

**Smoke Impact Report – Shasta-Trinity/Six Rivers National Forest August 12, 2015.**

**A) Fire growth**

<b>Complex Names</b>	<b>Fire Growth Yesterday</b>	<b>Total Acre</b>
Fork Complex	4030 Acres	28,725 Acres
Mad River Complex	563 Acres	20,526 Acres
River Complex	2708 Acres	23,621 Acres
Route Complex	1904 Acres	14,705 Acres
South Complex	611 Acres	25,677 Acres
Gasquet Complex	95 Acres	2,693 Acres
Nickowtiz Fires	123 Acres	1,349 Acres
Total	9911 Acres	116,558 Acres

Information came from Infrared Flights

Correction: Route Complex transferred Pelletreau Fire to South Complex.

**B) Weather**

Generally onshore flow is expected for Northern California near the surface for today and tomorrow. Also, southerly wind is expected from Sacramento Valley for today and tomorrow. These two winds will meet at Central Trinity County today and tomorrow. Overnight, smoke will settle into the Trinity River drainages and South Fork Trinity River drainages. Strong upper level southerly transport wind is forecast today and tomorrow. Good day time mixing is expected for today and tomorrow. But, on Friday, high pressure will establish over Northern California. The atmosphere will become more stable and much weaker transport wind speed is expected.

**C) Fire Behavior**

Fire behavior analysts predicted that fire behavior may become intense when smoke is lifted in and forecast gusty wind, 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 9911 acres yesterday. This generates decent amount of smoke. With good day time mixing and strong upper level southerly transport wind, Trinity County may have slightly better air quality today and tomorrow, even at Hayfork and Hyampon, for today and tomorrow. However, smoke dispersion will be much poorer on Friday.

Upper level southerly wind is going to bring smoke to the north today (Figure 1) and tomorrow (Figure 3). Overnight, smoke is likely to settle in the river drainages in the area (Figure 2, 4).

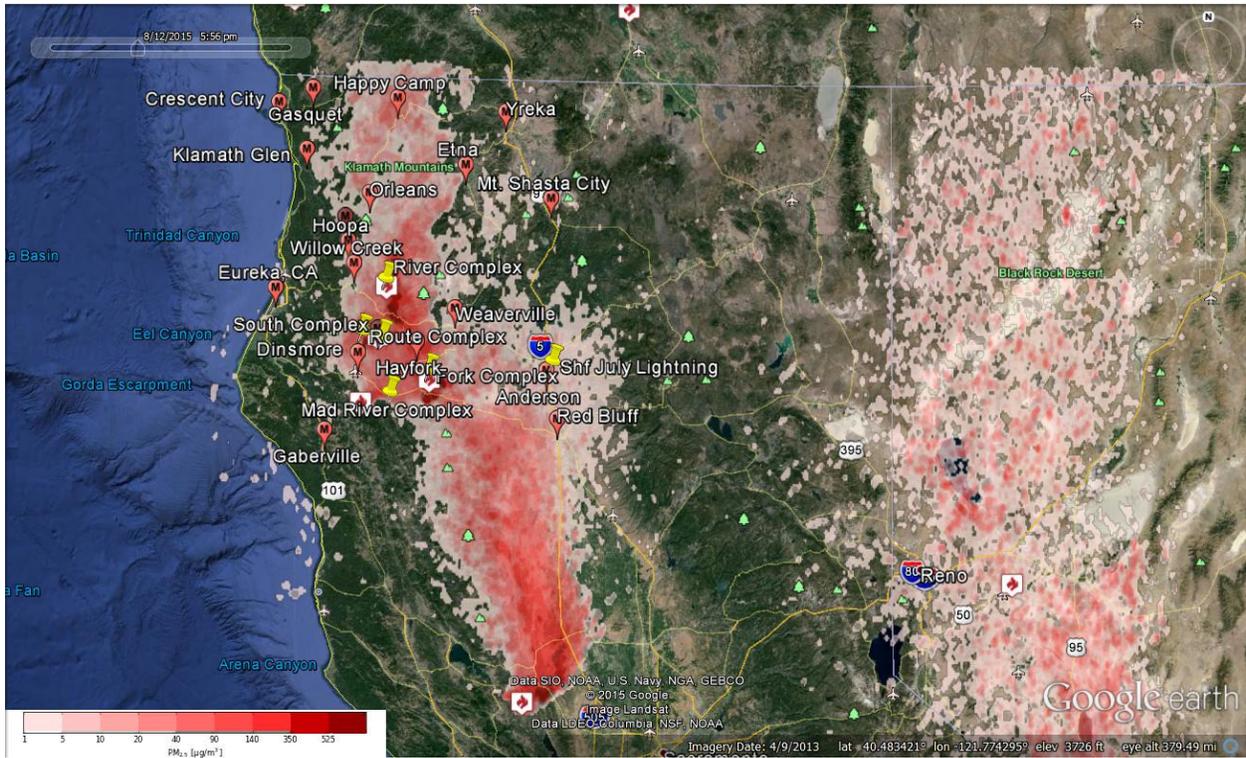


Figure 1: Bluesky run for 6pm on August 12, 2015.

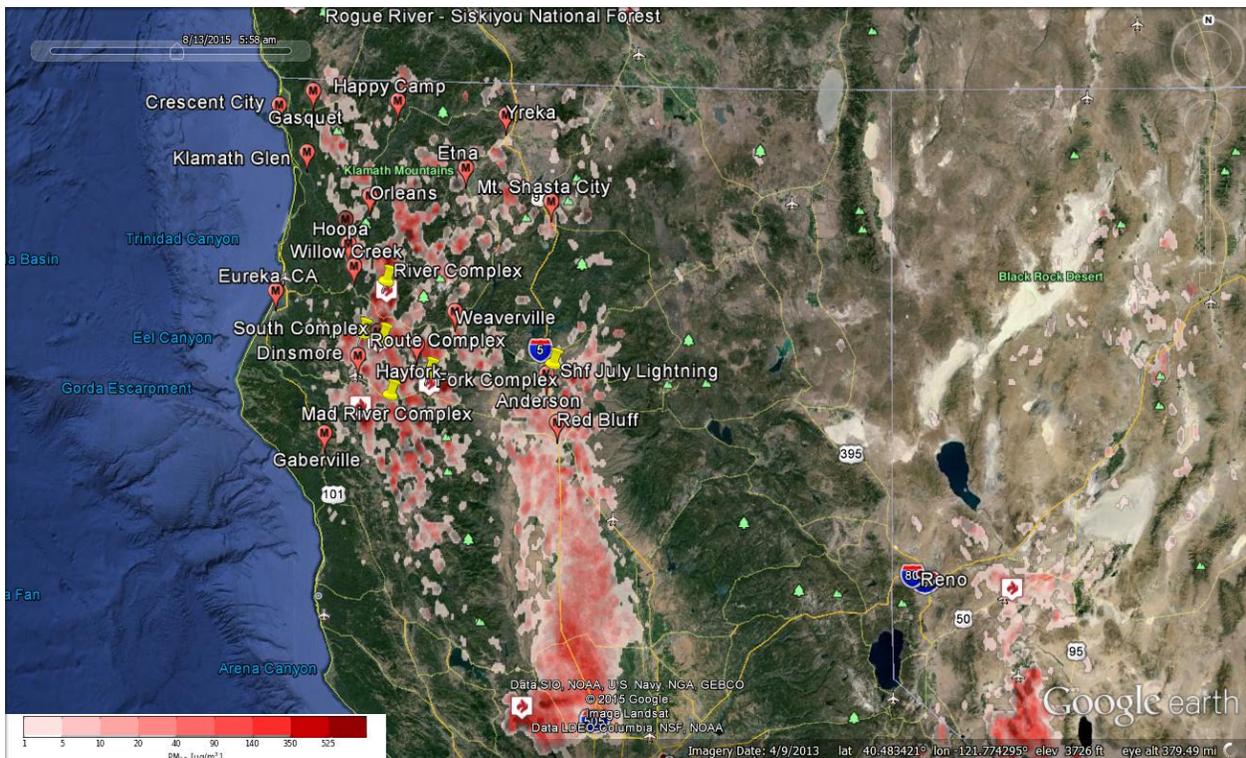


Figure 2: Bluesky run for 6am on August 12, 2015

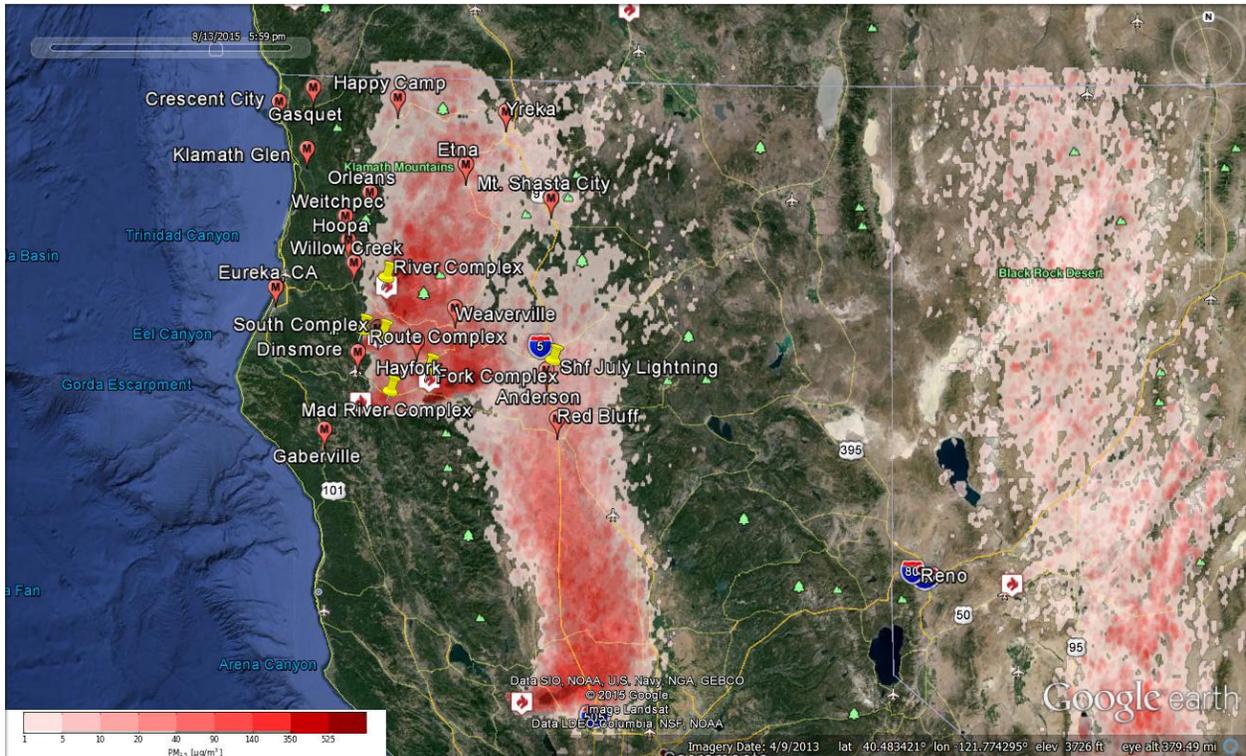


Figure 3: Bluesky run for 6pm on August 12, 2015

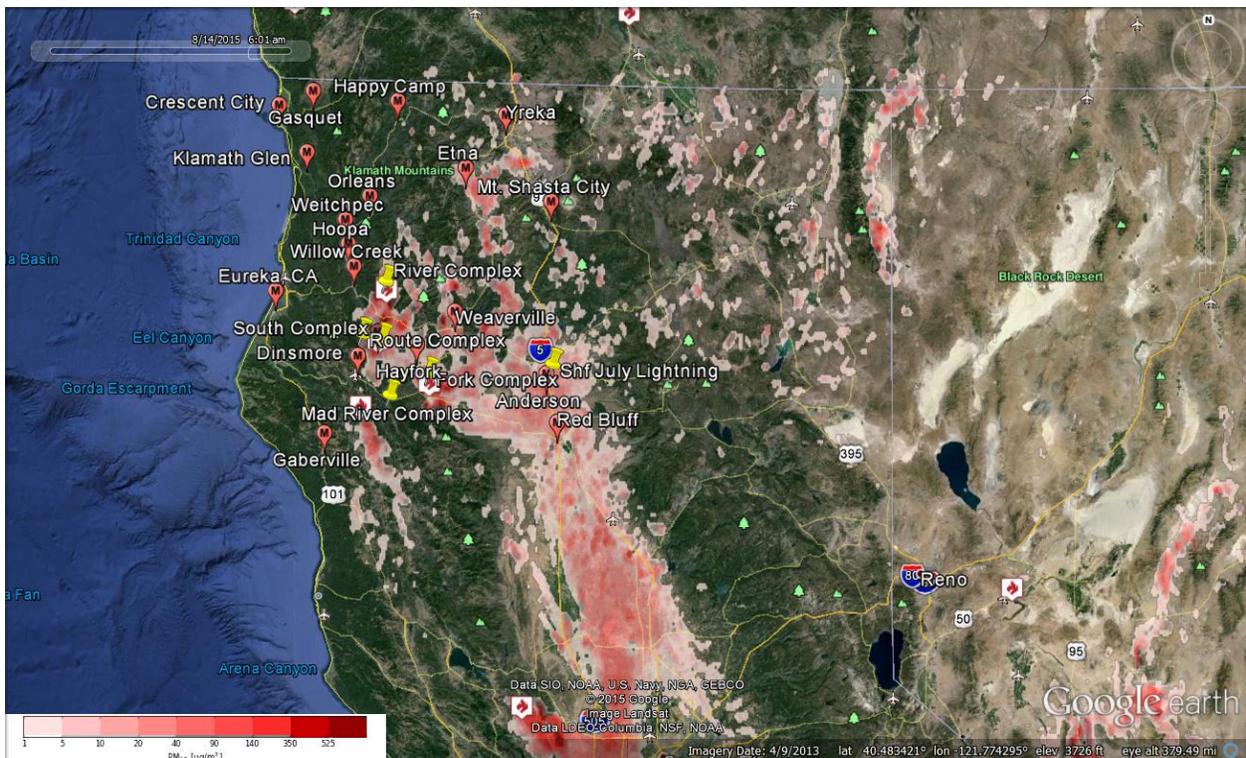


Figure 4: Bluesky run for 6am on August 13, 2015

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

**Smoke Synopsis:**

On Tuesday, based on 24-hour averages, most PM Monitors reported "Good" or "Moderate" air quality in the area. Happy Camp reported "USG" condition. Hayfork, Hyampom, and Weaverville reported "Unhealthy" condition. This is a considerable improvement from a few days ago when "Hazardous" condition was reported at Hayfork.

Today/Tomorrow: Westerly onshore flow will meet Southerly Valley wind from Sacramento Valley in Central/Eastern Trinity County. Good mixing height and strong Southerly transport wind is expected for today and tomorrow. So, smoke from fires in Trinity County is likely to be lifted and transported to the North. The improved air quality in the area is likely to continue today and tomorrow. Over nights, smoke will settle into the South Fork Trinity River drainage and Trinity River drainage. Anderson may receive some smoke from the Rocky and Jerusalem fires in east of Clear Lake, CA, about 50 miles NW of Sacramento, CA.

Friday: Wind will become weak for the area as a high pressure is being established. The atmosphere will become more stable and thus, day time mixing will be substantially weaker.

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

Site	Wednesday August 12, 2015	Thursday August 13, 2015	Friday August 14, 2015	Comments
Crescent City	Moderate	Good	Good	
Gasquet	Moderate	Good	Good	
Happy Camp	USG	USG	Moderate	
Etna	Moderate	USG	Moderate-AM	8/12: Short impacts late AM: 8/13 Heaviest before sundown.
Mt. Shasta	Moderate	USG	Moderate-AM	8/13: Heaviest before sundown.
Tulelake	Good	Good	Good-AM	
Yreka	Good	Moderate	Moderate-AM	
Eureka	Good	Good	Good	
Hoopla	Good	Good	Moderate	
Mad River/Dinsmore	Moderate	USG	Unhealthy	
Orleans	Good	Moderate	Moderate	
Weitchpec	Good	Good	Moderate	
Willow Creek	Moderate	Moderate	Moderate	
Hayfork	Very Unhealthy	Very Unhealthy	Unhealthy-AM	8/12: Heaviest near sundown. 8/13: Heaviest late afternoon
Hyampom	Hazardous	Very Unhealthy	Unhealthy-AM	8/12 & 8/13 Heaviest late afternoon
Weaverville	Very Unhealthy	Very Unhealthy	Very Unhealthy	8/12 Much lighter during daylight hours. 8/13 Much lighter during late afternoon
Anderson/Redding	Moderate	USG	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