

**CRITERIA CROSSWALK: COMPARISON OF EXISTING AND PROPOSED CRITERIA – CONFIDENTIAL**

Note: A strict comparison of the existing and proposed criteria would require incorporating the very lengthy “Line-by-Line Instructions” that are a companion to the existing LIHI questionnaire (see “Low Impact Hydropower Certification Program Part VI, Certification Criteria (As Revised September 2004).”) The table below presents only the existing questionnaire, without the line-by-line instructions, in the interest of relative conciseness. A separate document compares existing and proposed changes to LIHI definitions.

**GLOBAL CHANGES:**

Two global changes are worth noting. First, “Line-by-Line Instructions” for completing the existing LIHI questionnaire, currently provided in a separate LIHI program document, have been streamlined and integrated into the body of the new criteria, and further modified by presentation in the form of a “Goal” and “Standard” for satisfying a given requirement. Second, the proposed criteria rely on January 1, 1990 as the key date representing the effective date of implementation of the Electric Consumers Protection Act Of 1986, instead of the existing criteria’s reliance on the law’s enactment date of December 31, 1986,

<b>“BACKGROUND INFORMATION” CRITERION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
<p>e. LOW IMPACT HYDROPOWER QUESTIONNAIRE [Excerpted from Part VI, Section E of the Low Impact Hydropower Certification Program. Words in italics are defined in Part VI, Section C, and line-by-line instructions are available in Section D of the program, available on-line in PDF format at <a href="http://www.lowimpacthydro.org">http://www.lowimpacthydro.org</a>.</p> <p>BACKGROUND INFORMATION</p> <p>e. Name of the <i>Facility</i>.</p> <p>e. 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> <p>e. Location of Facility by river and state.</p> <p>e. Installed capacity.</p> <p>e. Average annual generation.</p> <p>e. Regulatory status.</p> <p>e. Reservoir volume and surface area measured at the high</p>	<p><u>BACKGROUND INFORMATION</u></p> <p>Note: you must provide the information requested in Questions 2 – 13 for <i>each</i> Facility for which you are seeking LIHI certification.</p> <ol style="list-style-type: none"> <li>1. Applicant’s name, contact information (including telephone and email) 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.</li> <li>2. Name of the Facility.</li> <li>3. Location of Facility by river, state, and county/ies.</li> <li>4. Installed capacity.</li> <li>5. Average annual generation.</li> <li>6. Regulatory status.</li> </ol> <p>Please describe the Facility’s regulatory status. For federal Facilities please provide a citation to the authorizing law. For FERC-regulated Facilities please provide:</p> <p>e. The FERC license or exemption number</p> <p>e. Dates of licensing and next relicensing.</p> <p>e. A copy of your current license and any applicable</p>	<p>The new Background Information section:</p> <ul style="list-style-type: none"> <li>• Asks more detailed information about a facility’s regulatory status and compliance with post-licensing requirements.</li> <li>• Requests information about other facilities in the watershed, both associated and (in streamlined form) not associated with the applicant.</li> <li>• Shifts questions related to incremental hydropower, removal recommendations, and post-licensing proceedings to a proposed new criterion, “A. General Eligibility”</li> </ul>

“BACKGROUND INFORMATION” CRITERION

EXISTING QUESTIONNAIRE	PROPOSED QUESTIONNAIRE	SUMMARY OF CHANGES
<p>water mark in an average water year.</p> <p>8) Area occupied by non-reservoir facilities (e.g., dam, penstocks, powerhouse).</p> <ul style="list-style-type: none"> <li>e. Number of acres inundated by the Facility.</li> <li>e. Number of acres contained in a 200-foot zone extending around entire impoundment.</li> <li>e. Please attach a list of contacts in the relevant Resource Agencies and in non-governmental organizations that have been involved in Recommending conditions for your Facility.</li> <li>e. Please attach a description of the Facility, its mode of operation (i.e., peaking/run of river) and a map of the Facility.</li> </ul> <p>Questions for For “New” Facilities Only:</p> <p>If the Facility you are applying for is “new” i.e., 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</p> <ul style="list-style-type: none"> <li>e. When was the dam associated with the Facility completed?</li> <li>e. 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.</li> <li>e. Did the added or increased power generation capacity require or include any new dam or other diversion structure?</li> <li>e. 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)?</li> </ul>	<p>settlement agreement.</p> <ul style="list-style-type: none"> <li>e. Status of any relicensing or post-licensing proceedings, or any recent or ongoing legal or regulatory proceedings that affect or may potentially affect operations at the Facility.</li> <li>e. A description of compliance with post-licensing requirements.</li> </ul> <p>7. Reservoir elevation and surface area measured at the high water mark, elevation of maximum drawdown, and reservoir surface area at maximum drawdown.</p> <p>8. Annual mean inflow into impoundment and square miles of watershed above the Facility.</p> <p>9. Number of acres contained in a 200-foot zone extending around entire impoundment.</p> <p>Provide the area of the perimeter of the impoundment extending from the reservoir high water mark in an average water year to a distance of 200 feet perpendicular to the perimeter of the impoundment.</p> <p>10. Operations. Please attach a description of the Facility, its mode of operation (i.e., peaking/run of river) and a map of the Facility.</p> <p>Please include any information you believe would be useful in explaining your Facility to a person knowledgeable about hydropower operations. Enclose photographs, maps and/or diagrams that will give the reviewer(s) a sense of the Facility’s dam, reservoir, and by pass reaches. (Note: please provide graphics and photos in electronic formats that minimize file size, e.g., jpg or pdf)</p> <p>11. Contacts. Please attach a list of contacts in the relevant Resource Agencies and in non-governmental organizations that have been involved in developing Resource Agency Recommendations for your Facility. You must include a telephone number and, if available, an email address.</p> <p>The Resource Agency contacts should be the offices or persons who would be the most knowledgeable about the</p>	

**“BACKGROUND INFORMATION” CRITERION**

EXISTING QUESTIONNAIRE	PROPOSED QUESTIONNAIRE	SUMMARY OF CHANGES
<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> <p>18 (a) If the increased or added 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>e. Are there any pending appeals or litigation regarding that authorization? If so, the facility is not eligible for consideration.</p>	<p>Resource Agency Recommendations made regarding the Facility and who have the greatest knowledge about its operations. Also include contacts for any non-governmental organizations or individual who had significant participation in the most recent licensing process for the Facility or other involvement in proceedings involving the operations of the Facility (e.g., intervenors in relicensing, plaintiffs in lawsuits, participants in stakeholder proceedings).</p> <p>12. Multiple Facilities in the same watershed not submitted for LIHI certification.</p> <p>If your company or a parent company own other Facility/ies in the same watershed or in a watershed that is otherwise Hydrologically or Operationally Connected to the Facility/ies for which you are seeking certification, please provide for each Facility the information required in Questions 2–5, Questions 6 a. and b., and Questions 7, 8, and 10 above.</p> <p>If other Facility/ies in the same watershed or watersheds are Hydrologically or Operationally Connected to the Facility/ies for which you are seeking certification and are under separate ownership, please provide a list of those Facilities and their ownership.</p>	

<b>“GENERAL ELIGIBILITY” CRITERION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
<p><i>The existing questionnaire does not have a “General Eligibility” criterion. However, the majority of questions in the new section are pulled from disparate parts of the existing questionnaire.</i></p>	<p><b>CRITERION A: GENERAL ELIGIBILITY</b></p> <hr/> <p><b>OVERVIEW:</b> This criterion seeks to ensure that the Applicant’s Facility meets LIHI’s minimum requirements for facility type and regulatory status. As regards incremental hydropower in particular, LIHI recognizes as eligible for LIHI certification only those hydroelectric power Facilities incrementally added on to an existing but non-hydroelectric related reservoir, so long as it achieves non-polluting power benefits without contributing to additional environmental impacts or extending existing ones. If incremental hydroelectric power is added to a non-hydro reservoir and its existence is entirely independent of the economic survival or operation of the reservoir it will be treated as neutral and pass; Facilities at new dams constructed for the purpose of hydropower generation are ineligible.</p> <p><b>A.1. General Eligibility: Threshold Questions</b></p> <p>a. Is the hydropower Facility a Conventional Hydropower Facility?                      YES = Go to question A.1.b.                      NO = Facility is not eligible.</p> <p>b. If the Facility is licensed by FERC, is it in compliance with the terms of its license?                      YES = Go to question A.1.c.                      NA = Go to question A.1.d.                      NO = Facility is not eligible.</p> <p>c. If the Facility is licensed by FERC, is the Facility currently the subject of a proceeding to contest provisions of its FERC license?                      NO or NOT APPLICABLE = Go to question A.1.d.                      YES= Facility is not eligible.</p> <p>d. Was the construction of all dams, impoundments, or diversion</p>	<ul style="list-style-type: none"> <li>• This section did not previously exist.</li> <li>• Screens for basic eligibility regarding a) type and age of facility and regulatory status; b) type and impacts of incremental hydro; c) removal recommendation.</li> </ul>

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	<p>structures at your Facility completed prior to August 1998?                      YES = Go to A.2                      NO = Facility is not eligible.</p> <p>A.2. General Eligibility: Incremental Hydropower</p> <p>a. Was the facility’s generating capacity authorized (e.g. licensed by the Federal Energy Regulatory Commission) to be added to an existing development such as a dam, diversion, or impoundment that was not previously operated for hydropower generation?                      YES = Go to A.2.b.                      NOT APPLI-CABLE = Go to A.3</p> <p>b. Are there any pending appeals or litigation regarding that authorization?                      YES = Facility is not eligible.                      NO = Go to A.2.c.</p> <p>c. Was the existing dam, diversion, or impoundment at the facility recommended for removal or decommissioning by Resource Agencies or by a broad representation of interested persons and organizations in the local and regional community prior to the addition of the facility’s generating capacity?                      YES = Facility is not eligible.                      NO = Go to question A.2.d.</p> <p>d. Is the Facility independent of the continued purpose, economic rationale, and operating regime for the dam, diversion, or impoundment?                      YES = Go to A.2.e.                      NO = Facility is not eligible.</p> <p>e. Did the addition of generating capacity to the facility result in changes to flows or reservoir levels (is the water surface elevation at any given location and time at an elevation different than what would have occurred in the absence of the</p>	

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	hydroelectric Facility?) YES = Go to A.2.f. NO = Go to A.3. f. Were any changes to flows or reservoir levels the result of agency recommendations or license conditions that were intended solely to improve the environmental quality of the affected waterway? A Resource Agency Letter confirming the intent of the conditions and describing how they improved the environmental quality of the waterway is encouraged. YES = Go to A.3. NO = Facility is not eligible A.3. General Eligibility: Facility Removal Recommendation a. Is there a Resource Agency Recommendation for removal of the dam associated with the Facility? NO = Go to criterion B. Settlement Agreements YES = Facility is not eligible.	

<b>“SETTLEMENT AGREEMENT” CRITERION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
<p>Neither the existing questionnaire nor other existing LIHI program documents explicitly mention settlement agreements, except in the Watershed Protection criterion added in 2004.</p>	<p><b>CRITERION B: SETTLEMENT AGREEMENTS</b></p> <hr/> <p>OVERVIEW: Settlement Agreement questions apply only to Facilities whose operations are governed, in whole or in part, by a Settlement Agreement (see Definitions section, below). LIHI encourages comprehensive Settlement Agreements as the basis for relicensing. Settlement Agreements represent openness, local decision-making, and a natural equilibrium between competing interests and priorities. LIHI accepts Settlement Agreements consistent with these principles as representative of the most recent Resource Agency Recommendations.</p> <p><b>B. Applicability of Settlement Agreement Criterion</b>                      Are the Facility/ies’ operations governed, in whole or in part, by a Settlement Agreement?                      YES = Review LIHI Guidance on Settlement Agreements and respond to questions.                      NO = Pass, go to C. Flows.</p> <p><b>LIHI Guidance on Settlement Agreements</b>                      Though licenses increasingly are reached through negotiated settlements, a small number of licenses achieved by Settlement Agreement do not reflect the principles summarized above, and described in greater detail below. LIHI therefore reserves the discretion to determine that a Settlement Agreement will or will not constitute recent Resource Agency Recommendations for the purpose of LIHI’s criteria review.</p> <p>LIHI will not second-guess the outcome of the Settlement Agreement, the intentions of the settling parties, or the balance that those parties were able to achieve at the negotiating table. Nor will LIHI ask questions about the private and confidential discussions that went into the development of any final settlement agreement.</p>	<ul style="list-style-type: none"> <li>• This is a completely new criterion and focus.</li> <li>• Seeks information to allow LIHI to assess quality of Settlement Agreement.</li> </ul>

“SETTLEMENT AGREEMENT” CRITERION

EXISTING QUESTIONNAIRE	PROPOSED QUESTIONNAIRE	SUMMARY OF CHANGES
	<p>Rather, LIHI wants to encourage – and ensure – that the public portion of the licensing process that led to that Settlement Agreement is one that reflects the principles of openness, transparency, and public participation.</p> <p>LIHI treats Settlement Agreements that are part of a FERC proceeding, where a Resource Agency is party to, or concurs in, the Settlement Agreement, as having the effect of becoming the latest Resource Agency Recommendation for that Resource Agency on the topics covered by the settlement, <u>if it can be shown</u> that the Settlement Agreement has the following attributes:</p> <ul style="list-style-type: none"> <li>• <b>Inclusiveness:</b> all interested stakeholders are invited to participate in settlement negotiations related to their interests.</li> <li>• <b>Transparency:</b> the study methods, data, and results are readily available to stakeholders.</li> <li>• <b>Governance, Education, and Funding:</b> the Applicant and stakeholders established mutually agreeable “ground rules” for the Settlement Agreement process.</li> <li>• <b>Study Requests, Study Plans and Contractor Selection:</b> the Applicant made reasonable efforts to resolve disputes about study requests, study plans, and contractor selection (lawyers, scientists, engineers, and other professionals).</li> </ul> <p>An Applicant may respond to the Settlement Agreement questions that follow in one of two ways. One option is to respond via interview with a LIHI staff person, who will prepare a written summary that an Applicant can review and edit prior to the summary’s inclusion in the final application. Alternatively, the Applicant may provide written responses in a draft application, with the understanding that LIHI staff may request supplemental information to achieve a complete response.</p>	

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	<p><b>LIHI SETTLEMENT AGREEMENT QUESTIONS</b></p> <p>B.1. Pre-Application Document</p> <p>a. If a pre-application document was required for your most recent licensing proceeding, please describe your outreach to interested stakeholders during the development of this document, and how such outreach contributed to the document.</p> <p>B.2. Studies</p> <p>a. If a pre-application document was required for your most recent licensing proceeding, please describe your outreach to interested stakeholders during the development of this document, and how such outreach contributed to the document.</p> <p>b. Did the Applicant permit interested stakeholders to participate in meetings with Resource Agencies to develop or implement the study plan?</p> <p>c. Did the Applicant disclose the computer models, other methodologies, data, and results from all studies so that interested participants could independently analyze study assumptions and results? If not, please explain.</p> <p>d. Did the development of the study plan involve any informal dispute resolution? If so, please describe the nature of each dispute and its resolution.</p> <p>i. Did the Applicant reject any study requests, in part or whole, made by state or federal agencies? Please describe.</p> <p>ii. Were there any formal study plan disputes filed with FERC? If so, please describe the nature of each dispute and its resolution.</p> <p>iii. If stakeholders requests additional studies or information after the initial adoption of the study plan, how did the Applicant respond to such requests?</p> <p>B.3. Settlement</p> <p>a. Did the Applicant permit interested stakeholders to participate in settlement discussions dealing with proposed license terms and conditions?</p>	

“SETTLEMENT AGREEMENT” CRITERION

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	<p>b. Did any Resource Agencies or stakeholders decline to sign the final settlement agreement? If so, please describe the nature of their objection to the settlement.</p> <p>c. Did the Applicant or any party seek a hearing under the Energy Policy Act of 2005 (EPAAct) disputing issues of material fact underlying federal agency preliminary conditions or prescriptions under § 4(e) or § 18 of the Federal Power Act? If so, what was the result of this hearing?</p> <p>i. If the above dispute was resolved through a negotiated settlement between the Applicant and the relevant federal agency, were other parties who intervened in the EPAAct hearing invited to participate in such settlement negotiations?</p> <p>ii. Did the above dispute involve disputed issues that were the subject of a rejected agency study request? If so, please explain.</p> <p>After responding to the Settlement Agreement questions the Applicant should continue to Criterion C. Flows.</p>	

<b>“FLOWS” CRITERION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
<p>A. Flows</p> <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?                      YES = Pass, Go to B                      N/A = Go to A2                      NO = Fail</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?                      YES = Pass, go to B                      NO = Go to A3</p> <p>3) 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?                      YES = Pass, go to B                      NO = Fail</p>	<p><b>CRITERION C: FLOWS</b></p> <hr/> <p><b>OVERVIEW:</b> The Flows Criterion is designed to ensure that the river provides healthy flows for riverine and riparian ecosystems, fish, wildlife and water quality.</p> <p><b>C.1. Flows: True Run of River Operations</b></p> <p>C.1.a. Are instantaneous inflows (allowing for evaporation, transpiration, and seepage) equal to outflows?                      YES = go to C.1.b                      NO = go to C.3</p> <p>C.1.b. Are flows into the Facility altered by any dam or hydropower Facility upstream?                      YES = go to C.2                      NO = go to C.1.c.</p> <p>C.1.c. Does the Facility include a bypass reach?                      YES = go to C.3                      NO = Pass, go to criterion D. Water Quality</p> <p><b>GOAL:</b> To distinguish Facilities that do not alter natural flows from those that do, and to direct the former to provide additional information relating to flows affected by hydropower operations in the watershed.</p> <p><b>STANDARD:</b> Inflows to the Facility are unaltered, and the Facility lacks a bypass reach and its operation cannot alter river flows in any manner save for incidental evaporation, transpiration, and groundwater seepage in the reservoir.</p> <p><b>C.2. Flows: Modified Run of River Operations</b></p> <p>C.2.a. Does the Applicant for LIHI certification (or a parent or subsidiary company, or otherwise associated entity) have operational control in whole or in part over flow alterations upstream of the Facility?                      YES = go to criterion C.3</p>	<p>The proposed Flows criterion represents a significant restructuring compared to the existing criterion. The questions are calibrated to the degree the facility, and any other facilities in the drainage controlled by the applicant, impact natural flows. Facilities that do not alter natural flows pass quickly, while those that do significantly alter flows at the facility or through control of upstream or downstream facilities, and/or due to a bypass reach, must demonstrate compliance with resource agency flow release requirements issued after January 1, 1990, or – for now – a demonstration that flows meet Aquatic Base Flow standards or “good” habitat flow standards calculated using the Montana-Tennant method. The proposed section alerts applicants that LIHI plans to replace the ABF/Montana-Tennant methods with a proposed quantitative method that is based on the natural flow paradigm, and that LIHI intends to launch the process to develop that approach in 2009.</p>

“FLOWS” CRITERION

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	<p>NO = go to C.2.b.</p> <p>C.2.b. Does the Facility include a bypass reach?                      YES = go to criterion C.3                      NO = Pass, go to criterion D. Water Quality</p> <p><u>GOAL:</u> To distinguish those Facilities that do not significantly affect downstream flows and do not have a bypass reach, and whose owners (or related entities) have no operational control over flows modified upstream of the Facility, from those that do.</p> <p><u>STANDARD:</u> Operational control means either by direct or indirect ownership of upstream storage or by having headwater storage agreements and sharing associated costs with another entity, or other contractual arrangement.</p> <p>C.3. Flows: Regulated Flows – Quantitative Approach</p> <p>C.3.a. Does the Facility operate in a daily peaking or load-following mode?                      YES = go to C.4.                      NO = Go to C.3.b.</p> <p>C.3.b. Do <i>all</i> Facility-affected reaches (including bypass reaches, if applicable) meet Aquatic Base Flow standards or “good” habitat flow standards calculated using the Montana-Tennant method?                      YES = Pass, go to criterion D. Water Quality                      NO = Go to C.4.</p> <p><u>GOAL:</u> Among Facilities that affect flow regimes, to distinguish those that allow the river to function more or less as a natural river and do not engage in load following (i.e., within-day fluctuations) and whose operations still provide important elements of the natural flow paradigm.</p> <p><u>STANDARD:</u> The Facility does not engage in load following, and the Facility is in Compliance with a flow release schedule, both below the tailrace and in all bypassed reaches, that at a minimum meets Aquatic Base Flow (ABF) standards or “good” habitat flow standards calculated using the Montana-Tennant</p>	

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	<p>method.</p> <p>Note: In 2010 LIHI will amend this question to replace the ABF and Tennant methods with a new quantitative method. Recent advances in river science have emphasized the importance of a range of flow levels and flow components (e.g., floods, high-flow pulses) for river health, a concept often referred to as the natural flow paradigm. Most river scientists today understand that a flow regime that only includes minimum or baseflows will not adequately protect river function and health. Because standard-setting methods such as ABF and Tennant evaluate primarily, or only, baseflow levels, these quantitative methods do not reflect current understanding of river function. Therefore, LIHI will replace those methods with a new quantitative method that is based on the natural flow paradigm. During 2009, LIHI will convene a process for developing a new quantitative method and solicits input during this public comment period about the development of such a method. Applicants who begin the review process before the promulgation of the new quantitative method will have the continued option of using ABF or Tennant.</p> <p>C.4. Flows: Regulated Flows – Qualitative Approach</p> <p>C.4.b Is the Facility in compliance with Resource Agency Recommendations issued after January 1, 1990 regarding flows for fish and wildlife protection, mitigation and enhancement (including seasonal and episodic variations) that FERC has included as a condition in a license or that are otherwise legally binding? Please document that compliance.</p> <p>YES = Pass, Go to D. Water Quality.</p> <p>NO = Facility is not eligible.</p> <p><u>GOAL:</u> To provide Facilities that do not have a run-of-river flow regime, or those that include a bypass reach, with two alternative means of demonstrating that the river has healthy flows for fish, wildlife and water quality.</p> <p><u>STANDARD:</u> The flow regime complies with the most Recent</p>	

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	Resource Agency Recommendations.	

<b>“WATER QUALITY” CRITERION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
<p><b>B. Water Quality</b></p> <p>1) Is the Facility either:                      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                      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?                      YES = Go to B2                      NO = Fail</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?                      YES = Go to B3                      NO = Pass</p> <p>3) If the answer to question B.2 is yes, has there been a determination that the Facility is not a cause of that violation?                      YES = Pass                      NO = Fail</p>	<p><b>CRITERION D: WATER QUALITY</b></p> <hr/> <p><b>OVERVIEW:</b> The Water Quality Criterion is designed to ensure that water quality in the river is protected. The Water Quality criterion has two parts. First, a Facility must demonstrate that it is in Compliance with state water quality standards, either by producing a recent Clean Water Act Section 401 certification or providing other demonstration of Compliance. Second, a Facility must demonstrate that it has not contributed to a state finding that the river has impaired water quality under Clean Water Act Section 303(d).</p> <p>D.1. Water Quality: Compliance with Section 401 Certification or Water Quality Standards</p> <p>D.1.a. Was the Facility licensed or relicensed after January 1, 2010?                      YES = Go to D.1.b.                      NO = Go to D.1.c.</p> <p>D.1.b. Is the Facility in Compliance with all conditions issued pursuant to a Clean Water Act Section 401 water quality certification?  <u>Or</u>                      If there is a Settlement Agreement governing water quality, is the Facility in compliance with the water quality requirements of that Settlement Agreement?                      YES = Go to D.2.                      NO = Facility is not eligible.</p> <p>D.1.c. Is the Facility in Compliance with all conditions issued pursuant to a Clean Water Act Section 401 water quality certification issued for the Facility after January 1, 1990?  <u>Or</u>                      Is the Facility in compliance with the quantitative water quality standards established by the state that support</p>	<p>This section maintains the general approach of the existing section in relying on compliance with a state-issued Clean Water Act Section 401 water quality certification or demonstrating compliance with the state’s quantitative water quality standards. However, the proposed criterion shifts one key date and adds another. Applicants meeting the criteria via compliance with a water quality certificate can do so only if the certificate was issued after January 1, 1990 (instead of December 31, 1986 as the existing criteria allow). Facilities licensed before January 1, 2010 – the date after which the proposed new LIHI criteria are expected to be in effect, and projects in the LIHI certification “pipeline” already processed – have the alternative of demonstrating compliance with the state’s quantitative water quality standards. Facilities licensed after that date must have a water quality certificate or demonstrate compliance with water quality requirements of a settlement agreement (i.e., they no longer have the route of compliance with state quantitative standards). The proposed criterion maintains the requirement to demonstrate that the facility does impair water quality in the vicinity of the project.</p>

**Comment [GG1]:** Page: 10  
 This is a date after which the proposed new LIHI criteria are expected to be in effect, and projects in the LIHI certification “pipeline” already processed.

<b>“WATER QUALITY” CRITERION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
	<p>designated uses pursuant to the federal Clean Water Act in the Facility area and in all Facility-affected reaches?</p> <p><u>Or</u></p> <p>If there is a Settlement Agreement governing water quality, is the Facility in compliance with the water quality requirements of that Settlement Agreement?</p> <p>YES = Go to D.2. NO = Facility is not eligible.</p> <p><u>GOAL:</u> To ensure Facility Compliance with state water quality standards.</p> <p><u>STANDARD:</u> The Facility is in Compliance with state water quality standards.</p> <p>If the Facility was licensed <u>before January 1, 2010</u>, the Applicant should obtain a Resource Agency Letter confirming that: (1) the Facility is in compliance with all conditions issued pursuant to a valid water quality certification issued after January 1, 1990; or (2) if the relevant Resource Agency did not issue a water quality certification, the project is 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 all Facility-affected reaches. A waiver of certification authority by the state does not qualify as water quality certification.</p> <p>If the Facility was licensed by FERC <u>after January 1, 2010</u>, the Applicant should obtain a Resource Agency Letter confirming that the Facility is in compliance with all conditions issued pursuant to a valid water quality certification. A waiver of certification authority by the state does not qualify as water quality certification.</p> <p>D.2. Water Quality: Impaired Waters</p> <p>D.2.a. Is the Facility area or any Facility-affected reach currently identified by the state as not meeting water quality</p>	

<b>“WATER QUALITY” CRITERION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
	<p>standards (including narrative and numeric criteria and designated uses) pursuant to Section 303(d) of the Clean Water Act?                      YES = Go to D.2.b.                      NO = Pass, go to E. Reservoir Levels.</p> <p>D.2.b. If the answer to question D.2 is yes, has there been a determination that the Facility is a cause of that violation?                      NO = Go to E. Reservoir Levels.                      YES = Facility is not eligible.</p> <p><u>GOAL:</u> To clarify whether the relevant stretch of river is identified by the state pursuant to Clean Water Act Section 303(d) as having impaired water quality and to ensure that the Facility is not a source of any such impairment.</p> <p><u>STANDARD:</u> Documentation for this question should include the relevant portion of the most recent list of water bodies designated under Section 303(d). If the relevant stretch of river has been designated as having impaired water quality under Section 303(d), the Facility may still pass the water quality criterion if there has been a determination that the Facility does not contribute to the water quality problem. This determination may include the state’s identification of a list of causes of the violation that does not include the Facility, a Resource Agency Letter explaining that the Facility is not a cause, or a letter from the Facility owner/operator that explains obvious exclusions from causation (<i>e.g.</i>, violations due to toxic chemicals from an upstream plant unrelated to the Facility).</p>	

<b>“RESERVOIR LEVELS” CRITERION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
<p>The existing questionnaire does not contain reservoir management-specific questions.</p>	<p><b>CRITERION E: RESERVOIR LEVELS</b></p> <hr/> <p><b>OVERVIEW:</b> Reservoirs commonly change streams and rivers from free-flowing to impounded ecosystems. Reservoirs experiencing changes in water levels that exceed natural fluctuations and timing for lakes in the same region may experience compromised littoral and wetland ecosystems, water quality and recreational opportunities created by the reservoir. The Reservoir Criteria are designed to ensure that daily and/or seasonal impoundment fluctuations adequately protect fish, littoral species, wetlands, wildlife including migratory birds, recreation, and water quality, where appropriate.</p> <p><b>E.1 Incremental Hydropower</b></p> <p><b>E.1.a</b> Does the facility meet the LIHI definition of Incremental Hydropower?                      YES = Go to E.1.b                      NO = go to E.2</p> <p><b>E.1.b</b> Did the facility pass criterion A.2, General Eligibility: Incremental Hydropower?                      YES = Pass criterion E and go to F. Fish Passage and Protection                      NO = Facility is not eligible.</p> <p><b>E.2 Reservoir Present</b></p> <p><b>E.2.a</b> Does the Facility involve a reservoir?                      YES = Go to E.3                      NO = go to F. Fish Passage and Protection</p> <p><b>GOAL:</b> The Reservoir Criterion is designed to ensure that if the Facility involves a reservoir, that ecological, recreational and water quality values are not compromised by reservoir operations.</p> <p><b>STANDARD:</b> A Facility will pass this criterion at this point if it does not rely on an impoundment and reservoir drawdowns are not of concern. Otherwise, the Applicant must respond to the</p>	<p>This is a completely new criterion; the existing questionnaire does not contain reservoir management-specific questions.</p>

<b>“RESERVOIR LEVELS” CRITERION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
	<p>questions that follow.</p> <p>E.3 Reservoir Operations – Run of River</p> <p>E.3.a. If the Facility reservoir is operated in run of river (ROR) mode, are reservoir fluctuations within the range of unregulated natural lakes for the region or operated in a range that protects and enhances water level-sensitive species?                      YES = Go to E.3.b.                      NO =Reservoir operation is not ROR, go to E.4</p> <p>E.3.b. Is the Facility in compliance with Resource Agency Recommendations issued after January 1, 1990 regarding handling of emergencies, flashboard operations and maintenance exceptions that: i) provide adequate consideration and protection for water level sensitive resources, and ii) that FERC has included as a condition in a license or that are otherwise legally binding?                      YES = go to F. Fish Passage and Protection                      NO = Facility is not eligible.</p> <p><u>GOAL:</u> The reservoir criterion is designed to recognize that ROR operations typically best maximize the lentic (pond/lake) ecosystem values created by the reservoir.</p> <p><u>STANDARD:</u> The Facility relies on an impoundment, but reservoir drawdowns approximate ‘natural’ water level fluctuations, or are implemented according to a regime that protects and enhances water level-sensitive species; and drawdown exceptions for emergencies, flashboards and maintenance consider resource protection, where applicable.</p> <p>E.4 Reservoir Operations – Non-Run of River</p> <p>Is the facility in compliance with Resource Agency Recommendations issued after January 1, 1990 to for a drawdown regime and protocols for emergencies, flashboard operations and maintenance exceptions to protect ecologically and recreationally sensitive resources</p>	

<b>“RESERVOIR LEVELS” CRITERION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
	<p>of concern (e.g. held within an identified range for critical time periods to protect waterfowl and loon nesting needs, meet summer recreation needs, provide an intentional flow release for downstream resources, etc.)?</p> <p>YES or NOT APPLICABLE = go to F. Fish Passage and Protection</p> <p>NO = Facility is not eligible.</p> <p><u>GOAL:</u> To recognize that storage reservoir operations can conflict with the goal of maximizing lentic (pond/lake) ecosystem values created by the reservoir, but achieve a balance between resource protection and operation needs.</p> <p><u>STANDARD:</u> Compliance with Resource Agency Recommendations that recognize that reservoir fluctuations are outside ‘natural’ water level fluctuations and lentic ecosystem values created by the reservoir are not maximized, but that 1) adequately protect key water level dependent resources identified by Resource Agencies and stakeholders, and 2) apply drawdown exceptions for emergencies, flashboards and maintenance consider resource protection, where appropriate.</p>	

<b>FISH PASSAGE AND PROTECTION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
<p>C. Fish Passage and Protection</p> <p>F. <input type="checkbox"/> 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 N/A = Go to C2 NO = Fail</p> <p>F. <input type="checkbox"/> 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 run is extinct)?</p> <p>YES = Go to C2a NO = Go to C3</p> <p>F. <input type="checkbox"/> 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>YES = Go to C2b N/A = Go to C2b</p> <p>F. <input type="checkbox"/> 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>YES = Go to C5 N/A = Go to C3 NO = Fail</p>	<p><b>CRITERION F: FISH PASSAGE AND FISH PROTECTION</b></p> <hr/> <p><b>OVERVIEW:</b> The Fish Passage and Fish Protection Criterion is designed to ensure that, where necessary, the Facility provides safe, timely, and effective passage for <i>Migratory Fish</i> and the facility protects fish from project operations in cases where fish passage is not appropriate.</p> <p>F.1. Presence of Migratory Fish at the Facility</p> <p>F.1.a Are there historic records of Migratory Fish movement through the Facility Area or any affected reaches that are now extirpated from the Facility area or any affected reaches?</p> <p>YES = Go to F.1.b NO = Go to F.1.c</p> <p>F.1.b. Can the Applicant demonstrate that the extirpation was not due in whole or part to the Facility?</p> <p>YES = Go to F.1.c NO = Facility is not eligible.</p> <p>F.1.c Are Migratory Fish present in the Facility Area?</p> <p>YES = Go to F.2 NO = Go to F.3</p> <p><b>GOAL:</b> To determine if there are Migratory Fish present in the Facility Area. If there are no Migratory Fish present but a historic record of such fish exists, the applicant must demonstrate that the Facility is not the cause of the extirpation.</p> <p><b>STANDARD:</b> Determine if there are Migratory Fish present at the Facility and demonstrate that the Facility is not responsible in whole or part for the extirpation of the fish from the Facility area or affected reaches by obtaining a Resource Agency Letter.</p> <p>Note: If the record about the historical presence of Migratory Fish is conflicting, ask: does the weight of the record show that such species moved through the Facility area on a more than incidental</p>	<p>The proposed section shifts the emphasis from the original’s focus on “anadromous and catadromous” fish to comprehensively address “migratory fish,” which encompass anadromous, catadromous, potadromous, and riverine fish in a newly added definition (see separate Definitions comparison document). As elsewhere, January 1, 1990 replaces December 31, 1986 as the key dividing line for resource agency recommendations. In regards to fish passage, the proposed section introduces a new path to pass the criterion by documenting 100% upstream and downstream fish passage survival rates for migratory fish “using a generally accepted monitoring methodology.” Otherwise, the criterion maintains the existing routes of compliance with a resource agency passage recommendation or obtaining a resource agency letter confirming that the facility’s upstream and downstream fish passage measures (if any) are appropriately protective of the fishery resource. The proposed section maintains the original’s investigation of circumstances in which resource agencies had the opportunity but declined to issue passage requirements, and questions related to adequately protecting fish from entrainment and other project impacts.</p>

FISH PASSAGE AND PROTECTION		
EXISTING QUESTIONNAIRE	PROPOSED QUESTIONNAIRE	SUMMARY OF CHANGES
<p>F. <input type="checkbox"/> If, since December 31, 1986:</p> <p>F. <input type="checkbox"/> 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</p> <p>F. <input type="checkbox"/> The Resource Agencies declined to issue a Mandatory Fish Passage Prescription,</p> <p>F. <input type="checkbox"/> 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?</p> <p>NO = Go to C5                      N/A = Go to C4                      YES = Fail</p> <p>F. <input type="checkbox"/> If C3 was not applicable:</p> <p>F. <input type="checkbox"/> 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>F. <input type="checkbox"/> If the Facility is unable to meet the fish passage standards in 4.a., has the Applicant demonstrated, and obtained a letter from the US 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?</p> <p>YES = Go to C5                      NO = Fail</p>	<p>basis? If so, and if the fish are not now present, the answer to F.1.a is “Yes” and the Applicant should proceed to Question F.1.b. However, if the weight of the conflicting record shows that such movement did not occur, or if there is no record of such movement, the correct answer to Question F.1.a is “No” and the Applicant should proceed to Question F.1.c.</p> <p>F.2. Fish Passage</p> <p>F.2.a. Is the Facility in Compliance with a Resource Agency Recommendation for Fish Passage?                      YES = Go to F.4                      N/A = Go to F.2.b                      NO = Facility is not eligible.</p> <p>F.2.b. Has the Resource Agency had an opportunity to issue a Recommendation for Fish Passage After January 1, 1990?                      YES = Go to F.3                      NO = Go to F.2.c</p> <p>F.2.c. Are 100% upstream and downstream Fish Passage survival rates for Migratory Fish at the dam documented using a generally accepted monitoring methodology?                      YES = Go to F.4                      NO = Go to F.2.d</p> <p>F.2.d. Has the Applicant obtained a Resource Agency Letter confirming that the Applicant has demonstrated that the upstream and downstream Fish Passage measures (if any) at the Facility are appropriately protective of the fishery resource?                      YES = Go to F.4                      NO = Facility is not eligible.</p> <p><u>GOAL</u>: To ensure that the Applicant provides safe, timely, and effective Fish Passage for Migratory Fish throughout the Facility, as deemed necessary by Federal and/or state Resource Agencies.</p>	

FISH PASSAGE AND PROTECTION		
EXISTING QUESTIONNAIRE	PROPOSED QUESTIONNAIRE	SUMMARY OF CHANGES
<p>F. <input type="checkbox"/> Is the Facility in Compliance with Mandatory Fish Passage Prescriptions for upstream and/or downstream passage of <i>Riverine</i> fish?</p> <p>YES = Go to C6 N/A = Go to C6 NO = Fail</p> <p>F. <input type="checkbox"/> Is the Facility in Compliance with Resource Agency Recommendations for Riverine, anadromous and catadromous fish entrainment protection, such as tailrace barriers?</p> <p>YES = Pass, go to D N/A = Pass, go to D NO = Fail</p>	<p><b>STANDARD:</b> Compliance with Resource Agency Recommendation for Fish Passage issued after January 1, 1990. The applicant must provide safe, timely, and effective Fish Passage for all targeted Migratory Fish resources. If a Resource Agency Recommendation calls for Fish Passage 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), the applicant must provide documentation of that Recommendation and the Applicant’s legally enforceable commitment to comply with that Recommendation.</p> <p>If a Resource Agency has not had an opportunity to Recommend Fish Passage After January 1, 1990, the applicant must provide documentation of passage survival rates to meet criterion F.2.c. Otherwise, to satisfy criterion F.2.d., the Applicant must obtain a Resource Agency Letter stating that Fish Passage (whether present or absent) is acceptable to the Resource Agency and adequately protective of the fishery resource. The Letter should also, if possible, refer to the Resource Agency’s substantive standards for protection of the resource. A Letter that simply states that Fish Passage provisions have not been required is not sufficient. Because this alternative is being used as a substitute for a Resource Agency’s having the opportunity to make a more formal prescription, the Letter must be prepared for the purpose of this application; a general Letter will not be sufficient, nor will an explanation of why the Applicant was unable to obtain a Letter. Documentation should include the Letter, and evidence of Compliance with the passage conditions specified in the Letter.</p> <p>F.3. Resource Agencies Declined to Issue Recommendations for Fish Passage</p> <p>F.3.a. Did the Resource Agencies decline to issue a Recommendation for Fish Passage?</p> <p>NO = Go to F.4 YES = Go to F.3.b</p> <p>F.3.b. Did the Resource Agencies decline to issue a</p>	

<b>FISH PASSAGE AND PROTECTION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
	<p>Recommendation for Fish Passage because of the technological infeasibility of passage?                      NO = Go to F.3.c                      YES = Facility is not eligible</p> <p>F.3.c Did the Resource Agencies decline to issue a Recommendation for Fish Passage because of the absence of habitat upstream of the Facility due at least in part to the Facility?                      NO = Go to F.4                      YES = Facility is not eligible</p> <p><u>GOAL:</u> To ensure that the Facility’s physical nature or environmental impacts are not the reason that Resource Agencies declined to issue a Recommendation for Fish Passage when afforded the opportunity to do so after January 1, 1990.</p> <p><u>STANDARD:</u> Applicants must provide a Resource Agency Letter describing the reasons for declining to issue Recommendation for Fish Passage at the Facility. Documentation should include evidence of the rationale for the Resource Agency’s decision not to recommend Fish Passage.</p> <p>Where no recent Recommendation for Fish Passage exists and Migratory Fish are still present in the area, the applicant must demonstrate that the Resource Agency did not recommend Fish Passage for a valid environmental reason (e.g. passage would facilitate proliferation of invasive species spread of contaminated fish, etc.)</p> <p>This criterion lists two possible reasons that Resource Agencies declined to issue a Recommendation for Fish Passage when given the option to do so after January 1, 1990. Neither of these are acceptable reasons. The first reason, technological infeasibility of Fish Passage, is expected to apply primarily to dams which are too high for effective Fish Passage, but may also apply in other situations, such as when a Migratory Fish species (e.g., sturgeon) is not capable of successfully using Fish Passage. The second reason is that the Facility has destroyed upstream habitat for the</p>	

FISH PASSAGE AND PROTECTION		
EXISTING QUESTIONNAIRE	PROPOSED QUESTIONNAIRE	SUMMARY OF CHANGES
	<p>Migratory Fish, and thus there is no reason to pass fish. In each of these cases, the Facility cannot be considered for certification because the Facility has had a direct adverse impact on the Migratory Fish.</p> <p>F.4 Fish Protection: Is the Facility in Compliance with Resource Agency Recommendations to protect fish from entrainment and other project impacts?                      YES or N/A = Pass, go to G. Watershed Protection                      NO = Facility is not eligible.</p> <p><u>GOAL</u>: To demonstrate that fish are adequately protected from entrainment and other project impacts in cases where Fish Passage is not appropriate.</p> <p><u>STANDARD</u>: Evidence of compliance with Resource Agency Recommendations for fish protection. Examples of fish protection include but are not limited to measures such as screens, trash racks, and tailrace barriers that protect fish from being entrained into the turbine intake and falsely attracted to the turbine. If no Resource Agency Recommendation was issued, the proper response to Question F.4. is N/A.</p>	

<b>WATERSHED PROTECTION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
<p>D. Watershed Protection</p> <p>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 high water mark in an average water year around 50 - 100% of the impoundment, and for all of the undeveloped shoreline YES = Pass, go to E and receive 3 extra years of certification NO = go to D2</p> <p>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? YES = Pass, go to E and receive 3 extra years of certification NO = go to D3</p> <p>3 ) Has the facility owner/operator established through a settlement agreement with appropriate stakeholders and that has 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) YES = Pass, go to E NO = go to D4</p> <p>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</p>	<p><u>CRITERION G: WATERSHED PROTECTION</u></p> <p><b>OVERVIEW:</b> The Watershed Protection Criterion is designed to reward Facility/ies with an extra three years of certification if they are providing “enhanced” protection for the conservation of cultural, fish, wetland and wildlife habitat, water quality, aesthetics and/or low-impact recreation through riparian buffers. Facility/ies pass this criterion, but do not receive additional years of certification, if they demonstrate compliance with an approved shoreland management plan regarding protection, mitigation or enhancement of shorelands surrounding the Facility arising from FERC license requirements and/or a Settlement Agreement.</p> <p>G.1. Protected Riparian Buffer Zone Is there a protected riparian buffer zone dedicated to the protection of fish, wetland and wildlife habitat, water quality, aesthetics, cultural resources and/or low-impact recreation) extending 200 feet from the high water mark in an average water year around 50 - 100% of the impoundment, and for all of the undeveloped shoreline? YES = Go to H. Threatened and Endangered Species and receive 3 extra years of certification. NO = go to G.2.</p> <p><b>GOAL:</b> Enhanced riparian land protection for the conservation of fish, wetland and wildlife habitat, water quality, cultural resources, aesthetics and/or low-impact recreation.</p> <p><b>STANDARD:</b> The Facility has a majority of the riparian buffer zone dedicated for conservation purposes to protect fish, wetland and wildlife habitat, water quality, cultural resources, aesthetics and/or low-impact recreation in an area extending 200 feet from the high water mark in an average water year around 50 - 100% of the impoundment, and for all of the undeveloped shoreline</p> <p>G.2. Watershed Enhancement Fund Has the Facility owner/operator established an approved</p>	<p>There are no significant changes to this section.</p>

<b>WATERSHED PROTECTION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
<p>project.                      YES = Pass, go to E                      No = Fail</p>	<p>watershed enhancement fund that: a) could achieve within the Facility’s watershed the ecological and recreational equivalent of land protection in G.1., and b) has the agreement of appropriate stakeholders and state and federal Resource Agencies?                      YES = Go to H. Threatened and Endangered Species and receive 3 extra years of certification.                      NO = go to G.3.  <u>GOAL:</u> Compensatory riparian land protection for the conservation and protection of fish, wetland and wildlife habitat, water quality, cultural resources, aesthetics and/or low-impact recreation in the vicinity of the Facility.  <u>STANDARD:</u> The Facility has an approved watershed enhancement fund that has the agreement of appropriate stakeholders and state and federal Resource Agencies that can achieve within the Facility’s watershed the cultural, ecological and/or recreational equivalent of land protection in G.1.                      G.3. Buffer or Watershed Plan                      Has the Facility owner/operator established an appropriate shoreland buffer or equivalent watershed land protection plan for conservation purposes (to protect cultural resources, fish and wildlife habitat, water quality, aesthetics and/or low impact recreation) through a Settlement Agreement with appropriate stakeholders and that has state and federal Resource Agencies’ agreement?                      YES = Go to H. Threatened and Endangered Species                      NO = go to G.4  <u>GOAL:</u> Appropriate riparian land protection for the conservation and protection of cultural resources, fish, wetland and wildlife habitat, water quality, aesthetics and/or low-impact recreation in the vicinity of the Facility?  <u>STANDARD:</u> The Facility has established, through the licensing process Settlement Agreement with appropriate stakeholders and that has state and federal Resource Agencies’ agreement, an appropriate shoreland buffer or equivalent watershed land</p>	

<b>WATERSHED PROTECTION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
	<p>protection plan to protect cultural resources, fish, wetland and wildlife habitat, water quality, aesthetics and/or low impact recreation).</p> <p>G.4. Shoreland Management                      Is the Facility in compliance with both state and federal Resource Agency Recommendations in a license approved shoreland management plan regarding protection, mitigation or enhancement of shorelands surrounding the Facility.                      YES = Go to H. Threatened and Endangered Species                      No = Facility is not eligible.</p> <p><u>GOAL:</u> Adequate conservation and protection of cultural resources, fish, wetland and wildlife habitat, water quality, aesthetics and/or low-impact recreation in the vicinity of the Facility.</p> <p><u>STANDARD:</u> The Facility in compliance with both state and federal Resource Agencies’ shoreland protection requirements to protect specifically identified high value ecological, recreational, aesthetic or cultural resource lands in the riparian zone of the Facility.</p>	

<b>THREATENED AND ENDANGERED SPECIES PROTECTION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
<p>E. Threatened and Endangered Species Protection</p> <p>1) Are threatened or endangered species listed under state or federal Endangered Species Acts present in the Facility area and/or downstream reach?                      YES = Go to E2                      NO = Pass, go to F</p> <p>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?                      YES = Go to E3                      N/A = Go to E3                      NO = Fail</p> <p>3) If the Facility has received authority to incidentally Take 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 authority pursuant to similar state procedures; is the Facility in Compliance with conditions pursuant to that authority?                      YES = Go to E4                      N/A = Go to E5                      NO = Fail</p> <p>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</p>	<p>Criterion H: Threatened And Endangered Species Protection                      Overview: The Threatened and Endangered Species Protection Criterion is designed to ensure that the Facility does not negatively impact state or federal threatened or endangered species.</p> <p>H.1. Listed Species                      Are threatened or endangered species listed under state or federal Endangered Species Acts present in the Facility area and/or downstream reach?                      YES = Go to H.2                      NO = Pass, go to I. Energy Efficiency.  <u>GOAL:</u> To determine whether the Facility has the potential to negatively impact state or federal threatened or endangered species.  <u>STANDARD:</u> Confirm the absence or presence of threatened or endangered species on state or federal Endangered Species Acts lists.</p> <p>H.2. Recovery Plan                      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?                      YES = Go to H.3                      N/A = Go to H.3                      NO = Facility is not eligible.  <u>GOAL:</u> To demonstrate that the Facility is in Compliance with all relevant conditions in the species recovery plan for the threatened or endangered species.  <u>STANDARD:</u> If there is a recovery plan, documentation should include the recovery plan and evidence of Compliance. The Applicant should obtain a Resource Agency Letter from the</p>	<p>The proposed criterion remains essentially unchanged from the existing criterion. The only change is the elimination of a requirement relating to circumstances in which there is a biological opinion applicable to the facility. Under the existing criterion, applicants in such circumstances have to demonstrate that a “recovery plan under active development will have no material effect on the Facility’s operations.”</p>

THREATENED AND ENDANGERED SPECIES PROTECTION		
EXISTING QUESTIONNAIRE	PROPOSED QUESTIONNAIRE	SUMMARY OF CHANGES
<p>b) The biological opinion was issued pursuant to or consistent with a recovery plan for the endangered or threatened species? Or</p> <p>c) There is no recovery plan for the threatened or endangered species under active development by the relevant Resource Agency? Or</p> <p>d) The recovery plan under active development will have no material effect on the Facility’s operations?</p> <p>YES = Pass, go to F NO = Fail</p> <p>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?</p> <p>YES = Pass, go to F NO = Fail</p>	<p>Resource Agency that issued the recovery plan confirming that: (1) the recovery plan is still valid; and (2) the Facility is in Compliance with the all relevant conditions contained in that recovery plan. Please see the general instructions and definitions above for more guidance regarding this letter. If no recovery plan has been issued, the correct answer to Question H.2. is N/A and the Applicant should proceed to Question H.3.</p> <p>H.3. Incidental Take</p> <p>If the Facility has received authority to incidentally <i>Take</i> a listed species, is the Facility in Compliance with conditions pursuant to that authority? Acceptable authorities include:</p> <p>i. Consultation by a relevant agency pursuant to ESA Section 7 resulting in a biological opinion, a habitat recovery plan, and/or (if needed) an incidental Take statement;</p> <p>ii. An incidental Take permit obtained pursuant to ESA Section 10;</p> <p>iii. In cases where a species is listed by a state and not by the federal government, authority obtained pursuant to relevant state procedures.</p> <p>YES = Go to H.4 N/A = Go to H.5 NO = Facility is not eligible.</p> <p><u>GOAL:</u> To show the Facility/ies’ Compliance with relevant conditions in an incidental Take permit or statement, biological opinion, habitat conservation plan, or, in cases where a species is listed by a state and not by the federal government, a relevant state document.</p> <p><u>STANDARD:</u> If no such authority has been issued, the correct answer to Question H.3. is N/A and the Applicant must pass this criterion through Question H.5. Documentation should include the relevant endangered species document and evidence of Compliance with conditions in that requirement. The Applicant must document compliance with a Resource Agency Letter. The letter should confirm that: (1) the authority is still valid; and (2)</p>	

<b>THREATENED AND ENDANGERED SPECIES PROTECTION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
	<p>the Facility is in Compliance with all relevant conditions contained in the authority. Please see the general instructions above for more guidance regarding this letter.</p> <p>H.4. Biological Opinion</p> <p>If a biological opinion applicable to the Facility for the threatened or endangered species has been issued, can the Applicant demonstrate one of the following?</p> <p>H.4.a. The biological opinion was accompanied by a FERC license or exemption or a habitat conservation plan, or;</p> <p>H.4.b. The biological opinion was issued pursuant to or consistent with a recovery plan for the endangered or threatened species, or;</p> <p>H.4.c. There is no recovery plan for the threatened or endangered species under active development by the relevant Resource Agency.</p> <p>YES = Go to I. Energy Efficiency.</p> <p>N/A = go to H.5</p> <p>NO = Facility is not eligible.</p> <p><u>GOAL:</u> To demonstrate that a Facility that has received authority to incidentally Take a listed species, and that this authority was designed to be a relatively permanent solution to the endangered species issue.</p> <p><u>STANDARD:</u> Compliance with this criterion can be demonstrated in one of three ways.</p> <p>Question H.4.a. – If the authority was issued along with long term operational requirements such as a FERC license or habitat conversation plan, this is good evidence that the endangered species resolution was designed to last several decades and the Facility will pass the criterion.</p> <p>Question H.4.b. – If the biological opinion was issued pursuant to or consistent with a recovery plan, there is also strong evidence that this was designed to be a permanent solution and the Facility will pass the criterion.</p>	

<b>THREATENED AND ENDANGERED SPECIES PROTECTION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
	<p>Question H.4.c. – A lack of active planning on behalf of the Resource Agencies for a more comprehensive resolution of the endangered species issues is good evidence that the Facility-specific resolution was designed to be relatively permanent, and thus the Facility will pass the criterion. However, if a Resource Agency has set a deadline for completion of a recovery plan within two years, this is a sign that the recovery plan is under active development, and thus the Endangered Species Act operational authority issued to the Facility was not expected to last a long time.</p> <p>H.5. Finding of No Negative Effect</p> <p>If H.2. and H.3. are not applicable, has the Applicant demonstrated that the Facility and Facility operations do not negatively affect listed species?</p> <p>YES = Pass, go to I. Energy Efficiency</p> <p>NO = Facility is not eligible.</p> <p><u>GOAL:</u> To demonstrate that the Facility does not affect the species in circumstances where H.2 and H.3 are not applicable.</p> <p><u>STANDARD:</u> The Applicant should obtain a letter from a relevant Resource Agency confirming that the Facility does not negatively affect the listed species. Documentation should include a basis for the conclusion and supporting studies. Please see the general instructions and definitions above for more guidance regarding this letter.</p>	

<b>“ENERGY EFFICIENCY” CRITERION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
<p>The existing questionnaire does not address energy efficiency.</p>	<p><b>CRITERION I: ENERGY EFFICIENCY</b></p> <hr/> <p><b>OVERVIEW:</b> If a Facility is operated efficiently there may be gains in energy produced. Since Facility owners use the public waters to generate electricity, making the most efficient use of that public resource is to everyone’s advantage. It is also important that Facility owners set the standard for efficient use of the water-generated electricity by insuring that all machines and devices that operate on electrical energy meet industry standards for optimum efficiency. Efficient operations may also reduce downstream migrant fish mortality for some hydropower Facilities.</p> <p>I.1 Turbine Efficiency: Have the turbines had more efficient runners installed in the last five years?                      YES = Add 1 year of certification and go to I.2                      NO = Go to I.2</p> <p><b>GOAL:</b> To encourage the Facility to make the most effective use of flow resources.</p> <p><b>STANDARD:</b> Provide documentation showing that the turbines have been upgraded with new runners within the last five years.</p> <p>I.2. Efficiency and Fish Passage: Has the Applicant upgraded the Facility by adding turbines designed to increase survival rates of downstream migrating fish?                      YES = Add 1 year to certification and go to J. Cultural Resource Protection                      NO = Go to J. Cultural Resource Protection</p> <p><b>GOAL:</b> To encourage the Facility to reduce downstream fish mortalities.</p> <p><b>STANDARD:</b> The Applicant must submit proof of having installed turbines that are designed to reduce downstream fish mortalities.</p>	<p>This is a completely new criterion.</p>

<b>CULTURAL RESOURCE PROTECTION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
<p>F. Cultural Resource Protection</p> <p>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> <p style="padding-left: 20px;">YES = Pass, go to G N/A = Go to F2 NO = Fail</p> <p>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?</p> <p style="padding-left: 20px;">YES = Pass, go to G NO = Fail</p>	<p><u>CRITERION J: CULTURAL RESOURCE PROTECTION</u></p> <p><b>OVERVIEW:</b> The Cultural Resource Protection Criterion is designed to ensure that the Facility does not inappropriately impact Cultural Resources. Cultural Resources must be protected either through Compliance with FERC license or exemption provisions, or through development of a plan approved by the relevant state or federal agency or Native American Tribe.</p> <p>J. Cultural Resource Protection</p> <p>J.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> <p style="padding-left: 20px;">YES = Pass, go to K. Recreation. N/A = Go to J.2. NO = Facility is not eligible.</p> <p>J.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 Native American Tribe, 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?</p> <p style="padding-left: 20px;">YES = Pass, go to K. Recreation. NO = Facility is not eligible.</p> <p><b>GOAL:</b> To ensure that a Facility/ies construction and operations are appropriately protective of cultural resources.</p> <p><b>STANDARD:</b> Documentation from the relevant Resource Agencies that the Facility has complied with cultural resource protection obligations.</p>	<p>There are no material changes to this criterion.</p>

<b>RECREATION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
<p>G. Recreation</p> <p>G.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?</p> <p>YES = Go to G3 N/A = Go to G2 NO = Fail</p> <p>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?</p> <p>YES = Go to G3 NO = Fail</p> <p>G.3 Does the Facility allow access to the reservoir and downstream reaches without fees or charges?</p> <p>YES = Pass, go to H NO = Fail</p>	<p><u>CRITERION K: RECREATION</u></p> <p>Overview: The Recreation Criterion is designed to ensure that the Facility provides reasonable access to the water and accommodates recreational activities.</p> <p>K.1. Levels and Flows Information: If recreational activities are affected by Facility operations on river flows or reservoir levels, does the Facility provide the public with relevant, readily accessible, and up-to-date information on reservoir levels and river flows? (If your answer is N/A, please explain.) YES or N/A = Go to K.2. NO = Facility is not eligible.</p> <p><u>GOAL:</u> To ensure that the Facility provides the public with relevant and up-to-date information on reservoir levels and river flows.</p> <p><u>STANDARD:</u> The Facility provides the public with relevant and up-to-date information on reservoir levels and river flows. Examples include but are not limited to: USGS real-time stream gauges, regularly-updated hotlines or websites with information about flows, reservoir levels, and scheduled or forecasted releases or drawdowns. In cases where flows rise or fall rapidly, either through Facility operations or emergency spills, the Facility should provide warning that is adequate to protect recreational users downstream.</p> <p>K.2. Access: Where the Applicant has control over recreational facilities or access, does the Facility provide reasonable access to the reservoir, affected river reaches, lands within the Facility boundary, and other recreational resources without fees or charges? If a fee is charged for specific amenities, please explain. YES or N/A = Go to K.3 NO = Facility is not eligible.</p>	<p>This criterion has been expanded in three ways: 1) Data: adds a new question asking about the applicant’s provision of “relevant, readily accessible, and up-to-date information on reservoir levels and river flows.” 2) Access: revises the access related question to require access to recreation unless a government agency has prohibited such access in all or part of the publicly owned water, and defines access more broadly, rather than simply asking about compliance with FERC license or resource agency recommendations related to access. 3) Mitigation: adds a new question asking whether the facility adequately mitigates for or enhances relevant reservoir and/or downstream facility-affected recreational resources (e.g. by maintaining reservoir levels for summer recreational use, scheduled whitewater releases, providing tailrace fishing access, etc.).</p>

<b>RECREATION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
	<p><u>GOAL:</u> To ensure that the Facility provides free and adequate access to the publicly owned water.</p> <p><u>STANDARD:</u> A Facility must provide access to recreation at the reservoir, at all affected river reaches, and on lands within the project boundary. However, if a state or federal agency has prohibited or recommended prohibiting access to any part of the reservoir or downstream reach, this provision does not apply to that area. The Applicant must provide access to the publicly owned waters without fee or charge. While access must be free, reasonable charges may be imposed for use of enhanced project amenities so long as the use of those facilities is not required as a precondition to access and it is possible to gain reasonable access to the publicly owned waters at the Facility without charge. If this question is not applicable, please explain why.</p> <p>K.3. Mitigation: Does the Facility adequately mitigate for or enhance relevant reservoir and/or downstream Facility-affected recreational resources (e.g. by maintaining reservoir levels for summer recreational use, scheduled whitewater releases, providing tailrace fishing access, etc.)?                      YES or N/A = PASS, FACILITY MEETS LIHI CRITERIA.                      NO = Facility is not eligible.</p> <p><u>GOAL:</u> To ensure that the Facility mitigates recreational impacts related to the operation of the Facility.</p> <p><u>STANDARD:</u> A certified Facility should mitigate impacts to recreational resources caused by the operation of the Facility, and/or enhance relevant recreational resources. Operational impacts include flow-related impacts on Facility-affected river reaches, and impacts related to reservoir levels. Recognizing that operational changes intended to benefit one form of recreation may be detrimental to another, a Facility should balance competing demands by providing reasonable mitigation for all forms of recreation where the public has expressed an interest in</p>	

<b>RECREATION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
	such mitigation. If this question is not applicable, please explain why.	

<b>REMOVAL RECOMMENDATION</b>		
<b>EXISTING QUESTIONNAIRE</b>	<b>PROPOSED QUESTIONNAIRE</b>	<b>SUMMARY OF CHANGES</b>
H. Facilities Recommended for Removal 1) Is there a Resource Agency Recommendation for removal of the dam associated with the Facility? NO = Pass, Facility is Low Impact YES = Fail	The proposed questionnaire addresses the specifically as part of question A.3 General Eligibility.	The proposed questionnaire shifts the question about whether a facility has been recommended for removal from a separate stand alone criterion to the new A. General Eligibility criterion (at A.3.).