

**LIHI CERTIFICATION HANDBOOK**

**-- PART VII --  
CERTIFICATION QUESTIONNAIRE**

\*\* PLEASE SUBMIT THIS QUESTIONNAIRE IN WORD FORMAT \*\*

<b>Background Information</b>	
1) Name of the Facility as used in the FERC license/exemption.	Stevens Mill Hydroelectric Project
2) Applicant's name, contact information and relationship to the Facility. If the Applicant is not the Facility owner/operator, also provide the name and contact information for the Facility owner and operator.	<p>Essex Power Services Inc. (agent)            For Eagle Creek Renewable Energy LLC (owner and operator)            55 Union Street, 4th Floor            Boston, MA 02108            ATTN: Stephen Hickey            tel: (617) 367-0032            email: <a href="mailto:sjh@essexhydro.com">sjh@essexhydro.com</a></p> <p><b>Eagle Creek Renewable Energy LLC (owner)</b>  <b>Attn: Dave Youlen, Executive Vice President</b>  <b>65 Madison Avenue, Suite 500</b>  <b>Morristown, NJ 07960</b>  <b>Tel: 973-998-8400</b>  <b>Email: <a href="mailto:dave.youlen@eaglecreekre.com">dave.youlen@eaglecreekre.com</a></b></p>
3) Location of Facility including (a) the state in which Facility is located; (b) the river on which Facility is located; (c) the river-mile location of the Facility dam; (d) the river's drainage area in square miles at the Facility intake; (e) the location of other dams on the same river upstream and downstream of the Facility; and (f) the exact latitude and longitude of the	<p>(a) New Hampshire            (b) Winnepesaukee River  <b>(c) River Mile 1.5</b>            (d) 490 miles            (e) see attached appendix 3-a</p>

Facility dam.	(f) Lat. 43°26'46.21"N, Long. 71°38'39.88"W
4) Installed capacity.	Stevens Mill: 0.340 MW River Bend: 1.6 MW
5) Average annual generation.	Stevens Mill: 1,182 MWh River Bend: 3,539 MWh
6) Regulatory status.	FERC Exemption Project No. 3760 dtd June 14, 1983 (see Appendix 1-1)  <b>Please see attached <i>Appendix I.6_19980820_ Order Amending Exemption 3760</i> for a copy of the FERC Order amending exemption No. 3760 issued August 20, 1998. The applicant is not aware of any compliance issues that have occurred at the project and does not have a copy of agency terms and conditions letters for the exemption.</b>
7) Reservoir volume and surface area measured at the normal maximum operating level.	Reservoir Volume: 7 acre-feet Surface Area: 1 acre
8) Area occupied by non-reservoir facilities ( <i>e.g.</i> , dam, penstocks, powerhouse).	4.6 acres
9) Number of acres inundated by the Facility.	<b>The applicant is uncertain of the number of acres inundated by the facility. Given the answer if optional, the applicant chooses not to respond to this question.</b>
10) Number of acres contained in a 200-foot zone extending around entire reservoir.	Approximately 4.8 acres
11) Contacts for Resource Agencies and non-governmental organizations	See Appendix 2

12) Description of the Facility, its mode of operation ( <i>i.e.</i> , peaking/run of river) and photographs, maps and diagrams.	See Appendix 3  <b>Please see attached Appendix I.12 for photos of the Stevens Mill and River Bend powerhouses ,the Stevens Mill dam from downstream and the Winnepesaukee river from the dam to the River Bend tailrace.</b>
<b>Questions for “New” Facilities Only:</b>  If the Facility you are applying for is “new” ( <i>i.e.</i> , an existing dam that added or increased power generation capacity after August of 1998) please answer the following questions to determine eligibility for the program	N/A
13) When was the dam associated with the Facility completed?	N/A
14) When did the added or increased generation first generate electricity? If the added or increased generation is not yet operational, please answer question 18 as well.	N/A
15) Did the added or increased power generation capacity require or include any new dam or other diversion structure?	N/A
16) Did the added or increased capacity include or require a change in water flow through the facility that worsened conditions for fish, wildlife, or water quality (for example, did operations change from run-of-river to peaking)?	N/A

<p>17 (a) Was the existing dam recommended for removal or decommissioning by resource agencies, or recommended for removal or decommissioning by a broad representation of interested persons and organizations in the local and/or regional community prior to the added or increased capacity?</p> <p>(b) If you answered “yes” to question 17(a), the Facility is not eligible for certification, unless you can show that the added or increased capacity resulted in specific measures to improve fish, wildlife, or water quality protection at the existing dam. If such measures were a result, please explain.</p>	N/A	
<p>18 (a) If the added or increased generation is not yet operational, has the increased or added generation received regulatory authorization (e.g., approval by the Federal Energy Regulatory Commission)? If not, the facility is not eligible for consideration; and</p> <p>(b) Are there any pending appeals or litigation regarding that authorization? If so, the facility is not eligible for consideration.</p>	N/A	
<i>A. Flows</i>	PASS	FAIL
<p>1) Is the Facility in <i>Compliance with Resource Agency Recommendations</i> issued after December 31, 1986 regarding flow conditions for fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking rate conditions, and seasonal and episodic instream flow variations) for both the reach below the tailrace and all bypassed reaches?</p>	<p>N/A</p> <p>See Appendix A</p> <p><b>The applicant does not have an update regarding the minimum flow reviews. The applicant will copy LIHI on any</b></p>	

	<p><b>communications with USFWS, NH F&amp;G and NH DES regarding flows and proposes this as a condition of LIHI's certification of the project.</b></p>	
<p>2) If there is no flow condition recommended by any Resource Agency for the Facility, or if the recommendation was issued prior to January 1, 1987, is the Facility in Compliance with a flow release schedule, both below the tailrace and in all bypassed reaches, that at a minimum meets Aquatic Base Flow standards or "good" habitat flow standards calculated using the Montana-Tennant method?</p>	<p>NO = Go to A3</p>	
<p>3) <i>If the Facility is unable to meet the flow standards in A.2., has the Applicant demonstrated, and obtained a letter from the relevant Resource Agency confirming that demonstration, that the flow conditions at the Facility are appropriately protective of fish, wildlife, and water quality?</i></p>	<p>YES = Pass, go to B</p> <p><b>The applicant will develop a flow monitoring plan approved by the Resource Agencies and will forward that plan and agency approval to LIHI. The applicant suggests this be a condition of the LIHI certification.</b></p> <p><b>Due to mechanical malfunctions with the data loggers</b></p>	

	<p>used in 2013 to test the water quality above and below the projects, the applicant has secured a commitment from NH DES to re test the water in 2015. See Appendix A.3_NHDES commitment ltr. The applicant will forward the test results and NH DES analysis to LIHI upon receipt. The applicant recommends this be a condition of low impact certification.</p> <p>The applicant does not have access to the FERC inspection reports for the project.</p>	
<p><b>B. Water Quality</b></p>	<p>PASS</p>	<p>FAIL</p>
<p>1) Is the Facility either:</p> <p>a) In Compliance with all conditions issued pursuant to a Clean Water Act Section 401 water quality certification issued for the Facility after December 31, 1986? Or</p>	<p>YES = Go to B2</p> <p><b>The applicant had approval from NH</b></p>	

<p>b) In Compliance with the quantitative water quality standards established by the state that support designated uses pursuant to the federal Clean Water Act in the Facility area and in the downstream reach?</p>	<p><b>DES to begin the sampling program prior to the receipt of a formal plan. The applicant has conducted numerous water quality monitoring programs for NH DES and visited the site with NH DES personnel during the sampling and prior to the receipt of a formal plan. See attached appendix B.1.b for confirmation from NH DES. As discussed in the applicant's response to A.3, Due to mechanical malfunctions with the data loggers used in 2013 to test the water quality above and below the projects, the applicant has secured a commitment from</b></p>	
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	<p><b>NH DES to re test the water in 2015. See appendix A.3. The applicant will forward the test results and NH DES analysis to LIHI upon receipt. The applicant recommends this be a condition of low impact certification.</b></p>	
<p>2) Is the Facility area or the downstream reach currently identified by the state as not meeting water quality standards (including narrative and numeric criteria and designated uses) pursuant to Section 303(d) of the Clean Water Act?</p>	<p><b>NO = Pass</b>  <b>As discussed in the applicant's response to A.3 and B.1.b, the applicant has committed and NH DES has confirmed they will work together to re sample the Facility area in 2015. The results will be provided to LIHI. With regard to the downstream reach, the impoundment and tailrace of the immediately</b></p>	



	<p>downstream Franklin Falls hydroelectric project (LIHI Cert No. 83 were assessed in 2011 and approved by NH DES as meeting NH State Water Quality Standards. No stretch of the Winnepesaukee River is listed on the NH 2012 303d list as being impaired. See <a href="http://des.nh.gov/organization/divisions/water/wmb/sw/qa/2012/documents/2012-final_303d_submitted.pdf">http://des.nh.gov/organization/divisions/water/wmb/sw/qa/2012/documents/2012-final_303d_submitted.pdf</a></p>	
<p>3) If the answer to question B.2 is yes, has there been a determination that the Facility does not cause, or contribute to, the violation?</p>	<p>N/A</p>	
<p><b>C. Fish Passage and Protection</b></p>	<p>PASS</p>	<p>FAIL</p>

<p>1) Is the Facility in Compliance with <i>Mandatory Fish Passage Prescriptions</i> for upstream and downstream passage of anadromous and catadromous fish issued by Resource Agencies after December 31, 1986?</p>	<p>YES = Go to C5 See Appendix C</p> <p><b>There are not formal fish passage prescriptions for this project. The applicant has voluntarily entered into a legally binding MOA with USFWS which was approved by NH F&amp;G. (see attached Appendix C.1 ECRE-USFWS MOA w. NHFG approval. Per the terms of the MOA, the applicant has budgeted in 2015 to install ¾" exclusionary trash racks and an angled surface boom for the protection of out migrating catadromous and anadromous species as required by the USFWS and NH F&amp;G. The applicant proposes that a condition be added</b></p>	
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	<p><b>to LIHI's certification of the project requiring that LIHI be copied on correspondence with the agencies and their official approval of the installed exclusionary measures.</b></p>	
<p>2) Are there historic records of anadromous and/or catadromous fish movement through the Facility area, but anadromous and/or catadromous fish do not presently move through the Facility area (<i>e.g.</i>, because passage is blocked at a downstream dam or the fish no longer have a migratory run)?</p> <p>a) If the fish are extinct or extirpated from the Facility area or downstream reach, has the Applicant demonstrated that the extinction or extirpation was not due in whole or part to the Facility?</p> <p>b) If a Resource Agency Recommended adoption of upstream and/or downstream fish passage measures at a specific future date, or when a triggering event occurs (such as completion of passage through a downstream obstruction or the completion of a specified process), has the Facility owner/operator made a legally enforceable commitment to provide such passage?</p>	<p><b>The applicant is unaware if there are historic records of anadromous and/or catadromus fish movement through the area but has agreed in its MOA with USFWS and NH F&amp;G (the agencies) to protect out migrating anadromous and/or catadromous species and install upstream passage facilities if/when they are required by the agencies</b></p> <p><b>(a) The applicant is unaware if there are</b></p>	

	<p><b>historic records of anadromous and/or catadromus fish movement through the area but has agreed in its MOA with USFWS and NH F&amp;G (the agencies) to protect out migrating anadromous and/or catadromous species and install upstream passage facilities if/when they are required by the agencies</b></p> <p><b>(b) The applicant has voluntarily entered into a legally binding MOA with USFWS and NH F&amp;G (the agencies) to protect existing out migrating anadromous and/or catadromous species and install upstream passage facilities if/when they are required by the agencies. The applicant proposes</b></p>	
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	<p><b>that a condition be added to its low impact certification that LIHI be copied on final approval of the as built passage measures constructed by the applicant in 2015.</b></p>	
<p>3) If, since December 31, 1986:</p> <ul style="list-style-type: none"> <li>a) Resource Agencies have had the opportunity to issue, and considered issuing, a Mandatory Fish Passage Prescription for upstream and/or downstream passage of anadromous or catadromous fish (including delayed installation as described in C2a above), and</li> <li>b) The Resource Agencies declined to issue a Mandatory Fish Passage Prescription,</li> <li>c) Was a reason for the Resource Agencies' declining to issue a Mandatory Fish Passage Prescription one of the following: (1) the technological infeasibility of passage, (2) the absence of habitat upstream of the Facility due at least in part to inundation by the Facility impoundment, or (3) the anadromous or catadromous fish are no longer present in the Facility area and/or downstream reach due in whole or part to the presence of the Facility?</li> </ul>	<p><b>(a) The applicant chooses to respond N/A, no mandatory fish passage prescription have been issued for the Facility. The applicant has voluntarily entered into a legally binding MOA with USFWS and NH F&amp;G (the agencies) to protect existing out migrating anadromous and/or catadromous species and install upstream passage facilities if/when they are required by the agencies. The applicant proposes</b></p>	

	<p><b>that a condition be added to its low impact certification that LIHI be copied on final approval of the as built passage measures constructed by the applicant in 2015.</b></p> <p><b>(b) No mandatory fish passage prescription have been issued for the Facility. The applicant has voluntarily entered into a legally binding MOA with USFWS and NH F&amp;G (the agencies) to protect existing out migrating anadromous and/or catadromous species and install upstream passage facilities if/when they are required by the agencies. The applicant proposes that a condition be added to its low impact certification</b></p>	
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	<p><b>that LIHI be copied on final approval of the as built passage measures constructed by the applicant in 2015.</b></p> <p><b>(c)(1) The applicant is uncertain why no mandatory fish passage prescriptions have been required at the Facility.</b></p> <p><b>(c)(2) Habitat exists upstream of the Facility in Lake Winnepesaukee.</b></p> <p><b>(c)(3) Both anadromous and catadromous species exist at the Facility. The applicant has voluntarily entered into a legally binding MOA with USFWS and NH F&amp;G (the agencies) to protect existing out migrating anadromous and/or catadromous species</b></p>	
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	<p>and install upstream passage facilities if/when they are required by the agencies. The applicant proposes that a condition be added to its low impact certification that LIHI be copied on final approval of the as built passage measures constructed by the applicant in 2015.</p>	
<p>4) If C3 was not applicable:</p> <p>a) Are upstream and downstream fish passage survival rates for anadromous and catadromous fish at the dam each documented at greater than 95% over 80% of the run using a generally accepted monitoring methodology? Or</p> <p>b) If the Facility is unable to meet the fish passage standards in 4.a, has the Applicant either i) demonstrated, and obtained a letter from the U.S. Fish and Wildlife Service or National Marine Fisheries Service confirming that demonstration, that the upstream and downstream fish passage measures (if any) at the Facility are appropriately protective of the fishery resource, or ii) committed to the provision of fish passage measures in the future and obtained a letter from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service indicating that passage measures are not currently warranted?</p>	<p><b>(a) Section 4.5 of the MOA, <i>Fish Passage Monitoring and Modifications</i>, commits the applicant to working with the USFWS to evaluate the effectiveness of the adopted fish passage measures and the applicant agrees to implement reasonable modifications to the passage facilities and</b></p>	<p>NO = Fail</p>



	<p><b>their operation in order to provide for safe, timely and effective passage of diadromous fish. The applicant proposes to copy LIHI on all correspondence and approvals received from the agencies.</b></p> <p><b>(b) Section 4.5 of the MOA, <i>Fish Passage Monitoring and Modifications</i>, commits the applicant to working with the USFWS to evaluate the effectiveness of the adopted fish passage measures and the applicant agrees to implement reasonable modifications to the passage facilities and their operation in order to provide for safe, timely and effective passage of diadromous fish. The applicant proposes LIHI create a</b></p>	
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	<p><b>condition in the certification to copy LIHI on all correspondence and approvals received from the agencies. IN addition to USFWS and NH F&amp;G, the applicant will include comments from the National Marine Fisheries Service confirming the downstream passage measures are appropriately protective of the fisheries resource.</b></p>	
<p>5) Is the Facility in Compliance with Mandatory Fish Passage Prescriptions for upstream and/or downstream passage of <i>Riverine</i> fish?</p>	<p><b>N/A</b></p>	<p>NO = Fail</p>
<p>6) Is the Facility in Compliance with Resource Agency Recommendations for Riverine, anadromous and catadromous fish entrainment protection, such as tailrace barriers?</p>	<p><b>The applicant is unable to locate any Resource Agency terms and condition letters. The applicant proposes that its commitment in the MOA with USFWS and NH F&amp;G supports a “Yes” answer for this</b></p>	<p>NO = Fail</p>

	<b>question. The applicant will copy LIHI on the agencies' approval of the passage measures installed by the applicant during 2015.</b>	
<b>D. Watershed Protection</b>	<b>PASS</b>	<b>FAIL</b>
1 ) Is there a buffer zone dedicated for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low-impact recreation) extending 200 feet from the average annual high water line for at least 50% of the shoreline, including all of the undeveloped shoreline?		NO = go to D2
2 ) Has the Facility owner/operator established an approved watershed enhancement fund that: 1) could achieve within the project's watershed the ecological and recreational equivalent of land protection in D.1, and 2) has the agreement of appropriate stakeholders and state and federal resource agencies?		NO = go to D3
3 ) Has the Facility owner/operator established through a settlement agreement with appropriate stakeholders, with state and federal resource agencies agreement, an appropriate shoreland buffer or equivalent watershed land protection plan for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low impact recreation)?		NO = go to D4
4 ) Is the facility in compliance with both state and federal resource agencies recommendations in a license approved shoreland management plan regarding protection, mitigation or enhancement of shorelands surrounding the project?	<b>The applicant is unable to locate any Resource Agency terms and condition letters. The applicant is unaware of any state or federally approved shoreland management plan for the Facility. The Facility is operated</b>	

	<b>run-of-river which should mitigate any shoreland erosion.</b>	
<b>E. Threatened and Endangered Species Protection</b>	PASS	FAIL
1) Are threatened or endangered species listed under state or federal Endangered Species Acts present in the Facility area and/or downstream reach?	No See Appendix E-1	
2) If a recovery plan has been adopted for the threatened or endangered species pursuant to Section 4(f) of the Endangered Species Act or similar state provision, is the Facility in Compliance with all recommendations in the plan relevant to the Facility?	N/A	
3) If the Facility has received authorization to incidentally <i>Take</i> a listed species through: (i) Having a relevant agency complete consultation pursuant to ESA Section 7 resulting in a biological opinion, a habitat recovery plan, and/or (if needed) an incidental Take statement; (ii) Obtaining an incidental Take permit pursuant to ESA Section 10; or (iii) For species listed by a state and not by the federal government, obtaining authorization pursuant to similar state procedures; is the Facility in Compliance with conditions pursuant to that authorization?	N/A = Go to E5	
4) If a biological opinion applicable to the Facility for the threatened or endangered species has been issued, can the Applicant demonstrate that:  a) The biological opinion was accompanied by a FERC license or exemption or a habitat conservation plan? Or  b) The biological opinion was issued pursuant to or consistent with a recovery plan for the endangered or threatened species? Or  c) There is no recovery plan for the threatened or endangered species under active development by the relevant Resource Agency? Or		NO = Fail

d) The recovery plan under active development will have no material effect on the Facility's operations?		
5) If E.2 and E.3 are not applicable, has the Applicant demonstrated that the Facility and Facility operations do not negatively affect listed species?	YES = Pass, go to F  See Appendix E-1	
<b>F. Cultural Resource Protection</b>	PASS	FAIL
1) If FERC-regulated, is the Facility in Compliance with all requirements regarding Cultural Resource protection, mitigation or enhancement included in the FERC license or exemption?	<p><b>The applicant has not received a response from NH DHR</b></p> <p><b>Attached as Appendix F.1 is a map including the project boundary and recreational access. Recreational access is permitted in the project bypass reach but is not utilized due to the steep slope of the downstream river bank.</b></p> <p><b>The applicant did not own or operate the project during the period of time when Stevens Mill</b></p>	

	<b>powerhouse was demolished and does not have any knowledge regarding the demolition.</b>	
2) If not FERC-regulated, does the Facility owner/operator have in place (and is in Compliance with) a plan for the protection, mitigation or enhancement of impacts to Cultural Resources approved by the relevant state or federal agency or <i>Native American Tribe</i> , or a letter from a senior officer of the relevant agency or Tribe that no plan is needed because Cultural Resources are not negatively affected by the Facility?		
<b>G. Recreation</b>	PASS	FAIL
1) If FERC-regulated, is the Facility in Compliance with the recreational access, accommodation (including recreational flow releases) and facilities conditions in its FERC license or exemption?	YES = Go to G3 See Appendix G	
2) If not FERC-regulated, does the Facility provide recreational access, accommodation (including recreational flow releases) and facilities, as Recommended by Resource Agencies or other agencies responsible for recreation?	N/A	
3) Does the Facility allow access to the reservoir and downstream reaches without fees or charges?	<b>The applicant has not received a response from NH P&amp;R</b>  <b>See Appendix F.1 for a map including the project boundary and recreational</b>	

	<p>access point. Recreational access is permitted in the project bypass reach but is not utilized due to the steep slope of the downstream river bank.</p> <p>See attached Appendix G.3.1 for an aerial view of the project boat ramp. Limited boating occurs due to the small impoundment and white water upstream of the Stevens Mill dam. Portage around the dam is not possible because of the industrial mill building on river west and the extremely steep slope of the project tailrace and bypass reach.</p>	
<b>H. Facilities Recommended for Removal</b>	PASS	FAIL
1) Is there a Resource Agency Recommendation for removal of the dam associated with the Facility?	NO = Pass, Facility is Low	

	Impact	
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