

Flint Hills Wildland Fire Update

March 14, 2025

The following information on the Flint Hills wildland fires is provided weekly to keep stakeholders up to date on fires, smoke, and air quality.



<https://www.KSFire.org/>

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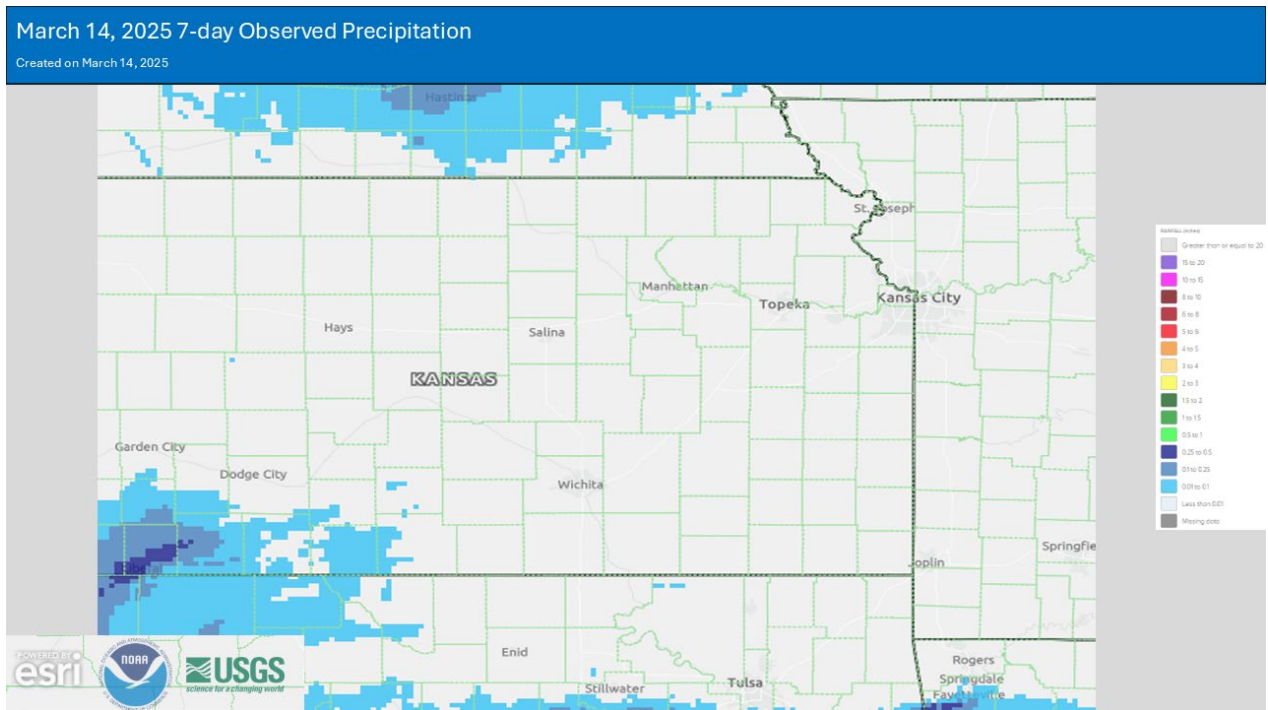
This website was developed as part of the development of the Kansas Flint Hills Smoke Management Plan. Kansas State University hosts the webpage, and it includes important information for ranchers and others who might be interested in the Flint Hills. It provides training, regulations, policies, publications, a modeling tool and other links to guide people looking for information on smoke management. The development of the Flint Hills Smoke Management Plan is an attempt to balance the need for prescribed fire in the Flint Hills with the need for clean air in downwind areas.



Meteorology

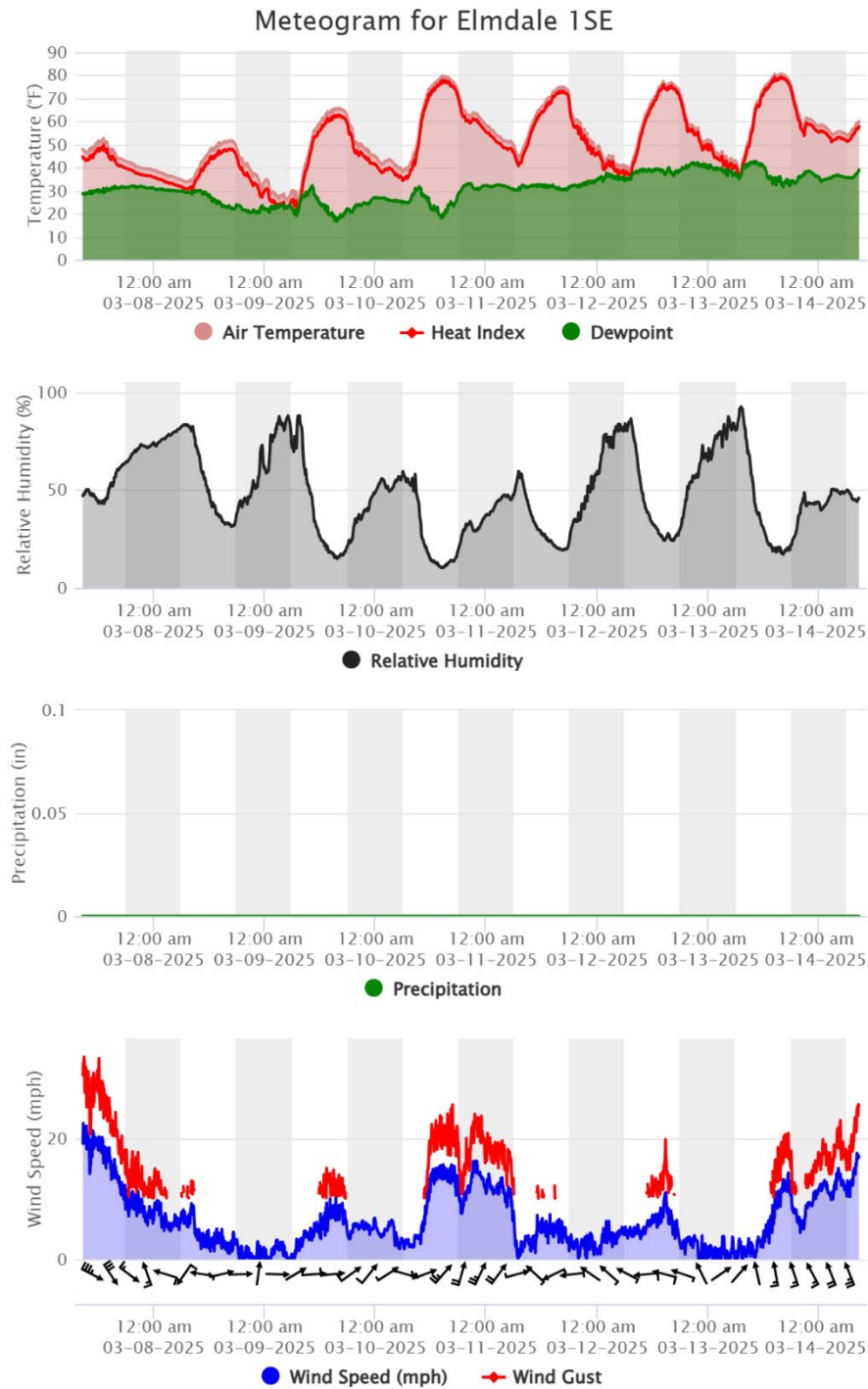
Temperatures in the lower 50s and gusty west to northwest winds were observed last Friday (March 7) across the region with wind gusts up to 35 mph. Lighter and variable winds alongside near normal temperatures (low 50s) continued Saturday (March 8). Southwest winds and temperatures in the upper 60s returned for Sunday (March 9). Sunny skies were the rule on Monday (March 10) with temperatures climbing well above normal in the upper 70s to low 80s with gusty SW winds (35 mph). A dry “cold” front moved through early Tuesday (March 11) which switched winds to the north at 5-10 mph, but temperatures still reached the lower 70s. Winds continued light from the north then east through most of the day on Wednesday (March 12) with sunny skies with high temperatures near 76°. Light north winds under 5 mph in the morning increased to 10-20 mph in the afternoon and switched to an SSE direction. Above normal temperatures under sunny skies continued Thursday (March 13) with highs once again near 80°. No precipitation occurred across the Flint Hills this week.

Precipitation



NOAA/NWS Observed Total Precip. for March 7-March 14, 2025.

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7-day (March 7-March 14, 2025) Observed Weather from the Kansas Mesonet station near Elmdale, Kansas (<https://mesonet.k-state.edu/>)



Fire, Smoke, and Air Quality

For the period of March 7 - March 13, 2025, there were no air quality exceedances that were potentially influenced by prescribed fire within the Flint Hills.

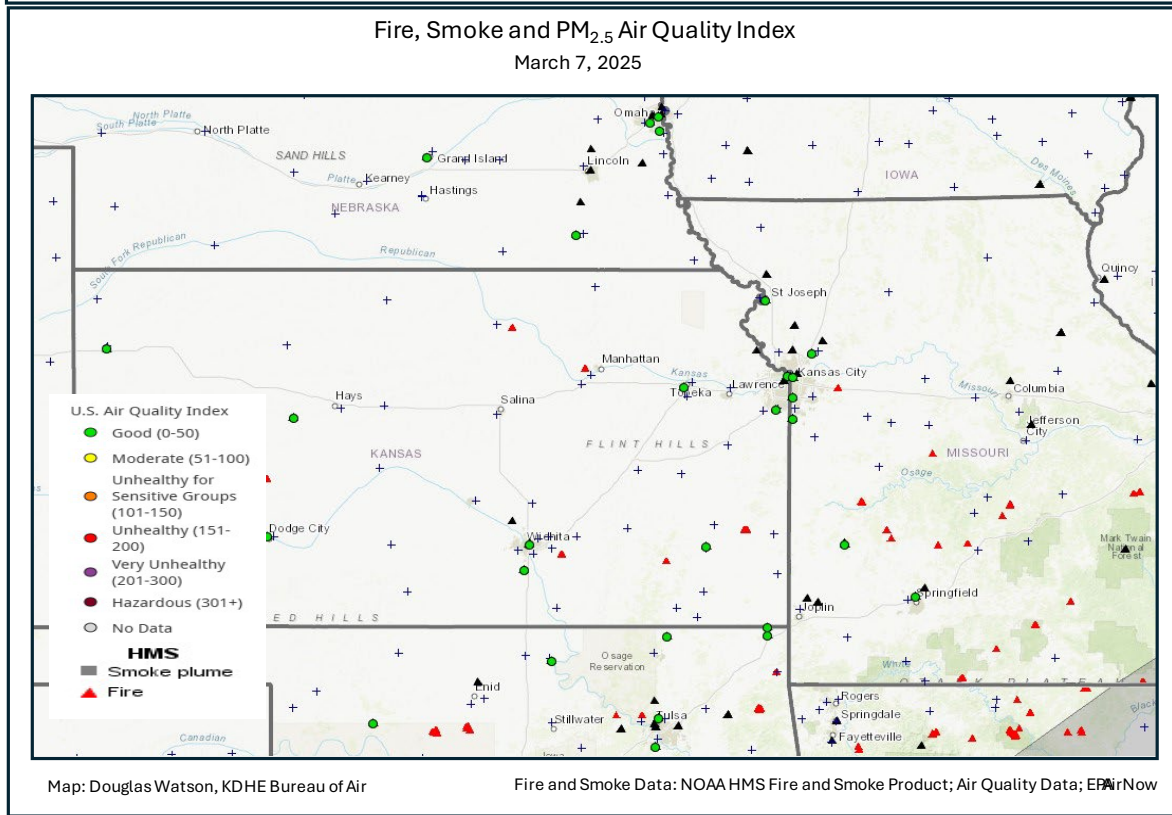
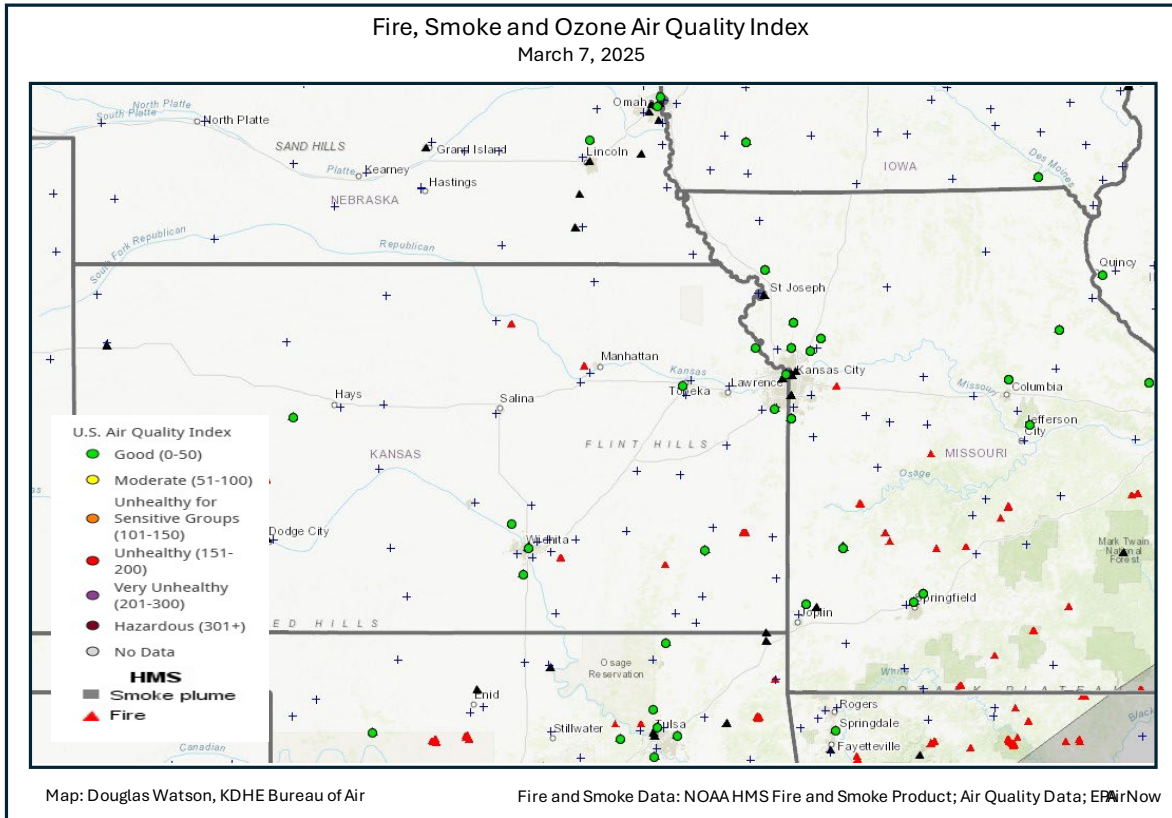
Ozone: Preliminary data indicates no exceedances of the NAAQS daily 8-hour average maximum of 70 ppb.

PM_{2.5}: Preliminary data indicates no exceedances of the NAAQS daily 24-hour average maximum of 35 µg/m³.

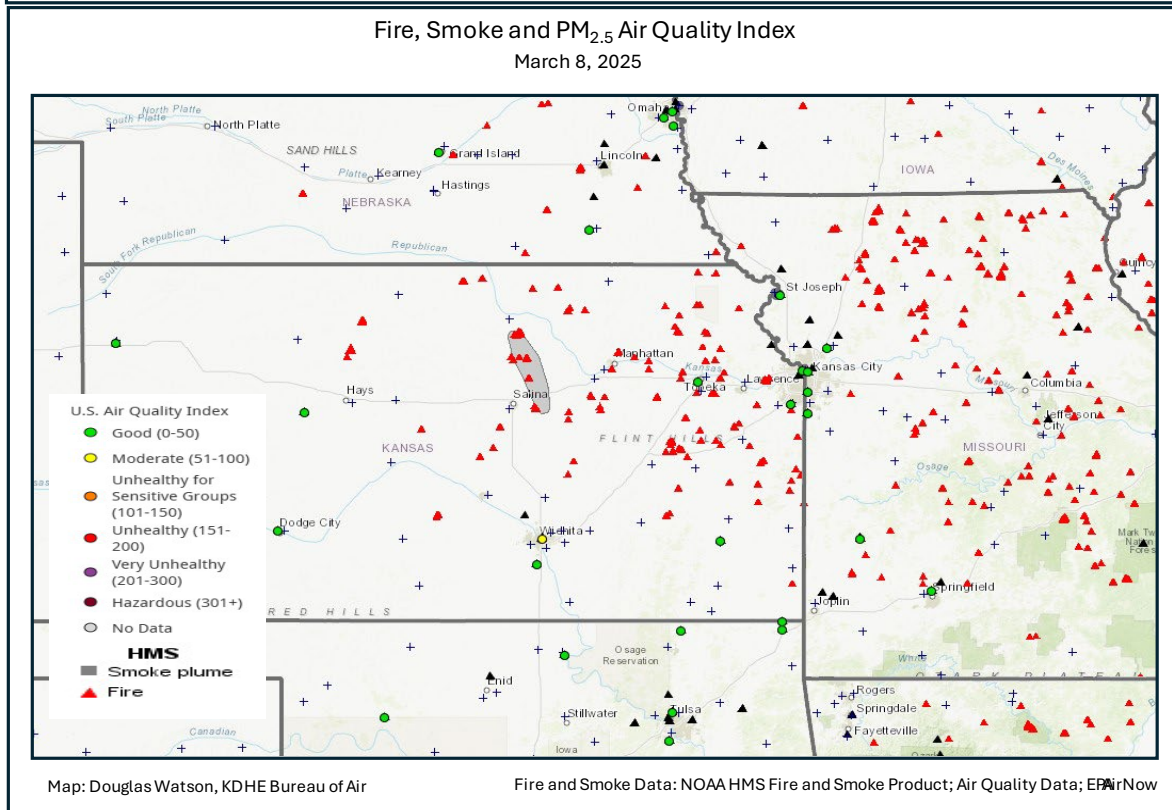
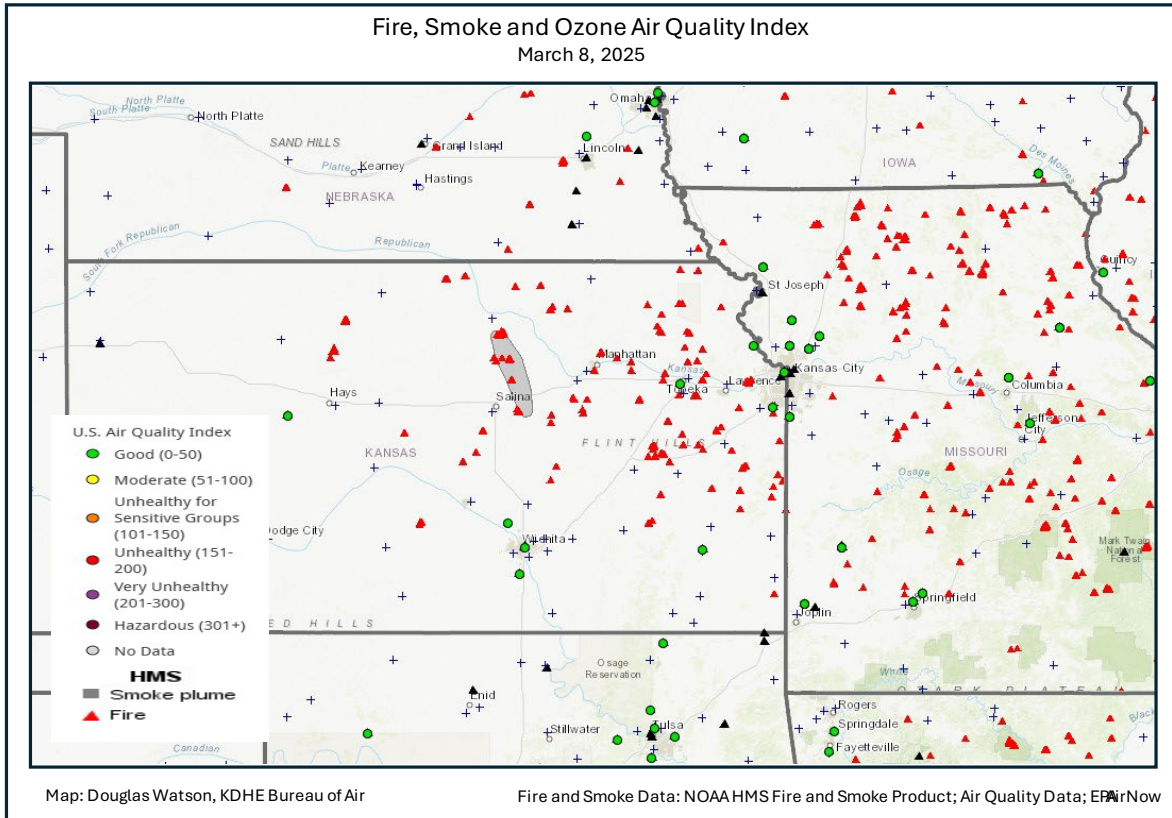
Prescribed fire activity was limited on Friday (March 7) across Kansas with most of the fires over far southern and eastern Oklahoma, with only smoke plumes visible mainly over far SE Missouri and parts of Arkansas. Only one light smoke plume, north of Salina, KS was observed on Saturday (March 8) across the area although there were scattered prescribed fires. Fire activity increased across the area on Sunday (March 9), with light smoke plumes located over most of Eastern Kansas, Southern Missouri and extending southward into Oklahoma and Arkansas that led to elevated (moderate) PM_{2.5} AQI values in some areas. On Monday (March 10) sunny and windy conditions prevailed, especially across the Flint Hills and led to fewer fires in Eastern Kansas. Considerably more fires were still occurring over far southern Oklahoma and Arkansas. On Tuesday (March 11), a dry cold front moved across the Flint Hills but numerous fires were observed and smoke plumes were scattered across the region. As a result, elevated AQI values were also seen across the Midwest. Fire activity continued Wednesday (March 12) as winds continued light and variable and temperatures well above normal in the upper 70s to lower 80s. With clear skies and lighter winds in the morning, prescribed fire activity was again seen across all states in the Midwest on Thursday (March 13). PM and Ozone AQI values remained elevated across the area from smoke plumes observed over most of the area.

The following pages have two maps for each day; One showing the 24-hour average Air Quality Index category for PM_{2.5} and the other showing the 8-hour average maximum Air Quality Index category for Ozone from regulatory air quality monitors in the region. Both maps show fires and smoke as analyzed by NOAA Hazard Mapping Services.

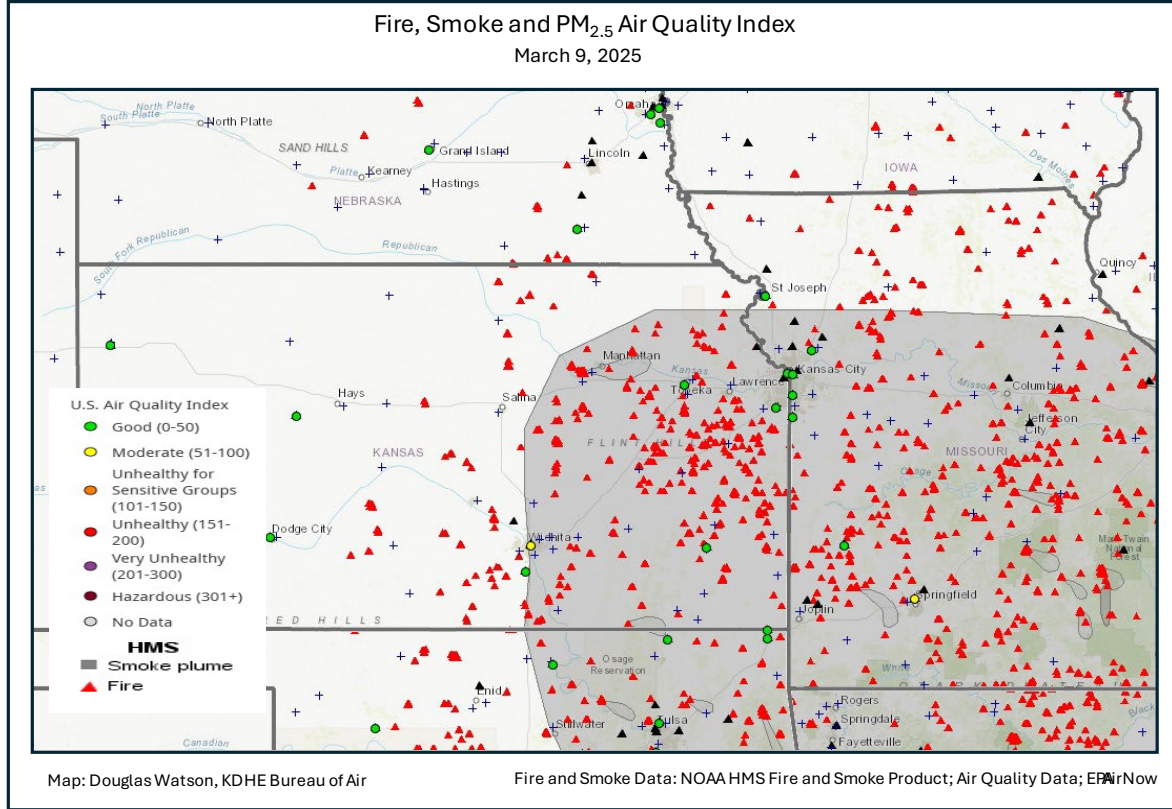
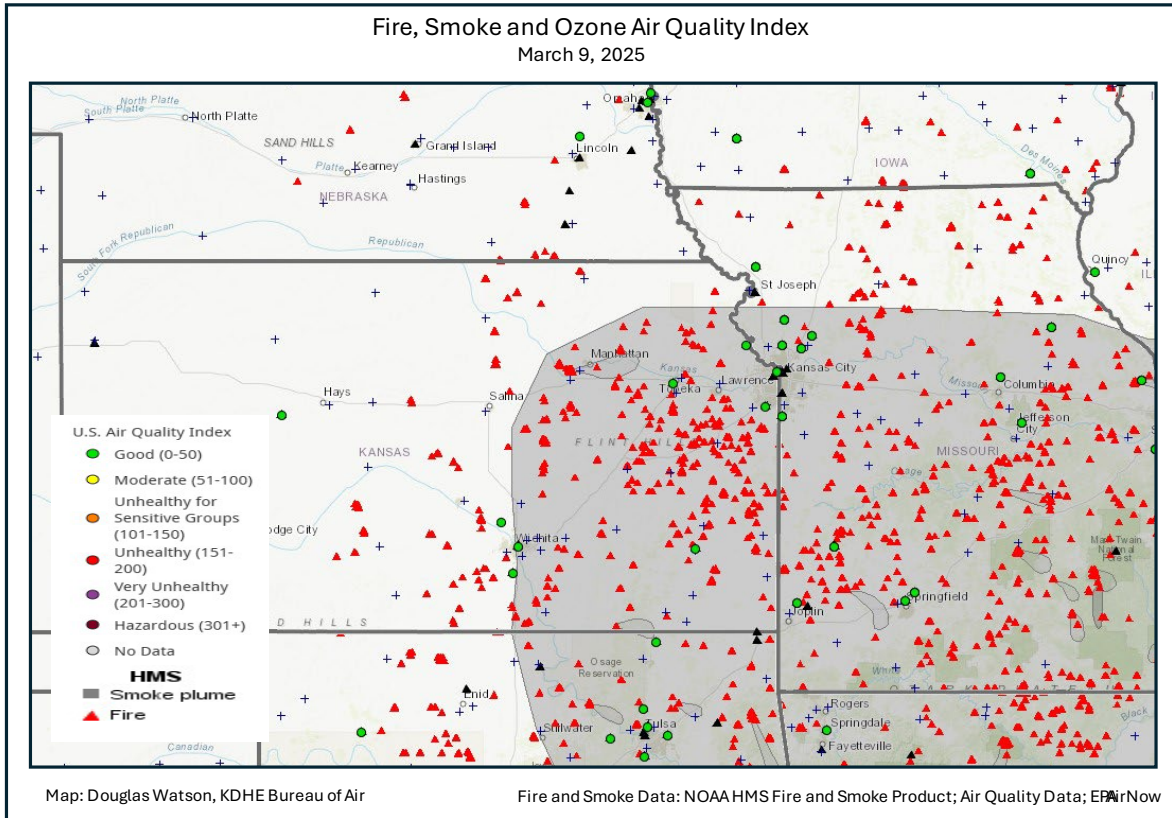
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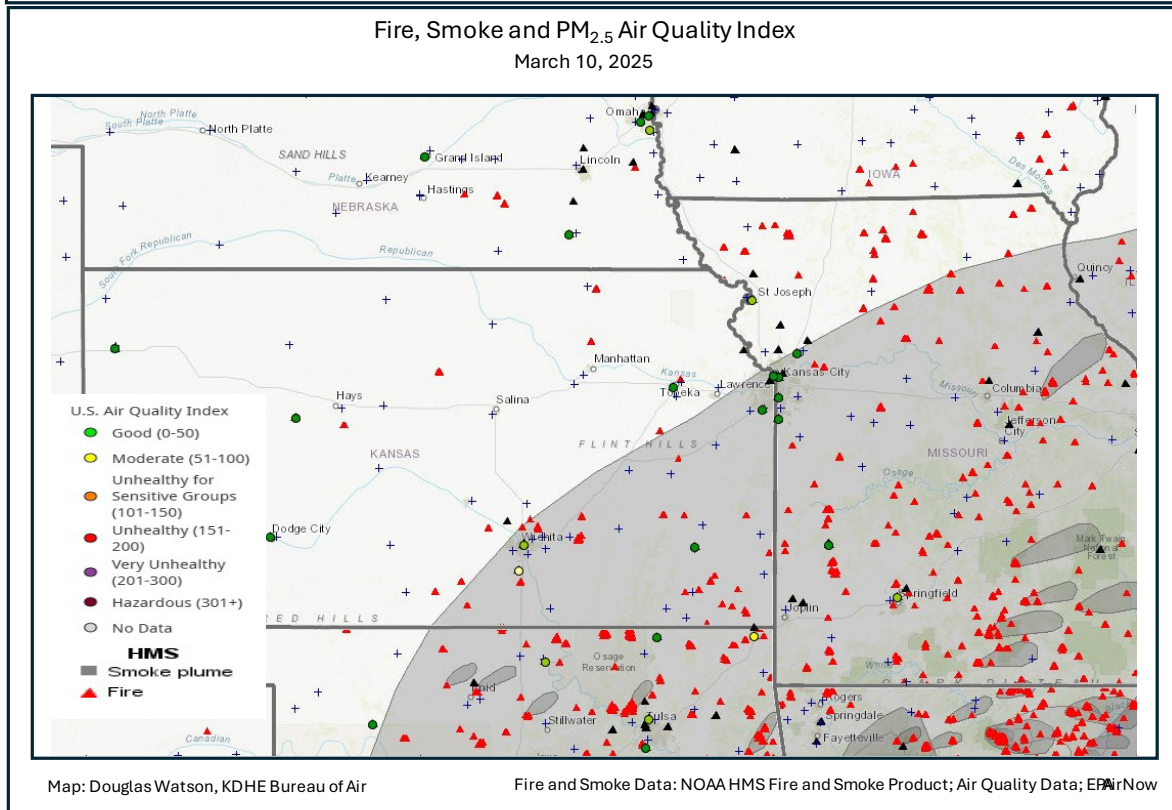
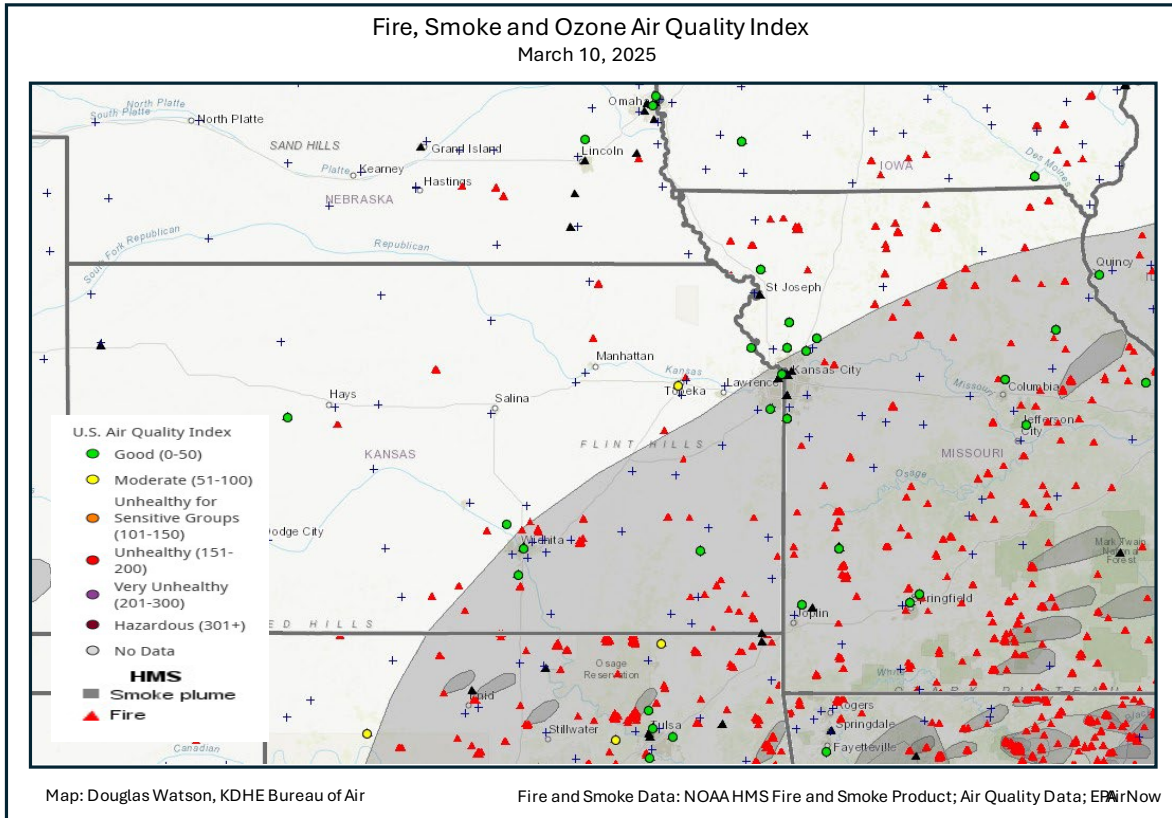
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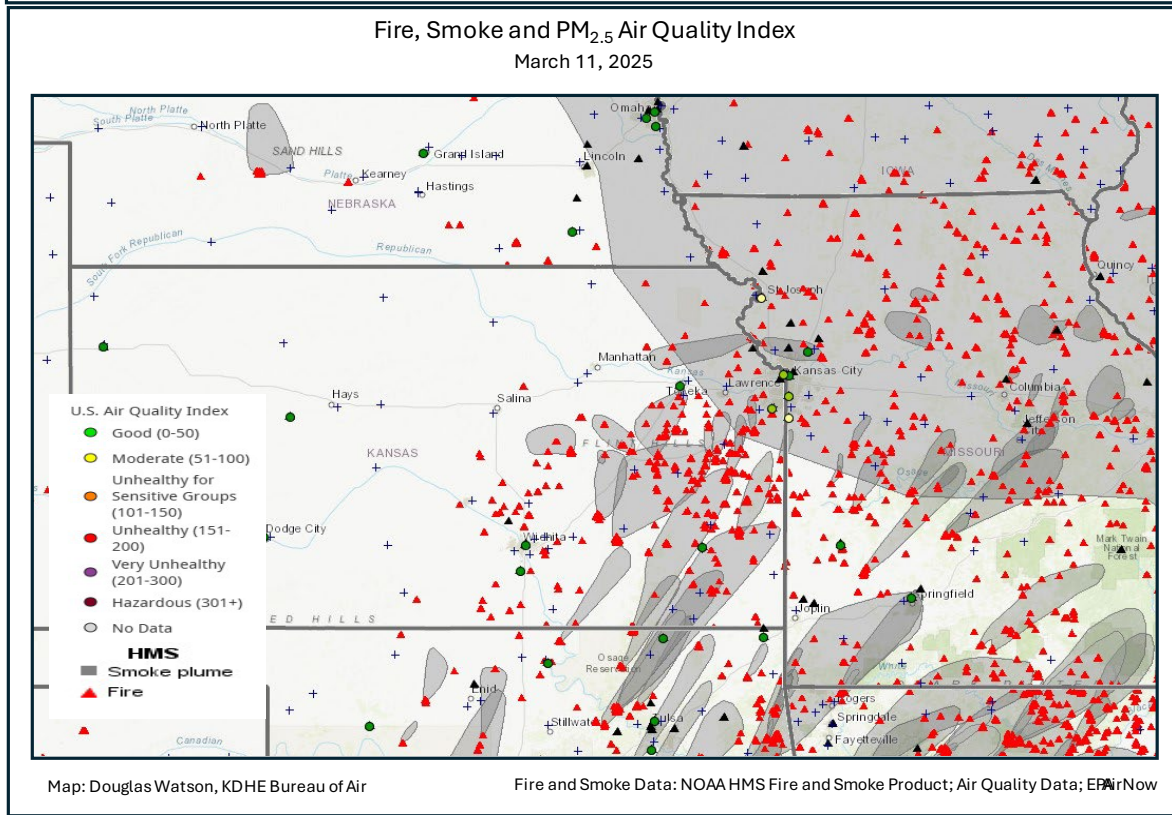
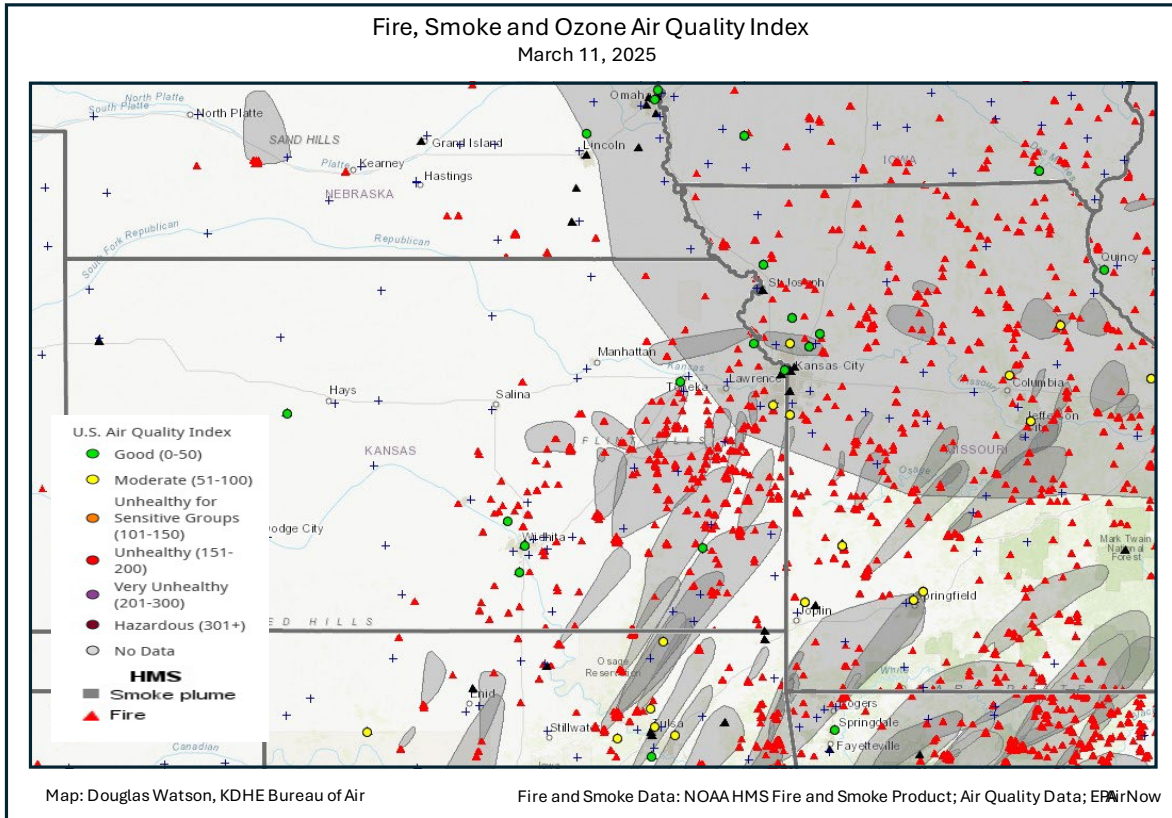
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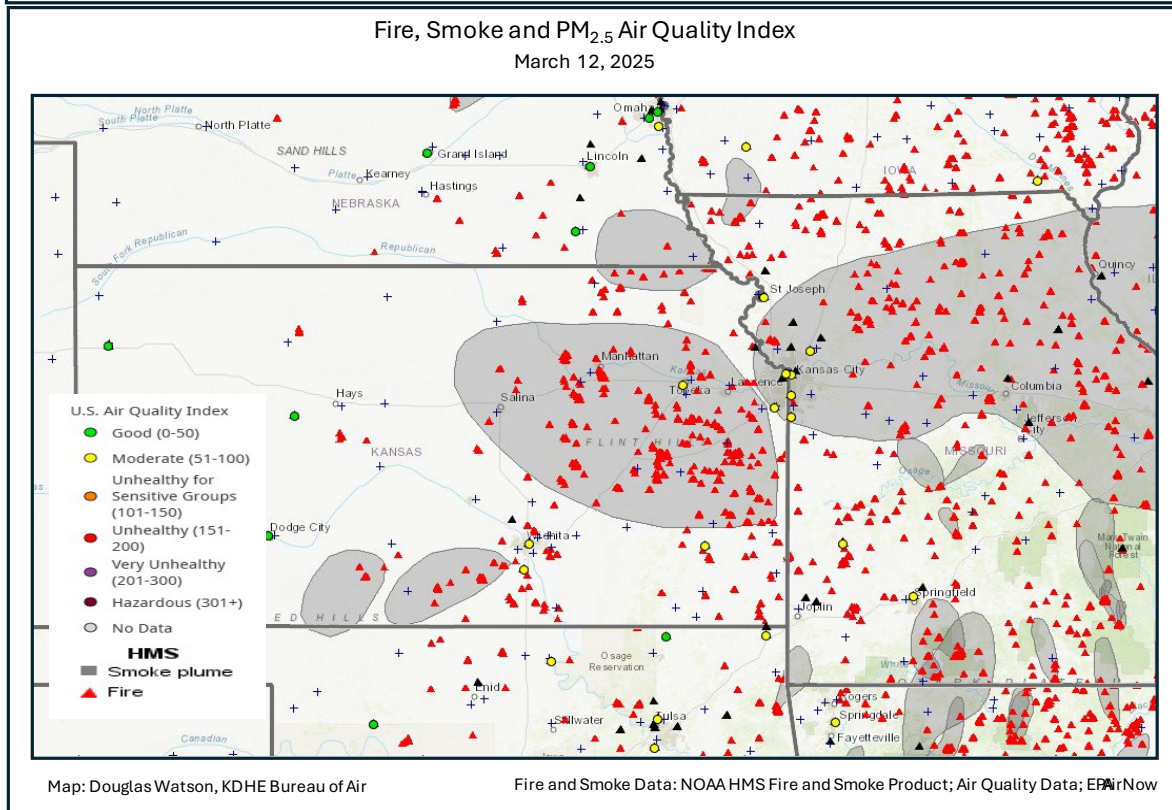
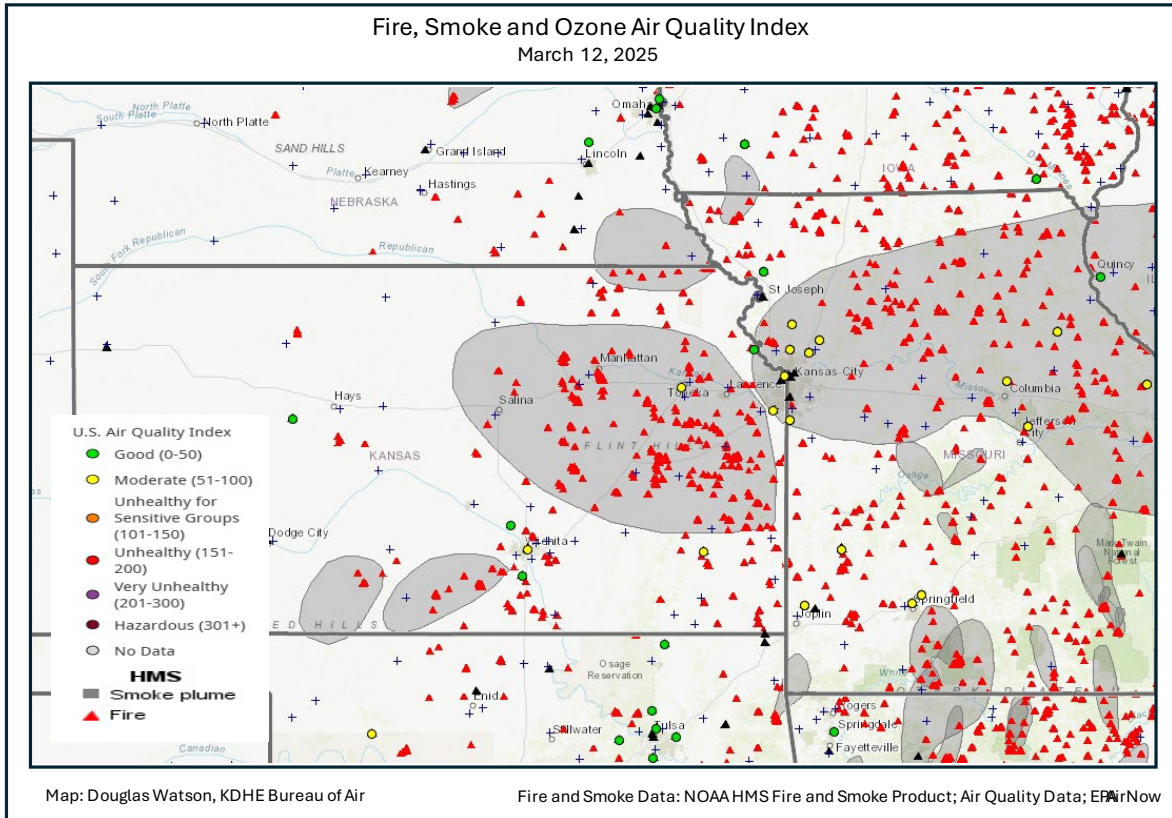
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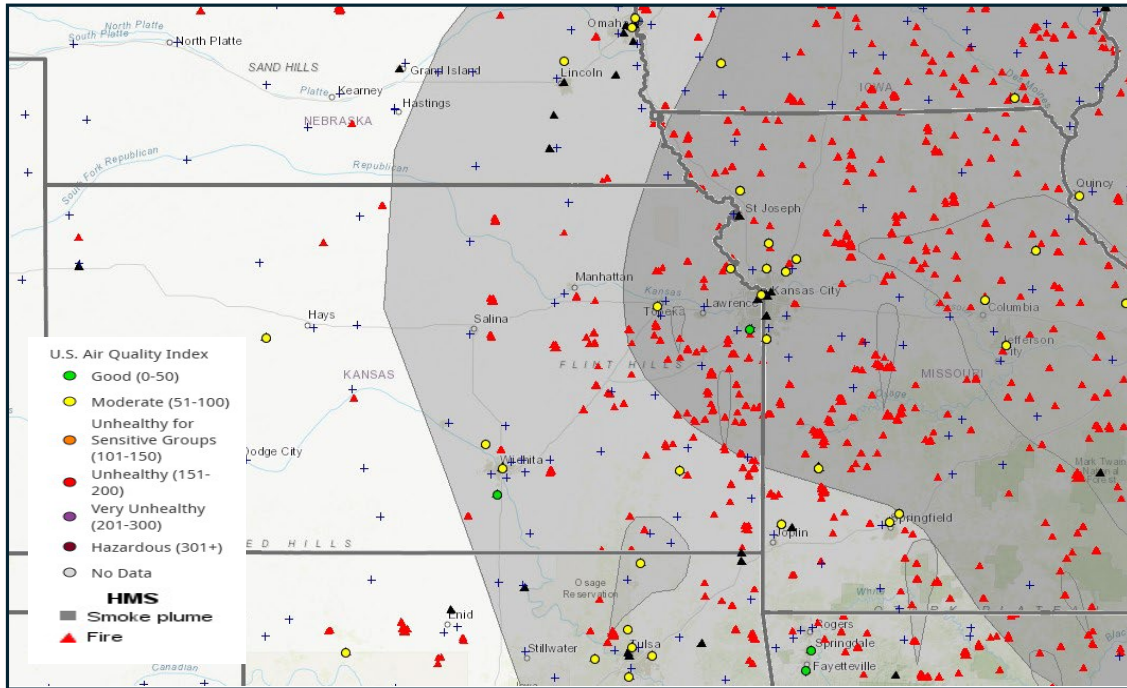
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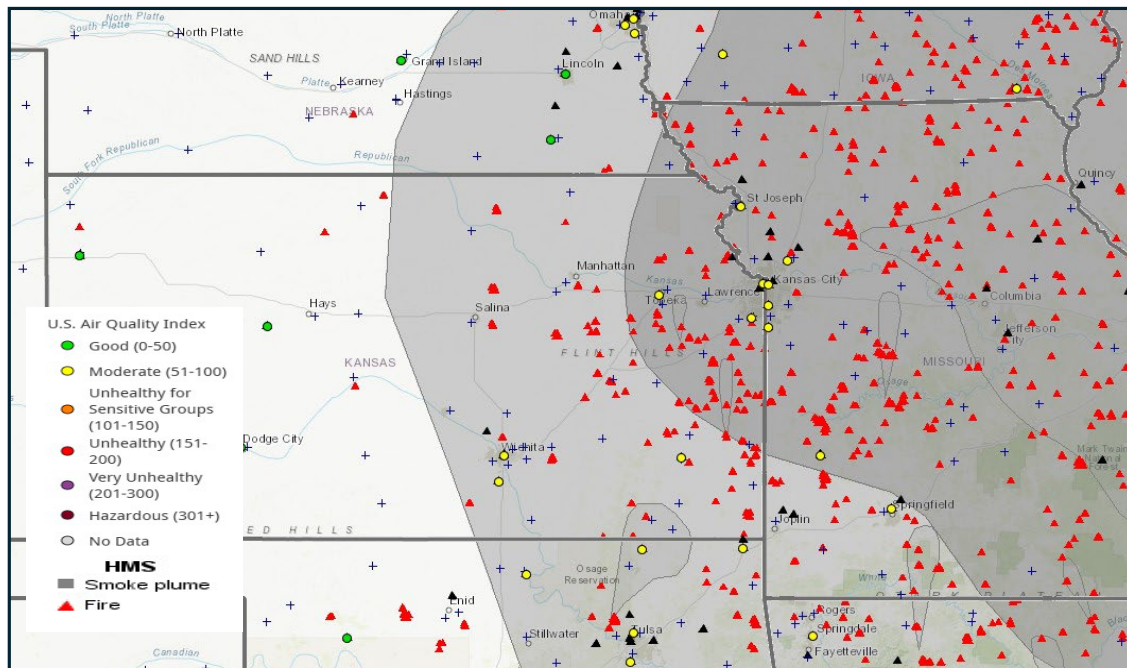
Fire, Smoke and Ozone Air Quality Index March 13, 2025



Map: Douglas Watson, KDHE Bureau of Air

Fire and Smoke Data: NOAA HMS Fire and Smoke Product; Air Quality Data: EPA AirNow

Fire, Smoke and PM_{2.5} Air Quality Index March 13, 2025

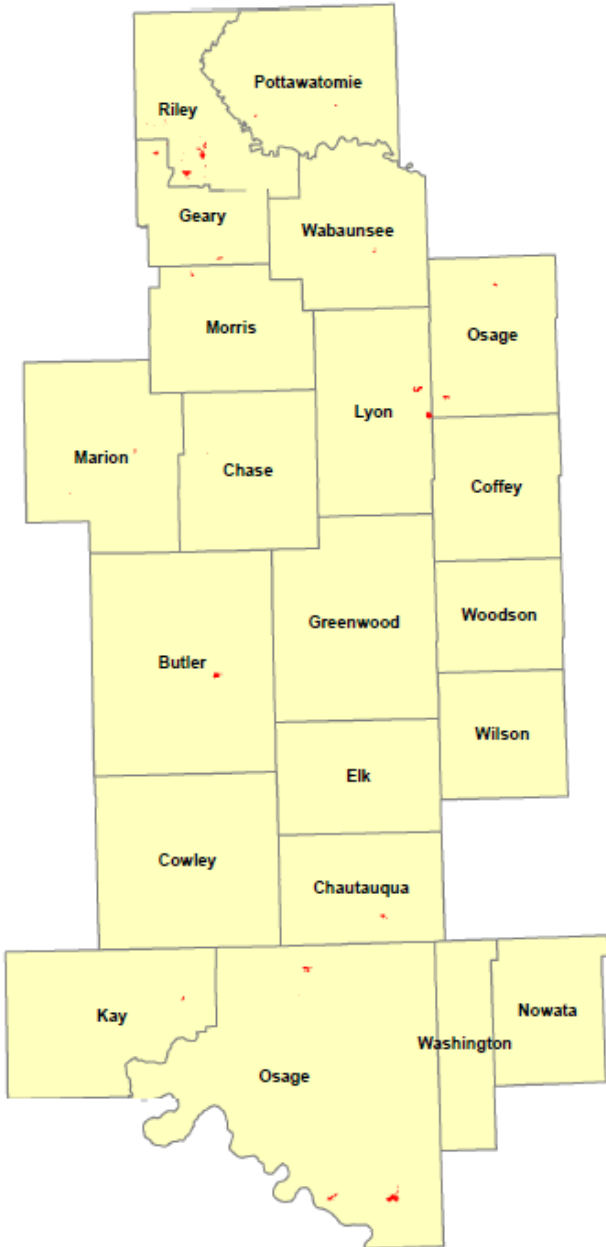


Map: Douglas Watson, KDHE Bureau of Air

Fire and Smoke Data: NOAA HMS Fire and Smoke Product; Air Quality Data: EPA AirNow



Flint Hills Acreage Burned (March 5 – March 10, 2025)



<u>Counties</u>	<u>Acres Burned</u>
Butler	695
Chase	15
Chautauqua	278
Coffey	0
Cowley	0
Elk	0
Geary	556
Greenwood	0
Lyon	1,343
Marion	201
Morris	170
Osage (KS)	479
Pottawatomie	170
Riley	2,131
Wabaunsee	123
Wilson	0
Woodson	0
Nowata (OK)	0
Osage (OK)	3,058
Washington (OK)	0
Kay (OK)	185
Total	9,404
* Denotes county was partly or completely covered by clouds during latest analysis.	



Upcoming Look at Fires and Smoke

Low pressure and a strong cold front will move across most of the Flint Hills today (Friday) with very windy conditions ahead of the front. Winds will be 25-35 mph with gusts near 60 mph. This will lead to extreme wildfire danger across the area. Saturday will see much cooler temperatures (although near normal) in the mid-50s but breezy conditions will continue with north winds 15-20 mph with gusts to 30 mph will limit the number of prescribed fires in Kansas. Winds should become lighter on Sunday which could lead to an increase in fire activity. High fire danger is expected to return to large portions of the forecast area Monday and Tuesday as a return to unseasonably warm temperatures, gusty winds, and low RH values are forecast for both days. Highs should reach the upper 70s to lower 80s. Another strong front moves through very early Wednesday morning and will bring a chance of rain/snow and much cooler temperatures in the upper 40s during the day and strong northerly winds. Thursday should have near normal high temperatures in the mid 50s.

Ideal Weather Conditions for Prescribed Burning

******This Graphic is Currently Unavailable from the NWS******

Current National Weather Service forecast for the approximate center of the Flint Hills showing when conditions may be most favorable for wildland burning as described at KSFire.org. Conditions are most favorable when each parameter has a colored boxplot displayed.

For more information, contact:

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