

June 13, 2023

SENT VIA EMAIL

Hydro.GeneralPermit@epa.gov

Re: **FirstLight MA Hydro LLC**
Turners Falls Hydroelectric Project - Cabot Generating Station
Montague, Massachusetts
Hydroelectric Generating Facilities General Permit

Dear Sir or Madam:

FirstLight Power Services LLC (FirstLight), as an agent for FirstLight MA Hydro LLC, is seeking coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Hydroelectric Generating Facilities (HYDRO GP) for the Turners Falls Hydroelectric Project's Cabot Generating Station (Cabot Station) in Montague, Massachusetts. This facility currently maintains coverage under the 2009 HYDRO GP.

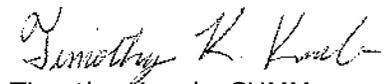
Please find attached the following documents supporting this submittal:

- Notice of Intent
- Supplemental Outfall Attachment
- Site Figures and Flow Diagram
- Cooling Water Information
- Endangered Species Submittal (Response Pending)
- Historic Places Listing
- Impaired Waters Listing

If you have any questions regarding this facility or the enclosed application package, please contact me at (413) 875-1607. Thank you for your attention with this matter.

Very truly yours,

TIGHE & BOND, INC.



Timothy Kucab, CHMM
Project Manager

Copy: Patty Goclowski, FirstLight (via email)



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SECTION 1

Section 1
Notice of Intent

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

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

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

A. Facility Information

| | | |
|--|-------------------|------------|
| 1. Facility Location | Name: | |
| | Street: | |
| | City: | State: |
| | Zip: | SIC Code: |
| | Latitude: | Longitude: |
| | Type of Business: | |
| 2. Facility Mailing Address (if different from Location) | Street: | |
| | City: | State: |
| | Zip: | |
| 3. Facility Owner | Name: | Email: |
| | Street: | Telephone: |

| | | | | |
|--|--|------------------------------|---------------------------------------|-----------------------------|
| | City: | State: | | |
| | Contact Person: | Zip: | | |
| 4. Facility Operator (if different from above) | Name: | Email: | | |
| | Street: | Telephone: | | |
| | City: | State: | | |
| | Zip: | | | |
| 5. Current Permit Status | Has prior HYDROGP coverage been granted for the discharge(s) listed in the NOI? | | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| | Permit number (if yes): | | | |
| | Is the facility covered under an Individual Permit? | | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| | Is there a pending NPDES application of file with EPA for the discharge(s)? | | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| | Date of Submittal (if yes): | | Permit Number (if known): | |
| | Attach a topographic map indicating the locations. of the facility and outfall(s) to the receiving water | | <input type="checkbox"/> Map Attached | |
| | Number of turbines: | | | |
| | Combined turbine discharge (installed capacity) at: | | Maximum capacity? | cfs |
| | | | Minimum capacity? | cfs |
| Is this facility operated as a pump storage project? | | <input type="checkbox"/> Yes | <input type="checkbox"/> No | |

B. Discharge Information

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

Combined - Equipment-related backwash strainer water and Equipment and Floor drain Water - Outfall 003 - 230,000 gpd

Please see attached sheet for all Outfall information.

7. For each outfall listed above, provide the following information (attach additional sheets if necessary). Outfalls may be eligible for alternative pH effluent limits. See Parts 1.7.1. and 2.7.1 of the permit for additional information. Contact MassDEP or NHDES to determine the required information and protocol to request alternative pH effluent limits.

| | | | | |
|-------------|---|------------|---|------|
| Outfall No. | Latitude: | Longitude: | | |
| | Discharge is: <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> Seasonal | | | |
| | Maximum Daily Flow | MGD | Average Monthly Flow | MGD |
| | Maximum Daily Temperature | °F | Average Monthly Temperature | °F |
| | Maximum Daily Oil & Grease | mg/L | Average Monthly Oil & Grease | mg/L |
| | Maximum Monthly pH | s.u. | Minimum Monthly pH | s.u. |
| | Alternative pH limits requested? <input type="checkbox"/> Yes <input type="checkbox"/> No | | State approval attached? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Outfall No. | Latitude: | Longitude: | | |
| | Discharge is: <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> Seasonal | | | |
| | Maximum Daily Flow | MGD | Average Monthly Flow | MGD |
| | Maximum Daily Temperature | °F | Average Monthly Temperature | °F |
| | Maximum Daily Oil & Grease | mg/L | Average Monthly Oil & Grease | mg/L |
| | Maximum Monthly pH | s.u. | Minimum Monthly pH | s.u. |
| | Alternative pH limits requested? <input type="checkbox"/> Yes <input type="checkbox"/> No | | State approval attached? <input type="checkbox"/> Yes <input type="checkbox"/> No | |

| | | | | |
|-------------|---|------------|---|------|
| Outfall No. | Latitude: | Longitude: | | |
| | Discharge is: <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> Seasonal | | | |
| | Maximum Daily Flow | MGD | Average Monthly Flow | MGD |
| | Maximum Daily Temperature | °F | Average Monthly Temperature | °F |
| | Maximum Daily Oil & Grease | mg/L | Average Monthly Oil & Grease | mg/L |
| | Maximum Monthly pH | s.u. | Minimum Monthly pH | s.u. |
| | Alternative pH limits requested? <input type="checkbox"/> Yes <input type="checkbox"/> No | | State approval attached? <input type="checkbox"/> Yes <input type="checkbox"/> No | |

C. Best Technology Available for Cooling Water Intake Structures

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

D. Chemical Additives

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

E. Endangered Species Act Certification

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

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

F. National Historic Properties Act Eligibility

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

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

G. Supplemental Information

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

H. Signature Requirements

1. The NOI must be signed by the operator in accordance with the signatory requirements of 40 C.F.R. § 122.22, including the following certification:

I certify under penalty of law that no chemical additives are used in the discharges to be authorized under this General Permit except for those used for pH adjustment or anti-freeze purposes and that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

2. Notification provided to the appropriate State, including a copy of this NOI, if required? Yes No

Signature: 
 Print Name and Title: Justin Trudell - Chief Operating Officer

Date: June 9, 2023

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SECTION 2

Section 2
Supplemental Outfall Information

**Turners Falls - Cabot Station
Outfall Description Attachment**

| Outfall Number: | Lattitude | 42°35'14"N | Longitude | 72°34'45"W |
|-----------------------------------|---|--------------|-------------------------------|------------|
| 001 - High Water Sump | Discharge is: | Intermittent | | |
| | Max Daily Flow (MGD) | - | Ave. Monthly Flow (MGD) | - |
| | Max Daily Temperature (F) | - | Ave Monthly Temperature (F) | - |
| Substantially Identical Outfalls: | Max Daily Oil & Grease (mg/L) | - | Ave Daily Oil & Grease (mg/L) | - |
| 012 | Max Monthly pH (s.u.) | - | Min Monthly pH (s.u.) | - |
| | Alternative pH Limts Requested? | No | State Approval Attached? | No |
| Remarks: | No sampling data available. Discharge is not routine. | | | |

| Outfall Number: | Lattitude | 42°35'14"N | Longitude | 72°34'45"W |
|---|--|--------------|-------------------------------|------------|
| 002 - Stormwater, Canal Seepage and Floor Drain | Discharge is: | Intermittent | | |
| | Max Daily Flow (MGD) | - | Ave. Monthly Flow (MGD) | - |
| | Max Daily Temperature (F) | - | Ave Monthly Temperature (F) | - |
| Substantially Identical Outfalls: | Max Daily Oil & Grease (mg/L) | - | Ave Daily Oil & Grease (mg/L) | - |
| N/A | Max Monthly pH (s.u.) | - | Min Monthly pH (s.u.) | - |
| | Alternative pH Limts Requested? | No | State Approval Attached? | No |
| Remarks: | No sampling data available. Flow includes primarily stormwater discharges. Floor drain discharge is not routine and for emergency discharges only. | | | |

| Outfall Number: | Lattitude | 42°35'14"N | Longitude | 72°34'45"W |
|--|--|------------|-------------------------------|------------|
| 003 - Combined Discharge (Backwash, Cooling Water, Head Cover Sumps, Roofdrains and Leakage) | Discharge is: | Continuous | | |
| | Max Daily Flow (MGD) | 0.229 | Ave. Monthly Flow (MGD) | 0.181 |
| | Max Daily Temperature (F) | 78 | Ave Monthly Temperature (F) | 56.7 |
| Substantially Identical Outfalls: | Max Daily Oil & Grease (mg/L) | 6.9 | Ave Daily Oil & Grease (mg/L) | 1.55 |
| N/A | Max Monthly pH (s.u.) | 7.9 | Min Monthly pH (s.u.) | 7.2 |
| | Alternative pH Limts Requested? | No | State Approval Attached? | No |
| Remarks: | Historic sampling performed at the oil/water separator effluent. | | | |

| Outfall Number: | Lattitude | 42°35'14"N | Longitude | 72°34'45"W |
|--|---|--------------|-------------------------------|------------|
| 004 - Emergency Head Cover Sump Discharge | Discharge is: | Intermittent | | |
| | Max Daily Flow (MGD) | - | Ave. Monthly Flow (MGD) | - |
| | Max Daily Temperature (F) | - | Ave Monthly Temperature (F) | - |
| Substantially Identical Outfalls: | Max Daily Oil & Grease (mg/L) | - | Ave Daily Oil & Grease (mg/L) | - |
| 005, 006, 007, 008, 009 | Max Monthly pH (s.u.) | - | Min Monthly pH (s.u.) | - |
| | Alternative pH Limts Requested? | No | State Approval Attached? | No |
| Remarks: | No sampling data available. Discharge is not routine. | | | |

**Turners Falls - Cabot Station
Outfall Description Attachment**

| | | | | |
|--|---|--------------|--|------------|
| Outfall Number: | Lattitude | 42°35'15"N | Longitude | 72°34'45"W |
| 005 - Emergency Head Cover Sump Discharge | Discharge is: | Intermittent | | |
| | Max Daily Flow (MGD) | - | Ave. Monthly Flow (MGD) | - |
| | Max Daily Temperature (F) | - | Ave Monthly Temperature (F) | - |
| Substantially Identical Outfalls: | Max Daily Oil & Grease (mg/L) | - | Ave Daily Oil & Grease (mg/L) | - |
| 004, 006, 007, 008, 009 | Max Monthly pH (s.u.) | - | Min Monthly pH (s.u.) | - |
| | Alternative pH Limts Requested? | No | State Approval Attached? | No |
| Remarks: | No sampling data available. Discharge is not routine. | | | |

| | | | | |
|--|---|--------------|--|------------|
| Outfall Number: | Lattitude | 42°35'15"N | Longitude | 72°34'45"W |
| 006 - Emergency Head Cover Sump Discharge | Discharge is: | Intermittent | | |
| | Max Daily Flow (MGD) | - | Ave. Monthly Flow (MGD) | - |
| | Max Daily Temperature (F) | - | Ave Monthly Temperature (F) | - |
| Substantially Identical Outfalls: | Max Daily Oil & Grease (mg/L) | - | Ave Daily Oil & Grease (mg/L) | - |
| 004, 005, 007, 008, 009 | Max Monthly pH (s.u.) | - | Min Monthly pH (s.u.) | - |
| | Alternative pH Limts Requested? | No | State Approval Attached? | No |
| Remarks: | No sampling data available. Discharge is not routine. | | | |

| | | | | |
|--|---|--------------|--|------------|
| Outfall Number: | Lattitude | 42°35'16"N | Longitude | 72°34'45"W |
| 007 - Emergency Head Cover Sump Discharge | Discharge is: | Intermittent | | |
| | Max Daily Flow (MGD) | - | Ave. Monthly Flow (MGD) | - |
| | Max Daily Temperature (F) | - | Ave Monthly Temperature (F) | - |
| Substantially Identical Outfalls: | Max Daily Oil & Grease (mg/L) | - | Ave Daily Oil & Grease (mg/L) | - |
| 004, 005, 006, 008, 009 | Max Monthly pH (s.u.) | - | Min Monthly pH (s.u.) | - |
| | Alternative pH Limts Requested? | No | State Approval Attached? | No |
| Remarks: | No sampling data available. Discharge is not routine. | | | |

| | | | | |
|--|---|--------------|--|------------|
| Outfall Number: | Lattitude | 42°35'16"N | Longitude | 72°34'45"W |
| 008 - Emergency Head Cover Sump Discharge | Discharge is: | Intermittent | | |
| | Max Daily Flow (MGD) | - | Ave. Monthly Flow (MGD) | - |
| | Max Daily Temperature (F) | - | Ave Monthly Temperature (F) | - |
| Substantially Identical Outfalls: | Max Daily Oil & Grease (mg/L) | - | Ave Daily Oil & Grease (mg/L) | - |
| 004, 005, 006, 007, 009 | Max Monthly pH (s.u.) | - | Min Monthly pH (s.u.) | - |
| | Alternative pH Limts Requested? | No | State Approval Attached? | No |
| Remarks: | No sampling data available. Discharge is not routine. | | | |

**Turners Falls - Cabot Station
Outfall Description Attachment**

| | | | | |
|--|---|--------------|--|------------|
| Outfall Number: | Lattitude | 42°35'16"N | Longitude | 72°34'46"W |
| 009 - Emergency Head Cover Sump Discharge | Discharge is: | Intermittent | | |
| | Max Daily Flow (MGD) | - | Ave. Monthly Flow (MGD) | - |
| | Max Daily Temperature (F) | - | Ave Monthly Temperature (F) | - |
| Substantially Identical Outfalls: | Max Daily Oil & Grease (mg/L) | - | Ave Daily Oil & Grease (mg/L) | - |
| 004, 005, 006, 008, 009 | Max Monthly pH (s.u.) | - | Min Monthly pH (s.u.) | - |
| | Alternative pH Limts Requested? | No | State Approval Attached? | No |
| Remarks: | No sampling data available. Discharge is not routine. | | | |

| | | | | |
|--|---|--------------|--|------------|
| Outfall Number: | Lattitude | 42°35'15"N | Longitude | 72°34'45"W |
| 010 - Floor Drain | Discharge is: | Intermittent | | |
| | Max Daily Flow (MGD) | - | Ave. Monthly Flow (MGD) | - |
| | Max Daily Temperature (F) | - | Ave Monthly Temperature (F) | - |
| Substantially Identical Outfalls: | Max Daily Oil & Grease (mg/L) | - | Ave Daily Oil & Grease (mg/L) | - |
| 011 | Max Monthly pH (s.u.) | - | Min Monthly pH (s.u.) | - |
| | Alternative pH Limts Requested? | No | State Approval Attached? | No |
| Remarks: | No sampling data available. Sampling cannot be performed under normal conditions as leakage is minimal. | | | |

| | | | | |
|--|---|--------------|--|------------|
| Outfall Number: | Lattitude | 42°35'15"N | Longitude | 72°34'45"W |
| 011 - Floor Drain | Discharge is: | Intermittent | | |
| | Max Daily Flow (MGD) | - | Ave. Monthly Flow (MGD) | - |
| | Max Daily Temperature (F) | - | Ave Monthly Temperature (F) | - |
| Substantially Identical Outfalls: | Max Daily Oil & Grease (mg/L) | - | Ave Daily Oil & Grease (mg/L) | - |
| 010 | Max Monthly pH (s.u.) | - | Min Monthly pH (s.u.) | - |
| | Alternative pH Limts Requested? | No | State Approval Attached? | No |
| Remarks: | No sampling data available. Sampling cannot be performed under normal conditions as leakage is minimal. | | | |

| | | | | |
|--|---|--------------|--|------------|
| Outfall Number: | Lattitude | 42°35'15"N | Longitude | 72°34'45"W |
| 012 - High Water Sump | Discharge is: | Intermittent | | |
| | Max Daily Flow (MGD) | - | Ave. Monthly Flow (MGD) | - |
| | Max Daily Temperature (F) | - | Ave Monthly Temperature (F) | - |
| Substantially Identical Outfalls: | Max Daily Oil & Grease (mg/L) | - | Ave Daily Oil & Grease (mg/L) | - |
| 001 | Max Monthly pH (s.u.) | - | Min Monthly pH (s.u.) | - |
| | Alternative pH Limts Requested? | No | State Approval Attached? | No |
| Remarks: | No sampling data available. Low flow volumes from wall seepage. | | | |

Representative Outfalls And Additional Descriptions

Outfalls DSN-001 and DSN-012

Outfalls DSN-001 and DSN-012 are emergency highwater sump pumps. These outfalls are located on either end of the facility and are designed to pump only during highwater emergencies. These outfalls are considered substantially identical. However, discharges are not expected regularly.

No sampling will be required from either of these outfalls.

Outfall DSN-002

Outfall DSN-002 discharges stormwater runoff from roof drains and canal seepage to the Connecticut River. A floor drain within the facility connects to the piping associated with this outfall. However, it is located in an area that is not susceptible to pollutant exposure and has not been sealed, as to facilitate emergency discharges in highwater conditions. This outfall is not accessible for sampling.

No sampling will be required from this outfall.

Outfall DSN-003

Outfall DSN-003 is the primary discharge location from the facility. This outfall includes a combined discharge of filter backwash, cooling water, head cover sump (unit leakage), roof drains and building leakage. As shown on the site figure in this package, several different sources co-mingle in the Outfall DSN-003 discharge pit prior to discharge. Specifically, unit leakage and thrust bearing cooling water discharges to an oil/water separator before ultimately collecting in the DSN-003 outfall pit prior to discharge. During maintenance operations, this discharge may be routed through a carbon filter on-site for additional treatment of discharge flows. Additionally, filter backwash and a variety of building leakage sources discharge directly to the DSN-003 outfall pit prior to discharge. The DSN-003 pit is not able to be sampled based upon its location within the facility.

Based on this unique configuration, FirstLight proposes to sample where possible upstream of the discharge pit. One sample will also be collected at the oil water separator location. Additionally, a sample will be collected at the filter as well as at the screen in the northeast corner of the facility which receives filter backwash as well as roof drain/leakage sources.

Outfalls DSN-004 through DSN-009

Outfalls DSN-004 through DSN-009 are emergency headcover sump pumps that may be used during highwater emergencies. Under typical operations, these pumps are routed through the oil/water separator and carbon filter, to the Connecticut River via Outfall DSN-003. During a high-water event, valves are engaged to direct discharge to the river. These outfalls are considered substantially identical.

No sampling will be required from these outfalls during high water conditions. Sampling of flows will be performed at DSN-003 during standard operation.

Outfalls DSN-010 and DSN-011

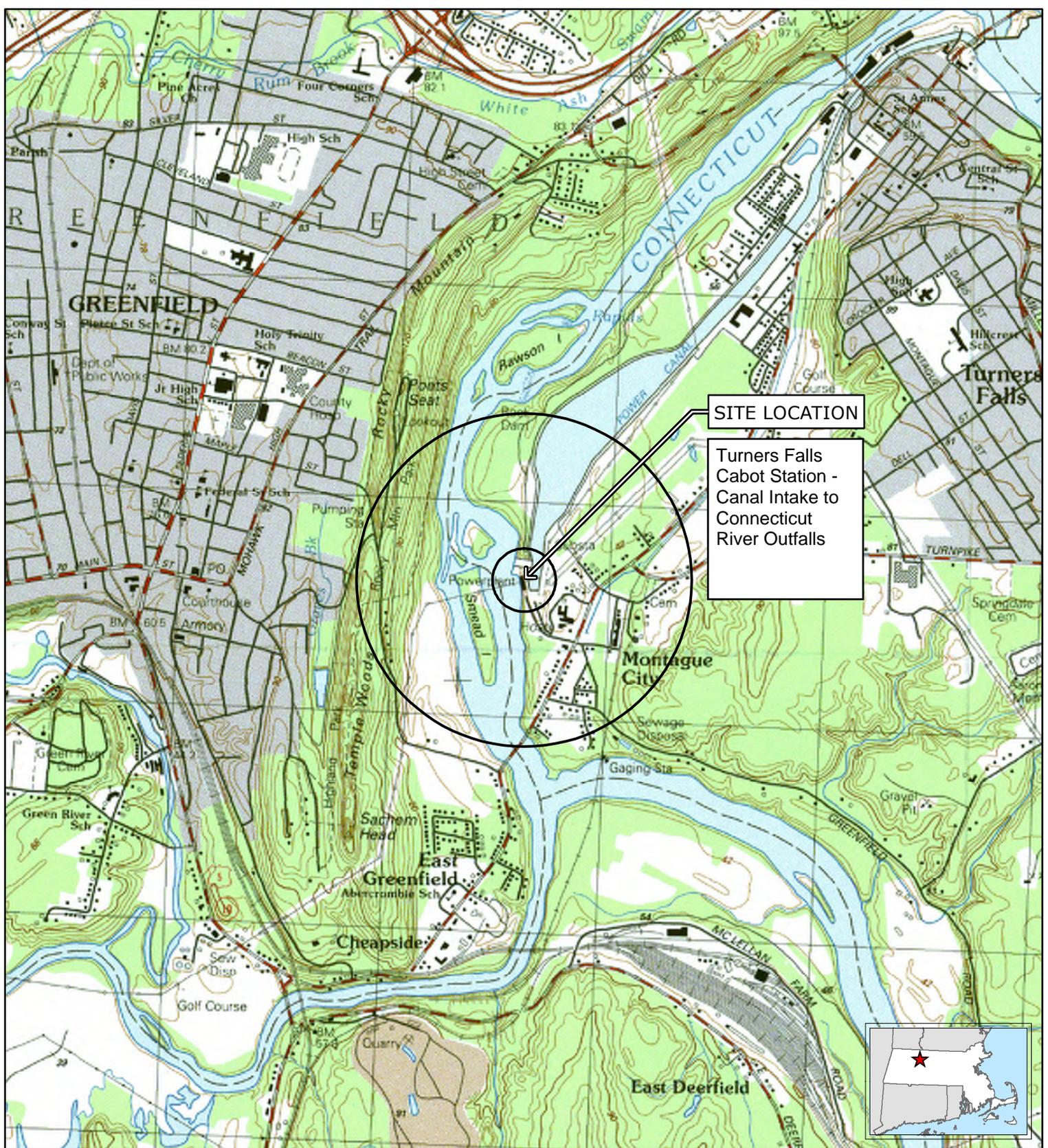
Outfalls DSN-010 and DSN-011 discharge foundation leakage and condensate through two holes in the floor directly to the Connecticut River. These outfalls are located several feet apart and are considered substantially identical. The flows in these areas are minimal and are generally only a trickle.

Sampling is not believed to be possible from either of these outfalls due to the limited and inconsistent flow.

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SECTION 3

Section 3
Site Figures and Flow Diagrams



SITE LOCATION

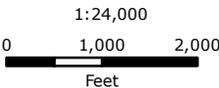
Turners Falls
Cabot Station -
Canal Intake to
Connecticut
River Outfalls

**FIGURE 1
SITE LOCATION**

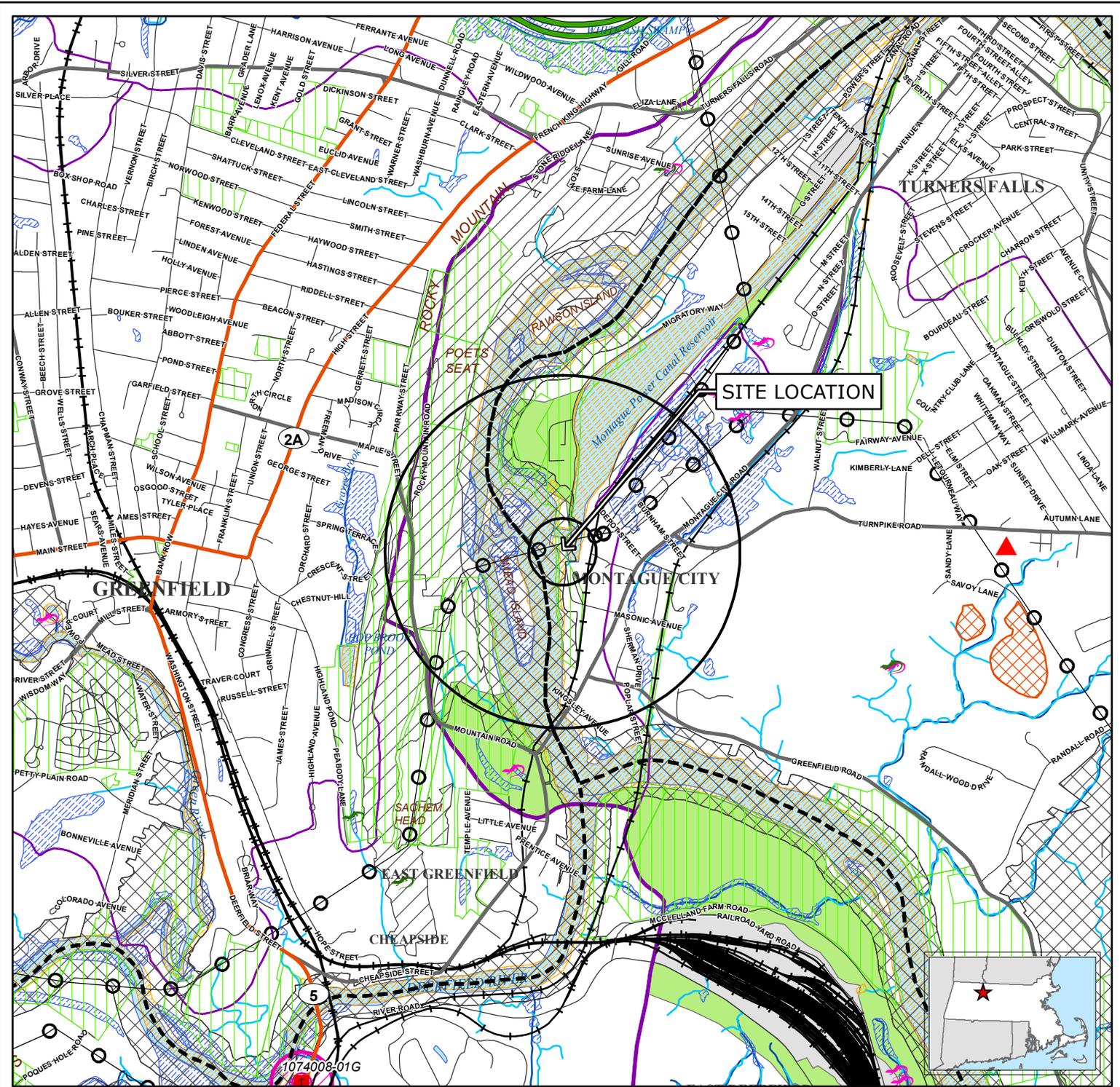
Turners Falls Hydroelectric Project
Cabot Generating Station
15 Cabot Street
Montague, Massachusetts



Based on USGS Topographic Map for
Greenfield, MA Revised 1990.
Contour Interval Equals 6-Meters.
Circles indicate 500-foot and half-mile radii



May 2023



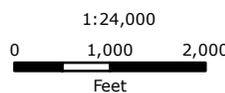
Legend

- NHESP Certified Vernal Pools
- NHESP Potential Vernal Pools
- Non-Landfill Solid Waste Sites
- Proposed Well
- Emergency Surface Water
- Community Public Water Supply - Surface Water
- Community Public Water Supply - Groundwater
- Non-Community Non-Transient Public Water Supply
- Non-Community Transient Public Water Supply
- Limited Access Highway
- Multi-Lane Highway, NOT Limited Access
- Other Numbered Route
- Major Road - Arterials and Collectors
- Minor Street or Road
- Aqueducts
- Hydrologic Connections
- Stream/Intermittent Stream
- Powerline
- Pipeline
- Track or Trail
- Trains
- Public Surface Water Supply Protection Area (Zone A)
- DEP Approved Wellhead Protection Area (Zone I)
- DEP Approved Wellhead Protection Area (Zone II)
- DEP Interim Wellhead Protection Area (IWPA)
- Protected and Recreational Open Space
- Solid Waste Landfill
- Area of Critical Environmental Concern (ACEC)
- NHESP Priority Habitats for Rare Species
- NHESP Estimated Habitats for Rare Wildlife
- EPA Designated Sole Source Aquifer
- Major Drainage Basin
- Sub Drainage Basin
- MassDEP Open Water
- MassDEP Inland Wetlands
- MassDEP Coastal Wetlands
- MassDEP Not Interpreted Wetlands
- Public Surface Water Supply (PSWS)
- Water Bodies
- Non-Potential Drinking Water Source Area - High Yield
- Non-Potential Drinking Water Source Area - Medium Yield
- Potentially Productive Medium Yield Aquifer
- Potentially Productive High Yield Aquifer
- County Boundary
- Municipal Boundary
- USGS Quadrangle Sheet Boundary

FIGURE 2
PRIORITY RESOURCES

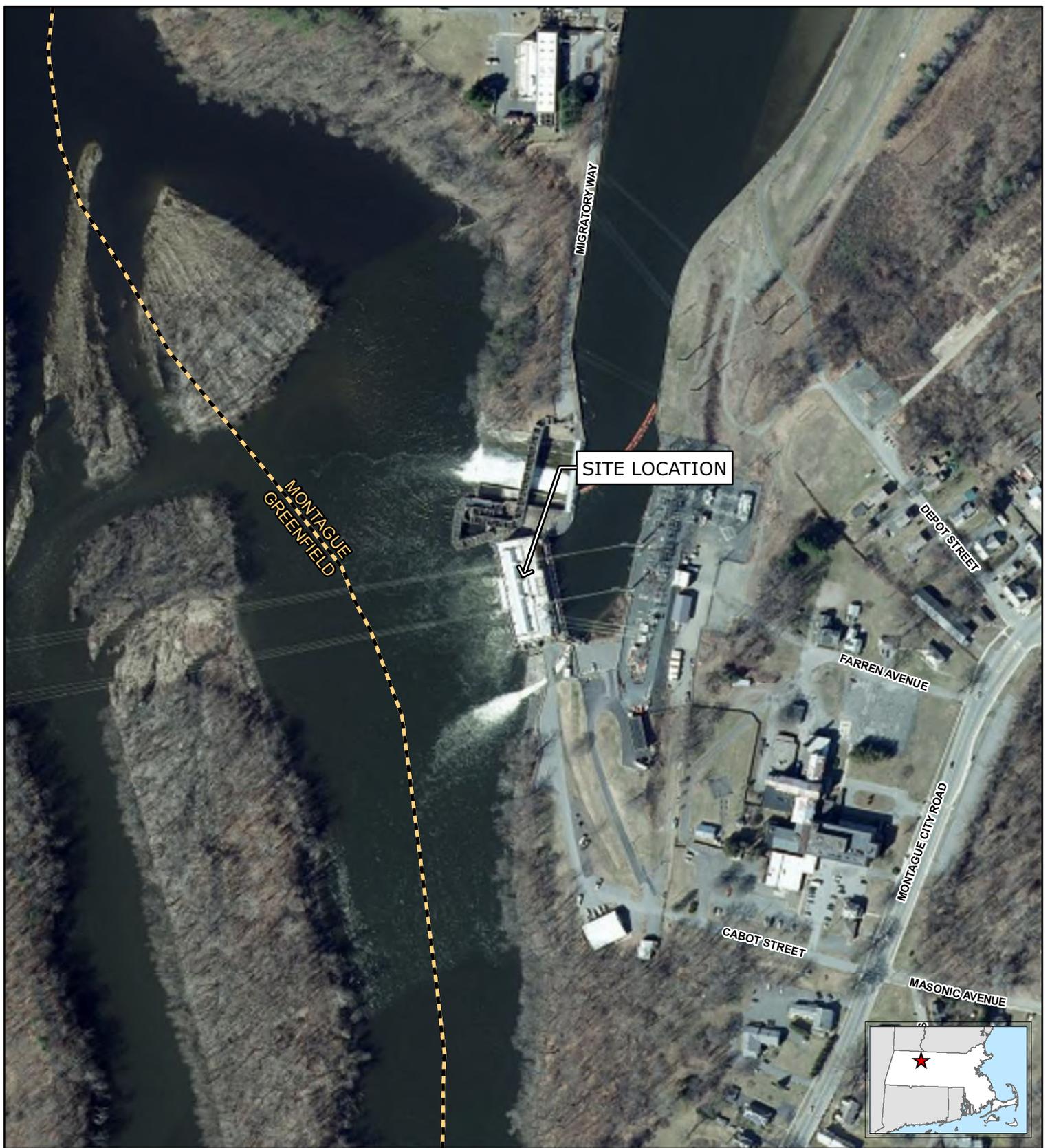
Turners Falls Hydroelectric Project
Cabot Generating Station
15 Cabot Street
Montague, Massachusetts

Data source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology
Circles indicate 500-foot and half-mile radii.
Data valid as of May 2023.



May 2023



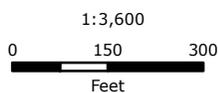


Legend

 Municipal Boundary



Based on MassGIS Color Orthophotography (2021)

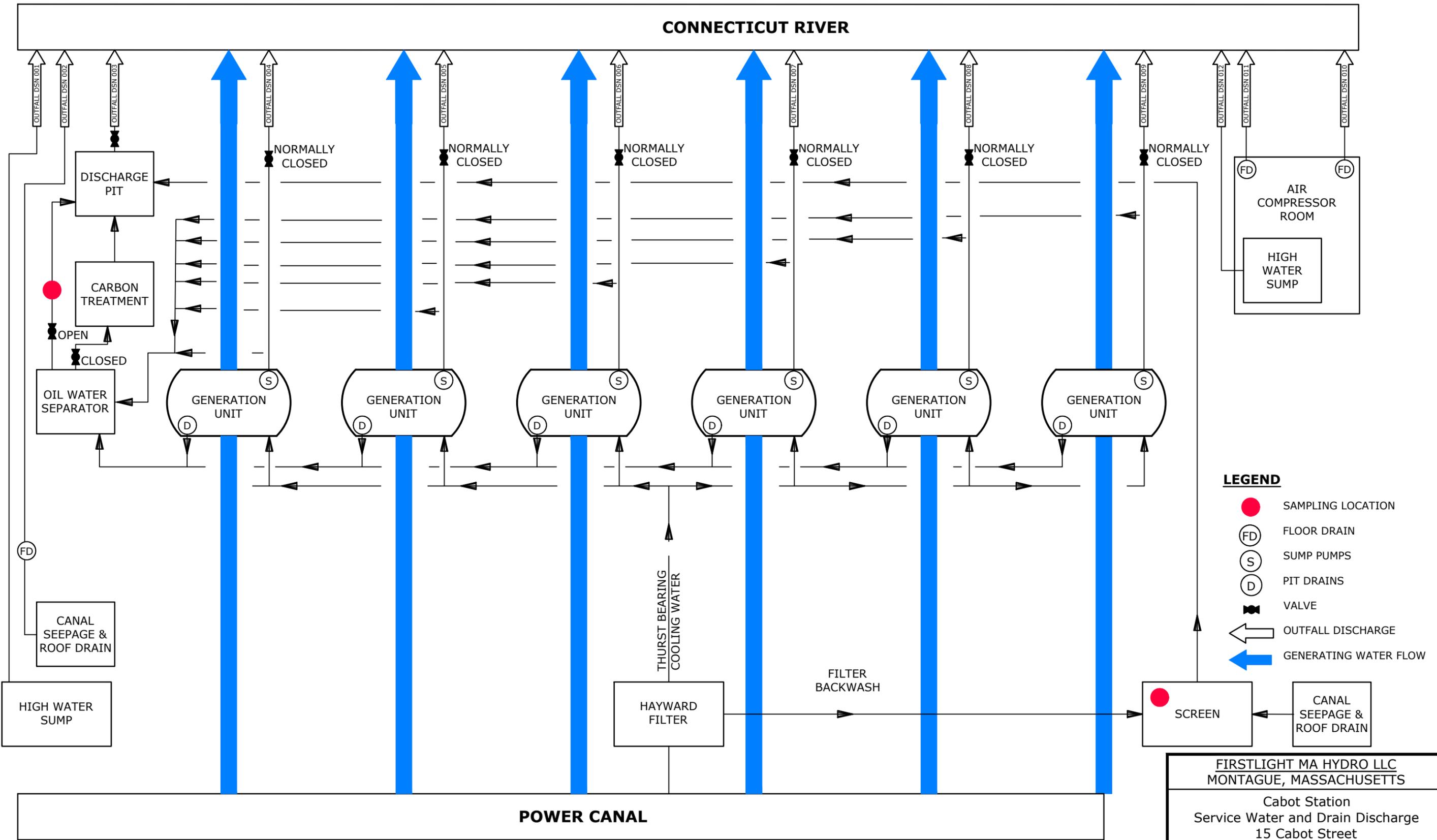


**FIGURE 3
ORTHOGRAPH**

Turners Falls Hydroelectric Project
Cabot Generating Station
15 Cabot Street
Montague, Massachusetts

May 2023

Plotted On: Jun 09, 2023 9:07am By: ETDeCotis
 Tighe & Bond: J:\F0211 - FirstLight Sediment\034 HYDRO GP Applications\15 Cabot Street Montague\Drawings\Figures\F-0211-034-Cabot.dwg



LEGEND

- SAMPLING LOCATION
- FD FLOOR DRAIN
- S SUMP PUMPS
- D PIT DRAINS
- VALVE
- OUTFALL DISCHARGE
- GENERATING WATER FLOW

FIRSTLIGHT MA HYDRO LLC
MONTAGUE, MASSACHUSETTS

Cabot Station
 Service Water and Drain Discharge
 15 Cabot Street
 Montague, Massachusetts

DATE: 06/09/2023
 SCALE: NO SCALE
 FIGURE:

Tighe & Bond

Tighe&Bond

SECTION 4

Section 4
Cooling Water Information

Cooling Water Intake Structure

Best Technology Available

Cabot Station intends on complying with the Cooling Water Intake Structure (CWIS) Best Technology Available (BTA) requirements of the HYDRO GP, via Section 4.2(b)(i). Specifically:

i. An existing exclusion, diversion, or guidance device (e.g., a physical or behavioral barrier or spillway) that provides fish downstream passage and minimizes exposure to a CWIS. The permittee must describe any technology or combination of technologies implemented for fish protection in the NOI and provide sufficient information to demonstrate that the downstream fish passage effectively transports live fish in a manner that minimizes the likelihood of becoming impinged at the cooling water intake.

The Turners Falls Dams create the Turners Falls Impoundment, which provides water to the Turners Falls Power Canal. The Power Canal serves both the Cabot Station, as well as FirstLight's No. 1 Station. Bordering the Turners Falls Dam is the Gatehouse which is equipped with 15 operable gates controlling the flow to the canal system.

Cabot Station is improved with angled upper and lower trash racks. The trashrack opening is 217 feet wide by 31 feet high, resulting in a gross area of 6,727 ft². At maximum hydraulic capacity of 13,728 cfs, the intake velocity immediately in front of the racks is approximately 2.0 feet/sec. The top 11 feet of the upper racks have clear bar spacing of 0.94 inches (15/16-inch, and the bottom 7 feet of the upper racks have clear bar spacing of 5 inches. The entire 13 feet of the lower racks have clear bar spacing of 5 inches. After passing through the trash racks, river water is directed to the Hayward Filter within the plant, ultimately providing thrust bearing cooling water to each of the six units.

Additionally, the entirety of the canal system is provided with three upstream fish passage facilities: the Cabot fishway, the Spillway fishway, and the Gatehouse fishway and one downstream passage, the Cabot log sluice with Alden-NU weir insert supporting fish migration and impact avoidance.

Please be advised that this facility is currently undergoing Federal Energy Regulatory Commission (FERC) relicensing. As part of relicensing, a variety of improvements in both upstream and downstream fish passage and environmental flows have been proposed. Each improvement will be thoroughly evaluated by regulators and a variety of additional stakeholders for effectiveness. Documents and studies can be found at FirstLight Power's Relicensing Website (<https://www.northfield-relicensing.com/>).

StreamStats Data-Collection Station Report

Gage Information

| Name | Value |
|--|---|
| USGS Station Number | 01170500 (https://waterdata.usgs.gov/monitoring-location/01170500) |
| Station Name | CONNECTICUT RIVER AT MONTAGUE CITY, MA |
| Station Type | Gaging Station, continuous record |
| Latitude | 42.5786972 |
| Longitude | -72.5745333 |
| NWIS Latitude | 42.5802222 |
| NWIS Longitude | -72.5745 |
| Is regulated? | true |
| Agency | United States Geological Survey |
| NWIS Discharge Period of Record | 03/30/1904 - 05/21/2023 |

Physical Characteristics

Filter By Statistic Group: 4 Checked ▾ Filter By Citation: Select ▾

Land Cover Characteristics

| Characteristic Name | Value | Units | Citation |
|-------------------------|-------|--------------|------------|
| Area_of_Lakes_and_Ponds | 0.8 | square miles | 193 |

Basin Dimensional Characteristics

| Characteristic Name | Value | Units | Citation |
|---------------------|-------|--------------|----------|
| Drainage Area | 7860 | square miles | 193 |

Topographical Characteristics

| Characteristic Name | Value | Units | Citation |
|----------------------------|-------|-------------|----------|
| Mean Basin Elevation | 1350 | feet | 193 |
| Mean Basin Slope ft per mi | 3.8 | feet per mi | 193 |

Stream Channel Properties

| Characteristic Name | Value | Units | Citation |
|---------------------|-------|-------|----------|
| Stream Length Total | 279 | miles | 3 |

Streamflow Statistics

Filter By Statistic Group: Filter By Citation: Show Only Preferred

Peak-Flow Statistics

| Statistic Name | Value | Units | Preferred? | Years of Record | Standard Error, percent | Citation | Comments |
|----------------------|--------|-----------------------|------------|-----------------|-------------------------|----------|----------|
| 50-percent AEP flood | 86700 | cubic feet per second | ✓ | 8 | | 57 | |
| 20-percent AEP flood | 112000 | cubic feet per second | ✓ | 8 | | 57 | |
| 10-percent AEP flood | 129000 | cubic feet per second | ✓ | 8 | | 57 | |

| Statistic Name | Value | Units | Preferred? | Years of Record | Standard Error, percent | Citation | Comments |
|-----------------------|--------|-----------------------|------------|-----------------|-------------------------|----------|----------|
| 4-percent AEP flood | 150000 | cubic feet per second | ✓ | 8 | | 57 | |
| 2-percent AEP flood | 165000 | cubic feet per second | ✓ | 8 | | 57 | |
| 1-percent AEP flood | 181000 | cubic feet per second | ✓ | 8 | | 57 | |
| 0.2-percent AEP flood | 218000 | cubic feet per second | ✓ | 8 | | 57 | |

Low-Flow Statistics

| Statistic Name | Value | Units | Preferred? | Years of Record | Standard Error, percent | Citation | Comments |
|------------------------|-------|-----------------------|------------|-----------------|-------------------------|----------|----------|
| 7 Day 2 Year Low Flow | 2410 | cubic feet per second | ✓ | | | 24 | |
| 7 Day 10 Year Low Flow | 1690 | cubic feet per second | ✓ | | | 24 | |

Flow-Duration Statistics

| Statistic Name | Value | Units | Preferred? | Years of Record | Standard Error, percent | Citation | Comments |
|-----------------------|--------------|-----------------------|-------------------|------------------------|--------------------------------|-----------------|---|
| 1 Percent Duration | 70500 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 2 Percent Duration | 60200 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 3 Percent Duration | 53300 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 5 Percent Duration | 44600 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 10 Percent Duration | 32300 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 15 Percent Duration | 25100 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |

| Statistic Name | Value | Units | Preferred? | Years of Record | Standard Error, percent | Citation | Comments |
|-----------------------|--------------|-----------------------|-------------------|------------------------|--------------------------------|-----------------|---|
| 20 Percent Duration | 20500 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 25 Percent Duration | 17500 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 30 Percent Duration | 15100 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 35 Percent Duration | 13200 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 40 Percent Duration | 11700 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 45 Percent Duration | 10400 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |

| Statistic Name | Value | Units | Preferred? | Years of Record | Standard Error, percent | Citation | Comments |
|-----------------------|--------------|-----------------------|-------------------|------------------------|--------------------------------|-----------------|---|
| 50 Percent Duration | 9320 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 55 Percent Duration | 8420 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 60 Percent Duration | 7640 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 65 Percent Duration | 6880 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 70 Percent Duration | 6120 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 75 Percent Duration | 5410 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |

| Statistic Name | Value | Units | Preferred? | Years of Record | Standard Error, percent | Citation | Comments |
|-----------------------|--------------|-----------------------|-------------------|------------------------|--------------------------------|-----------------|---|
| 80 Percent Duration | 4690 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 85 Percent Duration | 3960 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 90 Percent Duration | 3170 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 95 Percent Duration | 2260 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 97 Percent Duration | 1760 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| 98 Percent Duration | 1390 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |

| Statistic Name | Value | Units | Preferred? | Years of Record | Standard Error, percent | Citation | Comments |
|---------------------|-------|-----------------------|------------|-----------------|-------------------------|----------|--|
| 99 Percent Duration | 849 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |

Annual Flow Statistics

| Statistic Name | Value | Units | Preferred? | Years of Record | Standard Error, percent | Citation | Comments |
|----------------------------------|-------|-----------------------|------------|-----------------|-------------------------|----------|--|
| Mean Annual Flow | 14300 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| Standard Dev of Mean Annual Flow | 2940 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| Maximum Annual Mean Flow | 23000 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| Minimum Annual Mean Flow | 6770 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |

General Flow Statistics

| Statistic Name | Value | Units | Preferred? | Years of Record | Standard Error, percent | Citation | Comments |
|------------------------------|--------------|-----------------------|-------------------|------------------------|--------------------------------|-----------------|---|
| Minimum daily flow | 215 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| Maximum daily flow | 233000 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| Std Dev of daily flows | 14500 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| Average daily streamflow | 13940.419 | cubic feet per second | ✓ | 100 | | 86 | |
| Harmonic Mean Streamflow | 6150 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| Mean_of_Logs_of_Daily_Values | 3.982344 | Log base 10 | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |

| Statistic Name | Value | Units | Preferred? | Years of Record | Standard Error, percent | Citation | Comments |
|--------------------------------------|-----------|-----------------------|------------|-----------------|-------------------------|----------|--|
| Std_Dev_of_Logs_of_Daily_Values | 0.39448 | Log base 10 | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| Skew_of_Logs_of_Daily_Values | -0.145172 | Log base 10 | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |
| Non_Zero_Adjusted_Harmonic_Mean_Flow | 6150 | cubic feet per second | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |

Base Flow Statistics

| Statistic Name | Value | Units | Preferred? | Years of Record | Standard Error, percent | Citation | Comments |
|--------------------------------|-------|---------------|------------|-----------------|-------------------------|----------|----------|
| Number of years to compute BFI | 99 | years | ✓ | 100 | | 87 | |
| Average BFI value | 0.505 | dimensionless | ✓ | 100 | | 87 | |
| Std dev of annual BFI values | 0.075 | dimensionless | ✓ | 100 | | 87 | |

Probability Statistics

| Statistic Name | Value | Units | Preferred? | Years of Record | Standard Error, percent | Citation | Comments |
|---------------------------------|-------|---------------|------------|-----------------|-------------------------|----------|--|
| Probability zero flow durations | 0 | dimensionless | ✓ | 111 | | 52 | Statistic Date Range 10/1/1904 - 9/30/2015 |

Citations

| ID | Citation |
|-----|--|
| 193 | Imported from NWIS file (http://waterdata.usgs.gov/nwis/si) |
| 3 | Anderson, B.T., 2020, Magnitude and frequency of floods in Alabama, 2015: U.S. Geological Survey Scientific Investigations Report 2020-5032, 148 p. (https://doi.org/10.3133/sir20205032) |
| 57 | Olson, S.A., and Bent, G.C., 2013, Annual exceedance probabilities of the peak discharges of 2011 at streamgages in Vermont and selected streamgages in New Hampshire, western Massachusetts, and northeastern New York: U.S. Geological Survey Scientific Investigations Report 2013-5187, 17 p. (http://pubs.usgs.gov/sir/2013/5187/) |
| 24 | Wandle, S.W., Jr. 1984, Gazetteer of Hydrologic Characteristics of Streams in Massachusetts--Connecticut River Basin: U.S. Geological Survey Water-Resources Investigations Report 84-4282. (http://pubs.er.usgs.gov/usgspubs/wri/wri844282) |
| 52 | Granato G.E., Ries, K.G., III, and Steeves, P.A., 2017, Compilation of streamflow statistics calculated from daily mean streamflow data collected during water years 1901-2015 for selected U.S. Geological Survey streamgages: U.S. Geological Survey Open-File Report 2017-1108, 17 p. (https://pubs.er.usgs.gov/publication/ofr20171108) |

ID Citation

-
- 86 **Wolock, D.M., 2003, Flow characteristics at U.S. Geological Survey streamgages in the conterminous United States: U.S. Geological Survey Open-File Report 03-146, digital data set (<http://water.usgs.gov/GIS/metadata/usgswrd/XML/qsitesdd.xml>)**
-
- 87 **Wolock, D.M., 2003, Base-flow index grid for the conterminous United States: U.S. Geological Survey Open-File Report 03-263, digital data set (<https://water.usgs.gov/GIS/metadata/usgswrd/XML/bfi48grd.xml>)**

Tighe&Bond

SECTION 5

Section 5

Endangered Species Submittal (Response Pending)

May 4, 2023

*****SENT VIA EMAIL*****

Melissa Grader
Fish and Wildlife Biologist
Migratory Fish/Hydropower Program
U.S. Fish and Wildlife Service/New England Field Office
103 East Plumtree Road, Sunderland, MA 01375
melissa_grader@fws.gov

Re: **FirstLight MA Hydro LLC
Turners Falls Hydroelectric Project - Cabot Generating Station
Montague, Massachusetts
Hydroelectric Generating Facilities General Permit**

Dear Ms. Grader:

FirstLight Power Services LLC (FirstLight), as an agent for FirstLight MA Hydro LLC, is seeking coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Hydroelectric Generating Facilities (HYDRO GP) for the Turners Falls Hydroelectric Project's Cabot Generating Station (Cabot Station) in Montague, Massachusetts. This facility currently maintains coverage under the 2009 HYDRO GP.

The Turners Falls Dams create the Turners Falls Impoundment, which provides water to the Turners Falls Power Canal. The Power Canal serves both the Cabot Station, as well as FirstLight's No. 1 Station. Bordering the Turners Falls Dam is the Gatehouse which is equipped with 15 operable gates controlling the flow to the canal system. This system has three upstream fish passage facilities: the Cabot fishway, the Spillway fishway, and the Gatehouse fishway and one downstream passage, the Cabot log sluice with Alden-NU weir insert supporting fish migration. Additionally, this facility is currently undergoing Federal Energy Regulatory Commission (FERC) relicensing. As part of relicensing, a variety of improvements in both upstream and downstream fish passage and environmental flows have been proposed.

Cabot Station is a 62 MW plant with six generating units in the main powerhouse. The facility is improved with angled upper and lower trash racks. The trashrack opening is 217 feet wide by 31 feet high, resulting in a gross area of 6,727 ft². At maximum hydraulic capacity of 13,728 cfs, the intake velocity immediately in front of the racks is approximately 2.0 feet/sec. The top 11 feet of the upper racks have clear bar spacing of 0.94 inches (15/16-inch, and the bottom 7 feet of the upper racks have clear bar spacing of 5 inches. The entire 13 feet of the lower racks have clear bar spacing of 5 inches. After passing through the trash racks, flow is conveyed through one of six concrete penstocks to the turbines housed in the powerhouse. This facility has been operating in a substantially identical manner for decades and has quarterly wastewater analytical testing data for review upon request.

Wastewater at the facility is discharged via 12 Outfalls, many of which are either intermittent or substantially identical:

- One Outfall: Canal Seepage, Roof Drains, and Filter Backwash
- Two Outfalls: Compressor Room Pit Seepage
- One Outfall: Oil/Water Separator Discharge (includes Thrust Bearing Cooling Water)



- Two Outfalls: Flood Water Discharges (intermittent)
- Six Outfalls: Thrust Bearing Cooling Water – Flood Conditions Only (intermittent)

Additional and more detailed site information is available for your review at FirstLight's FERC relicensing public web portal (<https://www.northfield-relicensing.com/>).

As part of this process, the USFW IPaC System, as well as the NMFS EFH Mapper were reviewed. A summary of the species in the action area of the facility are presented in the list below:

USFWS

- Northern Long Eared Bat (Endangered)
- Northeastern Bulrush (Endangered)
- Monarch Butterfly (Candidate)

NMFS

- Shortnose Sturgeon (Count Only, Not Critical Habitat)

In addition to the mapping tools mentioned, attached to this email are two NE Consistency Letters for the Northern Long Eared Bat and Northeastern Bulrush identifying our No Effect Determination for both species. Furthermore, we do not believe the minimal wastewater discharge directly into the Connecticut River will pose a risk to the Monarch Butterfly, with a typical habitat of prairies, meadows, grasslands and along roadsides. Lastly, a review of the NOAA/NMFS online mapping indicated that there were Shortnose Sturgeon present in the action area in countable quantities. FirstLight acknowledges that there is a known spawning aggregation in the general vicinity of the project, however, we don't believe that minimal wastewater discharge (especially as proportional to total river discharge during the spawning and rearing season) poses a risk.

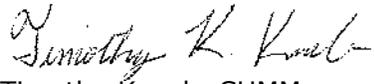
We are reaching out to you in an effort to seek written concurrence on our finding that the discharges and related activities are "not likely to adversely affect" listed species or critical habitat. We have arrived at this conclusion based upon the information provided in this correspondence.

Lastly, as noted in the HYDRO GP, there is the potential for discharges of oil and grease, slightly elevated temperatures, or pH levels different from ambient associated with the wastewaters authorized by this permit. However, relative to the overall flow of water through this facility, the HYDROGP wastewater flows make up less than 1% of the total flow discharged from the plant. Therefore, there are no expected adverse effects associated with the HYDROGP wastewaters specifically.

If you have any questions regarding this facility or the enclosed report, please contact me at (413) 875-1607. Thank you for your attention in this matter.

Very truly yours,

TIGHE & BOND, INC.



Timothy Kucab, CHMM
Project Manager

Enclosures

- USFW IPaC System Endangered Species Package
- USFW IPaC System NE Consistency Letter (2)
- NOAA/NMFS EFH Mapper (2)



United States Department of the Interior



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

In Reply Refer To:
Project Code: 2023-0076696
Project Name: Cabot Station Hydroelectric Project

May 02, 2023

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

To Whom It May Concern:

Updated 4/12/2023 - Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.

About Official Species Lists

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

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

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

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

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

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

Northern Long-eared Bat - (Updated 4/12/2023) The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule went into effect on March 31, 2023. You may utilize the **Northern Long-eared Bat Rangewide Determination Key** available in IPaC. More information about this Determination Key and the Interim Consultation Framework are available on the northern long-eared bat species page:

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

For projects that previously utilized the 4(d) Determination Key, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective. If your project was not completed by March 31, 2023, and may result in incidental take of NLEB, please reach out to our office at newengland@fws.gov to see if reinitiation is necessary.

Additional Info About Section 7 of the Act

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

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

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

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

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

Migratory Birds

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

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

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

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

Attachment(s): Official Species List

Attachment(s):

- Official Species List
-

OFFICIAL SPECIES LIST

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

This species list is provided by:

New England Ecological Services Field Office

70 Commercial Street, Suite 300

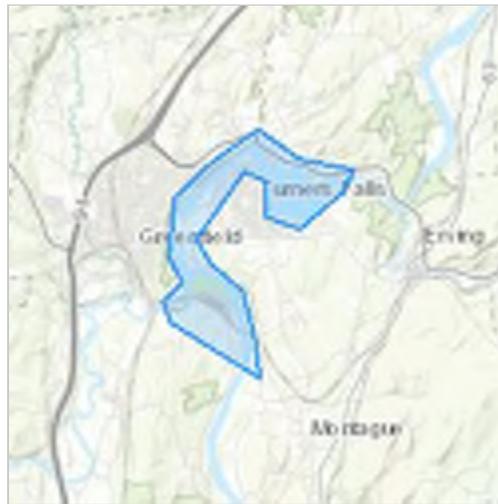
Concord, NH 03301-5094

(603) 223-2541

PROJECT SUMMARY

Project Code: 2023-0076696
Project Name: Cabot Station Hydroelectric Project
Project Type: Wastewater Discharge
Project Description: Hydroelectric Project
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.58601295,-72.57879801295847,14z>



Counties: Franklin County, Massachusetts

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

MAMMALS

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

INSECTS

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

FLOWERING PLANTS

| NAME | STATUS |
|---|------------|
| Northeastern Bulrush <i>Scirpus ancistrochaetus</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6715 | Endangered |

CRITICAL HABITATS

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

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

IPAC USER CONTACT INFORMATION

Agency: Tighe&Bond
Name: Holly Creigle
Address: 53 Southampton Road
City: Westfield
State: MA
Zip: 01085
Email: hcreigle@tighebond.com
Phone: 4136428688



United States Department of the Interior



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

In Reply Refer To:
Project code: 2023-0076696
Project Name: Cabot Station Hydroelectric Project

May 02, 2023

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

Subject: Federal agency coordination under the Endangered Species Act, Section 7 for 'Cabot Station Hydroelectric Project'

Dear Holly Creigle:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on May 02, 2023, for "Cabot Station Hydroelectric Project" (here forward, Project). This project has been assigned Project Code 2023-0076696 and all future correspondence should clearly reference this number.

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

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

not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13]).

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

| Species | Listing Status | Determination |
|---|-----------------------|----------------------|
| Northeastern Bulrush (<i>Scirpus ancistrochaetus</i>) | Endangered | No effect |

Conclusion If there are no updates on listed species, no further consultation/coordination for this project is required for the species identified above. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional consultation with the Service should take place before project implements any changes which are final or commits additional resources.

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

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

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

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

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

Action Description

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

1. Name

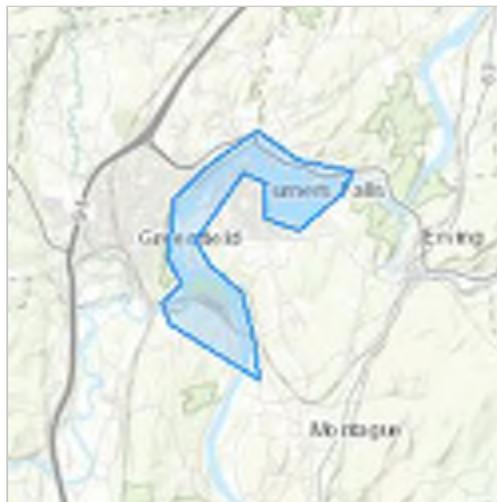
Cabot Station Hydroelectric Project

2. Description

The following description was provided for the project 'Cabot Station Hydroelectric Project':

Hydroelectric Project

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.58601295,-72.57879801295847,14z>



QUALIFICATION INTERVIEW

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

Yes

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

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

No

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

Yes

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

No

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

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

Yes

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

No

7. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)?

Yes

8. Will the proposed project involve the use of herbicide where listed species are present?

No

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

No

10. Does any component of the project associated with this action include structures that may pose a collision risk to **birds** (e.g., land-based or offshore wind turbines, communication towers, high voltage transmission lines, any type of towers with or without guy wires)?

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

No

11. Does any component of the project associated with this action include structures that may pose a collision risk to **bats** (e.g., land-based wind turbines)?

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

No

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

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

No

13. Will the proposed project affect wetlands where listed species are present?

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

No

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

No

15. Will the proposed project directly affect a streambed (below ordinary high water mark (OHWM)) of the stream or tributary where listed species may be present?

No

16. Will the proposed project bore underneath (directional bore or horizontal directional drill) a stream where listed species may be present?

No

17. Will the proposed project involve a new point source discharge into a stream or change an existing point source discharge (e.g., outfalls; leachate ponds) where listed species may be present?

No

18. Will the proposed project involve the removal of excess sediment or debris, dredging or in-stream gravel mining where listed species may be present?

No

19. Will the proposed project involve the creation of a new water-borne contaminant source where listed species may be present?

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

No

20. Will the proposed project involve perennial stream loss, in a stream or tributary of a stream where listed species may be present, that would require an individual permit under 404 of the Clean Water Act?

No

21. Will the proposed project involve blasting where listed species may be present?

No

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

No

23. Will the proposed project involve earth moving that could cause erosion and sedimentation, and/or contamination along a stream or tributary of a stream where listed species may be present?

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

No

24. Will the proposed project involve vegetation removal within 200 feet of a perennial stream bank where listed species may be present?

No

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

No

26. [Semantic] Does the project intersect the Virginia big-eared bat critical habitat?
Automatically answered
No
27. [Semantic] Does the project intersect the Indiana bat critical habitat?
Automatically answered
No
28. [Semantic] Does the project intersect the candy darter critical habitat?
Automatically answered
No
29. [Semantic] Does the project intersect the diamond darter critical habitat?
Automatically answered
No
30. [Semantic] Does the project intersect the Big Sandy crayfish critical habitat?
Automatically answered
No
31. [Hidden Semantic] Does the project intersect the Guyandotte River crayfish critical habitat?
Automatically answered
No
32. [Hidden Semantic] Does the project intersect the northeastern bulrush AOI?
Automatically answered
Yes
33. Do you have any other documents that you want to include with this submission?
No
-

PROJECT QUESTIONNAIRE

1. Approximately how many acres of trees would the proposed project remove?
0
 2. Approximately how many total acres of disturbance are within the disturbance/
construction limits of the proposed project?
0
 3. Briefly describe the habitat within the construction/disturbance limits of the project site.
No construction will be occurring.
-

IPAC USER CONTACT INFORMATION

Agency: Tighe&Bond
Name: Holly Creigle
Address: 53 Southampton Road
City: Westfield
State: MA
Zip: 01085
Email: hcreigle@tighebond.com
Phone: 4136428688

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Environmental Protection Agency



United States Department of the Interior



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

In Reply Refer To:
Project code: 2023-0076696
Project Name: Cabot Station Hydroelectric Project

May 02, 2023

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

Subject: Record of project representative's no effect determination for 'Cabot Station Hydroelectric Project'

Dear Holly Creigle:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on May 02, 2023, for 'Cabot Station Hydroelectric Project' (here forward, Project). This project has been assigned Project Code 2023-0076696 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

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

Determination for the Northern Long-Eared Bat

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

include consequences occurring outside the immediate area involved in the action. (See § 402.17).

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

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

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

- Monarch Butterfly *Danaus plexippus* Candidate
- Northeastern Bulrush *Scirpus ancistrochaetus* Endangered

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

Next Steps

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

If you have any questions regarding this letter or need further assistance, please contact the New England Ecological Services Field Office and reference Project Code 2023-0076696 associated with this Project.

Action Description

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

1. Name

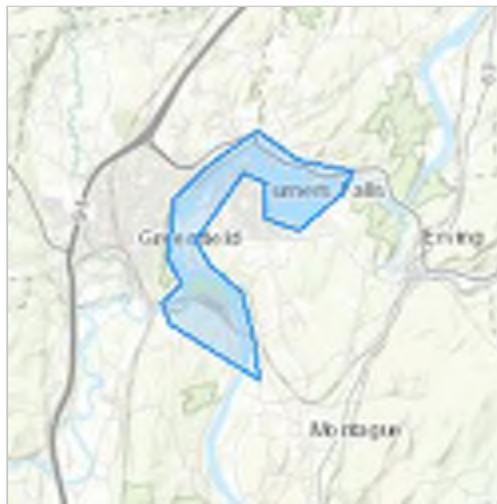
Cabot Station Hydroelectric Project

2. Description

The following description was provided for the project 'Cabot Station Hydroelectric Project':

Hydroelectric Project

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.58601295,-72.57879801295847,14z>



DETERMINATION KEY RESULT

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

QUALIFICATION INTERVIEW

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

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

No

2. Do you have post-white nose syndrome occurrence data that indicates that northern long-eared bats (NLEB) are likely to be present in the action area?

Bat occurrence data may include identification of NLEBs in hibernacula, capture of NLEBs, tracking of NLEBs to roost trees, or confirmed acoustic detections. With this question, we are looking for data that, for some reason, may have not yet been made available to U.S. Fish and Wildlife Service.

No

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

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

No

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

Yes

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

No

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

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

No

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

Yes

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

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

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

Yes

PROJECT QUESTIONNAIRE

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

Yes

IPAC USER CONTACT INFORMATION

Agency: Tighe&Bond
Name: Holly Creigle
Address: 53 Southampton Road
City: Westfield
State: MA
Zip: 01085
Email: hcreigle@tighebond.com
Phone: 4136428688

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Environmental Protection Agency

Summary

| Name | Count | Area(km ²) | Length(m) |
|-------------------------------|-------|------------------------|-----------|
| All Critical Habitat Polyline | 0 | N/A | N/A |
| All Critical Habitat Polygon | 0 | N/A | N/A |

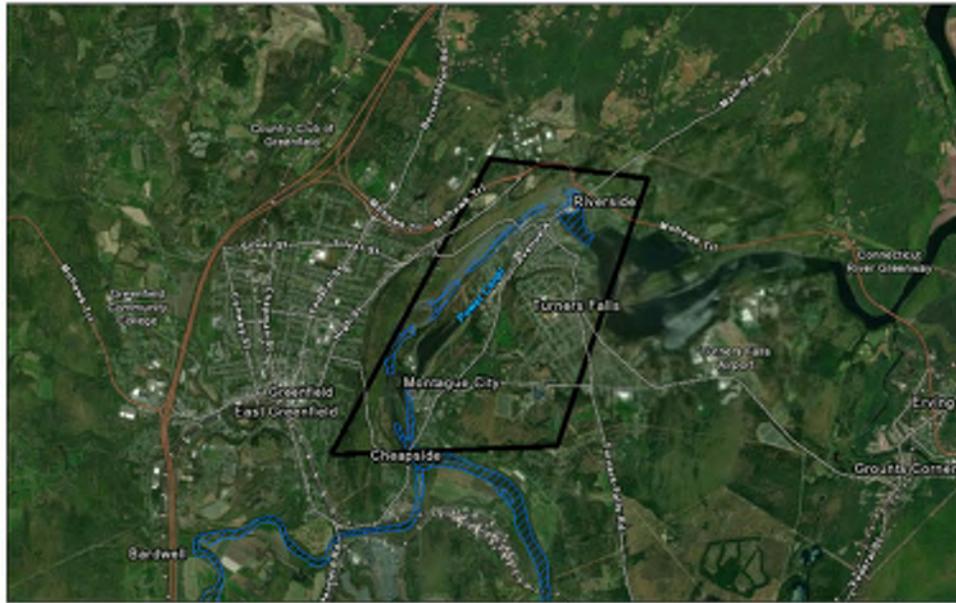


Drawn Action Area & Overlapping S7 Consultation Areas

Area of Interest (AOI) Information

Length : 8.79 mi

Apr 26 2023 8:13:10 Eastern Daylight Time



 Shortnose Sturgeon



Summary

| Name | Count | Area(acres) | Length(mi) |
|-----------------------------|-------|-------------|------------|
| Atlantic Sturgeon | 0 | N/A | N/A |
| Shortnose Sturgeon | 8 | N/A | N/A |
| Atlantic Salmon | 0 | N/A | N/A |
| Sea Turtles | 0 | N/A | N/A |
| Atlantic Large Whales | 0 | N/A | N/A |
| In or Near Critical Habitat | 0 | N/A | N/A |

Shortnose Sturgeon

| # | Feature ID | Species | Life Stage | Behavior | Zone | From | Until | From (2) | Until (2) | Area(acres) |
|---|---------------------|--------------------|--------------------------------|-------------------------|-----------------------|-------|-------|----------|-----------|-------------|
| 1 | SNS_CNU_EYL_NO N | Shortnose sturgeon | Eggs and Yolk-sac Larvae | N/A | Connecticu t River | 04/15 | 06/30 | N/A | N/A | N/A |
| 2 | SNS_CNU_JUV_MAF | Shortnose sturgeon | Juvenile | Migrating & Foraging | Connecticu t River | 01/01 | 12/31 | N/A | N/A | N/A |
| 3 | SNS_CNU_JUV_WIN | Shortnose sturgeon | Juvenile | Overwinteri ng | Connecticu t River | 11/15 | 04/15 | N/A | N/A | N/A |
| 4 | SNS_CNU_PYL_MAF | Shortnose sturgeon | Post Yolk- sac Larvae | Migrating & Foraging | Connecticu t River | 04/15 | 07/31 | N/A | N/A | N/A |
| 5 | SNS_CNU_YOY_MA F | Shortnose sturgeon | Young of year | Migrating & Foraging | Connecticu t River | 01/01 | 12/31 | N/A | N/A | N/A |
| 6 | SNS_CNU_ADU_SP N | Shortnose sturgeon | Adult | Spawning | Connecticu t River | 04/15 | 05/31 | N/A | N/A | N/A |
| 7 | SNS_CNU_ADU_WIN | Shortnose sturgeon | Adult | Overwinteri ng | Connecticu t River | 11/15 | 04/15 | N/A | N/A | N/A |
| 8 | SNS_CNU_ADU_MA F | Shortnose sturgeon | Adult | Migrating & Foraging | Connecticu t River | 01/01 | 12/31 | N/A | N/A | N/A |

Tighe&Bond

SECTION 6

Section 6
Historic Places Listings

National Register of Historic Places

| Reference numbe | Property Name | Status | Request Type | Restricted Address | Category of Property | State | County | City | Street & Number |
|-----------------|--|--------|--------------|--------------------|----------------------|---------------|----------|------------|---|
| _14000046 | Benson's New Block and the Mohawk Chambers | Listed | Single | FALSE | BUILDING | MASSACHUSETTS | Franklin | Greenfield | 136-138 & 130-134 Main St. & 11 Wells St. |
| _88002011 | East Main-High Street Historic District | Listed | Single | FALSE | DISTRICT | MASSACHUSETTS | Franklin | Greenfield | Roughly bounded by Church, High, E. Main and Franklin Sts. |
| _11000359 | Franklin County Fairgrounds | Listed | Single | FALSE | DISTRICT | MASSACHUSETTS | Franklin | Greenfield | 85 Wisdom Way (formerly 89) |
| _83000591 | Garden Theater Block | Listed | Single | FALSE | BUILDING | MASSACHUSETTS | Franklin | Greenfield | 361 Main St. (formerly 353-367) |
| _83003977 | Leavitt-Hovey House | Listed | Single | FALSE | BUILDING | MASSACHUSETTS | Franklin | Greenfield | 402 Main St. |
| _88001908 | Main Street Historic District | Listed | Single | FALSE | DISTRICT | MASSACHUSETTS | Franklin | Greenfield | Main St. between Chapman and Hope Sts., also along Bank Row |
| _88001907 | Newton Street School | Listed | Single | FALSE | BUILDING | MASSACHUSETTS | Franklin | Greenfield | 99 Mohawk Trail (formerly Shelburne Rd.) |
| _75000256 | Riverside Archeological District | Listed | Single | TRUE | DISTRICT | MASSACHUSETTS | Franklin | Greenfield | Address Restricted |
| _05000120 | Tavern Farm, Old | Listed | Single | FALSE | BUILDING | MASSACHUSETTS | Franklin | Greenfield | 817 Colrain Rd. |
| _85003224 | US Post Office-Greenfield Main | Listed | Single | FALSE | BUILDING | MASSACHUSETTS | Franklin | Greenfield | 442 Main St. |
| _80000503 | Weldon Hotel | Listed | Single | FALSE | BUILDING | MASSACHUSETTS | Franklin | Greenfield | 54 High St. |
| _97000562 | Alvah Stone Mill | Listed | Single | FALSE | DISTRICT | MASSACHUSETTS | Franklin | Montague | 440 Greenfield Rd. |
| _100007171 | Millers Falls Village Historic District | Listed | Single | FALSE | district | MASSACHUSETTS | Franklin | Montague | Roughly bounded by Bridge, Church, Crescent, East Main, and W |
| _01001236 | Montague Center Historic District | Listed | Single | FALSE | DISTRICT | MASSACHUSETTS | Franklin | Montague | Center, Main, North, School & Union Sts. |

National Register of Historic Places

| Reference number | Property Name | External Link | Federal Agencies | Level of Significance - International | Level of Significance - Local | Level of Significance - National | Level of Significance - Not Indicated | Level of Significance - State | Listed Date | Name of Multiple Property Listing |
|------------------|--|---|---------------------|---------------------------------------|-------------------------------|----------------------------------|---------------------------------------|-------------------------------|-------------|-----------------------------------|
| _14000046 | Benson's New Block and the Mohawk Chambers | | | False | True | False | False | False | 3/11/2014 | |
| _88002011 | East Main-High Street Historic District | https://catalog.archives.gov/id/63795109 | | False | True | False | False | False | 3/16/1989 | |
| _11000359 | Franklin County Fairgrounds | https://catalog.archives.gov/id/63795068 | | False | True | False | False | False | 6/15/2011 | |
| _83000591 | Garden Theater Block | https://catalog.archives.gov/id/63795131 | | False | True | False | False | False | 9/1/1983 | |
| _83003977 | Leavitt-Hovey House | https://catalog.archives.gov/id/63795083 | | False | False | True | False | False | 12/22/1983 | |
| _88001908 | Main Street Historic District | https://catalog.archives.gov/id/63795113 | U.S. POSTAL SERVICE | False | True | False | False | False | 10/13/1988 | |
| _88001907 | Newton Street School | https://catalog.archives.gov/id/63795123 | | False | True | False | False | False | 10/27/1988 | |
| _75000256 | Riverside Archeological District | | | False | False | False | False | True | 7/9/1975 | |
| _05000120 | Tavern Farm, Old | https://catalog.archives.gov/id/63795129 | | False | True | False | False | False | 3/10/2005 | |
| _85003224 | US Post Office-Greenfield Main | https://catalog.archives.gov/id/63795089 | U.S. POSTAL SERVICE | False | True | False | False | False | 12/20/1985 | |
| _80000503 | Weldon Hotel | https://catalog.archives.gov/id/63795105 | | False | True | False | False | False | 8/6/1980 | |
| _97000562 | Alvah Stone Mill | https://catalog.archives.gov/id/63795101 | | False | True | False | False | False | 6/30/1997 | |
| _100007171 | Millers Falls Village Historic District | est Main Sts. | | False | True | False | False | False | 11/22/2021 | |
| _01001236 | Montague Center Historic District | https://catalog.archives.gov/id/63795099 | | False | True | False | False | False | 11/16/2001 | |

National Register of Historic Places

| Reference number | Property Name | NHL Designated Date | Other Names | Park Name | Status Date | Area of Significance |
|------------------|--|---------------------|--|-----------|-------------|---|
| _1400046 | Benson's New Block and the Mohawk Chambers | | Patterson Apartments; Aaron Rooms; Newman Rooms; Winslow Hotel; Stearns Room; Harco Rooms; W | | 1/23/2014 | ARCHITECTURE; COMMERCE; COMMUNITY PLANNING AND DEVELOPMENT; SOCIAL HISTORY |
| _88002011 | East Main-High Street Historic District | | | | 3/16/1989 | COMMUNITY PLANNING AND DEVELOPMENT; ARCHITECTURE |
| _11000359 | Franklin County Fairgrounds | | | | 6/15/2011 | AGRICULTURE; ARCHITECTURE; ENTERTAINMENT/RECREATION |
| _83000591 | Garden Theater Block | | | | 9/1/1983 | ARCHITECTURE |
| _83003977 | Leavitt-Hovey House | | Greenfield Public Library | | 12/22/1983 | EDUCATION; LAW; ARCHITECTURE |
| _88001908 | Main Street Historic District | | See Also:US Post Office--Greenfield Main;Garden Theatre Bloc | | 10/13/1988 | COMMUNITY PLANNING AND DEVELOPMENT; ARCHITECTURE |
| _88001907 | Newton Street School | | | | 10/27/1988 | COMMUNITY PLANNING AND DEVELOPMENT; EDUCATION; ARCHITECTURE |
| _75000256 | Riverside Archeological District | | Riverside;Peskeompskut | | 7/9/1975 | PREHISTORIC; HISTORIC - ABORIGINAL; HISTORIC - NON-ABORIGINAL; MILITARY; EXPLORATION/SETTLEMENT |
| _05000120 | Tavern Farm, Old | | | | 3/10/2005 | ARCHITECTURE; SOCIAL HISTORY; COMMERCE |
| _85003224 | US Post Office-Greenfield Main | | Greenfield Main Post Office | | 12/20/1985 | ARCHITECTURE |
| _80000503 | Weldon Hotel | | Weldon House | | 8/6/1980 | COMMERCE; ARCHITECTURE |
| _97000562 | Alvah Stone Mill | | Montague Book Mill | | 6/30/1997 | INDUSTRY; ENGINEERING; COMMERCE; ARCHITECTURE |
| _100007171 | Millers Falls Village Historic District | | | | 11/29/2021 | ARCHITECTURE; COMMERCE; COMMUNITY PLANNING AND DEVELOPMENT |
| _01001236 | Montague Center Historic District | | | | 11/16/2001 | ARCHITECTURE; COMMERCE; COMMUNITY PLANNING AND DEVELOPMENT; INDUSTRY |

Tighe&Bond

SECTION 7

Section 7
Impaired Waters Listing

**Category 5 waters listed alphabetically by major watershed
The 303(d) List – “Waters requiring a TMDL”**

| Waterbody | AU_ID | Description | Size | Units | Impairment | ATTAINS Action ID |
|--------------------|---------|--|--------|-------|--|-------------------|
| Connecticut | | | | | | |
| Arcadia Lake | MA34005 | Belchertown. | 32.00 | Acres | (Fanwort*) | |
| | | | | | (Non-Native Aquatic Plants*) | |
| | | | | | Nutrient/Eutrophication Biological Indicators | |
| Atkins Reservoir | MA34006 | Shutesbury/Amherst. | 46.00 | Acres | Mercury in Fish Tissue | |
| Bachelor Brook | MA34-07 | Outlet Forge Pond, Granby to mouth at confluence with Connecticut River, South Hadley (through former 2006 segments: Aldrich Lake [East Basin] MA34002 and Aldrich Lake [West Basin] MA34106). | 11.50 | Miles | (Water Chestnut*) | |
| | | | | | Escherichia Coli (E. Coli) | |
| Barton Cove | MA34122 | Gill (cove of Connecticut River upstream of Turners Falls dams (NATID: MA00848 and MA00849)). | 160.00 | Acres | (Curly-leaf Pondweed*) | |
| | | | | | (Eurasian Water Milfoil, Myriophyllum Spicatum*) | |
| | | | | | (Fanwort*) | |
| | | | | | (Water Chestnut*) | |
| | | | | | Escherichia Coli (E. Coli) | |
| Bloody Brook | MA34-36 | Headwaters, perennial portion, from the railroad tracks north of North Main Street, Deerfield to mouth at confluence with Mill River, Whately. | 3.70 | Miles | Dissolved Oxygen | |
| | | | | | Escherichia Coli (E. Coli) | |
| | | | | | Phosphorus, Total | |
| | | | | | Turbidity | |
| Buttery Brook | MA34-42 | Headwaters (perennial portion), west of Haig Avenue, South Hadley to mouth at confluence with the Connecticut River, South Hadley (interrupted urban, approximately 1200 feet culverted). | 1.60 | Miles | Escherichia Coli (E. Coli) | |
| Connecticut River | MA34-01 | New Hampshire/Massachusetts state line, Northfield to Route 10 bridge, Northfield. | 3.50 | Miles | (Alteration in stream-side or littoral vegetative covers*) | |
| | | | | | (Flow Regime Modification*) | |
| | | | | | PCBs in Fish Tissue | |
| Connecticut River | MA34-02 | Route 10 bridge, Northfield to Turners Falls dams (NATID: MA00848 and MA00849), Gill/Montague (excluding the delineated segment: Barton Cove MA34019). | 11.40 | Miles | (Alteration in stream-side or littoral vegetative covers*) | |
| | | | | | (Flow Regime Modification*) | |
| | | | | | (Water Chestnut*) | |
| | | | | | PCBs in Fish Tissue | |
| Connecticut River | MA34-03 | Turners Falls dams (NATID: MA00848 and MA00849), Gil/Montague to confluence with Deerfield River, Greenfield/Deerfield. | 3.70 | Miles | (Dewatering*) | |
| | | | | | (Flow Regime Modification*) | |
| | | | | | Escherichia Coli (E. Coli) | |
| | | | | | PCBs in Fish Tissue | |
| | | | | | Total Suspended Solids (TSS) | |