Vegetation Management
Proposed reliability work along Durham Point Road

Presented by: Ian Farley (Eversource Arborist)

Eversource NH Vegetation Maintenance Program

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- Eversource has 12,000 miles of road side distribution conductors that require cyclical maintenance trimming from our tree contractors to ensure safe and reliable service to our customers.

- Every year Eversource has 100+ professional tree contractors on our system trimming 2850 miles in communities all over the state of NH.

- The four year trim cycle of these facilities helps the daily reliability of the system also helps better prepare us against storm events.

1

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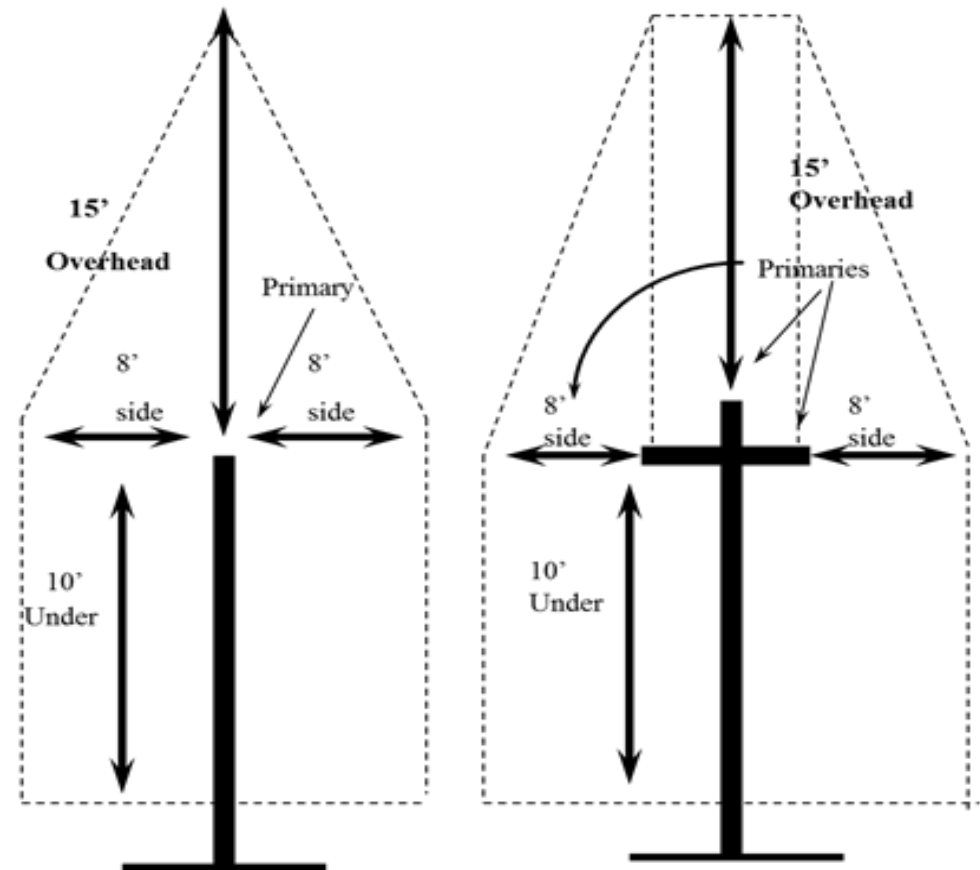
Tree Related Outages

- 45% of outages on Distribution due to vegetation
  - +/- 20,000 annually
- 90% of outages during storms due to trees
- 12 Transmission disturbances annually

- Original recommendation: 137 trees for removal
- Current recommendation: 48 trees for removal
  - Current recommendation:
    - Identified dead = 10
    - Identified poor form = 10
    - Identified in decline = 13
    - Identified canopy structure = 15

Eversource Tree Trimming

- Eversource evaluates the zone above, below and to the side of the energized conductor.

- Maintenance trimming cycle is typically every 4 years.
  - New England vegetation growing at 2 feet per year over a 4 year cycle, results in an 8 foot side zone.

- Each individual tree along this project route has been carefully examined by professional arborists on multiple occasions to determine what work is necessary.

- The following factors were taken into consideration as part of this assessment:
  - Signs of decline, defect or weakness.
  - Overall poor form
  - Canopy structure
  - Tree mortality

Scheduled Maintenance Trimming

Spacer cable construction   Cross arm construction

Tree shows sign of stress or "die back" in the canopy. (I.e. parts of the canopy are losing their leaves) Many of these trees are affected by several problems weather, plow or automobile damage, wood decay fungi, insect or disease issues being part of the roadside forest has inherent stress.

Tree #1

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Many White Pines have been affected by the White Pine Weevil which affects the terminal shoot. This causes another branch to take over as the dominant leader but it is never as strong as the original

- There are several other issues affecting white pine such as:

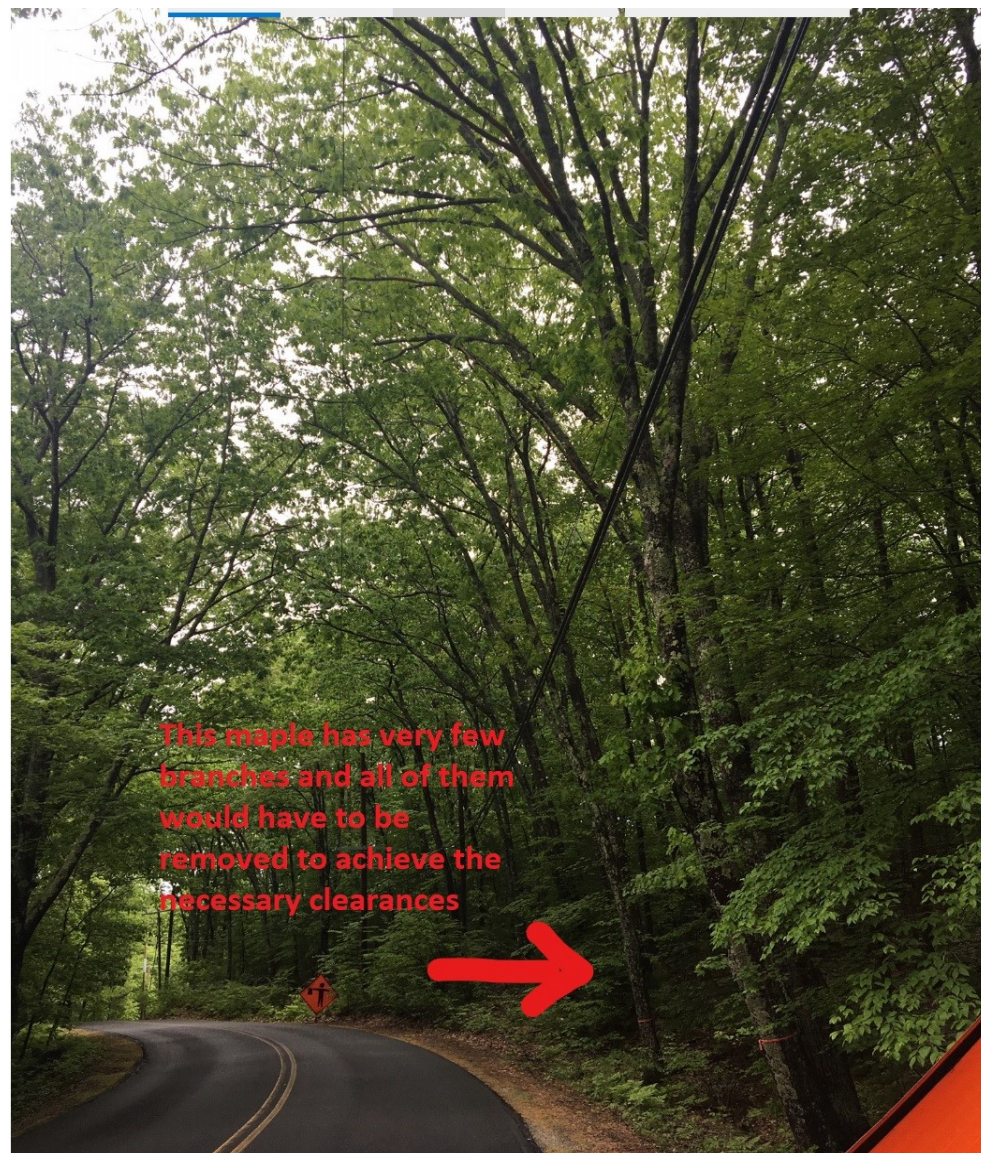USDA Forest Service   State and Private Forestry

White Pine Blister Rust, Caliciopsis Canker, Foliar Diseases, & White Pine Decline

Isabel Munck-USFS

William Ostrofsky, Barbara Schultz, Jen Weimer, Kyle Lombard, and Ken Gooch-Forest Health State Agencies

Kirk Broders, Stephen Wyka, Cameron McIntire & Heidi Asbjornsen-UNH

William Livingston-University of Maine

Kerik Cox & Sara Villani-Cornell University

Gaston Laflamme & Philippe Tanguay-Canadian Forest Service

*https://extension.unh.edu/resources/files/Resource004119_Rep5 868.pdf

Tree 5

- **Photo-tropism** is the term for growing towards sunlight- many of us have experienced it with houseplants where we have to rotate the pot or put in in another spot.

- Trees obviously cannot rotate so the growth continues to extend towards the light which can affect the form, strength, aesthetics and integrity of the tree

This maple has very few branches and all of them would have to be removed to achieve the necessary clearances

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Removal of several dead or dying trees will not only benefit the future reliability of the electrical system but will also be a direct safety benefit to the community

Tree 4

Trees 6+7

7

Tree 33

Tree 44

8

Eversource appreciates and understands that the tree canopy over Durham Point Road adds to its scenic quality and has developed plans to retain the canopy of trees where possible.

Trimming to Retain Canopy Trimming (Cont.)

By focusing on removing branches that are weakened, dead or pose an immediate threat, the canopy will be retained.

Eversource is committed to having appropriate oversight of crews to ensure all commitments are met to the planning boards satisfaction:

Crews will be overseen by:

Ian Farley

Eversource Arborist

B.S. Forest Operations, U. Maine, Orono

NH Certified Arborist

17+ years in the tree care industry

6+ years utility experience

Dave Burleigh

Asplundh Tree Experts

NH Certified Arborist

40+ years utility experience

QUESTIONS?