

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD
LAND CLEARING
(ACRE)
CODE460

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

WATER QUANTITY

Removal of vegetation may increase significantly the quantity of surface runoff from the site by reducing the retarding effect of vegetation and eliminating transpiration. Peak discharge from the site may be increased. On sites with permeable gravels that presently produce little or no surface runoff, land clearing may not result in a runoff increase.

The increase in surface runoff may be greatest after the soil has settled once the vegetation is removed. Settling may take 30 to 90 days, depending on soil type and precipitation patterns.

WATER QUALITY

Land clearing may increase erosion and sediment yield from the site. The erosion may be greatest during and immediately after clearing, and may be reduced as the site consolidates. The cleared site may continue to degrade surface water until vegetation is reestablished.

Surface water may also contain increased organic matter and dissolved nutrients from decaying vegetation left on the

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

site. These may lower dissolved oxygen levels in surface waters. Turbidity may increase. Reduced vegetation may increase water temperatures due to increased solar radiation.

There may be little if any change in ground water quality with land clearing.

PLANNING CONSIDERATIONS FOR WATER QUANTITY AND QUALITY

Quantity

1. Effects on the water budget, especially on volumes and rates of runoff, evaporation, and transpiration.
2. The impact of soil settling on the variation in rates of runoff immediately after clearing.

Quality

1. Effects on erosion and the movement of sediment, pathogens, and soluble sediment-attached substances carried by runoff.

PLANNING CONSIDERATIONS

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 to be salvaged. Clearing and disposal methods shall be according to applicable state laws and with due regard to the safety of person and property.

The plan shall provide for the measures necessary to protect the cleared area from erosion.

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

Special attention shall be given to maintaining or improving habitat for fish and wildlife where applicable. Consideration of such things as strip clearing, windrowing debris, and maintaining den and food trees shall be explored.

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.