

DAILY DART

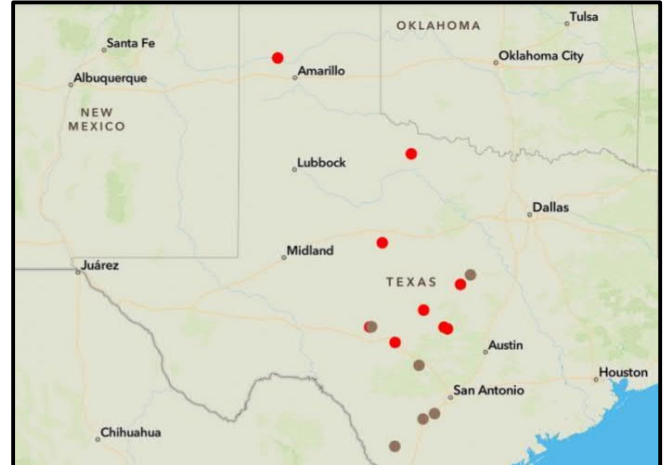
WSP USA INSPECTION SERVICES DISASTER AWARENESS REPORT

May 19, 2022

Wildfire Activity

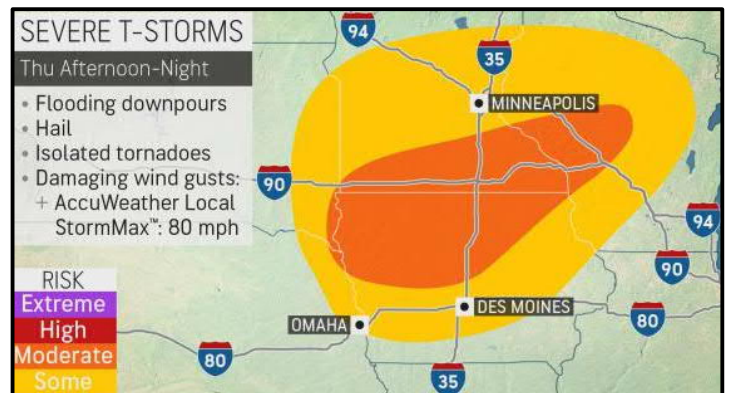
Texas

- Crews are fighting multiple wildfires in Texas, including two in Llano County, the Sandstone Mountain fire and the Slab Road fire, just a few minutes away, while the Mesquite Heat fire has led to an evacuation order in Abilene city and destroyed at least 10 homes.
- Early on Thursday morning, there were eight active fires across the state, according to the Texas Wildfire Incident Response System.
- These are mainly in central Texas, including the Coconut Fire in Wilbarger County, the Llano County fires, one at Johnson Fork, the Pope 2 Fire in Schleicher County, the Mesquite Heat fire and another in Mayfield.
- The Mesquite Heat fire has burned nearly 5,000 acres in 24 hours and is only 5% contained. It's expected to pick back up today as temperatures climb.
- Mandatory evacuations are in place for 1,000 people and 752 homes are threatened.



Severe Weather Outlook

- Following destructive thunderstorms that tore through portions of the Central states last Thursday, AccuWeather forecasters are monitoring the next potential round of severe weather in a similar area.
- Tranquil weather was in place across the northern Plains and Upper Midwest for days, but the silence was broken in part of the Plains when thunderstorms with high winds and large hail broke out on Wednesday.
- However, a much more widespread threat of severe weather is expected on Thursday.
- "The most notable period of severe weather will begin on Thursday from northeastern Nebraska to northern Wisconsin," said AccuWeather Meteorologist Andrew Johnson-Levine.
- He added that hail, damaging winds, flooding and tornadoes will all be possible.
- This is an area of the country still trying to recover from last week's storms. However, this event is not expected to come anywhere close to the intensity and magnitude of what occurred one week ago.
- The severe threat will end in the Upper Midwest on Friday, but the risk will shift farther east. Not only will the zone shift eastward, but it will also extend much farther south.



May 19, 2022

Atlantic Hurricanes Linked to Cleaner Air

- Researchers examined how particulate air pollution, or aerosols, and climate change have affected tropical cyclones across the planet over the past 40 years in a new study from the National Oceanic and Atmospheric Administration (NOAA) that was recently published in the journal Science Advances, and the results are surprising.
- "Air pollution is a big environmental risk to human health, and we have made great strides in reducing health risks by reducing particulate air pollution," said Hiroyuki Murakami, a physical scientist at NOAA's Geophysical Fluid Dynamics Laboratory and study author.
- Dr. Boris Quennehen, Lead Atmospheric Scientist at Plume Labs said particulate matter (PM), also known as aerosols, is a mix of fine dust and tiny liquid droplets.
- "Particulate matter can come from natural sources, like fine sand, wildfires, volcanic eruptions and sea salt for example, or from human activities, usually involving some kind of incomplete combustion -- a fire or explosion," said Quennehen.
- From 1980 to 2020, Europe and North America have reduced particulate air pollution from automotive, and energy industries. This has resulted in an estimated 50% drop in the concentration of particulate air pollution from North America and Europe, which, as noted by the study from NOAA, has had a significant impact on water temperatures in the tropical Atlantic Ocean basin and the development of tropical cyclones.
- "Particulate matter and water temperatures are linked, in this case, by the 'parasol effect.' The PM parasol effect means that a part of the sunlight is reflected [or] trapped by particles and thus can't reach the surface as it would have if particles weren't there," said Quennehen, who was not involved in the new study. "Less sunlight reaching the surface means less energy and thus lower temperature. Less particulate matter means less reflection, thus warmer waters."
- Warm water temperatures above 80 degrees F are one of the key ingredients in the formation of a tropical cyclone. So, thanks in part to the aforementioned parasol effect, water temperatures in the tropical Atlantic Ocean basin are warming, which is creating ideal breeding grounds for tropical development.

Joint Preliminary Damage Assessments

State	Event	Number of Counties for IA		Start-End
		Requested	Completed	
MCN*	Severe Storm & Flooding May 4 th & continuing	1	0	5/16-TBD
OK	Severe Storm & Flooding May 4 th & continuing	2	0	5/16-TBD

*MCN – Muscogee (Creek) Nation

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Pending Individual Assistance Declaration Request

State	Event	Date Submitted	Approved/Denied /Pending	Number of Counties/Tribes
MS	Severe Storms, Straight-Line Winds & Tornadoes March 22, 2022	4/28/2022	Pending	4 Counties
MS	Severe Storms, Straight-Line Winds & Tornadoes March 30, 2022	4/29/2022	Pending	8 Counties

WSP USA INSPECTION SERVICES ACTIVITY

