Low-Impact Hydropower Institute Certification Application

High Falls Hydroelectric Project

(FERC No. 3754)

Prepared for:

Copenhagen Hydro, LLC

Prepared by:

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September 2022

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ACRONYMS

B	
BMP	best management practices
C	
cfs	cubic feet per second
CRP	Central Rivers Power, LLC
F	
FERC	Federal Energy Regulatory Commission
ft	Foot/Feet
G	
GW	gigawatt
GWh	gigawatt hour
H	
High Falls	High Falls Hydroelectric Project
I	
IPaC	Information for Planning and Consultation
K	
kV	kilovolt
KW	kilowatt
kg/ac	kilograms per acre
L	
LIHI	Low Impact Hydroelectric Institute
M	
msl	mean sea level
MW	megawatt
Mwh	megawatt hour
N	
NYSDEC	New York State Department of Environmental Conservation
NYERM	New York Environmental Resources Mapper
NYSOPRHP	New York State Office of Parks, Recreation, and Historic Preservation

P

Project	High Falls Hydroelectric Project

R

RIBS	Rotating Integrated Basin Studies
ROR	ROR
RM	River Mile

S

SHPO	State Historic Preservation Office
sq mi	Square Mile
SPDES	State Pollution Discharge Elimination System

U

USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

W

WQC	Water Quality Certificate
WSEL	Water Surface Elevation

Z

ZOE	Zone of Effect

1.0 FACILITY DESCRIPTION

1.1 Project Description

1.1.1 Project Overview

The High Falls Hydroelectric Project (High Falls or Project) is located on the Deer River in Lewis County, New York and is owned and operated by Exemptee Copenhagen Hydro, LLC, (Copenhagen Hydro) a subsidiary of Central Rivers Power, LLC (CRP) (Photo 1.1). The Deer River is located in the Black River Watershed and is 27 miles long. The High Falls Dam was originally built in 1909 by the Deer River Power Company and is located 7.75 river miles (RM) upstream from the Black River confluence. In 1982, the Project was exempted from licensing by the Federal Energy Regulatory Commission (FERC) (No. 3754). The Project consists of a 175-ft long and 25-ft high concrete gravity dam, reservoir, 1,350-ft long penstock, powerhouse, transmission line, and appurtenant facilities. The Project has an installed capacity of 3,429 kilowatts (kW). The impoundment has negligible storage capacity and is kept at 1,135.65' mean sea level (msl)[1]. The impoundment is situated directly above a steep drop off with the penstock following the top western ridge line until plunging towards the powerhouse located along the riverbank (Photo 1.1 to Photo 1.5).

[1] The Stage 1 LIHI application identified this level to be 1,140, however this elevation relates to the top of the dam abutment. The PLC pond level setpoint is 1,135.65 feet and unit operation is automatically adjusted by the PLC to maintain pond level at the setpoint.

Photo 1.1 View of High Falls Project Impoundment Looking Downstream towards the Bypass Reach

Photo 1.2 View of the High Falls Dam, Penstock, and Natural Drop Off Directly Downstream of the Dam

Photo 1.3 View of the Penstock and Stairs leading to the Powerhouse

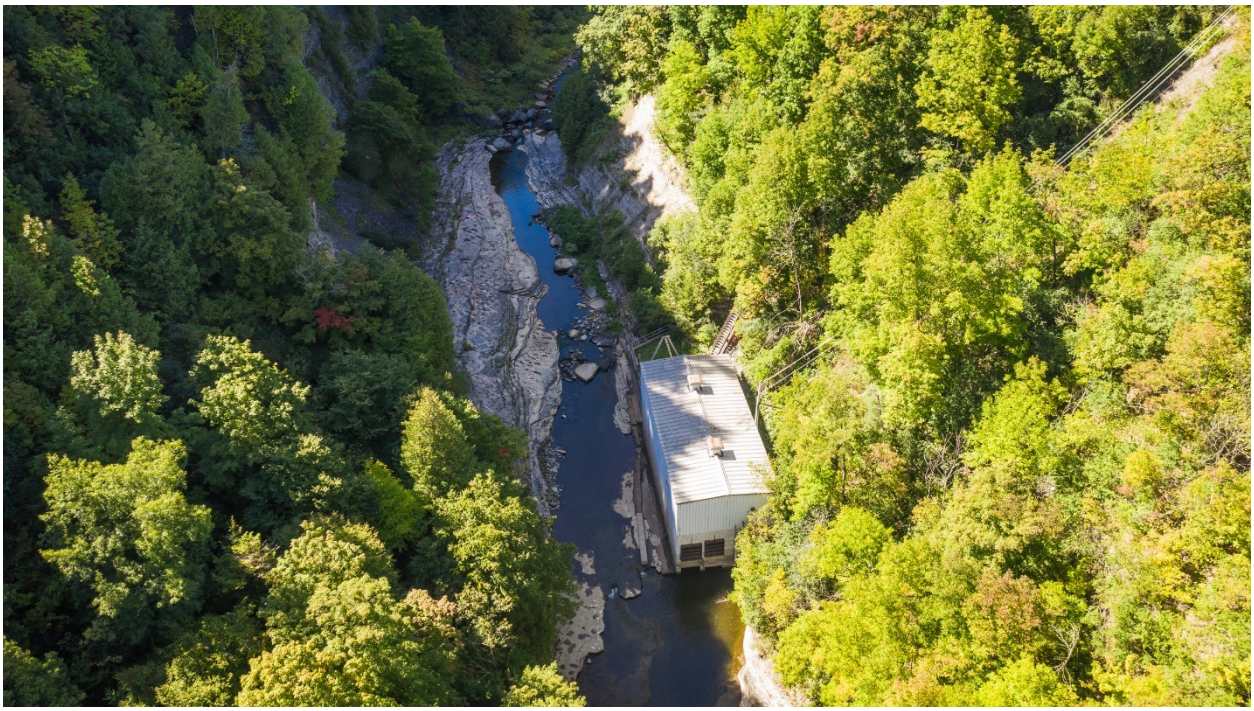

Photo 1.4 Overhead View of the High Falls Powerhouse

Photo 1.5 View of High Falls Project Bypassed Reach and Powerhouse Looking Upstream Towards the Impoundment

Photo 1.6 Overhead View of High Falls Turbine Units

Photo 1.7 Floor View of High Falls Turbine Units

1.2 Facility Information Table for Multiple Facilities – High Falls Project

Table 1.1 Facility Information

Item	***Information Requested***	***Response***
Name of the Facility	Facility name (use FERC project name or other legal name)	High Falls Hydroelectric Project (FERC #3754)
Reason for applying for LIHI Certification	1. To participate in state RPS program- (specify the state and the total MW/MWh associated with that participation (value and % of facility total MW/MWh)	To potentially participate in the Massachusetts RPS programs, primarily the MA Class II program. 100% of the facility production for RECs expected upon LIHI certification. To potentially participate in voluntary REC market. To possibly satisfy a direct energy buyer's purchasing requirement. Also satisfy Copenhagen Hydro's goals.
	2. To participate in voluntary REC market (e.g., Green-e)	
	3. To satisfy a direct energy buyer's purchasing requirement	
	4. To satisfy the facility's own corporate sustainability goals	
	5. For the facility's corporate marketing purposes	
	6. Other (describe)	
	If applicable, amount of annual generation (MWh and % of total generation) for which RECs are currently received or are expected to be received upon LIHI Certification	
Location	River name (USGS proper name)	Deer River
	Watershed name - Select region, click on the area of interest until the 8-digit HUC number appears. Then identify watershed name and HUC-8 number from the map at: https://water.usgs.gov/wsc/map_index.html	HUC – 04150101 – Black River
	Nearest town(s), county(ies), and state(s) to dam	Village of Copenhagen in the Town of Denmark, Lewis County, New York State

Item	*Information Requested*	*Response*
	River mile of dam above mouth	7.75 RM
	Geographic latitude and longitude of dam	43.897371, -75.663816
Facility Owner	Application contact names (Complete the Contact Form in Section B-4 also)	See Section 5.0
	Facility owner company and authorized owner representative name.	Copenhagen Hydro, LLC
	For recertifications: If ownership has changed since last certification, provide the effective date of the change.	N/A
	FERC licensee company name (if different from owner)	N/A
Regulatory Status	FERC Project Number (e.g., P-xxxxx), issuance and expiration dates, or date of exemption	P-3754-001 Exemption issued January 14, 1982
	FERC license type (major, minor, exemption) or special classification (e.g., "qualified conduit", "non-jurisdictional")	Exemption
	Water Quality Certificate identifier, issuance date, and issuing agency name. Include information on amendments. Include links or copies.	Permit No. 60-82-0098 July 8, 1982 New York State Department of Environmental Conservation Copy of the WQC is in Attachment C
	Hyperlinks to key electronic records on FERC e-library website or other publicly accessible data repositories	Application for Exemption Accession No. 19820120-0257 Order Granting Exemption Accession No. 19820120-0242 Minimum Flow Requirements Correspondence Accession No. 19870713-0105

Item	*Information Requested*	*Response*
		Minimum Flow Requirements Accepted by FERC Accession No. 19870716-0105 Order Amending Exemption and Approval Accession No. 20000107-0612
Powerhouse	Date of initial operation (past or future for pre-operational applications)	1909
	Total installed capacity (MW)	3,429 kW
	For recertifications: Indicate if installed capacity has changed since last certification	N/A
	Average annual generation (MWh) and period of record used	8,000 MWh (average for 2019 through 2021)
	For recertifications: Indicate if average annual generation has changed since last certification	N/A
	Mode of operation (ROR, peaking, pulsing, seasonal storage, diversion, etc.)	Run-of-river (ROR)
	For recertifications: Indicate if mode of operation has changed since last certification	N/A
	Number, type, and size of turbine/generators, including maximum and minimum hydraulic capacity and maximum and minimum output of each turbine and generator unit	The High Falls station has three turbines and generators with a combined high output of 3,429 KW Unit 1 & 2: • The two main units (units #1 and #2) are rated for 1,500 kW, with a minimum output of 300 kW; hydraulic capacity is 133 cfs each. Unit 3: • Unit 3 is turbine-limited to 429 kW

Item	*Information Requested*	*Response*
		• Unit 3 is an induction unit that is either on or off. Its minimum output is approximately 300 kW; hydraulic capacity is 35 cfs.
	Trashrack clear spacing (inches) for each trashrack	2.5 inches
	Approach water velocity (ft/s) at each intake if known	Unknown
	Dates and types of major equipment upgrades	Unit #2 shaft replacement (potentially in 2022 or 2023) Unit 3 Runner replacement (planned for 2022)
	For recertifications: Indicate only those since last certification	N/A
	Dates, purpose, and type of any recent operational changes	N/A
	For recertifications: Indicate only those since last certification	N/A
	Plans, authorization, and regulatory activities for any facility upgrades or license or exemption amendments	There are no plans for operation or facility changes at this time.
Dam or Diversion	Date of original dam or diversion construction and description and dates of subsequent dam or diversion structure modifications	1909
	Dam or diversion structure length, height including separately the height of any flashboards, inflatable dams, etc. and describe seasonal operation of flashboards and the like	175-ft long and 25-ft high concrete gravity dam with 2-ft flashboards
	Spillway maximum hydraulic capacity	4,250 cubic feet per second (cfs)
	Length and type of each penstock and water conveyance structure between the impoundment and powerhouse	Steel penstock 6-ft diameter 1,350 ft long

Item	*Information Requested*	*Response*
	Designated facility purposes (e.g., power, navigation, flood control, water supply, etc.)	Hydropower
Conduit Facilities Only	Date of conduit construction and primary purpose of conduit	Not a conduit project.
	Source water	N/A
	Receiving water and location of discharge	N/A
Impoundment and Watershed	Authorized maximum and minimum impoundment water surface elevations	N/A ROR
	For recertifications: Indicate if these values have changed since last certification	N/A
	Normal operating elevations and normal fluctuation range	N/A Operating as ROR
	For recertifications: Indicate if these values have changed since last certification	N/A
	Gross storage volume and surface area at full pool	No Storage ROR Project
	For recertifications: Indicate if these values have changed since last certification	N/A
	Usable storage volume and surface area	N/A Operating as ROR
	For recertifications: Indicate if these values have changed since last certification	N/A
	Describe requirements related to impoundment inflow and outflow, elevation restrictions (e.g., fluctuation limits, seasonality) up/down ramping and refill rate restrictions.	Must operate as a ROR project When adequate flows for power generation are not available, then all flow is passed over the spillway

Item	*Information Requested*	*Response*
	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.	No dams are located on the Deer River upstream of the Project. The closest upstream dam is the Neil Burns Marsh Dam (NY ID 100-2190) built in 1954, it is a private 5-ft tall earthen dam and 18 RM upstream from the project on a small tributary (NYSDEC 2022c, New York State Tug Hill Commission 2010). There are no fish passage facilities at NY ID 100-2190.
	Downstream dams by name, ownership, river mile and FERC number if FERC licensed or exempt. Indicate which downstream dams have upstream fish passage	The closest dam downstream is the Kings Falls Dam (FERC P-7352, Licensed), which was built in 1953 and is 12-ft tall (Black River Watershed Plan). Kings Falls Dam is a 1.6 megawatt (MW) hydroelectric dam and there are no fish passage facilities.
	Operating agreements with upstream or downstream facilities that affect water availability and facility operation	None
	Area of land (acres) and area of water (acres) inside FERC project boundary or under facility control. Indicate locations and acres of flowage rights versus fee-owned property.	Land Area: 15.7 acres Water Area: 6.7 acres
Hydrologic Setting	Average annual flow at the dam, and period of record used	No current stream gage data is available for the Deer River, therefore flow at the dam was determined through a linear regression of drainage area on discharge. See Section 3.1 Ecological Flow Standards for more details on how these flows were calculated. Run-of-river operation is achieved based upon headpond sensor and PLC such that units are ramped up, down, or taken off line to maintain impoundment level at the 1,135.65 elevation setpoint.

<table>
<tr><th>Item</th><th>Information Requested</th><th>Response</th></tr>
<tr><td rowspan="3"></td><td></td><td>Average annual Flow at the Dam: 127 cfs
Period of Record Use: 2009 to 2022</td></tr>
<tr><td>Average monthly flows and period of record used</td><td>No current stream gage data is available for the Deer River, therefore flow at the dam was determined through a linear regression of drainage area on discharge. See Section 3.1 Ecological Flow Standards for more details on how these flows were calculated.

<table>
<tr><th>Month</th><th>Average Flow (cfs)</th></tr>
<tr><td>January</td><td>170</td></tr>
<tr><td>February</td><td>142</td></tr>
<tr><td>March</td><td>201</td></tr>
<tr><td>April</td><td>237</td></tr>
<tr><td>May</td><td>158</td></tr>
<tr><td>June</td><td>102</td></tr>
<tr><td>July</td><td>65</td></tr>
<tr><td>August</td><td>53</td></tr>
<tr><td>September</td><td>41</td></tr>
<tr><td>October</td><td>88</td></tr>
<tr><td>November</td><td>134</td></tr>
<tr><td>December</td><td>192</td></tr>
</table></td></tr>
<tr><td>Location and name of closest stream gaging stations above and below the facility</td><td>Upstream (Not Active)
Site Number: 04258550
Site Name: DEER RIVER NEAR DEER RIVER NY

Downstream (Not Active)
Site Number: 04258700
Site Name: DEER RIVER AT DEER RIVER NY</td></tr>
</table>

Item	*Information Requested*	*Response*
		There are no active gaging stations close to the Project or rivers nearby.
	Watershed area at the dam (in square miles). Identify if this value is prorated from gage locations and provide the basis for proration calculation.	89.28 square miles (57,140 acres) Determined via GIS. The entire Deer River Sub-Watershed (HUC 04150101170) is 97.29 square miles (62,270 acres).
	Other facility specific hydrologic information (e.g., average hydrograph)	N/A
Designated Zones of Effect	Numbers and names of each zone of effect (e.g., Zone 1: Impoundment)	Zone 1: Impoundment Zone 2: Bypassed Reach Zone 3: Tailwater
	River mile of upstream and downstream limits of each zone of effect (e.g., Zone 1 Impoundment: RM 6.3 - 5.1)	Zone 1 Impoundment: RM 8.4 - 7.8 Zone 2 Bypass Reach: RM 7.8 – 7.1 Zone 3 Tailwater: RM 7.1 – 5.1
Pre-Operational Facilities Only		
Expected operational date	Date generation is expected to begin	N/A
Dam, diversion structure or conduit modification	Description of modifications made to a pre-existing conduit, dam or diversion structure needed to accommodate facility generation. This includes installation of flashboards or raising the flashboard height.	N/A
	Date the modification is expected to be completed	N/A

Item	***Information Requested***	***Response***
Change in water flow regime	Description of any change in impoundment levels, water flows or operations required for new generation	N/A

2.0 STANDARDS MATRICES

2.1 Zone of Effects

There are three zone of effects at the High Falls Project starting from RM 8.4 and ending at RM 5.1, with each zone only impacting the riverine habitat up to the normal water surface elevation (WSEL). Zone 1 is the impoundment starting from the High Street Bridge at RM 8.4 and ending at the High Falls dam (Figure 2.1). Zone 2 is the bypassed reach, which starts from the dam at RM 7.8 to the Project powerhouse. Zone 3 is the tailwater, which starts from the Powerhouse at the tailrace and extends down to King Falls dam located 2 RM downstream at RM 5.1. Table 2.1 provides the standard matrices for each zone.

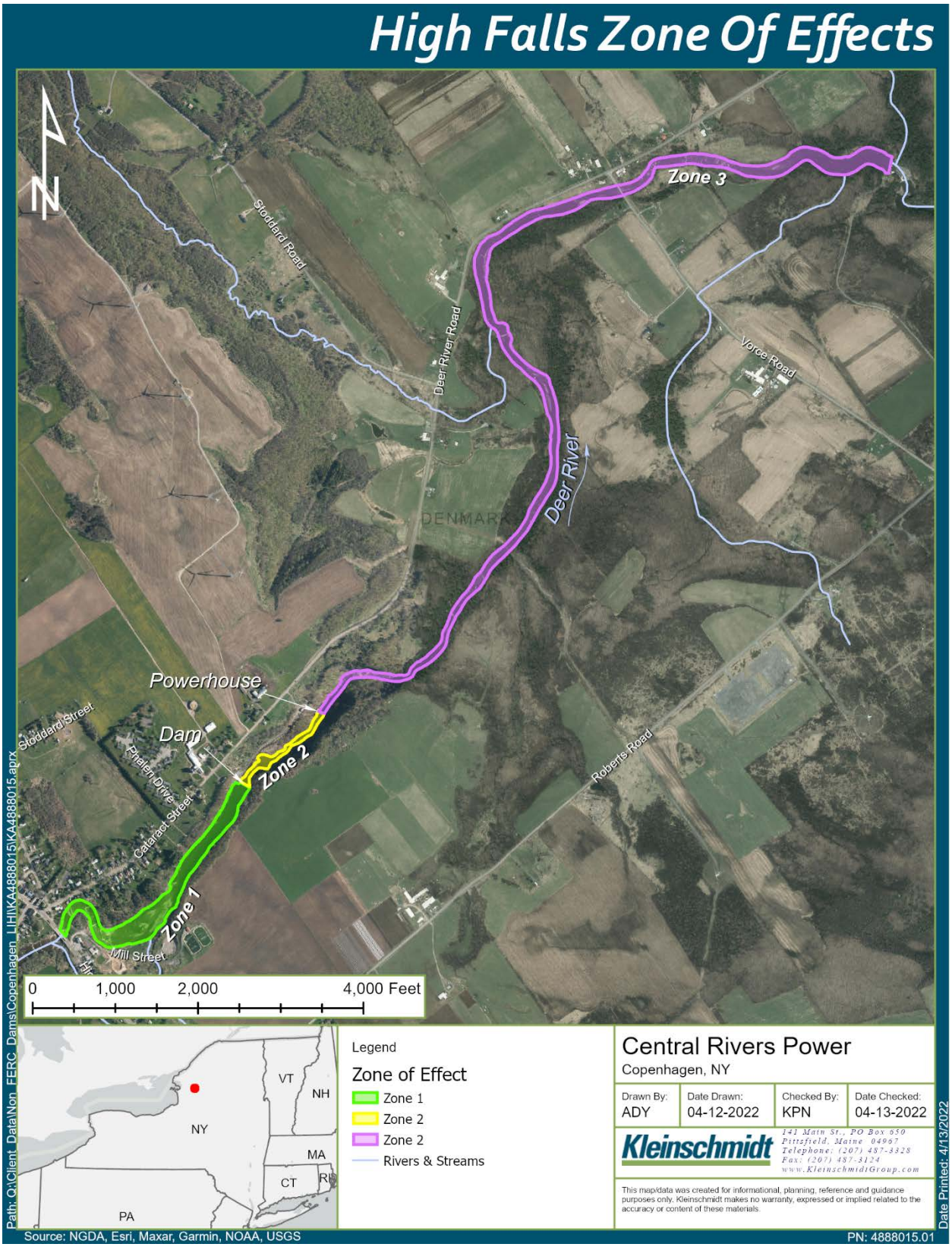

Figure 2.1 Zone of Effects for the High Falls Project in Copenhagen, New York

Table 2.1 Standards Matrix for each ZOE for the High Falls Project, NY

ZOE No.	ZOE Name	Approx. River Mile (RM) at upper and lower extent of Zone	Criterion							
			A	B	C	D	E	F	G	H
			Ecological Flows	Water Quality	Upstream Fish Passage	Downstream Fish Passage	Shoreline and Watershed Protection	Threatened and Endangered Species	Cultural and Historic Resources	Recreational Resources
1	Impoundment	RM 8.4 - 7.8	1	1	1	1	1	2	1	3
2	Bypassed Reach	RM 7.8 - 7.1	2	1	1	1	1	2	1	3
3	Tailwater	RM 7.1 – 5.1	1	1	1	1	1	2	1	3

3.0 SUPPORTING INFORMATION

3.1 Ecological Flows Standards

3.1.1 All ZOES

Flow data was not available for the High Falls Project, so an estimation of average flows the approach the Project was determined. With no United States Geological Survey (USGS) gage downstream of the Project, and no discharge records, the 50% exceedance flow at the High Falls dam was determined through a linear regression of drainage area on discharge. The Python module, hydrofunctions[2], sourced discharge data from the 100 nearest USGS stream gages to the Project over the period from 2009 - 2022. When plotted, we noted that a linear relationship exists between drainage area and the 50% exceedance flow (Figure 3.1). We used the Python library Statsmodels[3] to perform the linear regression. With a drainage area of 251.9 square kilometers in drainage area HUC04, we should expect a 50% exceedance flow of 127 cfs. Average estimated month flows can be found in Table 3.1.

Table 3.1 Estimated Average Flow for each Month at the High Falls Project

Month	Average Flow (cfs)
January	170
February	142
March	201
April	237
May	158
June	102
July	65
August	53
September	41
October	88
November	134
December	192

[2] https://hydrofunctions.readthedocs.io/en/master/

[3] https://www.statsmodels.org/stable/index.html

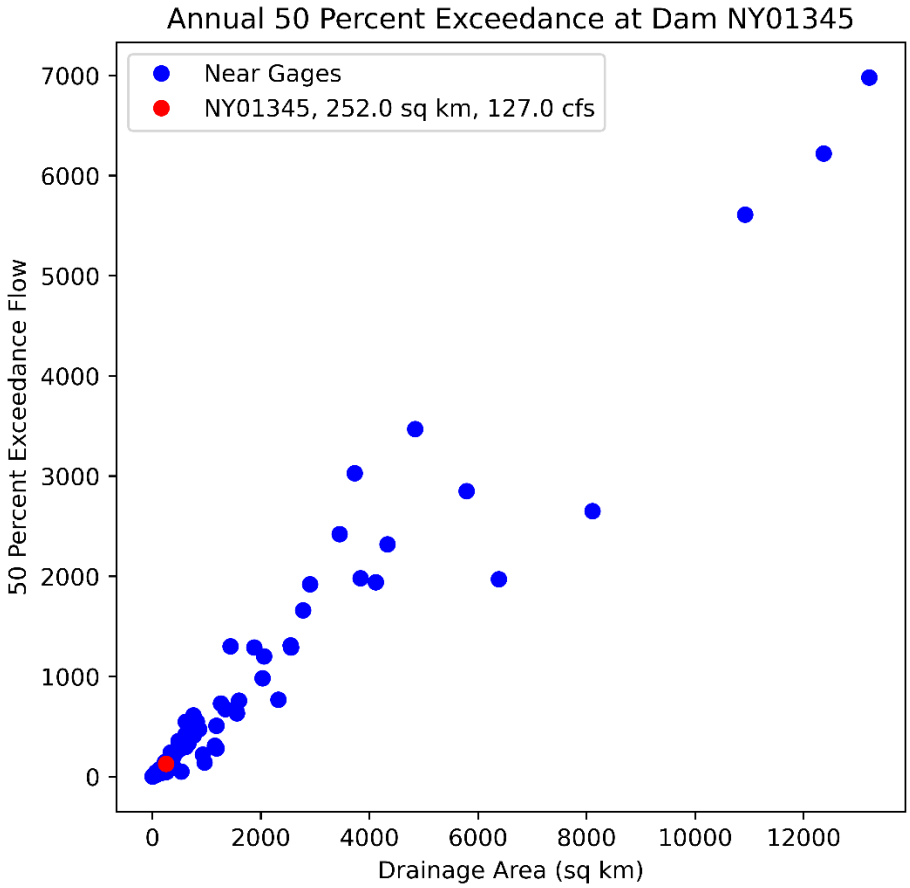

Figure 3.1 Annual Average River Flow for the closest 100 USGS Gages (blue dots) and estimated River Flow at the High Falls Project (red dot) based on Drainage Area and the Linear Regression

Table 3.2 ZOE 1 and 3 – Impoundment and Tailrace

Criterion	*Standard*	*Instructions*
A	1	Not Applicable / De Minimis Effect: • Confirm the location of the powerhouse relative to any dam/diversion structures and demonstrate that there are no bypassed reaches associated with the applicable Zone of Effect. • For run-of-river facilities, provide details on operations and describe how flows, water levels, and operations are monitored to ensure such an operational mode is maintained. In a conduit facility, identify the source waters, location of

Criterion	Standard	Instructions
		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, explain water management (e.g., fluctuations, ramping, refill rates, restrictions) and how those requirements support fish and wildlife habitat within the ZoE.

The Project operates as a true ROR facility, any water that approaches the dam is either released back into the Deer River downstream of the dam or through the powerhouse. No water from another body of water is collected or released as part of Project operations. Water that approaches the dam is either released over the spillway, through a bypass reach pipe (discussed in section 3.1.3) or enters the penstock and exits through the powerhouse. No peaking occurs at this facility. Run-of-river operation is achieved based upon headpond sensor and PLC such that units are ramped up, down, or taken off line to maintain impoundment level at the 1,135.65 elevation setpoint.

The High Falls Project received a Water Quality Certificate (WQC) in 1982 which was reviewed by the New York State Department of Environmental Conservation (NYSDEC) in 1994. Based on this WQC, if any drawdowns occur at the Project, it must be gradual and if downstream sedimentation becomes a problem, drawdowns should be halted until high flows are available.

Table 3.3 ZOE 2 – Bypassed Reach

Criterion	Standard	Instructions
A	2	Agency Recommendation • Identify the proceeding and source, date, and specifics of the agency recommendation applied (NOTE: there may be more than one; identify and explain which is most environmentally protective). • Explain the scientific or technical basis for the agency recommendation, including methods and data used. This is required regardless of whether the

Criterion	Standard	Instructions
		recommendation is or is not part of a Settlement Agreement. • Explain how the recommendation relates to formal agency management goals and objectives for fish and wildlife. • Explain how the recommendation provides fish and wildlife protection, mitigation, and enhancement (including instream flows, ramping, and peaking rate conditions, and seasonal and episodic instream flow variations).

As part of the 1981 FERC License exemption request, the Project was required to operate as a strict ROR project with a minimum release of 8 cfs into the bypassed reach to provide general aquatic habitat. After correspondences with the USFWS and the NYSDEC, on June 17, 1987, the Project licensee submitted plans and drawings for a 12-inch diameter pipe to be installed four feet below the dam crest. On June 25, 1987, FERC accepted the proposed measure. The upstream pipe opening is below the normal impoundment operating elevation of 1,135.65' such that minimum flow is continuously provided to the bypassed reach when flows are low and units are not operating or when inflow is sufficient to operate units to maintain headpond elevation such that water is being diverted through the penstock (Photo 3.1). Since the Project operates as ROR, when adequate flow for power generation is not available, the Project passes all flow over the spillway. By keeping some flow through the spillway, fish and wildlife are able to utilize this area based on the available water resources.

Photo 3.1 Discharge Pipe Releasing a Minimum of 8 cfs of Water Flow into the Bypassed Reach

3.1.2 Compliance

Based on a compliance review of the FERC administrative record and Copenhagen Hydro files, there have not been any deviations/non-compliance issues for the High Falls Project in relation to Ecological Flow Standards.

3.1.3 Ecological Flow Standards Conclusions

The Project operates as a ROR facility and has followed guidance on providing 8 cfs to the bypassed reach. It is not expected the facility has drastic negative impacts on the flow of the river or fish and wildlife resources.

3.2 Water Quality Standards

3.2.1 All ZOEs

Criterion	*Standard*	*Instructions*
B	1	Not Applicable / De Minimis Effect: • Explain the rationale for why the facility does not alter water quality characteristics below, around, and above the facility.

Deer River is a tributary to the Black River and is therefore part of the Black River Watershed (Figure 3.2). The Deer River sub-watershed (HUC 04150101170) drains 62,270 acres with average annual precipitation of 56.3 inches (Figure 3.2). The Deer River sub-watershed has a total of 250.3 miles of stream length, with 98.8 of those miles considered Trout Streams (New York Tug Hill Commission 2010). The Deer River itself is 27 miles long, originating from Tug Hill, and flows generally north (USGS 2014). The NYSDEC defines the Deer River as a "Significate Natural Community," specifically a Confined River (NYSDEC 2022c). These rivers are defined by their relatively large size, fast flowing waters, a moderate to gentle gradient, and waterfalls. Confined rivers often have high water clarity, with cool well-oxygenated waters (NYNHP 2022).

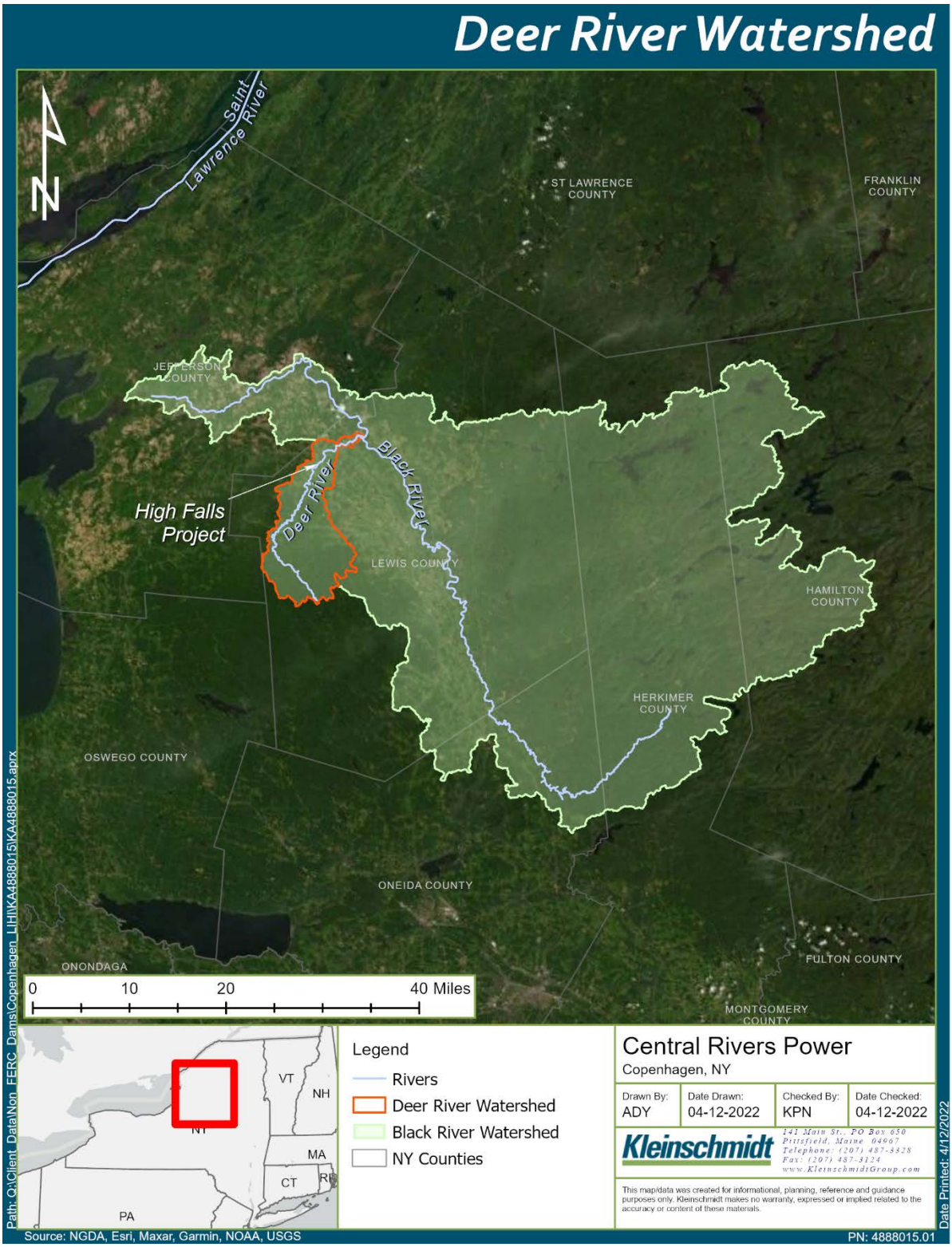

Figure 3.2 Deer River Watershed within the Black River Watershed

The most recent Water Quality Certificate (WQC) for the Project is from 1982 with an additional letter from the NYSDEC in 1994 that the facility has been operating in compliance with the WQC conditions. No New York State Pollution Discharge Elimination System (SPDES) is required for this facility because this permit is not required for small hydropower facilities less than 80 MW, as long as the cooling water and seal water are from the same source water as the actual turbine water.

In the Black River Watershed Management Plan, the Deer River sub-watershed was identified as a medium priority sub-watershed (out of low, medium, or high). The Deer River sub-watershed receives the largest amount of annual precipitation out of all 19 sub-watersheds in the Black River watershed. Seventeen percent of the lands are agricultural, with two-thirds of land classified as hay or pasture lands. Due to the heavy agriculture use, there are high levels of nitrogen and phosphorus. The Deer River watershed has a total nitrogen loads of 1.75 kilograms per acre (kg/ac), which is below the impairment threshold of 3.49 kg/ac. Phosphorus within the watershed has a total load of 0.11 kg/ac, which is just below the impairment threshold of 0.12 kg/ac (New York Tug Hill Commission 2010). These potential impairments to water quality are not caused by the Project but are likely caused by the surrounding land use in the watershed or the wastewater treatment facility located adjacent to the impoundment. Recommended fixes for these impairments include agricultural landowners implementing best management practices (BMP), improvements to stormwater management, implementing soil erosion and sedimentation control ordinances, monitoring stormwater and sediment control during construction, and improving habitat restoration activities at the Sears Pond State Forest (New York Tug Hill Commission 2010). None of these recommendations have impacts on the Project, nor does the Project impact them. High Falls is required by the WQC to reduce sedimentation of the river during any construction activities or drawdowns. In 2021, Copenhagen Hydro installed stabilization measures of the rock slope adjacent to the penstock saddle support and used BMPs during this construction, consistent with standard means and methods.

As part of the NYSDEC Rotating Integrated Basin Studies (RIBS), macroinvertebrate sampling has been completed upstream and downstream of the Project. The upstream monitoring site is 0.62 RM upstream from the High Falls dam and is located within ZOE 1. The downstream monitoring site is approximately 5.71 RM downstream

from the Project dam and is located 3 RM below the King Falls Project (NYSDEC 2022a). Macroinvertebrates can help assess water quality due to their sensitivity to environmental impacts and limited mobility. Biological Assessment Profile (BAP) scores are calculated for each stream site which indicates how severe the water quality is impacted. Based on the studies from the NYSDEC, from 2002 to 2017 water quality is either slightly impacted or non-impacted both upstream and downstream of the Project (Table 3.4). It does not seem that the Project is having a negative effect on the macroinvertebrate community at the upstream site in ZOE 1. The next upstream station (Station ID 08-DEER-18.5) is located approximately 19 RM upstream from the previous station and has a BAP score of 6.72 (slight impact), which provides evidence suggesting the impoundment and dam are not impacting the macroinvertebrate community.

The downstream site is below Kings Falls and outside the High Falls Project ZOEs, however it seems that neither the High Fall nor the Kings Falls project is impacting the macroinvertebrate community when compared to the upstream values.

Table 3.4 NYDEC Rotating Integrated Basin Macroinvertebrate Studies on the Deer River from 2002 to 2017 (NYSDEC 2022a)

Location	NYSDEC Site ID	Date	BAP Score	Impact Score*
Upstream	08-DEER-8.3	8/27/2002	7.81	Non-impacted
		7/11/2012	6.71	Slight Impact
		9/13/2017	6.88	Slight Impact
Downstream	08-DEER-2.0	8/27/2002	7.71	Non-impacted
		9/4/2003	6.57	Slight Impact
		9/26/2007	7.71	Non-impacted

* Source: NYSDEC 2019

Waters at the Project site are considered Class C Fresh Water (NYSDEC 2022c). According to 6 CRR-NY 701.8 NY-CRR, Class C waters are suitable for fish, shellfish, and wildlife propagation and survival. The best usage for this class of water quality is fishing. Primary and secondary contact recreation is also suitable but may be limited based on other factors. There is a wastewater treatment plant adjacent to the impoundment, which may impact close contact recreation at times.

Continuous data is not available for the 08-DEER-8.3 site located above the project, but spot measurements taken over the years indicates good water chemistry (Table 3.5). There is no continuous or ongoing monitoring at the Project, nor is any recommended or required by state or federal agencies.

Table 3.5 Water Quality Data Spot Measurements from 1996 to 2017 (NYSDEC 2022a)

Year	Month	Dissolved Oxygen (mg/L)	pH	Conductivity (uS/cm)	Temperature (°C)
1996	September	9.3	8.4	110	17
2002	August	8.8	8.3	156	20
2012	July	-	8.7	141	25
2017	September	10.6	7.4	90	13

Based on the data described above, the Project does not seem to be impacting water quality upstream or downstream of the Project. Since High Falls operates as ROR, there is no long-term storage of water that would result in adverse impacts on water quality. The Project does not actively contribute to erosion since there are no peaking operations. The Project also maintains the minimum flow required of 8 cfs to provide aquatic habitat in the bypassed reach. When not enough flow is available to operate for power generation, all flow is directed over the spillway.

3.2.2 Compliance

There have been no compliance issues for the High Falls Project in relation to water quality. By email dated July 14, 2022 (Attachment A), Copenhagen Hydro contacted NYSDEC seeking confirmation confirm that the terms and conditions set forth in the original WQC are still valid and in effect. To date, Copenhagen Hydro has not yet received a confirmation response.

3.2.3 Water Quality Standards Conclusion

High Falls Project operations do not impact the water quality in Deer River. Minimum flows are maintained downstream of the Project which provides suitable habitat for fish and wildlife, along with recreational activities, as required by the Class C classification prescribed to the Deer River.

3.3 Upstream Fish Passage Standards

Table 3.6 All ZOEs

Criterion	Standard	Instructions
C	1	Not Applicable/ De Minimis Effect: • Explain why the facility does not impose a barrier to upstream fish passage in the designated zone. • 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 fishway prescriptions for the High Falls Project. There are no natural or historical populations of diadromous fishes that occur within the Deer River (New York Tug Hill Commission 2010). Since no fish species depend on upstream movement to complete their life cycles, passage is not required at the Project. Directly downstream of the Project impoundment is a steep, plunging waterfall which is a natural barrier for fish passage (Photo 3.2). Additionally, the Kings Falls Hydroelectric Project, located downstream from the High Falls Project, does not have any upstream fish passage. The Project did not contribute to extirpation of migratory fish species since none have historically been found within the Deer River.

Thirty-six native fish species have been documented in the Deer River watershed, and one introduced fish (Rainbow trout, *Oncorhynchus mykiss*) (Table 3.7). Fish colonization of the Black River Watershed likely occurred though species moving from glacial lakes when the glaciers receded. Several species found in Lake Ontario have not been recorded in the Black River, likely due to natural upstream fish passage barriers (New York Tug Hill Commission 2010).

Photo 3.2 Waterfall directly downstream of the Impoundment which Impedes Natural Fish Passage

Table 3.7 Fishes Found in the Deer River Sub Watershed (New York Tug Hill Commission 2010)

Common Name	Scientific Name
banded killifish	*Fundulus diaphanus*
blacknose dace	*Rhinichthys atratulus*
blacknose shiner	*Notropis heterolepis*
bluntnose minnow	*Pimephales notatus*
brook stickleback	*Culaea inconstans*
brook trout	*Salvelinus fontinalis*
brown bullhead	*Amieurus nebulosus*
burbot	*Lota*
central mudminnow	*Umbra limi*
chain pickerel	*Esox niger*
common shiner	*Luxilus cornutus*
creek chub	*Semotilus atromaculatus*
cutlip minnow	*Exoglossum maxillingua*
fallfish	*Semotilus corporalis*
fantail darter	*Etheostoma flabellare*

Common Name	Scientific Name
fathead minnow	*Pimephales promelas*
golden shiner	*Notemogonus crysoleucas*
hornyhead chub	*Nocomis biguttatus*
logperch	*Percina caprodes*
longnose dace	*Rhinichthys cataractae*
margined madtom	*Noturus insignis*
northern hog sucker	*Hypentelium nigricans*
northern pike	*Esox lucius*
northern redbelly dace	*Phoxinus eos*
pearl dace	*Margariscus margarita*
pumpkinseed	*Lepomis gibbosus*
rainbow trout	*Oncorhynchus mykiss*
redside dace	*Clinostomus elongatus*
rock bass	*Ambloplites rupestris*
satinfin shiner	*Cyprinella analostana*
smallmouth bass	*Micropterus dolomieu*
spotfin shiner	*Cyprinella spiloptera*
spottail shiner	*Notropis hudsonius*
stonecat	*Noturus flavus*
tessellated darter	*Etheostoma olmstedi*
white sucker	*Catostomus commersonii*
yellow perch	*Perca flavescens*

3.3.1 Compliance

There is no required upstream passage at the Project and therefore no compliance issues. If the United States decides to construct fish and wildlife facilities or to improve existing fish and wildlife facilities at the Project, the Exemptee is obligated to provide the designated agency access to the Project.

3.3.2 Upstream Passage Conclusion

Upstream fish passage is not necessary at the High Falls Project based on fish distribution data, the lack of native migratory fish species, and natural fish passage barriers. The Project has operated in accordance with requirements. Since there are no fish passage facilities or fishway prescriptions, none of the ZOEs are impacted by the High Falls Project regarding upstream fish passage.

3.4 Downstream Fish Passage Standards

3.4.1 All ZOEs

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

There are no fishway prescriptions for the High Falls Project and no natural or historical populations of diadromous fishes that occur within the Deer River (see Section 3.3 Upstream Fish Passage Standards) (New York Tug Hill Commission 2010). Since no fish species depend on downstream movement to complete their life cycles, downstream passage is not required at the Project. The Project did not contribute to extirpation of migratory fish species since none have historically been found within the Deer River. Fishes found within the Deer River Watershed are listed in Table 3.7.

3.4.2 Compliance

There is no required downstream passage at the Project and therefore no compliance issues. If the United States decides to construct fish and wildlife facilities or to improve existing fish and wildlife facilities at the Project, the Exemptee is obligated to provide the designated agency access to the Project.

3.4.3 Downstream Passage Conclusion

Downstream fish passage is not necessary at the High Falls Project based on the lack of native migratory fish species. The Project has operated in accordance with its requirements; in which downstream fish passage is not required. Since there are no fish passage facilities or fishway prescriptions, none of the ZOEs are impacted by the High Falls Project in regard to downstream fish passage.

3.5 Shoreline and Watershed Protection Standards

Table 3.8 All ZOEs

Criterion	*Standard*	*Instructions*
E	1	Not Applicable / De Minimis Effect: • 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 Project boundary). • Document that there have been no Shoreline Management Plans or similar protection requirements for the facility.

There is no Shoreline Management Plan for the High Falls Project. Since the Project operates as a ROR, erosion along the shoreline from Project operations is minimal. Additionally, the Project is situated above a naturally occurring drastic elevation drop surrounded by bedrock as seen in Photo 1.5 (Cadwell & Pair 1991).

The Deer River is a tributary to the Black River and is therefore part of the Black River Watershed. The Deer River sub-watershed (HUC 04150101170) drains 62,270 acres with average annual precipitation of 56.3 inches. The Deer River Watershed has a total of 250.3 miles of stream length, with 98.8 of those miles considered Trout Streams (New York Tug Hill Commission 2010). The Deer River itself is only 27 miles long and originates from Tug Hill and flows generally north (USGS 2014). In the Black River Watershed Management Plan, the Deer River Sub watershed was identified as a medium priority watershed (Out of low, medium, or high). The Deer River sub-watershed receives the largest amount of annual precipitation out of all 19 sub-watersheds in the Black River watershed. Seventeen percent of the lands within the watershed are agricultural, with two-thirds of it being classified as hay or pasture lands.

Land cover within the Project area includes open water, developed land, forest, scrub/shrub, herbaceous, and hay/pastures (Table 3.9). The majority of the land on the Project area is hay/pasture (40.6%), open water (29.8%), and deciduous forest (11.5%). The forested areas within the Project area are bordering the river near the impoundment, which can help provide bank stability and reduce erosion. The surrounding area of the Project area is mostly cultivated crops, hay/pastures, deciduous forest and developed land (Figure 3.3).

Table 3.9 Land Cover within the High Falls Project Area

Land Cover	Acreage	Percentage
Open Water	6.7	29.8%
Developed, Open Space	0.9	4.1%
Developed, Low Intensity	0.0	0.1%
Deciduous Forest	2.6	11.5%
Evergreen Forest	0.5	2.4%
Shrub/Scrub	1.3	6.0%
Herbaceous	1.2	5.4%
Hay/Pasture	9.1	40.6%

Besides riverine habitat, there are no distinct wetlands located within the Project area or directly adjacent to it (Figure 3.4). The Impoundment is classified as a freshwater pond (PUNHh), which is characterized by permanent flooding and was created by manmade barriers. The river upstream and downstream from the Impoundment and dam are classified as riverine habitat. The specific classification of R3RBH indicates this river system has a rocky bottom with bedrock, boulders, and stones with less than 30% vegetative cover. It is also classified as an upper perennial subsystem which is defined by a high gradient with little floodplain development and the dissolved oxygen is normally near saturation. There are no wetlands located adjacent to the river within any of the ZOEs.

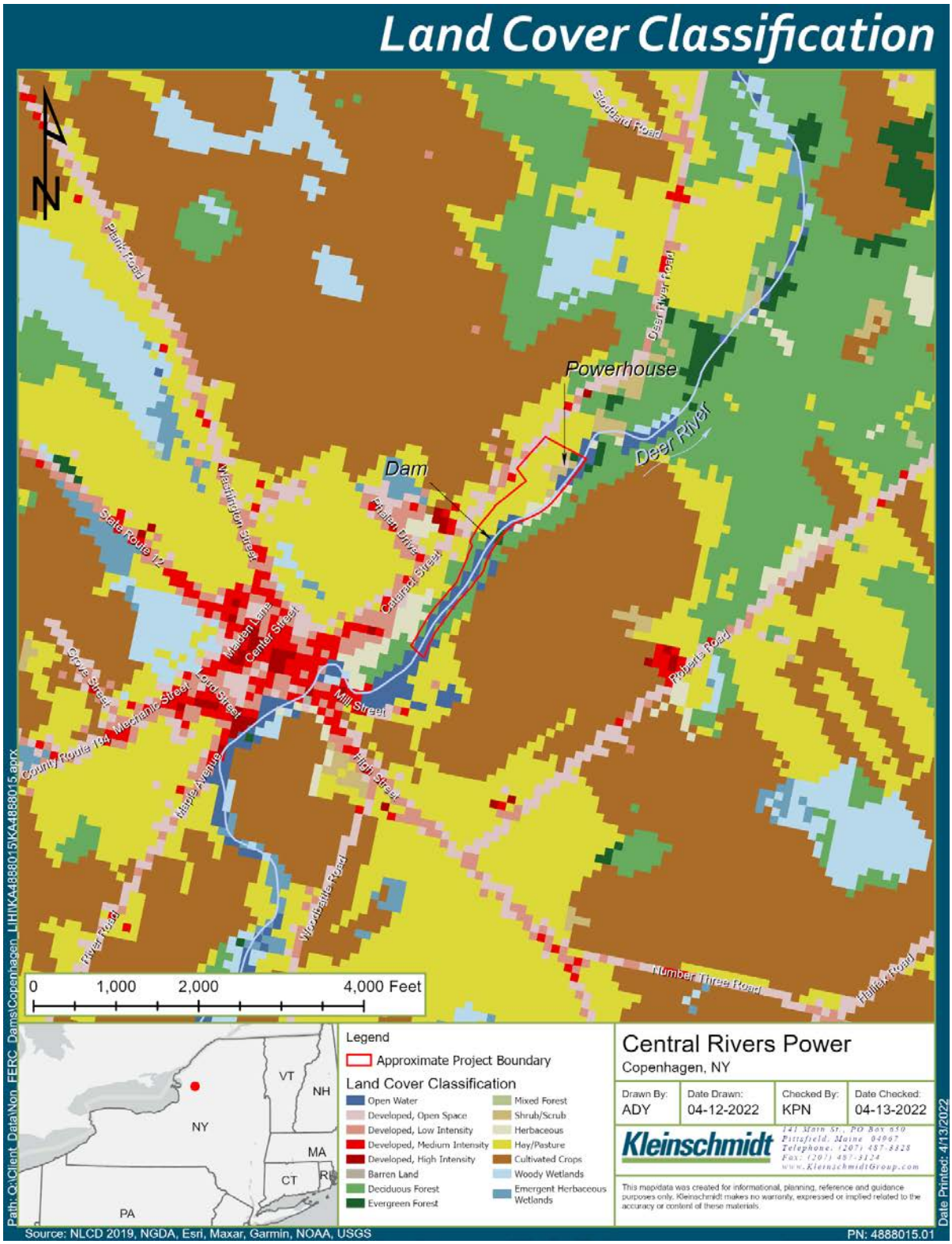

Figure 3.3 Land Cover with the High Falls Project Area and Surrounding Lands

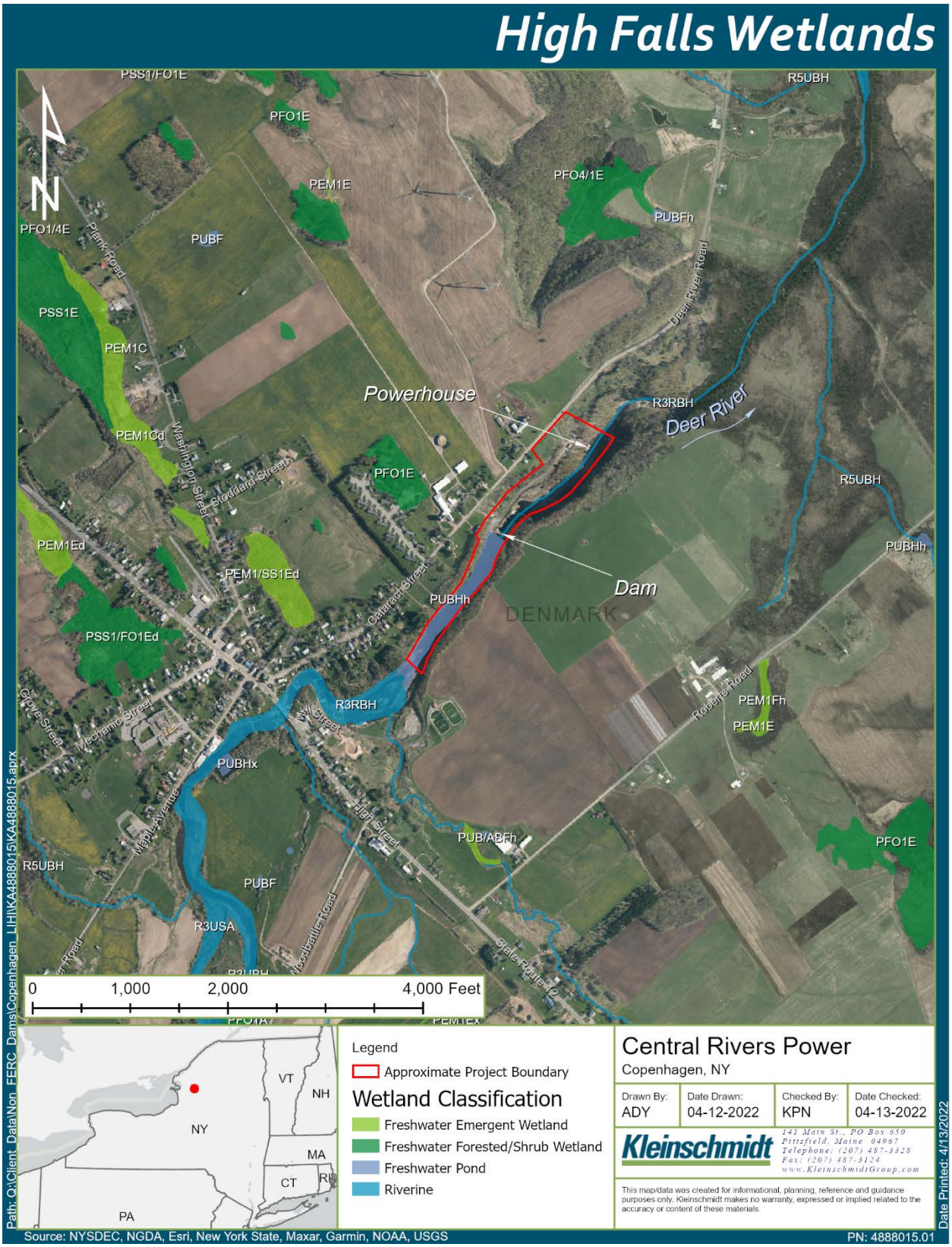

Figure 3.4 Wetlands within the Vicinity of the High Falls Hydroelectric Project

3.5.1 Compliance

There have been no compliance issues for the High Falls Project in relation to Shoreline and Watershed Protection Standards and no Shoreline Management Plan has been requested or developed.

Shoreline and Watershed Protection Standards Conclusion

The High Falls Project operates as a ROR facility and therefore has little impacts on the surrounding lands. There are no wetlands or sensitive habitats impacted by the Project.

3.6 Threatened and Endangered Species Standards

Table 3.10 All ZOEs

Criterion	*Standard*	*Instructions*
F	2	Finding of No Negative Effects: • Identify all federal and state listed species that are or may be in the immediate facility area based on current data from the appropriate state and federal natural resource management agencies. • Provide documentation that there is no demonstrable negative effect of the facility on any listed species in the area from an appropriate natural resource management agency or provide documentation that habitat for the species does not exist within the ZOE or is not impacted by facility operations.

Federally listed endangered and threatened species that could potentially occur within the Projects' ZOEs were identified using the USFWS Information for Planning and Consultation (IPaC) website on January 20, 2022 (Attachment B).

Mammals

One federally listed endangered species, the Indiana Bat (*Myotis sodalist*) and one federally listed threatened species, the Northern Long-eared Bat (*Myotis septentrionalis),* may be found within the Project's vicinity (USFWS 2022a). The State of New York lists the Indiana Bat as state endangered and the Northern Long-eared Bat as state threatened (NYSDEC 2022d and NYSDEC 2022e).

It is possible these bats feed near the Project, though no critical habitat is located on the Project vicinity for either species (USFWS 2022a). The ROR operation of the Projects are not anticipated to negatively impact either of the bats that may transiently utilize the area.

A New York Environmental Resources Mapper (NYERM) was used on January 26, 2022, to review State rare, threatened, and endangered species with the potential to occur in the Project vicinity. This resource indicated bat habitat was located adjacent to Copenhagen Village on the Eastern side but does not cross over the Deer River, or where the Project is located (NYSDEC 2022c).

Migratory Birds

Migratory birds within the Projects' ZOEs were identified using the USFWS IPaC website (USFWS 2022a). The Bald Eagle (*Haliaeetus leucocephalus*) and the Bobolink (*Dolichonyx oryzivorus*) were identified as potentially occurring within all three ZOEs. The Bald eagle is listed as endangered within the state and its federal status is Non-BCC Vulnerable. The Bobolink is not listed within the state of New York, but has the federal status of 'Bird of Conservation Concern' throughout its range (USFWS 2022a).

Botanical

Within the tailrace, the American Hart's-tongue Fern (*Asplenium scolopendrium var. Americanum*) was identified as potentially occurring. No critical habitat has been designated for this species but it is considered threatened by the USFWS (USFWS 2022a). This fern is often found in close association with dolomitic limestone gorges and in cool limestone sinkholes in mature hardwood forests. The American Hart's-tongue Fern requires high humidity and deep shade that is provided by mature forest, or overhanging cliffs (USFWS 2019).

Insects

The Monarch Butterfly (*Danaus plexippus*) is a candidate species for federal listing that was identified as potentially occurring within the Project ZOEs. The Monarch butterfly is a large butterfly with bright orange wings surrounded by a black border and covered with black veins. During breeding season, monarch lay their eggs on milkweeds and larvae emerge after two to five days to feed on the milkweed. In northern climates, such as New York, this species undergoes long distance migration starting in the fall and moving southward. These species may be found flying over the Project or on milkweed located near or on Project lands. There are no section 7 requirements under the Endangered Species Act (ESA) for this candidate species but opportunities to protect the species is encouraged (USFWS 2022b). The Project does not use any pesticides at the facility, and only uses herbicides periodically.

Fishes

No federal endangered or threatened species were found during the IPaC review (Attachment B). Based on the list of fishes found within the Deer River Sub-watershed

(Table 3.7), there are no fishes that are considered threatened or endangered by the State of New York (NYSDEC 2022b).

3.6.1.1 ZOE 1 and 2– Impoundment and Bypassed Reach

Within the Impoundment and Bypassed Reach ZOEs, the Northern Long-eared Bat and Monarch Butterfly may be found (USFWS 2022a) (Attachment B). There is no critical habitat designated for any of the species within the either ZOE. It is not expected Project operations will impact these species.

3.6.1.2 ZOE 3 – Tailrace

Within the Tailrace ZOE, the Indiana Bat, Northern Long-eared bat, monarch butterfly, and the American Hart's-tongue Fern may be found (USFWS 2022a) (Attachment B). There is no critical habitat designated for any of the species within the ZOE. It is not expected Project operations will impact these species.

3.6.2 Compliance

There have been no compliance issues for the High Falls Project in relation to Threatened and Endangered Species Standards.

3.6.3 Threatened and Endangered Species Standards Conclusion

The Project has been operating in accordance with the FERC exemption and has not had any incidental takes of any state or federally threatened or endangered species. It is not anticipated that the continued operation of the project would negatively impact Federal, or State listed wildlife or plant species. Vegetation management is limited to periodic mowing, weed whacking, and brush clearing around project structures and does not require tree clearing that could affect Norther long-eared bat habitat.

3.7 Cultural and Historic Resource Standards

Table 3.11 All ZOEs

Criterion	*Standard*	*Instructions*
G	1	Not Applicable / De Minimis Effect: • Document that there are no cultural or historic resources located on facility lands that can be affected by construction or operations of the facility; or • 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 Village of Copenhagen was developed in the town of Denmark in 1801 when Nathan Munger and his son erected their first saw mill on the Deer River. The village that grew up around this mill was called Munger Mills, with most of its residents considered Federalists in support of British rule. After the news of the British attacking Copenhagen, Denmark, the republican villagers agreed in a village meeting to take on the name of Copenhagen to shame local Federalists for their support of the British (Abbass 2019). The original mills built along the river are no longer standing. Based on the Cultural Resource Information System, the village of Copenhagen is an Archeologically sensitive Area, however, there are no National Register Buildings within the Town or downstream of the Project (NYSOPRHP 20220).

Prior to any construction or development, Copenhagen Hydro would consult and cooperate with the State Historic Preservation Office to determine if any archeological or historic resource surveys and any mitigating measures may be necessary. Copenhagen Hydro will notify SHPO if any items of historical significance are discovered during operations or any construction activities.

3.7.1 Compliance

There have been no compliance issues for the High Falls Project in relation to Cultural and Historic Resource Standards.

3.7.2 Cultural and Historic Resource Standards Conclusion

The Project has not had any impacts on archeological or historic resources in the past and will continue to communicate with SHPO before any construction activity occurs.

3.8 Recreational Resources Standards

Table 3.12 All ZOEs

Criterion	*Standard*	*Instructions*
H	3	Assured Accessibility: • In lieu of existing agency recommendations and plans for recreational uses, document the facility's current and future commitment to accommodate reasonable requests from recreation interests for adequate public access for recreational use of lands and waters of the facility, including appropriate recreational water flows and levels, without fees or charges.

The Project does not provide any formal recreational facilities but provides free access to project lands and waters for recreational purposes. The Deer River is just outside the Adirondack Park, which is known for outdoor recreation including camping, hunting, fishing, canoeing, whitewater rafting, skiing, and snowmobiling. Within the Deer River sub-watershed, there are 98.8 miles of trout streams for fishing (New York Tug Hill Commission 2010). The NYSDEC stocks Brook Trout in the Deer River and the West Branch of the Deer River in the Town of Montague, which is located south of Copenhagen, but upstream of the Project. The average number of fish stocked is approximately 1,000 with an average size of 9 inches (Table 3.13) (NYSDEC 2021a).

In addition to fishing along the Deer River, there is a section above the High Falls Project suitable for white water rafting. The stretch starts in New Boston and ends at the High Falls Dam. The stretch is 12.4 miles long and rated by American Whitewater as a class II-III section. Rafters may also break up the stretch of the river into two days and utilize campsites or nearby hotels. (River Facts 2022).

Table 3.13 NYSDEC Brook Trout Stocking Data from 2011 to 2019 (Source NYSDEC 2021a)

Year	County	Waterbody	Town	Month	No. of Fish	Species	Size (in)
2011	Lewis	Deer River West Branch	Montague	June	370	Brook Trout	9.6
2012	Lewis	Deer River West Branch	Montague	May	380	Brook Trout	9.2
2013	Lewis	Deer River West Branch	Montague	April	400	Brook Trout	9.2
2014	Lewis	Deer River	-	June	1000	Brook Trout	10
2014	Lewis	Deer River West Branch	Montague	April	400	Brook Trout	9.5

Year	County	Waterbody	Town	Month	No. of Fish	Species	Size (in)
2015	Lewis	Deer River West Branch	Montague	May	350	Brook Trout	9.3
2016	Lewis	Deer River	Montague	October	5000	Brook Trout	
2017	Lewis	Deer River West Branch	Montague	June	400	Brook Trout	8
2018	Lewis	Deer River West Branch	Montague	May	400	Brook Trout	8.4
2019	Lewis	Deer River West Branch	Montague	May	400	Brook Trout	7.8

3.8.1.1 ZOE 1 Impoundment

A Whitewater Rafting stretch ends at the High Falls dam; immediately downstream of the dam is a 166-ft cascade which would be impassible by rafters (Northern New York Waterfalls, 2015). It is not anticipated that the impoundment greatly impacts recreational activities.

3.8.1.2 ZOE 2 Bypassed Reach

The bypassed reach is surrounded by step elevation and bedrock which would make this section difficult to reach for reactional activities and therefore the Project does not have an impact on recreational activities for this ZOE. If the bypass were to be accessed by the public, there is suitable minimum waterflow.

3.8.1.3 ZOE 3 Tailwater

The tailwater receives ROR flow from the Project and therefore any fishing or canoeing recreation that would occur downstream from the Project would not be impacted by Project operations.

3.8.2 Compliance

There have been no compliance issues for the High Falls Project in relation to Recreational Resource Standards.

3.8.3 Recreational Resources Standards Conclusion

The High Falls Project operates in accordance with its exemption and provides free access to the Project waters and adjacent lands for full public utilization and water for navigation and outdoor recreational purposes. There have been no requests for new or enhanced recreational facilities.

4.0 REFERENCES

Abbass, Julie. 2019. Village of Copenhagen Celebrates 150 years. NNY360. August 12, 2019. Available Online: https://www.nny360.com/top_stories/village-of-copenhagen-to-celebrate-150-years/article_4789c66c-03f4-5cf5-8c41-e4b60cac2a5c.html. [Accessed January 29, 2022]

Cadwell, D.H. and D.L. Pair. 1991. Surficial Geological Map of New York, Adirondack Sheet. Available Online: http://www.nysm.nysed.gov/common/nysm/files/surf_adk.jpg. [Accessed January 17, 2022]

New York Natural Heritage Program (NYNHP). 2022. Online Conservation Guide for Confined River. Available online: https://guides.nynhp.org/confined-river/. [Accessed January 21, 2022]

New York State Department of Environmental Conservation (NYSDEC). 2019. NYSDEC Division of Water, Standard Operating Procedure: Biological Monitoring of Surface Waters in New York State. Rev 1.2. Available online: https://www.dec.ny.gov/docs/water_pdf/sop20821biomonitoring.pdf [Accessed May 3, 2022]

New York State Department of Environmental Conservation (NYSDEC). 2021a. Fish Stocking Lists (Actual): Beginning 2011. Available online: https://data.ny.gov/Recreation/Fish-Stocking-Lists-Actual-Beginning-2011/e52k-ymww. [Accessed January 13, 2022]

New York State Department of Environmental Conservation (NYSDEC). 2022a. NYSDEC Division of Water Monitoring Data Portal. Available Online: https://nysdec.maps.arcgis.com/apps/webappviewer/index.html?id=692b72ae03f14508a0de97488e142ae1. [Accessed January 26, 2022]

New York State Department of Environmental Conservation (NYSDEC). 2022b. Endangered & Threatened Fishes of New York. Available Online: https://www.dec.ny.gov/animals/7008.html#:~:text=New%20York%20State's%20current%20list,shiner%20(all%20special%20concern). [Access Date: February 4, 2022]

New York State Department of Environmental Conservation (NYSDEC). 2022c. Environmental Resource Mapper. Available Online: https://gisservices.dec.ny.gov/gis/erm/. [Accessed: January 26, 2022]

New York State Department of Environmental Conservation (NYSDEC) 2022d. Indiana Bat. Available Online: https://www.dec.ny.gov/animals/6972.html. [Accessed: May 3, 2022]

New York State Department of Environmental Conservation (NYSDEC) 2022e. Northern Long-eared Bat. Available Online: https://www.dec.ny.gov/animals/106713.html. [Accessed: May 3, 2022]

New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP) 2022. Cultural Resource Information System (CRIS) Available online: https://cris.parks.ny.gov/. [Accessed January 29, 2022]

New York State Tug Hill Commission. 2010. Black River Watershed Management Plan. Available online: https://tughill.org/projects/black-river-projects/watershed-initiative/. [Accessed January 14, 2022]

Northern New York Waterfalls. 2015. High Falls. Available online: https://nnywaterfalls.com/deerriver/highfalls/. [Accessed January 31, 2022]

United States Geographic Surveys (USGS). 2014. The National Map. Available online: http://nationalmap.gov/streamer/.[Accessed January 14, 2022]

United State Fish and Wildlife Service (USFWS). 2019. American Hart's-tongue Fern (*Asplenium scolopendrium var. Americanum*) Fact Sheet. Accessed Online at: https://www.fws.gov/midwest/endangered/plants/ahtf/amerihtf.html. Access Date [January 21, 2022]

United State Fish and Wildlife Service (USFWS). 2022. Information for Planning and Consultation (IPaC) List. High Falls Project, Lewis County, New York. Available online: https://ipac.ecosphere.fws.gov/.]Access Date January 20, 2022]

United State Fish and Wildlife Service (USFWS). 2022b. Monarch Butterfly (*Danaus plexippus*). Available online: https://ecos.fws.gov/ecp/species/9743. Access Date [May 3, 2022]

River Facts, 2022. New York whitewater, Deer River. Available online: http://www.riverfacts.com/rivers/12066.html. [Accessed: January 24, 2022]

5.0 CONTACTS FORMS

5.1 Applicant Contact Information

Project Owner:	
Name and Title	Matthew Stanley, VP & General Manager
Company	Central Rivers Power, LLC
Phone	603-554-2656
Email Address	mstanley@centralriverspower.com
Mailing Address	670 N. Commercial St., Ste 204, Manchester, NH 03101
Consulting Firm / Agent for LIHI Program (if different from above):	
Name and Title	Karen Bishop, Staff Scientist
Company	Kleinschmidt Associates
Phone	860-581-5877
Email Address	Karen.Bishop@KleinschmidtGroup.com
Mailing Address	P.O. Box 650, Pittsfield, ME 04967
Compliance Contact (responsible for LIHI Program requirements):	
Name and Title	Curt Mooney, Manager, Regulatory Compliance
Company	Central Rivers Power, LLC
Phone	603.744.0846
Email Address	cmooney@centralriverspower.com
Mailing Address	670 N. Commercial St., Ste 204, Manchester, NH 03101
Party responsible for accounts payable:	
Name and Title	Stacey Blair, AP Manager
Company	Central Rivers Power, LLC
Phone	978-604-0920
Email Address	accounting@centralriverspower.com
Mailing Address	670 N. Commercial St., Ste 204, Manchester, NH 03101 (do not mail – please email only)

5.2 State, Federal, Provincial, and Tribal Resource Agency Contacts

Agency Contact		***Area of Responsibility***
Agency Name	New York Natural Heritage Program	☐ Flows
Name and Title		☐ Water Quality
Phone	518.402.8935	☒ Fish/Wildlife
Email address	NaturalHeritage@dec.ny.gov	☐ Watershed
Mailing Address	656 Broadway, 5th floor Albany, NY 12233	☒ T & E Species ☐ Cultural/Historic ☐ Recreation

Agency Contact		***Area of Responsibility***
Agency Name	New York State Department of Environmental Conservation	☒ Flows ☒ Water Quality
Name and Title	James Pinheiro, Aquatic Biologist	☒ Fish/Wildlife
Phone	518-623-1264	☒ Watershed
Email address	James.pinheiro@dec.ny.gov	☒ T & E Species
Mailing Address	New York State Department of Environmental Conservation, Region 5 232 Golf Course Rd. Warrensburg, NY 12886	☐ Cultural/Historic ☐ Recreation

Agency Contact		***Area of Responsibility***
Agency Name	U.S. Fish and Wildlife Service	☒ Flows
Name and Title	John Wiley, Fish and Wildlife Biologist	☒ Water Quality
Phone	607-753-9334	☒ Fish/Wildlife
Email address	John_wiley@fws.gov	☒ Watershed
Mailing Address	U.S. Fish and Wildlife Service NY Region 5 Field Office 3817 Luker Road Cortland, NY 13045	☒ T & E Species ☐ Cultural/Historic ☐ Recreation

Agency Contact		***Area of Responsibility***
Agency Name	New York State Historic Preservation Office	☐ Flows
Name and Title	Daniel McEneny, Division Director	☐ Water Quality
Phone	518-268-2171	☐ Fish/Wildlife
Email address	Daniel.McEneny@parks.ny.gov	☐ Watershed
Mailing Address	OPRHP PO Box 189 Waterford, NY 12188	☐ T & E Species ☒ Cultural/Historic ☐ Recreation

6.0 SWORN STATEMENT

As an Authorized Representative of Central Rivers Power 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:

Authorized Representative:

Name: Matthew Stanley

Title: VP & General Manager

Authorized Signature: 

Date: 9/26/2022

ATTACHMENT A

AGENCY CONSULTATION

From:	Richard Malloy
To:	Andy Qua
Subject:	FW: Copenhagen Hydro, LLC - WQC
Date:	Thursday, July 14, 2022 9:49:32 AM
Attachments:	COP WQC 1982.pdf

FYI

From: Richard Malloy
Sent: Thursday, July 14, 2022 9:48 AM
To: jessica.hart@dec.ny.gov
Cc: Curtis Mooney <cmooney@centralriverspower.com>; Kevin Webb <kwebb@centralriverspower.com>; Skip Medford <smedford@centralriverspower.com>
Subject: Copenhagen Hydro, LLC - WQC

Good morning Jessica,

The High Falls Project (FERC No. 3754), owned and operated by Copenhagen Hydro, LLC (Copenhagen Hydro), a subsidiary of Central River Powers LLC, is exempt from licensing by the Federal Energy Regulatory Commission (FERC). The project is located on the Deer River in Lewis County, New York and is operated under the requirements of the FERC Exemption and in compliance with the NYDEC's Water Quality Certificate (WQC) issued for the project in July 1982. The project is operated in a run-of-river mode of operation and provides a minimum flow of 8 cfs into the bypassed reach to provide general aquatic habitat.

Copenhagen Hydro is undergoing a certification process to obtain renewable energy credits (RECs) for the project. As part of this process, Copenhagen Hydro must consult with NYDEC to confirm that the terms and conditions set forth in the original WQC are still valid and in effect. By way of this communication, Copenhagen Hydro requests NYDEC's confirmation of this. Attached for your reference is the WQC for the Project.

If you have questions, need additional information, or would like to meet to discuss this request, please let me know.

Sincerely,

Richard Malloy

Central Rivers Power

Richard Malloy

ATTACHMENT B

2022 USFWS INFORMATION FOR PLANNING AND CONSULTATIONS (IPAC)

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: January 20, 2022
Consultation Code: 05E1NY00-2022-SLI-1004
Event Code: 05E1NY00-2022-E-03828
Project Name: High Falls Bypassed Reach

Subject: List of threatened and endangered species that may occur in your proposed project location 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: 05E1NY00-2022-SLI-1004
Event Code: Some(05E1NY00-2022-E-03828)
Project Name: High Falls Bypassed Reach
Project Type: DAM
Project Description: High Falls Bypassed Reach ZOE for LIHI
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.898565000000005,-75.66177502824722,14z

Counties: Lewis County, New York

Endangered Species Act Species

There is a total of 2 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 Fisheries[1], 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.

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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 *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

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

United States Department of the Interior

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New York Ecological Services Field Office
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http://www.fws.gov/northeast/nyfo/es/section7.htm

In Reply Refer To: January 20, 2022
Consultation Code: 05E1NY00-2022-SLI-1003
Event Code: 05E1NY00-2022-E-03826
Project Name: High Falls Impoundment

Subject: List of threatened and endangered species that may occur in your proposed project location 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: 05E1NY00-2022-SLI-1003
Event Code: Some(05E1NY00-2022-E-03826)
Project Name: High Falls Impoundment
Project Type: DAM
Project Description: High Falls LIHI Impoundment ZOE
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.89471965,-75.66636943239408,14z

Counties: Lewis County, New York

Endangered Species Act Species

There is a total of 2 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 Fisheries[1], 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 *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

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

United States Department of the Interior

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Phone: (607) 753-9334 Fax: (607) 753-9699
http://www.fws.gov/northeast/nyfo/es/section7.htm

In Reply Refer To: January 20, 2022
Consultation Code: 05E1NY00-2022-SLI-1005
Event Code: 05E1NY00-2022-E-03830
Project Name: High Falls Tailwater

Subject: List of threatened and endangered species that may occur in your proposed project location 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:

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(607) 753-9334

Project Summary

Consultation Code: 05E1NY00-2022-SLI-1005
Event Code: Some(05E1NY00-2022-E-03830)
Project Name: High Falls Tailwater
Project Type: DAM
Project Description: High Falls Project Tailwater ZOE for LIHI
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.9089826,-75.64933146048244,14z

Counties: Lewis County, New York

Endangered Species Act Species

There is a total of 4 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 Fisheries[1], 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 *Myotis sodalis* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Ferns and Allies

NAME	STATUS
American Hart's-tongue Fern *Asplenium scolopendrium var. americanum* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4232	Threatened

Critical habitats

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

ATTACHMENT C

REFERENCE DOCUMENTS

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Hydro Development Group Inc.) Project No. 3754-001

ORDER GRANTING EXEMPTION FROM LICENSING OF A
SMALL HYDROELECTRIC PROJECT OF 5 MEGAWATTS OR LESS

(Issued January 14, 1982)

The Applicant 1/ filed an application for exemption from all or part of Part I of the Federal Power Act pursuant to 18 C.F.R. Part 4 SUBPART K (1980) implementing in part Section 408 of the Energy Security Act (Act) of 1980 for a project as described in the attached public notice. 2/ 3/

Notice of the application was published in accordance with Section 408 of the Act and the Commission's regulations and comments were requested from interested Federal and State agencies including the U. S. Fish and Wildlife Service and the State Fish and Wildlife Agency. All comments, protests and petitions to intervene that were filed have been considered. No agency has any objection relevant to issuance of this exemption.

Standard Article 2 included in this exemption requires compliance with any conditions that Federal or State fish and wildlife agencies have determined appropriate to prevent loss of, or damage to, fish and wildlife resources. The terms and conditions referred to in Article 2 are contained in any letters of comment by these agencies which have been forwarded to the Applicant in conjunction with this exemption.

1/ Hydro Development Group Inc., Project No. 3754-001, filed on October 5, 1981.

2/ Pub. Law 96-294, 94 Stat. 611. Section 408 of the ESA amends inter alia, Sections 405 and 408 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. §§2705 and 2708).

3/ Authority to act on this matter is delegated to the Director, Office of Electric Power Regulation under 18 C.F.R. §375.308 (1980), as amended by Fed. Reg. 14119 (1981).

Should the Applicant contest any terms or conditions that were proposed by Federal or State agencies in their letters of comment as being outside the scope of Article 2, the Commission shall determine whether the disputed terms or conditions are outside the scope of Article 2.

It is ordered that:

(A) High Falls Project No. 3754-001 as described and designated in Hydro Development Group Inc. application filed on October 5, 1981, is exempted from all of the requirements of Part I of the Federal Power Act, including licensing, subject to the standard articles in §4.106 of the Commission's regulations attached hereto as Form E-2, 18 C.F.R. §4.106 45 Fed. Reg. 76115 (November 18, 1980).

(B) This order is final unless a petition appealing it to the Commission is filed within 30 days from the date of its issuance, as provided in Section 1.7(d) of the Commission's regulations, 18 C.F.R. 1.7(d)(1981), as amended, 44 Fed. Reg. 46449 (1981). The filing of a petition appealing this order to the Commission or an application for rehearing as provided in Section 313(a) of the Act does not operate as a stay of the effective date of this order, except as specifically ordered by the Commission.

Robert E. Cackowski

Robert E. Cackowski
Deputy Director, Office of
Electric Power Regulation

§ 4.105 Action on exemption applications.

(a) *Exemption from provisions other than licensing.* An application for exemption of a small hydroelectric power project from provisions of Part I of the Act other than the licensing requirement will be processed and considered as part of the related application for license or amendment of license.

(b)(1) *Consultation.* The Commission will circulate a notice of application for exemption from licensing to interested agencies and Indian tribes at the time the applicant is notified that the application is accepted for filing.

(2) *Non-standard terms and conditions.* In approving any application for exemption from licensing, the Commission may prescribe terms or conditions in addition to those set forth in § 4.106 in order to:

(i) Protect the quality or quantity of the related water supply;

(ii) Otherwise protect life, health, or property;

(iii) Avoid or mitigate adverse environmental impact; or

(iv) Better conserve, develop, or utilize in the public interest the water resources of the region.

(Energy Security Act of 1980, Pub. L. 96-294, 94 Stat. 611; Federal Power Act, as amended (16 U.S.C. 792-828c); Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2601-2645); and the Department of Energy Organization Act (42 U.S.C. 7101-7352); E.O. 12009, 3 CFR 142 (1978))

[Order 106, 45 FR 76123, Nov. 18, 1980, as amended by Order 202, 47 FR 4246, Jan. 29, 1982; Order 413, 50 FR 11688, Mar. 25, 1985; Order 533, 56 FR 23154, May 20, 1991]

§ 4.106 Standard terms and conditions of case-specific exemption from licensing.

Any case-specific exemption from licensing granted for a small hydroelectric power project is subject to the following standard terms and conditions:

(a) *Article 1.* The Commission reserves the right to conduct investigations under sections 4(g), 306, 307, and 311 of the Federal Power Act with respect to any acts, complaints, facts, conditions, practices, or other matters related to the construction, operation, or maintenance of the exempt project, If any term or condition of the exemption is violated, the Commission has revoke the exemption issue a suitable order under section 4(g) of the Federal Power Act, or take appropriate action, for enforcement, forfeiture, or penalties under Part III of the Federal Power Act.

(b) *Article 2.* The construction, operation, and maintenance of the exempt project must comply with any terms and conditions that the United States Fish and Wildlife Service, the National Marine Fisheries Service, and any state fish and wildlife agencies have determined are appropriate to prevent loss of, or damage to, fish or wildlife resources or otherwise to carry out the purposes of the Fish and Wildlife Coordination Act, as specified in exhibit E of the application for exemption from licensing or in the comments submitted in response to the notice of exemption application.

(c) *Article 3.* The Commission may revoke this exemption if actual construction of any proposed generating facilities has not begun within two years or has not been completed within four years from the date on which this exemption was granted. If an exemption is revoked under this article, the Commission will not accept from the prior exemption holder a subsequent application for exemption from licensing for the same project within two years of the revocation.

(d) *Article 4.* This exemption is subject to the navigation servitude of the United States if the project is located on navigable waters of the United States.

(e) *Article 5.* This exemption does not confer any right to use or occupy any Federal lands that may be necessary for the development or operation of the project. Any right to use or occupy any Federal lands for those purposes must be obtained from the administering Federal land agencies. The Commission may accept a license application submitted by any qualified license applicant and revoke this exemption, if any necessary right to use or occupy Federal lands for those purposes has not been obtained within one year from the date on which this exemption was granted.

(f) *Article 6.* In order to best develop, conserve, and utilize in the public interest the water resources of the region, the Commission may require that the exempt facilities be modified in structure or operation or may revoke this exemption.

(g) *Article 7.* The Commission may revoke this exemption if, in the application process, material discrepancies, inaccuracies, or falsehoods were made by or on behalf of the applicant.

(h) *Article 8.* Any exempted small hydroelectric power project that utilizes a dam that is more than 33 feet in height above streambed, as defined in 18 CFR 12.31(c) of this chapter, impounds more than 2,000 acre-feet of water, or has a significant or high hazard potential, as defined in 33 CFR part 222, is subject to the following provisions of 18 CFR part 12, as it may be amended:

(1) Section 12.4(b)(1) (i) and (ii), (b)(2) (i) and (iii), (b)(iv), and (b)(v);
(2) Section 12.4(c);
(3) Section 12.5;
(4) Subpart C; and
(5) Subpart D.

For the purposes of applying these provisions of 18 CFR part 12, the exempted project is deemed to be a licensed project development and the owner of the exempted project is deemed to be a licensee.

(i) Before transferring any property interests in the exempt project, the exemption holder must inform the transferee of the terms and conditions of the exemption. Within 30 days of transferring the property interests, the exemption holder must inform the Commission of the identity and address of the transferee.

[Order 106, 45 FR 76123, Nov. 18, 1980; 45 FR 77420, Nov. 24, 1980, as amended by Order 202, 47 FR 4246, Jan. 29, 1982; Order 413, 50 FR 11688, Mar. 25, 1985; Order 482, 52 FR 39630, Oct. 23, 1987; Order 413-A, 56 FR 31331, July 10, 1991]

§ 4.107 Contents of application for exemption from licensing.

(a) *General requirements.* An application for exemption from licensing submitted under this subpart must contain the introductory statement, the exhibits described in this section, the fee prescribed in § 381.601 of this chapter and, if the project structures would use or occupy any lands other than Federal lands, an appendix containing documentary evidence showing that applicant has the real property interests required under § 4.31(c)(2)(ii). The applicant must identify in its application all Indian tribes that may be affected by the project.

(b) *Introductory statement.* The application must include an introductory statement that conforms to the following format:

BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

Application for Exemption of Small Hydroelectric Power Project From Licensing

(1) [Name of Applicant] applies to the Federal Energy Regulatory Commission for an exemption for [name of project], a small hydroelectric power project that is proposed to have an installed capacity of 5 megawatts or less, from licensing under the Federal Power Act. [If applicable: The project is currently licensed as FERC Project No. __.]

(2) The location of the project is:

[State or territory] _____

_____

[County] _____

[Township or nearby town] _____

_____

[Stream or body of water] _____

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Copenhagen Associates — Project No. 3754-002

ORDER AMENDING EXEMPTION
AND
APPROVING AS-BUILT EXHIBIT DRAWINGS

(Issued January 6, 2000)

On September 20, 1999, Hydro Development group, Inc. (HDI) on behalf of Copenhagen Associates, (Copenhagen) exemptee for the High Falls Project, FERC No. 3754 filed with the Commission as-built exhibits and a letter to resolve a discrepancy in the installed capacity of the project. The project is located on the Deer River in Lewis County, New York.

BACKGROUND

During an operation inspection of the project, the Commission's New York Regional Office (NYRO) found three generating units with an installed capacity of 3,300 kilowatts. The exemption from licensing for the High Falls Project authorizes two generating units having a total rated capacity of 3,000 kilowatts.[1]

REVIEW

A. Installed Capacity

In its September 20, 1999 letter, HDI stated that the project as constructed, consists of three generating units with a combined capacity of 3,400 kilowatts. To reconcile the differences in the installed capacity of the project, staff requested the exemptee to provide nameplate data for the three generating units. In a letter filed with the Commission on November 29, 1999, Copenhagen stated that the turbines and generators for Units #1 and #2 are identical and are rated at 1,500 kilowatts each, and the third unit has slightly different ratings for the turbine and generator, with the turbine being the limiting factor. Unit # 3 turbine rating is 429 kilowatts and the generator rating is 480 kilowatts. Therefore, the total installed capacity of the project is 3,429 kilowatts.[2]

[1]Order Granting Exemption From Licensing of a Small Hydroelectric Project of 5 Megawatts or less, issued January 14, 1982.

[2]18 CFR §11.1(i) authorized installed capacity means the lesser ratings of the

(continued...)

According to the exemptee, the third unit was added to generate at times of low river flows and when inflow exceeds the capacity of the two 1,500 kW units. Our review finds the minor increase in installed capacity from what is authorized will not result in any impacts to the environmental resources other than those identified in the original project review.

B. Exhibit Drawings

On October 5, 1981, along with the exemption application, the exemptee filed exhibit drawings B, G-1,G-2, and G-3. The Order Granting Exemption from Licensing did not formally approve the project drawings and our review found no record of as-built drawings. In its September 20, 1999 filing, the exemptee provided as-built exhibit drawings G-1, G-2 (sheets 1 thru 3), and G-3 (sheets 1 and 2). In reviewing the exhibit drawings, staff found the diameter of penstock at the dam on exhibit drawing G-2 (sheet 2) to be 5 feet and 6 feet at the powerhouse on exhibit drawing G-3 (sheet 1) and the length of penstock to be about 1,450. However, the project description in the order issuing the exemption states the penstock to be 2,000-foot long, and 5-foot diameter and would be either steel or fiberglass. Staff requested the exemptee to clarify this discrepancy and in a letter filed with the Commission on November 29, 1999, the exemptee stated that the penstock is 6 feet in diameter from the dam to powerhouse and submitted a revised exhibit drawing G-2 (sheet 2). In a letter dated December 20, 1999, exemptee stated that a review of the of the design drawings for the project indicate the penstock is approximately 1,350 feet long and is made up of steel. The exemptee further stated that an internal penstock inspection is scheduled during the summer of 2000 at which time a more accurate length of the penstock will be determined and will file for approval an exhibit G drawing showing elevations and sections of the penstock and surge tank.

Staff reviewed the exhibit drawings and found them to reflect accurate as-built conditions of the project . The exhibit B drawing submitted along with the exemption application and the as-built exhibit drawings submitted and revised on September 20, and November 29, 1999, respectively conform to the Commission's rules and regulations and are approved by this order. Ordering paragraph (D) of this order assigns title and drawing number to the approved exhibit B and reassigns exhibit G numbers. Changes to exhibit G

---

[2](...continued)
generator or turbine units.

Issuance of this order is also necessary to revise the project description to reflect as-built conditions of the project.

The Director orders:

(A) The exemption for the High Falls Project, FERC No.3754, is amended as provided by this order.

(B) Paragraph 2 of the project description is revised, in part, to read as follows:

...(2) install a 1,350 feet long, 6-foot diameter steel penstock; (3) install three generating units having a total rated capacity of 3,429 kilowatts.

(C) Within 90 days of the completion of the penstock inspection program, the exemptee shall file an exhibit G drawing showing the sectional details of the penstock and surge tank.

(D) The following exhibit B drawing filed along with the exemption application, and exhibit G drawings filed on September 20,1999, and revised on November 29, 1999, are approved and assigned drawing numbers as follows:

Approved Exhibit	TITLE	FERC Drawing No.
B-1	General Location Map	3754-1
G-1	General Layout	3754-5
G-2	Plan	3754-6
G-3	Sections	3754-7
G-5	Plan - Powerhouse and Penstock	3754-8
G-6	Plan - Generating Units	3754-9
G-7	Sections - Generating Units	3754-10

(E) Within 90 days of the date of issuance of this order, the exemptee shall file three original sets of aperture cards of the approved drawing reproduced on silver or gelatin 35 mm microfilm. All microfilm should be mounted on Type D (3¼" x 7⅜") aperture cards.

Prior to microfilming, the FERC Drawing Number, (3754-1, 3754-5 thru 10) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number should be typed in the upper right corner of each aperture card. Additionally, the Project Number, FERC exhibit G-1, Drawing Title, and date of this order should be typed in the upper left corner of each aperture card. See Figure 1.

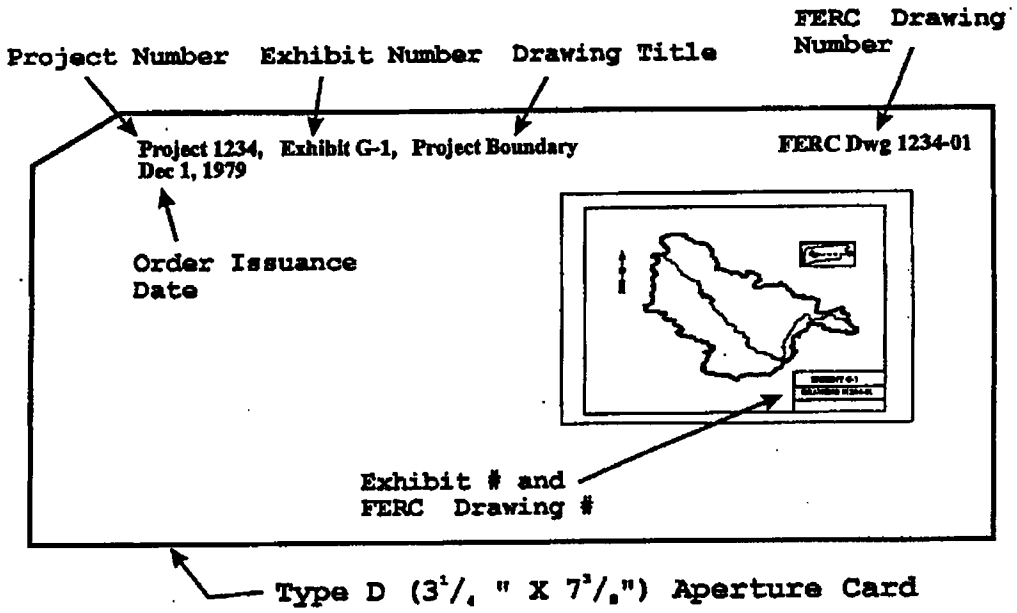

Figure 1. Sample Aperture Card Format

The original and one duplicate set of aperture cards should be filed with the Secretary of the Commission. One duplicate set of aperture cards should be filed with the Commission's New York Regional Office.

(F) This order constitutes final agency action. Requests for rehearing by the commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. §385.713.

Hossein Ildari
Chief
Engineering Compliance Branch

20030723-3007 Issued by FERC OSEC 07/23/2003 in Docket#: P-3754-003

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION
104 FERC ¶ 62,053

Copenhagen Associates Project No. 3754-003

ORDER APPROVING AS-BUILT EXHIBIT G[1]

(Issued July 23, 2003)

Copenhagen Associates, exemptee for the High Falls Project, FERC No. 3754, filed on December 26, 2000, and supplemented on June 10, 2003, a revised as-built Exhibit G-4, Plan and Section Penstock. The project is located on the Deer River in Lewis County, New York.

REVIEW

Ordering paragraph (C) of the order dated January 6, 2000, requires that within 90 days of the completion of the penstock inspection program, the exemptee shall file an Exhibit G drawing showing the sectional details of the penstock and surge tank. The drawing filed meets our specifications and will be approved by this order. Ordering paragraph (B) requires the filing of aperture cards.

The Director orders:

(A) The drawing filed June 10, 2003, is approved and made part of the exemption, as shown in the following table:

Exhibit	FERC Drawing No.	Title	Superseded Drawing No.
G-4	3754-11	Plan and Section Penstock	none

[1]90 FERC ¶ 62, 005 issued January 6, 2000, ordering paragraph (C).

(B) Within 90 days of the date of issuance of this order, the exemptee shall file three original sets of aperture cards of the approved drawing. The aperture cards should be reproduced on silver or gelatin 35 mm microfilm. All microfilm should be mounted on Type D (3¼" x 7ᑕ") aperture cards.

Prior to microfilming, the FERC Drawing Number (3754-11) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number should be typed in the upper right corner of each aperture card. Additionally, the Project Number, FERC Exhibit (G-4), Drawing Title, and date of this order should be typed in the upper left corner of each aperture card. See Figure 1.

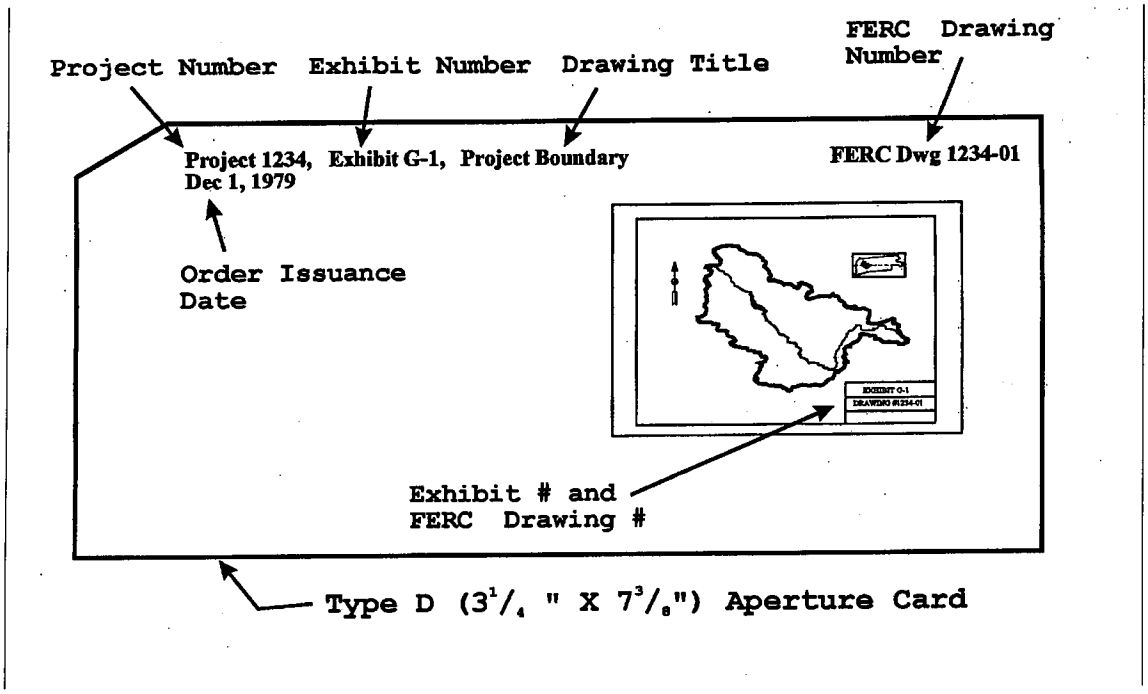

Figure 1. Sample Aperture Card Format

Two sets of the aperture card should be filed with the Secretary of the Commission. The third set of the aperture card should be filed with the Commission's New York Regional Office.

(C) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 CFR 385.713.

William Guey-Lee
Senior Technical Expert
Division of Hydropower Administration
and Compliance

Copen 400

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON 20426

IN REPLY REFER TO:

OEPR-HL
Project No. 3754-001 - New York
Hydro Development Group Inc.

JAN 12 1982

Mr. Mark E. Quallen
Hydro Development Group Inc.
P. O. Box 58
Dexter, New York 13634

Subject: Hydro Development Group Inc.'s application submitted on October 5, 1981, for exemption from licensing for the High Falls Project No. 3754.

Dear Mr. Quallen:

Enclosed for your information are agency letters commenting on the subject application.

Sincerely,

William W. Lindsay

William W. Lindsay
Director, Office of Electric
Power Regulation

Enclosures:
Interior letter dated December 15, 1981.

Laake

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Project Review
15 State Street
Boston, Massachusetts 02109

ER-81/2337

December 15, 1981

Mr. Kenneth F. Plumb, Secretary
Federal Energy Regulatory Commission
825 N. Capitol Street, N.E.
Washington, D.C. 20426

Dear Mr. Plumb:

The Department of the Interior has reviewed the October 23, 1981, Notice of Application by Hydro Development Group, Incorporated, for an exemption from licensing the proposed High Falls Project (Project No. 3754) located on the Deer River in the Town on Denmark, Lewis County, New York.

The proposed High Falls Project would consist of an existing concrete gravity type dam, an existing reservoir having negligible storage capacity, new headgates and trash racks, a new penstock, an existing powerhouse with new generating units, a new transmission line, and appurtenant facilities.

Cultural and Historical Resources

Based on the limited information contained in the application notice, it does not appear that exempting this project from licensing will adversely impact any programs of the National Park Service, provided there are no significant changes in the existing project works or operations that would appreciably alter present water levels or flow patterns. The project should also be reviewed by the State Historic Preservation Officer (SHPO) for a determination of possible impacts to existing or potential cultural resources. The review should include an assessment of the historical engineering importance of the High Falls Project, whose development dates back to the turn of the century. The SHPO for New York is Mr. Orin Lehman, Commissioner, Parks and Recreation, Agency Building #1, Empire State Plaza, Albany, New York 12238.

Fish and Wildlife Resources

Fishery resources, in the vicinity of the proposed project, consist primarily of smallmouth bass, rock bass, and yellow perch.

Except for occasional transient species, no federally listed or proposed endangered or threatened species under our jurisdiction are known to exist in the project impact area. Therefore, no Biological Assessment or further Section 7 consultation under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) is required with the U.S. Fish and Wildlife Service. Should project plans change, or if additional information on listed or proposed species becomes available, this determination may be reconsidered. A compilation of federally listed endangered and threatened species in New York is enclosed for your information.

The following comments are submitted pursuant to the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The proposed High Falls Project would have no significant adverse impact on existing fish and wildlife resources. Therefore, the U.S. Fish and Wildlife Service has no objection to the issuance of the proposed exemption provided the following terms and conditions, pursuant to Section 30(c) of the Federal Power Act, and Section 408 of the Energy Security Act, are stipulated in any exemption order issued by the Federal Energy Regulatory Commission for Project No. 3754:

1. The Exemptee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operations, as may be ordered by the Federal Energy Regulatory Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.

OK?

2. Whenever the United States shall desire, in connection with the project, to construct fish and wildlife facilities or to improve the existing fish and wildlife facilities at its own expense, the Exemptee shall permit the United States or its designated agency to use, free of cost, such of the Exemptee's lands and interests in lands, reservoirs, waterways and project works as may be reasonably required to complete such facilities or such improvements thereof. In addition, after notice and opportunity for hearing, the Exemptee shall modify the project operations as may be reasonably prescribed

by the Federal Energy Regulatory Commission in order to permit the maintenance and ~~operation of~~ the fish and wildlife facilities constructed or improved by the United States under the provisions of this condition. This condition shall not be interpreted to place any obligation on the United States to construct or improve fish and wildlife facilities or to relieve the Exemptee of any obligation under this license.

OK?

3. So far as is consistent with proper operation of the project, the Exemptee shall allow the public free access, to a reasonable extent, to project waters and adjacent project lands owned by the Exemptee for the purpose of full public utilization of such lands and waters for navigation and for outdoor recreational purposes, including fishing and hunting: Provided, that the Exemptee may reserve from public access such portions of the project waters, adjacent lands, and project facilities as may be necessary for the protection of life, health, and property.

non F&W ?

Sincerely,

William Patterson

William Patterson
Regional Environmental Officer

Enclosure

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES
IN NEW YORK

Common Name	Scientific Name	Status	Distribution
FISHES:			
Cisco, longjaw	Coregonus alpenae	E	Lake Erie-probably extir
Pike, blue	Stizostedion vitreum glaucum	E	Deep water of Lake Erie Lake Ontario - probably extinct
Sturgeon, shortnose*	Acipenser brevirostrum	E	Hudson River and other Atlantic Coastal river
REPTILES:			
Turtle, green*	Chelonia mydas	T	Oceanic summer visitor coastal waters
Turtle, hawksbill*	Eretmochelys imbricata	E	Oceanic summer visitor coastal waters
Turtle, leatherback*	Dermochelys coriacea	E	Oceanic summer resident coastal waters
Turtle, loggerhead*	Caretta caretta	T	Oceanic summer resident coastal waters
Turtle, Atlantic ridley*	Lepidochelys kempii	E	Oceanic summer resident coastal waters
BIRDS:			
Eagle, bald	Haliaeetus leucocephalus	E	Entire state
Falcon, American peregrine	Falco peregrinus anatum	E	Entire state - re-establishment to former breeding range progress
Falcon, Arctic	Falco peregrinus tundrius	E	Entire state migratory - no nesting
MAMMALS:			
Bat, Indiana	Myotis sodalis	E	Entire state
Cougar, eastern	Felis concolor cougar	E	Entire state - probably extinct
Whale, blue*	Balaenoptera musculus	E	Oceanic
Whale, finback*	Balaenoptera physalus	E	Oceanic
Whale, humpback*	Megaptera novaeangliae	E	Oceanic
Whale, right*	Eubalaena spp. (all species)	E	Oceanic
Whale, sei*	Balaenoptera borealis	E	Oceanic
Whale, sperm*	Physeter catodon	E	Oceanic

* Except for sea turtle nesting habitat, principal responsibility for these species is vested with the National Marine Fisheries Service.

Region 5 - 5/12/80 - 2 pp.

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES
IN NEW YORK (Cont'd)

Common Name	Scientific Name	Status	Distribution
MOLLUSKS:			
Snail, chittenango ovate amber	Siccinea ovalis chittenangoensis	T	Madison County
PLANTS:			
Monkshood, northern wild	Aconitum noveboracense	T	Ulster County

Region 5 - 5/12/80 - 2 pp.

Copenhagen 401.5.1

New York State Department of Environmental Conservation
Division of Regulatory Affairs
317 Washington Street
Watertown, New York 13601-3787
(315) 782-0100, Ext. 245

Robert F. Flacke
Commissioner

July 8, 1982

Mr. Mark E. Quallen
HYDRO DEVELOPMENT GROUP, INC.
Box 58
Dexter, New York 13634

RE: Small Hydroelectric Power Project
High Falls Dam, Deer River
Copenhagen (V), Lewis County
DEC Application #60-82-0098

Dear Mr. Quallen:

We have reviewed your application of April 26, 1982 for a Water Quality Certificate pursuant to Section 401 of the Clean Waters Act of 1977 (PL 95-217) which is necessary for your firm to obtain a Section 404 Permit from the Army Corps of Engineers. As we have previously advised you, a DEC Stream Protection Permit is not required for stream work in this particular section of the Deer River. Also a Dam Permit is not required for the work described in your application.

The Department has concerns that the proposed stream work could result in adverse environmental affects on water quality and aquatic life in the Deer River if the work is not done in a most careful manner. The attached Water Quality Certification takes into account these concerns and should limit potential adverse impacts. If you have any questions on the Water Quality Certification or its conditions, please feel free to contact me.

Sincerely yours,

John P. Kenna by Brian Fenlon
John P. Kenna, P.E.
Local Permit Agent
Region 6

JPK:BDF:mjc
Attachment

cc: Law Enforcement - 2
Army Corps of Engineers
Tom Brown
George Koch
Murdock MacKenzie

WATER QUALITY CERTIFICATION

HYDRO DEVELOPMENT GROUP, INC.
High Falls Dam, Deer River
Copenhagen (V), Lewis County
DEC Application #60-82-0098

In accordance with Section 401(a)(1) of the Clean Waters Act of 1977 (PL 95-217) the New York State Department of Environmental Conservation hereby certifies that the subject project proposal will not contravene effluent limitations or other limitations or standards under Sections 301, 302, 303, 306 or 307 of the Act, provided that:

1. As much sediment and debris as possible will be removed from behind the dam prior to drawdown. The dredged material will be placed in an upland site in such a manner so as not to wash back into the Deer River. Prior to use of any disposal site, approval for use of that site will be obtained from the Watertown DEC Office.

2. Notice will be given 48 hours prior to the start of drawdown to the Watertown DEC Office (317 Washington Street, Watertown, New York 13601-3787, phone (315) 782-0100, Ext. 245) so that a Department representative can be on site. The drawdown will be gradual and if downstream sedimentation becomes a problem, drawdown may have to await high flows.

3. Both the Watertown DEC Office and the Dam Safety Unit (Room 422, 50 Wolf Road, Albany, New York 12233) will be notified in writing when the drawdown is complete so that a dam inspection can be made.

4. Measures will be taken during construction of the powerhouse and penstock to keep erosion and sedimentation to a minimum. Care will also be taken to keep concrete and other materials out of the water.

5. DEC reserves the right to require the Hydro Development Group to implement temporary modifications to the project, if required by emergencies beyond control of the applicant, to assure the protection of the quality of the water and its biota.

John P. Kenna by Brian Fuller — July 8, 1982

John P. Kenna, P.E.
Local Permit Agent
Region 6

Date

FEDERAL ENERGY REGULATORY COMMISSION
OFFICE OF HYDROPOWER LICENSING
HYDROPOWER LICENSE COMPLIANCE TRACKING SYSTEM

PROJECT COMPLIANCE SUMMARY

OJECT NO: 03754 PROJECT NAME: HIGH FALLS PROJECT TYPE: ORDER TYPE: 3 RO: NY ENGINEER:

PROJECT IDENTIFICATION INFORMATION

CIPIENT (1): Copenhagen Associates (NY)
(2):
(3):
(4):
(5):

RIVER BASIN CODE: 0414200100MA0 CAPACITY (KW): 3,330
WATERWAY NAME(1): DEER RIVER
WATERWAY NAME(2):
WATERWAY NAME(3): WING
CI[illegible] OPENHAGEN
CO[illegible] IS
CITY(2):
COUNTY(2):

AISON: JAMES S GRENIER TELEPHONE: (315)639-6700
DRESS: HYDRO DEVELOPMENT GROUP INC ADDRESS: BOX 58
CITY: DEXTER STATE: NY ZIP: 13634

PROJECT DATES

ISSUANCE DATE	EFFECTIVE DATE	CONSTRUCTION START DATE	CONSTRUCTION FINISH DATE	OPE[illegible] DATE	EXPIRATION DATE
01/14/1982	01/14/1982	06/13/1983	07/10/1984	07/1[illegible]	

TRACKABLE ITEMS

CTS O.	ART NO.	DESCRIPTION OF REQUIREMENT	REVIEW ORGANIZATION CODE	REVIEWER	DUE DATE	EXT REQ DATE	EXT GRANT DATE	EXT DUE DATE	DEFICY LETTER SENT	DEFICY REPLY DUE	NONCOMP LETTER SENT	NONCOMP REPLY DUE	DATE FILED	DEFICY REPLY FILED	DATE APPRV
02	REG	OPERATIONAL FOLLOW-UP ITE			011689								011789		01268
03	REG	DAM REPAIRS(MINOR) OR MAI			071591								071091		07179
04	REG	PUBLIC SAFETY DEVICE INST			052491								052091		05289
05	.	OPERATIONAL FOLLOW-UP ITE			081693								080393		N/A
06	REG	PUBLIC SAFETY DEVICE INST			111097										N/A

Copenhagen 401.5.1

New York State Department of Environmental Conservation
Division of Regulatory Affairs
317 Washington Street
Watertown, New York 13601-3787
(315) 782-0100, Ext. 245

Robert F. Flacke
Commissioner

July 8, 1982

Mr. Mark E. Quallen
HYDRO DEVELOPMENT GROUP, INC.
Box 58
Dexter, New York 13634

RE: Small Hydroelectric Power Project
High Falls Dam, Deer River
Copenhagen (V), Lewis County
DEC Application #60-82-0098

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Sincerely yours,

John P. Kenna by Brian Fenlon
John P. Kenna, P.E.
Local Permit Agent
Region 6

JPK:BDF:mjc
Attachment

cc: Law Enforcement - 2
Army Corps of Engineers
Tom Brown
George Koch
Murdock MacKenzie

WATER QUALITY CERTIFICATION

HYDRO DEVELOPMENT GROUP, INC.
High Falls Dam, Deer River
Copenhagen (V), Lewis County
DEC Application #60-82-0098

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2. Notice will be given 48 hours prior to the start of drawdown to the Watertown DEC Office (317 Washington Street, Watertown, New York 13601-3787, phone (315) 782-0100, Ext. 245) so that a Department representative can be on site. The drawdown will be gradual and if downstream sedimentation becomes a problem, drawdown may have to await high flows.

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5. DEC reserves the right to require the Hydro Development Group to implement temporary modifications to the project, if required by emergencies beyond control of the applicant, to assure the protection of the quality of the water and its biota.

John P. Kenna, P.E.
Local Permit Agent
Region 6

Date July 8, 1983

401.5.1

APR -5 1994

NYS Department of Environmental Conservation
Division of Regulatory Affairs
317 Washington Street
Watertown, NY 13601-3787
315-785-2245

Langdon Marsh
Acting Commissioner

April 4, 1994

Mr. Mark Quallen, President
Hydro Development Group
PO Box 58
Dexter, New York 13634

RE: **Water Quality Certifications**

Dear Mr. Quallen:

This Department has reviewed all files which note that Hydro Development Group is an entity in the ownership or operation of hydroelectric facilities located in Region 6. These facilities include Dexter, Theresa, Diamond Island, Copenhagen, Hailsboro 3, 4, and 6, Fowler 7, Pyrites, Port Leyden, Rock Island and Denley. Region 6 is composed of the Counties of Herkimer, Jefferson, Lewis, Oneida and St. Lawrence.

Based upon that review, it is noted that a Water Quality Certification, under Section 401 of the Clean Water Act of 1977, has been issued for all of Hydro Development Group's facilities. Also based on the review, as of this date, it is shown that all of the facilities are being operated within the conditions set forth in each Certificate.

Sincerely yours,

C. Randy Vaas
Regional Supervisor of
Regulatory Affairs
Region 6

CRV:dmt

Dir-DINS

3754 Proj.

HYDRO DEVELOPMENT GROUP INC.
BOX 58
DEXTER, N.Y. 13634
(315) 639-6700

June 17, 1987

Mr. Martin Inwald, P.E.
Regional Director
FERC
26 Federal Plaza, Rm. 2207
New York, New York 10278

Re: Minimum Flow Requirement
Project #3754 NY, High Falls

Dear Mr. Inwald:

In regard to your letter dated June 6, 1987, I apologize for our tardiness in responding and filing our proposed plan.

Please find attached our correspondence and comments by DEC and Fish & Wildlife Service.

Also attached is the minimum flow requirement drawing 12" pipe imbed plan that should meet all requirements. After approval, installations would be completed this summer.

Thank you in advance for your review of this plan.

Sincerely,

Mark Quallen
President

MQ:sf

Attachments

8707130343

York State Department of Environmental Conservation
DIVISION OF REGULATORY AFFAIRS
317 Washington Street
Watertown, New York 13601
(315) 785-2245

Henry G. Williams
Commissioner

May 11, 1987

MAY 14 1987

Mr. Mark Quallen
HYDRO DEVELOPMENT GROUP
PO Box 58
Dexter, New York 13623

Dear Mr. Quallen:

RE: High Falls Hydro Project
FERC #3754

This letter concerns the minimum flow device proposed at the High Falls Project, my letter of 4/20/87, and our subsequent telephone conversation of 5/4/87. Our concern was that this device be installed at a lower elevation than the intake structure for the penstock so it could not be dewatered during operation of the turbine. If installation of the minimum flow device at this elevation is not possible then the proposed location four feet below dam crest is acceptable.

Agency comments on the 1981 exemption request specified the project be operated as in a strict run-of-river mode with a minimum release of 8 cfs. As long as this project is operated in a run-of-river mode and pulsing or a store and release mode is not used then the proposed minimum release device should work satisfactorily.

Sincerely yours,

Brian Fenlon
Brian D. Fenlon
Associate Environmental Analyst
Region 6

BDF:mjw

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
100 Grange Place
Room 202
Cortland, New York 13045

JUN 16 1987

June 12, 1987

Mr. Mark E. Quallen, President
Hydro Development Group, Inc.
Box 58
Dexter, New York 13634

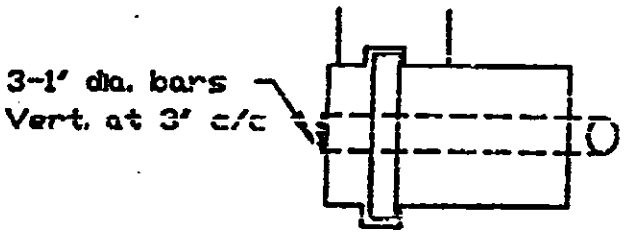
Dear Mr. Quallen:

This responds to your letter of June 10, 1987 requesting our comments on your proposed plan for the minimum release at the High Falls Hydroelectric Project (FERC #3754). The installation of a 12 inch pipe at the bottom of the sluice in the dam is an acceptable release mechanism. Please contact us if any problems should arise in the implementation of this plan.

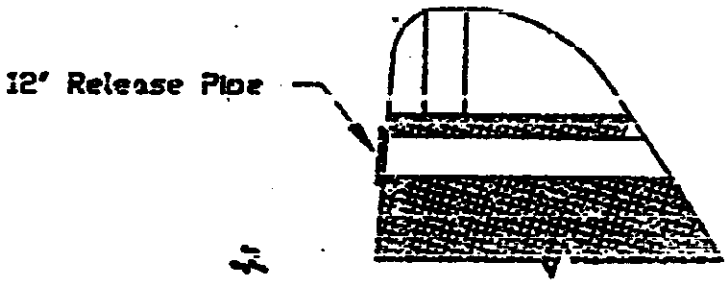
Sincerely yours,

Paul P. Hamilton
Field Supervisor

cc: NYSDEC, Albany, NY
NYSDEC, Watertown, NY
EPA, New York, NY
FERC, Washington, DC (Plumb & Springer)



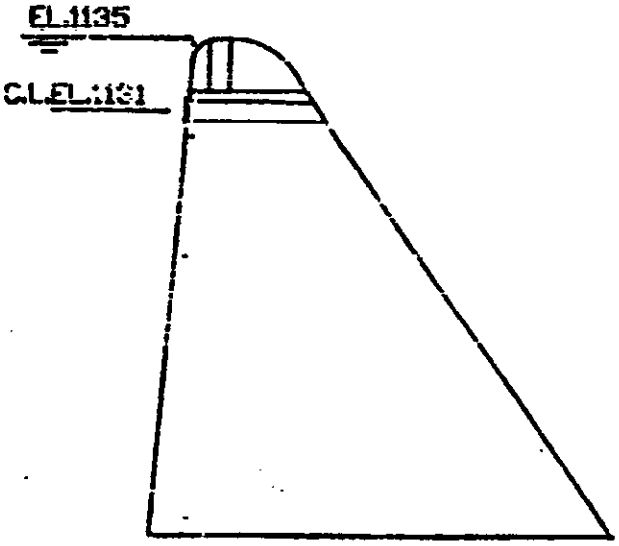
PLAN



SECTION THRU CENTER OF PIPE

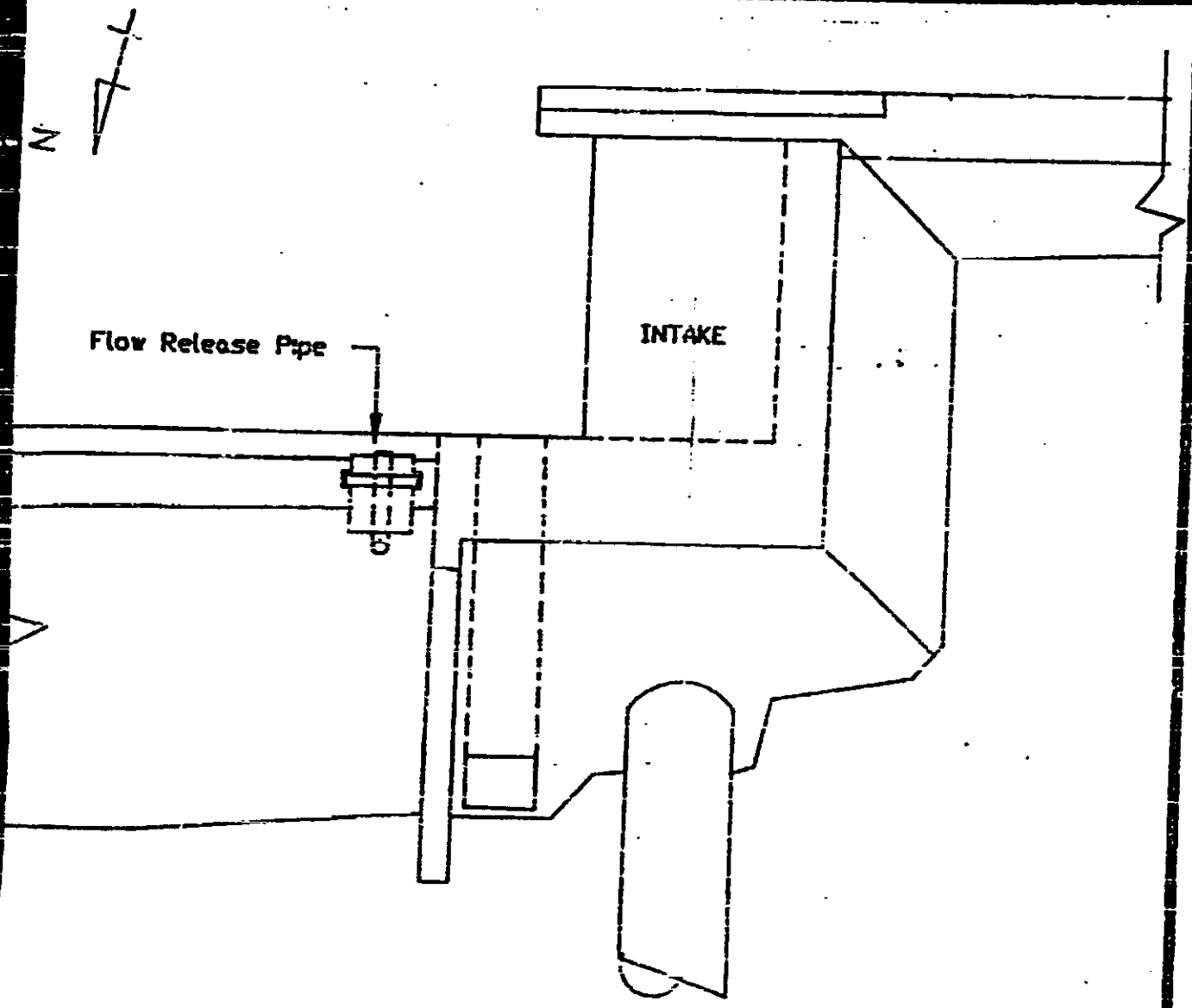
RELEASE PIPE DETAIL

Scale: 1" = 5'



SPILLWAY SECTION AT SLUICE

Scale: 1" = 10'



PLAN VIEW

Scale: 1" = 10'

NOTES

1. Release pipe shall be 12" diameter standard wall black pipe with two 1/8"x 4" plate waterstops welded full around and spaced one foot and four feet from the upstream face, respectively. The pipe shall be placed in a rough cut opening at a centerline elevation 4' below spillway crest. The pipe shall be grouted in place using nonshrink grout fully encasement to the pipe and walls of the opening.

STATE OF NEW YORK
PETER H. TUCKER
LICENSED PROFESSIONAL ENGINEER

PHT

HYDRO DEVELOPMENT GROUP	
COPENHAGEN HYDRO DEVELOPMENT	
SCALE AS NOTED	DRAWN P. TUCKER
DATE 3/18/87	
PROPOSED 12" RELEASE PIPE AT DAM	
P.H. Tucker Consulting Engineer	DRAWING CD-C-2

FEDERAL ENERGY REGULATORY COMMISSION
NEW YORK REGIONAL OFFICE
26 FEDERAL PLAZA, ROOM 1237
NEW YORK, NEW YORK 10278

June 25, 1987

Mr. Mark E. Quallen
President
Hydro Development Group Inc.
Box 58
Doxter, New York 13634

RE: Project No. 3754-NY, High Falls
Minimum Flow Requirement

Dear Mr. Quallen:

We have reviewed your proposed plan for complying with the minimum flow requirements of the New York State DEC and U.S. Fish and Wildlife Service at the referenced project. The installation of a 12-inch diameter release pipe, four feet below dam crest is acceptable to this office.

Your continued cooperation in this matter is appreciated.

Sincerely,

Anton L. Sidoti /fo

Martin Znvald, P.E.
Regional Director

cc: Director/DINS
FERC-NYRO
Cataldo,C./sar
June 25, 1987

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