

NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE STANDARD

LAND CLEARING

(Ac.)

Code 460



**DEFINITION**

Removing trees, stumps, and other vegetation 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 or abandoned citrus groves where the removal of trees, stumps, brush, and other vegetation is required to implement a conservation plan.

**CRITERIA**

**General.** Clearing and disposal methods shall be in accordance with federal, state, and local laws. Methods must address the impacts to erosion, air and water quality, and the safety of the public and property. Some clearing activities may require a U.S. Army Corps of Engineers Section 10 or 404 permit.

Impact to cultural resources, wetlands and Federal and state protected species shall be

evaluated and avoided or minimized to the extent practicable during planning, design and implementation of this conservation practice in accordance with established National and Florida policy, General Manual (GM) Title 420-Part 401; Title 450-Part 401, Title 190-Parts 410.22 and 410.26, National Planning Procedures Handbook (NPPH) Florida Supplements to Parts 600.1 and 600.6, National Cultural Resources Procedures Handbook (NCRPH), National Food Security Act Manual (NFSAM), and the National Environmental Compliance Handbook (NECH).

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 Florida NRCS Conservation Practice Standard Woody Residue Treatment, Code 384; or if cleared debris disposed by burning, Florida NRCS Conservation Practice Standard Prescribed Burning, Code 338.

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

**Water Quality.** A minimum width of 50 feet of undisturbed area shall be left between the area being cleared and all wetlands, water bodies, and perennial streams. Within the USFWS designated Gulf Sturgeon critical habitat and the Florida listed mussel critical habitat, a 100 feet wide buffer is required.

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

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

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

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

## 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. Consider land clearing during periods of dry 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.

Land clearing can increase the volume and rate of runoff. This is more pronounced on steeper land.

Consider the disposal of vegetation with regards to carbon sequestration. Burying, composting, or mulching the debris would limit the release of carbon.

**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. 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.

Select appropriate equipment type, size, and capacity for land clearing tasks to facilitate the timely execution of the work in an economically feasible manner. Consider the steepness of slope when selecting the size and type of equipment needed to clear land.

Additionally, the disposal of vegetation by burying, composting, or mulching debris will facilitate decomposition.

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

Consider steam cleaning equipment prior to site work activities to minimize the spread or introduction of invasive/exotic species or other undesirable weeds into a newly cleared field.

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

## 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. A debris removal plan shall be developed prior to initiating any land clearing activities. As a minimum, the plans and specifications shall include, as applicable, the following items:

- A plan view or a description of the limits of land to be cleared.
- Location of areas off limits for disposal areas.
- Location of trees or woody vegetation to be left undisturbed.

- For timber to be salvaged include kinds of timber, length of logs, and location of stacking.
- Burning related activities and authorizations.
- 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.

#### **OPERATION AND MAINTENANCE**

An Operation and Maintenance plan shall be prepared for use by the client. The plan shall include specific instructions to ensure 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.

#### **REFERENCES**

Florida NRCS Conservation Practice Standards  
Prescribed Burning, Code 338  
Woody Residue Treatment, Code 384  
General Manual  
Title 420-Part 401  
Title 450-Part 401  
Title 190-Parts 410.22 and 410.26  
National Cultural Resources Handbook  
National Environmental Compliance Handbook  
National Food Security Act Manual  
National Planning Procedures Handbook Florida  
Supplements to Parts 600.1 and 600.6