

Flint Hills Prescribed Fire Update

2020 Summary
May 15, 2020





Acreage Burned Analysis

Analysis was conducted during the period of February 2, 2020 to April 30, 2020 to determine the approximate total of acres burned. The analysis conducted does not differentiate between prescribed fire and wildfire. While prior year periods of analysis differ in date range the analysis always encompasses the clear majority of the Spring burning period within the Flint Hills.

If you have questions, or for more information, contact:

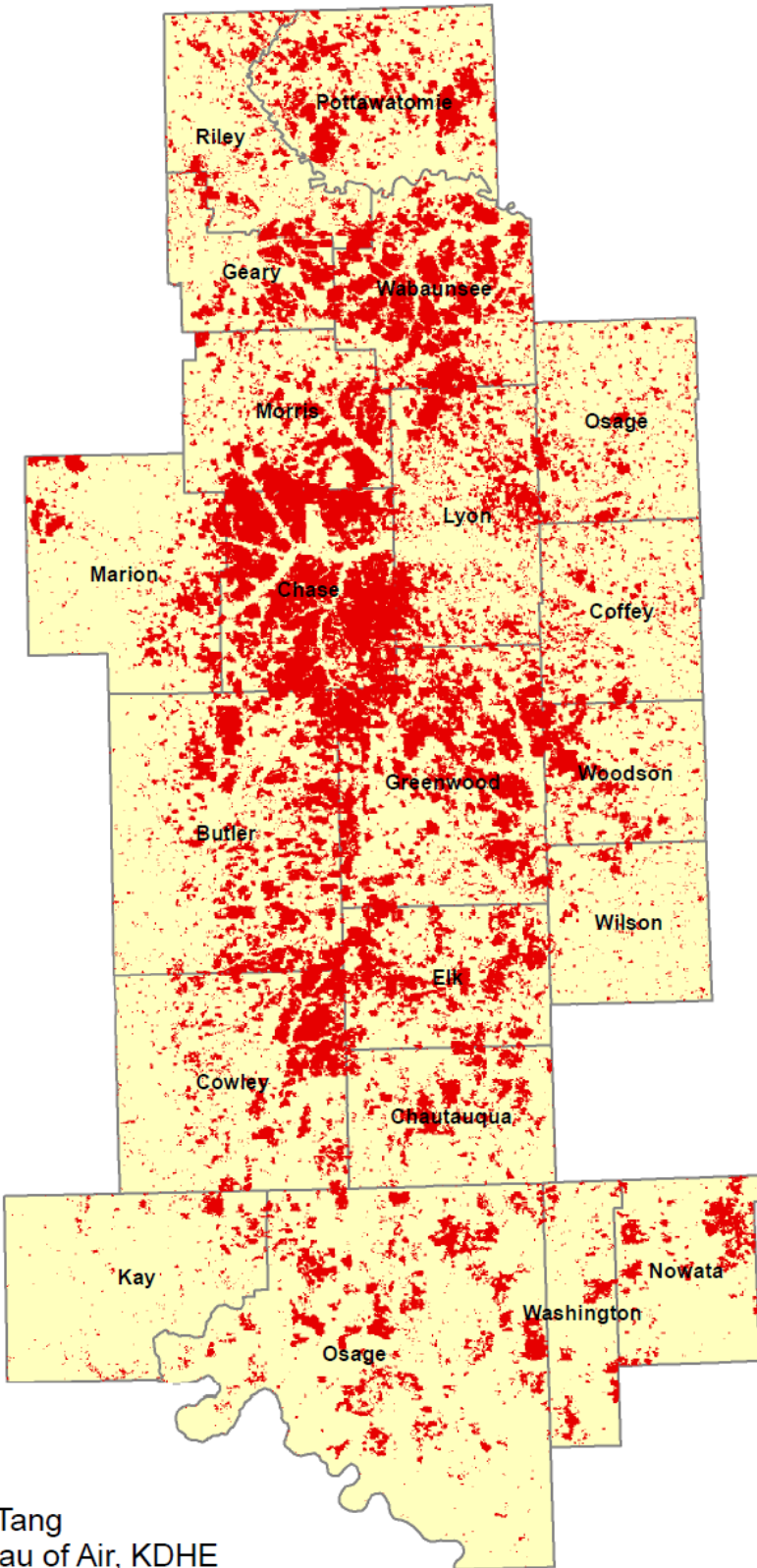
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Flint Hills Prescribed Fire Update



Flint Hills Acreage Burned (February 2 – April 30, 2020)



<u>Counties</u>	<u>Acres Burned</u>
Butler	237,628
Chase	343,359
Chautauqua	73,515
Coffey	61,330
Cowley	149,254
Elk	139,926
Geary	70,998
Greenwood	296,671
Lyon	159,231
Marion	83,909
Morris	147,293
Osage (KS)	61,870
Pottawatomie	139,385
Riley	74,395
Wabaunsee	231,820
Wilson	22,997
Woodson	70,890
Nowata (OK)	51,970
Osage (OK)	181,549
Washington (OK)	27,182
Kay (OK)	24,031
Total	2,649,203
* Denotes county was partly or completely covered by clouds during latest analysis.	

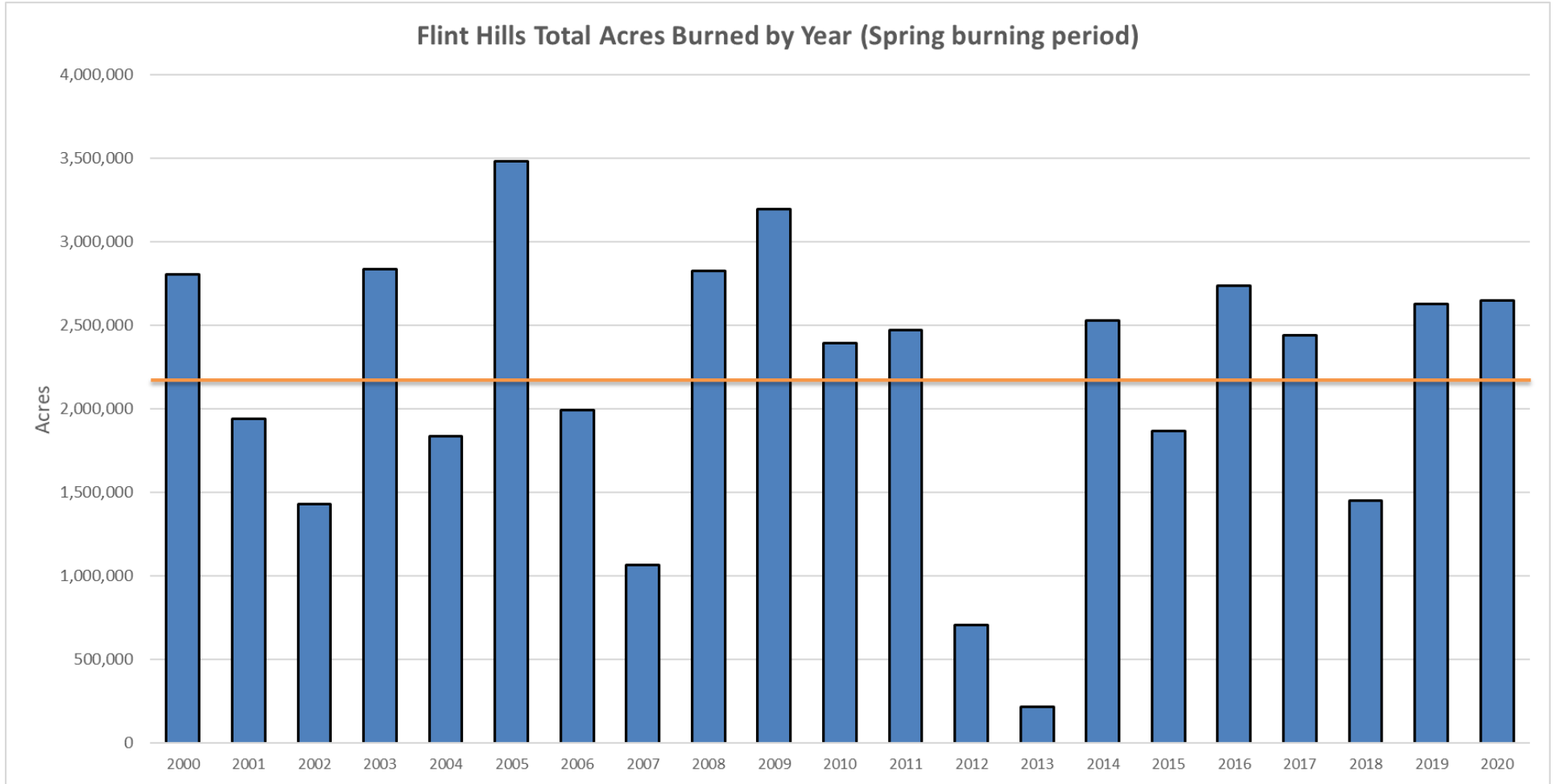
Yao Tang
Bureau of Air, KDHE



Flint Hills Total Acres Burned by Year (Spring burning period)

Year	Acres Burned
2000	2,802,963
2001	1,939,859
2002	1,429,438
2003	2,835,778
2004	1,837,021
2005	3,483,101
2006	1,992,477
2007	1,066,809
2008	2,825,876
2009	3,195,053
2010	2,392,693
2011	2,473,423
2012	706,016
2013	217,377
2014	2,529,468
2015	1,870,018
2016	2,736,791
2017	2,441,355
2018	1,453,748
2019	2,627,737
2020	2,649,203
Average	2,166,962

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Year:	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<u>County</u>										
Butler	213,883	45,004	13,097	166,442	94,349	245,921	220,221	93,964	240,021	237,628
Chase	255,240	28,912	5,174	288,529	218,860	318,679	273,258	72,449	332,950	343,359
Chautauqua	79,226	12,819	3,985	113,499	71,321	94,473	59,353	87,214	110,366	73,515
Coffey	77,612	26,162	11,166	77,298	81,978	76,450	84,697	50,565	75,029	61,330
Cowley	134,002	18,193	3,907	92,804	61,036	158,984	99,786	52,758	186,383	149,254
Elk	124,363	35,027	8,680	167,647	92,990	171,757	126,613	89,809	157,594	139,926
Geary	56,120	52,418	6,039	47,769	15,583	51,492	62,195	10,965	39,013	70,998
Greenwood	258,973	29,993	18,873	250,042	247,741	284,624	351,467	148,328	311,482	296,671
Lyon	160,604	43,336	14,471	143,075	156,975	174,213	151,865	86,242	135,138	159,231
Marion	45,632	8,324	3,228	44,402	28,124	75,647	68,357	7,043	52,526	83,909
Morris	114,117	16,155	2,162	107,600	64,433	149,780	118,721	61,376	110,860	147,293
Osage (KS)	----	42,657	10,008	77,901	66,070	64,974	67,229	72,928	50,055	61,870
Pottawatomie	108,853	124,480	5,961	120,882	63,229	89,114	125,671	39,182	83,245	139,385
Riley	89,490	85,561	36,201	84,032	50,039	64,110	63,723	32,325	57,407	74,395
Wabaunsee	203,319	64,047	23,552	240,173	102,349	199,804	194,954	83,832	189,363	231,820
Wilson	----	7,985	8,417	33,236	22,688	23,136	31,090	31,970	31,136	22,997
Woodson	73,855	19,599	12,124	82,271	82,596	79,276	100,759	47,878	83,647	70,890
Nowata (OK)	----	4,880	4,834	68,217	64,773	48,186	25,051	73,036	66,967	51,970
Osage (OK)	265,387	36,155	22,147	275,278	206,504	301,258	173,703	248,824	241,457	181,549
Washington (OK)	----	4,309	3,351	48,371	45,669	32,387	14,904	45,515	37,298	27,182
Kay (OK)	----	----	----	----	32,711	32,526	27,738	17,545	35,800	24,031
Total Acres	2,260,676	706,016	217,377	2,529,468	1,870,018	2,736,791	2,441,355	1,453,748	2,627,737	2,649,203



Air Quality Data

Air quality data for the period of February 28 – May 1, 2020:

Ozone: Preliminary data indicates the following exceedances of the NAAQS daily 8-hour average maximum of 70 ppb which may have been influenced by prescribed burning.

April 7, 2020 at the monitor located in Topeka, KS - 93 ppb

PM_{2.5}: Preliminary data indicates the following exceedances of the NAAQS daily 24-hour average maximum of 35 $\mu\text{g}/\text{m}^3$ which may have been influenced by prescribed burning.

March 27, 2020 at the monitor located in/near Ponca City, Oklahoma - 36.2 $\mu\text{g}/\text{m}^3$

April 4, 2020 at the monitor located in Wichita, KS - 40.5 $\mu\text{g}/\text{m}^3$

April 7, 2020 at the monitor located in Topeka, KS - 51.9 $\mu\text{g}/\text{m}^3$

April 8, 2020 at the monitor located in Topeka, KS - 72.7 $\mu\text{g}/\text{m}^3$

April 8, 2020 at the monitor located in Kansas City, KS - 38.1 $\mu\text{g}/\text{m}^3$

April 8, 2020 at the monitor located in Chanute, KS - 36.0 $\mu\text{g}/\text{m}^3$

April 11, 2020 at the monitor located in Lincoln, NE - 45.3 $\mu\text{g}/\text{m}^3$

April 11, 2020 at the monitor located in/near Elk Point, SD - 51.9 $\mu\text{g}/\text{m}^3$