

# 2008 June Fire Siege



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## Dedication

This *2008 June Fire Siege* is dedicated in memoriam to:

**Dan Packer, 44**

Fire Chief  
East Pierce Fire & Rescue  
Bonney Lake, WA

**Andrew Palmer, 18**

Firefighter  
Olympic National Park  
Port Townsend, WA

**Bob Roland, 63**

Volunteer Firefighter  
Anderson Valley Volunteer Fire  
Department  
Boonville, CA

**Jim Ramage, 63**

Helicopter Pilot Inspector  
USDA Forest Service  
Redding, CA

**Roark Schwanenberg, 54**

Helicopter Pilot  
Carson Helicopters  
Lostine, OR

**Shawn Blazer, 30**

Firefighter  
Grayback Forestry, Inc.  
Medford, OR

**Curtis Hillman, 77**

Contract Equipment Operator  
Happy Camp, California

**Scott Charlson, 25**

Firefighter  
Grayback Forestry, Inc.  
Phoenix, OR

**Edrik Gomez, 19**

Firefighter  
Grayback Forestry, Inc.  
Ashland, OR

**Matthew Hammer, 23**

Firefighter  
Grayback Forestry, Inc.  
Grants Pass, OR

**Steven Renno, 21**

Firefighter  
Grayback Forestry, Inc.  
Cave Junction, OR

**Bryan Rich, 29**

Firefighter  
Grayback Forestry, Inc.  
Medford, OR

**David Steele, 19**

Firefighter  
Grayback Forestry, Inc.  
Ashland, OR

And to all the other firefighters who gave their lives protecting ours.

## Introduction

Starting in the late afternoon on June 20<sup>th</sup>, 2008, continuing throughout the next day and into the evening, California experienced a series of severe thunderstorms. They carpeted the state from Santa Barbara to Yreka with more than 6,000 lightning strikes. By the time the lightning storm left California, it had ignited a total of 1,754 fires. When the fires were all finally contained, a total of \_\_\_\_\_ acres had burned. At the peak of fire control operations, more than \_\_\_\_\_ firefighters, from as far away as Australia and New Zealand, were engaged.

The impact of the fires to people and society were great. During this unprecedented fire siege, thirteen people were killed, and many fire fighters were injured. These fires destroyed \_\_\_\_\_ homes, \_\_\_\_\_ commercial buildings, \_\_\_\_\_ other structures, and caused hundreds of millions of dollars in property and natural resource damage. Thousands of people were evacuated from their homes, some for several days at a time and some more than once during the summer. Communications, power delivery, and transportation systems were disrupted. Smoke adversely impacted outdoor activities over large portions of the state for weeks at a time, presenting significant health hazards.

The large scale ecological impacts of the fires are complex and vary widely. The fires burned valuable timber and watershed lands, impacted the habitats of several threatened and endangered species, and many areas burned with uncharacteristically high severity because of the fuel accumulations. Many of the long term impacts to natural resources were generally beneficial as fire was returned to many landscapes and heavy fuel accumulations were reduced.

Both the Governor of California and the President of the United States toured fire operations. Governor Schwarzenegger declared a state of emergency for 13 counties, and President Bush declared a state of disaster that made available a wide variety of federal assets, including the military.

In the recorded history of wildfire-prone California, there has never been this many fires started in such a short timeframe, this early in the season, and burned simultaneously over such a long a period of time. There have been more damaging wildfires, but the number of acres burned by so many large fires at once is unprecedented.

### ***Purpose***

The purpose of this report is to provide a broad, factual overview of the 2008 June fire siege documenting key events, providing summary statistics, and serving as a reference for other more detailed reviews, inquiries, studies and reports. This effort also describes the:

- weather and fuel conditions that made California's wildlands susceptible to extreme fire behavior early in the "fire season"
- conditions that made the fires resistant to control efforts

- competition for limited fire suppression resources
- social and economic impacts including infrastructure, health, and direct threats to life and property
- organizational process and interagency cooperation in response to the magnitude of this event

Detailed assessment and analyses of specific issues that arose during this siege are the focus of other efforts and not covered in this report.

## ***Fire History***

California's Mediterranean climate with dry summers, abundant lightning and available fuels have resulted in an environment favorable to the occurrence of fire. California and the western United States have a history of wildfires.

Native Americans used fire extensively for thousands of years to sustain plant and animal populations and provide for their own safety. Early European settlers continued the use of fire as a tool to help clear the land for subsistence farming and grazing. Fuel continuity and fire patterns were disrupted with the widespread, intensive domestic livestock grazing in the latter part of the 19<sup>th</sup> and early 20<sup>th</sup> centuries.

Following a series of massive wildfires in 1910, public policy changed to require immediate suppression of wildfires. The Forest Service adopted the "10 a.m. Policy" under which every wildfire was to be controlled by the morning after it started. Federal and state wildland fire agencies began developing suppression forces that became effective at reducing the annual acreage burned. This policy was effective at eliminating small, low-intensity fires that limited fuel loading, but had little effect on the infrequent high intensity fire. The long term effect of fire exclusion has been heavy accumulation of fuel, increased tree density, and greater risk of stand replacing fire. As the population of California has increased, more people and their homes are situated adjacent to wildlands, where wildfires are likely to occur.

## ***California Lightning Siege Fires***

California has suffered severe wildland fire sieges as a result of lightning storms several times since World War II. Although the term "fire siege" is not well-defined, the following table shows a series of lightning fire events recognized by many regional fire chiefs as significant. These events are often described as multiple fires burning simultaneously for an extended period of time and over large geographic areas.

<b>Year</b>	<b>Date</b>	<b>Duration</b>	<b>Number of Fires</b>	<b>Acres</b>	<b>Large Fires within the Siege</b>
1955	August	18 days	436	307,113	Haystack Fire Refugio Fire
1977	August	3 weeks	240	344,000	Marble-Cone Fire Scarface Fire

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					Gerig-Mevers Fire
1987	August	8 weeks	1241	549,810	Stanislaus Complex Hayfork Fire
1999	August	3 months	1200	800,000	Big Bar Complex Kirk Complex
2008	June	3-5 months	1754	1,200,000	Basin Complex Iron/Alps Complex Lime Complex Yolla Bolly

Table 1 – Significant lightning sieges in California from 1955.

The 2008 June Fire Siege was unique. Although it occurred in June, the burning conditions were more like those of a typical August, due to the effects of a spring drought. The storms on June 20<sup>th</sup> concentrated large numbers of wildfires in northern California. These fires were spread over a wide range of elevations, from the Sacramento Valley floor all the way up to the high country wilderness of the Trinity Alps. Fires were reported several CAL FIRE units, National Forests, the Hoopa Indian Reservation, and Whiskeytown National Park. These fires had tremendous potential for large fire development and exhibited high resistance to control efforts. Many of the siege fires continued to burn throughout the summer.

The Governor's Office of Emergency Services reported that the 2008 June Fire Siege was the largest single fire event in California's recorded history (since 1936) with over 1.2 million acres burned. The second largest event was the 2003 October Fire Siege with over 750,000 acres burned.

To put the 2008 June Fire Siege into perspective, Table 2 shows the 26 largest fires in terms of area burned that occurred in California between 1932 and 2008. In the 76 years of record, more than half of the largest fires have occurred in the last 8 years after 2000. Six of those fires were during the 2008 June Fire Siege (highlighted in yellow).

	<b>Fire Name/Cause</b>	<b>Start Date</b>	<b>County</b>	<b>Acres Burned</b>	<b>Structures Destroyed</b>	<b>Fatalities</b>
1	CEDAR ( <i>human</i> )	Oct. 2003	San Diego	273,246	4,847	15
2	ZACA ( <i>human</i> )	July 2007	Santa Barbara	240,207	1	0
3	MATILIJIA ( <i>undetermined</i> )	Sept. 1932	Ventura	220,000	0	0
4	WITCH ( <i>powerlines</i> )	Oct. 2007	San Diego	197,990	1,650	2
5	MARBLE CONE ( <i>lightning</i> )	July 1977	Monterey	177,866	0	0
6	LAGUNA ( <i>POWERLINES</i> )	Sept. 1970	San Diego	175,425	382	5
7	BASIN COMPLEX ( <i>lightning</i> )	June 2008	Monterey	162,818	58	0
8	DAY FIRE ( <i>human</i> )	Sept. 2006	Ventura	162,702	11	0
9	MCNALLY ( <i>human</i> )	July 2002	Tulare	150,696	1	0
10	STANISLAUS	August 1987	Tuolumne	145,980	28	1



	COMPLEX ( <i>lightning</i> )					
11	BIG BAR COMPLEX ( <i>lightning</i> )	August 1999	Trinity	140,948	0	0
12	CAMPBELL COMPLEX ( <i>powerlines</i> )	August 1990	Tehama	125,892	27	0
13	WHEELER ( <i>arson</i> )	July 1985	Ventura	118,000	26	0
14	SIMI ( <i>under investigation</i> )	Oct. 2003	Ventura	108,204	300	0
15	HWY. 58 ( <i>vehicle</i> )	August 1996	San Luis Obispo	106,668	13	0
16	IRON ALPS COMPLEX ( <i>LIGHTNING</i> )	June 2008	Trinity	105,805	2	10
17	CLAMPITT ( <i>powerlines</i> )	Sept. 1970	Los Angeles	105,212	86	4
18	BAR COMPLEX ( <i>lightning</i> )	July 2006	Trinity	100,414	0	0
19	LIME COMPLEX ( <i>lightning</i> )	June 2008	Trinity	98,715	5	0
20	WELLMAN ( <i>equip. Use</i> )	June 1966	Santa Barbara	93,600	0	0
21	OLD ( <i>under investigation</i> )	Oct. 2003	San Bernardino	91,281	970	6
22	HARRIS ( <i>undetermined</i> )	Oct. 2007	San Diego	90,440	373	8
23	YOLLA BOLLY COMPLEX ( <i>lightning</i> )	June 2008	Mendocino	89,994	0	0
24	SISKIYOU/BLUE 2 COMPLEX ( <i>lightning</i> )	June 2008	Siskiyou	88,069	0	1
25	KIRK COMPLEX ( <i>lightning</i> )	Sept. 1999	Monterey	86,700	0	0
26	SHASTA LIGHTNING COMPLEX ( <i>lightning</i> )	June 2008	Shasta-Trinity	86,500	25	0

Table 2. California's 26 largest fires by acreage since 1932. Six complexes that occurred during the 2008 June Fire Siege are highlighted in yellow. Developed from CAL FIRE Fact Sheet dated 1/12/2009 and 209 data.

## Setting the Stage

When the cells that had formed over the ocean moved on shore and the first lightning struck on evening of June 20<sup>th</sup>, the 2008 June Fire Siege had started. To understand why the siege occurred, it is necessary to review the weather and fuel conditions that lead up to the first ignition.

Fire season in California is largely determined by its Mediterranean climate of long, hot, dry summers and is usually busiest from July to October. During years with an atypically dry spring or fall the fire season can be longer.

The year started off wet through about mid February, but there was very little significant precipitation for the rest of the winter and spring. For example at the Redding airport, January accounted for almost half of the year's total precipitation, with below normal precipitation from March through June. Statewide, spring (March, April, May) of 2008 ranked as the driest year of the 114 years of record in the California Climate Tracker



(Western Region Climate Center – California Climate Tracker). Snow surveys at the end of April 2008 showed that water content of the snow pack was far below average in most mountain areas. The third week of May brought a significant heat wave starting in northern California and spreading to southern California with 194 record high temperatures set.

June saw a continuation of the dryer than average trend with a foehn wind event from the 10<sup>th</sup> through the 12<sup>th</sup>. By late June fuels were reaching historic levels of dryness. The hot, dry spring led to an early curing of lower elevation annual grasses and large woody fuel moistures were 4-8 weeks ahead of typical early summertime drying. Several shrub species put on little or no new growth, which has high moisture content. In many places, the mature shrub growth died back, increasing the ratio of dead-to-live fuel, and making already flammable brush species even more dangerous. Many shrub and some tree species go into a dormant condition during times of heat or drought stress, decreasing the plant's live fuel moisture to the critical level. In forests, 1000-hour fuel moistures were at record low levels by May, and live fuel moistures in conifer timber stands were at or below record levels.

Insert ERC graphs pick up to 6 representative areas (caption: By late June, Energy Release Components (ERCs), a measure of how intensely wildland fuels will burn, were already ranging from well above normal to record highs for the date. )

The years of fire exclusion from the forests have created abnormally high fuel volumes, and increased horizontal and vertical fuel continuity. Ladder fuels allow the fire to travel into the crowns of the trees. Highly flammable, non-native plants promote the easy ignition and rapid spread of new fires. In much of California, insect and disease infestations including Sudden Oak Death continued to spread, adding to the dead fuel load.

These factors contributed to the conditions that made California unseasonably susceptible to ignition, allowing fires to burn with greater intensity, with more resistance to control efforts.

## ***Preparedness***

Preparation for the fire season in California is an intensive, year-round effort for the professional fire fighting agencies. Hiring, training, education and conditioning of firefighters is emphasized in the winter. Equipment is purchased, updated, maintained and ready before the start of fires. Contracts must be in place, overhead teams staffed and organized, and mutual aid agreements finalized. Every summer, the agencies must be ready to go when fire season arrives.

Months before the 2008 June Fire Siege started, the firefighting agencies in California recognized that the combination of weather and fuel conditions increased the potential for a very severe fire season. Federal fire agencies are designed to handle severe fire seasons that may occur in any part of the country each year. This year, much of the focus was on

California. The State of California increased its level of preparedness due to both the potential of the fire season and trend toward more active fire seasons.

On May 9<sup>th</sup>, 2008, California Governor Arnold Schwarzenegger signed an Executive Order S-03-08 (see appendix), designed to bolster the state's preparedness for a long, dangerous fire season by increasing the state's firefighting resources and raising public awareness of the early, very dry fire season. The order directed CAL FIRE and other state agencies to take immediate action to prepare and protect the state from wildfire.

While the magnitude of the June lightning storm and fires was not forecast, when it arrived, the firefighting agencies were already well prepared for a long, severe fire season.

To prepare for the likelihood of a busy fire season, the fire agencies took several actions.

- Additional staffing was hired and trained
- Interagency coordination agreements were developed and in place prior to the fire season
  - Interagency dialog was initiated and kept open
  - The northern and southern GACCs conducted a joint activation simulation in May.
- Contracted fire fighting resources were inspected, trained, and available for deployment.
- Fire fighting resources were made ready for quick deployment as fire conditions worsened
- Agencies exercised early contract start dates for aircraft.
- Early efforts were made to boost public awareness
- Military Resources were coordinated and made available.
- Joint training exercises were conducted

### ***Early Season Fire Activity***

In May and June, California experienced major fires exhibiting fire behavior more characteristic of late summer than spring. These fires reflected the influence of drought, build-up of dry fuel (ERC), and wind driven rapid rates of spread. The fires described here were early indicators of what was to come.

The **Summit Fire** began on May 22<sup>nd</sup>, at 5:17 AM near Mayman's Flat in Santa Clara County and quickly spread into Santa Cruz County. North/northwest winds of about 20 mph (with gusts exceeding 50 mph) drove the fire at an extreme rate of spread, burning nearly 3,500 acres on the first day. This fire was contained on May 28<sup>th</sup>, having burned 4,270 acres and forcing the evacuation of about 1,500 residents. The fire destroyed 42 dwellings, 37 outbuildings, and 42 vehicles. At the height of the firefighting effort, over 3,500 personnel, including 250 engines, 98 hand crews, 54 bulldozers, 18 helicopters, and seven air tankers were committed to this incident.

The **Clover Fire** was burning 8 miles north of Kennedy Meadows on the Sequoia National Forest. Burning 13,500 acres since May 28<sup>th</sup> in the rugged South Sierra Wilderness Area, this fire was only 10% contained and was being managed under a Wildland Fire Use strategy.

The **Indians Fire** on the Los Padres National Forest, about 20 miles west of King City in the Salinas Valley. Starting on June 8<sup>th</sup>, this fire was only 41% contained, and covered more than 50,000 acres in and around the rugged and inaccessible Ventana Wilderness Area. Firefighting resources committed to this fire operation on June 20<sup>th</sup> included 121 fire engines, 71 hand crews, 15 bulldozers, 14 helicopters, 7 air tankers and more than 2,300 fire personnel.

The **Martin Fire** started the afternoon of June 11<sup>th</sup>, off of Martin Road in the Santa Cruz County community of Bonny Doon. Unlike the Summit Fire, which was primarily spread by strong wind, the Martin Fire was burning in lighter winds in dry, heavy fuels. March through June rainfall amounts were the lowest ever recorded in this area, at about 8% of average. The May and June weather here had been unseasonable hot and dry, with little of the seasonal marine layer intrusion. The Martin Fire burned 520 acres before being contained on June 16<sup>th</sup>, with about 90% of that acreage burned the first day. The fire forced evacuation of approximately 1,200 residents and destroyed three dwellings and eight outbuildings. At the height of fire operations, there were 67 fire engines, 29 hand crews, 11 water tenders, eight air tankers and five helicopters assigned, with a total of about 900 personnel.

In Butte County on June 10<sup>th</sup>, the Ophir Fire started east of highway 70 near Palermo. On June 11<sup>th</sup> the Humboldt Fire spread rapidly, moving from the outskirts of Chico uphill into the town of Paradise. Combined, the two fires burned approximately 40,000 acres and 303 structures. At the height of the Ophir Fire operations, 96 engines, 21 crews, 11 bulldozers, and 429 personnel were committed. As the Ophir Fire reached containment on June 12<sup>th</sup>, all excess resources were re-mobilized from the Ophir Fire to the Humboldt Fire. At the height of fire operations on the Humboldt Fire there were 521 fire engines, 68 hand crews, 22 bulldozers, and 3,826 personnel committed to the fire fight. At the height of the fire, more than 18,000 residents of the Paradise area were without power, and as many as 10,000 people were evacuated from their homes and businesses.

Governor Schwarzenegger proclaimed a State of Emergency in Butte County due to the Ophir and Humboldt Fires and in Santa Cruz County, as a result of the Martin Fire.

## **Siege Summary: The First 10 Days**

### ***The Lightning Storm: Friday, June 20***

Fire activity is typical for California most of the day on June 20, 2008. The weather forecast predicts strong high pressure over the desert Southwest producing seasonal warm and dry conditions for inland areas and a southwest flow bringing cool and humid conditions along the coast.

The Trabling Fire starts that afternoon north of Watsonville, in Santa Cruz County, when a vehicle's exhaust system ignites a series of fires along a ¾ mile stretch of road. These fires spread rapidly into a large eucalyptus grove and merge into a single fire threatening hundreds of structures and forcing the evacuation of about 2,000 people and 220 horses and other livestock. There are also two ongoing, large wildland fires actively burning; the Clover Fire and the Indians Fire. While responding to these fires was a sizeable resource commitment, numerous interagency wildland firefighting resources remained available for new initial attack fires.

By late afternoon and evening, thunderstorm cells are moving in along the coast, producing dry lightning strikes from Big Sur, north to Humboldt County. As the early reports started to accumulate, the magnitude of the lightning event and resulting fire situation was starting to reveal itself. The 2008 June Fire Siege was under way.

By midnight on Friday, suppression efforts are initiated on 14 fires in southwestern Mendocino County between Boonville and Point Arena. Dispatch centers are receiving reports of scattered lightning fires along the coast. Further inland the Six Rivers and Shasta-Trinity National Forests report several new fires from lightning.

### ***Lightning Activity Increases: Saturday, June 21***

Starting about 2 AM on Saturday, June 21<sup>st</sup>, the lightning activity increases, with hundreds of downstrikes in Mendocino, Humboldt, and Trinity counties. A low pressure trough moving through Northern California on Saturday further intensifies the lightning activity and sweeps north and east, bringing heavy concentrations of lightning strikes to Butte, Tehama, Shasta, and Lassen counties. Other counties are also experiencing lightning strikes and fires, but the center of the storm hovers over Mendocino, Trinity, Shasta, Tehama, and Butte counties for most of the day. More than 6,000 lightning strikes are recorded in the Northern California area during a 33-hour period.

**Insert map of lightning strikes across the state.**

Within a very short time period, lightning activity starts a huge number of fires, creating competition for the state's interagency wildland fire protection resources. With many more fires than locally available fire fighting resources, many fires remain unstaffed. Committing all available resources to fires leaves many wildland fire stations temporarily unstaffed or staffed by local volunteer fire departments and districts.

The Governor orders the California National Guard to mobilize six helicopters, one RC-26 imaging aircraft, and two Modular Airborne Fire Fighting Systems (MAFFS) aircrafts.

The Northern California Geographic Area Multi-Agency Coordinating (NORCAL MAC) Group is activated. At the first meeting in Redding, they are confronted with hundreds of wildfires burning in conditions more typical of August than June. They quickly prioritize the fire situation by Administrative Unit.

## ***Creating Order Out of Chaos: Sunday, June 22***

On Sunday morning, the weather forecast calls for hot and very dry conditions following the passage of the trough, with scattered thunderstorms possible over the Southern California mountains and deserts. Over 600 additional lightning fires are reported, with Butte, Mendocino, Shasta, and Trinity counties hardest hit. Early reports reveal numerous uncontained and unstaffed fires.

California is divided into two geographic areas, splitting the workload during multiple incidents. There are three Multi-Agency Coordination MAC groups in California: Northern California geographic area MAC or NORCAL MAC, Southern California geographic area MAC or SOCAL MAC and a statewide MAC referred to as CALMAC. The MACS, consisting of regional chief officers (USFS, DOI, CALFIRE, County and OES) are established to prioritize incidents and manage resource allocations for their respective geographic areas.

The NORCAL MAC quickly implements the procedure for prioritization of incidents on 20 different units. Given the large number of fires, several fires are grouped into complexes to facilitate priority setting.

The prioritization of incidents is based on:

- Life threatening situations;
- Real property threatened;
- High damage potential (infrastructure, natural and cultural resources);
- Incident complexity (multiple jurisdictions, potential for growth, current political situation, potential for more incidents).

Fire fighting resources are allocated to the administrative units for dispatch to the priority fires within a complex. NORCAL scored and ranked individual large fires and complexes daily, sometimes twice a day, until August 20.

**WHEN DID SOCAL MAC begin meeting?**

## ***Evacuations and Life Threat: Monday, June 23***

The fires are having a major impact on local communities, regional transportation corridors, and power infrastructure. Evacuations are ordered for multiple fires near residential areas in Solano, Napa, Shasta, Trinity, Lassen, Mendocino and Butte Counties. A spot fire on the slope below the town of Paradise in the Butte Complex generates an order for 125 fire engines to protect threatened structures. Fires in the Lime Complex, in Trinity County, destroyed the Limesdyke Fire Lookout, and have the potential to surround entire communities (Hyampom, Hayfork, Platina and Harrison Gulch) affecting thousands of residents.

The fires close major routes from the Central Valley to eastern California including State Routes 299 East, 44 and 70. The Lime Complex threatens SR 3 and 36 in Trinity County and has the potential to sever all ingress/egress on the county road to Hyampom.

In Shasta County major transmission lines in Burney are threatened, and approximately 4000 PG & E customers in the Shingletown area are without power. The Butte complex threatens the South Feather Water and Power Transmission lines.

Governor Schwarzenegger receives a briefing on the statewide firefighting efforts at the base camp of the Wild Fire burning in Napa - Solano Counties. The California National Guard assets requested on Saturday were deployed today. The Governor declares a state of emergency in Monterey County and Trinity County for the numerous fires, including the Basin Complex and Lime Complex.

### ***Early Successes: Tuesday, June 24***

Despite the great number of starts, severe burning conditions and limited resources, fire fighters are having a lot of success containing fires. As more fires are contained daily, by June 24 more than 500 fires are fully contained. Some original fire starts have merged together creating larger fires. NORCAL MAC reports 26 large uncontained fires or complexes (approximately 400 total active fires) and SOCAL MAC is prioritizing 6 large uncontained fires.

### ***Governor and CAL MAC: Wednesday, June 25***

Another success is achieved today as the Wild Fire is declared contained at 4,089 acres.

The Governor receives briefings today for the Butte Complex in Chico and the Basin Complex in Monterey County. He requests additional helicopters from Oregon, Arizona and Washington to assist fire fighting efforts.

In response to the statewide competition for firefighting resources the California Multi-Agency Coordination (CAL MAC) group was activated in Sacramento

They convene for the first time in over nine years as the state Preparedness Level reaches the maximum of 5. CALMAC reviews the northern and southern MAC group priorities, establishes statewide priorities, and approves resource allocations. CALMAC establishes procedures regarding sharing and use of critical resources, work-rest cycles and documentation requirements for incident management team requests. They are the communication point with National MAC for requesting national, active military and out of country resources. They continued to set priorities for the state until August 9<sup>th</sup>.

### ***Weather and Social Impacts: Thursday, June 26***

Adding to the growing list, Governor Schwarzenegger declares a state of emergency for Mendocino and Shasta Counties.

Air quality is impaired over a wide area throughout the siege, putting asthmatics and smoke sensitive populations at risk and creating unhealthy conditions for all. Air quality districts closely monitor airborne particulate matter levels and issue public health advisories in response to the heavy smoke concentrations (figure X).

Today, an upper level ridge strengthens the inversion over Central California, trapping smoke close to the ground and preventing dispersion into the atmosphere. Air quality impacts occur, even in areas many miles from the fires (figure XX). Smoke impacts also impair visibility, limiting the use of firefighting aircraft.

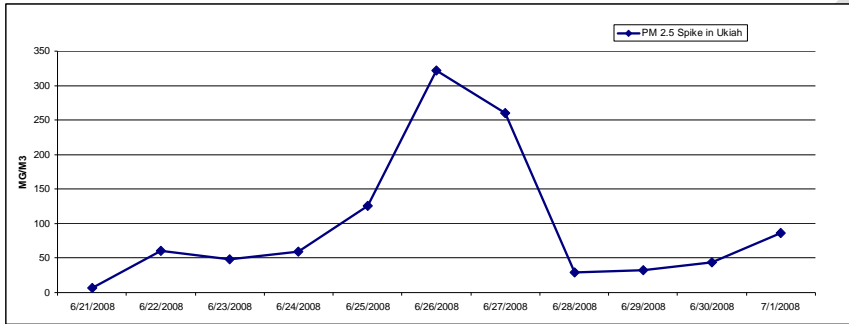


Figure X Particulate matter levels recorded in Ukiah peaked on June 26, far exceeding the national air quality standard of 35 µg/m<sup>3</sup> for a daily average.



Figure XX Smoke induced haze seen above California on June 27.

For administrative reasons, the Blue Fire (SRF) is incorporated into the Ukonom Complex.



The power and communication infrastructure continues to be threatened by multiple complexes. The Nor-Cal fiber-optic main is threatened by the Mendocino Complex fires. The Western Area Power Authority (WAPA) power lines extending from Canada to Mexico are threatened by the Whiskeytown Complex and the Shasta Dam power generating system is threatened by Shasta Complex fires. The Shasta Dam power generating facility is a major supplier of energy to the Central Valley Project with 500 KV power lines. Power generation and transmission also remains threatened in the Feather River Canyon by the Canyon and Butte Complexes.

Fire fighting resources on the Whiskeytown Complex secure commercial communication towers used by television, radio, and numerous public and private agencies and companies for two-way radio communications in the greater Redding area from potential damage

Impacts to natural resources are also increasing. The old growth redwood stands in the Headwaters Forest were threatened and many acres of commercial timber had burned. The following chart depicts the estimated merchantable commercial timber by CAL FIRE Unit that was destroyed by the conclusion of the fire Siege. This does not include regeneration.

BTU	150 million board feet. – Douglas-fir, and Ponderosa Pine, white fir (Butte County)
LMU	6 million board. feet (Lassen, Modoc, Plumas Counties) saw log salvage - PP, D-fir, white fir
HUU	3 million board feet (Humboldt, Del Norte County) – Douglas fir
SHU	80 million board feet (Trinity and Shasta County) – Douglas fir, Ponderosa Pine
MEU	104 million board feet. Redwood, Douglas-fir and Ponderosa Pine (Mendocino County)
CSR?????	

***Weather, Governor’s Briefing, and Presidential Declaration: Friday, June 27 - Monday, June 30***

Fire activity increases Friday morning with a significant north wind blowing down the Sacramento Valley. It clears out smoke, allowing air tankers to operate effectively on several fires.

Governor Schwarzenegger visits Whiskeytown National Recreation Area and receives a briefing on the firefighting efforts statewide and on the Whiskeytown Complex.

PHOTO DOI Secretary Kempthorne W/Quote: - “perspective of the national resources: 1270 of 1426 engines, 429 of 502 Type I and II crews, 96 of 119 helicopters, and 11 of 17 airtankers are deployed in California.”

Saturday begins with a prediction for more thunderstorm activity and a Red Flag Warning in effect for dry lightning during the next 3 days. In anticipation of additional lightning storms forecast for this weekend, the Governor directs OES, CNG and CAL FIRE to continue utilizing all resources, while preparing for additional fires. He directs CAL FIRE to continue running a centralized staging area at the Madera County Fairgrounds. This ensures that resources throughout the state are mobilized quickly and ready for deployment if new fires emerge.

Governor Schwarzenegger sends a request to President George W. Bush for federal assistance, including air and ground firefighting resources. On Saturday, June 28, President Bush signs a federal disaster declaration authorizing federal assistance and fiscal support for Butte, Mendocino, Monterey, Santa Clara, Santa Cruz, Shasta and Trinity Counties. Evacuation operations and sheltering of displaced people continue for the counties of Butte, Mendocino, Monterey, Santa Clara, Santa Cruz, Shasta and Trinity.

A thunder cell over the Corral Fire in Lassen County collapses with peak wind gusts of 50 MPH. This causes rapid fire spread, frequent spotting and the loss of established fire control lines. Resources are forced to disengage and retreat to safety zones as a precautionary measure.

On the Basin Fire, Highway 1 remains closed south of the community of Big Sur. Business and commerce continues within the community. There is concern that a predicted wind shift will increase acreage to the north and west affecting the east side of Big Sur. The Oliver Fire is causing unhealthy air quality affecting people in 4 counties.

Following the lightning, strong winds are predicted for all fire areas with the potential to increase fire activity. As the winds materialize on Sunday, the smoke is again pushed out of the valley, allowing air tankers to resume operations. Fire intensity increases with significant runs and spot fires. The North Mountain Fire in the Sierra Nevada expands, threatening a gathering of children at Camp Mather. Fire fighting resources from the Siskiyou Complex assist with five initial attack fires that started with lightning on the Klamath National Forest.

On the Butte Complex, the Oak Flat powerhouse on the Feather River goes offline due to burned poles on a primary transmission line.

Despite the adverse weather conditions the Walker Fire (LNU) is contained at 19,504 acres.

The Governor proclaims a state of emergency in Plumas County, (12,000 acres burned) and in Kern County with more than 2,500 acres burned.

## **Siege Summary: Tuesday, July 1**

By July 1st, the 2008 June Fire Siege is fully underway. The 1,754 fires defining the siege are identified and the vast majority are already contained by the relentless work of

firefighters from California and throughout the nation. State, local and federal firefighters continue to battle more than 75 uncontained large fires from Kern County, north to the Oregon border. While some fires are immediately threatening communities, others are in areas so remote and rugged that they will burn until the arrival of fall rains. Nationally there are 337 new fires and a total of 95 uncontained large fires taxing scarce suppression resources and requiring fire managers to constantly reassess priorities. Fires were actively burning in the hot, extremely dry weather. A few of the fires within the complexes remained unstaffed due to limited resources.

Today Governor Schwarzenegger visits the Shasta Complex and the Forest Service Chief's principal representative visits North Zone. Military assistance continues to increase in the form of helicopters and air tankers. The Governor orders 200 California National Guard soldiers to be trained and deployed to fight wildland fires. Their training begins this week for deployment on the fire lines early next week. Today the Governor proclaimed a state of emergency in Mariposa County, bringing the total to ten counties (Plumas, Butte, Kern, Mendocino, Monterey, Plumas, Santa Clara, Santa Cruz, Shasta and Trinity).

The Governor is briefed with a daily Statewide Fire Overview which includes the following statistics:

<p><b>Statewide Fire Overview</b> <b>July 1, 2008</b></p> <p><b>Fires:</b> 1,459 <b>Acres:</b> 435,894 <b>Personnel Committed:</b> 18,457 <b>Resources Committed:</b>     <b>Engines:</b> 1,399     <b>Crews:</b> 488     <b>Dozers:</b> 335     <b>Water Tenders:</b> 410     <b>Helicopters:</b> 100</p> <p><b>Highway closures:</b> State highways and local roads are closed throughout California due to wildfire activities. Closures are in place for State Highways 1 near Big Sur, 32 between Chico and Chester, and 70 in the Feather River Canyon with delays on Hwy 299 along the Trinity River. Numerous county and local roads are closed as well.</p> <p><b>Evacuations:</b> Areas of Monterey and Shasta counties are under evacuation orders. Precautionary evacuation orders are in place for areas in Butte, Kern, Mendocino, Monterey and Shasta counties.</p> <p><b>Structures Threatened:</b> 8,076 residences, 165 commercial, 3,045 outbuildings.</p> <p><b>Structures Destroyed:</b> 31 residences, 1 commercial, 28 outbuildings.</p>
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The following section provides a detailed description of a single day to illustrate the scope and complexity of the siege. The fires are presented in the priority order determined by CAL MAC with input from the NORCAL and SOCAL MAC groups. (Today, FEMA also joined the CALMAC group). Priorities continue to emphasize the protection of life, property, critical infrastructure and natural/cultural resources.

**Northern Predictive Services Forecast:** Another weak disturbance is crossing Northern California from SW to NE. It will bring mid and high level clouds which will be thickest over the northwestern half of the area. The marine layer has deepened to 2000-2500'. The biggest concern is the SW gradient winds ahead of the trough. Record high Energy Release Components and record low 1,000- hour fuel moisture levels are reached in three Northern California planning areas.

**Southern Predictive Services Forecast:** A ridge of high pressure over the southwestern states will maintain temperatures a little above normal over most of the region. Morning low clouds and fog will move into coastal areas. Humidity will remain very low above the marine layer.

**Butte Complex (CAL FIRE's Butte Unit):** Of the 36 fires in this 17,000 acre complex, 11 were already contained and 12 had merged with other fires, leaving 13 active fires. Some of the fires in the Canyon Complex on the neighboring Plumas National Forest were burning areas where they could potentially influence or join fires in this complex. The two incident management teams had to closely coordinate firefighting efforts with each other and with the team managing the nearby Cub Fire on the Lassen National Forest. The Butte and Canyon complexes threatened major electrical transmission lines in the Feather River Project, and the communities of Magalia, Coutolenc, Butte Meadows, Jonesville, and Jarbo Gap remained threatened. Successful firing operations had been carried out last night on the Breakneck Fire. The Camp Fire joined with other fires and grew to 5,900 acres. The complex still was still not able to take effective perimeter control actions on all of the fires due to the unavailability of additional engines, crews, dozers, and overhead. During the day, the Butte Complex grew by 1,000 acres and was 30% contained.

**Shasta Complex (CAL FIRE's Shasta-Trinity Unit):** Of the 158 original fires in this 51,000 acre complex, an impressive 108 fires had been contained and 43 had merged with adjacent fires, leaving 5 active fires. Several of these fires were burning heavy fuels, in remote areas with difficult access, west of Redding. The fires near Lake Shasta continued to threaten the major electrical power lines of the Western Area Power Administration (WAPA), which are significant sources of electricity for all of California and contribute to the Western Power Grid. The three fires of primary concern were: Motion fire (16,700 acres and 25% contained), the Deerlick Fire, (16,800 acres and 10% contained), and the Moon Fire (18,500 acres and 15% contained). Fires in the nearby Whiskeytown Complex and the Lime Complex to the west maintained the potential to influence or merge with these fires. Again the various management teams had to closely

coordinate their plans and actions. During the day, the Shasta Complex grew by about 2,500 acres and was 20% contained. Governor Schwarzenegger visited the Shasta Complex today.

**Whiskeytown Complex (Whiskeytown National Recreation Area):** The four fires in this complex had gradually grown to about 4,800 acres and were 30% contained. The fires threatened the WAPA power lines and critical radio, TV, and fire and law enforcement repeater sites on Shasta Bolly. During the day, control lines held, and the Park Service Incident Management Team developed a plan with CALFIRE on how to cooperate in containing the SE and SW flanks. Estimates of the acreage burned in this complex decreased as the smoke lifted enough to allow more accurate mapping of the fires.

**Indians Fire (Los Padres National Forest):** Eighteen miles west of King City, the Indians Fire has grown by 20,533 acres (to 81,378 acres) as the result of a successful, large, burnout operation. The firelines held in place today and containment stands at 95%. Some crews are being released for redeployment to other fires.

**Basin Complex (Los Padres National Forest):** Five miles southeast of Big Sur, the Basin Complex burned very actively today in timber, brush, and slash. This complex added 12,079 acres today, bringing the total area burned to 51,985 with only 3% containment. Evacuation orders are in effect for the community of Big Sur and Highway 1 is closed.

**Oliver Fire (CAL FIRE's Madera-Mariposa-Merced Unit):** The Oliver Fire continued to hold inside the indirect lines, with containment growing to 75% today. Full containment of this 2,789 acre fire was predicted for July 5<sup>th</sup>, and many resources were being released today for redeployment to other fires.

**Lime Complex (Shasta-Trinity National Forest):** The 35,766 acre Lime Complex in the Hyampom area of Trinity County originally included 70 fires, 30 of which have been contained. Many of these fires are burning in steep, remote areas with limited access, presenting a significant challenge. Highway 3 and Highway 36 continue to be affected, disrupting transportation in Trinity County. During this day, these fires grew by only 321 acres, but continued to move into more difficult terrain.

**Iron Complex (Shasta-Trinity National Forests):** The Iron Complex fires are scattered from south of Hayfork to the Trinity River Canyon and Highway 299 corridor presenting a serious challenge. The main fires of concern in this complex include the Eagle Fire, with several miles of open line on the south side of the Trinity River, the Ziegler Fire threatening the communities of Hawkins Bar and Trinity Village, the Ironside Fire, abutting Highway 299 and necessitating frequent closures, and the Cedar Fire. Today a bulldozer rolled over on this complex resulting in arm and shoulder injuries to the operator. Ten fires in the Iron Complex have been contained, but five fires remain active. During the day these fires grew by 1,061 acres to total of 19,178 acres and 25% containment.

**Mendocino Complex (CAL FIRE's Mendocino Unit):** The 37,800 acre Mendocino Complex originally included 129 lightning fires. Forty fires are currently active, 14 of which are unstaffed due to competition for fire suppression resources. This complex is now 40% contained. Fires are spread over a large area and organized into six organizational branches. Multiple base camps are established and supported by a distribution center at the Ukiah fairgrounds. Large stands of valuable commercial timber, including coast redwood forests, were impacted. Mendocino Redwood Company took independent action on 15,500 acres within their ownership. Several fires continue to threaten Highway 1, the main north-south artery along the Pacific Coast. A strong marine influence with cool weather helped to keep the fires from spreading much today with fires in heavy fuel concentrations actively burning.

**Piute Fire (Unified Command between the Sequoia National Forest and Kern County Fire Department):** The 11,514 acre Piute Fire is located 17 miles northeast of Caliente. Extreme fire behavior with high rates of spread, torching and spotting result in an additional 4,474 acres burned today. Several small, mountain communities remained threatened and evacuations have been implemented. The fire now stands at 11% containment.

**North Mountain Fire (Stanislaus National Forest):** The North Mountain Fire is located seven miles northeast of Groveland. The fire continues to back and creep, but the acreage is holding at about 2,711 acres, and containment increased to 75%. Full containment is expected within two days.

**Canyon Complex (Plumas National Forest):** The Canyon Complex is located in the rugged Feather River Canyon. Several fires have been contained including two fires, the Hartman Fire and Four Mile Fire which were contained today. Twelve of the original 42 fires have merged with other fires. Nine fires remain active, one of which has not yet been staffed. The fires had remain active, even at night when strong, gusty down-canyon and down-slopes winds fan the flames. Firefighters who had rappelled from helicopters into the Belden Fire are being removed due to intensified fire behavior. There was a bulldozer rollover accident and the operator was evacuated with injuries. Contingency plans are being developed for structure protection, protecting the power stations and railroad out ahead of the fires, and the Incident Management Team and the forest are developing long-term strategy.

**American River Complex (Tahoe National Forest):** The American River Complex grew by 1,112 acres today to 5,292 acres as the Government Springs Fire made a run on its northwest corner. Firefighters who are trying to delay spread of the fire until indirect lines can be completed. The American River Complex continues to threaten the Interstate 80 corridor, the Union Pacific Railroad, and the community of Blue Canyon. Cost of closing the railroad has been estimated at \$1,000,000 per hour. Difficult terrain requires the use of remote spike camps, making logistical support difficult.

**Yuba River Complex (Tahoe National Forest):** The 3,619 acre Yuba River Complex includes three fires and is 78% contained. Although the Scotchman Fire continues to

spread in the Canyon Creek and Yuba River drainages, good progress is being made by firefighters who indicate that they have enough resources to continue making progress under current burning conditions.

**Silver Complex (Sierra National Forest):** The Silver Complex includes two fires twelve miles southeast of Mariposa. Fire activity is moderate with only 50 more acres burning today, bringing the total to 1,161 acres with 95% containment.

**Mad Complex (Six Rivers National Forest):** The 2,633 acre Mad Complex originally contained 29 fires. Twenty three of the fires are contained, leaving six active fires. The Bonanza fire is burning in steep terrain with difficult access. Anchor points are being established for an indirect attack strategy. Fire managers are concerned about the fires on neighboring lands that could potentially spread into this area adversely affecting firefighter safety. Some fires remained unstaffed and containment is now 40%.

**Hell's Half Complex (Six Rivers National Forest):** The two fires in this complex near Burnt Ranch continue to spread south and the east. The Half Fire has burned into the Shasta-Trinity National Forest and is nearing structures. The Grouse Fire is threatening a major power line. The fires total of 2,793 acres and are 40% contained. Good progress is being made, but the potential for significant runs by both fires remains high.

**Ukonom Complex (Six Rivers National Forest):** The 3 fires in the Ukonom Complex (Merrill, Jake, and Blue), north of Somes Bar on the grew by about 474 acres today to a total of 6,358 acres. The Blue Fire, in the headwaters of Blue Creek was difficult to access, but holding operations seem successful. Fire managers are trying to minimize the impact that both the fire and suppression efforts have on Native American spiritual sites and the Forest Service facilities at Oak Bottom, and were developing a long-term implementation plan. Containment was only at 5%.

**Corral Fire (CALFIRE's Lassen-Modoc Unit):** The 15,000 acre Corral Fire is burning actively about 10 miles north of Eagle Lake. Burning eastside mixed conifer (small to medium-sized trees) with grass and brush understory, the fire exhibits rapid rates of spread, erratic fire behavior and spotting over control lines in the late afternoon gusty winds. Containment is 25%, but the continuing shortage of hand crews and dozer bosses is a concern as the fire continued to burn actively through the night.

**Cub Complex (Lassen National Forest):** Two of four fires in the 5,000 acre Cub Complex, 16 miles southwest of Chester, are contained and turned back to the Forest for patrol. Two fires remain active, the Cub Fire and Onion Fire. Short uphill runs and spotting up to ¼ mile are common today with an additional 668 acres burned. Because of location and limited resource availability, the Cub Fire remains unstaffed and fire managers note it's potential to become a long-term event. Highway 32 remains closed. The complex is 25% contained.

**Yolla Bolly Complex (Mendocino National Forest):** The Yolla Bolly Complex originally included 22 fires within the Yolla Bolly Wilderness Area. Thirteen have been



contained, and the Camp Fire was contained today. The Frying Pan and Vinegar fires merged. Two new fires are detected, one was contained by smokejumpers, but the second fire went unstaffed. Three fires (Harvey Ridge, Thomes, and the new Sugarloaf) were very active today, with running and spotting fire behavior. Today an additional 2,203 acres burned, bringing the total to 6,103 acres with 5% containment.

**Clover Fire (Sequoia National Forest):** The Clover Fire, 32 mile north of Weldon, continues to back and creep within the containment lines. It totals 15,262 acres and is 70% contained, but full containment is not expected until July 15<sup>th</sup> due to difficult terrain.

**Siskiyou Complex (Klamath National Forest):** The three Siskiyou Complex fires, are burning in steep, inaccessible terrain, southwest of Happy Camp. The fires are well established with potential for significant growth over an extended timeframe. The strategy is to merge these fires by constructing and burning out indirect hand lines along existing trails. Potential size is estimated at 40,000 acres. Today's 2,203 acres increased the total to 9,915 acres burned with 25% containment, all on the Dark-Three Fire.

**Alps Complex (Shasta-Trinity National Forest):** The Alps Complex in the Trinity Alps Wilderness Area originally contained 13 fires. Four are contained, and five are unstaffed. Fire behavior intensifies as the inversion layer lifts. Some fires are in such steep terrain and heavy fuels that firefighters cannot approach them. Long-term strategy is being developed employing an indirect attack, using the existing trail system and natural barriers. Today 595 acres burn and the complex totals 3,245 acres with 2% containment.

**Soda Complex (Mendocino National Forest):** The Soda Complex includes four fires located about 15 miles northwest of Upper Lake. The Back Fire is contained. The western flank of the Mill Fire is burning into the Sanhedrin Wilderness Area and poised to merge with the Big Fire. The Monkey Rock Fire is burning in the Yuki Wilderness Area and has no containment. High recreational activity is noted in the area of these fires. The complex is now 5,100 acres with 72% containment, but potential for growth is rated as high.

Regional Chief Officers and CAL MAC will be concerned about maintaining an adequate reserve of forces for initial attack in the face of predicted thunderstorms and the remainder of a long fire season still ahead.

## **Siege Summary: July 2- August 5**

The 2008 June Fire Siege continues until the fall rains come for some of the complexes. The remaining portion of this report highlights the significant events that occur during the next 34 days. During this time period a critical wind event causes a major expansion of all fires, and additional lightning ignites more fires. This segment is marked by severe tragedy with 13 firefighter fatalities directly related to the fires.

The fires continue to disrupt everyday life in the affected communities. Evacuations are initiated and rescinded, and smoke becomes a long term impact to health. Many 4<sup>th</sup> of

July celebrations and other special events are impacted, along with tourism, travel, health and air quality. Life does not go on as usual.

The scale of the fire fighting effort requires extraordinary efforts and cooperation between a growing number of organizations. Fire fighting resources have now been working for 10 plus days and fatigue is beginning to become a factor. Fire managers are concerned about firefighter health and safety. There is an exceptional response by local fire departments from throughout California assisting in the fire fight. Additional California National Guard are activated for training and deployment, Department of Defense air resources become involved, along with activation of international cooperative agreements.

To emphasize the importance of the effort and recognize the dedication of those involved, it is important to note that the Governor continues to visit the fires and President Bush visits with firefighters. Regional Chief Officers and CAL MAC must maintain an adequate reserve of initial attack forces in the face of predicted thunderstorms and remain prepared for the remainder of a long fire season still ahead.

We end the detailed discussion of the 2008 June Siege Summary on August 5 with the tragedy of the helicopter crash that took the lives of 9 firefighters. These fires do not end on August 5<sup>th</sup>, but for practical purposes, the siege ends and the remaining fires start to blend into the other fires of a busy wildfire season.

### ***The Gap Fire: Wednesday, July 2***

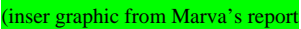
The Gap Fire started yesterday in Santa Barbara County, and quickly becomes the top priority for resources. Structures are threatened when “sundowner” (Santa Barbara’s version of Santa Ana) winds push the fire downhill from the mountains to the outskirts of Goleta and Santa Barbara. Resources originally are re-directed from Northern California Siege fires to the Gap Fire.

### ***The First Life Lost: Thursday, July 3***

Less than two weeks into the siege, Governor Schwarzenegger acknowledges concern about the hazard of fatigue associated with the long days that firefighters were working.

*“I think that they all are doing a great job, but the danger is that our firefighters get stretched thin. A lot of them are working overtime and they are staying up for more than 12 hours, sometimes 24 hours, 36 hours. So we have to be very careful that they get enough sleep and this is also why we have asked the National Guard to provide us with 200 extra personnel.”*

To bring some relief to fire fighters, CAL FIRE is able to order FEMA resources to work on incidents in counties that have received the Presidential declaration of disaster. FEMA resources are assigned to CAL FIRE for suppression efforts in BTU, SHU, and

MEU. BTU has the largest number of resources assigned with  (insert graphic from Marva's report page 9)

Two days after the Governor's statement, Volunteer Fire Fighter (VFF) recruit Bob Roland, 63, of Anderson Valley, CA passes away during the early morning of July 3, 2008 after suffering fatigue and respiratory difficulties. He was assigned to the Oso Fire in the Mendocino Lightning Complex.

**Sidebar BIO: VFF Bob Roland grew up in Southern California and was a Volunteer Firefighter for CDF Riverside as a teenager. VFF Roland was a Marine Corps pilot from 1967 to 1977 and retired from an aeronautical engineering firm in San Diego County. He had relocated to Anderson Valley earlier in 2008. To honor VFF Roland's sacrifice, his family requested that all energy be put into successfully fighting the Mendocino Lightning Complex fires; and they urged all firefighters to spend as much time with their families as possible.**

The North Mountain Fire is contained today at 2,889 acres.

### ***Fires Hamper Holiday Events: Friday, July 4***

Independence Day dawns cool and clear, as a southwesterly nighttime wind has allowed the marine layer to move inland. Fire behavior on the west side of the Central Valley moderates and crews are able to make significant progress. The TGU complex is declared contained at 22,907 acres.

The impact of fire and fire suppression activity keeps three major highways closed, impacting holiday traffic. The Cub Complex closes Highway 32, inconveniencing thousands of people attending a Fourth of July celebration in Chester. Similar frustrations occur with the continuing Highway 70 closure for thousands of people attending a music festival in Quincy. The Iron/Alps Complex burns on both sides of over 5 miles of Highway 299, causing intermittent closures. Highway 1 is closed north and south [ ??? ] of Big Sur. Closure of these major transportation routes is contributing to the large scale economic impact, and particularly to seasonal businesses depending on tourism during the holiday.

Many Northern California communities cancel or postpone traditional firework show due to limited visibility, and high fire danger. At the Corral Fire, a Fourth of July Parade is held at the Incident Base. Fire personnel, including the vendors, participate in the parade and are treated to a simulated fireworks display. Chemical light sticks and vehicle emergency warning lights provide the visual effects. The great attitudes and imaginations make the holiday enjoyable.

Other special events and significant ceremonies are affected by the siege as well. Fires on the Six Rivers National Forest limit access to the Yurok and Karuk tribe's ceremonial grounds. One major Karuk ceremony is cancelled, and a Yurok ceremony is almost cancelled by the fires.

The Governor announces that he is doubling the California National Guard ground forces deploying to Northern California Wildfires. Two hundred soldiers are deployed on Tuesday and today he orders another 200 to begin reporting on Sunday.

Major General William H. Wade states “we're doing something that we heretofore have not done and that is to take our soldiers and put them on the fire line. We've always used our unique military capabilities in other ways with MPs, truck drivers, cooks, fighting fires from the air with our pilots, but this is something different. Exigent circumstances require extraordinary response measures and that's what we're about to do with this first time ever commitment of National Guard forces to actually fight on the fire lines.”

### ***Inversion helps firefighters: Saturday and Sunday, July 5 - 6***

An inversion moves over the fires continuing to moderate fire behavior. This gives personnel the opportunity to make progress and secure constructed fire line. Aircraft is limited by the smoke and unable to support ground operations.

The Oliver Fire is contained at 2,789 acres and Regional Chief Officers are hopeful that the increased containment on some of the complexes indicates the worst is over. Precautionary evacuations of the Magalia area on the Butte Complex are lifted and some engines, water tenders and dozers are being reassigned to other fires or home for rest.

SOCAL MAC is convened in Riverside, California in anticipation of increased fire activity as an extreme heat event develops across California.

### ***Critical Wind Event: Monday through Thursday, July 7-10***

The Corral Fire is contained on July 7 at 12,434 acres. The Blue Fire (SRF) that was previously incorporated into the Ukonom Complex is now separated from the complex and prioritized as an individual fire known as the Blue 2 Fire.

Fire activity does not moderate for long; July 7-10 brings an extremely critical foehn wind event. It coincides with a record breaking heat wave and very low relative humidity. These winds produce the last big increases in acreage. Red flag warnings are issued as temperatures reach 115 degrees with minimum relative humidity inland ranging from 5-16%. Foehn wind events of this magnitude and duration are uncommon during July in Northern California.

Demobilization of resources on the Butte Complex is discontinued on July 7 with predicted winds. On July 8, strong east winds surface in the early morning hours, blowing down the Feather River Canyon. On the Butte Complex, the Camp Fire exhibits sustained runs, with spotting, torching, and crowning on both flanks. The burned area increases by 17,000 acres in one day. The giant convection column is readily visible on weather satellite images. By mid-morning there are reports of 10-15 structures destroyed in the Concow area. The threat of fire crossing the West Branch of the Feather River

necessitates evacuations in communities of Magalia and Paradise Pines. This is the third time this summer that these communities have been under evacuation orders.

The nearby Canyon Complex, is also affected by the east winds. An immediate evacuation order is issued for the area southeast of Lake Madrone. Fires in this complex burn an additional 4,708 acres.

On the Shasta Complex, the Mary Fire in the Whiskeytown Complex merges with the Moon Fire. It makes a rapid run, threatening the communities of Ono and Igo and prompting evacuations. The nearby Motion Fire spreads to the south and southwest threatening structures in the communities of Keswick and Shasta. Large numbers of engines are diverted from other assignments to provide structure protection for the threatened communities.

The American River Complex also experiences a significant setback, as the Government Springs Fire, is active on three flanks under the influence of strong easterly winds.

The Basin Complex displays extreme fire behavior with group tree torching, spotting, and short duration crown runs. The fire increases in size by 5,531 acres necessitating the evacuation of Big Sur and the closure of U.S. Highway 1. The Martin Mars airtanker diverts from Lake Shasta to the Basin Fire and operates from Lake San Antonio.

### ***International Assistance: Tuesday, July 8***

International support is offered by Australia, New Zealand, Canada and Mexico. Fire fighters from Greece, already in California are engaged in suppression activities.

Amidst the critical wind event, firefighters from Australia and New Zealand depart for the Interagency Fire Center in Boise for orientation before deploying to California. Some of these firefighters remain for up to thirty days

Meanwhile, a Canadian overhead team of 15 fires specialists is deployed to the Mendocino Complex. An order is placed to Canada for air tankers. Aviation managers work through Customs issues for entry into United States airspace. Once in California they inspect and card the aircraft for use. *Insert Convair sidebar*

### ***Governor Requests Additional Federal Resources: Wednesday, July 9***

Responding to earlier gubernatorial requests, the Federal Government (FEMA resources) helps California as 40 other states send firefighters, fire engines and other resources. In preparation for additional lightning and anticipating the rest of fire season, Governor Schwarzenegger sends the following letter to President Bush requesting federal active duty military forces, out of state federal firefighters to train National Guard forces, and an increase the "Maximum Efficiency Level" (MEL) for the U.S. Forest Service to 100 percent.

Dear Mr. President,

As you know, California is in the midst of battling unprecedented wildfires that have stretched our state's firefighting resources to their limit and placed thousands of Californians in immediate danger. On the heels of lightning storms in June that ignited more than 1,700 fires across the state, we now face extremely high temperatures and increased fuel loads that are exacerbating fire conditions and putting our communities and firefighters and other first responders at risk. With more lightning storms forecast for later this week, we sit at a critical tipping point in California that requires immediate federal help and aggressive pre-positioning of federal resources.

As of July 8, 2008 California had placed requests for the following assets with the National Interagency Fire Center (NIFC) in Boise, Idaho: 302 hand crews; 41 helicopters; 616 fire engines; and 773 support personnel. In addition, we are calling on NIFC daily for additional air tankers that are critical to suppressing the flames. These numbers change daily based on the current fire status; I ask that you direct your federal agencies, working through the NIFC, to make all requested assets available to California...

### ***Governor Visits Shasta Complex: Thursday, July 10***

Record heat and critically low humidity continue. Temperatures of 100-115 degrees are recorded across the interior below 2000 ft elevation, and extend to within a few miles of the ocean. Red Flag Warnings are in effect for most of Northern California through Friday morning. Heat related illness affect suppression efforts on numerous complexes.

The Governor visits the Shasta Complex today and comments on the cooperation of all agencies. He states, "The way we fight those fires is if everyone works together. And I think that the world has seen how we handle emergencies in California. They've seen how well we handle it because we coordinate well between the state, the locals and the federal government and how well that the fire officials and law enforcement officials work together..."

Despite the critical weather the past three days, the Indians Fire is contained today at 81,378 acres.

### ***Civilian Fatality and Increased National Guard Mobilization: Friday, July 11***

Today officials disclose that the body of a civilian fire victim was found in the smoldering remains of a house in the Concow area on the Butte Complex. The victim is later identified as Van Scott West, 61 of Concow.

Governor Schwarzenegger orders an additional 2,000 California National Guard troops to train for firefighting duties. The fire agencies increase the training effort and initiate a nationwide search for qualified military fire crew leaders to accompany each crew of

soldiers. The training consists of three days of classroom training on basic wildland firefighting and safety. The 10 (20-person) crews then move outdoors for two days of intensive training before deployment to a fire assignment.

The additional trained troops would be ready to respond to new fires as the fire season continues.

### ***Flash Flood in Southern California: Saturday, July 12***

The weather affects firefighting efforts again with the arrival of monsoonal rain over the southern portion of the state. The system arrives over the region on July 12<sup>th</sup> and remains in place until the 17<sup>th</sup> producing 2 to 4 inches of rain. The reduced fire activity proves beneficial to firefighters.

The Piute Fire in Kern County receives 4 inches of rain in two days, leading to serious flooding but also effectively extinguishing the blaze. Flash floods concern fire officers and firefighters are removed from the fire before access is severed.

The Mad Complex is contained at 3,705 acres.

### ***Critical Infrastructure Repairs: Sunday through Wednesday, July 13 – July 16***

Sustained efforts and good weather are continuing to produce more successes. On July 14, the Humboldt Complex is contained at 1,325 acres and the Whiskeytown Complex at 6,240 acres. Then on July 15, the Yuba River Complex is contained at 4,254 acres. The total number of Siege complexes still being prioritized is down to **16 from \_\_\_\_\_**

Railroad lines were strongly impacted by the Siege. The Government Springs Fire on the American River Complex, is contained before direct contact with the rail lines. To protect their asset, Union Pacific Railroad (UPRR) brought in a fire train for protection of the tracks. They estimated the economic impact of shutting this major rail line would be \$1,000,000 per hour.

Fires in the Butte and Canyon complexes directly impact the UPRR line in the Feather River Canyon. The line is closed for many days. Suppression personnel on the Butte Complex work with UPRR when Tunnel #15 caught on fire. UPRR is successful in extinguishing the fire without the need for fire engines assigned to the fire line being redirected to the tunnel.

The power infrastructure (lines and generation facilities) is impacted by many Siege fires. The power companies are making repairs to restore power as soon as fire officials allow. On July 12, a Pacific Gas & Electric (PG&E) employee repairing power infrastructure damaged by the Camp Fire, Butte complex, is injured and transported to the hospital. The Cedar Fire (Iron Complex) affected four to five miles of PG&E transmission line.



### ***Presidential Visit: Thursday, July 17***

President George W. Bush arrives in Redding and tours the North Operations Coordination Center and meets the employees who make the movement of personnel, resources and aircraft happen.

The President flies over the Shasta Complex fires and meets with firefighters and Boy Scouts that are working on a Healthy Forest Initiative project to reduce fuels. He also visits the Redding Smokejumpers who had a record breaking year. They made the highest number of jumps \_\_\_\_\_ with one jumper exceeding over XXX career jumps. President Bush was accompanied by Governor Schwarzenegger, Senator Feinstein, and Congressman Herger.

Governor Schwarzenegger comments on the President's rapid response from the federal agencies and the cooperative efforts recognizing that 80 percent of the United States firefighting resources were in California.

### ***Demobilization and Redeployment: Friday, July 18***

With several of the Complexes reaching containment the fire chief officers in the MAC groups begins planning for demobilization and redeployment. The long fire season ahead is still a driving factor in assuring "ready reserve forces for new fires". Discussions focus on maintenance of the logistical support for incident bases and the distribution center for the months of containment, mop-up, and recovery efforts still ahead.

CALMAC begins the planned release of the MAFFS airtankers back to their home bases. The military helicopters provided by the Navy and Marine Corps are also released.

### ***The Fire Fight Continues: Sunday, July 20***

The Mill Fire (Soda Complex) in the Sanhedrin Wilderness Area crosses protection boundaries. A Unified Command is established between the Mendocino National Forest and the Mendocino Unit of CAL FIRE.

A south-southeast wind on the Bear Wallow Complex, pushes the Caribou Fire north, with spotting up to ¼ mile. One spot fire burns 30 acres.

Mandatory evacuation orders are lifted in the area affected by the Motion Fire (Shasta Complex).

A main concern on the Lime Complex is road closures and construction activities on Hyampom Road as firefighters are conducting burnout operations.

The Cub fire is contained at 19,718 acres.

## ***Additional Lightning: Monday through Thursday, July 21 - July 24***

On Monday, scattered thunderstorms are predicted for Northern California and eastern Oregon with drier air following behind the storms. The Regional Chief Officers deploy additional heavy helicopters in the northeastern part of the state in preparation for new fires. By afternoon many of the fire complexes in Northern California are extremely active, and the convection columns from the Lime Complex fires are clearly visible from Redding. Additional resources to meet anticipated needs were coming available as several of the complexes were nearing full containment.

By Wednesday, many of the large fires are reporting active burning with continued threats to communities. The Basin Complex near Big Sur displays active fire behavior with backing, upslope runs and isolated torching. Voluntary evacuations and road closures remain in effect. The Basin Complex has reached 142,617 acres burned with 72% containment. Of the 4 active fires within the Iron and Alps Complexes (SHF), the Cedar Fire is once again threatening structures in the communities of Del Loma and Big Bar with mandatory evacuation orders in effect for communities along the Highway 299 corridor. Communities along the Trinity River are threatened and evacuated numerous times beginning June 25<sup>th</sup>. Evacuations recur in July due to threats from various fires within the Iron Complex. Low visibility, due to smoke, is limiting the use of aircraft. The Iron and Alps Complexes have burned 68,292 and are 62% contained. The Lime Complex (Shasta-Trinity National Forest) has 10 uncontained fires, continues to burn in heavy fuels and rugged terrain and is 65% contained at 130,936 acres. Progress is expected to remain slow.

Of 174 new fire starts that occurred throughout California during this period (July 21 – July 24) only one, the Panther Fire, has escaped initial attack. Located 15 miles south of Happy Camp, it starts by lightning on July 24 and burns in steep terrain and heavy timber. Fire fighting resources from the Siskiyou Complex provide an initial attack response. By afternoon it has burned more than 100 acres and is 16% contained. This new fire on the Klamath National Forest will take the life of one firefighter.

Addressing firefighter safety and fatigue remains the highest priority for regional fire chiefs as they develop strategies to rotate and rest fire personnel. Many engine crews, strike teams, and overhead personnel have been assigned to the siege for more than a month; some firefighters have been away from home for more than 50 days. (*sidebar of work/rest guidelines*)

As part of the California National Guard's response to the Governor's order for an additional 2,000 National Guard personnel to boost firefighting forces, 240 members of Taskforce Shovel are assigned to assist with mop-up and patrol of the Ironside, Ziegler, and Denny Fires on the Iron/Alps Complexes.

### ***Firefighter Fatality: Friday, July 25, 2008***

On July 25, 2008 Andrew Jackson Palmer, an 18 year old a firefighter at Olympic National Park in Washington, is fatally injured when he is struck by a falling tree. Palmer's engine crew was assigned to the Iron Complex (SHF) as a falling team to remove hazard trees along the fireline ahead of mop-up crews.

The Telegraph Fire, a human-caused fire, started today in Mariposa County.

The Shasta Lightning Complex was contained at 86,500 acres. The Piute Fire is contained at 37,026 acres.

### ***A 2<sup>nd</sup> Firefighter Fatality: Saturday, July 26, 2008***

Today the Panther Fire took the life of Daniel Packer, Chief of East Pierce County Fire and Rescue in Lake Tapps, Washington. Packer, while scouting fireline locations as a Division Supervisor, deploys his fire shelter when fire activity increases and succumbs to fatal injuries from burns and smoke inhalation.

The Panther Fire doubles in size as it continues to spread. It moves into a snag patch from a fire originating during the 1987 lightning siege. Standing dead trees greatly increase the transport of embers raising the potential for spot fires.

The Soda Complex is contained at 8,652 acres.

Another two hundred member task force of the California National Guard (Sidebar: Task Force Bucket) and their instructors arrive on the Breakneck Fire in the Butte Complex for two days of additional training after having completed wildland firefighting classroom training at the Wildland Fire Training Center in McClellan, CA.

### ***Progress in the Fire Fight: Sunday through Monday, July 27 – August 4***

As containment increases on remaining siege fires, requests for additional resources are diminishing. This prompts the reduction of the California Preparedness Level to 4, shifting CAL MAC to an information-only role. CAL MAC directs NORCAL and SOCAL MACs to collaborate on priority setting and forward the information directly NMAC.

The Basin Fire on the Los Padres National Forest is contained on July 27<sup>th</sup> at 162,818 acres. Resources are beginning to be released and redeployed to other fires.

The Telegraph Fire (a non-siege fire) located near Yosemite National Park in Mariposa County, becomes the number one priority fire. It has grown to more than 26,000 acres and destroyed thirty seven structures.

The Panther Fire continues to double in size daily.

Hyampom Road is closed by a rock slide for a few days hampering fire suppression force access and logistical support to the Miners Fire (Lime Complex). The fire spots across Little Creek and burns up to the indirect containment line above the community of Hayfork.

On July 28, the Canyon Complex (PNF) experiences a 30-acre slopover in a streambed on the Little Fire. This complex of six fires has now burned 37,753 acres and is 90% contained. The last 10% will be difficult to achieve, with the active fire lodged in steep, rugged terrain that is nearly inaccessible.

The Gap Fire is contained at 9,443 acres and the Hell's Half Complex is contained at 15,146 acres.

On July 29, the Rich Fire (non-siege fire) is reported around 3 p.m. along Highway 70 on Plumas National Forest. It is 80 acres upon arrival of the first units and burning with a rapid rate of spread. Evacuations are ordered immediately for many residents along Rush Creek Road. Highway 70 and UPPR rail line are closed again. The extreme fire behavior continues through the night, with the fire reaching more than 2,400 acres by morning.

The fires in the Yolla Bolly Complex (MNF) continues to burn actively in the remote wilderness area. Due to the rugged terrain and long travel times, most crews are spiked out in remote camps, making logistics and communications difficult. Progress is slow.

The Butte Complex is fully contained at 64,955 acres.

On July 30, 2008, more than 200 California National Guard are deployed to the Telegraph Fire. Task Force Bucket is the fourth wave in support of "Operation Lightning Strike", the military term used for the siege fires.

The American River Complex is contained at 20,541 acres.

From July 31st through August 4<sup>th</sup>, the uncontained siege fires continue to burn actively. Favorable weather conditions allow significant progress by resources now available from contained fires. Several complexes are more than 85% contained.

<b>Siege Complex</b>	<b>Acres</b>	<b>Percent Contained</b>
Bear-Wallow	12,567	19
Blue 2	6,955	62
Canyon	37,357	93
Iron/Alps	84,788	87
Lime	63,192	95
Siskiyou	57,890	60
Ukonom	42,785	66
Yolla-Bolly	78,548	60

Table Z. Status of uncontained siege fires as of August 4, 2008.

The fires with less than 70% containment are located in rugged, remote areas including the Panther Fire, which is 8% contained at 9,806 acres. Resources remain assigned as these fires are expected to burn until sufficient rainfall occurs in the Fall.

The Rich Fire, at 6,517 acres and 50% containment, continues to threaten communities and evacuations are in effect.

Today the Craig Fire, starts twelve miles east of Oroville in Butte County, burns more than 1,000 acres, and destroyed one residence the first day. A heavily augmented suppression force has achieved 30% containment by morning.

### ***Final Tragedy of the Siege: Tuesday: August 5, 2008***

In anticipation of predicted thunderstorms, many fire fighters are pulled off the line for safety. Crews that are spiked out in the rugged Trinity Alps Wilderness are being shuttled off the line by helicopters.

At approximately 7:45 p.m., a contract helicopter, ferrying firefighters from a helispot on the Buckhorn Fire in the Iron/Alps Complex struck a tree and crashed, killing nine occupants. Aboard the helicopter are the pilot, copilot, FS pilot-inspector, and nine contract firefighters from Grayback Forestry of Medford, OR. The surviving copilot and three firefighters are hospitalized with moderate to severe injuries. The National Transportation Safety Board is investigating the accident.

The multiple tragedies during siege represent a devastating blow to the fire fighting community. However wildfires continue to burn. August 5<sup>th</sup> - 6<sup>th</sup> brings an additional 1,200 lightning strikes to Northern California, the firefighters attack the new and ongoing fires with even greater resolve.

## **Epilogue**

*(to be written)*

## Sample Complex Summary

**Complex Name: Popcorn/Peterson Complex**

*(insert complex perimeter map)*

**Number of Fires:** 3

**Major fires:**

Popcorn Fire, Peterson Fire, H-1

**Counties:** Shasta, Lassen

**Directly Affected Communities:** Little Valley, Pittville

**Agencies in Command:** USFS, CAL FIRE

**Start Report Date:** 6/21/08 4:00 PM

**Containment Date:** 6/30/08

**Total Acres:** 7,842

**Direct Fire Suppression Costs:** \$2,649,044

**Firefighters Assigned at Peak:** 404

**Structures Destroyed:** 0

**Structures Damaged:** 0

**Fatalities:** 0

**Fuels:** Timber, brush, & grass

**Cause:** Lightning

The Peterson Complex is comprised of three fires, the **H-1, Popcorn Fire and Peterson Fire** located twelve miles east of Cassel. The fires start during the lightning storm on June 21<sup>st</sup> and are burning in timber with brush and grass, on steep, southern aspects.

The **Popcorn Fire** originates in Shasta County under the SHU Burney Battalion LCA, quickly burns onto the Lassen - Modoc Unit and is included in the **LMU June Lightning Complex** (CA-LMU-002605). On June 23 the Popcorn Fire is separated from the LMU June Lightning complex and reported as a separate incident (CA-LMU-2725).

The **Peterson Fire** starts on June 21 at 1600 hours and is reported by the Lassen National Forest under incident #CA-LNF-002745. The Communities of Little Valley and Pittville are threatened and under precautionary evacuation. As predicted, the 3,000 acre Popcorn Fire and the 1,200 acre Peterson Fire merge. Initially an Incident Management Type II team is ordered, but based on complexity; a Type 1 team is required.

When the Popcorn Fire merges with the Peterson Fire it is now on the Lassen National Forest DPA. Unified Command with CAL FIRE and USFS occurs on June 24. On June 25, the Type 1 team (Southern Red Team, Mark Ruggerio - IC) under unified command with CAL FIRE (Steve Emerick) transition and the fires are moved to a new incident number (CA-LNF-002725) named the **Peterson Complex**.

The fire damages and threatens a PG&E power line which is shut down. The fire also poses a threat to the railroad lines and an endangered trout species. Spot fires continue to hamper containment strategies for many days.

On June 28, Red Flag warnings are in place for a threat of dry lightning. Resources from the Peterson Complex are made available as the team prepares to transition the Complex to a type 3 organization under the Forest.

At approximately 6:00 PM on June 30<sup>th</sup>, the Peterson Complex is 100% contained at 7,842 acres. The morning of July 1, the fire transitioned management back to the LNF.

## Sample Sidebar

### Piute Fire/Flood Event

Chief John Hayes, Kern County Fire Department

Insert Photo

*An influx of monsoonal moisture to the Piute Mountain Range leads to thunderstorm development and significant rainfall over the Piute Fire. On July 12<sup>th</sup>, locally intense rain falls on portions of the fire resulting in flash flooding in the Erskine Creek and Thompson Creek drainages. Road access washes out, stranding approximately 60 firefighters for the night in the upper end of Erskine Creek. The following morning dozers are sent in to open the road allowing their exit.*

*The afternoon of the 13<sup>th</sup> brings more rain, and the automated rain gauge on Piute Peak recorded 3.2 inches of rain for that day alone. Several local roads are closed, and some residents along Erskine Creek are evacuated by a hoist rescue from Kern County Fire Helicopter 408. Unsettled weather continues through July 16th, with Piute Peak receiving a total of 5.16 inches of rain during the 5 day period.*

*Although the Piute Flood Incident was managed by Kern County Fire Department separately from the Piute Fire, resources were shared in order to minimize the damage and mitigate the danger to the citizens in the impacted areas. These included a strike team of engines, dozers, hand crews, and a helicopter.*

*There were no injuries reported due to the flooding, but numerous roads, structures, and other improvements are damaged. The primary damage is located in the Kelso Creek, Erskine Creek, and Thompson Creek areas. Flooding and/or mudslides are anticipated to be a problem downstream from the fire for the next few years. On the plus side, however, the rain brought a quick end to the Piute Fire.*