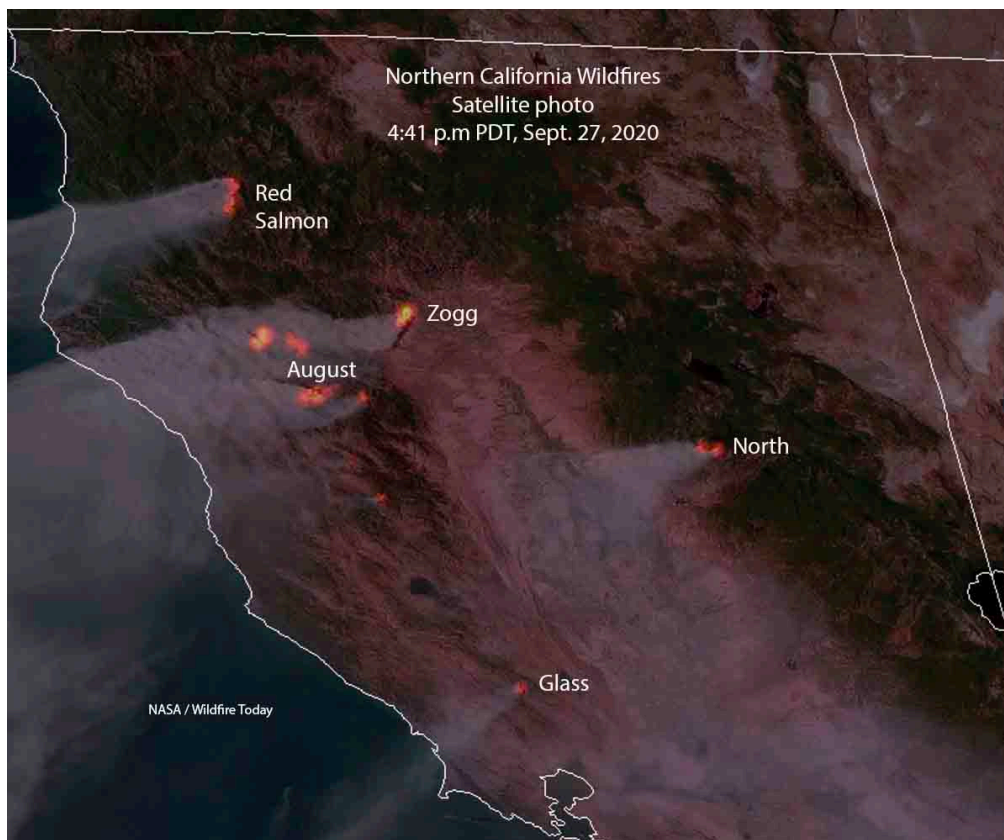


**With Steve LaNore, CBM
October 1, 2020**

Fierce September Firestorms

This may seem like media hype, and your author wishes that's all it was, but here's the reality - it's the most devastating fire season on record for California. It's a "rolling catastrophe" from colossal firestorms as new ones roar to life as fast as firefighters gain the upper hand on older fires.



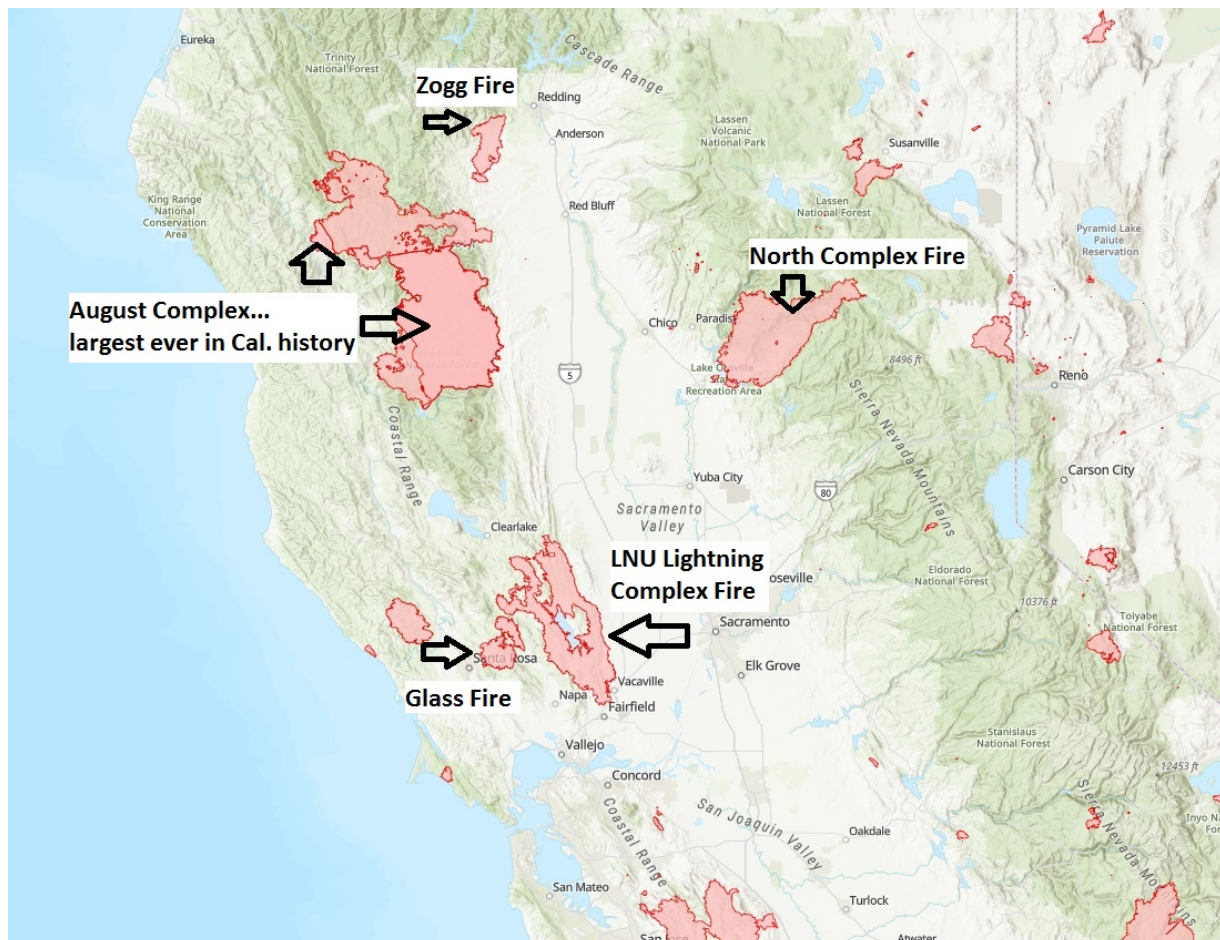
Sep 27: Smoke plumes clearly visible as northeast winds blow them toward the ocean / NASA

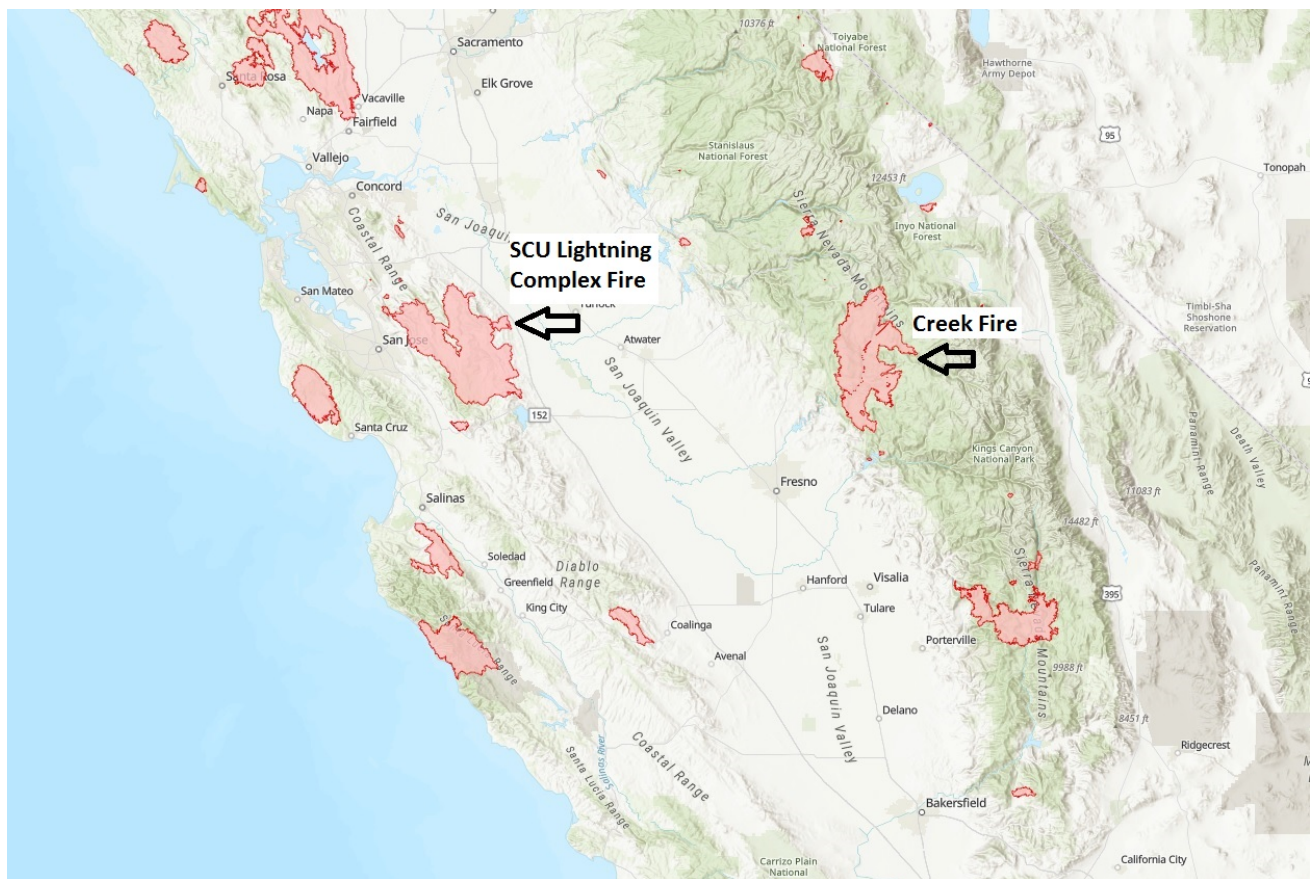
Cal Fire, also known as the California Department of Forestry and Fire Protection is, according to their website, “dedicated to the fire protection and stewardship of over 31 million acres of California's privately-owned wildlands.” What this means is simple – Cal Fire has a big hand in not only fighting fires but in trying to prevent them. Their smorgasbord of fire prevention strategies include clearing brush, controlled burns, evacuation planning, fire prevention education, fire hazard severity mapping, and fire investigations/law enforcement. But all of this fell short against nature’s multi-pronged assault. As you can imagine they are absolutely overwhelmed as of late.

Indeed, as of October 1 there were still 26 major fires burning in the state with an astounding 17,000 firefighting personnel engaging fires on the ground and in the air. At least 3.9 million California acres have been charred in 2020 – five times last year’s total and easily surpassing the horrific fire seasons of 2017 and 2018. A total area larger than the State of Massachusetts has been consumed by fire in the western U.S. this year- over 7,000,000 acres and counting.

Arguments rage over what causes the fires – climate change, typical summer dry seasons, poor forest management, increasing population in fire-prone areas, negligent power line maintenance, perhaps some mix of it all. No doubt the extreme lightning barrage in August had a direct hand in a few of the biggest ones, see last month’s newsletter for details.

But no one is disputing the dollars. CBS News reported in mid-September that the total cost of actual losses and rebuilding could exceed \$100 billion, making it the costliest fire season ever and more expensive than Hurricane Irma (2017), Hurricane Florence and Hurricane Michael (both 2018) put together. And the human suffering is also high – more than 30 killed in California fires alone.





Strange Phrase: “Flex Alert”

A week-long heat wave over southern California further illustrates the three-pronged problem the “Bear Flag republic” (Hey! Worth a Google...) has seen since August - excessive dry fuels, too much wind...AND...way too much heat. For now, let’s talk about the ridiculous heat:

The heat forced the “California Independent System Operator” (or Cal-ISO) to issue a Flex Alert for Thursday October 1. It is both bizarre sounding and serious. It’s a heads up for electric consumers to save energy however they can to ease to burden on the overall system and avoid the possibility of rolling blackouts.



News Release

For immediate release | **Sept. 30, 2020**

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Flex Alert issued for tomorrow, calling for energy conservation
Reduced capacity, along with fires and heat, impacting energy supplies

From caiso.com, October 1, 2020, released Sep 30, 2020

“With high temperatures in the forecast, the power grid operator is predicting an increase in electricity demand, primarily from air conditioning use,” said Cal-ISO. “Reduced capacity, along with fire activity and heat, has led to a potential shortage of energy supply.”

Super-Duper Heat

September ended with absolutely baking highs across southern California: check out these maximum temperatures on Sep 30:

>>> 108 degrees in Fullerton and Van Nuys

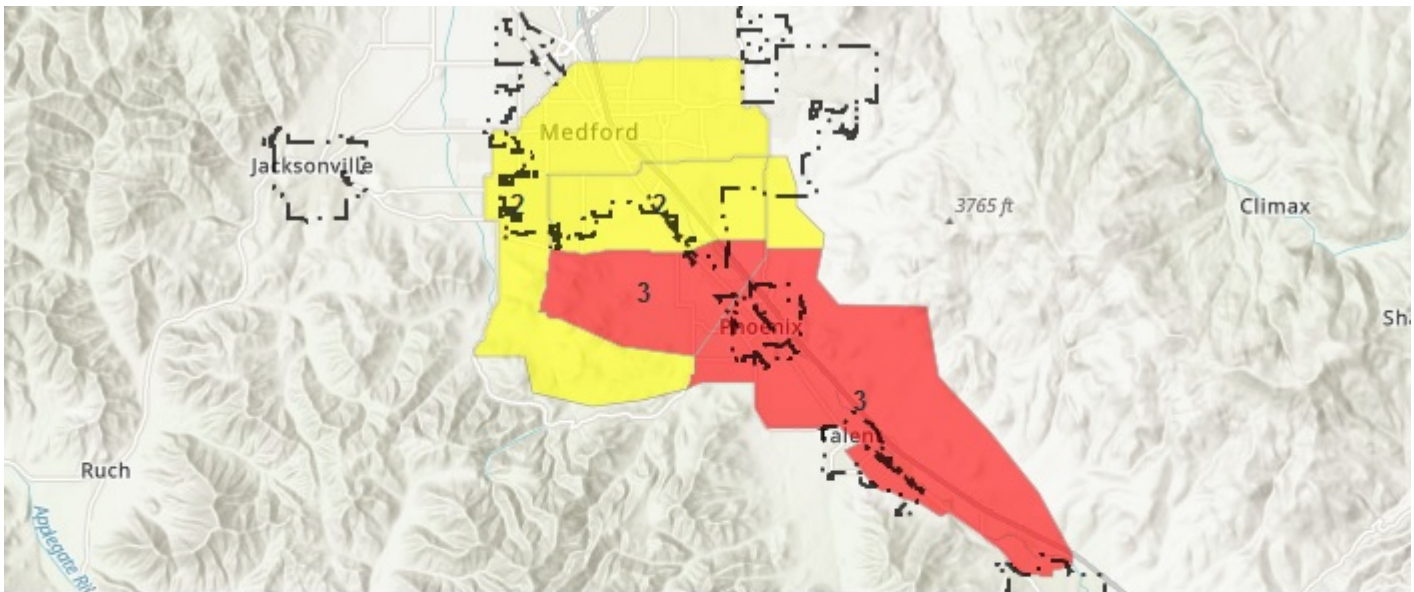
>>> 106 in Burbank and Pasadena

>>> 103 in downtown Los Angeles.

>>>> A searing 108 at Riverside.

Oregon gets it, too

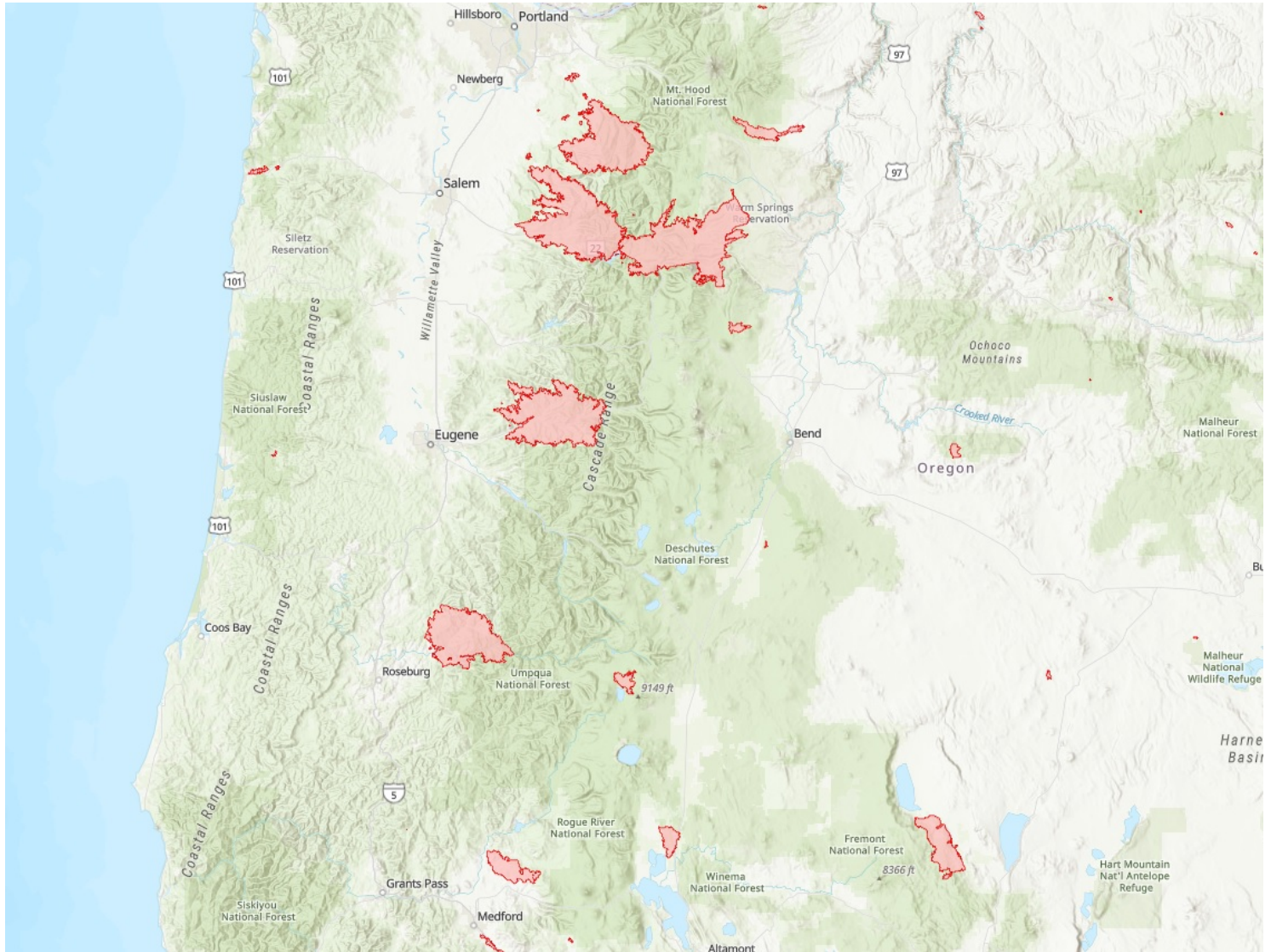
California’s northern neighbor is also blasted by some big fires, especially compared to what Oregon typically gets. Medford was facing a city-wide evacuation order in early September. This map was put forth by disaster officials on September 8th, red areas requiring immediate evacuation:



Red...Level 3...leave immediately
Yellow...Level 2...be prepared to leave at a
moment's notice. Entire city of 83,000 affected.

Medford wound up getting singed by the edge of the fire, but most of the losses were just to the south of the city. Over 600 structures were destroyed by this blaze.

Oregon's fires consumed about 2,500 structures, so when combined with California we're talking 10,000 buildings, many of them residences, leaving tens of thousands homeless in the two states. And other fires in Washington State, Colorado and Wyoming tacked on several hundred more.



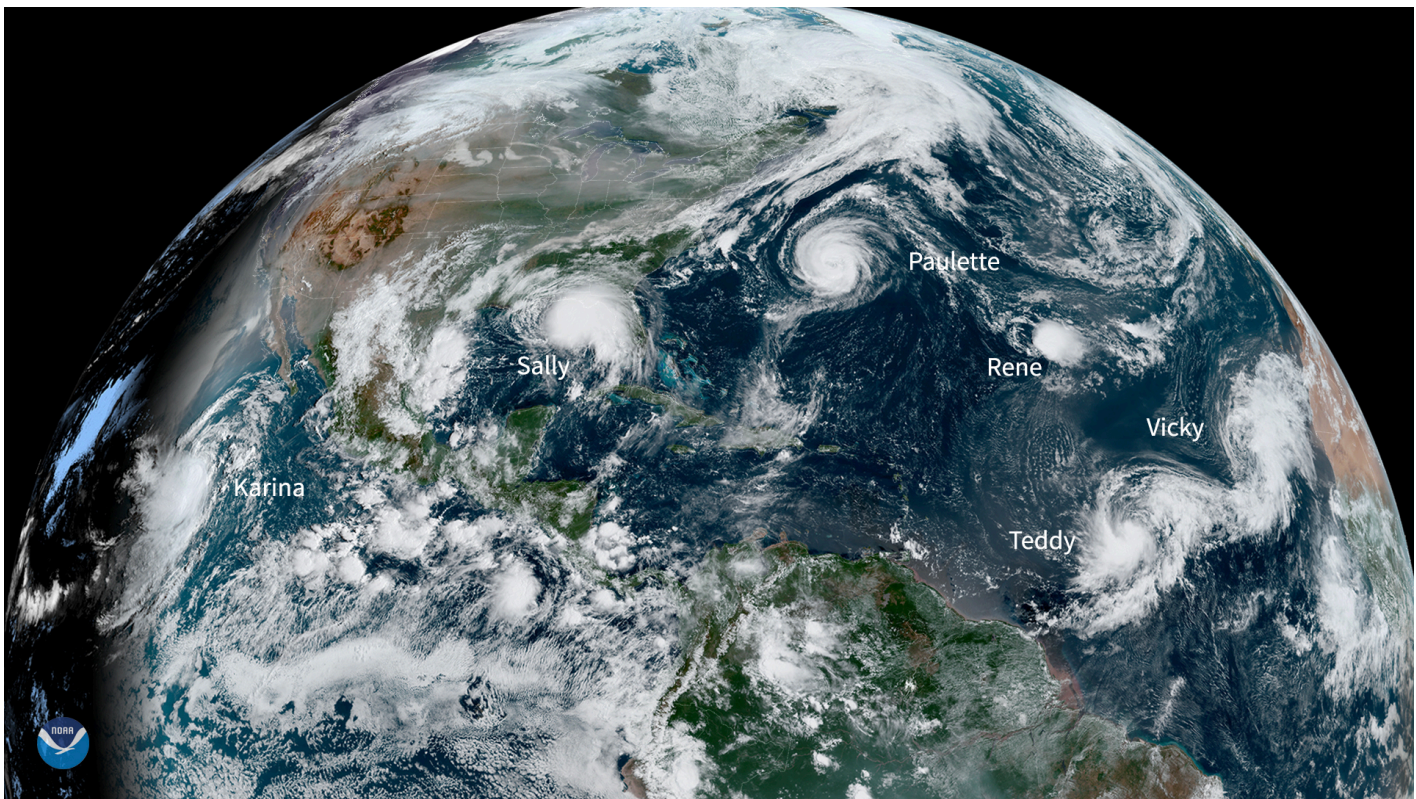
About 1,000,000 acres were torched in Oregon (red zones), mostly between Aug 15th and 15th. / Cal Fire map

It's not over yet....

Unseasonably strong high pressure responsible for the record heat the last days of September looks to ease only a little through October 6th keeping fire threats fairly high. So it's not over yet, especially for southern California where the hottest and driest weather will be concentrated.

Five is Five too Many...

It's been 49 years since we saw so many tropical cyclones in the Atlantic, and the 1971 example is the ONLY other time in modern records that we've had FIVE in the Atlantic/Gulf at one time. Check it out from space, and on top of that there's a sixth storm named Karina in the eastern Pacific, this image captured on September 14:



A crazy mess of storms / NOAA

Of the ones seen here, Sally and Teddy were the only two that directly affected the United States, with Sally causing a lot of flooding in southern Alabama and northern Florida.

Looking Back at Laura: Fresh Numbers

Better damage figures are now available on Hurricane “Laura” which made landfall south of Lake Charles in the early morning hours of Thursday, August 27. Winds to 133 mph were recorded at Lake Charles in the northern eyewall and severe damage was observed in and around southwestern Louisiana.



Hurricane “Laura” on August 26, about 10 hours before it came ashore in southwestern Louisiana. NOAA data.

Damage estimates from “Laura” are given as around \$10 billion according to CoreLogic, this would put it in the moderate range for hurricane events. Compare it to 2018’s Hurricane Florence which logged \$25B in losses and this year’s Hurricane “Hanna” (south Texas), which did only a few hundred million.

Sadly, 26 people also perished in “Laura” four who were killed by trees falling on their homes; nine other died from carbon monoxide poisoning while using improperly ventilated generators. So sad and completely preventable!

Let’s take a minute to review generator safety:

According to the Centers for Disease Control (CDC), 400 people die every year at the hands of carbon monoxide (CO) poisoning from events other than fire. You never know when you or someone you know might need use of a generator, please keep these safety tips from the CDC in mind:

- Never use a gas range or oven to heat a home.
- Never leave the motor running in a vehicle parked in an enclosed or partially enclosed space, such as a garage.
- Never use a generator, pressure washer, or any gasoline-powered engine inside your home, basement, or garage or less than 20 feet from any window, door, or vent. Use an extension cord that is **more than 20 feet long** to keep the generator at a safe distance.
- When using a generator, use a battery-powered or battery backup CO detector in your home.
- Never run a generator, pressure washer, or any gasoline-powered engine inside a basement, garage, or other enclosed structure, even if the doors or windows are open, unless the equipment is professionally installed and vented. Keep vents and flues free of debris, especially if winds are high. Flying debris can block ventilation lines.
- Never use a charcoal grill, hibachi, lantern, or portable camping stove inside a home, tent, or camper.
- If conditions are too hot or too cold, seek shelter with friends or at a community shelter.
- If CO poisoning is suspected, call 911 or your local Poison Control Center at 1-800-222-1222 or consult a health care professional right away.

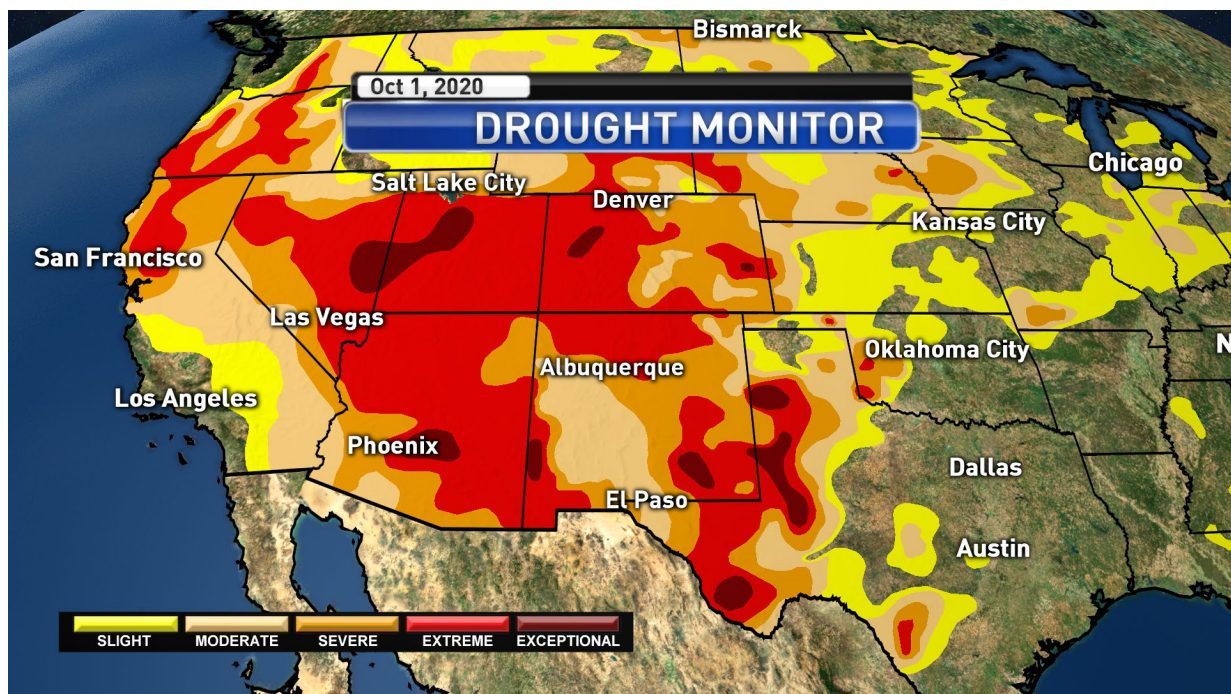
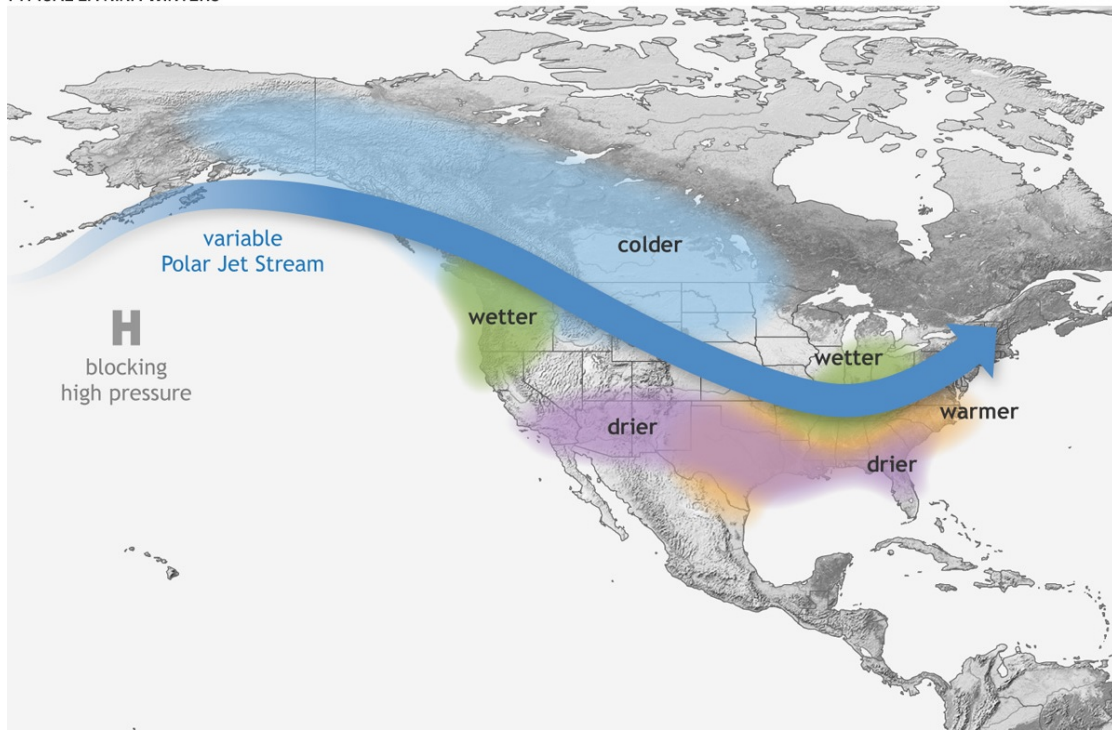
La Nina Advisory....

La Nina is likely returning for this winter, NOAA issued a “La Nina Advisory” in September with a 75 percent chance of La Nina for the winter of 2020-21. This is not good news for drought-parched areas from southern California to Texas as La Nina’s typically mean warmer and drier than normal across the south.

This is not to say you won’t get cold weather (or rain/snow), we’re speaking of averages. For instance, let’s say you’re in Memphis and you get three inches of snow one weekend in January but the rest of the winter is mild – that would be consistent with a La Nina. However, even short bursts of record cold can happen in a La Nina while the AVERAGE weather over the south and west will be warm and dry. Southern California eastward through the southern Rockies and Texas couldn’t ask for worse news. The northern half of the Pacific coast may get some needed relief and that would carry inland into Wyoming and Montana.

Of course, you cannot take these maps down to the mile, but history shows they’re pretty good guides for dry versus wet. If you look at the map then Great Lakes and Appalachians residents might have the best odds for snowman building!

TYPICAL LA NIÑA WINTERS



Drought-stricken areas of the west probably won't get much help from the skies this winter / US Drought Monitor

As for severe weather, there's always a "secondary season" in October-November but La Nina years see lower than normal activity. And of course there's always some potential for an October hurricane. I suppose we'll just hide and watch!

Take Care,

Steve LaNore, CBM