

Mid-Atlantic Regional Air Management Association

Overview & Updates

AAPCA Spring Meeting
May 1, 2025

Marc A. R. Cone (MARC), P.E.
Executive Director



MARAMA

Mid Atlantic Regional Air Management Association, Inc.

Our Members

- Allegheny County
- Delaware
- District of Columbia
- Maryland
- New Jersey
- North Carolina
- Pennsylvania
- Philadelphia
- Virginia
- West Virginia



MARAMA also provides technical support to the Ozone Transport Commission (OTC) and we are a member of the Mid-Atlantic Northeast Visibility Union (MANEVU)

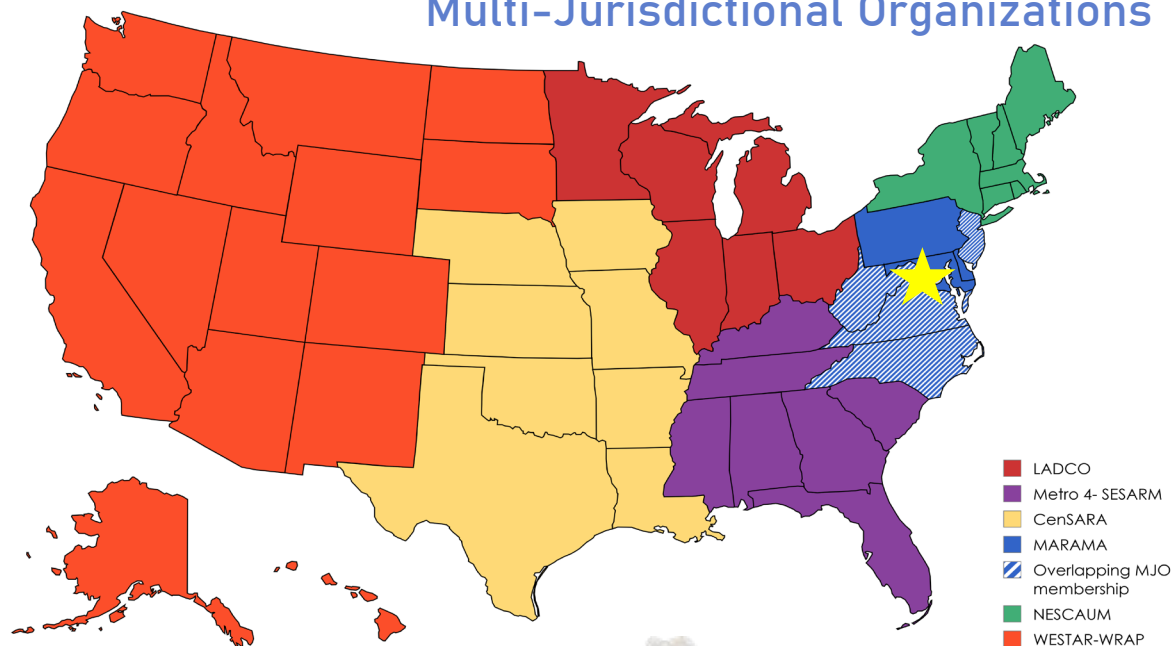


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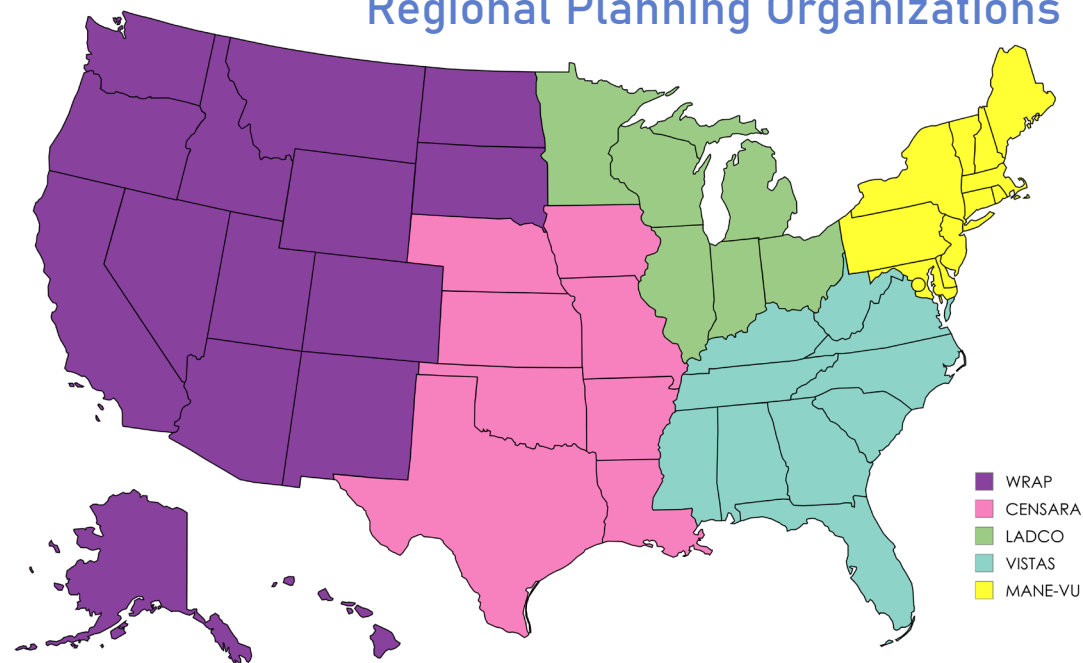
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Geographic Coverage of MARAMA & Our Partners

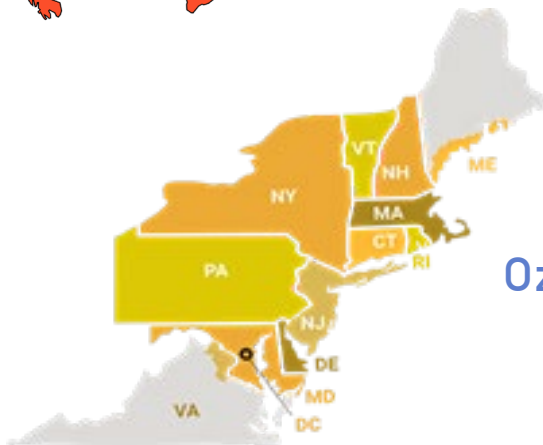
Multi-Jurisdictional Organizations



Regional Planning Organizations



Ozone Transport Commission



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Mission and Priorities

- Training: Virtual, In-Person and Hybrid Events
- Technical Support Inventory Development
- Coordination and Collaboration
- Benefits of Beyond Our Borders



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Our Primary Regional Air Quality Challenge

- Ozone attainment
- Areas of particular concern:
 - I-95 Corridor
 - DC-Baltimore-Philadelphia
 - Northern New Jersey
 - New York City
 - Coast of Connecticut
- Exacerbating factor: Wildfires



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Inventory Collaboration

- Critical for Ozone, Regional Haze and PM_{2.5} SIP Development
- Dr. Susan McCusker (MARAMA) manages several inventory workgroups
- MARAMA also continues to update our inventory tools to provide EPA and SLTs the best data possible for planning purposes

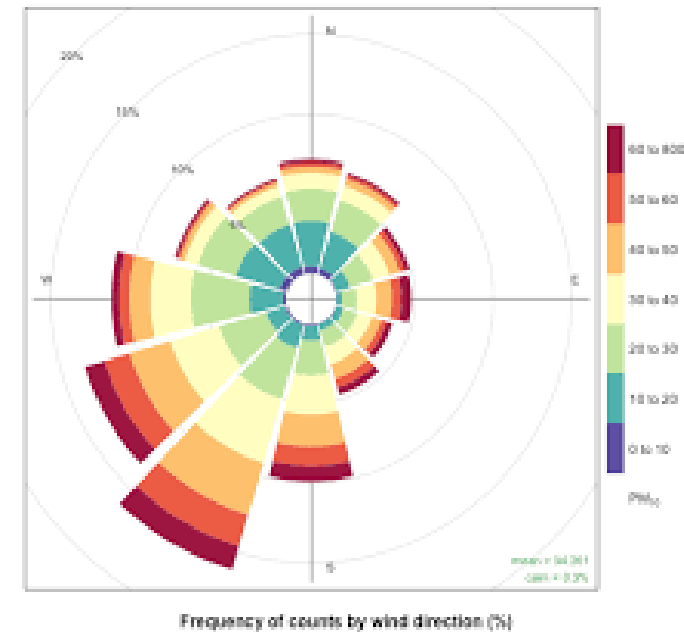


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Enhancing Air Quality Analysis with R

- Coordinating R trainings
 - 2019: Introductory training webinars, 2020 w/WESTAR
 - 2023: R-based Exceptional Event Training w/ WESTAR
 - 2024: Basic R Training Series
 - 2025 (upcoming): Advanced R Training Series
- Facilitating ongoing MARAMA R-Exchange Workgroup
 - Co-led by Min Zhong (PA DEP), Jessica Munyan (NJDEP), & Jesse Carpentier (MARAMA)
- Fostering the continued development and sharing of powerful R-based tools, including those that support EE demos
 - Ozone predictive tool (by Min Zhong, PA DEP) - winner of AAPCA Best Practices Award!

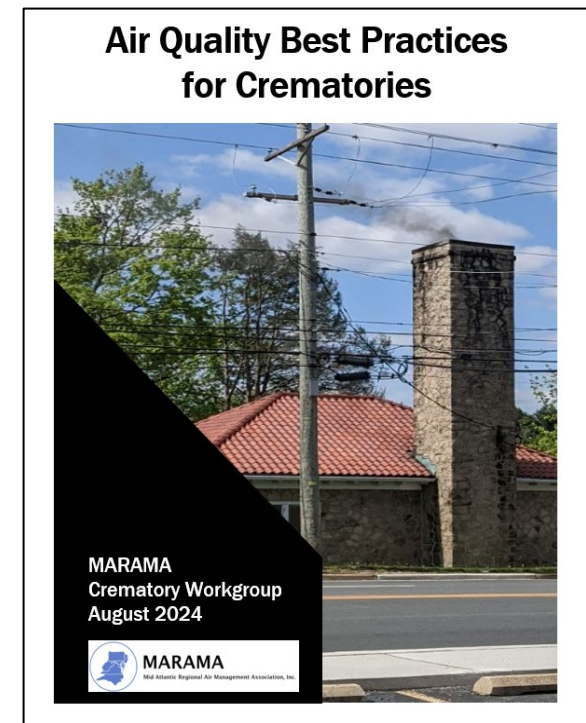


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Crematory Workgroup

- Led by MARAMA's Alex Garsteck
- Minor Sources – Big Headaches
- Agencies from MARAMA, Metro4/SESARM, and NESCAUM shared their experiences
- Interesting conversations....
- Creating a Best Practices Document that covers Permitting, Compliance, and Emission Factors



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Recent Permit Training

- MARAMA-Metro4/SESARM Collaboration
 - PSD/NSR/Title V Permitting
 - Providence Engineering
 - Regulatory, Consultant and Source Perspectives Provided
- MARAMA has also provided Technical Writing Classes to support permitting as well as planning staff

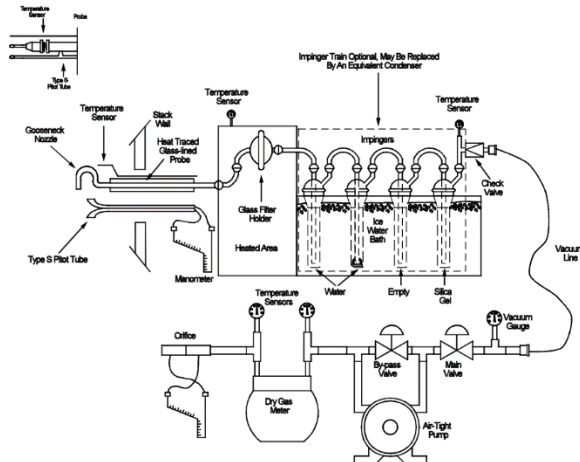


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Stack Testing Training

- PA DEP requested Methods 1-5, and FTIR Methods 318, 320 and 321. Led by MARAMA's resident stack tester Alex Garsteck
- Montrose Air Quality Services
- Hands-on two day in-person class



Max Analytical/ Thermo Fisher Scientific & MKS FTIR Products



Thermo MAX-ir™

FTIR Gas Analyzer

1.0 cm⁻¹ rugged FTIR spectrometer
9.86 m gas cell – 500 mL volume
DTGS Detector (no LN₂)
Diode laser – Life of instrument



MKS MultiGas™ 2030

FTIR Gas Analyzer

0.5 cm⁻¹ rugged FTIR spectrometer
5.11 m gas cell – 200 mL volume
MCT Detector requires LN₂ (usually)
Measure 20 to 30 species simultaneously



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Webinars on Emerging Issues

- Dec 2024: Electric Grid Operations and Air Quality
- Mar-Apr 2025: Data Centers and Air Quality Series
 1. Introduction to Data Centers
 2. Permitting Challenges and Pathways
 3. Compliance and Enforcement
 4. Impacts on the Grid and Modeling Considerations



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MJO Joint Meetings

- May 2023 held a joint MARAMA/NESCAUM meeting which preceded an OTC air directors meeting
- December 2023 MARAMA Monitoring workshop in Pittsburgh included our neighbors from Ohio.
- November 2024 MARAMA Monitoring Workshop in conjunction with the Metro 4/SESARM Region 4 meeting in Richmond, VA



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Upcoming MARAMA Workshops

- July 28–30: Landfill Workshop
Wilmington, Delaware– Hybrid for classroom and the event will finish with a landfill site visit.
- December 8–11: Monitoring Workshop
Hybrid Event– more to come...
- Considering a permitting and compliance workshop in 2026

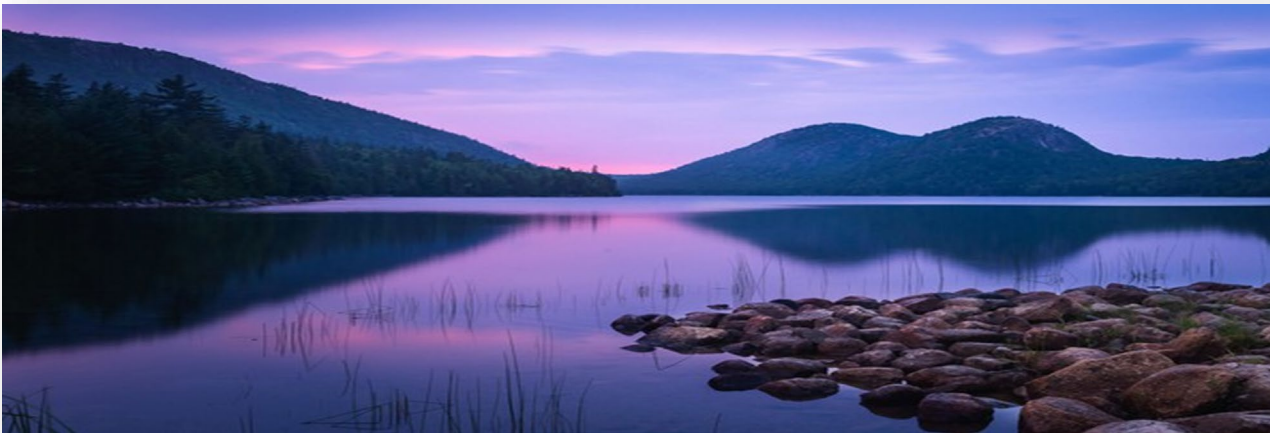


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Regional Haze Regulatory Changes

- 2024 Regional Haze Regulatory Proposals
- MARAMA and MANEVU agencies are in favor of extending the third planning period.
- MJOs and agencies all look forward to working with EPA on the future considerations to the Regional Haze regulations



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MJOs Supporting Federal Goals

Goal: Clean Air and Making the US the AI Capitol of the World

- MARAMA drives efficient and effective strategies for clean air through:
 - Agency Inventory Collaborations
 - Exceptional Event Demonstration Tool Collaborations
 - Sharing Data Center Permitting and Compliance Challenges
 - Enhanced Permit Training
 - Facilitating the sharing of agency experiences



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MJOs Supporting Federal Goals (cont.)

Goal: Delivering lower cost energy and bringing back manufacturing

- Energy demands will be increasing significantly with data centers and manufacturing
- Timely permitting for new sources is imperative
- Combustion turbine deliveries for low-cost energy production will create short term challenges
- Grid management, cross-agency coordination with utility commissions, and innovation will be needed to deliver lower cost energy solutions in the short term



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MJOs Supporting Federal Goals (cont.)

Goal: Cooperative Federalism and Permitting Reform

- Cooperative Federalism is needed for Inventories, Exceptional Event Demonstrations, and SIP Development
- Cooperative Federalism is also needed for permitting reform
- MJOs and agencies are ready to share their perspectives
- Ultimately, we all want to be good stewards of air quality and we need the tools to make that happen



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Thank you!



Otter Creek Wilderness, West Virginia

