

June 13, 2023

SENT VIA EMAIL

Hydro.GeneralPermit@epa.gov

Re: FirstLight MA Hydro LLC

Turners Falls Hydroelectric Project - No. 1 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 No. 1 Station (No. 1 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
- 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 in this matter.

Very truly yours,

TIGHE & BOND, INC.

Timothy K. Kind-Timothy Kucab, CHMM

Project Manager

Copy: Patty Goclowski, FirstLight (via email)



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 Di	scharge(s): \square MAG360000 \square N	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	2 :	
	City:	State:		
	Zip:			
5. Current Permit Status	Has prior HYDROGP coverage been granted for the discharge(s) listed in the NOI?		□ Yes	□ No
	Permit number (if yes):			
	Is the facility covered under an Individual Perm	□ Yes	□ No	
	Is there a pending NPDES application of file wife for the discharge(s)?	th EPA	□ Yes	□ No
	Date of Submittal (if yes):	Pern	nit Number (if kn	own):
	Attach a topographic map indicating the locations. of the facility and outfall(s) to the receiving water		☐ Map Attached	
	Number of turbines:			
	Combined turbine discharge (installed		ım capacity?	cfs
	capacity) at:		m capacity?	cfs
	Is this facility operated as a pump storage projection	ct?	☐ Yes	□ No

B. Discharge Information 1. Name of Receiving Water(s): Freshwater

Marine 2. Waterbody classification: ☐ Class A ☐ Class B ☐ Class SA Class SB Is the receiving water is listed in the State's Integrated List of Waters (i.e., CWA Section 3. □ Yes \square No 303(d))? If the applicant answered yes to B.3, has the applicant identified the designated uses that are □ Yes \square No impaired, any pollutants indicated, and whether a final TMDL is available for any of the indicated pollutants in a separate attachment to the NOI? Attach a line drawing or flow schematic showing water flow through the facility including 5. ☐ Line Drawing Attached location of intake(s), operations contributing to effluent flow, treatment units, outfalls, and receiving water(s). List each outfall (numbered sequentially) discharging effluent from the following categories and provide an estimate of the average 6. 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 Outfalls: gpd during flood/high water events

Outfalls:

Equipment-related backwash strainer

water

gpd

Please see attached sheet for all Outfall information.

7.	alternative pH effluent lin	ove, provide the following information (at mits. See Parts 1.7.l. and 2.7.l of the perm formation and protocol to request alternat	it for additio	onal information. Contact MassDEP or N	_
Outfal	1 No.	Latitude:		Longitude:	
		Discharge is: Continuous	☐ Inter	rmittent Seasonal	
		Maximum Daily Flow	MGD	Average Monthly Flow	MGD
		Maximum Daily Temperature	°F	Average Monthly Temperature	°F
		Maximum Daily Oil & Grease	mg/L	Average Monthly Oil & Grease	mg/L
		Maximum Monthly pH	s.u.	Minimum Monthly pH	s.u.
		Alternative pH limits requested? □Y	Yes □ No	State approval attached? Yes	□ No
Outfal	l No.	Latitude:		Longitude:	
		Discharge is: Continuous	☐ Inter	rmittent Seasonal	
		Maximum Daily Flow	MGD	Average Monthly Flow	MGD
		Maximum Daily Temperature	°F	Average Monthly Temperature	°F
		Maximum Daily Oil & Grease	mg/L	Average Monthly Oil & Grease	mg/L
		Maximum Monthly pH	s.u.	Minimum Monthly pH	s.u.
		Alternative pH limits requested? □Y	es □ No	State approval attached?	s 🗆 No

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

\Box For cooling water withdrawn directly from the source waterbody (<i>i.e.</i> , not from within the penstock barrier technology with a mesh size no greater than $\frac{1}{2}$ -inch that minimizes the potential for adult and entrapped in the CWIS.	, <u> </u>	
Has the applicant attached a description of the technology? \Box Yes \Box No		
If the mesh size of the screen is greater than ½-inch has the applicant demonstrated that the calculated	l intake velocity is	less than
0.5 fps based on the screen dimensions, maximum intake volume, and source water 7Q10 low flow?		
3. If the answer to question C.1 is yes, in addition to complying with one of the criteria above, the application information:	ant must submit the	following
Maximum daily volume of cooling water withdrawn during previous five (5) years:	gpd	
Maximum monthly average volume of cooling water withdrawn during the previous five (5) years:	gpd	
Maximum daily and average monthly volume of water used exclusively for cooling: Max:	gpd Avg:	gpd
Maximum daily and average monthly volume of water used for another process before or after being		
Max: §	gpd Avg:	gpd
Has the applicant attached a narrative description explaining how cooling water is reused? ☐ Yes	□ No	
Volume of total intake water withdrawn and used in facility as a percentage of:		
Installed turbine capacity % Average daily flow through penstock	%	
Minimum flow through penstock %		
Source water annual mean flow (e.g., available from USGS, MassDEP, or NHDES):	cfs	
Source water 7-day mean low flow with 10-year recurrence interval (7Q10):	cfs	
Volume of total intake water withdrawn and used in facility as a percentage of:		
Source water mean annual flow cfs		
Source water 7Q10 flow cfs		

D. Chemical Additives					
1. Does the facility use or adjustment?	plan to use non-toxic chemicals for pH	□ Yes □ No			
2. Does the facility use or purposes?	plan to use chemicals for anti-freeze	□ Yes □ No			
3. If the answer to D.2 is yes, p	provide the following for EACH chemical	additive used for anti-freeze:			
Chemical Name and Manufac	eturer:				
Maximum Dosage Concentra	tion Used:	Average Dosage Concentration Used:			
Maximum Concentration in I mg/L	Discharge:	Average Concentration in Discharge: mg/L			
Material Safety Data Sheet (N	MSDS) or other toxicity documentation	for each chemical attached? \square Yes \square No			
E. Endangered Species Act					
Appendix 2 to the HYDROG	P explains the certification requirement	s related to threatened and endangered species and designated			
critical habitat. Indicate under	r which criteria the discharge is eligible	for coverage under the HYDROGP:			
1. ESA eligibility for	☐ Criterion A: No endangered or t	hreatened species or critical habitat are in proximity to the			
species under	discharges or related activities or com	ne in contact with the "action area." See Appendix 2, Part B for			
jurisdiction of USFWS	documentation requirements. Docume	entation attached? Yes No			
□ Criterion B: Formal or informal consultation with the USFWS under Section 7 of the ESA					
resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by USFWS on					
		ed activities are "not likely to adversely affect" listed species or			
		pleted consultation with USFWS and attached documentation?			
	☐ Yes ☐ No				
If no, is consultation underway? Yes No					
		ntific and commercial data available, the effect of the discharges			
	_	and designated critical habitat have been evaluated. Based on			

	discharges and related activities will have "no effect" on any federally threatened or endangered
	species or designated critical habitat under the jurisdiction of the USFWS. Has the applicant attached
	documentation of the "no effect" finding? Yes No
2. ESA eligibility for	Is the facility located on: the Connecticut River between the Massachusetts/Connecticut state line
species under jurisdiction of NMFS	and Turners Falls, MA; the Taunton River; the Merrimack River between Lawrence, MA and the
Jurisdiction of Nivirs	Atlantic Ocean; the Piscataqua River including the Salmon Falls and Cocheco Rivers; or a marine
	water?
	□ Yes □ No
	If yes, was the applicant authorized to discharge from the facility under the 2009 HYDROGP?
	□ Yes □ No
	If the discharge is to one of the named rivers above or to a marine water <i>and</i> the facility was not
	previously covered under the 2009 HYDROGP, has there been any previous formal or informal
	consultation with NMFS? ☐ Yes ☐ No
	Documentation of consultation attached? Yes No
F. National Historic Proper	rties Act Eligibility
	ion the discharge(s) is eligible for covered under the HYDROGP:
☐ Criterion A: No hi	storic properties are present.
☐ Criterion B : Histor	ric properties are present. The discharges and related activities do not have the potential to impact
historic properties.	
☐ Criterion C: Histor	ric properties are present. The discharges and related activities have the potential to impact or adversely
impact historic proj	perties.
2. Has the applicant attached	supporting documentation for NHPA eligibility described in Appendix 3, Part C of the HYDROGP?
□ Yes □ No	

3. Does supporting documentation include a written agreement from the State Historic F Officer, or other tribal representative that outlines measures the operation will carry of effects on historic properties? ☐ Yes ■ No	Preservation Officer, Tribal Historic Preservation ut to mitigate or prevent any adverse
G. Supplemental Information	
Please provide any supplemental information, including antidegradation review inform	nation applicable to new or increased
discharges. Attach any certifications required by the HYDROGP. Supplemental inform	nation attached? Yes No
H. Signature Requirements 1. The NOI must be signed by the operator in accordance with the signatory requirement certification:	s of 40 C.F.R. § 122.22, including the following
I certify under penalty of law that no chemical additives are used in the discharges Permit except for those used for pH adjustment or anti-freeze purposes and that this prepared under my direction or supervision in accordance with a system designed properly gather and evaluate the information submitted. Based on my inquiry of the system, or those directly responsible for gathering the information, I certify that the my knowledge and belief, true, accurate, and complete. I certify that I am aware the submitting false information, including the possibility of fine and imprisonment for	is document and all attachments were to assure that qualified personnel e person or persons who manage the e information submitted is, to the best of at there are significant penalties for
2. Notification provided to the appropriate State, including a copy of this NOI, if required?	☐ Yes ■ No
Signature: — Lilli	Date: The 9, 2023
Print Name and Title: Justin Trudell - Chief Operating Officer	

SECTION 2

Section 2 Supplemental Outfall Information

Turners Falls - No. 1 Station Outfall Description Attachment

Outfall Number:	Lattitude	42° 36′ 21"N	Longitude	72° 33′ 53″W
	Discharge is:	Intermittent		
,	Max Daily Flow (MGD)	-	Ave. Monthly Flow (MGD)	-
	Max Daily Temperature (F)	-	Ave Monthly Temperature (F)	-
Subtantially Identical Outfalls:	Max Daily Oil & Grease (mg/L)	-	Ave Daily Oil & Grease (mg/L)	-
002	Max Monthly pH (s.u.)	-	Min Monthly pH (s.u.)	-
002	Alternative pH Limts Requested?	No	State Approval Attached?	No
Remarks:		No data available. Discharge is not routine.		

Outfall Number:	Lattitude	42° 36' 20"N	Longitude	72° 33′ 54″W
	Discharge is:	Intermittent		
002 - High Water Sump	Max Daily Flow (MGD)	-	Ave. Monthly Flow (MGD)	-
	Max Daily Temperature (F)	-	Ave Monthly Temperature (F)	-
Subtantially 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.)	-
001	Alternative pH Limts Requested?	No	State Approval Attached?	No
Remarks:		No sampling data available. Discharge is not routine.		

Outfall Number:	Lattitude	42°36'21"N	Longitude	72°33'52"W
	Discharge is:	Continuous		
003 - Floor Drain	Max Daily Flow (MGD)	0.000144	Ave. Monthly Flow (MGD)	0.0000431
	Max Daily Temperature (F)	0	Ave Monthly Temperature (F)	0
Subtantially Identical Outfalls:	Max Daily Oil & Grease (mg/L)	11	Ave Daily Oil & Grease (mg/L)	1.71
004, 005, 006, 007, 008, 009, 010, 011, 012	Max Monthly pH (s.u.)	8	Min Monthly pH (s.u.)	7.34
004, 003, 000, 007, 000, 003, 010, 011, 012	Alternative pH Limts Requested?	No	State Approval Attached?	No
Remarks:	In prior general permits, substantially identical outfalls were listed as a single discharge point.			

Outfall Number:	Lattitude	42°36'22"N	Longitude	72°33'53"W
004 - Floor Drain	Discharge is:	Continuous		
	Max Daily Flow (MGD)	0.000144	Ave. Monthly Flow (MGD)	0.0000431
	Max Daily Temperature (F)	0	Ave Monthly Temperature (F)	0
Subtantially Identical Outfalls:	Max Daily Oil & Grease (mg/L)	11	Ave Daily Oil & Grease (mg/L)	1.71
003 005 006 007 009 000 010 011 013	Max Monthly pH (s.u.)	8	Min Monthly pH (s.u.)	7.34
003, 005, 006, 007, 008, 009, 010, 011, 012	Alternative pH Limts Requested?	No	State Approval Attached?	No
Remarks:	In prior general permits, substantially identical outfalls were listed as a single discharge point.			

Turners Falls - No. 1 Station Outfall Description Attachment

Outfall Number:	Lattitude	42°36'22"N	Longitude	72°33'53"W
	Discharge is:	Continuous		
005 - Floor Drain	Max Daily Flow (MGD)	0.000144	Ave. Monthly Flow (MGD)	0.0000431
	Max Daily Temperature (F)	0	Ave Monthly Temperature (F)	0
Subtantially Identical Outfalls:	Max Daily Oil & Grease (mg/L)	11	Ave Daily Oil & Grease (mg/L)	1.71
003, 004, 006, 007, 008, 009, 010, 011, 012 Max Monthly pH (s.u.) Alternative pH Limts Requested?	Max Monthly pH (s.u.)	8	Min Monthly pH (s.u.)	7.34
	Alternative pH Limts Requested?	No	State Approval Attached?	No
Remarks:	In prior general permits, substantially identical outfalls were listed as a single discharge point.			

Outfall Number:	Lattitude	42°36'21"N	Longitude	72°33'53"W
	Discharge is:	Continuous		
006 - Floor Drain	Max Daily Flow (MGD)	0.000144	Ave. Monthly Flow (MGD)	0.0000431
	Max Daily Temperature (F)	0	Ave Monthly Temperature (F)	0
Subtantially Identical Outfalls:	Max Daily Oil & Grease (mg/L)	11	Ave Daily Oil & Grease (mg/L)	1.71
003, 004, 005, 007, 008, 009, 010, 011, 012	Max Monthly pH (s.u.)	8	Min Monthly pH (s.u.)	7.34
Alternative pH Limts Requested?	Alternative pH Limts Requested?	No	State Approval Attached?	No
Remarks:	In prior general permits, substantially identical outfalls were listed as a single discharge point.			

Outfall Number:	Lattitude	42°36'21"N	Longitude	72°33'53"W
	Discharge is:	Continuous		
007 - Floor Drain	Max Daily Flow (MGD)	0.000144	Ave. Monthly Flow (MGD)	0.0000431
	Max Daily Temperature (F)	0	Ave Monthly Temperature (F)	0
Subtantially Identical Outfalls:	Max Daily Oil & Grease (mg/L)	11	Ave Daily Oil & Grease (mg/L)	1.71
003, 004, 005, 006, 008, 009, 010, 011, 012 Max Monthly pH (s.u.) Alternative pH Limts Requested?	Max Monthly pH (s.u.)	8	Min Monthly pH (s.u.)	7.34
	No	State Approval Attached?	No	
Remarks:	In prior general permits, substantially identical outfalls were listed as a single discharge point.			

Outfall Number:	Lattitude	42°36'21"N	Longitude	72°33'54"W
	Discharge is:	Continuous		
008 - Floor Drain	Max Daily Flow (MGD)	0.000144	Ave. Monthly Flow (MGD)	0.0000431
	Max Daily Temperature (F)	0	Ave Monthly Temperature (F)	0
Subtantially Identical Outfalls:	Max Daily Oil & Grease (mg/L)	11	Ave Daily Oil & Grease (mg/L)	1.71
002 004 005 006 007 000 040 041 042	Max Monthly pH (s.u.)	8	Min Monthly pH (s.u.)	7.34
003, 004, 005, 006, 007, 009, 010, 011, 012	Alternative pH Limts Requested?	No	State Approval Attached?	No
Remarks:	In prior general permits, substantially identical outfalls were listed as a single discharge point.			

Turners Falls - No. 1 Station Outfall Description Attachment

Outfall Number:	Lattitude	42°36'21"N	Longitude	72°33'54"W
	Discharge is:	Continuous		
009 - Floor Drain	Max Daily Flow (MGD)	0.000144	Ave. Monthly Flow (MGD)	0.0000431
	Max Daily Temperature (F)	0	Ave Monthly Temperature (F)	0
Subtantially Identical Outfalls:	Max Daily Oil & Grease (mg/L)	11	Ave Daily Oil & Grease (mg/L)	1.71
003, 004, 005, 006, 007, 008, 010, 011, 012 Max Monthly pH (s.u.) Alternative pH Limts Rec	Max Monthly pH (s.u.)	8	Min Monthly pH (s.u.)	7.34
	Alternative pH Limts Requested?	No	State Approval Attached?	No
Remarks:	In prior general permits, substantially identical outfalls were listed as a single discharge point.			

Outfall Number:	Lattitude	42°36'21"N	Longitude	72°33'54"W
	Discharge is:	Continuous		
010 - Floor Drain	Max Daily Flow (MGD)	0.000144	Ave. Monthly Flow (MGD)	0.0000431
	Max Daily Temperature (F)	0	Ave Monthly Temperature (F)	0
Subtantially Identical Outfalls:	Max Daily Oil & Grease (mg/L)	11	Ave Daily Oil & Grease (mg/L)	1.71
003, 004, 005, 006, 007, 008, 009, 011, 012	Max Monthly pH (s.u.)	8	Min Monthly pH (s.u.)	7.34
Alternative pH Limts Requested?	No	State Approval Attached?	No	
Remarks:	In prior general permits, substantially identical outfalls were listed as a single discharge point.			

Outfall Number:	Lattitude	42°36'21"N	Longitude	72°33'54"W
	Discharge is:	Continuous		
011 - Floor Drain	Max Daily Flow (MGD)	0.000144	Ave. Monthly Flow (MGD)	0.0000431
	Max Daily Temperature (F)	0	Ave Monthly Temperature (F)	0
Subtantially Identical Outfalls:	Max Daily Oil & Grease (mg/L)	11	Ave Daily Oil & Grease (mg/L)	1.71
003, 004, 005, 006, 007, 008, 009, 010, 012 Max Monthly pH (s.u.) Alternative pH Limts Requested?	Max Monthly pH (s.u.)	8	Min Monthly pH (s.u.)	7.34
	Alternative pH Limts Requested?	No	State Approval Attached?	No
Remarks:	In prior general permits, substantially identical outfalls were listed as a single discharge point.			

Outfall Number:	Lattitude	42°36'21"N	Longitude	72°33'54"W
	Discharge is:	Continuous		
012 - Floor Drain	Max Daily Flow (MGD)	0.000144	Ave. Monthly Flow (MGD)	0.0000431
	Max Daily Temperature (F)	0	Ave Monthly Temperature (F)	0
Subtantially Identical Outfalls:	Max Daily Oil & Grease (mg/L)	11	Ave Daily Oil & Grease (mg/L)	1.71
003, 004, 005, 006, 007, 008, 009, 010, 011	Max Monthly pH (s.u.)	8	Min Monthly pH (s.u.)	7.34
Alternative	Alternative pH Limts Requested?	No	State Approval Attached?	No
Remarks:	In prior general permits, substantially identical outfalls were listed as a single discharge point.			

Representative Outfalls And Additional Descriptions

Outfalls DSN-001 and DSN-002

Outfalls DSN-001 and DSN-002 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 substantially identical. However, discharges are not expected regularly.

No sampling will be required from either of these outfalls.

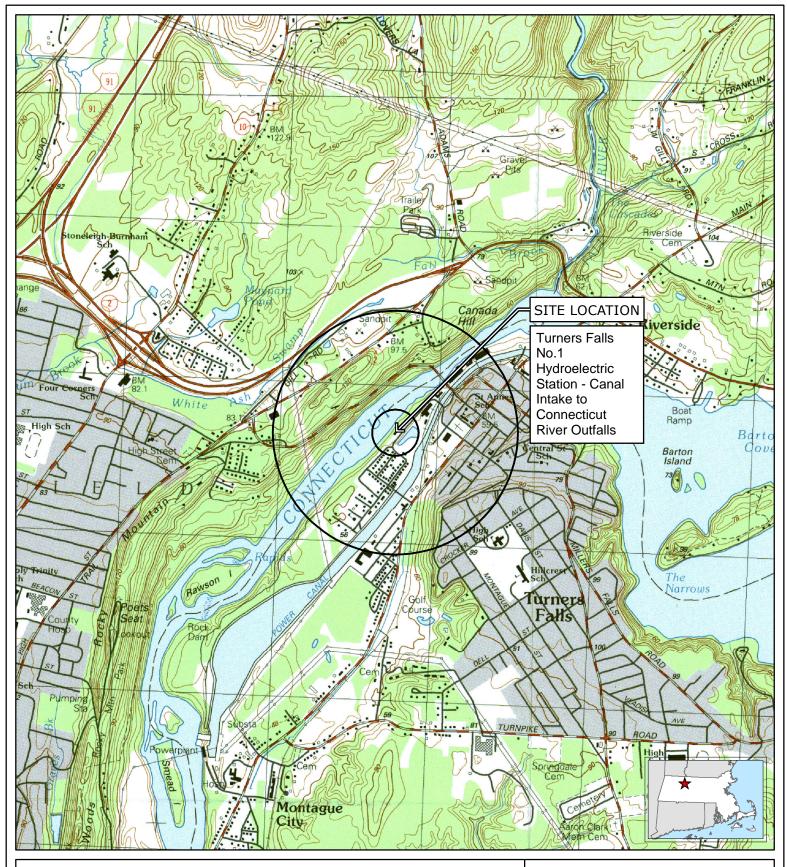
Outfalls DSN-003 through DSN-012

Outfalls DSN-003 through DSN-012 discharge primarily generator water seal leakage. Water from the seals collect in an open trench that is gravity fed to the drains adjacent to each unit. Each drain allows the water to drop down to the tailrace from under the powerhouse. These discharges are variable, depending on which units may be operating at a given time and the condition of the seals at each unit. As such, discharges from each drain are considered substantially identical.

For the purposes of sampling, Outfall DSN-003 will be established as the primary sampling point. However, should sampling not be possible at this location during a monitoring period, sampling will be performed at an alternate substantially identical location.

SECTION 3

Section 3 Site Figures and Flow Diagrams





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

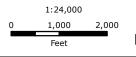
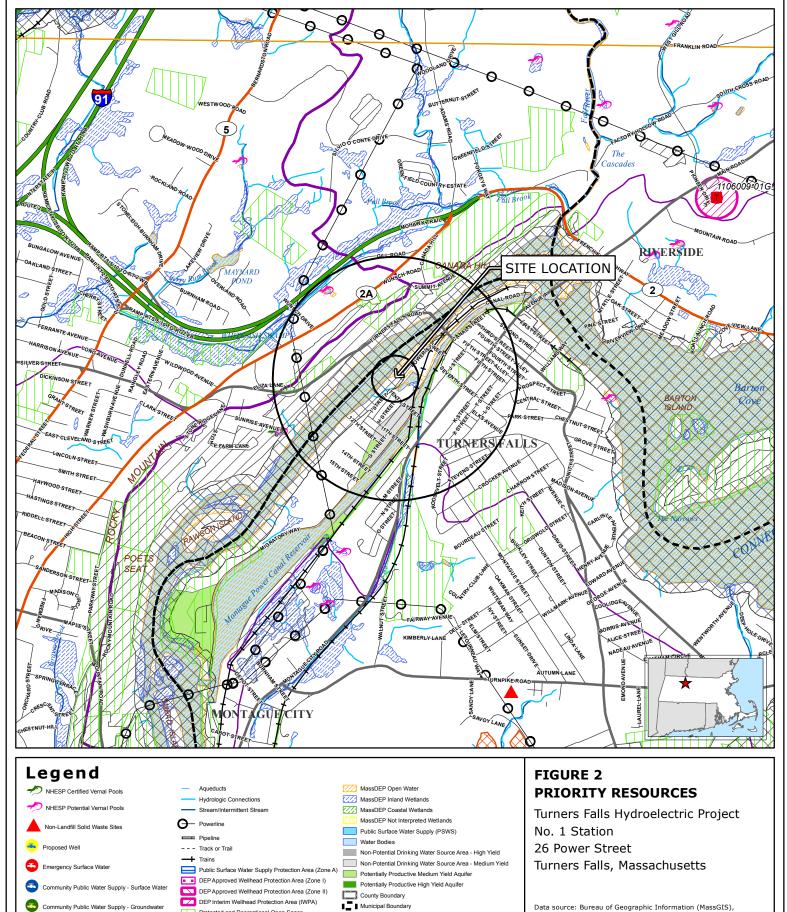


FIGURE 1 SITE LOCATION

Turners Falls Hydroelectric Project No. 1 Station 26 Power Street Turners Falls, Massachusetts

May 2023



USGS Quadrangle Sheet Boundary

1:24,000

2,000

1,000

Feet

Minor Street or Road ojects\F\F0211\26PowerSt_TurnersFallsMA\MXD\26PowerSt_TurnersFalls_Resource.mxd [Exported By: kjw, 5/17/2023, 5:09:44 PM

Solid Waste Landfill

Major Drainage Basin

Sub Drainage Basin

Non-Community Non-Transient Public Water Supply Non-Community Transient Public Water Supply

Multi-Lane Highway, NOT Limited Access

Major Road - Arterials and Collectors

Limited Access Highway

Other Numbered Route

Protected and Recreational Open Space

NHESP Priority Habitats for Rare Species NHESP Estimated Habitats for Rare Wildlife

EPA Designated Sole Source Aquifer

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.

Tighe&Bond May 2023



Legend



Municipal Boundary



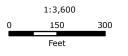


FIGURE 3 **ORTHOPHOTOGRAPH**

Turners Falls Hydroelectric Project No. 1 Station 26 Power Street Turners Falls, Massachusetts

May 2023

SECTION 4

Section 4 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 - No. 1 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 No. 1 Station (No. 1 Station) in Montague, Massachusetts,. This facility currently maintains coverage under the 2009 HYDRO GP.

The Turners Falls Dam create the Turners Falls Impoundment, which provides water to the Turners Falls Power Canal. The Power Canal serves both No. 1 Station as well as FirstLight's Cabot Generating Station. Bordering the Turners Falls Dam is the Gatehouse which is equipped with 15 operable gates controlling 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 designated downstream fishway, 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 have been proposed.

No. 1 Station is a 6 MW facility with five turbine generating units in the main powerhouse. The maximum hydraulic capacity of No. 1 Station is 2,210 cubic feet per second. Trash racks are angled across the entrance, totaling 120 feet wide by 20.5 feet high. After passing the trashrack the intakes narrow to four individual steel penstocks approximately 100 feet long, feeding the Horizontal Francis Turbines 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 discharges:

• Ten Outfalls: Water Seal Leakage

Two Outfalls: Flood Waters (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 is 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 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 email.

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: May 02, 2023

Project Code: 2023-0076711

Project Name: Turners Falls Hydroelectric Project - Station No. 1

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

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

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

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

Additional Info About Section 7 of the Act

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

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

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

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

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

Migratory Birds

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

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

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

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

Attachment(s): Official Species List

Attachment(s):

Official Species List

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: 2023-0076711

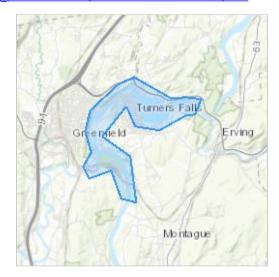
Project Name: Turners Falls Hydroelectric Project - Station No. 1

Project Type: Wastewater Discharge

Project Description: Hydroelectric

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.5829163,-72.5754657943342,14z



Counties: Franklin County, Massachusetts

05/02/2023

ENDANGERED SPECIES ACT SPECIES

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

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

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

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

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat Myotis septentrionalis	Endangered
No critical habitat has been designated for this species	

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

INSECTS

NAME	STATUS

Candidate

Endangered

Monarch Butterfly *Danaus plexippus*No critical habitat has been designated for this species.

Species profile: https://ecos.fws.gov/ecp/species/9743

FLOWERING PLANTS

NAME	STATUS

Northeastern Bulrush Scirpus ancistrochaetus

Population:

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6715

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: May 03, 2023

Project code: 2023-0076826

Project Name: Turners Falls Hydroelectric Project - Station No. 1

Federal Nexus: yes

Federal Action Agency (if applicable): Environmental Protection Agency

Subject: Federal agency coordination under the Endangered Species Act, Section 7 for 'Turners

Falls Hydroelectric Project - Station No. 1'

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 03, 2023, for "Turners Falls Hydroelectric Project - Station No. 1" (here forward, Project). This project has been assigned Project Code 2023-0076826 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:

SpeciesListing StatusDeterminationNortheastern Bulrush (Scirpus ancistrochaetus)EndangeredNo 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

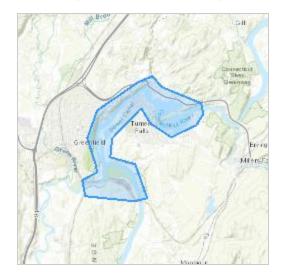
Turners Falls Hydroelectric Project - Station No. 1

2. Description

The following description was provided for the project 'Turners Falls Hydroelectric Project - Station No. 1':

Hydroelectric

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.5865184,-72.58095145616282,14z



QUALIFICATION INTERVIEW

- 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?

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?

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 instream 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 of 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?

NoteAnswer "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.

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? θ
- 2. Approximately how many total acres of disturbance are within the disturbance/ construction limits of the proposed project?
- 3. Briefly describe the habitat within the construction/disturbance limits of the project site. *no construction will occur.*

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: May 02, 2023

Project code: 2023-0076711

Project Name: Turners Falls Hydroelectric Project - Station No. 1

Federal Nexus: yes

Federal Action Agency (if applicable): Environmental Protection Agency

Subject: Record of project representative's no effect determination for 'Turners Falls

Hydroelectric Project - Station No. 1'

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 'Turners Falls Hydroelectric Project - Station No. 1' (here forward, Project). This project has been assigned Project Code 2023-0076711 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 2023-0076711 associated with this Project.

Action Description

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

1. Name

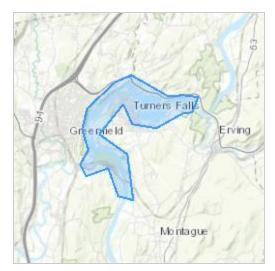
Turners Falls Hydroelectric Project - Station No. 1

2. Description

The following description was provided for the project 'Turners Falls Hydroelectric Project - Station No. 1':

Hydroelectric

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.5829163,-72.5754657943342,14z



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.).

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

Yes

No

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?

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 longeared bat? Remember to consider the <u>effects of any activities</u> 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 by 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

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LEAD AGENCY CONTACT INFORMATION

Lead Agency: Environmental Protection Agency

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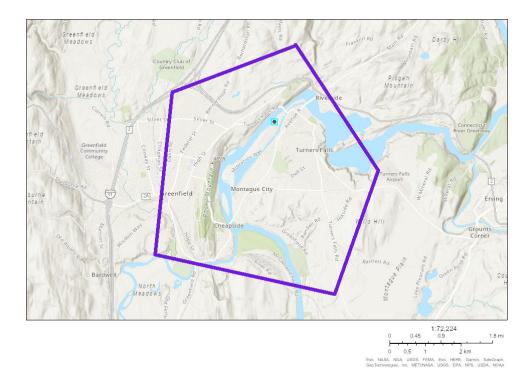


Critical Habitat Report for 26 Power Street, Turners Falls MA

Area of Interest (AOI) Information

Length: 21.41 km

Mar 22 2023 9:25:03 Eastern Daylight Time



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Summary

Name	Count	Area(km²)	Length(m)	
All Critical Habitat Polyline	0	N/A	N/A	
All Critical Habitat Polygon	0	N/A	N/A	

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Drawn Action Area & Overlapping S7 Consultation Areas

Area of Interest (AOI) Information

Length: 5.11 mi

Apr 26 2023 8:18:24 Eastern Daylight Time



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Summary

Name	Count	Area(acres)	Length(mi)
Atlantic Sturgeon	0	N/A	N/A
Shortnose Sturgeon	2	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 _JUV_MAF	Shortnose sturgeon	Juvenile	Migrating & Foraging	Connecticu t River	01/01	12/31	N/A	N/A	N/A
2	SNS_CNU _ADU_MA F	Shortnose sturgeon	Adult	Migrating & Foraging	Connecticu t River	01/01	12/31	N/A	N/A	N/A

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SECTION 5

Section 5 Historic Places Listing

Reference num	be 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 nun	nbe 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 num	be Property Name	NHL Designated Date	Other Names	Park Name	Status Date Area of Significance
_14000046	Benson's New Block and the Mohawk Chambers		Patterson Apartments; Aaron Rooms; Newman Rooms; Winsl	ow Hotel; Stearns Room; Harco Rooms; V	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 OfficeGreenfield Main;Garden Theatre Blo	с	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

SECTION 6

Section 6 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	11.50	Miles	(Water Chestnut*)	
		confluence with Connecticut River, South Hadley (through former 2006 segments: Aldrich Lake [East Basin] MA34002 and Aldrich Lake [West Basin] MA34106).			Escherichia Coli (E. Coli)	
Barton Cove	MA34122	Gill (cove of Connecticut River upstream of	160.00	Acres	(Curly-leaf Pondweed*)	
		Turners Falls dams (NATID: MA00848 and			(Eurasian Water Milfoil, Myriophyllum	
		MA00849)).			Spicatum*)	
					(Fanwort*)	
					(Water Chestnut*)	
					Escherichia Coli (E. Coli)	
					PCBs in Fish Tissue	
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,	3.50	Miles	(Alteration in stream-side or littoral	
		Northfield to Route 10 bridge, Northfield.			vegetative covers*)	
					(Flow Regime Modification*)	
					PCBs in Fish Tissue	
Connecticut River	MA34-02	Route 10 bridge, Northfield to Turners Falls	11.40	Miles	(Alteration in stream-side or littoral	
		dams (NATID: MA00848 and MA00849),			vegetative covers*)	
		Gill/Montague (excluding the delineated			(Flow Regime Modification*)	
~~~	~~	segment: Barton Cove MA34019).		$\sim$	(Water Chestnut*) PCBs in Fish Tissue	$\sim$
Connecticut River	MA34-03	Turners Falls dams (NATID: MA00848 and	3.70	Miles	(Dewatering*)	
		MA00849), Gil/Montague to confluence with			(Flow Regime Modification*)	
		Deerfield River, Greenfield/Deerfield.	ļ		Escherichia Coli (E. Coli)	
					PCBs in Fish Tissue	
					Total Suspended Solids (TSS)	