



AIR QUALITY MONITORING WORKGROUP

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Bureau of Air Management
April 13, 2023

AGENDA

AQMWG: What and who

Goals and Objectives

Workgroup Activities (training, regional engagements, surveys)

Past & Future CBAQM Studies

DEEP's Outreach and Engagement Efforts

AIR QUALITY MONITORING WORKGROUP (AQMWG) OF NORTHEAST AND MID-ATLANTIC STATES & DC

Participating Jurisdictions: Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Jersey, New York, Pennsylvania, Rhode Island, Vermont

Workgroup Resources & Support: Georgetown Climate Center, TD Environmental, Metropolitan Group

WORKGROUP GOALS & OBJECTIVES

- Build a new “community of practice” for state agencies on the topic of community-based air quality monitoring and policy decisions/ actions that can be taken to support and act upon local air quality data.
 - Support participating states and community partners in establishing hyperlocal air quality monitoring projects, including by leveraging federal funding
 - Use data from air monitoring projects in ways that inform state & local policy actions to reduce emissions
- Establish, build and strengthen relationships with groups in communities overburdened by air pollution

WORKGROUP ACTIVITIES

- Take advantage of federal funding opportunities to expand community-based air quality monitoring
- Build capacity for state agencies and communities
- Expand and improve outreach and engagement with overburdened communities
- Conduct meetings, webinars, workshops and other dialogue with stakeholders and communities to collect public input, share case studies, and discuss examples and lessons
- Develop an “Action Toolkit” featuring case studies and best practices for informing policy decisions/ action with AQ monitoring

WORKGROUP TRAINING

- **Air Quality Foundations** (Nov 2022)
 - General concepts, with tools and resources to help agencies build their own versions of the presentations – with placeholders to localize
- **Environmental Justice and Equity 101 Workshop** (Jan 2023)
 - Help develop a shared understanding of the history of environmental injustice in the U.S. and opportunities to implement achievable changes that advance EJ via AQ monitoring projects
- **Designing an Air Monitoring Study** (Spring 2023)
 - Basics of planning an air monitoring program with communities, from start to finish. Establish the purpose of a project; budgeting for processes (not just hardware)
- **Equitable Community Engagement Workshop** (Spring 2023)
 - Explore tips and tools for building – and investing in -- authentic relationships with impacted communities and conducting equitable community engagement.
 - Analyze case studies in AQ monitoring context

COMMUNITY PARTNERS MEETING: INITIAL REGIONAL ENGAGEMENT MARCH 28, 2023

- **For meeting participants** to learn more about the workgroup and have opportunities to help steer the direction of our efforts
- **For agency officials** to learn how participants would like states to help make future community-based air quality monitoring projects more purpose-driven, designed to inform policy actions that improve air quality in communities
- **Explore partnership opportunities:** how to participate, receive regular updates, additional/ongoing feedback on proposed workgroup activities, and involvement with future workgroup activities
- **Identified priorities:** public awareness & bad air quality alerts, informing policy action, health & equity, improving communications & public engagement, funding for projects, technical challenges

PAST AND FUTURE COMMUNITY-BASED AIR QUALITY MONITORING

- What can we learn from past and ongoing projects?
 - Surveyed states in the workgroup to assess 20 projects
- U.S. EPA funding is accelerating the number of AQM projects
- All AQM projects have
 - Many similarities
 - Some unique differences
- Opportunity for regional cooperation, sharing tools, learning, and more

PAST/ ONGOING: 20 Community-Based Monitoring Projects Surveyed

Partners



State AQ Agency (12)



Community Groups (20)



Other Governments (12)

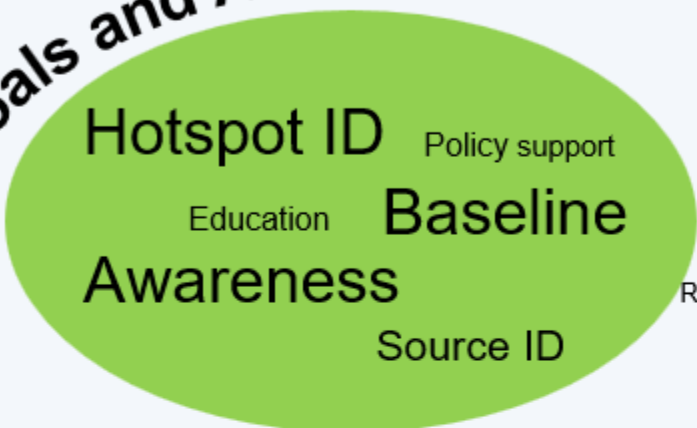


Universities (8)

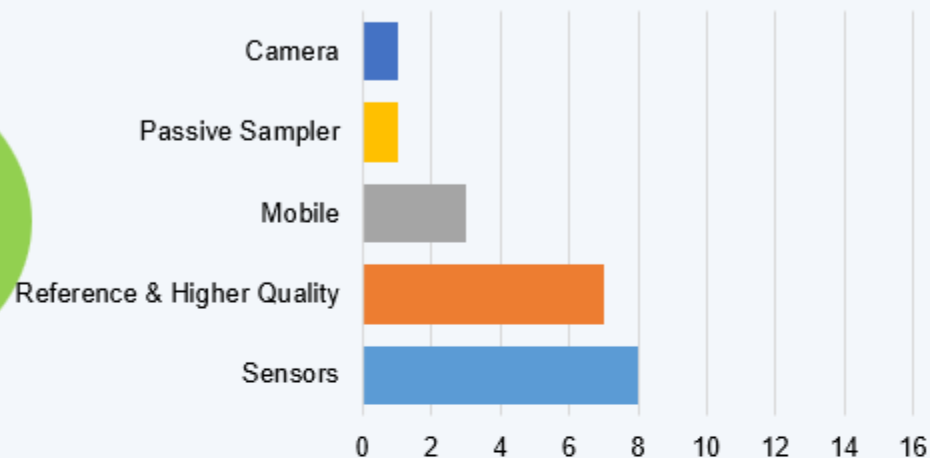


K-12 Schools (3)

Goals and Actions



Measurement Devices



FUTURE: 32 Community-Based Projects beginning this Fall

Lead Orgs



State AQ Agency (5)



City Governments (5)



Community Groups (18)



Universities (3)

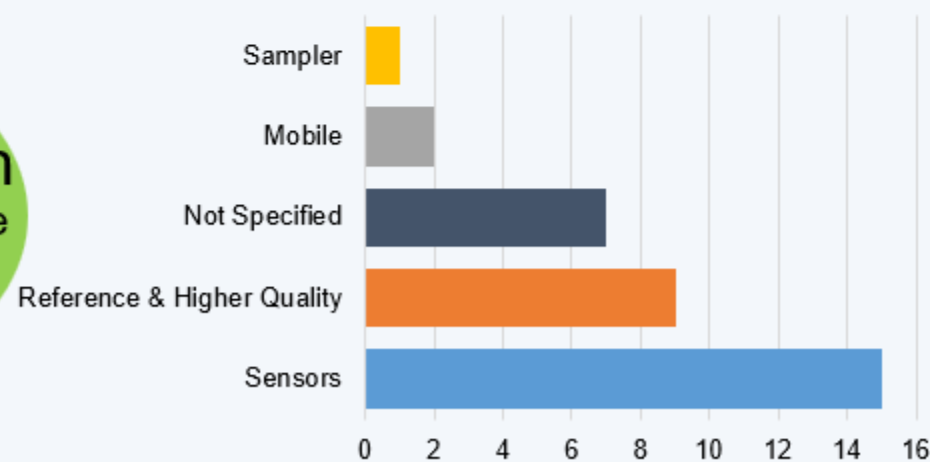


Tribe (1)

Goals and Actions



Measurement Devices



DEEP'S OUTREACH AND ENGAGEMENT EFFORTS


- [Community-Based Air Monitoring webpage](#)
- [Air Sensor Loan Program](#)
- CEEJAC Air & Transportation Subcommittee
- DPH ARP grant award
- Conducting virtual and in-person workshops for educators and community groups
- Ongoing air sensor evaluation and assessment

Questions?

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Outreach Workshops



Workshops for Educators

PurpleAir

Air Quality Flag Program

Air Quality for Schools
March 14, 2023
2:00 pm - 4:00 pm
Virtual Webinar

Join DEEP representatives from the Air Bureau to learn about the importance of air quality monitoring and how to engage your classrooms in its study. Information includes how to set up a Purple Air Monitoring Site at your school and be part of a growing community science network. Great introduction to the use of monitoring programs as part of school culture and student involvement in environmental issues. Suitable for all grade levels.

Hands on Air Quality
March 28, 2023
9:00 am - 2:00 pm
In Person Workshop
Kellogg Estate
500 Hawthorne Ave
Derby, CT 0418

Go deeper into activities for the classroom that engage students in understanding air quality, monitoring methods, and inclusion of outdoor activities. Suitable for grade levels 2-8. Will include information on the Purple Air monitoring program and the EPA Flag Program.

Nitrogen-sensitive lichens

Nitrogen-tolerant lichens

Sensor Loan Program



Connecticut Department of Energy & Environmental Protection

CT.gov Home / Department of Energy & Environmental Protection / Air / Sensor Loan Program

Air Sensor Loan Program

Air quality sensors are a class of lower-cost air monitors that are portable, easy to operate, and provide real-time measurements of air pollution concentrations. The increasing availability of air sensor technology has allowed individuals, researchers, and community groups to measure and engage with local air quality. Air quality sensors can estimate a range of pollutants, including those that drive the Air Quality Index. Data from these air sensors can be made public and readily available on a scale otherwise unfeasible with regulatory monitors.

DEEP has developed a pilot sensor loan program to provide

