

# GREATER PRAIRIE CREEK ECOSYSTEM RESTORATION PROJECT

## Forest Restoration



Redwood National and State Parks plans to carry out forest restoration by thinning across approximately 9,000 acres of second growth forest. Forest thinning is intended to reduce stand density, redistribute growth among the remaining trees, and enhance forest health in order to restore late-seral conditions. The primary thinning method that would be used under the Proposed Action is variable-density thinning (VDT), which focuses on the enhancement of spatial heterogeneity (i.e., variability) across the landscape by prescribing fine-scale variation in silvicultural treatments that result in a more diverse forest structure. VDT can take many forms. In the case of the Proposed Action, it may incorporate a mixture of silvicultural treatments, including low thinning, crown thinning, gaps, skips, and conifer release.



As part of ground-based operations, a skidder pulls cut trees to a small landing, where they are processed and loaded onto a haul truck.



This series of photos shows a forest from a previous restoration project at the South Fork Lost Man Creek. The photo-point depicts forest conditions before treatment (left), immediately after treatment (center), and 5 years after treatment (right). By opening up the canopy, plants and trees can reestablish in the understory and help promote the recovery of diversity in a relatively short time.



Cable yarding equipment pulls up cut trees on steep slopes to a haul road where they will be removed from the site.



A feller buncher cuts smaller diameter trees as part of a low thin prescription in an ongoing forest restoration project in the upper Lost Man Creek watershed.

Following restoration thinning, some of the cut trees (i.e., biomass) will remain on site to provide habitat, while most of the biomass will be removed to reduce fire risk and partially offset the cost of overall project. The Proposed Action will use various operational methods, including ground-based, skyline, and lop-and-scatter, to achieve this objective. Ground-based operations will occur on slopes less than 40%. Skyline operations will be used on slopes greater than 40%. Lop-and-scatter operations, in which felled trees are cut (i.e., lopped) and broadcast (i.e., scattered) throughout the treatment area for natural decomposition, will occur in areas that cannot be accessed by heavy equipment.

The objectives of forest restoration include:

- Reestablish old growth connectivity in the Greater Prairie Creek watershed
- Enhance structural complexity of the forest
- Encourage the development of the forest understory
- Establish multi-aged stands
- Recover desired composition of overstory tree species
- Increase resilience to environmental stressors (e.g., severe wildfire and drought)

