

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

TREE/SHRUB SITE PREPARATION

(Ac.)

CODE 490

DEFINITION

Treatment of areas to improve site conditions for establishing trees and/or shrubs.

PURPOSE

- Encourage natural regeneration of desirable woody plants.
- Permit artificial establishment of woody plants.

CONDITIONS WHERE PRACTICE APPLIES

On all lands needing treatment to establish trees and/or shrubs.

CRITERIA

General Criteria Applicable to All Purposes

The method, intensity and timing of site preparation will match the limitations of the site, equipment, and the requirements for establishing the desired woody species. Refer to sources such as a published soil survey, Web Soil Survey, Soil Data Mart, etc. to determine any site limitations for mechanical and chemical site preparation and choose the appropriate method(s).

An appropriate site preparation method will be chosen to achieve the intended purpose and to protect desirable vegetation, site and soil conditions. Other complementary practices and measures will be used as necessary to control erosion, runoff, compaction and displacement to acceptable levels.

Slash and debris shall be removed, treated or eliminated as appropriate.

Remaining slash and debris shall not create habitat for or harbor harmful levels of pests.

Remaining slash and debris shall not hinder needed equipment operations or create an undue fire hazard.

Measures, including the use of equipment, will be implemented to control or protect against locally invasive and noxious species that may arise from site preparation activities.

Anticipate possible off-site effects and modify the site preparation design accordingly. Do not plan mechanical, broadcast chemical or burning within 50 feet of a perennial or intermittent stream.

All methods will comply with the Texas Forestry Best Management Practices.

CONSIDERATIONS

Impacts on wildlife species, habitat and aesthetics should be considered when selecting site preparation methods.

Particulates, smoke, and other air pollutants generated by site preparation may have on-site and off-site effects on air quality.

The site preparation method should be cost effective and protect cultural resources, wildlife habitat, water resources, and identified unique areas.

Visual quality objectives should be considered when selecting site preparation methods.

Where wildlife is a consideration, from 10% to 15% of the mature oaks, hickories and ash trees should be left for mast and den space. These trees should be left with associated understory in clumps of 10-15 trees or in corridors that connect one forested tract to another or connect the tract to the riparian forest buffer. No two tracts receiving extensive site preparation should occur adjacent to each other, but should be separated by at least 500 feet of more mature forest or native pasture.

The effects on water quality are commensurate with the method selected. Sediment load can increase following site preparation, especially with the more intense methods such as shearing. Chemical site preparation presents potential chemical runoff. The amount of chemicals from chemical site preparation that reaches receiving waters depends on the type of herbicide used, the application method, soil type, amount of vegetation on the soil surface, compliance with Texas Forestry Best Management Practices and the timing of an intense storm event. As the field is established to trees or shrubs the runoff will decrease with an accompanying decrease in erosion. Thus, there will be a reduced sediment load. Reduced quantities of water percolating below the root zone will reduce the potential for transport of dissolved solids into the ground water.

Consider personnel safety during site preparation activities.

PLANS AND SPECIFICATIONS

Specifications for applying this practice and protection of the site shall be prepared and recorded using approved specification sheets, job sheets, technical notes and narrative statements in the conservation plan or other acceptable documentation. Plans will address method of site preparation, species, and protection required for desirable woody plants.

OPERATION AND MAINTENANCE

Maintain erosion control measures as necessary.

Control locally invasive and noxious plants as necessary.

Access by vehicles or equipment during or after site preparation shall be controlled to minimize erosion, compaction and other site impacts.

REFERENCES

Site Preparation and Forest Management Measure. 1999. Environmental Protection Agency Office of Water, Nonpoint Source Pollution MMGI. 4 pp.

Site Preparation Guidebook. 1995. British Columbia Ministry of Forests. 65pp

Texas Forestry Best Management Practices. 2000. Texas Forestry Association. 102 pp.

USDA, Natural Resources Conservation Service Conservation Practice Standards Code 338 - *Prescribed Burning* (1997) Code 391 - *Riparian Forest Buffer* (2000) Code 660 - *Forest Site Preparation* (1996)