

# Technical Advisory Council Quarter 1 Meeting

Integrated Climate Adaptation and Resiliency Program

March 7, 2025, 10:00am



CA Governor's Office of  
**Land Use and  
Climate Innovation**

# Agenda

1. Roll Call & Housekeeping
2. Meeting Minutes
3. TAC Member Updates
4. ICARP Updates
5. ICARP TAC Charter & Bylaw Update
6. ICARP 2025 Priorities
7. Vulnerable Communities Definition
8. Fifth Assessment Reports
9. CAL FIRE Grantee Case Study
10. LA Fires Rapid Assessment Case Study
11. Wildfire and Forest Resilience Taskforce Action Plan Update
12. General Public Comment
13. Closing and Meeting Adjourned



# Item 1 | Roll Call and Housekeeping



CA Governor's Office of  
Land Use and  
Climate Innovation

# Zoom Support

- For virtual attendees, technical support questions can be directed in the chat to Sam Magill.
- You can also reach him by email:
  - [s.magill@csus.edu](mailto:s.magill@csus.edu)



# Item 2 | Meeting Minutes



CA Governor's Office of  
Land Use and  
Climate Innovation

# Item 2 | Public Comment



CA Governor's Office of  
Land Use and  
Climate Innovation

# **ACTION**

**Approve the meeting minutes  
from the ICARP Technical  
Advisory Council 3rd Quarter  
Meeting on October 25, 2024.**



# Item 3 | TAC Member Updates



CA Governor's Office of  
Land Use and  
Climate Innovation

# Congratulations!

Congratulations to Council Member  
Nayamin Martinez on being recognized as  
a 2025 James Irvine Foundation  
Leadership Award recipient!



# Congratulations!

Congratulations to Council Member Jonathan Parfrey on his appointment to the LA Blue Ribbon Commission!



# Congratulations!

Congratulations to Council Member Roberto Carlos Torres on his new role as Senior Environmental Justice Coordinator at SF Department of the Environment!



# Updates

- Office of Emergency Services – Robyn Fennig
- Department of Public Health – Linda Helland
- Natural Resources Agency – Clesi Bennett
- Town of Mammoth Lakes - John Wentworth





**Welcome...**

ESCCRP  
WRAFT  
FEB 20, 2025  
Regular  
Meeting

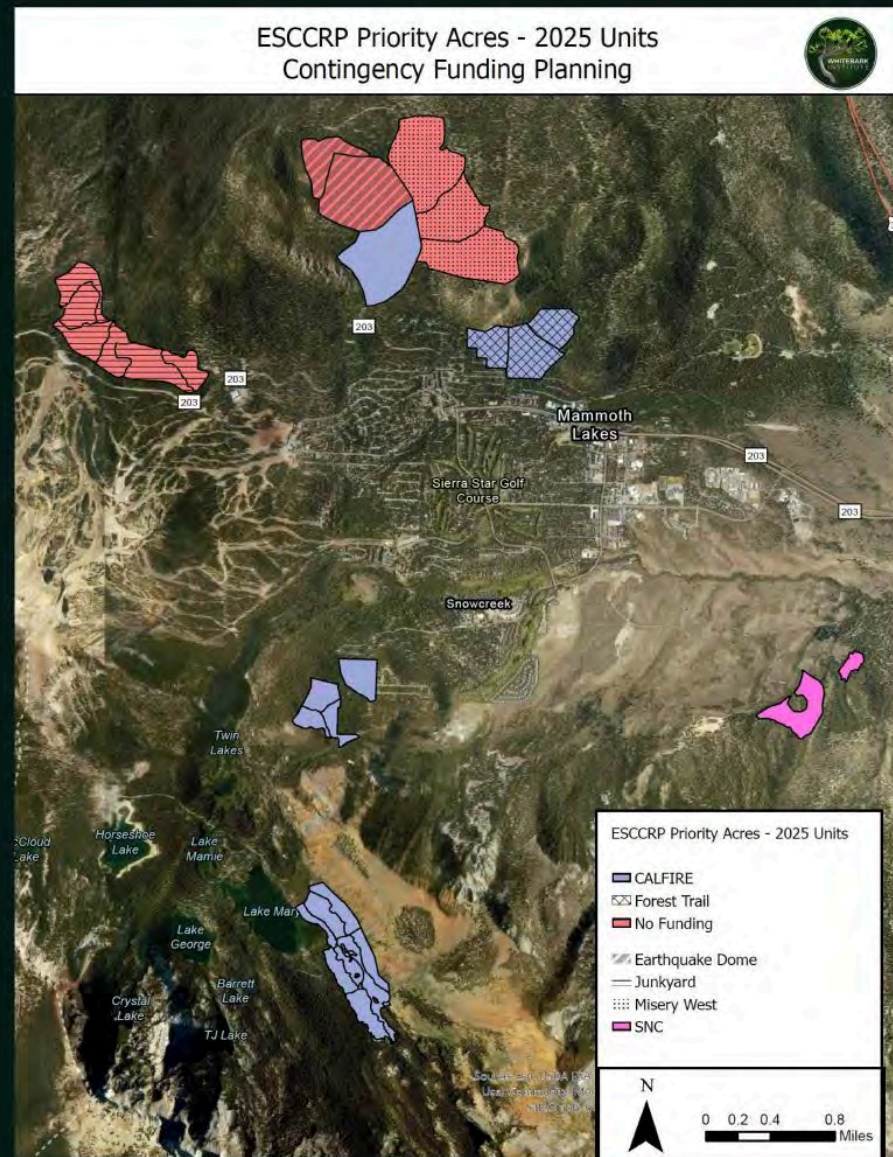


WHITEBARK  
INSTITUTE



# Planning for Uncertainty

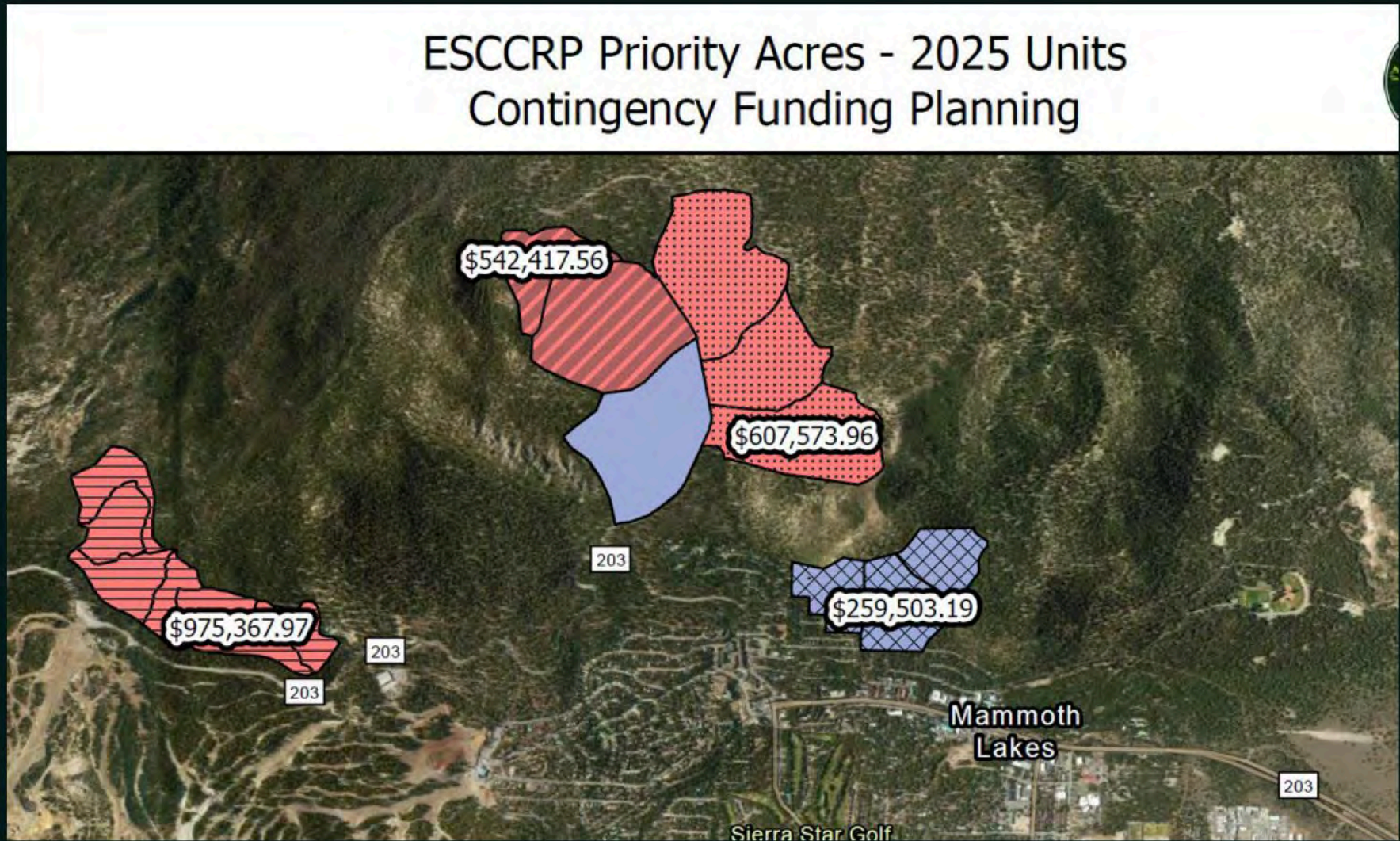
## Federal Funding Freeze Impacts to ESCCRP



# ESCCRP Federal Funding Shortfalls



TOTAL FUNDING  
SHORTAGES  
\$ 2 , 3 8 4 , 8 6 4





# CALREC Vision

**MLTPA**  
MAMMOTH LAKES TRAILS - PUBLIC ACCESS



# CALIFORNIA'S JOINT STRATEGY FOR SUSTAINABLE OUTDOOR RECREATION & WILDFIRE RESILIENCE



PREPARED FOR THE CALIFORNIA WILDFIRE  
AND FOREST RESILIENCE TASK FORCE  
DECEMBER 12, 2022



## California's Joint Strategy for Sustainable Outdoor Recreation and Wildfire Resilience Goals and Key Actions – December 12, 2022

### **GOAL 1: INTEGRATE FOREST HEALTH AND SUSTAINABLE OUTDOOR RECREATION**

Integrate the provision of high-quality, sustainable outdoor recreation opportunities with forest health and resilience and wildfire and climate mitigation efforts so that all people can connect to the benefits and wonders of the natural world.

#### Key Actions

- 1. Maintain Public Access as the Climate Changes:** Develop climate-smart best practices toolkits and resources to be used by land-management organizations for programs and projects associated with forest and wildland health, vegetation management, transportation, and visitor use that enhance public access to outdoor recreation on public lands and waters as the climate changes.
- 2. Develop Educational Materials Targeted at Reducing the Human Causes of Ignition:** Create and distribute educational materials in multiple languages targeting human causes of ignition of wildfires.
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- 4. Incorporate Sustainable Outdoor Recreation into the State Department of Conservation's Regional Forest Fire Capacity (RFFC) Program:** Incorporate the Key Actions from California's Joint Strategy for Sustainable Outdoor Recreation and Wildfire Resilience into the RFFC Program, Regional Forums, and Regional Priority Plans being developed by RFFC Program Regional Block Grantees.
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California's Joint Strategy for Sustainable Outdoor Recreation and Wildfire Resilience  
Goals and Key Actions – December 12, 2022



Friends -

On January 15, the Mammoth Lakes Town Council officially adopted "California's Joint Strategy for Sustainable Outdoor Recreation & Wildfire Resilience," the first jurisdiction in the state to do so. The strategy was published in March 2023 by the Wildfire and Forest Resilience Task Force of the State of California. Its authors, the Sustainable Recreation/CALREC Vision Key Working Group, received the "Partnership of the Year" award in 2022 from Region 5 of the U.S. Forest Service, Pacific Southwest Region. [The Mammoth Lakes Trails and Public Access Foundation \(MLTPA\)](#) convened and facilitated the Key Working Group, collaborating with the Wildfire and Forest Resilience Task Force to produce the final document. [Learn more about the Joint Strategy and the CALREC Vision.](#)

**The Wildfire Threat**

The Mammoth Lakes economy relies on sustainable outdoor recreation. As the home of Mammoth Mountain, the premier winter recreation resort operated by the Alterra Mountain Company, year-round tourism revenue generated by recreation visitors funds the community's municipal services and is now providing crucial support to address the local housing crisis. But the threat of catastrophic wildfire looms.

The Town Council adopted the Joint Strategy as a guiding document to engage and strengthen its recreation assets in the fight against wildfires and to protect the community's housing and capital assets, all while ensuring public safety and making the jurisdiction attractive for state and federal funding, such as Proposition 4, the climate bond measure passed by California voters in November 2024.

**Communities Taking Action**

Do you live in or enjoy a California recreation community threatened by wildfire from its surrounding natural environment? Mammoth Lakes may be the first Jurisdiction in California to adopt the Joint Strategy, but it must not be the last. Advocate for your local elected officials to adopt "California's Joint Strategy for Sustainable Outdoor Recreation & Wildfire Resilience" and its [four goals and 31 key actions](#) so that we can act, because the time for action is now. We must proactively engage our communities and their recreation assets in their protection before, during, and as we recover from wildfires.

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Best to all -



John Wentworth  
CEO/Board President  
Mammoth Lakes Trails and Public Access Foundation

SUPPORT OUR WORK



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## TOWN COUNCIL STAFF REPORT

Title: Town Council Adoption of California Joint Strategy for Sustainable Outdoor Recreation & Wildlife Resilience

Meeting Date: January 15, 2025

Prepared by: Rob Patterson, Town Manager

### RECOMMENDATION:

It is recommended that the Town Council review and adopt "California's Joint Strategy for Sustainable Outdoor Recreation & Wildfire Resilience," as published by The California Wildfire and Forest Resilience Task Force in March of 2023, as a guiding document in the Town's effort for resource protection, community investment, and public safety.

### BACKGROUND:

The Town of Mammoth Lakes, like many communities and regions in rural California, has an economic model centered around recreation, tourism and the natural environment, most of which is managed by the federal government. These vital natural resources are under pressure from both overutilization and the threat of catastrophic wildfires. The principal economic driver in our Eastern Sierra region is our recreation-based tourism economy and without the natural resources for these activities, the Town loses the ability to sustain itself financially. To rebuild from a natural disaster like a wildfire would take many years and require dependence on outside resources to recover. In light of the current and anticipated wildfire risk environment in California, the recovery may not even be economically feasible. The goal of adopting "California's Joint Strategy for Sustainable Outdoor Recreation & Wildfire Resilience" is to engage on a state and federal level with programs that can provide funding to mitigate our exposure to these catastrophic events before they happen. A part of our success has been to leverage programs that are complementary to our own stated goals. This force multiplier, using state and federal initiatives that align with our own goals, allows us to achieve more than we could on our own, with our own funding sources. Adopting this plan should enhance our eligibility to receive state-level and federal funding for programs that will be generated from the recent passing of Proposition 4 and the reauthorization of the Great American Outdoors Act, which provide funding for wildfire prevention, recreation infrastructure and programming, and the protection of communities and natural lands from climate risks. By adopting this plan, the Town would become the first in the state to recognize this strategy, and the implementation of its key actions that will address our unique concerns.

### ANALYSIS/DISCUSSION:

The joint strategy consists of four goals with a number of specific key actions to address the effects of climate change and the threat of wildfire on sustainable outdoor recreation infrastructure and programs that drive economic activity. The Sustainable Recreation/CALREC Vision Key Working Group, which developed the joint strategy, was awarded Partnership of the Year from the U.S. Forest Service Pacific Southwest Region in recognition of their efforts. The joint strategy

1



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#### Communities Taking Action

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Mammoth Lakes Trails and Public Access Foundation

SUPPORT OUR WORK



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CALRECVision.org c/o MLTPA PO Box 100 PMB #432 Mammoth Lakes, CA 93546 (760) 934-3154 ww.mltpa.org



STAFF REPORT

To: ESCOG Joint Powers Authority
From: Elaine Kabala, ESCOG Executive Director
Subject: Accept the State of California's "Joint Strategy for Sustainable Outdoor Recreation & Wildfire Resilience"
Meeting date: February 26, 2024
Prepared on: February 15, 2025
Attachments: A) Joint Strategy for Sustainable Outdoor Recreation & Wildfire Resilience

BACKGROUND/HISTORY:

The Eastern Sierra has an economic model centered around recreation, tourism and the natural environment, most of which is managed by the federal government. These vital natural resources are under pressure from both overutilization and the threat of catastrophic wildfires. The principal economic driver in our Eastern Sierra region is our recreation-based tourism economy and without the natural resources for these activities, the region would realize economic impacts. To rebuild from a natural disaster like a wildfire would take many years and require dependence on outside resources to recover. In light of the current and anticipated wildfire risk environment in California, the recovery may not even be economically feasible.

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Best to all -

Handwritten signature of John Wentworth

John Wentworth
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SUPPORT OUR WORK



California's Joint Strategy for Sustainable Outdoor Recreation and Wildfire Resilience
Goals and Key Actions - December 12, 2022

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<a href="#">Alameda</a>	Alameda	?	Regional Park District/Doug H David G, Clint Celio/Wildfire Coord., trails group
<a href="#">Alpine</a>	Alpine	Y	
<a href="#">Amador</a>	Amador	?	Work through wildfire collab
<a href="#">Butte</a>	Butte	Y	BOS/Doug Teeter BOS/Ben Stoppard (former BOS Jack Garamendi also)
<a href="#">Calaveras</a>	Calaveras	Y	
<a href="#">Colusa</a>	Colusa	N	
<a href="#">Contra Costa</a>	Contra Costa	Y	BOS John Gioia (CSAC)
<a href="#">Del Norte</a>	Del Norte	Y	BOS Chris Howard (CSAC)
<a href="#">El Dorado</a>	El Dorado	Y	BOS Brook? And City of SLT - John Fr
<a href="#">Fresno</a>	Fresno	?	
<a href="#">Glenn</a>	Glenn	N	
<a href="#">Humboldt</a>	Humboldt	Y	BOS Mike Wilson
<a href="#">Imperial</a>	Imperial	?	
<a href="#">Inyo</a>	Inyo	Y	Nate/Trina/Kristen P Kernville/mtb connections, community foundation
<a href="#">Kern</a>	Kern	?	
<a href="#">Kings</a>	Kings	N	
<a href="#">Lake</a>	Lake	Y	BOS Eddi Crandell (RCRC)
<a href="#">Lassen</a>	Lassen	Y	CAO; Joel Rathje connection/trails
<a href="#">Los Angeles</a>	Los Angeles	Y	Parks and Recreation/Doug H
<a href="#">Madera</a>	Madera	Y	BOS Bobby McCauley (Oakhurst)
<a href="#">Marin</a>	Marin	Y	Bill K, Kevin Wright/Marin Open Spa BOS Rosemarie Smallcombe; Sierra Foothill Conservancy/Bridget Fithian
<a href="#">Mariposa</a>	Mariposa	Y	
<a href="#">Mendocino</a>	Mendocino	Y	John - Redwoods Rising contact
<a href="#">Merced</a>	Merced	N	
<a href="#">Modoc</a>	Modoc	?	BOS Geri Byrne/RCRC
<a href="#">Mono</a>	Mono	Y	Paul, Lynda, Marcella, Wendi
<a href="#">Monterey</a>	Monterey	Y	BOS Chris Lopez/Parks District
<a href="#">Napa</a>	Napa	Y	BOS Anne Cottrell BOS Hardy Bullock, Heidi Hall; Town



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CALREC.Vision.org c/o MLTPA PO Box 100 PMB #432 Mammoth Lakes, CA 93546 (760) 934-3154 ww.mltpa.org

# Item 3 | Discussion



CA Governor's Office of  
Land Use and  
Climate Innovation

# Item 4 | ICARP TAC Charter & Bylaw Update



CA Governor's Office of  
Land Use and  
Climate Innovation

# Roles & Responsibilities

Councilmembers shall:

- Identify opportunities for ICARP to uplift and be responsive to local & regional priorities and needs for climate adaptation planning.
- Promote coordination of regional and local efforts with state adaptation and resilience strategies.
- Offer recommendations to ICARP to define priorities, advise and shape the program's climate adaptation and resiliency efforts, and support the program to be responsive to political and fiscal conditions.
- Ensure the work of ICARP is grounded in ICARP principles.



# Attendance & Satellite Locations

- Members will attend at least two meetings per year (designated alternates count).
  - Designated alternates are apprised of the work of the TAC, voting items, and attend in person.
- Members are expected to attend meetings in person.
  - Zoom attendance permitted only for reasonable accommodation or attendance by satellite location.
- Satellite locations must be open and accessible to the public and ICARP staff must be notified 1 month in advance.



# Decision-making

- Council meetings will follow Roberts Rules of Order. Council members are expected to be familiar with Roberts Rules of Order.
- All voting items must be considered under a quorum (simple majority of all TAC members).
- Decisions will be made, where possible, under consensus. Otherwise, will be approved by a majority vote, where each member has one vote.
- It is the personal responsibility of each TAC member to recuse themselves or abstain from participating in agenda items which may result in current or future conflicts of interest.



# Item 4 | Public Comment



CA Governor's Office of  
Land Use and  
Climate Innovation

# **ACTION**

**Approve the revised TAC  
Charter and Bylaws.**



# Item 5 | ICARP Programmatic Updates



CA Governor's Office of  
Land Use and  
Climate Innovation

# Welcome New Staff!



**Catherine Foster**  
Senior Adaptation  
and Resilience  
Planner



**Emely Anico**  
Senior Climate  
Research  
Specialist



**Azura Haley**  
Executive  
Fellow

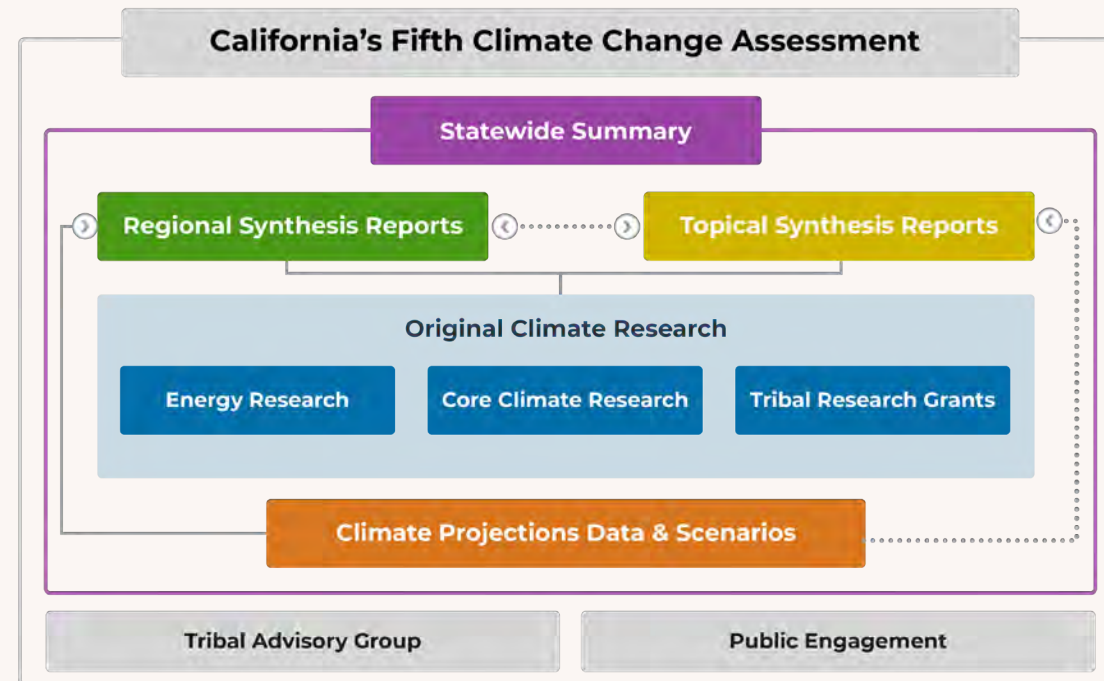


# Welcome Baby Tamara!



# Updates – 5<sup>th</sup> Assessment

- Author teams for Statewide Topical Reports on “Climate Impacts to the Economy”, “Racial Equity and Climate Justice”, and “Climate Displacement and Migration” confirmed.
- CEC Business Council approved funding for Round 2 of Tribal Research Grant Program.
- Recruiting for:
  - New Tribal Advisory Group members
  - Editorial Board Leadership
  - Expert Reviewers
- Hosting a Youth Art Competition this Spring



# Updates – Climate Services

**Vulnerable Communities Platform** will launch late March-April. We have entered into contract with the Foundation for California Community Colleges for the Pilot Communities Program.

The screenshot shows the 'Climate Vulnerability Map Viewer' interface. At the top, there is a navigation bar with the title and several menu items: 'Welcome & Regions', 'Climate Vulnerability Index', 'Individual Indicators', and 'Compare Tool'. Below the navigation bar, there are two main sections. On the left, 'Choose a Timeframe' has buttons for 'Now' and '2050'. Below that is 'California Summary Information' with a text block describing California's climate challenges. On the right, 'Choose a Hazard to View Present Vulnerability' has buttons for 'Drought', 'Extreme Heat', 'Flood', 'Sea Level Rise', and 'Wildfire'. The main area is a map of California showing vulnerability levels in various colors. At the bottom, there is a legend diagram showing 'Social Vulnerability' (High/Low) plus 'Climate Vulnerability' (Low/High) equals 'Climate' (Both High/Low). There are also buttons for 'Index Methodology (coming soon)', 'Download Data (coming soon)', and 'En Español'.

**Climate Vulnerability Map Viewer**

Welcome & Regions | Climate Vulnerability Index | Individual Indicators | Compare Tool

Return to VCP Home

Choose a Timeframe

Now | 2050

Choose a Hazard to View Present Vulnerability

Drought | Extreme Heat | Flood | Sea Level Rise | Wildfire

**California Summary Information**

California is one of the most "climate-challenged" regions of North America; its historical climate is extremely variable, and climate change is making extreme conditions more frequent and severe. California's temperatures are already warming, heat waves are more frequent, and precipitation continues to be highly variable. Since its Third Climate Change Assessment in 2012, California has experienced several of the most extreme natural events in its recorded history: a severe drought from 2012-2016, an almost non-existent Sierra Nevada winter snowpack in 2014-2015, increasingly large and severe wildfires, and back-to-back years of the warmest average temperatures.

Information adapted from California's 4th Climate Change Assessment. Revision to information based on 5th Climate Change findings is forthcoming.

En Español

Social Vulnerability: High, Low

Climate Vulnerability: Low, High

Climate: Both High, Both Low

Click to Expand

Index Methodology (coming soon)

Download Data (coming soon)



# Updates – Grant Programs

- Extreme Heat and Community Resilience Program is contracting with 49 first round grantees.
- Two technical assistance convenings for Adaptation Planning Grant Program grantees in January on Case Studies for Collaborative Engagement and Strategic Storytelling.
- Regional Resilience Planning & Implementation Grant Program grantee workshop March 4<sup>th</sup> on community engagement, the 2nd peer-to-peer learning workshop.



# Other Updates

- LCI is engaged with Cal OES and our Community Planning and Capacity Building partners to coordinate the development of a long-term recovery plan in Los Angeles County following the 2025 LA Firestorm.
- CNRA and ICARP will develop the timeline and engagement strategy for the Extreme Heat Action Plan update.



# Item 5 | Discussion



CA Governor's Office of  
Land Use and  
Climate Innovation

# Item 6 | ICARP 2025 Priorities



CA Governor's Office of  
Land Use and  
Climate Innovation

# Cultivate Trust and Empower Communities

- Deepen partnerships with CA Native American Tribes and Indigenous communities that meaningfully respond to Tribal feedback, include consistent and reliable engagement opportunities, and honor and respect Tribal sovereignty.
- Foster meaningful ongoing relationships with grantees, local governments, and vulnerable communities.
- Strengthen participatory and equitable grant processes that prioritize community needs and enhance accessibility to State funds.
- Evaluate and address shortcomings in community support and engagement to better align State efforts with local priorities.
- Align public engagement, technical assistance, policies, investments, and State-funded research to meet the diverse needs and contexts across regions.
- Build capacity in vulnerable communities through focused technical assistance and training programs.
- Guarantee reliable public access to statewide and locally specific information to support informed decision-making.



# Showcase Impact Through Storytelling

LCI Newsletter: January Highlights and February Lookahead



On Jan. 29, Abby Edwards, Acting Executive Director for State Planning and Policy Development spoke at the *Gathering on Climate Resilience in the North Coast of California* hosted by NCRP. NCRP, in partnership with Humboldt County, the Watershed Research and Training Center, and Sonoma Water, are grant recipients of LCI's Regional Resilience Grant Program (RRGP) - which funds climate resilience projects for regional partnerships to address the most significant climate risks in their regions. Learn more about [RRGP](#) on our website!



Governor's Office of Land Use and Climate Innovation (LCI)

7,803 followers

1d • 🌐

📣 Grantee Shoutout: LCI's Regional Resilience Grant Program (RRGP) grantee, Mechoopda Indian Tribe of Chico Rancheria, along with partners Big Chico Creek Ecological Preserve, have been working together to offer comprehensive fire trainings for the Sierra Nevada region. Through the help of a \$1.9 million grant for their project Kó:dom Hýbísín ("Land Stewardship"), they were able to build capacity by hiring a stewardship crew, doing cultural monitoring of fire scars and other restoration activities, and cross training staff. All crew members received new or renewed firefighter certificates and received S-219 certification in basic fire operations, with the partners already planning their next trainings, including S-212 chainsaw certifications.

Kó:dom Hýbísín addresses wildfire, extreme heat, and drought through land stewardship, such as cultural burns to reduce fuel loads and enhance climate-resilient vegetation.

🔗 Learn more about RRGP today! <https://lnkd.in/gw7fDfnP>

## GRANTEE SHOUTOUT

Mechoopda Indian Tribe of Chico Rancheria & Partners Big Chico Creek Ecological Preserve



Partnership used \$1.9M in grant funding to offer comprehensive fire trainings for the Sierra Nevada region through their project Kó:dom Hýbísín - "Land Stewardship!"



MORE IN CAPTION

# Expand Localized Data, Research, and Tools

- Further develop and leverage informational resources, frameworks, and tools to guide local governments in assessing vulnerabilities and implementing adaptation actions.
- Identify shared regional and local priorities to streamline efforts, avoid duplicative processes, and ensure consistent messaging.
- Expand decision-support tools and data resources to deliver equity-centered guidance, enhance local planning capacity, and support resilience-oriented recovery from climate impacts.
- Support low-capacity users with technical assistance, translating complex data and information into actionable insights for projects and plans.
- Fund tribally-led research and knowledge sharing that respects Indigenous data governance and acknowledges the unique relationships and histories of Tribes in California.
- Develop regionally-specific action-based research that uplifts local priorities through a community-driven research model.



# Implement Innovative Adaptation and Resilience Action

- Prioritize investments in climate adaptation and resilience efforts in the communities most vulnerable to the impacts of climate change.
- Utilize ICARP's role as an interagency connector to advance a comprehensive and coordinated response across state agencies for equitable climate adaptation and resilience outcomes.
- Foster and invest in diverse partnerships among public, private, Tribal, and community-based entities.
- Support access to multiple funding mechanisms for local projects.
- Provide technical assistance to align plans, accelerating the development and implementation of holistic resilience plans.
- Provide technical assistance, evaluation, and case studies for climate adaptation infrastructure and programs.
- Identify opportunities to fund regional resilience efforts that help interconnected and diverse communities build resilience across jurisdictional boundaries.



# Item 6 | Discussion



CA Governor's Office of  
Land Use and  
Climate Innovation

# Item 6 | Public Comment



CA Governor's Office of  
Land Use and  
Climate Innovation

# **ACTION**

**Approve the 2025 ICARP  
Priorities.**



# Item 7 | Vulnerable Communities Definition



CA Governor's Office of  
Land Use and  
Climate Innovation

# Current Vulnerable Communities

## Definition

*Climate vulnerability describes the degree to which natural, built, and human systems are at risk of exposure to climate change impacts. Vulnerable communities experience heightened risk and increased sensitivity to climate change and have less capacity and fewer resources to cope with, adapt to, or recover from climate impacts. These disproportionate effects are caused by physical (built and environmental), social, political, and/ or economic factor(s), which are exacerbated by climate impacts. These factors include, but are not limited to, race, class, sexual orientation and identification, national origin, income inequality, and disability.*



# Vulnerable Communities Resource Guide

This resource guide expands on the vulnerable communities definition as a starting point for practitioners to use when first considering how to define vulnerable communities in an adaptation context.



# New Vulnerable Communities

## Definition

*Climate vulnerability describes the degree to which natural, built, and human systems are at risk of exposure to climate change impacts. Vulnerable communities experience heightened risk and increased sensitivity to climate change and have less capacity and fewer resources to cope with, adapt to, or recover from climate impacts. These disproportionate effects are caused by physical (built and environmental), social, political, and/ or economic factor(s), which are exacerbated by climate impacts. These factors include, but are not limited to, race, class, sexual orientation, **gender, gender identification**, national origin, income inequality, and disability.*



# Item 7 | Discussion



CA Governor's Office of  
Land Use and  
Climate Innovation

# Item 7 | Public Comment



CA Governor's Office of  
Land Use and  
Climate Innovation

# **ACTION**

**Approve the addition of gender and gender identification to the vulnerable communities definition.**



# LUNCH BREAK



# Item 8 | Fifth Assessment Reports



CA Governor's Office of  
Land Use and  
Climate Innovation

# What are the California Climate Change Assessments?

Visit Website:



California's Climate Assessment is a multi-year research effort with government, academic, tribal, and community partners to generate new data, original research, and syntheses on the ways climate change impacts California's diverse communities.



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
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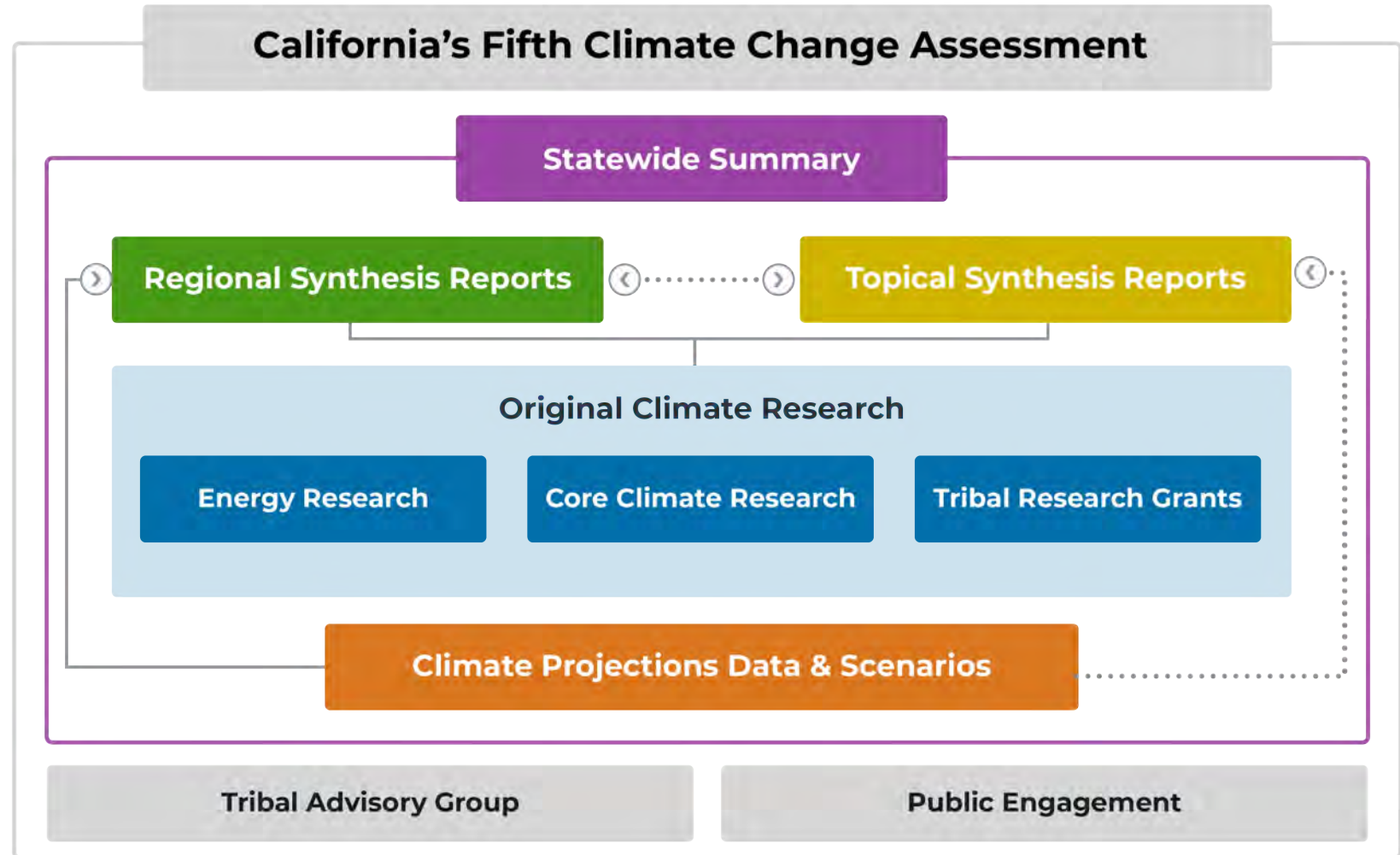
CALIFORNIA  
**STRATEGIC**  
**GROWTH**  
COUNCIL



CALIFORNIA  
**NATURAL**  
**RESOURCES**  
AGENCY

# California's Fifth Climate Assessment

*The Fifth Assessment will produce a suite of research and tools that report the impacts and risks of climate change, based on the best available science.*



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT



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GROWTH  
COUNCIL



CALIFORNIA  
**NATURAL**  
**RESOURCES**  
AGENCY

# Author Team Presenters

## Los Angeles Regional Report

- Jesse Norris, UCLA

## Climate Adaptation Finance & Insurance

- Kara Voss, CDI

## Climate Impacts to the Economy

- McKenna Maxwell, UCSD

## Racial Equity & Climate Justice

- Margaretta Lin & Charisma Acey, UC Berkeley

## Climate-Induced Human Displacement & Migration

- Betsy Popken & Hossein Ayazi, UC Berkeley



The UCLA logo is displayed in a bold, blue, sans-serif font. The background of the entire slide is a panoramic view of the Los Angeles skyline at dusk, with snow-capped mountains in the distance and various skyscrapers in the foreground.

# UCLA

## Los Angeles Chapter of California's 5th Climate Change Assessment

ICARP TAC Q1 meeting

March 7th, 2025

# Los Angeles Region within California 5th Assessment



**Includes all of LA, Ventura, and Orange Counties, plus urban parts of San Bernardino and Riverside Counties**

# LA region experiences a wide range of extreme climate phenomena

Extreme heat



Extreme rain



Drought



Landslides



Hazardous air quality



Wildfire



# LA Chapter Team

## Lead Authors



**Jesse Norris**  
Atmospheric and  
Oceanic Sciences,  
UCLA



**Alex Hall**  
Atmospheric and  
Oceanic  
Sciences, UCLA



**Ben Bass**  
Atmospheric and  
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Sciences, UCLA



**Jiachen Zhang**  
Civil and  
Environmental  
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USC



**Zhiyun Li**  
Anderson  
School of  
Management,  
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**Juliette Finzi-Hart**  
Pathways Climate  
Institute



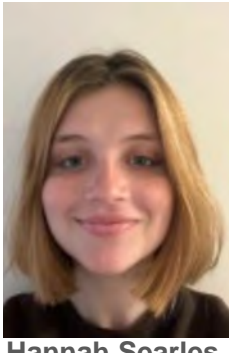
**Nancy Cohen**  
Gender Equity  
Policy Institute



**Dustin Hermann**  
TreePeople



**Mary  
Hillemeier**  
TreePeople



**Hannah Searles**  
TreePeople

## Community Outreach

## Advisors



**Gavin  
Madakumbura**  
Geography,  
UCLA



**Edith de Guzman**  
UC Agriculture  
and Natural  
Resources



**Eric Fournier**  
California Center for  
Sustainable  
Communities, UCLA



**Eric Porse**  
UC Agriculture  
and Natural  
Resources



**Erin Coutts**  
LA Regional  
Collaborative for  
Climate Action and  
Sustainability, UCLA



**Fortino Morales**  
Sustainability  
Manager, City of  
Riverside



**Greg Pierce**  
Luskin Center,  
UCLA



**Jonathan  
Parfrey**  
Climate Resolve



**Nurit Katz**  
Chief  
Sustainability  
Officer, UCLA



**Deborah Glaser**  
The Nature  
Conservancy



**Sophie Katz**  
The Sustainable  
LA Grand Challenge



**Elesee Lui**  
Stemp  
The Sustainable LA  
Grand Challenge

## Coordination Support

# LA Chapter structure

1. **Physical and Ecological Changes**
2. **Impacts**
  - a. **Natural Systems**
  - b. **Built Systems**
  - c. **Social Impacts**
3. **Adaptation Strategies**

**Each section addresses the following climate-change impacts:**

- **Extreme heat**
- **Water resources/flooding**
- **Wildfire**
- **Air quality**
- **Sea-level rise**

# Climate Data

- LOCA2 statistical downscaled projections of CMIP6 climate models
  - 15 different climate models
  - 1 to 10 realizations for each model
  - 3 emissions scenarios (SSP2-4.5, SSP3-7.0, SSP5-8.5)
  - 199 total projections
- WRF dynamically downscaled projections of CMIP6 models
  - 1 realization of 8 different climate models
  - All based on SSP3-7.0
  - 8 total projectios
- Mid-Century (2041–2070) and Late-Century (2071–2100) projections

# Climate Data Continued

Based on the above projections, we will also use:

- Hydrological projections using 2 hydrology models
  - Flood projections under extreme rainfall
  - Reservoir levels
  - Drought projections
- Sea-level rise projections based on coastal storm modeling
  - Coastal flooding
  - Erosion
  - Cliff failures
- Wildfire projections based on extreme fire weather

# Community Engagement

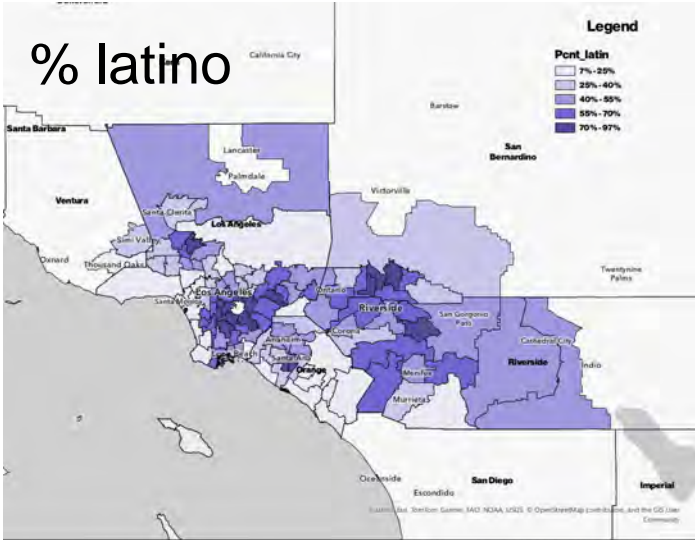
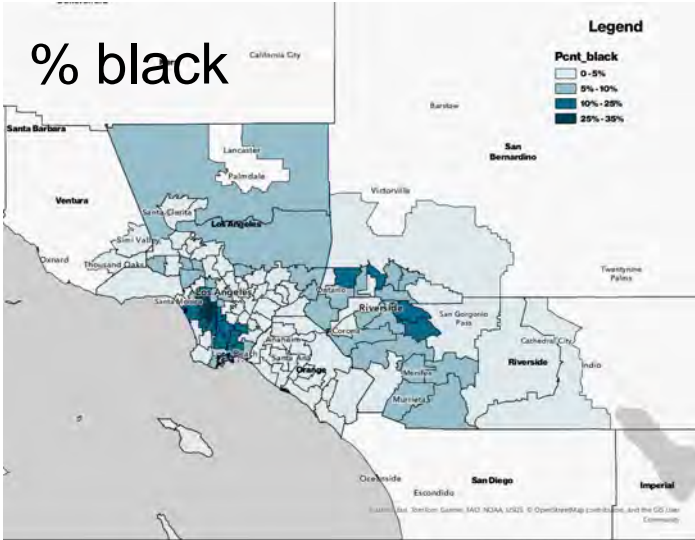
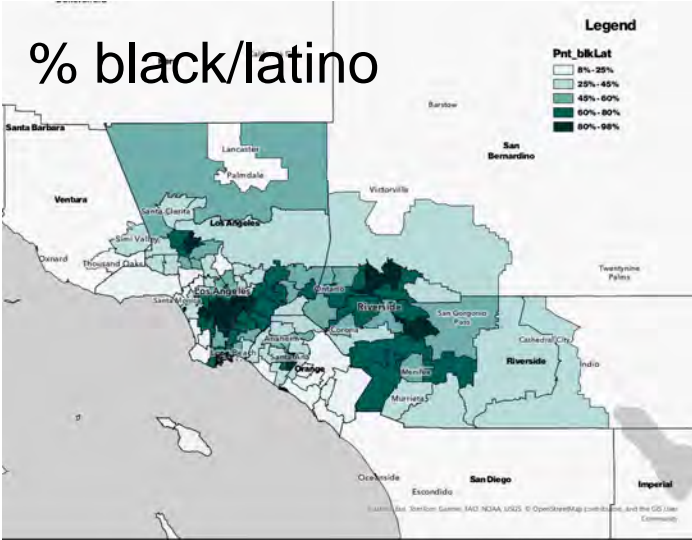
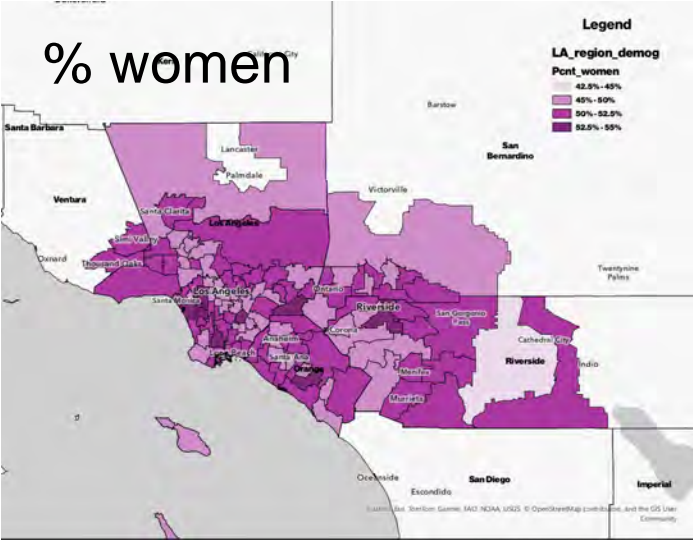
LA Chapter to be informed by community outreach by TreePeople

- Establish community priorities regarding impacts of climate change in LA region
- Solicit community reviewers of LA Chapter
- Include stories from community members in final report



**In this way, final LA Chapter will be as relevant as possible in addressing impacts across the community**

# Identifying socio-demographic inequities



# 2025 LA wildfires

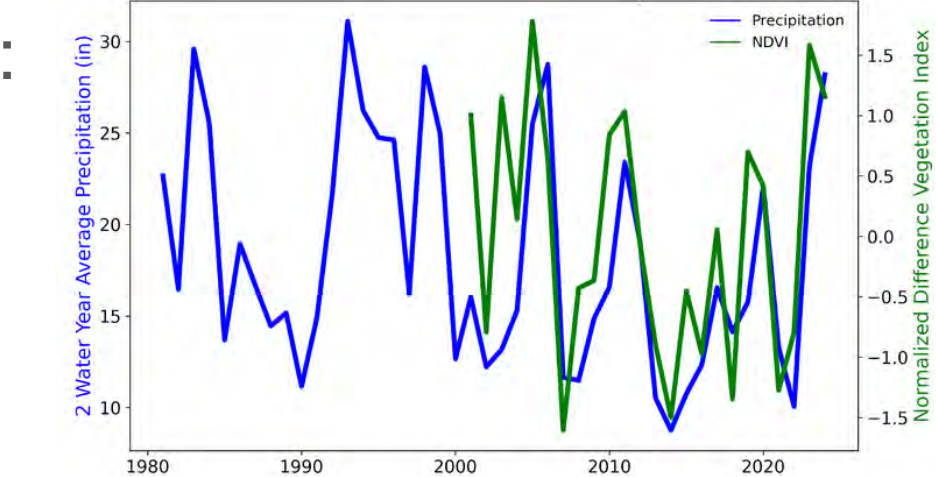
Our group has released a statement on the drivers of January 2025 wildfires:

<https://sustainablela.ucla.edu/2025lawildfires>

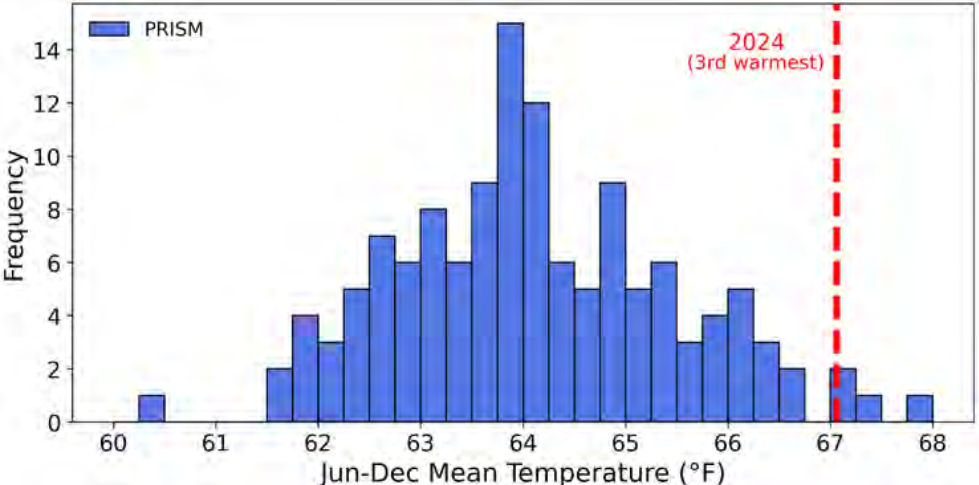


# Devastating wildfires resulting from unique blend of 4 factors

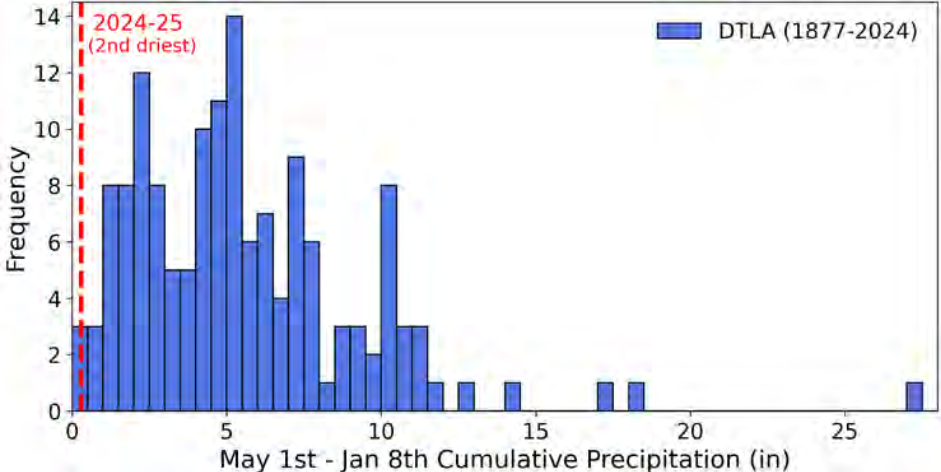
### 2 very wet winters 2022–2024



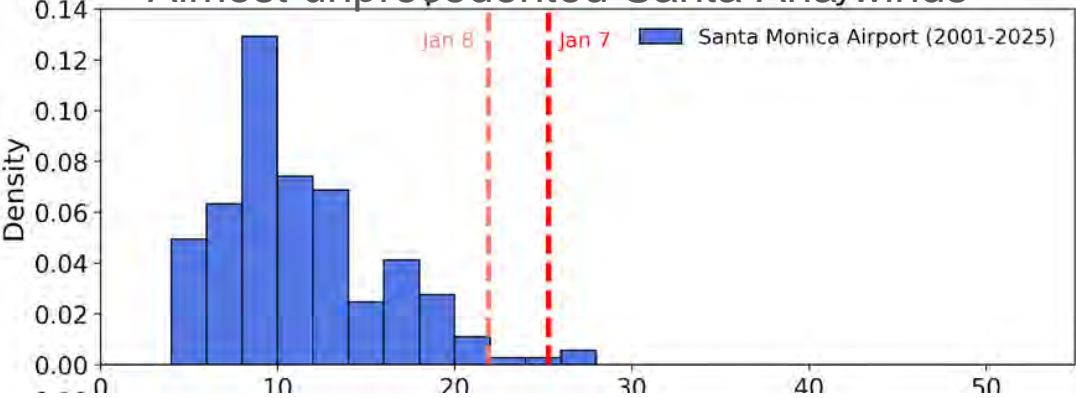
### Extremely hot summer of 2024



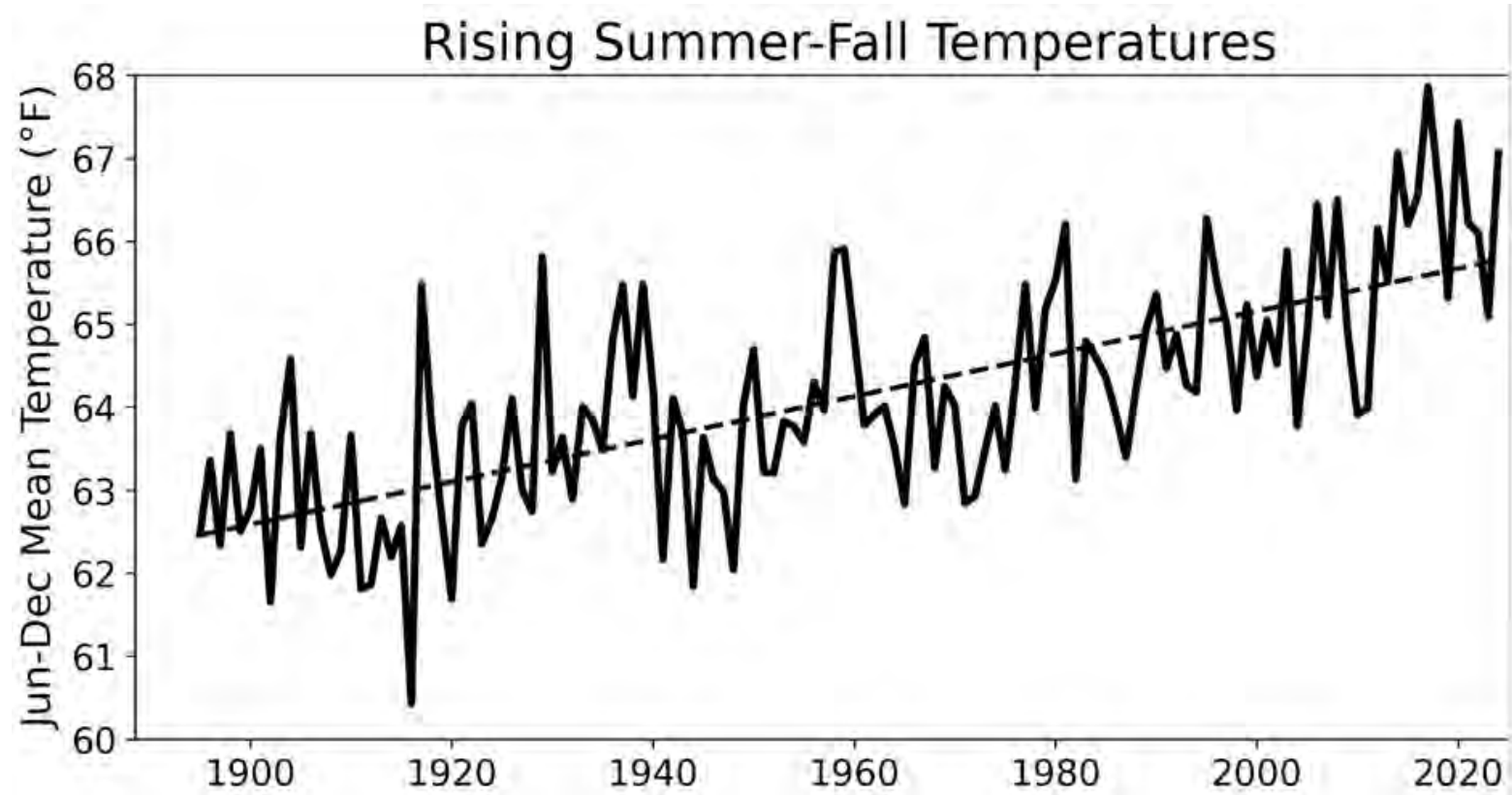
### Absence of precipitation this wet season



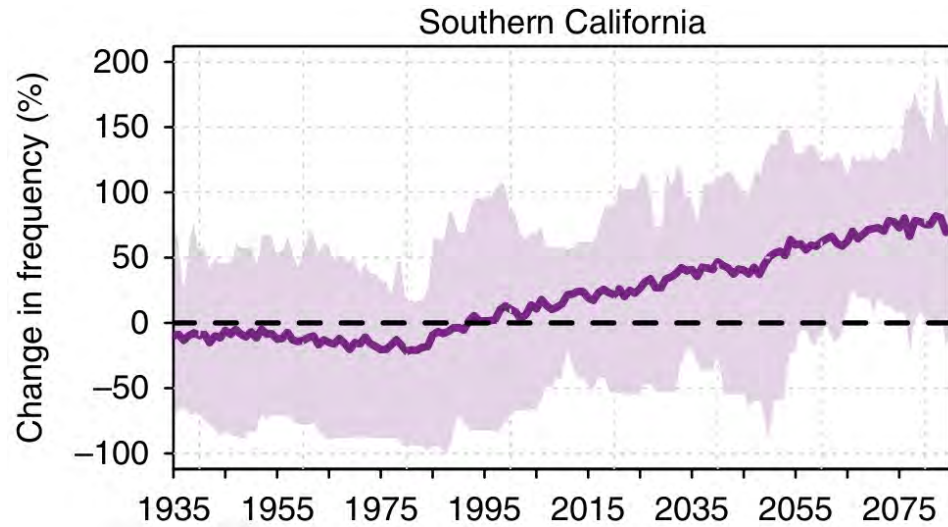
### Almost unprecedented Santa Ana winds



# Climate change impacts on fires: Temperature

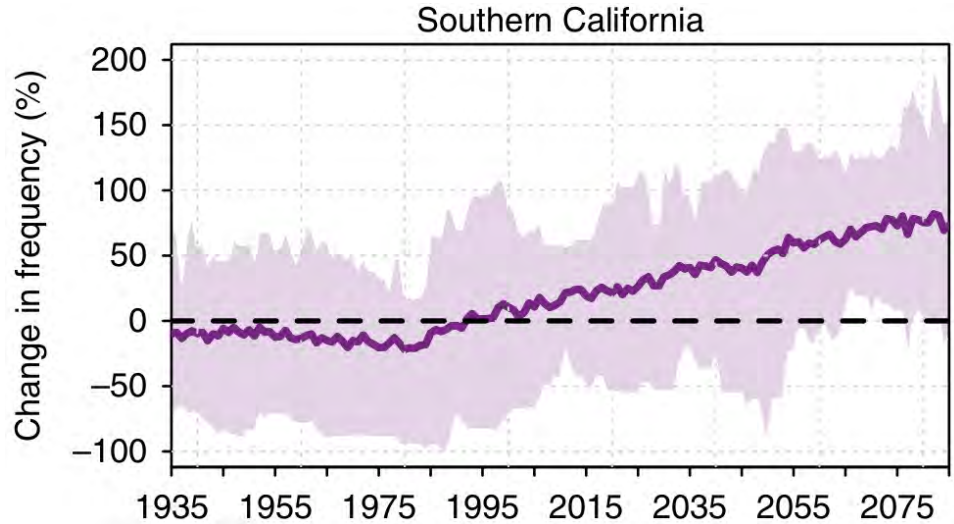


# Climate change impacts on fires: Precipitation



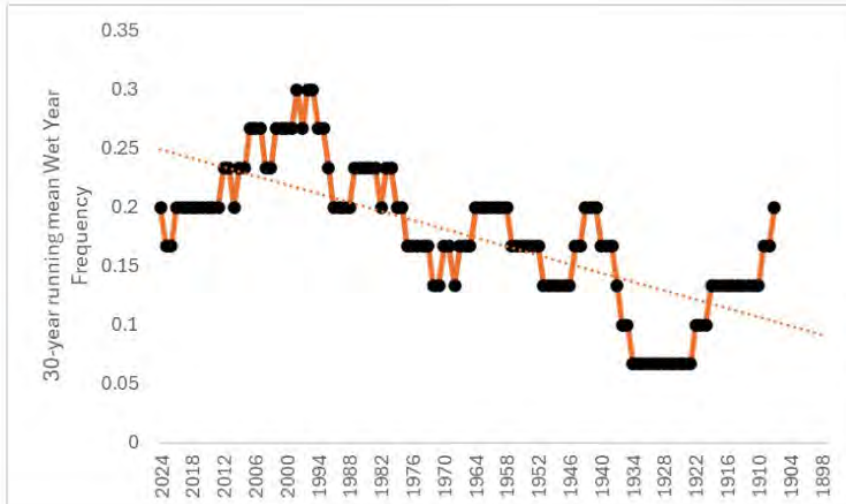
Increase in precipitation “whiplash” projected by GCMs (Swain et al., 2018, Nature Climate Change)

# Climate change impacts on fires: Precipitation



Increase in precipitation “whiplash” projected by GCMs (Swain et al., 2018, Nature Climate Change)

Preliminary analysis shows that wet-year and dry-year frequency have both increased in LA



# Summary

- LA Chapter is using the most advanced and high-resolution 21st Century climate projections over California to predict future changes to mean climate and extremes
- Community Engagement by TreePeople to ensure that final report addresses relevant impacts across the community
- Socio-demographic inequities to be identified by overlaying demographic maps with climate change impacts
- Report to be informed by recent extreme events, e.g., 2025 wildfires, to predict future risk of similar conditions reoccurring



[jessenorris@ucla.edu](mailto:jessenorris@ucla.edu)



# California's 5<sup>th</sup> Climate Assessment Climate Adaptation Finance

ICARP Technical Advisory Council Meeting


March 7, 2025

Kara Voss

California Department of Insurance

# THE TEAM

- Kara Voss, California Department of Insurance
- Deborah Halberstadt, California Department of Insurance
- Francis Bouchard, Duke University
- Michael Paparian, Climate Bonds Initiative
- David Victor, UC San Diego
- Rhaguveer Vinukollu, MunichRe
- David Wooley, UC Berkeley
- Megan Kelso, UC Santa Cruz
- Michael Solomon, CPI Global
- Rae Taylor-Burns, UC Santa Cruz
- Angela Aducci, BMO
- Shalini Vajjhala, Precollective
- Mike Beck, UC Santa Cruz
- Hope Cupples, CA Air Resources Board
- Kiya Bibby, Ocean Science Trust
- Heidi Waite, Ocean Science Trust
- Morgan Richmond, CPI Global
- Emilie Mazzacurati, Tailwind Climate

A close-up photograph of a yellow bird, likely a Goldfinch, perched on a dark brown branch. The bird has a bright yellow body, a black cap, and a black eye. Its beak is a light brown color. The background is a soft, out-of-focus green, suggesting a natural, outdoor setting. The bird is facing left, and its tail feathers are visible at the bottom of the frame.

**Climate Adaptation Finance:** we define adaptation finance as the financial flows that support adaptation and resilience activities, including activities that seek to prevent harm, reduce or transfer risk, recover from impacts, or promote economic, social and natural ecosystems' co-benefits, across all sectors. Adaptation finance includes a wide range of capital flows from both public and private capital in developing countries and industrialized economies.

# REPORT SCOPE

## In-Scope:

Adaptation  
Finance

Adaptation  
Funding

Disaster Risk  
Finance

Insurance

Tracking  
Finance and  
Funding

## Out-of-Scope:

GHG  
Mitigation  
Finance

GHG  
Mitigation  
Funding

Financial Risks

Physical Risks  
with Financial  
Consequences

# OUTLINE

- Why adaptation finance needs to be part of the Fifth Assessment
- Part I: California's Climate Adaptation Finance Past and Present
  - Adaptation finance needs
  - Past/current adaptation finance expenditures
  - Role of the private sector
  - Insurance and disaster risk finance present
  - Equity considerations for financing adaptation and disaster risk financing
- Part II: California's Climate Adaptation Finance Future
  - Existing strategies for funding and financing adaptation in CA
  - Why does adaptation finance, disaster risk financing, and insurance need to evolve?
  - Case Studies: Adaptation Finance
  - Case Studies: Disaster Risk Finance and Insurance
  - Case Studies: Private Sector
- Conclusion
- Resources

# Linkages to LA Wildfires

## **Preparing for future wildfires**

- Mechanisms for financing and funding wildfire resilience and adaptation
- Innovation in the insurance sector



Kara Voss

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Deborah Halberstadt

[Deborah.Halberstadt@insurance.ca.gov](mailto:Deborah.Halberstadt@insurance.ca.gov)



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

# California's Fifth Climate Change Assessment: Climate Impacts to the Economy Topical Report



**UC San Diego**  
SCHOOL OF GLOBAL POLICY AND STRATEGY

# Climate Impacts to the Economy Topical Report

The fiscal and economic impacts of current and projected climate change events and trends in California.

Opportunities to build adaptation capacity, reporting costs and benefits of climate adaptation responses.



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

# Report Contents



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

## **Executive Summary**

### **Introduction**

Scope of Report

Sources of Climate Risk

### **Economy Wide Impacts**

GDP wide estimates

### **Natural Capital systems**

Agriculture

Coastal Economy

Freshwater Availability

Forestry Economy

### **Infrastructure and Services**

Energy

Transportation

Real Estate

Government Operations

Tourism

### **Human Capital**

Labor

Education

Health

### **Cross-sector Interactions**

### **Differing Regional Impacts**

# Economic Impacts of Climate Change



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

## Climate Hazards

Wildfire

Heat

Drought

Flooding

Sea Level Rise

Storm Surges

## Sectors



Government



Households



Health



Agriculture



Business



Infrastructure



Recreation



Labor



Existence/non-use value



Unknown value

# Climate Impacts to the Economy Topical Report

How are the Los Angeles region wildfires informing this report? How can the report inform future responses to wildfires?



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT



# Wildfire Economic Impacts addressed within the 5th National Climate Change Assessment




CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

**Table 19.1. Example US Economic Impacts of Climate Extremes and Climate Change**

## a) Sample Current Impact Estimates of Climate Hazards on US Economic Outcomes

Sector	Impact Type	Climate Hazard	Economic Estimate
Labor 	Earnings	Wildfire smoke	-\$144 billion per year <sup>59</sup>
Government 	Municipal budgets	Wildfire	+25 percentage point increase in likelihood of budget deficit <sup>53</sup>

## b) Sample Future Impact Estimates of Projected Climate Hazards on US Economic Outcomes

Health 	Mortality (all causes)	Wildfire	+9–20 deaths per 100,000 people ≥65 years old (for 50% increase in smoke) <sup>74</sup>
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# Wildfire Economic Impacts addressed within the 5th National Climate Change Assessment



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

## How Climate Hazards Impact Real Estate Prices

Lower exposure to climate hazards



Higher housing price

\$

Same house with higher exposure to climate hazards



Lower housing price

\$

Lost value due to climate



Current inland flooding risk: -4.6%



Future sea level rise risk: -14.7%



Past wildfire: -9.3% (1 fire),  
-27.7% (2 fires)



Other climate hazards, including  
hurricanes, temperature, drought,  
and ecosystem health

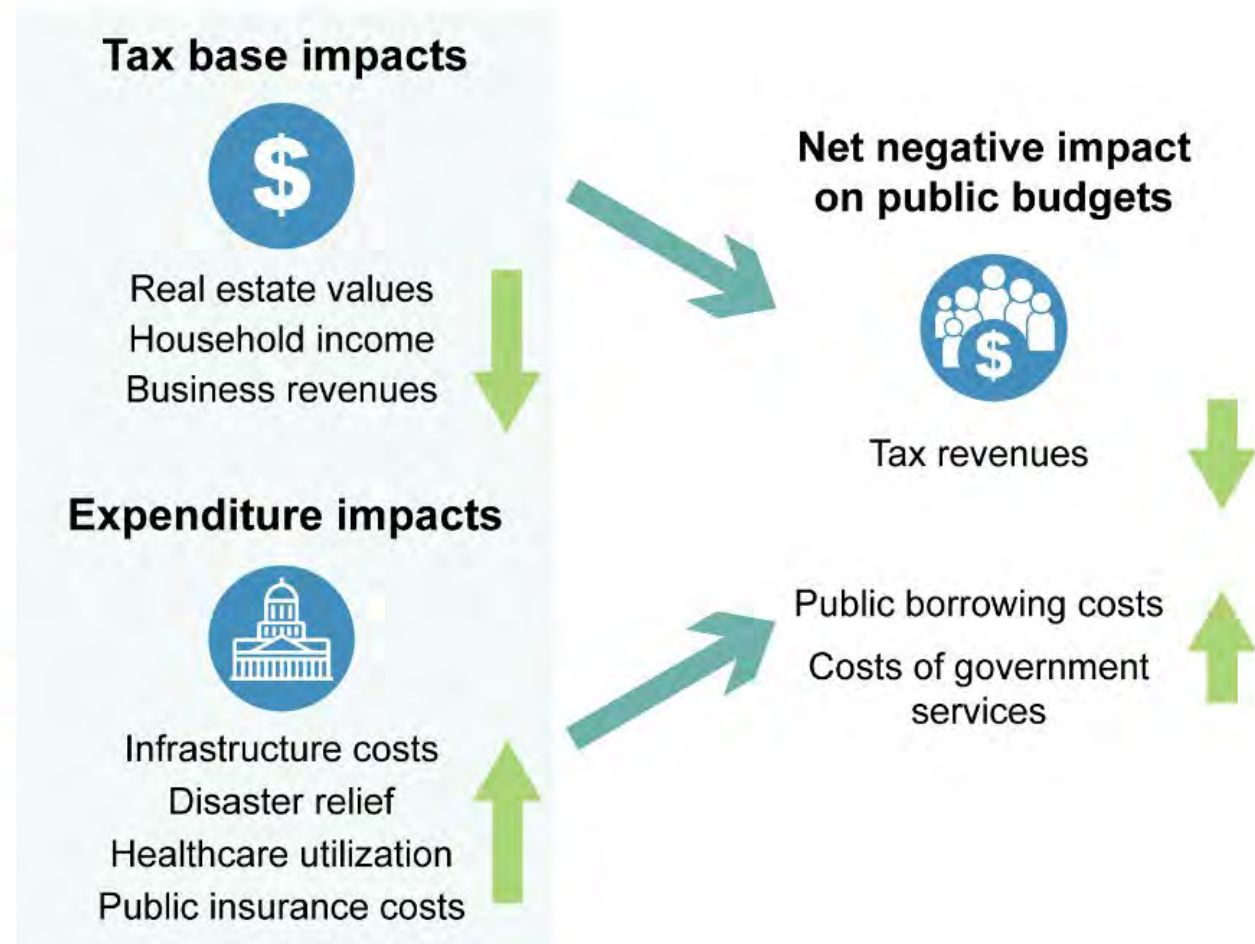
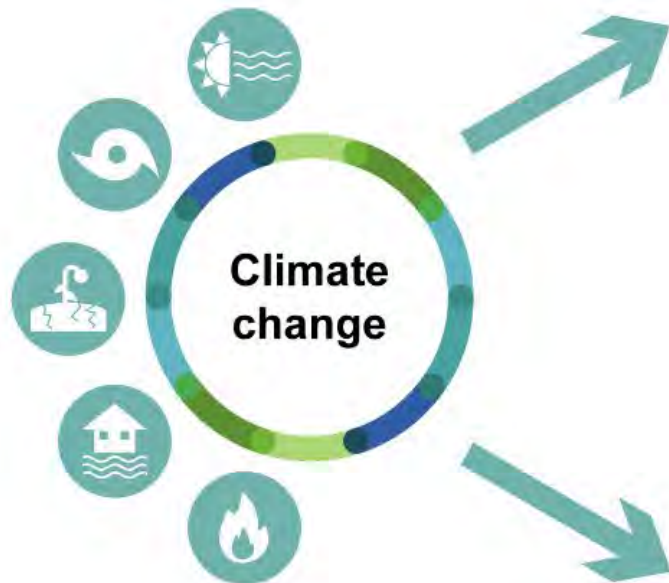
Climate hazards influence real estate prices, much like square footage or number of bedrooms.

# Wildfire Economic Impacts addressed within the 5th National Climate Change Assessment



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

## Fiscal Risks of Climate Change





The estimated cost of fighting the 10 largest California wildfires in 2021 exceeded \$2.25 billion [5NCA, Chapter 28].

## **Additional Economic Costs of Fires include:**

- loss of structures and infrastructure
- increased medical costs
- crop losses
- water quality contamination
- Secondary impacts of wildfires, such as postfire debris flows

# Climate Impacts to the Economy Topical Report



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

Thank you!

## **Topical Economic Report Team:**

Gordon McCord, Co-Lead

Teevrat Garg, Co-Lead

McKenna Maxwell, Project Manager



# Racial Equity and Climate Justice Topical Synthesis Report

California's Fifth Climate Assessment

March 2025

# Overview



peacesupplies.org

Source: peacesupplies.org

- Report Objectives
- Team
- Steering Committee Criteria
- Research Justice Framework
- Emergency Events and the RECJ Report

# Racial Equity & Climate Justice Report Objectives

**Aim: Compile the best available science and information** about Racial Equity and Climate Justice, **including identifying potential solutions** that build resilience to current and future climate impacts, by:

- 1. Synthesizing existing research and informational resources** since the Fourth Assessment Report to uplift specific issues on climate change impacts.
- 2. Integrating subject-specific community priorities** on Racial Equity and Climate Justice from across the state through community engagement and partnerships.
- 3. Creating informational resources and tools on Racial Equity and Climate Justice** that can be used to guide state and local policy, planning, and action on climate change.
- 4. Attempt to forecast racialized climate impacts** on “vulnerable communities” using new State datasets.
- 5. Identify the structural roots of racial disparities.**
- 6. Recommend state, regional, and local new policies and programs** to address major gaps.

# Team

## Lead Author Team



Margaretta Lin



Charisma Acey

Margaretta Lin, Charisma Acey  
PIs, UC Berkeley

Supported by Just Cities researchers Erika Anjum, Dagin Faulkner, Titli Thind



Erika Anjum



Dagin Faulkner



Titli Thind

## Co-Author Team

AJ Kim, SDSU  
Dorsey Nunn, AOUON  
Emery Tahy, NAHC  
Federico Castillo, UCB  
Ms. Margaret Gordon, WOEIP/JC  
Nader Afzalan, UCB  
Needa Bee, The Village  
Regan Patterson, UCLA



AJ Kim



Dorsey Nunn



Emery Tahy



Federico Castillo



Ms. Margaret Gordon



Nader Afzalan



Needa Bee



Regan Patterson

## Steering Committee

Manuel Pastor, USC  
Mike Mendez, UCI

Other committee member selection  
in progress

# People-Centric Approach

## Highly-Impacted Groups

- 1 Migrant Farmworkers & Undocumented Workers
- 2 Immigrants & Undocumented Residents
- 3 Low Income & Black Communities
- 4 Urban Indigenous Communities
- 5 Current and Formerly Incarcerated People
- 6 Unhoused People

## Intersectionalities

Queer and Trans folk, Elderly, Youth, Single Mothers, other intersectional 'vulnerabilities'

# People-Centric Approach

## Chapters: Highly-Impacted Groups

- 1 Migrant Farmworkers & Undocumented Workers
- 2 Immigrants & Undocumented Residents
- 3 Low Income & Black Communities
- 4 Urban Indigenous Communities
- 5 Current and Formerly Incarcerated People
- 6 Unhoused People

- Forecasting Impacts & Resilience
- Wildfires & Air Quality
- Heat
- Water Quality & Access
- Stormwater, Flooding, Sea Level Rise & Drought
- Transportation Access
- Food
- Housing & Displacement  
(Refer other report)

# Steering Committee Criteria

1. **Leading researchers** on racial equity & climate justice in other areas not covered by the **Co-Authors**, such as:
  - a. Public school infrastructure
  - b. Rising seas
  - c. Rising heat
  - d. Energy justice & decarbonization—Just Transition
  
2. **Representative from Statewide climate justice networks/coalitions** that are advancing climate justice statewide efforts, such as:
  - a. CA Environmental Justice Alliance (CEJA)
  - b. CA EJ Coalition (CEJC)
  - c. CA Farmers Justice Coalition, and others

## Research Justice Framework

Can give us the “ceremony” for us to “return to our knowledge systems” and to heal the “ruptures that create soul wounds”

From Prof. Andrew Jolivette’s poem

Professor Andrew Jolivette, Research Justice Methodologies for Social Change <https://www.youtube.com/watch?v=-0VBjW3knWM>

1. Recognition of **community as experts**
2. **Equitable access** to information that impact the community
3. **Community control** over information
4. **Capacity to produce knowledge** that reflect the community’s experiences
5. Capacity to use all forms of community knowledge to **effectively advance community change agenda, especially structural change**



## Inclusive Sources of Knowledge

“Information” is made of three sets of knowledge.

**Community Knowledge**—cultural practices and wisdom passed down from our community (elders, neighbors, friends, etc.).

**Knowledge from experience**— Our lived, day-to-day experience; what we learn and know from living and doing it.

**Mainstream/Institutional Knowledge**—published facts & data produced by research professionals usually from outside of the community.

All three sets of knowledge inform an issue. One form may be more convincing depending on goals and audiences.

**All three are necessary to shift public opinion and make community-based social change.**

# Racial Equity & Climate Justice = Research Justice Strategies

1. People-Centered Approach to Analyzing Climate Impacts (rather than by climate topics)
2. Centering the Wisdom of Grassroots Movement Leaders on the Research Team, Including Pairing with Researchers & Students
3. Partnership Agreement & Collaborative Decision-Making
4. Secured Additional Funding for Community Scholars via Foundation Support
5. Policy change & funding priorities recommendations are key to racial equity, climate justice & research justice principles

## HOMELESSNESS

## How the LA fires could exacerbate California's homelessness crisis



BY MARISA KENDALL  
JANUARY 15, 2025

Republish



The Racial Equity & Climate Justice Report's partnership between academic researchers, frontline leaders, and government agencies enable us to identify fast evolving climate issues.



We will be holding a hybrid public launch event on April 28th, 10 am - 12 noon at the UC Berkeley campus.

You are all welcome!

More details to come...

*Thank you!*



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

Berkeley Human Rights Center



# Topical Synthesis Report: Climate-Induced Human Displacement & Migration

March 7, 2025

Integrated Climate Adaptation and Resiliency Program, Technical Advisory Council



## OUTLINE

### **Topical Synthesis Report: Climate-Induced Human Displacement & Migration**

- Report Purpose
- Report Goals
- Organization of the Report
- Community Engagement
- A Close Look: The Camp Fire (2019)



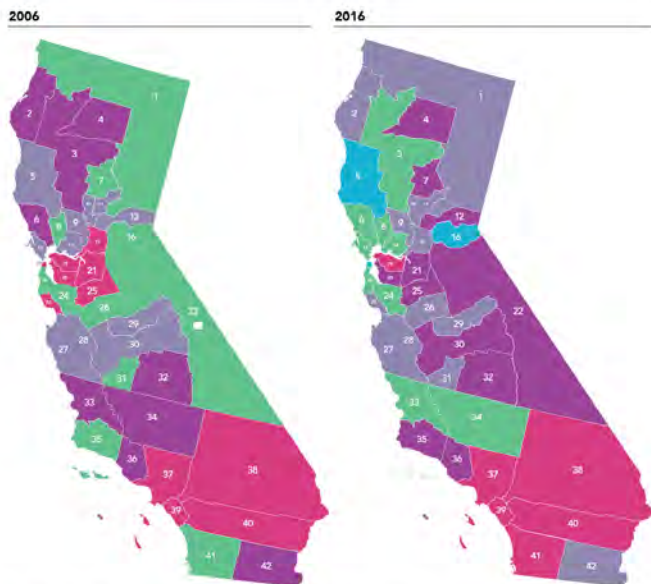
CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

# Climate-Induced Human Displacement & Migration Report Purpose



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

**Map 1. California Net Domestic Migration by County**  
2006 vs. 2016



<p><b>Net Migration Flow</b></p> <ul style="list-style-type: none"> <li>■ Less than -5,000</li> <li>■ -5,000 to -1,500</li> <li>■ -5,000 to 0</li> <li>■ 0 to 500</li> <li>■ More than 500</li> </ul>	<p>1 Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra &amp; Siskiyou</p> <p>2 Humboldt</p> <p>3 Colusa, Glenn, Tehama &amp; Trinity</p> <p>4 Shasta</p> <p>5 Lake &amp; Mendocino</p> <p>6 Sonoma</p> <p>7 Butte</p> <p>8 Napa</p> <p>9 Yolo</p> <p>10 Sutter</p> <p>11 Yuba</p> <p>12 Placer</p> <p>13 Marin</p>	<p>14 Solano</p> <p>15 Sacramento</p> <p>16 El Dorado</p> <p>17 San Francisco</p> <p>18 San Mateo</p> <p>19 Contra Costa</p> <p>20 Alameda</p> <p>21 San Joaquin</p> <p>22 Alpine, Amador, Calaveras, Inyo, Mariposa, Mono &amp; Tuolumne</p> <p>23 Santa Cruz</p> <p>24 Santa Clara</p> <p>25 Stanislaus</p> <p>26 Merced</p> <p>27 Monterey</p>	<p>28 San Benito</p> <p>29 Madera</p> <p>30 Fresno</p> <p>31 Kings</p> <p>32 Tulare</p> <p>33 San Luis Obispo</p> <p>34 Kern</p> <p>35 Santa Barbara</p> <p>36 Ventura</p> <p>37 Los Angeles</p> <p>38 San Bernardino</p> <p>39 Orange</p> <p>40 Riverside</p> <p>41 San Diego</p> <p>42 Imperial</p>
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Source: American Community Survey Public Use Microdata Samples, Tabulations by Region, Economics

Note: Counties with small populations are aggregated together.

*Climate change is causing people to migrate in California due to wildfires, flooding, sea-level rise, and other extreme weather events. These short- and long-term events put pressure on climate-impacted communities and receiving communities alike.*

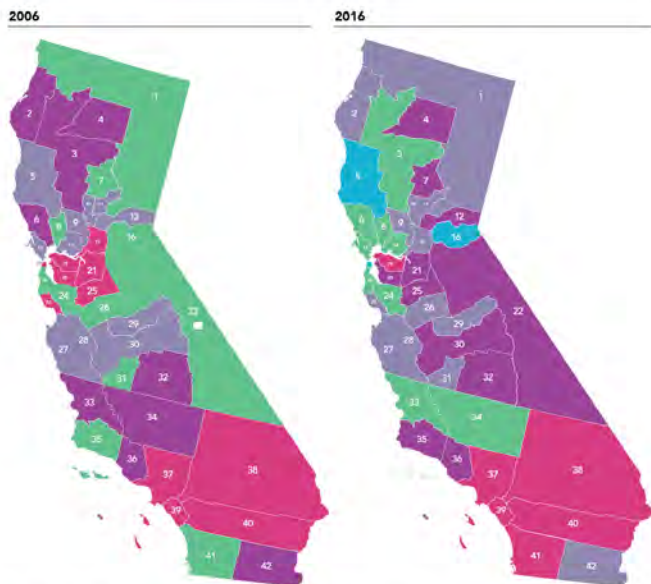
- *Synthesize current and projected impacts of climate change on human displacement and migration in California. Synthesize emerging mitigation and adaptation strategies that address the needs of all Californians, including those who are most at-risk.*
- *Ultimately, develop a resource that can help guide state and local policy, planning, and action on climate change (e.g., State agency and legislative decisions, vulnerability assessments, adaptation planning, and community resilience efforts).*

# Climate-Induced Human Displacement & Migration Report Goals



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

**Map 1. California Net Domestic Migration by County**  
2006 vs. 2016



<p><b>Net Migration Flow</b></p> <ul style="list-style-type: none"> <li>■ Less than -5,000</li> <li>■ -5,000 to -1,500</li> <li>■ -5,000 to 0</li> <li>■ 0 to 500</li> <li>■ More than 500</li> </ul>	<p>1 Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra &amp; Siskiyou</p> <p>2 Humboldt</p> <p>3 Colusa, Glenn, Tehama &amp; Trinity</p> <p>4 Shasta</p> <p>5 Lake &amp; Mendocino</p> <p>6 Sonoma</p> <p>7 Butte</p> <p>8 Napa</p> <p>9 Yolo</p> <p>10 Sutter</p> <p>11 Yuba</p> <p>12 Placer</p> <p>13 Marin</p>	<p>14 Solano</p> <p>15 Sacramento</p> <p>16 El Dorado</p> <p>17 San Francisco</p> <p>18 San Mateo</p> <p>19 Contra Costa</p> <p>20 Alameda</p> <p>21 San Joaquin</p> <p>22 Alpine, Amador, Calaveras, Inyo, Mariposa, Mono &amp; Tuolumne</p> <p>23 Santa Cruz</p> <p>24 Santa Clara</p> <p>25 Stanislaus</p> <p>26 Merced</p> <p>27 Monterey</p>	<p>28 San Benito</p> <p>29 Madera</p> <p>30 Fresno</p> <p>31 Kings</p> <p>32 Tulare</p> <p>33 San Luis Obispo</p> <p>34 Kern</p> <p>35 Santa Barbara</p> <p>36 Ventura</p> <p>37 Los Angeles</p> <p>38 San Bernardino</p> <p>39 Orange</p> <p>40 Riverside</p> <p>41 San Diego</p> <p>42 Imperial</p>
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Source: American Community Survey Public Use Microdata Samples, Tabulations by Region, Economics

Note: Counties with small populations are aggregated together.

© NEXT 10

*Identify and help address the needs of communities people are displaced from and displaced to (“two-way integration”)*

—

Identify significant gaps in **research** - in CA, the U.S., globally

Identify significant gaps in **resources** - in CA - while focusing on those who are most impacted

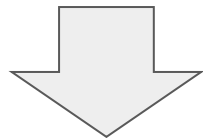
- How are these resources met by community organizations?
- What role does the state play, or could play, in providing such resources?

# Climate-Induced Human Displacement & Migration Organization of the Report



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

*Ultimately, develop a resource that can help guide state and local policy, planning, and action on climate change (e.g., State agency and legislative decisions, vulnerability assessments, adaptation planning, and community resilience efforts).*



**Organized not by region or disaster but by sector**

## **Report Sections + Lead Authors**

### **Community Identity**

- Nathalie "NJ" Mvondo, Yolo County Climate Action Commission

### **Economy**

- Federico Castillo, University of California-Berkeley

### **Education**

- Helen Lorraine Fitzmaurice, University of California-Berkeley

### **Energy; Natural Resources**

- Saraí Jiménez, Better World Group
- Asma Mahdi, Better World Group

### **Emergency Management**

- Kendall Jarvis, Legal Aid of Sonoma County

### **Health**

- Sheri Weiser, University of California-San Francisco

### **Housing**

- Karen Chapple, University of California-Berkeley

### **Transportation**

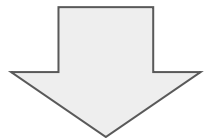
- Maria Calahorra-Jimenez, California State University-Fresno

# Climate-Induced Human Displacement & Migration Organization of the Report



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

*Ultimately, develop a resource that can help guide state and local policy, planning, and action on climate change (e.g., State agency and legislative decisions, vulnerability assessments, adaptation planning, and community resilience efforts).*



**Organized not by region or disaster but by sector**

## Advisory Group

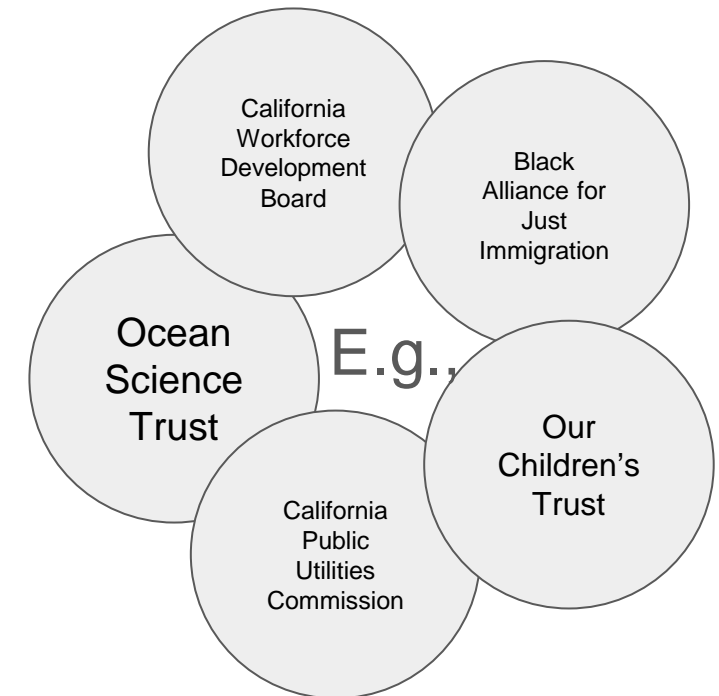
Law  
Econometrics  
Demography  
Local Government – city/county  
Utility / special district

- (Energy)
- (Water)
- (Parks)

Emergency Management  
Community-based organization  
Tourism

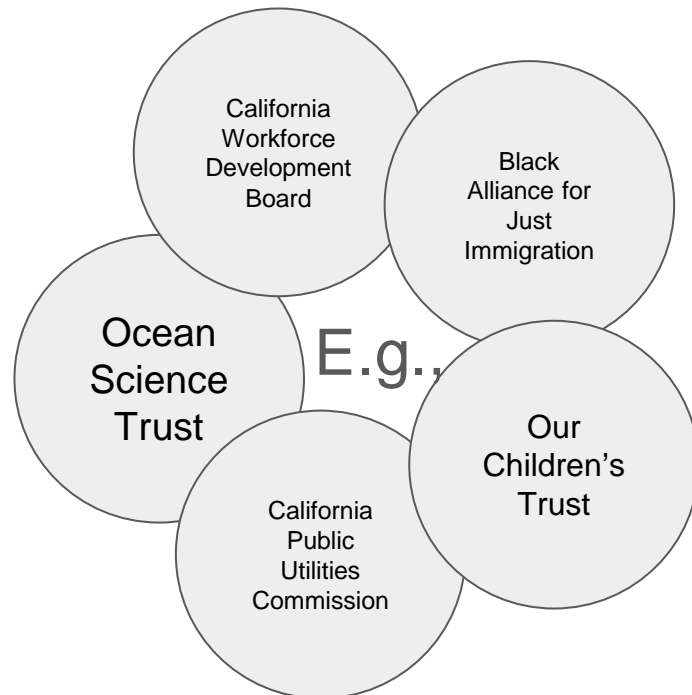
- (Coastal economy)
- (Mountain)

Land Use Planning  
International relations  
Housing  
Department of Finance  
Behavioral science





## Advisory Group



*Doing it through our  
advisory group;  
people who  
represent the voices  
of different  
communities;  
coordinating with  
other report teams*

## Cross-Report Coordination

- **Racial Equity & Climate Justice:** The effects of current and projected climate change impacts on racial equity and climate justice in California.
- **Climate-Induced Human Displacement & Migration:** The effects of current and projected climate change impacts on human displacement and migration in California.
- **Climate Impacts to the Economy:** The fiscal and economic impacts of current and projected climate change events and trends in California.
- **Tribal and Indigenous Communities:** The effects of current and projected impacts on California Native American Tribes.

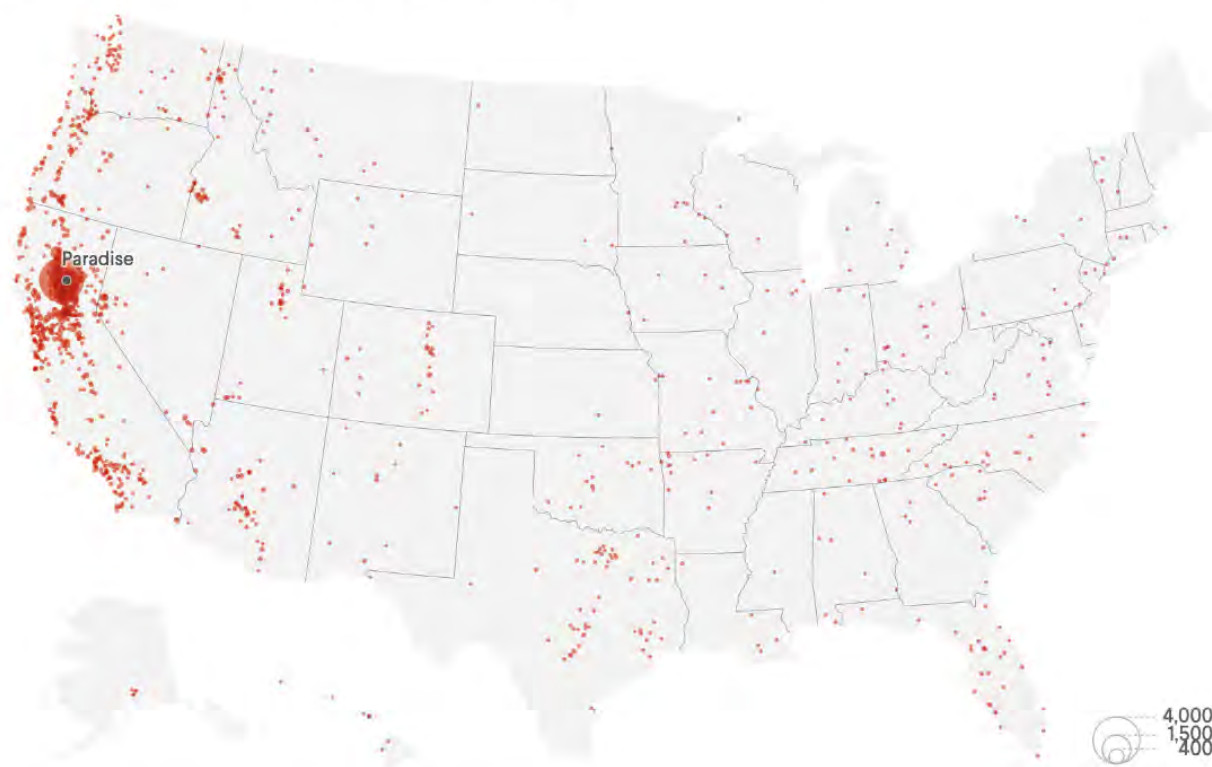
# A Close Look: The Camp Fire (2019)



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

## Paradise's Camp Fire Displaced Thousands

Using address data, geospatial analyst Peter Hansen found that Paradise, California residents resettled across all 50 states after the Camp Fire in late 2018



Resettlement data from November 2018 to September 2019.

Map: CFR/Allison Krugman • Source: [Peter Hansen](#)

ThinkGlobalHealth

Two California State University, Chico researchers are continuing their analysis of the aftermath of the 2018 Camp Fire and the future of Paradise.

Prof. Jacquelyn Chase and GIS Specialist Peter Hansen updated their data in an article published in 2021, that show where Camp Fire survivors are now living.

The team added 1,200 addresses to their database of where survivors have relocated. Their data now include 14,250 addresses through Sept. 2021.

-----

Based on the 2019 research, there are 1,018 individual cities that people traveled to or moved to: 11,000, in California, almost 500 in Oregon, a couple hundred in Nevada, a couple hundred in Arizona, almost 200 in Idaho, 150 in Washington, 100 in Texas, Utah, Colorado, Florida, Tennessee. Those all have at least 50 [people]

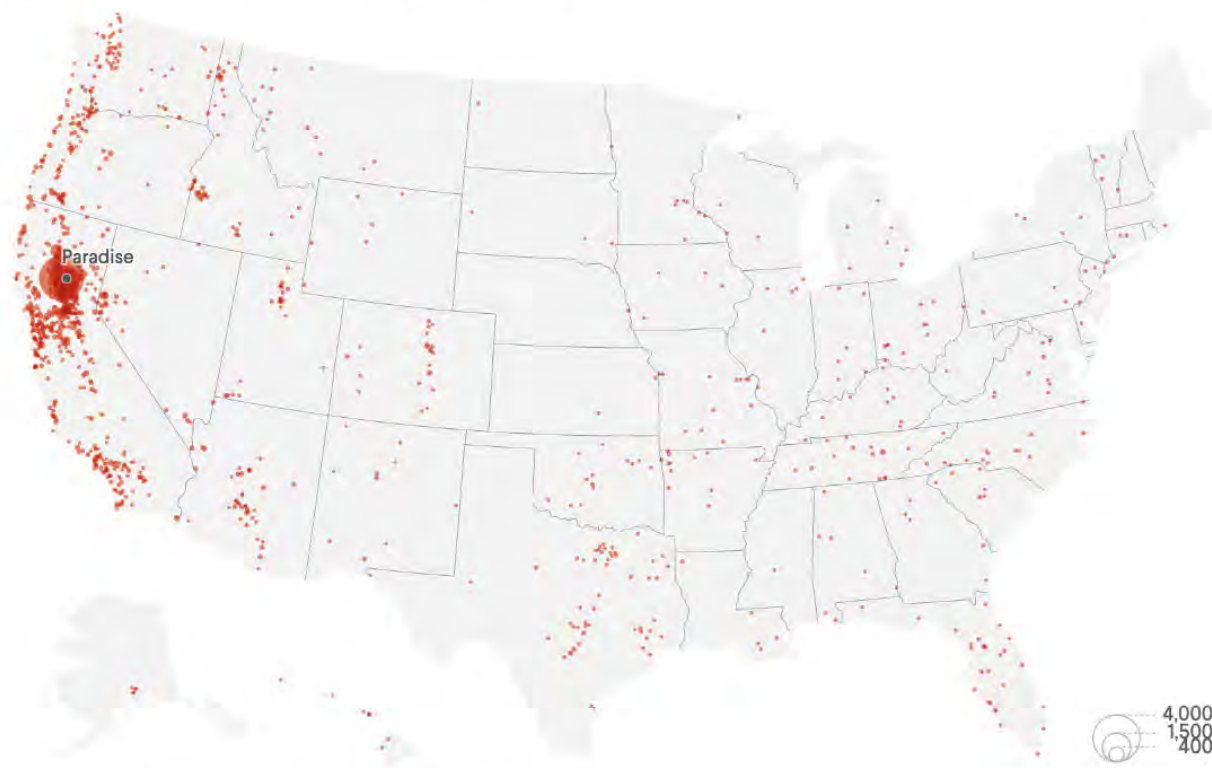
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Resettlement data from November 2018 to September 2019.

Map: CFR/Allison Krugman • Source: [Peter Hansen](#)

Think Global Health

**Chase:** “I don't think it's untypical for any disaster to see the clustering locally, it's just kind of a common thing for people to go as close as they need to go in order to get the services they are looking for. It might be related to the family. It's so common [that] people go local first. **The types of people that ended up in Chico may bifurcate along with social class lines because it was very hard to get housing right away, the market blew up and it was very expensive and there was a shortage.**

Renters were getting displaced, even renters who had lived [in Chico] a long time. It was very hard for people that didn't have resources. **At the same time, for people who had no resources, it was a place where those social resources existed, and a collective response to the fire was concentrated.**

... As fires become more comprehensive like this one was, wiping out an entire, more than one, community and really having to figure out what to do with the entire population. That's something that I think people need to be more aware of, and willing to look at more comprehensively.”

Thank You



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

# Thank you!



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT

Email us: [climateassessment@lci.ca.gov](mailto:climateassessment@lci.ca.gov)

Website: <https://lci.ca.gov/climate/icarp/climate-assessment/>

*Visit our  
website*



*Sign up for  
our email list*



*Check out our  
new video*



# Item 8 | Discussion



CA Governor's Office of  
Land Use and  
Climate Innovation

# Item 8 | Public Comment



CA Governor's Office of  
Land Use and  
Climate Innovation

# Item 9 | CAL FIRE Grantee Case Study



CA Governor's Office of  
Land Use and  
Climate Innovation

**ICARP**



CA Governor's Office of  
Land Use and  
Climate Innovation

***Taylor Nilsson, Executive Director, BCFSC***

**Butte County Fire Safe Council**  
**Serving Butte County since 1998**



# Butte County Fire Safe Council (BCFSC)

## Formed in 1998

- Grassroots, community-based 501©3
- Four Staff (1998 – Nov. 2018) / 34 Staff (Present)
- **Parent Organization to:**
  - **Local Fire Safe Councils**
    - 7 Active FSC's
  - **County-Wide Firewise USA™ Communities**
    - 35 “In Good Standing” Firewise USA™ Communities
      - *19 new communities in 2024*
- **Butte County Collaborative Group (BCCG) Admin Committee**
- **BCFSC Board of Directors**
  - *Active 17-member board with CAL FIRE, PG&E, local FSC, AQMD, fire ecology expert and legacy upper-ridge resident representation.*



*Big Chico Creek Canyon – Forest Ranch, CA  
April 1<sup>st</sup>, 2021*



# BCFSC: Active & Completed Projects

**20 Active Grants**

**50+ Active Projects**






**Total Acres Treated (2024):**

**3,156**

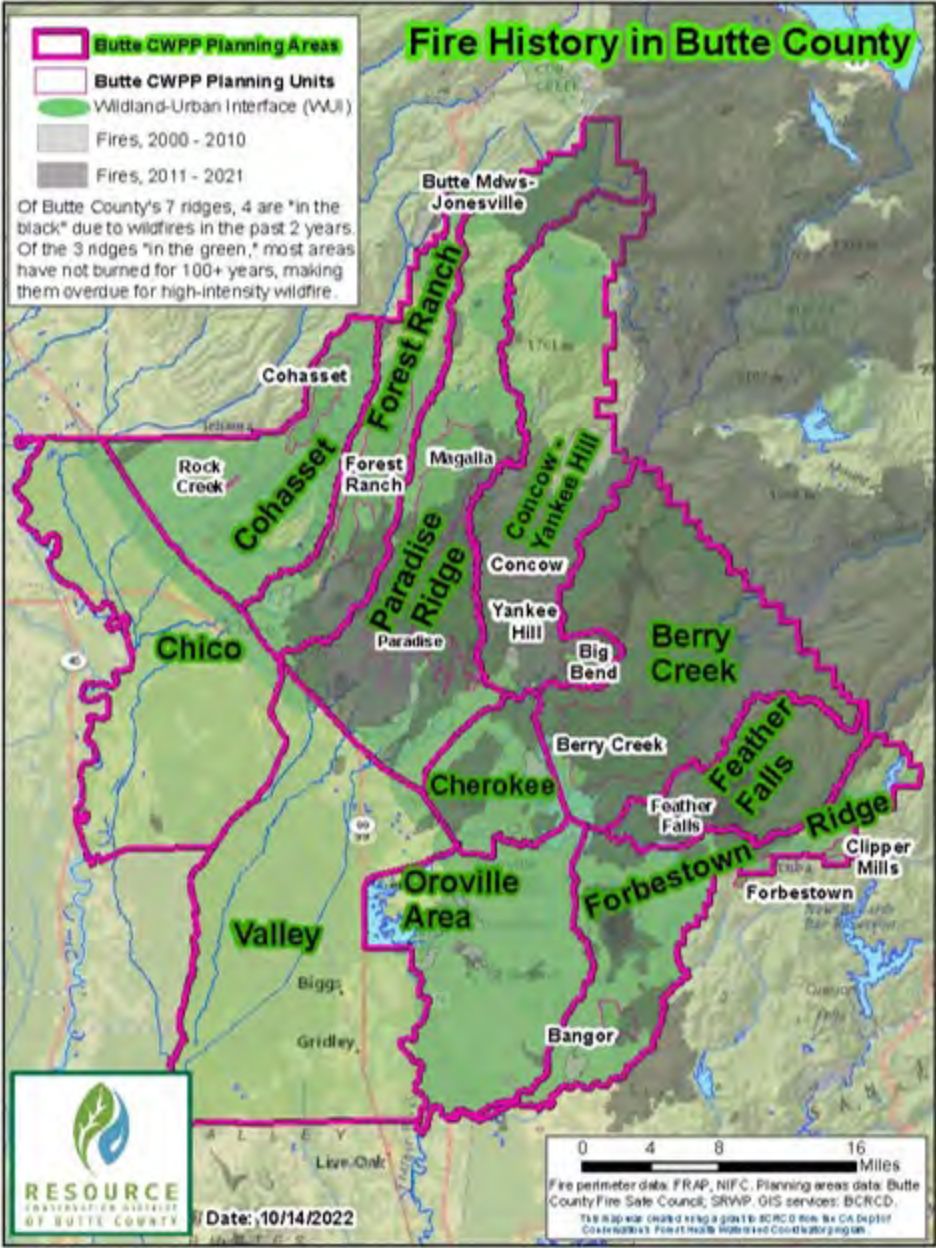


CCI FH – “Upper Watershed” – Magalia, CA (11/27/23)

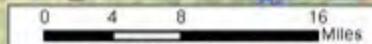
# Fire History in Butte County

-  Butte CWPP Planning Areas
-  Butte CWPP Planning Units
-  Wildland-Urban Interface (WUI)
-  Fires, 2000 - 2010
-  Fires, 2011 - 2021

Of Butte County's 7 ridges, 4 are "in the black" due to wildfires in the past 2 years. Of the 3 ridges "in the green," most areas have not burned for 100+ years, making them overdue for high-intensity wildfire.

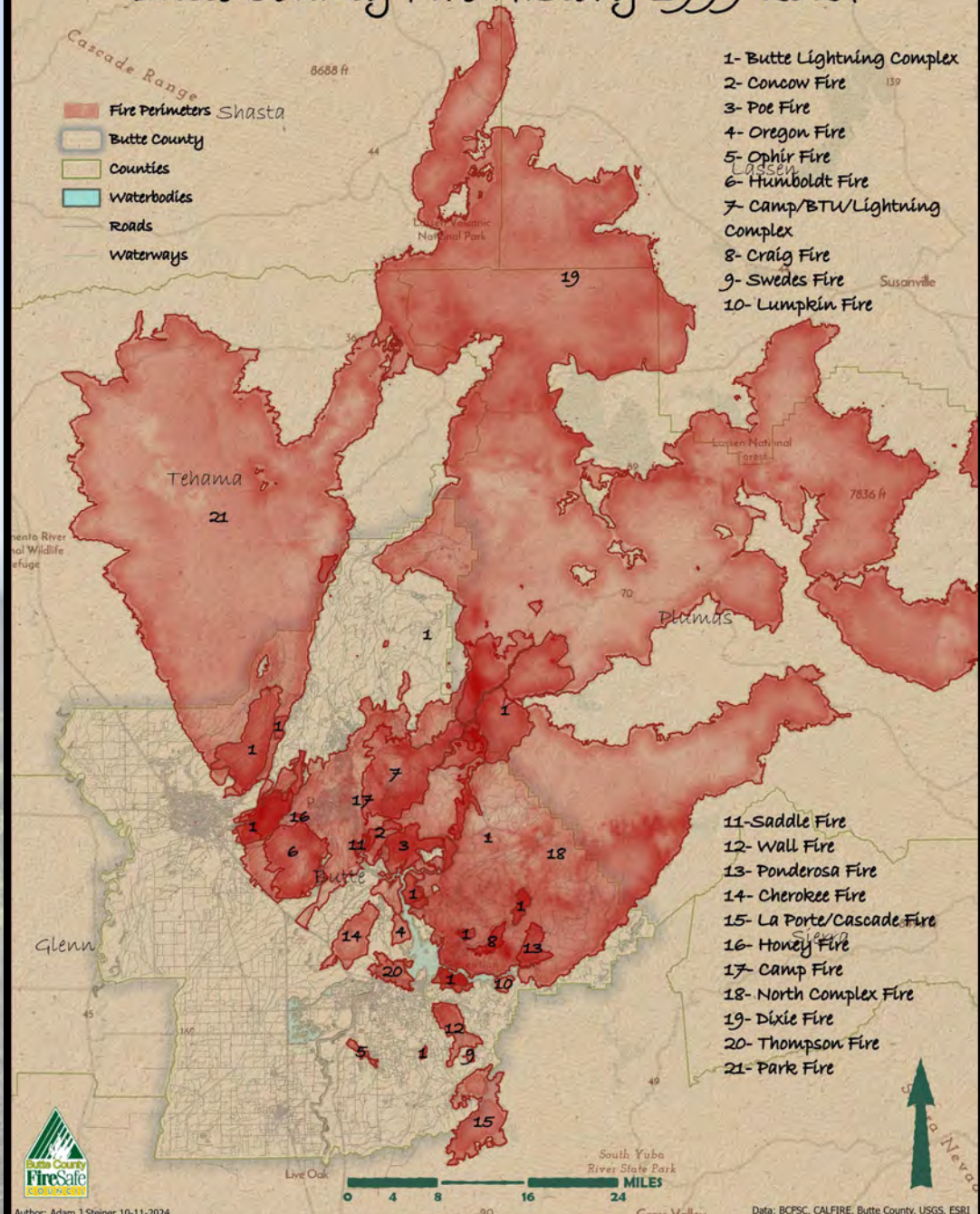


Date: 10/14/2022



Fire perimeter data: FRAP; NIFC. Planning areas data: Butte County Fire Safe Council; SRWP. GIS services: BCRCD.  
THIS MAP WAS CREATED USING A GRANT FROM BCRCD AND IS A PROPERTY OF BUTTE COUNTY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.

# Butte County Fire History 1999-2024



Author: Adam J Steiner 10-11-2024

Data: BCPCS, CALFIRE, Butte County, USGS, ESRI

# Fuels Reduction: Treatment Types

- **Hand Cutting and Chipping**
- **Mastication**
- **Lop & Scatter**
- **Prescribed Fire**
- **Pile Burning**
- **Grazing**
- **Herbicide**
- **Hazard Tree Removal**



# Butte County SRA – FHSZ Designation

Of Butte County's 1,073,280 acres, 542,304 acres are designated State Responsibility Area (SRA).

Of those 542,304 acres, 389,014 are designated as having "very high wildfire potential".

An additional 121,500 are designated as having "high wildfire potential".

This indicates that approximately 96% of Butte County's SRA falls under the "very high" and "high" wildfire hazard severity zone designation.

# Wildfire Impacts: Butte County

## **2018 - Present:**

- **63% of Butte County's Wildland Urban Interface (WUI) has burned**
- **36% of Butte County has burned**

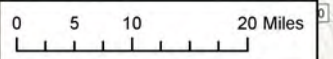
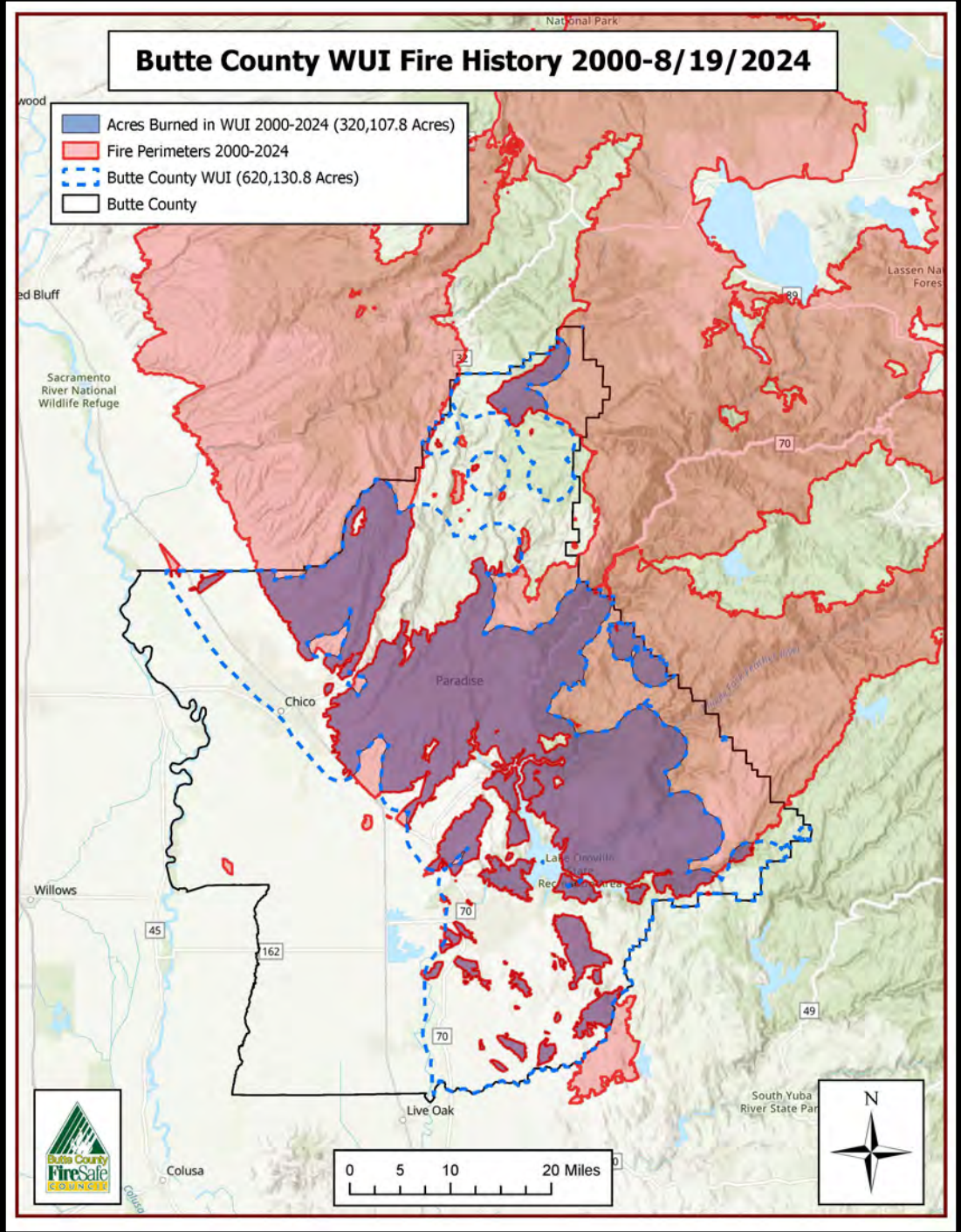
## **1999 - Present:**

- **88% Butte County's Wildland Urban Interface (WUI) has burned**
- **51% of Butte County has burned**

**In the last 25 years, over half of Butte County has experienced wildfire**

# Butte County WUI Fire History 2000-8/19/2024

- Acres Burned in WUI 2000-2024 (320,107.8 Acres)
- Fire Perimeters 2000-2024
- Butte County WUI (620,130.8 Acres)
- Butte County





**BUTTE COUNTY  
COLLABORATIVE GROUP**

Forming strategic partnerships for forest health, ecological restoration, and wildfire safety

**The BCCG is comprised of over 30 participating organizations, community members, and 12 MOU signatories strengthening strategic partnerships for forest health, ecological restoration, and wildfire safety.**



# BUTTE COUNTY COLLABORATIVE GROUP

[Home](#) [Success Stories](#) [BCCG Projects Map](#) [Data Submission](#) [Eyes On The Forest](#)

Butte County Air Quality  
Management District



Butte County Fire Safe Council



Resource Conservation District of  
Butte County



Konkow Valley Band of Maidu  
Indians



North State Planning &  
Development Collective



Butte Environmental Council



Butte County



Enterprise Rancheria



Yankee Hill Fire Safe Council



United States Forest Service



Northern California Regional  
Land Trust



Sierra Pacific



Big Chico Creek Ecological  
Reserve



Mechoopda Indian Tribe of Chico  
Rancheria



**Signatories to the MOU as of 9/24/24:**



**BCCG Tour: BCEP  
(06/23/24)**

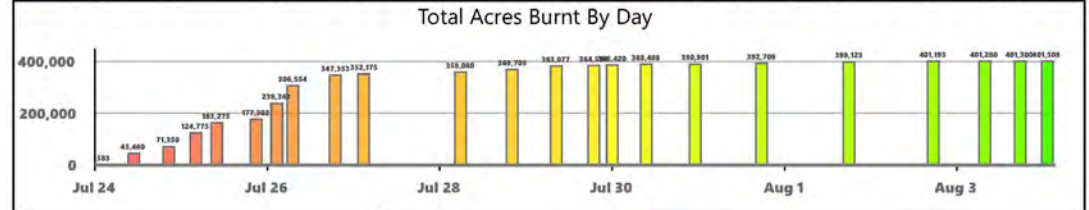
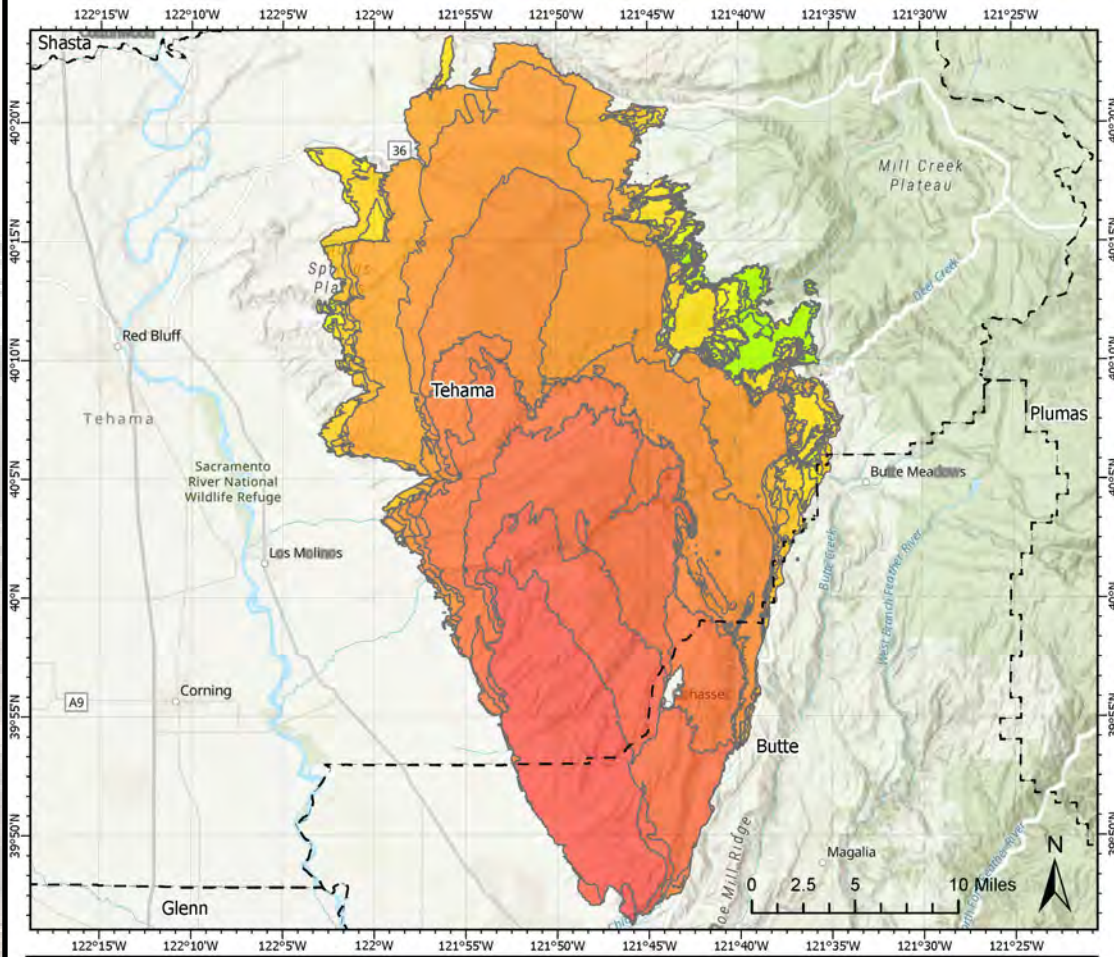
*A wide array of interagency partners gathered at the Butte Creek Ecological Preserve (BCEP) to tour the property and learn about the reappropriation process surrounding the transfer of land from Chico State Enterprises' management to Mechoopda Indian Tribe of Chico Rancheria.*



**BCCG Tour: Loafer Creek VMP  
(11/07/24)**

# The Park Fire: July 24<sup>th</sup>, 2024





## Park Fire Progression

401,508 Acres Total & 52,937 Acres in Butte County (5:15 8/4/24)



Map Created By BCFCSC 8/6/24

Park Fire Progression	
7/24/2024 6:21:00 PM	7/26/2024 11:15:00 PM
7/25/2024 2:57:00 AM	7/27/2024 11:00:00 AM
7/25/2024 12:40:00 PM	7/27/2024 6:56:00 PM
7/25/2024 8:10:00 PM	7/28/2024 9:53:00 PM
7/26/2024 1:59:00 AM	7/29/2024 12:14:00 PM
7/26/2024 1:00:00 PM	7/30/2024 12:30:00 AM
7/26/2024 6:45:00 PM	7/30/2024 10:58:00 AM
	7/30/2024 4:10:00 PM
	7/31/2024 1:35:00 AM
	7/31/2024 3:15:00 PM
	8/1/2024 9:45:00 AM
	8/2/2024 10:00:00 AM
	8/3/2024 9:30:00 AM
	8/3/2024 11:53:00 PM
	8/4/2024 9:45:00 AM
	8/4/2024 3:30:00 PM
	8/4/2024 5:15:00 PM







***West Branch Mud Creek, Cohasset, CA***

***August 2024***



***Drone Imagery of the “Green Island”, Cohasset, CA***

***August 2024***



***Drone Imagery above HWY 32 - Forest Ranch, CA***

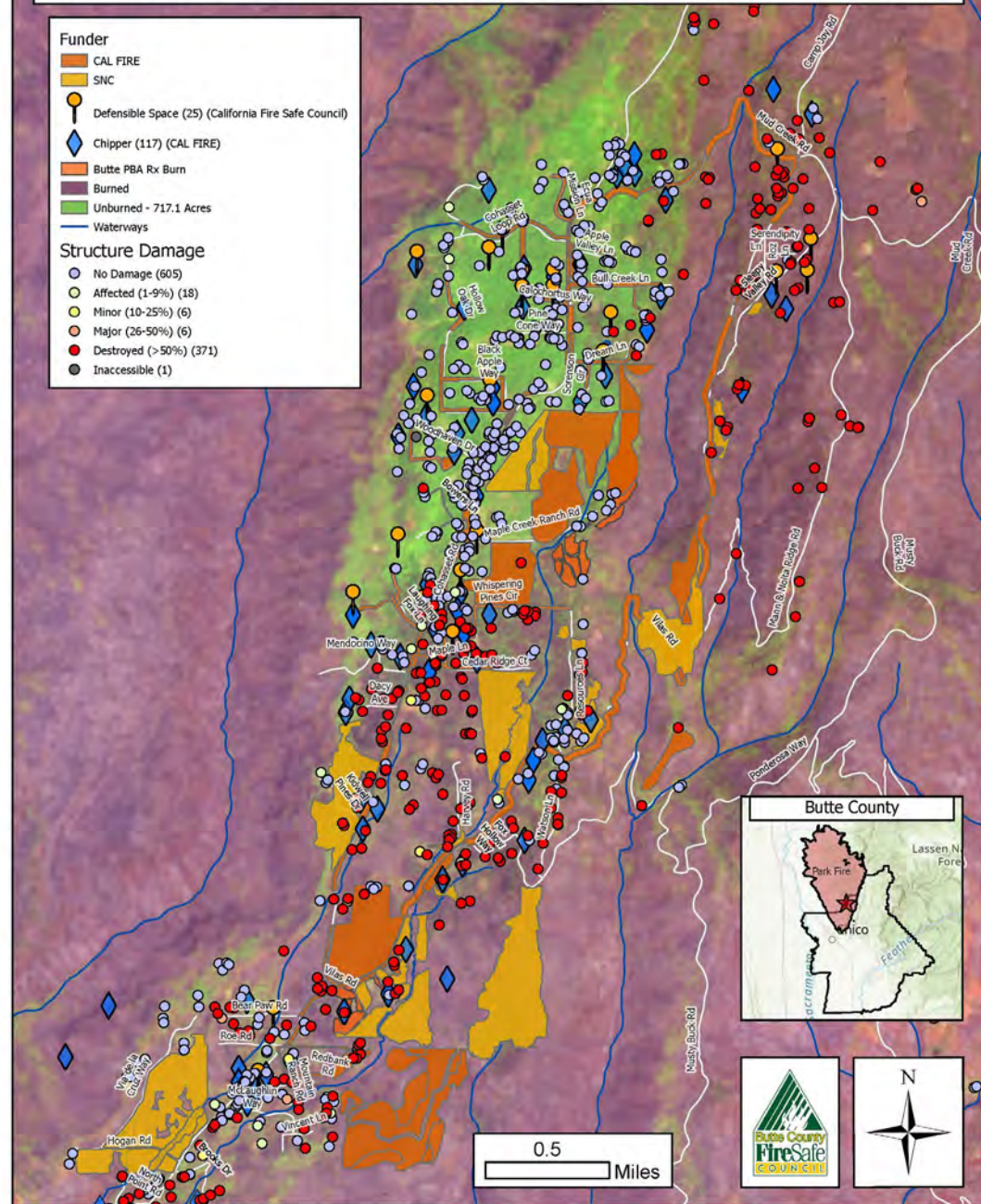
**2024**

*Imagery courtesy of the Sierra Nevada Conservancy*



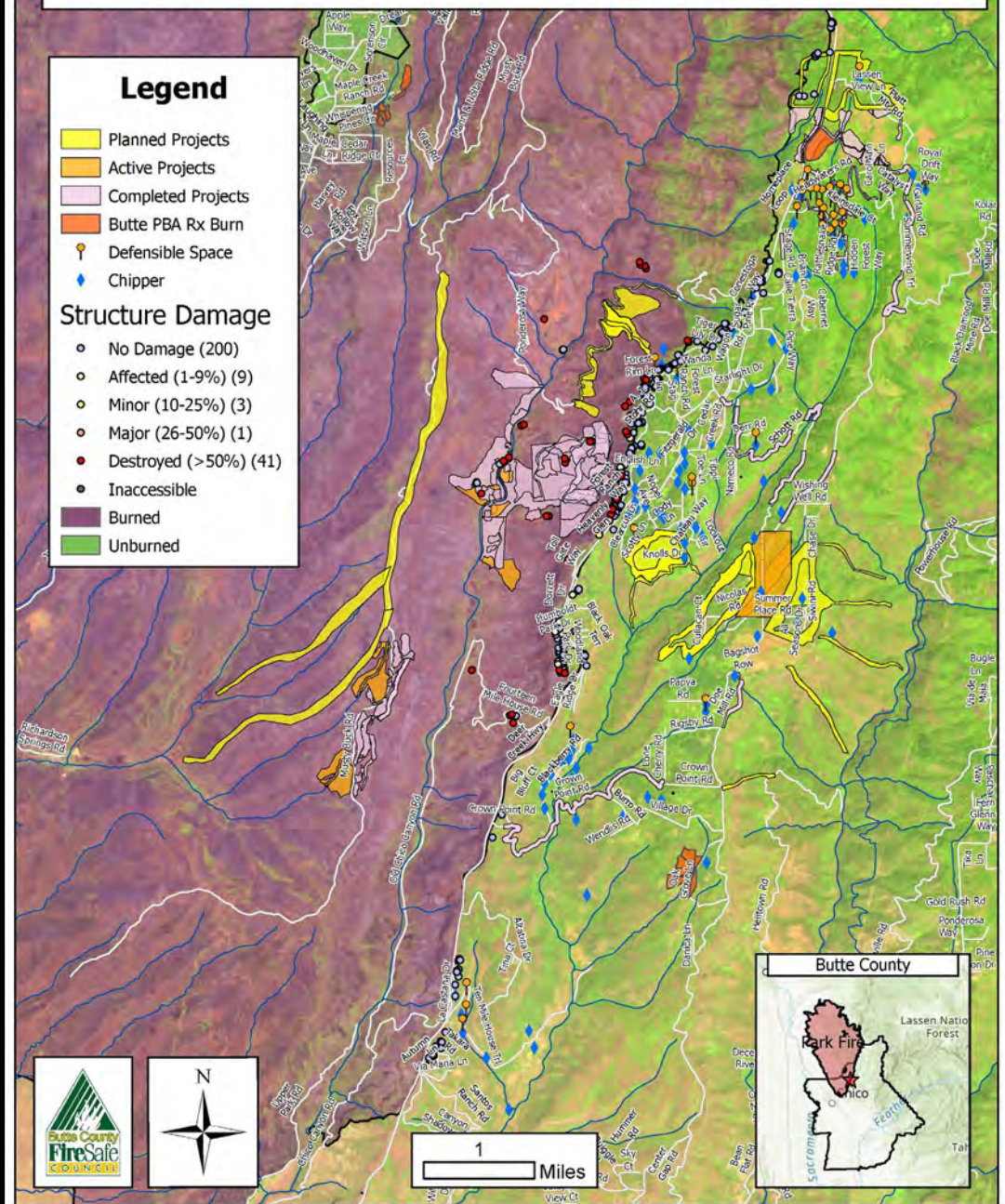
# Cohasset Green Island, Park Fire, Butte County CA

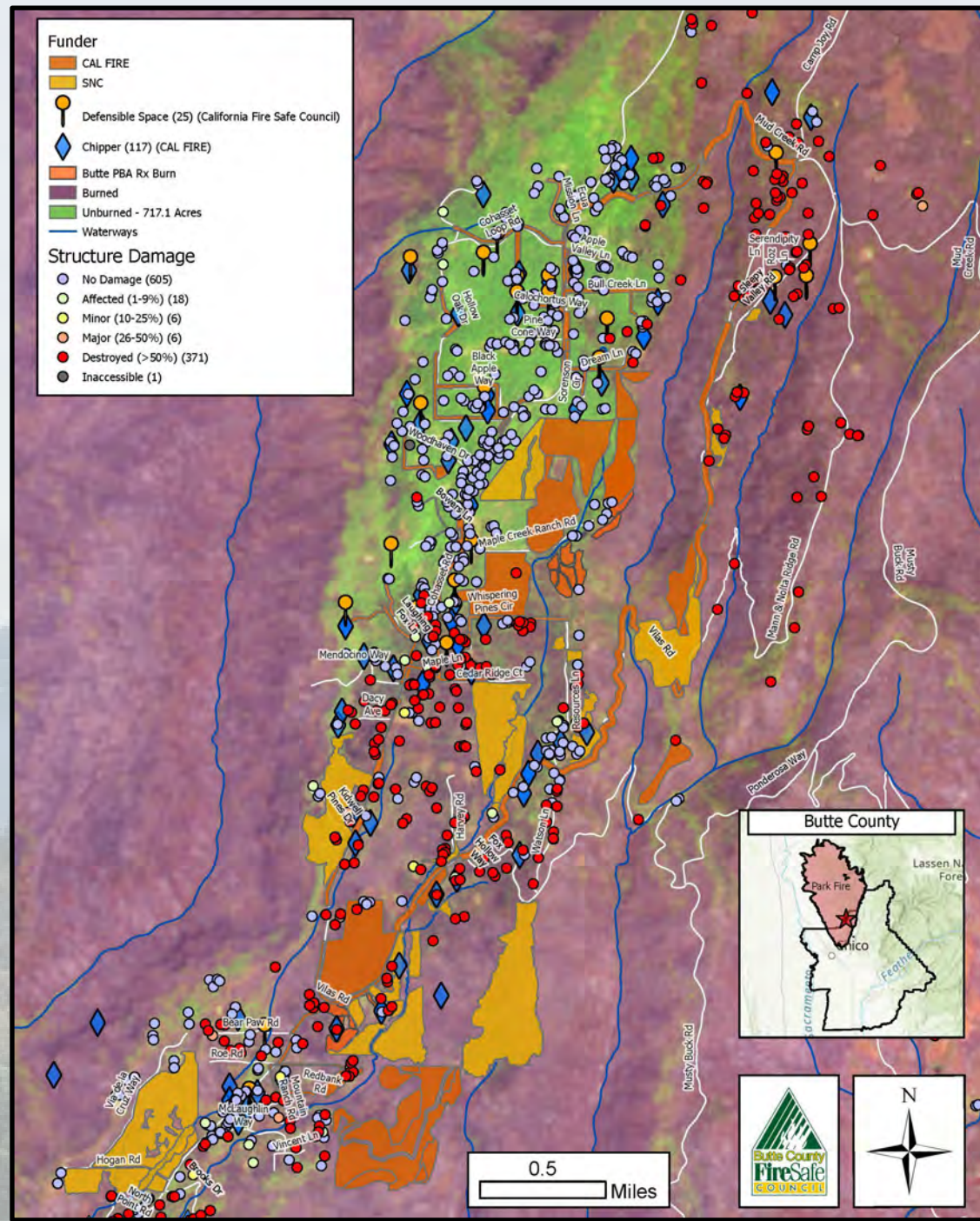
- Funder**
- CAL FIRE
  - SNC
- Defensible Space (25) (California Fire Safe Council)
- Chipper (117) (CAL FIRE)
- Butte PBA Rx Burn
- Burned
- Unburned - 717.1 Acres
- Waterways
- Structure Damage**
- No Damage (605)
  - Affected (1-9%) (18)
  - Minor (10-25%) (6)
  - Major (26-50%) (6)
  - Destroyed (>50%) (371)
  - Inaccessible (1)



# Forest Ranch Green Wall, Park Fire, Butte County CA

- Legend**
- Planned Projects
  - Active Projects
  - Completed Projects
  - Butte PBA Rx Burn
  - Defensible Space
  - Chipper
- Structure Damage**
- No Damage (200)
  - Affected (1-9%) (9)
  - Minor (10-25%) (3)
  - Major (26-50%) (1)
  - Destroyed (>50%) (41)
  - Inaccessible
  - Burned
  - Unburned





# CAL FIRE: CCI FH Upper Watershed

## Treatments

- **Mastication + Biomass Removal**
- **Roadside Fuels Reduction**
  - Primary Roads + Secondary Roads
    - Hand Cutting and Chipping
    - Mastication
- **Prescribed Fire**

## Chipper Program

- 117 BCFSC Chipper site visits

## Defensible Space Program - CFSC

- 25 sites





*MCR – Biomass Removal Unit – Pre Park Fire*





*MCR – Biomass Removal Unit – Post Park Fire*











# SNC: Cohasset Forest Resilience Project

## Grants

- SNC 1378 – “Cohasset Forest Resilience Project”

## Treatments

- **Hand Cutting and Chipping**
  - 127 acres
- **Mastication**
  - 265 acres
- **Lop & Scatter**
  - 12 acres

## Maximized Benefits

- Partnered with landowners who hired contractors for additional work to increase project scale.
- Increased continuity of fuels reduction / amplified benefits.





***Hogan Road Mastication Unit – Cohasset, CA (08/03/24)***

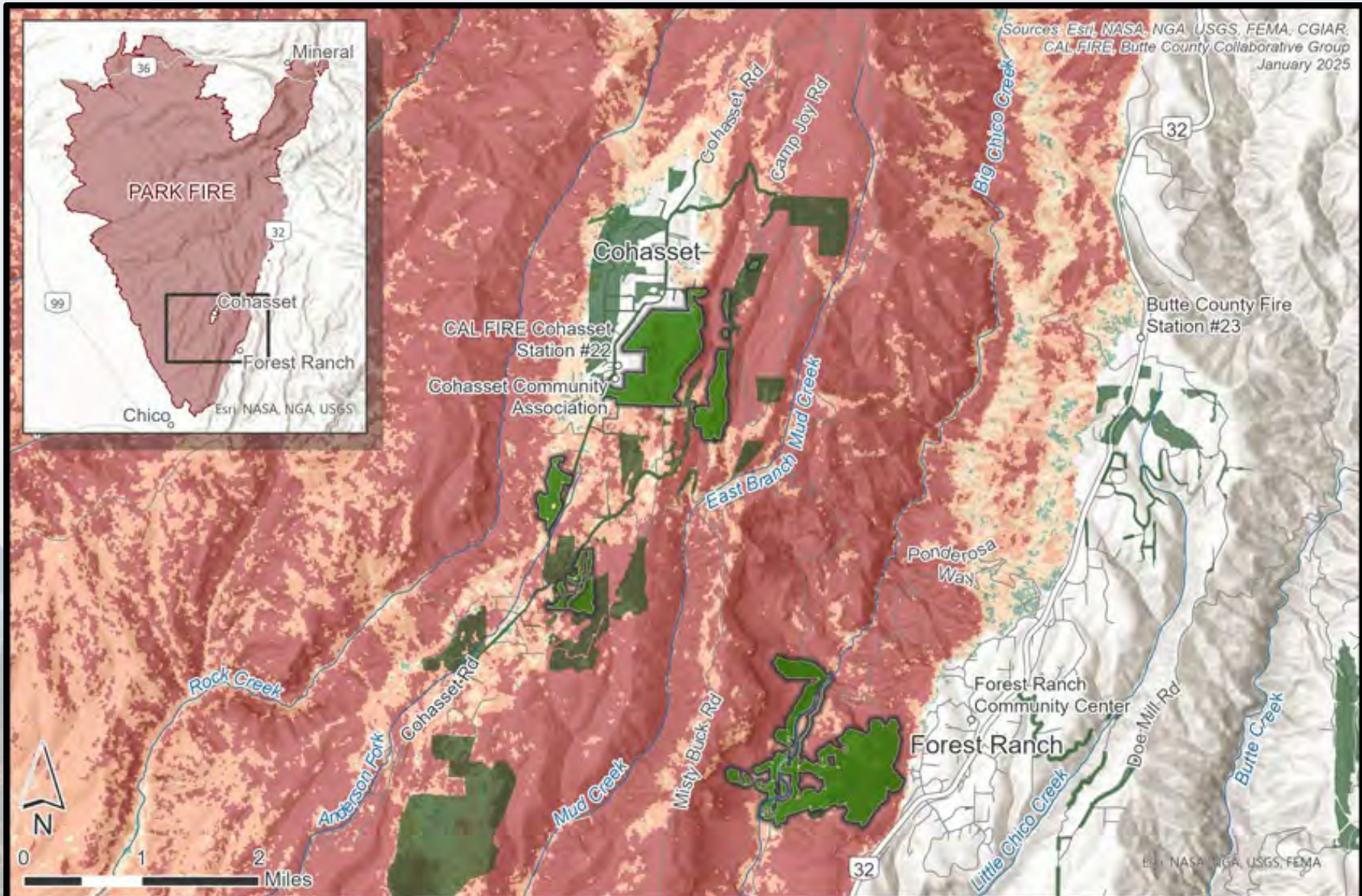
***SNC 1378***



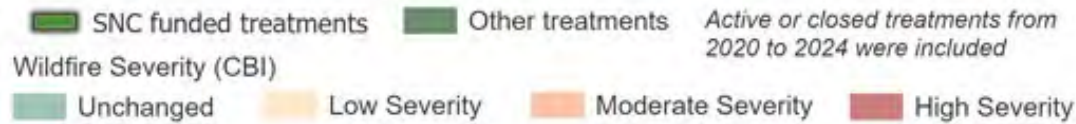
***Maple Creek Ranch, Cohasset, CA – Post-Park Fire***

***08/03/24***

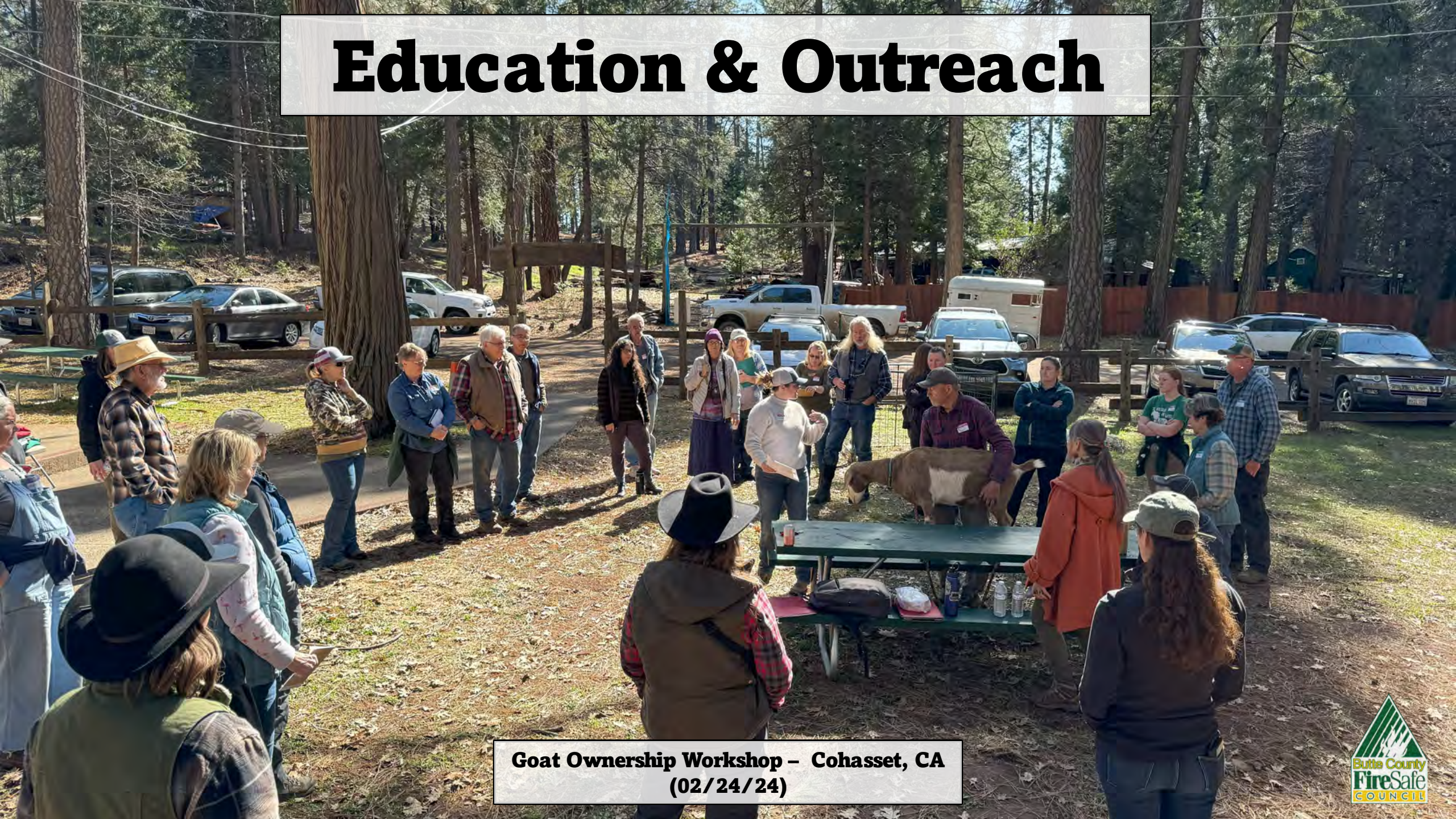




## Forest Treatments Help Protect Butte County Communities



# Education & Outreach



**Goat Ownership Workshop – Cohasset, CA  
(02/24/24)**

## **BCFSC Education & Outreach Efforts**

- **Firewise USA™ Community Development**
- **Cohasset Fire Safe Council**
- **Community Meetings**
  - Evacuation preparedness
  - Land management
- **Boots on the Ground – Landowner Outreach**
- **Cohasset Forest Management Plan**







# Cohasset Community Association

   
**FIREWISE USA**  
Residents reducing wildfire risks  
Nationally Recognized  
Participating Site  
Firewise.org

THE COHASSIAN  
NATION WILL  
RISE AGAIN!

August 6<sup>th</sup>, 2024



***Cohasset Community Center (08/03/24)***



**Project Highlight:**  
**SNC-Funded Fuel Treatments Protected Butte County Communities From Park Fire**

“The 2024 Park Fire burned over 450,000 acres and destroyed more than 700 structures.

It was yet another megafire that destroyed California homes and degraded treasured landscapes.

Even so, if not for a network of fuel breaks and other forest treatments in Butte County created by local leaders, like the BCFSC, in partnership with state entities like SNC and CAL FIRE, it would have almost certainly been far worse.”

- Sierra Nevada Conservancy (January 7<sup>th</sup>, 2025)

The Butte County Fire Safe Council is pioneering cross-boundary fuels reduction projects to protect lives, preserve forests, and cultivate shared responsibility that results in long-term ecological and community resilience.

Guided by a noble cause to empower individuals and adopt conscious wildland management, we're helping shift the paradigm from reactive to proactive hazardous fuels reduction, approaching wildfire mitigation, community education and evacuation preparedness at a landscape scale.

Through innovative strategies and strong partnerships, we're creating increasingly resilient communities today and for future generations.



# BCFSC: Funding Organizations



CALIFORNIA  
VOLUNTEERS



The Paradise  
**Rotary**  
Foundation



# Thank You



# Item 9 | Discussion



CA Governor's Office of  
Land Use and  
Climate Innovation

# Item 10 | LA Fires Rapid Assessment Case Study



CA Governor's Office of  
Land Use and  
Climate Innovation

# Acknowledgement

We recognize and acknowledge the weight of discussing the recent LA fires, and the communities that continue to be impacted by these events.

Our goal with a rapid analysis is to:

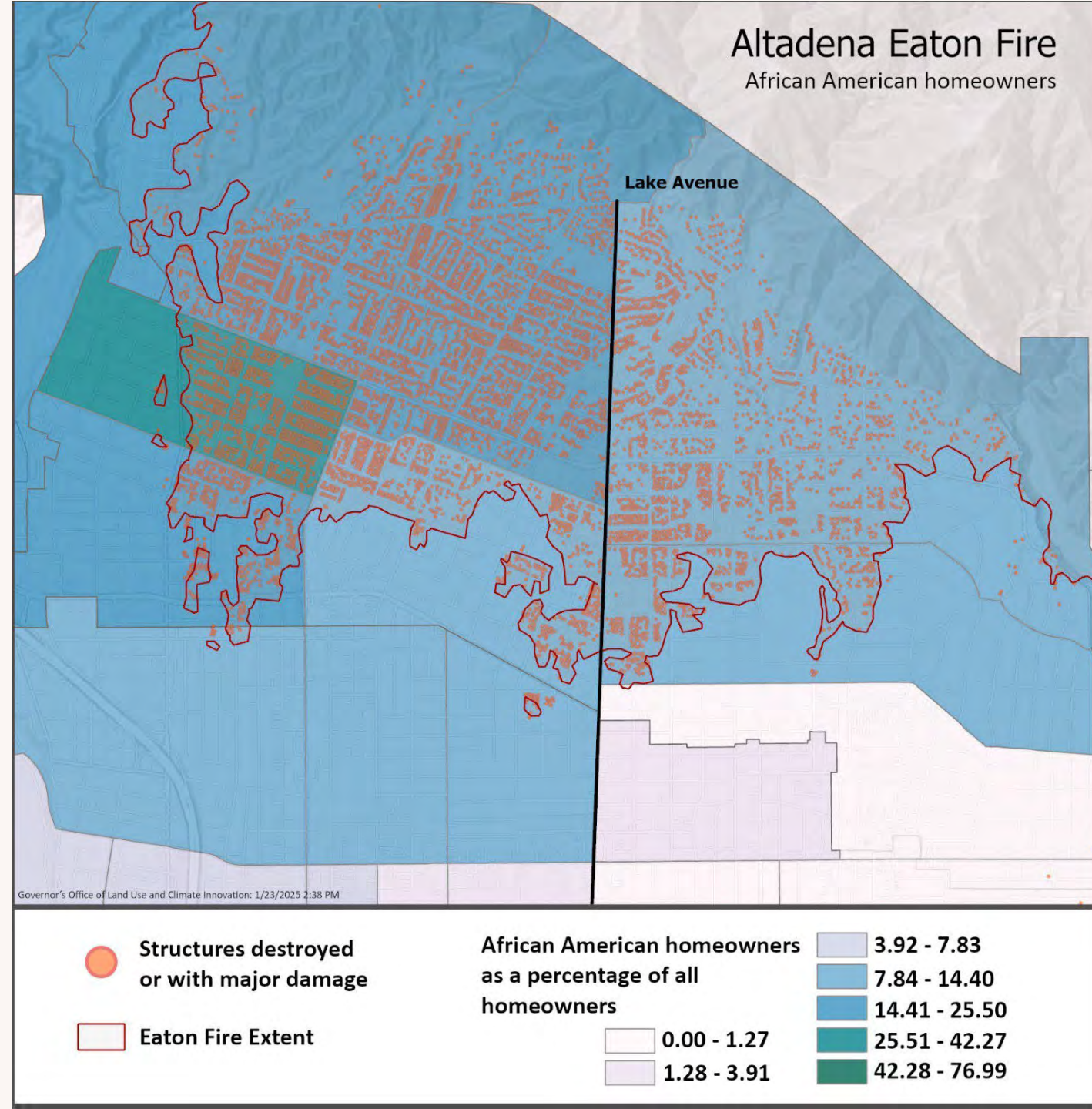
- Learn about this event to inform how we characterize climate vulnerability and resilience.
- Inform our work with the FEMA Recovery Needs Assessment.



# Background on the Eaton Fire

- Historical context
- Climate conditions
- Fire conditions

<https://sustainablela.ucla.edu/2025lawildfires>



# Rapid Assessment

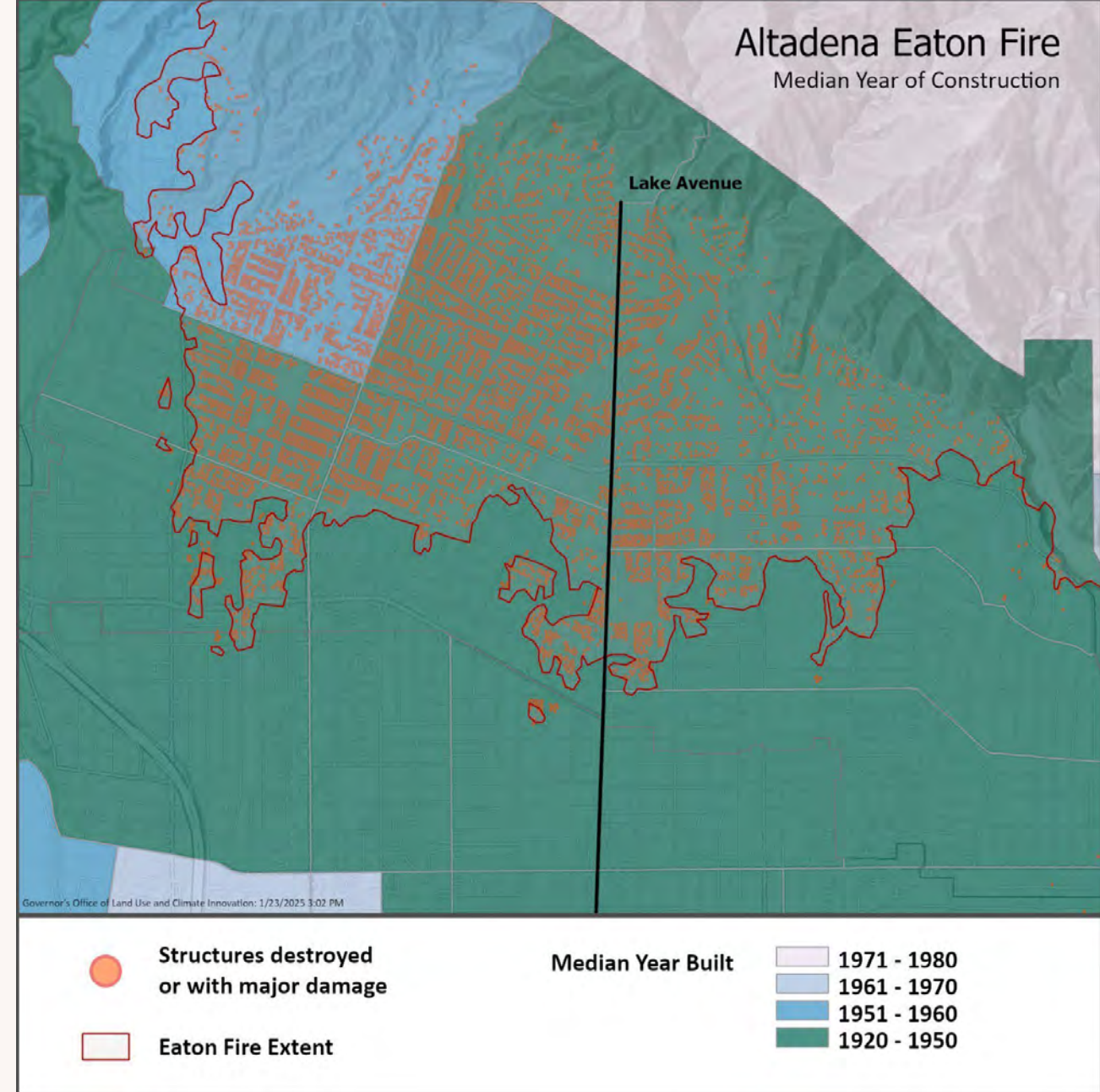
We conducted a rapid assessment of publicly available data from the Eaton Fire. The types of data we looked at included parcel data, as well as recently released data sources from CalFIRE, including the fire perimeter, as well as structure footprints and damage.

Key question: what specific factors influence community vulnerability to the Eaton Fire?



# Results

- We looked for simple answers around determinants of structure survival in the Eaton Fire (e.g., structure age, proximity to WUI).
- No one factor explained structure survival rates.
- Elevates importance of a holistic approach for wildfire resilience.



# Discussion

- What are the challenges as the new climate normal expands our definition of communities at risk to wildfire?
- Are there opportunities for reframing community resilience efforts to emphasize whole of community protection from wildfire, in addition to parcel-level protections?
- What other considerations, related to additional social or environmental factors or others, would be important for us to include in a future analysis?



# Item 10 | Discussion



CA Governor's Office of  
Land Use and  
Climate Innovation

# **Item 11 | Wildfire and Forest Resilience Taskforce Action Plan Update**



CA Governor's Office of  
Land Use and  
Climate Innovation



CALIFORNIA  
WILDFIRE & FOREST RESILIENCE  
TASK FORCE

Task Force Overview,  
Accomplishments & Next Steps

March 2025

# A Plan for California

- 99 Key Actions
- Align agencies & grow regional partnerships
- Codified by SB 456  
(Laird, Chapter 387, Statutes of 2021)



## CALIFORNIA'S WILDFIRE AND FOREST RESILIENCE ACTION PLAN



**A Comprehensive Strategy  
of the Governor's  
Forest Management  
Task Force**

January 2021

PROGRESS ▾ THE PLAN

CALIFORNIA  
WILDFIRE & FOREST RESILIENCE  
TASK FORCE

ABOUT ▾ MEETINGS



## THE FRONT LINES OF LANDSCAPE HEALTH

In a response commensurate to the challenge, Governor Gavin Newsom created the California Wildfire & Forest Resilience Task Force, bringing together an unprecedented coalition of the best available resources for preventing catastrophic wildfires by creating healthier, more sustainable natural environments. The Governor's Task Force is a proactive effort that is already showing progress towards long term forest health and safe, sustainable coexistence with fire.

## Task Force Structure

- Executive Committee
- Science Advisory Council
- Interagency Workgroups

## Task Force Reporting

- State Meetings – Sacramento
- Regional Convenings
- Regular Communications
  - [www.wildfiretaskforce.org](http://www.wildfiretaskforce.org)
  - Governor's Monthly Update & E-newsletter



# 2025 Action Plan Shared Strategies



2025 Wildfire  
& Landscape  
Resilience  
Action Plan



# 2025 Action Plan Shared Strategies



Expand Large-Landscape  
and Community  
Resilience Projects

# Expanding Beneficial Fire





# Strategic Fire Management

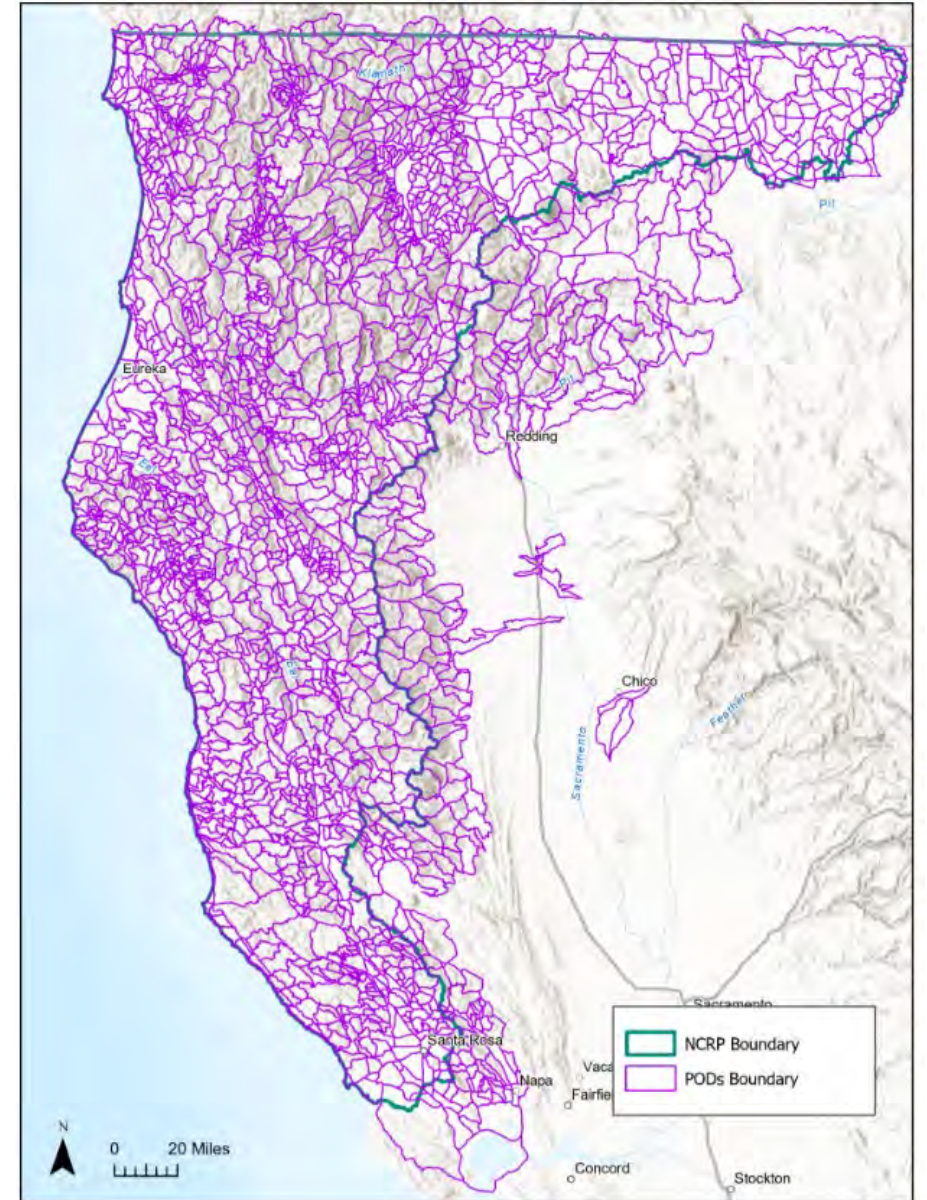


Photo and Map Credit: North Coast Resource Partnership



# 2025 Action Plan Shared Strategies



Expand Large-Landscape  
and Community  
Resilience Projects



# 2025 Action Plan Shared Strategies

Enhance Efficiency and Capacity



Expand Large-Landscape  
and Community  
Resilience Projects

# EFRTs Gaining Momentum

## Emergency Forest Restoration Teams (EFRTs)

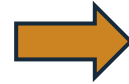
- **What:** Local groups pre-designated to rapidly restore private forestlands after fires
- **Where:** 15 established across the state





# 2025 Action Plan Shared Strategies

Enhance Efficiency and Capacity



Expand Large-Landscape  
and Community  
Resilience Projects



# 2025 Action Plan Shared Strategies

Integrate Multiple Benefits

Enhance Efficiency and Capacity

  
2025 Wildfire  
& Landscape  
Resilience  
Action Plan

Expand Large-Landscape  
and Community  
Resilience Projects



# 2025 Action Plan Shared Strategies

Integrate Multiple Benefits



Enhance Efficiency and Capacity



Expand Large-Landscape  
and Community  
Resilience Projects



# 2025 Action Plan Shared Strategies

Integrate Multiple Benefits

Enhance Efficiency and Capacity

  
2025 Wildfire  
& Landscape  
Resilience  
Action Plan

Build the Science-Based  
Framework for Planning  
and Measuring Progress

Expand Large-Landscape  
and Community  
Resilience Projects



# Interagency Treatment Dashboard





# Interagency Treatment Dashboard

Data Refreshed 12/13/2024, Version 1.1.1

Calendar Year  
2023

Counties  
All Counties

Regions  
All Regions

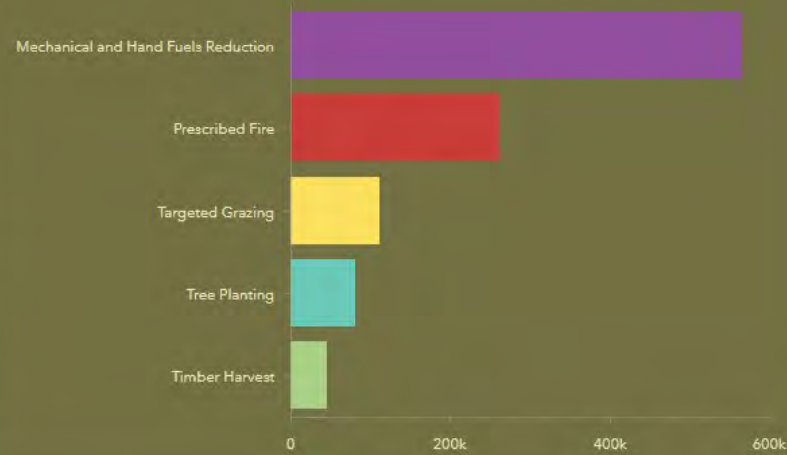
Entity Type  
All Entity Types

Land Ownership Group  
All Ownership

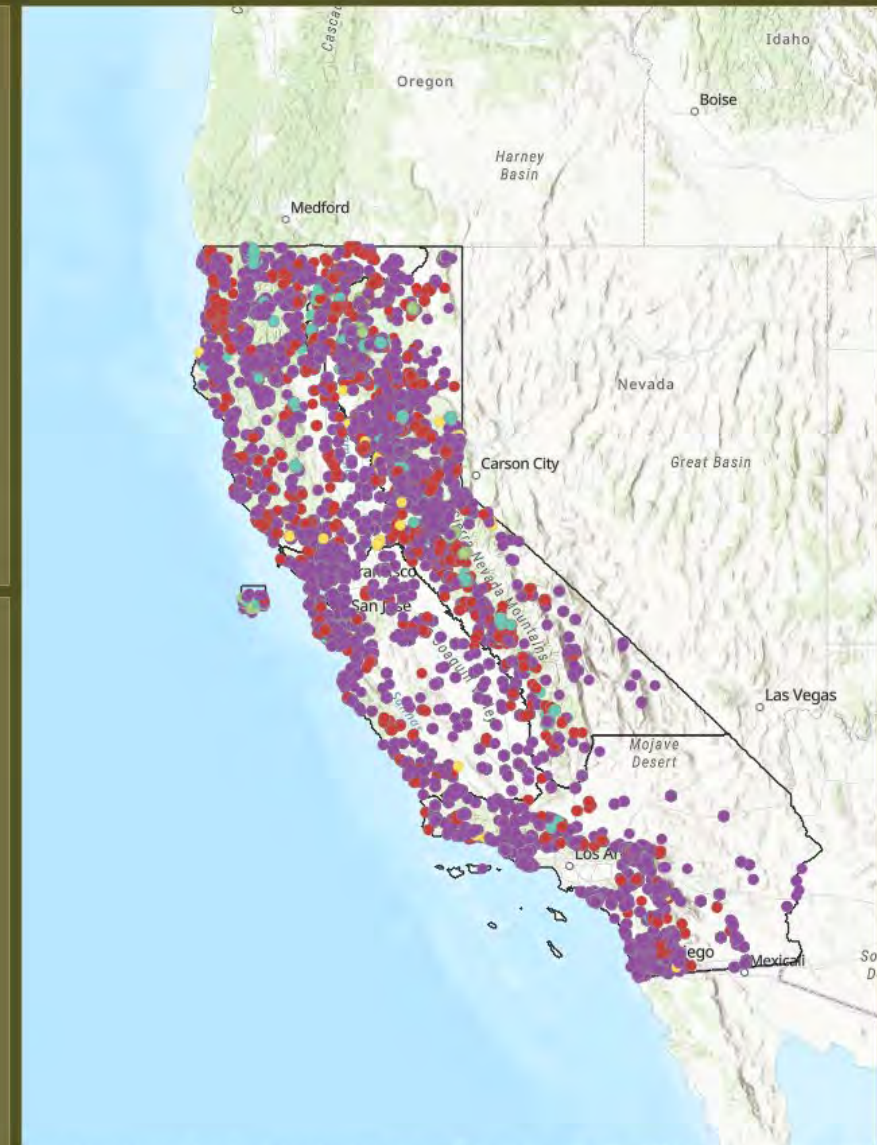
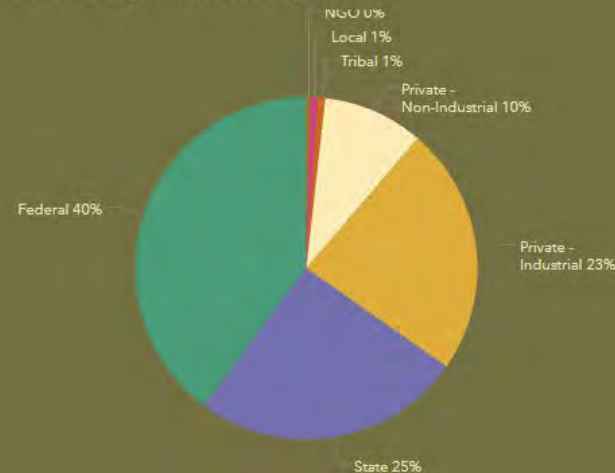
Administering Organization	Activity Acres
U.S. Forest Service	256,798
Timber Companies	234,729
CAL FIRE	157,585
CA Department of Transportation	135,941
CA Department of Fish and Wildlife	117,383
U.S. Fish and Wildlife Service	80,618
Bureau of Land Management	24,639
CA State Parks	14,582
Bureau of Indian Affairs	8,145
US Department of Energy	7,187
National Park Service	4,754
Sierra Nevada Conservancy	4,603
CA Wildlife Conservation Board	4,552
U.S. Department of Defense	1,883
San Diego River Conservancy	1,847
CA Conservation Corps	1,020
State Coastal Conservancy	1,005
Santa Monica Mountains Conservancy	394
San Gabriel and Lower Los Angeles Rivers ...	309
Tahoe Conservancy	302
Mountains Recreation and Conservation Au...	29
<b>Total</b>	<b>1,058,306</b>

## Activity Category

What is in these categories? ([Click here](#))



## Activity Acres by Ownership



# California Landscape Metrics



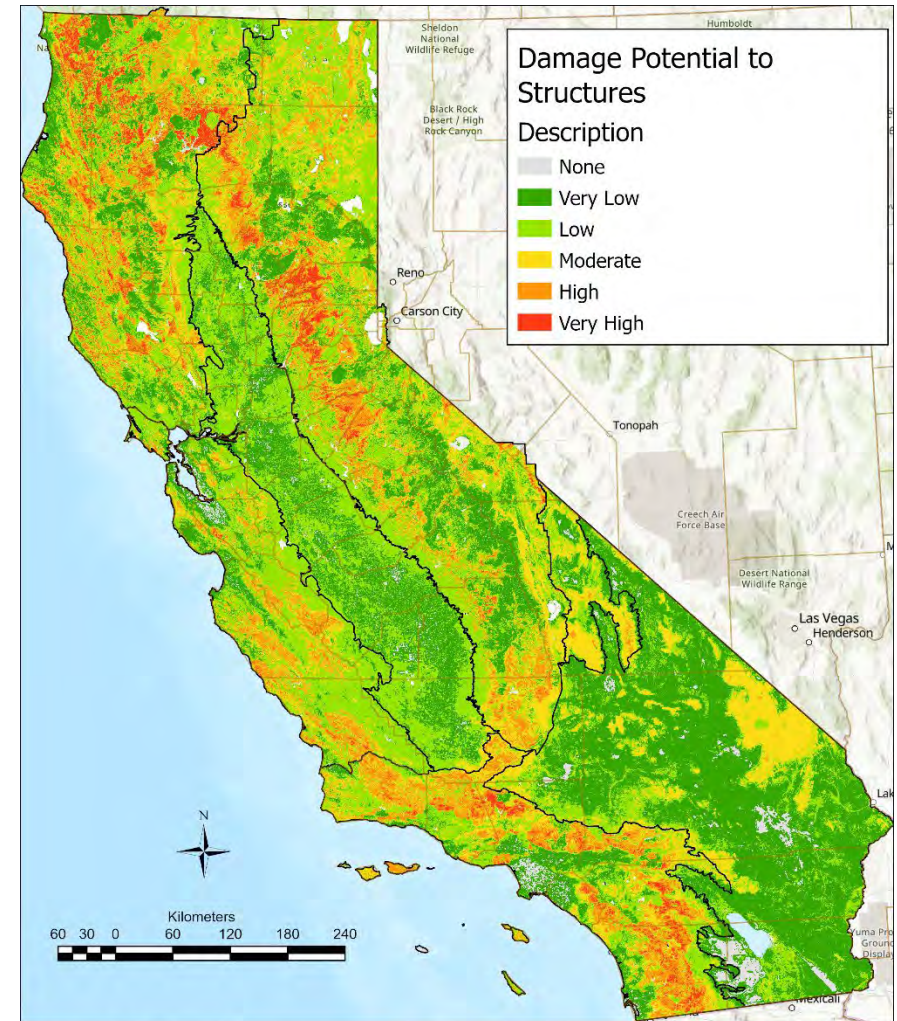
Source: LANDFIRE FCCS ([LANDFIRE Program: Data Products – Fuel – Fuel Characteristic Classification System Fuelbeds](https://www.landfire.gov/fccs.php)) 2022

Map Created: 7/22/2024

CA Wildfire & Forest Resilience Task Force

CLIMATE & WILDFIRE INSTITUTE

Data Vintage: 2022



Source: \* Pyrologix, LLC

Map Created: 7/23/2024

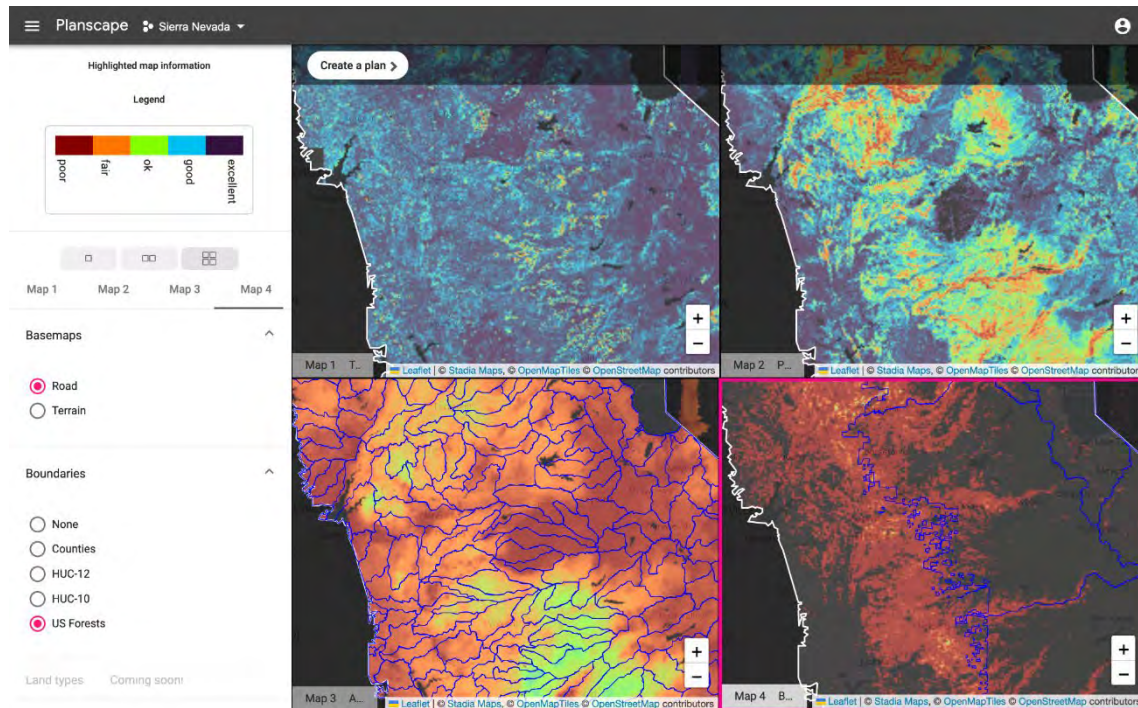
CA Wildfire & Forest Resilience Task Force

CLIMATE & WILDFIRE INSTITUTE

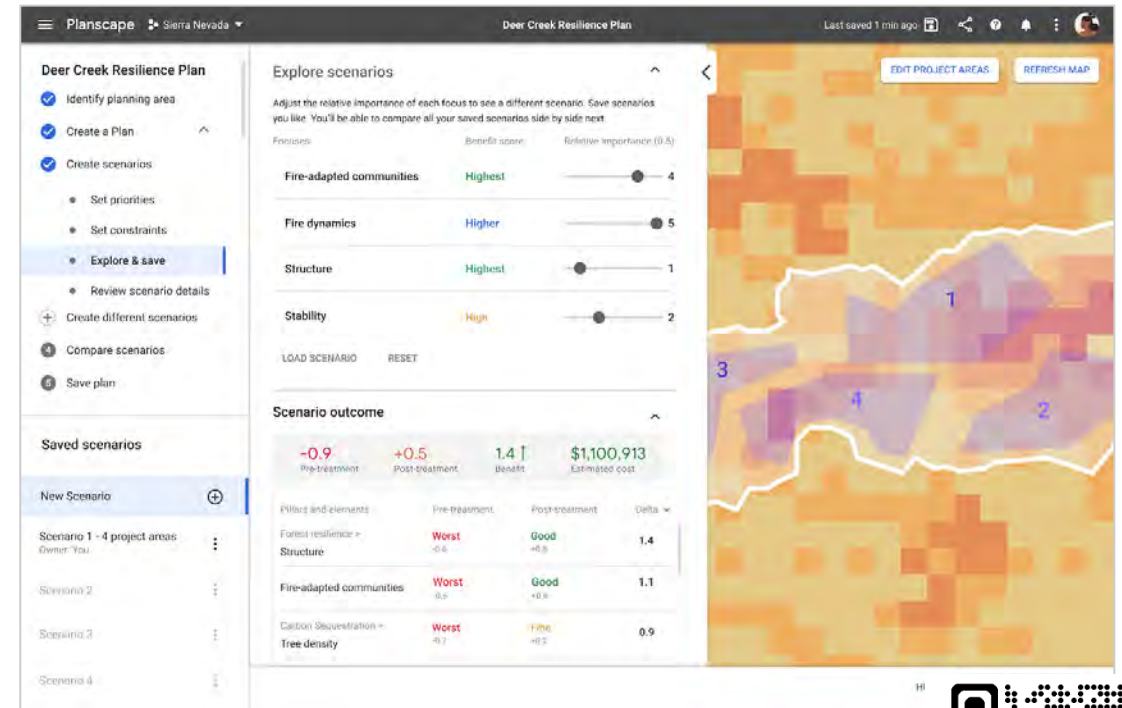
Data Vintage: 12/2022



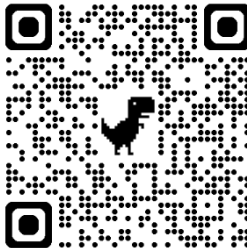
A decision support tool that empowers **regional planners** to **prioritize resilience treatments** across the landscape and **inform** the funding process.



Explore the landscape and data



Model the impact for different scenarios





# 2025 Action Plan Shared Strategies

Integrate Multiple Benefits

Enhance Efficiency and Capacity

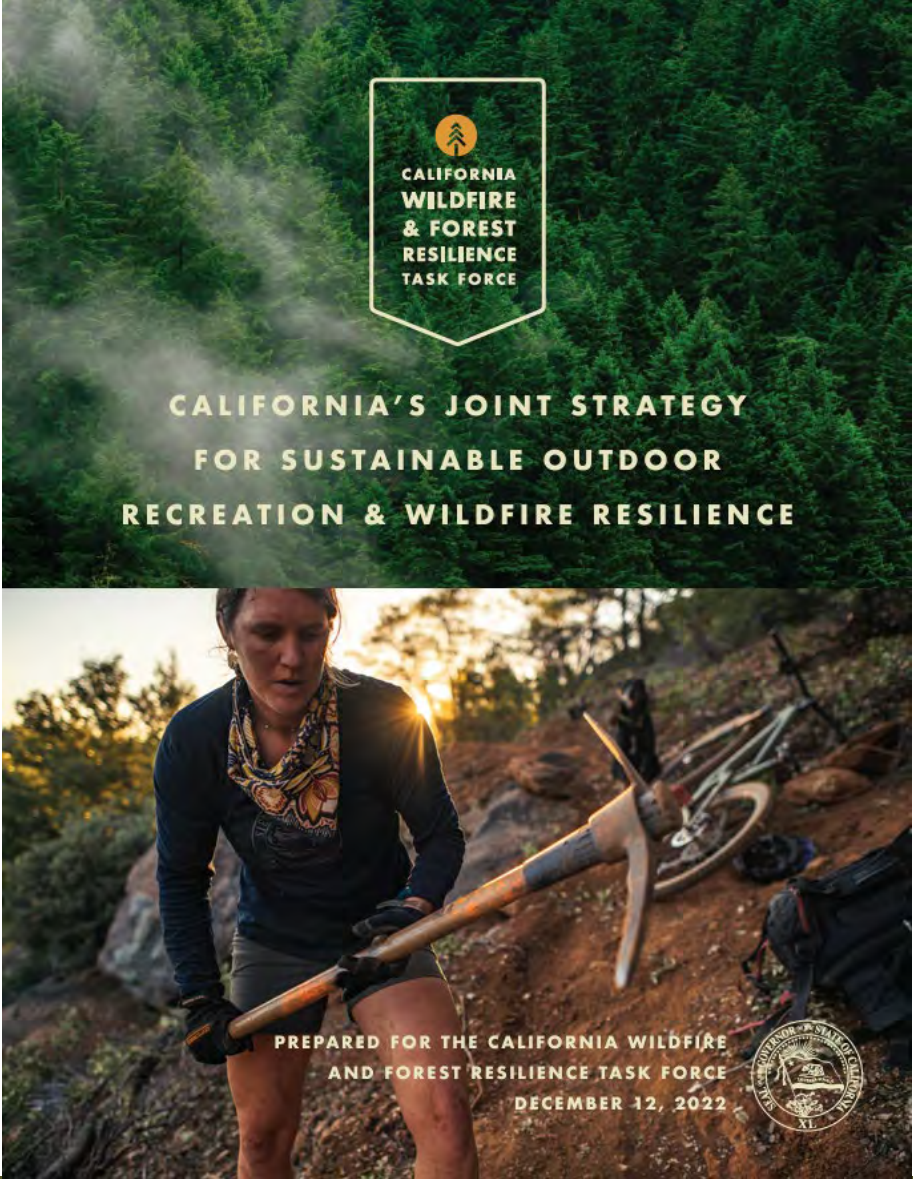
  
2025 Wildfire  
& Landscape  
Resilience  
Action Plan

Build the Science-Based  
Framework for Planning  
and Measuring Progress

Expand Large-Landscape  
and Community  
Resilience Projects



# Integrating Multiple Benefits





# 2025 Action Plan Shared Strategies

Integrate Multiple Benefits

Enhance Efficiency and Capacity

  
2025 Wildfire  
& Landscape  
Resilience  
Action Plan

Build the Science-Based  
Framework for Planning  
and Measuring Progress

Expand Large-Landscape  
and Community  
Resilience Projects





# 2025 Action Plan Shared Strategies

Integrate Multiple Benefits

Support Regionally-Tailored Strategies

Enhance Efficiency and Capacity

  
2025 Wildfire & Landscape Resilience Action Plan

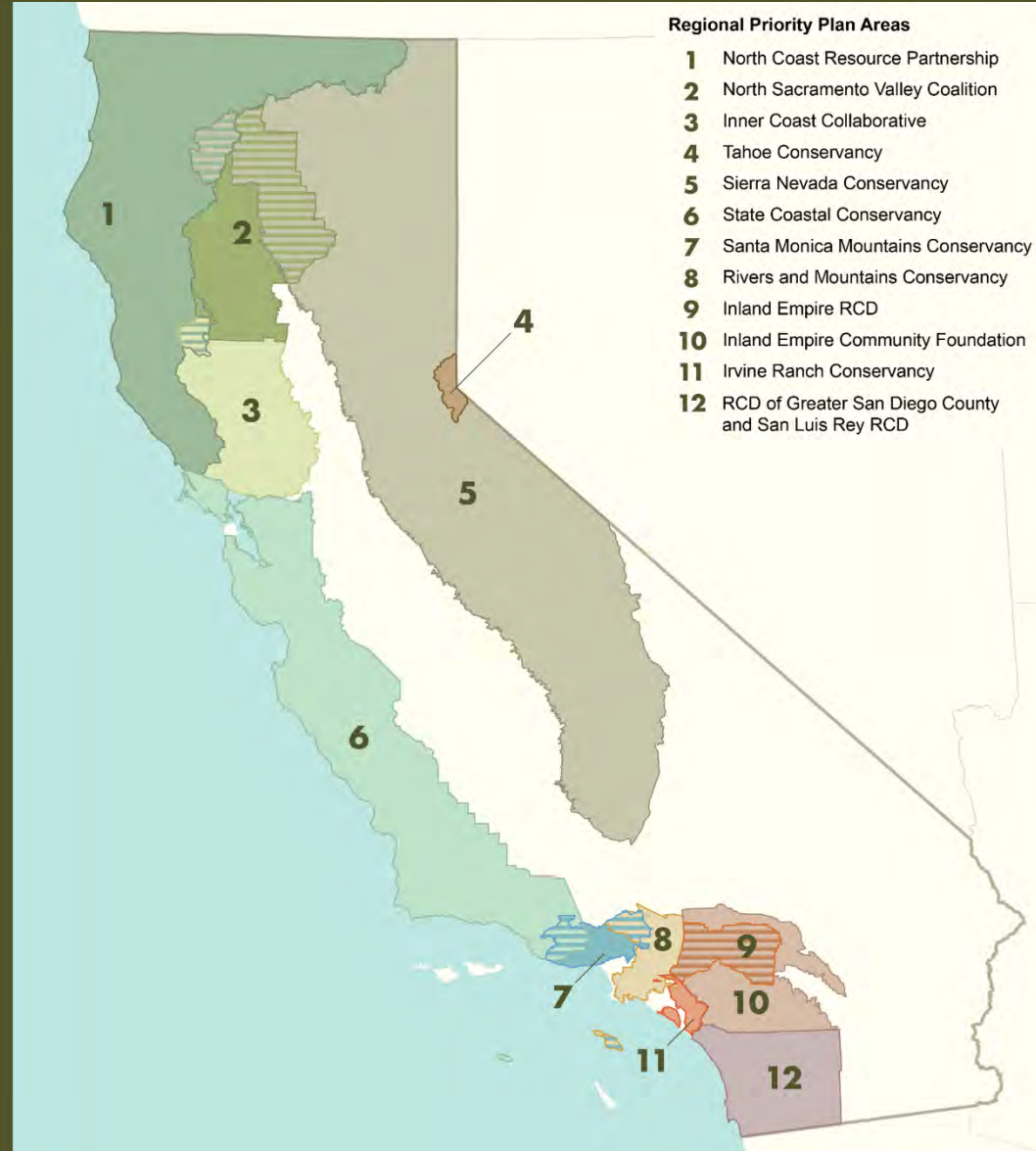
Build the Science-Based Framework for Planning and Measuring Progress

Expand Large-Landscape and Community Resilience Projects





# Regional Priority Plans





# Stay Updated

Sign up! [wildfiretaskforce.org](https://wildfiretaskforce.org)

- E-newsletter
- Governor's Monthly Update

Follow!

- [@wildfiretaskforce](https://twitter.com/wildfiretaskforce)
- [@CAwildfireTF](https://twitter.com/CAwildfireTF)





# Item 11 | Discussion



CA Governor's Office of  
Land Use and  
Climate Innovation

# Item 12 | General Public Comment



CA Governor's Office of  
Land Use and  
Climate Innovation

# Item 13 | Closing and Meeting Adjourned



CA Governor's Office of  
Land Use and  
Climate Innovation

# Thank You!

## CONTACT

[icarp@opr.ca.gov](mailto:icarp@opr.ca.gov)

## FUTURE MEETING DATES

May 16<sup>th</sup>

August 29<sup>th</sup>

October 24<sup>th</sup>

Newsletter and more: [lci.ca.gov/climate/icarp](https://lci.ca.gov/climate/icarp)

## STAY CONNECTED



[@Cal\\_LCI](https://twitter.com/Cal_LCI)



Governor's Office of Land  
Use and Climate  
Innovation (LCI)



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Climate Innovation