APPENDIX C

MEDIA REPORTS AND TCEQ FORECAST DISCUSSIONS

EXCEPTIONAL EVENTS DEMONSTRATION FOR 2022 $PM_{2.5}$ EXCEEDANCES AT HARRISON COUNTY, TRAVIS COUNTY, AND KLEBERG COUNTY

February 7, 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 1, 2022

Table C-1: TCEQ Forecast discussions for January 1, 2022

EE Date	Site Name	Summary of Applicable Information
1/1/2022	National Seashore	Suspended dust may be transported to southwest and South-central Texas from northerly winds behind a strong cold front.

C.2: GROUP 2 - JANUARY 21, JANUARY 22, AND JANUARY 23, 2022

Table C-2: TCEQ Forecast discussions for January 21 -23, 2022

EE Date	Site Name(s)	Summary of Applicable Information
1/21/2022	Karnack	Depending on the amount of agricultural burning activity across portions of the Southeast U.S. (including in parts of Northeast, Southeast, South Central, Deep South Texas, and along the coastal bend of Texas), slightly increased fine particulate background levels associated with light amounts of smoke (including continental haze) may begin to filter and expand back into these regions as a high pressure system develops overhead.

EE Date	Site Name(s)	Summary of Applicable Information
1/22/2022	Karnack	Should the agricultural burning activity in portions of the Southeast U.S. including in East, Southeast, South Central, Deep South Texas, and along the coastal bend of Texas continue, slightly increased fine particulate background levels from a combination of light amounts of smoke mixed with building continental haze, associated with light winds and lower vertical mixing heights from the high pressure system, could impact the eastern two-thirds of the state at varying intensities, with higher concentrations across North Central, South Central, and Southeast Texas.
1/23/2022	Karnack	As the aforementioned high pressure system slides to the east, fine urban particulate levels owing to limited dispersion from light winds and limited vertical mixing in addition to any light amounts of residual smoke from agricultural burning activity across portions of the Southeast U.S. including in East, Southeast, South Central Texas, and along the coastal bend of Texas could possibly increase the daily $PM_{2.5}$ AQI.

https://www.marshallnewsmessenger.com/news/smoke-inside-marshall-city-limit-is-result-of-controlled-burn/article_f61fdd96-7b11-11ec-bf33-7770c9c62c82.html

BREAKING

Smoke inside Marshall city limit is result of controlled burn

From Staff Reports
Jan 21, 2022

1 of 2

US Fish and Wildlife is conducting a prescribed burn at Caddo Lake National Wildlife Refuge, causing smoke to reach some a within the city limits of Marshall. Fire officials thank the public for their understanding.

Special to the News Messenger

KARNACK — Marshall Fire Chief Reggie Cooper advises residents nc if they see billows of smoke roaming over the area this weekend.

It is the result of a prescribed burn being conducted at the Caddo Lake National Wildlife Refuge in Karnack.

Figure C-1: Local media report showing prescribed burn underway at Caddo Lake Wildlife Reserve

Figure C-2: Local media report showing hazy and smoke cover over the Caddo Lake National Wildlife Refuge due to prescribed burn

C.3: GROUP 3 - MARCH 25, 2022

Table C-3: TCEQ Forecast discussions for March 25, 2022

EE Date	Site Name	Summary of Applicable Information
3/25/2022	National Seashore	Light amounts of fine particulate matter associated with residual smoke from prescribed burnings across the South Central U.S. as well as along the coastal bend of Texas and portions of Southeastern Texas could enhance $PM_{2.5}$ levels at times across the eastern two-thirds of the state.

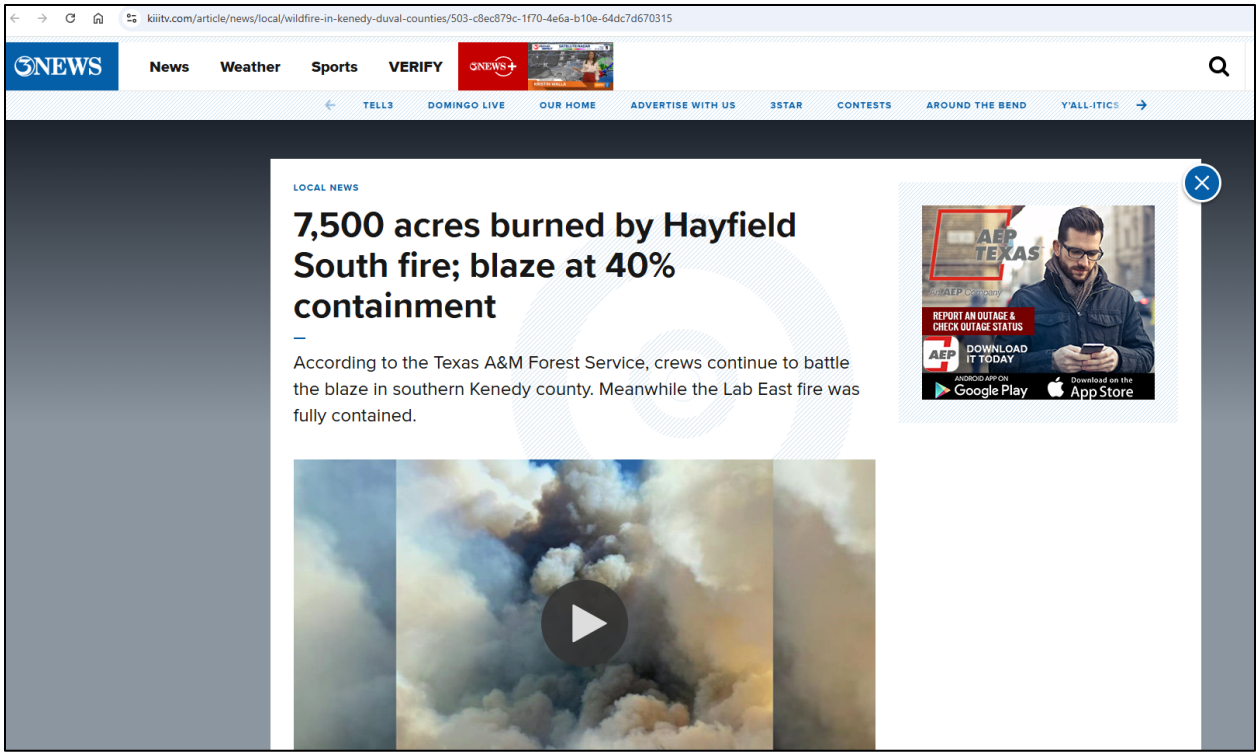

Figure C-3: An Image showing media report of Hayfield South fire near Corpus Christi area.

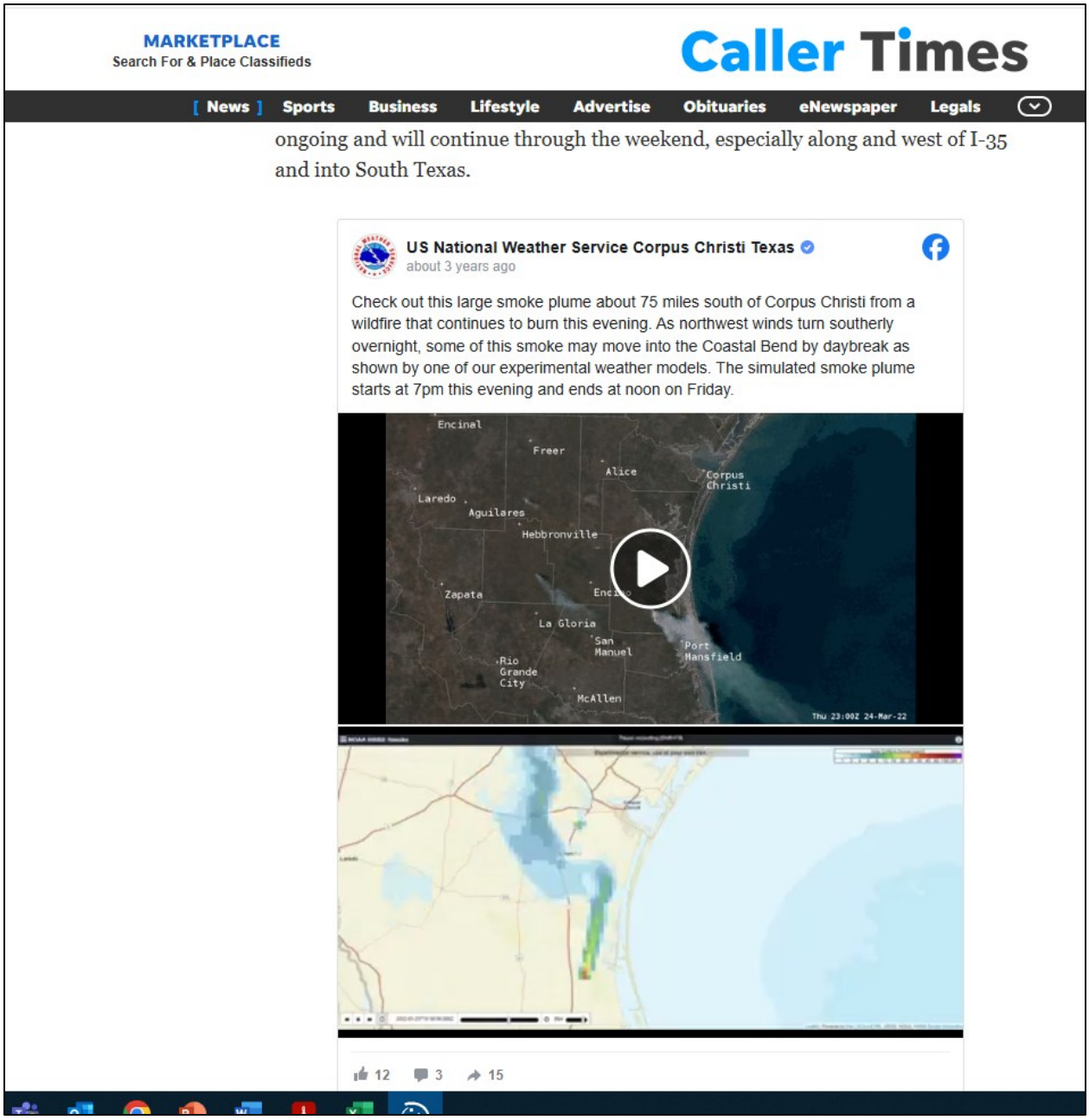

Figure C-4: A local media report showing smoke impact from the fire that affected National Seashore Monitor

C.4: GROUP 4 - APRIL 11, APRIL 12, AND APRIL 13, 2022

Table C-4: TCEQ Forecast discussions for April 11-13, 2022

EE Date	Site Name(s)	Summary of Applicable Information
4/11/2022	National Seashore	Building fine particulate levels associated with light to moderate amounts of incoming residual smoke from agricultural burning activity in addition to oil and gas flaring and other industrial activities across portions of Mexico, Central America, and the Gulf of Mexico (including seasonal burning activity across portions of South, South Central, and Southeast Texas) is forecast to cover much of the eastern two-thirds of the state at varying intensities generally along and east of a line from Del Rio to Sherman, with highest concentrations across Deep South Texas and along the coastal bend of Texas.
4/12/2022	National Seashore	Depending on the amount of agricultural burning in Mexico and Central America, oil and gas flaring and other industrial activities in parts of the Gulf of Mexico, as well as seasonal burning activities across portions of South, South Central, and Southeast Texas, increasing amounts of fine particulate matter associated with lingering and incoming smoke may continue across the majority of the eastern two-thirds of the state at varying intensities, although intermittent precipitation from thunderstorms in the afternoon and evening may significantly reduce fine particulate levels at times across portions of South Central, North Central, East, and Southeast Texas.
4/13/2022	National Seashore	Lingering fine particulate levels associated with agricultural burning in Mexico and Central America, oil and gas flaring and other industrial activities in parts of the Gulf of Mexico, as well as seasonal burning activities across portions of South and Southeast Texas may at times raise $PM_{2.5}$ levels to the lower to middle end of the "Moderate" range in parts of the Brownsville-McAllen, Corpus Christi, San Antonio, and Victoria areas.

C.5: GROUP 5 - MAY 6 AND MAY 7, 2022

Table C-5: TCEQ Forecast discussions for May 6-7, 2022

EE Date	Site Name(s)	Summary of Applicable Information
5/6/2022	National Seashore	Elevated residual smoke from ongoing agricultural burnings in Mexico and Central America may continue at varying intensities across portions of South Texas, along the coastal bend of Texas and Rio Grande Valley, in addition to South Central and Southeast Texas. Overall, depending on the coverage and intensity of the lingering and incoming smoke, the daily $PM_{2.5}$ AQI is forecast to possibly reach the middle to upper end of the "Moderate" range in parts of the Brownsville-McAllen, Corpus Christi, Laredo, and Victoria areas and the lower end of the "Moderate" range in parts of the Austin, Beaumont-Port Arthur, Bryan-College Station, Houston, and San Antonio areas.
5/7/2022	National Seashore	Residual smoke from the ongoing agricultural burnings in Mexico and Central America may continue at varying intensities mostly across portions of Deep South Texas, along the coastal bend of Texas and Rio Grande Valley possibly into the Big Ben region, and portions of South Central as well as Southeast Texas.

C.6: GROUP 6 - MAY 20, 2022

Table C-6: TCEQ Forecast discussions for May 20, 2022

EE Date	Site Name	Summary of Applicable Information
5/20/2022	National Seashore	Lingering amounts of residual smoke from the seasonal burning activities across the Southeastern U.S. (including in eastern Texas) filtering and lingering over East and Southeast Texas; and moderate to heavy residual smoke from the agricultural burnings in Mexico and Central America filtering over South Texas, South Central Texas, along the coastal bend of Texas as well as the Rio Grande Valley, and expanding over Southeast and North Central Texas is forecast to keep and raise $PM_{2.5}$ levels a bit across the majority of the state.

C.7: GROUP 7 - JUNE 11, 2022 THROUGH JUNE 17, 2022

Table C-7: TCEQ Forecast discussions for June 11-17, 2022

EE Date	Site Name(s)	Summary of Applicable Information
6/11/2022	National Seashore	Depending on the amount of seasonal burning activity across the Southeastern U.S. (including in eastern Texas) light amounts of residual smoke may continue filtering and lingering over portions of Southeast, East, and North Central Texas in addition to slightly elevated urban fine particulate levels over these same regions of Texas as well as portions of South Central Texas. Light to moderate amounts of residual smoke from the seasonal fire activity as well as industrial activities along western, eastern, and southern portions of Mexico mixed with aerosols from gas flaring activity in the Bay of Campeche along with light amounts of African dust forecast to arrive in deep South Texas and along the coastal bend of Texas later on in the day will elevate $PM_{2.5}$ levels.
6/12/2022	National Seashore	Depending on the amount of seasonal burning activity across the Southeastern U.S. (including in eastern Texas) light amounts of residual smoke may continue filtering and lingering over portions of Southeast, East, and North Central Texas in addition to slightly elevated urban fine particulate levels over these same regions of Texas as well as portions of South Central Texas. Additionally, the light to moderate density African dust plume is expected to continue to build as it spreads northward and westward, with at least light patches extending to cover portions of the state at varying intensities generally along and south of a line from Carrizo Springs to Waco to San Augustine. Light to moderate amounts of residual smoke from the seasonal fire activity as well as industrial activities along western, eastern, and southern portions of Mexico mixed with aerosols from gas flaring activity in the Bay of Campeche along with light to moderate amounts of African dust are forecast to continue filtering across portions of South Texas, the coastal bend of Texas while expanding into portions of Southeast and South Central Texas.

EE Date	Site Name(s)	Summary of Applicable Information
6/13/2022	National Seashore, Webbervil le Rd, and Karnack	Heavy amounts of African dust will continue surging into and through the state from south to north, impacting most parts of the state with the exception of Far West Texas and the Panhandle. The heaviest concentrations are expected to be in South Texas, along the coast, and over portions of South Central as well as Southeast Texas. More urban portions of the state such as parts of North Central, South Central, and Southeast Texas with slightly elevated fine urban particulates mixed with the Saharan dust will see elevated $PM_{2.5}$ levels as well.
6/14/2022	National Seashore and Karnack	The dense African dust plume is forecast to continue filtering and expanding over the majority of the state with at least light patches reaching most areas with the exception of Far West Texas. The heaviest concentrations are forecast to be over Deep South Texas, Southeast Texas, and along the coastal bend of Texas. Additionally, fine particulate levels over more urban portions of the state will contribute to the elevated $PM_{2.5}$ levels in addition to the African dust.
6/15/2022	National Seashore and Karnack	Moderate to heavy density African dust will continue across much of the state with the exception of Far West Texas and the heaviest concentrations forecast to be over Deep South Texas, Southeast Texas, and along the coastal bend of Texas.
6/16/2022	National Seashore, Webbervil le, and Karnack	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.
6/17/2022	National Seashore and Webbervil le	The heavy density plume of African dust is forecast to continue moving inland, reaching most spots statewide with improvements beginning to be seen and gradually decreasing amounts as the day progresses from south to north.

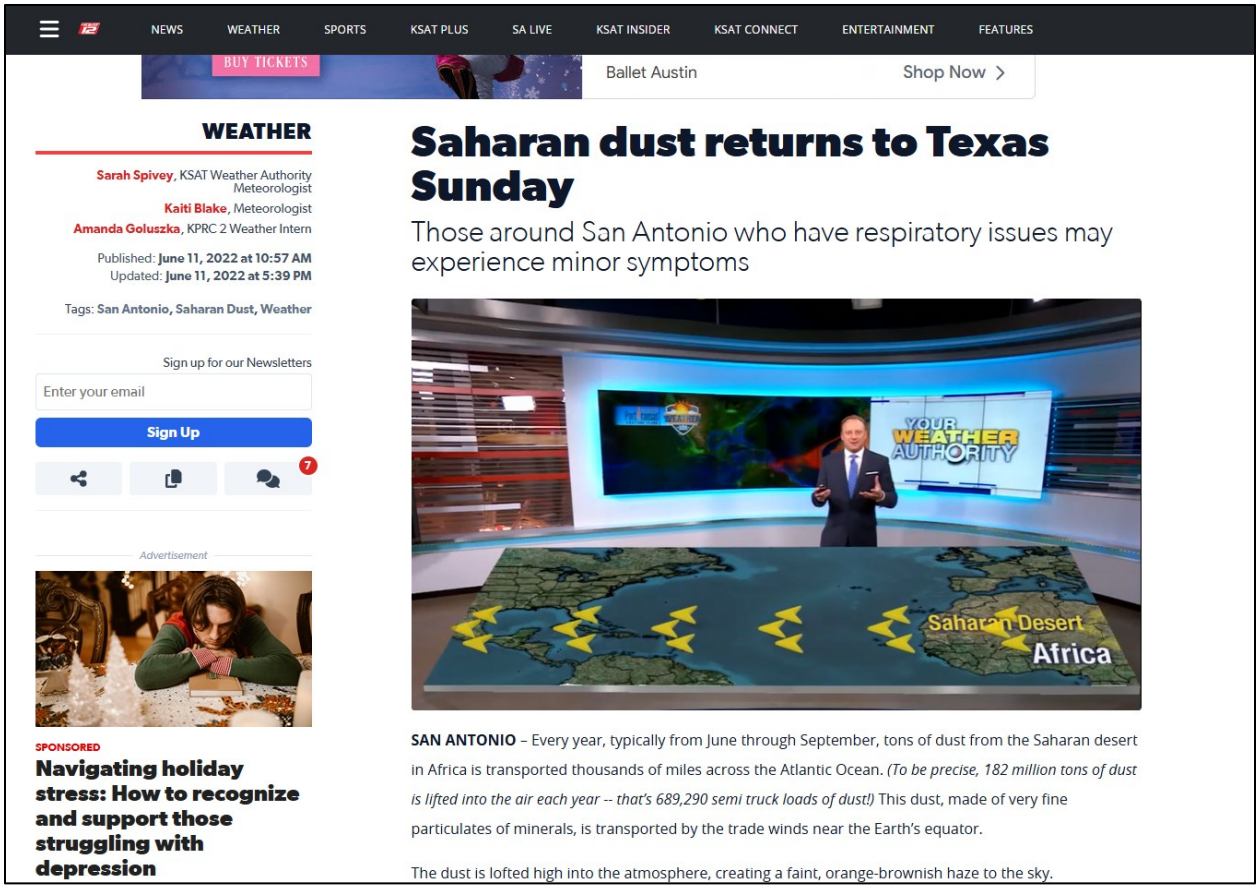

Figure C-5: Local news report discussing return of Saharan dust to Texas on June 11, 2022

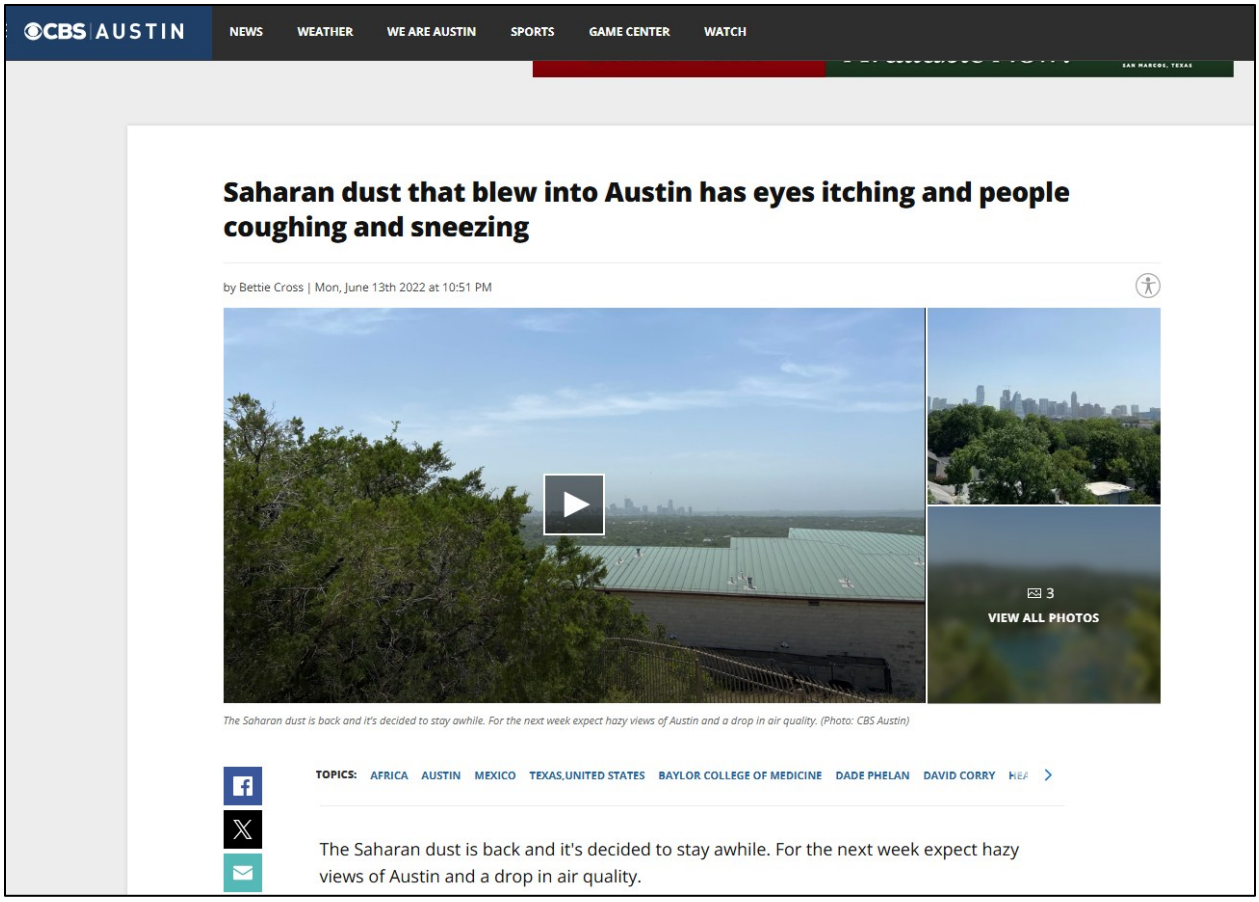

Figure C-6: Local news report with picture of hazy sky over Austin area due to Saharan dust

KERANews

Donate

The long, strange trip that brings Saharan dust to Texas

KERA | By Mose Buchele

Published June 13, 2022 at 4:00 PM CDT

Gabriel C. Pérez / KUT

The sunset over Canyon Lake in the Texas Hill Country is colored orange on June 25, 2020, in part because of a Saharan dust cloud.

Dust blown all the way from Africa's Sahara Desert is arriving this week in Texas, which happens every year around this time.

Around 6,000 years ago, North Africa was covered in huge lakes that were home to microscopic creatures. The dust that now blows over from Africa and visits us every summer is made up of the remains of those ancient lake-dwellers. It's mind-boggling.

But it poses more immediate concerns for asthma sufferers and people with respiratory conditions. The Texas Commission on Environmental Quality says the dust is partly to blame for moderate air quality this week in many parts of the state, including Austin.

KERA
Morning Edition

If you are sensitive to particle pollution, the Environmental Protection Agency advises you consider reducing outdoor activities. On the flip side, the annual dust clouds can make for some pretty sunsets and help fertilize the Amazon Rainforest.

Figure C-7: Local news channel reporting about Saharan dust in Texas on June 13, 2022.

C.8: GROUP 8 - JULY 16 THROUGH JULY 18, 2022

Table C-8: TCEQ Forecast discussions for July 16-18, 2022

EE Date	Site Name(s)	Summary of Applicable Information
7/16/2022	National Seashore	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	National Seashore, Webbervi lle, and Karnack	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.
7/18/2022	Karnack	Light to moderate amounts of Saharan dust will persist in at least light patches across most of the state, with the highest concentrations across South Central and North Central Texas as most of the dust continues to move north and east.

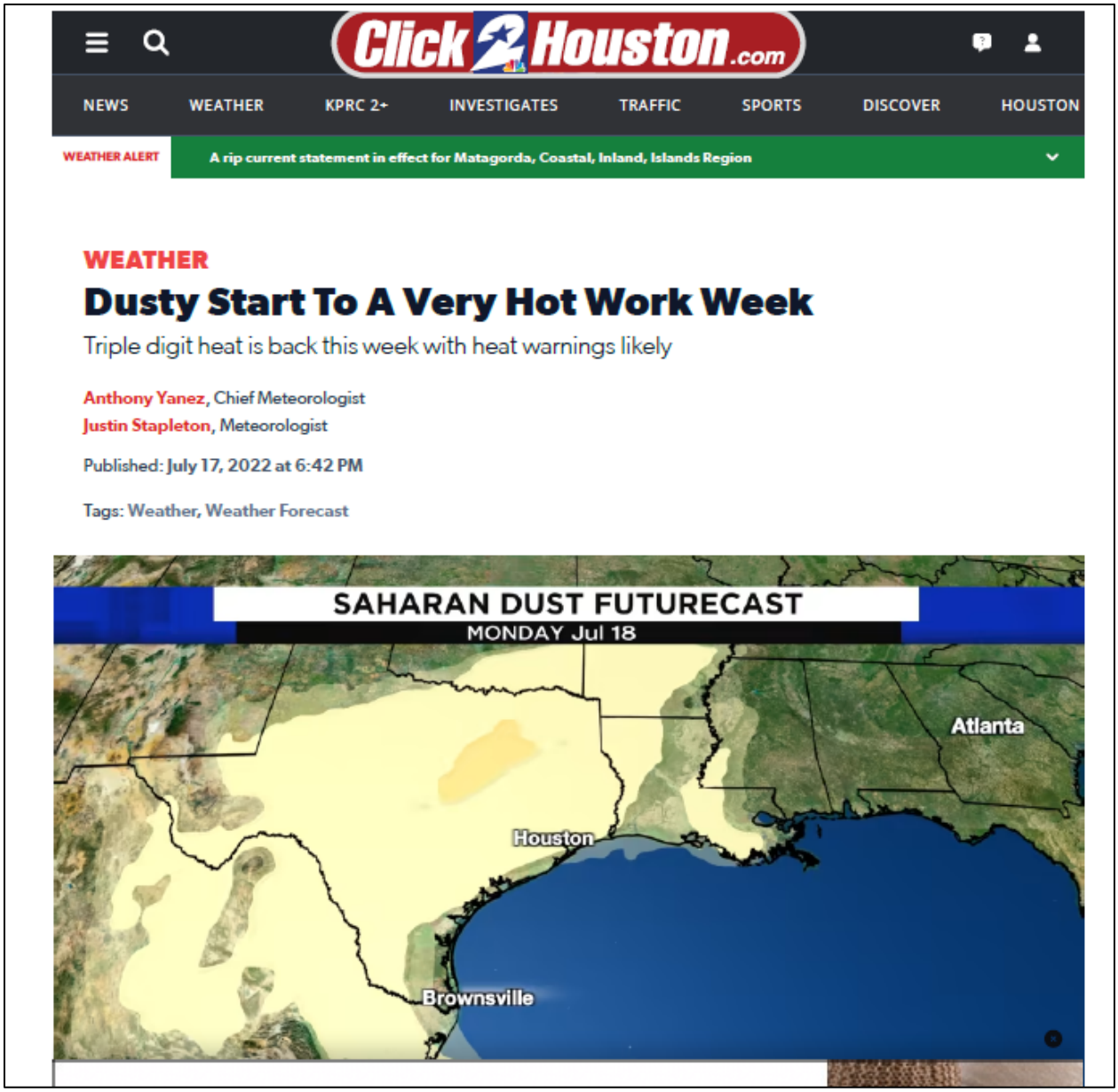

Figure C-8: Local news reporting about Saharan dust in Texas on July 17, 2022.

C.9: GROUP 9 - JULY 21, 2022

Table C-9: TCEQ Forecast discussions for July 21, 2022

EE Date	Site Name	Summary of Applicable Information
7/21/2022	National Seashore	A moderate density Saharan dust plume is forecast to arrive along the southern Texas coastline and begin spreading inland into portions of South Central, Southeast, along the Rio Grande Valley, and possibly into North Central Texas.