In which a member of the public comments on a Proposed Action in WMNF...

In its Small Projects Day application to WMNF Eversource states:

“Eversource, current permit holder for utility lines across the WMNF, has identified five existing utility poles that need to be replaced within the existing right of way (ROW) of the X178-1 transmission line in Campton, Thornton, and Woodstock, NH.”

These five poles, which become five structures, are likely to need to be replaced or reinforced only if Eversource is allowed to replace the X-178’s two existing static line/ground wires (399 lbs per 1,000’?) with two OPGWs (Optical Ground Wire; 537 lbs per 1,000), and the existing 908 amp conductors (3 @ 1094 lbs per 1,000’) with 2,200 amp conductors (3 @ 1,633 pounds per 1,000’), as it plans.

Eversource has actually identified only 41 poles out of the 580 structures on the 49 mile X-178 transmission line, that need replacement or repair within the next maintenance cycle.

Reason For Replacement	Total	Priority C	Priority B	Priority A
OPGW Loading / Clearance Failure	244	0	242	2
Asset Condition + Laminate	43	41	2	0
Access Opportunity	231	0	229	2
Additional Opportunity	62	0	62	0
Total Replacement Structures	**580**	**41**	**535**	**4**

https://nhconservation.org/lib/exe/fetch.php?media=x178:x-178_presentation.pdf

Eversource did not include the information below, in its 2/28/2024 X-178 presentation to the ISO Project Advisory Committee (PAC) though it is present in many of Eversource’s “Asset Condition” presentations:

- *A: Nominal Defect – No Action Required*
- *B: Minimal Defect – Monitor Degradation*
- *C: Moderate Defect – Repair or Replace under next maintenance*
- *D: Severe Defect – Repair, Reinforce, or Replace immediately*

In 2018 Eversource proposed to replace 57 of the structures on the X-178 line but eventually canceled that project. Since it has refused to provide information on how many of those poles may have been replaced/repaired since 2018, it seems likely that most of them are still standing

and that the maintenance cycle is around ten years, the length of the transmission structure inspection/treatment cycle and Eversource's distribution pole maintenance cycle.

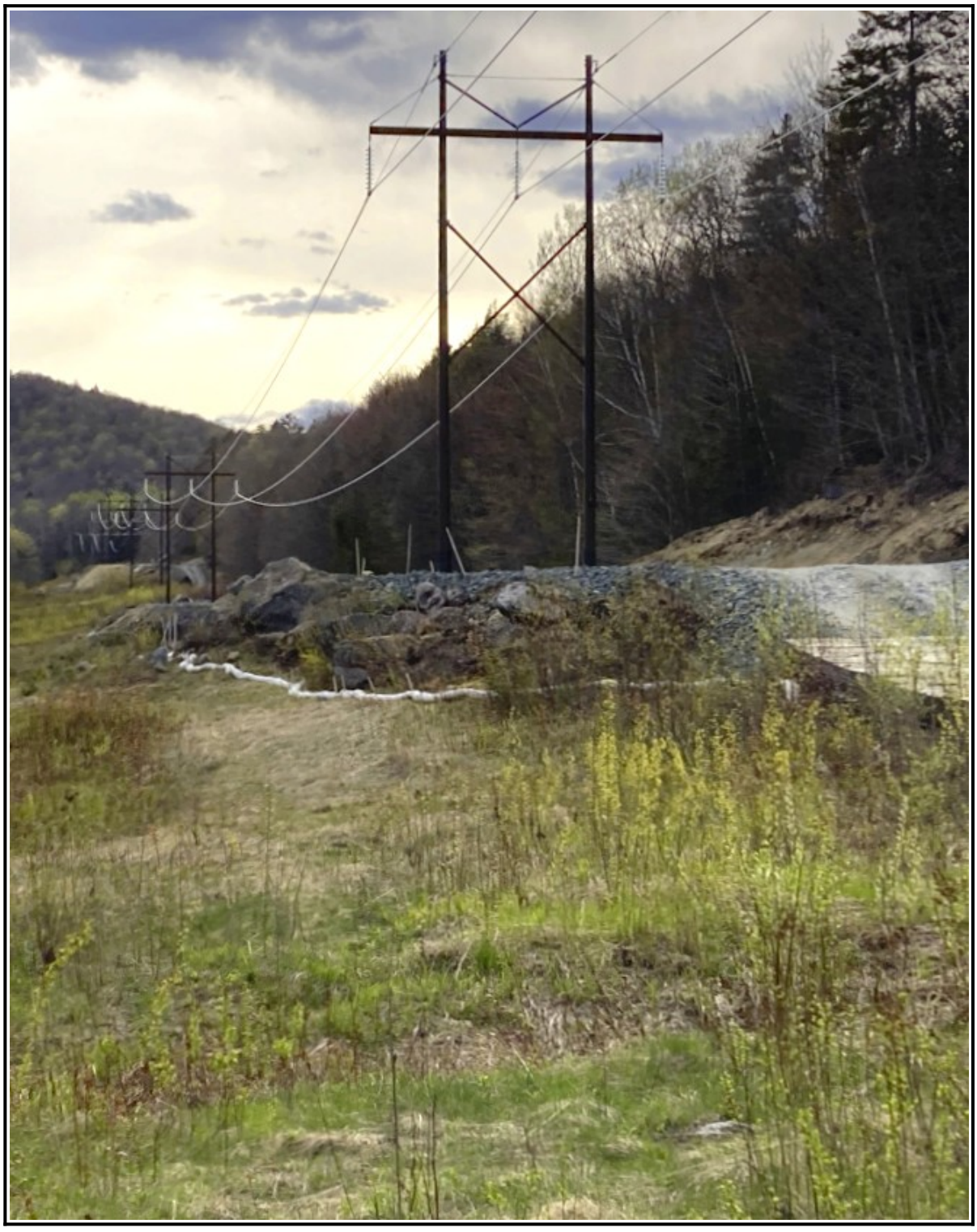
Eversource refuses to provide the location of the 41 poles/structures that need to be replaced/repaired within the next maintenance cycle, and refuses to provide the structure inspection reports.

Eversource states: "The proposed structure replacement work will involve replacing five wooden H-frame structures with new, steel H-frame structures along 0.28 miles of the ROW within the WMNF."

Why steel, which has a high carbon footprint and industrializes the easement, especially if you see the structures from within the easement rather than from a road or highway? Eversource states that steel is lighter than wood, yet claims its contractors need to use high-impact construction methods: 16' wide permanent roads from which topsoil and plants have been removed, and 100' x 100' permanent construction pads; leveled, topsoil removed, and rip-rap, gravel and glacial erratics used for berms. Both the roads and pads will cause land fragmentation and degradation, increased run-off, and illegal use of the easement. *(2/4/2024)*

Can the steel structures have the upper section replaced with a taller one, for future "incremental" (15') height increases?

Below: Eversource complete rebuild, O-154 line, Stark, N.H. Note permanent road and construction pads, both bermed with glacial erratics and rip-rap and covered with gravel.



(5/7/2023)

Eversource E-194 115kV line (mislabeled) new steel structures, like those proposed for the X-178, Former smaller structure wood pole stubs behind:

(11/24/2023)

Eversource easement roads: *(8/2/2023)* *(1/1/2024)*

Are the access roads and construction pads being constructed for future projects, a pipeline perhaps? Since rate-payers are paying for this project and Eversource's sixty-five other "Asset Condition" "upgrades" and complete rebuilds in New Hampshire, will the roads and construction pads become assets, like the structures, for which rate-payers will be paying maintenance expenses?

Eversource states: "All work will follow the Best Management Practices Manual for Utility Maintenance in and Adjacent to Wetlands and Waterbodies in NH. "

Eversource contractors have failed to use Best Management Practices in its other projects:

(Above: 391/373, 1/2/2024) All photos are of Eversource "Asset Condition projects.

"2.6 Operating Adjacent to Wetlands and Waterbodies

Work adjacent to wetlands and waterbodies, but not necessarily in wetlands and waterbodies, can present potential environmental impacts. Care must be taken when working in these areas in order to protect these existing resource buffers. To minimize erosion potential, preserve low-growing vegetation adjacent to wetlands or waterbodies to the fullest extent possible.

Stumps and rocks must not be removed unless required for safety reasons…"

“18 2.11.2 Upland Restoration
If exposed soils present sedimentation issues to adjacent wetlands and waterbodies, provide permanent soil protection. On steep slopes, install erosion control blankets as needed. “
(Below: 391/373 1/2/2024), 2/18/2024)

Install stakes at least every three feet apart along the length of the roll. Additional stakes may be driven on the downslope side of the trenches on highly erosive or very steep slopes Consider using coir logs where slopes are susceptible to sheet and rill erosion, to freeze and thaw activity, or where slopes are difficult to vegetate because of soil movement."

(Above: 1/2/24 391/373, Below: E-194/U-181, 2/25/2024)

https://www.nh.gov/nhdfl/documents/new_final_utility_bmp_manual_3_8_19.pdf

Eversource states: “Vehicles and equipment that will need to access the transmission line corridor include mobile cranes to set poles, flatbed trucks to deliver materials, and other mobile equipment such as drill rigs, front-end loaders, and excavators.

(2/4/2024)

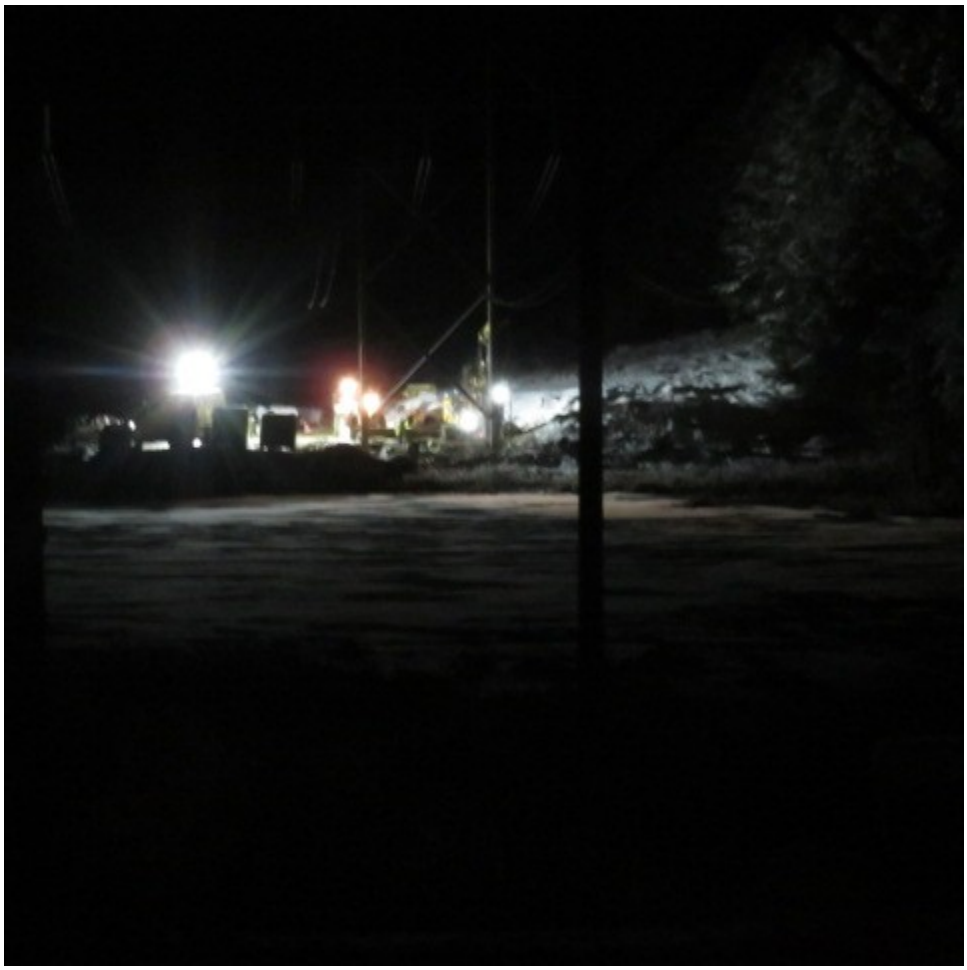
The project proposes to use portions of two existing roads outside of the ROW for access. Grading and the addition of gravel may be necessary to make access roads off the ROW passable by construction equipment.”

Neither Eversource nor the Forest Service provided maps of the proposed access roads outside the easement, nor of the project location and plans.

Above and below, Eversource equipment on line rebuilds, 2/14/2024 and 2/4/2024

Eversource states: “ No tree clearing will be required during any phase of construction, and all work will occur within the existing, cleared transmission line ROW and access roads. Trimming of tree branches may be done as needed along the ROW for equipment access. Construction proposed to begin October 2024 with an in service date of December 2026. Work is expected to take place throughout the year to allow for time to replace the structures and replace the overhead wires.”

Work may even take place in the winter and at night, since Eversource is in a hurry to complete its “Asset Condition” projects, especially the complete rebuilds like the X-178 at $384.61M (-50% +200%), S-136 at $139.8 M (-25% / +50%) U-199 at $51.18M (-25% / +50%) and Q-195 at $100.00M (-25% / +50%) and receive Transmission Cost Allocation from ISO-NE (Independent System Operators, New England) before someone asks FERC (Federal Regulatory Commission) to look into the prudence of these projects and if they even meet the definition of “Asset Condition” projects.



(1/29/2024)

Eversource states: “Portions of the ROW occur within the WMNF lands and there are also some areas where access to the ROW may need to cross WMNF lands. The proposed project will use existing access routes within the X178-1 transmission line ROW wherever possible. Most existing access routes are comprised of dirt or grassy areas, or previously used access routes, and are proposed to be improved as part of the project to allow for construction vehicle access.”

Will this “existing access route” in WMNF be “improved” *(9/17/2023)*

to this standard Eversource permanent access road?:

(1/1/2024)

Eversource states: “Where access and work pads are proposed within wetlands, Eversource will use temporary timber matting to cross wetlands and minimize rutting and compaction in wetlands. Individual timber mats are about four feet by sixteen feet and will be placed in adjoining segments to span wetlands. Upon completion of work, temporary timber matting will be removed and impacted wetlands will be restored by seeding and adding mulch.”

Is anyone documenting for how long Eversource’s contractors leave the wetlands mats lying on wetlands?

Is anyone inspecting Eversource’s contractors’ compliance with Best Management Practices and site restoration?

Is anyone enforcing Eversource’s contractors’ compliance with practices to reduce/eliminate phragmites seeds that are transported on the wetlands matting to the next work site?

Eversource states: “In uplands, Eversource is proposing grading and construction of about sixteen feet wide gravel access roads and 100 by 100 square foot gravel work pads at most structure locations. Upon completion of work, Eversource is proposing to leave access roads in place in order to access structures in the event of an emergency, and will reduce work gravel pads to an approximate 60 foot by 30 foot area in order for bucket trucks to access structures in emergencies and/or structure maintenance.”

(2/4/2024)

Eversource has not provided documentation of the emergencies that may or may not have occurred sine the X-178 was build in 1948, structure maintenance which has been done without these roads since 1948, nor explained why structures with a claimed life of 60 years need permanent heavy equipment access roads for maintenance.

Eversource states: “Structure heights will increase on average ten feet to fifteen feet which is required to meet current National Electric Safety Code standards.” [If the existing static wire is replaced with OPGW, which requires, according to Eversource, a greater clearance from the conductors than the former static ground wire, and if the 975 ASCR condutors are replaced with 1272 ACSS, which sags more.]

Eversource construction pad awaiting restoration?

(2/18/24)

The standard Alteration of Terrain plan wording for construction pad “restoration” is:

“Restoration should include reducing the work pad to a 30 by 60 foot area and reducing slopes to a maximum of 25%. Stockpiled material should be spread to reduce any unnecessary slopes. Gravel work pads and slopes should be scarified to a minimum of 3” before spreading topsoil/loam”

S-136 115kV line near the Appalachia trailhead, off of Route 2: “Restored” construction pad:

(9/23/2023)

In its “Asset Condition” structure replacement projects, Eversource routinely exceeds required clearances which means many of its structures are taller than they need to be.

In the O-154 115kV complete rebuild, from (3) 336 ASCR 529 amp conductors (482 lbs per 1,000’) to (3) 1272 ACSS 2,200 amp conductors, (1,633 lbs per 1,000’) structure heights exceed required clearance by 5.4’-18.1’ for the structures considered part of the water crossings:

O154 115kV LINE STATE LAND AND PUBLIC WATERBODY CROSSING STRUCTURE TABLE

EXHIBIT 7

Eversource O154 Line Rebuild - DOE State Land and Waterbody Crossing Details								
Existing Structure #	New Structure #	Structure Type	Height Change (feet)	Span (Pole to Pole)	Span Distance (feet)	Minimum NESC Table 232-1 Clearance (ft.)	ES Vertical Design Clearance (ft.)	Complies with NESC Table 232-1 (Y/N)
268	37	56.5' steel 2 pole, T, CLH1	15	37-38	642.6	18.6	28.8	Y
267	38	65.5' steel 2 pole, T, CLH1	10					
250	55	56.7' steel 2 pole, T, CLH1	15	55-56	460.7	20.1	28	Y
249	56	61.0' steel 2 pole, TG, CLH1	20					
248	57	61.0' steel 2 pole, T, CLH1	20	56-57	498	20.1	29.4	Y
247	58	65.5' steel 3 pole, P, CLH1	20	57-58	433.1	20.1	32.0	Y
246	59	61.0' steel 2 pole, T, CLH1	10	58-59	767	20.1	32.1	Y
232	73	52.0' steel 3 pole, ADS, CLH3	5	73-74	429.8	20.1	27.4	Y
231	74	52.0' steel 2 pole, T, CLH1	10					
230	75	61.0 steel 2 pole, T, CLH1	15	74-75	445.5	20.1	28.0	Y
229	76	70.0' steel 2 pole, T, CLH1	20	75-76	507.5	20.1	33.8	Y
228	77	61.0' steel 2 pole, T, CLH1	20	76-77	635.8	20.1	30.1	Y
227	78	61.0' steel 2 pole, T, CLH1	20	77-78	488.4	20.1	29.4	Y
226	79	64.8' steel 3 pole, BP, CLH1	25	78-79	455.6	20.1	26.8	Y
225	80	56.5' steel 2 pole, T, CLH1	15	79-80	294.4	20.1	38.2	Y
224	81	52.0' steel 2 pole, T, CLH1	10	80-81	465.7	20.1	32.2	Y
223	82	52.0' steel 2 pole, T, CLH1	10	81-82	363.4	20.1	26.5	Y
222	83	52.0' steel 2 pole, T, CLH1	10	82-83	423.1	20.1	29.6	Y

https://nhconservation.org/lib/exe/fetch.php?media=petition-attachments_o-154.pdf

Eversource refuses to provide the proposed heights of the new structures on the X-178 line.

The X-178 Small Day Projects Form information below is not posted on the Forest Service site:

15. Required Supplemental Information—The following materials must be included with the proposal for Responsible Official signature.

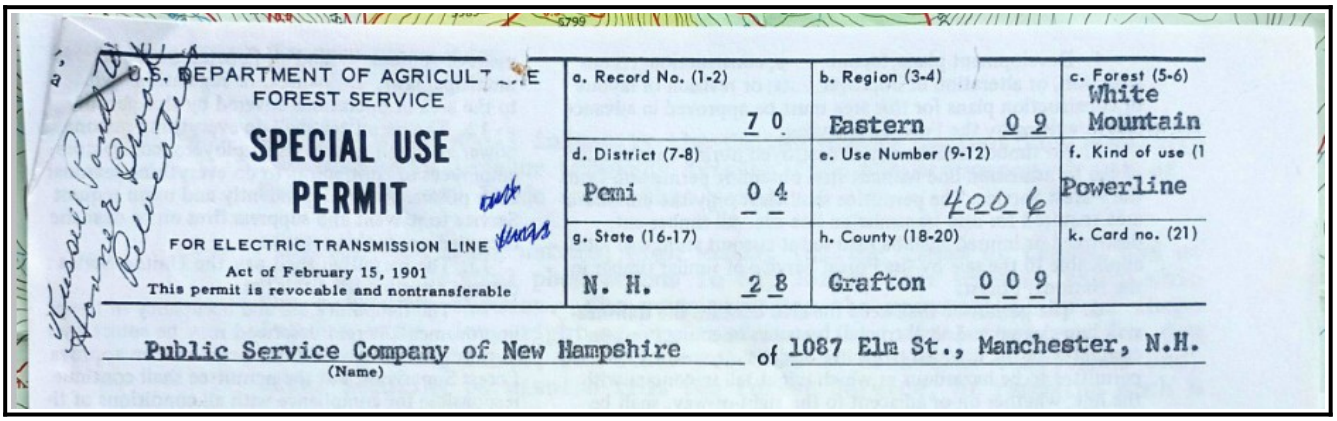
☒ Photographs and/or video documentation of project area

☒ Figure and/or spatial data

Eversource's X-178 Small Day Projects Form states:

7. Special Uses
Does the project require a special use permit? No If yes, has an application been accepted? Not applicable

Yet it appears a Special Use Permit is required:



U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

SPECIAL USE PERMIT

FOR ELECTRIC TRANSMISSION LINE
Act of February 15, 1901
This permit is revocable and nontransferable

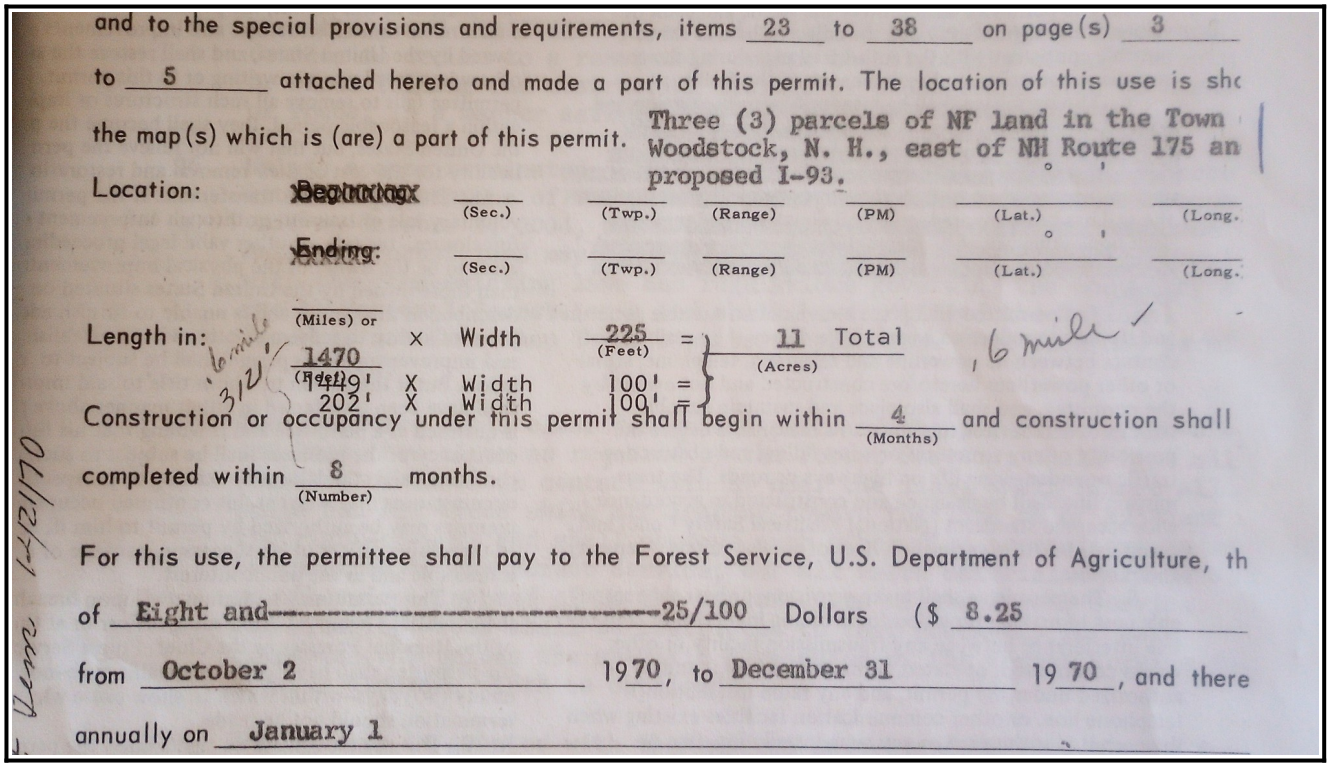
a. Record No. (1-2)	b. Region (3-4)	c. Forest (5-6)
7 0	Eastern 0 9	White Mountain
d. District (7-8)	e. Use Number (9-12)	f. Kind of use (1
Pemi 0 4	4006	Powerline
g. State (16-17)	h. County (18-20)	k. Card no. (21)
N. H. 2 8	Grafton 0 0 9	

Public Service Company of New Hampshire (Name) of 1087 Elm St., Manchester, N.H.

"Russell Pond to Horner Brook relocation"

https://nhconservation.org/lib/exe/fetch.php?media=x178:x-178_sup_russell_brook.pdf

https://nhconservation.org/lib/exe/fetch.php?media=x178:x-178_fs_dot_russell_pond_brook_to_horner_brook_powerline.pdf



and to the special provisions and requirements, items 23 to 38 on page(s) 3 to 5 attached hereto and made a part of this permit. The location of this use is shc the map(s) which is (are) a part of this permit. Three (3) parcels of NF land in the Town Woodstock, N. H., east of NH Route 175 an proposed I-93.

Location: Beginning: (Sec.) (Twp.) (Range) (PM) (Lat.) (Long.)

Ending: (Sec.) (Twp.) (Range) (PM) (Lat.) (Long.)

Length in: (Miles) or 1470 (Feet) x Width 225 (Feet) = 11 Total (Acres)

1449' x Width 100' =

202' x Width 100' =

Construction or occupancy under this permit shall begin within 4 (Months) and construction shall completed within 8 (Number) months.

For this use, the permittee shall pay to the Forest Service, U.S. Department of Agriculture, th of Eight and 25/100 Dollars ($ 8.25

from October 2 1970, to December 31 1970, and there annually on January 1

01/21/70

In its “Amended Attachment to Special Use Permit Application September, 2013 Amended Answers to Questions 7, 12-20” Eversource stated:

“Transportation aerial photography and input from Northeast Utilities Transmission field personnel, the current PSNH ROWs are cleared as follows:

1 . The ¼ mile ROW section adjacent to Interstate 93 covered by PSNH SUP FIA-136 is cleared to approximately 120 feet in width;” (p. 9)

“With two exceptions the PSNH SUPs authorize at least 150’ wide corridors. The first is likely a typographical mistake. SUP Authorization WTM0771, east of I-93, identifies the Corridor as being 100 feet wide. Based on a review of the existing and past Forest Service SUPs for that location, the 100’ wide permit area in Authorization WTM0771, the width of the corridor in that location was 225’. A review of available records indicates that PSNH did not make any attempt to reduce the corridor width in that area, nor is there any record of any explicit or articulated decision by the USFS to alter the corridor width in that location. The probability is that a typographical error occurred is also supported by the fact that PSNH holds a private easement in that location that is 225’ wide...The other exception is an approximate ¼ mile long section located in the southern limits of the WMNF where the U.S. Department of Agriculture Forest Service SUP FIA-136 provides PSNH with a 100-foot wide area. FIA-136 was issued as a result of PSNH accommodating the construction of Interstate 93. In the location of the FIA-136 SUP PSNH has an existing 225-foot wide easement.” (p. 2)

It appears that Eversource is aware of the Special Use Permit it was granted by the Forest Service for this section of the X-178 transmission line and chose not to disclose this knowledge in its Small Projects Day application for permission to rebuild the X-178 line on White Mountain National Forest land.

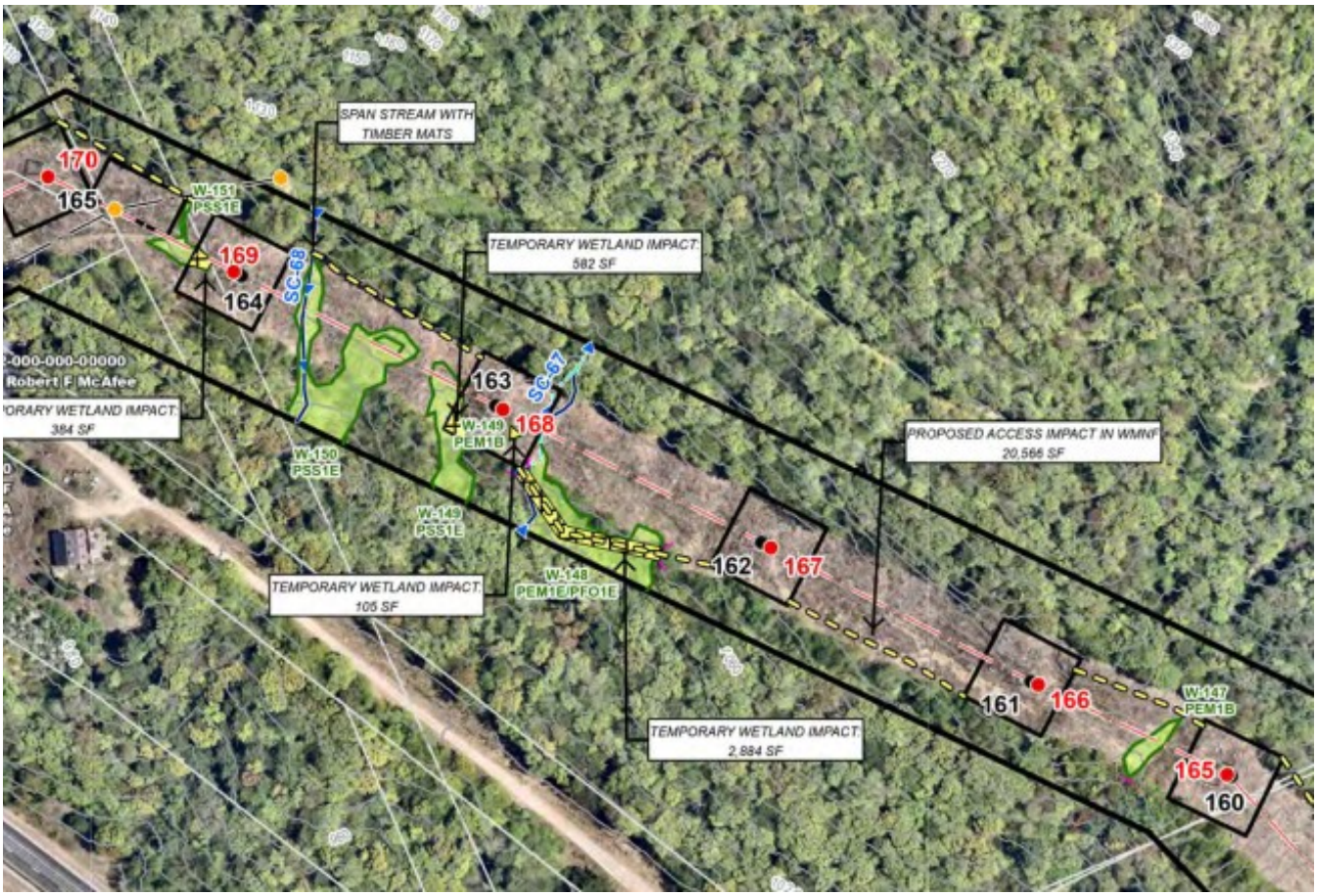
This project was just posted in the April to June Schedule of Proposed Actions, but the Forest Service signed it on September 5, 2023. Why was Eversource allowed to determine that it would not be available to the public (absent a FOIA) until April 1, 2024?

Schedule of Proposed Actions (SOPA)
04/01/2024 to 06/30/2024
White Mountain National Forest

Project is appropriate and ready for consideration at Small Projects Day.
BROOKE BROWN Digitally signed by BROOKE BROWN Date: 2023.09.05 16:01:35 -04'00'
Responsible Official and Date

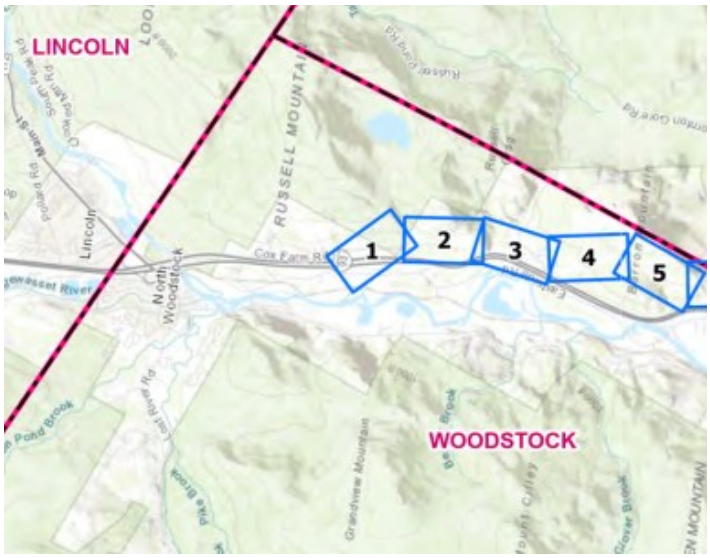
Eversource X-178-1 Transmission Line Rebuild CE ***NEW LISTING***	- Special use management	In Progress: Scoping Start 03/29/2024	Expected:09/2024	10/2024	Marianne Leberman 603-466-2713 ext216 marianne.leberman@usda.gov
	Description: The Eversource Energy company proposes to replace five wooden H-frame structures with new, steel H-frame structures along 0.28 of a mile of the Right-Of-Way within the White Mountain National Forest. **Web Link:** http://www.fs.usda.gov/project/?project=65963				
	Location: UNIT - Pemigewasset Ranger District. STATE - New Hampshire. COUNTY - Grafton. LEGAL - Not Applicable. About one quarter of a mile of the established Beebe to North Woodstock transmission line going through Campton, Thornton, and Woodstock, Grafton County, New Hampshire.				

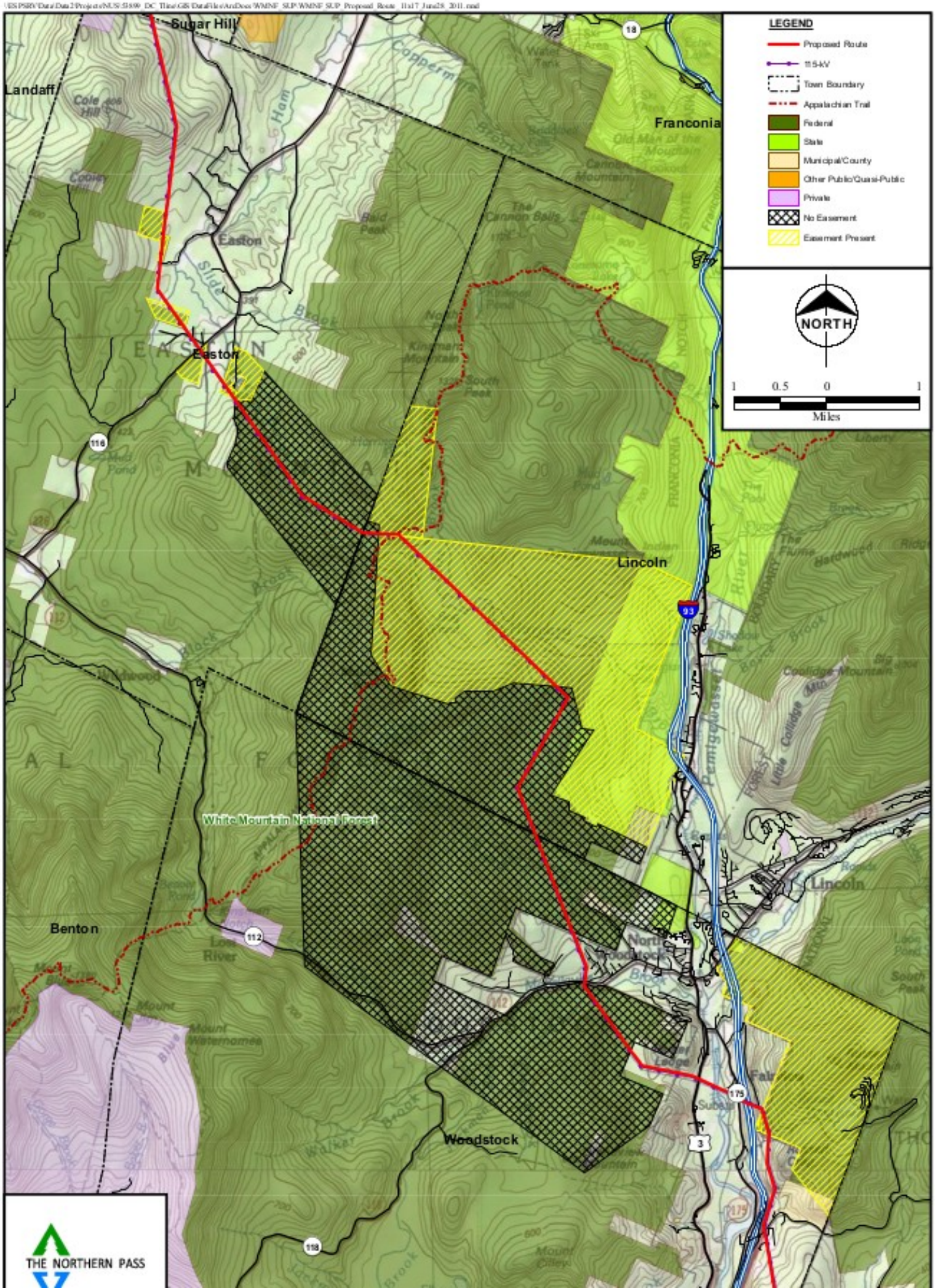
Below: the section of the X-178 covered in Eversource's Small Projects Day application.



Section shown above is from Map 1 in Eversource's section 1 map set. The X-178 easement continues northwest on the Section 2 map set which covers more of the easement/SUP area in WMNF. (<-N)

https://www.eversource.com/content/docs/default-source/projects-infrastructure/x178-1-draft-map-set.pdf?sfvrsn=44174477_1




LEGEND
Proposed Route
115-kV
Town Boundary
Appalachian Trail
Federal
State
Municipal/County
Other Public/Quasi-Public
Private
No Easement
Easement Present
NORTH
1 0.5 0 1
Miles
Sugar Hill
Landaff
Franconia
Easton
Lincoln
Benton
Woodstock
White Mountain National Forest
THE NORTHERN PASS

Eversource repeatedly stresses the interdependence of its transmission lines, yet when it wants to complete construction of sections 1 and 3 of the X-178, and place pressure on the Forest Service to grant it a Special Use Permit for construction in Section 2, which holds the unique and environmentally sensitive Bog Pond area, it presents the X-178 as a project in which .28 miles (Eversource information) of the line can be considered unconnected to the other 48.72 miles. It states that a Special Use Permit is not required for this construction, despite its knowledge of the SUP. Perhaps Eversource representatives should be under oath when filling out federal forms, and at the PAC presentations.

14. Public Involvement—Describe anticipated level of public involvement (e.g., SOPA only, length of scoping period, etc.). What is target SOPA publication date? Will Public Affairs be needed?

Project Name: Eversource X178-1 Transmission Line Rebuild Project
Small Projects Day Form 1 – Project Information

April 2024 SOPA. To date Eversource has reached out to interested stakeholders and town officials, held public information sessions in Sugar Hill and Campton, and put up a project website where more information can be obtained www.eversource.com/X178-line-project.

In case Eversource failed to inform Marianne Leberman and Jasmin Faunce, WMNF contacts for this "Small Project", of its presentation of the X-178 project to the PAC (Project Advisory Committee of ISO-NE (Independent System Operators of New England)) and of responses to that presentation, I include links below:

Presentation to the PAC: https://nhconservation.org/lib/exe/fetch.php?media=x178:x-178_presentation.pdf

"NESCOE [New England States Committee on Electricity] is troubled by the lack of compelling evidence to justify a project of this scale as well any consideration or discussion of lower cost, targeted intervention alternatives."

https://nhconservation.org/lib/exe/fetch.php?media=x178:2024_03_15_pac_nescoe_feedback_line_x178.pdf

https://nhconservation.org/lib/exe/fetch.php?media=x178:2024_03_20_pac_me_puc_comments_x_line_178.pdf

The $400 Million Construction Project Eversource Hopes You Won't Notice

By DONALD M. KREIS

https://indepthnh.org/2024/03/07/the-400-million-construction-project-eversource-hopes-you-wont-notice/

This .28 miles (Eversource data) of the X-178 cannot be severed from the rest of the X-178. It must be assessed with the rest of the proposed project that is in the White Mountain National Forest.

"REPLY TO: Special Use Permits February 6, 1970

SUBJECT: Public Service Co. of N.H. Powerline Relocation --
I - 93---Russell Pond Brook to Horner Brook Section

TO: To the Record…

This line is going to be reconstructed in part as 115,000 volts and in part going through us as 69,000 volts with the indication that within a short time it would be increased to 345,000 KV and 115,000 KV."

K.I. Sutherland
Lands Staff Officer

https://nhconservation.org/lib/exe/fetch.php?media=x178:x-178_fs_dot_russell_pond_brook_to_horner_brook_powerline.pdf

kris pastoriza april 9, 2024