APPENDIX B: GLOSSARY

Authority Having Jurisdiction (AHJ) – The organization, office, or individual responsible for approving equipment, materials, an installation, or a procedure (NFPA, <u>NFPA 1144</u>, 2002, p. 4).

Aspect - Compass direction toward which a slope faces (NFPA, NFPA 1144, 2002, p. 4).

Building – Any structure used or intended for supporting or sheltering any use or occupancy (NFPA, <u>NFPA 1144</u>, 2002, p. 4).

Combustible – Any material that, in the form in which it is used and under the conditions anticipated will ignite and burn or will add appreciable heat to an ambient fire (NFPA, <u>NFPA 1144</u>, 2002, p. 5).

Community Wildfire Protection Plan (CWPP) – Address issues such as wildfire response, hazard mitigation, community preparedness, or structure protection. The process of developing a CWPP can help communities clarify and refine their priorities for the protection of life, property, and critical infrastructure in the wildland-urban interface (Source: <u>Preparing a Community Wildfire Protection Plan</u>. March, 2004).

Condition Class – Describes fire-related risk to ecosystems and relates current expected wildfires to their historic frequency and effects. Condition class ranks are defined as the relative risk of losing key components that define an ecosystem. Higher ranked areas present greater risk to ecosystem health. Condition class is a measure of the expected response of ecosystems to fire given current vegetation type and structure that often is far different from that historically present.

Class	Departure from natural regimes	Vegetation composition, structure, fuels	Fire behavior, severity, pattern	Disturbance agents, native species, hydrologic functions	Increased smoke production
Low Condition Class 1	None, minimal	Similar	Similar	Within natural range of variation	Low
Moderate Condition Class 2	Moderate	Moderately Altered	Uncharacteristic	Outside historical range of variation	Moderate
High Condition Class 3	High	Significantly different	Highly uncharacteristic	Substantially outside historical range of variation	High

(Source: CDF FRAP 2003 Forest and Range Assessment, p. 98)

Defensible Space – An area as defined by the AHJ (typically a width of 30 feet or more) between an improved property and a potential wildland fire where combustible materials and vegetation have been removed or modified to reduce the potential for fire on improved property spreading to wildland fuels or to provide a safe working area for fire fighters protecting life and improved property form wildland fire (NFPA, <u>NFPA 1144</u>, 2002, p. 5), or as defined by PRC 4291.

Disaster – Disaster is characterized by the scope of an emergency. An emergency becomes a disaster when it exceeds the capability of the local resources to manage it. Disasters often result in great damage, loss, or destruction (Greene, R.W., *Confronting Catastrophe*, ESRI Press, 2002, p. 110).

Dry Hydrant – An arrangement of pipe permanently connected to a water source other than a piped, pressurized water supply system that provides a ready means of water supply for fire-fighting purposes and that utilizes the drafting (suction) capability of fire department pumpers (NFPA, <u>NFPA 1144</u>, 2002, p. 5).

Dwelling – One or more living units, each providing complete and independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation (NFPA, <u>NFPA 1144</u>, 2002, p. 4).

Emergency – A deviation from planned or expected behavior or course of events that endangers or adversely affects people, property, or the environment (Greene, R.W., *Confronting Catastrophe*, ESRI Press, 2002, p. 110).

Evacuation/Escape Route – A route away from dangerous areas on a fire; should be preplanned (FIREWISE Communities, 2009, <u>http://www.firewisewiki.org/main/index.php/Escape_Route</u>)

Fire Behavior – The manner in which a fire reacts to the influences of fuel, weather, and topography (FIREWISE Communities, 2009, <u>http://www.firewisewiki.org/main/index.php/Fire_behavior</u>).

Fire Frequency – A broad measure of the rate of fire occurrence in a particular area. For historical analyses, fire frequency is often expressed using the fire return interval calculation. For modern-era analyses, where data on timing and size of fires are recorded, fire frequency is often best expressed using fire rotation (*CDF FRAP 2003 Forest and Range Assessment*, p. A-12).

Fire Hazard – A fuel complex, defined by volume, type condition, arrangement, and location that determine the degree of ease of ignition and of resistance to control (FIREWISE Communities, 2009, <u>http://www.firewisewiki.org/main/index.php/Fire_hazard</u>).

Fire Hydrant – A valved connection on a water supply system having one or more outlets and that is used to supply hose and fire department pumpers with water (NFPA, <u>NFPA 1144</u>, 2002, p. 5).

Fire Lane – A means of access or other passageway designated and identified to provide access for emergency apparatus where parking is not allowed (NFPA, <u>NFPA 1141</u>, 1998, p. 4).

Fire Protection – All measures taken to reduce the burden of fire on the quality of life. Fire protection includes measures such as fire prevention, fire suppression, built-in *fire protection systems*, and planning and building codes (NFPA, <u>NFPA 1141</u>, 1998, p. 4).

Fire Protection System – Any fire alarm device or system or fire extinguishing device or system, or their combination, that is designed and installed for detecting, controlling, or extinguishing a fire or otherwise alerting occupants, or the fire department, or both, that a fire has occurred (NFPA, <u>NFPA 1141</u>, 1998, p. 4).

Fire Threat – The combination of two factors: 1) fire frequency, or the likelihood of a given area burning, and 2) potential fire behavior (hazard). Components include surface fuels, topography, fire history, and weather conditions (Source: CDF FRAP, <u>http://frap.cdf.ca.gov/frapgisdata/output/fthrt.txt</u>, *CDF FRAP*, <u>2003 Forest and Range Assessment</u>, p. A-12, <u>http://frap.cdf.ca.gov/assessment2003/</u>).

Fire Regime – A measure of the general pattern of fire frequency and severity typical to a particular area or type of landscape: The regime can include other metrics of the fire, including seasonality and typical fire size, as well as a measure of the pattern of variability in characteristics (*CDF FRAP 2003 Forest and Range Assessment*, p. A-12).

Fire Rotation – An area-based average estimate of fire frequency, calculated as the length of time necessary for an area equal to the total area of interest to burn. Fire rotation is often applied to regionally stratified land groupings where individual fire-return interval across the variability of the strata (i.e., the fine scale pattern of variation in timing of fires) is unknown, but detailed information on fire size is known. Hence, fire rotation is a common estimate of fire frequency during periods of recorded fire sizes (*CDF FRAP 2003 Forest and Range Assessment*, p. A-12).

Fire Weather – Weather conditions that influence fire starts, fire behavior or fire suppression (FIREWISE Communities, 2009, <u>http://www.firewisewiki.org/main/index.php/Fire_weather</u>).

Firebreak – A natural or constructed barrier used to stop or check fires that may occur, or to provide a control line from which to work (FIREWISE Communities, 2009, http://www.firewisewiki.org/main/index.php/Firebreak).

Fuelbreak – An area, strategically located for fighting anticipated fires, where the native vegetation has been permanently modified or replaced so that fires burning into it can be more easily controlled. Fuel breaks divide fire-prone areas into smaller areas for easier fire control and to provide access for firefighting (FIREWISE Communities, 2009, <u>http://www.firewisewiki.org/main/index.php/Fuelbreak</u>).

Fuels – All combustible material within the wildland/urban interface or intermix, including vegetation and structures (FIREWISE Communities, 2009, <u>http://www.firewisewiki.org/main/index.php/Fuels</u>).

Fuel Loading – The volume of fuel in a given area generally expressed in tons per acre (FIREWISE Communities, 2009, <u>http://www.firewisewiki.org/main/index.php/Fuel_loading</u>).

 Fuel Models – Description of the types of vegetative combustible material: Light Fuels – grasses, forbs Medium Fuels – short light brush and small trees Heavy Fuels – tall dense brush, timber and hardwoods Slash Fuels – logs, chunks, bark, branches, stumps, and broken understory trees and brush.

Fuel Modification – Any manipulation or removal of fuels to reduce the likelihood of ignition or the resistance to fire control (FIREWISE Communities, 2009, http://www.firewisewiki.org/main/index.php/Fuel_modification).

GIS - See Geographic Information Systems

Geographic Information Systems – The combination of skilled persons, spatial and descriptive data, analytic methods, and computer software and hardware – all organized to automate, manage, and deliver information though geographic presentation (i.e., maps) (Zeiler, M., <u>Modeling Our World</u>, ESRI Press, 1999, p. 46).

Ground Fuels – All combustible materials such as grass, duff, loose surface litter, tree or shrub roots, rotting wood, leaves, peat or sawdust that typically support combustion (FIREWISE Communities, 2009, http://www.firewisewiki.org/main/index.php/Ground_fuels).

Hazard – Refers generally to physical characteristics that may cause an emergency. Earthquake faults, flood zones, and highly flammable brush fields are all examples of hazards (Greene, R.W., <u>Confronting</u> <u>Catastrophe</u>, ESRI Press, 2002, p. 110). Also see *Fire Hazard*.

Healthy Forests Restoration Act (HFRA), 2003 – Gives incentives for communities to engage in comprehensive forest planning and prioritization. This legislation includes statutory incentives for the US Forest Service (USFS) and the Bureau of Land Management (BLM) to give consideration to the priorities of local communities as they develop and implement forest management and hazardous fuel reduction priorities. The Act emphasizes the need for federal agencies to work collaboratively with communities in developing hazardous fuel reduction projects, and it places priority on treatment areas identified by communities themselves in a CWPP (Source: *Preparing a Community Wildfire Protection Plan*. March, 2004).

Improved Property – A piece of land or real estate upon which a structure has been placed, a marketable crop is growing (including timber), or other property improvement has been made (NFPA, *NFPA 1144*, 2002, p. 5).

Intermix – An area where improved property and wildland fuels meet with no clearly defined boundary (NFPA, *NFPA 1144*, 2002, p. 5).

Ladder Fuels – Fuels that provide vertical continuity allowing fire to carry from surface fuels in the crowns of trees or shrubs with relative ease (FIREWISE Communities, 2009, http://www.firewisewiki.org/main/index.php/Ladder_fuels).

Mitigation – Action that moderates the severity of a fire or risk (NFPA, <u>NFPA 1144</u>, 2002, p. 5).

National Fire Protection Association (NFPA) – An international nonprofit organization, established in 1896, to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating consensus codes and standards, research, training, and education (NFPA, 2009, http://www.nfpa.org/categoryList.asp?categoryID=143&URL=About%20Us).

NFPA-1144 Standard for Protection of life and Property from Wildfire – Standard developed by the NFPA to be used to provide minimum planning, construction, maintenance, education, and management elements for the protection of life, property, and other values that could be threatened by wildland fire. The standard shall be used to provide minimum requirements to parties responsible for fire protection, land use planning, property development, property maintenance, and others responsible for or interested in improving fire and life safety in areas where wildland fire could threaten lives, property, and other values (NFPA, <u>NFPA 1144</u>, 2002, p. 4).

Noncombustible – Any material that, in the form in which it is used and under the conditions anticipated will not ignite and burn nor will add appreciable heat to an ambient fire (NFPA, <u>NFPA 1144</u>, 2002, p. 5).

Overstory – That portion of the trees in a forest that forms the upper or uppermost layer (FIREWISE Communities, 2009, <u>http://www.firewisewiki.org/main/index.php/Overstory</u>).

Risk – The potential or likelihood of an emergency to occur. For example, the risk of damage to a structure from wildfire is high if it is built upon, or adjacent to, a highly flammable brush field or other area deemed to have a high *Fire Threat* (Greene, R.W., *Confronting Catastrophe*, ESRI Press, 2002, p. 110).

Safe Zone – An area cleared of flammable materials used for escape in the event the line is outflanked or in case a spot fire causes fuels outside the control line to render the line unsafe. In firing operations, crews progress so as to maintain a safety zone close at hand allowing the fuels inside the control line to be consumed before going ahead. Safety zones may also be constructed as integral parts of fuelbreaks; they are greatly enlarged areas which can be used with relative safety by firefighters and their equipment in the event of blowup in the vicinity (National Wildfire Coordinating Group, 2009, http://www.nwcg.gov/pms/pubs/glossary/s.htm).

Slope – The variation of terrain from the horizontal; the number of feet rise or fall per 100 feet measured horizontally, expressed as a percentage (FIREWISE Communities, 2009, http://www.firewisewiki.org/main/index.php/Slope). Upward or downward incline or slant (NFPA, <u>NFPA 1144</u>, 2002, p. 5).

Turnaround – A portion of a roadway, unobstructed by parking, that allows for a safe reversal of direction for emergency equipment (NFPA, <u>NFPA 1144</u>, 2002, p. 5).

Turnouts – A widening in a travelway of sufficient length and width to allow vehicles to pass one another (NFPA, *NFPA 1144*, 2002, p. 5).

Understory – Low-growing vegetation (herbaceous, brush or reproduction) growing under a stand of trees. Also, that portion of trees in a forest stand below the **Overstory** (FIREWISE Communities, 2009, http://www.firewisewiki.org/main/index.php/Understory).

Water Supply - A source of water for fire-fighting activities (NFPA, NFPA 1144, 2002, p. 5).

Wildfire – Any fire occurring on undeveloped land; the term specifies a fire occurring on a wildland area that does not meet management objectives and thus requires a suppression response. Wildland fire protection agencies use this term generally to indicate a vegetation fire. Wildfire often replaces such terms as forest fire, brush fire, range fire, and grass fire (*CDF FRAP 2003 Forest and Range Assessment*, p. A-17).

Wildland – A region with minimal development as evidenced by few structures; transportation networks may traverse region. Region typically contains natural vegetation and may be used for recreational or agricultural purposes (*CDF FRAP 2003 Forest and Range Assessment*, p. A-17).

Wildland-Urban Interface (WUI) – Commonly described as the zone where structures and other human development meet and intermingle with undeveloped wildland or vegetative fuels. In the absence of a CWPP, Section 101 (16) of the HFRA defines WUI as " (I) an area extending ½ mile from the boundary of an at-risk community; (II) an area within 1 ½ miles of the boundary of an at-risk community, including any land that (1) has a sustained steep slope that creates the potential for wildfire behavior endangering the at-risk community; (2) has a geographic feature that aids in creating an effective fire break, such as a road or ridge top; or (3) is in condition class 3, as documented by the Secretary in the project-specific environmental analysis; (III) an area that is adjacent to an evacuation route for an at-risk community that the Secretary determines, in cooperation with the at-risk community, requires hazardous fuels reduction to provide safer evacuation from the at-risk community." A CWPP offers the opportunity to establish a localized definition and boundary for the wildland-urban interface (Source: <u>Preparing a Community</u> <u>Wildfire Protection Plan</u>. March, 2004).