SME
SEVEE & MAHER
ENGINEERS

4 Blanchard Road, P.O. Box 85A
Cumberland, ME 04021
Tel: 207.829.5016 • Fax: 207.829.5692
info@sme-engineers.com
sme-engineers.com

June 8, 2023

U.S. Environmental Protection Agency, Region 1
ATTN: George Papadopoulos, HYDROGP Coordinator
5 Post Office Square – Mailcode 06-1
Boston, MA 02109-3912

Email: Hydro.GeneralPermit@epa.gov

Subject: Notice of Intent (NOI) Applications for Coverage under the EPA Region 1 Hydroelectric Generating Facilities General Permit (Hydro GP) for Facilities in New Hampshire

Dear Mr. Papadopoulos:

On behalf of the following FERC licensees, please see the attached NOI applications for the following facilities located along the Androscoggin River in New Hampshire:

Great Lakes Hydro America, LLC

- Cascade Hydro – NPDES Permit No. NHG360010
- Cross Hydro – NPDES Permit No. NHG360009
- Gorham Hydro – NPDES Permit No. NHG360011
- Riverside Hydro – NPDES Permit No. NHG0008
- Sawmill Hydro – NPDES Permit No. NHG360007
- Shelburne Hydro – NPDES Permit No. NHG0012

Errol Hydroelectric Company, LLC

- Errol Hydro – NPDES Permit No. NHG360016

Pontook Operating LP

- Pontook Hydro – NPDES Permit No. NHG36006

Per Section 6.7 of the 2023 Hydro GP, copies of these NOI applications were also provided to the New Hampshire Department of Environmental Services (NHDES).

Should questions arise or additional information be desired, please do not hesitate to contact me at 207.829.5016.

Sincerely,

SEVEE & MAHER ENGINEERS, INC.

Philip H. Gerhardt, P.E.
Principal/Senior Environmental Engineer

cc: Hayley Franz (Hayley.Franz@des.nh.gov), Theresa Ptak (Teresa.Ptak@des.nh.gov), NHDES

Request for General Permit Authorization to Discharge Wastewater Notice of Intent (NOI) to be covered by Hydroelectric Generating Facilities General Permit (HYDROGP) No. MAG360000 or NHG360000

Indicate Applicable General Permit for Discharge(s): ☐ MAG360000 ■ NHG360000

A. Facility Information

1. Facility Location	Name: Cascade Hydro	
	Street: 72 Cascade Flats	
	City: Gorham	State: New Hampshire
	Zip: 03581	SIC Code: 4911
	Latitude: 44º 26' 52" N	Longitude: 71º 11' 14" W
	Type of Business: Hydroelectric Generating Station	
2. Facility Mailing Address (if different from Location)	Street: 972 Main Street	
	City: Berlin	State: New Hampshire
	Zip: 03570	
3. Facility Owner	Name: Great Lakes Hydro America LLC	Email: Patrick.McDonough@brookfieldrenewable.com
	Street: 972 Main Street	Telephone: 207-376-7063

	City: Berlin	State: New Hampshire
	Contact Person: Patrick McDonough	Zip: 03570
4. Facility Operator (if different from above)	Name:	Email:
	Street:	Telephone:
	City:	State:
	Zip:	

5. Current Permit Status	Has prior HYDROGP coverage been granted for the discharge(s) listed in the NOI?		■ Yes ☐ No
	Permit number (if yes): NHG360010		
	Is the facility covered under an Individual Permit?		☐ Yes ■ No
	Is there a pending NPDES application of file with EPA for the discharge(s)?		☐ Yes ■ No
	Date of Submittal (if yes):	Permit Number (if known):	
	Attach a topographic map indicating the locations. of the facility and outfall(s) to the receiving water		■ Map Attached
	Number of turbines: 3		
	Combined turbine discharge (installed capacity) at:	Maximum capacity? 2,690 cfs Minimum capacity? 1,400 (estimated) cfs	
	Is this facility operated as a pump storage project?		☐ Yes ■ No

B. Discharge Information

1. Name of Receiving Water(s): Androscoggin River		■ Freshwater ☐ Marine
2. Waterbody classification: ☐ Class A ■ Class B ☐ Class SA ☐ Class SB		
3. Is the receiving water is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d))?		■ Yes ☐ No
4. If the applicant answered yes to B.3, has the applicant identified the designated uses that are impaired, any pollutants indicated, and whether a final TMDL is available for any of the indicated pollutants in a separate attachment to the NOI?		■ Yes ☐ No
5. Attach a line drawing or flow schematic showing water flow through the facility including location of intake(s), operations contributing to effluent flow, treatment units, outfalls, and receiving water(s).		■ Line Drawing Attached
6. List each outfall (numbered sequentially) discharging effluent from the following categories and provide an estimate of the average monthly flow (in gallons per day) for each discharge type. See Parts 1.1 through 1.5 (for MA) or Parts 2.1 through 2.5 (for NH) for descriptions and permit conditions for each discharge type.		
Equipment-related cooling water	Outfalls: 22-A	110,000 gpd
Equipment and floor drain water	Outfalls:	gpd
Maintenance-related water	Outfalls:	gpd
Facility maintenance-related water during flood/high water events	Outfalls:	gpd
Equipment-related backwash strainer water	Outfalls:	gpd

7. For each outfall listed above, provide the following information (attach additional sheets if necessary). Outfalls may be eligible for alternative pH effluent limits. See Parts 1.7.l. and 2.7.l of the permit for additional information. Contact MassDEP or NHDES to determine the required information and protocol to request alternative pH effluent limits.		
Outfall No. 22-A	Latitude: 44° 26' 52" N	Longitude: 71° 11' 14" W
	Discharge is: ■ Continuous ☐ Intermittent ☐ Seasonal	
	Maximum Daily Flow 0.11 MGD	Average Monthly Flow 0.11 MGD
	Maximum Daily Temperature 54 °F	Average Monthly Temperature 45.25 °F
	Maximum Daily Oil & Grease <5 mg/L	Average Monthly Oil & Grease <5 mg/L
	Maximum Monthly pH 6.88 s.u.	Minimum Monthly pH 6.64 s.u.
	Alternative pH limits requested? ■Yes ☐ No	State approval attached? ■ Yes ☐ No
Outfall No.	Latitude:	Longitude:
	Discharge is: ☐ Continuous ☐ Intermittent ☐ Seasonal	
	Maximum Daily Flow MGD	Average Monthly Flow MGD
	Maximum Daily Temperature °F	Average Monthly Temperature °F
	Maximum Daily Oil & Grease mg/L	Average Monthly Oil & Grease mg/L
	Maximum Monthly pH s.u.	Minimum Monthly pH s.u.
	Alternative pH limits requested? ☐Yes ☐ No	State approval attached? ☐ Yes ☐ No

Outfall No.	Latitude:	Longitude:
	Discharge is: ☐ Continuous ☐ Intermittent ☐ Seasonal	
	Maximum Daily Flow MGD	Average Monthly Flow MGD
	Maximum Daily Temperature °F	Average Monthly Temperature °F
	Maximum Daily Oil & Grease mg/L	Average Monthly Oil & Grease mg/L
	Maximum Monthly pH s.u.	Minimum Monthly pH s.u.
	Alternative pH limits requested? ☐Yes ☐ No	State approval attached? ☐ Yes ☐ No

C. Best Technology Available for Cooling Water Intake Structures

Facilities that checked "equipment-related cooling" as one of the discharges in Part B. of this NOI are subject to the following requirements.	
1. Does the facility intake water for cooling purposes subject to the BTA Requirements at Part 4 of the HYDROGP?	■ Yes ☐ No If no, skip to Part D of this NOI.
2. If yes, indicate which technology employed to comply with the general BTA requirements at Part 4.2.b of the HYDROGP:	
☐An existing technology (e.g., a physical or behavioral barrier, spillway, or guidance device) that directs fish towa downstream passage that minimizes exposure to the CWIS. Has the applicant attached a narrative description of the barrier to demonstrate that the downstream fish passage effectively transports live fish in a manner that minimizes the likelihood of becoming impinged or entrained at the cooling water intake? ☐ Yes ☐ No	
☐An effective intake velocity at the point of cooling water withdrawal, or alternatively, at the point where cooling water enters the penstock (for intakes located within the penstock), not to exceed 0.5 fps. Has the applicant attached a demonstration of compliance with this intake velocity through observation of live fish in the intake or calculation based on the maximum intake volume and minimum bypass flow? ☐ Yes ☐ No	

Please see the attached documentation describing Option 3 and Option 4

☐For cooling water withdrawn directly from the source waterbody (*i.e.*, not from within the penstock), a physical screen or other barrier technology with a mesh size no greater than ½-inch that minimizes the potential for adult and juvenile fish to become entrapped in the CWIS.
Has the applicant attached a description of the technology? ☐ Yes ☐ No
If the mesh size of the screen is greater than ½-inch has the applicant demonstrated that the calculated intake velocity is less than 0.5 fps based on the screen dimensions, maximum intake volume, and source water 7Q10 low flow? ☐ Yes ☐ No

3. If the answer to question C.1 is yes, in addition to complying with one of the criteria above, the applicant must submit the following information:

Maximum daily volume of cooling water withdrawn during previous five (5) years: 110,000 gpd

Maximum monthly average volume of cooling water withdrawn during the previous five (5) years: 110,000 gpd

Maximum daily and average monthly volume of water used exclusively for cooling: Max: 110,000 gpd Avg: 110,000 gpd
Maximum daily and average monthly volume of water used for another process before or after being used for cooling:
Max: 0 gpd Avg: 0 gpd
Has the applicant attached a narrative description explaining how cooling water is reused? ☐ Yes ■ No

Volume of total intake water withdrawn and used in facility as a percentage of:
Installed turbine capacity 0.006 % Average daily flow through penstock 0.011 % - 0.008 %
Minimum flow through penstock 0.012 %

These values are based on a range of 60% - 80% of installed turbine capacity

Source water annual mean flow (*e.g.*, available from USGS, MassDEP, or NHDES): 1925 cfs

Source water 7-day mean low flow with 10-year recurrence interval (7Q10): 758 cfs

Volume of total intake water withdrawn and used in facility as a percentage of:
Source water mean annual flow 0.009 % or 0.17 cfs
Source water 7Q10 flow 0.022 % or 0.17 cfs cfs

D. Chemical Additives

1. Does the facility use or plan to use non-toxic chemicals for pH adjustment?	☐ Yes ■ No
2. Does the facility use or plan to use chemicals for anti-freeze purposes?	☐ Yes ■ No
3. If the answer to D.2 is yes, provide the following for **EACH** chemical additive used for anti-freeze:	
Chemical Name and Manufacturer:	
Maximum Dosage Concentration Used:	Average Dosage Concentration Used:
Maximum Concentration in Discharge: mg/L	Average Concentration in Discharge: mg/L
Material Safety Data Sheet (MSDS) or other toxicity documentation for each chemical attached? ☐ Yes ☐ No	

E. Endangered Species Act Certification

Appendix 2 to the HYDROGP explains the certification requirements related to threatened and endangered species and designated critical habitat. Indicate under which criteria the discharge is eligible for coverage under the HYDROGP:	
1. ESA eligibility for species under jurisdiction of USFWS	☐ **Criterion A**: No endangered or threatened species or critical habitat are in proximity to the discharges or related activities or come in contact with the "action area." See Appendix 2, Part B for documentation requirements. Documentation attached? ☐ Yes ☐ No
	■ **Criterion B**: Formal or informal consultation with the USFWS under Section 7 of the ESA resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by USFWS on a finding that the discharges and related activities are "not likely to adversely affect" listed species or critical habitat. Has the operator completed consultation with USFWS and attached documentation? ☐ Yes ■ No If no, is consultation underway? ■ Yes ☐ No
	☐ **Criterion C**: Using the best scientific and commercial data available, the effect of the discharges and related activities on listed species and designated critical habitat have been evaluated. Based on those evaluations, a determination is made by EPA, or by the operator and affirmed by EPA, that the

		discharges and related activities will have "no effect" on any federally threatened or endangered species or designated critical habitat under the jurisdiction of the USFWS. Has the applicant attached documentation of the "no effect" finding? ☐ Yes ☐ No
2.	ESA eligibility for species under jurisdiction of NMFS	Is the facility located on: the Connecticut River between the Massachusetts/Connecticut state line and Turners Falls, MA; the Taunton River; the Merrimack River between Lawrence, MA and the Atlantic Ocean; the Piscataqua River including the Salmon Falls and Cocheco Rivers; or a marine water? ☐ Yes ■ No
		If yes, was the applicant authorized to discharge from the facility under the 2009 HYDROGP? ☐ Yes ☐ No
		If the discharge is to one of the named rivers above or to a marine water *and* the facility was not previously covered under the 2009 HYDROGP, has there been any previous formal or informal consultation with NMFS? ☐ Yes ☐ No Documentation of consultation attached? ☐ Yes ☐ No

F. National Historic Properties Act Eligibility

1. Indicate under which criterion the discharge(s) is eligible for covered under the HYDROGP:
■ **Criterion A**: No historic properties are present.
☐ **Criterion B**: Historic properties are present. The discharges and related activities do not have the potential to impact historic properties.
☐ **Criterion C**: Historic properties are present. The discharges and related activities have the potential to impact or adversely impact historic properties.
2. Has the applicant attached supporting documentation for NHPA eligibility described in Appendix 3, Part C of the HYDROGP? ■ Yes ☐ No

3.	Does supporting documentation include a written agreement from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or other tribal representative that outlines measures the operation will carry out to mitigate or prevent any adverse effects on historic properties? ☐ Yes ■ No

G. Supplemental Information

Please provide any supplemental information, including antidegradation review information applicable to new or increased discharges. Attach any certifications required by the HYDROGP. Supplemental information attached? ■ Yes ☐ No

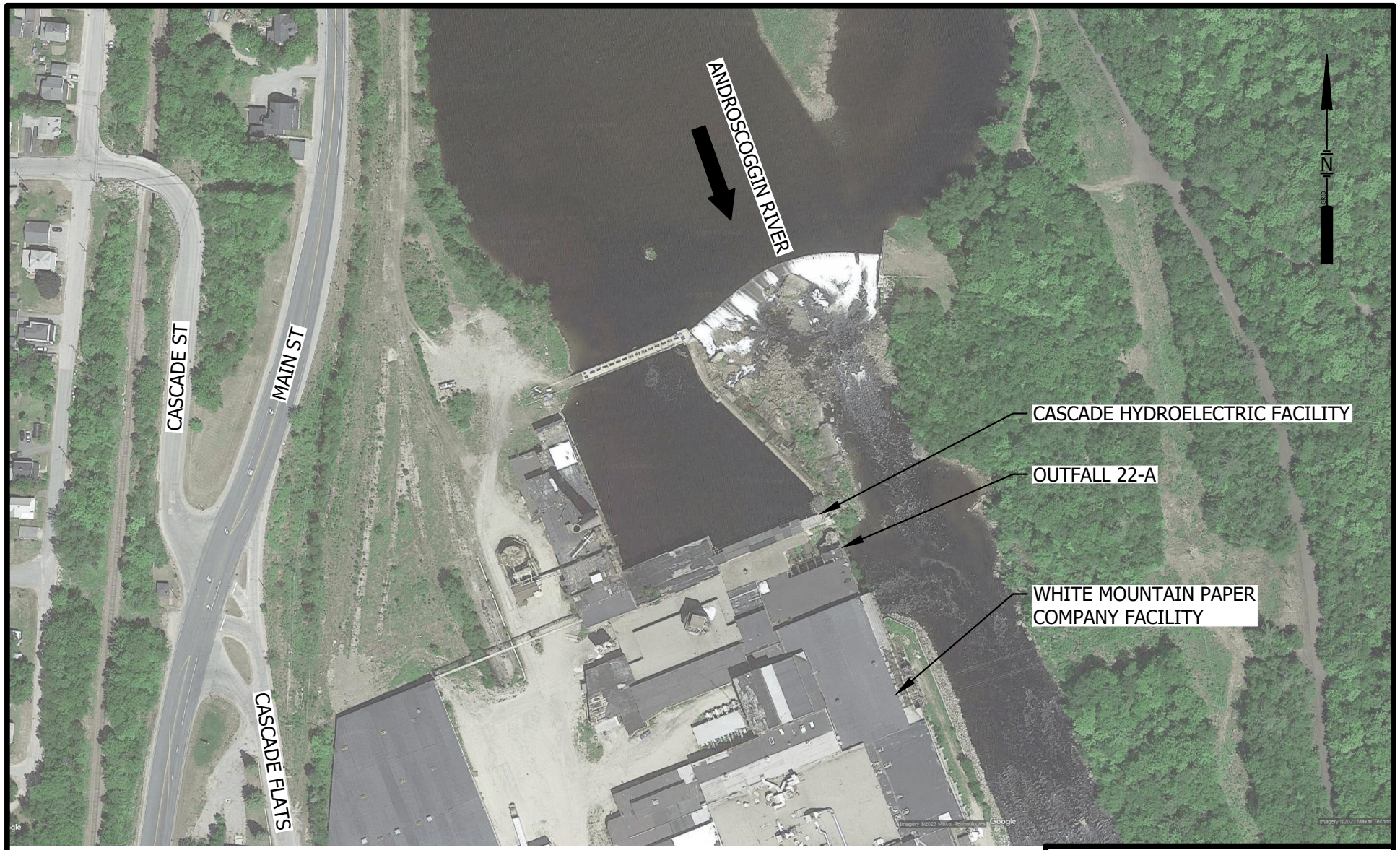
H. Signature Requirements

1.	The NOI must be signed by the operator in accordance with the signatory requirements of 40 C.F.R. § 122.22, including the following certification:	
	I certify under penalty of law that no chemical additives are used in the discharges to be authorized under this General Permit except for those used for pH adjustment or anti-freeze purposes and that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	
2.	Notification provided to the appropriate State, including a copy of this NOI, if required?	■ Yes ☐ No
Signature:	Stephen Michaud (50794) Digitally signed by Stephen Michaud (50794) Date: 2023.06.08 10:06:03 -04'00'	Date:
Print Name and Title:	Steve Michaud, Director of Operations	

NOI ATTACHMENT 1

SITE AND FACILITY LOCATION MAPS

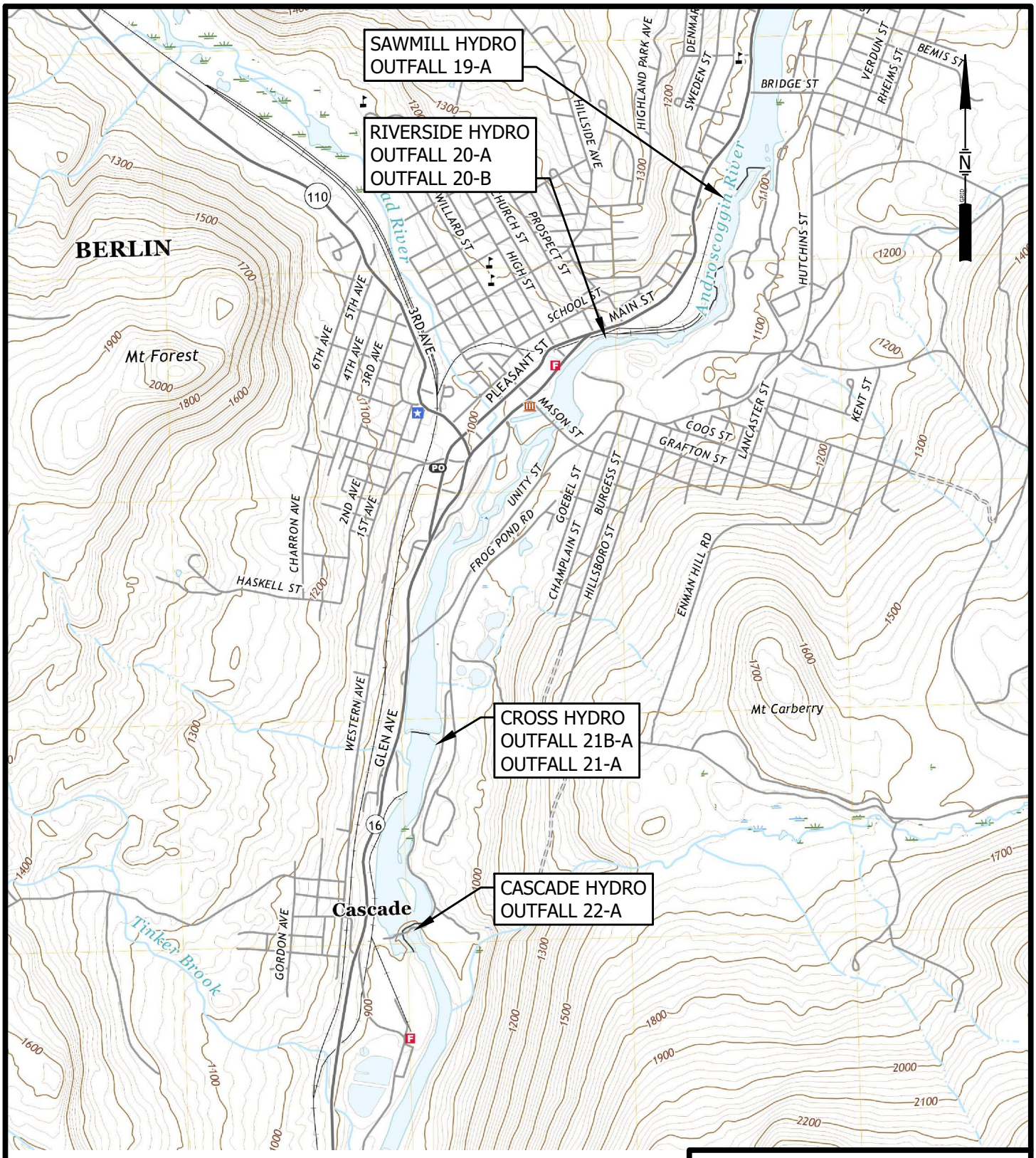
SME
SEVEE & MAHER
ENGINEERS



SITE LOCATION MAP
CASCADE HYDRO
72 CASCADE FLATS
GORHAM, NEW HAMPSHIRE

SME
SEVEE & MAHER ENGINEERS

DWG: CASCADE LMN: LMN CTB: SME-STD REV: 5/19/2023



BASEMAP ADAPTED FROM 7.5 MIN USGS TOPO QUADS
BERLIN, NH - 2021

1000 0 2000 FEET

DWG: FACILITY LOC LMN: LMN CTB: SME-STD REV: 5/19/2023

BROOKFIELD FACILITY LOCATIONS
BERLIN, NEW HAMPSHIRE

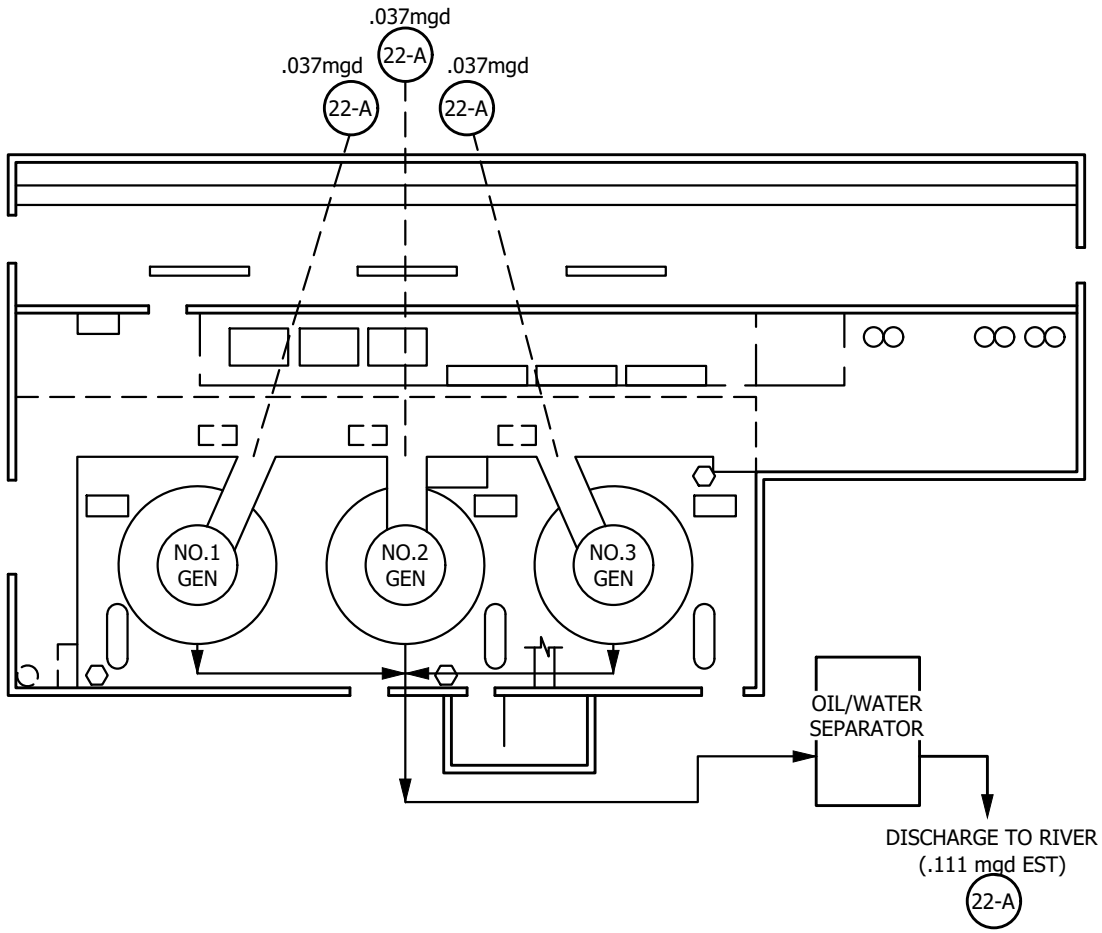
SME
SEVEE & MAHER
ENGINEERS

\\Nserver\cfs\Brookfield\Great Lakes Hydro America\Acad\Figures\FACILITY LOC.dwg, BERLIN, 5/19/2023 4:05:52 PM, bwb

NOI ATTACHMENT 2

SITE DIAGRAMS

SME
SEVEE & MAHER
ENGINEERS



NOT TO SCALE

WATER FLOW DIAGRAM
CASCADE HYDRO
72 CASCADE FLATS
GORHAM, NEW HAMPSHIRE

LEGEND

22-A NON CONTACT COOLING WATER

SME
SEVEE & MAHER
ENGINEERS

DWG: CASCADE LMN: LMN CTB: SME-STD REV: 5/19/2023

NOI ATTACHMENT 3

NEW HAMPSHIRE INTEGRATED LIST OF WATERS AND IMPAIRMENTS

SME
SEVEE & MAHER
ENGINEERS

Watershed 305(b) Assessment Summary Report:

Assessment Cycle: 2020/2022

HUC 12: 010400010606

HUC 12 Name: Berlin Tributaries

(Locator map on next page only applies to this HUC12)

Good	Meets water quality standards/thresholds by a relatively large margin.
Marginal	Meets water quality standards/thresholds but only marginally.
Likely Good	Limited data available, however, the data that is available suggests that the parameter is Potentially Attaining Standards (PAS).
No Current Data	Insufficient information to make an assessment decision.
Likely Bad	Limited data available, however, the data that is available suggests that the parameter is Potentially Not Supporting (PNS) water quality standards.
Poor	Not meeting water quality standards/thresholds. The impairment is marginal.
Severe	Not meeting water quality standards/thresholds. The impairment is more severe and causes poor water quality.

Assessment Unit ID	Map Label	Assessment Unit Name	Aquatic Life	Fish Consump.	Swimming	Boating
NHIMP400010606-01	I*01	Cascade Alpine Brook		4A-M	3-ND	3-ND
NHIMP400010606-02	I*02	Androscoggin River - Cross Power Dam	3-PAS	4A-M	4B-M	3-ND
NHIMP400010606-03	I*03	Androscoggin River - Cascade Dam	3-ND	4A-M	4B-M	3-ND
NHIMP400010606-04	I*04	Androscoggin River - Gorham Dam	3-ND	4A-M	3-ND	3-ND
NHLAK400010606-01	L*01	Jericho Lake	3-ND	4A-M	5-M	3-ND
NHLAK400010606-01-02	L*01-02	Jericho Mountain State Park Beach	3-ND	4A-M	5-M	2-G
NHRIV400010606-01	R*01	Jericho Brook - Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV400010606-02	R*02	Dead River - Jericho Brook - Unnamed Brook	3-ND	4A-M	4B-P	4B-M
NHRIV400010606-03	R*03	Cascade Alpine Brook - Unnamed Brook	5-M	4A-M	3-ND	3-ND
NHRIV400010606-04	R*04	Cascade Alpine Brook	3-ND	4A-M	3-ND	3-ND
NHRIV400010606-05	R*05	Tinker Brook	3-ND	4A-M	3-ND	3-ND
NHRIV400010606-06	R*06	Unnamed Brook - To Androscoggin River	3-ND	4A-M	3-ND	3-ND

NHRIV400010606-07	R*07	Androscoggin River	3-ND	4A-M	4B-M	3-ND
NHRIV400010606-08	R*08	Androscoggin River	3-ND	4A-M	4B-M	3-ND
NHRIV400010606-09	R*09	Androscoggin River	3-ND	4A-M	4B-M	3-ND
NHRIV400010606-10	R*10	Androscoggin River	3-ND	4A-M	4B-M	3-ND
NHRIV400010606-11	R*11	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV400010606-12	R*12	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV400010606-13	R*13	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV400010606-14	R*14	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV400010606-15	R*15	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV400010606-16	R*16	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV400010606-17	R*17	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV400010606-18	R*18	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV400010606-19	R*19	Unnamed Brook	3-ND	4A-M	3-ND	3-ND

Assessment Unit ID: NHIMP400010606-03
Assessment Unit Name: Androscoggin River - Cascade Dam
Town(s) Primary Town is Listed First: Berlin, Gorham

Size: 50 ACRES
Assessment Unit Category: 4B-M
Beach: N

2020/2022, 305(b)/303(d) - All Reviewed Parameters by Assessment Unit

Designated Use Description	Desig. Use Category	Parameter Name	Parameter Threatened (Y/N)	Last Sample	Last Exceed	Parameter Category	TMDL Priority
Aquatic Life Integrity	3-ND	ALUMINUM	N	2005	2005	3-ND	
		AMMONIA (TOTAL)	N	2003	N/A	3-ND	
		COPPER	N	2005	2005	3-ND	
		Chlorophyll-a	N	2003	NLV	3-ND	
		DISSOLVED OXYGEN SATURATION	N	2003	N/A	3-ND	
		LEAD	N	2005	2005	3-ND	
		NICKEL	N	2005	N/A	3-ND	
		OXYGEN, DISSOLVED	N	2003	N/A	3-ND	
		PH	N	2003	N/A	3-ND	
		ZINC	N	2005	2005	3-ND	
Fish Consumption	4A-M	COPPER	N	2005	N/A	3-ND	
		Dioxin (including 2,3,7,8-TCDD)	N			4B-M	
		Dioxin (including 2,3,7,8-TCDD)	N			4B-M	
		MERCURY - FISH CONSUMPTION ADVISORY	N			4A-M	
		NICKEL	N	2005	N/A	3-ND	

Good	Marginal	Likely Good	No Current Data	Likely Bad	Poor	Severe
Meets water quality standards/thresholds by a relatively large margin.	Meets water quality standards/thresholds but only marginally.	Limited data available. The data that is available suggests that the parameter is Potentially Attaining Standards (PAS)	Insufficient information to make an assessment decision.	Limited data available The data that is available suggests that the parameter is Potentially Not Supporting (PNS) water quality standards.	Not meeting water quality standards/thresholds. The impairment is marginal.	Not meeting water quality standards/thresholds The impairment is more severe and causes poor water quality.

Assessment Unit ID: NHRIV400010606-10
Assessment Unit Name: Androscoggin River
Town(s) Primary Town is Listed First: Gorham

Size: 2.3440 MILES
Assessment Unit Category: 4B-M
Beach: N

2020/2022, 305(b)/303(d) - All Reviewed Parameters by Assessment Unit

Designated Use Description	Desig. Use Category	Parameter Name	Parameter Threatened (Y/N)	Last Sample	Last Exceed	Parameter Category	TMDL Priority
Aquatic Life Integrity	3-ND	Dissolved oxygen saturation	N			3-ND	
		Oxygen, Dissolved	N			3-ND	
		pH	N			3-ND	
Fish Consumption	4A-M	Dioxin (including 2,3,7,8-TCDD)	N			4B-M	
		Dioxin (including 2,3,7,8-TCDD)	N			4B-M	
		MERCURY - FISH CONSUMPTION ADVISORY	N			4A-M	
Potential Drinking Water Supply	2-G						
Primary Contact Recreation	4B-M	Escherichia coli	N		SSO	4B-M	
Secondary Contact Recreation	3-ND	Escherichia coli	N			3-ND	
Wildlife	3-ND						

Good	Marginal	Likely Good	No Current Data	Likely Bad	Poor	Severe
Meets water quality standards/thresholds by a relatively large margin.	Meets water quality standards/thresholds but only marginally.	Limited data available. The data that is available suggests that the parameter is Potentially Attaining Standards (PAS)	Insufficient information to make an assessment decision.	Limited data available The data that is available suggests that the parameter is Potentially Not Supporting (PNS) water quality standards.	Not meeting water quality standards/thresholds. The impairment is marginal.	Not meeting water quality standards/thresholds The impairment is more severe and causes poor water quality.

NOI ATTACHMENT 4

PH LIMIT ADJUSTMENT REQUEST

SME
SEVEE & MAHER
ENGINEERS

SME
SEVEE & MAHER
ENGINEERS

4 Blanchard Road, P.O. Box 85A
Cumberland, ME 04021
Tel: 207.829.5016 • Fax: 207.829.5692
info@smemaine.com
smemaine.com

June 8, 2023

U.S. Environmental Protection Agency, Region 1
ATTN: George Papadopoulos, HYDROGP Coordinator
5 Post Office Square – Mailcode 06-1
Boston, MA 02109-3912

Email: Hydro.GeneralPermit@epa.gov

Subject: Cascade Hydroelectric Facility – pH Limit Adjustment Request

Dear Mr. Papadopoulos:

As required within Section B.7 of the Hydroelectric Generating Facilities General Permit (Hydro GP) notice of intent (NOI), the Cascade Hydroelectric Facility is providing this written request to adjust the current pH limit range of 6.5 standard units (s.u). to 8.0 s.u. to an alternative pH limit range of 6.0 s.u. to 8.0 s.u. The New Hampshire Department of Environmental Services (NHDES) has provided a signed letter supporting the adjustment of the pH limit range at the facility to the requested alternative value (see Attachment 1).

Should questions arise or additional information be desired, please do not hesitate to contact me at 207.829.5016.

Sincerely,

SEVEE & MAHER ENGINEERS, INC.

Philip H. Gerhardt, P.E.
Principal/Senior Environmental Engineer

Attachment: 1. NHDES pH Limit Adjustment Approval Letter

ATTACHMENT 1

NHDES PH LIMIT ADJUSTMENT APPROVAL LETTER

SME
SEVEE & MAHER
ENGINEERS

The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner

September 4, 2018

Mr. Kyle Murphy, Compliance Specialist
Brookfield Renewable
Great Lakes Hydro America, LLC
972 Main Street
Berlin, NH 03570

Subject: Brookfield Renewable
NPDES/State Surface Water Discharge Permit No. NHG360006, NHG360008, NHG360009, NHG360010, NHG360011, NHG360016
pH Limit Adjustment

Dear Mr. Murphy:

The Department of Environmental Services (DES) assisted Brookfield Renewable with a pH study to evaluate the potential for a pH range adjustment at six of their NPDES permitted sites: Pontook Hydro (NHG360006), Riverside Hydro (NHG360008), Cross Power Hydro (NHG360009), Cascade Hydro (NHG360010), Gorham Hydro (NHG360011), and Errol Hydro (NHG360016), per their request in a letter dated June 29, 2018. The pH range adjustment was requested for the facilities' upcoming NPDES permit renewals. The pH study was conducted with the help of DES on June 7, 2018 and July 31, 2018 and included data and backup quality assurance information for measurements made on the Androscoggin River.

After reviewing the results of the pH study, DES supports adjusting the permit limit range for pH from 6.5 to 8.0 standard units (s.u.) to 6.0 to 8.0 s.u. in the upcoming NPDES/State Surface Water Discharge Permit renewals for the above referenced facilities. This original signed letter should be submitted to EPA-New England with a written request to include the pH limit range of 6.0 to 8.0 s.u. as an attachment to the Notice of Intent (NOI) for each facility.

Adjustment of the permitted pH range is subject to change by EPA-New England or DES with new information or changing conditions related to either the facility or the receiving water (Androscoggin River). Please note that a permit limits adjustment will be valid only for the duration of the reissued NPDES permit.

If you have any questions relative to this letter, please call me at (603) 271-6637.

Sincerely,

Stergios K. Spanos, P.E., Supervisor
Permits and Compliance Section
Wastewater Engineering Bureau

cc. Georgė Papadopoulos, EPA-NE
Tracy Wood, P.E., DES-WEB

NOI ATTACHMENT 5

DESCRIPTION OF BTA TECHNOLOGY FOR MINIMIZATION OF IMPINGEMENT MORTALITY

SME
SEVEE & MAHER
ENGINEERS

SME
SEVEE & MAHER
ENGINEERS

4 Blanchard Road, P.O. Box 85A
Cumberland, ME 04021
Tel: 207.829.5016 • Fax: 207.829.5692
info@smemaine.com
smemaine.com

June 8, 2023

U.S. Environmental Protection Agency, Region 1
ATTN: George Papadopoulos, HYDROGP Coordinator
5 Post Office Square – Mailcode 06-1
Boston, MA 02109-3912

Email: Hydro.GeneralPermit@epa.gov

Subject: Cascade Hydroelectric Facility – Description of BTA Technology for Minimization of Impingement Mortality

Dear Mr. Papadopoulos:

As requested within Section C.2 of the Hydroelectric Generating Facilities General Permit (Hydro GP) Notice of Intent (NOI), the Cascade Hydroelectric Facility is providing this description of the technology employed to comply with the general BTA requirements of Part 4.2.b of the Hydro GP. The primary source of cooling water for the facility is an approximately 24-inch-diameter pipeline that is owned and operated by the White Mountain Paper Company (WMPC). The WMPC pipeline transports water from the headpond located near the Sawmill Hydroelectric Facility to several facilities down river (including the Cascade and Cross facilities) and is primarily located underground. The pipeline and inlet are not readily accessible, and construction details have not been located. It is unknown if a screen or grating has been installed on the inlet to the WMPC pipeline. Measured water flow data through this pipeline is unavailable; therefore, a calculative approach utilizing the Hazen-Williams Equation was used to determine the volume of water passing through this pipeline and the percentage of cooling water withdrawn for the Cascade facility. Calculations and assumptions are included in Attachment 1.

The facility has calculated that approximately 0.52 percent of the water passing through the WMPC pipeline is withdrawn for the Cascade cooling system. It should be noted that water used for electricity generation comes from the facility's penstock, and is not fed from the same 24-inch-diameter pipeline that supplies the cooling water. As noted in the NOI form, the water withdrawn from the pipeline for use as cooling water is approximately 0.006 percent of the installed turbine capacity, and 0.009 percent of the source water mean annual flow.

The facility believes it has demonstrated that impingement mortality has been minimized due to the minimal amount of cooling water withdrawn from the WMPC pipeline; therefore, the facility should remain eligible for coverage under the Hydro GP in accordance with Option 4 within Section C.2.

The Cascade facility can also withdraw cooling water directly from the Androscoggin River as the secondary source of cooling water for the facility. Based on the design information and photographs provided by the facility (see Attachment 3), it appears that the cooling water intake structure is located within the vicinity of the forebay and is equipped with a stainless-steel screen with a mesh size less than

½-inch; therefore, the facility should remain eligible for coverage under the Hydro GP in accordance with Option 3 within Section C.2.

Should questions arise or additional information be desired, please do not hesitate to contact me at 207.829.5016.

Sincerely,

SEVEE & MAHER ENGINEERS, INC.

Philip H. Gerhardt, P.E.
Principal/Senior Environmental Engineer

Attachments:
1. Percentage of Cooling Water Withdrawn Calculations
2. WMPC Pipeline Photographs and Orcas™ Measurement Data
3. Secondary Cooling Water System Photographs

ATTACHMENT 1

PERCENTAGE OF COOLING WATER WITHDRAWN CALCULATIONS

SME
SEVEE & MAHER
ENGINEERS

Hazen-Williams Equation for Velocity of Water in Gravity Flow

$$v = k\ x\ C\ x\ R^{0.63}\ x\ S^{0.54}$$

v = Fluid velocity *C = Roughness coefficient*
R = Hydraulic radius of the pipe *S= Slope of the energy line*
k = Conversion factor (1.318 for imperial system)

The following assumptions were applied in order to utilize the Hazen-Williams Equation: there are no booster pumps in the pipeline (gravity-fed system only), the piping system is completely full of water, the flow throughout the piping system is turbulent, and the water temperature is in the range of 40 – 75 ºF.

C - Roughness Coefficient Selection
Based on information provided by Brookfield personnel, it was determined that the White Mountain Paper Company (WMPC) pipeline is constructed of fiberglass-reinforced polymer (FRP) – this corresponds to a roughness coefficient of 150.

S – Slope of the Energy Line
The distance and change in elevation from the inlet of the WMPC pipeline (near the headpond of the Sawmill Hydroelectric Facility) to the inlet of the Cascade Hydroelectric Facility was utilized to calculate the slope of the energy line. Through the use of aerial imagery and analysis of topographic maps, it was determined that the distance is approximately 13,000 feet (ft) and the change in elevation is approximately 250 ft. Thus,

$$S = \frac{250\ ft}{13{,}000\ ft} = 0.0192$$

R – Hydraulic Radius of the Pipe
Based on photographs provided by the Cascade facility and interviews with Brookfield personnel, the external diameter of the WMPC pipeline is approximately 24 inches.

$$R = \frac{Area\ of\ Pipe}{Perimeter\ of\ Pipe} = \frac{\pi * (Radius\ of\ Pipe)^2}{\mathbf{2} * \pi\ (Radius\ of\ Pipe)} = \frac{\pi * (1\ ft)^2}{2 * \pi\ (1\ ft)} = 0.5\ ft$$

v – Fluid Velocity

$$v = k\ x\ C\ x\ R^{0.63}\ x\ S^{0.54} = 1.318\ x\ 150\ x\ (0.5\ ft)^{0.63}\ x\ (0.0192)^{0.54} = 15.07\frac{ft}{s}$$

The flow rate of the water passing through the WMPC pipeline is therefore estimated to be 15.07 ft/s

The estimated velocity and pipe diameter are then used to calculate the volume of water passing through the WMPC pipeline:

$$Volumetric\ Flow = Area\ of\ Pipe * Fluid\ Velocity = \pi * (1\ ft)^2\ x\ 15.07\frac{ft}{s} = 47.32\frac{ft^3}{s}$$

$$1\ \frac{ft^3}{s} = 448\ gallons\ per\ minute\ (GPM)$$

$$Volume = 47.32\frac{ft^3}{s} = 21{,}199\ GPM$$

The volume of water passing through the WMPC pipeline is estimated to be 21,199 GPM

Volume of Water Withdrawn for Cooling vs. Volume of Water Passing Through the WMPC Pipeline

To determine the average cooling water withdrawal requirements, the Cascade facility measured water flow velocity utilizing an Orcas™ Ultrasonic Flowmeter. Due to the WMPC pipeline being located underground and inaccessible to Brookfield personnel, the water flow volume was measured at a location on the secondary cooling water system piping. It was assumed that the volume of water withdrawn from the secondary cooling system will be reasonably consistent with the volume of water withdrawn from the primary cooling system (WMPC pipeline).

The volume of water required for the Cascade facility was measured to be approximately 110 GPM

Percentage of Cooling Water Withdrawn from the WMPC Pipeline

$$Percentage = \frac{Volume\ Withdrawn\ for\ Cooling}{Volume\ within\ the\ Pipeline}\ x\ 100 = \frac{110\ GPM}{21{,}199\ GPM} x\ 100 =\ 0.52\%$$

It is estimated that 0.52% of the water flowing through the WMPC pipeline is withdrawn for cooling at the Cascade facility.

ATTACHMENT 2

WMPC PIPELINE PHOTOGRAPHS AND ORCAS™ MEASUREMENT DATA

SME
SEVEE & MAHER
ENGINEERS

site name: Cascade Hydro(1)
date/time: 3/6/2023 15:13
number samples: 121
sampling period(s): 2

sample number	date/time (y:m:d h:m:s)	time delta (h:m:s)	flow rate (gallons/min)	flow volume (gallons)	flow velocity (ft/sec)	measurement quality (good/bad)
1	3/6/2023 15:13	0:00:00	110.7243	2228.3761	4.256	good
2	3/6/2023 15:13	0:00:02	110.775	2243.4642	4.2579	good
3	3/6/2023 15:13	0:00:04	110.8397	2247.1565	4.2604	good
4	3/6/2023 15:13	0:00:06	110.8981	2250.8526	4.2626	good
5	3/6/2023 15:13	0:00:08	110.9087	2254.5495	4.263	good
6	3/6/2023 15:13	0:00:10	110.915	2258.2466	4.2633	good
7	3/6/2023 15:13	0:00:12	110.9307	2262.0032	4.2639	good
8	3/6/2023 15:13	0:00:14	110.9464	2265.7014	4.2645	good
9	3/6/2023 15:13	0:00:16	110.9555	2269.435	4.2648	good
10	3/6/2023 15:13	0:00:18	110.9373	2273.1332	4.2641	good
11	3/6/2023 15:13	0:00:20	110.9204	2276.8306	4.2635	good
12	3/6/2023 15:13	0:00:22	110.9285	2280.567	4.2638	good
13	3/6/2023 15:13	0:00:24	110.909	2284.2641	4.2631	good
14	3/6/2023 15:13	0:00:26	110.9146	2287.9613	4.2633	good
15	3/6/2023 15:13	0:00:28	110.8973	2291.6579	4.2626	good
16	3/6/2023 15:13	0:00:30	110.8929	2295.3545	4.2624	good
17	3/6/2023 15:13	0:00:32	110.9043	2299.125	4.2629	good
18	3/6/2023 15:13	0:00:34	110.9154	2302.8221	4.2633	good
19	3/6/2023 15:13	0:00:36	110.9238	2306.5195	4.2636	good
20	3/6/2023 15:13	0:00:38	110.9342	2310.2171	4.264	good
21	3/6/2023 15:13	0:00:40	110.9561	2313.9155	4.2649	good
22	3/6/2023 15:13	0:00:49	110.9774	2317.6867	4.2657	good
23	3/6/2023 15:13	0:00:51	110.9723	2334.3252	4.2655	good
24	3/6/2023 15:13	0:00:53	110.9621	2338.0221	4.2651	good
25	3/6/2023 15:14	0:00:55	110.9791	2341.7212	4.2658	good
26	3/6/2023 15:14	0:00:57	110.9958	2345.4211	4.2664	good
27	3/6/2023 15:14	0:00:59	110.9977	2349.121	4.2665	good
28	3/6/2023 15:14	0:01:01	110.9987	2352.9207	4.2665	good
29	3/6/2023 15:14	0:01:03	111.0128	2356.6211	4.267	good
30	3/6/2023 15:14	0:01:05	111.0227	2360.3218	4.2674	good
31	3/6/2023 15:14	0:01:07	111.0324	2364.0229	4.2678	good
32	3/6/2023 15:14	0:01:09	111.0367	2367.7241	4.268	good
33	3/6/2023 15:14	0:01:11	111.0366	2371.4976	4.268	good
34	3/6/2023 15:14	0:01:13	111.0293	2375.1985	4.2677	good
35	3/6/2023 15:14	0:01:15	111.015	2378.8991	4.2671	good
36	3/6/2023 15:14	0:01:17	110.9988	2382.5993	4.2665	good
37	3/6/2023 15:14	0:01:19	110.9817	2386.2969	4.2659	good
38	3/6/2023 15:14	0:01:21	110.9728	2390.0719	4.2655	good
39	3/6/2023 15:14	0:01:23	110.9645	2393.7708	4.2652	good
40	3/6/2023 15:14	0:01:25	110.9564	2397.4695	4.2649	good
41	3/6/2023 15:14	0:01:27	110.944	2401.1676	4.2644	good
42	3/6/2023 15:14	0:01:29	110.9529	2404.866	4.2647	good
43	3/6/2023 15:14	0:01:31	110.9621	2408.6387	4.2651	good
44	3/6/2023 15:14	0:01:33	110.9637	2412.3376	4.2652	good
45	3/6/2023 15:14	0:01:35	110.954	2416.036	4.2648	good
46	3/6/2023 15:14	0:01:37	110.9575	2419.7344	4.2649	good
47	3/6/2023 15:14	0:01:39	110.9739	2423.4335	4.2656	good
48	3/6/2023 15:14	0:01:41	110.977	2427.2068	4.2657	good
49	3/6/2023 15:14	0:01:43	110.9674	2430.9059	4.2653	good
50	3/6/2023 15:14	0:01:45	110.9597	2434.6045	4.265	good
51	3/6/2023 15:14	0:01:47	110.9529	2438.3029	4.2647	good
52	3/6/2023 15:14	0:01:49	110.9508	2442.0013	4.2647	good
53	3/6/2023 15:14	0:01:51	110.9543	2445.7718	4.2648	good
54	3/6/2023 15:14	0:01:53	110.9504	2449.4704	4.2646	good
55	3/6/2023 15:15	0:01:55	110.9328	2453.2053	4.264	good
56	3/6/2023 15:15	0:01:57	110.9191	2456.9007	4.2634	good
57	3/6/2023 15:15	0:01:59	110.9155	2460.5978	4.2633	good
58	3/6/2023 15:15	0:02:01	110.9117	2464.3338	4.2632	good
59	3/6/2023 15:15	0:02:03	110.9123	2468.0309	4.2632	good
60	3/6/2023 15:15	0:02:05	110.9165	2471.728	4.2633	good
61	3/6/2023 15:15	0:02:07	110.9211	2475.4254	4.2635	good
62	3/6/2023 15:15	0:02:09	110.9144	2479.1226	4.2633	good
63	3/6/2023 15:15	0:02:11	110.915	2482.8938	4.2633	good
64	3/6/2023 15:15	0:02:13	110.9013	2486.5906	4.2628	good
65	3/6/2023 15:15	0:02:15	110.8871	2490.287	4.2622	good
66	3/6/2023 15:15	0:02:17	110.8668	2493.9826	4.2614	good
67	3/6/2023 15:15	0:02:19	110.8574	2497.6778	4.2611	good
68	3/6/2023 15:15	0:02:21	110.8506	2501.4469	4.2608	good
69	3/6/2023 15:15	0:02:23	110.8439	2505.1416	4.2606	good
70	3/6/2023 15:15	0:02:25	110.8406	2508.8364	4.2604	good

71	3/6/2023 15:15	0:02:27	110.8406	2512.531	4.2604	good
72	3/6/2023 15:15	0:02:29	110.8566	2516.2262	4.261	good
73	3/6/2023 15:15	0:02:31	110.8607	2519.9933	4.2612	good
74	3/6/2023 15:15	0:02:33	110.8704	2523.6892	4.2616	good
75	3/6/2023 15:15	0:02:35	110.8706	2527.3848	4.2616	good
76	3/6/2023 15:15	0:02:37	110.868	2531.0804	4.2615	good
77	3/6/2023 15:15	0:02:39	110.8626	2534.7758	4.2613	good
78	3/6/2023 15:15	0:02:41	110.8633	2538.5453	4.2613	good
79	3/6/2023 15:15	0:02:49	110.866	2540.3929	4.2614	good
80	3/6/2023 15:15	0:02:51	110.8687	2556.9901	4.2615	good
81	3/6/2023 15:15	0:02:53	110.8664	2560.6855	4.2614	good
82	3/6/2023 15:16	0:02:55	110.8548	2564.3808	4.261	good
83	3/6/2023 15:16	0:02:57	110.8374	2568.0755	4.2603	good
84	3/6/2023 15:16	0:03:00	110.832	2571.7698	4.2601	good
85	3/6/2023 15:16	0:03:02	110.8235	2575.5619	4.2598	good
86	3/6/2023 15:16	0:03:04	110.8158	2579.2558	4.2595	good
87	3/6/2023 15:16	0:03:06	110.8038	2582.9494	4.259	good
88	3/6/2023 15:16	0:03:08	110.7918	2586.6425	4.2586	good
89	3/6/2023 15:16	0:03:10	110.7851	2590.3356	4.2583	good
90	3/6/2023 15:16	0:03:12	110.7678	2594.1018	4.2576	good
91	3/6/2023 15:16	0:03:14	110.7514	2597.7936	4.257	good
92	3/6/2023 15:16	0:03:16	110.7435	2601.4852	4.2567	good
93	3/6/2023 15:16	0:03:18	110.7569	2605.1768	4.2572	good
94	3/6/2023 15:16	0:03:20	110.747	2608.8684	4.2568	good
95	3/6/2023 15:16	0:03:22	110.7252	2612.6333	4.256	good
96	3/6/2023 15:16	0:03:24	110.7145	2616.3221	4.2556	good
97	3/6/2023 15:16	0:03:26	110.7004	2620.0139	4.255	good
98	3/6/2023 15:16	0:03:28	110.6997	2623.7038	4.255	good
99	3/6/2023 15:16	0:03:30	110.7151	2627.3941	4.2556	good
100	3/6/2023 15:16	0:03:32	110.7215	2631.157	4.2558	good
101	3/6/2023 15:16	0:03:34	110.7222	2634.8476	4.2559	good
102	3/6/2023 15:16	0:03:36	110.7097	2638.5381	4.2554	good
103	3/6/2023 15:16	0:03:38	110.6967	2642.228	4.2549	good
104	3/6/2023 15:16	0:03:40	110.6918	2645.9178	4.2547	good
105	3/6/2023 15:16	0:03:42	110.6851	2649.6812	4.2544	good
106	3/6/2023 15:16	0:03:44	110.6702	2653.3703	4.2539	good
107	3/6/2023 15:16	0:03:46	110.6534	2657.0959	4.2532	good
108	3/6/2023 15:16	0:03:48	110.6421	2660.7822	4.2528	good
109	3/6/2023 15:16	0:03:50	110.6297	2664.4697	4.2523	good
110	3/6/2023 15:16	0:03:52	110.6142	2668.1958	4.2517	good
111	3/6/2023 15:17	0:03:54	110.5855	2671.8824	4.2506	good
112	3/6/2023 15:17	0:03:56	110.5635	2675.5679	4.2498	good
113	3/6/2023 15:17	0:03:58	110.5545	2679.2532	4.2494	good
114	3/6/2023 15:17	0:04:00	110.5502	2682.9383	4.2493	good
115	3/6/2023 15:17	0:04:02	110.5416	2686.6949	4.2489	good
116	3/6/2023 15:17	0:04:04	110.5269	2690.3794	4.2484	good
117	3/6/2023 15:17	0:04:06	110.5065	2694.0629	4.2476	good
118	3/6/2023 15:17	0:04:08	110.5061	2697.7467	4.2476	good
119	3/6/2023 15:17	0:04:10	110.5134	2701.4302	4.2479	good
120	3/6/2023 15:17	0:04:12	110.5207	2705.1878	4.2481	good
121	3/6/2023 15:17	0:04:14	110.5293	2708.8721	4.2485	good

ATTACHMENT 3

SECONDARY COOLING WATER SYSTEM PHOTOGRAPHS

SME
SEVEE & MAHER
ENGINEERS


STANLEY
0517

NOI ATTACHMENT 6

LOW IMPACT HYDROPOWER INSTITUTE CERTIFICATION

SME
SEVEE & MAHER
ENGINEERS

Cascade Hydroelectric Project

Certificate No. 188

This certificate is effective March 1, 2022 for the Cascade Hydroelectric Project (FERC No. 2327), located on the Androscoggin River in New Hampshire, in recognition of its compliance with the certification criteria of the Low Impact Hydropower Certification Program as administered by the Low Impact Hydropower Institute.

This certificate will expire on February 29, 2032.

Shawn Seaman
Chair, Governing Board

Rick Glick
Secretary, Governing Board

LIHI CERTIFIED®

Certifying environmentally Low Impact hydropower facilities nationwide on behalf of green energy consumers.

Low Impact Hydropower Institute
1167 Massachusetts Ave, #407
Arlington, MA 02476
www.lowimpacthydro.org

NOI ATTACHMENT 7

USFWS ESA CERTIFICATION LETTERS

SME
SEVEE & MAHER
ENGINEERS

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To: March 23, 2023
Project Code: 2023-0059250
Project Name: Cascade Hydroelectric Facility Endangered Species Act Certification

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:

Updated 3/8/2023 - Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.

About Official Species Lists

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

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 (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

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 note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

Please visit the "**New England Field Office Endangered Species Project Review and Consultation**" website for step-by-step instructions on how to consider effects on listed

species and prepare and submit a project review package if necessary:

https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review

NOTE Please do not use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

Northern Long-eared Bat - (Updated 3/8/2023) The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule will go into effect on **March 31, 2023**. After that date, the current 4(d) rule for NLEB will be invalid, and the 4(d) determination key will no longer be available. New compliance tools will be available in March 2023, and information will be posted in this section on our website and on the northern long-eared bat species page, so please check this site often for updates.

Depending on the type of effects a project has on NLEB, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective. If your project may result in incidental take of NLEB after the new listing goes into effect, this will need to be addressed in an updated consultation that includes an Incidental Take Statement. Many of these situations will be addressed through the new compliance tools. If your project may require re-initiation of consultation, please wait for information on the new tools to appear on this site or contact our office for additional guidance.

Additional Info About Section 7 of the Act
Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/service/section-7-consultations

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Please contact NEFO if you would like more information.

Candidate species that appear on the enclosed species list have no current protections under the ESA. The species' occurrence on an official species list does not convey a requirement to

consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

Migratory Birds

In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see:

https://www.fws.gov/program/migratory-bird-permit

https://www.fws.gov/library/collections/bald-and-golden-eagle-management

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

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 England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

PROJECT SUMMARY

Project Code: 2023-0059250
Project Name: Cascade Hydroelectric Facility Endangered Species Act Certification
Project Type: Power Gen - Hydropower - FERC
Project Description: The Cascade Hydroelectric Facility is required to undergo an endangered species act certification as part of the notice of intent (NOI) renewal associated with the 2023 NPDES General Permit for Hydroelectric Generating Facilities (NHG360000).

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@44.448644200000004,-71.18688222919727,14z

Counties: Coos County, New Hampshire

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 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
Canada Lynx *Lynx canadensis* Population: Wherever Found in Contiguous U.S. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3652	Threatened
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.

IPAC USER CONTACT INFORMATION

Agency: Sevee & Maher Engineers, Inc.
Name: Anthony Pais
Address: 4 Blanchard Road
City: Cumberland
State: ME
Zip: 04021
Email aep@smemaine.com
Phone: 2078295016

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To: March 30, 2023
Project code: 2023-0059250
Project Name: Cascade Hydroelectric Facility Endangered Species Act Certification
IPaC Record Locator: 824-124368579

Federal Nexus: yes
Federal Action Agency (if applicable): Environmental Protection Agency

Subject: Technical assistance for 'Cascade Hydroelectric Facility Endangered Species Act Certification'

Dear Anthony Pais:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on March 30, 2023, for “Cascade Hydroelectric Facility Endangered Species Act Certification” (here forward, Project). This project has been assigned Project Code 2023-0059250 and all future correspondence should clearly reference this number.

The Service developed the IPaC system and associated species’ determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into the IPaC must accurately represent the full scope and details of the Project. Failure to accurately represent or implement the Project as detailed in IPaC or the Northeast Determination Key (Dkey), invalidates this letter. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative effect(s)), to a federally listed species or designated critical habitat.

Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17). Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no further consultation with, or concurrence from, the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal

consultation is required (except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect (NLAA)" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13]).

The IPaC results indicated the following species is (are) potentially present in your project area and, based on your responses to the Service's Northeast DKey, you determined the proposed Project will have the following effect determinations:

Species	Listing Status	Determination
Canada Lynx (*Lynx canadensis*)	Threatened	NLAA

Conclusion

Coordination with the Service is not complete. The project has a federal nexus (e.g., funds, permits); however, you are not the federal action agency. Therefore, the ESA consultation status is incomplete and no project activities on any portion of the parcel should occur until consultation between the Service and the Federal action agency (or designated non-federal representative), is completed. Section 7 consultation is not complete until the federal action agency submits a determination of effects, and the Service concurs with the federal action agency's determination. Please provide this technical assistance letter to the lead federal action agency or its designated non-federal representative with a request for its review.

As the federal agency deems appropriate, they should submit their determination of effects to the appropriate Ecological Services Field Office. The lead federal action agency or designated non-federal representative can log into IPaC system using their agency email account and click "Search by record locator" to find this Project using 824-124368579.

In addition to the species listed above, the following species and/or critical habitats may also occur in your project area and are not covered by this conclusion:

- Monarch Butterfly *Danaus plexippus* Candidate
- Northern Long-eared Bat *Myotis septentrionalis* Threatened

To complete consultation for species that have reached a "May Affect" determination and/or species may occur in your project area and are not covered by this conclusion, please visit the "New England Field Office Endangered Species Project Review and Consultation" website for step-by-step instructions on how to consider effects on these listed species and/or critical habitats, avoid and minimize potential adverse effects, and prepare and submit a project review package if necessary: https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review

If no changes occur with the Project or there are no updates on listed species, no further consultation/coordination for this project is required for the species identified above. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or

amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional consultation with the Service should take place before project implements any changes which are final or commits additional resources.

Please Note: If the Action may impact bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d) by the prospective permittee may be required. Please contact the Migratory Birds Permit Office, (413) 253-8643, or PermitsR5MB@fws.gov, with any questions regarding potential impacts to Eagles.

If you have any questions regarding this letter or need further assistance, please contact the New England Ecological Services Field Office and reference the Project Code associated with this Project.

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

Cascade Hydroelectric Facility Endangered Species Act Certification

2. Description

The following description was provided for the project 'Cascade Hydroelectric Facility Endangered Species Act Certification':

> The Cascade Hydroelectric Facility is required to undergo an endangered species act certification as part of the notice of intent (NOI) renewal associated with the 2023 NPDES General Permit for Hydroelectric Generating Facilities (NHG360000).

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@44.448644200000004,-71.18688222919727,14z

QUALIFICATION INTERVIEW

1. As a representative of this project, do you agree that all items submitted represent the complete scope of the project details and you will answer questions truthfully?

   Yes

2. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed species?

   Note: This question could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered, or proposed species.

   No

3. Is the action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

   Yes

4. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) the lead agency for this project?

   No

5. Are you including in this analysis all impacts to federally listed species that may result from the entirety of the project (not just the activities under federal jurisdiction)?

   Note: If there are project activities that will impact listed species that are considered to be outside of the jurisdiction of the federal action agency submitting this key, contact your local Ecological Services Field Office to determine whether it is appropriate to use this key. If your Ecological Services Field Office agrees that impacts to listed species that are outside the federal action agency's jurisdiction will be addressed through a separate process, you can answer yes to this question and continue through the key.

   Yes

6. Are you the lead federal action agency or designated non-federal representative requesting concurrence on behalf of the lead Federal Action Agency?

   No

7. Will the proposed project involve the use of herbicide?

   No

8. Are there any caves or anthropogenic features suitable for hibernating or roosting bats within the area expected to be impacted by the project?

   No

9. Does any componentof the project associated with this action include structures that may pose a collision risk to birds or bats (e.g., wind turbines, communication towers, transmission lines, any type of towers with or without guy wires)?

   NoteFor federal actions, answer ‘yes’ if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

   Yes

10. Will the proposed project result in permanent changes to water quantity in a stream or temporary changes that would be sufficient to result in impacts to listed species?

    For example, will the proposed project include any activities that would alter stream flow, such as water withdrawal, hydropower energy production, impoundments, intake structures, diversion structures, and/or turbines? Projects that include temporary and limited water reductions that will not displace listed species or appreciably change water availability for listed species (e.g. listed species will experience no changes to feeding, breeding or sheltering) can answer "No". Note: This question refers only to the amount of water present in a stream, other water quality factors, including sedimentation and turbidity, will be addressed in following questions.

    Yes

11. Will the proposed project affect wetlands?

    This includes, for example, project activities within wetlands, project activities within 300 feet of wetlands that may have impacts on wetlands, water withdrawals and/or discharge of contaminants (even with a NPDES).

    No

12. Will the proposed project activities (including upland project activities) occur within 0.5 miles of the water's edge of a stream or tributary of a stream where listed species may be present?

    Yes

13. Will the proposed project directly affect a streambed (below ordinary high water mark (OHWM)) of the stream or tributary?

    No

14. Will the proposed project bore underneath (directional bore or horizontal directional drill) a stream?

    No

15. Will the proposed project involve a new point source discharge into a stream or change an existing point source discharge (e.g., outfalls; leachate ponds)?

    No

16. Will the proposed project involve the removal of excess sediment or debris, dredging or in-stream gravel mining?

    No

17. Will the proposed project involve the creation of a new water-borne contaminant source?

    Note New water-borne contaminant sources occur through improper storage, usage, or creation of chemicals. For example: leachate ponds and pits containing chemicals that are not NSF/ANSI 60 compliant have contaminated waterways. Sedimentation will be addressed in a separate question.

    No

18. Will the proposed project involve perennial stream loss that would require an individual permit under 404 of the Clean Water Act?

    No

19. Will the proposed project involve blasting?

    No

20. Will the proposed project include activities that could result in an increase to recreational fishing or potentially affect fish movement temporarily or permanently (including fish stocking, harvesting, or creation of barriers to fish passage)?

    Yes

21. Will the proposed project involve earth moving that could cause erosion and sedimentation, and/or contamination along a stream?

    NoteAnswer "Yes" to this question if erosion and sediment control measures will be used to protect the stream.

    No

22. Will the proposed project involve vegetation removal within 200 feet of a perennial stream bank?

    No

23. Will erosion and sedimentation control Best Management Practices (BMPs) associated with applicable state and/or Federal permits, be applied to the project? If BMPs have been provided by and/or coordinated with and approved by the appropriate Ecological Services Field Office, answer "Yes" to this question.

    No

24. [Semantic] Does the project intersect the Virginia big-eared bat critical habitat?

    Automatically answered
    No

25. [Semantic] Does the project intersect the Indiana bat critical habitat?

    Automatically answered
    No

26. [Hidden Semantic] Does the project intersect the Canada lynx AOI?

    Automatically answered
    Yes

27. Will the project involve trapping, poisoning, or broadcasting disease control agents for wild animals (e.g. animal damage control, controlling or managing furbearer wildlife, capturing animals for research projects, rabies baits)?

    No

28. Will the project be enclosed by fencing that could unintentionally trap lynx (e.g. wind and solar development, waste treatment settling ponds, impervious fencing along roads)?

    No

29. Is this a road or highway project?

    No

30. Is the project in a non-forested habitat (fields, towns and urban areas, agricultural fields) and of a nature that will not result in take of lynx?

    Yes

31. [Semantic] Does the project intersect the candy darter critical habitat?

    Automatically answered
    No

32. [Semantic] Does the project intersect the diamond darter critical habitat?

    Automatically answered
    No

33. [Semantic] Does the project intersect the Big Sandy crayfish critical habitat?

    Automatically answered
    No

34. [Hidden Semantic] Does the project intersect the Guyandotte River crayfish critical habitat?

    Automatically answered
    No

35. Do you have any other documents that you want to include with this submission?

    No

PROJECT QUESTIONNAIRE

1. Approximately how many acres of trees would the proposed project remove?

   0

2. Approximately how many total acres of disturbance are within the disturbance/ construction limits of the proposed project?

   10

3. Briefly describe the habitat within the construction/disturbance limits of the project site.

   The project involves a hydroelectric facility, including a dam and powerhouse, located on the Androscoggin River.

IPAC USER CONTACT INFORMATION

Agency: Sevee & Maher Engineers, Inc.
Name: Anthony Pais
Address: 4 Blanchard Road
City: Cumberland
State: ME
Zip: 04021
Email aep@smemaine.com
Phone: 2078295016

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Environmental Protection Agency
Name: George Papadopoulos
Email: papadopoulos.george@epa.gov
Phone: 6179181579

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To: March 30, 2023
Project code: 2023-0059250
Project Name: Cascade Hydroelectric Facility Endangered Species Act Certification
IPaC Record Locator: 824-124368840

Federal Nexus: yes
Federal Action Agency (if applicable): Environmental Protection Agency

Subject: Record of project representative's no effect determination for 'Cascade Hydroelectric Facility Endangered Species Act Certification'

Dear Anthony Pais:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on March 30, 2023, for 'Cascade Hydroelectric Facility Endangered Species Act Certification' (here forward, Project). This project has been assigned Project Code 2023-0059250 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into the IPaC must accurately represent the full scope and details of the Project. Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter.

Determination for the Northern Long-Eared Bat

Based upon your IPaC submission and a standing analysis, your project has reached the determination of "No Effect" on the northern long-eared bat. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action

and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Canada Lynx *Lynx canadensis* Threatened
- Monarch Butterfly *Danaus plexippus* Candidate

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

Based upon your IPaC submission, your project has reached the determination of “No Effect” on the northern long-eared bat. If there are no updates on listed species, no further consultation/ coordination for this project is required with respect to the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the New England Ecological Services Field Office and reference Project Code 2023-0059250 associated with this Project.

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

Cascade Hydroelectric Facility Endangered Species Act Certification

2. Description

The following description was provided for the project 'Cascade Hydroelectric Facility Endangered Species Act Certification':

> The Cascade Hydroelectric Facility is required to undergo an endangered species act certification as part of the notice of intent (NOI) renewal associated with the 2023 NPDES General Permit for Hydroelectric Generating Facilities (NHG360000).

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@44.448644200000004,-71.18688222919727,14z

DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the Endangered northern long-eared bat (Myotis septentrionalis). Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

   Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

   No

2. Do you have post-white nose syndrome occurrence data that indicates that northern long-eared bats (NLEB) present in the action area? Bat occurrence data may include identification of NLEBs in hibernacula, capture of NLEBs, tracking of NLEBs to roost trees, or confirmed acoustic detections.

   No

3. Does any component of the action involve construction or operation of wind turbines?

   Note: For federal actions, answer ‘yes’ if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

   No

4. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

   Yes

5. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

   No

6. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

   Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

   No

7. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

   Yes

8. Have you determined that your proposed action will have no effect on the northern long-eared bat? Remember to consider the effects of any activities that would not occur but for the proposed action.

   If you think that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, answer “No” below and continue through the key. If you have determined that the northern long-eared bat does not occur in your project’s action area and/or that your project will have no effects whatsoever on the species despite the potential for it to occur in the action area, you may make a “no effect” determination for the northern long-eared bat.

   Note: Federal agencies (or their designated non-federal representatives) must consult with USFWS on federal agency actions that may affect listed species [50 CFR 402.14(a)]. Consultation is not required for actions that will not affect listed species or critical habitat. Therefore, this determination key will not provide a consistency or verification letter for actions that will not affect listed species. If you believe that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, please answer “No” and continue through the key. Remember that this key addresses only effects to the northern long-eared bat. Consultation with USFWS would be required if your action may affect another listed species or critical habitat. The definition of Effects of the Action can be found here: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

   Yes

PROJECT QUESTIONNAIRE

Will all project activities by completed by April 1, 2024?

No

IPAC USER CONTACT INFORMATION

Agency: Sevee & Maher Engineers, Inc.
Name: Anthony Pais
Address: 4 Blanchard Road
City: Cumberland
State: ME
Zip: 04021
Email aep@smemaine.com
Phone: 2078295016

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Environmental Protection Agency
Name: George Papadopoulos
Email: papadopoulos.george@epa.gov
Phone: 6179181579

NOI ATTACHMENT 8

NATIONAL REGISTER OF HISTORIC PLACES REVIEW

SME
SEVEE & MAHER
ENGINEERS

SME
SEVEE & MAHER
ENGINEERS

4 Blanchard Road, P.O. Box 85A
Cumberland, ME 04021
Tel: 207.829.5016 • Fax: 207.829.5692
info@smemaine.com
smemaine.com

June 8, 2023

U.S. Environmental Protection Agency, Region 1
ATTN: George Papadopoulos, HYDROGP Coordinator
5 Post Office Square – Mailcode 06-1
Boston, MA 02109-3912

Email: Hydro.GeneralPermit@epa.gov

Subject: Cascade Hydroelectric Facility – National Register of Historic Places Review

Dear Mr. Papadopoulos:

As requested within Section F of the Hydroelectric Generating Facilities General Permit (Hydro GP) notice of intent (NOI), Sevee & Maher Engineers, Inc. (SME) has completed a review of the National Register of Historic Places near the Cascade Hydroelectric facility located at 72 Cascade Flats in Gorham, NH on behalf of Brookfield Renewable Great Lakes Hydro America, LLC. As a result of this review, it was determined that there are no historic properties present within the vicinity of the Cascade facility; therefore, the facility should remain eligible for coverage under the Hydro GP in accordance with Criterion A.

Should questions arise or additional information be desired, please do not hesitate to contact me at 207.829.5016.

Sincerely,

SEVEE & MAHER ENGINEERS, INC.

Philip H. Gerhardt, P.E.
Principal/Senior Environmental Engineer

Attachments: 1. National Register of Historic Places Overhead

ATTACHMENT 1

NATIONAL REGISTER OF HISTORIC PLACES OVERHEAD

SME
SEVEE & MAHER
ENGINEERS

National Register of Historic Places

National Park Service
U.S. Department of the Interior

Public, non-restricted data depicting National Register spatial data processed by the Cultural Resources GIS facility. …