

# Colorado Department of Public Health & Environment

## Air Pollution Control Division

### Air Quality Forecast & Monitoring

Visit the Air Pollution Control Division Air Quality Homepage <https://www.colorado.gov/airquality> for current air quality information, including:

- Air Quality Health Advisories for Wildfire Smoke, Ozone, and Blowing Dust
- Colorado Smoke Outlook
- Daily Air Quality Summary and Forecast



Signup for Air Quality Health Advisory email alerts at: [https://www.colorado.gov/airquality/request\\_alerts.aspx](https://www.colorado.gov/airquality/request_alerts.aspx)

Follow our efforts and join the discussion!

- [www.facebook.com/cdphe.apcd](http://www.facebook.com/cdphe.apcd)
- <http://twitter.com#!/cdpheapcd>

### Colorado Air Quality Collaboration



Environmental Outreach to the Cannabis Industry in Colorado, Kaitlin Urso, Small Business Assistance Program

Providing local governments with a direct line of contact in the Air Pollution Control Division, the Air Quality Collaboration provides both technical and policy expertise to assist regional leaders in their efforts to improve and learn about air quality across Colorado.

Education is conducted through webinars on air quality related topics that are voted upon by the collaboration members.

Presentation topics include:

- Wildfire Outlook and Response
- Clean Car Regulations
- Indoor Air Quality
- Air Quality and Colorado Industries

Get more information at:

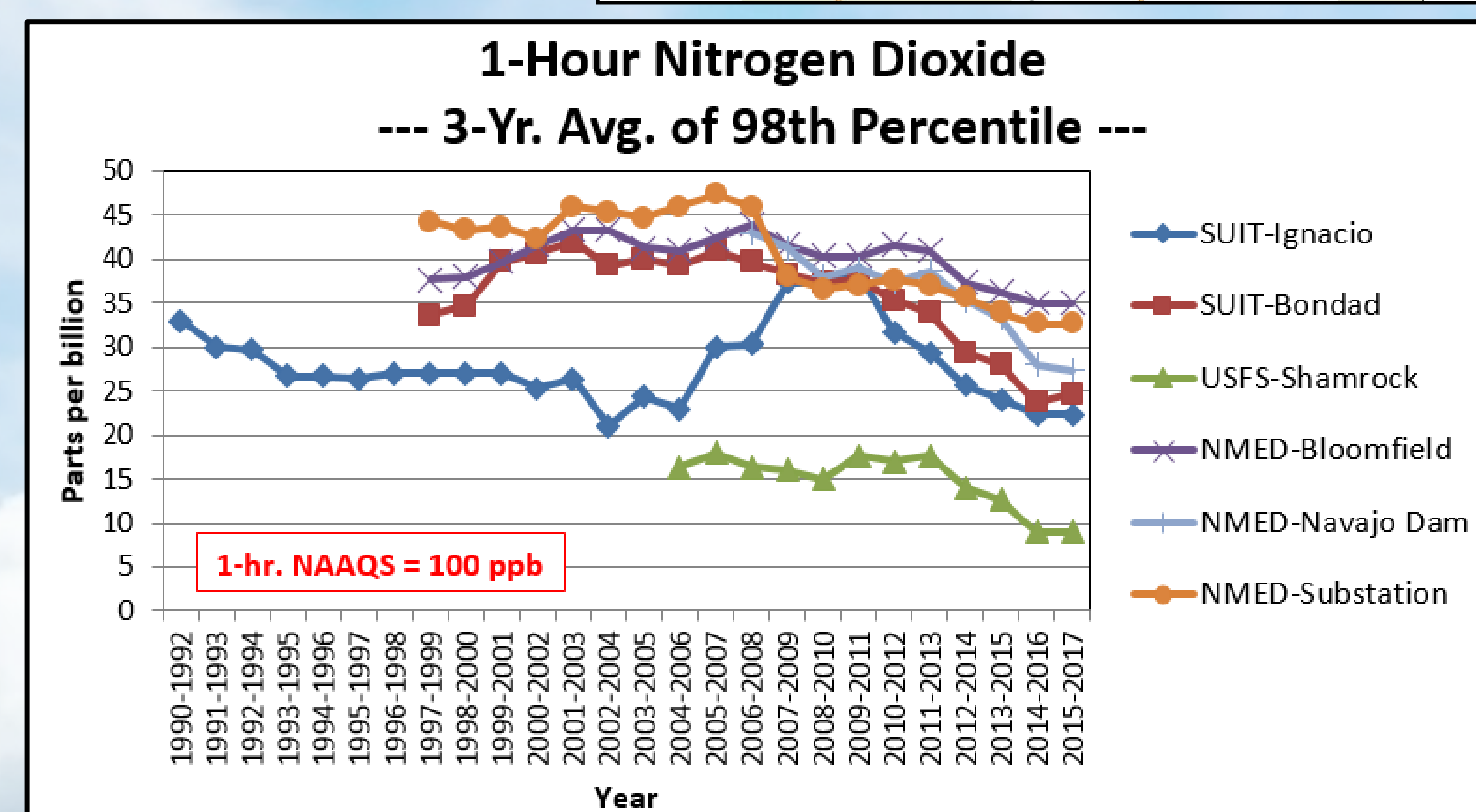
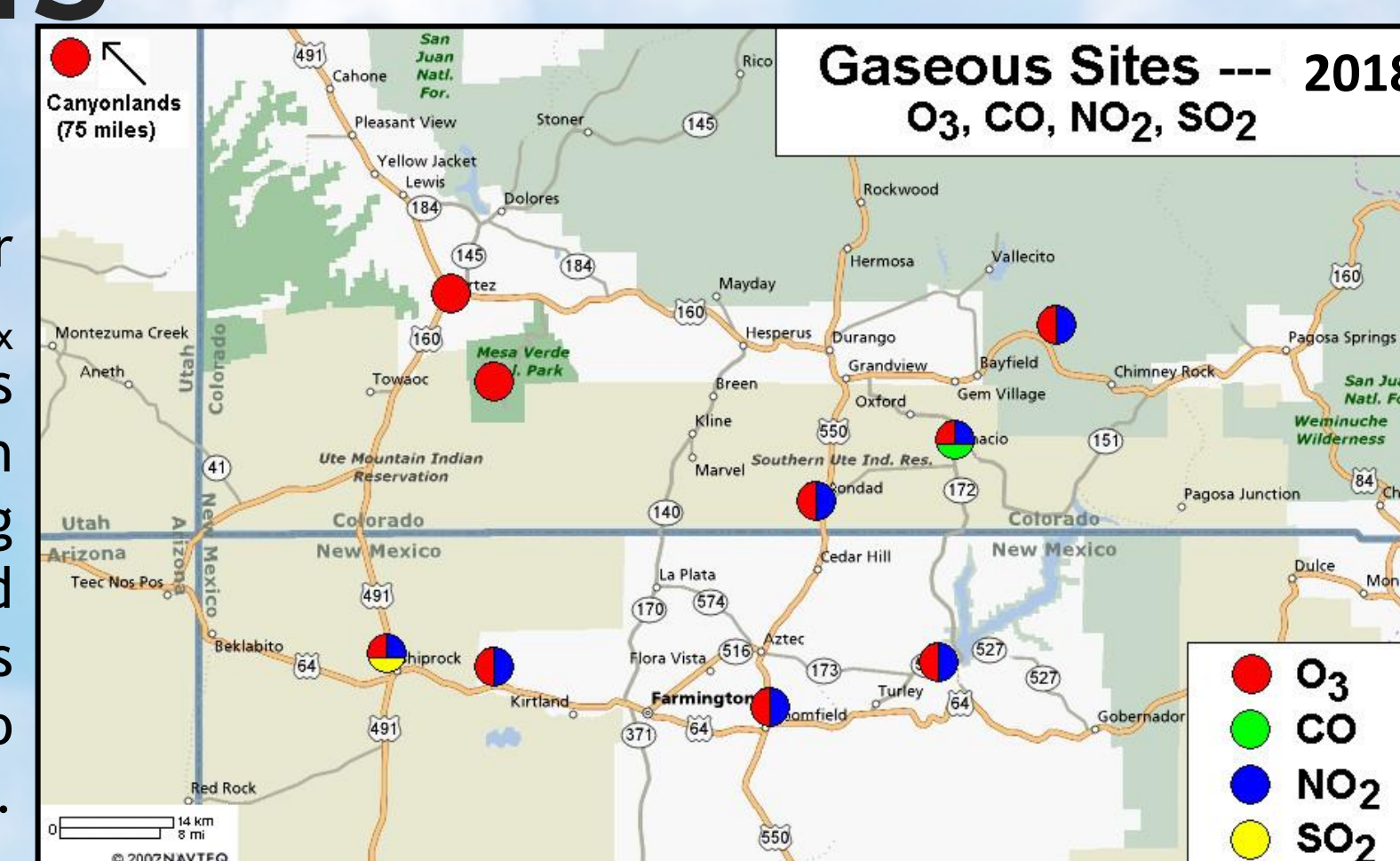
<https://www.colorado.gov/cdphe/western-colorado-regional-air-quality-collaboration>

### Ozone/NO<sub>x</sub> Regional Trends

#### Nitrogen Oxides (NO<sub>x</sub>)

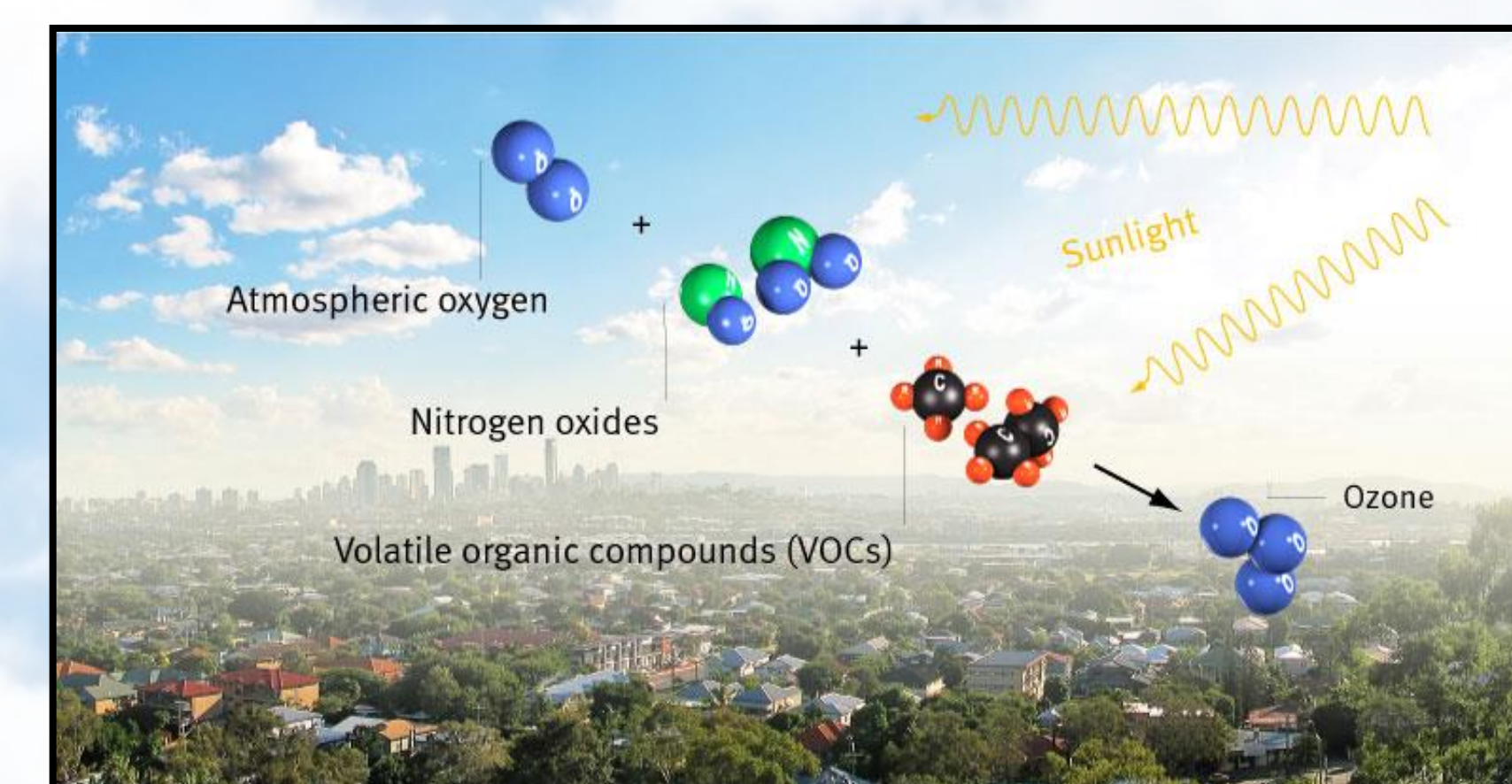
- Primarily nitrogen dioxide (NO<sub>2</sub>) and nitric oxide (NO). Plays a major role in ozone formation (“ozone precursor”) particulate matter, haze and acid rain.
- Health effects: increase in respiratory problems, causes symptoms in asthmatics & increases susceptibility to respiratory infections.
- Significant sources including: burning fuel in automobiles, industrial engines and power plants.

This map shows the air monitors from which the NO<sub>x</sub> and ozone trend data was collected. CDPHE works with federal partners including the U.S. Forest Service and the National Park Service as well as other states to compile this data.



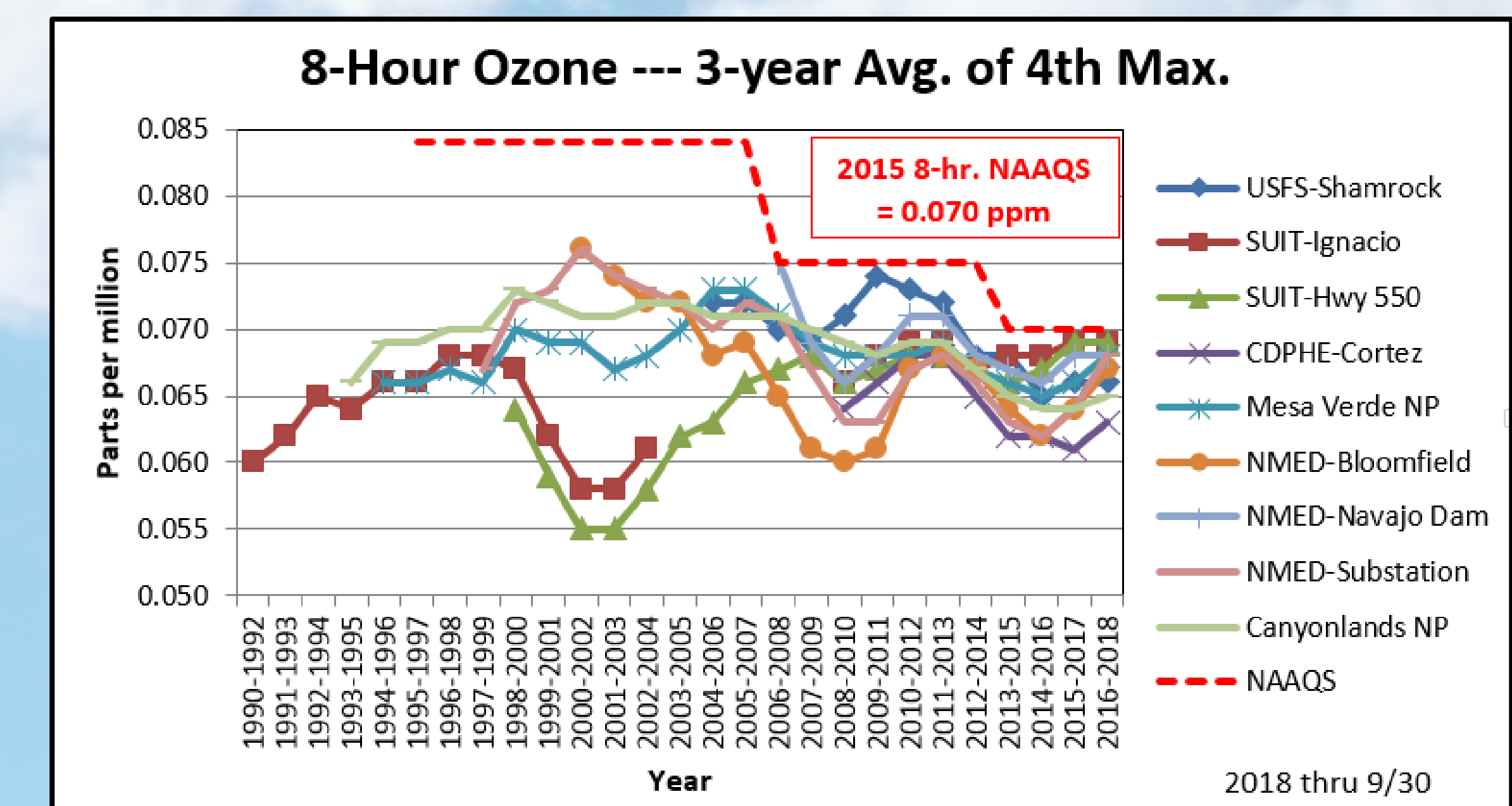
#### Ozone:

- Formed through interaction between volatile organic compounds (VOCs) & nitrogen oxides (NO<sub>x</sub>) in presence of sunlight. Colorless and odorless at ambient concentrations. Typically not emitted from individual sources directly.



- Highest ground-level ozone concentrations usually occur in the summer when hot, still days cause reactive pollutants to form ozone. However, high ozone levels have been observed in winter in areas with high oil and gas production activities.

- Health effects: causes breathing difficulties & respiratory infections in the elderly, the young & those with preexisting ailments such as asthma. Can cause premature mortality. Healthy people who exercise or work outdoors can experience respiratory effects from ozone.



- Significant sources include emissions from motor vehicles, industry, oil and gas production, and vegetation contribute to ozone formation.