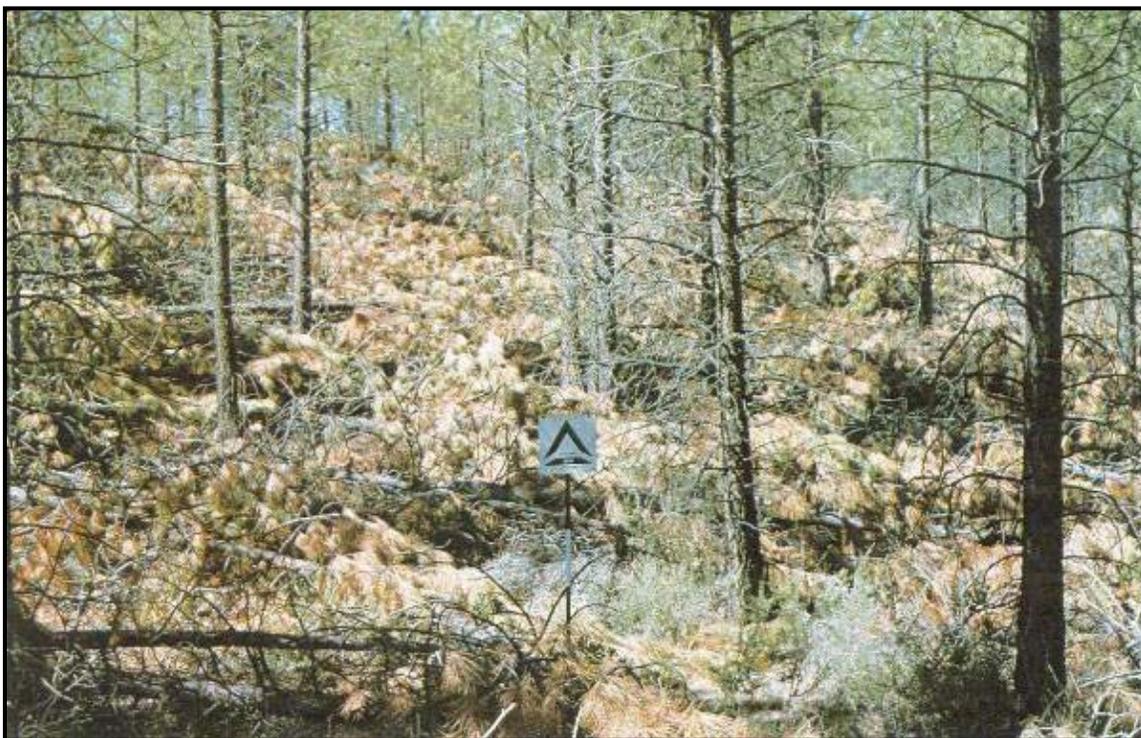


WOODY RESIDUE TREATMENT (384)

PLANNER GUIDE

USDA, Natural Resources Conservation Service—Practice Code 384



Treating Forest Slash

Treating forest slash reduces or otherwise addresses woody plant residues created during forestry, agroforestry, and horticultural activities to achieve management objectives.

PRACTICE INFORMATION

This practice applies on areas with quantities of woody slash and debris requiring treatment.

The practice is applied to address one or more of the following purposes:

- Reduce hazardous fuels
- Reduce the risk of harmful insects and disease
- Protect/maintain air quality by reducing the risk of wildfire
- Improve access to forage for grazing and browsing animals
- Enhance aesthetics
- Reduce the risk of harm to humans and livestock
- Improve the soil organic matter
- Improve the site for natural or artificial regeneration.
- Develop renewable energy system.

COMMON ASSOCIATED PRACTICES

Forest Slash Treatment is commonly used as part of a Forest Management Plan with practices such as Forest Stand Improvement (666), Access Control (472), Pest Management (595), Prescribed Burning (378), Critical Area Planting (342), Sediment Basin (350), Structure for Water Control (587), and Prescribed Grazing (528).

For further information, refer to the practice standard in the local Field Office Technical Guide and associated practice specifications and job sheets.

Complete the basic header information: client name, farm/ranch location, farm and tract numbers, fields in which the practice will be installed, proposed treatment acres (practice extent), program under which this practice is being installed, planned date for installation and if there is a contract associated with this practice, include the contract item number. Also, document the planner who wrote the specification in the space following the “Assisted by”.

General Specifications

Woody residue treatment, as well as the condition and extent of residual residue shall comply with the following items in general specifications; any additional specifications based on purpose(s); and requirements listed for applicable woody residue treatment techniques.

1. All activities associated with applying this practice shall comply with state, tribal and local forestry and related laws and regulations. It is the landowner’s responsibility to obtain appropriate permits and/or applications prior to commencing an activity.
2. The equipment and tools used in the woody residue treatment and the timing of application must be consistent with soil and site factors, for avoiding excessive compaction, rutting, or damage to the soil surface layer. For safety purposes and to protect site resources including residual trees, treatment methods involving ground-based heavy equipment are generally not applied on slopes exceeding 35 percent.
3. For areas with residual trees, the woody residue treatment method may consist of lopping and scattering, piling, piling and burning (provided burning will minimize heat-damage to residual trees and underlying soil), crushing, chipping, and/or removal. For areas with few or no residual trees (e.g., slash left after block harvest cutting), the woody residue treatment method may consist of lopping and scattering, piling, piling and burning, crushing, chipping, broadcast burning and/or removal. **Any burning associated with 384 Woody Residue Treatment will comply with State and local laws, regulations and permitting requirements. NRCS will not be responsible for the planning, design, and application for any kind of prescribed burning. The Washington Department of Natural Resources (DNR) will be contacted early in the planning process and prior to any burning activity.**

Additional Specifications by Practice Purpose

Check all purposes that meet or are consistent with the client’s objectives. Each purpose has unique criteria. Provide site specific description, information and additional requirements for the purposes that you check.

Associated Practices

Check all associated practices within the conservation system. Make sure 384 and associated practice specifications are consistent and complementary to each other in order to successfully address the resource concern.

Existing Conditions

Document the following information:

- Soils and appropriate soils interpretations-such as map unit descriptions, erosion hazards, suitability for mechanical site prep, soil compaction resistance and potential damage by fire.

• Estimate amount of woody residue to be treated. A variety of methods and combination of methods are acceptable for estimation of residue quantity. USFS photo series (Examples are PNW-GTR-51, 52, 95, 105, 231, 258), local photo series, DNR fuels quantity calculations or calculator such as Piled Fuels Biomass and Emissions Calculator, down wood transects (GTR-INT-16, 1974 Handbook for Inventorying Down Woody Material, By James Brown) or for quick field estimations use Forestry Clipboard tables. When using the Forestry Clipboard tables for quick field estimate, do a couple of plots and determine how many cut trees. Determine average DBH and Height of the proposed cut trees. Assume the tree is that diameter for the entire height of the tree. This will account for branches and foliage. Determine how many cut trees per cubic foot or how many cubic feet per cut tree. For example: You have 400 cut Douglas fir per acre that are 4" average DBH and an average 18' in height. It would take 1.5 cubic feet per cut tree. If you look at (green) material Douglas-fir trees times 1.5 cubic feet per foot = 25,200 lbs or 12.6 tons.

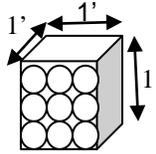


Table 8 of the Forestry Clipboard, for fresh cut is 42 lbs per cubic foot. 400 cut tree = 600 cubic feet times 42 lbs per cubic foot = 25,200 lbs or 12.6 tons. Just so you know, this is likely to be an over estimation.

- Describe the condition of the residue. Is the woody material green such as recently cut (or will be cut) material or has it been down for a while (all needles are red or are fallen off), which we would call air-dry. If the material is air-dry then use the air-dry lbs/cord column of Table 8.
- Discuss site factors that may affect equipment, treatment method choice and/or timing of treatment. Examples of site factors are steep slopes, average annual precipitation, rock outcrops, sensitive areas, broken terrain, condition of and quantity of fuel on adjacent stands and state or local regulation and required permits.

When fuels reduction/wildfire risk reduction is the purpose, this scenario should only be applied on the following type of sites: 1) that are in precipitation zones of less than 36" or if more than 36" the precipitation is delivered mostly as snow in the winter months; 2) within the high to extreme risk areas identified by WA DNR Wildland Urban Interface Communities; or 3) where the entire unit or parts of units are considered to have "Extreme Fire Hazard" conditions (Refer to WAC 332-24-650 and 652). Extreme Fire Hazard conditions include: i) areas within 100' of a publically used road; ii) areas within 200-500' of buildings belonging to neighbors; iii) or within 200-500' of public use areas.

Slash Treatment Methods and Requirements

Choose the slash treatment method that is appropriate for the purpose, soil, amount of material, condition of the material and site factors. 338-Prescribed Burning is not an offered practice in Washington State. If the participant wishes to include burning (piled and/or broadcast) within the treatment options, then direct them to the DNR for the burn plan and permits. NRCS does not pay for burning because of the air quality issues, and encourages other forms of treatment.

For example:

Some soils have low suitability for equipment use or high soil compaction risk. For soils like these, the planner's specifications will focus on hand treatments or mitigate for the use of equipment.

Large amount of woody residue material, in drier climates, with the purpose of fuels reduction and improved air quality by reducing wildfire risk may require piling, chipping or removal of most of the material. The planner will choose the method or methods that best meets the participants objectives, labor, equipment and managerial skills.

The participant is going to do the work and the woody debris is 8-10 ton/acre that are unevenly distributed and non-continuous. Lop and Scatter may be the most appropriate method of treating this slash.

In addition, remind the participant of the safety considerations for the selected methods.

Practice Specifications Design Approval Certification

This section documents required Job Approval Authority (JAA) and TechReg Category Certification for the project area and practice's limiting factor. It also documents the planner (or Technical Service Provider (TSP) and their JAA or certification for the TechReg category. The Planner (or TSP) will sign and date this section, print their name and title.

If the planner does not have enough JAA to approve the specifications there is a Reviewer section that allows for someone who does have the appropriate JAA to document their JAA and to approve the design with their signature. Include the date, printed name, and title.

There is a section for the client to sign and date. With their signature the client is accepting the specifications, indicate the planner reviewed the specifications with them, agrees to install according to the specifications and that they are responsible for the permits and notifying the appropriate, governmental agencies or utilities prior to implementation of practice.

Documentation Requirement

This form is used for quality control of the practice design and checkout of practice installation for practice certification. It provides a list of documentation required in order for the plan to include this practice and for designing this practice.

Complete the basic header information: client name, farm/ranch location, farm and tract numbers, fields in which the practice will be installed, treated acres (extent installed), program under which this practice is being installed, planned date for installation and if there is a contract associated with this practice, include the contract item number.

Mandatory Documentation within the Plan

Check box of each item that is present within the file and properly completed.

The following additional data/documentation needed for this practice

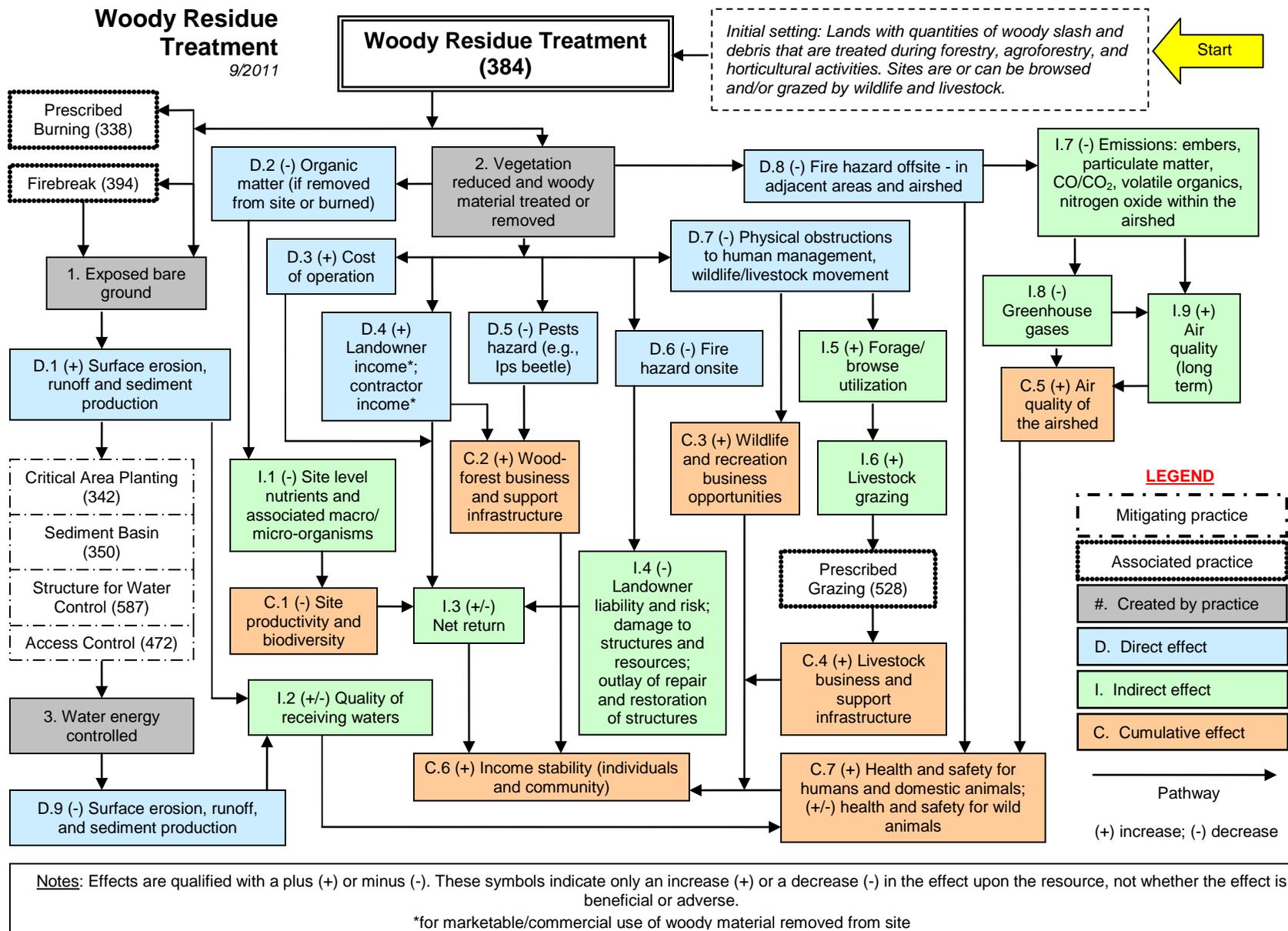
Check the box of each inventory and analysis documentation that was used to supports the presence of the resource concern and landowner objective. The documentation should be in the file or discussed on P&I notes. Check the box for each Checkout item that is attached or documented in the file. Feel free to hand write notes clarifying the check or lack of check.

Additional Notes on Practice documentation, installation or comments on associated Practices

Planner should include any additional information they deem necessary to support the completion certification of the practice.

Practice Completion Certification

Person with appropriate JAA will sign this form for the certification that this practice was installed according to NRCS standards and specifications.



The diagram above identifies the effects expected to occur when this practice is applied according to NRCS practice standards and specifications. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. All appropriate local, State, Tribal, and Federal permits and approvals are the responsibility of the landowner and are presumed to have been obtained. All income changes are partially dependent upon market fluctuations which are independent of the conservation practices. Users are cautioned that these effects are estimates that may or may not apply to a specific site.