



Air Program Updates

Stephen Hall

Director, Air Pollution Control Program

Missouri Environmental Compliance

Conference

September 26, 2023

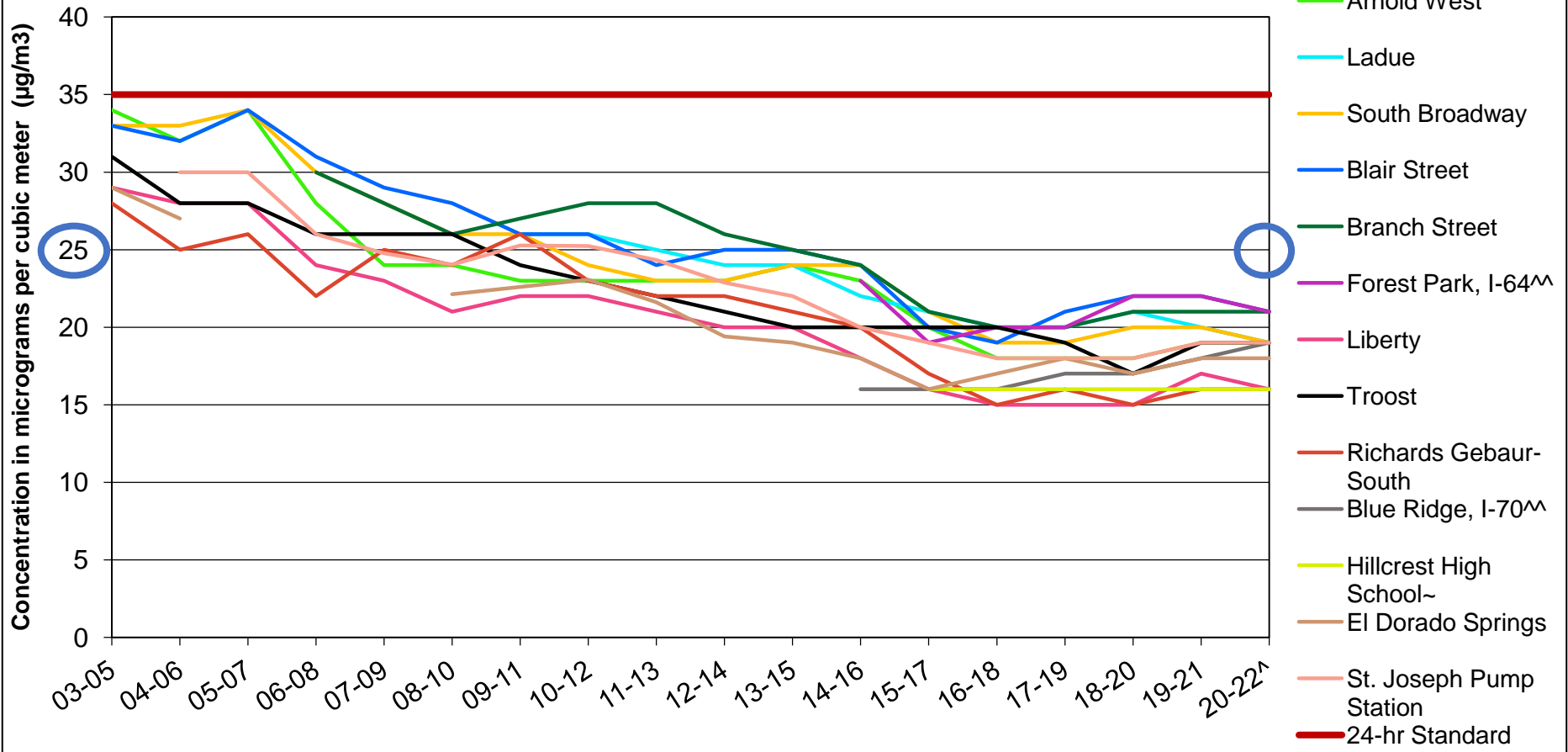
Presentation Overview

- Particulate Matter PM_{2.5} monitoring trends
- Areas of potential impact lower PM_{2.5} NAAQS
- Tentative designation timelines
- Ozone monitoring trends

PM_{2.5} Trends

- Missouri is monitoring compliance with PM_{2.5} annual and daily standards
- EPA Proposed revisions to the PM_{2.5} NAAQS
 - Annual standard in a range 9.0 µg/m³ - 10.0 µg/m³ (taking comment on larger range (between 8 and 11 µg/m³)
 - 24-hour standard proposed to retain at 35 µg/m³ (taking comment on revising this level to as low as 25 µg/m³)

Statewide Trends in PM2.5 Design Values Based on 24-Hour Averages, 2003-2022



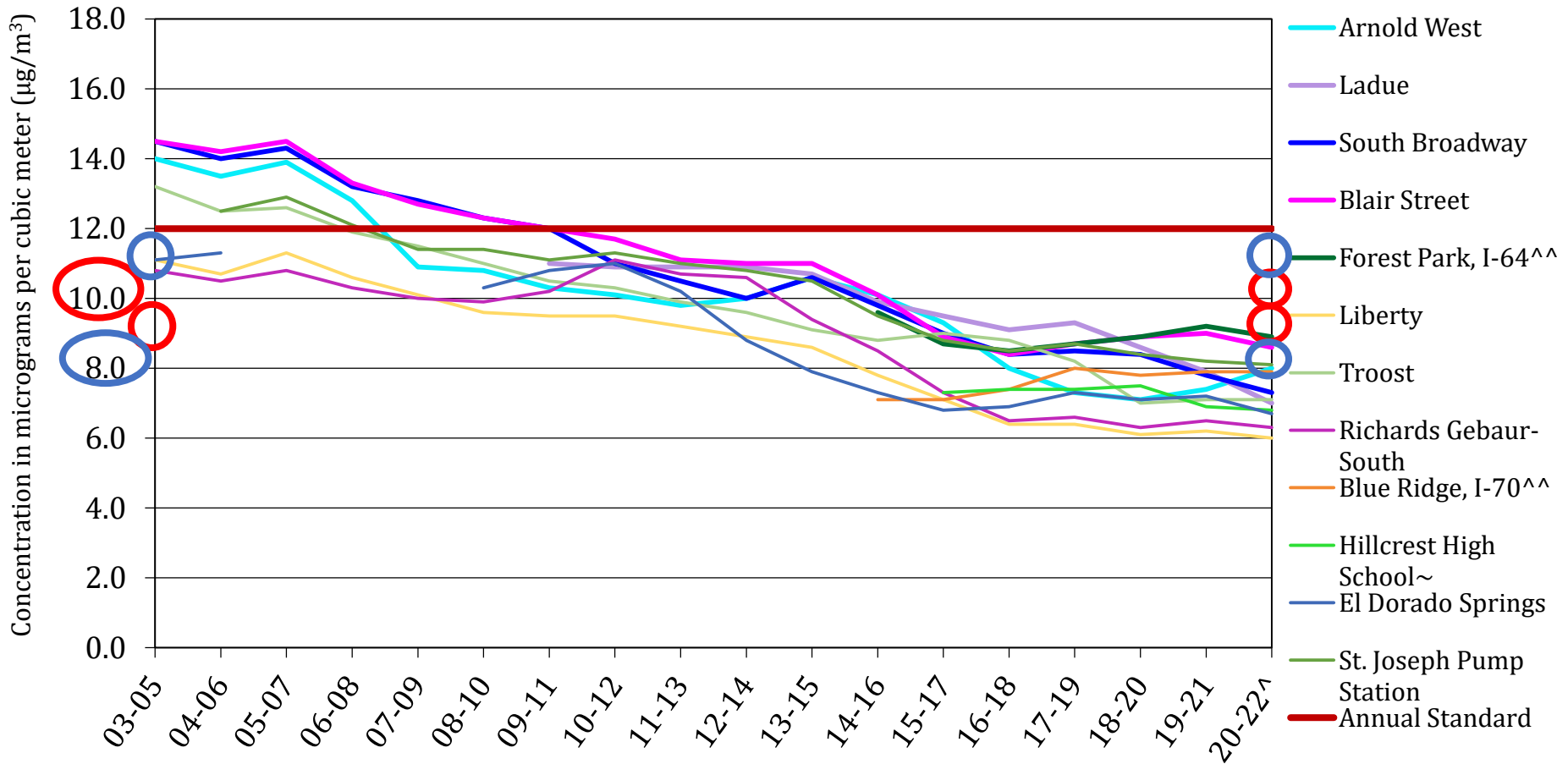
^Quality assured data through December 31, 2022.

^^Near roadway monitor

~2019, 2021, and 2022- insufficient data completeness, design value use subject to EPA approval



Statewide Trends in PM_{2.5} Design Values Based on Annual Averages, 2003-2022



^Quality assured data through December 31, 2022.

^^Near roadway monitor

*Branch Street is a middle scale (100 meters to 0.5 kilometers) monitor and cannot be compared to the annual standard

~2019, 2021, and 2022- insufficient data completeness, design value use subject to EPA approval



Latest Design Values - STL, KC, and Rest of State (Annual Standard)

Proposed Range: 9.0 - 10 $\mu\text{g}/\text{m}^3$ Outer Range: 8.0 - 11 $\mu\text{g}/\text{m}^3$

Latest Annual PM_{2.5} Design Values ***

St. Louis Area (MO/IL)

STL (MO)*	STL (IL)**
9.9	10.1

Kansas City Area (MO/KS)

KC (MO)*	KC (KS)**
7.9	10.8

Rest of Missouri

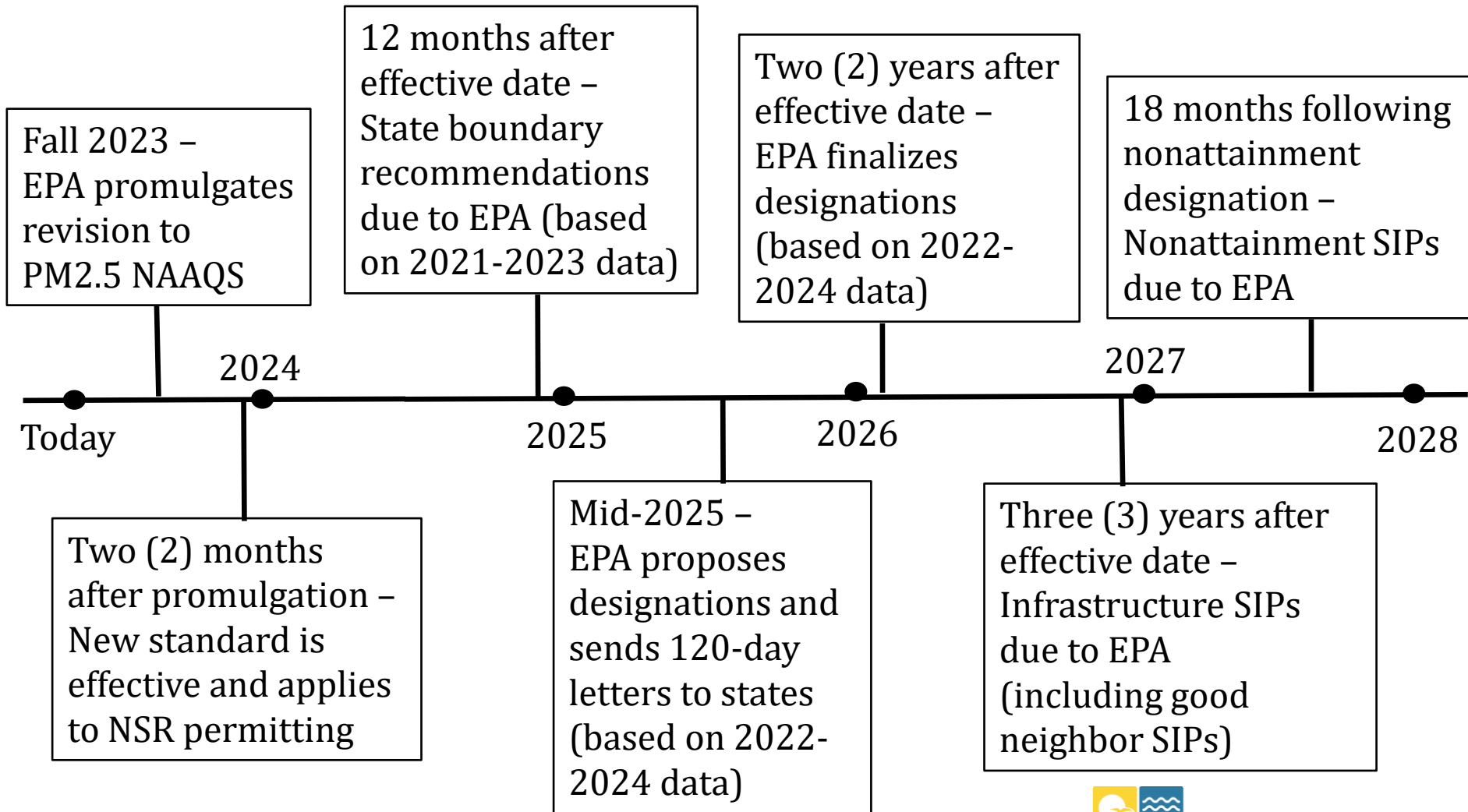
St. Joseph (MO)*	El Dorado Springs (MO)*	Springfield (MO)*
8.8	7.0	7.2

* MO design values based on 2023 YTD data thru September 17. The 2023 data is not quality assured or certified, and could increase or decrease depending on remainder of year.

** KS and IL design values based on 2020-2022 data in AQS

*** None of the design values exclude data based on any exceptional events

Potential PM2.5 Nonattainment Timelines



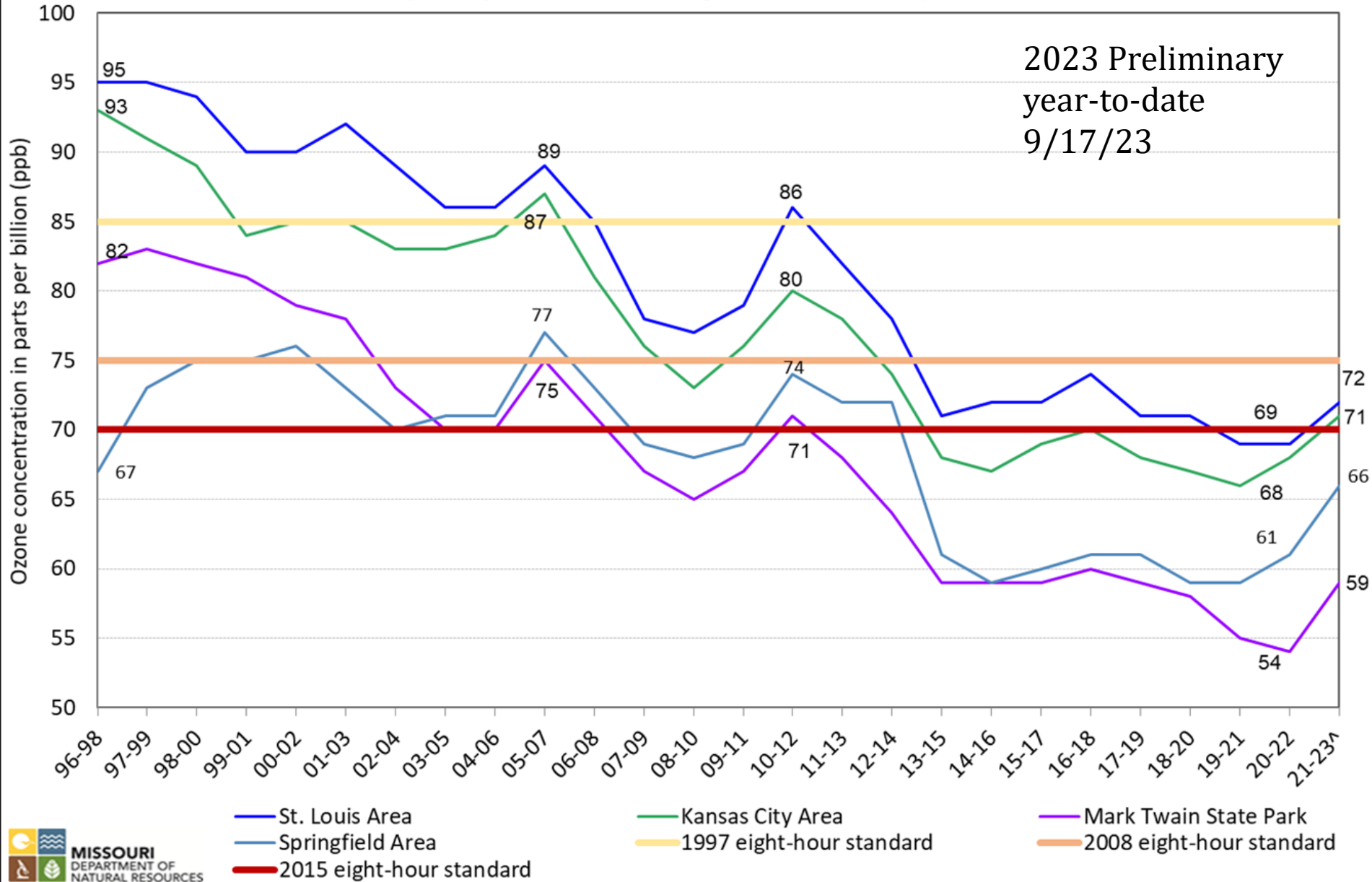
Ozone Trends

- Long term decreasing trends in ozone concentrations
- 2021 – All monitors comply with 2015 ozone standard
- 2022 – All Missouri monitors comply with the 2015 ozone standard
 - One monitor in Alton Illinois violates
- 2023 – Several St. Louis area and other statewide monitors monitoring preliminary violations
 - Likely many days affected by wildfire events

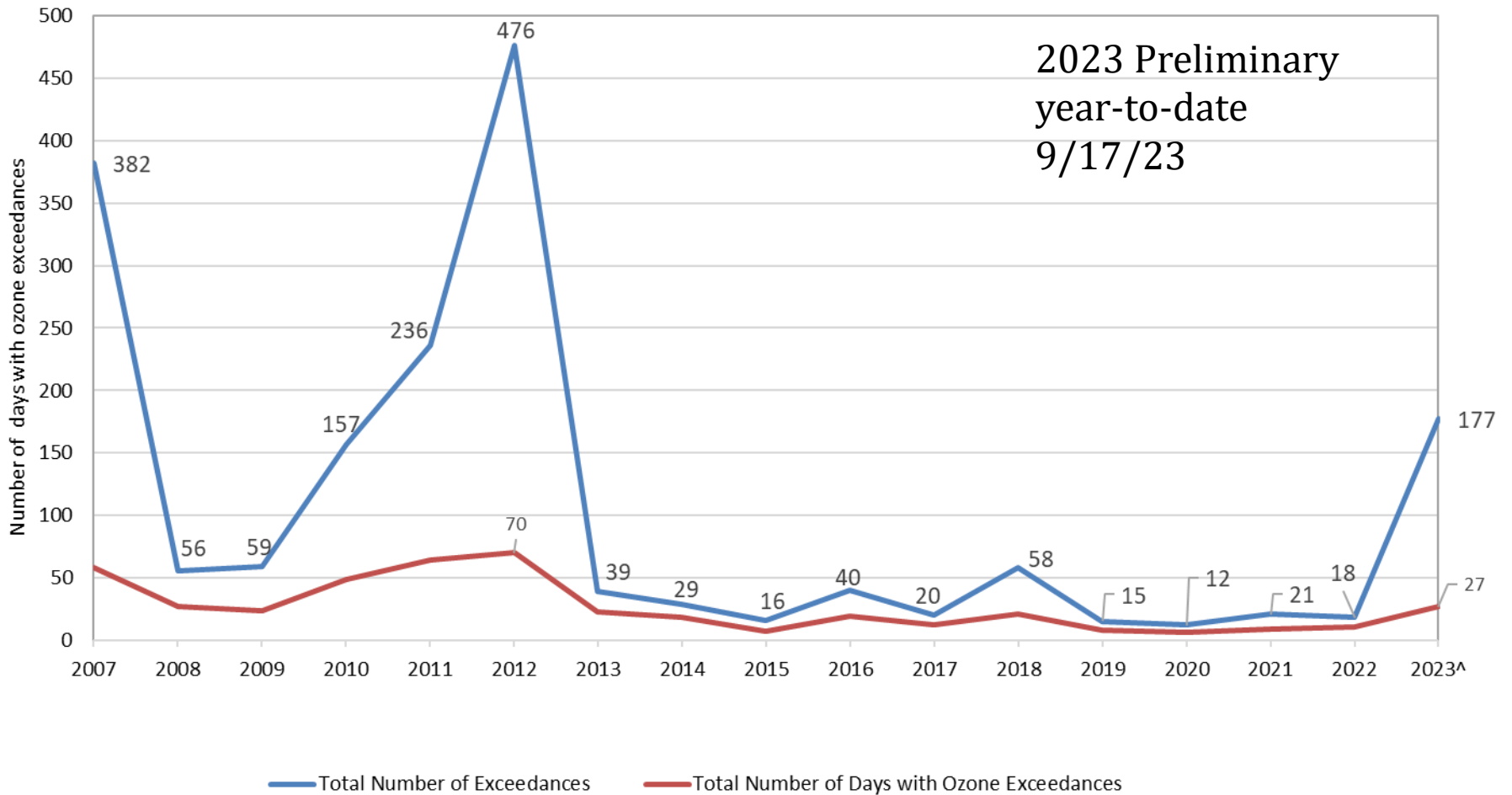
Trends in Eight-hour Ozone Design Values St. Louis, Kansas City, and Springfield Areas and Rural Site (Mark Twain)

(^Quality Assured data through October 31, 2022)

2023 Preliminary
year-to-date
9/17/23



2007-2023 Yearly Number of Days with Ozone Exceedances (>70 ppb)
 (245 days in ozone season starting in the year 2017)



[^]2023 data is preliminary

Questions?

Stephen M. Hall

Director, Air Pollution Control Program

Missouri Department of Natural Resources

1659A E. Elm St., Jefferson City, MO 65101

573-526-1985 direct line

Call toll-free 800-361-4827

stephen.hall@dnr.mo.gov

Find us on the web at <https://dnr.mo.gov/air>