

# Flint Hills Wildland Fire Update

**2023 Summary**  
**May 23, 2022**





## Acreage Burned Analysis

Analysis was conducted during the period of February 3 to May 1, 2023, to determine the approximate total of acres burned within the Flint Hills region. The analysis conducted does not differentiate between prescribed fire and wildfire which is important to note, especially when wildfires are common. For this period there were at least 25,000 acres consumed by wildfires within this region per reports by state forest services. While prior year periods of analysis differ in date range the analysis always encompasses a clear majority of the Spring burning period within the Flint Hills.

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

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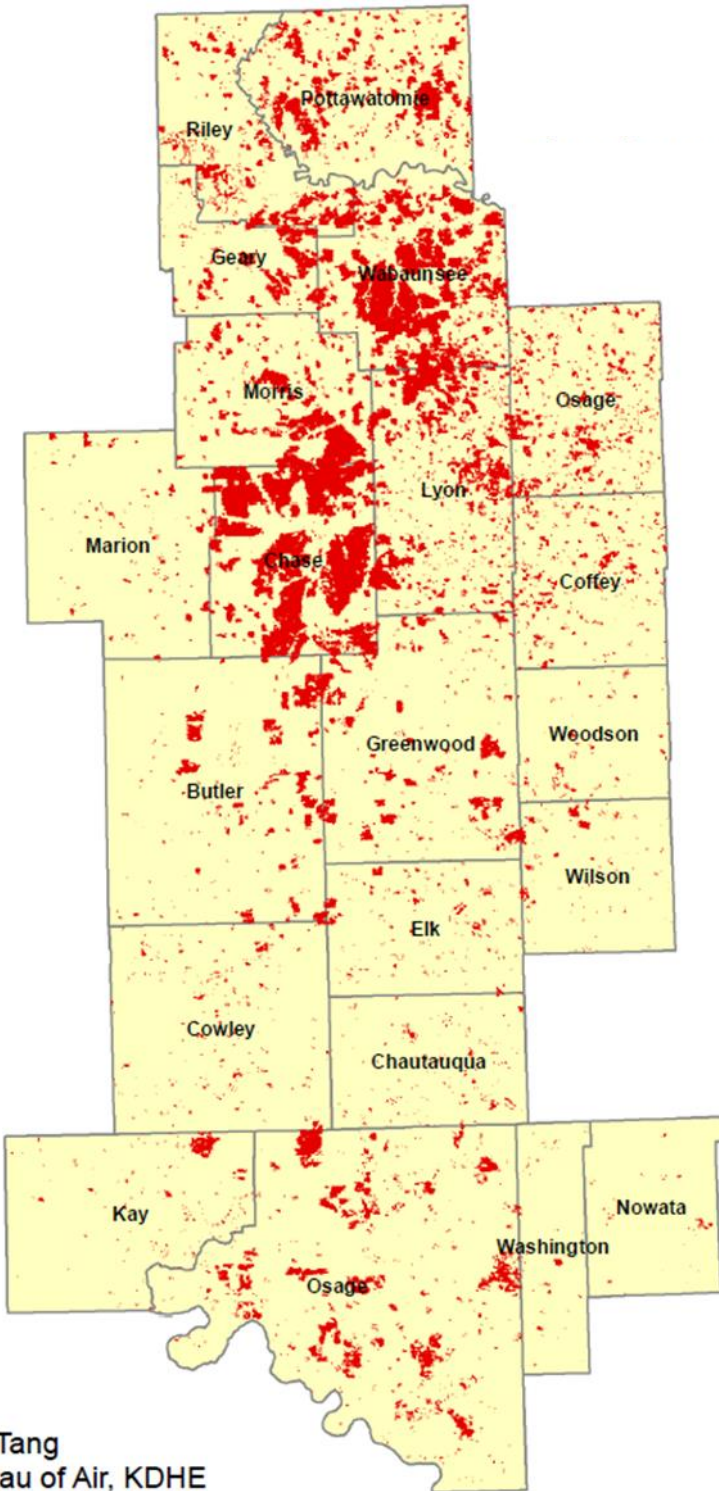
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Flint Hills Prescribed Fire Update



**Flint Hills Acreage Burned (February 3 – May 1, 2023)**



<u>County</u>	<u>Acres Burned</u>
Butler	52,418
Chase	238,693
Chautauqua	7,645
Coffey	26,178
Cowley	13,112
Elk	14,301
Geary	38,147
Greenwood	54,704
Lyon	115,091
Marion	16,047
Morris	81,268
Osage (KS)	51,167
Pottawatomie	94,597
Riley	56,326
Wabaunsee	196,421
Wilson	9,653
Woodson	6,162
Nowata (OK)	1,961
Osage (OK)	111,478
Washington (OK)	2,595
Kay (OK)	12,649
<b>Total</b>	<b>1,200,613</b>

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Bureau of Air, KDHE



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

<b>Year</b>	<b>Acres Burned</b>
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
2021	1,899,225
2022	2,112,759
2023	1,200,613
<b>Average</b>	<b>2,113,283</b>

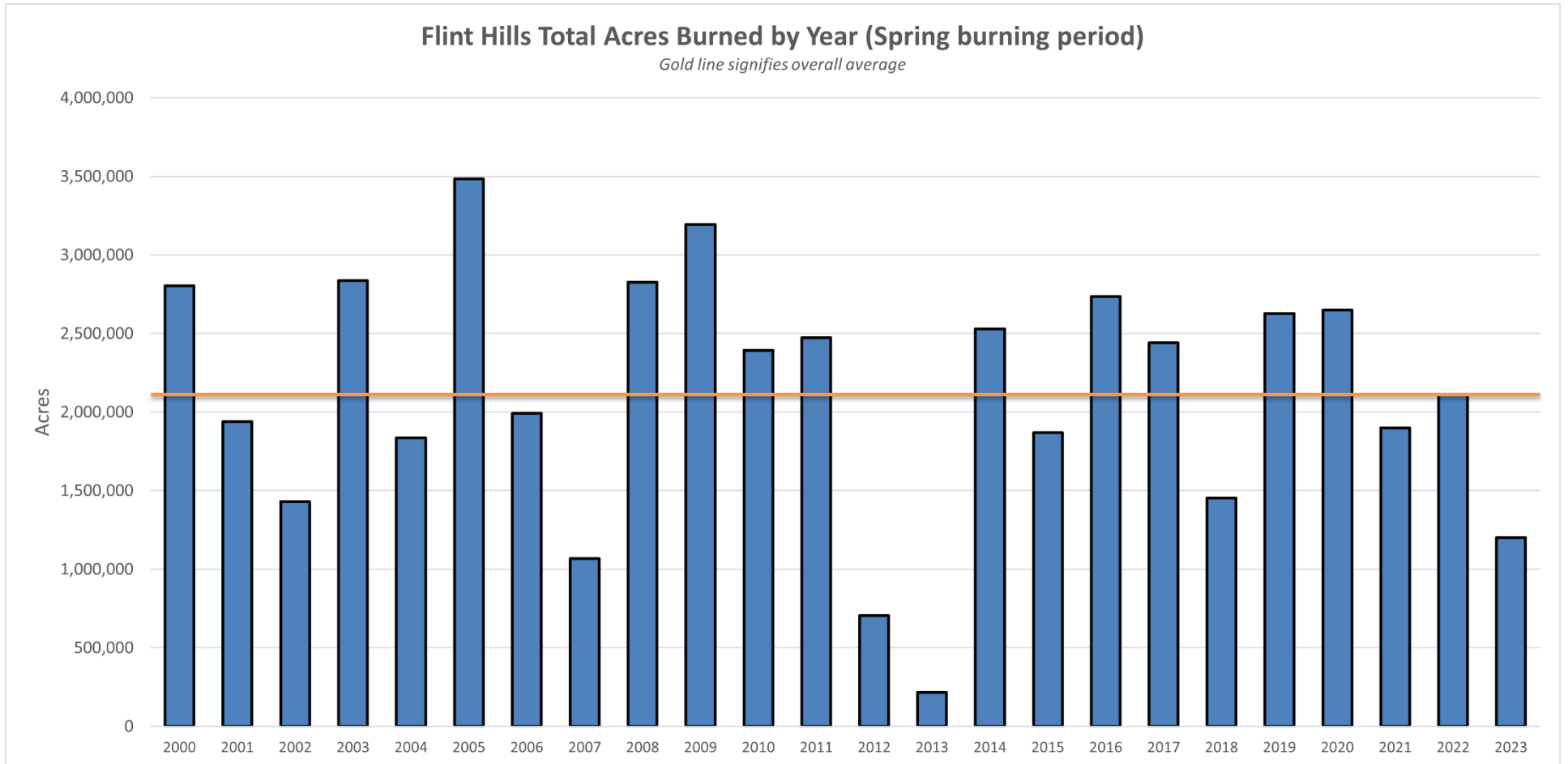
## Flint Hills Prescribed Fire Update



### 2023 Flint Hills Acres Burned by County compared to 10-year average

County	2023	10-Year Average	% of Average
Butler	52,418	162,093	32%
Chase	238,693	240,553	99%
Chautauqua	7,645	72,780	11%
Coffey	26,178	65,944	40%
Cowley	13,112	95,043	14%
Elk	14,301	114,992	12%
Geary	38,147	35,598	107%
Greenwood	54,704	244,399	22%
Lyon	115,091	131,728	87%
Marion	16,047	44,143	36%
Morris	81,268	93,664	87%
Osage (KS)	51,167	60,007	85%
Pottawatomie	94,597	80,314	118%
Riley	56,326	55,749	101%
Wabaunsee	196,421	161,807	121%
Wilson	9,653	25,436	38%
Woodson	6,162	68,263	9%
Nowata (OK)	1,961	47,989	4%
Osage (OK)	111,478	200,458	56%
Washington (OK)	2,595	31,740	8%
Kay (OK)	12,649	26,337	48%
<b>Total Acres</b>	<b>1,200,613</b>	<b>2,053,768</b>	<b>58%</b>

# Flint Hills Prescribed Fire Update



## Flint Hills Prescribed Fire Update



Year:	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
County											
<b>Butler</b>	13,097	166,442	94,349	245,921	220,221	93,964	240,021	237,628	145,393	163,895	52,418
<b>Chase</b>	5,174	288,529	218,860	318,679	273,258	72,449	332,950	343,359	314,833	237,442	238,693
<b>Chautauqua</b>	3,985	113,499	71,321	94,473	59,353	87,214	110,366	73,515	56,171	57,901	7,645
<b>Coffey</b>	11,166	77,298	81,978	76,450	84,697	50,565	75,029	61,330	55,028	85,902	26,178
<b>Cowley</b>	3,907	92,804	61,036	158,984	99,786	52,758	186,383	149,254	57,422	88,095	13,112
<b>Elk</b>	8,680	167,647	92,990	171,757	126,613	89,809	157,594	139,926	84,975	109,933	14,301
<b>Gearv</b>	6,039	47,769	15,583	51,492	62,195	10,965	39,013	70,998	34,889	17,035	38,147
<b>Greenwood</b>	18,873	250,042	247,741	284,624	351,467	148,328	311,482	296,671	219,155	315,605	54,704
<b>Lyon</b>	14,471	143,075	156,975	174,213	151,865	86,242	135,138	159,231	115,879	180,190	115,091
<b>Marion</b>	3,228	44,402	28,124	75,647	68,357	7,043	52,526	83,909	40,711	37,483	16,047
<b>Morris</b>	2,162	107,600	64,433	149,780	118,721	61,376	110,860	147,293	78,288	96,126	81,268
<b>Osage (KS)</b>	10,008	77,901	66,070	64,974	67,229	72,928	50,055	61,870	45,144	83,894	51,167
<b>Pottawatomie</b>	5,961	120,882	63,229	89,114	125,671	39,182	83,245	139,385	77,361	59,106	94,597
<b>Riley</b>	36,201	84,032	50,039	64,110	63,723	32,325	57,407	74,395	41,561	53,700	56,326
<b>Wabaunsee</b>	23,552	240,173	102,349	199,804	194,954	83,832	189,363	231,820	169,966	182,259	196,421
<b>Wilson</b>	8,417	33,236	22,688	23,136	31,090	31,970	31,136	22,997	16,093	33,592	9,653
<b>Woodson</b>	12,124	82,271	82,596	79,276	100,759	47,878	83,647	70,890	53,762	69,422	6,162
<b>Nowata (OK)</b>	4,834	68,217	64,773	48,186	25,051	73,036	66,967	51,970	33,344	43,507	1,961
<b>Osage (OK)</b>	22,147	275,278	206,504	301,258	173,703	248,824	241,457	181,549	197,565	156,297	111,478
<b>Washington (OK)</b>	3,351	48,371	45,669	32,387	14,904	45,515	37,298	27,182	31,877	30,842	2,595
<b>Kay (OK)</b>	----	----	32,711	32,526	27,738	17,545	35,800	24,031	29,808	10,533	12,649
<b>Total Acres</b>	<b>217,377</b>	<b>2,529,468</b>	<b>1,870,018</b>	<b>2,736,791</b>	<b>2,441,355</b>	<b>1,453,748</b>	<b>2,627,737</b>	<b>2,649,203</b>	<b>1,899,225</b>	<b>2,112,759</b>	<b>1,200,613</b>



## Air Quality Data

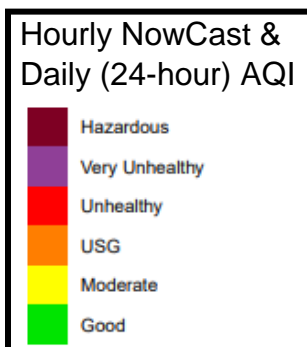
Air quality data for the period of February 3 – May 1, 2023:

**Ozone:** Preliminary data indicates no exceedances of the NAAQS daily 8-hour average maximum of 70 ppb which may have been influenced by wildland fires within the Flint Hills.

**PM<sub>2.5</sub>:** Preliminary data indicates no exceedances of the NAAQS daily 24-hour average maximum of 35  $\mu\text{g}/\text{m}^3$  which may have been influenced by wildland fires within the Flint Hills.

## Air Quality Monitor Data

The following graphs encompass many of the regulatory air quality monitors that are near the Flint Hills. Each graph of a single monitor displays the hourly NowCast and daily Air Quality Index (AQI) when compared to the fine inhalable particulates (PM<sub>2.5</sub>) National Ambient Air Quality Standard. Air quality impacts measured may not always be due to wildland fire smoke and may be due to other regional pollutants or events. **All data should be considered preliminary**; Graphical representation of data may be misinterpreted due to rounding errors and other preliminary data may not represent final values due to automated quality assurance/control methods by EPA and partners.





# Flint Hills Prescribed Fire Update



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