

House Committee on Oversight and Reform, Subcommittee on Environment
“Courage Under Fire: Examining Government Preparedness and Response to
Wildfires in California”

**August 20, 2019 – 10:00 AM – Council Chambers of Simi Valley City Hall,
2929 Tapo Canyon Rd., Simi Valley, CA 93063**

**Written Testimony of Dan Johnson, Southern Region Chief, California
Department of Forestry and Fire Protection (CAL FIRE)**

Good morning Chairman Rouda and Members. My name is Dan Johnson and I am the Southern Region Chief of CAL FIRE. Thank you for the opportunity to testify on CAL FIRE’s efforts to make our natural environment more fire resilient; to make our homes and infrastructure more fire resistant; and to mitigate the threat of wildland fire in California.

- Wildfires are a natural part of California’s landscape, but during the past two years we have experienced the most destructive fires in our recorded history.
- In 2017 over 10,000 structures were destroyed, and in 2018 over 22,000 structures were destroyed. Over the last two years, close to two million acres burned across the state, and 100 people – residents and first responders – tragically lost their lives in wildfires.
- The effects of climate change, fire suppression activities, overgrown forests, and prolonged drought have resulted in unprecedented tree mortality in the state’s forests, as well as an increase in the number, size, and severity of wildfires. Loss of life and structures as a direct or proximate result of wildfires is at an all-time high.
- Certain populations in our state are particularly vulnerable to wildfire threats. Californians who live in the “wildland urban interface” (WUI) face greater near-term public safety threats due to the risk of wildfire than those who live in more urban environments. But cities - like Oakland, Redding, Santa Rosa, and others across the state - are not immune to the risk either. And the threat posed by wildfire can be compounded by other factors such as a resident’s age or lack of mobility.

- But California is a resilient state! Beginning last year, California committed to spending \$1 billion dollars over the next five years to improve forest health and reduce fuel loads in our wildlands. In this fiscal year alone, Governor Newsom and the Legislature allocated nearly a billion dollars for emergency management programs, including money to build out our Earthquake Early Warning System and update our nearly 40 year old 9-1-1 system to NextGen 911.
- The women and men of CAL FIRE work daily to confront the risk of wildfire in our state, not only through our more visible programs like wildland fire response and aerial firefighting, but also through our Department's many risk assessment and prevention activities.
- Today, I will provide an overview of some of these efforts leading into the peak of this year's fire season, focusing on four areas: **our people** (our most important asset), **our equipment**, **our landscape**, and **our partnerships**.

People:

Our people at CAL FIRE are our most important resource in responding to the more than 5,600 wildland fires that occur in California each year.

- CAL FIRE's jurisdiction extends the length and breadth of the State, and the heart of its emergency response and resource protection capability is a force of approximately 6,100 full-time fire professionals, foresters, and administrative employees; 2,600 seasonal firefighters; 105 California Conservation Corps (CCC) firefighters; 600 Volunteers In Prevention (VIP); and up to 4,300 inmates and wards.
- The CAL FIRE Northern and Southern Regions hired seasonal firefighters on April 15, 2019, to begin their weeklong training. These employees will staff fire engines to augment fuels reduction, prescribed fire, and emergency response operations. All 343 fire engines have been staffed as of early June.
- Additionally, CAL FIRE will have six All Risk/All Hazards Type 1 Incident Management Teams available for deployment throughout California in 2019.
- Moving into the this current fiscal year, the Governor's 19-20 budget added:

- 13 additional year-round engines (and 131 positions) to the existing fleet of 343 engines, resulting in a total of 356 engines, to meet the increased demand for wildland fire response, to more equitably meet the intent of the State’s Master Mutual Aid System, to meet the need for additional resources earlier and later in the calendar year, and to bring more suppression and response resources to address the reality and ongoing fact of larger and more frequent fires;
 - 34 positions to provide relief for seven-day coverage for bulldozers and surge capacity for response to extended attack and major incidents, ensuring dozers can remain in operation throughout the fire year, 24 hours per day, seven days per week; and
 - 13 positions to improve CAL FIRE’s intelligence function and ensure firefighter and aircraft safety issues are met by establishing dedicated intel positions that will provide timely and accurate intel to decision makers.
- Additionally, Governor Newsom signed an Executive Order in July to allow CAL FIRE to hire an additional 393 seasonal firefighters to increase staffing for wildfire suppression and fire lookouts, and enable additional shift rotations during this year’s fire season.

Equipment:

We currently have 343 fire engines deployed throughout the state for wildland fire response. These ground forces are supported by a diverse fleet of aerial firefighting aircraft strategically placed throughout California.

- Airtankers are used in CAL FIRE’s firefighting operations to drop retardant on wildland fires on both state and federal responsibility areas. During a normal summer day in California, numerous fires start across the state and it is the rapid Initial Attack response of ground and aerial firefighters that suppress these fires before they ever make the news.
- CAL FIRE currently has 22 airtankers available at 13 air tanker bases across California, plus 1 spare airtanker for maintenance. We also have one exclusive use C-130 airtanker available statewide for pilot training and fire response.

Additional Federal contract airtankers as well as private “call when needed” airtankers are also available.

- CAL FIRE currently staffs 10 helicopters statewide and has 2 spare helicopters for maintenance swaps. CAL FIRE also has access to federal contract helicopters and private “call when needed” helicopters.
- CAL FIRE also has 12 air tactical aircraft and one aerial supervision aircraft with 2 maintenance spares.
- We are in the process of modernizing both our fixed wing and rotary aircraft fleets:
 - CAL FIRE is working with the United States Coast Guard and United States Air Force for the transition of seven Coast Guard C-130H aircraft to be retrofitted as airtankers. The retardant delivery system Request for Proposal (RFP) has been released by the United States Air Force with the intent to award in the fall of 2019. CAL FIRE expects the first fully functional C-130H airtanker to arrive in early 2021. The C-130s will operate at McClellan, Ramona, Fresno, Paso Robles, and Chico.
 - CAL FIRE is replacing its Vietnam-era UH1H “Huey” helicopter fleet with modern Black Hawks capable of nighttime aerial firefighting. Two of these S70i helicopters are in Colorado for avionics, firefighting and rescue equipment outfitting, and two are in Texas being painted. We should receive our first S70i helicopter in October 2019, followed by Helicopter #2 and #3 in the winter of 2019/2020, with one additional helicopter delivered every 4 months thereafter.
- CAL FIRE’s firefighting airplanes, helicopters, fire engines, bulldozers and other resources are specifically designed and strategically located to ensure the success of the Department’s mission of **containing 95 percent of all fires at 10 acres or less**. While no single piece of equipment can solely meet all the Department’s needs, the integration of these tools functioning together assists the Department in meeting this goal.

CAL FIRE is also looking to leverage new technology to enhance our ability to detect and model fire activity in the wildlands. Governor Newsom's January Executive Order directed us to undertake an "Innovation Procurement Sprint" to purchase the best tools and technologies under government contract while they are still cutting-edge in an effort to save lives and properties.

- Through this Procurement Sprint, CAL FIRE is seeking ideas to reduce, mitigate, and/or eliminate the threat to human life, real and personal property, infrastructure, and damage to the natural resources and watersheds of California caused by wildfires through solutions that can bring real-time situational awareness information quickly and accurately to those who need the information.
- Also in the field of technology, the Governor's 19-20 budget allocates funding to acquire and maintain fire validation cameras on strategic mountain tops that will offer situational awareness technology to first responders and decisions makers through real time, live video streaming.

Landscape:

In addition to our people and equipment, CAL FIRE protects neighborhoods and communities from wildfire through landscape-scale fuel reduction and forest health projects.

- The wildlands of California are naturally fire prone. Our past land and fire management practices have had the effect of increasing the intensity and rate of wildfire spread.
- For years, we have recognized the risks of damage to the environment, housing, and infrastructure from catastrophic wildland fire and have acted to reduce hazardous fuels through thinning, prescribed burning, and other vegetation treatments.
- Seeing the need for urgent action in the wake of catastrophic fires experienced over the past two years, Governor Gavin Newsom issued an Executive Order in January directing CAL FIRE to recommend immediate forest and vegetative fuels management actions to help prevent destructive wildfires.

- The Governor directed CAL FIRE to focus on California's most vulnerable communities in an effort to realize the greatest returns on reducing risk to life and property.
- Using locally developed fire plans prepared by CAL FIRE Units, we identified priority fuel reduction projects that could be implemented almost immediately to protect communities most vulnerable to wildfire.
- In total, 35 priority projects were identified that will help reduce wildfire risk to over 200 of California's most vulnerable communities.
- By next year, the Board of Forestry's Cal VTP – the Vegetation Treatment Program Programmatic EIR -- will be certified, which will streamline the regulatory process for most future fuels management projects.
- Across our organization, 21 administrative units with existing hand crews and 343 year-round fire engines, when not responding to fire activity, are conducting fuels reduction and defensible space inspections. Six dedicated CAL FIRE fuels crews and five additional CAL FIRE/California Military Department fuels crews are working throughout California to reduce hazardous fuels around communities most at risk. Staff for four additional CAL FIRE fuels crews have been hired and are undergoing training to start conducting fuels reduction work in the fall.

The efforts we are undertaking this year build upon the \$195 million in Greenhouse Gas Reduction Funds (GGRF) provided last year for forest health, forest resiliency, and fire prevention projects:

- These projects are located across the state and focus primarily on having the largest direct benefit for forest resilience, but also have tangible co benefits such as protection of carbon sinks, water supply and delivery, wildlife habitat, community safety, and rural economic stability.
- CAL FIRE has used prescribed fire and other tools to reduce the wildfire hazard on over 36,884 acres across the state in Fiscal Year 2018-19.

Going into the current fiscal year, the Governor's Budget allocated \$165 million GGRF to build healthy and fire resilient forests through a variety of grants and activities to support land management actions:

- These include tree thinning, reforestation, forest insect and disease mitigation, prescribed fire, local community capacity development, research, and other forest resilience activities, such as the acquisition of conservation easements and other actions to restore watershed health and function, and support biodiversity and wildlife adaptation to climate change.
- Additionally, the Budget allocated \$35 million GGRF to support our six prescribed fire crews and fund four additional crews starting in 2019-20, for a total of ten crews that enable CAL FIRE to increase the pace and scale of prescribed fire and other fuels reduction activities.

Partnerships

CAL FIRE is actively working with our local, state, and federal partners to prepare for the 2019 fire season in California. Meetings are occurring, and cooperative agreements and contracts are in place that allow us to bring in firefighters and equipment from different agencies under a unified command.

As important as these intergovernmental partnerships are, the public is our most important partner in achieving our goal of preventing and/or reducing the effects of devastating wildfires in our state:

- 95 percent of all wildland fires are caused by human activity. This means we absolutely need residents and visitors to be extra cautious both indoors and outdoors to prevent sparking a new wildfire.
- Our Public Education Program helps inform Californians about fire risk and fire prevention measures, enabling CAL FIRE to decrease the number of human-caused fires and mitigate the damage caused by fires that do occur.
 - This year's wet winter created a sizable crop of grass that will dry quickly and become very flammable.

- No amount of rain will bring back the estimated 147 million trees that have died across the state due to drought conditions, climate change, and pest infestation.
- As of August 12th, CAL FIRE has already responded to over 3,198 wildfires in California this year.
- Now is the time for Californians to prepare for wildfire.

We have developed a communications program called “Ready, Set, Go!” that breaks down the actions needed to be ready for wildfire. These actions are:

- Be Ready: Create and maintain defensible space and harden your home against flying embers.
- Get Set: Prepare your family and home ahead of time for the possibility of having to evacuate.
- Be Ready to GO!: Take the evacuation steps necessary to give your family and home the best chance of surviving a wildfire.

CAL FIRE’s “Ready for Wildfire” app is a great addition to our public education efforts. It provides the public with step by step instructions on how to prepare their homes and families before, during and after wildfire strikes.

California homeowners play a key role in fire prevention through the maintenance of defensible space, which is essential to improve a home’s chance of surviving a wildfire:

- Our firefighters and defensible space inspectors completed 204,341 inspections in Fiscal Year 2018-19, working with homeowners to educate them on steps they need to take to increase their homes’ chance of surviving a wildfire.
- The data collected from these inspections helps us analyze how home ignitions occur and form recommendations for future changes to the building code and home hardening techniques.

Just as critical to maintaining defensible space is the need to “harden” or make your home more resilient to wildfire. The State Fire Marshal maintains a list of upgrades that homeowners in high fire hazard areas can undertake to harden their homes, including getting rid of wood or shingle roofs and wood siding and replacing it with ember-resistant building materials.

- We are developing a low-cost building retrofit list for existing structures not built to California’s most recent building standards. We think this will be an extremely helpful guide for homeowners on easy to implement home improvements that will harden their homes against wildfire embers.
- We need to continue to educate and incentivize homeowners to upgrade homes and other structures that were built before the current building codes.
- This effort must be community based to avoid inconsistent application. When one home is compliant with “hardening” retrofit construction and the next-door neighbor in close proximity is not, both homes are still at risk.
- Home hardening is a critical step in making a community fire resistant. In fact, our damage inspection analysis of wildfires has shown that 93% of all structures that catch fire during a wildfire will be destroyed.

In conclusion, California is “leaning forward” to make our natural environment more fire resilient; to make our homes and infrastructure more fire resistant; and to shape our awareness of threats and ways to mitigate wildland fire.

- CAL FIRE leverages its multi-disciplinary force of firefighters, foresters, inspectors, planners, and engineers to protect our communities and unique resources stretching from California’s natural wildlands to our urban built environments.
- When fires do occur, we will be ready to respond with well-trained, dedicated first responders equipped with cutting-edge technology.

And while we will be there once again to answer the call in 2019, we must do more to support our most valuable asset, our people:

- Long deployments on emergency incidents are now being compared to military deployments, in terms of the health effects on employees and their families, particularly following our longer and more intense recent wildfire seasons.

- First responders experience Post-Traumatic Stress Injuries (PTSI) and depression at a level five times that of the civilian population.
- While frontline first responders directly experience the trauma, destruction, and death caused by an all-hazard response, everyone in the Department is susceptible.
- CAL FIRE has made a department-wide commitment to support the physical and behavioral health of our employees by:
 - Expanding the staffing for all post-coverage positions (24 hour coverage) from the previous 2.67 employees per position to a minimum of 3.11 beginning July 1, 2019; and
 - Continuing to foster a behavioral health culture and provide training and support services for all employees.

Thank you for your time and I look forward to answering any questions you may have.