



Report Summary: Emergency Forest Restoration Teams - Lessons from the First Two Years

In response to the increasing scale and severity of wildfires affecting California's forests, the 2021 California Wildfire and Forest Resilience Action Plan recommended formation of Emergency Forest Restoration Teams (EFRTs) to rapidly provide assistance to private forest landowners using public funding. Pilot EFRTs were formed following the 2021 Caldor, Dixie, and Tamarack Fires, utilizing special disaster relief funding from the U.S. Forest Service and CAL FIRE. Led by two Resource Conservation Districts (RCDs) and one county, the pilot EFRTs developed new assistance programs, completed environmental and cultural reviews, and hired contractors to cut dead trees, remove biomass when possible, process remaining dead wood on site, and plant conifer seedlings. Program practices varied somewhat based upon ecological and social circumstances. University of California Cooperative Extension conducted interviews with professionals involved in the pilot programs and developed a case study on each. We found that:

EFRTs are a successful model for rapid forest restoration assistance on private

lands: Each of the three pilot programs completed forest restoration treatments on a significant number of acres within two years of the fire. Many treatments would not otherwise have been completed. Collectively, the three pilots completed over

Primary Recommendations

- A source of rapid and flexible funding for future EFRTs should be identified, sufficient to address restoration needs in priority areas.
- Local agencies should be supported to plan post-fire restoration programs before a wildfire occurs. Experienced lead agencies could be organized and funded to support EFRTs after a fire.
- EFRT funding should allow flexibility to sell woody material to reduce the volume left onsite as markets allow.
- Environmental and cultural resource permitting for post-fire forest restoration projects should be simplified and clarified.
- State and federal cost share programs should be expanded. These programs and EFRTs should collaborate to accomplish forest restoration treatments on a larger spatial and temporal scale.

2,500 acres of dead tree removal, and about 1,400 acres of conifer planting by the end of 2023 (Figure 1b).

Timely post-fire forest restoration requires rapid and flexible funding: The quick development of the pilot EFRT programs was made possible by rapid, non-competitive disaster relief funding from the U.S. Forest Service and CAL FIRE that did not require prior identification of parcels to be treated. Each program received an initial pulse of funding. To date, one has received

additional non-competitive funds, and one was awarded additional competitive funding through CAL FIRE and U.S. Forest Service grants. Competitive grants, which require an application process, may provide supplemental funding necessary to address the scale of restoration need within an EFRT’s priority areas.

Local agencies are effective EFRT leads:

The two RCDs and one county were successful in leading a rapid post-fire response. Where present, RCDs are well-positioned to develop forest restoration programs after fires due to their local focus, and their status as a state special district helps maintain the integrity of EFRT projects.

EFRTs and state and federal cost share programs can work together to increase the pace and scale of restoration:

The pilot EFRTs completed rapid restoration work at no cost to the landowner within targeted areas affected by the 2021 wildfires. The role of state and federal assistance programs that fund a portion of forest restoration costs to a single landowner through competitive grant processes varied within the fires addressed by the pilot EFRTs. These programs included CAL FIRE’s California Forest Improvement Program, the USDA Natural Resources Conservation Service’s Environmental Quality Incentive Program, and the USDA Farm Service Agency’s Emergency Forest Restoration Program. Where a cost share program funded significant restoration work in a fire area, the EFRT was able to prioritize treatment areas more easily, and the scale of landscape restoration was much greater. Expansion of

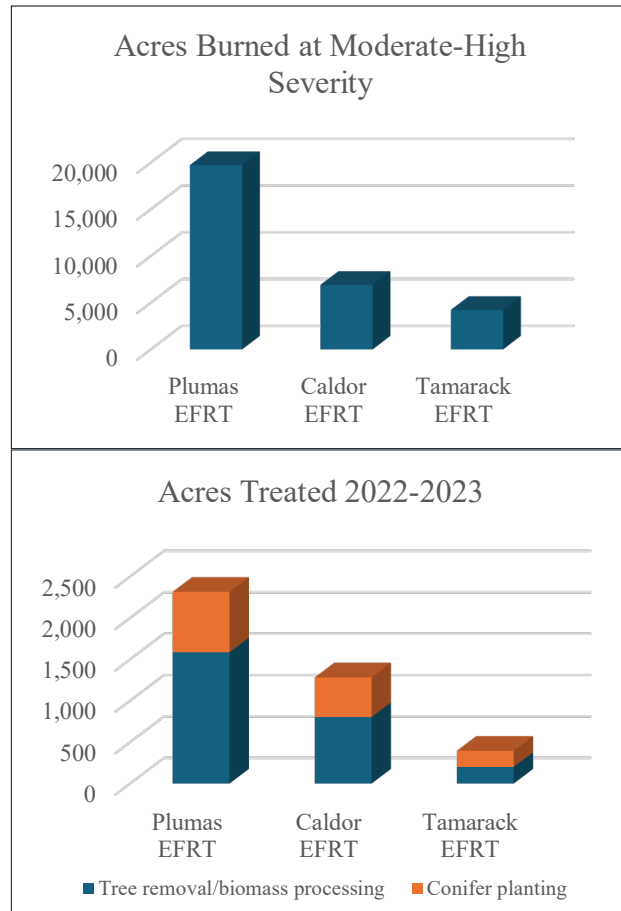


Figure 1 (a) Private non-industrial forestland acres burned at moderate to high severity by the fires addressed by the EFRTs and (b) The number of acres of tree removal and planting completed by each of the programs as of the end of 2023. The scope of the Plumas EFRT included private lands burned in the 2020 North Complex, and the 2021 Beckwourth Complex and Dixie fires. The Tamarack EFRT also completed 2,730 acres of seeding for forbs, grasses, and minimal shrubs.

cost share programs along with continued formation of EFRTs would address the large scale and long timeline of restoration actions needed on private lands after major wildfires. Coordination between programs increases efficiency and restoration impact.

Permitting for post-fire restoration work is complex and confusing:

Due to the complexity of environmental permitting for post-fire forest restoration in California and the lack of a clear permitting pathway, each

of the three pilot EFRTs used a different pathway for environmental and cultural resource review, with some limitations in timeliness and treatments. In some cases, multiple permitting pathways were required for treatments on a single parcel of land. Streamlining and clarifying the permitting process would increase the efficiency and effectiveness of EFRT work.

Commercial sales reduce the volume of woody material that must be treated with public funds: EFRT managers facilitated the sale of logs and wood chips where there was a market for these products either by allowing sales within tree removal contracts or by facilitating and encouraging landowners to arrange sales prior to EFRT treatments. This reduced the volume of material to be processed onsite by EFRTs through chipping, mastication, and/or pile burning, reducing residual fuels and costs.

EFRT programs are complex. Lead agencies would benefit from guidance: Success of the EFRTs required that each lead agency rapidly change work priorities to develop a novel program and navigate many aspects of program management, including selection of partners and collaborators, landowner outreach and communication, permitting, and contracting

for program-level work. Preparation ahead of a fire in the form of funding and guidance would improve program development and implementation, as would guidance from experienced local lead agencies once a fire has occurred.



Figure 2. A healthy ponderosa pine seedling planted by the Caldor EFRT on private land in 2023. Severely burned, untreated forest land can be seen in the background.

To read the entire report, please visit: <https://ucanr.edu/efrt>