



Air Quality – Participatory Science & Sensors Monterey, California – May 4, 2022

Today is the third day of Air Quality Awareness Week. Citizen science is an expansive field where the public contributes to scientific knowledge and understanding. Ordinary people participate in projects, collect data, and share information to help better understand environmental concerns happening in their communities, such as soil contamination, microplastic pollution, and environmental justice issues. Sensors are one tool that citizen scientists can use to monitor the air quality in their area and help them Be Air Aware & Prepared!

There are twenty-five air sensors across twenty-plus municipalities in Monterey, San Benito and Santa Cruz Counties. Over 750,000 residents can access real-time, local air quality data. Monterey Bay Air Resources District (MBARD) collects data from monitoring sites that it operates year round throughout the North Central Coast Air Basin, and collects ozone data from a separate site operated by the National Parks Service at Pinnacles National Park. The collected data is reviewed and submitted to the US EPA and to the California Air Resources Board (CARB). Hourly data is also made immediately available to [CARB, AIRNOW](#), and www.mbard.org in order to provide the most current air quality information to the public.

Air Sensor Toolbox, a citizen science opportunity.

The quality of the air is fundamental to health and well-being. The nation's conventional air quality monitoring network has a limited number of stations that use expensive equipment to measure the air for a limited number of pollutants. Because location-specific data are relatively sparse, people often don't know what is in the air they breathe.

Communities are understandably concerned. Citizen science can be part of the solution. Advances in mobile sensors and software applications offer new opportunities for community-based sensing projects.

The EPA *Air Sensor Toolbox*, <https://www.epa.gov/air-sensor-toolbox>, gives concerned citizens technical information on next-generation air monitoring devices, including a description of new technologies and how to use them to meet a wide range of needs. The toolbox contains training materials, such as video and slide presentations, specifically designed for users of the new technologies. In the coming years, the EPA will continue to update the toolbox based on its research on emerging technologies for air quality monitoring. By using the *Air Quality Toolbox*, citizen scientists can help fill knowledge gaps about the quality of their local air, leading to regulatory action, technology improvements and less air pollution.

For local information, please visit: <https://www.mbard.org/wildfire-smoke-information-and-resources>.

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Hashtags: #AQAW2022, #AQI, #Asthma, #BeAirAwareAndPrepared, #Sensors, #Wildfire, #AQIQ, #EJ, #ParticipatoryScience, #AirQuality, #EnvironmentalJustice, #CitizenScience

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