# POST-FIRE CONSIDERATIONS FOR FOREST LANDOWNERS

Post fire environments are dynamic and vastly change in the first decade after a fire. Developing a timely postfire recovery strategy is important as decisions can have economic, ecological, and operational consequences. This handout was designed as a primer to help landowners navigate post-fire recovery considerations. More information can be found here:<u>https://ucanr.edu/sites/fire/Recovery/</u>



**SAFETY!** Safety should be a primary concern in post-fire environments. Trees that have been injured or killed by fire often have structural defects that contribute to tree failure. Trees don't always fall in entirety; trees often fall in part, by shedding limbs or tops that fall piece by piece. Landowners should utilize proper personal protective equipment such as hard hat, eye protection, and leather boots. Landowners should be situationally aware of weather such as wind patterns and events, and wet weather conditions which can contribute to tree failure. Take time to assess hazard trees around structures, roads, and power lines. More info can be found here: <a href="https://ucanr.edu/sites/fire/Recovery/ForestRecovery/TreeMortality/">https://ucanr.edu/sites/fire/Recovery/ForestRecovery/TreeMortality/</a>

### **POST-FIRE ASSESSMENT & RE-EVALUATING GOALS AND OBJECTIVES**

Post-fire assessment is a critical piece of re-evaluating land management goals and objectives. Objectives should include short term and long term actions that meet the goals for your property. Post-fire actions should then be designed to meet this framework. Assessing fire effects like severity, the survival or probability of mortality of your trees, and the anticipated understory response is important to setting goals and objectives. Mapping the fire effects and resources (streams, roads, forest types, etc.) is a critical piece of a post-fire assessment and will help you formulate and communicate your post-fire objectives as you consider fire salvage, reforestation, or other post-fire rehabilitation. Post-fire tree survival assessment resources can be found here: <a href="https://anrcatalog.ucanr.edu/pdf/8386.pdf">https://anrcatalog.ucanr.edu/pdf/8386.pdf</a>

### **PROFESSIONAL RESOURCES & TECHNICAL ASSISTANCE**

There are a number of state, federal, and non-profit organizations that offer technical assistance programs to small forest landowners following wildfires including: the Natural Re-source Conservation Service (NRCS), CalFire CFIP program, Resource Conservation Districts, county fire safe councils. California Registered Professional Foresters (RPFs) can prepare timber harvest plans and exemptions for harvests on private lands. More info can be found at https://bof.fire.ca.gov/projects-andprograms/professional-foresters-registration/



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## POST-FIRE TREATMENTS

In post-fire environments, swift timing of planning and treatments is critical. Erosion control should be in place before winter rains, salvage planning and operations should be expedited to minimize wood deterioration and value loss, and seedling stock is commonly ordered 12-16 months in advance of planting.

**Erosion control & Road Protection.** Late summer and early fall fires may



leave your land and roads vulnerable to erosion from wet winter weather. Erosion potential assessment and implementation of mitigation treatments prior to fall and winter rain events is critical. There are various methods utilizing on-site materials or special erosion control measures. Roads should be maintained prior to the winter to clear ditches and culverts, slow and divert water, and improve drainage. For more information



visit: https://ucanr.edu/sites/fire/Recovery/Revegetation/Erosion/

**Salvage Harvesting.** Post-fire salvage harvesting can be a useful tool in removing hazard trees, recovering timber value, managing the long term development of fuel loads, and preparing the site for planting. Economics and feasibility of salvage harvests are determined by scale of harvest (acres), quantity and quality of wood to be harvested (including species, size and wood deterioration) and operability (topography, road access, etc). Due to wood deterioration, timing is critical! Landowners will need to work with a registered professional forester to develop a harvest plan, contract with a licensed timber operator, and negotiate the sale of timber with the mill log buyer.





**Reforestation.** Landowners interested in reforestation should start thinking about what steps are necessary to remove hazards, prepare the site for planting, reforest, and manage competing vegetation early in the process. Tree density and arrangement can be modified to meet wildlife, aesthetic, and fuels management goals. Tree species and stock typically needs to be ordered a year in advance. Resource conservation districts, the NRCS EQIP program, CALFIRE CFIP program, and non-profits can provide funding and technical assistance.

#### **ADDITIONAL RESOURCES**

Shive, Kocher (2017), Recovering from Wildfire: A Guide for California's Forest Landowners, UC Cooperative Extension Owen, Cluck, Smith (2015), Survival of Fire-Injured Conifers in California, California Department of Forestry and Fire Protection McCreary et al (2011) Burned Oaks, Which Ones Will Survive?, UC Cooperative Extension

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