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This started out as the best air-quality summer in the Valley. Then wildfires ignited

By Tad Weber

The central San Joaquin Valley has been blanketed in wildfire smoke for weeks. That smoke has come from not just the Ferguson fire near Yosemite National Park, but blazes as far north as Mendocino and Shasta counties.

Given the Valley's topography and weather — which trap air pollution in the hot months — as well as the role of drought and climate change, The Bee asked Samir Sheikh, executive director of the San Joaquin Valley Air Pollution Control District, whether smoky skies are becoming the new normal for the region during summer, and what that means for public health. Here are his answers to The Bee's emailed questions:

Q. Climate experts say that California's fire season is getting longer and that bigger wildfires are becoming the new normal. Is a smoky summer of bad air becoming our new normal?

A. Air pollution generated from wildfires is enormous and can well exceed total industrial and mobile source emissions in the San Joaquin Valley, overwhelming decades of local efforts to reduce air pollution and resulting in periods of excessively high particulate matter and ozone concentrations.

Fires have always been a very important part of California's ecology and are necessary for the health of our wildlands. Due to the buildup of combustible materials through decades of forest mismanagement, and the mortality of millions of trees from drought and bark beetle infestation, the state is experiencing record-setting large wildfires that are directly impacting the Valley's air quality and the health of Valley residents.

The district governing board has long advocated for resources and policy changes at the state and federal levels to enhance the management of our forests. According to a report released earlier this year, "Fire on the Mountain: Rethinking Forest Management in the Sierra Nevada," the Little Hoover Commission found that "instead of focusing almost solely on fire suppression, the state must institute wide-scale controlled burns and other strategic measures as a tool to reinvigorate forests, inhibit firestorms and help protect air and water quality."

Q. Short of leaving the Valley when it is so smoky, what can residents do?

A. We understand the concern of Valley residents and the impact this smoke is having on their daily activities. During severe wildfire impacts, the district strives to provide timely and health-protective information to minimize wildfire smoke exposure. The district wildfire page (www.valleyair.org/wildfires) includes specific information about current wildfires, hourly air quality data, health protective tips and a link to temporary air monitors in the mountain and foothill communities. In response to this summer's wildfires, the district has been engaging the public, media, stakeholder groups, schools and county public health officers via comprehensive multimedia outreach to educate them on the various free tools the district has available for individuals to stay updated on current air quality conditions and to convey steps individuals should take to protect their health. We issue up-to-date health cautionary advisories and encourage residents to stay informed of current air quality conditions in their area by following our Real-Time Air Advisory Network at www.myraan.com or by downloading the Valley Air app.

When air quality is at unhealthy levels due to wildfires, we recommend the following actions (more detailed information available at www.valleyair.org/wildfires):

▪ Limit your outdoor activities, especially children and people with chronic heart and lung diseases.

▪ Remain inside air-conditioned buildings. Note: If you do not have an air conditioner, staying inside with the windows closed may be dangerous in extremely hot weather. In these cases, seek alternative shelter.

▪ If you have asthma or other lung diseases, make sure you follow your doctor's instructions about taking your medicines and following your asthma management plan. Call your doctor if your symptoms worsen.

Q. Put this last month in context: How bad has the air been in Fresno?

A. Unfortunately, as in past years during wildfires, Fresno and most of the San Joaquin Valley have experienced extended periods of poor quality from wildfire smoke. While PM2.5 air quality levels are typically the lowest during the summer season, the wildfires have caused elevated PM2.5 concentrations. This past month, Fresno has experienced daily average PM2.5 values up to 60 micrograms/cubic meter, while summer PM2.5 concentrations in the absence of wildfires are typically much cleaner, ranging from 5 to 10 micrograms/cubic meter.

Q. Before July, how was the summer shaping up for air quality?

A. Through decades of investments by Valley businesses and residents to reduce air pollution, the Valley has experienced a continued trend of improved air quality. In fact, until wildfires ignited in July, the Valley was on track to experience the cleanest summer on record. Initial wildfires impacting the Valley include the Ferguson, Carr, and Mendocino fires, with the Valley and state now reeling from the impacts of at least 18 large wildfires.

Q. How does wildfire smoke hamper your efforts to reduce air pollution?

A. Wildfires generate massive emissions that not only include particulate matter (PM2.5), but also include ozone precursors and other pollutants. These emissions from wildfires overwhelm local air pollution reduction efforts and when combined with the Valley's common summertime high temperatures and stagnant conditions, cause extended periods of poor air quality. The significant air pollution from wildfires impedes the district's ongoing effort to reduce air pollution and improve the health and quality of life for all Valley residents.

Q. What is the air district's position on controlled burns to reduce fuels in nearby forests?

A. While there are many factors that need to be evaluated and addressed in the pursuit of minimizing fuel buildup, the district has long been supportive of fuel reduction efforts, including prescribed burns, to counter decades of forest mismanagement. The district has long advocated that reducing fuels in a responsible way will improve the health of the forests and improve future air quality by lessening the severity of wildfires. Despite these efforts, the forest fuel buildup has continued to increase at an alarming rate over the years due to multiple causes, including the recent catastrophic tree mortality from the drought and pest infestation. This long-term buildup of forest fuel poses a significant risk of large-scale wildfires with potential devastating impacts on air quality and public health. This has increased the need and urgency for greater forest fuel reductions, and concerted, sustained efforts and resources at the state and federal levels will be needed to remedy the issue.