

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE STANDARD**

**LAND CLEARING, (ACRE)**

**Code 460**

**DEFINITION**

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

**PURPOSE**

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 soil and water conservation plan, and the land to be cleared will be used according to its capabilities.

**CRITERIA**

The plan shall specify the kinds of timber to be salvaged, lengths of logs, and place of stacking. Method of disposal shall be specified for all material not salvaged. Clearing and disposal methods shall be 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 sightly condition that will facilitate the planned use and treatment of the land.

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.

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

**CONSIDERATIONS**

Consider land clearing when the soil is frozen with minimal snow cover or during a dry summer period to minimize disturbance and movement of topsoil.

Land clearing is usually more efficient if the tree is less than 4 inches (in.) in diameter. For larger trees, the root wad or crown should be removed during drier soil conditions. Rough pushing under wet summer conditions can create deep rutting and can bury debris complicating final cleanup.

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

Consider strip clearing, windowing debris, and maintaining den and food trees.

Consider a berm pile removal plan prior to land clearing. Limit pushing the clearing debris into standing or green timber due to increased maintenance issues for re-clearing and the potential of creating a fire hazard. A pile should not be closer than 100 feet from adjacent woodland, buildings, or roads. Clear the strip under the berm to minimize vegetation growth in the berm.

The orientation and layout of berm piles should be considered. The pile should be high, narrow, and compact, with trees chained or pushed down parallel to each other, follow topographical contours, and free of topsoil and snow. Piles with excess debris do not cure properly.

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.

If berm piles are to be burned, follow all federal, state, and local fire authority permit requirements prior to initiating work.

Consider steepness of slope and the impact of land clearing on the volumes and rates of runoff, evaporation, and transpiration.

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

Consider the size of equipment for its intended purpose. Light vegetation and ground cover can be rotary mowed or removed by land breaking using a rotary plow or a heavy-duty disc. 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 can be helpful for piling and cleanup by reducing the amount of soil and snow in a berm pile.

Consider the size of the bulldozer. 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.

## **OPERATION AND MAINTENANCE**

The following actions shall be carried out to insure 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 while controlling undesired and exotic vegetation.

Watercourses and water quality shall be protected during and after removal of trees and vegetation.

Avoid crossing with heavy equipment when wet.

The use of mechanical treatments, prescribed burning, pesticides or other chemicals shall not compromise the intended purpose.

Select equipment sizes and capacities that will handle the clearing tasks in a timely and economically feasible manner.