

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

LAND CLEARING

(Ac.)
Code 460



DEFINITION

Removing trees, stumps, and other vegetation from wooded areas.

PURPOSE

To achieve needed land use adjustments and improvements in the interest of soil and water conservation, and in keeping with the capabilities of the land.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to wooded areas where the removal of trees, stumps, brush, and other vegetation is needed in carrying out a resource management plan, and the land to be cleared will be used according to its capabilities.

CRITERIA

Planned work shall comply with all Federal, state, and local rules and regulations. Some clearing activities may require a U.S. Army Corps of Engineers Section 10 or 404 permit.

The plan shall specify the kinds of timber to be salvaged, lengths of logs, and location(s) of stacking. Method of disposal shall be specified for all material not salvaged. All clearing and

disposal methods shall be performed according to applicable state laws and with due regard to the safety of persons and property.

The cleared area shall be left in a neat and slightly condition that will facilitate the planned use and treatment of the land.

Strip clearing and windrowing of debris shall be conducted perpendicular to the slope to prevent accelerated erosion.

A debris removal plan shall be developed prior to initiating any land clearing activities.

When removing the vegetation, the method for clearing shall consider the least possible disturbance of the topsoil. The plan shall provide for the measures necessary to protect the cleared area from erosion and invasion of non-native invasive plant species.

Special attention shall be given to maintaining or improving habitat for fish and wildlife and water quality where applicable.

Where possible and practicable, select land clearing methods and treatments that minimize or eliminate the potential to spread weeds and invasive non-native plants.

CONSIDERATIONS

Consider land clearing during a dry period to minimize disturbance and movement of topsoil.

Consider the size of material to be removed when selecting land clearing methods. Land clearing is usually more efficient if the tree is less than 4-inches in diameter. When clearing larger trees, the root wad or crown should be removed during drier soil conditions. Avoid rough pushing under wet conditions to prevent creation of deep ruts and burying debris complicating final cleanup.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

Consider the stump height when removing timber because it is easier for equipment to uproot and grub out a taller stump.

Consider strip clearing, windrowing debris, and maintaining cavity and food producing trees to improve or maintain wildlife habitat.

Avoid pushing the cleared debris into standing or green timber to avoid increased maintenance issues for re-clearing, damaging other trees making them susceptible to insect damage, and the potential of creating a fire hazard.

Debris piles should not be closer than 100 feet from adjacent woodland, watercourses, wetlands, buildings and roads.

The orientation and layout of berm piles should be considered. The pile should be high, narrow, and compact, and free of topsoil. Piles with excess debris do not cure properly. Trees should be chained or pushed down parallel to each other and follow topographical contours. Berms are normally 15 to 25 feet wide by 10 to 15 feet high, and are spaced 150 to 200 feet apart. A break of 30 feet between berms is recommended for every 200 feet of berm length to act as a firebreak, allow natural drainage or runoff, and facilitate equipment. Clear a strip adjacent to the berm to minimize vegetation growth in the berm.

If berm piles are to be burned, follow all Federal, state, and local fire authorization requirements prior to initiating burning activities.

When selecting land clearing methods, consider steepness of slope and the impact of land clearing on the volumes and rates of runoff, evaporation, and transpiration.

Consider steam cleaning equipment prior to site work activities to minimize the spread or introduction of weeds into a newly cleared field.

Consideration should be given to limit the spread of seed and plant material from non-native invasive plants. Consider treating non-native invasive plants with herbicide prior to removal and/or burning. When treating sites that have Melaleuca, Brazilian pepper, tropical soda apple, Chinese tallow trees, Japanese or Old World climbing fern, or any other non-native invasive species listed as a Category I invasive plant by the Florida Exotic Pest Plant Council, care should be taken to limit the spread of their seeds or spores.

Consider the steepness of slope when selecting the size and type of equipment needed to clear land.

Select the the size of equipment based on its intended purpose. Light vegetation and ground cover can be rotary mowed or removed by tillage using a rotary plow or a heavy-duty disc. When clearing timber consider shearing with an angled dozer blade or vee blade for small to medium diameter trees, or chaining for larger trees. A toothed brush blade or stacking blade is appropriate for piling and cleanup by reducing the amount of soil in a berm pile.

Consider the size of the equipment used in clearing operations. Select equipment sizes and capacities that will handle the clearing tasks in a timely and economically feasible manner. A medium-sized bulldozer, D-6 or equivalent, should be able to handle small to medium sized timber. A large bulldozer, D-9 or equivalent, could be used for chaining and rough piling.

Consider traction trails before chaining so the equipment can gain maximum footing to pull the anchor chain.

PLANS AND SPECIFICATIONS

Plans and specifications for land clearing shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose. As a minimum, the plans and specifications shall include, as applicable, the following items:

- limits of area to be cleared,
- location of areas off limits for disposal areas,
- location of trees or woody vegetation to be left undisturbed,
- method of disposal,
- location of disposal areas,
- burning related activities and authorizations,
- erosion control measures.

OPERATION AND MAINTENANCE

The following actions shall be carried out to ensure that this practice functions as intended throughout its expected life. These actions include normal repetitive activities in the application and use of the practice (operation),

and repair and upkeep of the practice (maintenance).

- A maintenance program shall be established to maintain vegetative cover following treatment.
- Watercourses and wetlands shall be protected during and after removal of trees and vegetation.
- The use of mechanical treatments, prescribed burning, pesticides and/or other chemicals shall be planned and applied in a manner that does not compromise the intended purpose.