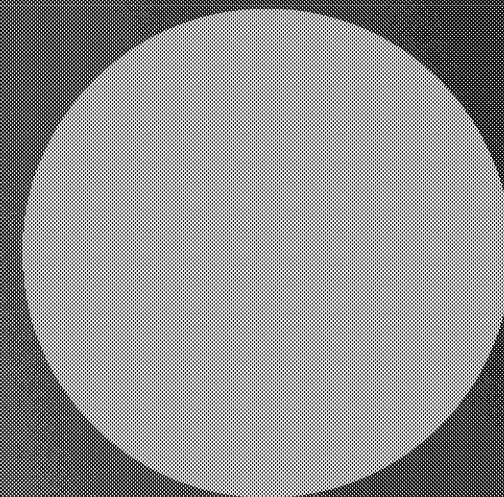


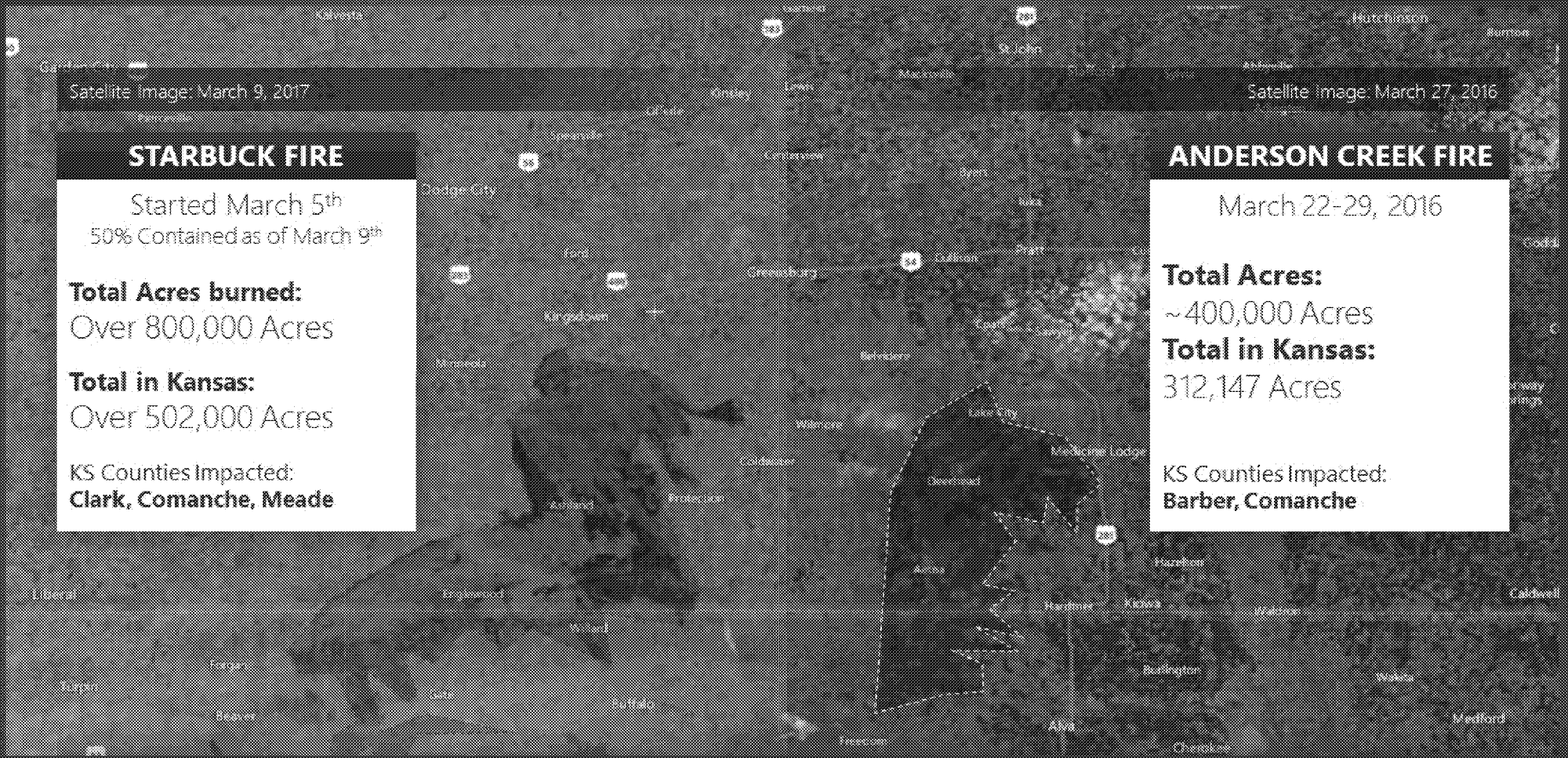
2017 Prescribed Fire Season Summary

MAY 2, 2017

GINA GRIER

EPA R7





Satellite Image: March 9, 2017

STARBUCK FIRE

Started March 5th
50% Contained as of March 9th

Total Acres burned:
Over 800,000 Acres

Total in Kansas:
Over 502,000 Acres

KS Counties Impacted:
Clark, Comanche, Meade

Satellite Image: March 27, 2016

ANDERSON CREEK FIRE

March 22-29, 2016

Total Acres:
~400,000 Acres

Total in Kansas:
312,147 Acres

KS Counties Impacted:
Barber, Comanche

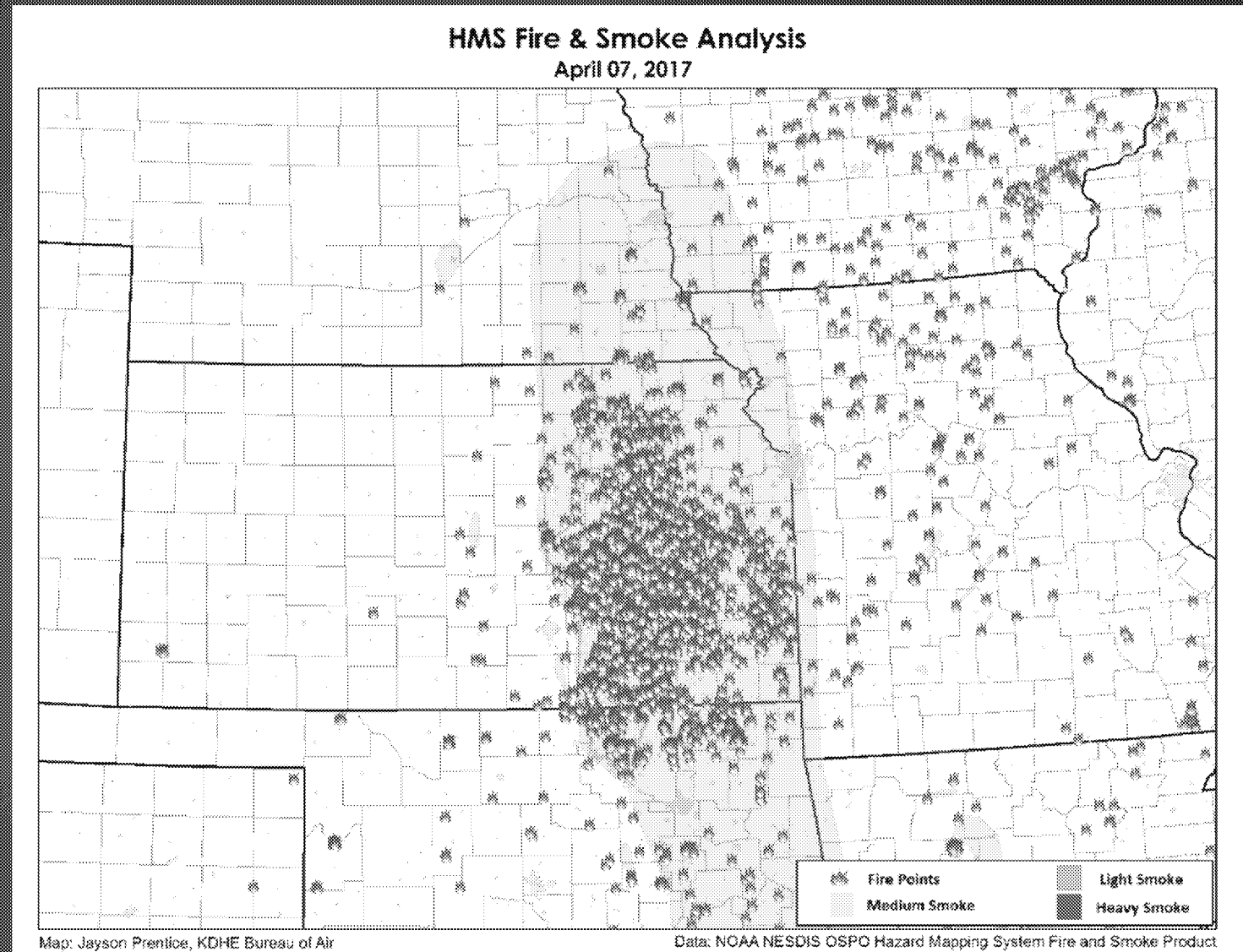
"The 2017 Starbuck wildfire set a state record for the most widespread single fire ever recorded in the history of the State of Kansas, almost doubling last years record-breaking Anderson Creek wildfire."

Brief elevated levels of PM and ozone at the KS monitoring sites, but no exceedances. The burn scar and high winds just after the fire did cause a potential exceedance at the Dodge City PM10 monitoring site (data has not yet been Quality Assured).

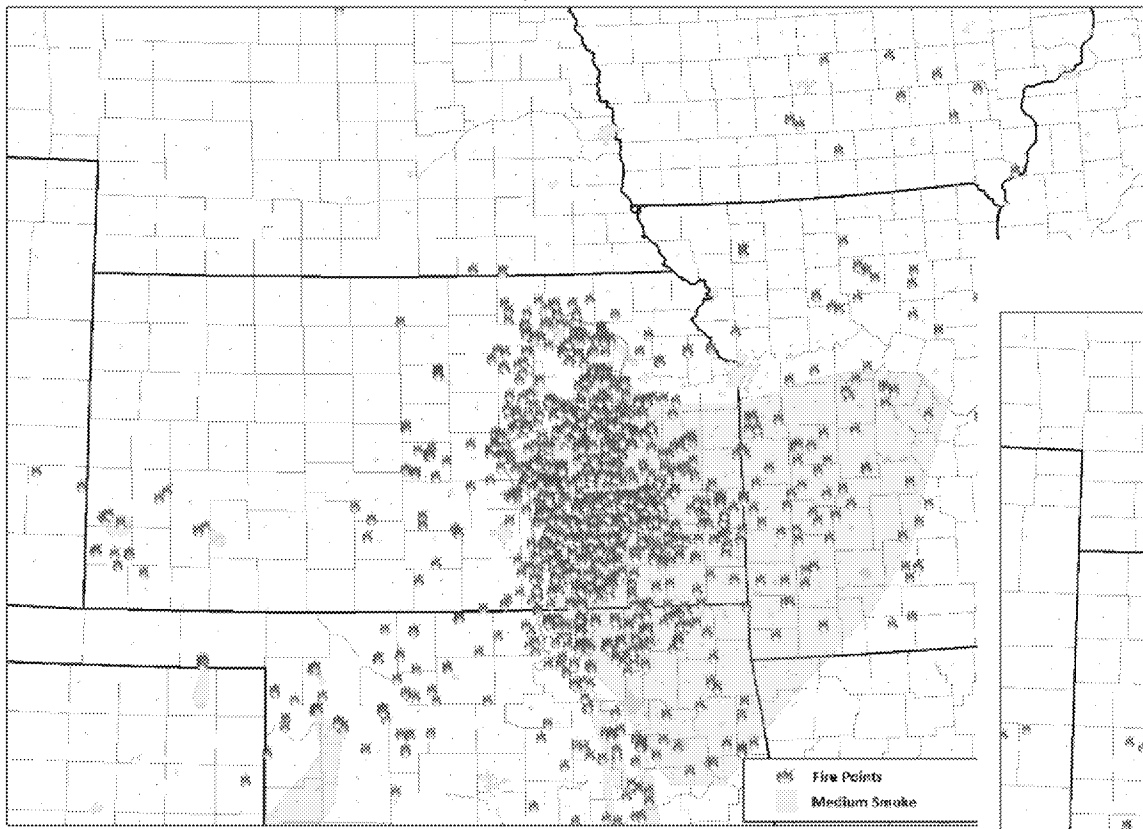
Friday, April 7, 2017;
Copan, OK measured 37.9
 $\mu\text{g}/\text{m}^3$ – EPA Region 6

Significant burning was
observed on Friday (April 7),
Monday (April 10), and
Tuesday (April 11).

Lack of available burn
days in the prior 14+ days
was likely key in seeing a
significant week. The prior
two weeks landowners
endured periods of heavy
rain, wind, and cloudy
conditions that inhibited
the ability to conduct
prescribed fires.



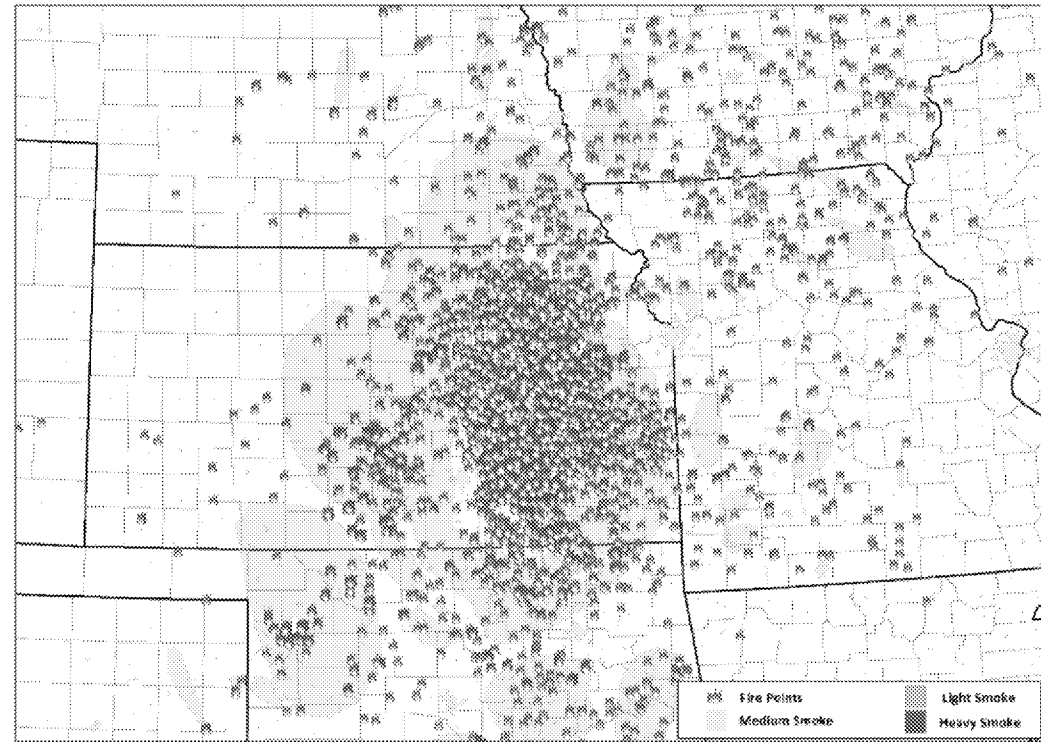
HMS Fire & Smoke Analysis April 10, 2017



Map: Jayson Prentice, KDHE Bureau of Air

Data: NOAA NESDIS OSPO Hazard Mapping System

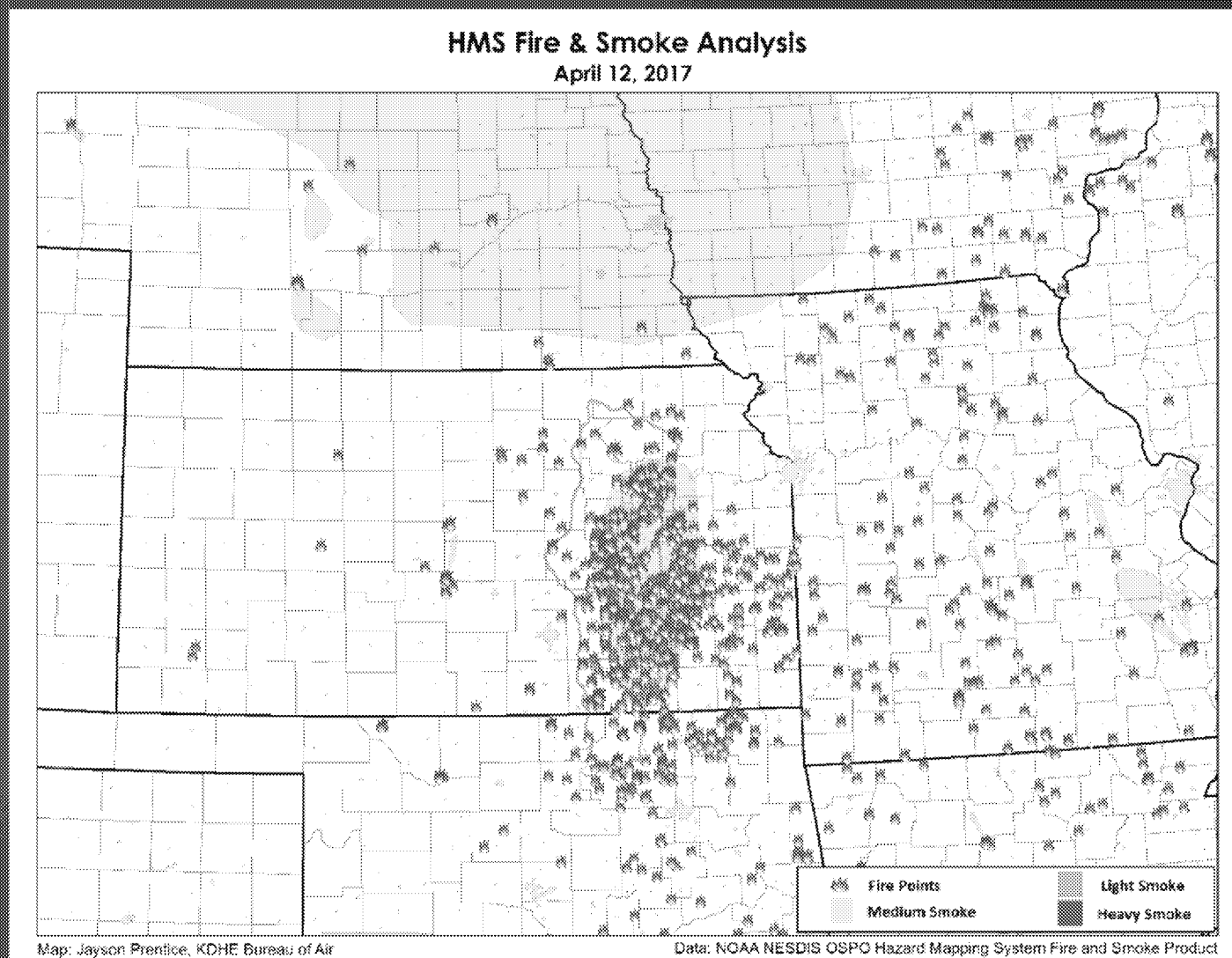
HMS Fire & Smoke Analysis April 11, 2017



Map: Jayson Prentice, KDHE Bureau of Air

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

On April 12, smoke pushed as far north as South Dakota and Minnesota, and then eastward towards the Great Lakes.



Social Media Outreach – success!

KS Flint Hills Smoke Management

KS Flint Hills Smoke Management

KS Flint Hills Smoke Management

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Posts

KS Flint Hills Smoke Management
Apr 26 at 12:47pm · 88

The KSFire.org Smoke Model will be discontinued for the 2017 burning season on Sunday, April 30, 2017.

Like Comment Share

KS Flint Hills Smoke Management
Apr 28 at 10:27am · 88

Update: Number of acres burned within the Flint Hills during spring 2017 near normal, just shy of 2.3 million acres. This analysis includes all burning through April 22, and may include some of the acres burned on April 23. It is expected that additional acreage burned since this analysis will be minimal.

#KSFire #OKFire #KSWS #OKWS #FlintHills #RvFire

Flint Hills Acreage Burned (February 15 – April 22, 2017)

Agriculture Company

Search for posts on this Page

278 people like this and 252 people follow this
Mike Beam and Thomas Orvis

Invite friends to like this Page

About

Ask for KS Flint Hills Smoke Management's address

Ask for KS Flint Hills Smoke Management's phone

Ask for KS Flint Hills Smoke Management's hours

Ask for KS Flint Hills Smoke Management's pricing

Typically replies within a day
Send message

<http://www.ksfire.org/>

During the period of
March 1 – May 1, 2017
the KS SMP Facebook page had
over 10,000 visits.

Kansas Flint Hills
SMOKE MANAGEMENT

Smoke Management

Kansas Flint Hills Smoke Management

Kansas Flint Hills Smoke Management



Welcome to the Kansas Flint Hills Smoke Management Website. This site provides a single location for land managers conducting prescribed burns in the Flint Hills to obtain information and access tools to assist them in making burn decisions.



This website supports the Flint Hills Smoke Management Plan,

At A Glance

[2017 Air Quality Health Advisory Alert](#)

[2016 Flint Hills Acres Burned](#)

[April Burning Restrictions \(Regulations\)](#)

[April Burning Restrictions \(FAQ\)](#)

[Kansas Smoke Management Plan - KDHE](#)

[Fire Management Practices to Improve Air Quality \(PDF\)](#)

[County Burn Permit Information](#)

[Current Burn Bans - Contact your local Emergency Manager](#)

[Fire Management Practices to Reduce the Impacts of Smoke \(PDF\)](#)

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Kansas Flint Hills
Smoke Management
1906 SW Jackson
Suite 310
Topeka, KS 66612-
1366

(785) 296-1551

[Contact us](#)





NDEQ developed a Smoke Awareness webpage in preparation for this year's burn season.

Collaboration between NDEQ and KDHE was especially successful.

Kansas Beef Council Supports FH SMP



Kansas Beef Council

April 2 · 🌐

With spring here, many ranchers will use carefully planned prescribed burns to manage invasive plant species that threaten the Flint Hills. Properly managed prescribed burns can also help reduce the risk of wildfires. These well-planned and controlled burns are much different than the uncontrolled, accidental, and devastating wildfires that swept across several states in early March. Our thoughts are with all the communities still impacted by the aftermath of the fires as they continue to rebuild.

Follow one rancher, a volunteer firefighter, as he explains why prescribed burns are needed in the Flint Hills, how he makes sure pastures are ready for a prescribed burn, and how ranchers rely on the Smoke Management Plan to reduce smoke drift.

Want to learn more about prescribed burns in Kansas? Visit <http://www.kafire.org>

60K Views

👍 Like 💬 Comment ➦ Share

🔄 296

Top Comments *

611 shares

14 Comments



Write a comment...



Robert Larson Well said totally agree a good burn plan and prepared fire guards are essential for a successful controlled burn. It is very important that we as stewards of the land educate the public the importance of fire management practices. It will continue to be an up hill battle

Like · Reply · 🌐 11 · April 2 at 8:53pm



Ed Allen The native americans did controlled burns for centuries



U.S. Environmental Protection Agency - Region 7 (IA, KS, MO, NE)

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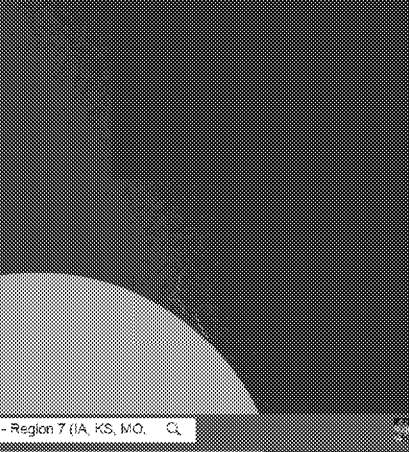
Liked Following Share ...

U.S. Environmental Protection Agency - Region 7 (IA, KS, MO, NE) April 4 at 10:45am

Why Do Controlled Burns Occur Every Spring? As KDHE explains in their February 21, 2017 press release, large areas of the Flint Hills wildlands are burned to help preserve the tallgrass prairie, control invasive species such as Eastern Red Cedar and sumac, and provide better forage for cattle. Prescribed burning minimizes risk of wildfires and is effective in managing wildland resources.



Like Comment Share



Following Share ...

Environmental Protection Agency - Region 7 (IA, MO, NE)

In March to mid-April, you may see large controlled burns in the area of Kansas and surrounding region. All wildland fires produce smoke carried away from the burned area where it can impair air quality in downwind communities. Throughout the week we will post information that will give information on smoke management and smoke management. Enjoy this informative video that talks about the importance of prescribed burns.

EPA reached out through twitter feeds and Facebook posts from April 3-7, with Facebook seeing the most action. EPA posts (20) reached and estimated 27,736 viewers. The total number of impressions was 47, 816, which is great response for a one week span.

U.S. Environmental Protection Agency - Region 7 (IA, KS, MO, NE)

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"Preserving the Tallgrass Prairies"

www.youtube.com

Like Comment Share

Write a comment...

U.S. Environmental Protection Agency - Region 7 (IA, KS, MO, NE) shared U.S. Environmental Protection

FEATURED

The season of bad air days is beginning

By NANCY HICKS / Lincoln Journal Star Mar 8, 2016 (0)



The Associated Press file photo

A controlled fire burns in a Flint Hills pasture near Council Grove, Kansas, in 2014. Each spring, rangeland is burned from through April to provide better forage for cattle and to control invasive plant species. The fires can cause unhealthy air in Leavenworth County.

HEALTH/MEDICINE



'Tis the season for bad air days. So it's time for people.



Curtis State Office Building
1800 SW Jackson St., Suite 540
Topeka, KS 66612-1347

Susan Messier, MD, Secretary

Department of Health & Environment

Phone: 785-296-0461
Fax: 785-168-6368
www.kdheks.gov

Sam Brownback, Governor

FOR IMMEDIATE RELEASE
April 6, 2017

Contact: Kara Titus
(785) 291-3684
Kara.Titus@ks.gov

KDHE issues air quality health advisory Prescribe burning to increase this weekend

TOPEKA, Kan. – Conditions will be ideal for burning in the Flint Hills and surrounding areas during the period of Friday, April 7, 2017 through Sunday, April 9, 2017. Air pollutant levels are expected to be elevated, and may be unhealthy both near and downwind of burn activity. Air pollutant levels can be monitored using the KDHE Bureau of Air website (<http://www.kdheks.gov/bar/air-monitor/airdata.html>) and EPA Air Now (<https://airnow.gov>).

LINCOLN, Neb. (KOLN) - Lincoln Mayor Chris Beutler sent a letter Tuesday to the director of the Division of Environment at the Kansas Department of Health and Environment regarding controlled burns and the health of people in the capital city.

Beutler would like the KDHE to update its Flint Hills Smoke Management Plan to reflect current research.

"The 2010 Plan's recommendations, based on 40 year old research, should be updated with consideration given to current studies questioning the necessity of abbreviated burn periods," said Beutler.

Nebraska mayor calls for changes to Kansas burn rules



Associated Press. Enlarge photo

Landowners drive through smoke from a controlled burn of a pasture near Salina, Kan., Tuesday, April 11, 2017. Owners hope to keep the fire on one side of the road. (AP Photo/Orlin Wagner)

[Email](#) [Print](#) [Facebook](#) [Tweet](#) [Comments \(2\)](#)

By Allison Kite, Associated Press

April 29, 2017

ADVERTISEMENT

TOPEKA — A Nebraska mayor is pushing for changes in Kansas' oversight of prairie and ranchland burning after smoke from the Flint Hills

Air quality still bad for some people; LPS elementary children kept inside

Lincoln Journal Star | Apr 13, 2017



KRISTIN STREFF, Journal Star

Kansas fires send a haze across Lincoln on Wednesday. The Capitol is seen from Holmes Lake.

MORE INFORMATION



The Lincoln-Lancaster County Health Department issued another health warning Thursday morning for people with certain health conditions because of smoke in the air from agricultural burning.

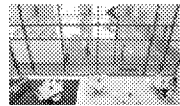


State, city plan to lodge

Latest galleries



Photos: Second-half flurry sends Southwest to A-7 district boys soccer win



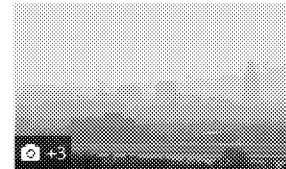
Photos: Inside Lincoln's new Y

By the Lincoln Journal Star | Apr 14, 2016



GWYNETH ROBERTS/Journal Star

A smoky haze from fires in Kansas softens the view of the Nebraska State Capitol from Pioneer's Park on Wednesday.



Haze from Kansas fires spurs health advisory; LPS cancels outside events

The prescribed prairie fires that mark Kansas' smoky rite of spring



Residents of eastern Nebraska breathed easier Thursday afternoon as smoke carried into the state from prescribed burns in the Flint Hills of Kansas dissipated.

With the air quality index improving to "good" in Lincoln, school officials allowed outdoor activities to go on as scheduled Thursday afternoon after shutting down recesses in the fresh air

ALERT FEATURED

Mayor sends letter to Kansas about unhealthy air from Flint Hills fires

NANCY HICKS Lincoln Journal Star | Apr 19, 2017 | Updated Apr 28, 2017 | 9



KRISTIN STREFF, Journal Star file photo

Kansas fires send a haze across Lincoln on April 11, one of the four days this year when the air quality index has been unhealthy for 24 hours. The Capitol and the Lincoln skyline as seen from Arnold Heights Park.

MORE INFORMATION



Letter, 4/19: On smoke and cattle

I was happy to read that burning over 2 million acres of pastureland in Kansas is good for the ranchers and their cattle ("Burns necessary for...")

Lincoln Mayor Chris Beutler wants Kansas ranchers to pay more attention to the health of Lincoln residents, downwind from their annual grass burns.

In a letter to Kansas officials, Beutler described some of the complaints he received from Lincoln residents and doctors and he urged regulators to pay more attention to these consequences.

Air quality still bad for some people: LPS elementary children



NEVILL DUNN BOUTLER
305 South 9th Street - Suite 301 Lincoln, NE 68508
402.342.7311 Fax: 402.492.7259
lincoln.gov

April 18, 2017

John Mitchell
Director, Division of Environment
Kansas Department of Health and Environment
1000 SW Jackson, Suite 400
Topeka, KS 66612-1167

Dear Mr. Mitchell,

Prairie and range management are important to farmers, ranchers, and environmentalists in both Kansas and Nebraska. We share the goal of good stewardship of our natural ecosystems and controlled burns are an important tool in protecting the health of our native landscapes. As a

Lincoln Mayor Chris Beutler wants Kansas ranchers to pay more attention to the health of Lincoln residents, downwind from their annual grass burns.

The mayor questioned the current Kansas burn plan, which allows burns in the Flint Hills area to be concentrated into a short period of time.

agricultural roots, I understand the importance of these programs. However, as the smoke from these programs are becoming increasingly severe, the health of our community is jeopardized by the smoke. The smoke from these burns is conducted over a short period of time and has tracked the smoke pollution caused by these burns in 2003, 2006, 2010, 2011, 2014 and 2015. The Air Quality Index has been in the "unhealthy" category consistently for over 24 hours. The department has warned our citizens that the smoke can cause asthma attacks, worsen asthma, and is a concern for people with heart disease. The smoke can be detrimental to long-term health. The health impacts have been documented throughout the City over the past



R.H.

April 24, 2017

RECEIVED

APR 27 2017

Chris Beutler
Mayor
555 South 10th Street, Suite 301
Lincoln, NE 68508

MAYORS OFFICE

Dear Mr. Beutler,

I have received your April 18, 2017, letter and appreciate your reaching out to me regarding the effects of the burning in the Flint Hills. The Kansas Department of Health and Environment ("KDHE") understands and acknowledges the concerns you have for the welfare of your citizens. KDHE has worked diligently to mitigate the effects of the burning in the Flint Hills on all downwind residents, whether Kansans, Nebraskans, or others.

KDHE appreciates that the City of Lincoln recognizes the importance of fire in the management and survivability of the tallgrass prairie ecosystem in the Flint Hills. The Flint Hills of Kansas and the Osage Hills of northern Oklahoma are the last substantial contiguous stand of tallgrass prairie in North America, and one of the world's most endangered ecosystems. Tallgrass prairie requires fire on a relatively frequent basis to prevent the encroachment of woody species and maintain the integrity of plant communities. The Flint Hills is a unique ecosystem that is largely owned by private landowners. These private landowners have assumed the role of stewards of this ecosystem. KDHE continues to work with these landowners within its statutory authority regarding burning in the Flint Hills.

As the state environmental agency, KDHE is aware of the potential health effects associated with smoke generated by prescribed fires in the wildlands of the Flint Hills and surrounding areas. Our agency has worked diligently for many years to educate and inform those conducting prescribed burns of the potential effects the smoke can have on downwind communities. In 2010, we increased our efforts and worked with numerous stakeholders to develop the Flint Hills Smoke Management Plan. This plan, although voluntary, includes techniques that can be used to mitigate effects that smoke may have on downwind areas. It includes a modeling tool to assist the prescribed fire community in visualizing the effect that smoke from the fires may have in downwind areas. This tool allows ranchers and other land managers to make informed decisions on what effect their smoke may have downwind of a fire. The modeling tool is updated yearly to account for updated information, and in 2014, KDHE added air monitors in Lincoln and Omaha to its model to help address potential effects of the smoke in those cities.



MAYOR CHRIS BEUTLER
600 South 10th Street - Suite 201 Lincoln, NE 68508
402.441.2511 fax: 402.441.3729 lincoln.ne.gov

April 28, 2017

John Mitchell
Director, Division of Environment
Kansas Department of Health and Environment
1000 SW Jackson, Suite 400
Topeka, KS 66612-1367

Dear Mr. Mitchell,

We appreciate the KDHE's recognition of the problem, its willingness to improve the smoke management plan, and its pledge to work with the Nebraska Department of Environmental Quality. These are good first steps and we applaud KDHE's responsiveness.

However, beginnings have to become effective action to protect the health of Lincoln citizens. It is clear that a change of practices must occur to alleviate the current unacceptable situation. The failure of the existing plan suggests that new practices must be both established and enforced. We will further coordinate with our own state authorities before deciding Lincoln's next steps. But we hope you are putting this matter on your front burner.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Beutler".

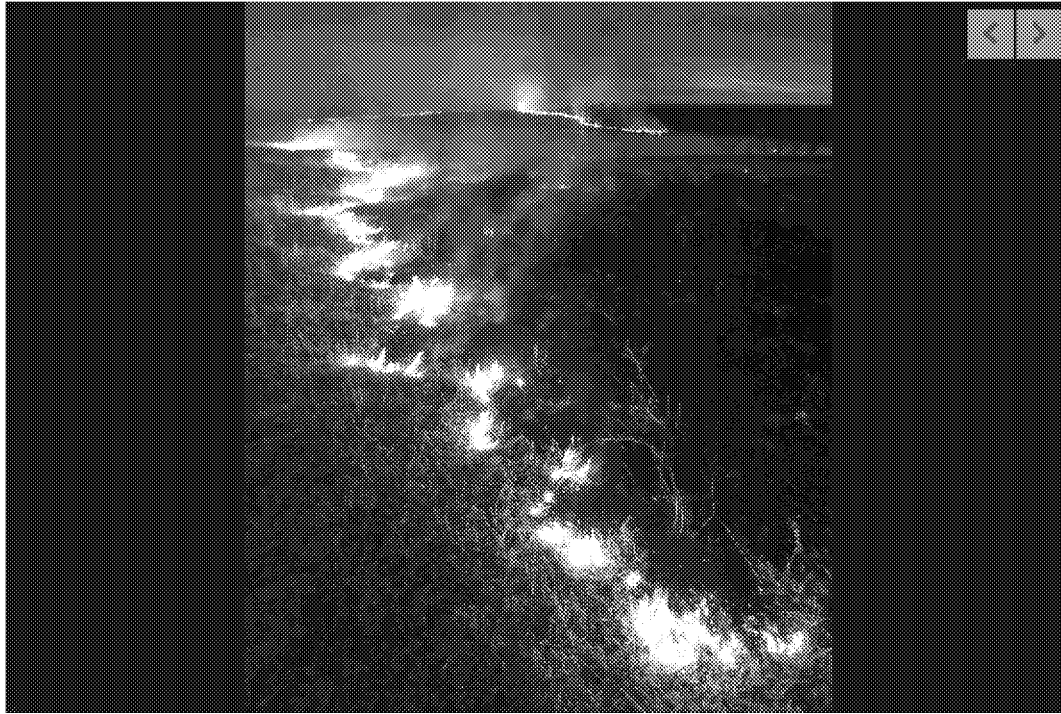
Chris Beutler
Mayor of Lincoln

Cc: Governor Sam Brownback
Governor Pete Ricketts

FEATURED

Kansas smoke plan not protecting Lincoln health, local health officials say

NICHOLAS BERGIN Lincoln Journal Star Apr 24, 2017 Updated Apr 28, 2017 (8)



Associated Press file photo

A controlled fire burns in a Flint Hills pasture near Council Grove, Kansas, in March 2014. That year was a particularly bad year for smoke in Nebraska since Kansans had done limited burning the previous two years because of drought conditions.

Gov. Pete Ricketts' office referred a request for comment on how the administration will respond efforts in Kansas to manage prescribed burns to the Nebraska Department of Environmental Quality.

The plan to manage spring fires in Kansas is not protecting Nebraskans from potentially harmful smoke, according to local health officials. But state officials say they won't seek federal intervention, instead they'll continue informal discussions with Kansas.

Topeka Capital – Journal:



Posted April 29, 2017 10:07 pm - Updated April 30, 2017 04:58 am

By Tim Carpenter

timothy.carpenter@cjonline.com

Burning Questions: Tradition, economics cloud debate on prairie burning

2 Comments 130 Share



A spring fire of Flint Hills pasture starts a process that promotes growth of nutrient-rich grass for livestock and deters invasive plants and trees. (JILL HUMMELS/SUBMITTED)

STRONG CITY — Brian Obermeyer's hiking boots clawed at stubble-covered ground in the Tallgrass Prairie National Preserve intentionally consumed by fire the previous fall to burn away dry roughage and promote spring growth of native grasses.

Nebraska Air Quality Summary for 2017 Fire Season

Fine Particulate Pollution NAAQS (PM _{2.5})	Averaging Time	Level
	24 hours	35 µg/m ³

LLCHD PM_{2.5} Response from Different Samplers (ug/m³)

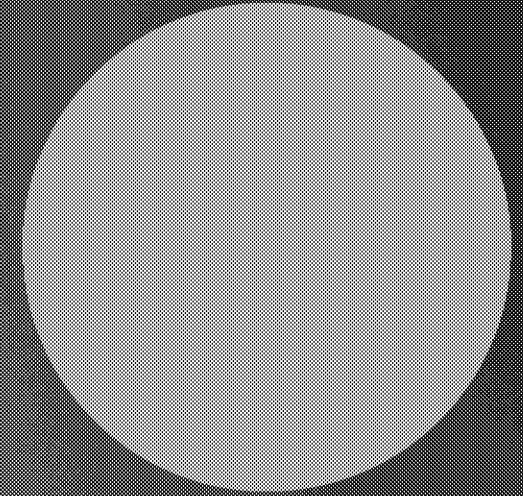
Date	Continuous BAM	Primary FRM	Collocated FRM	BAM-Primary Difference Or Bias
4/4/17	8.4	3.8	nd	+ 4.6
4/7/17	33.4	28.6	29.9	+ 4.8
4/10/17	6.6	3.0	nd	+3.6
4/13/17	26.7	19.3	19.5	+ 7.4
4/16/17	7.1	2.8	nd	+4.3
Average				+4.9

Nebraska Air Quality Summary for 2017 Fire Season

The Lincoln BAM detected two PM2.5 exceedances:

1. Saturday, April 8, 2017 = **43.7** ug/m³
2. Wednesday, April 12, 2017 = **49.6** ug/m³

The FRM sampler is used for NAAQS comparison operates every 3rd day and was not operating on the days the BAM recorded the exceedances.



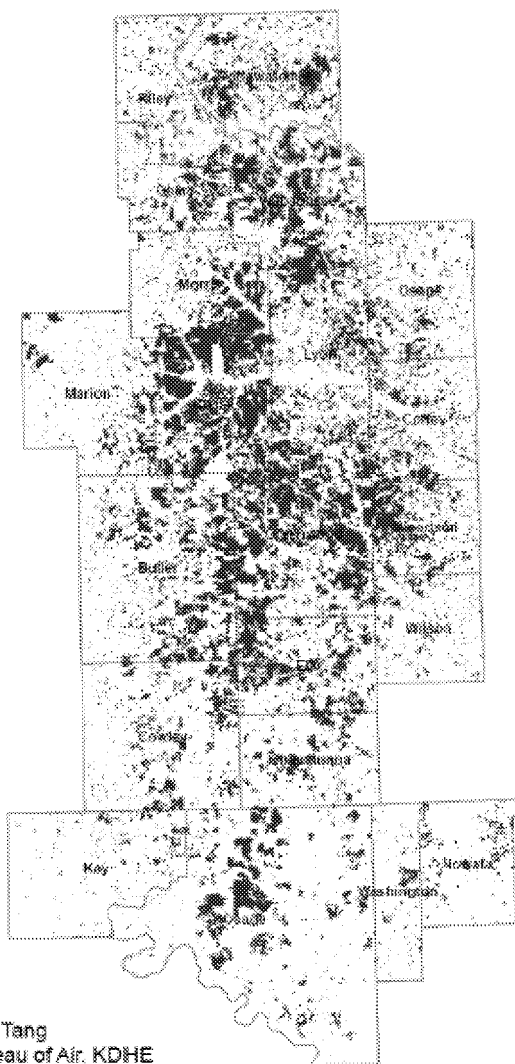
"NE had no FRM samplers for NAAQS this year"

KDHE Air Quality Summary for Ozone 2017 Fire Season Wichita

Ozone (O ₃)	Averaging Time	Level
	8 hours	0.070 ppm

The highest 8-hour ozone average in Wichita was 0.070 ppb on Tuesday, April 11, 2017.

Flint Hills Acreage Burned (February 15 – May 1, 2017)



Counties	Acres Burned	
Butler	219,202	
Chase	273,088	
Chautauqua	59,276	
Coffey	84,203	*
Cowley	99,786	
Elk	126,520	
Geary	62,133	
Greenwood	351,035	
Lyon	151,617	
Marion	68,156	
Morris	118,721	
Osage (KS)	67,152	*
Pottawatomie	125,331	
Riley	63,677	
Wabaunsee	194,908	
Wilson	31,074	
Woodson	100,620	
Nowata (OK)	24,835	
Osage (OK)	173,317	
Washington (OK)	14,811	
Kay (OK)	27,676	
Total	2,437,138	
* Denotes county was partly or completely covered by clouds during analysis.		

Yao Tang
Bureau of Air, KDHE

Questions?

Gina Grier

EPA Region 7

Air Planning and Development Branch

grier.gina@epa.gov

913-551-7078

