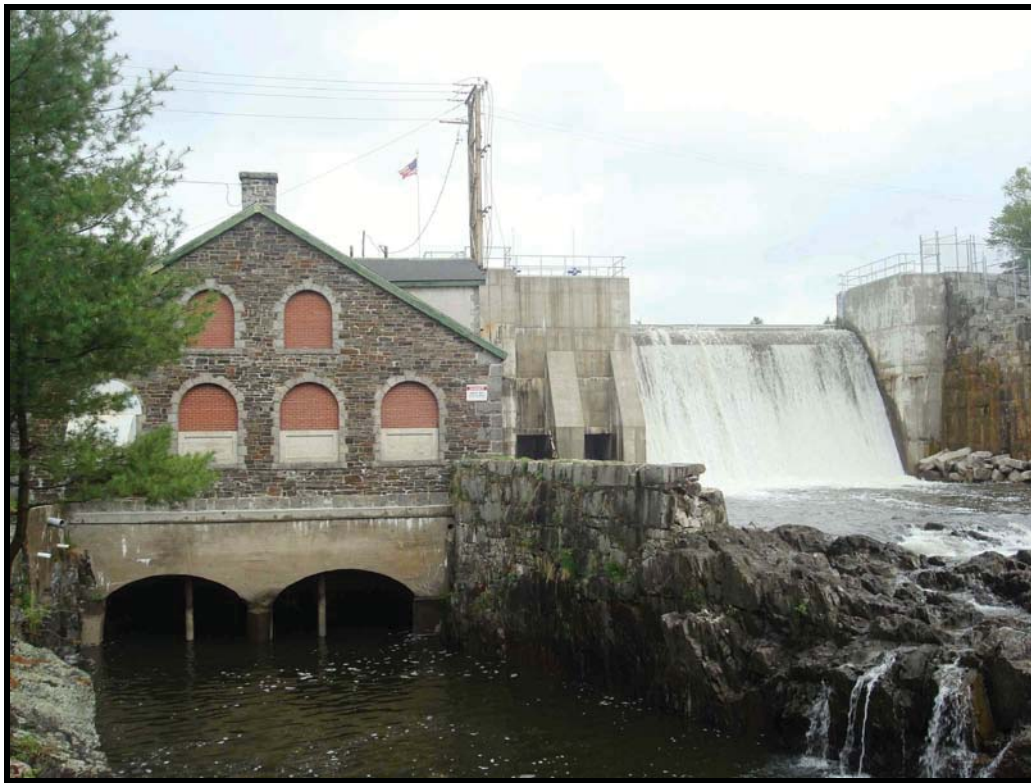


**THIRD PARTY REVIEW OF APPLICATION  
FOR LOW IMPACT HYDROPOWER CERTIFICATION**

**UNION GAS HYDROPOWER PROJECT  
WATERVILLE, MAINE  
(FERC LICENSE NO. 2556)**



**PREPARED FOR:  
LOW IMPACT HYDROPOWER INSTITUTE  
34 PROVIDENCE STREET  
PORTLAND, MAINE 04103**

**PREPARED BY:  
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## **Introduction**

This report provides a review of the application dated May 9, 2010 by Messalonskee Stream Hydro Associates (MSH or “applicant”) to the Low Impact Hydropower Institute (LIHI) for Low Impact Hydropower Certification of its Union Gas Hydropower Project. The review was completed according to the current (September, 2004) LIHI Certification Program rules and criteria.

## **Project Description & Operation**

The Union Gas Hydroelectric facility is located on Messalonskee stream approximately 1 mile upstream from its confluence with the Kennebec River in Waterville, Maine. The Union Gas project is the last of the three hydropower facilities between Messalonskee Lake dam and the Kennebec River that are licensed under the FERC project No. 2556. The Union Gas facility operates with an installed electrical generating capacity of 1.8 MW.

The facility is comprised of a 343 foot-long dam that is 31 feet high with 18 inch flashboards. The facility impoundment is approximately 1.5 miles long with a usable storage capacity of 30 acre-feet.

## **Regulatory History**

The Union Gas Hydro Project was originally constructed in the early 19<sup>th</sup> century by the Union Gas & Electric Company and operated until 1969 as an unlicensed facility. On February 24, 1969, Federal Energy Regulatory Commission (FERC) issued the facility a 30-year license. The facility was then consolidated with the two other hydropower facilities on Messalonskee Stream and re-licensed for an additional 37 years by the FERC on July 28, 1999 (FERC Project No. 2556).

## **Public Comments**

No public comments were received on this application.

## **Agency Correspondence**

As part of the review process, both State and Federal government resource agency officials were contacted to confirm that (1) resource agency recommendations provided during the FERC licensing process are still valid; and (2) the applicant is currently in compliance with those recommendations. Following is a list of resource agencies that were contacted as part of the LIHI review process for this project:

- Maine Department of Environmental Protection (Maine DEP)
- Maine Department of Inland Fisheries and Wildlife (Maine IF&W)
- Maine Historic Preservation Commission (MHPC)
- Maine Department of Conservation (MDC)
- US Fish & Wildlife Service (USFWS)

The agencies listed above assisted this review through providing compliance information regarding each, individual agency's recommendations. For the purpose of determining satisfaction of LIHI certification criteria, a facility is considered in compliance with an agency requirement or recommendation if it complies at the time the LIHI certification questionnaire is filled out and has not had any material violations or formal notices of violation issued by an agency within the last year. If the hydropower facility has been in violation of an agency requirement or recommendation, but the applicant does not believe the violation is material, the violation must be disclosed and its materiality explained in the application.

The summary tables below outline our independent conclusions as to whether the LIHI criteria have been met. The conclusions were drawn from information derived from the application; from information gathered directly from the applicant; and through discussions with resource agencies and others. Contact information for each of the resource agency personnel contacted as part of this review has been provided as Attachment A to this document.

### **Conclusions & Recommendation**

Based upon our independent review of the MSH application dated 5/9/2010, our consultations with relevant Resource Agency staff, and the current LIHI Certification Program and Criteria, it is our opinion that

***The project's design and operation, given its location and physical constraints, appears to be consistent with LIHI criteria for certification.***

Our full evaluation using the LIHI questionnaire and criteria is provided in the Analysis section below. This report includes excerpts from the LIHI application submitted by MSH and excerpts from other supporting materials, such as License orders and other documents issued by the FERC.

**Summary Tables**

<b>LIHI CRITERION &amp; CONCLUSIONS</b>	<b>SUMMARY &amp; CURRENT STATUS</b>
<p><b>River Flows</b></p> <p><b>Facility Passes</b></p>	<p>The FERC license and Maine Department of Environmental Protection Water Quality Certificate require the applicant to maintain a prescribed water level of 235.4 feet in Messalonskee Lake during the summer months and 235.1 feet during the winter. The licenses require the applicant to maintain a minimum instantaneous flow of 15 cfs below the project and also require submittal of a flow monitoring plan for FERC approval.</p> <p>The FERC approved the applicant's Flow Monitoring Plan on 2/21/2002. In a letter dated August 6, 2009, the applicant reported the minimum instantaneous flow requirement had been met at the Union Gas facility during the most recent review period from August, 2008 through July, 2009. Consultation with Dana Murch of the Maine DEP confirmed there have been no instances where the applicant has failed to maintain the minimum flow requirements and all other required elements of the plan have been met.</p>

<b>LIHI CRITERION &amp; CONCLUSIONS</b>	<b>SUMMARY &amp; CURRENT STATUS</b>
<p><b>Water Quality</b></p> <p><b>Facility Passes</b></p>	<p>The project received a Water Quality Certificate from the Maine Department of Environmental Protection on August 29, 1995. The certificate noted that Messalonskee Stream is classified as a Class C water. The certificate requires the applicant to maintain a minimum flow of 15 cfs below the project to minimize the effect of internal cycling of phosphorous and to maintain a suitable habitat for brow trout in the tailrace of the Union dam. Currently, the project remains in compliance with all terms and conditions of its permits. This was verified in telephone discussions with Dana Murch from the Maine DEP.</p>

<b>LIHI CRITERION &amp; CONCLUSIONS</b>	<b>SUMMARY &amp; CURRENT STATUS</b>
<p><b>Fish Passage &amp; Protection</b></p> <p><i>Facility Passes</i></p>	<p>At the time of FERC licensing, the U.S. Fish and Wildlife Service requested that the authority to prescribe fishways be reserved. This request was submitted by letter on January 26, 1994. Article 406 of the FERC license does, however, reserve the authority to the commission to require the licensee to construct, operate and maintain a fishway, if prescribed by the Secretary of the Interior at a future date. This was verified during phone discussions with the Maine DEP.</p>

<b>LIHI Criterion &amp; Conclusions</b>	<b>Summary &amp; Current Status</b>
<p><b>Watershed Protection</b></p> <p><i>Facility Passes</i></p>	<p>Article 408 in the FERC License, as amended in May, 2007, requires that the applicant adhere to the wetlands and wildlife monitoring requirements set forth in the “Messalonskee Lake Waterfowl Management Plan” originally published in 1993. The plan requires the applicant to conduct waterfowl and wetland surveys every 5 years to monitor potential impacts the project has on the watershed.</p> <p>The first monitoring report was conducted in 2005 and submitted to FERC in January, 2006. The applicant’s report was reviewed by FERC and the appropriate State and Federal agencies. The agencies accepted the methods and findings of the report and there were no comments suggesting the project had either a negative effect on wetland water levels or waterfowl species within the watershed. This information was confirmed through conversations with Dana Murch at the Maine DEP. The next waterfowl survey and wetland assessment monitoring report is due January 31, 2011. The applicant verified that monitoring efforts are currently underway for the 2010 season and that the facility will be submitting the monitoring report as scheduled to the FERC.</p>

LIHI CRITERION & CONCLUSIONS	SUMMARY & CURRENT STATUS
<p><b>Threatened &amp; Endangered Species</b></p> <p><i>Facility Passes</i></p>	<p>There are no state or federal threatened or endangered species present within the vicinity of the project area and/or its downstream reach, except for occasional transient Bald Eagles and Peregrine Falcons. The applicant has indicated there has been no change, and....</p> <p><i>(Currently waiting for confirmation from Maine IF&amp;W as well as USFWS)</i></p>

LIHI CRITERION & CONCLUSIONS	SUMMARY & CURRENT STATUS
<p><b>Cultural Resources Protection</b></p> <p><i>Facility Passes</i></p>	<p>The Facility is in Compliance with all requirements regarding cultural resources protection included in the FERC license. A letter from Dr. Arthur Spiess of Maine Historic Preservation Commission requires the applicant to continue monitoring 5 archaeological sites for evidence of emergency erosion status. The sites will require monitoring every 2 years, beginning in 2010. This represents a change from the original license requirement of monitoring on an annual basis. This information was confirmed in e-mail correspondence with Arthur Spiess of the MHPC on June 9, 2010. The 2010 report is due by February 15, 2011 and is not yet complete. In a recent phone interview, the applicant confirmed that MSH plans to submit a monitoring report for 2010 and every two years thereafter.</p>

LIHI CRITERION & CONCLUSIONS	SUMMARY & CURRENT STATUS
<p><b>Facilities Recommended for Removal</b></p> <p><i>Facility Passes</i></p>	<p>There is no Resource Agency Recommendation for removal of the dam associate with the Facility. This was confirmed in a conversation with Dana Murch of the Maine DEP.</p>

<b>LIHI Criterion &amp; Conclusions</b>	<b>Summary &amp; Current Status</b>
<b>Recreation</b>  <b>Facility Passes</b>	The Facility is in full compliance with its Recreation Plan. The applicant has continued compliance with the required recreational monitoring efforts, submitting reports in 2002 and 2008 (i.e. every six years as required in the FERC License). A letter dated November 12, 2009 confirms the receipt and acceptance of the most recent, 2008, recreation monitoring report by the FERC. This letter is available on the FERC E-Library Database. The next recreation monitoring report is due from the applicant on or before September 30, 2015. This information was verified in phone and e-mail correspondence with the Maine Department of Conservation.
<b><u>THE FACILITY IS LOW IMPACT</u></b>	

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## Analysis of the Low Impact Certification Criteria

### A. River Flows

**Goal:** The Facility (dam and powerhouse) should provide river flows that are healthy for fish, wildlife, and water quality, including seasonal flow fluctuations where appropriate.

**Standard:** For in-stream flows, a certified Facility must comply with recent Resource Agency Recommendations for flows. If there were no qualifying Resource Agency Recommendations, the applicant can meet one of two alternative standards: (1) meet the flow levels required using the Aquatic Base Flow methodology or the “good” habitat flow level under the Montana-Tennant methodology; or (2) present a letter from a Resource Agency prepared for the application confirming the flows at the Facility are adequately protective of fish, wildlife, and water quality.

#### Criteria:

- 1) **Is the Facility in Compliance with Resource Agency Recommendations 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 in-stream flow variations) for both the reach below the tailrace and all bypassed reaches?**

✓ YES

Article 401 of the original FERC license issued July 28, 1999 ordered that a minimum instantaneous flow of 100 cfs be sustained from the Union Gas development. Following a rehearing of the commission’s order, an amended license was issued on October 12, 2000, which lowered the required instantaneous flow to 15 cfs. In a letter submitted to the FERC dated August 6, 2009, the applicant reported that the minimum instantaneous flow requirement had been met from August, 2008 through July, 2009. This was confirmed through interviews with resource agency personnel.

***If YES, go to B.***

***If NOT APPLICABLE, go to A2.***

***If NO, Facility fails***

- 2) **If there is no flow 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?**

***If YES, go to B.***

***If NO, go to A3.***

- 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?**

***If YES, go to B.***

***If NO, Facility fails.***

### THE FACILITY PASSES

<b>River Flows -</b>	The Facility is in Compliance with LIHI River Flows standards.
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### B. Water Quality

**Goal:** *Water quality in the river is protected.*

**Standard:** *The water quality criterion has two parts. First, a Facility must demonstrate that it is in Compliance with state water quality standards, either through producing a recent (after 1986) Clean Water Act Section 401 certification, or demonstrating Compliance with state water quality standards (typically by presenting a letter prepared for the application from the state confirming the Facility is meeting water quality standards). 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) (relating to water quality limited streams).*

**Criteria:**

- 1) **Is the Facility either:**
  - a) **in Compliance with all conditions issued pursuant to a Clean Water Act (CWA) Section 401 water quality certification issued for the Facility after December 31, 1986? OR**
  - b) **in Compliance with quantitative water quality standards established by the state that support designated uses pursuant to the federal Clean Water Act (CWA) in the Facility area and in the downstream reach?**

✓ **YES**

The project received a 401 Water Quality Certificate from the Maine Department of Environmental Protection on August 29, 1995. The certificate noted that Messalonskee Stream is classified as Class C water. The certificate requires the applicant to maintain a minimum flow of 15 cfs at all time from the project. Additionally, the project was reissued its Maine Pollutant Discharge Elimination System (MEPDES) Permit (No. 0001252) on January 23, 2009. Therefore, the facility is currently in compliance with all conditions issued pursuant to the Clean Water Act.

**If YES, go to B2.**  
**If NO, Facility fails.**

**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?**

✓ **NO.**

Messalonskee Stream is currently categorized as Class C water by the Maine DEP and is not on the list of impaired waters under Section 303(d).

**If YES, go to B3.**  
**If NO, go to C.**

**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?**

**If YES, go to C.**  
**If NO, the Facility fails.**

#### **THE FACILITY PASSES**

<b>Water Quality -</b>	The Facility is in Compliance with LIHI Standards for Water Quality
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#### **C. Fish Passage and Protection**

**Goal:** *The Facility provides effective fish passage for Riverine, anadromous and catadromous fish, and also protects fish from entrainment.*

**Standard:** *For Riverine, anadromous, and catadromous fish, a Facility must be in Compliance with recent (after 1986) mandatory prescriptions regarding fish passage (such as a Fish and Wildlife Service prescription for a fish ladder) as well as any recent Resource Agency Recommendations regarding fish protection (e.g., a tailrace barrier). If anadromous or catadromous fish historically passed through the Facility area but are no longer present, the applicant must show that the fish are not extirpated or extinct in the area because of the Facility and that the Facility has made a legally binding commitment to provide any future fish passage recommended by a Resource Agency.*

*When no recent fish passage prescription exists for anadromous or catadromous fish, and the fish are still present in the area, the Facility must demonstrate either that there was a recent decision that fish passage is not necessary for a valid environmental reason, that existing fish passage survival rates at the Facility are greater than 95% over 80% of the run, or provide a*

letter prepared for the application from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service confirming the existing passage is appropriately protective.

**Criteria:**

**1) Is the Facility in Compliance with Mandatory Fish Passage Prescriptions for upstream and downstream passage of anadromous and catadromous fish issued by Resource Agencies after December 31, 1986?**

✓ **NOT APPLICABLE.**

There are no anadromous or catadromous fish that utilize the upper portions of Messalonskee Stream or Messalonskee Lake. This was confirmed during discussion with Dana Murch from the Maine DEP. According to Mr. Murch, the presence of a natural 40 foot-high water fall at the location of the present-day Oakland facility acted as a natural barrier to anadromous and catadromous fish passage prior to the installation of hydropower facilities along Messalonskee Stream. Therefore, there have been no requests from State or Federal agencies to provide infrastructure for fish passage at the Union Gas hydropower facility.

However, as stated in Article 406 of the FERC License, the authority is reserved to the commission to require the applicant to construct, operate, and maintain upstream and/or downstream fishways as may be prescribed by the Secretary of the Interior under section 18 of the Federal Power Act.

*If YES, go to C5.*

**If NOT APPLICABLE, go to C2.**

*If NO, Facility fails.*

**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 (e.g., because passage is blocked at a downstream dam or the fish run is extinct?)**

✓ **NO.**

*If YES or NOT APPLICABLE, go to C2a.*

**If NO, go to C3.**

**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 in part to the Facility?**

*If YES, go to C2b.*

***If NOT APPLICABLE, go to C2b.***

*If NO, Facility fails.*

**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?

*If YES, go to C5.*

*If NOT APPLICABLE, go to C3.*

*If NO, Facility fails.*

3) If, since December 31, 1986:

- 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 C2 above), and
- b) the Resource Agency declined to issue a Mandatory Fish Passage Prescription,
- 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?

✓ NO.

Resource Agencies did not issue Mandatory Fish Passage Prescriptions during FERC licensing.

*If NO, go to C5.*

*If NOT APPLICABLE, go to C4.*

*If YES, Facility fails.*

4) If C3 was not applicable:

- 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
- b) If the Facility is unable to meet the fish passage standards in 4a, 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?

*If YES, go to C5.*

*If NO, Facility fails.*

5) Is the Facility in Compliance with Mandatory Fish Passage Prescriptions for upstream and/or downstream passage of Riverine fish?

✓ N/A

There have been no requirements for upstream or downstream fish passage prescribed by Resource Agencies.

**If YES or NOT APPLICABLE, go to C6.**  
**If NO, Facility fails.**

**6) Is the Facility in Compliance with Resource Agency Recommendations for Riverine, anadromous and catadromous fish entrainment protection, such as tailrace barriers?**

✓ N/A

No recommendations were prescribed.

**If YES or NOT APPLICABLE, go to D.**  
**If NO, Facility fails.**

### THE FACILITY PASSES

<b>Fish Passage and Protection -</b> The Facility is in compliance with LIHI requirements for Fish Passage
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#### D. Watershed Protection

**Goal:** Sufficient action has been taken to protect, mitigate and enhance environmental conditions in the watershed.

**Standard:** A certified Facility must be in Compliance with Resource Agency Recommendations and FERC license terms regarding watershed protection, mitigation or enhancement. These may cover issues such as shoreline buffer zones, wildlife habitat protection, wetlands protection, erosion control, etc. The Watershed Protection Criterion was substantially revised in 2004. The revised criterion is designed to reward projects with an extra three years of certification that have: a buffer zone extending 200 feet from the high water mark; or, an approved watershed enhancement fund that could achieve within the project's watershed the ecological and recreational equivalent of land protection in D.1 and has the agreement of appropriate stakeholders and state and federal resource agencies. A Facility can pass this criterion, but not receive extra years of certification, if it is 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.

#### Criteria:

**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 round 50-100% of the impoundment, and for all of the undeveloped shoreline?**

✓ NO

There is currently no 200-foot buffer that is dedicated for conservations purposes around 50 to 100% of the impoundment including undeveloped shoreline.

*If YES, go to E and receive 3 extra years of certification*  
*If 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 D1, and 2) has the agreement of appropriate stakeholders and state and federal resource agencies?**

✓ NO

*If YES, go to E and receive 3 extra years of certification*  
*If NO, go to D3.*

**3) Has the Facility owner/operator established through a settlement agreement with appropriate stakeholders and that has the 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

The project is required under Article 408 of the FERC License to operate the facility within the guidelines of the "Messalonskee Lake Waterfowl Management Plan" originally published in 1993. The plan requires the applicant to monitor select waterfowl species and wetland habitats that are associated with Messalonskee Lake. Monitoring reports are required to be submitted every 5 years to the FERC, with the first report due in January, 2006. There were no deficiencies noted by any resource agency in the 2006 report. As a condition of the FERC License, the applicant must comply with any terms and conditions determined by State or Federal wildlife agencies as appropriate to prevent loss of, or damage to, fish and wildlife within the project area.

*If YES, go to E.*  
*If 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?**

*If YES, go to E.*  
*If NO, Facility fails*

#### THE FACILITY PASSES

<b>Watershed Protection -</b>	The Facility is in Compliance with LIHI's Watershed Protection standard.
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## E. Threatened And Endangered Species Protection

**Goal:** *The Facility does not negatively impact state or federal threatened or endangered species.*

**Standard:** *For threatened and endangered species present in the Facility area, the Facility owner/operator must either demonstrate that the Facility does not negatively affect the species, or demonstrate Compliance with the species recovery plan and any requirements for authority to "take" (damage) the species under federal or state laws.*

### Criteria:

**1) Are threatened or endangered species listed under state or federal Endangered Species Act (ESA) present in the Facility area and/or downstream reach?**

✓ NO

Consultation with MIF&W and USFWS confirmed that none are present.

*If YES, go to E2.*

*If NO, go to F.*

**2) If a recovery plan has been adopted for the threatened or endangered species pursuant to Section 4(f) of the Endangered Species Act (ESA) or similar state provision, is the Facility in Compliance with all Recommendations in the plan relevant to the Facility?**

*If YES or NOT APPLICABLE, go to E3.*

*If NO, Facility fails.*

**3) If the Facility has receive 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 and 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?**

*If YES, go to E4.*

*If NOT APPLICABLE, go to E5.*

*If NO, Facility fails.*

**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
- d) the recovery plan under active development will have no material effect on the Facility's operation?

If YES, go to F.  
If NO, Facility fails.

- 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?

If YES, go to F.  
If NO, Facility fails

### THE FACILITY PASSES

#### Threatened and Endangered Species Protection -

The Facility is in Compliance with LIHI's Threatened and Endangered Species Protection standard.

### F. Cultural Resources Protection

*Goal: The Facility does not inappropriately impact Cultural Resources.*

*Standard: Cultural Resources must be protected either through Compliance with FERC license provisions, or, if the project is not FERC regulated, through development of a plan approved by the relevant state, federal, or tribal agency.*

#### Criteria:

- 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?**

✓ YES

The Union Gas facility is in Compliance with all requirements regarding cultural resources protection included in the FERC license. A letter from Dr. Arthur Spiess of Maine Historic Preservation Commission requires the applicant to continue monitoring 5 archaeological sites for evidence of emergency erosion status. The sites will require monitoring every 2 years, beginning in 2010. This represents a change from the original license requirement of monitoring on an annual basis, with which the applicant has been in compliance to date.

***If YES, go to G.***

***If NOT APPLICABLE, go to F2***

***If NO, Facility fails.***

- 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 state or federal agency or Tribe that no plan is needed because Cultural Resources are not negatively affected by the Facility?**

***If YES, go to G.***

***If NO, Facility fails.***

### THE FACILITY PASSES

<b>Cultural Resources -</b>	The Facility is in Compliance with LIHI's Cultural Resources Standard
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### G. Recreation

***Goal:*** The Facility provides free access to the water and accommodates recreational activities on the public's river.

***Standard:*** A certified Facility must be in Compliance with terms of its FERC license or exemption related to recreational access, accommodation and facilities. If not FERC-regulated, a Facility must be in Compliance with similar requirements as recommended by resource agencies. A certified Facility must also provide the public access to water without fee or charge.

#### Criteria:

- 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**

The FERC approved the applicant's proposed Recreation Plan, per Articles 409, 410, and 411 of the FERC License, with an order issued on June 21, 2000. The Recreation plan required several actions to be taken at the Union Gas facility, including:

1. Provide parking facilities on a level area near the Union Gas powerhouse
2. Provide a platform for bank fishing downstream of the Union Gas tailrace
3. Provide an access route from the Union Gas parking lot to the fishing platform

Article 412 of the FERC license requires that the applicant develop a plan to monitor the recreation activities at the Union Gas development and report such activities with the required Form 80 every 6 years, beginning with the initial study to be completed in 2002.

According to a letter from FERC to the applicant dated November 12, 2009, all requirements under the order of June 21, 2000 have been met and the FERC has accepted the most recent monitoring report conducted in 2008 and submitted to the FERC on September 29, 2009. Copies of the 2008 recreation monitoring report were provided to all appropriate resource agencies for further recommendations and commenting. No comments were received. Consultation with the resource agencies has confirmed these findings. Therefore, the applicant has fulfilled all obligations for the Union Gas development under the FERC recreational access, accommodation and facilities conditions.

***If YES, go to G3.***

***If NOT APPLICABLE, go to G2.***

***If NO, Facility fails.***

- 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?**

***If YES, go to G3.***

***If NO, Facility fails.***

- 3) Does the Facility allow access to the reservoir and downstream reaches without fees or charges?**

**✓ YES**

***If YES, go to H.***

***If NO, Facility fails.***

**THE FACILITY PASSES**

<b>Recreation -</b>	The Facility is in Compliance with LIHI's Recreation standard
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## H. Facilities Recommended for Removal

**Goal:** To avoid encouraging the retention of facilities that have been considered for removal due to their environmental impacts.

**Standard:** If a Resource Agency has recommended removal of a dam associated with the Facility, certification is not allowed. **Criterion:**

1) **Is there a Resource Agency Recommendation for removal of the dam associated with the Facility?**

✓ NO

Consultation with Maine DEP has confirmed this status.

**If NO, Facility is low impact.**  
**If YES, the Facility fails.**

### THE FACILITY PASSES

**Dam Removal -**

There is no Resource Agency Recommendation for removal of the Union Gas development.

### FACILITY IS LOW IMPACT

## **Appendix A: Agency Contact Information**

**Maine Department of Environmental Protection:**

Dana Murch  
Bureau of Land and Water Quality  
[dana.p.murch@maine.gov](mailto:dana.p.murch@maine.gov) 207-287-7784

**Maine Historic Preservation Commission:**

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