

**STATE OF NEW HAMPSHIRE
BEFORE THE
SITE EVALUATION COMMITTEE
Docket No. 2015-06**

**APPLICATION OF NORTHERN PASS TRANSMISSION, LLC AND PUBLIC
SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
FOR A CERTIFICATE OF SITE AND FACILITY TO CONSTRUCT A NEW
HIGH VOLTAGE TRANSMISSION LINE AND RELATED FACILITIES IN
NEW HAMPSHIRE**

**PREFILED ENVIRONMENTAL TESTIMONY OF
DEERFIELD ABUTTERS**

DECEMBER 30, 2016

1 **Q. Please state your name and title.**

2 We are the Deerfield Abutters and this testimony is being coauthored by several members
3 (Jeanne Menard, Erick and Kathleen Berglund and Jo Anne Bradbury) of this Intervener
4 Group.
5

6 **Q. Briefly summarize your background and experience.**

7 We all are experts about our properties and its inhabitants and we have personal
8 knowledge of Blanding's Turtles (*Emydoidea blandingii*) due to our land stewardship
9 activities. Each of our pre-filed testimony and data responses highlight our additional
10 prior experience and opinions relating to wildlife.
11

12 **Q. Are you familiar with the Project?**

13 Deerfield Abutters are Interveners in the SEC action and have reviewed portions of the
14 Application, attended technical sessions as well as many public hearings.
15

16 **Q. What is the purpose of your testimony?**

17 The purpose of our testimony is to demonstrate that the construction of this Project will
18 have an unreasonable adverse effect on wildlife including the Blanding's Turtle. The
19 proposed mitigation along this 192-mile Project will not eliminate this unreasonable
20 adverse effect.
21

22 **Q. In addition to your experience, what materials have you reviewed in preparing**
23 **your testimony?**

24 Materials include the Northeast Blanding's Turtle Working Group website,
25 www.blandingsturtle.org; Blanding's Turtle Status Assessment Compton 2007 Report,
26 Appendix J of the Conservation Plan; Deerfield Open Space Plan; and the NH Wildlife
27 Action Plan.
28

29 We have reviewed portions of the NPT Application and have attended technical sessions.
30 General knowledge has been gained from reading articles available in wildlife magazines,
31 reading books, and attending public talks about turtles.
32

33 **Q. What conclusions can be drawn about the impact of the construction on wildlife,**
34 **including the Blanding's Turtles?**

35 The construction of this Project will have an unreasonable adverse effect on wildlife
36 including the Blanding's Turtle. Blanding's Turtles have been observed by Deerfield
37 Abutters in the wetland complexes that are impacted by the proposed NPT Project area of
38 Deerfield. The NPT construction activities will kill wildlife including Blanding's Turtles.
39 There is no avoiding this fact. Moreover, there are continuing unreasonable adverse
40 effects with ongoing ROW maintenance and decommissioning activities. Mitigation
41 efforts will not eliminate this unreasonable adverse effect on the population of Blanding's
42 Turtles.
43

44 **Q. Please describe the key features underlying your opinion.**

45 Every breeding adult of this species is critical to the survival of NH Blanding's Turtle
46 populations, and conservation efforts are imperative if this NH State listed endangered
47 species is to be saved. Scientific models, as seen in the Compton Report page 40 (see
48 attached), predict that yearly losses of just a few adults will lead to extinction of our
49 distinct North East population.
50

51 Blanding's Turtles utilize sunny, gravelly areas for nesting, common to ROW utility
52 corridors. Increased activity due to **all** phases of construction and maintenance of the
53 proposed NPT will further threaten the Blanding's Turtles nesting areas and travel routes
54 from one vernal pool or wetland complex to another for feeding and resting phases in any
55 given year.
56

57 The proposed NPT project undermines Deerfield's efforts to protect this endangered
58 species. The NH Wildlife Action Plan as published in the UNH Cooperative Extension
59 brochure entitled "Blanding's Turtles in New Hampshire" states:
60

61 "Conserve your land. Minimizing future habitat loss in areas where Blanding's

Turtles are known to occur (see attached figure entitled PSNH D118 Transmission Line Wetland Impact/Access Plan Sheet 5 of 27) is integral to the conservation of the species. Help conserve important natural areas in your community, or put your land in conservation easement to help ensure that it will never be developed."

The NPT is a for profit commercial development. It is not a reliability project, and it threatens every Blanding's Turtle in its path. The proposed level of construction and maintenance activities poses a year-long threat to Blanding's Turtles. In addition to destruction of Blanding's Turtles during their active period, NPT construction will destroy overwintering sites in wetlands and will pose a mortal threat to adult populations in hibernation.



Blanding's Turtle photographed on Deerfield Abutter Intervener property.

Many Deerfield landowners have conserved land for the expressed purpose of wildlife habitat protection from encroaching development. (see attached NPT_DIS 166683 pg 18). The Menard Easement (which is flanked by conserved land of Berglund's to the west and

80 Geddes to the east, Beye and Jaeger's land to the north) is noted as a private easement to
81 protect environmental systems. It is just one of many conserved parcels in Deerfield that
82 aim to protect wildlife and wildlife habitat.

83
84 NPT is in direct conflict with the goals of the Menard Easement as well as Deerfield
85 Abutters efforts to preserve and protect the Blanding's Turtle and other wildlife.

86
87 The Deerfield Abutters incorporate by reference Jo Anne Bradbury's pre-filed testimony
88 addressing wildlife impacts.

89
90 **Q. Does this conclude your testimony?**

91 Yes.



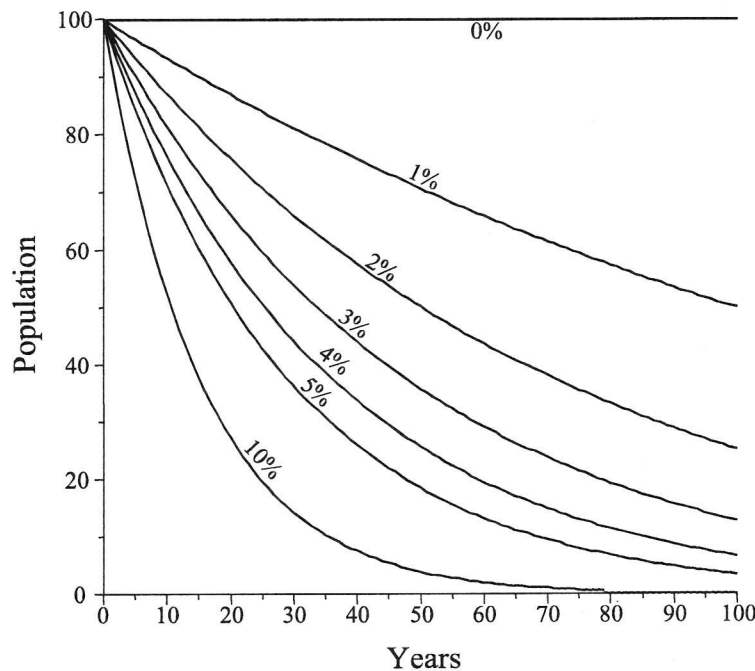


Fig. 7. Population trajectories from a deterministic population model of a population of 100 Blanding's turtles, given various rates of additional adult mortality.






Table 8. Time to 90% reduction of populations at given annual adult mortality rates from deterministic population model. Generation time is assumed to be 37 years (Congdon et al. 1993, p. 829).

Annual mortality (percent)	Time to 90% reduction	
	Years	Generations
1	334	9.0
2	169	4.6
3	114	3.1
4	87	2.4
5	70	1.9
10	37	1.0
50	10	0.3

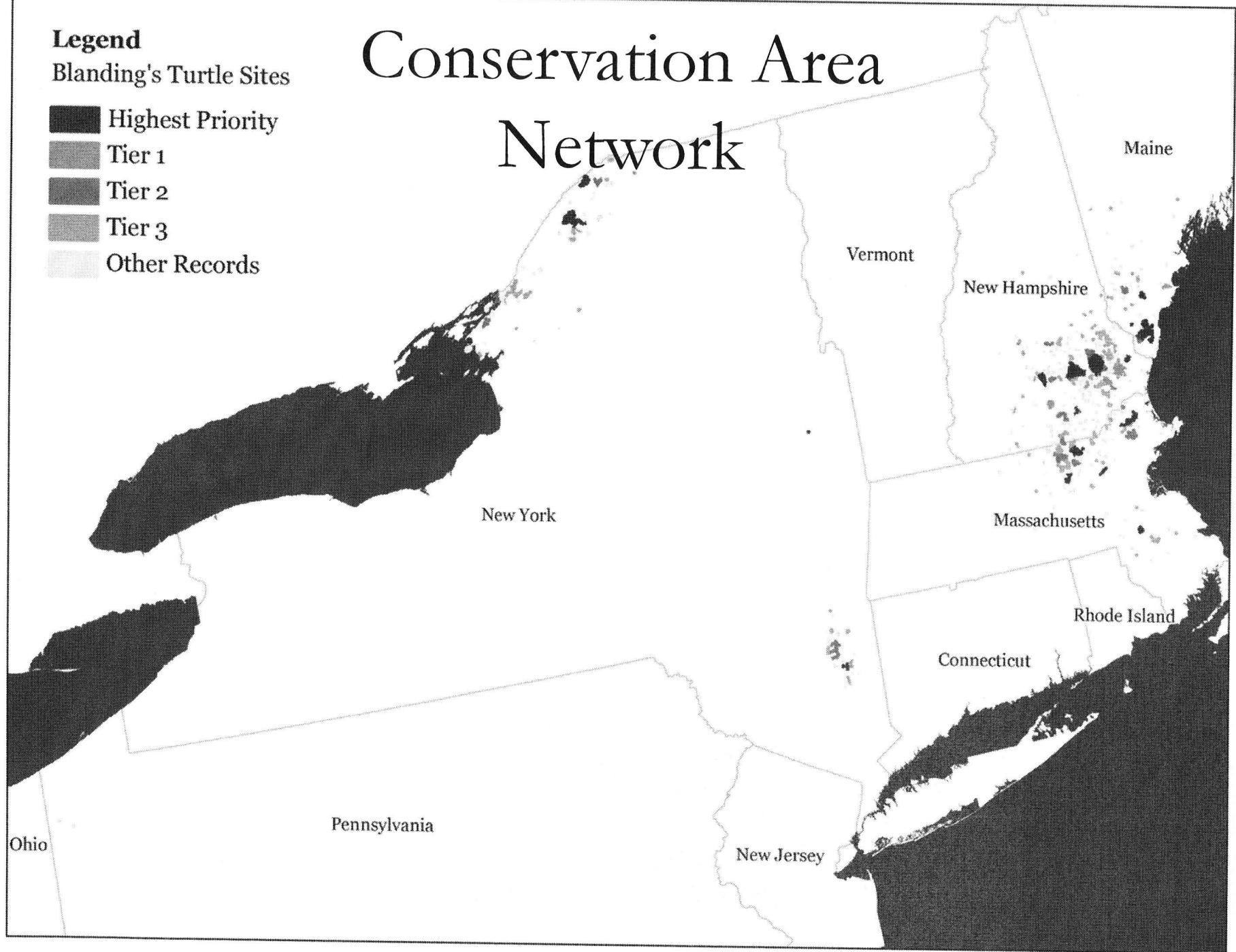
Such static, non-spatial PVAs are useful for understanding the relative effect of demographic factors, but do not consider local sources of mortality and thus cannot predict local population sizes. Another modeling approach is to take spatial pattern into account since road mortality resulting from movement between wetlands is an important source of mortality in Blanding's

Legend

Blanding's Turtle Sites

-  Highest Priority
-  Tier 1
-  Tier 2
-  Tier 3
-  Other Records

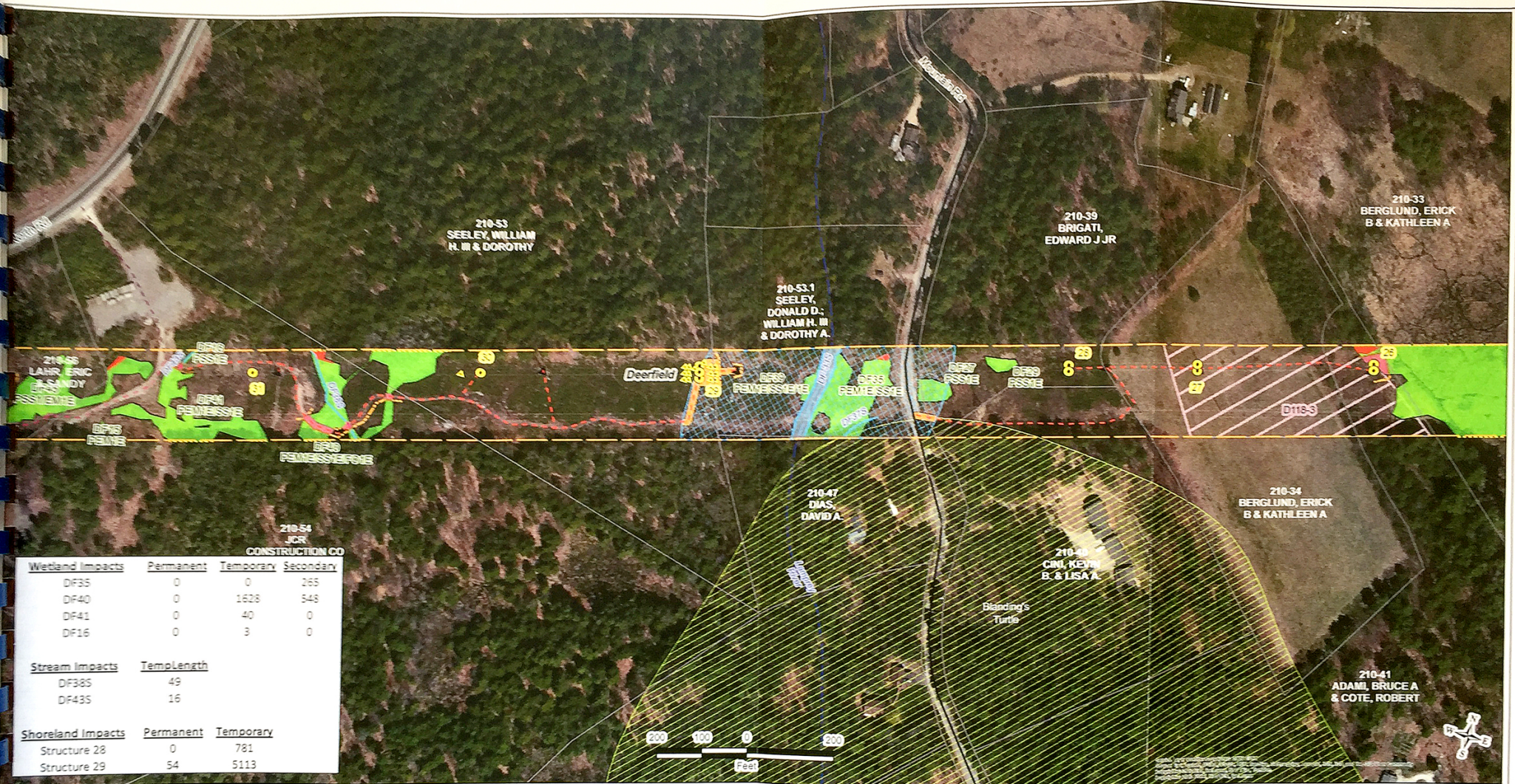
Conservation Area Network



Deerfield Scenic Resources

NPT_DIS 1666 83
AESTHETICS DAY 1 #03

SCENIC RESOURCE	NOTES	Ownership	Distance	Cultural Value	Visibility	
11 McNeil Conservation Area Town Forest	Town forest with no known trails.	Town of Deerfield	2.5 mi	LOW	No	
12 Peg King Park	Town park with wooded trails.	Town of Deerfield	0.4 mi	LOW	No	
13 Weiss Town Forest	Town forest with no known trails.	Town of Deerfield	0.6 mi	LOW	YES	Woodland/wetland adjacent to Dowst-Cate Town Forest. Old woods road but no formal hiking trails. Viewshed maps indicate minor amount of additional project visibility in vicinity of substation.
14 Wells Town Forest	Town forest with no known trails.	Town of Deerfield	1.1 mi	LOW	No	
15 Woodman State Forest	State Forest. with no known trail. Also located in Northwood.	State	1.6 mi	MEDIUM	No	
17 North Branch River	Tributary of the Lamprey River and included in the designation as a NH Rivers Management Program. Publicly accessible waterbody with access for paddling and fishing. No access in Deerfield.	State	2.8 mi	MEDIUM	No	
19 White Building Playground	Town recreational facility	Town of Deerfield	0.2 mi	LOW	No	
20 Bicentennial Field	Town baseball field	Town of Deerfield	0.4 mi	LOW	No	
21 Deerfield Fairgrounds	Town fairgrounds. Identified in Master Plan as culturally and historically significant	Town of Deerfield	2.4 mi	LOW	Yes	Minimal potential for adverse visual impact at this distance.
22 Meetinghouse Hill Road	Town voted Scenic Road (east of Old Corner Road)	Town of Deerfield	0.4 mi	LOW	Yes	Described on pp. 6-24 and 6-25 of VIA. Photographs of Old Center Cemetery and views from road. Part of Upper Lamprey River Scenic Byway.
23 Whittier Road	Town voted Scenic Road	Town of Deerfield	2.8 mi	LOW	No	
24 Perry Road	Town voted Scenic Road	Town of Deerfield	0.2 mi	LOW	yes	Narrow tree-lined local gravel road, paralleling NPT transmission corridor. Viewshed maps indicate filtered views of project in vicinity of unnamed pond.
25 Harvey Road	Town voted Scenic Road	Town of Deerfield	0.3 mi	LOW	NO	
26 Cate Road	Town voted Scenic Road	Town of Deerfield	Crosses corridor	LOW	yes	Narrow tree-lined local road, many stone walls, old homes. Project only visible at two existing transmission corridor crossings west of substation.
27 Bean Hill Road	Town voted Scenic Road	Town of Deerfield	0.5 mi	LOW	No	
28 Coffeetown Road	Town voted Scenic Road	Town of Deerfield	0.5 mi	LOW	yes	Narrow tree-lined local road, many stone walls, new homes. Viewshed maps indicate very few views of project except where it crosses existing transmission corridor north of substation.
29 Candia Road	Town voted Scenic Road	Town of Deerfield	0.8 mi	LOW	No	
30 Cole Road	Town voted Scenic Road	Town of Deerfield	0.8 mi	LOW	No	
31 Freese Town Forest	Town Forest. No Trails	Town of Deerfield	2.3 mi	LOW	Yes	Minimal potential for adverse visual impact at this distance.
32 Fogg/Shores Town Forest	Town Forest. No Trails	Town of Deerfield	0.5 mi	LOW	No	
33 Olsen/Willnave Conservation Land	Conservation lands. No clear trail designed for the public to Nottingham.	State	2.1 mi	LOW	No	
34 Menard	Conservation easement	Society for the Protection of New Hampshire Forests (easement holder)	Crosses corridor	LOW	Yes	Private conservation easement to protect environmental systems. Public access unknown. NPT corridor crosses northern end of easement.
35 Menard Easement	Conservation easement	Bear-Paw Regional Greenways (easement holder)	0.3 mi	LOW	No	
36 Pendleton Conservation Easement	Conservation easement	Town of Deerfield	0.2 mi	LOW	No	
37 Doane / Schorr Easement	Conservation easement	Bear-Paw Regional Greenways (easement holder)	2.5 mi	LOW	Yes	Minimal potential for adverse visual impact at this distance.
38 Katharyn Williams Easement	Conservation easement	Town of Deerfield	2.6 mi	LOW	No	
39 Clifford Easements	Three contiguous conservation easement parcels	Town of Deerfield	0.3 mi	LOW	No	



Wetland Impacts			
	Permanent	Temporary	Secondary
DF35	0	0	265
DF40	0	1628	548
DF41	0	40	0
DF16	0	3	0

Stream Impacts	
	Temp Length
DF38S	49
DF43S	16

Shoreland Impacts		
	Permanent	Temporary
Structure 28	0	781
Structure 29	54	5113

- Silt/Sediment Curtain
 Sediment Log
 Silt Fence
 Stream Impact
 Proposed Guy Wire (2/11/13), SW, Top, Top2
 Proposed Structure (2/11/13)
 D118 ROW (PSNH)
 D118 Existing Structure (PSNH)
 Road (NHDOT)
 D118 Potential VP (NAI 2011)
- 250 Ft. Shoreland Buffer
 RTE Plant Area (NAI 2011/2012)
 Access Pad Temp Wet Impact
 Temp Impact Shoreland Buffer
 Secondary Impact (Tree Trim)
 Wetland Continues off ROW
 Stream
 Stream/River
 Vernal Pool (NAI 2011)
 Wetland
- Arch. Resource Sensitivity (VBI)
 NH8_Approx
 Stream (USGS)
 Prime Wetland Buffer (100 ft.)
 Off-ROW Preferred
 On-ROW
 On-ROW Contingency
 On-ROW Preferred
 Secondary Off-ROW
 Town Boundary



PSNH D118 Transmission Line
 Wetland Impact/Access Plan
 Structures 26 - 31
 Sheet 5 of 27

