

Storm Damage Assessment Protocol for Urban Areas

Providing Tools for Estimating Damage To Trees

The Challenge

Large-scale storm events that cause excessive tree damage can rapidly compromise public safety. Communities manage such catastrophes with varying degrees of efficiency and often rely on aid from state and federal government agencies to fund hazard reduction and debris removal. That aid depends significantly on the ability to estimate storm damage accurately and quickly. To date, however, there is no standard procedure for assessing the amount of damage that severe storms cause to trees on a community or regional basis. The initial estimate of costs related to storm-damaged trees can vary widely among different communities, even if the amount or type of damage is similar.

The Solution

The USDA Forest Service's Northeast Center for Urban and Community Forestry, in partnership with the University of Massachusetts/Amherst and Davey Resource Group have developed a standardized method to assess widespread storm damage in a simple, credible, and efficient manner immediately after a severe storm. This assessment method is adaptable to various community types and sizes, and it provides information on the time and funds needed to mitigate storm damage. The protocol involves a planning stage that evaluates a community's street-side and adjacent trees, and estimates the amount of cleanup that might be needed after a severe storm.

- The Storm Damage Assessment Protocol provides a standardized procedure for assessing tree related storm damage in urban areas
- The protocol involves a planning stage that evaluates a community's street-side and adjacent trees, and estimates the amount of cleanup that might be needed after a severe storm.
- In the planning stage, sample plots are randomly chosen in a community, a survey is performed, and

This Assessment Method is Adaptable to Various Community Types and Sizes and Provides Timely Information on Storm Damage in Urban Areas.



Information on the Storm Damage Assessment protocol can be found at www.umass.edu/urbantree/icestorm.

time and cost estimates are made.

- Once a storm has passed and community-wide damage is evident, the same sample plots are re-surveyed. A qualified damage assessor evaluates the tree damage in each plot and uses the data to estimate the initial resources necessary for hazard mitigation and debris cleanup for the entire community.

Resulting Benefits

- Increased communication with state and federal emergency management agencies
- Increased communication and involvement among community departments in planning for storm emergencies
- Facilitation of the reimbursement process by using a pre-approved, standard, reasonable, and credible method for assessing tree damage.
- Increased potential for full reimbursement based on an accurate assessment of damage early in the crisis.

Sharing Success

- Training workshops offered in six states.
- Web site under development.
- FEMA partnership proposed and expanded implementation planned for 2003-2005.



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