

OFFICE OF THE GOVERNOR

August 4, 2018

The President
The White House
Washington, D. C. 20500

Through:

Robert J. Fenton, Jr.

Regional Administrator

Federal Emergency Management Agency

Region IX

1111 Broadway, Suite 1200 Oakland, California 94607-4052

Dear Mr. President:

I would first like to thank you for issuing an Emergency Declaration on July 28, 2018, and for the assistance of the federal government in response to the Carr Fire burning in Shasta County. Pursuant to Section 401 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. Sections 5121-5207 (Stafford Act), and Title 44 of the Code of Federal Regulations Section 206.36, I respectfully request you declare a major disaster in the State of California as a result of the devastating wildfires burning in Lake, Mendocino, Napa, Shasta, and Trinity counties.

California experienced exceptionally dangerous fire weather conditions in late July 2018, resulting in several catastrophic fires. Beginning on July 21, 2018, a strong ridge of high pressure centered over the western United States and created widespread hot, dry, and windy conditions throughout California, including Lake, Mendocino, Napa, Shasta, and Trinity counties. During this weather system, daytime high and overnight low temperatures averaged up to 10 degrees above normal. While July is typically a very dry time of the year for much of the state, July 2018 was exceptionally dry as compared to 2017. In fact, the United States Drought Monitor indicates northern California went from having no drought classification in 2017 to officially categorized as abnormally dry or in moderate drought in 2018. These arid conditions, coupled with the strong ridge of high pressure, led to extraordinarily dangerous fire weather.

Beginning on July 23, 2018, the Carr Fire broke out in Shasta County. Extremely hot temperatures, low humidity, and erratic winds caused the Carr Fire to grow uncontrollably and trigger widespread devastation. As a result, the Federal Emergency Management Agency approved a Fire Management Assistance Grant to assist the state in its response efforts. Tragically, this fire has caused two firefighters and four civilian fatalities. As of the morning of July 26, 2018, the fire had already burned over 20,000 acres. Over the next twenty-four hours, the fire crossed the Sacramento River and doubled in size to over 44,000 acres. By July 28, 2018, as these dangerous fire weather conditions persisted, the fire nearly doubled yet again to more than 80,000 acres. As of the date of this letter, the fire has destroyed more than 131,000 acres. Officials anticipate the Carr Fire, presently only 39 percent contained, will continue to grow and cause further destruction, as there are currently red flag weather conditions in the Carr Fire area. The Carr Fire ranks as the sixth most destructive fire in California history and is continuing to burn more acreage every day. In fact, the fire crossed into Trinity County and on August 2, 2018, the Federal Emergency Management Agency approved an additional Fire Management Assistance Grant for Trinity County.

The National Weather Service confirmed the Carr Fire spawned an exceptionally rare "fire whirl." This tornado-like phenomenon is caused by extreme heat from a fire that draws air inward and creates an updraft that can rotate at an extraordinarily fast rate of speed, at times well in excess of 100 miles per hour. According to the National Weather Service, the plume-dominated Carr Fire generated a fire whirl with winds in excess of 143 miles per hour, equivalent to an EF-3 tornado. This vortex became so strong that it remained intact after it moved away from the burn zones and caused substantial destruction to areas outside the path of the fire. These fierce wind conditions sheared roofs off homes and uprooted trees, causing extensive property damage. The fire whirl also destroyed power and fiber optics infrastructure.

As the Carr Fire ravaged Shasta County, treacherous fire-weather continued to blanket northern California with triple digit temperatures, challenging wind conditions, and low humidity. On July 27, 2018, the River and Ranch Fires ignited in Mendocino County and quickly crossed into

Lake County. These two fires, collectively referred to as the Mendocino Complex Fire, exploded in size and raced towards highly populated areas within Lake County, including but not limited to Upper Lake and the City of Lakeport, prompting 100 percent population evacuation of each city. The Federal Emergency Management Agency approved Fire Management Assistance Grants to assist in battling these fires. The Mendocino Complex Fire has scorched more than 153,000 acres and is only 30 percent contained. On July 28, 2018, the Federal Emergency Management Agency approved a Fire Management Assistance Grant for the River Fire, and on July 29, 2018, it approved the same grant for the Ranch Fire. This fire is continuing to grow at an alarming rate, and increased by nearly 50 percent over the past 24 hours. Most concerning, there are red flag conditions in the Mendocino Complex fire area over the next several days, and officials expect this fire to continue to grow. Additionally, on the evening of July 28, 2018, the Steele Fire ignited in Napa County. Though this fire is smaller in size than the Carr, Ranch, and River Fires, it was nevertheless extremely destructive. Almost immediately after it ignited, the Steele Fire destroyed homes as residents fled with nearly no notice.

On July 26, 2018, I proclaimed, under the California Emergency Services Act, a State of Emergency in Shasta County as a result of the Carr Fire. Shasta County and the City of Redding also proclaimed local emergencies as a result of the Carr Fire. On July 28, 2018, I proclaimed a State of Emergency to exist in Mendocino and Lake counties as a result of the Ranch and River Fires, and in Napa County as a result of the Steele Fire. Lake and Mendocino counties also proclaimed local emergencies as a result of these fires.

In response to these wildfires, my Office of Emergency Services activated our State Operations Center, as well as the Inland and Coastal Regional Emergency Operations Center, and Shasta County and the City of Redding activated their Emergency Operation Centers. The state activated its Emergency Plan and deployed all available assets, including local and state mutual aid as well as mobilizing out-of-state resources.

Battling these relentless fires requires a Herculean effort. There are more than 15 fires currently burning throughout the state, including the Carr, Mendocino Complex, and Steele Fires, as well as three other major fires. As a result, there are more than 1,000 fire engines and aircraft deployed in response to these statewide fires, which includes nearly 450 local government engines. Additionally, there are more than 14,000 firefighters on the front lines of the fires throughout the state, which includes nearly 3,000 local government firefighters. Jurisdictions are drawing on any and all available resources to contain all of the fires statewide and to quickly attack and attempt to extinguish the myriad of new fire starts that arise across all regions of the state every day. There are countless resources working to mitigate further impacts, including equipment and soldiers from the California National Guard, which at one time had more than 1,000 soldiers activated in response to fires statewide. The state's mutual aid system is at capacity, with nearly 100 percent drawdown, and California has been forced to bring in out-of-state resources, and even out-of-country resources, in an effort to prevent further catastrophic destruction. To date, California has secured assistance from states throughout the nation, including, but not limited to: Arizona, Colorado, Florida, Idaho, Maryland, Michigan, Missouri, Montana, New Jersey, New Mexico, Nevada, Oregon, South Dakota, Washington, and Wyoming to assist in firefights throughout the state. Additionally, the United States military has deployed a battalion to provide additional firefighting assistance.

At its peak, the Carr Fire forced more than 35,000 residents to evacuate their homes and seek temporary shelter, most of whom had little time to flee. Many of these individuals include first responders who were forced to grapple with the safety of their homes, families, and loved ones as they battle these fires. Evacuations have impacted the City of Redding and surrounding Shasta County communities, and recently extended into Trinity County. As of the date of this letter, more than 9,000 residents remain evacuated as a result of the Carr Fire.

Approximately eight shelters remain established within Shasta, Lassen, Tehama, and Trinity counties temporarily house evacuated residents who have been displaced as a result of the Carr Fire.

Additional evacuation orders may be issued as the fire continues to spread through other populated

areas within or near the City of Redding, the largest city in the region with a population of nearly 100,000 residents. Hospitals and critical care facilities have been forced to evacuate and relocate particularly vulnerable patients.

The Mendocino Complex has already destroyed an estimated 100 structures, but most concerning, it is still posing an immediate threat to nearly 10,000 structures. As a result, more than 10,000 Lake and Mendocino County residents remain evacuated, many of whom are currently housed in shelters in these affected counties.

At the peak of the fires, more than 55,000 residents were evacuated from their homes and more than 15 shelters were quickly established to provide shelter and essential services. There were an additional 15 shelters established specifically to assist with the handling of evacuated animals. With the start of the school year looming, more than 30 public schools are within the boundaries of the collective evacuated areas. In addition, these wildfire have impacted many tribes in these areas.

The devastation and disruption caused by these fires is extraordinary. In addition to the tens of thousands of individuals displaced from their homes, there are major impacts to critical infrastructure. The fires have caused power outages to thousands of households, schools, and businesses, including at least four water treatment plants in Shasta County, all of which are currently operating on emergency backup generators. Additionally, these fires have forced the closure of major roadways, including the critical Highway 299, and have impacted critical communication towers, cellular sites, and microwave facilities, including radios and repeater sites that support public safety communications.

The State of California, local governments, community based organizations, and volunteers have taken extraordinary steps to respond to these fires. More than 20 California state agencies are activated and providing assistance, both in the field and the State Operations Center. This includes the California Department of Social Services, which is assisting with shelter operations and is

providing support to individuals with access and functional needs. The American Red Cross and other Voluntary Organizations Active in Disaster are providing support to the community and disaster survivors.

The areas within the impacted counties are tight-knit, small-town communities. These fires were, and will continue to be, extremely traumatic. Neighborhoods have been decimated, particularly by the Carr Fire. All residents will inevitably have a family member or loved one who lost their home. Further, even if an evacuated resident's home was spared, dangerous conditions remain. Large amounts of wreckage and debris must be expeditiously removed to eliminate the immediate threat to lives, public health, and safety. Fire debris hazards, including asbestos, heavy metals, structural debris, ash, concrete foundations, and metals pose public health and safety concerns and threaten the health of the environment. Rapid debris removal is also necessary to enable community rebuilding and economic recovery of impacted communities. This debris also poses a significant threat to the watershed.

On August 1, 2018, state, local, and federal officials began the joint preliminary damage assessment. This formal Preliminary Damage Assessment in accessible areas has validated at least 982 homes were destroyed by the Carr Fire. However, there are at least 100 additional destroyed homes and officials estimate an additional 200 to 300 destroyed homes in inaccessible areas. With regard to the Mendocino Complex, officials were unable to assess the impacted areas, as this is fire continues to rage and would pose a threat to the safety of individuals performing this assessment. However, it is clear that the number of structures lost is substantial, likely in excess of 100. The Steele Fire in Napa County destroyed or damaged at least 11 structures.

Based on the information we have thus far, we know many residents will be displaced and ultimately left homeless. While some portion of the disaster survivors will have insurance coverage, we know based upon the numerous recent California wildfires that many people will be underinsured or have no insurance coverage whatsoever. Even for those residents with insurance coverage, major

challenges will remain with regard to their recovery. Portions of the impacted communities are isolated and generally rural, with very little available rental or temporary housing to accommodate homeowners during the rebuilding process.

Shasta County, and specifically the City of Redding and surrounding areas, have significant elderly, low income, access and functional needs, and veteran populations. In fact, Redding is home to one of the state's veterans homes. Overall, the impacted counties have exceptionally vulnerable communities and will inevitably face a challenging recovery from this disaster. Many residents in these communities live on low or fixed incomes. In fact, more than 21 percent of Lake County residents, and 17 percent of Shasta and Mendocino County residents, live below the poverty level, which are higher than the state and national averages of 15.9 and 15.4 percent, respectively. More than 20 percent of the population in Lake, Mendocino, and Shasta counties, and 18 percent of Napa County, is elderly. All of these counties exceed the state average of 11.4 percent and national average of 13 percent for elderly population. Further, Lake, Mendocino, and Shasta counties all have disabled populations substantially above the state and national averages of 6.8 and 8.6 percent, respectively.

A breakdown of Individual Assistance Program demographics is presented below:

	Population*	Average of Persons Below Poverty Level*	Median Household Income*	Percent Elderly (over 65 yrs)*	Percent Disabled (Under 65 yrs)**	Percent Pre-Disaster Unemployment***
National	308,745,538	15.4%	\$53,889	13.0%	8.6%	8.30%
California	37,253,956	15.9%	\$61,094	11.4%	6.8%	9.90%
Lake County	64,665	21.4%	\$36,132	22.4%	15.7%	5.5%
Mendocino County	87,841	17.8%	\$43,510	21.2%	11.8%	4.3%
Napa County	136,484	9.8%	\$74,609	18.4%	6.9%	3.2%
Shasta County	177,223	17.2%	\$45,582	20.3%	12.9%	5.8%

^{* 2010-2011} U.S. Census

In addition to the significant impacts to individuals and homes, officials indicate there is substantial damage to public infrastructure. This includes damages to power utilities, significant damage to critical roadways, parks, and water treatment plants. Additionally, the wildfires caused an enormous amount of debris. Collectively, the Public Assistance Preliminary Damage Assessment thus far revealed damages well in excess of California's indicator, even absent an assessment of areas that were rendered inaccessible due to the perilous fire conditions.

California has suffered multiple disasters in the past year and a half which have severely impacted its response and recovery resources. Beginning in December 2016, California experienced three months of severe winter storms associated with several atmospheric river systems. These storms caused unprecedented widespread flooding and resulted in three separate Major Disaster Declarations (DR-4301, DR-4305, and DR-4308). Last October, you issued a Major Disaster Declaration (DR-4344) for wildfires in Northern California, the deadliest and most destructive in California history, which destroyed thousands of structures and claimed 44 lives. Further, beginning in December 2017, the largest wildfire in California history, the Thomas Fire, erupted in Southern California, burning

^{** 2014} U.S. Census

^{***} U.S. Bureau of Labor Statistics

hundreds of thousands of acres and claiming two lives. Following that fire, a deadly mudslide took at least 21 lives. The Thomas Fire and subsequent mudslides caused unprecedented damage and destruction and resulted in another Major Disaster Declaration (DR-4353).

The start of the 2018 fire season is already exceptionally active, and unfortunately deadly, further underscoring the extreme danger of these unrelenting fire conditions. Tragically, at least ten people lost their lives as a result of this season's early wildfires. Since January of 2018, there have been over 4,000 active fires. In just the past month, there were ten fires significant enough to warrant Fire Management Assistance Grant declarations. There are approximately 50 new fires starts each day and more than 15 significant fires currently burning throughout California. Many of these current fires, including the Mendocino Complex and Steele Fires, are impacting the very same jurisdictions still recovering from the late 2017 devastating wildfires. Additionally, firefighters are now battling fires year round, as last year's fire season extended well beyond what would historically have been post-fire season. Unfortunately, extreme weather patterns, enormous wildfires, and extended fire seasons appear to be the new normal.

The wildfires in Lake, Mendocino, Napa, and Shasta counties have caused extensive damage to primary residences and infrastructure, and continue to pose a direct threat to public health and safety. I have determined this incident is of such severity and magnitude that an effective response is beyond the capabilities of the state and affected local governments and supplemental federal assistance is necessary. I am specifically requesting Public Assistance and all Individual Assistance Programs for Lake, Mendocino, Napa, and Shasta counties, including the Individuals and Households Program, Transitional Sheltering Assistance, Disaster Case Management, Disaster Unemployment Assistance, Crisis Counseling and Disaster Legal Services, Hazard Mitigation statewide, and any other Stafford Act disaster assistance programs that may be appropriate. I am also requesting U.S. Small Business Administration disaster loans and funds from the U.S. Department of Agriculture Emergency Loan Program.

I certify for this major disaster the state and local governments will assume all applicable non-federal shared costs as required by the Stafford Act. I have designated the Director of the California Governor's Office of Emergency Services, Mark Ghilarducci, as the State Coordinating Officer for this request. Mr. Ghilarducci will work with the Federal Emergency Management Agency in continuing to assess damages and may provide more information or justification on my behalf.

Thank you for your concern and leadership during this difficult time in our state.

Sincerely,

Edmund G. Brown Jr.

Enclosures

Enclosure A: Verified Minimum Residential Damaged Units for Individual Assistance

Enclosure B: Public Assistance

Enclosure C: Stafford Act and State Disaster Declarations in Previous 18 Months

Enclosure D: National Weather Service Report (July 23-28, 2018)

Enclosure E: National Weather Service Report – Fire Whirl

OMB No. 1660-0009/FEMA Form 010-0-13

ENCLOSURE A TO MAJOR DISASTER REQUEST

Verified Minimum Residential Damaged Units for Individual Assistance under the Stafford Act*

Individual Assistance Joint Preliminary Damage Assessment Cost Estimate Worksheets

Counties	Agency		R	esidential Uni	t Damage	
	8	D	MJ	MR/AF	TOTAL D/MJ	TOTAL
Shasta	OES	982			982	982
Situsta	FEMA	982			982	982
Napa	OES	8				8
Тара	FEMA	8				8
Mendocino	OES	TBD		TBD		8
	FEMA	TBD		TBD		8
	0.776					
Lake	OES	TBD		TBD		
	FEMA	TBD		TBD		
TOTALS	– OES		1000	3		
TOTALS -			1000	3		.,,,

^{*}The figures in this chart represent verified minimums. Extraordinarily dangerous fire conditions prevented an accurate assessment. Officials estimate there are an additional 200-300 damaged and destroyed residential units in the impacted areas.

ENCLOSURE B TO MAJOR DISASTER REQUEST

Estimated Stafford Act Requirements for Public Assistance

Public Assistance Preliminary Damage Assessment (PDA) Cost

Estimate Summary

COUNTY	¥	8	-	ပ	٥		ш	L	Ø	State Agnoy	PDA Total	Population	S ner Canita	Population Sper Capita Enders Indicator	750
NAPA	\$ 260,000	66	↔		4	63			69		\$ 560,000	136,484	\$ 4.10	\$492,707 \$	420,000
SHASTA	\$ 70,865,550 \$ 2,297,575 \$ 1,630,000 \$	\$ 2,297,57	75 \$ 1	000'089'	\$ 104,000 \$	1	2,280,200	\$ 17,094,221	2,280,200 \$ 17,094,221 \$ 4,080,000		\$ 98,351,546	177,223	\$ 554.96		\$639,775 \$ 73.763.660
SUBTOTAL	\$ 71,425,550 \$ 2,297,575 \$ 1,630,000 \$	\$ 2,297,57	75 \$ 1	900,059,	\$ 104,000 \$		3,280,200	\$ 17,094,221	2,280,200 \$ 17,094,221 \$ 4,080,000 \$		\$ 98,911,546	***************************************			
STATE AGENCIES \$ 3,000,000 \$	\$ 3,000,000	\$ 140,000 \$	\$ 00		4	69	1,010,000 \$		- \$ 450,000		\$ 4,600,000				3.450.000
TOTAL	\$ 74,425,550 \$ 2,437,575 \$ 1,630,000 \$ 104,000 \$	\$ 2,437,57	75 \$ 1	,630,000	104,000		3,290,200	\$ 17,094,221	3,290,200 \$ 17,094,221 \$ 4,530,000 \$		\$ 103,511,546			\$53,273,157	

DEBRIS REMOVAL
PROTECTIVE MEASURES
ROADS AND BRIDGES
WATER CONTROL FACILITIES

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E. PUBLIC BUILDINGS & EOUIPMENT F. PUBLIC UTILITIES G. OTHER FACILITIES

POPULATION IS BASED ON 2010 CENSUS FEMA's state threshold = \$1.43 / Capita (currently \$53.2M) FEMA's county threshold = \$3.61 / Capita

Stafford Act and State Disaster Declarations in Previous 18 Months

Event Number	Disaster Name	Counties
FM-5266	Carr Fire	Trinity
FM-5262	Mendocino Complex	Mendocino, Lake
CDAA 2018-05	Ferguson Fire	Mariposa
FM-5260	Cranston Fire	Riverside
FM-5259/EM-3398	Carr Fire	Shasta
FM-5252	Holiday Fire	Santa Barbara
FM-5251	West Fire	San Diego
FM-5250/CDAA 2018-04	Klamathon Fire	Siskiyou
FM-5245	Creek Fire	Shasta
FM-5244/CDAA 2018-03	Pawnee Fire	Lake
CDAA 2018-02	January 2018 Debris and Mudflow	Burbank
CDAA 2018-01	March 2018 Storms	Mariposa, Merced, and Tuolumne
DR-4353/CDAA 2017-12	December 2017 California	083, 111 (PA)
	Wildfires and Debris Flows	037, 073, 083, 1111 (IA)
EM-3396	Southern California Wildfires	Los Angeles, Riverside, San Diego, Santa Barbara, and Ventura
FM-5227	Skirball Fire	Los Angeles
FM-5226	Rye Fire	Los Angeles
FM-5225	Creek Fire	Los Angeles
FM-5224	Thomas Fire	Ventura
CDAA 2017-11	Inyo/Mono Snowmelt	Inyo, Mono
FM-5223	Canyon 2 Fire	Riverside (FMAG Only)
DR-4344/CDAA 2017-09	October 2017 Wildfires	Butte, Lake, Mendocino, Napa, Nevada, Orange, Solano, Sonoma, Yuba
CDAA 2017-10	Ponderosa Fire	Butte
FM-5213	Canyon Fire	Orange, Riverside

FM-5205	Pier Fire	Tulare
FM-5204	Mission Fire	Madera
FM-5202	Railroad Fire	Madera, Mariposa
FM-5201	La Tuna Fire	Los Angeles
CDAA 2017-08	Alamo and Whittier Fires	Santa Barbara
FM-5199/CDAA 2017-07	Helena Fire	Trinity
CDAA 2017-06	Modoc County Wildfires	Modoc
FM-5192/CDAA 2017-04	Detwiler Fire	Mariposa
FM-5189/CDAA 2017-05	Wall Fire	Butte
DR-4308/CDAA 2017-03	February 2017 Winter Storms	Alameda, Alpine, Amador, Butte,
		Calaveras, Contra Costa,
		Del Norte, El Dorado, Glenn,
		Humboldt, Kings, Lake, Lassen,
		Marin, Mariposa, Merced,
		Modoc, Mono, Monterey, Napa,
		Nevada, Plumas, Sacramento,
		San Benito, San Juaquin,
		San Luis Obispo, San Mateo,
		Santa Barbara, Santa Clara,
		Santa Cruz, Shasta, Sierra,
		Siskiyou, Solano, Sonoma,
		Stanislaus, Sutter, Tehama,
		Trinity, Tuolumne, Yolo, Yuba,
		and the Tule River Tribe in Tulare
DR-4305/CDAA 2017-02	Late January 2017 Winter Storms	Alameda, Calaveras, Contra
		Costa, El Dorado, Inyo, Kern,
		Los Angeles, Mendocino, Mono,
		Napa, Orange, Riverside,
		Sacramento, San Diego,
		San Luis Obispo, San Mateo,
		Santa Barbara, Santa Cruz,
		Trinity, Tuolumne, Yolo
EM-3381	Potential Failure of Oroville Dam	Butte, Sutter, and Yuba

	Emergency Spillway	
DR-4301/CDAA 2017-01	January 2017 Winter Storms	Alameda, Amador, Butte,
		Calaveras, Contra Costa,
		El Dorado, Humboldt, Inyo, Lake,
		Lassen, Marin, Mendocino,
		Merced, Mono, Monterey, Napa,
		Nevada, Placer, Plumas,
		Sacramento, San Benito,
		San Luis Obispo, Santa Clara,
		Santa Cruz, Shasta, Sierra,
		Siskiyou, Solano, Sonoma, Sutter,
		Trinity, Tuolumne, Yolo, and
		Yuba



Carr Fire, Mendocino Complex, and Steele Fire Wildfire Impacts - 23-28 July 2018

July 2018 was a month that had many areas across the western United States, including much of California experiencing temperatures that were generally two to six degrees Fahrenheit above normal. More significant was the tendency for overnight low temperatures to also be well above normal, with many areas averaging four to eight degrees above normal during the month of July. These warm overnight low temperatures can create an environment where relative humidity is not able to increase significantly overnight, which can also have a cumulative impact toward drying vegetation when several warm and dry nights occur in sequence.

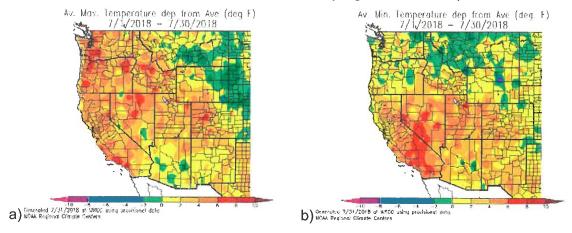


Figure 1: a) Average High temperature departure from average for July 1-30, 2018. b) Average Low Temperatures departure from average for July 1-30, 2018.

Precipitation across much of California was less than normal as well during July 2018, and it is important to note that this is already a very dry time of year across the state.

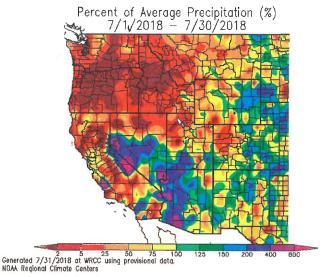


Figure 2. Percent of average precipitation across California for the July 1-30, 2018.

As of July 24, 2018, the United States Drought Monitor (on the right in the image below) indicated at least abnormally dry conditions across much of California, with widespread areas of moderate and severe drought. Extreme drought conditions are present near the Lower Colorado River Valley in extreme southeast California as well. The graphic on the left below shows the drought status in early August of 2017, following the very wet winter and early spring of 2016-17. The graphic on the left, when combined with the current drought status on the right, helps to show the drying trend California has observed in the past year.

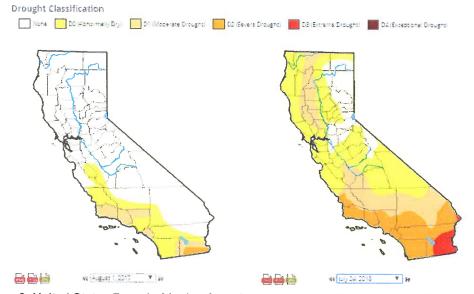
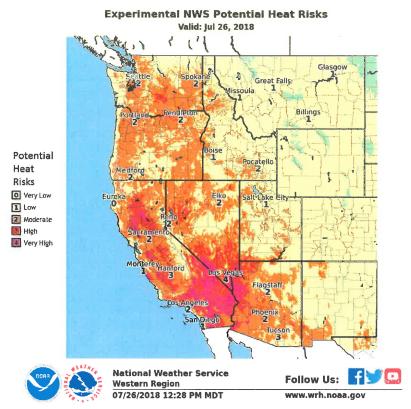


Figure 3. United States Drought Monitor from 1 August 2017 (left), and 24 July 2018 (right).

Specific to the Carr, Mendocino Complex, and Steele Fires during July 2018, the weather patterns set up in such a way to promote very hot temperatures combined with dry and windy

conditions. A strong ridge of high pressure was centered over the four corners region of the western United States around 21-22 July, prior to the start of Carr, Mendocino Complex, and Steele Fires. The northern area of this warm signal in the atmosphere shifted farther north and west during the 23-24 July, and by 25 July the high pressure was centered over the Lower Colorado River Valley, near Yuma, Arizona. With this pattern in place, the state was experiencing an extended period of very hot and dry conditions. The graphic below displays the Experimental NWS Potential Heat Risk graphic valid on 26 July 2018, indicating widespread Very High Heat Risk across much of southern CA and large areas of the Sacramento and San Joaquin Valleys.



The Carr Fire started at 1:15 pm PDT on 23 July 2018, and began growing during the time of year when the normal high temperatures in Redding, CA are 100°F. Normal lows during this time of year in Redding, CA are around 66°F. Throughout the month of July at Redding, CA, average temperatures were overall about 4.5°F above normal. Between 23-27 July 2018, the high temperatures at Redding, CA were observed to be between 106-113°F, topping out with a record high being recorded for 26 July 2018. These high temperatures were 5-10°F above normal. Overnight low temperatures were very warm as well, generally in the 70s and 5-10°F above normal during the 23-27 July period. These overnight lows did not allow for much improvement in humidity values during the overnight hours, including very poor recoveries to only around 35% on the night of the 26-27 July 2018.

The Mendocino Complex was made up of the River and Ranch Fires. The Ranch Fire began on 27 July 2018 at 12:05 pm PDT and the River Fire just about an hour later. Nearby at Ukiah, CA the normal high temperature during late July is 94°F, and the normal low temperature is 55°F. During late July 2018, the high temperatures were generally reaching 100-105°F at Ukiah, and overnight lows were about 57-59°F. On average throughout the month of July 2018, temperatures were about 3.5°F above average at Ukiah, CA.

The Steele Fire began on 28 July 2018 with high temperatures near the fire area reaching the upper 90s°F. Nearby in Vacaville, CA on 28 July 2018 the high temperature reached 102°F, and the overnight low was 60°F. Normal high temperature for Vacaville, CA on 28 July is 97°F. Normal low temperature for this date is 60°F. Winds during the day on 28 July were gusting to 15 to 25 mph from the Southwest.

NWS Sacramento Issued: August 2, 2018



What is a Fire Whirl?

A rotating column of fire induced by intense rising heat and turbulent winds. Intense fire whirls can be violent and cause damage similar to tornadoes.

Large Fire Whirl in Redding, CA

- Between 7:30-8:00 PM on July 26th, 2018
- Result of the plume dominated Carr fire. Winds in excess of 143 mph (equivalent to an EF-3 on the Enhanced Fujita Scale)
- Preliminary reports include the collapse of high tension power line towers, uprooted trees, and the complete removal of tree bark



DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency REQUEST FOR PRESIDENTIAL DISASTER DECLARATION MAJOR DISASTER OR EMERGENCY

OMB Control Number 1660-0009 Expires 09/30/2019

1. Request Date Aug 4, 2018

Burden Disclosure Notice

Public reporting burden for this form is estimated to average 9 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and submitting the form. This collection of information is required to obtain a benefit. You are not required to respond to this collection of information

unless it displays a valid OMB control number. for reducing the burden to: Information Collection Management Agency, 500 C Street SW, Washingour completed form to this address.	Send comments regarding the accome Management, Department of Hington, DC 20472, Paperwork Red	luction Project (1660-0009). NOTE: Do not send
requests under 42 U.S.C. §§ 5170 and 5191, reform may result in a failure to meet these requires	espectively, as implemented at 44 rements and/or a delay in process	ents for emergency and major disaster declaration C.F.R §§ 206.35 and 206.36. Failure to use this ing the request.
Name of State (as defined in Stafford Act 1 tribal government requesting declaration. California	02, 42 U.S.C. § 5122) or Indian	2b. Population (as reported by 2010 Census) or estimated population of Indian tribal government's damaged area(s). 37,253,956
Governor's or Tribal Chief Executive's Name Governor Edmund G. Brown, Jr.	and phone number Mark S. Ghilarducci, (916) 845-85	
phone number Mark S. Ghilarducci, (916) 845-8575		e Representative upon declaration (if available) and
6. Declaration Request For: Major Disas	ter (Stafford Act Sec. Eme	rgency (Stafford Act Sec. 501
7. Incident Period: Beginning Date End Jul 23, 2018	offici Date or ⊠ Continuing ager incid	questing a "continuing" incident period, enclose an ial statement from a qualified Federal Government acy acknowledged as a national authority in a specific lent field (e.g., United States Geological Survey for mic incidents, the National Weather Service for ling).
Other (please specify)	Snowstorm (Must include Enclosure D: His Data) Depression Tropical Storm	Tsunami Volcanic Eruption Winter Storm
enclosed Governor's or Tribal Chief Executive's Thus far, the Carr Fire in Shasta and Trinity co homes, with hundreds more expected; threater caused extensive damage to infrastructure (poinfrastructure. To date, the Mendocino Comple contained; destroyed at least 100 structures wievacuated. The Steele Fire in Napa County: bu power outages, forced closure of major roadwards.	s cover letter. unties: has burned over 131,000 a ns nearly 1,500 additional structure wer utilities, roads, parks, water tre x in Mendocino and Lake counties th many more expected; threatens urned 125 acres and destroyed or ays, and impacted critical commun	eatment plants, etc.); and threatens other critical s: has burned more than 153,000 acres; is 30% s 10,000 structures; 10,000 residents remain damaged at least 11 structures. All fires caused ication towers, cell sites, and microwave facilities.
of Forestry and Fire Protection (CAL FIRE), fire firefighting resources from at least 14 states the	ed Governor's or Tribal Chief Exec epleted. All necessary state asset mutual aid, law enforcement mut roughout the nation. More than 14 the California Department of Social and functional needs. The American	utive's cover letter. s are deployed, including the California Department ual aid, the California National Guard, and ,000 firefighters are fighting fires statewide. More al Services assisting with shelter operations and

10. Joint Preliminary Damage Assessment*	
☑ Individual Assistance Dates Performed Requested Jul 31, 2018 Start Aug 1, 2018	B End
Individual Assistance Accessibility Problems (Areas that could not be accessed, and why) Fire continues to burn in Shasta and Trinity counties, as well as Lake and Mendocino counties. Off of the impacted areas due to safety concerns.	
□ Public Assistance Dates Performed Requested Jul 31, 2018 Start Aug 1, 2018	End
Public Assistance Accessibility Problems (Areas that could not be accessed, and why) Fire continues to burn in Shasta and Trinity counties, as well as Lake and Mendocino counties. Office of the impacted areas due to safety concerns.	icials were unable to access some
11. Programs and Areas Requested	
Individual Assistance N/A Individuals and Households Crisis Counseling Program	Disaster Unemployment Assistance
	Administration (SBA) Disaster
For the following jurisdictions, specify programs and areas (counties, parishes, independent cities; f tribe(s) and/or tribal area(s)) If additional space is needed, please enclose additional documentation All Individual Assistance programs for the counties of Lake, Mendocino, Napa, and Shasta. For States, identify Federally-recognized Tribes in the requested counties (if applicable).	for Indian tribal government, list
Please see Enclosure A: Supplemental Information for Individual Assistance for additional infor	mation in support of this request.
*Not Required for Emergency Declaration Request	madori in support of tills request".

11. Programs and Areas Requested (Continued)
Public Assistance N/A Debris Removal (Category A) Emergency Protective Measures (Category B) Permanent Work (Categories C-G) (not available for Emergency Declaration Requests)
For the following jurisdictions, specify programs and areas (counties, parishes, independent cities; for Indian tribal government, list tribe(s) and/or tribal area(s)). If additional space is needed or your request includes different categories of work for different jurisdictions; please enclose additional documentation. Categories A through G for the counties of Lake, Mendocino, Napa, and Shasta.
For States, identify Federally-recognized Tribes included in the requested counties (if applicable).
Please see Enclosure B: Supplemental Information for Public Assistance for additional information in support of this request*.
Indemnification for Debris Removal Activity
I do not anticipate the need for debris removal.
I anticipate the need for debris removal, which poses an immediate threat to lives, public health and safety. Pursuant to Sections 403 and 407 of the Stafford Act, 42 U.S.C. §§ 5170b & 5173, the State or Indian tribal government agrees to indemnify and hold harmless the United States of America for any claims arising from the removal of debris or wreckage for this disaster. The State or Indian tribal government agrees that debris removal from public and private property will not occur until the landowner signs an unconditional authorization for the removal of debris.
Request for Direct Federal Assistance
I do not request direct Federal assistance at this time.
I request direct Federal assistance for work and services to save lives and protect property, and:
a. I request the following type(s) of assistance:
Mass care and sheltering commodities and additional firefighting resources as necessary.
b. List of reasons why State and local or Indian tribal government cannot perform, or contract for, required work and services. The state is experiencing extreme fire weather conditions statewide and its resources are stretched beyond its capabilities. The state fully engaged all of its resources, activated the California National Guard, and brought in out-of-state and international resources.
c. In accordance with 44 C.F.R. § 206.208, the State or Indian tribal government agrees that it will, with respect to direct Federal assistance: (1) Provide without cost to the United States all lands, easements, and rights-of-ways necessary to accomplish the approved work; (2) Hold and save the United States free from damages due to the requested work, and shall indemnify the Federal Government against any claims arising from such work; (3) Provide reimbursement to FEMA for the non-Federal share of the cost of such work in accordance with the provisions of the FEMA-State or FEMA-Tribe Agreement; and (4) Assist the performing Federal agency in all support and local jurisdictional matters.
Request for Snow Assistance
N/A
Snow assistance for the following jurisdictions (Specify counties, independent cities or tribes and/or tribal areas).
Please see Enclosure D: Historic and Current Snowfall Data for additional information in support of this request*.
*Not Required for Emergency Declaration Request

11. Programs and Areas Requested (Continued)
Hazard Mitigation* Statewide OR
For the following specific counties, parishes, independent cities or tribes and/or tribal areas.
12. Mitigation Plan Information*
a. Mitigation Plan Expiration Date September 30, 2018 b. Type of Plan Enhanced Standard
13. Other Federal Agency Programs
I do not anticipate requirements from Other Federal Agencies I do anticipate requirements from Other Federal Agencies
Please see Enclosure C: Requirements for Other Federal Agency Programs for additional information in support of this request*.
14. Findings and Certifications
I certify the following:
a. I have determined that this incident is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local government or Indian tribal government and that supplementary federal assistance is necessary.
b. In response to this incident, I have taken appropriate action under State or tribal law and have directed the execution of the State or Tribal Emergency Plan on Jul 26, 2018 in accordance with the Stafford Act.
c. The State and local governments, or Indian tribal government will assume all applicable non-Federal share of costs required by the Stafford Act.
15. List of Enclosures and Supporting Documentation
Enclosure C (Requirements for Other Federal Agency Programs)
Additional Supporting Documentation Stafford Act and State Disaster Declarations in Previous 18 Months; NWS Report
Governor's or Tribal Chief Executive's signature B - 1-18 Date If anyone except the Governor or Tribal Chief Executive signs this document, please provide the documentation that establishes that this individual has the legal authority to act on behalf of the Governor or Tribal Chief Executive.
*Not Required for Emergency Declaration Request