

**LIHI Mid Term Review Application
Gorham Project**

1. Introduction

Date of submittal to LIHI	Mar 10, 2026
Project Name, LIHI #, FERC No.	Gorham, LIHI #153, FERC No. 2288
Current LIHI Term	March 29, 2019 – March 28, 2029
Effective date of the material change(s)	September 8, 2025
Material change(s) that occurred	New FERC license

- a. The Gorham Project received a new FERC license on September 8, 2025.

E Library Link https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20250908-3036&optimized=false&sid=ce931024-b222-4bfb-bc42-ff1d132304f0

Appendix A provides a “crosswalk” table comparing the prior and new FERC license requirements.

2. Standards Selection

The table below indicates standards selected for each LIHI criterion based on the new license. Entries in red differ from the numbered standards that were determined to be applicable in the last LIHI recertification review report¹ due to the new license. Changes in the facility, its operations, and standards selected as a result of the new license are discussed in Section 3.

The Gorham Project has no significant changes to operations or new license requirements that would substantially affect project resources; therefore, the proposed standards remain unchanged since the 2019 LIHI review.

Zone:		1: Impoundment	2: Bypassed Reach	3. Headrace, Tailrace, Downstream Reach
River Mile at upper and lower extent of Zone:				
Criterion		Standard Selected		
A	Ecological Flow Regimes	2	2	2
B	Water Quality	2	2	2
C	Upstream Fish Passage	1	1	1
D	Downstream Fish Passage	2	2	1
E	Shoreline and Watershed Protection	2	2	2
F	Threatened and Endangered Species	1	1	1
G	Cultural and Historic Resources	2	2	2
H	Recreational Resources	2	2	2

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3. Discussion and Supporting Documentation

A. Ecological Flow Regimes

No changes were made to the flow regime at the Gorham project following the new license. The Project continues to operate in a run-of-river mode, where outflows approximate inflows, and provide a 200 cfs minimum flow into the bypassed reach (the north side of the river opposite the power canal) at all times. This flow is provided over a modified flashboard panel on the west side of the dam. This minimum flow requirement is maintained by keeping the headpond elevation at 96.75 feet MSL, which is monitored and recorded (along with minimum flows) at the dispatch center. During refilling of the impoundment, the Owner is required to release Aquatic Base Flows (ABF) or 90 percent of inflow, whichever is less, into the tailrace to protect aquatic resources downstream. Per Article 402 and Condition E-9 of the WQC, the Licensee must develop an Operations Compliance Monitoring Plan within 120 days of the new license.

CRP proposed to modify drawdown rate from 6 inches per day to 2 feet per day in the OCMP. The drawdown rate will remain at 6 inches per day. NHDES agreed on an adaptive plan to negotiate the drawdown rate starting at 6 inches.

Bypass Reach flow Study Results

CRP originally proposed establishing transects at in each bypass, depending on habitat types, including detailed photography and video at each bypass reach, and drone flyovers to capture high resolution photographs and video for documentation, but due to safety considerations as well as the need to gather preliminary information, after consulting with NHDES, CRP focused on drone aerial photography combined with analyses of applicable existing modeling data during 2020.

CRP conducted a Bypass Reach Aquatic Habitat Study in November 2020. Data was collected via an aerial drone survey, in November 2020, with flow in each bypass reach held as close as possible to current minimum flows. The pilot and biologist monitored the controller video screen view as the drone moved. For each section the pilot and biologist noted the mesohabitat types, dominant substrates, cover types, and cover quality based on direct observation and professional judgement. Substrate in the reach is predominantly medium and large sized boulder although there are bedrock outcrops and occasional gravel patches. Object cover is limited to scattered boulders, and deeper sections of pools. Mesohabitats include a large pool at the toe of the spillway, a boulder riffle terminating in a riverine pool backwatered by the pool outlet downstream from the tailrace at the confluence with the Peabody River.

The Gorham bypass reach is in an area with safe public access where angling can occur. The reach was the subject of an IFIM model specifically designed to assess flows that promote a self-sustaining trout fishery. The current minimum flow in that reach targets trout habitat requirements, from agency recommendations based on study results. Fish occupying these reaches can also be recruited from contiguous downstream river reaches and nearby tributaries such as the Peabody River. The river channel is fully wetted and mesohabitats are interconnected at the existing minimum flow.

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B. Water Quality

There are no significant changes in water quality requirements under the new license, as the Gorham Project continues to meet the Surface Water Quality Standards as described under Condition E-1 of the WQC. If the Surface Water Quality Standards are no longer met, and NHDES determines that the Upper Gorham Project is contributing to the violation on the Water Quality Standards, the Licensee must provide a Water Quality Improvement Plan with 120 days of notice from the NHDES, per condition E-10 and E-11 of the WQC. The purpose of the plan would be to restore the surface waters to meet Surface Water Quality Standards, in accordance with Env-Wq 1703.01(b), for parameters that are influenced by the Gorham Project.

Water Quality Certificate

E Library Link

https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20240919-5067&optimized=false&sid=1b683f18-7c7c-46fc-bf6f-f2d0bd45525a

Water Quality Study Results

CRP completed a water quality study between June 29 and September 24, 2020, monitoring ten sites throughout the Smith and Gorham Projects. A water quality study was also completed at six GLHA NH Projects located in the same 11-mile reach of the Androscoggin River as the CRP Projects. Continuous monitoring of the DO concentration, DO percent saturation, water temperature, and pH was completed at 10 sites for 10 to 12 weeks. This study revealed that both projects remained above the Class B Water Quality Standards.

Two types of monitoring were conducted, Riverine and Impoundment monitoring. Riverine monitoring continuously monitored DO concentration, water temperature, and pH at 15-minute intervals for 10 to 12 weeks depending on date of installation. Impoundment monitoring began with vertical profile of DO and water temperature at the deep spot in the Gorham impoundment to determine the depth to install the DO, water temperature, and pH data sondes. Based on the vertical profile, the deep spot was not stratified; the data sondes were installed approximately 1-meter (m) below the surface. The data sondes were attached to an anchored buoy which also marked the location of site for the remainder of the monitoring season. CRP continuously monitored DO concentration, water temperature, and pH with Onset HOB0 U-26 and MX-2501 data sondes at 15-minute intervals between the date of installation and September 23 or 24, 2020. Water samples were collected to analyze total Kjeldahl nitrogen (TKN), nitrite + nitrate nitrogen, total phosphorus, and chlorophyll-a at Site 10 Smith Impoundment and Site 23 Gorham Impoundment once per week for 10 weeks. During each sampling event, the vertical profile measurements indicated that the deep spot in the impoundment was not thermally stratified.

Throughout the entire monitoring period, the DO concentration and daily average DO percent saturation were above the Class B water quality standards (5.0 mg/L and 75 percent saturation) at all 10 monitoring sites. pH was within the limits of the Class B standard (6.5 to 8.0) throughout the entire monitoring period at 4 sites. At the other 6 sites, pH was in attainment with the standard between 90.6 percent and 99.8 percent of the time. pH was primarily below 6.5 during times of cooler water

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temperatures and higher flows following rain events. Some minor variations in DO and pH were observed during short-term maintenance work; both parameters remained above the Class B standards. Normal operations did not have an adverse impact on water quality.

The median chlorophyll-a and total phosphorus concentrations were in attainment with the Class B standards for oligotrophic or mesotrophic waters. The low chlorophyll-a and nutrient concentrations and the good water clarity indicate the Androscoggin River in the project areas has low productivity and is not influenced by algal blooms.

C. Upstream Fish Passage

There is no upstream migratory fish passage at the Upper Gorham Project as there are no anadromous fish present at the project. Article 403 of the license reserves the Commission's authority to require fishways that may be prescribed by Secretary of the Interior pursuant to section 18 of the Federal Power Act for the Gorham Project.

Study Results

No fish passage studies were conducted.

D. Downstream Fish Passage and Protection

There is no downstream migratory fish passage at the Gorham Project as there are no catadromous fish present at the project. Article 403 of the license reserves the Commission's authority to require fishways that may be prescribed by Secretary of the Interior pursuant to section 18 of the Federal Power Act for the Gorham Project.

Study Results

CRP evaluated entrainment risk, impingement risk, and the potential for turbine passage survival of juvenile and adult life stages of stocked trout, fallfish, smallmouth bass, white sucker, and longnose dace. This combination of species and life stages represents a range of game species, nongame species, and native species that may be affected by project operations.

Turbine passage survival estimates were made for those species and life stages that were found to be at risk (i.e., could physically fit through the trash racks and with swim speeds less than calculated approach velocities). Turbine passage survival estimates were derived from the USFWS' Turbine Blade Strike Analysis model (Towler and Pica 2020) to assess turbine passage survival for those species or life stages classified as at risk (i.e., in instances where swim speeds were less than calculated approach velocities). The model was run 5 times for each scenario to arrive at a range of survival estimates.

The risk of impingement and entrainment of fish at the Smith and Gorham hydropower projects is low.

This is a result of several factors including:

- The lack of quality aquatic habitat in the power canals, which minimizes the likelihood that fish will encounter the intake areas.
- The industrial nature and developmental history of the Project area, which has resulted in limited

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fisheries management in the 11-mile-long reach of the Androscoggin River between the Sawmill Project and the Shelburne Project.

- Low water velocities in front of the intake racks at the Gorham Project (e.g., 2 fps or less) and the ability of fish to swim away from the racks.
- The absence of migratory fish that require downstream passage which would be more at risk of entrainment as compared to resident fish species; the natural range of migratory, anadromous fish does not extend to the upper Androscoggin River.

E. Shoreline and Watershed Protection

Article 408 of the License required a Shoreline Management Plan, which FERC approved on April 19, 1999. The Plan was prepared in consultation with the Town of Gorham, New Hampshire Fish and Game Department, and the National Park Service, and requires practices for managing vegetation, maintaining aesthetics and submitting annual shoreline inspection reports. The new license does not require a shoreline management plan.

The Shoreline Management Plan states that the licensee only owns 35% of the area within the Project boundary. The LIHI requirement states that the plan must protect 50% or more of the undeveloped shoreline that the facility owns, so the buffer zone applies only to that portion. FERC noted that the licensee should not be required to acquire the 150-foot buffer around the entire reservoir in order to comply.) The Owner visually inspects the shoreline annually and files a report with FERC to determine whether any violations of the SWQPA have occurred. None have been recorded.

Study Results

No studies were conducted. CRP NH Gorham, LLC conducts annual inspections of the shoreland to assess compliance with the SWQPA and whether any changes to the SWQPA impact the Gorham Project. The annual shoreland inspections have not identified any violations of the SWQPA.

F. Threatened and Endangered Species Protection

Based on FWS's Information for Planning and Consultation (IPaC) website, the federally endangered northern long-eared bat, the federally threatened Canada lynx, the federally proposed endangered tricolored bat, and the federally proposed threatened Monarch Butterfly have the potential to occur within the project boundary. There is no proposed or designated critical habitat for either bat species, the Canada lynx, or monarch butterfly in the project area.

Article 404 of the new FERC license implements protection for the endangered bat species the northern long-eared bats and proposed threatened species the tricolored bat. The Licensee must avoid removing trees of any size on project land from April 15 through October 31, unless emergency tree removal for public safety is necessary. If emergency tree removal is required, the Licensee shall notify the NHFWD and USFWS as soon as it is practicable following the tree removal.

Attached are Appendix A and Appendix C from the FLA. List of potential species.

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Study Results

CRP conducted a reconnaissance level survey to document botanical communities and rare, threatened, and endangered (RTE) botanical species in the Smith and Gorham Projects study areas during the September 2020.

Within the study area there are 12 habitat communities that occur. With the exception of the Developed area (31 percent of the study area) and Open Space (19 percent), the Sugar Maple-Beech-Yellow Birch Forest is the dominant community (12 percent of the study area). Wetlands are rare within the Project boundary and account for less than one percent of the overall study area. A total of 157 plant species were documented across the 12 communities. No federal or state threatened or endangered species were observed during the 2020 field survey.

Biodiversity LLC conducted a freshwater mussel survey in Androscoggin River in Berlin and Gorham, New Hampshire, in areas influenced by the J. Brodie Smith and Gorham Hydroelectric Projects. This study occurred between August 26- September 4, 2021. For the Gorham Project, the study area included the ~0.9mile (1,400 meter) impoundment, the 250-meter bypass reach, and tailrace.

Only two mussel species were detected during the surveys, including Eastern Elliptio that is common and widespread in New Hampshire, and Triangle Floater that is widespread in New Hampshire's rivers but usually not common. No state-listed species were detected. Two Triangle Floater were found in the Gorham impoundment, and none were found in the bypass reaches or tailraces of either project. Both of the impoundments appear to provide suitable habitat for these two species. The bypass reaches of both projects provide poor mussel habitat due to a combination of strong flows, shallow depth, and coarse rocky substrates. The tailraces of both projects contain deep, hydraulically stable areas with finer substrates (gravel and small cobble) that are occupied by Eastern Elliptio.

G. Cultural and Historic Resource Protection

Article 406 of the new license requires the Licensee to implement a Programmatic Agreement between FERC and the New Hampshire State Historic Preservation Office for Managing Historic Properties. Pursuant to the Programmatic Agreement executed on December 12, 2024, the Licensee must develop an HPMP with 1-year within license issuance, as such the HPMP is currently under development and should be complete by September 2026. The HPMP will contain a (1) a description of each historic property; (2) a description of the potential effect on each historic property; (3) proposed measures for avoiding or mitigating adverse effects; and (4) documentation of the nature and extent of consultation; and (5) a schedule for implementing mitigation.

Study Results

In FERC's study request from November 25, 2019, they requested that CRP NH Gorham, LLC conduct a historic architectural survey of the Gorham Dam. Harvey Research and Consulting reviewed all components of the project that are 50 years or older and evaluated them for eligibility on the National Register and, if eligible, assessed them for project-related effects so that the nature and extent of potential project effects and measures to avoid, lessen, or mitigate adverse effects can be properly determined. CRP NH Gorham, LLC surveyed the structures in the area of potential effect (APE) of the

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Project, in consultation with the New Hampshire State Historic Preservation Office (New Hampshire SHPO).

In accordance with the RSP, Harvey Research and Consulting completed a desktop review in 2020 to document the presence of historical structures and completed the historic architectural survey in September 2020 (CRP 2021). They concluded that the Project is not recommended for eligibility for the National Register.

A. National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA), as amended, requires FERC to consider the effect of its undertakings on historic properties. Historic properties are any prehistoric or historic districts, sites, buildings, structures, Traditional Cultural Properties (TCPs), and objects significant in American history, architecture, engineering, and culture that are eligible for inclusion in the National Register of Historic Places (NRHP). Section 106 of the NHPA is implemented through the Advisory Council on Historic Preservation (Council regulations "Protection of Historic Properties" (36 CFR Part 800). On September 19, 2019, FERC granted CRP NH Gorham, LLC designation as the FERC's non-federal representative for carrying out consultation with the State Historic Preservation Officer, as required by section 106, National Historic Preservation Act, and the implementing regulations of the Advisory Council on Historic Preservation at 36 CFR 800.2.

B. Tribal Consultation

There are no Native American lands, known Native American TCPs or religious properties, or NRHP-eligible or -listed sites associated with Native American Nations within the Project boundary or which would likely be affected by the proposed relicensing. No federally recognized Tribes having an interest in the project area at the county level were identified by Commission staff using the Tribal Directory Assessment Tool.

H. Recreational Resources

Project Boundary:

The current project boundary encloses an area of about 80.19 acres. CRP proposed to modify the project boundary to remove 4.27 acres of land adjacent to the Route 2 access road. The proposed project boundary would enclose 75.92 acres.

CRP proposed making improvements to the existing canoe portage and developing a new parking area. The Town of Gorham obtained a grant for the access improvements in 2022 and is responsible for maintenance of the parking and hand carry access (including a seasonal dock). Since these areas are located on a town owned parcel, the parking area is not proposed to be included in the Gorham project boundary. CRP NH will continue to maintain the existing recreational parking adjacent to Route 2, which is within the project boundary.

Article 405 states the licensee must continue to operate and maintain, or provide for the operation and maintenance, of the following recreation facilities for the term of the license:

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- 1.) the canoe portage with a take-out and put-in and directional signage
- 2.) the informational kiosk located on the north shore of the impoundment containing maps and other recreation information
- 3.) the informational signage located at the Route 2 entrance to the project and on Hogan Road
- 4.) the approximately 20-foot by 60-foot gravel parking area accessible located off Route 2.

Study Results

The previous Licensee filed a recreation use report with FERC every five years for the Gorham Project (FERC 1995). Annual recreation use information was obtained from observations made by project operators who recorded the number of people recreating at the project during each visit to the facility and from self-reporting surveys available at the two information kiosks (FERC 1995). FERC approved and modified the 1995 Recreation Plan by Order dated May 1, 1995, requiring a self-registration survey system to supplement operator observation data that would only be collected during weekdays. The self-registration monitoring component was approved by FERC on November 14, 1995, which includes providing a Recreation Survey sheet at two kiosks, which tracks the visitor's date and time of arrival, residence, estimated monetary spending this visit, recreation activities in which the visitor took part, and questions adequacy of the facilities for use by the physically challenged.

CRP conducted recreation user intercept surveys on 6 to 8 days each month from May 15 to September 15, 2022, at SPP and Gorham and the other sites. On each survey day, two clerks conducted surveys at two sites over four-hour shifts. The survey was designed to collect information on user characteristics (place of residency, age, group size), frequency of visits, recreation activities, and perceptions of the level of use, condition of amenities, number and type of available amenities, and the need for improvements to river access.

At Gorham, 8 surveys were completed with a response rate of 62 percent. The most surveys were conducted at the AT/Mahoosuc Trail (32), followed by 23 surveys at Community Field, 16 at Reflection Pond, and 15 at Rotary Park. Overall, most survey respondents rated the crowdedness of the site as light; responded that the site was in satisfactory, good, or excellent condition; and were satisfied with the available number and type of facilities. Parking at the Gorham Project was well under capacity.

Existing LIHI Conditions

If the Facility Owner completes water quality studies during the certification term, results shall be provided to LIHI in annual compliance submittals along with NHDES approval of results. LIHI reserves the right to modify or revoke the certification if the water quality results demonstrate that the Project contributes adversely to water quality standards.

Status: Partially satisfied in 2021. See WQ study results and link to WQ certificate.

B.3 Attestation and Waiver Form

All applications for LIHI Certification must include the following statement before they can be reviewed by LIHI:

ATTESTATION

As an Authorized Representative of
CRP- NH Gorham

the Undersigned attests that the material presented in the application is true and complete.

The Undersigned acknowledges that the primary goal of the Low Impact Hydropower Institute's certification program is public benefit, and that the LIHI Governing Board and its agents are not responsible for financial or other private consequences of its certification decisions.

The Undersigned further acknowledges that if LIHI Certification of the applying facility is granted, the LIHI Certification Mark License Agreement must be executed prior to the final certification decision and prior to marketing the electricity product as LIHI Certified® (which includes selling RECs in a market that requires LIHI Certification).

The Undersigned further agrees to hold the Low Impact Hydropower Institute, the Governing Board, and its agents harmless for any decision rendered on this or other applications, from any consequences of disclosing or publishing any submitted certification application materials to the public, or on any other action pursuant to the Low Impact Hydropower Institute's certification program.

FOR PRE-OPERATIONAL CERTIFICATIONS:

The Undersigned acknowledges that LIHI may suspend or revoke the LIHI Certification should the impacts of the facility, once operational, fail to comply with the LIHI program requirements.

Authorized Representative:

Name: John Robichaud

Title: Asset Manager

Authorized Signature: *John Robichaud*

Date: Click or tap to enter a date. 3/10/2026

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5. Contacts Forms

Applicant-related contacts

Facility Owner:	
Name and Title	Johnathan Robichaud- Asset Manager
Company	LS Power/CRP NH Gorham LLC
Phone	(603) 617-6165
Email Address	jrobichaud@lspower.com
Mailing Address	670 N. Commercial Street Suite 204, Manchester, NH 03101
Facility Operator (if different from Owner):	
Name and Title	Shawn Gregg- Operations Manager- New England
Company	Patriot Hydro/CRP NH- Gorham
Phone	603-731-9984
Email Address	sgregg@patriohydro.com
Mailing Address	670 N. Commercial Street Suite 204, Manchester, NH 03101
Consulting Firm / Agent for LIHI Program (if different from above):	
Name and Title	Any Qua- Principal Consultant/Regulatory Advisor
Company	Kleinschmidt Associates
Phone	207-416-1246
Email Address	andy.qua@kleinschmidtgroup.com
Compliance Contact	Compliance Contact (responsible for LIHI Program requirements):
Name and Title	Kevin Webb- Licensing Manager
Company	Patriot Hydro/CRP NH- Gorham
Phone	(978) 935-6039
Email Address	kwebb@patriohydro.com
Mailing Address	670 N. Commercial Street Suite 204, Manchester, NH 03101
Compliance Contact	
Name and Title	Miley Kinney- Associate Compliance Specialist
Company	Patriot Hydro/CRP NH-Gorham
Phone	603-732-8162
Email Address	mkinney@patriohydro.com
Mailing Address	670 N. Commercial Street Suite 204, Manchester, NH 03101
Party responsible for accounts payable:	
Name and Title	Stacey Blair- AP & Procurement Manager
Company	Patriot Hydro/CRP NH-Gorham
Phone	978-604-0920
Email Address	sblair@patriohydro.com

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Current relevant state, federal, and tribal resource agency contacts.

Contact Name and Agency	Title	Email	Phone	Resource Area(s) of Interest, from the list below
John Spain, FERC	Regional Engineer, D2SI NY Region	john.spain@FERC.gov	212-273-5954	A, B, C, D, E, F
Harold Peterson, U.S. Bureau of Indian Affairs	Natural Resources Officer	Harold.Peterson@bia.gov		G
Mel Cote, U.S. EPA	Surface Water Branch Chief	cote.mel@epa.gov		B
Dave Simmons, USFWS	Hydropower Program Coordinator	david_simmons@fws.gov		C, D, F
Tom Chapman, USFWS	Supervisor, New England Field Office	Tom.chapman@fws.gov		C, D, F

Resource Areas (LIHI Criteria):

- A.** Flow regimes
- B.** Water quality
- C.** Upstream fish passage
- D.** Downstream fish passage and protection
- E.** Shorelines and watershed
- F.** Threatened and endangered species
- G.** Cultural and historic resources
- H.** Recreation

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Contact Name and Agency	Title	Email	Phone	Resource Area(s) of Interest, from the list below
Benjamin German, NOAA	Marine Resources Management Specialist and Hydropower Coordinator	benjamin.german@noaa.gov	978-281-9353	C, D
Mark Prout, U.S. Forest Service	Forest Fish Biologist	mprout@fs.fed.us		C, D, E
Catherine Brown, U.S. National Park Service	Hydro Program Coordinator	catherine_brown@nps.gov		H
Steve Couture, New Hampshire Coastal Zone Management	Coastal Program Administrator	steven.couture@des.nh.gov		A, E
Rene Pelletier, NHDES	Director, Water Division	Rene.pelletier@des.nh.gov	603-271-0677	A, B, C, D, E
Diane Timmins, NH Department of Fish and Game	Fisheries Biologist, Region 1	Dianne.Timmins@Wildlife.nh.gov		A, B, C, D, E

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Contact Name and Agency	Title	Email	Phone	Resource Area(s) of Interest, from the list below
Nadine Miller, New Hampshire Department of Natural and Cultural Resources	Deputy State Historic Preservation Officer	Nadine.Miller@dcr.nh.gov	603-271-6628	G
Benjamin Wilson, New Hampshire Department of Natural and Cultural Resources	Director and State Historic Preservation Officer	benjamin.h.wilson@dncr.nh.gov	603-271-8850	G
Sabrina Stanwood, New Hampshire Department of Natural and Cultural Resources	Administrator, Natural Heritage Bureau	Sabrina.stanwood@dncr.nh.gov	603-892-8824	G

Resource Areas (LIHI Criteria):

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Contact Name and Tribal Affiliation	Title	Email	Phone	Resource Area(s) of Interest, from the list below
Rhonda Besaw Abenaki Nation of New Hampshire	Speaker	AbenakiNationofNH@gmail.com	603-837-3381	All resources may be of interest
Arthur Hanchett Koasek Abenaki Nation	Chief	chiefarthanchett@gmail.com		All resources may be of interest
Paul Pouliot Pennacook New Hampshire Tribe	Council Chief and Speaker	cowasuck@cowasuck.org	603-776-1090	All resources may be of interest

Resource Areas (LIHI Criteria):

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Contact Name and Organization	Title	Email	Phone	Resource Area(s) of Interest, from the list below
Brian Graber, American Rivers	Director Northeast Field Office	bgrab@americanrivers.org		B, C, D
Carol Foss, Audubon Society of New Hampshire	Senior Advisor for Science and Policy			E, F
Kevin Richard Colburn, American Whitewater	National Stewardship Director	kevin@americanwhitewater.org		A, B, H

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Appendix A – FERC License Crosswalk

Resource Area	Topic	Previous License Requirement	Change from Existing License
Ecological Flow Regimes	Drawdown Rate	OCMP- drawdown rate of 6 inches per day.	NHDES agreed on an adaptive plan to negotiate the drawdown rate starting at 6 inches.
Recreational	Project Boundary	The current project boundary encloses an area of about 80.19 acres.	CRP proposed to modify the project boundary to remove 4.27 acres of land adjacent to the Route 2 access road. The proposed project boundary would enclose 75.92 acres.
Threatened and Endangered Species Protection	Northern long-eared bat and tricolored bat	None	Article 404 of new license- To protect the northern long-eared bat and tricolored bat, the license requires CRP to avoid, among other things, removing, destroying, or trimming trees of any size on project land from April 15 through October 31 unless the trees represent a safety hazard.
Shoreline and Watershed Protection	Shoreline Management Plan	Article 408 of the License required a Shoreline Management Plan, which FERC approved on April 19, 1999.	The new license does not require a shoreline management plan. The Owner visually inspects the shoreline annually and files a report with FERC to determine whether any violations of the SWQPA have occurred. None have been recorded.

APPENDIX A
PLANT CENSUS TABLE

Common Name	Scientific Name	Growth Form
Boxelder	<i>Acer negundo</i>	Tree
Striped Maple	<i>Acer pensylvanicum</i>	Tree, Shrub
Norway Maple	<i>Acer platanoides</i>	Tree
Red Maple	<i>Acer rubrum</i>	Tree
Silver Maple	<i>Acer saccharinum</i>	Tree
Sugar Maple	<i>Acer saccharum</i>	Tree
Common Yarrow	<i>Achillea millefolium</i>	Herb
Speckled Alder	<i>Alnus incana</i>	Shrub
Annual Ragweed	<i>Ambrosia artemisiifolia</i>	Herb
Smooth Shadbush	<i>Amelanchier laevis</i>	Shrub
Pearly Everlasting	<i>Anaphalis margaritacea</i>	Perennial Herb
Groundnut	<i>Apios americana</i>	Vine
Indianhemp	<i>Apocynum cannabinum</i>	Herb
Wild Sarsaparilla	<i>Aralia nudicaulis</i>	Perennial Herb
Common Burdock	<i>Arctium minus</i>	Herb
Jack In The Pulpit	<i>Arisaema triphyllum</i>	Perennial Herb
Black Chokeberry	<i>Aronia melanocarpa</i>	Shrub
Common Wormwood	<i>Artemisia vulgaris</i>	Herb
Common Milkweed	<i>Asclepias syriaca</i>	Perennial Herb
Japanese Barberry	<i>Berberis thunbergii</i>	Shrub
Yellow Birch	<i>Betula alleghaniensis</i>	Tree
River Birch	<i>Betula nigra</i>	Tree
Paper Birch	<i>Betula papyrifera</i>	Tree
Gray Birch	<i>Betula populifolia</i>	Tree
Beck's Beggar-Ticks	<i>Bidens beckii</i>	Perennial Herb
Nodding Beggartick	<i>Bidens cernua</i>	Herb
Devil's Beggertick	<i>Bidens frondosa</i>	Annual Herb
Hedge False Bindweed	<i>Calystegia sepium</i>	Vine
Fringed Sedge	<i>Carex crinita</i>	Perennial Graminoid
American Hornbeam	<i>Carpinus caroliniana</i>	Tree
Oriental Bittersweet	<i>Celastrus orbiculatus</i>	Vine
White Turtlehead	<i>Chelone glabra</i>	Perennial Herb
Chicory	<i>Cichorium intybus</i>	Herb

Common Name	Scientific Name	Growth Form
Devil's Darning Needles	<i>Clematis virginiana</i>	Vine
Bluebead Lily	<i>Clintonia borealis</i>	Perennial Herb
Sweet Fern	<i>Comptonia peregrina</i>	Shrub
Threeleaf Goldthread	<i>Coptis trifolia</i>	Herb
Redosier Dogwood	<i>Cornus sericea</i>	Shrub
Beaked Hazelnut	<i>Corylus cornuta</i>	Shrub
Hawthorn	<i>Crataegus sp.</i>	Shrub/Tree
Eastern Hayscented Fern	<i>Dennstaedtia punctilobula</i>	Perennial Herb
Deertongue	<i>Dichantherium clandestinum</i>	Perennial Herb
Northern Bush Honeysuckle	<i>Diervilla lonicera</i>	Shrub
Parasol Whitetop	<i>Doellingeria umbellata</i>	Herb
Mountain Woodfern	<i>Dryopteris campyloptera</i>	Herb
Spinulose Woodfern	<i>Dryopteris carthusiana</i>	Perennial Herb
Three-Way Sedge	<i>Dulichium arundinaceum</i>	Graminoid
Field Horsetail	<i>Equisetum arvense</i>	Perennial Herb
Philadelphia Fleabane	<i>Erigeron philadelphicus</i>	Herb
Burningbush	<i>Euonymus alatus</i>	Shrub
Common Boneset	<i>Eupatorium perfoliatum</i>	Herb
Cypress Spurge	<i>Euphorbia Cyparissias</i>	Perennial Herb
Spotted Joe Pye Weed	<i>Eutrochium maculatum</i>	Herb
American Beech	<i>Fagus gradifolia</i>	Tree
White Ash	<i>Fraxinus americana</i>	Tree
Black Ash	<i>Fraxinus nigra</i>	Tree
Green Ash	<i>Fraxinus pennsylvanica</i>	Tree
Stickywilly	<i>Galium aparine</i>	Herb/Vine
Eastern Teaberry	<i>Gaultheria procumbens</i>	Subshrub
Fowl Mannagrass	<i>Glyceria striata</i>	Perennial Graminoid
American Witch-hazel	<i>Hamamelis virginiana</i>	Shrub
Jerusalem Artichoke	<i>Helianthus tuberosus</i>	Herb
Shining Clubmoss	<i>Huperzia lucidula</i>	Herb
Common St. Johnswort	<i>Hypericum perforatum</i>	Herb
Jewelweed	<i>Impatiens capensis</i>	Annual Herb
Soft Rush	<i>Juncus effusus</i>	Perennial Graminoid

Common Name	Scientific Name	Growth Form
Common Juniper	<i>Juniperus communis</i>	Shrub/Tree
Butter and Eggs	<i>Linaria vulgaris</i>	Herb
Morrow's Honeysuckle	<i>Lonicera morrowii</i>	Shrub
Bird's-Foot Trefoil	<i>Lotus corniculatus</i>	Herb
Running Clubmoss	<i>Lycopodium clavatum</i>	Perennial Herb
Fan Clubmoss	<i>Lycopodium digitatum</i>	Herb
Canada Mayflower	<i>Maianthemum canadense</i>	Perennial Herb
False Solomon's Seal	<i>Maianthemum racemosum</i>	Perennial Herb
Apple/ Crab Apple	<i>Malus spp.</i>	Tree
Ostrich Fern	<i>Matteuccia struthiopteris</i>	Perennial Herb
Indian Cucumber	<i>Medeola virginiana</i>	Perennial Herb
Sweetclover	<i>Melilotus officinalis</i>	Herb
Wild Mint	<i>Mentha arvensis</i>	Herb
Partridgeberry	<i>Mitchella repens</i>	Perennial Herb
True Forget-Me-Not	<i>Myosotis scorpioides</i>	Perennial Herb
White Water Lily	<i>Nymphaea odorata</i>	
Whorled Wood Aster	<i>Oclemena acuminata</i>	Perennial Herb
Common Evening Primrose	<i>Oenothera biennis</i>	Herb
Sensitive Fern	<i>Onoclea sensibilis</i>	Perennial Herb
Interrupted Fern	<i>Osmunda claytoniana</i>	
Royal Fern	<i>Osmunda regalis</i>	Herb
Hophornbeam	<i>Ostrya virginiana</i>	Tree
Northern Wood Sorrel	<i>Oxalis montana</i>	Herb
Virginia Creeper	<i>Parthenocissus quinquefolia</i>	Vine
Reed Canarygrass	<i>Phalaris arundinacea</i>	Graminoid
Red Spruce	<i>Picea rubens</i>	Tree
Canadian Clearweed	<i>Pilea pumila</i>	Annual Herb
Eastern White Pine	<i>Pinus strobus</i>	Tree
Common Plantain	<i>Plantago major</i>	Perennial Herb
Hairy Solomon's Seal	<i>Polygonatum pubescens</i>	Perennial Herb
Japanese Knotweed	<i>Polygonum cuspidatum</i>	Herb
Arrowleaf Tearthumb	<i>Polygonum sagittatum</i>	Vine
Bigtooth Aspen	<i>Populus grandidentata</i>	Tree

Common Name	Scientific Name	Growth Form
Quaking Aspen	<i>Populus tremuloides</i>	Tree
Common Cinquefoil	<i>Potentilla simplex</i>	Perennial Herb
Tall Rattlesnakeroot	<i>Prenanthes altissima</i>	Perennial Herb
Black Cherry	<i>Prunus serotina</i>	Tree
Western Bracken fern	<i>Pteridium aquilinum</i>	Perennial Herb
Northern Red Oak	<i>Quercus rubra</i>	Tree
Greater Creeping Spearwort	<i>Ranunculus flammula</i>	Herb
Staghorn Sumac	<i>Rhus typhina</i>	Shrub
Prickly Currant	<i>Ribes lacustre</i>	Shrub
Black Locust	<i>Robinia pseudoacacia</i>	Tree
Multiflora Rose	<i>Rosa multiflora</i>	Shrub
Allegheny Blackberry	<i>Rubus allegheniensis</i>	Subshrub
Bristly Dewberry	<i>Rubus hispida</i>	Perennial Subshrub
Blackeyed Susan	<i>Rudbeckia hirta</i>	Herb
Curly Dock	<i>Rumex crispus</i>	Herb
Black Willow	<i>Salix nigra</i>	Tree
Black Elderberry	<i>Sambucus nigra</i>	Shrub
Woolgrass	<i>Scirpus cyperinus</i>	Graminoid
Crownvetch	<i>Securigera varia</i>	Herb
Bittersweet Nightshade	<i>Solanum dulcamara</i>	Herb/Vine
Sharp-Leaved Goldenrod	<i>Solidago arguta</i>	Perennial Herb
Downy Goldenrod	<i>Solidago puberula</i>	Perennial Herb
Goldenrod	<i>Solidago spp.</i>	Herb
American Mountain Ash	<i>Sorbus americana</i>	Tree
White Meadowsweet	<i>Spiraea alba var. latifolia</i>	Shrub
Steeplebush	<i>Spiraea tomentosa</i>	Shrub
Grass-Like Starwort	<i>Stellaria graminea</i>	Herb
Clasping-Leaved Twistedstalk	<i>Streptopus amplexifolius</i>	Perennial Herb
Lance-Leaved Twistedstalk	<i>Streptopus lanceolatus</i>	Perennial Herb
Common Snowberry	<i>Symphoricarpos albus</i>	Shrub
White Panicle Aster	<i>Symphyotrichum lanceolatum</i>	Herb
Calico Aster	<i>Symphyotrichum lateriflorum</i>	Perennial Herb

Common Name	Scientific Name	Growth Form
New England Aster	<i>Symphyotrichum novae-angliae</i>	Perennial Herb
New York Aster	<i>Symphyotrichum novi-belgii</i>	Herb
Common Lilac	<i>Syringa vulgaris</i>	Shrub
Common Tansy	<i>Tanacetum vulgare</i>	Perennial Herb
King of the Meadow	<i>Thalictrum pubescens</i>	Perennial Herb
New York Fern	<i>Thelypteris noveboracensis</i>	Perennial Herb
Northern White Cedar	<i>Thuja occidentalis</i>	Tree
American Basswood	<i>Tilia americana</i>	Tree
Eastern Poison Ivy	<i>Toxicodendron radicans</i>	Perennial Herb/Vine
Starflower	<i>Trientalis borealis</i>	Perennial Herb
Rabbitfoot Clover	<i>Trifolium arvense</i>	Annual Herb
Red Clover	<i>Trifolium pratense</i>	Perennial Herb
Trillium	<i>Trillium sp.</i>	Perennial Herb
Eastern Hemlock	<i>Tsuga canadensis</i>	Tree
Broadleaf Cattail	<i>Typha latifolia</i>	Herb
American Elm	<i>Ulmus americana</i>	Tree
Lowbush Blueberry	<i>Vaccinium angustifolium</i>	Shrub
Common Mullein	<i>Verbascum thapsus</i>	Biennial Herb
Swamp Verbena	<i>Verbena hastata</i>	Herb
Arrowwood Viburnum	<i>Viburnum dentatum</i>	
Hobblebush	<i>Viburnum lantanooides</i>	Shrub
Withe-Rod	<i>Viburnum nudum</i>	Shrub
Winter Vetch	<i>Vicia villosa</i>	Perennial Herb
Violet Sp.	<i>Viola sp.</i>	Annual Herb
Riverbank Grape	<i>Vitis riparia</i>	Vine
Flat-Top Goldentop	<i>Euthamia graminifolia</i>	Herb

APPENDIX C

LIST OF SPECIES POTENTIALLY OCCURRING IN THE PROJECT AREA

Table C-1 List of Mammals Potentially Occurring in the Vicinity of the Gorham Project

Species	Scientific Name	Habitat
Moose	<i>Alces alces</i>	Emergent wetlands, waterbodies edges, forest
Short-tailed shrew	<i>Blarina brevicauda</i>	Variety of open wooded habitats
Coyote	<i>Canis latrans</i>	Forest edge, existing ROW
Beaver	<i>Castor canadensis</i>	Slow moving waterbodies, wetlands
Star-nosed mole	<i>Condylura cristata</i>	Moist, open areas
Big brown bat	<i>Eptesicus fuscus</i>	Wooded areas, tree cavities
Lynx	<i>Felis lynx</i>	Extensive forest
Northern flying squirrel	<i>Glaucomys sabrinus</i>	Deciduous and mixed forest above 1,000 feet
Porcupine	<i>Hystricomorph hystricidae</i>	Mixed or coniferous forest
Silver-haired bat	<i>Lasionycteris noctivagans</i>	Wooded areas with loose bark near watercourses
Red bat	<i>Lasiurus borealis</i>	Edge of wooded areas
Hoary bat	<i>Lasiurus cinereus</i>	Wooded coniferous areas
Snowshoe hare	<i>Lepus americanus</i>	Woodlands with dense cover, clear cuts, regeneration
River otter	<i>Lontra canadensis</i>	Riparian areas and wetlands
Bobcat	<i>Lynx rufus</i>	Mixed and deciduous forest, brushy fields, swamps
Woodchuck	<i>Marmota monax</i>	Woodland edges, open areas
Pine marten	<i>Martes americana</i>	Deciduous and coniferous forest
Fisher	<i>Martes pennanti</i>	Mixed and coniferous forest
Striped skunk	<i>Mephitis</i>	Open woodlands, meadows
Meadow vole	<i>Microtus pennsylvanicus</i>	Open areas such as fields, marshes and clear cuts
House mouse	<i>Mus musculus</i>	Buildings, fields, corncribs
Ermine	<i>Mustela erminea</i>	Variety of brushy, wooded habitats, close to waterbodies
Long-tailed weasel	<i>Mustela frenata</i>	Open areas, forest edge, existing ROW
Southern red-backed Vole	<i>Myodes gapperi</i>	Cool, moist forest with mossy rocks, clear cuts
Eastern small-footed bat	<i>Myotis leibii</i>	Caves and mines, tree cavities
Little brown bat	<i>Myotis lucifugus</i>	Near waterbodies and wetlands, tree cavities
Northern long-eared bat	<i>Myotis septentrionalis</i>	Mixed forested landscapes

Species	Scientific Name	Habitat
Woodland jumping mouse	<i>Napaeozapus insignis</i>	Meadows, marshes, clear cuts and wooded areas
Mink	<i>Neovison vison</i>	Riparian and wetland areas
White-tailed deer	<i>Odocoileus virginianus</i>	Forest edge, coniferous swamps
Muskrat	<i>Ondatra zibethicus</i>	Marshes and slow waterbodies with cattail
Hairy-tailed mole	<i>Parascalops breweri</i>	Open wooded areas, fields
Tri-colored bat	<i>Perimyotis subflavus</i>	Wooded areas, caves and mines, tree cavities
Deer mouse	<i>Peromyscus maniculatus</i>	Coniferous or mixed forests, edges and clear cuts
Raccoon	<i>Procyon lotor</i>	Wooded areas along waterbodies
Norway rat	<i>Rattus norvegicus</i>	Industrial, farm and residential areas
Gray squirrel	<i>Sciurus carolinensis</i>	Deciduous and mixed forest
Red squirrel	<i>Sciurus vulgaris</i>	Coniferous forests
Masked shrew	<i>Sorex cinereus</i>	Damp woodlands with structures
Long-tailed shrew	<i>Sorex dispar</i>	Deep coniferous/mixed forests, with moss covered rocks
Smoky shrew	<i>Sorex fumeus</i>	Moist, bouldery upland areas with moss, clear cuts
Pygmy shrew	<i>Sorex minutus</i>	Variety of wooded habitats
Water shrew	<i>Sorex palustris</i>	Riparian and wetland areas in coniferous areas
Eastern chipmunk	<i>Tamias striatus</i>	Deciduous woodlands, ROW edge
Black bear	<i>Ursus americanus</i>	Mixed Forest and swamps
Red fox	<i>Vulpes</i>	Forest edge, existing ROW, meadows
Meadow jumping mouse	<i>Zapus hudsonius</i>	Moist, open meadows, shrub swamps and wooded uplands

Table C-2 List of Reptiles and Amphibians Potentially Occurring in the Vicinity of the Gorham Project

Species	Scientific Name	Habitat
Blue-spotted salamander	<i>Ambystoma laterale</i>	Moist areas such as vernal pools and forested wetlands
Spotted salamander	<i>Ambystoma maculatum</i>	Moist forested areas, vernal pools, marshy areas, mixed woods
Fowler's toad	<i>Anaxyrus fowleri</i>	Sandy areas such as river valleys, floodplains, lakeshores, and agricultural

Species	Scientific Name	Habitat
		areas. Also, in pine forests, fields, and lawns
Eastern/red-spotted newt	Notophthalmus viridescens	Juveniles (red efts) in moist forested areas, adults in slow moving waters
Northern dusky salamander	Desmognathys fuscus	Cool running waters at forest margin
Ring-necked snake	Diadophis punctatus	Warm, exposed areas, often near water with abundant bark, log, or rock cover
Northern redback salamander	Plethodon cinereus	Mixed deciduous woodlands; under decaying logs, rocks and litter
Four-toed salamander	Hemidactylum scutatum	Wet forested areas with sphagnum moss, bogs
Northern two-lined salamander	Eurycea bislineata	Floodplains, moist forests near seeps
Eastern American toad	Bufo a. americanus	Forested habitats, existing ROW
Spring peeper	Pseudacris crucifer	Wetlands such emergent and scrub-shrub, edges of waterbodies
Gray tree frog	Hyla versicolor	Forested areas, scrub-shrub swamps
Bullfrog	Rana catesbeiana	Shorelines of large waterbodies
Green frog	Rana clamitans melanota	Riparian areas along waterbodies and shallow pools
Mink frog	Rana septentrionalis	Margins of ponds, waterbodies
Wood frog	Rana sylvatica	Forested areas, vernal pools
Northern leopard frog	Rana pipiens	Wet open fields, emergent wetlands
Pickerel frog	Rana palustris	Wet open areas, waterbodies and pond margins
Snapping turtle	Chelydra serpentina	Permanent waterbodies
Wood turtle	Glyptemys insculpta	Slow-moving sandy/gravel bottom waterbodies, fields and woods
Eastern painted turtle	Chrysemys picta	Slow, quiet waterbodies
Northern water snake	Nerodia sipedon	Permanently flooded wetlands, waterbodies
Northern redbelly snake	Storeria occipitomaculata	Moist woodlands, bogs with sphagnum
Eastern garter snake	Thamnophis sirtalis	Variety of terrestrial habitats
Northern ringneck snake	Diadophis punctatus edwardsii	Shady woodlands and under logs, rocks
Eastern smooth green snake	Opheodrys vernalis	Upland areas, scrublands, existing ROW

Species	Scientific Name	Habitat
Eastern milk snake	Lampropeltis tiangulum	Variety of habitats such as scrublands, woodlands and ROW edge
Eastern Newt	Notophthalmus viridescens	Forests but requires large mosaics of interconnected hardwoods and wetlands

Table C-3 List of Birds Potentially Occurring in the Vicinity of the Gorham Project

Species	Scientific Name	Habitat
Cooper’s hawk	Accipiter cooperii	Extensive forests
Northern goshawk	Accipiter gentilis	Extensive forests
Sharp-shinned hawk	Accipiter striatus	Isolated forested areas, edges
Spotted sandpiper	Actitis macularius	Edges of lakes and rivers
Northern Saw-whet owl	Aegolius acadicus	Woodlands, edges
Boreal owl	Aegolius funereus	Dense coniferous and mixed hardwood forests
Red-winged blackbird	Agelaius phoeniceus	Marshes, sloughs, dry fields, woodlands
Wood duck	Aix sponsa	Shallow water ponds, lakes and wetlands near wooded areas
Green-winged teal	Anas carolinensis	Ponds, lakes and marshes
Mallard	Anas platyrhynchos	Emergent and shrub wetlands, rivers and lakes
American black duck	Anas rubripes	Emergent and shrub wetlands, flowages, rivers and lakes
Ruby-throated hummingbird	Archilochus colubris	Woodlands, edges, swamps
Great blue heron	Ardea Herodias	Shallow shores of marshes and waterbodies
Long-eared owl	Asio otus	Dense (usually coniferous) forests or groves
Redhead	Aythya americana	Marshes, ponds, lakes
Ring-necked duck	Aythya collaris	Marshes, bogs, and flowages
Cedar waxwing	Bombycilla cedrorum	Open woodlands, open orchards, towns
Ruffed grouse	Bonasa umbellus	Forested areas with herbaceous openings, ROW edges
American bittern	Botaurus lentiginosus	Marshes, bogs, and waterbodies
Canada goose	Branta canadensis	Wetlands and waterbodies
Great horned owl	Bubo virginianus	Interior woodlands, forest edges, wetlands

Species	Scientific Name	Habitat
Common goldeneye	<i>Bucephala clangula</i>	Ponds, lakes and rivers near wooded areas
Red-tailed hawk	<i>Buteo jamaicensis</i>	Woodlands, ROW corridors, old fields
Rough-legged hawk	<i>Buteo lagopus</i>	Open fields, marshes
Red-shouldered hawk	<i>Buteo lineatus</i>	Woodlands, forested wetlands
Broad-winged hawk	<i>Buteo platypterus</i>	Woodlands, forested wetlands
Green heron	<i>Butorides virescens</i>	Waterbodies and shrub wetlands
Northern cardinal	<i>Cardinalis cardinalis</i>	Woodland edges, swamps, streamside thickets, gardens
American goldfinch	<i>Carduelis tristis</i>	Weedy fields, open second-growth woodlands, roadsides
Veery	<i>Catharus fuscescens</i>	Moist deciduous woodlands
Hermit thrush	<i>Catharus guttatus</i>	Wooded swamps, coniferous edges
Swainson's thrush	<i>Catharus ustulatus</i>	Coniferous forest, near water
Brown creeper	<i>Certhia Americana</i>	Dense woodlands
Killdeer	<i>Charadrius vociferous</i>	Barren areas, pastures, gravel pits
Common nighthawk	<i>Chordeiles minor</i>	Open woodlands, railroad beds, clearings
Northern harrier	<i>Circus cyaneus</i>	Meadows, emergent wetlands, bogs
Marsh wren	<i>Cistothorus palustris</i>	Marshes
Black-billed cuckoo	<i>Coccyzus erythrophthalmus</i>	Brushy areas, open woodlands
Northern flicker	<i>Colaptes auratus</i>	Open woodlands, edges, clear cuts
Rock dove	<i>Columba livia</i>	Near human dwellings
Olive-sided flycatcher	<i>Contopus cooperi</i>	Spruce forests, bog edges
Eastern wood pewee	<i>Contopus virens</i>	Forest interior
American crow	<i>Corvus brachyrhynchos</i>	Woodlands, ROW corridors
Common raven	<i>Corvus corax</i>	Open woodlands, clear cuts
Blue jay	<i>Cyanocitta cristata</i>	Woodlands, towns
Black-throated blue warbler	<i>Dendroica caerulescens</i>	Mixed or deciduous forests with dense undergrowth
Bay-breasted warbler	<i>Dendroica castanea</i>	Coniferous forest, coniferous shrub areas
Yellow-rumped warbler	<i>Dendroica coronate</i>	Coniferous forest, edges
Palm warbler	<i>Dendroica palmarum</i>	Bogs and bog edges
Chestnut-sided warbler	<i>Dendroica pensylvanica</i>	Regeneration areas, clear cuts, ROW corridors
Yellow warbler	<i>Dendroica petechial</i>	Shrub and emergent wetlands, brushy areas along waterbodies
Pine warbler	<i>Dendroica pinus</i>	Pine forests, mixed woodlands

Species	Scientific Name	Habitat
Black-throated green warbler	<i>Dendroica virens</i>	Mixed forest, forested wetlands
Pileated woodpecker	<i>Dryocopus pileatus</i>	Interior second growth forest, forested wetlands
Gray catbird	<i>Dumetella carolinensis</i>	Brushy edges, shrub wetlands, clear cuts
Alder flycatcher	<i>Empidonax alnorum</i>	Shrub wetlands with openings
Least flycatcher	<i>Empidonax minimus</i>	Deciduous woodlands, edges, forested wetlands
Horned lark	<i>Eremophila alpestris</i>	Open areas, fields, pastures
Spruce grouse	<i>Falciennis Canadensis</i>	Dense interior coniferous forest, cedar bogs
Merlin	<i>Falco columbarius</i>	Open forests adjacent to open areas for foraging
Peregrine falcon	<i>Falco peregrinus</i>	Rocky cliffs with ledges overlooking waterbodies, lakes, with a abundance of birds
American kestrel	<i>Falco sparverius</i>	ROW edges, old fields near tree cavities
Common snipe	<i>Gallinago gallinago</i>	Marshes, emergent bogs
Common loon	<i>Gavia immer</i>	Large waterbodies
Common yellowthroat	<i>Geothlypis trichas</i>	Grassy fields, shrubs, marshes
Bald eagle	<i>Haliaeetus leucocephalus</i>	Near large waterbodies
Barn swallow	<i>Hirundo rustica</i>	Near farms, pastures
Wood thrush	<i>Hylocichla mustelina</i>	Swamps and moist deciduous or mixed forest
Dark-eyed junco	<i>Junco hyemalis</i>	Forest, clearings, ROW edges
Northern shrike	<i>Lanius excubitor</i>	Open woodlands, brushy areas
Herring gull	<i>Larus argentatus</i>	Large waterbodies
Hooded merganser	<i>Lophodytes cucullatus</i>	Wooded ponds, lakes and rivers
Belted kingfisher	<i>Megaceryle alcyon</i>	Waterbodies, banks of waterbodies
Swamp sparrow	<i>Melospiza georgiana</i>	Shrub and emergent wetlands, waterbodies edges
Song sparrow	<i>Melospiza melodia</i>	Brushy fields, shrub wetlands, towns
Common merganser	<i>Mergus merganser</i>	Rivers and lakes
Red-breasted merganser	<i>Mergus serrator</i>	Rivers and lakes
Northern mockingbird	<i>Mimus polyglottos</i>	Near towns in brush
Black-white warbler	<i>Mniotilta varia</i>	Forest and second growth
Great crested flycatcher	<i>Myiarchus crinitus</i>	Woodlands, forested swamps
Mourning warbler	<i>Oporornis Philadelphia</i>	ROW corridors, clear-cuts
Tennessee warbler	<i>Oreothlypis peregrine</i>	ROW edges, open woodlands, dense shrubs

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Species	Scientific Name	Habitat
Osprey	<i>Pandion haliaetus</i>	Near large waterbodies
Northern waterthrush	<i>Parkesia noveboracensis</i>	Forested wetlands near waterbodies
Savannah sparrow	<i>Passerculus sandwichensis</i>	Meadows, fields
Indigo bunting	<i>Passerina cyanea</i>	Forest edges and openings, ROW corridors
Gray jay	<i>Perisoreus Canadensis</i>	Coniferous forest, cedar bogs
Rose-breasted grosbeak	<i>Pheucticus ludovicianus</i>	Deciduous forest
Black-backed woodpecker	<i>Picoides arcticus</i>	Coniferous forest, clear cuts with dead timber
Three-toed woodpecker	<i>Picoides dorsalis</i>	Coniferous forest, clear cuts with dead timber
Downy woodpecker	<i>Picoides pubescens</i>	Forests
Hairy woodpecker	<i>Picoides villosus</i>	Forests
Rufous-sided Towhee	<i>Pipilo erythrophthalmus</i>	Forest edges and openings, ROW corridors
Pied-billed grebe	<i>Podilymbus podiceps</i>	Ponds, marshes with heavy emergent vegetation
Black-capped chickadee	<i>Poecile atricapillus</i>	Woodlands, towns
Boreal chickadee	<i>Poecile hudsonicus</i>	Coniferous forest, spruce bogs
Common grackle	<i>Quiscalus quiscula</i>	Open fields, marshes, parks
Ruby-crowned kinglet	<i>Regulus calendula</i>	Coniferous forest, edges
Golden-crowned kinglet	<i>Regulus satrapa</i>	Coniferous forest
Bank swallow	<i>Riparia</i>	Riverbanks, gravel pits
Eastern phoebe	<i>Sayornis phoebe</i>	Wooded or shrub areas near waterbodies
American woodcock	<i>Scolopax minor</i>	Moist woodlands, alder thickets
Ovenbird	<i>Seiurus aurocapillus</i>	Mature deciduous forest, no undergrowth
Northern parula warbler	<i>Setophaga Americana</i>	Mix forest with old man's beard, forested wetlands
American redstart	<i>Setophaga ruticilla</i>	Deciduous woodlands, forested wetlands
Eastern bluebird	<i>Sialia sialis</i>	Open woodlands, clearings, edges
Red-breasted nuthatch	<i>Sitta Canadensis</i>	Coniferous Forest
White-breasted nuthatch	<i>Sitta carolinensis</i>	Deciduous woodlands
Yellow-bellied sapsucker	<i>Sphyrapicus varius</i>	Woodlands, edges
Chipping sparrow	<i>Spizella passerine</i>	Towns, farms, fields
Barred owl	<i>Strix varia</i>	Forested wetlands, bottomlands

Species	Scientific Name	Habitat
European starling	<i>Sturnus vulgaris</i>	Towns, farms and fields
Tree swallow	<i>Tachycineta bicolor</i>	Open areas near water, beaver flowages
House wren	<i>Troglodytes aedon</i>	Near human dwellings, brushy clearings
Winter wren	<i>Troglodytes hiemalis</i>	Dense coniferous undergrowth, bog edges
American robin	<i>Turdus migratorius</i>	Open woodlands, clearings pastures
Eastern kingbird	<i>Tyrannus tyrannus</i>	Open woodlands, shrub wetlands
Nashville warbler	<i>Vermivora ruficapilla</i>	Moist deciduous forest, edges
Warbling vireo	<i>Vireo gilvus</i>	Open woodlands
Red-eyed vireo	<i>Vireo olivaceus</i>	Open deciduous forest
Philadelphia vireo	<i>Vireo philadelphicus</i>	Forests, edges, ROW corridors
Solitary vireo	<i>Vireo solitaries</i>	Mixed woodlands with dense understory
Canada warbler	<i>Wilsonia Canadensis</i>	Moist forest with undergrowth, forested wetlands
Wilson's warbler	<i>Wilsonia pusilla</i>	Bogs, shrub wetlands
Mourning dove	<i>Zenaida macroura</i>	ROW corridors, open woodlands, backyards
White-throated sparrow	<i>Zonotrichia albicollis</i>	Brushy areas, clear-cuts, bogs