

# 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

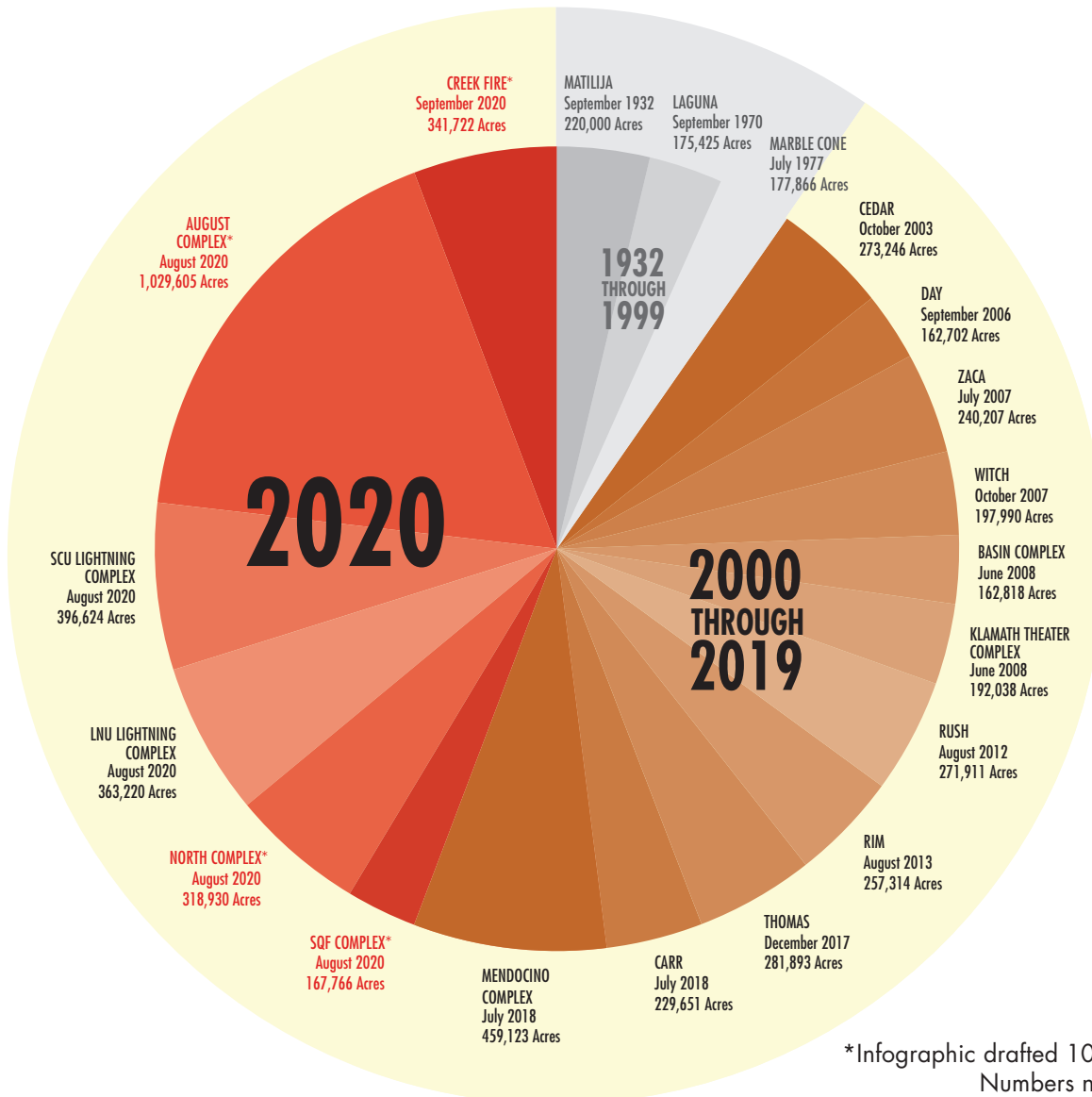
Cover photo: Ken Meinhart, USFWS

# 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



\*Infographic drafted 10/13/2020. Numbers not finalized.

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

<b>Executive Summary</b> .....	6
<b>Introduction</b> .....	9
<b>Goal 1: Increase the Pace and Scale of Forest Health Projects</b> .....	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
<b>Goal 2: Strengthen Protection of Communities</b> .....	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
<b>Goal 3: Manage Forests to Achieve the State’s Economic and Environmental Goals</b> .....	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
<b>Goal 4: Drive Innovation and Measure Progress</b> .....	40
Utilize Best Available Science and Accelerate Applied Research .....	40
Expand and Improve Monitoring, Reporting and Decision-Support Tools .....	41
<b>Moving Forward: Maintain Progress and Partnerships</b> .....	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.<sup>1</sup> 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.<sup>2</sup>

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.

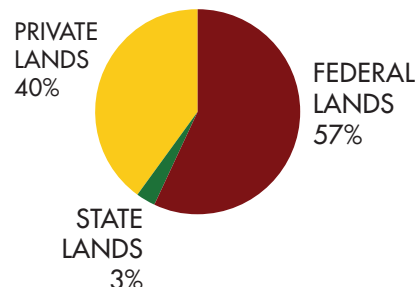
## INCREASE TREATMENTS ON FEDERAL LANDS

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.

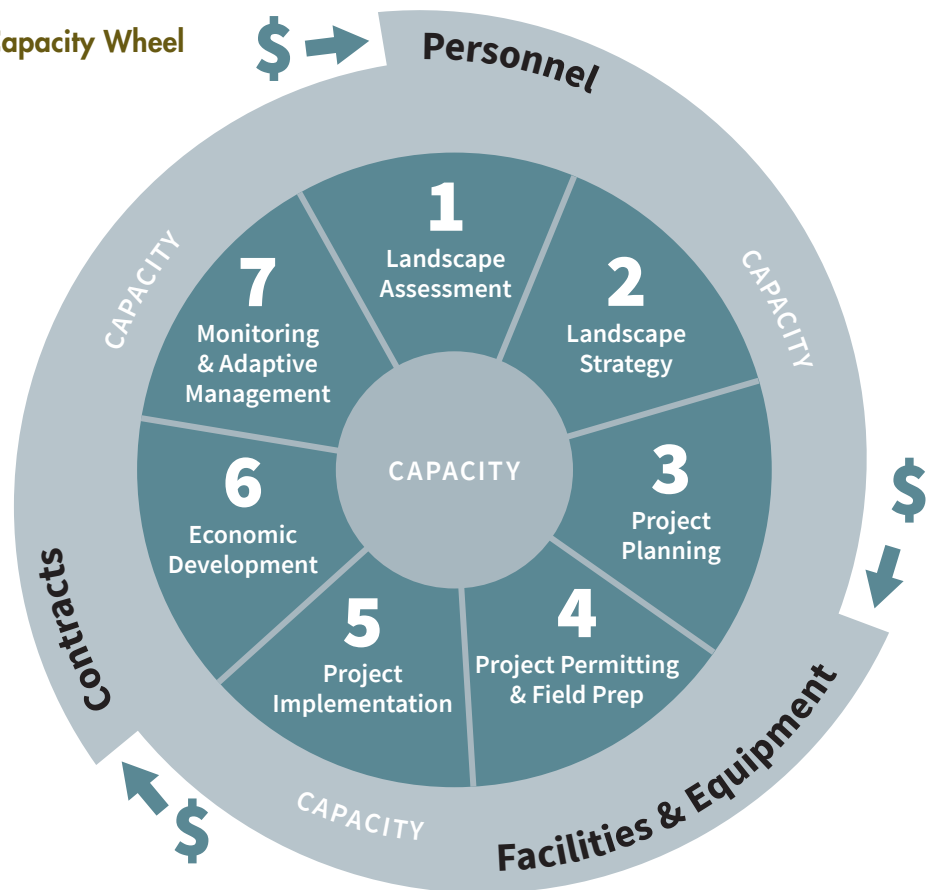
# Mobilize Regional Action Plans

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:

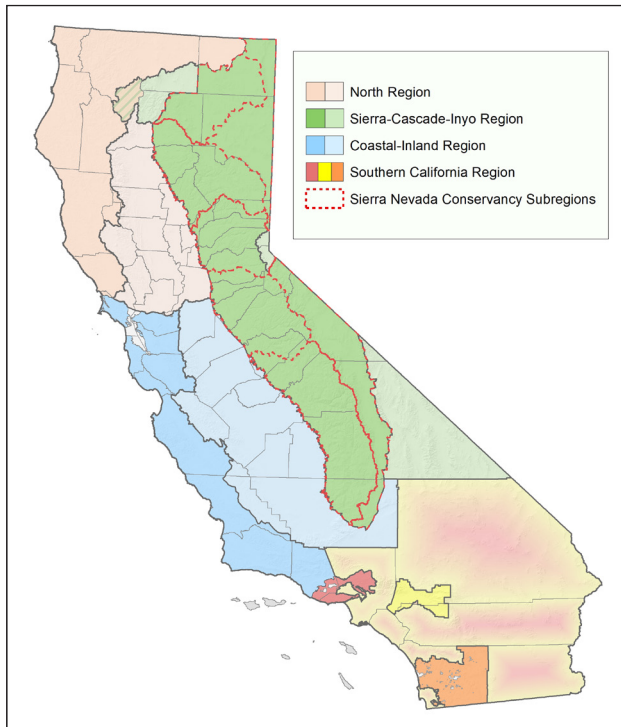
- » Building a workforce and the capacity to develop an ongoing pipeline of projects;
- » Fostering alignment of state and federal goals and mandates ranging from forest health and resilience, climate adaptation, watershed protection, biodiversity and outdoor recreation;
- » Facilitating multi-benefit 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**

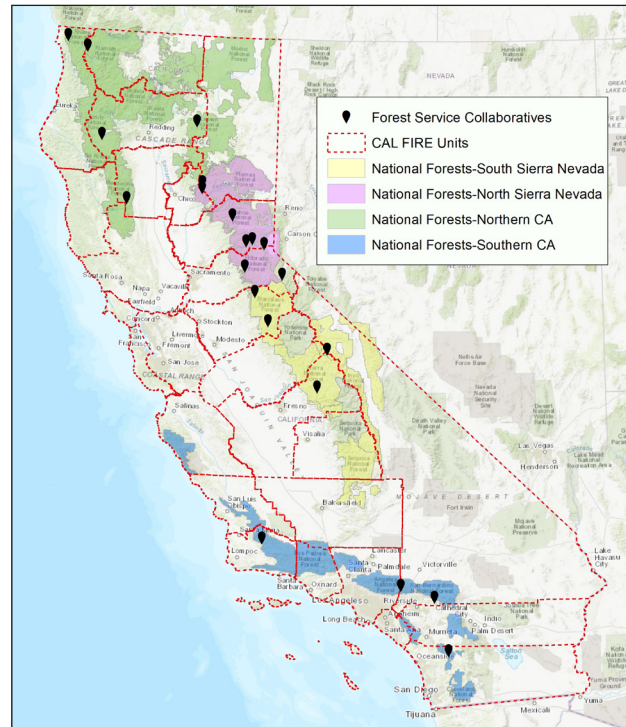


(Source: Watershed Center, Tahoe Fire and Fuels Team)

**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.

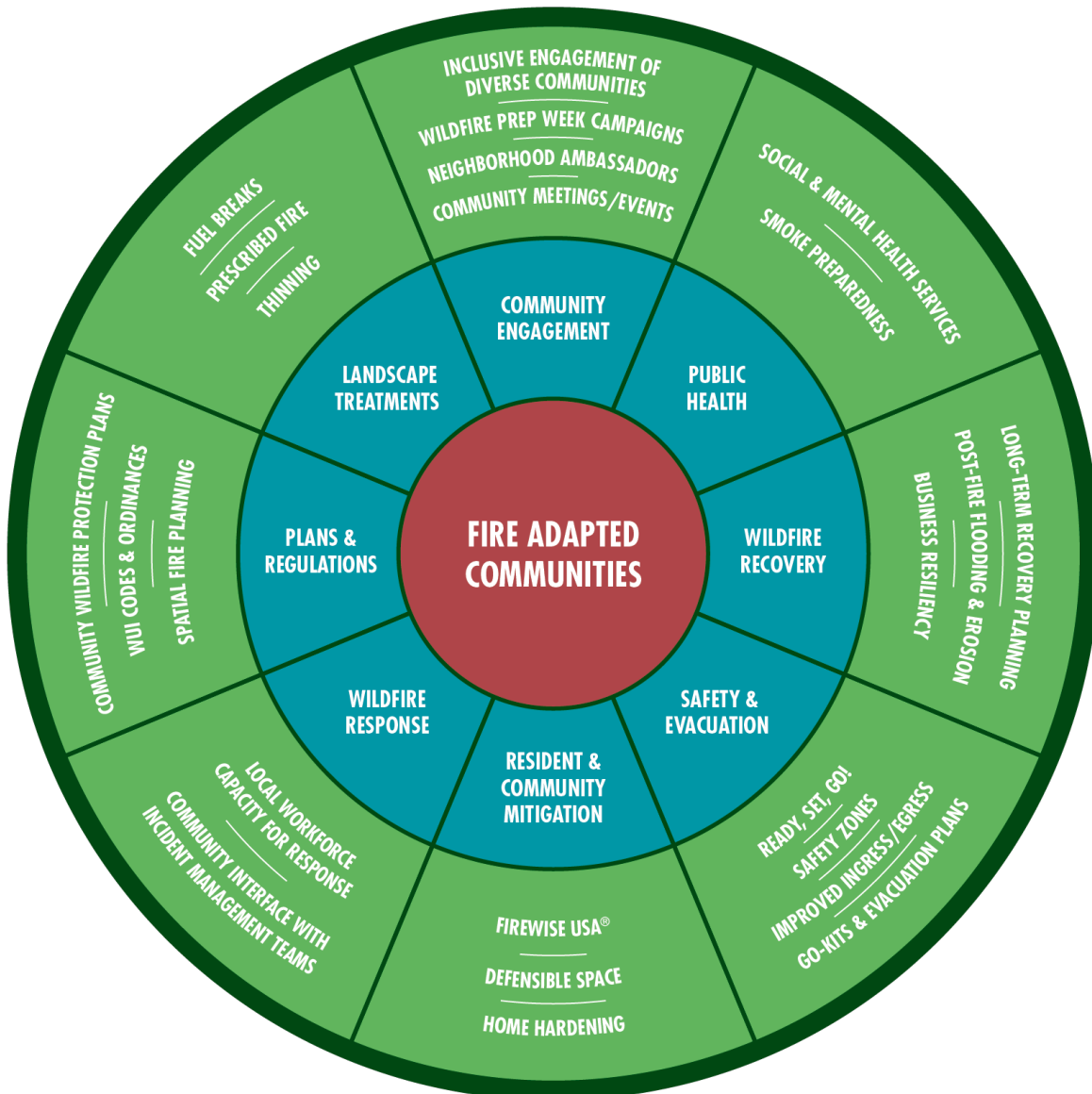
**2.2 Develop Performance Measures:** CAL FIRE will work with the Watershed Research and Training Center (WRTC) and other partners to identify performance measures for community wildfire risk reduction and adaptation.

**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.

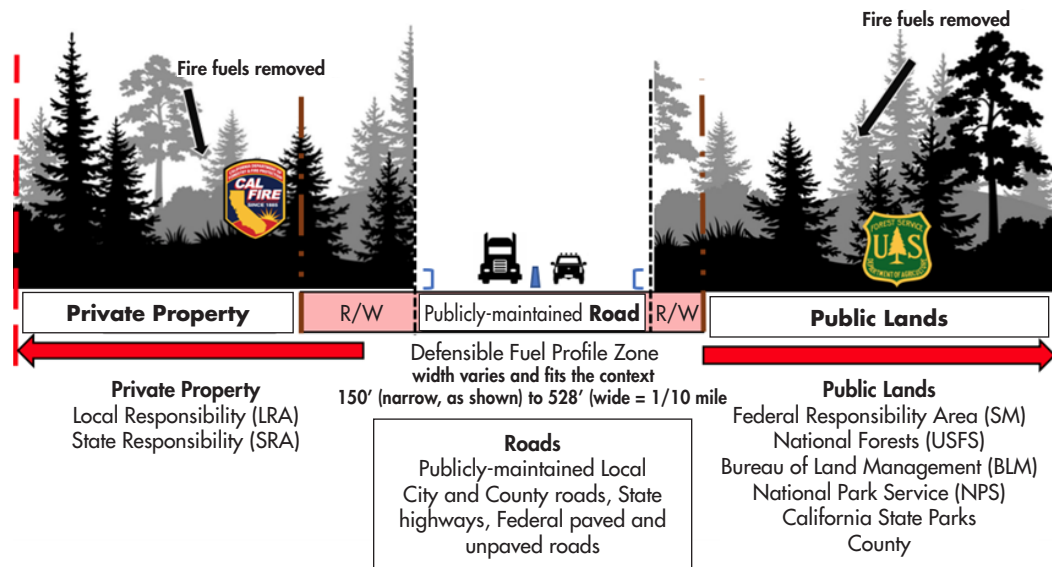
**2.23 Expand USFS Master Special Use Permits:** In 2019, the USFS signed a 30-year Master Special Use Permits with Pacific Gas and Electric (PG&E) and Southern California Edison (SCE) to streamline permitting of hazard tree removals and other routine maintenance activities along powerline corridors, 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](http://fmtf.fire.ca.gov)  
January 2021