

LOW-IMPACT HYDROPOWER POWER INSTITUTE CERTIFICATION APPLICATION

GORHAM HYDROELECTRIC PROJECT (FERC No. 2288)



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LOW-IMPACT HYDROPOWER POWER INSTITUTE CERTIFICATION APPLICATION

GORHAM HYDROELECTRIC PROJECT (FERC No. 2288)

1.0 FACILITY DESCRIPTION

The Gorham Hydroelectric Project (Project) is located in northern New Hampshire in Coos County, and in the town of Gorham. The Project is located on the Androscoggin River, the Gorham Project is one of seven hydroelectric projects within an 11-mile reach of the Androscoggin River between Berlin and Shelburne, New Hampshire (FERC 1993¹). There are five hydroelectric projects within 8-river-miles upstream of the Gorham Project; the Shelburne Project is approximately 2.8-river-miles downstream of the Gorham Project. The Project's hydroelectric facilities are owned by HSE Hydro NH, LLC and operated by Central Rivers Power NH, LLC (CRP NH or CRP).

The Project boundary generally includes the reservoir, dam, powerhouse, and tailrace. The general Project area extends from the dam downstream approximately 2,070 feet and upstream approximately 4,700 feet. Table 1 describes the Gorham Project facilities.

TABLE 1 GORHAM PROJECT FACILITIES AND DESCRIPTIONS

GORHAM PROJECT – FERC No. 2288	
Description	Number or Fact
GENERAL INFORMATION	
FERC Number	P-2288
License Issued	August 1, 1994
License Expiration Date	July 31, 2024
Licensed Capacity	2,150 kW
Project Location	On Androscoggin River in Coos County, New Hampshire.
RESERVOIR AND DAM	
Surface Area of Reservoir	32 acres
Elevation Top of Dam	772.23 feet (spillway); 768.112 feet (spillway); 768.20 feet (sluiceway)
Height	20 feet

¹ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=165045>

GORHAM PROJECT – FERC No. 2288	
Description	Number or Fact
Length of Dam	417 feet
POWER CANAL	
Length	415 feet
Width	60 feet
Depth	20 feet
POWERHOUSE	
Length (Superstructure)	37.8
Width (Superstructure)	27.1
TURBINES/GENERATORS	
Number of units	4 units (2 S. Morgan Smith vertical Francis-type) (2 Allis-Chalmers vertical, propeller-type)
Rated Net Head	18 feet
Total Hydraulic Capacity	2,000
Average Annual Generation	10,524 MWH
TRANSMISSION LINES	
Type	33-kV
Length	200 feet

The current Federal Energy Regulatory Commission (FERC) license will expire on July 31, 2024. CRP NH will be starting the Federal Energy Regulatory Commission (FERC) relicensing process for the project in 2019.

Project Location

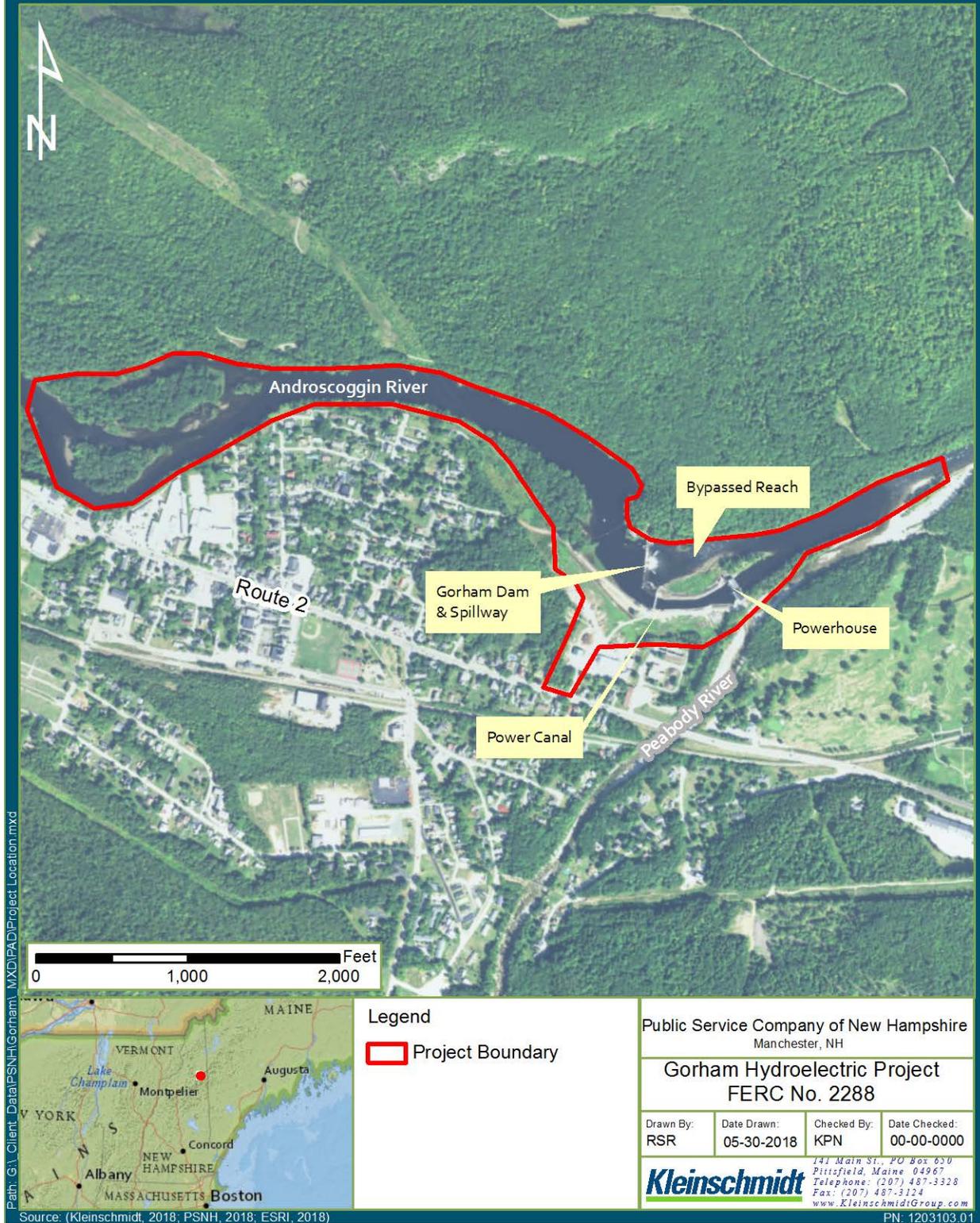


FIGURE 1 PROJECT LOCATION



FIGURE 2 **GEOGRAPHIC OVERVIEW OF PROJECT LOCATION**

Zones of Effect

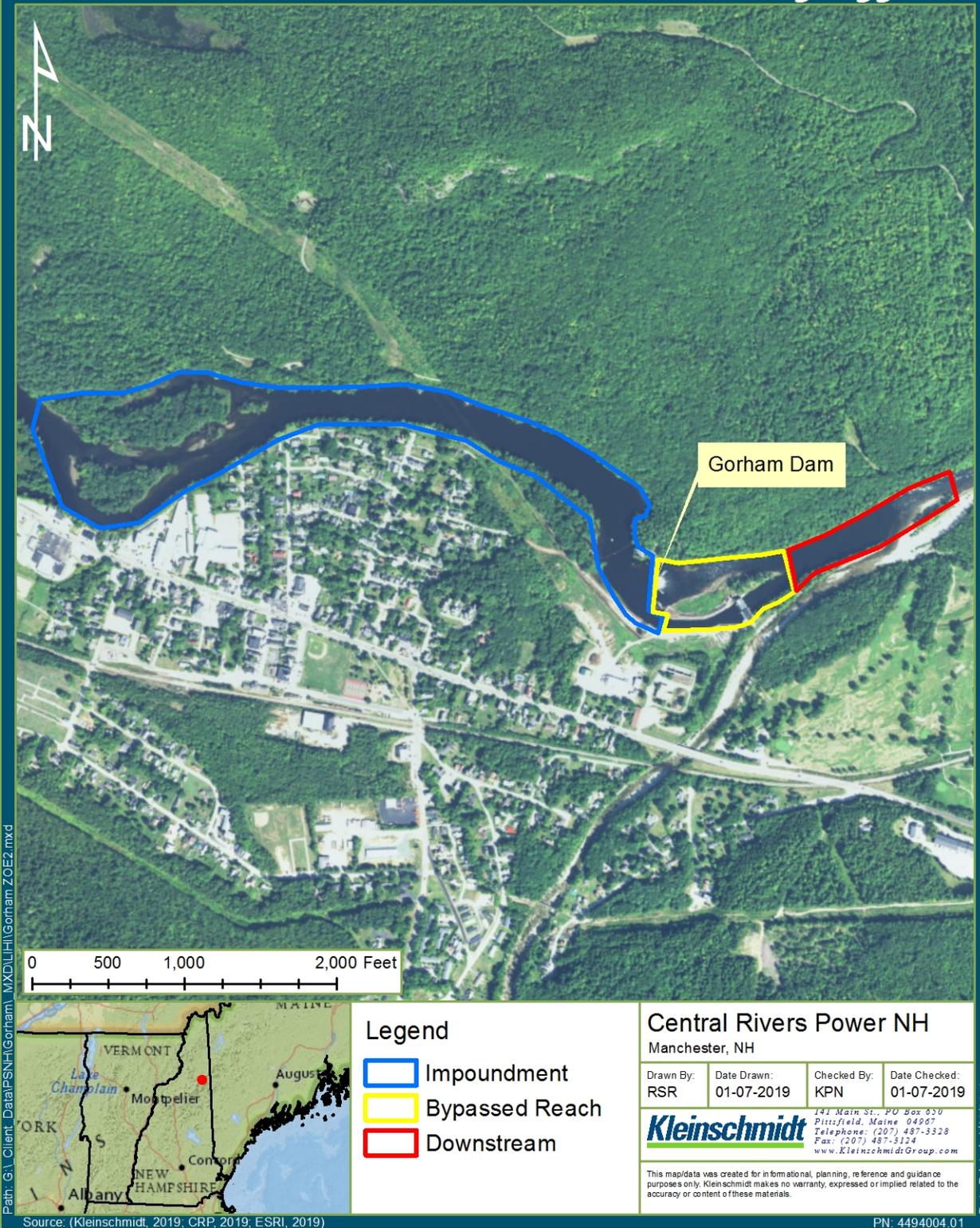


FIGURE 3 ZONES OF EFFECT

1.1 PROJECT DESCRIPTION

The Gorham Project consists of an impoundment, dam, powerhouse, tailrace channel, transmission lines, transformers, and appurtenant facilities, which are described in further detail below. The project operates as an un-manned, run-of-river facility. Table 2 provides a summary of the installed equipment.

The Project dam is a timber crib, L-shaped dam, 417 feet long and about 20 feet high, with three sections: (1) a 90-foot-long spillway section, with a steel sheet pile facing, having a crest elevation of 772.23 feet (USGS), topped with wooden flashboards, about 1.7 feet high, (2) a 252-foot-long spillway section, with two layers of 3-inch wooden plank facing, having a crest elevation of 768.12 feet (USGS), topped with hinged wooden flashboards, about 5.4 feet high, and (3) a 75-foot-long reinforced-concrete sluiceway section, with a crest elevation of 768.20 feet (USGS), topped with 5.33-foot-high hinged wooden flashboards, having one 15-foot-wide sluice gate (Photo 1).



PHOTO 1 **GORHAM DAM**

The Project has an earthen power canal which is approximately 415-feet-long by 60-feet-wide by 20-feet-deep.



PHOTO 2 GORHAM POWER CANAL

The powerhouse contains two 400-kW Allis-Chalmers generators (Photo 3) driven by two 583-horsepower (hp) S. Morgan Smith vertical, Francis-type turbines, and two 675-kW Allis-Chalmers generators driven by two 1,000-hp Allis-Chalmers vertical, propeller-type turbines, totaling a maximum hydraulic capacity of about 2,800 cfs, at an operating head of approximately 18 feet.



PHOTO 3 **VIEW OF POWERHOUSE INTERIOR AND GENERATING UNITS.**

The Project has a 33 kV, 200-foot-long transmission line, and appurtenant facilities.

PROJECT OPERATIONS

The Project is operated as run-of-river with no impoundment fluctuations. Article 402 of the existing license requires there be a minimum flow release of 200 cfs from the Gorham dam at all times. The minimum flow is released through a lowered flashboard near the middle of the dam. The generating units are normally operated remotely from CRP NH's Control Center Customized Energy Solutions (CES) located in Philadelphia, Pennsylvania, although the units are also capable of local operation. Manual operations and maintenance of the Gorham Project are performed by the Upper Hydro Group, which is also responsible for CRP NH's J. Brodie Smith Project (FERC No. 2287) and Canaan Project (FERC No. 7528) located in northern New Hampshire. Daily logs of pond level, flow, and outages are maintained electronically for the Project. Minimum bypass flows are assured by maintaining the headpond at a minimum elevation of 96.75 feet MSL, monitored at the licensee's dispatch center. Minimum flows are recorded on a computer.



PHOTO 4 **VIEW OF LOWERED FLASHBOARD TO PROVIDE MINIMUM FLOW**

TABLE 2 FACILITY DESCRIPTION INFORMATION FOR THE GORHAM HYDROELECTRIC PROJECT (FERC No. 2288)

INFORMATION TYPE	VARIABLE DESCRIPTION	RESPONSE (AND REFERENCE TO FURTHER DETAILS)
<i>Name of the Facility</i>	Facility name (use FERC project name if possible)	Gorham Hydroelectric Project (FERC No. 2288)
<i>Location</i>	River name (USGS proper name)	Androscoggin River
	River basin name	Androscoggin River Basin
	Nearest town, county, and state	Gorham, Coos County, New Hampshire
	River mile of dam above next major river	River Mile (RM) 118.5
	Geographic latitude	44.389368
	Geographic longitude	-71.166826
<i>Facility Owner</i>	Application contact names (IMPORTANT: you must also complete the Facilities Contact Form):	Curtis R. Mooney Project Manager Central Rivers Power 59 Ayers Island Road Bristol, NH 03222
	- Facility owner (individual and company names)	HSE Hydro NH AC, LLC Todd Wynn, CEO Portfolio Companies
	- Operating affiliate (if different from owner)	Central Rivers Power NH, LLC Brent Sowle, Hydro Manager
	- Representative in LIHI certification	Andy Qua Project Manager Kleinschmidt Associates 141 Main Street P.O. Box 650 Pittsfield, ME 04967
<i>Regulatory Status</i>	FERC Project Number (P-2457), issuance and expiration dates	FERC No. 2288, issued August 1, 1994; expires July 31, 2024.
	FERC License type or special classification (e.g., "qualified conduit")	Major Project – Existing Dam
	Water Quality Certificate identifier and issuance date, plus source agency name	See Appendix C: Certification issued by the New Hampshire Department of Environmental Services
	Hyperlinks to key electronic records on FERC e-library website (e.g., most recent Commission Orders, WQC, ESA documents, etc.)	Hyperlinks can be found in the footnotes and references can be found under Section 4.0 and Appendix C.
<i>Power Plant Characteristics</i>	Date of initial operation (past or future for operational applications)	Units 1&2- 1917; Units 3&4- 1923
	Total name-plate capacity (MW)	2.15
	Average annual generation (MWh)	Project generation for the past five years (2013-2018) averaged 10,727 kWh

INFORMATION TYPE	VARIABLE DESCRIPTION	RESPONSE (AND REFERENCE TO FURTHER DETAILS)
	Number, type, and size of turbines, including maximum and minimum hydraulic capacity of each unit	4 units (2 S. Morgan Smith vertical Francis-type) (2 Allis-Chalmers vertical, propeller-type)
	Modes of operation (run-of-river, peaking, pulsing, seasonal storage, etc.)	Run-of-river
	Dates and types of major equipment upgrades	New electrical controls and switchgear-2016; new generator step-up transformer-2017
	Dates, purpose, and type of any recent operational changes	None
	Plans, authorization, and regulatory activities for any facility upgrades	None
<i>Characteristics of Dam, Diversion, or Conduit</i>	Date of construction	The first part of the existing Gorham powerhouse was built in 1909. Additional parts of the Gorham Project were built from 1917 to 1923 in stages by the Twin State Gas and Electric Company. In addition, the dam was enlarged several times, in 1903, 1927-1928, and 1958-1959. The Gorham Project was acquired by PSNH in 1943.
	Dam height	20 feet high (max.)
	Spillway elevation and hydraulic capacity	96.45 feet (spillway crest); 92.41 feet (spillway); 92.42 feet (sluiceway) Hydraulic Capacity of the project generation units is 2,800 cfs
	Tailwater elevation	85.2 feet
	Length and type of all penstocks and water conveyance structures between reservoir and powerhouse	The Project has an earthen power canal which is approximately 415-feet-long by 60-feet-wide by 20-feet-deep.
	Dates and types of major, generation-related infrastructure improvements	None
	Designated facility purposes (e.g., power, navigation, flood control, water supply, etc.)	Hydropower
	Water source	Androscoggin River
	Water discharge location or facility	Androscoggin River
<i>Characteristics of Reservoir and Watershed</i>	Gross volume and surface area at full pool	The Project reservoir has a surface area of 32 acres, with no usable storage.
	Maximum water surface elevation (ft. MSL)	97.75 feet msl (top of flashboards)

INFORMATION TYPE	VARIABLE DESCRIPTION	RESPONSE (AND REFERENCE TO FURTHER DETAILS)
	Maximum and minimum volume and water surface elevations for designated power pool, if available	N/A Run of River Project
	Upstream dam(s) by name, ownership, FERC number (if applicable), and river mile	<p>Gorham, Great Lakes Hydro America, LLC, FERC No.2311, RM 121</p> <p>Cascade, Great Lakes Hydro America, LLC, FERC No. 2327, RM 124</p> <p>Cross Power, Great Lakes Hydro America, LLC, FERC No. 2326, RM 124.6</p> <p>J. Brodie Smith, HSE Hydro NH AC, LLC, FERC No. 2287, RM 125.6</p> <p>Riverside, Great Lakes Hydro America, LLC, FERC No. 2423, RM 126.1</p> <p>Sawmill, Great Lakes Hydro America, LLC, FERC No. 2422, RM 126.5</p> <p>Note: there are additional dams upstream of this series of upper Androscoggin dams (see Figure 11).</p>
	Downstream dam(s) by name, ownership, FERC number (if applicable), and river mile	<p>Shelburne, Great Lakes Hydro America, LLC, FERC No. 2300, RM 115.6</p> <p>Rumford Falls, Rumford Falls Hydro, LLC, FERC No. 2333, RM 85</p> <p>Riley, Jay, Livermore Falls, Andro Hydro, LLC, FERC No. 2375, between RM 53 and 65</p> <p>Otis, Andro Hydro, LLC, FERC No. 8277, between Jay and Livermore Falls</p> <p>Please note that there are several additional dams downstream to the mouth of the river (see Figure 11).</p>
Operating agreements with upstream or downstream reservoirs that affect water	None	

INFORMATION TYPE	VARIABLE DESCRIPTION	RESPONSE (AND REFERENCE TO FURTHER DETAILS)		
	availability, if any, and facility operation			
	Area inside FERC project boundary, where appropriate	61.1 acres		
<i>Hydrologic Setting</i>	Average annual flow at the dam	2,130 CFS		
	Average monthly flows	MONTH	MEAN FLOW (CFS)	
		January	2,591	
		February	2,704	
		March	3,057	
		April	4,702	
		May	4,055	
		June	2,998	
		July	2,330	
		August	2,070	
September		1,957		
October	2,449			
November	2,688			
December	2,600			
Annual	2,849			
	Location and name of relevant stream gauging stations above and below the facility	USGS gage No. 01054000 Androscoggin River near Gorham, NH		
	Watershed area at the dam	1,402 square miles		
<i>Designated Zones of Effect</i>	Number of zones of effect	Three Zones of Effect, including, impoundment, bypassed reach, and downstream.		
	Upstream and downstream locations by river miles	Zone 1: RM 118.5 to RM 117.64 Zone 2: RM 118.5 to RM 118.7 Zone 3: RM 118.7 to RM 118.9		
	Type of waterbody (river, impoundment, by-passed reach, etc.)	Zone 1: Impoundment Zone 2: Bypassed reach Zone 3: River		
	Delimiting structures	Zone 1: Gorham dam up to Buck Island (approximately 4,510 feet) Zone 2: Gorham dam down to the confluence of the power canal (approximately 996 feet) Zone 3: from the confluence of the bypassed reach and power canal downstream approximately 1,086 feet.		
	Designated uses by state water quality agency	Class B		

INFORMATION TYPE	VARIABLE DESCRIPTION	RESPONSE (AND REFERENCE TO FURTHER DETAILS)
<i>Additional Contact Information</i>	Names, addresses, phone numbers, and e-mail for local state and federal resource agencies	See attached LIHI Facility Contact Form
	Names, addresses, phone numbers, and e-mail for local non-governmental stakeholders	See attached LIHI Facility Contact Form
<i>Photographs and Maps</i>	Photographs of key features of the facility and each of the designated zones of effect	See Appendix A
	Maps, aerial photos, and/or plan view diagrams of facility area and river basin	See Appendix A

2.0 STANDARDS MATRICES

2.1 IMPOUNDMENT ZOE

CRITERION		ALTERNATIVE STANDARDS				
		<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>Plus</i>
A	Ecological Flow Regimes		<i>X</i>			
B	Water Quality		<i>X</i>			
C	Upstream Fish Passage	<i>X</i>				
D	Downstream Fish Passage		<i>X</i>			
E	Watershed and Shoreline Protection		<i>X</i>			<i>X</i>
F	Threatened and Endangered Species Protection	<i>X</i>				
G	Cultural and Historic Resources Protection		<i>X</i>			
H	Recreational Resources		<i>X</i>			

2.2 BYPASSED REACH

CRITERION		ALTERNATIVE STANDARDS				
		<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>Plus</i>
A	Ecological Flow Regimes		<i>X</i>			
B	Water Quality		<i>X</i>			
C	Upstream Fish Passage	<i>X</i>				
D	Downstream Fish Passage		<i>X</i>			
E	Watershed and Shoreline Protection		<i>X</i>			<i>X</i>
F	Threatened and Endangered Species Protection	<i>X</i>				
G	Cultural and Historic Resources Protection		<i>X</i>			
H	Recreational Resources		<i>X</i>			

2.3 DOWNSTREAM ZOE

CRITERION		ALTERNATIVE STANDARDS				
		<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>Plus</i>
A	Ecological Flow Regimes		<i>X</i>			
B	Water Quality		<i>X</i>			
C	Upstream Fish Passage	<i>X</i>				
D	Downstream Fish Passage	<i>X</i>				
E	Watershed and Shoreline Protection		<i>X</i>			<i>X</i>
F	Threatened and Endangered Species Protection	<i>X</i>				
G	Cultural and Historic Resources Protection		<i>X</i>			
H	Recreational Resources		<i>X</i>			

3.0 SUPPORTING INFORMATION

3.1 ECOLOGICAL FLOWS STANDARDS: IMPOUNDMENT ZOE

CRITERION	STANDARD	INSTRUCTIONS
A	2	<p><u>Agency Recommendation</u> (see Appendix A for definitions):</p> <ul style="list-style-type: none"> Identify the proceeding and source, date, and specifics of the agency recommendation applied (NOTE: there may be more than one; identify and explain which is most environmentally stringent). Explain the scientific or technical basis for the agency recommendation, including methods and data used. This is required regardless of whether the recommendation is or is not part of a Settlement Agreement. Explain how the recommendation relates to agency management goals and objectives for fish and wildlife. Explain how the recommendation provides fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking rate conditions, and seasonal and episodic instream flow variations).

- The Impoundment ZOE does not have a bypassed reach.
- The New Hampshire Department of Environmental Services granted the licensee a water quality certification for the Project on April 25, 1991 (Appendix C).
- On June 9, 1995, FERC issued an order modifying and approving run-of-river and minimum flow monitoring plans², under article 403 of the license³. Article 403 of the project license requires the licensee to file with the Commission for approval, a plan to monitor run-of-river operation and minimum flows of the project, as stipulated by articles 401 and 402, respectively.
- The plan was to include a schedule for installing the monitoring equipment, the proposed location, design, and calibration of the monitoring equipment, the method of flow data collection, and a provision for providing flow data to the consulted agencies, within 30 days from the date of the agencies' request for the data. The licensee was required to prepare the plan after consultation with the U.S. Geological Survey (USGS), the U.S. Fish and Wildlife Service (USFWS), and the New Hampshire Fish and Game Department (NHFGD). Article 403 also requires the licensee to describe how flows will be maintained below the project when the impoundment is refilled after any maintenance and/or repairs.
- The minimum flow monitoring plan along with the run-of-river mode were modified to include:

² <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=3014673>

³ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13711082>

- If the flows through the project, as measured by the approved system, deviate from the run-of-river requirements under Article 401, or if the minimum flow, as measured by the approved gage, falls below 200 cfs, the required flow under Article 402, the licensee shall file a report, with the Commission, within 30 days of the incident.
- CRP NH operates the Gorham Project in run-of-river mode where outflow from the powerhouse is approximately equal to inflow. Run-of-river operations minimize water level fluctuations in the impoundment; protect water quality, fishery, wildlife, and visual resources; and provide stable river flows downstream. Operation of the Gorham Project results in the diversion of water from an approximately 850-foot-long bypassed reach. CRP NH provides a minimum flow of 200 cfs or inflow, whichever is less, into the bypassed reach for the protection of water quality and fish and wildlife resources (FERC 1994⁴). This minimum flow was based on results from an IFIM study which found that 200 cfs optimized habitat for the studied fish species (e.g., fallfish, brook trout, and rainbow trout) (FERC 1993⁵).
- The Licensee provides a minimum flow of 200 cfs, as measured immediately below the Gorham dam, by passing water over a modified flashboard panel at the west end of the dam.
- To quantify the total water being passed at the dam, the licensee has installed a heated Metritape level sensor. The Metritape sensor assembly consists of a 2-inch removable, heated sensor/pipe within a permanent 3-inch outer pipe. The Metritape assembly (type LA-AF) has been chosen because of its operating temperature range (-29 to +107ø Celsius), it has no moving parts, has high mechanical shock resistance and its output is stable and dependable. The Metritape level sensor will inputs to the CRP NH's Control Center Customized Energy Solutions (CES) to ensure that the required pool level, corresponding to the 200 cfs minimum flow requirement, is maintained.
- The meter is located in the pool area at the foot of the dam. The measured pool level will be used to correspond to the flows being passed at the dam. A chart recorder coupled to the output of the Metritape level sensor provides a continuous record of pool level below the dam.
- Routinely, the pool, bypass reach, and flashboards are visually inspected. Any accumulation of materials that may prevent meeting the minimum flow requirement are removed. While refilling the impoundment, the 200 cfs minimum flow is maintained by leaving an appropriate number of flashboard panels down and maintaining the required pool level immediately below Gorham dam.
- During refilling of the impoundment as may be necessary after any maintenance and/or repairs, the licensee will release Aquatic Base Flows (ABF) or 90 percent of inflow, whichever is less, into the tailrace to protect aquatic resources downstream. The ABF flows used for this project are 680 cubic feet per second (cfs) from June through September 1,360 cfs from October through March, and 5,440 cfs from April through May. These flows are based on drainage flow criteria derived from the FWS's Interim Regional Policy for New England Stream Flow Recommendations. The generating units are normally operated remotely by CES in Philadelphia, Pennsylvania, although the units

⁴ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13711082>

⁵ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=165045>

are also capable of local operation. Manual operations and maintenance of the Gorham Project are performed by the Upper Hydro Group, which is also responsible for CRP NH's J. Brodie Smith Project (FERC No. 2287) and Canaan Project (FERC No. 7528) located in northern New Hampshire. Daily logs of pond level, flow, and outages are maintained electronically for the Project. The Licensee performs regularly scheduled maintenance on the equipment based on the manufacturer's recommendations and experience. Minimum bypass flows are assured by maintaining the headpond at elevation 96.9 feet MSL, which is the run of river set point, monitored at the licensee's dispatch center. Minimum flows are recorded on a computer.

- River flow data for the Gorham Project was generated from USGS gage No. 01054000 (Androscoggin River near Gorham, New Hampshire) for the period January 1988 to December 2017; the USGS gage is approximately 4.5 river miles upstream of the Gorham Project. Data from the USGS gage were pro-rated by a factor of 1.03 to account for the additional drainage area at the Gorham Project.
- The mean, median, minimum, and maximum annual river flows of the Androscoggin River at the Gorham Project are estimated to be 2,849 cfs; 2,355 cfs; 802 cfs; and 20,461 cfs, respectively. The maximum monthly average flow typically occurs in April, and the minimum monthly average flow is typically in September. The peak flow (20,461 cfs) occurred on April 1, 1998, and the minimum flow (802 cfs) occurred September 4, 2015. Annual and monthly flow duration curves for the Gorham Project are presented in Appendix E.

TABLE 3 MEAN, MEDIAN, MINIMUM, AND MAXIMUM RIVER FLOWS BY MONTH FOR THE GORHAM PROJECT (JANUARY 1988 TO DECEMBER 2017).

MONTH	MEAN FLOW (CFS)	MEDIAN FLOW (CFS)	MINIMUM FLOW (CFS)	MAXIMUM FLOW (CFS)
January	2,591	2,576	1,285	6,478
February	2,704	2,653	1,306	7,146
March	3,057	2,828	1,296	14,601
April	4,702	3,671	1,306	20,461
May	4,055	3,131	1,419	16,657
June	2,998	2,319	1,193	13,161
July	2,330	1,902	971	10,591
August	2,070	1,851	1,141	10,282
September	1,957	1,861	802	10,004
October	2,449	1,984	1,049	15,423
November	2,688	2,267	1,172	10,282
December	2,600	2,385	1,193	10,066
Annual	2,849	2,355	802	20,461

- This is not a conduit project
- The Project's run-of-river operations create a stable impoundment environment.

3.2 ECOLOGICAL FLOWS STANDARDS: BYPASSED REACH ZOE

CRITERION	STANDARD	INSTRUCTIONS
A	2	<p><u>Agency Recommendation:</u></p> <ul style="list-style-type: none"> Identify the proceeding and source, date, and specifics of the agency recommendation applied (NOTE: there may be more than one; identify and explain which is most environmentally stringent). Explain the scientific or technical basis for the agency recommendation, including methods and data used. This is required regardless of whether the recommendation is or is not part of a Settlement Agreement. Explain how the recommendation relates to agency management goals and objectives for fish and wildlife. Explain how the recommendation provides fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking rate conditions, and seasonal and episodic instream flow

- The New Hampshire Department of Environmental Services granted the licensee a water quality certification for the Project on April 25, 1991 (Appendix C).
- On June 9, 1995, FERC issued an order modifying and approving run-of-river and minimum flow monitoring plans⁶, under article 403 of the license⁷. Article 403 of the project license requires the licensee to file with the Commission for approval, a plan to monitor run-of-river operation and minimum flows of the project, as stipulated by articles 401 and 402, respectively.
- The minimum flow monitoring plan along with the run-of-river mode were modified to include:
 - If the flows through the project, as measured by the approved system, deviate from the run-of-river requirements under Article 401, or if the minimum flow, as measured by the approved gage, falls below 200 cfs, the required flow under Article 402, the licensee shall file a report, with the Commission, within 30 days of the incident.
 - The licensee was required to prepare the plan after consultation with the U.S. Geological Survey (USGS), the U.S. Fish and Wildlife Service (FWS), and the New Hampshire Fish and Game Department (NHFGD).
- The Licensee provides a minimum flow of 200 cfs, as measured immediately below the Gorham dam, by passing water over a modified flashboard panel at the west end of the dam.
- To quantify the total water being passed at the dam, the licensee has installed a heated Metritape level sensor. The Metritape sensor assembly consists of a 2-inch removable, heated sensor/pipe within a permanent 3-inch outer pipe. The Metritape assembly (type LA-AF) has been chosen because of its operating temperature range (-29 to +107ø Celsius), it has no moving parts, has high mechanical shock resistance and its output is

⁶ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=3014673>

⁷ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13711082>

stable and dependable. The Metritape level sensor will inputs to the CRP NH's Control Center Customized Energy Solutions (CES) to ensure that the required pool level, corresponding to the 200 cfs minimum flow requirement, is maintained.

- The meter is located in the pool area at the foot of the dam. The measured pool level will be used to correspond to the flows being passed at the dam. A chart recorder coupled to the output of the Metritape level sensor provides a continuous record of pool level below the dam.
- Routinely, the pool, bypass reach, and flashboards are visually inspected. Any accumulation of materials that may prevent meeting the minimum flow requirement are removed. While refilling the impoundment, the 200 cfs minimum flow is maintained by leaving an appropriate number of flashboard panels down and maintaining the required pool level immediately below Gorham dam.
- During refilling of the impoundment as may be necessary after any maintenance and/or repairs, the licensee will release Aquatic Base Flows (ABF) or 90 percent of inflow, whichever is less, into the tailrace to protect aquatic resources downstream. The ABF flows used for this project are 680 cubic feet per second (cfs) from June through September, 1,360 cfs from October through March, and 5,440 cfs from April through May. These flows are based on drainage flow criteria derived from the FWS's Interim Regional Policy for New England Stream Flow Recommendations.

3.3 ECOLOGICAL FLOWS STANDARDS: DOWNSTREAM ZOE

CRITERION	STANDARD	INSTRUCTIONS
A	2	<p><u>Agency Recommendation:</u></p> <ul style="list-style-type: none"> Identify the proceeding and source, date, and specifics of the agency recommendation applied (NOTE: there may be more than one; identify and explain which is most environmentally stringent). Explain the scientific or technical basis for the agency recommendation, including methods and data used. This is required regardless of whether the recommendation is or is not part of a Settlement Agreement. Explain how the recommendation relates to agency management goals and objectives for fish and wildlife. Explain how the recommendation provides fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking rate conditions, and seasonal and episodic instream flow

- The Downstream ZOE does not have a bypassed reach.
- The New Hampshire Department of Environmental Services granted the licensee a water quality certification for the Project on April 25, 1991 (Appendix C).
- On June 9, 1995, FERC issued an order modifying and approving run-of-river and minimum flow monitoring plans, under article 403 of the license. Article 403 of the project license requires the licensee to file with the Commission for approval, a plan to monitor run-of-river operation and minimum flows of the project, as stipulated by articles 401 and 402, respectively.
- The minimum flow monitoring plan along with the run-of-river mode were modified to include:
 - If the flows through the project, as measured by the approved system, deviate from the run-of-river requirements under Article 401, or if the minimum flow, as measured by the approved gage, falls below 200 cfs, the required flow under Article 402, the licensee shall file a report, with the Commission, within 30 days of the incident.
- The Licensee provides a minimum flow of 200 cfs, as measured immediately below the Gorham dam, by passing water over a modified flashboard panel at the west end of the dam.
- To quantify the total water being passed at the dam, the licensee has installed a heated Metritape level sensor. The Metritape sensor assembly consists of a 2-inch removable, heated sensor/pipe within a permanent 3-inch outer pipe. The Metritape assembly (type LA-AF) has been chosen because of its operating temperature range (-29 to +107ø Celsius), it has no moving parts, has high mechanical shock resistance and its output is stable and dependable. The Metritape level sensor will inputs to the CRP NH's Control Center Customized Energy Solutions (CES) to ensure that the required pool level, corresponding to the 200 cfs minimum flow requirement, is maintained.
- The meter is located in the pool area at the foot of the dam. The measured pool level will be used to correspond to the flows being passed at the dam. A chart recorder coupled to

the output of the Metritape level sensor provides a continuous record of pool level below the dam.

- Routinely, the pool, bypass reach, and flashboards are visually inspected. Any accumulation of materials that may prevent meeting the minimum flow requirement are removed. While refilling the impoundment, the 200 cfs minimum flow is maintained by leaving an appropriate number of flashboard panels down and maintaining the required pool level immediately below Gorham dam.
- During refilling of the impoundment as may be necessary after any maintenance and/or repairs, the licensee will release Aquatic Base Flows (ABF) or 90 percent of inflow, whichever is less, into the tailrace to protect aquatic resources downstream. The ABF flows used for this project are 680 cubic feet per second (cfs) from June through September, 1,360 cfs from October through March, and 5,440 cfs from April through May. These flows are based on drainage flow criteria derived from the FWS's Interim Regional Policy for New England Stream Flow Recommendations.
- The Gorham water treatment facility discharges to the Androscoggin River approximately 500 feet downstream of the powerhouse (PSNH 1998⁸). There are no current or proposed water withdrawals or consumptive uses of water at the Gorham Project.
- The elevation of the Androscoggin River at the base of the Gorham dam is approximately 758 feet, and the elevation at the Shelburne dam is approximately 700 feet (FEMA 2013⁹). Therefore, the river is low gradient, dropping 58 feet over approximately 3 miles between the Gorham and Shelburne dams (58 feet/15,200 feet=0.004 or 0.4 percent).
- This is not a conduit project.

⁸ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=59742>

⁹ <http://www.granit.unh.edu/dfirms/d-FISpdfs/FIS33007CV001A.pdf>

3.4 WATER QUALITY STANDARDS: ALL ZOES

CRITERION	STANDARD	INSTRUCTIONS
B	2	<p><u>Agency Recommendation:</u></p> <ul style="list-style-type: none"> • If facility is located on a Water Quality Limited river reach, provide an agency letter stating that the facility is not a cause of such limitation. • Provide a copy of the most recent Water Quality Certificate, including the date of issuance. • Identify any other agency recommendations related to water quality and explain their scientific or technical basis. • Describe all compliance activities related to the water quality related agency recommendations for the facility, including on-going monitoring, and how those are integrated into facility operations.

- The Androscoggin River in the Gorham Project area is classified by the state of New Hampshire as Class B. Class B waters are “*considered acceptable for fishing, swimming and other recreational purposes, and, after adequate treatment, for use as water supplies.*” All surface waters shall be free from substances that: settle to form harmful benthic deposits; float as foam, debris, scum or other visible substances; produce odor, color, taste or turbidity that is not naturally occurring and would render the surface water unsuitable for its designated uses; result in the dominance of nuisance species; or interfere with recreational activities (NHDES 2008¹⁰). Water quality criteria are provided in Table 4. The Androscoggin River in the Gorham Project area is not listed as impaired on the 303(d) list for the state of New Hampshire (NHDES 2017a¹¹).

TABLE 4 WATER QUALITY CRITERIA FOR CLASS B WATERS IN NEW HAMPSHIRE.*

PARAMETER	CRITERIA
DO	At least 75% saturation, based on a daily average; instantaneous minimum of 5 mg/L
Color	No concentrations that would impair any existing or designated use, unless naturally occurring
Turbidity	Shall not exceed naturally occurring conditions by more than 10 NTU
Nutrients	Shall contain no phosphorus or nitrogen in such concentrations that would impair any existing or designated uses, unless naturally occurring.
pH	6.5 to 8.0
Temperature	Any stream temperature increase associated with the discharge of treated sewage, waste or cooling water, water diversions, or releases shall not be such as to appreciably interfere with the uses assigned to this class.

*NHDES 2008¹²

¹⁰ <https://www.des.nh.gov/organization/commissioner/legal/rules/documents/env-wq1700.pdf>

¹¹ <https://www.des.nh.gov/organization/divisions/water/wmb/swqa/2016/index.htm>

¹² <https://www.des.nh.gov/organization/commissioner/legal/rules/documents/env-wq1700.pdf>

- Article 405 of the license requires the licensee to file with the Commission, for approval, a plan to monitor DO levels and water temperature of the Androscoggin River upstream and downstream of the project.
- On June 20, 1995, FERC issued an order modifying and approving dissolved oxygen and water temperature monitoring plan¹³ for the Project which was filed on February 1, 1995.
- The purpose of each monitoring plan is to ensure that stream flows, as measured immediately upstream of the impoundment, downstream of the project dam, and downstream of the project tailrace, maintain a DO content of no less than 75 percent saturation. The monitoring plans must include a schedule for: (1) implementation of the monitoring plan; (2) consultation with the appropriate federal and state agencies concerning the results of monitoring; and (3) filing the results, agency comments, and the licensee's response to agency comments with the Commission.
- Article 405 requires the licensee to prepare the monitoring plans after consultation with the New Hampshire Department of Environmental Services (NHDES), the New Hampshire Fish and Game Department (NHFGD), and USFWS.
- The New Hampshire Department of Environmental Services granted the licensee a water quality certification for the Project on April 25, 1991 (Appendix C).
- Ordering paragraph (C) of the June 20, 1995¹⁴ order (modifying and approving dissolved oxygen and water temperature monitoring plan) required the licensee to file a final report on the results of the monitoring at each project. If the results of the three years of monitoring indicate that further sampling is needed at either project, the licensee is to include recommendations, for Commission approval, for continuing the monitoring study. The purpose of the monitoring plans was to ensure that stream flows, upstream and downstream of the project, maintain a dissolved oxygen (DO) content of no less than 75 percent saturation. Final report on the results of the monitoring was submitted on June 29, 1998¹⁵ and approved by FERC on August 13, 1998¹⁶.
- Water quality was monitored at 26 sites in the Androscoggin River between Berlin, New Hampshire, and Gilead, Maine, from August 4-6, 1987, under low flow, high water temperature conditions (NAI 1989). One of the sites was in the Gorham Project headpond and was sampled once each day; a continuous logger recorded DO data in the tailrace over the three-day period. DO in the impoundment was 8.1 mg/L, 7.9 mg/L, and 7.8 mg/L on August 4, 5, and 6, respectively (Table 5). In the tailrace, DO ranged from approximately 7.3 mg/L to 8.2 mg/L with a mean of 7.5 mg/L; the water temperature ranged from 69°F to 73°F. At the time of the study, the Androscoggin River in the Gorham Project area was classified as Class C (it was reclassified to Class B in 1991); there were no violations of Class B or Class C water quality standards in the Gorham headpond or tailrace (NAI 1989).

¹³ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=3015458>

¹⁴ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=3015458>

¹⁵ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=59742>

¹⁶ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10811982>

TABLE 5 WATER QUALITY DATA COLLECTED AUGUST 4-6, 1987, IN THE GORHAM PROJECT HEADPOND.

DATE	DO (MG/L)	TOTAL KJELDAHL NITROGEN (MG/L)	AMMONIA (MG/L)	TOTAL PHOSPHORUS (MG/L)	CHLOROPHYLL-A (µG/L)	WATER TEMPERATURE (°F)	PH
August 4	8.1	0.77	0.11	0.05	2.33	73.4	6.7
August 5	7.9	0.84	0.16	0.01	1.24	70.7	
August 6	7.8	1.10	0.08	0.07	0.66	69.8	

- PSNH continuously monitored DO and water temperature over 72-hour periods at two sites at the Gorham Project in 1994, 1995, and 1997 (PSNH 1998¹⁷). One site was approximately 500-feet-upstream of the dam in the headpond, and the second site was in the tailrace approximately 200-feet-downstream of the powerhouse. The objective of the monitoring was to assess if station generation impacted DO and water temperature conditions at the project. The DO percent saturation ranged from 64.6 percent to 100.7 percent in the headpond and from 65.3 percent to 100.2 percent in the tailrace (Table 6). A relationship between DO and generation was not observed in the headpond or tailrace (PSNH 1998).

TABLE 6 DO (PERCENT SATURATION) MEASURED IN THE GORHAM PROJECT HEADPOND AND TAILRACE

DATE	HEADPOND	TAILRACE
August 9-12, 1994	87.5-99.8	74.4-92.3
September 2-5, 1994	64.6-87.8	65.7-88.0
August 4-7, 1995	66.1-83.4	68.2-86.1
August 25-28, 1995	74.4-90.3	65.3-86.9
October 4-7, 1995	80.7-95.5	82.9-96.6
July 18-21, 1997	84.7-100.7	90.2-100.2
August 15-18, 1997	no data-issues with instrument	82.4-97.4
September 5-8, 1997	81.0-94.4	83.4-93.7

¹⁷ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=59742>

- The New Hampshire Volunteer River Assessment Program (VRAP) monitors water quality at several sites in the Upper Androscoggin River (NHDES 2017b¹⁸). None of the monitoring sites are within the Gorham project boundary, but one site is at the Gorham railroad trestle approximately 2-river-miles-upstream of the Gorham Project. Several water quality parameters are measured on multiple days (6 to 11) each year between May and October. The range of measurements observed each year monitoring occurred are shown in Table 7. The DO concentration and percent saturation met the state standard in all samples collected in 2004, 2013, 2014, 2015, 2016, and 2017 (Table 7) (NHDES 2017b). In 2011-2015 and 2017, pH measurements below the state standard were recorded.
- There is also the Shelburne monitoring site (Meadow Road Bridge), which is 5.83 miles downstream of the Project (Table 8).

TABLE 7 WATER QUALITY DATA COLLECTED AT THE RAILROAD TRESTLE IN GORHAM, NH, IN 2013 TO 2017, BY THE VOLUNTEER RIVER ASSESSMENT PROGRAM.*

DATE	DO (MG/L)	DO (% SATURATION)	WATER TEMPERATURE (°C)	pH	TURBIDITY (NTU)	SPECIFIC CONDUCTANCE (µS/CM)
May 10-October 28, 2017	8.2-12.3	90-102.2	7.3-20.2	5.9-6.9	0.64-2.0	26.2-35.0
June 30-October 22, 2016	7.8-9.9	89.7-94.1	13.2-22.5	6.8-7.1	0.8-1.3	34.2-37.6
June 26-October 18, 2015	7.5-10.5	78.9-96.0	8.3-21.6	6.3-6.9	0.7-2.3	26.6-34.8
June 15-October 18, 2014	7.2-9.5	79.4-91.2	13.7-21.9	6.1-6.6	0.8-1.5	27.5-34.3
June 22-October 26, 2013	6.5-10.9	72.3-102.5	6.3-22.9	6.1-6.6	0.9-2.7	34.0-38.6
June 7-October 7, 2012	3.3-9.2	38.4-96.2	12.0-22.6	6.1-6.6	0.9-2.2	34.7-51.2
June 6-October 25, 2011	4.2-6.8	46.1-71.3	10.3-20.2	6.1-6.5	1.3-2.4	29.9-37.7
June 11-September 3, 2004	8.1-8.8	89.7-92.2	17.9-21.1	6.6-7.1	1.6-2.1	54.4-89.0

*NHDES 2017

TABLE 8 ANDROSCOGGIN RIVER, MEADOW ROAD BRIDGE, SHELBURNE

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µs/cm)	Water Temp / (°C)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cmA	NA
5/10/2017	9:30	12.32	104.8	6.35	1.76	25	7.7
6/23/2017	8:40	9.05	101.7	6.35	2.04	33.2	20
7/31/2017	8:20	9.22	104.4	6.67	1.68	31.2	20.8

¹⁸ <https://www.des.nh.gov/organization/divisions/water/wmb/vrap/androscoggin/index.htm>

8/21/2017	8:25	9.3	104.6	6.58	1.41	31.6	20.6
9/18/2017	8:37	9.41	103.6	6.64	1.67	34.1	19.6
10/24/2017	8:00	10.62	104.4	6.4	1.93	33.5	13.9

Source: VRAP Data¹⁹

*Measurements not meeting New Hampshire surface water quality standards in blue

- The 2016 303(d) impaired waters list includes a listing for low DO and pH at Gorham and Shelburne units, and for low Aluminum in Shelburne.

The draft 2018 303(d) list²⁰ includes the same listings. While the listing identifies the source of impairments as unknown, this section of the Androscoggin River has long been known for being contaminated from paper production operations and addressing the contamination was one of the primary objectives behind the Clean Water Act, as explained in *Waterways Restored: Case Study 9 – Maine’s Androscoggin River*²¹.

¹⁹ <https://www.des.nh.gov/organization/divisions/water/wmb/vrap/androscoggin/documents/and-data-2017.pdf>

²⁰ <https://www.des.nh.gov/organization/divisions/water/wmb/swqa/2018/documents/2018-draft-303d.xlsx>

²¹ https://frontiergroup.org/blogs/blog/fg/waterways-restored-case-study-9-maines-androscoggin-river#_ednref3

TABLE 9 2016 303(D) LIST FOR GORHAM AND SHELBURNE, NH

Assessment Unit ID	Water Name	Primary Town	Water Size	Size Unit	Use Desc	Impairment Name	DES Category	Threatened	TMDL Priority	Source Name
NHRIV400020101-12	Androscoggin River	Gorham	1.051	Miles	Aquatic Life	Oxygen, Dissolved	5-P	N	Low	Source Unknown
NHRIV400020101-12	Androscoggin River	Gorham	1.051	Miles	Aquatic Life	pH	5-M	N	Low	Source Unknown
NHRIV400020103-06	Androscoggin River	Shelburne	9.054	Miles	Aquatic Life	Aluminum	5-M	N	Low	Source Unknown
NHRIV400020103-06	Androscoggin River	Shelburne	9.054	Miles	Aquatic Life	Dissolved oxygen saturation	5-M	N	Low	Source Unknown
NHRIV400020103-06	Androscoggin River	Shelburne	9.054	Miles	Aquatic Life	Oxygen, Dissolved	5-P	N	Low	Source Unknown
NHRIV400020103-06	Androscoggin River	Shelburne	9.054	Miles	Aquatic Life	pH	5-M	N	Low	Source Unknown

- Per email dated January 15, 2019 (Appendix D), CRP NH requested that the NHDES verify the continued operations of the project will not contribute to water quality limitations. To date, no response has been received.

3.5 UPSTREAM FISH PASSAGE STANDARDS: ALL ZOES

CRITERION	STANDARD	INSTRUCTIONS
C	1	<p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none"> • Explain why the facility does not impose a barrier to upstream fish passage in the designated zone. Typically, impoundment zones will qualify for this standard since once above a dam and in an impoundment, there is no facility barrier to further upstream movement. • Document available fish distribution data and the lack of migratory fish species in the vicinity. • If migratory fish species have been extirpated from the area, explain why the facility is or was not the cause of this.

- The facility does not pose a barrier to upstream passage, the Gorham Project is approximately 68 river miles upstream of Lewiston Falls, which is the natural upstream migration limit for most diadromous species on the Androscoggin River. However, historical records show that sea-run Atlantic salmon and American eel could pass the falls at Lewiston and move upstream to Rumford Falls, which is approximately 40 RM downstream of the Gorham Project (Brown et al., 2006²²). Diadromous species did not occur in the Project area historically, nor do they occur presently. Therefore, there is no Essential Fish Habitat in the upper Androscoggin River.
- Although there is no federal mandatory prescription for the upstream passage of fish at the Project, License Article 404²³ of the current license requires the licensee to install, maintain and operate fishways if requested by the Commission pursuant to Section 18 and Standard Article 11²⁴ of the current license requires the Licensee to install fish passage and other wildlife facilities when requested by state and federal resource agencies.

²² <http://cybrary.friendsofmerrymeetingbay.org/DMR/NA05NMF4051120.pdf>

²³ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13711082>

²⁴ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13711082>

3.6 DOWNSTREAM FISH PASSAGE AND PROTECTION STANDARDS: ALL ZOES

CRITERION	STANDARD	INSTRUCTIONS
D	2	<p><u>Agency Recommendation:</u></p> <ul style="list-style-type: none"> Identify the proceeding and source, date, and specifics of the agency recommendation applied (NOTE: there may be more than one; identify and explain which is most environmentally protective). Explain the scientific or technical basis for the agency recommendation, including methods and data used. This is required regardless of whether the recommendation is part of a Settlement Agreement or not. Describe any provisions for fish passage monitoring or effectiveness determinations that are part of the agency recommendation, and how these are being implemented.

- The Gorham Project is approximately 68 river miles upstream of Lewiston Falls, which is the natural upstream migration limit for most diadromous species on the Androscoggin River. However, historical records show that sea-run Atlantic salmon and American eel could pass the falls at Lewiston and move upstream to Rumford Falls, which is approximately 40 RM downstream of the Gorham Project (Brown et al., 2006²⁵). Diadromous species did not occur in the Project area historically, nor do they occur presently. Therefore, there is no Essential Fish Habitat in the upper Androscoggin River.
- Although there is no federal mandatory prescription for the upstream passage of fish at the Project, License Article 404²⁶ of the current license requires the licensee to install, maintain and operate fishways if requested by the Commission pursuant to Section 18 and Standard Article 11²⁷ of the current license requires the Licensee to install fish passage and other wildlife facilities when requested by state and federal resource agencies.
- License article 406²⁸ requires the licensee to file functional design drawings of a trashrack and downstream fish passage facility and schedule for installation. Article was stayed by Order dated February 20, 1996²⁹ and then deleted by Order of January 9, 2003³⁰.

²⁵ <http://cybrary.friendsofmerrymeetingbay.org/DMR/NA05NMF4051120.pdf>

²⁶ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13711082>

²⁷ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13711082>

²⁸ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13711082>

²⁹ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=8287075>

³⁰ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=9618758>

3.7 SHORELINE AND WATERSHED PROTECTION STANDARDS: ALL ZONES

CRITERION	STANDARD	INSTRUCTIONS
E	2	<p><u>Agency Recommendation:</u></p> <ul style="list-style-type: none"> • Provide copies or links to any agency recommendations or management plans that are in effect related to protection, mitigation, or enhancement of shoreline surrounding the facility (e.g., Shoreline Management Plans). • Provide documentation that indicates the facility is in full compliance with any agency recommendations or management plans that are in effect.

- The area surrounding the Impoundment, Bypassed Reach, and Downstream ZONES consists of forested stretches along both sides of the river, with patches of wooded and emergent wetlands along the edges of the river. Mixed industrial and commercial buildings and rural residential housing are spaced relatively evenly on western side of the river while the eastern side of the river is largely undeveloped. Land cover units identified in the vicinity of the project can be found in the Land Cover map below as identified within the National Land Cover Database, 2011 (http://www.mrlc.gov/nlcd11_leg.php).

Land Cover

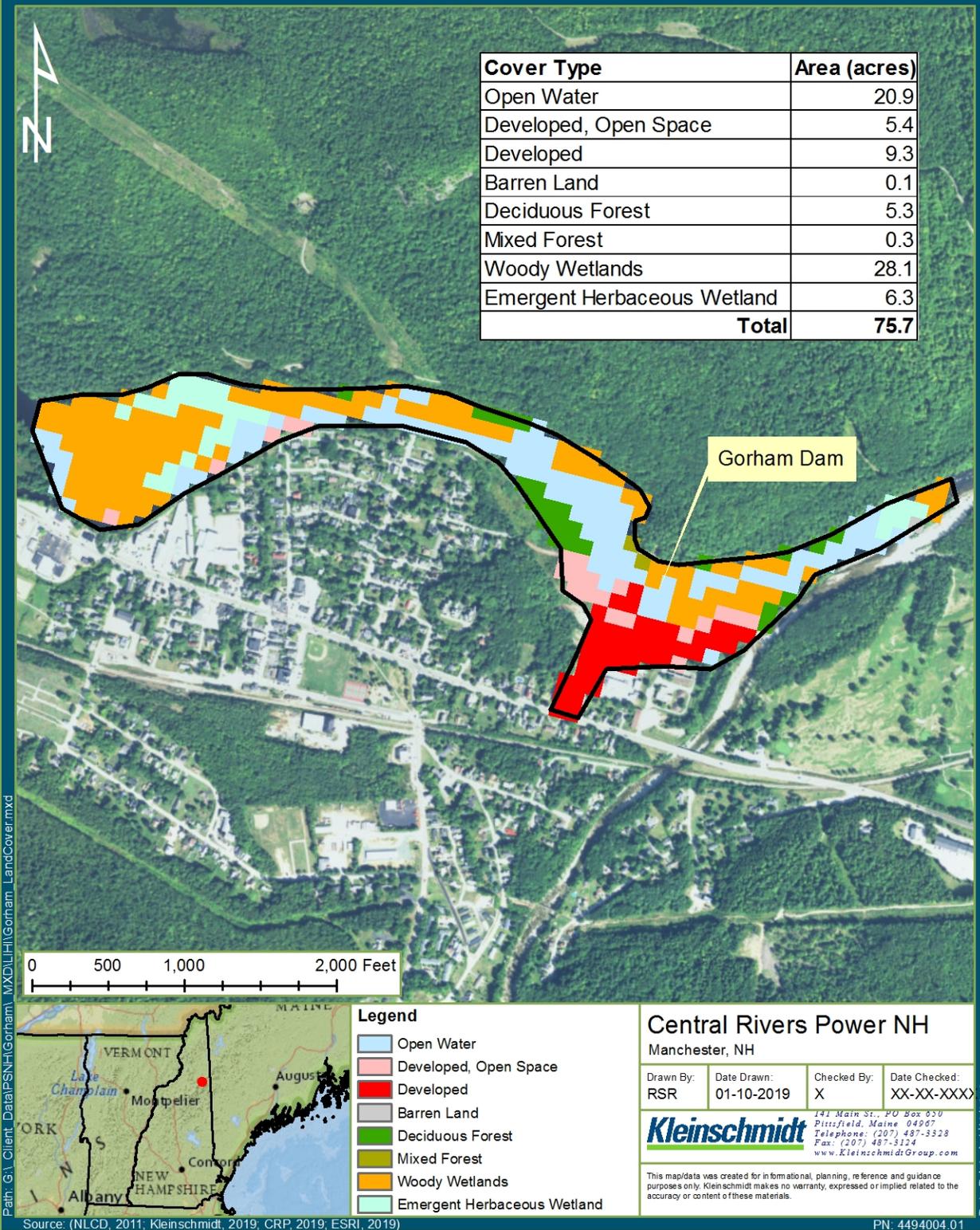


FIGURE 4 LAND COVER MAP

- Article 408 of the project license requires the licensee to file a shoreland protection plan to protect the aesthetics of and public access to the project's shoreland. The article requires the plan to include maps delineating the shoreland protective buffer zone area; a description of vegetative management; and measures for maintaining the aesthetics of the transmission line right-of-way. The article also requires the licensee to prepare the plan after consultation with the Town of Gotham, City of Berlin, NHFGD, and the National Park Service (NPS).
- On August 1, 1995, PSNH filed a Shoreland Protection Plan for the Gorham Project and supplemented the filing on September 22, 1998 by letter. FERC modified and approved the plan on April 19, 1999 (87 FERC ¶ 62,076)³¹.
- PSNH adopted provisions from the New Hampshire Shoreland Water Quality Protection Act (SWQPA) to serve as the Shoreland Protection Plan for the Gorham Project (PSNH 1995³²; FERC 1999³³; NHDES 2017³⁴). Specifically, all land within 250-feet of the ordinary high water mark will be defined as protected shoreland with restrictions on the uses of that land, and land within a 150-foot buffer of the ordinary high water mark will be maintained as a natural woodland buffer (FERC 1999; NHDES 2017). CRP NH manages vegetation growth along the transmission line right-of-way to minimize adverse impacts to project facilities and aesthetics (FERC 1999; PSNH 1999³⁵). Furthermore, CRP NH 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 (e.g., Eversource Energy 2017³⁶).

Annual shoreland inspection and reports (last 5 years):

- 2018³⁷
- 2017³⁸
- 2016³⁹
- 2015⁴⁰
- 2014⁴¹
- 2013⁴²

³¹ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10832771>

³² <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10676421>

³³ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10832771>

³⁴ <https://www.des.nh.gov/organization/divisions/water/wetlands/cspa/index.htm>

³⁵ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=134344>

³⁶ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14773768>

³⁷ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=15120645>

³⁸ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14773768>

³⁹ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14420208>

⁴⁰ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14062556>

⁴¹ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13702463>

⁴² <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13398006>

Bonus:

E	PLUS	<p><u>Bonus Activities:</u></p> <ul style="list-style-type: none">• Provide documentation that the facility has a formal conservation plan protecting a buffer zone of 50% or more of the undeveloped shoreline that the facility owns around its reservoirs and river corridors.• In lieu of a formal conservation plan, provide documentation that the facility has established a watershed enhancement fund for ecological land management that will achieve the equivalent land protection value of an ecologically effective buffer zone of 50% or more around undeveloped shoreline.
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- As previously discussed, the Project has a FERC approved Shoreland Protection Plan for the Gorham Project that stipulates that all land within 250-feet of the ordinary high water mark is protected shoreland with restrictions on the uses of that land, and land within a 150-foot buffer of the ordinary high water mark are maintained as a natural woodland buffer. CRP NH manages vegetation growth along the transmission line right-of-way to minimize adverse impacts to project facilities and aesthetics. CRP NH conducts annual inspections of the shoreland to assess compliance with the SWQPA and whether any changes to the SWQPA impact the Gorham project, which have not identified any violations of the SWQPA.
- Based upon calculation within GIS of the shoreline boundary and shoreline development information illustrated in Figure 4 above, approximately 77% of the shoreline within the project boundary and subject to the Riparian Zone Management Plan is undeveloped.

3.8 THREATENED AND ENDANGERED SPECIES STANDARDS: IMPOUNDMENT ZOE

CRITERION	STANDARD	INSTRUCTIONS
F	1	<p><u>Finding of No Negative Effects:</u></p> <ul style="list-style-type: none"> Identify all listed species in the facility area based on current data from the appropriate state and federal natural resource management agencies. Provide documentation of a finding of no negative effect of the facility on any listed species in the area from an appropriate natural resource management agency.

- Based on an official USFWS Species List populated on February 1, 2019, (Appendix D), the northern long-eared bat (*Myotis septentrionalis*) and the Canada lynx (*Lynx canadensis*) may occur in the Project Area.
- It is unlikely that the northern long-eared bat or Canada lynx would use the Project area for breeding or hibernating due to the urbanized development located around the Project. However, the species could use the area for feeding and transit place. For brief occurrences such as these it is unlikely that the species would be affected long term by the existing project operations.
- Based on the available habitat and ranges of the state listed species using the New Hampshire Fish and Game species list and fact sheets within the New Hampshire Wildlife Action Plan, three additional bat species have been identified as having the potential to occur in or near the Project Area (Table 10).

TABLE 10 POTENTIAL STATE AND FEDERAL LISTED SPECIES THAT MAY OCCUR IN THE PROJECT AREA.

COMMON NAME	SCIENTIFIC NAME	STATUS
Eastern small-footed bat	<i>Myotis leibii</i>	SE
Little brown bat	<i>Myotis lucifugus</i>	SE
Northern long-eared bat	<i>Myotis septentrionalis</i>	SE, FT
Tri-colored bat	<i>Perimyotis subflavus</i>	SE
Canada lynx	<i>Lynx canadensis</i>	SE, FT

- Per request through the Natural Heritage Bureau (NHB) Datacheck Tool on December 28, 2018, CRP NH requested that the NHB verify the list of possible rare, threatened, and endangered species and determine if the Project continued to operate in compliance with Water Quality Certification conditions, the Project would not be expected to negatively affect listed species located in or within the vicinity of the Project.
- On January 24, 2018, additional information about the project was submitted to the NHB and NHFG including project description, project operations, and date of dam construction (Appendix G).

- On January 29, 2019, NHB responded that there is record for a sugar maple - silver maple - white ash floodplain forest. There is an area of this community west (upstream of) the dam, as well as areas to the east (downstream of) the dam. This location is one of only two documented exemplary sugar maple - silver maple - white ash floodplain forests in the state. Portions of this natural community are described as having evident disturbance and patchy distribution of invasive species while records indicate that to the east “was a typical, non-disturbed patch of high terrace floodplain forest”. The presence of the dam may contribute to the current condition of these communities, for example maintaining the headpond at elevation 96.75 feet may alter downstream flood regimes to unknown effect. However, the inflow from the Peabody River may lessen influence from the dam.

The first part of the existing Gorham powerhouse was built in 1909. Additional parts of the Gorham Project were built from 1917 to 1923 in stages by the Twin State Gas and Electric Company. In addition, the dam was enlarged several times, in 1903, 1927-1928, and 1958-1959. The Gorham Project was acquired by PSNH in 1943. The Project is operated as run-of-river with no impoundment fluctuations. Article 402 of the existing license requires there be a minimum flow release of 200 cfs from the Gorham dam at all times. It is the applicant’s opinion that the continued use of the Project will not significantly affect the sugar maple - silver maple - white ash floodplain forest.

3.9 THREATENED AND ENDANGERED SPECIES STANDARDS: BYPASSED REACH ZOE

CRITERION	STANDARD	INSTRUCTIONS
F	1	<u>Finding of No Negative Effects:</u> <ul style="list-style-type: none">• Identify all listed species in the facility area based on current data from the appropriate state and federal natural resource management agencies.• Provide documentation of a finding of no negative effect of the facility on any listed species in the area from an appropriate natural resource management agency.

- Please see answer to Impoundment ZOE above.

3.10 THREATENED AND ENDANGERED SPECIES STANDARDS: DOWNSTREAM ZOE

CRITERION	STANDARD	INSTRUCTIONS
F	1	<u>Finding of No Negative Effects:</u> <ul style="list-style-type: none">• Identify all listed species in the facility area based on current data from the appropriate state and federal natural resource management agencies.• Provide documentation of a finding of no negative effect of the facility on any listed species in the area from an appropriate natural resource management agency.

- Please see answer to Impoundment ZOE above.

3.11 CULTURAL AND HISTORIC RESOURCES STANDARDS: ALL ZOES

CRITERION	STANDARD	INSTRUCTIONS
G	2	<p><u>Approved Plan:</u></p> <ul style="list-style-type: none"> • Provide documentation of all approved state, provincial, federal, and recognized tribal plans for the protection, enhancement, and mitigation of impacts to cultural and historic resources affected by the facility. • Document that the facility is in compliance with all such plans

- In 1991, Justine Gengras and Dr. Charles Bolian conducted a Phase 1 archeological study of the Gorham Project vicinity. While, they did not identify any prehistoric resources, they did identify two historic sites in the Gorham Project boundary. The Eddy Bridge site is comprised of abutments for an 1877-1921 suspension bridge and the Logging Boom site contains logging cribs and boom. Both sites are continuously inundated and not affected by normal Gorham Project operations. In addition, to the Eddy Bridge and Logging Boom site, Gengras and Bolian noted that some terrace areas and Buck Island near the Gorham Project may have a potential for prehistoric resource sensitivity (PSNH 1996⁴³).
- In 1992, Ronald Tetu evaluated the Gorham Project for the potential eligibility to be listed on the National Register of Historic Places (NRHP). While the facility was greater than 50 years of age, it does not remain the integrity needed for listing due to the extensive redevelopment of the Gorham Project. The New Hampshire State Historic Preservation Office (SHPO) noted in a letter dated August 3, 1992 that the Gorham Project is “of historic interest” (PSNH 1996).
- Article 407 of the 1994 License⁴⁴ order provides for a “Programmatic Agreement Among the Federal Energy Regulatory Commission, the Advisory Council on Historic Preservation, and the New Hampshire Division for Historic Preservation, for Managing Historic Properties Likely to be Affected by Continuing to Operate the Sawmill Project, Project No. 2422, Cross Power Project, Project No. 2326, Cascade Project, Project No. 2327, Gorham Project, Project No. 2311, Shelburne Project, Project No. 2300, J. Brodie Smith Project, Project No. 2287, and Gorham Project No. 2288, All Located on the Androscoggin River” (Programmatic Agreement) as executed in November 1993. Among other things this Programmatic Agreement provides for a Cultural Resources Management Plan (FERC 1994⁴⁵).
- In accordance with Article 407, a cultural resources management plan was submitted to FERC on July 22, 1996⁴⁶.

⁴³ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=8262365>

⁴⁴ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13711082>

⁴⁵ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13711082>

⁴⁶ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=8262365>

Annual Historic Reports (last 5 years):

- 2018⁴⁷
- 2017⁴⁸
- 2016⁴⁹
- 2015⁵⁰
- 2014⁵¹
- 2013⁵²

⁴⁷ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=15120647>

⁴⁸ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14780314>

⁴⁹ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14446306>

⁵⁰ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14072314>

⁵¹ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13709555>

⁵² <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13414493>

3.12 RECREATIONAL RESOURCES STANDARDS: ALL ZOES

CRITERION	STANDARD	INSTRUCTIONS
H	2	<u>Agency Recommendation:</u> <ul style="list-style-type: none"> Document any comprehensive resource agency recommendations and enforceable recreation plan that is in place for recreational access or accommodations. Document that the facility is in compliance with all such recommendations and plans.

- In accordance with License Article 409, CRP NH provides recreation facilities along the south shore of the Gorham project including a walking trail, a picnic area, a canoe portage, a fishing area downstream of the powerhouse, parking, and an information kiosk; a second information kiosk is located on the north shore of the project (FERC 1995⁵³; PSNH 2005⁵⁴, 2010⁵⁵, 2015⁵⁶). Access to the Androscoggin River within the Gorham project boundary is also available from Hogan Road which runs along the northern shore. Hogan Road is an informal road primarily used by all-terrain vehicles (ATV) and mountain bikers.
- PSNH filed a recreation use report with FERC every five years for the Gorham Project (FERC 1995). Annual recreation use information is obtained from observations made by project operators who record 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). The total number of visitors to the Gorham Project were 160 from 1996-1999, 314 from 2000 to 2004, 596 from 2005 to 2009, and 469 from 2010 to 2014 (Table 11). The most popular activities at the Gorham Project were walking and hiking followed by fishing and biking (PSNH 2000⁵⁷, 2005, 2010, 2015).

TABLE 11 NUMBER OF RECREATION VISITS FROM THE 5-YEAR RECREATION USAGE REPORTS FOR THE GORHAM PROJECT.

RECORDING METHOD	1996-1999	2000-2004	2005-2009	2010-2014
Operator Reports	-	251	503	401
Surveys	-	63	93	68
Total	160	314	596	469

⁵³ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=3011454>

⁵⁴ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10629158>

⁵⁵ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12339755>

⁵⁶ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13801790>

⁵⁷ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=3202222>

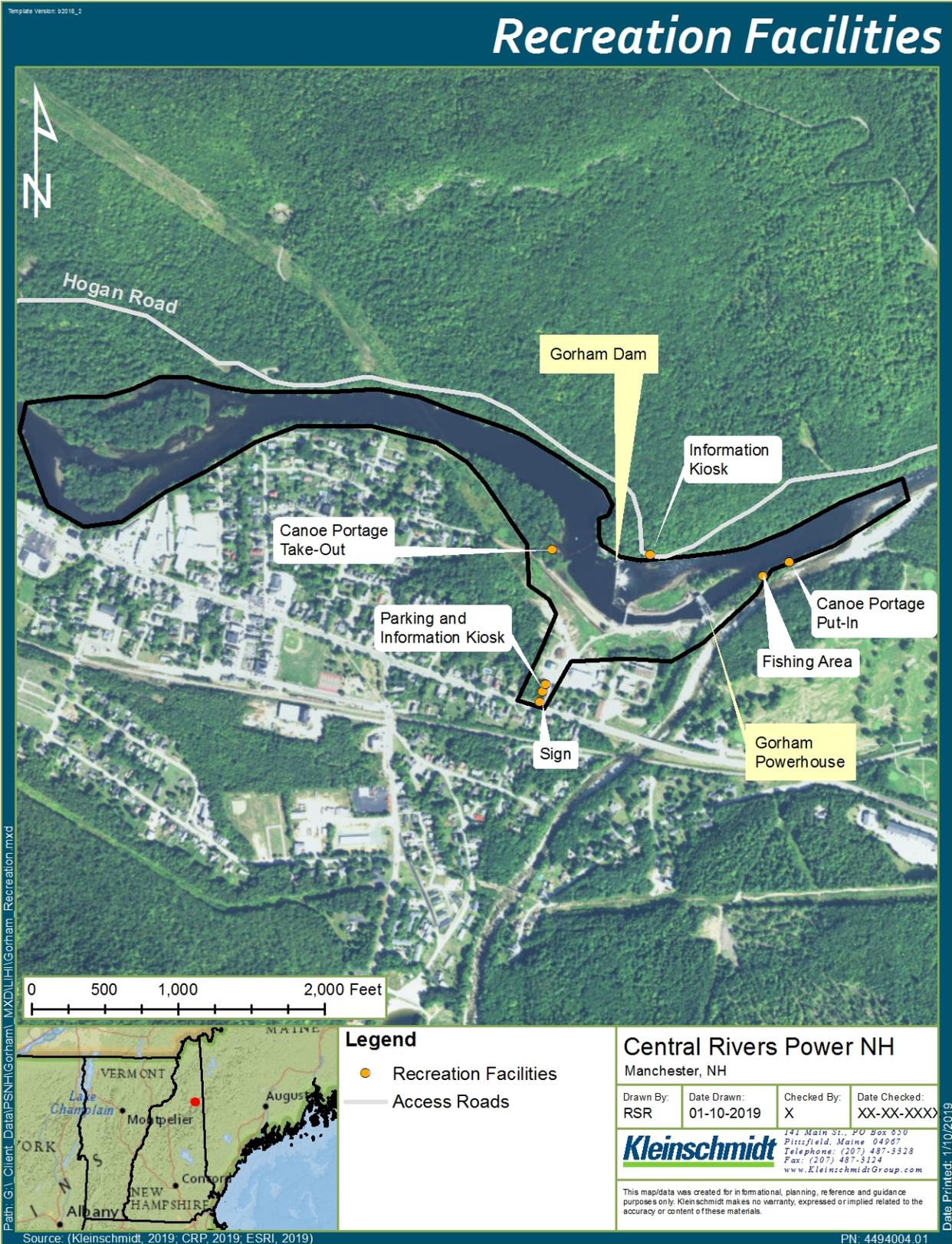


FIGURE 5 RECREATION FACILITIES AT THE GORHAM HYDROELECTRIC PROJECT.

- CRP NH reports the number of recreation days at the Gorham project every six years in the FERC Form 80 Licensed Hydropower Development Recreation Report. The annual total recreation days were 977, 47, and 870 in 2003, 2009, and 2015, respectively. Capacity utilization ranged from 15 percent to 25 percent (PSNH 2003⁵⁸, 2009⁵⁹; Eversource 2015⁶⁰).

TABLE 12 RECREATION DAYS* AND CAPACITY UTILIZATION FROM THE 2003, 2009, AND 2015 FERC FORM 80 REPORTS FOR THE GORHAM PROJECT.

	2003	2009	2015 ⁶¹
Annual Total Recreation Days	977	47	870
Peak Weekend Average Recreation Days	20	125	8
Capacity Utilization (%)	25	20	15

*A recreation day is defined as each visit by a person to a development for recreational purposes during any portion of a 24-hour period.

Recreation Reports:

- 2014⁶² and supplemental information⁶³
- 2015 (Appendix F)

⁵⁸ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=3202222>

⁵⁹ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12354128>

⁶⁰ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13801790>

⁶¹ Appendix F

⁶² <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13801790>

⁶³ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13822113>

4.0 REFERENCES

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<https://www.des.nh.gov/organization/divisions/water/wmb/vrap/androscoggin/index.htm>. Accessed May 29, 2018.
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- Public Service Company of New Hampshire (PSNH). 1996. Cultural Resource Management Plan for the Gorham Hydroelectric Facility, in Gorham Township, Coos County, New Hampshire. Santa Fe, NM 87505.
- Public Service Company of New Hampshire (PSNH). 1998. 1994, 1995, & 1997 Final Report of Water Quality Monitoring for Gorham Project, FERC L.P. No. 2288.
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- Public Service of New Hampshire (PSNH). 2003. FERC Form 80 Submittal. March 27, 2003.
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- Public Service of New Hampshire (PSNH). 2015. 2015 Recreational Usage Report for the Gorham Hydroelectric Project. Project No. 2288-NH. Submitted March 31, 2015.

5.0 CONTACTS FORMS

1. All applications for LIHI Certification must include complete contact information to be reviewed.

Project Owner:	
Name and Title	Todd, Wynn; CEO Portfolio Companies
Company	Hull Street Energy
Phone	301-664-7701
Email Address	twynn@hullstreetenergy.com
Mailing Address	4920 Elm Street, Suite 205 Bethesda, MD 20814
Consulting Firm / Agent for LIHI Program (if different from above):	
Name and Title	Andy Qua
Company	Kleinschmidt Associates
Phone	207-416-1246
Email Address	Andy.Qua@kleinschmidtgroup.com
Mailing Address	141 Main Street P.O. Box 650 Pittsfield, Maine 04967
Compliance Contact (responsible for LIHI Program requirements):	
Name and Title	Curtis R. Mooney; Manager, Regulatory Affairs
Company	Central Rivers Power
Phone	(603)744-0846
Email Address	cmooney@centralriverspower.com
Mailing Address	59 Ayers Island Road Bristol, NH 03222
Party responsible for accounts payable:	
Name and Title	Ryan McQueeney; CFO, Portfolio Companies
Company	Hull Street Energy, LLC
Phone	(301)664-7702
Email Address	accounting@centralriverspower.com
Mailing Address	4920 Elm Street, Suite 205 Bethesda, MD 20814

2. Applicant must identify the most current and relevant state, federal, provincial, and tribal resource agency contacts (copy and repeat the following table as needed).

Agency Contact (Check area of responsibility: Flows <u>X</u> , Water Quality __, Fish/Wildlife Resources <u>X</u> , Watersheds <u>X</u> , T/E Spp. __, Cultural/Historic Resources __, Recreation __):	
Agency Name	United States Fish and Wildlife Service (USFWS)
Name and Title	Julianne Rosset; Fish & Wildlife Biologist
Phone	603-227-6436
Email address	julianne_rosset@fws.gov
Mailing Address	USFWS New England Field Office 70 Commercial Street, Suite 300 Concord, NH 03301
Agency Contact (Check area of responsibility: Flows <u>X</u> , Water Quality <u>X</u> , Fish/Wildlife Resources __, Watersheds <u>X</u> , T/E Spp. __, Cultural/Historic Resources __, Recreation __):	
Agency Name	New Hampshire Department of Environmental Services (NHDES)
Name and Title	Gregg Comstock, P.E.; Supervisor, Water Quality Planning Section
Phone	603-271-2983
Email address	gregg.comstock@des.nh.gov
Mailing Address	NH Department of Environmental Services 29 Hazen Drive, P.O. Box 95 Concord, NH 03302-0095

Agency Contact (Check area of responsibility: Flows <u>X</u> , Water Quality <u>X</u> , Fish/Wildlife Resources <u>X</u> , Watersheds __, T/E Spp. <u>X</u> , Cultural/Historic Resources __, Recreation <u>X</u>):	
Agency Name	New Hampshire Fish and Game Department (NHFGD)
Name and Title	Carol Henderson; Environmental Review Coordinator
Phone	603-271-1138
Email address	Carol.Henderson@wildlife.nh.gov
Mailing Address	New Hampshire Fish and Game Department 11 Hazen Drive Concord, NH 03301

Agency Contact (Check area of responsibility: Flows __, Water Quality __, Fish/Wildlife Resources __, Watersheds __, T/E Spp. __, Cultural/Historic Resources <u>X</u> , Recreation __):	
Agency Name	New Hampshire Division of Historical Resources
Name and Title	Nadine Miller; Deputy State Historic Preservation Officer
Phone	603-271-6628
Email address	Nadine.Miller@dcr.nh.gov
Mailing Address	NH Division of Historical Resources 19 Pillsbury Street – 2 nd Floor Concord, NH 03301-3570

Agency Contact (Check area of responsibility: Flows <u>X</u> , Water Quality __, Fish/Wildlife Resources __, Watersheds __, T/E Spp. __, Cultural/Historic Resources __, Recreation __):	
Agency Name	Federal Energy Regulatory Commission
Name and Title	John Spain; Regional Engineer
Phone	212-273-5900
Email address	John.Spain@ferc.gov
Mailing Address	19 West 34 th Street Suite 400 New York, NY 1001-3006

B.3 Sworn Statement and Waiver Form

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

SWORN STATEMENT

*As an Authorized Representative of **Central Rivers Power NH Gorham, LLC**, the Undersigned attests that the material presented in the application is true and complete.*

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

The Undersigned further acknowledges that if LIHI Certification of the applying facility is granted, the LIHI Certification Mark License Agreement must be executed prior to marketing the electricity product as LIHI Certified®.

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

PLEASE INSERT FOR PRE-OPERATIONAL CERTIFICATIONS (see [Section 4.5.3](#)):

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.

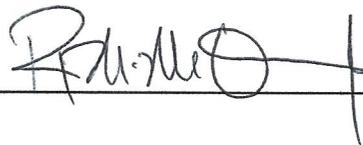
Company Name: CRP NH Gorham, LLC

Authorized Representative:

Name: Ryan McQueeney

Title: CFO

Authorized Signature: _____



Date: March 12, 2019

APPENDIX A

PROJECT ZOE, DRAWINGS, AND PHOTOS



FIGURE 6 **GEOGRAPHIC OVERVIEW OF PROJECT LOCATION**

Zones of Effect

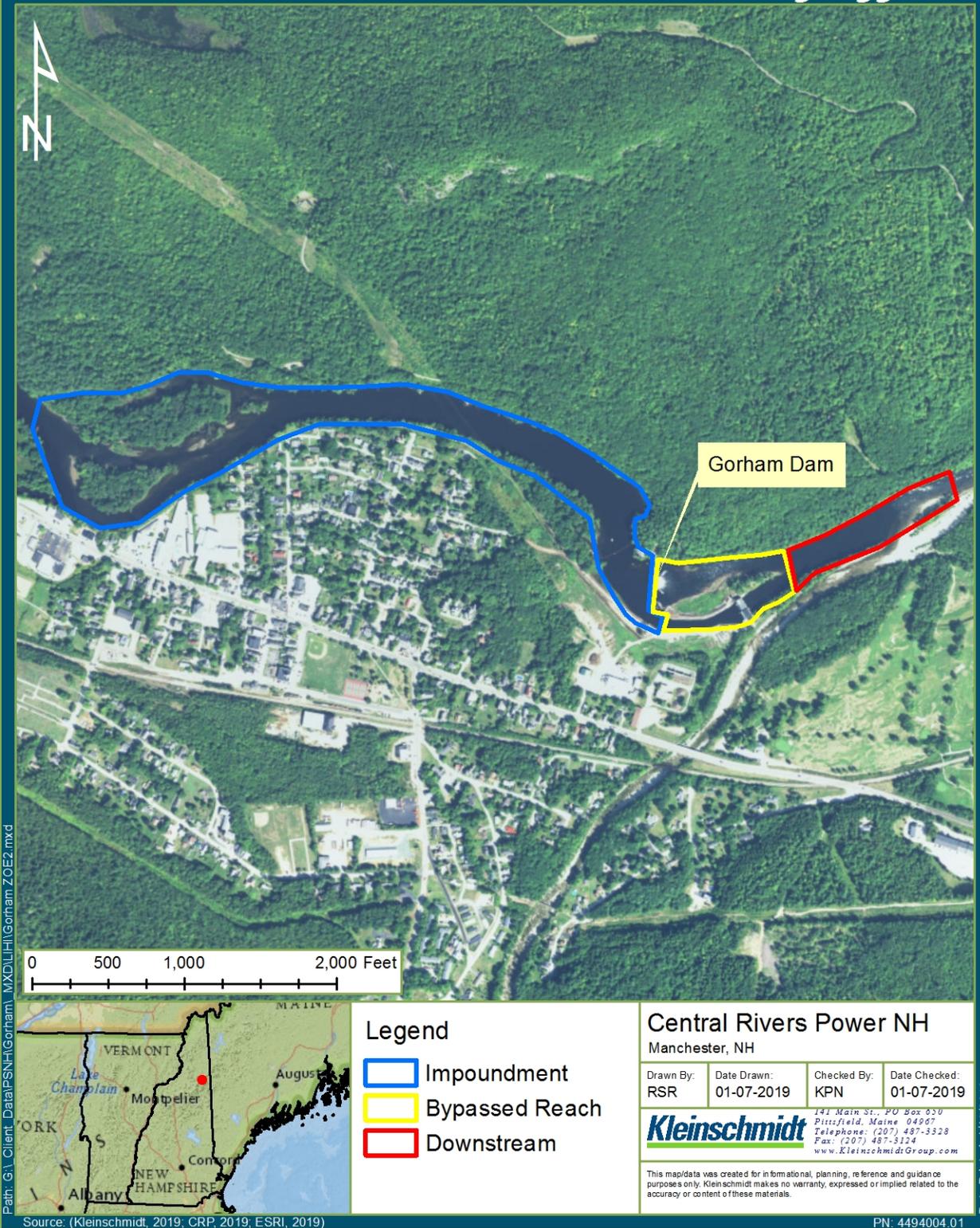


FIGURE 7 ZONES OF EFFECT

Project Location

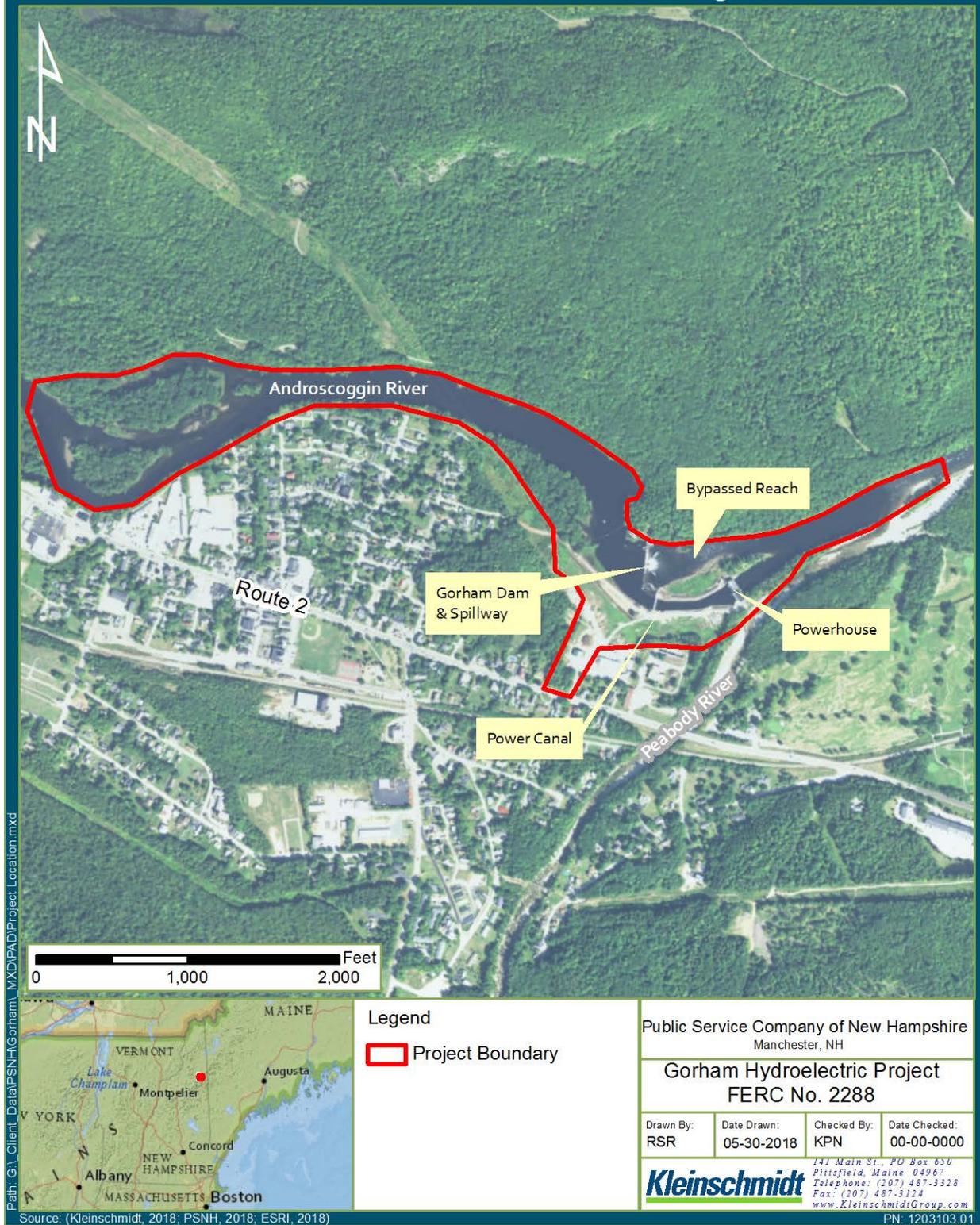


FIGURE 8 OVERVIEW OF GORHAM PROJECT



PHOTO 5 **GORHAM DAM**



PHOTO 6 **GORHAM POWER CANAL**



PHOTO 7 **VIEW OF POWERHOUSE INTERIOR AND GENERATING UNITS.**



PHOTO 8 **VIEW OF LOWERED FLASHBOARD TO PROVIDE MINIMUM FLOW**



PHOTO 9 **VIEW OF BOAT BARRIER**



PHOTO 10 VIEW OF TYPICAL PERMANENT UPSTREAM WARNING SIGN IN RESERVOIR. NOTE BARRIER ON OPPOSITE SHORELINE.



PHOTO 11 VIEW OF CANOE PORTAGE TRAIL AND SIGN.



PHOTO 12 PARKING AREA AND PICNIC TABLE⁶⁴ AT POWERHOUSE AREA. NOTE CANOE PORTAGE SIGN.

⁶⁴ Note that the picnic table has been moved to the other side of the pole fence subsequent to this photo.



PHOTO 13 CANOE PUT-IN LOCATION. NOTE SIGN.

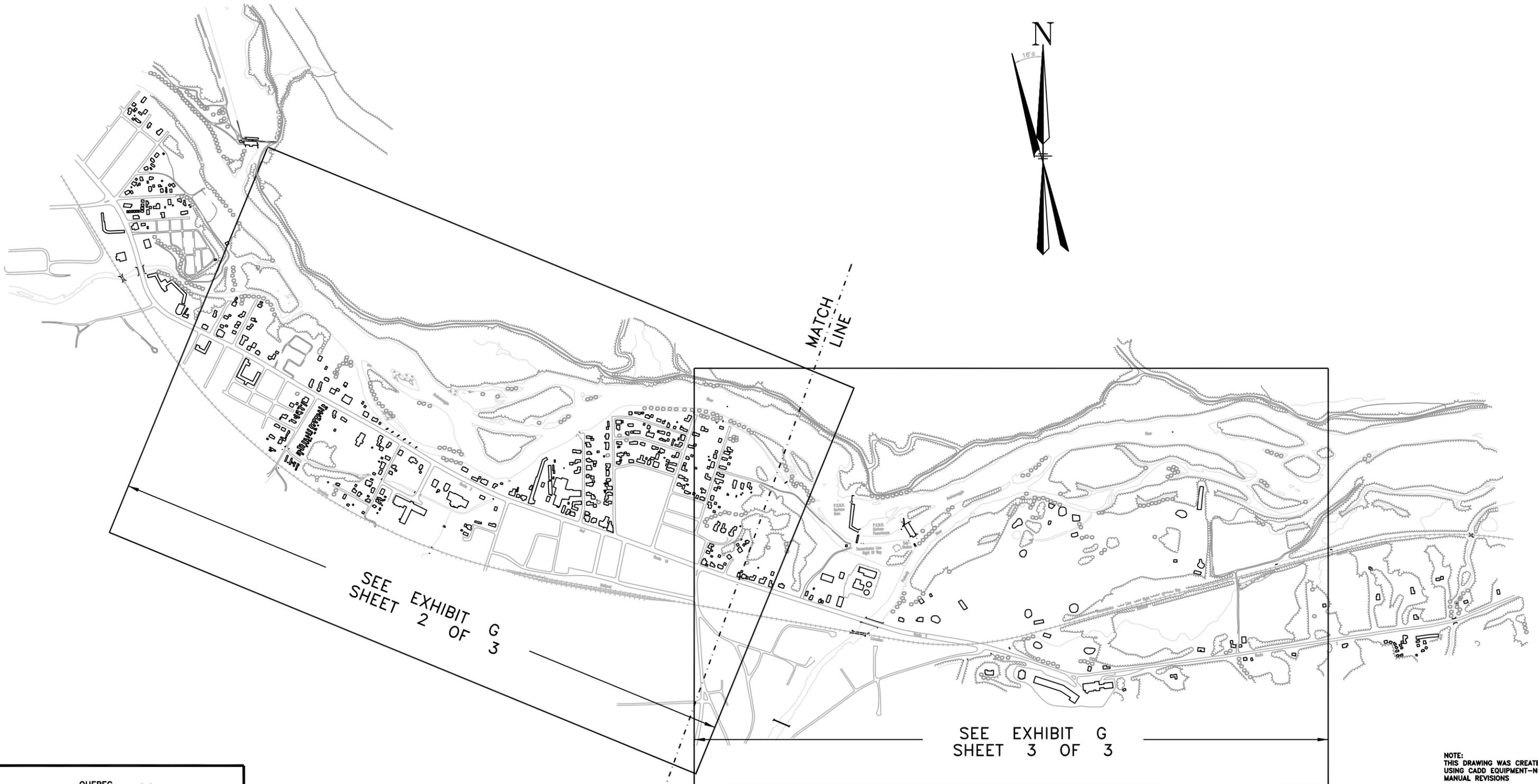


PHOTO 14 INFORMATION AND SURVEY KIOSK AT MAIN PROJECT ENTRANCE.



PHOTO 15 PART 8 SIGN AT THE ENTRANCE TO PROJECT. NOTE SIGN FOR TOWN PUBLIC WORKS GARAGE.

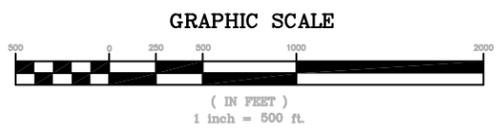
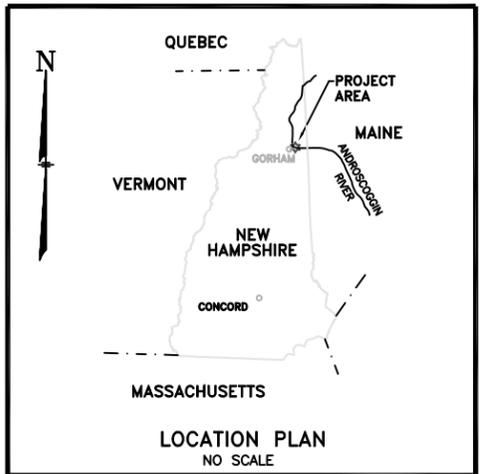
PROJECT DRAWINGS (PUBLIC)



SEE EXHIBIT 2 OF G 3

SEE EXHIBIT G SHEET 3 OF 3

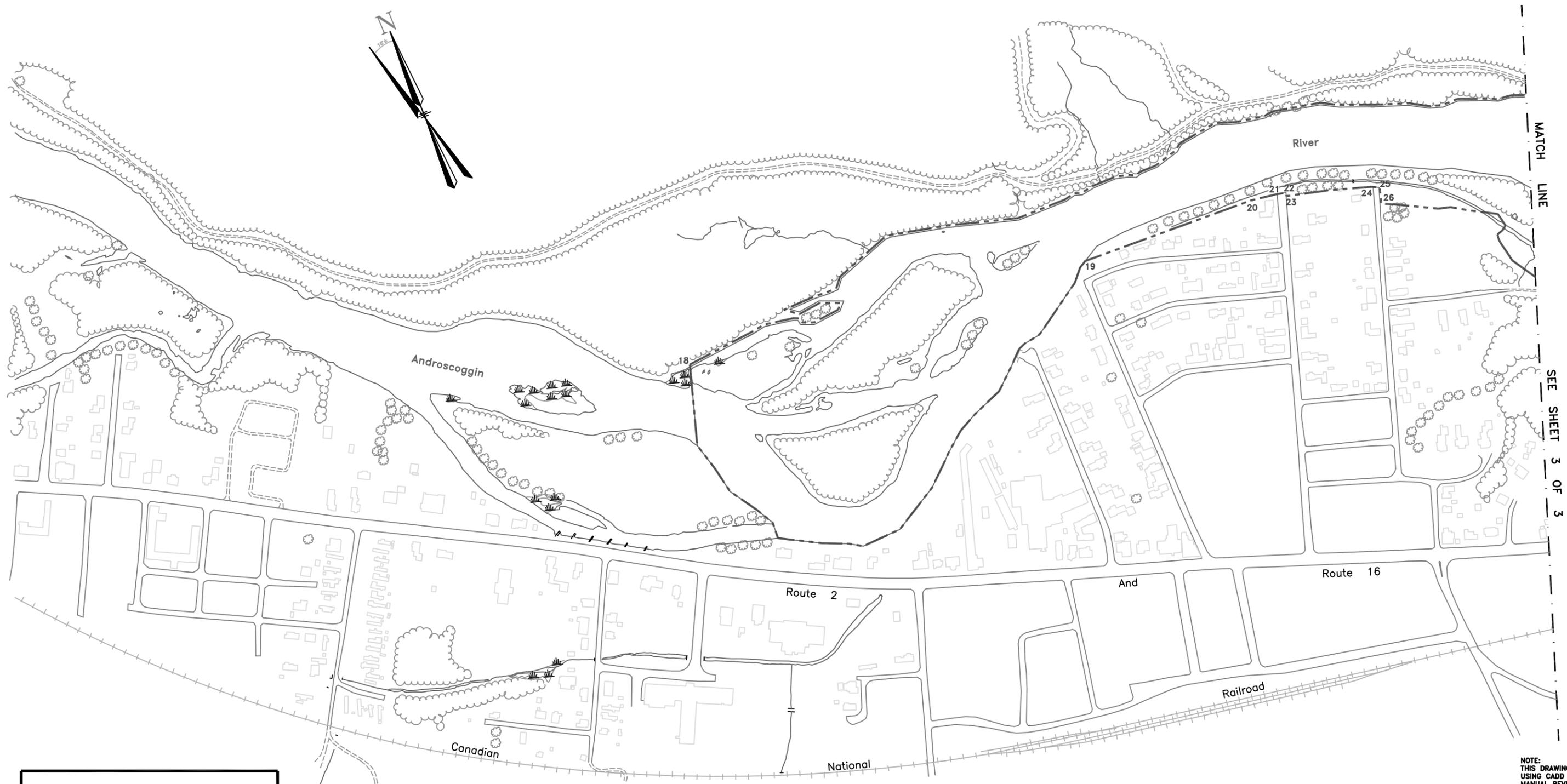
NOTE: THIS DRAWING WAS CREATED USING CADD EQUIPMENT—NO MANUAL REVISIONS



THIS PRINT MAY BE A REDUCED COPY OF THE ORIGINAL. WHEN NECESSARY TO SCALE USE GRAPHIC SCALE ABOVE.

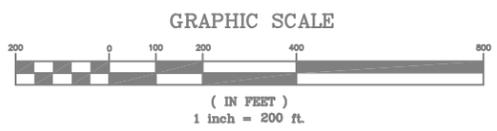
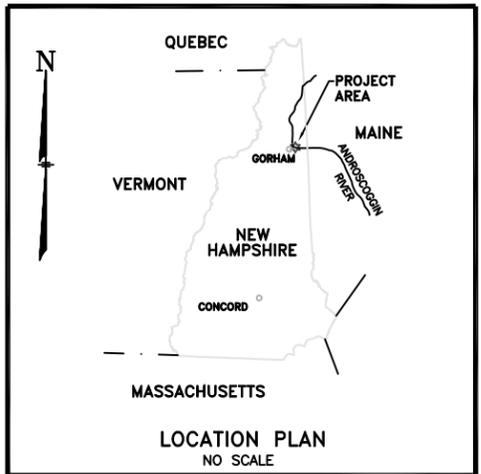
THIS PLAN IS PART OF THE APPLICATION FOR A LICENSE MADE BY THE UNDERSIGNED THIS DAY OF 1991
BY : _____ VICE PRESIDENT
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

EXHIBIT G SHEET 1 OF 3
GORHAM PROJECT
MAP OF PROJECT AREA
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
MANCHESTER, N.H.



MATCH LINE

SEE SHEET 3 OF 3



THIS PRINT MAY BE A REDUCED COPY OF THE ORIGINAL. WHEN NECESSARY TO SCALE USE GRAPHIC SCALE ABOVE.

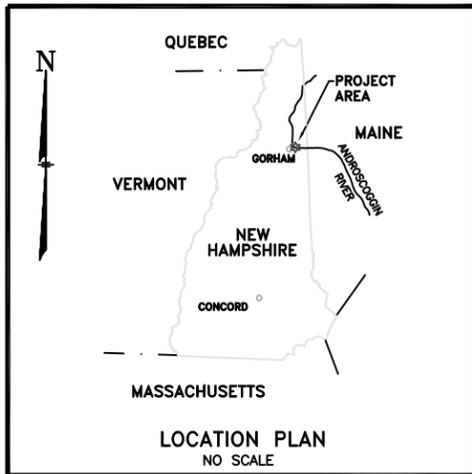
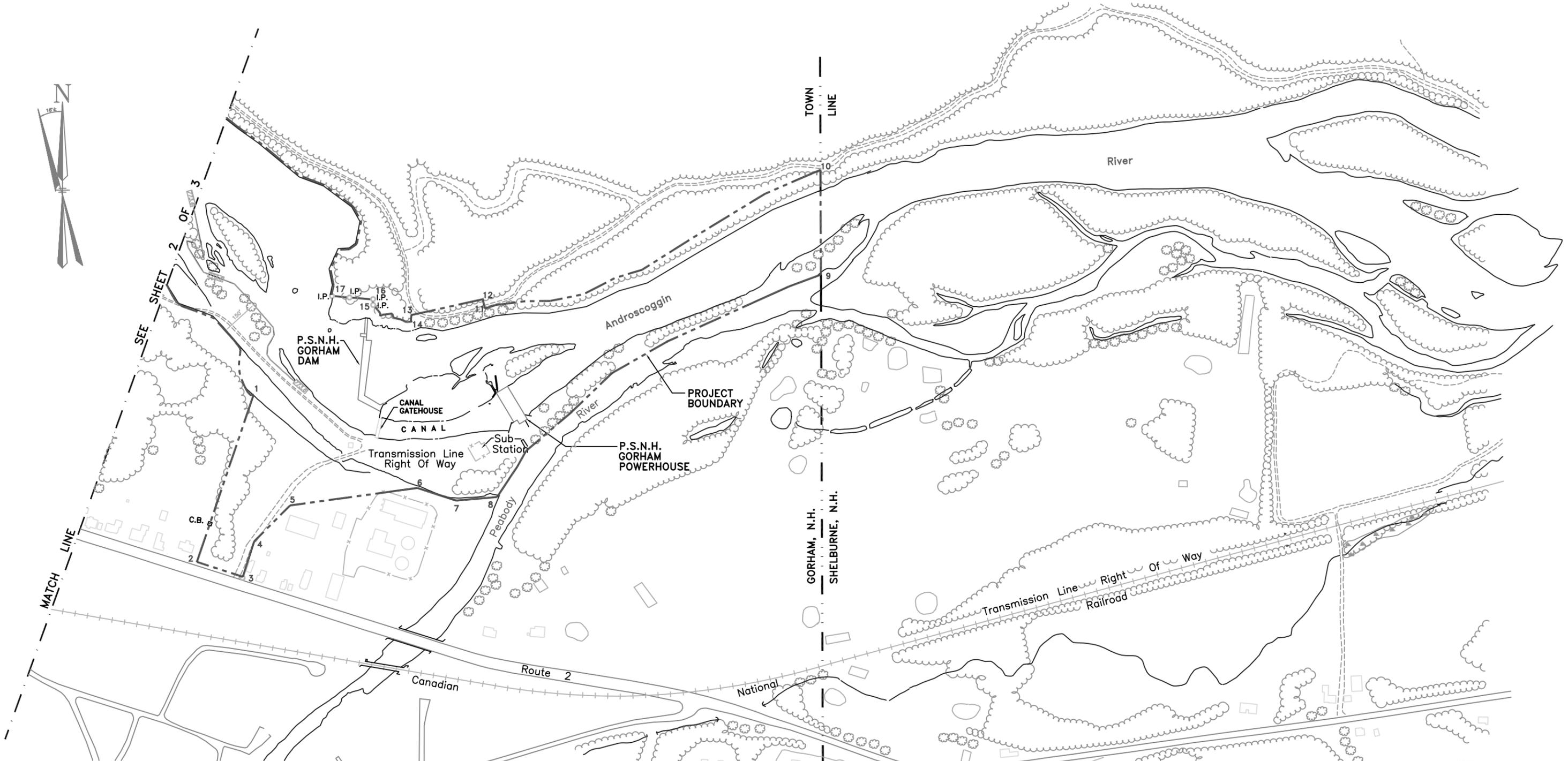
LEGEND:
 - - - - - PROJECT BOUNDARY

THIS PLAN IS PART OF THE APPLICATION FOR A LICENSE MADE BY THE UNDERSIGNED THIS DAY OF
 BY : _____ VICE PRESIDENT
 PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

NOTE: THIS DRAWING WAS CREATED USING CADD EQUIPMENT-NO MANUAL REVISIONS

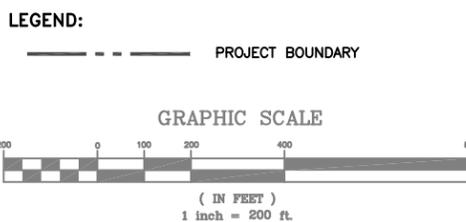
EXHIBIT G SHEET 2 OF 3
 GORHAM PROJECT
 MAP OF PROJECT AREA
 PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
 MANCHESTER, N.H.
 REVISED 4/2000

FERC #2288-34



PROJECT BOUNDARY		
NO.	BEARING	DIST.
1	S 34°-49' E	701'
2	S 55°-59' W	193'
3	N 33°-40' E	148'
4	N 61°-04' E	203'
5	S 81°-04' E	512'
6	S 56°-05' E	164'
7	S 78°-58' E	163'
8	S 78°-58' E	163'
9	PROJECT BOUNDARY IS AT NORMAL WATER LINE ALONG NORTH BANK OF THE PEARBODY RIVER	
10	PROJECT BOUNDARY IS AT TOWN LINE	
11	TOP OF BANK	1440'±
12	N 03°-07' E	38'
13	N 86°-27' W	292'
14	S 19°-28' W	25'
15	PROJECT BOUNDARY IS AT CONTOUR ELEV. 780' U.S.G.S. DATUM TO AN IRON PIN	
16	N 21° E	19'
17	N 89°-14' W	164'
18	PROJECT BOUNDARY IS AT CONTOUR ELEV. 780' U.S.G.S. DATUM	
19	PROJECT BOUNDARY IS AT CONTOUR ELEV. 773.6' U.S.G.S. DATUM	
20	S 71°-33' E	686'±
21	S 65°-06' E	99'±

PROJECT BOUNDARY		
NO.	BEARING	DIST.
21	S 61°-11' E	41'±
22	S 26°-58' W	14'±
23	S 59°-18' E	167'±
24	S 47°-15' E	33'±
25	S 34°-17' W	63'±
26	PROJECT BOUNDARY IS OFFSET 150' FROM CONTOUR ELEV. = 773.6 (U.S.G.S. DATUM)	
1		



THIS PRINT MAY BE A REDUCED COPY OF THE ORIGINAL. WHEN NECESSARY TO SCALE USE GRAPHIC SCALE ABOVE.

- NOTE:**
1. THE APPLICANT OWNS BY DEED ALL LANDS NECESSARY TO OPERATE AND MAINTAIN THE EXISTING PROJECT.
 2. METES AND BOUNDS HAVE NOT BEEN FIELD SURVEYED.
 3. THE TOWN OF GORHAM HAS THE RIGHT BY EASEMENT TO OPERATE AND MAINTAIN THE PIPELINES TO AND FROM THEIR POLLUTION CONTROL FACILITY, LOCATED IN AND ADJACENT TO THE PROJECT BOUNDARY.

THIS PLAN IS PART OF THE APPLICATION FOR A LICENSE MADE BY THE UNDERSIGNED THIS _____ DAY OF _____

BY : _____ VICE PRESIDENT
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

EXHIBIT G SHEET 3 OF 3

GORHAM PROJECT

MAP OF PROJECT AREA

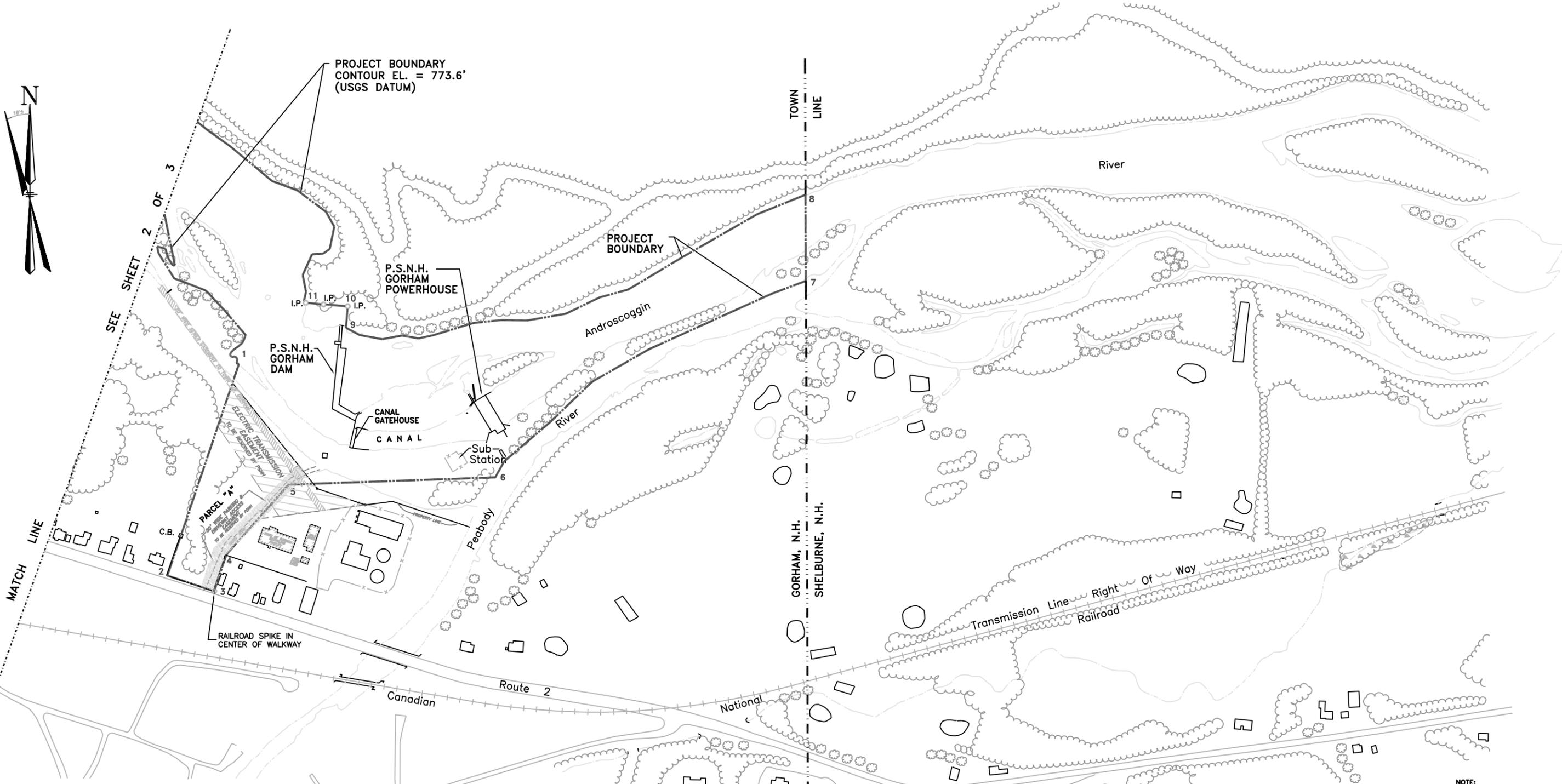
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
MANCHESTER, N.H.

REVISED 4/2000

NOTE: THIS DRAWING WAS CREATED USING CADD EQUIPMENT-NO MANUAL REVISIONS



PROJECT BOUNDARY
CONTOUR EL. = 773.6'
(USGS DATUM)

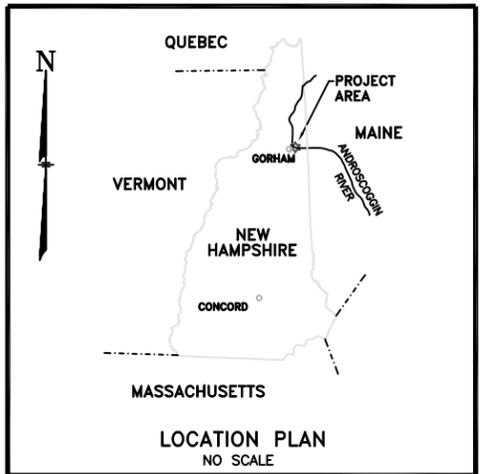


MATCH LINE

SEE SHEET 2 OF 3

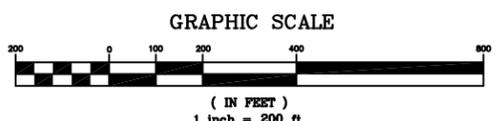
TOWN LINE

GORHAM, N.H.
SHELburne, N.H.



PROJECT BOUNDARY		
NO.	BEARING	DIST.
1	S 34°-43' E	870'
2	S 88°-40' W	193'
3	N 34°-20' E	150'
4	N 57°-40' E	364'
5	S 76°-00' E	807'
6	PROJECT BOUNDARY IS AT NORMAL WATER LINE ALONG NORTH BANK OF THE PEABODY RIVER	
7	PROJECT BOUNDARY IS AT TOWN LINE	
8	PROJECT BOUNDARY IS AT NORMAL WATER LINE ALONG NORTH BANK OF ANDROSCOGGIN RIVER	
9	N 20°-46' E	84'
10	N 69°-14' W	164'
11	PROJECT BOUNDARY IS AT CONTOUR ELEV. = 773.6 FEET (U.S.G.S. DATUM)	
1		

- NOTE:
1. THE APPLICANT OWNS BY DEED ALL LANDS NECESSARY TO OPERATE AND MAINTAIN THE EXISTING PROJECT.
 2. METES AND BOUNDS HAVE NOT BEEN FIELD SURVEYED.
 3. THE TOWN OF GORHAM HAS THE RIGHT BY EASEMENT TO OPERATE AND MAINTAIN THE PIPELINES TO AND FROM THEIR POLLUTION CONTROL FACILITY, LOCATED IN AND ADJACENT TO THE PROJECT BOUNDARY.



THIS PRINT MAY BE A REDUCED COPY OF THE ORIGINAL. WHEN NECESSARY TO SCALE USE GRAPHIC SCALE ABOVE.

LEGEND:
----- PROJECT BOUNDARY

THIS PLAN IS PART OF THE APPLICATION FOR A LICENSE MADE BY THE UNDERSIGNED THIS DAY OF 1991

BY : _____ VICE PRESIDENT
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

EXHIBIT G SHEET 3A OF 3

GORHAM PROJECT
MAP OF PROJECT AREA
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
MANCHESTER, N.H.

NOTE:
THIS DRAWING WAS CREATED USING CADD EQUIPMENT-NO MANUAL REVISIONS

PROJECT DRAWINGS (CEII)

NOT INCLUDED IN PUBLIC VERSION

(THIS MATERIAL IS CRITICAL ENERGY INFRASTRUCTURE INFORMATION (CEII)).

MEMBERS OF THE PUBLIC MAY OBTAIN NONPUBLIC OR PRIVILEGED INFORMATION BY

SUBMITTING A FREEDOM OF INFORMATION ACT (FOIA) REQUEST.

SEE WWW.FERC.GOV/LEGAL/CEII-FOIA.ASP FOR MORE INFORMATION.)

APPENDIX B

FACILITY AREA AND RIVER BASIN

Project Location

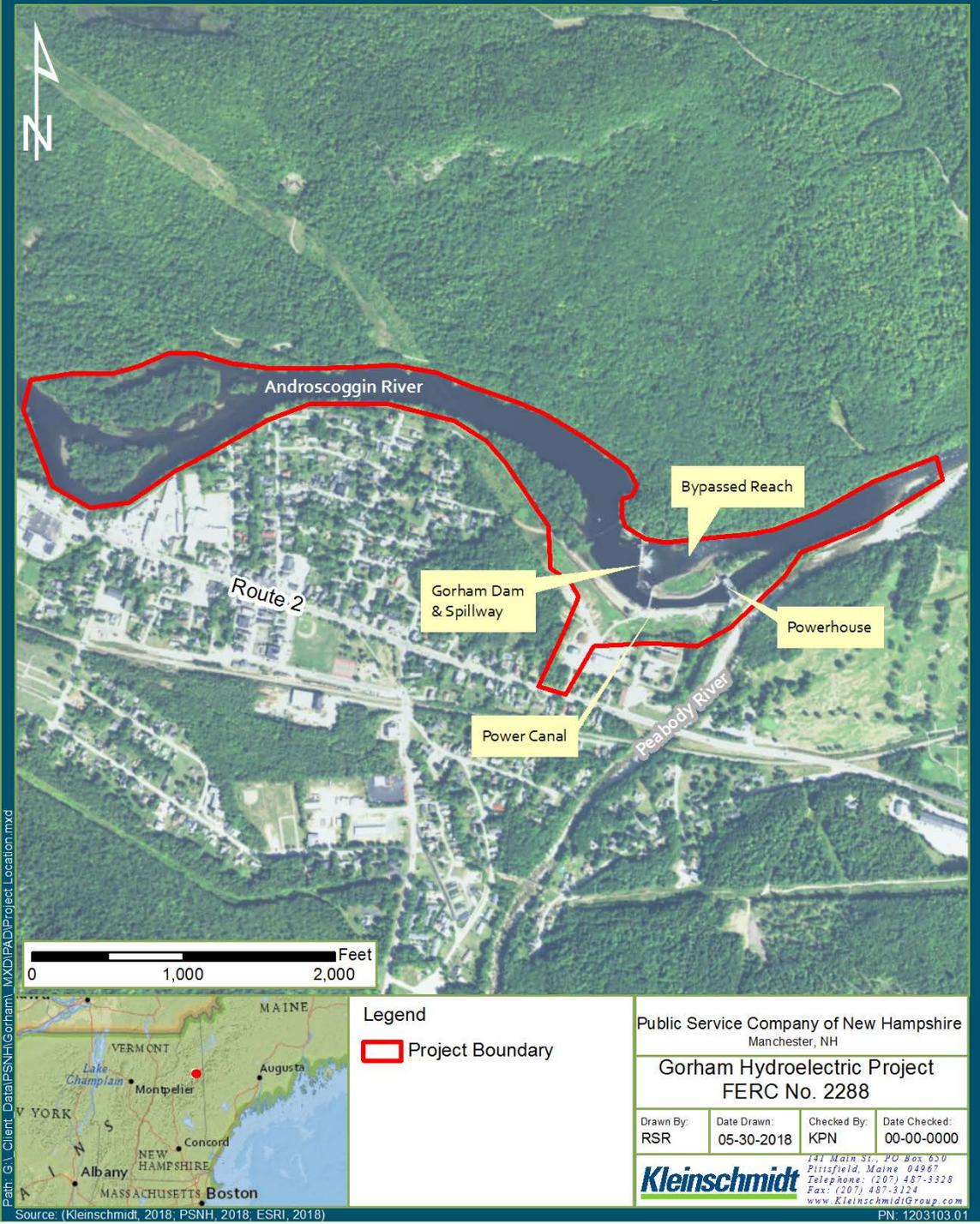


FIGURE 9 PROJECT LOCATION



FIGURE 10 ANDROSCOGGIN RIVER BASIN

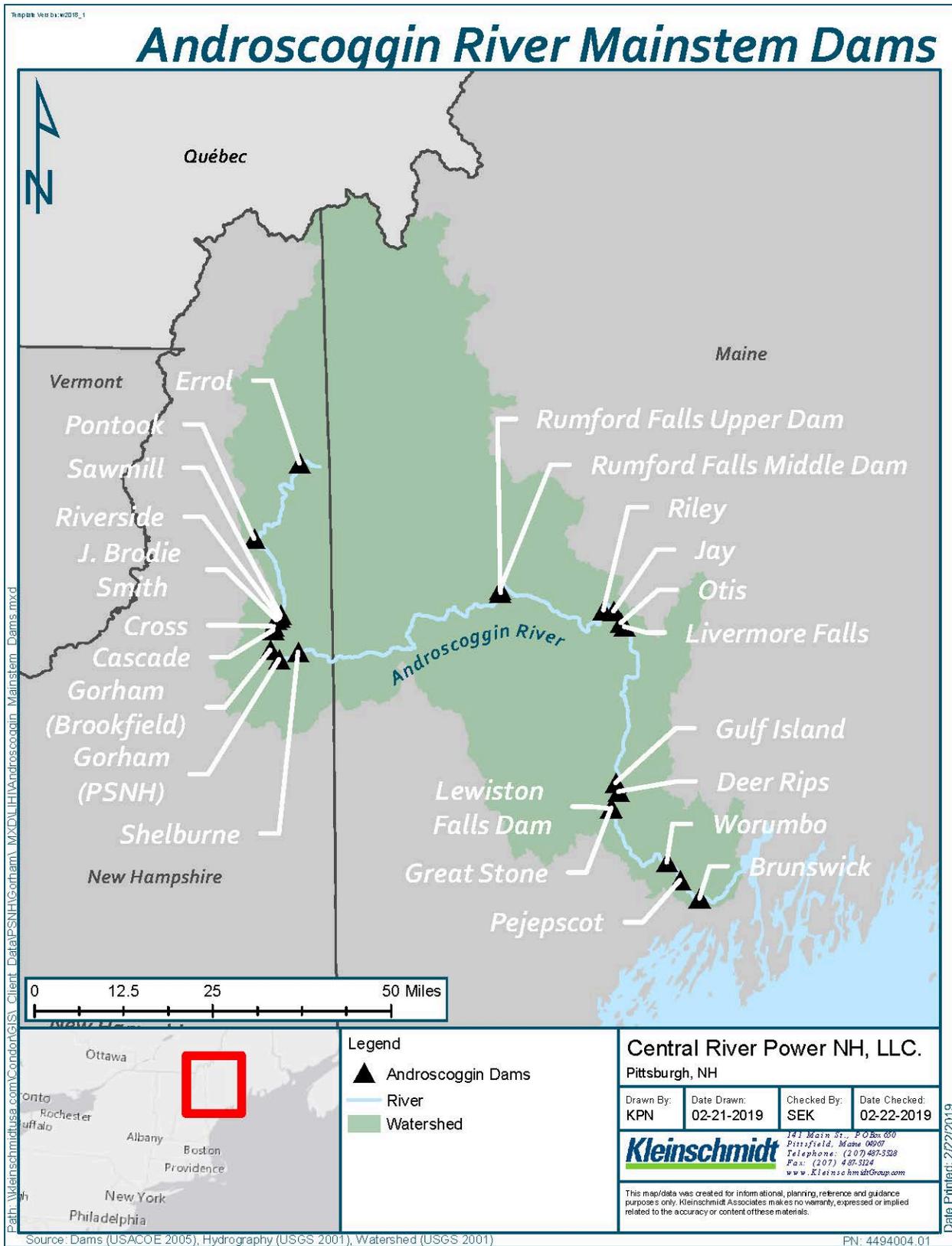


FIGURE 11 DAMS IN ANDROSCOGGIN RIVER BASIN

APPENDIX C

WATER QUALITY CERTIFICATION



ROBERT W. VARNEY
COMMISSIONER

EDWARD J. SCHMIDT, P.E.; Ph.D.
DIRECTOR

RUSSELL A. NYLANDER, P.E.
CHIEF ENGINEER

State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES
WATER SUPPLY & POLLUTION CONTROL DIVISION

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095

603-271-3504

TTY/TDD 225-4033
Relay Service for Deaf/Speech Impaired

April 25, 1991

COUNCIL

JOHN F. BRIDGES, Chairman
MICHAEL G. LITTLE, Vice Chairman
E. H. B. BARTELINK, Ph.D.
MALCOLM R. BUTLER
JOHN C. COLLINS, P.E.
RAY S. COWAN, P.E.
RICHARD M. FLYNN
JAMES F. HAYDEN
GEORGE F. HURT
DAVID KIBBEY
WILBUR F. LaPAGE
DONALD A. NORMANDEAU, Ph.D.
WAYNE L. PATENAUDE
JEFFREY TAYLOR
JAMES VAROTSIS

James Kearns
PSNH
1000 Elm St., PO Box 330
Manchester, NH 03105

Re: Water Quality Certificate (pursuant to Section 401 of the Clean Water Act): FERC Project #2288. Gorham Hydroelectric Project, Gorham, N.H.

Dear Mr. Kearns:

The Division has determined that under the conditions outlined in this certificate, FERC Project #2288 will comply with the applicable provisions of Section 301, 302, 303, 306, and 307 of the Clean Water Act as amended.

The following conditions are placed on this section 401 Water Quality Certificate:

- 1) The following water quality monitoring program must be enacted no later than 1994 and shall continue for three (3) consecutive years. It will be determined at the end of the third sampling period whether continued monitoring will be necessary.
 - (a) Dissolved oxygen and water temperature must be monitored at two locations in the Androscoggin River, upstream of the Gorham impoundment and downstream of the dam, as specified by DES-WSPCD.
 - (b) Continuous monitoring must occur once each month for 72 hours during the following periods: late June - early July, late July - early August, late August - early September.
 - (c) Equipment calibration and quality control measures must be followed to assure accurate reporting.
 - (d) Monitoring events will be conducted under limiting water quality conditions (ie. river flow below 2100 cfs and water temperatures of 20°C or greater)
 - (e) Water quality monitoring and QA/QC results must be reported on an annual basis and a summary report for the three years must be submitted to DES-WSPCD.

If operational modifications other than setting minimum flow releases are made at the Gorham Project, this Section 401 certificate shall be void, and a new Section 401 certificate must be applied for.

This office reserves the right to gain access to the Gorham Hydroelectric site at any time to check monitoring equipment and records to assure compliance with the State's water quality standards.

Finally, all existing river uses must be maintained and protected, and at no time shall Class B water quality standards be violated.

Sincerely,



Richard A. Flanders, Jr., Supervisor
Water Quality Section

RBJ/RAF/tmk:7588D

cc: Delbert Downing - NHWB

Raymond Carter, P.E., Water Quality, Permits & Compliance

George Berlandi, P.E., Water Quality, Permits & Compliance

Gretchen Rule - Comm

Katherine Ueland - Comm

Tim Drew - Comm

Chuck Holtman - AG

Nancy Derey-Wilson - Dept. of the Army
N.E. Division, Corps of Engineers
424 Trapelo Road
Waltham, MA 02254

Sec. Lois Cashill
HL 21.1 FERC
825 N. Capital St., N.E.
Washington, D.C. 20426

Mark Robinson
HL 21.1 FERC
825 N. Capital St., N.E.
Washington, D.C. 20426

APPENDIX D

THREATENED AND ENDANGERED SPECIES

["J:\4494\004\Docs\Species List - New England Ecological Services Field Office.pdf"](#)

APPENDIX E
FLOW DURATION CURVES

["J:\1203\103\Calcs\Gorham Flow data analysis for PAD\Gorham FDCs.pdf"](#)

APPENDIX F
RECREATION



780 North Commercial Street
Manchester, NH 03101-1134

March 16, 2015

D32745

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

RE: FERC Form 80 Submittal

Merrimack River Project **1893-NH**
Amoskeag
Hooksett
Garvins Falls
J. Brodie Smith **2287-NH**
Gorham **2288-NH**
Ayers Island **2456-NH**
Eastman Falls **2457-NH**
Canaan **7528-VT**

Dear Ms. Bose:

Public Service Company of New Hampshire d/b/a Eversource Energy herein submits the required Form 80, Licensed Hydropower Development Recreation Report, for the following Projects:

- Merrimack River Project (Amoskeag, Hooksett & Garvins Falls)
- Eastman Falls
- Ayers Island
- J. Brodie Smith
- Gorham
- Canaan

If you have any questions regarding the Form 80 reports, please contact Mr. Curtis R. Mooney at (603) 744-8855, Ext. 555-5841 or curtis.mooney@eversource.com.

Very truly yours,

EVERSOURCE ENERGY

A handwritten signature in black ink that reads "William H. Smagula".

William H. Smagula
Vice President – Generation

Federal Energy Regulatory
Commission (FERC)
FERC Form 80

Licensed Hydropower Development Recreation Report

Form Approved
OMB No. 1902-0106
Expires: 09/30/2016
Burden 3.0 hours

General Information:

This form collects data on recreation amenities at projects licensed by FERC under the Federal Power Act (16 USC 791a-825r). This form must be submitted by licensees of all projects except those specifically exempted under 18 CFR 8.11 (c). For regular, periodic filings, submit this form on or before April 1, 2015. Submit subsequent filings of this form on or before April 1, every 6th year thereafter (for example, 2021, 2027, etc.). For initial Form No. 80 filings (18CFR 8.11(b)), each licensee of an unconstructed project shall file an initial Form No. 80 after such project has been in operation for a full calendar year prior to the filing deadline. Each licensee of an existing (constructed) project shall file an initial Form No. 80 after such project has been licensed for a full calendar year prior to the filing deadline. Filing electronically is preferred. (See <http://www.ferc.gov> for more information.) If you cannot file electronically, submit an original and two copies of the form to the: Federal Energy Regulatory Commission, Office of the Secretary, 888 First St., NE, Washington, DC 20426.

The public burden estimated for this form is three hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing the collection of information. Send comments regarding the burden estimate or any aspect of this collection of information, including suggestions for reducing burden, to: FERC via e-mail DataClearance@ferc.gov; or mail to 888 First Street NE, Washington, DC 20426 (Attention: Information Clearance Officer) and Office of Management and Budget (OMB), via e-mail to oir_submission@omb.eop.gov; or mail to OMB, Office of Information and Regulatory Affairs, Attention: Desk Officer for FERC, Washington, DC 20503. Include OMB Control Number 1902-0106 as a point of reference. No person shall be subject to any penalty for failing to comply with a collection of information if the collection of information does not display a valid control number (44 U.S.C. § 3512 (a)).

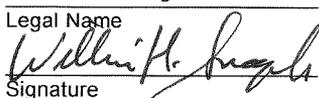
Instructions:

- a. All data reported on this form must represent publicly available recreation amenities and services located within the project boundary.
- b. To ensure a common understanding of terms, please refer to the Glossary on page 3.
- c. Report actual data for each item. If actual data are unavailable, then please estimate.
- d. Submit a completed form for each development at your project.

Schedule 1. General Data

1. Licensee Name: <u>Public Service Company of NH</u> 2. Project Name: <u>Merrimack River</u> 3. Project Number: <u>1893-NH</u> 4. Development Name: <u>Amoskeag Hydro</u>	Complete the following for each development if more than one. 8. Reservoir Surface Area at Normal Pool (acres): <u>478.00</u> 9. Shoreline Miles at Normal Pool: <u>15.00</u> 10. Percent of Shoreline Available for Public Use: <u>30.00</u>
States Development/Project Traverses (List state with largest area within the development/project boundary first): 5. State #1: <u>NH</u> 6. State #2: _____ 7. Type of Project License: Major <input checked="" type="checkbox"/> (check one) Minor _____	11. Data Collection Methods (enter percent for each method used; total must equal 100%): _____ traffic count/trail count _____ attendance records <u>20</u> staff observation <u>80</u> visitor counts or surveys _____ estimate (explain)
For 2014, enter only the licensee's annual recreational construction, operation, and maintenance costs for the development (project). Also, enter the annual recreational revenues for that year.	
Item	Licensee's Annual Recreation Costs and Revenues (In Whole Dollars)
	Construction, Operation and Maintenance Costs Recreation Revenues for Calendar Year
12. Dollar Values	\$226,032.00
13. Length of Recreation Season: Summer: From (MM/DD) <u>05/25</u> To <u>09/02</u> Winter: From (MM/DD) <u>09-03</u> To <u>05/24</u>	
Period	Number of visits to all recreational areas at development/project (in Recreation Days)
	Annual Total Peak Weekend Average (see Glossary)
14. Daytime	23,973 150
15. Nighttime	

Respondent Certification: The undersigned certifies that he/she examined this report; and to the best of his/her knowledge, all data provided herein are true, complete, and accurate.

William H. Smagula
Legal Name

Signature

V.P. Generation
Title
March 6, 2015
Date Signed

(603) 634-2851
Area Code/Phone No.
2014
Reporting Year Ending

Title 18 U.S.C. 1001 makes it a crime for any person knowingly and willingly to make to any Agency or department of the United States any false, fictitious or fraudulent statement or misrepresentation as to any matter within its jurisdiction.

Licensed Hydropower Development Recreation Report

Schedule 2. Inventory of Publicly Available Recreation Amenities Within the Project Boundary

16. Enter data for each Recreation Amenity Type (a). For User Free (b) and User Fee (c) enter the number of publicly available recreation amenities, located within the project boundary, regardless of provider. For FERC Approved (d) enter the number of amenities identified under User Free (b) and User Fee (c) for which the licensee has an ongoing responsibility for funding or maintenance (see Glossary for further detail). For Capacity Utilization (f), of the total publicly available amenities (b) + (c), compare the average non-peak weekend use (see Glossary) for each recreation amenity type (during the recreation season, with the highest use, reported on Schedule 1, Item 13) with the total combined capacity of each amenity type and enter a percentage that indicates their overall level of use. For example, if all public boat launches are used to half capacity during the non-peak weekend days, enter 50% (should use exceed capacity for an amenity type, enter the appropriate percentage above 100).

Recreation Amenity Type (a)	Number of Recreation Amenities			Total Units (e)	Capacity Utilization (%) (f)
	User Free (b)	User Fee (c)	FERC Approved (d)		
Boat Launch Areas. Improved areas having one or more boat launch lanes (enter number in column e) and are usually marked with signs, have hardened surfaces, and typically have adjacent parking.	1			Lanes	35%
Marinas. Facilities with more than 10 slips on project waters, which include one or more of the following: docking, fueling, repair and storage of boats; boat/equipment rental; or sell bait/food (see Glossary FERC approved).				N/A	
Whitewater Boating. Put-ins/Take-outs specifically designated for whitewater access.				N/A	
Portages. Sites designed for launching and taking out canoes/kayaks and the improved, designated, and maintained trails connecting such sites (enter length of trail in column e).	1			Feet	5%
Tailwater Fishing. Platforms, walkways, or similar structures to facilitate below dam fishing.				N/A	
Reservoir Fishing. Platforms, walkways, or similar structures to facilitate fishing in the reservoir pool or feeder streams.				N/A	
Swim Areas. Sites providing swimming facilities (bath houses, designated swim areas, parking and sanitation facilities).				Acres	
Trails. Narrow tracks used for non-automobile recreation travel which are mapped and designated for specific use(s) such as hiking, biking, horseback riding, snowmobiling, or XC skiing (excludes portages, paths or accessible routes; See Glossary).				Miles	
Active Recreation Areas. Playground equipment, game courts/fields, golf/disc golf courses, jogging tracks, etc.				Acres	
Picnic Areas. Locations containing one or more picnic sites (each of which may include tables, grills, trash cans, and parking).	1			Sites	40%
Overlooks/Vistas. Sites established to view scenery, wildlife, cultural resources, project features, or landscapes.	1			Acres	5%
Visitor Centers. Buildings where the public can gather information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.	1			N/A	45%
Interpretive Displays. Signage/Kiosks/Billboards which provide information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.				N/A	N/A
Hunting Areas. Lands open to the general public for hunting.				Acres	
Winter Areas. Locations providing opportunities for skiing, sledding, curling, ice skating, or other winter activities.				Acres	
Campgrounds. Hardened areas developed to cluster campers (may include sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination, but excludes group camps).				Acres	N/A
Campsites. Sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination of temporary uses.				N/A	
Cottage Sites. Permanent, all-weather, buildings rented for short-term use, by the public, for recreational purposes.				N/A	
Group Camps. Areas equipped to accommodate large groups of campers that are open to the general public (may be operated by public, private, or non-profit organizations).				Sites	
Dispersed Camping Areas. Places visitors are allowed to camp outside of a developed campground (enter number of sites in clmn. e).				Sites	
Informal Use Areas. Well used locations which typically do not include amenities, but require operation and maintenance and/or public safety responsibilities					
Access Points. Well-used sites (not accounted for elsewhere on this form) for visitors entering project lands or waters, without trespassing, for recreational purposes (may have limited development such as parking, restrooms, signage).				N/A	
Other. Amenities that do not fit in the categories identified above. Please specify (if more than one, separate by commas):					

Federal Energy Regulatory
Commission (FERC)
FERC Form 80

Licensed Hydropower Development Recreation Report

Form Approved
OMB No. 1902-0106
Expires: 09/30/2016
Burden 3.0 hours

General Information:

This form collects data on recreation amenities at projects licensed by FERC under the Federal Power Act (16 USC 791a-825r). This form must be submitted by licensees of all projects except those specifically exempted under 18 CFR 8.11 (c). For regular, periodic filings, submit this form on or before April 1, 2015. Submit subsequent filings of this form on or before April 1, every 6th year thereafter (for example, 2021, 2027, etc.). For initial Form No. 80 filings (18CFR 8.11(b)), each licensee of an unconstructed project shall file an initial Form No. 80 after such project has been in operation for a full calendar year prior to the filing deadline. Each licensee of an existing (constructed) project shall file an initial Form No. 80 after such project has been licensed for a full calendar year prior to the filing deadline. Filing electronically is preferred. (See <http://www.ferc.gov> for more information.) If you cannot file electronically, submit an original and two copies of the form to the: Federal Energy Regulatory Commission, Office of the Secretary, 888 First St., NE, Washington, DC 20426.

The public burden estimated for this form is three hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing the collection of information. Send comments regarding the burden estimate or any aspect of this collection of information, including suggestions for reducing burden, to: FERC via e-mail DataClearance@ferc.gov; or mail to 888 First Street NE, Washington, DC 20426 (Attention: Information Clearance Officer) and Office of Management and Budget (OMB), via e-mail to oir_submission@omb.eop.gov; or mail to OMB, Office of Information and Regulatory Affairs, Attention: Desk Officer for FERC, Washington, DC 20503. Include OMB Control Number 1902-0106 as a point of reference. No person shall be subject to any penalty for failing to comply with a collection of information if the collection of information does not display a valid control number (44 U.S.C. § 3512 (a)).

Instructions:

- All data reported on this form must represent publicly available recreation amenities and services located within the project boundary.
- To ensure a common understanding of terms, please refer to the Glossary on page 3.
- Report actual data for each item. If actual data are unavailable, then please estimate.
- Submit a completed form for each development at your project.

Schedule 1. General Data

<p>1. Licensee Name: <u>Public Service Company of NH</u></p> <p>2. Project Name: <u>Ayers Island</u></p> <p>3. Project Number: <u>2456-NH</u></p> <p>4. Development Name: <u>Ayers Island</u></p>	<p>Complete the following for each development if more than one.</p> <p>8. Reservoir Surface Area at Normal Pool (acres): <u>600</u></p> <p>9. Shoreline Miles at Normal Pool: <u>20</u></p> <p>10. Percent of Shoreline Available for Public Use: <u>20</u></p>						
<p>States Development/Project Traverses (List state with largest area within the development/project boundary first):</p> <p>5. State #1: <u>NH</u></p> <p>6. State #2: _____</p> <p>7. Type of Project License: Major <input checked="" type="checkbox"/> Minor _____ (check one)</p>	<p>11. Data Collection Methods (enter percent for each method used; total must equal 100%):</p> <p>_____ traffic count/trail count</p> <p>_____ attendance records</p> <p><u>75</u> staff observation</p> <p>_____ visitor counts or surveys</p> <p><u>25</u> estimate (explain)</p>						
<p>For 2014, enter only the licensee's annual recreational construction, operation, and maintenance costs for the development (project). Also, enter the annual recreational revenues for that year.</p>							
Item	Licensee's Annual Recreation Costs and Revenues (In Whole Dollars)						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">Construction, Operation and Maintenance Costs</th> <th style="width: 50%;">Recreation Revenues for Calendar Year</th> </tr> <tr> <td style="text-align: center;">12. Dollar Values</td> <td style="text-align: center;">\$4,380.00</td> </tr> </table>	Construction, Operation and Maintenance Costs	Recreation Revenues for Calendar Year	12. Dollar Values	\$4,380.00		
Construction, Operation and Maintenance Costs	Recreation Revenues for Calendar Year						
12. Dollar Values	\$4,380.00						
<p>13. Length of Recreation Season: Summer: From (MM/DD) <u>04/01</u> To <u>10/31</u> Winter: From (MM/DD) _____ To _____</p>							
Period	Number of visits to all recreational areas at development/project (in Recreation Days)						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">Annual Total</th> <th style="width: 50%;">Peak Weekend Average (see Glossary)</th> </tr> <tr> <td style="text-align: center;">14. Daytime</td> <td style="text-align: center;">1,680</td> </tr> <tr> <td style="text-align: center;">15. Nighttime</td> <td style="text-align: center;">5</td> </tr> </table>	Annual Total	Peak Weekend Average (see Glossary)	14. Daytime	1,680	15. Nighttime	5
Annual Total	Peak Weekend Average (see Glossary)						
14. Daytime	1,680						
15. Nighttime	5						

Respondent Certification: The undersigned certifies that he/she examined this report; and to the best of his/her knowledge, all data provided herein are true, complete, and accurate.

William H. Smagula

V.P. Generation

(603) 634-2851

Legal Name

Title

Area Code/Phone No.

William H. Smagula

March 6, 2015

2014

Signature

Date Signed

Reporting Year Ending

Title 18 U.S.C.1001 makes it a crime for any person knowingly and willingly to make to any Agency or department of the United States any false, fictitious or fraudulent statement or misrepresentation as to any matter within its jurisdiction.

Licensed Hydropower Development Recreation Report

Schedule 2. Inventory of Publicly Available Recreation Amenities Within the Project Boundary

16. Enter data for each Recreation Amenity Type (a). For User Free (b) and User Fee (c) enter the number of publicly available recreation amenities, located within the project boundary, regardless of provider. For FERC Approved (d) enter the number of amenities identified under User Free (b) and User Fee (c) for which the licensee has an ongoing responsibility for funding or maintenance (see Glossary for further detail). For Capacity Utilization(f), of the total publicly available amenities (b) + (c), compare the average non-peak weekend use (see Glossary) for each recreation amenity type (during the recreation season, with the highest use, reported on Schedule 1, Item 13) with the total combined capacity of each amenity type and enter a percentage that indicates their overall level of use. For example, if all public boat launches are used to half capacity during the non-peak weekend days, enter 50% (should use exceed capacity for an amenity type, enter the appropriate percentage above 100).

Recreation Amenity Type (a)	Number of Recreation Amenities			Total Units (e)	Capacity Utilization (%) (f)
	User Free (b)	User Fee (c)	FERC Approved (d)		
Boat Launch Areas. Improved areas having one or more boat launch lanes (enter number in column e) and are usually marked with signs, have hardened surfaces, and typically have adjacent parking.	1			Lanes	40
Marinas. Facilities with more than 10 slips on project waters, which include one or more of the following: docking, fueling, repair and storage of boats; boat/equipment rental; or sell bait/food (see Glossary FERC approved).				N/A	
Whitewater Boating. Put-ins/Take-outs specifically designated for whitewater access.	1			N/A	20
Portages. Sites designed for launching and taking out canoes/kayaks and the improved, designated, and maintained trails connecting such sites (enter length of trail in column e).	1			Feet	5
Tailwater Fishing. Platforms, walkways, or similar structures to facilitate below dam fishing.				N/A	
Reservoir Fishing. Platforms, walkways, or similar structures to facilitate fishing in the reservoir pool or feeder streams.				N/A	
Swim Areas. Sites providing swimming facilities (bath houses, designated swim areas, parking and sanitation facilities).				Acres	
Trails. Narrow tracks used for non-automobile recreation travel which are mapped and designated for specific use(s) such as hiking, biking, horseback riding, snowmobiling, or XC skiing (excludes portages, paths or accessible routes; See Glossary).				Miles	
Active Recreation Areas. Playground equipment, game courts/fields, golf/disc golf courses, jogging tracks, etc.				Acres	
Picnic Areas. Locations containing one or more picnic sites (each of which may include tables, grills, trash cans, and parking).	1			Sites	25
Overlooks/Vistas. Sites established to view scenery, wildlife, cultural resources, project features, or landscapes.				Acres	
Visitor Centers. Buildings where the public can gather information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.				N/A	
Interpretive Displays. Signage/Kiosks/Billboards which provide information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.	1			N/A	N/A
Hunting Areas. Lands open to the general public for hunting.				Acres	
Winter Areas. Locations providing opportunities for skiing, sledding, curling, ice skating, or other winter activities.				Acres	
Campgrounds. Hardened areas developed to cluster campers (may include sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination, but excludes group camps).				Acres	N/A
Campsites. Sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination of temporary uses.				N/A	
Cottage Sites. Permanent, all-weather, buildings rented for short-term use, by the public, for recreational purposes.				N/A	
Group Camps. Areas equipped to accommodate large groups of campers that are open to the general public (may be operated by public, private, or non-profit organizations).				Sites	
Dispersed Camping Areas. Places visitors are allowed to camp outside of a developed campground (enter number of sites in clmn. e).				Sites	
Informal Use Areas. Well used locations which typically do not include amenities, but require operation and maintenance and/or public safety responsibilities					
Access Points. Well-used sites (not accounted for elsewhere on this form) for visitors entering project lands or waters, without trespassing, for recreational purposes (may have limited development such as parking, restrooms, signage).				N/A	
Other. Amenities that do not fit in the categories identified above. Please specify (if more than one, separate by commas):					

Federal Energy Regulatory
Commission (FERC)
FERC Form 80

Licensed Hydropower Development Recreation Report

Form Approved
OMB No. 1902-0106
Expires: 09/30/2016
Burden 3.0 hours

General Information:

This form collects data on recreation amenities at projects licensed by FERC under the Federal Power Act (16 USC 791a-825r). This form must be submitted by licensees of all projects except those specifically exempted under 18 CFR 8.11 (c). For regular, periodic filings, submit this form on or before April 1, 2015. Submit subsequent filings of this form on or before April 1, every 6th year thereafter (for example, 2021, 2027, etc.). For initial Form No. 80 filings (18CFR 8.11(b)), each licensee of an unconstructed project shall file an initial Form No. 80 after such project has been in operation for a full calendar year prior to the filing deadline. Each licensee of an existing (constructed) project shall file an initial Form No. 80 after such project has been licensed for a full calendar year prior to the filing deadline. Filing electronically is preferred. (See <http://www.ferc.gov> for more information.) If you cannot file electronically, submit an original and two copies of the form to the: Federal Energy Regulatory Commission, Office of the Secretary, 888 First St., NE, Washington, DC 20426.

The public burden estimated for this form is three hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing the collection of information. Send comments regarding the burden estimate or any aspect of this collection of information, including suggestions for reducing burden, to: FERC via e-mail DataClearance@ferc.gov; or mail to 888 First Street NE, Washington, DC 20426 (Attention: Information Clearance Officer) and Office of Management and Budget (OMB), via e-mail to oina_submission@omb.eop.gov; or mail to OMB, Office of Information and Regulatory Affairs, Attention: Desk Officer for FERC, Washington, DC 20503. Include OMB Control Number 1902-0106 as a point of reference. No person shall be subject to any penalty for failing to comply with a collection of information if the collection of information does not display a valid control number (44 U.S.C. § 3512 (a)).

Instructions:

- All data reported on this form must represent publicly available recreation amenities and services located within the project boundary.
- To ensure a common understanding of terms, please refer to the Glossary on page 3.
- Report actual data for each item. If actual data are unavailable, then please estimate.
- Submit a completed form for each development at your project.

Schedule 1. General Data

<p>1. Licensee Name: <u>Public Service Company of NH</u></p> <p>2. Project Name: <u>Canaan</u></p> <p>3. Project Number: <u>7528-VT</u></p> <p>4. Development Name: <u>Canaan</u></p>	<p>Complete the following for each development if more than one.</p> <p>8. Reservoir Surface Area at Normal Pool (acres): <u>20.0</u></p> <p>9. Shoreline Miles at Normal Pool: <u>0.60</u></p> <p>10. Percent of Shoreline Available for Public Use: <u>60.0</u></p>
<p>States Development/Project Traverses (List state with largest area within the development/project boundary first):</p> <p>5. State #1: <u>NH</u></p> <p>6. State #2: <u>VT</u></p> <p>7. Type of Project License: Major <input checked="" type="checkbox"/> Minor <input type="checkbox"/></p>	<p>11. Data Collection Methods (enter percent for each method used; total must equal 100%):</p> <p><input type="checkbox"/> traffic count/trail count</p> <p><input type="checkbox"/> attendance records</p> <p><input checked="" type="checkbox"/> 75 staff observation</p> <p><input type="checkbox"/> visitor counts or surveys</p> <p><input checked="" type="checkbox"/> 25 estimate (explain)</p>
<p>For 2014, enter only the licensee's annual recreational construction, operation, and maintenance costs for the development (project). Also, enter the annual recreational revenues for that year.</p>	
Item	Licensee's Annual Recreation Costs and Revenues (In Whole Dollars)
	Construction, Operation and Maintenance Costs Recreation Revenues for Calendar Year
12. Dollar Values	\$3,000.00
<p>13. Length of Recreation Season: Summer: From (MM/DD) <u>05/01</u> To <u>09/30</u> Winter: From (MM/DD) _____ To _____</p>	
Period	Number of visits to all recreational areas at development/project (in Recreation Days)
	Annual Total Peak Weekend Average (see Glossary)
14. Daytime	450 10
15. Nighttime	

Respondent Certification: The undersigned certifies that he/she examined this report; and to the best of his/her knowledge, all data provided herein are true, complete, and accurate.

William H. Smagula

Legal Name

William H. Smagula

Signature

V.P. Generation

Title

March 6, 2015

Date Signed

(603) 634-2851

Area Code/Phone No.

2014

Reporting Year Ending

Title 18 U.S.C.1001 makes it a crime for any person knowingly and willingly to make to any Agency or department of the United States any false, fictitious or fraudulent statement or misrepresentation as to any matter within its jurisdiction.

Licensed Hydropower Development Recreation Report

Schedule 2. Inventory of Publicly Available Recreation Amenities Within the Project Boundary

16. Enter data for each Recreation Amenity Type (a). For User Free (b) and User Fee (c) enter the number of publicly available recreation amenities, located within the project boundary, regardless of provider. For FERC Approved (d) enter the number of amenities identified under User Free (b) and User Fee (c) for which the licensee has an ongoing responsibility for funding or maintenance (see Glossary for further detail). For Capacity Utilization (f), of the total publicly available amenities (b) + (c), compare the average non-peak weekend use (see Glossary) for each recreation amenity type (during the recreation season, with the highest use, reported on Schedule 1, Item 13) with the total combined capacity of each amenity type and enter a percentage that indicates their overall level of use. For example, if all public boat launches are used to half capacity during the non-peak weekend days, enter 50% (should use exceed capacity for an amenity type, enter the appropriate percentage above 100).

Recreation Amenity Type (a)	Number of Recreation Amenities			Total Units (e)	Capacity Utilization (%) (f)
	User Free (b)	User Fee (c)	FERC Approved (d)		
Boat Launch Areas. Improved areas having one or more boat launch lanes (enter number in column e) and are usually marked with signs, have hardened surfaces, and typically have adjacent parking.				Lanes	
Marinas. Facilities with more than 10 slips on project waters, which include one or more of the following: docking, fueling, repair and storage of boats; boat/equipment rental; or sell bait/food (see Glossary FERC approved).				N/A	
Whitewater Boating. Put-ins/Take-outs specifically designated for whitewater access.				N/A	
Portages. Sites designed for launching and taking out canoes/kayaks and the improved, designated, and maintained trails connecting such sites (enter length of trail in column e).	1			Feet	5
Tailwater Fishing. Platforms, walkways, or similar structures to facilitate below dam fishing.				N/A	
Reservoir Fishing. Platforms, walkways, or similar structures to facilitate fishing in the reservoir pool or feeder streams.				N/A	
Swim Areas. Sites providing swimming facilities (bath houses, designated swim areas, parking and sanitation facilities).				Acres	
Trails. Narrow tracks used for non-automobile recreation travel which are mapped and designated for specific use(s) such as hiking, biking, horseback riding, snowmobiling, or XC skiing (excludes portages, paths or accessible routes; See Glossary).				Miles	
Active Recreation Areas. Playground equipment, game courts/fields, golf/disc golf courses, jogging tracks, etc.				Acres	
Picnic Areas. Locations containing one or more picnic sites (each of which may include tables, grills, trash cans, and parking).	1			Sites	5
Overlooks/Vistas. Sites established to view scenery, wildlife, cultural resources, project features, or landscapes.				Acres	
Visitor Centers. Buildings where the public can gather information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.				N/A	
Interpretive Displays. Signage/Kiosks/Billboards which provide information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.	1			N/A	N/A
Hunting Areas. Lands open to the general public for hunting.				Acres	
Winter Areas. Locations providing opportunities for skiing, sledding, curling, ice skating, or other winter activities.				Acres	
Campgrounds. Hardened areas developed to cluster campers (may include sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination, but excludes group camps).				Acres	N/A
Campsites. Sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination of temporary uses.				N/A	
Cottage Sites. Permanent, all-weather, buildings rented for short-term use, by the public, for recreational purposes.				N/A	
Group Camps. Areas equipped to accommodate large groups of campers that are open to the general public (may be operated by public, private, or non-profit organizations).				Sites	
Dispersed Camping Areas. Places visitors are allowed to camp outside of a developed campground (enter number of sites in clmn. e).				Sites	
Informal Use Areas. Well used locations which typically do not include amenities, but require operation and maintenance and/or public safety responsibilities					
Access Points. Well-used sites (not accounted for elsewhere on this form) for visitors entering project lands or waters, without trespassing, for recreational purposes (may have limited development such as parking, restrooms, signage).	3			N/A	10
Other. Amenities that do not fit in the categories identified above. Please specify (if more than one, separate by commas):					

Federal Energy Regulatory
Commission (FERC)
FERC Form 80

Licensed Hydropower Development Recreation Report

Form Approved
OMB No. 1902-0106
Expires: 09/30/2016
Burden 3.0 hours

General Information:

This form collects data on recreation amenities at projects licensed by FERC under the Federal Power Act (16 USC 791a-825r). This form must be submitted by licensees of all projects except those specifically exempted under 18 CFR 8.11 (c). For regular, periodic filings, submit this form on or before April 1, 2015. Submit subsequent filings of this form on or before April 1, every 6th year thereafter (for example, 2021, 2027, etc.). For initial Form No. 80 filings (18CFR 8.11(b)), each licensee of an unconstructed project shall file an initial Form No. 80 after such project has been in operation for a full calendar year prior to the filing deadline. Each licensee of an existing (constructed) project shall file an initial Form No. 80 after such project has been licensed for a full calendar year prior to the filing deadline. Filing electronically is preferred. (See <http://www.ferc.gov> for more information.) If you cannot file electronically, submit an original and two copies of the form to the: Federal Energy Regulatory Commission, Office of the Secretary, 888 First St., NE, Washington, DC 20426.

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Instructions:

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- To ensure a common understanding of terms, please refer to the Glossary on page 3.
- Report actual data for each item. If actual data are unavailable, then please estimate.
- Submit a completed form for each development at your project.

Schedule 1. General Data

1. Licensee Name: <u>Public Service Company of NH</u>		Complete the following for each development if more than one.
2. Project Name: <u>Eastman Falls</u>		
3. Project Number: <u>2457-NH</u>		
4. Development Name: <u>Eastman Falls</u>		
8. Reservoir Surface Area at Normal Pool (acres): <u>467</u>		
9. Shoreline Miles at Normal Pool: <u>18.0</u>		
10. Percent of Shoreline Available for Public Use: <u>70</u>		
States Development/Project Traverses (List state with largest area within the development/project boundary first):		11. Data Collection Methods (enter percent for each method used; total must equal 100%): <input type="checkbox"/> traffic count/trail count <input type="checkbox"/> attendance records <input checked="" type="checkbox"/> 100 staff observation <input type="checkbox"/> visitor counts or surveys <input type="checkbox"/> estimate (explain)
5. State #1: <u>NH</u>		
6. State #2: _____		
7. Type of Project License: Major <input checked="" type="checkbox"/> Minor <input type="checkbox"/> (check one)		
For 2014, enter only the licensee's annual recreational construction, operation, and maintenance costs for the development (project). Also, enter the annual recreational revenues for that year.		
Item	Licensee's Annual Recreation Costs and Revenues (In Whole Dollars)	
	Construction, Operation and Maintenance Costs	Recreation Revenues for Calendar Year
12. Dollar Values	<u>\$1,680.00</u>	
13. Length of Recreation Season: Summer: From (MM/DD) <u>04/01</u> To <u>10/31</u> Winter: From (MM/DD) _____ To _____		
Period	Number of visits to all recreational areas at development/project (in Recreation Days)	
	Annual Total	Peak Weekend Average (see Glossary)
14. Daytime	<u>2940</u>	<u>18</u>
15. Nighttime		

Respondent Certification: The undersigned certifies that he/she examined this report; and to the best of his/her knowledge, all data provided herein are true, complete, and accurate.

William H. Smagula

Legal Name

William H. Smagula

Signature

V.P. Generation

Title

March 6, 2015

Date Signed

(603) 634-2851

Area Code/Phone No.

2013

Reporting Year Ending

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Licensed Hydropower Development Recreation Report

Schedule 2. Inventory of Publicly Available Recreation Amenities Within the Project Boundary

16. Enter data for each Recreation Amenity Type (a). For User Free (b) and User Fee (c) enter the number of publicly available recreation amenities, located within the project boundary, regardless of provider. For FERC Approved (d) enter the number of amenities identified under User Free (b) and User Fee (c) for which the licensee has an ongoing responsibility for funding or maintenance (see Glossary for further detail). For Capacity Utilization (f), of the total publicly available amenities (b) + (c), compare the average non-peak weekend use (see Glossary) for each recreation amenity type (during the recreation season, with the highest use, reported on Schedule 1, Item 13) with the total combined capacity of each amenity type and enter a percentage that indicates their overall level of use. For example, if all public boat launches are used to half capacity during the non-peak weekend days, enter 50% (should use exceed capacity for an amenity type, enter the appropriate percentage above 100).

Recreation Amenity Type (a)	Number of Recreation Amenities			Total Units (e)	Capacity Utilization (%) (f)
	User Free (b)	User Fee (c)	FERC Approved (d)		
Boat Launch Areas. Improved areas having one or more boat launch lanes (enter number in column e) and are usually marked with signs, have hardened surfaces, and typically have adjacent parking.	1			Lanes	10
Marinas. Facilities with more than 10 slips on project waters, which include one or more of the following: docking, fueling, repair and storage of boats; boat/equipment rental; or sell bait/food (see Glossary FERC approved).				N/A	
Whitewater Boating. Put-ins/Take-outs specifically designated for whitewater access.				N/A	
Portages. Sites designed for launching and taking out canoes/kayaks and the improved, designated, and maintained trails connecting such sites (enter length of trail in column e).	1			Feet	5
Tailwater Fishing. Platforms, walkways, or similar structures to facilitate below dam fishing.				N/A	
Reservoir Fishing. Platforms, walkways, or similar structures to facilitate fishing in the reservoir pool or feeder streams.				N/A	
Swim Areas. Sites providing swimming facilities (bath houses, designated swim areas, parking and sanitation facilities).				Acres	
Trails. Narrow tracks used for non-automobile recreation travel which are mapped and designated for specific use(s) such as hiking, biking, horseback riding, snowmobiling, or XC skiing (excludes portages, paths or accessible routes; See Glossary).				Miles	
Active Recreation Areas. Playground equipment, game courts/fields, golf/disc golf courses, jogging tracks, etc.				Acres	
Picnic Areas. Locations containing one or more picnic sites (each of which may include tables, grills, trash cans, and parking).	2			Sites	40
Overlooks/Vistas. Sites established to view scenery, wildlife, cultural resources, project features, or landscapes.	1			Acres	10
Visitor Centers. Buildings where the public can gather information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.				N/A	
Interpretive Displays. Signage/Kiosks/Billboards which provide information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.				N/A	N/A
Hunting Areas. Lands open to the general public for hunting.				Acres	
Winter Areas. Locations providing opportunities for skiing, sledding, curling, ice skating, or other winter activities.				Acres	
Campgrounds. Hardened areas developed to cluster campers (may include sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination, but excludes group camps).				Acres	N/A
Campsites. Sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination of temporary uses.				N/A	
Cottage Sites. Permanent, all-weather, buildings rented for short-term use, by the public, for recreational purposes.				N/A	
Group Camps. Areas equipped to accommodate large groups of campers that are open to the general public (may be operated by public, private, or non-profit organizations).				Sites	
Dispersed Camping Areas. Places visitors are allowed to camp outside of a developed campground (enter number of sites in column e).				Sites	
Informal Use Areas. Well used locations which typically do not include amenities, but require operation and maintenance and/or public safety responsibilities					
Access Points. Well-used sites (not accounted for elsewhere on this form) for visitors entering project lands or waters, without trespassing, for recreational purposes (may have limited development such as parking, restrooms, signage).				N/A	
Other. Amenities that do not fit in the categories identified above. Please specify (if more than one, separate by commas):					

Federal Energy Regulatory
Commission (FERC)
FERC Form 80

Licensed Hydropower Development Recreation Report

Form Approved
OMB No. 1902-0106
Expires: 09/30/2016
Burden 3.0 hours

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- c. Report actual data for each item. If actual data are unavailable, then please estimate.
- d. Submit a completed form for each development at your project.

Schedule 1. General Data

1. Licensee Name: <u>Public Service Company of NH</u> 2. Project Name: <u>Merrimack River</u> 3. Project Number: <u>1893-NH</u> 4. Development Name: <u>Garvins Falls</u>	Complete the following for each development if more than one. 8. Reservoir Surface Area at Normal Pool (acres): <u>640</u> 9. Shoreline Miles at Normal Pool: <u>16.0</u> 10. Percent of Shoreline Available for Public Use: <u>50.0</u>
States Development/Project Traverses (List state with largest area within the development/project boundary first): 5. State #1: <u>NH</u> 6. State #2: _____ 7. Type of Project License: Major <input checked="" type="checkbox"/> (check one) Minor _____	11. Data Collection Methods (enter percent for each method used; total must equal 100%): _____ traffic count/trail count _____ attendance records <u>80</u> staff observation _____ visitor counts or surveys <u>20</u> estimate (explain)
For 2014, enter only the licensee's annual recreational construction, operation, and maintenance costs for the development (project). Also, enter the annual recreational revenues for that year.	
Item	Licensee's Annual Recreation Costs and Revenues (In Whole Dollars)
	Construction, Operation and Maintenance Costs Recreation Revenues for Calendar Year
12. Dollar Values	<u>\$6,120.00</u>
13. Length of Recreation Season: Summer: From (MM/DD) <u>04/01</u> To <u>10/31</u> Winter: From (MM/DD) <u>11/01</u> To <u>03/31</u>	
Period	Number of visits to all recreational areas at development/project (in Recreation Days)
	Annual Total Peak Weekend Average (see Glossary)
14. Daytime	<u>420</u> <u>10</u>
15. Nighttime	

Respondent Certification: The undersigned certifies that he/she examined this report; and to the best of his/her knowledge, all data provided herein are true, complete, and accurate.

William H. Smagula _____

V.P. Generation _____

(603) 634-2851 _____

Legal Name
William H. Smagula
Signature

Title
March 6, 2015
Date Signed

Area Code/Phone No.
2014
Reporting Year Ending

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Licensed Hydropower Development Recreation Report

Schedule 2. Inventory of Publicly Available Recreation Amenities Within the Project Boundary

16. Enter data for each Recreation Amenity Type (a). For User Free (b) and User Fee (c) enter the number of publicly available recreation amenities, located within the project boundary, regardless of provider. For FERC Approved (d) enter the number of amenities identified under User Free (b) and User Fee (c) for which the licensee has an ongoing responsibility for funding or maintenance (see Glossary for further detail). For Capacity Utilization (f), of the total publicly available amenities (b) + (c), compare the average non-peak weekend use (see Glossary) for each recreation amenity type (during the recreation season, with the highest use, reported on Schedule 1, Item 13) with the total combined capacity of each amenity type and enter a percentage that indicates their overall level of use. For example, if all public boat launches are used to half capacity during the non-peak weekend days, enter 50% (should use exceed capacity for an amenity type, enter the appropriate percentage above 100).

Recreation Amenity Type (a)	Number of Recreation Amenities			Total Units (e)	Capacity Utilization (%) (f)
	User Free (b)	User Fee (c)	FERC Approved (d)		
Boat Launch Areas. Improved areas having one or more boat launch lanes (enter number in column e) and are usually marked with signs, have hardened surfaces, and typically have adjacent parking.	2			Lanes	25
Marinas. Facilities with more than 10 slips on project waters, which include one or more of the following: docking, fueling, repair and storage of boats; boat/equipment rental; or sell bait/food (see Glossary FERC approved).				N/A	
Whitewater Boating. Put-ins/Take-outs specifically designated for whitewater access.				N/A	
Portages. Sites designed for launching and taking out canoes/kayaks and the improved, designated, and maintained trails connecting such sites (enter length of trail in column e).	1			Feet	5
Tailwater Fishing. Platforms, walkways, or similar structures to facilitate below dam fishing.				N/A	
Reservoir Fishing. Platforms, walkways, or similar structures to facilitate fishing in the reservoir pool or feeder streams.				N/A	
Swim Areas. Sites providing swimming facilities (bath houses, designated swim areas, parking and sanitation facilities).				Acres	
Trails. Narrow tracks used for non-automobile recreation travel which are mapped and designated for specific use(s) such as hiking, biking, horseback riding, snowmobiling, or XC skiing (excludes portages, paths or accessible routes; See Glossary).				Miles	
Active Recreation Areas. Playground equipment, game courts/fields, golf/disc golf courses, jogging tracks, etc.				Acres	
Picnic Areas. Locations containing one or more picnic sites (each of which may include tables, grills, trash cans, and parking).	1			Sites	10
Overlooks/Vistas. Sites established to view scenery, wildlife, cultural resources, project features, or landscapes.				Acres	
Visitor Centers. Buildings where the public can gather information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.				N/A	
Interpretive Displays. Signage/Kiosks/Billboards which provide information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.				N/A	N/A
Hunting Areas. Lands open to the general public for hunting.				Acres	
Winter Areas. Locations providing opportunities for skiing, sledding, curling, ice skating, or other winter activities.				Acres	
Campgrounds. Hardened areas developed to cluster campers (may include sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination, but excludes group camps).				Acres	N/A
Campsites. Sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination of temporary uses.				N/A	
Cottage Sites. Permanent, all-weather, buildings rented for short-term use, by the public, for recreational purposes.				N/A	
Group Camps. Areas equipped to accommodate large groups of campers that are open to the general public (may be operated by public, private, or non-profit organizations).				Sites	
Dispersed Camping Areas. Places visitors are allowed to camp outside of a developed campground (enter number of sites in clmn. e).				Sites	
Informal Use Areas. Well used locations which typically do not include amenities, but require operation and maintenance and/or public safety responsibilities					
Access Points. Well-used sites (not accounted for elsewhere on this form) for visitors entering project lands or waters, without trespassing, for recreational purposes (may have limited development such as parking, restrooms, signage).				N/A	
Other. Amenities that do not fit in the categories identified above. Please specify (if more than one, separate by commas):					

Federal Energy Regulatory
Commission (FERC)
FERC Form 80

Licensed Hydropower Development Recreation Report

Form Approved
OMB No. 1902-0106
Expires: 09/30/2016
Burden 3.0 hours

General Information:

This form collects data on recreation amenities at projects licensed by FERC under the Federal Power Act (16 USC 791a-825r). This form must be submitted by licensees of all projects except those specifically exempted under 18 CFR 8.11 (c). For regular, periodic filings, submit this form on or before April 1, 2015. Submit subsequent filings of this form on or before April 1, every 6th year thereafter (for example, 2021, 2027, etc.). For initial Form No. 80 filings (18CFR 8.11(b)), each licensee of an unconstructed project shall file an initial Form No. 80 after such project has been in operation for a full calendar year prior to the filing deadline. Each licensee of an existing (constructed) project shall file an initial Form No. 80 after such project has been licensed for a full calendar year prior to the filing deadline. Filing electronically is preferred. (See <http://www.ferc.gov> for more information.) If you cannot file electronically, submit an original and two copies of the form to the: Federal Energy Regulatory Commission, Office of the Secretary, 888 First St., NE, Washington, DC 20426.

The public burden estimated for this form is three hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing the collection of information. Send comments regarding the burden estimate or any aspect of this collection of information, including suggestions for reducing burden, to: FERC via e-mail DataClearance@ferc.gov; or mail to 888 First Street NE, Washington, DC 20426 (Attention: Information Clearance Officer) and Office of Management and Budget (OMB), via e-mail to oir_submission@omb.eop.gov; or mail to OMB, Office of Information and Regulatory Affairs, Attention: Desk Officer for FERC, Washington, DC 20503. Include OMB Control Number 1902-0106 as a point of reference. No person shall be subject to any penalty for failing to comply with a collection of information if the collection of information does not display a valid control number (44 U.S.C. § 3512 (a)).

Instructions:

- All data reported on this form must represent publicly available recreation amenities and services located within the project boundary.
- To ensure a common understanding of terms, please refer to the Glossary on page 3.
- Report actual data for each item. If actual data are unavailable, then please estimate.
- Submit a completed form for each development at your project.

Schedule 1. General Data

<p>1. Licensee Name: <u>Public Service Company of NH</u></p> <p>2. Project Name: <u>Gorham Hydro</u></p> <p>3. Project Number: <u>2288-NH</u></p> <p>4. Development Name: <u>Gorham Hydro</u></p>	<p>Complete the following for each development if more than one.</p> <p>8. Reservoir Surface Area at Normal Pool (acres): <u>32</u></p> <p>9. Shoreline Miles at Normal Pool: <u>3.0</u></p> <p>10. Percent of Shoreline Available for Public Use: <u>60.0</u></p>
<p>States Development/Project Traverses (List state with largest area within the development/project boundary first):</p> <p>5. State #1: <u>NH</u></p> <p>6. State #2: _____</p> <p>7. Type of Project License: Major <input checked="" type="checkbox"/> Minor _____ (check one)</p>	<p>11. Data Collection Methods (enter percent for each method used; total must equal 100%):</p> <p>_____ traffic count/trail count</p> <p>_____ attendance records</p> <p>⁷⁵ _____ staff observation</p> <p>²⁵ _____ visitor counts or surveys</p> <p>_____ estimate (explain)</p>
<p>For 2014, enter only the licensee's annual recreational construction, operation, and maintenance costs for the development (project). Also, enter the annual recreational revenues for that year.</p>	
Item	Licensee's Annual Recreation Costs and Revenues (In Whole Dollars)
	Construction, Operation and Maintenance Costs Recreation Revenues for Calendar Year
12. Dollar Values	\$1,290.00
<p>13. Length of Recreation Season: Summer: From (MM/DD) <u>04/01</u> To <u>10/31</u> Winter: From (MM/DD) <u>10/01</u> To <u>03/31</u></p>	
Period	Number of visits to all recreational areas at development/project (in Recreation Days)
	Annual Total Peak Weekend Average (see Glossary)
14. Daytime	870 8
15. Nighttime	

Respondent Certification: The undersigned certifies that he/she examined this report; and to the best of his/her knowledge, all data provided herein are true, complete, and accurate.

William H. Smagula

V. P. Generation

(603) 634-2851

Legal Name

Title

Area Code/Phone No.

William H. Smagula

March 6, 2015

2014

Signature

Date Signed

Reporting Year Ending

Title 18 U.S.C. 1001 makes it a crime for any person knowingly and willingly to make to any Agency or department of the United States any false, fictitious or fraudulent statement or misrepresentation as to any matter within its jurisdiction.

Licensed Hydropower Development Recreation Report

Schedule 2. Inventory of Publicly Available Recreation Amenities Within the Project Boundary

16. Enter data for each Recreation Amenity Type (a). For User Free (b) and User Fee (c) enter the number of publicly available recreation amenities, located within the project boundary, regardless of provider. For FERC Approved (d) enter the number of amenities identified under User Free (b) and User Fee (c) for which the licensee has an ongoing responsibility for funding or maintenance (see Glossary for further detail). For Capacity Utilization (f), of the total publicly available amenities (b) + (c), compare the average non-peak weekend use (see Glossary) for each recreation amenity type (during the recreation season, with the highest use, reported on Schedule 1, Item 1.3) with the total combined capacity of each amenity type and enter a percentage that indicates their overall level of use. For example, if all public boat launches are used to half capacity during the non-peak weekend days, enter 50% (should use exceed capacity for an amenity type, enter the appropriate percentage above 100).

Recreation Amenity Type (a)	Number of Recreation Amenities			Total Units (e)	Capacity Utilization (%) (f)
	User Free (b)	User Fee (c)	FERC Approved (d)		
Boat Launch Areas. Improved areas having one or more boat launch lanes (enter number in column e) and are usually marked with signs, have hardened surfaces, and typically have adjacent parking.				Lanes	
Marinas. Facilities with more than 10 slips on project waters, which include one or more of the following: docking, fueling, repair and storage of boats; boat/equipment rental; or sell bait/food (see Glossary FERC approved).				N/A	
Whitewater Boating. Put-ins/Take-outs specifically designated for whitewater access.				N/A	
Portages. Sites designed for launching and taking out canoes/kayaks and the improved, designated, and maintained trails connecting such sites (enter length of trail in column e).	1			Feet	5
Tailwater Fishing. Platforms, walkways, or similar structures to facilitate below dam fishing.				N/A	
Reservoir Fishing. Platforms, walkways, or similar structures to facilitate fishing in the reservoir pool or feeder streams.				N/A	
Swim Areas. Sites providing swimming facilities (bath houses, designated swim areas, parking and sanitation facilities).				Acres	
Trails. Narrow tracks used for non-automobile recreation travel which are mapped and designated for specific use(s) such as hiking, biking, horseback riding, snowmobiling, or XC skiing (excludes portages, paths or accessible routes; See Glossary).				Miles	
Active Recreation Areas. Playground equipment, game courts/fields, golf/disc golf courses, jogging tracks, etc.				Acres	
Picnic Areas. Locations containing one or more picnic sites (each of which may include tables, grills, trash cans, and parking).	1			Sites	10
Overlooks/Vistas. Sites established to view scenery, wildlife, cultural resources, project features, or landscapes.				Acres	
Visitor Centers. Buildings where the public can gather information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.				N/A	
Interpretive Displays. Signage/Kiosks/Billboards which provide information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.				N/A	N/A
Hunting Areas. Lands open to the general public for hunting.				Acres	
Winter Areas. Locations providing opportunities for skiing, sledding, curling, ice skating, or other winter activities.				Acres	
Campgrounds. Hardened areas developed to cluster campers (may include sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination, but excludes group camps).				Acres	N/A
Campsites. Sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination of temporary uses.				N/A	
Cottage Sites. Permanent, all-weather, buildings rented for short-term use, by the public, for recreational purposes.				N/A	
Group Camps. Areas equipped to accommodate large groups of campers that are open to the general public (may be operated by public, private, or non-profit organizations).				Sites	
Dispersed Camping Areas. Places visitors are allowed to camp outside of a developed campground (enter number of sites in column e).				Sites	
Informal Use Areas. Well used locations which typically do not include amenities, but require operation and maintenance and/or public safety responsibilities					
Access Points. Well-used sites (not accounted for elsewhere on this form) for visitors entering project lands or waters, without trespassing, for recreational purposes (may have limited development such as parking, restrooms, signage).	1			N/A	10
Other. Amenities that do not fit in the categories identified above. Please specify (if more than one, separate by commas):					

Federal Energy Regulatory
Commission (FERC)
FERC Form 80

Licensed Hydropower Development Recreation Report

Form Approved
OMB No. 1902-0106
Expires: 09/30/2016
Burden 3.0 hours

General Information:

This form collects data on recreation amenities at projects licensed by FERC under the Federal Power Act (16 USC 791a-825r). This form must be submitted by licensees of all projects except those specifically exempted under 18 CFR 8.11 (c). For regular, periodic filings, submit this form on or before April 1, 2015. Submit subsequent filings of this form on or before April 1, every 6th year thereafter (for example, 2021, 2027, etc.). For initial Form No. 80 filings (18CFR 8.11(b)), each licensee of an unconstructed project shall file an initial Form No. 80 after such project has been in operation for a full calendar year prior to the filing deadline. Each licensee of an existing (constructed) project shall file an initial Form No. 80 after such project has been licensed for a full calendar year prior to the filing deadline. Filing electronically is preferred. (See <http://www.ferc.gov> for more information.) If you cannot file electronically, submit an original and two copies of the form to the: Federal Energy Regulatory Commission, Office of the Secretary, 888 First St., NE, Washington, DC 20426.

The public burden estimated for this form is three hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing the collection of information. Send comments regarding the burden estimate or any aspect of this collection of information, including suggestions for reducing burden, to: FERC via e-mail DataClearance@ferc.gov; or mail to 888 First Street NE, Washington, DC 20426 (Attention: Information Clearance Officer) and Office of Management and Budget (OMB), via e-mail to oir_submission@omb.eop.gov; or mail to OMB, Office of Information and Regulatory Affairs, Attention: Desk Officer for FERC, Washington, DC 20503. Include OMB Control Number 1902-0106 as a point of reference. No person shall be subject to any penalty for failing to comply with a collection of information if the collection of information does not display a valid control number (44 U.S.C. § 3512 (a)).

Instructions:

- All data reported on this form must represent publicly available recreation amenities and services located within the project boundary.
- To ensure a common understanding of terms, please refer to the Glossary on page 3.
- Report actual data for each item. If actual data are unavailable, then please estimate.
- Submit a completed form for each development at your project.

Schedule 1. General Data

<p>1. Licensee Name: <u>Public Service Company of NH</u></p> <p>2. Project Name: <u>Merrimack River</u></p> <p>3. Project Number: <u>1893-NH</u></p> <p>4. Development Name: <u>Hooksett Hydro</u></p>	<p>Complete the following for each development if more than one.</p> <p>8. Reservoir Surface Area at Normal Pool (acres): <u>350</u></p> <p>9. Shoreline Miles at Normal Pool: <u>10.0</u></p> <p>10. Percent of Shoreline Available for Public Use: <u>80.0</u></p>
<p>States Development/Project Traverses (List state with largest area within the development/project boundary first):</p> <p>5. State #1: <u>NH</u></p> <p>6. State #2: _____</p> <p>7. Type of Project License: Major <input checked="" type="checkbox"/> _____ (check one) Minor <input type="checkbox"/> _____</p>	<p>11. Data Collection Methods (enter percent for each method used; total must equal 100%):</p> <p>_____ traffic count/trail count</p> <p>_____ attendance records</p> <p><u>80</u> staff observation</p> <p>_____ visitor counts or surveys</p> <p><u>20</u> estimate (explain)</p>
<p>For 2014, enter only the licensee's annual recreational construction, operation, and maintenance costs for the development (project). Also, enter the annual recreational revenues for that year.</p>	
Item	Licensee's Annual Recreation Costs and Revenues (In Whole Dollars)
	Construction, Operation and Maintenance Costs Recreation Revenues for Calendar Year
12. Dollar Values	<u>\$2,000.00</u>
<p>13. Length of Recreation Season: Summer: From (MM/DD) <u>04/01</u> To <u>10/31</u> Winter: From (MM/DD) <u>11/1</u> To <u>03/31</u></p>	
Period	Number of visits to all recreational areas at development/project (in Recreation Days)
	Annual Total Peak Weekend Average (see Glossary)
14. Daytime	<u>600</u> <u>40</u>
15. Nighttime	

Respondent Certification: The undersigned certifies that he/she examined this report; and to the best of his/her knowledge, all data provided herein are true, complete, and accurate.

William H. Smagula

V.P. Generation

(603) 634-2851

Legal Name

Title

Area Code/Phone No.



March 6, 2015

2014

Signature

Date Signed

Reporting Year Ending

Title 18 U.S.C.1001 makes it a crime for any person knowingly and willingly to make to any Agency or department of the United States any false, fictitious or fraudulent statement or misrepresentation as to any matter within its jurisdiction.

Licensed Hydropower Development Recreation Report

Schedule 2. Inventory of Publicly Available Recreation Amenities Within the Project Boundary

16. Enter data for each Recreation Amenity Type (a). For User Free (b) and User Fee (c) enter the number of publicly available recreation amenities, located within the project boundary, regardless of provider. For FERC Approved (d) enter the number of amenities identified under User Free (b) and User Fee (c) for which the licensee has an ongoing responsibility for funding or maintenance (see Glossary for further detail). For Capacity Utilization(f), of the total publicly available amenities (b) + (c), compare the average non-peak weekend use (see Glossary) for each recreation amenity type (during the recreation season, with the highest use, reported on Schedule 1, Item 13) with the total combined capacity of each amenity type and enter a percentage that indicates their overall level of use. For example, if all public boat launches are used to half capacity during the non-peak weekend days, enter 50% (should use exceed capacity for an amenity type, enter the appropriate percentage above 100).

Recreation Amenity Type (a)	Number of Recreation Amenities			Total Units (e)	Capacity Utilization (%) (f)
	User Free (b)	User Fee (c)	FERC Approved (d)		
Boat Launch Areas. Improved areas having one or more boat launch lanes (enter number in column e) and are usually marked with signs, have hardened surfaces, and typically have adjacent parking.	2			Lanes	25
Marinas. Facilities with more than 10 slips on project waters, which include one or more of the following: docking, fueling, repair and storage of boats; boat/equipment rental; or sell bait/food (see Glossary FERC approved).				N/A	
Whitewater Boating. Put-ins/Take-outs specifically designated for whitewater access.				N/A	
Portages. Sites designed for launching and taking out canoes/kayaks and the improved, designated, and maintained trails connecting such sites (enter length of trail in column e).	1			Feet	5
Tailwater Fishing. Platforms, walkways, or similar structures to facilitate below dam fishing.				N/A	
Reservoir Fishing. Platforms, walkways, or similar structures to facilitate fishing in the reservoir pool or feeder streams.				N/A	
Swim Areas. Sites providing swimming facilities (bath houses, designated swim areas, parking and sanitation facilities).				Acres	
Trails. Narrow tracks used for non-automobile recreation travel which are mapped and designated for specific use(s) such as hiking, biking, horseback riding, snowmobiling, or XC skiing (excludes portages, paths or accessible routes; See Glossary).				Miles	
Active Recreation Areas. Playground equipment, game courts/fields, golf/disc golf courses, jogging tracks, etc.				Acres	
Picnic Areas. Locations containing one or more picnic sites (each of which may include tables, grills, trash cans, and parking).	2			Sites	15
Overlooks/Vistas. Sites established to view scenery, wildlife, cultural resources, project features, or landscapes.	1			Acres	5
Visitor Centers. Buildings where the public can gather information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.				N/A	
Interpretive Displays. Signage/Kiosks/Billboards which provide information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.				N/A	N/A
Hunting Areas. Lands open to the general public for hunting.				Acres	
Winter Areas. Locations providing opportunities for skiing, sledding, curling, ice skating, or other winter activities.				Acres	
Campgrounds. Hardened areas developed to cluster campers (may include sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination, but excludes group camps).				Acres	N/A
Campsites. Sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination of temporary uses.				N/A	
Cottage Sites. Permanent, all-weather, buildings rented for short-term use, by the public, for recreational purposes.				N/A	
Group Camps. Areas equipped to accommodate large groups of campers that are open to the general public (may be operated by public, private, or non-profit organizations).				Sites	
Dispersed Camping Areas. Places visitors are allowed to camp outside of a developed campground (enter number of sites in clmn. e).				Sites	
Informal Use Areas. Well used locations which typically do not include amenities, but require operation and maintenance and/or public safety responsibilities					
Access Points. Well-used sites (not accounted for elsewhere on this form) for visitors entering project lands or waters, without trespassing, for recreational purposes (may have limited development such as parking, restrooms, signage).				N/A	
Other. Amenities that do not fit in the categories identified above. Please specify (if more than one, separate by commas):					

Federal Energy Regulatory
Commission (FERC)
FERC Form 80

Licensed Hydropower Development Recreation Report

Form Approved
OMB No. 1902-0106
Expires: 09/30/2016
Burden 3.0 hours

General Information:

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Instructions:

- All data reported on this form must represent publicly available recreation amenities and services located within the project boundary.
- To ensure a common understanding of terms, please refer to the Glossary on page 3.
- Report actual data for each item. If actual data are unavailable, then please estimate.
- Submit a completed form for each development at your project.

Schedule 1. General Data

<p>1. Licensee Name: <u>Public Service Company of NH</u></p> <p>2. Project Name: <u>J. Brodie Smith</u></p> <p>3. Project Number: <u>2287-NH</u></p> <p>4. Development Name: <u>J. Brodie Smith</u></p>	<p>Complete the following for each development if more than one.</p> <p>8. Reservoir Surface Area at Normal Pool (acres): <u>8.0</u></p> <p>9. Shoreline Miles at Normal Pool: <u>0.50</u></p> <p>10. Percent of Shoreline Available for Public Use: <u>20</u></p>
<p>States Development/Project Traverses (List state with largest area within the development/project boundary first):</p> <p>5. State #1: <u>NH</u></p> <p>6. State #2: _____</p> <p>7. Type of Project License: Major <input checked="" type="checkbox"/> Minor _____ (check one)</p>	<p>11. Data Collection Methods (enter percent for each method used; total must equal 100%):</p> <p>_____ traffic count/trail count</p> <p>_____ attendance records</p> <p>⁷⁵ _____ staff observation</p> <p>_____ visitor counts or surveys</p> <p>²⁵ _____ estimate (explain)</p>
<p>For 2014, enter only the licensee's annual recreational construction, operation, and maintenance costs for the development (project). Also, enter the annual recreational revenues for that year.</p>	
Item	Licensee's Annual Recreation Costs and Revenues (In Whole Dollars)
	Construction, Operation and Maintenance Costs Recreation Revenues for Calendar Year
12. Dollar Values	\$20,100.00
<p>13. Length of Recreation Season: Summer: From (MM/DD) <u>05/01</u> To <u>10/31</u> Winter: From (MM/DD) <u>11/01</u> To <u>04/30</u></p>	
Period	Number of visits to all recreational areas at development/project (in Recreation Days)
	Annual Total Peak Weekend Average (see Glossary)
14. Daytime	1,440 16
15. Nighttime	

Respondent Certification: The undersigned certifies that he/she examined this report; and to the best of his/her knowledge, all data provided herein are true, complete, and accurate.

William H. Smagula

V.P. Generation

(603) 634-2851

Legal Name

Title

Area Code/Phone No.

Signature

Date Signed

2014

Reporting Year Ending

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Licensed Hydropower Development Recreation Report

Schedule 2. Inventory of Publicly Available Recreation Amenities Within the Project Boundary

16. Enter data for each Recreation Amenity Type (a). For User Free (b) and User Fee (c) enter the number of publicly available recreation amenities, located within the project boundary, regardless of provider. For FERC Approved (d) enter the number of amenities identified under User Free (b) and User Fee (c) for which the licensee has an ongoing responsibility for funding or maintenance (see Glossary for further detail). For Capacity Utilization (f), of the total publicly available amenities (b) + (c), compare the average non-peak weekend use (see Glossary) for each recreation amenity type (during the recreation season, with the highest use, reported on Schedule 1, Item 13) with the total combined capacity of each amenity type and enter a percentage that indicates their overall level of use. For example, if all public boat launches are used to half capacity during the non-peak weekend days, enter 50% (should use exceed capacity for an amenity type, enter the appropriate percentage above 100).

Recreation Amenity Type (a)	Number of Recreation Amenities			Total Units (e)	Capacity Utilization (%) (f)
	User Free (b)	User Fee (c)	FERC Approved (d)		
Boat Launch Areas. Improved areas having one or more boat launch lanes (enter number in column e) and are usually marked with signs, have hardened surfaces, and typically have adjacent parking.				Lanes	
Marinas. Facilities with more than 10 slips on project waters, which include one or more of the following: docking, fueling, repair and storage of boats; boat/equipment rental; or sell bait/food (see Glossary FERC approved).				N/A	
Whitewater Boating. Put-ins/Take-outs specifically designated for whitewater access.				N/A	
Portages. Sites designed for launching and taking out canoes/kayaks and the improved, designated, and maintained trails connecting such sites (enter length of trail in column e).				Feet	
Tailwater Fishing. Platforms, walkways, or similar structures to facilitate below dam fishing.				N/A	
Reservoir Fishing. Platforms, walkways, or similar structures to facilitate fishing in the reservoir pool or feeder streams.				N/A	
Swim Areas. Sites providing swimming facilities (bath houses, designated swim areas, parking and sanitation facilities).				Acres	
Trails. Narrow tracks used for non-automobile recreation travel which are mapped and designated for specific use(s) such as hiking, biking, horseback riding, snowmobiling, or XC skiing (excludes portages, paths or accessible routes; See Glossary).	1			Miles	5
Active Recreation Areas. Playground equipment, game courts/fields, golf/disc golf courses, jogging tracks, etc.				Acres	
Picnic Areas. Locations containing one or more picnic sites (each of which may include tables, grills, trash cans, and parking).	2			Sites	5
Overlooks/Vistas. Sites established to view scenery, wildlife, cultural resources, project features, or landscapes.	1			Acres	10
Visitor Centers. Buildings where the public can gather information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.				N/A	
Interpretive Displays. Signage/Kiosks/Billboards which provide information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.				N/A	N/A
Hunting Areas. Lands open to the general public for hunting.				Acres	
Winter Areas. Locations providing opportunities for skiing, sledding, curling, ice skating, or other winter activities.	1			Acres	15
Campgrounds. Hardened areas developed to cluster campers (may include sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination, but excludes group camps).				Acres	N/A
Campsites. Sites for tents, trailers, recreational vehicles [RV], yurts, cabins, or a combination of temporary uses.				N/A	
Cottage Sites. Permanent, all-weather, buildings rented for short-term use, by the public, for recreational purposes.				N/A	
Group Camps. Areas equipped to accommodate large groups of campers that are open to the general public (may be operated by public, private, or non-profit organizations).				Sites	
Dispersed Camping Areas. Places visitors are allowed to camp outside of a developed campground (enter number of sites in column e).				Sites	
Informal Use Areas. Well used locations which typically do not include amenities, but require operation and maintenance and/or public safety responsibilities					
Access Points. Well-used sites (not accounted for elsewhere on this form) for visitors entering project lands or waters, without trespassing, for recreational purposes (may have limited development such as parking, restrooms, signage).				N/A	
Other. Amenities that do not fit in the categories identified above. Please specify (if more than one, separate by commas):					

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780 North Commercial Street
Manchester, NH 03101-1134

March 31, 2015

D33192

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First St., NE
Washington DC 20426

**Re: 2015 Recreational Usage Report for the Gorham Hydroelectric
Project FERC No. 2288-NH**

Dear Ms. Bose:

Public Service Company of New Hampshire (PSNH) d/b/a Eversource submits the 2015 Gorham Recreational Usage Report. In accordance with the Commission's Order Modifying and Approving the Gorham Hydroelectric Project Recreation Plan dated May 1, 1995, Paragraph (C) of the Director's Order requires that every five years from the date of the order, the Licensee file a report of recreation use figures with the Commission.

PSNH provided a copy of the 2015 Recreation Usage Report to the New Hampshire Fish and Game Department and the National Park Service for their review and comment on January 29, 2015 (email & cover letter attached). As of the date of this filing, no agency comments have been received.

If you have any questions, please contact Mr. Curtis R. Mooney at (603) 744-8855, Ext. 2 or email moonecr@nu.com.

Sincerely,

A handwritten signature in black ink that reads "Michael Hitchko". The signature is written in a cursive, slightly slanted style.

Michael Hitchko
Eversource Hydro Manager

Enclosures



Re: PSNH's Gorham Hydroelectric Projects Recreation Report 

From: Curtis R. Mooney <HYDRO> <555-5841 >
To: Carol B Henderson, Kevin_mendik

01/29/2015 03:19 PM

Greetings:

I wanted to give you a heads up that you will be receiving a copy of Public Service Company of NH's Gorham Project's 5 year Recreation Summary Report. The report was sent out in the mail today.

Please provide any comments you may have to me by March 9, 2015.

Thanks,
Curtis R. Mooney
PSNH Hydro Senior Engineering Specialist
59 Ayers Island Road
Bristol, NH 03222
Office phone: 744-8855 ext. 555 5841
Cell phone: 345-8531
Fax: 744-2766



**Public Service
of New Hampshire**

A Northeast Utilities Company

January 29, 2015

D33148

Ms. Carol Henderson
NH Fish & Game Department
11 Hazen Dr.
Concord, NH 03301

Mr. Kevin Mendik
National Park Service
North Atlantic Region
15 State Street
Boston, MA 02109-3572

PSNH Energy Park
780 North Commercial Street, Manchester, NH 03101

Public Service Company of New Hampshire
P.O. Box 330
Manchester, NH 03105-0330
(603) 669-4000
www.psnh.com

**Re: FERC 2015 Recreational Usage Report for the Gorham Hydroelectric
Project no. 2288-NH**

Dear Ms. Henderson & Mr. Mendik:

In accordance with the FERC Order Modifying and Approving the Recreation Plan for the Gorham Hydroelectric Project, paragraph (C), enclosed for your review and comment is a report of recreation use for the period 2010-2014 for the Gorham Hydroelectric Project.

In part, Paragraph (C) of the Director's Order states "every five years...the licensee shall file a report with the Commission, for approval, on the monitoring results". The report shall include annual recreation use figures collected by the hydro operator mechanics & self-registration surveys, and a discussion of the adequacy of the existing recreational facilities to meet recreational demand.

Please review the enclosed report and forward any comments you may have to me by March 9, 2015. If you have any questions, please contact me at (603) 744-8855, Ext. 555 5841 or by e-mail at curtis.mooney@nu.com.

Sincerely,

A handwritten signature in black ink that reads "Curtis R. Mooney". The signature is written in a cursive style and is positioned above the printed name.

Curtis R. Mooney
PSNH Engineering Specialist

Enclosure

2015 RECREATION USAGE REPORT
Gorham Hydroelectric Project
Project No. 2288-NH

Introduction

The Federal Energy Regulatory Commission (FERC) issued an Order Modifying and Approving the Recreation Plan for Gorham Hydroelectric Project, Project No. 2288, a facility licensed to Public Service Company of New Hampshire. Paragraph (B) of the Director's Order required Public Service to develop a self-registration survey system. The self-registration survey system was approved by the FERC in an order issued November 14, 1995. Paragraph (C) of the Director's Order required that every five years from the date of the order the licensee shall file a report with the Commission on the monitoring results, including comments from the National Park Service and New Hampshire Fish and Game Department.

Following is a report of the annual recreation use figures collected from PSNH's Hydro Operator-Mechanic observations and the self-registration surveys, and a discussion of the adequacy of the existing recreational facilities.

Monitoring Results

PSNH utilizes a self-registration survey system whereby visitors complete a survey form (Attachment 1) provided at two kiosks, one on each side of the river, and observations recorded by PSNH's Hydro Operator-Mechanics (HOMs). The self-registration system provides more information (i.e. comments and estimated spending amounts) than is available through Hydro HOM observations. Appendices I and II contain a listing of data collected through both methods.

Based on the data collected through both methods, there were 469 recorded visits. 68 of these visitors were recorded through the self-registration survey and 401 were visually observed by the Licensee's Hydro HOMs.

Overall, the most popular visitor activity at Gorham Hydro was walking & hiking, followed by fishing and biking. Walking & hiking comprised 335 of the 469 recorded activities.

Table 1 provides a summary, in total and by year, of the activities pursued by visitors to Gorham Hydro as observed by the PSNH's HOMs. Some visitors participated in up to four different activities during their visit, resulting in higher activity numbers than actual visitors.

TABLE 1
Summary of Activities Recorded by PSNH
(in Total and By Year)

	<u>Total</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
Walking/Hiking	318	44	53	57	67	97
Fishing	71	6	9	21	18	17
Biking						
Other						1
Canoeing		3	8			
Picnic						
Swimming						
Total	401	53	70	78	85	115

A total of 40 visitors completed the survey form from 2010 - 2015. Table 2 contains a breakdown of activities recorded by the self-registration process.

TABLE 2
Summary of Activities Recorded by Self-Registration
(in Total and By Year)

	<u>Total</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
Biking	17	4	4	7	1	1
Fishing	14	5	4	2	2	1
Picnic	6	3	1	2	0	0
Canoeing	3	0	1	2	0	0
Swimming	5	0	3	2	0	0
Walking/Hiking	17	5	3	6	2	1
Other	6	2	3	0	1	0
Total	68	19	19	21	6	2

Of the visitors that completed the survey, 27 recorded comments. The majority, 19 of the 27 visitors, recorded favorable comments about the facility and/or general environment.

Favorable comments included: great biking along Hogan Road, great place, beautiful here, cool place, I love this place, thank you and great day. Six of the visitors who recorded comments made suggestions. All of the comments and suggestions can be found in Appendix I.

One visitor indicated he or she would like to see a bridge over the dam. One visitor wanted to see the ruts in the road improved. Another visitor wanted to see trail maps. One suggested installing a bench.

Two visitors acknowledged being physically challenged, with one responding that the facilities met their needs while the other responded it did not meet their needs with no specific comment.

Discussion

The Gorham Hydro recreational facilities include parking, a walking trail, a portage trail and two information kiosks, one on each side of the river. All facilities are located on the west side of the Androscoggin River, with the exception of an information kiosk on the east side of the river. As mentioned earlier, Hogan Road parallels the Androscoggin River on the east side. This road runs from North Road in Shelburne, south of the Licensee's project, to Great Lakes Hydro's Gorham Hydroelectric Project powerhouse, north of PSNH's Gorham Project. This road is used extensively by mountain bikers.

Based on the information gathered through the self-registration survey and the observations made by our HOMs, we believe the recreation facilities provided are adequate. The overwhelming majority of the visitors had positive experiences.

Appendix I

Appendix I. Self-Registration Survey Data 2010-2014

Date	Time	Number in Party	Residence	Est. spending	Biking	Fishing	Picnic	Canoeing	Swimming	Walking	Other	Other	Physically challenged	Facilities meet your needs	Comments
5/10/10	2:00 AM	2	Berlin & Milan, NH	\$10.00		1							No		Stock with fish; only caught one
5/31/10	11:25 AM	2	Somerville, MA	\$0.00	1								No		Great biking along Hogan Road
7/6/10	1:15 AM	1	Gorham NH							1					Make a bridge over dam
7/31/10	12:30 PM	2	Dover, NH	\$25.00		1	1			1			Yes	Yes	Great place. We love it. Improve ruts in the road.
8/1/10	3:20 AM	1	N. Bolton, VT	\$400.00			1			1	1	Geocaching	No		
8/7/10	1:00 PM	2	Groveton/N. Conway	\$80.00		1							No		We don't like dams at all but appreciate your letting us visit/use this location
8/14/10	N/A	4	Tolland CT	N/A							1	Looking at scenery	No		Beautiful here
8/14/10	N/A	2	Wakefield NH	\$100.00	1	1						Biking	No		
8/21/10	1:30 PM	2	Eaton NH	N/A	1								No		Would like to see a bench
9/6/10	N/A	2	Fairfax NJ	\$300.00						1			Yes	No	
9/9/10	N/A	2	Gorham NH	\$20.00		1	1						No		Needs to be brush cut. Nice place. No picnic tables
9/11/10	N/A	1	Natick MA	\$200.00	1								No		
10/2/10	12:00 PM	0	MA & CT	\$900.00						1			No		
Total		23		\$2,035.00	4	5	3	0	0	5	2				
1/1/11	10:00 AM	3	Rainbow Lake NY	\$11.00							1	visiting	No		Camping at AMC trail Cabin for New Years
4/27/11	2:30 PM	3	Gorham NH	\$5.00							1	wheeling in trucks	No		Keep this here. Great way to pass the time and get outdoors
5/7/11	3:45 AM	2	Shelburne NH	\$0.00	1								No		Cool place
5/23/11	6:00 PM	1	Randolph NH	\$0.00		1							No		No fish today
7/28/11	1:00 PM		Barnstable, MA	\$500.00	1	1			1	1			No		Could use trail maps
8/7/11	10:00 AM	2	Shelburne NH	\$60.00		1			1	1			No		I love this place
8/31/11	2:00 PM	2	Jackson, NH		1								No		
9/4/11	6:00 PM	2	Northwood, NH	\$900.00	1	1	1	1	1	1	1	Camping	No		Thanks
Total		15		\$1,476.00	4	4	1	1	3	3	3				
4/6/12	12:30 PM		Madison, NH	\$2.00		1							No		
5/6/12	11:45 AM	4	Shelburne, NH & Falmouth, MA	\$100.00	1								No		Love it!

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**Appendix I. Self-Registration Survey Data
2010-2014**

5/11/12	2:00 PM	2	Gilcad, ME	\$20.00	1			1		1			No	
5/12/12	12:00 PM	2	Lancaster, NH	\$0.00	1								No	Thank You!
6/9/12		1	Gorham, NH	\$0.00	1		1			1			No	Thank You
7/4/12	8:00 AM	1	Porter, ME	\$30.00		1							No	Great fishing
7/21/12	12:00 PM	5	North Conway, NH	\$0.00			1		1	1			No	
7/21/12	8:00 AM	2	Fort Collins, CO	\$300.00	1					1			No	Awesome bike trail
7/24/12	3:00 PM	7	Shelburne, NH		1			1	1	1			No	Great day!
7/29/12	12:30 PM	9	Gorham, NH	\$0.00	1								No	
8/2/12	1:20 PM	11	Freedom, NH	\$100.00						1			No	Awesome time thanks for letting us park
Total		44		\$552.00	7	2	2	2	2	6	0			
1/3/13	4:00 PM	3	Gorham, NH										No	Great area to walk the dogs. Thanks!
1/12/13	11:00 AM	2	Shelburne, NH	\$0.00						1		Eagle watching	No	
7/5/13	3:00 PM	3	Sorrento, FL	\$1,000.00		1							No	Thank You! Awesome use of public space and funds
8/5/13	4:14 PM	2	Gorham, NH	\$20.00		1				1			No	Excellent maintenance, very enjoyable
8/25/13	3:00 PM	1	03561, NH	\$0.00	1								No	Beautiful at rivers intersection.
9/29/13	10:45 AM	1	Berlin, Nh							1			No	Thank You!
Total		12		\$1,020.00	1	2	0	0	0	2	1			
5/15/14	4:30 PM	2	Wofeboro, NH	\$250.00	1					1			No	Yes Thank You very nice
9/26/14	8:45 AM	1	Pittsburg, NH	\$30.00		1							No	
Total		3		\$280.00	1	1	0	0	0	1	0			

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Appendix II

Appendix II. Hydro Operator Mechanics Recreation Observations
2010-2014

Date	Time	Swimming	Fishing	Walking	Boating (motor)	Boating (non-motor)	Picnicing	Camping	Other	Total
1/7/10	13:00			2						2
1/11/10	15:20			2						2
1/15/10	8:00			2						2
1/22/10	12:00			2						2
2/3/10	11:30			2						2
2/8/10	9:00			2						2
2/18/10	11:00			4						4
4/26/10	1:30		1							1
5/7/10	10:55			2						2
5/12/10	11:00			1						1
5/13/10	9:00			2						2
5/20/10	8:00			1						1
5/21/10	8:00			1						1
5/28/10	9:00			2						2
6/14/10	13:30					3				3
7/19/10	13:00			4						4
7/30/10	9:00			2						2
8/2/10	13:00			5						5
8/9/10	13:20			3						3
9/2/10	9:25		2							2
9/3/10	10:00			5						5
9/27/10	13:00		2							2
9/28/10	8:00		1							1
2010	Total		6	44		3			0	53
8/4/11	7:00			2						2
8/10/11	9:00			2						2
8/18/11	11:00			2						2
8/29/11	9:30			2						2
8/30/11	1:00			2						2
4/6/11	13:30			2						2
4/25/11	10:00			3		3				6

Appendix II. Hydro Operator Mechanics Recreation Osbservations
2010-2014

4/27/11	9:00		4	4	8
4/28/11	2:00		1	1	2
9/9/11			4		4
9/12/11			1		1
9/14/11		1			1
9/19/11		1			1
9/23/11		1			1
9/29/11			4		4
10/3/11	10:30		2		2
10/4/11	13:05		1		1
10/5/11	8:00		2		2
10/7/11	13:00		2		2
10/24/11	10:30		3		3
7/11/11			7		7
7/12/11			2		2
7/13/11		5	2		7
7/14/11		1			1
7/27/11			3		3
2011	Total	9	53	8	70
1/10/12	10:00		2		2
1/25/12	12:00		3		3
2/1/12			3		3
2/2/12			5		5
2/3/12			1		1
2/8/12			1		1
2/21/12			2		2
6/6/12	10:15	2	4		6
6/7/12	14:00		2		2
6/11/12	13:00		2		2
6/19/12	12:40	3			3
6/21/12	14:30		6		6
6/25/12	11:30	2	1		3
6/26/12	11:55	4			4
6/28/12	13:10		2		2
7/5/12	10:00	2	3		5

Appendix II. Hydro Operator Mechanics Recreation Osbservations
2010-2014

7/11/12	12:00	4			4
7/17/12	13:30		2		2
7/18/12	8:00		1		1
7/19/12	14:00	2	2		4
7/27/12	10:00		4		4
7/31/12	14:15	2			2
8/2/12	13:40		2		2
8/3/12	11:15		2		2
8/6/12	14:00		2		2
9/24/12	10:00		3		3
9/27/12	1:00		2		2
2012	Total	21	57	0	78
1/7/13	10:30		1		1
1/14/13			1		1
1/31/13	8:00		2		2
4/4/13	7:45		2		2
4/8/13	7:30		1		1
4/15/13	7:25		3		3
4/23/13	11:00		1		1
4/29/13	7:55		2		2
5/3/13	12:00	1	2		3
5/6/13	11:30	1	3		4
5/8/13	10:30		2		2
5/22/13	11:00		3		3
5/24/13	8:00		3		3
6/3/13	10:00	1			1
6/17/13	13:00		2		2
6/19/13	2:00	3			3
6/24/13	12:00	2			2
6/27/13	10:00		3		3
7/5/13	9:00	2	2		4
7/8/13	1:00		3		3
7/10/13	9:00		2		2
8/7/13	9:00		2		2

Appendix II. Hydro Operator Mechanics Recreation Osbservations
2010-2014

8/16/13	9:00		2	2
8/19/13	8:00	4	4	8
8/20/13	8:00	4		4
8/22/13	11:00		3	3
8/23/13	10:45		3	3
8/27/13	8:00		5	5
8/29/13	10:00		1	1
9/12/13	12:00		2	2
9/23/13	11:00		3	3
9/25/13	10:00		3	3
9/27/13	8:30		1	1
2013	Total	18	67	85
3/3/14	7:30		3	3
3/10/14	9:00		2	2
3/11/14	11:00		1	1
3/14/14	9:00		1	1
3/27/14	11:00		2	2
3/31/14	8:30		2	2
4/2/14	8:00		1	1
4/3/14	8:00		1	1
4/9/14	8:00		1	1
4/10/14	11:00		2	2
4/14/14	12:00		2	2
4/16/14	8:00		2	2
4/21/14	7:30		3	3
4/30/14	14:30		3	3
5/1/14	9:00		2	2
5/2/14	13:00		2	2
5/14/14	12:00		3	3
5/16/14	8:00	2	1	3
5/19/14	8:00		2	2
5/21/14	12:00	1		1
5/29/14	14:30		4	4
5/30/14	11:00	2	2	4

Appendix II. Hydro Operator Mechanics Recreation Osbservations
2010-2014

6/2/14	9:00	2	4		6	
6/4/14	8:30	2	5		7	
6/9/14	10:00	2	1	1	4	biking
6/11/14	14:30		2		2	
6/17/14	11:00	1	2		3	
6/23/14	10:00	1	4		5	
8/6/15	10:00		3		3	
8/11/14	1:30		2		2	
8/21/14	9:00		1		1	
8/25/14	10:30	2			2	
8/28/14	2:00		1		1	
10/2/14	10:00		3		3	
10/8/14	2:00	2	3		5	
10/21/14	9:30		3		3	
11/12/14	10:00		2		2	
11/13/14	9:00		4		4	
11/17/14	8:00		1		1	
11/19/14	13:00		2		2	
11/25/14	7:30		1		1	
12/4/14	8:00		1		1	
12/5/14	8:00		1		1	
12/9/14	8:30		1		1	
12/10/14	7:30		2		2	
12/22/14	9:00		3		3	
12/23/14	10:00		1		1	
12/24/14	8:00		1		1	
12/29/14	8:30		1		1	
					0	
2014	Total	17	97	1	115	

Document Content(s)

Gorham Recreation Rpt. FERC cover letter.PDF.....1-3

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APPENDIX G
CONSULTATION



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
<http://www.fws.gov/newengland>

In Reply Refer To:

June 12, 2018

Consultation Code: 05E1NE00-2018-SLI-2073

Event Code: 05E1NE00-2018-E-04802

Project Name: Gorham Hydroelectric Project FERC No. 2288

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (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 feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

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. Under sections 7(a)(1) and 7(a)(2) 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 and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, 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 Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. 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:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2018-SLI-2073

Event Code: 05E1NE00-2018-E-04802

Project Name: Gorham Hydroelectric Project FERC No. 2288

Project Type: DAM

Project Description: Public Service Company of New Hampshire (PSNH) is filing with the Federal Energy Regulatory Commission (FERC or the Commission) its Notification of Intent (NOI) to re-license the 2.25 MW Gorham Hydroelectric Project (FERC Project No. 2288). The Gorham Hydroelectric Project consists of a 20-foot-high timber crib dam, a reservoir with a surface area of 32 acres, a spillway, a power canal, a powerhouse containing four generating units, located on the Androscoggin River in Coos County, New Hampshire. PSNH is not proposing to add capacity or make any physical modifications to the Project under the new license. The current license will expire on July 31, 2024.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/44.390213622937N71.16825638241306W>



Counties: Coos, NH

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

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

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

Mammals

NAME	STATUS
Canada Lynx <i>Lynx canadensis</i> Population: Wherever Found in Contiguous U.S. There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3652	Threatened
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

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

Request for NHB Review of "Potential Impacts" from the NHB DataCheck Tool

NHB File Number: NHB18-3938

Data Requested: 12/28/2018

Requested By:

Name: Kayla Easler
141 Main Street, P.O. Box 650
Pittsfield, ME 04967
E-mail: kayla.easler@kleinschmidtgroup.com
Phone: 207-416-1271

Project Location:

Town: Gorham, Shelburne
Description: Powerhouse Road, Gorham, NH

Payment Information. These fields MUST be filled out.

Check Number: _____

Name of Account: _____

(as printed on the check)

Enclose this completed form with a check in the amount of \$25, made out to "Treasurer, State of NH".

Send the check and the completed form to the following address:

DRED - NHB
NHB Reviews
172 Pembroke Road
Concord, NH 03301



January 9, 2018

VIA-EMAIL

Gregg Comstock
Supervisor, Water Quality Planning Section
NH Department of Environmental Services
29 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095

Gorham Hydroelectric Project (FERC No. 2288)
LIHI application Project Review of Continued Use

Dear Gregg:

The following is a request for review of water quality resources for the Low Impact Hydropower Institute (LIHI) certification application for Central Rivers Power: Gorham Hydroelectric Project (FERC No. 2288) located on the Androscoggin River in the town of Gorham, Coos County, New Hampshire.

Part of the LIHI application process requires the applicant to receive conformation from the state water resource agency that the continued operation of the project does not and will not contribute to the impaired waters of the state.

We ask that you please confirm, to your best abilities, that this is still true for the project and that the continued operations of the project do not contribute to water quality limitations.

If you have any questions, please contact me at (207) 416-1271 or by email at Kayla.Easler@KleinschmidtGroup.com.

Sincerely,

KLEINSCHMIDT ASSOCIATES

A handwritten signature in cursive script that reads "Kayla A. Easler".

Kayla A. Easler
Regulatory Coordinator

KAE:TMJ

cc: Curt Mooney, Central Rivers Power
Andy Qua, Kleinschmidt

\\kleinschmidtusa.com\Condor\Jobs\4494\004\Docs\Gorham\4494004 DES request.docx

From: Kayla Easler
To: "[Lamb, Amy](#)"
Cc: [Tuttle, Kim](#); "Carol.Henderson@wildlife.nh.gov"; [Andy Oua](#)
Subject: RE: NHB review: NHB19-0070
Date: Thursday, January 24, 2019 10:51:00 AM
Attachments: [Project Description Canann for NHB.docx](#)
[Canaan_PB.jpg](#)
[Project Location.png](#)
[Project Description Gorham for NHB.docx](#)

Amy,

Attached are the project description and operations for the Gorham (NHB18-3938) and Canaan (NHB19-0070) project.

The first part of the existing Gorham powerhouse was built in 1909. Additional parts of the Gorham Project were built from 1917 to 1923 in stages by the Twin State Gas and Electric Company. In addition, the dam was enlarged several times, in 1903, 1927-1928, and 1958-1959. The Gorham Project was acquired by PSNH in 1943.

The first part of the existing Canaan dam was originally constructed at the project site in 1927 and was reconstructed in 1943 after the original timber crib dam washed out. A powerhouse was also constructed, and project operation began in 1943.

Thank you,

Kayla A. Easler
Regulatory Coordinator

Kleinschmidt

Direct: (207) 416-1271

www.KleinschmidtGroup.com

*Providing **practical** solutions for **complex** problems affecting energy, water, and the environment*

From: Lamb, Amy <Amy.Lamb@dncr.nh.gov>
Sent: Thursday, January 24, 2019 10:15 AM
To: Kayla Easler <Kayla.Easler@KleinschmidtGroup.com>
Cc: Tuttle, Kim <Kim.Tuttle@wildlife.nh.gov>
Subject: RE: NHB review: NHB19-0070

Kayla,

We do not have current information about the natural community or rare plant species within the project area, nor a set of historic data to compare with existing conditions. Therefore, we can't comment on any effects the dam might be having on these resources. How long has the dam been present at this location?

Amy Lamb
Ecological Information Specialist

(603) 271-2834

amy.lamb@dncr.nh.gov

NH Natural Heritage Bureau

DNCR - Forests & Lands

172 Pembroke Rd

Concord, NH 03301

From: Kayla Easler [<mailto:Kayla.Easler@KleinschmidtGroup.com>]

Sent: Thursday, January 24, 2019 8:56 AM

To: Lamb, Amy

Cc: Tuttle, Kim

Subject: RE: NHB review: NHB19-0070

Amy and Kim,

Like my email for the Hooksett Development I am looking to what additional information would like on the project? As I put in the project description, Central Rivers Power (CRP) is applying for Low Impact Hydropower Institute (LIHI) Certification and as part of the process, CRP needs to reach out to agencies and update their project information with the most up-to-date information. No changes to the Project are expected at this time.

Along with getting the most up-to-date information on listed species, LIHI is looking for a written response from the agencies, showing the continued operation of the project will not contribute to the status of the species and that no significant affect is expected. We will need a response for all three project, Gorham, Canaan, and Hooksett.

If you have questions, feel free to call me at 207-416-1271

Kayla A. Easler
Regulatory Coordinator

Kleinschmidt

Direct: (207) 416-1271

www.KleinschmidtGroup.com

*Providing **practical** solutions for **complex** problems affecting energy, water, and the environment*

From: Lamb, Amy <Amy.Lamb@dncr.nh.gov>

Sent: Friday, January 18, 2019 12:29 PM

To: Kayla Easler <Kayla.Easler@KleinschmidtGroup.com>

Cc: Tuttle, Kim <Kim.Tuttle@wildlife.nh.gov>

Subject: NHB review: NHB19-0070

Attached, please find the review we have completed. If your review memo includes potential impacts to plants or natural communities please contact me for further information. If your project had potential impacts to wildlife, please contact NH Fish and Game at the phone

number listed on the review.

Best,
Amy

Amy Lamb
Ecological Information Specialist

NH Natural Heritage Bureau
DNCR - Forests & Lands
172 Pembroke Rd
Concord, NH 03301
603-271-2834

PROJECT DESCRIPTION

The Canaan Project consists of an impoundment, dam, powerhouse, tailrace channel, transmission lines, transformers, and appurtenant facilities, which are described in further detail below. The run-of-river plant is operated automatically as a base load unit generating power whenever adequate river flows are available.

The Canaan dam is approximately 275 feet long. The height of the dam measured from the lowest elevation of the natural streambed at the downstream toe of the dam to the top of the 3.5 feet high spillway flashboards is 18 feet. A concrete section is located at the south abutment and is 56 feet wide with stoplogs supported by steel stanchions. The crest of the sluiceway is at elevation 1046.0 (USGS) and the stoplogs extend up to elevation 1055.7 (USGS).

The main spillway of the dam is a concrete gravity, ogee-shaped section approximately 150 feet long with a crest elevation of 1051.5 (USGS). This section is equipped with 3.5 feet high pipe-supported flashboards extending to elevation 1055.0 (USGS).

A waste gate is located to the right of the main spillway. It consists of a 20-foot wide concrete sluiceway equipped with an electrically operated 15-foot high steel tainter gate. The crest of the sluiceway is at elevation 1040.75 (USGS).

The intake structure is located at the north abutment of the dam. An electrically operated steel gate measuring 12-1/2 feet wide by 12 feet high leads to a steel penstock. The intake racks have a clear spacing of 3 inches.

The penstock leading from the intake structure at the dam to the surge tanks and powerhouse is approximately 1360 feet long with diameter of 9 feet. The invert of the penstock at its upstream end is at elevation 1040.0 (USGS). The penstock is constructed of steel supported by concrete saddles.

Two steel surge tanks are 15' 4" in diameter and 21' 4" in height. The two tanks are supported by a reinforced concrete substructure. The invert elevation of the penstock at the surge tanks is 1033.90 (USGS).

The powerhouse, located on the north bank of the river approximately 200 feet downstream from the surge tanks, has a substructure of reinforced concrete with a brick superstructure supported by steel framing. The superstructure is approximately 31 feet long by 29 feet wide.

The Canaan Project has a bypass reach which is approximately 1,600 feet long, composed of ledge, cobble and boulders.

Bypass flows and station outflow converge in the tailwater immediately downstream of the powerhouse which has normal water surface elevation of 1031.5 feet (USGS)

The Project related transmission facilities include 2.3-kV generator leads, a 1,350-kVa 2.3/34.5-kV transformer bank; a 34.5-kV and 1,450-foot-long transmission line; and other appurtenances.

PROJECT OPERATIONS

The run-of-river plant is operated automatically as a base load unit generating power whenever adequate river flows are available. CRP provides a minimum flow of 165 cfs, in the bypass reach to support aquatic habitat and aesthetics.

PROJECT DESCRIPTION

The Gorham Project consists of an impoundment, dam, powerhouse, tailrace channel, transmission lines, transformers, and appurtenant facilities, which are described in further detail below. The project operates as an un-manned, run-of-river facility. Photo 1 provides a summary of the installed equipment.

The Project dam is a timber crib, L-shaped dam, 417 feet long and about 20 feet high, with three sections: (1) a 90-foot-long spillway section, with a steel sheet pile facing, having a crest elevation of 772.23 feet (USGS), topped with wooden flashboards, about 1.7 feet high, (2) a 252-foot-long spillway section, with two layers of 3-inch wooden plank facing, having a crest elevation of 768.12 feet (USGS), topped with hinged wooden flashboards, about 5.4 feet high, and (3) a 75-foot-long reinforced-concrete sluiceway section, with a crest elevation of 768.20 feet (USGS), topped with 5.33-foot-high hinged wooden flashboards, having one 15-foot-wide sluice gate.

The Project has an earthen power canal which is approximately 415-feet-long by 60-feet-wide by 20-feet-deep.

The powerhouse contains two 400-kW Allis-Chalmers generators driven by two 583-horsepower (hp) S. Morgan Smith vertical, Francis-type turbines, and two 675-kW Allis-Chalmers generators driven by two 1,000-hp Allis-Chalmers vertical, propeller-type turbines, totaling a maximum hydraulic capacity of about 2,800 cfs, at an operating head of approximately 18 feet.

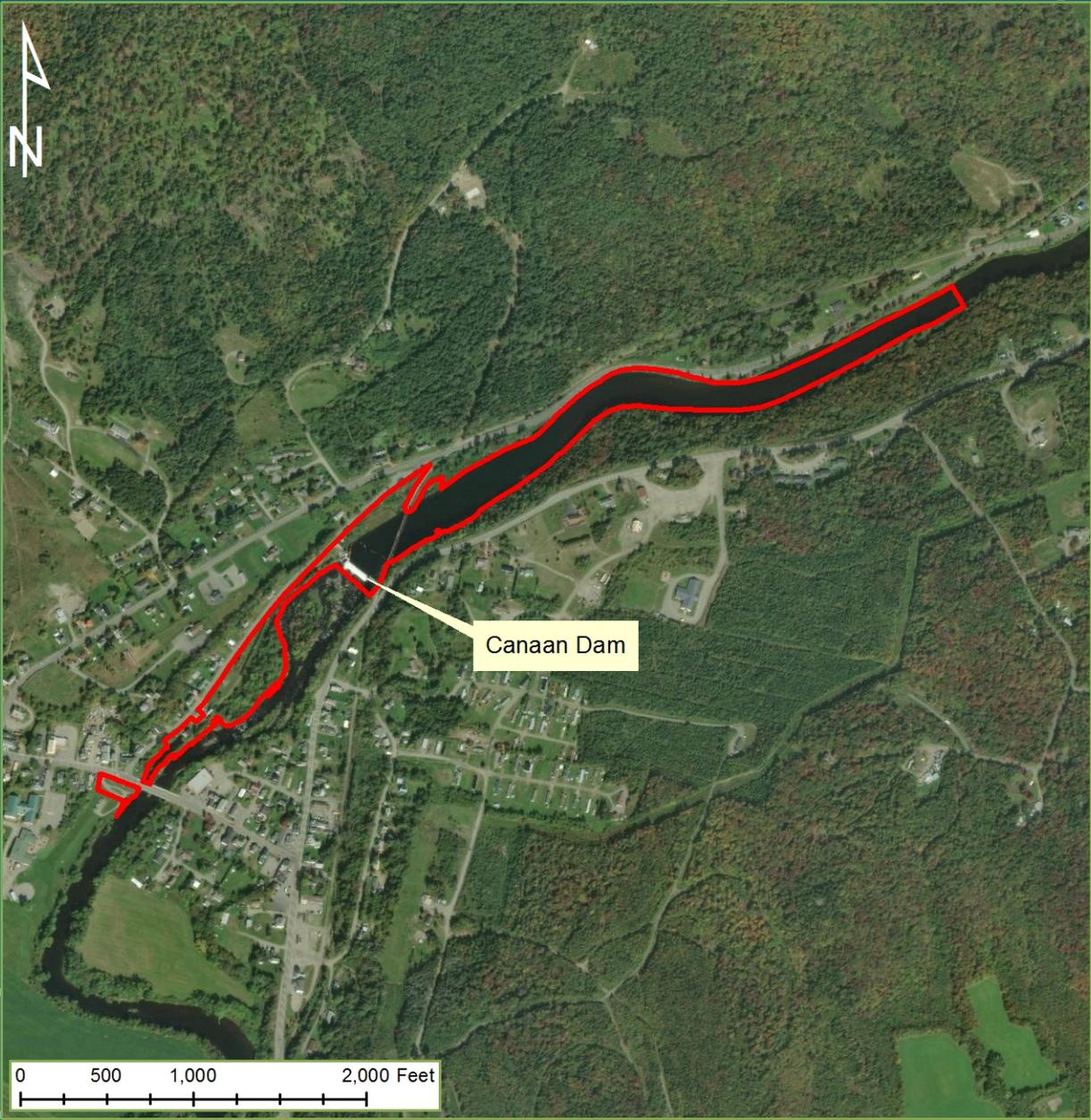
The Project has a 33 kV, 200-foot-long transmission line, and appurtenant facilities.

PROJECT OPERATIONS

The Project is operated as run-of-river with no impoundment fluctuations. Article 402 of the existing license requires there be a minimum flow release of 200 cfs from the Gorham dam at all times. The minimum flow is released through a lowered flashboard near the middle of the dam. The generating units are normally operated remotely from CRPNH's Control Center Customized Energy Solutions (CES) located in Philadelphia, Pennsylvania, although the units are also capable of local operation. Manual operations and maintenance of the Gorham Project are performed by the Upper Hydro Group, which is also responsible for CRPNH's J. Brodie Smith

Project (FERC No. 2287) and Canaan Project (FERC No. 7528) located in northern New Hampshire. Daily logs of pond level, flow, and outages are maintained electronically for the Project. Minimum bypass flows are assured by maintaining the headpond at elevation 96.75 feet MSL, monitored at the licensee's dispatch center. Minimum flows are recorded on a computer.

Project Boundary



Canaan Dam

0 500 1,000 2,000 Feet

Path: G:\Client_Data\PSN\H\Canaan_MXD\I\H\Canaan_PB.mxd



Legend

Project Boundary

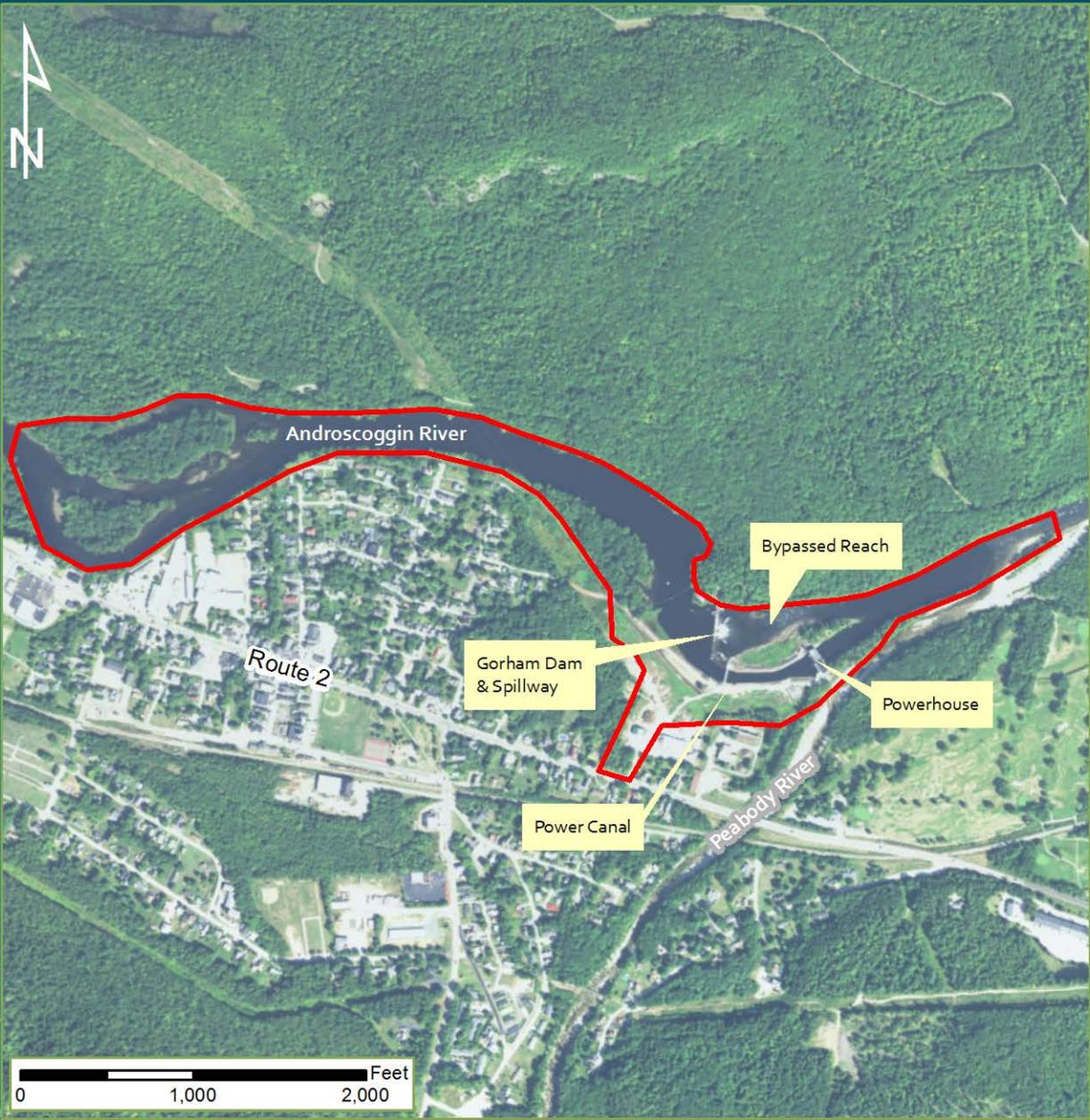
Central Rivers Power NH Manchester, NH

Drawn By: RSR	Date Drawn: 01-10-2019	Checked By: KPN	Date Checked: 01-17-2019
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Kleinschmidt
 141 Main St., PO Box 650
 Pittsfield, Maine 04967
 Telephone: (207) 487-3328
 Fax: (207) 487-3124
www.KleinschmidtGroup.com

This map/data was created for informational, planning, reference and guidance purposes only. Kleinschmidt makes no warranty, expressed or implied related to the accuracy or content of these materials.

Project Location



Path: G:\Client_Data\PSNH\Gorham_MXD\IPAD\Project_Location.mxd



Legend

Project Boundary

Public Service Company of New Hampshire
Manchester, NH

Gorham Hydroelectric Project
FERC No. 2288

Drawn By: RSR	Date Drawn: 05-30-2018	Checked By: KPN	Date Checked: 00-00-0000
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PN: 1203103.01

Source: (Kleinschmidt, 2018; PSNH, 2018; ESRI, 2018)