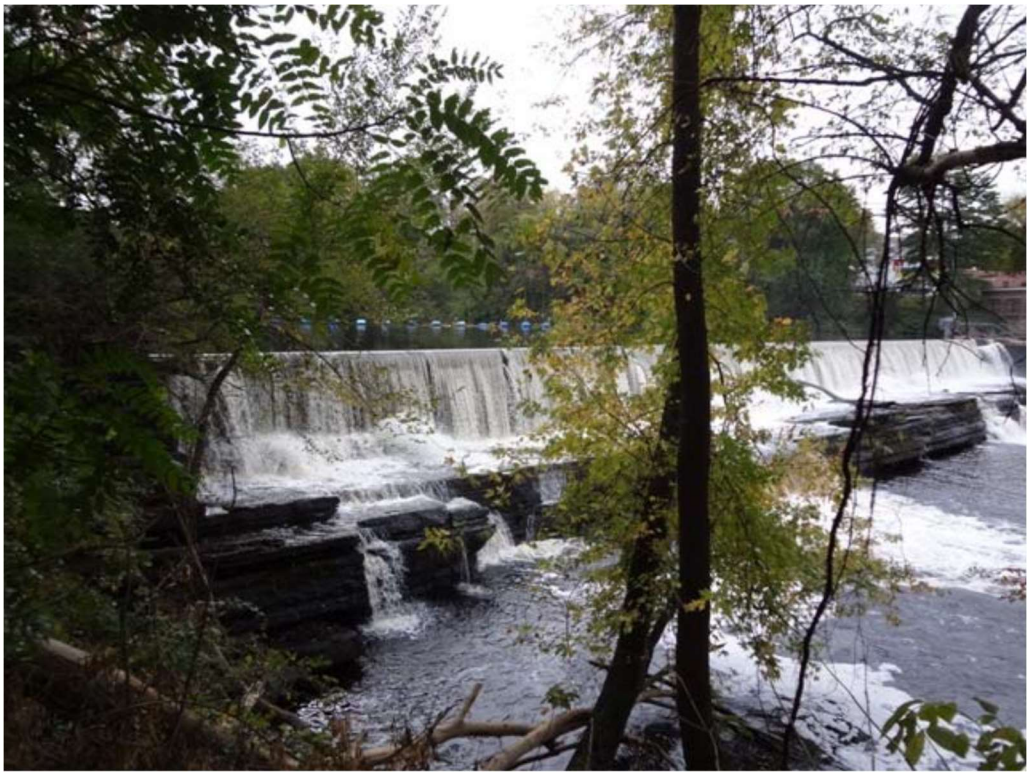
Low-Impact Hydropower Power Institute Certification Application

For

Chicopee Falls Hydroelectric Project

(FERC No: P-6522-MA)



Prepared by:

Ware River Power Co., Inc.
Barre, Massachusetts

November 21, 2025

Low-Impact Hydropower Power Institute Certification Application

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1.0 FACILITY DESCRIPTION

The Chicopee Hydroelectric Project (FERC No. P-6522-MA) is located on the Chicopee River in the City of Chicopee, Hampden County, Massachusetts. The facility is owned by Chicopee Electric Light and managed by Ware River Power, Inc., with operations handled by their staff.

The project features a 314-foot-long, 10-foot-high concrete gravity dam, topped with 1.5-foot-high wooden hydraulic flashboards. These flashboards are adjusted seasonally to manage ice hazards during winter. The facility includes twin penstocks—24-foot-wide concrete box and exposed steel sections, each approximately 90 feet long—leading to twin ESAC (bulb) turbine generator units, accompanied by a flood bypass wall and appurtenant structures.

Operating as a run-of-river facility, the project is monitored and controlled using a PLC and SCADA system. Key operational data, including headwater and tailwater elevations, gate opening percentages, and generation output, are recorded and displayed in a control building located on the land side of the flood wall. A pressure transducer in the head pond continuously monitors water levels, feeding data into the SCADA system to adjust project output in alignment with river flow.

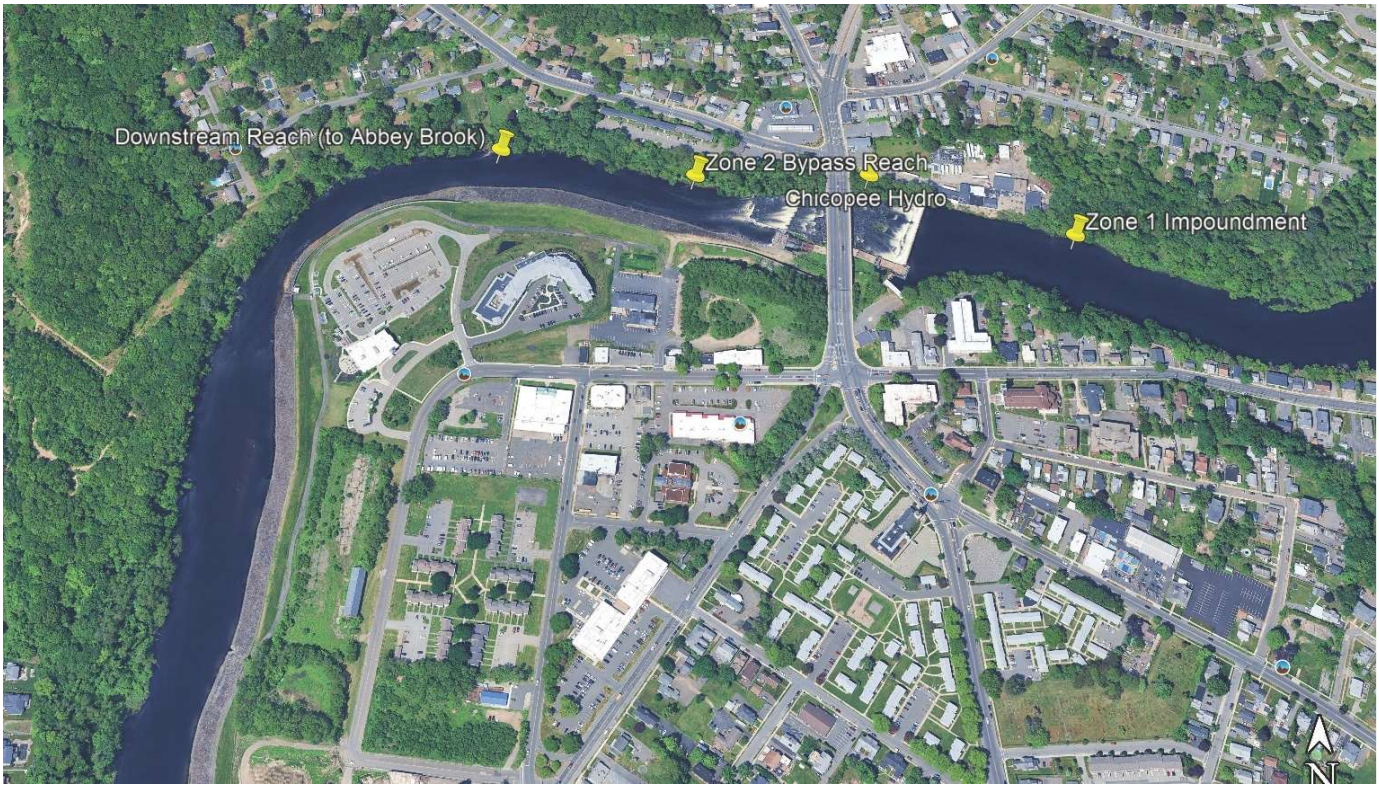

Figure 1: Photo of Project / Identification of Project Parts

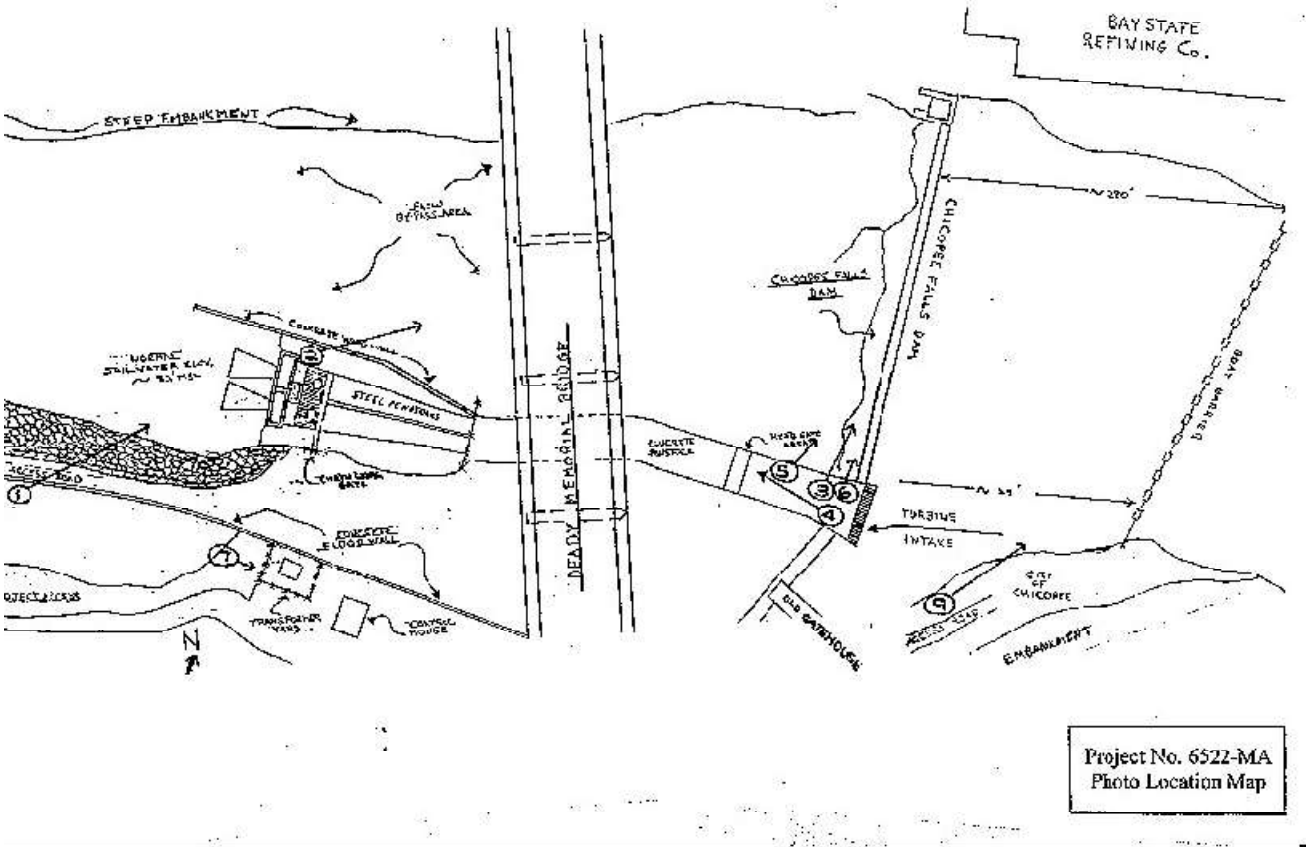

Figure 2 FERC Project Boundary Map

1.1 Geographic Location

Chicopee Hydroelectric is located on the Chicopee River in the City of Chicopee, Massachusetts. The location coordinates are Latitude: 42.1336, Longitude: -72.6302.

Chicopee River Overview

- Length: 18 miles
  Watershed Area: 721 square miles
  Confluence: Flows into the Connecticut River
  Fish Management: The Chicopee River watershed is not currently subject to American eel or other migratory fish management efforts.

Other Hydropower Plants on the Chicopee River: Several other hydropower plants are located along the Chicopee River, all certified by the Low Impact Hydropower Institute (LIHI):

- Located downstream:
    - Dwight Hydro (LIHI #170), owned by Patriot Hydro LLC
- Located upstream:
    - Indian Orchard (LIHI #112); Putts Bridge (LIHI #102); and Red Bridge (LIHI #96) all owned by Patriot Hydro LLC.
    - Collins Hydro (LIHI #88): owned by Dichotomy Hydro LLC.

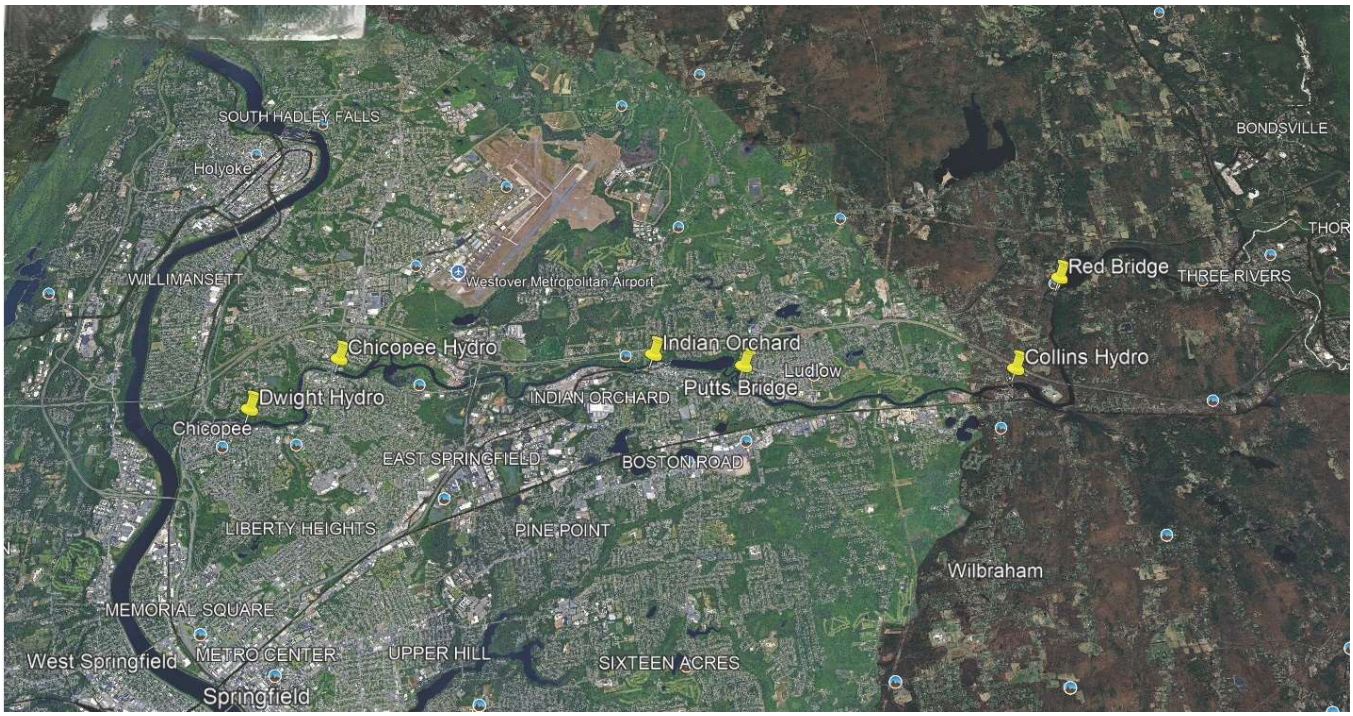

Figure 3: Geographic Overview of Project Location

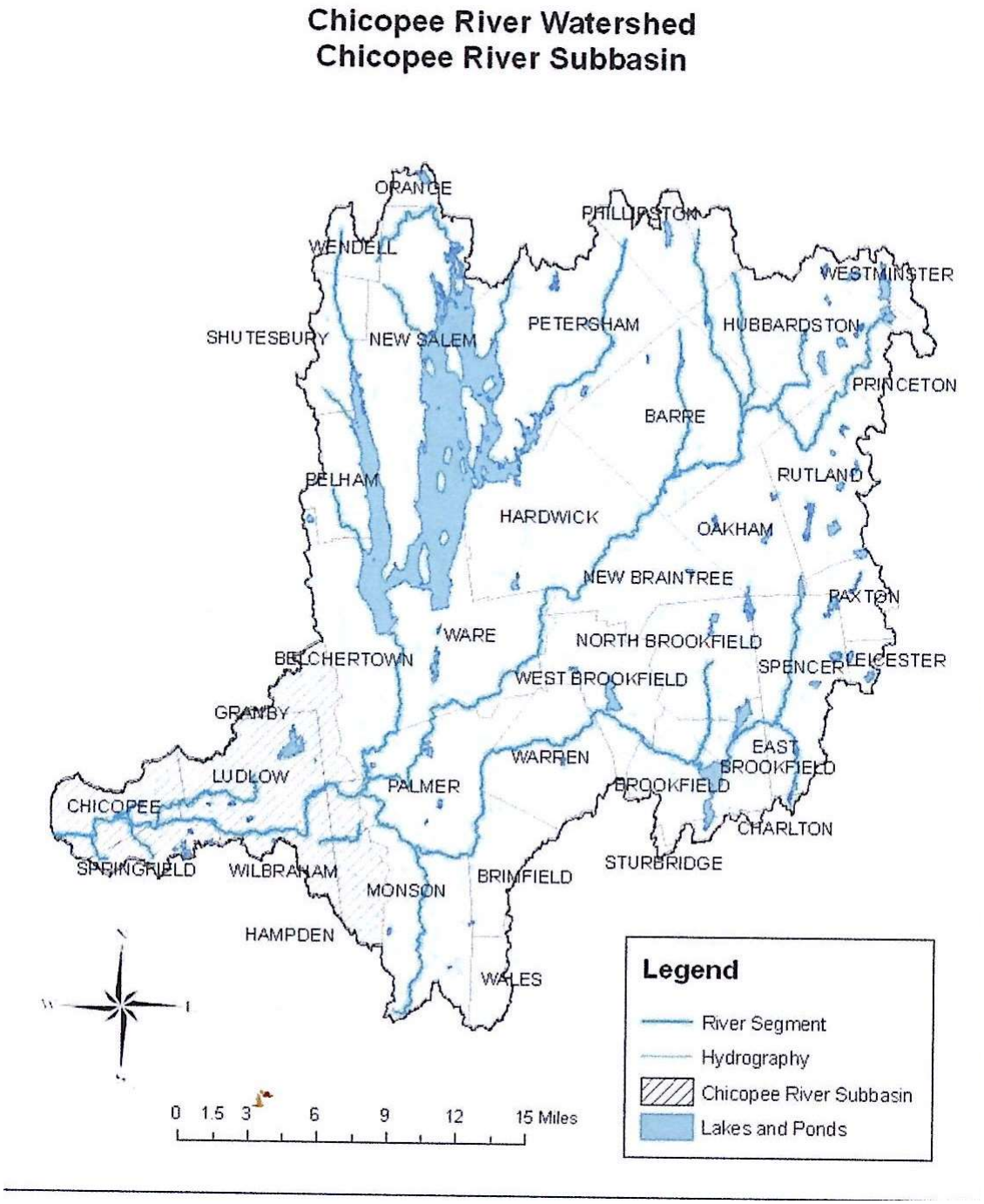

Figure 4: Area River Basin

1.2 Project Description

The Project includes a granite block masonry dam/spillway, a gatehouse structure, non-overflow sluice gate structure, retaining walls, a canal intake with two headgates, an exposed concrete box-section penstock, two steel penstocks, a turbine pit, tailraces with closure gates, and a training wall.

The approximately 10-foot-tall, 256-foot-long granite block masonry dam was completed in 1898, with the plant being commissioned in 1985. The spillway has an overall length of 256 feet, and the concrete capped, top of the dam is lined with 1.4-foot-high, hydraulically actuated flashboards which brings the impoundment elevation from 106.7 feet to 108.1 feet. The downstream toe of the dam also contains a concrete apron.

The Project is operated in run-of-river mode, meaning that inflow and outflow are generally equal. The turbine-generators' control system is a microprocessor-based programmable logic controller (PLC) that operates automatically to adjust the wicket gates which in turn maintain consistent headwater levels despite upstream flow conditions. The normal headwater elevation is 108.15 ft (NGVD). The headgates are normally kept in the 'Up' position allowing water flow to pass through the penstock to the turbine(s). When in the fully lowered or 'Closed' position, the headgates isolate the water flow from the turbines in order to provide a safe working environment for maintenance and repair personnel.

The canal intake is approximately 45-foot-wide concrete structure which allows water to enter the exposed concrete box culvert from the impoundment. The upstream side of the intake is protected by steel trash racks.

The Powerhouse tailrace area is approximately 73' wide, left bank is approximately 200' training wall that divides the spillway tailrace from the powerhouse tailrace area.

The spillway tailrace is immediately downstream of the spillway and runs parallel to the box culvert, penstock and the powerhouse tailrace.

1.3 Regulatory Status

The Chicopee Hydro Electric Project filed and received a FERC exemption on December 8, 1982 and is in good standing with FERC. See Attachment A.

Table 1.a Facility Information.

Item	***Information Requested***	***Response – if applicable, include references or links to further details***
Name of the Facility	Facility name (use FERC project name or other legal name)	Chicopee Hydroelectric Project (FERC No. P-6522-MA)
Reason for applying for LIHI Certification	1. To participate in state RPS program (specify the state and the total MW/MWh associated with that participation (value and % of facility total MW/MWh) 2. To participate in voluntary REC market (e.g., Green-e) 3. To satisfy a direct energy buyer's purchasing requirement 4. To satisfy the facility's own corporate sustainability goals 5. For the facility's corporate marketing purposes 6. Other (describe)	#2, would like to participate in the REC market #6 Client would like this plant to be LIHI Certified.
	If applicable, the amount of annual generation (MWh and % of total generation) for which RECs are currently received or are expected to be received upon LIHI Certification	8,850,000 kWh

Item	***Information Requested***	***Response – if applicable, include references or links to further details***
Location	River name (USGS proper name)	Chicopee River
	Watershed name - Select region, click on the area of interest until the 8-digit HUC number appears. Then identify watershed name and HUC-8 number from the map at: https://water.usgs.gov/wsc/map_index.html	Northeast Region-01 010802040402
	Nearest town(s), county(ies), and state(s) to dam	The project is located in the City of Chicopee, Hampton County, Massachusetts.
	River mile of dam above mouth	Approximately 2.9 miles upstream from its confluence with the Connecticut River.
	Geographic latitude and longitude of dam	Latitude= 42.1336 Longitude= -72.6302
Facility Owner	Application contact names	Nancy Brown / Lucas Wright
	Facility owner company and authorized owner representative name. **For recertifications: If ownership has changed since last certification, provide the effective date of the change.**	Facility Owner: Chicopee Electric Light Owner Authorized Rep: Ware River Power
	FERC licensee company name (if different from owner)	Chicopee Electric Light
Other Owners	If different from hydro facility owner, Provide the dam owner(s)/operator(s) entity names (see also Table 11).	
Regulatory Status	FERC Project Number (e.g., P-xxxxx), issuance and expiration dates, or date of exemption	P-6522-MA, Exemption on December 8, 1982. (See Attachment A)
	FERC license type (major, minor, exemption) or special classification (e.g., "qualified conduit", "non-jurisdictional")	Exemption
	Water Quality Certificate identifier, issuance date, and issuing agency name. Include information on amendments.	None.
	Hyperlinks to key electronic records on FERC e-Library website or other publicly accessible data repositories[1] ***(or provide a separate list) If not electronically available, provide as appendices to the application***	See Attachment A.
Powerhouse	Date of initial operation (past or future for pre-operational applications)	June 1985

[1] For example, the FERC license or exemption, recent FERC Orders, Water Quality Certificates, Endangered Species Act documents, Special Use Permits from the U.S. Forest Service or other agency, U.S. Army Corps of Engineers permits, and other regulatory documents, or permits or authorizations issued by a Tribal Nation, other 3rd-party agreements including Memorandums of Agreement or Understanding about water or land management, grants of right-of-way, water rights, and the like. If extensive, the list of hyperlinks can be provided separately in the application.

Item	***Information Requested***	***Response – if applicable, include references or links to further details***
	Total installed capacity (MW) **For recertifications: Indicate if installed capacity has changed since last certification**	2.5 MW
	Average annual generation (MWh) and period of record used **For recertifications: Indicate if average annual generation has changed since last certification**	See Attachment C.
	Mode of operation (run-of-river, peaking, pulsing, seasonal storage, diversion, etc.) **For recertifications: Indicate if mode of operation has changed since last certification**	Run-of-river mode of operation
	Number, type, and size of turbine/generators, including maximum and minimum hydraulic capacity (in cfs) and maximum and minimum output (in kW or MW) of each turbine and generator unit	Two ESAC bulb turbines. T1, 1700 kW with a hydraulic capacity of 1050 cfs and T2, 800 kw with a hydraulic capacity of 500 cfs
	Trashrack clear spacing (inches) for each trashrack	Steel trash racks with 1-3/4” spacing
	Approach water velocity (ft/s) at each intake if known	Not known
	Dates and types of major equipment upgrades ***(or provide a separate list)*** **For recertifications: Indicate only those since last certification**	2017, new steel trash racks
	Dates, purpose, and type of any recent operational changes ***(or provide a separate list)*** **For recertifications: Indicate only those since last certification**	None
	Plans, authorization, and regulatory activities for any facility upgrades or license or exemption amendments ***(or provide a separate list)***	None
Dam or Diversion	Date of original dam or diversion construction and description and dates of subsequent dam or diversion structure modifications	Dam was constructed in 1898.
	Dam or diversion structure length, height including separately the height of any flashboards, inflatable dams, etc. and describe seasonal operation of flashboards and the like	10-foot-tall, 256-foot-long granite block masonry dam with 1.5-foot-high wooden hydraulic flashboards
	Spillway maximum hydraulic capacity	

Item	***Information Requested***	***Response – if applicable, include references or links to further details***
	Length and type of each penstock and water conveyance structure between the impoundment and powerhouse	Two penstocks consist of exposed 24-foot-wide concrete box and 90-foot in length above ground/exposed steel penstocks
	Designated facility purposes (e.g., power, navigation, flood control, water supply, etc.)	Power production
Conduit Facilities Only	Date of conduit construction and primary purpose of conduit	Not applicable
	Source water	Not applicable
	Receiving water and location of discharge	Not applicable
Impoundment and Watershed	Authorized maximum and minimum impoundment water surface elevations **For recertifications: Indicate if these values have changed since last certification**	The reservoir minimum is 106.7 feet and the maximum is 108.1 feet
	Normal operating elevations and normal fluctuation range **For recertifications: Indicate if these values have changed since last certification**	Normal Operating Elevation: 108.1 with flashboards down, elevation is 106.7 Run of River
	Gross storage volume and surface area at full pool **For recertifications: Indicate if these values have changed since last certification**	The minimum and maximum storage is 310 acre-feet
	Usable storage volume and surface area **For recertifications: Indicate if these values have changed since last certification**	Negligible useable storage, due to run-of-river operations
	Describe requirements related to impoundment inflow and outflow, elevation restrictions (e.g., fluctuation limits, seasonality) up/down ramping and refill rate restrictions	Not applicable, run of river.
	Upstream dams by name, ownership (including if owned by an affiliate of the applicant's company) and river mile. If FERC licensed or exempt, please provide FERC Project number of these dams. Indicate which upstream dams have downstream fish passage	Indian Orchard (LIHI #112); Putts Bridge (LIHI #102); and Red Bridge (LIHI #96), owned by Patriot Hydro. Collins Hydro (LIHI #88), owned by Collins Hydro LLC, a subsidiary of Relevate Power LLC
	Downstream dams by name, ownership (including if owned by an affiliate of the applicant's company), river mile and FERC number if FERC licensed or exempt. Indicate which downstream dams have upstream fish passage	Dwight Hydro (LIHI #170), owned by Patriot Hydro.

<table>
<tr><th>Item</th><th>Information Requested</th><th>Response – if applicable, include references or links to further details</th></tr>
<tr><td></td><td>Operating agreements with upstream or downstream facilities that affect water availability and facility operation</td><td>No operating agreements are in effect with other surrounding facilities</td></tr>
<tr><td></td><td>Area of land (acres) and area of water (acres) inside FERC project boundary or under facility control. Indicate locations and acres of flowage rights versus fee-owned property</td><td>See Attachment D.</td></tr>
<tr><td>Hydrologic Setting</td><td>Average annual flow at the dam, and period of record used</td><td>Average annual inflow = 1072 cfs.

Period of record: water year 2015 – 2024, as measured at the upstream USGS gage #01177000 - CHICOPEE RIVER AT INDIAN ORCHARD, MA located about 4 river-miles upstream.</td></tr>
<tr><td></td><td>Average monthly flows and period of record used</td><td>Average Monthly flows from Indian Orchard USGS gage period of record July 2014 – June 2025
<table><tr><td>2014</td><td>1350</td></tr><tr><td>2015</td><td>1280</td></tr><tr><td>2016</td><td>1510</td></tr><tr><td>2017</td><td>1830</td></tr><tr><td>2018</td><td>1280</td></tr><tr><td>2019</td><td>657</td></tr><tr><td>2020</td><td>715</td></tr><tr><td>2021</td><td>483</td></tr><tr><td>2022</td><td>5564</td></tr><tr><td>2023</td><td>678</td></tr><tr><td>2024</td><td>888</td></tr><tr><td>2025</td><td>1290</td></tr></table></td></tr>
<tr><td></td><td>Locations, names, and hyperlinks to the closest stream gaging stations above and below the facility</td><td>Above: USGS 01177000 CHICOPEE RIVER AT INDIAN ORCHARD, MA

Below: None</td></tr>
<tr><td></td><td>Watershed area at the dam (in square miles). Identify if this value is prorated from gage locations and provide the basis for proration calculation</td><td>689 sq miles at the upstream gage, 718 sq miles at Dwight, the downstream dam. Estimated drainage at Chicopee Falls = 710 sq mi</td></tr>
<tr><td></td><td>Other facility specific hydrologic information (e.g., average hydrograph)</td><td></td></tr>
<tr><td>Designated Zones of Effect</td><td>Numbers and names of each zone of effect and river mile of upstream and downstream limits of each zone of effect (e.g., “Zone 1: Impoundment RM 6.3 - 5.1”)</td><td>Zone 1: Impoundment RM 3.8 – 2.9
Zone 2: Bypass Reach RM 2.9 - 2.8
Zone 3: Downstream Reach RM 2.9-1.6 to confluence with Abbey Brook</td></tr>
</table>

Pre-Operational Facilities Only		
Expected Operational Date	Date generation is expected to begin	Not applicable, this is not a new facility
Dam, Diversion Structure or Conduit Modification	Description of modifications made to a pre-existing conduit, dam or diversion structure needed to accommodate facility generation. This includes installation of flashboards or raising the flashboard height. Date the modification is expected to be completed	Not applicable, this is not a new facility
Change in Water Flow Regime	Description of any change in impoundment levels, water flows or operations required for new generation	Not applicable, this is not a new facility

2.0 STANDARDS MATRICES

2.1 Impoundment ZoE (Zone 1)

Facility Name: Chicopee Hydroelectric **Zone of Effect: Impoundment ZoE (Zone 1)**

Criterion		***Alternative Standards (check one numbered box and PLUS if applicable)***				
		1	***2***	***3***	***4***	***Plus***
A	**Flow Regimes**	☒	☐	☐	☐	☐
B	**Water Quality**	☒	☐	☐		☐
C	**Upstream Fish Passage**	☒	☐	☐	☐	☐
D	**Downstream Fish Passage**	☒	☐	☐	☐	☐
E	**Shorelines and Watershed**	☒	☐	☐		☐
F	**Threatened and Endangered Species**	☒	☐	☐	☐	☐
G	**Cultural and Historic Resources**	☒	☐			☐
H	**Recreational, Public, and Traditional Cultural Access**	☒	☐	☐		☐

2.2 Bypass Reach ZoE (Zone 2)

Facility Name: Chicopee Hydroelectric **Zone of Effect: Bypass Reach ZoE (Zone 2)**

Criterion		*Alternative Standards (check one numbered box and PLUS if applicable)*				
		1	*2*	*3*	*4*	*Plus*
A	Flow Regimes	☐	☒	☐	☐	☐
B	Water Quality	☒	☐	☐		☐
C	Upstream Fish Passage	☒	☐	☐	☐	☐
D	Downstream Fish Passage	☒	☐	☐	☐	☐
E	Shorelines and Watershed	☒	☐	☐		☐
F	Threatened and Endangered Species	☐	☒	☐	☐	☐
G	Cultural and Historic Resources	☒	☐			☐
H	Recreational, Public, and Traditional Cultural Access	☒	☐	☐		☐

2.3 Downstream Reach ZoE (Zone 3)

Facility Name: Chicopee Hydroelectric **Zone of Effect: Downstream Reach ZoE (Zone 3)**

Criterion		*Alternative Standards (check one numbered box and PLUS if applicable)*				
		1	*2*	*3*	*4*	*Plus*
A	Flow Regimes	☐	☒	☐	☐	☐
B	Water Quality	☒	☐	☐		☐
C	Upstream Fish Passage	☒	☐	☐	☐	☐
D	Downstream Fish Passage	☒	☐	☐	☐	☐
E	Shorelines and Watershed	☒	☐	☐		☐
F	Threatened and Endangered Species	☐	☒	☐	☐	☐
G	Cultural and Historic Resources	☒	☐			☐
H	Recreational, Public, and Traditional Cultural Access	☒	☐	☐		☐

3.0 SUPPORTING INFORMATION

3.1 Flow Regimes Standards: Impoundment (Zone 1)

Criterion	*Standard*	*Instructions*
A	1	Not Applicable / De Minimis Effect: • Confirm the location of the powerhouse relative to dam/diversion structures and demonstrate that there are no bypassed reaches at the facility. • For run-of-river facilities, provide details on operations and demonstrate that flows, water levels, and operation are monitored to ensure such an operational mode is maintained. If deviations from required flows have occurred, discuss them and the measures taken to minimize reoccurrence. • In a conduit facility, identify the source waters, location of discharge points, and receiving waters for the conduit system within which the hydropower facility is located. This standard cannot be used for conduits that discharge to a natural waterbody. • For impoundment zones only, explain water management (e.g., fluctuations, ramping, refill rates) and how fish and wildlife habitat within the zone is evaluated and managed. ***NOTE:*** this is required information, but it will not be used to determine whether the Ecological Flows criterion has been satisfied. All impoundment zones can apply Criterion A-1 to pass this criterion.

The project operates as an instantaneous run-of-river project, whereby the inflow to the project shall equal the outflow from the project. Water levels above the dam are not drawn down for purposes of generating power and may be temporarily modified if there are emergencies beyond the operators' control or for short periods upon mutual agreement between the project and the U.S. Fish and Wildlife Service as well as the Massachusetts Division of Fisheries and Wildlife.

Run-of-river operation is maintained and monitored utilizing a PLC and SCADA system, operating since 1993. Plant status (i.e. headwater/tailwater elevations, percent gate opening, generation, etc.) is recorded and plotted every 15 minutes in a control building located on the land side of the flood wall on the left bank. A pressure transducer in the headpond monitors headpond level. This information is tied into the SCADA system, allowing the project output to track river flow.

3.2 Flow Regime Standards: Bypass and Downstream Reach

A	2	Agency Recommendation (see Appendix A for definitions): • Identify the proceeding and source, date, and specifics of the agency recommendation applied (NOTE: there may be more than one; identify and explain which is most environmentally protective). • Explain the scientific or technical basis for the agency recommendation, including methods and data used. This is required regardless of whether the recommendation is or is not part of a Settlement Agreement. • Explain how the recommendation relates to agency management goals and objectives for fish and wildlife. • Explain how the recommendation provides fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking rate conditions, and seasonal and episodic instream flow variations).

The project is a run-of-river facility operating under a FERC exemption, with automatic controls for pond leveling to maintain stable impoundment levels and minimize fluctuations. It includes protections such as minimum flow releases permitting downstream migration of species like American eel and safeguards to prevent operations if pond levels drop below the dam crest, ensuring ecological flows in the bypass and downstream reaches of the Chicopee River. The downstream reach benefits from continuous inflow releases, with no significant ecological impairments attributed to the project.

Massachusetts Division of Fisheries and Wildlife letter dated January 2, 1986, requires an aquatic base flow of 357 cubic feet per second (cfs) to be provided below the tailrace and a minimum instantaneous flow equal to or exceeding the 7-day 10 year low flow of 127 cfs to be released at the dam during operation of the hydroelectric facility for the protection of aquatic resources and water quality.

3.3 Water Quality Standards: Impoundment, Bypass and Downstream Reach

Criterion	*Standard*	*Instructions*
B	1	Not Applicable • If facility is located on a Water Quality Limited river reach, provide a link to the state's most recent impaired waters list and indicate the page(s) therein that apply to facility waters. If possible, provide an agency letter stating that the facility is not a cause of such limitation. • Explain the rationale for why the facility does not alter water quality characteristics below, around, and above the facility.

The Chicopee River, on which the Chicopee hydropower plant is located, is classified as a water quality limited river reach under Massachusetts' Clean Water Act Section 303(d) program. Multiple assessment units (AUs) along the Chicopee River are listed as impaired (Category 5) in the state's most recent approved Integrated List of Waters for the 2022 reporting cycle. The primary impairments identified include bacteria (e.g., E. coli and fecal coliform), which affect uses such as primary and secondary contact recreation. A draft Total Maximum Daily Load (TMDL) for bacteria has been developed for 17 AUs in the Chicopee River Watershed, with projected EPA final approval in State Fiscal Year 2024. Other impairments in various AUs

include invasive aquatic vegetation (e.g., water chestnut) and, in some cases, aesthetic or biological conditions, but bacteria is the dominant pollutant requiring TMDL development. Link to the Most Recent Impaired Waters List: The Final Massachusetts Integrated List of Waters for the Clean Water Act 2022 Reporting Cycle (approved by EPA in June 2023, with partial deferral on certain bacteria assessments) is available at: https://www.mass.gov/doc/final-massachusetts-integrated-list-of-waters-for-the-clean-water-act-2022-reporting-cycle/download.

Segment MA 36-24 is listed as non-supporting for aquatic life use. While the benthic, fish and water quality data were indicative of good conditions, an impairment for the presence of the non-native aquatic macrophyte species *Trapa natans* (water chestnut) is being added. There is an alert due to the potential impacts of hydromodification resulting from the hydropower operations on the river. Segment MA 36-25 from the dam downstream to the confluence with the Connecticut River is listed as fully supporting for aquatic life use based on limited water quality data collected in 2008 which were indicative of good conditions. There is an alert due to the potential impacts of hydromodification resulting from the hydropower operations on the river (see https://www.mass.gov/doc/20182020-integrated-list-of-waters-appendix-13-chicopee-river-watershed-assessment-and-listing-decision-summary/download) .

In summary, the facility's design, operations, and regulatory oversight ensure water quality remains stable or improved relative to natural variability, without causing or exacerbating the river's limited status which is due to non-project related factors.

3.4 Upstream Fish Passage Standards: Impoundment, Bypass and Downstream Reach

Criterion	*Standard*	*Instructions*
C	1	Not Applicable: • Explain why the facility does not impose a barrier to upstream fish passage in the designated zone. Typically, impoundment zones will qualify for this standard since once above a dam and in an impoundment, there is no facility barrier to further upstream movement. • Document available fish distribution data and the lack of migratory fish species in the vicinity. • If migratory fish species have been extirpated from the area, explain why the facility is or was not the cause of this.

The facility does not impose a barrier to upstream fish passage in the impoundment zone. Once fish are above the dam and within the impoundment, there are no additional facility-related barriers (e.g., physical structures or operational conditions) that restrict further upstream movement. The impoundment provides open water with sufficient depth, flow, and connectivity to allow fish to move freely toward upstream habitats, if present. Therefore, the facility meets the "Not Applicable" standard for upstream fish passage in this zone.

The only migratory species currently present in the Chicopee River is American eel, a small number of which are able to naturally ascend dams and have been found in the Chicopee River basin upstream of Chicopee Falls. Anadromous species including American shad, sea lamprey, and river herring, as well as many American eels are blocked from access to the Chicopee Falls Project by the downstream Dwight dam which was constructed in 1860, prior to Chicopee Falls, and which does not have upstream passage facilities.

The FERC exemption includes Standard Article 2 which requires compliance with the terms and conditions of federal and state fish and wildlife agencies. Agencies have not issued any terms or conditions related to upstream fish passage at the project. See Attachment A, FERC Exemption.

3.5 Downstream Fish Passage Standards: Impoundment, Bypass and Downstream Reach

Criterion	*Standard*	*Instructions*
D	1	Not Applicable: • Explain why the facility does not impose a barrier to downstream fish passage in the designated zone, considering both physical obstruction and increased mortality relative to natural downstream movement (e.g., entrainment into hydropower turbines). Typically, tailwater/downstream zones will qualify for this standard since below a dam and powerhouse there is no facility barrier to further downstream movement. Bypassed reach zones must demonstrate that flows in the reach are adequate to support safe, effective and timely downstream migration. • For riverine fish populations that are known to move downstream, explain why the facility does not contribute adversely to the sustainability of these populations or to their access to habitat necessary for successful completion of their life cycles. • Document available fish distribution data and the lack of migratory fish species in the vicinity. • If migratory fish species have been extirpated from the area, explain why the facility is or was not the cause of this.

The facility does not contribute adversely to the sustainability of American eel populations. The run-of-river operation and minimum bypass flows ensure that eels can access downstream habitats necessary for their catadromous life cycle.

Additionally, there are no anadromous fish in this stretch of the river. The Chicopee River has no migratory fish or eel passage on any of the nine hydropower projects currently.

Resident fish species in the Chicopee River include black bullhead, bluegill, brown trout, rainbow trout, chain pickerel, channel catfish, carp, shiners, sunfish, and bass (https://fishboxapp.com/spot/united-states/massachusetts/chicopee-river-6123). These fish do not require passage in order to complete their lifecycles.

3.6 Watershed and Shoreline Protection Standards: Impoundment, Bypass and Downstream Reach

Criterion	*Standard*	*Instructions*
E	1	Not Applicable: • If there are no lands with significant ecological value associated with the facility, document and justify this (e.g., describe the land use and land cover within the FERC project or facility boundary). • Document that there have been no Shoreline Management Plans or similar protection requirements for the facility.

Refer to Figure 2 FERC Project Boundary Map on page 2 of this application.

This project is within city limits and terrestrial wildlife resources are limited. A site survey by the Massachusetts Energy Office reported no large mammals and some populations of small mammals consisting of rabbits, muskrats and mice. There are a variety of game and songbirds in the projects area. There are no lands of ecological significance in the project boundary.

Run-of-river operations and stable impoundment levels minimize the potential for erosion of the shoreline.

3.7 Threatened and Endangered Species Standards: Impoundment, Bypass and Downstream Reach

Criterion	*Standard*	*Instructions*
F	2	Finding of No Negative Effects: • Identify all federal and state listed species in the facility area based on current data from the appropriate state and federal natural resource management agencies. • Provide documentation that there is no demonstrable negative effect of the facility on any listed species in the area from an appropriate natural resource management agency or provide documentation that habitat for the species does not exist within the ZoE or is not impacted by facility operations.

The Northern Long Eared bat is listed as a federal endangered species. However, this project is in an urban area and it's unlikely that this project would have an impact on the northern long eared bat. The USFWS IPaC online program indicates that northern long-eared bat is not present, but tricolored bat, a species proposed for listing as endangered may be present in the project area. The proposed threatened monarch butterfly may also be present. Since the project is located in an urban area and does not require tree cutting or significant vegetation management, neither of these species are likely to be impacted by project operations.

See Attachment B.

3.8 Cultural and Historic Resources Standards: Impoundment, Bypass and Downstream Reach

Criterion	*Standard*	*Instructions*
G	1	Not Applicable : • Document that there are no cultural or historic resources located on facility lands that can be affected by construction or operations of the facility. • Document that the facility construction and operation have not in the past, nor currently adversely affect any cultural or historic resources that are present on facility lands.

There are no listed archaeological sites of historic value in the area of the Chicopee Hydropower plant, except for the Deady Memorial Bridge, which carries Route 33 (Memorial Drive) over the Chicopee River adjacent to the dam near the gate house. The Chicopee power plant has no negative effect on the Deady Memorial Bridge. The former Chicopee Manufacturing Company site is also included on the Massachusetts Historical Commission list and is located just downstream of the project's tailrace, outside of the project boundary.

The Chicopee area was home to Native Americans prior to European settlement. The Nipmuc Tribe is a state-recognized Indian tribe in Massachusetts. Federally recognized tribes are lMashpee Wampanoag Tribe and the Wampanoag Tribe of Gay Head (Aquinnah) of Massachusetts. https://maps.mhc-macris.net/

3.9 Recreational Resources Standards: Impoundment, Bypass and Downstream Reach

Criterion	*Standard*	*Instructions*
H	1	Not Applicable: • Document that the facility does not occupy lands or waters to which public access can be granted and that the facility does not otherwise impact recreational opportunities in the facility area.

The project area has limited recreational value. The stretch of the river immediately below the dam is owned by private companies, while other parts of the property are restricted due to public safety. The boat barriers are installed every spring above the dam.

4.0 CONTACTS FORM

4.1 Applicant-related contacts

Facility Owner:	
Name and title	Daniel R. Faille; General Manager
Company	Chicopee Electric Light
Phone	413-377-6089
Email Address	DFaille@CELD.com
Mailing Address	725 Front Street; Chicopee MA 01020
Facility Operator (if different from Owner):	
Name and title	Lucas Wright, President
Company	Ware River Power Co., Inc.
Phone	978-355-4575
Email Address	lwright@wareriverpower.com / nbrown@wareriverpower.com
Mailing Address	102 South Barre Road; Barre MA 01005
Consulting Firm / Agent for LIHI Program (if different from above):	
Name and title	
Company	
Phone	
Email Address	
Mailing Address	
Compliance Contact (responsible for LIHI Program requirements):	
Name and title	Nancy Brown; Administrator
Company	Ware River Power Co., Inc.
Phone	978-939-3205
Email Address	nbrown@wareriverpower.com
Mailing Address	102 South Barre Road; Barre, MA 01005
Party responsible for accounts payable:	
Name and title	Nancy Brown
Company	Ware River Power Co., Inc.
Phone	978-939-3205
Email Address	nbrown@wareriverpower.com
Mailing Address	102 South Barre Road; Barre MA 01005

4.2 Federal, state and local resource agency contacts with knowledge of the facility.

Contact Name and Agency	Email	Phone	Resource Area(s) of Interest, from the list below
Derek Standish **Massachusetts Executive Office of Energy and Environmental Affairs; Department of Environmental Protection**	Derek.Standish@mass.gov	617-654-6611	A through F
Rebecca Quinones **Massachusetts Division of Fisheries and Wildlife**	rebecca.quinones@mass.gov	508-389-6300	A through F
Conservation Commission / City of Chicopee		413-594-1400	G & H
John Wiley **US Fish and Wildlife Service**	John_Wiley@fws.gov	607-753-9334	A through F
Brona Simon **Massachusetts State Historic Preservation Officer**	Brona.Simon@sec.state.ma.us	617-727-8470	G

Resource Areas (LIHI Criteria):

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

4.3. Tribal government and tribal agency contacts

- Include federally recognized tribes, state-recognized tribes, and non-recognized tribal entities (see Appendix B instructions).
- If applicable, also include at least one contact for each tribe involved in each active project working group and identify the working group name.

Contact Name and Tribal Affiliation	Email	Phone	Resource Area(s) of Interest, from the list below
Chairman Brian M. Weeden Mashpee Wampanoag Tribe	Brian.Weeden@mwtribe-nsn.gov AnnMarie.Askew@mwtribe-nsn.gov	(508) 477-0208	all
Chairwoman Cheryl Andrews-Maltais Wampanoag Tribe of Gay Head (Aquinnah) of Massachusetts	chairwoman@wampanoagtribe-nsn.gov	(508) 645-9265	all
Tenah Richardson, Tribal Chairperson **Nipmuc Nation (state recognized)**	chairperson@nipmucnation.org	(774) 317-9138	all

Resource Areas (LIHI Criteria):

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

4.4. Currently engaged external interested party contacts

Contact Name and Agency	Email	Phone	Resource Area(s) of Interest, from the list below
Nina Gordon-Kirsch **River Steward in Massachusetts** **Connecticut River Conservancy**	ngordonkirsch@ctriver.org	413-772-2020 ext. 216	all
Keith Davies **Chicopee 4Rivers**	chicopeewatershed@gmail.com		B, H

Resource Areas (LIHI Criteria):

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

ATTESTATION AND WAIVER FORM

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

ATTESTATION

As an Authorized Representative of Chicopee Electric Light, the Undersigned attests that the material presented in the application is true and complete.

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

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

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

FOR PRE-OPERATIONAL CERTIFICATIONS:

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

Company Name: Chicopee Hydroelectric Project; c/o Ware River Power

Authorized Representative:

Name: Lucas W. Wright

Title: President

Authorized Signature: Lucas Wright

Date: November 21, 2025