

Forest Storm Damage Factsheet



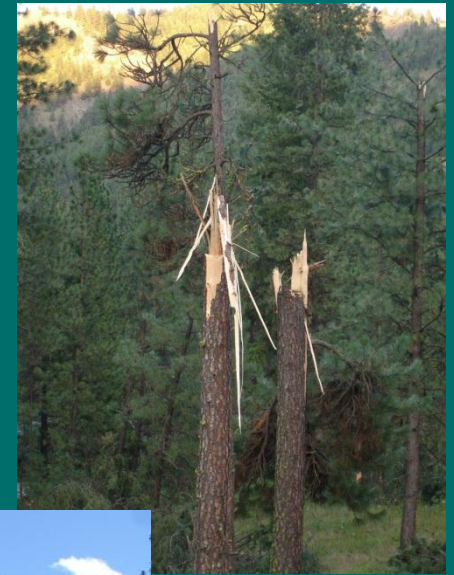
Washington State Department of Natural Resources
August 2012



Damage Assessment

To determine the type and extent of damage on your woodlot:

- Walk your entire woodlot if possible. Make a map showing the location and intensity of damage.
- Count fallen, broken or bent trees.
 - Note important characteristics such as species and breakage pattern of the damaged trees.
- Take lots of photographs to help communicate your observations with others.



Determine Cause of Tree Failure

Knowing why trees failed can help you manage more effectively in the future.



Soil Failure

Roots are abundant and strong. Note if failure was likely due to a site factor such as shallow soils or high water table.



Stem Failure

Trunk broke. If skinny-growing trees, multiple tops, a wound, or stem decay caused weakness, note that condition.



Root Failure

Note if roots are missing, rotten or broke off due to past damage or a root decay fungus.



Salvage Harvest

- If a significant number of sawlog sized trees (12 inches or larger diameter at chest height) on your woodlot are fallen, bent, or have broken tops, consider planning a salvage harvest.
- Contact a professional consulting forester to help you.

Consulting Forester Directory:

<http://ext.nrs.wsu.edu/publications/forestry/consultingdirectory.htm>

Managing Your Timber Sale Guide:

<http://cru.cahe.wsu.edu/CEPublications/eb1818/eb1818.pdf>



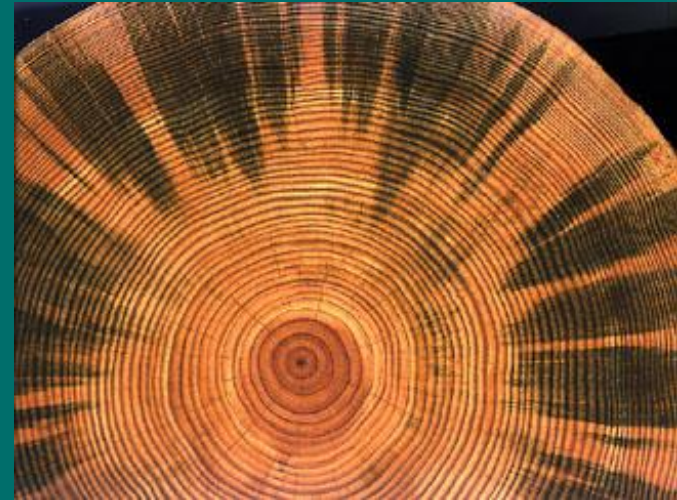
Salvage PLUS Long-term Objectives

- Every forest management activity, including salvage, is an opportunity to improve forest health, address deficiencies that contributed to the damage, and make progress toward your long term goals.
- Give as much thought to the condition you are leaving the forest as to what you are taking away.
- Mimic the effects that natural fire would have had such as increasing the proportion of pine and larch; reducing the proportion of Douglas-fir and other fir; removing the smallest, weakest trees; reducing the impact of dwarf mistletoe and other diseases.



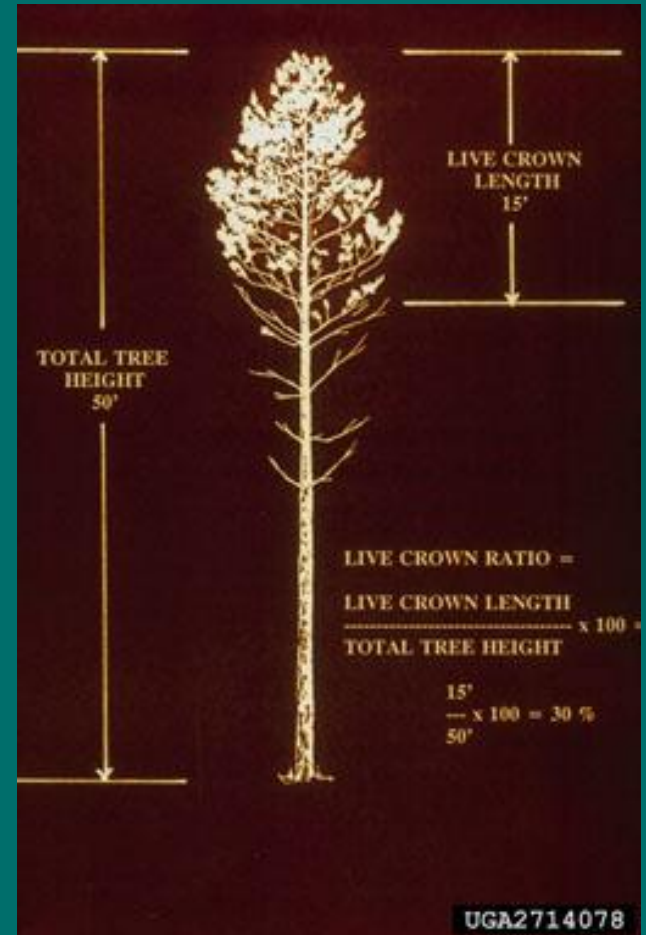
Salvage Harvest: Important Considerations

- Trees that are down or damaged during a storm will develop decay and discoloration in the wood that can affect its marketability.
- Appearance-grade products, such as ponderosa pine sawtimber, can quickly degrade in quality due to blue-stain fungus and need to be salvaged within 1 to 2 months in the summer.
- Pulp or sawlog trees used as dimensional lumber can be salvaged 3 to 6 months after a storm.



Salvage Harvest: Important Considerations

- Forest Practices rules still apply for salvage harvests following storms.
- Please indicate on your Forest Practices Applications that it is “Storm Damage” and DNR will expedite the application process, typically 5 to 30 days.
- Leave some standing dead and downed trees for wildlife habitat.
- Trees with >30% of their height in live crown should survive and can be retained (see live crown ratio diagram).



David J. Morehead, University of Georgia, Bugwood.org.



Forest Insects and Diseases After a Storm

- Following a major wind or ice storm, the risk of insect and disease populations increasing depends on the type of trees affected and time of year.

- Storms that generate pine slash from January to June can increase the levels of *Ips* beetles which can lead to elevated levels of mortality in small diameter pine trees and top kill in larger pine trees.

- Storms that generate pine slash from July through December will likely lead to little bark beetle damage in residual trees.



(Top) *Ips* bark beetle
(Bottom) Pine slash that is suitable host material for *Ips* bark beetles.



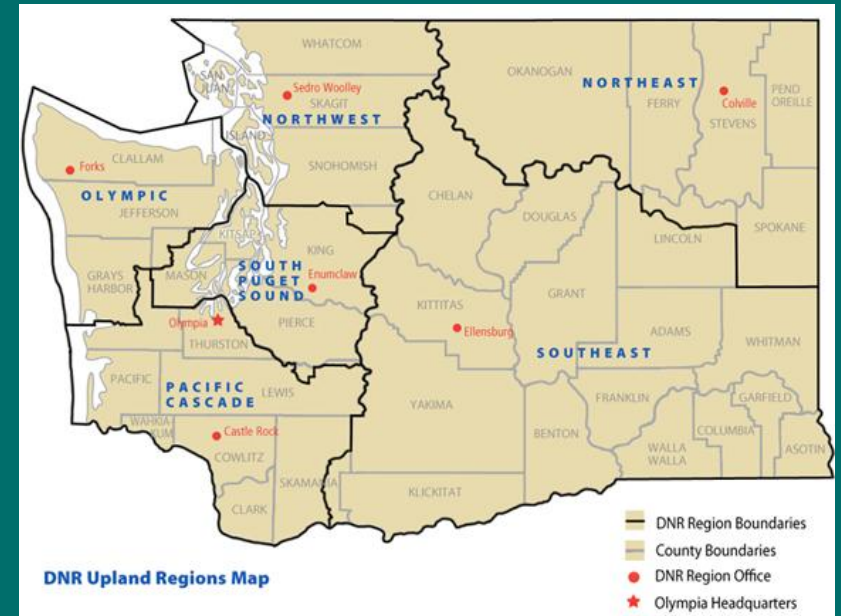
Assistance Available for Landowners

DNR

DNR foresters can help landowners assess the best course of action for dealing with storm damage.

DNR Northeast Region Office
509-684-7474 Colville, WA

DNR Southeast Region Office
509-925-8510 Ellensburg, WA



Natural Resources Conservation Service

NRCS may have funding available for storm cleanup and slash disposal. Contact your local NRCS office for more information:



<http://www.wa.nrcs.usda.gov/contact/fieldoffices.html>



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Natural Resources
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