

Managing wildfire smoke in Washington State

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Comparing recent wildfire seasons

Summer	Acres burned in WA	# of exceedences of PM _{2.5} NAAQS (FEM/ FRMs)
2012	259,526	123 (5)
2013	152,603	3 (0)
2014	386,972	32 (0)
2015	1,137,664	198 (15)
2016	293,717	1 (0)
2017	409,989	488 (137)

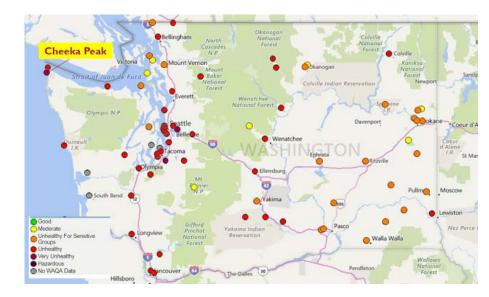


Air monitoring data

State AQ monitoring map: https://fortress.wa.gov/ecy/enviwa/default.ltr.aspx WA only, multiple pollutants, can download data

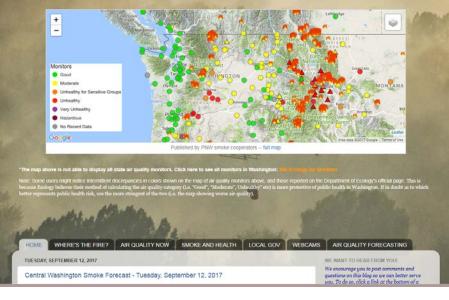
WA Smoke blog: <u>http://wasmoke.blogspot.com</u> Nationwide data, PM_{2.5} only, not easy to download data

When feasible, deploy temporary monitors to hard- hit areas



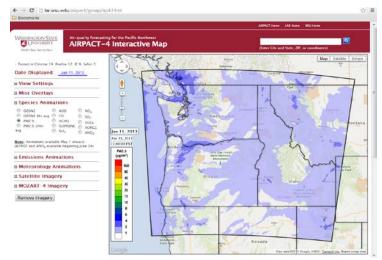
Washington Smoke Information

his site is an effort by county, state, and Federal agencies and Indian Tribes to coordinate and aggregate information for Washington communities flected by smoke from wildland fires. The information is posted here by the agencies themselves while volunteers built and maintain the page.



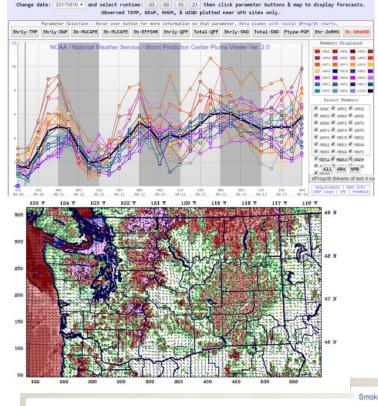
Smoke forecasting

Use multiple modeling products



Posted to smoke blog http://wasmoke.blogspot.com

Statewide outlook in addition to ARA reports



NCEP SREF Plume for 3h-10mWND at SEA from 20170810/09 UTC run

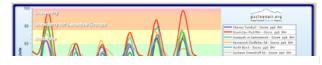
Will smoke start to clear by Friday? Yes ± maybe

Ah the challenges of communicating scientific uncertainty

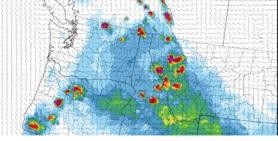
Wednesday's air quality conditions remained pretty close to a repeat of Tuesday. Thursday will plagian Wednesday. There is a reasonable chance that gradual improvements in western WA will commence afternoon. Eastern WA will have to wait a little longer. More on all that further down

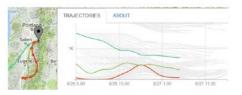
For today, expect mostly Good to Moderate air in southwest and northwest WA, while areas from Lynn Olympia can expect Unhealthy for Sensitive Groups or Unhealthy air at times. No change to the pessi most of eastern WA: Unhealthy for Sensitive Groups or worse 🕲

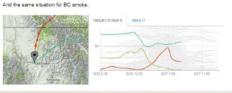
Ground level ozone (aka smog) concerns (which we blogged about recently) persist, exacerbated by w Locations in the Cascade foothills communities of east King and Pierce Counties and the Tri Cities rec of ozone this past week. An air quality advisory for smog has been issued.



R-SMOKE 08/11/2017 (18:00) 3h fcst - Experimental 0) 3h fcst - Experimental Valid 08/11/2017 21:00 UTC Near-Surface Smoke (μg/m³), 10m Wind (kt)







Smoke on the west side should start clearing late tonight. No such luck in eastern W

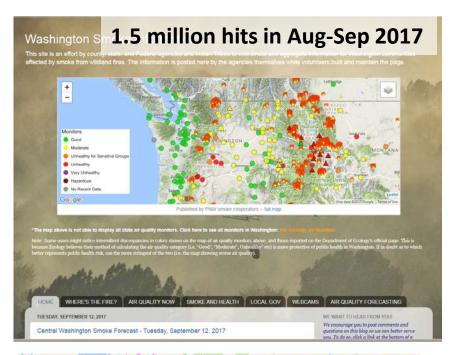
Satellite imagery shows impressive plumes from fires in the Cascades headed northeast



But it requires a look at a zoomed out loop to see the culprit behind all the smoke in western WA: smoke fr southwestern Oregon that moved over the Pacific and is now swinging over us as it departs to the east. Ma along the I-5 corridor are reporting Moderate to Unhealthy for Sensitive Groups (USG) air and that will rem

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Coordinated Communications



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we've never seen numbers like this across the board. Washington's air quality is the worst in the nation. We're tracking the smoke and our toxicologist shares health tips. bit.ly/WAsmoke18 #bcwildfire



Smoke chokes Washington - air quality worst in the nation Air monitors around Washington state are lighting up the maps like a Christmas tree - and red lights aren't good. Almost every community i... ECOLOGYWA BLOGSPOT.COM

KOMONEWS.com



The state is blanketed with #BCwildfire smoke. We're socked in and It won't move out soon enough according to our latest forecast http://bitly.com/WAsmoke17

📫 163 🗯 191 🏕 3.7K







Our toxicologist is urging people to stay indoors if you can. Now is not the time to exercise outdoors.Save that 5K run for another day. Consider putting off outdoor activities, like mowing your yard, until air quality has improved. Get air quality conditions and forecasts...