





Forecasting Air Quality in the Bay Area



What We Do...



Mission: *Ensure a healthy breathing environment for every Bay Area Resident.*



Includes 7 Million people within a 9-county region.

San Francisco Bay Area Air Basin



Meteorologists Responsibilities

Issue daily air quality forecast.

Recommend calling Spare The Air Alert on poor air quality days.

Quality control of air quality data.



How We Do What We Do...

Air Quality Monitoring Stations

- Over 30 stations across the Bay Area.
- At least one station in each Bay Area County.
- Stations measure a variety of air pollutants such as ozone, CO, particles, and dust.

Air Quality Measurements



Typical air monitoring station



Map of air quality stations

Air Quality Forecasting

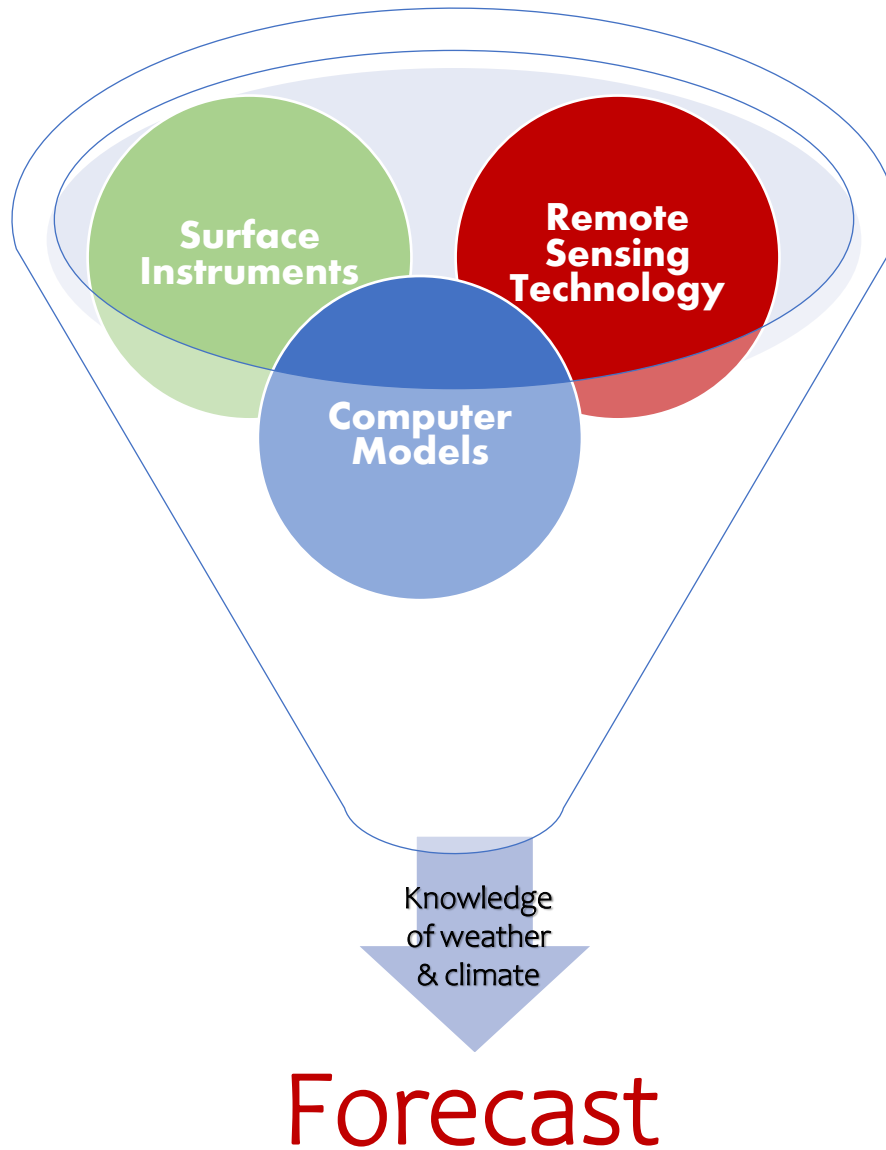
Air quality is highly dependent on weather conditions.

We issue forecasts for five zones in the Bay Area based on microclimates.

We use a variety of data and tools to analyze weather conditions and forecast air quality.



“Tools of the Trade”



Air Quality Forecasting - Summer

Conditions favorable for unhealthy ozone in the Bay Area:

- Sunny, hot weather (high temperatures over 100° inland)
- Stable conditions
- Weak afternoon wind from Pacific Ocean



Air Quality Forecasting - Winter

Conditions favorable for unhealthy particle levels in the Bay Area:

- Clear, cold nights (low temperatures below 32° inland)
 - Calm winds or light offshore winds
 - Strong temperature inversion near the ground
- ▶ When unhealthy particle levels are expected, use of fireplaces is prohibited in the Bay Area.



Wildfire Smoke

- ▶ The Air District forecasts for these events during the Fire Weather Season.
- ▶ Very difficult to forecast as smoke is very sensitive to many environmental parameter.





SEPTEMBER 9, 2020

True or False

Rain has the biggest affect on improving air quality.



False! It's
The Wind!



Bay Area Air Quality Forecasting

- ▶ Air quality forecasts are available daily on our website at www.sparetheair.org
- ▶ Thank you for doing your part to help improve air quality in the Bay Area
- ▶ Questions?

