

Air Management Advisory Group Quarterly Meeting

December 5, 2024



Hybrid Meeting Guidelines

- Please sign in if attending in person.
- Attendees in the room can raise their hand and will be called on.
- Online attendees should use the raise hand feature and will be called upon by the meeting host
- The host will attempt to respond to all messages received
- Participants will join the meeting with their video disabled. We ask that you keep your video disabled for the duration of the meeting, unless called on by the host.

Air Management Advisory Group Quarterly Meeting Agenda

- Hiring and Administrative Updates
- Proposed guidance, rules and legislative update
- Program Updates
 - Trends Report
 - EE Demo
- Member Updates
- Ozone

Hiring and Administrative Update

Gail Good, Air Management Program Director

Proposed Guidance, Rules and Legislative Update

Ron Binzley, Permitting Section Manager

Brianna Denk, Air Quality Planning and Standards Section Manager

Maria Hill, Compliance, Enforcement & Emissions Inventory Section Manager

Proposed/Final DNR Rules

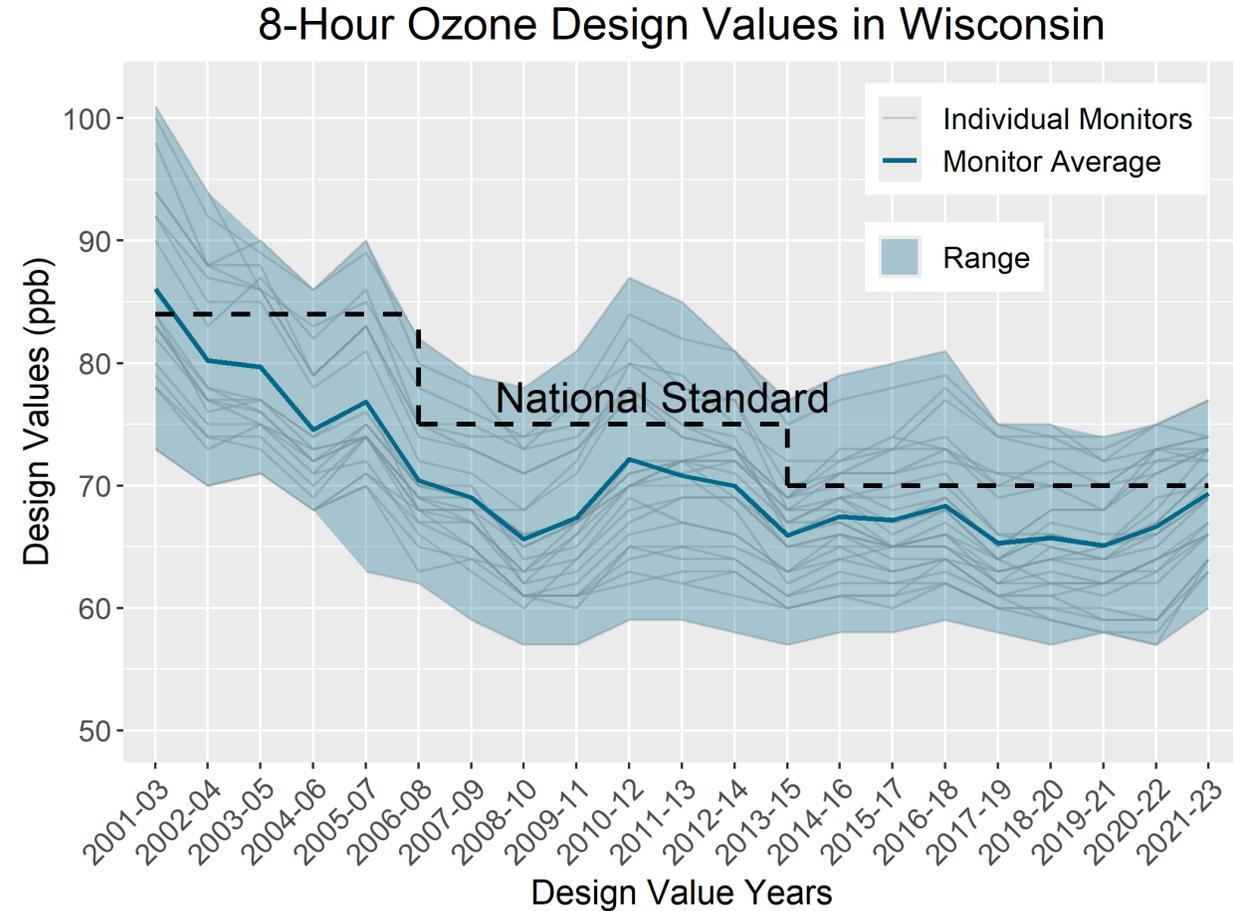
Proposed DNR rule	Description	Phase
AM-05-22 Compliance Demonstration Rule	Updates to NR 439 testing, monitoring, recordkeeping, reporting requirements for compliance Rulemaking to Revise Chapter NR 439 Wisconsin DNR	Rule Signed by Governor 08/22/2024
AM-10-23 NSR Fee Rule	Updates to construction permit fees to assure compliance with Clean Air Act requirements and to meet business needs of permitted sources. NR410 Rulemaking Wisconsin DNR	Public Comment Period Closed 09/04/2024

Finalized EPA Rules/Guidance

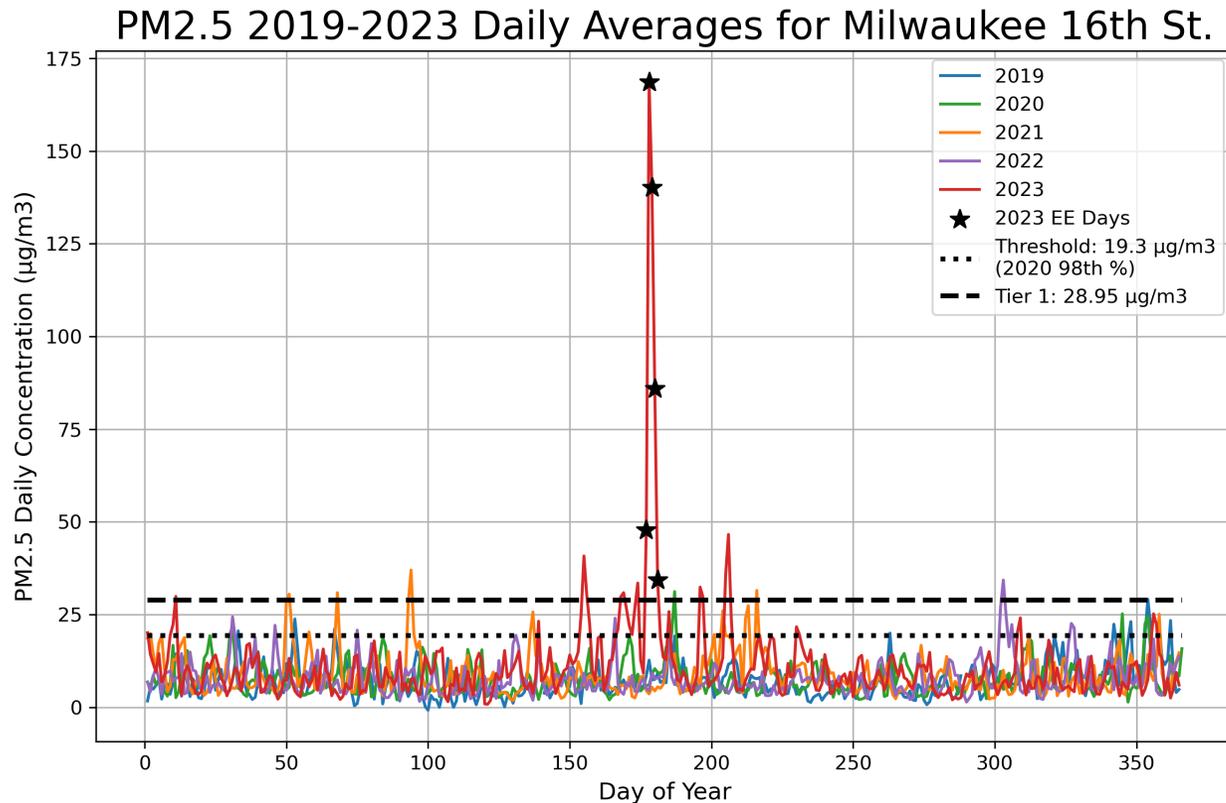
Finalized EPA rule/guidance	Link	Date finalized
Air Plan Approval; Wisconsin's Second Period Regional Haze Plan	Federal Register Notice	Final: 11/19/24 Effective: 12/20/24
SIP approval of revisions to NR 428; NOx Emission Control Requirements	Federal Register Notice	Final: 11/22/24 Effective: 12/23/24
Guidelines on Air Quality Models (Appendix W to 40 CFR Part 51)	Final Rule Webpage	Final: 11/21/24 Effective: 60 days after publication in Federal Register

2024 Trends Report

- Publishing early December
- Statewide since 2001-2003:
 - Sulfur Dioxide (SO₂) has decreased 89%
 - PM2.5 has decreased 25%
 - Ozone has decreased 15%
- News Release
- Social Media Post
- Find the report and Storymap on the [Air Quality Trends page](#).



PM_{2.5} Exceptional Events Demonstration Update



- Wisconsin DNR developed an exceptional events demonstration for the late-June 2023 Canadian wildfire event (June 26 – June 30) for the following monitors:
 - Milwaukee – 16th St.
 - Waukesha
- Public comment period ran from October 1- October 31.
- This demonstration was submitted to EPA on November 22, 2024, well in advance of the February 7, 2025 deadline.

Member Updates

Ozone Topics

Gail Good
Air Management Program Director

Brianna Denk
Air Quality Planning and Standards Section Manager

Ron Binzley
Permitting Section Manager

Topics

- 2024 Ozone season recap and current design values
- Reclassification of ozone nonattainment areas to serious
- Long-term planning implications and activities



Air Monitoring Highlights

- Ozone season wrap up: 99+% data completion on the season across 32 sites
- Longest down time was four days at one site due to a power outage
- EPA Technical Systems Audit
 - Entire air monitoring network evaluated from field sites, sampling, data handling, quality assurance and submittal to national database (AQS)
 - Ozone related findings were all minor and processes to resolve these findings are underway.

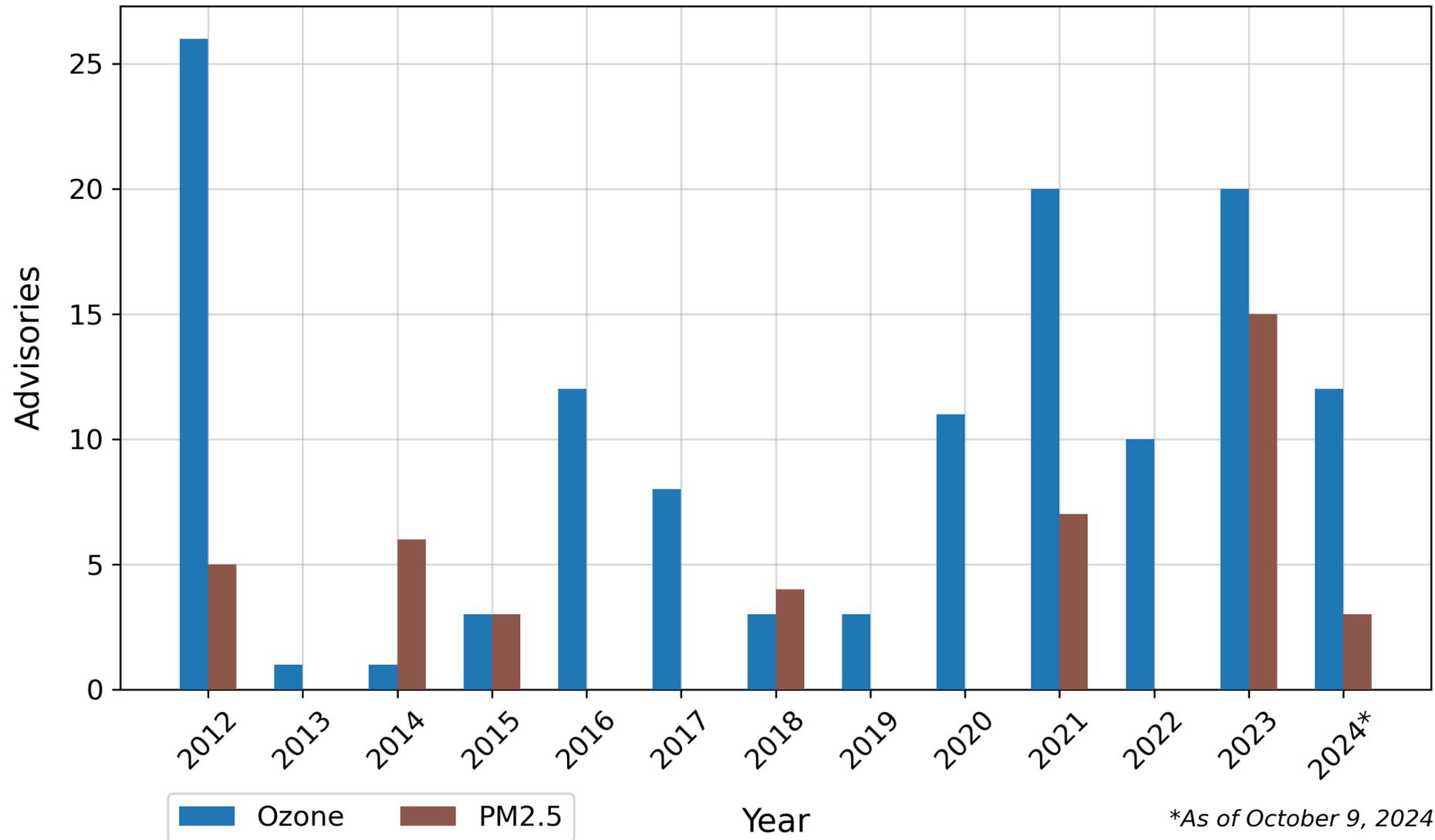
Ozone: 2024 Critical Value Exceedances

Wisconsin Sites	Concentrations (ppb)				2024 Critical Values (2008 NAAQS)	Days at/above Critical Values (2008 NAAQS)	2024 Critical Values (2015 NAAQS)	Days at/above Critical Values (2015 NAAQS)	Preliminary 2022-2024 "Design Value" (2015 NAAQS)
	1st high	2nd high	3rd high	4th high					
Bayside	84	77	73	73	78	1	63	13	74
Beloit	74	72	69	63	79	0	64	3	70
Chiwaukee	83	81	81	80	74	6	59	33	78
Elkhorn	70	69	67	66	76	0	61	13	72
Grafton	90	75	74	73	79	1	64	17	74
Harrington Beach	90	88	76	75	80	2	65	11	74
Kenosha-WT	74	73	73	73	77	0	62	22	74
Kewaunee	72	68	68	67	81	0	66	5	71
Manitowoc	79	79	75	71	78	2	63	11	73
Milwaukee-UPark	71	70	68	66	82	0	67	3	70
Newport	73	73	68	67	80	0	65	6	71
Racine	86	84	82	78	82	3	67	18	74
Sheboygan-Haven	81	69	68	67	83	0	68	3	70
Sheboygan-KA	92	90	80	76	69	10	54	42	78
Waukesha	71	70	70	66	79	0	64	10	71

2015 NAAQS: 70 ppb	Non-Attainment for 2015 NAAQS	Reached 2015 Critical Value	Exceeded 2015 Standard
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Note: 2024 data have not yet been QA'ed or certified and are subject to change. Values are only shown for monitors that exceeded their critical value at least once.

Ozone Air Quality Advisories

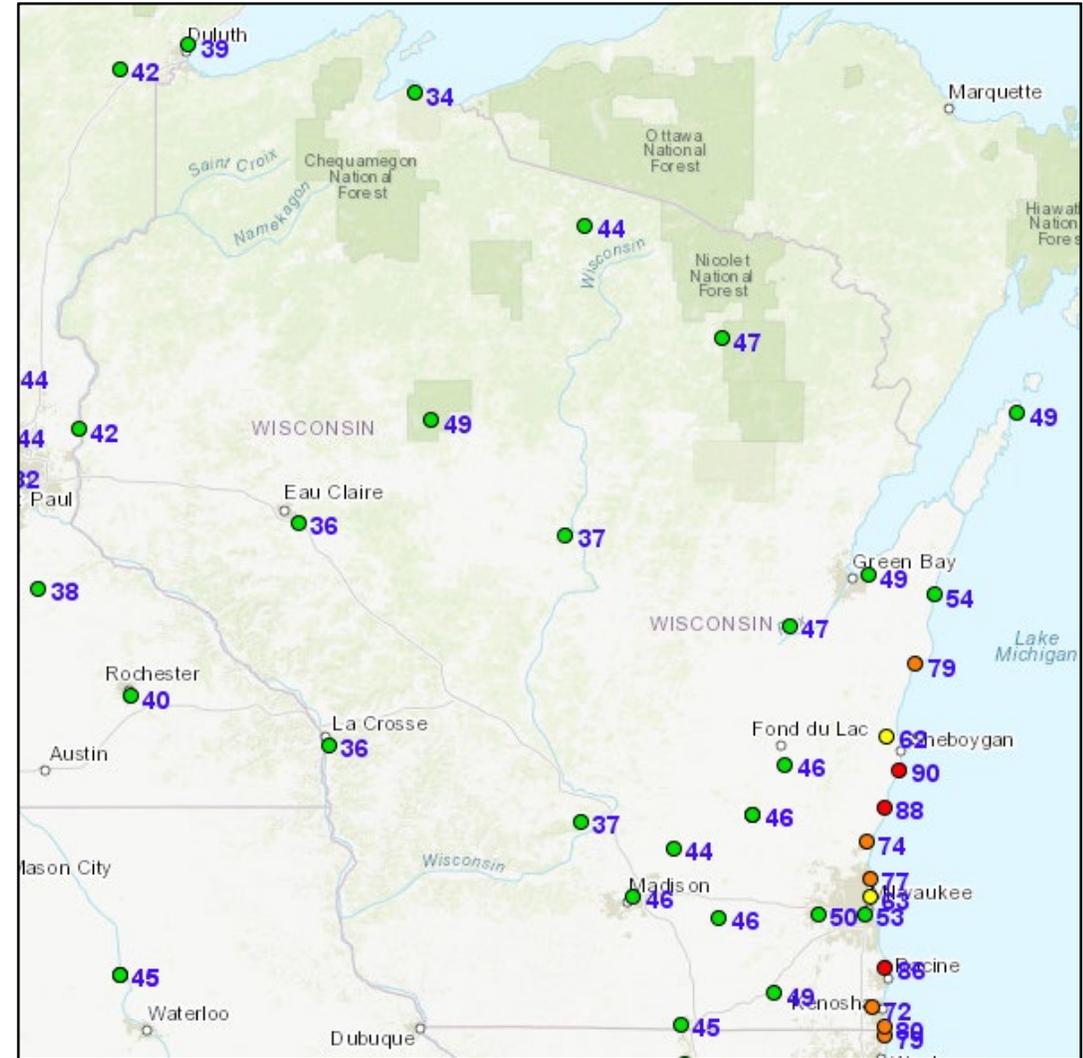


High Ozone Analysis

In 2024, there were two days with ozone in the **Unhealthy AQI** range.

➤ July 15, 2024

- Exceedances (MDA8>70): 8
- Max MDA8: 90 ppb (Sheboygan-KA)
- Meteorological Conditions:
 - ✓ Hot. High temperatures in the mid to upper 80s
 - ✓ Sunny, clear skies
 - ✓ Light southerly winds with lake breeze
- Other factors
 - 14 of 16 PM_{2.5} monitors recorded **Good AQI**.

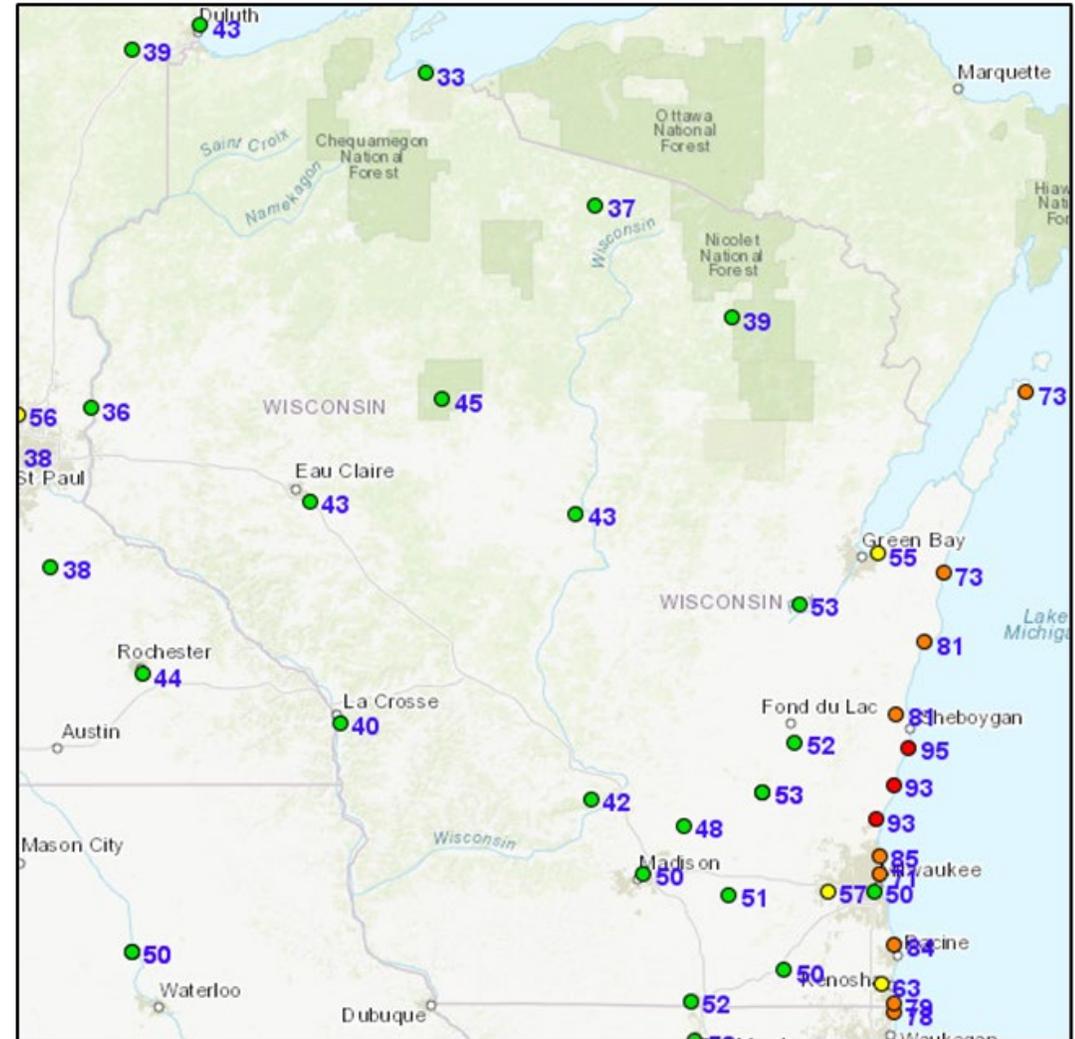


High Ozone Analysis

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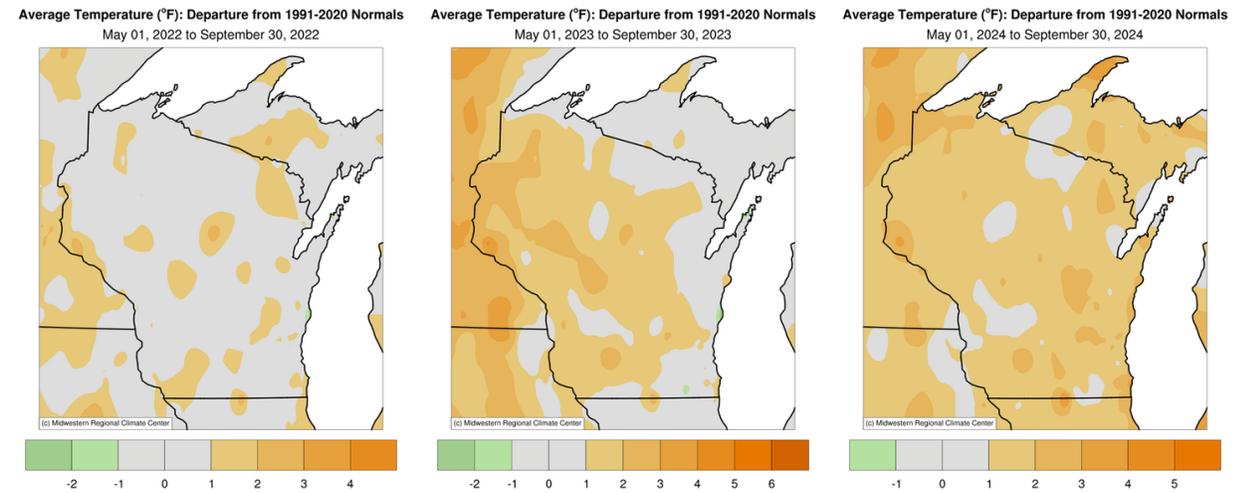
➤ August 26, 2024

- Exceedances (MDA8>70): 11
- Max MDA8: 95 ppb (Sheboygan-KA)
- Meteorological Conditions:
 - ✓ Very Hot. High temperatures in the mid 90s
 - ✓ Sunny, clear skies
 - ✓ Light southerly winds with lake breeze
- Influence from fire smoke?
 - All PM_{2.5} monitors recorded **Moderate AQI** but ozone was only high along the lakeshore.

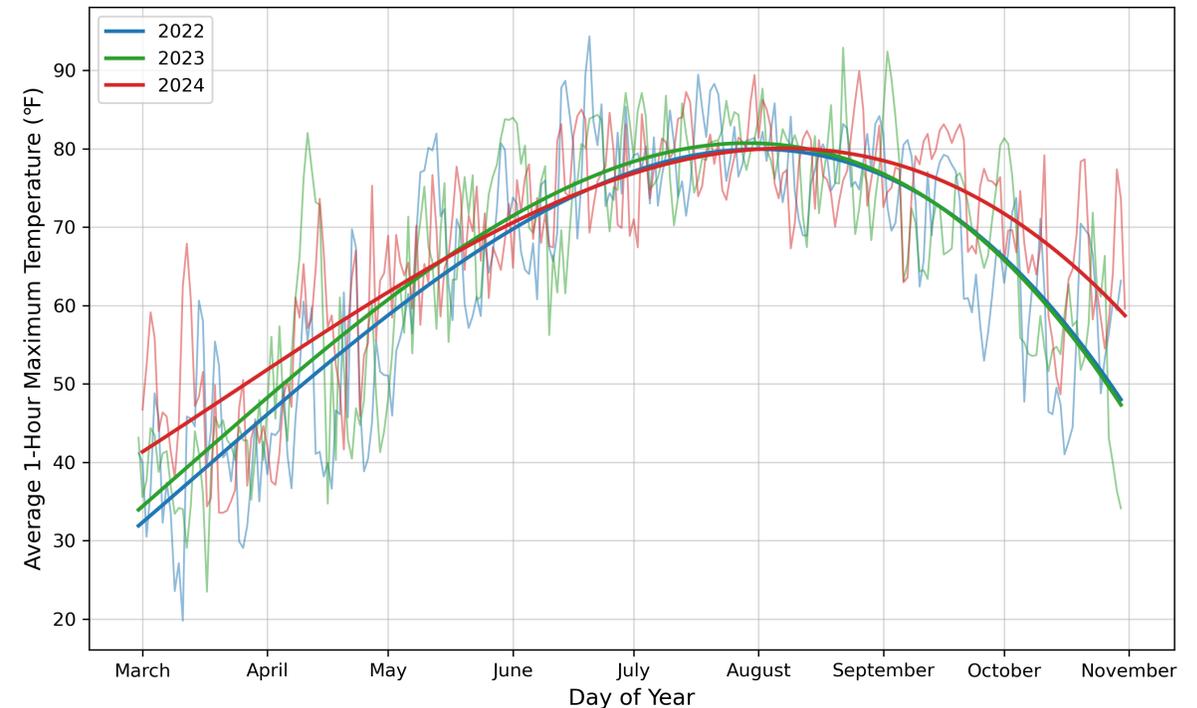


2024 Meteorology

- Compared to a 30-year climatology (1991-2020), daily average temperatures were above normal statewide throughout the 2024 ozone season.
- Compared to 2022 and 2023, maximum 1-hour average temperatures in 2024 were warmer in the early spring, late summer, and early fall.



Average Maximum 1-Hour Temperature During Ozone Season

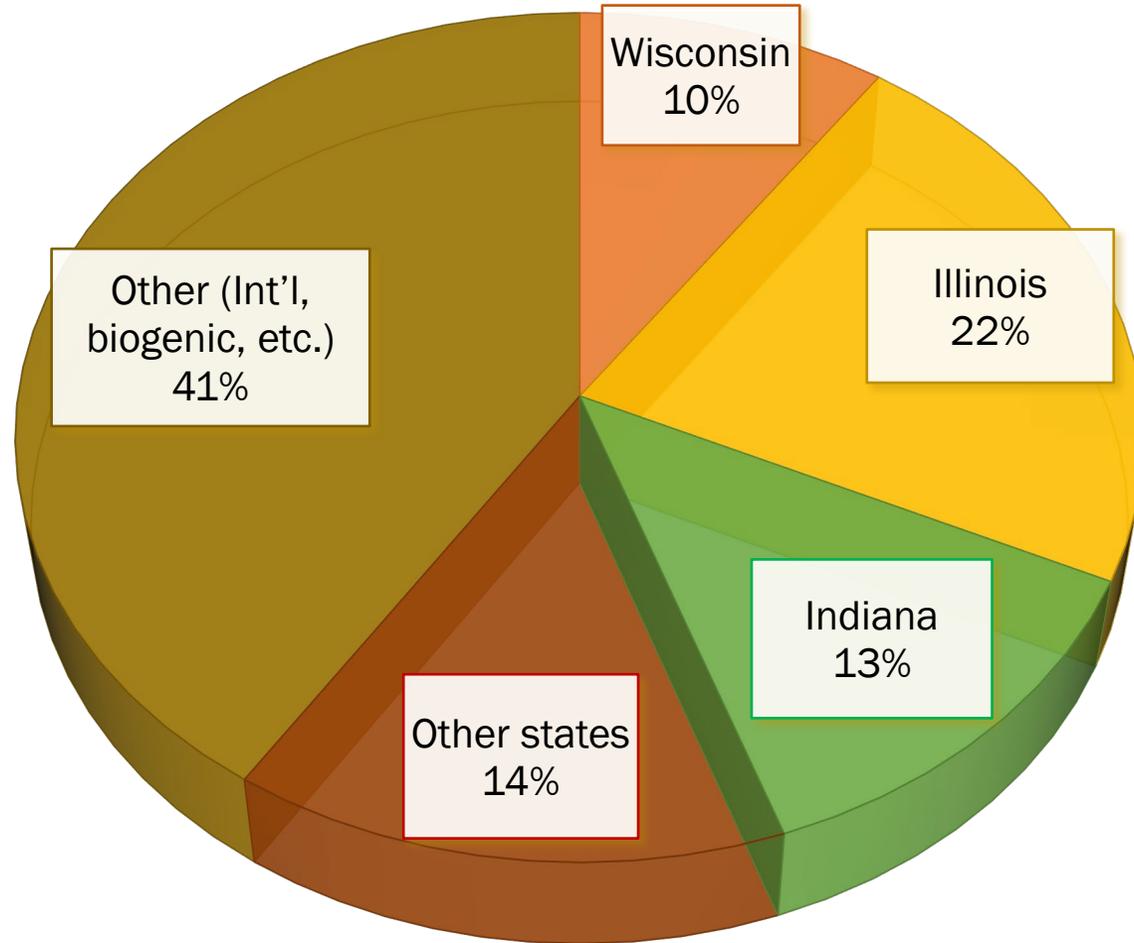


Ozone NAAQS Exceedances – Nonattainment Areas

	2022	2023	2024
Number of days over 70	7	29	16
Highest Day	96 ppb (Sheboygan-KA)	112 ppb (Sheboygan-KA)	95 ppb (Sheboygan-KA)
Average exceedance concentration across all monitors	77.9 ppb	77.8 ppb	76.3 ppb

Sources of Ozone in Wisconsin

Origin of ozone-forming emissions

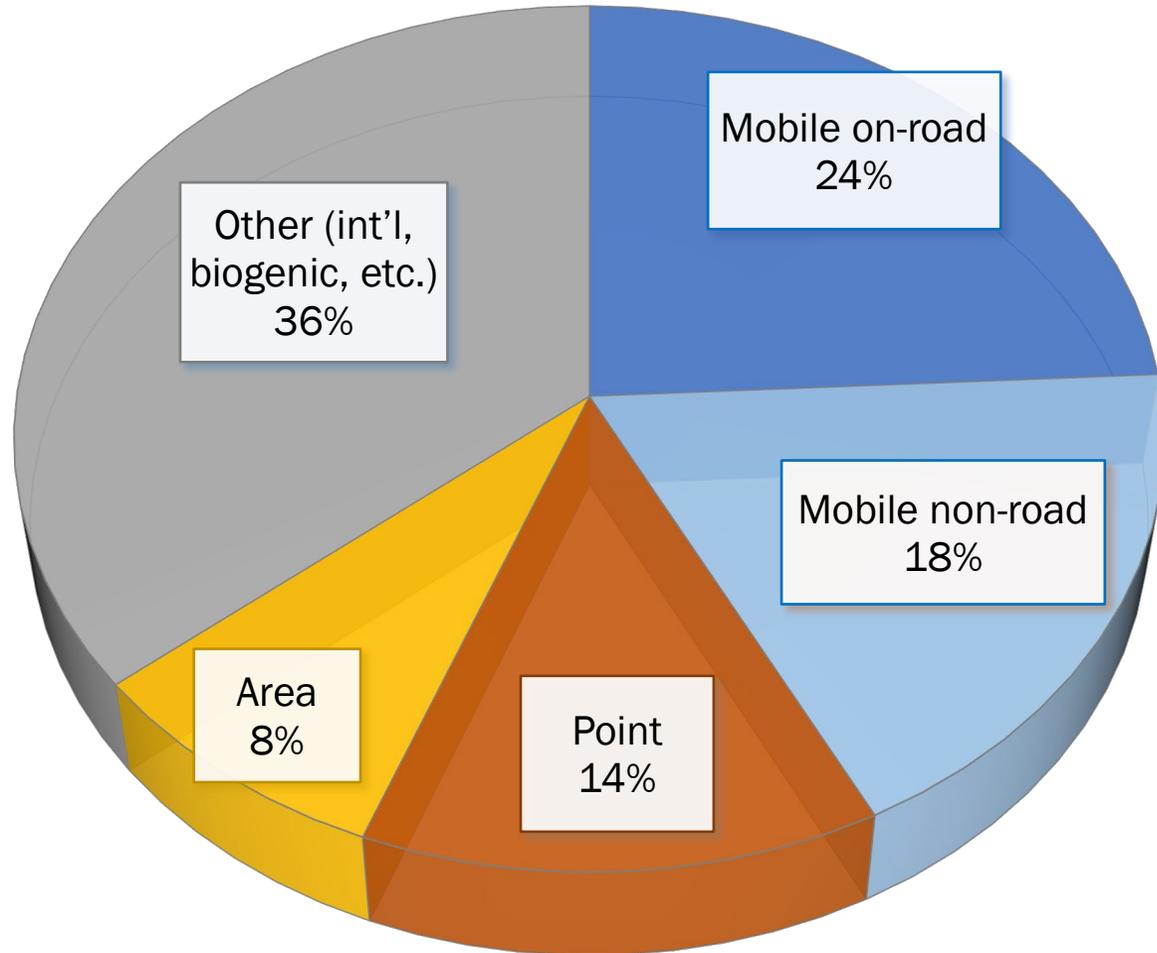


- Wisconsin is responsible for no more than 10% of the ozone measured in Wisconsin's nonattainment areas
- All other states are responsible for 49%

Contributions to Wisconsin ozone levels (by location)

Source: EPA 2016v3 modeling (Jan 2023)

Sources of ozone-causing emissions



- Most controllable emissions are from mobile sources (42%)
- State control mostly limited to area and stationary (point) sources (22%)

Contributions to Wisconsin ozone levels (by emissions sector)

Source: LADCO 2016bcc ozone attainment planning modeling (Mar 2022)

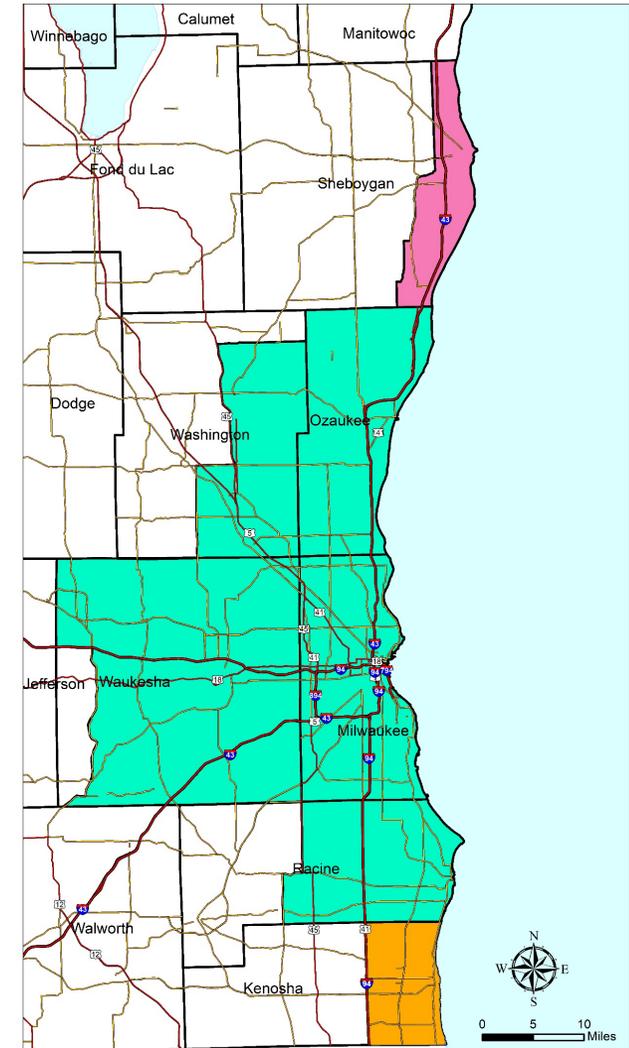
2015 Ozone Standard: Reclassification from Moderate to Serious

Ozone Nonattainment Area Reclassifications - Background

- Ozone nonattainment areas are subject to a 5-step classification scheme: Marginal, Moderate, Serious, Severe, and Extreme.
- The Clean Air Act specifies regulatory requirements for each classification. The higher the classification, the more stringent the requirements.
- If an area fails to attain by the attainment date associated with its current classification, the area must be reclassified (or “bumped up”) to the next higher classification within 6 months.
- Reclassifications are required by operation of law; no agency discretion.

Reclassification of Wisconsin's 2015 ozone NAAQS nonattainment areas to Serious

- None of Wisconsin's nonattainment areas (Milwaukee, Sheboygan, Kenosha) attained the NAAQS by their Aug. 3, 2024 Moderate area attainment date
- The EPA is expected to reclassify these areas to Serious by the end of 2024
- This will have permitting and planning implications
- New attainment date will be Aug. 3, 2027



Planning and SIP implications

- Program will need to develop and submit plans showing how areas will attain the 2015 ozone NAAQS by the Aug. 3, 2027 Serious area deadline (2026 ozone season).
- New SIP submittals will be required, likely due January-April 2026.
- Program work likely to include:
 - Review of RACT programs and rules
 - Assessment of emissions inventories, trends, new modeling projections
 - Interstate discussions
 - Dialogue with the EPA on federal actions needed to support attainment
 - Evaluation of need for new emissions control programs

Impacts on Permitting

- Nonattainment permitting requirements become more stringent for ozone precursors: NO_x and VOCs
 - The major source threshold decreases (from 100 to 50 tons per year)
 - Emissions offset requirements for new major sources or major modifications increases (from 1.15:1 to 1.2:1)
- Sources located in the nonattainment areas should assess whether operation permit changes are needed to address the new thresholds
 - Apply for a Title V operation permit
 - Apply for an operation permit revision to adjust synthetic minor caps
 - Apply for a different Type of Registration Operation Permit (ROP)

Reclassification Outreach

- Outreach plan to communicate reclassification to permitted sources in the nonattainment areas
 - Updates to [Permitting Requirements Webpage](#) including a Reclassification FAQ section
 - Direct email/communication
 - Air News
 - Air Management Advisory Group
 - Email to nonattainment area sources
- New shared email inbox to field specific questions
 - DNRAMNONATTAINMENT@wisconsin.gov

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

HUNTING FISHING PARKS CLIMATE ENVIRONMENT FORES

PERMITTING REQUIREMENTS FOR NONATTAINMENT AREAS IN WISCONSIN

Areas that currently are or have been designated as being in "nonattainment" of a national ambient air quality standard (NAAQS) have more restrictive permitting requirements, and sources in those areas may be subject to more stringent regulations known as Reasonably Available Control Technology (RACT) standards. This page shows current Wisconsin nonattainment areas and summarizes the applicable permitting requirements for major sources of emissions within these areas. It also contains information about nonattainment area history to assist in determining RACT applicability for specified sources of nitrogen oxides (NOx) and select source categories of volatile organic compounds (VOC). The contents of this page are intended to provide a general overview of the applicable requirements. For more detailed information about RACT applicability, state permitting regulations or for questions related to a specific permit, contact the [Air Management Program](#).

INTERACTIVE MAP

Click on a county below for a summary of applicable permitting requirements based on nonattainment area designations. The map also provides relevant information for determining NOx RACT applicability for all sources and VOC RACT applicability for the following source categories: miscellaneous industrial adhesives ([s. NR 422.128](#)), plastic parts coatings ([s. NR 422.084](#)), and metal parts coatings ([s. NR 422.151](#)).

Please note: Graphical representations of attainment/nonattainment areas are approximate. For the most precise rule applicability information, type a specific address into the search bar on the map and then click on the map.

Legend Info

Permitting Requirements in Wisconsin

Permitting Nonattainment

- Moderate Nonattainment NSR for ozone - NOx and VOCs regulated; PSD for all other pollutants

PSD for all pollutants

NOx RACT Applicability

- NOx RACT - Applicable: Moderate
- NOx RACT - Applicable: Serious

VOC RACT applicability for adhesives (s. NR 422.128), plastic parts (s. NR 422.084) and metal parts (s. NR 422.151) coatings

- VOC RACT - Applicable

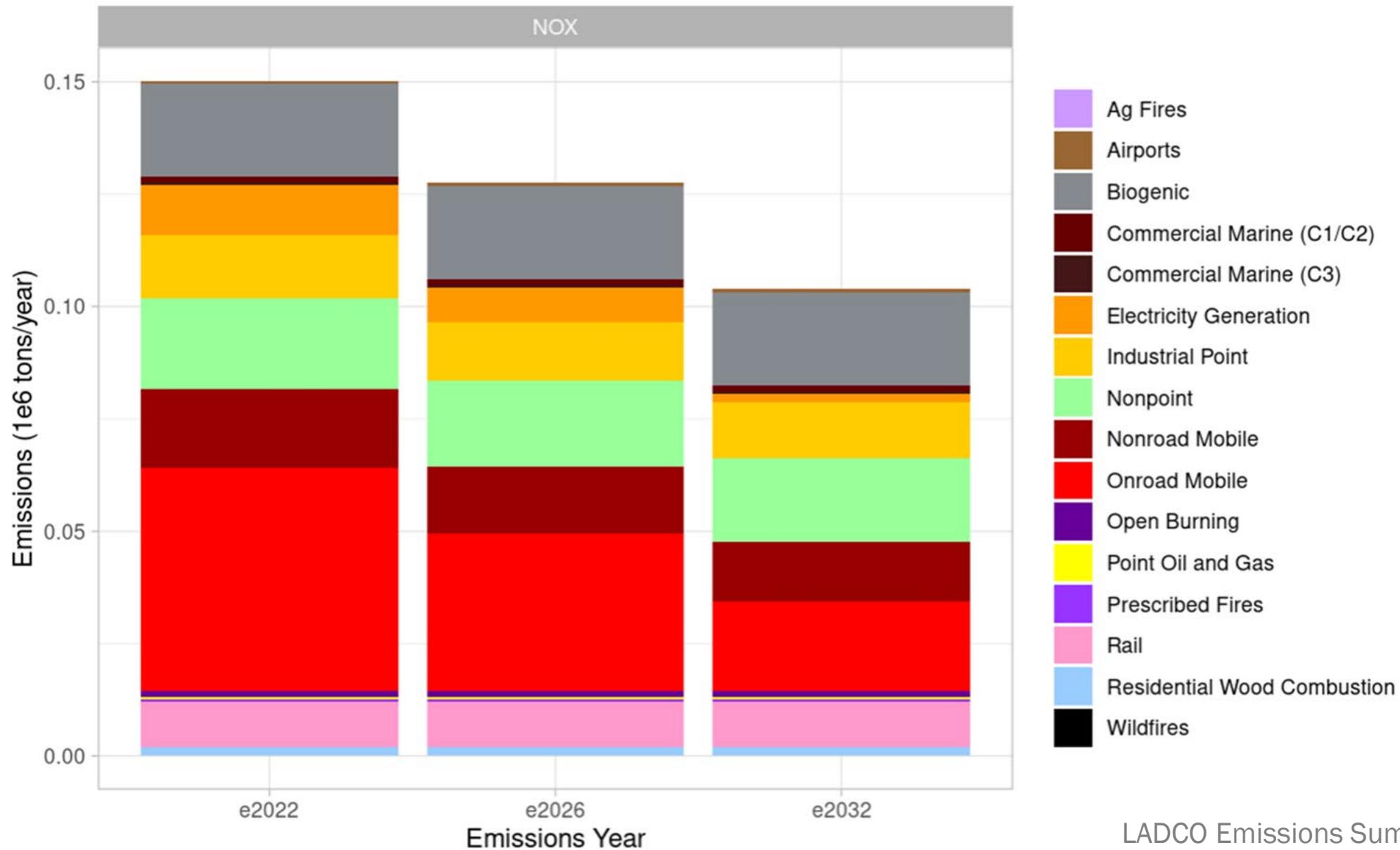
2015 Ozone Nonattainment: Long Term Outlook

Projected 2025 & 2026 ozone DVs

Monitor	Preliminary 2024 4 th High	Projected 2025 DVs (low)	Projected 2025 DVs (ave)	Projected 2026 DVs (low)	Projected 2026 DVs (ave)
Chiwaukee	80	77	80	71	77
Racine	78	73	75	70	74
Sheboygan-KA	76	75	77	70	75

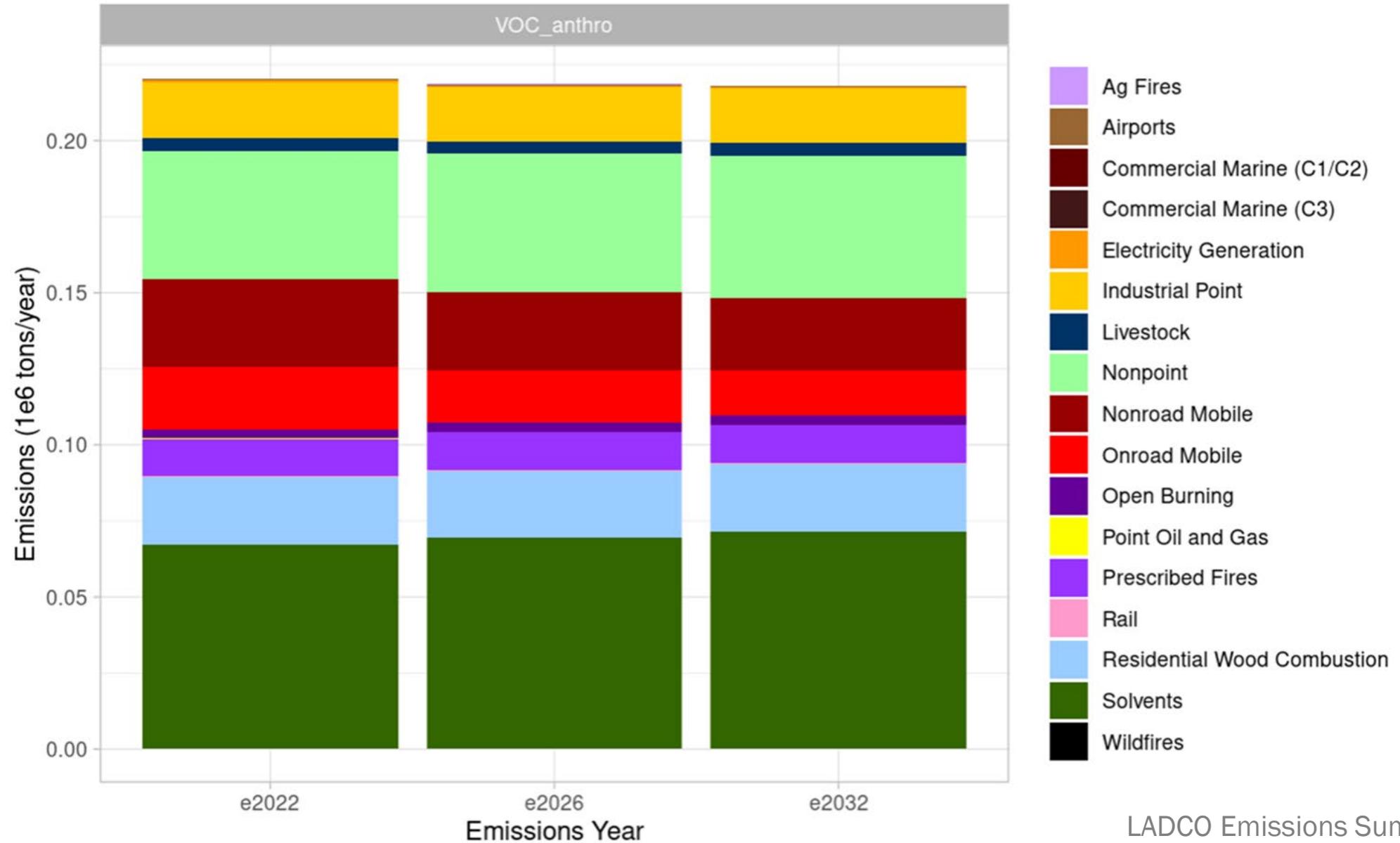
Annual Emissions by Sector

State: WI



Annual Emissions by Sector

State: WI



LADCO Emissions Summary Tool

Nonattainment Implications

- Projected NO_x reductions may be optimistic. Any rollback in federal rules (EGU and mobile) will also impact anticipated reductions.
- Optimistic emissions projections will lead to optimistic air quality modeling projections.
- Area-source VOCs are static; likely require additional attention.
- Future year reductions may not be sufficient for areas to attain, especially given recent DVs.

Potential Transition-Related Impacts

- Will be evaluating impact to WI of any changes/rollback of federal rules impacting ozone, especially mobile source rules
- Litigation regarding 2015 ozone transport (Good Neighbor Plan) likely to be impacted; transport to WI areas to remain unresolved
- Opportunity to address specific technical and policy issues with EPA (e.g., modeling, SIP reviews/approvals)
- Ozone NAAQS review timeline uncertain
- New/additional litigation will add to regulatory uncertainty

Impacts of Severe Reclassification on Permitting and Stationary sources

- Nonattainment permitting requirements become more stringent for ozone precursors: NO_x and VOCs
 - The major source threshold further decreases (from 50 to 25 tons per year)
 - Emissions offset requirements for new major sources or major modifications further increases (from 1.2:1 to 1.3:1)
 - Sources in nonattainment areas should assess whether operation permit changes are needed to address the new thresholds
- Section 185 penalty fee requirement for major sources

Program Actions to Address Nonattainment

- Expanded outreach to different audiences and stakeholders
- Updating state VOC and NOx rules to ensure approvable SIPs and potential redesignation
- Engagement with the EPA to address barriers to attainment (e.g., SIP approvals, policy and technical changes)
- Managing impacts on stationary sources/permitting needs

2025 Priority Topics

Emerging federal regulation

- Emerging contaminants (PFAS)
- Federal permit actions
- PM2.5 NAAQS
- Long term planning at the federal level
- Climate initiatives

Ongoing efforts

- Environmental Justice
- 2015 ozone NAAQS implementation
- Ozone transport
- SIP submittals and redesignation requests
- Regional haze
- Rulemaking

Opportunities

- Inflation Reduction Act
- Transparency in information
- Goals and vision of DNR
- Working with other states and organizations

2025 Meeting Dates

- Thursday, March 6
- Thursday, June 5
- Thursday, Sept. 11
- Thursday, Dec. 4

CONNECT WITH US

Next Meeting

March 6, 2024



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OFF THE RECORD"