

**Annual Report**  
**Wood Products and Bioenergy Team**  
**Climate and Energy Program**  
**Department of Forestry and Fire Protection**  
**2023 Calendar Year**



June 28, 2024

# Table of Contents

## Contents

The 2023 Wood Products and Bioenergy Team .....	1
Introduction to the Wood Products & Bioenergy Team .....	2
Directors Innovation Award .....	3
Grants.....	3
Anticipated impacts of 2023 grant projects .....	3
Wood Products Outreach .....	6
Workforce Outreach .....	7
Accomplishments.....	9
Acknowledgement to Partners .....	10
Feedback from Grantees.....	11
Summary of Grants Awarded in 2023.....	12
Goals for 2024.....	13

## Figures

Figure 1. Locations of Awarded Grants in 2023.....	5
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## Tables

Table 1. Grants Awarded in 2023.....	12
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## The 2023 Wood Products and Bioenergy Team



John McCarthy is the Program Manager for Wood Products & Bioenergy. Prior to joining CAL FIRE, he spent 20 years at Garcia and Associates, providing CEQA, NEPA, and permitting services to State and federal agencies and public utilities. Before that he was a Registered Professional Forester at Sierra Pacific Industries, where he wrote Timber Harvest Plans and managed reforestation activities in Trinity and Humboldt counties. He also served as a Peace Corps Volunteer in Bolivia working as an agroforestry extension agent in rural communities. John earned a Bachelor of Science in Forestry from the University of California at Berkeley and a Master of Business Administration from the California State University at Chico.



Justin Britton is the Operations Forester for Wood Products & Bioenergy. He supports project management efforts with existing business and workforce development grantees. Justin joined CAL FIRE in 2019 as an inaugural forester in the Climate and Energy Program. Prior to CAL FIRE, he spent 5 years working as a Registered Professional Forester in private industry, managing lands in Shasta, Siskiyou and Trinity counties. Justin earned a Bachelor of Science in Forestry from Southern Illinois University Carbondale and a Master of Science in Forest Ecology from Utah State University.



Jason Butcher is the Team's Planning Forester. He holds a Bachelor of Science Degree from Humboldt State University in Computer Information Systems with minors in both Forestry and Business Administration. Jason worked for private timber companies between 1992 and 2014 before coming to CAL FIRE, initially as a Forest Practice Inspector. In 2015, he transferred into the Pre-fire Battalion as the Vegetation Management Forester responsible for developing fuel reduction projects, prescribed burns, and the administration of the Fire Prevention Grants. Jason is rostered on Incident Management Team 3 as a Situation Unit Leader trainee.



Sunoy Nandi is the Grants Analyst for the Wood Products & Bioenergy team. Beyond reviewing grant applications and development of agreements, he serves as a resource for grantees in helping them prepare invoices and progress reports. Before joining CAL FIRE in November of 2022, he graduated from the University of California, Davis with a Bachelor of Science in Mathematics. He has always had a keen interest in climate economics and policy, which eventually led to his commitment towards helping wildfire prevention programs and other projects focused on mitigating the effects of climate change.

## Introduction to the Wood Products & Bioenergy Team

The Wood Products and Bioenergy Team is part of CAL FIRE's Climate and Energy Program. Our mission is to maintain and enhance the wood products infrastructure of California to support healthy resilient forests along with the people and ecosystems that depend on them.

The Team continued to grow its grant program in 2023, offering two rounds of solicitations to fund forestry-sector businesses and workforce development projects in California. Grantees were attracted to financial incentives to invest in clean technologies, develop innovative ways to process wood products, and support the growth of a strong-forest sector workforce. Building upon their research into subsidizing biomass transportation costs, the grant program offered \$10 million in new grants to mobilize biomass that would otherwise be left in the woods.



The grant program has four primary areas of responsibility, including existing and emerging technologies:

1. Business development, including solid wood and biomass processing and manufacturing, in-woods operations, and tree nurseries.
2. Bioenergy business and workforce development, including forest bio-material power generation and biofuels for domestic use and export.
3. Forest-related workforce development at all levels including in-woods, transportation, and manufacturing.
4. Research and development that is ancillary to forest-related business and workforce development.

In 2023, Team members presented topics at numerous workshops, provided expertise in technical advisory committees, and served as panelists in many discussions at a variety of conferences. Details of those events are provided below.

## Directors Innovation Award

The Team, with GMU partner, Anne Fischer, gathered with others from across the State to receive a 2023 Innovation Award for launching their statewide grants for wood utilization, technology, and workforce development.

“Despite a small staff”, commented Deputy Director Monte Manson, “they’ve built a respected program, adeptly managing funding changes. Their partnerships with entrepreneurs and leadership in grants management exemplify innovation and best practices at CAL FIRE.”



## Grants

Over the course of the second year of the grant program, 108 applicants submitted proposals for a combined request of \$141 million. Of those 108 applications, 30 projects were awarded \$31 million in grant funds, which break down as follows:

- \$7 million for 8 workforce development projects.
- \$14 million for 18 business development projects.
- \$10 million for 4 biomass transportation subsidy projects

## Anticipated impacts of 2023 grant projects

Workforce development grants are estimated to train about 1,750 people in the next four years.

Business development grants will enable businesses to create approximately 65 direct, full-time jobs over four years. Those jobs are expected to persist beyond the life of the funding.

\$10 million in transportation subsidies will mobilize 200,000 bone dry tons (20,000 truckloads) of forest biomass to processing facilities. Without the support that material, which is generated from forest thinning salvage, would be left in the woods or burned in open piles.

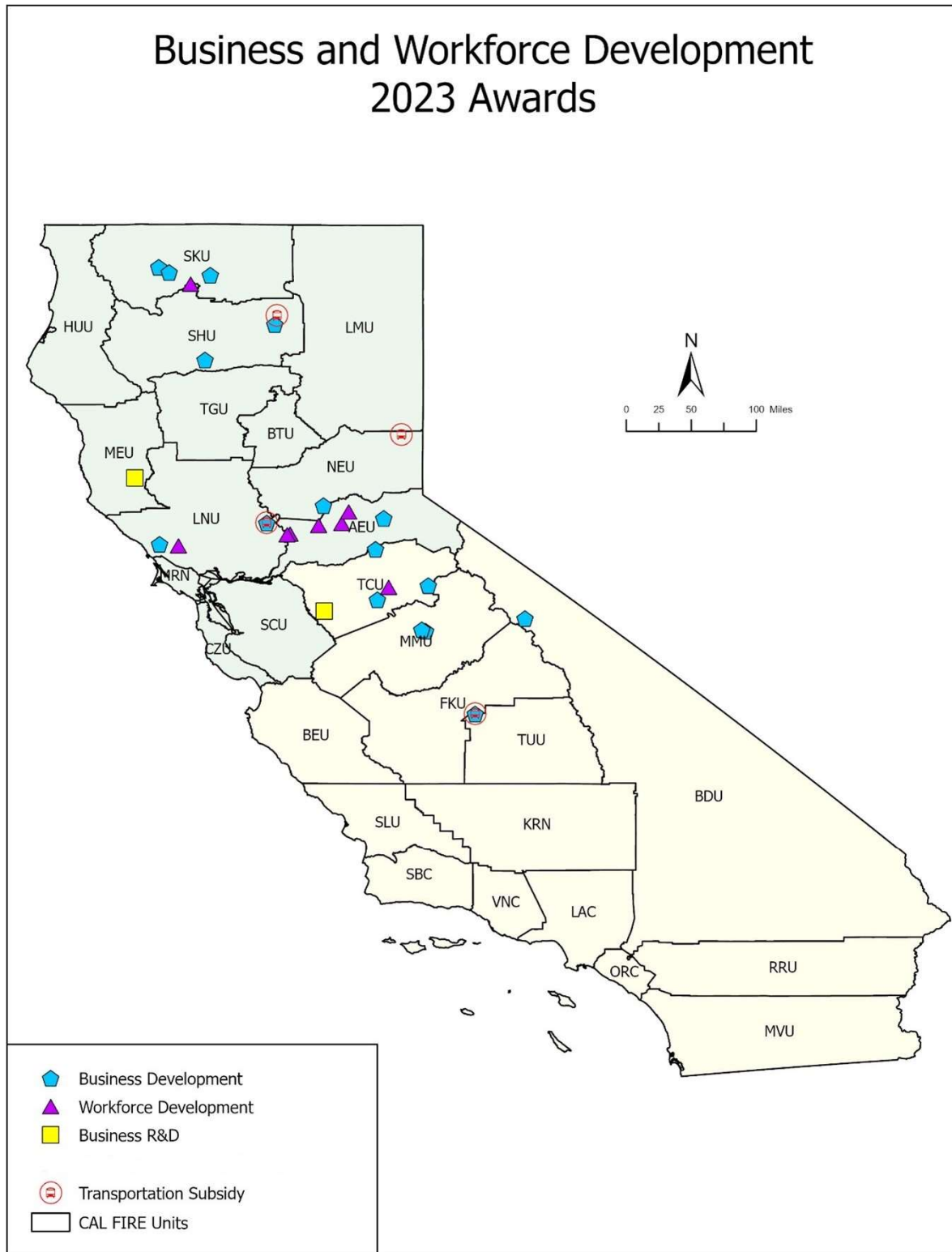
Over 16,000 bone dry tons of biomass processing capacity will be developed from these grants, and an additional 7 million board feet of lumber will be manufactured by new and expanding small mills.

Workforce grants will benefit tribes, high schools, non-profits, and community colleges that will train individuals in prescribed fire, forestry skills, heavy equipment operations, firefighting and cone collection.





Figure 1. Locations of Awarded Grants in 2023



## Wood Products Outreach

Staff collaborated with State and federal agencies and served on panels at regional, national and international conferences covering many forestry-sector subjects. Some of the more notable events attended are listed below:

- Presented on Wood Products Markets at the Napa and Sonoma Forest Stewardship Workshop hosted by UC Ag and Natural Resources.
- Attended the California Forestry Association's Forestry Strategies and Innovations Conference in Sacramento in February.
- Represented California at the Council of Western States Foresters Forest Products Committee Annual Meeting in Salt Lake City in March.
- Represented CAL FIRE at the Hydrogen Leadership Summit in Sacramento in June.
- Attended the Biomass Energy Technology Symposium in Roseville on May 1; the event was sponsored by the Placer County Air Pollution Control District.
- Together with the SCU Unit Forester, Ed Orre, hosted a workshop on Access to Public Funding at the Together Bay Area Annual Conference in Richmond in May.
- Represented CAL FIRE and presented at the Department of Conservation's Feedstock Supply Workshop in May.
- Represented CAL FIRE at PG&E's Innovation Summit in San Ramon in July.



- (above) In September, along with Assistant Deputy Director, Alan Talhelm, the Team attended the Department of Conservation's Bioenergy Bus Tour in Sacramento and surrounding communities. The tour brought colleagues from



across State government to discuss developing an advanced woody bioenergy industry.

- Presented “State Investments in Forest Innovation” at the Forest Innovation Summit, sponsored by the Swedish-American Chamber of Commerce of San Francisco, on November 16-17.
- Served as a panelist at the California Energy Commission’s Climate Innovation Program Forests and Agriculture Workshop in December.

## Workforce Outreach



(left) Along with our Staff Chief, Shannon Johnson, we attended the spring Forestry Workforce Summit in Davis. The Summit met again for three days in September in Redding, where Justin Britton organized and hosted a speaker panel.

- Attended the Resilient Careers in Forestry Retreat in Redding on May 2-3.
- Represented CAL FIRE at the Placerville Nursery on May 8 at the Sierra Nevada Alliance Reforestation and Inspection Training. Attendees include fellows who are supported through a workforce development grant.
- Attended a “Sawmill 101” Workshop in Oregon House on June 21 which was hosted by the Forest Business Alliance and The Beck Group. This workshop was highly attended, with more than 60 participants from existing and newly built sawmills around California.

- (right) Met with undeclared UC Berkeley students on August 17-18 to discuss majoring and minoring in forestry. The students attended a week-long program at the Cal Forestry Camp in Plumas County, which was one of a series of mini camps funded through a contract with CAL FIRE.



- (left) Attended a fire academy graduation on October 18 in Oakland for the newest cohort from Forestry and Fire Recruitment Program (FFRP). FFRP has a workforce grant from CAL FIRE to train formerly incarcerated individuals for careers in firefighting.

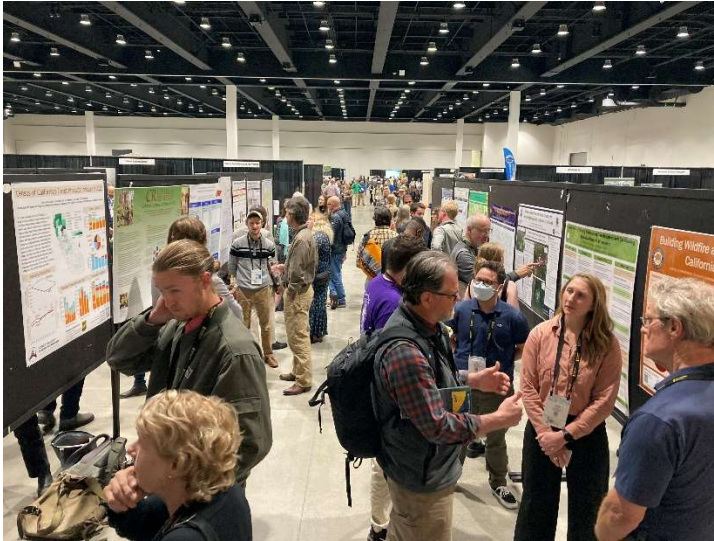
- Attended and served as a panelist at the California Licensed Foresters Association Fall Workshop “Branching Out: Developing the Next Generation of CA Foresters” in Anderson in November.

## Interagency Outreach

- Hosted four quarterly coordination meetings with representatives from other State agencies to update each other on wood products business development efforts. Attendees included the Governor's Office of Business and Economic Development (GO-Biz), California Infrastructure and Economic Development Bank (IBank), Governor's Office of Planning and Research (OPR), the California Public Utilities Commission (CPUC), Department of Conservation (DOC),

California Air Resources Board (CARB), California Energy Commission (CEC), the California Natural Resources Agency (CNRA), and the Board of Forestry's Joint Institute for Wood Products Innovation.

- Presented regular updates at the quarterly Joint Institute for Wood Products Innovation meetings.
- Served on the Wildfire and Forest Resilience Task Force Working Group on Wood Utilization, which drafted a statewide Strategic Plan.



## Accomplishments

In January the Wood Products Team released to the public a white paper titled “An Evaluation of Forest Biomass Transportation Subsidies”. This paper identified the known issues in subsidizing the transportation of wood fiber to processing facilities. California-specific challenges and opportunities were provided, and recommendations were made for a pilot program. The paper was well received in the biomass community and was the structure for our \$10 million transportation subsidy grant solicitation.

In March, in collaboration with IBank, we finalized negotiations for a \$1.6 million loan agreement with Hat Creek Bioenergy LLC.





(left) Attended the Groundbreaking Ceremony for Sierra Pacific Industries' State-of-the-Art Conifer Seedling Nursery in Gazelle on April 28. The nursery's first phase, which is estimated to cost over \$10 million, leverages a \$3 million CAL FIRE grant from our program. CAL FIRE's Executive Team, North Region and Local Units all came out for the event.

Grantee Lignum LLC finalized their report *Biomass Offtake Opportunities and Logistics*, which they presented at the BOF's Joint Institute for Wood Products Innovation in July.

Wood Products and the U.S. Forest Service jointly funded a study that quantified the impacts of recent mega fires in California on potential future timber harvesting. Authored by the consulting firm, Mason, Bruce & Girard, *Long-Term Economic Impacts of Large Fires in California from 2018-2021: Losses and Opportunities*, was released to the public in September.

### Acknowledgement to Partners

- Wood Products is fortunate to work with all the great teams in the Climate and Energy Program: Forest Health, Tribal Wildfire Resilience and Climate Change. Together, we develop and manage grant programs, technical outreach, greenhouse gas reduction reporting and environmental compliance.
- The Team appreciates the CAL FIRE Grants Management Unit for work with us to manage two grant solicitations during the year through the 3<sup>rd</sup> party platform, eCivis. With nearly 100 active grants, we rely on GMU to develop grant agreements and process invoices.

- Special thanks are owed to CAL FIRE’s Northern and Southern Region Resource Management Staff Chiefs and their Units, which provided excellent local knowledge and feedback in reviewing grant applications.
- The Program’s interagency grant application review team included participants from U.S. Forest Service, the California Workforce Development Board, DOC, CEC, IBank, and OPR.

## Feedback from Grantees

“The proceeds from our business development grant from CAL FIRE gives us the ability to go past the conventional thinking and do the ground-up research needed to assess the opportunity to build a complex panel mill in California”, says Scott Gable from West Forest. “The Cal Fire grant has been the catalyst to this effort”.

“The CAL FIRE Business and Workforce Development Grant program has been instrumental for the development of both our own biomass utilization facility and so many others across the State of California,” said Matt King of Tuolumne Biomass.



Taylor Parker of the Sierra Nevada Alliance commented, “CAL FIRE’s Workforce Development Grant gives my team the opportunity to help California. Because of this funding, we are able to fill some crucial forestry gaps, increasing the quality of life for habitats and people in this process.”



## Summary of Grants Awarded in 2023

Table 1. Grants Awarded in 2023

Grant Type	Grantee	Award
Bus Dev	American Wood Fibers, Inc.- Jamestown, CA	\$ 1,891,000
Bus Dev	Arbor Energy and Resources Corporation	\$ 2,000,000
Bus Dev	Ascent Forestry	\$ 500,000
Bus Dev	Cal Forest Nurseries, Inc.	\$ 592,500
Bus Dev	Calaveras Healthy Impact Product Solutions	\$ 317,116
Bus Dev	Cascade Custom Cutting	\$ 90,000
Bus Dev	Community Renewable Energy Services, Inc.	\$ 801,232
Bus Dev	Forestree Collective	\$ 40,000
Bus Dev	G.C. Cook Forest Products, Inc.	\$ 164,000
Bus Dev	Johnson Contracting LLC	\$ 150,000
Bus Dev	Mariposa Bioenergy LLC	\$ 2,000,000
Bus Dev	Mote, Inc.	\$ 500,000
Bus Dev	Rath Industries, Inc.	\$ 351,054
Bus Dev	Tubit Enterprises, Inc.	\$ 2,000,000
Bus Dev	Woodland Biomass Power, LLC	\$ 1,001,667
Business R&D	Caribou Biofuels	\$ 500,000
Business R&D	Kodama Systems, Inc.	\$ 300,582
Business R&D	Mendocino Forest Products Company, LLC	\$ 500,000
Transport Subsidy	Community Renewable Energy Services, Inc.	\$ 3,000,000
Transport Subsidy	Hat Creek Bioenergy LLC	\$ 2,000,000
Transport Subsidy	Lignum Support LLC	\$ 2,000,000
Transport Subsidy	Woodland Biomass Power, LLC	\$ 3,000,000
Workforce	American Forests	\$ 474,358
Workforce	Black Oak Mine Unified School District	\$ 434,050
Workforce	California Association of Resource Conservation Districts	\$ 1,288,137
Workforce	California Forestry Association	\$ 500,000
Workforce	County of Tuolumne	\$ 1,669,928
Workforce	Future Fire Academy	\$ 1,276,370
Workforce	Quartz Valley Indian Reservation	\$ 495,404
Workforce	Resilience Force CA, LLC	\$ 994,578
<b>Total</b>		<b>\$ 30,831,976</b>

## Goals for 2024

- Open a new grant solicitation in Q1 and award new grants for business and workforce development in June, 2024.
- Collaborate with the Chancellor's Office for California Community Colleges to open a grant solicitation in 2024. The solicitation will target forestry workforce development using \$14 million from Proposition 98 funding. Proposition 98 is a constitutional amendment adopted by California voters in 1988 that establishes an annual minimum funding level for K-14 education each fiscal year.
- Continue to attend conferences and workshops and meet with business leaders, non-profits, schools and government organizations. Stay up to date on developments and technologies in wood products to help us identify where to put support and resources.
- Recruit an Associate Government Program Assistant to fill out the Team's organization chart.

