

TREE MORTALITY TASK FORCE



State of Emergency Proclamation

Executive Department
State of California

PROCLAMATION OF A STATE OF EMERGENCY

WHEREAS the State of California is experiencing record drought conditions, which have persisted for the last four years; and

WHEREAS on January 17, 2014, I proclaimed a State of Emergency to exist throughout the State of California due to severe drought conditions; and

WHEREAS a lack of precipitation over the last four years has made trees in many regions of California susceptible to epidemic infestations of native bark beetles, which are constrained under normal circumstances by the defense mechanisms of healthy trees; and

WHEREAS these drought conditions and resulting bark beetle infestations across broad areas have caused vast tree mortality in several regions of the state, with the United States Forest Service estimating that over 22 million trees are dead and that tens of millions more are likely to die by the end of this year; and

WHEREAS recent scientific measurements suggest that the scale of this tree die-off is unprecedented in modern history; and

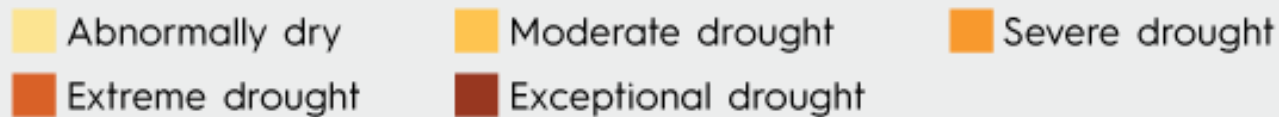
How did we get here?

- 5 Years of Drought
- Increasing Climatic Temperatures
- Declining Snow Pack
- Unresilient, overstocked Sierran Forests

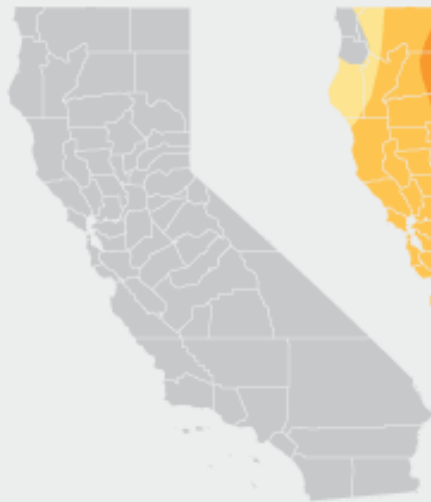
Current Trends- Five Years of Drought

A Record-Breaking Drought

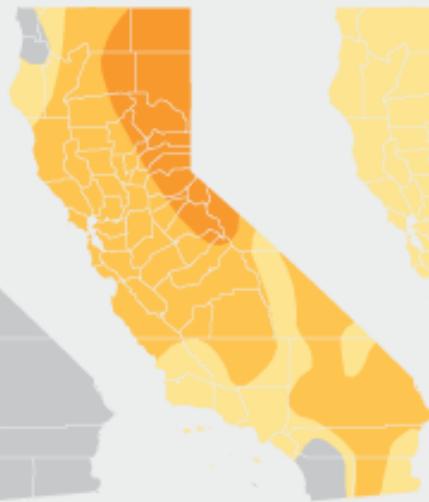
41% of the state is facing “exceptional drought” (the most severe kind).



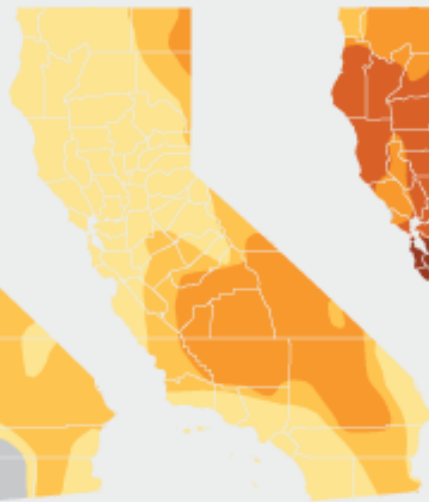
2011



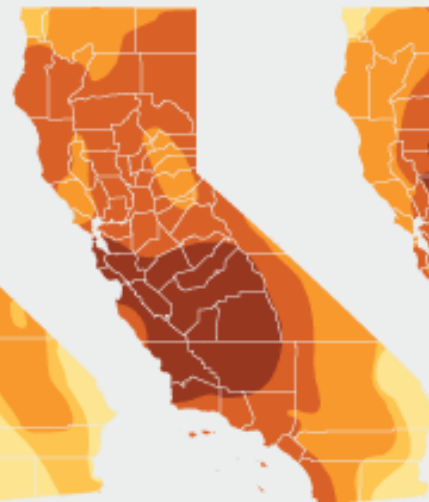
2012



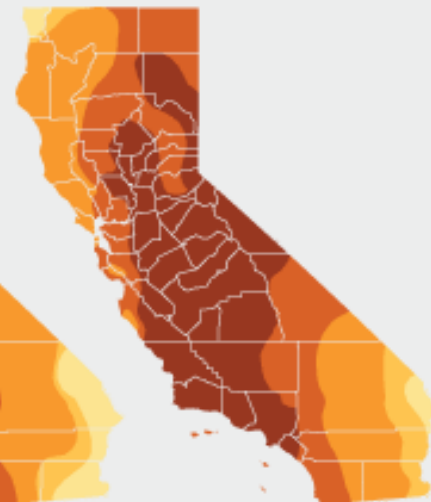
2013



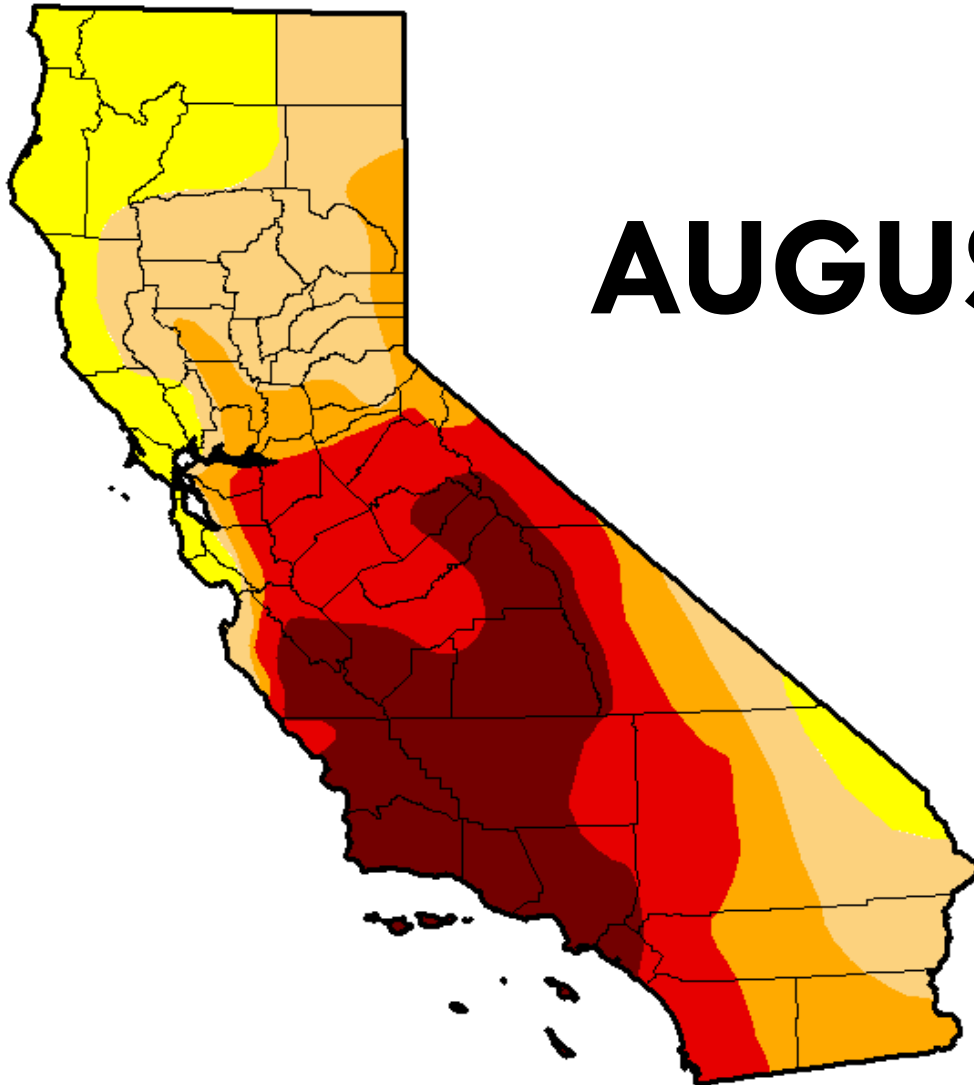
2014



2015

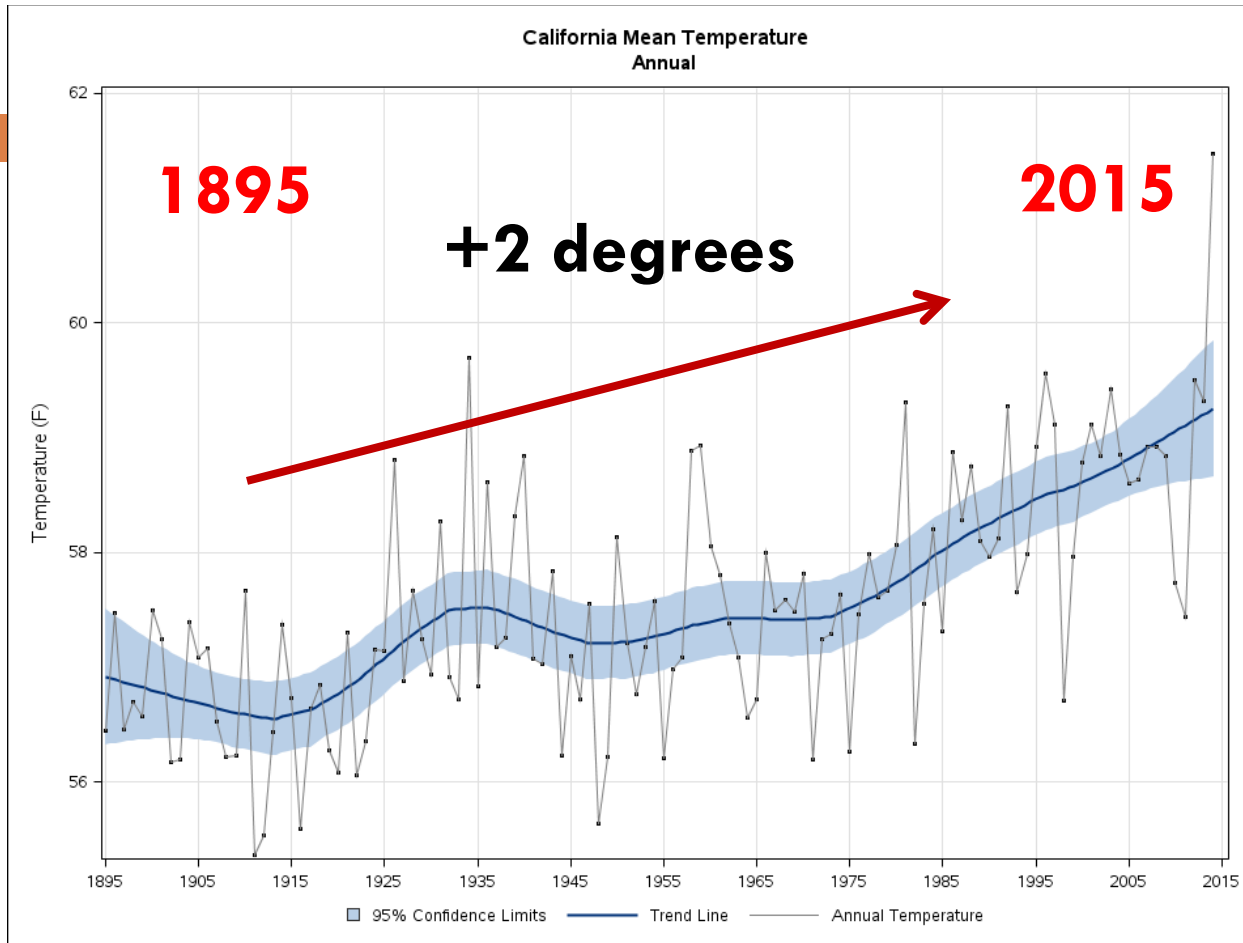


U.S. Drought Monitor
California



AUGUST 2, 2016

Current Trends- CA Mean Annual Temp



This June was the 14th consecutive month the monthly global temperature record has been broken—the longest such streak in NOAA's 137 years of record keeping.

Current Trends- Top 20 Wildfires

Top 20 Largest California Wildfires

	FIRE NAME (CAUSE)	DATE	COUNTY	ACRES	STRUCTURES	DEATHS
1	CEDAR (<i>Human Related</i>)	October 2003	San Diego	273,246	2,820	15
2	RUSH (<i>Lightning</i>)	August 2012	Lassen	271,911 CA / 43,666 NV	0	0
3	RIM (<i>Human Related</i>)	August 2013	Tuolumne	257,314	112	0
4	ZACA (<i>Human Related</i>)	July 2007	Santa Barbara	240,207	1	0
5	MATILJA (<i>Undetermined</i>)	September 1932	Ventura	220,000	0	0
6	WITCH (<i>Powerlines</i>)	October 2007	San Diego	197,990	1,650	2
7	KLAMATH THEATER COMPLEX (<i>Lightning</i>)	June 2008	Siskiyou	192,038	0	2
8	MARBLE CONE (<i>Lightning</i>)	July 1977	Monterey	177,866	0	0
9	LAGUNA (POWERLINES)	September 1970	San Diego	175,425	382	5
10	BASIN COMPLEX (<i>Lightning</i>)	June 2008	Monterey	162,818	58	0
11	DAY FIRE (<i>Human Related</i>)	September 2006	Ventura	162,702	11	0
12	STATION FIRE (<i>Human Related</i>)	August 2009	Los Angeles	160,557	209	2
13	ROUGH (<i>Lightning</i>)	July 2015	Fresno	151,623	4	0
14	McNALLY (<i>Human Related</i>)	July 2002	Tulare	150,696	17	0
15	STANISLAUS COMPLEX (<i>Lightning</i>)	August 1987	Tuolumne	145,980	28	1
16	BIG BAR COMPLEX (<i>Lightning</i>)	August 1999	Trinity	140,948	0	0
17	HAPPY CAMP COMPLEX (<i>Lightning</i>)	August 2014	Siskiyou	134,056	6	0
18	CAMPBELL COMPLEX (<i>Powerlines</i>)	August 1990	Tehama	125,892	27	0
19	WHEELER (<i>Arson</i>)	July 1985	Ventura	118,000	26	0
20	SIMI (<i>Under Investigation</i>)	October 2003	Ventura	108,204	300	0

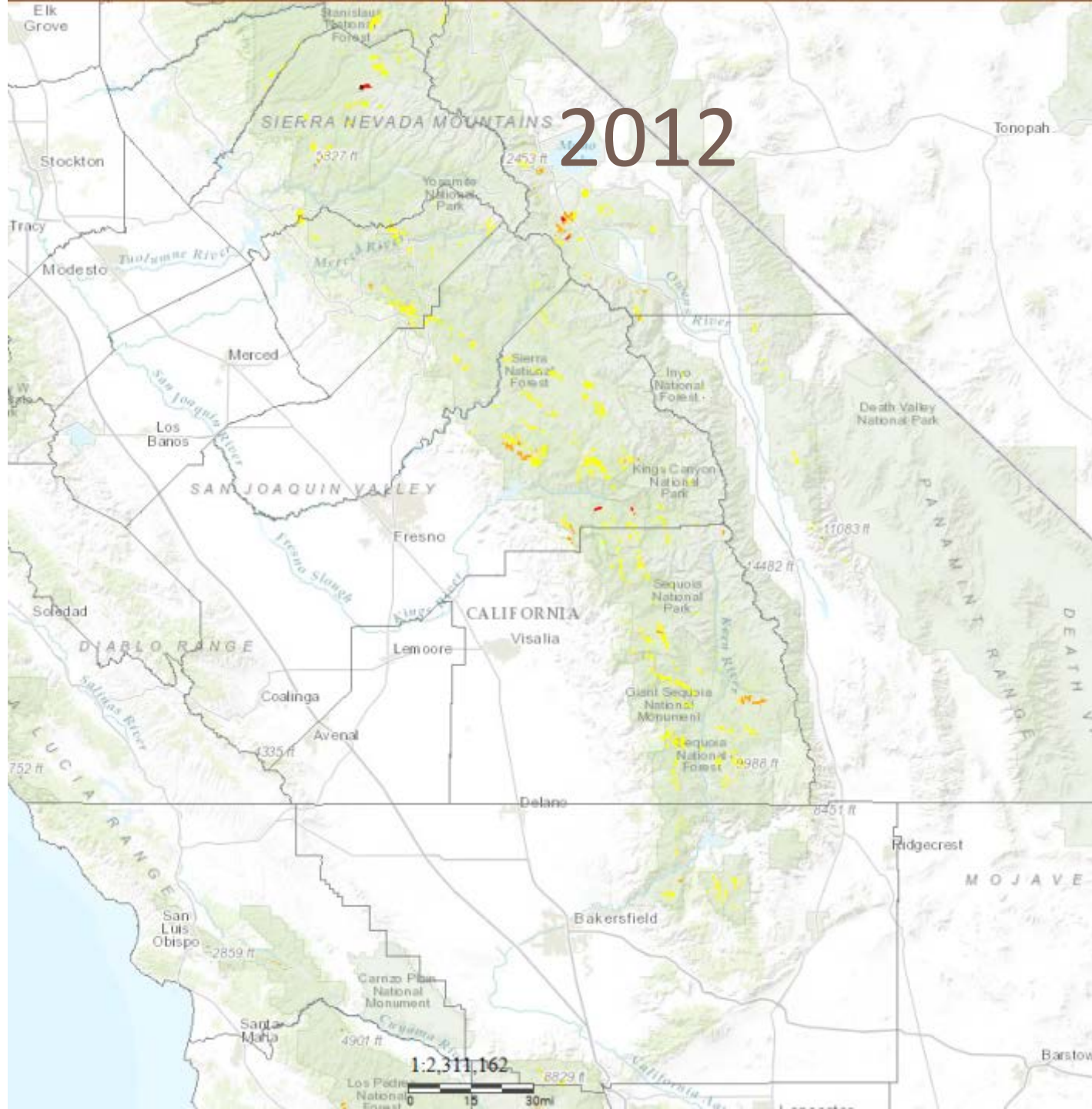
*There is no doubt that there were fires with significant acreage burned in years prior to 1932, but those records are less reliable, and this list is meant to give an overview of the large fires in more recent times.

**This list does not include fire jurisdiction. These are the Top 20 regardless of whether they were state, federal, or local responsibility.



12/8/2015

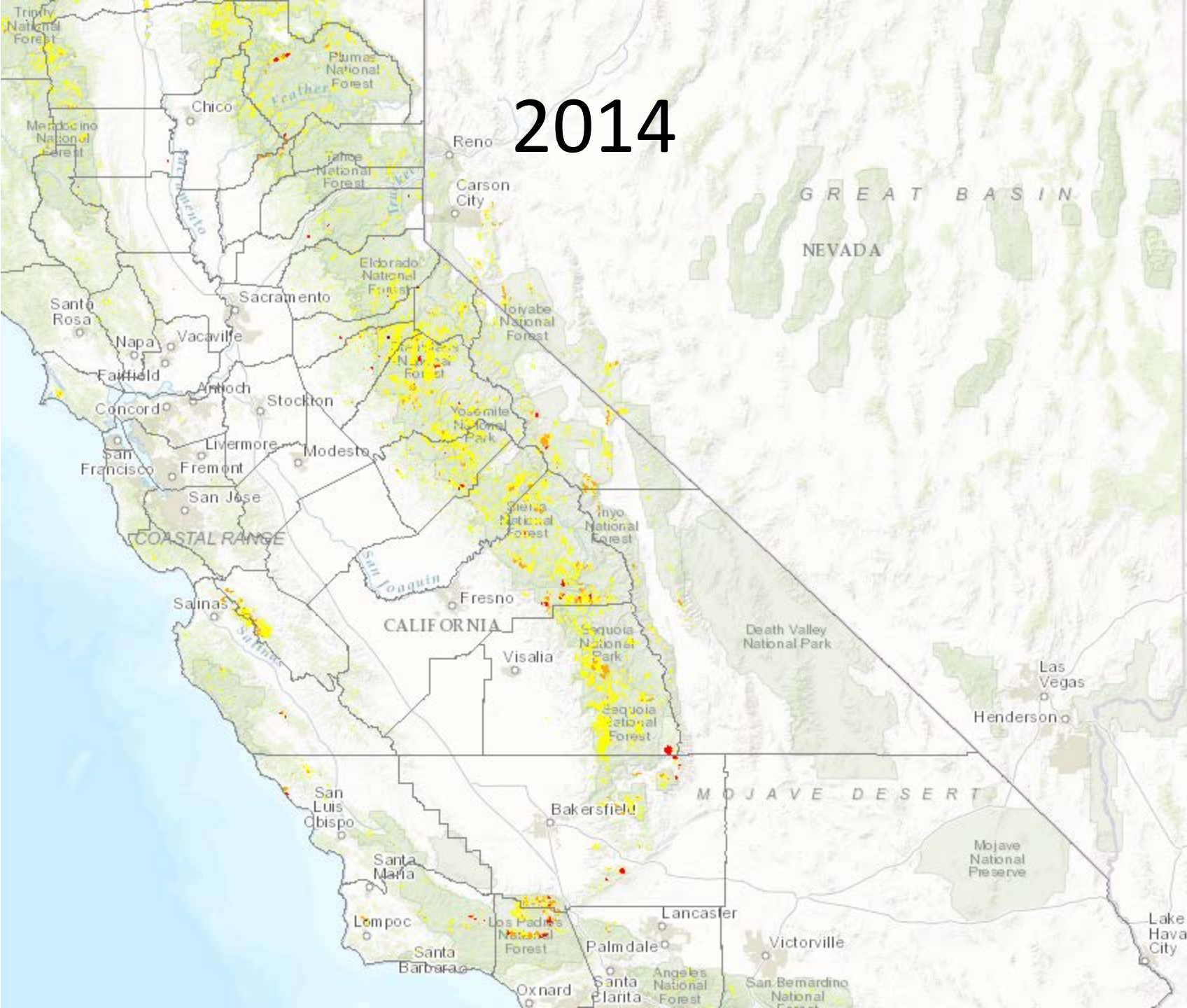
2012



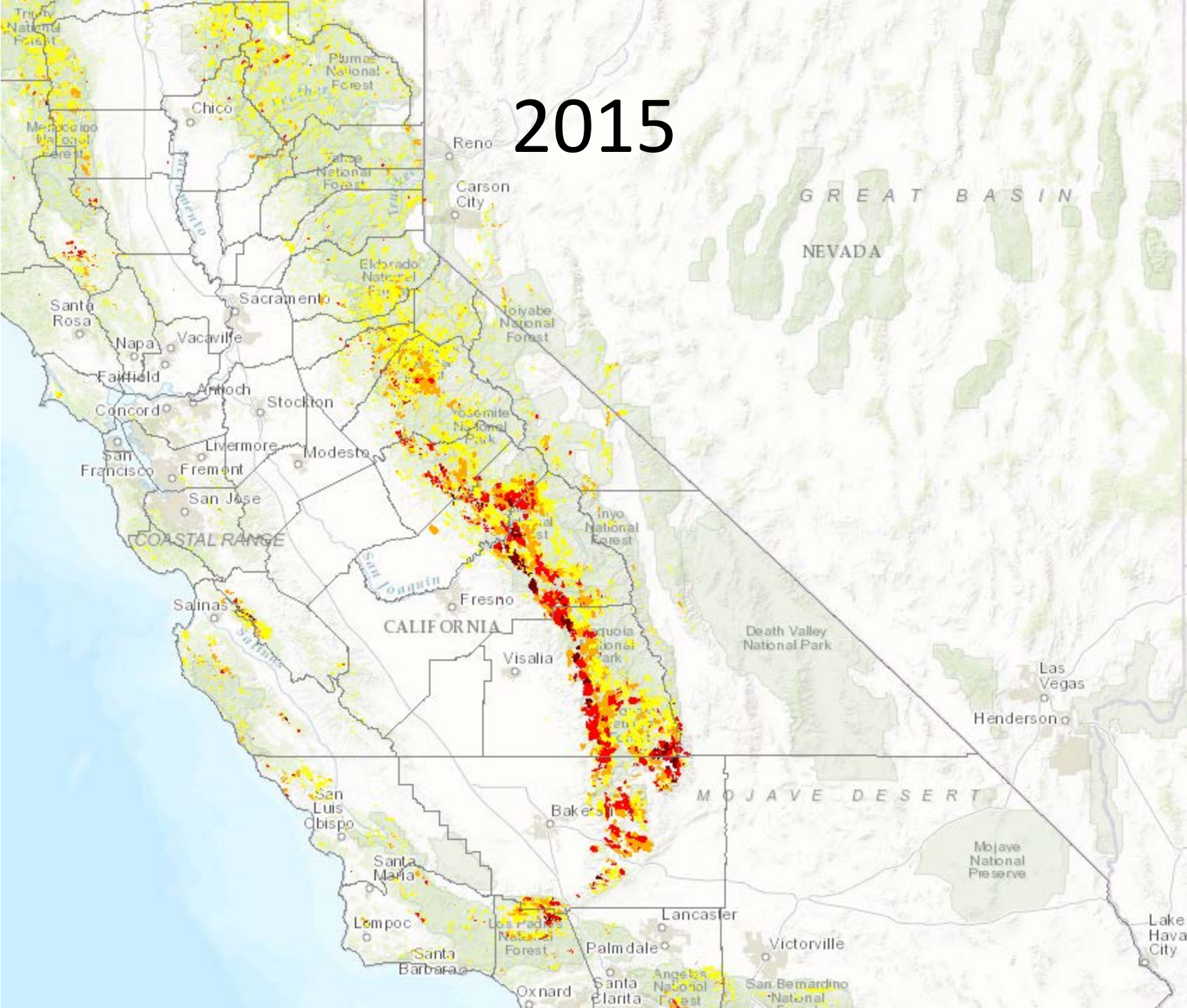
2013



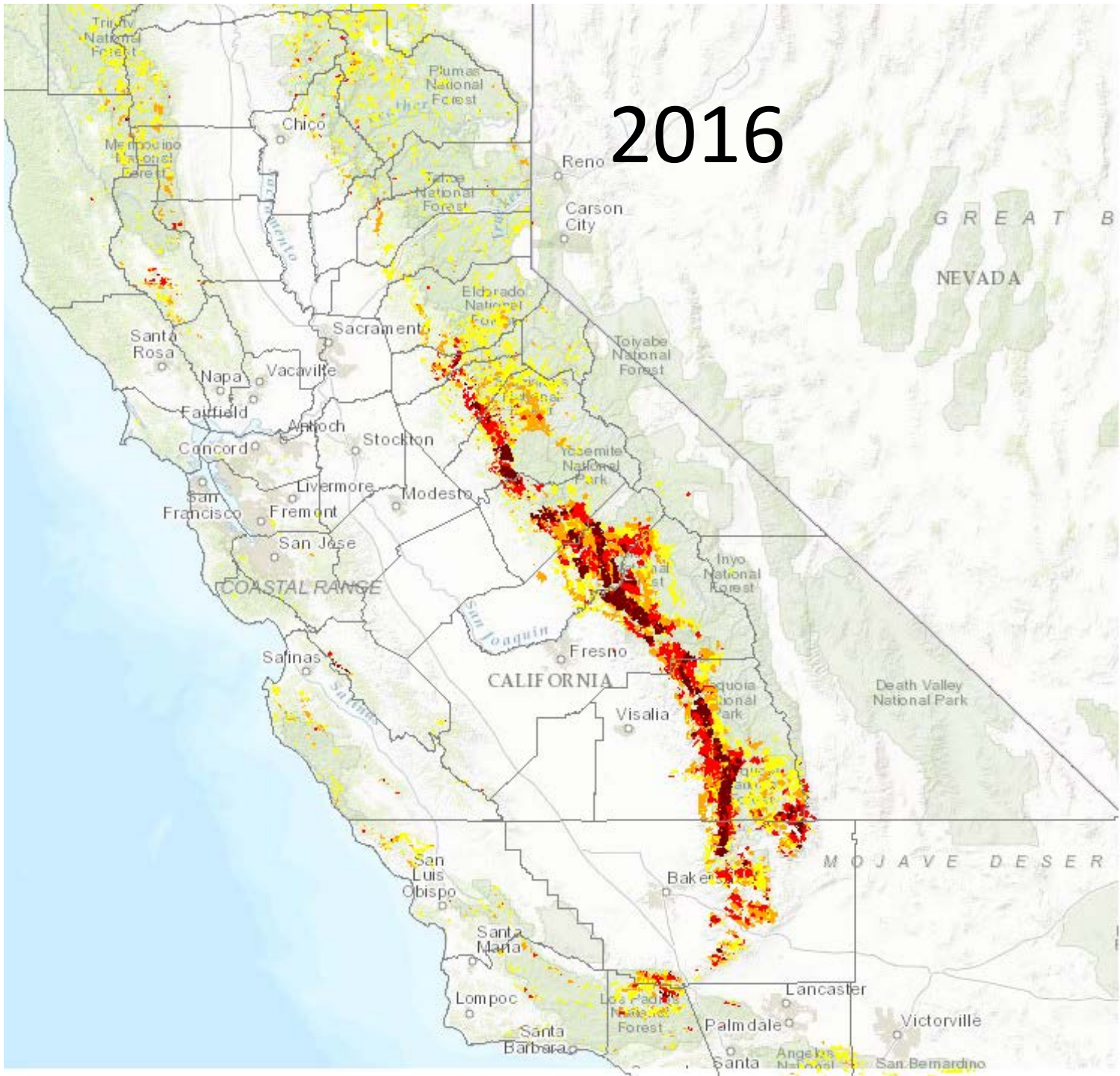
2014



2015

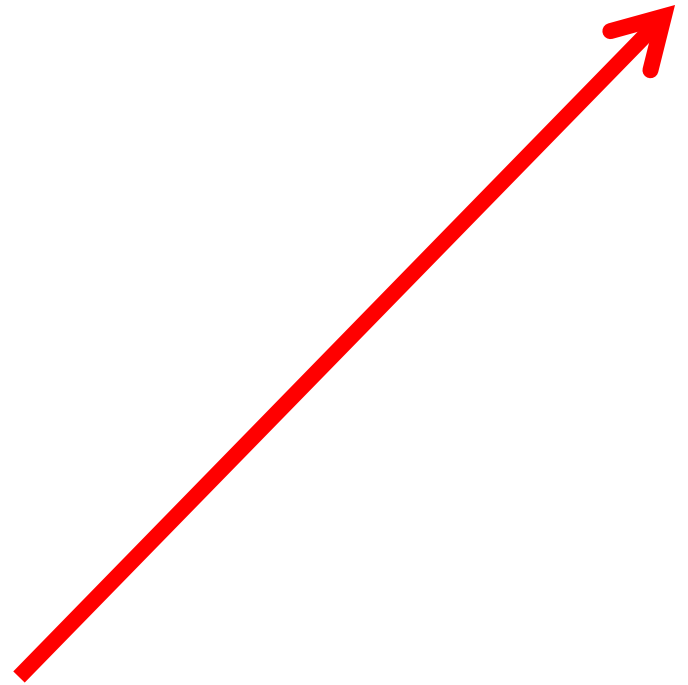


2016



Current Trends- Mortality Expansion

- **2014- 3.3 million**
- **2015- 29 million**
(40 million since 2010-2015)
- **2016- 26 million**



66 MILLION TOTAL DEAD TREES

Scope of the Mortality

- **10 counties** and 300 linear miles
- **>4,000** miles of road with dead trees next to them
- **5.5 million trees** have been estimated for removal for public safety
- Cost to remove trees on non-Forest Service land alone = **\$2.2 billion** (1.8 million trees)

Mariposa County March 21, 2015



Mariposa County October 11, 2015





November 11, 2015 Madera/Fresno County line



Mariposa County



Ponderosa Basin October 20, 2015



Ponderosa Basin October 20, 2015

TREE MORTALITY TASK FORCE

FORMATION

19 DIRECTIVES

7 WORKING GROUPS

80 ENTITIES

10 COUNTIES



Cal OES
GOVERNOR'S OFFICE
OF EMERGENCY SERVICES



Chairs: Director Pimlott, Director Ghilarducci, Governor's Office

Task Force Leaders:

- Gabriel Schultz
- Rick Carr
- Whitney Bray
- Glenn Barley (emeritus)
- Chris Anthony (emeritus)

Liaison Officers

- CSAC
- RCRC
- CAL FIRE

7 Working Groups:

- Forest Health and Resilience
- Mapping and Monitoring
- Public Outreach
- Regulations
- Resource Allocation
- Utilization- Bioenergy
- Utilization- Market Development



Cal OES
GOVERNOR'S OFFICE
OF EMERGENCY SERVICES

TREE MORTALITY TASK FORCE

In Response to the State of
Emergency Proclamation

Incident Action Plan
2016



Work of the Taskforce

- **Implement the Governor's Proclamation**
- **Statewide Taskforce efforts:**
 - **Provide coordination among agencies/entities**
 - **Establish and focus efforts on High Hazard Zones (HHZs)**
 - **Identify funding sources**
 - **Reduce regulatory impediments**
 - **Provide public education.**
 - **Expand the use of bioenergy**
 - **Identify potential storage/utilization sites**
 - **Distribute equipment across counties**
 - **Work to identify and promote wood markets**
- **Core to this effort is local organizations**

Forefront Action Items

- **Outlet for Trees Being Cut**
 - **Sawmills**
 - **Bioenergy contract extensions (CPUC)**
 - **Export Markets**
 - **Storage sites**

Forefront Action Items

- **CDA A Funding through Cal OES**
- **Financial Assistance For Private Landowners**
- **Homeowner Insurance Non-Renewals**

Forefront Action Items- FEDERAL

- Support a solution to fix wildfire funding at the Federal level.
- Additional funding for USFS Region 5 (project and operational).
- NRCS – EQIP funding assistance to forestland owners.
- **Presidential Disaster Declaration**



CAL FIRE EFFORTS

- **State and local Task Force involvement**
- **80,000 hours of staff time to mortality**
- **Redirected or focused \$10.2 million to mortality**
 - **Equipment**
 - **Tree removal projects**
 - **HHZ mapping**
 - **Public education**

CAL FIRE EFFORTS

□ CAL FIRE GRANT PROGRAMS

▣ SRAFPF GRANTS- \$10 million

- Fire prevention projects and activities that address the risk and potential impacts of wildfire to habitable structures

▣ TMTF GRANTS- \$6 million

- Support local efforts to remove hazardous trees that pose a threat to public health and safety.

ROLL OUT ON AUGUST 22, 2016

Public Outreach



WEBSITES

- ❑ www.treetaskforce.org (TMTF)
- ❑ www.prepareforbarkbeetle.org (Public)
- ❑ **Tree Mortality Viewer Overview**
<http://egis.fire.ca.gov/TreeMortalityViewer/>





Closing Comments

We have never seen an event which will so profoundly impacts the forests of California and its associated resources including water, wildlife, fire regimes, public safety, forest products, recreation, and their associated economics. These impacts will be felt for decades.