

# Flint Hills Wildland Fire Update

April 25, 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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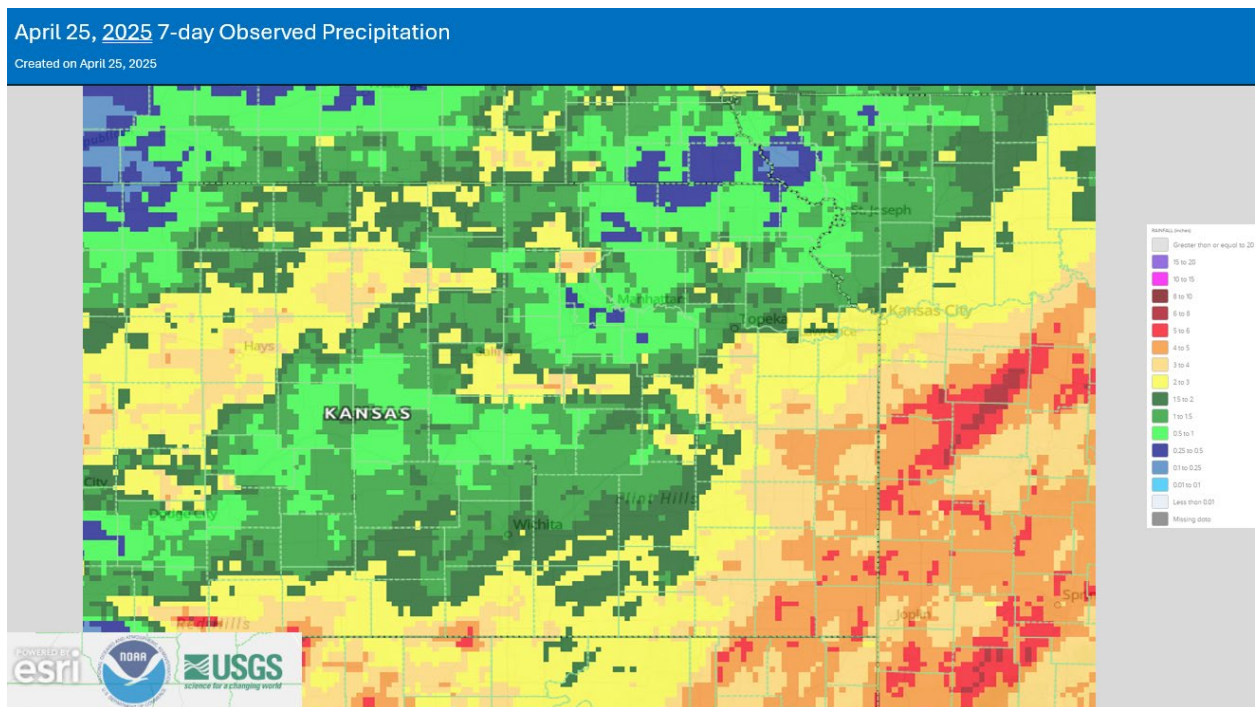
This website was developed as part of the development of the Kansas Flint Hills Smoke Management Plan. Kansas State University hosts the webpage, and it includes important information for ranchers and others who might be interested in the Flint Hills. It provides training, regulations, policies, publications, 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

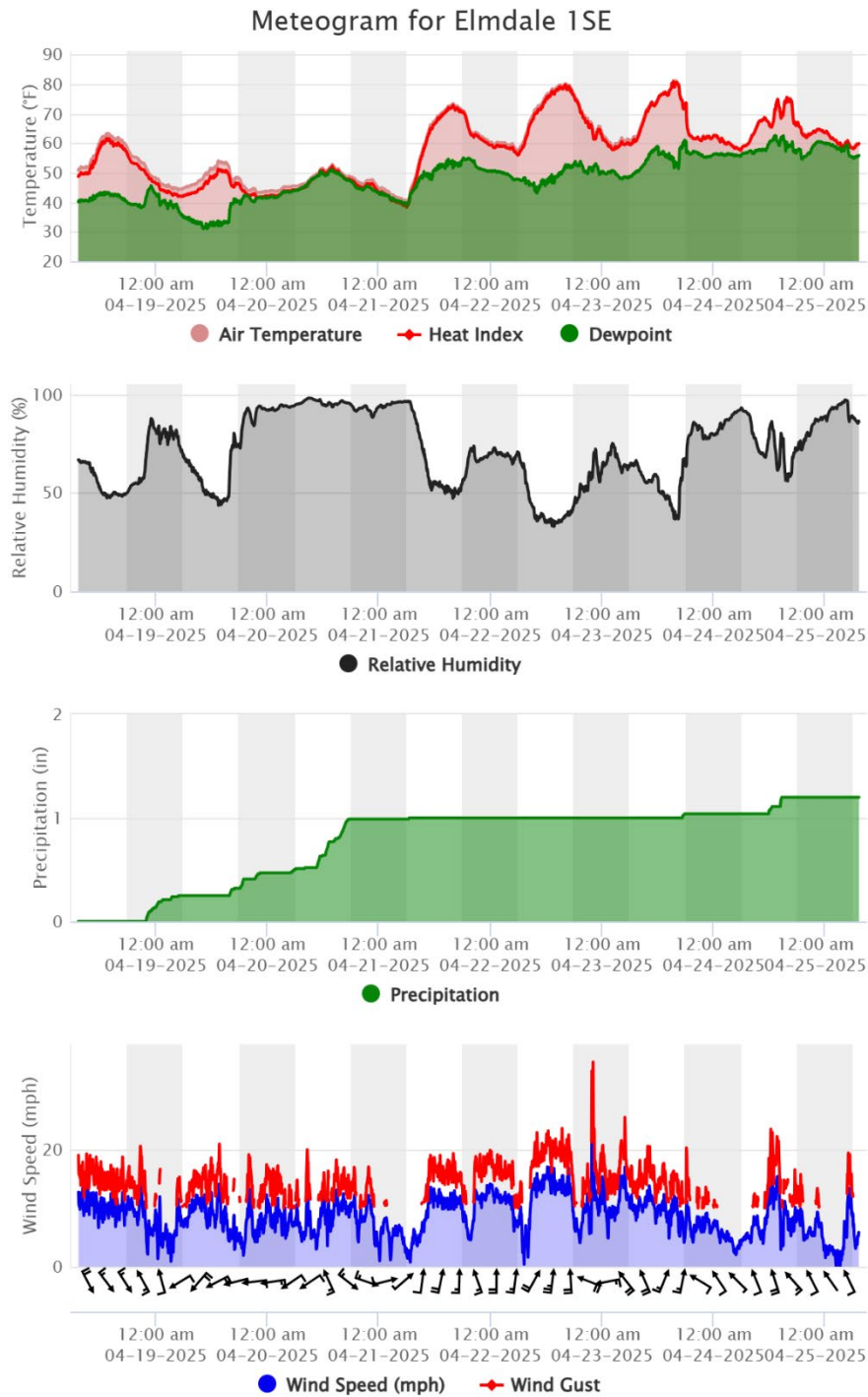
Falling temperatures from the lower-70s to the 50s and mostly cloudy skies were observed last Friday (April 18) across the region. Strong winds from the south-southwest (15-25 mph) in the early morning changed to the north-northwest by 6am and continued moderate. Cool temperatures in the low to mid 50s occurred on Saturday (April 19). Winds were light from the north-northeast early before becoming light and variable by evening and light rain developed. Mostly cloudy skies, occasional rain and northerly winds of 5-15 mph and temperatures in the upper-40s were the rule on Sunday (April 20). Early foggy conditions gave way to fair conditions on Monday (April 21) with temperatures warming to the lower-70s by afternoon with light south-southwest winds (5-15 mph). Tuesday (April 22) saw moderate winds mainly from the south throughout the day (10-20 mph) and temperatures reaching near 80°. Wednesday (April 23), very early morning winds were from the south-southeast at 5-10 mph. with scattered thunderstorms. Fair skies ruled throughout the remainder of the day before another round of heavy thunderstorms moved into the area by early evening. Temperatures were mainly in the mid-70s. Thursday (April 24) saw highs in the lower-70s. Winds were light from the south-southeast at 5-10 mph. Most areas of Kansas received precipitation (>.50 inch) over the last week. Heavier precipitation (2.50 to 4.5 inch) occurred over southern and southeast Kansas and parts of western Kansas.

## Precipitation



NOAA/NWS Observed Total Precip. for April 18-April 25, 2025.

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7-day (April 18-April 25, 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 April 18 – April 24, 2025, there were no air quality exceedance 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.

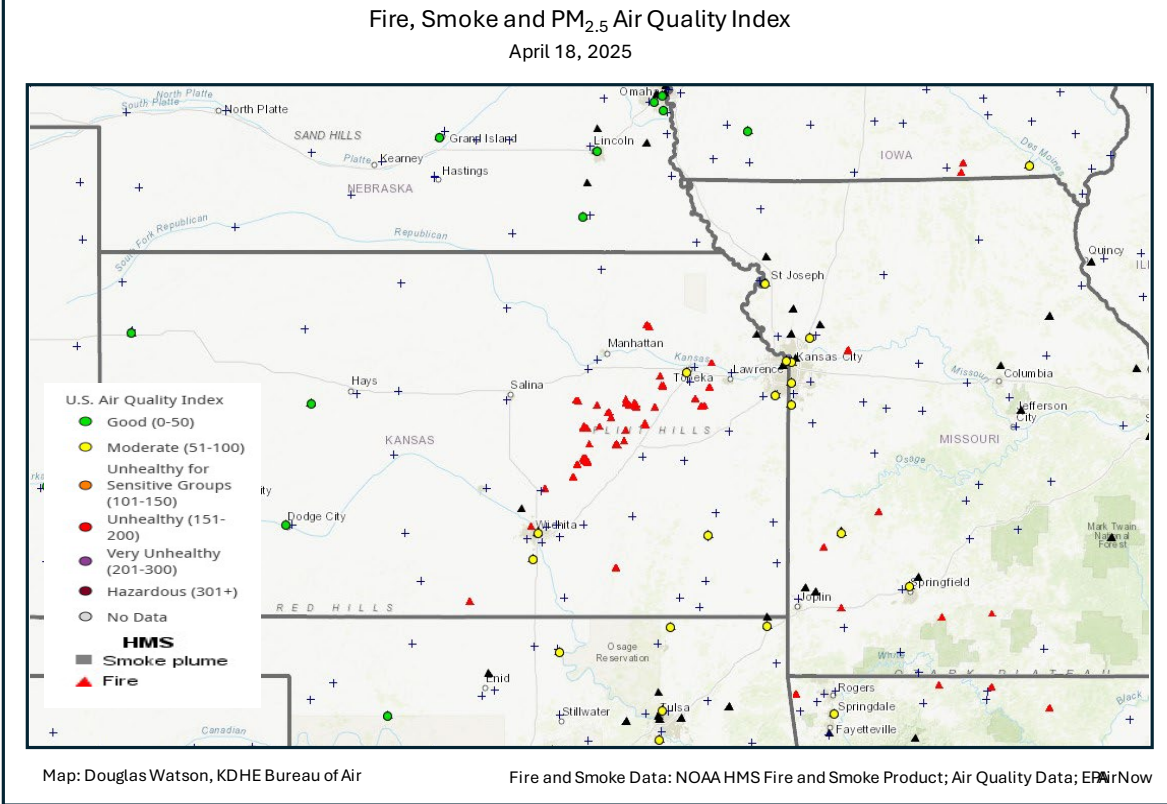
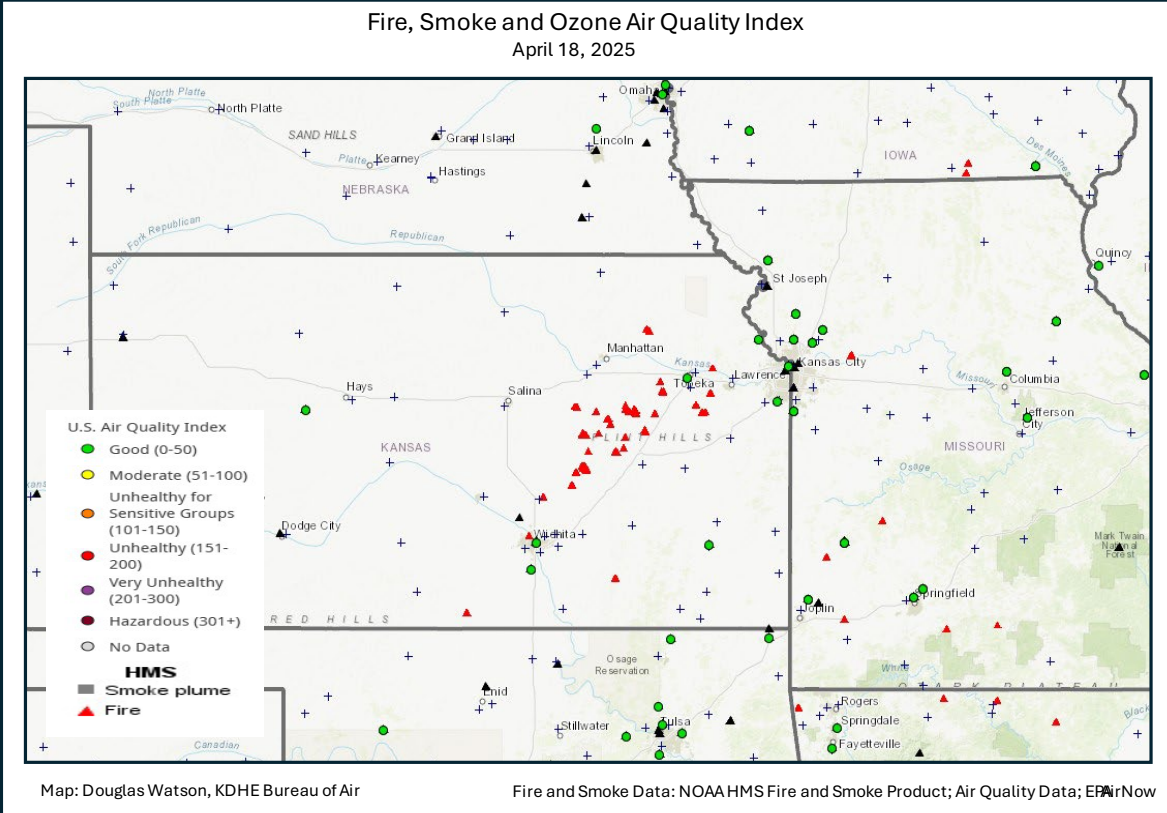
**PM<sub>2.5</sub>:** Preliminary data indicates no exceedances of the NAAQS daily 24-hour average maximum of 35 µg/m<sup>3</sup>.

Prescribed fires activity was very light on Friday (April 18) across the Flint Hills with scattered fires in the central section. No large smoke plumes were observed. Prescribed fire activity was again light on Saturday (April 19). One small smoke plume was observed from fires to the east of Hastings, NE. AQI values for both PM<sub>2.5</sub> and Ozone were good. No prescribed fire activity was observed in the Flint Hills on Sunday (April 20), but a large area of smoke was observed over far western Kansas and Nebraska. On Monday (April 21), prescribed fire activity increased with warmer temperatures. Areas of smoke covered northeastern Kansas, southeast Nebraska and parts of Missouri into Iowa. PM<sub>2.5</sub> AQI values were moderate. On Tuesday (April 22), prescribed fires continued across the area, including the Flint Hills. Ozone AQI values were elevated in some areas. Prescribed fire activity was light on Wednesday (April 23). Smoke was observed over parts of Kansas, Nebraska, Missouri and Iowa. Some areas saw AQI values remain moderate. Prescribed fire activity was very light across all states in the Midwest on Thursday (April 24). Smoke was visible over the area but may be contributed to fires in Mexico and Central America.

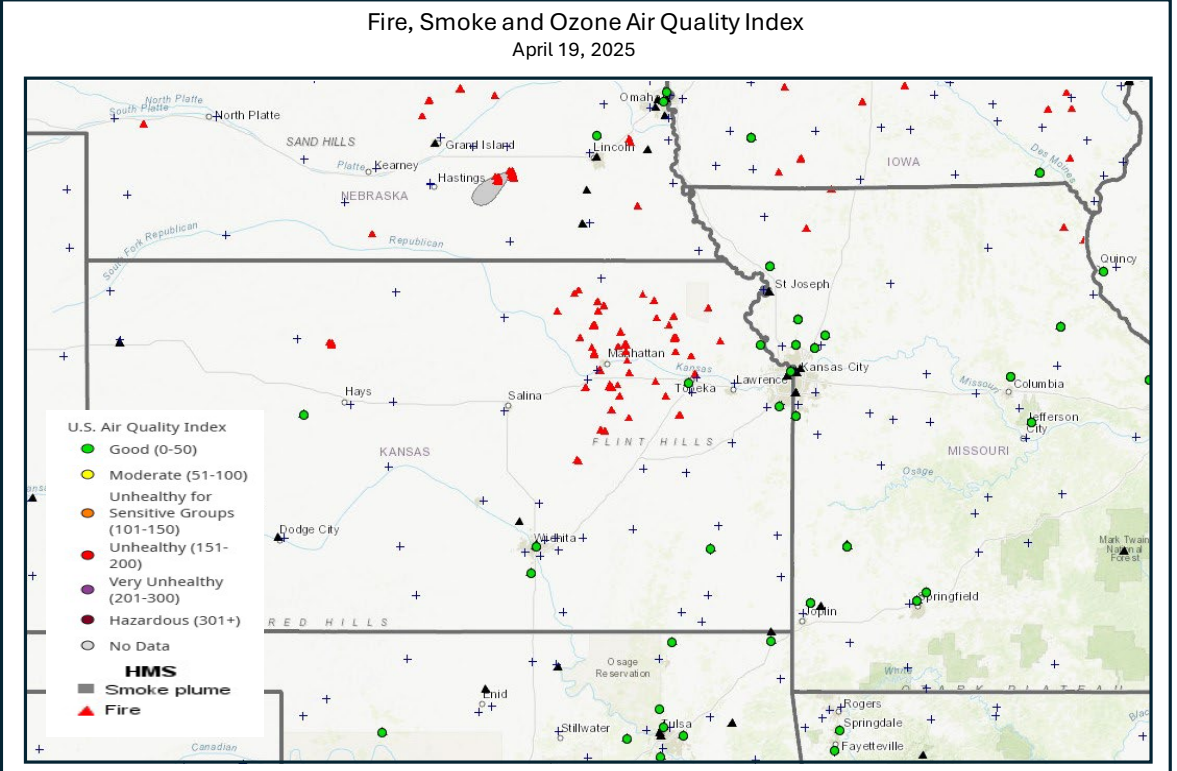
*The following pages have two maps for each day; One showing the 24-hour average Air Quality Index category for PM<sub>2.5</sub> and the other showing the 8-hour average maximum Air Quality Index category for Ozone from regulatory air quality monitors in the region. Both maps show fires and smoke as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



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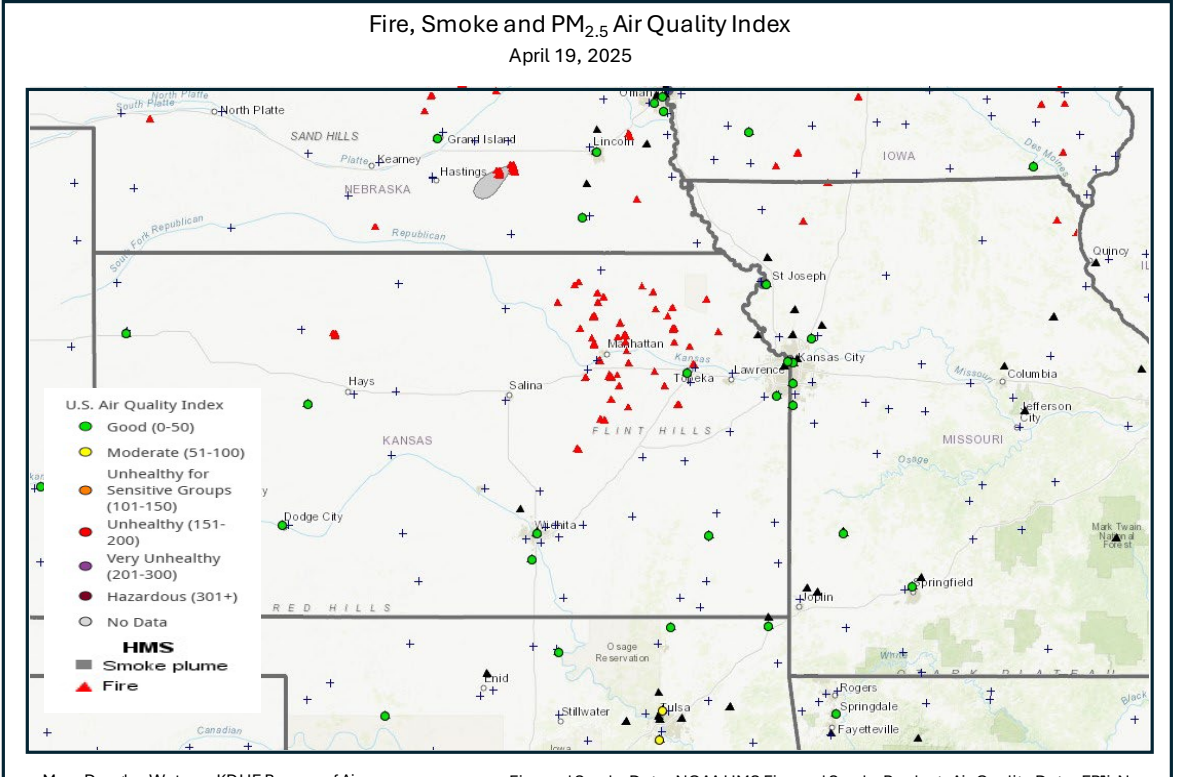


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Map: Douglas Watson, KDHE Bureau of Air

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

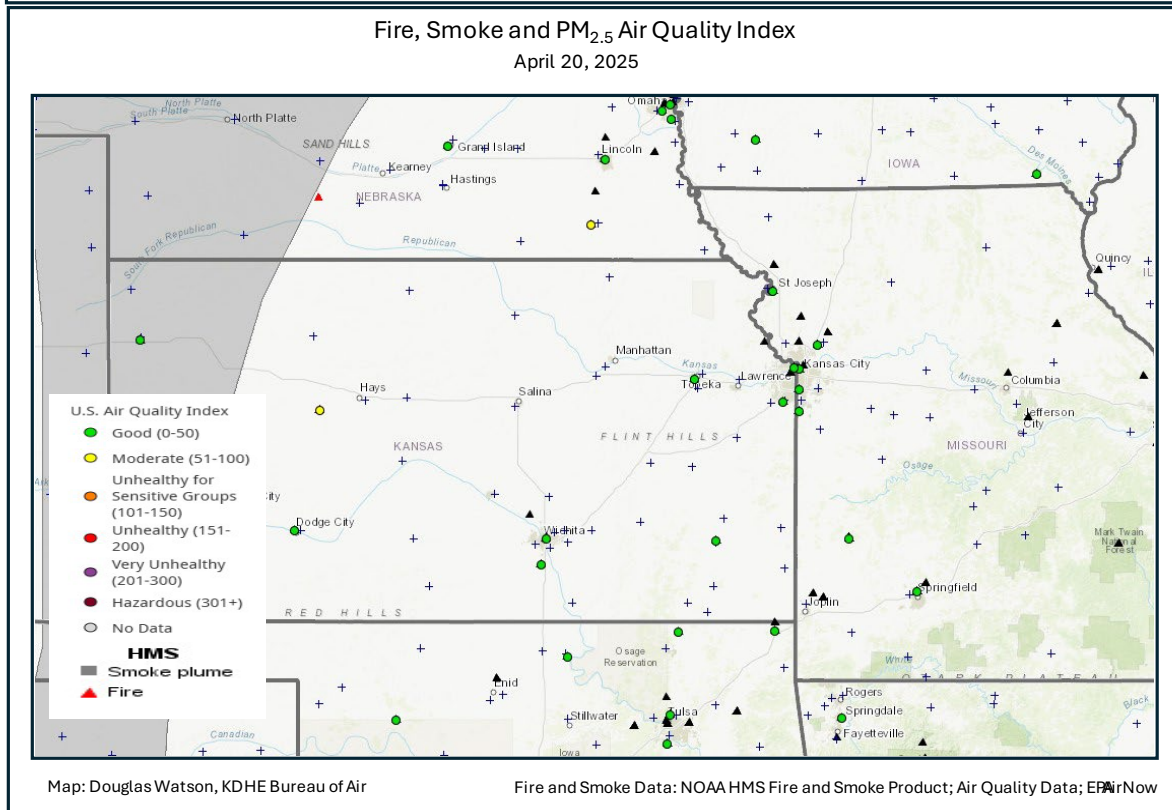
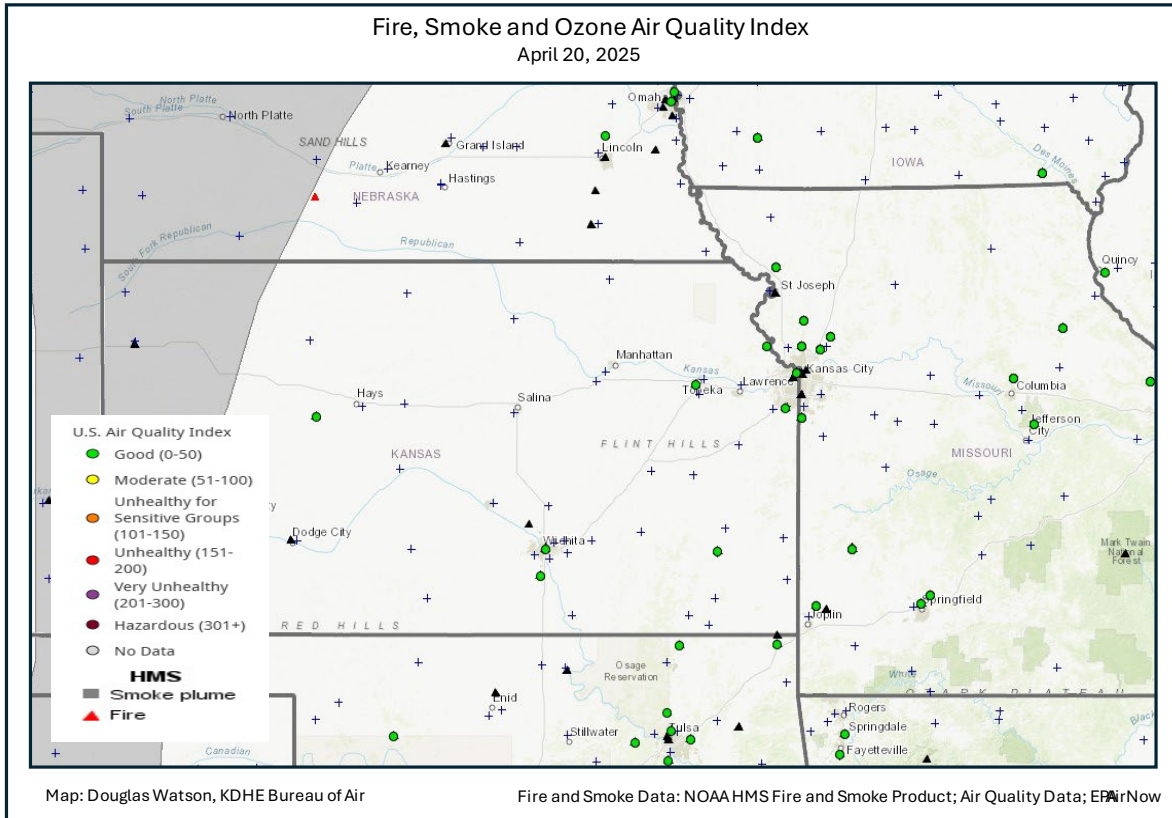


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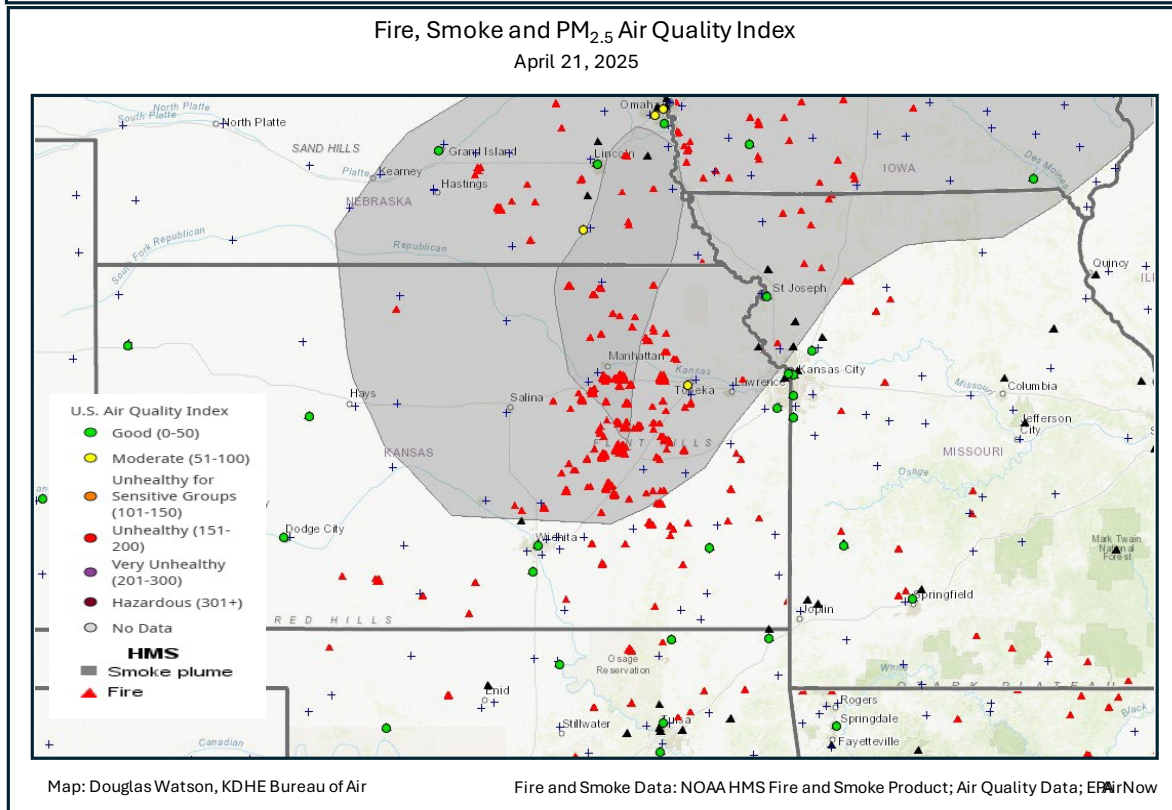
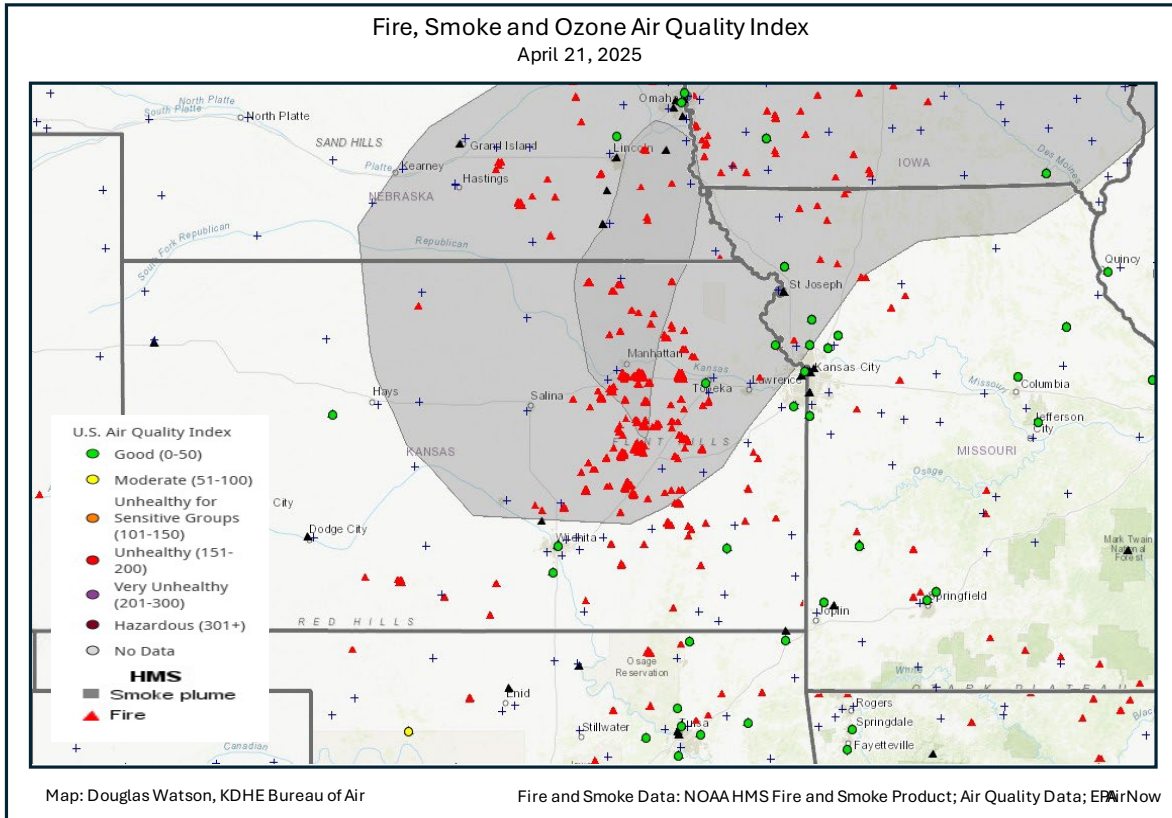
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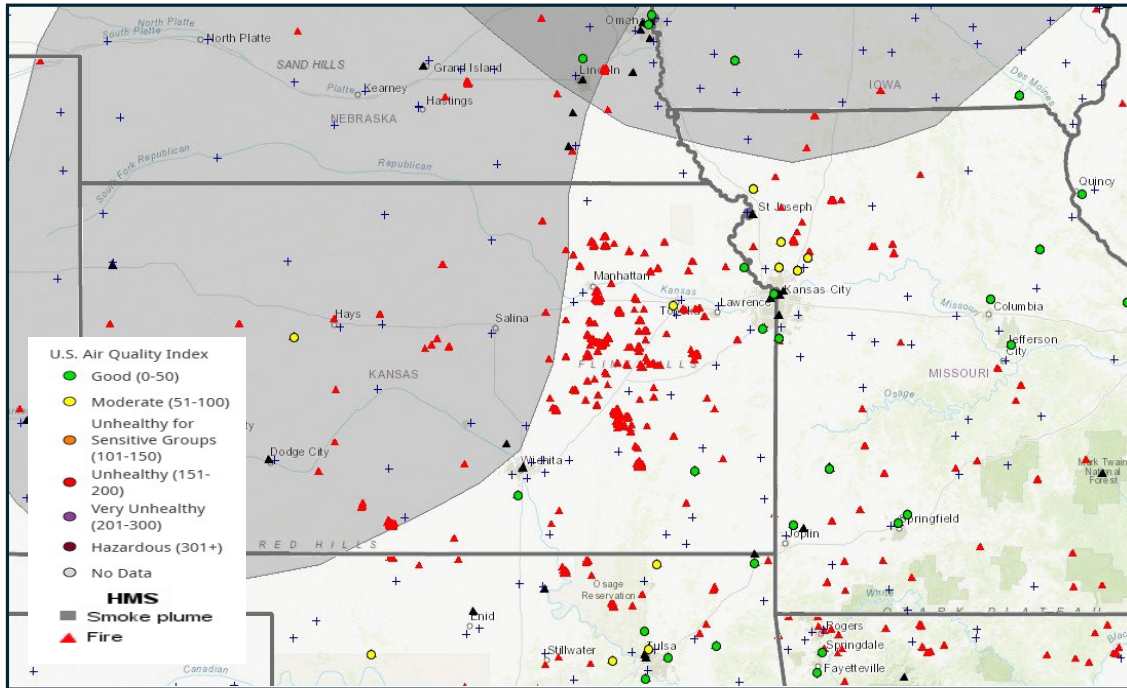




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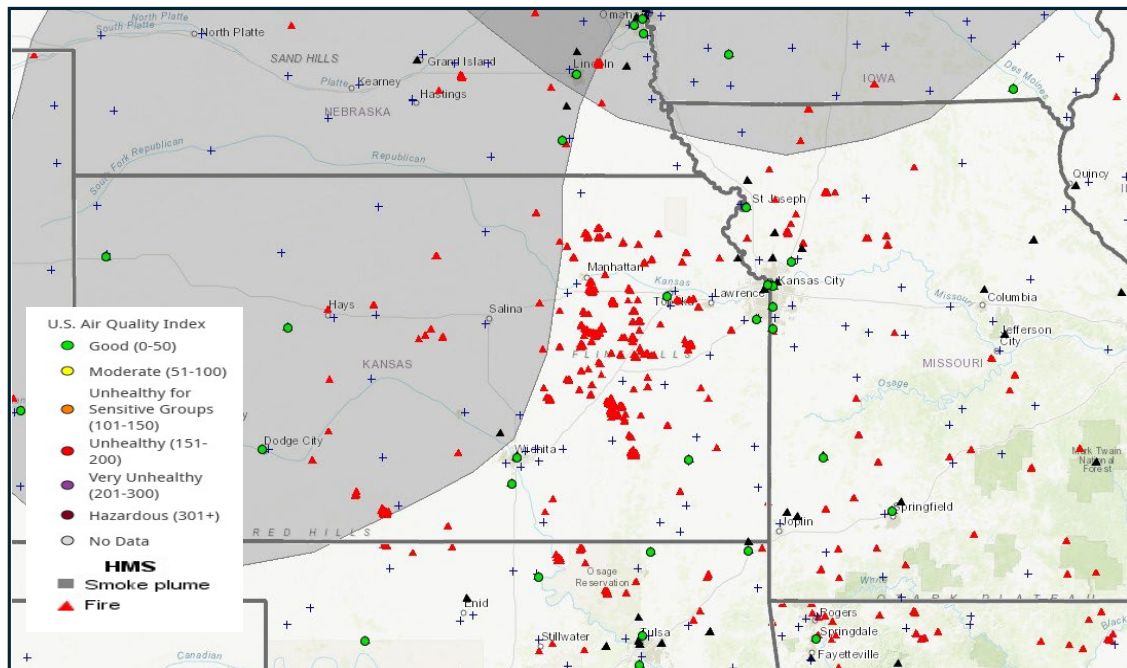
## Fire, Smoke and Ozone Air Quality Index April 22, 2025



Map: Douglas Watson, KDHE Bureau of Air

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

## Fire, Smoke and PM<sub>2.5</sub> Air Quality Index April 22, 2025



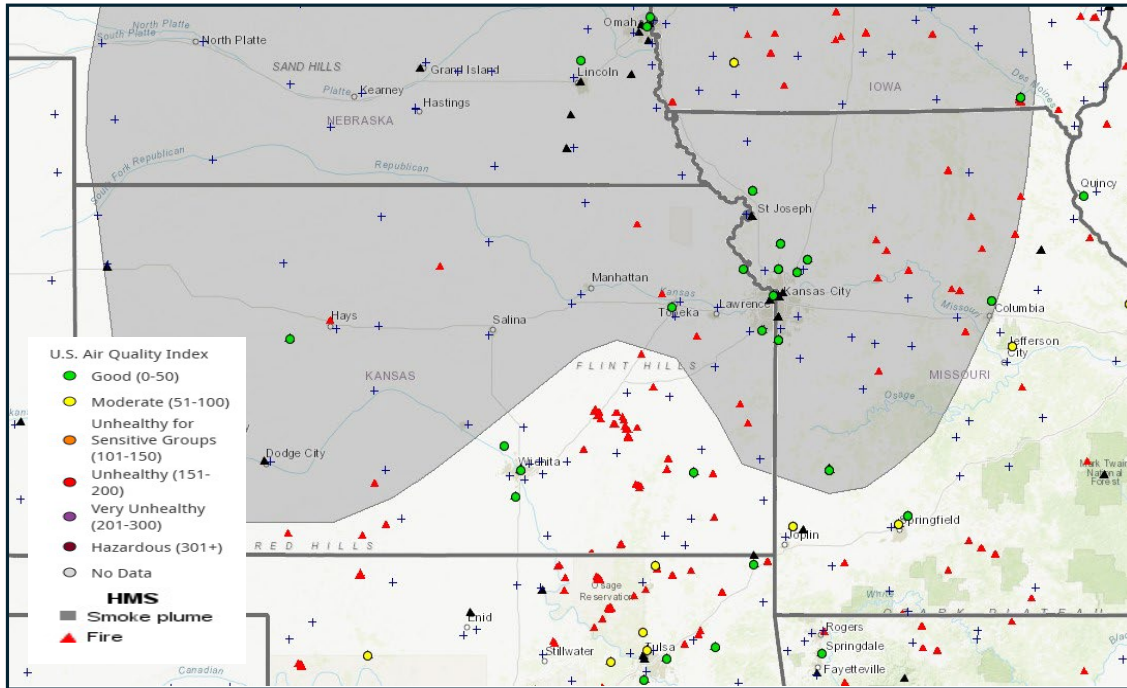
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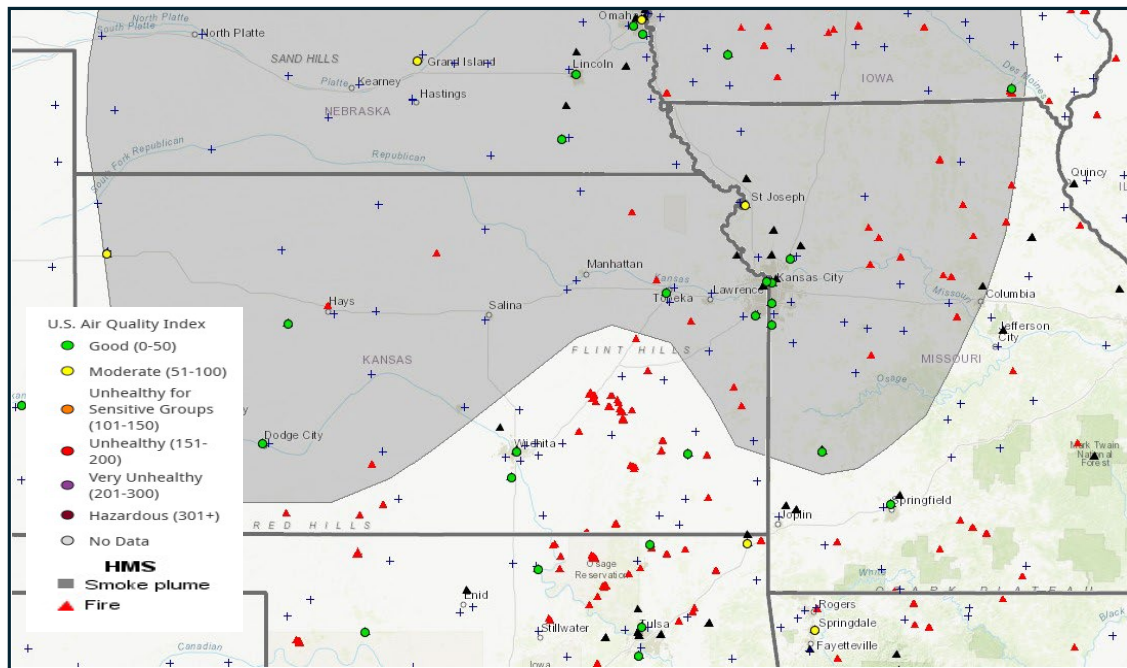
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Map: Douglas Watson, KDHE Bureau of Air

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

## Fire, Smoke and PM<sub>2.5</sub> Air Quality Index April 23, 2025



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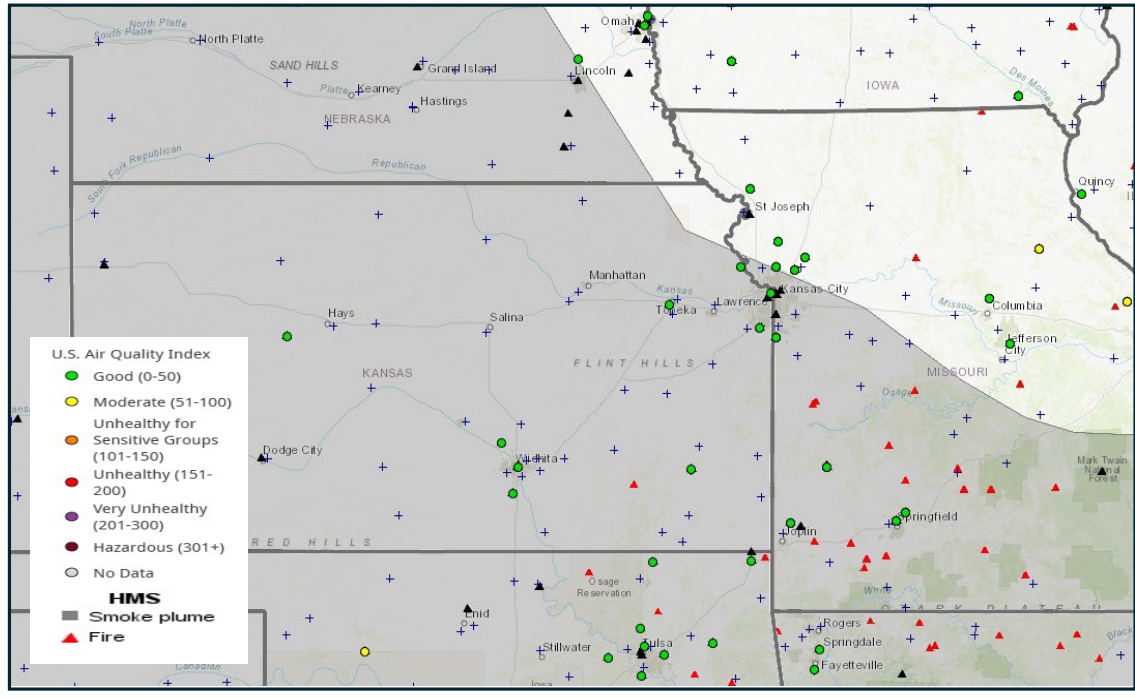
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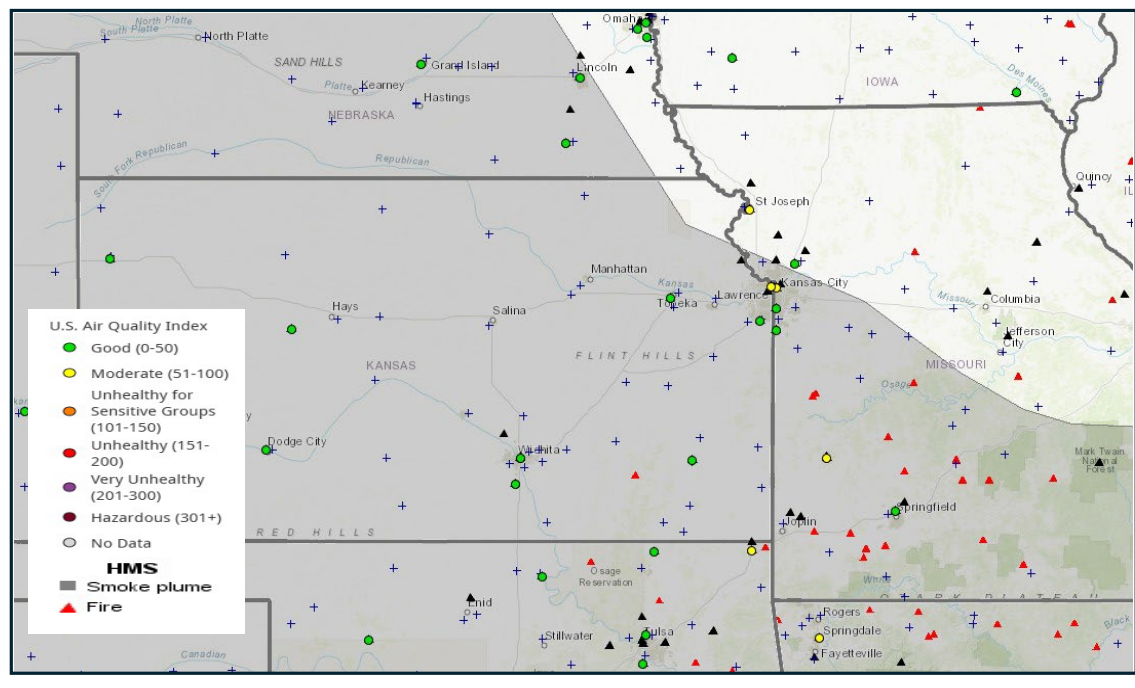
## Fire, Smoke and Ozone Air Quality Index April 24, 2025



Map: Douglas Watson, KDHE Bureau of Air

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

## Fire, Smoke and PM<sub>2.5</sub> Air Quality Index April 24, 2025



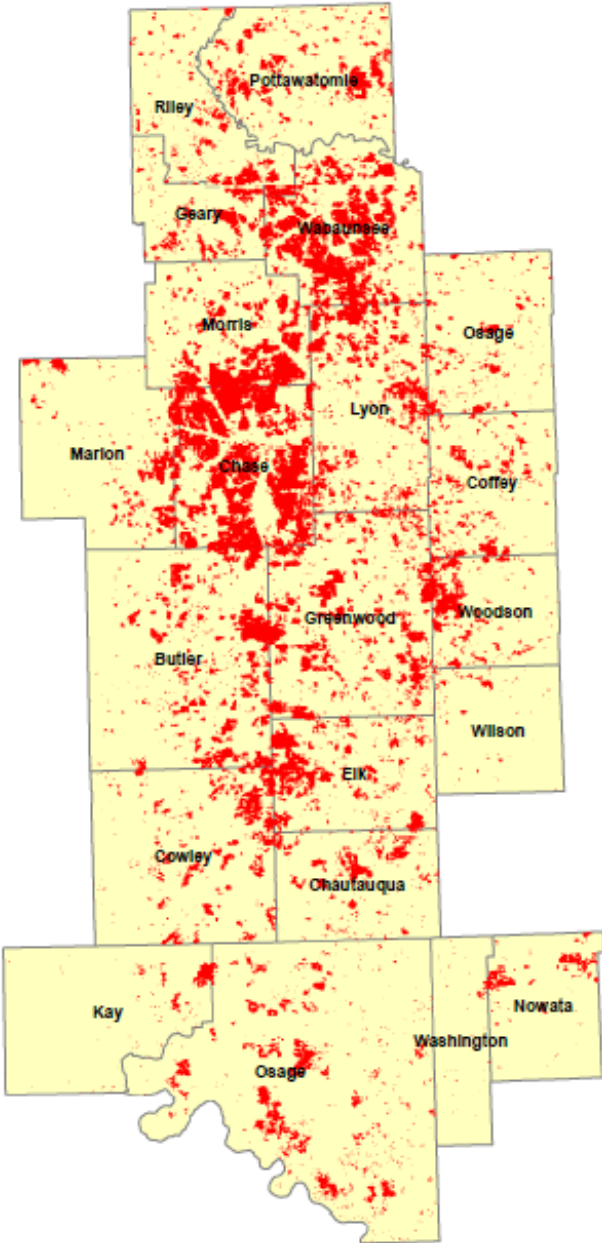
Map: Douglas Watson, KDHE Bureau of Air

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





Flint Hills Acreage Burned (March 5 – April 16, 2025)



<u>Counties</u>	<u>Acres Burned</u>	
<b>Butler</b>	122,767	*
<b>Chase</b>	262,137	
<b>Chautauqua</b>	37,406	
<b>Coffey</b>	42,673	*
<b>Cowley</b>	69,778	*
<b>Elk</b>	75,631	
<b>Geary</b>	38,642	*
<b>Greenwood</b>	143,556	
<b>Lyon</b>	107,493	*
<b>Marion</b>	47,198	*
<b>Morris</b>	105,114	*
<b>Osage (KS)</b>	29,730	*
<b>Pottawatomie</b>	66,256	*
<b>Riley</b>	42,981	*
<b>Wabaunsee</b>	188,591	*
<b>Wilson</b>	6,749	
<b>Woodson</b>	45,206	
<b>Nowata (OK)</b>	20,232	
<b>Osage (OK)</b>	94,056	
<b>Washington (OK)</b>	2,394	
<b>Kay (OK)</b>	11,985	
<b>Total</b>	<b>1,560,575</b>	
* Denotes county was partly or completely covered by clouds during latest analysis.		



## Upcoming Look at Fires and Smoke

Mostly cloudy skies will be the rule on Friday across the Flint Hills. Winds will remain out of the north at 10-15 mph (gust to 20 mph) for most of the day. These conditions may limit widespread prescribed fire activity today.

Winds will shift to the east-southeast at 5-15 mph with gust to 20 mph through the day Saturday. There will be a chance of scattered showers and thunderstorms. Highs will be cool in the lower 60s. Prescribed fire activity should be limited.

Showers and possible thunderstorms and high temperatures in the lower 70s will continue Sunday. Winds will be out of the south at 15-20 mph (gusts to 30 mph). These conditions should continue to limit fire activity.

Monday will see warmer temperatures in the low-80s with south winds around 20 mph and gusts to 35 mph. These strong winds should limit widespread fires across the Flint Hills along with quickly greening up conditions.

Temperatures will be in the upper-60s on Tuesday after a cold front passage and upper 60s to lower 70s on Wednesday. Winds will be moderate on Tuesday from the north. Scattered prescribed fire activity could again be possible on Tuesday. Chances of precipitation, including thunderstorms, increase on Wednesday and Thursday which may inhibit fire activity.

### **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](http://KSFire.org). Conditions are most favorable when each parameter has a colored boxplot displayed.*

For more information, contact:

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