

**NATURAL RESOURCES CONSERVATION SERVICE
VIRGINIA 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 will be 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 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 noninvasive (i.e. orchardgrass and clover), provide wildlife value and be capable of retarding fire.

Bare ground firebreaks shall be disked prior to the fire season.

Comply with applicable federal, state, and local laws and regulations, during the installation, operation and maintenance of this practice.

TYPES OF FIREBREAKS

Four types of firebreaks can be adapted to various needs and conditions. They are:

- existing roads or forest trails,
- plowed, disked, or bladed firebreaks
- burned firebreaks
- vegetated firebreaks

Burned and vegetated firebreaks are generally restricted to pine woodlands in the Coastal Plain and on gentle slopes in the Piedmont.

Existing Roads or Forest Roads

Existing forest roads or trails can be effective firebreaks if properly maintained. Abandoned roads or trails should be renovated and erosion should be controlled. Expose mineral soil where needed prior to the critical fire season. Debris and other flammable materials should be removed.

Plowed, Disked or Bladed Firebreaks

Plowed, disked, or bladed firebreaks should be constructed to expose mineral soil. Depending upon the terrain and character of vegetation to be removed; fireline plows, heavy bush and bog disks, or farm equipment should be utilized.

Firebreak width is a site-specific determination. The breaks should be, at a minimum, the width

of the disk, fire plow (3 to 5 feet), or blade (5 to 8 feet).

Temporary firebreaks shall be plowed immediately before burning, then seeded after the burn.

Burned Firebreaks

Plow or disk two parallel strips, each 5 feet wide and a minimum of 20 feet apart.

Remove woody debris and flammable materials from the area between the strips leaving any sound healthy trees.

The area between the two strips is then burned.

Vegetated Firebreaks

Shall be a minimum of 30 feet wide adjoining forestland, and 50 feet wide within forests. The land should be prepared and seeded with an adapted grass and/or an adapted legume. Use cool season forages only.

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.

Consider planting bare ground firebreaks with low-growing annual or perennial herbaceous species for erosion control and wildlife food.

Attempt to locate firebreaks near ridge crests and valley bottoms.

Firebreaks should be located perpendicular to the wind and on the windward side of the area to be protected.

Periodically disk and interplant annuals to benefit wildlife.

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

Design and layout should include multiple uses.

On larger tracts consider burning in a rotational manner (about 1/3 of the area each year). This will encourage diversity in the vegetation and benefit more wildlife species.

Recommend firebreaks for all woodlots over 30 acres, small woodlots adjoining a larger forest, or any woodlot near an active railroad bed.

Consider the effects of firebreak installation on cultural resources, 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, burn plan, or other acceptable documentation.

Complete the environmental form (Form VA-EE-1) to determine and avoid any potential adverse impacts.

OPERATION AND MAINTENANCE

Requirements for Operations and Maintenance of 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, burning plan or other acceptable documentation.

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 on 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 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 to prevent damage.

Bare ground firebreaks which are no longer needed, will be stabilized. Vegetated breaks must be 50 feet wide within woodlands to allow sufficient sunlight for grass and legume plants to grow successfully and form a sod.

A written burn plan must be prepared by a Certified Burn Manager who has completed the VDOF burning certification program. Refer to the Virginia Conservation Practice Standard *Prescribed Burning (Code 338)* for more information.

Apply fertilizer and lime as recommended for the soil conditions or according to soil tests. See Virginia Conservation Practice Standard *Critical Area Planting (Code 342)*.

REFERENCES

Virginia Department of Forestry, 1978 Revised, Third Edition, "Forestry Best Management Practices for Water Quality in Virginia Technical Guide".

Hausman, Richard F. and Pruett, Emerson W., USDA, Forest Service, NE Forest Exp. Sta., 1973, "Permanent Logging Roads for Better Woodlot Management".

Kochenderfer, James N., USDA, Forest Service NE Forest Exp. Sta., Upper Darby, PA, 1970. "Erosion Control on Logging Roads in the Appalachians".

NRCS, Virginia Field Office Technical Guide, Section I & IV.

"The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer