

Approach to Developing a SOFAR Red Fir Management Strategy

Developed for SOFAR Landscape Vision Committee

Updated 7/25/2019

Overview

Red fir forests make up a large portion of the forest area in the upper headwaters of the SOFAR watershed and many other watersheds on the Eldorado National Forest. The Forest Service and the SOFAR Collaborative have identified that within the SOFAR project area, the headwaters focus area (south of Highway 50 and east of Long Canyon Silver Fork American River watershed boundary) is of high interest for restoration activities. While there is more broad ranging agreement on the desired conditions for Mixed Conifer Forest, there is less consensus and information available on appropriate management objectives in red fir forests. As the headwaters area contains a higher proportion of red fir than many areas within the SOFAR landscape where projects have been recently occurring, the emphasis on projects in the headwaters focus area has prompted a desire to develop and document agreed upon red fir strategy goals and objectives for both this area and the larger collaborative area.

Collaborative members agree that red fir forests in the SOFAR project area are threatened by climate-related tree mortality and potential high severity fire, but specific landscape desired conditions are not clear. Adding to issue complexity, red fir forests may be comprised of a spectrum of different forest cover types that are dominated by red fir, occurring across a range of elevations, slope positions, and aspects that have a range of fire return intervals, and which has driven variation in stand structure and composition.

Forest Service projects in red fir forests have been a point of contention with collaborators, and is likely to increase when larger, more red fir-focused projects are planned. A major challenge is that little, if any, management requirements or guidance exist for red fir. The Forest Plan (2004 Sierra Nevada Forest Plan Amendment) has little direction regarding treatments in red fir forests. Many project activities with a forest health concern have used the 1989 Eldorado Forest Plan; however, this document also lacks clear guidance for red fir management. A Natural Range of Variation General Technical Report (GTR) has been developed for red fir forests in conjunction with recent forest planning efforts, summarizing the available information on the natural range of variation of function, structure, and composition, and highlighting the departure in our current conditions. The GTR does not address current red fir management; rather, it provides guidance on developing desired conditions and therefore, does not solve the controversy on red fir management.

Intent

The intent of the SOFAR red fir strategy is to have a collaboratively developed and generally agreed upon set of landscape-scale desired conditions and objectives for red fir forests to serve as a foundation for project development. The strategy will inform developing desired conditions at the stand level that also considers the overall landscape. The strategy is not meant to replace forest planning or to serve as a policy document, but rather to capture a shared vision for the current and desired conditions in red fir forest types in the SOFAR area, and to serve as a framework for moving projects forward with

stakeholder consensus. This strategy is to allow for the development of future projects based on overall landscape conditions and not on stand-by-stand objectives.

Resources

- PSW
- Forest Health Program, Regional Office
- TCSI is doing assessments: Rod Kelsey from TNC is doing an assessment on historic range of variability by cover type. It will be broader, but could inform the strategy. PSW is developing what is resilience)
- Sierra and Sequoia Forest Plans have red fir component
- New GTR by Mark Meyer on the natural range of variability for mistletoe
- 2013 Red Fir workshop at the regional level. Not much came out. Need monitoring. Largely triggered by salvage logging in late 70s and early 80s.

Steps

1. *Underway*: Dana and Ben: Develop framework, work plan, and intent
2. *7/25*: Refine proposed framework and review existing information and resources; clarify objectives
3. *8/29/2019*: Hold field visit with Regional Office Forest Health Program (Beverly Bulloan and others)
4. *9/19/19*: Debrief field visit and begin developing desired conditions and treatment options
5. *April 2020*: finalize strategy