

**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 bare ground and/or fire-resistant (green growing) vegetation, non-flammable materials, or a combination of these.

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

Locate firebreaks to minimize risk to the resources being protected.

Erosion control measures shall prevent sediment from leaving the site.

Select plant species for vegetated firebreaks that are noninvasive and capable of retarding fire.

CONSIDERATIONS

When possible, constructed firebreaks should tie into existing 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. Electric lines can be hazardous in heavy smoke as they may conduct electricity.

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, when possible.

Consider using diverse species combinations which best meet locally native wildlife and pollinator needs.

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

Design and layout should include multiple uses.

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

Consult the Guide to Forestry Best Management Practices in Tennessee and A Guide to Successful Wildlife Food Plots, Blending Science with Common Sense during the installation, operation, and maintenance of this practice.

TYPES OF FIREBREAKS

In Tennessee, three types of firebreaks are generally implemented. They are:

1. Access Roads
2. Plowed or Disked
3. Vegetated

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service [State Office](#), or visit the [Field Office Technical Guide](#).

**NRCS, TN
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Access Roads**Location**

Existing roads and trails can serve as effective firebreaks if properly maintained. If needed, renovate abandoned roads or trails and control erosion. Remove all fuels from the roads before burning, exposing mineral soil.

Construction

- Use Tennessee Conservation Practice Standard Access Road (code 560) to design new roads used as firebreaks. Locate roads on contours where possible. Do not locate roads along streams and in natural depressions.
- Plant constructed roadway following Tennessee Conservation Practice Standards Critical Area Planting (Code 342), Pasture and Hay Planting (Code 512), or Conservation Cover (327).

Plowed or Disked Firebreaks**Location**

Locate firebreaks as follows:

- Parallel to public roads, railroads, and property boundaries.

Establish firebreaks on the contour at intervals of about 1/8 to 1/4 mile. Use closer intervals in areas of high risk. When building firebreaks, construct water bars according to NRCS Conservation Standard Access Road (560). Place water bars at a 45-degree angle to turn water out of plowed line. Consider the installation of temporary cover to minimize soil erosion.

Construction

A variety of equipment can be used to construct firebreaks. The desired result is a bare area free of burnable material. Remove dead trees next to firebreaks as these trees burn slowly and could throw sparks across the firebreak.

Maintenance

Disk firebreaks whenever needed to maintain bare ground to reduce wildfire threat or prior to prescribed burning.

Vegetated Firebreaks**Construction**

- Firebreaks can be constructed by bulldozing, plowing or disking, and then vegetating. Plant firebreaks following Tennessee Conservation Practice Standards Critical Area Planting (Code 342), Pasture and Hay Planting (Code 512), or Conservation Cover (Code 327).
- Vegetated firebreaks should be at least 10 feet wide and may be used for access.

Lime and fertilize vegetated firebreaks according to soil test and reseed when necessary.

PLANS AND SPECIFICATIONS

Prepare specifications for applying this practice for each site using approved specification sheets, implementation requirement sheets, technical notes, and narrative statements in the conservation plan and the burn plan, or other acceptable documentation.

OPERATION AND MAINTENANCE

Mow, disk, or graze vegetative firebreaks as needed to avoid excess litter and/or to manage vegetation. Treatment should be timed to reduce impacts to nesting when possible.

Inspect firebreaks and remove woody materials, such as dead limbs or downed trees.

Inspect firebreaks at least annually and rework bare ground firebreaks as necessary to keep them clear of flammable vegetation.

Repair erosion control measures as necessary to ensure proper function.

REFERENCES

NRCS - Conservation Practice Standards

- Code 560 - Access Road
- Code 655 - Forest Trails and Landings
- Code 338 - Prescribed Burning

Harper, Craig. 2008. A Guide to Successful Wildlife Food Plots, Blending Science with Common Sense. University of Tennessee Extension PB 1769.

Tennessee Department of Agriculture, Division of Forestry, Guide to Forestry Best Management Practices in Tennessee, 2003.