

Fighting the Thompson fire near Lake Oroville in California on July 2. Credit...Noah Berger/Associated Press

California Water and Infrastructure Report For July 11 2024

(With expanded coverage of all the Western States) by Patrick Ruckert

Published weekly since July, 2014 An archive of all these weekly reports can be found at both links below:

http://www.californiadroughtupdate.org

https://www.facebook.com/CaliforniaDroughtUpdate

A Note to Readers

The heat wave that has stalled over California, and has set high temperature records in the West for near two weeks now, may be coming to an end soon, so say the forecasts. Of course, blaming it on global warming is, as usual, the standard explanation that attempts to continue the argument that we humans are to blame for all unusual weather and climate developments.

Once again, I must disagree with that narrative. Of course the climate changes. It has done that regularly for three billion years. It does make me wonder if high school science classes even mention the phenomenon of Ice Ages any more. Alternating warming and cooling cycles has been the history of the Earth's climate.

I call your attention, once again, to the history of California's climate. Which for at least the past 2,000 years has been characterized by alternating megadroughts and megafloods. Droughts that lasted decades and floods that turned the entire Central Valley into a four-hundred mile long lake.

See my book review of "*The West Without Water: What Past Floods, Droughts, and Other Climatic Clues Tell Us About Tomorrow,*" by B. Lynn Ingram and Frances Malamud-Roam, two Climatologists at the University of California- Berkeley.

Here is my review: "Are We Controlled by the Whims of Nature, or Will We Create Our Future?" https://larouchepub.com/eiw/public/2014/eirv41n19-20140509/48-52_4119.pdf

I shall limit this week's report to the heat wave and the wild fires that so far this year surpass the number and acreage burned five year average. And the summer has just begun.

Of course, other developments include the catastrophic damage from the hurricane in Texas. Which, again, there is a loud attribution to climate change. Often one will read that the dollar damage of such storms is multiple times what the damage was 20 or 50 years ago. Usually such reports ignore factors such as more people live in vulnerable areas, much more has been built there to be wrecked or destroyed, and inflation costs of clean up are, like most things, subject to inflation over the years.

The Wild Fires, and their growing intensity and destructive power does have a simple, not a solution, but a means of alleviating their destructive power. That is, thin the forests and allow harvesting of the timber once again. Edward Ring has a contribution to make on this topic, and you will find it on page 6.

The Weather, Heat and Fires

The third item below, from the *New York Times*, underlines what I wrote above about blaming everything bad on "human caused climate change."

Wildfire risk rises as Western states dry out amid protracted heat wave

By CHRISTOPHER WEBER Updated 1:14 PM PDT, July 11, 2024

https://apnews.com/article/us-heat-wave-dangerous-temperatures-27b2d39ff68b87f131c67fc7594163e3

LOS ANGELES (AP) — Authorities in Western states warned of the rising risk of wildfires amid a <u>protracted heat wave</u> that has dried out the landscape while setting temperature records and putting lives at risk. Forecasters, meanwhile, said Thursday that some relief was due by the weekend.

California's top fire official said Wednesday that so far this year, the state has responded to more than 3,500 wildfires that have scorched nearly 325 square miles (842 square kilometers) — five times the average burned through July 10 in each of the past five years.

"We are not just in a fire season, but we are in a fire year," Joe Tyler, director of the California Department of Forestry and Fire Protection, said at a news conference. "Our winds and the recent heat wave have exacerbated the issue, consuming thousands of acres. So we need to be extra cautious."

California crews working in scorching temperatures and single-digit humidity were battling numerous

wildfires Thursday, including a stubborn 53-square-mile (137-square-kilometer) blaze that prompted evacuation orders for about 200 homes in the mountains of Santa Barbara County northwest of Los Angeles. It was 16% contained.

California's fires began in earnest in early June, following back-to-back wet winters that <u>pulled the</u> <u>state out of drought</u> but spawned abundant grasses that have since dried out. A June blitz of lightning ignited some of the fires, a risk that may return with thunderstorms in the Sierra Nevada this weekend, forecasters said.

More than <u>63 million</u> people around the U.S. remained under heat alerts Thursday, a significant reduction from earlier this week.

The National Weather Service said the combination of power outages from <u>Hurricane Beryl</u> and heat indices up to 106 degrees Fahrenheit (41 Celsius) prompted heat advisories across parts of southeast Texas. In Western states, where dozens of locations tied or broke heat records since the weekend, torrid conditions were expected through Friday before some cooling.

Las Vegas on Thursday simmered into a record sixth consecutive day of temperatures at 115 degrees Fahrenheit (46.1 Celsius) or greater. The temperature hit 115 shortly before 1 p.m. at Harry Reid International Airport, and it could get hotter still before the sun goes down. It extends a newly broken record set Wednesday when Las Vegas reached 118 F (47.8 C), toppling the old record of four consecutive days set in July 2005, according to the National Weather Service.

Forecasters called it an unprecedented heat wave, even for desert standards.

From the Los Angeles Times of July 11, 2024

So far this year, 3,543 wildfires have broken out in California. While that's a big number, it's in line with recent experience: In the previous five years, an average of 3,659 wildfires had erupted by July 10.

What's unusual and worrisome this year is the size of the blazes. As of Wednesday, more than 207,000 acres have burned across the state, compared with the five-year average of 38,000 acres, according to <u>Cal Fire</u>.

<u>Two wet winters</u> in a row have helped pull the state out of a terrible drought. But those heavy rains also promoted the growth of grass, brush and other vegetation that is now drying out and becoming highly flammable, especially during the current <u>record-breaking heat wave</u>.

So when a fire erupts, it's able to spread rapidly through vegetation that is primed to burn, Joe Tyler, Cal Fire's director, said at the news conference. "We need to be extra cautious in these hot, dry and windy conditions," he said.

The largest fire currently burning in California is the <u>Lake fire</u> in the mountains above the Santa Ynez Valley, which has grown to about 29,000 acres since it ignited on Friday. That fire has swelled significantly after dark, growing by 5,000 acres on Monday night and by 2,000 on Tuesday night, Austyn reported. It was only 16 percent contained as of yesterday evening.

Hot Nights Fuel Wildfires in California, Complicating Containment

Climate change is causing more fires to burn overnight, growing bigger, lasting longer and challenging the fire teams trying to control them.



- Fighting the Thompson fire near Lake Oroville in California on July 2.Credit...Noah Berger/Associated Press

By Austyn Gaffney

July 10, 2024 <u>https://www.nytimes.com/2024/07/10/climate/wildfires-heat-wave-night-temperature.html?</u> unlocked article code=1.6U0.-auU.xAuqiPXBzbMa&smid=url-share

Over the July 4 weekend, <u>hundreds of fires</u> sparked across California, feeding on the hot, dry conditions of an ongoing heat wave.

But some of these fires were strange.

They grew rapidly and expanded their territory at a time when fires, like people, traditionally rest: at night.

Overnight hours, when temperatures tend to go down and relative humidity, or the amount of water vapor in the air, goes up, can act as a barrier to fire. Overnight, fires tend to creep along, giving firefighters a chance to sleep or manage smaller flames. But human-caused climate change has accelerated <u>nighttime warming</u> more quickly than daytime warming, dismantling this natural shield.

A majority of overnight burns happen within the first few days of ignition, and they tend to occur consecutively, according to the study. That means that if a fire burns overnight, and for multiple nights, there's less time for firefighting interventions, and it's more likely that the fire will grow out of control.

"We might need to consider a firefighting model that operates around the clock," Mr. Luo said in an email.

Decades earlier, firefighters could rest and regroup at night, and fires required less personnel, said Kaitlyn Trudeau, a senior research associate at Climate Central who worked on the report.

"But it's completely different now," said Ms. Trudeau. "It's straining already stressed resources and

having this huge physical and mental toll on firefighters."

Mr. Luo's study found that while heat waves are a big contributor to extreme fire behavior, drought conditions could be the main driver. Understanding these factors could help emergency managers and communities better prepare, Mr. Luo said. If a fire starts in an area of drought, for example, firefighters could anticipate that overnight burning is likely to increase the fire's range and severity.

California is not currently experiencing drought conditions, but about <u>3,500 fires</u> have ignited this year across the state, burning <u>more than 200,000 acres</u>. Cal Fire called it an "<u>unusually active early fire</u> <u>season</u>." This time last year, <u>about 3,000 fires</u> had burned less than 10,000 acres.

Meanwhile the California State Government Is Implementing a Policy of Permanent Rationing of Water

Having built virtually no new water infrastructure in the state since 1972, the environmentalist and rationing mentality of the state government has announced "permanent water restrictions"

The state has approved new permanent restrictions to conserve water, while blaming, once again, the water shortages that have plagued the state since the 1990s on "climate change."

Permanent water restrictions headed to California

byReid Stone July 11, 2024 https://sjvsun.com/california/permanent-water-restrictions-headed-to-california/

California will implement permanent water restrictions for the first time in history to reduce statewide water use and minimize severe water reductions during droughts.

Retail water suppliers, not individual households or businesses, will be mandated to reduce water use by around 30% over the next 15 years, with non-compliant suppliers facing \$10,000 daily fines. The State Water Resources Control Board said only a small portion of the state's largest water suppliers will face those restrictions, with most fines capped at \$1,000 per day.

The big picture: The policy is called Making Conservation a California Way of Life and was approved by the state Water Resources Control Board.

- Suppliers will need to implement measures to encourage customers to reduce water consumption, such as enforcing restrictions or advocating for the use of low-flow appliances.
- The cuts will not follow a one-size-fits-all approach but will be determined based on various factors like past water consumption, climate, and land use.
- Different regions will experience varying levels of water use reductions, with some regions like the Bay Area having historically low water use and others like Los Angeles County facing higher projected reductions.
- The policy, initiated by legislation that was signed by former Gov. Jerry Brown in 2018, is expected to be effective from January 1, 2025, with the first round of cuts slated for 2027. While some water agencies have criticized the policy, environmental groups argue that the water reduction percentages should have been higher.

A Positive Approach to Alleviate the Damage and Intensity of Wild Fires

Logging can protect forests, increase water supplies

<u>Ag Alert</u> <u>Commentary</u> July 11, 2024 <u>https://mavensnotebook.com/2024/07/11/commentary-logging-can-protect-forests-increase-water-</u> <u>supplies/</u>

By Edward Ring, Ag Alert



Practical solutions to California's energy and water shortages will always have a better chance of being implemented if they adhere to the limitations placed upon them by those concerned about climate change. A solution that should work for everyone is forest thinning. It will save our forests, with the added benefit of increasing our water supply.

Wildfires have become catastrophic because the California Legislature funds fire suppression at the same time as it has regulated timber harvesting nearly out of existence. We are very good at squelching wildfires before they get started. But if ignited, our overgrown forests can now fuel infernos that were once unfathomable.

California's forests today have tree densities that are many times what is historically normal, and conditions are more dangerous because we've reduced our annual timber harvest from 6 billion board feet per year in the 1990s to around 1.5 billion board feet today.

In past millennia, fires caused by lightning strikes routinely burned off undergrowth and a high percentage of small trees, leaving the larger trees to survive. Today, trees and undergrowth are so crowded that everything is stressed. Light, soil nutrients and water are shared by anywhere between two and six times as many trees and plants as these ecosystems naturally evolved to support. Observations of excessive tree density are corroborated by numerous studies, testimony and journalistic investigations.

This is why fires have gotten so bad. Anyone concerned about climate resiliency who cares about the health of our forests should be demanding forest thinning.

That forests subject to responsible logging actually report more robust populations of wildlife, including the endangered spotted owl, is rarely acknowledged. But comparisons between commercially managed forests in California's Northern Sierra and adjacent national forests that are off limits to logging confirm this assertion. Even clear cuts, when implemented on a multi-decade rotation and with each cut limited in area, are beneficial to wildlife. They temporarily create meadows that create forage for deer, in turn creating food for mountain lions. These open areas also help owls and other raptors spot prey. When the slash is furrowed along level contours, runoff is contained and percolates.

This is not a trivial increase, particularly because it could be realized at no expense to taxpayers. In fact, reviving California's timber industry would create thousands of jobs and industry profits, which would increase state tax revenues.

Another benefit would be the obvious upside of having an additional 2 million acre-feet of water to

deliver to California farmers. That's enough to irrigate at least a half-million acres, with all the jobs, food and tax revenues this productive farmland would contribute to California.

The Disaster in Texas

Anger mounts in southeast Texas as crippling power outages and heat turn deadly

_By Elizabeth Wolfe, <u>Ashley Killough</u> and <u>Ed Lavandera</u>, CNN Updated 10:20 AM EDT, Thu July 11, 2024 <u>https://www.cnn.com/2024/07/11/weather/texas-heat-beryl-power-outage-thursday/index.html</u>

Frustrations are mounting across southeast Texas as residents enter a fourth day of <u>crippling power</u> <u>outages and heat</u>, a combination that has proven dangerous – and at times deadly – as some struggle to access food, gas and medical care.

More than 1.3 million homes and businesses across the region are still without power after Beryl slammed into the Gulf Coast as a Category 1 hurricane on Monday, leaving at least 11 people dead across Texas and Louisiana. The storm continues to threaten flooding Thursday in New England.

Many residents <u>https://www.cnn.com/2024/07/11/weather/texas-heat-beryl-power-outage-thursday/index.html</u>are sheltering with friends or family who have power, but some can't afford to leave their homes, Houston City Councilman Julian Ramirez told CNN. And while countless families have lost food in their warming fridges, many stores are still closed, leaving government offices, food banks and other public services scrambling to distribute food to underserved areas, he said.

As residents desperately try to cool their homes with generators, carbon monoxide poisoning has become a serious concern. At least two people have died in Harris County from carbon monoxide poisoning and fire departments have received more than 200 carbon monoxide poisoning calls in 24 hours, local officials said.

Heat-related medical emergencies are also spiking in Houston, as 90-degree temperatures blanket southeast Texas, Fire Chief Samuel Peña said. The heat index – a measurement of how the body feels under both heat and humidity – could reach <u>106 degrees</u> in some areas, a life-threatening scenario for people without adequate cooling.

The dangerous heat – <u>driven by</u> human-caused climate change – hasn't been limited to Texas. At least 28 heat-related deaths in the West have been reported since July 1, as a record-breaking heat wave beats down on states including California, Oregon and Arizona.

Texans losing patience with utility company

As miserable conditions persist, Houston area residents are growing increasingly frustrated with CenterPoint Energy, the city's primary utility company that is responsible for restoring the vast majority of outages.

"Almost universally people have lost patience with CenterPoint," Ramirez told CNN.

Beryl's impact left more than 2.2 million customers without electricity on Monday. By Wednesday night, the utility said it had <u>restored power</u> to 1.1 million customers and hoped to have an additional 400,000 restored by Friday and 350,000 more by Sunday.

More than <u>1 million CenterPoint customers</u> remain without power, as of Thursday morning.