

2015 Wildfire Responses

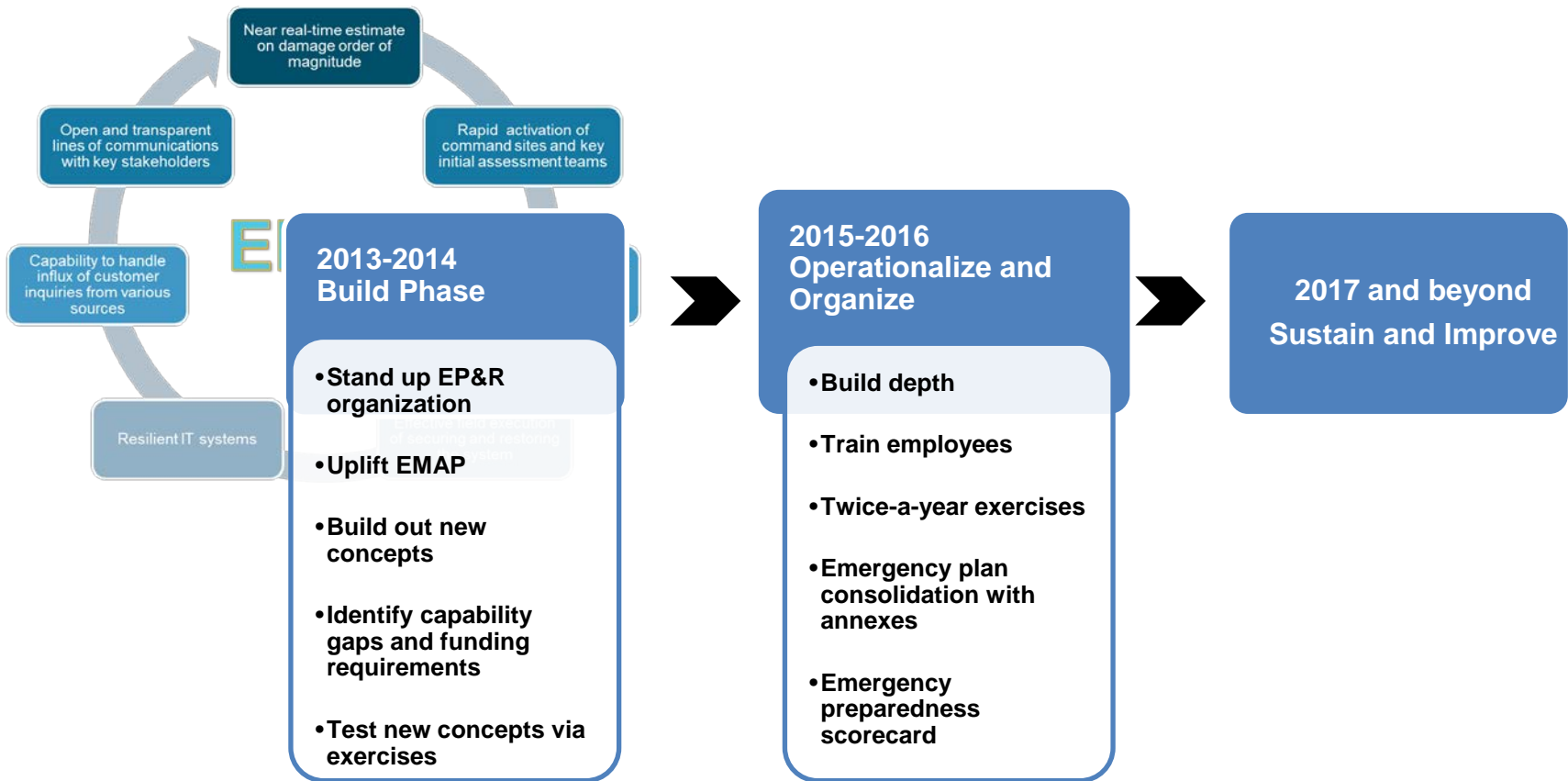
PG&E Response and Preparedness





Our History and Future

PG&E's road map to sustainability for Emergency Preparedness and Response (EP&R)





Building Partnerships with External Agencies

Preparation activities in partnership with external agencies:

- CalOES

- ▶ PG&E Rep sits on the Mutual Aid Regional Advisory Committee (MARAC)
- ▶ Physically staffed CAL OES offices during incidents

- Red Cross and SF DEM

- ▶ Partner with Red Cross discussing crisis decision making and leadership
- ▶ Participated in SF Fleet Week

- Partnerships and quarterly meetings with SF DEM

- Workshops

- ▶ Workshops hosted both externally and internally with partners, such as CalFire, Cal-OES, CAISO, FEMA, SCE and SDG&E

- Media organization

- ▶ Conduct media roundtables with approximately 30 media outlets in attendance and invited other external agencies
 - Red Cross, Cal-OES, Alameda County Fire Department



American Red Cross



City and County of San Francisco
LIFELINES COUNCIL





Base camps play a critical role in PG&E's response to catastrophic emergencies as places to stage crews and equipment in heavily impacted areas.

PG&E Base Camps



Emergency Base Camp Exercise at Alameda County Fairgrounds November 2014



PG&E Trucks at the Napa Valley Expo Base Camp after the Napa earthquake



PG&E base camp layout at the Alameda County Fairgrounds



Emergency Base Camp at Scotts Valley in response to winter storms in 2014



24 hour operations at basecamps provide for restoration efforts and employees





Equipment, material, supplies, and fuel within restoration area provide for safe and quick restoration





Valley, Butte, Tassajara and Rough Wildfires

Employees

- **6 employees & 8 retirees** lost their homes
- **48 employees & 25 retirees** evacuated
- Over **1,400 employees** supported the responses

Customers & Environment

- Approximately **33,000 customers** impacted
- **Tens of thousands** trees removed

Equipment

- **16 transmission & 18 Distribution Lines**
- Approximately **13,000 locations** assessed
- Approximately **2,000 Poles** requiring replacement





Butte, Rough, Valley, and Tassajara Wildfires

Rough

- **152k** acres, started 7/31/15, **4** structures destroyed

Butte

- **72k** acres, started 9/7/15, **921** structures destroyed including 549 Homes

Valley

- **76k** acres, started 9/12/15, 1,955 structures destroyed including 1,281 homes

Tassajara

- **1k** acres, started 9/19/15, **20** structures destroyed including 12 homes



Rough Fire



Valley Fire



Butte Fire



Tassajara Fire

Top 20 Damaging California Wildfires

Top 20 Most Damaging California Wildfires

	FIRE NAME (CAUSE)	DATE	COUNTY	ACRES	STRUCTURES	DEATHS
1	TUNNEL - Oakland Hills (<i>Rekindle</i>)	October 1991	Alameda	1,600	2,900	25
2	CEDAR (<i>Human Related</i>)	October 2003	San Diego	273,246	2,820	15
3	VALLEY*** (<i>Under Investigation</i>)	September 2015	Lake, Napa & Sonoma	76,067	1,910***	3
4	WITCH (<i>Powerlines</i>)	October 2007	San Diego	197,990	1,650	2
5	OLD (<i>Human Related</i>)	October 2003	San Bernardino	91,281	1,003	6
6	JONES (<i>Undetermined</i>)	October 1999	Shasta	26,200	954	1
7	BUTTE*** (<i>Under Investigation</i>)	September 2015	Amador & Calaveras	70,868	818***	2
8	PAINT (<i>Arson</i>)	June 1990	Santa Barbara	4,900	641	1
9	FOUNTAIN (<i>Arson</i>)	August 1992	Shasta	63,960	636	0
10	SAYRE (<i>Misc.</i>)	November 2008	Los Angeles	11,262	604	0
11	CITY OF BERKELEY (<i>Powerlines</i>)	September 1923	Alameda	130	584	0
12	HARRIS (<i>Under Investigation</i>)	October 2007	San Diego	90,440	548	8
13	BEL AIR (<i>Undetermined</i>)	November 1961	Los Angeles	6,090	484	0
14	LAGUNA (<i>Arson</i>)	October 1993	Orange	14,437	441	0
15	LAGUNA (<i>Powerlines</i>)	September 1970	San Diego	175,425	382	5
16	HUMBOLDT (<i>Arson</i>)	June 2008	Butte	23,344	351	0
17	PANORAMA (<i>Arson</i>)	November 1980	San Bernardino	23,600	325	4
18	TOPANGA (<i>Arson</i>)	November 1993	Los Angeles	18,000	323	3
19	49ER (<i>Illegal Debris Burning</i>)	September 1988	Nevada	33,700	312	0
20	ANGORA (<i>Human Related</i>)	June 2007	El Dorado	3,100	309	0

***Information from the Butte Fire and Valley Fire will likely change until the fire is contained and the full damage inspection is complete.

**Structures" include homes, outbuildings (barns, garages, sheds, etc) and commercial properties.

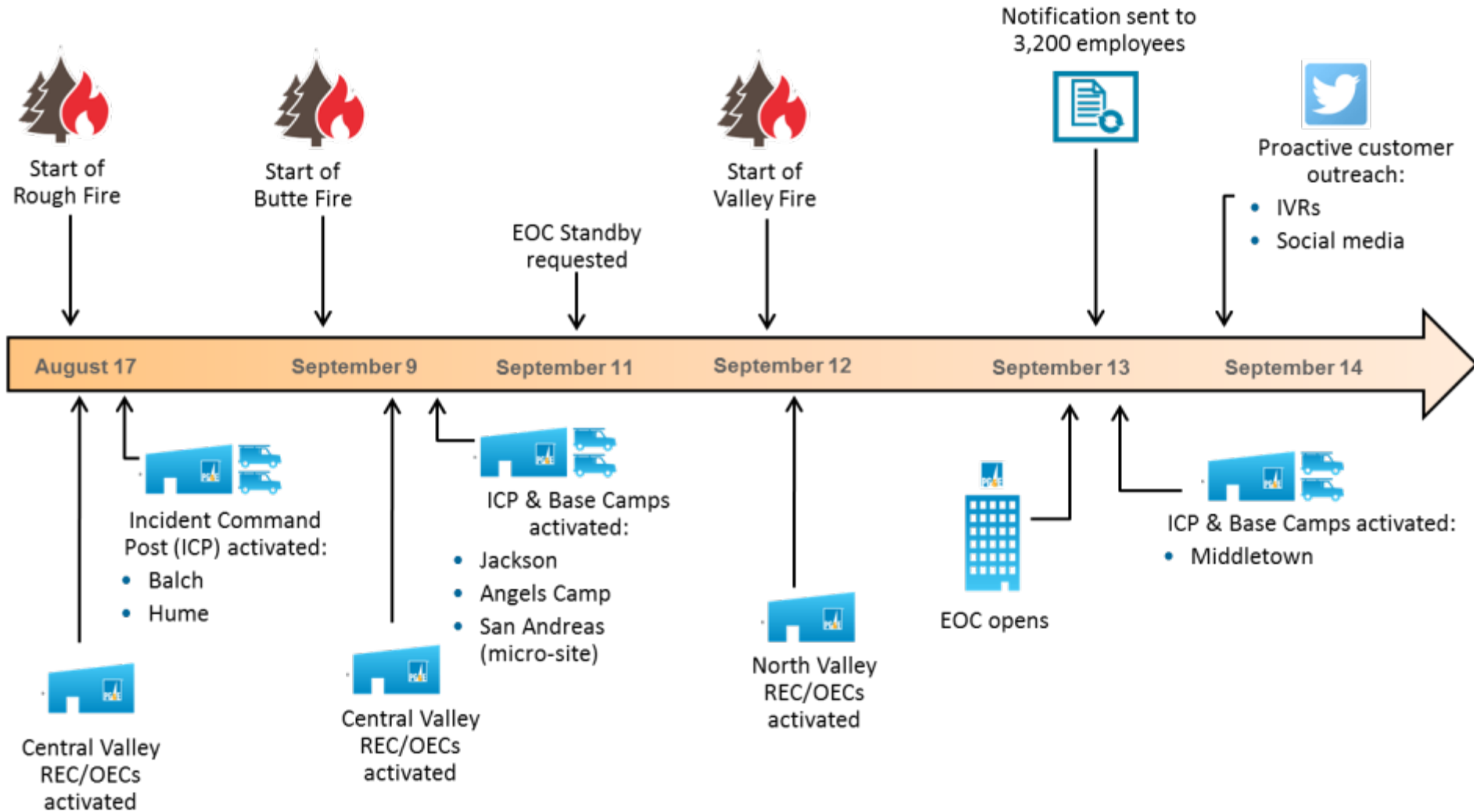
**This list does not include fire jurisdiction. These are the Top 20 regardless of whether they were state, federal, or local responsibility.



9/23/2015



Activating PG&E's Response



Twenty-nine days of response



Rough, Butte, Valley, and Tassajara Wildfires



Rough, Butte, Valley, and Tassajara Wildfires





Middleton Basecamp

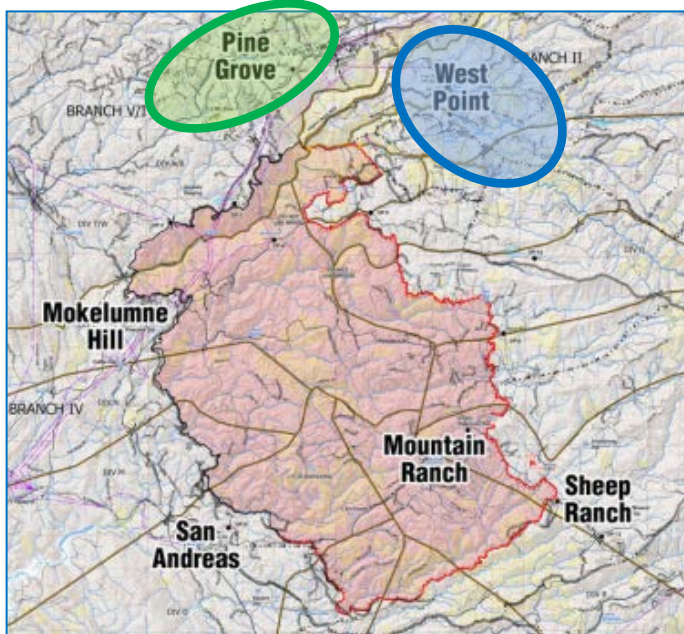


Preparedness

- Generation
- Pre-emptive actions



Powering communities





2015 Asset Pretreatment

- **PHOS-CHeK® Fire Retardants**
 - For the use in preventing and controlling fires in wildland fuels
- Dry powder concentrates consist of primarily of a blend of ammonium phosphate and/or sulfate which function as a active fire retarding component.
- Retardant solution is applied to vegetation as a form of a chemical fire break before the arrival of an approaching fire.
- Solution coats the fuel and then, as the fire gets closer and its contained water evaporates, the fire retardant component reacts with the cellulose present in the woody material, grass, needles and other matter which normally provide fuel for the fire.
- Same retardant used by the wildland agencies and it has been exhaustively tested by the US Forest Service for environmental impact.





2015 Asset Pretreatment

- 1300 Poles Treated
- 315 Impacted by Fire
- 3 Poles Destroyed
- 312 Poles Undamaged
- Approximately \$6.24 Million saved



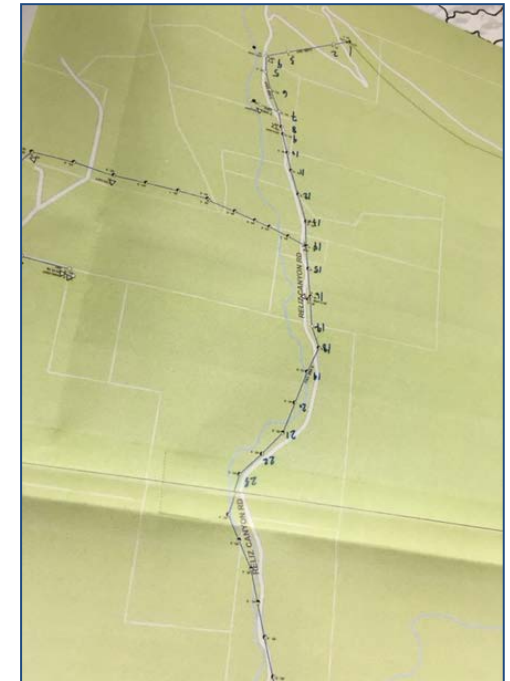
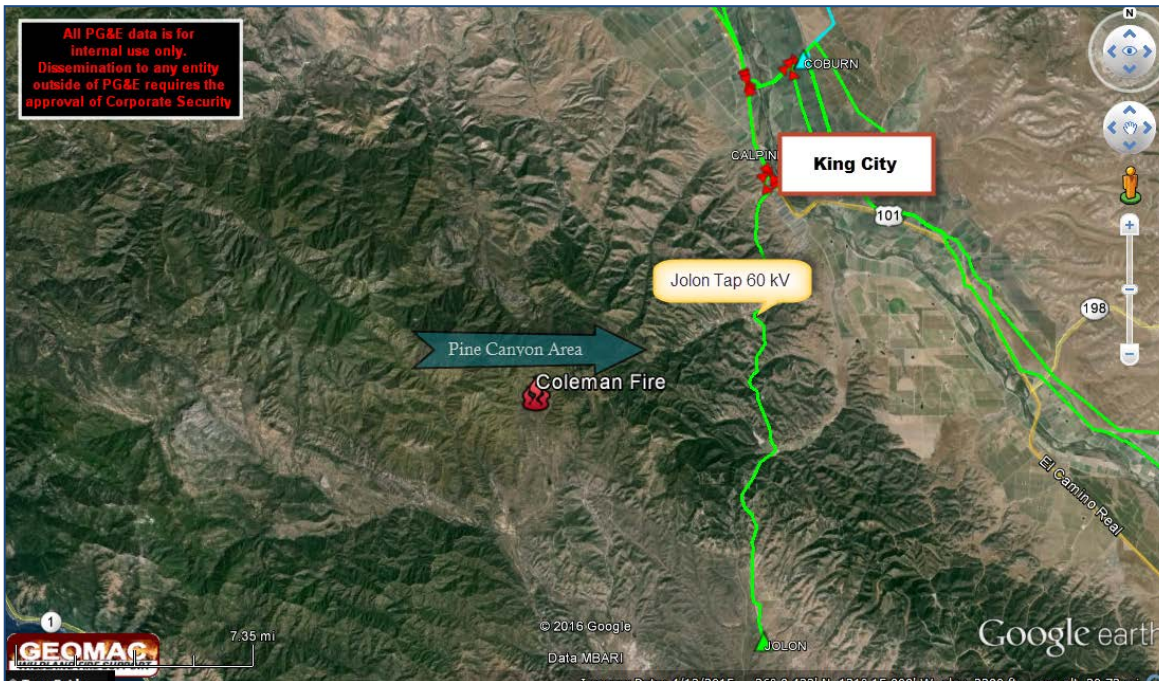
Asset Pretreatment





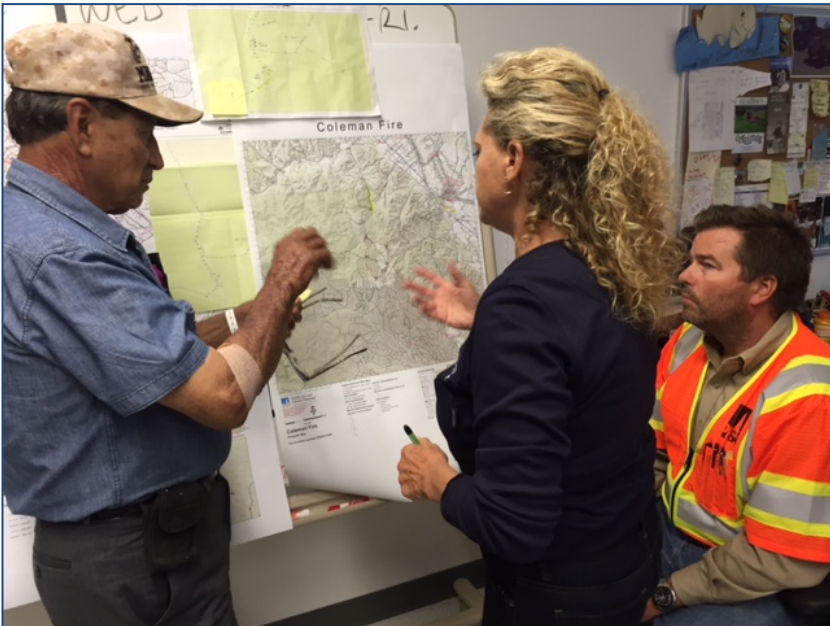
Recent Pretreatment, Coleman Fire

- Started June 4, west of King City on the boundary of Fort Hunter Liggett and Los Padres National Forest's Monterey Ranger District
- Rapid rate of spread through grass and brush
- Grew to more than 3,200 acres due to high temperatures, dry vegetation, and gusting winds.
- PG&E crews pretreated the north end of the fire to pre-treat poles on the Los Ositos 2103.
 - 22 poles pre-treated, including 2 customer owned poles
 - 3000 customers at risk relative to power outage if T&D sources lost
- ***Ultimately no assets destroyed by the fire***





Recent Pretreatment, Coleman Fire





Being There For Our Customers



Thank you

Questions

