

Smoke Impact Report – Shasta-Trinity/Six Rivers National Forest August 16, 2015.

A) Fire growth

Complex Names	Fire Growth Yesterday	Total Acre
Fork Complex	689 Acres	32,694 Acres
Mad River Complex	389 Acres	22,807 Acres
River Complex	1343 Acres	37,134 Acres
Route Complex	463 Acres	27,801 Acres
South Complex	1058 Acres	20,064 Acres
Gasquet Complex	305 Acres	3,920 Acres
Nickowtiz Fires	NA Acres	2,184 Acres
Total	4256 Acres	144,420 Acres

Information came from Infrared Flights

B) Weather

Onshore Northwesterly wind is expected for today into Trinity/Shasta County line. Overnight, weak northeasterly wind will occur in Humboldt and Del Norte County. Tomorrow, Northeasterly wind will persist in Del Norte County, but Northwesterly onshore wind is expected to develop into Central Trinity County. Northerly wind is expected in the Sacramento Valley during the night. Weak transport wind speed is forecast for the next few days.

C) Fire Behavior

With generally hotter and drier weather, fire behavior analysts are predicting a longer burn window today. This has the potential for more acreage burn, generating more smoke.

D) Smoke

All complexes/fires in the area grew about 4,256 acres yesterday. This is the smallest growth in the last week, but this trend is likely to reverse due to hot and dry weather today and the next few days. Smoke dispersion will be limited in the next few days due to weak transport wind speed. Air quality is likely to deteriorate in the area especially in Trinity County.

Weak Northwesterly transport wind pushes smoke to the Southeast today and tomorrow (Figures 1,3). Overnight, smoke is likely to settle down in river drainages, but is pushed slightly to the west (Figures 2,4). The displayed model runs did not cover fires in Southern Oregon. With a southerly flow, Crescent City, Gasquet, Happy Camp, Yreka, Etna and Mt. Shasta may be impacted by smoke from these fires that are not included in this particular model run.

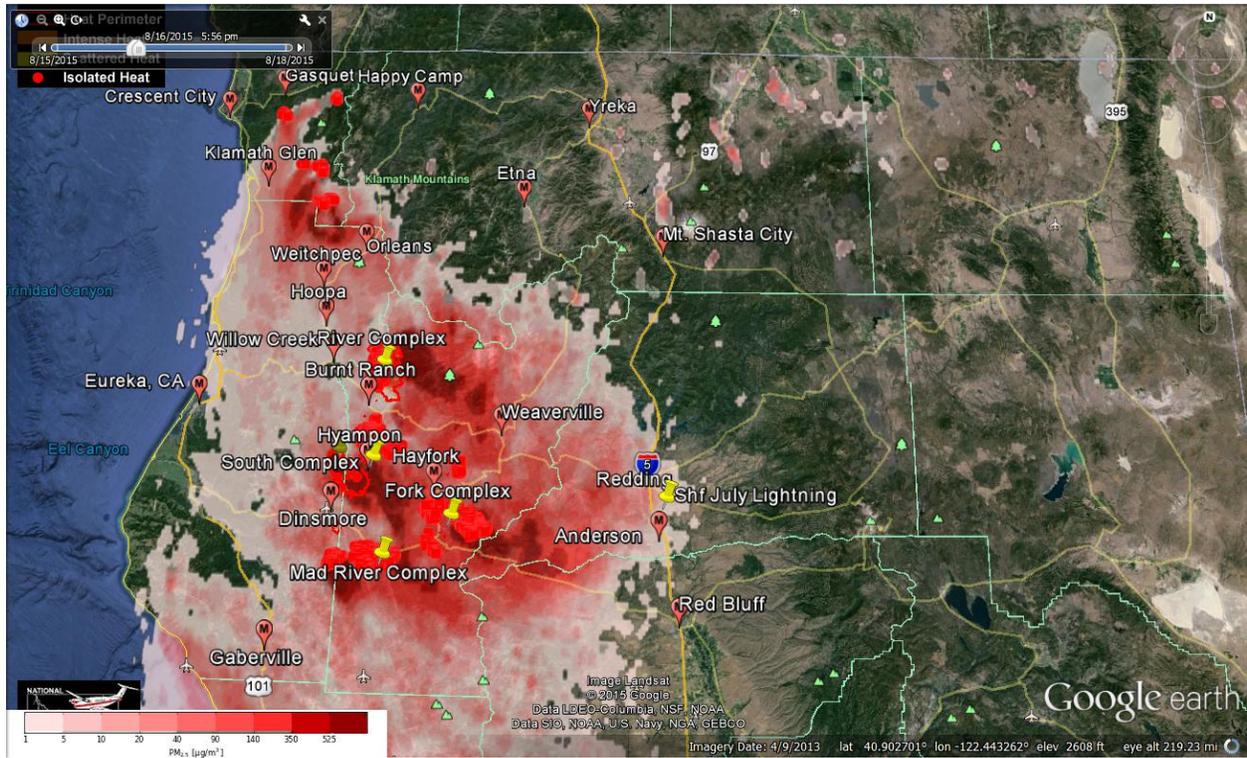


Figure 1: Bluesky run for 6pm on August 16, 2015.

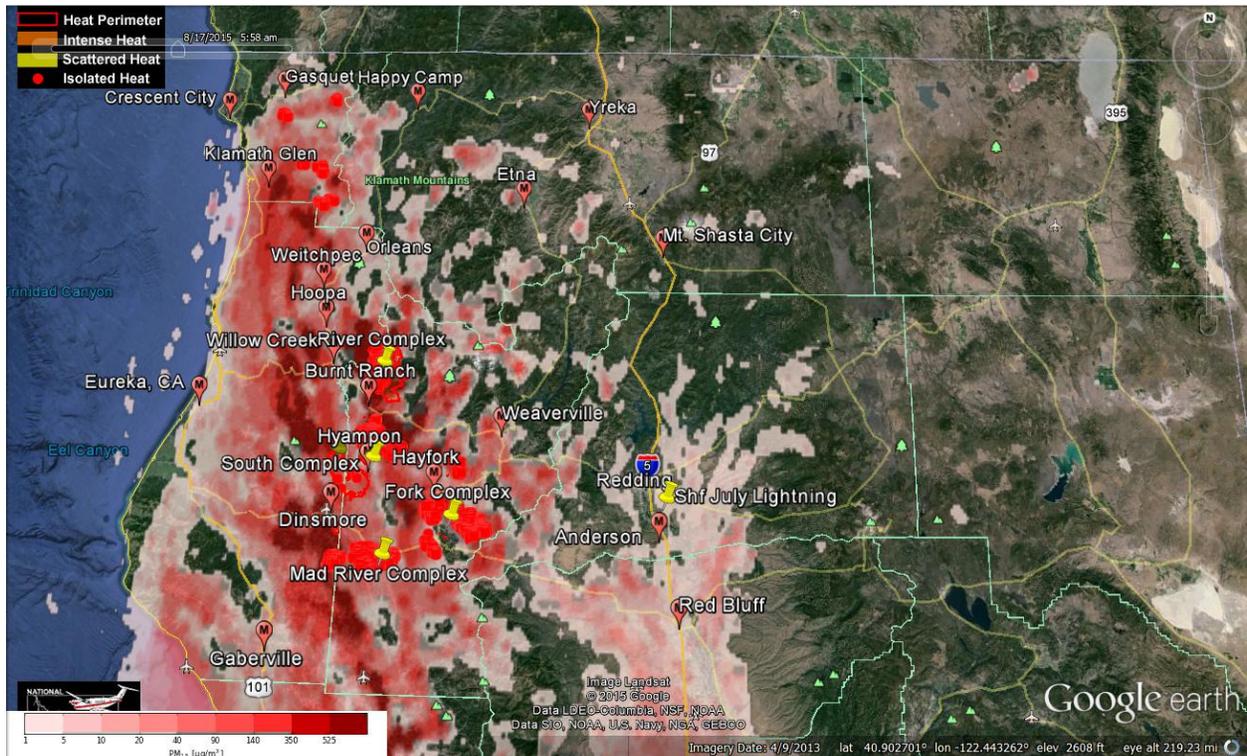


Figure 2: Bluesky run for 6am on August 17, 2015

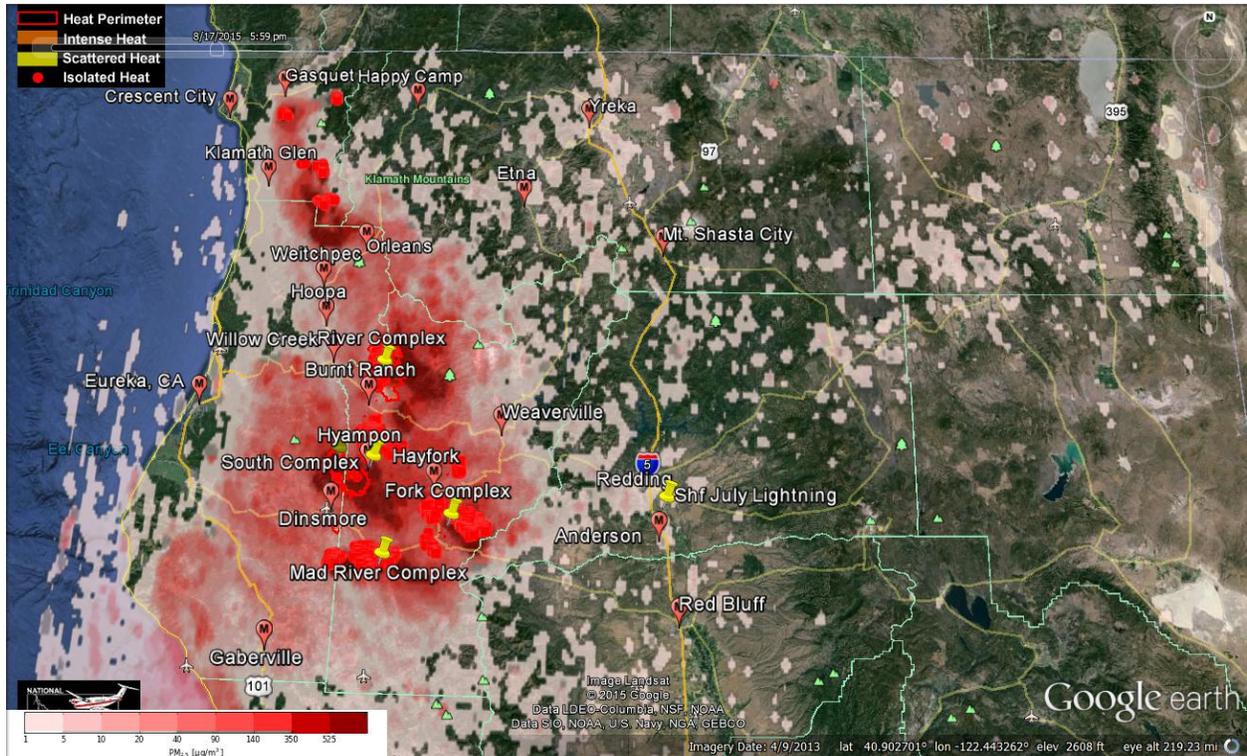


Figure 3: Bluesky run for 6pm on August 17, 2015

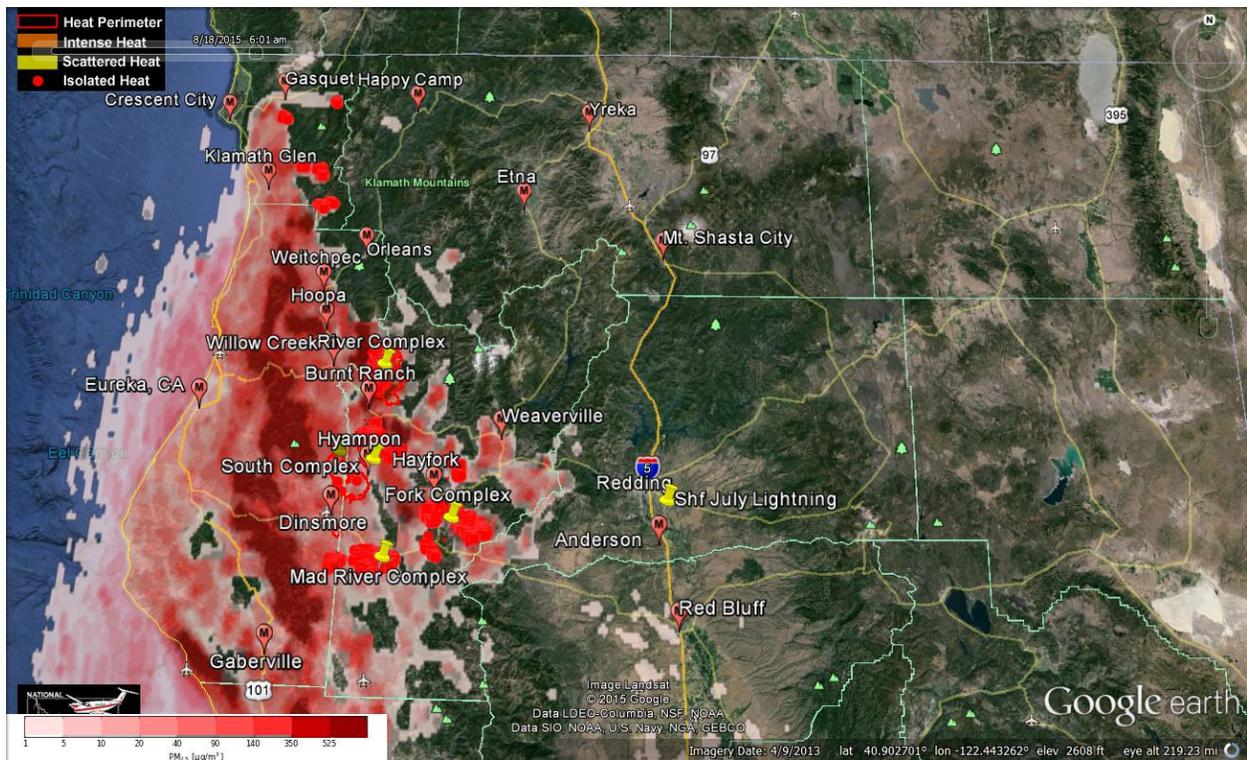


Figure 4: Bluesky run for 6am on August 18, 2015

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

Smoke Synopsis:

On Saturday, based on 24-hour averages, air quality in the area deteriorated. Hyampom, and Hayfork reported "Hazardous" conditions. Weaverville reported "Very Unhealthy" conditions. Burnt Ranch and Mad River/Dinsmore reported "Unhealthy" conditions. Weitchpec reported "USG" conditions. Air quality is not likely to improve for the next few days as a high pressure is over the area with weak transport wind speed.

Today: Smoke dispersion will be limited due to weak Northwest transport wind over the area. North/Northeasterly wind is expected in Del Norte County, Siskiyou County and Shasta County. Northwestern/Westerly onshore wind is expected in Humboldt and Trinity County. At night, North weak is expected in Sacramento Valley, but weak in Trinity County. So, smoke will settle in Trinity River drainage, South Fork Trinity River drainage, Klamath River drainage and the Sacramento Valley tonight. PM Monitors in Trinity County such as Hayfork and Hyampom may measure over 750 µg/m3 for a few hours.

Tomorrow: Smoke dispersion will be limited due to slow transport wind over the area. Weak Northwestern/Westerly onshore wind is expected to go into Central Trinity County only. With weak wind overnight, smoke will settle in Trinity River drainage, South Fork Trinity River drainage, Klamath River drainage and the Sacramento Valley again tomorrow night. PM Monitors in Trinity County such as Hayfork and Hyampom may measure over 750 µg/m3 for a few hours.

Air Quality Outlook: Shasta-Trinity & Six Rivers Complexes

Site	Sunday August 16, 2015	Monday August 17, 2015	Tuesday August 18, 2015	Comments
Crescent City	Moderate	USG	USG	
Gasquet	Moderate	USG	USG	
Happy Camp	Moderate	Moderate	Moderate	
Etna	Good	Moderate	Good	
Mt. Shasta	Good	Good	Good	
Tulelake	Good	Good	Good	8/17: Heaviest around noon
Yreka	Moderate	Moderate	Good	
Eureka	Good	Moderate	Moderate	8/17: Heaviest after sunrise
Hoopa	Moderate	USG	USG	
Mad River/Dinsmore	Unhealthy	Very Unhealthy	Very Unhealthy	
Orleans	USG	USG	Unhealthy	
Weitchpec	USG	USG	Unhealthy	
Willow Creek	Moderate	USG	USG	
Burnt Ranch	Very Unhealthy	Very Unhealthy	Very Unhealthy	
Hayfork	Unhealthy	Very Unhealthy	Hazardous	
Hyampom	Hazardous	Hazardous	Hazardous	
Weaverville	Unhealthy	Unhealthy	Moderate	
Anderson/Redding	Moderate	Moderate	Good	

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

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

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