



## Air Quality, Emissions, and Modeling

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The California Air Resources Board (ARB) gathers air quality data for the state of California, ensures the quality of this data, distributes data sets to our stakeholders, designs and implements air models, and sets ambient air quality standards for the state. ARB compiles the state's emissions inventory, makes Sacramento Valley agricultural burn acreage allocation decisions, and performs air quality and emissions inventory special studies.

Below you will find listed several areas of this website which provide background and detailed information on these subjects.

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### [Air Quality Data](#)

This area provides access to ambient air quality data, maps of areas that violate the national and state air quality standards, plans for PM<sub>2.5</sub> monitoring, and electronic versions of several reports including listings and maps of the ambient air quality monitoring network and a report of air quality trends and summary statistics.

### [Air Quality Index \(AQI\)](#)

The ARB provides some general information on this statistic (formerly known as the Pollutant Standards Index (PSI) plus links to AQI forecasts.

### [Air Quality Models and Documentation](#)

Air quality models are software applications that are categorized into one of the following: Toxics and Permitting; Photochemical; Meteorological; Emission Inventory; and System. The ARB and U.S. EPA air quality modeling guidance documents can be found here (Also, see "Special Studies" below).

### [Air Quality Standards \(Current\)](#)

Both the Federal and State Ambient Air Quality Standards can be found at this location plus State comments regarding the latest Federal standard changes for particulate matter and ozone.

### [Air Quality Standards \(Under Review\)](#)

The ARB establishes air quality standards for key air pollutants in California. These standards are designed to protect the health and welfare of Californians. This location describes these standards, the air pollutants

and harmful health effects caused by these. This area also describes the scientific review mandated by the Children's Environmental Health Protection Act (CEHPA), also known as SB 25, and provides access to the review schedule mandated by this law.

### [Ambient Air Quality Monitoring](#)

The ARB's air monitoring program collects real-time pollutant values and samples of ambient air at over 40 sites located throughout California. The program also is designed to ensure the quality of the data collected and disseminated by the ARB and California's air quality districts. The data generated are used to determine which areas of California are in attainment, or non-attainment, and the severity of pollution in California. The data are also used in air models and emission inventory.

### [Area Designations \(Activities and Maps\)](#)

This area provides links to all ARB activities pertaining to existing and proposed area designations (nonattainment, attainment, and unclassifiable). Also, you will find California designation maps for state and national standards.

### [Children's Community Health Study Results](#)

This area provides links to air quality data and background information on several studies dedicated to children's health issues

### [Emission Inventory](#)

The ARB and local air pollution agencies collect, estimate, and forecast emission inventory data throughout California. These data are used to estimate the quantity of emissions from different types of emission sources such as point sources, area sources, and mobile sources. In addition to the emission inventory data itself, this area includes access to area source methodologies, emission inventory software, publications and other related websites.

### [PM2.5 Monitoring Network Design](#)

This area includes the latest PM2.5 monitoring network plan for California, any proposals for future expansion, and tables and maps of the proposed monitoring site locations.

### [Smoke Management Program](#)

The ARB develops regulations which affect agricultural burning in California. The ARB is involved in the burn decision process for the Sacramento Valley. In addition, ARB is involved in identifying and promoting alternative uses for rice straw.

### [Special Studies](#)

[Southern California](#) The Southern California Ozone Study documents and data are here.

[Central California](#) The Central California air quality studies (CCAQS) documents and data are here.

**Transport**

The ARB evaluates the transport of air pollutants from one region of the State to another. The results of these [assessments](#) are available in report form. ARB also establishes [mitigation](#) requirements for upwind districts commensurate with their contributions to the air quality problems in downwind areas.

**"Weekend Effect"  
Research**

We provide information regarding the ARB's ongoing and planned research on the "weekend effect", the phenomenon of elevated ozone concentrations on weekend days in some air basins of California..

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*A department of the California Environmental Protection Agency*