows: January – 6,463 cfs February – 5,365 cfs March – 6,034 cfs April – 10,161 cfs May – 7,493 cfs June – 5,964 cfs July – 4,268 cfs August – 3,412 cfs September – 3,097 cfs October – 4,502 cfs November – 6,535 cfs December – 6,833 cfs |
| | Location and name of closest stream gauging stations above and below the facility | Downstream: USGS Gage No. 01327750 Hudson River at Fort Edward, NY (located downstream of the Hudson Falls Hydroelectric Project), RM 196 Upstream: USGS Gage No 01318500 Hudson River at Hadley, NY (located immediately upstream of the Sacandaga River confluence with the Hudson River), RM 224 |
| | Watershed area at the dam (in square miles). Identify if this value is prorated and provide the basis for proration. | 2,817 square miles Daily mean flow data for the Glens Falls Project was estimated by a linear proration of data from USGS Gage No. 01327750 Hudson River at Fort Edward, NY. ¹ |
| Designated Zones of Effect | Number of zones of effect | There are three zones of effect at the Glens Falls Project (See Appendix A). |
| | Upstream and downstream locations by river miles | Zone 1: 198.7 to 200.7 Zone 2: 200.7 to 200.8 Zone 3: 200.8 to 200.83 |
| | Type of waterbody (river, impoundment, by-passed reach, etc.) | Zone 1: Impoundment Zone 2: Bypassed Reach |

¹ Ries, K.G. and Friesz, P.J. 2000. Methods for Estimating Low-Flow Statistics for Massachusetts Streams. Water Resources Investigations Report 00-4135. U.S. Department of Interior. U.S. Geological Survey.

Glens Falls Project Certification Application

| <i>Item</i> | <i>Information Requests</i> | <i>Response (and references to further details)</i> |
|-------------|---|---|
| | | Zone 3: Downstream |
| | Delimiting structures or features | <p>(1) Zone one, which extends from the head of the Glens Falls impoundment downstream approximately 2.0 miles to the Glens Falls dam.</p> <p>(2) Zone two, which extends from the Glens Falls dam downstream approximately 600 feet to the confluence with the Glens Falls tailrace, and</p> <p>(3) Zone three, which is the approximately 100-foot tailrace.</p> |
| | Designated uses by state water quality agency | <p>The NYSDEC has classified the portion of the Hudson River from the head of the Glens Falls impoundment to the Glens Falls dam as Class B water. The portion of the Hudson River downstream from the Glens Falls dam is Class C. Link to NYSDEC Classification Codes: https://govt.westlaw.com/nycrr/Browse/Home/NewYork/NewYorkCodesRulesandRegulations?guid=I06849fe0b5a111dda0a4e17826ebc834&originatIonContext=documenttoc&transitionType=Default&contextData=(sc.Default)</p> |

Glens Falls Project Certification Application

PART II. STANDARD MATRICES

The Glens Falls Project has a total of three zones of effect that are defined as: (1) Zone one, which extends from the head of the Glens Falls impoundment downstream approximately 2.0 miles to the Glens Falls dam (2) Zone two, which extends from the Glens Falls dam downstream approximately 600 feet to the confluence with the Glens Falls tailrace, and (3) Zone three, which is the approximately 100-foot tailrace.

The standards selected to satisfy the LIHI certification criteria in each of these zones are identified in the following tables.

Table II-1. LIHI Standards Selected for Zone of Effect No. 1 for the Glens Falls Project

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

Table II-2. LIHI Standards Selected for Zone of Effect No. 2 for the Glens Falls Project

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

Table II-3. LIHI Standards Selected for Zone of Effect No. 3 for the Glens Falls Project

| Criterion | | Alternative Standards | | | | |
|-----------|-------------------------|-----------------------|---|---|---|------|
| | | 1 | 2 | 3 | 4 | Plus |
| A | Ecological Flow Regimes | | X | | | |
| B | Water Quality | | X | | | |
| C | Upstream Fish Passage | X | | | | |

Glens Falls Project Certification Application

| Criterion | | Alternative Standards | | | | |
|-----------|--|-----------------------|---|---|---|------|
| | | 1 | 2 | 3 | 4 | Plus |
| 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 | | | |

PART III. SUPPORTING INFORMATION

This section contains information that explains and justifies the standards selected to pass the LIHI certification criteria (see Part II for selections).

GLENS FALLS PROJECT

Information Required to Support Ecological Flows Standards.

Table III.A.1 Ecological Flows: Glens Falls Project Zone 1

| Criterion | Standard | Instructions |
|------------------|-----------------|--|
| A | 2 | <u>Agency Recommendation (see Appendix A for definitions):</u> <ul style="list-style-type: none">• 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 protective).• 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). |

Zone 1 of the Glens Falls Project is the impoundment. Article 401 of the November 21, 2001 FERC license requires the Licensee to operate the project in run-of-river (ROR) mode. The Licensee must also maintain the impoundment within 6 inches of the normal water level of 269.1 feet NGVD.

According to the September 13, 2001 Environmental Assessment (EA), the impoundment fluctuation limitations protect shoreline spawning habitat, limit nest abandonment and exposure, and protect centrarchids (e.g., sunfish and bass) which are particularly susceptible to water level fluctuations because they spawn primarily in the shallow, nearshore zone. At the maximum drawdown of 6 inches, about 2 acres of nearshore habitat would be exposed, but most centrarchid nest building occurs in water deeper than 6 inches.

September 13, 2001 EA:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=6005334>

Article 404 of the FERC license requires a Project Operations Plan (POP) be developed to ensure compliance with impoundment fluctuations, ROR operations, and minimum flows. The licensee filed a POP on May 21, 2002 which was approved and modified by the Commission on October 23, 2002. The POP was developed in consultation with the NYSDEC and the United States Fish and Wildlife Service (USFWS). The Licensee's Programmable Logic Controller (PLC)

Glens Falls Project Certification Application

continuously monitors the headpond elevations and adjusts generation to maintain the water level and to limit fluctuations. The Licensee maintains Milltronics hydro-acoustic sensors in the forebay to monitor the elevation of the power canal. The NYSDEC, USFWS, and FERC did not require management of fish and wildlife in the Glens Falls impoundment in the FERC license or Section 401 Water Quality Certificate (WQC).

May 21, 2002 License Article 404 POP:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=1018881>

October 23, 2002 FERC Order Modifying and Approving POP:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=9581794>

FH OPCO remains in compliance with the established impoundment levels and maintains records of these conditions at the Project. In the event of a deviation from established minimum flows or impoundment levels, FH OPCO files documentation with FERC detailing the reasons for the deviation.

Table III.A.2 Ecological Flows: Glens Falls Project Zone 2

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|--|
| A | 2 | <u>Agency Recommendation (see Appendix A for definitions):</u> <ul style="list-style-type: none">• 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 protective).• 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). |

Zone 2 of the Glens Falls Project is the bypassed reach. Article 402 of the FERC license requires a minimum flow of 5 cfs as measured in the bypassed reach immediately downstream of the Glens Falls dam for the protection and enhancement of water quality and aquatic resources in the Hudson River. According to the September 13, 2001 EA, the 5 cfs minimum flow enhances water quality by preventing water stagnation and provides sufficient flow to adequately protect the limited aquatic habitat in the bypassed reach.

September 13, 2001 EA:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=6005334>

Article 404 of the FERC license requires a POP to ensure compliance with ROR operations and minimum flows. The Licensee filed a POP on May 21, 2002 which was approved and modified by the Commission on October 23, 2002. The POP was developed in consultation with the

Glens Falls Project Certification Application

NYSDEC and the USFWS. The Licensee maintains Milltronics hydro-acoustic sensors in the forebay and tailrace to monitor the elevation of the power canal and tailwaters. The NYSDEC, USFWS, and FERC did not require management of fish and wildlife in the Glens Falls bypass reach or tailrace.

May 21, 2002 License Article 404 POP:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=1018881>

October FERC Order Modifying and Approving POP:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=9581794>

Article 403 of the FERC license required the Licensee to file a plan to construct lowhead diversion weirs to strategically direct the minimum bypass flows to enhance the aquatic habitat near the base of the dam. The Licensee filed the plan on December 21, 2002, and it was approved, in part, by FERC on April 7, 2004.

Order Approving, In Part, Weir Installation Plan:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=10110258>

On May 17, 2004 (the document date of May 14, 2003 appears to be in error), the Licensee filed the Weir Monitoring Plan, which was acknowledged by FERC on June 03, 2004. The Weir Monitoring Plan requires the Licensee to annually visually inspect that the weirs are functional and appear to be working as designed.

May 17, 2004 Weir Monitoring Plan:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=10162517>

June 03, 2004 FERC Weir Monitoring Plan acknowledgement:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=10163488>

FH OPCO remains in compliance with the established impoundment levels and maintains records of these conditions at the Project. In the event of a deviation from established minimum flows or impoundment levels, FH OPCO files documentation with FERC detailing the reasons for the deviation.

Table III.A.3 Ecological Flows: Glens Falls Project Zone 3

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|---|
| A | 2 | <u>Agency Recommendation (see Appendix A for definitions):</u> <ul style="list-style-type: none">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 protective).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. |

Glens Falls Project Certification Application

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|--|
| | | <ul style="list-style-type: none">• 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). |

See response above for Zone 2.

Information Required to Support Water Quality Standards.

Table III.B.1 Water Quality: Glens Falls Project Zone 1

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|---|
| B | 2 | <u>Agency Recommendation:</u> <ul style="list-style-type: none">• 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 protective).• 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). |

The portion of the Hudson River in Zone 1 is listed as an impaired in the November 2016 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy for mercury contaminated sediments. Listing is here: <http://www.dec.ny.gov/chemical/31290.html>. The cause of this impairment is not related to the Glens Falls Project. A copy of the November 2016 Section 303(d) list for New York State can be viewed at https://www.dec.ny.gov/docs/water_pdf/303dListfinal2016.pdf.

The portion of the Hudson River from the head of the Glens Falls impoundment to the Glens Falls dam is classified as Class B water. The best usage of Class B is fishing, public swimming, and other contact recreation activities. The Glens Falls Project is in compliance with all conditions issued pursuant to a Clean Water Act – Section 401 WQC. The WQC for the Project was issued May 5, 1995 (<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=13707264>). On-going water quality monitoring at the Project is not required as part of the WQC or FERC license. According to the 2001 EA, the NYSDEC generally considered the water quality to be good.

Generally, any changes to the original WQC are necessitated by significant changes in or to the Project environment affecting the Conditions of the original WQC, which culminates in an

Glens Falls Project Certification Application

amendment of the original WQC. This situation has not occurred for the Glen Falls Project WQC, and the original WQC, issued on May 5, 1995, is still in effect.

Additionally, the Applicant contacted the NYSDEC on March 19, 2020, regarding the current WQC status for the Project. On April 20, 2020 NYSDEC stated that as long as the FERC license is still valid and the conditions of the WQC are still being met, the WQC will remain valid. The consultation documentation regarding the 401 WQC is included in Appendix D.

Table III.B.2 Water Quality: Glens Falls Project Zone 2

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|---|
| B | 2 | <u>Agency Recommendation:</u> <ul style="list-style-type: none">• 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 protective).• 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). |

The portion of the Hudson River from Schuylerville to the Glens Falls dam is listed as an impaired waterway in the November 2016 Section 303(d) List of Impaired Waters deferring a TMDL/Other Strategy for PCB contaminated sediments. Listing is here: <http://www.dec.ny.gov/chemical/31290.html>. The cause of this impairment is not related to the Glens Falls Project. A copy of the November 2016 Section 303(d) list for New York State can be viewed at https://www.dec.ny.gov/docs/water_pdf/303dListfinal2016.pdf.

The portion of the Hudson River from the Glens Falls dam to Schuylerville is classified as Class C water. The best usage of Class C is fishing and other non-contact activities. The Glens Falls Project is in compliance with all conditions issued pursuant to a Clean Water Act – Section 401 WQC. The WQC for the Project was issued May 5, 1995 (<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=13707264>). On-going water quality monitoring at the Project is not required as part of the WQC or FERC license.

Generally, any changes to the original WQC are necessitated by significant changes in or to the Project environment affecting the Conditions of the original WQC, which culminates in an amendment of the original WQC. This situation has not occurred for the Glen Falls Project WQC, and the original WQC, issued on May 5, 1995, is still in effect.

Additionally, the Applicant contacted the NYSDEC on March 19, 2020, regarding the current WQC status for the Project. On April 20, 2020 NYSDEC stated that as long as the FERC license

Glens Falls Project Certification Application

is still valid and the conditions of the WQC are still being met, the WQC will remain valid. The consultation documentation regarding the 401 WQC is included in Appendix D.

Table III.B.3 Water Quality: Glens Falls Project Zone 3

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|---|
| B | 2 | <u>Agency Recommendation:</u> <ul style="list-style-type: none">• 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 protective).• 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). |

See above response for Zone 2.

Information Required to Support Upstream Fish Passage Standards.

Table III.C.1 Upstream Fish Passage: Glens Falls Project Zone 1

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|---|
| C | 1 | <u>Not Applicable / De Minimis Effect:</u> <ul style="list-style-type: none">• Explain why the facility does not impose a barrier to upstream fish passage in the designated zone. Typically, impoundment zones will qualify for this standard since once above a dam and in an impoundment, there is no facility barrier to further upstream movement.• 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. |

There are no upstream fish passage barriers in Zone 1 because it is an impoundment. Additionally, natural barriers exist to upstream passage, such as Hudson Falls and Glens Falls. There are no anadromous fish species present in the project area. There are no mandatory prescriptions (section 18 or similar) for the passage of riverine fish at the Project. The Interior requested reservation of its authority to prescribe upstream and downstream fish passage devices in the future, which was granted in Article 406 of the license.

According to the 2001 EA, the fish community in the project impoundment appears balanced and stable. In addition to the game and predatory fish (e.g., northern pike and basses), a variety of forage fish are present in the project area and relatively common. About 40 percent of the fish

Glens Falls Project Certification Application

(representing 12 species) collected during the 1993 fishery survey were minnows and darters. A range of fish sizes also were collected during the fishery survey. A total of 30 species of fish were collected in the Project area during fishery surveys in 1985 and 1993. The three most abundant fish species in both surveys were rock bass, spottail shiner, and fallfish. During the last relicensing, the Licensee did not collect any anadromous fish species during its fishery surveys at the Glens Falls Project. The EA stated that the American eel, a catadromous fish, may be able to migrate this far north via the Feeder Canal, but it did not seem to occur since it was infrequently collected in the Project area.

September 13, 2001 EA:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=6005334>

Table III.C.2 Upstream Fish Passage: Glens Falls Project Zone 2

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|---|
| C | 1 | <u>Not Applicable / De Minimis Effect:</u> <ul style="list-style-type: none">• Explain why the facility does not impose a barrier to upstream fish passage in the designated zone. Typically, impoundment zones will qualify for this standard since once above a dam and in an impoundment, there is no facility barrier to further upstream movement.• 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. |

There are no mandatory prescriptions (section 18 or similar) for the passage of riverine fish at the Project. The Interior requested reservation of its authority to prescribe upstream and downstream fish passage devices in the future, which was granted in Article 406 of the license. Natural barriers exist to upstream passage, such as Hudson Falls and Glens Falls. There are no anadromous fish species present in the project area.

According to the 2001 EA, the fish community in the project impoundment appears balanced and stable. In addition to the game and predatory fish (e.g., northern pike and basses), a variety of forage fish are present in the project area and relatively common. About 40 percent of the fish (representing 12 species) collected during the 1993 fishery survey were minnows and darters. A range of fish sizes also were collected during the fishery survey. A total of 30 species of fish were collected in the Project area during fishery surveys in 1985 and 1993. The three most abundant fish species in both surveys were rock bass, spottail shiner, and fallfish. During the last relicensing, the Licensee did not collect any anadromous fish species during its fishery surveys at the Glens Falls Project. The EA stated that the American eel, a catadromous fish, may be able to migrate this far north via the Feeder Canal, but it did not seem to occur since it was infrequently collected in the Project area.

September 13, 2001 EA:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=6005334>

Table III.C.3 Upstream Fish Passage: Glens Falls Project Zone 3

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|--|
| C | 1 | <p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none"> • Explain why the facility does not impose a barrier to upstream fish passage in the designated zone. Typically, impoundment zones will qualify for this standard since once above a dam and in an impoundment, there is no facility barrier to further upstream movement. • 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. |

There are no mandatory prescriptions (section 18 or similar) for the passage of riverine fish at the Project. The Interior requested reservation of its authority to prescribe upstream and downstream fish passage devices in the future, which was granted in Article 406 of the license. Additionally, natural barriers exist to upstream passage, such as Hudson Falls and Glens Falls. There are no anadromous fish species present in the Project area.

Information Required to Support Downstream Fish Passage Standards.

Table III.D.1 Downstream Fish Passage: Glens Falls Project Zone 1

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|---|
| D | 2 | <p><u>Agency Recommendation:</u></p> <ul style="list-style-type: none"> • 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 protective). • 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. |

The Interior requested reservation of its authority to prescribe upstream and downstream fish passage devices in the future, which was granted in Article 406 of the license. Article 402 of the FERC license requires a minimum flow of 5 cfs as measured in the bypassed reach immediately downstream of the Glens Falls dam for the protection and enhancement of water quality and aquatic resources in the Hudson River. In the 2001 EA, FERC concurred that the minimum flow release of 5 cfs provides sufficient flow to adequately protect the limited aquatic habitat in the bypassed reach.

According to the 2001 EA, the fish community in the project impoundment appears balanced and stable. In addition to the game and predatory fish (e.g., northern pike and basses), a variety of forage fish are present in the project area and relatively common. About 40 percent of the fish (representing 12 species) collected during the 1993 fishery survey were minnows and darters. A range of fish sizes also were collected during the fishery survey. A total of 30 species of fish

Glens Falls Project Certification Application

were collected in the Project area during fishery surveys in 1985 and 1993. The three most abundant fish species in both surveys were rock bass, spottail shiner, and fallfish. During the last relicensing, the Licensee did not collect any anadromous fish species during its fishery surveys at the Glens Falls Project. The EA stated that the American eel, a catadromous fish, may be able to migrate this far north via the Feeder Canal, but it did not seem to occur since it was infrequently collected in the Project area.

September 13, 2001 EA:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=6005334>

Article 405 required the Licensee to file a plan providing details to replace the existing trashracks with new 1-inch clear spaced trashracks and to install a downstream fish passage pipe. On August 7, 2002 FERC issued an Order Modifying and Approving Trashrack Replacement and Downstream Fish Bypass. There are no agency provisions for downstream fish passage monitoring.

Order Modifying and Approving Trashrack Replacement:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=9547204>

Table III.D.2 Downstream Fish Passage: Glens Falls Project Zone 2

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|--|
| D | 2 | <u>Agency Recommendation:</u> <ul style="list-style-type: none">• 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 protective).• 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. |

The Interior requested reservation of its authority to prescribe upstream and downstream fish passage devices in the future, which was granted in Article 406 of the license. Article 402 of the FERC license requires a minimum flow of 5 cfs as measured in the bypassed reach immediately downstream of the Glens Falls dam for the protection and enhancement of water quality and aquatic resources in the Hudson River. FH OPCO releases this minimum flow through the existing 8-inch steel discharge pipe with its independently operated minimum flow release gate located at the northern end.

Article 403 required the Licensee to file a plan to construct lowhead diversion weirs to redirect flow to enhance the aquatic habitat near the base of the dam. The plan should include, at a minimum, design drawings of the proposed weirs, proposed monitoring to ensure that the weirs remain functional throughout the term of the license, and a schedule for implementing the plan.

Glens Falls Project Certification Application

The Licensee filed the plan on December 21, 2002, and it was approved, in part, by FERC on April 7, 2004.

Order Approving, In Part, Weir Installation Plan:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=10110258>

On May 17, 2004 (the document date of May 14, 2003 appears to be in error), the Licensee filed the Weir Monitoring Plan, which was acknowledged by FERC on June 03, 2004. The Weir Monitoring Plan requires the Licensee to annually visually inspect that the weirs are functional and appear to be working as designed.

May 17, 2004 Weir Monitoring Plan:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=10162517>

June 03, 2004 FERC Weir Monitoring Plan acknowledgement:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=10163488>

The 2001 EA states the bypassed reach offers marginal quality habitat for fish, with evidence of suckers and minnows in the bypassed reach. The EA found that the fish community in the project impoundment appears balanced and stable. In addition to the game and predatory fish (e.g., northern pike and basses), a variety of forage fish are present in the project area and relatively common. About 40 percent of the fish (representing 12 species) collected during the 1993 fishery survey were minnows and darters. A range of fish sizes also were collected during the fishery survey. A total of 30 species of fish were collected in the Project area during fishery surveys in 1985 and 1993. The three most abundant fish species in both surveys were rock bass, spottail shiner, and fallfish. During the last relicensing, the Licensee did not collect any anadromous fish species during its fishery surveys at the Glens Falls Project. The EA stated that the American eel, a catadromous fish, may be able to migrate this far north via the Feeder Canal, but it did not seem to occur since it was infrequently collected in the Project area.

In the 2001 EA, FERC concurred that both the minimum flow release of 5 cfs and the weirs would enhance the suitability of one of the bypassed reach for fish and benthic invertebrate habitat. It would also serve as a protective measure for fish that may pass over the crest of the dam.

September 13, 2001 EA:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=6005334>

Table III.D.3 Downstream Fish Passage: Glens Falls Project Zone 3

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|--|
| D | 1 | <u>Not Applicable / De Minimis Effect:</u> <ul style="list-style-type: none">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). Typically, tailwater/downstream |

Glens Falls Project Certification Application

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|---|
| | | <p>zones will qualify for this standard since below a dam and powerhouse there is no facility barrier to further downstream movement. Bypassed reach zones must demonstrate that flows in the reach are adequate to support safe, effective and timely downstream migration.</p> <ul style="list-style-type: none">• 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. |

There are no barriers to downstream fish passage in Zone 3 because it is a tailrace. A total of 30 species of fish were collected in the project area during fishery surveys in 1985 and 1993. The three most abundant fish species in both surveys were rock bass, spottail shiner, and fallfish. During the last relicensing, the Licensee did not collect any anadromous fish species during its fishery surveys at the Glens Falls Project. According to the 2001 EA, American eels may be able to migrate this far via the Feeder Canal, but it did not seem to occur.

Information Required to Support Shoreline and Watershed Protection Standards.

Table III.E.1 Shoreline and Watershed Protection: Glens Falls Project Zone 1

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|---|
| E | 1 | <p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none">• If there are no lands with significant ecological value associated with the facility, document and justify this (e.g., describe the land use and land cover within the FERC project or facility boundary).• Document that there have been no Shoreline Management Plans or similar protection requirements for the facility. |

The 2001 EA stated that the shoreline of the Glens Falls Project is steep and densely forested with mature hardwoods and shrub species. The primary canopy species within the project area include red oak and sugar maple. Trembling aspen and red maple, early successional species, are also common. Dominant midstory and groundcover species include hazel, willow, alder, brambles, elderberry, twinflower, bracken fern, aster, goldenrod, Pennsylvania sedge, and yarrow. The FERC EA and 2001 license did not indicate any concerns with the Project's shoreline, and did not require a Shoreline Management Plan.

September 13, 2001 EA:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=6005334>

Table III.E.2 Shoreline and Watershed Protection: Glens Falls Project Zone 2

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|---|
| E | 1 | <p><u>Not Applicable / De Minimis Effect:</u></p> |

Glens Falls Project Certification Application

| Criterion | Standard | Instructions |
|-----------|----------|---|
| | | <ul style="list-style-type: none">• If there are no lands with significant ecological value associated with the facility, document and justify this (e.g., describe the land use and land cover within the FERC project or facility boundary).• Document that there have been no Shoreline Management Plans or similar protection requirements for the facility. |

See response above for Zone 1.

Table III.E.3 Shoreline and Watershed Protection: Glens Falls Project Zone 3

| Criterion | Standard | Instructions |
|-----------|----------|--|
| E | 1 | <u>Not Applicable / De Minimis Effect:</u> <ul style="list-style-type: none">• If there are no lands with significant ecological value associated with the facility, document and justify this (e.g., describe the land use and land cover within the FERC project or facility boundary).• Document that there have been no Shoreline Management Plans or similar protection requirements for the facility. |

See response above for Zone 1.

Information Required to Support Threatened and Endangered Species Standards.

Table III.F.1 Threatened and Endangered Species: Glens Falls Project Zone 1

| Criterion | Standard | Instructions |
|-----------|----------|--|
| F | 3 | <u>Recovery Planning and Action:</u> <ul style="list-style-type: none">• If listed species are present, document that the facility is in compliance with relevant conditions in the species recovery plans, incidental take permits or statements, biological opinions, habitat conservation plans, or similar government documents.• Document that any incidental take permits and/or biological opinions currently in effect were designed as long-term solutions for protection of listed species in the area. |

Based on information received from the USFWS's New York Field Office on March 19, 2020, regarding a request for information on rare, threatened or endangered (RTE) species it appears that the Indiana bat (*Myotis sodalis*) may potentially occur within the Project area. There are no critical habitats located within the Glens Falls Project area.

The USFWS has adopted the following recovery plan for the Indiana bat that may be present in the vicinity of the Glens Falls Project:

U.S. Fish and Wildlife Service. 2007. Indiana Bat (*Myotis sodalis*) Draft Recovery Plan: First Revision. U.S. Fish and Wildlife Service, Fort Snelling, MN. 258 pp (https://www.fwspubs.org/doi/suppl/10.3996/042015-JFWM-033/suppl_file/042015-jfwm-033.s6.pdf)

Glens Falls Project Certification Application

Recovery actions identified in USFWS's Indiana Bat Draft Recovery Plan include hibernacula related recovery actions and summer habitat management. No Indiana bat hibernacula, which typically include caves and mines, are known to exist in the immediate vicinity of the Glens Falls Project. Transient individuals, presumably in association with summer habitat, may however exist in the Project area. Operations of the Glens Falls Project are consistent with this draft recovery plan, especially in regards to forest preservation.

During preparation of this application, FH OPCO also consulted with NYSDEC's Natural Heritage Program (NHP) for an updated list of threatened and endangered species that may occur in the vicinity of the Glens Falls Project. On April 7, 2020, the NYSDEC NHP responded stating that the Peregrine falcon (*Falco peregrinus*), state-listed as endangered, has been documented nesting within 0.5 miles of the Project. According to the NHP's Peregrine Falcon Guide (<https://guides.nynhp.org/peregrine-falcon/>), the species' recovery program has been successful and the population has been growing steadily. Human disturbances known to affect the species include rock climbing and hiking near nest sites, which generally do not occur at the Project. Any bridge maintenance of the Cooper's Cave Bridge would be conducted by the New York State Department of Transportation in a manner that limits impacts to the species.

There are no specific additional requirements for threatened or endangered species protection in the FERC license or WQC for the Glens Falls Project.

The record of RTE consultation is included in Appendix E.

Table III.F.2 Threatened and Endangered Species: Glens Falls Project Zone 2

| Criterion | Standard | Instructions |
|------------------|-----------------|--|
| F | 3 | <u>Recovery Planning and Action:</u> <ul style="list-style-type: none">• If listed species are present, document that the facility is in compliance with relevant conditions in the species recovery plans, incidental take permits or statements, biological opinions, habitat conservation plans, or similar government documents.• Document that any incidental take permits and/or biological opinions currently in effect were designed as long-term solutions for protection of listed species in the area. |

See response above for Zone 1.

Table III.F.3 Threatened and Endangered Species: Glens Falls Project Zone 3

| Criterion | Standard | Instructions |
|------------------|-----------------|--|
| F | 3 | <u>Recovery Planning and Action:</u> <ul style="list-style-type: none">• If listed species are present, document that the facility is in compliance with relevant conditions in the species recovery plans, incidental take permits or statements, biological opinions, habitat conservation plans, or similar government documents.• Document that any incidental take permits and/or biological opinions currently in effect were designed as long-term solutions for protection of listed species in the area. |

Glens Falls Project Certification Application

See response above for Zone 1.

Information Required to Support Cultural and Historic Resources Standards.

Table III.G.1 Cultural and Historic Resources: Glens Falls Project Zone 1

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|--|
| G | 2 | <u>Approved Plan:</u> <ul style="list-style-type: none">• Provide documentation of all approved state, federal, and recognized tribal plans for the protection, enhancement, and mitigation of impacts to cultural and historic resources affected by the facility.• Document that the facility is in compliance with all such plans. |

According to the 2001 EA, there are no known historic resources at the Project. On May 16, 2001 FH OPCO and the Commission executed a Programmatic Agreement (PA) with the New York State Historic Preservation Officer (SHPO) that is designed to avoid, mitigate, or lessen the any affects which may occur during the term of the license. In fulfilling its obligation to implement the PA, FH OPCO agreed to ensure the Glens Falls Feeder Canal reasonable protection as a historic property.

Article 407 of the FERC License required FH OPCO to file a Historical Properties Management Plan (HPMP) to provide measures to be taken for undiscovered historic or archaeological resources prior to and during any ground-disturbing activities. FH OPCO filed the HPMP on November 20, 2001 for Commission approval.

September 13, 2001 EA:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=6005334>

May 16, 2001 PA:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=10054048>

November 20, 2001 HPMP (Appended to the PA):

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=10054048>

On January 9, 2018 FERC inquired about the status of the HPMP and asked the Licensee if they had correspondence indicating the HPMP was accepted by FERC. On January 23, 2018, the Licensee refiled the HPMP for Commission approval, which was approved on March 6, 2018.

2018 FERC Order Approving HPMP:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=14835468>

The Licensee files an annual monitoring report on activities undertaken that may be subject to the HPMP. The annual historic properties monitoring report for 2019 was filed on January 2, 2020. The Licensee appears to be in compliance with its requirements with regard to cultural and historical resources.

Glens Falls Project Certification Application

January 02, 2020 Annual HPMP Report

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=15435368>

Table III.G.2 Cultural and Historic Resources: Glens Falls Project Zone 2

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|--|
| G | 2 | <u>Approved Plan:</u> <ul style="list-style-type: none">• Provide documentation of all approved state, federal, and recognized tribal plans for the protection, enhancement, and mitigation of impacts to cultural and historic resources affected by the facility.• Document that the facility is in compliance with all such plans. |

See above response for Zone 1.

Table III.G.3 Cultural and Historic Resources: Glens Falls Project Zone 3

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|--|
| G | 2 | <u>Approved Plan:</u> <ul style="list-style-type: none">• Provide documentation of all approved state, federal, and recognized tribal plans for the protection, enhancement, and mitigation of impacts to cultural and historic resources affected by the facility.• Document that the facility is in compliance with all such plans. |

See above response for Zone 1.

Information Required to Support Recreational Resources Standards.

Table III.H.1 Recreational Resources: Glens Falls Project Zone 1

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|---|
| H | 2 | <u>Agency Recommendation:</u> <ul style="list-style-type: none">• 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. |

Article 408 required the Licensee to file a recreation plan to provide recreational access for fishing and boating, access for canoe portage, parking for five cars, and recreation signs at the Licensee's picnic and overlook area. On July 23, 2002 FERC issued an Order Approving the Recreation Plan, which was submitted to FERC on May 21, 2002. The Glens Falls Project is in compliance with recreational access, accommodation, and facilities' conditions in the FERC license.

May 21, 2002 Glens Falls Recreation Plan:

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=10160779>

July 23, 2002 Order Approving the Recreation Plan

<https://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=1049194>

Glens Falls Project Certification Application

FH OPCO permits free public access to the shoreline of the Glens Falls impoundment where Project facilities, hazardous areas and existing leases, easements, and private ownership do not preclude access.

Table III.H.2 Recreational Resources: Glens Falls Project Zone 2

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|---|
| H | 2 | <u>Agency Recommendation:</u> <ul style="list-style-type: none">• 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. |

See response above for Zone 1.

Table III.H.3 Recreational Resources: Glens Falls Project Zone 3

| <i>Criterion</i> | <i>Standard</i> | <i>Instructions</i> |
|------------------|-----------------|---|
| H | 2 | <u>Agency Recommendation:</u> <ul style="list-style-type: none">• 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. |

See response above for Zone 1.

Glens Falls Project Certification Application

PART IV. SWORN STATEMENT AND WAIVER

As an Authorized Representative of FH OPCO, 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 LIHI Certification of the applying facility is granted, the LIHI Certification Mark License Agreement must be executed prior to marketing the electricity product as LIHI Certified®.

The Undersigned 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.

Company Name: FH OPCO, LLC

Authorized Representative

Name: Daniel J. Maguire

Title: Compliance Manager

Authorized Signature: _____



Date: 4/20/2020

Glens Falls Project Certification Application

PART V. CONTACTS

Table V-1. Complete contact information for FH OPCO, LLC

| | |
|--|--|
| Project Owner: | |
| Name and Title | |
| Company | FH OPCO, LLC |
| Phone | |
| Email Address | |
| Mailing Address | 399 Big Bay Road, Queensbury, NY 12804 |
| Project Operator (if different from Owner): | |
| Name and Title | |
| Company | |
| Phone | |
| Email Address | |
| Mailing Address | |
| Consulting Firm / Agent for LIHI Program (if different from above): | |
| Name and Title | |
| Company | |
| Phone | |
| Email Address | |
| Mailing Address | |
| Compliance Contact (responsible for LIHI Program requirements): | |
| Name and Title | Daniel J. Maguire, P.E., Compliance Manager |
| Company | Brookfield Renewable |
| Phone | 315-267-1036 |
| Email Address | Danny.Maguire@brookfieldrenewable.com |
| Mailing Address | 184 Elm Street, Potsdam, NY 13676 |
| Party responsible for accounts payable: | |
| Name and Title | |
| Company | Brookfield Renewable |
| Phone | |
| Email Address | AP@brookfieldrenewable.com |
| Mailing Address | 41 Victoria, Gatineau, QC J8X 2A1 |
| Name and Title | Sandeep Mascarenhas, Senior Analyst, Capacity & Ancillary Services Management |
| Company | Brookfield Renewable |
| Phone | 819-561-2722 ext. 6743 |
| Email Address | Sandeep.Mascarenhas@brookfieldrenewable.com |
| Mailing Address | 41 Victoria, Gatineau, QC J8X 2A1 |

Glens Falls Project Certification Application

Table V-2. Complete contact information for current and relevant state, federal, provincial, and tribal resource agency contacts.

| Agency Contact (Check area of responsibility: Flows <input checked="" type="checkbox"/> , Water Quality <input checked="" type="checkbox"/> , Fish/Wildlife Resources <input checked="" type="checkbox"/> , Watersheds <input type="checkbox"/> , T/E Spp. <input type="checkbox"/> , Cultural/Historic Resources <input type="checkbox"/> , Recreation <input checked="" type="checkbox"/>): | |
|---|--|
| Agency Name | New York State Department of Environmental Conservation |
| Name and Title | Beth Magee, Environmental Analyst |
| Phone | 518-623-1281 |
| Email address | dep.r5@dec.ny.gov |
| Mailing Address | 232 Golf Course Road, Warrensburg, NY 12885 |

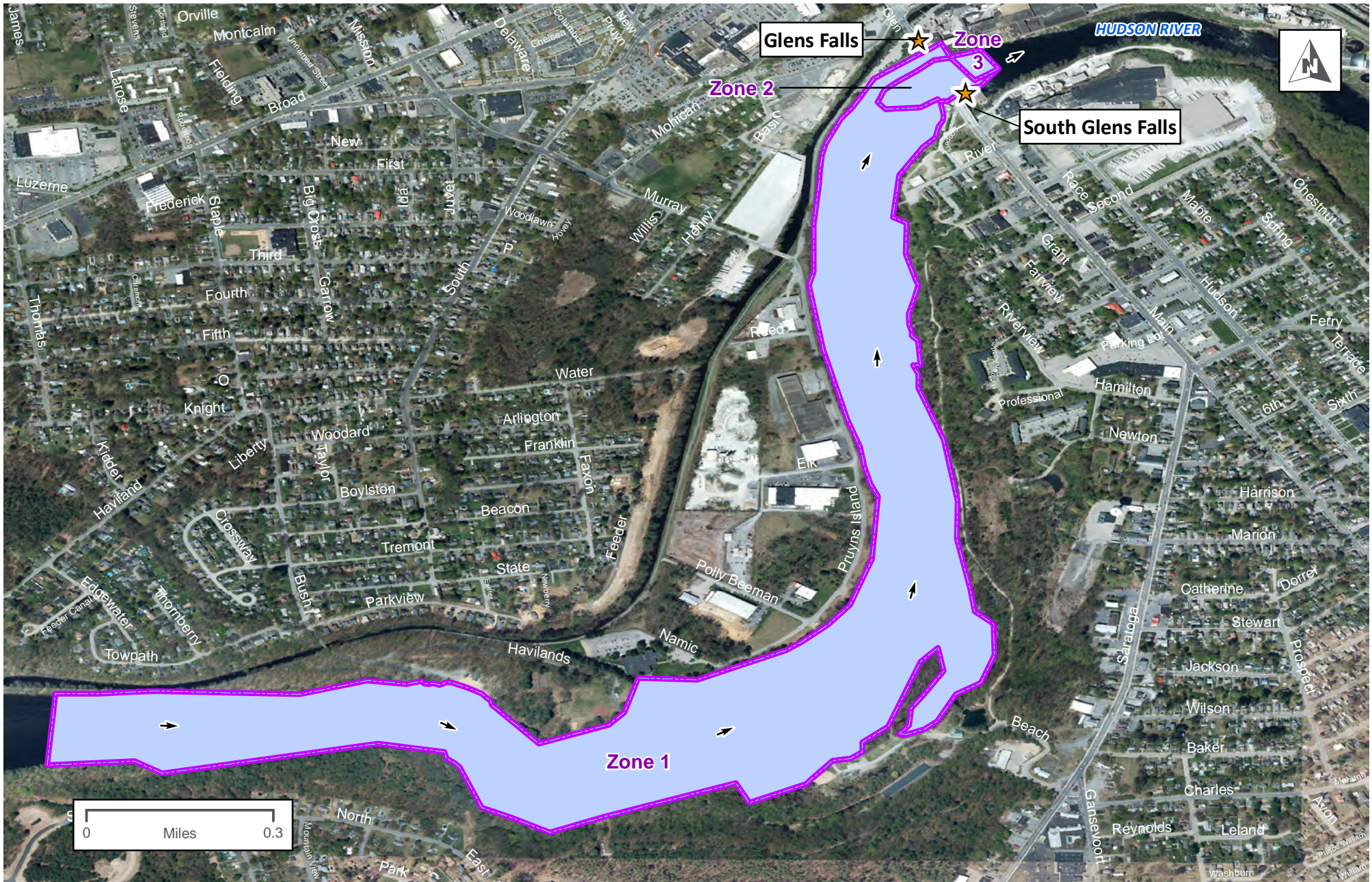
| Agency Contact (Check area of responsibility: Flows <input type="checkbox"/> , Water Quality <input type="checkbox"/> , Fish/Wildlife Resources <input type="checkbox"/> , Watersheds <input type="checkbox"/> , T/E Spp. <input checked="" type="checkbox"/> , Cultural/Historic Resources <input type="checkbox"/> , Recreation <input type="checkbox"/>): | |
|--|--|
| Agency Name | New York State Department of Environmental Conservation |
| Name and Title | Nicholas Conrad, Information Resources Coordinator |
| Phone | 518-402-8935 |
| Email address | Nick.Conrad@dec.ny.gov |
| Mailing Address | 625 Broadway, Albany, NY 12233-4757 |

| Agency Contact (Check area of responsibility: Flows <input type="checkbox"/> , Water Quality <input type="checkbox"/> , Fish/Wildlife Resources <input type="checkbox"/> , Watersheds <input type="checkbox"/> , T/E Spp. <input checked="" type="checkbox"/> , Cultural/Historic Resources <input type="checkbox"/> , Recreation <input type="checkbox"/>): | |
|--|--|
| Agency Name | U.S. Fish and Wildlife Service |
| Name and Title | Robyn Niver, Endangered Species Biologist |
| Phone | 607-753-9334 |
| Email address | Robyn_Niver@fws.gov |
| Mailing Address | 3817 Luker Road, Cortland, NY 13045 |

| Agency Contact (Check area of responsibility: Flows <input checked="" type="checkbox"/> , Water Quality <input checked="" type="checkbox"/> , Fish/Wildlife Resources <input checked="" type="checkbox"/> , Watersheds <input type="checkbox"/> , T/E Spp. <input checked="" type="checkbox"/> , Cultural/Historic Resources <input type="checkbox"/> , Recreation <input type="checkbox"/>): | |
|---|--|
| Agency Name | U.S. Fish and Wildlife Service |
| Name and Title | Steve Patch |
| Phone | 607-753-9334 |
| Email address | Stephen_Patch@fws.gov |
| Mailing Address | 3817 Luker Road, Cortland, NY 13045 |

| Agency Contact (Check area of responsibility: Flows <input type="checkbox"/> , Water Quality <input type="checkbox"/> , Fish/Wildlife Resources <input type="checkbox"/> , Watersheds <input type="checkbox"/> , T/E Spp. <input type="checkbox"/> , Cultural/Historic Resources <input checked="" type="checkbox"/> , Recreation <input type="checkbox"/>): | |
|--|--|
| Agency Name | New York State Division for Historic Preservation |
| Name and Title | Michael Lynch, Division Director |
| Phone | 518-237-8643 |
| Email address | Michael.Lynch@parks.ny.gov |
| Mailing Address | Peebles Island State Park, P.O. Box 189, Waterford, NY 12188-0189 |

APPENDIX A
GLENS FALLS PROJECT ZONES OF EFFECT



↑ Flow Direction

▭ Zones of Effect

ZONES OF EFFECT GLEN FALLS HYDROELECTRIC PROJECT

APPENDIX B
PHOTOS OF KEY PROJECT FEATURES

APPENDIX B – PHOTOGRAPHS OF KEY PROJECT FEATURES



Spillway



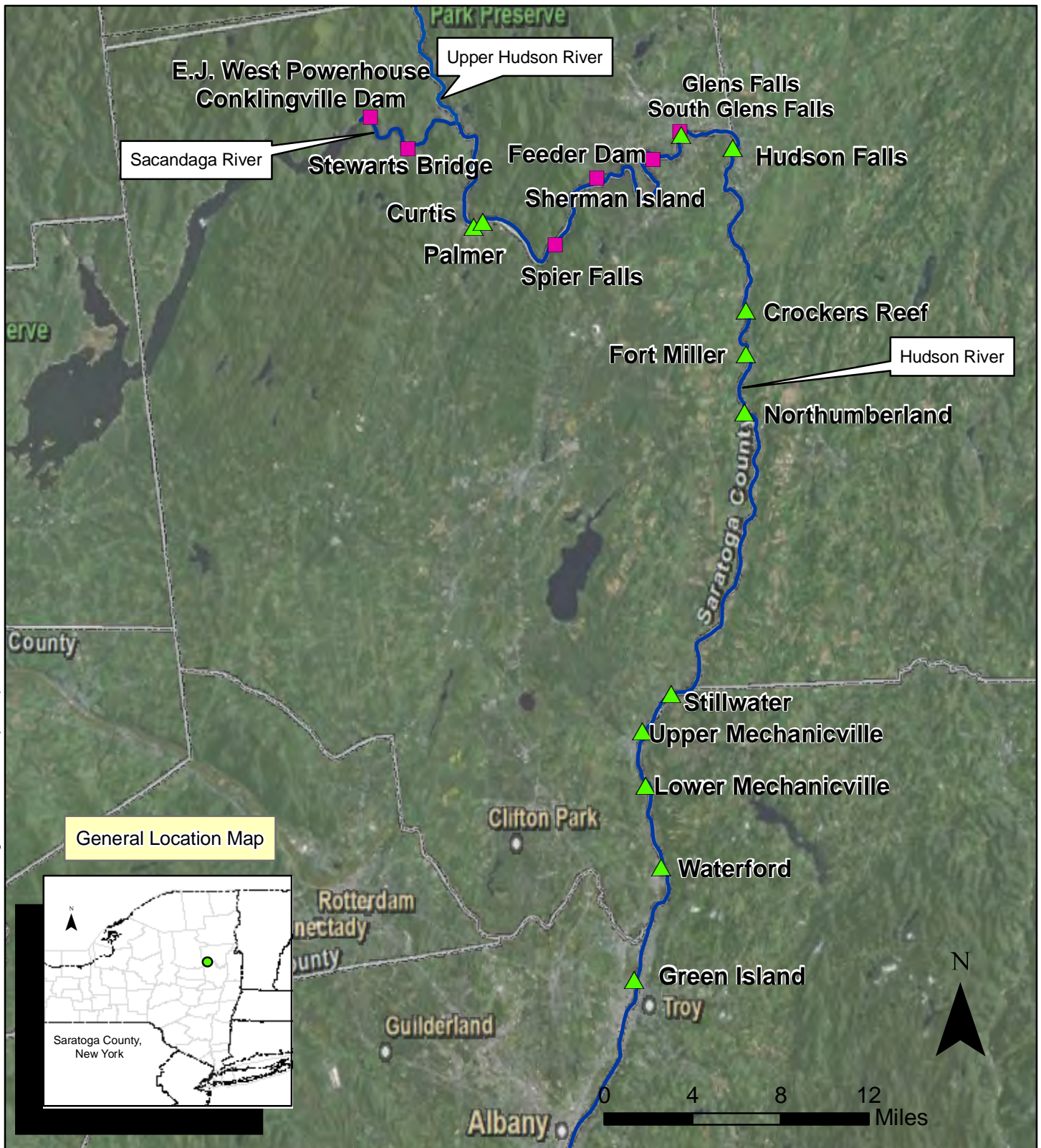
Bypass Reach and Power Canal



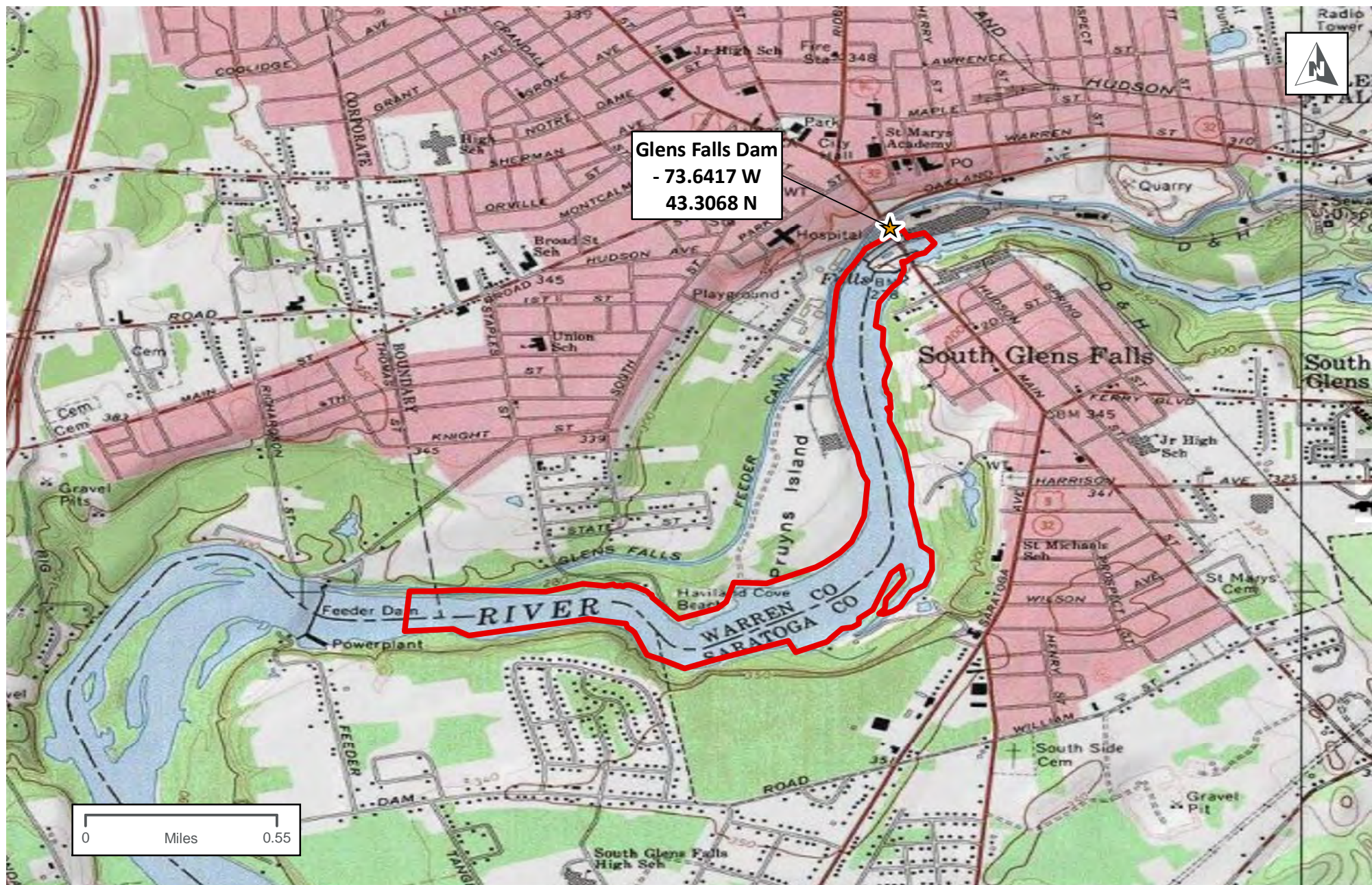
Power Canal and Intake

APPENDIX C
PROJECT MAPS AND AERIALS

P:\Brookfield\NY\074.0174_EJ_West_Stewarts_Bridge_IGIS\MXDs\ProjectMap_111209kab.mxd
Thursday, January 20, 2011 2:28:05 PM



| | | |
|---|---|---|
| <p>Sacandaga and Hudson River Dam Locations</p> <p>DATA SOURCE: http://server.arcgisonline.com/ArcGIS/rest/services/ESRI_Imagery_World_2D/MapServer FILE LOCATION: P:\BROOKFIELD\074.174\GIS\MXD\PROJECTMAP_111209_kab</p> | <ul style="list-style-type: none">▲ Non-Brookfield Dam■ Brookfield Dam— UpperHudson— River Center Line□ County Boundary | <p>FIGURE 1</p> <p>Brookfield Power HDR DTA</p> |
|---|---|---|



GLENS FALLS HYDROELECTRIC PROJECT

USGS QUADRANGLE: GLENS FALLS

APPENDIX C – MAPS AND AERIAL PHOTOS OF FACILITY AREA AND RIVER BASIN
GLENS FALLS HYDROELECTRIC PROJECT



APPENDIX D
401 WATER QUALITY CERTIFICATION CONSULTATION

March 18, 2020

Ms. Beth Magee
New York State Department of Environmental Conservation
232 Gold Course Road
Warrensburg, NY 12885-1172

Subject: **Glens Falls Project (FERC No. 2385)**
Low Impact Hydropower Institute Certification
Water Quality Certificate Verification

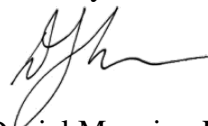
Dear Ms. Magee:

Erie Boulevard Hydropower, L.P. (Erie) is applying for Low Impact Hydropower Institute (LIHI) certification for the Glens Falls Project (FERC No. 2385). This Project is located on the Hudson River in the Towns of Glens Falls and South Glens Falls, Saratoga and Warren Counties, New York.

Erie is requesting confirmation from the New York State Department of Environmental Conservation stating that the 401 Water Quality Certificate issued for the operation of Glens Falls Project on May 5, 1995 is still valid. Please provide this confirmation by reply to this letter via letter or email.

Erie would appreciate a response within 30 days of the date of this letter. Thank you in advance for your assistance, and if you have any questions, please do not hesitate to contact me at (315) 267-1036 or by email at Danny.Maguire@brookfieldrenewable.com.

Sincerely,



Daniel Maguire, P.E.
Compliance Manager
North Atlantic Operations

Scott, Kelsey

Subject: FW: Glens Falls Project Water Quality Certificate Verification

From: Magee, Beth A (DEC) [mailto:beth.magee@dec.ny.gov]
Sent: Monday, April 20, 2020 5:27 AM
To: Scott, Kelsey <Kelsey.Scott@hdrinc.com>
Subject: RE: Glens Falls Project Water Quality Certificate Verification

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Kelsey.

My apologies for not getting back to you sooner. I thought that I had replied but I can see now that I did not. I checked our files and records and found that the Water Quality Certification (DEC Permit # 5-5205-00032/00003) for the Glens Falls Dam (issued 5/3/1995 to Finch Pruyn Co. Inc.) does not have an expiration date as it is tied to the expiration of the FERC license. As long as the FERC license is still valid and the conditions of the WQC are still being met, the WQC will remain valid. Please feel free to contact me via email with any additional questions.

Thank you,

Beth A. Magee

Deputy Regional Permit Administrator, Division of Environmental Permits

New York State Department of Environmental Conservation

232 Golf Course Road, Warrensburg, NY 12885

P: (518) 623-1283 | F: (518) 623-3603 | beth.magee@dec.ny.gov

www.dec.ny.gov |  |  | 



From: dec.sm.DEP.R5 <DEP.R5@dec.ny.gov>
Sent: Friday, April 17, 2020 7:16 PM
To: Magee, Beth A (DEC) <beth.magee@dec.ny.gov>
Subject: Fw: Glens Falls Project Water Quality Certificate Verification

From: Scott, Kelsey
Sent: Thursday, March 19, 2020 10:30 AM
To: 'dep.r5@dec.ny.gov' <dep.r5@dec.ny.gov>
Cc: Caley, Katherine <Katherine.Caley@hdrinc.com>; Maguire, Danny <Danny.Maguire@brookfieldrenewable.com>
Subject: Glens Falls Project Water Quality Certificate Verification

Good Morning,

Erie Boulevard Hydropower is developing an application for Low Impact Hydropower Institute (LIHI) certification for the Glens Falls Project (FERC No. 2385). This project is located on the Hudson River, in the Towns of Glens Falls and South Glens Falls. In support of this application, Erie is submitting the attached request for confirmation that the 401 Water Quality Certificate issued for this Project is still valid.

Please let me know if you have any questions on the attached request.

Thank you,
Kelsey

Kelsey Scott, MS
Assistant Regulatory Specialist

HDR

1304 Buckley Road, Suite 202
Syracuse, NY 13212

D 315.414.2206 **M** 315.706.5176
kelsey.scott@hdrinc.com

hdrinc.com/follow-us

APPENDIX E
RARE, THREATENED AND ENDANGERED SPECIES CONSULTATION

From: naturalheritage@nynhp.org
Sent: Thursday, March 19, 2020 10:16 AM
To: Scott, Kelsey
Subject: Confirmation of your submitted request to New York Natural Heritage

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Submission ID: 4259

Submitted on Thursday, March 19, 2020 - 10:15 Submitted values are:

Company, Organization, or Agency: HDR, Inc Requestor Name: kelsey scott Requestor Address (Street/PO Box): 1304 buckley road suite 202 Requestor City: syracuse Requestor State: New York Requestor Zip Code: 13210 Requestor Telephone #: 3157065176 Requestor Email:

kelsey.scott@hdrinc.com Project Type: hydroelectric facility/project Project Name: Glens Falls

Hydroelectric Project - LIHI Project Applicant: Erie Boulevard Hydropower Project County:

- Saratoga

- Warren

Town (Saratoga County): Moreau

Town (Warren County): City Of Glens Falls Project Summary:

Erie is presently working with the Low Impact Hydropower Institute (LIHI) to certify the Glens Falls Project (FERC No. 2385), as a low impact project. In preparing the application for LIHI certification, Erie must update or confirm consultation with resource agencies with respect to the presence of threatened or endangered species within the vicinity of the hydroelectric development. Per the request from LIHI, Erie respectfully requests information on the presence of threatened or endangered species within the vicinity of the above-listed project.

As a matter of background, the license from the Federal Energy Regulatory Commission (FERC) was issued for this Project on November 20, 2001. Project operations and environmental protection measures at this Project have been largely determined by the License and the Section 401 Water Quality Certificate issued by the New York State Department of Environmental Conservation. The licensing processes for this Project included consultation with resource agencies regarding threatened and endangered species.

Current Land Use: The site is currently developed for the primary purpose of hydroelectric energy production on the Hudson River.

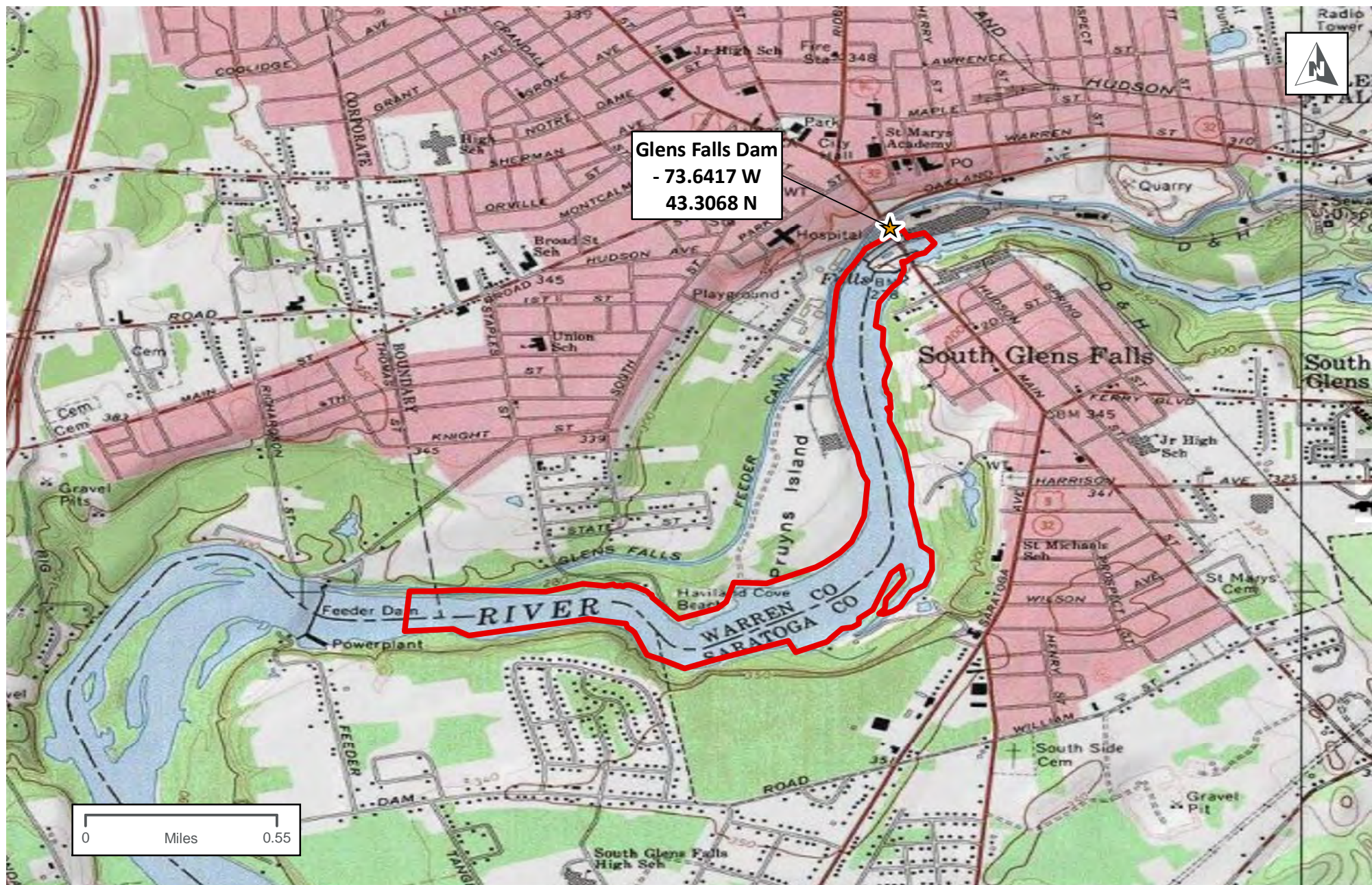
Tax parcel number:

Latitude:

Longitude:

Street Address of Project:

Project Notes:



GLENS FALLS HYDROELECTRIC PROJECT

USGS QUADRANGLE: GLENS FALLS



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program
625 Broadway, Fifth Floor, Albany, NY 12233-4757
P: (518) 402-8935 | F: (518) 402-8925
www.dec.ny.gov

April 7, 2020

Kelsey Scott
HDR, Inc
1304 Buckley Road, Suite 202
Syracuse, NY 13210

Re: Glens Falls Hydroelectric Project - LIHI
County: Saratoga, Warren Town/City: Moreau, City Of Glens Falls

Dear Kelsey Scott:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

We have no records of rare or state-listed animals or plants, or significant natural communities at the project site.

Peregrine falcon (*Falco peregrinus*, state listed as Endangered) has been documented nesting within 0.5 mile of the project site. For information about any permit considerations for your project, please contact the Permits staff at the NYSDEC Region 5 Office, Division of Environmental Permits, at dep.r5@dec.ny.gov.

For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other resources may be required to fully assess impacts on biological resources.

For information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the Permits staff at the NYSDEC Region 5 Office as described above.

Sincerely,



Heidi Krahling
Environmental Review Specialist
New York Natural Heritage Program



United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office

3817 Luker Road
Cortland, NY 13045-9385

Phone: (607) 753-9334 Fax: (607) 753-9699

<http://www.fws.gov/northeast/nyfo/es/section7.htm>



In Reply Refer To:

March 19, 2020

Consultation Code: 05E1NY00-2020-SLI-2101

Event Code: 05E1NY00-2020-E-06372

Project Name: Glens Falls Hydroelectric Project

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 13045-9385

(607) 753-9334

Project Summary

Consultation Code: 05E1NY00-2020-SLI-2101

Event Code: 05E1NY00-2020-E-06372

Project Name: Glens Falls Hydroelectric Project

Project Type: DAM

Project Description: Erie Boulevard is presently working with the Low Impact Hydropower Institute (LIHI) to certify the Glens Falls Hydroelectric Project (FERC No. 2385) as a low impact project. In preparing the application for LIHI certification, Brookfield must update or confirm consultation with resource agencies with respect to the presence of threatened or endangered species within the vicinity of the hydroelectric development. Per the request from LIHI, Erie respectfully requests information on the presence of threatened or endangered species within the vicinity of the above-listed projects.

As a matter of background, the license from the Federal Energy Regulatory Commission (FERC) was issued for this Project in November 2001. The licensing processes for this Project included consultation with resource agencies regarding threatened and endangered species.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/43.29763150121738N73.64230448598808W>



Counties: Saratoga, NY | Warren, 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.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

| NAME | STATUS |
|---|------------|
| Indiana Bat <i>Myotis sodalis</i> | Endangered |
| There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949 | |

Critical habitats

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