

**Smoke Impact Report – Shasta-Trinity/Six Rivers National Forest August 14, 2015.**

**A) Fire growth**

<b>Complex Names</b>	<b>Fire Growth Yesterday</b>	<b>Total Acre</b>
Fork Complex	2232 Acres	30,891 Acres
Mad River Complex	684 Acres	21,949 Acres
River Complex	4563 Acres	32,996 Acres
Route Complex	482Acres	26,941 Acres
South Complex	885 Acres	17,210 Acres
Gasquet Complex	141 Acres	3,181 Acres
Nickowtiz Fires	N/A Acres*	1,609 Acres*
Total	8987 Acres	133,168 Acres

Information came from Infrared Flights

\*Due to cloud cover in the area. Acre kept as yesterday's acres.

**B) Weather**

Generally westerly/northwesterly onshore wind is expected for Northern California today, tomorrow and Sunday. This wind will flow all the way into Shasta County today, but only reach Trinity County tomorrow and Sunday. Strong Northerly wind is expected tonight in Sacramento Valley, but it will weaken by tomorrow. Much weaker transport wind speed and lower mixing height is forecast for tomorrow and Sunday, compared to the previous days.

**C) Fire Behavior**

Fire behavior analysts predicted that moderate fire behavior when smoke is lifted and wind is forecast to be gusty today, especially in high elevation. And they are also predicting longer active burn periods today due to less hazy conditions.

**D) Smoke**

All complexes/fires in the area grew about 8987 acres yesterday. This generates decent amount of smoke. Smoke dispersion will be poorer in the next few days, compared to previous few days due to lower mixing height and weaker transport wind speed. Air quality is likely to deteriorate over the forecast area, especially in Hyampon and Hayfork in Trinity County.

Onshore wind keep smoke away from the coast this afternoon (Figure 1). Tomorrow and Sunday, generally northwesterly wind bring smoke to the Southeast, but Yreka, Happy Camp and Etna are likely to have smoke impact from Oregon which is not modeled in this particular BlueSky run (Figure 2,3,4). At nights, smoke is likely to settle in the river drainages in the area.

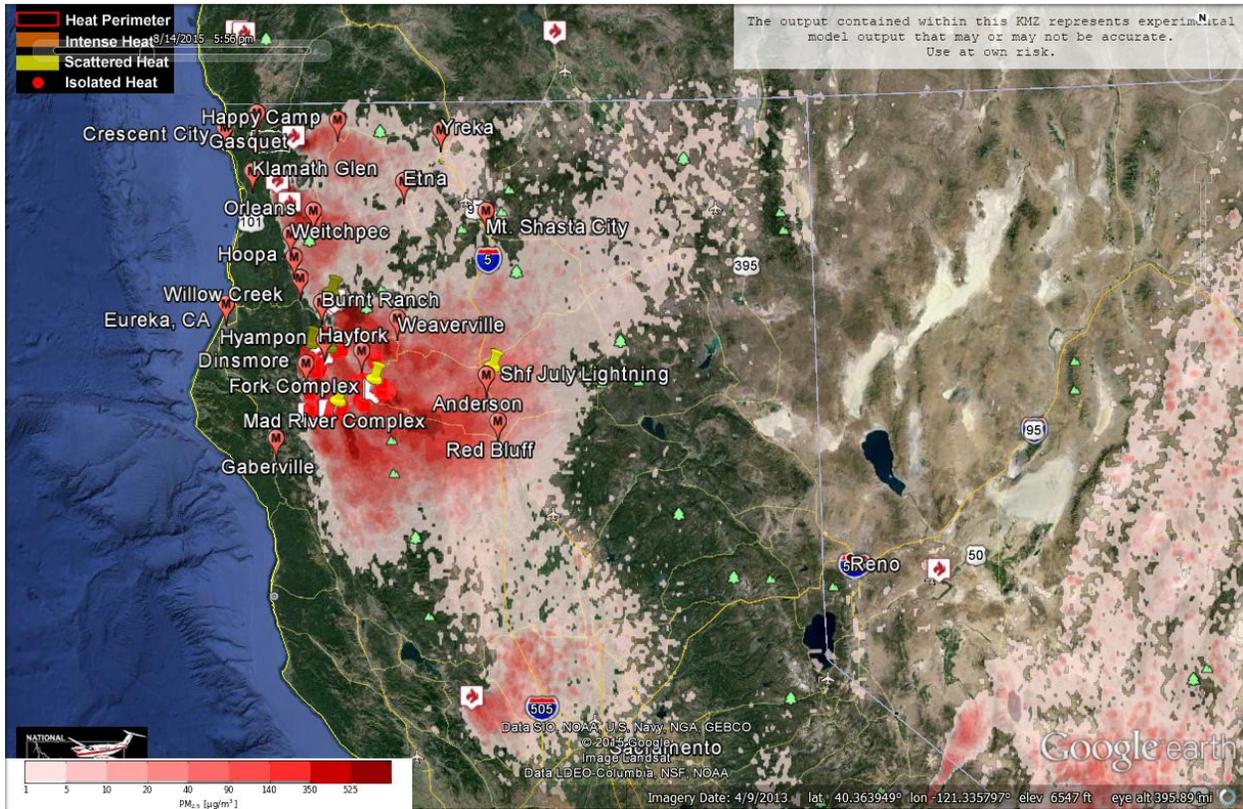


Figure 1: Bluesky run for 6pm on August 14, 2015.

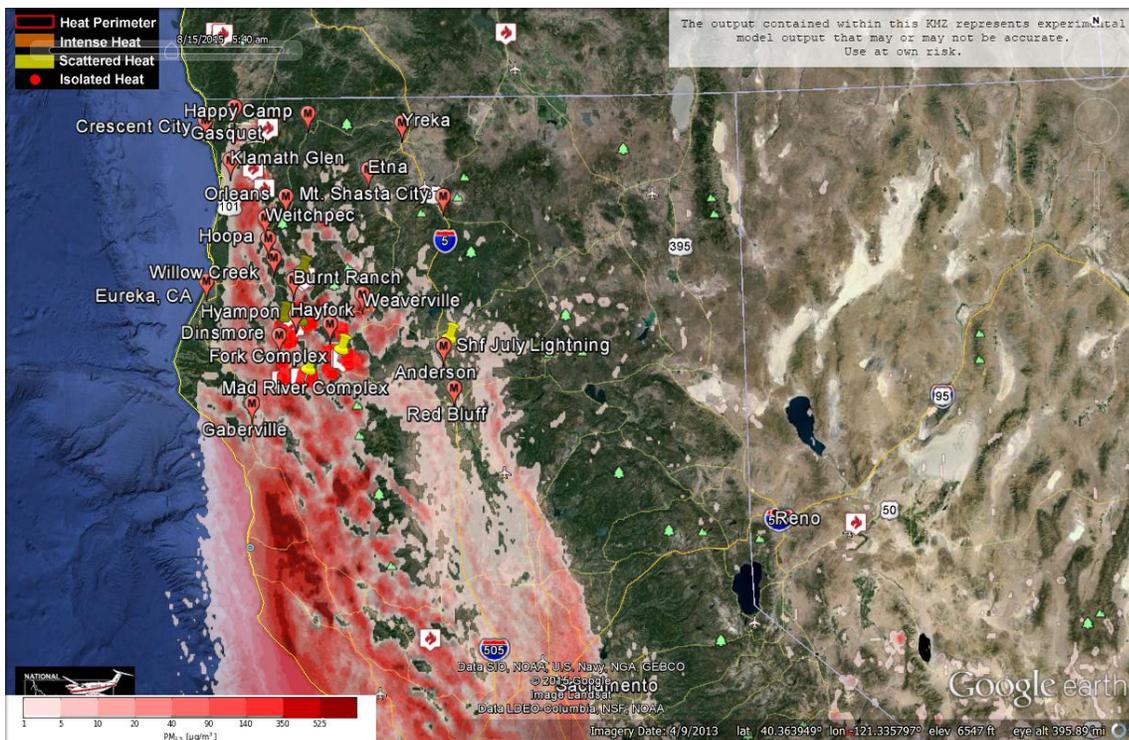


Figure 2: Bluesky run for 6am on August 15, 2015

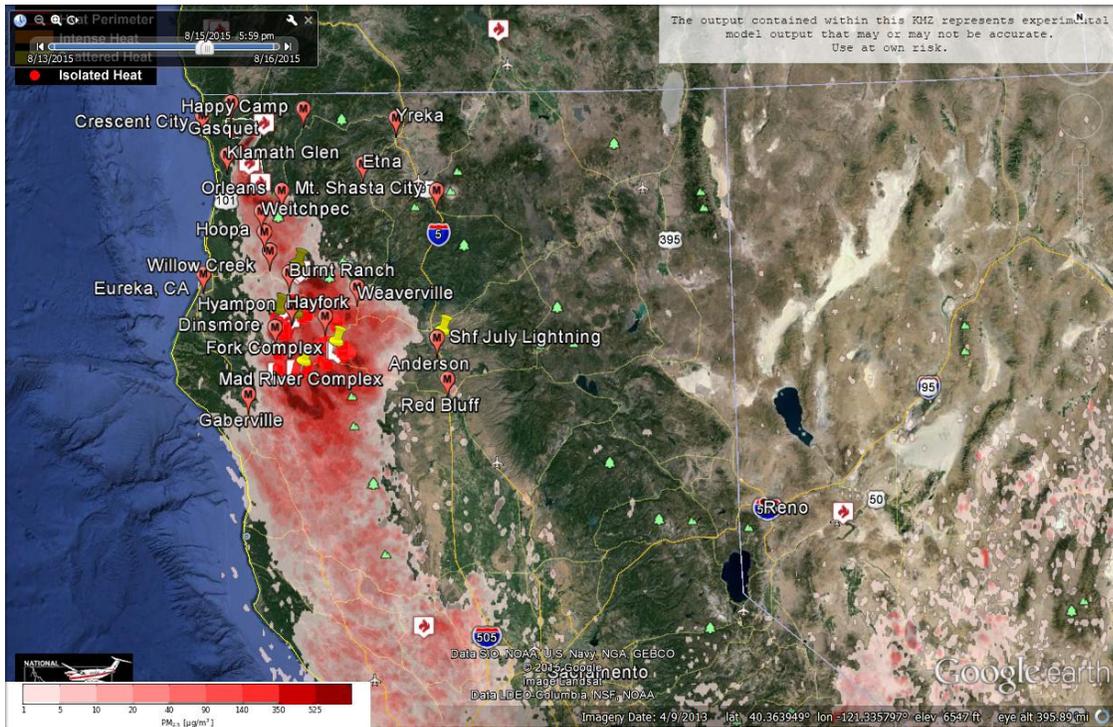


Figure 3: Bluesky run for 6pm on August 15, 2015

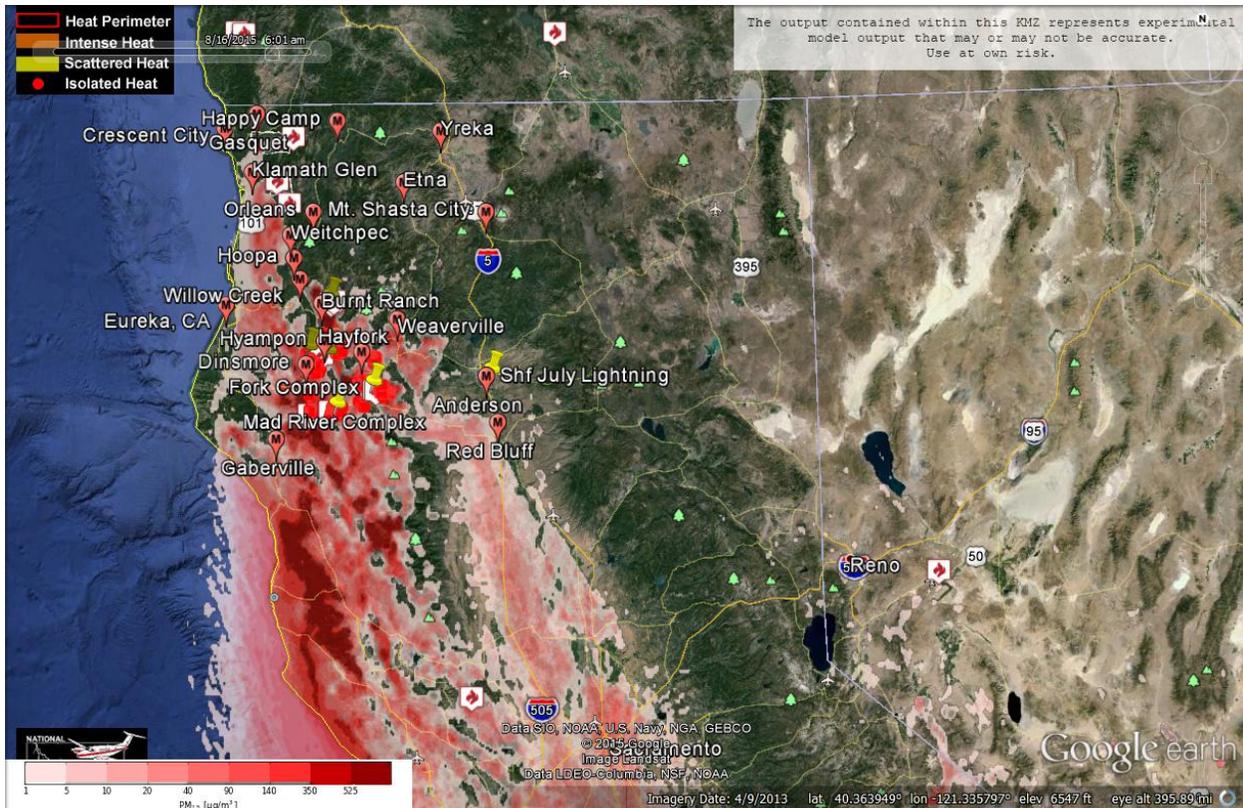


Figure 4: Bluesky run for 6am on August 16, 2015

Forecast conditions represent impacts from smoke. Contributions from ozone and other pollutants are not reflected.

**Smoke Synopsis:**

On Tuesday, based on 24-hour averages, many PM Monitors reported "Good" or "Moderate" air quality in the area. Weaverville reported "USG" condition. "Unhealthy" condition was reported at Happy Camp, Yreka, and Etna. "Very Unhealthy" condition was reported at Hayfork and Hyampom. "Hazardous" condition was reported at Weitchpec.

Today/Tomorrow: Day time mixing will not be as good as the previous days due to lower mixing height and slower transport wind speed because of the establishment of high pressure over the area. Northwesterly/Westerly onshore wind will flow all the way into Shasta County in late afternoon today, but it will be weaker tomorrow and only go into Humboldt/Trinity County line. Strong Northerly wind is forecast to develop tonight at the Sacramento Valley, but this wind is forecast to weaken tomorrow. Air quality is likely to deteriorate in the area, especially in Trinity County where the fires are.

**Air Quality Outlook: Shasta-Trinity & Six Rivers Complexes**

Site	Friday August 14, 2015	Saturday August 15, 2015	Sunday August 16, 2015	Comments
Crescent City	Good	Moderate	USG	
Gasquet	Moderate	USG	Unhealthy	
Happy Camp	USG	USG	Unhealthy	
Etna	USG	Good	Good	8/14: Very heavy in AM
Mt. Shasta	Moderate	Moderate	Good	
Tulelake	Moderate	USG	Moderate	
Yreka	Moderate	Moderate	Moderate	
Eureka	Good	Good	Good	
Hoopla	Moderate	USG	USG	
Mad River/Dinsmore	USG	USG	USG	
Orleans	Moderate	Moderate	Moderate	
Weitchpec	Moderate	Moderate	Moderate	
Willow Creek	Moderate	Moderate	Moderate	
Burnt Ranch	Moderate	Moderate	Unhealthy	
Hayfork	USG	Unhealthy	Unhealthy	8/14 & 8/15 Heaviest near sundown
Hyampom	Very Unhealthy	Unhealthy	Unhealthy	8/14: Heaviest late afternoon
Weaverville	USG	USG	USG	8/14 & 8/15: Very heavy during AM
Anderson/Redding	Moderate	Moderate	Moderate	

**Disclaimer:** Forecast conditions represent air quality levels affected by fine particulates; contribution from ozone and other pollutants is not reflected. Conditions may change quickly, these projections are based on anticipated weather and fire activity. Sensitive groups including individuals with asthma, lung or heart disease, children, older adults, and pregnant women should take precautions to avoid exposure to smoke. If you feel as though you are having health effects from smoke, see your doctor or health professional as needed. In some cases your eyes are your best tools. If it is smoky outside, you are being impacted. Use caution when driving in or around smoky areas.

AQI Index	Actions to Protect Yourself
Good	None
Moderate	Unusually sensitive people should consider reducing prolonged or heavy outdoor exertion.
Unhealthy for Sensitive Groups - USG	People with heart or lung disease, children and older adults should reduce prolonged or heavy outdoor exertion. Everyone else should limit prolonged or heavy exertion.
Unhealthy	The following groups should avoid all physical outdoor activity: People with heart or lung disease, children and older adults. Everyone else should avoid prolonged or heavy exertion.
Very Unhealthy	Everyone should avoid any outdoor exertion; people with respiratory or heart disease, the elderly and children should remain indoors.
Hazardous	The following groups should remain indoors and keep activity levels low: People with heart or lung disease; children and older adults. Everyone else should avoid prolonged or heavy exertion

**Links:**

AirNow - [http://airnow.gov/index.cfm?action=airnow.local\\_state&stateid=5&tab=0](http://airnow.gov/index.cfm?action=airnow.local_state&stateid=5&tab=0)

California Smoke Information Blog - <http://californiasmokeinfo.blogspot.com/>

North Coast Unified Air Quality Management District <http://www.ncuaqmd.org/>

Shasta County Air Pollution Control District - [http://www.co.shasta.ca.us/index/drm\\_index/aq\\_index.aspx](http://www.co.shasta.ca.us/index/drm_index/aq_index.aspx)

Siskiyou County Air Pollution Control District <http://www.co.siskiyou.ca.us/content/agriculture-air-pollution-control-district>

Interagency Real Time Smoke Monitoring - <http://app.airsis.com/usfs/fleet.aspx>

[Wildfire Smoke – A Guide for Public Health Official](#) from California Air Resource Board

[Wildland Fire Personnel Smoke Exposure Guidebook](#) from National Interagency Fire Center

[Smoke: Knowing the Risks video \(14 minutes\)](#) from WFStar