

APPENDIX C

Media Reports and TCEQ Forecast Discussions

EXCEPTIONAL EVENTS DEMONSTRATION FOR 2022, 2023,
AND 2024 PM_{2.5} EXCEEDANCES AT JEFFERSON COUNTY

August 5, 2025

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. BOX 13087
AUSTIN, TEXAS 78711-3087

APPENDIX C: MEDIA REPORTS AND TCEQ FORECAST DISCUSSIONS

C.1: GROUP 1 - JANUARY 17, 2022

Table C-1: TCEQ Forecast Discussions for January 17, 2022

EE Date	Site Name	Summary of Applicable Information
1/17/2022	Port Arthur Memorial School	Should seasonal burning activity across the Southeastern U.S. (including in eastern Texas) continue, fine particulate levels associated with light amounts of patchy smoke could continue to filter across East and Southeast Texas while expanding into South Central and North Central Texas.

C.2: GROUP 2 - MAY 8, 2022

Table C-2: TCEQ Forecast Discussions for May 8, 2022

EE Date	Site Name(s)	Summary of Applicable Information
5/8/2022	Port Arthur Memorial School	Depending on the amount of ongoing agricultural burnings in Mexico and Central America, residual smoke May continue to linger and filter across Deep South Texas, along the coastal bend of Texas, Rio Grande Valley, as well as into the Big Bend region, in addition to South Central and Southeast Texas at varying intensities.

C.3: GROUP 3 - JUNE 12 THROUGH JUNE 16, 2022

Table C-3: TCEQ Forecast Discussions for June 12, 2022, through June 16, 2022

EE Date	Site Name	Summary of Applicable Information
6/12/2022	Port Arthur Memorial School	Light-moderate Saharan dust was noted moving north and west into Texas.
6/13/2022	Port Arthur Memorial School	Heavy Saharan dust was noted as filtering throughout the state (excluding the panhandle and Far West Texas).
6/14/2022	Port Arthur Memorial School	The dense Saharan dust plume was expected to continue filtering throughout Texas.
6/15/2022	Port Arthur Memorial School	Moderate-heavy plumes of Saharan dust remained prevalent.
6/16/2022	Port Arthur Memorial School	Another heavy pulse of Saharan dust expected to arrive in South Texas, reaching across most of the state

WEATHER

Sarah Spivey, KSAT Weather Authority Meteorologist

Kaiti Blake, Meteorologist

Amanda Goluszka, KPRC 2 Weather Intern

Published: June 11, 2022 at 10:57 AM

Updated: June 11, 2022 at 5:39 PM

Tags: San Antonio, Saharan Dust, Weather

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Summer months bring times of Saharan dust to Texas

SAHARAN DUST

COURTESY: CIRA/NOAA

SAN ANTONIO – Every year, typically from June through September, tons of dust from the Saharan desert in Africa is transported thousands of miles across the Atlantic Ocean. (To be precise, 182 million tons of dust is lifted into the air each year -- that's 689,290 semi truck loads of dust!) This dust, made of very fine particulates of minerals, is transported by the trade winds near the Earth's equator.

The dust is lofted high into the atmosphere, creating a faint, orange-brownish haze to the sky.

Sometimes, this dust makes it all the way to San Antonio. This is NOT like a dust or sandstorm people experience out west. The dust particles are very fine and will only have noticeable, irritating effects for those who are sensitive to it -- especially for those who suffer from respiratory issues.

Latest Saharan Dust Outlook

Another plume of Saharan dust is expected to arrive in South Central Texas from the Gulf of Mexico by Sunday, June 12th.

PAY FOR A DAY, GET A YEAR FREE

Figure C-1: KSAT News Article on Saharan Dust in Texas, Reported on June 11, 2022¹

¹ <https://www.ksat.com/weather/2022/06/11/saharan-dust-returns-to-texas-sunday/>

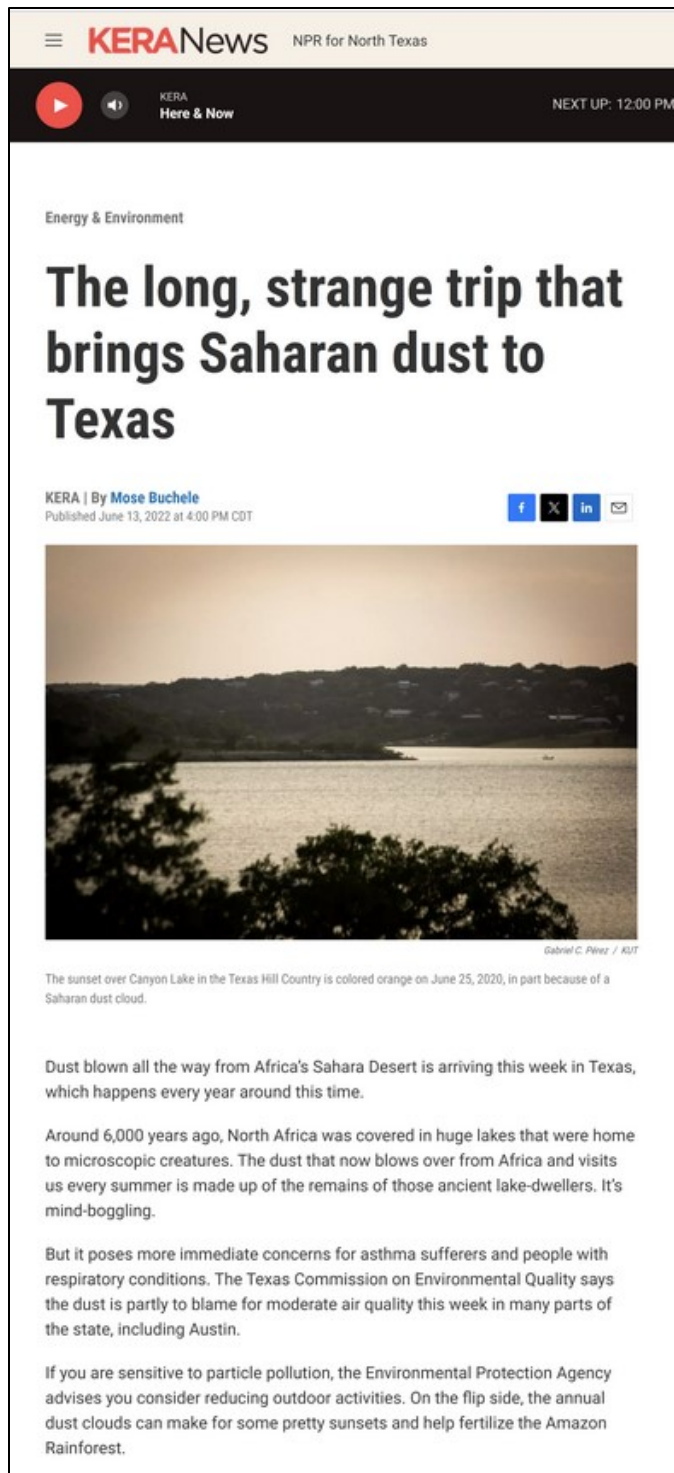


Figure C-2: KERA News Article on Saharan Dust Arriving in Texas, Reported on June 13, 2022²

² <https://www.keranews.org/energy-environment/2022-06-13/the-long-strange-trip-that-brings-saharan-dust-to-texas>

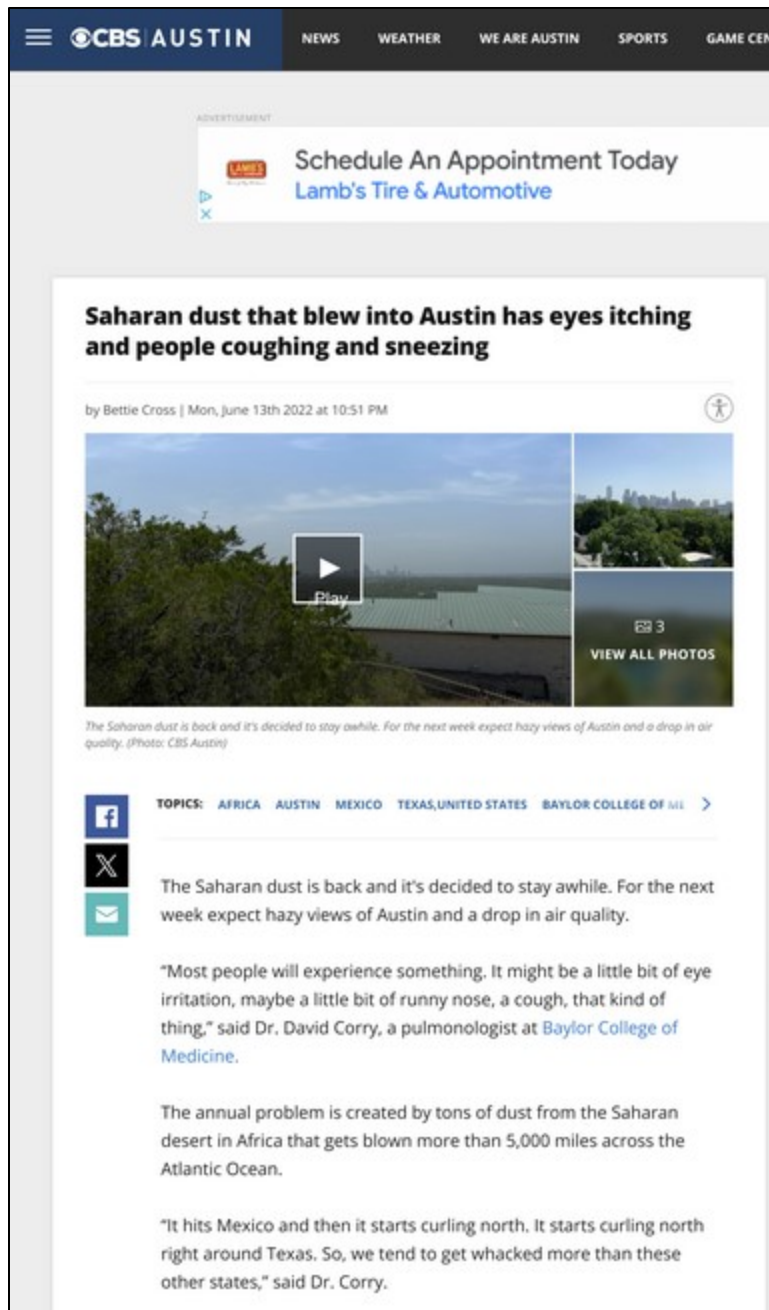


Figure C-3: CBS Austin New Article on Saharan Dust Affecting Air Quality in Texas, Reported on June 13, 2022³

³ <https://cbsaustin.com/news/local/saharan-dust-06-13-2022>



Figure C-4: KWTX News Article on Hazy Skies due to Saharan Dust, Reported on June 14, 2022⁴

⁴ <https://www.kwtx.com/2022/06/14/its-not-dust-wind-its-sahara-desert-dust-sky/>

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Saharan dust cloud crosses Atlantic, sweeps across Valley

By **Rick Kelley** · June 15, 2022

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In this Aug. 18, 2011, file photo, a dust storm hovers over Queen Creek, Ariz. A massive Saharan dust cloud began creeping over Texas on Sunday. (Courtesy: Matt York/AP Photo)

Summer hasn't officially started, but those lazy, hazy days are already making an appearance.

A massive Saharan dust cloud began creeping over Texas on Sunday, and how long it will endure is pretty much anyone's guess.

"That's the hard part. It can vary in intensity, obviously, as far as how much haze is there at any one particular time," Dave Houk, senior meteorologist at AccuWeather, said Wednesday. "But I think the overall pattern is what we see with high pressure centered over the Tennessee Valley, a big dome of high pressure sitting up there, we're going to have a mid- to upper-level flow out of the east and southeast and there's a lot of dry air with that Saharan layer of dust mixed in with that."

Figure C-5: myRGV News Article on Saharan Dust Cloud Affecting South Texas, Reported on June 15, 2022⁵

⁵ <https://myrgv.com/local-news/2022/06/15/saharan-dust-cloud-crosses-atlantic-sweeps-across-valley/>

C-5

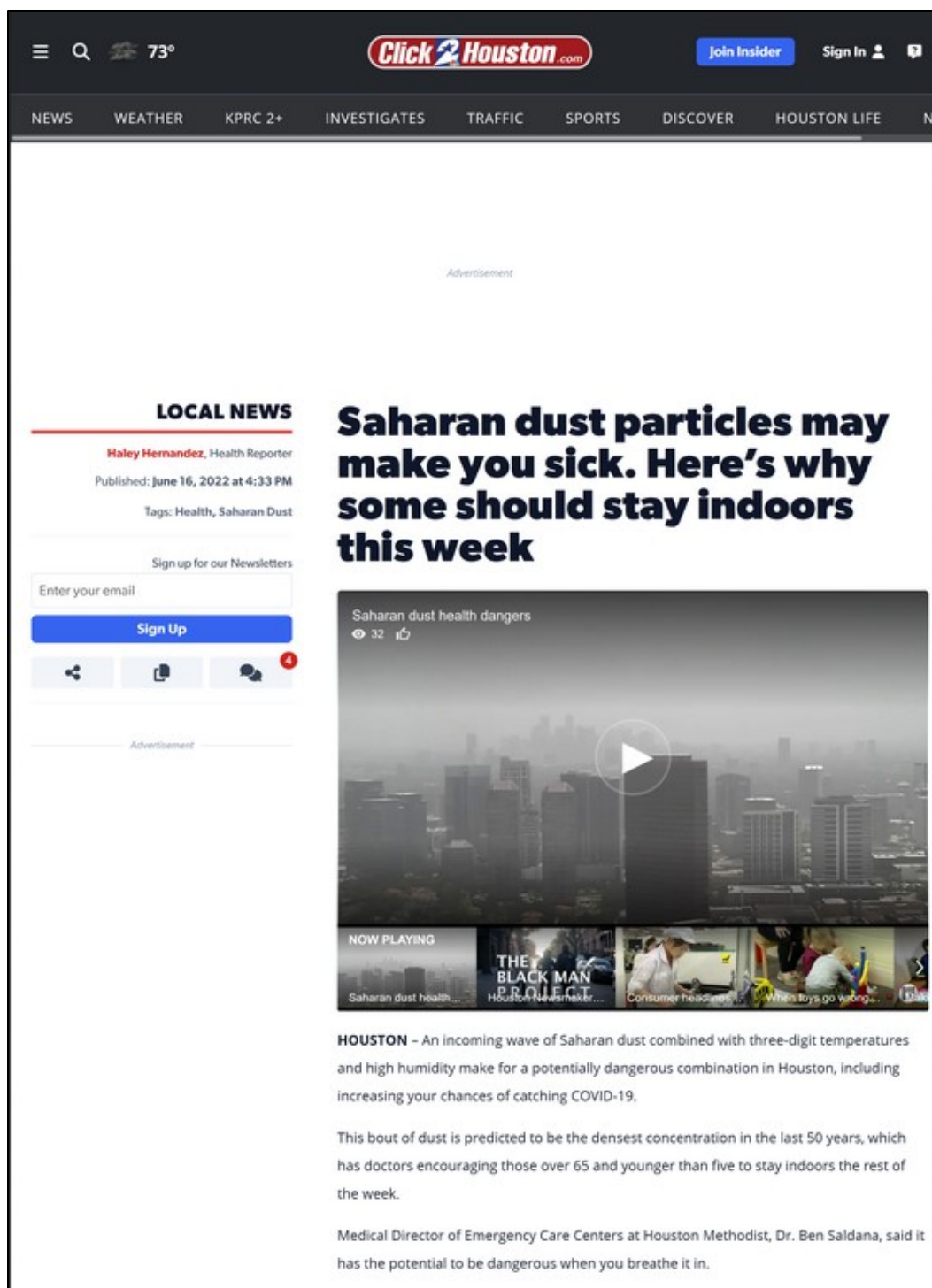


Figure C-6: KPRC News Article on Saharan Dust Affecting Human Health, Reported on June 16, 2022⁶

⁶ <https://www.click2houston.com/news/local/2022/06/16/saharan-dust-particles-may-make-you-sick-why-some-should-stay-indoors-this-week/>

C.4: GROUP 4 - JULY 16 AND JULY 17, 2022

Table C-4: TCEQ Forecast Discussions for July 16, 2022 and July 17, 2022

EE Date	Site Name(s)	Summary of Applicable Information
7/16/2022	Port Arthur Memorial School	The moderate density plume of Saharan dust will continue spreading inland through Texas, possibly impacting spots at varying intensities generally along and south of a line from Del Rio to Waco to Beaumont, with the highest concentrations remaining along the lower Texas coast.
7/17/2022	Port Arthur Memorial School	The Saharan dust is expected to continue to build as it spreads from south to north, possibly impacting most parts of the state with the exception of Far West Texas and the upper Texas panhandle.

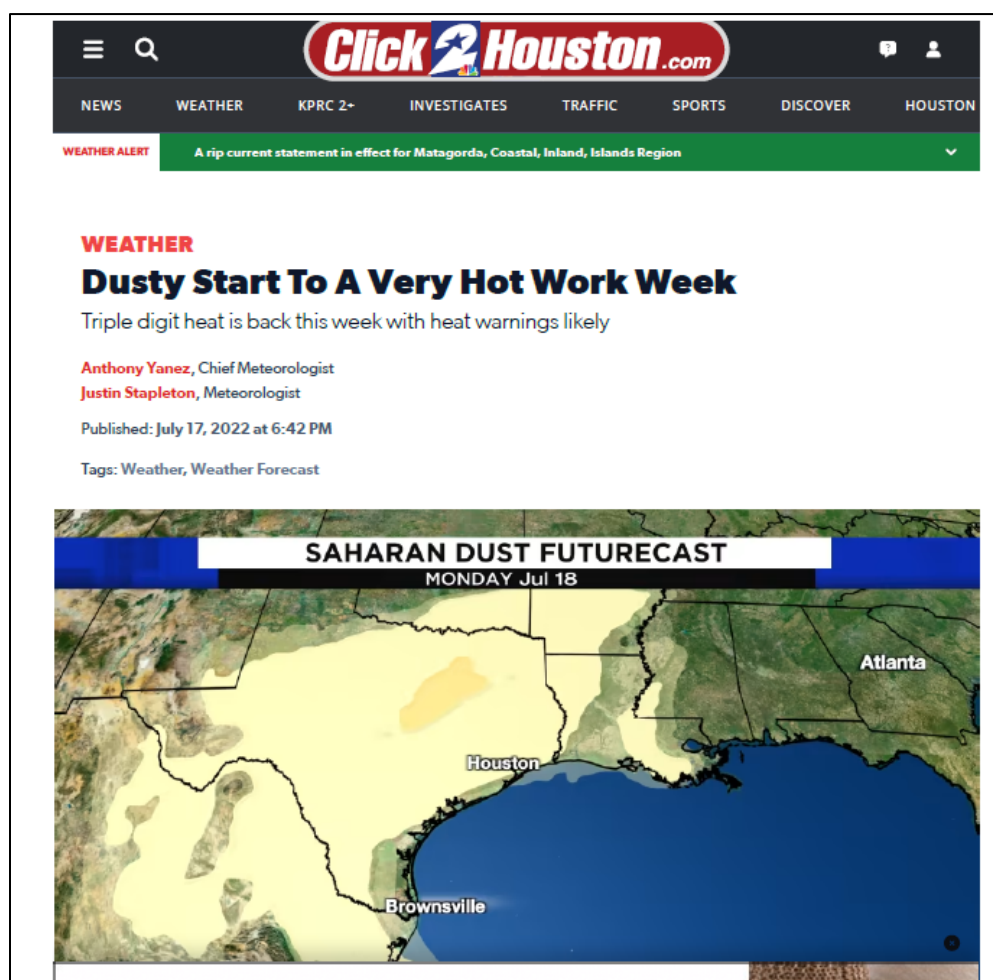


Figure C-7: KPRC News Articles on Saharan Dust Bringing Hazy Skies and Reduced Air Quality in Texas, Reported on July 17, 2022⁷

⁷ <https://www.click2houston.com/weather/2022/07/17/hotter-drier-weather-is-headed-our-way/>

C.5: GROUP 5 – SEPTEMBER 22 AND SEPTEMBER 23, 2022**Table C-5: TCEQ Forecast Discussions for September 22, 2022, and September 23, 2022**

EE Date	Site Name	Summary of Applicable Information
9/22/2022	Port Arthur Memorial School	Seasonal fires with associated residual smoke across portions of East Texas and the Southeast U.S. in addition to continental haze May continue to contribute to the overall fine particulate background levels across the eastern two-thirds of the state.
9/23/2022	Port Arthur Memorial School	Seasonal fire activity across the Southeast U.S. and East Texas, in addition to continental haze over the more urban areas in East and Southeast, with highest concentrations across East and Southeast Texas.

C.6: GROUP 6 – FEBRUARY 27 AND FEBRUARY 28, 2023**Table C-6: TCEQ Forecast Discussions for February 27, 2023, and February 28, 2023**

EE Date	Site Name	Summary of Applicable Information
2/27/2023	Port Arthur Memorial School	Heavy amounts of suspended fine particulate matter kicked up from an intense dust storm as a cold front moved over New Mexico, Northern Mexico, and Texas are still lingering over the southern Texas Panhandle as well as Far West, North Central, South Central, and East Texas. Thin density smoke/aerosols from seasonal fires and industrial activity in southern Mexico, Central America, and Cuba are filtering over the coastal bend of Texas and expanding over Southeast Texas, South Texas, and possibly mixing with some of the dust aerosols over South Central and East Texas, contributing towards elevated fine particulate levels.
2/28/2023	Port Arthur Memorial School	The cold front stalled over southeast Texas. Southerly winds associated with the transitioning frontal boundary will continue to filter residual smoke/aerosols from seasonal fires and industrial activity in southern Mexico, Central America, and Cuba over the eastern two-thirds of the state. Light amounts of patchy residual smoke associated with seasonal fires across portions of South and Southeast Texas as well as the coastal bend will also contribute to slightly higher fine particulate background levels. Meanwhile, light fine particulates from the dust storm on Sunday are lingering over East and Southeast portions of the state and is contributing towards the elevated PM _{2.5} levels.

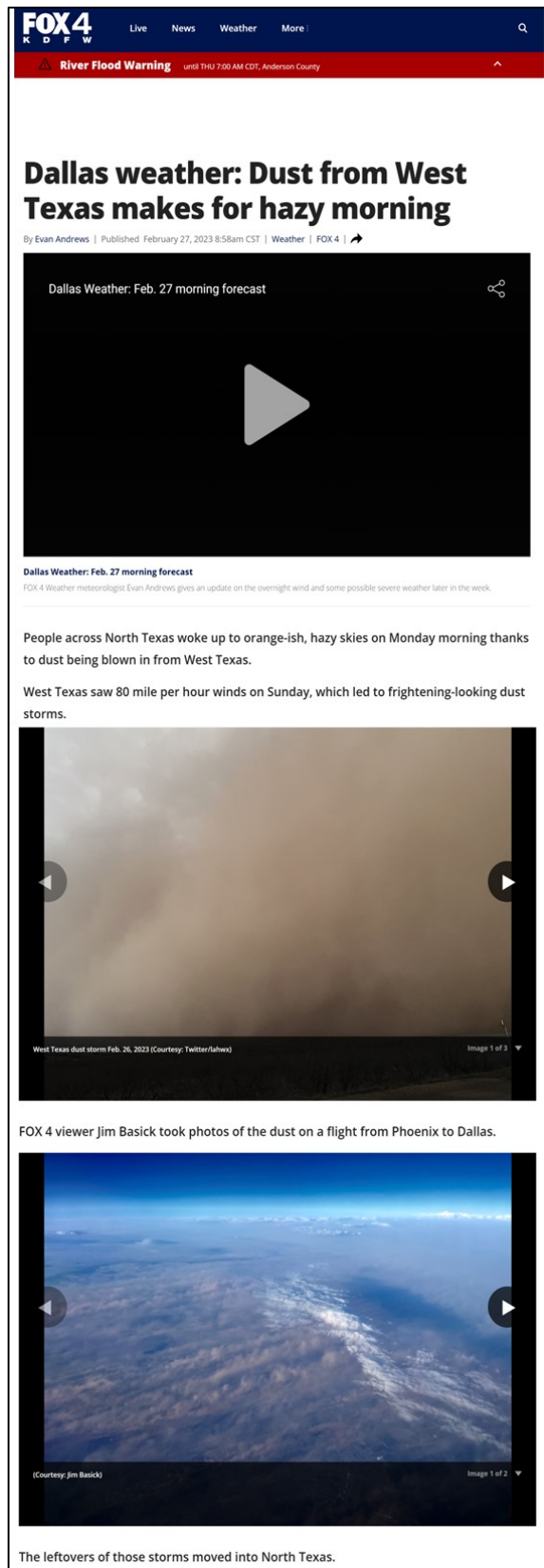


Figure C-8: FOX4 News Article on Dust Storm from West Texas, Reported on February 27, 2023

Texas Standard for Feb. 28, 2023: Dust storms and dirt worsen air quality throughout the state

A dust storm blew through the Texas high plains last week, and winds then carried that dust due east to the Dallas-Fort Worth area, dirtying cars and dropping air quality. Space City Weather managing editor Matt Lanza shares the latest.



Texas Standard: Full show
February 28, 2023



By Texas Standard | February 28, 2023 8:34 am
[Texas Standard Original, Whole Shows](#)



Here are the stories on Texas Standard for Tuesday, Feb. 28, 2023:

Dust storms and dirt worsen air quality throughout Texas

A dust storm blew through the Texas high plains last week, and winds then carried that dust due east to the Dallas-Fort Worth area, dirtying cars and dropping air quality on Monday. Space City Weather managing editor Matt Lanza has more, including whether the worst has passed.

Figure C-9: Texas Standard Article on Dust Storm in Texas, Reported on February 28, 2023

C.7: GROUP 7 – MARCH 5, 2023**Table C-7: TCEQ Forecast Discussions for March 5, 2023**

EE Date	Site Name	Summary of Applicable Information
3/5/2023	Port Arthur Memorial School	Depending on the amount of seasonal burning activity across portions of South Texas, Southeast Texas, and the coastal bend, southerly winds may continue to bring light residual smoke combined with slightly elevated urban fine particulate background levels.

C.8: GROUP 8 – MAY 22, MAY 23, MAY 24, MAY 26, AND MAY 27, 2023**Table C-8: TCEQ Forecast Discussions for May 22, May 23, May 24, May 26, and May 27, 2023**

EE Date	Site Name	Summary of Applicable Information
5/22/2023	Port Arthur Memorial School	Fine particulate levels associated with residual smoke from the large wildfires in Canada are continuing to dissipate across Central, North Central, and Northeast Texas. A large area of thin density smoke from burning activity along with a few wildfires in Mexico and northwestern Central America is expanding over portions of Deep South Texas and the southern coastal bend of Texas.
5/23/2023	Port Arthur Memorial School	Satellite imagery shows residual smoke from the large wildfires in Canada is lingering in higher quantities over the state than previously expected. These fine particulates are mixing with other PM _{2.5} from building urban fine particulate levels and continental haze associated with light winds and limited vertical mixing. Light residual smoke from burning activity and wildfires in Mexico and northwestern Central America is filtering over Deep South Texas and the southern coastal bend.
5/24/2023	Port Arthur Memorial School	Light winds and limited vertical mixing, preventing fine particulate dispersion of the residual smoke particles from the wildfires in Canada and urban fine particulate levels and continental haze are forecast to keep PM _{2.5} levels elevated across the eastern two-thirds of the state. Residual smoke from the burning activity in Mexico and northwestern Central America is expected to persist across portions of South Texas and the southern coastal bend of Texas.
5/26/2023	Port Arthur Memorial School	Fine particulates are forecast to raise PM _{2.5} levels at various intensities across most of the state, due to a mixture of light lingering smoke from the wildfires in Canada, residual smoke associated with seasonal fire activity across portions of the Lower Mississippi River Valley, residual smoke from the burning activity in Mexico and northwestern Central America expanding from the south and west, and urban fine particulate background levels associated with continental haze from light winds.

EE Date	Site Name	Summary of Applicable Information
5/27/2023	Port Arthur Memorial School	Model guidance has a dense plume of incoming fine particulate levels associated with residual smoke from wildfires in Canada from over the Midwest and Southeast U.S. to mix with urban fine particulate background levels associated with continental haze over most of Texas with the exception of Far West Texas, the Big Bend region, South Texas, and the Rio Grande Valley. Residual smoke from burning activity in Mexico and northwestern Central America is forecast to filter over Far West Texas, the Big Bend region, South Texas, and the Rio Grande Valley. Model guidance indicates that residual smoke associated with seasonal fire activity across portions of the Lower Mississippi River Valley will contribute to fine particulate background levels over East and Southeast Texas.

C.9: GROUP 9 – JUNE 19 AND JUNE 20, 2023

Table C-9: TCEQ Forecast Discussions for June 19, 2023, and June 20, 2023

EE Date	Site Name	Summary of Applicable Information
6/19/2023	Port Arthur Memorial School	Westerly winds are expected west of the dryline as mostly southerly flow will prevail to the east, continuing the transport of moderate density residual smoke from widespread seasonal burnings and industrial activities across southern Mexico and Central America over the eastern two-thirds of the state. Slightly increased urban fine particulate background levels associated with continental haze are filtering over the eastern portion of the state. A weak pulse of Saharan dust is expected to begin to reach the Texas coastline and contribute light amounts of fine particulate matter over coastal areas overnight.
6/20/2023	Port Arthur Memorial School	Westerly and northerly winds are expected west of the dryline and mostly southerly windflow to the east of the dryline, continuing to transport light to moderate density residual smoke from widespread seasonal burnings and industrial activities across Mexico and Central America over the eastern two-thirds of the state. Slightly increased urban fine particulate background levels associated with continental haze are expected to filter over the eastern portion of the state. Elevated relative humidity levels east of the dryline will contribute to the increase of fine particulate levels. A very weak pulse of Saharan dust is expected to push inland but stay primarily over coastal areas of the state.

WEATHER

How Mexico's agriculture burn affects Austin local weather

by: Rich Segal

Posted: Jun 14, 2023 / 04:50 PM CDT

Updated: Jun 14, 2023 / 05:20 PM CDT

TRACKING SMOKE

WEDNESDAY 4:00PM

0:26 / 1:46

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AUSTIN (KXAN) — The [haze happens every spring](#) and it can make you feel bad.

The sky loses that beautiful azure, blue hue. Though its occurrence doesn't originate in the Austin area, if the wind is blowing just right, Central Texas and a good deal of the state will still see the haze's effects.

[| Why is the sky so hazy in Austin? >](#)

The Texas Commission On Environmental Quality attributes this recent haze to "a good amount of atmospheric moisture" helping to partially contribute to the hazy sky.

Figure C-10: KXAN News Article on Hazy Weather due to Agricultural Burning in Mexico, Reported on June 14, 2023⁸

⁸ <https://www.kxan.com/weather/how-mexicos-agriculture-burn-affects-austin-local-weather/>

SAN ANTONIO NEWS | WEATHER

Smoke from Mexican agricultural fires cause haze in San Antonio

Agricultural burns are the source of the smoke.

By **Warren Brown**, Digital Opinion Producer
Updated June 15, 2023 7:49 p.m.

Hazy skies in San Antonio are a result of drifting smoke from agricultural fires in Mexico. Courtesy Texas Department of Transportation

Listen Now:

Smoke from Mexican agricultural fires cause haze in San Antonio

About 1 Minute

1x

Everit

Smoke drifting across Texas is casting a haze across skies in San Antonio and contributing to issues with air quality. Agricultural fires burning in Mexico are the source of smoke, and the controlled blazes are done to clear ground before sowing crops, according to the Climate & Clean Air Coalition.

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Figure C-11: MySanAntonio News Article on Hazy Skies in San Antonio Due to Agricultural Fires in Mexico, Reported on June 15, 2023⁹

C.10: GROUP 10 – JULY 15 THROUGH JULY 17, 2023

Table C-10: TCEQ Forecast Discussions for July 15, 2023, through July 17, 2023

EE Date	Site Name	Summary of Applicable Information
7/15/2023	Port Arthur Memorial School	Thin density smoke associated with the Canadian wildfires is expected to slightly increase fine particulate PM _{2.5} background levels across the state, impacts should be minimal. Fine particulate matter associated with a light to moderate density plume of Saharan dust are forecast to cover much of the state, with the highest concentrations across South Texas and the coastal bend of Texas. Elevated relative humidity levels across the state




⁹ <https://www.mysanantonio.com/news/weather/article/haze-in-san-antonio-18152127.php>


EE Date	Site Name	Summary of Applicable Information
		are expected to contribute to slightly elevating fine particulate background levels.
7/16/2023	Port Arthur Memorial School	A weak cold front is forecast to slow and should help quell the spread and intrusion of the pulse of residual smoke associated with the Canadian wildfires towards Texas. Saharan dust will continue spreading through Texas reaching most spots and impacting areas at varying intensities. Elevated relative humidity levels across the state are expected to continue contributing towards slightly elevating fine particulate background levels.
7/17/2023	Port Arthur Memorial School	The plume of African dust over Texas is forecast to begin weakening and dissipating, with model guidance indicating the highest density concentrations to be primarily east and south of a line from Eagle Pass to Nacogdoches. Models indicate that very light residual smoke associated with the Canadian wildfires could linger over a majority of the state in low concentrations.

WEATHER

Saharan dust plume arrives in Houston, another health risk as temperatures approach 100

By **Justin Ballard**, Newsroom meteorologist
Updated July 12, 2023 4:41 p.m.



12 Jul 2023 16:50Z - NOAA NESDIS/STAR - GOES-East - GEOCOLOR Composite - True

Saharan dust can be seen over the Caribbean Sea on visible satellite imagery from Wednesday, July 12, 2023.
National Oceanic and Atmospheric Administration

Did you know that one of the largest deserts in the world has a connection to Houston's summertime weather? A plume of Saharan dust is forecast to arrive in Southeast Texas later this week and several additional surges could follow in the weeks to come.

Most Popular

1. Can the Texas Lottery recover cash from an unfair \$95 million jackpot?
2. 16 Houston billionaires make Forbes list of world's wealthiest people

Figure C-12: Houston Chronicle News Article on Saharan Dust Plume Arriving in Southeast Texas, Reported on July 12, 2023¹⁰

¹⁰ <https://www.houstonchronicle.com/news/houston-weather/article/saharan-dust-plume-houston-weather-18196882.php>

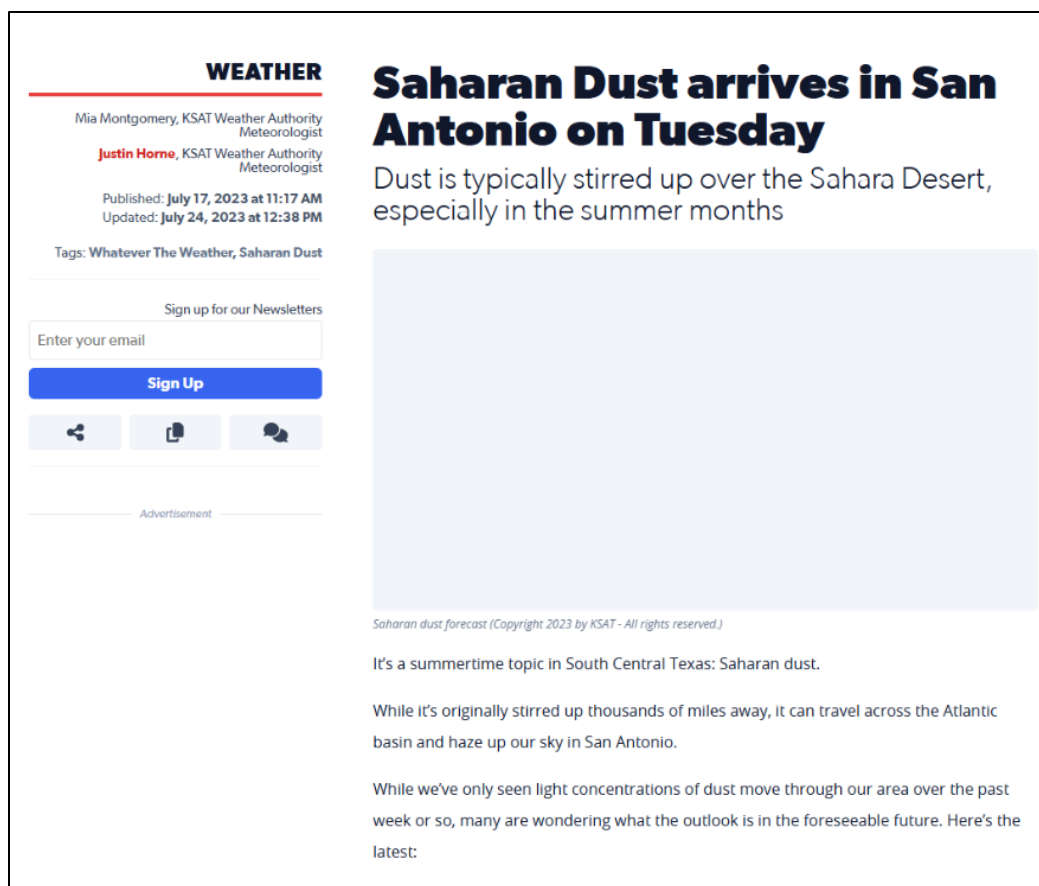


Figure C-13: KSAT News Article on Saharan Dust Arriving in South Central Texas, Reported on July 17, 2023¹¹

C.11: GROUP 11 – JULY 19, 2023

Table C-11: TCEQ Forecast Discussions for July 19, 2023

EE Date	Site Name	Summary of Applicable Information
7/19/2023	Port Arthur Memorial School	Some areas along the coast and in south Texas may experience very light amounts of Saharan dust. Light residual smoke from localized burnings across the southern and eastern part of the state could provide a source of fine particulate matter in the immediate surrounding areas, as moisture transport from the Gulf keeps relative humidity elevated.

C.12: GROUP 12 – JULY 26 AND JULY 29, 2023

Table C-12: TCEQ Forecast Discussions for July 26, 2023, and July 29, 2023

EE Date	Site Name	Summary of Applicable Information
7/26/2023	Port Arthur Memorial School	The plume of Saharan dust is expected to build as it spreads northward and westward, with light patches

¹¹ <https://www.ksat.com/weather/2023/07/17/saharan-dust-what-is-the-latest-outlook-and-how-does-it-get-to-san-antonio/>

EE Date	Site Name	Summary of Applicable Information
		possibly extending to cover most of the state, with the highest concentrations over South, Central, Southeast Texas and along the coastal bend of Texas and the Rio Grande Valley.
7/29/2023	Port Arthur Memorial School	While the plume of Saharan dust is expected to linger over the state, model guidance continues to be bullish on the fine particulate levels associated with this source will begin to slightly improve with lower concentrations for South Texas, Central Texas, North Central Texas, and along the coastal bend of Texas as the fine particulates disperse. Depending on the amount of small, isolated burning activities across East and Central Texas, light residual smoke could slightly increase fine particulate levels in parts of these regions of the state as well as building continental haze over East and North Central Texas too.

Saharan dust is returning to San Antonio again. Here's what to know.

Texans can expect to see hazy skies beginning Thursday evening

By **Jennifer Flores**, *Digital Content Producer*

Updated July 26, 2023 10:07 a.m.



Saharan Dust arrived in South-Central Texas on Wednesday afternoon in New Braunfels.
US National Weather Service Austin-San Antonio Texas

The Saharan dust is returning again to Texas, and San Antonians can expect to see hazy skies this week. If you are wondering what this means for you and your family, here is what to expect and how you can prepare.

Figure C-14: MySanAntonio News Report on Saharan Dust Returning to Texas, Reported on July 26, 2023¹²

¹² <https://www.mysanantonio.com/news/weather/article/saharan-dust-cloud-texas-18194585.php>

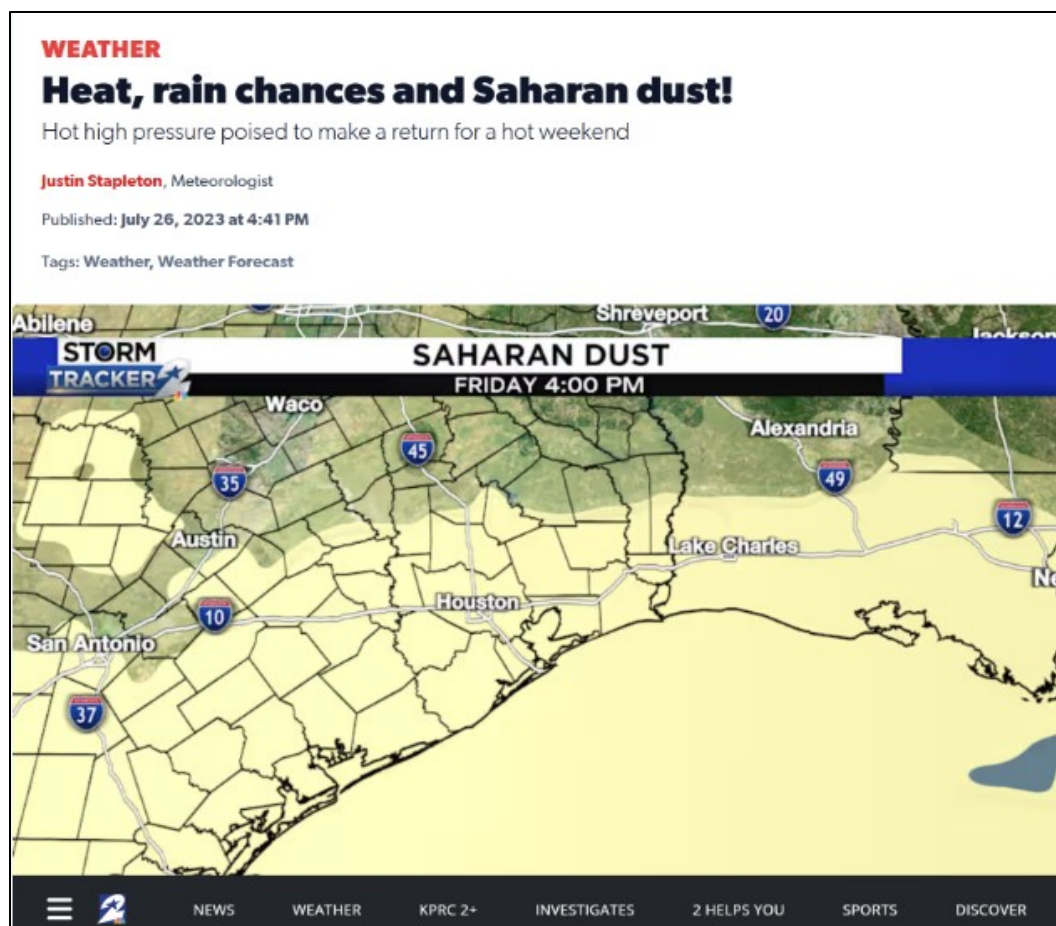


Figure C-15: KPRC News Article on Saharan Dust Moving into Southeast Texas Bringing Hazy Skies, Reported on July 26, 2023¹³

¹³ <https://www.click2houston.com/weather/2023/07/26/heat-rain-chances-and-saharan-dust/>

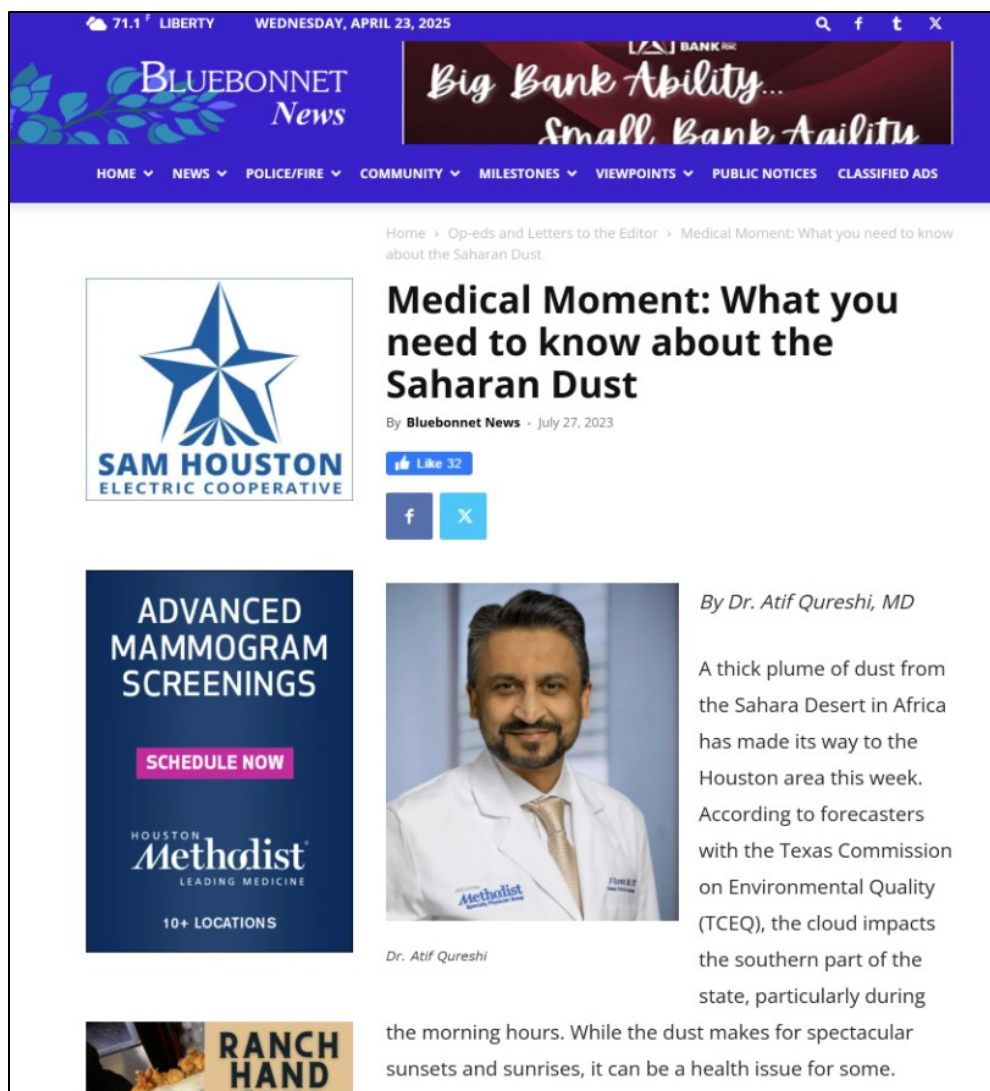


Figure C-16: Bluebonnet News Article on the Health Concerns Associated with Saharan Dust Affecting Air Quality in Southeast Texas, Reported on July 27, 2023¹⁴

C.13: GROUP 13 – AUGUST 2, 2023

Table C-13: TCEQ Forecast Discussions for August 2, 2023

EE Date	Site Name	Summary of Applicable Information
8/2/2023	Port Arthur Memorial School	Enhanced fine particulate background production because of the continued presence of continental haze could remain a factor in North, East, and Southeast Texas, as elevated relative humidity facilitates increased PM _{2.5} concentrations. Depending on the amount of seasonal burning activity across portions of the Lower Mississippi River Valley, light amounts of residual smoke may continue to filter over parts of Southeast and East Texas.

¹⁴ <https://bluebonnetnews.com/2023/07/27/medical-moment-what-you-need-to-know-about-the-saharan-dust/>

C.14: GROUP 14 – AUGUST 24, AUGUST 25, AUGUST 28, AUGUST 31, SEPTEMBER 1, AND SEPTEMBER 2, 2023

Table C-14: TCEQ Forecast Discussions for August 24, August 25, August 28, August 31, September 1, and September 2, 2023

EE Date	Site Name	Summary of Applicable Information
8/24/2023	Port Arthur Memorial School	Fairly heavy density smoke from the Tiger Island Fire in Southwest Louisiana is forecast to expand over Southeast Texas. Additionally, a large area of lighter density smoke from wildfires in western Canada, the Northwest U.S., and northern California is extending across Canada, most of the U.S., the northern/central Gulf, and northern Mexico but the majority of the smoke over Texas should remain aloft. Also, a light density plume of Saharan dust is moving over the coastal bend of Texas, deep South Texas, South Central and Southeast Texas, providing these regions with additional sources of fine particulate matter.
8/25/2023	Port Arthur Memorial School	Depending on the burning activity from the Tiger Island Fire in Southwest Louisiana, model guidance suggests that moderate to heavy density smoke may filter and expand over the majority of Southeast Texas, with PM _{2.5} concentrations possibly spiking to the "Unhealthy for Sensitive Groups" range at times during the morning and afternoon hours primarily in parts of the Beaumont-Port Arthur and Tyler-Longview areas. Additionally, a large area of lighter density smoke from the wildfires in western Canada, the Northwest U.S., and northern California is expected to persist over the state, however most of the smoke should remain aloft. The light density plume of Saharan dust is expected to weaken and dissipate over the coastal bend of Texas, deep South Texas, South Central and Southeast Texas.
8/28/2023	Port Arthur Memorial School	Light amounts of residual smoke from the wildfires in western Canada, the Northwest U.S., and northern California combined with light residual smoke from east Texas and western Louisiana are forecast continue to influence PM _{2.5} concentrations in lower concentrations across the state. A weak cold front stretching from South Central and Southeast Texas could be a focal point for pollutant convergence; however, the buildup of fine particulate matter is expected to be tempered due to an advancing shortwave trough, increasing vertical mixing.
8/31/2023	Port Arthur Memorial School	Smoke from wildfire activity across wide portions of western Canada covered most of Canada and the U.S. with the exception of parts in the western U.S. Moderate smoke has engulfed most of the southern U.S. and Gulf with elevated surface PM observed in most areas in the eastern two thirds of the state.

EE Date	Site Name	Summary of Applicable Information
9/1/2023	Port Arthur Memorial School	Moderate to dense smoke has been observed extending from Alberta and Northwest Territories to western Quebec in Canada as well as most of the Great Plains as far south as Texas. This smoke also was observed over the western Gulf and parts of Mexico, mixing with smoke from local agricultural burning in those areas. A wind shift toward the south could aid in moisture advection from the Gulf, boosting fine particulate formation in the coastal and southern regions, while continental haze continues to also play a role in the eastern half of the state.
9/2/2023	Port Arthur Memorial School	Residual smoke emanating from the Canadian wildfires as well as the seasonal burnings in the southeastern U.S. and Lower Mississippi Valley is anticipated to continue being transported, and affecting, pretty much all of Texas, while increased relative humidity contributes to higher fine particulate concentrations.

TIMELINE: This is how the Tiger Island Fire unfolded, hour by hour

Published 5:04 pm Friday, August 25, 2023

By Emily Burleigh



Flames can be seen behind near a store at the corner of La. 27 and La. 110. (Sara McDaniel / Special to the American Press)

Monday, Aug. 21

Red Flag Warnings went into effect for Southwest Louisiana due to extreme drought conditions, gradient winds, low humidity and dry vegetation. These warnings indicate extreme fire danger. During Red Flag Warnings, it is advised that no outdoor fires are lit and that citizens treat ignition sources — mufflers, cigarettes, outdoor welding, grinding or cutting — with extreme caution.

Figure C-17: American Press News Article on the Tiger Island Louisiana Wildfire Mentioning High Winds Exacerbating Fire Spread, Reported on August 25, 2023¹⁵

¹⁵ <https://americanpress.com/2023/08/25/timeline-this-is-how-the-tiger-island-fire-unfolded-hour-by-hour/>

Multiple Large Fires in Louisiana & Texas



W BEAUREGARD PARISH, LA
TIGER ISLAND FIRE
LOUISIANA OFFICE OF
STATE FIRE MARSHAL

Top Stories



25 Aug 2023 10:20 PM

The large Tiger Island Fire broke out SW of Fort Johnson (Polk), LA growing to 30k acres and prompting evacuations that remain in effect as of Friday. The fire was named for the hunting club it started near on Tuesday, but the cause is under investigation. Containment has dropped back to 50% after red flag conditions helped to spread the fire on Thursday.

Figure C-18: Weather Nation News Article on Multiple Wildfires Occurring in Louisiana and Southeast Texas, Reported on August 25, 2023

Judge declares state of disaster due to Jasper County wildfire



A judge has declared a state of disaster for Jasper County due to the Shearwood Creek Wildfire.

By [Brittany Hunter](#)

Published: Aug. 26, 2023 at 12:13 PM CDT



JASPER COUNTY, Texas (KTRE) - A judge has declared a state of disaster for Jasper County due to the Shearwood Creek Wildfire.

Figure C-19: KTRE News Article on the Declaration of a State of Disaster in Jasper County, Texas due to the Shearwood Creek Wildfire in Southeast Texas, Reported on August 26, 2023¹⁶

¹⁶ <https://www.ktre.com/2023/08/26/judge-declares-state-disaster-due-jasper-county-wildfire/>

LOCAL NEWS

Large fire that threatened homes was started by resident who violated burn ban in Montgomery Co.

Brittany Taylor, Senior Digital Content Producer

Moriah Ballard, Digital Reporter

Published: **August 28, 2023** at 6:15 PM

Updated: **August 29, 2023** at 8:29 AM

Tags: Local, Montgomery County, News



Firefighters with the Montgomery County Fire Marshal's Office are battling a large fire near east of Willis. (Copyright 2023 by KPRC Click2Houston - All rights reserved.)



8

WILLIS, Texas – Firefighters with the Montgomery County Fire Marshal's Office were battling a large fire near east of Willis on Monday.

Figure C-20: KPRC News Article on a Large Resident-Caused Fire in Montgomery County Texas, Reported on August 28, 2023¹⁷

¹⁷ <https://www.click2houston.com/news/local/2023/08/28/large-fire-threatening-homes-started-by-resident-who-violated-burn-ban-in-montgomery-co-officials-say/>

Louisiana's massive Tiger Island Fire continues to burn: What to know



Greg Hilburn
Shreveport Times

Published 11:39 a.m. CT Aug. 29, 2023 | Updated 2:21 p.m. CT Aug. 29, 2023



eNewspaper: It's like the paper, only paperless.

Get a replica of the paper on your digital doorstep with eNewspaper. *Shreveport Times*

One of the largest wildfires in Louisiana history continued to burn Tuesday in Beauregard Parish having already destroyed more than 30,000 acres as emergency response personnel from across the South work to protect the most threatened town of Merryville with a command post in DeRidder.

Figure C-21: Shreveport Times News Article on the Continuation of Louisiana's Tiger Island Wildfire, Reported on August 29, 2023¹⁸

¹⁸ <https://www.shreveporttimes.com/story/news/2023/08/29/what-to-know-about-louisianas-massive-tiger-island-fire-than-continues-to-burn/70703844007/>

Wildfire in Tiger Island Louisiana burns on after leveling 30,000 acres of land

Greg Hilburn and Kayla Jimenez USA TODAY NETWORK

Published 6:25 p.m. ET Aug. 29, 2023



Texas Launches New Policy For Cars Used Less Than 50 Miles/day

Insurance Auto Advice

OPEN



Massive dusty phenomenon swirls near homes in Mayo, Florida

A large dust devil was spotted moving across a field in Mayo, Florida.

One of the largest wildfires in Louisiana history is continuing to spread and threaten rural communities.

Figure C-22: USA Today Article on the Tiger Island Wildfire, Reported on August 29, 2023¹⁹

¹⁹ <https://www.usatoday.com/story/news/nation/2023/08/29/tiger-island-louisiana-wildfire/70712699007/>



Figure C-23: Vox News Article on Multiple Wildfires Occurring in Louisiana, Reported on August 30, 2023²⁰

²⁰ <https://www.vox.com/climate/2023/8/30/23852363/louisiana-wildfires>

Orange County officials say they are battling fires on a daily basis; need burn ban followed

Published 1:29 pm Thursday, August 31, 2023

By Staff Reports



4 of 4



A Deweyville fire got close to an abandoned structure Wednesday. (Courtesy photo)

Firefighters across Orange County were busy Wednesday battling three separate fires, one of which scorched about 20 acres of land.

Figure C-24: The Orange Leader News Article on Three Separate Wildfires Burning 20 Acres of Land in Orange County, Texas, Reported on August 31, 2023²¹

²¹ <https://orangeleader.com/2023/08/31/orange-county-officials-say-they-are-battling-fires-on-a-daily-basis-need-burn-ban-followed/>

Large wildfire triggers evacuations in east Texas

By Mitchell McCluskey and Zoe Sottile, CNN

🕒 2 minute read · Published 8:19 PM EDT, Fri September 1, 2023



Smoke billows from a wildfire in Walker County, Texas. KHOU

(CNN) — A large wildfire burning across 500 acres in Huntsville, Texas, forced some parts of the city to evacuate Friday, as forecasters are predicting extremely hot weather to persist over Labor Day weekend.

Figure C-25: CNN News Article of a Large Wildfire Burning Across 500 Acres in Huntsville, Texas, Reported on September 1, 2023²²

²² <https://www.cnn.com/2023/09/01/us/huntsville-texas-wildfire-evacuations>



Figure C-26: KATC News Report of Smoke Impacting Air Quality From the Louisiana Tiger Island Wildfire, Reported on September 1, 2023²³

²³ <https://www.katc.com/news/covering-louisiana/tiger-island-fire-update-for-friday-september-1-2023>

[ENVIRONMENT](#)[HEALTH](#)[WEATHER](#)

Poor air quality from Louisiana wildfires could become more common

BY: **DREW COSTLEY, VERITE** - SEPTEMBER 3, 2023 10:00 AM



An image of a wildfire in Beauregard Parish from drone video taken Saturday, Aug. 26, 2023. (Louisiana State Police)

NEW ORLEANS — Jeff Parker stayed inside his St. Roch home as much as possible the last week of August, as people all around New Orleans reported smelling smoke in the air.

Weather forecasts reported that [smoke drifted](#) into the city's atmosphere from southwest Louisiana, where wildfires were

Figure C-27: Louisiana Illuminator News Article Highlighting Poor Air Quality due to Smoke from the Louisiana Tiger Island Wildfire, Reported on September 3, 2023²⁴

²⁴ <https://lailluminator.com/2023/09/03/louisiana-air-quality/>

C.15: GROUP 15 – OCTOBER 4, 2023**Table C-15: TCEQ Forecast Discussions for October 4, 2023**

EE Date	Site Name	Summary of Applicable Information
10/4/2023	Port Arthur Memorial School	A slow moving cold front is forecast to push through the Permian Basin by the evening hours and possibly reach parts of North Central and South Central Texas through the overnight hours. Depending on the amount of precipitation associated with the front, fine particulate background levels may slightly increase primarily over portions of East and Southeast Texas associated with some light residual smoke from the burning activities across portions of the Southeastern U.S. (including in parts of Southeast and East Texas) along with some residual smoke from the Canadian wildfires over the northern Gulf being transported over the Gulf coast states.

C.16: GROUP 16 – OCTOBER 20, 2023**Table C-16: TCEQ Forecast Discussions for October 20, 2023**

EE Date	Site Name	Summary of Applicable Information
10/20/2023	Port Arthur Memorial School	Westerly and northerly winds behind a weak cold front that is stalling and weakening across the Coastal Plains through Southeast Texas will steer light residual smoke associated with seasonal burning activities across East, Southeast, and South Central Texas as well as the Southeastern U.S. over East Texas, Southeast Texas, and along the coastal bend of Texas. Additionally, fine urban particulate matter associated with continental haze is expected to continue to be slightly elevated across the eastern two-thirds of the state.

C.17: GROUP 17 – DECEMBER 31 AND JANUARY 1, 2024**Table C-17: TCEQ Forecast Discussions for December 31, 2023, and January 1, 2024**

EE Date	Site Name	Summary of Applicable Information
12/31/2023	Port Arthur Memorial School	Depending on the small seasonal burning activities across parts of South, South Central, and East Texas, very light residual smoke combined with slightly increased urban fine particulate background levels may elevate PM _{2.5} concentrations primarily for the eastern two-thirds of the state. Additionally, locally heavy smoke from celebratory festivities including firework displays for New Years may contribute to PM _{2.5} concentrations, causing PM _{2.5} levels to increase and decrease on an hourly basis throughout the day, primarily in more urban locations and areas in the vicinity and immediately downwind of celebrations.

EE Date	Site Name	Summary of Applicable Information
1/1/2024	Port Arthur Memorial School	Depending on the timing of the cold front, elevated fine particulate matter could continue being observed during the morning and early afternoon hours as the front potentially provides a focal point for pollutant convergence, particularly for any lingering particulate matter from yesterday's festivities. Additionally, residual smoke from scattered burning activity across the South, South Central, and East regions may also be a source for fine particulates, but the intensity and coverage are not expected to have significant effects on surface concentrations as moderate winds provide adequate dispersion.

C.18: GROUP 18 – MAY 8, MAY 9, AND MAY 13, 2024

Table C-18: TCEQ Forecast Discussions for May 8, May 9, and May 13, 2024

EE Date	Site Name	Summary of Applicable Information
5/8/2024	Port Arthur Memorial School	Residual smoke from seasonal burnings and industrial activity is expected to be transported into the eastern two thirds of Texas as a cold front begins to advance southward from the Central and Southern Plains. Light smoke was observed affecting primarily the southernmost region of Texas with lighter density smoke extending along the coastal bend and Southeast region.
5/9/2024	Port Arthur Memorial School	A cold front will make its way from the North Central part of the state this morning extending from the Permian Basin to the Northeast region before arriving in South-Central Texas in the afternoon/evening. Light to moderate residual smoke was observed over Deep South Texas and along the coast with thinner density smoke extending into portions of South-Central Texas. Southerly winds ahead of the front will continue advecting residual smoke and high relative humidity into the eastern half of Texas, with northerly winds behind the front assisting in pollutant and moisture convergence near the boundary. Pollutant carryover from the previous day, light winds, and the approaching surface front has enhanced fine particulate concentrations across the eastern two thirds of Texas.

EE Date	Site Name	Summary of Applicable Information
5/13/2024	Port Arthur Memorial School	<p>Light to moderate density residual smoke from widespread seasonal fire activities throughout central-southern Mexico, the Yucatan Peninsula, Central America, and northern South America is covering the Gulf and extending over most of the state at various intensities east and south of a line from Big Bend National Park to Carthage, with the highest densities over deep South Texas and along the lower Rio Grande Valley. A very light plume of African dust may be contributing towards the elevated fine particulate matter primarily for areas in South Texas and the southern coastal bend of Texas though expected to weaken and dissipate. Elevated relative humidity levels and urban fine particulate matter from continental haze are also increasing PM_{2.5} concentrations for the eastern two-thirds of the state.</p>

Why the haze? Humidity, wildfire smoke from Mexico among reasons for milky skies this week

Minor air quality issues thanks to "trapped" air closer to the surface

By Max Crawford

Published: May 8, 2024 at 5:41 PM CDT



BRYAN, Texas (KBTX) - It seems like ever since the rain *stopped*, the haze *started*. In a lot of ways, that's true! Hazy skies have stubbornly stuck around the Brazos Valley for the greater part of the week, and will likely be with us for one more day before Thursday evening's front arrives.



Why the haze?? An inversion in the lower levels of the atmosphere is "trapping" particulate matter closer to the surface, and the added humidity is making it easier to see. (KBTX)

Figure C-28: KBTX News Article on Haze in Central Texas Due to Agricultural Burning in Mexico and Central America, Reported on May 8, 2024²⁵

²⁵ <https://www.kbtx.com/2024/05/08/why-haze-humidity-wildfire-smoke-mexico-among-reasons-milky-skies-this-week/>

Why are skies hazy across Texas? See your city's AQI this weekend

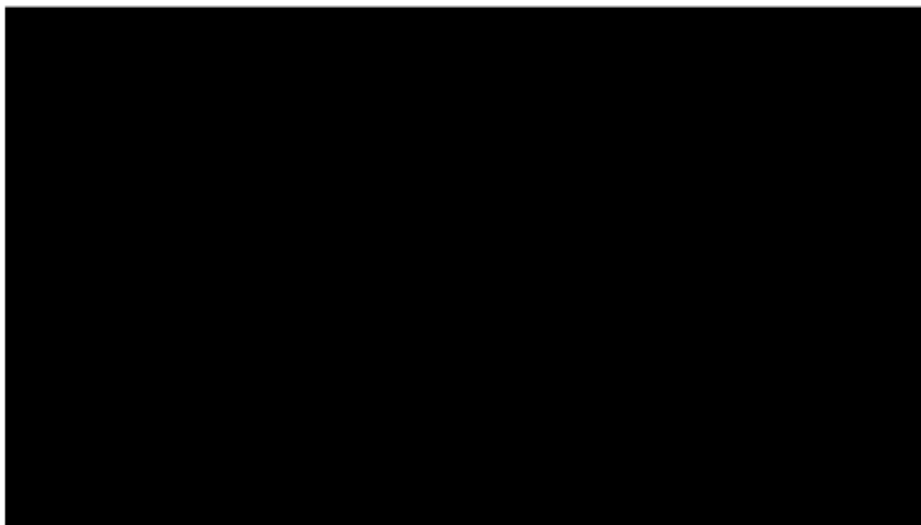
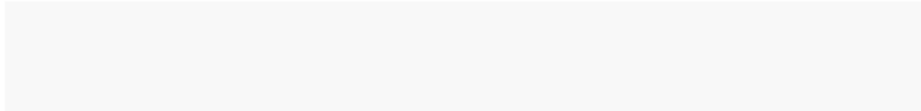
Humidity and wildfires in Mexico are bringing hazy skies across the state of Texas.



Brandi D. Addison

USA TODAY NETWORK

May 9, 2024 | Updated May 10, 2024, 12:04 p.m. CT



2024 wildfire season forecast

Bad air quality and low visibility could once again be a concern as wildfires ramp up in the United States and Canada.

Texas skies are hazy this week thanks to the tedious combination of humidity and smoke drifting from various fires.

Hazy conditions and poor air quality will remain through the weekend, according to data from AirNow.gov, the nation's official website for air quality monitoring.

Figure C-29: USA Today News Article on Smoke from Multiple Wildfires Across California, New Mexico, and Central America Affecting Texas, Reported on May 10, 2024²⁶

²⁶ <https://www.statesman.com/story/news/state/2024/05/09/air-quality-index-texas-weather-forecast-hazy-skies-aqi-near-me-map/73627354007/>

C.19: GROUP 19 – MAY 15, 2024

Table C-19: TCEQ Forecast Discussions for May 15, 2024

EE Date	Site Name	Summary of Applicable Information
5/15/2024	Port Arthur Memorial School	Light to moderate density residual smoke from seasonal fire activities throughout central-southern Mexico, the Yucatan Peninsula, Central America, and northern South America will linger mainly over South Texas, the lower Rio Grande Valley as well as the lower coastal bend of Texas, and portions of Southeast and South Central Texas. Very light residual smoke from the large wildfires in Canada, specifically British Columbia and the Northwest Territories, is lingering over portions of North Central and Northeast Texas and slightly contributing towards elevating PM _{2.5} concentrations in these regions. Slightly elevated relative humidity levels and urban fine particulate background levels from continental haze will continue contributing towards raising fine particulate levels for most of the state with the exception of Far West Texas.



Figure C-30: Fox Weather News Article on Smoke from Raging Fires in Mexico Affecting South Texas, Reported on May 17, 2024²⁷

²⁷ <https://www.foxweather.com/weather-news/smoke-alert-map-south-us-forecast>

C.20: GROUP 20 – MAY 24 AND MAY 25, 2024

Table C-20: TCEQ Forecast Discussions for May 24, 2024, and May 25, 2024

EE Date	Site Name	Summary of Applicable Information
5/24/2024	Port Arthur Memorial School	Higher density residual smoke from widespread seasonal burning activities throughout central-southern Mexico, the Yucatan Peninsula, and Central America along with aerosols from industrial sources in Mexico are beginning to filter over deep South Texas and the lower coastal bend of Texas. Moderate density smoke is expanding over the South Central, Southwest, North Central, and Southeast Texas. Elevated relative humidity levels are contributing towards elevating PM _{2.5} concentrations for the eastern two-thirds of the state.
5/25/2024	Port Arthur Memorial School	Moderate to higher density residual smoke from the seasonal burning activities throughout central-southern Mexico, the Yucatan Peninsula, and Central America along with aerosols from industrial sources in Mexico are expected to continue filtering over deep South Texas and the lower coastal bend of Texas while expanding over the lower Rio Grande Valley, South Central as well as North Central Texas, with lighter amounts over the Big Bend region, the Permian Basin, Southeast and Northeast Texas. Elevated relative humidity levels will contribute towards elevating PM _{2.5} concentrations, for the eastern two-thirds of the state.

WEATHER

Why the hazy skies in Texas lately? Agricultural burning in Mexico, Central America partially to blame

Updated: May. 27, 2024, 11:43 p.m. | Published: May. 27, 2024, 6:01 p.m.



Advertisement

Hazy skies are shown over downtown Houston on Friday, June 26, 2020. The city and other Texas metros are experiencing hazy skies due to smoke from agricultural burns in Mexico and Central America. AP Photo/David J. Phillip

Figure C-31: Lonestar Live News Article on Hazy Conditions in Central and East Texas Due to Fires in Mexico and Central America, Reported on May 27, 2024²⁸

²⁸ <https://www.lonestarlive.com/weather/2024/05/why-the-hazy-skies-lately-in-texas-agricultural-burning-in-mexico-central-america-partially-to-blame.html>

WEATHER

Here's why you're seeing hazy skies around the Houston area

Smoke from agricultural fires is moving to the north. It made it into Texas and even the Great Plains.



Credit: KHOU 11

This image of hazy skies over Houston is from the Galleria area.

Author: KHOU 11 Staff

Published: 2:49 PM CDT May 27, 2024

Updated: 4:26 PM CDT May 27, 2024



Figure C-32: KHOU News Article on Hazy Conditions Resulting from Agricultural Fire Smoke in Mexico and Central America Affecting Southeast Texas, Reported on May 27, 2024²⁹

²⁹ <https://www.khou.com/article/weather/houston-texas-haze-smoke-sky/285-c4de87ee-a873-4b4f-9424-ab25a70ce7b6>

At least 23 killed in long-weekend swarm of severe weather

Dallas and Houston were smacked by high winds Tuesday after tornado-bearing storms gouged the landscape across multiple states.

by BOB HENSON
MAY 28, 2024



A brief but strong EF3 tornado that struck near Celina, Texas, on the night of May 25, 2024, sent a fifth-wheel trailer into this heavily damaged home, according to longtime tornado surveyor Tim Marshall (left), a consultant to the National Weather Service. Marshall noted that in both this tornado and the much-longer-track EF3 tornado that struck Valley View, many newly built homes were severely damaged. "Typical failures occurred where wall studs were straight nailed to wall bottom plates and where rafters were toenailed to wall top plates. Straps would have helped. Garage doors (rollers) also were a problem." (Image credit: Courtesy Tim Marshall)

Miserably hot and humid air — for any time of year, much less May — continued to juice the southern U.S. atmosphere over Memorial Day weekend. The record-

Figure C-33: Yale Climate Connections News Article on High Winds, Severe Storms, and Multiple Tornado Reports in Southeast Texas, Reported on May 28, 2024³⁰

C.21: GROUP 21 – JULY 1 AND JULY 3, 2024

Table C-21: TCEQ Forecast Discussions for July 1, 2024, and July 3, 2024

EE Date	Site Name	Summary of Applicable Information
7/1/2024	Port Arthur Memorial School	A large area of light to potentially moderate density smoke attributed to widespread seasonal fire activity throughout Central and Southern Mexico and Central America was observed today from the Gulf into a large portion of the Central United States. Southerly winds will continue to transport moisture northward and while fine particulate matter is expected to be elevated across the eastern two thirds of the state.

³⁰ <https://yaleclimateconnections.org/2024/05/at-least-23-killed-in-long-weekend-swarm-of-severe-weather/>

EE Date	Site Name	Summary of Applicable Information
7/3/2024	Port Arthur Memorial School	An area of predominantly light density smoke was observed today circulating around the southeast and portions of the coastal bend and southeast Gulf Coast of Texas. The edge of the Saharan dust plume that was initially expected earlier in the week could affect portions of the southern and southeast coast as a high-pressure center tracks farther eastward into the Gulf, however, satellite imagery indicates any effects will likely be minimal.

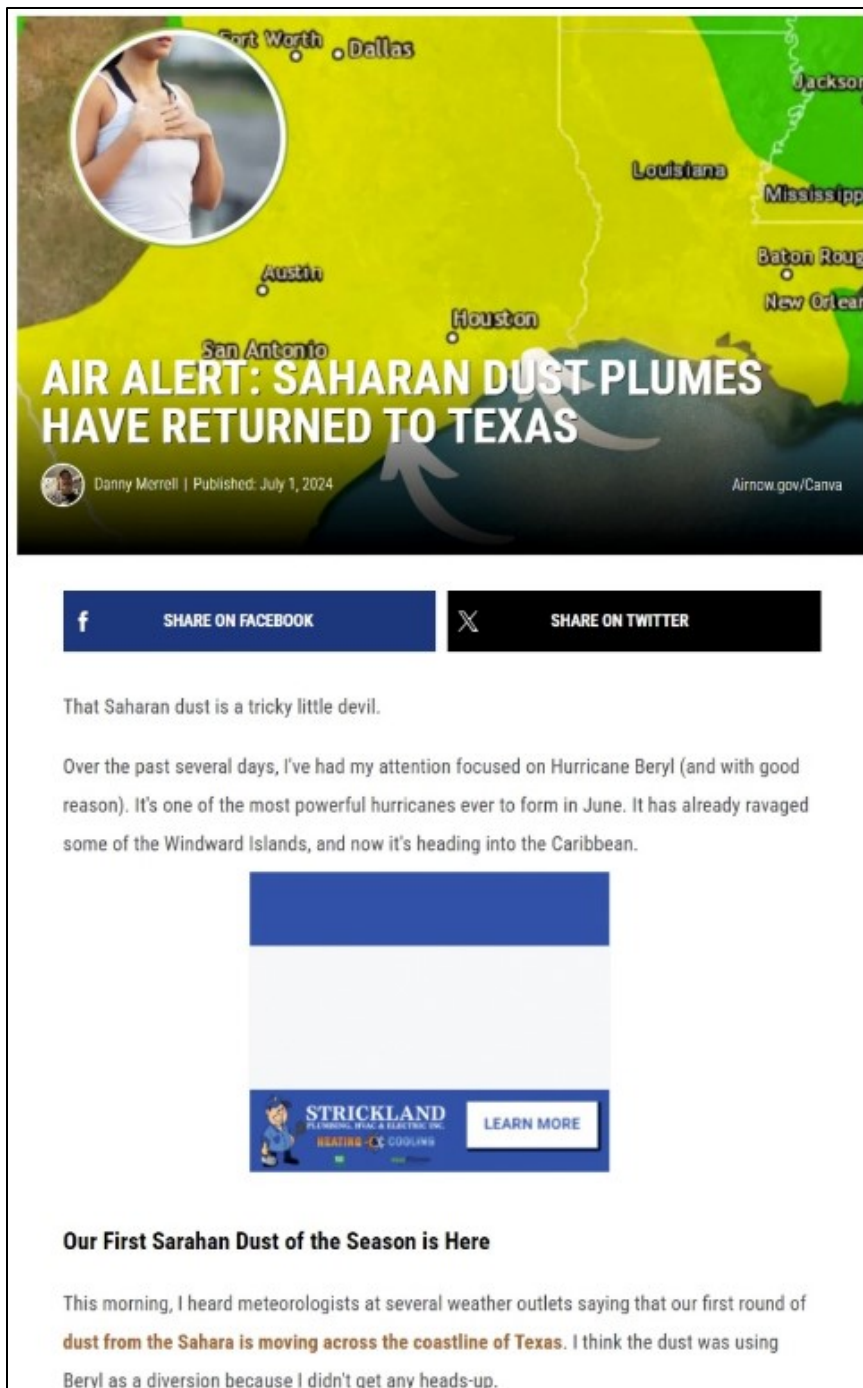
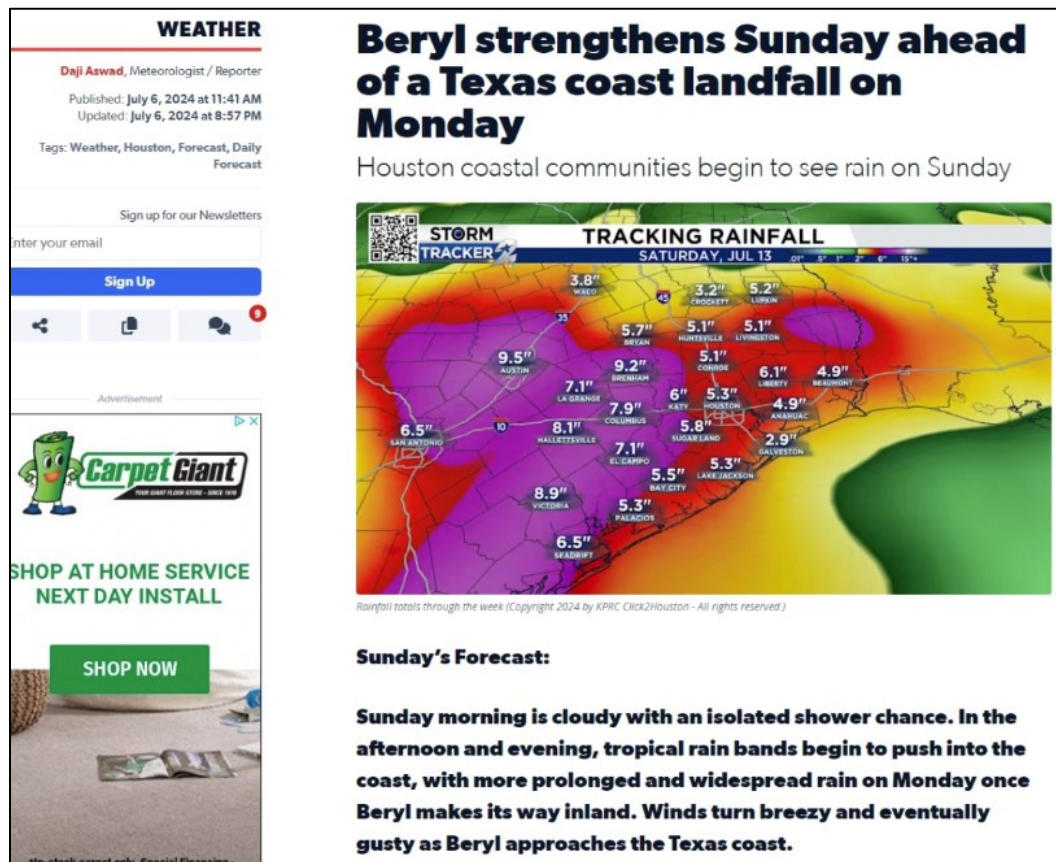


Figure C-34: KICKS 105 News Article on Saharan Dust Moving Along the Coastline of Texas, Reported on July 1, 2024³¹

³¹ <https://kicks105.com/saharan-dust-invades-texas/>

Table C-22: TCEQ Forecast Discussions for July 6, 2024

EE Date	Site Name	Summary of Applicable Information
7/6/2024	Port Arthur Memorial School	Depending on the seasonal burning activity in the southeast U.S., light residual smoke could get transported into the central and eastern portions of the state as high pressure in the Mississippi Valley and Central Plains turn surface winds out of the east/northeast. Meanwhile, a higher density plume of Saharan dust could begin to encroach on the Deep South and southeast coast during the morning hours while slowly pushing north and westward. With high relative humidity also advecting out of the Gulf, fine particulate formation could be maximized in these areas.

Figure C-35: KPRC News Article on Tropical Storm Beryl Moving Inland into Texas, Reported on July 6, 2024³²

³² <https://www.click2houston.com/weather/2024/07/06/stormy-saturday-in-houston-ahead-of-the-impacts-of-beryl/>

WEATHER

Houston region prepares for heavy rains as Beryl approaches Texas coast

Meteorologists are forecasting up to eight inches of rain for parts of the region on Monday and Tuesday. The center of the storm is projected to pass west of Houston.

HPM Staff | July 6, 2024, 3:08 PM



Heavy rains and some flooding for the Houston region are likely as Beryl makes its way toward the Texas coast.

Figure C-36: Houston Public Media News Article on Tropical Storm Beryl Approaching Southeast Texas, Reported on July 6, 2024³³

³³ <https://www.houstonpublicmedia.org/articles/news/weather/2024/07/06/492758/houston-region-beryl-heavy-rains-texas-coast/>

C.23: GROUP 23 – JULY 30, JULY 31, AND AUGUST 1, 2024

Table C-23: TCEQ Forecast Discussions for July 30, July 31, and August 1, 2024

EE Date	Site Name	Summary of Applicable Information
7/30/2024	Port Arthur Memorial School	The lighter to moderate density portion of a heavily dense plume of Saharan dust will continue spreading inland through Texas, possibly impacting spots at varying intensities generally along and east of a line from Laredo to just south of Dallas, with the highest concentrations remaining along the southern Texas coastline and out over the western Gulf.
7/31/2024	Port Arthur Memorial School	The higher density portion of the Saharan dust plume has begun to move on shore along the southern and southeast coast and is forecast to gradually advect farther north and west into the state, as significantly increased impacts become more ubiquitous particularly in the eastern half of Texas.
8/1/2024	Port Arthur Memorial School	The plume of Saharan dust will likely be affecting a majority of Texas with most regions experiencing noticeable impacts on fine particulate concentrations.

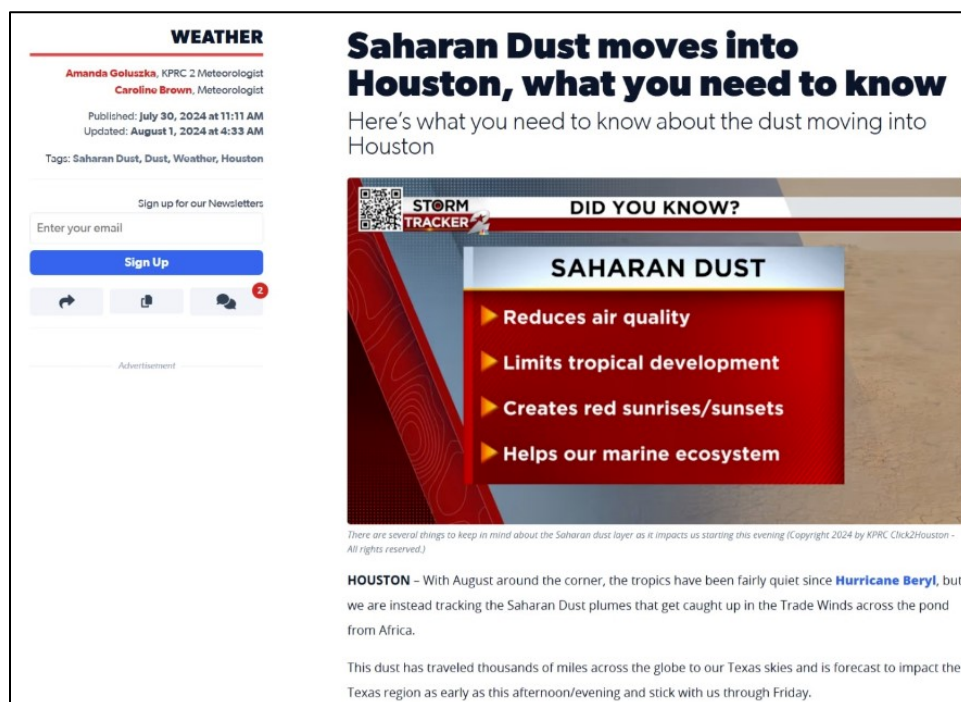


Figure C-37: KPRC News Article on Saharan Dust Moving into Southeast Texas, Reported on July 30, 2024³⁴

³⁴ <https://www.click2houston.com/weather/2024/07/30/saharan-dust-moves-into-houston-mid-week-what-you-need-to-know/>



Figure C-38: Lonestar Live News Article on a Large Saharan Dust Plume Bringing Hazy Skies and Reduced Air Quality to Texas, Reported on July 30, 2024³⁵



Figure C-39: Austin American-Statesman News Article on Saharan Dust Causing Hazy Skies and Lower Air Quality in Texas, Reported on July 30, 2024³⁶

³⁵ <https://www.lonestarlive.com/weather/2024/07/large-saharan-dust-plume-expected-to-bring-hazy-skies-reduced-air-quality-to-much-of-texas.html>

³⁶ <https://www.statesman.com/story/weather/2024/07/30/texas-skies-hazy-saharan-dust-air-quality-index-map-weather/74591360007/>

C.24: GROUP 24 – AUGUST 6 AND AUGUST 21, 2024**Table C-24: TCEQ Forecast Discussions for August 6, 2024, and August 21, 2024**

EE Date	Site Name	Summary of Applicable Information
8/6/2024	Port Arthur Memorial School	Residual smoke attributed to the wildfire activities across western and central Canada as well as the U.S. Pacific Northwest will continue to linger over the state, consisting mostly of light density smoke. Lingering light density Saharan dust over portions of the coastal parts of Texas and possibly over Southeast and South-Central Texas will continue to weaken with minimal impacts from these aerosols expected. Persistent light surface winds, limiting pollutant dispersion, are expected to continue slightly elevating fine particulate background levels over more urban areas of the state as well.
8/21/2024	Port Arthur Memorial School	Lingering and incoming light density residual smoke mainly from seasonal fire activities across the Southeastern U.S. but also slightly mixed with light density residual smoke from wildfires across western Canada, north-central Canada, as well as the U.S. Pacific Northwest are expected to persist over North Central, South Central, Southeast, and Northeast Texas, in addition to portions of the Texas panhandle and along the coastal bend of Texas, however these aerosols should remain mostly aloft. Light morning winds and/or relative humidity levels may periodically contribute to the elevation of PM _{2.5} levels across more urban areas of the eastern two-thirds of the state.

C.25: GROUP 25 – AUGUST 22, 2024**Table C-25: TCEQ Forecast Discussions for August 22, 2024**

EE Date	Site Name	Summary of Applicable Information
8/22/2024	Port Arthur Memorial School	Lingering and incoming light density residual smoke plumes mainly from seasonal fire activities across the Southeastern U.S. and lower Mississippi River Valley region as well as a little bit from the wildfires across western Canada, north-central Canada, as well as the U.S. Pacific Northwest are expected to persist more so over North Central, South Central, Southeast, and Northeast Texas with lower amounts over the rest of the state. These aerosols combined with slightly elevated urban fine particulate levels associated with light morning winds and/or relative humidity levels, predominately over the eastern two-thirds of the state are forecast to be enough to raise the overall daily PM _{2.5} AQI.

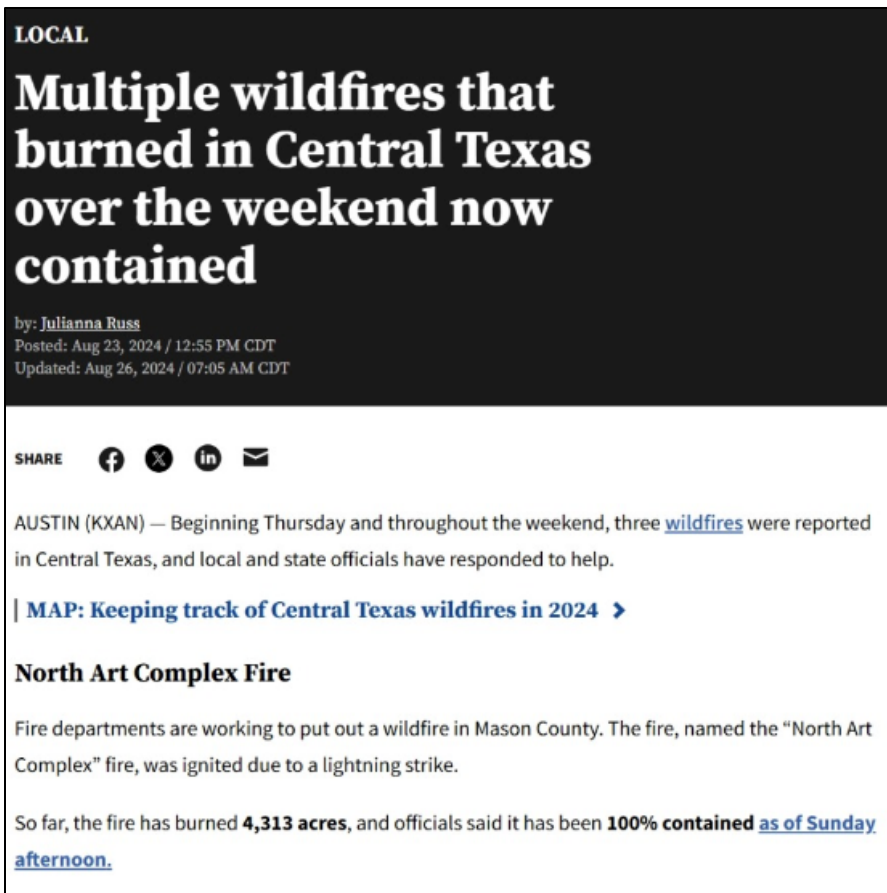


Figure C-40: KXAN News Article on Wildfires in Central Texas Burning Approximately 4,300 Acres, Reported on August 23, 2024³⁷

C.26: GROUP 26 – OCTOBER 10, 2024

Table C-26: TCEQ Forecast Discussions for October 10, 2024

EE Date	Site Name	Summary of Applicable Information
10/10/2024	Port Arthur Memorial School	A large area of mixed density smoke attributed to large wildfires in western Oregon, central Idaho, southwestern Montana, western/northern Wyoming, and northern Utah continues to be seen stretching eastward through the Central Plains and continuing southeastward through the Mississippi River Basin. The residual wildfire smoke and seasonal burning throughout the Southeastern United States resulted in a layer of light to moderate density smoke that was seen covering the majority of the South-Central and Southeastern regions of the U.S. and extending south through Texas and into the western part of the Gulf.

³⁷ <https://www.kxan.com/news/local/multiple-wildfires-burning-in-central-texas-details-on-acreage-containment/>

C.27: GROUP 27 – OCTOBER 15, 2024

Table C-27: TCEQ Forecast Discussions for October 15, 2024

EE Date	Site Name	Summary of Applicable Information
10/15/2024	Port Arthur Memorial School	Slightly increased fine particulate background levels due to transported light density residual smoke from wildfire activities across the U.S. Pacific Northwest and western Canada are lingering over a large portion of the state.

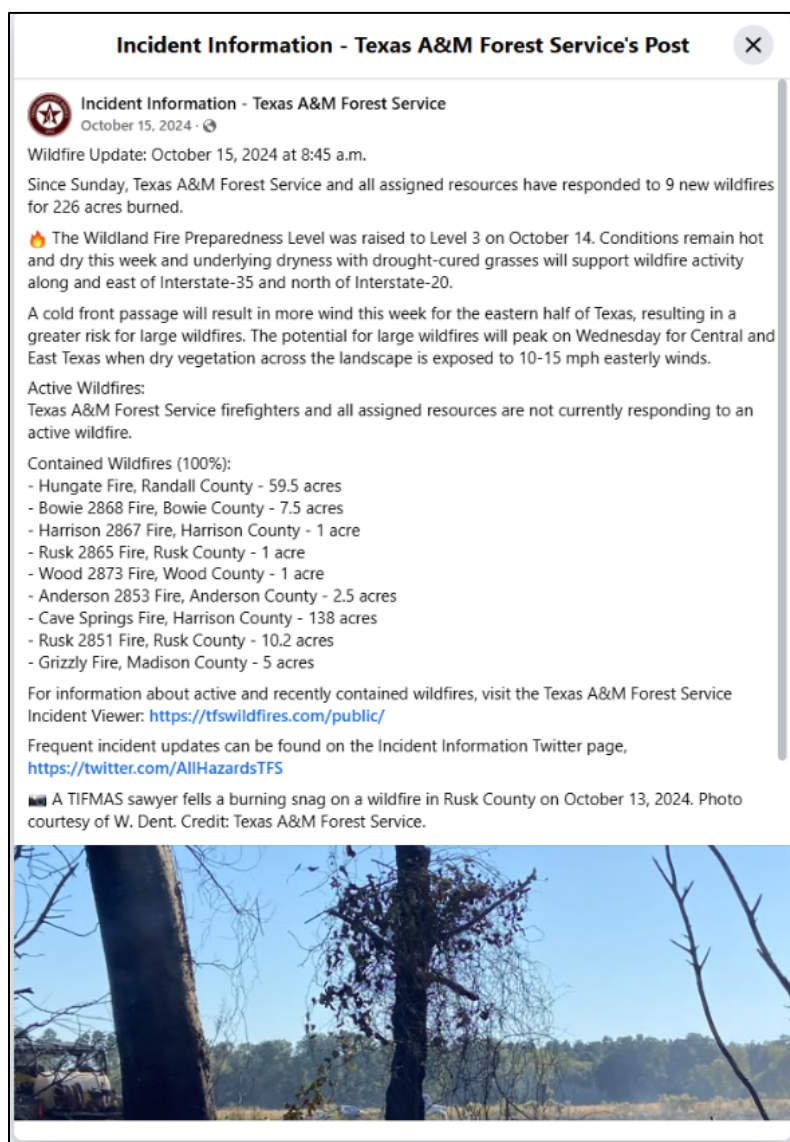


Figure C-41: Texas A&M Forest Service Social Media Post on Wildfires Burning Throughout Northeast and Southeast Texas, Reported on October 15, 2024³⁸

C.28: GROUP 28 – OCTOBER 28, 2024

³⁸ <https://www.facebook.com/AllHazardsTFS/posts/wildfire-update-october-15-2024-at-845-amsince-sunday-texas-am-forest-service-an/949448987228835/>

Table C-28: TCEQ Forecast Discussions for October 28, 2024

EE Date	Site Name	Summary of Applicable Information
10/28/2024	Port Arthur Memorial School	Seasonal agricultural burning activities across the Southeastern U.S., Mississippi Valley, and Eastern Texas are producing light density residual smoke that are expanding over the eastern half of the state however remaining mostly aloft. These aerosols combined with slightly elevated relative humidity levels may be enough to raise the overall daily PM _{2.5} AQI.

C.29: GROUP 29 – OCTOBER 29, 2024**Table C-29: TCEQ Forecast Discussions for October 29, 2024**

EE Date	Site Name	Summary of Applicable Information
10/29/2024	Port Arthur Memorial School	Light density residual smoke from agricultural burning activities across the Southeastern U.S., Mississippi Valley, and Eastern Texas combined with slightly elevated relative humidity levels are expected to continue across the eastern two-thirds of the state however most of the smoke aerosols will remain aloft in addition to gusty conditions also helping to disperse the fine particulate levels.

C.30: GROUP 30 – NOVEMBER 26, 2024**Table C-30: TCEQ Forecast Discussions for November 26, 2024**

EE Date	Site Name	Summary of Applicable Information
11/26/2024	Port Arthur Memorial School	A cold front pushed through Southeast and South Texas early this morning and is currently over the Gulf while a high pressure system is building overhead behind the front. Model guidance suggests very few to no seasonal burning activities should persist across East and Southeast Texas following the passing of the cold front. Light density smoke/aerosols attributed to scattered biomass burnings, gas flaring activities, and other industrial sources across the Bay of Campeche and Central Mexico are lingering over deep South Texas however northerly winds should push the majority of these aerosols out of the state. Light surface winds and lower morning vertical mixing heights associated with the high pressure building overhead may limit local dispersion of fine particulate matter for more urban areas of the eastern two-thirds of the state.