

**With Steve LaNore, CBM
November 2, 2020**

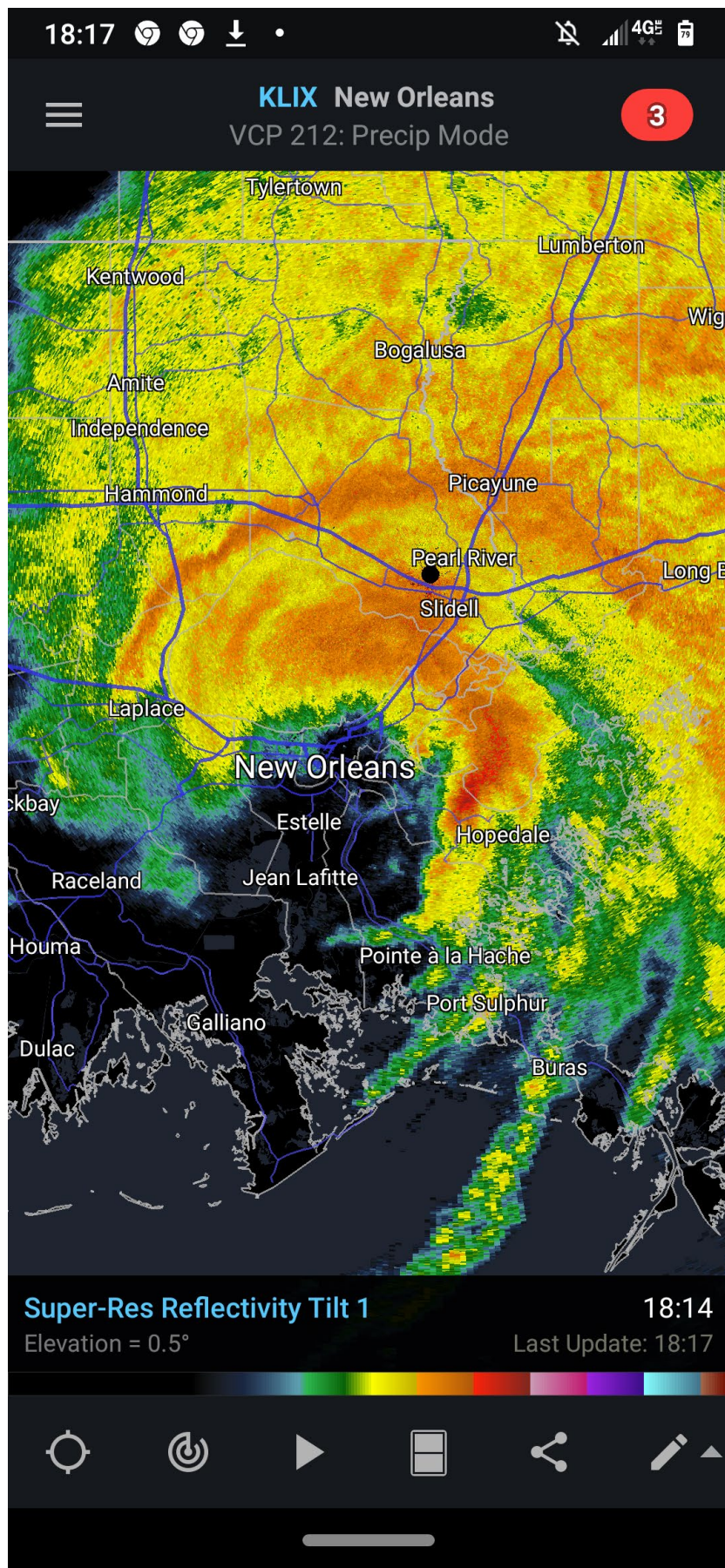
Louisiana's Lousy Luck

Five tropical cyclones in one year for the Bayou State, first time for residents to see so many there in 18 years with only a handful of time to ever get that many. One of these Hurricane "Laura" struck the western part of Louisiana in late August as a Category 4 (winds of EF3 tornado strength). Damage racked up to \$14 billion (revised total), much of it within 50 miles of severely battered Lake Charles.

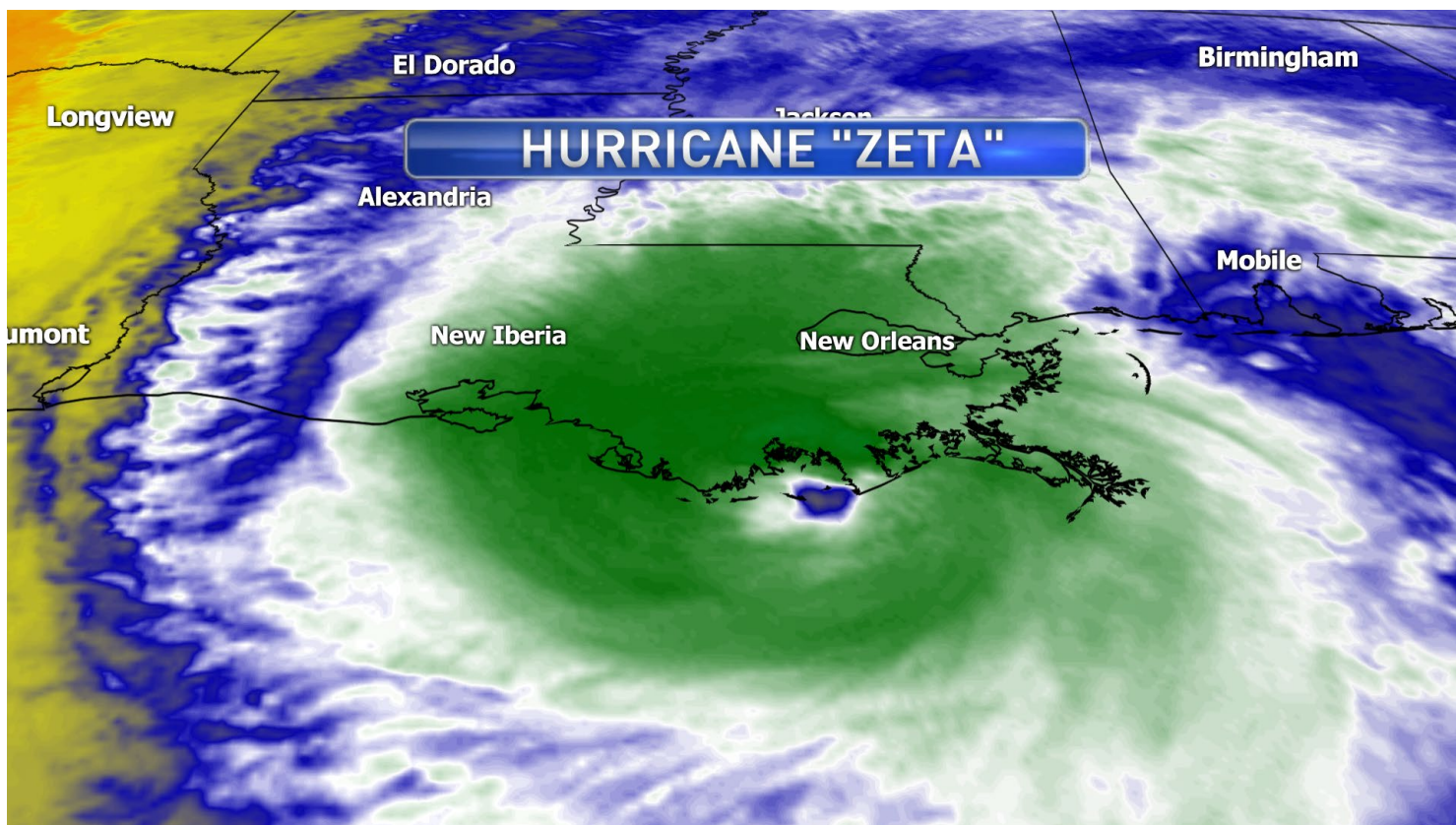
Through "Laura" and three other storms (Cristobal, Marco and Delta) New Orleans managed to dodge most of the trouble, but not with Zeta. In fact the eye went right over the city:



Track derived from three-hourly National Hurricane Center (NHC) reports



Hurricane “Zeta” over New Orleans around supertime with winds over 90 mph/NWS data. Note the well-defined northern eyewall, the southern eyewall was obscured by torrential rain along the radar beam’s path.



Colorized satellite image shows clearly defined eye of "Zeta" just before landfall / NOAA data

Zeta made landfall south of New Orleans as a strong Category 2 storm with maximum sustained winds of 110 mph, as hurricanes go it was a moderate event with lots of downed trees and a few examples of major structural damage, but far below what Laura brought to Lake Charles in August. Still, it was quite tragic as a number of people died when trees fell on their homes from Louisiana to Georgia. Two and a half million people were without power at the max point, much of it from fallen trees and short circuits as the storm clawed its way from Louisiana to Virginia.

Zeta's forward speed reached 50 mph as it traversed the southeast, giving it less time to weaken so strong winds penetrated well inland. High winds pushing the storm along fed down toward the ground allowing for strong surface winds to last longer than usual. **Overall Zeta damage will probably come in within the range of \$2-4 billion** according to disaster modeling firms Karen Clark & Co. and AIR worldwide. These numbers are a bit below Hurricane Sally but still a very significant loss for customers and insurers alike. Zeta was the strongest hurricane to strike the U.S. this late in the season in at least a century.

Adding up the Hurricane numbers for 2020...the most Significant storms

Hurricane Isaias \$5 billion - costliest storm since Sandy (2012) in the U.S. northeast. The Category One hurricane spawned 39 tornadoes primarily over North Carolina and Virginia. One of the tornadoes was an EF3, it killed two mobile home residents and was the largest hurricane-spawned tornado in 15 years. New York City saw their most widespread power failures since Hurricane Sandy.

Hurricane Laura \$14 billion - a lot of deaths from improper generator usage, a total of 42 fatalities in the U.S. Laura tied with an 1856 hurricane as the strongest hurricane *at landfall* to strike the state of Louisiana since records began with 150 mph winds and a central pressure of 938 mb.

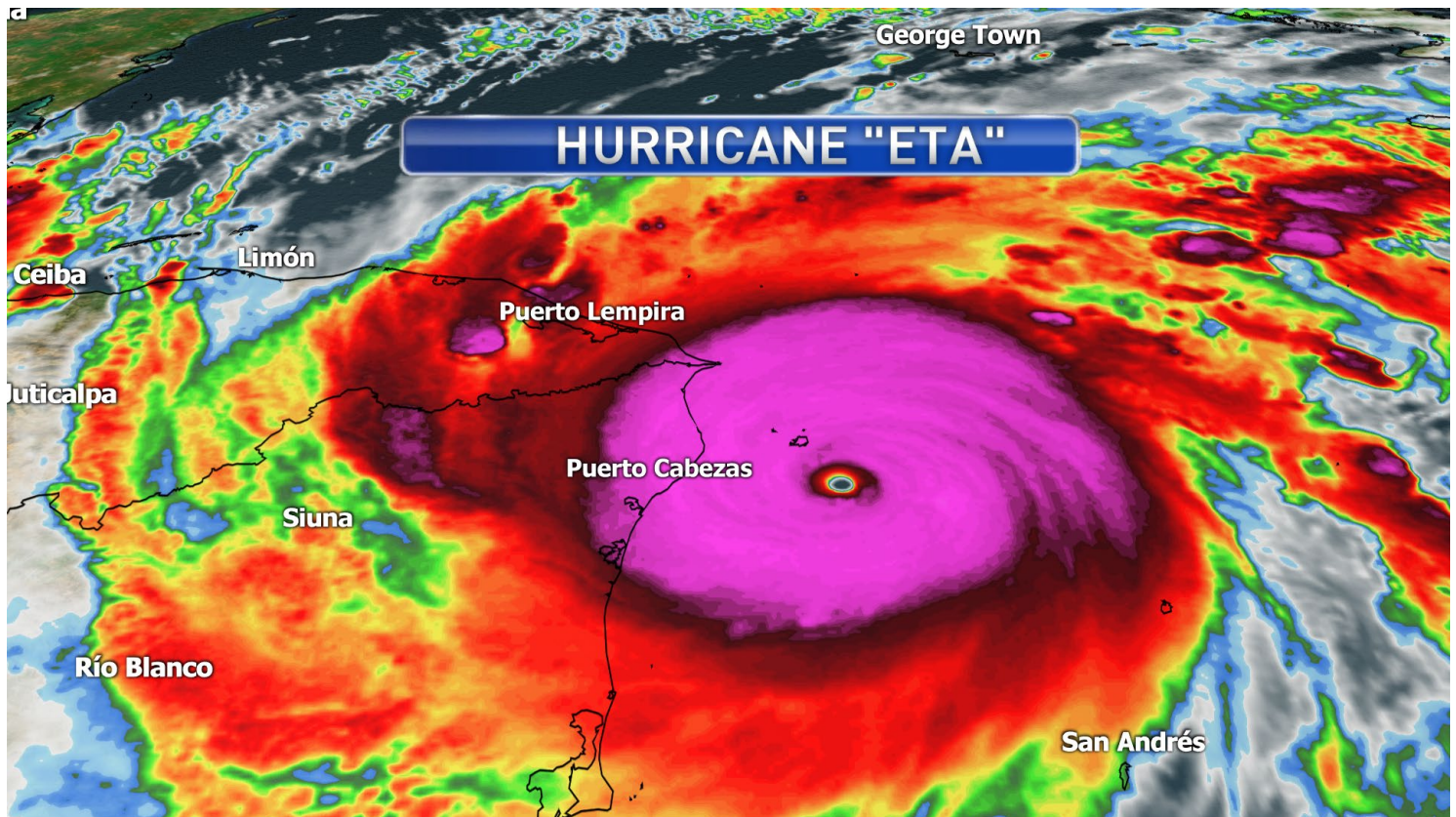
Hurricane Sally \$5.8 billion - The storm made landfall just west of Pensacola on September 15, the 16-year anniversary of devastating Hurricane Ivan which made landfall at nearly this exact location in 2004. The area between Mobile, Alabama and Pensacola, Florida took it on the chin with widespread wind damage, mostly roofs and trees, storm surge flooding, and over 20 inches of rainfall. A peak of 30 inches was recorded at the Pensacola Naval Air Station. Several tornadoes touched down as well, but the overall tornado count was quite low. Eight people were killed and damage estimates run about \$5.8 billion.

Hurricane Delta \$1 billion - Came ashore at very near the same location (near Lake Charles) as “Laura” six weeks earlier, its October 9th landfall was accompanied by 100-mph winds. Damage was not extreme, confined mostly to coastal storm surges and downed trees and power lines. Ironically, Delta passed through many areas already ravaged by Laura making for lower losses than typical for a hurricane of this intensity.

Total damage from these five named systems is just below \$30 billion.

You’ve got to be kidding me....

There’s actually a low chance that Hurricane “Eta” (over eastern Nicaragua at press time) could affect Florida or perhaps even the north central Gulf coast next week, the odds are low but not zero. What’s much more likely is for “Eta” to break up over the rugged mountains of Central America where it will sadly cause catastrophic flooding and mudslides. However, given this wacky year, all cards are on the table at this point!

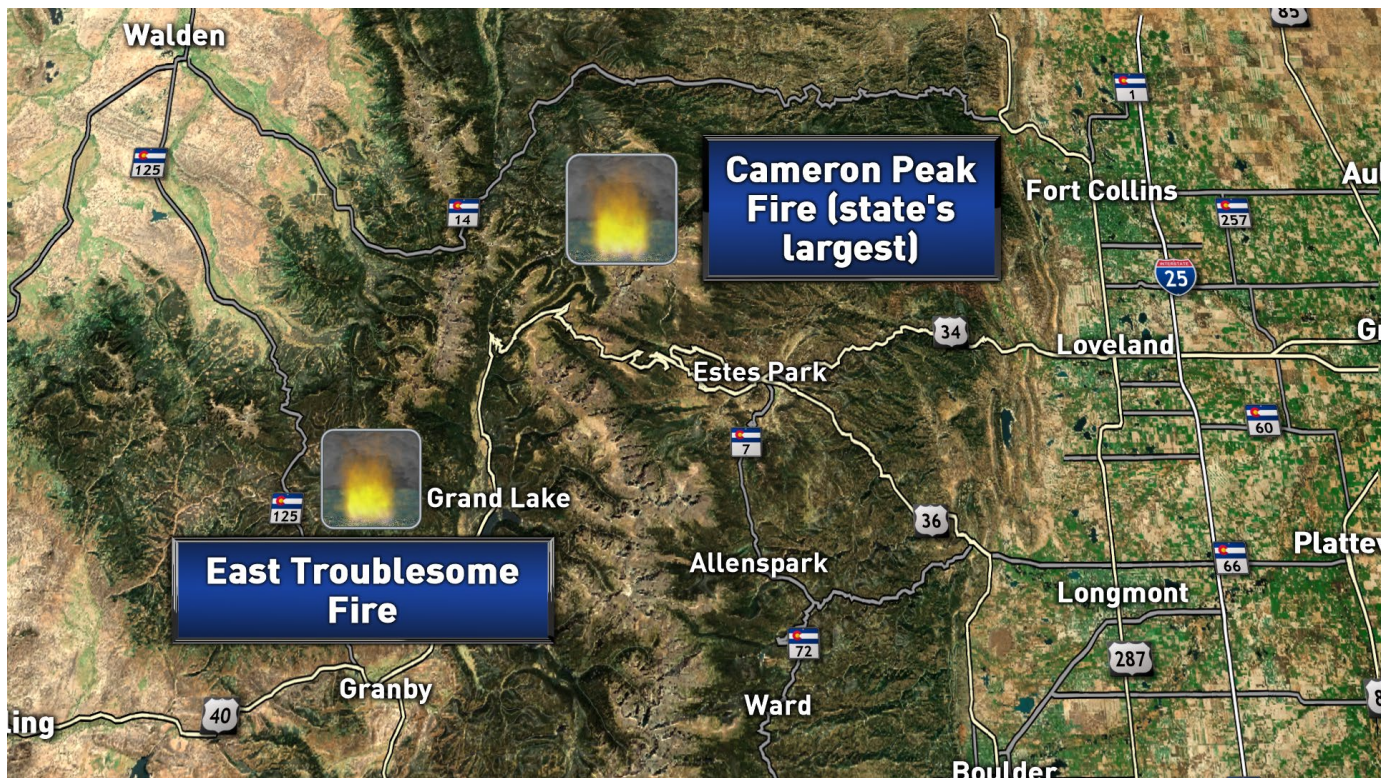


*There’s a small chance this late-season hurricane could get into the Gulf around Nov 9 or 10 / NOAA data
This image captured 9 p.m. CST/ 2 Nov 2020.*

Colorado's Biggest Wildfire Ever

Call it crazy luck, divine intervention or what have you, but Colorado took an incredible dose of good fortune in late October. Three days before Hurricane Zeta pummeled New Orleans, an unseasonably robust snow storm buried the northern Colorado Rockies in one to two feet of snow.

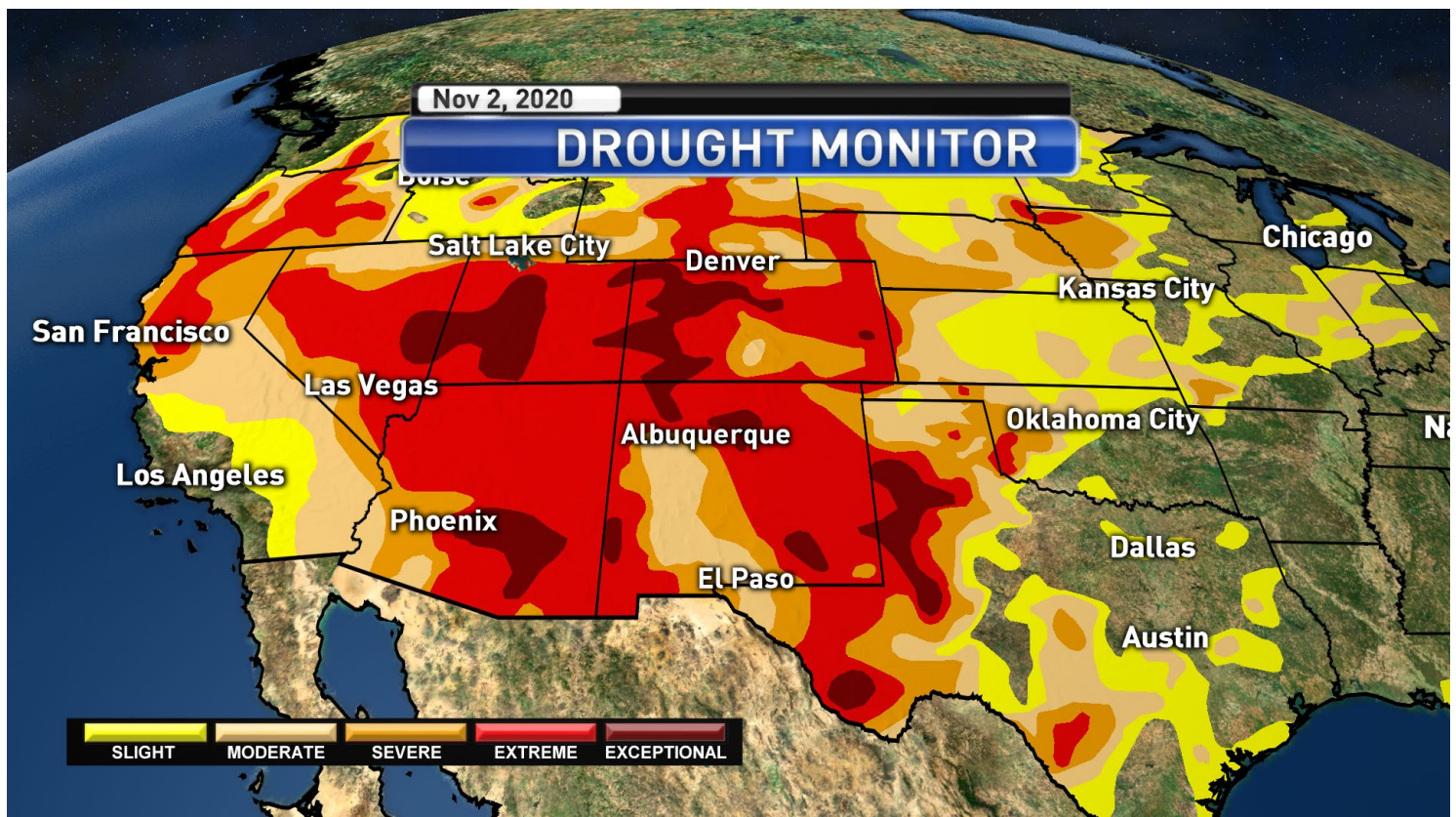
This massive snow-dump helped quash the Cameron Peak Fire, the largest fire in Colorado history. The blaze had been smoldering, popping and occasionally surging since August, but only gotten truly out of hand in October. Some 200 residences and another 200 outbuildings were incinerated by the flames, they raged in remote areas west of Interstate 25 and north of Interstate in the north central part of the state:



The Cameron Peak Fire consumed about 210,000 acres since mid-August. Fortunately, much of the fire has been at least temporarily reduced to a smoldering mass underneath loads of snow. But, the snow will melt during the first week of November and a dry spell is expected during the next couple of weeks. Certainly not the best of news!

The East Troublesome Fire has claimed nearly as much timber, about 195,000 acres since firing up October 14, it destroyed even more homes, some 300, making it even more destructive in insured losses. Collectively, Colorado wildfires have racked up over \$1 billion in damage this year.

Colorado is not the only state in trouble this winter. Widespread extreme to exceptional drought blankets vast portions of the western U.S. from the forests of Arizona through about three-fourths of Colorado. Given the La Nina forecast, we're looking at some serious trouble next year.



The US Forest Service says fire seasons are now two and a half months longer than they were fifty years ago. The changes can be attributed to several things including climate change, poor forest management, power line malfunctions and greatly increased population (many more careless idiots starting fires).

One especially noteworthy problem that hatches from persistent warmer weather: hard freezes required to kill bark beetle larvae are lacking. These pests are extremely destructive and are directly responsible for vanquishing some 250,000 acres of trees per year. The beetles leave massive stands of dead trees just waiting to burn, all fires are not part of this problem, and it's just one more straw in the proverbial camels back of fire dangers.

Another factor contributing to the scale of the disaster this year is wind. During its peak, the Cameron Peak fire engulfed 30,000 acres a day. The East Troublesome fire consumed 100,000 acres in an evening. Some of the California fires roared along at the heels of 60 to 80 mph winds.

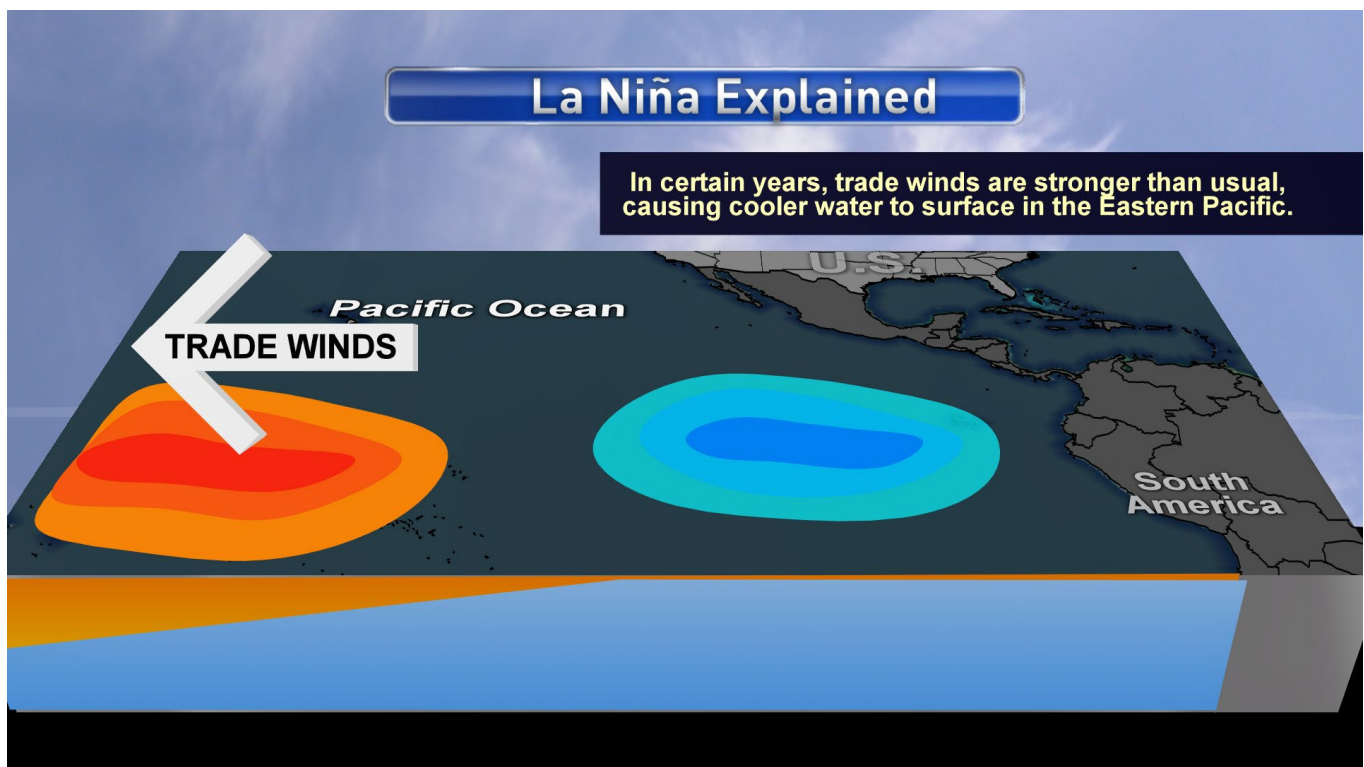
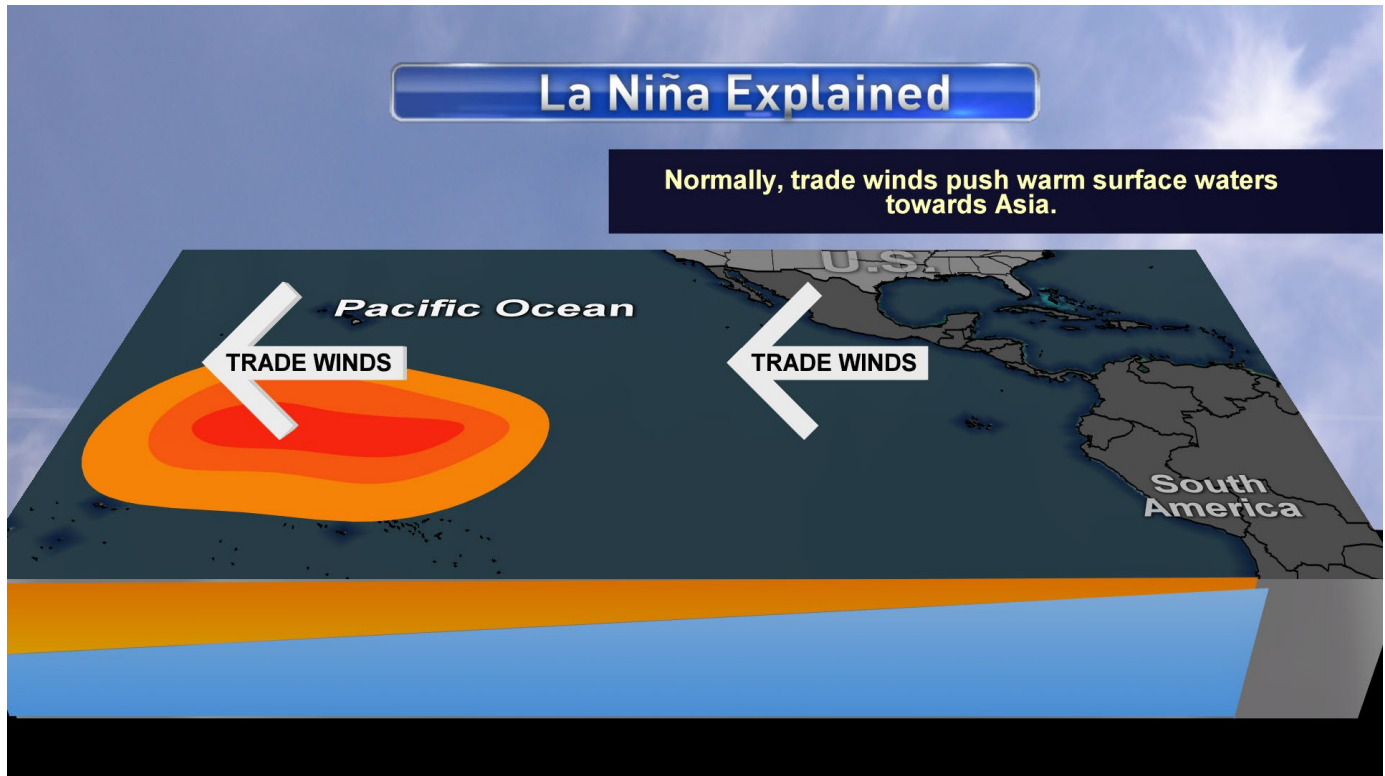
"The weather drives the fire and the fire changes the atmosphere that in turn feeds back on the fire," according to Janice Coen; she's an atmospheric scientist at the National Center for Atmospheric Research in Boulder.

The scope and number of wildfires this year is making for renewed efforts to develop an effective strategy against them. Typically the US Forest Service tries to put out fires as quickly as possible, but there is a move underfoot to more fully understand the crucial role fires play in forest ecosystems. Fires feed off the trees and undergrowth that has bene allowed to spread much more than it would in a naturally purged environment. So perhaps the firefighting efforts are compounding the fire issue. This will no doubt be a conversation and a controversy for year to come, but the science is suggesting a blend of fire control and forest management might give better results long term.

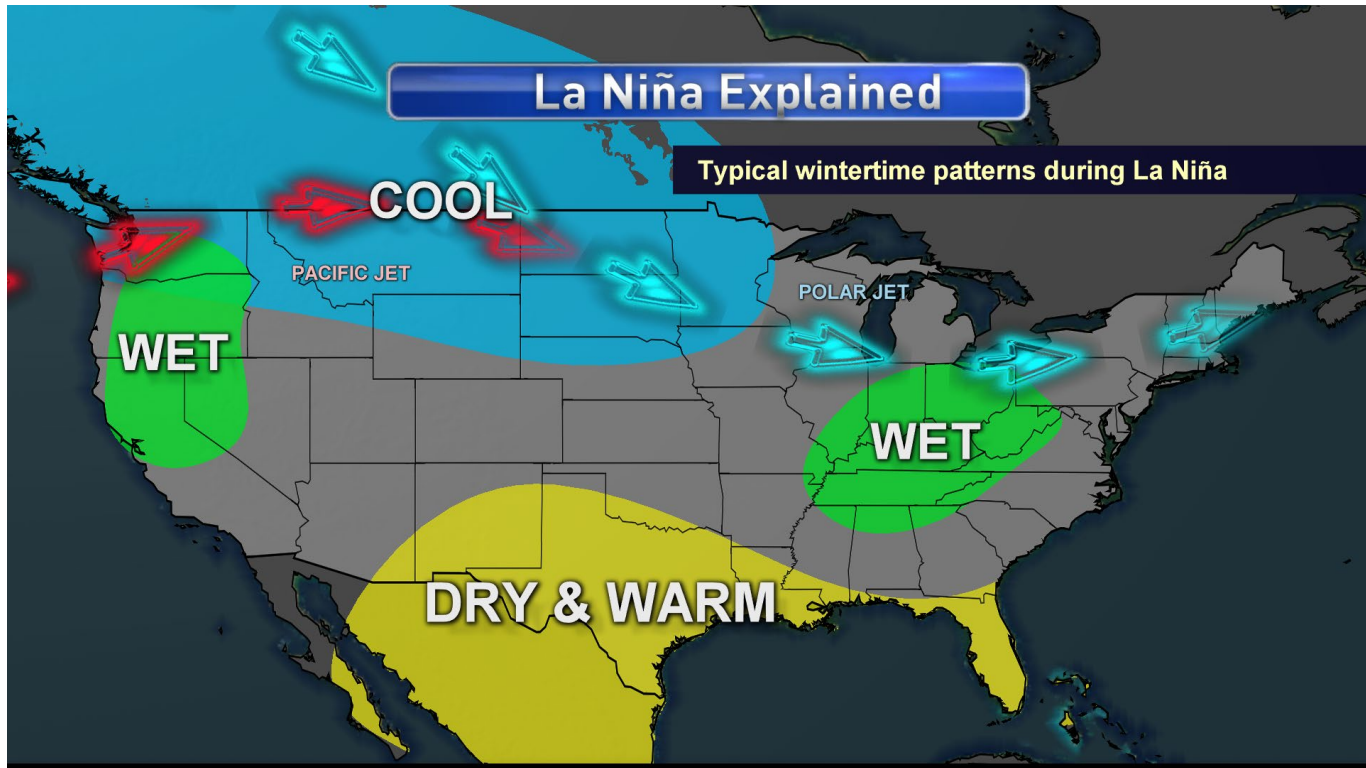
La Nina and our winter

So far the prediction of a La Nina winter is spot on, that's one reason we've seen almost no severe weather this fall, normally there is a "secondary season" of tornadoes and severe thunderstorms but they have been a no-show this year. We've had several near-record cold intrusions over the eastern U.S. in October and also several tropical systems, both of these suppress Supercell thunderstorms.

Here's what is happening:



...And here's what we' likely to get as a result. This long-range forecast has a better-than-average chance of being right:



Winter Outlook Highlights:

>>> Snow lovers will be happy from Minneapolis to Chicago and Pittsburgh and southward perhaps into Tennessee, but be advised given the overall mild winter some of this could easily come as ice, not snow.

>>> New England will be in a pattern that favors "nor'easters" which Bostonians know means heavy snow potential. New England will be on the "edge of the cold" this winter, so some of this could come as cold rain or ice. I predict an above-average chance of an ice event.

>>> The Gulf coastal region and most of Texas will be dry. Severe weather outbreaks will be fewer than typical.

>>> There's a moderate chance of at least one short (a week or less) but intense cold spell in the south. This historically is more likely in La Nina winters, but the winter overall is still expected to be mild in the south.

>>> The Pac NW will get some good rain, great for moistening up charred parts of Oregon and Washington but not much help for southern and central California fire zones.

>>> Southern/central California will see continued fire risk through the winter.

Here's wishing you and yours a most wonderful Thanksgiving Holiday and of course plenty of happy shopping!

Take Care,

Steve LaNore, CBM