



NORMANDEAU ASSOCIATES
ENVIRONMENTAL CONSULTANTS

25 Nashua Road
Bedford, New Hampshire 03110
Tel (603) 472-5191 Fax (603) 472-7052
www.normandeau.com

22 July 2011

Ref: 21922.004

US Environmental Protection Agency
Dewatering GP Processing
Municipal Assistance Unit (CMU),
1 Congress Street, Suite 1100
Boston, MA 02114-2023

New Hampshire Department of Environmental Services
Water Division, Wastewater Engineering Bureau
29 Hazen Drive, P.O. Box 95
Concord, New Hampshire 03302-0095

Re: Notice of Intent (NOI), NPDES Dewatering General Permit
PSNH Ayers Island Earthquake Remediation Project

On behalf of our client, Public Service of New Hampshire, we are submitting the attached NOI to seek coverage under the NPDES Dewatering General Permit. If you have any questions on the NOI, please call me at the number below or Ryan McGlone from PSNH at 634-3616.

Very truly yours,

Richard Masters, P.E.
Director of Engineering

AUG 11 2011

Bedford, NH (Corporate)

North Haven, CT
Lewes, DE
Gainesville, FL
Falmouth, ME

Falmouth, MA
Hampton, NH
Portsmouth, NH
Westmoreland, NH

Haverstraw, NY
Oswego, NY
Drumore, PA

Stowe, PA
Aiken, SC
Moncks Corner, SC

Stevenson, WA
Vancouver, WA
E. Wenatchee, WA

Notice of Intent (NOI)
NPDES Dewatering General Permit
PSNH Ayers Island Earthquake Remediation Project

1. General facility information. Please provide the following information about the facility.

a) Name of facility:

Ayers Island Hydroelectric Station

Mailing Address for the Facility:

**PSNH
PO Box 330
Manchester, NH
03105-0330**

b) Location Address of the Facility (if different from mailing address):

**59 Ayers Island Road
Bristol, NH 03222**

Facility Location longitude: **43-35.51** latitude: **71-42.59**

Type of Business: **Electric Power Generation**

Facility SIC codes: **4911**

c) Name of facility owner: **Public Service of New Hampshire**
Owner's email: **mcglor@nu.com** [Ryan McGlone]

Owner's Tel #: **603/634-3616** Owner's Fax #: **603-744-2766**

Address of owner (if different from facility address)

Owner is (check one): 1. Federal 2. State
 3. Tribal 4. Private 4. Other (Describe) **Regulated Utility**

Legal name of Operator, if not owner:

Abington Group, Inc. [General Contractor for dam restoration]

Operator Contact Name: **Don Leavitt Jr., Superintendent**

Operator Tel Number: **603-498-1886** Fax: **603-436-8019**

Operator's email: **dlj@abingtongroup.com**

Operator Address (if different from owner): **195 West Road, Portsmouth, NH 03801**

AUG 11 2011

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

Attachments:

1. Topographic Map
2. Federal T&E listed species in New Hampshire
3. USFWS letter
4. NH Natural Heritage Board memo
5. SHPO (NH Division of Historical Resources) Project Review

Submitted to:

US Environmental Protection Agency
Dewatering GP Processing
Municipal Assistance Unit (CMU),
1 Congress Street, Suite 1100
Boston, MA 02114-2023

New Hampshire Department of Environmental Services
Water Division, Wastewater Engineering Bureau
29 Hazen Drive, P.O. Box 95
Concord, New Hampshire 03302-0095

d) Attach a topographic map indicating the location and the outfall(s) to the receiving water. **[Map attached]**

e) Check Yes or No for the following:

1. Has a prior NPDES permit been granted Yes ___ No If Yes, Permit No.

Please note that a dewatering discharge permit has not been previously granted for this site. However, the Station operates under the NPDES General Permit for Hydroelectric Generating Facilities No. NHG360019.

2. Is the discharge a "new discharge" Yes

3. Is the facility covered by an individual Yes _____ No If Yes,

4. Is there a pending application Yes _____ No

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed)

Public Service Company of New Hampshire and its contractor, Abington Group, Inc., is seeking coverage under the NPDES Dewatering General Permit for a construction project to rehabilitate the Ayers Island Ambursen Dam for earthquake safety under a FERC directive. The project will add concrete vertical pilasters (columns) to the interior of the dam adjacent to the existing concrete buttresses to provide structural stability to the dam. Dewatering may be needed to remove river water that may enter the interior of the dam through the tailrace area prior to, or during, construction. The interior of the dam is open to the environment at the tailrace and high river flows can, at times, enter the interior of the dam. To prevent water from being present while pouring the pilasters, the contractor plans to temporarily seal off the downstream water passages at the mud gate bays and pump infiltrated water to adjacent bays in the dam. In the event of extreme high water conditions where discharge to the river is necessary, the dewatering hose would run through a silt and pollution control bag. Any continuing seepage would be removed through the pollution control bag system.

a) Name of receiving water into which discharge will occur: **Pemigewasset River**

State Water Quality Classification: **B**
Freshwater: Marine Water: _____

b) Describe the discharge activities for which the owner/applicant is seeking coverage:

1. Construction dewatering of groundwater intrusion and/or storm water accumulation. **Construction dewatering water (river water) as described in 2 above.**
2. Short-term or long-term dewatering of foundation sumps.
3. Other.

c) Number of outfalls 3

For each outfall:

d) Estimate the maximum daily and average monthly flow of the discharge (in gallons per day – GPD). Max Daily Flow _____ GPD Average Monthly Flow _____ GPD

Maximum flow will be 3,000 GPD per outfall. Average monthly flow will depend on the frequency that the river stage causes infiltration. It is anticipated that there will be less than 10 discharge events.

e) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH _____ Min pH _____

Samples of the ambient river water were recorded to be 6.08 s.u. Samples of existing standing water within the dam wastegates were recorded to be 6.30 s.u. It is anticipated that water discharged under this permit would be ambient riverwater that infiltrates and interferes with the construction activities. It is also anticipated that the pH of the discharged water would be similar, if not identical to, the ambient river water pH and within the discharge limits specified in the General Permit (within 0.5 s.u. of the upstream receiving water).

f) Identify the source of the discharge (i.e. potable water, surface water, or groundwater). If groundwater, the facility shall submit effluent test results, as required in Section 4.4.5 of the General Permit.

The discharge will consist only of infiltrated river water.

g) What treatment does the wastewater receive prior to discharge?

The dewatering hoses will run through a silt and pollution control bag.

h) Is the discharge continuous? Yes _____ No If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B) If (P), number of days or months per year of the discharge _____ and the specific months of discharge _____;

If (I), number of days/year there is a discharge: **The number of days of discharge depends on the river stage during the construction period and the amount of infiltration. Each occurrence of maximum flow represents approximately 10 days of discharge.**

Is the discharge temporary? Yes No _____

If yes, approximate start date of dewatering: **August 2011**

Approximate end of dewatering: **January 2012**

i) Latitude and longitude of each discharge within 100 feet (See http://www.epa.gov/tri/report/siting_tool):

No known Toxic Release Inventory discharges are located within 100 feet of the proposed dewatering discharge. The nearest facility storing toxic materials is Freudenberg-NOK, 450 Pleasant Street, Bristol [per EPA's TRI Explorer facility report]

j) If the source of the discharge is potable please provide the reported or calculated seven day-ten year low flow (7Q10) the receiving water and attach any calculation sheets flow and dilution calculations _____. (See Appendix VII for equations) **N/A**

3. Contaminant Information

a) Are any pH neutralization and/or dechlorination chemicals used in the discharge? If so, include the chemical name and manufacturer; maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC50 in percent for aquatic organism(s)).

No chemical additives to the discharge are planned.

b) Please report any known remediation activities or water-quality issues in the vicinity of the discharge

The river assessment unit downstream of the impoundment is listed as impaired for pH on the NH 303(d) list.

4. Determination of Endangered Species Act Eligibility: Provide documentation of ESA eligibility as required at Part 3.4 and Appendices III and IV. In addition, respond to the following questions.

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes ___ No X

b) Has any consultation with the federal services been completed? Yes X No ___

Copy of letter attached

c) Is consultation underway? Yes ___ No X

d) What were the results of the consultation with the U.S. Fish and Wildlife Service and/or NOAA Fisheries Service (check one): a "no jeopardy" opinion X or written concurrence ___ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat.

e) Which of the five eligibility criteria listed in Appendix 2, Section B (A,B,C,D,or E) have you met?
A

f) Please attach a copy of the most current federal listing of endangered and threatened species, found at USF&W website. **[T&E listing, USFWS letter, and NH NHB memo attached]**

5. Documentation of National Historic Preservation Act requirements: Please respond to the following questions:

a) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? Yes ___ No X

b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes X or No ____ If yes, attach the results of the consultation(s). [SHPO (DHR) review attached]

c) Which of the three National Historic Preservation Act requirements listed in Appendix 3, Section 1

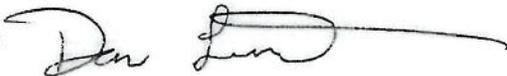
6. Supplemental Information: Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit

7. Signature Requirements: The must be signed by the operator with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the dewatering system; (2) the discharge consists solely of dewatering and authorized pH adjustment and/or dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product or finished product; (4) if the discharge of dewatering subsequently mixes with other permitted wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for dewatering discharge; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

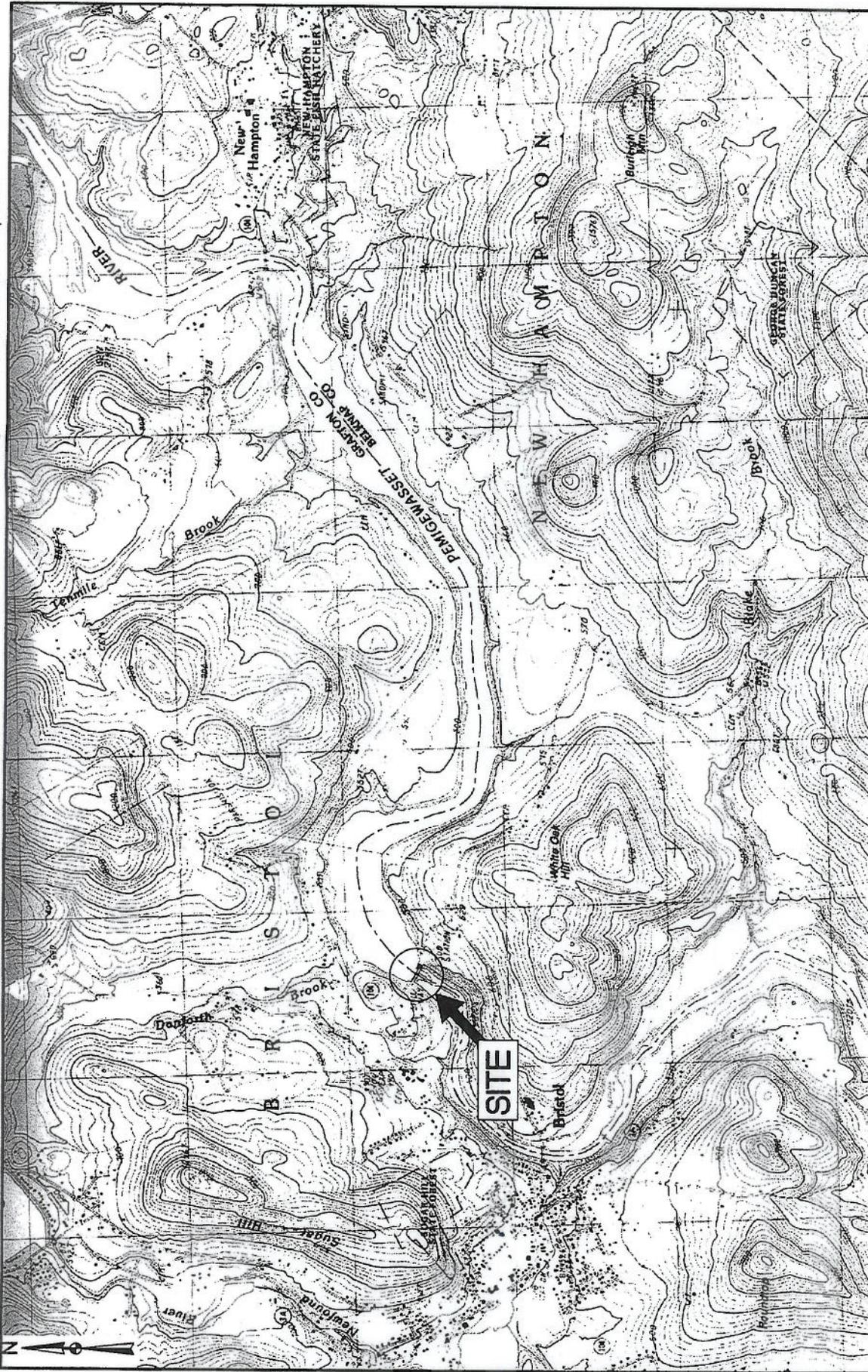
Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility Name: **Ayers Island Ambursen Dam**

Operator signature: 

Title: Gen. Sup.

Date: 7-14-11



SCALE IN MILES

NPDES HYDROELECTRIC GENERATING
 FACILITIES GENERAL PERMIT
 AYERS ISLAND HYDROSTATION
 PUBLIC SERVICE OF NEW HAMPSHIRE
 59 AYERS ISLAND RD, BRISTOL, NEW HAMPSHIRE 03222

PREPARED BY: **GZA** Geo-Environmental, Inc.
 Engineers and Scientists
 100 WASHINGTON ST
 MANCHESTER, NEW HAMPSHIRE 03103
 (603) 623-3000

PREPARED FOR:
 PUBLIC SERVICE OF NEW HAMPSHIRE

PROJ. NO.:	KOB	DATE:	JUNE 2010	FIGURE:	1
DESIGNED BY:	DSJ	PROJECT NO.:	04.0024931.03	REVISION NO.:	
REVIEWED BY:	PAW	CHECKED BY:	KOB	SCALE:	AS SHOWN
DRAWN BY:	MA				

LOCUS PLAN

**FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES
IN NEW HAMPSHIRE**

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Belknap	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Meredith, Alton and Laconia
Carroll	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Albany, Eaton, Madison Wolfeboro, Brookfield and Wakefield
Coos	Canada Lynx	Threatened	Regenerating softwood forest, usually with a high density of snowshoe hare.	All Towns
	Dwarf wedgemussel	Endangered	Connecticut River main channel and Johns River	Northumberland, Lancaster and Dalton
Cheshire	Dwarf wedgemussel	Endangered	S. Branch Ashuelot River and Ashuelot River	Swanzy, Keene and Surry
Grafton	Dwarf wedgemussel	Endangered	Connecticut River main channel	Haverhill, Piermont, Orford and Lyme
	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Holderness
Hillsborough	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Weare
Merrimack	Karner Blue Butterfly	Endangered	Pine Barrens with wild blue lupine	Concord and Pembroke
	Small whorled Pogonia	Threatened	Forests	Danbury, Epsom, Warner and Allenstown
Rockingham	Piping Plover	Threatened	Coastal Beaches	Hampton and Seabrook
	Roseate Tern	Endangered	Atlantic Ocean and nesting at the Isle of Shoals	
	Small whorled Pogonia	Threatened	Forests	Northwood, Nottingham, and Epping
Strafford	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Middleton, New Durham, Milton, Farmington, Strafford, Barrington, and Madbury
Sullivan	Northeastern bulrush	Endangered	Wetlands	Acworth, Charlestown, Langdon and Walpole
	Dwarf wedgemussel	Endangered	Connecticut River main channel	Plainfield, Cornish, Claremont and Charlestown
	Jesup's milk-vetch	Endangered	Banks of the Connecticut River	Plainfield and Claremont

- Eastern cougar, gray wolf and Puritan tiger beetle are considered extirpated in New Hampshire.
- Endangered gray wolves are not known to be present in New Hampshire, but dispersing individuals from source populations in Canada may occur statewide.
- There is no federally-designated Critical Habitat in New Hampshire.

7/31/2008



United States Department of the Interior



FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
<http://www.fws.gov/newengland>

January 3, 2011

To Whom It May Concern:

This project was reviewed for the presence of federally-listed or proposed, threatened or endangered species or critical habitat per instructions provided on the U.S. Fish and Wildlife Service's New England Field Office website:

(<http://www.fws.gov/newengland/EndangeredSpec-Consultation.htm>)

Based on the information currently available, no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service (Service) are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required.

This concludes the review of listed species and critical habitat in the project location(s) and environs referenced above. No further Endangered Species Act coordination of this type is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

Thank you for your cooperation. Please contact Mr. Anthony Tur of this office at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

New Hampshire Natural Heritage Bureau - Animal Record

Osprey (*Pandion haliaetus*)

Legal Status

Federal: Not listed
State: SC

Conservation Status

Global: Demonstrably widespread, abundant, and secure
State: Not ranked (need more information)

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 2010: Nest 1: 1 fledged.2008: Nest 1: 2 fledged.2007: Nest 1: 3 fledged.

General Area:

General Comments:

Management

Comments:

Location

Survey Site Name: Ayers Island Platform
Managed By:

County: Belknap

USGS quad(s): Bristol (4307156)

Town(s): New Hampton

Lat, Long: 433551N, 0714259W

Size: .4 acres

Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions:

Dates documented

First reported: 2007

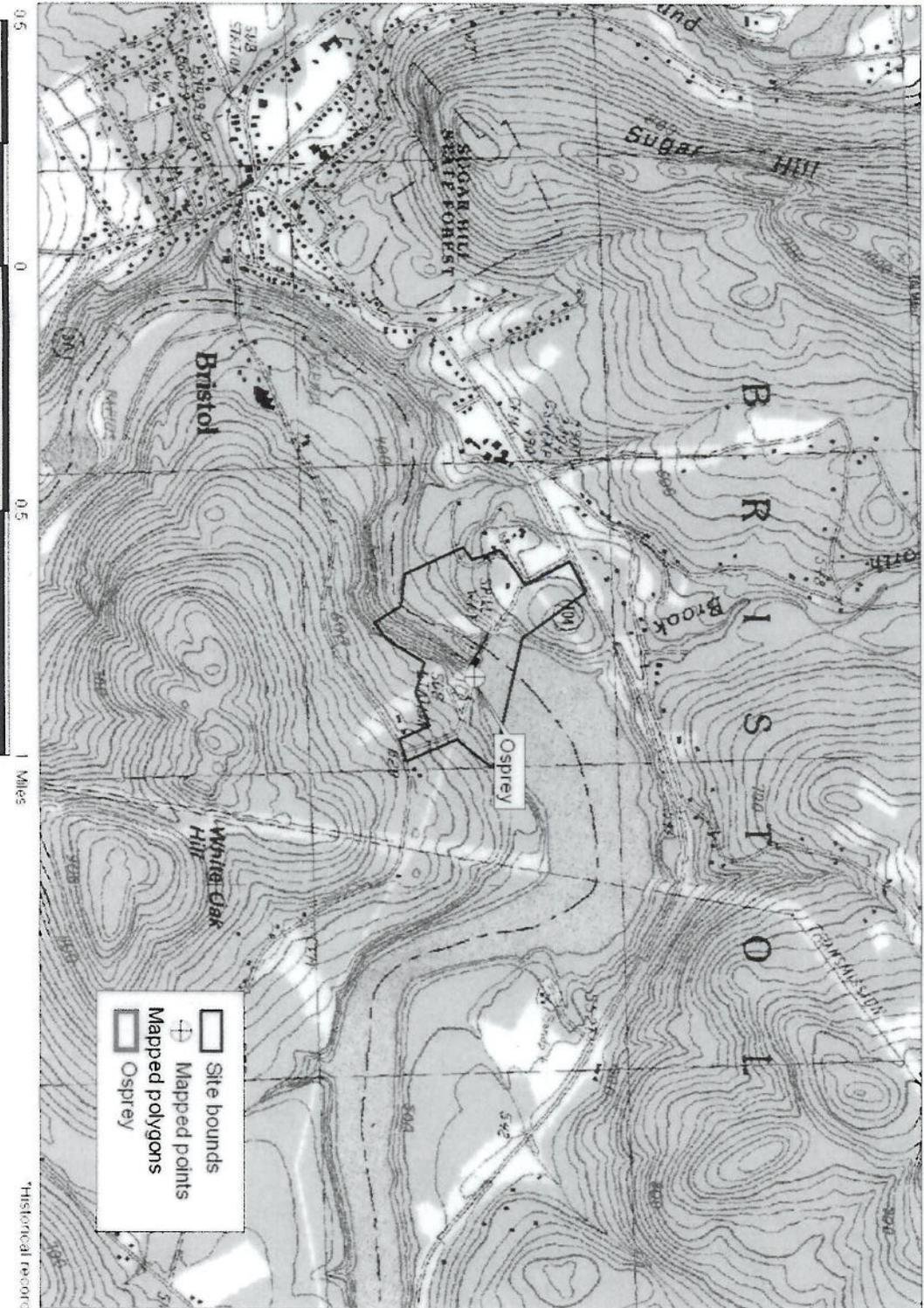
Last reported: 2010



NH NATURAL HERITAGE BUREAU

Known locations of rare species and exemplary natural communities

Note: Mapped locations are not always exact. Occurrences that are not in the vicinity of the project are not shown.



Memo



NH NATURAL HERITAGE BUREAU

To: Mathew Cardin
30 International Drive, suite 6
Portsmouth, NH 03801

From: Melissa Coppola, NH Natural Heritage Bureau
Date: 1/31/2011 (valid for one year from this date)
Re: Review by NH Natural Heritage Bureau
NHB File ID: NHB11-0223
Description: restabilizing existing dam to meet current structural requirements
cc: Kim Tuttle
Town: Bristol & New Hampton
Location: Tax Maps: R-15-19 and 223-74

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

Comments:

Vertebrate species	State ¹	Federal	Notes
Osprey (<i>Pandion haliaetus</i>)	SC	--	Contact the NH Fish & Game Dept (see below).

¹Codes: "E" = Endangered, "T" = Threatened, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

Contact for all animal reviews: Kim Tuttle, NH F&G, (603) 271-6544.

A negative result (no record in our database) does not mean that a sensitive species is not 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. For some purposes, including legal requirements for state wetland permits, the fact that no species of concern are known to be present is sufficient. However, an on-site survey would provide better information on what species and communities are indeed present.

Please mail the completed form and required material to:

New Hampshire Division of Historical Resources
State Historic Preservation Office
Attention: Review & Compliance
19 Pillsbury Street, Concord, NH 03301-3570

RECEIVED

FEB 23 2011

DHR Use Only	
R&C#	2768
Log In Date	2/23/11
Response Date	2/23/11
Sent Date	2/24/11

Request for Project Review by the New Hampshire Division of Historical Resources

- This Project is funded by the American Recovery and Reinvestment Act of 2009
 This is a new submittal This is additional information relating to DHR Review #:

GENERAL PROJECT INFORMATION	
Project Title	Ayers Island Earthquake Remediation Project
Project Location	Bristol and New Hampton New Hampshire
Tax Map & Lot #	Bristol - Map 223, Lot 74 New Hampton - Map R-15, Lot 19A
NH State Plane - Feet Geographic Coordinates: Easting	1930823.64 Northing 930697.12 WGS84 datum (see RPR Manual and R&C FAQ's for help accessing this data)
Lead Federal Agency (Agency providing funds, licenses, or permits)	Permit or Job Reference #
State Agency and Contact (if applicable)	Permit or Job Reference #
MHDES Wetlands Bureau	
APPLICANT INFORMATION	
Applicant Name	Public Service Company of New Hampshire
Street Address	780 N. Commercial St.
City	Manchester
State	NH
Zip	03105
Email	
CONTACT PERSON TO RECEIVE RESPONSE	
Name/Company	Curt Mooney
Street Address	59 Ayers Island Rd.
City	Bristol
State	NH
Zip	03222
Phone Number	(603) 744-8855, Ext. 5841
Email	MOONICR@NH.COM

Thank You

Please refer to the Request for Project Review manual for direction on completing this form. Submit one copy of this project review form for each project for which review is requested. Include a self-addressed stamped envelope to expedite review response. Project submissions will not be accepted via facsimile or e-mail. This form is required. Review request form must be complete for review to begin. Incomplete forms will be sent back to the applicant without comment. Please be aware that this form may only initiate consultation. For some projects, the Division of Historical Resources (DHR) may require additional information to complete our review. All items and supporting documentation submitted with a review request, including photographs and publications, must be retained by the DHR as part of its review records. Items to be kept confidential should be clearly identified. For questions regarding the DHR review process, please visit our website at: <http://www.nh.gov/nhdhr/review> or contact the R&C Specialist at 603.271.3558.

PROJECT BOUNDARIES AND DESCRIPTION

PROJECTS CANNOT BE PROCESSED WITHOUT THIS INFORMATION

REQUIRED

- Attach the relevant portion of a 7.5' USGS Map (photocopied or computer-generated) *indicating the defined project boundary.*
- Attach a detailed written description of the proposed project. Include: (1) a narrative description of the proposed project; (2) site plan; (3) photos and description of the proposed work if the project involves rehabilitation, demolition, additions, or alterations to existing buildings or structures; and (4) a photocopy of the relevant portion of a soils map (if accessible) for ground-disturbing projects.

Architecture See Ayers Island Cultural Resources Management Plan

Are there any buildings or structures within the project area? Yes No

If yes, submit all of the following information:

Approximate age(s):

- Photographs of *each* building located within the project area along with a photo key. Include streetscape images if applicable. (Digital photographs are accepted. All photographs must be clear, crisp and focused)
- DHR file review conducted on

Please note that as part of the review process, the DHR may request an architectural survey or other additional information.

Archaeology See Ayers Island Cultural Resources Management Plan

Does the proposed undertaking involve ground-disturbing activity? Yes No

If yes, submit all of the following information:

- Project specific map and/or preliminary site plan that fully describes the project boundaries and areas of proposed excavation.
- Description of current and previous land use and disturbances.
- Any available information concerning known or suspected archaeological resources within the project area.

Please note that as part of the review process, the DHR may request an archaeological survey or other additional information.

DHR COMMENT

This Space for Division of Historical Resources Use Only

- No Potential to cause Effects Additional information is needed in order to complete our review
- No Adverse Effect No Historic Properties Affected Adverse Effect

Comments: Agreed to Photo Documentation

If plans change or resources are discovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation.

Authorized Signature: Wade Ray Wilson DSHPO

Date: 2/23/11