

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE STANDARD**

**LAND CLEARING**

(Ac.)

CODE 460

**DEFINITION**

Removing trees, stumps, and other vegetation from wooded areas to achieve a conservation objective.

**PURPOSE**

Facilitate needed land use adjustments and improvements to an existing site in the interest of natural resource conservation.

**CONDITIONS WHERE PRACTICE APPLIES**

This practice applies to wooded areas for the removal of trees, stumps, brush, and other vegetation in order to implement a conservation objective.

**CRITERIA**

**Federal, State and Local Laws and Permits**

***Design and construction activities shall comply with all federal, state, and local laws, rules, and regulations governing activities in or along streams and pollution abatement, health, utility and safety activities.***

***The owner or operator is responsible for securing all required permits or approvals and for performing all planned work in accordance with such laws and regulations. NRCS employees are not to assume responsibility for procuring these permits, rights, or approvals, or for enforcing laws and regulations. NRCS may provide the landowner or operator with technical information needed to obtain the required rights or approvals to construct, operate, and maintain the practice.***

***Permits may be required from the following agencies when obstruction removal is performed within the boundaries of a stream or floodplain or if burning is required:***

1. ***WV Department of Environmental Protection (Air, Land, Water and Waste, Permitting, other)***
2. ***Division of Natural Resources Office of Land and Streams***
3. ***US Fish and Wildlife Service***
4. ***WV Division of Forestry***
5. ***WV Dept. of Agriculture***
6. ***Local, state and county ordinances***

***All required permits shall be approved before construction implementation.***

**General.** Clearing and disposal methods shall be in accordance with federal, state, and local laws. Methods must address the impacts to erosion control, air and water quality, and the safety of the public and property.

Limit disposal of cleared debris into standing or green timber. This will minimize the need for increased maintenance and reclearing while reducing fire hazards. Ensure that debris piles are at least 100 feet from adjacent woodland, buildings, or roads.

Disposal of cleared debris shall be in accordance with NRCS Conservation Practice Standard Woody Residue Treatment (384); or if cleared debris disposed by burning, NRCS Conservation Practice Standard Prescribed Burning (338).

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September 2011**

**NRCS, WV  
September 2012**

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact your Natural Resources Conservation Service [State Office](#), or download it from the [Field Office Technical Guide](#). **Note: Bold italics is information added or changes made by WV NRCS.**

Cleared area shall be left in a condition that facilitates the planned use and treatment of the land.

**Water Quality.** An area 50-foot wide will be left undisturbed between the area being cleared and all wetlands, water bodies and watercourses.

**Soil Quality.** Clearing shall be performed when the soil moisture content is such that soil structure damage or compaction is minimized.

Temporary cover will be established as necessary to control sheet, rill and wind erosion on the cleared area until the planned land use is in place.

## CONSIDERATIONS

**General.** When a salvage harvest is performed prior to land clearing, leaving taller stumps will facilitate final clearing and grubbing activities.

Land clearing should be conducted when disturbance to, and movement of, topsoil is minimized. Consideration should be given to land clearing during periods when the soil is frozen (in areas with minimal soil cover), during periods of dry summer conditions (in areas prone to water induced erosion), and during periods of low probability of high winds (in areas prone to wind-induced erosion).

Land clearing is generally more efficient for tree diameters less than 4 inches. For larger diameter trees, the root wad (or crown) should be removed during periods of low soil moisture. Moving debris during periods of high soil moisture can lead to deep rutting and burying of debris, complicating final cleanup.

**Cultural Resources.** Ground disturbing activities associated with this practice have the potential to affect cultural resources. Consideration should be given to using methods that minimize disturbance to the ground surface.

**Fish and Wildlife Resources.** Special attention should be given to maintaining habitat for fish and wildlife. Strip clearing, windrowing debris, and maintaining den and food trees can minimize impacts on wildlife.

**Other Considerations.** The orientation and layout of debris piles should be considered to promote proper curing of the debris and facilitate surface water drainage. Chained or pushed trees should be oriented so that they

lay parallel to one another. Debris piles should follow ground contours and be high, narrow, compact and free of soil and snow. Debris piles, in general, should be between 15 to 25 feet wide, 10 to 15 feet high, and spaced 150 to 200 feet apart. As a minimum, debris piles should include an opening (within the debris pile) of approximately 30 feet at 200 foot intervals, and at other locations where routing of equipment, natural drainage, surface water runoff, and firebreaks may be needed.

***Land clearing can increase the volume and rate of runoff with increasing negative impacts on steeper land. Consider the affect of clearing on the water budget, especially on volumes and rates of runoff, evaporation, and transpiration, immediately after construction and long term.***

Select appropriate equipment type, size, and capacity for land clearing tasks to facilitate the timely execution of the work in an economically feasible manner.

Activities which minimize the spread or introduction of weeds on a newly cleared site should be considered. Additionally, the disposal of vegetation by burying, composting, or mulching debris will facilitate decomposition.

## 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 plans and specifications shall include:

- A plan view or a description of the limits of land to be cleared
- The kinds of timber to be salvaged, lengths of logs, and location of stacking
- Disposal requirements for all materials not salvaged
- Orientation and layout of debris piles
- Requirements to control erosion, water pollution and air pollution
- Vegetative requirements
- Site specific specifications that describe the condition of the cleared area needed to facilitate the planned use and treatment of the land, including surface grading requirements if applicable.

- ***WV "700 series" Specifications***
- ***Additional requirements for support data are provided in 210-VI-EFH, Amendment WV-45 (Nov 1996), WV5-23, "Preparation of Engineering Plans, Design and Construction Support Data for Conservation Practices."***

#### **OPERATION AND MAINTENANCE**

An Operation and Maintenance plan shall be prepared for use by the client. The plan shall include specific instructions to insure that this practice functions as intended throughout its expected life.

Minimum requirements to be addressed in the plan are:

- A maintenance program to maintain vegetative cover while controlling undesired and exotic vegetation
- Protection of watercourses and water quality after land clearing
- Guidance on crossing cleared areas with heavy equipment when the ground is saturated
- Restrictions on the use of mechanical treatments, prescribed burning, pesticides and other chemicals that compromise the intended purpose.
- ***Periodic inspections.***
- ***Timely repair of eroded areas or settled areas.***