



Air Quality Analysis for Ozone

The following information is for the ambient air monitors operated by the state. This information is reported to the U.S. Environmental Protection Agency's Air Quality System database. The monitoring information provided in the chart below includes the preliminary design values for the ozone National Ambient Air Quality Standard, or NAAQS.

In March 2008, EPA strengthened the ozone NAAQS by setting it at a level of 0.075 parts per million (ppm) measured over 8 hours. In April 2012, EPA finalized nonattainment areas for the 2008 ozone NAAQS. In Missouri, only the St. Louis area was designated as nonattainment with a boundary encompassing St. Louis City and St. Louis, St. Charles, Jefferson, and Franklin Counties. Missouri then developed plans to bring the St. Louis nonattainment area into compliance. In September 2018, EPA formally redesignated the St. Louis area back to attainment of the 2008 ozone NAAQS.

In October 2015 (effective in December 2015), EPA further strengthened the ozone NAAQS by setting it at a level of 0.070 ppm measured over 8 hours. Based on 2015 to 2017 monitoring data, only the West Alton site in the St. Louis area exceeds the standard. On April 30, 2018, EPA designated the City of St. Louis, St. Charles County, St. Louis County, and a portion of Franklin County (Boles Township) in Missouri as nonattainment for the 2015 ozone NAAQS. Jefferson County and the remainder of Franklin County were not included in the nonattainment area for the 2015 ozone NAAQS at that time. Then, in July 2021, as a result of federal litigation, EPA revised the designation for Jefferson County. This action changed Jefferson County from attainment to nonattainment and added it back into the St. Louis nonattainment area. All of Franklin County, with the exception of Boles Township, remains in attainment for the 2015 ozone NAAQS.

For more information, see [Ozone Pollutants and Sources](#) on the Missouri Department of Natural Resources website.



Eight-hour Ozone Design Values^a

Annual summary through March 31, 2024

Site	County	Fourth Highest Eight-Hour Ozone Averages					Critical Values	Exceedances	Design Values		
		Parts per billion (ppb)						> 70 ppb (2015 Std)	Year-to-date		
		2020	2021	2022	2023	2024 ^{cd}	CV - 70	2024 ^c	20-22	21-23	22-24 ^c
St. Louis											
Arnold West	Jefferson	65	73	67	78	48	68	0	68	72	64
Blair Street*	St. Louis City	65	68	68	77	48	68	0	67	71	64
Foley West	Lincoln	65	60	68	76	52	69	0	64	68	65
Maryland Heights	St. Louis	74	65	67	81	50	65	0	68	71	66
Orchard Farm	St. Charles	65	65	67	73	50	73	0	65	68	63
Pacific	St. Louis	65	65	61	77	50	75	0	63	67	62
West Alton	St. Charles	71	67	71	80	53	62	0	69	72	68
Ste. Genevieve											
Bonne Terre	Ste. Genevieve	61	65	63	78	52	72	0	63	68	64
Southeast											
Farrar	Perry	59	67	67	80	48	66	0	64	71	65
Kansas City											
Liberty	Clay	65	66	69	74	49	70	0	66	69	64
RG South	Cass	58	63	63	73	49	77	0	61	66	61
Rocky Creek	Clay	65	71	69	74	49	70	0	68	71	64
Trimble	Clinton	63	63	65	76	49	72	0	63	68	63
Watkins Mill	Clay	65	65	66	71	49	76	0	65	67	62
Springfield											
Fellows Lake	Greene	53	60	66	72	52	75	0	59	66	63
Hillcrest H.S.	Greene	56	63	66	71	37	76	0	61	66	58
Outstate											
Alba	Jasper	56	64	69	69	53	75	0	63	67	63
El Dorado Springs	Cedar	57	59	66	72	51	75	0	60	65	63
Finger Lakes	Boone	57	58	57	72	49	84	0	57	62	59
Mark Twain*	Monroe	56	55	53	70	49	90	0	54	59	57
New Bloomfield	Callaway	58	61	59	71	51	83	0	59	63	60
Savannah	Andrew	61	61	61	72	49	80	0	61	64	60

0

^aQuality assured data through Dec. 31, 2023.

^cYear-to-date preliminary data. Numbers may change as more data is collected over the year. Do not cite or quote.

^dFourth highest concentration measured year-to-date. Concentrations may change as more data is collected over the year.

*Year-round ozone monitoring. Blair Street is a National (Ncore) multipollutant site and a Photochemical Assessment Monitoring Station (PAMS).

Design values in red and bold are violations of 2015 standard.

Fourth highest eight-hour averages in purple and bold are exceedances of the 2015 standard.



Four Highest Eight-hour Ozone Values

Through March 31, 2024

2024^c

Year-to-date in parts per billion (ppb)

St. Louis	1st High	2nd High	3rd High	4th High	CV - 70
Arnold West	50	49	49	48	68
Blair Street*	50	49	49	48	68
Foley West	54	54	52	52	69
Maryland Heights	53	52	51	50	65
Orchard Farm	55	52	51	50	73
Pacific	53	52	51	50	75
West Alton	55	55	54	53	62

Ste. Genevieve

Bonne Terre	54	54	54	52	72
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Southeast

Farrar	51	51	49	48	66
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Kansas City

Liberty	55	52	50	49	70
RG South	53	52	50	49	77
Rocky Creek	55	53	51	49	70
Trimble	55	52	51	49	72
Watkins Mill	54	50	50	49	76

Springfield

Fellows Lake	58	56	54	52	75
Hillcrest H.S.	42	39	37	37	76

Outstate

Alba	56	56	55	53	75
El Dorado Springs	55	54	51	51	75
Finger Lakes	57	55	54	49	84
Mark Twain*	53	52	51	49	90
New Bloomfield	56	53	53	51	83
Savannah	53	52	50	49	80

CV - 70:

The critical value (CV) is the current year's fourth-highest value, which, if monitored, could yield a violation of the ozone standard for the most current three year period. (CV = 213 ppb – last year's fourth-highest value – previous year's fourth-highest value).

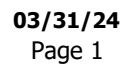
^cYear-to-date preliminary data. Do not cite or quote.

*Year-round ozone monitoring. Blair Street is an Ncore and a PAMS site.

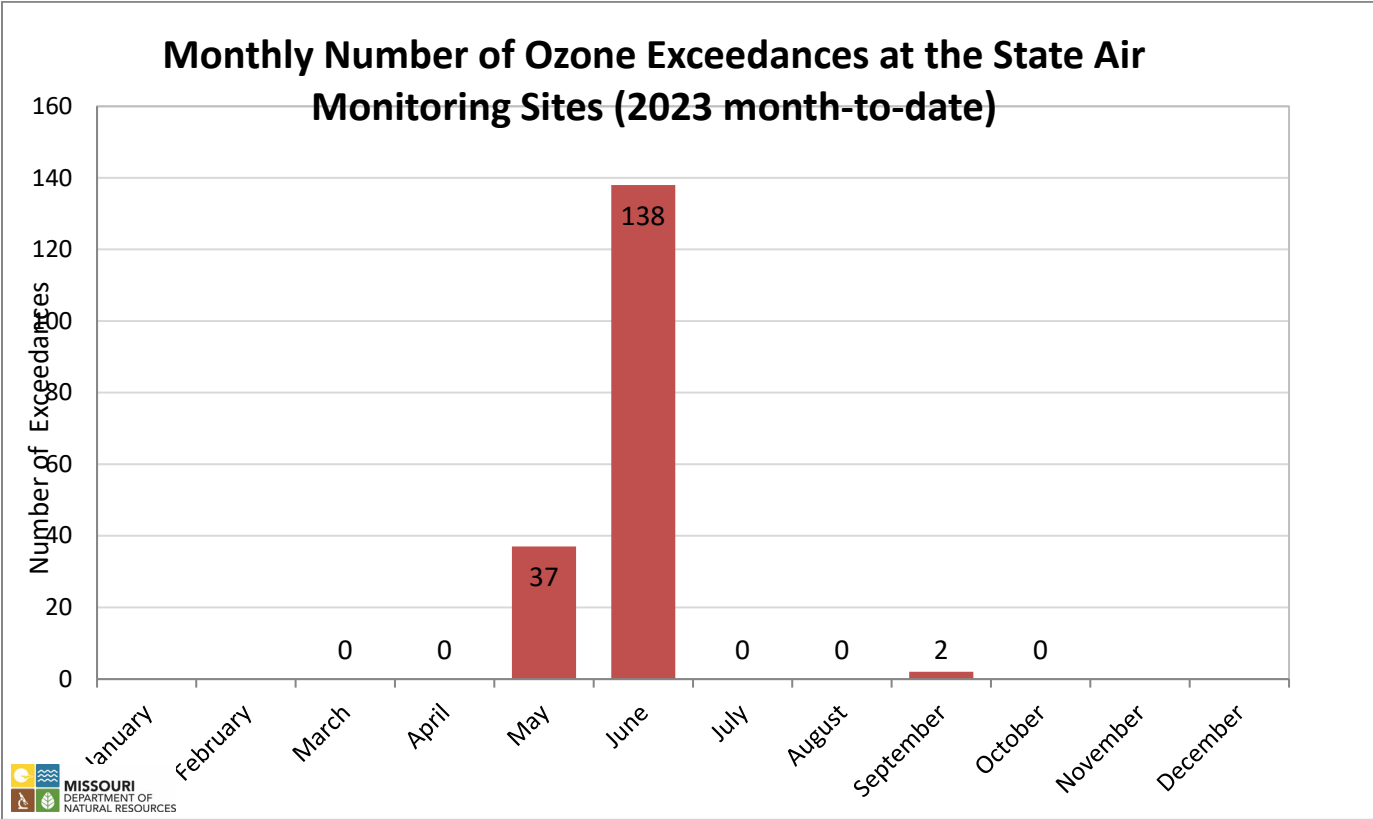
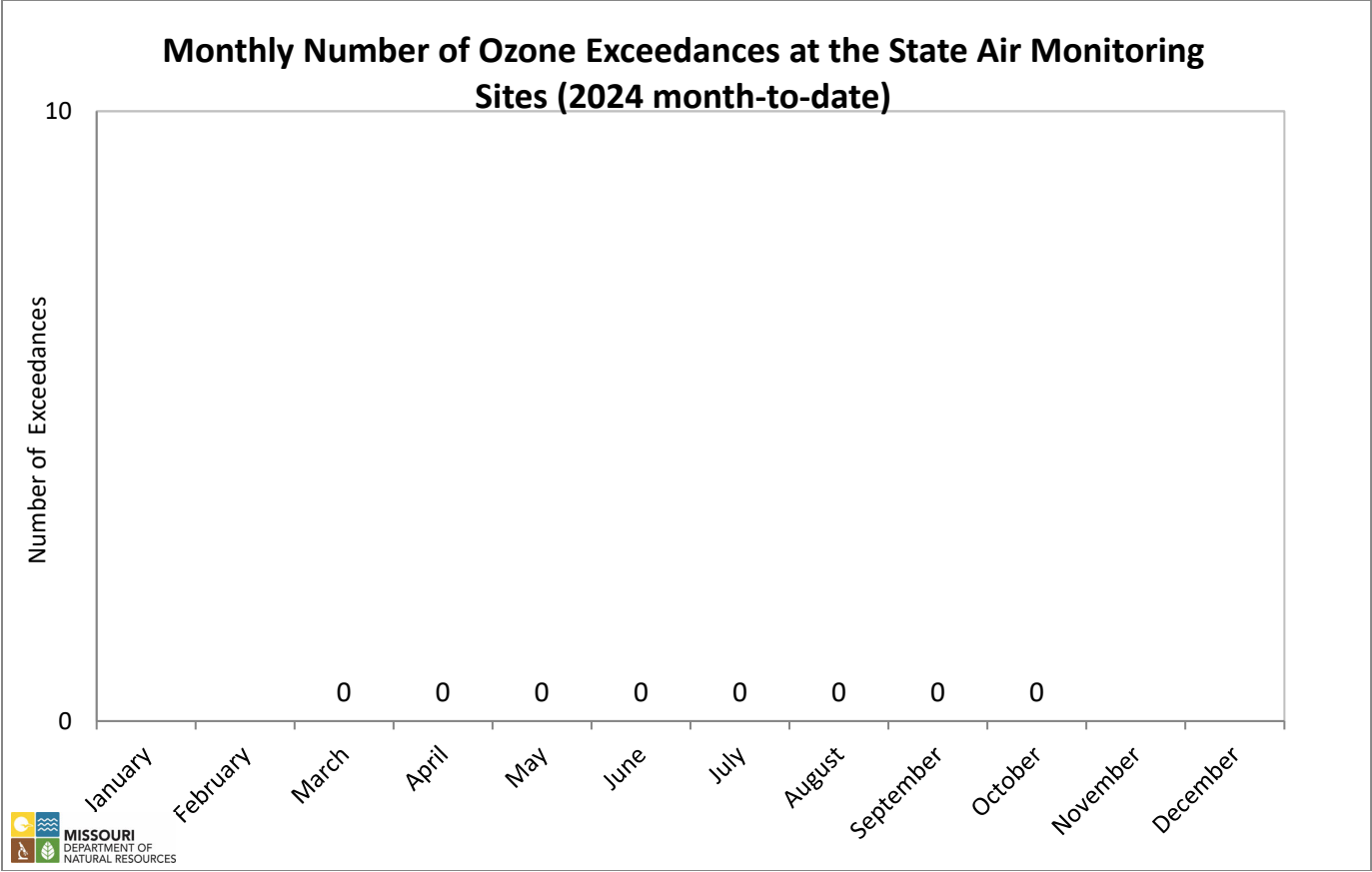
Averages in red and bold recorded from the primary monitor and exceed the 2015 standard.

Averages in green recorded from the secondary monitor, primary monitor inoperative at that time.

Averages in green and bold recorded from the secondary monitor and exceed the 2015 standard.

[illegible]

^All the 2024 data have not been quality assured. The figures are preliminary. Do not cite or quote.
Exceedances in green recorded from the secondary monitor, primary monitor inoperative at that time.





Daily 2024 Maximum Average Eight-Hour Concentration of Ground-Level Ozone in Parts per Million ^

Ozone Season is from March 1 to October 31

	Area's Maximum	Site's Maximum	1-Mar	2-Mar	3-Mar	4-Mar	5-Mar	6-Mar	7-Mar	8-Mar
<u>St. Louis</u>	0.055									
Arnold West		0.050	0.032	0.039	0.035	0.027	0.025	0.035	0.019	0.023
Blair Street*		0.050	0.028	0.042	0.037	0.026	0.025	0.034	0.018	0.024
Foley West		0.054	0.040	0.045	0.043	0.034	0.028	0.042	0.023	0.029
Maryland Heights		0.053	0.032	0.043	0.039	0.031	0.028	0.037	0.022	0.025
Orchard Farm		0.055	0.031	0.043	0.039	0.031	0.028	0.037	0.021	0.023
Pacific		0.053	0.038	0.045	0.040	0.032	0.028	0.039	0.024	0.025
West Alton		0.055	0.030	0.045	0.043	0.031	0.029	0.038	0.022	0.026
<u>Ste. Genevieve</u>	0.054									
Bonne Terre		0.054	0.036	0.045	0.034	0.035	0.036	0.041	0.026	0.037
<u>Southeast</u>	0.051									
Farrar		0.051	0.031	0.041	0.037	0.035	0.037	0.036	0.023	0.036
<u>Kansas City</u>	0.055									
Liberty		0.055	0.040	0.047	0.043	0.033	0.033	0.044	0.026	0.025
RG South		0.053	0.040	0.044	0.042	0.033	0.026	0.042	0.031	0.023
Rocky Creek		0.055	0.039	0.048	0.044	0.032	0.035	0.046	0.029	0.026
Trimble		0.055	0.039	0.047	0.043	0.030	0.035	0.044	0.027	0.025
Watkins Mill		0.054	0.040	0.047	0.042	0.032	0.032	0.043	0.027	0.024
<u>Springfield</u>	0.058									
Fellows Lake		0.058	0.041	0.045	0.047	0.036	0.023	0.040	0.037	0.037
Hillcrest H.S.		0.042	0.028	0.032	0.034	0.025	0.016	0.028	0.022	0.021
<u>Outstate</u>	0.057									
Alba		0.056	0.044	0.053	0.046	0.037	0.027	0.034	0.038	0.034
El Dorado Springs		0.055	0.045	0.047	0.046	0.037	0.027	0.041	0.035	0.024
Finger Lakes		0.057	0.040	0.045	0.046	0.035	0.025	0.041	0.027	0.020
Mark Twain*		0.053	0.040	0.042	0.044	0.033	0.026	0.040	0.021	0.023
New Bloomfield		0.056	0.038	0.043	0.043	0.034	0.025	0.043	0.027	0.027
Savannah		0.053	0.039	0.047	0.044	0.030	0.040	0.044	0.030	0.027

^All the 2023 data have not been quality assured and the values are preliminary. Do not cite or quote.

*Year-round ozone monitoring. Blair Street is an Ncore and a PAMS site.

Averages in red or bold recorded from the primary monitor and exceed the 2015 standard.

Averages in green recorded from the secondary monitor, primary monitor inoperative at that time.

Averages in green and bold recorded from the secondary monitor and exceed the standard.

The 'm' code is a placeholder for missing data on the primary and secondary monitors.

Cont.

**Daily 2024 Maximum Average Eight-Hour Concentration
of Ground-Level Ozone in Parts per Million**

Ozone Season is from March 1 to October 31

	9-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar	16-Mar	17-Mar	18-Mar	19-Mar
<u>St. Louis</u>											
Arnold West	0.035	0.041	0.046	0.049	0.047	0.035	0.039	0.044	0.038	0.036	0.044
Blair Street*	0.038	0.041	0.045	0.049	0.044	0.035	0.039	0.045	0.041	0.038	0.044
Foley West	0.041	0.043	0.051	0.052	0.050	0.043	0.042	0.046	0.040	0.039	0.048
Maryland Heights	0.037	0.042	0.049	0.053	0.051	0.040	0.041	0.045	0.039	0.038	0.045
Orchard Farm	0.039	0.043	0.050	0.051	0.049	0.043	0.041	0.045	0.040	0.039	0.045
Pacific	0.039	0.043	0.048	0.052	0.047	0.039	0.044	0.046	0.042	0.039	0.047
West Alton	0.039	0.043	0.051	0.054	0.050	0.044	0.043	0.046	0.041	0.039	0.046
<u>Ste. Genevieve</u>											
Bonne Terre	0.040	0.044	0.050	0.054	0.053	0.043	0.045	0.048	0.044	0.041	0.048
<u>Southeast</u>											
Farrar	0.037	0.043	0.045	0.049	0.048	0.038	0.043	0.045	0.043	0.040	0.043
<u>Kansas City</u>											
Liberty	0.042	0.046	0.051	0.050	0.052	0.047	0.043	0.042	0.040	0.038	0.044
RG South	0.041	0.046	0.050	0.047	0.043	0.040	0.043	0.042	0.040	0.038	0.043
Rocky Creek	0.042	0.046	0.049	0.051	0.053	0.048	0.044	0.042	0.040	0.038	0.047
Trimble	0.042	0.048	0.049	0.052	0.051	0.046	0.044	0.043	0.039	0.039	0.046
Watkins Mill	0.041	0.045	0.050	0.049	0.049	0.045	0.042	0.042	0.038	0.037	0.044
<u>Springfield</u>											
Fellows Lake	0.042	0.047	0.051	0.054	0.051	0.040	0.044	0.050	0.045	0.040	0.052
Hillcrest H.S.	0.031	0.034	0.035	0.039	0.035	0.025	0.033	0.035	0.034	0.030	0.034
<u>Outstate</u>											
Alba	0.040	0.047	0.051	0.050	0.045	0.039	0.044	0.050	0.043	0.041	0.056
El Dorado Springs	0.042	0.046	0.051	0.050	0.044	0.037	0.043	0.047	0.044	0.04	0.055
Finger Lakes	0.039	0.043	0.049	0.054	0.048	0.041	0.041	0.044	0.038	0.036	0.046
Mark Twain*	0.039	0.042	0.047	0.051	0.049	0.039	0.041	0.041	0.036	0.036	0.043
New Bloomfield	0.039	0.043	0.048	0.051	0.047	0.039	0.040	0.044	0.040	0.036	0.046
Savannah	0.042	0.046	0.049	0.050	0.047	0.043	0.042	0.042	0.038	0.038	0.045

Cont.

Daily 2024 Maximum Average Eight-Hour Concentration of Ground-Level Ozone in Parts per Million

Ozone Season is from March 1 to October 31

	20-Mar	21-Mar	22-Mar	23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar	29-Mar	30-Mar
<u>St. Louis</u>											
Arnold West	0.039	0.041	0.038	0.041	0.047	0.038	0.031	0.040	0.049	0.050	0.048
Blair Street*	0.039	0.035	0.034	0.038	0.041	0.037	0.031	0.039	0.048	0.050	0.049
Foley West	0.044	0.043	0.039	0.043	0.048	0.042	0.033	0.039	0.052	0.054	0.054
Maryland Heights	0.041	0.040	0.039	0.041	0.047	0.039	0.032	0.040	0.050	0.051	0.052
Orchard Farm	0.042	0.042	0.040	0.042	0.046	0.039	0.033	0.039	0.050	0.052	0.055
Pacific	0.043	0.044	0.044	0.044	0.049	0.042	0.032	0.041	0.051	0.053	0.050
West Alton	0.044	0.042	0.043	0.043	0.046	0.043	0.035	0.041	0.053	0.055	0.055
<u>Ste. Genevieve</u>											
Bonne Terre	0.043	0.046	0.049	0.043	0.051	0.036	0.036	0.041	0.054	0.054	0.052
<u>Southeast</u>											
Farrar	0.043	0.046	0.043	0.038	0.048	0.043	0.037	0.043	0.047	0.051	0.051
<u>Kansas City</u>											
Liberty	0.043	0.046	0.038	0.041	0.041	0.043	0.033	0.043	0.050	0.055	0.046
RG South	0.043	0.045	0.036	0.038	0.04	0.042	0.031	0.045	0.049	0.053	0.052
Rocky Creek	0.042	0.046	0.037	0.041	0.041	0.043	0.032	0.043	0.048	0.055	0.046
Trimble	0.041	0.046	0.037	0.041	0.041	0.043	0.033	0.043	0.047	0.055	0.046
Watkins Mill	0.042	0.045	0.036	0.041	0.042	0.043	0.032	0.042	0.050	0.054	0.045
<u>Springfield</u>											
Fellows Lake	0.049	0.048	0.046	0.041	0.048	0.044	0.033	0.046	0.056	0.058	0.049
Hillcrest H.S.	0.037	0.033	0.033	0.030	0.034	0.029	0.022	0.032	0.037	0.042	0.031
<u>Outstate</u>											
Alba	0.052	0.046	0.040	0.040	0.047	0.045	0.035	0.046	0.056	0.055	0.046
El Dorado Springs	0.043	0.048	0.039	0.039	0.043	0.043	0.034	0.046	0.051	0.054	0.044
Finger Lakes	0.042	0.043	0.035	0.041	0.049	0.043	0.030	0.041	0.055	0.057	0.049
Mark Twain*	0.043	0.043	0.033	0.040	0.045	0.040	0.031	0.039	0.052	0.053	0.044
New Bloomfield	0.043	0.044	0.039	0.041	0.049	0.042	0.030	0.041	0.053	0.056	0.053
Savannah	0.042	0.046	0.036	0.041	0.039	0.041	0.032	0.044	0.052	0.053	0.048

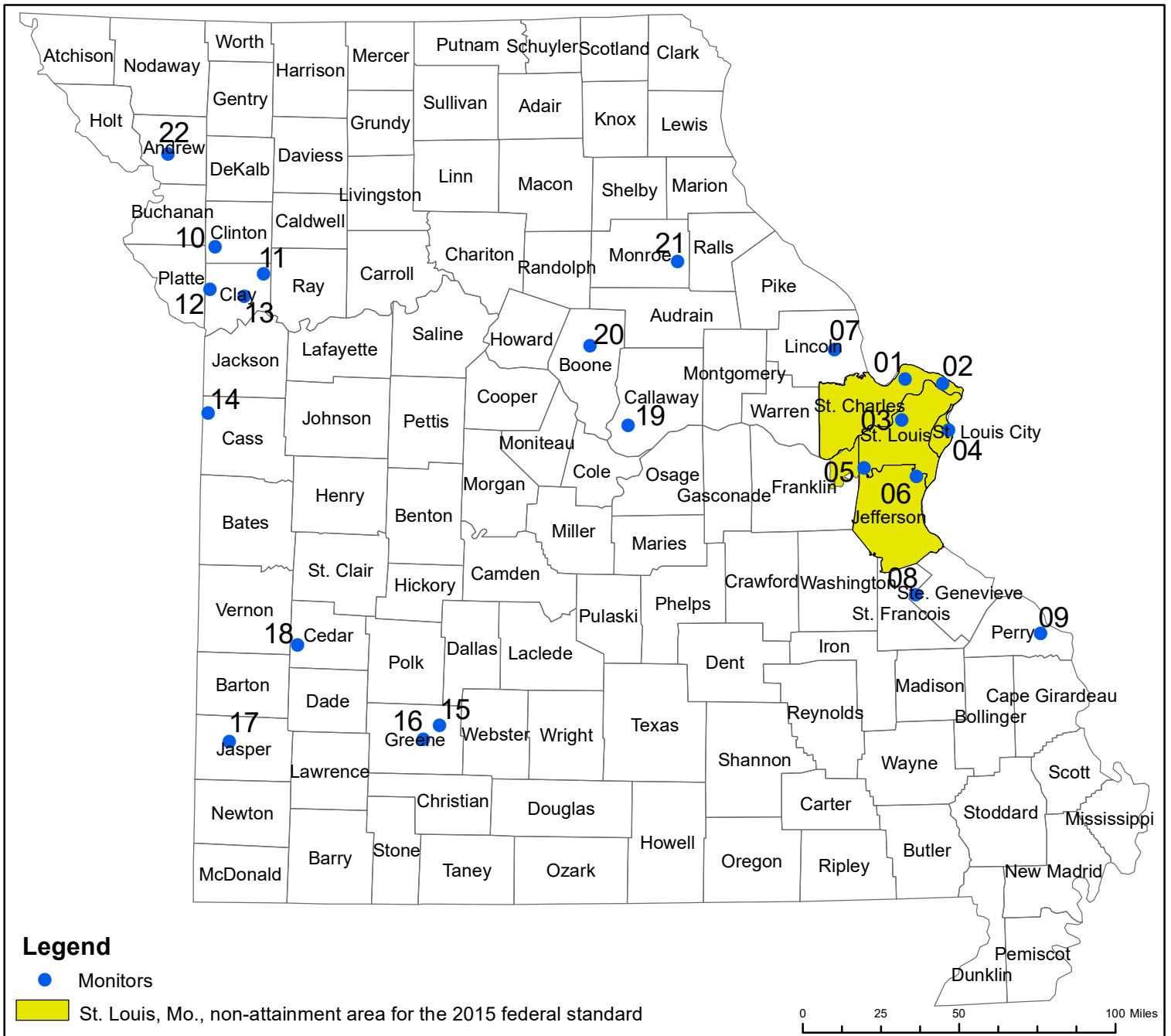
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Daily 2024 Maximum Average Eight-Hour Concentration of Ground-Level Ozone in Parts per Million

Ozone Season is from March 1 to October 31

	31-Mar	1-Apr	2-Apr	3-Apr	4-Apr	5-Apr	6-Apr	7-Apr	8-Apr	9-Apr	10-Apr
<u>St. Louis</u>											
Arnold West	0.043										
Blair Street*	0.042										
Foley West	0.048										
Maryland Heights	0.046										
Orchard Farm	0.046										
Pacific	0.047										
West Alton	0.046										
<u>Ste. Genevieve</u>											
Bonne Terre	0.046										
<u>Southeast</u>											
Farrar	0.043										
<u>Kansas City</u>											
Liberty	0.039										
RG South	0.038										
Rocky Creek	0.040										
Trimble	0.039										
Watkins Mill	0.039										
<u>Springfield</u>											
Fellows Lake	0.041										
Hillcrest H.S.	0.028										
<u>Outstate</u>											
Alba	0.040										
El Dorado Springs	0.039										
Finger Lakes	0.042										
Mark Twain*	0.042										
New Bloomfield	0.042										
Savannah	0.038										

Missouri Ozone (O3) Monitoring Network, 2024



St. Louis Area

- 01 Orchard Farm
- 02 West Alton
- 03 Maryland Heights
- 04 Blair Street**
- 05 Pacific
- 06 Arnold West
- 07 Foley West

Ste. Genevieve Area

- 08 Bonne Terre

Southeast Area

- 09 Farrar

Kansas City Area

- 10 Trimble
- 11 Watkins Mill State Park
- 12 Rocky Creek
- 13 Liberty
- 14 Richards Gebaur-South

Springfield Area

- 15 Fellows Lake
- 16 Hillcrest High School

Outstate Area

- 17 Alba
- 18 El Dorado Springs
- 19 New Bloomfield
- 20 Finger Lakes State Park
- 21 Mark Twain State Park**
- 22 Savannah

