

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

FIREBREAK

(Ft.)

CODE 394

DEFINITION

A permanent or temporary strip of bare or vegetated land planned to retard fire.

PURPOSE

- Reduce the spread of wildfire.
- Contain prescribed burns.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies on all land uses where protection from wildfire is needed or prescribed burning is applied.

CRITERIA

General Criteria Applicable to All Purposes

Firebreaks may be temporary or permanent and shall consist of fire-resistant vegetation, non-flammable materials, bare ground, or a combination of these.

Firebreaks will be of sufficient width and length to contain the expected fire.

Firebreaks shall be located to minimize risk to the resources being protected.

Erosion control measures shall be installed to prevent sediment from leaving the site.

Plant species selected for vegetated firebreaks will be capable of retarding fire.

Comply with applicable laws and regulations, including the state's Management Measures.

CONSIDERATIONS

Use barriers such as streams, lakes, ponds, rock cliffs, roads, field borders, skid trails, landings, drainage canals, railroads, utility right-of-ways, cultivated land, or other areas as existing firebreaks.

Attempt to locate firebreaks near ridge crests and valley bottoms.

If winds are predictable, firebreaks should be located perpendicular to the wind and on the windward side of the area to be protected.

Locate on the contour where practicable to minimize risk of soil erosion.

Electric lines can be hazardous in heavy smoke as they may be energized.

When using barriers consider the effects on wildlife and fisheries.

Consider the selection of plant species that will provide wildlife needs, if compatible with the primary purpose.

Design and layout should include multiple uses, such as beautification and aesthetics.

Consider the beneficial and other effects of installation of the firebreak on cultural resources and threatened and endangered species, natural areas, riparian areas and wetlands.

Firebreaks

The basic function of a firebreak is to impose some obstacle to the spread and a means of access to the fire.

A firebreak consists of two parts; a lane or strip cleared of most trees, shrubs and other large flammable material within which a narrower strip is cleared down to bare mineral soil. They are best suited for use in range, crop, and urban lands.

Breaks are usually located with reference to probable sources of fires. These may be along roads or fences. They are also located in the usual direction a fire may spread.

Because mineral soil is required, erosion from firebreaks can become a serious problem. Therefore, erosion control measures may be necessary when slopes exceed 8 percent.

Breaks are constructed for a number of purposes:

- a. To act as a barrier to prevent the spread of a fire to a particular area or property.
- b. To contain the spread of a fire from a fire source.
- c. To breakup large fuel areas. Where fire may spread rapidly or be difficult to control, a system of firebreaks is sometimes established to aid in confining the fire to a relatively small area.

Existing barriers must be considered. These include rock outcrops, streams, water bodies, swamps, and cover with naturally low flammability, and artificial barriers such as roads and railroads, power, gas, oil and telephone rights-of-way.

While applicable to most land uses, firebreak planning should be combined with other management activities. For example, access roads provides an opportunity to utilize firebreaks while accomplishing other objectives

The installation of firebreaks is based on the value of the resource which is susceptible to fire. The costs of installation must be weighed against the benefits received through the

reduced fire damage. Firebreaks should be a planned method that seeks a reasonable level of control based on a determination of what is sufficient to the need. Areas with high economic, social, wildlife or watershed values should be protected. These could include high value crops, home sites, plantations, significant cultural resources, areas which contain rare and endangered plants and animals, municipal water supply sources and Christmas tree farms.

CULTURAL RESOURCES CONSIDERATIONS

NRCS policy is to avoid any effect to cultural resources and protect them in their original location. Determine if installation of this practice or associated practices in the plan could have an effect on cultural resources. The National Historic Preservation Act may require consultation with the California State Historic Preservation Officer.

<http://www.nrcs.usda.gov/technical/cultural.html> is the primary website for cultural resources information. The California Environmental Handbook and the California Environmental Assessment Worksheet also provide guidance on how the NRCS must account for cultural resources. The e-Field Office Technical Guide, Section II contains general information, with Web sites for additional information.

Document any specific considerations for cultural resources in the design docket and the Practice Requirements worksheet.

ENDANGERED SPECIES CONSIDERATIONS

If during the Environmental Assessment NRCS determines that installation of this practice, along with any others proposed, will have an effect on any federal or state listed Rare, Threatened or Endangered species or their habitat, NRCS will advise the client of the requirements of the Endangered Species Act and recommend alternative conservation treatments that avoid the adverse effects. Further assistance will be provided only if the client selects one of the alternative conservation treatments for installation; or with concurrence of the client, NRCS initiates

consultations concerning the listed species with the U.S. Fish and Wildlife Service, National Marine Fisheries Service and/or California Department of Fish and Game.

PLANS AND SPECIFICATIONS

Specifications for applying this practice shall be prepared for each site and recorded using approved specification sheets, job sheets, technical notes, and narrative statements in the conservation plan and the burn plan, or other acceptable documentation.

OPERATION AND MAINTENANCE

A maintenance plan will be prepared which shall list various items that are to be inspected and follow-up work to be conducted.

Mow, spray, browse or graze vegetative portion of the firebreak to avoid a build-up of excess litter and to control unwanted vegetation. Treatment should be timed to reduce impacts to nesting when possible

Inspect all firebreaks for woody materials such as dead limbs or blown down trees and remove them from the firebreak.

Inspect firebreaks annually and rework the bare ground portion of the firebreak as often as necessary to keep them clear of flammable vegetation.

Repair erosion control measures as necessary to ensure proper function.

Access by vehicles or people will be controlled to prevent damage to the firebreak.

When the bare ground portion of the firebreak is no longer needed it will be stabilized and/or revegetated.

REFERENCES

Davis, K. P. *Forest Fire, Control and Use*. McGraw Hill Book Co. 1959.

Kerstiens, R. J. *California Fire Plan*. The Resources Agency. 1996.

