

**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

Comply with applicable federal, state, and local laws and regulations, during the installation operation and maintenance of this practice. See field office technical guide forestry BMPs entitled *Kentucky Forest Practice Guidelines for Water Quality Management*.

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.

All firebreaks will begin and end at control points, such as a road or stream that will not

allow fire to burn around the end of the firebreak.

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

Plant species selected for vegetated firebreaks will be non-invasive and capable of retarding fire.

Permanent Woodland Firebreaks

Keep grades below 15 percent wherever possible and build with a width of at least 8 feet. Note: wider firebreaks will be needed if vehicle access is necessary and/or when the terrain is greater than 15% slope.

Vegetated firebreaks will be seeded according to the conservation practice standard, Critical Area Planting (342). Utilize those species identified in that standard other than native warm season grasses (NWSG).

Existing woodland roads or trails can be effective firebreaks if properly managed, improved and maintained. Abandoned roads or trails should be renovated and erosion controlled. Fallen trees, leaves or other inflammable materials must be removed from the road surface. If roads are overgrown, they must be cleared of woody vegetation and mowed. Mowing just prior to the fall fire season will improve the road's effectiveness as a firebreak.

Provide water control and water quality safeguards.

Permanent Firebreaks in Open Lands

Locate firebreaks at intervals throughout the desired area(s). Frequency of firebreaks will depend upon the value of the crop, degree of hazard, and size, shape and orientation/location of the area.

Permanent Sod Firebreaks

Seed to appropriate cool season grass/legume mix on prepared seedbed that is at least 8 feet wide. See conservation practice standard Critical Area Planting, code 342.

Maintain a thick, short stand by mowing at least annually.

Woody vegetation will be controlled through cutting, mowing or the use of approved herbicides.

Permanent Plowed, Disked or Bladed Firebreaks

These may be used parallel to public roads, railroads and other high risk areas such as, forestland, farm fields, native grass plantings, cutover land, old fields and property boundaries.

Disk or plow strips at least 8 feet wide. On lands with slopes greater than 5 percent locate firebreaks on the contour. Utilize practices to ensure that minimal erosion occurs.

After initial establishment by plowing or disking, disk annually before spring forest fire hazard season Feb. 15 - April 30 and fall forest fire hazard season Oct. 1 - Dec. 15 to control vegetation and remove all inflammable material from the firebreak.

Temporary Firebreaks

Temporary firebreaks are to be built during wildfire control efforts. Location, pattern, and frequency need to be determined on site taking into consideration present and anticipated fire conditions. **NOTE:** Kentucky Division of Forestry personnel are responsible for directing wildfire control efforts in Kentucky.

Minimum specifications include clearing a lane at least 6 feet wide with a 2 foot wide pathway in the middle cleared of all flammable material down to mineral soil. Firebreaks should angle outward from the top of the hill to the bottom and placed on the outside of the drainage ways (where applicable) to keep burning debris from rolling across the cleared line into unburned areas.

Placement should also take into consideration potential snags which may fall across the firebreak.

Erodible areas should be vegetated following any fire emergency.

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

When using barriers consider the effects on wildlife and fisheries.

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.

Consider using diverse species combinations which best meet locally native wildlife and may augment pollinator needs. (e.g. clover)

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

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.

At a minimum the following will be identified in the conservation plan:

- Purpose of the firebreak
- Type of firebreak
- Field location / plan view
- Length of firebreak (ft.)
- Minimum width of firebreak (ft.)
- Method of construction
- Dates of construction/maintenance
- Site preparation and seeding methods (if applicable) – Refer to Critical Area Planting, code 342
- Operation and maintenance requirements

OPERATION AND MAINTENANCE

Mow, disk, or graze vegetative firebreaks to avoid a build-up of excess litter and to control weeds. Treatment should be timed to reduce impacts to nesting when possible. Where practical, management activities will be performed outside the primary nesting season (May 15 - Aug 1).

Inspect all firebreaks annually prior to March 1 and each fall after most of the leaves have fallen for woody materials such as dead limbs

or blown down trees and remove them from the firebreak.

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.

Access by vehicles or people will be controlled as necessary to prevent damage and not jeopardize the intended purpose. Refer to conservation practice standard Access Control (472).

Vegetated firebreaks should be fertilized and managed as needed to maintain ground cover.

Bare ground firebreaks, which are no longer needed, will be stabilize.

REFERENCES

Kentucky Forest Practice Guidelines for Water Quality Management; Jeffrey W. Stringer, Ph.D., Department of Forestry, University of Kentucky, Lexington, KY 40546-0073 Cary Perkins, Kentucky Division of Forestry, 627 Comanche Trail, Frankfort, KY 40601