

Flint Hills Wildland Fire Update

May 6, 2022

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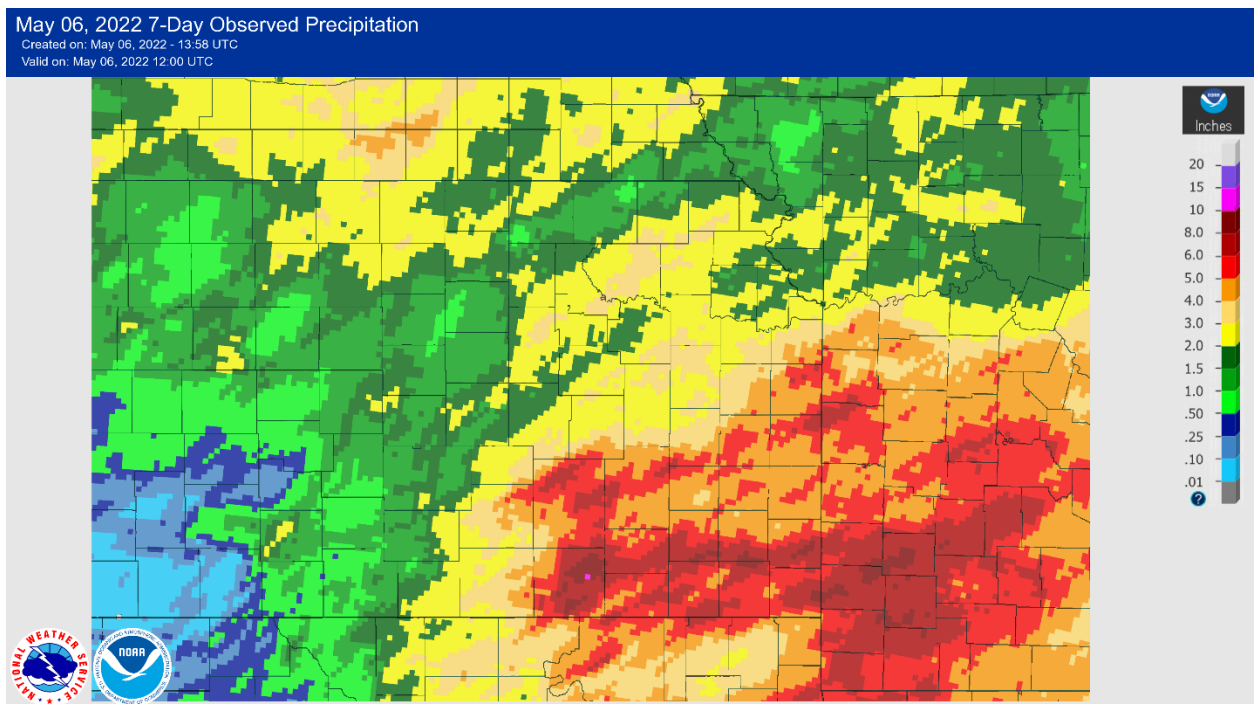
This website was developed as part of the development of the Kansas Flint Hills Smoke Management Plan. Kansas State University hosts the webpage and it includes important information for ranchers and others who might be interested in the Flint Hills. It provides training, regulations, policies, publications,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

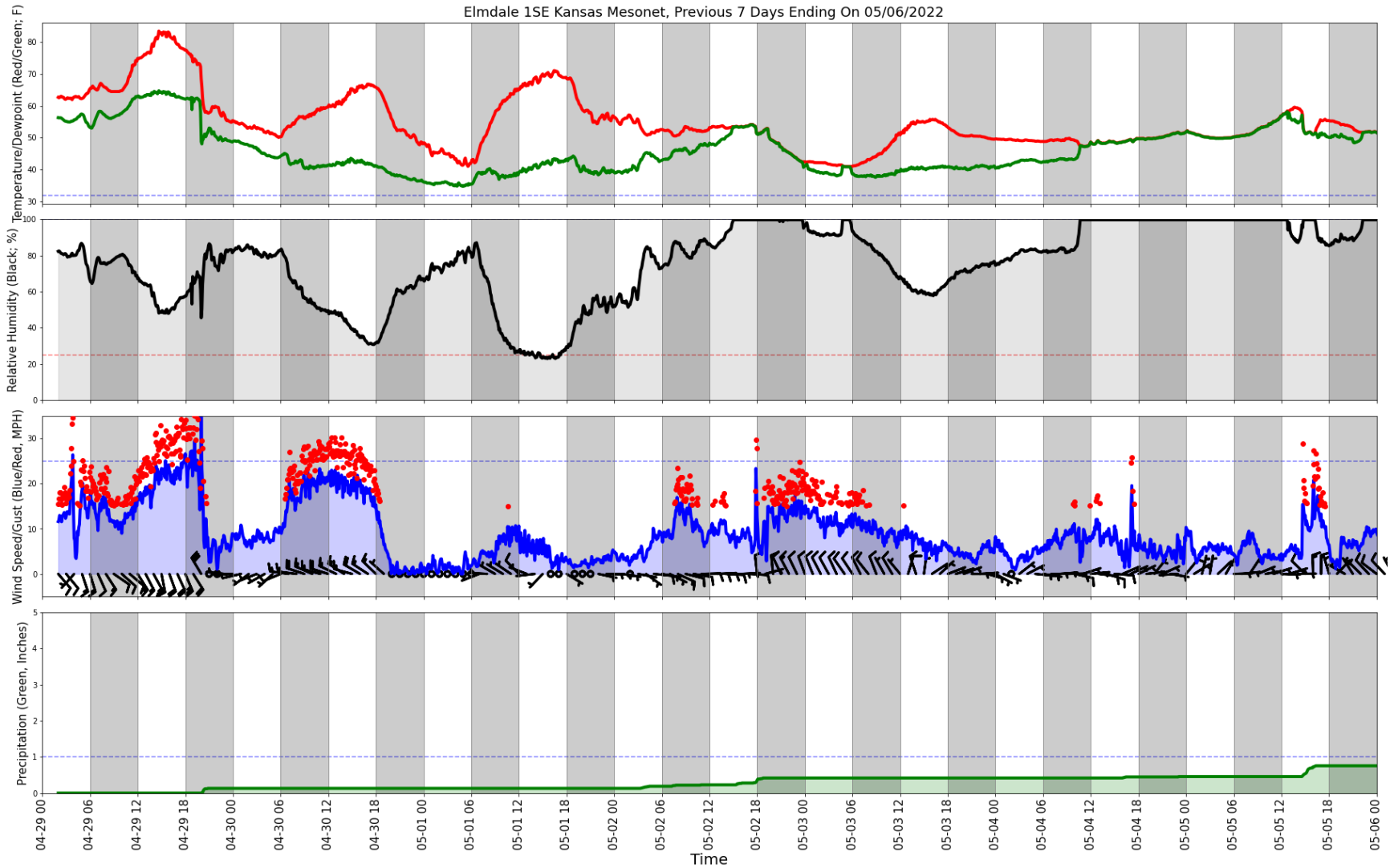
A strong storm system on Friday (April 29) brought windy conditions to much of the Flint Hills with a dryline and elevated fire weather concerns just west of the Flint Hills. Numerous thunderstorms developed and moved across the area late Friday with some rain lingering into Saturday (April 30) behind a cold front. Skies cleared and temperatures remained seasonable for Sunday (May 1) with lighter winds before another slow-moving storm system moved into the region. Monday (May 2) through Thursday (May 5) has featured occasional bouts of rain, heavy at times, and otherwise cloudy and cooler conditions. Total precipitation amounts for the prior seven days have varied from an inch to upwards of five inches in the southern Flint Hills with localized amounts even approaching ten inches with reports of flooding in some parts of southeast Kansas and northeast Oklahoma.

Precipitation



NOAA/NWS Observed Total Precipitation for Apr. 29 – May 5, 2022.

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7-day (Apr. 29 – May 5, 2022) Observed Weather from Kansas Mesonet station near Elmdale, Kansas
<https://mesonet.k-state.edu/>



Fire, Smoke, and Air Quality

For the period of April 29 – May 5, 2022 there were zero air quality exceedances of the National Ambient Air Quality Standards (NAAQS) that were potentially influenced by prescribed fire within the Flint Hills region.

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.

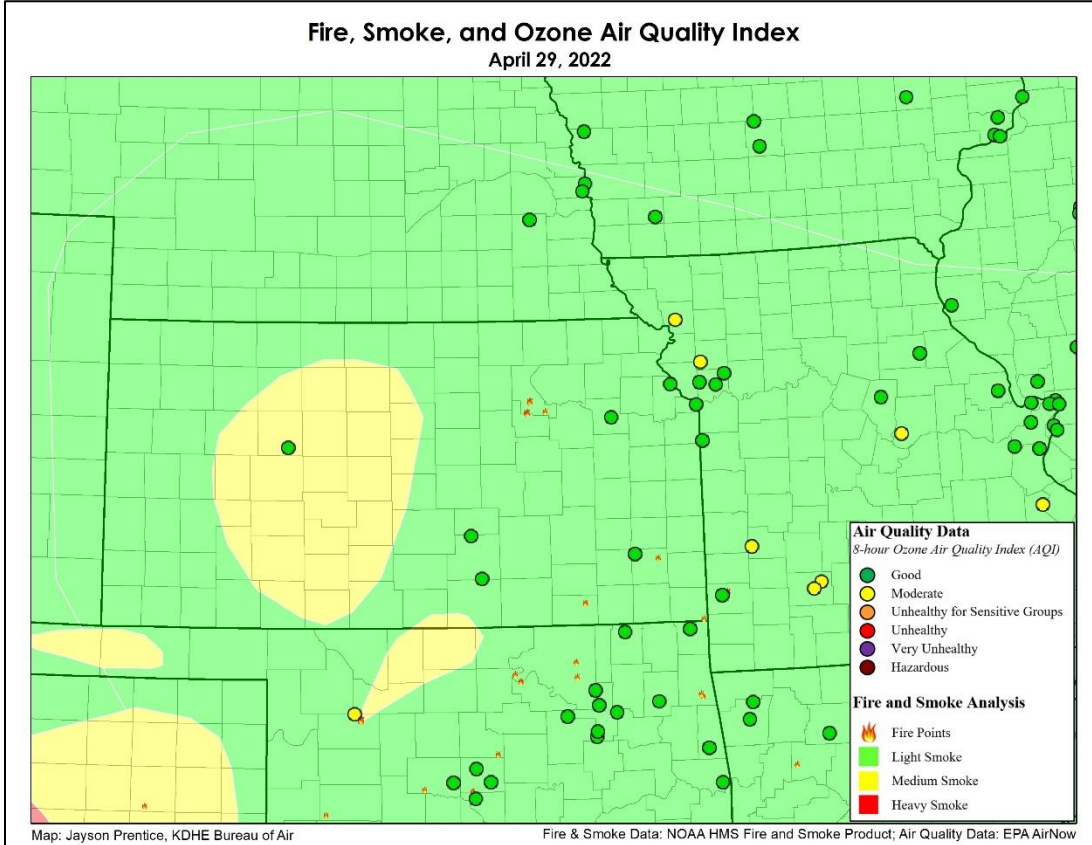
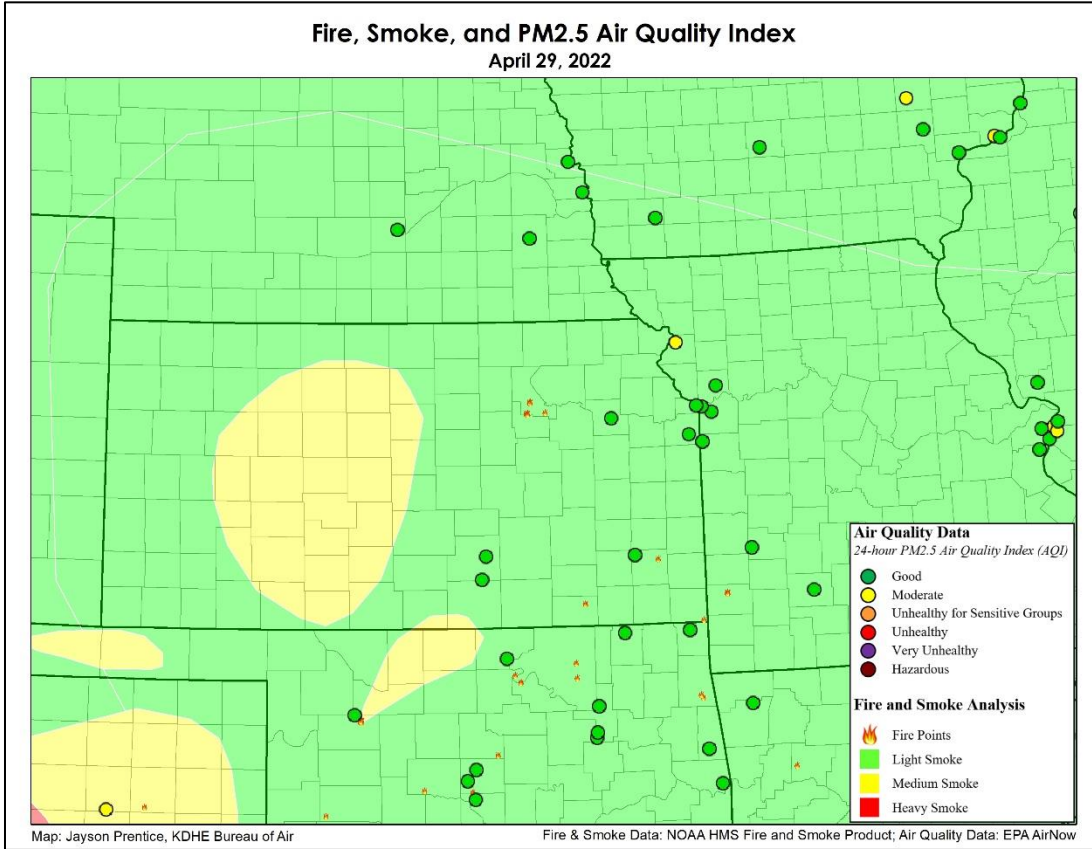
Windy to breezy conditions on Friday (April 29) and a storm system which brought thunderstorms and locally heavy rain to the Flint Hills area precluded prescribed fire usage. A few wildfires were noted on satellite analysis. Widespread smoke from wildfires in the Southwest was also analyzed. Breezy conditions continued Saturday (April 30) which kept prescribed burning to a minimum.

Winds decreased for Sunday (May 1) and with relative humidity dropped to near 30 percent any grasses dried quickly. This allowed for scattered prescribed fires to be conducted throughout the Flint Hills region with light to moderate smoke impacts.

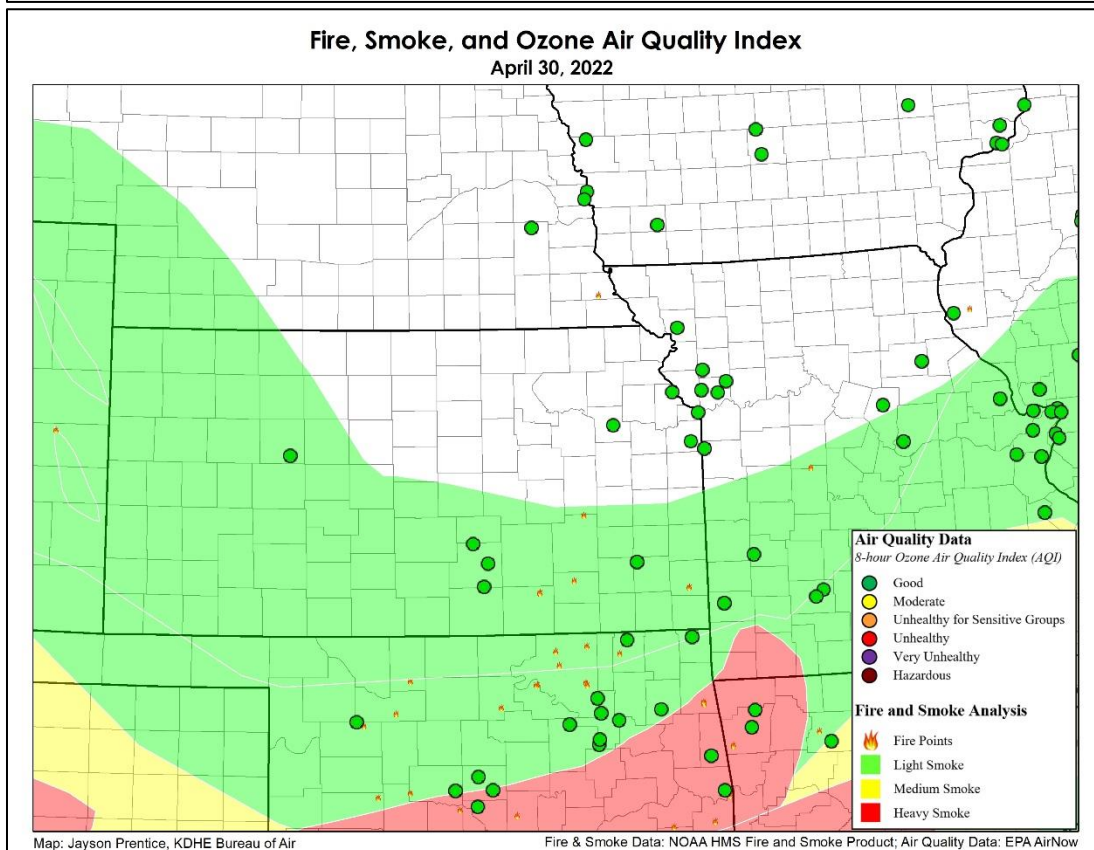
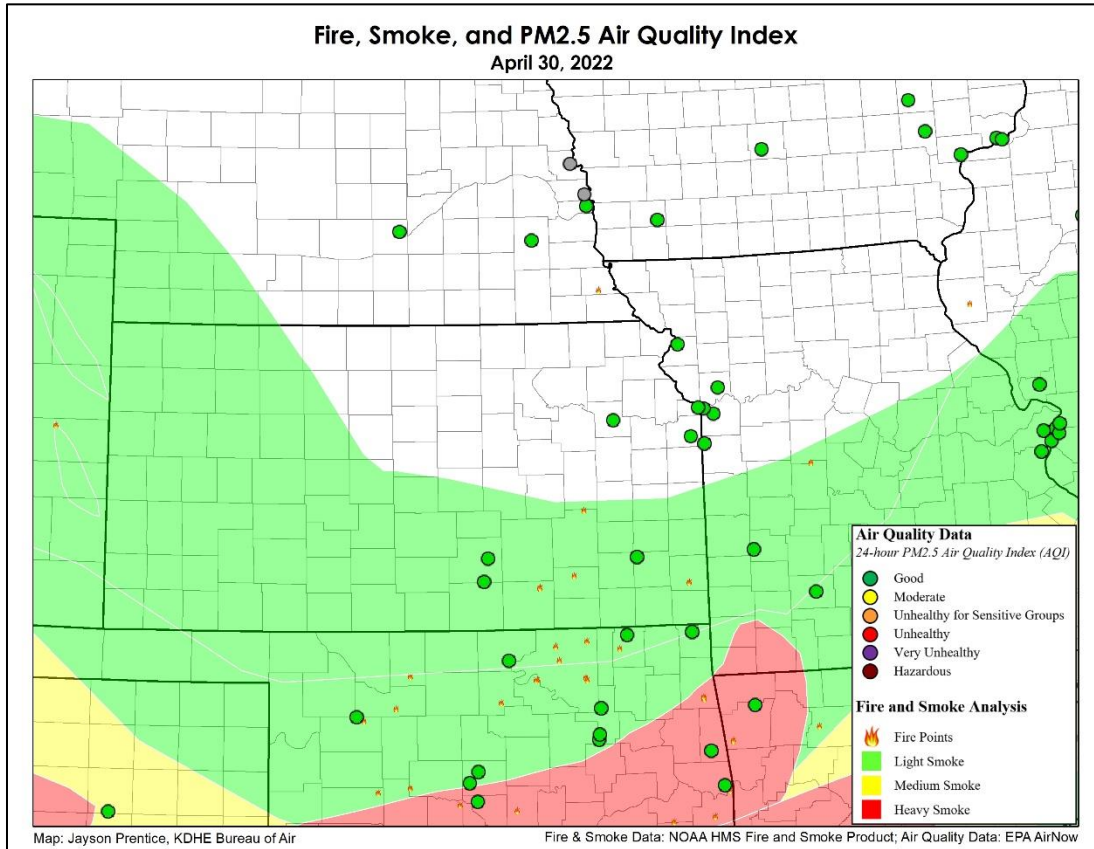
The remainder of the week, Monday (May 2) through Thursday (May 5) has featured cloudy skies, periods of precipitation, and occasionally breezy conditions. This of course has led to minimal to no prescribed fire activity throughout the region. Smoke analyzed at times is a result of wildfires in New Mexico which continues to primarily stay aloft for most of the region – the panhandles of Texas and Oklahoma, and southwest Kansas being the exception at times.

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.

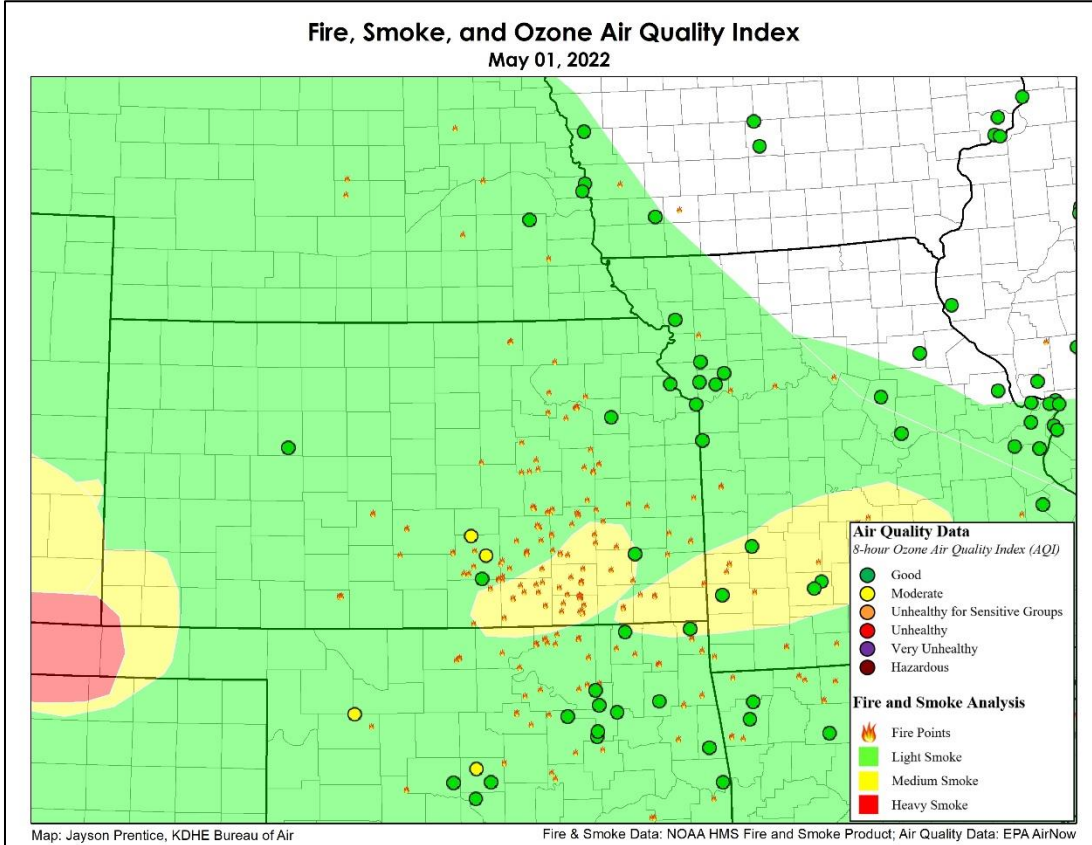
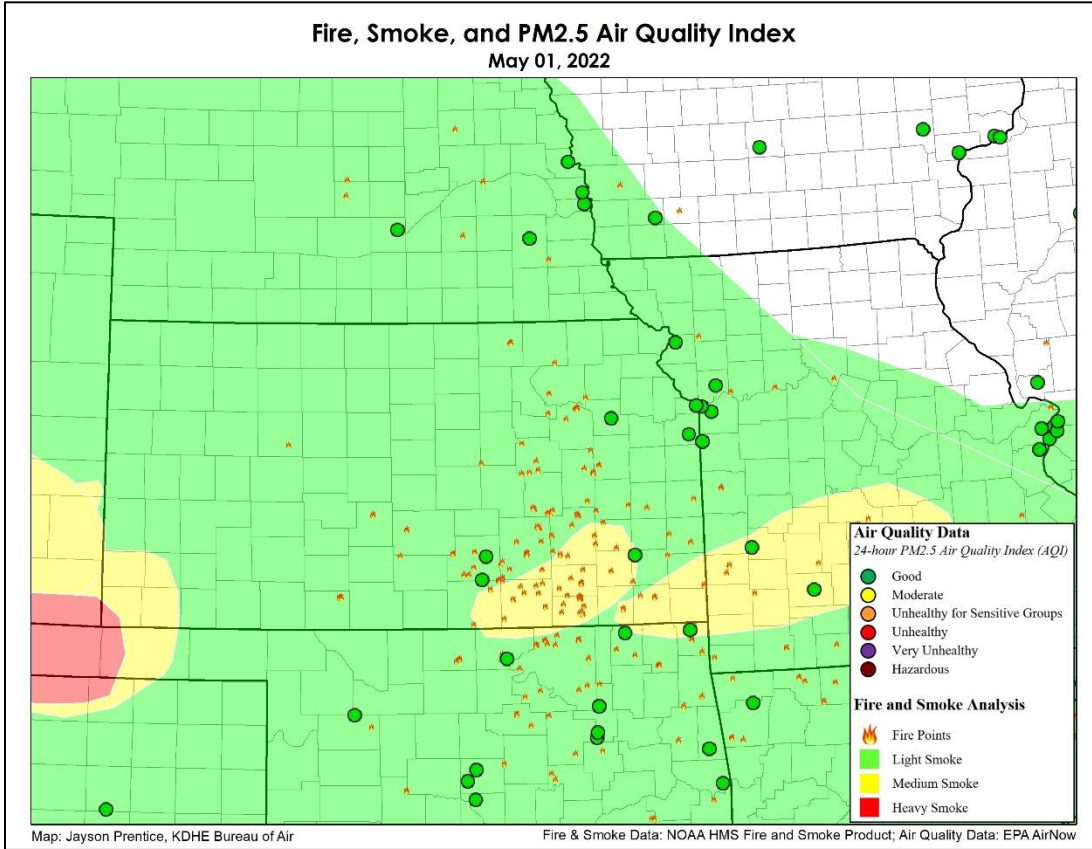
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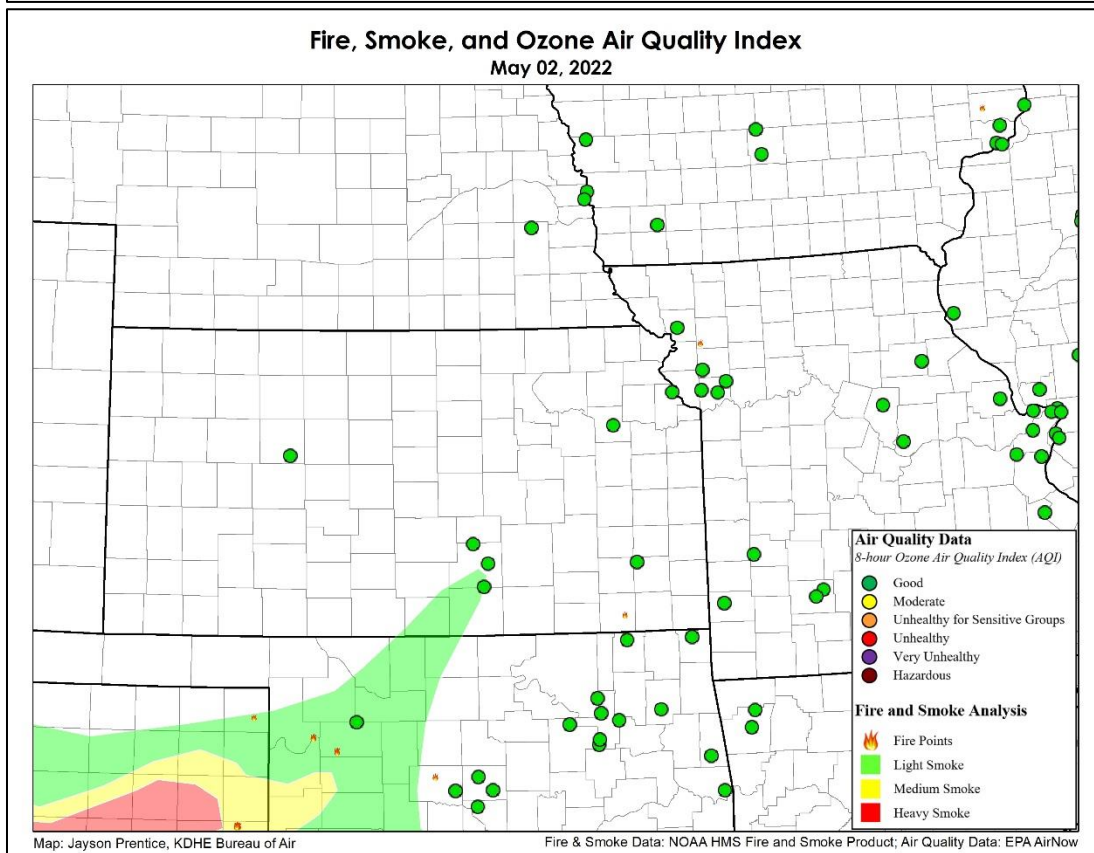
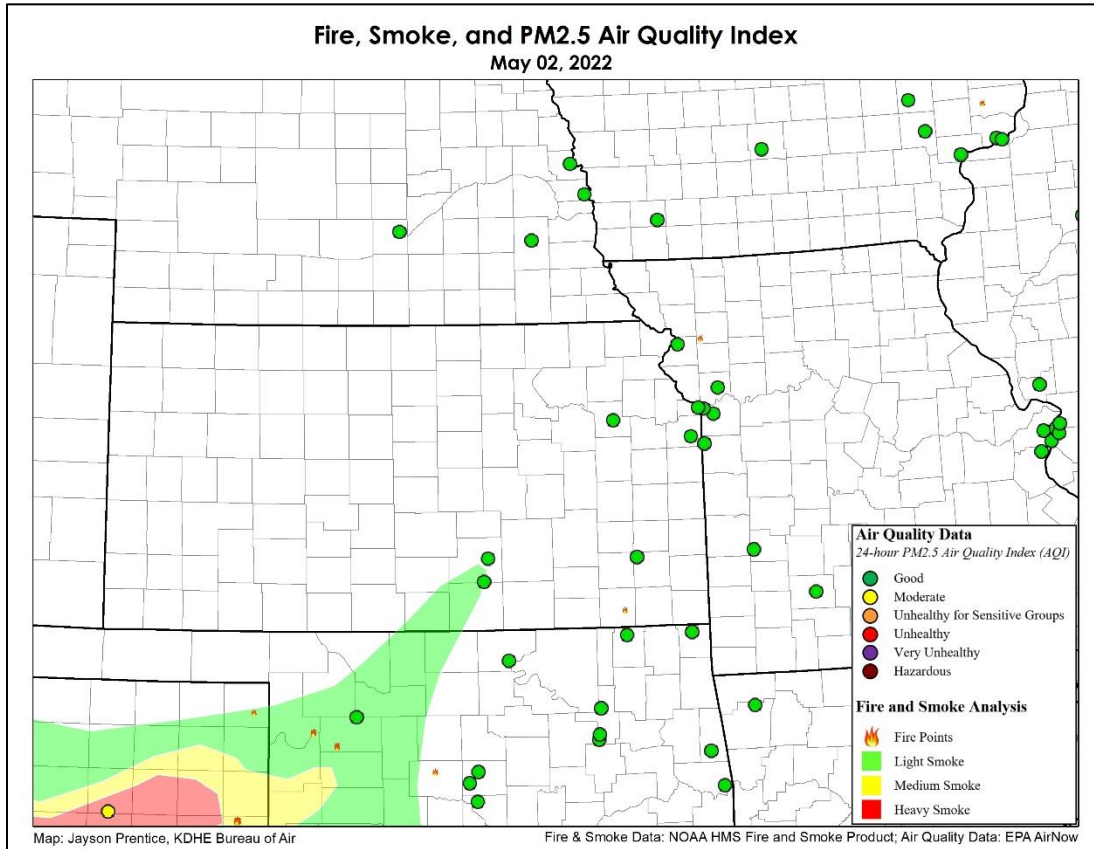
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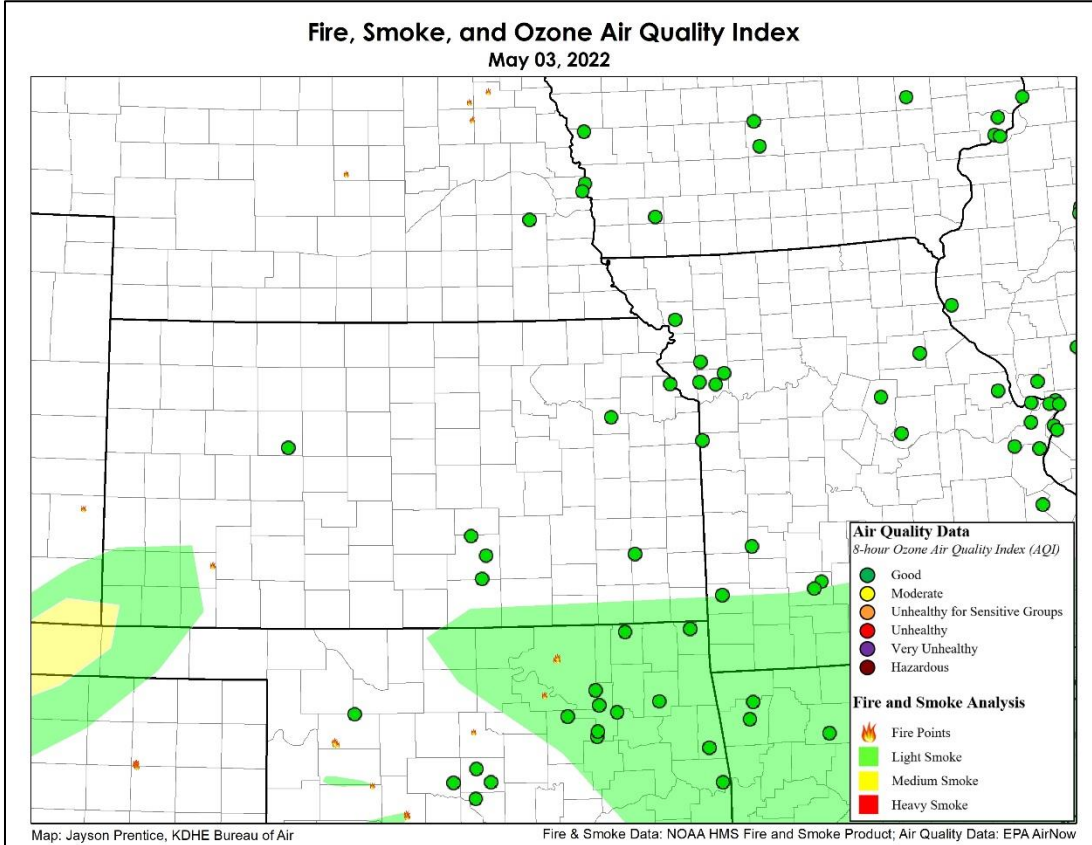
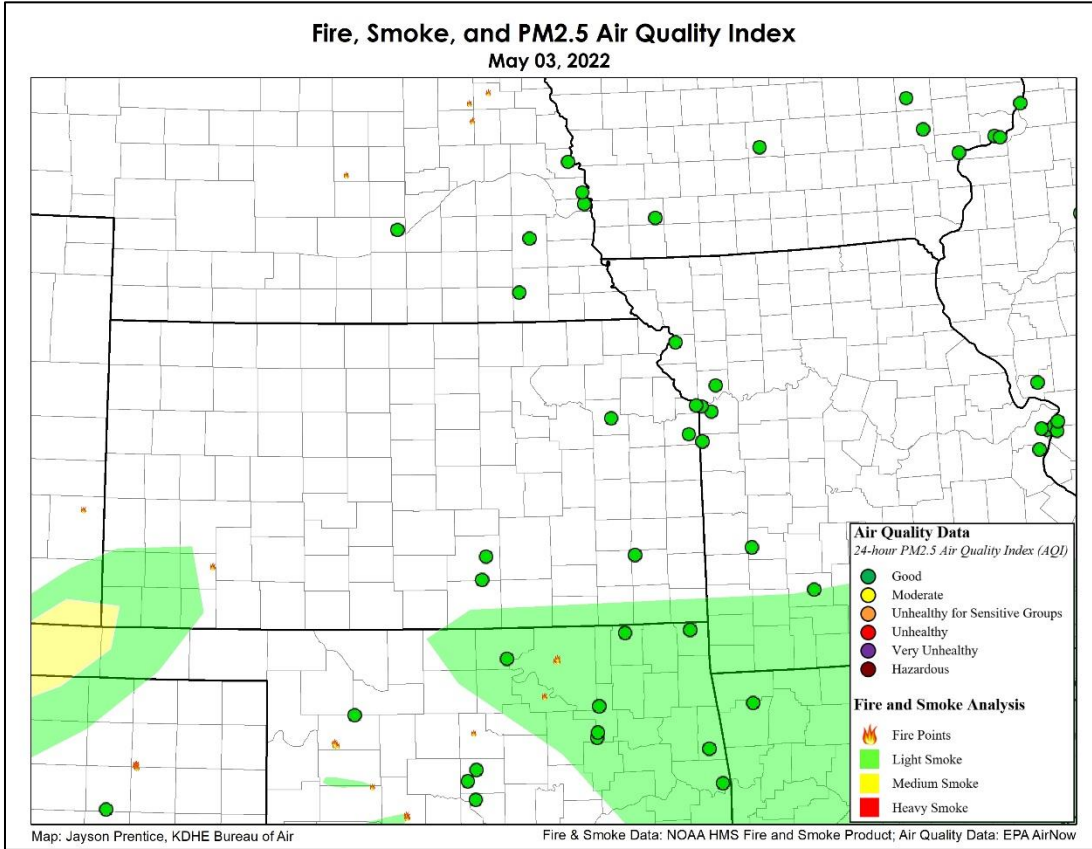
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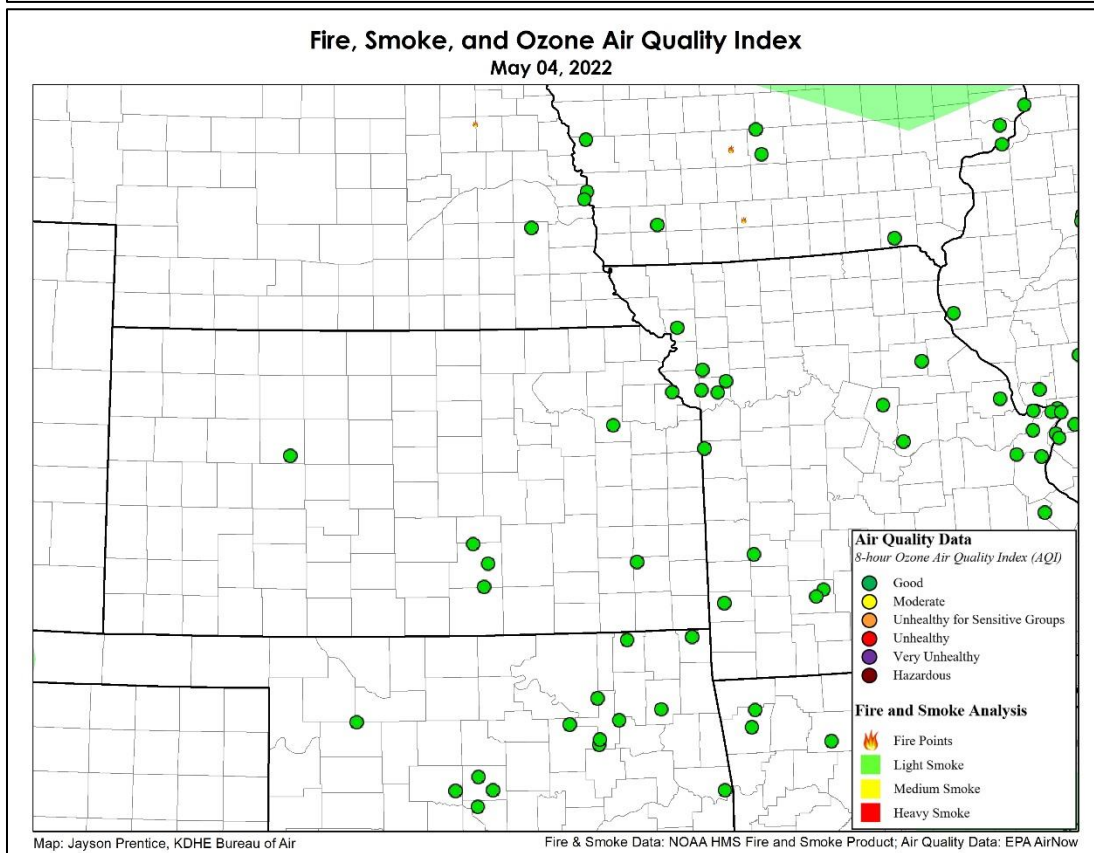
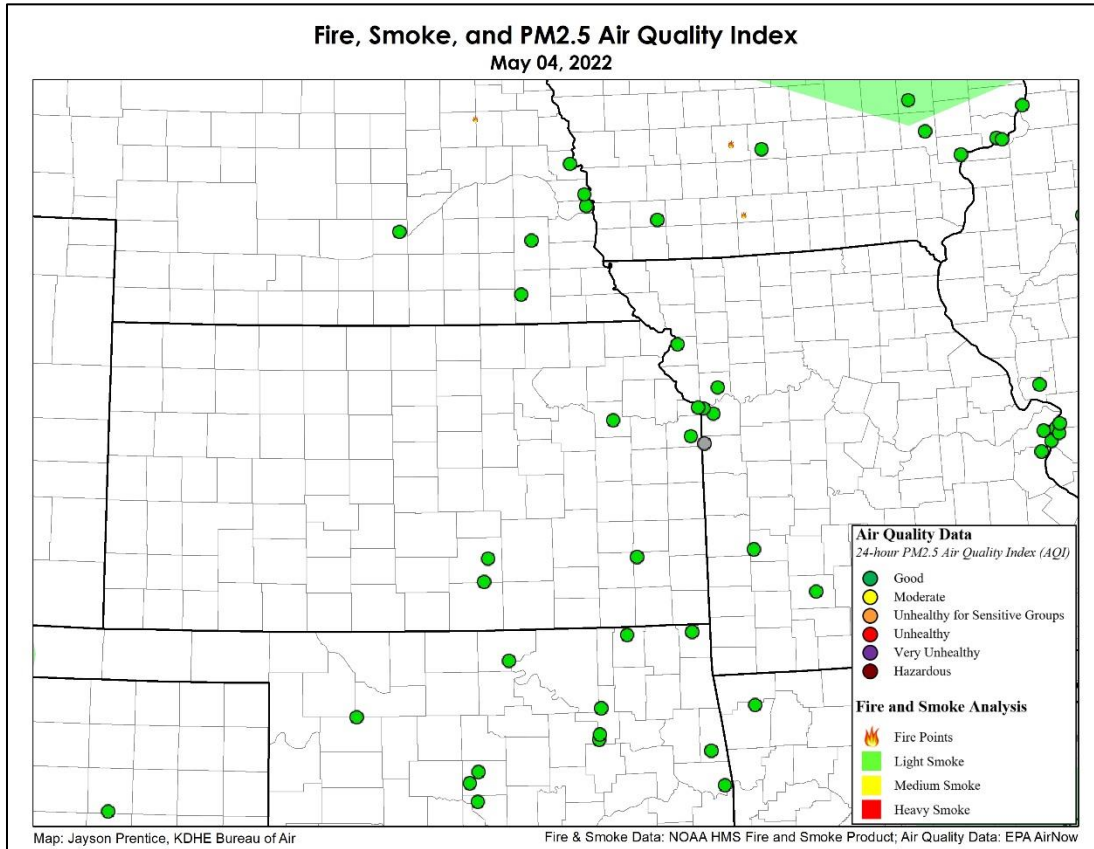
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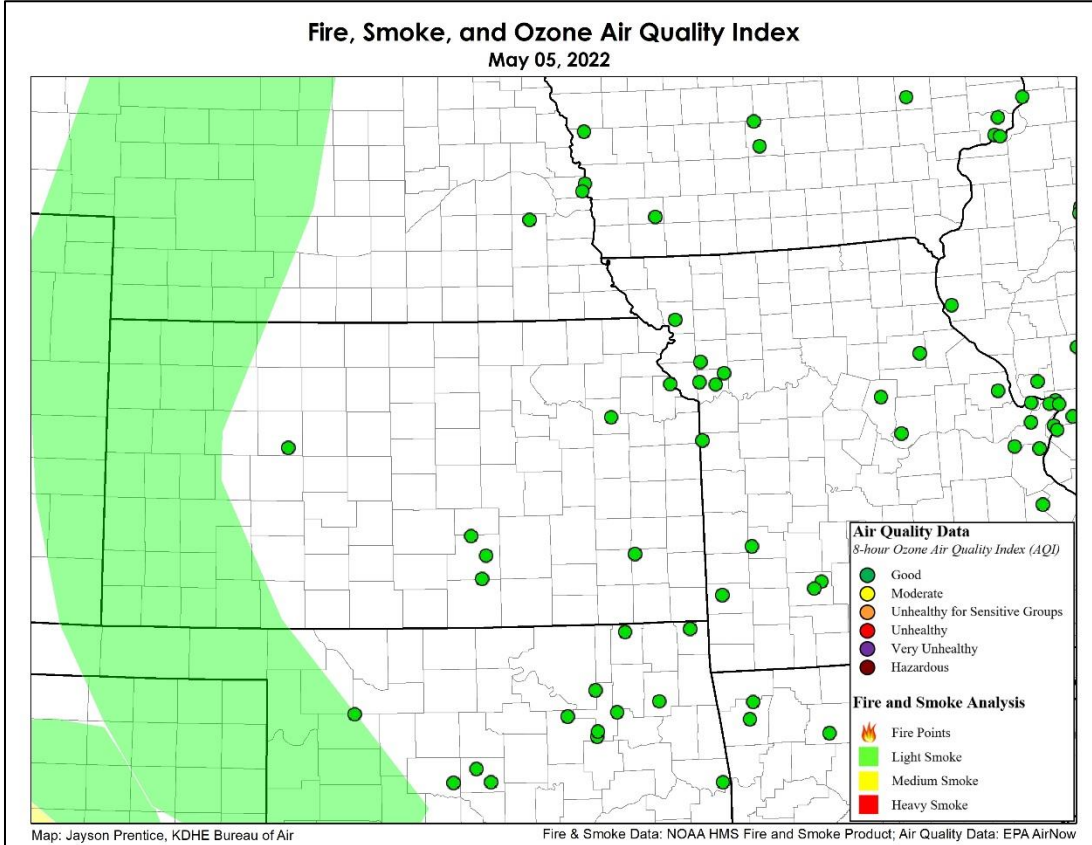
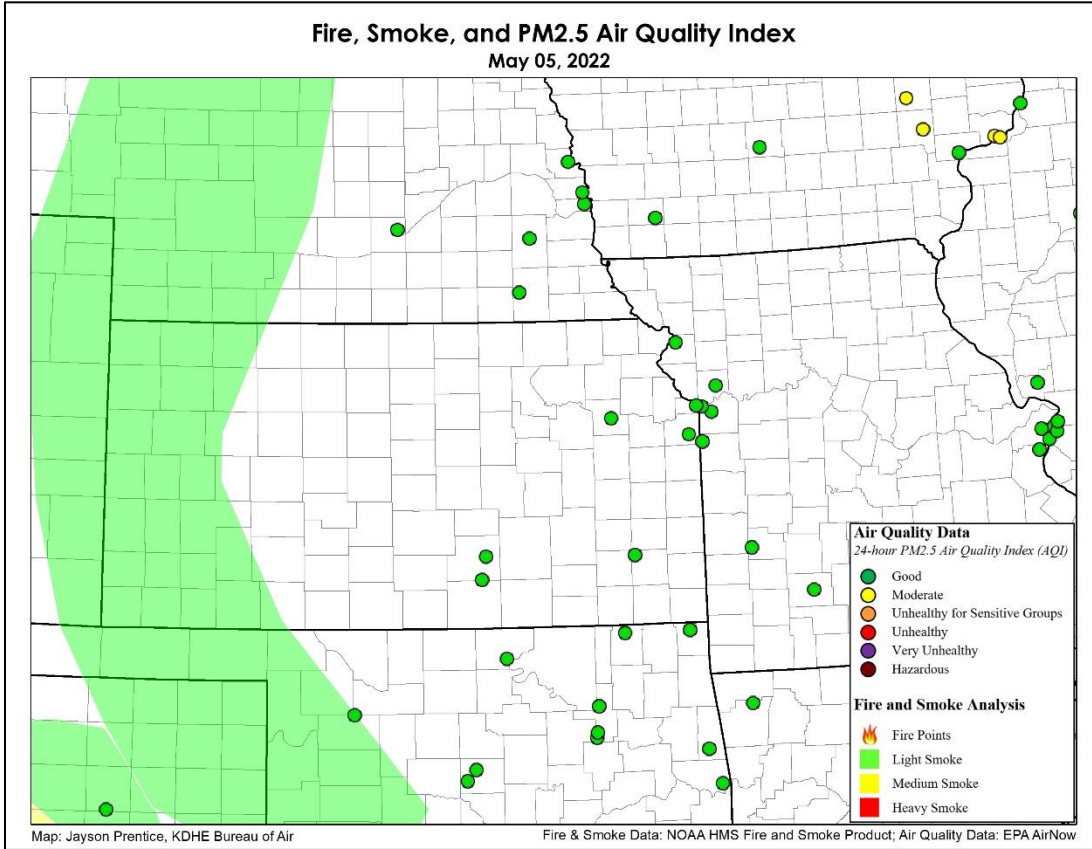
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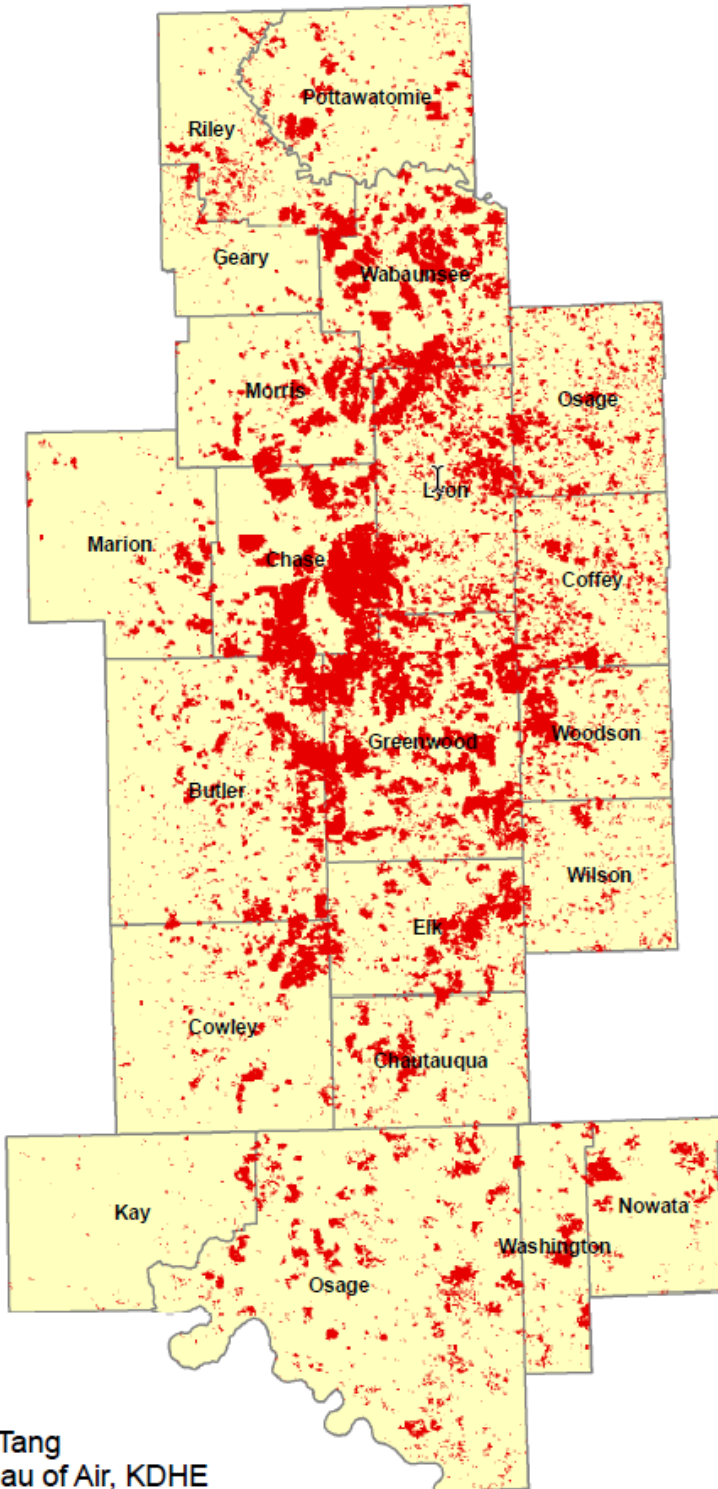


Flint Hills Wildland Fire Update





Flint Hills Acreage Burned (Feb. 14 – Apr. 24, 2022)



Yao Tang
Bureau of Air, KDHE

<u>Counties</u>	<u>Acres Burned</u>	
Butler	150,830	
Chase	207,634	
Chautauqua	45,159	*
Coffey	80,450	
Cowley	70,550	*
Elk	88,852	*
Geary	15,274	
Greenwood	290,740	
Lyon	174,753	
Marion	36,047	
Morris	81,809	
Osage (KS)	80,434	
Pottawatomie	50,735	
Riley	49,885	
Wabaunsee	170,212	
Wilson	31,244	
Woodson	61,283	
Nowata (OK)	32,279	*
Osage (OK)	132,266	*
Washington (OK)	27,599	*
Kay (OK)	9,838	*
Total	1,887,873	
* Denotes county was partly or completely covered by clouds during latest analysis.		

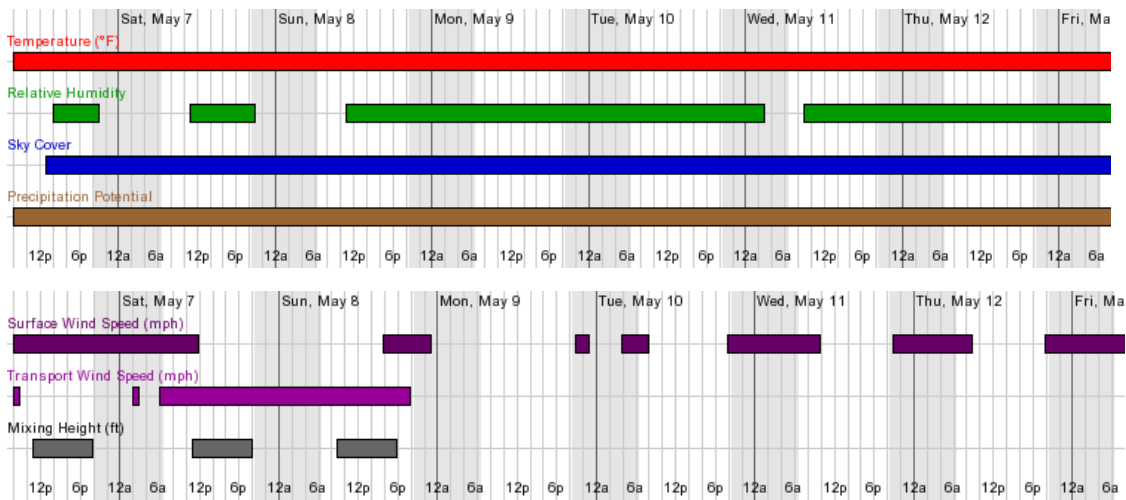


Upcoming Look at Fires and Smoke

Extensive green-up has occurred throughout the Flint Hills region and will continue with recent rainfall and upcoming warm temperatures. Strong southerly winds are expected for much of the next week which will push temperatures well above normal with highs into the 90s in some locations. It is anticipated that minimal prescribed burning will be conducted throughout the remaining Spring season.

This is the final weekly update for the 2022 spring burn period in the Flint Hills. A final summary will be provided when final acreage estimates and additional information can be compiled.

Ideal Weather Conditions for Prescribed Burning



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 that hour.

Note: Forecast for mixing height and transport winds are only issued for the next 72 hours. Forecast valid: 8am May 6, 2022.

For more information, contact:

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