

## 2<sup>nd</sup> Edition LIHI Handbook Recertification Application Table and Checklist

- This is a fillable form. Click in each righthand column to enter data or check the applicable box(es).
- For YES responses, enter or attach a summary/description and supply links to, or copies of all related documentation.
- Identify attachments by the item number below and note if any attachments are confidential.

<b>Facility Name:</b>	<b>Gardners Falls Project</b>
<b>LIHI Certificate No:</b>	<b>80</b>
<b>Application Date:</b>	<b>5/21/2021</b>
<b>Application Fee Payment Date:</b>	Click and use arrow button to enter date
<b>1. Updates and Changes Needed to <a href="#">Facility Webpage</a></b>	<input type="checkbox"/> N/A – webpage is accurate. <input checked="" type="checkbox"/> <b>Changes are needed. FERC license number is wrong on the Facility webpage. It should be P-2334 throughout the Facility webpage.</b>
<b>2. Updated Facility Information Table:</b>	<input checked="" type="checkbox"/> Updated form attached, either the <a href="#">Single Facility Form</a> or <a href="#">Multiple Facility Excel sheet</a>
<b>3. During the current LIHI term, have there been any:</b>	
FERC license or exemption proceedings, applications, amendments and/or FERC orders?	<input checked="" type="checkbox"/> <b>Yes. FERC Orders attached at end of Table</b>
Water Quality Certification (WQC) or amendment proceedings?	<input checked="" type="checkbox"/> <b>No.</b>
FERC-required facility or operational changes?	<input checked="" type="checkbox"/> <b>No.</b>
Changes to facility-related management plans, settlement agreements, MOUs, or other agreements?	<input checked="" type="checkbox"/> <b>No.</b>
Any formal or informal resource agency communications related to the LIHI criteria?	<input checked="" type="checkbox"/> <b>No.</b>
<b>4. During the current LIHI term, have there been any activities or changes at the facility:</b>	
Environmental upsets (e.g., oil spills, erosion events, damaging flood events)?	<input checked="" type="checkbox"/> <b>No.</b>

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Changes in the environmental conditions at the facility (e.g., significant land clearing, dredging, flood damage repairs, construction activities)?	<input checked="" type="checkbox"/> <b>No.</b>
Any other issues related to the LIHI criteria that have arisen (e.g., agency comments or new recommendations, stakeholder inquiries, etc.)?	<input checked="" type="checkbox"/> <b>Yes. See attached correspondence regarding responsibility for maintenance of road to Wilcox Hollow from Massachusetts Route 2.</b>
<b>5. During the current LIHI term have there been any:</b>	
Deviations or excursions from regulatory requirements?	<input checked="" type="checkbox"/> <b>None have occurred.</b>
FERC compliance orders, notices of non-compliance or violations from FERC, from regulatory agencies, or from stakeholders or the general public?	<input checked="" type="checkbox"/> <b>None received.</b>
<b>6. Ecological Flows (if not captured above):</b>	
Are there any temporary or permanent changes in impoundment operations that have occurred or are planned, including significant drawdowns (planned for maintenance or dam repairs or extended flashboard removal); and/or changes in flow release quantity or schedules, including white water releases?	<input checked="" type="checkbox"/> <b>No changes have occurred or are planned.</b>
<b>7. Water Quality:</b>	
If applicable, are there any amendments or applications for amendment to the facility's Water Quality Certification (WQC) during the current LIHI term?	<input checked="" type="checkbox"/> <b>No WQC amendment proceedings.</b>  <b>The Gardners Falls Water Quality Certificate may be found on the portion of the LIHI website devoted Gardners Falls and is attached to this Application.</b>

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<p>If there is a WQC and you selected Standard B-2, Agency Recommendation in the prior LIHI application, is the WQC is now &gt; 10 years old?</p> <p>Provide a letter from the state water quality agency confirming that the terms and conditions of the existing WQC are still valid and applicable to the facility.</p>	<p><input checked="" type="checkbox"/> <b>Yes, WQC is &gt; 10 years old, and a draft agency letter is attached at the end of the Application. Once a letter from the Mass DEP is received, it will be uploaded to Gardners Falls portion of the LIHI website.</b></p> <p><b>Over the past three months, MASS DEP has been contacted several times, via e-mail and phone, for updates confirming water quality terms and conditions of the existing WQC; however, no update has been provided.</b></p>
<p>Review the most recent published state impaired waters list (draft or final).</p> <p>Have there been any changes in the listing (new impairments, impairments removed, etc.) for the facility vicinity since the prior LIHI application?</p>	<p><input checked="" type="checkbox"/> <b>Yes.</b></p> <p><b>The waters above and below the dam (Segment MA33-02) are now impaired with the Escherichia Coli bacteria (E. Coli). The presence of E. Coli appears to start at the Buckland wastewater treatment plant just downstream of the Deerfield No. 3 project. Given that, the facility operation does not appear to be a cause of or contribute to this impairment.</b></p> <p><b>Copies of the applicable portions for the Deerfield River Watershed from <u>Massachusetts Year 2016 Integrated List of Waters</u> are attached at the end of the Application.</b></p>
<p>Identify any changes in stream designation such as state water quality classification changes for the river, Wild and Scenic Rivers designation, or other protected river status changes.</p>	<p><input checked="" type="checkbox"/> <b>Yes.</b></p> <p><b>Since its last LIHI re-certification, the impoundment, bypassed reach and tailrace down to the impoundment of Deerfield No. 2. have been re-classified as Category 5 waters, “Water requiring a TMDL” due to Escherichia Coli bacteria (E. Coli).</b></p>

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<p>If water quality monitoring has been conducted at or near the facility by you or others during the current LIHI term, provide links to, or copies of, the final monitoring report, and if applicable, all related FERC and agency consultation and communications.</p>	<p><input checked="" type="checkbox"/> <b>N/A, no monitoring conducted.</b></p>
<p><b>8. Upstream and Downstream Fish Passage:</b></p>	
<p>Have there been any completed or ongoing fish passage studies during the current LIHI term, including any data collected on fish passage (e.g., return numbers, changes made in seasonal operations, mortalities reported, effectiveness results)?</p>	<p><input checked="" type="checkbox"/> <b>No, at this time no new fish evaluations are planned.</b></p>
<p>Have there been any temporary or permanent changes in passage facilities or related operations that have occurred during the current LIHI term, or that are planned?</p>	<p><input checked="" type="checkbox"/> <b>Yes, changes have occurred. Downstream fish passage was suspended on May 18, 2016.</b></p> <p><b>Copies of that correspondence and associated FERC Order are attached at the end of the Application.</b></p>
<p><b>9. Shoreline and Watershed Protection:</b></p>	
<p>Are there any new or revised agency watershed-related management plans that may affect the facility (e.g., watershed management plan, fishery restoration plan, recovery plan for threatened or endangered species, or other agency plans)?</p>	<p><input checked="" type="checkbox"/> <b>None identified.</b></p> <p><b>While there is no watershed-related management plan, annually the applicant files with FERC a report on the changes in the upstream and downstream operations of other hydro-electric dams on the Deerfield River.</b></p> <p><b>Copies of that FERC correspondence is attached.</b></p>
<p><b>10. Threatened and Endangered Species:</b></p>	

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<p>Conduct a U.S. Fish and Wildlife Service IPaC online data check (<a href="https://ecos.fws.gov/ipac/">https://ecos.fws.gov/ipac/</a>) for newly observed or newly listed federally threatened and endangered species.</p>	<p><input checked="" type="checkbox"/> <b>IPaC report attached.</b></p> <p><b>Per the attached IPaC Report, the facility does not impact any newly listed species since the prior LIHI re-certification. The only species on the T&amp;E species list, the Northern Long-eared Bat, was listed in the prior LIHI re-certification.</b></p>
<p>Conduct a state threatened and endangered species data check (may require payment of fees) for newly observed or newly listed state threatened and endangered species.</p>	<p><input checked="" type="checkbox"/> <b>State listed species report attached.</b></p> <p><b>A 2021 Massachusetts threatened and endangered species study was performed and its results were compared against a 2017 study.</b></p> <p><b>That comparison found there were no newly observed or newly listed state threatened and endangered species in the Project area.</b></p> <p><b>Copies of both reports are attached at the end of Application.</b></p>
<p>Describe and summarize any studies of protected species at the facility that were completed or are ongoing during the current LIHI term.</p>	<p><input checked="" type="checkbox"/> <b>No studies have occurred or are planned.</b></p>
<p><b>11. Cultural and Historic Resources:</b></p>	
<p>Are there any structural or operational changes that have occurred or are planned that affect or could affect cultural or historic resources?</p>	<p><input checked="" type="checkbox"/> <b>Yes.</b></p> <p><b>While changes have occurred, no additional changes are planned. The Project’s CRMP was updated for the loss of one historical structure due to a weather event beyond the control of the Applicant.</b></p> <p><b>Appropriate correspondence and annual reports are attached at the end of this Application.</b></p>
<p>Describe and summarize any cultural or historic resource studies at the facility, that were completed or are ongoing during the current LIHI term including mitigation measures taken or planned.</p>	<p><input checked="" type="checkbox"/> <b>No studies have occurred or are planned.</b></p> <p><b>There are no management plans that may affect the facility’s compliance with the Project’s CRMP.</b></p>
<p><b>12. Recreational Resources:</b></p>	

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<p>Provide a description of and current photos of formal and informal recreation areas/facilities along with a description of any temporary or permanent changes in recreational facilities or services, including consultation with recreational stakeholders during the current LIHI term or planned in the foreseeable future.</p>	<p><input checked="" type="checkbox"/> <b>Yes, recreation area photos attached.</b>  <input checked="" type="checkbox"/> <b>No changes have occurred or are planned.</b>  <b>The Applicant maintains the bottom third of the road to Wilcox Hollow as well as its parking lot. On the powerhouse side of the Deerfield River, the Applicant maintains picnic facilities just outside of the entrance to the Project. The Applicant maintains a nature trail, starting at the power canal and ending on the tailrace discharge. There were no changes to recreational facilities or services during the current LIHI term nor are any planned in the foreseeable future.</b></p>
<p>Provide a summary of inquiries and comments received from stakeholders about recreation sites during the current LIHI term, including any changes made as a result.</p>	<p><input checked="" type="checkbox"/> <b>Yes, inquiries were received regarding the need for repairs to the Wilcox Hollow access road.</b></p> <p><b>The road is owned by three parties, Mass DCR (parcel 3), NSTAR (parcel 6) and the Project (parcel 7). (A plot of the land is attached for review). The NSTAR portion is in the worst shape and needs repair while the Project's portion, the lower 1/3 of the road and its parking lot, is in good shape.</b></p> <p><b>Discussions regarding making immediate repairs to the Wilcox Hollow access road are on going.</b></p>
<p>If applicable, provide links to or copies of, any FERC Environmental and Recreation Inspection reports and reports of follow up activities during the current LIHI term.</p>	<p><input checked="" type="checkbox"/> <b>Yes.</b></p> <p><b>FERC Environmental Inspection occurred on August 22, 2016. That report and related correspondence is attached. Based upon that inspection, there were no follow-up activities.</b></p>
<p>If there is a recreation management plan for the facility, provide any updates to the plan that have occurred during the current LIHI term.</p>	<p><input checked="" type="checkbox"/> <b>No changes have occurred or are planned.</b></p>
<p><b>13. Other:</b></p>	
<p>Provide updated photos of key project features and updated maps if the FERC boundary has changed.</p>	<p><input checked="" type="checkbox"/> <b>Yes, photos attached.</b></p>

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If the FERC boundary has changed during the current LIHI term, provide updated maps.	<input checked="" type="checkbox"/> <b>No FERC boundary changes have occurred.</b>
Review and update the <a href="#">facility, agency, and stakeholder contact lists</a> from the prior LIHI application, including all requested contact information therein.	<input checked="" type="checkbox"/> <b>Yes, updated contact list is attached.</b>
Provide a signed <a href="#">Sworn Statement and Waiver Form</a> .	<input checked="" type="checkbox"/> <b>Signed statement attached.</b>

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### Appendices

- 1. Updated Facility Information Table**  
Single Facility Form
- 2. FERC Orders Since 2015**  
Fish Passage  
Name or Ownership Changes
- 3. Stakeholder Inquiries**  
Summary of Meeting Notes regarding repairs to Wilcox Hollow access road between the Mass DCR, NSTAR and the Project
- 4. DRAFT Massachusetts Department of Environmental Protection letter on Water Quality Certificate.**
- 5. Gardners Falls Project report on impaired waters classifications.**
- 6. Gardners Falls Project changes in downstream fish passage requirement.**
- 7. Gardners Falls Project annual reconnaissance reports.**
- 8. Gardners Falls Project Threatened and Endangered Species.**  
IPaC report  
NHESP report
- 9. Gardners Falls Project Cultural and Historic Resources.**  
Annual CRMP compliance reports  
10-year Update of Project's CRMP
- 10. Recreational Resources**  
Wilcox Hollow  
Environmental Inspection Report
- 11. Gardners Falls Photographs**
- 12. Gardners Falls Project Updated Contact List**
- 13. Gardners Falls Project Signed Statement**

**Table B-1.1. Facility Information.**

<b>Item</b>	<b>Information Requested</b>	<b>Response (include references to further details)</b>
<b>Name of the Facility</b>	Facility name (use FERC project name or other legal name)	<b>Gardners Falls Project</b>
<b>Reason for applying for LIHI Certification</b>	<ol style="list-style-type: none"> <li>To participate in state RPS program and specify the state and the total MW/MWh associated with that participation (value and % of facility total Mw/MWh).</li> <li>To participate in voluntary REC market (e.g., Green-e)</li> <li>To satisfy a direct energy buyer’s purchasing requirement</li> <li>To satisfy the facility’s own corporate sustainability goals</li> <li>For the facility’s corporate marketing purposes</li> <li>Other (describe)</li> </ol>	<p><b>To participate in the Massachusetts RPS Class II program for all of the Project’s output. That annual output has been as high as nearly 15,000 MWh (14,724 MWh); however, its long-term average, 8,328 MWh, is less than 60% of that number.</b></p> <p><b>The annual value of the Massachusetts Class II program has been as high as \$400,000 while in recent years that value has been as low as 0% of that number due to extended outages.</b></p> <p><b>Future revenues from the Massachusetts RPS Class II (“Class II”) RECS are anticipated to be materially less than its highest amount due to a surplus of Class II RECs depressing Class II prices.</b></p>
	If applicable, amount of annual generation (MWh and % of total generation) for which RECs are currently received or are expected to be received upon LIHI Certification	<b>See the previous answer.</b>
<b>Location</b>	River name (USGS proper name)	<b>Deerfield River.</b>
	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: <a href="https://water.usgs.gov/wsc/map_index.html">https://water.usgs.gov/wsc/map_index.html</a>	<b>Deerfield River Watershed.</b>  <b>HUC # 01080203</b>
	Nearest town(s), county(ies), and state(s) to dam	<b>Towns of Buckland and Shelburne Falls, Franklin County and Commonwealth of Massachusetts</b>
	River mile of dam above mouth	<b>15.8 mile</b>
	Geographic latitude of dam	<b>43° 35'29.47" N</b>

<i>Item</i>	<i>Information Requested</i>	<i>Response (include references to further details)</i>
	Geographic longitude of dam	72° 43'42.58" W
<b>Facility Owner</b>	Application contact names (Complete the Contact Form in <a href="#">Section B-4</a> also):	Central Rivers Power MA, LLC
	Facility owner company and authorized owner representative name. <b>For recertifications: If ownership has changed since last certification, provide the effective date of the change.</b>	<p><b>Facility Owner Representative:</b>  Curtis Mooney, M.S.  Manager, Regulatory Compliance  Central Rivers Power NH, LLC  59 Ayers Island Road  Bristol, New Hampshire 03222  Office: (603) 744-0846  Mobile: (603) 530-2200  <a href="mailto:cmooney@centralriverspower.com">cmooney@centralriverspower.com</a></p> <p><b>Facility Operator:</b>  Luke W. Wright  President/Owner  Ware River Power, Inc.  P.O. Box 512  Barre, Massachusetts 01005  Office: (978) 355-4575  Cell: (978) 852-6034  <a href="mailto:lwright@wareriverpower.com">lwright@wareriverpower.com</a></p> <p><b>Authorized Owner Representative:</b>  William P. Short III  Consultant  P.O. Box 237173  New York, New York 10023-7173  Office: (917) 206-0001  Cell: (201) 970-3707  <a href="mailto:w.shortiii@verizon.net">w.shortiii@verizon.net</a></p> <p>While technically not an ownership change but a name change, Central Rivers Power MA, LLC became the current owner of the Project on July 18, 2018.</p>
	FERC licensee company name (if different from owner)	Central Rivers Power MA, LLC
<b>Regulatory Status</b>	FERC Project Number (e.g., P-xxxxx), issuance and expiration dates, or date of exemption	Project No. 2234; Issued April 4, 1997; Expiration March 31, 2037.
	FERC license type (major, minor, exemption) or special classification (e.g., "qualified conduit", "non-jurisdictional")	Major license.

<b>Item</b>	<b>Information Requested</b>	<b>Response (include references to further details)</b>
	Water Quality Certificate identifier, issuance date, and issuing agency name. Include information on amendments.	<a href="#">Water Quality Certification Gardners Falls Hydroelectric Project, FERC Project No.-2334-01, December 14, 1994, Massachusetts Department of Environmental Protection; no amendments.</a>
	Hyperlinks to key electronic records on FERC e-library website or other publicly accessible data repositories <sup>1</sup>	<a href="#">All key FERC records or other public documents on the Project are already on the LIHI website from previous applications for LIHI certification or attached to this application for re-certification.</a>
<b>Powerhouse</b>	Date of initial operation (past or future for pre-operational applications)	<a href="#">The Project was originally constructed in 1904. The original project included two hydro-electric turbines. The powerhouse was expanded in 1914 with the installation of two more turbines, followed by a final expansion in 1924 with the addition of a fifth turbine. One of the original turbines (“Unit 1”) was retired in 1971. The Unit 1 penstock was plugged and filled in when the unit was removed from service. Currently, the Project is semi-automated and contains four active units.</a>
	Total installed capacity (MW) <b>For recertifications: Indicate if installed capacity has changed since last certification</b>	<a href="#">3.58 MW.</a> <a href="#">Installed capacity has not changed since the last certification.</a>
	Average annual generation (MWh) and period of record used <b>For recertifications: Indicate if average annual generation has changed since last certification</b>	<a href="#">Average annual generation from 2002 through August 2020 is 8,328 MWh.</a> <a href="#">Average annual generation has not changed materially since the last certification.</a>

<sup>1</sup> 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, 3<sup>rd</sup>-party agreements about water or land management, grants of right-of-way, U.S. Army Corps of Engineers permits, and other regulatory documents. If extensive, the list of hyperlinks can be provided separately in the application.

<i>Item</i>	<i>Information Requested</i>	<i>Response (include references to further details)</i>
	<p><u>Mode of operation</u> (run-of-river, peaking, pulsing, seasonal storage, diversion, etc.)  <b>For recertifications: Indicate if mode of operation has changed since last certification</b></p>	<p>The Gardners Falls project is operated in a limited pond-and-release mode, utilizing the small storage capacity (37.2 acre-feet) afforded by a maximum 1.8-foot drawdown to accommodate the flows caused by the upstream peaking operations of Great River Hydro or Bear Swamp Power Company.</p> <p>Mode of operation has not changed since last certification.</p>
	<p>Number, type, and size of turbine/generators, including maximum and minimum hydraulic capacity and maximum and minimum output of each turbine and generator unit</p>	<p>Four turbines;  Unit #2: Rodney Hunt; 783.7 hp; 230 cfs Maximum hydraulic capacity; <b>minimum hydraulic capacity is not known.</b>  Unit #3: S. Morgan Smith; 1450 hp; 370 cfs Maximum hydraulic capacity; <b>minimum hydraulic capacity is not known.</b>  Unit #4: S. Morgan Smith; 1450 hp; 370 cfs Maximum hydraulic capacity; <b>minimum hydraulic capacity is not known.</b>  Unit #5: S. Morgan smith; 1700 hp; 450 cfs Maximum hydraulic capacity; <b>minimum hydraulic capacity is not known.</b></p>
	<p>Trashrack clear spacing (inches) for each trashrack</p>	
	<p>Approach water velocity (ft/s) at each intake if known</p>	<p>The approach water velocity (ft/s) at each intake is not known.</p>
	<p>Dates and types of major equipment upgrades  <b>For recertifications: Indicate only those since last certification</b></p>	<p>There has been no major equipment upgrades since the last certification.</p>
	<p>Dates, purpose, and type of any recent operational changes  <b>For recertifications: Indicate only those since last certification</b></p>	<p>There has been no operational changes since the last certification.</p>
	<p>Plans, authorization, and regulatory activities for any facility upgrades or license or exemption amendments</p>	<p>There are no plans, authorization, and regulatory activities for any facility upgrades or license amendments.</p>

<b>Item</b>	<b>Information Requested</b>	<b>Response (include references to further details)</b>
<b>Dam or Diversion</b>	Date of original dam or diversion construction and description and dates of subsequent dam or diversion structure modifications	1904 initial; 1914 first expansion; 1925 second expansion
	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	The Project consists of a 337 foot-long, 30 foot-high dam with a maximum height of 30 feet at permanent crest elevation of 332.79 feet mean sea level (msl) and 32 feet at flashboard crest elevation 334.79 feet msl, flashboards are permitted to be up 12 months of the year
	Spillway maximum hydraulic capacity	50,000 cfs; however, during Hurricane Irene, it is estimated that the spillway handled over 75,000 cfs.
	Length and type of each penstock and water conveyance structure between the impoundment and powerhouse	The major project works consist of a dam and impoundment, a power canal, an intake structure and a powerhouse. Specifically, the Project consists of: (1) 337 foot-long, 30 foot-high dam, (2) an impoundment 3,200 feet long, with a surface area of 21 acres, 190 acre-feet gross storage and 37.2 acre-feet usable storage, (3) a brick and concrete powerhouse equipped with four turbine-generator units with total capacity 3.58 MW, (4) a 1,300-foot power canal 31 feet wide and 15 feet deep, and (5) a double circuit 13.8 KV transmission line connecting the Gardners Falls project to the Montague substation.
	Designated facility purposes (e.g., power, navigation, flood control, water supply, etc.)	The designated facility purpose of Gardners Falls Project is power generation.
<b>Conduit Facilities Only</b>	Date of conduit construction and primary purpose of conduit	Not Applicable.
	Source water	Not Applicable.
	Receiving water and location of discharge	Not Applicable.

<b>Item</b>	<b>Information Requested</b>	<b>Response (include references to further details)</b>
<b>Impoundment and Watershed</b>	<p>Authorized maximum and minimum impoundment water surface elevations  <b>For recertifications: Indicate if these values have changed since last certification</b></p>	<p><b>Maximum water surface elevation at dam crest of 332.79 feet mean sea level (msl) with a maximum flashboard water surface elevation of 334.79 feet msl.</b></p> <p><b>Minimum impoundment water surface and minimum flashboard water surface elevations are 1.8 feet less than the preceding numbers, respectively.</b></p> <p><b>None of these values have been changed since the last certification.</b></p>
	<p>Normal operating elevations and normal fluctuation range  <b>For recertifications: Indicate if these values have changed since last certification</b></p>	<p><b>Normal operating elevations are 332.79 feet msl with the flashboards out and 334.79 feet msl with the flashboards up. Normal fluctuation range (drawdown) is 1.8 feet.</b></p> <p><b>None of these values have been changed since the last certification.</b></p>
	<p>Gross storage volume and surface area at full pool  <b>For recertifications: Indicate if these values have changed since last certification</b></p>	<p><b>A 3,200 foot-long impoundment with a surface area of 21 acres, 190 acre-feet of gross storage.</b></p> <p><b>These values have not changed since the last certification.</b></p>
	<p>Usable storage volume and surface area  <b>For recertifications: Indicate if these values have changed since last certification</b></p>	<p><b>A 3,200 foot-long impoundment with a surface area of 21 acres, 37.2 acre-feet of usable storage.</b></p> <p><b>These values have not changed since the last certification.</b></p>

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	<p>Describe requirements related to impoundment inflow and outflow, elevation restrictions (e.g., fluctuation limits, seasonality) up/down ramping and refill rate restrictions.</p>	<p><b>The facility operates with a minimum flow of 150 cfs, or inflow if less. (The immediate upstream dam, Deerfield #3, has a minimum flow of 100 cfs, or inflow if less).</b></p> <p><b>The facility also operates with a maximum drawdown of 1.8 feet to enable the facility to accommodate the peaking operation of upstream dams owned by unrelated third-parties.</b></p> <p><b>There are no other elevation, up/down ramping or refill rate restrictions.</b></p>

<b>Item</b>	<b>Information Requested</b>	<b>Response (include references to further details)</b>																		
	<p>Upstream dams by name, ownership and river mile. If FERC licensed or exempt, please provide FERC Project number of these dams. Indicate which upstream dams have downstream fish passage.</p>	<p>The Gardners Falls project is situated among nine other hydroelectric facilities located on the Deerfield River. Of the nine facilities, eight are owned and operated by Great River Hydro, and are licensed as one project (“Deerfield River Project,” FERC No. 2323). The Deerfield River Project consists of one storage facility (Somerset Development) and seven hydroelectric facilities (Searsburg, Harriman, and Sherman Developments, and the Deerfield No. 5, No. 4, No. 3 and No. 2 Developments).</p> <p>The ninth, a pumped-storage project (Bear Swamp Project), is owned by Bear Swamp Power Company, LLC and operated by Brookfield Renewable Power. This project is licensed by the FERC as Project No. 2669 and is located below the Deerfield No. 5 development.</p> <p>The upstream dams and their locations are as follows:</p> <table border="0"> <tr> <td>Somerset</td> <td>river mile 66.0</td> </tr> <tr> <td>Searsburg</td> <td>river mile 60.3</td> </tr> <tr> <td>Harriman</td> <td>river mile 48.5</td> </tr> <tr> <td>Sherman</td> <td>river mile 42.0</td> </tr> <tr> <td>Deerfield No.5</td> <td>river mile 41.2</td> </tr> <tr> <td>Bear Swamp</td> <td>river mile 39.0</td> </tr> <tr> <td>Fife Brook</td> <td>river mile 37.0</td> </tr> <tr> <td>Deerfield No.4</td> <td>river mile 20.0</td> </tr> <tr> <td>Deerfield No.3</td> <td>river mile 17.0</td> </tr> </table> <p>While all upstream dams except Bear Swamp, have installed downstream fish passage, no downstream fish passage is currently operational.</p>	Somerset	river mile 66.0	Searsburg	river mile 60.3	Harriman	river mile 48.5	Sherman	river mile 42.0	Deerfield No.5	river mile 41.2	Bear Swamp	river mile 39.0	Fife Brook	river mile 37.0	Deerfield No.4	river mile 20.0	Deerfield No.3	river mile 17.0
Somerset	river mile 66.0																			
Searsburg	river mile 60.3																			
Harriman	river mile 48.5																			
Sherman	river mile 42.0																			
Deerfield No.5	river mile 41.2																			
Bear Swamp	river mile 39.0																			
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Deerfield No.4	river mile 20.0																			
Deerfield No.3	river mile 17.0																			
	<p>Downstream dams by name, ownership, river mile and FERC number if FERC licensed or exempt. Indicate which downstream dams have upstream fish passage</p>	<p>The only dam downstream of Gardners Falls Project is Deerfield No. 2. This facility is owned and operated by Great River Hydro and its FERC license number is 2323. Its location is at river mile 12.2. Deerfield No.2 has not installed upstream fish passage.</p>																		

<b>Item</b>	<b>Information Requested</b>	<b>Response (include references to further details)</b>
	Operating agreements with upstream or downstream facilities that affect water availability and facility operation	There are no operating agreements with upstream or downstream facilities that affect water availability and facility operation.
	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.	59.90 acres of which approximately 21 acres are impoundment and the balance of 38.80 acres are land.
<b>Hydrologic Setting</b>	Average annual flow at the dam, and period of record used	1,212 cfs at dam; 1,349 cfs at gage; flow at dam is a straight drainage area ratio adjustment from the gage. During Hurricane Irene, it is estimated that the spillway handled over 75,000 cfs.
	Average monthly flows and period of record used	Jan. - 1,349 cfs at dam; 1,500 cfs at gage Feb. - 1,322 cfs at dam; 1,470 cfs at gage Mar. - 1,880 cfs at dam; 2,090 cfs at gage April - 2,581 cfs at dam; 2,870 cfs at gage May - 1,484 cfs at dam; 1,650 cfs at gage June - 917 cfs at dam; 1,020 cfs at gage July - 568 cfs at dam; 632 cfs at gage August - 573 cfs at dam; 637 cfs at gage Sept. - 586 cfs at dam; 651 cfs at gage Oct. - 829 cfs at dam; 922 cfs at gage Nov. - 1,115 cfs at dam; 1,240 cfs at gage Dec. - 1,367 cfs at dam; 1,520 cfs at gage
	Location and name of closest stream gaging stations above and below the facility	USGS 01168500 Deerfield River at Charlemont, MA Lat 42° 32'09", long 72° 39'14", Franklin County, Hydrologic Unit 01080203, on right bank 0.4 mi downstream from South River, 1.2 mi west of West Deerfield, 2.5 mi west of Deerfield, and 9.2 mi upstream from mouth.
	Watershed area at the dam (in square miles). Identify if this value is prorated from gage locations and provide the basis for proration calculation.	501 square miles at the dam; 557 square miles at the gage. This value is prorated from the gage location. Central Rivers Power is unaware of the basis for the proration calculation.
	Other facility specific hydrologic information	There is no other specific hydrologic information.
<b>Designated Zones of Effect</b>	Number of zones of effect	Three
	Type of waterbody (river, impoundment, bypassed reach, etc.)	Impoundment Bypassed Reach River

<b>Item</b>	<b>Information Requested</b>	<b>Response (include references to further details)</b>
	Upstream and downstream locations by river miles	<b>Impoundment – above river mile 16.3</b> <b>Bypassed Reach – between river mile 15.8 and river mile 16.3</b> <b>River – below river mile 15.8</b>
	Delimiting structures or features	<b>1) Impoundment – from the tailrace of Deerfield No.3 to dam of Gardners Falls</b> <b>2) Bypassed Reach – Dam to tailrace of Gardners Falls</b> <b>3) River -- Tailrace of Gardners Falls to Impoundment of Deerfield No.2</b>
<b>Pre-Operational Facilities Only</b>		
<b>Expected operational date</b>	Date generation is expected to begin	<b>Not Applicable.</b>
<b>Dam, diversion structure or conduit modification</b>	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	<b>Not Applicable.</b>
<b>Change in water flow regime</b>	Description of any change in impoundment levels, water flows or operations required for new generation	<b>Not Applicable.</b>

## Contacts Forms

All applications for LIHI Certification must include complete contact information.

### A. Applicant-related contacts

<b>Facility Owner:</b>	
Name and Title	<a href="#">Matthew Stanley, VP &amp; General Manager</a>
Company	<a href="#">Central Rivers Power LLC</a>
Phone	<a href="#">(603)554-2656</a>
Email Address	<a href="mailto:mstanley@centralriverspower.com">mstanley@centralriverspower.com</a>
Mailing Address	<a href="#">670 N. Commercial Street, Manchester, NH 03101</a>
<b>Facility Operator (if different from Owner):</b>	
Name and Title	<a href="#">Lucas W. Wright, President/Owner</a>
Company	<a href="#">Ware River Power</a>
Phone	<a href="#">(978) 355-4575</a>
Email Address	<a href="mailto:lwright@wareriverpower.com">lwright@wareriverpower.com</a>
Mailing Address	<a href="#">P.O. Box 512, Barre, Massachusetts 01005</a>
<b>Consulting Firm / Agent for LIHI Program (if different from above):</b>	
Name and Title	<a href="#">William P. Short III</a>
Company	<a href="#">William P. Short III</a>
Phone	<a href="#">(201) 970-3707</a>
Email Address	<a href="mailto:w.shortiii@verizon.net">w.shortiii@verizon.net</a>
Mailing Address	<a href="#">P.O. Box 237173, New York, New York 10023-7173</a>
<b>Compliance Contact (responsible for LIHI Program requirements):</b>	
Name and Title	<a href="#">Curtis Mooney, M.S., Manager, Regulatory Compliance</a>
Company	<a href="#">Central Rivers Power NH, LLC</a>
Phone	<a href="#">(603) 530-2200</a>
Email Address	<a href="mailto:cmooney@centralriverspower.com">cmooney@centralriverspower.com</a>
Mailing Address	<a href="#">59 Ayers Island Road, Bristol, New Hampshire 03222</a>
<b>Party responsible for accounts payable:</b>	
Name and Title	<a href="#">Stacey Blair, AP Manager</a>
Company	<a href="#">Central Rivers Power MA, LLC</a>
Phone	<a href="#">978-604-0920</a>
Email Address	<a href="mailto:accounting@centralriverspower.com">accounting@centralriverspower.com</a>
Mailing Address	<a href="#">670 N. Commercial Street, Suite 204, Manchester, New Hampshire 03101</a> <a href="#">(do not mail – please email only)</a>

**B. Current and relevant state, federal, and tribal resource agency contacts with knowledge of the facility (copy and repeat the following table as needed).**

<i>Agency Contact</i>		<i>Area of Responsibility</i>
Agency Name	<b>Massachusetts Department of Environmental Protection Division of Watershed Management</b>	<input checked="" type="checkbox"/> <b>Flows</b> <input checked="" type="checkbox"/> <b>Water Quality</b> <input type="checkbox"/> Fish/Wildlife <input type="checkbox"/> Watershed <input type="checkbox"/> T&E Species <input type="checkbox"/> Cultural/Historic <input type="checkbox"/> Recreation
Name and Title	<b>Derek Standish</b>	
Phone	<b>(339) 225-5084</b>	
Email address	<b><a href="mailto:derek.standish@mass.gov">derek.standish@mass.gov</a></b>	
Mailing Address	<b>627 Main Street Worcester, Massachusetts 01608</b>	

<i>Agency Contact</i>		<i>Area of Responsibility</i>
Agency Name	<b>Massachusetts Division of Fisheries &amp; Wildlife Division of Fisheries &amp; Wildlife</b>	<input type="checkbox"/> Flows <input type="checkbox"/> Water Quality <input type="checkbox"/> Fish/Wildlife <input type="checkbox"/> Watershed <input checked="" type="checkbox"/> <b>T&amp;E Species</b> <input type="checkbox"/> Cultural/Historic <input type="checkbox"/> Recreation
Name and Title	<b>Eve Schlüter, Assistant Director</b>	
Phone	<b>(508) 389-6346</b>	
Email address	<b><a href="mailto:eve.schluter@mass.gov">eve.schluter@mass.gov</a></b>	
Mailing Address	<b>1 Rabbit Hill Road, North Drive Westborough, Massachusetts 01581</b>	

<i>Agency Contact</i>		<i>Area of Responsibility</i>
Agency Name	<b>Massachusetts Division of Fisheries and Wildlife</b>	<input checked="" type="checkbox"/> <b>Flows</b> <input type="checkbox"/> Water Quality <input checked="" type="checkbox"/> <b>Fish/Wildlife</b> <input type="checkbox"/> Watershed <input type="checkbox"/> T&E Species <input type="checkbox"/> Cultural/Historic <input type="checkbox"/> Recreation
Name and Title	<b>Steven Mattocks</b>	
Phone	<b>(508) 389-6339</b>	
Email address	<b><a href="mailto:steven.mattocks@state.ma.us">steven.mattocks@state.ma.us</a></b>	
Mailing Address	<b>100 Hartwell Street, Suite 230 West Boylston, MA 01583</b>	

<b>Agency Contact</b>		<b>Area of Responsibility</b>
Agency Name	<b>United States Fish and Wildlife Service</b>	<input checked="" type="checkbox"/> <b>Flows</b>
Name and Title	<b>Melissa Grader, Fish and Wildlife Biologist</b>	<input type="checkbox"/> Water Quality
Phone	<b>(413) 548-9138</b>	<input checked="" type="checkbox"/> Fish/Wildlife
Email address	<b><a href="mailto:Melissa_Grader@fws.gov">Melissa_Grader@fws.gov</a></b>	<input type="checkbox"/> Watershed
Mailing Address	<b>US FWS/New England Field Office c/o CT River Coordinator's Office 103 East Plumtree Road Sunderland, Massachusetts 01375</b>	<input checked="" type="checkbox"/> T&E Species
		<input type="checkbox"/> Cultural/Historic
		<input type="checkbox"/> Recreation

<b>Agency Contact</b>		<b>Area of Responsibility</b>
Agency Name	<b>Massachusetts Historical Commission</b>	<input type="checkbox"/> Flows
Name and Title	<b>Ed Bell</b>	<input type="checkbox"/> Water Quality
Phone	<b>(617) 727-8470</b>	<input type="checkbox"/> Fish/Wildlife
Email address	<b><a href="mailto:Ed.Bell@sec.state.ma.us">Ed.Bell@sec.state.ma.us</a></b>	<input type="checkbox"/> Watershed
Mailing Address	<b>220 Morrissey Boulevard Boston, Massachusetts 02125</b>	<input type="checkbox"/> T&E Species
		<input checked="" type="checkbox"/> Cultural/Historic
		<input type="checkbox"/> Recreation

<b>Agency Contact</b>		<b>Area of Responsibility</b>
Agency Name	<b>Massachusetts Department of Conservation &amp; Recreation</b>	<input type="checkbox"/> Flows
Name and Title	<b>Jennifer Howard</b>	<input type="checkbox"/> Water Quality
Phone	<b>(413) 586-8706 x 12</b>	<input type="checkbox"/> Fish/Wildlife
Email address	<b><a href="mailto:Jennifer.howard@mass.gov">Jennifer.howard@mass.gov</a></b>	<input type="checkbox"/> Watershed
Mailing Address	<b>136 Damon Road Northampton, Massachusetts 01060</b>	<input type="checkbox"/> T&E Species
		<input type="checkbox"/> Cultural/Historic
		<input checked="" type="checkbox"/> Recreation

C. Current stakeholder contacts that are actively engaged with the facility (copy and repeat the following table as needed).

<i>Stakeholder Contact</i>		<i>Area of Responsibility</i>
Organization Name	<b>Deerfield River Watershed Association</b>	<input type="checkbox"/> Flows
Name and Title	<b>Jim Perry, President</b>	<input type="checkbox"/> Water Quality
Phone	<b>(413) 772-2020</b>	<input type="checkbox"/> Fish/Wildlife
Email address	<a href="mailto:drwa@deerfieldriver.org">drwa@deerfieldriver.org</a>	<input type="checkbox"/> Watershed
Mailing Address	<b>15 Bank Row, Suite A Greenfield, Massachusetts 01301</b>	<input type="checkbox"/> T&E Species
		<input type="checkbox"/> Cultural/Historic
		<input checked="" type="checkbox"/> <b>Recreation</b>

<i>Stakeholder Contact</i>		<i>Area of Responsibility</i>
Organization Name	<b>Connecticut River Conservancy</b>	<input type="checkbox"/> Flows
Name and Title	<b>Andrea Donlon, River Steward</b>	<input type="checkbox"/> Water Quality
Phone	<b>(413) 772-2020 ext. 205</b>	<input type="checkbox"/> Fish/Wildlife
Email address	<a href="mailto:adonlon@ctriver.org">adonlon@ctriver.org</a>	<input type="checkbox"/> Watershed
Mailing Address	<b>15 Bank Row Greenfield, Massachusetts 01301</b>	<input type="checkbox"/> T&E Species
		<input type="checkbox"/> Cultural/Historic
		<input checked="" type="checkbox"/> <b>Recreation</b>

<i>Stakeholder Contact</i>		<i>Area of Responsibility</i>
Organization Name	<b>NSTAR Electric Company dba Eversource Energy</b>	<input type="checkbox"/> Flows
Name and Title	<b>Christopher A. Soroka Transmission &amp; Distribution Rights and Survey</b>	<input type="checkbox"/> Water Quality
Phone	<b>860-706-3123 (cell)</b>	<input type="checkbox"/> Fish/Wildlife
Email address	<a href="mailto:christopher.soroka@eversource.com">christopher.soroka@eversource.com</a>	<input type="checkbox"/> Watershed
Mailing Address	<b>107 Selden Street Berlin, Connecticut 06037</b>	<input type="checkbox"/> T&E Species
		<input type="checkbox"/> Cultural/Historic
		<input checked="" type="checkbox"/> <b>Recreation</b>

## SWORN STATEMENT

*As an Authorized Representative of [Central Rivers Power, LLC](#), the Undersigned attests that the material presented in the application is true and complete.*

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

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

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

### **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: [Central Rivers Power, LLC](#)

Authorized Representative:

Name: [Matthew Stanley](#)

Title: [Vice President and General Manager](#)

Authorized Signature: \_\_\_\_\_



Date: 5/21/2021