

Appendix I: Plan Amendment – Thinning in LSR stands over 80 years

Background

The Northwest Forest Plan (NFP)¹ provides Standards and Guidelines for the protection and maintenance of late-successional and old-growth forest ecosystems within Late Successional Reserve (LSR) areas. Northwest Forest Plan Standard and Guideline C-11 directs the development of Late Successional Reserve management plans before habitat manipulation activities are designed and implemented. The Shasta-Trinity Forest-wide Late Successional Reserve Assessment (LSRA)² was developed to respond to this direction.

Northwest Forest Plan Standard and Guidelines C-12 and C-13 pertaining to LSR, provides for appropriate treatments within the northern spotted owl's range, making a distinction in allowable treatments between the western and eastern portions of the range. For the western portion of the range, the NFP provides for thinning of stands up to 80 years of age. For the eastern portion of the range, the NFP provides no stand age requirement. The Shasta-Trinity National Forest is within the eastern portion of the range. The Shasta-Trinity Land and Resource Management Plan (Forest Plan)³ incorporated this direction for appropriate management direction in Forest Plan page 4-37.

The Regional Ecosystem Office (REO) is an interagency oversight group that is responsible for developing, evaluating, and resolving consistency and implementation issues regarding the NFP. In this capacity, the REO reviewed the Shasta-Trinity Forest-wide LSRA and made two findings which necessitate this plan amendment for the Gemmill Thin Project: 1) REO found that the Standards and Guidelines for non-risk thinning projects apply to all provinces;⁴ thus, the 80-year stand age limitation for harvest applies to all LSR projects, regardless of geographic location; and 2) REO also found in the LSRA that “the goals and objectives of the proposed thinning in stands greater than 80 years of age to be consistent with the NFP goals and objectives, while recognizing that appropriate analysis and documentation under the National Environmental Policy Act, including a Forest Plan amendment, will be needed before thinning in these stands may proceed.”⁵

Proposed Amendment

The proposed amendment is to modify the Shasta-Trinity Land and Resource Management Plan on page 4-37 “Guidelines to Reduce Risks of Large-Scale Disturbance” by adding the following statement

¹ *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl*, April 1994.

² Shasta-Trinity National Forest Forest Wide LSR Assessment, August 1999.

³ Shasta-Trinity National Forests Land and Resource Management Plan, April 1994,

⁴ Regional Ecosystem Office, *Regional Ecosystem Office Review of Siskiyou Habitat Improvement Project In the Siskiyou Late-Successional Reserve (LSR)*, Smith River NRA, July 15, 1997.

⁵ Regional Ecosystem Office, *Regional Ecosystem Office Review of Shasta-Trinity National Forest Late-Successional Reserve Assessment (LSRA)*, August 26, 1999.

For the Gemmill Thin Project, treatments are allowed within stands over 80 years and up to 150 years of age.

Treatment Standards

1. The improvement treatment is designed to increase tree size, crown development, or other desirable characteristics; to maintain vigor for optimum late-successional development; to reduce large-scale loss of key late-successional structure; to increase diversity of stocking levels and size classes within the stand or landscape; or to provide various stand components beneficial to late-successional forest-related species.
2. Overstory conifers will be left. Treatment will be confined to the dense understory. Efforts will be made to be made to promote diversity of hardwood and conifer species. Thinning in these types of stands will focus on removal of suppressed and intermediate trees. Occasional co-dominants will be removed in order to provide growing space for remaining trees. In some cases, smaller diameter trees may be favored over adjacent larger diameter trees in order to promote species diversity, maintain structural diversity, or adequate horizontal stem juxtaposition.
3. The treatment will increase diversity within relatively uniform stands by including areas of variable spacing as follows:
 - Ten percent or more of the area would be in unthinned patches to retain processes and conditions such as thermal and visual cover, natural suppression and mortality, small trees, natural size differentiation, and undisturbed debris.
 - The treatment does not inappropriately "simplify" stands by removing layers or structural components, creating uniform stocking levels, or by removing broken and diseased trees needed for snag recruitment, and nesting habitat.
4. Certain considerations will be made for larger sugar pine existing in stands proposed for treatment. This is a valuable species for late-successional stands. As previously stated, it is currently being impacted by white pine blister rust and high stocking levels have made it very susceptible to mountain pine beetle attacks. Thinning operations will place special emphasis on existing sugar pine. The following considerations will be applied to the sugar pine component; 1) protect large trees by removing the second stand layer around each to the drip line plus 10 feet (this will allow some snag recruitment), 2) where maintaining individual large sugar pine is deemed particularly important, thin to the drip line plus 20 feet, 3) leave healthy appearing young sugar pines, consistent with treatment objectives for LSRs, on sites that are low risk for white pine blister rust.
5. To the extent practicable for the diameter and age of the stand being treated, the treatment includes falling green trees or leaving snags and existing debris to meet the overall CWD objective. If the determination is made that the landscape area will be at less than minimum desired condition levels, additional measures will be considered to create additional snags and/or CWD.

6. Snag objectives have been identified as part of the desired condition. Prescriptions must be designed to meet the overall snag objective, including developing large trees for future snag recruitment and retaining agents of mortality or damage.
7. Overall, treatment prescriptions will strive towards minimizing the number of management entries to meet long term objectives while retaining desirable habitat components in the short term.

Significance

Significance Analysis (16 U.S.C. 1604(f)(4), 36 CFR 219.10(f) 1982: Forest Service Handbook FSH 1909.12.5.32 (*WO Amendment 1909.12.91-1, 8/3/92*) directs consideration of significance of change to a forest plan. The following factors are used to determine whether the proposed forest plan amendment is significant or not significant.

1. **Timing.** Amendment of the LSR stand age Standard and Guideline of the Forest Plan affects the thinning treatment of approximately 532 acres of the Gemmill Thin Project. This change is only in effect for the duration of the treatment of these acres. Once harvest of these acres is complete, the 1995 Forest Plan Standard and Guide will again apply.
2. **Location and Size.** The location of the area involved in the amendment is within Late-Successional Reserve land allocations near Wildwood, California on the South Fork Management Unit. The area of the amendment applies to approximately 2½ % of the estimated 22,526 acre Chanchellula LSR (RC-331).
3. **Goals, Objectives, and Outputs.** The LSR stand age amendment would not alter long-term relationships between the levels of goods and services projected by the forest plan. The amendment would not alter timber outputs projected by the Forest Plan because it does not adjust the capable, available, and suitable land base.
4. **Management Prescription.** The amendment would change the LSR stand age Standard and Guideline for treatment units for this Project only. This amendment does not apply to any future decisions.

Conclusion: The amendment to Modify Forest Plan 4-37 “Guidelines to Reduce Risks of Large-Scale Disturbance” is not a significant change to the Forest Plan, because;

- It is a site-specific amendment the applies only to the identified Gemmill Thin Project units,
- It is short duration, only for the harvest of the proposed units for this project.
- It is minor in context of the achievement of Forest Plan goals and objectives,
- It is will make improvements towards meeting the goals of the Forest Plan by increasing the sustainability of Late-Successional Reserve stands from loss due to insect, disease, or fire effects when compared with no action.

