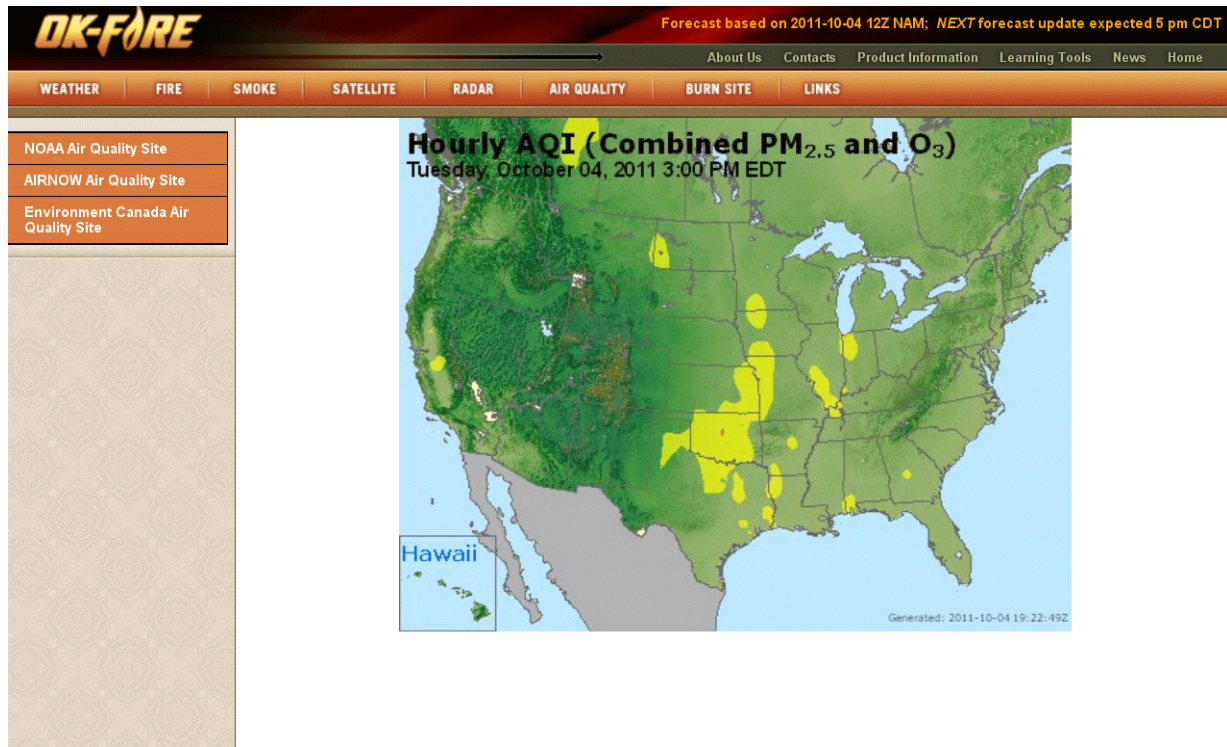


AIR QUALITY Section of OK-FIRE



The OK-FIRE site features a section on AIR QUALITY, which provides current and forecast information for surface ozone (O₃) and particulate (PM) concentrations. Knowing the current and projected local concentrations for ozone and PM can be useful in decision-making. If conditions are currently severe or expected to become so, it would be unwise to conduct a prescribed burn under such a scenario, as it would make the air quality even worse.

Below are listed the US EPA standards for ozone and particulate matter (both PM_{2.5} and PM₁₀, which refer respectively to PM 2.5 microns or less in diameter and PM 10 microns or less in diameter). Levels above these values are detrimental to public health.

O ₃	1-hr average	0.12 ppm (124 ppb)
	8-hr average	0.075 ppm (75 ppb)
PM _{2.5}	24-hr average	35 micrograms/m ³
PM ₁₀	24-hr average	150 micrograms/m ³

There are three governmental web sites listed in the AIR QUALITY section of the OK-FIRE web site. The first one, the “NOAA Air Quality Site”, features current and forecast values for 1-h and 8-h ozone concentrations. One can animate the maps and get a site-specific hourly O₃ and surface smoke concentration forecast by clicking on “Point Guidance” at the bottom of the page.

The second site is the “EPA Air Quality Site” called “AIRNOW”. It features measured values of ozone (O₃) and particulate matter (PM_{2.5}), so is only able to present maps/tables of current and past values. Click on “Current Ozone” to get the ozone maps; click on “Current PM_{2.5}” to get the PM_{2.5} maps. Click on “Forecast” to get a national forecast based on the “Air Quality Index” (AQI), which takes into account a variety of pollutants.

The third site is the “Environment Canada Air Quality Site”, which includes 48-hr forecasts for ozone, PM_{2.5}, and PM₁₀. Choose the “North America” set of maps to include our part of the United States. Below is an example of a forecast map for ozone at the 10-m level.

