

Site: _____ Page: ____ of ____

Date: _____ Inspected by: _____

(Each column represents one tree)

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Unit (campsite or other)					
Tree number					
if used	Ref. point (codes on back)				
	Azimuth				
	Distance				
Tree species					
DBH					
Tar- get	1 – Trails, roads 2 – People, structures, veh.				
Wounds/cankers	1 – 10-33% circumf. 2 – 33-50% circumf. 3 – >50% circumf.				
Lean	1 – corrected (natural) 3 – uncorrected (unnatural)				
Fork	1 – strong (no incl. bark, U) 2 – weak (included bark, V)				
Crack/lightning	1 – minor 3 – severe or at fork/decay				
Root disease	3 – present				
Exposed roots	1 – no decay 2 – <50% roots decayed 3 – >50% roots decayed				
Conk or punk knot	3 – present				
Open Cavity	1 – <30%,adj. sound shell 2 – <30%, inaccessible 3 – ≥30% of circumf.				
Sound shell	2 – 33-60% tree radius 3 – <33% tree radius				
	Core/drill – sound depth				
	Decay encountered? Y / N				
Dead part	1 – 3-5" diameter or broom 2 – 5-7" diameter 3 – >7" diam./dead tree				
	D if tree is Dead				
Hazard rating					
Notes:					

Use of the Hazard Tree Evaluation Form for Developed Sites

Any tree can fail; all trees are potentially hazardous. Hazard trees are defined as trees with structural defects that might hit a target (e.g., people or property). Target rating is based on the probability a target (e.g., people or property) will be hit (assuming the tree fails). Defect rating is an estimated probability a tree will fail based on defects. Defects are detectable, structural characteristics that may increase a tree's risk of failure.

Hazard trees are identified by conducting inspections. This includes rating tree's targets, determining defects or risk of failure, and identifying a risk rating threshold. Trees with a risk rating beyond the threshold are considered hazard trees. Documented inspections of trees in developed sites and corrective action are recommended to reduce hazards.

This form can assist in determining and documenting hazard ratings. It is a record of the condition of trees that can be used to document changes over time and to document frequency of defects at sites. All defects should be checked even though only the highest values are used in the hazard rating.

Evaluation crews should be trained. If training is needed or you have questions, please contact Forest Health Protection staff:

Gunnison Service Center: (970) 641-0471

Lakewood Service Center: (303) 236-9541

Rapid City Service Center: (605) 343-1567

- Maps of the sites are helpful in planning and performing hazard tree surveys. All structures should be drawn on maps. The maps used/created during a survey should be included with the forms to indicate which sites were surveyed.
- Trees can be mapped by selecting reference points, then recording azimuths and distances to all defective trees on the form. Choose reference points that are permanent structures and unlikely to be moved. For large structures, use a more specific reference point such as the most northern/northwestern edge of the structure. Good reference points to use are: permanent picnic tables (codes as "T"), fire pits or grills ("F"), campsite number sign ("#"), latrines ("L"), signs ("S"), benches ("B"), water spigots ("W"), and garbage containers ("G").
- See the Web page: <http://www.fs.usda.gov/goto/r2/fh/hazard> for other mapping and form options.
- Hazard rating is determined by a tree's Target and Defect rating.
 - Targets have a value of 1 or 2.
 - Defects have a value of 0 to 3.
- More than one type of defect may be identified and recorded for a tree.
- Calculate hazard rating by multiplying target value by the value of the worst defect.
$$\text{Target} * \text{Worst Defect} = \text{Hazard Rating}$$

Possible Hazard Ratings: 6 = Highest, 4, 3, 2, 1, and 0 = lowest (there is no 5)

See Forest Service Handbook (FSH) 2309.13, Chapter 50, for guidance on hazard tree management at developed recreation sites operated and maintained by the Forest Service. Chapter 50 provides guidance on pre-season safety inspections and mitigation of risks, including hazard trees, to the extent deemed feasible and appropriate by the local Forest Service official, at developed recreation sites operated and maintained by the Forest Service.