GREAT RIVER HYDRO, LLC

2 Killeen Street N. Walpole, NH 03609

tel 802.299.5943

www.greatriverhydro.com

June 13, 2023

US Environmental Protection Agency

RE: NPDES General Draft Permit # NHG360000 for Hydroelectric Generating Facilities, Comerford Facility

To whomever it may concern,

Enclosed please find the Notice of Intent (NOI) for Great River Hydro, LLC Comerford hydroelectric generating facility located in Monroe, New Hampshire. Great River Hydro, LLC is seeking a National Pollutant Discharge Elimination System (NPDES) permit under the Hydroelectric Generating Facilities General Permit #NHG360000.

If you have any questions or need additional information, please contact me at (802) 299-5943 or at ksparks@greatriverhydro.com.

Sincerely,

Kari Sparks

Environmental Specialist

Kari Sparks

Enclosures: Notice of Intent for Comerford facility to be covered under NHG360000.

cc: New Hampshire Department of Environmental Services Water Division, Wastewater Engineering Bureau

Table of Contents

Request for General Permit Authorization to Discharge Wastewater Notice of Intent

Appendix A – Station Location Topographical Map

Appendix B – Designated Uses, Pollutants, TMDL Availability

Appendix C - Station Flow Schematic

Appendix D - Intake Velocity Demonstration of Compliance

Appendix E - ESA Eligibility for Species under Jurisdiction of USFWS

Appendix F - National Historic Property Act Eligibility

II. Suggested Format for the HYDRO General Permit Notice of Intent (NOI):

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 A. Facility Information	Discharge(s): ☐ MAG360000	□ NHG360000	
Facility Location	Name:		
	Street:		
	City:	State:	
	Zip:	SIC Code:	
	Latitude:	Longitude:	
	Type of Business:	<u> </u>	
2. Facility Mailing Address (if different from Location)	Street:		
	City:	State:	
	Zip:		
3. Facility Owner	Name:	Email:	
	Street:	Telephone:	

	City:	State:		
	Contact Person:	Zip:		
4. Facility Operator (if different from above)	Name:	Email:		
	Street:	Telephone	2 :	
	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):			
	Is the facility covered under an Individual Perm	nit?	□ Yes	□ No
	Is there a pending NPDES application of file we for the discharge(s)?	ith EPA	□ Yes	□ No
	Date of Submittal (if yes):		nit Number (if kn	own):
	Attach a topographic map indicating the location the facility and outfall(s) to the receiving water		☐ Map Att	ached
	Number of turbines:			
	Combined turbine discharge (installed		ım capacity?	cfs
	capacity) at:		m capacity?	cfs
	Is this facility operated as a pump storage proje	ct?	□ Yes	□ No

B. Discharge Information

Name of Receiving Water(s):		☐ Freshwater ☐ ☐	Marine
2. Waterbody classification: Class A	☐ Class B ☐ Class SA	☐ Class SB	
3. Is the receiving water is listed in the State's Int 303(d))?	egrated List of Waters (i.e., CWA Section	☐ Yes ☐	No
4. If the applicant answered yes to B.3, has the ap impaired, any pollutants indicated, and whether indicated pollutants in a separate attachment to	r a final TMDL is available for any of the the NOI?	☐ Yes ☐	No
5. Attach a line drawing or flow schematic showin location of intake(s), operations contributing to receiving water(s).	effluent flow, treatment units, outfalls, and	☐ Line Drawing A	
` *	arging effluent from the following categories and harge type. See Parts 1.1 through 1.5 (for MA) ocharge type.	•	_
Equipment-related cooling water 001 - Main Compressor - 1,900 gpd 002 - After Cooler - 4,400 gpd 003 - Unit #1 thrust bearing - 144,000 gpd 004 - Unit #1 guide bearing - 72,000 gpd 005 - Unit #2 thrust bearing - 144,000 gpd	Outfalls: 006 - Unit #2 guide bearing - 72,000 gpd 007 - Unit #3 thrust bearing - 144,000 gpd 008 - Unit #3 guide bearing - 72,000 gpd 009 - Unit #4 thrust bearing - 144,000 gpd 010 - Unit #4 guide bearing - 72,000 gpd		
Equipment and floor drain water	Outfalls:	gpd	
Maintenance-related water	Outfalls:		
Facility maintenance-related water during flood/high water events	Outfalls: 012 - Small sump (back up only) - 216,000 gpd 013 - Main sump (back up only) - <=388,800 gpd 014 - Pylon A - Winter 16,000 gpd; Summer 7,200 gpd	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.	Latitude:	Longitude:		
	Discharge is: ☐ Continuous ☐ Inte	rmittent 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 8.3 —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 ☐ Inte	rmittent 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 8.3 — s.u.	Minimum Monthly pH s.u.		
	Alternative pH limits requested? □Yes □ No	State approval attached? Yes No		

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.I. and 2.7.I 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.	Latitude: 44° 19′ 30.752″ N	Longitude: 72° 0' 4.223" W		
003	Discharge is: ☐ Continuous ☐ Intermittent ☐ Seasonal			
	Maximum Daily Flow . 144 MGD	Average Monthly Flow 144 MGD		
	Maximum Daily Temperature 90 °F	Average Monthly Temperature 54 °F		
	Maximum Daily Oil & Grease n/a mg/L	Average Monthly Oil & Grease n/a mg/L		
	Maximum Monthly pH 8.3 s.u.	Minimum Monthly pH 6.5 s.u.		
	Alternative pH limits requested? □Yes 🎗 No	State approval attached? Yes No		
Outfall No.	Latitude: 44° 19′ 30.752" N	Longitude: 72°0' 4.223" W		
001	Discharge is: ☐ Continuous ☐ Interest	rmittent Seasonal		
	Maximum Daily Flow .072 MGD	Average Monthly Flow .072 MGD		
	Maximum Daily Temperature 90 °F	Average Monthly Temperature 53 °F		
	Maximum Daily Oil & Grease n/a mg/L	Average Monthly Oil & Grease n/a mg/L		
	Maximum Monthly pH 8.3 s.u.	Minimum Monthly pH 6.5 s.u.		
	Alternative pH limits requested? □Yes 🏖 No	State approval attached? Yes No		

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.	Latitude: 44° 19′ 30.341" N	Longitude: 72°0' 3.953" W		
005	Discharge is: ☐ Continuous ☐ Interest	rmittent Seasonal		
*	Maximum Daily Flow . 144 MGD	Average Monthly Flow 144 MGD		
	Maximum Daily Temperature 90 °F	Average Monthly Temperature 54 °F		
	Maximum Daily Oil & Grease n/a mg/L	Average Monthly Oil & Grease hla mg/L		
	Maximum Monthly pH 8.3 s.u.	Minimum Monthly pH 6.5 s.u.		
	Alternative pH limits requested? □Yes X No	State approval attached? ☐ Yes 💆 No		
Outfall No.	Latitude: 44° 19′ 30.341″ N	Longitude: 72°0'3.953"W		
000	Discharge is: ☐ Continuous ☐ Intermittent ☐ Seasonal			
	Maximum Daily Flow .072 MGD	Average Monthly Flow .072 MGD		
/	Maximum Daily Temperature 90 °F	Average Monthly Temperature 53 °F		
	Maximum Daily Oil & Grease n/a mg/L	Average Monthly Oil & Grease na mg/L		
	Maximum Monthly pH 8.3 s.u.	Minimum Monthly pH 6.5 s.u.		
	Alternative pH limits requested? □Yes ► No	State approval attached? ☐ Yes 💢 No		

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.	Latitude: 44° 19' 29.944" N	Longitude: 72°0' 3.779" W				
	Discharge is: ✓ Continuous ☐ Intermittent ☐ Seasonal					
	Maximum Daily Flow .144 MGD	Average Monthly Flow 144 MGD				
	Maximum Daily Temperature 90 °F	Average Monthly Temperature 54 °F				
	Maximum Daily Oil & Grease na mg/L	Average Monthly Oil & Grease n a mg/L				
	Maximum Monthly pH 9.3 s.u.	Minimum Monthly pH 6.5 s.u.				
	Alternative pH limits requested? □Yes 🅦 No	State approval attached? Yes No				
Outfall No. DD8	Latitude: 44° 191 29.944" N	Longitude: 72° 0' 3.779" W				
		rmittent Seasonal				
	Maximum Daily Flow .D72 MGD	Average Monthly Flow .072 MGD				
	Maximum Daily Temperature 90 °F	Average Monthly Temperature 53 °F				
	Maximum Daily Oil & Grease n/a mg/L	Average Monthly Oil & Grease na mg/L				
	Maximum Monthly pH 8.3 s.u.	Minimum Monthly pH 6.5 s.u.				
	Alternative pH limits requested? □Yes 🕱 No	State approval attached? Yes No				

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.	Latitude: 44° 19' 29.472" N	Longitude: 72° 0' 3.499" W		
007	Discharge is: ✓ Continuous ☐ Inte	rmittent Seasonal		
	Maximum Daily Flow .144 MGD	Average Monthly Flow 144 MGD		
	Maximum Daily Temperature 90 °F	Average Monthly Temperature 54°F		
	Maximum Daily Oil & Grease Na mg/L	Average Monthly Oil & Grease na mg/L		
	Maximum Monthly pH \\ \mathcal{T} \ .3 \\ \ s.u.	Minimum Monthly pH 6.5 s.u.		
	Alternative pH limits requested? □Yes ► No	State approval attached? Yes No		
Outfall No.	Latitude: 44° 19' 29.472" N	Longitude: 72°0' 3.499" W		
010	Discharge is: ☐ Continuous ☐ Interest	rmittent Seasonal		
	Maximum Daily Flow .072 MGD	Average Monthly Flow .072 MGD		
	Maximum Daily Temperature 90 °F	Average Monthly Temperature 53 °F		
	Maximum Daily Oil & Grease Na mg/L	Average Monthly Oil & Grease Na mg/L		
	Maximum Monthly pH 8.3 s.u.	Minimum Monthly pH 6.5 s.u.		
	Alternative pH limits requested? □Yes ►No	State approval attached? Yes No		

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 1.7.1. and 2.7.1 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.	Latitude: 44° 19' 31.402" N	Longitude: 72°0' 4.799" W		
UII	Discharge is: ☐ Continuous ☒ Inte	rmittent Seasonal		
	Maximum Daily Flow ./60 MGD	Average Monthly Flow . 140 MGD		
	Maximum Daily Temperature 90 °F	Average Monthly Temperature 52 °F		
	Maximum Daily Oil & Grease 15 mg/L	Average Monthly Oil & Grease < 5 mg/L		
	Maximum Monthly pH 8.3 s.u.	Minimum Monthly pH 6.5 s.u.		
	Alternative pH limits requested? □Yes 🗷 No	State approval attached? ☐ Yes 🗷 No		
Outfall No. D12	Latitude: 44° 19' 30. 182" N	Longitude: 72°0' 4.525" W		
	Discharge is: ☐ Continuous ☐ Inter	rmittent X Seasonal		
	Maximum Daily Flow . 216 MGD	Average Monthly Flow .216 MGD		
	Maximum Daily Temperature 90 °F	Average Monthly Temperature na °F		
	Maximum Daily Oil & Grease 15 mg/L	Average Monthly Oil & Grease < 5 mg/L		
	Maximum Monthly pH 8.3 s.u.	Minimum Monthly pH 6.5 s.u.		
	Alternative pH limits requested? □Yes 🗷 No	State approval attached? Yes No		

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.	Latitude: 44° 19' 31.402" N	Longitude: 72° 0' 4.799" W		
013	Discharge is: ☐ Continuous ☐ Inte	rmittent \(\subseteq \subseteq Seasonal \)		
	Maximum Daily Flow .388 MGD	Average Monthly Flow .388 MGD		
	Maximum Daily Temperature 90 °F	Average Monthly Temperature 5a °F		
	Maximum Daily Oil & Grease 15 mg/L	Average Monthly Oil & Grease 25 mg/L		
	Maximum Monthly pH 8.3 s.u.	Minimum Monthly pH 6.5 s.u.		
	Alternative pH limits requested? □Yes ᢂNo	State approval attached? ☐ Yes ► No		
Outfall No.	Latitude: 44° 19' 33.064" N	Longitude: 72°0'3.806" W		
014	Discharge is: ☐ Continuous ☐ Interest	rmittent Seasonal		
	Maximum Daily Flow . 0072 MGD	Average Monthly Flow .0072 MGD		
	Maximum Daily Temperature 90 °F	Average Monthly Temperature 51 °F		
	Maximum Daily Oil & Grease 15 mg/L	Average Monthly Oil & Grease < 5 mg/L		
	Maximum Monthly pH 8.3 s.u.	Minimum Monthly pH 6.5 s.u.		
	Alternative pH limits requested? □Yes 🗷 No	State approval attached? Yes No		

Outfall No.	Latitude:		Longitude:	
	Discharge is: Continuous	☐ Inte	rmittent Seasonal	
	Maximum Daily Flow	MGD	Average Monthly Flow MG	D
	Maximum Daily Temperature	°F	Average Monthly Temperature °1	7
	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? □Ye	es 🗆 No	State approval attached? ☐ Yes ☐ No	
C. Best Technology Availabl	e for Cooling Water Intake Structure	s		
			Part B. of this NOI are subject to the following	
requirements.		1		
1. Does the facility intake v BTA Requirements at Pa	vater for cooling purposes subject to the art 4 of the HYDROGP?	\square Yes	☐ No ip to Part D of this NOI.	
2. If yes, indicate which technol	logy employed to comply with the general l			
☐ An existing technology (e.g., a physical or behavioral barrier, sp	illway, or	guidance device) that directs fish towards a	
	<u>=</u>		t attached a narrative description of the barrier	to
		s live fish	in a manner that minimizes the likelihood of	
0 1 0	ained at the cooling water intake?			
☐ Yes ☐ No				
			natively, at the point where cooling water enter	
			e applicant attached a demonstration of compli	
,		or calcula	tion based on the maximum intake volume and	
minimum bypass flow?	Yes □ No			

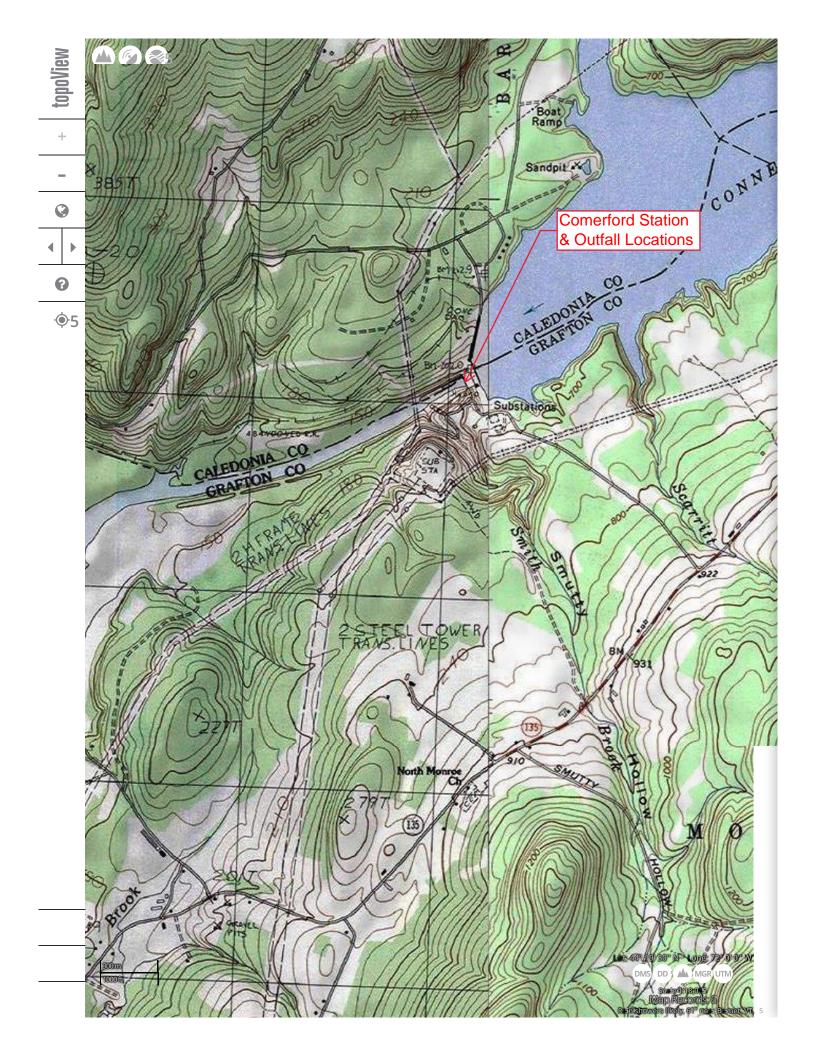
\Box For cooling water withdrawn directly from the source waterbody (<i>i.e.</i> , not from within the penstock), a physical screen or other barrier technology with a mesh size no greater than ½-inch that minimizes the potential for adult and juvenile fish to become entrapped in the CWIS.			
Has the applicant attached a description of the technology? \Box Yes \Box No			
If the mesh size of the screen is greater than ½-inch has the applicant demonstrated that the calculated intake velocity is le	ngg t han		
of the cases of the server annearment, maximum means votating, and source water / Q10 few from E 100			
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 fo information:	llowing		
Maximum daily volume of cooling water withdrawn during previous five (5) years: gpd			
Maximum monthly average volume of cooling water withdrawn during the previous five (5) years: gpd			
Maximum daily and average monthly volume of water used exclusively for cooling: Max: gpd Avg:	gpd		
Maximum daily and average monthly volume of water used for another process before or after being used for cooling:			
Max: gpd Avg:	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 % Average daily flow through penstock %			
Minimum flow through penstock %			
Source water annual mean flow (e.g., available from USGS, MassDEP, or NHDES): cfs			
Source water 7-day mean low flow with 10-year recurrence interval (7Q10): cfs			
Volume of total intake water withdrawn and used in facility as a percentage of:			
Source water mean annual flow cfs			
Source water 7Q10 flow cfs			

D. Chemical Additives									
1. Does the facility use or padjustment?	plan to use non-toxic chemicals for pH	□ Yes □ No							
2. Does the facility use or purposes?	plan to use chemicals for anti-freeze	□ Yes □ No							
3. If the answer to D.2 is yes, p	rovide the following for EACH chemical	additive used for anti-freeze:							
Chemical Name and Manufac	turer:								
Maximum Dosage Concentrat	tion Used:	Average Dosage Concentration Used:							
Maximum Concentration in D mg/L	Pischarge:	Average Concentration in Discharge: mg/L							
Material Safety Data Sheet (M	ISDS) or other toxicity documentation	for each chemical attached? \square Yes \square No							
E. Endangered Species Act									
Appendix 2 to the HYDROGI	P explains the certification requirement	s 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	☐ Criterion A: No endangered or threatened species or critical habitat are in proximity to the								
species under	discharges or related activities or come in contact with the "action area." See Appendix 2, Part B for								
jurisdiction of USFWS	documentation requirements. Docume	tion 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 of									
critical habitat. Has the operator completed consultation with USFWS and attached documentation									
\square Yes \square No									
	If no, is consultation underway? Yes No								
	☐ Criterion C : Using the best scien	ntific and commercial data available, the effect of the discharges							
		and designated critical habitat have been evaluated. Based on							
	_	nade 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	Is the facility located on: the Connecticut River between the Massachusetts/Connecticut state line
species under	and Turners Falls, MA; the Taunton River; the Merrimack River between Lawrence, MA and the
jurisdiction of NMFS	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 <i>and</i> 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? \square Yes \square No
F. National Historic Proper	ties Act Eligibility
1. Indicate under which criterio	on the discharge(s) is eligible for covered under the HYDROGP:
☐ Criterion A: No his	toric properties are present.
☐ Criterion B : Histori	ic properties are present. The discharges and related activities do not have the potential to impact
historic properties.	
☐ Criterion C : Histori	ic properties are present. The discharges and related activities have the potential to impact or adversely
impact historic prop	
	upporting 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 C								
Officer, or other tribal representative that outlines measures the operation will carry out to mitigate	e or prevent any adverse							
effects on historic properties? Yes No								
G. Supplemental Information								
Please provide any supplemental information, including antidegradation review information appli	cable to new or increased							
discharges. Attach any certifications required by the HYDROGP. Supplemental information attac								
discharges. Attach any certifications required by the HTDROOF. Supplemental information attac	hed? □ Yes □ No							
H. Signature Requirements								
1. The NOI must be signed by the operator in accordance with the signatory requirements of 40 C.F.I.	R. § 122.22, including the following							
certification:								
I certify under penalty of law that no chemical additives are used in the discharges to be author Permit except for those used for pH adjustment or anti-freeze purposes and that this document prepared under my direction or supervision in accordance with a system designed to assure the properly gather and evaluate the information submitted. Based on my inquiry of the person or system, or those directly responsible for gathering the information, I certify that the information my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are submitting false information, including the possibility of fine and imprisonment for knowing visiting false.	t and all attachments were nat qualified personnel persons who manage the on submitted is, to the best of e significant penalties for							
2. Notification provided to the appropriate State, including a copy of this NOI, if required?	□ Yes □ No							
Signature: Kari Sparks	Date:							
Print Name and Title:	,							

Appendix A: Station Location - Topographical Map



Appendix B – Designated Uses, Pollutants, TMDL Availability

Appendix B:

Receiving water designated uses that are impaired, pollutants and TMDL availability.

Connecticut River:

According to pages 80 and 81 of the most recent 2016 List of Threatened or Impaired Waters that Require a Total Daily Maximum Load (TMDL) report, dated November 30, 2017; the Connecticut River in locations of Littleton, NH (Moore Station) and Monroe, NH (Comerford and McIndoes Station) are listed as having pH impairments that not threatened with a low TMDL Priority. Both impairment sources are unknown. New Hampshire DES has categorized these impairments as a level 5-M. Designated uses for both locations are aquatic life. Refer to the next pages for a copy of this report pertaining to Littleton, NH and Monroe, NH. There are no available TMDL reports for either location.

2016 LIST OF THREATENED OR IMPAIRED WATERS THAT REQUIRE A TMDL

(i.e., Category 5 Impairments - this represents the Section 303(d) List)

(Excluding Fish/Shellfish Consumption Advisories due to Mercury - see Note 3)

November 30, 2017 Page 80 of 91 R-WD-17-09, App 1

- 1. See the Consolidated Assessment and Listing Methodology (CALM) for definitions and details regarding how this list was developed.
 2. This list is sorted by Waterbody Type and then Assessment Unit ID.
 3. By this note, all marine surface waters in New Hampshire are also included on this list due to statewide fish/shellfish consumption advisories issued because of mercury levels in fish/shellfish tissue. To keep the size of this list manageable, mercury 4. TMDL stands for Total Maximum Daily Load study. TMDL schedules are subject to change as funding and resources become available.
 5. Waters presented on this list may also be threatened or impaired by other pollutants or nonpollutants that do not require a TMDL.

Assessment Unit ID	Water Name	Primary Town	Water Size	Size Unit	Use Desc	Impairment Name	DES Category	Threatened	TMDL Priority		Source Name
NHRIV801010203-07	Connecticut River	Clarksville	4.604	Miles	Aquatic Life	Lead	5-P	N	Low	Source Unknown	
						рН	5-M	N	Low	Source Unknown	
NHRIV801010303-02	Halls Stream	Pittsburg	13.734	Miles	Aquatic Life	Lead	5-M	N	Low	Source Unknown	
NHRIV801010305-01	Connecticut River	Stewartstown	1.830	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801010404-02	Connecticut River	Columbia	8.900	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801010405-01	Cone Brook	Columbia	11.144	Miles	Aquatic Life	Fishes Bioassessments (Streams)	5-P		Low	Source Unknown	
NHRIV801010405-03	Connecticut River	Columbia	6.213	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801010603-02	Kimball Brook	Stratford	1.705	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801010704-03	Phillips - W Br Phillips - Nelson - Watkinson - Wells Bks	Ervings Location	19.702	Miles	Aquatic Life	Aluminum	5-P	N	Low	Source Unknown	
NHRIV801010704-04	Phillips Brook	Dummer	19.195	Miles	Aquatic Life	Aluminum	5-P	N	Low	Source Unknown	
						рН	5-M		Low	Source Unknown	
NHRIV801010707-13	Upper Ammonoosuc River	Stark	2.919	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801010707-18	Upper Ammonoosuc River	Northumberland	1.944	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801010801-01	Israel River	Low And Burbanks	29.685	Miles	Aquatic Life	pH	5-P	N	Low	Source Unknown	
NHRIV801010803-02	Israel River	Jefferson	29.260	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801010804-05	Bunnell Brook	Lancaster	24.002	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801010805-04	Burnside Brook	Northumberland	11.781	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801010805-06	Otter Brook	Lancaster	6.028	Miles	Aquatic Life	Fishes Bioassessments (Streams)	5-P		Low	Source Unknown	
						рН	5-M	N	Low	Source Unknown	
NHRIV801010806-06	Israel River	Jefferson	6.944	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801010806-07	Israel River	Lancaster	3.089	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801010806-09	Israel River	Lancaster	2.163	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801010902-02	Connecticut River	Northumberland	3.989	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801010902-03	Connecticut River	Lancaster	9.546	Miles	Aquatic Life	Aluminum	5-M	N	Low	Source Unknown	
						рН	5-M	N	Low	Source Unknown	
NHRIV801010902-04	Indian Brook	Lancaster	4.269	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801030101-02	Unnamed Brook - From Forest Lake To Burns Pond	Whitefield	5.487	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801030102-08	Johns River	Dalton	2.955	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801030102-13	Johns River	Dalton	4.326	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801030201-01	Cushman Brook	Dalton	20.549	Miles	Aquatic Life	Fishes Bioassessments (Streams)	5-M		Low	Source Unknown	
NHRIV801030201-02	Connecticut River	Dalton	0.715	Miles	Aquatic Life	Aluminum	5-M	N	Low	Source Unknown	
						рН	5-M	N	Low	Source Unknown	
NHRIV801030203-01	Connecticut River	Littleton	1.113	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	

2016 LIST OF THREATENED OR IMPAIRED WATERS THAT REQUIRE A TMDL

(i.e., Category 5 Impairments - this represents the Section 303(d) List)

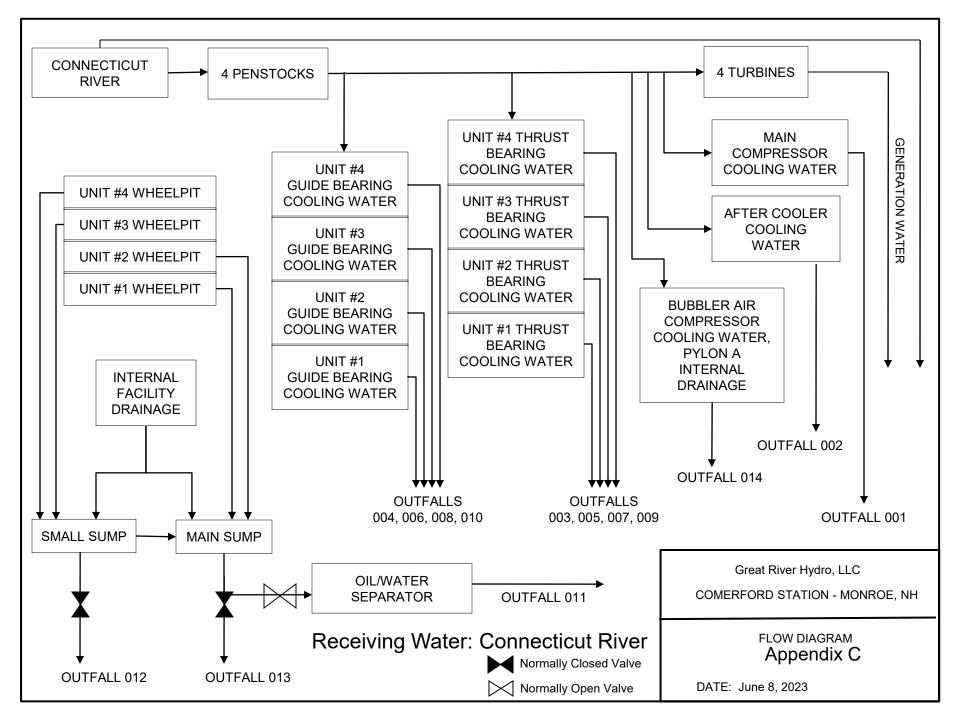
(Excluding Fish/Shellfish Consumption Advisories due to Mercury - see Note 3)

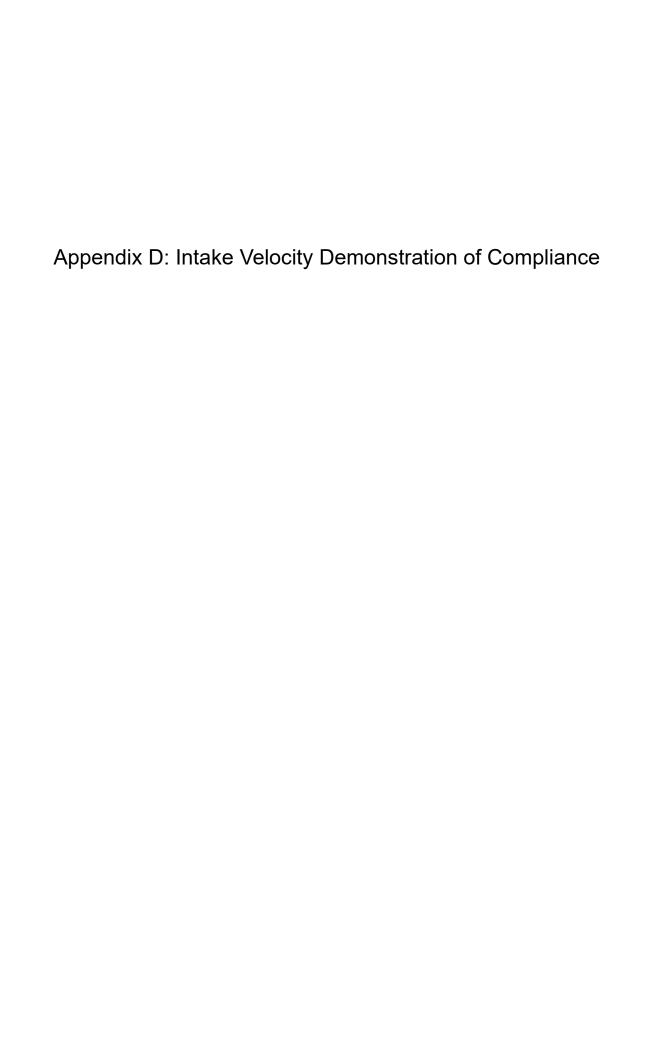
November 30, 2017 Page 81 of 91 R-WD-17-09, App 1

- 1. See the Consolidated Assessment and Listing Methodology (CALM) for definitions and details regarding how this list was developed.
 2. This list is sorted by Waterbody Type and then Assessment Unit ID.
 3. By this note, all marine surface waters in New Hampshire are also included on this list due to statewide fish/shellfish consumption advisories issued because of mercury levels in fish/shellfish tissue. To keep the size of this list manageable, mercury 4. TMDL stands for Total Maximum Daily Load study. TMDL schedules are subject to change as funding and resources become available.
 5. Waters presented on this list may also be threatened or impaired by other pollutants or nonpollutants that do not require a TMDL.

Assessment Jnit ID	Water Name	Primary Town	Water Size	Size Unit	Use Desc	Impairment Name	DES Category	Threatened	TMDL Priority		Source Name
NHRIV801030205-02	Connecticut River	Monroe	1.738	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801030302-01	Beaver - Lafayette - Skookumchuck - Jordan Bks - And Tribs	Franconia	14.106	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
NHRIV801030401-01	Ammonoosuc R - Jefferson - Clay - Franklin - Monroe Bks	Thompson And M	27.657	Miles	Aquatic Life	рН	5-P	N	Low	Source Unknown	
IHRIV801030401-03	Sebosis Brook	Carroll	12.701	Miles	Aquatic Life	Aluminum	5-M	N	Low	Source Unknown	
						рН	5-M		Low	Source Unknown	
IHRIV801030401-04	Ammonoosuc River	Crawfords Purcha:	2.992	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
HRIV801030401-05	Halfway Brook - Dartmouth Brook - Unnamed Brook	Crawfords Purcha:	15.887	Miles	Aquatic Life	рН	5-P	N	Low	Source Unknown	
HRIV801030401-09	Unnamed Brook	Carroll	5.642	Miles	Aquatic Life	Dissolved oxygen saturation	5-M	N	Low	Source Unknown	
						Oxygen, Dissolved	5-P	N	Low	Source Unknown	
						pН	5-P	N	Low	Source Unknown	
HRIV801030401-10	Unnamed Brook	Carroll	1.959	Miles	Aquatic Life	Aluminum	5-M	N	Low	Source Unknown	
						рН	5-M		Low	Source Unknown	
HRIV801030402-04	Ammonoosuc River	Carroll	5.570	Miles	Aquatic Life	Benthic-Macroinvertebrate Bioassessments (Streams)	5-M		Low	Source Unknown	
						pН	5-P	N	Low	Source Unknown	
HRIV801030402-07-01	Ammonoosuc River	Carroll	8.119	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
HRIV801030402-07-02	Twin Mt. Rec. Area Tuttle Brook	Carroll	0.020	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
HRIV801030403-01	Ammonoosuc River	Bethlehem	1.626	Miles	Aquatic Life	ALUMINUM	5-M	N	Low	Source Unknown	
						рН	5-P	N	Low	Source Unknown	
HRIV801030403-03	Ammonoosuc River	Bethlehem	2.261	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
HRIV801030403-07	Ammonoosuc River	Bethlehem	4.262	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
HRIV801030403-09	Baker Brook	Bethlehem	9.391	Miles	Aquatic Life	Fishes Bioassessments (Streams)	5-P		Low	Source Unknown	
HRIV801030403-11	Ammonoosuc River	Littleton	3.460	Miles	Aquatic Life	Aluminum	5-M	N	Low	Source Unknown	
						pН	5-M	N	Low	Source Unknown	
HRIV801030403-16	Ammonoosuc River	Littleton	4.900	Miles	Aquatic Life	Aluminum	5-M	N	Low	Source Unknown	
						рН	5-P	N	Low	Source Unknown	
HRIV801030503-07	Ammonoosuc River	Landaff	1.757	Miles	Aquatic Life	рН	5-M	N	Low	Source Unknown	
HRIV801030504-01	Wld Ammo R -Clay-Stony-Black-Olesons-St ark Fls-Underhill Bks	Easton	38.952	Miles	Aquatic Life	Aluminum	5-M	N	Low	Source Unknown	
						Lead	5-M	N	Low	Source Unknown	
						рН	5-P	N	Low	Source Unknown	

Appendix C: Station Flow Schematic





Appendix D: Cooling Water Intake Velocity, Demonstration of Compliance NOI Application Section C.2

Permit Threshold: <.5 fps (feet per second)

Comerford Station – Cooling water intake is located within penstock.

Maximum Cooling Water Capacity = 217,575 GPD (gallons per day) (per unit)

Conversion Calculation: GPD/646,300 = fps

217,575 GPD / 646,300 = .34 fps (per unit)

Appendix E: ESA Eligibility for Species under Jurisdiction of USFWS



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: June 07, 2023

Project Code: 2023-0090747

Project Name: Comerford Sation NPDES General Permit Application

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 4/12/2023 - 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

06/07/2023

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 <u>do not</u> 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 4/12/2023**) The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule went into effect on March 31, 2023. You may utilize the **Northern Long-eared Bat Rangewide Determination Key** available in IPaC. More information about this Determination Key and the Interim Consultation Framework are available on the northern long-eared bat species page:

https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis

For projects that previously utilized the 4(d) Determination Key, 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 was not completed by March 31, 2023, and may result in incidental take of NLEB, please reach out to our office at newengland@fws.gov to see if reinitiation is necessary.

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

06/07/2023

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: 2023-0090747

Project Name: Comerford Sation NPDES General Permit Application

Project Type: Dam - Operations

Project Description: This project is for the continuation of a New Hampshire NPDES

wastewater discharge permit from Comerford Station's Hydroelectric

power generation.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@44.32509145,-72.00130924120779,14z



Counties: New Hampshire and Vermont

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 Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, 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

Threatened

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

Northern Long-eared Bat Myotis septentrionalis

Endangered

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

INSECTS

NAME STATUS

Monarch Butterfly *Danaus plexippus*

Candidate

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743

CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Kari Sparks

Address: 152 Governor Hunt Road

Address Line 2: PO Box 155
City: Vernon
State: VT
Zip: 05354

Email ksparks@greatriverhydro.com

Phone: 8022995943

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Environmental Protection Agency

Name: George Papadopoulos

Email: papadopoulos.george@epa.gov

Phone: 6179181579

Appendix F: National Historic Property Act Eligibility

$126~\text{FERC}~\P~62,\!044\\$ UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

TransCanada Hydro Northeast, Inc.

Project No. 2077-065

ORDER MODIFYING AND APPROVING CULTURAL RESOURCES MANAGEMENT PLAN

(Issued January 21, 2009)

1. On January 4, 2008, TransCanada Hydro Northeast, Inc (licensee) filed a Cultural Resources Management Plan (CRMP), pursuant to article 419 of the license for the Fifteen Mile Falls Hydroelectric Project.¹ The project consists of three developments located on the Connecticut River, near the Town of Littleton in Grafton County, New Hampshire, and Caledonia County, Vermont.

BACKGROUND

2. Article 419 requires the licensee to implement the Programmatic Agreement (PA), executed on February 6, 2002. The PA directs the licensee to file a CRMP, within one year of license issuance, for mitigating the project's effects on historic properties. The CRMP was also to be developed to ensure recreation enhancements pursuant to article 418 did not conflict with management of historic properties.

LICENSEE'S PLAN

- 3. The project Area of Potential Effect (APE) is defined as being conterminous with the currently delineated project boundary, including lands owned in fee simple by the licensee and where flowage rights are granted to the licensee. Three archeological studies have been conducted to date in the APE. The Fifteen Mile Falls Hydroelectric Project is identified as being eligible for the National Register of Historic Places with the three dams that make up the project and their associated structures contributing to its eligibility.
- 4. The CRMP addresses integration with other project license requirements, archeological area and site monitoring and management, and site identification and mapping. It contains provisions for mitigating unavoidable adverse impacts to historic properties and sites. The filed CRMP also addresses public interpretation, identification

¹ On April 8, 2002, the Commission issued an Order Issuing New License (99 FERC ¶ 62,025).

and treatment of presently unknown archeological sites and human remains, agency consultation, and dispute resolution. All work would immediately cease, and either the Vermont or the New Hampshire State Historic Preservation Officer (SHPO) would be contacted, if any previously-unidentified historic properties are discovered within the APE during ground-disturbing activities.

- 5. The PA requires the licensee to file with the Commission, in a filing separate from the CRMP, a land-use map of the project that depicts current and proposed land uses; locations and eligibility status of historic properties; the project boundaries; and, any areas currently surveyed. The map would also be updated as new data becomes available pursuant to any project-related activities covered under the PA. Any updates to the map would be submitted to the SHPOs within 30 days of the changes. The licensee states in its filing that a Geographic Information Systems (GIS) map is being developed to incorporate the required information layers. The map would be updated as new data on properties becomes available, but not more frequently than every 2 years pursuant to any project-related activities covered under the CRMP. Any updates will be filed with the Vermont and New Hampshire SHPOs, and the Commission as part of the required annual report.
- 6. The licensee proposes to file a bi-annual report detailing information associated with implementation of the CRMP with the Vermont and New Hampshire SHPOs. The licensee is reminded that the report detailing implementation information should be filed with the SHPO on an annual basis, as required by the PA for the project, unless the SHPO agrees to bi-annual reports.

CONSULTATION

- 7. The licensee states that the CRMP was developed in consultation with the SHPO, as required by the PA, and that all comments were incorporated into the submitted CRMP. By letter dated February 2, 2007, the draft CRMP was provided to both the Vermont and New Hampshire SHPOs. On April 3, 2007, a copy of the most up-to-date GIS map was furnished to the Vermont SHPO at their request. No further comments from the SHPO have been received.
- 8. By letter dated September 9, 2008, the Commission forwarded the CRMP to the Advisory Council on Historic Preservation (ACHP), as required by the PA. No comments from the ACHP were received.

DISCUSSION AND CONCLUSION

9. The CRMP takes into account the effects of project activities on historic properties and archeological sites within the project APE. It ensures no inadvertent alterations of National Register-qualifying characteristics take place during routine activities or project

maintenance outside of normal operation. Also identified are archeological areas and sites surveyed to date, management of the known sites, and actions that do not require SHPO consultation. The licensee should file the completed land-use map with the SHPOs and the Commission within 6 months of the date of approval of the CRMP to ensure the Commission and SHPOs have the most recent information. Any updates should be filed pursuant to provisions in the CRMP.

10. Commission staff concludes that the final CRMP meets the requirements of the PA and will adequately protect historic properties during the operation and maintenance of the project. The CRMP should be approved. Upon issuance of this order, the licensee should implement the CRMP. The Commission reserves the right to make changes to the CRMP based on the findings of the land-use map.

The Director orders:

- (A) The Cultural Resources Management Plan for the Fifteen Mile Falls Hydroelectric Project, filed on January 4, 2008, is approved and made part of the license.
- (B) The licensee shall file the completed land-use map, as detailed and required by Stipulation II C. of the Programmatic Agreement for the project, with the Commission, the Vermont State Historic Preservation Officer, and the New Hampshire State Historic Preservation Officer within 6 months from the date of the approval of the Cultural Resources Management Plan. The Commission reserves the right to require changes to the Cultural Resources Management Plan approved in paragraph (A) should the land-use map indicate a need.
- (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 C.F. R. §385.713.

Robert J. Fletcher, Chief Land Resources Branch Division of Hydropower Administration and Compliance

Document Content(s)
19948169.DOC1

Document Accession #: 20090121-3032 Filed Date: 01/21/2009