SACC Daily Outlook
Wednesday, July 20, 2022

Watches and Warnings

• **Red Flag Warnings**: southeast OK and interior southeast TX today for very hot and unstable conditions, with RH from 20-30%, winds from 15-30 mph and critically to extremely dry fuels
• **Fire Weather Watches**: none
• **Excessive Heat Warnings** and **Heat Advisories** are in effect for large parts of TX, OK, AR, LA, MS, AL, TN and KY

Today’s Weather Outlook

• Showers and thunderstorms are expected today from parts of the OH and TN Valleys into the Southeast and FL – some storms may be severe, especially in KY, where wind damage is the main threat
• Spotty thunderstorms over OK and northern TX this morning will continue at times through the day; expect this activity to affect AR and parts of west TX, as well – dry lightning and erratic wind gusts up to 60 mph are possible, though some wetting rain will occur in small areas
• While drought and extreme heat are the primary drivers of fire weather again today, thunderstorms will locally complicate and enhance fire danger across OK, northern/western TX and AR

Very Hot Again Today

• High temperatures will once again surpass 100° over most of TX and OK in AR, northern LA and perhaps western TN
• Some portions of TX and southern OK will see readings exceed 110°
• These very hot and unstable conditions will be the primary driver of fire weather concerns, especially where RH drops to 25% or lower and winds reach or exceed 15 mph

Please contact your local National Weather Service office for spot forecasts and the latest watches and warnings.
High Risk (L): very hot and unstable conditions will develop amid ongoing scattered thunderstorms capable of producing dry lightning, erratic winds up to 60 mph and heat bursts (rapid temperature rise and RH drop) across parts of northwest TX into OK and AR.

High Risk (U): very hot, dry and unstable conditions again today, along with RH at or below 25% and winds from 15-25 mph, locally/briefly higher near thunderstorm outflows and sea breezes.

Moderate to Low Risk across the panhandles into west TX and from coastal and southeast TX into northwest LA, eastern AR and the Mississippi Valley, all for hot, dry and unstable conditions.

Low Risk across parts of the FL peninsula due to hot and dry conditions.

High Risk (L): very hot and unstable conditions expected before scattered thunderstorms capable of producing dry lightning and erratic winds develop, mainly across NW TX – some of this activity will affect southern OK into northeast TX and northern LA, as well, but wetting rain and thicker clouds may be a bit more widespread.

High Risk (U): very hot, dry and unstable conditions across central and southern TX, in addition to northeastern OK and northwest AR, where RH may drop to as low as 10-15% in the afternoon as dry air filters in.

Moderate Risk over the rest of TX, OK and AR into western LA for very hot and unstable conditions, with a Low Risk farther east where humidity will be higher.

Low Risk again across the FL peninsula where hot and dry conditions are expected.

High Risk (U) due to very hot, dry and unstable conditions across much of TX into parts of OK and AR, where winds may locally gust from 25-35 mph; thunderstorms will be less numerous on Friday but still capable of producing erratic wind gusts and lightning, mainly over northwest and central TX into parts of OK.

Moderate Risk over the rest of TX, OK and AR into northwest LA and western TN, due to very hot, dry and unstable conditions; RH will be higher near the Gulf Coast, as will winds in the afternoon.

Low Risk into adjacent parts of LA, MS, northern AL, central TN and western KY, in addition to central and western VA and parts of the FL peninsula, all due to hot and dry conditions.

Please contact your local National Weather Service office for spot forecasts and the latest watches and warnings.
10-Hour Fuels

- 10-hour dead fuel moisture as low as 4-8% was increasingly common across the northwest half of TX into OK yesterday, where hot conditions will lower dead fuel moisture further in places that do not see wetting rain the next few days.

- 10-hour dead fuel moisture is generally above 10% closer to the coast in TX and over most of the rest of the SA.

100-Hour Fuels

- 100-hour dead fuel moisture was observed as low as 6-10% across western and northern TX into western OK yesterday, with values gradually increasing south and east of there.

- 100-hour fuels should gradually dry out over the northwest half of the SA into the weekend, while areas farther east will see a mix of improvement and deterioration due to hot and humid conditions, with scattered wetting rain.

Keetch-Byram Drought Index (KBDI)

- KBDIs are largely above 500 over TX, OK and AR into parts of LA, MS, AL, TN and western KY, with readings above 700 noted throughout parts of TX, LA and AR.

- KBDIs have continued to increase in areas farther east that have missed out on heavy rain recently.

- Local improvement can be expected the next several days where thunderstorms occur, but widespread wetting rain is not anticipated across drought-stricken TX, OK and AR into the weekend.

Please contact your local National Weather Service office for spot forecasts and the latest watches and warnings.
While parts of TX, OK, AR and LA will see thunderstorms the next several days, widespread heavy rain is not expected, and drought will only worsen for most of the region as very hot conditions persist.

Areas of heavy rain on the order of 1-3” are expected farther east, especially over the Appalachians and parts of MS, AL, GA and the Carolinas into northern FL.

Note that parts of the FL peninsula will continue to see hot and drier than normal conditions into next week, especially across the central and eastern peninsula.

The ridge of high pressure responsible for our current heat and fire activity will shift into the Northwest, while the Atlantic ridge (i.e. Bermuda High) shifts into the eastern U.S. next week.

This subtle pattern change will result in widespread above normal temperatures, with perhaps the greatest anomalies centered along the East Coast.

Triple-digit high temperatures can still be expected across TX and OK into the Mississippi Valley at times, but RH levels may be on the increase by mid- to late week.

The probability for above normal rainfall will be highest across the Ohio Valley, while some drier than normal conditions are most likely farther south and may extend up the east side of the Appalachians, where confidence is lower.

Note that some forecast guidance maintains well below normal rainfall across the entire state of FL throughout the next two weeks.

Confidence is lower farther west, but there may be some hope for a frontal boundary and increasing moisture to allow for scattered thunderstorms across TX, OK and adjacent areas, especially once the high pressure ridge aloft focuses abnormal heat over the northern Rockies and Pac. NW.