

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

Commented [EB-1] : Not sure if we also want to go so far as developing our objectives for this or is this something we are planning on doing later?

Commented [GB2] : I think this is part of our effort.

Commented [SH3R2] : Landscape Vision group confirmed objectives would be hashed out more as part of this strategy development process. The group did not have more specific objectives for this effort beyond avoid project-by-project approach, minimize conflict on red fir management

Commented [EB-4] : Could we be more specific about headwaters? Maybe provide a distinct location of what we are talking about.

Commented [SH5R4] : Landscape Vision group wanted to capture concept that the Headwaters was one of the drivers for creating a red fir strategy, but want the red fir strategy to apply beyond the Headwaters, but stay within the SOFAR landscape (avoid "dictating" what other collaboratives / NFs should do).

Commented [BS6] : I am not aware how the 1989 plan has been influencing forest health activities in red fir. I'd like to understand this better.

Commented [EB-7R6] : I agree I am not quite sure what this means. Since we are treating for forest health we are using the 89 forest plan?

Commented [SH8R6] : Landscape Vision group discussed how the 89 Plan offers details on forest health, but is still vague about red fir. It's the closest thing to "direction" related to red fir.

Commented [BS9] : I'd like to talk about how one decides the desired conditions for stands based on the landscape.

Commented [SH10R9] : Landscape Vision group discussed the desire to not just manage solely at the landscape level; we want to be more specific on how we decide what desired conditions are appropriate at the stand level that still satisfies landscape-level management goals

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 Buluan and others)
4. *9/19/19*: Debrief field visit and begin developing desired conditions and treatment options
5. *April 2020*: finalize strategy