

**HYDRO General Permit Notice of Intent (NOI):**

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**Request for General Permit Authorization to Discharge Wastewater Notice of Intent (NOI)**

**Hydroelectric Generating Facilities General Permit (HYDROGP) No. NHG360000**

**A. Facility Information**

1. Facility Location	Name: <b>Lower Great Falls (Somersworth) Hydroelectric Project</b>	
	Street: 82 Olde Mill Rd.	
	City: Somersworth	State: New Hampshire
	Zip: 03878	SIC Code: 4911
	Latitude: 43°15'15.00" N	Longitude: 70°50'39.00" W
	Type of Business: Hydroelectric power generation	
2. Facility Mailing Address (if different from Location)	Street: 163 Acorn Lane	
	City: Colchester	State: VT
	Zip: 05446	
3. Facility Owner	Name: Green Mountain Power	Email: laura.vallett@greenmountainpower.com
	Street: 163 Acorn Lane	Telephone: (802) 779-6996
	City: Colchester	State: VT
	Contact Person: Laura Vallett	Zip: 05446
4. Facility Operator (if different from above)	Name: Bancroft Contracting Corp. (Hannah Gallant)	Email: Hgallant@bancroftcontracting.com
	Street: 23 Phillips Road	Telephone: (207) 890-9008
	City: So. Paris	State: ME
	Zip: 04281	

5. Current Permit Status	Has prior HYDROGP coverage been granted for the discharge(s) listed in the NOI?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	Permit number (if yes): <b>NHG360028</b>		
	Is the facility covered under an Individual Permit?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	Is there a pending NPDES application of file with EPA for the discharge(s)?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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		<input checked="" type="checkbox"/> Map Attached <b>Attachment 1</b>
	Number of turbines:		4
	Combined turbine discharge (installed capacity) at:	Maximum output capacity?	1050 cfs
		Minimum output capacity?	286 cfs
Is this facility operated as a pump storage project?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

### B. Discharge Information

1. Name of Receiving Water(s): Salmon Falls River	<input checked="" type="checkbox"/> Freshwater <input type="checkbox"/> Marine	
2. Waterbody classification: <input type="checkbox"/> Class A <input checked="" type="checkbox"/> Class B <input type="checkbox"/> Class SA	<input type="checkbox"/> Class SB	
3. Is the receiving water is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d))?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
4. If the applicant answered yes to B.2, 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?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Attachment 3</b>	
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).	<input checked="" type="checkbox"/> Line Drawing Attached <b>Attachment 2</b>	
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 2.1 through 2.5 for descriptions and permit conditions for each discharge type.		
Equipment-related cooling water	Outfalls: N/A	gpd
Equipment and floor drain water	Outfalls: 001	0-2,880 gpd
Maintenance-related water	Outfalls: 001	0-2,880 gpd
Facility maintenance-related water during flood/high water events	Outfalls: N/A	gpd
Equipment-related backwash strainer water	Outfalls: N/A	gpd

7. For each outfall listed above, provide the following information. Outfalls may be eligible for alternative pH effluent limits. Contact NHDES to determine the required information and protocol to request alternative pH effluent limits.

Outfall No. 001	Latitude: 43°15'15.00" N	Longitude: Longitude: 70°50'39.00" W
	Discharge is: <input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Seasonal	
	Maximum Daily Flow 0.00288 MGD	Average Monthly Flow <0.00288 MGD
	Maximum Daily Temperature °C	Average Monthly Temperature °C
	Maximum Daily Oil & Grease 15 mg/L	Average Monthly Oil & Grease <15 mg/L
	Maximum Monthly pH s.u. 8	Minimum Monthly pH s.u. 6.5
	Alternative pH limits requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	State approval attached? <input type="checkbox"/> Yes <input type="checkbox"/> No
Outfall No.	Latitude:	Longitude:
	Discharge is: <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No	State approval attached? <input type="checkbox"/> Yes <input type="checkbox"/> No
Outfall No.	Latitude:	Longitude:
	Discharge is: <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No	State approval attached? <input type="checkbox"/> Yes <input type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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:	
<input type="checkbox"/> An existing technology (e.g., a physical or behavioral barrier, spillway, or guidance device) that directs fish towards a 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? <input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> 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?	
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:	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? <input type="checkbox"/> Yes <input type="checkbox"/> 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 plan to use non-toxic chemicals for pH adjustment?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Does the facility use or plan to use chemicals for anti-freeze purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. If the answer to D.2 is yes, provide the following for <b>EACH</b> 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? <input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> <b>Criterion A:</b> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No
	<input checked="" type="checkbox"/> <b>Criterion B:</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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>(FERC Project 4451)</b> If no, is consultation underway? <input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> <b>Criterion C:</b> 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? <input type="checkbox"/> Yes <input type="checkbox"/> 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 Coheco Rivers; or a marine water? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	If yes, was the applicant authorized to discharge from the facility under the 2009 HYDROGP? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No Documentation of consultation attached? <input type="checkbox"/> Yes <input type="checkbox"/> No

### F. National Historic Properties Act Eligibility

1. Indicate under which criterion the discharge(s) is eligible for covered under the HYDROGP:
<input type="checkbox"/> <b>Criterion A:</b> No historic properties are present.
<input checked="" type="checkbox"/> <b>Criterion B:</b> Historic properties are present. The discharges and related activities do not have the potential to impact historic properties. <b>(FERC Project 4451)</b>
<input type="checkbox"/> <b>Criterion C:</b> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No

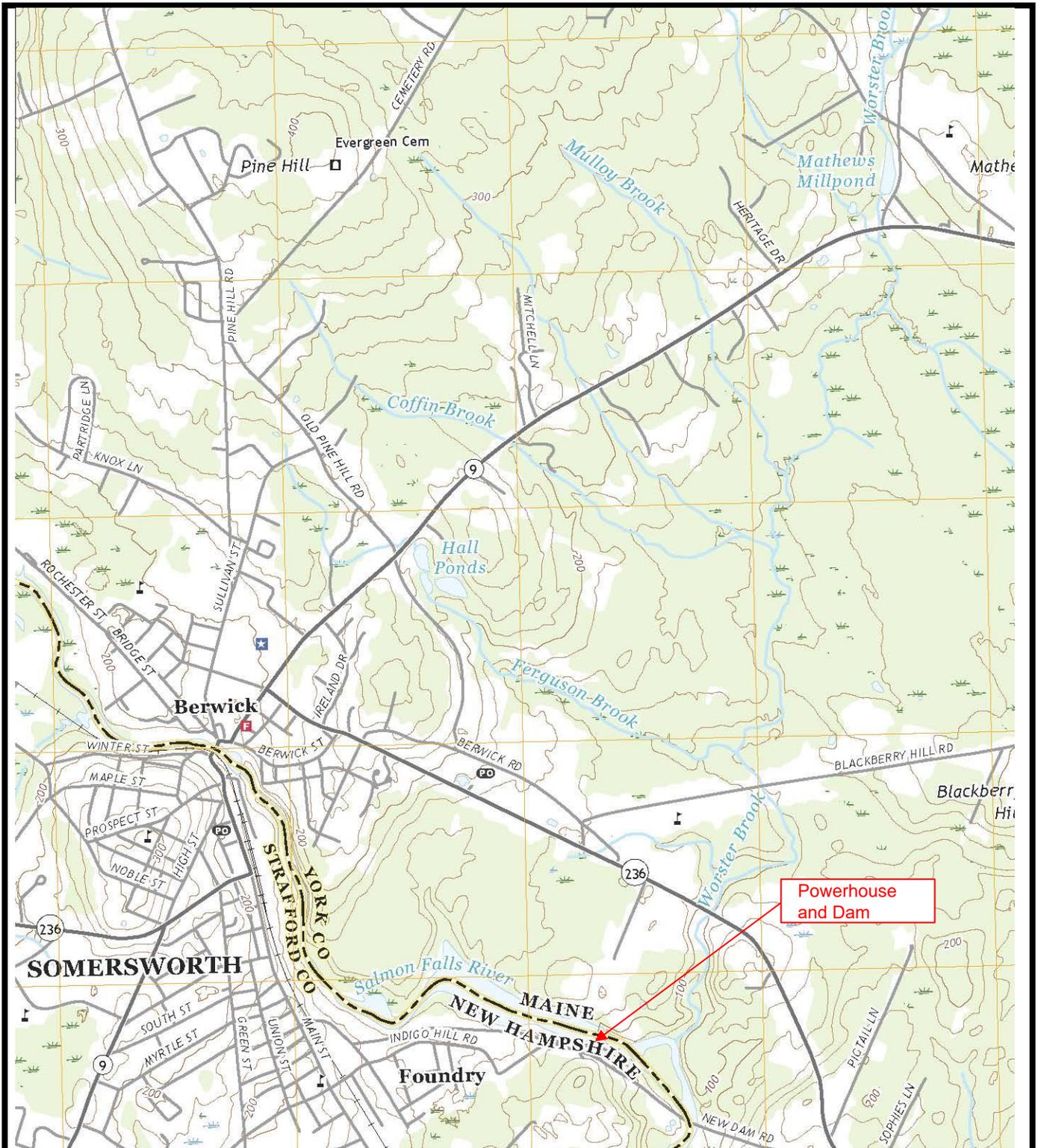
### G. Supplemental Information

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? <input type="checkbox"/> Yes <input type="checkbox"/> No
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**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>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.</i>	
2. Notification provided to the appropriate State, including a copy of this NOI, if required?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Signature: 	Date: 6/14/2023
Print Name and Title: Jason Lisai, Director Generation & Relay Operations	

# Attachment 1. Site Location Map, Lower Great Falls (Somersworth) Hydroelectric Project



Source: USGS Somersworth, NH-ME Quadrangle, 2018



34 School Street  
 Littleton, NH 03561  
 Phone: 603.444.4111 – Fax 603.444.1343

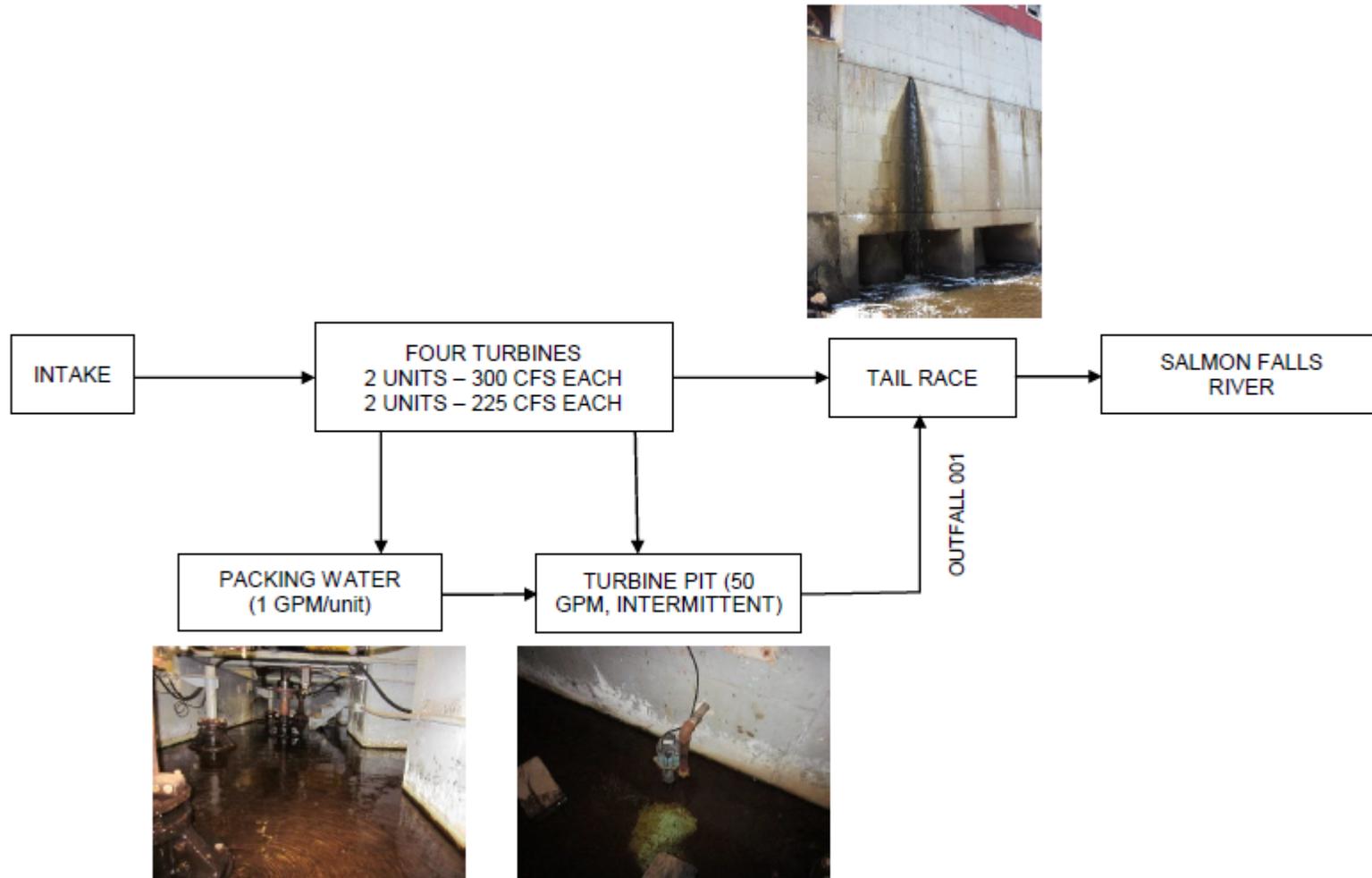
## Attachment 1 - Site Location Map

Lower Great Falls Hydroelectric Project  
 (FERC #P-3777)

SOMERSWORTH, NH

PROJECT #:	16092
ENGIN'D BY:	BHC
DRAWN BY:	BHC
DATE:	FEB 2019

## Attachment 2. Line Drawing, Lower Great Falls (Somersworth) Hydroelectric Project



Attachment 3. New Hampshire Watershed Report Card/Watershed 305(b)  
Assessment Summary Report

**Each Watershed Report Card covers a single 12-digit Hydrologic Unit Code (HUC12), on average a 34 square mile area. Each Watershed Report Card has three components;**

1. REPORT CARD - A one page card that summarizes the overall use support for Aquatic Life Integrity, Primary Contact (i.e. Swimming), and Secondary Contact (i.e. Boating) Designated Uses on every Assessment Unit ID (AUID) within the HUC12.
2. HUC 12 MAP - A map of the watershed with abbreviated labels for each AUID within the HUC12.
3. ASSESSMENT DETAILS - Anywhere from one to forty pages with the detailed assessment information for each and every AUID in the Report Card and Map.

**How are the Surface Water Quality Assessment determinations made?**

All readily available data with reliable Quality Assurance/Quality Control is used in the biennial surface water quality assessments. For a full understanding of how the Surface Water Quality Standards (Env-Wq 1700) are translated into surface water quality assessments we urge the reader to review the 2020/2022 [Consolidated Assessment and Listing Methodology](#) (CALM).

**Where can I find more advanced mapping resources?**

GIS files are available by assessment cycle at the NHDES [FTP site](#).

**I'd like to see the more raw water quality data?**

The [web mapping tool](#) allows you to download the data used in the assessment of the primary contact and aquatic life designated uses by clicking on the “[Data Access Waterbody Data \(Aquatic Life and Swimming Uses\)](#)” link for any assessment unit.

**How are assessments coded in the report card?**

Assessment outcomes are displayed on a color scale as well as an alpha numeric scale that provides additional distinctions for the designated use and parameter level assessments as outlined in the table below.

	Severe	Poor	Likely Bad	No Data	Likely Good	Marginal	Good
	Not Supporting, Severe	Not Supporting, Marginal	Insufficient Information – Potentially Not Supporting	No Data	Insufficient Information – Potentially Full Supporting	Full Support, Marginal	Full Support, Good
CATEGORY	Description						
Category 2	Meets standards					2-M or 2-OBS	2-G
Category 3	Insufficient Information		3-PNS	3-ND	3-PAS		
Category 4	Does not Meet Standards;						
4A	TMDL* Completed	4A-P	4A-M or 4A-T				
4B	Other enforceable measure will correct the issue.	4B-P	4B-M or 4B-T				
4C	Non-pollutant (i.e. exotic weeds)	4C-P	4C-M				
Category 5	TMDL* Needed	5-P	5-M or 5-T				

\* [TMDL](#) stands for Total Maximum Daily Load studies

# Watershed 305(b) Assessment Summary Report:

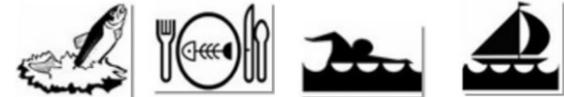
Assessment Cycle: 2020/2022

HUC 12: 010600030406

HUC 12 Name: Lower Salmon Falls River

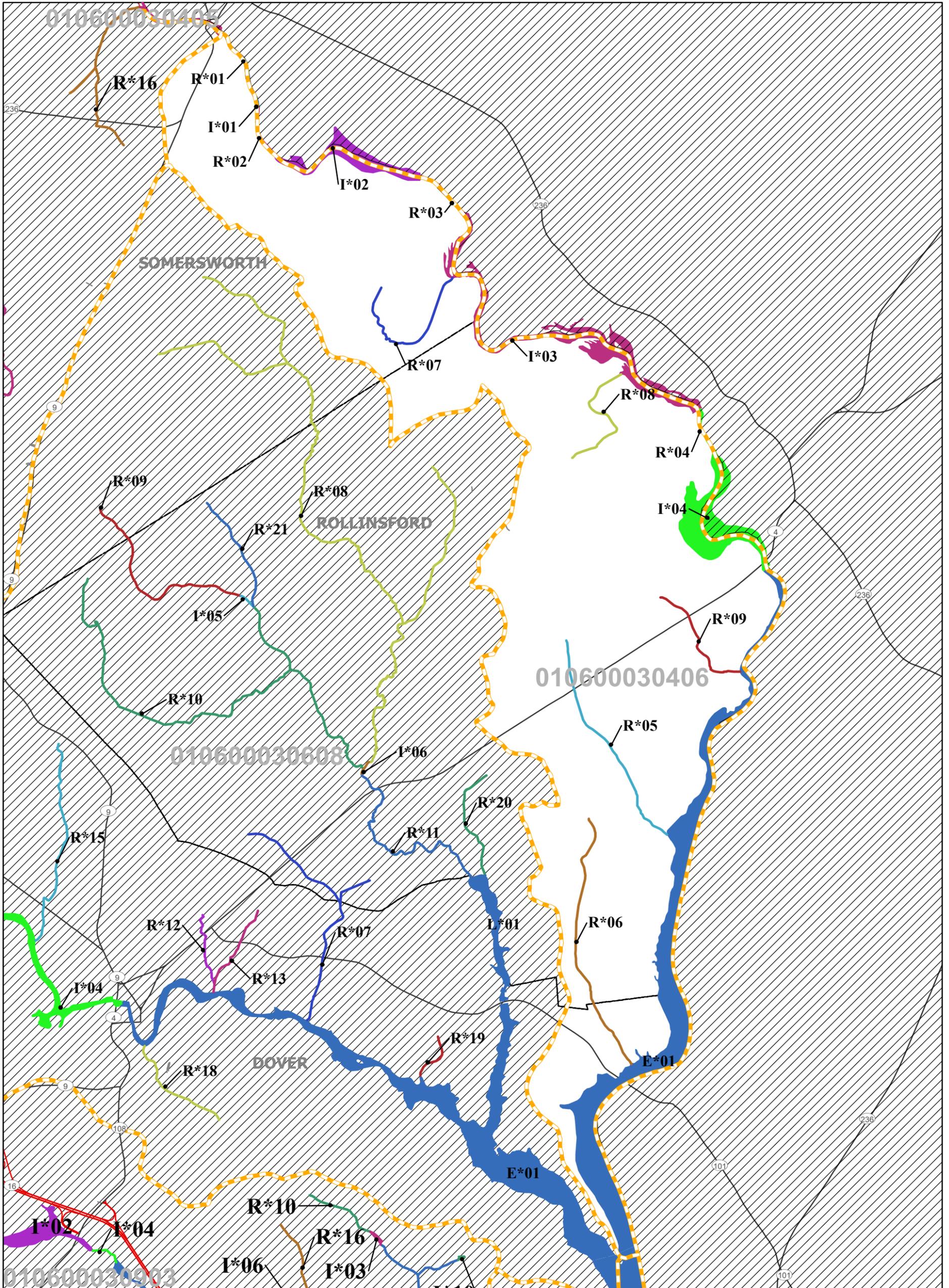
(Locator map on next page only applies to this HUC12)

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
NHEST600030406-01	E*01	Salmon Falls River		5-M	5-P	3-ND
NHIMP600030406-01	I*01	Salmon Falls River - Salmon Falls River Dam li	3-ND	4A-M	3-ND	3-ND
NHIMP600030406-02	I*02	Salmon Falls River - Lower Great Falls Dam	4C-P	4A-M	4A-M	3-ND
NHIMP600030406-03	I*03	Salmon Falls River - Rollinsford Dam	5-M	4A-M	3-PAS	3-ND
NHIMP600030406-04	I*04	Salmon Falls River - South Berwick Dam	5-M	4A-M	5-M	3-ND
NHRIV600030406-01	R*01	Salmon Falls River	3-ND	4A-M	3-ND	3-ND
NHRIV600030406-02	R*02	Salmon Falls River	5-M	4A-M	3-ND	3-ND
NHRIV600030406-03	R*03	Salmon Falls River	5-M	4A-M	4A-M	3-ND
NHRIV600030406-04	R*04	Salmon Falls River	4A-M	4A-M	3-ND	3-ND
NHRIV600030406-05	R*05	Sligo Brook	3-ND	4A-M	3-ND	3-ND
NHRIV600030406-06	R*06	Garvin Brook	3-ND	4A-M	3-ND	3-ND
NHRIV600030406-07	R*07	Unnamed Brook	3-ND	4A-M	3-ND	3-ND

NHRIV600030406-08	R*08	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV600030406-09	R*09	Unnamed Brook	3-ND	4A-M	3-ND	3-ND



	HUC12 Boundaries
	Town Boundaries
	Major Roads
	Interstate Highway
	US Highway
	State Highway

<b>Assessment Unit Coloring</b>	4 =
	5 =
	6 =
	7 =
	8 =
	9 =

<b>Assessment Unit Ending with:</b>	
0 =	
1 =	
2 =	
3 =	



<b>Abbrev. Label</b>	<b>HUC 12</b>
L*03	010 700060201
<b>AUID = NH LAK700060201-03</b>	

Assessment Unit IDs are derived from the HUC12 they reside within. The labels have been shortened on this map for presentation purposes. Example: the Label "L\*03" in HUC12 = 010700060201 represents AUID = "NHLAK700060201-03" In rare cases where an AUID extends beyond the boundary of a single HUC12, additional portions of the end of the HUC 12 number have also been replaced.



Scale: 1:28,880

**Assessment Unit ID:** NHIMP600030406-02  
**Assessment Unit Name:** Salmon Falls River - Lower Great Falls Dam  
**Town(s) Primary Town is Listed First:** Somersworth

**Size:** 33 ACRES  
**Assessment Unit Category:** 4A-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	4C-P	ALKALINITY, CARBONATE AS CaCO3	N	1996	1996	3-ND	
		AMMONIA (TOTAL)	N	2018	N/A	3-PAS	
		CHLORIDE	N	2008	N/A	3-ND	
		CHLOROPHYLL-A	N	2018	NLV	2-M	
		DISSOLVED OXYGEN SATURATION	N	2018	2018	3-PAS	
		Non-Native Aquatic Plants	N			4C-P	
		OXYGEN, DISSOLVED		2018	2018	2-M	
		PH		2018	2015	2-M	
		PHOSPHORUS (TOTAL)	N	2018	NLV	3-PNS	
Fish Consumption	4A-M	MERCURY - FISH CONSUMPTION ADVISORY	N			4A-M	
Potential Drinking Water Supply	2-G	ESCHERICHIA COLI	N	2001	2001	3-ND	
		FECAL COLIFORM	N	2001	2001	3-ND	
		SULFATES	N	1995	N/A	3-ND	
Primary Contact Recreation	4A-M	CHLOROPHYLL-A	N	2018	N/A	2-G	
		ESCHERICHIA COLI	N	2001	1997	4A-M	

<b>Good</b> Meets water quality standards/thresholds by a relatively large margin.	<b>Marginal</b> Meets water quality standards/thresholds but only marginally.	<b>Likely Good</b> Limited data available. The data that is available suggests that the parameter is Potentially Attaining Standards (PAS)	<b>No Current Data</b> Insufficient information to make an assessment decision.	<b>Likely Bad</b> Limited data available The data that is available suggests that the parameter is Potentially Not Supporting (PNS) water quality standards.	<b>Poor</b> Not meeting water quality standards/thresholds. The impairment is marginal.	<b>Severe</b> Not meeting water quality standards/thresholds The impairment is more severe and causes poor water quality.
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Secondary Contact Recreation	3-ND	ESCHERICHIA COLI	N	2001	1997	3-ND	
Wildlife	3-ND						

<p><b>Good</b> Meets water quality standards/thresholds by a relatively large margin.</p>	<p><b>Marginal</b> Meets water quality standards/thresholds but only marginally.</p>	<p><b>Likely Good</b> Limited data available. The data that is available suggests that the parameter is Potentially Attaining Standards (PAS)</p>	<p><b>No Current Data</b> Insufficient information to make an assessment decision.</p>	<p><b>Likely Bad</b> Limited data available The data that is available suggests that the parameter is Potentially Not Supporting (PNS) water quality standards.</p>	<p><b>Poor</b> Not meeting water quality standards/thresholds. The impairment is marginal.</p>	<p><b>Severe</b> Not meeting water quality standards/thresholds The impairment is more severe and causes poor water quality.</p>
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## Attachment 4. US Fish and Wildlife Service Official Species List



# 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:  
Project Code: 2023-0091975  
Project Name: Lower Great Falls Hydroelectric Project

June 09, 2023

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

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 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](mailto: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

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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

**Note:** IPaC has provided all available attachments because this project is in multiple field office jurisdictions.

Attachment(s):

- Official Species List
  - USFWS National Wildlife Refuges and Fish Hatcheries
  - Migratory Birds
  - Wetlands
-

## 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

This project's location is within the jurisdiction of multiple offices. However, only one species list document will be provided for all offices. The species and critical habitats in this document reflect the aggregation of those that fall in each of the affiliated office's jurisdiction. Other offices affiliated with the project:

### **Maine Ecological Services Field Office**

P. O. Box A

East Orland, ME 04431

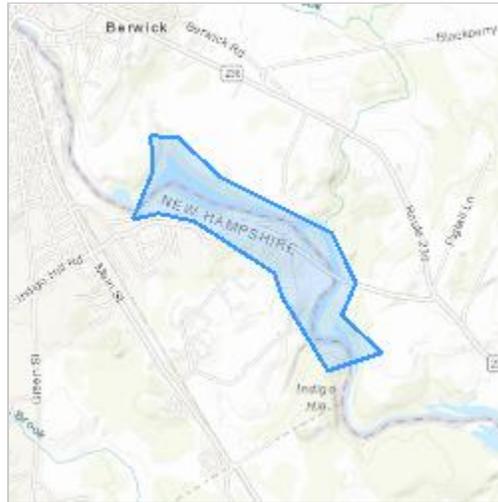
(207) 469-7300

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## PROJECT SUMMARY

Project Code: 2023-0091975  
Project Name: Lower Great Falls Hydroelectric Project  
Project Type: Power Gen - Hydropower - FERC  
Project Description: Hydroelectric generation, FERC licensed.  
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.25255635,-70.84282569880361,14z>



Counties: Maine and New Hampshire

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## ENDANGERED SPECIES ACT SPECIES

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

## MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Endangered

## INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## 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.

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# **USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES**

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

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## MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

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1. The [Migratory Birds Treaty Act](#) of 1918.
  2. The [Bald and Golden Eagle Protection Act](#) of 1940.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

**The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\) list](#) or warrant special attention in your project location.** To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Oct 15 to Aug 31
Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9399">https://ecos.fws.gov/ecp/species/9399</a>	Breeds May 15 to Oct 10

NAME	BREEDING SEASON
<b>Blue-winged Warbler <i>Vermivora pinus</i></b> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 1 to Jun 30
<b>Bobolink <i>Dolichonyx oryzivorus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
<b>Canada Warbler <i>Cardellina canadensis</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
<b>Chimney Swift <i>Chaetura pelagica</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
<b>Eastern Whip-poor-will <i>Antrostomus vociferus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
<b>Golden Eagle <i>Aquila chrysaetos</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1680">https://ecos.fws.gov/ecp/species/1680</a>	Breeds elsewhere
<b>Lesser Yellowlegs <i>Tringa flavipes</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a>	Breeds elsewhere
<b>Prairie Warbler <i>Dendroica discolor</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
<b>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
<b>Ruddy Turnstone <i>Arenaria interpres morinella</i></b> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
<b>Rusty Blackbird <i>Euphagus carolinus</i></b> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
<b>Short-billed Dowitcher <i>Limnodromus griseus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9480">https://ecos.fws.gov/ecp/species/9480</a>	Breeds elsewhere

NAME	BREEDING SEASON
Willet <i>Tringa semipalmata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 5
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

## PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

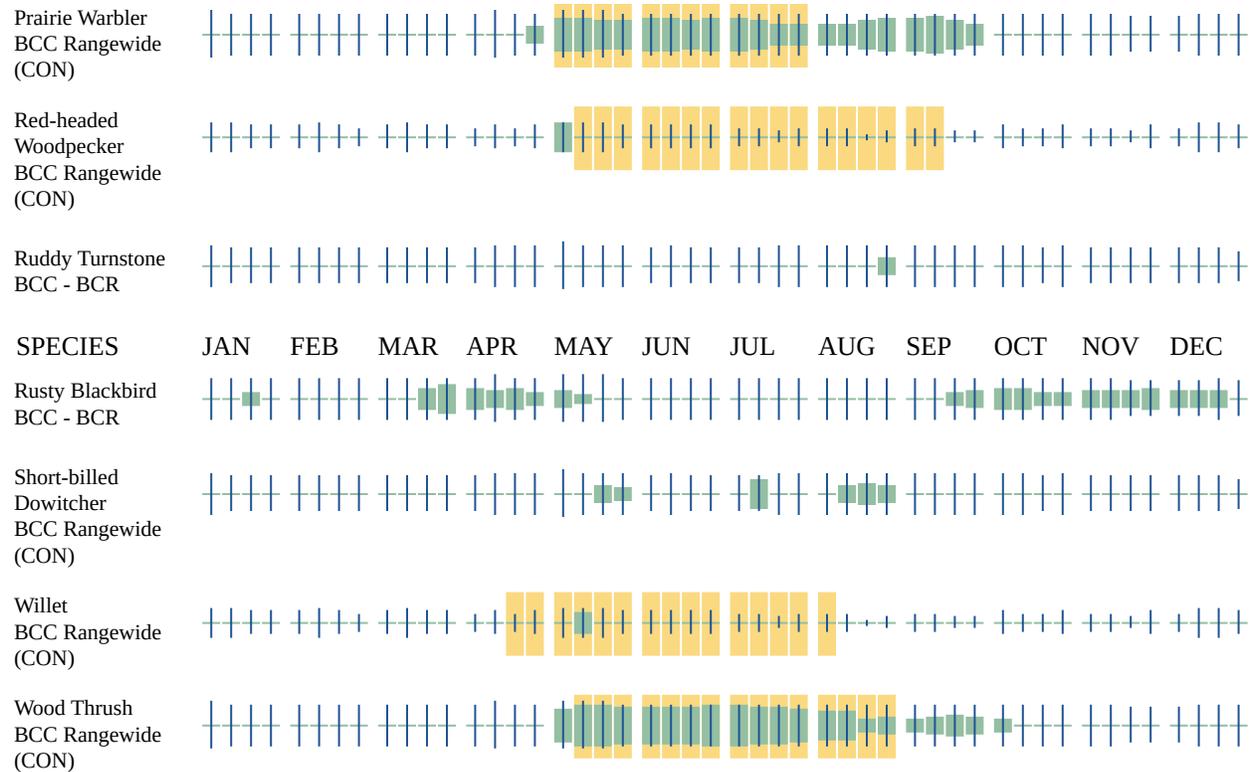
How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.





Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

## MIGRATORY BIRDS FAQ

**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
  2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
  3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles)
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potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### **What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

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## WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED.  
PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

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## **IPAC USER CONTACT INFORMATION**

Agency: Private Entity  
Name: Beth Eliason  
Address: 40 IDX Drive, Bldg 100, Ste 200  
City: South Burlington  
State: VT  
Zip: 05403  
Email: beliason@vhb.com  
Phone: 8024976126

## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Environmental Protection Agency

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