May 3, 2024

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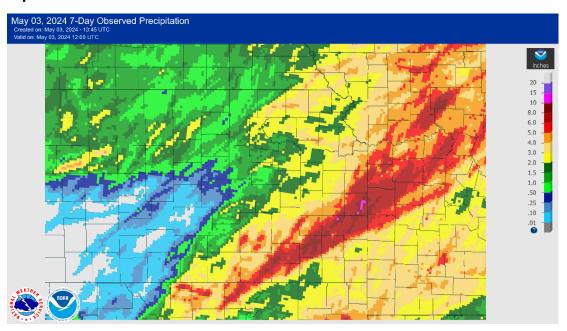
This website was developed as part of the development of the Kansas Flint Hills Smoke Management Plan. Kansas State University hosts the webpage, and it includes important information for ranchers and others who might be interested in the Flint Hills. It provides training, regulations, policies, publications,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

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Meteorology

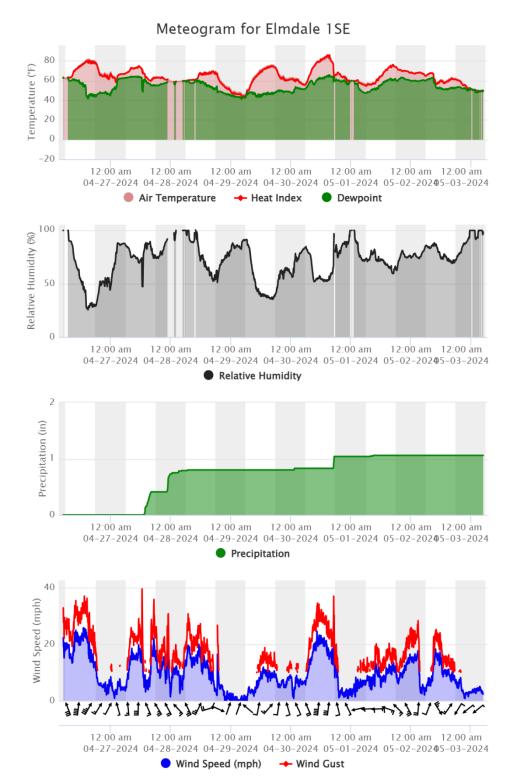
Strong south winds and warm temperatures were the focus of weather last Friday (Apr 26) where wind gusts approaching 40 mph were common in the afternoon. The first round of rainfall during this past week occurred for most on Saturday (Apr 27) with a warm front moving across the area. Occasional clouds and precipitation continued Sunday (Apr 28) as temperatures remained near steady. Monday (Apr 29) saw seasonably warm temperatures, sunny skies, and light winds. Warm temperatures on Tuesday (Apr 30) alongside other weather conditions gave way to significant thunderstorm development and severe weather for parts of the Flint Hills. Rain showers and thunderstorms continued on Wednesday (May 1) for some with cloud cover and seasonable temperatures continuing. A cold front finally pushed into the area on Thursday (May 2) resulting in some additional rain and otherwise cooler temperatures. Much of the Flint Hills saw significant rain, with at least the entire area seeing nearly an inch, but many seeing 2-4 inches of rainfall with some isolated higher amounts.

Precipitation



NOAA/NWS Observed Total Precipitation for April 26 - May 3, 2024.

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7-day (April 26 – May 3, 2024) Observed Weather from the Kansas Mesonet station near Elmdale, Kansas

(https://mesonet.k-state.edu/)

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Fire, Smoke, and Air Quality

For the period of April 26 – May 2, 2024, there were no preliminary air quality exceedances that were potentially influenced by prescribed fire within the Flint Hills.

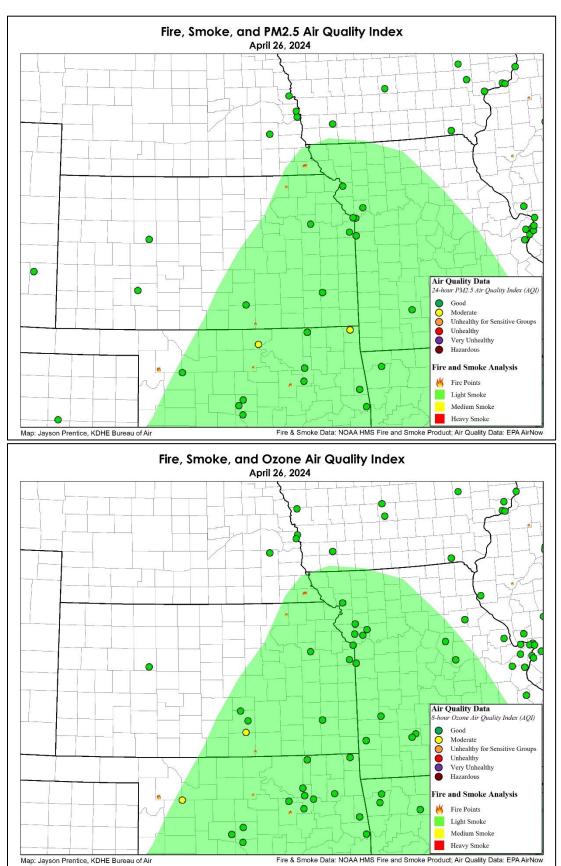
Ozone: Preliminary data indicates no exceedances of the NAAQS daily 8-hour average maximum of 70 ppb.

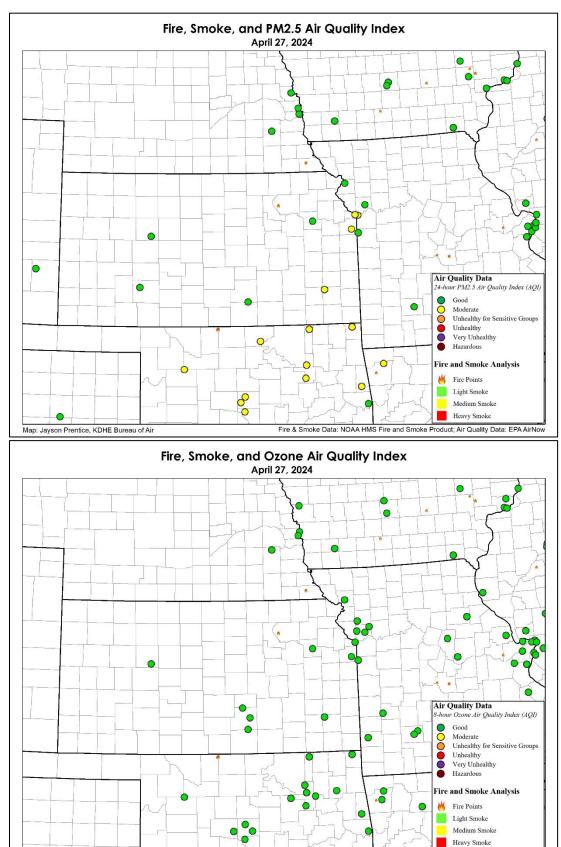
PM_{2.5}: Preliminary data indicates no exceedances of the NAAQS daily 24-hour average maximum of 35 μ g/m³.

Prescribed fire activity was limited throughout the past week with occasional rainfall, cloud cover, and breezy conditions. There were only some fires observed on Monday (Apr 29) on what was an ideal day for prescribed fire, which indicates that the prescribed fire window for most has closed for the season. Significant green-up with new grass growth has occurred throughout the Flint Hills and the calendar moving into May certainly signifies the end of prescribed fire use for a vast majority of fire practitioners.

Air quality during the past week was Good to Moderate across the region with only some elevated values in either particulate matter or ozone, especially in Oklahoma. While regional fire activity may have played some role, warmer temperatures and other pollution sources also likely contributed – especially in ozone development.

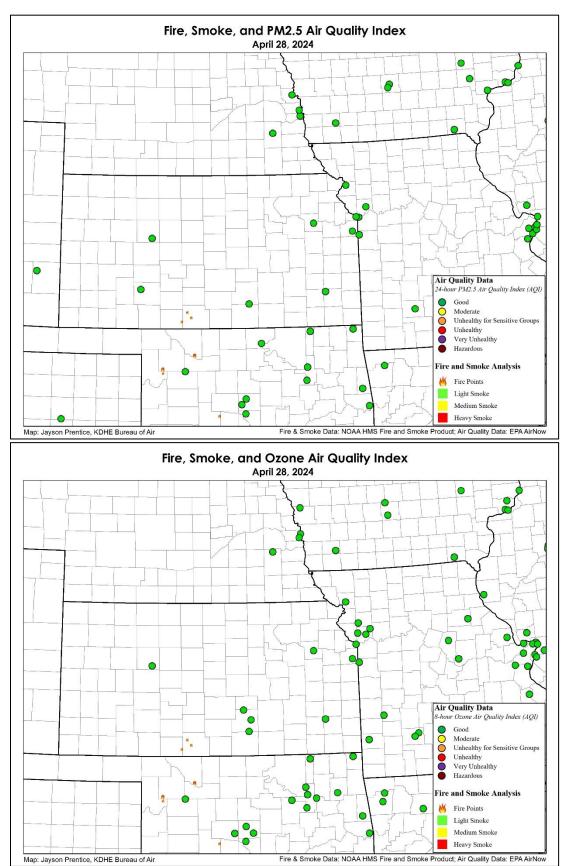
The following pages have two maps for each day; One showing the 24-hour average Air Quality Index category for $PM_{2.5}$ and the other showing the 8-hour average maximum Air Quality Index category for Ozone from regulatory air quality monitors in the region. Both maps show fires and smoke as analyzed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



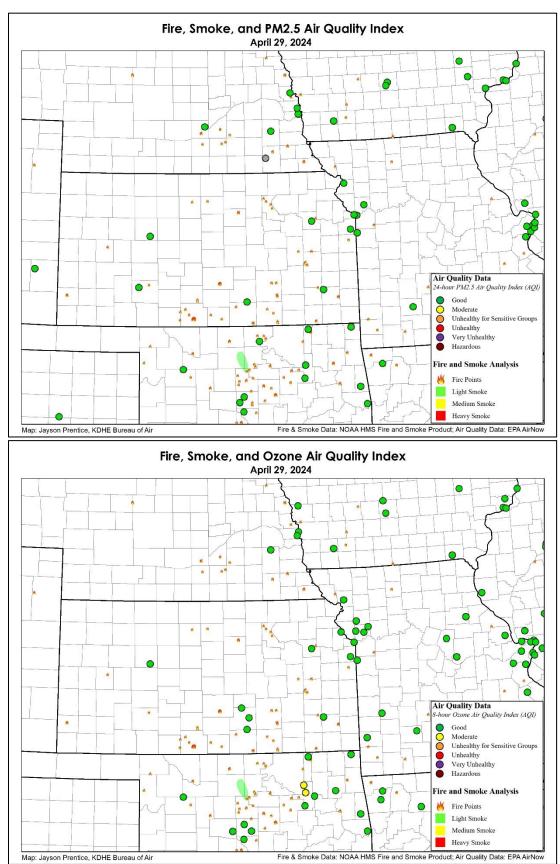


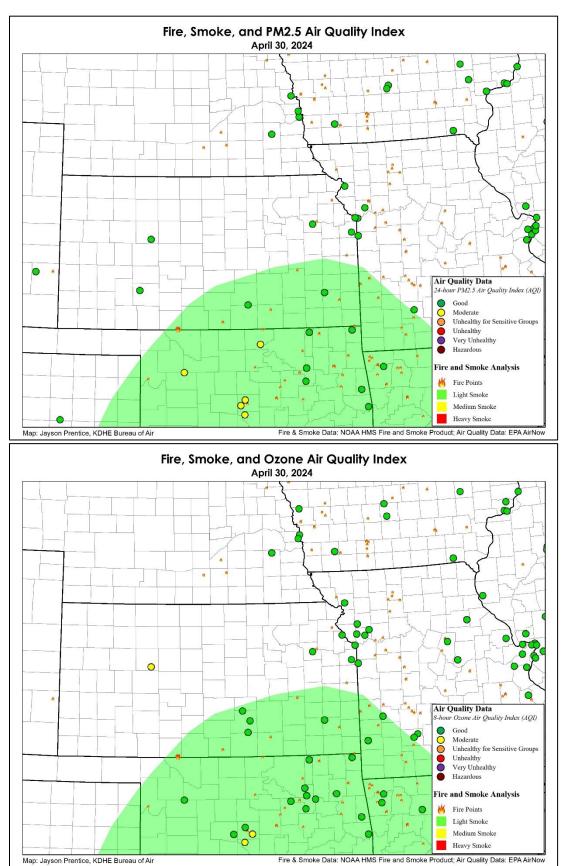
Fire & Smoke Data: NOAA HMS Fire and Smoke Product; Air Quality Data: EPA AirNow

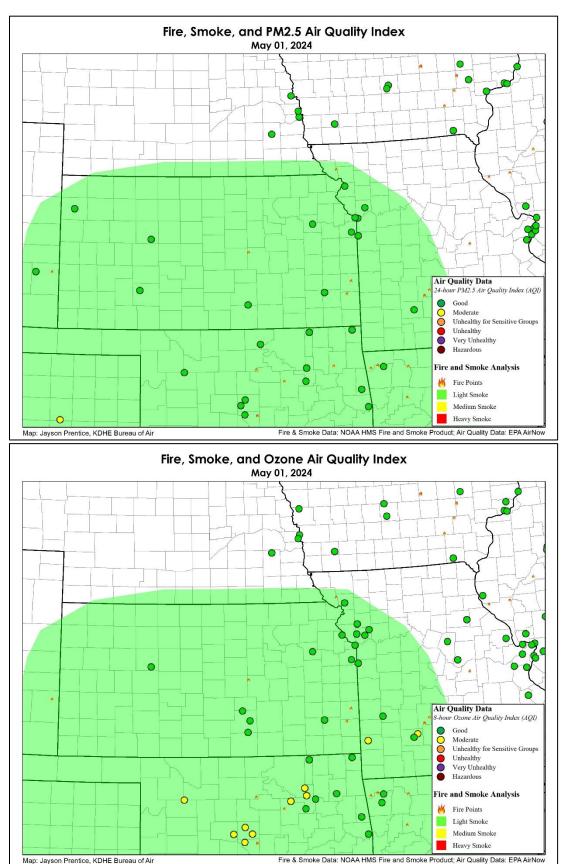
Map: Jayson Prentice, KDHE Bureau of Air



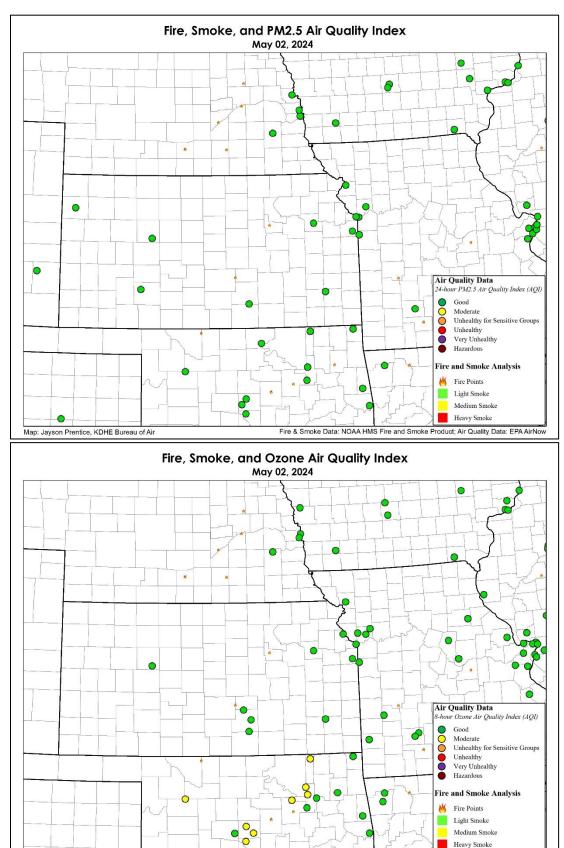
Friday, May 3, 2024 • 7
Kansas Department of Health and Environment







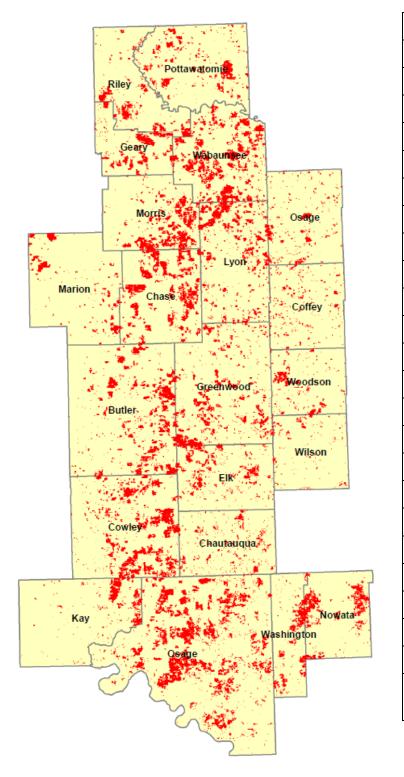
Map: Jayson Prentice, KDHE Bureau of Air



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

Map: Jayson Prentice, KDHE Bureau of Air

Flint Hills Acreage Burned (February 14 – April 29, 2024)



Counties	Acres Burned
Butler	104,064
Chase	101,423
Chautauqua	28,881
Coffey	23,012
Cowley	117,748
Elk	49,082
Geary	38,688
Greenwood	89,885
Lyon	84,913
Marion	29,221
Morris	74,952
Osage (KS)	29,978
Pottawatomie	56,048
Riley	45,823
Wabaunsee	126,103
Wilson	13,900
Woodson	23,923
Nowata (OK)	43,908
Osage (OK)	234,924
Washington (OK)	29,375
Kay (OK)	30,842
Total	1,376,663

^{*} Denotes county was partly or completely covered by clouds during latest analysis.

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This is the final routine weekly update for the 2024 spring prescribed fire period in the Flint Hills. A full summary with historical comparisons and a review of air quality throughout the spring period will be provided at a later date.

For more information, contact:

Jayson Prentice

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