The 2020-21 Budget:

Governor's Wildfire-Related Proposals

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Executive Summary

While wildfires have always been a natural part of California's ecosystems, recent increases in the severity of wildfires and the adverse impacts on communities have increased the focus on the state's ability to effectively prevent, mitigate, and respond to wildfire risks. This report has two parts. First, we assess the state's approach to addressing wildfire risks in light of the complex challenges that make an efficient and effective approach difficult. Second, we evaluate the Governor's various wildfire-related budget proposals in the absence of having a statewide strategic wildfire plan.

Assessing the State's Approach to Addressing Wildfire Risks

Growing Wildfire Risks. The state has experienced some of the deadliest and most destructive wildfires in its history in recent years. Several factors contribute to increasing wildfire risks, including increased development in fire-prone areas, unhealthy forestlands, climate change, and the role of utility infrastructure management.

Challenges to Managing Wildfire Risks. Wildfire risks can be addressed through a variety of wildfire prevention, mitigation, and response activities. However, implementing the most effective and efficient strategies is challenging for numerous reasons. For example, there are many different entities involved—including the state, local governments, federal agencies, utilities, and private landowners—which can make coordination difficult. Moreover, these entities often face competing demands and complicated incentives that might not fully account for wildfire risks. In addition, preventing, mitigating, and responding to wildfires can be costly for governments and private landowners. Each of these challenges contributes to making it less likely that the best strategies for reducing wildfire risks are implemented.

Potential for Inefficient Allocation of Resources and Broader Consequences. In the coming decades, the ongoing wildfire risks are likely to contribute to demands for the state to increase funding and resources for prevention, mitigation, and response activities. Yet, without a broad and comprehensive evaluation of wildfire risks and various risk mitigation strategies, it will be difficult for the Legislature to efficiently and effectively allocate additional funding related to wildfires. For example, in the absence of high-quality information about the cost-effectiveness of different types of risk reduction and response efforts, the state might not effectively balance funding for prevention and mitigation with funding for response capacity. Importantly, an ineffective allocation of resources could contribute to higher risks to people and properties, as well as increased costs to the state and local communities associated with recovery after wildfires do occur.

Recommend Development of a Strategic Wildfire Plan. Accordingly, we recommend that the Legislature require the development of a statewide strategic wildfire plan. The purpose of the plan would be to inform and guide state policymakers regarding the most effective strategies for responding to wildfires and mitigating wildfire risks. In particular, the plan should include guidance on future funding allocations to ensure the highest-priority and most cost-effective programs and activities receive funding and that the state achieves an optimal balance of funding for prevention and mitigation activities with demands to increase fire response capacity. Some of the other key elements of the strategic wildfire plan would include (1) establishing risk reduction and response

goals as a first step in order for agencies to focus their efforts and measure progress and (2) integrating information on the co-benefits of different approaches into decision-making.

Assessing the Governor's Budget Proposals in Absence of a Statewide Strategy

Governor's Proposals. The Governor's budget provides a total of $492 million (mostly from the General Fund) for 22 proposals for wildfire-related augmentations across multiple departments. This includes $179 million for the California Department of Forestry and Fire Protection, $77 million for the Governor's Office of Emergency Services, $30 million for the California Public Utilities Commission, and $206 million for various other departments and multi-departmental proposals.

Some Proposals Appear Reasonable, While Others Lack Justification or May Not Align With Strategic Plan. Ideally, the state would have a strategic wildfire plan in place to determine the most cost-effective approaches to mitigating wildfire risks and to identify gaps or redundancies in existing efforts. Such an approach would assist the state in allocating new funding related to wildfires to ensure funding augmentations meet the highest priorities. However, in the absence of a strategic wildfire plan, the Legislature must still make funding decisions and respond to the budget proposals put forward by the Governor.

Based on our review, we classify the budget proposals in three categories. Specifically, we find (1) that even in the absence of a strategic plan, some proposals appear reasonable; (2) several proposals are promising but lack important implementation details; and (3) some proposals raise more significant concerns because they might not align with some of the key elements we think should be included in a strategic wildfire plan, they lack basic workload justification, or both. In particular, several of the proposals that raise concerns provide costly year-round resources rather than providing flexible resources to meet peak seasonal demands. Similarly, some proposals might not align roles and responsibilities to the various state and local entities best suited for specific workload.

Recommendations. We offer recommendations on each of the Governor's proposals based on our categorization described previously. (A figure listing our recommendations for each budget proposal is included at the end of this report.) First, we recommend approving proposals that appear reasonable. Second, for the proposals that appear promising but lack important implementation details, we recommend that the Legislature either provide implementation guidance or withhold action pending additional information, depending on the specific circumstances of the proposal. Third, for the proposals that raise more significant concerns, we recommend that the Legislature ensure it has sufficient details and workload justification for the proposals that we find lack this information. If the administration does not provide sufficient information to justify these proposals, we recommend that the Legislature reject them. For proposals that might not align with a strategic approach to addressing wildfire risks, we recommend modifying the proposals to limit ongoing commitments.

INTRODUCTION

In recent years, California has experienced some of the deadliest and most destructive wildfires in the state's history. While wildfires have always been a natural part of California's ecosystems, recent increases in the severity of wildfires and the adverse impacts on communities have increased the focus on the state's ability to effectively prevent, mitigate, and respond to wildfire risks. In response to these severe wildfires, the state has undertaken numerous efforts to reduce specific wildfire risks and bolster response capacity, as well as provided a significant amount of funding to support these efforts. However, as we discuss in the first part of this report, the state has not yet developed a strategic approach to addressing the complex, costly, and long-term nature of wildfire risks in California. We find that developing such an approach could better ensure that limited funding and resources are allocated in the most effective ways to reduce risks to life and property. In the second part of this report, we evaluate the numerous wildfire-related budget proposals that are included in the Governor's 2020-21 budget plan.

PART I: ASSESSING THE STATE'S APPROACH TO ADDRESSING WILDFIRE RISKS

MANAGING WILDFIRE RISKS A MAJOR CHALLENGE IN CALIFORNIA

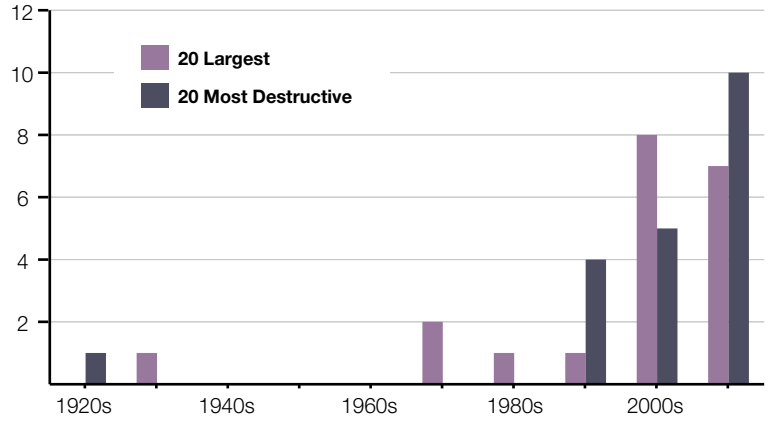
Wildfires are a natural part of California's ecosystems. Many fires are started naturally by lightning strikes, but wildfires can also be caused by humans. When a wildfire occurs, it can provide benefits to the forest, such as burning excess vegetation and improving habitat for wildlife. In addition, wildfires can actually reduce the severity of future wildfires by keeping forests healthy and periodically reducing the amount of fuels in a forest. However, wildfires become problematic when they burn in areas that threaten lives and property or are much more severe than what would typically occur naturally. As we discuss in this section, the state has experienced some of the most destructive wildfires in its history in recent years. Several factors contribute to this trend of increasing risks and the state faces many challenges in addressing them.

Recent and Historical Wildfire Trends

Most Destructive Wildfires Have Occurred in Most Recent Decades. As Figure 1 shows, a majority of California's largest and most destructive wildfires have occurred in recent decades. This

Figure 1

Most of the Largest and Most Destructive Wildfires Occurred in Recent Years

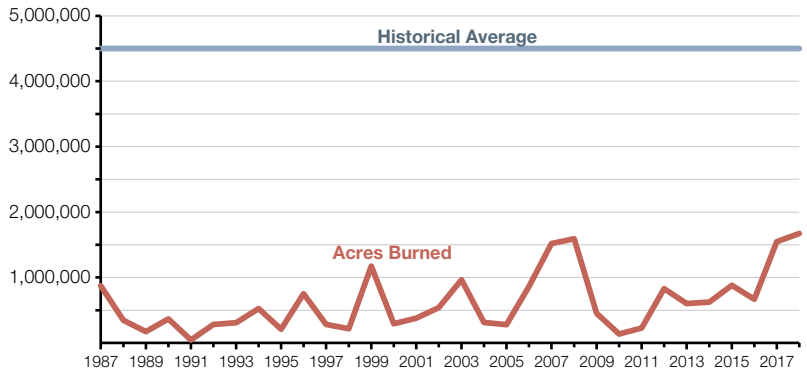


trend has been particularly acute in recent years, which have seen some of the worst individual wildfires in the state's recorded history. The 2018 wildfire season included several particularly large and catastrophic wildfires, such as the Mendocino Complex Fire that was the largest in recorded state history at 459,000 acres. The 2018 wildfire season also included the Camp Fire in Butte County that became the most destructive wildfire in state history with nearly 19,000 structures destroyed and 85 fatalities, including the near-total destruction of the town of Paradise.

Fewer Acres Burn in Wildfires Than Historical Average. While the last few years have brought particularly destructive wildfires, the number of acres burned in wildfires is significantly less than the historical average. In fact, wildfires are a normal part of the natural ecosystems in many parts of California. It is estimated that in the 1700s an average of 4.5 million acres of California forestlands burned in wildfires each year. This is far greater than the average acres burned by wildfires in recent decades—about 1 million acres. **Figure 2** shows acres burned by wildfires over the last 30 years compared to the historical average. The reduction in acres burned by wildfires largely is due to fire suppression policies that generally aim to put out wildfires quickly after they ignite in order to reduce risks to lives and properties.

Figure 2

Wildfire Acreage Burned Varies by Year, but Much Less Than Historical Average



Wildfires Are Seasonal. Despite recent years having particularly destructive wildfires and concerns about wildfires becoming a year-round phenomenon, the occurrence of wildfires continues to have a strongly seasonal pattern—primarily occurring during the summer and fall months when weather is the driest. **Figure 3** shows the number of wildfires by month for the last three years compared to the ten-year average. As the figure shows, wildfire activity is relatively low from December through March and reaches its peak from June through August each year. While the number of wildfires occurring each fall decreases relative to the peak levels, wildfires occurring in the fall can be particularly severe because forests are dry after little to no rainfall during the summer, as well as because of other weather conditions, especially seasonal wind patterns.

Factors Contributing to Growing Wildfire Risks

There are several reasons why wildfires have become more deadly and destructive despite having fewer acres burn than was historically the case.

Increased Development in Fire-Prone Areas. Over time, as the state's population has increased and more development has occurred, larger communities have built up in forested areas that previously had limited development. This intersection of developed areas and the wildlands is known as the "wildland urban interface," or WUI. Continued development in the WUI means that more people and property are located in areas prone to wildfires. For instance, between 2000 and 2012 (the most recent year for which data is available), the number of households in fire-prone areas grew from 2.6 million to 2.9 million (an 11 percent increase). To the extent that development continues in the WUI and pushes further into areas prone to wildfires, the risks to lives and property could continue to grow.

Unhealthy Forests. Much of the state's forestlands are unhealthy, which means they tend to be dense with small trees and brush. Comparatively, a healthy forest typically has fewer trees that are larger and more established and also has less brush. As described in **Figure 4** (see next page), healthy forests tend to be more resilient and less prone to severe wildfires than unhealthy forests. The brush and small trees common in unhealthy forests serve as "ladder fuels" to carry wildfires into tree canopies, increasing their spread. Healthy forests tend to have less severe wildfires that burn through the brush and may leave tree canopies intact. Many forestlands are in an unhealthy condition as a result of historical failure to implement logging best practices and years of suppressing naturally occurring wildfires. In addition, the state's forestlands have many dead, dying, or diseased trees as the result of past drought conditions and pest infestations that further exacerbate the severity of wildfires by providing more combustible fuels.

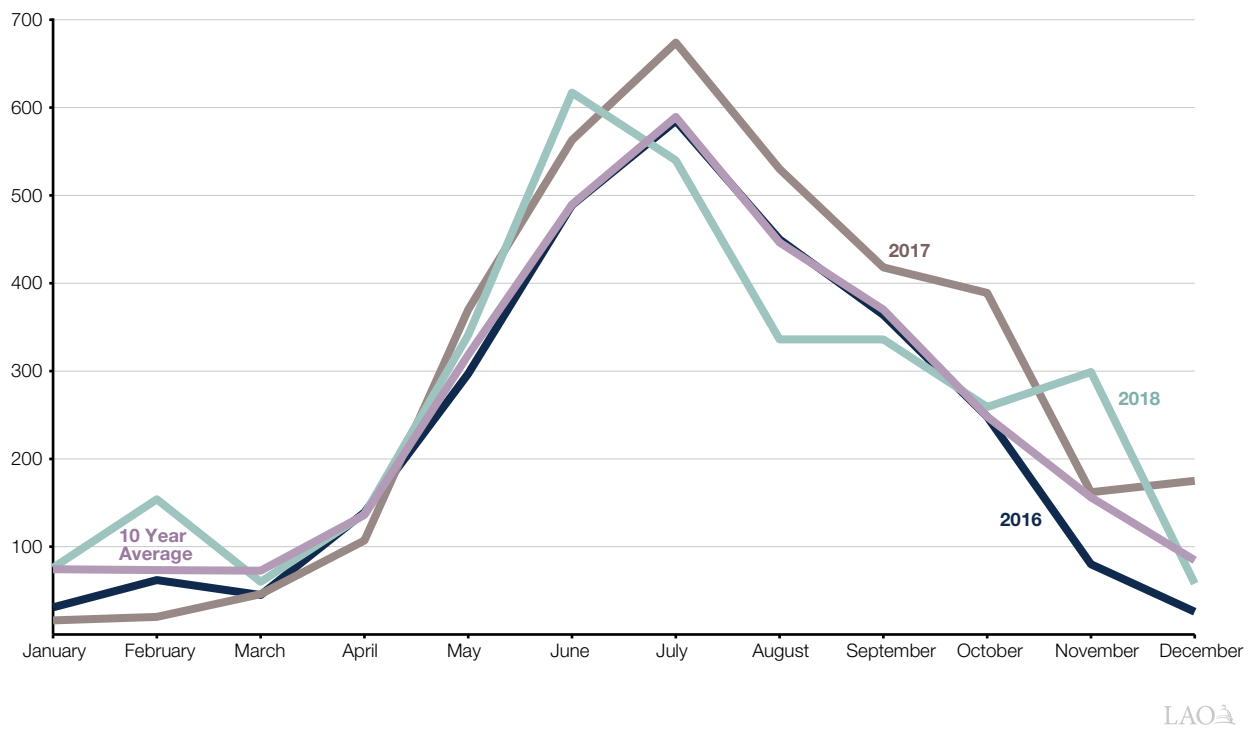
Climate Change. Climate scientists project that climate change will contribute to hotter weather and longer dry seasons in California than was previously typical. These changes can negatively affect forest health and increase wildfire risks because the increased prevalence of droughts and warmer weather could result in longer wildfire seasons in the future. This is because extremely dry conditions in combination with high winds can result in embers from a wildfire being blown miles away from the main fire. In such cases, wildfires have jumped across fire breaks, roadways, and bodies of water. For example, weather conditions were a major factor in several of the recent wildfires that were particularly destructive, such as the Camp Fire.

Utility Infrastructure Management. Only about 10 percent of fires are started by utility equipment, and many of those fires result in little or no property

Figure 3

Even in Recent Destructive Wildfire Years, Few Wildfires Have Occured in the Winter

Number of Fires

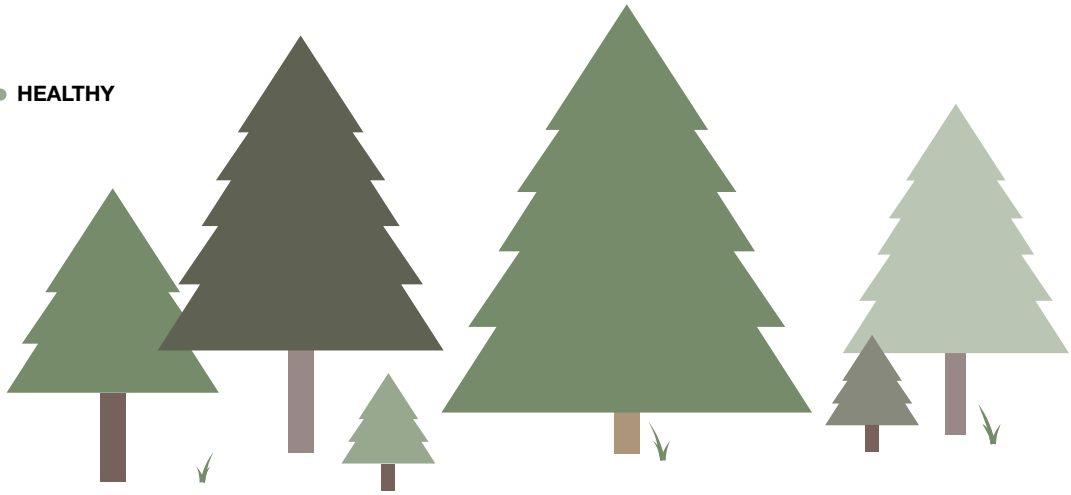


damage. However, some of these fires can cause significant damage as has occurred in recent years. Utility powerlines caused at least 8 of the 20 most destructive fires (40 percent) in California's history. Seven of these utility-caused fires occurred since 2007, and six have occurred since 2015. Wildfires caused by powerlines can be particularly damaging, in part, because some of the factors that cause utility ignitions—such as high winds damaging electrical lines—also contribute to a rapid spread of fire that is difficult to control. For example, Pacific Gas and Electric (PG&E) equipment started the 2018 Camp Fire.

Figure 4

Comparing the Potential Impacts of Healthy and Unhealthy Forests

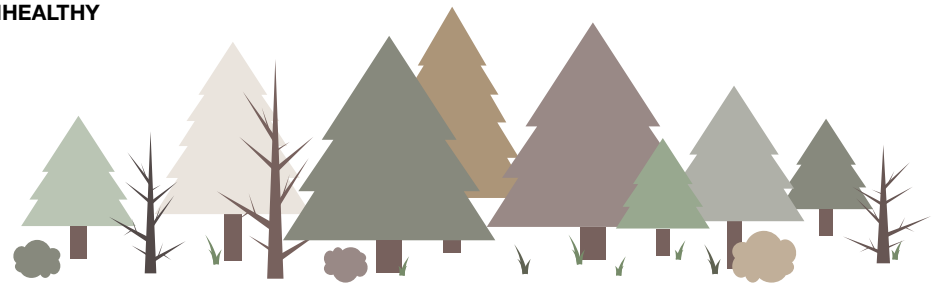
HEALTHY



Sporadic small trees and brush, comparatively more large and older trees, 40-60 trees per acre.

- Smaller and less intense wildfires.
- Increased forest resilience to pests, drought, and disease.
- Greater mitigation against climate change.
- Protected and potentially increased water supply.

UNHEALTHY



Prevalent small trees and brush, comparatively fewer large and older trees, 100-200 trees per acre.

- Increased risk of severe forest fires.
- Less resilient forests, large numbers of dead trees.
- Loss of carbon sequestration benefits, potential increase in emissions.
- Threats to water supply and quality, and to hydropower generation.

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Key Challenges to Managing Wildfires in California

Wildfire risks can be addressed through (1) prevention—reducing the likelihood that a wildfire will start, (2) mitigation—lessening the damage that wildfires cause when they do occur, and (3) response—suppressing fires after they start. As we discuss in this section, the state faces numerous challenges in addressing wildfire risks because of the number of different entities involved, competing demands and incentives, high costs of wildfire activities, and the uncertain nature of wildfires.

Many Different Entities Involved. There is no single entity with responsibility over wildfire issues in the state. On the contrary, there are numerous entities involved, including various state and federal departments responsible for forest management and wildfire response in different jurisdictions, local agencies responsible for fire protection and land use planning, private landowners, and electric utilities. Each of these entities often has a somewhat narrow role in wildfire-related issues, such as focusing on only certain prevention, mitigation, or response activities. Figure 5 summarizes the key wildfire responsibilities of certain state, local, federal, and private entities.

This challenge is illustrated in the fact that the state does not own or have direct control over most of the 33 million acres of forestlands in California. As Figure 6 (see next page) shows, the federal government owns 57 percent (nearly 19 million acres) of California forestlands. The next largest share, covering 25 percent (8 million acres) of forestlands, belongs to private nonindustrial landowners. Private industrial landowners—primarily timber companies—own 14 percent (4.5 million acres) of forestlands. State and local governments own the remaining 3 percent (1 million acres) of forestlands. The complex ownership structure of forestlands in the state presents challenges, such as with coordinating and implementing forest health projects that can span multiple different landowners.

In addition, electric utilities have a critical role to play in wildfire prevention by reducing the number of fires started by powerlines. Utilities can take many different actions to reduce the risks, including clearing trees located near powerlines (vegetation management), upgrading poles and wires, burying powerlines underground, and de-energizing powerlines during high-risk weather conditions (referred to as public safety power shutoff [PSPS] events).

Figure 5

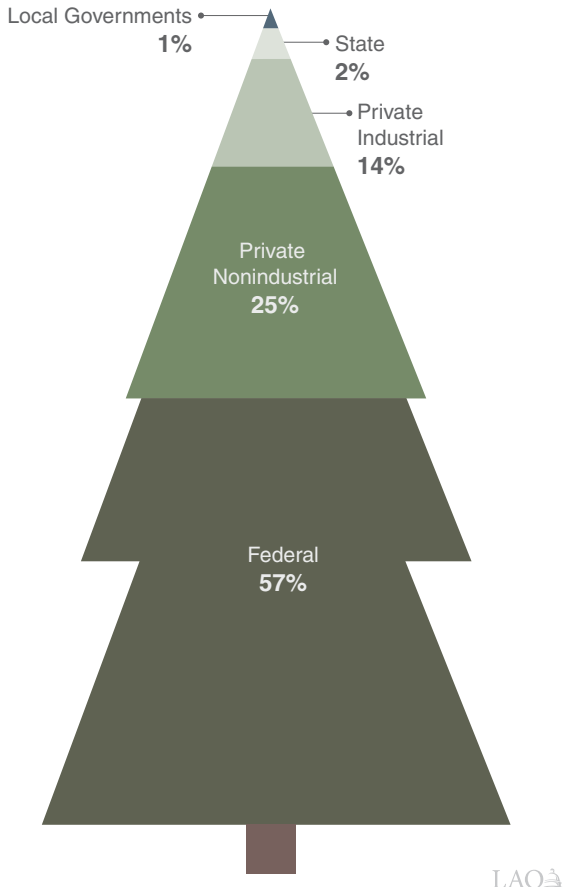
Major Entities Involved in Wildfire Management

State Agencies	
California Department of Forestry and Fire Protection	Suppresses wildfires on wildlands within "State Responsibility Areas" (which includes over 31 million acres of mostly privately owned forestlands). Administers forest health and fire prevention programs.
Office of Emergency Services	Coordinates planning, response (including mutual aid), and recovery efforts related to wildfires and other types of disasters.
California Military Department	Mobilizes California National Guard resources to assist with wildfire mitigation, response, and recovery-related activities.
California Public Utilities Commission	Regulates investor-owned electric utilities and oversees utility wildfire mitigation plans.
Federal Agencies	
U.S. Forest Service	Manages and suppress wildfires on federal lands in California. Owns and manages forests. Oversees activities related to resource development, land conservation, and recreation.
Bureau of Land Management	Owns and manages forests. Oversees activities related to resource development, land conservation, and recreation.
Local Agencies	
Local fire districts	Suppress wildfires in local responsibilities areas. Participate in state's mutual aid system.
Cities and counties	Operate planning departments that make land use and zoning decisions related to development in the wildland urban interface.
Other Entities	
Electric utilities	Manage electrical infrastructure (such as powerlines) and undertake various actions to reduce risks of wildfires started by their equipment.
Private landowners	Own forestlands for various purposes including timber harvesting, residential, commercial, future development, and open space.

Competing Demands and Complicated Incentives. Another challenge relates to competing demands and potentially misaligned incentives. For example, privately owned lands (in particular, nonindustrial forestlands) are managed to meet different purposes, including for residential and business development, and open space. Some of these uses may not align with forest management best practices that reduce wildfire risks. For instance, forestlands can be attractive sites for development, in part because of the lower cost of land compared to other regions of the state. Because local governments do not face most costs associated with wildfires and because they typically consider a range of factors when making development decisions, they might not fully account for wildfire risks in their land use planning decisions. However, the increase in development in these areas can expose more properties and people to wildfire risks.

Figure 6

Majority of Forestlands in California Owned by Federal Government



An example of complicated incentives is California's current legal structure of "inverse condemnation," which makes utilities liable for all property damage associated with fires started by their equipment, regardless of whether or not they acted negligently. This structure of paying for wildfire costs started by utilities allocates a significant amount of risk to utilities—including both ratepayers and shareholders. As a result, they have a substantial incentive to invest in activities to reduce the risk of fires caused by their equipment through such things as vegetation management and equipment improvements. On the other hand, the legal structure limits some of the financial risk borne by property owners who live in high-risk fire areas—and insurers who cover those properties—because they can recover costs from utilities that started the fire, regardless of whether the utility was negligent. As a result, these owners have somewhat less of a financial incentive to invest in fire prevention activities to protect their home, such as defensible space.

Another example of complicated incentives is the role of property insurance. Property insurance rates reflect, to some extent, the risk of damage related to wildfires (and other factors). The differences in rates could provide a financial incentive for homeowners to build and purchase properties in lower-risk regions, or potentially invest in different risk reduction activities (such as home hardening). However, insurers must comply with various laws and regulations in setting the rates they will charge for property insurance policies. These regulations generally require insurers to consider historical losses and strictly limit their ability to consider expectations about future risk. This likely reduces the degree to which property insurance rates serve as an effective mechanism to encourage wildfire risk reduction. Moreover, insurers are not required to offer property insurance coverage. As a result of the growing wildfire damage in recent years and some of the limits on the ability to adjust rates in a way that reflect expectations about future risk, major insurers are increasingly declining to offer

insurance coverage for high-risk properties located in the WUI.

Wildfire Activities Are Costly. Wildfire prevention, mitigation, and response activities can be costly. For example, utility wildfire mitigation activities can be expensive and are ultimately paid by electricity ratepayers. Estimated total ratepayer costs of 2019 investor-owned utility wildfire mitigation plans were $3.5 billion. (Most of these costs are still subject to California Public Utilities Commission [CPUC] review and approval in future years.) Furthermore, utility wildfire prevention activities can have broad regional economic and public safety impacts for households, businesses, communication providers, health care facilities, and other public services from the loss of electricity during PSPS events. In response to recent legislative direction and PSPS events, CPUC has expanded and modified the Self-Generation Incentive Program, which traditionally provides funding for alternative energy. The program now provides over $100 million annually (ratepayer funds) in electricity storage incentives for residential customers and critical facilities in certain high fire risk areas or who have been affected by more than one PSPS event.

Similarly, making significant improvements to the health of the state's forestlands is estimated to cost billions of dollars and would have to occur over many years. This is because of the magnitude of unhealthy forestlands in the state, as well as the long-term nature of improving forest health. For example, conducting a forest health project in an area does not result in that forestland immediately becoming healthy. Instead, multiple projects in the surrounding areas would be needed to reduce the risk of severe wildfires affecting the project site. Moreover, these projects would need to be maintained over decades—such as through periodic use of prescribed fire to reduce fuels and allow for the growth of larger trees to develop.

Property owners can also undertake activities to mitigate the risks of wildfire damage by taking certain steps, such as maintaining defensible space by removing vegetation and other flammable items from around their buildings, as well as "hardening" structures, such as by using nonflammable roofing and siding. In some cases, taking these steps can be costly to property owners.

The state's wildfire response efforts, while necessary, are also quite expensive. As we discuss in more detail later in this report, the state pays roughly $2 billion annually from the General Fund for the California Department of Forestry and Fire Protection's (CalFire's) wildfire response activities.

Extreme Wildfire Events Can Strain Response Capacity. While the state generally can plan around the known wildfire season, it is difficult to plan for extreme wildfire events. For example, in 2017 and 2018, the state experienced particularly destructive wildfires that placed significant strains on the state's capacity to respond. In 2017, roughly 6,000 requests for fire engines (out of a total of about 17,000 requests) went unfulfilled through the state's mutual aid system. We describe the state's typical process for addressing the seasonal and somewhat unpredictable nature of wildfires through the use of flexible resources (including the mutual aid system) in the box on page 10.

IMPORTANCE OF DIRECTING RESOURCES EFFECTIVELY

There is significant funding spent each year related to wildfires, particularly by the state, as well as private utilities and federal and local governments. This includes recent funding augmentations and policy changes made by the Legislature and the Governor. While these recent steps have addressed urgent concerns, ongoing challenges with addressing wildfire risks make it important that the state prioritize resources efficiently and adopt effective policy changes.

Current Funding Provided for Wildfire Prevention and Response

State Provides Significant Baseline Funding Related to Wildfires. In the current year, the state has budgeted about $2.5 billion for wildfire prevention and response activities for CalFire. This includes roughly $1.8 billion of baseline resources for fire suppression, including year-round and seasonal firefighters. In addition, the budget includes a set-aside—the Emergency Fund (E-Fund)—that provides additional funding as needed for emergency wildfire response. E-Fund expenditures are generally in the range of a few

hundred million dollars annually, although the amount varies widely depending on the severity of each wildfire season. CalFire's budget also includes funding for forest health and fire prevention projects (such as constructing fire breaks). The current level of funding for these purposes is $364 million, which reflects limited-term augmentations made in the last couple of years. (CalFire's budget typically has included about $100 million annually for these purposes.)

The Governor's Office of Emergency Services' (OES') current budget includes $122 million for emergency management services, which includes coordination of disaster activities—including, but not limited to, wildfires—as well as homeland security. The amount of funding OES ultimately spends responding to wildfires, as opposed to other disasters, depends on the severity of each wildfire season, as well the extent to which the state experiences other disasters.

Recent Funding Augmentations and Policy Changes. In response to growing wildfire risks and the particularly severe 2017 and 2018 wildfire seasons, the state has augmented funding for various wildfire-related activities, as well as enacted policy changes to increase fire response capacity, improve forest health, protect communities, and prevent utility-started wildfires. **Figure 7** shows the key funding augmentations made in recent years. As the figure shows, funding augmentations have been provided for both mitigation efforts (such as grants to improve forest health) as well as increased fire suppression resources (such as CalFire staff, fire engines, air tankers, and helicopters). As shown in the figure, these funds were provided both on an ongoing and limited-term basis.

In addition, the Legislature has passed numerous bills to change state policies and programs in recognition of increasing wildfire risks. For example, Chapter 626 of 2018 (SB 901, Dodd) included a

Key Approaches to Providing Flexible Wildfire Response Resources

The need for firefighting resources to protect communities is relatively high during the peak fire season and relatively low during the winter. The state implements several strategies to provide flexible resources to align with the variation in need throughout the year and from one year to the next. This includes both directing resources to active wildfire events and also prepositioning resources to high-risk areas (such as areas forecasted to experience severe wind events). Two primary types of flexible resources include the California Department of Forestry and Fire Protection (CalFire) seasonal resources and the state's mutual aid system.

CalFire Seasonal Resources. One way that the state currently addresses this challenge is for CalFire to hire seasonal firefighters that can work for up to nine months out of the year. CalFire also maintains a fleet of 53 reserve fire engines to provide for "surge capacity" to respond to the higher number of wildfires that occur during the peak season. (For comparison, the department operates 356 fire engines on a regular basis, including 65 year-round engines.)

Mutual Aid System. In addition, the state relies on a system of mutual aid to augment firefighting resources during critical periods. The state's mutual aid system, which is coordinated by the Governor's Office of Emergency Services, relies on communities helping each other during times of high need. Specifically, when a fire (or other disaster) is large enough that it overwhelms a community's capacity to respond, it can request additional resources—such as fire engines or other equipment—from other governmental entities through the state's mutual aid system. In turn, these communities are expected to reciprocate and to provide assistance to others, when requested and reasonably available. The state supports the mutual aid system in a number of ways, such as providing state-funded fire engines to local communities. The mutual aid system plays a critical part of the state's capacity to respond to large wildfires and generally is considered successful.

Figure 7

Key State Wildfire-Related Funding Augmentations in Recent Years

California Department of Forestry and Fire Protection (CalFire)

- ***Blackhawk Helicopters.*** $315 million one time (General Fund) over a few years beginning in 2018-19 to replace all 12 of CalFire's helicopters, and $14 million ongoing to support increased maintenance and staffing associated with the helicopters.
- ***Forest Health and Fire Prevention Grants.*** $165 million annually (Greenhouse Gas Reduction Fund [GGRF]) for five years beginning in 2019-20 for forest health and fire prevention grants (required by Chapter 626 of 2018 [SB 901, Dodd]).
- ***13 Year-Round Fire Engines.*** About $40 million (mostly General Fund) in 2019-20 to purchase and staff 13 additional fire engines on a year-round basis. Includes $8.3 million (one time) to purchase the fire engines and $32.6 million ongoing for 131 positions.
- ***Prescribed Fire Crews.*** $35 million annually (GGRF) for five years beginning in 2019-20 for ten dedicated prescribed fire crews (required by SB 901).
- ***Innovative Procurement.*** $15 million one time (General Fund) in 2019-20 for CalFire to work with vendors to test proofs of concept for various potential firefighting technology solutions.
- ***Air Tankers.*** $13 million ongoing (General Fund) beginning in 2019-20—increasing to $50 million upon full implementation in 2023-24—for contract funding for flight crews, maintenance parts and logistics, and 50 additional positions to operate and maintain seven C-130 air tankers that CalFire expects to receive from the federal government.
- ***Heavy Fire Equipment Operator Staffing.*** $10.6 million ongoing (General Fund) beginning in 2019-20 for 34 additional heavy fire equipment operators to operate bulldozers.

Governor's Office of Emergency Services (OES)

- ***California Disaster Assistance Act Funding.*** Various one-time and ongoing General Fund augmentations in recent years. For example, the state provided an $88.1 million augmentation in 2018-19—$64.4 million one-time and $23.5 million ongoing—and $28.8 million on a one-time basis in 2019-20.
- ***Public Safety Power Shutoff Mitigation.*** $75 million one time (General Fund) in 2019-20 for state and local agencies to plan for and mitigate the effects of investor-owned utility-led power shutdowns implemented to reduce the risk of wildfires sparked by utility-owned equipment.
- ***Mission Tasking Fund and Other Disaster-Related Support.*** $27.5 million ($26.6 million General Fund and $874,000 federal funds) in 2019-20 to support various disaster and emergency-related purposes. Includes $20 million one time to create a mission tasking fund for state agencies that have been tasked by OES to perform response and recovery activities for declared disasters and $7.5 million ongoing to support 88 positions to administer the mission tasking fund and provide staff augmentations across the department.
- ***110 Fire Engines.*** $25 million one time (GGRF) in 2018-19 to purchase 110 additional fire engines, and $1.1 million ongoing to maintain and fuel the additional engines.
- ***Fire Engine Prepositioning.*** $25 million annually to pre-position mutual aid fire engines and other related equipment in order to decrease local response times to potentially destructive wildfires and other disasters. This funding was provided on a one-time basis in 2017-18 (GGRF) and in 2018-19 (General Fund). Funding was extended on an ongoing basis in 2019-20 (General Fund).
- ***Emergency Operations and Critical Support.*** $20.4 million (General Fund) and 54.5 positions in 2016-17 to support a variety of activities across OES. Includes $10 million (one time) to provide additional fire engines to local fire departments, as well as ongoing funding for various activities, such as disaster coordination, fire-related staffing, and information technology.
- ***Disaster Recovery and Hazard Mitigation Workload.*** $14.4 million annually ($11.6 million in Federal Trust Fund authority and $2.8 million General Fund) for three years starting in 2018-19 for additional workload related to disaster recovery and hazard mitigation.
- ***Emergency Response Operations.*** About $1.6 million ongoing (General Fund) and eight positions starting in 2018-19 to support local agencies and coordinate emergency response activities.

Other Departments

- ***Public Outreach on Disasters.*** $50 million one time (General Fund) in 2018-19 for OES and the Office of Planning and Research to administer an outreach effort known as the California For All Emergency Preparedness Campaign.
- ***Administrative Resources for Response Activities.*** $1.7 million ongoing (General Fund) and eight positions for the California Military Department to maintain, improve, and expand use of military air and ground administrative resources for emergency response activities, including fires.

variety of policy changes intended to help reduce wildfire risks, including additional requirements for utility wildfire mitigation plans and streamlining the processes for removing trees to create defensible space around structures in high fire threat areas and establish fire breaks. Subsequently, Chapter 79 of 2019 (AB 1054, Holden) and Chapter 81 of 2019 (AB 111, Committee on Budget) established additional utility oversight requirements, including establishing the Wildfire Safety Division within CPUC—which will become the Office of Energy Infrastructure Safety within the California Natural Resources Agency on July 1, 2021—to review wildfire mitigation plans and other aspects of utility safety.

Potential for Inefficient Resource Allocation and Adverse Consequences

Lack of Strategic Approach Increases Risk of Inefficient Resource Allocation. In the coming decades, the state will likely continue to face increased risks related to severe wildfires, as well as demands to increase funding and resources to respond to wildfire risks. Without a broad and comprehensive evaluation of wildfire risks and mitigation strategies it will be difficult for the Legislature to efficiently and effectively allocate additional funding related to wildfires. For example, in the absence of high-quality information about the cost-effectiveness of different types of risk reduction and response efforts, the state might not effectively balance funding for prevention and mitigation with funding for response capacity. Along those same lines, not having good cost-effectiveness information can make it difficult to prioritize resources for specific strategies, including how to choose among different mitigation options. Similarly, if the state does not maintain good information about the regions where different strategies could be most effective, the state might commit forest health or other prevention and mitigation resources to regions that should be of lower priority.

Consequences of Poor Resource Allocation. We note that even the most efficient allocation of resources will not allow the state to completely avoid damaging wildfires in the future. However, ineffective allocation of resources could contribute to higher risks to people and properties, as well as increased costs to the state and local communities associated with recovery after wildfires do occur. Much of state and local government costs associated with the most severe wildfires are eventually reimbursed by the federal government. However, even when federal reimbursements are available, the state has to make upfront payments before receiving reimbursements, and it still usually has to pay a share of the total costs. As an example of the costly nature of wildfire recovery, the state has made upfront payments of over $2 billion to remove debris resulting from the Camp Fire; 90 percent of these eligible costs will be reimbursed by the federal government.

Legislature Has Taken Steps to Begin Informing a Strategic Approach. The Legislature has taken steps to begin collecting additional information that would facilitate a more strategic approach to addressing wildfire risks. For example, as part of the 2019-20 budget package, the Legislature required CalFire and OES to conduct an assessment of existing wildfire response capacity through state and mutual aid resources to identify gaps in capacity, cost-effective approaches, and fire response goals. This report is due on April 1, 2020. (Given the limited amount of time and resources available to the administration to complete this report, the Department of Finance indicates that the report will not include responses to several of the requirements.) Other recent legislative changes also could be helpful in informing the state's approach to addressing wildfire risks, such as requirements to compile information on low-cost and cost-effective home hardening solutions and the creation of the Wildfire Safety Advisory Board to compile information on best practices and advise the state.

RECOMMENDATIONS

In order to build on recent augmentations and policy changes and to ensure resources are allocated effectively, we recommend that the Legislature require the development of a statewide strategic wildfire plan. The purpose of the plan would be to inform and guide state policymakers regarding the most effective strategies for

responding to wildfires and mitigating wildfire risks. This could include guidance on future funding allocations to ensure the highest-priority and most cost-effective programs and activities receive funding and that the state achieves an optimal balance of funding for prevention and mitigation activities with demands to increase fire response capacity. A strategic wildfire plan could help address many of the challenges we identified above, such as how best to coordinate the efforts of the numerous entities involved in prevention and mitigation activities, the most efficient ways to quickly augment response capacity in extreme wildfire events, and the most cost-effective strategies for reducing wildfire risks.

In addition, we recommend that the Legislature task a state entity with creating the strategic wildfire plan and provide clear direction on the development of the plan. (Although, as we discuss later in this report, there is no existing state entity that is clearly best suited.) The development of the wildfire strategic plan would be an iterative process of synthesizing research, identifying need for new research, and translating available research into an actionable plan. Developing the initial plan will likely take a couple of years and require some additional resources, but should result in longer-term savings to the extent that it results in more cost-effective and targeted allocation of resources.

Require Development of Statewide Strategic Wildfire Plan

We recommend that the Legislature approve budget trailer legislation to require the development of a statewide strategic wildfire plan including certain key elements and information.

Establishing Risk-Reduction and Response Goals. An effective strategic wildfire plan should start by establishing the key risk-reduction goals for the state to achieve. Developing these goals is a critical first step because they would establish targets towards which agencies could focus their efforts and against which progress could be measured. Moreover, clarifying the state's goals would better articulate the level of risk tolerance the state has regarding wildfires. While the overarching objective of the state's wildfire strategy should be about improving public safety, the plan should identify more specific goals. These goals should include ones for mitigation and prevention efforts, as well as response. With respect to prevention and mitigation goals, these should be ones that illuminate the underlying factors contributing to increasingly severe and destructive wildfires, such as measurements of forest health and levels of community preparedness. The plan also should develop goals and specific targets for fire response capacity, such as response times and the state's ability to handle multiple large disasters at the same time.

Identifying the Most Cost-Effective Approaches. We recommend that the strategic wildfire plan include an assessment of the cost-effectiveness of various strategies. This will likely require efforts to obtain data and identify research on the cost-effectiveness of different programs and activities. In addition, these cost-effectiveness assessments should consider different types of costs and benefits—including both fiscal and non-fiscal effects—as well as how these costs and benefits are distributed among state, local, federal, and private entities. The data and research collected could then be used to assist the state in targeting resources in ways that have the greatest potential to maximize benefits, including the reduction of wildfire risks. To the extent that there are gaps in the research on cost-effective strategies, this should lead to recommendations within the plan regarding where research funding could best be directed to inform future policy and resource allocation decisions.

Determining the Amount of Resources to Achieve Goals. The strategic plan also should evaluate the amount of resources—including funding, personnel, and equipment—that would be required to achieve each of the identified prevention, mitigation, and response goals in a cost-effective manner. For example, the plan should address the need for flexible wildfire response capacity due to the seasonal nature of wildfires, including both year-round resources, as well as resources for surge capacity during peak wildfire season. For goals that may take several years to achieve, the plan should identify a multiyear funding and implementation plan for how to achieve the identified goals. In addition, the plan should

evaluate the availability and appropriateness of various potential funding sources. This should include which types of costs are best paid for by different entities, including the state, local governments, utilities, and private landowners.

Measuring Co-Benefits of Different Approaches. We also recommend that the strategic plan identify the key co-benefits of various wildfire mitigation or response strategies, as well as the best ways of measuring those co-benefits and integrating that information into decision-making. For example, improving the health of forestlands in the state can have an array of ecosystem benefits, such as improving watershed health, improving wildlife habitat, reducing air pollutants, and sequestering carbon. Developing ways to consistently measure and integrate these types of nonfiscal benefits into decision-making could be beneficial, particularly when trying to compare forest health projects to other types of wildfire risk-reduction activities. As another example, providing resources to local fire departments that can assist the state during peak wildfire season through the mutual aid system would benefit not only the state's response capacity, but also local fire departments by bolstering their resources. We think consideration of co-benefits will be particularly important given that the state has limited information on the cost-effectiveness of various strategies.

Balancing Demand for Resources Within and Across Stages—Prevention Through Response. Given the complexities and costs associated with addressing wildfire risks, the state very likely will face a situation where the level of resources identified to achieve the goals of the strategic wildfire plan exceeds available funding. Accordingly, it would be important for the strategic wildfire plan to include an assessment of how to prioritize limited resources and balance available resources across competing priorities, such as based on additional information on cost-effectiveness and co-benefits. This could include recommendations of how best to balance the allocation of resources to actions that address near-term risks versus actions with the potential for longer-term benefits or savings. In particular, there might be high demand now to increase fire response capacity because of the recent, very destructive wildfires. However, improving the underlying health of forestlands in the state could be found to have greater longer-term benefits and cost savings.

Ensuring Effective Governance Structures. Lastly, we think the strategic plan should assess whether the state has effective governance structures to implement wildfire-related programs and activities. For example, this assessment should include determining the entities best suited to performing certain activities, identifying any duplication of efforts, and identifying effective coordination strategies across the various entities with wildfire-related responsibilities. In evaluating governance structures, the strategic wildfire plan should also assess whether public and private incentives are appropriately aligned and identify ways to address misaligned incentives. For example, the plan might make recommendations on how to better incentivize private forestland owners to implement forest management best practices or encourage lower-risk development patterns in the WUI.

Task State Entity With Development of Plan

Various Existing Entities Could Be Tasked. No existing state entity is obviously best suited to develop the strategic wildfire plan we describe earlier. Most of the state entities that work on wildfire-related issues have expertise or responsibilities related to only part of the spectrum of wildfire prevention, mitigation, and response activities. Recognizing that even though there is no clear best fit, the Legislature could task an existing state entity with responsibilities related to wildfire risk reduction or governmental planning (such as the Wildfire Safety Advisory Board or Office of Planning and Research) with the development of a statewide strategic wildfire plan. Alternatively, the Legislature could consider creating a temporary commission of subject matter experts, with input from various state and local entities, such as was done with the SB 901 commission to address certain utility wildfire cost allocation issues.

Timing and Resources Needed. Regardless of which entity is tasked, the development of the strategic plan will likely require some staff

resources—costing perhaps in the range of a few hundred thousand dollars annually for a couple of years. Having dedicated staff will likely be needed to synthesize and identify gaps in existing research, coordinate with departments and stakeholders, and develop written reports.

Provide Clear Direction on Strategic Plan. We recommend that the Legislature adopt budget trailer legislation to provide clear legislative direction for completion of the strategic wildfire plan, including (1) which entity is responsible for the plan; (2) the specific content to be included in the plan; (3) the timing of the final and any interim reports; and (4) how various entities should be involved in the development of the plan, including state agencies, local representatives, and academic researchers. Given the complexities of developing a statewide strategic wildfire plan, we recommend that the entity tasked with its development be required to provide interim reports at least annually to share the research and information that has been identified and to assist the Legislature with making budgetary decisions over the coming few years until a statewide strategic wildfire plan is complete.

PART II: ASSESSING THE GOVERNOR'S BUDGET PROPOSALS IN ABSENCE OF STATEWIDE STRATEGY

Ideally, the state would have a strategic wildfire plan to determine the most cost-effective approaches to mitigating wildfire risks and responding to wildfires when they occur and to identify gaps or redundancies in existing efforts. Such an approach would assist the state in allocating new funding related to wildfires to ensure funding augmentations meet the highest priorities, as well as reallocating existing resources if necessary. However, in the absence of a strategic plan, the Legislature must still make funding decisions and respond to the budget proposals put forward by the Governor. In this part of the report, we review the Governor's various 2020-21 wildfire-related budget proposals, and provide our evaluation of proposals based on the individual merits of each proposal, how consistent they are with legislative priorities, whether proposals raise questions about how well they might fit into a strategic wildfire plan, and how proposals impact ongoing General Fund commitments.

GOVERNOR'S 2020-21 BUDGET INCLUDES NUMEROUS WILDFIRE-RELATED PROPOSALS

The Governor's budget provides a total of $492 million (mostly from the General Fund) for various proposals across multiple departments for wildfire-related augmentations, as shown in Figure 8 (see pages 16 and 17). This includes $178.7 million for CalFire, $76.5 million for OES, $30.2 million for CPUC, and $206.2 million for various other departments and multi-departmental proposals. (In addition, the budget assumes $750 million for forest health and wildfire prevention from the proposed climate bond, which we discuss in our recent report *The 2020-21 Budget: Climate Change Proposals*.) Many of the Governor's proposals provide ongoing resources, such as permanent state staff, to augment programs and increase the state's fire response capacity.

ASSESSMENT

We evaluate each of the Governor's various wildfire-related proposals and find that (1) even in the absence of a strategic plan, some proposals appear reasonable; (2) several proposals are promising but lack important implementation details; and (3) many proposals are difficult to evaluate because they lack basic justification, raise questions about whether they would fit into a strategic approach, or both.

Despite Absence of Strategic Plan, Some Proposals Appear Reasonable

Some of the Governor's proposals appear to have merit, despite not being able to evaluate them in the context of a statewide strategic approach

to wildfires. This is because the proposals appear justified based on workload and demonstrated programmatic demands. Further, we think that the resources requested in these proposals are unlikely to change substantially even if the state develops a strategic approach to wildfires as we recommend previously. In total, we find that nine of the Governor's wildfire-related proposals appear reasonable.

Various Capital Outlay Projects (CalFire). The Governor's budget includes $11.9 million from the General Fund in 2020-21 to begin four major capital outlay projects—the replacement or relocation of two helitack bases, one conservation camp, and an auto shop and warehouse—and several minor projects. While the full costs of these projects will be substantial, we find that the new projects serve critical infrastructure needs for the department because they address aging facilities that are no

Figure 8

Summary of Governor's Wildfire-Related Budget Proposals

Proposal	Funding Requested	Description
Department of Forestry and Fire Protection (CalFire)		
Relief staffing	$93.4 million in 2020-21, increasing to $142.6 million ongoing, mostly General Fund	294 positions in 2020-21, increasing to 555 positions ongoing, for (1) additional firefighting staff, (2) increased training academy staff, and (3) 14 fire engines for training purposes.
Various capital outlay projects	$39.4 million General Fund	Four new capital outlay projects and various minor projects ($11.9 million) and continue previously approved projects ($27.5 million). New projects include replacing two helitack bases, a conservation camp, and an auto shop.
Mobile equipment replacement	$19 million General Fund for two years	Replace CalFire vehicles and mobile equipment.
Direct mission support—administrative staffing	$16.6 million ongoing ($10.8 million General Fund and $5.8 million reimbursements)	103 administrative positions.
Wildland firefighting research grant	$5 million one-time General Fund	Grant to fund firefighting research related to protective equipment and safety.
Hired equipment staffing	$2.9 million in 2020-21 and $2.4 million ongoing General Fund	Ten positions to operate a program to contract for firefighting equipment from private vendors.
Mobile equipment staffing	$1.7 million in 2020-21 and $1.5 million ongoing General Fund	Nine positions related to processing and procurement of vehicles and mobile equipment.
Building standards and defensible space education—SB 190	$689,000 Building Standards Administration Special Revolving Fund	Two positions for the Office of the State Fire Marshall to implement provisions of Chapter 404 of 2019 (SB 190, Dodd) related to defensible space inspections and fire safety building standards training.
Office of Emergency Services (OES)		
Community power resiliency	$50 million one-time General Fund	Support for state or local costs associated with preparing and responding to power shutoff events.
California Disaster Assistance Act	$16.7 million one-time General Fund	Financial assistance to local governments for costs incurred as a result of disasters, including fires.
Disaster planning, preparedness, and response	$9.4 million in 2020-21 ($9.2 million General Fund and $255,000 Federal Trust Fund authority), increasing to $10.4 million ongoing	50 positions to support many areas across the department, such as finance and administration and response-related activities.
State Operations Center improvements	$377,000 General Fund	Preliminary plans and working drawings phases of a project to modify the State Operations Center. (The total project cost is estimated to be $9.5 million.)

(Continued)

longer compliant with current building codes or have operational challenges. We also raise no concerns with $27.5 million included in the budget for the next phases of previously approved CalFire capital outlay projects.

Mobile Equipment Replacement (CalFire). The budget provides $19 million (General Fund) annually for two years to replace CalFire vehicles and mobile equipment (such as fire engines and bulldozers). According to CalFire, 593 (21 percent) out of approximately 2,800 of its fleet of vehicles and mobile equipment meet the department's replacement criteria. Therefore, providing funding on a limited-term basis to replace existing CalFire vehicles that are past their useful life has merit. Even in a scenario where a strategic plan recommended that CalFire needed fewer vehicles in the future, the replacement vehicles in this proposal would still likely be needed in the coming years.

Wildland Firefighting Research Grant (CalFire). The budget includes $5 million (one time) from the General Fund for wildland firefighting research related to protective equipment and safer firefighting techniques. It is reasonable for the department to obtain research on current

Proposal	Funding Requested	Description
California Public Utilities Commission (CPUC)		
Wildfire safety and process reform	$27.6 million PUCURA includes (1) $17.6 million ongoing and (2) $10 million annually for three years	93 positions and contracting resources to implement recent legislation. Activities related to (1) reviewing and overseeing utility wildfire mitigation plans, (2) reviewing other utility applications for cost recovery and securitization, and (3) reforms to CPUC processes.
Public Advocates Office wildfire safety implementation	$2.6 million ongoing PUCPAOA	14 positions to implement recent legislation, including reviewing utility applications related to wildfire safety and financing.
Multi-Department and Other Departments		
Home hardening pilot program—AB 38 (OES/CalFire)	$110.1 million including (1) $100 million one time ($75 million federal funds and $25 million General Fund); (2) $8.3 million in 2020-21 (GGRF), decreasing to $6.1 million ongoing; and (3) $1.8 million General Fund, decreasing to $1.6 million annually for next four years.	Implement Chapter 391 of 2019 (AB 38, Wood). Provides 33 positions. Includes establishing a $100 million home-hardening grant program, conducting defensible space inspections related to real estate transactions, training defensible space inspectors, hiring mobile equipment positions, and purchasing a new fire engine.
LiDAR data (CNRA)	$80 million one time General Fund	Contract for the collection of light detection and ranging (LiDAR) data of the entire state.
Wildfire Forecast and Threat Intelligence Integration Center—SB 209 (CalFire, CPUC, CMD, and OES)	$9 million General Fund and PUCURA, decreasing $6.3 million ongoing	Establish a weather forecasting intelligence and integration center required by Chapter 405 of 2019 (SB 209, Dodd).
Emergency preparedness and response (CMD)	$3.2 million General Fund in 2020-21 and $3 million ongoing	21 positions to provide operational, logistical, administrative, and fiscal support for troop deployments.
Center for Public Preparedness (UC)	$3 million ongoing General Fund	Establish a Center for Public Preparedness at UC San Diego.
Regional disaster medical health response (Emergency Medical Services Authority)	$365,000 ongoing General Fund	Hire three medical health specialists.
Support for statewide emergency management functions (DGS)	$295,000 ongoing Service Revolving Fund expenditure authority	Two positions to enhance DGS' ability to provide support—such as procurement of critical resources—during emergencies, such as fires.
Administration and research support (Forest Management Task Force)	$210,000 ongoing Environmental License Plate Fund	Two positions to conduct various workload required by executive order.

PUCURA = Public Utilities Commission Utilities Reimbursement Account; PUCPAOA = Public Utilities Commission Public Advocates Office Account; GGRF = Greenhouse Gas Reduction Fund; CNRA = California Natural Resources Agency; CMD = California Military Department; and DGS = Department of General Services.

technology, equipment, and techniques to improve safety for firefighters.

Building Standards and Defensible Space Education—SB 190 (CalFire). The budget includes $689,000 for additional staff at the Office of the State Fire Marshall within CalFire to develop (1) a model defensible space program, and (2) WUI fire safety building standards compliance training for local agencies. This proposal appears consistent with the requirements of Chapter 404 of 2019 (SB 190, Dodd).

California Disaster Assistance Act (CDAA) Program (OES). The budget includes a one-time General Fund increase of $16.7 million (for a total of $79.3 million) for financial assistance to local governments for costs incurred as a result of disasters, including wildfires. The proposed funding level is consistent with anticipated costs for providing assistance for past disasters, and thus appears reasonable.

State Operations Center Improvements (OES). The budget includes $377,000 (General Fund) for the preliminary plans and working drawings phases of a project to modify the State Operations Center, which OES uses to coordinate resource requests and manage disasters, including wildfires. (The total project cost is estimated to be $9.5 million.) The proposed project appears reasonable to support OES' continued use of this key state facility.

Wildfire Forecast and Threat Intelligence Integration Center—SB 209 (CalFire, OES, CPUC, and CMD). The budget includes $9 million to establish the Wildfire Forecast and Threat Intelligence Integration Center. The proposal appears consistent with the requirements of Chapter 405 of 2019 (SB 209, Dodd).

Regional Disaster Medical Health Response (Emergency Medical Services Authority). The budget includes $365,000 from the General Fund to support three regional disaster medical health specialists. The proposal appears justified based on an assessment of tasks and workload not currently being performed.

Support for Statewide Emergency Management Functions (DGS). The budget includes $295,000 to enhance the Department of General Services' (DGS') ability to provide support—such as procurement of critical resources—during emergencies, such as wildfires. The proposal appears justified, and the need for DGS support is unlikely to change significantly depending on the specifics of a strategic approach.

Several Proposals Are Promising, but Lack Implementation Details

We find that several of the Governor's proposals seem reasonable in concept because they appear to address legislative priorities or involve the use of promising new technology that could help to mitigate the impacts of wildfires. However, the proposals provide a significant level of discretion to the administration to determine key implementation details, or in a couple of cases, the most effective approaches will depend on litigation that is not yet resolved. Consequently, it is difficult for the Legislature to determine whether the implementation of the proposed activities would be cost-effective, consistent with legislative priorities for limited state funds, and focused on collecting data on program outcomes to ensure that key information is available to inform future decisions. We describe the key information we find to be lacking for six of the Governor's wildfire-related proposals.

Community Power Resiliency (OES). The budget includes $50 million (one time) from the General Fund to support state or local costs related to preparing for and responding to power shutoff events, such as purchasing generators for state facilities, providing grants to local governments to help them plan for shutoff events, and helping local governments or food banks secure backup power for key facilities. While it is reasonable for the state to address the important public health and safety implications of PSPS, the proposal lacks some key information. First, the basis for the proposed funding level is unclear, particularly given that the state dedicated $75 million to these activities in 2019-20, and most of these funds have not yet been allocated to specific projects. Second, there is no specific information on the department's plans for utilizing these additional funds, such as how much of the funds would go to state entities, local governments, or other entities (such as foodbanks); how much of the funds would be spent

on the specific types of activities (such as planning activities or backup generators); or how the specific proposed activities might interact with existing rate-payer-funded programs.

Wildfire Safety and Process Reform (CPUC). The budget provides $27.6 million (Public Utilities Commission Utilities Reimbursement Account) to CPUC to implement recent legislation, including SB 901 and AB 1054. Most of the proposed funding would go toward oversight of utility wildfire mitigation plans, including developing evaluation criteria and metrics, reviewing and approving plans, monitoring compliance, and conducting enforcement. We find that the CPUC request is reasonable and consistent with recent legislation, which has clearly resulted in a substantial increase in workload at CPUC to conduct greater oversight of utility wildfire mitigation. However, the state's largest utility, PG&E, is in federal Chapter 11 bankruptcy proceedings as a result of the liability associated with fires started by its equipment. As a result, the future structure of the company is in question. The *Governor's Budget Summary* states that the administration will seek a state takeover of the utility, if necessary. Although the ultimate outcome of the bankruptcy is unclear, such a change to PG&E could have a substantial effect on CPUC workload.

Public Advocates Office Wildfire Safety Implementation (CPUC). The budget includes $2.6 million (Public Utilities Commission Public Advocates Office Account) for the Public Advocates Office to review utilities' wildfire mitigation plans, utilities' requests for rate increase changes to pay for the wildfire mitigation plans, and utility applications to securitize costs—in accordance with SB 901 and AB 1054. We find the request reasonable and consistent with recent legislation. However, similar to the CPUC request, there is uncertainty related to the PG&E bankruptcy that makes future workload unclear.

Home Hardening Pilot Program—AB 38 (OES and CalFire). The budget includes a total of $110.1 million (various fund sources) for OES and CalFire to implement the requirements of Chapter 391 of 2019 (AB 38, Wood). One component of this proposal is $100 million for financial assistance to local jurisdictions for hardening homes and other structures and increasing community resilience. While the legislation requires the financial assistance to be cost-effective, the proposal does not indicate how the program will ensure this. In fact, the proposal indicates the program could fund large grants—up to $50,000 each—for individual homes to replace roofs and siding. This appears to be a more expensive approach than focusing on low-cost retrofits that are more likely to achieve community-scale benefits. For example, retrofitting most buildings in a subdivision is more likely to reduce the spread of wildfire than retrofitting a smaller number of buildings spread throughout a community. In addition, providing larger grants will result in fewer grants in total, which the Legislature might find problematic given the significant number of homes—particularly older homes—in the WUI that do not comply with current building standards for fire safety.

In addition, while it is not related to the implementation details of the proposal, we have identified a couple of concerns with the justification for one component of the proposal. Specifically, most of the remaining funding requested as part of this proposal is related to performing defensible space inspections for real estate transactions, as required by AB 38. We find most of this requested funding to be reasonable. However, we have concerns with portions of this proposal related to three training positions, two mobile equipment program positions, and one additional fire engine. The budget includes three ongoing positions to train defensible space inspectors despite the fact that the training workload will occur on a one-time basis when the new inspectors are hired. Similarly, the budget includes ongoing mobile equipment program positions related to the one-time procurement of 22 sport utility vehicles for the defensible space inspectors. The budget also includes the purchase of an additional fire engine for training purposes that does not appear warranted. Given that it can take up to a couple of years to complete the purchase of a new fire engine due to the state's procurement process and the length of time needed for the manufacturer to build these customized vehicles, it is questionable whether the fire engine would arrive soon enough

to be used to train the defensible space inspectors. Further, at the time this analysis was prepared, the department had about 30 usable fire engines that the department is planning to sell because new replacement engines were recently purchased. It appears likely that many of these older fire engines are still functional and align with engine types used in the field by the department and could therefore be appropriate to repurpose for training purposes.

Light Detection and Ranging (LiDAR) Data. The budget includes a one-time $80 million General Fund augmentation for the California Natural Resources Agency (CNRA) to collect LiDAR data for the entire state, which could be used to better understand the geological and forest structures of various landscapes, including identifying fuel loads in forests and structures underneath tree canopies. While the use of improved technology has the potential to significantly improve state decision-making by providing better information, this specific proposal lacks an implementation plan to ensure that the state and others would use the data. For example, it is unclear whether departments are prepared to make programmatic changes necessary to incorporate the use of LiDAR data and how the new data would be used to improve decision-making. For example, the administration has not specified how CalFire would use LiDAR data to inform allocation of forest health grants. In addition, potential long-term costs of the technology are unclear because there could be additional out-year costs to keep updating the LiDAR data after the initial investment. Without a commitment to fund those out-year costs, it is unclear how useful much the data would be to state programs in the long run if the LiDAR data is not regularly updated.

Administration and Research Support (Forest Management Task Force). The Governor's budget includes $210,000 (Environmental License Plate Fund) to support the Forest Management Task Force, which was created in 2018 through an executive order. The task force currently has a director who is appointed by the Governor and no other staff. The executive order required the task force to research and make recommendations on various issues related to forest management, such as ways to improve forest health and economic development opportunities in forestlands. The Legislature also has required the task force to develop specific reports, such as on ways to streamline the regulatory approval process for forest health projects. Given the current workload of the task force, the two positions appear reasonable. However, the Legislature has not established the task force in state law as a permanent entity of state government. Adopting a statutory framework for the task force would allow the Legislature to define the scope of responsibilities and intended outcomes of the task force and ensure legislative priorities are reflected.

Some Proposals Might Not Fit Well Into a Strategic Approach or Are Not Justified

We have more significant concerns with the remaining proposals because it is unclear how they would fit into a strategic statewide approach, they lack basic workload justification, or both. While it is difficult to assess proposals in the absence of a strategic plan, some might not align with some of the key elements we think are needed in a strategic approach. In particular, several of the proposals provide costly year-round resources rather than providing flexible resources to meet peak seasonal demands. Similarly, some proposals might not align roles and responsibilities to the various state and local entities best suited for specific workload. In addition, certain proposals, or components of proposals, lack basic justification, such as quantifying staffing needs based on actual workload.

In addition, unlike most of the proposals described previously, many of these proposals would commit ongoing General Fund resources. In the absence of a strategic wildfire plan, it is difficult for the Legislature to know whether it makes sense to commit to these ongoing spending proposals, or if some of them might ultimately be determined to be a lower priority for state wildfire-related spending in the future. In many cases these proposals would be difficult to undo in the future because they commit to hiring permanent state staff positions, which cannot be easily eliminated.

Relief Staffing (CalFire). The budget includes $93.4 million (General Fund) and 294 positions—

increasing to $142.6 million ongoing and 555 positions—primarily to provide additional staffing to bolster CalFire's wildfire response capacity, which could reduce how often front-line staff have to work back-to-back shifts during peak fire season. Broadly, we have four potential concerns with this proposal. First, while it is important for the state have sufficient fire response resources—including for staff to take time off—determining whether this proposal for hundreds of additional staff provides CalFire with the most appropriate staffing level is very difficult in the absence of a strategic wildfire plan. Similarly, even under a scenario where a strategic wildfire plan identified a need for additional response staffing, it is unclear whether the most cost-effective approach would be to provide those resources to CalFire versus other state and local entities, such as to support the mutual aid system. Second, the proposal might not align with the elements we have identified as important to developing a strategic approach to wildfires. Specifically, the proposal provides year-round permanent staff, rather than providing additional flexible resources during the peak season when they are most needed. Third, the estimated number of positions does not appear to be fully justified on a workload basis because the proposal (1) is based on a staffing ratio that assumes that employees take all of their vacation and sick leave each year, which is inconsistent with patterns of actual leave taken by state employees, and (2) provides ongoing positions for the one-time workload associated with training new staff.

Fourth, we have concerns with the portion of this proposal for $11.2 million to purchase 14 new fire engines for the department's training academy. While additional training engines would be needed to train a large cohort of new fire response staff, purchasing 14 new fire engines does not appear cost-effective. Similar to the concerns raised previously with purchasing a new fire engine to train defensible space inspectors, it is unclear whether the new engines would arrive in time to be used to train many of the positions requested in the proposal. Moreover, the need for training engines could be met by repurposing older fire engines that the department would otherwise sell.

Direct Mission Support—Administrative Staffing (CalFire). The budget provides $16.6 million for 103 new administrative positions. Figure 9 shows the proposed administrative staffing augmentations compared to the currently authorized number of positions. As indicated in the figure, the proposed increase in positions is sizable compared to the base level of staffing for these units, with some units nearly doubling in size. The proposal does not appear to be based on a quantitative assessment of actual workload. While CalFire has provided some information attempting to quantify workload, the workload justification provided at the time of this analysis was incomplete and generally does not justify the need for many of the positions. This is because the information provided generally does not identify the specific tasks that the department is not able to accomplish with its existing level of

Figure 9

Governor's Budget Significantly Increases CalFire Administrative Positions—Direct Mission Support

	Current Level	Augmentation	New Level	Percent Increase
Executive Office support	2.0	1.0	3.0	50%
Legal Office	18.5	1.0	19.5	5
Office of Program Accountability	6.0	1.0	7.0	17
Headquarters Administration	24.0	7.0	31.0	29
Departmental Accounting Office and ERBU	80.6	29.0	109.6	36
Budget Office	12.5	10.0	22.5	80
Business Services Office	32.0	29.0	61.0	91
Region and Unit Administration	129.0	25.0	154.0	19
Totals	**304.6**	**103.0**	**407.6**	**34%**

ERBU = Emergency Response Billing Unit.

positions. (We note that a few of the positions requested do appear reasonable.) In addition, most of the units requesting additional positions currently have a number of vacant positions, which further raises questions about the need for the additional positions requested. For example, the Business Services Office had 9 vacancies out of 33 authorized positions in 2018-19—a vacancy rate of 27 percent.

Hired Equipment Staffing (CalFire). The Governor's budget includes $2.9 million (General Fund) and ten positions for CalFire's hired equipment program, which manages agreements with contract operators of wildfire equipment. (The program currently has one authorized position.) While the proposal identifies some workload—such as audits of contract agreements—that is not being completed to indicate the need for some increased positions, it does not clearly justify why the ten positions requested is the correct number to address the workload.

Mobile Equipment Staffing (CalFire). The budget provides $1.7 million (General Fund) in 2020-21, and $1.5 million ongoing, to support nine positions for the Davis Mobile Equipment Facility. (The facility currently has 14 authorized positions.) This proposal lacks sufficient workload justification. The Davis Mobile Equipment Facility has handled an increased level of workload due to one-time augmentations provided in each of the last couple of years to replace vehicles and other mobile equipment (such as fire trucks and bulldozers). Based on our conversation with the department, despite the increased workload and having a couple of vacant positions, the facility did not appear to develop any backlog of workload to receive and process new CalFire vehicles. As discussed previously, the budget includes $19 million for two years to replace additional CalFire vehicles and mobile equipment. This level of funding is roughly the same as the funding level for vehicle replacement in recent years. In addition, the department plans to focus the next phases of equipment replacement on replacing front-line equipment such as fire engines and crew transports. Because most of these vehicles are built according to specifications developed by CalFire, the vehicles are delivered by the manufacturer nearly complete and thus require much less time to evaluate and process before being released to the field than many of the vehicles the department has recently purchased—meaning future workload for processing new vehicles will likely be somewhat lower.

Disaster Planning, Preparedness, and Response (OES). The budget provides $9.4 million and 50 positions to augment 20 different operational and administrative areas of OES, with over two-thirds of the positions for finance and administration (19 positions) and response operations (17 positions). We find that this proposal lacks sufficient workload justification. In particular, it is generally not clear from the proposal (1) what are the current staffing levels to support the activities described, (2) what specific workload backlogs or gaps in service exist because of inadequate staffing, and (3) why the specific number of additional staff requested are justified. Additionally, we note that OES has received resources for many similar activities in recent years. Most recently, OES received $7.5 million in the current year to support 88 new positions in many of the same categories currently proposed for funding. It is unclear how the previously approved resources have been used and why the proposed level of additional resources are needed to supplement them.

Emergency Preparedness and Response (CMD). The budget includes $3.2 million (General Fund) and 21 positions to provide operational, logistical, administrative, and fiscal support for troop deployments. The California Military Department (CMD) indicates these additional resources will be needed to address disasters of increased magnitude, frequency, and complexity that it anticipates encountering in the coming decade. We find, however, that the level of future workload related to fires and other disasters for CMD is uncertain. This is in part because, absent a strategic wildfire plan, it is unclear how much of a role CMD should play in future disaster-related activities compared to other entities. For example, a major activity that CMD has undertaken recently is the clearing of vegetation in support of CalFire. However, we find that CMD may not be the most cost-effective entity to conduct this type of work, and the state might ultimately want to rely more

heavily on other entities that might be less costly, such as inmate crews.

Center for Public Preparedness (UC). The budget includes $3 million (General Fund) for the University of California (UC) San Diego to create the Center for Public Preparedness. The specific activities that would be funded under the proposal remain unclear. The proposed provisional language in the budget describes the proposal as a research initiative affecting multiple UC campuses. However, the budget plan UC submitted to us focuses primarily on conducting public outreach campaigns at K-12 schools and other community sites. Subsequently, the Department of Finance indicated to us that the administration is still confirming the use of the funds. The Legislature cannot evaluate the merit of this proposal without further clarity regarding its goals and intended activities.

In addition, our review of UC's initial plans identified three concerns. First, UC's proposed outreach activities appear to be duplicative with existing state programs. For example, the *2018-19 Budget Act* provided $50 million for OES and the Office of Planning and Research to administer an outreach effort known as the California For All Emergency Preparedness Campaign. The administration has not provided the Legislature evidence that this existing program is insufficient or oversubscribed. Furthermore, it is unclear how this new UC program would coordinate or align with existing state efforts. Second, despite the proposal providing entirely ongoing funding, UC's initial plan included certain one-time costs, such as a renovation of an existing building to house the program. UC could not clarify how it would spend the associated ongoing funding in future years once the renovation is completed. Third, UC's plan budgets around one-third of the proposed funding for campus overhead costs. Given the relatively high amount for campus administration, we question whether the state has more cost-effective options to improve public awareness statewide.

RECOMMENDATIONS

Based on our assessment, we recommend that the Legislature take a mix of actions on the Governor's various wildfire proposals. Specifically, we recommend (1) approving those proposals that appear reasonable, (2) providing additional guidance on the implementation of certain proposals, (3) withholding action on certain proposals, and (4) modifying or rejecting proposals that might not align with a strategic wildfire plan or lack justification. (We also summarize our recommendations—organized by department—in a table at the end of this report.)

Approve Proposals That Appear Reasonable

We recommend that the Legislature approve the wildfire-related proposals that appear reasonable, including proposals for (1) various CalFire capital outlay projects, (2) CalFire mobile equipment replacement, (3) CalFire wildland firefighting research grant, (4) CalFire building standards and defensible space education—SB 190, (5) OES CDAA funding, (6) OES State Operations Center improvements, (7) the Wildfire Forecast and Threat Intelligence Integration Center—SB 209, (8) regional disaster medical health response (Emergency Medical Services Authority), and (9) DGS support for statewide emergency management functions. Approving these proposals will meet clearly established workload related to wildfires that is unlikely to change even if the state develops a strategic approach to wildfires. In addition, some of the proposals will help provide additional information to better inform a strategic approach.

Provide Additional Guidance on Implementation of Certain Proposals

We identify three proposals for which we recommend that the Legislature approve with additional guidance on how they would be implemented in order to ensure that they are consistent with legislative priorities. These are proposals that we generally find to be reasonable because they implement legislative priorities or are otherwise promising, yet lack key implementation details. Our recommendations include:

- ***Clarify Community Power Resiliency (OES).*** We recommend that the Legislature adopt budget bill language to further define how the proposed funds for community resiliency

could be used. For example, the Legislature may want to specify how much of these funds are to be spent on state projects, local government projects, or projects undertaken by other entities. Additionally, the Legislature may want to specify that these funds be prioritized for certain types of eligible activities, such as providing certain types of backup power. This direction would provide additional clarity regarding the proposed use of the funds and ensure that they would be spent according to legislative priorities. We further recommend that the Legislature require OES to provide a report on how funds provided in 2020-21 were used, as well as what outcomes were achieved. This information—which would be similar to the information OES is required to provide for the PSPS funding provided in 2019-20—would facilitate legislative oversight of OES' efforts and their effectiveness at mitigating the effects of PSPS events.

- ***Provide Greater Specificity for Home Hardening Pilot Program—AB 38 (OES and CalFire).*** We recommend that the Legislature take steps to ensure that OES and CalFire limit eligible grants to the most cost-effective home hardening and community resiliency measures as required by AB 38. For example, the Legislature could consider approving budget trailer legislation placing a cap on the total grant amount per home or requiring the majority of the funds to be used for low-cost retrofits, which we believe would likely be more cost-effective than higher-cost retrofits. In addition, similar to other recommendations we make, we recommend making certain components of the defensible space program limited term—specifically, the three training positions and two mobile equipment program positions—to align with actual workload. We also recommend rejecting the one additional training fire engine requested because CalFire has not demonstrated that it is needed or will be purchased in time for use as a training engine for the 21 new defensible space inspectors.
- ***Establish Statutory Framework for Forest Management Task Force.*** While this proposal seems reasonable based on the workload of the task force, the Legislature has not established the task force in state law. We recommend, to the extent that providing the requested positions aligns with legislative priorities, that the Legislature approve budget trailer legislation to establish the Forest Management Task Force in statute. We recommend that this trailer legislation define the goals and responsibilities for the task force to ensure that it will meet legislative priorities, as well the priorities specified in the executive order that initially created the task force.

Withhold Action on Certain Promising Proposals That Would Benefit From Additional Information

For proposals that appear consistent with legislative priorities, but for which we think the Legislature needs additional information before taking action, we recommend withholding action pending receipt of additional information. Specifically, we recommend withholding action on the following proposals:

- ***Wildfire Safety and Process Reform (CPUC).*** We recommend the Legislature withhold action on the CPUC proposal until there is more information about how the PG&E bankruptcy will be resolved. As previously discussed, the outcome of the bankruptcy proceeding could affect CPUC workload. Given the time lines established in AB 1054 that requires PG&E complete the bankruptcy process under certain conditions by June 30, 2020 in order to access the newly created Wildfire Fund, we expect more clarity by mid-May—before the Legislature's constitutional deadline for passing a budget.
- ***Public Advocates Office Wildfire Safety Implementation (CPUC).*** Similar to the CPUC proposal, we recommend the Legislature withhold action on the Public Advocate's Office proposal until there is more information about how the PG&E bankruptcy is resolved, which could affect workload.

- ***LiDAR (CNRA).*** We find that the proposed use of LiDAR technology appears to have very promising applications for the state—including both related to wildfires, as well as other uses. However, the high cost and lack of important implementation details makes the proposal potentially premature. We recommend withholding action and requiring CNRA to provide a detailed implementation plan that (1) addresses programmatic changes necessary for departments to integrate LiDAR data into their operational decision-making, (2) describes the uses and benefits of the data and how often it would need to be updated in order to continue the proposed uses, and (3) estimates future costs to support ongoing data collection. If CNRA is unable to provide a more detailed implementation plan, we recommend rejecting the proposal and directing CNRA to bring the proposal back in a year after the development of an implementation plan. To the extent that CNRA is able to provide some implementation details, such as regarding uses for forest health evaluation, the Legislature may wish to provide partial funding in order to pilot test the use of LiDAR data.

Modify or Reject Proposals That Might Not Align With a Strategic Approach or Lack Justification

Ensure Legislature Has Sufficient Details on Each Proposal. As we discuss previously, there are a few proposals for which departments have not provided sufficient workload justification to justify the level of resources being requested. This includes CalFire's proposals for direct mission support—administrative staffing, hired equipment staffing, and mobile equipment staffing; OES' disaster planning, preparedness, and response proposal; and UC San Diego's proposal for the Center for Public Preparedness. If the administration does not provide sufficient information to justify these proposals, we recommend that the Legislature reject them. If the Legislature receives sufficient workload justification for the mobile equipment staffing and Center for Public Preparedness proposals, we recommend modifying them to limit ongoing budgetary commitments, as discussed in the next section of this report.

Modify Proposals to Limit Ongoing Commitments. For each of the proposals listed in this section, we recommend that the Legislature—should it choose to approve them—consider various modifications to limit permanent commitments that would be difficult to change in the future. This is because these proposals might not align with future wildfire funding priorities depending on the outcome of the development of a strategic wildfire plan. Similarly, these proposals lock in General Fund spending that could be difficult to reduce in the future. Specifically, we recommend that the Legislature consider potential modifications to limit permanent budgetary increases related to the following proposals:

- ***Relief Staffing (CalFire).*** First, for the CalFire relief staffing proposal, we recommend that the Legislature provide limited-term resources for any new training positions. Even if the Legislature were to approve the other components of the request, most of the training staff only would be needed temporarily to handle a one-time influx of new staff. Second, to the extent the Legislature wants to increase CalFire's fire response staffing, we recommend approving seasonal positions rather than permanent state staff. This approach would provide additional resources for up to nine months out of the year, which would cover the majority of the fire season and provide additional support during the peak season when it is most needed. Third, we recommend rejecting the purchase of new fire engines for training purposes and instead direct the department to use surplus engines for training. If adopted, these recommendations would result in ongoing budget savings likely in the low tens of millions of dollars, though the exact amount would depend on the specific actions taken.
- ***Mobile Equipment Staffing (CalFire).*** If CalFire is able to provide workload justification showing the need for additional resources to

process the procurement of a greater number of new vehicles and other mobile equipment proposed with the augmented funding provided for two years to replace additional vehicles, then the proposal for associated staffing should be provided on a limited-term basis, because the higher level of workload would be temporary.

- ***Emergency Preparedness and Response (CMD).*** We recommend approving funding for CMD's proposal on a three-year, limited-term basis, rather than on an ongoing basis as proposed by the Governor. This is because, while the department has significant workload currently related to wildfires, it is not clear how its role might change in light of a strategic wildfire plan. Providing funding on a limited-term basis would enable the Legislature to revisit the appropriate amount of ongoing support for the department with the benefit of additional information on the state's wildfire plan.
- ***Center for Public Preparedness (UC).*** To the extent the administration and UC clarify its intent and submits a detailed plan for how the proposed funds would be spent, we recommend only funding portions of the plan that do not duplicate existing state efforts, are aligned with UC's mission (primarily research), and eliminate out-year funding for any costs that are for one-time activities or projects.

CONCLUSION

Various factors are contributing to the state facing growing risks of destructive wildfires, which could continue in the decades to come. Given the long-term and complex nature of wildfire risks—as well as the challenges and costs associated with effectively addressing those risks—we find it is important for the state to develop a statewide strategic wildfire plan. The purpose of the plan would be to inform and guide state policymakers regarding the most effective strategies for responding to wildfires and mitigating wildfire risks. This could include guidance on future funding allocations to ensure the highest-priority and most cost-effective programs and activities receive funding and that the state achieves an optimal balance of funding for prevention and mitigation activities with demands to increase fire response capacity.

In addition, we find that in the absence of such a strategic wildfire plan, the Governor's 2020-21 budget proposals are difficult to evaluate and in some cases might not align with some of the key elements we think might be included in a strategic approach. Consequently, it is possible that under the Governor's budget plan, the state could be committing to wildfire strategies that are not the most effective or efficient. Therefore, until the state has developed a strategic wildfire plan, we recommend that the Legislature consider limiting certain ongoing budget commitments that would be difficult to change in the future. In so doing, the state would better maintain budget flexibility to implement the most effective and efficient wildfire risk reduction strategies recommended by the strategic wildfire plan.

SUMMARY OF RECOMMENDATIONS

(In Millions)

Proposal	Proposed 2020-21 Amount	Recommendation
Department of Forestry and Fire Protection (CalFire)		
Relief staffing	$93.4	• Make funding for training staff limited term. • Provide additional seasonal staffing rather than permanent staff. • Reject funding for training fire engines.
Various capital outlay projects	39.4	• Approve.
Mobile equipment replacement	19.0	• Approve.
Direct mission support—administrative staffing	16.6	• Require additional workload justification; reject if sufficient information not provided. • If justification is provided, align proposal with positions that are justified.
Wildland firefighting research grant	5.0	• Approve.
Hired equipment staffing	2.9	• Require additional workload justification; reject if sufficient information not provided. • If justification is provided, align proposal with positions that are justified.
Mobile equipment staffing	1.7	• Require additional workload justification; reject if sufficient information not provided. • If justification is provided, approve staffing on limited-term basis.
Building standards and defensible space education—SB 190	0.7	• Approve.
Governor's Office of Emergency Services (OES)		
Community power resiliency	$50.0	• Approve with additional implementation guidance and reporting.
California Disaster Assistance Act	16.7	• Approve.
Disaster planning, preparedness, and response	9.4	• Require additional workload justification; reject if sufficient information not provided.
State Operations Center improvements	0.4	• Approve.
California Public Utilities Commission (CPUC)		
Wildfire safety and process reform	$27.6	• Withhold action pending additional information about Pacific Gas and Electric (PG&E) bankruptcy.
Public Advocates Office wildfire safety implementation	2.6	• Withhold action pending additional information about PG&E bankruptcy.

(Continued)

Proposal	Proposed 2020-21 Amount	Recommendation
Multi-Department and Other Departments		
Home hardening pilot program—AB 38 (OES/CalFire)	$110.1	• Approve majority of proposal with additional implementation guidance. • Provide funding for training and mobile equipment staff for CalFire only on a limited-term basis. • Reject funding for additional fire engine.
Light detection and ranging data (CNRA)	80.0	• Withhold action and require CNRA to provide a detailed implementation plan. • If no plan is provided, reject the proposal. • Consider funding a pilot project.
Wildfire Forecast and Threat Intelligence Integration Center—SB 209 (CalFire, OES, CPUC, and CMD)	9.0	• Approve.
Emergency preparedness and response (CMD)	3.2	• Approve funding on a three-year, limited-term basis.
Center for Public Preparedness (UC)	3.0	• Require additional workload justification; reject if sufficient information not provided. • If information is provided, (1) fund only research, not outreach and (2) modify proposal to eliminate out-year funding for one-time costs.
Regional disaster medical health response (Emergency Medical Services Authority)	0.4	• Approve.
Support for statewide emergency management functions (Department of General Services)	0.3	• Approve.
Administration and research support (Forest Management Task Force)	0.2	• Approve and establish a statutory framework for the task force.

SB 190 = Chapter 404 of 2019 (SB 190, Dodd); AB 38 = Chapter 391 of 2019 (AB 38, Wood); SB 209 = Chapter 405 of 2019 (SB 209, Dodd); CMD = California Military Department; CNRA = California Natural Resources Agency; and UC = University of California.

LAO PUBLICATIONS

This report was prepared by Jessica Peters, with assistance from Helen Kerstein and Ross Brown, and reviewed by Brian Brown and Anthony Simbol. The Legislative Analyst's Office (LAO) is a nonpartisan office that provides fiscal and policy information and advice to the Legislature.

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