# Amador Calaveras Consensus Group Cornerstone (CFLR015) Eldorado and Stanislaus National Forests

## 1. CFLRP Expenditures, Match, and Leveraged Funds:

## a. FY21 CFLN and Matching Funds Documentation

Fund Source – (CFLN Funds Expended)	Total Funds Expended in Fiscal Year 2021
CFLN20 - Stanislaus	\$22,922.00
CFLN21 - Stanislaus	\$192,554.95
CFLN20 - Eldorado	\$40,843.03
CFLN21 - Eldorado	\$157,314.84
Cornerstone Total =	\$413,634.90

Fund Source – (FS Matching Funds)	Total Funds Expended in Fiscal Year	
	2021	
NFSE	\$264,098.35	
RIRI Match	\$684,372.13	
Match Total =	\$948,470.48	

Partner Match and Leveraged Funds	Total Funds in FY 2021
Partner Match	\$200,670
Leveraged Funds	\$1,065,199

# List and description of Budget Line Item (BLIs) used in this report.

BLI	Description
CFLN	Collaborative Forest Landscape Restoration
CFRI	Restoration of Improvements on Forest Lands (RIRI Matching Funds)
NFSE	FS Appropriated Funds

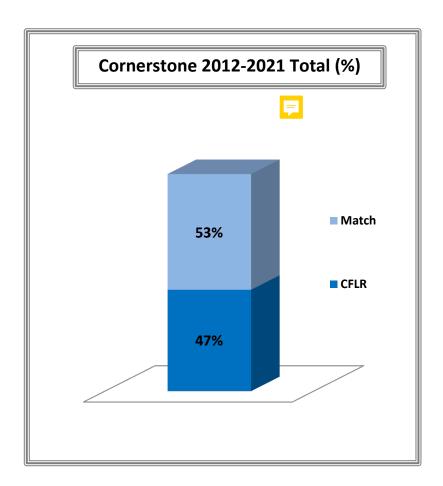
During the Fiscal Year 2021, approximately **\$200,670** partner in-kind contributions were reported for implementation and monitoring within the Cornerstone Project.

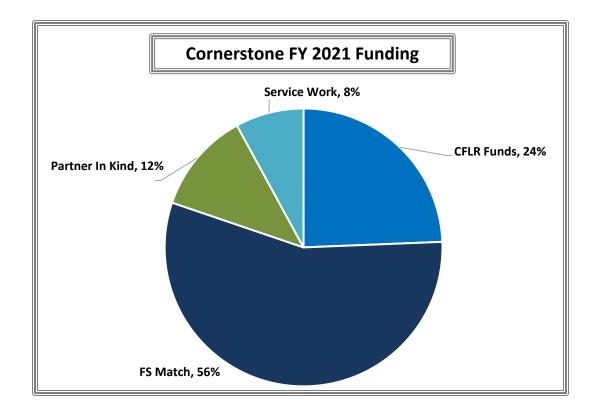
Fund Source – Partner Match	In-Kind Contribution or Funding Provided?	Total Estimated Funds/Value for FY21	Description of CFLRP implementation or monitoring activity	Where activity/item is located or impacted area
Amador Calaveras Consensus Group (ACCG)	In-kind contribution	\$45,136	Collaborative meetings and work group participation. *2021 Federal volunteer hourly rate used to calculate estimated funds (\$28.54/hr).	<ul><li>☑ National Forest</li><li>System Lands</li><li>☑ Other lands within</li><li>CFLRP landscape:</li></ul>
Arnold Rim Trail Association (Docents)	In-kind contribution	\$19,850	Duties consisted of making public contacts, maintain, observe and report trail conditions and provide for public safety.	☑ National Forest System Lands
Calaveras Healthy Impact Product Solutions (CHIPS)	In-kind contribution	\$26,684	Contract Administration, Mechanical and hand fuel reduction work.	<ul><li>☑ National Forest</li><li>System Lands</li><li>☑ Other lands within</li><li>CFLRP landscape:</li></ul>
Upper Mokelumne River Watershed Authority (UMRWA)	In-kind contribution	\$94,000	Worked on three grant funded projects in the Mokelumne River Watershed. Provided support for the use of the Amador Calaveras Consensus Group Mapping Tool completion and maintenance.	☑ National Forest System Lands
Mule Deer Foundation (MDF)	In-kind contribution	\$15,000	Project Management and Contract Administration	☑ National Forest System Lands

Total partner in-kind contributions for implementation and monitoring of a CFLR project across **all lands** within the CFLRP landscape.

Service work accomplishment through goods-for services funding within a stewardship contract (for contracts awarded in FY21)	Totals
Total revised non-monetary credit limit for contracts awarded in	
FY21	\$126,473
None to report	
Revenue generated through Good Neighbor Agreements	Totals
None to report	\$0.00

Revised non-monetary credit limits should be the amount in contract's "Progress Report for Stewardship Credits, Integrated Resources Contracts or Agreements" in cell J46, the "Revised Non-Monetary Credit Limit," as of September 30. Additional information on the Progress Reports is available in CFLR Annual Report Instructions document. Information for contracts awarded prior to FY21 were captured in previous annual reports. Revenue generated from GNA should only be reported for CFLRP match if the funds are intended to be spent within the CFLRP project area for work in line with the CFLRP project's proposed restoration strategies and in alignment with the CFLRP authorizing legislation





**b.** Describe additional leveraged funds in your landscape in FY2021. Leveraged funds refer to funds or in-kind services that help the project achieve proposed objectives but do not meet match qualifications.

During the Fiscal Year 2021, approximately **\$1,065,199** was leveraged by the Amador Calaveras Consensus Group and/or our Partners (i.e., Calaveras Healthy Impact Product Solutions, Mule Deer Foundation, and Upper Mokelumne River Watershed Authority) from in-kind services, restoration treatments, and capacity building that helped achieve Amador Calaveras Consensus Group and Cornerstone project goals and objectives.

Description of Item	Where Activity/Item is Located or Impacted Area	Estimated Total Amount	Forest Service or Partner Funds?	Source of Funds
In-kind Services; workgroups	CFLR all-lands	\$14,407	Partner	Amador Calaveras Consensus
and meetings, web	landscape within		Funds	Group, Calaveras Healthy
oversight, grant and letter	Cornerstone Project			Impact Product Solutions, and
writing.				Consensus Building Institute
				(Administrative and
				Facilitation Services matching
				funds for FY 2021)

CFLRP Annual Report: 2021

Description of Item  South Fork Mokelumne	Where Activity/Item is Located or Impacted Area  CFLR all-lands	Estimated Total Amount	Forest Service or Partner Funds? Partner	Source of Funds  Calaveras Healthy Impact
Project (Phase 3 Treatment)  - 300 acres of fuels reduction, timber, biomass on BLM lands.	landscape in Calaveras County	\$69,093	Funds	Product Solutions – Sierra Nevada Conservancy Grant
South Fork Mokelumne River Watershed Restoration Project (Phase 4) – planning project for 640 acres of private and BLM lands	CFLR all-lands landscape in Calaveras County	landscape in Calaveras Fu		Calaveras Healthy Impact Product Solutions – Sierra Nevada Conservancy Grant
Fuels Reduction in  Bummerville – planning  project for 456 acres of BLM  property to prepare for  future fuels reduction  projects.	CFLR all-lands landscape in Calaveras County	ndscape in Calaveras Fund		Calaveras Healthy Impact Product Solutions – Sierra Nevada Conservancy Grant
Arnold-Avery Hazardous Fuels Reduction & Fuelbreak Maintenance Project on the Stanislaus National Forest and neighboring SPI and private lands.	CFLR all-lands landscape in Calaveras County	\$64,899	Partner Funds	Calaveras Healthy Impact Product Solutions – CAL FIRE California Climate Investment Grant
Upper Mokelumne Forest Restoration – reforestation of 300 acres, restoration of 889 acres and pre- and post- restoration and reforestation monitoring.	CFLR all-lands landscape in Amador County	\$147,299	Partner Funds	Calaveras Healthy Impact Product Solutions – CA Wildlife Conservation Board Grant
View 88 Fuels Reduction and Prescribed Fire Readiness Project – a minimum of 412 acres will be treated along the Highway 88 corridor on the Eldorado NF to prepare site for future prescribed fire	CFLR all-lands landscape in Amador County	\$3,151	Partner Funds	Calaveras Healthy Impact Product Solutions – Sierra Nevada Conservancy Grant
Arnold-Avery Healthy Forest Restoration Project on the Stanislaus National Forest.	CFLR all-lands landscape in Calaveras County	\$570,000	Forest Service	Pacific Gas and Electric (PG&E)

CFLRP Annual Report: 2021

Description of Item	Where Activity/Item is Located or Impacted Total Amount		Forest Service or Partner Funds?	Source of Funds
Arnold-Avery Healthy Forest Restoration Project on the Stanislaus National Forest.	CFLR all-lands landscape in Calaveras County	ands \$180,895 For Falaveras Serv		Sierra Nevada Conservancy

2. Please tell us about the CFLR project's progress to date in restoring a more fire-adapted ecosystem as described in the project proposal, and how it has contributed to the wildland fire goals in the 10-Year Comprehensive Strategy Implementation Plan.

The Comprehensive Strategy Implementation Plan focuses on building collaborative relationships with local, State, Regional, Tribal and National interests. The U.S. Forest Service is working with Amador Calaveras Consensus Group, in which the Fire Safe Councils are active participants, to provide a foundation to meet performance measures inthe future. Fuel treatments conducted in FY 2021 within the Cornerstone project area are expected to reduce the extent and intensity of future wildfires within the Wildland Urban Intermix (WUI). Hazardous fuels havebeen greatly reduced in the project area adjacent to communities at risk.

#### FY2021 Overview

FY21 Activity Description (Agency performance measures)	Total Acres
Number of acres treated by prescribed fire	821.7
Number of acres treated by mechanical thinning	5,083.7
Number of acres of natural ignitions that are allowed to burn under strategies that result in desired conditions	0
Number of acres treated to restore fire-adapted ecosystems which are maintained in desired condition	5,856.7
Number of acres mitigated to reduce fire risk (FP-FUELS-ALL_MIT)	1238.8

#### **Expenditures**

Category	Total Funding Spent
FY2021 Wildfire Preparedness. <sup>1</sup>	N/A
FY2021 Wildfire Suppression. <sup>2</sup>	N/A
The cost of managing fires for resource benefit if appropriate (i.e., full suppression versus managing)	\$0
FY2021 Hazardous Fuels Treatment Costs (CFLN)	\$164,910
FY2021 Hazardous Fuels Treatment Costs (other BLIs)	\$1,832

**2a.** Please provide a narrative overview of treatments completed in FY21, including data on whether your project has expanded the pace and/or scale of treatments over time, and if so, how you've accomplished that – what were the key enabling factors?

## **Amador Ranger District**

### **Calaveras Healthy Impact Product Solutions - Treatment and Planning Projects**

#### WCB-funded Upper Mokelumne Forest Restoration Project

In FY 2021, Amador Ranger District worked closely together with local partner, Calaveras Healthy Impact Product Solutions to begin implementation on the Upper Mokelumne Forest Restoration Project, a \$1,932,000-grant awarded to Calaveras Healthy Impact Product Solutions by the California Wildlife Conservation Board (WCB) to help fund reforestation and post-fire habitat recovery, protection of remnant aspen stands, and hazardous fuels reduction on over 1,900 acres in the Amador Ranger District. As of FY 2021, 146 acres of reforestation, 9.2 acres of aspen fencing, and over 60 acres of roadside thinning has occurred. The Institute for Bird Populations is also contracted under

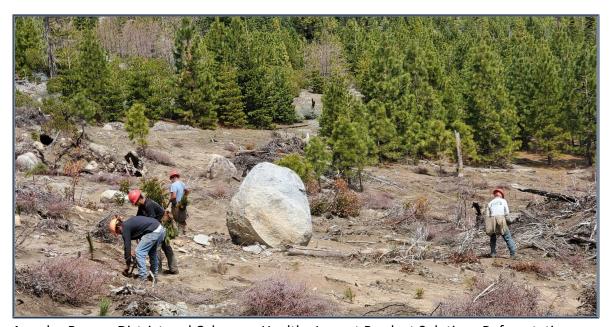
Calaveras Healthy Impact Product Solutions to monitor forest restoration treatments effect on future tree spacing and tree species heterogeneity relative to desired natural conditions. Pre-treatment monitoring is already well underway. A forest-wide closure due to the Caldor Fire did impact this work in 2021. Reforestation, pre-commercial thinning, roadside thinning and aspen stand protection will continue into FY 2022.

<sup>&</sup>lt;sup>1</sup> Include base salaries, training, and resource costs borne by the unit(s) that sponsors the CFLRP project. If costs are directly applicable to the project landscape, describe full costs. If costs are borne at the unit level(s), describe what proportions of the costs apply to the project landscape. This may be as Simple as Total Costs X (Landscape Acres/Unit Acres).

<sup>&</sup>lt;sup>2</sup> Include emergency fire suppression and BAER within the project landscape. Describe acres of fires contained and not contained by initial attack. Describe acres of resource benefits achieved by unplanned ignitions within the landscape. Where existing fuel treatments within the landscape are tested by wildfire, summary and reference the fuel treatment effectiveness report.



Amador Ranger District and Calaveras Healthy Impact Product Solutions Reforestation Pretreatment Meeting



Amador Ranger District and Calaveras Healthy Impact Product Solutions Reforestation

#### View 88 Project under Eldorado National Forest Supplemental Project Agreement

In summer 2021, Amador Ranger District fire and fuels personnel worked with Calaveras Healthy Impact Product Solutions, under an Eldorado National Forest Supplemental Project Agreement, to complete 38 acres of fuels reduction work along Highway 88 performing hand cutting, pruning, chipping and mechanical piling. A forest-wide closure due to the Caldor Fire did impact this work in 2021.

#### SNC-funded View 88 Fuels Reduction and Prescribed Fire Readiness Project

Amador Ranger District worked together with Calaveras Healthy Impact Product Solutions to begin developing the Request for Proposals (RFP) for the Sierra Nevada Conservancy \$999,196-grant for the View 88 Fuels Reduction and Prescribed Fire Readiness Project, awarded to Calaveras Healthy Impact Product Solutions to fund implementation of hazardous fuels reduction and prescribed fire preparation treatments adjacent to State Route Highway 88. Contractor proposal solicitation and subsequent implementation is expected to begin in FY 2022.

#### <u>Upper Mokelumne River Watershed Authority – Restoration Projects</u>

At the end of the 2019 fiscal year, the Upper Mokelumne River Watershed Authority executed a grant agreement with the National Fish and Wildlife Foundation for the project entitled *Improving Drainage by Upgrading Culverts in Eldorado National Forest* (CA) for \$1,286,610.82. Under that Grant Agreement, the Upper Mokelumne River Watershed Authority committed to a minimum of 45 drainage structure improvements and culvert replacements. In the 2021 fiscal year, the Upper Mokelumne River Watershed Authority completed improvements of 75 drainage structures including culvert replacements, installation of water bars, and drainage system improvements. The Upper Mokelumne River Watershed Authority completed the designs to replace or reconstruct culverts and water control structures (e.g., water bars, graded dips, berms) on nearly 60 miles of roads in the Panther Creek and Bear River sub-watersheds in the Power Fire scar in Eldorado National Forest. This work is designed to improve aquatic organism passage, instream flow and watershed health and provides road access for fuels treatments and fire suppression efforts.

#### **Forest Service - Collaborative Meadow Restoration Projects**

#### Foster Meadow Restoration Project and Three Meadows Restoration Project

Two meadow projects took place on the Amador side of the Cornerstone Project, the Foster Meadow Restoration Project was completed early in the fiscal year, and the Three Meadows Project was initiated, and of the three meadows in the project, Tyler Meadow was completed in FY 2021. Both projects were part of the initial CFLR Cornerstone Project, and have received extensive Amador Calaveras Consensus Group involvement, planning through implementation/monitoring. Both projects utilized partnerships, and National Fish and Wildlife grants to plan and implement them. *Foster Meadow* occurs at the headwaters of the Middle Fork of the Cosumnes River. The Foster Meadow

project was completed in partnership by Plumas Corp. in October of 2020, utilizing a NFWF grant. This project design included a channel fill, aquatic organism passage, roughened channel construction, rock weirs, and willow/vegetation planting to affect approximately 35 acres of meadow habitat, and 1.8 miles of stream habitat. The project is expected to improve habitat quality for game species such as mule deer which use the area for fawning, and TES species such as willow flycatcher, and potentially Sierra Nevada yellow-legged frog. The project will also provide for better water retention and slower release of water throughout the dry summer months. This will provide downstream benefits to water users and habitat/wildlife.



Foster Meadow Aquatic Organism Passage

#### **Three Meadows Project**

The Three Meadows Project is within the higher elevations of the Middle Fork of the Mokelumne River. This project was completed in partnership with the Amador Resource Conservation District (Amador RCD), utilizing a NFWF grant. The project was designed to restore hydrologic function in three meadows: Tyler Meadow, Upper Onion Valley Meadow, and High Onion Meadow. Tyler Meadow was completed mid-summer of 2021, and although the work was also completed in both Upper and High Onion meadows, it was not completed until mid-October and does not count towards this year's accomplishments. The restoration efforts in High and Upper Onion meadows will be accounted for in fiscal year 2022. Tyler Meadow's accomplishment are approximately 2.5 acres. The treatment was to install 11 log weirs to raise the water table of this small meadow and reverse some of the erosion and

down cutting of the channel which had occurred over time. Willows were also planted as part of the construction. The project will improve game habitat for mule deer, and forage for the cattle grazing of the Pardoe Allotment.

Both projects were completed in challenging times. COVID-19 restrictions, forest closures, and the Caldor Fire resulted in some delays and complications during implementation. These were overcome through diligent work, creativity, and great flexibility shown by both partners and their contractors (Amador Calaveras Consensus Group, Plumas Corp., and Amador RCD) and the Eldorado National Forest staff.



Tyler Meadow Log Weir Placement

#### Calaveras Ranger District

Working together with our partners Calaveras Healthy Impact Product Solutions, Mule Deer Foundation, and Upper Mokelumne River Watershed Authority has allowed the Calaveras District to increase pace and scale as we continue to strengthen these relationships through the shared values of trust and collaboration. The result is the mutual benefit of creating a more resilient landscape that serves everyone's goals and interests. As projects create lessons learned, our partners continually improve their own processes and efficiencies. Three key enabling factors that allow us to accomplish an increased pace and scale are shared values, strong relationships, and open channels of communication across a network of partners and stakeholders. Through

collaboration and partnership, agencies, individuals, and varied

interest-groups with different goals are working together towards the common goal of a resilient landscape and reduced fire severities. The local communities are also recognizing the employment opportunities and intent to increase pace and scale through these partnerships.

A total of 2,136 fuels reduction treatment acres were accomplished in FY21. Mule Deer Foundation awarded and completed 785 acres of mastication and upgraded the Moore Creek, Highlands Lake and Mosquito Lake campgrounds. Upper Mokelumne River Watershed Authority completed 431 acres of hand thinning and 184 acres of mastication in the Hemlock project area. The Forest Service harvested 336 acres of timber within in the Cabbage and Thompson sale areas in the Hemlock project area and Calaveras Healthy Impact Product Solutions completed approximately 400 acres within the Arnold Avery hazardous Fuelbreak project.

#### **Arnold Avery Noxious Weed Infestation and Treatment**

#### French Broom Population

In the Arnold Avery Healthy Forest project, a population of the noxious weed French Broom (*Genista monspessulana*) was discovered with approximately 50 seedlings. Since most of the seedlings were less than 6" tall, all the seedlings were pulled by hand, even the larger more mature French Broom that had grown to 18-inches was pulled by hand. Plants were placed in large garbage bags and removed to a disposal site. With the minimal number of seedlings, hand treatment seemed the best option to avoid potential resprouting. Post treatment effectiveness was conducted 2-4 weeks after initial treatment and monitoring of the site will continue until infestation and regrowth is controlled.



Noxious Weed (French Bloom Flowering)

#### **Arnold Rim Trail Association (ARTA)**

In FY 2021 the Arnold Rim Trail Association had approximately 488.5 hours donated on docent patrols and 207 hours donated to other activities like grant applications and ArcGIS work, however, due to COVID there was a significant decrease in the number of volunteer hours than seen in previous years. There were a total of 6 Saturday volunteer days where the Arnold Rim Trail Association totaled 168 volunteer hours and averaged about 10 volunteers each day. These volunteers were able to restore and maintain countless miles of trails for the benefit of all users to public lands.





Volunteers work on the Arnold Rim Trail.

#### Biochar Plots and Forest Restoration within the Arnold Avery Healthy Forest Project

This interdisciplinary project involves R5 Regional Staff, the Pacific Southwest Research Station, Humboldt State University, University of Idaho, the Rocky Mountain Research Station, the Tahoe National Forest, and the Stanislaus National Forest. Biochar is the utilization of woody biomass

generated from forest restoration treatments and aids in long-term carbon sequestration. Biochar has the potential to increase soil water holding capacity and nutrient retention and may inhibit invasive weed growth. These positive benefits will likely help residual trees and seedling be more resistant to diseases and insects. Biochar benefits are primarily focused on carbon sequestration with biochar being applied to various forest sites.



**Biochar Dispersal** 

#### Calaveras Healthy Impact Product Solutions -Treatment and Planning Projects

## District Recreational Site Rehabilitation under a Stanislaus National Forest Supplemental Project Agreement

In late summer 2021, Calaveras Ranger District staff worked with Calaveras Healthy Impact Product Solutions, under a Participating Agreement, to implement recreational site rehabilitation on the district, including fuels reduction treatments, fence construction and slash piling.

#### CAL FIRE-funded Arnold-Avery Hazardous Fuelbreak Maintenance Project

Calaveras Ranger District worked closely together with Calaveras Healthy Impact Product Solutions to begin implementation on the \$1,980,749.00- CAL FIRE grant awarded to Calaveras Healthy Impact Product Solutions to implement the Arnold-Avery Hazardous Fuelbreak Maintenance Project promote landscape-scale forest restoration and watershed protection through strategic hazardous fuels reduction and provide critical protection of life and private property within multiple at-risk and low-income communities on approximately 900 acres. In FY 2021, project implementation began in Project Area C (near Arnold, CA). There is also a monitoring component to this project that was developed in partnership with the Amador-Calaveras Consensus Group (Amador Calaveras Consensus Group) Monitoring Work Group. The monitoring effort is aimed to measure the efficacy of fuelbreak treatments across treatment types, assess project implementation affects to



FS Staff, Professional Forester, and Calaveras Healthy Impact Product Solutions (CHIPS) Pre-Operations Meeting

ecological, socio-economic, and collaboration-related indices, and ensure compliance. Pre-treatment monitoring was initiated in FY 2021.



Calaveras Healthy Impact Product Solutions Contract Mastication and Hazard Tree Removal in the Arnold Avery Fuelbreak

#### **Black Springs Meadow Restoration and Protection**

The purpose of the Black Springs Meadow Restoration project is to reduce further resource damage, decrease conifer encroachment and restore the natural processes of the meadow. The primary objectives were to enhance hydrologic and biological characteristic, while also protecting historic resources. The project included the removal and replacement of the existing fence to encourage motorized users to keep within legal routes and the cutting and hand piling of conifer trees less than 8 inches to help restore the hydrologic function and remove the seed source for future conifer encroachment. Calaveras Healthy Impact Product Solutions completed this 10-acre meadow restoration project and approximately 500 feet of fence enclosures.



Black Springs Meadow Restoration and Fence Enclosure

#### Federal Partners: Bureau of Land Management (BLM)

#### SNC-funded South Fork Mokelumne River Project Phases 3-4

Phase 3 of the project, 300 acres of fuels reduction, timber, biomass on Bureau of Land Management lands, is near completion as of the date of this report. Phase 4 of the project, planning project for 640 acres of private and Bureau of Land Management lands, is underway and surveys have been completed as of the date of this report.

#### **SNC-funded Bummerville Fuels Reduction**

This planning project is for 456 acres of Bureau of Land Management property to prepare for future fuels reduction projects. Planning efforts under this grant are ongoing as of the date of this report.

#### Cabbage Patch Restoration Project

During the 2021 fiscal year, Upper Mokelumne River Watershed Authority completed all 131.4 acres of additional treatments under the modified Sierra Nevada Conservancy grant agreement. Upper Mokelumne River Watershed Authority is on schedule to have this project completed and a final report submitted to SNC by December 31, 2021. The original SNC Grant Agreement Committed to a Minimum 314 Acres, but Upper Mokelumne River Watershed Authority was able to complete a grand total of 449.4 Acres from 2018 to 2021, exceeded minimum acres by 143%.



Cabbage Restoration Project – Before



Cabbage Restoration Project – After



Black Springs Hand Thinning / Burn Piles

#### **Black Springs Restoration Project**

During the 2021 fiscal year, Upper Mokelumne River Watershed Authority worked closely with the USFS to implement fuels treatments in additional priority areas with all remaining funds. Upper Mokelumne River Watershed Authority conducted work in both Black Springs and the West Calaveras Thin treatment areas. In Black Springs Upper Mokelumne River Watershed Authority completed 431 Acres of Hand Thinning for a total of 812.2 acres treated to date and 71.6 Acres of Mechanical Thinning for a total of 151.6 acres treated to date. In West Calaveras Thin Upper Mokelumne River Watershed Authority completed 92 Acres of Mechanical Treatments for a total of 252 Acres treated to date.

The original Sierra Nevada Conservancy grant agreements was for a total commitment of a minimum 1214 Acres. Upper Mokelumne River Watershed Authority has completed a grand total of 1,236.1 acres from 2018 to 2021, exceeded minimum acres.

#### **Mule Deer Foundation – Restoration Work**

The Mule Deer Foundation has a long and positive history as a partner assisting the Forest Service with implementing important projects, creating resilient landscapes and building and maintaining important recreation infrastructure. The Mule Deer Foundation currently has two active supplemental project agreements (SPA's): the Mule Deer Foundation Arnold Avery SPA and the Calaveras SPA, with the primary focus to improve and maintain resilience to large scale disturbances (i.e., drought, bark beetle, high-intensity wildfire), establish a healthy and resilient forest, and improve campground infrastructure.

#### **Arnold Avery Healthy Forest Project**

Mule Deer Foundation contractors completed 785 acres of mastication and hazard tree removal in the Wildland Urban Interface near the community of Arnold and White Pines. The project is fully funded by the SNC and Pacific Gas and Electric (PG&E). Additional funds have been provided from the California Department of Forestry and Fire Protection (CAL FIRE), California Climate Investment (CCI) grant, allowing us to add an additional 615 acres for a grand total of 1,400 treatment acres.



Arnold Avery Wildland Urban Interface Fuelbreak

#### Moore Creek Campground Infrastructure Improvement

Mule Deer Foundation completed a major reconstruction of the Moore Creek Campground on the northern edge of the Stanislaus National Forest. All campsites were upgraded and defined including picnic tables, fire rings, road reconstruction, signage, bathroom painting, and exclusion fencing in and around the entire campground. As part of the project, 60 hazard trees were also felled and used as definition and exclusion barriers withing the campground.



Moore Creek Campground Improvement

#### Picnic Table Replacement

Mule Deer Foundation purchased 60 new picnic tables with funds in the Calaveras Supplemental Project Agreement to replace existing dilapidated picnic tables in the Highlands Lake Campground, the Mosquito Lake Campground and the Stanislaus River Campground. They contracted with the Greater Valley Conservation Corps to remove the old tables and assemble and install the new picnic tables the three campgrounds.



Highlands Lake Campground Picnic Table Installation

# 2b. How was this area prioritized for treatment? What kinds of information, input, and/or analyses were used to prioritize?

The Highway 88 corridor, a major east-west State highway along a main ridgeline, is a primary fuel break forAmador Ranger District. The entire area is within Wildland Urban Interface (WUI) Defense. Other fuels treatments anchor off Highway 88 (for example, the Omo Ranch Road shaded fuel break) which is needed toenable prescribed burning of larger areas.

Ongoing project implementation often require fuels maintenance to achieve desired conditions. For example, the Power Fire Reforestation project has site preparation piles that need to be burned to enable spring planting. Additionally, the Foster Firs timber sale included service contract non-commercial thinning work that also created piles which require to be burned or otherwise removed. Ongoing project implementation is a priority for fuels treatment to avoid a backlog of work overtime.

The <u>Mokelumne Watershed Avoided Cost Analysis</u> was used to guide treatment objectives, all treatments described in Question 2a are in high or very high wildfire hazard areas as well as near communities, high userecreation area, and near power and water infrastructure developments.

#### Mapping Tool Project – Mokelumne, Stanislaus, Cosumnes Watersheds

To engage our partners and increase pace and scale, district staff worked closely with members of Amador Calaveras Consensus Group and Upper Mokelumne River Watershed Authority to complete

a high-tech and sophisticated GIS mapping tool project funded by the Sierra Nevada Conservancy. The database includes vegetation layers, fire history, fire management status, etc. and it is designed to help prioritize areas most in-need of fuels treatments in the Mokelumne and Cosumnes watersheds and portions of the Stanislaus watershed. In 2021, Upper Mokelumne River Watershed Authority completed the mapping tool and received funding for a NEPA Planning Project using the mapping tool to identify the highest priority areas in need of treatment. This tool is designed to increase the capacity of the Upper Mokelumne River Watershed Authority and the Amador Calaveras Consensus Group to strategically plan and develop projects that will assist the collaborative in meeting its mission of promoting fire safe communities, healthy forests and watersheds, and sustainable local economies.

# 2c. Have there been any assessments or reports conducted within your CFLRP landscape that provide information on cost reduction, cost avoidance, and/or other cost related data as it relates to fuels treatment and fires?

In 2014, The Nature Conservancy, Sierra Nevada Conservancy, and the USFS completed the. <u>Mokelumne Watershed Avoided Cost Analysis</u>. The Calaveras Ranger District has experienced a less severe fire season when compared to recent year, while the Amador Ranger District has experienced a more intense FY 2021 fire season due to the Caldor fire.

#### <u>Amador Ranger District - Fiscal Year 2021 Fire Report</u>

The Amador Ranger District experienced a higher-than-average fire activity during FY21 with 13 wildfire fires totaling 14,754 acres. The Caldor fire, which was the largest of the wildfires, burned a total of 221,901 acres, of which 170,054 acres were on the Eldorado National Forest and of those 14,727 acres were on the Amador Ranger District. The fire destroyed 1,003 residential and commercial building, injured 7 first responders and 2 civilians and took an estimated 5,072 personnel, 357 engines, 88 water tenders, 78 hand crews, 79 dozers, 31 helicopters and 12 airtankers to full containment.

Amador R	anger i	District :	Total – :	14,75	54 Acres
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Fire Name	Disc Date	*Stat. Cause	Size (acres)
Sopiago	5/17/2021	Misc.	0.1
Sherman	5/22/2021	Misc.	0.1
Twin	6/22/2021	Misc.	0.1
Mud	6/26/2021	Misc.	1.2
Deer	7/5/2021	Misc.	0.1
Buckskin	7/19/2021	Lightning	0.2
Cat	7/19/2021	Misc.	0.0
Summit	7/20/2021	Lightning	22.0

	7/22/2224		0.4
Little Bear	7/23/2021	Misc.	0.1
Bear	7/29/2021	Misc.	0.1
Deadwood	8/1/2021	Misc.	2.8
Lower Bear	8/15/2021	Misc.	0.0
Caldor	8/14/2021	Under Investigation	14,727*

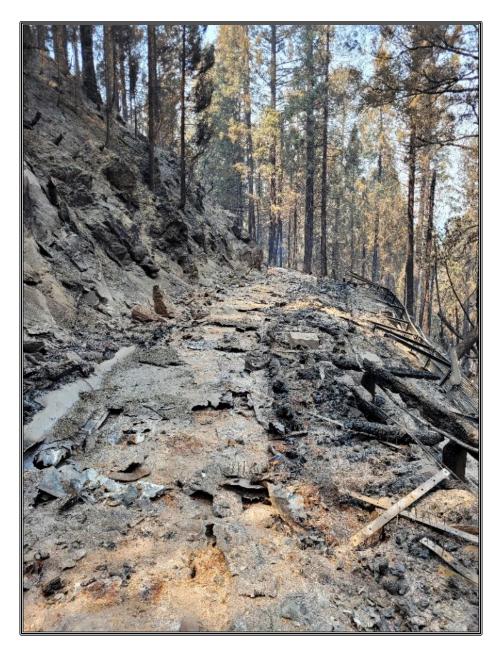
<sup>\*</sup>Amador RD acres only. Total Caldor Fire 221,901 acres.

#### The Caldor Fire

The Caldor Fire started on August 14, 2021, in steep and rugged terrain near the middle fork of the Cosumnes River and Little Mountain, south of Pollock Pines in El Dorado County. The area has few roads, but firefighters were directly attacking the fire with hand crews, engines, heavy equipment, and aircraft. On August 15th, evacuations were ordered within 1.5-mile radius of the fire for Grizzly Flats, Somerset, Sly Park Reservoir and Pollock Pines. On August 16th the fire exceeded suppression efforts due to high winds and high fuel loads in the area. By the evening of August 16th, the fire had grown to over 6,500 acres. This prompted Governor Gavin Newsom to declare a state of emergency for El Dorado County. On August 17th the fire grew to 30,000 acres as it rapidly moved northeast, crossing the North Fork Cosumnes River. The fire burned with such high intensity through areas that there was 100% tree mortality. By August 20th, the fire had almost reached Highway 50, forcing the highway to close and more evacuations to be ordered. By August 27th, the fire had crossed Highway 50 and with increased winds, drove the fire rapidly towards the Lake Tahoe Basin. As of Sunday night August 29th, evacuation orders were sent out to some residents of the Tahoe Basin as well as locations in Amador County. By August 30th, the fire had reached Echo Summit, less than 5 miles from the Lake Tahoe Basin. While South Lake Tahoe had not yet been ordered to evacuate during the early morning briefings that day, by the early afternoon the entire city of South Lake Tahoe (22,000 people) were ordered to evacuate. Due to the focused efforts of fire crews aggressively reducing ladder fuels and developing a fire perimeter around structures, evacuation orders were lifted approximately one week later. By October 2nd, the fire was at 221,775 acres and 91% containment. Full containment was reached on October 21st, 2021 ("Caldor Fire Incident Information").



Burning east of Sacramento, though initially small, the Caldor Fire exploded in size on August 16 as winds picked up. Photo Courtesy of Wikipedia.



High intensity burned area and nearly 100% tree mortality. This was once the site of a historic wooden flume and critical water conveyance infrastructure which was completely consumed by the Caldor Fire.



Burned area near Strawberry Lodge. Photo taken by Karen Quidachay. November 5, 2021.



Burned area near Twin Bridges on Highway 50. Photo taken by Karen Quidachay. November 5, 2021.

#### **Calaveras Ranger District - Fiscal Year 2021 Fire Report**

The Calaveras Ranger District within the Cornerstone footprint experienced a lower-than-average fire activity during FY21 with 9 fires of which 4 were lightning caused and all were less than 0.5 acres. Below normal snowpack and early season drying conditions allowed for early curing of high elevation fuels. Record high Energy Release Component and Burning Index were observed throughout the summer months. Frequent thunderstorms passed through the district in June and July, resulting in lightning caused fires in the higher elevation areas. Most fires were contained in initial attack. These fires resulted in approximately 1.3 acres of impacted area.

Pile Burning - Regional direction for prescribed fire implementation and staffing shortages limited burning opportunities across the region through the 2021 fall burn season. A total of 821.7 acres of pile burning was accomplished in FY21 on the Calaveras Ranger District.

Calaveras Ranger District Total - 1.3 Acres

Fire Name	Disc Date	*Stat. Cause	Size (acres)
Cabbage	01/20/21	Misc.	0.1
Hawkwind	04/01/21	Misc.	0.1
Forest	05/17/21	Misc.	0.1
Salt	05/20/21	Lightning	0.1
Big	06/02/21	Campfire	0.1
Cabin	06/18/21	Debris Burning	0.1
Highland	07/19/21	Lightning	0.1
Bloomfield	07/29/21	Lightning	0.1
Middle	07/21/21	Lightning	0.5



Calaveras Ranger District fire crew clearing line around an Incense cedar (Calocedrus decurrens) struck by lightning on July 29, 2021.



Calaveras Ranger District fire crew burning piles along Highway 4 in the Hemlock project.

# 3. What assumptions were used in generating the numbers and/or percentages you plugged into the TREAT tool?

Part-time and full-time jobs and labor income estimates were derived from local records using the following assumptions:

Description	CFLR/N Funds Only	All Funds (CFLR/N and Match)
Funding and Employment	CFLR/N Funds	All Funds
Total Funding	\$413,635	\$2,113,000
Percent of Funding used for Contracted Work	66%	13%
Percent of Funding used for Force Account Implementation and		
Monitoring	19%	18%
Annual Force Account FTEs for Implementation and Monitoring	10	10
Contract Funding Distribution	CFLR/N Funds	All Funds
<b>Equipment intensive</b> - (No Commercial Products). Includes chipping in the woods and mechanical treatments such as non-commercial logging, mastication. Grapple piling. Excavator work, tree-tipping, etc.	61%	58%
Labor intensive - (No Commercial Products). Includes labor intensive, simple mechanical treatments such as thinning with chain saws, hand piling, prescribed burning, tree planting, etc.	26%	29%
Material-Intensive Work - (No Commercial Products). Projects where materials represent a significant portion of project costs. Includes road work, culvert replacement, in-stream restoration, fence construction, some trail work, etc.	0%	0%
Technical Services - (No Commercial Products). Includes stand exams, marking, layout, biological surveys, cultural surveys, invasiveweed	0%	0%
spraying, etc.  Professional Services - (No Commercial Products). Includes studies completed by scientists, engineering design, acquisition or analysis of remotely sensed data, scientific modeling, workshops, etc.	14%	13%
Contracted Monitoring (Does not include in-kind and volunteer contributions)	0%	0%
Amount of Harvest Volume	CFLR/N Funds	All Funds
CCF (100 cubic feet)	33,841	37,401
MBF (1000 board feet)	0	0
Dry Tons	0	2,417
Cords	0	0
Product Distributions	CFLR/N Funds	All Funds
Sawmills and Wood Preservation	100%	100%
Veneer and Plywood Manufacturing	0%	0%

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Oriented Strand Board	0%	0%
Roundwood for pulp, paper, paperboard, paperboard container mills	0%	0%
Roundwood for Biomass Energy Plant Small	0%	0%
Roundwood for Biomass Energy Plant Large	0%	0%
Other Timber Products - Post and Pole	0%	0%
Other Timber Products - not elsewhere classified	0%	0%
Other Timber Products - Miscellaneous	0%	0%
Other Timber Products -Engineered	0%	0%
Firewood (Commercial)	0%	0%
Firewood (Home Use)	0%	0%

Compared to FY 2020, the Jobs and Income results on the CFLR funds only are higher, but the results for the CFLR and matching funds tab are lower. These differences are primarily driven by changes in commercial timber volume between years.

#### FY 2021 Jobs Supported/Maintained (CFLN and matching funding):

FY 2021 Jobs Supported/Maintained	Jobs (Full and Part- Time) (Direct)	Jobs (Full and Part- Time) (Total)	Labor Income (Direct)	Labor Income (Total)
Timber harvesting component	71	109	\$3,960,090	\$4,643,114
Forest and watershed restoration				
component	2	3	\$103,750	\$159,621
Mill processing component	71	139	\$4,441,351	\$8,004,803
Implementation and monitoring	11	11	\$238,127	\$263,619
Other Project Activities	0	0	0	0
TOTALS:	155	263	\$8,743,319	\$13,071,157

# 4. Describe other community benefits achieved and the methods used to gather information about these benefits. How has CFLR and related activities benefitted your community from a social and/or economic standpoint?

The Cornerstone collaborative identified the following community benefits from FY 2021:

- Developed a 5-year Strategic Plan to promote a productive and sustainable future for Amador Calaveras Consensus Group.
- Reduced the risk of uncharacteristic fire that could harm people and property.
- Increased public awareness of restoration efforts in the Cornerstone all-lands planning area.
- Increased participation of local Tribes in forest management activities.
- Leveraged investment from other federal, state, and private sources.
- Involved diverse community members in project planning, implementation, and monitoring.
- Increased partner capacity to fund and implement restoration projects.
- Attracted regional attention as a model for community forest collaboration.

- Promoted open discussion of forest issues related to Amador Calaveras Consensus Group goals through on-the-ground projects.
- Provided opportunities for community learning through project field trips.
- Represented Amador Calaveras Consensus Group with statewide collaborative groups as part of the annual SCALE (Sierra to California All Lands Enhancement) meeting.

Indicator	Brief Description of Impacts, Successes, and Challenges	Links to reports or other published materials (if available)
Preserving cultural	Calaveras Healthy Impact Product Solutions:put	http://www.calaverasCalaveras
heritage of	local Native Americans to work restoring	<u>Healthy Impact Product</u>
sites/resources	traditional cultural sites.	Solutions.org/contact.html
Responses to	Sierra Institute for Community and	https://sierrainstitute.us/program/
surveysabout	Environment: worked with Amador Calaveras	socioecomonitoring/
collaboration	Consensus Group and community to draft	
conducted locally	Socioeconomic Monitoring Report.	
	National Fish and Wildlife Foundation:	https://www.nfwf.org/programs/
Project	partnership to restore fire affected watersheds	northern-california-forests-and-
partnership	and ecosystems on national forest lands.	<u>watersheds</u>
composition		
	California Fire Safe Council: Leveraged investment	http://www.amadorfiresafe.org
	from other federal, state, and private sources.	
		http://www.calaverasfiresafecou
		<u>ncil.org</u>
Relationship	Amador Calaveras Consensus Group:	http://acconsensus.org/
building/collaborati	continued and expanded collaboration and	
vework	communication.	

#### 5. Based on your project monitoring plan, describe the multiparty monitoring process.

The Amador Calaveras Consensus Group Collaborative has a team with diverse knowledge, technical resource skills, planning expertise, and perspectives on forest restoration and community conditions actively defining and implementing the <u>Cornerstone Monitoring Strategy</u>. This monitoring team includes a variety of USFS staff, representatives from environmental and non-profit organizations, and the forest products industry. The monitoring strategy describes what will be monitored, how to conduct the monitoring, how the monitoring results will be used, and the responsible party for each step in the process. The monitoring strategy provides guidance in:

- Determining if restoration projects are implemented in accordance with the project design and intent.
- Determining if the outcomes and effects of restoration actions are achieving desired conditions.
- Identifying whether the restoration treatments need to be modified to accommodate results of monitoring.

The following table identified what is being monitoring and what parties are involved in monitoring. Broad monitoring results can be found in the 2019 Ecological Indicator report. In addition, all ecological monitoringfor the Amador Calaveras Consensus Group that has been summarized to date can be found on the SCALE (Sierra to California All Lands Enhancement) website on their ecological monitoring page.

Current Monitoring Efforts within the Cornerstone Project Area					
Monitoring Project	Perspective	Discipline	Responsible Party		
Amador Calaveras Consensus Group Collaborative Monitoring Survey	Collaboration	Other	Region 5 Ecology, Amador Calaveras Consensus Group		
Annual Invasive Plant Surveys	Ecological Effectiveness	Invasive Species	Eldorado NF, Stanislaus NF		
Aspen/Meadow Restoration Monitoring  – Hemlock Restoration Project	Ecological Effectiveness	Watershed	Stanislaus NF		
Bales Snow Study	Ecological Effectiveness	Watershed	UC Merced		
Biochar Research Study	Ecological Effectiveness	Soils	Rocky Mountain Research Station, Stanislaus NF		
BMP Monitoring Database - FS National	Implementation	Other	USFS Region 5 Ecology, ENF, SNC		
CA Department of Water Resources	Ecological Effectiveness	Watershed	CA State		
Caples Creek - Aspen Monitoring	Ecological Effectiveness	Hardwoods, Riparian	USFS Region 5 Ecology, ENF, SNC		
Caples Watershed Avian Monitoring	Ecological Effectiveness	Conifer Forest, Terrestrial Wildlife	Eldorado NF		
Designation by Prescription Implementation Monitoring – Hemlock Restoration Project	Implementation	Conifer Forest	Stanislaus NF		
Edart - change detection for monitoring mortality	Ecological Effectiveness	Conifer Forest	USFS RSL		
Effectiveness of conifer removal in meadows	Ecological Effectiveness	Riparian	USFS Region 5 Ecology, ENF, SNC, Amador Calaveras Consensus Group members		
Forest Inventory Analysis - FIA	Ecological Effectiveness	Conifer Forest	USFS		
Forest Treatment Effectiveness for Reducing Tree Mortality	Ecological Effectiveness	Conifer Forest	USFS Region 5 Ecology, ENF, SNC		

Current Monitoring Efforts within the Cornerstone Project Area					
Monitoring Project	Perspective	Discipline	Responsible Party		
Identifying desired conditions for plantation management and providing tools to identify planting and thinning techniques to reach desired conditions	Ecological Effectiveness	Conifer Forest, Fire and Fuels, Other	USFS Pacific Southwest Research Station, University of Michigan		
Inventory and monitoring of post fire forest succession in the Power Fire area, including comparison of treated and untreated areas	Ecological Effectiveness	Conifer Forest	UC Davis		
Mixed Conifer Monitoring - Project Effectiveness - Caples, Hemlock, Panther	Ecological Effectiveness	Conifer Forest, Fire and Fuels	UC Davis, USFS Region 5 Ecology		
Monitoring of birds and bats in the Power Fire: ecological implications for post-fire restoration	Ecological Effectiveness	Terrestrial Wildlife	UC Davis, Point Blue		
Ongoing Invasive Plant Treatment Monitoring	Ecological Effectiveness	Invasive Species	Eldorado NF, Stanislaus NF		
Ongoing Sensitive Plant Monitoring	Ecological Effectiveness	Sensitive Plants	Eldorado NF, Stanislaus NF		
Planning and Implementation of Prescribed Burns in the Power Fire	Ecological Effectiveness	Conifer Forest, Fire and Fuels	USFS Pacific Southwest Research Station, UC Berkeley		
Post implementation field trip implementation monitoring	Implementation	Other	USFS Region 5 Ecology, ENF, SNC, Amador Calaveras Consensus Group members		
Power Fire Pre-Commercial Variable Thinning	Ecological Effectiveness	Conifer Forest	Institute of Bird Populations (Amador Calaveras Consensus Group Monitoring WG)		
Power Fire Reforestation	Ecological Effectiveness	Conifer Forest	Eldorado NF		
R5 Range Monitoring - vegetative trend transects meadows	Ecological Effectiveness	Riparian	USFS Region 5 Ecology, ENF, SNC		
Red Fir Vegetation Management Monitoring	Ecological Effectiveness	Conifer Forest	UC Davis, USFS Region 5 Ecology		
Restoring services provided by mature California black oak in the Power Fire	Ecological Effectiveness	Hardwoods	USFS Pacific Southwest Research Station		
Social/Economic Monitoring	Social Economics	Social Economics	Sierra Institute, Stanislaus NF (SNC) and Eldorado NF (ENF), Amador Calaveras Consensus Group		
Travel Management Implementation Monitoring	Implementation	Other, Soils	Eldorado NF, Stanislaus NF		

. Current Monitoring Efforts within the Cornerstone Project Area					
Monitoring Project	Responsible Party				
USGS Stream Flow Data	Ecological Effectiveness	Watershed	USGS		
Using birds to effectively monitor the ecological restoration of post fire	Ecological Effectiveness	Terrestrial Wildlife	Point Blue		
Western bumble bee distribution and management in the Power Fire area.	Ecological Effectiveness	Terrestrial Wildlife	Institute of Bird Populations		

# 6. FY 2021 Agency performance measure accomplishments:

Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost (\$) (Contract Costs) <sup>3</sup>	
Forest Improvements				
Acres of forest vegetation established FOR-VEG-EST	Acres	459	\$0.00	
Acres of forest vegetation improved FOR-VEG-IMP	Acres	323	\$0.00	
Volume of Timber sold TMBR-VOL-SLD-MMBF	MMBF	20.65	\$0.00	
Volume of timber sold TMBR-VOL-SLD-CCF	CCF	37,401	\$0.00	
Acres covered by stewardship contracts/agreements STWD-CNTRCT-AGR-AC	Acres	1426.5	\$0.00	
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green Tons	2417	\$0.00	
Fuels Trea	tments			
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acres	2183.3	\$0.00	
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	4379.4	\$0.00	

<sup>&</sup>lt;sup>3</sup> Please include the costs associated with a contract to complete acres reported, if this level of detail is available, including partner funds

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Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost (\$) (Contract Costs) <sup>3</sup>
Prescribed Fire Accomplishments	Acres	821.7	\$0.00
Habitat Imp	rovement		
Acres of stream habitat restored or enhanced HBT-ENH-STRM-ECO-AC	Acres	1.6	\$0.00
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	1.3	\$0.00
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	47	\$0.00
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acres	17	\$0.00
Road Impro	vements		
Miles of high clearance system roads receiving maintenance RD-HC-MAINT	Miles	5	\$0.00
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles	7.8	\$0.00
Miles of road decommissioned RD-DECOM-SYS	Miles	.24	\$0.00
Miles of high clearance system road reconstruction RD-HC-RCNSTR	Miles	.1	\$0.00
Trail Impro	vements		
Miles of system trail maintained to standard TL-MAINT-STD	Miles	5.9	\$0.00
Watershed Improvement			
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	32.5	\$0.00

Units accomplished should match the accomplishments recorded in the Databases of Record.

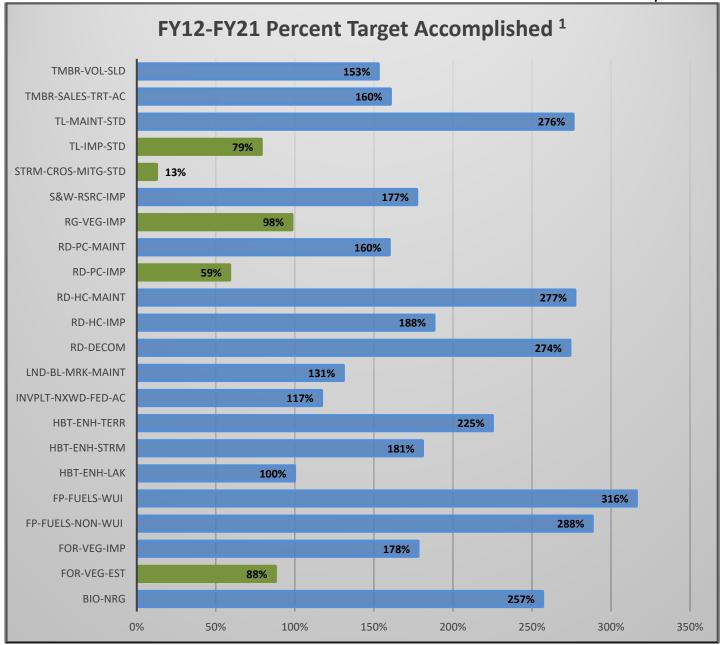
#### **Cornerstone Project Implementation**

The Cornerstone CFLR just completed its 10<sup>th</sup> year of project implementation. Work in the initial years focused on watershed restoration; aquatic, terrestrial wildlife, and rangeland restoration; and fuels reduction in the Wildland Urban Intermix (WUI). Many of the Cornerstone restoration projects that have actions to decommission, maintain, or improve roads have now been implemented. In our 10<sup>th</sup> and final year, all actions related to improving forested and meadow environments, timber sale stewardships, fuel break maintenance, and treating fuels outside of WUIs met our management objectives. The program missed the project goal target in forest vegetation establishment

(reforestation), passenger car roads improved, aquatic organism passages, trails improved and rangeland improvement.

Code	2017 Revised Project Goal Target	Unit of Measure	FY12-FY21 Total Units Completed	FY12-FY21 Percent Target Accomplished (2017 Target)
BIO-NRG	9,078	Green Tons	23,309.20	257%
FOR-VEG-EST	1,607.50	Acres	1,409.50	88%
FOR-VEG-IMP	7,645.50	Acres	13,605.30	178%
FP-FUELS-NON-WUI	4,910	Acres	14,148.40	288%
FP-FUELS-WUI	11,370	Acres	35,934.60	316%
HBT-ENH-LAK	52	Acres	51.90	100%
HBT-ENH-STRM	13.5	Miles	24.40	181%
HBT-ENH-TERR	3,056	Acres	6,875.60	225%
INVPLT-NXWD-FED-AC	963	Acres	1,125.70	117%
LND-BL-MRK-MAINT	15	Miles	19.60	131%
RD-DECOM	1	Miles	2.74	274%
RD-HC-IMP	45	Miles	84.60	188%
RD-HC-MAINT	67	Miles	185.70	277%
RD-PC-IMP	106	Miles	62.30	59%
RD-PC-MAINT	200	Miles	319.50	160%
RG-VEG-IMP	226	Acres	221.90	98%
S&W-RSRC-IMP	1,879	Acres	3,328.00	177%
STRM-CROS-MITG-STD	8	Number	1.00	13%
TL-IMP-STD	40	Miles	31.50	79%
TL-MAINT-STD	76	Miles	209.80	276%
TMBR-SALES-TRT-AC	3,201	Acres	5,135.90	160%
TMBR-VOL-SLD	114,644	CCF	175,179.10	153%

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<sup>1</sup> FY 2012 - FY 2021 Percent Target Accomplished based on revised target goals approved in the 2017 Cornerstone Business Plan Revision for an 8-year funded program of work (FY2012 – FY2019).

7. FY 2021 accomplishment narrative – Summarize key accomplishments and evaluate project progress *not already described elsewhere* in this report. What impact, if any, has Shared Stewardship in your region had on your CFLRP work? (This could be from a Shared Stewardship MOU or the general emphasis in your region on working cross-boundary on shared priorities at the scale needed to have your desired impact).

The WO (EDW) will use spatial data provided in the databases of record to **estimate a treatment footprint** for your review and verification.

Fiscal Year	Footprint of Acres Treated (without counting an acre of treatment on the land in more than one treatment category)
FY 2021	6,087
Estimated Cumulative Footprint of Acres (2012 through 2021)	48,766

Footprint acres were calculated by first summing treatment acres for projects listed in the FY 2020 accomplishments identified in Question 6, then removing overlapping treatment areas. Footprint acrescalculated in ArcGIS represent acres treated per fiscal year. Spatially overlapping treatments are only summarized once.

#### 8. FY21 What challenges and/or accomplishments are you faced this last year?

How have integrated project activities enhanced the resiliency of the forest and watershed landscape to stressors, including those that may be exacerbated by climate change, such as wildfire, drought, insects and disease?

- How have activities within the CFLRP landscape informed subsequent work?
- What innovations are being implemented on the landscape (e.g., use of new technologies, partnerships, etc. that other efforts can learn from?)
- Are there new or different partners engaged at the table in new ways?
- What projects are members of your community most excited about? New infrastructure for utilization of restoration byproducts? Enhanced habitat for a particular plant or animal species? Improved access to recreation sites?

# Upper Mokelumne River Watershed Authority Mapping Tool Project – Mokelumne, Stanislaus, Cosumnes Watersheds

During the 2021 fiscal years, Upper Mokelumne River Watershed Authority completed a high-tech and sophisticated GIS mapping tool project funded by the Sierra Nevada Conservancy. The database includes vegetation layers, fire history, fire management status, etc. and it is designed to help prioritize areas most in-need of fuels treatments in the Mokelumne and Cosumnes watersheds and portions of the Stanislaus watershed. In 2021, Upper Mokelumne River Watershed Authority completed the mapping tool and received funding for a NEPA Planning Project using the mapping tool to identify the highest priority areas in need of treatment. This tool is designed to increase the capacity of the Upper Mokelumne River Watershed Authority and the Amador Calaveras Consensus Group to strategically plan and develop projects that will assist the collaborative in meeting its mission of promoting fire safe communities, healthy forests and watersheds, and sustainable local economies.

#### Upper Mokelumne River Watershed Authority - Amador Calaveras Consensus Group Interactive Web

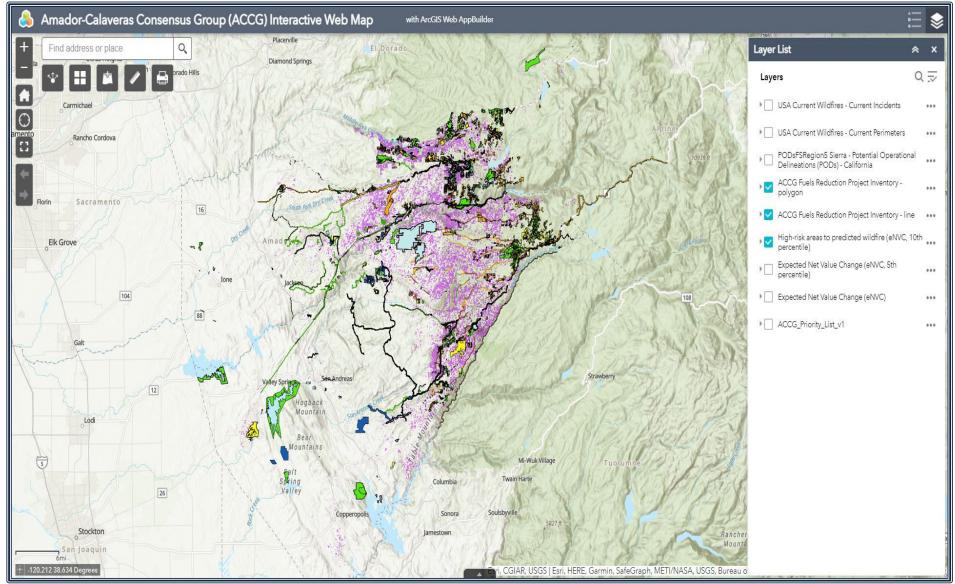
#### Map:

https://Calaveras Healthy Impact Product Solutions .maps.arcgis.com/apps/webappviewer/index.html?id=b3cd2e849a6840ea9a74aa24edd76ebf&%20Pri ority%20Areas%20(11.11.2020)=

GIS Tools Info Guide: <a href="https://acconsensus.org/wp-content/uploads/2021/02/AMADOR CALAVERAS">https://acconsensus.org/wp-content/uploads/2021/02/AMADOR CALAVERAS</a> CONSENSUS GROUP-SLAWG-GIS-Tools-Info-Sheet-2021.pdf

SLAWG Homepage: <a href="https://acconsensus.org/work-groups/slawg/">https://acconsensus.org/work-groups/slawg/</a>

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Amador Calaveras Consensus Group Interactive Web

#### Upper Mokelumne River Watershed Authority - Forest Project Plan - CEQA/NEPA

In June of 2021, Upper Mokelumne River Watershed Authority was awarded a NEPA planning project based on the mapping tool database described above. This stewardship project is designed to implement mastication and hand treatments on over 10,000 acres and up to 40,000 acres in the Mokelumne watershed. The 10,000+-acre project is located on the Calaveras Ranger District, Stanislaus National Forest in Calaveras County and the Amador Ranger District, Eldorado National Forest in Amador, Alpine, and El Dorado Counties. The purpose of this project is to thin plantations and improve ecological resilience, protect tributaries to Mokelumne water storage facilities, support the regional economy and build contractor capacity.

In addition to members of the Amador Calaveras Consensus Group, Upper Mokelumne River Watershed Authority anticipates support from Alpine County, Amador County, Amador Water Agency, Calaveras-Amador Forestry Team, United States Forest Service, Calaveras County, East Bay Municipal Utility District, Bureau of Land Management, and Calaveras Public Utility District.

In May 2021, Upper Mokelumne River Watershed Authority completed a \$5 million grant application for additional NEPA funding and implementation of the Forest Projects Plan. Based on recent conversations with CalFire staff and grant reviewers it appears promising at this point that Upper Mokelumne River Watershed Authority will be awarded these additional funds.

9. and 10. Report expected accomplishments for FY22 and justify any proposed changes from CFLRP project work plan for planned FY2022 accomplishments and/or funding. Please report all expected accomplishments, whether funded by CFLN or matching funds. Use actual planned funding if quantity is less than specified in CFLRP project proposal and justify deviation from project work plan in question 10 of this template. These planned accomplishments should align with what was in the CFLR proposals and Work Plan. If relevant for your project area – please provide estimates for planned work on non-NFS lands within the CFLRP areas for work that generally corresponds with the Agency performance measure to the left and supports, the CFLRP landscape strategy. Please include all relevant planned accomplishments, assuming that funding specified in the CFLRP project proposal for FY 2021 is available. (If applicable)

CFLRP funding has ended as of September 30, 2021 and project will no longer be planned based on CFLN or matching funds.

11. Please include an up-to-date list of the members of your collaborative <u>if</u> it has changed from previous years. If the information is available online, you can simply include the hyperlink here.

Amador Calaveras Consensus Group Membership is open to all stakeholders, individuals, or organizations. Membership requires signing a copy of the Amador Calaveras Consensus Group Memorandum of Agreement (MOA) and acceptance as a member by the group at a regularly scheduled meeting. There are currently 22

Amador Calaveras Consensus Group MOA signatories and over a dozen non-MOA signatory, active participants (Member page: <a href="https://acconsensus.org/about/members/">https://acconsensus.org/about/members/</a>). The signature of the MOA is not a requirement for participation in Amador Calaveras Consensus Group. Amador Calaveras Consensus Group meeting and events are open to the public. Current year and archived meeting agendas and summaries can be found here: <a href="https://acconsensus.org/about/agendas-minutes/">https://acconsensus.org/about/agendas-minutes/</a>. In addition to meeting materials, event announcements, Amador Calaveras Consensus Group-related news, work group information, grant funding opportunities, the Amador Calaveras Consensus Group's GIS Mapping tools, and much more can be found on the Amador Calaveras Consensus Group website.

#### General Meeting Trends FY 2017 to FY 2021

Participation in Amador Calaveras Consensus Group General Meetings has varied since its inception in 2008. There was a 30% increase in general meeting participation from FY 2020 to FY 2021. In FY 2020, 71 individuals participated in general meetings, whereas 101 participants attended general meetings in FY 2021. This increase in general meeting participation may be attributed to many factors, but two in particular may be related. The COVID-19 pandemic caused the Amador Calaveras Consensus Group to move toward all virtual meetings, which could have made it easier for many to attend meetings, because virtual meetings (Zoom) would have decreased time and cost related to travel. In addition, during the FY 2021, the Amador Calaveras Consensus Group general meetings were the host of 11 different guest presentations and panels, including guest speakers from the USFS Region 5, National Center for Atmospheric Research, University of California, Merced, University of California Cooperative Extension, and many more. These guest speakers and panelists may have attracted new Amador Calaveras Consensus Group participants or some regular Amador Calaveras Consensus Group members who may not patriciate regularly, coupled with the accessibility of virtual meetings.

Affiliation of Amador Calaveras Consensus Group participants has also varied across time. Amador Calaveras Consensus Group observed an increase in non-government and government (Federal, State, and County) participation from FY 2020 to FY 2021, including from 42 to 56 individuals, and from 29 to 45 individuals, respectively.

Amador Calaveras Consensus Group observed an increase in non-government hours reported from FY 2020 to FY 2021, from 399 to 562 hours. Respectively, an increase in government hours reported from FY 2020 to FY 2021, from 224 to 267 hours. This reflects an increase of 29% non-government and an increase of 16% in government overall hours reported from FY 2020 to FY 2021.

# **Amador Calaveras Consensus Group General Meeting Participants**

Number of Individuals				
FY	Total	non-Gov't	Gov't	
2017	104	52	52	
2018	68	33	35	
2019	92	47	45	
2020	71	42	29	
2021	101	56	45	
Hours Reported				
FY	Total	non-Gov't	Gov't	
2017	2,736	1,513	1,223	
2018	1,623	935	688	
2019	1,816	1,238	578	
2020	623	399	224	
2021	829	562	267	
% of Total Hours				
FY		non-Gov't	Gov't	
2017		55%	45%	
2018		58%	42%	
2019		68%	32%	
2020		64%	36%	
2021		68%	32%	

FY 2021 Amador Calaveras Consensus Group General Meeting Virtual* Speakers (All meeting presentations and panels were via Zoom due to the COVID-19 pandemic)		
October 2020	Dr. LeRoy Westerling, University of California, Merced Forest Fire Research and Simulations for the Fifth California Climate Assessment.	
November 2020	Karen Quidachay and Pat Farrell, Landmark Environmental/Upper Mokelumne River Watershed Authority Contract procurement, project implementation, and lessons learned Steve Wilensky, Calaveras Healthy Impact Product Solutions Calaveras Healthy Impact Product Solutions' history, current efforts and challenges	
January 2021	Ken Pimlott, CAL FIRE (retired); Jesse Plummer, USFS, ENF, Amador RD; Susie Kocher, UCCE; Chris Dow, SPI <i>Prescribed Fire Panel</i>	
February 2021	Megan Layhee, Landmark Environmental Overview of Amador Calaveras Consensus Group SLAWG Mapping/GIS Tools	
March 2021	Maria Benech, USFS, STF; Scott Oneto, UCCE; John Buckley, CSERC Herbicide Panel	

FY 2021 Amador Calaveras Consensus Group General Meeting Virtual* Speakers		
(All meeting presentations and panels were via Zoom due to the COVID-19 pandemic)		
October 2020	Dr. LeRoy Westerling, University of California, Merced Forest Fire Research and Simulations for the Fifth California Climate Assessment.	
April 2021	Tania Carlone, CBI Amador Calaveras Consensus Group Communications & Engagement Plan development update	
May 2021	Upper Mokelumne River Watershed Authority Team Forest Projects Plan Phase 1	
June 2021	Jeff Marsolais, USFS, ENF; Jason Kuiken, USFS STF Forest Resilience Initiative Mike Vollmer, USFS R5 USFS Shared Stewardship Advisor Program	
July 2021	Sean Kriletich, Agricultural Consultant/Owner Paloma Pollinators; Dan Macon, UCCE Herbicide Alternatives Panel <a href="https://acconsensus.org/resources/videos/">https://acconsensus.org/resources/videos/</a> .	
August 2021	Dr. Malcom North, USFS R5 Pyrosilviculture needed for landscape resilience of dry western U.S. forest click here to view the publication).	
September 2021	Dr. Janice Coen, National Center for Atmospheric Research Weather, Fire Behavior and Trends in the Central Sierra https://acconsensus.org/resources/videos/.	

12. **Media recap**. Please share with us any hyperlinks to videos, newspaper articles, press releases, scholarly works, and photos of your project in the media that you have available. You are welcome to include links or to copy/paste.

Arnold-Avery Healthy Forest Fuels Reduction Project, in collaboration with the Mule Deer Foundation and funded by the Sierra Nevada Conservancy, and Pacific Gas and Electric (PG&E).

December 8, 2020

https://www.kcra.com/article/work-underway-to-protect-sierra-communities-from-wildfire/34905276

# Calaveras Healthy Impact Product Solutions Arnold-Avery Fuels Reduction & Fuelbreak Maintenance Project Feb 15, 2021

Calaveras Healthy Impact Product Solutions in partnership with the Stanislaus National Forest, was awarded a CAL FIRE California Climate Investment grant to implement the Arnold-Avery Hazardous Fuels Reduction and Fuelbreak Maintenance Project to reduced fuels near the communities of Arnold, Avery, Hathaway Pines and Dorrington. Click here to view the article published in the Calaveras Enterprise last week about the project. Implementation is anticipated to begin this year.

# New USFS R5 Management Briefs: Conifer Resistance & Resilience to Drought Induced Mortality with Restoration Treatments

Mar 25, 2021

Click the links below to view two management briefs from the USFS Region 5 Ecology Program summarizing two papers that highlight resistance and resilience of ponderosa pine/mixed conifer forests with multiple restoration treatments to drought induced mortality. Links to the full articles can be found in the management briefs.

Restaino, C., Young, D., et al. Sierra Nevada Tree Mortality and how it Changed with Management, Precipitation and Forest Density Young, D., et al. Post-Drought Sierra Nevada Forests and how they vary with Management History and compare to Historical Forests

## USFS R5 Ecology Program: Stanislaus NF Climate Change Trend Summary (2021)

Aug 18, 2021

The 2021 Stanislaus National Forest Climate Change Trend Summary, produced by the US Forest Service Pacific Southwest Region (R5) Ecology Program. Contact Becky Estes (<a href="mailto:becky.estes@usda.gov">becky.estes@usda.gov</a>) for more information.

This trend summary is intended to inform national forest managers on climate change-related ecosystem vulnerabilities to plan for and where possible, mitigate, and are updated regularly as new climate science becomes available.

StanisalusNationalForest ClimateSummary 2021.pdf (acconsensus.org)

Signatures: ELIZABETH Digitally signed by ELIZABETH MARTINEZ Date: 2021.12.15 Digitally signed by TIMOTHY GARCIA TIMOTHY Date: 2021.12.15 09:30:16 **GARCIA** MARTINEZ Approved by: Approved by 11:54:04 -08'00' JASON KUIKEN JEFF MARSOLAIS For: Forest Supervisor Forest Supervisor Eldorado National Forest Stanislaus National Forest Digitally signed by CARINNA ROBERTSON CARINNA RICHARD HOPSON Date: 2021.12.13 12:42:31 -08'00' ROBERTSON Date: 2021.12.13 Recommended by: Recommended by: RICHARD G. HOPSON CARINNA ROBERTSON District Ranger Project Coordinator Eldorado National Forest Stanislaus National Forest Digitally signed by Megan Megan Layhee Date: 2021.12.13 12:27:52 Reviewed by MEGAN LAYHEE Administrator Amador Calaveras Consensus Group