



TABLE OF CONTENTS

April 22, 2021

Agenda	Public Notice & Agenda (Published April 12, 2021)	Page 2
Item 2	Meeting Minutes for January 28, 2021	Page 6
Item 3	Executive Report	Page 13
Item 4	Wildfire Mitigation	Page 14
Item 5	Annual Administrator Evaluation	Page 114
Item 6	Financial Report	Page 115
Item 7	Claims Administration	Page 130
Item 8	ERM Framework	Page 134
Item 9	IOU Insurance Evaluation Process	Page 139
Item 10	Tax Status	Page 146



Date of Notice: Monday, April 12, 2021

PUBLIC NOTICE

A PUBLIC MEETING OF THE CALIFORNIA CATASTROPHE RESPONSE COUNCIL

NOTICE IS HEREBY GIVEN that the California Catastrophe Response Council (Council) will conduct a **teleconference meeting**. Pursuant to California Government Code §11120 *et seq.*, the Bagley-Keene Open Meeting Act applies generally to meetings of the Council, and the meeting is open to the public – public participation, comments, and questions will be welcome for agenda items on which the Council is considering taking action. All items on the Agenda are appropriate for action if the Council wishes to take action. Agenda items may be taken out of order.

Pursuant to Governor Newsom’s Executive Order N-29-20, issued March 17, 2020, certain provisions of the Bagley-Keene Open Meeting Act are suspended or waived during the declared State of Emergency in response to the COVID-19 pandemic. Consistent with the Executive Order, in order to promote and maximize social distancing and public health and safety, this meeting will be conducted by teleconference only. None of the locations from which the Council members will participate will be open to the public. All members of the public shall have the right to observe the meeting and offer comment at this public meeting as described in this Notice.

DATE: Thursday, April 22, 2021

TIME: 2:00 p.m.

TELECONFERENCE ACCESS: *

Online Access: <https://us02web.zoom.us/j/85666127987>

Dial-in Number: +1 (669) 900-6833

Enter Access code: 856 6612 7987#

Public Participation: The telephone lines of members of the public who dial into the meeting to observe or comment will initially be muted to prevent background noise from inadvertently disrupting the meeting. Phone lines will be unmuted upon request during all portions of the meeting that are appropriate for public comment to allow members of the public to comment. Please see additional instructions below regarding Public Participation Procedures.

* Neither the Council nor the California Earthquake Authority, as Administrator of the Wildfire Fund, are responsible for unforeseen technical difficulties or connectivity issues that may occur in the audio feed.

PUBLIC PARTICIPATION PROCEDURES: All members of the public shall have the right to observe the meeting and offer comment at this public meeting. The member of the Council acting as Chair of the meeting will indicate when a portion of the meeting is to be open for public comment. **At that point, any member of the public wishing to comment must press *9 on their phone.** Pressing *9 will notify the call moderator that you wish to comment, and you will be placed in line to comment in the order in which requests are received by the moderator. When it is your turn to comment, the moderator will unmute your line and announce your opportunity to comment by referencing your telephone number. The Chair of the meeting reserves the right to limit the time for comment. **Members of the public should be prepared to complete their comments within approximately 2 to 3 minutes.** More or less time may be allotted by the Chair in his or her sole discretion.

In addition, members of the public may submit comments in writing by emailing comments to PublicComment@calwildfire.com.

ACCESSIBILITY FOR DISABLED PERSONS: Persons who, due to a disability, need assistance in order to participate in this meeting should, prior to the meeting, contact CEA's ADA Coordinator either by phone by dialing (916) 661-5400, or by e-mail addressed to EEO@calquake.com and sjohnson@calwildfire.com. TTY/TDD and Speech to-Speech users may dial 7-1-1 for the California Relay Service to submit comments on an agenda item or to request special accommodations for persons with disabilities. Persons with disabilities may request special accommodations at this or any future Council meeting or may request the accommodation necessary to receive agendas or materials prepared for Council meetings. Please contact Susan Johnson by telephone, toll free, at **(877) 797-4300** or by email at sjohnson@calwildfire.com. We would appreciate hearing from you at least five days before the meeting date to best allow us to meet your needs.

MEETING MATERIALS: A copy of this Notice and Agenda has been posted on the website of the California Wildfire Fund (Wildfire Fund), at the following link:

<https://www.cawildfirefund.com/council>

Prior to the meeting, the written materials that will be provided to members of the Council will also be posted on the Fund's website. Finally, on the day of the meeting, a copy of any presentation deck that the Council or the Administrator may use during the meeting will also be posted to this site.

AGENDA

1. Quorum: Call to order and member roll call:

Governor	Appointee of the Senate Rules Committee
Treasurer	Public Member Paul Rosenstiel
Insurance Commissioner	Public Member Rhoda Rossman
Secretary for Natural Resources	Public Member Catherine Barna
Appointee of the Speaker of the Assembly	

Establishment of a quorum

2. Minutes: Review and approve minutes of the January 28, 2021 meeting of the Council.
3. Executive Report: CEA Chief Executive Officer Glenn Pomeroy will provide the Council with an executive report.
4. Wildfire Mitigation: CEA Chief Administration Officer Jim Lombard and California Natural Resources Agency Deputy Secretary, Forest Resources Management, Jessica Morse will brief the Council on California's Wildfire and Forest Resilience Action Plan.
5. Annual Administrator Evaluation: Council members Paul Rosenstiel and Catherine Barna will present the Annual Administrator Evaluation.
6. Financial Report: CEA Chief Financial Officer Tom Hanzel will provide the Council with a financial report on the Wildfire Fund.
7. Claims Administration: Dr. Laurie Johnson, CEA's Chief Catastrophe Response & Resiliency Officer, will provide an update on the progress and timeline for the Council's review of the complete draft procedures for Wildfire Claims Administration.
8. ERM Framework: Chief Risk & Actuarial Officer Shawna Ackerman will provide a brief overview of CEA's current Enterprise Risk Management program and a plan to incorporate the California Wildfire Fund into the existing framework.
9. IOU Insurance Evaluation Process: CEA General Counsel Tom Welsh will provide an update on the development of a framework for CEA's periodic review, pursuant to Public Utility Code § 3293, of the insurance programs of the participating electric utility companies.
10. Tax Status: Mr. Welsh will provide information on the Federal tax status of the Wildfire Fund.
11. Public comment: Public Comment opportunity on matters that do not appear on this agenda and requests by the public that matters be placed on a future agenda.
12. Adjournment.

For further information about this notice or its contents:

Agenda Information:

Tom Welsh
General Counsel
(916) 661-5527 (Direct)
Toll free: (877) 797-4300
twelsh@calwildfire.com

General Meeting Information:

Susan Johnson
Governance Liaison
(916) 661-5586 (Direct)
Toll free: (877) 797-4300
sjohnson@calwildfire.com

Media Contact:

(279) 203-5998
media@calquake.com

To view this notice on the California Wildfire Fund website and to access meeting materials, please visit

<https://www.cawildfirefund.com/council>



California Catastrophe Response Council Memorandum

April 22, 2021

Agenda Item 02: Meeting Minutes

Recommended Action: Approve Minutes of January 28, 2021 Meeting

Attached is a draft of the minutes of the January 28, 2021 meeting of the California Catastrophe Response Council. CEA staff has reviewed these minutes and believe they accurately summarize and document the matters discussed and actions taken by the Council at the meeting. CEA staff recommends approval and adoption of the draft minutes as the official record of the January 28, 2021 meeting of the Council.

DRAFT
California Catastrophe Response Council
Meeting Minutes

Teleconference Meeting
Thursday, January 28, 2021
2:00 p.m.

Members of Council in Attendance:

Mark Ghilarducci, Chair, designee of Governor Gavin Newsom
Richard Gordon, Vice-Chair, appointee of Speaker of the Assembly
Michael Martinez, designee of Insurance Commissioner Ricardo Lara
Kasey O'Connor, designee of State Treasurer Fiona Ma
Bryan Cash, designee of Secretary of Natural Resources Wade Crowfoot
Michael Wara, appointee of Senate Rules Committee Chairman
Rhoda Rossman, Public Member
Catherine Bando, Public Member
Paul Rosenstiel, Public Member

Members of CEA Staff in Attendance:

Glenn Pomeroy, Chief Executive Officer
Shawna Ackerman, Chief Risk and Actuarial Officer
Dr. Laurie Johnson, CEA's Chief Catastrophe Response & Resiliency Officer
Tom Hanzel, Chief Financial Officer
Tom Welsh, General Counsel
Susan Johnson, Governance Liaison

Speakers:

Matthew Cohen, AIR Worldwide
Shelly Yerkes, CoreLogic
Michael Young, Risk Management Solutions

1. QUORUM: Call to Order and Member Roll Call

Chairman Ghilarducci called the meeting, held via Zoom, to order at 2:02 p.m. Susan Johnson, CEA Governance Liaison, called the roll and stated that a quorum was present.

2. MINUTES: Review and approve minutes of the October 22, 2020 meeting of the Council.

MOTION: Ms. O'Connor motioned to approve the October 22, 2020 meeting minutes as written. Mr. Gordon seconded. The motion carried unanimously.

3. EXECUTIVE REPORT: CEA CEO Glenn Pomeroy provided the Council with an executive report.

Mr. Pomeroy reported on recent weather and wildfire events and activity across the state of interest to the Council. Mr. Pomeroy noted that CEA, as Wildfire Fund Administrator, does not currently anticipate that any of the recent wildfires will result in claims against the Wildfire Fund. Staff continues to closely monitor the following events for potential claim exposure: Kincaid Fire (October 2019), Bobcat Fire (September 2020), Zogg Fire (September 2020), Silverado Fire (October 2020), and other fires that occurred in December 2020 and January 2021.

4. WILDFIRE MODELING: Representatives from AIR Worldwide, CoreLogic, and Risk Management Solutions (RMS) provided the Council with presentations of their wildfire models and modeling capabilities.

Chief Risk and Actuarial Officer Shawna Ackerman introduced representatives from wildfire modeling firms AIR, CoreLogic and RMS, who briefed Council members on wildfire modeling.

Wildfire Modeling: Matthew Cohen, AIR Worldwide, explained his firm’s Catastrophe Modeling Framework and discussed the hazard components used in the model. Mr. Cohen said the modeling framework uses weather conditions- temperature, precipitation, and drought- as the basis of their model and noted that climate and vegetation are key drivers of a fire’s behavior. Mr. Cohen also stated that their model captures ignition locations, likelihood of an area to burn, how a fire spreads against a given landscape and all the ways a fire can spread. He added that AIR provides real time hazards and loss estimates.

Shelly Yerkes, CoreLogic, said her firm models wildfire risks from utility caused fires, noting that forests in California are becoming denser and climate change is acting as a “stressor.” She stated the state’s population dynamics continue to change, and with more Californians choosing to live in wildfire areas, CoreLogic wildfire models provide a compass for forward views of wildfire risks. Ms. Yerkes also stated that there are an average of 8,500 wildfires annually in California with weather being a key influence on the ultimate size of a fire. CoreLogic’s wildfire risk models can determine the probability of utility caused fires and determine the areas of greatest exposure.

Michael Young, RMS, said the four ways to reduce wildfire exposure are to reduce ignition, reduce fuel, fight the fire and hardening. RMS wildfire model is aimed at assessing the hazard, apply exposure, calculate the damage, and quantify the financial loss. He described wildfires as the “canary in the coal mine for climate change.” He further noted that 84 percent of wildfires are related to human ignitions and that managing the wildfire risk is heavily dependent on human response. RMS strongly advocates the concept of defensible space because reducing fuel near a structure can reduce the wildfire risk.

Questions and Discussion

Mr. Martinez thanked the three representatives for their presentations and asked if their models factor in prescribed firefighting efforts such as planned burns.

The representatives replied that prescribed burns affecting an individual property can be accommodated in their models. Michael Young of RMS noted there is no master database of prescribed fires and it is uncertain how long the benefit lasts.

Mr. Martinez also asked how transparency for insurance policyholders and regulators can be built into their models.

Mr. Cohen of AIR and Ms. Yerkes of CoreLogic replied that modelers attempt to be as transparent as they can considering the technical nature of the models and the proprietary nature of the models. Mr. Young noted that RMS has supplied model documentation to the NAIC (National Association of Insurance Commissioners.)

Mr. Rosenstiel asked if the models can determine which large fires can cause enough destruction to result in claims against the Wildfire Fund.

Mr. Cohen of AIR replied that the models can determine such large fires and Mr. Young of RMS and Ms. Yerkes of CoreLogic said the modelers simulate large events to establish the most credible scenarios.

Mr. Wara asked about the impact of climate change when it comes to the growing number of wildfires in California.

All three modelers indicated that climate change is an active area of research.

Note: During this Agenda item, Chair Ghilarducci was called away on urgent State business and Vice Chair Gordon assumed the duties of chairing the remainder of the meeting.

5. ADMINISTRATOR EVALUATION: Mr. Pomeroy asked the Council to consider the creation of, and appointment to, an Administrator Evaluation Subcommittee for the purpose of the 2021-2022 Wildfire Administrator Evaluation.

Mr. Pomeroy asked the Council to consider creating an Evaluation Subcommittee to annually assess and provide feedback to CEA regarding its performance as Wildfire Fund Administrator. He suggested that two Council members volunteer to serve on the subcommittee, with the responsibility to rotate annually. After discussion, the Council agreed that this process would assist both the Counsel and the Administrator. Vice Chair Gordon called for volunteers, and Council members Catherine Bando and Paul Rosenstiel volunteered to serve on the subcommittee, and they were duly appointed.

6. CLAIMS ADMINISTRATION: Dr. Laurie Johnson, CEA's Chief Catastrophe Response & Resiliency Officer, presented and requested adoption of an Expanded Summary of Procedures for Wildfire Claims Administration.

Dr. Johnson presented to the Council for consideration and adoption the Expanded Summary of Procedures for Wildfire Claims Administration, which provides definitions and an outline of procedures to be carried out by the Administrator in the handling of claims submitted by Participating Utilities for reimbursement by the Wildfire Fund. Dr. Johnson stated that the Expanded Summary is an interim step in the development of more detailed claims administration procedures and that a team of multi-disciplinary consultants, including claims adjusting experts, are involved in the development of the complete claims procedures. Dr. Johnson assured Council member Paul Rosenstiel that the claim administration procedures will be consistent with the standards of claim file review set forth in Assembly Bill 1054, including the legislative intent encouraging lower subrogation settlement targets.

Council member Rosenstiel acknowledged Dr. Johnson and her team for the excellent work to date.

MOTION: Mr. Rosenstiel moved to approve the Wildfire Claims Administration – Expanded Summary of Procedures. Ms. Bando seconded. After a call for public comment, and hearing none, the motion passed with no nay votes with the Governor’s designee absent for the vote.

Note: In order to ensure that remaining Agenda Items requiring action by the Council could be taken up before additional Council members may be required to depart, Vice Chair Gordon deferred Agenda Item 7 and called Items 8 and 9 for discussion and action.

8. FINANCIAL REPORT: Chief Financial Officer Tom Hanzel provided the Council with financial report on the Wildfire Fund as of December 31, 2020.

Highlighting the Wildfire Fund’s balance sheet, Mr. Hanzel reported that \$300 million of additional Investor-Owned Utility (IOU) contributions were added to the Wildfire Fund’s balance sheet since the last Council meeting. With this contribution, the Wildfire Fund ended 2020 with a net position of \$10.1 billion.

Mr. Hanzel also stated that Wildfire Fund investment income totaled \$83 million in 2020. He also presented an investment analysis, noting that the Wildfire Fund’s investments felt the pressure of low Treasury rates, but reminded the Council members that the preservation of capital “first and foremost” remains the Wildfire Fund’s investment policy.

9. California Wildfire Fund 2021 Budget: Mr. Hanzel presented and requested approval of the California Wildfire Fund’s proposed 2021 budget.

Mr. Hanzel presented for discussion and approval the proposed 2021 administrative budget, set forth as follows:

	Proposed 2021 Budget	Actual Activity for FY 2020	Variance \$	%
Additions to fund assets:				
Rate payer monthly NBCs, gross	\$ 902,400,000	\$ -	\$ 902,400,000	100.0%
Utility annual contributions	300,000,000	300,000,000	-	0.0%
Investment income (net of expenses)	81,937,986	82,955,099	(1,017,113)	-1.2%
Initial contribution - PG&E	-	4,815,000,000	(4,815,000,000)	-100.0%
2019 annual contribution - PG&E	-	192,600,000	(192,600,000)	-100.0%
Total additions to fund assets	\$ 1,284,337,986	\$ 5,390,555,099	\$ (4,106,217,113)	-76.2%
Deductions to fund assets:				
SMIF - principal payment	\$ 840,000,000	\$ 70,000,000	\$ 770,000,000	1100.0%
SMIF - loan interest	36,106,945	47,064,736	(10,957,791)	-23.3%
DWR administrative and operating costs	12,000,000	-	12,000,000	100.0%
Reinsurance expenses	-	26,208,000	(26,208,000)	-100.0%
Reinsurance broker commissions	-	486,000	(486,000)	-100.0%
Personnel expenses:				
Personnel expenses - allocated from CEA	1,462,596	916,878	545,718	59.5%
Direct expenses from CWF temps	-	174,994	(174,994)	-100.0%
General and administrative expenses:				
Other contracted services	1,100,200	295,638	804,562	272.1%
Direct legal services-general	700,000	625,250	74,750	12.0%
Consulting fees - financial services	300,000	300,000	-	0.0%
Bank fees	248,638	179,039	69,599	38.9%
G&A expenses - allocated from CEA	234,624	124,028	110,596	89.2%
Travel	20,000	6,407	13,593	212.1%
Software and licenses	12,000	25,912	(13,912)	-53.7%
Direct IT services	12,000	9,372	2,628	28.0%
Advertising administration - RFP	10,000	-	10,000	100.0%
Audit Fees	6,000	6,732	(732)	-10.9%
Printing & stationary	1,200	751	449	59.8%
CCRC meeting expenses	1,200	1,509	(309)	-20.5%
Total deductions to fund assets	\$ 892,215,403	\$ 146,425,246	\$ 745,790,157	509.3%
Increase in net position	\$ 392,122,583	\$ 5,244,129,853	\$ (4,852,007,270)	-92.5%

MOTION: Mr. Rosenstiel moved to adopt the Wildfire Fund’s 2021 budget. Mr. Cash seconded. After a call for public comment, and hearing none, the motion passed with no nay votes (8-0) with the Governor’s designee absent for the vote.

7. NON-BYPASSABLE CHARGES: CEA’s General Counsel, Tom Welsh, and Mr. Hanzel, provided an update on the status and administration of non-bypassable charges (NBCs) currently being collected by the California Department of Water Resources (DWR).

CEA General Counsel Tom Welsh provided a brief history of the administration of the utility ratepayer NBCs by the DWR. He explained the DWR, among other things, provides accounting and record-keeping functions and that the DWR’s administrative expenses are paid from the NBCs, thus those costs impact the claim paying capacity and durability of the Wildfire Fund. Accordingly, CEA continues to work with DWR, Department of Finance and other government officials to press for maximizing efficiency and minimize administrative expenses. Those discussions include continuing exploration of options to achieve efficiency.

Questions and Discussion

Council members Ms. Bando and Ms. Rossman asked staff to continue strong efforts try and limit, to the extent possible, the DWR’s expenses and resulting financial impact on the Wildfire Fund budget.

Regarding the NBCs, Mr. Welsh confirmed that staff would continue its efforts to work with DWR and other appropriate officials to ensure there is efficiency in the administration of the NBCs in order to maximize funds to pay claims arising from covered wildfires.

10. TAX STATUS: Mr. Welsh provided an update on work related to the federal tax status of the Wildfire Fund.

Mr. Welsh explained that revenues collected by the Wildfire Fund are exempt from California taxation under express provisions of AB 1054, and CEA staff are working to obtain legal and tax compliance opinions from nationally recognized federal tax experts confirming the Wildfire Fund is similarly exempt from federal income taxation, given that the Wildfire Fund is an integral part of the State of California. That legal and federal tax work should be completed by the April Council meeting. Mr. Welsh will report back to the Council on this matter at that meeting. There were no questions from the Council on this topic.

11: INSURANCE EVALUATION: Mr. Welsh and Mr. Hanzel briefed the Council on the Administrator’s statutory duty under Public Utilities Code section 3293 to periodically review and make recommendations on the IOUs’ wildfire insurance coverage.

Mr. Welsh and Mr. Hanzel reported that CEA, as Wildfire Fund Administrator, is developing a framework and process for conducting periodic evaluations of Investor-Owned Utilities (IOUs) wildfire insurance coverage plans in compliance with Public Utilities Code section 3293, which was enacted as part of AB 1054. CEA is supplementing its earthquake related insurance and reinsurance market expertise with similar energy sector expertise to work on this project. There were no questions from Council members on this topic.

12. Public Comment: Public comment opportunity on matters that do not appear on the agenda and requests by the public that those matters be placed on a future agenda.

There was no public comment.

13. Adjournment.

There being no further business, Vice-Chair Gordon adjourned the meeting at 4:11 p.m.



California Catastrophe Response Council Memorandum

April 22, 2021

Agenda Item 3: Executive Report

Recommended Action: No action required—information only

Chief Executive Officer, Glenn Pomeroy will present his Executive Report to the Council.



California Catastrophe Response Council Memorandum

April 22, 2021

Agenda Item 4: Wildfire Mitigation

Recommended Action: No action required—information only

Jim Lombard, CEA’s Chief Administration Officer, and Jessica Morse, Deputy Secretary for Forest Resources Management at the California Natural Resources Agency, will brief the Council on the State of California’s ongoing work to address forest resilience and wildfire risk mitigation, with particular emphasis on *California’s Wildfire and Forest Resiliency Action Plan*, a comprehensive strategy prepared and published in January 2021 by Governor Newsom’s Forest Management Task Force (“*Action Plan*” – copy attached). As noted in the *Action Plan*:

California is facing a growing forest and wildfire crisis. Decades of fire suppression, coupled with the increasing impacts of climate change, have dramatically increased wildfires’ size and intensity throughout the state.

The 2020 fire season broke numerous records. Five of California’s six largest fires in modern history burned at the same time, destroying thousands of buildings, forcing hundreds of thousands of people to flee their homes, and exposing millions of residents to dangerously unhealthy air. More than 4 million acres burned across the state, double the previous record.

California prepared the *Action Plan* to (1) accelerate efforts to restore the health of California forests, grasslands and natural places, (2) improve fire safety in communities, and (3) sustain economic vitality of rural forested areas. (*Action Plan – Executive Summary*). Given the complex nature of land ownership in California, the *Action Plan* includes action items for federal, state, local, private, and tribal entities. The *Action Plan* anticipates scaling up forest management practices to treat 1 million acres annually, significantly expand prescribed fires across the state, reforest areas burned by catastrophic fire, support community resiliency, and develop a comprehensive program to assist private forest landowners, among other things.

Ms. Morse and Mr. Lombard will discuss the *Action Plan* and related mitigation activities.



Attachments

- A. *California's Wildfire and Forest Resiliency Action Plan* (January 2021)
- B. *Agreement for Shared Stewardship of California's Forest and Rangelands*, between the State of California and the USDA, Forest Service, Pacific Southwest Region, entered into on August 8, 2020
- C. Governor's Budget Change Proposal to the California Legislature, dated 1/10/2021, to fund *California's Wildfire and Forest Resilience Strategy*

CALIFORNIA'S WILDFIRE AND FOREST RESILIENCE ACTION PLAN



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

January 2021

California's Wildfire and Forest Resilience Action Plan

January 2021

STATE OF CALIFORNIA
Gavin Newsom, Governor

Task Force Co-Chairs
CALIFORNIA NATURAL RESOURCES AGENCY
Wade Crowfoot, Secretary

CALIFORNIA ENVIRONMENTAL
PROTECTION AGENCY
Jared Blumenfeld, Secretary

DEPARTMENT OF FORESTRY AND
FIRE PROTECTION
Thom Porter, Director

Thank you to the
numerous federal, state and local agencies and
non-governmental organizations who contributed to this plan.



This Action Plan is located on the
Forest Management Task Force website: <https://fmf.fire.ca.gov/>

Document designed and published by
the California Department of Water Resources,
Public Affairs Office, Creative Services Branch

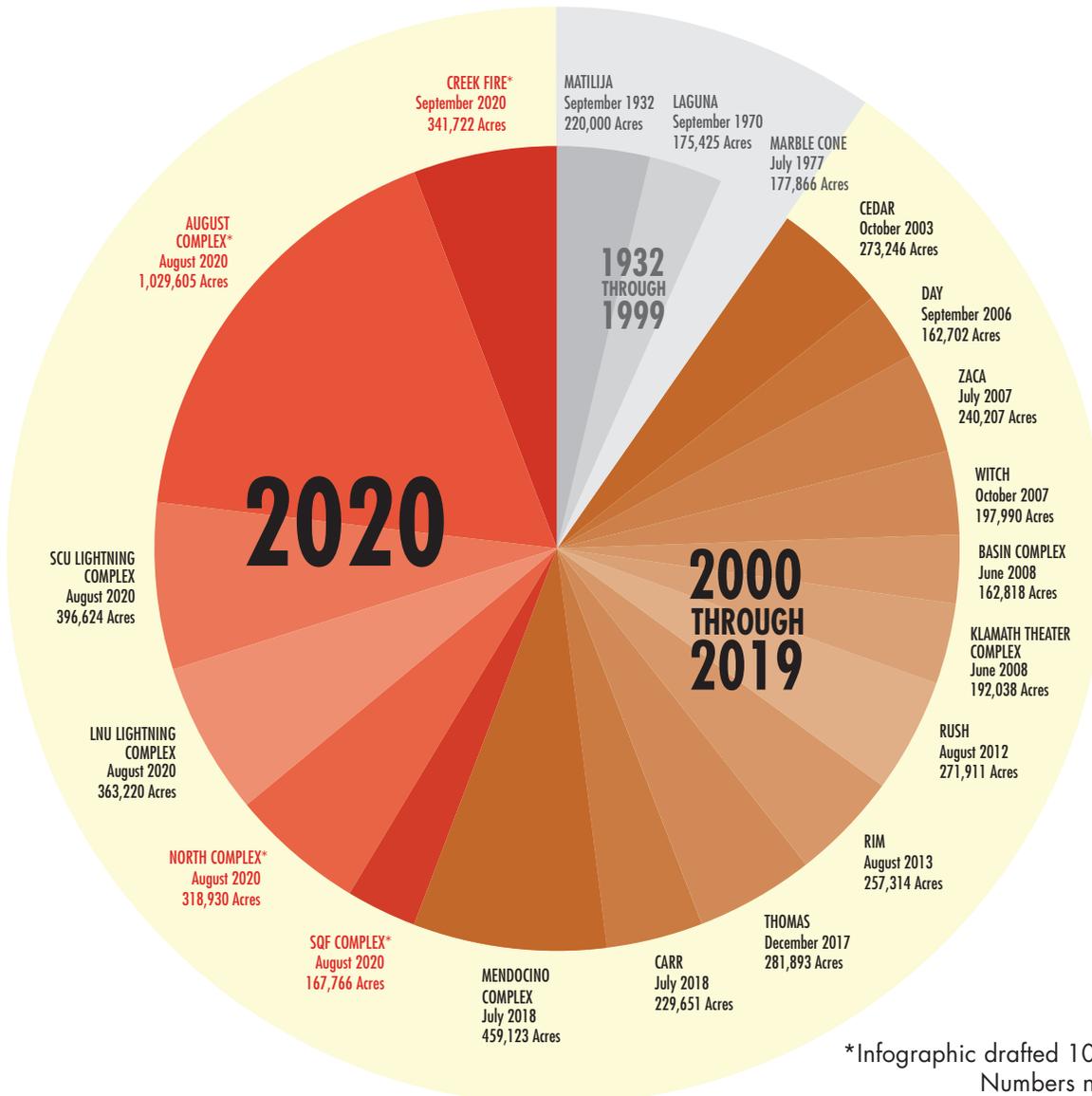
Cover photo: Ken Meinhart, USFWS

CALL TO ACTION

California is facing a growing forest and wildfire crisis. Decades of fire suppression, coupled with the increasing impacts of climate change, have dramatically increased wildfires' size and intensity throughout the state.

The 2020 fire season broke numerous records. Five of California's six largest fires in modern history burned at the same time, destroying thousands of buildings, forcing hundreds of thousands of people to flee their homes, and exposing millions of residents to dangerously unhealthy air. More than 4 million acres burned across the state, double the previous record.

TOP 20 LARGEST CALIFORNIA WILDFIRES



Building on important work started during the previous administration, state policymakers and agencies have bolstered efforts and expanded investments in unprecedented ways over the past two years to address this crisis. Despite this progress, bolder action is required to address the key drivers of catastrophic fires, significantly increase the pace and scale of forest management, and improve the resilience of increasingly threatened communities.

First, we recognize that climate change increases the frequency and severity of catastrophic wildfires. More than 100 peer-reviewed studies published since 2013 demonstrate a strong consensus that climate change extends the periods of wildfire risk and enhances the likelihood of fires. Land use and forest management practices are also contributing factors but cannot fully explain the magnitude of wildfires in recent years.

Second, California's diverse landscapes and communities require regionally tailored strategies and actions. Protecting California's communities and natural places from the impacts of catastrophic wildfire cannot be achieved through a "one size fits all" solution. Different types of vegetation and landscapes—from redwoods to chaparral to desert—require different approaches. State investments and programs must recognize and enable regionally and locally-driven solutions in partnership with groups and leaders from these regions.

Third, we recognize that building California's resilience to catastrophic wildfires means restoring the health of our forests and diverse landscapes across the state and strengthening wildfire preparation within our communities. While the Task Force started with a focus on forest management, we recognize that an effective strategy to address growing wildfire risk must also emphasize actions we can take in our homes, neighborhoods and communities.

Fourth, we recognize the scientific consensus that frequent, low-intensity fire can be a positive force in improving forest health and biodiversity and forested communities' safety. We must draw upon the practices of Native Americans, ranchers, and rural communities to rapidly expand the use of prescribed fire and bring these best practices to state lands.

Fifth, we recognize and commit to strengthening the linkages between the ecological health of forests and the economic and social health of rural communities. Successful environmentally sustainable forest management and wood products sectors are vital to enabling prosperity in forested rural economies.

Sixth, since landscapes at risk of wildfire cross multiple ownerships, we recognize the need for strong partnerships among federal, state, local and tribal entities and private organizations. In August 2020, Governor Newsom and Vicki Christiansen, Chief of the United States Department of Agriculture's Forest Service (USFS), announced a historic Agreement for Shared Stewardship of California's Forest and Rangelands to improve the health of California's forests and reduce wildfire risk across the state. Complementary partnerships at the local level through tribal governments, cities and counties, fire safe councils, regional collaboratives, resource conservation districts, and others will continue to protect our forested landscapes and at-risk communities.

And finally, we recognize that state government must play a leadership role in bringing these interests together to align and integrate activities, coordinate investments, and help to shape a resilient future for communities and natural places. The Wildfire and Forest Resilience Action Plan provides a framework and strategy to improve wildfire resilience and forest health throughout the state.

TABLE OF CONTENTS

Executive Summary	6
Introduction	9
Goal 1: Increase the Pace and Scale of Forest Health Projects	12
Accelerate Restoration Across All Lands	13
Increase Prescribed Fire	18
Mobilize Regional Action Plans	20
Conserve Working Forests	22
Reforest Burned Areas	23
Improve Regulatory Efficiency	24
Goal 2: Strengthen Protection of Communities	26
Support Community Risk Reduction and Adaptation Planning	26
Increase Fuel Breaks	28
Protect Wildfire-Prone Homes and Neighborhoods	29
Improve Utility-Related Wildfire Risk	31
Create Fire-Safe Roadways	32
Reduce Health Impacts of Smoke	33
Goal 3: Manage Forests to Achieve the State’s Economic and Environmental Goals	34
Integrate Forest Management into State Climate and Biodiversity Programs	34
Create a Sustainable Wood Products Market in California	36
Sustain and Expand Outdoor Recreation on Forestlands	38
Protect and Expand Urban Canopy and Forests	39
Goal 4: Drive Innovation and Measure Progress	40
Utilize Best Available Science and Accelerate Applied Research	40
Expand and Improve Monitoring, Reporting and Decision-Support Tools	41
Moving Forward: Maintain Progress and Partnerships	45

EXECUTIVE SUMMARY

The Wildfire and Forest Resilience Action Plan is designed to strategically accelerate efforts to:

- » Restore the health and resilience of California forests, grasslands and natural places;
- » Improve the fire safety of our communities; and
- » Sustain the economic vitality of rural forested areas.

To meet these goals, the following will need to be achieved:

Scale-up forest management to meet the state and federal 1 million-acre annual restoration target by 2025.

- » The Department of Forestry and Fire Protection (CAL FIRE) and other state entities will expand its fuels management crews, grant programs, and partnerships to scale up fuel treatments to 500,000 acres annually by 2025;
- » California state agencies will lead by example by expanding forest management on state-owned lands to improve resilience against wildfires and other impacts of climate change; and
- » The USFS will double its current forest treatment levels from 250,000 acres to 500,000 acres annually by 2025.



Significantly expand the use of prescribed fire across the state:

- » CAL FIRE will expand its fuels reduction and prescribed fire programs to treat up to 100,000 acres by 2025, and the California Department of Parks and Recreation (State Parks) and other state agencies will also increase the use of prescribed fire on high-risk state lands;
- » The USFS, in partnership with CAL FIRE, tribal governments, and other agencies will seek to establish a Prescribed Fire Training Center to provide training opportunities for prescribed burn practitioners and focus training efforts on western ecosystems;
- » CAL FIRE will also establish a new tribal grants program, increase support for workforce development and training programs, and evaluate options to address liability issues for private landowners seeking to conduct prescribed burns.” for the private insurance market;
- » The USFS will significantly expand its prescribed fire program to attain its 500,000-acre target for forest treatments by 2025.

Reforest areas burned by catastrophic fire:

- » The USFS will develop a restoration strategy for wildfire impacted federal lands and CAL FIRE will partner with the California Office



of Emergency Services (Cal OES) and other federal, state, and local agencies to develop a coordinated strategy to prioritize and rehabilitate burned areas and affected communities. These ecologically-based strategies will focus on silvicultural practices that increase carbon storage, protect biodiversity, and build climate resilience.

Support communities, neighborhoods, and residents in increasing their resilience to wildfire:

- » CAL FIRE will significantly expand its defensible space and home hardening programs and launch a new program building upon the Governor’s 35 Emergency Fuel Break Projects by developing a list of 500 high priority fuel breaks across the state. This list will be continuously updated.

Utilize a statewide network of regional plans to ensure coordinated, comprehensive action across the state:

- » The California Natural Resources Agency (CNRA) will expand its Regional Forest and Fire Capacity (RFFC) Program to all high-risk areas throughout the state and increase local and regional governments’ capacity

to build and maintain a pipeline of forest health and fire prevention projects.

Develop a comprehensive program to assist private forest landowners, who own more than 40 percent of the state’s forested lands:

- » CAL FIRE will coordinate the implementation of several grants and technical assistance programs for private landowners through a unified Wildfire Resilience and Forestry Assistance Program.

Create economic opportunities for the use of forest materials that store carbon, reduce emissions, and contribute to sustainable local economies.

- » The Governor’s Office of Planning and Research (OPR) is leading the development of a comprehensive framework to expand the wood products market in California and will partner with CAL FIRE, the Governor’s Office of Business and Economic Development (GoBiz), the USFS, and the California Infrastructure and Economic Development Bank (iBank) to draft a market development roadmap and catalyze private investment into this sector.

Improve and align forest management regulations:

- » The Board of Forestry and Fire Protection (BOF) is leading the expansion of a new online permitting tool and permit synchronization initiative to provide a one-stop shop for permits from several agencies and will use the California Vegetation Treatment Program (CalVTP) to streamline project planning and environmental review.

Spur innovation and better measure progress:

- » CAL FIRE and the USFS, in coordination with the USDA California Climate Hub, the California Air Resources Board (CARB), and other agencies, will seek to establish a Forest Data Hub to coordinate and integrate federal, state, and local reporting on forest management and carbon accounting programs, and serve as a clearinghouse for new and emerging technologies and data platforms.

This strategy will also be integrated into the state's efforts to combat climate change through the following actions:

1. Scale-up forest thinning and prescribed fire efforts to reduce long-term greenhouse gas emissions and harmful air pollution from large and catastrophic wildfires;
2. Integrate science-based climate adaptation and resiliency strategies into the emerging state-wide network of regional forest and community fire resilience plans;
3. Drive forest management, conservation, reforestation and wood utilization strategies that stabilize and increase the carbon stored in forests while preserving biodiversity and revitalizing rural communities;
4. Improve electricity grid resilience; and
5. Promote sustainable land use.



INTRODUCTION



The California Forest Management Task Force (Task Force) was established in 2018 to introduce a more holistic, integrated approach toward effective forest management. The Task Force’s purpose has been to develop a framework for establishing healthy and resilient forests that can withstand and adapt to wildfire, drought and a changing climate.

The Task Force grew out of the state’s Tree Mortality Task Force, which was established during California’s recent drought in response to the massive die-off of trees across the state. It was specifically charged with implementing the California Forest Carbon Plan of 2018 and Executive Order B-52-18. The Task Force also drew upon the mandates and recommendations of a broad range of state, federal, local, and tribal governments and private organizations.

Over the past two years, the Task Force has convened more than two dozen interagency and stakeholder-led workgroups to develop the recommendations presented in this Wildfire and Forest Resilience Action Plan (Action Plan). This Action Plan will also serve as a roadmap for implementing the Agreement for Shared Stewardship of California’s Forest and Rangelands (Shared Stewardship Agreement) with the United States Forest Service (USFS) under the United States Department of Agriculture (USDA), and for aligning the state’s efforts with other federal, local, tribal, regional and private organizations.

This strategy integrates recommendations from existing state and federal plans that tackle

various aspects of the state’s forest health and wildfire crisis. California’s natural and working lands have also been analyzed by several commissions, task forces, legislative hearings and reports, scientific conferences, workshops, and papers.¹ A common theme of these reports and recommendations is that the state needs “an unprecedented action plan” to effectively respond to the forest health and wildfire crisis.²

This Action Plan responds to that challenge by integrating key findings and recommendations from these various plans, studies, and assessments into a single coordinated and comprehensive strategy.

The entities responsible for implementing this strategy and its actions are committed to doing so in a manner that advances California’s goals to achieve carbon neutrality, build climate resilience, improve equity, and foster economic prosperity. Many of these actions will inform other upcoming state agency plans, including the Natural and Working Lands Climate Smart Strategy (October 2021); State Adaptation Strategy (2021); 30 by 30 Pathways Document (February 2022); and Climate Change Scoping Plan (2022).

1 [Strategic Fire Plan](#) (2018), [Forest Carbon Plan](#) (2018), [Governor’s Office of Planning and Research’s \(OPR\) updated Fire Hazard Planning Technical Advisory](#) (2020), [AB 32 Scoping Plan](#) (2017), [Forest and Range Assessment](#) (2017), [Safeguarding California Plan](#) (2018), [California Biodiversity Initiative](#) (2018), [Fourth California Climate Change Assessment](#) (2018), [California Water Resilience Portfolio](#) (2020), [State Wildlife Action Plan](#) (2015), [Sierra Nevada Watershed Improvement Program](#), [Lake Tahoe Forest Action Plan](#) (2019), [The National Cohesive Wildland Fire Management Strategy](#), [The USFS Region 5 Leadership Intent for Ecological Restoration](#).

2 [Little Hoover Commission](#) (2018), [Legislative Analyst’s Office](#) (2018 and 2019), [Public Policy Institute of California](#) (2018), [California Economic Summit](#) (2019), The National Cohesive Summit (2019), [Governor’s Strike Force](#) (2019), [The Joint Institute for Wood Products Innovation](#) (2020), [California Council on Science and Technology](#) (2020)



The focus of this Action Plan is increasing the pace and scale of forest management and wildfire resilience efforts by 2025 and beyond. The Action Plan sets state and federal

attainment goals and describes a number of activities to work towards achieving these goals. These actions will be implemented to the extent resources are available.

Building Upon Recent Progress

This Action Plan builds on the state's significant progress and accomplishments in tackling California's forest health and wildfire crisis. First and foremost, the Administration and the Legislature have prioritized budgetary resources to provide CAL FIRE and other agencies with the resources needed to more effectively fight uncontrolled fires and protect vulnerable communities:

» **Hired Additional Seasonal Firefighters:**

Additional seasonal firefighters were added during the 2019 and 2020 fire seasons to enhance CAL FIRE's firefighting surge capacity, given increased fire risk, including 393 seasonal firefighters in 2019 and 858 new seasonal firefighters in 2020.

» **Relief Staffing and Additional Surge**

Capacity: The 2020 Budget included \$85.6 million ongoing funding for additional firefighting resources to provide CAL FIRE with operational flexibility throughout the peak fire season and beyond as fire conditions dictate.

» **Purchased Additional Fire Engines:** The 2019 Budget Act included \$67.5 million for enhanced fire suppression resources, including funding to purchase and staff new year-round fire engines and for heavy equipment fire support (e.g., fire bulldozing operations).

» **Modernization of Firefighting Aircraft:**

Recent budgets have included resources to enhance CAL FIRE'S aviation fleet with new aircraft equipped to meet the challenges associated with more severe wildfire activity, including seven C-130 air tankers and 12 Black Hawk helicopters for nighttime firefighting operations.

» **Innovation Procurement Sprint:** The 2020 Budget added ongoing funding to enable CAL FIRE to implement the new, pioneering wildfire prediction and modeling technology that was procured through the Innovation Procurement Sprint process, which was initiated through Executive Order N-04-19.

» **Investments in Detection Technology:** The 2019 Budget Act added ongoing funding to install, operate, and maintain an additional 100 infrared fire monitoring cameras to help dispatchers and firefighters identify and confirm wildfire locations.

- » **Pre-positioning Resources for Critical Fire Weather:** To boost California’s wildland firefighting ranks during critical fire weather, the 2018-19 Budget added \$25 million annually to fund city and county firefighting engines and crews to be able to pre-deploy in strategic locations and respond to breaking fires.
- » **Building Wildfire Community Preparedness:** In 2019, Governor Newsom launched a \$50 million emergency preparedness campaign to connect vulnerable populations with culturally and linguistically competent support and build resiliency in vulnerable communities at high risk for wildfires and other disasters.

In addition to these investments, Governor Newsom has issued several executive orders and initiatives to protect communities, restore forest health, and build wildfire and climate resilience.

- » **Executive Orders:** On his first full day in office, Governor Newsom issued an Executive Order directing CAL FIRE to identify areas at high risk from wildfire and develop recommendations to better protect these vulnerable communities, which resulted in the CAL FIRE Community Wildfire Prevention and Mitigation Report.
- » **Recently-Chaptered Legislation:** The California Legislature has passed several state laws, as described throughout this Action Plan and summarized in Appendix C, to establish new programs to restore forest health and protect communities.
- » **Strike Force Report:** In April 2019, the Governor’s Strike Force Report set forth a series of steps the state could take to reduce the incidence and severity of wildfires and maintain the state’s commitment to clean energy.
- » **35 Priority Fuel Reduction Projects:** CAL FIRE designed and implemented 35 fuel reduction projects in 2019 to protect more than 200 of California’s most wildfire-vulnerable communities, facilitated by a State of Emergency Declaration issued by the Governor. These projects were highly effective in preventing fires and modifying fire behavior during the 2020 fire season.
- » **Utility-Related Wildfire Risk:** The California Public Utilities Commission (CPUC) established a new Wildfire Safety Division and developed a strategy and roadmap for reducing utility-related wildfire risk.
- » **Regulatory Streamlining:** State agencies have improved the planning and regulatory process for forest management, including accelerating the environmental review timeline for fire-prevention activities from several years to several months through the California Vegetation Treatment Program (CalVTP) and moving the timber harvest permitting system online through a new transparent platform called the California Timber Regulation and Environmental Evaluation System, or CalTREES.
- » **Shared Stewardship Agreement:** In August 2020, Governor Newsom signed a Shared Stewardship Agreement with the USFS that establishes unprecedented coordination between state and federal agencies to each meet a goal of treating 500,000 acres annually by 2025 (total of 1 million acres).
- » **Climate and Biodiversity:** Governor Newsom issued Executive Order N-82-20 in October 2020, directing state agencies to accelerate actions to combat climate change, protect biodiversity, and build resilience nature-based solutions, including improved forest management.
- » **Investments in Forest Management:** The state has invested \$1.4 billion in California Climate Investments (CCI) projects that provide climate mitigation or adaptation benefits and contribute to forest health and fire protection.

GOAL 1: INCREASE THE PACE AND SCALE OF FOREST HEALTH PROJECTS

The state must significantly increase the pace and scale of forest health projects to meet the goals of the Forest Carbon Plan and Shared Stewardship Agreement, which call for federal and state agencies to each meet a goal of treating 500,000 acres annually by 2025. The Shared Stewardship Agreement also commits the state and the United States Department of Agriculture's Forest Service (USFS) to develop a coordinated 20-year plan updated at five-year intervals for forest and vegetation management. This Action Plan, developed in coordination with the USFS and a broad and diverse coalition of agencies and key stakeholders, serves as the first five-year plan to advance the Shared Stewardship Agreement's goals.

The overarching goal of this state-federal agreement is to improve the health and resilience of the state's forested landscapes. While forest health can have multiple definitions, for the purposes of this Action Plan, healthy forests include woodlands, grasslands, chaparral, shrublands, and related vegetation types that yield both ecological and community benefits. Healthy vegetation improves climate resilience, reduce the risk of catastrophic wildfire, safeguard water and air quality, protect fish and wildlife habitat, enhance biodiversity, sequester carbon, improve recreational opportunities, and generate job and economic opportunities. However, as shown below, each of these vegetation types provides unique benefits, face different risks, and therefore require different management strategies.



FOREST

- » 100+ years of fire suppression = fire scarcity
- » Accumulation of fuels/dense undergrowth
- » Ladder fuels contribute to severe canopy fires
- » Prescribed fire, ecological thinning, and sustainable timber harvest are needed
- » Rare plants and species diversity must be protected when "clearing" forest floors



GRASSLAND & WOODLANDS

- » Home of super blooms, vernal pools, often intermixed with woodlands
- » Often targeted for development because they look weedy and bare for much of the year
- » Prone to fast-moving fires
- » Fires increased in severity due to the presence of invasive species and humans (witness Santa Rosa)
- » Especially vulnerable to type conversion (other plants taking over) that increase fire risk and fire return intervals
- » Community and home hardening and building restrictions are key



CHAPARRAL & SHRUBLANDS

- » Found statewide but primarily in Southern California and along the coast
- » Also found in lower elevations of the Sierra Nevada, adding complexity to forest regimes
- » Chaparral habitats require fire for health, but the fire is happening too frequently
- » At risk of type conversion, which increases fire risk
- » Hardening and building restrictions are key

Accelerate Restoration Across All Lands

With California’s landscape divided among multiple ownerships, coordinated stewardship is essential. Strengthening wildfire resilience is a shared responsibility of federal, state, and private landowners.

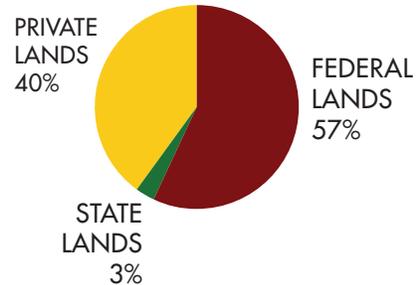
INCREASE TREATMENTS ON FEDERAL LANDS

Federal agencies own and manage about 57 percent of the state forested lands. The USFS Pacific Southwest Region manages 20.8 million acres across 18 National Forests in California. The Bureau of Land Management (BLM) owns 1.2 million acres of forest and woodlands, and the National Park Service (NPS) manages approximately 1.6 million acres.

These federal agencies have significantly increased the scale of their forest fuels reduction projects in recent years. For example, the USFS has increased its targets for acres treated from 167,000 acres in 2016 to 235,000 acres in 2019 and 2020.

As described below, the USFS is also working to increase its use of prescribed and managed wildland fire significantly. As its National Forest land and resource management plans are revised, the USFS will encourage broader prescribed fire use on the landscape when conditions permit and complement mechanical and other vegetation treatments.

Forest Lands Ownership in California



Key Actions:

1.1 Treat 500,000 Acres of USFS Land Annually by 2025: Consistent with the Shared Stewardship Agreement, the USFS intends to treat a total of 500,000 acres annually by increasing the pace-and-scale of restoration treatments over the next five years.

1.2 Increase Sustainable Timber Harvest: The USFS will seek to increase its annual timber harvest from 400 million board feet (MBF) to 500 MBF annually, accounting for a third of the current industry capacity of 1.5 billion board feet annually.



1.3 Identify Strategic Fire Management Zones:

In 2021, the USFS will identify Strategic Fire Management Zones to expand its use of managed wildland fire while protecting public and community health and safety.

1.4 Expand Agreements:

The USFS will seek to expand its use of Good Neighbor Authority and Shared Stewardship Agreements and other mechanisms to partner with state, local and tribal governments to accomplish fuels reduction projects on federal land more efficiently.

1.5 Manage 175,000 Acres of NPS Lands by 2025:

NPS will utilize a combination of mechanical and prescribed fire to treat 75,000 acres and managed wildfires to treat another 100,000 acres to meet ecological objectives and reduce the risk and impact of high severity wildfires.

1.6 Treat 10,000 to 15,000 acres of BLM Land Annually by 2025:

BLM will increase its pace and scale to meet its goal of treating approximately 9,000 acres a year to 10,000 to 15,000 acres a year.

RESTORE STATE AND PRIVATE LANDS

The State of California is responsible for fire and resource protection on nearly 13.3 million acres of private and state-owned forested lands. About 1.1 million acres of these lands are owned by the state, and 12.2 million acres of lands are under private ownership. In the past several years, forest management has significantly expanded on these lands. CAL FIRE has increased its forest thinning and prescribed fire activities from about 30,000 acres in 2016 to more than 50,000 acres in 2020. Partners receiving state-funded grants treated more than 30,000 acres in 2020. Private landowners currently actively manage 250,000-300,000 acres through fuels reduction, mechanical thinning, and timber harvest projects.

California plans to scale up its efforts to meet its 500,000-acre target by 2025 through:

- » Expanding assistance to private landowners;
- » Implementing forest health and resiliency projects on state-owned land; and
- » Continuing sustainable timber harvest projects.

ENHANCE SUSTAINABLE TIMBER HARVEST

Private companies that harvest timber own nearly 14 percent of California's forestlands. These companies have harvested about 1.5 billion board feet per year for the past seven years at a \$370 million market value. Ecologically and financially sustainable timber harvest in California helps rural economies, reduces transportation emissions from imported lumber, limits forestland conversion to development, improves air and water quality, enables carbon sequestration, conserves biodiversity and reduces wildfire risk.

As noted above, private landowners currently contribute 250,000-300,000 acres to the state's 500,000-acre fuels reduction goal. Private timber operators have also partnered with the USFS, the Department of Forestry and Fire Protection (CAL FIRE), California Department of Parks and Recreation (State Parks), California Department of Fish and Wildlife (CDFW), the Sierra Nevada Conservancy, the National Fish and Wildlife Foundation and other partners to develop a Fuels Reduction Memorandum of Understanding (MOU) to conserve the California spotted owl and other wildlife while coordinating wildfire risk reduction measures on California's federal, state and private lands.



Key Actions:

1.7 Increase Incentives for Timber Harvests that Improve Forest Resilience: In coordination with the state agencies biodiversity initiative, the state will develop a set of incentives to increase ecologically and financially sustainable timber harvest and associated infrastructure, which may include improved permitting, landscape-scale projects across multiple ownerships, and incentives for multi-age stands, increased carbon storage, and biodiversity

1.8 Implement Fuels Reduction MOU: CAL FIRE and the USFS will seek to implement and expand participation in the Fuels Reduction MOU among key agencies and partners.

INCREASE ASSISTANCE TO SMALL PRIVATE LANDOWNERS

Significantly increasing the pace and scale of forest management across the state can only be achieved through significant contributions from small private landowners. Family-owned forest lands make up about 20 percent of California's forests, approximately 7 million acres. Nearly 90 percent of this acreage is comprised of parcels that are 50 acres or less in size. Almost 60 percent of the state's 200,000 non-industrial private forest landowners (NIPFs) are 65 years and older, and only nine percent derive income from their forest land.

The state offers various assistance programs to NIPFs, including the California Forest Improvement Program (CFIP), Forest Stewardship Program, and Wildfire Resilience Program. However, limited state funding generates competition among small landowners, and the lack of a common framework or shared goals poses further challenges to expanding forest management across private lands. Accordingly, CAL FIRE is partnering with the USFS, the USDA Natural Resources Conservation Service (NRCS), the American Forest Foundation, The Nature Conservancy (TNC), and UC Cooperative Extension (UCCE) to create a comprehensive program to assist small landowners with forest assessments, thinning, prescribed fire and rapid recovery after wildfires.

Key Actions:

- 1.9 Develop Implementation Strategy:** By December 31, 2023, CAL FIRE will develop an implementation strategy for a Wildfire Resilience and Forest Assistance Program targeted to small private landowners. The implementation strategy will also include information related to meeting the California State Water Resources Control Board (Water Board) permitting and CDFW regulatory requirements as needed.
- 1.10 Maintain Forest Stewardship Education Program:** CAL FIRE will maintain its Forest Stewardship Workshop program to help forest landowners develop management plans and implement stewardship projects. Workshop locations will be based on CAL FIRE's fire-risk and priority landscape map and the 2019 Community Wildfire Prevention and Mitigation Report.
- 1.11 Increase Technical Assistance:** The state, through contracts with cooperators, will assist landowners with Forest Management Plans, Burn Plans, archeological and biological surveys, project field design, and other support from forestry and other natural resource professionals.
- 1.12 Improve Outreach:** State agencies will partner with the Forest Landowners of California and other organizations to more efficiently target outreach efforts, guide assistance planning, and track project implementation.
- 1.13 Support Forest Health and Maintenance Treatments:** CAL FIRE will provide funding for initial fuels treatments and follow-up maintenance with landowners contributing at least 10 percent of costs. CAL FIRE will prioritize funding of NIPF projects that are included within locally coordinated forest management and post-fire restoration projects that benefit wider landscapes across multiple ownership types.
- 1.14 Establish Emergency Forest Restoration Teams:** CAL FIRE and other state agencies will explore the potential for developing emergency forest restoration teams to assist small landowners impacted by wildfires with funding and expertise to restore their properties and help prevent further damage to life, property and natural resources. This program would complement the NRCS Environmental Quality Incentives Program (EQIP) and the Emergency Forest Restoration Program (EFRP).
- 1.15 Provide Seedlings for Restoration:** CAL FIRE will expand its nursery and seed bank to deliver seeds and seedlings to small landowners whose properties are affected by wildfire or diseases. Experts will focus on using native seed selections that are best suited to current and future landscapes. The Placerville USFS nursery will expand its capacity to grow approximately 15 million seedlings per year.
- 1.16 Expand Lumber Certifiers:** Expand Lumber Certifiers: BOF will assist in establishing additional small-scale forest product infrastructure, such as portable sawmills, and will explore the potential for Registered Professional Foresters to become third-party certified as Lumber Graders.



EXPAND FOREST MANAGEMENT ON STATE LANDS

The state of California owns and manages 3 percent (approximately 3 million acres) of land in the state. These parcels contain many of the state’s most valuable natural areas, such as State Parks, CAL FIRE’s network of demonstration forests, and CDFW-managed wildlife areas. Up to a third of these lands, covering a million acres, are at high risk from uncontrolled wildfire. By restoring and protecting these lands, the state can deliver on its goals related to forest health, fire prevention, climate resilience, carbon neutrality, biodiversity and outdoor access for all.

As described below, CNRA will partner with State Parks, CDFW, the Tahoe Conservancy, and other state land-owning agencies to execute a comprehensive strategy for restoring and maintaining forested state lands. The strategy will include: (1) scaling-up prescribed fire and fuel reduction programs; (2) expanding collaboration with neighboring landowners and agencies to promote resilient and healthy forests at a landscape scale; (3) increasing outreach and education to share best practices that support ecosystem services; and (4) implementing an effective monitoring program to gather information on the ecological benefits of these practices.

Key Actions:

1.17 Execute Strategy for Forested State Lands: CNRA will partner with State Parks, CDFW, the Tahoe Conservancy, and other agencies that own state land to execute a comprehensive strategy to expand forest management and improve the health and resilience of forested state lands.

Increase the Use of Prescribed Fire

Fire has a long history as a vegetation management tool in California used by Native Americans, ranchers, and rural communities. Prescribed fire, or the use of fire under safe conditions, is now well-recognized as one of the most versatile and cost-effective tools available to reduce fuels buildup in forests and the risk of catastrophic wildfires while increasing climate resilience. Controlled burns also support native plants, boost soil health and increase ecosystem function. Fire is among the most critical ecological treatment methods for maintaining a myriad of functions that collectively contribute to maintaining healthy and resilient forests.

While prescribed fire has been used in many California locations, several factors have limited its widespread use, especially in more populated areas, including resource availability, liability issues and public acceptance of fire and smoke. Federal, state and local agencies, tribal governments, non-governmental organizations and landowners understand the urgency in overcoming these barriers to increase the use of prescribed fire. These entities are actively collaborating to get more “good” fire on the ground. Where possible, CAL FIRE and the USFS are also seeking to support and expand California Tribes’ ability to culturally burn.

Key Actions:

1.18 Develop Prescribed Fire Strategic Action

Plan: By the spring of 2021, CAL FIRE, CARB, USFS and other federal, state, local and tribal governments will develop and issue a Prescribed Fire Strategic Action Plan to coordinate and guide prescribed fire activities, and to address the key barriers to its widespread use in California.

1.19 Utilize All Fuels Reduction Methods to

Treat up to 100,000 Acres by 2025: CAL FIRE will use all fuels reduction methods, including prescribed fire, to expand its fuels reduction program with a goal of treating 100,000 acres of its 500,000-acre target.



- 1.20 Establish a Grant Program to Support Cultural Burning:** CAL FIRE will establish a new program to provide direct funding for tribal governments to support cultural burning and other traditional forest health practices.
- 1.21 Establish a National Prescribed Fire Training Center:** The USFS, in partnership with CAL FIRE and local and tribal governments, will seek to establish a National Prescribed Fire Training Center to provide training opportunities for prescribed burn practitioners and focus its efforts on western U.S. ecosystems.
- 1.22 Explore Strategies to Address Liability Issues:** Insurance is no longer available for most private landowners and organizations seeking to conduct prescribed fire projects. In 2021, the state will explore the development of alternative strategies to increase the availability of insurance for these projects.
- 1.23 Modify Suppression Tactics on State Lands:** CAL FIRE will continue to expand its use of modified suppression tactics on state lands to allow a wildfire to burn under predetermined and carefully prescribed conditions to reduce forest fuels and provide ecological benefits. These tactics will follow predetermined plans that consider property and life safety issues.
- 1.24 Develop an Automated Prescribed Burn Permit:** By 2021, CAL FIRE will develop and deploy an automated system for prescribed burn permits.
- 1.25 Provide Training and Technical Assistance:** State agencies will partner with local governments and nonprofit organizations to establish sustained, multi-year funding for regional vocational training, community college curricula, and technical assistance programs for professional fire service, conservation, tribal and other fire practitioners.



- 1.26 Improve Workforce Development:** CAL FIRE will quantify current and projected unmet needs for forestry-related workers by job type (vocational and professional) and location to inform its investments in training and vocational programs. This assessment is coordinated with the statewide assessment in Action 3.11.
- 1.27 Develop an Annual Reporting System:** CAL FIRE, in coordination with state and federal partners, will develop an annual reporting system to consolidate and report relevant data for prescribed fires in California.

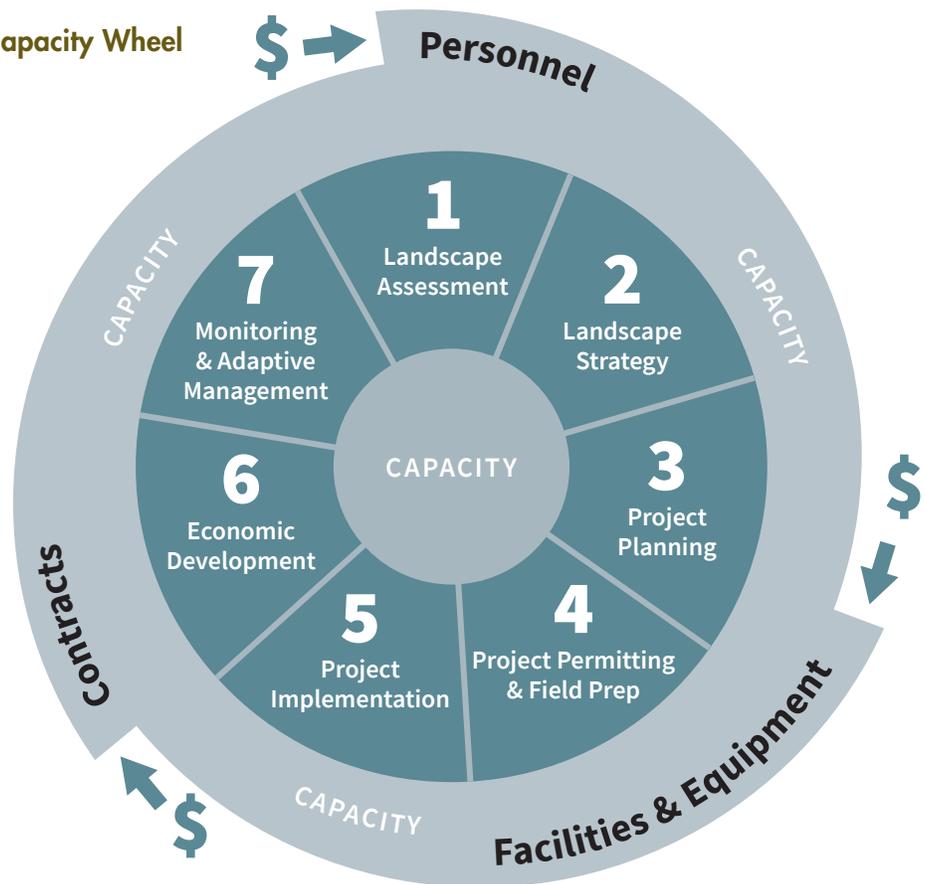
Mobilize Regional Action Plans

A central recommendation of the state’s Forest Carbon Plan and the National Forest Planning Rule is to build and maintain regional approaches to improve the health and resilience of forested landscapes. The Forest Carbon Plan highlighted the growing network of regional forest collaboratives in California, where diverse local, regional, and tribal governments and stakeholders jointly develop forest health and wildfire resilience plans and projects.

The key benefits of a regional approach include:

- » Building a workforce and the capacity to develop an ongoing pipeline of projects;
- » Fostering alignment of state and federal goals and mandates ranging from forest health and resilience, climate adaptation, watershed protection, biodiversity and outdoor recreation;
- » Facilitating multi-benefit and multi-jurisdictional projects;
- » Providing a vehicle for new, more flexible contracting authorities, such as Good Neighbor and Master Stewardship Agreements;
- » Building capacity to develop regional wood utilization strategies;
- » Empowering local governments and collaboratives to set priorities and integrate forest resilience and sustainable development programs; and
- » Focusing state and federal investments on the unique risks and wildfire resilience priorities of each region.

Figure 1: Forest and Fire Capacity Wheel



(Source: Watershed Center, Tahoe Fire and Fuels Team)

Figure 2: Current Regions

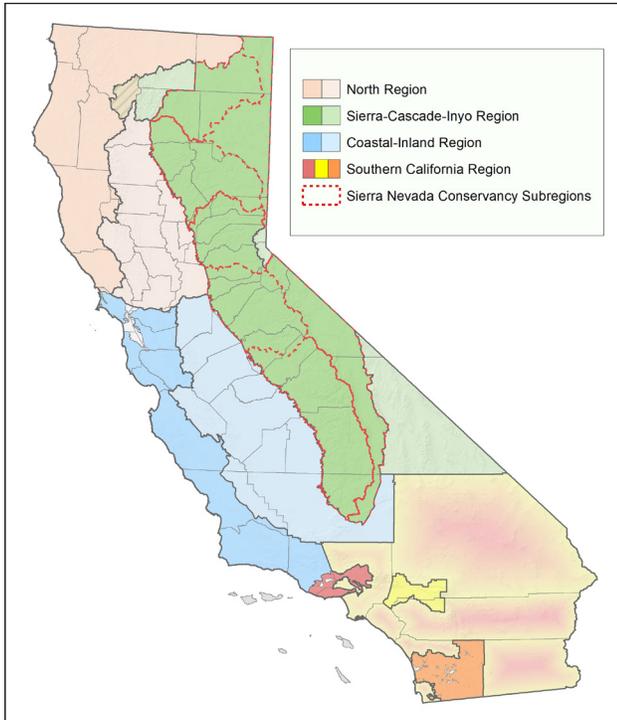
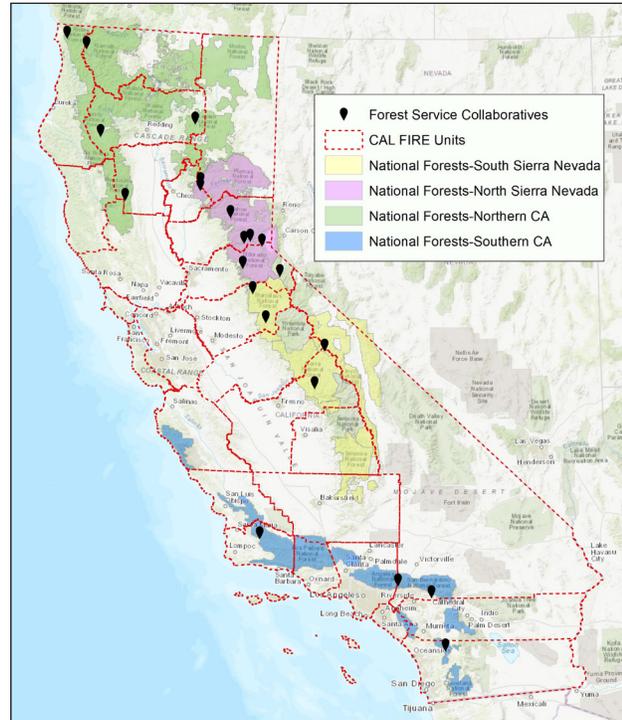


Figure 3: Future Regions and Subregions



At the federal level, the USFS is moving toward a regional framework of coordinated management and shared resources, in which national forest units are grouped into “zones” of four to six national forests, where individual work plans and resources are increasingly integrated. Furthermore, with a renewed national prioritization of Shared Stewardship Agreements, the USFS continues to support collaborative forest management with California and stakeholders across all lands at increasingly large landscape scales.

In partnership with the National Fish and Wildlife Foundation (NFWF), the USFS supports Shared Stewardship coordinators in its four regions through CAL FIRE funding. NFWF will work closely with USFS and CAL FIRE Units, local collaboratives, and the Department of Conservation’s (DOC) watershed coordinators to better align and implement federal, state, and local priorities and projects.

Despite this progress, many of the newly established collaboratives lack guidance on assessing risk and developing landscape-scale strategies. They also lack dedicated funding to sustain their efforts and build a pipeline of projects. To fill this gap, in 2019, DOC launched a Regional Fire and Forestry Capacity (RFFC) program to build the capacity of regional collaboratives through a common framework of regional forest and community resilience plans.

However, the RFFC program does not cover all high-risk areas of the state, and not all forested areas are covered within existing regional initiatives. Figure 2 identifies current USFS, CAL FIRE, FMTF boundaries, and related forest collaboratives.

Figure 3 displays the regional boundaries of the RFFC program. The darker shades represent current RFFC block grantee jurisdictions, lighter shades represent areas that do not currently have block grantees, and diagonal lines represent a shared area. The Sierra Nevada

Conservancy's watershed-based subregions are also displayed as examples of how regions are self-organizing into sub-regions.

Key Actions

1.28 Expand RFFC Program: In 2021, DOC will develop draft guidelines to expand the RFFC Program to all high-risk areas statewide. DOC will collaborate with CAL FIRE, the USFS, and other state and regional agencies and stakeholders to develop the draft guidelines.

1.29 Develop Network of Regional Forest and Community Fire Resilience Plans: As part of its updated guidelines, the RFFC Program will seek to provide a common but highly flexible framework for the development of Regional Forest and Community Fire Resilience Plans that can be tailored to a variety of regional governance structures and risks and priorities.

1.30 Develop Pipeline of Local and Regional Shovel-Ready Projects: DOC will develop a regional pipeline of shovel-ready projects and investment strategies that provide dedicated ongoing funding for implementation. Regional plans will guide project pipeline development and investment strategies and be developed in partnership with the USFS, CAL FIRE, and other key regional stakeholders. The Sierra Nevada, Tahoe, Coastal, and Santa Monica Mountains Conservancies will also play a lead role in allocating these funds.

Conserve Working Forests

The California and federal Forest Legacy Conservation Programs and funding from the Wildlife Conservation Board (WCB) are powerful tools for conserving private working forestlands. By funding working conservation easements and acquisitions across forests with wildfire risks, these programs reduce wildfire risks and help protect natural landscapes threatened with conversion to other uses, promote sustainable and resilient forest practices, and encourage long-term land stewardship.

While CAL FIRE, the USFS, the WCB, and other agencies already partner to fund projects through their respective competitive grant programs, a targeted and integrated approach will more efficiently and effectively achieve these programs' goals.

Key Actions:

1.31 Develop Consolidated Forest Conservation Program: In 2021, CAL FIRE and the WCB, in coordination with partner state agencies, will develop a consolidated program and grant application process for forest conservation and will align federal conservation programs to the extent feasible.

1.32 Align Forest Conservation Programs with Climate, Biodiversity, and Outdoor Access Programs: CAL FIRE and the WCB will adopt guidelines for this consolidated program aligned with the development and implementation of the Climate Smart Strategy and Biodiversity initiatives outlined in EO N-82-20.



Reforest Burned Areas

Recent catastrophic wildfires have damaged critical wildlife habitat, imperiled fisheries, watersheds, municipal water sources, threatened public safety due to mudslides and impacted rural, tourism-based economies. These events also threaten the long-term productivity of forest soils through erosion and changes in soil properties.

An average of about 35,000 acres has been reforested each year over the past decade, mainly following timber harvests. The USFS recently estimated that approximately 274,000 acres need to be reforested, and the recent 2020 wildfires have significantly increased this deficit.

The vast majority of recent wildland fires have occurred on federal lands. The USFS, in a partnership with American Forests, has made significant progress in restoring areas burned with high-intensity fire. Still, the remaining need is large and growing. In addition to carbon sequestration and water supply benefits, reforestation activities boost job creation. For every \$1 million invested in rural reforestation and vegetation management, approximately 17.3 jobs (13.5 direct and 3.8 indirect) are generated.

Key Actions:

1.33 Develop Restoration Strategy for Federal Lands: Given the recent fires, including 2020's unprecedented fire year, 650,000 to one million acres of federal land need some degree of reforestation. In spring 2021, the USFS, in partnership with American Forests and key stakeholders, will develop a strategy to restore its highest priority areas. This ecologically based strategy will focus on silvicultural practices to increase carbon

storage, protect biodiversity, and build climate resilience.

1.34 Develop Coordinated State Restoration Strategy: CNRA will partner with Cal OES, OPR, and other federal, state, and local agencies to develop a coordinated strategy to prioritize and restore non-federal burned areas and communities as part of the state's overall long-term recovery and resilience strategies.

Improve Regulatory Efficiency

California landowners are faced with a complex set of regulations related to timber harvesting, reforestation, vegetative fuels treatment, and ongoing management and conservation of their lands. Among other actions, Senate Bill 901(2018) amended the Forest Practices Act to require state agencies to pursue opportunities to streamline the Forest Practice Act and associated rules and regulations to expedite forest health and fire prevention projects while preserving the resource protection functions.

In recent years, state agencies have completed several initiatives to coordinate better and streamline forest planning and the regulatory process. Two notable examples are the CalVTP, which conducted an environmental review on more than 20 million acres of fire-prone landscapes to streamline permitting of projects in the State Responsibility Area (SRA), and a new online timber harvest permitting system known as CalTREES.

These efforts are aligned with the administration’s Cutting Green Tape Initiative, a collaborative effort led by CNRA to improve regulatory processes to increase the pace and scale of ecological restoration and stewardship.

Key Actions:

1.35 Complete Permit Synchronization

Workplan: By December 2021, BOF, working with the AB 1492 Leadership Team, will complete its permit synchronization work plan. Permit synchronization intends to align permitting

under the Forest Practice Act and Forest Practice Rules with the Water Board and CDFW permitting and regulatory requirements, including waste discharge requirements and lake and streambed alteration permit issuance timelines.



1.36 Complete Timber Harvesting Plan

Guidance Documents: By 2022, CAL FIRE, in coordination with the Water Board, California Geographical Survey (CGS), and CDFW, will complete a series of permitting guidance documents to help small landowners and others navigate the timber harvesting process. Guidance will include how to efficiently file a Timber Harvest Plan (THP) for review and approval, and how to meet Water Board permitting and CDFW regulatory requirements, including waste discharge requirements and lake and streambed alteration permits.

1.37 Improve and Expand CalTREES:

CalTREES will be finalized and operational by 2022. Once fully operational, CalTREES will be improved to include the integration of a Geographical Information System (GIS) mapping platform, improved search functionality, and a one-stop platform for timber-related permits and notifications. Where appropriate, CalTREES shall also be built to interface with or include CDFW's Environmental Permit Information Management System, and a Water Board permit tracking and submission system for necessary timber harvest permits.

1.38 Enhance CalVTP Implementation:

BOF will provide statewide web-based training on utilizing the CalVTP and other permitting processes. Working collaboratively with the California Coastal Commission and the Water Board, the BOF will also identify additional permitting processes that may need to be incorporated into the CalVTP process. To ensure consistent execution of CalVTP, BOF will oversee the first round of Project Specific Analysis in various landscapes and geographies to ensure future projects have a consistent and high-quality template to follow.

1.39 Update Prescribed Fire Information

Reporting System: By December 2021, CNRA will collaborate with CARB to update its Prescribed Fire Information Reporting System (PFIRS), which is designed to capture statewide details on prescribed fires and enable estimations of smoke pollution. Under the goals of SB 1260, CARB will enhance PFIRS to improve data collection and ease-of-use by local air districts and burn managers to expand the safe application of prescribed fire. CARB will also lead an interagency analysis of prescribed fire smoke data to document public health impacts compared with wildfire smoke exposure.

1.40 Help Landowners Conserve Northern Spotted Owls:

CAL FIRE and CDFW, in collaboration with the U.S. Fish and Wildlife Service (USFWS), will develop tools to assist timber landowners with conserving northern spotted owls and their habitat.

- » CAL FIRE and CDFW will enroll eligible timberland owners in the Eastside Spotted Owl Resource Plan (ESORP). The ESORP is a regional and programmatic agreement between CAL FIRE and landowners that avoids taking of the northern spotted owl while conducting timber harvest operations.
- » CAL FIRE will work with the USFWS and CDFW to develop a northern spotted owl federal Safe Harbor Agreement (SHA) to facilitate land management and fuel reduction activities for non-industrial landowners. CDFW has the authority to issue a consistency determination based on a federal SHA.
- » CDFW, BOF, and CAL FIRE shall develop a strategy to incorporate the management of barred owl intrusion into spotted owl habitat.

GOAL 2: STRENGTHEN PROTECTION OF COMMUNITIES

More frequent, larger, high-severity wildfires threaten communities throughout California. A broad range of communities are threatened, from small isolated towns in rural areas to major metropolitan areas along the coast. Threats to these communities are compounded by population growth, local land-use decisions, and a longer annual fire season due to climate change. This confluence of factors has worsened loss to human life, property damage and destruction.

It is important to note that California's wildfire vulnerable communities are located across a range of landscapes with diverse vegetation types. While better forest management will reduce wildfire risk in California's forested regions, different strategies are required to protect much of the state's population that lives in cities and towns outside of forests. Building resilience in many of these communities relies on hardening homes, buildings and infrastructure, increasing defensible space and fuel breaks, and strengthening community planning and preparedness.

Historically, California's efforts to protect communities from wildfire focused primarily on suppressing fires, but the state's approach has been evolving in recent decades. The 2018 Strategic Fire Plan, which addressed wildfire threats across California communities, lays out eight goals, including to advance fire-resilient natural environments, fire-resistant buildings and infrastructure, and greater awareness of wildfire threats. It also called for local, state, federal, tribal, and private partnerships to achieve these goals. The Key Actions in this Action Plan are consistent with those eight goals.

The state will partner with federal and local agencies to significantly increase fire prevention, preparedness, and mitigation efforts, reduce community wildfire risk and create fire-adapted and resilient communities throughout the state.

Support Community Risk Reduction and Adaptation Planning

CAL FIRE and other state agencies will increase their assistance programs and partnerships with local communities to reduce risk, improve preparedness, and foster resilience. While each community has a unique set of needs, values, risks, and capacities, CAL FIRE, the USFS, and key stakeholders will develop a common framework to facilitate comprehensive local plans, as shown in the figure below. Building on this common framework, state agencies will partner with the California Fire Safe Council (CFSC), the California State Association of Counties (CSAC), the Rural Counties Representatives of California (RCRC), the Watershed Center, and other local and regional organization to expand and integrate these efforts into creating fire-adapted communities.

Key Actions:

2.1 Assess Statewide Risk to Vulnerable Communities: CAL FIRE will work with other state and federal agencies to improve and refine quantitative wildfire risk assessments across all lands and

ownerships, focusing on identifying the most vulnerable communities and populations. The assessment results will be coordinated with related efforts by OPR's Integrated Climate Adaptation

and Resiliency program and integrated into statewide and regional risk-based planning efforts and grant programs.

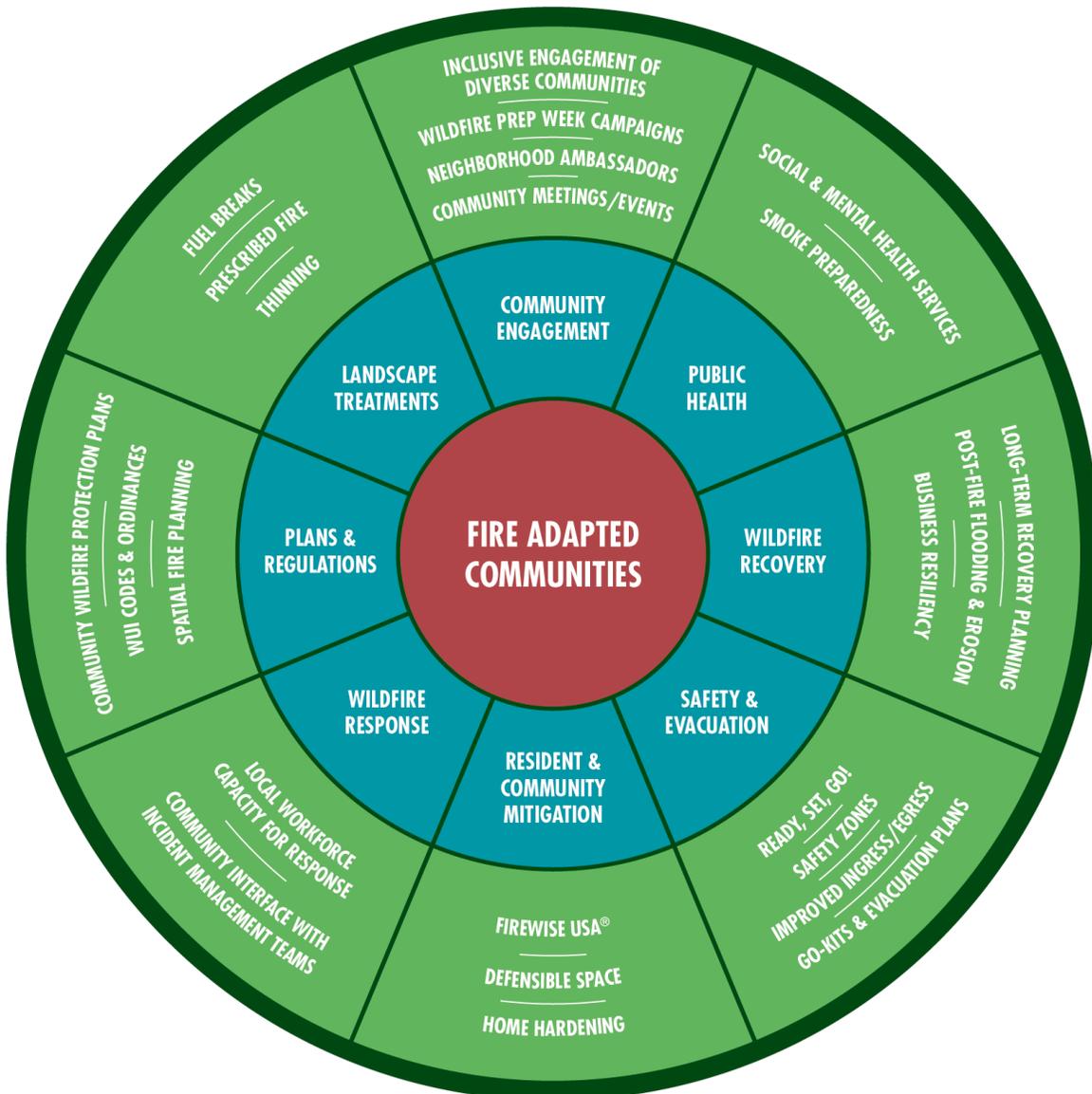
2.2 Develop Performance Measures: CAL FIRE will work with the Watershed Research and Training Center (WRTC) and other partners to identify performance measures for community wildfire risk reduction and adaptation.

2.3 Develop and Implement New Fire Hazard Severity Zones: CAL FIRE will update the scientific factors that determine the

hazard ratings, including new local climate data and improved fire spread modeling. CAL FIRE will work with local jurisdictions and submit Local Responsibility Area maps to respective jurisdictions.

2.4 Update the Fire Hazard Planning Technical Advisory: Consistent with SB 901 (2018) and AB 2911 (2018), OPR will finalize its update to the Fire Hazard Planning guidance document in early 2021 to assist local governments in

Figure: Elements of Fire Adapted Communities (courtesy Watershed Research and Training Center)



developing effective fire hazard policies and programs in the general plan and other implementing plans, codes, standards, and programs.

- 2.5 Develop WUI Best Practices Inventory:** OPR, in collaboration with CAL FIRE and the Water Board, will prepare an inventory of best practices for planning, zoning, development review, and code enforcement to address and reduce wildfire hazards and risks related to planning and development activities in the Wildland Urban Interface (WUI). The inventory will serve as a complement to OPR's Fire Hazard Planning Technical Advisory (recently updated pursuant to SB 901 and AB 2911) and will inform local governments on how best to develop and implement plans, codes, standards, and enforcement activities within the WUI. OPR will publish the results of the inventory and best practices on the Adaptation Clearinghouse.

- 2.6 Develop CWPP Best Practices Guide:** In coordination with the CFSC, WRTC and other organizations, CAL FIRE will develop and make available a best practice guide for new and updated Community Wildfire Protection Plans (CWPP's), including data standards to facilitate integration with other plans at the county, regional and statewide level.

- 2.7 Increase Information Sharing:** DOC will coordinate an organized peer networking effort that will meet virtually through an interactive forum to share information monthly or quarterly to facilitate learning and preserve institutional knowledge of wildfire-mitigation planning across disciplines.

- 2.8 Develop Defensible Space and Home Hardening Curriculum:** CAL FIRE will develop a formal defensible space and home hardening inspections curriculum to ensure statewide consistency and implementation

Increase Fuel Breaks

Fuel breaks in and around communities and across the landscape represent a critical link between efforts to create healthy, resilient forests and reduce communities' risks to catastrophic wildfires.

Building on the success of past fuel reduction work, including the 35 priority projects implemented in 2019, CAL FIRE is pivoting to a model of continuously developing and maintaining a list of more than 500 fuel break projects across the state. CAL FIRE is now working on multiple projects simultaneously and starting new projects as soon as existing projects are complete. These projects are vital to slow the spread of fires in the WUI and provide anchor points for fire personnel.

Key Actions

- 2.9 Develop and Maintain 500 Fuels Management Projects:** Using a science-based approach to identify priority areas for treatment, CAL FIRE will create a dynamic matrix of newly developed fuel break projects. These projects are described in CAL FIRE's Unit Fire Plans, including assessments of threats

to vulnerable communities identified in the Community Wildfire Prevention and Mitigation Report.

- 2.10 Link with Landscape Scale Projects:** When developing the 500 projects, CAL FIRE will identify fuel breaks and landscape restoration projects created by federal land managers, timber companies, non-

governmental organizations (NGOs), and other land managers, and seek opportunities to fill gaps and leverage project efforts. These efforts will link continuous fuel breaks and forest resilience projects across landscapes at the lowest possible cost.

2.11 Maintain Fire Prevention Grants: CAL FIRE will coordinate with other state agencies and organizations to allocate fire prevention grants to the highest priority areas and projects.

Protect Wildfire-Prone Homes and Neighborhoods

To address the long-term trend of more people living in the WUI, it is critical to increase vulnerable communities' resilience to uncontrolled wildfires. As described in OPR's Fire Hazard Planning Technical Advisory, developments in the WUI increase the number of ignitions, the likelihood that wildfires become urban conflagrations, putting many homes and structures at risk of being damaged or destroyed by a wildfire, and constrain fuel-management activities.

Key Actions:

2.12 Extend Defensible Space Programs: In 2021, CAL FIRE, through a public process, will assist BOF in updating defensible space regulations to meet AB 3074 (2020), which requires a five-foot ember-resistant zone around homes. CAL FIRE and BOF will also develop and implement a widespread public information campaign and update the Ready for Wildfire program to explain the updated requirements.





2.13 Expand Assistance Programs: CAL FIRE will look at ways to expand program assistance for elderly, low-income, and/or people with disabilities to comply with defensible space requirements.

2.14 Increase Defensible Space Inspections: In 2021, CAL FIRE will expand its inspection program to meet the requirements of AB 38 (2020), which requires CAL FIRE to conduct defensible space inspections year-round on the sale of real property in the SRA.

2.15 Improve Defensible Space Compliance: CAL FIRE will work with stakeholders to increase defensible space compliance by developing a cooperative defensible space strategy. This effort will provide education and assistance to homeowners to improve defensible space effectiveness. CAL FIRE will expand its support for the creation of new National Fire Protection Association Firewise USA recognized communities.

2.16 Create a Model Defensible Space Program: CAL FIRE is developing a model defensible space program that will be available to cities and counties to enforce defensible space provisions, as required by SB 190 (2019).

2.17 Expand Home Hardening Programs: Cal OES, in coordination with other state agencies, will expand home hardening programs through the development of a statewide program as described in AB 38 (2019) for cost-effective structure hardening and retrofitting to create fire-resistant homes, businesses, and public buildings.

2.18 Develop Home Hardening Guidance: CAL FIRE will continue to work with the Insurance Institute for Business and Home Safety, National Institute for Standards and Technology, and other partners to develop home hardening guidance.

2.19 Develop WUI Fire Safety Training Material: CAL FIRE will develop a WUI Fire Safety Building Standards Compliance training manual for local building officials, builders, and fire service personnel, and make it available on its department website to meet the requirements of SB 190 (2019).

2.20 Develop Insurance MOU: The California Department of Insurance will continue to work with CAL FIRE and Cal OES to develop an MOU and implement the provision of SB 824 (2017) regarding residential property insurance in wildfire-affected areas under a declaration of a state of emergency.

Improve Utility-Related Wildfire Risk

Utility-related wildfires have led to some of the most catastrophic wildfires in state history. From 2017-2018, utility sparked wildfires that killed 109 people and destroyed 20,000 structures, with additional investigations underway for damaging and deadly wildfires in 2020. In response, the state initiated several actions, including establishing a new Wildfire Safety Division (WSD) in January 2020 within the California Public Utilities Commission (CPUC).

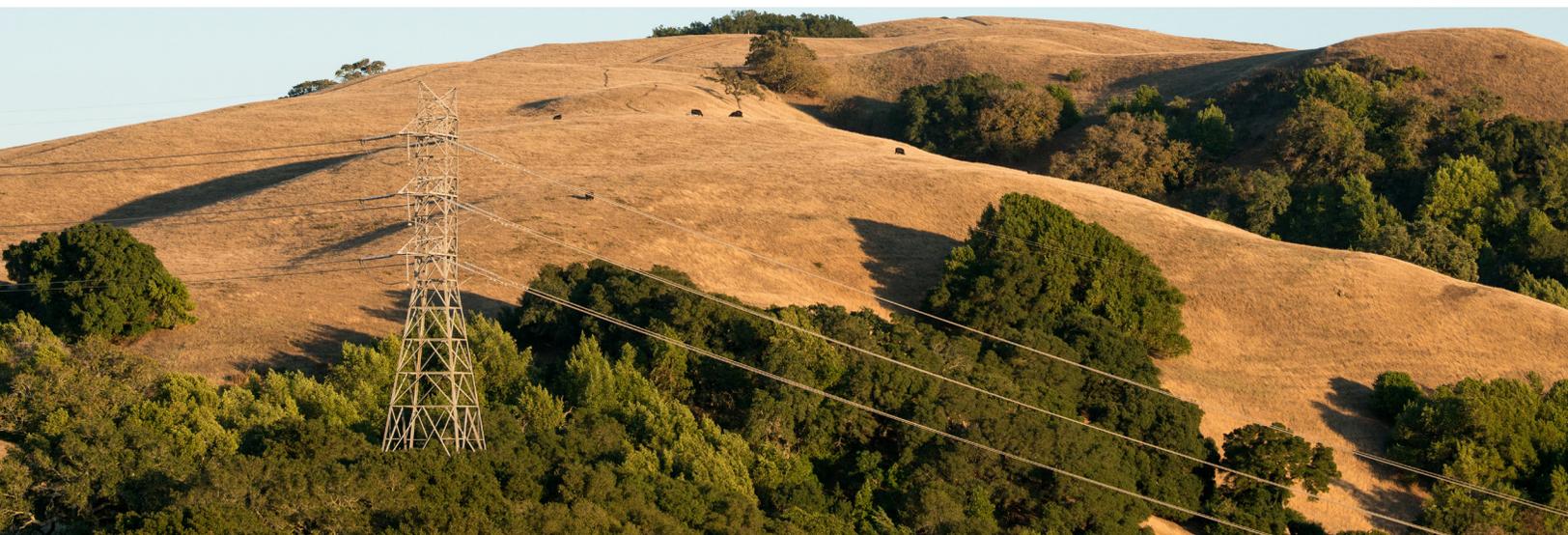
As described in Reducing Utility-related Wildfire Risk: Utility Wildfire Mitigation Strategy and Roadmap for the Wildfire Safety Division, the WSD is charged with driving oversight and enforcement of electrical corporations' compliance with wildfire safety regulations. By July 1, 2021, the WSD will transition into the Office of Energy Infrastructure Safety (OEIS) under CNRA.

Key Actions:

2.21 Review Wildfire Mitigation Plans: The new OEIS will work collaboratively with CAL FIRE and other agencies to review and comment on the investor-owned utility Wildfire Mitigation Plans.

2.22 Coordinate Utility-Related Wildfire Mitigation Initiatives: Through the OEIS and the Utility Wildfire Mitigation Steering Committee, the state will continue to reduce wildfire risk, including assuring compliance with commitments from electrical corporations to reduce utility-related ignitions that can cause catastrophic wildfires while protecting natural resources and biodiversity.

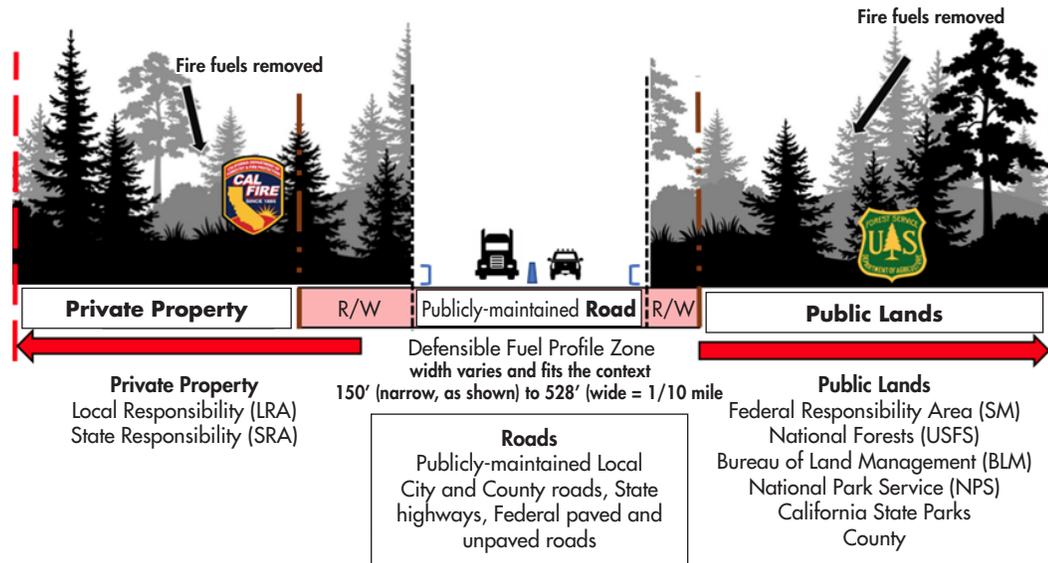
2.23 Expand USFS Master Special Use Permits: In 2019, the USFS signed a 30-year Master Special Use Permits with Pacific Gas and Electric (PG&E) and Southern California Edison (SCE) to streamline permitting of hazard tree removals and other routine maintenance activities along powerline corridors, and will seek to expand the use of these permits to other utilities throughout the state.



Create Fire-Safe Roadways

A fire-safe state highway system is vital to reducing wildfire ignitions and ensuring emergency evacuation routes. According to the California Department of Transportation (Caltrans), 2,600 centerline miles of California’s highway system needs defensible space within and alongside the Caltrans-owned right of way.

Figure 4: Public roads with “defensible fuel profile zone”



As shown in the figure, defensible space must be wide enough to function as a fuel break or fire control line. In many cases, the thinning of vegetation along road corridors will cross federal, state, or local boundaries. Accordingly, Caltrans works with a broad range of adjacent landowners to develop and implement forest thinning and maintenance projects.

Key Actions:

2.24 Identify Subdivision Secondary

Emergency Access: BOF, in consultation with CAL FIRE shall survey subdivisions in the SRA and very high fire hazard severity zones without a secondary egress route that are at significant fire risk, consistent with the requirements of AB 2911 (2018). In consultation with CAL FIRE and the impacted local government, BOF shall develop recommendations to improve the subdivision’s fire safety.

2.25 Develop Framework for Safe Road

Corridors: Through workshops with key agencies and stakeholders, Caltrans is

establishing a framework for collaborative fuels reduction projects to protect roadway travelers, communities along highways and to reduce roadside ignitions along primary and secondary emergency evacuation routes. Caltrans will identify highway corridors most in need of defensible space and develop a strategy in the spring of 2021 while seeking to align funding and crew resources.

2.26 Assist with General Plans: Caltrans will assist cities and counties in updating their general plan safety elements under AB 747 (2019), which requires that safety elements be updated to address

evacuation routes and their capacity, safety, and viability under a range of emergency scenarios. OPR will also work with Caltrans to update the General Plan Guidelines to include guidance for meeting AB 747 requirements for safety elements.

2.27 Expand Highway Treatments: CAL FIRE and Caltrans will seek to partner with adjacent landowners to treat priority areas along its 2,600 miles of high-risk roadways.

2.28 Develop Good Neighbor Agreement:

Recognizing that there are more than 3,000 miles of road crossing federal lands, Caltrans will work with the USFS to develop a state-wide Good Neighbor Agreement to allow Caltrans to treat adjacent federal lands.

2.29 Expand Messaging Campaign: Caltrans will partner with CAL FIRE to expand its public outreach efforts to include graphics and messages that align with emergency evacuation messaging, such as Ready, Set, Go!, FEMA's Ready.gov, and the 5 Minute Plan.

Reduce Health Impacts of Smoke

By some measures, increased wildfire smoke has reversed gains in air quality created by improved emission in transportation and other sectors in parts of California. Evidence also suggests that smoke's public health effects are even larger than the tragic burns and deaths caused directly by wildfire in California. The state has responded to this increase in wildfire smoke by creating programs to better monitor smoke, increase public awareness, create clean air shelters, and research smoke health effects. In addition, state and federal efforts to significantly increase thinning and prescribed fire will decrease the spread, severity, and smoke impacts of large uncontrolled fires.

Key Actions

2.30 Launch Smoke Ready California

Campaign: Through the interagency Smoke Communications Working Group, which includes more than 15 federal, state, and local agencies and stakeholders, CARB is developing a Smoke Ready California campaign ahead of the 2021 wildfire season that will provide coordinated messaging and content to help Californians plan for and protect themselves from smoke impacts.

2.31 Release California Smoke Spotter App:

CARB, with support from partners, is developing a California Smoke Spotter app to provide the public with information on nearby prescribed fires, hourly data gathered from permanent and portable air monitors, as well as personalized alerts. It will also offer a 24-hour smoke forecast, information on wildfires, and

educational content to help people prepare for possible smoke impacts. The app's public release is expected to be in early 2021, with more enhancements planned in the coming years.

2.32 Enhance Prescribed Fire Reporting:

CARB will pursue significant enhancements in data collection and reporting for PFIRS, a platform for aggregating data from air districts, fire management agencies, and burners. The enhancements will enable more efficient reporting and analysis of the effects of prescribed fire and smoke.

GOAL 3: MANAGE FORESTS TO ACHIEVE THE STATE'S ECONOMIC AND ENVIRONMENTAL GOALS

Healthy forests provide a range of benefits, boosting climate resilience, increasing carbon sequestration, protecting water supply, improving air quality, cooling communities, providing habitat for wildlife, and supporting local economies. Accordingly, California's forested landscapes are a key component of the state's strategy to combat climate change, promote biodiversity, and support rural economic development.

Integrate Forest Management into State Climate and Biodiversity Strategies

In October 2020, Governor Newsom signed Executive Order N-82-20, directing state agencies to accelerate actions to combat climate change, protect biodiversity, and build resilience through nature-based solutions.

The executive order elevates the role of natural and working lands as a key pillar of California's climate change strategy, committing the state to immediate actions to increase carbon removal and enhance resilience in the state's forests, wetlands, agricultural soils, urban greenspaces, and land conservation efforts. The executive order directs state agencies to create a Natural and Working Lands Climate Smart Strategy to help meet the state's carbon neutrality goal and build climate resilience, and to consider this strategy in the development of an updated target for the natural and working lands sector in the 2022 Climate Change Scoping Plan Update (Scoping Plan Update).

Pursuant to the order, CNRA has launched the California Biodiversity Collaborative to develop an equitable statewide approach to protecting the state's natural richness.

The order also establishes a state goal of conserving at least 30 percent of California's land and coastal waters by 2030 to address the biodiversity and climate crisis. CNRA and other state



agencies, in consultation with the Collaborative, are directed to develop and report strategies to the Governor no later than February 1, 2022, to achieve the 30 by 30 goal.

In addition, the legislature has enacted several bills related to climate and natural and working lands, including SB 1386 (2016), which states that the protection and management of natural and working lands, including forests, is an essential strategy in meeting the state's greenhouse gas reduction goals, and requires all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands.

For the state's forested landscapes, state agencies will promote landscape-scale forest management that supports migration corridors and biodiversity, safely reintroduces fire back on the landscape, supports native species that depend upon fire to thrive, and acquire and protect working forests, mountain meadows, and other significant areas. Mountain meadows, for example, cover less than two percent of the Sierra/Cascade landscape, but their unique functions add resiliency to the hydrologic and ecological processes that sustain California's headwaters, particularly during drought years, which experts predict will be more common as the climate warms.

Increased ecologically-appropriate forest thinning and prescribed fire will also be important elements of the Climate Smart Strategy and Scoping Plan Update. Although these treatments will decrease forest carbon pools in the near term, in the long-run, they will reduce forest density, promote the growth of larger, more fire-resistant trees, and create a mosaic of forests that are less vulnerable to uncontrolled wildfire and climate change. Significant reforestation investments will also be essential to meet the state's long-term carbon storage targets for the forest sector.

Finally, the state will also continue to invest in forest management through the CCI program. The state has invested \$1.4 billion in CCI projects that provide climate mitigation or adaptation benefits and contribute to the Forest Carbon Plan goals, including forest thinning and prescribed fire, urban tree planting, land conservation, and mountain meadow restoration.

Key Actions:

3.1 Develop Natural and Working Lands

Climate Smart Strategy: Consistent with Executive Order N-82-20, CNRA will coordinate the development and release of a Natural and Working Lands Climate Smart Strategy by October 2021.

3.2 Develop 2022 Climate Change Scoping Plan Update:

CARB, in partnership with CNRA and other agencies, will build upon the Natural and Working Lands Climate Smart Strategy and other science-based data in updating the strategies and targets for natural and working lands in the 2022 Climate Change Scoping Plan.

3.3 Establish Biodiversity Collaborative:

CNRA, in coordination with the California

Department of Food and Agriculture (CDFA), California Environmental Protection Agency (CalEPA), and other state agencies, has launched the California Biodiversity Collaborative and will bring together experts, leaders and communities from across California to advance a unified, comprehensive approach to protecting the state's biodiversity.

3.4 Develop Biodiversity Strategy: CNRA and other relevant state agencies, in consultation with the Collaborative, will develop and report strategies to meet the goal of conserving at least 30 percent of California's land and coastal waters by February 2022.

Create a Sustainable Wood Products Market in California

Government agencies alone cannot hope to adequately reduce fire risk and preserve healthy and sustainable forest lands. State and federal policies must attract private sector investments into a vibrant wood products market that advances the state's sustainable forest management strategy. Facilitating expanded economic activity in this sector will increase the value of woody biomass and help meet our state's sustainable forest management goals.

Several studies have concluded that expanding confidence in feedstock availability is the single most crucial factor in developing a thriving wood utilization sector. Other barriers include limited access to private capital and limited capacity in forested communities to engage in forest product market development. In the absence of a clear market for non-merchantable woody feedstock, more than half of all woody materials derived from forest management projects are piled and opened burned, emitting considerable amounts of carbon and hazardous air pollutants.

For the past few years, the Rural Economic Development Steering Committee/ Wood Utilization Work Group of the Task Force has been leading a collaborative effort to create a sustainable wood products market in California. More recently, OPR has led an interagency team to build on this work in developing a comprehensive framework to align the state's wood utilization policies and priorities to fulfill the state's climate change and economic development goals. Lastly, BOF's Joint Institute for Wood Products Innovation (Institute) brought together finance, wood utilization, non-profit, bioenergy, forestry, and feedstock experts to work in conjunction with the Institute Advisory Council to develop its Joint Institute Recommendations to Expand Wood and Biomass Utilization in California (Institute Recommendations).



Key Actions:

- 3.5 Complete State Framework:** In 2021, OPR, in collaboration with other state agencies, will complete the development of its comprehensive framework to align the state’s wood utilization policies and priorities.
- 3.6 Develop Market Roadmap:** Building upon OPR’s framework and Joint Institute recommendations, GoBiz will partner with OPR, CAL FIRE, BOF, and other key agencies and stakeholders in developing a focused market strategy by December 2021.
- 3.7 Establish Metrics:** The OPR framework will also include a comprehensive set of metrics to evaluate biomass availability, usage, investments, and workforce levels.
- 3.8 Launch Catalyst Fund Forest Investments:** In 2021, the state’s iBank will partner with CAL FIRE and other agencies to advance forest-related applications to the Catalyst Fund, building on work to date, which will accelerate with the passage of the state budget. The fund will (1) provide loans, loan guarantees and other credit support to encourage the development of businesses that utilize wood and forest biomass; (2) encourage private-sector innovations in technology, business models, infrastructure, and supply chains in the woody biomass markets; and (3) promote optimization of state grant funds in the sector by leveraging the maximum amount of private capital possible for each public dollar provided.
- 3.9 Develop X-Prize for Wood Product Innovation:** By December 2021, OPR will coordinate the development and execution of an X-Prize for wood product innovation. The competition will be designed to showcase California’s commitment to becoming the hub of wood product innovation and leverage state investments to bring philanthropic and private capital into the competition.
- 3.10 Address Feedstock Barriers through Pilot Projects:** OPR will develop five pilot projects to test new mechanisms for developing long-term feedstock contracts. Information and templates from the pilot projects will be shared broadly to provide a menu of options for broader adoption.
- 3.11 Develop Statewide Forest and Wood Products Workforce Assessment:** OPR, in coordination with the Labor and Workforce Development Agency and other key agencies and stakeholders, including CAL FIRE, the Community College System, and the Sierra Business Council, will lead the development of a statewide Forest and Wood Products Workforce Assessment by December 2021.
- 3.12 Maintain and Develop Removal Incentives:** As required by SB 901 (2018), CAL FIRE will provide transportation incentives to offset a portion of the cost to move forest byproducts to end-user facilities. In addition, as described in the Joint Institute recommendations, CAL FIRE will evaluate the potential for the development of incentive programs to reduce the costs to forest landowners to remove woody biomass.

Sustain and Expand Outdoor Recreation on Forestland

Outdoor recreation is a major economic sector in California, responsible for 691,000 jobs, \$92 billion in economic benefits, and an essential economic driver in rural forested communities. From wilderness excursions, hunting and fishing, rock climbing, and snow sports to motorized and nonmotorized activities, the recreational economy for the Sierra Nevada range, for example, is valued at \$3 to \$5 billion annually.

By enacting the federal Great American Outdoors Act (GAOA), significant new federal funding sources will provide new opportunities for partnerships with state, local, and tribal governments. GAOA will provide up to \$285 million a year to the states for five years. Much of this work will be implemented through partnerships with state, local, and tribal governments, NGOs, and others as part of the Shared Stewardship framework.

Key Actions:

3.13 Update Statewide Comprehensive Outdoor Recreation Plan (SCORP): In 2021, CNRA, in coordination with State Parks, will update the Statewide Comprehensive Outdoor Recreation Plan (SCORP). The SCORP will provide a comprehensive framework and investment strategy, emphasizing equitable access to underserved communities and rural recreation-dependent communities.

3.14 Develop Joint Strategy to Improve Access to Sustainable Recreation: In accordance with the Shared Stewardship Agreement, the USFS will coordinate the development of a joint strategy to improve access to sustainable recreation.





Protect and Expand Urban Canopy and Forests

Establishing and maintaining urban forests improves Californians' quality of life and the quality of urban natural resources. Trees provide energy conservation, reduce stormwater runoff, extend the life of surface streets, improve local air, soil and water quality, reduce atmospheric carbon dioxide, improve public health, provide wildlife habitat, and increase property values.

CAL FIRE's Urban and Community Forestry Program provides grants, technical assistance, education, and policy advice to local governments, non-profits, private sector organizations, and the public to advance urban forestry efforts under the Forestry Act of 1978. The program also works with CAL FIRE's Fire Prevention Program in advocating fire-safe landscaping for homeowners and communities. Local communities have planted more than 80,000 trees through this program since 2015, primarily in disadvantaged communities.

Key Actions:

3.16 Increase Urban Canopy: By 2030, CAL FIRE will seek to significantly increase California's urban tree canopy, targeting disadvantaged and low-income communities and low-canopy areas.

3.17 Establish Regional Targets: CAL FIRE will also seek to work with local and regional agencies to establish local tree canopy cover goals.

3.18 Identify High Priorities: CAL FIRE will help local governments identify optimal green infrastructure locations and increased tree canopy cover in high priority areas described in CAL FIRE's 2017 Forest and Rangeland Assessment.

GOAL 4: DRIVE INNOVATION AND MEASURE PROGRESS

California is renowned as the land of innovation and has a history of building new industries, inventing cutting-edge technologies, and experimenting with novel policies. Our forests and the communities that depend upon them face exceptional risk from climate change and wildfires, and the state's best hope for reducing these threats is to use this proven capacity to innovate.

Utilize Best Available Science and Accelerate Applied Research

Science improves understanding of cause and effect relationships in ecosystems. Understanding the dynamics of forest management and forest health outcomes is more important than ever as California aims to increase investment in land management to deliver on broader state goals.

In the last two fiscal years, CAL FIRE distributed approximately \$2.5 million annually in forest health research grants to evaluate the efficacy of forest management actions, improve model predictions, and improve research capacity in the state.

Key applied research topics include evaluating:

- » Total cost of uncontrolled wildfire, including the health costs of increased air pollution, loss of economic output, lost school days, environmental damages, and other impacts;
- » Effectiveness and trade-offs between alternative management strategies to reduce wildfire risk, increase carbon storage, improve biodiversity, improve water and air quality, and provide regional economic benefits;
- » Human health impacts of smoke from prescribed and uncontrolled fires;
- » Public perceptions of risk, wildfire, prescribed and managed fire, and smoke;
- » Influence of extreme weather conditions on fire behavior;
- » Environmental factors that influence post-fire regeneration;
- » Drought impacts on forests and expected wildfire behavior; and
- » Factors that affect fire spread and behavior within the WUI.

Key Actions:

4.1 Complete Applied Research Plans: In coordination with the Science Advisory Panel of the Task Force and other leading scientists, BOF and CAL FIRE's Forest and Resource Assessment Program (FRAP) will develop and issue an applied research plan by June 2021.

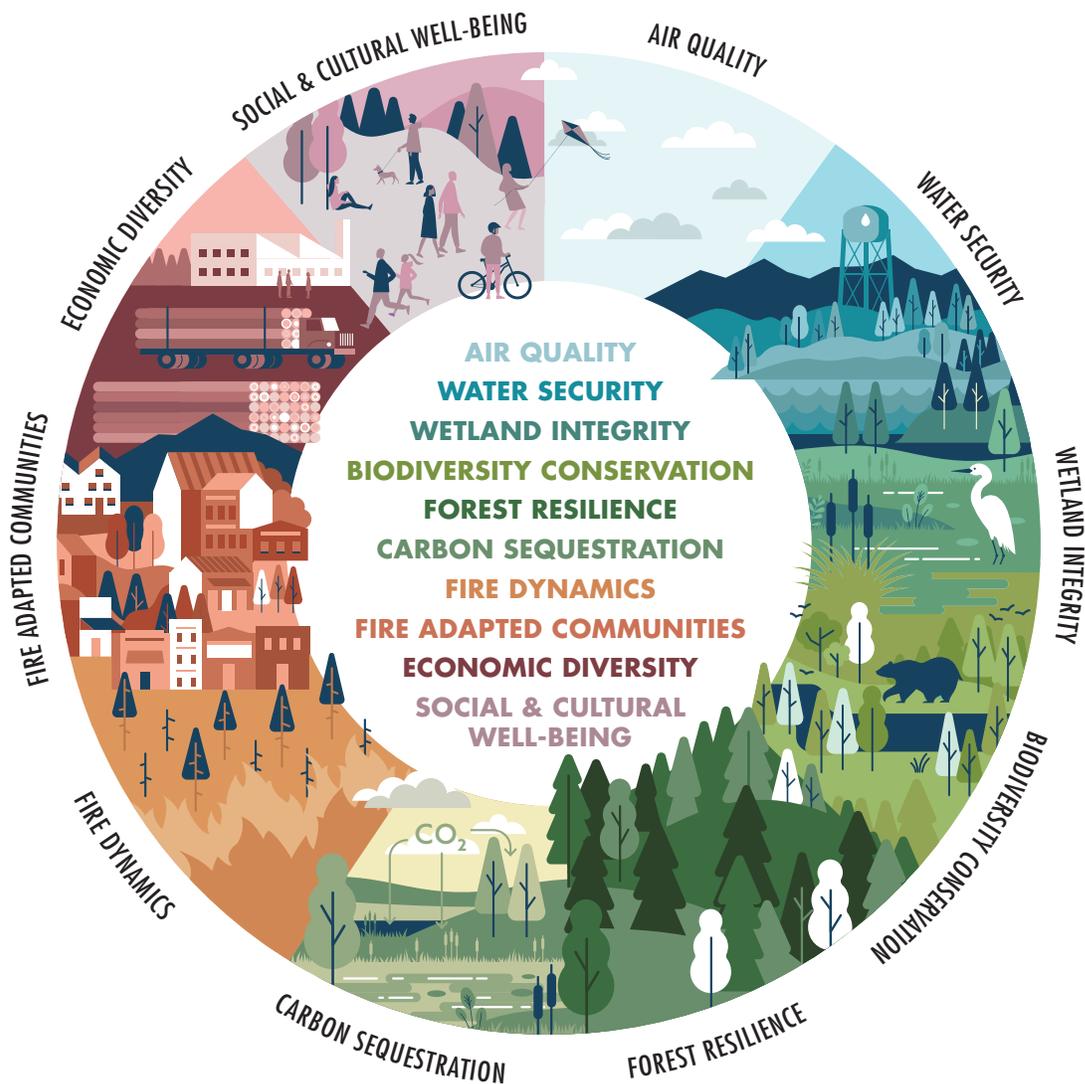
4.2 Forest Research Grants: Based on the applied research plan results, CAL FIRE will expand its forest research grant program to address key management questions and priorities.

Expand and Improve Monitoring, Reporting, and Decision-Support Tools

The state continues to invest in inventory and monitoring programs to understand the status of and trends within forests and other natural lands. Data gathered from these efforts are key inputs into modeling efforts that provide an understanding of the past, present, and future of forests, fire, and climate in California.

In addition, emerging technologies transform our ability to assess wildfire risk, forest health, and watershed resilience and rapidly put that knowledge to use in guiding management, planning, and finance decisions. These tools help prioritize and assess trade-offs among forest management objectives while providing transparent and defensible information to the public. For example, CNRA and CalEPA will develop a landscape-scale prioritization tool that may serve as a model for a more consistent state-wide approach.

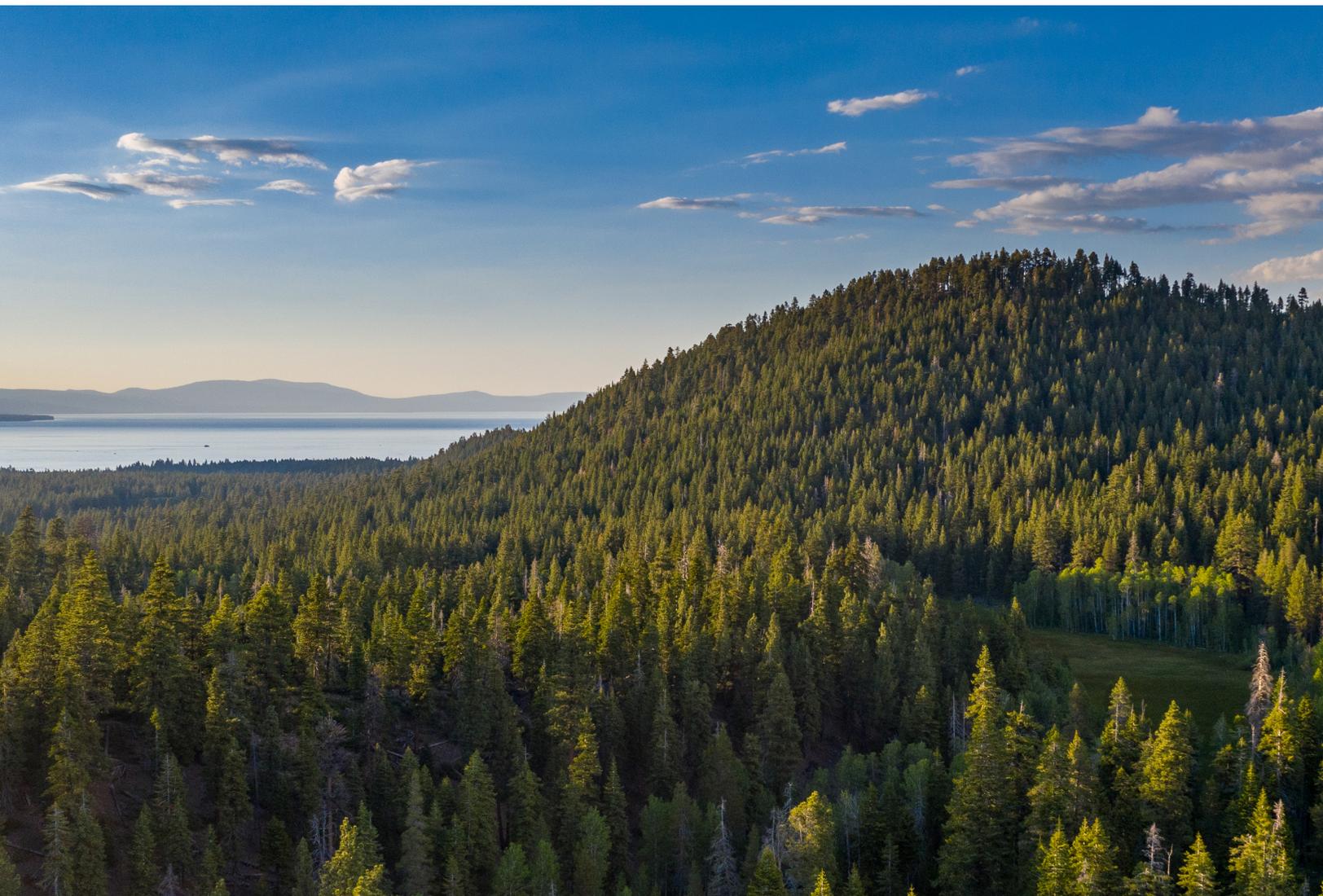
Figure: the Pillars of Resilience



Source: Tahoe Conservancy

The USFS, Sierra Nevada and Tahoe Conservancies, and other partners will also develop prioritization and scenario planning tools on the Stanislaus National Forest and in the Tahoe-Central Sierra region, as well as a comprehensive set of indicators to measure forest health and resilience. The 10 Pillars of Resilience (see figure) provide a framework for assessing progress under the environmental, social, and economic goals of landscape-scale forest management projects and programs. These efforts will complement related programs established under AB 1492 (2019) and CAL FIRE's Forest and Range Assessment and inform broader state and federal climate resilience strategies.

Despite this progress, state, federal, and local agencies and land managers have developed their own data sets to track, report, and evaluate progress on forest management activities and priorities. Aligning these efforts is essential to develop a comprehensive assessment and strategy for improving the health and resilience of the state's forested lands. The development of new databases, assessment tools, and related efforts in this Action Plan will be coordinated with other federal, state, and local agencies to improve coordination and ensure consistency with the agencies' statutory requirements.

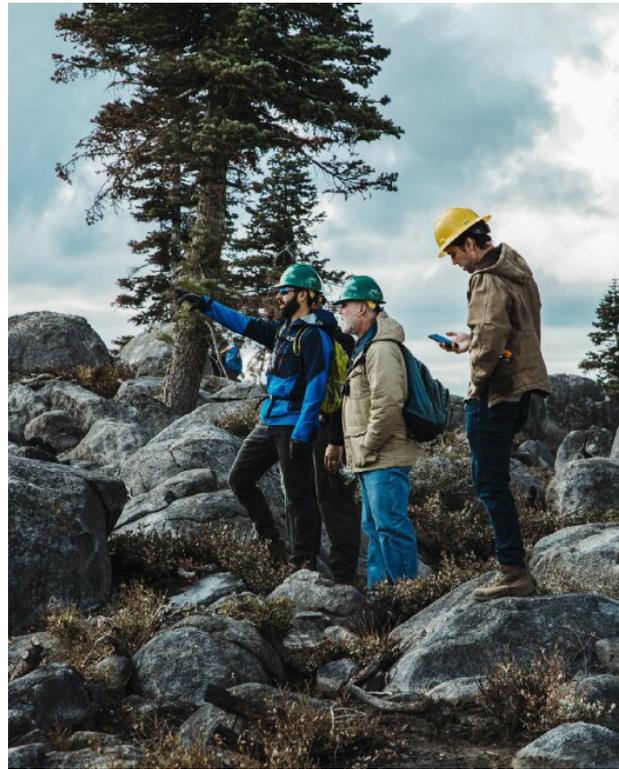


Key Actions:

4.3 Establish Forest Data Hub: CAL FIRE and the USFS, in collaboration with the USDA California Climate Hub and other agencies, will seek to establish a Forest Data Hub (Hub) to serve as a multi-institutional information clearinghouse. The Hub's goal will be to support, integrate, evaluate, and synthesize ongoing reporting and monitoring efforts conducted by state and federal agencies, universities, and non-governmental organizations. For example, the Hub could develop standard protocols for field-based monitoring, expand data sharing, and require annual reporting into a common data repository. These coordinated information products would be rapidly and reliably made available to land managers and decision-makers. The Hub would be initially staffed by an interagency team of CAL FIRE, CARB, the University of California, and the USFS.

4.4 Establish Ecological Planning Tool: By January 2023, CalEPA and CNRA will develop a landscape-scale planning tool for state, local, and federal partners and tribes to establish forest management and restoration priorities.

4.5 Develop Statewide Forest Ecosystem Monitoring System: CNRA will continue to lead a long-term statewide forest ecosystem monitoring and assessment initiative to analyze how forest management and timber harvest practices impact forest health. By integrating interagency data and remote sensing from state and federal resource programs, CNRA will establish a spatially explicit, consistent approach to track forest ecosystem conditions over time at a watershed scale. The work has now been linked directly to AB 2551 (2017) to develop a spatial assessment and priority plan in northeastern California that will extend statewide.



4.5 Integrate and Expand Forest Carbon Inventories: CARB and CAL FIRE staff will continue to coordinate improvements to the Natural and Working Lands and AB 1504 (2009) forest carbon inventories to ensure that the state has a detailed and comprehensive understanding of forest carbon dynamics.

4.6 Develop State-of-the-Science Models: CARB and CAL FIRE are developing state-of-the-science models to map fuels and simulate the future of California's Natural and Working Lands, including interactions between climate, fire, carbon and water in forests. This effort will utilize CAL FIRE's recent investment in better field-based inventory data. This modeling will inform CARB's modeling effort to determine management strategies to deliver on the state's climate change goals while providing other valuable ecosystem services.

4.7 Develop Consistent Reporting Tools:

Through the proposed Forest Data Hub, CNRA, CAL FIRE, CARB, and the USFS will develop reporting tools that allow for consistent reporting on acres treated, prescribed fire, reforestation, carbon accounting, fire intensity, land cover change, and other key information.

4.8 Establish Clearinghouse: The Science Advisory Panel of the Task Force is collecting, reviewing, and organizing information on new and emerging technologies and data platforms designed to inform forest management practices at multiple scales. This effort will be coordinated with the state's Adaptation Planning Clearinghouse and the development of the Forest Data Hub.

4.9 Improve Coordination of Climate and Fire Research:

Despite substantial investments by several agencies, the state lacks a focused, coordinated approach to improve our understanding of the complex impacts of climate change on wildfire regimes. The Science Advisory Panel will convene a planning effort to better coordinate the ongoing and future actions of state and federal agencies, academic institutions, and the private sector to develop the knowledge and tools necessary to advance predictions of wildfire on multiple timescales, and to inform management decisions that prevent further catastrophic damage to the state's ecosystems and economy.



MOVING FORWARD: MAINTAIN PROGRESS AND PARTNERSHIPS

California's forest management and wildfire prevention programs are led by a broad and diverse set of state, federal, local, tribal, and private organizations, often facing competing and overlapping mandates. Therefore, the Task Force's key goal has been to coordinate and integrate these disparate efforts into a comprehensive state framework.

Despite this progress, however, several of the more than two dozen Task Force workgroups are addressing similar goals and mandates and overlap with existing interagency programs and workgroups. To maintain momentum and track progress of this Action Plan, the Task Force itself will be streamlined into a more focused governance structure.

Key Actions:

Streamline Task Force: The Task Force will be streamlined to focus on oversight and coordinate implementation of this Action Plan. The key roles of the Task Force will be:

- » Providing regular reports on progress towards the goals and milestones of this Action Plan;
- » Coordinating and aligning state, federal, local, tribal, academic, and private forest management programs and projects;
- » Establishing and maintaining strong working relationships among the agencies and key stakeholders;
- » Developing coordinated investment programs that leverage state, federal, and local funding programs; and
- » Establishing a strategic vision for protecting and maintaining the health and resilience of the state's forested landscapes and communities.

The following groups will also aid the Task Force:

- » Working Groups: The Task Force will continue to oversee a much smaller number of interagency and stakeholder-led workgroups to align agency activities and identify and resolve issues.
- » Science Advisory Panel: The Task Force Science Advisory Panel will continue to support science-based decision making, translate scientific findings related to agency programs, and identify research gaps to inform future forest health projects.
- » Forest Data Hub: The Forest Data Hub will support innovation, align annual state and federal reporting of forest management activities and serve as a clearinghouse for new and emerging scientific findings, data platforms, and technology.



fmtf.fire.ca.gov
January 2021

**AGREEMENT FOR SHARED STEWARDSHIP OF CALIFORNIA’S FOREST AND
RANGELANDS**
Between the
STATE OF CALIFORNIA
And the
USDA, FOREST SERVICE
PACIFIC SOUTHWEST REGION

This MEMORANDUM OF UNDERSTANDING (MOU) is hereby made and entered into by and between the State of California, hereinafter referred to as “the State,” and the United States Department of Agriculture (USDA), Forest Service, Pacific Southwest Region, hereinafter referred to as “the U.S. Forest Service” and together referred to as “The Parties.”

TITLE: Agreement for Shared Stewardship of California's Forests and Rangelands

PURPOSE:

This MOU establishes a joint framework to enhance science-based forest and rangeland stewardship in California. The U.S. Forest Service and the State of California commit to maintain and restore healthy forests and rangelands that reduce public safety risks, protect natural and built infrastructure, and enhance ecological habitat and biological diversity. The Parties agree to develop shared tools, coordinated processes, and innovative approaches to increase the pace, scale, and effectiveness of forest and rangeland stewardship in California.

The U.S. Forest Service and the State of California, through the California Natural Resources Agency, make this commitment in accordance with the following provisions.

STATEMENT OF MUTUAL BENEFIT AND INTERESTS:

Restoring healthy forests and rangelands in California will yield both ecological and community benefits. Healthy forests will improve climate resilience and reduce the risk of catastrophic wildfire, safeguard water quality and air quality, protect fish and wildlife habitat, enhance biological diversity, sequester carbon, improve recreational opportunities, and generate good jobs and economic opportunities.

BACKGROUND:

Home to some of the largest, tallest and oldest trees in the world, rich biological diversity, vast watersheds, and spectacular recreation, the grandeur of California’s wildlands has captivated generations. California’s forests naturally adapted to low-intensity fire, nature’s preferred management tool, but Gold Rush-era clearcutting followed by a wholesale policy of fire suppression resulted in the overly dense, ailing forests that dominate the landscape today.

Compounding risks have made it nearly impossible for nature to self-correct. A cycle of catastrophic wildfires, longer fire seasons, severe drought, intense wind, tree mortality, invasive species, and human population pressure threaten to convert conifer forests to shrublands and shrublands to invasive grasses.

The health and wellbeing of California communities and ecosystems depend on urgent and effective forest and rangeland stewardship to restore resilient and diverse ecosystems.

With California's landscape heavily divided among multiple landowners, coordinated stewardship is critical to success. The U.S. Forest Service's Pacific Southwest Region manages over 20 million acres across 18 National Forests in California. The State of California has nearly 14 million acres of private or state-owned forested lands within its jurisdiction. Together this represents over one-third of California's landmass.

In August 2018, the USDA announced a new Shared Stewardship Investment Strategy, committing to establish shared stewardship agreements with state partners throughout the nation. The USDA strategy outlined three core elements:

1. Manage together. Establish a joint forest stewardship plan to combine capacity and assets to achieve shared goals across jurisdictions.
2. Do the right work in the right places at the right scale. Identify and prioritize forest treatments and other investments that can do the most good to protect the most vulnerable communities, watersheds, fish and wildlife habitat, and economies.
3. Use all available tools for better stewardship. Utilize all available authorities, investments and programs to do more work on the ground, which includes carefully managed fire, appropriate timber harvest, non-commercial mechanical treatments, infrastructure maintenance and improvement, and other habitat and watershed restoration activities. Work with partners and stakeholders to utilize appropriate tools for each project.

California's Shared Stewardship Agreement will enable the Parties to increase pace and scale of science-based forest and rangeland stewardship efforts, and better protect California's people, infrastructure, and ecosystems. It is incumbent upon us to restore California's forest through stewardship that returns natural fire regimes to the landscape and restores the natural functions of California's ecosystems.

PRINCIPLES:

1. **Utilize Science:** Use science to inform and prioritize stewardship decisions. Adapt stewardship tools and techniques around improvements in scientific understanding. Support long-term research and studies to deepen our understanding of forest management. Use the best technology and tools to acquire accurate and detailed data. Share data, maps, and analyses and assess any gaps or duplication. Apply this science to all management techniques to ensure the right management plan support the right ecology, including taking into account California's wide variance in fire return intervals for shrublands vs. conifer forests.
2. **Prioritize Community Safety and Ecology:** Manage risk across broad landscapes by prioritizing vulnerable communities and ecosystems for improved fire suppression and

prevention capabilities. Protect vulnerable communities by expanding wildfire risk models beyond fire-prone topography and vegetation to include socioeconomic factors such as age, car ownership, disability, and ingress or egress corridors that hinder evacuation. Ensure that all management plans and projects incorporate ecological goals and protections to avoid solving one problem by creating another.

3. **Improve Efficiency:** Adopt efficiencies and streamlined regulatory procedures to quickly and effectively complete environmental review while maintaining environmental safeguards and opportunities for public engagement. Streamline and synchronize permits through on-line permitting systems. Utilize all tools available including but not limited to, state-delivered landowner technical assistance, forest health assistance, wildland fire suppression, prescribed fire, State and private forestry programs, Good Neighbor Authority and other Farm Bill authorities.
4. **Scale Up Ecologically-based Forestry Across Sectors:** Evaluate and deploy available resources such as staff and funding for targeted investment to help local governments, small landowners, tribal governments, and businesses scale up sustainable ecological forest management efforts that deliver multiple ecological and social co-benefits. Explore opportunities to leverage public-private partnerships and investments. Government investments should act as a force multiplier for private and local funds.
5. **Coordinate Land Management:** Wildfires don't stop at jurisdictional boundaries. Work with landowners, including small landowners, tribal governments, utility companies and owners of road rights-of-way to promote consistent, efficient, economic and environmental forest stewardship across a contiguous landscape.
6. **Collaborate and Innovate with all Stakeholders:** Utilizing the Governor's Forest Management Task Force, coordinate and collaborate with environmental and non-governmental organizations, academic institutions and other federal and state agencies, tribal governments, local governments, and private landowners. Consistent and clear communication and collaboration will result in more effective policy outcomes, foster better public understanding, encourage constructive engagement across multiple stakeholders and promote effective stewardship, problem-solving and decision-making. The Parties will embrace new thinking, innovation, and take measured risks to seize opportunities for shared success.

ACTIONS:

The Parties commit to the following actions to advance shared stewardship opportunities:

1. **Treat One Million Acres per Year:** The Parties will scale up vegetation treatment to one million acres of forest and wildlands annually by 2025, committing to each sustainably treat 500,000 acres per year. Treatments will follow a joint plan and will be driven by public safety and ecological goals including reducing wildfire impacts in high priority areas and maintaining or restoring healthy, resilient forests and rangelands.

2. **Develop a Joint Plan:** The Parties will develop a coordinated, statewide, 20-year project plan by 2021 for forest and vegetation management. This plan will be based on landscape level analysis, risk assessment and other relevant methods and will be updated at five-year intervals. This plan will be captured on a master map that includes recently completed, ongoing and planned vegetation management and forest thinning projects across State, Federal and private landowners. This project map will overlay landscape level risk assessments including ecological, wildfire and community risks, identifying any gaps and highlighting the highest priority areas. The Parties will consult with, and seek input from, tribal governments, local governments, other state and federal agencies, NGOs and other stakeholders in developing and updating this map. This map will be shared publicly to foster coordinated planning, dialogue and feedback among community and environmental stakeholders.

3. **Use Sustainable Vegetation Treatments:** The Parties will use science-based management to ensure vegetation treatment tools are ecologically appropriate to specific vegetation and landscapes. Treatments will include thinning in excessively dense stands, timber harvesting, mechanical fuel reduction, prescribed fire, grazing, and reforestation.
 - a. Expand Prescribed Fire: Expanding and accelerating the use of prescribed fire is key to effective stewardship at scale. The Parties will build public awareness about prescribed fire and develop tools to support expanding natural fire on the landscape.

 - b. World Class Research Forests: To effectively monitor treatment types and climate change, the Parties will establish a world-class monitoring and research program. Coordinating and expanding the existing network of 50-plus experimental forests in California, the Parties will partner with state and national parks, universities, and non-profits. Future sites can focus on non-forested areas like Southern California chaparral systems, ensuring that treatments are ecologically appropriate for non-conifer ecosystems.

4. **Expand Forest Management and Associated Infrastructure:** To increase the pace and scale of forest stewardship, especially for small landowners, the entire infrastructure behind forestry and vegetation management will need to expand, including the workforce, investments in projects and equipment, and technical support for small landowners to manage their land.
 - a. Improve Sustainable Timber Harvest: Californians purchase 7 billion board feet of lumber annually, but only 2 billion board feet is produced in the state. Given that California has some of the highest environmental standards for timber harvest in the world, producing California lumber could decrease demand for timber harvested with lower ecological standards. Given California's increasing housing needs and greenhouse gas emission goals, California has a direct interest in consuming ecologically sourced lumber. Improving ecologically and financially sustainable timber harvest in California will support rural economies, reduce transportation emissions from imported lumber, stem conversion of forestland to developments, improve air and water quality, promote carbon sequestration, protect biodiversity and

most importantly reduce wildfire risk.

To enable landowners to better harvest and thin their forestland, the Parties will work to streamline permitting, support public-private partnerships, continue to incorporate the latest science-based management standards and provide technical support to help small landowners design and execute timber harvest. The Parties will explore incentives for ecologically beneficial harvest outcomes like multi-age class stands, stable carbon storage, and biological diversity. The Parties will identify tools to promote timber as a California agricultural product using labels like “California Grown” and better integrate timber into policies that prevent conversion of agricultural land. The Parties can also better support landowners adjacent to or within State or Federal land to achieve contiguous forest health.

- b. Increase Access to Capital: Shortages of equipment and resources for forest treatment is driving up the price per acre and slowing California’s capacity to restore forests. Parties will explore ways to incentivize investment in vegetation treatment equipment like masticators, chippers, and bulldozers and forest products processing facilities like mills. Parties will also support finance mechanisms like loan guarantees, revolving loan funds, and cooperative models to attract private investment.
 - c. Grow the Workforce: The Parties will support training and workforce development to increase the current labor pool available to meet the challenge of forest management, forest health and fuels reduction. The Parties will develop career pathways into forestry through high schools, community colleges, the California Conservation Corps, local certified conservation corps, and the Public Land Corps. Parties will promote alternative education venues such as vocational training targeted to specific professions such as timber faller, heavy machine operator, vegetation treatment crews, and ecological restorationists. State and Federal entities will work to avoid bottlenecks or oversight gaps.
 - d. Expand Landowner Agreements: Build on the existing fuels reduction MOUs and Good Neighbor Authority agreements to achieve efficiencies and increase support in forest and rangeland stewardship. Expand MOUs to include local governments, tribal governments, utility companies, consortiums of small landowners, and owners of road rights-of-way, like CalTrans and County Governments.
5. **Promote Ecological Co-Benefits**: In addition to public safety, recreation, job creation, and economic opportunity, restoring the ecological function of California forests will yield multiple ecological co-benefits. These include habitat protection, watershed health, air quality, and carbon sequestration.
- a. Protect Biodiversity: California is a world biodiversity hotspot. Among the 50 states, California is home to more species of plants and animals and the highest number of species found nowhere else. Protecting and fostering that diversity is both fundamental to the citizens of California and will help to reduce wildfire risk. The California Biodiversity Initiative highlights state agencies roles to understand the

threats to biodiversity, protect native species, manage natural and working lands to promote biodiversity, and promote partnerships to achieve biodiversity protection. The Parties will incorporate increased biodiversity into forest management plans and prioritize vulnerable habitats and species for protection and restoration.

- b. Protect Water Resources: California's forested watersheds function as critical natural infrastructure for wildlife and people. Catastrophic wildfire devastates both the natural and built infrastructure endangering California's drinking water. By prioritizing vulnerable watersheds for restoration and vegetation treatment, our work will protect and purify California's water supply for communities, agriculture, and critical fish and wildlife habitat. Much of California's physical water infrastructure including reservoirs and pipelines run through high risk fire zones. The Parties will focus on protecting water systems against damaging wildfire effects from the forest to the faucet.
- c. Carbon Sequestration: The mega-fire phenomenon has turned California's forests into carbon emitters rather than carbon sinks. Well-managed forests provide a significant source of stable carbon storage. The Parties will manage for carbon sequestration by thinning dense stands and undergrowth and promoting growth of large trees, which provide hundreds of years of carbon storage. The Parties will work with experts like the California Air Resources Board to establish forest-specific carbon accounting techniques to incentivize stable carbon storage.

6. **Develop Markets for Wood Products and Recycle Forest Byproducts**: The byproduct of forest management projects are limbs and small trees referred to as woody biomass. Currently woody biomass is either piled and burned in the forest or left to rot, diminishing air quality, increasing wildfire risk, or emitting green-house gasses. As pace and scale of forest management increases, it is imperative to develop cleaner and more sustainable alternative uses for woody biomass. Developing markets for wood products includes:

- a. Innovation: The Parties will explore innovative uses for wood products and establish a strategy to signal, subsidize, or incubate alternate uses for woody biomass products. Innovative products like cross-laminated timber, gasification, or cellular reconstruction, sequester carbon or provide carbon-efficient alternatives to fossil fuels and building materials such as steel and concrete.
- b. Biomass Energy: To avoid mass pile-burning, biomass energy will be a key component of forest recycling. To site or support new facilities, the Parties will use the principles of right scale, right place, right technology taking externalities into account like air quality impact, environmental justice, and wildfire avoidance. The Parties will help identify and untangle market distortions, inefficiencies, and obstacles to the use of forest waste for alternative energy.
- c. Supply Signals: Investors are unlikely to build wood product facilities for logs, small logs, and woody biomass without a sustainable, uninterrupted raw material supply. The Parties will make their Joint Plan public so investors will know when and where

wood supply will be available. The Parties will work with stakeholders to develop additional supply signal tools to guarantee multi-year supply contracts and incentivize new investments in wood processing facilities in California.

7. **Improve Access to Sustainable Recreation:** Foster a range of forest and wildland opportunities that reflect the needs of and better serve California’s diverse population. The Parties will pursue mission-appropriate and sustainable recreation opportunities in ways that leverage resources and extend capacity through partnerships and alignment around a shared vision of access and diversity. Examples include improved transportation opportunities, more affordable lodging options, increasing accessible trails and facilities, and targeting low income communities that lack access.
8. **Fire-Adapted Communities:** Identify and protect communities most vulnerable to fire impacts. These vulnerability factors include proximity to high fire risk, communities without good ingress or egress corridors and socioeconomic factors that hinder evacuation such as age or car ownership. The Parties will work together to improve fire suppression and fire prevention capabilities that safeguard communities, including but not limited to, these vulnerable populations.
9. **Advance Science and Share Monitoring and Data Analytics:** Leverage scientific expertise and capacity to maintain healthy and resilient forests in a changing climate. Coordinated data will enable stakeholders to adapt priorities and management techniques to the dynamics of California’s changing ecosystems. The Parties will:
 - a. Consolidate Data: Consider co-locating data teams from State and Federal agencies to reduce redundancy and improve efficiency. Establish joint monitoring methods, joint protocols, and work on developing a single, statewide shared data set that all Parties can utilize and update.
 - b. Ecological Monitoring: Consistently monitor forest health, carbon sequestration, biological diversity, watershed quality, and other parameters that impact forest and wildlands in California. The Parties will coordinate closely with environmental organizations and universities to ensure monitoring techniques are addressing the most current ecological concerns.
 - c. Research and Innovation: Support long-term research and monitoring efforts. Enhance surveying and monitoring programs such as the Forest Inventory and Analysis program with joint funding contributions, allowing a greater number of monitoring installations to be remeasured more frequently.

MUTUAL UNDERSTANDING AND AGREEMENT BETWEEN THE PARTIES:

- A. The Parties are bound by all applicable federal, state, and local statutes and regulations. If conflicts arise, the Parties will evaluate how authorities can best achieve the goals of a project.

- B. The Parties will protect sacred sites and preserve cultural resources and take all necessary actions to protect data collected from Native American tribes.
- C. All Parties will communicate on a regular basis to enhance and develop the institutional arrangements necessary to facilitate the purposes of this MOU.
- D. The Parties will meet at least twice a year to evaluate progress on the MOU and will meet regularly with stakeholders including the environmental community, local government, tribal governments, and industry.

NONBINDING AGREEMENT. This MOU creates no right, benefit, or trust responsibility, substantive or procedural, enforceable by law or equity. The Parties shall manage their respective resources and activities in a separate, coordinated, and mutually beneficial manner to meet the purpose(s) of this MOU. Nothing in this MOU authorizes or requires either of the Parties to obligate or transfer anything of value.

Specific, prospective projects or activities that involve the transfer of funds, services, property, and/or anything of value to, from, or between the Parties requires the execution of separate agreements and are contingent upon numerous factors, including, as applicable, but not limited to: availability of appropriated funds and other resources and administrative, regulatory, and legal requirements (including authorization by statute).

This MOU neither provides, nor meets these criteria. If the Parties elect to enter into an obligation agreement that involves the transfer of funds, services, property, and/or anything of value to, from, or between the Parties, then the applicable criteria must be met. Additionally, under a prospective agreement, each party operates under its own laws, regulations, and/or policies, and any obligation of the Parties is subject to the availability of appropriated funds and other resources. The negotiation, execution, and administration of these prospective agreements must comply with all applicable authorities.

Nothing in this MOU is intended to alter, limit, or expand the Parties' statutory and regulatory authority.

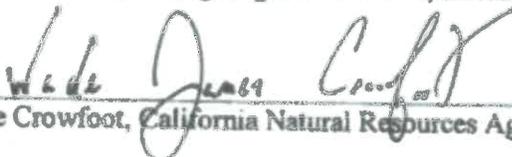
I. AUTHORIZED REPRESENTATIVES


Gavin Newsom, California Governor

 8/12/2020
Victoria C. Christiansen, Chief, US Forest Service

 8/12/20
Randy Moore, Regional Forester Pacific Southwest Region

 8/12/2020
Frank R. Beum, Acting Regional Forester, Intermountain Region

 8/12/20
Wade Crowfoot, California Natural Resources Agency Secretary

STATE OF CALIFORNIA
Budget Change Proposal - Cover Sheet
 DF-46 (REV 10/20)

Fiscal Year 2021-22	Business Unit Various	Department Various	Priority No. Click or tap here to enter text.
Budget Request Name Various		Program Various	Subprogram Various

Budget Request Description
 Wildfire and Forest Resilience Strategy

Budget Request Summary

The Administration proposes a \$1 billion investment in forest health and fire prevention, beginning with \$323 million in an early action package to help the state prepare for upcoming fire seasons and \$677 million in 2021-22 to build the state's resilience to wildfires, increase pace and scale, and reduce fire risk. This request includes \$198 million General Fund in 2020-21 and \$477 million General Fund in 2021-22. The Cap and Trade Expenditure Plan proposes \$125 million Greenhouse Gas Reduction Fund in 2020-21 and \$200 million GGRF in 2021-22 for this strategy and is addressed in a separate budget change proposal.

Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed Click or tap here to enter text.	
Does this BCP contain information technology (IT) components? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes, departmental Chief Information Officer must sign.</i>	Department CIO Click or tap here to enter text.	Date Click or tap to enter a date.

For IT requests, specify the project number, the most recent project approval document (FSR, SPR, S1BA, S2AA, S3SD, S4PRA), and the approval date.

Project No. Click or tap here to enter text. **Project Approval Document:** Click or tap here to enter text.

Approval Date: Click or tap to enter a date.

If proposal affects another department, does other department concur with proposal? Yes No
Attach comments of affected department, signed and dated by the department director or designee.

Prepared By Click or tap here to enter text.	Date Click or tap to enter a date.	Reviewed By Click or tap here to enter text.	Date Click or tap to enter a date.
Department Director Click or tap here to enter text.	Date Click or tap to enter a date.	Agency Secretary Click or tap here to enter text.	Date Click or tap to enter a date.

Department of Finance Use Only

Additional Review: Capital Outlay ITCU FSCU OSAE Dept. of Technology

PPBA Stephen Benson	Date submitted to the Legislature 1/10/2021
-------------------------------	--

A. Budget Request Summary

The Administration proposes a \$1 billion investment in fire prevention, beginning with \$323 million in an early action package to help the state prepare for upcoming fire seasons. In addition, the Governor's Budget proposes \$677 million in 2021-22 to build the state's resilience to wildfires, increase pace and scale, and reduce fire risk. This request includes \$198 million General Fund in 2020-21 and \$477 million General Fund in 2021-22. The Cap and Trade Expenditure Plan proposes \$125 million Greenhouse Gas Reduction Fund in 2020-21 and \$200 million GGRF in 2021-22, consistent with the directives of Chapter 626, Statutes of 2019 (SB 901). The GGRF fund request for this strategy is addressed in a separate Cap and Trade Expenditure Plan budget change proposal. The categories of investment are:

Wildfire Resilience Expenditure Plan* (Dollars in Millions)

Investment Category	Department	Program	Early Action 2020-21	Budget Year 2021-22	Total	
Resilient Forests & Landscapes	CAL FIRE	Forest Health Program	\$70	\$100	\$170	
		Forest Improvement Program for Small Landowners	\$10	\$40	\$50	
		Forest Legacy & Reforestation Nursery	\$8	\$17	\$25	
		Urban Forestry	\$10	\$13	\$23	
		Tribal Engagement	\$1	\$19	\$20	
	State Parks, Fish & Wildlife & State Lands Commission	Stewardship of State-Owned Land	\$19	\$123	\$142	
Wildfire Fuel Breaks	CAL FIRE	Sierra Nevada & Tahoe Conservancies	Project Implementation in High-Risk Regions	\$21	\$61	\$82
		CAL FIRE Unit Fire Prevention Projects	\$10	\$40	\$50	
		Fire Prevention Grants	\$50	\$80	\$130	
	California Conservation Corps	Forestry Corps	\$0	\$20	\$20	
	Department of Conservation	Regional Forest and Fire Capacity	\$25	\$60	\$85	
Community Hardening	CalOES & CAL FIRE	Home Hardening	\$25	\$0	\$25	
	CAL FIRE	Defensible Space Inspectors	\$0	\$6	\$6	
	CAL FIRE & University of California	Land Use Planning & Public Education Outreach	\$0	\$7	\$7	

Analysis of Problem

Science-Based Management	CAL FIRE	Ecological Monitoring, Research & Adaptive Management	\$3	\$17	\$20
	Natural Resources Agency	Remote Sensing	\$0	\$15	\$15
	Air Resources Board & Water Board	Permit Efficiencies	\$0	\$4	\$4
Forestry Sector Economic Stimulus	I Bank & GO-Biz	Climate Catalyst Fund	\$47	\$2	\$49
	CAL FIRE	Workforce Training	\$6	\$18	\$24
	Office of Planning & Research	Market Development	\$3	\$0	\$3
Total			\$323	\$677	\$1,000

*Reflects \$125 million in Cap and Trade funding in 2020-21 and \$200 million in 2021-22 consistent with the proposed Cap and Trade Expenditure Plan and Chapter 626, Statutes of 2018 (SB 901, Dodd).

B. Background/History

California's last wildfire season broke records for the third time in the past five years. With over 4 million acres burned, five of the six largest fires in state history burning simultaneously, and at one point, as many as 250,000 people displaced, the 2020 fire season strained California's emergency response capacity.

These devastating wildfires build upon other crises, from homelessness to drought, which results in cascading climate events. High severity burn scars left by catastrophic wildfires can trigger mudslides, flooding, loss of topsoil and loss of habitat if left unchecked. Prolonged exposure to smoke causes serious health consequences from chronic asthma in youth to heart attack and strokes in older populations. A dramatic scaling up of proven prevention measures is the best approach for keeping pace with the exponential growth of the wildfire and climate crises.

California has already started scaling wildfire mitigation efforts in recent years. The passage of Chapter 626, Statutes of 2018 (SB 901, Dodd) directs an investment of \$200 million per year of Cap and Trade funds for wildfire and forest resilience. In 2019, Governor Newsom issued a State of Emergency Declaration and deployed the National Guard to support CAL FIRE in delivering 35 strategic fuel breaks to protect 200 of the state's most vulnerable communities. These fuel breaks played a life-saving role during the 2020 fire season.

California reduced the environmental review timeline for forest health and fuel reduction projects, through the new California Vegetation Programmatic Environmental Impact Report (CAL VTP), from two years to several months by conducting a pre-environmental analysis on over 20 million acres of land in state responsibility areas.

Given that 58 percent of the forest land in California is federally owned, Governor Newsom signed the shared stewardship agreement with the U.S. Forest Service in August 2020, mapping out a 20-year, joint, science-based strategy to achieve wildfire resilience and forest health. The Administration's Forest Management Task Force has been working with key stakeholders from environmental non-profits to local partners and has developed a collective vision to achieve cohesive wildfire resilience in California and execute the stewardship agreement. This budget investment provides a sizable investment in foundation of that strategy including increasing the pace and scale of forest health and fire prevention activities, including increased forest thinning and prescribed fire to meet the state's 500,000-acre annual target, support for local and regional efforts to build a pipeline of projects, creating fire-adapted homes and

Analysis of Problem

communities, and wood utilization strategies that promote jobs and economic growth. These targets and strategies build on the California Forest Carbon Plan, the Governor's Energy Strike Force Report and will support key initiatives like the State's recent commitment to the Thirty-by-Thirty initiative.

C. State Level Considerations

Wildfires have a significant effect on our environment, the economy, and on the lives of those living in fire prone areas. Wildfire is a natural part of California's ecology, but catastrophic wildfires are not. Our goal is not to eliminate wildfire, but to live safely and sustainably with it. This wildfire resilience requires simultaneous action across three areas:

- 1) Across broad landscapes to limit risk of large, catastrophic wildfire and restore ecological health;
- 2) Around communities threatened by wildfire to protect residents and property; and,
- 3) Within communities to help them survive if a wildfire swept through.

This investment will not only improve the health and safety of Californians, it will result in sustainable jobs and businesses, creating at least 8,000 new jobs in some of California's most vulnerable communities.

FEMA estimates that every dollar spent on fire prevention saves between \$6 and \$11 in disaster recovery. The sooner California makes a scaled-up investment in wildfire resilience, the less Californians pay for cascading community and climate consequences of catastrophic fire.

D. Justification

The resources proposed in the Wildfire and Forest Resilience Expenditure Plan will build on recent investments the Administration has made to enhance California's fire protection and suppression capabilities and increase the pace and scale of fire prevention activities to prevent catastrophic wildfires. The state has been scaling up forest and landscape management activities and deploying a cohesive strategy built on science to achieve long-term wildfire resilience. This funding will be critical in helping the state to achieve both near-term and long-term forest management and fire prevention goals and support the state in meeting climate targets. This request proposes a wildfire resilience strategy that will invest in five simultaneous fronts:

Resilient Forests and Landscapes (\$139 million in 2020-21 and \$373 million in 2021-22)

Achieving wildfire resilience requires cohesive landscape-level action and engagement with landowners, including small family forest land owners, tribes, industrial timber operators, and state land managers. Wildfires don't recognize ownership boundaries. Fuel reduction and restoration projects that stop at ownership boundaries rather than ecological boundaries still suffer the cumulative impact of catastrophic fire. Executing forest management projects that are coordinated across entire watersheds will improve California's watershed health, protect critical habitat, and enhance natural carbon storage. From a rolling oak woodlands to conifer forests, active management is needed to mitigate catastrophic fire and restore fire intervals their ecological norm.

The early action package and the Governor's Budget will: (1) invest in coordinated forest health and fire prevention projects that help restore the right fire regime to the right ecosystem; (2) provide state land managers resources to better manage state-owned lands in particularly fire-prone area; (3) expand programs that provide assistance to non-industrial landowners; (4) implement ready-to-go projects in high-risk regions; and (5) provide resources to Tribes for fire resilience. These programs will be executed by several departments (see chart below).

Analysis of Problem

- **Tribes:** This funding also includes \$20 million in grants for Tribes to manage tribal land holdings, implement and promote tribal ecological knowledge in wildfire resilience, and establish the wildfire safety for tribal communities.

State-Owned Land

The state owns 3 million acres of some of the most unique, beloved, and critical habitat on the planet. Year after year, these ecosystems are being devastated by wildfire, with over 100,000 acres of State Parks land and 40,000 acres of Fish and Wildlife land burning in the 2020 wildfire season alone. Protecting these lands from catastrophic wildfire will not only improve wildfire resilience but will help protect some of the most unique ecosystems on the planet, supporting Governor Newsom's recent commitment to reach "Thirty by Thirty." (EO N-82-20).

- **California State Parks:** The increased investment and ongoing dedicated funding will enable State Parks to deliver 25,000 acres treated annually and harden their infrastructure, a dramatic increase from their current 2,000-4,000 annual acres treated.
- **Department of Fish and Wildlife:** DFW stewards some of the state's most ecological sensitive lands in its Ecological Preserves and wildlife refuges. Typically treating between 1,000 and 5,000 acres per year, the sustained funding will enable DFW to treat between 12,000-15,000 acres per year. Fish and Wildlife lost 40,000 acres to wildfire in 2020.
- **California Tahoe Conservancy:** The Tahoe Conservancy, owns over 6,500 vacant lots around Lake Tahoe—these are forested plots scattered throughout Lake Tahoe neighborhoods, posing a significant wildfire hazard if not thinned and managed. These resources will support full treatment on all plots, improving fire safety for the Tahoe community.
- **California State Lands Commission:** The State Lands Commission owns over 150,000 acres of wildfire vulnerable land, including 55,000 acres of timberlands. The State Lands Commission will develop a full forest-management plan and treat acres, prioritizing those that create a fire-hazard for communities.

CAL FIRE

This funding will enable CAL FIRE to increase its pace completing vegetation management projects across its regional units and enhance its prescribed fire program to encourage more natural fire on the landscape. As the state's forestry department, CAL FIRE will increase programs to improve private forest management. Over 40% of the state's forest land is privately owned. Active management and support is needed to ensure wildfire resilience, promote ecological gain, and prevent the land from being sold and converted into wildfire-vulnerable developments.

- **California Forest Improvement Program (CFIP):** Small forest landowners represent 26 percent of the forest landownership in California. Often small holdings with absentee landowners, they lack the resources and expertise to manage their land. This program provides the expertise and grants to manage their lands for forest health and wildfire resilience. Education and mobilization of this landowner group is essential to meeting the state's wildfire resilience goals.
- **Forest Legacy:** The Forest Legacy program provides funding for working forest conservation easements that protect forest land from conversion to non-forest uses, and forest management practices that promote forest health and fire resilience. Forest-land conversion to housing creates more high-fire risk homes and diminishes ecological goals. These lands directly correlate with the Newsom Administrations Biodiversity Executive Order to preserve 30% of California's natural lands by 2030.
- **Urban Forestry:** Sustains urban forestry programs in cities throughout California, a critical piece of California's climate equity goals.
- **Nursery:** Critical to re-planting post-wildfire, CAL FIRE is expanding the capacity of its nursery to meet the ecological diversity of reforestation demands in the state, specifically to help small landowners recover their forests.

Analysis of Problem

Regional Implementation

With forest health and fire prevention grants widely distributed throughout the state, grantees often only complete one phase of a project at a time, needing to wait three to five years to begin the next phase, resulting in a patchwork of wildfire-resilient areas next to heavy fuel load areas that can have a catastrophic impact. During the 2020 Sheep Fire near Susanville, areas where fuel reduction had been complete resulted in an ecological burn, but an adjacent area, identified for fuel reduction that hadn't been funded, became a catastrophic fire and destroyed homes and a historic landmark. Developing focused regional strategies and then funding a pipeline of ready-to-go projects from those strategies will deliver more cohesive wildfire resilience. Funding for regionally-driven projects will also establish a foundation for forest-sector businesses to start up in that watershed/region.

- The California Sierra Nevada Conservancy** stewards the highest fire-risk region in the State and originates the majority of California's water. Over 72 percent of the Sierra Nevada region is in a high fire risk zone. These catastrophic wildfires across California's critical watersheds exacerbate drought conditions for decades after a fire. Effective at using science-based management and building community coalitions to execute programs, the Sierra Nevada Conservancy's Watershed Improvement Program (WIP) includes over 100 projects ready to start. Targeting regional funding to the Sierra Nevada Conservancy will deliver both wildfire and drought resilience on protecting communities, habitat, and California's water supply.

Investment Category	Department	Program	Early Action 2020-21	Budget Year 2021-22	Total
Resilient Forests & Landscapes	CAL FIRE	Forest Health Program	\$70	\$100	\$170
		Forest Improvement Program for Small Landowners	\$10	\$40	\$50
		Forest Legacy & Reforestation Nursery	\$8	\$17	\$25
		Urban Forestry	\$10	\$13	\$23
		Tribal Engagement	\$1	\$19	\$20
	State Parks, Fish & Wildlife & State Lands Commission	Stewardship of State-Owned Land	\$19	\$123	\$142
	Sierra Nevada & Tahoe Conservancies	Project Implementation in High-Risk Regions	\$21	\$61	\$82

Protective Fuel Breaks

Emergency fuel breaks protect communities and sensitive areas against the impacts of wildfires. They enable firefighters to approach a fire, take a stand, establish containment lines, and create evacuation routes. The early action package and the Governor's Budget will provide \$335 million for strategic fuel breaks and the other fire prevention projects to reduce fire risk.

CAL FIRE

In 2019, the Governor deployed National Guard crews to help CAL FIRE establish 35 emergency fuel breaks in record time. These projects played a critical life-saving role this past fire season. This funding will enable CAL FIRE to expand its hand crews and projects to

Analysis of Problem

complete 60,000 acres of fuel breaks annually, to protect hundreds of fire vulnerable communities every year for multiple fiscal years. Communities are identified based not only on environmental and weather conditions that predict fire intensity, but demographic factors like age or car ownership that impact the community's ability to evacuate. CAL FIRE will also expand its fire prevention grant program empowering local communities and partners to improve evacuation and buffers.

California Conservation Corps

The Forestry Corps are critical to statewide forestry work and post-wildfire recovery while training California youth for climate careers, and expanding this program (established pursuant to AB 2126 (2019) will provide a reliable workforce to implement fuel breaks for CAL FIRE and other state, local, and federal partners.

Department of Conservation

The Regional Forest and Fire Capacity (RFFC) Program supports local and regional efforts to coordinate and plan wildfire prevention projects. This program provides technical support to the highest wildfire-prone regions with the highest ecological need and equips communities with the planning, coordination, and preparation tools necessary to develop regional plans and prepare projects. This model enables communities to leverage federal and local resources and compete for project implementation dollars via state fire prevention and forest health grants.

The new funding will expand the RFFC Program to more wildfire-prone regions in California and develop a consistent pipeline of high-value projects. Specifically, this increased funding will enable the Regional Forest and Fire Capacity program to expand beyond its current eight regions to include five additional wildfire-prone regions including Southern California, Lake County, Greater Sacramento Region, Napa County, and Shasta County.

Investment Category	Department	Program	Early Action 2020-21	Budget Year 2021-22	Total
Wildfire Fuel Breaks	CAL FIRE	CAL FIRE Unit Fire Prevention Projects	\$10	\$40	\$50
		Fire Prevention Grants	\$50	\$80	\$130
		Prescribed Fire & Hand Crews	\$15	\$35	\$50
	California Conservation Corps	Forestry Corps	\$0	\$20	\$20
	Department of Conservation	Regional Forest and Fire Capacity	\$25	\$60	\$85

Community and Home Hardening

Investments within communities are essential to protect our residents from all types of wildfires, including wind driven fires that spread embers ahead of the fire front. These include hardening homes against embers, creating survivable spaces, establishing defensible space around homes, and supporting local and regional efforts to create fire-adapted communities through improvements in local ordinances, emergency access routes, communications, smoke management, and other tools.

Home Hardening

Analysis of Problem

Simple retrofits like fine-mesh attic vents or double paneled windows dramatically improve a home's survival in the face of a wildfire. Education and outreach can help homeowners make the right improvements. The early action package and the Governor's Budget propose resources to implement the wildfire mitigation assistance pilot program created by Chapter 391, Statutes of 2019 (AB 38) to support implementation of home hardening education programs, as well as grants to low-income homeowners in high-risk areas of the state that could not otherwise afford retrofitting projects (\$25 million in 2020-21 and \$13 million in 2021-22). California will work with FEMA to pursue potential federal funding to match the state's investment.

Defensible Space

Creating areas around homes and enhancing defensible space and land use planning efforts. The Legislature recently changed defensible space laws to include a new 5-foot defensible space barrier. Outreach and education to homeowners about these new standards is crucial to helping homeowners implement the new standards.

Land Use Planning & Public Education Outreach

The Office of the State Fire Marshal will deploy land use planners within critical counties to support their wildfire resilience emergency plans. The University of California extension program will deliver 11 new fire advisors to help link the public with critical fire science.

Investment Category	Department	Program	Early Action 2020-21	Budget Year 2021-22	Total
Community Hardening	CalOES & CAL FIRE	Home Hardening	\$25	\$0	\$25
	CAL FIRE	Defensible Space Inspectors	\$0	\$6	\$6
	CAL FIRE & University of California	Land Use Planning & Public Education Outreach	\$0	\$7	\$7

Science Based Management

The Governor's Budget will include funding to improve the predictive models and science-based approaches to support the state's forest health and fire prevention goals, including the expanded use of LiDAR and other remote sensing technology, research, and data analysis and collection methods (\$3 million in 2020-21 and \$36 million in 2021-22). Funding includes the execution of the CAL VTP including synchronizing the State Water Resources Control Board permits within the CAL VTP application. The Air Resources Board will also have resources to facilitate the issuance of "burn permits" to keep pace with the increase in prescribed fire.

Ecological monitoring, research, and adaptive management

Cutting edge research, studies, monitoring and experiments, improve and pinpoint wildfire risks and improve forest techniques for reforestation and thinning in line with the changing climate realities.

- **Ground Data:** Forest Inventory and Analysis provides the most comprehensive assessment of forest plots so that current fuel reduction treatments are adequate to reset natural forest ecosystems for California's future and complement remote sensing data to ensure it translates into real-world parameters such as tree density, height and diameter.
- **Research:** Conduct research on the kinds of forest management practices that are required to foster forest health and resilience. This research requires actively managed

Analysis of Problem

working forests, such as state and university research forests, with a focus on applied research and testing the best forest management practices for carbon sequestration, forest health and fire resilience under a changing climate.

Remote Sensing

Developing reliable data sources to inform predictive and planning models is crucial to improving the effectiveness of all wildfire resilience efforts. Remote sensing including LiDAR, satellite images and hyperspectral analysis will improve predictive modeling and project planning analytics. During the 2020 Creek Fire, fire predictive models were built on the assumption of 3-inch diameter wood on the ground fueling the fire. But a LiDAR flight over the region earlier in the year revealed 30-inch diameter wood on the ground fueling the fire, creating a drastically hotter, faster, and more dangerous fire. Accurate and consistent remote sensing and research will enable CAL FIRE to plan for and adapt to the dynamic changes on the landscape.

Permit Efficiencies

The new CAL VTP reduced the CEQA timeline from two years to several months for forest health and fire resilience projects. To ensure the VTP is user-friendly and executed with a high ecological standard, the Board of Forestry will complete the first round of VTP environmental reviews for state-funded projects in various geographies and ecological zones, to ensure other projects that use the CAL VTP in the future will have a straightforward model to follow. To increase efficiency, the State Water Boards will fund staff oversight for a state-wide water permit integrated into the CAL VTP, ensuring that grantees and project proponents don't have additional costs or paperwork when using the CAL VTP. The California Air Resources Board is also receiving additional funds to ensure efficient oversight for prescribed fire burn permits.

Investment Category	Department	Program	Early Action 2020-21	Budget Year 2021-22	Total
Science-Based Management	CAL FIRE	Ecological Monitoring, Research & Adaptive Management	\$3	\$17	\$20
	Natural Resources Agency	Remote Sensing	\$0	\$15	\$15
	Air Resources Board & Water Board	Permit Efficiencies	\$0	\$4	\$4

Forestry Sector Economic Stimulus

The early action package and the Governor's Budget will include one-time resources to ensure fire prevention investments will be a driver for economic growth in rural California communities. Fuel reduction projects create thousands of well-paying jobs and create a foundation for small businesses to start up from back-yard micro-mills to bio-diesel conversion. But barriers to these markets exist. Private loans for forestry equipment can face a 40% interest rate. Shortages in crews and specialized equipment operators are slowing the pace of projects and driving up the cost-per-acre. Low-interest lending programs and training to expand the workforce will improve the pace of fire resilience. Steady, long-term regional funding will also enable local businesses to startup in regions to meet the State's demand.

Analysis of Problem

- **Workforce Development:** Grants to community colleges and nonprofits to train, develop, and certify forestry professionals and expand the workforce available to support the implementation of forest health and fuel reduction projects.
- **Climate Catalyst Fund:** Establish a low-interest lending program and explore supply chain guarantees through the Climate Catalyst Fund to help remove key barriers to expand wood product markets (\$56 million in 2020-21 and \$20 million in 2021-22).
- **Wood Products Innovation:** Expanding wood markets to fully utilize the material being thinned from forests and using it for building material, energy or fuel will create incentives for private forest-land management and meet California's carbon goals.

Investment Category	Department	Program	Early Action 2020-21	Budget Year 2021-22	Total
Forestry Sector Economic Stimulus	I Bank & GO-Biz	Climate Catalyst Fund	\$47	\$2	\$49
	CAL FIRE	Workforce Training	\$6	\$18	\$24
	Office of Planning & Research	Market Development	\$3	\$0	\$3

E. Outcomes and Accountability

Each department that receives funding from this package is preparing to quickly invest these dollars so that they will have the earliest impact possible on the state's forest resilience. Forest land managers have committed to clear annual targets for acres treated, including CAL FIRE at 55,000 acres treated, State Parks treating 25,000 acres, Department of Fish and Wildlife treating 15,000 acres and grantees delivering at least 30,000 acres.

F. Analysis of All Feasible Alternatives

Alternative 1: Approve the \$1 billion Wildfire and Forest Resilience Package and the associated 58 permanent positions.

Advantages:

- Allows for immediate investments in the five wildfire resilience strategy areas: 1) Resilient forest landscapes, 2) Wildfire fuel breaks, 3) Community Hardening, 4) Science-based management and 5) Forestry sector economic stimulus.
- Provides current year funding that will impact California's wildfire resilience as early as possible.

Disadvantages:

- Requires additional General Fund and Cap and Trade funds that could be used for other priorities.

Alternative 2: Approve partial funding of the Wildfire and Forest Resilience Package and reduce the number of approved positions.

Advantages:

- Allows the General Fund and Cap and Trade funds to be invested in other priorities.
- Still provides some of the benefits of the proposed package.

Disadvantages:

Analysis of Problem

- Reduces the impact that the full package could provide in the five strategy areas at a time when these investments are sorely needed.

Alternative 3: Do not approve funding or positions

Advantages:

- Allows the General Fund and Cap and Trade funds to be invested in other priorities.

Disadvantages:

- Will not allow for immediate investments in the five wildfire resilience strategy areas: 1) Resilient forest landscapes, 2) Wildfire fuel breaks, 3) Community Hardening, 4) Science-based management and 5) Forestry sector economic stimulus.
- Will not provide current year funding capable of helping the state prepare for the 2021 fire season.

G. Implementation Plan

Departments have started planning for implementation of the current year and budget year funds so that they can be used as soon as possible. The hiring process for the requested positions will start as early as May 2021 with a caveat that the positions are contingent on funding provided in the final budget act.

H. Supplemental Information

CAL FIRE will need to acquire equipment to conduct additional unit fire projects that are above and beyond the current unit fire projects being completed by existing staff. The funding amounts in this request are the incremental amounts of equipment needed above CAL FIRE's existing equipment, and the information presented below is presently the specific detail of the equipment needing to be acquired.

CAL FIRE is requesting funding to acquire 13 vehicles: five $\frac{3}{4}$ ton 4 x 4 pickups for the Battalion Chiefs; three $\frac{3}{4}$ ton 4 x 4 pickups for the Foresters; and five $\frac{3}{4}$ ton 4 x 4 pickups for the Senior Environmental Scientists. The vehicles are necessary to fulfill the duties of each position, and 72-hour shift coverage for applicable classifications, and to travel to various statewide locations to complete field assessment and monitoring, fuels reduction, and fire reintroduction work, as well as fire control response, required job functions, etc. There are no additional vehicles that can be redirected due to the current cap on vehicles, so funding is necessary to acquire and pay for new vehicles.

In addition to the 13 vehicles, CAL FIRE will need to acquire 21 1.5 ton crew cab trucks with utility bed, tow capable, mobile tank and pump unit, 21 trailers capable of transporting tracked chipper/skid steer or terra torch transport, seven skid steers with attachments, six 1.5 ton 4x4 utility bed trucks to support dozer operations, 21 utility vehicles/all-terrain vehicles for new unit projects. These assets are necessary to ensure that crews have the necessary equipment to complete fuel reduction projects.

CAL FIRE will need to pay for Out of State Travel to complete Forest Inventory Analysis training.

Long-term vehicle leases through the Department of General Services (DGS) for some or all of the above-noted equipment will be needed, and CAL FIRE would include this information in its annual fleet acquisition plan, as required by DGS.

I. Recommendation

Alternative 1: Approve the \$1 billion package so that the funding can have an impact as soon as possible on California's wildfire and forest resilience and can boost the economies in forested areas of the state.

BCP Fiscal Detail Sheet

BCP Title: Wildfire and Forest Resilience Package: Wood Product Innovation

BR Name: 0509-036-BCP-2021-GB

Budget Request Summary

Personal Services

Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Positions - Permanent	0.0	1.0	1.0	1.0	1.0	1.0
Total Positions	0.0	1.0	1.0	1.0	1.0	1.0
Salaries and Wages Earnings - Permanent	0	690	0	0	0	0
Total Salaries and Wages	\$0	\$690	\$0	\$0	\$0	\$0
Total Staff Benefits	0	310	0	0	0	0
Total Personal Services	\$0	\$1,000	\$0	\$0	\$0	\$0

Operating Expenses and Equipment

Operating Expenses and Equipment	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5324 - Facilities Operation	0	50	0	0	0	0
5340 - Consulting and Professional Services - Interdepartmental	0	100	0	0	0	0
5340 - Consulting and Professional Services - External	0	850	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$1,000	\$0	\$0	\$0	\$0

Total Budget Request

Total Budget Request	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Budget Request	\$0	\$2,000	\$0	\$0	\$0	\$0

Analysis of Problem

Fund Summary

Fund Source

Fund Source	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
State Operations - 0001 - General Fund	0	2,000	0	0	0	0
Total State Operations Expenditures	\$0	\$2,000	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$2,000	\$0	\$0	\$0	\$0

Program Summary

Program Funding

Program Funding	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
0220 - Go-Biz	0	2,000	0	0	0	0
Total All Programs	\$0	\$2,000	\$0	\$0	\$0	\$0

Analysis of Problem

Personal Services Details

Positions

Positions	FY21 Current Year	FY21 Budget Year	FY21 BY+1	FY21 BY+2	FY21 BY+3	FY21 BY+4
VR00 - Various	0.0	1.0	1.0	1.0	1.0	1.0
Total Positions	0.0	1.0	1.0	1.0	1.0	1.0

Salaries and Wages

Salaries and Wages	FY21 Current Year	FY21 Budget Year	FY21 BY+1	FY21 BY+2	FY21 BY+3	FY21 BY+4
VR00 - Various	0	690	0	0	0	0
Total Salaries and Wages	\$0	\$690	\$0	\$0	\$0	\$0

Staff Benefits

Staff Benefits	FY21 Current Year	FY21 Budget Year	FY21 BY+1	FY21 BY+2	FY21 BY+3	FY21 BY+4
5150900 - Staff Benefits - Other	0	310	0	0	0	0
Total Staff Benefits	\$0	\$310	\$0	\$0	\$0	\$0

Total Personal Services

Total Personal Services	FY21 Current Year	FY21 Budget Year	FY21 BY+1	FY21 BY+2	FY21 BY+3	FY21 BY+4
Total Personal Services	\$0	\$1,000	\$0	\$0	\$0	\$0

Analysis of Problem

BCP Fiscal Detail Sheet

BCP Title: Wildfire and Forest Resilience Package: Remote Sensing

BR Name: 0540-027-BCP-2021-GB

Budget Request Summary

Operating Expenses and Equipment

Operating Expenses and Equipment	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5340 - Consulting and Professional Services - External	0	15,000	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$15,000	\$0	\$0	\$0	\$0

Total Budget Request

Total Budget Request	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Budget Request	\$0	\$15,000	\$0	\$0	\$0	\$0

Fund Summary

Fund Source

Fund Source	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
State Operations - 0001 - General Fund	0	15,000	0	0	0	0
Total State Operations Expenditures	\$0	\$15,000	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$15,000	\$0	\$0	\$0	\$0

Program Summary

Program Funding

Program Funding	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
0320 - Administration of Natural Resources Agency	0	15,000	0	0	0	0
Total All Programs	\$0	\$15,000	\$0	\$0	\$0	\$0

Analysis of Problem

BCP Fiscal Detail Sheet

BCP Title: Wildfire and Forest Resilience Package: Tahoe Conservancy Project Implementation

BR Name: 3125-019-BCP-2021-GB

Budget Request Summary

Personal Services

Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Positions - Permanent	0.0	1.0	1.0	1.0	1.0	1.0
Total Positions	0.0	1.0	1.0	1.0	1.0	1.0
Earnings - Permanent	0	299	0	0	0	0
Total Salaries and Wages	\$0	\$299	\$0	\$0	\$0	\$0
Total Staff Benefits	0	251	0	0	0	0
Total Personal Services	\$0	\$550	\$0	\$0	\$0	\$0

Operating Expenses and Equipment

Operating Expenses and Equipment	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5340 - Consulting and Professional Services - External	0	10,450	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$10,450	\$0	\$0	\$0	\$0

Total Budget Request

Total Budget Request	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Budget Request	\$0	\$11,000	\$0	\$0	\$0	\$0

Fund Summary

Fund Source

Fund Source	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
State Operations - 0001 - General Fund	0	11,000	0	0	0	0
Total State Operations Expenditures	\$0	\$11,000	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$11,000	\$0	\$0	\$0	\$0

Analysis of Problem

Program Summary

Program Funding

Program Funding	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
2340 - Tahoe Conservancy	0	11,000	0	0	0	0
Total All Programs	\$0	\$11,000	\$0	\$0	\$0	\$0

Analysis of Problem

Personal Services Details

Positions

Positions	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
4713 - Sr Envirnal Plnr	0.0	1.0	1.0	1.0	1.0	1.0
Total Positions	0.0	1.0	1.0	1.0	1.0	1.0

Salaries and Wages

Salaries and Wages	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
4713 - Sr Envirnal Plnr	0	299	0	0	0	0
Total Salaries and Wages	\$0	\$299	\$0	\$0	\$0	\$0

Staff Benefits

Staff Benefits	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5150900 - Staff Benefits - Other	0	251	0	0	0	0
Total Staff Benefits	\$0	\$251	\$0	\$0	\$0	\$0

Total Personal Services

Total Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Personal Services	\$0	\$550	\$0	\$0	\$0	\$0

Analysis of Problem

BCP Fiscal Detail Sheet

BCP Title: Wildfire and Forest Resilience Package: Forestry Corps

BR Name: 3340-025-BCP-2021-GB

Budget Request Summary

Personal Services

Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Salaries and Wages Earnings - Temporary Help	0	1,095	0	0	0	0
Salaries and Wages Overtime/Other	0	36	0	0	0	0
Total Salaries and Wages	\$0	\$1,131	\$0	\$0	\$0	\$0
Total Staff Benefits	0	582	0	0	0	0
Total Personal Services	\$0	\$1,713	\$0	\$0	\$0	\$0

Operating Expenses and Equipment

Operating Expenses and Equipment	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5301 - General Expense	0	522	0	0	0	0
5302 - Printing	0	33	0	0	0	0
5304 - Communications	0	60	0	0	0	0
5306 - Postage	0	21	0	0	0	0
5320 - Travel: In-State	0	168	0	0	0	0
5322 - Training	0	441	0	0	0	0
5324 - Facilities Operation	0	210	0	0	0	0
5326 - Utilities	0	114	0	0	0	0
5340 - Consulting and Professional Services - External	0	5,016	0	0	0	0
5340 - Consulting and Professional Services - Interdepartmental	0	72	0	0	0	0
5346 - Information Technology	0	306	0	0	0	0
5368 - Non-Capital Asset Purchases - Equipment	0	4,608	0	0	0	0
539X - Other	0	1,716	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$13,287	\$0	\$0	\$0	\$0

Analysis of Problem

Total Budget Request

Total Budget Request	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Budget Request	\$0	\$15,000	\$0	\$0	\$0	\$0

Fund Summary

Fund Source

Fund Source	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
State Operations - 0001 - General Fund	0	15,000	0	0	0	0
Total State Operations Expenditures	\$0	\$15,000	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$15,000	\$0	\$0	\$0	\$0

Program Summary

Program Funding

Program Funding	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
2360010 - Training and Work Program--Base and Fire Centers	0	15,000	0	0	0	0
Total All Programs	\$0	\$15,000	\$0	\$0	\$0	\$0

Analysis of Problem

Personal Services Details

Salaries and Wages

Salaries and Wages	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
OT00 - Overtime	0	36	0	0	0	0
TH00 - Temporary Help	0	1,095	0	0	0	0
Total Salaries and Wages	\$0	\$1,131	\$0	\$0	\$0	\$0

Staff Benefits

Staff Benefits	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5150150 - Dental Insurance	0	582	0	0	0	0
Total Staff Benefits	\$0	\$582	\$0	\$0	\$0	\$0

Total Personal Services

Total Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Personal Services	\$0	\$1,713	\$0	\$0	\$0	\$0

Analysis of Problem

BCP Fiscal Detail Sheet

BCP Title: Wildfire and Forest Resilience Package: Regional Forest and Fire Capacity

BR Name: 3480-044-BCP-2021-GB

Budget Request Summary

Personal Services

Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Positions - Permanent	0.0	5.0	5.0	5.0	5.0	5.0
Total Positions	0.0	5.0	5.0	5.0	5.0	5.0
Salaries and Wages Earnings - Permanent	0	1,740	0	0	0	0
Total Salaries and Wages	\$0	\$1,740	\$0	\$0	\$0	\$0
Total Staff Benefits	0	785	0	0	0	0
Total Personal Services	\$0	\$2,525	\$0	\$0	\$0	\$0

Operating Expenses and Equipment

Operating Expenses and Equipment	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5301 - General Expense	0	75	0	0	0	0
5304 - Communications	0	25	0	0	0	0
5320 - Travel: In-State	0	50	0	0	0	0
5322 - Training	0	125	0	0	0	0
5346 - Information Technology	0	125	0	0	0	0
539X - Other	0	25	0	0	0	0
54XX - Special Items of Expense	0	57,050	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$57,475	\$0	\$0	\$0	\$0

Total Budget Request

Total Budget Request	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Budget Request	\$0	\$60,000	\$0	\$0	\$0	\$0

Analysis of Problem

Fund Summary

Fund Source

Fund Source	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
State Operations - 0001 - General Fund	0	2,950	0	0	0	0
Total State Operations Expenditures	\$0	\$2,950	\$0	\$0	\$0	\$0
Local Assistance - 0001 - General Fund	0	57,050	0	0	0	0
Total Local Assistance Expenditures	\$0	\$57,050	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$60,000	\$0	\$0	\$0	\$0

Program Summary

Program Funding

Program Funding	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
2430028 - Soil Resource Protection	0	60,000	0	0	0	0
Total All Programs	\$0	\$60,000	\$0	\$0	\$0	\$0

Analysis of Problem

Personal Services Details

Positions

Positions	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
4800 - Staff Svcs Mgr I	0.0	1.0	1.0	1.0	1.0	1.0
5393 - Assoc Govtl Program Analyst	0.0	3.0	3.0	3.0	3.0	3.0
5729 - Research Data Analyst I	0.0	1.0	1.0	1.0	1.0	1.0
Total Positions	0.0	5.0	5.0	5.0	5.0	5.0

Salaries and Wages

Salaries and Wages	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
4800 - Staff Svcs Mgr I	0	410	0	0	0	0
5393 - Assoc Govtl Program Analyst	0	1,050	0	0	0	0
5729 - Research Data Analyst I	0	280	0	0	0	0
Total Salaries and Wages	\$0	\$1,740	\$0	\$0	\$0	\$0

Staff Benefits

Staff Benefits	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5150900 - Staff Benefits - Other	0	785	0	0	0	0
Total Staff Benefits	\$0	\$785	\$0	\$0	\$0	\$0

Total Personal Services

Total Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Personal Services	\$0	\$2,525	\$0	\$0	\$0	\$0

Analysis of Problem

BCP Fiscal Detail Sheet

BCP Title: Wildfire and Forest Resilience Package: CAL FIRE Forest Health and Fire Prevention Programs and Projects

BR Name: 3540-109-BCP-2021-GB

Budget Request Summary

Personal Services

Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Positions - Permanent	0.0	39.0	39.0	39.0	39.0	39.0
Total Positions	0.0	39.0	39.0	39.0	39.0	39.0
Earnings - Permanent	0	9,438	0	0	0	0
Salaries and Wages	0	11,274	0	0	0	0
Earnings - Temporary Help	0	6,576	0	0	0	0
Salaries and Wages Overtime/Other	0	6,576	0	0	0	0
Total Salaries and Wages	\$0	\$27,288	\$0	\$0	\$0	\$0
Total Staff Benefits	0	17,167	0	0	0	0
Total Personal Services	\$0	\$44,455	\$0	\$0	\$0	\$0

Operating Expenses and Equipment

Operating Expenses and Equipment	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5301 - General Expense	0	2,253	0	0	0	0
5322 - Training	0	216	0	0	0	0
5340 - Consulting and Professional Services - External	0	77,438	0	0	0	0
5368 - Non-Capital Asset Purchases - Equipment	0	13,638	0	0	0	0
54XX - Special Items of Expense	0	57,000	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$150,545	\$0	\$0	\$0	\$0

Total Budget Request

Total Budget Request	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Budget Request	\$0	\$195,000	\$0	\$0	\$0	\$0

Analysis of Problem

Fund Summary

Fund Source

Fund Source	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
State Operations - 0001 - General Fund	0	138,000	0	0	0	0
Total State Operations Expenditures	\$0	\$138,000	\$0	\$0	\$0	\$0
Local Assistance - 0001 - General Fund	0	57,000	0	0	0	0
Total Local Assistance Expenditures	\$0	\$57,000	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$195,000	\$0	\$0	\$0	\$0

Program Summary

Program Funding

Program Funding	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
2475 - Board of Forestry and Fire Protection	0	2,000	0	0	0	0
2465010 - Fire Prevention	0	11,000	0	0	0	0
2470010 - Resources Protection and Improvement	0	148,000	0	0	0	0
2470028 - Forest Resources Inventory and Assessment	0	34,000	0	0	0	0
Total All Programs	\$0	\$195,000	\$0	\$0	\$0	\$0

Analysis of Problem

Personal Services Details

Positions

Positions	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
0765 - Sr Envirnal Scientist (Spec)	0.0	5.0	5.0	5.0	5.0	5.0
1039 - Asst Chief	0.0	1.0	1.0	1.0	1.0	1.0
1042 - Forester II (Supvry)	0.0	2.0	2.0	2.0	2.0	2.0
1054 - Forester I	0.0	1.0	1.0	1.0	1.0	1.0
1093 - Forestry Asst II	0.0	2.0	2.0	2.0	2.0	2.0
4567 - Sr Accounting Officer (Spec)	0.0	2.0	2.0	2.0	2.0	2.0
4588 - Assoc Accounting Analyst	0.0	1.0	1.0	1.0	1.0	1.0
4800 - Staff Svcs Mgr I	0.0	4.0	4.0	4.0	4.0	4.0
5393 - Assoc Govtl Program Analyst	0.0	14.0	14.0	14.0	14.0	14.0
5731 - Research Data Analyst II	0.0	1.0	1.0	1.0	1.0	1.0
7867 - Research Spec III -Various Studies	0.0	1.0	1.0	1.0	1.0	1.0
9723 - Battalion Chief	0.0	5.0	5.0	5.0	5.0	5.0
OT00 - Overtime	0.0	0.0	0.0	0.0	0.0	0.0
TH00 - Temporary Help	0.0	0.0	0.0	0.0	0.0	0.0
Total Positions	0.0	39.0	39.0	39.0	39.0	39.0

Salaries and Wages

Salaries and Wages	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
0765 - Sr Envirnal Scientist (Spec)	0	1,575	0	0	0	0
1039 - Asst Chief	0	0	0	0	0	0
1042 - Forester II (Supvry)	0	690	0	0	0	0
1054 - Forester I	0	270	0	0	0	0
1093 - Forestry Asst II	0	426	0	0	0	0
4567 - Sr Accounting Officer (Spec)	0	480	0	0	0	0
4588 - Assoc Accounting Analyst	0	252	0	0	0	0
4800 - Staff Svcs Mgr I	0	1,128	0	0	0	0
5393 - Assoc Govtl Program Analyst	0	3,120	0	0	0	0
5731 - Research Data Analyst II	0	252	0	0	0	0
7867 - Research Spec III -Various Studies	0	0	0	0	0	0
9723 - Battalion Chief	0	1,245	0	0	0	0
OT00 - Overtime	0	6,576	0	0	0	0
TH00 - Temporary Help	0	11,274	0	0	0	0
Total Salaries and Wages	\$0	\$27,288	\$0	\$0	\$0	\$0

Analysis of Problem

Staff Benefits

Staff Benefits	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5150900 - Staff Benefits - Other	0	17,167	0	0	0	0
Total Staff Benefits	\$0	\$17,167	\$0	\$0	\$0	\$0

Total Personal Services

Total Personal Services	FY20 Current Year	FY21 Budget Year	FY21 BY+1	FY21 BY+2	FY21 BY+3	FY21 BY+4
Total Personal Services	\$0	\$44,455	\$0	\$0	\$0	\$0

Analysis of Problem

BCP Fiscal Detail Sheet

BCP Title: Wildfire and Forest Resilience Package: State Lands Project Implementation

BR Name: 3560-016-BCP-2021-GB

Budget Request Summary

Operating Expenses and Equipment

Operating Expenses and Equipment	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5340 - Consulting and Professional Services - External	0	12,000	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$12,000	\$0	\$0	\$0	\$0

Total Budget Request

Total Budget Request	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Budget Request	\$0	\$12,000	\$0	\$0	\$0	\$0

Fund Summary

Fund Source

Fund Source	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
State Operations - 0001 - General Fund	0	12,000	0	0	0	0
Total State Operations Expenditures	\$0	\$12,000	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$12,000	\$0	\$0	\$0	\$0

Program Summary

Program Funding

Program Funding	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
2565019 - Land Management	0	12,000	0	0	0	0
Total All Programs	\$0	\$12,000	\$0	\$0	\$0	\$0

Analysis of Problem

BCP Fiscal Detail Sheet

BCP Title: Wildfire and Forest Resilience Package: Resilient State Lands

BR Name: 3600-049-BCP-2021-GB

Budget Request Summary

Personal Services

Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Positions - Permanent	0.0	4.0	4.0	4.0	4.0	4.0
Total Positions	0.0	4.0	4.0	4.0	4.0	4.0
Earnings - Permanent	0	1,550	0	0	0	0
Salaries and Wages	0	12,619	0	0	0	0
Earnings - Temporary Help						
Total Salaries and Wages	\$0	\$14,169	\$0	\$0	\$0	\$0
Total Staff Benefits	0	4,251	0	0	0	0
Total Personal Services	\$0	\$18,420	\$0	\$0	\$0	\$0

Operating Expenses and Equipment

Operating Expenses and Equipment	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5301 - General Expense	0	959	0	0	0	0
5302 - Printing	0	138	0	0	0	0
5304 - Communications	0	138	0	0	0	0
5306 - Postage	0	138	0	0	0	0
5308 - Insurance	0	138	0	0	0	0
5320 - Travel: In-State	0	758	0	0	0	0
5322 - Training	0	758	0	0	0	0
5324 - Facilities Operation	0	1,136	0	0	0	0
5326 - Utilities	0	40	0	0	0	0
5340 - Consulting and Professional Services - External	0	7,638	0	0	0	0
5342 - Departmental Services	0	4,400	0	0	0	0
539X - Other	0	1,339	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$17,580	\$0	\$0	\$0	\$0

Analysis of Problem

Total Budget Request

Total Budget Request	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Budget Request	\$0	\$36,000	\$0	\$0	\$0	\$0

Fund Summary

Fund Source

Fund Source	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
State Operations - 0001 - General Fund	0	36,000	0	0	0	0
Total State Operations Expenditures	\$0	\$36,000	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$36,000	\$0	\$0	\$0	\$0

Program Summary

Program Funding

Program Funding	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
2590 - Biodiversity Conservation Program	0	36,000	0	0	0	0
Total All Programs	\$0	\$36,000	\$0	\$0	\$0	\$0

Analysis of Problem

Personal Services Details

Positions

Positions	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
0762 - Environmental Scientist (Eff. 07-01-2021)	0.0	3.0	3.0	3.0	3.0	3.0
5393 - Assoc Govtl Program Analyst (Eff. 07-01-2021)	0.0	1.0	1.0	1.0	1.0	1.0
TH00 - Temporary Help	0.0	0.0	0.0	0.0	0.0	0.0
Total Positions	0.0	4.0	4.0	4.0	4.0	4.0

Salaries and Wages

Salaries and Wages	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
0762 - Environmental Scientist (Eff. 07-01-2021)	0	1,200	0	0	0	0
5393 - Assoc Govtl Program Analyst (Eff. 07-01-2021)	0	350	0	0	0	0
TH00 - Temporary Help	0	12,619	0	0	0	0
Total Salaries and Wages	\$0	\$14,169	\$0	\$0	\$0	\$0

Staff Benefits

Staff Benefits	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5150900 - Staff Benefits - Other	0	4,251	0	0	0	0
Total Staff Benefits	\$0	\$4,251	\$0	\$0	\$0	\$0

Total Personal Services

Total Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Personal Services	\$0	\$18,420	\$0	\$0	\$0	\$0

Analysis of Problem

BCP Fiscal Detail Sheet

BCP Title: Wildfire and Forest Resilience Package: Resilient State Lands

BR Name: 3790-115-BCP-2021-GB

Budget Request Summary

Personal Services

Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Positions - Permanent	0.0	5.0	5.0	5.0	5.0	5.0
Total Positions	0.0	5.0	5.0	5.0	5.0	5.0
Salaries and Wages Earnings - Permanent	0	2,115	0	0	0	0
Total Salaries and Wages	\$0	\$2,115	\$0	\$0	\$0	\$0
Total Staff Benefits	0	1,275	0	0	0	0
Total Personal Services	\$0	\$3,390	\$0	\$0	\$0	\$0

Operating Expenses and Equipment

Operating Expenses and Equipment	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
539X - Other	0	71,610	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$71,610	\$0	\$0	\$0	\$0

Total Budget Request

Total Budget Request	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Budget Request	\$0	\$75,000	\$0	\$0	\$0	\$0

Fund Summary

Fund Source

Fund Source	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
State Operations - 0001 - General Fund	0	75,000	0	0	0	0
Total State Operations Expenditures	\$0	\$75,000	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$75,000	\$0	\$0	\$0	\$0

Analysis of Problem

Program Summary

Program Funding

Program Funding	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
2840 - Support of the Department of Parks and Recreation	0	75,000	0	0	0	0
Total All Programs	\$0	\$75,000	\$0	\$0	\$0	\$0

Analysis of Problem

Personal Services Details

Positions

Positions	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
0765 - Sr Envirnal Scientist (Spec)	0.0	1.0	1.0	1.0	1.0	1.0
1042 - Forester II (Supvry)	0.0	1.0	1.0	1.0	1.0	1.0
1054 - Forester I	0.0	2.0	2.0	2.0	2.0	2.0
2795 - Sr State Archeologist	0.0	1.0	1.0	1.0	1.0	1.0
Total Positions	0.0	5.0	5.0	5.0	5.0	5.0

Salaries and Wages

Salaries and Wages	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
0765 - Sr Envirnal Scientist (Spec)	0	460	0	0	0	0
1042 - Forester II (Supvry)	0	450	0	0	0	0
1054 - Forester I	0	760	0	0	0	0
2795 - Sr State Archeologist	0	445	0	0	0	0
Total Salaries and Wages	\$0	\$2,115	\$0	\$0	\$0	\$0

Staff Benefits

Staff Benefits	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5150900 - Staff Benefits - Other	0	1,275	0	0	0	0
Total Staff Benefits	\$0	\$1,275	\$0	\$0	\$0	\$0

Total Personal Services

Total Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Personal Services	\$0	\$3,390	\$0	\$0	\$0	\$0

Analysis of Problem

BCP Fiscal Detail Sheet

BCP Title: Wildfire and Forest Resilience Package: Sierra Nevada Conservancy Project Implementation

BR Name: 3855-014-BCP-2021-GB

Budget Request Summary

Personal Services

Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Positions - Permanent	0.0	3.0	3.0	3.0	3.0	3.0
Total Positions	0.0	3.0	3.0	3.0	3.0	3.0
Salaries and Wages Earnings - Permanent	0	1,541	0	0	0	0
Total Salaries and Wages	\$0	\$1,541	\$0	\$0	\$0	\$0
Total Staff Benefits	0	739	0	0	0	0
Total Personal Services	\$0	\$2,280	\$0	\$0	\$0	\$0

Operating Expenses and Equipment

Operating Expenses and Equipment	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5320 - Travel: In-State	0	135	0	0	0	0
5340 - Consulting and Professional Services - External	0	55	0	0	0	0
539X - Other	0	30	0	0	0	0
54XX - Special Items of Expense	0	47,500	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$47,720	\$0	\$0	\$0	\$0

Total Budget Request

Total Budget Request	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Budget Request	\$0	\$50,000	\$0	\$0	\$0	\$0

Analysis of Problem

Fund Summary

Fund Source

Fund Source	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
State Operations - 0001 - General Fund	0	2,500	0	0	0	0
Total State Operations Expenditures	\$0	\$2,500	\$0	\$0	\$0	\$0
Local Assistance - 0001 - General Fund	0	47,500	0	0	0	0
Total Local Assistance Expenditures	\$0	\$47,500	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$50,000	\$0	\$0	\$0	\$0

Program Summary

Program Funding

Program Funding	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
3220 - Sierra Nevada Conservancy	0	50,000	0	0	0	0
Total All Programs	\$0	\$50,000	\$0	\$0	\$0	\$0

Analysis of Problem

Personal Services Details

Positions

Positions	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
4809 - Conservancy Proj Analyst II	0.0	1.0	1.0	1.0	1.0	1.0
5393 - Assoc Govtl Program Analyst	0.0	1.0	1.0	1.0	1.0	1.0
5780 - Atty IV	0.0	1.0	1.0	1.0	1.0	1.0
Total Positions	0.0	3.0	3.0	3.0	3.0	3.0

Salaries and Wages

Salaries and Wages	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
4809 - Conservancy Proj Analyst II	0	393	0	0	0	0
5393 - Assoc Govtl Program Analyst	0	377	0	0	0	0
5780 - Atty IV	0	771	0	0	0	0
Total Salaries and Wages	\$0	\$1,541	\$0	\$0	\$0	\$0

Staff Benefits

Staff Benefits	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5150900 - Staff Benefits - Other	0	739	0	0	0	0
Total Staff Benefits	\$0	\$739	\$0	\$0	\$0	\$0

Total Personal Services

Total Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Personal Services	\$0	\$2,280	\$0	\$0	\$0	\$0

Analysis of Problem

BCP Fiscal Detail Sheet

BCP Title: Wildfire and Forest Resilience Package: Prescribed Fire Permitting

BR Name: 3900-041-BCP-2021-GB

Budget Request Summary

Operating Expenses and Equipment

Operating Expenses and Equipment	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
54XX - Special Items of Expense	0	2,000	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$2,000	\$0	\$0	\$0	\$0

Total Budget Request

Total Budget Request	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Budget Request	\$0	\$2,000	\$0	\$0	\$0	\$0

Fund Summary

Fund Source

Fund Source	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Local Assistance - 0001 - General Fund	0	2,000	0	0	0	0
Total Local Assistance Expenditures	\$0	\$2,000	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$2,000	\$0	\$0	\$0	\$0

Program Summary

Program Funding

Program Funding	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
3510 - Climate Change	0	2,000	0	0	0	0
Total All Programs	\$0	\$2,000	\$0	\$0	\$0	\$0

Analysis of Problem

BCP Fiscal Detail Sheet

BCP Title: Wildfire and Forest Resilience Package: Statewide General Permit

BR Name: 3940-049-BCP-2021-GB

Budget Request Summary

Personal Services

Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Salaries and Wages Earnings - Temporary Help	0	940	0	0	0	0
Total Salaries and Wages	\$0	\$940	\$0	\$0	\$0	\$0
Total Staff Benefits	0	453	0	0	0	0
Total Personal Services	\$0	\$1,393	\$0	\$0	\$0	\$0

Operating Expenses and Equipment

Operating Expenses and Equipment	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5301 - General Expense	0	20	0	0	0	0
5302 - Printing	0	28	0	0	0	0
5304 - Communications	0	70	0	0	0	0
5306 - Postage	0	14	0	0	0	0
5320 - Travel: In-State	0	125	0	0	0	0
5322 - Training	0	111	0	0	0	0
5324 - Facilities Operation	0	139	0	0	0	0
5340 - Consulting and Professional Services - External	0	100	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$607	\$0	\$0	\$0	\$0

Total Budget Request

Total Budget Request	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Budget Request	\$0	\$2,000	\$0	\$0	\$0	\$0

Analysis of Problem

Fund Summary

Fund Source

Fund Source	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
State Operations - 0001 - General Fund	0	2,000	0	0	0	0
Total State Operations Expenditures	\$0	\$2,000	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$2,000	\$0	\$0	\$0	\$0

Program Summary

Program Funding

Program Funding	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
3560 - Water Quality	0	2,000	0	0	0	0
Total All Programs	\$0	\$2,000	\$0	\$0	\$0	\$0

Analysis of Problem

Personal Services Details

Salaries and Wages

Salaries and Wages	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
TH00 - Temporary Help	0	940	0	0	0	0
Total Salaries and Wages	\$0	\$940	\$0	\$0	\$0	\$0

Staff Benefits

Staff Benefits	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5150350 - Health Insurance	0	231	0	0	0	0
5150600 - Retirement - General	0	222	0	0	0	0
Total Staff Benefits	\$0	\$453	\$0	\$0	\$0	\$0

Total Personal Services

Total Personal Services	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Personal Services	\$0	\$1,393	\$0	\$0	\$0	\$0

Analysis of Problem

BCP Fiscal Detail Sheet

BCP Title: Wildfire and Forest Resilience Package: UC Fire Advisors

BR Name: 6440-045-BCP-2021-GB

Budget Request Summary

Operating Expenses and Equipment

Operating Expenses and Equipment	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5301 - General Expense	0	2,000	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$2,000	\$0	\$0	\$0	\$0

Total Budget Request

Total Budget Request	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
Total Budget Request	\$0	\$2,000	\$0	\$0	\$0	\$0

Fund Summary

Fund Source

Fund Source	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
State Operations - 0001 - General Fund	0	2,000	0	0	0	0
Total State Operations Expenditures	\$0	\$2,000	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$2,000	\$0	\$0	\$0	\$0

Program Summary

Program Funding

Program Funding	FY20 Current Year	FY21 Budget Year	FY22 BY+1	FY23 BY+2	FY24 BY+3	FY25 BY+4
5440 - Support	0	2,000	0	0	0	0
Total All Programs	\$0	\$2,000	\$0	\$0	\$0	\$0



California Catastrophe Response Council Memorandum

April 22, 2021

Agenda Item 5: Annual Administrator Evaluation

Recommended Action: No action required—information only

Council Members Paul Rosenstiel and Catherine Barna will brief the Council on the completion of the Council's first annual evaluation of CEA's performance as Administrator of the Wildfire Fund.



California Catastrophe Response Council Memorandum

April 22, 2021

Agenda Item 6: Financial Report

Recommended Action: No action required—information only

CEA Chief Financial Officer Tom Hanzel will provide the California Catastrophe Response Council with a financial report on the Wildfire Fund as of February 28, 2021 and February 29, 2020.



FINANCIAL REPORT

February 28, 2021

Financial Report Table of Contents

	Page
Financial Statements	
Balance Sheets as of February 28, 2021 and February 29, 2020	1
Statements of Revenues, Expenses and Changes in Net Position for the Two Months Ended February 28, 2021 and the Two Months Ended February 29, 2020	2
Contributions Received	
Schedule of Contributions and NBC's received by the Fund from inception through March 15, 2021	3
Personnel and General & Administrative Expenses Detail	
Personnel and General & Administrative Expenses Detail	4
Investment Analysis	
Investments Analysis as of February 28, 2021 and February 29, 2020	5 - 6
Cost Allocation	
Current cost allocation methodology and calculation for the Two Months Ended February 28, 2021 and the Two Months Ended February 29, 2020	7

Financial Statements

**California Wildfire Fund
Balance Sheets**

UNAUDITED

	February 28, 2021	February 29, 2020
Assets		
Cash and investments:		
Cash and cash equivalents	\$ 282,736,514	\$ 243,704,141
Investments	9,630,419,355	4,578,604,968
Total cash and investments	9,913,155,869	4,822,309,109
Securities receivable	64,333,707	8,153,144
Interest receivable	38,566,468	16,811,481
Prepaid expenses	125,000	-
Prepaid reinsurance premium	-	4,430,737
Total assets	\$ 10,016,181,044	\$ 4,851,704,471
Liabilities and Net Position		
Securities payable	\$ 59,261,778	\$ -
SMIF loan interest payable	7,160,096	7,576,501
Accounts payable and accrued expenses	964,400	691,967
Related party payable - CEA	281,777	160,877
Total liabilities	67,668,051	8,429,345
Net position:		
Restricted for CWF	9,948,512,993	4,843,275,126
Total net position	9,948,512,993	4,843,275,126
Total liabilities and net position	\$ 10,016,181,044	\$ 4,851,704,471

California Wildfire Fund
Statements of Revenues, Expenses and Changes in Net Position

UNAUDITED

	Two Months Ended February 28, 2021	Two Months Ended February 28, 2020
Additions to fund assets:		
Rate payer monthly NBCs	\$ 123,638,829	\$ -
Total contributions	123,638,829	-
Investment income & expenses	14,253,387	12,252,113
Change in unrealized gain/(loss)	(165,375,554)	72,403,346
Net investment income	(151,122,167)	84,655,459
Total additions to fund assets	<u>(27,483,338)</u>	<u>84,655,459</u>
Deductions to fund assets:		
SMIF loan principal payments	140,000,000	-
SMIF loan interest expense	7,160,096	7,576,502
General and administrative expenses	275,820	112,786
Personnel expenses	152,708	160,821
Reinsurance expenses	-	8,727,261
Reinsurance broker commissions	-	107,999
Total deductions to fund assets	<u>147,588,624</u>	<u>16,685,369</u>
Increase in net position	(175,071,962)	67,970,090
Net position, beginning of year	<u>10,123,584,955</u>	<u>4,775,305,036</u>
Net position, end of year	<u><u>\$ 9,948,512,993</u></u>	<u><u>\$ 4,843,275,126</u></u>

Contributions & NBCs Received

**California Wildfire Fund
Contributions & NBCs Received
As of March 15, 2021**

Description	Date Received	Amount
1. SMIF Loan Proceeds	8/15/2019	\$ 2,000,000,000
2. SDG&E initial capital contribution	9/9/2019	322,500,000
3. SoCal Edison initial capital contribution	9/9/2019	2,362,500,000
4. SDG&E 2019 annual contribution	12/19/2019	12,900,000
5. SoCal Edison 2019 annual contribution	12/27/2019	94,500,000
6. PG&E initial capital contribution	7/1/2020	4,815,000,000
7. PG&E 2019 annual contribution	7/1/2020	192,600,000
8. SDG&E 2020 annual contribution	12/16/2020	12,900,000
9. SoCal Edison 2020 annual contribution	12/28/2020	94,500,000
10. PG&E 2020 annual contribution	12/30/2020	<u>192,600,000</u>
	Total Contributions	10,100,000,000
1. October 2020 NBC funds	1/19/2021	4,529,887
2. November 2020 NBC funds	1/19/2021	49,757,447
3. December 2020 NBC funds	2/9/2021	69,351,495
4. January 2021 NBC funds	3/15/2021	<u>59,438,336</u>
	Total NBCs	183,077,165
	Total Funds Received	<u><u>\$ 10,283,077,165</u></u>

Note 1:

NBC funds received by the CWF are net of DWR administrative and operating expenses.

Personnel and G&A Expenses

**California Wildfire Fund
Operating Expenses**

Personnel expenses

Description	Two Months Ended February 28, 2021	Two Months Ended February 29, 2020
1. Amounts allocated from CEA employee time	\$ 152,708	\$ 124,886
2. Direct expenses from CWF temps	-	35,935
Total Personnel expenses	152,708	160,821

General and administrative expenses

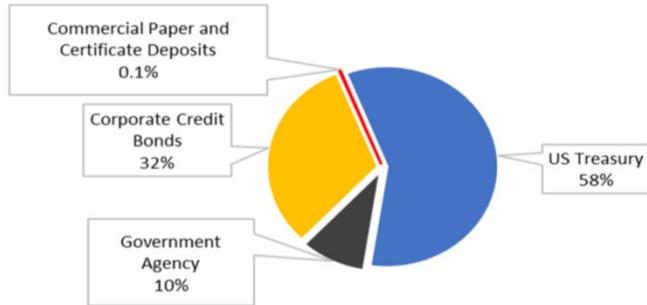
1. Outside Legal Expense	91,054	1,354
2. Other contracted services	78,693	1,157
3. Consulting - Financial Services	45,000	45,000
4. Bank Fees	38,811	21,366
5. Office Rent, Parking, and Maint	9,189	7,085
6. Equipment, Hardware, and Software expense	8,826	28,712
7. Telecom Expense	2,165	909
8. IT Services	1,589	-
9. Governing board meeting expense	470	520
10. Office Supplies	23	458
11. Travel	-	6,225
Total G&A expenses	275,820	112,786
Total Operating Expenses	\$ 428,528	\$ 273,607

Investment Analysis

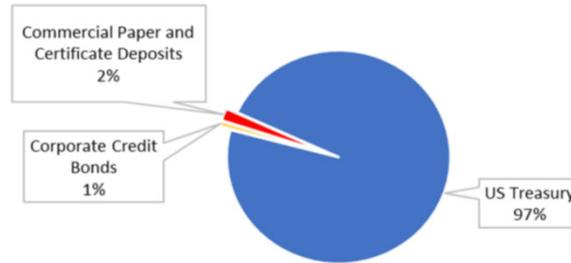
**California Wildfire Fund
Investments Analysis
2/28/2021**

The revised investment policy became effective on June 22, 2020 and will allow the CWF to increase its income return by taking advantage of credit diversity and composition along with an increased duration while still meeting its goal of preserving principal and liquidity.

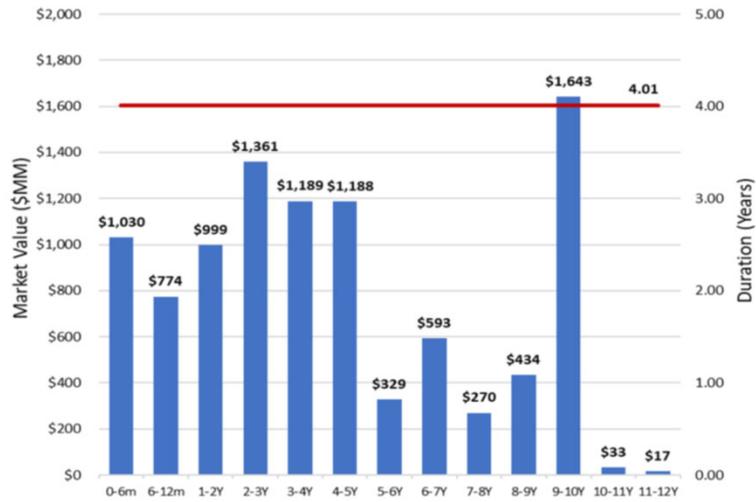
CWF Asset Allocation: February 28, 2021



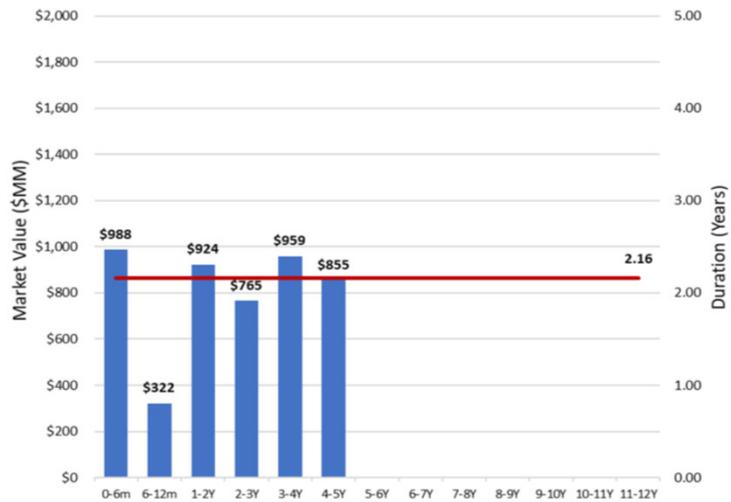
CWF Asset Allocation: February 29, 2020



Maturity Distribution: February 28, 2021



Maturity Distribution: February 29, 2020



California Wildfire Fund
Investments Analysis (continued)
2/28/2021

California Wildfire Fund Investment Analysis														
Amount (as of February 28, 2021)		Yields			Total Return (Gross of Fees)				Income Return (Net of Fees)				Effective Duration (Years)	Actual Mark-to-Market (\$000's)**
	Par Value (\$000's)*	Market Value (\$000's)	Yield At Acquisition	Yield To Maturity	1-Month (February)	1-Month Prior (January)	3-Month	12-Month	1-Month (February)	1-Month Prior (January)	3-Month	12-Month	Feb. 2021	Feb. 2021
All Funds Total	\$9,579,974	\$9,834,767	1.008%	0.791%	-1.009%	-0.466%	-1.360%	0.341%	0.127%	0.138%	0.405%	1.651%	4.01	(70,821)

California Wildfire Fund
Investment Analysis
2/29/2020

California Wildfire Fund Investment Analysis														
Amount (as of February 29, 2020)		Yields			Total Return (Gross of Fees)				Income Return (Net of Fees)				Effective Duration (Years)	Actual Mark-to-Market (\$000's)**
	Par Value (\$000's)*	Market Value (\$000's)	Yield At Acquisition	Yield To Maturity	1-Month (February)	1-Month Prior (January)	3-Month	12-Month	1-Month (February)	1-Month Prior (January)	3-Month	12-Month	Feb. 2021	Feb. 2021
All Funds Total	\$4,705,990	\$4,836,941	1.580%	0.860%	1.011%	0.130%	1.911%	NA	0.136%	0.139%	0.421%	NA	2.16	62,594

Notes:

* Par value does not include amortization of premiums or accretion of discounts.

** Mark-to-market values are per BondEdge and may differ from mark-to-market values as shown in the financials due to the timing differences of security valuations.

Cost Allocation

California Wildfire Fund

Cost Allocation Methodology and Calculation for the Two Months Ended February 28, 2021 and for the Two Months Ended February 29, 2020
02/28/2021

Note 1: Cost Allocation Approach

CEA's Cost Allocation Plan is based on the Direct Allocation Method. The Direct Allocation Method treats all costs as direct costs except general administration and general expenses.

Direct costs are those that can be identified specifically with a particular final cost objective. Indirect costs are those that have been incurred for common or joint objectives and cannot be readily identified with a particular final cost objective.

The general approach of the CEA in allocating costs to the CWF is as follows:

- A. All direct costs that are incurred directly by the CWF.
- B. All other general and administrative costs (costs that benefit both Funds and cannot be identified to a specific Fund) are allocated to each Fund using a base that results in an equitable distribution. Costs that benefit more than one Fund will be allocated to each Fund based on the ratio of each Fund's salaries/benefits to the total of such salaries/benefits

Essentially, CWF cannot operate without administrative functions and these areas touch every aspect of the business and this is the justification for allocation. A continuing review of cost allocation will be a policy and more importantly, it will not be a standard and may change from time to time.

Note 2: Direct and Indirect Costs

Starting in July 2019, the CEA, acting as the interim administrator of the CWF, started tracking employees who were working directly on the CWF. These hours were tracked in a time tracking software that is on CEA's SharePoint intranet site.

The following hours were captured and the CEA applied each employees hourly rate + the predetermined burden rate to come up with the direct labor charge for the CWF for the Two Months Ended Feb'21 and Feb'20.

Department	2 months ended Feb'21		2 months ended Feb'20		CWF Salary & Benefit costs =	Feb'21	Feb'20
	Hours	Salaries & Benefits	Hours	Salaries & Benefits		Feb'21	Feb'20
1. Comms	62.5	5,890	70.6	4,542		148,324 A	124,886
2. Exec	176.3	24,646	61.6	14,507		4,101,920 B	4,167,206
3. Finance	483.0	45,611	503.1	60,891		4,250,244 C	4,292,092
4. IT	37.0	2,982	-	-			
5. Internal Ops	3.5	538	15.5	700			
6. Insurance Ops	107.5	20,429	-	-			
7. Legal	258.2	48,229	266.7	44,246			
Total Direct Hours/Costs	1,128.0	148,324	917.5	124,886	Allocation % =	3.49% = A/C	2.91%

All other indirect costs were allocated to the CWF based on the 3.49% and 2.91% allocations noted above. The following indirect expenses were charged to the CWF:

Account Name	Acct #	Amount	Amount
Rent-Office and Parking	86400-16	8,461	6,521
Rent-Office Equip/Furniture	86450-16	603	513
Building Maintenance and Repairs	86475-16	125	51
Furniture/Equipment <\$5000	86500-16	-	350
EDP Hardware <5000	86505-16	448	2,535
EDP Software <5000	86506-16	8,378	26,177
Office Supplies	86510-16	23	458
HR and IT staff allocation	85101-16	4,384	-
Telecommunications	86550-16	2,165	909
Direct Investment Technology Support	89805-16	823	3,554
Total Indirect Costs		25,410	41,069
Total Costs		173,733	165,954



California Catastrophe Response Council Memorandum

April 22, 2021

Agenda Item 7: Claims Administration

Recommended Action: No action required - Information only

Background and Update

Public Utilities Code section 3284(g) requires that the Wildfire Fund Administrator (Administrator), with the approval of the California Catastrophe Response Council (Council), establish procedures for the review, approval and timely funding of eligible claims.

At its January 28, 2021 meeting, the Council adopted an *Expanded Summary of Procedures* that builds upon the previously approved *Provisional Policy Statement and Summary of Procedures*, providing staff with essential policy direction and the Council with an interim opportunity to weigh in on key elements of the claims administration process as it has taken shape. The Council's adoption of the *Expanded Summary of Procedures* and the *Provisional Policy Statement and Summary of Procedures* are in keeping with the Articles of Governance in which the Administrator is authorized to operate the Wildfire Fund (Fund) within the framework established by law and in accordance with the claims administration procedures approved by the Council.

Since January, the Administrator has continued to build out the claims administration process and prepare the draft claims administration procedures through the development of the following products:

- More detailed procedures for each aspect of the claims administration process:
 - Annual Activities – defining the role and responsibilities of claims liaisons and annual capability reviews conducted with each Participating Utility
 - Pre-Claim Processes – quarterly and triggered claim reporting requirements before a Participating Utility submits claims for review and potential reimbursement from the Fund
 - Submission of Claims – specific information requirements for non-subrogation and subrogation claims submitted by Participating Utilities



- Vendor Policies and Procedures – roles and responsibilities in reviewing claim submissions and reporting to the Administrator, including the roles of a statistician and subject-matter experts for different types of wildfire damage (i.e., structures and land, crops and trees, personal injury)
 - Threshold Claims Review – process for evaluating third-party claims paid by the Participating Utility and determining whether the Participating Utility’s threshold amount has been met for submission of Eligible Claims
 - Eligible Claims Review – process for evaluating third-party claims paid by the Participating Utility and determining Eligible Claims reimbursement payments by the Administrator
 - Independent Audit of Claim Review Process – independent auditing of the Administrator’s claims review, reporting and quality control processes
 - Dispute Resolution – mechanisms to resolve disputes arising during claims administration
 - Administrator’s Payment of Claims – terms and conditions of claim reimbursement payments by the Administrator to the Participating Utilities
 - Reimbursement Procedures Following a Catastrophic Wildfire Proceeding – terms and conditions of reimbursements to the Fund by Participating Utilities following a Catastrophic Wildfire Proceeding of the Public Utilities Commission.
- Supporting exhibits, process maps and templates for claims administration procedures, including the utility claims data, claim review, Threshold Claims Report, and Eligible Claims Report templates.
 - Procedures for the submission of confidential information to the Administrator and the processing of Public Records Act requests that implicate information claimed as confidential.
 - Statistical sampling methods and procedures for evaluating threshold claims and Eligible Claims.
 - Itemization and prioritization of the types of documents and/or information needed to support the validation and valuation of claims for different types of wildfire damage.
 - Materials for the proposal elicitation and selection of a third-party administrator to work for the Administrator in implementing the Council-approved claims administration procedures.



- Outreach to the three electrical corporations, claims data specialists, reinsurers and intermediary brokers, and subject matter experts on various aspects of wildfire liability assessment to better understand claim handling and auditing processes.

As previously noted, the Administrator is supported by its consulting attorneys, Carlson, Calladine & Peterson LLP who, along with CEA’s Chief Catastrophe Response and Resiliency Officer and in-house counsel, began work on the claims administration process in June 2020; a team of subject-matter experts retained in the Fall of 2020 to advise on statistical sampling and claims validation, valuation and review processes; and two claims adjusting and auditing experts who began work in January 2021 to help draft the detailed claim procedures.

While the full draft procedures are not ready for the Council’s review and adoption at this meeting, staff want to assure the Council that it has undertaken extensive work to establish thoughtful and fulsome procedures for this unprecedented reimbursement mechanism within the wildfire insurance space. In particular, staff have been diligently working through the nuances of the authorizing legislation to balance reasonable confidentiality issues and the public charge to the Administrator, and to the Council, to reimburse claims that are settled within the “reasonable business judgment” of a Participating Utility.

Staff also continues to closely monitor the status of potentially Covered Wildfires, which are wildfires that ignited on or after July 12, 2019 and that a determining governmental entity has found was caused by an electrical corporation. The California Department of Forestry and Fire Protection (CAL FIRE) has completed investigations on at least two of the major fires of the 2019 and 2020 seasons—the October 2019 Kincade Fire and the September 2020 Zogg Fire—and investigations for other potentially Covered Wildfires are still in progress. At this point, reported losses, in aggregate, for the 2019 and 2020 seasons for each of the electrical corporations have not exceeded the current \$1 billion threshold necessary to make a claim on the Fund.

If 2019 or 2020 losses for one or more of the electrical corporations does exceed the threshold, or if a catastrophic Covered Wildfire occurs early in the 2021 season, staff is confident that the interim policies and claims process structure that the Council has reviewed and approved, along with the nearly completed full draft procedures, can be quickly mobilized into “interim” procedures to process claims on the Fund once a determining governmental entity has found that the fire was caused by an electrical



corporation and the Participating Utility has aggregate losses that exceed the current \$1 billion threshold necessary to make a claim on the Fund.

Next Steps

Staff will have the full draft procedures completed and available by mid-June for individual Council members and the three electrical corporations to review. Outreach to additional key stakeholders, including ratepayer advocacy groups, will be conducted in April and May, prior to completion of the full draft procedures. All feedback will be integrated into the final draft procedures that will be presented to the Council at its next meeting on July 22, 2021.

In May, the Administrator will also initiate the proposal elicitation process for the selection of a third-party administrator (TPA) to assist the Administrator in implementing the Council-approved claims administration procedures. Staff anticipates the TPA selection process will be completed or nearing completion by the Council's July 22nd meeting.

California Catastrophe Response Council Memorandum

April 22, 2021

Agenda Item 8: ERM Framework

Recommended Action: No action required — information only

Background

CEA has developed an Enterprise Risk Management (ERM) program based on the framework depicted and described below. CEA selected this general framework to be consistent with the National Association of Insurance Commissioner's *Own Risk and Solvency Assessment* guidance, which is a framework for regulated insurance companies. While CEA is not a traditional insurance company, it operates similarly to one. The general elements of the framework are similar across industry and entity. The goal is to create and maintain an integrated approach to managing risk. Taking on responsibility as Administrator of the Wildfire Fund has demonstrated that the framework has the necessary flexibility and agility to identify and mitigate any new operational risks that may emerge from these duties.





Risk Governance and Culture

The ERM Committee meets no less than monthly to discuss priority risks and emerging risks. CEA maintains a formalized and active Risk and Compliance Committee responsible for promoting a culture of compliance and fostering a workforce that continually considers and evaluates risk. In addition, there is a formalized Business Continuity Committee to ensure coordination and collaboration in maintaining an effective and responsive business continuity program (this Committee has been particularly active in facilitating CEA’s uninterrupted operations during the COVID-19 pandemic emergency). The Chief Risk Officer acts as Chair of all three of these formalized risk-related committees, and regularly reports to the CEO, CEA Executive Team and CEA Governing Board. Specific CEA employees are identified as “Risk Owners” for each priority risk as the primary and accountable point of contact.

Risk Identification and Prioritization

The priority risks were determined by conducting a survey of all risks with the highest combination of likelihood and impact and categorized into financial, insurance, operational and strategic risks. These risks are reviewed annually to ensure suitability. Each priority risk contemplates several risk drivers that are monitored by the business units who have designated a Risk Owner.

Financial Risks	Insurance Risks	Operational Risks	Strategic Risks
<ul style="list-style-type: none"> • Risk Transfer • Financial Management – Investments and Accounting 	<ul style="list-style-type: none"> • Policy Contracting and Servicing • Claim Handling • Earthquake Science and Modeling • CEA Residential Mitigation programs 	<ul style="list-style-type: none"> • Business Continuity • IT Systems and Data Security • Legal – Compliance and Litigation • Workforce • Wildfire Fund 	<ul style="list-style-type: none"> • Legislative / Regulatory • Reputation

Risk Appetite, Tolerances and Limits

CEA has developed risk appetite and tolerance statements for each priority risk through a series of CEA Executive Team surveys, discussions and consensus by the ERM Committee.



Risk *appetite* sets the boundaries of the acceptable risk level for each priority risk and can be qualified by one of the three following categories:

- *Averse*-Close to zero appetite for a risk event
- *Cautious*-Accept uncertainty when it can be carefully measured and monitored
- *Flexible*-Open to reasonable risk taking

Risk *tolerance* captures the amount of acceptable variation and can be qualified by one of the three following categories:

- *Low/Unwilling* – Will select the lowest risk option always
- *Medium/Limited* – Will accept favorable risk-reward scenario
- *High/Fully Willing* – Will choose option with highest benefit and accept possibility of failure

Risk *limits* are more granular. Each priority risk has several risk drivers that are monitored. The limit is the point at which a risk driver has potential to create more risk than is acceptable and additional action must be taken, including reporting to CEA's Governing Board.

Risk Management and Controls

Risk Owners coordinate efforts to do the following:

- Priority risks drivers are identified, assessed, managed and monitored;
- Risks are clearly articulated in a Risk Control Summary and an appropriate level of risk tolerance for risk is monitored;
- Risk management is integrated into operational activities;
- Gaps in mitigation and monitoring activities are remediated;
- The status of mitigation and monitoring efforts are communicated to the ERM Committee;
- The internal and external environments are scanned for emerging risks and opportunities;
- Annual Reporting is completed as scheduled including an annual Risk Control Summary review with the ERM Committee.



Risk Reporting and Communications

As noted above, the Chief Risk Officer regularly reports to the CEA Governing Board. At each meeting a summary report of the status of each priority risk is presented highlighting both successes and areas for improvement.

ERM Quarterly Report Priority Risk	Status		Activity Last Quarter / Comments
	Q1 2021	Outlook	
Risk Transfer	●	Negative	
Financial Management - Investments and Accounting	●	Stable	
Policy Sales and Servicing	●	Stable	
Business Continuity	●	Stable	
IT Systems and Data Security	●	Stable	
Legislative/Regulatory	▲	Stable	Checkpoint reached on the initiation of state or federal legislative change that could materially affect CEA's mission or structure
Claim Handling	●	Stable	
Legal - Compliance and Litigation	●	Stable	
Reputation	●	Stable	
Earthquake Science and Modeling	●	Stable	
Workforce	●	Stable	
Residential Mitigation Programs	●	Stable	
Wildfire Fund	●	Stable	

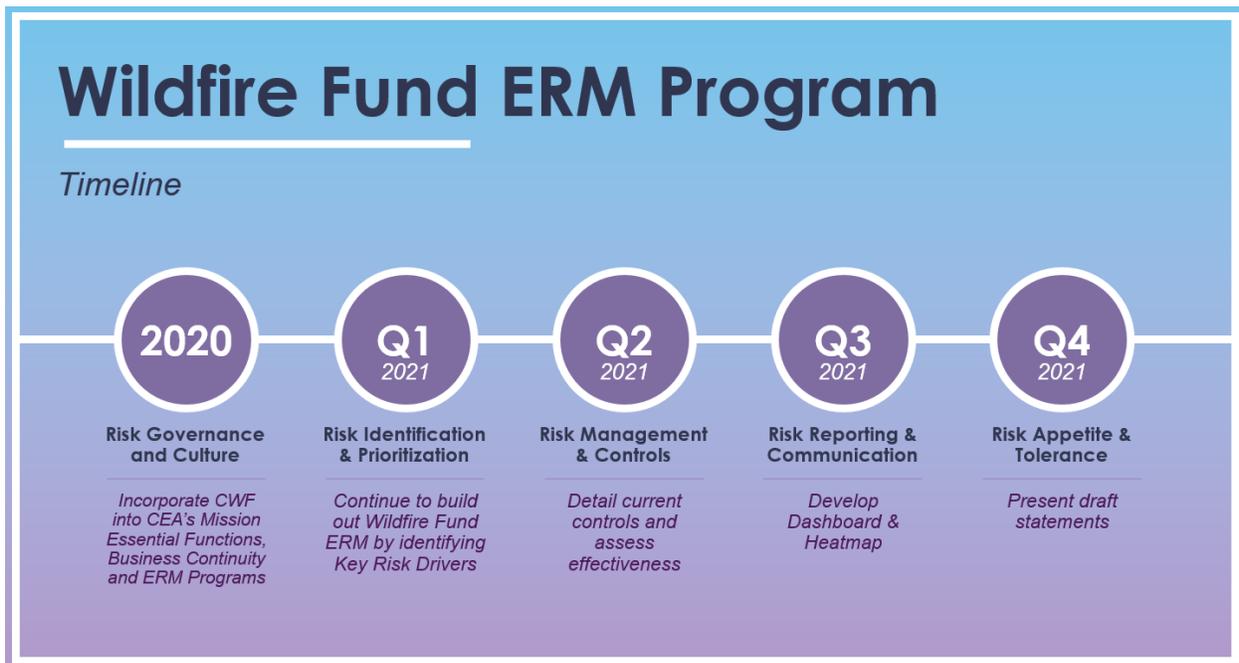
Legend	
●	No risk checkpoints or limits reached.
▲	Approaching or reached a risk checkpoint.
◆	Approaching or reached a risk limit.

ERM Framework Applied to CEA as Administrator of the Wildfire Fund

CEA is incorporating its duties as Wildfire Fund Administrator into the existing ERM framework. Most of the priority risks are mirrored from CEA's ERM program when tracking risk drivers for the Wildfire Fund. These include Financial Management, Risk Transfer, Claim Handling, Modeling, Business Continuity, IT Systems and Data Security, Legal Compliance / Litigation, Workforce, Legislative / Regulatory and Reputation. Other priority risks for the Wildfire Fund are analogous to those previously identified. For example, the Wildfire Fund necessarily considers wildfire models as opposed to earthquake models. Likewise, CEA's residential earthquake mitigation programs do not apply to or create risk for the Wildfire Fund; however, numerous external mitigation programs and efforts do impact the Wildfire Fund's overall risk and durability, so these will be considered as part of the general risk environment impacting CEA's administration of the Wildfire Fund.

CEA considers the risks to all its operations holistically. However, CEA, as Wildfire Fund Administrator, understands the interests of the California Catastrophe Response Council (Council) are those risks which are specific to the Wildfire Fund. Among the primary interest of the Council in CEA’s operations and ERM program is ensuring that CEA’s earthquake response duties will not interfere with the administration of the Wildfire Fund.

The timeline below outlines the evolution and development of the program in 2020 and for the current year.



CONCLUSION

CEA has developed and deployed a robust ERM frameworks that protects its operational resilience in the face of all reasonably identifiable risks. That framework has proven to be sufficiently agile to allow CEA to address any new enterprise risks that may emerge from CEA’s performance of its duties as Administrator of the Wildfire Fund, for the ultimate benefit of all beneficiaries of the Wildfire Fund.



California Catastrophe Response Council Memorandum

April 22, 2021

Agenda Item 9: Framework Development for Administrator’s Periodic Review of IOU Wildfire Insurance Programs (Public Utilities Code § 3293)

Recommended Action: No action required—information only

Background

AB 1054 established that each participating investor-owned electric utility company (IOU) is required to retain and pay the first \$1 billion of losses incurred during each wildfire season before submitting reimbursement claims from covered wildfires to the Wildfire Fund. (PUC § 3280(f)). The legislation also enacted Public Utilities Code section 3293, which requires that each IOU “shall maintain reasonable insurance coverage” against wildfire losses and requires the Administrator of the Wildfire Fund to periodically review each IOU’s insurance program taking into consideration a variety of IOU-specific factors that are relevant to the Wildfire Fund’s exposure to claims from that IOU.

At the January 28, 2021 Council meeting, the CEA advised the Council that it had retained a consultant with expertise in the energy sector (Scidan Consulting) to assist in the development of a framework for conducting these periodic reviews of the IOUs’ insurance programs. At this meeting, the CEA will provide an update on the continuing work to finalize a framework to comply with the Administrator’s duty under Public Utilities Code section 3293 to conduct these periodic insurance reviews.

Preliminary Framework for Insurance Reviews & Recommendations

Scidan has prepared an executive summary of its recommended framework under which the Administrator may conduct its insurance reviews and make recommendations that may impact the IOU and the attachment point for access to the Wildfire Fund in the future. A copy of the executive summary is attached.



Scidan’s work has built upon a set of foundational facts that emerge from AB 1054, and the recommended framework is the product of collaboration between CEA and Scidan, as noted below.

Foundational Facts

- In 2019, the Legislature enacted AB 1054 and established the initial IOU liability retention amount of \$1 billion per season for each of the three participating IOUs.
- CEA’s duty as Administrator (among others) is to manage the CWF with a goal of achieving durability in the range of 10 to 15 years, which the Legislature hoped would be sufficient time for the IOUs’ investments in safety plans and infrastructure hardening to materially reduce the frequency of IOU-cased wildfires.
- Neither the 2019 nor 2020 wildfire seasons resulted in Covered Wildfires of sufficient size to result in Eligible Claims.
- In short, given the lack of claims against the CWF to date, the basic durability status of the CWF is unchanged from when the Legislature fixed the annual IOU retention at \$1 billion.

Tentative Approach to a Framework

As noted in Scidan’s executive summary, the \$1 billion retention amount will remain the default retention for each IOU, unless and until actual loss experience (including both submitted claims and estimated “incurred” losses from covered wildfires) demonstrate the need to adjust an IOUs’ retention under Public Utilities Code section 3280(f) in order to achieve the goal of a 10-15 year durability window, which analysis will take into account, among other things, wildfire mitigation and individual IOU risk curves.

The overarching goal of the framework is to allow CEA to administer the CWF in a manner that maximizes the benefits to utility ratepayers, both by ensuring effective and efficient use of the ratepayer surcharges that will flow into the CWF over the next 15 years and by helping to facilitate efficiency in the IOUs’ insurance programs.

While CEA has engaged with a number of stakeholders in the development of the framework, presentation of the recommended framework at this meeting will allow for feedback from the Council and the public which will help ensure that implementation of the framework enhances the goals of AB 1054 and the effectiveness of the CWF.

Executive Summary: California Wildfire Fund Wildfire Liability Retention Recommendation Framework

Prepared for the California Earthquake Authority in its role as the
Administrator of the California Wildfire Fund

April 15, 2021



Background and Foundational Facts

- In 2019, the Legislature enacted A.B. 1054 and established an initial liability retention amount of \$1 billion per wildfire season for each of the three electrical corporations that participate in the California Wildfire Fund (CWF).
- Neither the 2019 nor 2020 wildfire seasons resulted in Covered Wildfires where the incurred liabilities exceeded the liability retention amount for each electrical corporation, therefore, no Eligible Claims have thus far been submitted to CWF.
- The Administrator's duty (among others) is to manage the CWF with a goal of achieving durability in the range of 10 to 15 years (long enough for the three electric corporations to deploy investments in safety plans and infrastructure hardening to materially reduce the frequency of electric corporation-responsible wildfires).
 - Related to this responsibility, the Administrator shall conduct an annual durability analysis and a periodic assessment of the insurance and financial programs supporting the liability retention amount of the electrical corporations.
- In short, given the lack of claims against the CWF to-date, the basic durability status has not diminished from when the Legislature initially set the uniform annual electrical corporation liability retention amount at \$1 billion.

Electric Corporation Liability Retention Recommendation Framework Overview

- The Administrator engaged Scidan Consulting to develop a framework to assess the appropriateness of electrical corporation wildfire liability retention programs, consistent with Public Utilities Code section 3293.
 - The objective of Scidan’s analysis was to design a repeatable framework that will allow the Administrator to make the mandated periodic recommendations for wildfire liability retention levels in a consistent and transparent matter to the electrical corporations participating in the CWF.
 - The assessment framework should provide the Administrator with an ability to incorporate new facts and information as they develop, such as paid and incurred claims, mitigation investments, and updated wildfire potential loss modeling.
 - The framework should have the capacity to deliver either:
 - A single threshold value which would serve as a wildfire liability retention level recommendation that would apply equally to all three participating utilities, akin to the single threshold for “Eligible Claims” at \$1 billion as defined in AB 1054;
- OR
- Three unique values, one for each of the participating electrical corporations, that reflect each electrical corporation’s individual underlying and perceived gross economic damage risk curve.

Recommended Liability Retention Framework Execution by the CWF Administrator

1. Develop and incorporate individual wildfire peril economic risk curves (i.e., loss exceedance curves) for each participating electrical corporation. These risk curves should be updated as needed every 1-2 years to reflect current estimates of each entity's *future* risk profile based on the specified statutory factors under PUC Section 3293, including: environmental factors, Wildland-Urban Interface exposure, and operational and infrastructure wildfire mitigation improvements.
2. Update the CWF durability model with historical (or estimated pending) Eligible Claims based on wildfire seasons to-date.
3. Establish key liability retention framework constraints:
 - Minimum CWF durability threshold percentages for years 2030 and 2035
 - Estimate of global capacity to insure California wildfire peril
4. Using the framework model, iteratively refine the liability retention level (using both uniform and variable retention thresholds) until the stochastic outcome of hundreds of thousands of simulations approximates the desired durability threshold while staying under the estimated global capacity for California wildfire insurance.
5. Based on the resultant framework outcomes, perform a post hoc customer cost analysis to (1) estimate potential impacts to ratepayers as required under PUC Section 3293; and (2) evaluate the efficiency of ratepayer-funded premiums with respect to CWF durability.
6. As needed, refine the framework constraints to balance potential tradeoffs between durability thresholds, wildfire insurance market capacity, and ratepayer impacts.

Summary of Current Liability Retention Program Assessment Process

- The Administrator has determined it must adhere to Legislature’s initial prospective \$1 billion retention as an effective baseline that supports the desired CWF Fund durability through a 10- to 15-year target window (2030-2035).
- Thus, the \$1 billion will remain the default liability retention amount for each CWF participating electrical corporation, unless and until actual loss experience (including estimated “incurred” losses) demonstrate the need to increase an electrical corporation’s retention under 3280(f) in order to achieve the goal of a 2030-2035 durability window.
- Should realized wildfire losses and Eligible Claims continue to fall below initially modeled expectations, more flexibility from the Legislature in adjusting an electrical corporation’s retention threshold and other cost-savings initiatives could allow for a more efficient use of authorized ratepayer funds, and over time, a reduction in the impact of wildfire insurance programs on ratepayer bills.
- A periodic retrospective 3293 evaluation would allow the review and the Administrator’s framework recommendation to have the following benefits:
 - Provides additional time to research how best to quantify wildfire safety mitigation;
 - Provides time to analyze and potentially support initiatives such as a ratepayer funded self-insurance trust to cover a portion of an electrical corporation’s liability retention amount if such a plan would save money for ratepayers; and
 - Allows time to consider legislative amendments to allow electric corporation liability retention amounts to fall below \$1 billion to (i) further incentivize improved safety performance and continued mitigation investments, and (ii) retain a CWF durability window between 10 and 15 years (2030-2035).



California Catastrophe Response Council Memorandum

April 22, 2021

Agenda Item 10: Tax Status of the Wildfire Fund

Recommended Action: No action required—information only

Background

In creating the California Wildfire Fund (CWF), the Legislature specifically exempted income of the CWF from taxation by California (Pub. Util. Code § 3297). In addition, the Legislature made the IOUs' contributions tax deductible for purposes of their tax compliance obligations.

This exemption of the CWF from state taxation demonstrates, among many other things included in AB 1054, the deep integration of the CWF into the State's overall approach to ensuring California residents have access to stable and affordable energy, that the state maintain a stable energy marketplace, and that state residents be protected from the direct and indirect impacts of IOU-caused wildfires. The fact that CWF is an integral part of the state is key to the ability to operate the CWF as exempt from federal taxation as well.

The Internal Revenue Service has a long-standing and extensively applied doctrine, generally referred to as the "integral part doctrine," that exempts from federal taxation the income of any entity that is an integral part of a state government. CEA, for example, has always operated its residential earthquake insurance business on a tax-exempt basis from federal income tax in reliance on the integral part doctrine.

As previously reported to the Council, CEA has been working with a nationally recognized law firm and an international tax compliance firm to obtain formal opinions that the Council and CEA, as the CWF Administrator, may rely upon in operating the CWF as an integral part of the State of California exempt from federal income tax. Both firms have now delivered their opinions, which are briefly summarized below.



Summary of Tax Opinions

The core opinion of both firms, although worded slightly differently in each opinion, is that all CWF income should be exempt from federal income taxation because all such income should be treated as income earned by an integral part of the State of California. The delivery of these opinions, together with the statutory exemption from California state taxation, collectively provide a clear basis and strong comfort that the CWF may be operated, administered, and overseen as a fully tax-exempt statutory fund.