

# after the fire



## Post Fire Restoration

### Post Fire Restoration on Forestland and Woodland areas

Private landowners with wooded areas or non-industrial forestland affected by wildfire are very concerned about what might happen to fire-damaged soils, slopes, and water courses when the rains come.

They are also wondering what can be done now to minimize the effects of erosion and sedimentation processes before any storm events. Still others are questioning whether or not to remove fire damaged or destroyed trees and other vegetation now, to leave alone or to wait.

The Natural Resources Conservation Service (NRCS), a federal non-regulatory agency under the U.S. Department of Agriculture, provides assessments of fire damages to natural resources and watersheds to forest land owners and managers. Some of the more important post fire actions to take include the following:

(1) Have an *on-site assessment of fire damage* done to your property by a NRCS specialist, Registered Professional Forester (RPF), Certified Professional in Soil Erosion and Sediment Control (CPESC), or other qualified fire restoration specialist.

(2) *Don't be too quick to remove fire damaged trees* and other vegetation, especially redwood and coastal live oak trees that have thick and/ or fire resistant

bark. On some properties, doing nothing may be the best solution, allowing nature to restore vegetative cover naturally. In areas where trees were partially damaged by fire, smoke or heat there will be an enormous leaf drop through the fall that will provide soil protection from rain and runoff in the coming winter. Consult with a RPF or Certified Arborist for specific advice on which trees to cut or save. Contact the California Forestry Stewardship Program's Forestry Helpline at: 800-738-TREE (8733) or at [forestryhelp@gmail.com](mailto:forestryhelp@gmail.com) for more information and a list of Registered Professional Foresters and Certified Arborists practicing in California.

(3) *Monitor and maintain any pre-existing and new fire/fuel breaks*, access roads and trails that might exist on your property to make sure that surface runoff does not concentrate and cause these facilities to erode or cause damage to slopes, soils and water courses. Proper grading and/ or correctly spaced and constructed water bars and/or drainage/rolling dips will help to prevent these bare soil and disturbed areas from being an erosion problem during the rainy season.

**Note:** In some cases, water bars may actually cause problems if not located, constructed or maintained properly. In other cases, they might not even be needed. Bare and disturbed soil areas can also be protected with a layer of slash or weed-free



## Post Fire Restoration on Forestland and Woodland areas

## Post Fire Restoration

straw mulch. Consult with NRCS and/or CalFire for assistance on preventing erosion on fire/fuel breaks and access routes constructed in the firefighting effort.

(4) *Do not plant non-native* erosion control seed mixes. These mixes are not intended for forestland. Where soil and sunlight conditions are desirable, some seeding of equipment/dozer disturbed areas (usually around home sites and not in the wildland landscape) may be beneficial but should only be done in accordance with appropriate native or short-lived, non-invasive, non-native grasses and advice provided by NRCS, fire restoration expert, or a CPESC.

**Note:** Seeding will delay native plant regeneration and actually compete with natural recovery of the forest landscape.

(5) *Runoff control will be imperative* in the first few winters following wildfire, especially where drainage facilities on roads and around structures were damaged, destroyed or inadequate. Efforts should be made to minimize concentrated flow especially over steep slopes. Whenever possible, runoff should not be channeled but allowed to either sheet over the soil and slopes as it naturally would or be controlled in such a way that it does not cause slope saturation or erosion. Contact NRCS for runoff control strategies and further details.

(6) *Control non-native, invasive plants* that will want to take over fire damaged soils and slopes following fire and in the years ahead. Non-native plants will slow natural regeneration and will likely create a higher fire and soil erosion hazard over time.

## Contact Information

Mendocino County  
Carol Mandel  
District Conservationist  
707-485-3233  
[Carol.mandel@ca.usda.gov](mailto:Carol.mandel@ca.usda.gov)

Napa County  
Emma Chow  
District Conservationist  
707-252-4189 Ext. 3111  
[emma.chow@ca.usda.gov](mailto:emma.chow@ca.usda.gov)

Solano County  
Liz Colby  
Field Office Engineer  
707-448-0106 ext. 115  
[Liz.colby@ca.usda.gov](mailto:Liz.colby@ca.usda.gov)

Sonoma County  
Jennifer Walser  
District Conservationist  
707-794-1242 Ext. 3  
[jennifer.walser@ca.usda.gov](mailto:jennifer.walser@ca.usda.gov)  
[www.ca.nrcs.usda.gov](http://www.ca.nrcs.usda.gov)