

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

FOREST SITE PREPARATION

(acre)
CODE 490

DEFINITION

Treating areas to improve site conditions for establishing a forest.

PURPOSES

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

CONDITIONS WHERE PRACTICE APPLIES

On all lands where establishment of woody plants is desired.

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 of the desired woody species.

An appropriate site preparation method will be chosen to protect any desirable vegetation.

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.

Erosion and/or runoff will be controlled.

Soil compaction and displacement will be minimized.

All chemicals will be applied in accordance with label guidelines.

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

CONSIDERATIONS

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

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

Anticipate possible off-site effects and modify the site preparation design accordingly.

Consider personnel safety during site preparation activities.

Practice Effects

Site preparation activities on forestland may have the following effects on natural resources. For additional information on the physical effects of this practice, refer to Section V of the FOTG.

Soil

Improved establishment of desired woody vegetation will reduce runoff and erosion.

However, initial soil disturbance activities and removal of vegetative cover will leave the land susceptible to erosion until revegetation occurs. Use of heavy equipment when soils are saturated may compact the soil and hinder establishment of trees.

Water

Until desired vegetation is established, runoff and sediment yields may increase due to soil disturbance activities and reduced vegetative cover. There is an increased risk for chemicals and pesticides to enter surface and ground water sources if used during site preparation.

Air

Initially, there may be a slight reduction in air quality from site disturbance activities. Smoke, when burning is prescribed, or airborne sediment may reduce visibility and create a safety hazard. There may also be an increase in chemical drift from pesticide applications, depending upon the amount and kind used during site preparation. Exposed soil may be subject to wind erosion until desirable cover is established.

Plant

Establishment and growth of suitable woody vegetation will significantly improve with the removal of unwanted plants and debris that compete for space, sunlight, moisture and/or nutrients. Short-term loss in productivity may occur if disturbance of soil has caused damage to existing desirable woody vegetation.

Animal

Wildlife habitat will generally improve with the regeneration of woody vegetation. However, there may be an initial short-term loss of cover or shelter following site preparation activities.

PLANS AND SPECIFICATIONS

Specifications for establishment and operation of this practice shall be prepared for each field or treatment unit according to the Criteria, Considerations, and Operation and Maintenance described in this standard. Additional guidance is provided in the practice specification. Specifications will address method of site preparation, species, and protection required for desirable woody plants.

The site-specific specifications shall be documented on the NRCS Hawaii Jobsheet for this practice and given to the client. Other documents such as practice worksheets, maps, drawings, and narrative statements in the conservation plan may be used to plan or design the practice and to prepare the specifications.

OPERATION AND MAINTENANCE

Repair erosion control measures as necessary to ensure proper function. Access by vehicles during site preparation or after (i.e., before adequate tree and shrub establishment occurs) should be controlled to minimize erosion, compaction and other site impacts.