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Virginia Tech Urban Forest Storm and Emergency Response Procedure

OVERVIEW

Urban trees on Virginia Tech properties are vulnerable to damage from seasonal storms, extreme weather events, and routine tree-related incidents. Response during and after these incidents is required to ensure low risk and limited disruption of community activities on campus.

This procedure organizes the Virginia Tech Division of Campus Planning, Infrastructure, and Facilities (DCPIF) department's responses to tree-related emergencies and represents a protocol that begins with planning, ends with emergency resolution, and includes appropriate notifications throughout.

Planning and preparing for weather events that may damage trees is the foundation for urban forestry storm and emergency response and must be led by the Urban Forestry Team in coordination with the Grounds Team. Operational response to storms begins with initial incident assessments and tree inspections; following this, these incidents are then triaged and finally response operations begin. While these operations are not scheduled, staff and resources must be allocated to facilitate this work as needed for quick and low risk emergency response. The status of individual emergencies and the response schedule must be communicated to the Director of Operations throughout operations to ensure the University is aware of the schedule and when normal operations may return to normal.

GOALS

This procedure:

- shall allow the Urban Forestry Team to mitigate risk in a timely manner
- shall accompany the development of the Urban Forest Master Plan and Virginia Tech Tree Policy
- shall provide high-quality arboriculture practice on Virginia Tech's properties
- shall optimize the value of trees on Virginia Tech properties

PROPOSED SPECIFICATIONS

Tree Incidents

Tree related incidents are any tree or tree debris related incident that exposes the public or property to risk or disruption of community activities and campus operations. These incidents may range from low limbs obstructing views at intersections to widespread wind and ice damage that include large tree failures.

- Storm Event - Any weather-related event that results in more than three reported tree incidents within 48 hours.
- Extreme Weather Event - Any weather-related event that results in five or more reported tree incidents within 24 hours.
- Routine Tree Incidents - All other tree or tree debris related issues that occur regularly and are not associated with seasonal storms or extreme weather events.

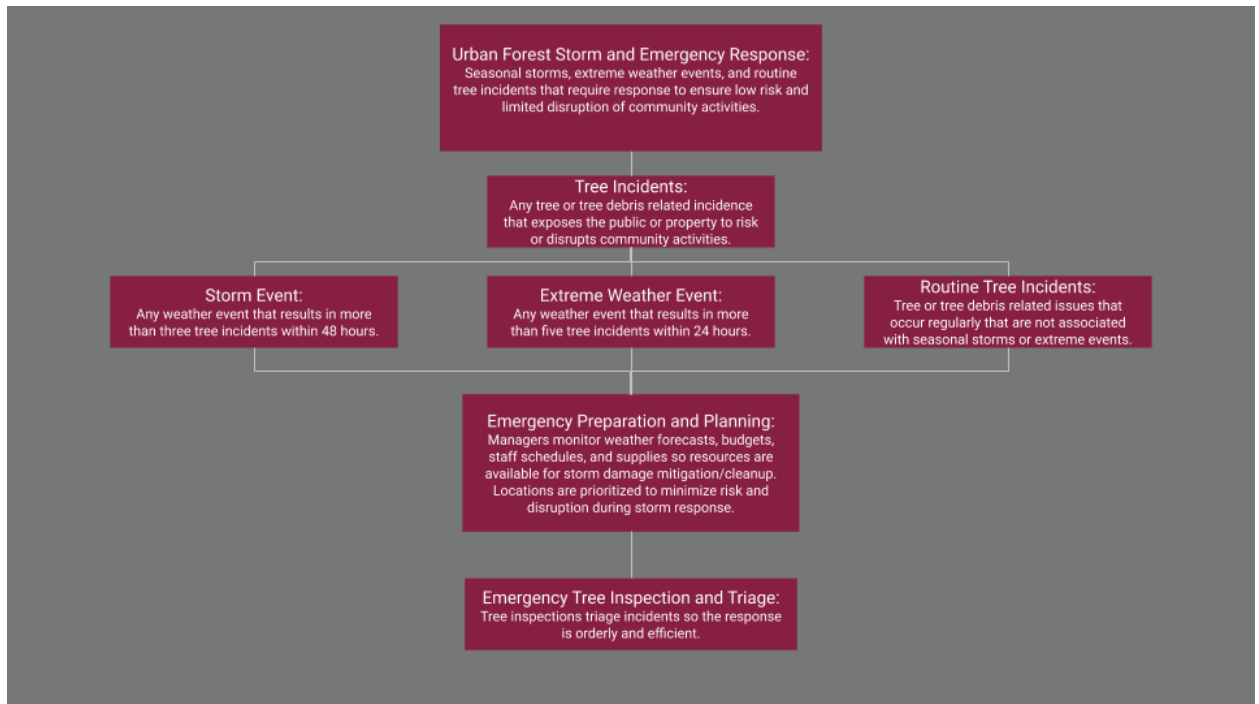
When an extreme weather event occurs, support from other departments and sometimes regional partners may be required to coordinate response across campus and the immediate region.

Tree Incident Emergency Preparation and Planning

While storms and extreme weather events may not be predicted, Virginia Tech DCPIF must plan and prepare for these potentially damaging incidents so resources are available when needed.

- The Urban Forestry Team monitors weather forecasts and alerts the Director of Operations and the Grounds Manager when damaging storms may occur.
- Supplies and equipment for emergency tree work must be stocked and accessible to staff.
- Some incidents may be technical and require advanced skills or special tools provided by contracted arborists. A budget for this work must be allocated and managed throughout the fiscal year.
- On-call staff shall be scheduled beyond business hours and on-call schedules must provide nonstop response and coverage after business hours. Overtime pay must be budgeted and available for Grounds staff during storm response operations.

- Priority thoroughfares, arterial roads, and high use paths take precedence before roads and paths with less traffic. Some locations with high use or proximity to high use areas shall be addressed before low use areas. Incidents and sites are prioritized based on seasonal event schedules, potential impact to University operations, and field observations during incident triage and throughout event response.

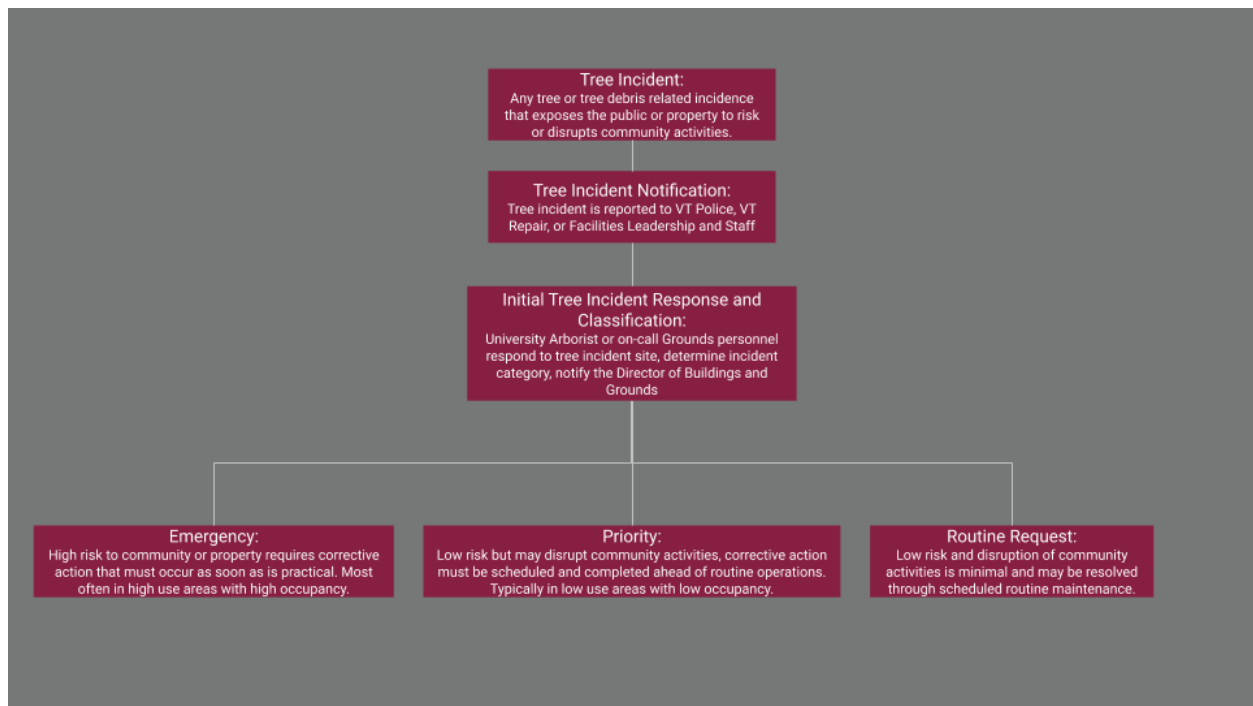


Tree Emergency Inspection and Triage

Tree incidents occur without notice and may pose risk to the public and property or disrupt campus operations.

1. Response begins when an incident is recognized and reported to VT Police, VT Repair, the Urban Forestry Team, or Grounds staff.
2. During business hours, the Urban Forestry Team responds to tree-related notifications, inspects trees and reported incidents, and prioritizes response. The Urban Forestry Team responds to emergency reports after hours. When utility lines are present and in conflict with tree debris, VT Electric must be notified and the site confirmed as not energized before corrective work begins.
3. The incident is classified to allow swift action:
 - Emergency - High risk to community or property, requires corrective action as soon as is practical. These incidents are most often found in high use areas with high occupancy.

- Priority - Low risk but may disrupt community activities or campus operations, corrective action must be scheduled and completed ahead of routine operations. These incidents are typically in low use areas with low occupancy.
 - Routine Request - Low risk and with minimal disruption to activities and campus operations. These incidents are scheduled into routine maintenance operations.
4. Throughout incident assessment, tree inspection, and emergency response, all trees and sites must be recorded and Tree IDs noted for record-keeping, work order filing, and tree inventory update. After the emergency response concludes, these records will be filed and major tree losses reported to the Director of Operations and the Urban Forestry Advisory Committee.
 5. The Director Operations must be notified for any incident beyond Routine Requests.



Incidence assessments may be performed by on-call Grounds staff, the Grounds Managers, the Associate Director of Housekeeping and Grounds, or the Director of Buildings and Grounds. When emergencies require technical solutions after hours the Urban Forestry Team must be notified so inspection may occur. All tree inspections must be performed by an ISA Certified Arborist or an arborist with ISA qualifications that surpass the Certified Arborist standard, within the office of the Urban Forestry Team or as contracted by the Team office as necessary.

The status of individual emergencies and the response schedule must be communicated to the Director of Buildings and Grounds throughout operations to ensure the University is aware of the schedule and when normal operations may return to normal.

Tree Emergency Response and Resolution

After incidents are categorized prioritized response begins:

1. High-risk emergencies are triaged first based on potential impacts and location.
2. Priorities are then scheduled for completion in a timely manner.
3. Routine requests are logged and worked into routine maintenance operations.

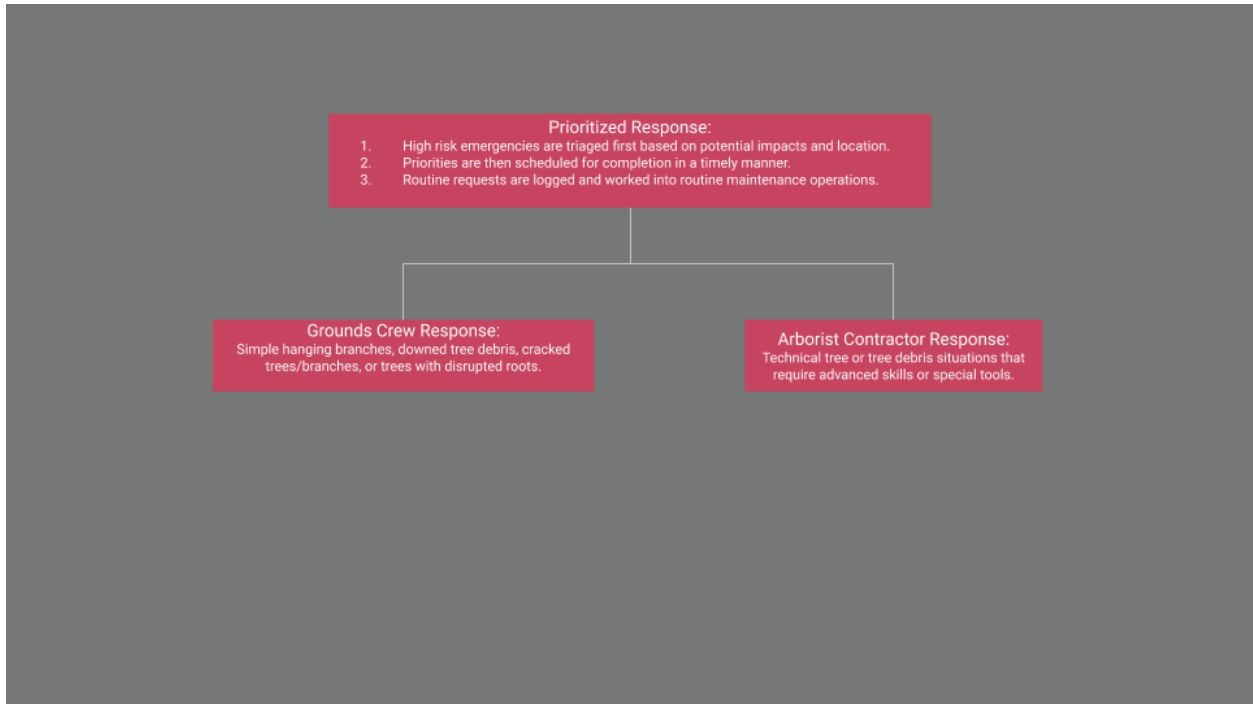
During and after large storms or extreme weather events, debris from tree incidents may be left on-site or moved to a holding area to allow staff or contractors to move to other high-risk incidents. This tree debris must be collected and disposed of after all sites are addressed and risk is mitigated.

Some trees may be mortally damaged and require removal, but most trees may remain and only require corrective pruning. This distinction will be noted through the inspection process to prevent further asset damage or resource loss. Corrective action that damages trees beyond what is necessary to mitigate risk shall be avoided.

Different incidents require different strategies for resolution as determined by the the incident assessment or tree inspection:

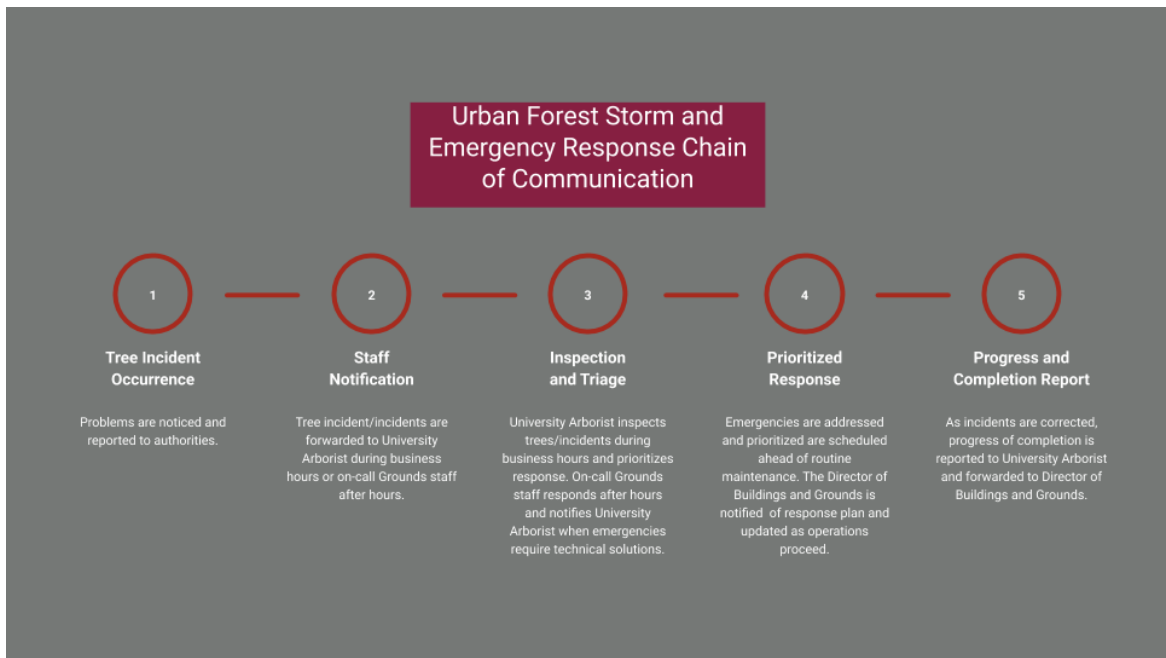
- Grounds crews can address simple hanging branches, downed tree debris, cracked trees and branches, or trees with disrupted roots that do not require tree climbing or advanced rope rigging techniques.
- Arborist contractors may be required to address technical tree or tree debris situations that require specialized skills and tools.

The status of individual emergencies and the response schedule must be communicated to the Director of Buildings and Grounds throughout operations to ensure the University is aware of the schedule and when normal operations may return to normal.



Emergency Response Chain of Communication

The chart below depicts the appropriate chain of communication to ensure activities and operations are scheduled around the emergency tree response.



PROJECTED OUTCOMES

Virginia Tech's urban canopy is of great value and is subjected to various biotic and abiotic pressures/stressors. Each tree in the canopy (and the site where it grows) is vulnerable to damaging storms and winds that can pose risk to the public and property. This procedure will ensure tree emergency response is planned and performed in a systematic way that reduces risk and disruption to campus activities and operations.