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DATE

Fred Ayer, Executive Director
Low Impact Hydropower Institute
34 Providence St.
Portland, ME 04103

Subject: Draft Application Reviewer Report for the Dodge Falls Hydroelectric Project

Dear Fred:

Attached please find my draft reviewer's report on the application by Dodge Falls Associates for certification of the Dodge Falls Hydroelectric Project by the Low Impact Hydropower Institute (LIHI). Please contact me with any questions or concerns.

Best regards,

s//Gabriela

Gabriela Goldfarb

Attachment: as described.

Review of Low Impact Hydropower Institute Application for Low Impact Hydropower Certification: Dodge Falls Hydroelectric Project

Introduction and Overview

This report reviews the application submitted by Dodge Falls Associates (applicant) to the Low Impact Hydropower Institute (LIHI) for Low Impact Hydropower Certification for the Dodge Falls Hydroelectric Project (project or facility) located on the Connecticut River in Grafton County, New Hampshire and Caledonia County, Vermont. The Federal Energy Regulatory Commission (FERC) issued the project (FERC 8011) an exemption in 1984 for the operation and maintenance of the 5 megawatt run-of-river project.

Project and site characteristics. The project is located at river Mile 268 on the Connecticut River in the towns of Bath, New Hampshire and Ryegate, Vermont, constructed at the site of the existing Dodge Falls dam. From 1909 to 1966 the dam provided waterpower to operate the grinders of a paper mill located on the Vermont side of the river. Between 1966 and 1990 the dam was used to supply process water instead of power to the paper mill, with excess flow discharged over the dam. The hydroelectric project was not constructed until the late 1980s and began operation in 1990. At that time, most of the river flow was used for hydroelectric generation, with the paper mill receiving up to 5 cubic feet per second (cfs) of flows for process use. The paper mill shut down in 2000 and the papermaking machinery was removed.

The dam is 485 feet long and consists of a grouted, rock fill, timber crib with a timber crest and wood plank facing. The crest elevation of the dam is 421.4 feet NGVD and is about 15.5 feet above the bedrock streambed at the downstream toe. Initially the project was authorized to install 2 feet of pin supported wooden flashboards to reestablish the historic level of the impoundment.

The project consists of an old concrete powerhouse at the west end of the dam, without generating units, formerly used by the paper mill; a training wall section at the west end of the dam; a 240-foot-long by an average 9-foot-high, grouted rock-filled timber crib spillway dam at crest elevation 421.6 feet m.s.l. topped with two-foot-high flashboards; a 100-foot-long concrete gravity side channel overflow spillway at crest elevation 421.6 m.s.l., topped with a two-foot-high rubber dam; a 12-foot-wide by 7-foot-high hydraulic sluice gate; a reinforced concrete powerhouse located on the New Hampshire side of the river with a 5000-kW Kaplan pit turbine-generating unit having a hydraulic capacity of 5,800 cfs and a rated head of 12 feet; transmission line and appurtenant facilities. The pond is 4 miles long and covers 290 acres, with a usable storage capacity of 590 acre-feet at elevation 423.6 m.s.l.

From 1990 to 1993 the project operated using pin supported wooden flashboards that were subsequently replaced by a two-foot rubber pneumatic flashboard system in two

phases; the spillway flashboards were replaced in 1993, and the rest were replaced in 1997. A single double regulated 5 megawatt Escher Wyse turbine is installed in the powerhouse.

The project is operated as a run of river facility. The reservoir level is maintained by means of a pond level control system. The project is required to maintain a minimum flow of 1108 cfs, which is equivalent to 0.5 cubic feet per second per square mile (csm), or project inflow, whichever is less. The project is located 4 miles downstream of the Macindoes dam, the lowermost facility making up the three-dam Fifteen Mile Falls Hydroelectric Project. River flow for the Dodge Falls project is determined by discharge from the MacIndoes project. FERC relicensed the Fifteen Mile Falls project in 2002, incorporating new minimum flows set by a 1997 settlement agreement among a range of resource agencies and other stakeholders.

Regulatory history. The project changed design, ownership, and FERC exemptions between the time it was first proposed in the early 1980s and when it commenced operation in 1990. FERC first issued an exemption for a project at the site on the New Hampshire side of the river in 1982. In 1984 the then owners of the project surrendered the exemption and that same year obtained a new exemption from FERC for a project on the Vermont side of the river using the existing infrastructure of the defunct paper mill. In 1985 they asked FERC to amend the exemption to allow for a reconfigured project on the New Hampshire side of the river after discovering the infeasibility of re-using the existing paper mill infrastructure. The proposed site and design changes were also submitted to regulatory agencies for review. The Vermont and New Hampshire water quality agencies issued new Clean Water Act Section 401 certifications for the revised project; other environmental agencies did not raise objections or otherwise identify changes to the terms and conditions they imposed in the context of the 1984 exemption. FERC, finding that the proposed changes did not materially alter the terms of the 1984 exemption and that resource agencies did not raise objections or new recommendations to the reconfigured project, dismissed the amended exemption request as moot. The applicant assumed ownership of the project in 1988 and construction commenced. The project was completed and began operating in 1990. In 1993 FERC amended the exemption at the applicant's request to replace part of the wooden flashboards with an inflatable rubber dam; there appear to have been no resource agency comments at that time. In 1997 the applicant requested another amendment to replace the remaining flashboards, but FERC deemed the amendment unnecessary and issued a letter that year authorizing the flashboards' replacement on the rest of the dam. There have been no further changes in the regulatory status of the project since 1997.

Public comment. LIHI received no public comments on this application.

Recommendation. Based on my review of information submitted by the applicant, my review of additional documentation, and my consultations with resource agency staff, I believe the Dodge Falls Hydroelectric Project meets all of the criteria to be certified and I recommend certification, with one caveat. While the documentary evidence

appears to demonstrate the project's consistency with the LIHI criteria, it is standard practice for application reviewers to consult with appropriate resource agency officials to confirm an applicant's compliance with regulatory requirements and to learn whether there are any issues of concern related to LIHI's evaluation of projects. The field research season and summer vacations caused a number of officials to be unavailable for consultation for an extended period. Most officials are scheduled to return the week of August 24, which coincides with the week the LIHI Governing Board will consider this application at its August 27 meeting. Every effort will be made to contact the officials (see the "Records of Contacts" section below for a list) and present any relevant information verbally to the board at its meeting.

Low Impact Certification Criteria

A. Flows

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 instream flow variations) for both the reach below the tailrace and all bypassed reaches?

NOT APPLICABLE

If NOT APPLICABLE, go to A2.

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

At the time of the exemption the resource agencies set a minimum flow requirement of 1108 cfs, equivalent to 0.5 csm. Because the facility operates in a run-of-river mode, flows are effectively regulated by the upstream Macindoes development, the lowermost dam in the Fifteen Mile Falls hydropower project 4 miles upstream.

Minimum flows from the Macindoes development established in a settlement agreement and reflected in the project's 2002 FERC relicensing requirements are as follows:

- 1,105 cfs from June 1 through September 30, or inflow, whichever is less
- 2,210 cfs from October I through March 31, or inflow, whichever is less

- 4,420 from April I through May 31, or inflow, whichever is less

According to the 1986 Vermont 401 Certification for the Dodge Falls project, the limited storage of 580 acre-feet retained behind the flashboards is not to be utilized to cycle the pond for power production, and the impoundment will be maintained within three inches of the flashboards.

If YES, go to B

PASS.

B. Water Quality

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

YES

The facility appears to be in compliance with the water quality standards of Vermont and New Hampshire. The Connecticut River is a Class B river; designated uses in the vicinity of the project include supporting aquatic life and habitat, aesthetics, public water supply, agricultural uses, public water supply, and swimming, boating, and other water based recreation. (Waters immediately downstream of the facility formerly had a Class C designation when the paper mill at the dam site was still operating and discharging process water.) The State of Vermont's March, 1986 CWA Section 401 water quality certification required the applicant to conduct water quality sampling for dissolved oxygen. The project began operating in 1990 and the applicant submitted results of the monitoring to the State of Vermont in 1991; results showed that the river was easily meeting its designated classification without spillage at the dam.

If YES, go to B2.

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

The waters in the vicinity of the project, as well as the entire Connecticut River, are

listed as impaired for mercury.

Note: The State of Vermont also maintains a list of priority surface waters outside the scope of Clean Water Act Section 303(d) that for various reasons are of state concern and prioritized for management action, but do not qualify for listing under 303(d). Waters in the vicinity of the project do not appear on this list.

If YES, go to B3.

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?

The 2008 303(d) lists of Vermont and New Hampshire list atmospheric deposition as the cause of the mercury impairment.

If YES, go to C.

NOTE: The documentary evidence supports the applicant's contention that the project complies with LIHI's water quality criterion. However, it is this reviewer's practice to also consult with agency staff, which has not been possible to date (see "Record of Contacts" section at the end of this report for an explanation.) Information from consultations that occur after this report is released but prior to the Governing consideration of this application at its August 2009 meeting will be reported verbally if there is any conflict with the conclusion that the project's operations are consistent with the LIHI water quality criterion.

PASS.

C. Fish Passage and Protection

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?

YES (with qualification)

If YES, go to C5.

The Connecticut River Atlantic Salmon Commission's 1998 *Strategic Plan for the Restoration of Atlantic Salmon to the Connecticut River*, in its description of actions to be taken to restore salmon, confirms that downstream passage is in place at the project and that there is an enforceable commitment to construct upstream passage at the site, but that implementation is deferred until such time as 20 Atlantic salmon reach the dam for two consecutive years.

These requirements are identical to those recommended for incorporation in the project's FERC exemption in letters issued in 1981 by the U.S. Fish and Wildlife Service (FWS), the National Oceanic and Atmospheric Administration, what was then known as the Vermont Agency of Environmental Conservation, and the New Hampshire Fish and Game Department. The recommendations were reiterated in letters several of the agencies issued in 1985, when the then-owners of the project sought an amendment to the exemption to shift the project to the New Hampshire side of the river. In 1990, FWS issued a new letter in response to the applicant's submittal of design plans for the project's downstream passage facilities. The letter approved the design and noted that installation of the facilities would satisfy the downstream passage conditions of the project's FERC exemption. The 1990 letter then went on to say:

> *Condition number 1 of the September, 1985 [FWS] letter requires that fish trapping facilities for upstream migrating salmon be constructed by 1992. However, in past meetings and discussions, it has been acknowledged that these facilities may not be necessary in 1992. The Technical Committee of the Connecticut River Atlantic Salmon Commission (CRASC) has not yet finalized its position regarding the timing of construction of upstream passage facilities on various dams including Dodge Falls. You will be notified when this policy is finalized, at which time an amendment of your exemption to incorporate modified terms and conditions may be in order.*

The applicant annually receives and is required to follow the Downstream Fish Passage Operations Schedule CRASC sets for eight projects on the mainstem Connecticut River. CRASC's most recent letter to the applicant, dated March 31, 2009, acknowleges the applicant's cooperation with the 2008 schedule.

Finally, in the 1997 settlement agreement and 2002 FERC relicensing of the Fifteen Mile Falls hydropower project immediately upstream from the Dodge Falls project, the implementation of upstream passage is deferred until the same triggering event occurs: 20 or more salmon reaching Dodge Falls dam for two consecutive years. The license further provides Fifteen Mile Falls with the option of satisfying that upstream passage requirement by participating in the construction of trap and truck facilities at Dodge Falls in lieu of providing upstream passage at the MacIndoes development (the lowermost of the three Fifteen Mile Falls developments).

For all of the foregoing reasons, it appears that the project is governed by legally enforceable requirements for fish passage that are consistent with post-1986 fish passage prescriptions.

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

NOT APPLICABLE

If NOT APPLICABLE, go to C6.

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

NOT APPLICABLE

NOT APPLICABLE, go to D

PASS.

D. Watershed Protection

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

NO

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 D.1.,and 2) has the agreement of appropriate stakeholders and state and federal resource agencies?

NO

If NO = go to D3

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)

NO

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.

YES

The applicant does not own lands along the shoreline of the impoundment. However, terms of the project's FERC exemption do require compliance with a requirement in the State of Vermont's 401 Certification for the project that the applicant maintain "strict run-of-river operation… and maintenance of headpond elevation within 3.0 inches of the top of the dam crest (or flashboards, when in place) [to] maintain aquatic and fisheries habitat in the impoundment."

If YES = Pass, go to E

PASS.

E. Threatened and Endangered Species Protection

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

NO

The applicant requested from the New Hampshire Natural Heritage Bureau a review of the agency's database containing known records for species officially listed as Threatened or Endangered by either the state or federal governments, as well as natural communities judged by experts to be at risk in New Hampshire but not yet formally listed. The agency's report stated that there are no records of such species or communities within one mile of the project site, but that the site is within an area flagged by the New Hampshire Department of Fish and Game (NHDFG) for possible impacts on "rare mussels." A call to NHDFG confirmed that the species is the Dwarf Wedgemussel. The applicant also emailed a request to the Vermont Department of Fish and Wildlife (VDFW) asking about the presence of threatened and endangered species in the vicinity of the site, and received a reply that the Dwarf Wedgemussel "is known to occupy the Connecticut River adjacent to Ryegate upstream of the dam facility," and that there are no other listed species in proximity to the project. A follow up call and email exchange with VDFW in the course of this application review clarified that records of the mussel in the project area derived from an undated historical collection, although the species is currently found in towns upstream and downstream of the project. The mussel was not mentioned in environmental reviews conducted at the time of the project's review for its FERC exemption.

The Dwarf Wedgemussel was federally listed as an endangered species in 1990. The recovery plan (also issued 1990) identifies the Connecticut River at Ryegate as a site of historical (not present) occurrence of the mussel. There are no recommendations in the recovery plan relevant to the facility. The FWS most recent 5-year review of the species status, completed in 2007, found that Connecticut River Basin populations were stable, though the species is declining in other parts of its range and is not eligible for delisting or downlisting.

If NO, go to F.

PASS.

F. Cultural Resource Protection

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 (with qualification)

As noted earlier in this report, the project's proposed location shifted multiple times, having initially been issued a FERC exemption (subsequently surrendered) to construct on the New Hampshire side of the dam in 1982, then in 1984 issued a new exemption to build on the Vermont side. Finally, in 1985, the then owner sought an amendment to return the project to the New Hampshire side, where it was eventually built and went into operation in 1990. In the course of the amendment proceedings the then owner consulted with the Vermont Division for Historic Preservation (VDHP). The VDHP issued a letter in October 1985 which noted that the paper mill site and associated facilities "appear to be eligible for inclusion in the National Register [of Historic Places]," but that "the proposed project, as presently planned, will not affect the qualities that may make this property eligible for inclusion in the National Register."

An official with the New Hampshire Division of Historical Resources consulted in the course of preparing this report stated that New Hampshire did not have any concerns with the project because the eligible historic properties were on the Vermont side of the river. An official with the VDHP who was also consulted was not aware of any issues, but wanted to consult with a colleague. As noted in the "Record of Contacts" section below, that colleague is out of the office and unavailable until shortly before the LIHI Governing Board meeting at which this application will be considered. If consultations with this official raise any concerns about the project's compliance with the LIHI criterion, they will be presented at the Governing Board meeting.

If YES, go to G.

PASS.

G. Recreation

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 exemption required the project to implement recommendations of the resource agencies that the then owner construct a canoe portage at the dam site. According to the Connecticut River Watershed Council's "The Connecticut River Boating Guide: Source to Sea" (Third Edition, 2007) the portage is in place on the New Hampshire side of the river.

The applicant further reports that during the recreational season a boat restraint cable is installed in the vicinity of Marshall Island upstream of the dam, with signs on Marshall Island guiding boats heading downstream to the north end of the portage. The applicant reports providing access to the portage by a gravel road, as well as a sleeping platform adjacent to the portage.

If YES, go to G3.

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

YES

If YES, go to H.

PASS.

H. Facilities Recommended for Removal

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

NO

If NO, facility is low impact.

PASS.

FACILITY IS LOW IMPACT

RECORD OF CONTACTS

Table of Pending Consultations

There are a number of key contacts who did not respond or were unavailable for comment prior to the deadline for submitting this reviewer report. The names of officials and status of efforts to reach them are presented in the following table. Records of conversations or email exchanges that did take place follow.

Name/Affiliation/Criterion	Status
Gregg Comstock, New Hampshire Dept. of Environmental Conservation (water quality)	Emails sent 7/27 and 8/16, left voicemail 8/19. Outgoing message reports Mr. Comstock is out on vacation returning 8/24.
Jeff Cueto, Vermont Agency for Natural Resources (water quality)	Emails sent 7/27 and 8/15, on 8/15 received out-of-office reply that he would return to the office 8/24.
Susi von Oettingen, Endangered Species Biologist, US Fish and Wildlife Service	Emails sent 7/31, 8/17; received out-of-office reply to 2nd email that she would return to the office 8/26.
Giovanna Peebles, State Archeologist, Vermont Division for Historic Preservation	Devin Colman, Historic Buildings Specialist for VDHP wants to consult with his colleague who previously handled hydropower projects; she is out of the office until 8/24. (See below for record of consultation w/Mr. Colman.
John Warner, U.S. Fish and Wildlife Service (flows and fish passage and protection)	Email sent 7/27, received reply 8/6 that he would be unable to speak until after 8/24.

Records of Completed Consultations

Date of Email: July 28, 2009
Application Reviewer: Gabriela Goldfarb, Consultant
Person Contacted: Jay McMenamy, Fisheries Biologist
Telephone/email: jay.mcmenemy@state.vt.us
Areas of Expertise: Fisheries, flows

I haven't been intimately involved with Dodge Falls as there have been no issues that I am aware of. It has downstream passage in place and operational for salmon and a future requirement for upstream passage for salmon based on trigger numbers below that have not been met. I believe it is run of the river and there have been no issues that I am aware of.

You should speak to John Warner of USFWS as I'm sure you are planning on. Len Gerardi of VTFW may have more local knowledge of the project and I am copying him on this note.

Everett [Marshall] is T&E.

If Vernon and FMF can be certified as low impact, then Dodge Falls certainly can.

I'd be happy to talk with you, but I don't know much more than this about Dodge Falls.

Jay

James R. McMenemy
Fisheries Biologist
Vermont Fish and Wildlife Department
100 Mineral Street, Suite 302
Springfield, VT 05156-3168
Telephone: (802) 885-8829
Fax: (802) 885-8890
jay.mcmenemy@state.vt.us

Date of Conversation:	July 31, 2009
Application Reviewer:	Gabriela Goldfarb, Consultant
Person Contacted:	Lenny Gerardi, Fisheries Biologist, VT Fish and Wildlife
Telephone/email:	802-751-0100
Areas of Expertise:	Fisheries, flows

Confirmed that it was his understanding that downstream passage had been implemented and upstream passage deferred. Noted that at the time of the exemption there was little focus on issues on connectivity, and that the exemption did not require safety and effectiveness studies for passage. Speculated that if the project had filed for an exemption in the 1990s, the project might have been a target for removal, restoring 4 miles of free flowing river.

Date of Conversation:	August 6, 2009
Application Reviewer:	Gabriela Goldfarb, Consultant
Person Contacted:	Everett Marshall, Biologist/Information Manager, Vermont Fish &Wildlife Department
Telephone/email:	everett.marshall@state.vt.us
Areas of Expertise:	Threatened & endangered species

By telephone, Mr. Marshall explained that the record of a Dwarf Wedgemussel, federally listed as endangered in 1990, was from an undated specimen in a museum collection, of historic vintage. Via email, he communicated the following:

> *The Dwarf Wedgemussel, which is state and federally endangered, is the only rare, threatened or endangered species we have documented in the vicinity of Dodge Falls. As I said, this species is known only from an undated collection. There are current records of this species in towns both upstream and downstream of the project site. I am copying Mark Ferguson, our Zoologist, who has expertise in Dwarf Wedgemussel.*

See below applicant's email exchange with Mark Ferguson.

Date of Conversation:	August 19, 2009
Application Reviewer:	Gabriela Goldfarb, Consultant
Person Contacted:	Devin Colman, Historic Buildings Specialist, Vermont Division for Historic Preservation
Telephone/email:	802-828-3043, Devin.Colman@state.vt.us
Areas of Expertise:	Cultural resources

By telephone Mr. Colman speculated that the project might have been one where the owner refused to develop a cultural resources management plan. In an email Mr. Colman wrote:

> *I checked our Dodge Falls Hydro files, and there does not appear to be a CRMP in place. This was not the project that refused to work with us in the 1980s; that was the Gilman Hydro project in Gilman, VT. I'd like to review the files with Giovanna Peebles, State Archeologist, who handled all of the hydro projects until recently. She's out of town until next week, so I'll get back to you in a few days.*

Date of Conversation:	August 19, 2009
Application Reviewer:	Gabriela Goldfarb, Consultant
Person Contacted:	Edna Feighner, Archaeologist and Review and Compliance Coordinator, NH Division of Historical Resources
Telephone/email:	603-271-2813
Areas of Expertise:	Cultural resources

New Hampshire has no issues with the project because the eligible properties are on the Vermont side of the river. There is a Vermont Division for Historic Preservation letter in the file that she will fax to me.

Records of Applicant Consultations

Note: Please see above record of the application reviewer's email consultation with Everett Marshall.

Subject: RE: East Ryegate Threatened & Endangered Species: Dodge Falls Hydro
From: "Ferguson, Mark" <mark.ferguson@state.vt.us>
Date: Wed, 27 May 2009 13:21:02 -0400
To: 'Stephen Hickey' <sjh@essexhydro.com>
CC: "Marshall, Everett" <everett.marshall@state.vt.us>

Stephen,
I searched our database for information at this site. The dwarf wedgemussel, a state and federal endangered species, is known to occupy the Connecticut River adjacent to Ryegate upstream of the dam facility. We have no records of any other threatened or endangered species from the vicinity of the dam. You should also check with the New Hampshire Fish & Game Department's Nongame & Endangered Wildlife Program for any additional records of T&E species.

Mark Ferguson
Zoologist
Nongame & Natural Heritage Program
Vermont Department of Fish & Wildlife
(802) 241-3667

From: Stephen Hickey [mailto:sjh@essexhydro.com]
Sent: Tuesday, May 26, 2009 4:38 PM
To: Ferguson, Mark
Subject: East Ryegate Threatened & Endangered Species: Dodge Falls Hydro

Mark,

Please confirm if there are any threatened or endangered plant or animal species that are potential visitors to the vicinity of Dodge falls Hydroelectric facility along the Connecticut River in East Ryegate, VT. Please see the location as labeled in the below image.

Thank you,
Stephen Hickey

To: Stephen Hickey, Dodge Falls Associates LP
c/o Essex Hydro Associates
55 Union St 4th Floor
Boston MA 02108

From: Sara Cairns, NH Natural Heritage Bureau
Date: 2009-06-09
Re: Review by NH Natural Heritage Bureau of request dated 2009-05-26

NHB File ID: 585 **Town:** Bath
Project type: Landowner Request **Location:** Dodge Falls Dam (Tax map 7, Lot 10)

I have searched our database for records of rare species and exemplary natural communities on the property(s) identified in your request. Our database includes known records for species officially listed as Threatened or Endangered by either the state of New Hampshire or the federal government, as well as species and natural communities judged by experts to be at risk in New Hampshire but not yet formally listed.

This site is within an area flagged by NH Fish & Game for possible impacts on rare mussels. Contact Kim Tuttle (271-6544) for more details. The closest documented mussel population within 10 miles of the dam is a historical (date unknown) record from the town of Bath.

NHB records on the property(s): **None**

NHB records within one mile of the property(s): **None**

A negative result (no record in our database) does not mean that no rare species are present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.