

# Flint Hills Prescribed Fire Update

March 17, 2017

The following information on the Flint Hills prescribed fires will be sent out weekly to keep stakeholders up to date on fires and related smoke.

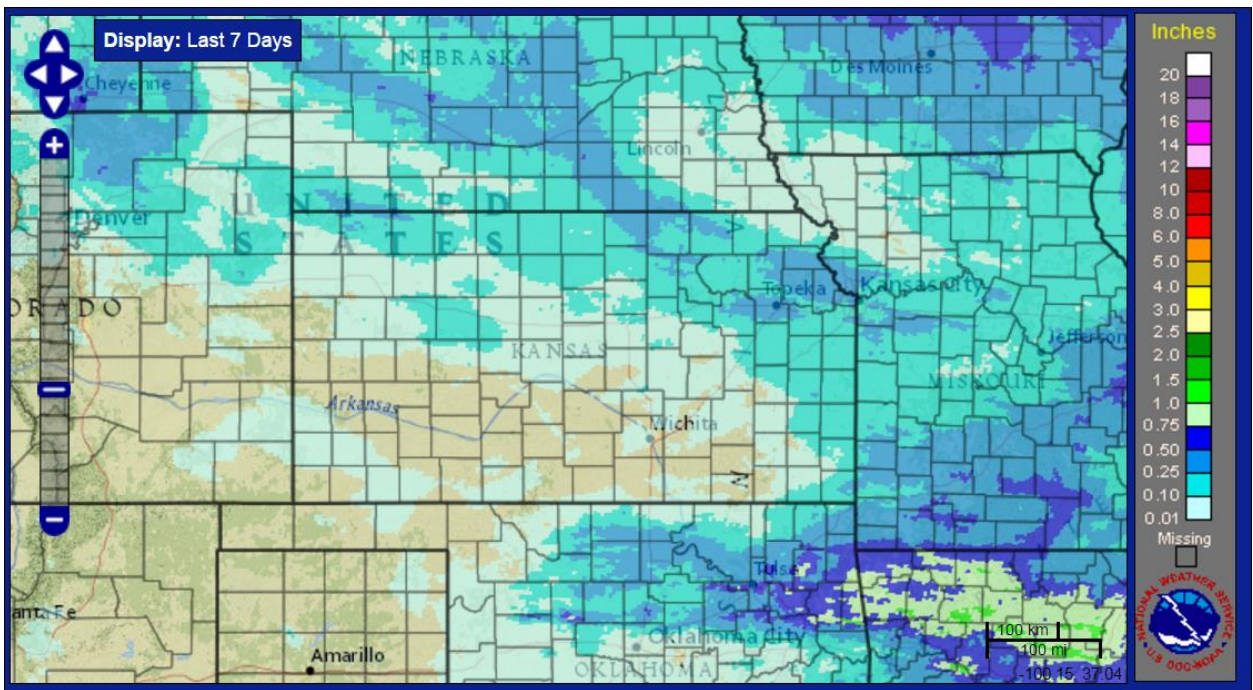




## Meteorology

Cool, actual below normal temperatures, were seen during the period of last Friday through Wednesday (March 10-15) before a rebound quickly to above normal occurred yesterday (Thursday, March 16). Breezy winds were observed Sunday and Monday (March 12-13), and again yesterday (March 16) with the remainder of the week staying relatively calm. Precipitation during the past week was primarily confined to the northern Flint Hills as a swath of snow fell last Saturday (March 11) and again on Tuesday (March 14). The snow was quick to melt provided warm ground temperatures and an improving sun angle.

### Precipitation

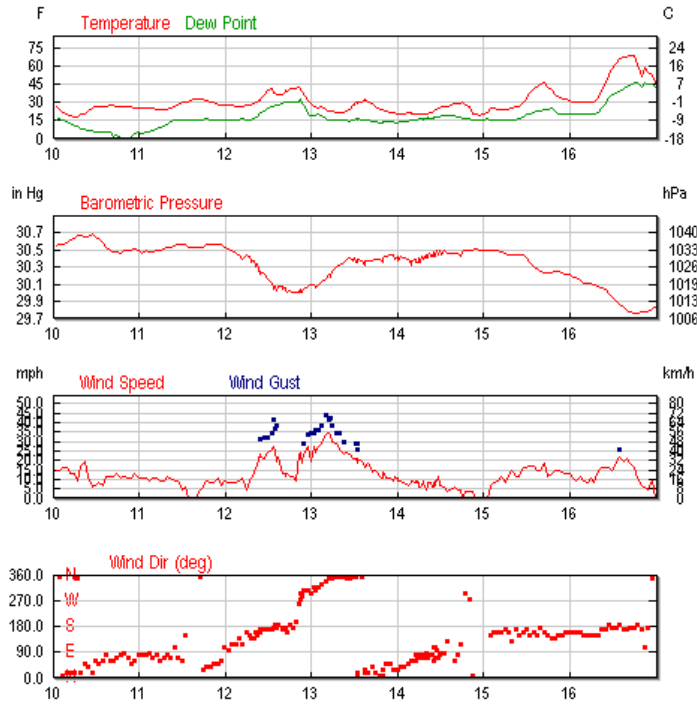


NOAA/NWS Observed Total Precipitation for March 10-16, 2017.

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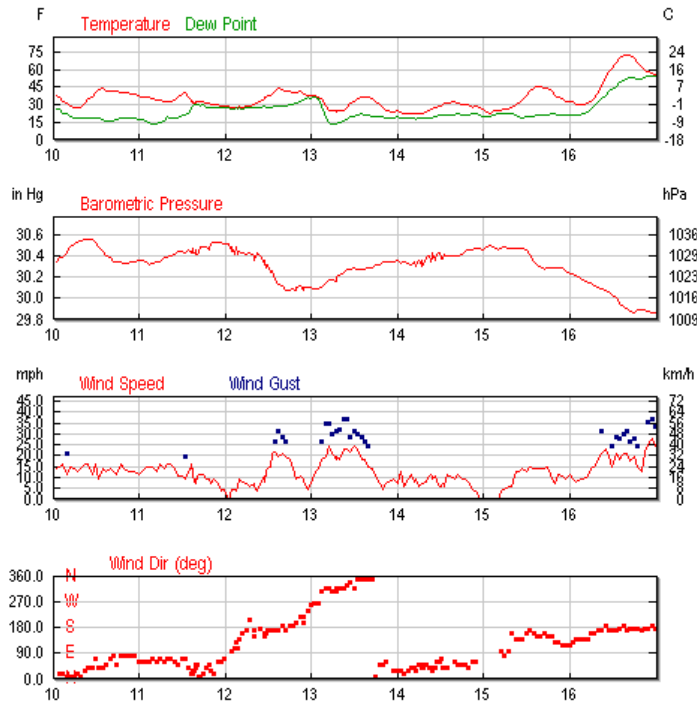


## Lincoln, NE



Mar 10-16, 2017 Observed Weather from KLNK. Graphic: Weather Underground, Inc.

## Emporia, KS



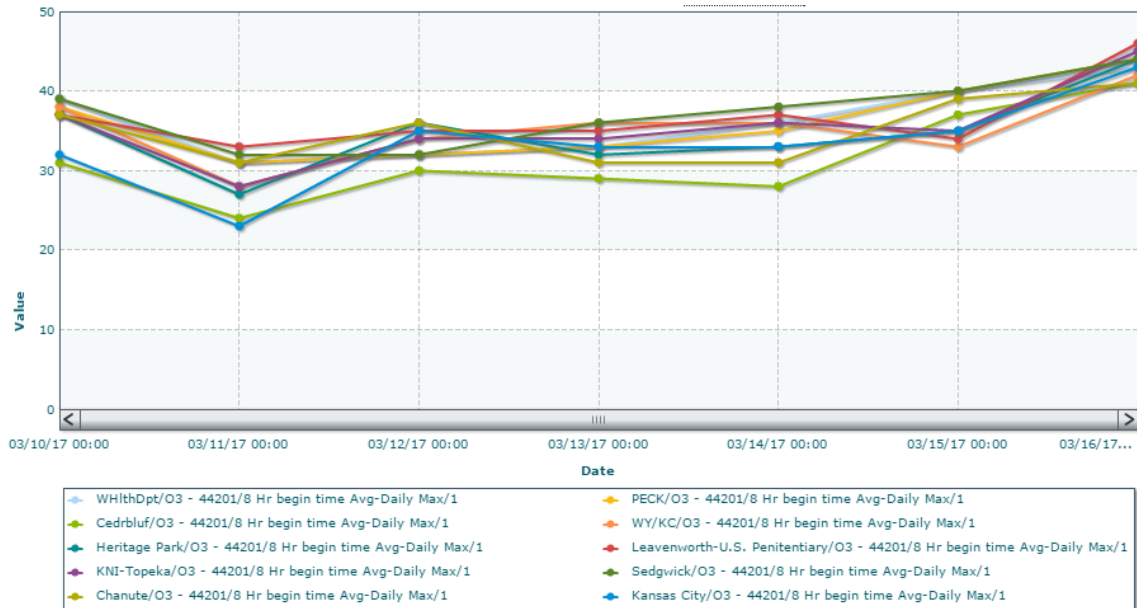
Mar 10-16, 2017 Observed Weather from KEMP. Graphic: Weather Underground, Inc.



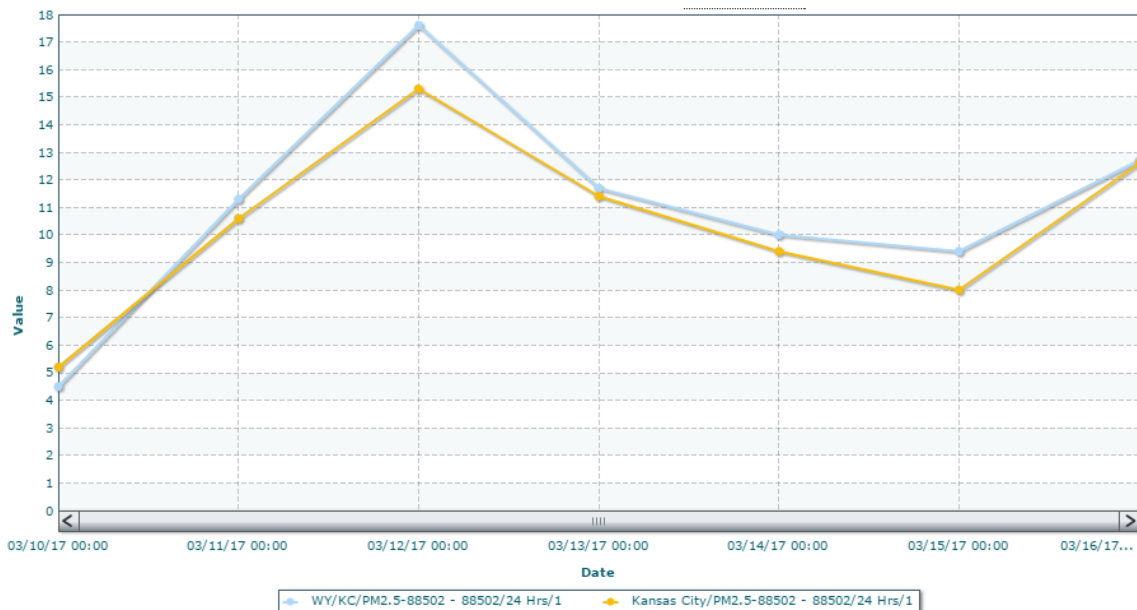
## Air Quality Data

Air quality data for all sites in the region remained below exceedance levels during the past week, March 10-16, 2017.

### Kansas Daily 8-hour Maximum Ozone (ppb)



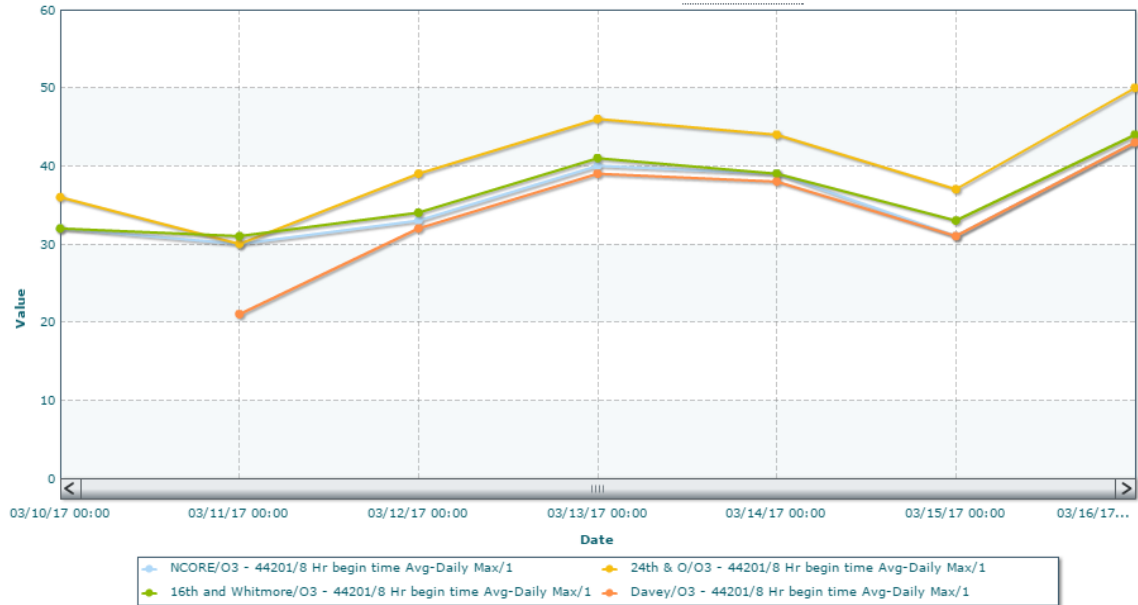
### Kansas Daily PM<sub>2.5</sub> (µg/m<sup>3</sup>)



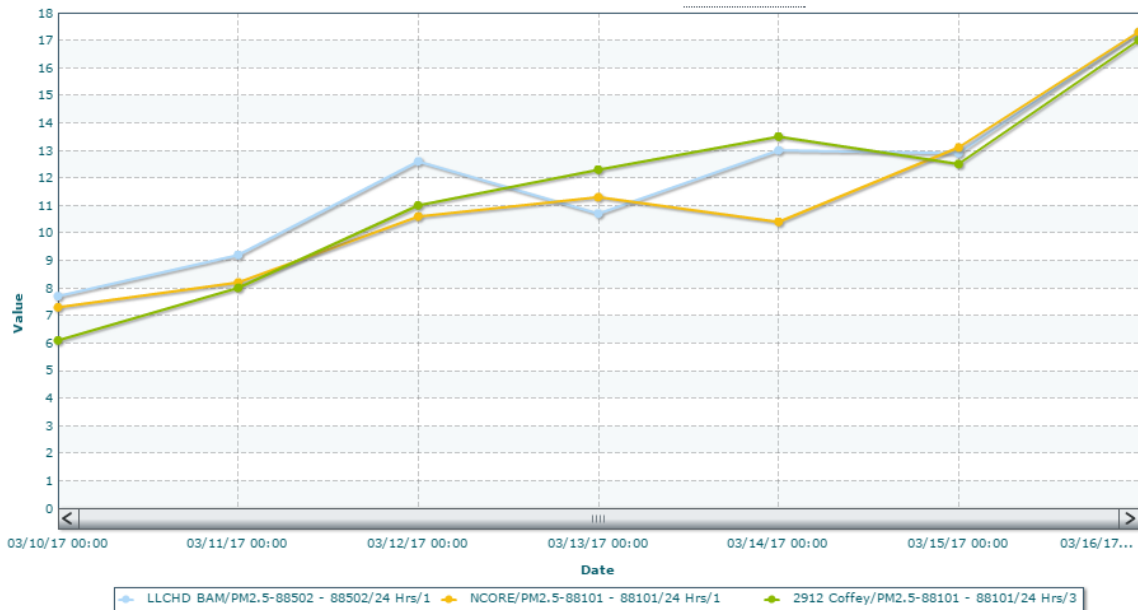
# Flint Hills Prescribed Fire Update



## Nebraska Daily 8-hour Maximum Ozone (ppb)



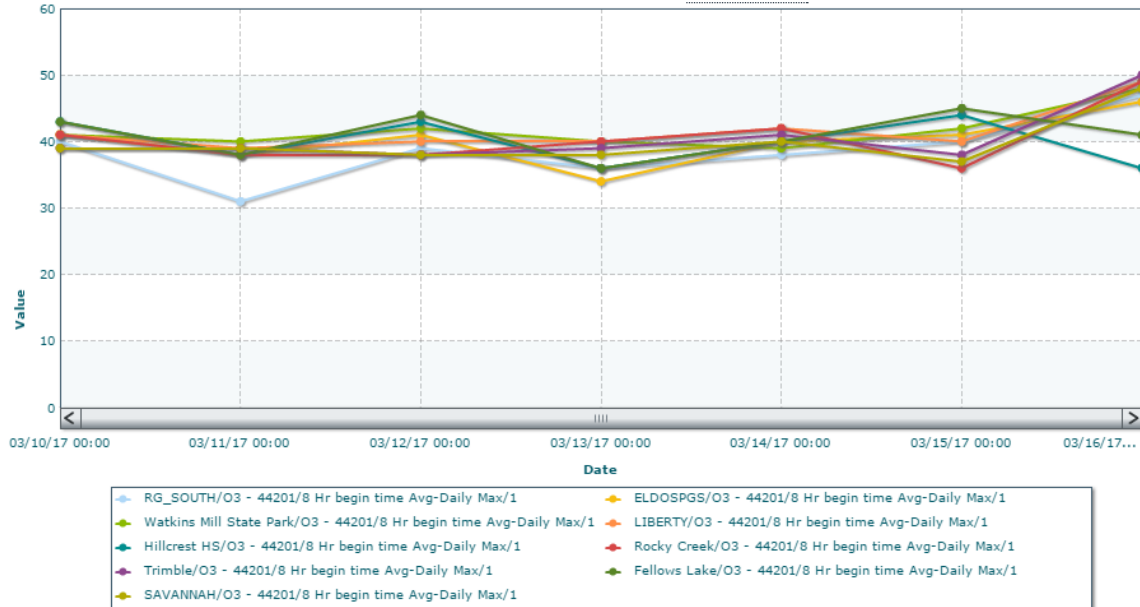
## Nebraska Daily PM<sub>2.5</sub> (µg/m<sup>3</sup>)



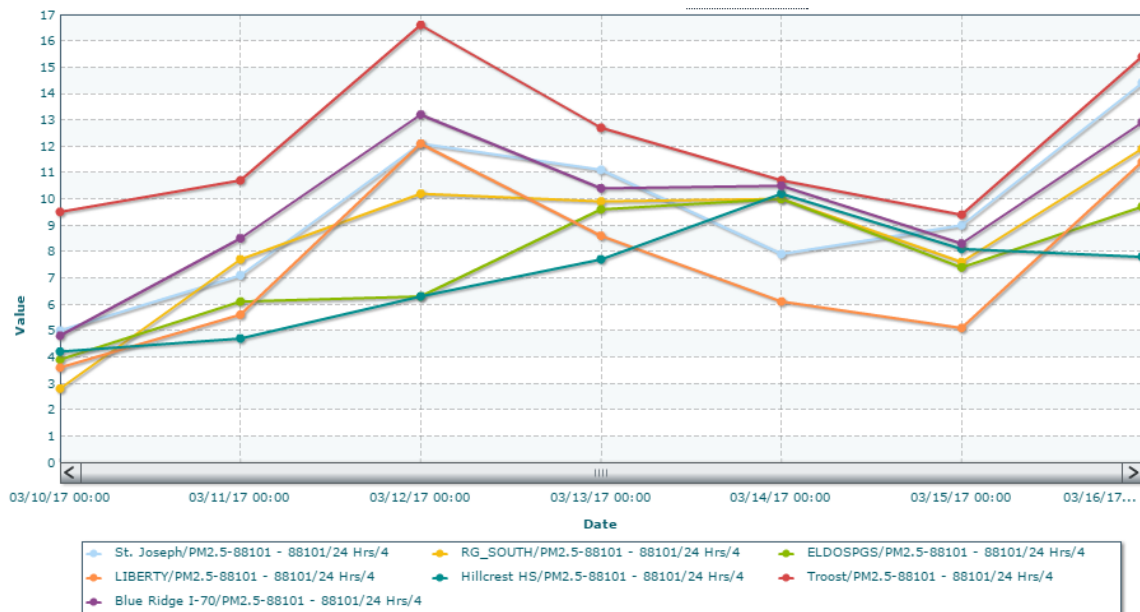
# Flint Hills Prescribed Fire Update



## Missouri Daily 8-hour Maximum Ozone (ppb)



## Missouri Daily PM<sub>2.5</sub> (µg/m<sup>3</sup>)





## Fires and Smoke

The past seven days were a quiet week of prescribed burning in and around the Flint Hills. Cold temperatures hindered any thoughts of prescribed burning from last Friday through Wednesday (March 10-15) of this week. Two bouts of snow across the northern Flint Hills on Saturday (March 11) and Tuesday (March 14) also deterred thoughts of any wildland fires.

The warmth finally returned yesterday (Thursday) with gusty afternoon winds too. A handful of prescribed fires and wildfires were observed via satellite analysis and supplemental reports.

Daily Fires and Smoke Analysis provided by NOAA Hazard Mapping System Fire and Smoke Product are provided on the following pages.

## KSFIRE.ORG

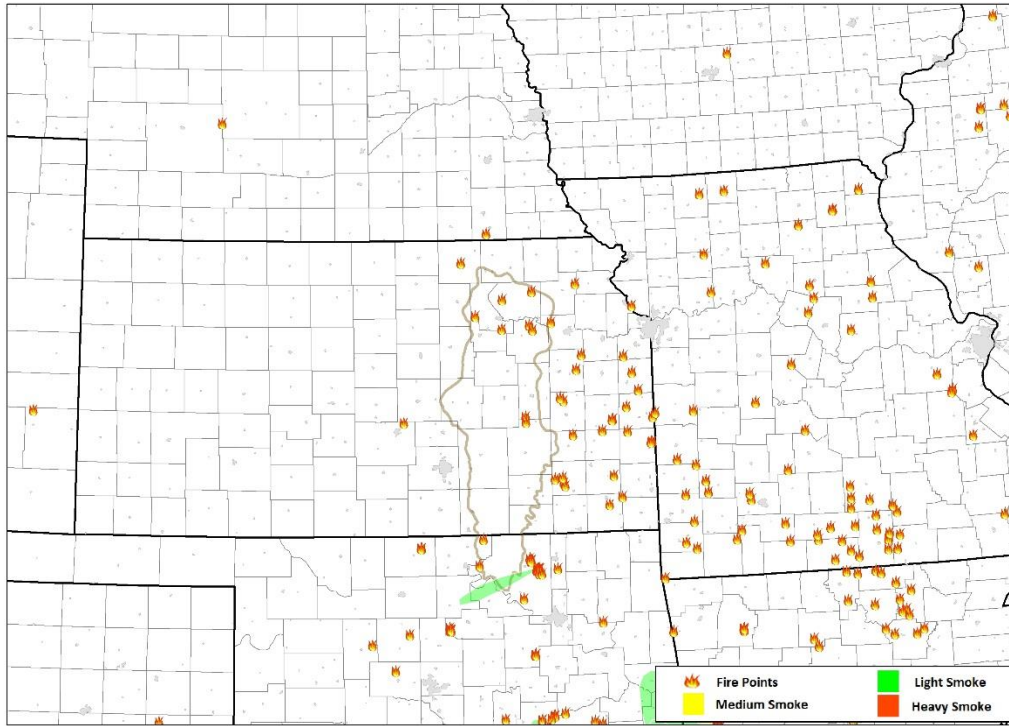


This website was developed as part of the development of the Kansas Flint Hills Smoke Management Plan. Kansas State University hosts the webpage and it includes important information for ranchers and others who might be interested in the Flint Hills. It provides training, regulations, policies, publications,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

# Flint Hills Prescribed Fire Update



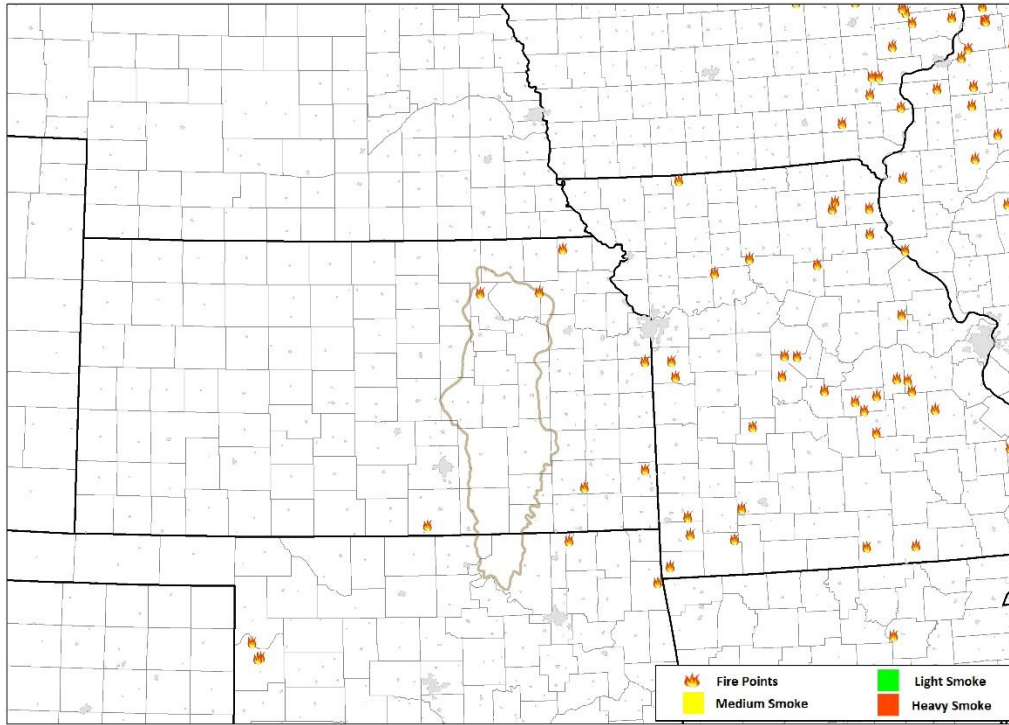
## HMS Fire & Smoke Analysis March 10, 2017



Map: Jayson Prentice, KDHE Bureau of Air

Data: NOAA NESDIS OSPO Hazard Mapping System Fire and Smoke Product

## HMS Fire & Smoke Analysis March 11, 2017



Map: Jayson Prentice, KDHE Bureau of Air

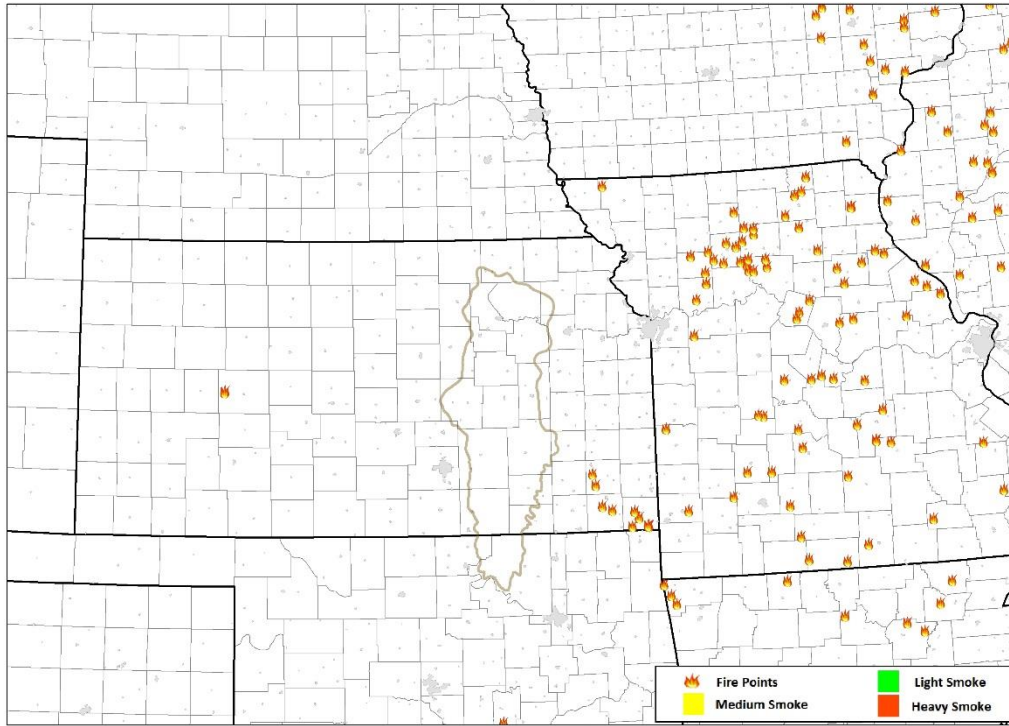
Data: NOAA NESDIS OSPO Hazard Mapping System Fire and Smoke Product



# Flint Hills Prescribed Fire Update



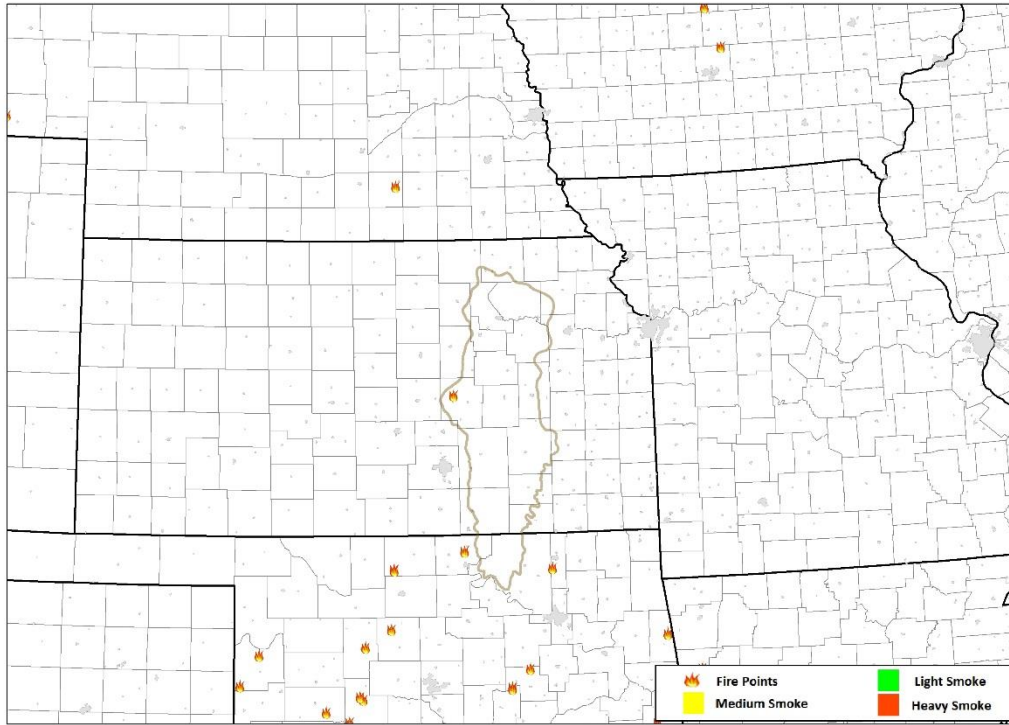
## HMS Fire & Smoke Analysis March 12, 2017



Map: Jayson Prentice, KDHE Bureau of Air

Data: NOAA NESDIS OSPO Hazard Mapping System Fire and Smoke Product

## HMS Fire & Smoke Analysis March 13, 2017



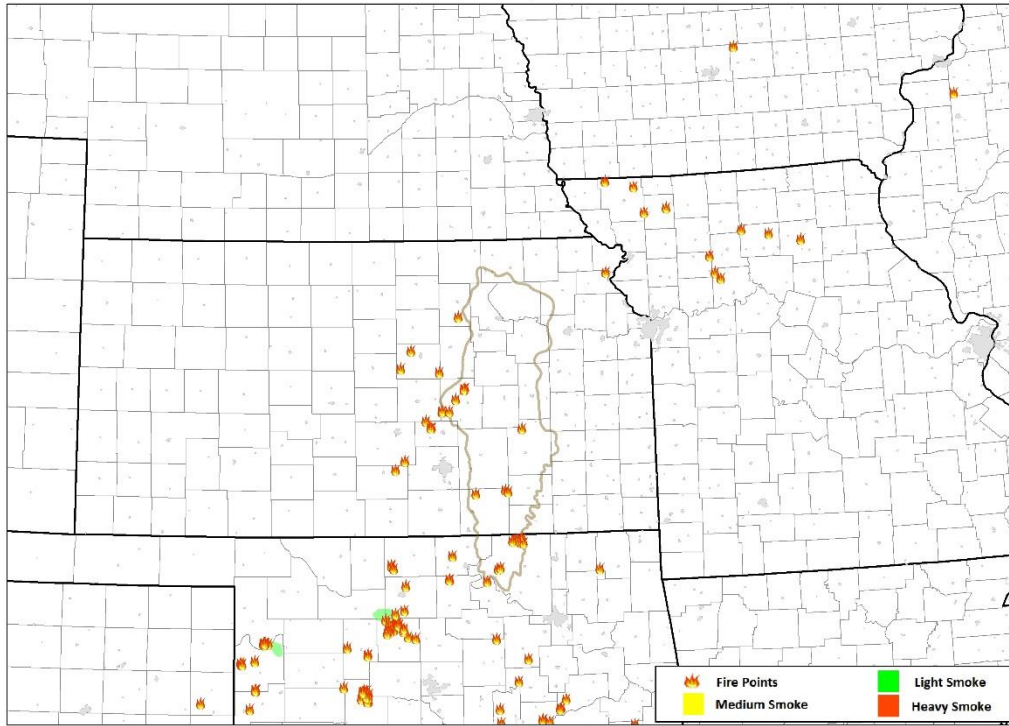
Map: Jayson Prentice, KDHE Bureau of Air

Data: NOAA NESDIS OSPO Hazard Mapping System Fire and Smoke Product

# Flint Hills Prescribed Fire Update



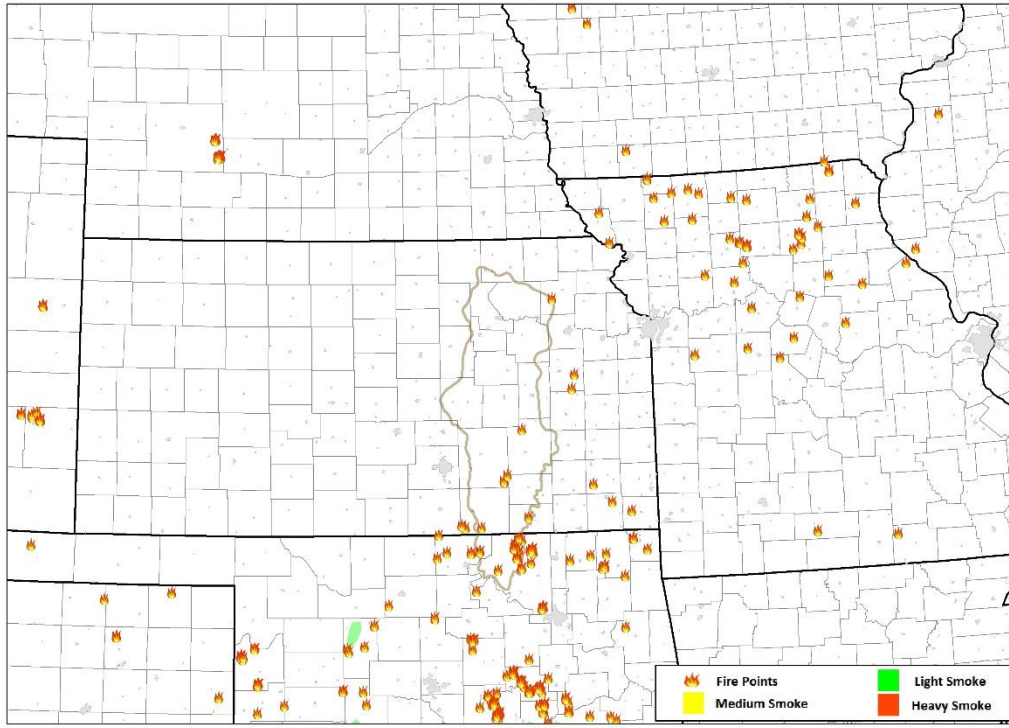
## HMS Fire & Smoke Analysis March 14, 2017



Map: Jayson Prentice, KDHE Bureau of Air

Data: NOAA NESDIS OSPO Hazard Mapping System Fire and Smoke Product

## HMS Fire & Smoke Analysis March 15, 2017



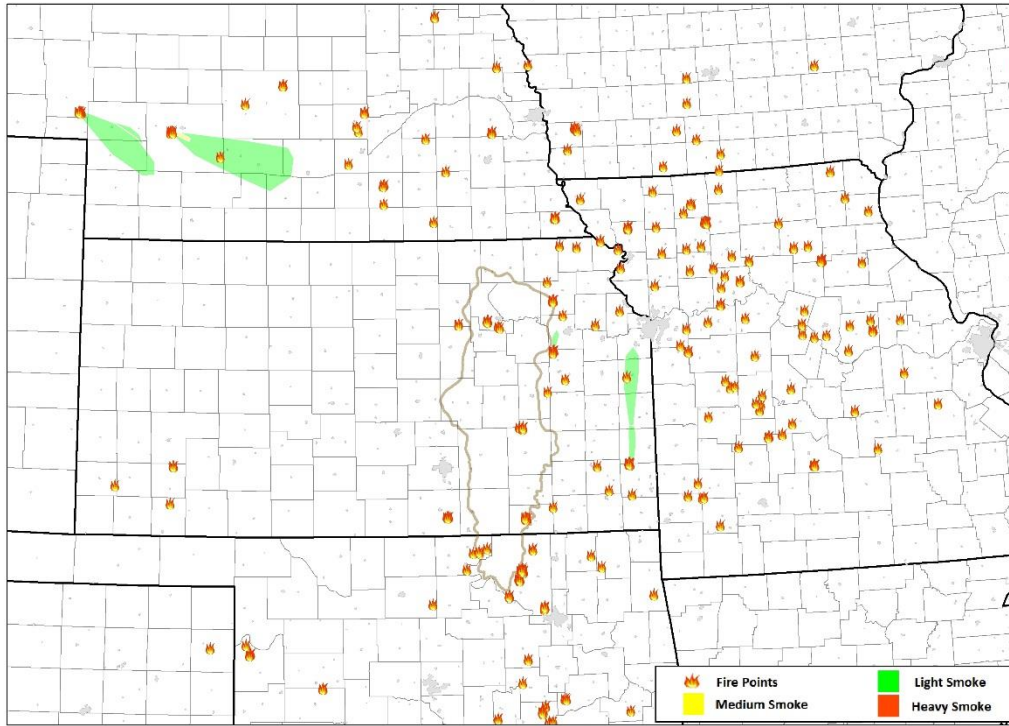
Map: Jayson Prentice, KDHE Bureau of Air

Data: NOAA NESDIS OSPO Hazard Mapping System Fire and Smoke Product

# Flint Hills Prescribed Fire Update



## HMS Fire & Smoke Analysis March 16, 2017



Map: Jayson Prentice, KDHE Bureau of Air

Data: NOAA NESDIS OSPO Hazard Mapping System Fire and Smoke Product



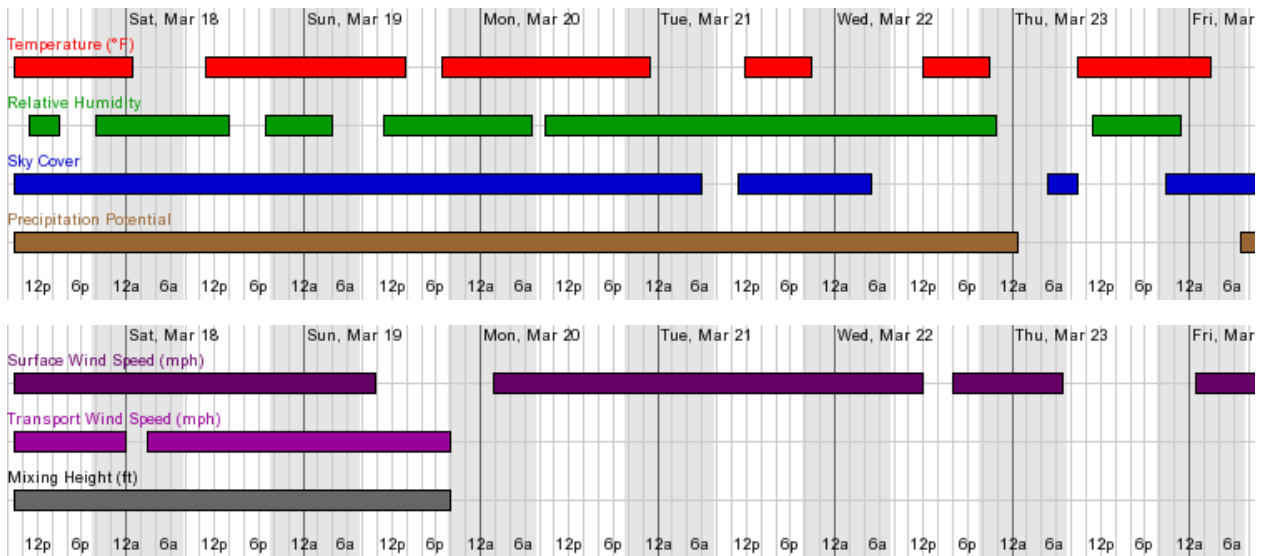
## Upcoming Look at Fires and Smoke

Patchy fog this morning will give way to warm temperatures and lighter winds. It may take a few hours for grasses to dry, but afternoon sunshine and lower relative humidity should leave fuels dry by mid-afternoon. Expect an increase in afternoon/evening wildland fires later today. Conditions remain relatively favorable for wildland burning on Saturday (March 18) with light winds, warm temperatures, and clear skies although mixing heights are barely at the minimum recommendations for ideal smoke dispersion.

Very warm temperatures (mid- to upper-80s) and gusty winds on Sunday will likely yield Very High fire danger. Expect fires/smoke seen across the region to be limited to wildfires.

Ideal conditions for prescribed burning may return on Monday, and could continue into the day on Tuesday. Potential for rain on Wednesday and rain/thunderstorms on Thursday will likely limit activity.

### 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](http://KSFire.org). Conditions are most favorable when each parameter has a colored boxplot displayed. Note: Forecast for mixing height and transport winds are only out to 2 days. Forecast valid: 9am March 17, 2017.