

7.0 NHNHB Coordination

Information regarding Threatened and Endangered Species and coordination with the New Hampshire Natural Heritage Bureau follows.



NEW HAMPSHIRE NATURAL HERITAGE BUREAU

DRED - DIVISION OF FORESTS & LANDS

PO Box 1 856 - 1 72 PEMBROKE ROAD, CONCORD, NH 03302-1 856
(603) 271 -221 4

To: William McCloy, Normandeau Associates, Inc.
From: Melissa Coppola, Environmental Information Specialist
Date: March 30, 2015
Subject: Northern Pass Database Request (NHB15-0611)

This memo is to confirm that Normandeau Associates have coordinated with the NH Natural Heritage Bureau (NHB) regarding information on known locations of rare species and exemplary natural communities for the Northern Pass project.

Due to the size and scope of the project, NHB is not providing a typical NHB review memo for permitting. Instead, this memo summarizes information provided by NHB to date, and notes that specific recommendations should be developed after project plans are close to being finalized:

- Normandeau was provided with digital data for the project under a data-sharing agreement dated 1/16/15 (397 digital NHB records). This is the sixth data-sharing agreement Normandeau has requested for this project: others were provided in 2010, 2011, 2012, 2013, and 2014 for project planning and ecological impact studies. NHB has also reviewed work plans associated with plant and community survey methodology on several occasions, including a meeting on 6/18/10.
- At the request of NHB, Normandeau consultants have conducted rare plant and natural community surveys within the proposed project area. If the project area extends to new locations, or new concerns are identified, additional surveys may be requested.
- As the project progresses and impacts areas are further clarified, Normandeau should set up a meeting with NHB staff to discuss avoiding and minimizing impacts to rare plant species and exemplary natural communities.



NEW HAMPSHIRE NATURAL HERITAGE BUREAU

DIVISION OF FORESTS & LANDS - DRED
172 PEMBROKE ROAD, CONCORD, NH 03301
(603) 271-2214 WWW.NHDFL.ORG

To: Lee Carbonneau, Normandeau Associates, Inc.
From: Amy Lamb, Ecological Information Specialist/Environmental Reviewer
Date: September 4, 2015
Subject: Northern Pass Plant Survey Follow-Up Questions

Hello Lee,

I wanted to check in with you about the rare plant and natural community surveys that have been done for this project to date, as well as surveys that were planned for this summer that we have not yet discussed.

First, I would like to clarify a summary table in the "Rare, Threatened, and Endangered Plants and Exemplary Natural Communities" document submitted on November 22, 2013. The summary table is on page 26 and is entitled "Summary of Rare, Threatened, and Endangered Species and Exemplary Natural Communities Verified in 2010, 2011, or 2013 within the Project Area." In this table, there is a list of several endangered and threatened plants and two exemplary natural communities, as well as several state watch or indeterminate species. Several of the species listed on this table are not included in the Northern Pass Botanical Survey Summary impacts document of 2015. Would you explain the exclusion of the plant species listed below? For example, was it determined that none of the plants occurring between the Deerfield and Scobie Substations would be impacted?

Wiegand's Sedge (<i>Carex wiegandii</i>)	State Endangered	Lincoln (WMNF)
Medium Level Fen System	Exemplary natural community	Lincoln (WMNF)
Poor Level Fen/Bog System	Exemplary natural community	Lincoln (WMNF)
Blunt-leaved Milkweed (<i>Asclepias amplexicaulis</i>)	State Threatened	Concord/Pembroke
Spiked Needle Grass (<i>Aristida longispica</i> var. <i>geniculata</i>)	State Endangered	Raymond
Hairy Thoroughwort (<i>Eupatorium</i> cf. <i>pubescens</i>)	State Endangered	Derry

Second, NHB requests the results of the additional surveys referenced in the May 2014 Addendum, including those for small (*Isotria medeoloides*) and large whorled pogonia (*Isotria verticillata*), peatland areas, and poor level fen/bogs. Additionally, I'd like to inquire about the status of the additional surveys in ROW expansion areas and proposed access roads, as discussed in previous meetings and communications. Please send NHB any data resulting from these additional surveys.

I also wanted to inquire whether a determination was made in regards to the classification of the circumneutral hardwood forest seep/northern hardwood seepage forest?



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172 PEMBROKE ROAD, CONCORD, NH 03301
(603) 271-2214 WWW.NHDFL.ORG

Please send any new survey results and the other information requested above to the Natural Heritage Bureau, either electronically or to our office at:

NHB – DRED

Attn: Amy Lamb, Ecological Information Specialist

172 Pembroke Road

Concord, NH 03301

We would also like to schedule a meeting to discuss the implications of the newly proposed route, namely the new 52-mile section of underground lines extending from Bethlehem to Bridgewater. Thank you for your continued cooperation, and I look forward to hearing from you.

Best,

Amy Lamb

Ecological Information Specialist

NH Natural Heritage Bureau

Table 3. Threatened, Endangered and Special Concern Species within 1 Mile of the Northern Pass Project from NH Natural Heritage Bureau

Common Name	Scientific Name	State Status
INVERTEBRATES		
Brook Floater	<i>Alasmidonta varicosa</i>	E
Butterfly Milkweed	<i>Asclepias tuberosa</i>	E
Dwarf Wedge Mussel	<i>Alasmidonta heterodon</i>	E
Frosted Elf	<i>Callophrys irus</i>	E
Karner Blue Butterfly	<i>Lycaeides melissa samuelis</i>	E
Barrens Itame	<i>Speranza exonerata</i>	SC
Barrens Xylotype	<i>Xylotype capax</i>	SC
Phyllira Tiger Moth	<i>Grammia phyllira</i>	SC
Pine Barrens Zanclognatha Moth	<i>Zanclognatha martha</i>	SC
Rapids Clubtail	<i>Gomphus quadricolor</i>	SC
Riverine Clubtail	<i>Stylurus amnicola</i>	SC
Skillet Clubtail	<i>Gomphus ventricosus</i>	SC
Brook Floater	<i>Alasmidonta varicosa</i>	
FISH		
American Eel	<i>Anguilla rostrata</i>	SC
Swamp Darter	<i>Etheostoma fusiforme</i>	SC
AMPHIBIANS		
Fowler's Toad	<i>Bufo fowleri</i>	SC
Northern Leopard Frog	<i>Rana pipiens</i>	SC
REPTILES		
Blanding's Turtle	<i>Emydoidea blandingii</i>	E
Eastern Hognose Snake	<i>Heterodon platirhinos</i>	E
Smooth Green Snake	<i>Opheodrys vernalis</i>	SC
Wood Turtle	<i>Glyptemys insculpta</i>	SC
Northern Black Racer	<i>Coluber constrictor constrictor</i>	T
Spotted Turtle	<i>Clemmys guttata</i>	T
BIRDS		
Common Nighthawk	<i>Chordeiles minor</i>	E
Northern Harrier	<i>Circus cyaneus</i>	E
Cerulean Warbler	<i>Dendroica cerulea</i>	SC
Horned Lark	<i>Eremophila alpestris</i>	SC
Osprey	<i>Pandion haliaetus</i>	SC
Rusty Blackbird	<i>Euphagus carolinus</i>	SC

Common Name	Scientific Name	State Status
Sora	<i>Porzana carolina</i>	SC
Vesper Sparrow	<i>Poocetes gramineus</i>	SC
Bald Eagle	<i>Haliaeetus leucocephalus</i>	T
Common Loon	<i>Gavia immer</i>	T
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	T
Pied-billed Grebe	<i>Podilymbus podiceps</i>	T
Peregrine Falcon	<i>Falco peregrinus anatum</i>	T
MAMMALS		
American Marten	<i>Martes americana</i>	T
PLANTS		
Allegheny-vine	<i>Adlumia fungosa</i>	E
Back's Sedge	<i>Carex backii</i>	E
Chestnut Sedge	<i>Carex castanea</i>	E
Dry Land Sedge	<i>Carex siccata</i>	E
Golden Heather	<i>Hudsonia ericoides</i>	E
Greater Yellow Lady's-slipper	<i>Cypripedium parviflorum</i> var. <i>makasin</i>	E
Licorice Goldenrod	<i>Solidago odora</i>	E
Long-leaved Bluet	<i>Houstonia longifolia</i>	E
Red Threeawn	<i>Aristida longespica</i> var. <i>geniculata</i>	E
Satiny Willow	<i>Salix pellita</i>	E
Showy Lady's-slipper	<i>Cypripedium reginae</i>	E
Slender Rock-brake	<i>Cryptogramma stelleri</i>	E
Smooth Cliff Fern	<i>Woodsia glabella</i>	E
Upright False Bindweed	<i>Calystegia spithamea</i>	E
Wiegand's Sedge	<i>Carex wiegandii</i>	E
Wild Hound's-tongue	<i>Cynoglossum virginianum</i> ssp. <i>boreale</i>	E
American Ginseng	<i>Panax quinquefolius</i>	T
American Spurred-gentian	<i>Halenia deflexa</i>	T
Broad-leaved Twayblade	<i>Neottia convallarioides</i>	T
Brook Lobelia	<i>Lobelia kalmii</i>	T
Clasping Milkweed	<i>Asclepias amplexicaulis</i>	T
Fragrant Wood Fern	<i>Dryopteris fragrans</i>	T
Golden-fruited Sedge	<i>Carex aurea</i>	T
Green Adder's-mouth	<i>Malaxis unifolia</i>	T
Hairy Hudsonia	<i>Hudsonia tomentosa</i>	T
Heart-leaved Twayblade	<i>Neottia cordata</i>	T

Common Name	Scientific Name	State Status
Large Yellow Lady's-slipper	<i>Cypripedium parviflorum</i> var. <i>pubescens</i>	T
Large-fruited Sanicle	<i>Sanicula trifoliata</i>	T
Lesser Tussock Sedge	<i>Carex diandra</i>	T
Lindley's American-aster	<i>Symphyotrichum ciliolatum</i>	T
Loesel's Wide-lipped Orchid	<i>Liparis loeselii</i>	T
Northern Neglected Reed Grass	<i>Calamagrostis stricta</i> ssp. <i>inexpansa</i>	T
Showy Orchid	<i>Galearis spectabilis</i>	T
Small Whorled Pogonia	<i>Isotria medeoloides</i>	T
Tufted Yellow-loosestrife	<i>Lysimachia thyrsiflora</i>	T
Wild Lupine	<i>Lupinus perennis</i>	T

Table 4. Threatened and Endangered Species and Species of Concern Known or Confirmed Within the Project Area

RTE Species or Exemplary Natural Community	Status	Towns
PLANTS		
Mountain Sweet Cicely (<i>Osmorhiza berteroi</i>)	State Endangered	Dixville
Swamp Buttercup (<i>Ranunculus caricetorum</i>)	State Indeterminate	Pittsburg, Clarksville, Stewartstown, Dixville, Millsfield
Wild Leek (<i>Allium tricoccum</i> var. <i>tricoccum</i>)	State Watch	Pittsburg, Clarksville, Stewartstown, Dixville
Canada Violet (<i>Viola canadensis</i>)	State Watch	Stewartstown, Dixville
Northern Wild Licorice (<i>Galium kamtschaticum</i>)	State Watch	Stewartstown, Dixville
Goldie's Fern (<i>Dryopteris goldiana</i>)	State Watch	Dixville
Pale Jewelweed (<i>Impatiens pallida</i>)	State Watch	Dixville
Squirrel Corn (<i>Dicentra canadensis</i>)	State Watch	Dixville
Northern Hardwood Seepage Forest*	S3 (Vulnerable)/Potential Exemplary natural community	Dixville
Narrowleaf Sedge (<i>Carex grisea</i>)	State Indeterminate	Lancaster
Wild Lupine (<i>Lupinus perennis</i>)	State Threatened	Concord, Pembroke
Blunt-leaved Milkweed (<i>Asclepias amplexicaulis</i>)	State Threatened	Concord, Pembroke

RTE Species or Exemplary Natural Community	Status	Towns
Spiked Needle Grass (<i>Aristida longespica</i> var. <i>geniculata</i>)	State Endangered	Concord, Pembroke, Raymond
Branching Needle Grass (<i>Aristida basiramea</i>)	State Indeterminate	Canterbury, Concord, Pembroke, Raymond
Fall Witch-grass (<i>Digitaria cognata</i>)	State Indeterminate	Canterbury, Concord, Pembroke
Licorice Goldenrod (<i>Solidago odora</i>)	State Endangered	Pembroke, Derry
Sensitive species	State Endangered	Chester
Hairy Thoroughwort (<i>Eupatorium</i> cf. <i>pubescens</i>)	State Endangered	Derry
Sensitive species	State Endangered	Derry
American Chestnut (<i>Castanea dentata</i>)	State Watch	Derry
Early Azalea (<i>Rhododendron prinophyllum</i>)	State Watch	Derry
INSECTS		
Karner blue butterfly (<i>Lycaeides melissa samuelis</i>)	Federally Endangered, State Endangered	Concord
Frosted elfin (<i>Callophrys irus</i>)	State Endangered	Concord
Persius duskywing skipper (<i>Erynnis persius</i>)	State Endangered	Concord
Pine pinion moth (<i>Lithophane lepida lepida</i>)	State Threatened	Concord
MUSSELS		
Brook Floater (<i>Alasmidonta varicosa</i>)	State Endangered	Concord/Pembroke
Eastern Pearlshell (<i>Margaritifera margaritifera</i>)	SSC	Concord/Pembroke
REPTILES		
Blanding's turtle (<i>Emydoidea blandingii</i>)	State Endangered	Holderness; Canterbury southwards
Spotted turtle (<i>Clemmys guttata</i>)	State Threatened	Concord south
Eastern hognose snake (<i>Heterodon platirhinos</i>)	State Endangered	Pembroke
Northern black racer (<i>Coluber constrictor</i>)	State Threatened	Pembroke - Deerfield
BIRDS		
Northern harrier (<i>Circus cyaneus</i>)	State Endangered	No known nests in Project Area

RTE Species or Exemplary Natural Community	Status	Towns
Osprey (<i>Pandion haliaetus</i>)	Forest Service Sensitive, Species of Special Concern	Statewide, near larger waterbodies
American three-toed woodpecker (<i>Picoides dorsalis</i>)	State Endangered	Dixville
Bald eagle (<i>Haliaeetus leucocephalus</i>)	State Threatened, FSS	Statewide, near larger waterbodies
Golden eagle (<i>Aquila chrysaetos</i>)	State Endangered	Statewide
Peregrine falcon (<i>Falco peregrinus</i>)	State Threatened, FSS	Stark, Woodstock
Common Nighthawk (<i>Chordeiles minor</i>)	State Endangered	Concord
Rusty blackbird	Species of Special Concern	Woodstock north, especially Coos County
American kestrel	Species of Special Concern	Statewide
MAMMALS		
Canada lynx (<i>Felis lynx Canadensis</i>)	Federally Threatened, State Endangered	Coos County, WMNF
Small-footed bat (<i>Myotis leibii</i>)	State Endangered	Statewide
Northern long-eared bat (<i>Myotis septentrionalis</i>)	Federally Threatened, State Threatened	Statewide

From: Bowman, Peter <Peter.Bowman@dred.nh.gov>
Sent: Monday, May 12, 2014 10:57 AM
To: Coppola, Melissa; Adele Fiorillo
Cc: Lee Carbonneau; Susan Hegarty
Subject: RE: Northern Pass

Hi Adele,

I have looked over the proposed addendum to the survey protocol, and I have no new comments. We have no concerns with you proceeding with the surveys as described.

Thanks,

Pete

From: Coppola, Melissa
Sent: Thursday, May 08, 2014 2:30 PM
To: Adele Fiorillo
Cc: Lee Carbonneau; Bowman, Peter; Susan Hegarty
Subject: RE: Northern Pass

Pete Bowman from our office will review it and provide comments in my absence, so that we can meet your end of May deadline for comments.

Melissa

From: Adele Fiorillo [mailto:afiorillo@normandeau.com]
Sent: Thursday, May 08, 2014 2:12 PM
To: Coppola, Melissa
Cc: Lee Carbonneau; Bowman, Peter; Susan Hegarty
Subject: RE: Northern Pass

Hi Melissa: there are no changes to those protocols you have approved in the past. However, the document I sent is an addendum meant to be added to the previous documents. So, everything in the addendum is new; however, our procedure for identifying target areas is the same as it has been in the past. The bulk of what is new are the areas identified for survey through the approved mapping methods using updated data from Sara Cairns. Since you will be out of the office for the next week and a half, I suppose we can start our field work as planned and amend any survey areas if you have changes on your return – but at least we will not lose any prime windows for observation. Is this an okay way to proceed?

ADELE FIORILLO
603-319-5303 (direct)
603-494-8931 (mobile)
afiorillo@normandeau.com

From: Coppola, Melissa [mailto:Melissa.Coppola@dred.nh.gov]
Sent: Thursday, May 08, 2014 1:27 PM
To: Adele Fiorillo
Cc: Lee Carbonneau; Bowman, Peter
Subject: RE: Northern Pass

Are there any changes you are proposing from what we have approved in the past? And if so can you highlight those? I'm not going to get a chance to read the full 65 page document before I leave for May 9-21st. Highlighted changes would be helpful to expedite this since we have read and provided comments on multiple drafts in the past.

Thanks,
Melissa

Melissa Coppola
Environmental Information Specialist
Division of Forest & Lands- Natural Heritage Bureau
PO Box 1856
Concord, NH 03302-1856
603-271-2215 ext. 323
NHB web page

From: Adele Fiorillo [mailto:afiorillo@normandeau.com]
Sent: Monday, May 05, 2014 3:31 PM
To: Coppola, Melissa
Cc: Lee Carbonneau
Subject: Northern Pass

Hello Melissa: Attached is a revised work plan for the Northern Pass Transmission Project. If you recall a work plan was previously developed, reviewed and commented on by the Bureau back in 2010 when the Project was first established. That work plan covered the Project area from Northumberland to Franklin. A second revision to the work plan was provided in 2011 and that revised plan included sections from Franklin to Deerfield. The attached work plan has been further revised to include additional Project areas north of Northumberland (Sections 5.1 and 5.2) and south of Deerfield (Section 5.3). Previous work plans had been provided to both the the USFWS and the White Mt. National Forest for review and comment in 2010 and 2011. However, now that the Dept. of Energy has taken on the role of lead agency for the Presidential Permit, these other Federal agencies will not be commenting on our work plan. Our schedule is to complete the remaining surveys in these areas starting in June, 2014. If you could please have any comments or acknowledgment/approval of this work plan back to us by the end of May so we can move forward at the start of this growing season that would be most appreciated. Please let me know if you have any questions. Thank you and sincerely,

Adele

ADELE FIORILLO Principal Wetland Scientist
NORMANDEAU ASSOCIATES, Inc.
30 International Drive - Suite 6, Portsmouth, NH 03801
603-319-5303 (direct) 603-494-8931 (mobile)
afiorillo@normandeau.com www.normandeau.com

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Northern Pass Transmission Project

NH Natural Heritage Bureau Pre-Application Meeting Agenda

June 15th 1:00 to 3:00 PM

- Introductions – attendance sheet
- Project Overview and Status
 - Project Location and Overview
 - History and Status of Botanical Surveys Since 2010, limited to ROW, all botany done to work plans (April 2011 work plan and Addendum May 2014) Currently working on addendum to work plan. Need to survey access roads this year.
- Plant Packets from 2014 surveys (to be submitted)
- Preliminary Impact Assessment—waiting on DOE draft EIS.
 - Data/Map Package--need info from WMNF, Normandeau will circle back to NHB on that because they are still reviewing alternative routes.
 - Project-related activities--Isotria surveys and proposed widening areas this summer
 - Direct, Indirect, Temporary and Permanent impacts
 - Draft SEC rules and S3 Communities-What would NHB look for in S3 communities? In new ROW vs. existing transmission ROW? What level of effort would we look for in mapping out S3 communities in each of these areas?
 - NHB Concerns, Resource Issues
- Impact Avoidance, Minimization and Mitigation NHB Thoughts, recommendations—Engineers and staff have worked in citing the location prior to submitting to NHB. Resurveys needed and will happen prior to work. Is a permit required to collect seed?
- Follow-up / Next steps—see attached follow ups document
 - Additional information needs from NPT?
 - Consultation/Coordination needs for permit applications
 - Meeting notes

Follow ups:

- Utilities guidance document—Sabrina spoke with Melissa and this document is for maintenance work only.

- Hierarchy of protecting species at each site i.e., avoid, perform clearing/construction in winter, then flag or fence off areas, etc.
- Amy reviewed the April 2011 work plan from Normandeau and May 2014 Addendum—Amy looked for these documents (and Sabrina spoke with Melissa) and the documents that we have are the “21812 Northern Pass Plant Survey Workplan pdf—when opened the title is “Methodology for survey of rare plant species and exemplary natural communities March 2011.” NHB does not have an Addendum. Lee—could you please email it to us?
- Evolution of S3 Communities: What level of effort required to evaluate the S3 communities in existing ROWs (current management) and non-existing ROW?—This proposed rule is still in the public comment period.
- Jake will get info on engineering avoidance and minimization efforts near the potential exemplary natural community near Sugar Hill/Dixville. Could Susan and Dennis examine if it is a *northern hardwood seepage forest* instead of a *circumneutral hardwood forest seep*?
- Sabrina will ask Melissa Coppola/Bill Nichols about timber matting or light weight matting as an option for the species that prefers disturbed areas.
- Any activities that involve filling and grading negatively impact all plant species (including species that prefer disturbance). Matting in winter is acceptable, but matting on top of rare species during the growing season would mostly likely compress and damage/kill rare plants. Delineating and avoiding and minimizing is preferable.
- NHB to provide recommendations for seed mixes to be used for restoration.
- NHB to verify with Bill Nichols whether there are any restrictions on collecting seed of RTE plants.
- Need info from WMNF, Normandeau will circle back to NHB on that because they are still reviewing alternative routes
- Northern Pass is asking for a letter in writing from NHB



New Hampshire Natural Heritage Bureau

DRED - Division of Forests & Lands
172 Pembroke Road, Concord, NH 03301
(603) 271-2214

DRAFT

To: Lee Carbonneau, Normandeau Associates, Inc.
From: Amy Lamb, Ecological Information Specialist
Date: October 5, 2015
Subject: Northern Pass Pre-Application Meeting Summary (NHB15-0611)

On March 30, 2015, Melissa Coppola issued a NH Natural Heritage Bureau (NHB) memo (NHB15-0611) to Normandeau Associates, Inc. that listed Threatened and Endangered species populations that will potentially be impacted by the proposed Northern Pass project. Since that date, NHB and Normandeau have met on several occasions to discuss project impacts, avoidance and minimization measures, route changes, and the remaining survey work to be completed.

This memo summarizes the most recent pre-application meeting, which took place on October 1, 2015. This meeting was held in order to review current rare plant and natural community information, refine avoidance and minimization measures, and determine additional steps to be taken in preparation for permit application submittal at the end of October, 2015.

The meeting resulted in the following determinations regarding data and documentation:

- NHB last provided digital data to Normandeau in February of 2015, and will continue to provide any new data (i.e., new plant surveys within the project area) as they become available.
- Normandeau will provide the final reports on Vegetation and Threatened and Endangered species to NHB upon completion.
- Normandeau will provide NHB a table summarizing the anticipated impacts to all rare plants and exemplary natural communities within the selected corridor. This table will distinguish between the different types of impacts and their resulting (long-term) effects on rare plants and exemplary natural communities.

- Any reports that are filed as publicly available information will not contain specific locations of rare plants; this information will be restricted to an appendix and treated as confidential, and will be removed from publicly available reports.
- The rare plant avoidance and minimization measures that the applicant has proposed were developed in consultation with NHB. NHB will provide additional species-specific avoidance and minimization guidance during the permit review period. This will consist of a table with prioritized actions for each species.
- As any new areas for access, staging, etc. become known, Normandeau (or any subsequent contractor) will conduct rare plant surveys in the areas and provide the results to NHB.
- Normandeau identified Lee Carbonneau as the point person for future Natural Heritage communications, and the NHB point person will be Amy Lamb.

The meeting also resulted in the determination of several measures to avoid and minimize impacts to Natural Heritage resources during construction:

- Meetings will be held among contractors, environmental monitors, and inspectors, prior to contractors working in or near areas where listed plants are located, that will include making contractors aware of sensitive areas and the appropriate best management practices for each area.
- Plans that are provided to contractors will contain a color-coded bar indicating the extent of a sensitive area; no further information will be revealed on such plans.
- Normandeau (or any subsequent contractor) will have "Sensitive Area" signs installed around rare plant populations and exemplary natural communities to alert work crews to their presence.
- It was agreed that it is critical that environmental monitors have the power and authority to stop work immediately if they become aware that any action will violate agreed-upon BMPs.
- NHB will make a recommendation to NHDES regarding qualifications of Environmental Monitors, to be included as a permit condition.

NHB and Normandeau will continue to communicate as the project progresses, in particular as any route changes or new impacts to rare plants become known.

8 NH NHB Review

Northern Pass, via Normandeau Associates, Inc. (Normandeau) and Burns & McDonnell (B&M), has maintained a current *Data Sharing Agreement for the Release of NH Natural Heritage Bureau Data* (DSA) since 2010 when initial field work for the Northern Pass Transmission Line Project (Northern Pass or Project) project was planned. The DSA includes several terms which are required to be followed to protect the sensitive data. A new DSA for 2015-2016 has recently been received. In addition, NHNHB provided a memorandum detailing the ongoing DSA and other coordination (see below).

The DSA covers access to full element occurrences in GIS shapefile format for rare, threatened and endangered species, sensitive species and exemplary natural communities and natural community systems. Bat hibernacula data have also been shared. In addition to the DSAs, Normandeau submitted survey methodology work plans to the NHNHB for review and comment. The development of the survey methodologies utilized the GIS data provided by the NHNHB along with other publically available data including soils and aerial imagery. Survey methodologies for project areas located within existing ROW between Northumberland and Deerfield are described in Normandeau's work plan dated April 2011, entitled *Methodology for Survey of Rare Plant Species and Exemplary Natural Communities*. The April 2011 work plan was reviewed and approved by NHNHB, USFWS, and USFS. In May 2014, Normandeau compiled an Addendum to the *Methodology for Survey of Rare Plant Species and Exemplary Natural Communities*, which describes proposed search methodologies for additional project areas not covered in the April 2011 work plan. The May 2014 addendum provides search methodologies for the following project areas: new ROW located between the US Border and Dummer; existing ROW located between Dummer and Northumberland, Deerfield to Scobie Pond Substation, and Scobie Pond to Lawrence Road Substation; and substation and transition station area properties. The May 2014 work plan addendum was reviewed and approved by NHNHB.

Normandeau continued to coordinate throughout the field survey and permitting portions of the Project. This included requests for additional NHNHB records and discussions regarding the avoidance and minimization of proposed impacts, and mitigation for impacts that cannot be avoided (in progress).