

GLOSSARY

aspect: the predominant direction of the slope of the land.

acre: *one acre is approximately 209 feet by 209 feet or 43,560 square feet.*

basal area: *the cross-sectional area of a single tree stem, including the bark, measured at breast height (4.5 feet above ground). Often expressed as BA/Acre.*

bole: the trunk of a tree. Equals one board foot.

conifer: a cone-bearing tree

cord: a stack of firewood that measures 4 x 4 by 8 feet or 128 cubic feet.

crown: the uppermost branches and foliage of a tree.

deciduous: shedding or losing leaves annually; the opposite of evergreen. Trees such as maple, ash, cherry, and aspen are deciduous.

defensible space: *an area around a structure where fuels and vegetation are treated, cleared or reduced to slow the spread of wildfire towards the structure.*

diameter at breast height (dbh): The measurement of tree diameter at a point 4 ½ feet above ground level. Usually expressed in inches.

dominant trees: trees that extend above surrounding individuals and capture sunlight from above and around the crown.

Dripline: : a tree's dripline is the same as the dripline on a house; it is where the rain drips off the limbs at the outer edge of the crown.

even-aged: Forest stand composed of trees of a single age class. *Even-aged stand* - a stand in which the age difference between the oldest and youngest trees is minimal, usually no greater than 10 to 20 years.

fuel: any combustible material, especially petroleum-based products and wildland fuels.

fuel loading: the oven-dry weight of fuel per unit area.

ladder fuels: *vegetative materials with vertical continuity that allows fire to burn for the ground level up to the branches and crowns of trees (Dennis 1999).*

lop and scatter: a hand method of removing the upward-extending branches from tops of felled trees to keep slash low to the ground, to increase rate of decomposition, lower fire hazard, or as a pretreatment prior to burning

National Ambient Air Quality Standards (NAAQS): a legal limit on the level of atmospheric contamination. The level is established as the concentration limits needed to protect all of the public against adverse effects on public health and welfare, with an adequate safety margin. Primary standards are those related to health effects. Secondary standards are designed to protect public welfare from effects such as visibility reduction, soiling, material damage and nuisances.

National Fire Danger Rating System (NFDRS): a uniform fire danger rating system that focuses on the environmental factors that control the moisture content of fuels.

National Fire Protection Association (NFPA): a private, non-profit organization dedicated to reducing fire hazards and improving fire service.

National Fire Protection Association Standards (NFPA): Standards of the National Fire Protection Association are frequently adopted by insurance agencies such as the National Board of Fire Underwriters as a basis for their regulations and used as a guide for municipal, state, or provincial laws, ordinances, and regulations.

National Pipe Straight Hose Thread (NPSH): Also known as national Pipe Straight Mechanical (NPSM) thread. This is a straight (nontapered) thread standard with the same threads per inch as the appropriate size iron pipe thread.

National Wildfire Coordinating Group (NWCG): a group formed under the direction of the Secretaries of the Interior and Agriculture to improve the coordination and effectiveness of wildland fire activities and provide a forum to discuss, recommend appropriate action, or resolve issues and problems of substantive nature.

overstocked: the situation in which trees are so closely spaced that they compete for resources and do not reach full growth potential.

overstory: the level of forest canopy that includes the crowns of dominant, co-dominant, and intermediate trees.

overtopped: the situation in which a tree cannot sufficiently extend its crown into the overstory and receive direct sunlight. Overtopped trees that lack shade tolerance lose vigor and die.

pruning: the act of removing branches from a living tree to improve tree beauty, increase future lumber value, remove ladder fuels, and remove disease infested limbs.

QUINT: A ladder truck with a fire pump. Tank size is generally 250 gallons to 750 gallons. Pump sizes can vary from 1200 GPM to 2,000 GPM.

regeneration: the process by which a forest is reseeded and renewed. Advanced regeneration refers to regeneration that is established before the existing forest stand is removed.

Remote Automated Weather Station (RAWS): a weather station that transmits weather observations vi GOES satellite to the wildland fire management information system.

release: to remove overtopping trees that compete with understory or suppressed trees.

residual stand: the trees remaining intact following any thinning operation.

salvage cut: the removal of dead, damaged, or diseased trees to recover maximum value prior to deterioration.

sapling: a tree at least 4 1/2 feet tall and up to 4 inches in diameter.

sawlog: a log large enough to be sawed economically on a sawmill. Sawlogs are usually at least 8 feet long and 6 inches in diameter at the small end of the tree.

SCAT: Short, Chassis Attack Truck. This apparatus is designed for both structural and wildland fire fighting. A SCAT can have a tank capacity of 200 gallons to 750 gallons of water and pump size can be from 150 GPM to 450+ GPM. A SCAT generally operates with a minimum crew of two persons.

seed tree: a mature tree left uncut to provide seed for regeneration of a harvested stand.

slash: branches and other woody material left on a site after forest management activities.

snag: a dead tree that is still standing. Snags provide important food and cover for a wide variety of wildlife species.

stocking: is a measure of the occupancy of available growing space, and is a function of the number of trees and their size relative to the ideal stand.

***stand:** a contiguous group of trees sufficiently uniform in age-class distribution, composition, and structure, and growing on a site of sufficiently uniform quality, to be a distinguishable unit.*

stand density: A quantitative measure of stem crowding within a stocked area

suppressed: trees with crowns entirely below the general level of the crown cover, receiving no direct light either from above or from the sides

thinning: Removal of poorest formed, damaged, suppressed, and crowded trees in a stand to improve growth and form of remaining trees.

timber stand improvement (tsi): any practice that increases the value or rate of value growth in a stand of potential sawtimber trees. Pruning and thinning are considered tsi.

Type: Refers to resource capability. a Type 1 resource provides a greater overall capability due to power, size, capacity, etc., than would be found in a Type 2 resource. Resource typing provides managers with additional information in selecting the best resource for the task.

Type 1 engine: a Type 1 engine is a structure engine which carries a minimum 300 gallons of water, minimum pump flow requirements are 1000 gpm, at 150 psi.

Type 3 wildland engine: carries a minimum of 500 gallons of water, 150 gallons per minute (gpm) minimum pump flow, at a rated pressure of 150 (psi). A Type 3 engine carries 1000 feet of 2 ½" hose, 500 feet of 1 ½" hose, and a crew of 3 persons.

Type 6 wildland engine: carries a minimum of 150 gallons of water, 50 gallons per minute (gpm) minimum pump flow, at a rated pressure of 100 (psi). A Type 6 engine carries 300 feet of 1 ½" hose, 300 feet of 1' hose, and a crew of 2 persons and has a gross vehicle weight (GVWR) of 19,500 pounds.

understory: the level of forest vegetation beneath the canopy.

uneven-aged: Forest stand composed of intermingling of trees that differ markedly in age. Three or more age classes of trees represented.

Volunteer Fire Department (VFD): A fire Department company or a response unity, the members of which are not paid.

wildfire: an unplanned or unwanted fire requiring suppression action; an uncontrolled fire, usually spreading through vegetative fuels but often threatening structures.

wildland Urban Interface (WUI): an area where development and wildland fuels meet at a well-defined boundary.

windfirm: trees able to withstand strong winds and resist windthrow, open grown trees tend to grow slower and develop deep root systems whereas some species grow within a stand which acts as a buffer, thinning in this second type needs to be completed in stages to allow remaining trees to increase their windfirmness.

water tender: any ground vehicle capable of transporting specified quantities of water.

REFERENCES

Abella, Scott R. 2008. Managing Gambel Oak in Southwestern Ponderosa Pine Forests: The Status of Our Knowledge. USDA Forest Service General Technical Report RMRS-GTR-218. Fort Collins, CO. 27 pages.

Cohen, Jack D., Preventing Disaster Home Ignitability in the Wildland-Urban Interface. Journal of Forestry. 15-21

Cohen, Jack D., 1999. Reducing the Wildland Fire Threat to Homes: Where and How Much. USDA Forest Service General Technical Report PSW-GTR-173. 189-195.

Cohen, Jack D., 2008. The wildland Urban Interface Fire Problem, A consequence Of The Fire Exclusion Paradigm. Forest History Today. 20-26.

Colorado Department of Public Health and Environment. Attainment/Maintenance Plans for Colorado Communities. <http://www.cdphe.state.co.us/ap/attainmaintain.html> 2011.

Douglas County, Colorado. Douglas County Wildfire Mitigation Standards 2008.

McCaffery, S.M. 2006. The Public and Wildland Fire Management: Social Science Findings for Managers. USDA Forest Service General Technical Report NRS-1. Newton Square, PA. 202 pages.

NWCG, BIA, NASF, NPS, USFA, USFWS, USDA FS, 2008. Interagency Prescribed Fire Planning and Implementation Procedures Guide. 50 pages.

NWCG #006-2008, Engine and Water Tender Typing Standards. 3 pages.