

Urban Forest Strike Team – Tree Assessment Field Guide

Data Collection Attributes

- Public** (Yes, No, Unknown)
- Genus/Species**
- DBH** (to nearest inch)
- Tree Part**
 - Root Plate
 - Trunk
 - Co-dominant Stem
 - Scaffold Branch
 - Crown
 - Stump
- FEMA**
 - Limb Removal ($\geq 2''$)
 - Remove (Canopy Broken)
 - Remove (Trunk Split)
 - Remove (>30 deg. Lean)
 - Remove Windthrown ($\geq 50\%$ roots)
 - Stump Removal
 - Stump Flushcut
 - Tree Bracing
- Likelihood of Failure** (storm-damaged part w/highest risk)
 1. Improbable
 2. Possible
 3. Probable
 4. Imminent
- Likelihood of Impact** (consider target zone & occupancy)
 1. Very low
 2. Low
 3. Medium
 4. High
- Consequence** (assume part will hit target)
 1. Negligible
 2. Minor
 3. Significant
 4. Severe
- Mitigation** (treatment)
 - Limb Removal
 - Bracing
 - Tree Removal
 - Windthrow Removal
 - Stump
 - Inspect
 - Prune
 - No Action
- ResidDefect(s)**
 - None/NA
 - Rootplate
 - Trunk
 - Co-dominant (Stem)
 - Scaffold
 - Branches
- Hangers** (0, 1, 2-4, 5-9, 10+)
- FieldNotes** (significant only)

FEMA Hazard Tree, Limb, and Stump Removal Criteria

All Tree, Limb, and Stump Removal

All of these must be met:

- Damage caused by disaster
- Immediate threat to public health/safety
- On improved/maintained property
- Tree is greater than 6" DBH

Limb Removal

Must be $\geq 2''$ at break

Tree Removal

- Tree Bracing
- Tree Removal (Canopy Broken)
- Tree Removal (Trunk Split)
- Tree Removal (>30 deg. Lean)
- Windthrow Removal ($\geq 50\%$ roots)

Stumps

- Removal (with special equip):
- Stump Removal ($\geq 50\%$ roots, $\geq 24''$ at 2')
- Stump Flush Cut ($<50\%$ roots, $\geq 6''$ at 2')

ISA Tree Risk Assessment Best Management Practices

Table 1

Likelihood of Failure	Likelihood of Impacting Target			
	Very Low	Low	Medium	High
Imminent	Unlikely	Somewhat Likely	Likely	Very Likely
Probable	Unlikely	Unlikely	Somewhat Likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat Likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Table 2

Likelihood of Failure and Impact	Consequences			
	Negligible	Minor	Significant	Severe
Very Likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat Likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

Limb Removal ($\geq 2''$ at Break) – There is at least one broken limb in the crown of the damaged tree that is greater than two inches in diameter at the break and was caused by the natural disaster.

Tree Removal (Canopy Broken) – Lost a significant* amount of crown volume due to the storm.

Tree Removal (Trunk Split) – Exposure of heartwood in the stem or major, structural branches.

Tree Removal (Lean >30) – Storm-related lean is at least 30 degrees, been uprooted, or has fallen.

Windthrow Removal (Roots $\geq 50\%$) – The fallen tree and root ball are recommended for removal as a single unit and the remaining hole is to be filled if at least 50% of the roots are exposed.

Stump Removal (Roots $\geq 50\%$, $\geq 24''$ at 2') – This is a stump that is greater than 24" diameter at 2' above ground line and has at least 50% of the root ball exposed.

Stump Flush Cut ($<50\%$ roots, $\geq 6''$ at 2') – This is a stump that is greater than 6" diameter at 2' above ground line and has less than 50% of the root ball exposed.

Stumps Picked Up (Out of Ground) – A stump that is laying on top of the ground; not to be confused with a windthrown tree which would include: root ball, stump, trunk, and crown (or portions).

Tree Bracing or Staking – The use of any means necessary to prevent the tree from falling as long as that means is less costly than removing the tree. The tree is not eligible for removal later if it dies.