

Hydraulic Race Hydroelectric Project

Certification Application to the Low Impact Hydropower Institute

FERC Project No. 2424



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Potsdam, New York

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INTRODUCTION

Erie Boulevard Hydropower, L.P. (Erie), a wholly owned subsidiary of Brookfield Renewable, is providing this application to the Low Impact Hydropower Institute (LIHI) for certification of the Hydraulic Race Hydroelectric Project. The Hydraulic Race Hydroelectric Project is located on the New York State Canal System in the Town of Lockport, NY in Niagara County. This facility is exempt from licensing with the Federal Energy Regulatory Commission (FERC), and is known as the Hydraulic Race Hydroelectric Project (FERC No. 2424) (Hydraulic Race Project).

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PART I. FACILITY DESCRIPTION

The key features of the Hydraulic Race Hydroelectric Project are described in Table 1.

Table I-1. Facility Description Information for the Hydraulic Race Hydroelectric Project.

<i>Item</i>	<i>Information Requests</i>	<i>Response (and references to further details)</i>
Name of the Facility	Facility name (use FERC project name if possible)	Hydraulic Race Hydroelectric Project (FERC No. 2424)
Location	River name (USGS proper name)	New York State Barge Canal (Erie Canal)
	Watershed name	Niagara Watershed HUC-04120104
	Nearest town(s), county(ies), and state(s) to dam	City of Lockport, Niagara County, New York
	River mile of dam above next major river	N/A
	Geographic latitude of dam	43.171
	Geographic longitude of dam	-78.692
Facility Owner	Application contact names	See Part V of LIHI certification application for more information
	Facility owner company and authorized owner representative name.	Erie Boulevard Hydropower, L.P. Daniel J. Maguire
	FERC licensee company name (if different from owner)	Same as above
Regulatory Status	FERC Project Number (e.g., P-xxxxx), issuance and expiration dates, or date of exemption	FERC Project Number 2424 License Exception issued April 21, 1989
	FERC license type (major, minor, exemption) or special classification (e.g., "qualified conduit", "non-jurisdictional")	Exempt - Conduit
	Water Quality Certificate identifier, issuance date, and issuing agency name. Include information on amendments.	N/A
	Hyperlinks to key electronic records on FERC e-library website or other publicly accessible data repositories	November 27, 1990 Order Granting Exemption from FERC Licensing: https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=3455674
Powerhouse	Date of initial operation (past or future for pre-operational applications)	1942

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	Total installed capacity (MW)	4.867 MW (3.4 MW maximum capability due to hydraulic limitations of conduit)
	Average annual generation (MWh) and period of record used	The average generation from 1969 to 2016 is 10,800MWh.
	Mode of operation (run-of-river, peaking, pulsing, seasonal storage, diversion, etc.)	The Hydraulic Race Project does not have a dam and is only operated during navigation season from May 1 to December 1.
	Number, type, and size of turbines, including maximum and minimum hydraulic capacity of each unit	<p>Generating Units: 1 Type: vertical Kaplan turbine</p> <p>Description: Design capacity of 6,200 HP at design head of 46 feet, a speed of 200 rpm, and a discharge capacity of 1,200 cfs.</p> <p>Maximum Capacity: Due to hydraulic limitations in the conduit system, the maximum capability of this unit is 1,080 cfs.</p> <p>Minimum Capacity: 800 cfs (efficient)</p>
	Trashrack clear spacing (inches), for each trashrack	5.0 inch clear spacing
	Dates and types of major equipment upgrades	<p>The major upgrades are listed as follows:</p> <p>2004 – Turbine runners were replaced.</p>
	Dates, purpose, and type of any recent operational changes	There have been no recent operational changes at the Project.
	Plans, authorization, and regulatory activities for any facility upgrades or license or exemption amendments	There are no plans for any facility upgrades at the Project.
Dam or Diversion	Date of original construction and description and dates of subsequent dam or diversion structure modifications	The project does not have a dam; water is impounded by the locks on the Erie Canal.
	Dam or diversion structure height including separately, the height of any flashboards, inflatable dams, etc.	N/A
	Spillway elevation and hydraulic capacity	N/A
	Tailwater elevation (provide normal range if available)	513.8 feet msl (normal)

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	Length and type of all penstocks and water conveyance structures between the impoundment and powerhouse	Water is conveyed by a 650-foot-long rock tunnel (NYSCC-owned), a 410-foot-long concrete lined tunnel, and 100-foot-long steel penstock.
	Dates and types of major infrastructure changes	There have been no major infrastructure improvements.
	Designated facility purposes (e.g., power, navigation, flood control, water supply, etc.)	The purpose of the Hydraulic Race Project is for power production.
	Source water	New York State Barge Canal
	Receiving water and location of discharge	New York State Barge Canal below Lock 34 and 35
Conduit	Date of conduit construction and primary purpose of conduit	Constructed in 1942 to convey water to the powerhouse
Impoundment and Watershed	Authorized maximum and minimum water surface elevations	Not applicable
	Normal operating elevations and normal fluctuation range	Not applicable
	Gross storage volume and surface area at full pool	Not applicable
	Usable storage volume and surface area	Not applicable
	Describe requirements related to impoundment inflow, outflow, up/down ramping and refill rate restrictions.	The Hydraulic Race Project does not have a dam and is only operated during navigation season from May 1 to December 1.
	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.	Not applicable
	Downstream dams by name, ownership, river mile and FERC number if FERC licensed or exempt. Indicate which downstream dams have upstream fish passage	Not applicable
	Operating agreements with upstream or downstream facilities that affect water availability and facility operation	Not applicable
	Area of land (acres) and area of water (acres) inside FERC project boundary or under facility control.	The FERC project boundary covers 1.60 acres (1.45 acres of land and 0.15 acres of water).

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Hydrologic Setting	Average annual flow at the dam, and period of record used	This water amounts to an average daily flow of approximately 600 to 800 cfs during the canal season, which is from approximately April 15 to December 15 each year.
	Average monthly flows and period of record used	This water amounts to an average daily flow of approximately 600 to 800 cfs during the canal season, which is from approximately April 15 to December 15 each year.
	Location and name of closest stream gauging stations above and below the facility	Not applicable
	Watershed area at the dam (in square miles). Identify if this value is prorated and provide the basis for proration.	Not applicable
Designated Zones of Effect	Number of zones of effect	There is one zone of effect at the Hydraulic Race Hydroelectric Project (See Appendix A)
	Upstream and downstream locations by river miles	Zone 1: 0 to 0.1
	Type of waterbody (river, impoundment, by-passed reach, etc.)	Zone 1: River
	Delimiting structures or features	Zone 1: Powerhouse, downstream approximately 0.1 miles to the New York State Barge Canal.
	Designated uses by state water quality agency	<p>The Erie Canal in the vicinity of the Hydraulic Race Project is classified by NYSDEC as Class C waters.</p> <p>Link to NYSDEC Classification Codes: https://govt.westlaw.com/nycrr/Browse/Home/NewYork/NewYorkCodesRulesandRegulations?guid=I06849fe0b5a111dda0a4e17826ebc834&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default) </p>

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PART II. STANDARD MATRICES

The Hydraulic Race Hydroelectric Project has one zone of effect defined as the 0.1 mile tailrace area extending from the powerhouse to the Erie Canal.

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

Criterion		<i>Alternative Standards</i>				
		<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>Plus</i>
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				

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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).

Information Required to Support Ecological Flows Standards.

III.A.1 Ecological Flows: Hydraulic Race Project Zone 1

<i>Criterion</i>	<i>Standard</i>	<i>Instructions</i>
A	1	<p><u>Not Applicable/De Minimis Effect:</u></p> <ul style="list-style-type: none">• Confirm the location of the powerhouse relative to dam/diversion structures and demonstrate that there are no bypassed reaches at the facility.• For run-of-river facilities, provide details on operations and demonstrate that flows, water levels, and operation are monitored to ensure such an operational mode is maintained. If deviations from required flows have occurred, discuss them and the measures taken to minimize reoccurrence.• In a conduit facility, identify the source waters, location of discharge points, and receiving waters for the conduit system within which the hydropower facility is located. This standard cannot be used for conduits that discharge to a natural waterbody.• For impoundment zones only, explain water management (e.g., fluctuations, ramping, refill rates) and 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.

The Hydraulic Race Project is exempted from FERC Licensing, as per the November 27, 1990 FERC Order Granting Exemption from Licensing. Due to its FERC-exempt status, the Project was not subject to an environmental assessment. During the application review process, State and federal agencies, including the United States Fish and Wildlife Service (USFWS) had the opportunity to object to an exemption or require base flows through the tailrace. The USFWS comment letter, dated September 24, 1990, did not include a recommendation for base flows during the application review.

As a conduit facility, this Project draws water from the Erie Canal at Lock No. 35, and discharges it below Lock No. 34. Water is supplied to this portion of the Erie Canal from Tonawanda Creek, Ellicott Creek, and the Niagara River. The New York State Canal Corporation (NYSCC) is responsible for the operation of Lock Nos. 34 and 35 and for maintaining operating water levels in the downstream section of the canal. Control of water release and the resulting generation from the project is achieved by the Erie Canal Lock Operator adjusting the discharge of water from the canal. Generation is limited to the navigation season

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which is from approximately May 1 to December 1 each year. During the non-navigation season, the canal is dewatered.

Order Granting License Exemption Status:

<https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=3455674>

Information Required to Support Water Quality Standards.

III.B.1 Water Quality: Hydraulic Race Project Zone 1

<i>Criterion</i>	<i>Standard</i>	<i>Instructions</i>
B	1	<p><u>Not Applicable/De Minimis Effect:</u></p> <ul style="list-style-type: none">• If facility is located on a Water Quality Limited river reach, provide a link to the state's most recent impaired waters list and indicate the page(s) therein that apply to facility waters. If possible, provide an agency letter stating that the facility is not a cause of such limitation.• Explain the rationale for why the facility does not alter water quality

The Hydraulic Race Project is exempted from FERC Licensing, as per the November 27, 1990 FERC Order Granting Exemption from Licensing. The State of New York did not issue a water quality certificate for the Hydraulic Race Project. As per the November 2016 New York State Impaired Water Bodies list (https://www.dec.ny.gov/docs/water_pdf/303dListfinal2016.pdf), this portion of the Erie Canal is not listed as impaired.

The Erie Canal in the vicinity of the Hydraulic Race Project is classified by NYSDEC as Class C waters. The best usage of Class C waters is fishing, and they are also suitable for fish propagation and survival, as well as primary and secondary contact recreation, where such use is not limited by other factors.

Water is supplied to this portion of the Erie Canal from Tonawanda Creek, Ellicott Creek and the Niagara River. The NYSCC is responsible for the operation of Locks 34 and 35 and for maintaining operating water levels in the downstream section of the canal. Control of water release and the resulting generation from the project is achieved by the Erie Canal Lock Operator adjusting the discharge of water from the canal. Generation is limited to the navigation season which is from approximately May 1 to December 1 each year. During the non-navigation season, the canal is dewatered.

Order Granting License Exemption Status:

<https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=3455674>

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Information Required to Support Upstream Fish Passage Standards.

III.C.1 Upstream Fish Passage: Hydraulic Race Project Zone 1

<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.

While the Erie Canal is a man-made canal with yearly drawdowns and lock activities, a warmwater fishery is known to exist in the Project vicinity, including largemouth bass, brown bullhead, and northern pike. During the exemption proceedings for the Project, neither the Department of Commerce nor the USFWS prescribed upstream fish passage facilities for the Project. In a September 24, 1990 letter, the Interior reserved their right to prescribe facilities to protect fish and wildlife, after notice and opportunity for hearing.

Information Required to Support Downstream Fish Passage Standards.

III.D.1 Downstream Fish Passage: Hydraulic Race Project Zone 1

<i>Criterion</i>	<i>Standard</i>	<i>Instructions</i>
D	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 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 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.• 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.

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During the exemption proceedings for the Project, neither the Department of Commerce nor the USFWS prescribed downstream fish passage facilities for the Project. While the Erie Canal is a man-made canal with yearly drawdowns and lock activities, a warmwater fishery is known to exist in the Project vicinity, including largemouth bass, brown bullhead, and northern pike. In their September 24, 1990 letter, the Interior reserved their right to prescribe facilities to protect fish and wildlife, after notice and opportunity for hearing.

III.E.1 Shoreline and Watershed Protection Hydraulic Race Project Zone 1

<i>Criterion</i>	<i>Standard</i>	<i>Instructions</i>
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.

There is no shoreline management plan required for the Project. The Erie Canal and the tailrace area are man-made structures blasted through rock, and they do not have riverine zones associated with them. The tailrace includes a 100-ft-long concrete wall along the shore that would not be subject to erosion. The Erie Canal is not currently considered impaired or threatened by the NYSDEC. As described in Section III.H.I, there are no recreational facilities associated with this Zone.

Information Required to Support Threatened and Endangered Species Standards.

III.F.1 Threatened and Endangered Species: Hydraulic Race Project Zone 1

<i>Criterion</i>	<i>Standard</i>	<i>Instructions</i>
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.

In a letter dated September 24, 1990 the USFWS stated that no federally listed or proposed species is known to exist in the area. Therefore, no Biological Assessment or further consultation with USFWS was needed for the protection of threatened or endangered species.

Based on information received from the USFWS's New York Field Office on February 1, 2019, regarding a request for information on RTE species it appears that the northern long-eared bat

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(*Myotis septentrionalis*) may potentially occur within the Project area. There are no critical habitats located within the Hydraulic Race Project area.

During preparation of this application, Erie also consulted with NYSDEC's Natural Heritage Program for a list of threatened and endangered species that may occur in the vicinity of the Hydraulic Race Project. Pursuant to a letter dated February 7, 2019, NYSDEC indicated that pink heelsplitter (*Potamilus alatus*) and fragile papershell (*Leptodea fragilis*) may potentially occur in the vicinity of the Hydraulic Project. While neither species is listed as threatened or endangered, the pink heelsplitter is considered imperiled in New York and the fragile papershell is considered vulnerable in New York. The NYSDEC has not adopted a formal recovery plan for the pink heelsplitter or fragile papershell.

The USFWS has not adopted a formal recovery plan for the northern long-eared bat. On January 14, 2016, the USFWS published the final 4(d) rule identifying prohibitions for the protection of northern long-eared bats. Operations of the Hydraulic Race Project, especially with regard to tree clearing from June 1 through July 31, adhere to the prohibitions outlined in the final 4(d) rule.

There are no specific requirements for threatened or endangered species protection in the FERC exemption order.

The record of RTE consultation is included in Appendix D.

Information Required to Support Cultural and Historic Resources Standards.

III.G.1 Cultural and Historic Resources: Hydraulic Race Project Zone 1

<i>Criterion</i>	<i>Standard</i>	<i>Instructions</i>
G	1	<u>Not Applicable/De Minimis Effect:</u> <ul style="list-style-type: none">• 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, nor currently adversely affect any cultural or historic resources that are present on facility lands.

The Hydraulic Race Project is exempted from FERC Licensing, as per the November 27, 1990 FERC Order Granting Exemption from Licensing. The Erie Canal is designated a National Historical Landmark. There are no cultural resources associated with Zone 1 because the tailrace is not included as a part of the Canal System.

Erie follows its "Compendium of Compatible Operation and Maintenance Activities (Categorical Exclusions for Historic Hydro Facilities) Pursuant to a Cultural Resources Management Plan." Any activities beyond those listed in the Compendium are submitted to the New York State Historic Preservation Office prior to commencing.

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Information Required to Support Recreational Resources Standards.

III.H.1 Recreational Resources: Hydraulic Race Project Zone 1

<i>Criterion</i>	<i>Standard</i>	<i>Instructions</i>
H	1	<u>Not Applicable/De Minimis Effect:</u> <ul style="list-style-type: none">• Document that the facility does not occupy lands or waters to which public access can be granted and that the facility does not otherwise impact recreational opportunities in the facility area.

The Hydraulic Race Project is exempted from FERC Licensing, as per the November 27, 1990 FERC Order Granting Exemption from Licensing. There are no recreational resources associated with Zone 1. New York State law prohibits swimming, diving or fishing in any canal lock chambers, from the lock walls or from any other canal structure. It is illegal to jump into the water from any of the canal's bridges, locks, guard gates or mooring walls. Hunting on, at or near canal locks or any other canal structure is prohibited. This law is necessary for public safety, as the Erie Canal can be dangerous for recreationists. Near the powerhouse/tailrace access road are guardrails and handrails posted with "Danger Fast Rising Water" signs.

The area is fenced and posted with "Danger High Voltage" and "Danger Private Property No Trespassing" signs. The City of Lockport and building leasee have been contacted regarding trespassing through adjoining structure.

New York State Canal Regulations:

<http://www.canals.ny.gov/about/rulesregs/canalregs.pdf>

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PART IV. SWORN STATEMENT AND WAIVER

As an Authorized Representative of Erie Boulevard Hydropower, L.P., 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: Erie Boulevard Hydropower, L.P.

Authorized Representative

Name: Daniel J. Maguire

Title: Compliance Manager

Authorized Signature: _____

Date: 2/15/2019

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PART V. CONTACTS

Table V-1. Complete contact information for Erie Boulevard Hydropower, L.P.

Project Owner:	
Name and Title	
Company	Erie Boulevard Hydropower, L.P., a subsidiary of Brookfield Renewable
Phone	
Email Address	
Mailing Address	399 Big Bay Rd, 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

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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 <u>X</u> , Water Quality <u>X</u> , Fish/Wildlife Resources <u>X</u> , Watersheds __, T/E Spp. __, Cultural/Historic Resources __, Recreation <u>X</u>):	
Agency Name	New York State Department of Environmental Conservation
Name and Title	Permit Administrator
Phone	(716) 851-7165
Email address	dep.r9@dec.ny.gov
Mailing Address	270 Michigan Ave., Buffalo NY 14203-2915

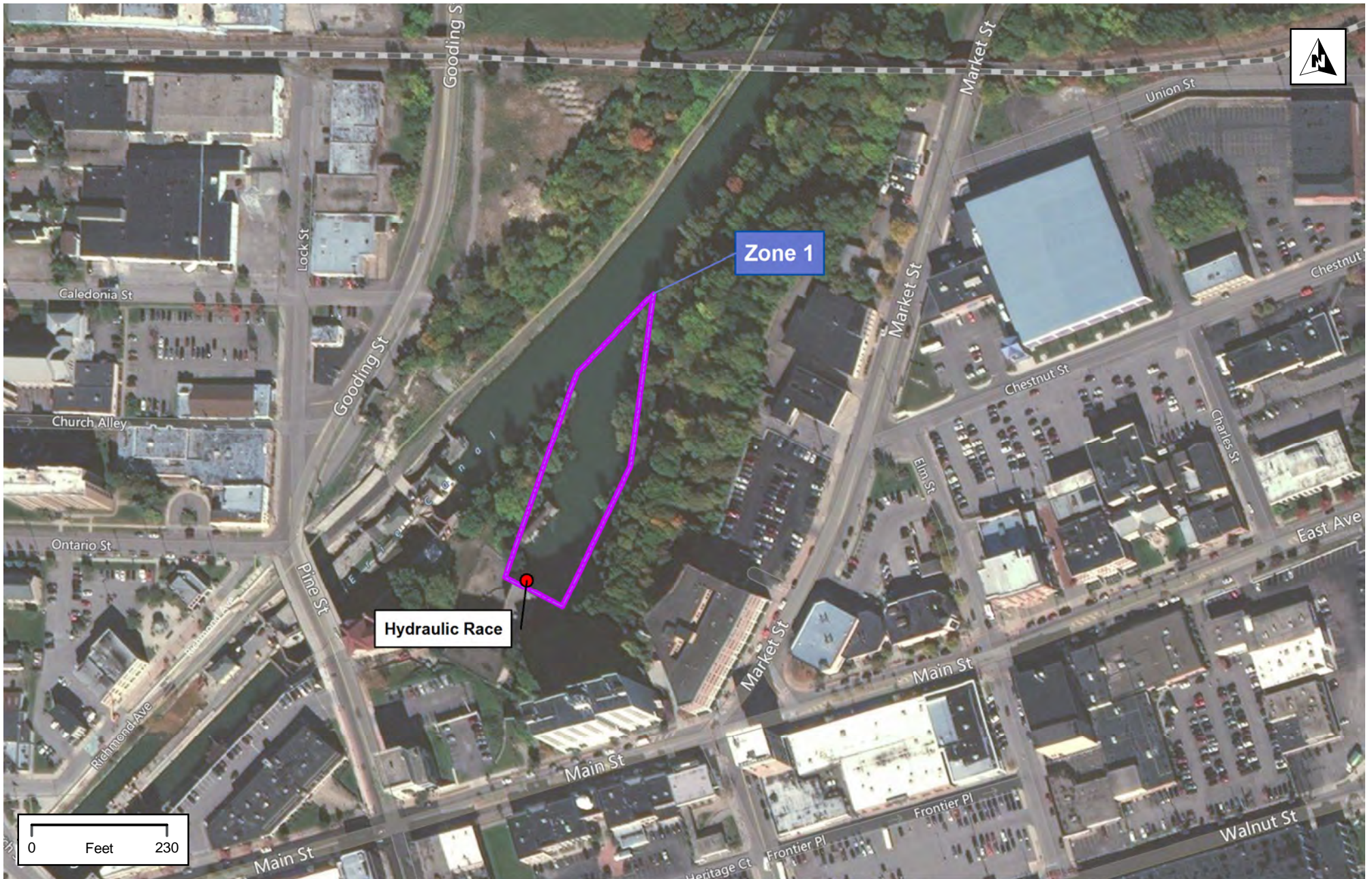
Agency Contact (Check area of responsibility: Flows __, Water Quality __, Fish/Wildlife Resources __, Watersheds __, T/E Spp. <u>X</u> , Cultural/Historic Resources __, Recreation __):	
Agency Name	New York State Department of Environmental Conservation
Name and Title	Nicholas Conrad, Information Resources 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 __, Water Quality __, Fish/Wildlife Resources __, Watersheds __, T/E Spp. <u>X</u> , Cultural/Historic Resources __, Recreation __):	
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 <u>X</u> , Water Quality <u>X</u> , Fish/Wildlife Resources <u>X</u> , Watersheds __, T/E Spp. <u>X</u> , Cultural/Historic Resources __, Recreation __):	
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 __, Water Quality __, Fish/Wildlife Resources __, Watersheds __, T/E Spp. __, Cultural/Historic Resources <u>X</u> , Recreation __):	
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
ZONE OF EFFECT



APPENDIX B

PHOTOS OF KEY PROJECT FEATURES

APPENDIX B – PHOTOGRAPHS OF KEY PROJECT FEATURES



Intake Gates (Non-navigation Season)



Powerhouse



Tailrace



Tailrace

APPENDIX C
PROJECT MAPS AND AERIALS



APPENDIX C – MAPS AND AERIAL PHOTOS OF FACILITY AREA AND RIVER BASIN

HYDRAULIC RACE HYDROELECTRIC PROJECT



APPENDIX D

RARE, THREATENED AND ENDANGERED SPECIES CONSULTATION



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:

February 01, 2019

Consultation Code: 05E1NY00-2019-SLI-0806

Event Code: 05E1NY00-2019-E-02552

Project Name: Hydraulic Race 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: 05E1NY00-2019-SLI-0806

Event Code: 05E1NY00-2019-E-02552

Project Name: Hydraulic Race Hydroelectric Project

Project Type: DAM

Project Description: The Hydraulic Race Hydroelectric Project is applying to the Low Impact Hydropower Institute (LIHI) for a certification of their project, and is looking for information regarding rare, threatened or endangered species that may occur in the project area. LIHI requires documentation of a finding of no negative effects or documentation that the facility is in compliance with relevant conditions in the species recovery plans.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/43.1720384191554N78.69090890412465W>



Counties: Niagara, 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
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

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

Caley, Katherine

From: naturalheritage@nynhp.org
Sent: Wednesday, January 09, 2019 12:28 PM
To: Caley, Katherine
Subject: Confirmation of your submitted request to New York Natural Heritage

Submission ID: 2919
Submitted on Wednesday, January 9, 2019 - 12:27 Submitted values are:

Company, Organization, or Agency: HDR, Inc.
Requestor Name: Katherine Caley
Requestor Address (Street/PO Box): 1304 Buckley Road, Suite 202 Requestor City: Syracuse Requestor State: New York
Requestor Zip Code: 13212 Requestor Telephone #: 315-414-2213 Requestor Email: Katherine.Caley@hdrinc.com Project
Type: hydroelectric facility/project Project Name: Hydraulic Race LIHI Consultation Project Applicant: Erie Boulevard
Hydropower, LLC Project County: Niagara Town (Niagara County): City Of Lockport Project Summary: Erie is presently
working with the Low Impact Hydropower Institute (LIHI) to certify the Hydraulic Race Hydroelectric Project (FERC No.2424)
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 project.
Current Land Use: The site is currently developed for the primary purpose of hydroelectric energy production on the NYSCC
Barge Canal.
Tax parcel number:
Latitude: 43.171
Longitude: -78.961
Street Address of Project:
Project Notes:

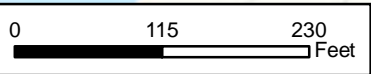


*Town of
Lockport*

Erie Canal

Hydraulic Race
78° 41' 29.88" W
43° 10' 15.81" N

USGS QUAD MAP: Lockport



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

February 7, 2019

Katherine Caley
HDR, Inc.
1304 Buckley Road, Suite 202
Syracuse, NY 13212

Re: Hydraulic Race LIHI Consultation
County: Niagara Town/City: City Of Lockport

Dear Ms. Caley:

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

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur in the vicinity of the project site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to 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 sources may be required to fully assess impacts on biological resources.

Our database is 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.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 9 Office, Division of Environmental Permits at dep.r9@dec.ny.gov, (716) 851-7165.

Sincerely,



Heidi Krahling
Environmental Review Specialist
New York Natural Heritage Program



The following rare animals have been documented in the vicinity of the project site.

We recommend that potential impacts of the proposed project on these species be addressed as part of any environmental assessment or review conducted as part of the planning, permitting and approval process, such as reviews conducted under SEQR. Field surveys of the project site may be necessary to determine the status of a species at the site, particularly for sites that are currently undeveloped and may still contain suitable habitat. Final requirements of the project to avoid, minimize, or mitigate potential impacts are determined by the lead permitting agency or the government body approving the project.

The following animals, while not listed by New York State as Endangered or Threatened, are rare in New York and are of conservation concern.

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	HERITAGE CONSERVATION STATUS	
Freshwater Mussels				
Pink Heelsplitter	<i>Potamilus alatus</i>	Unlisted	Imperiled in NYS	
Documented within 0.5 mile upstream of Locks 34 & 35. 2016-03-30.				5679
Fragile Papershell	<i>Leptodea fragilis</i>	Unlisted	Vulnerable in NYS	
Documented within 0.5 mile upstream of Locks 34 & 35. 2016-03-30.				1952

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, from NatureServe Explorer at www.natureserve.org/explorer, and from USDA's Plants Database at <http://plants.usda.gov/index.html> (for plants).