

The mission of the Vermont Agency of Transportation is: "Through excellent customer service, provide for the safe and efficient movement of people and goods." This mission is supported by Strategic Goals; one that specifically has relevance to this topic: Grow Vermont's economy by providing a safe, reliable and efficient transportation system in a state of good repair.

The encroachment of woody vegetation along our state highways is a public safety concern and directly impacts our ability to meet the Agency's mission and strategic goals. The clearing of brush and vegetation is a normal ongoing VTrans maintenance activity; whereas the cutting of hazard trees shall follow the risk-based tree cutting guidance outlined below.

This Guidance shall be referenced any time District forces are faced with the need to cut trees.

#### **Purpose:**

Assigning a risk-based approach to District tree removal activities (under the authority of Title 19 VSA) within the State ROW and VTrans State Property and aligning risk categories with natural and cultural resource review and permitting requirements and notification of municipalities when cutting occurs within a setting where housing or commercial development predominates or within a downtown or village center.

The need to cut a tree that potentially poses a risk is discovered through the normal course of district business or it is initiated via communication from a municipality to the district as a concern. It is the responsibility of District staff to conduct and coordinate tree cutting with the VTrans Project Delivery Bureau (PDB) Environmental Unit and municipalities as outlined in this Guidance. The VTrans Landscape Architect is always available for consult to evaluate the health of any tree(s) and to confirm the risk.

#### **Applicability:**

The Agency shall consider cutting trees (described in Risk Categories below) hanging over or within impact distance (fall zone) of the highway and/or private developed property or in the highway clear zone that:

- May fail due to mortality, a structural defect, or changed stand conditions and as a result may cause property damage or personal injury, or
- Poses an encroachment to the roadway.

Cutting trees 3 or more inches in diameter are subject to this Guidance. Cutting brush and/or pruning limbs less than 3-inch diameter is not subject to this Guidance.

#### **Categories:**

#### **High Risk**

<u>Definition</u>: Any tree, or group of trees, that poses an <u>imminent threat</u> to the safety of the traveling public or private developed property.

- A. Dead trees of any species
- B. Dying, diseased or damaged trees that have or are:
  - 1) Open seams, fully split, large woodpecker excavations, etc.
  - 2) Broken or partially tipped over by wind or ice or other forces
  - 3) Apparent canker or root rot
  - 4) Obvious deterioration

Tree Cutting under High Risk will be accomplished in response to a recognized immediate threat through the District or through a construction contract when that threat is within the limits of an active construction project.

<u>Environmental Resources Coordination</u>: For District High Risk Tree cutting activities, coordination with the Project Delivery Bureau (PDB) Environmental Section, for potential impact to natural and cultural resources, is <u>not</u> necessary. However, to avoid or minimize impacts to environmental resources, the *Environmental Standard Operating Procedures* should be employed to the maximum extent possible/practicable.

<u>Municipal Notification</u>: For High Risk tree cutting within a setting where housing or commercial development predominates or within a downtown or village center, the District shall contact the municipality (Town Manager, or in smaller communities, the Town Clerk) to inform them of the need to remove a tree(s). The District shall attempt to give the municipality 48-hours' notice prior to cutting trees, however timing will be dependent on the nature and severity of the risk.

#### **Moderate Risk**

<u>Definition</u>: Any tree, or group of trees, that poses a <u>probable or possible threat</u> to negatively impact the safety of the traveling public or private developed property.

- A. Trees that are otherwise healthy, but overhanging or leaning towards the roadway
- B. Fast growing weak-wooded trees, including but not limited to:
  - 1) Trees that are not resilient to high winds and heavy snow loads such as Birch and Poplar
  - 2) Pioneer species such as Populus (i.e. aspen and cottonwood), Prunus (i.e. black and pin cherry), or Betula (i.e. paper and gray birch), that tend to rapidly establish on open or abandoned land, grow quickly and die young and are nearing their expected life span.
- C. Structurally defective or unstable trees:
  - 1) Individual or stands of trees that grow under heavy stocking conditions, with small crowns and thus small root systems (Stands of such trees become more susceptible to wind damage with each passing year and when they eventually do begin to tip over, they often do so in groups)
  - 2) Interior trees exposed due to removal of edge trees that may pose a risk to the highway once edge trees are removed
  - 3) Shallow-rooted trees on top of ledges or in saturated soils
  - 4) Trees susceptible to mortality due to insects or disease.
- D. Trees shading roadways causing unsafe winter driving conditions or increased winter de-icing burdens.
- E. Trees growing in the clear zone that are not protected by guardrail
- F. Trees that are blocking signs, signals, or lights or otherwise interfering with sight distances (tree pruning is preferred over removal and tree pruning is not subject to this Guidance)
- G. Ash trees<sup>1</sup>

Tree Cutting under Moderate Risk will be accomplished through the District or through pay items included in PDB project contracts. Moderate Risk Tree Cutting may also fall under a statewide right-of-way reclamation effort, which will address larger scale vegetation management needs and activities along highway rights-of-way.

<u>Environmental Resources Coordination</u>: For District Moderate Risk cutting, coordination with the PDB Environmental Section is not necessary when SOPs can be met. For District Moderate Risk cutting when SOPs cannot be met, requests for PDB Environmental review will follow the same process as is established for PDB projects and shall be submitted through NERD, the electronic submittal for PDB Environmental Section Project Review (see attached instructions).

<u>Municipal Notification</u>: For Moderate Risk tree cutting within a setting where housing or commercial development predominates or within a downtown or village center, the District shall contact the municipality (Town Manager, or in smaller communities, the Town Clerk) to inform them of the need to remove a tree(s). The District will give the municipality a minimum of one week's notice prior to tree cutting.

<sup>&</sup>lt;sup>1</sup> Emerald ash borer (EAB) was identified in Vermont in February 2018 and has spread to numerous locations throughout the state. As EAB takes hold, it causes widespread ash mortality, which has already been experienced in other states. Trees suspected of having EAB should be reported immediately to your County Forester or other Vermont Dept. of Forests, Parks & Recreation (VTFP&R) staff, or you can "Report It" through the Vermont Invasive website, <a href="https://www.vtinvasives.org/reporting-emerald-ash-borer.">vtinvasives.org/reporting-emerald-ash-borer.</a>

#### **Transport of Trees:**

- 1. State and federal quarantines regulate the transport of firewood, including logs intended for firewood, out of the State.
- 2. VTFP&R best management practices suggest limiting transport of trees cut for firewood within 25 miles from where the trees are cut.
- 3. Transport of Ash trees should also follow the "Slow the Spread" recommendations <a href="https://vtinvasives.org/land/emerald-ash-borer-vermont/slow-spread-of-eab">https://vtinvasives.org/land/emerald-ash-borer-vermont/slow-spread-of-eab</a> and trees suspected of having EAB should not be transported from where they are cut. More information about EAB and transport requirements can be found at: <a href="https://vtinvasives.org/land/emerald-ash-borer-vermont-ash-borer">https://vtinvasives.org/land/emerald-ash-borer-vermont-ash-borer</a>.

#### **Replacement of Trees:**

VTrans does not replace trees removed pursuant to this guidance or other safety concerns in the state highway rights of way but understands under certain circumstances municipalities may want to replace trees removed by VTrans. Municipalities that would like to propose planting and maintaining trees in the State ROW may reference the Planting Public Street Trees in State Highway Rights of Way Policy.

#### VTrans Maintenance District Tree Cutting Environmental SOPs

#### Purpose:

These Environmental SOPs are intended for use to determine the need for PDB Environmental Section Review for proposed tree cutting activities.

Select Risk Category then determine need to consider using SOP Checklist or further coordination with the Environmental Section.

□ High Risk

For District High Risk Tree cutting activities, these Standard Operating Procedures (SOPs) should be employed to the extent possible/practicable. The SOP checklist should be referenced for that purpose; however completion and filing of the actual checklist is not required.

□ Moderate Risk

For District Moderate Risk Tree Cutting, no environmental review is necessary when these SOPs can be met. The SOP Checklist is attached and shall be used to determine the need for coordination with PDB Environmental. When SOPs cannot be met, requests for environmental review shall be submitted through NERD, the electronic submittal for PDB Environmental Section Project Review (see attached instructions).

Use <u>ANR Natural Resources Atlas</u> "VTrans Maintenance District Tree Cutting" Theme Layer (instructions attached) and a site inspection to determine presence of natural resources.

Perform site inspection to identify any above ground cultural resources (stone walls, cellar holes, foundations, gravestones, etc.) through visual inspection.

Avoid impacts to resources by:

- Installing temporary access roads that:
  - Avoid mapped and field identified natural resources
  - Avoid identified cultural resources (for example: use established openings in stone walls where it
    is necessary to access land beyond the wall)
  - Avoid existing stormwater treatment areas
  - Can be removed and the disturbed area restored to a pervious vegetated condition immediately after cutting is performed (where possible use geotextile under fill to maintain natural conditions). Tracking equipment over land does not constitute a road but proper vegetation restoration is required.
  - Involve less than 1 acre of disturbed earth
- Performing machine access work in dry/non-wet conditions (or when possible on frozen ground)
- Performing work at least 50 ft from identified wetlands
- Performing work at least 50 ft from streams; with the exception of necessary crossings
- Installing stream crossings to span the stream entirely (i.e. top of bank to top of bank)
- Avoiding cuts within 500 ft of identified Rare, Threatened, Endangered (R,T,E) species
- Conducting tree cuts in accordance with the VTrans Bat Guidance
- Stabilizing exposed soils within 48 hours of disturbance (or sooner if there is wet weather predicted) and implement other Erosion Prevention Sediment Control measures in accordance with ANRLowRisk Sites Handbook
- Felling trees away from or otherwise physically protecting stone walls, foundations, gravestones, etc. during harvesting
- Avoiding cutting legacy/veteran/heritage trees
- Grinding stumps (as opposed to pulling) or cut flush

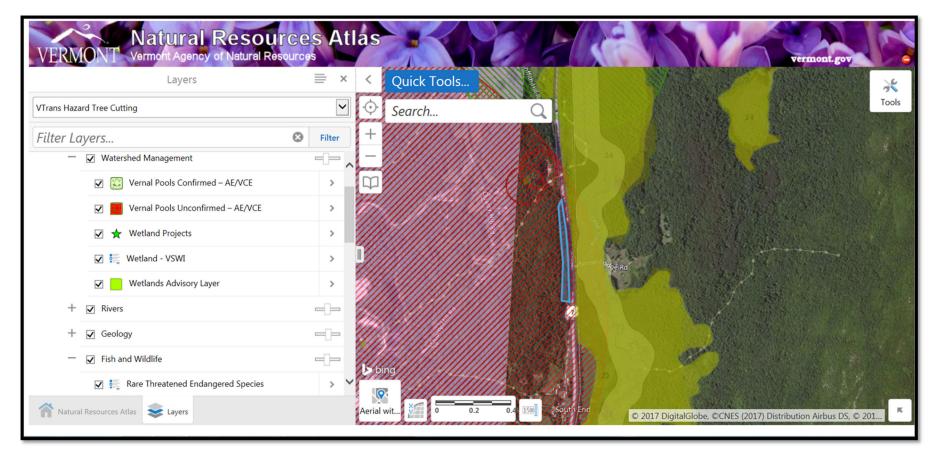
#### VTrans Maintenance District Tree Cutting Environmental SOPs Checklist

(High Risk: use as reference to avoid or minimize impacts to environmental resources; no filing or formal submittal required)

(Moderate Risk: complete; submit for Environmental Unit review only when Mitigating Measures cannot be met)

District:	Point of Contact:
Route:	Mile Marker:
Resource	Mitigating Measures
Cultural Resources identified (as identified from field review)  stone walls cellar hole foundation gravestones legacy/veteran/heritage tree Other	<ul> <li>□ Install access roads around identified resource</li> <li>□ Use existing stone wall openings</li> <li>□ Fell trees away from identified resources</li> <li>□ Construct or install physical protection measure for identified resource</li> <li>□ Do not cut legacy/veteran/heritage trees</li> <li>□ Do not pull stumps</li> </ul>
Natural Resources identified (as identified from Arc GIS and field review)  Stream Wetland* Rare, Threatened, Endangered Other  *Due to the presence of Emerald Ash Borer in Vermont, ash trees will be significantly impacted by this forest pest. An ash tree within an area infested with Emerald Ash Borer may be considered for removal as an allowed use when within striking distance of a structure or facility. Areas of infestation are mapped on the Vermont Atlas.	Guidance  ☐ Return areas to original grade
Stormwater Resources Identified (include on Resource Map as identified from Arc GIS and field review)   Existing SW treatment areas	□ Avoid alteration of existing SW treatment areas □ Return access road to pervious vegetated conditions immediately upon completion of cutting
Erosion Prevention and Sediment Control Measures to be implemented:  Seed and mulch Silt fence Erosion Matting Other	□ Stabilize exposed soils within 48 hours of disturbance (or sooner if there is wet weather predicted) and implement other EPSC measures in accordance with <u>ANR Low Risk Sites Handbook</u>
□ Resource Map generated	☐ Resource Map provided to field crew
Additional Comments:	

### **ANR Atlas "VTrans Hazard Tree Cutting" Theme Layer**



Go to the 'Layer Theme' pull down in the upper left corner of the screen and select 'VTrans Hazard Tree Cutting'.

http://anrmaps.vermont.gov/websites/anra5/

# **Environmental Section Project Review Instructions for electronic submittals, a.k.a. NERD requests**

For District Project reviews please send requests using our Environmental Electronic Submittal Form (a.k.a. NERD).

#### NERD Link:

http://aotapps/EnvironmentalRequestAdmin/default.aspx

- 1. Under Request Forms, use Agency Request
- 2. Under Request Activity, use Environmental Permits OPS (This will submit a single request for both the resource clearance reviews and for environmental permitting).
  - a. The remaining boxes and drop downs should be self-explanatory (Latitude and Longitude can be found on Google Earth or ArcMap).
  - b. Note: Please be sure to include the following info, which can also be sent via email attachment location map; photos; sketches/ drawings/ plans; impact plans/quantities for wetlands, below ordinary high water, streams, etc. Please do not merge documents/ files into one pdf.
  - c. See screen shot example below.
- 3. If you have questions, please notify the VTrans PDB-Environmental Section.
  - a. Link: http://vtransengineering.vermont.gov/bureaus/pdb/environmental

