



Air Pollution Control Program Updates

REGFORM

Missouri Air Compliance Seminar

November 10, 2022

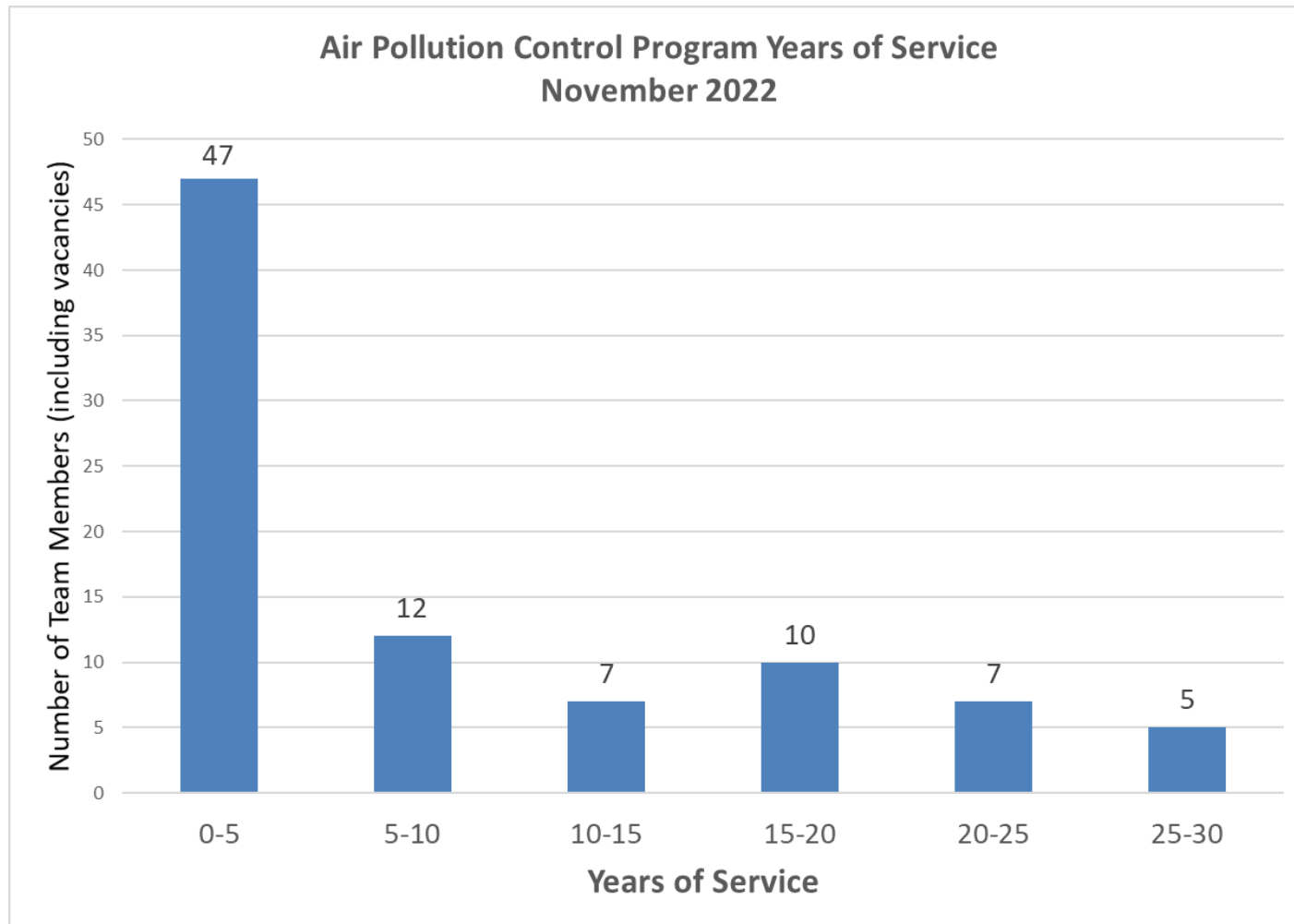
Overview

- Air Program Staffing
- Air Program Financial Health
- Federal Inflation Reduction Act
- PM_{2.5} and Ozone Standard Reconsiderations
- St. Louis Ozone Nonattainment Area Reclassification
- Good Neighbor Obligations - 2015 Ozone Standard
- Regional Haze

Air Program Staffing

- Opportunities for team member
- Many new team members
- Turnover due to promotions
- 20 persistent vacancies on average
- Two 1000-hour employees hired temporarily
- Voluntary overtime option
- Working with Department Recruiter

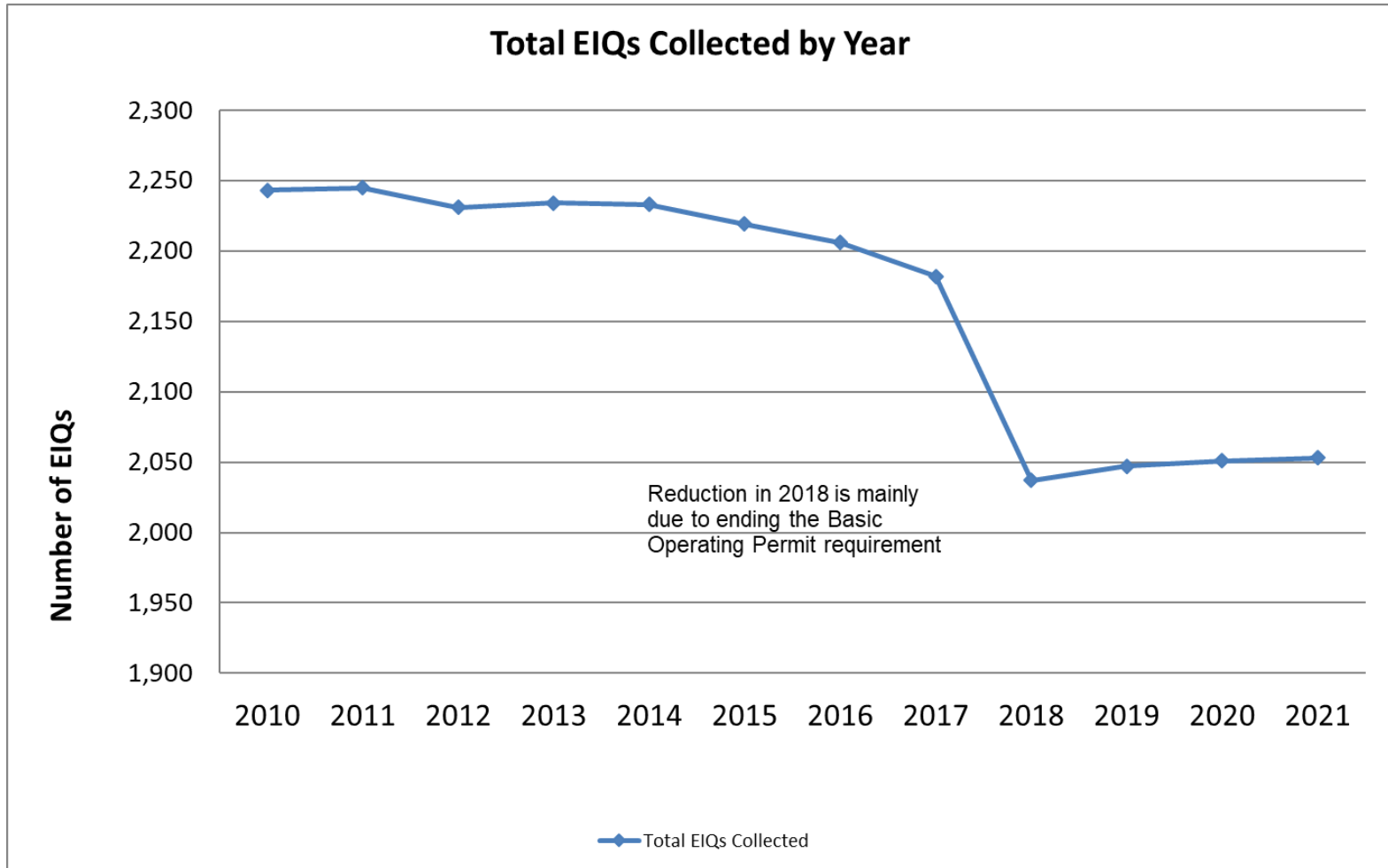
Air Program Staffing



Air Program Financial Health

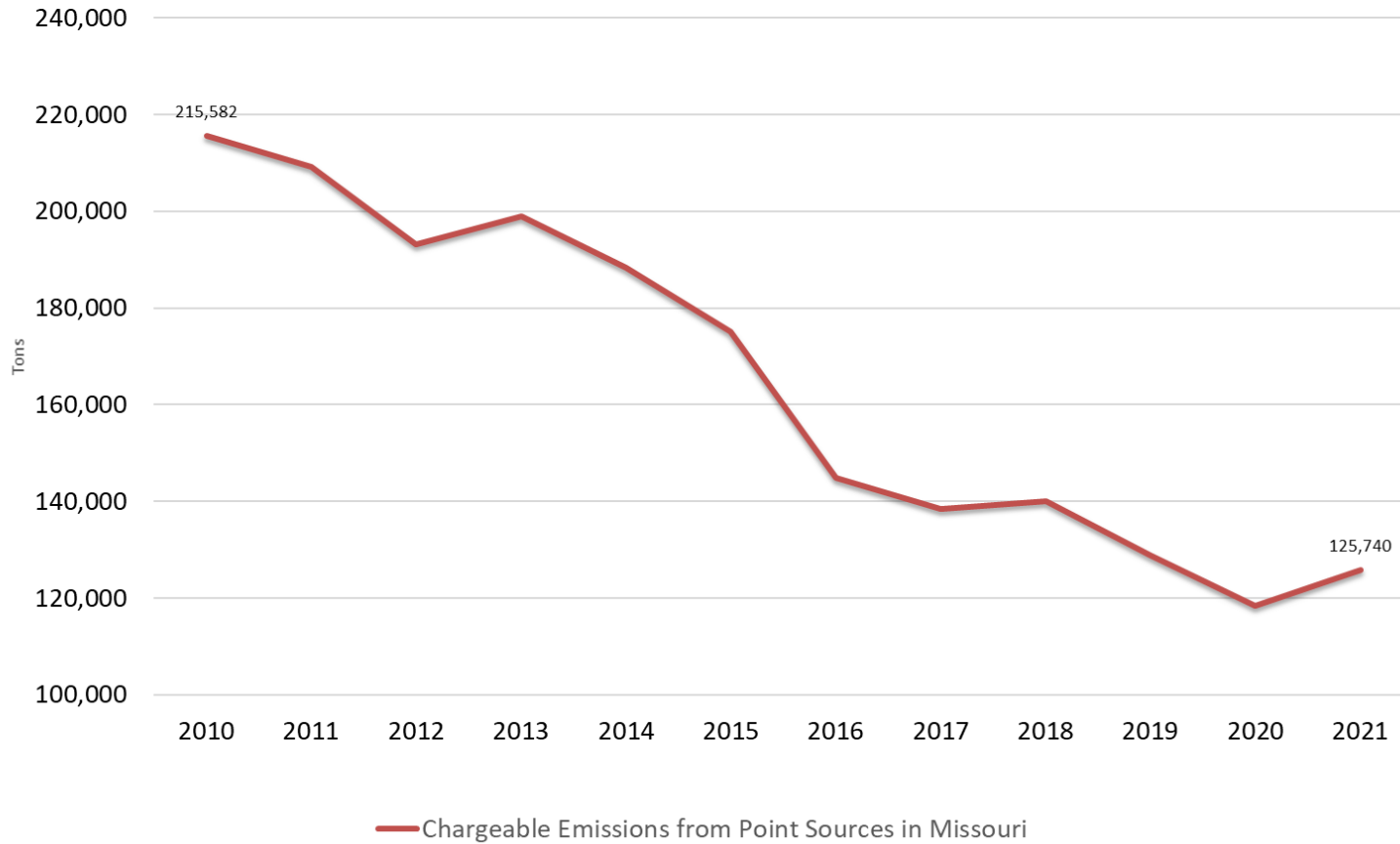
- Chargeable Emissions- Projecting Decreases
- Vacancies yield temporary expense buffer
- 2022 Emission Year: fee \$55/ton (last adjustment)
- Committed to future engagement with fee stakeholders
- August 28, 2024 Sunset of fee stakeholder process (643.079 RSMo)
- Department working this legislative session to extend the authority of the clean air fee structure to 2034

Air Program Financial Health



Air Program Financial Health

Chargeable Emissions from Point Sources in Missouri



Air Program Financial Health

- In FY 2022, the Department was fortunate to receive General Revenue for team member pay increases effective March 2022, in lieu of those costs being charged to the Air Permit Fee Fund and Asbestos Fee Fund; saving these two funds more than \$520 thousand (plus fringe/benefits)
- Depending on fiscal scenarios air fund solvency issues may occur as early as fiscal year 2025 (December 2024)
- Air Program will continue to evaluate air fund solvency and update fee stakeholders

Federal Inflation Reduction Act

Many new programs for:

- **Decarbonization and Emission Reduction**

- **Greenhouse Gas Reduction Fund** (\$27 billion)
- **Clean Heavy-Duty Vehicles** (\$1 billion)
- **Grants to Reduce Air Pollution at Ports** (\$3 billion)
- **Climate Pollution Reduction Grants** (\$5 billion)
- **Methane Emissions Reduction Program** (\$1.55 billion)
- **Methane Emissions Fee** (Facilities emitting more than 25,000 metric tons of CO₂ annually)
- **Diesel Emissions Reduction Act Funding** (\$60 million)
- **Low-Emissions Electricity Program** (\$87 million)
- **Greenhouse Gas Corporate Reporting** (\$5 million)
- **Environmental Production Declaration Assistance** (\$250 million)
- **Low-Embodied Carbon Labeling for Construction Materials** (\$100 million)

Federal Inflation Reduction Act

- Program Implementation and Enforcement
 - **Funding for Implementation of the American Innovation and Manufacturing Act** (\$38.5 million)
 - **Funding for Enforcement Technology and Public Information** (\$25 million)
(\$3 million for grants to states, tribes and air pollution control agencies to update their compliance systems, and \$4 million to acquire and update inspection software used by EPA, states, tribes and air pollution control agencies)
 - **EPA Efficient, Accurate and Timely Reviews** (\$40 million)
(provides \$40 million to develop reviews for permitting and approval processes)

Federal Inflation Reduction Act

- **Air Pollution Monitoring, Mitigation and Reduction**
 - **Environmental and Climate Justice Block Grants** (\$3 billion)
 - **Funding to Address Air Pollution** (\$280.5 million)
 - **Funding to Address Air Pollution at Schools** (\$40 million)
 - **Funding for the Renewable Fuels Standard, per Section 211(O) of the Clean Air Act** (\$15 million)
- **Funding Available Through Federal Agencies Other than EPA**
 - U.S. Department of Agriculture: Biofuel Infrastructure
 - U.S. Department of Energy (advanced technology vehicles that have low or zero-emissions at the tailpipe for GHGs)

PM_{2.5} and Ozone Standards

- PM_{2.5} Proposal Imminent -EPA Policy Assessment suggests:

- Annual Standard (currently 12 $\mu\text{g}/\text{m}^3$)

potential range: 8 - 10 $\mu\text{g}/\text{m}^3$

- 24 hour Standard (currently 35 $\mu\text{g}/\text{m}^3$)

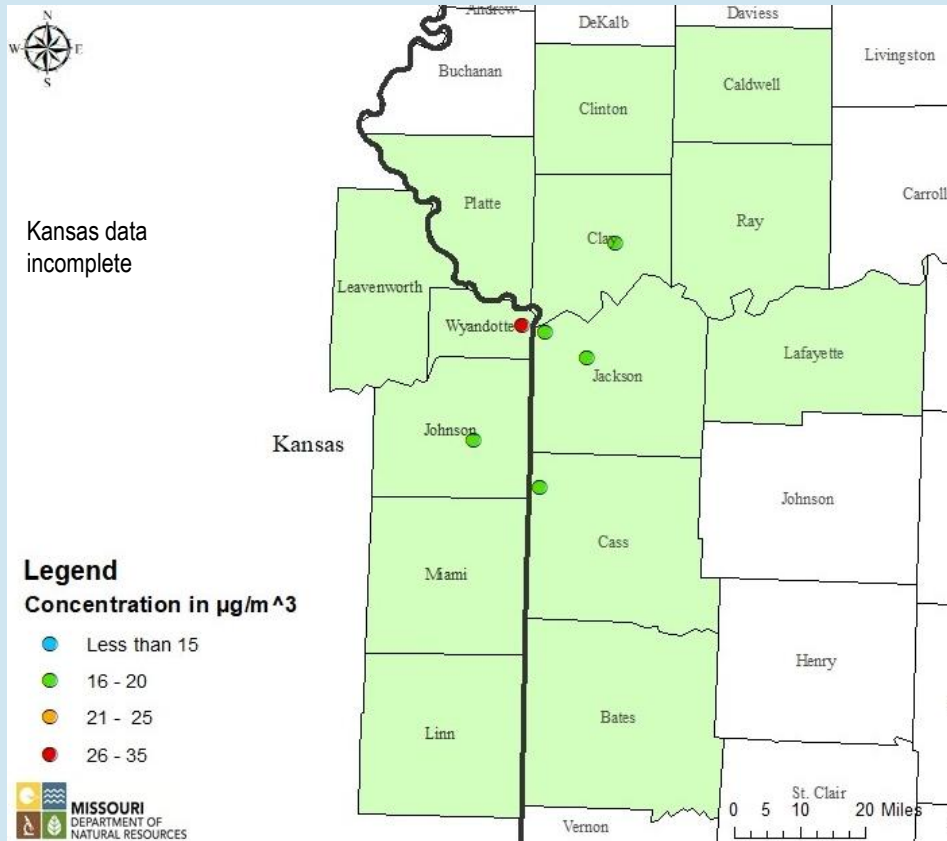
potential range: 30 $\mu\text{g}/\text{m}^3$

(only if the annual PM_{2.5} standard is not changed)

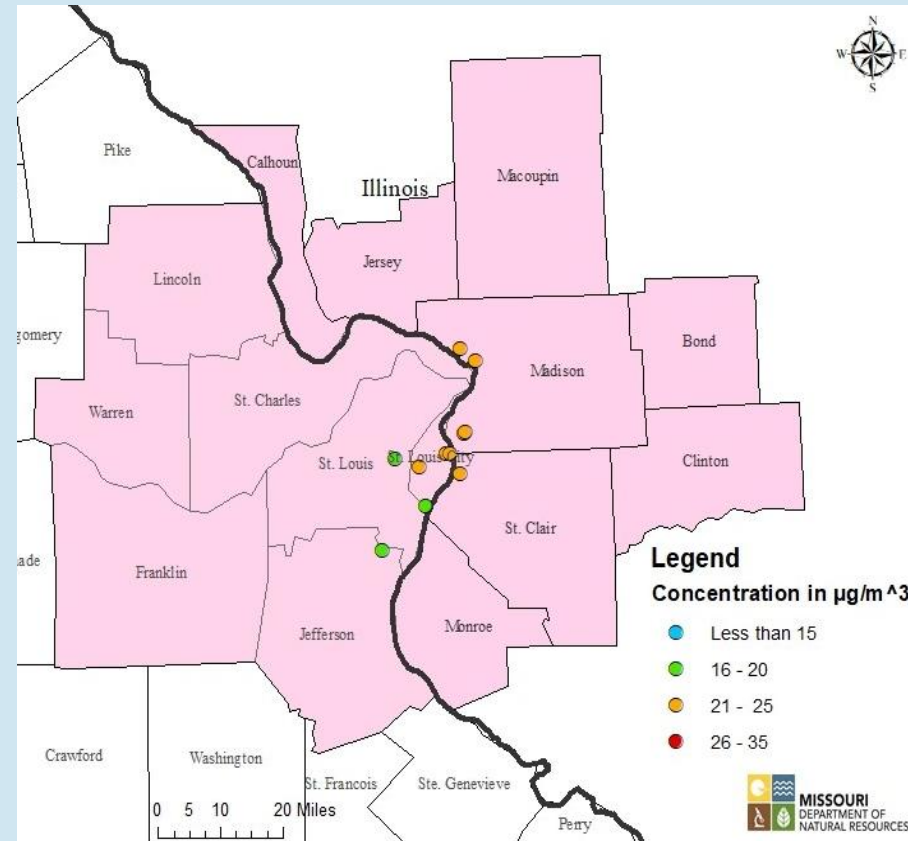
- Annual standard at 10 $\mu\text{g}/\text{m}^3$ may affect the Kansas City and St. Louis attainment status

PM_{2.5} 24-Hour Standard

Kansas City



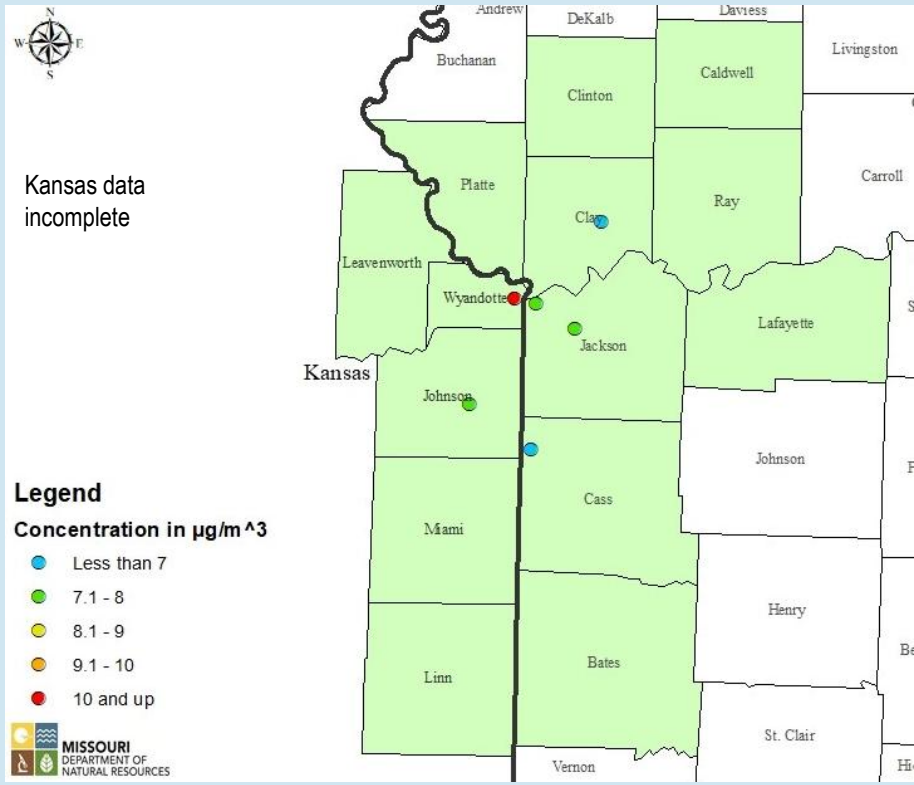
St. Louis



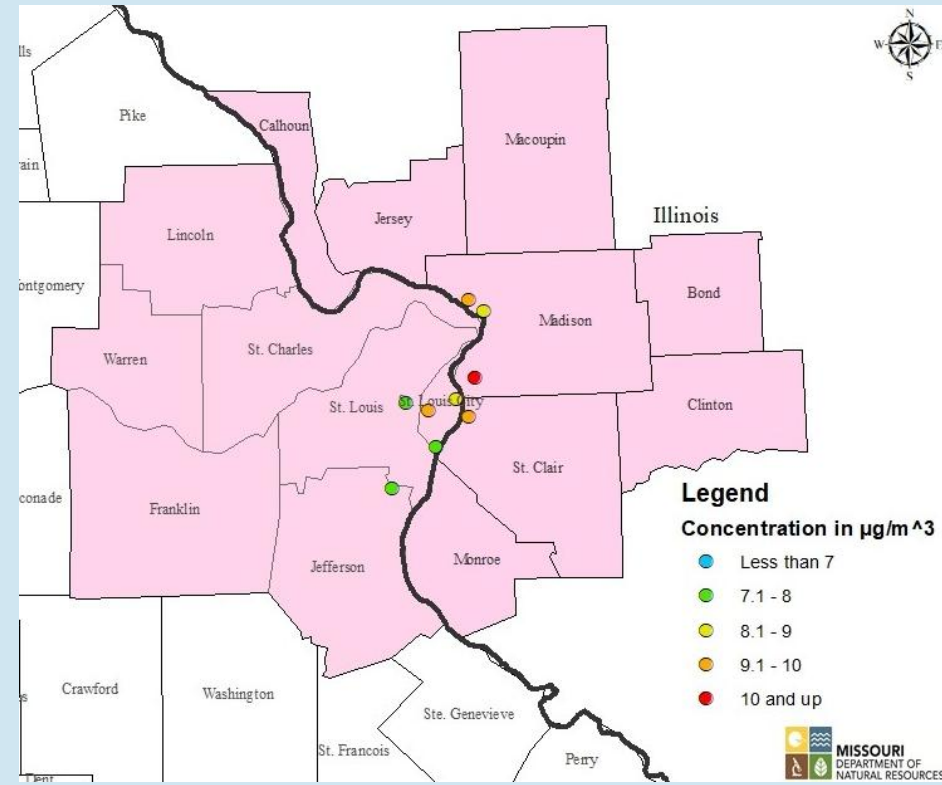
2019-2021 Design Value Data

PM_{2.5} Annual Standard

Kansas City



St. Louis

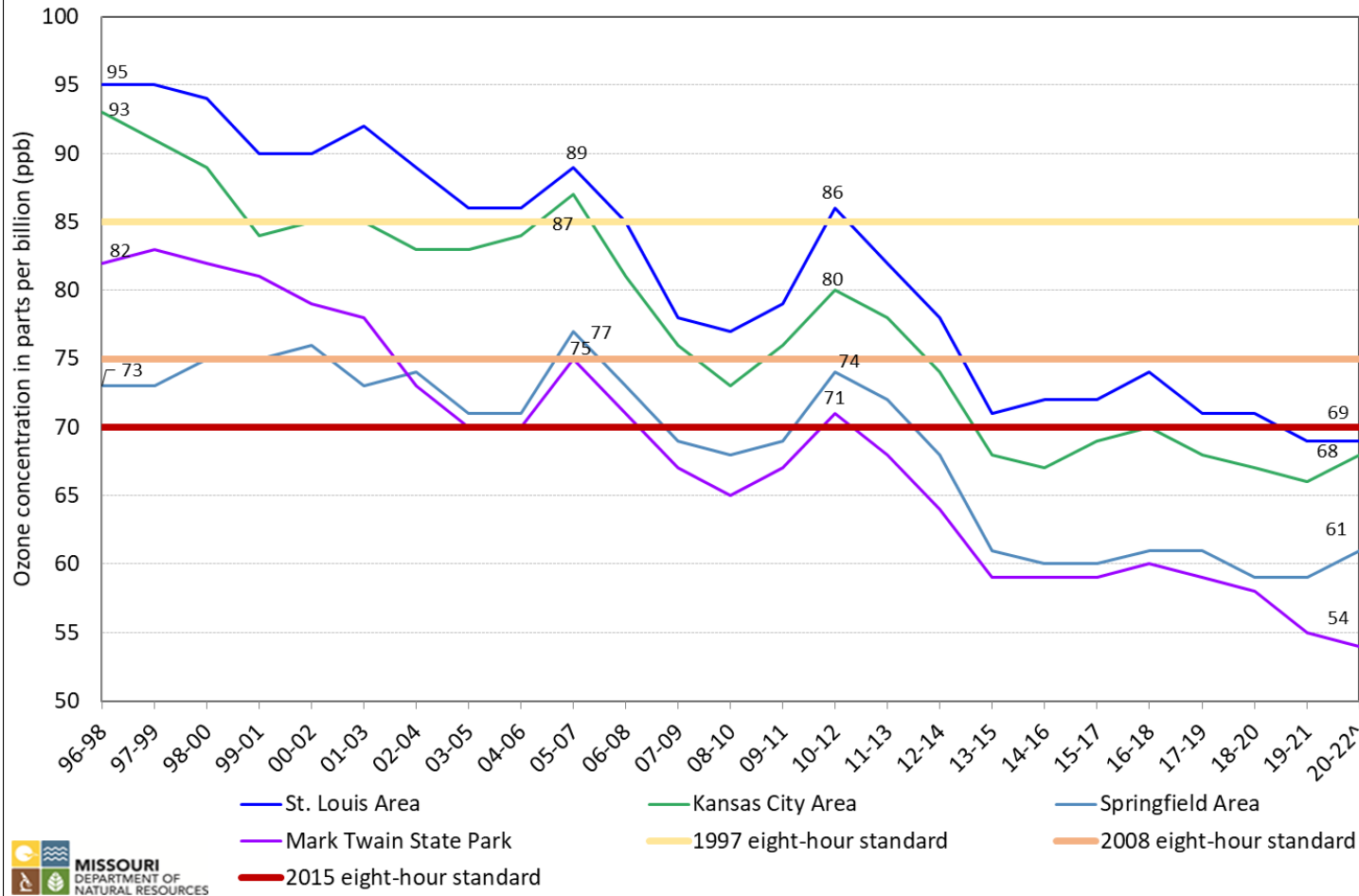


2019-2021 Design Value Data

Ozone Trends

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

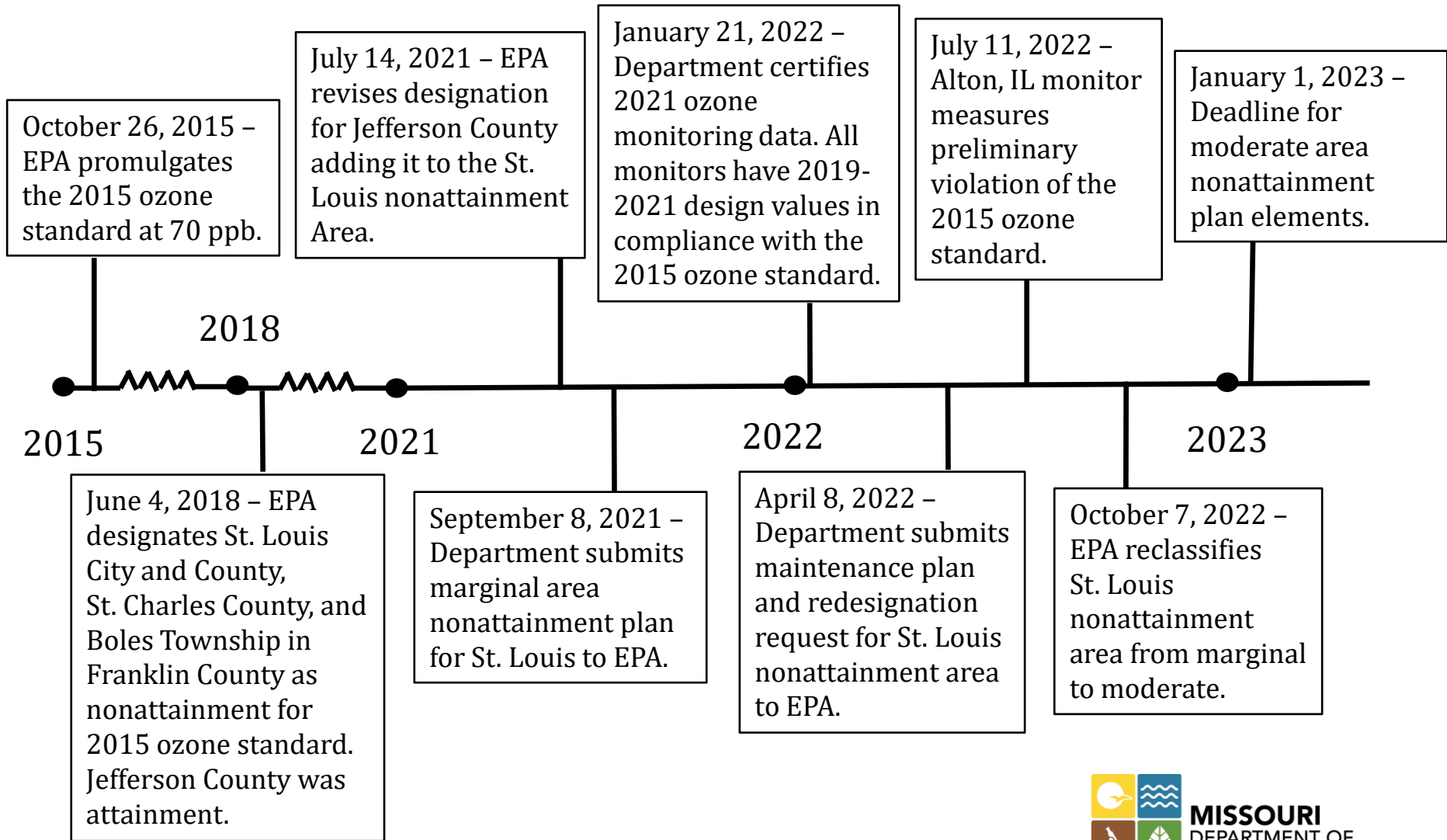
(*Preliminary data through October 31, 2022)



Air Pollution Control Program Updates

Reclassification/Bump-Up for Bi-State St. Louis Ozone Nonattainment Area 2015 Ozone Standard

St. Louis 2015 Ozone Standard Timeline



St. Louis 2015 Ozone Nonattainment Area



Legend

 2015 St. Louis Ozone NAA



Nonattainment Area SIP Requirements for Marginal and Moderate Ozone Areas – CAA 182

Marginal Areas

- Emission Inventory, Periodic Updates, Emission Statements
- Nonattainment Area Permitting
- Offset Requirement: 1.1 – 1
- Corrections to RACT and Vehicle Inspection and Maintenance (I/M) Programs

Moderate Areas

- All elements for marginal areas
- NO_x RACT and VOC RACT
- Attainment Demonstration
- 15 Percent RFP Plan
- Contingency Plan
- Basic I/M Program
- Offset Requirement: 1.15 - 1

St. Louis Ozone Moderate Nonattainment Plan

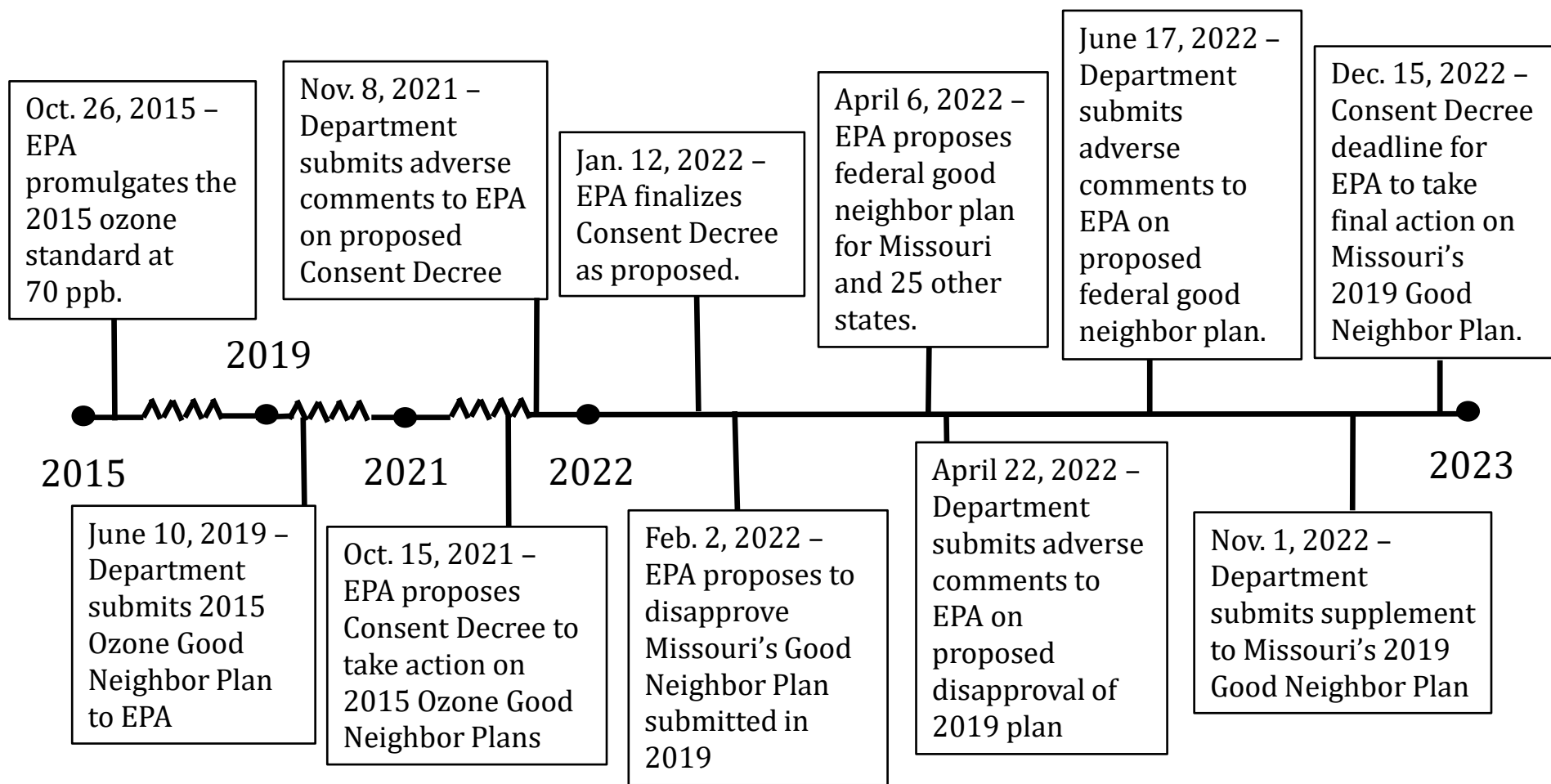
Missouri's Statutory Requirements

- RSMo 640.090 applies to nonattainment area plans and plans relating to carbon emissions for existing source performance standards
 - Department must hold a stakeholder meeting to solicit stakeholder input
 - Department must develop an implementation impact report and submit both the plan and report to the Governor and other elected officials at least 45 days before submission to EPA

Air Pollution Control Program Updates

Interstate Transport (Good Neighbor Provisions) 2015 Ozone Standard

2015 Ozone Good Neighbor Plan Timeline



Missouri's 2019 Good Neighbor SIP

- The Air Program submitted Missouri's Good Neighbor SIP for the 2015 Ozone Standard on June 10, 2019

<https://dnr.mo.gov/document-search/missouri-sip-revision-interstate-transport-provisions-2015-ozone-naaqs>

- Addressed six receptors and utilized EPA guidance to address linkages to Missouri at step 2

Proposed Disapproval – Missouri's 2019 Good Neighbor SIP

- On February 22, 2022 EPA proposed to disapprove Missouri's Good Neighbor SIP [87 FR 9533]
<https://www.govinfo.gov/content/pkg/FR-2022-02-22/pdf/2022-03183.pdf>
- The disapproval, if finalized, sets a two year deadline for EPA to promulgate a federal plan or approve an updated state plan
- EPA proposed similar disapprovals for 18 other states this same day
- The Air Program submitted comments on April 22, 2022

Proposed Good Neighbor FIP

- On April 6, 2022 EPA proposed a Federal Good Neighbor Plan for 26 states, including Missouri

<https://www.govinfo.gov/content/pkg/FR-2022-04-06/pdf/2022-04551.pdf>

- The proposed federal plan establishes requirements for power plants to take effect in 2023 and other industrial sources taking effect in 2026
- The Air Program submitted comments on June 17, 2022
- EPA received over 50,000 separate comment submissions on the proposed federal plan

Proposed Good Neighbor FIP Power Plant Requirements

Missouri NO_x Ozone Season Budget (Statewide)

	Budget (tons of NO _x)	Assurance Level (tons of NO _x)
Current Budget	15,780	19,094
2023 Proposed	11,857	14,347
2026 Proposed (Illustrative)	7,246	8,768

2021 Actual Emissions	20,388
2022 Actual Emi	12,160

Ozone season budget applies: May 1 – September 30

Proposed Good Neighbor FIP Power Plant Requirements

New Assurance Provisions (4 in total)

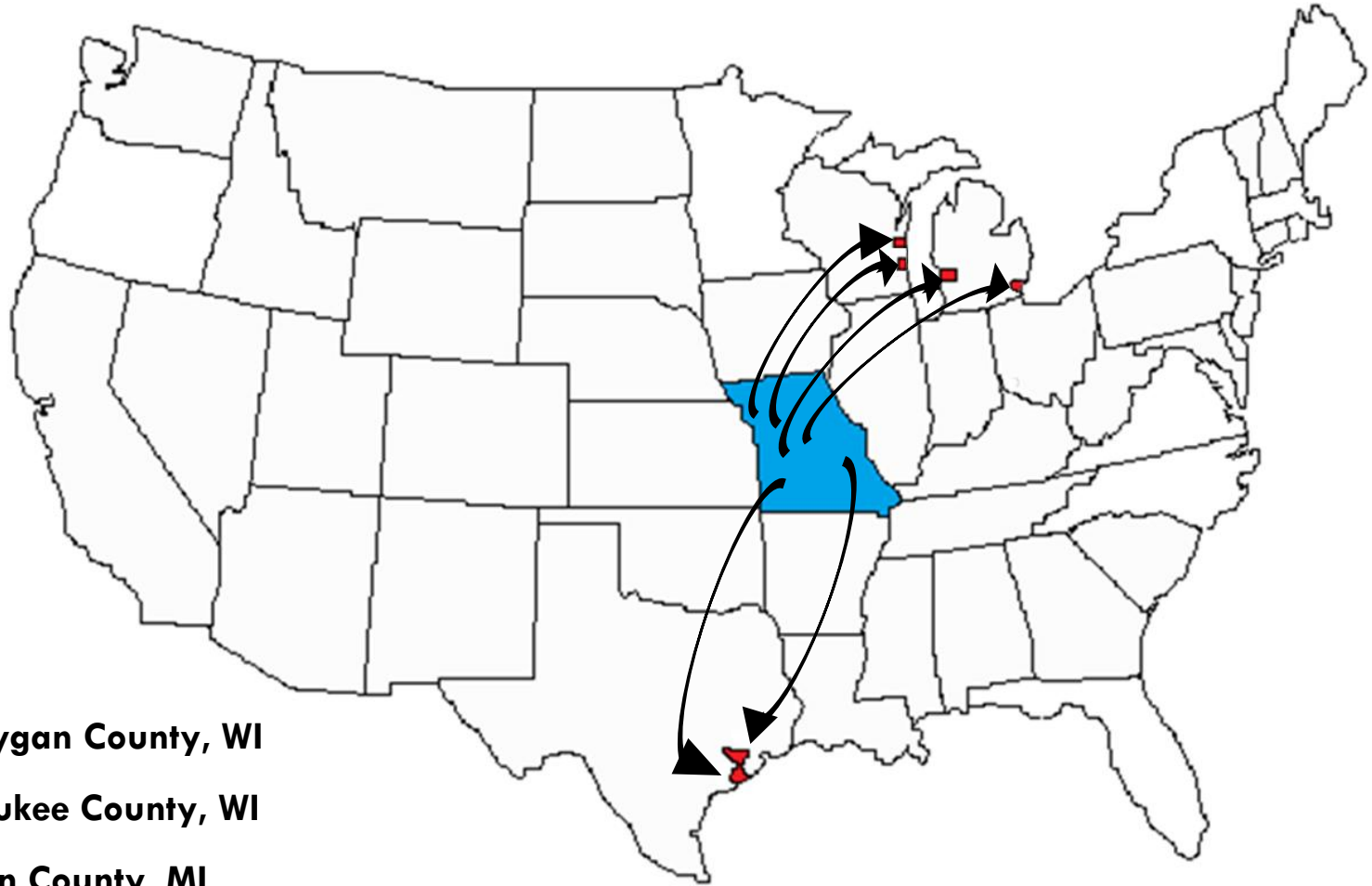
- Daily emissions limit for coal-fired units (0.14 lbs/mmBtu)
- Dynamic Budget starting in 2025 that is reviewed each year thereafter
- Bank cannot grow larger than 10.5% of the sum of the states emissions budgets for the control period
- Violation of the CAA for a unit if the state exceeds its assurance budget and an individual unit exceeds their assurance level and has an average rate above 0.1 lbs/mmBtu or 125% of their lowest season rate achieve

Proposed Good Neighbor FIP

Other Industrial Source Requirements

- Other Industrial Sources (Non-EGUs)
 - Proposed FIP includes new requirements for NO_x ozone season emission rates for the following source categories
 - Cement and Concrete Product Manufacturing
 - Glass and Glass Product Manufacturing
 - Natural Gas Transportation
 - Basic Chemical Manufacturing
 - Petroleum and Coal Products Manufacturing
 - Pulp, Paper, and Paperboard Mills
 - Potentially Metal Ore Mining and Lime and Gypsum Product Manufacturing

Missouri Linked Receptors in 2019 SIP



Sheboygan County, WI

Milwaukee County, WI

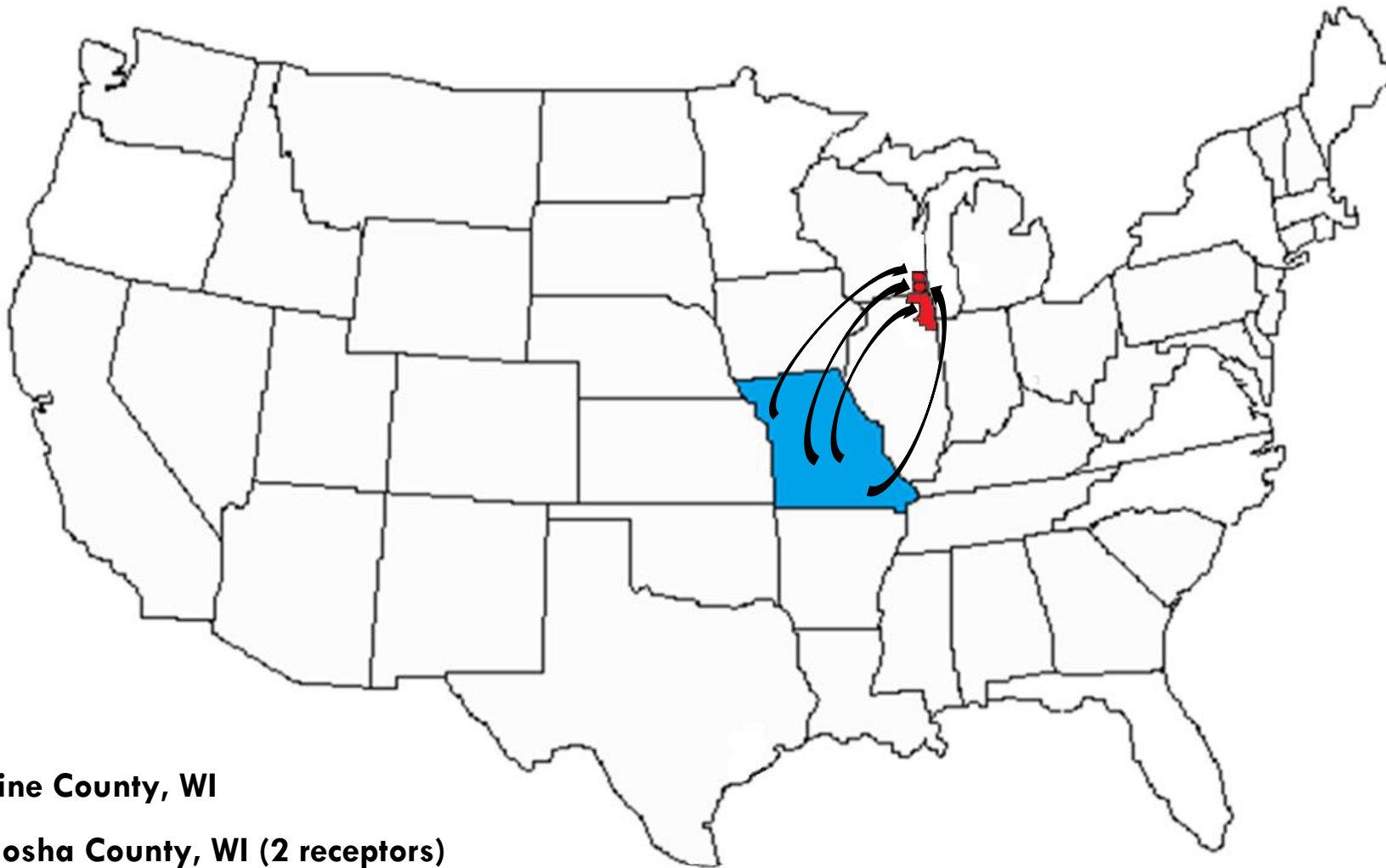
Allegan County, MI

Wayne County, MI

Harris County, TX

Brazoria County, TX

Missouri Linked Receptors in Updated Modeling Used for Proposed FIP



Racine County, WI

Kenosha County, WI (2 receptors)

Cook County, IL

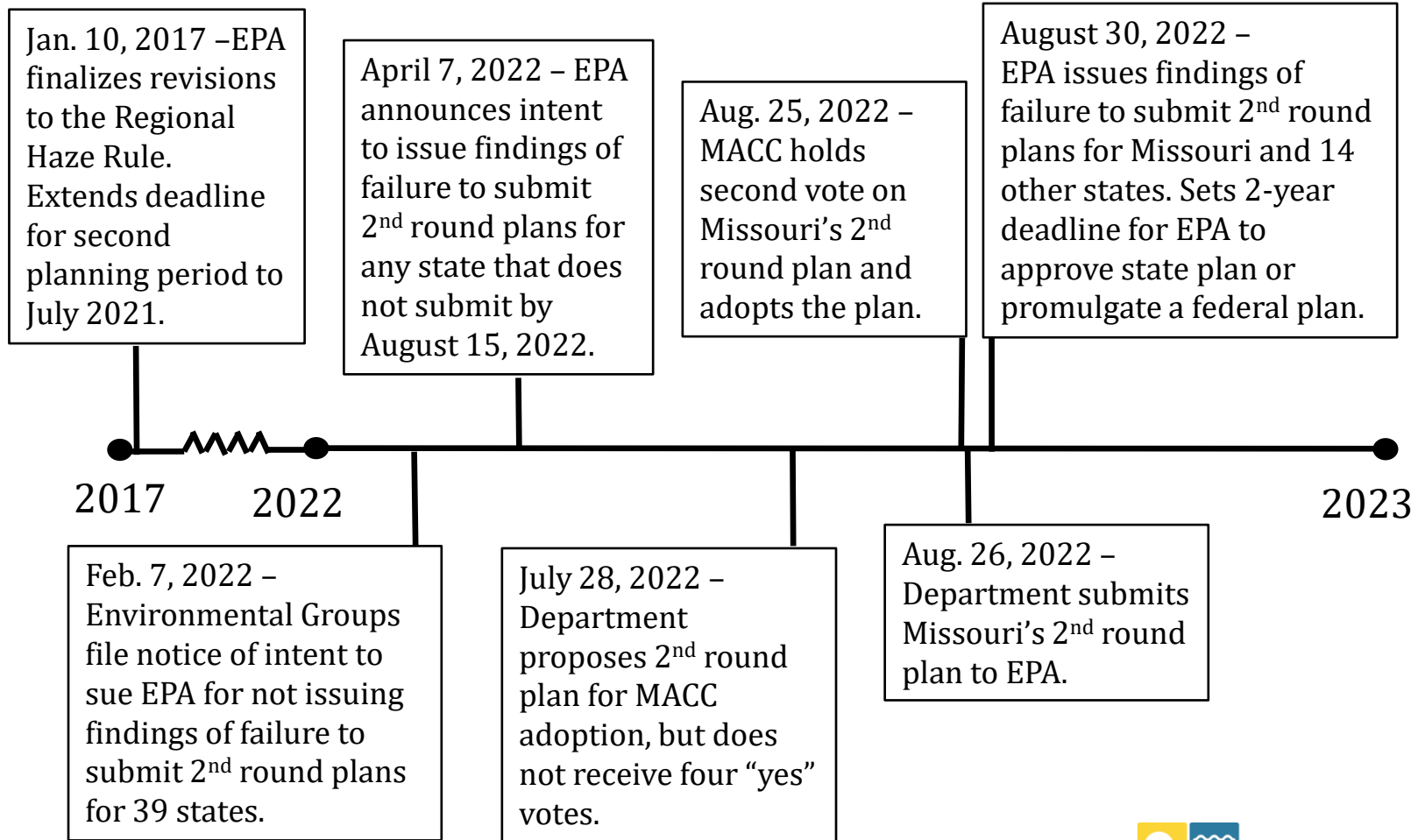
Missouri Good Neighbor SIP Supplement

- Supplement includes Step 1 and 2 evaluation for all ten receptors (six from 2019 plan and four from updated modeling)
- Supplement includes a Step 3 evaluation of control requirements for Missouri EGUs and Non-EGUs
- Supplement includes at Step 4 – New enforceable Consent Agreements to control ozone season NO_x emissions from six power plants
 - Consent agreement requirements do not take effect unless EPA approves Missouri's 2015 Ozone Good Neighbor Plan
- Department submitted the supplement to EPA on November 1, 2022

Air Pollution Control Program Updates

Regional Haze

Regional Haze Second Planning Period Timeline



Missouri Statutory Process

RSMo 640.100.3(3)

All final orders or determinations or other final actions by the commission shall be approved in writing by at least four members of the commission

- If there are not four “yes” or four “no” votes, there is no final action; the motion is neither passed nor defeated
 - This effectively tables the action, and it can be brought for another vote at a later meeting

Missouri's 2nd Round Regional Haze Plan

- Includes rate of progress requirements, reasonable progress goals, and long term strategy to address visibility in Missouri's two Federal Class I areas
 - Mingo Wilderness Area
 - Hercules Glades Wilderness Area
- Shows both areas on pace to meet 2028 rate of progress requirements without additional reductions
- Includes new enforceable requirements to address reasonable progress requirements through new Consent Agreements for six power plants
 - Consent agreement requirements do not take effect unless EPA approves Missouri's 2nd Round Regional Haze Plan

Missouri's 2nd Round Regional Haze Plan

- Missouri's 2nd round regional haze plan is currently pending EPA review
- EPA's statutory timeframe to act on Missouri's 2nd round plan is February 25, 2024
- Due to the finding of failure to submit, EPA's deadline to approve a state plan or promulgate a federal plan for Missouri is September 29, 2024

Questions

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