Summer heat breaks 1936 "Dust Bowl" record

Jan Hovey / The Valley Springs News / September 24, 2021

As we transition into the fall season, Calaveras, as well as many California and Western U.S. residents can agree – it has been one heck of a "long, hot" summer. But just how hot was the summer?

According to Newsweek, "Scientists have determined that the heat wave in the West during the summer of 2021 has broken the record set during the Dust Bowl of 1936."

Nationwide, the stretch from June to August tied with the 1936 Dust Bowl summer as the hottest on record, with temperatures across the country averaging 2.6 degrees above normal, according to the National Oceanic and Atmospheric Administration. A record 18.4 percent of the contiguous United States experienced record-warm temperatures.

The month of August finished as the sixth-warmest August on record, following RECORD-HOT July. Across the Northern Hemisphere, this summer tied as the second hottest in its 142-year record, according to scientists at NOAA's National Centers for Environmental Information.

"The grim conditions of the Dust Bowl years were more of an outlier," said Karen McKinnon, an assistant professor at the UCLA Institute of the Environment and Sustainability, while the latest extremes belong to a larger warming trend. "In fact," she said, "the summer of 2021 was even hotter than mere extrapolation would suggest, leading some to question whether that warming is accelerating."

California and several other Western states experienced their hottest summers on record this year. Warming trends are fundamentally altering life on the West Coast, causing a rise in energy usage for air conditioning and air purifiers for wildfire smoke. But it's not just human beings who are suffering – so is the wildlife, especially inhabitants in the ocean and rivers. An estimated 1 billion sea creatures died because of heat off the coast, and the Sacramento River is facing a "near complete loss" of young Chinook salmon because of abnormally warm waters.

Locally, in Angels Camp, 99 - degree and above days forecasted this year in June totaled 10, in July - 18 days and in August - 14 days. That's 42 days in three months, coming in at 47 percent summer days of extreme high temperatures. To top it off, some days registered as high as 111 degrees.

Rising heat and drought conditions have fueled huge fires this summer. Firefighters say heat has made the terrain so dry that it is primed for ignition, spreading faster and hotter fires than they've ever seen.

The Dixie and Caldor fires became the first to burn from one side of the Sierra to the other, and officials fear conditions will worsen in coming months as the winds of fall arrive.

More than 2 million acres have already burned this year, and more than a dozen active wildfires are blazing across California. Added heat, dryness and the potential for dry lightning could make conflagrations worse or even ignite new ones.

"The warming of temperatures overall can lead to drying, and that drying later in the season can lead to warming, and all of those things can lead to enhanced wildfire,' McKinnon said. "Basically, it is all linked."

Alan Barreca, an environmental economist at UCLA, said extreme heat is among the deadliest of natural disasters, and soaring temperatures often disproportionately affect the most vulnerable, including pregnant women and infants, elderly people, the homeless and residents of low-income neighborhoods.

Extreme heat also could be deadly for people without air conditioning during a heat wave, especially when residents are prompted to stay inside with doors and windows shut to avoid the hazardous effects of wildfire smoke.

Conditions have already become so dire that the California Independent System Operator, which runs most of the state's power grid, asked the federal government to declare an "electric reliability emergency" that would allow six natural gas-fired power plants to generate power at maximum levels, even if they violate air pollution limits. It is a scrambling effort by state officials to reduce the risk of rolling blackouts in the face of increased energy demands by adding new electricity supplies, including fossil-fuel resources that contribute to worsening heat waves — a short-term sacrifice that has proved controversial among clean energy groups.

One thing that can be said is that we survived through it all, and hopefully Calaveras, California and communities in the nation will keep resiliency at the forefront.

For more information, visit the National Oceanic and Atmospheric website at www.noaa.gov.