

State of California

National
Disaster
Resilience
Competition

Phase II
October 27, 2015

Attachment E:
Optional Maps, Drawings,
Renderings
AttEMaps.pdf

8/25 Rim/American Fire AQ Summary; 8/26-8/28 Outlook

- Under the influence of stronger SW winds, the Rim fire grew to 149,780, with 21,782 acres of that in Yosemite NP .
- The plume and pattern of impacts remains the same, as smoke continues to spread as far north as Reno and the Carson Valley, east over the Great Basin, and then downslope at night to communities immediately north and west of the fire.
- **Tuolumne City in particular continues to experience smoke in the hazardous AQI range at night, though concentrations recover to good in the afternoon.**
- Generally, models show same pattern (or worse) continuing for all sites for the next few days.
- Pinecrest Lake is likely experiencing direct plume impacts and heavy smoke, data from that monitor should be coming online soon.
- Models show Carson Valley and Reno/Tahoe will continue to see afternoon direct plume impacts in the late morning to early afternoon, with accumulation of drift smoke under inversions in the evening and overnight. See attached graphs for patterns and levels of impacts at a given site.



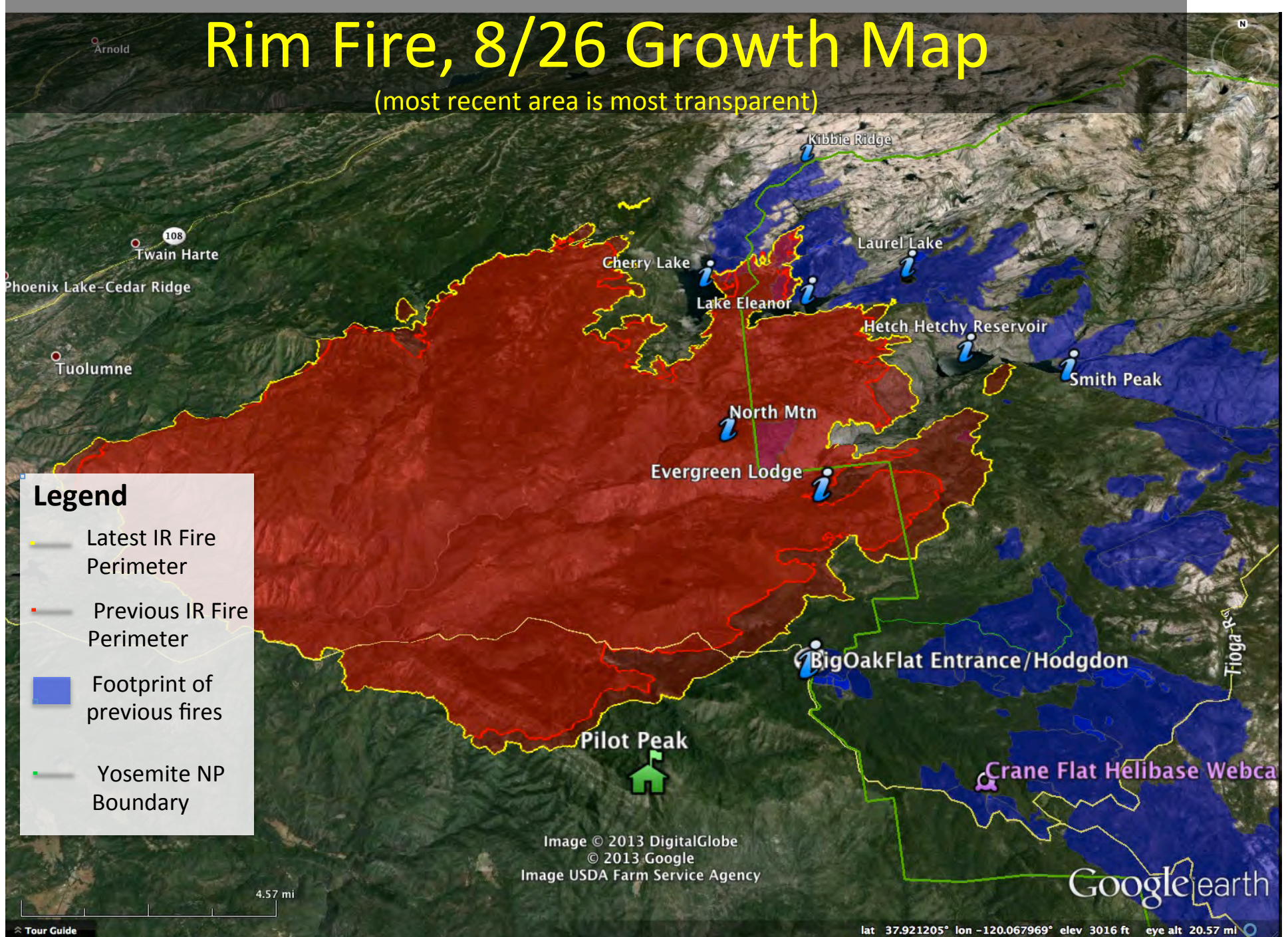
Prepared by Leland Tarnay, air resources specialist

Rim Fire Information:

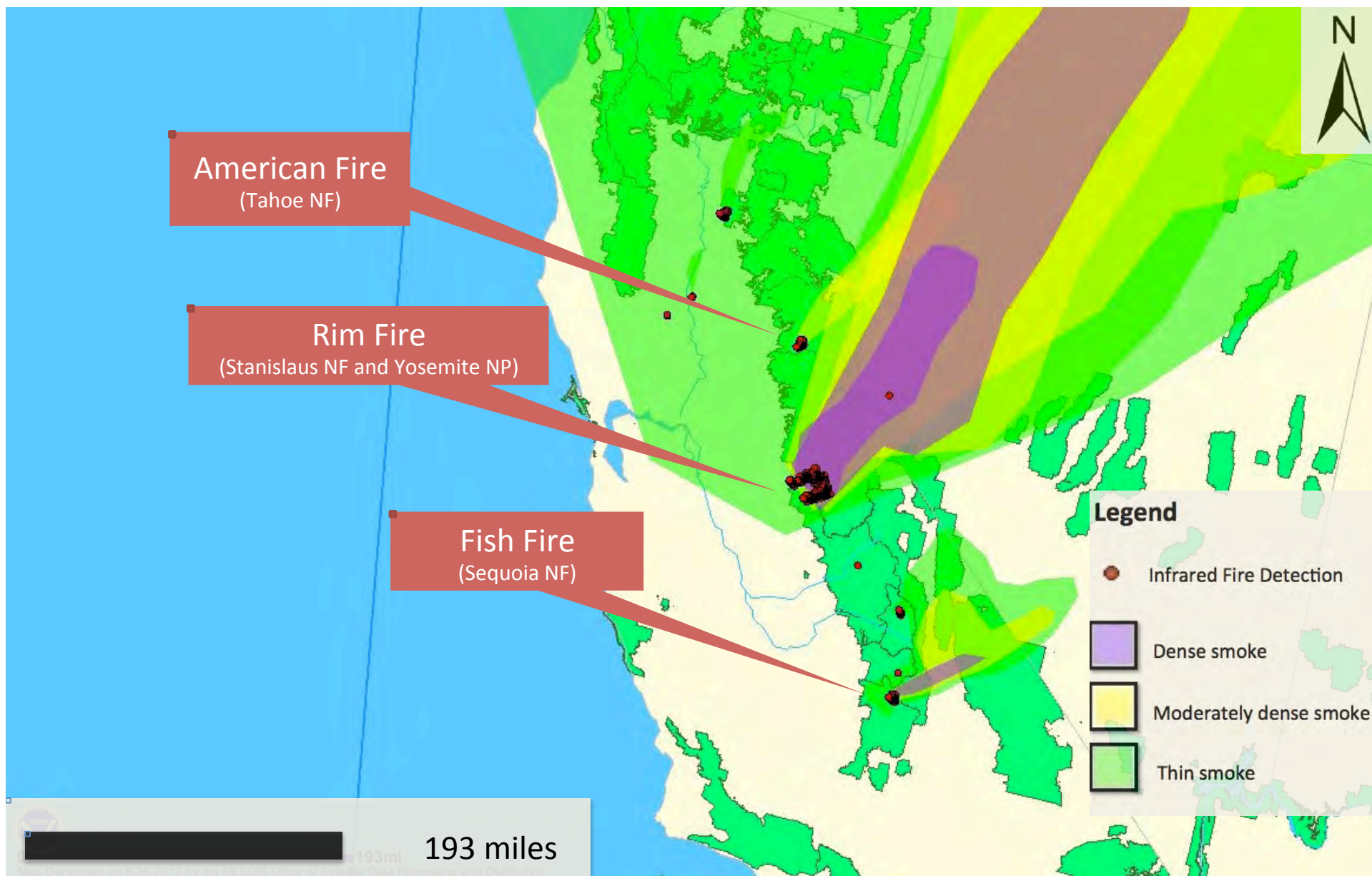
<http://inciweb.nwcg.gov/incident/3660/>

Rim Fire, 8/26 Growth Map

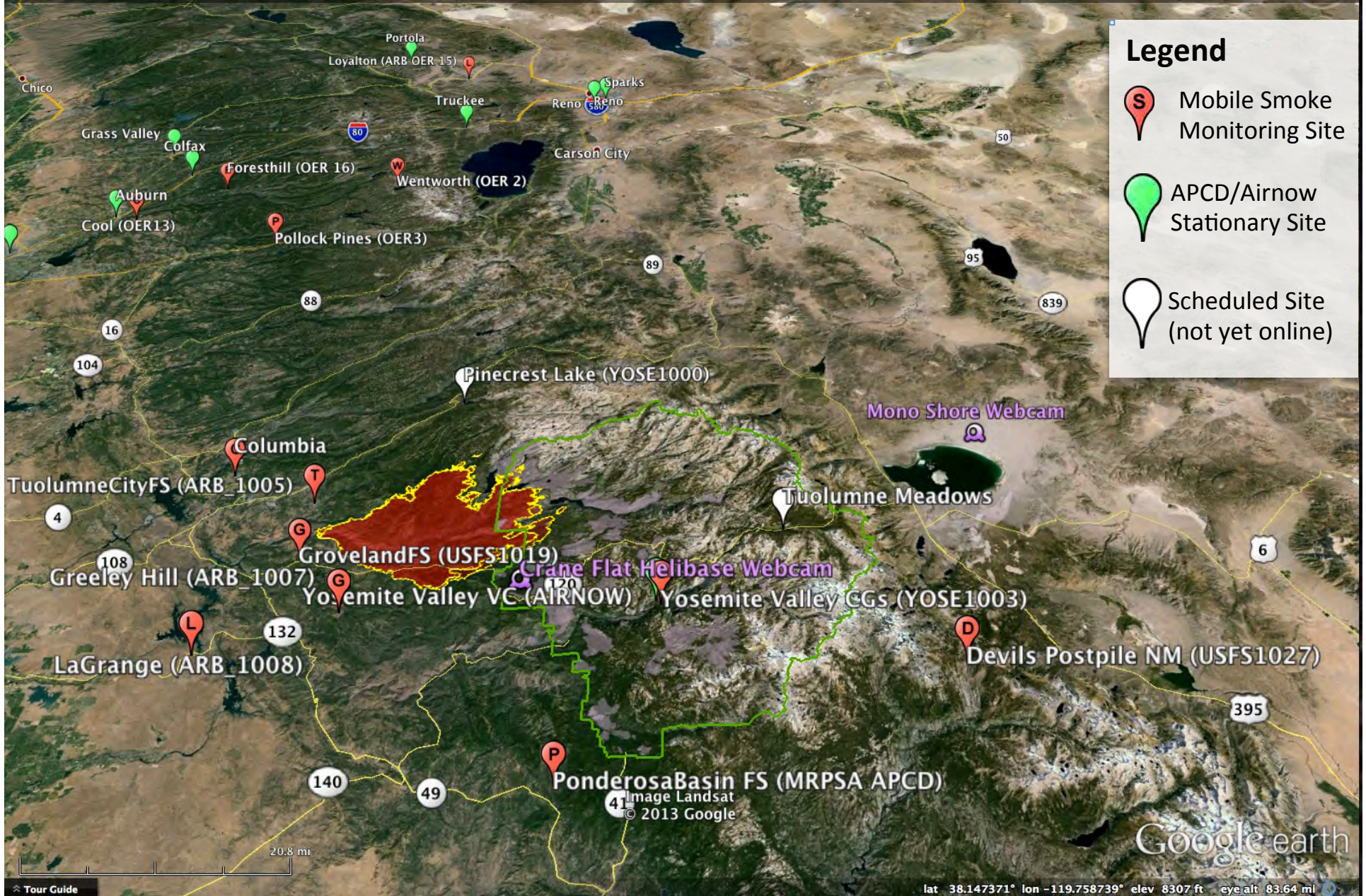
(most recent area is most transparent)



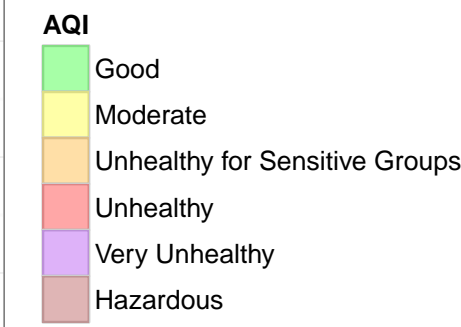
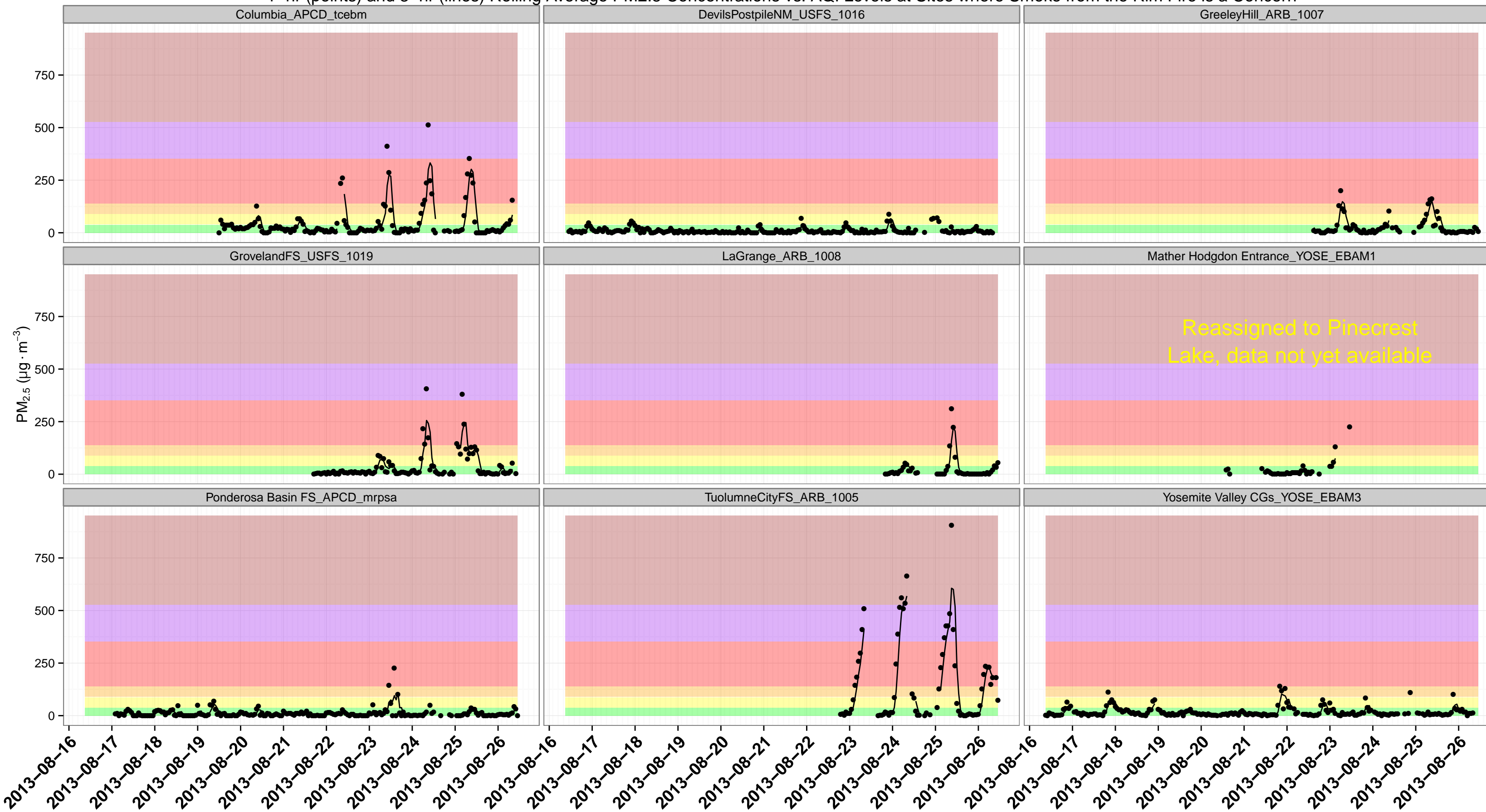
August 25, 2013: Fires and Smoke over California and the Western U.S. (Satellite Observation)



Rim and American Fire, AQ Monitoring Site Map

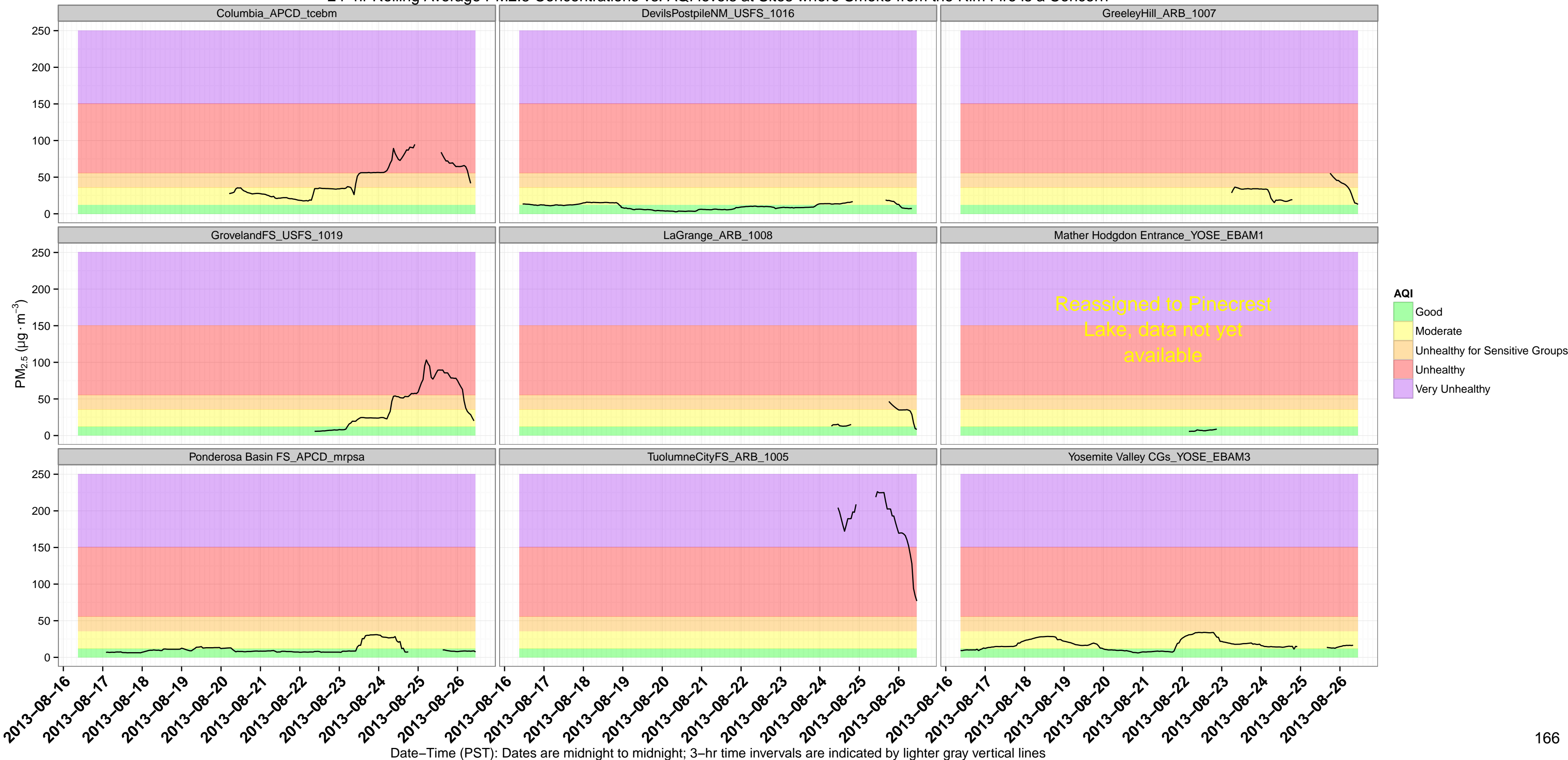


1-hr (points) and 3-hr (lines) Rolling Average PM2.5 Concentrations vs. AQI Levels at Sites where Smoke from the Rim Fire is a Concern

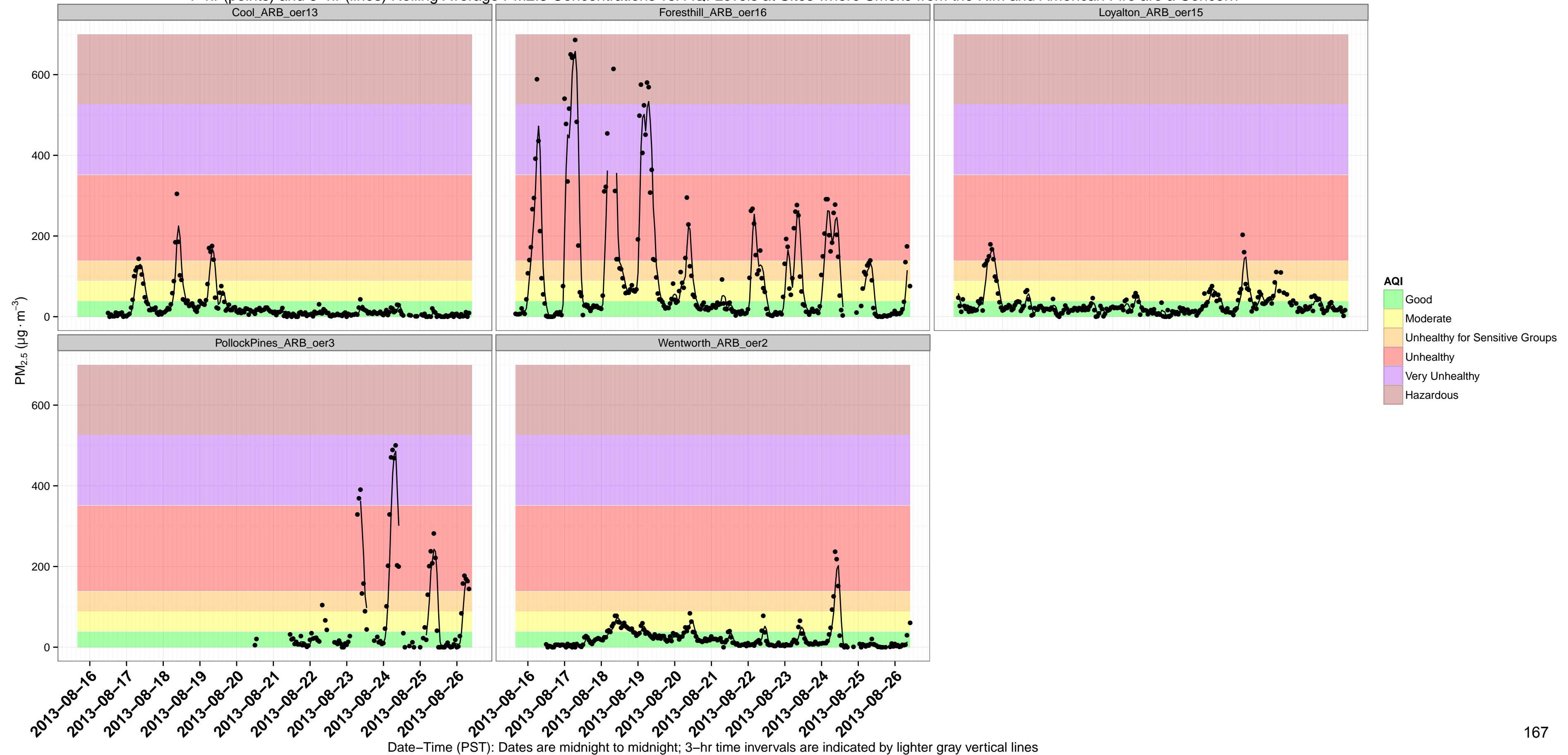


Date-Time (PST): Dates are midnight to midnight; 3-hr time intervals are indicated by lighter gray vertical lines

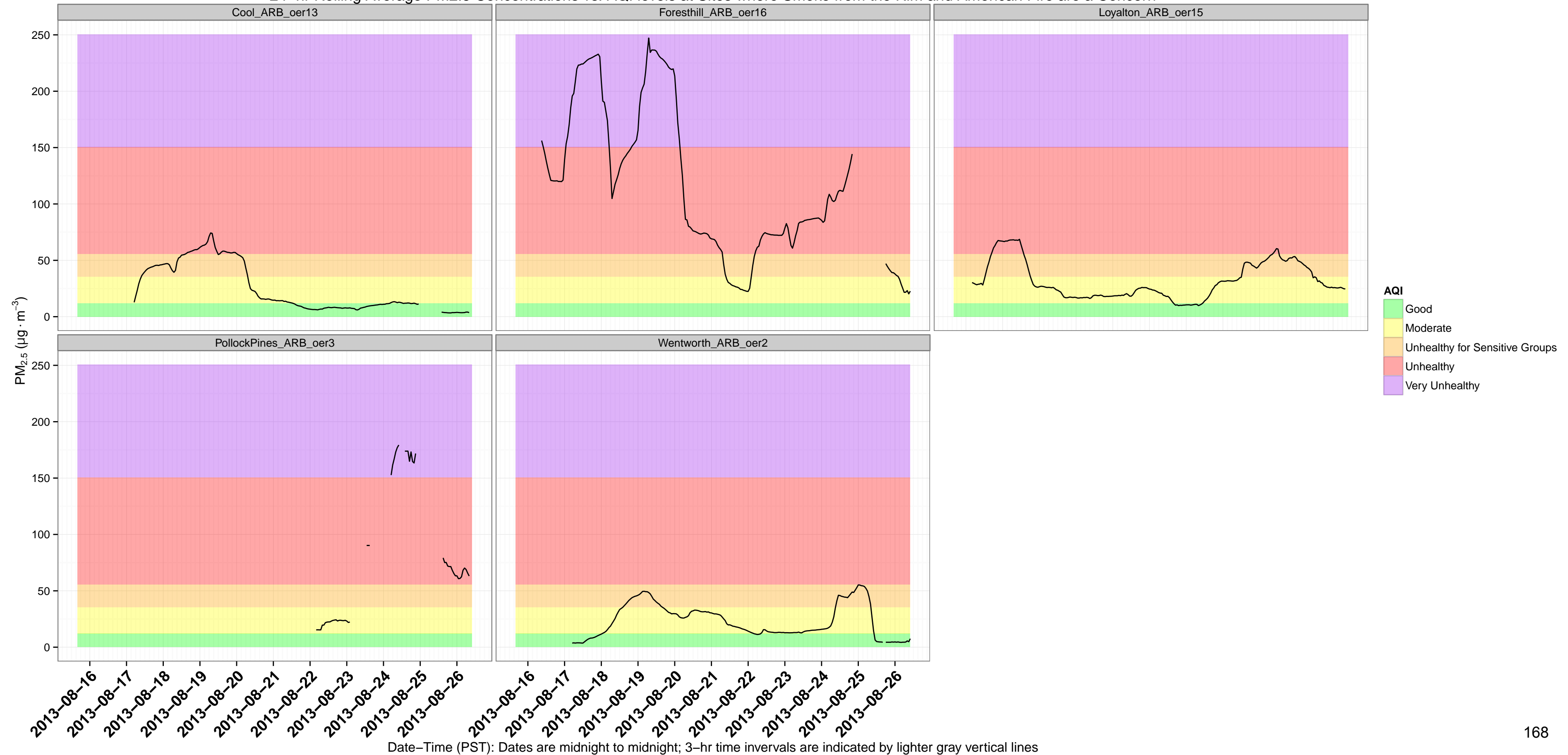
24-hr Rolling Average PM_{2.5} Concentrations vs. AQI levels at Sites Smoke from the Rim Fire is a Concern

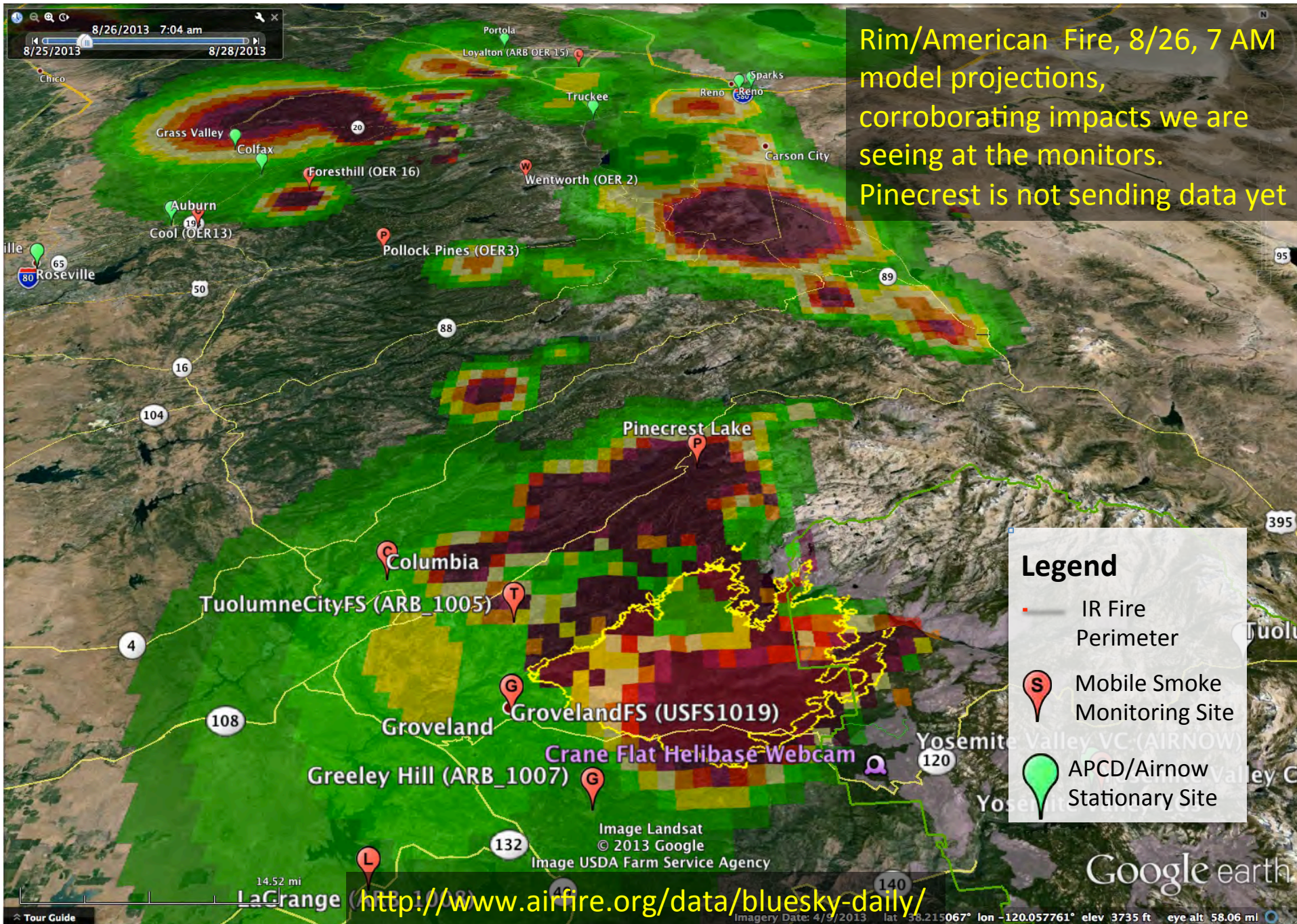


1-hr (points) and 3-hr (lines) Rolling Average PM2.5 Concentrations vs. AQI Levels at Sites where Smoke from the Rim and American Fire are a Concern



24-hr Rolling Average PM2.5 Concentrations vs. AQI levels at Sites where Smoke from the Rim and American Fire are a Concern



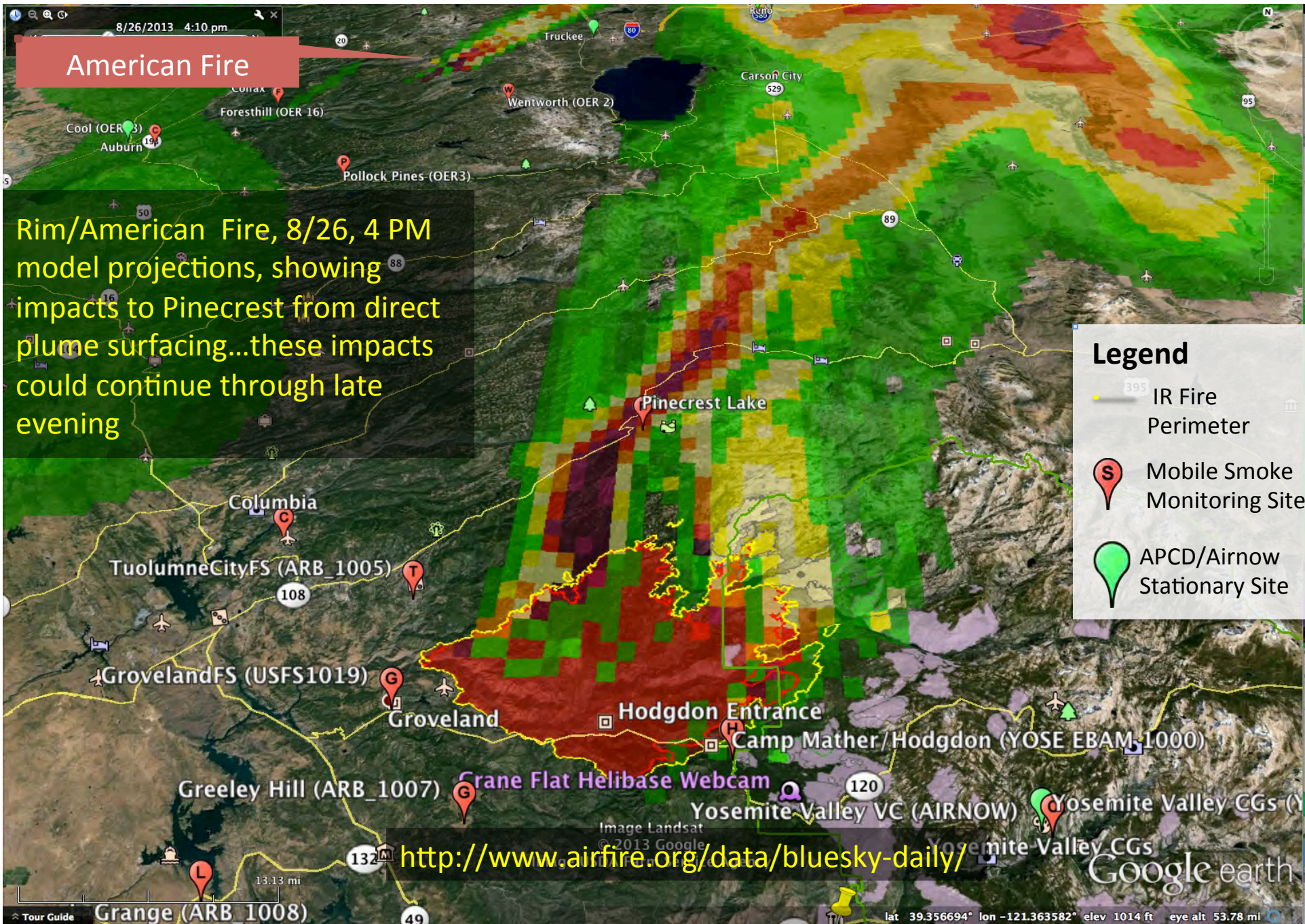


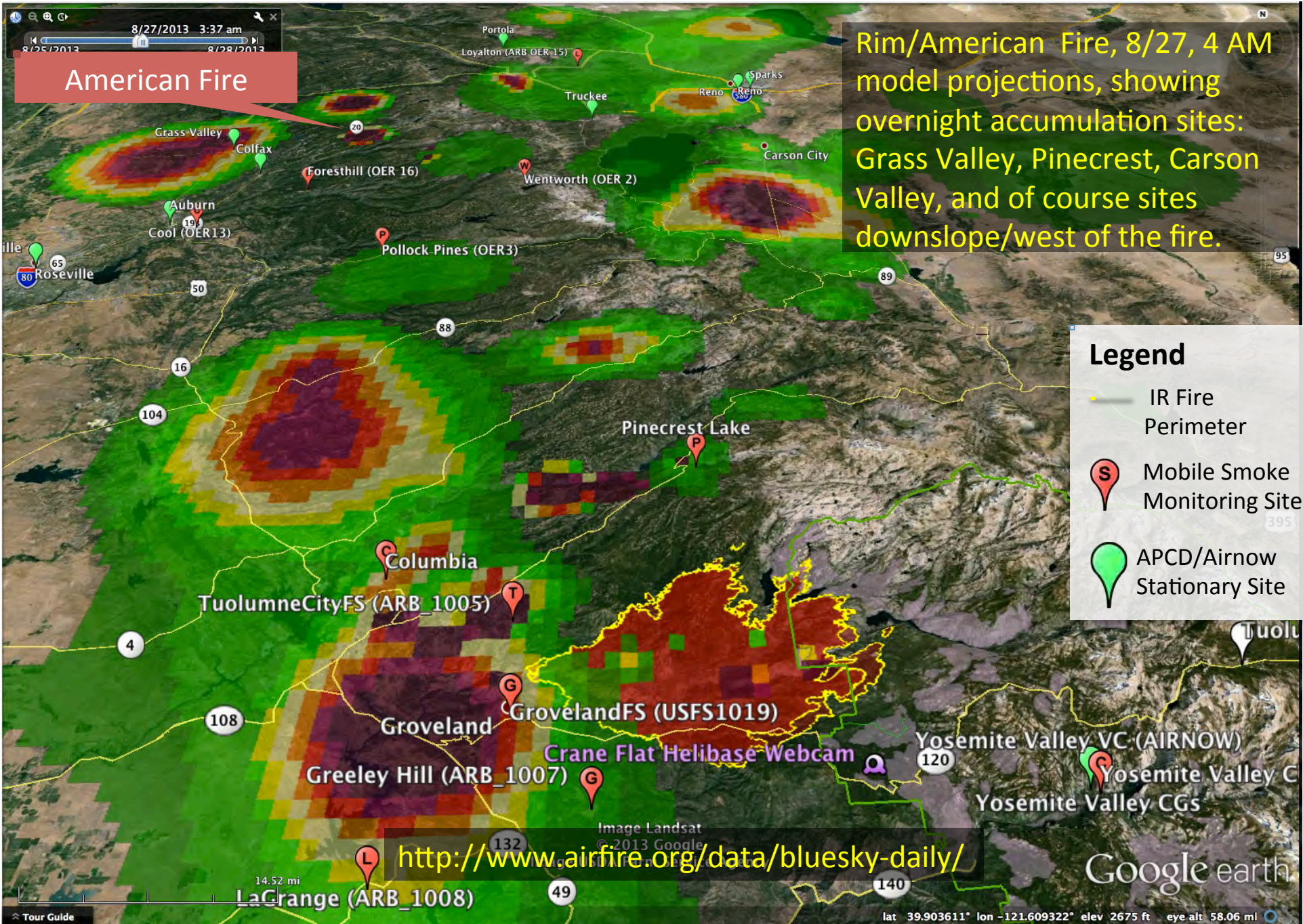
Rim/American Fire, 8/26, 7 AM model projections, corroborating impacts we are seeing at the monitors. Pinecrest is not sending data yet

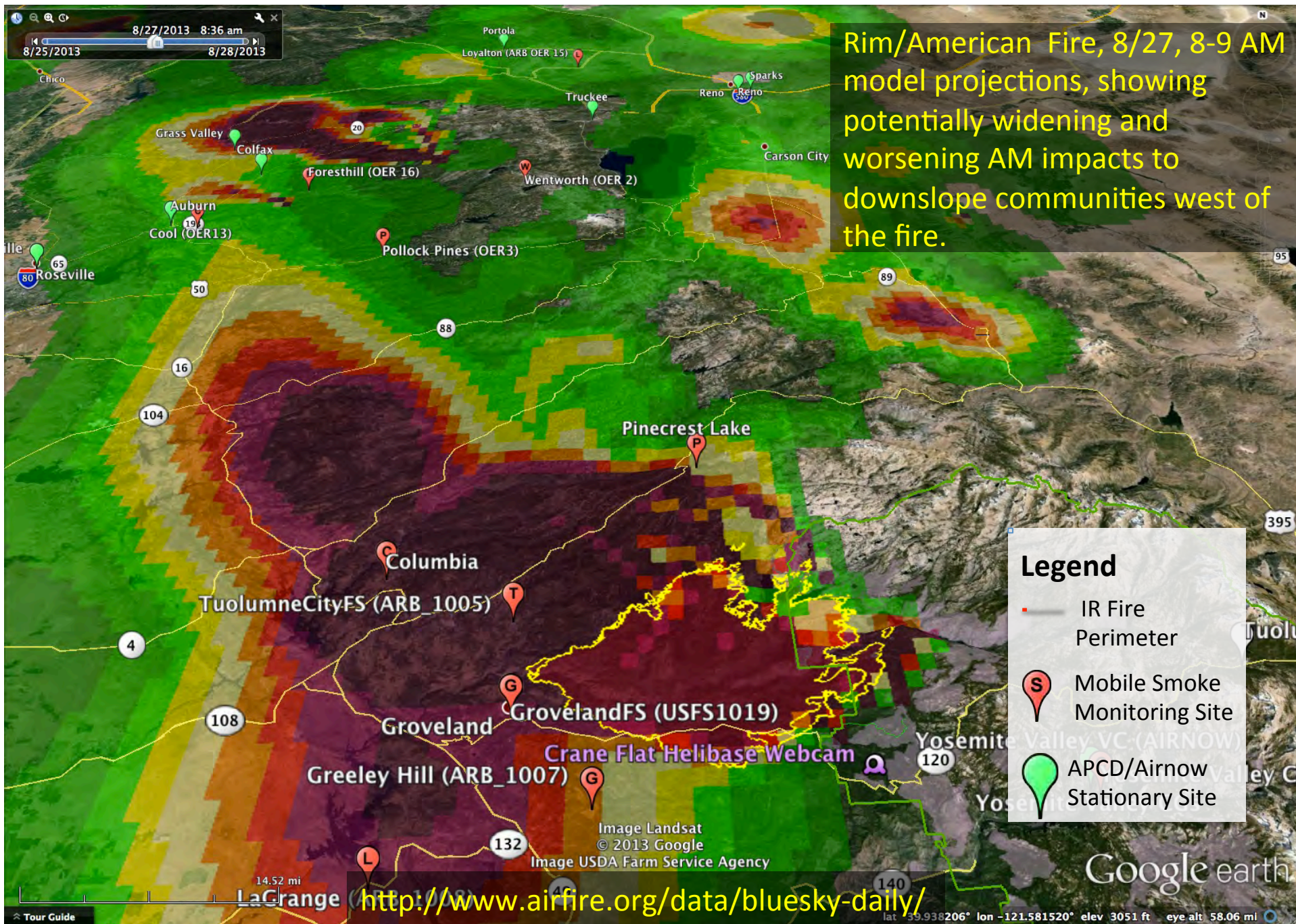
Legend

- IR Fire Perimeter
- Mobile Smoke Monitoring Site
- APCD/Airnow Stationary Site

<http://www.airfire.org/data/bluesky-daily/>





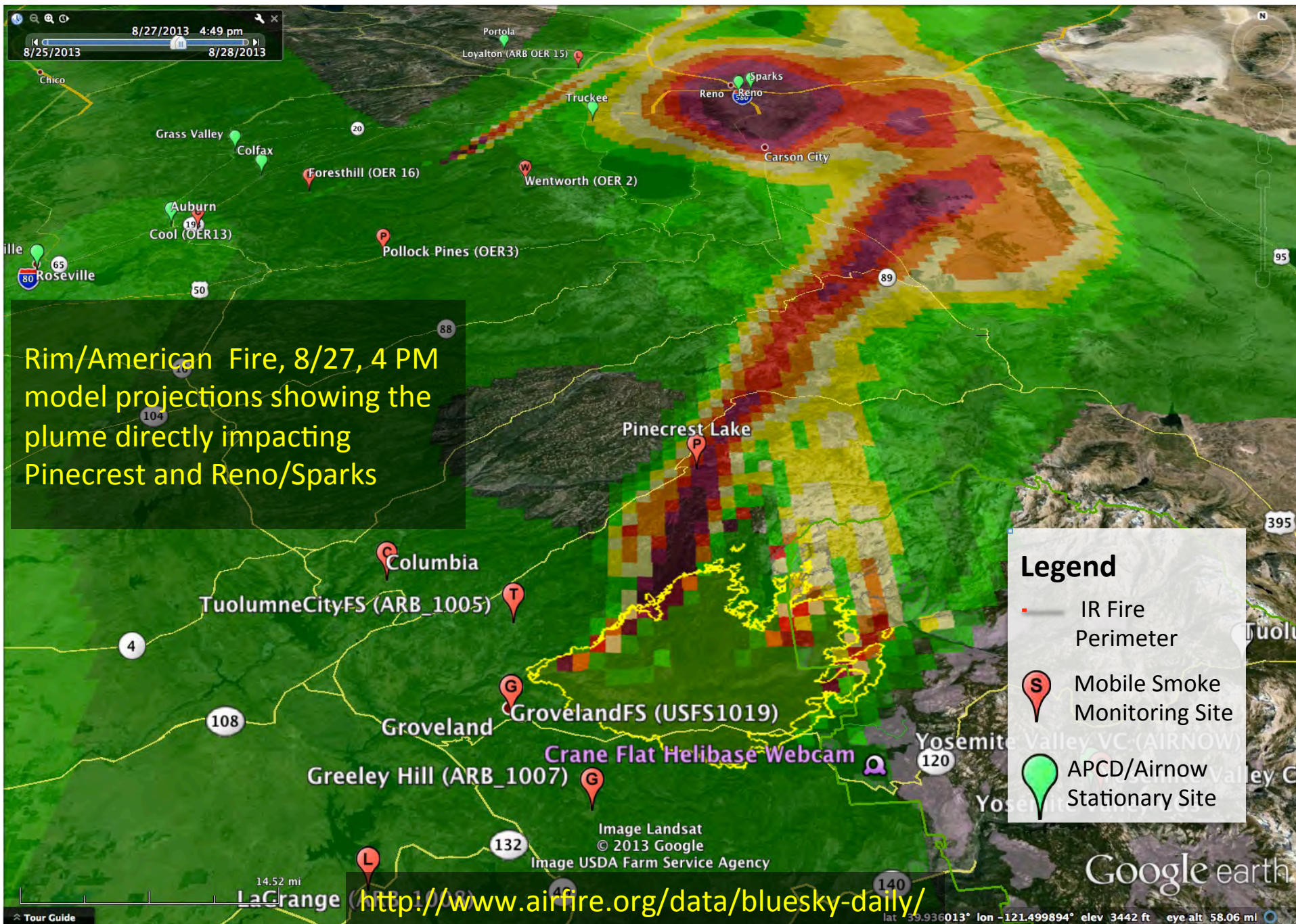


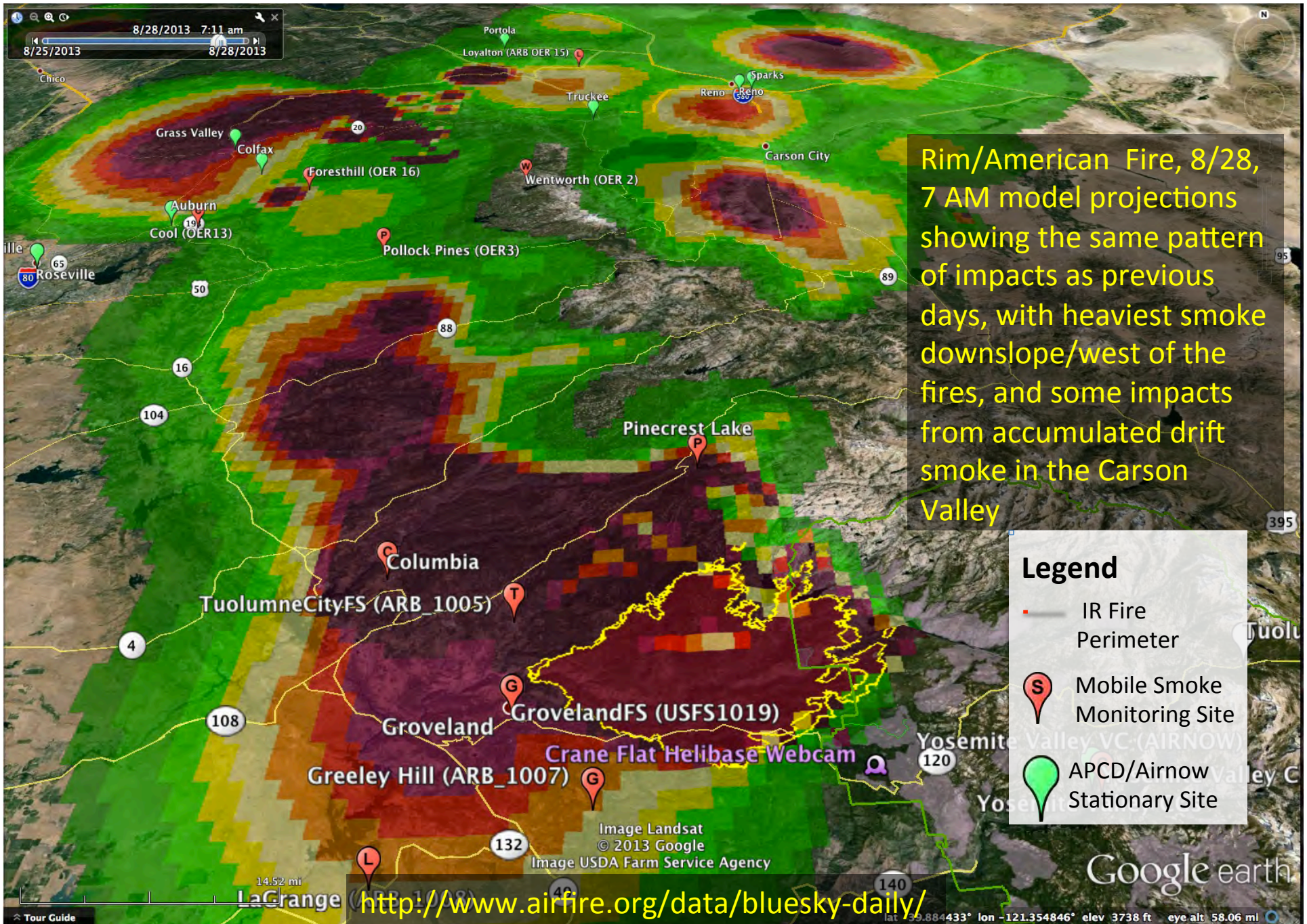
Rim/American Fire, 8/27, 8-9 AM model projections, showing potentially widening and worsening AM impacts to downslope communities west of the fire.

Legend

- IR Fire Perimeter
- Mobile Smoke Monitoring Site
- APCD/Airnow Stationary Site

<http://www.airfire.org/data/bluesky-daily/>

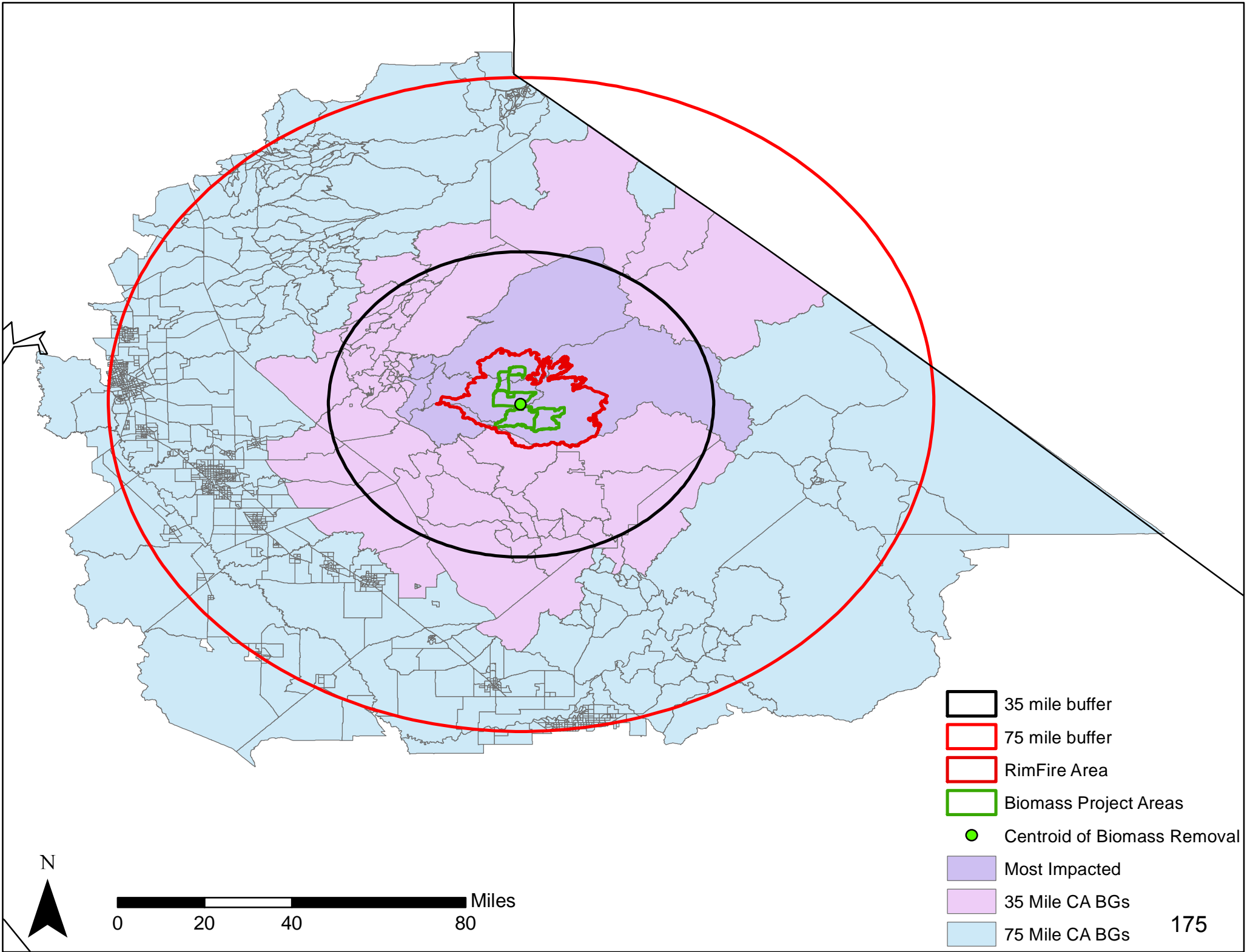




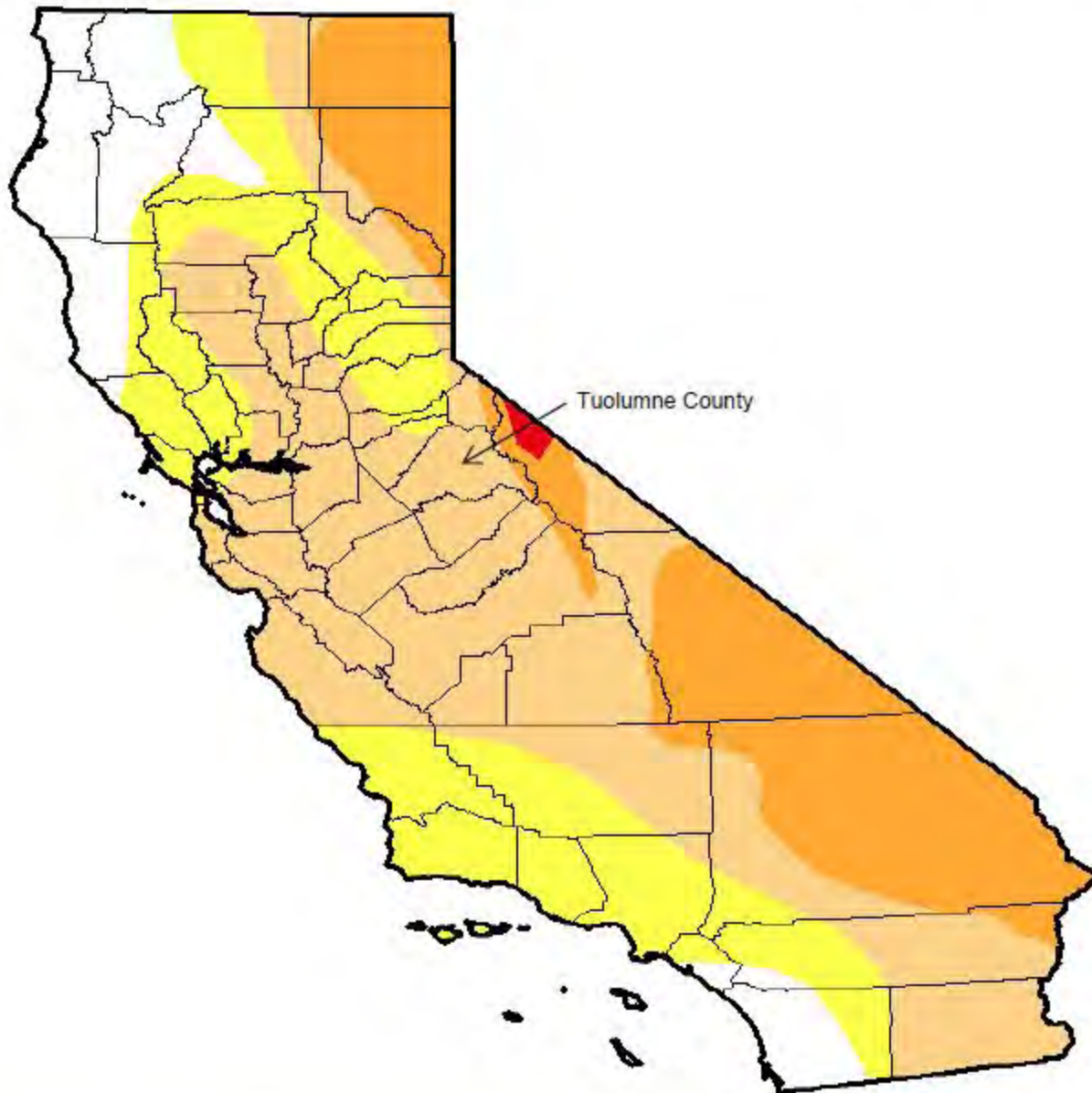
Rim/American Fire, 8/28, 7 AM model projections showing the same pattern of impacts as previous days, with heaviest smoke downslope/west of the fires, and some impacts from accumulated drift smoke in the Carson Valley

Legend

- - - IR Fire Perimeter
- Mobile Smoke Monitoring Site
- APCD/Airnow Stationary Site



August 14, 2012

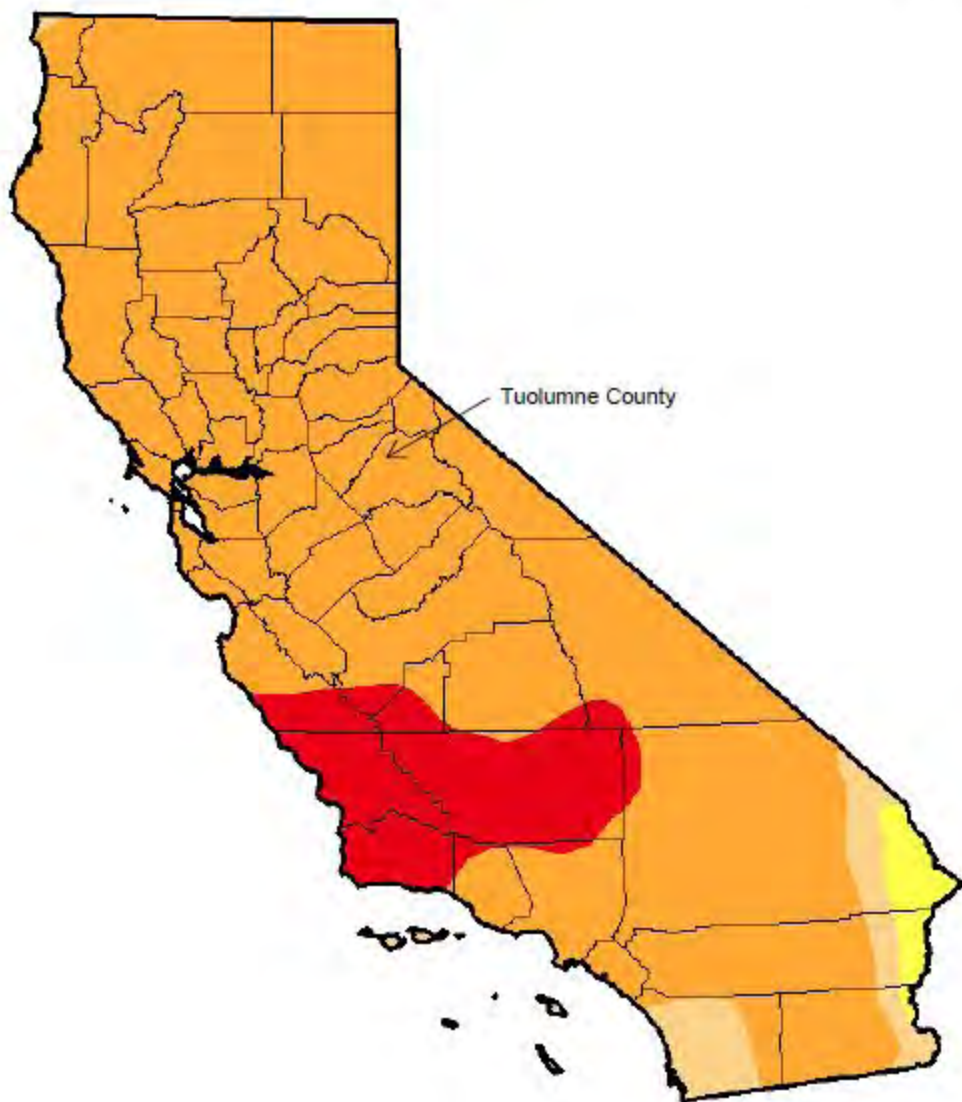


<http://droughtmonitor.unl.edu/MapsAndData/DataTables.aspx?CA>

Drought Severity

- D0 - Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

August 13, 2013





Three Pillars of the Community and Watershed Resilience Program

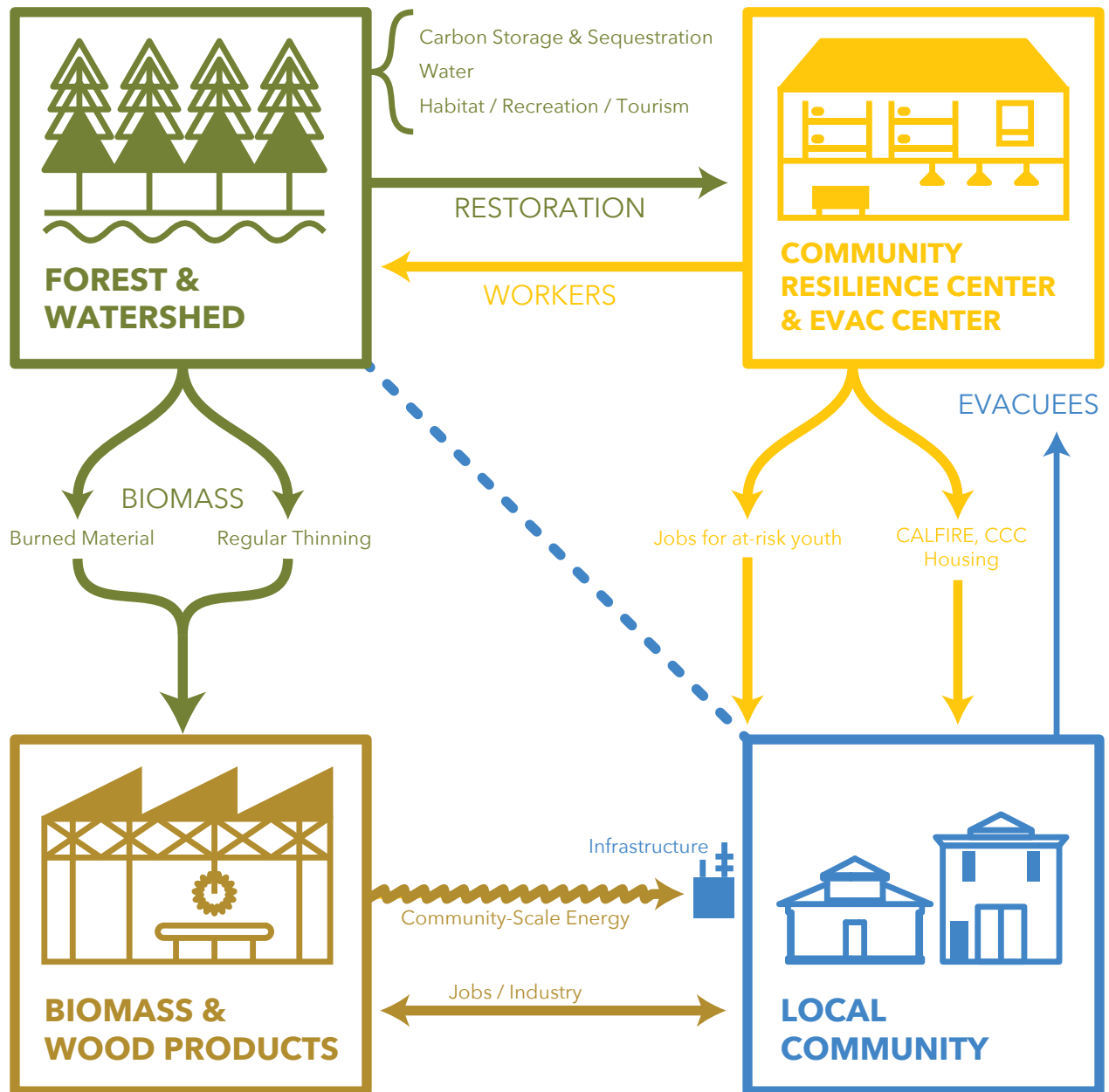
Community Resilience Centers (CRCs) - est. \$55M

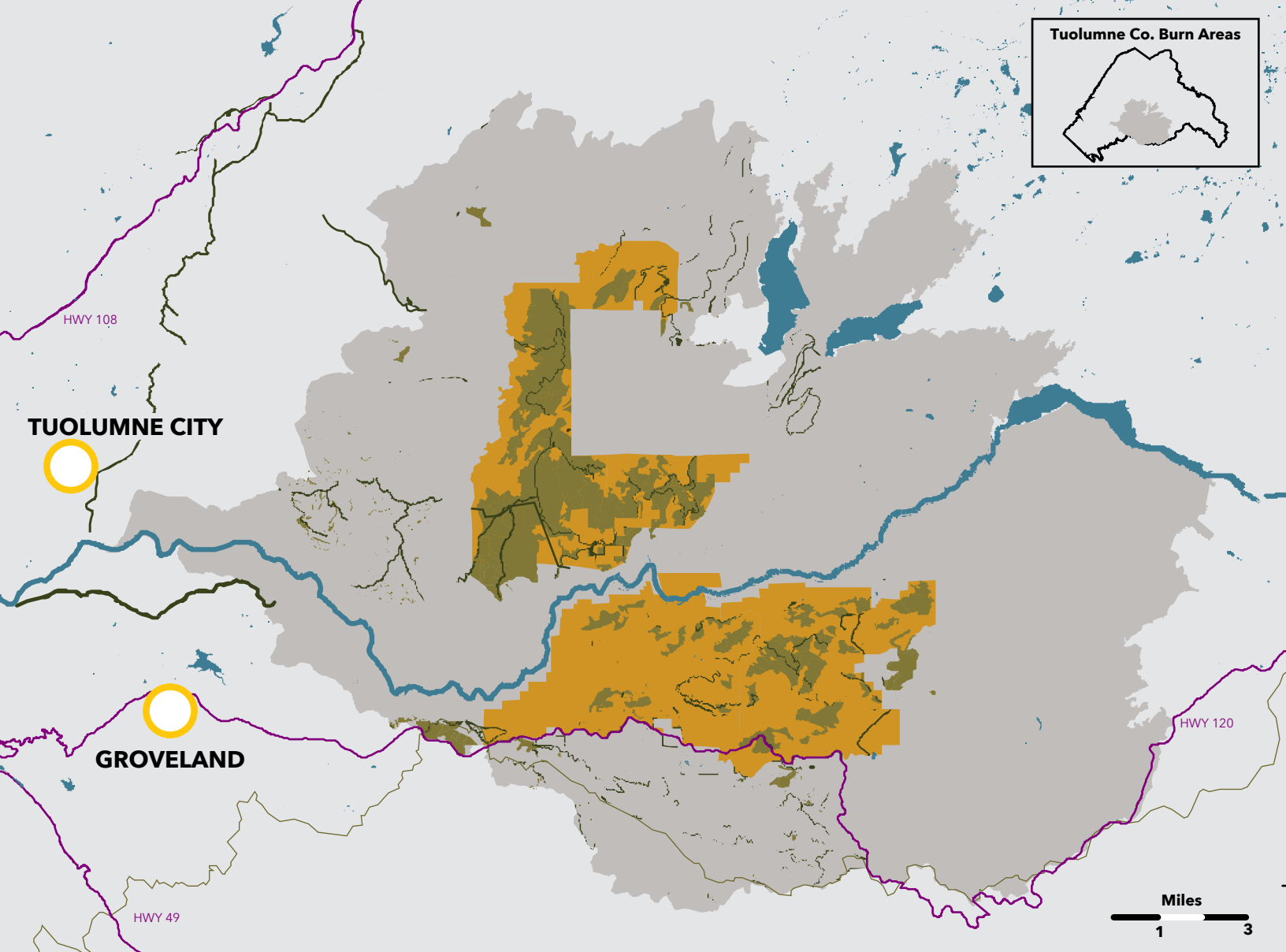
Tuolumne City & Groveland

Biomass Co-gen Facility & Wood Products Campus - est. \$22M

Forest and Watershed Health - est. \$40M

Three main focal points: biomass thinning, reforestation, critical fuel breaks





FOREST & WATERSHED

Biomass removal, Restoration and Reforestation, Noxious Weed Treatment, Rangeland Improvements, Critical Fuel Breaks

- TARGET REFORESTATION AREAS**
- FUEL BREAKS**



COMMUNITY RESILIENCE CENTER & EVAC CENTER

GROVELAND AND TUOLUMNE CITY LOCATIONS



BIOMASS & WOOD PRODUCTS

Wood Products; Biomass Co-gen Facility (Heat, Power and Cooling Facility)

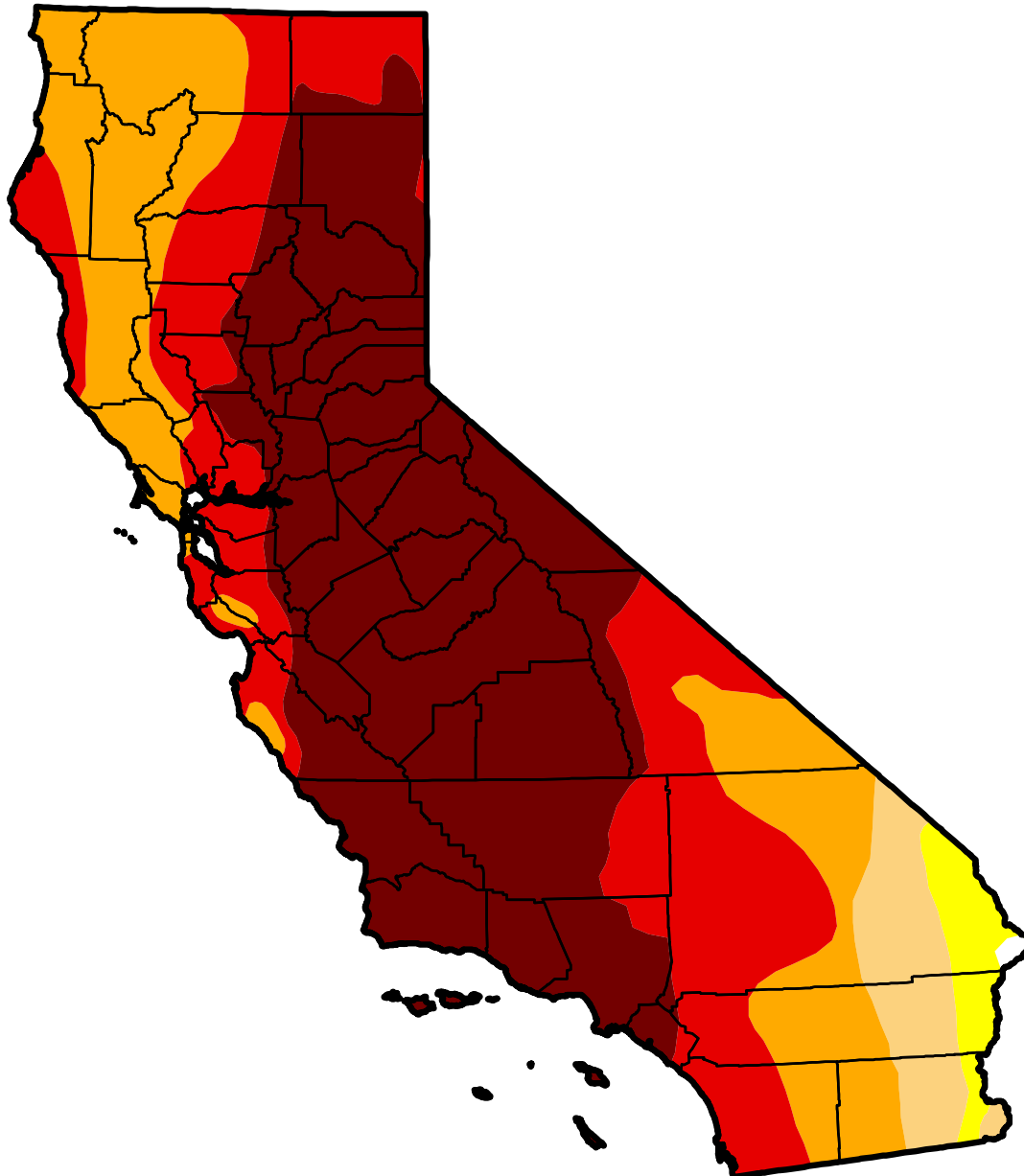
- TARGET BIOMASS REMOVAL AREAS**

- RIM FIRE AREA**
- COUNTY LIMIT**
- LAKES AND MAJOR RIVERS**
- HIGHWAYS**



U.S. Drought Monitor California

October 20, 2015
(Released Thursday, Oct. 22, 2015)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.14	99.86	97.33	92.27	71.08	46.00
Last Week <i>10/13/2015</i>	0.14	99.86	97.33	92.36	71.08	46.00
3 Months Ago <i>7/21/2015</i>	0.14	99.86	97.35	94.59	71.08	46.00
Start of Calendar Year <i>12/30/2014</i>	0.00	100.00	98.12	94.34	77.94	32.21
Start of Water Year <i>9/29/2015</i>	0.14	99.86	97.33	92.36	71.08	46.00
One Year Ago <i>10/21/2014</i>	0.00	100.00	100.00	95.04	81.92	58.41

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

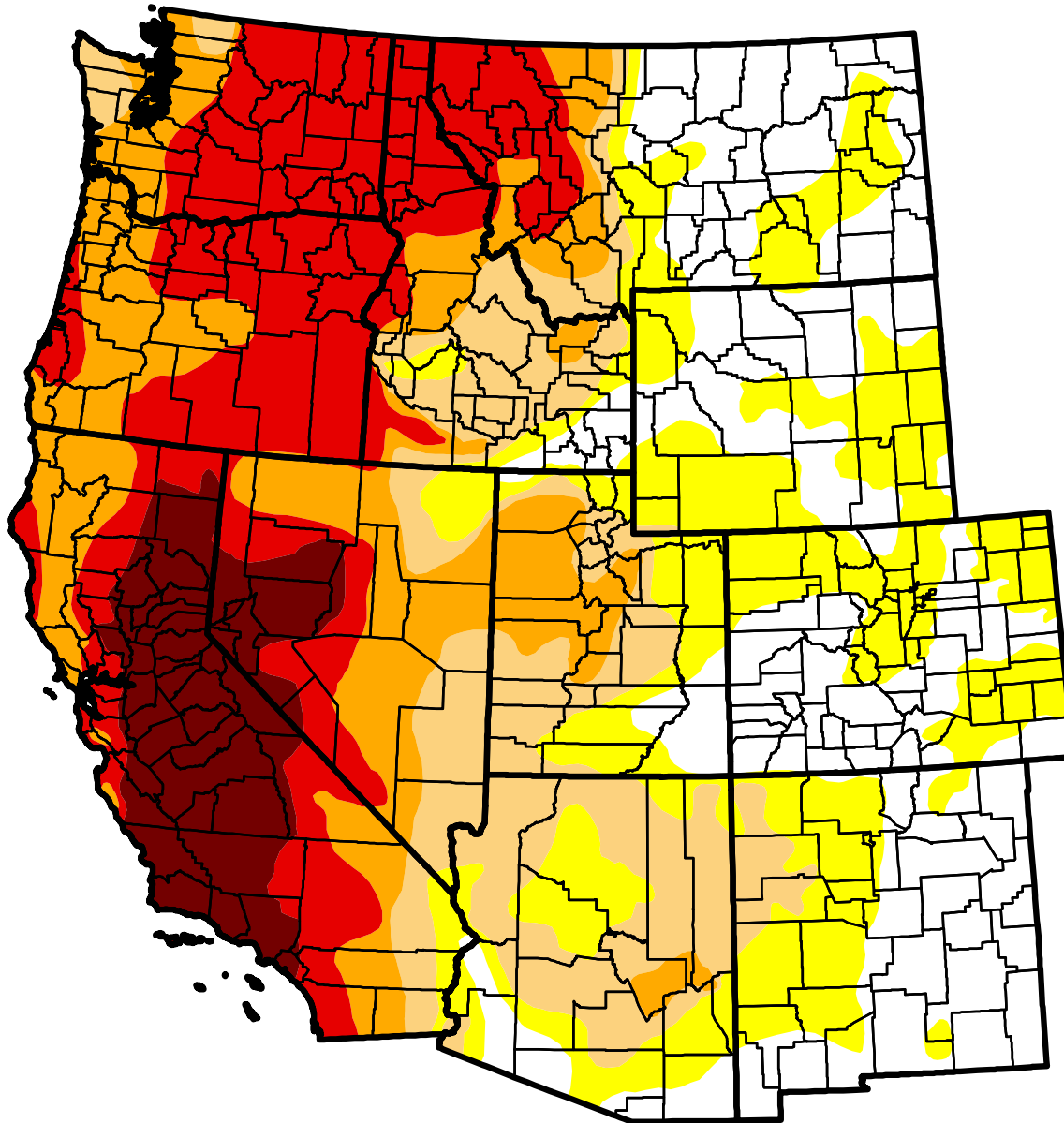
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Brad Rippey
U.S. Department of Agriculture



U.S. Drought Monitor West

October 20, 2015
(Released Thursday, Oct. 22, 2015)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	22.91	77.09	56.07	41.32	26.23	7.62
Last Week <i>10/13/2015</i>	25.31	74.69	57.06	41.92	26.44	7.62
3 Months Ago <i>7/21/2015</i>	25.49	74.51	61.04	41.92	18.87	7.17
Start of Calendar Year <i>12/30/2014</i>	34.76	65.24	54.48	33.50	18.68	5.40
Start of Water Year <i>9/29/2015</i>	22.77	77.23	57.81	42.42	26.50	7.62
One Year Ago <i>10/21/2014</i>	31.95	68.05	55.56	34.82	19.08	8.90

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

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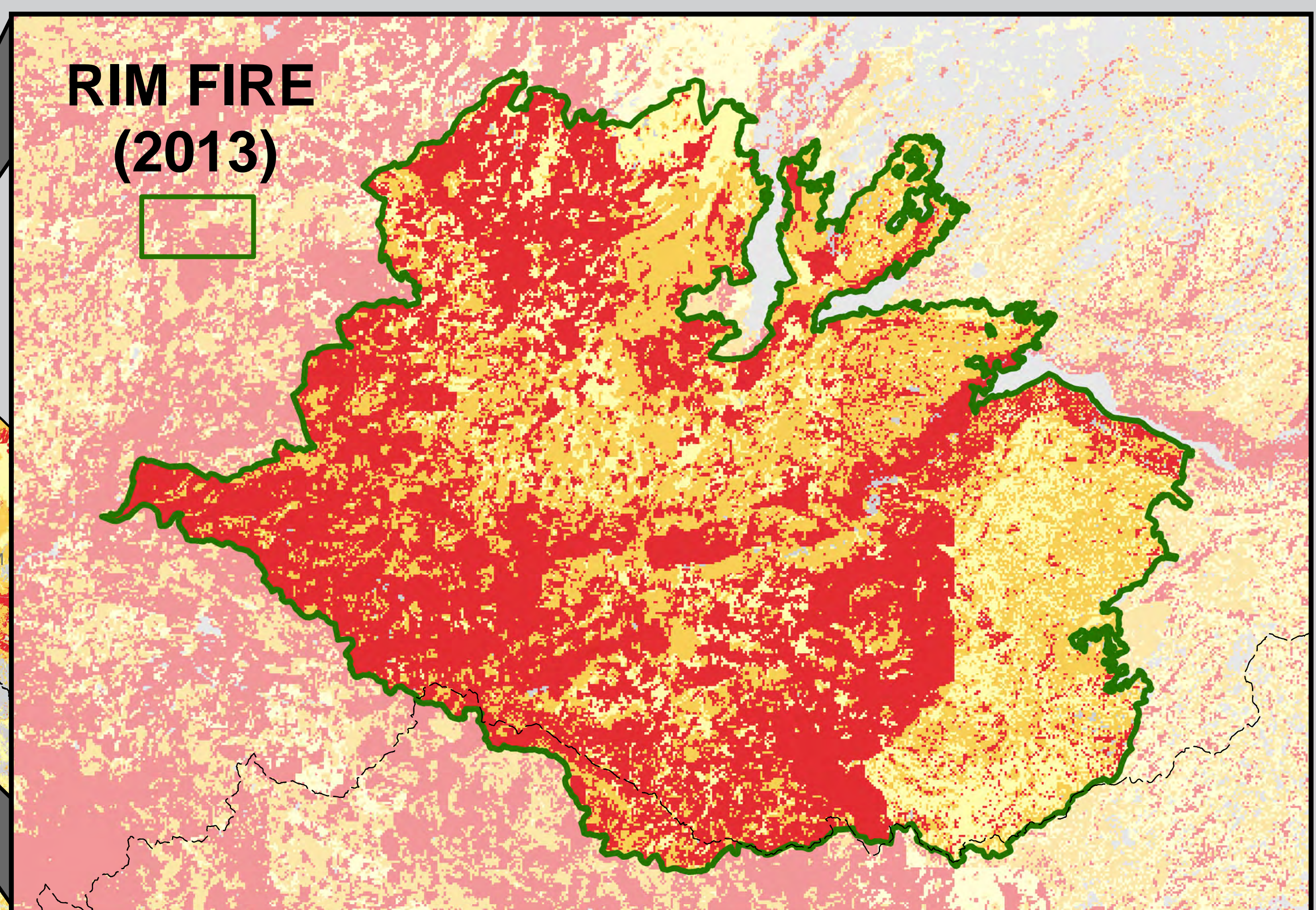




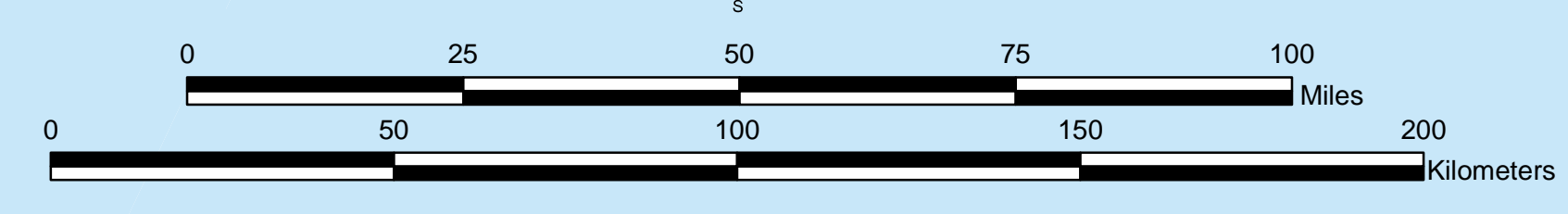
FIRE THREAT (2005)

- | | | | |
|--|-----------|--|------------|
| | Extreme | | Moderate |
| | Very High | | Non-fuel |
| | High | | Not Mapped |

CAL FIRE - FRAP has developed a rating of wildland fire threat based on the combination of potential fire behavior (Fuel Rank) and expected fire frequency (Fire Rotation) to create a 4-class index for risk assessment. Areas that do not support wildland fuels (eg., open water, agricultural lands, etc.) are omitted from the calculation. Most large urbanized areas receive a moderate fire threat classification to account for fires carried by ornamental vegetation and flammable structures.



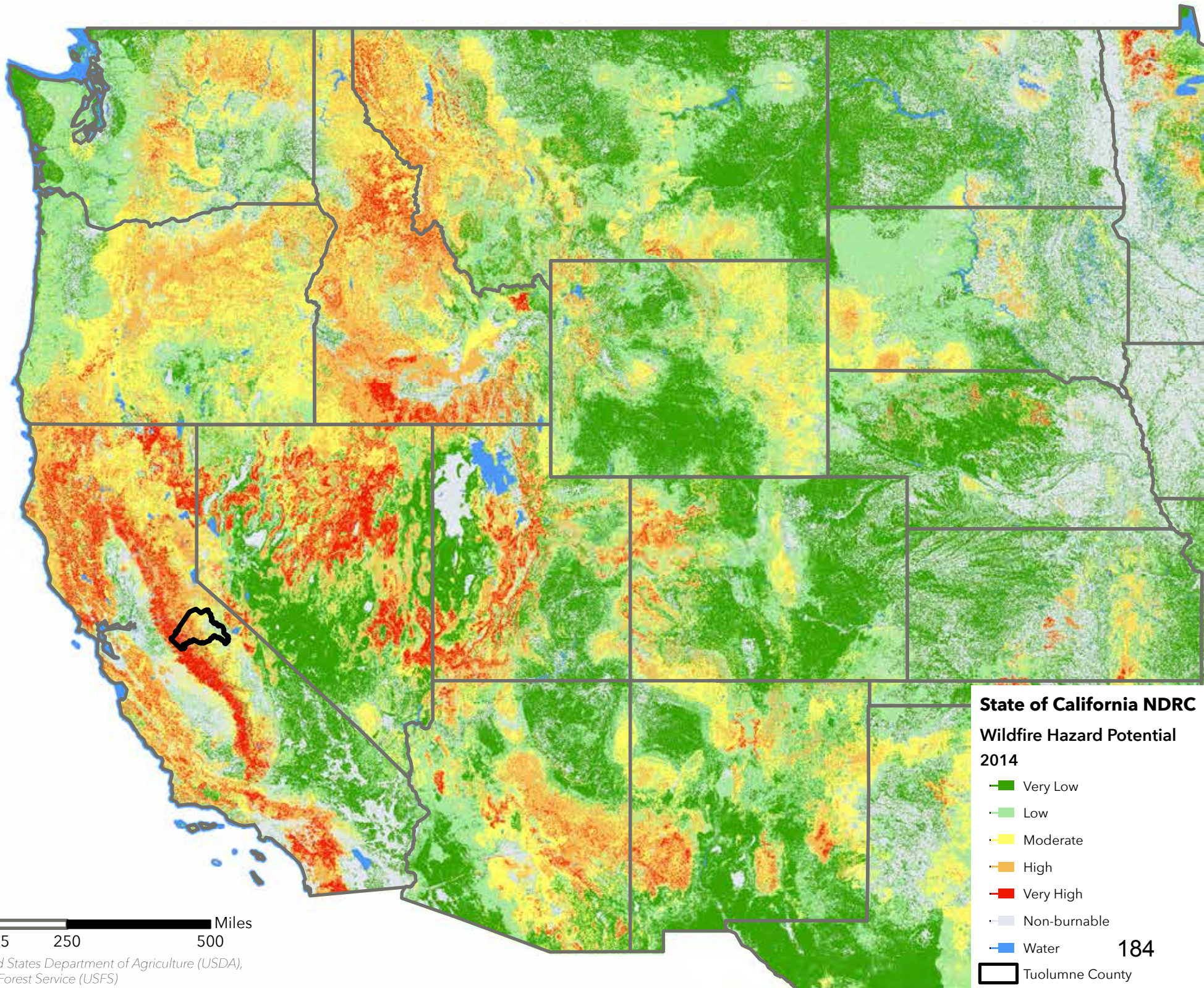
Pacific Ocean



Projection California Teale Albers
Scale 1:1,020,000
N 29° x 48"
March 2015

The State of California and the Department of Forestry and Fire Protection make no representations or warranties regarding the accuracy of data or maps. Neither the State nor the Department shall be liable under any circumstances for any direct, special, incidental, or consequential damages with respect to any claim by any user or third party on account of, or arising from, the use of data or maps.

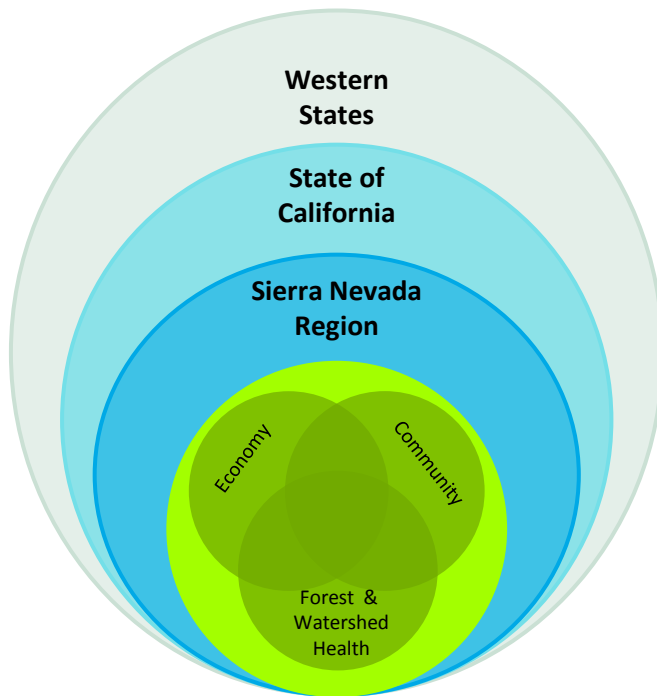
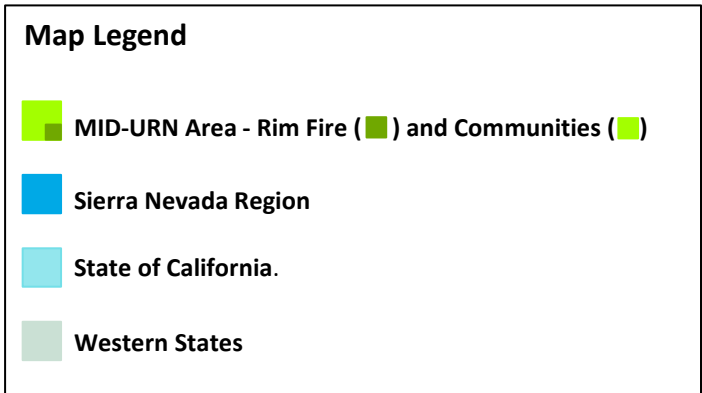
Obtain FRAP maps, data, metadata and publications on the Internet at <http://frap.cdf.ca.gov>
For more information, contact CAL FIRE - FRAP, PO Box 944246, Sacramento, CA 94244-2460, (916) 327-3939.



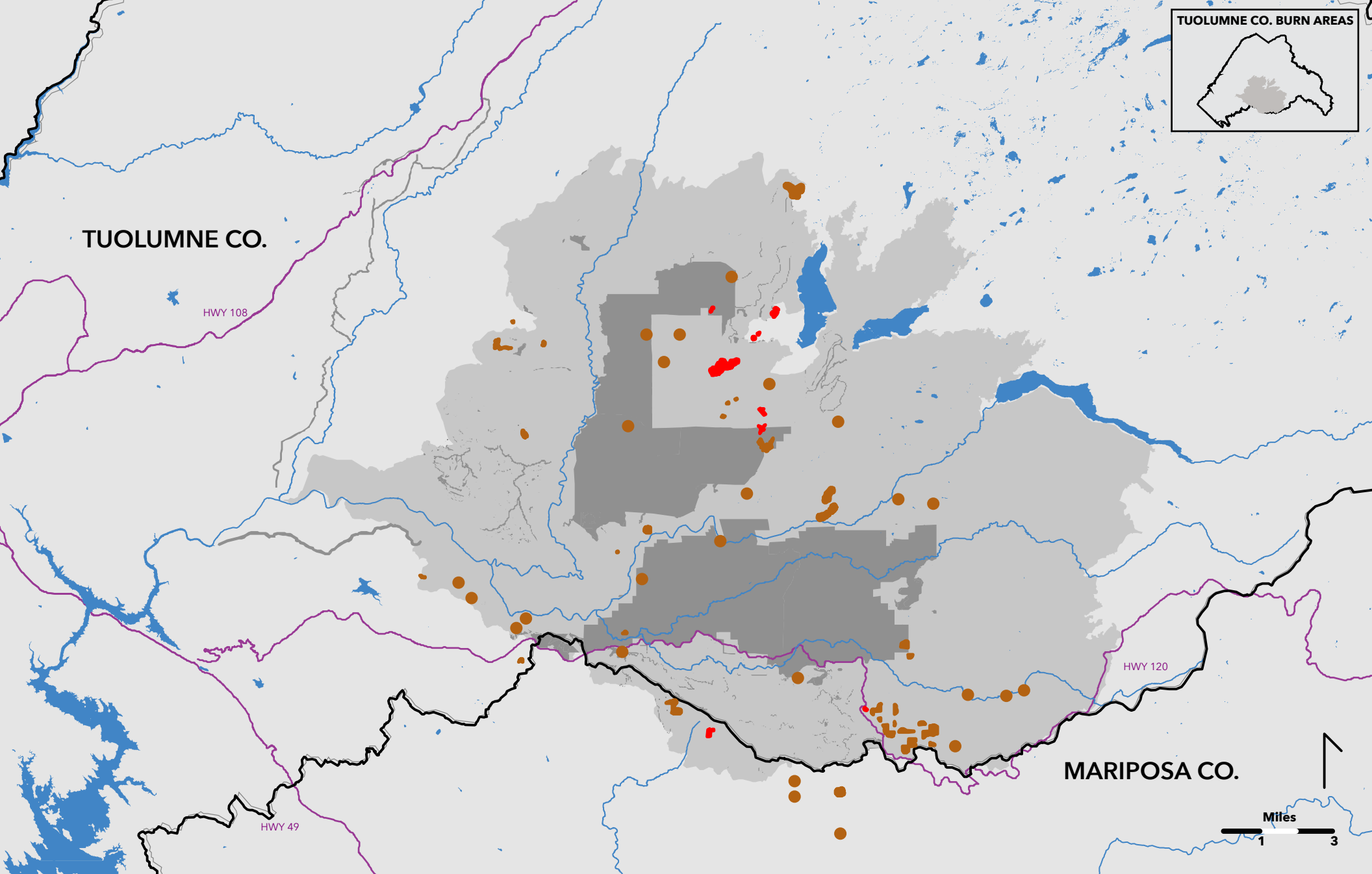
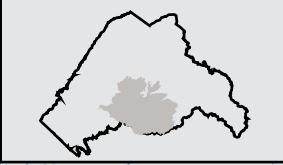
0 125 250 500 Miles

Source: United States Department of Agriculture (USDA),
United States Forest Service (USFS)

Figure 1: Community and Watershed Resilience Program

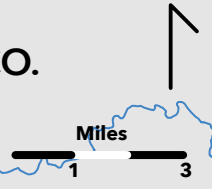


MID-URN Area: Rim Fire Burn Area & Communities



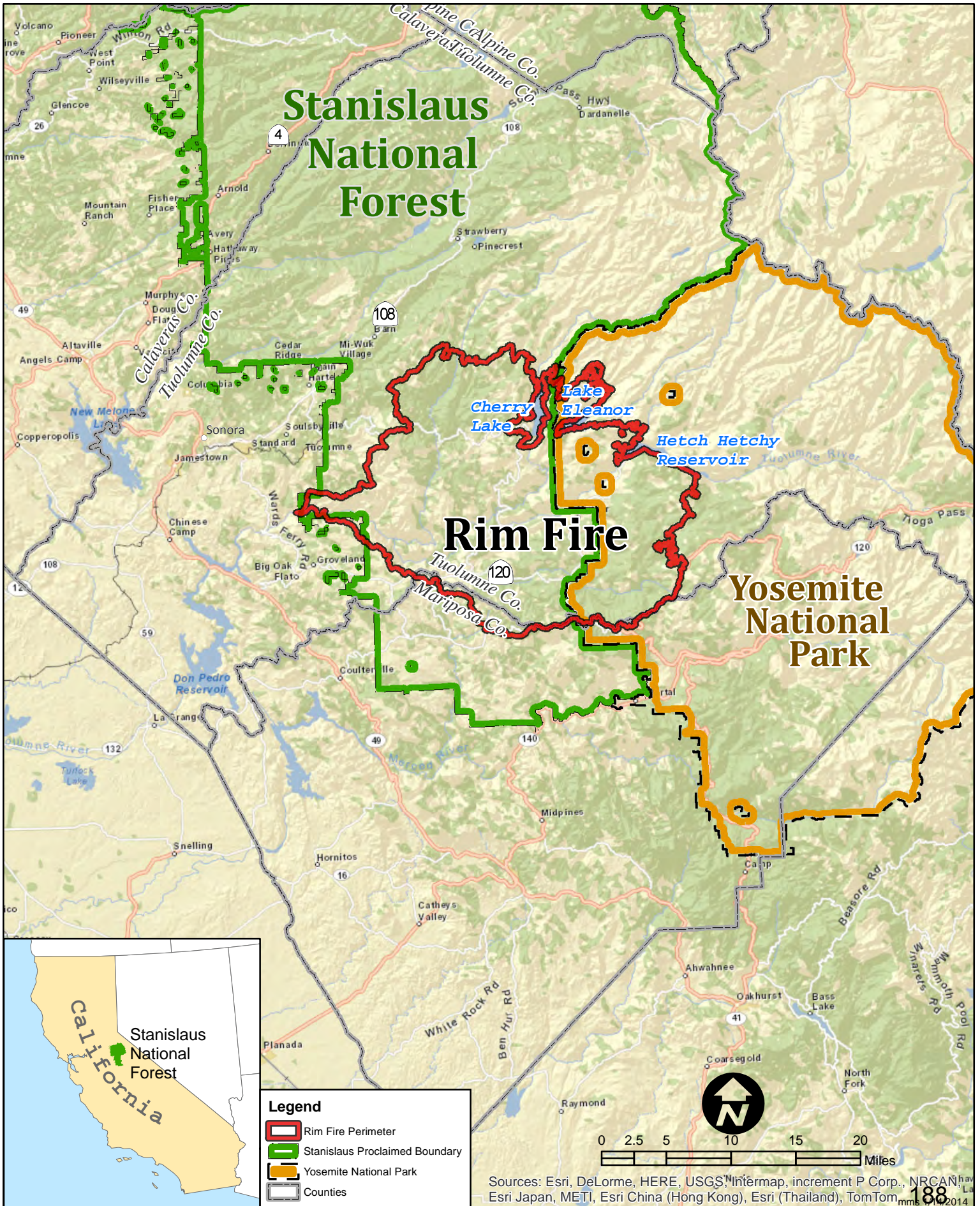
U.S. Forest Service Propositions 1 and 84 Submitted Projects (Pending Award)

- Rim Fire Area
- NDRC Activity Areas
- Water
- Highway
- Proposition 1 Activity - \$1,897,100
- Proposition 84 Activity - \$5,883,559





Stanislaus National Forest Rim Fire



Casting a long shadow

Smoke from the massive Rim Fire in and around Yosemite National Park has drifted thousands of miles, according to data from NOAA and NASA satellites. The trail of soot on Friday merged with smoke from agricultural fires in the lower Mississippi River area.



Source: National Oceanic and Atmospheric Administration

BAY AREA NEWS GROUP

Tuolumne County Block Groups by Percent of Households under HUD Low-Mod Threshold

