



OAQPS Technical Updates

Richard “Chet” Wayland
EPA Office of Air Quality Planning & Standards
NACAA Spring Meeting
May 19, 2020

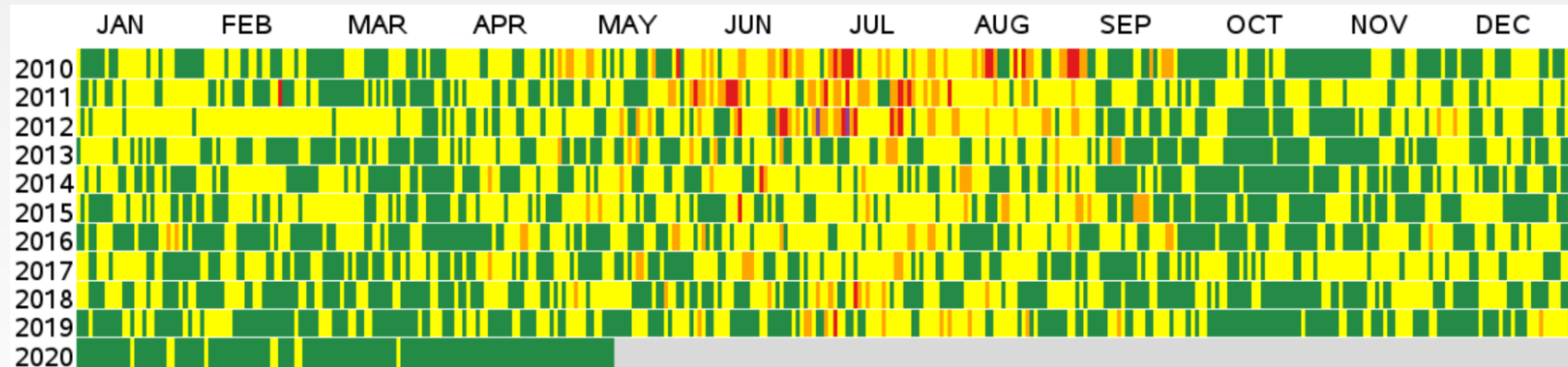
COVID-19 Response

- Initial response was to clarify that during an emergency or Continuity of Operations Plan (COOP), **ambient air monitoring programs are a mission essential function** and should continue unless state, local, or tribal (SLT) directives prohibit their operation
 - ***Memo: “Ambient Air Monitoring Programs Continuity of Operations Associated with the COVID-19 Response” (March 18, 2020)***
- In response to questions from SLT agencies concerning monitoring priorities during COVID-19, we provided input to consider when balancing mission essential functions of ambient air monitoring with local orders and the health and safety of employees
 - ***Memo: “EPA Input on Ambient Air Monitoring Priorities in the Absence of Monitoring Agency Priorities During the COVID-19 Response” (March 30, 2020)***
- EPA recognized that the COVID-19 response was straining many air monitoring agency resources and, in some cases, limited access to monitoring sites
 - Biggest reductions in site shutdowns were associated manually operated sites such as CSN, Improve, PM2.5 and some air toxics sites (< 5% of total sites)
 - Most continuous monitors continued to operate
 - Worked to provide flexibility in QA schedules

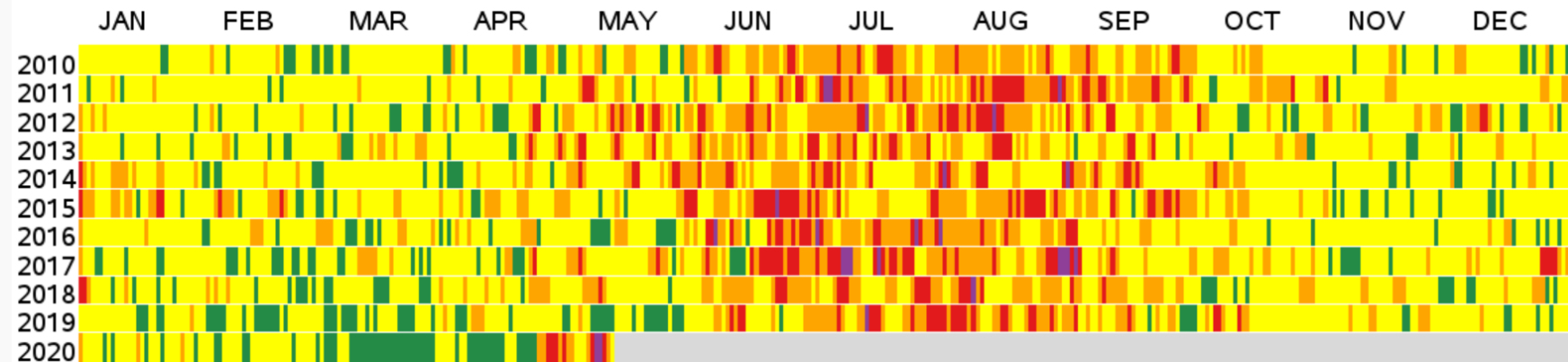
Air Quality in 2020 – AQI Tile Plots

<https://www.epa.gov/outdoor-air-quality-data>

Daily AQI Values, 2010 to 2020
Washington-Arlington-Alexandria, DC-VA-MD-WV

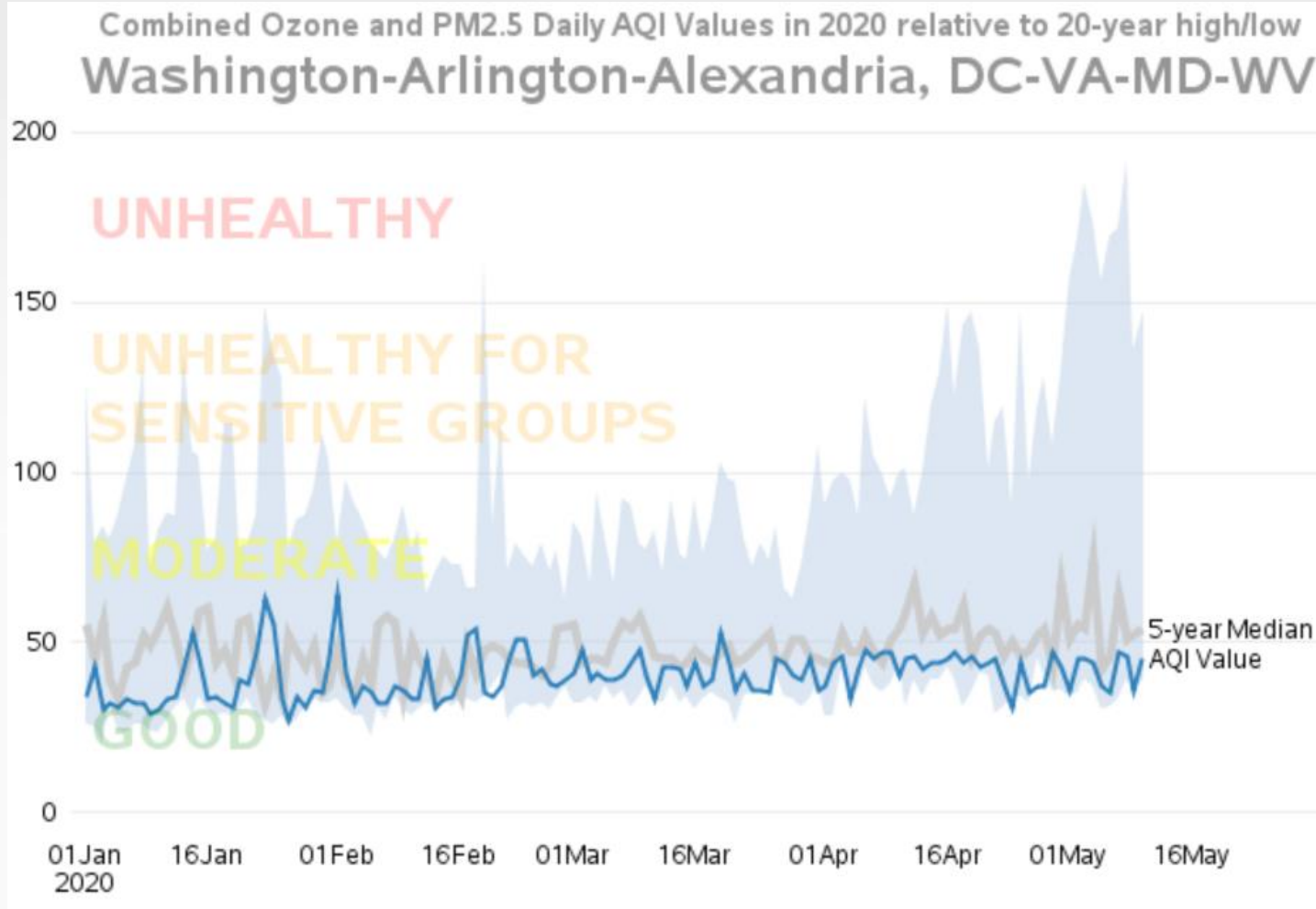


Daily AQI Values, 2010 to 2020
Los Angeles-Long Beach-Anaheim, CA



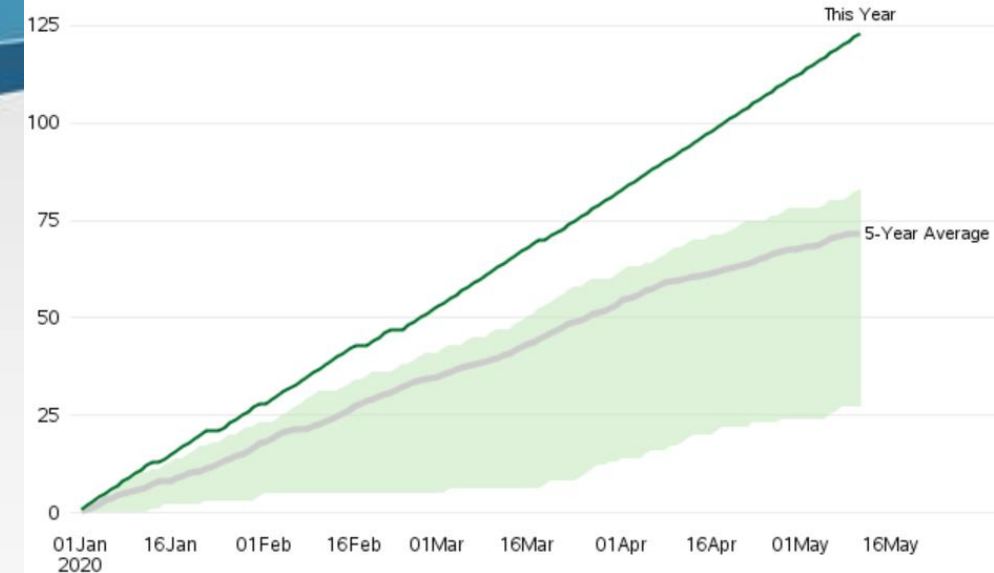
Daily AQI vs last 20 years

<https://www.epa.gov/outdoor-air-quality-data>



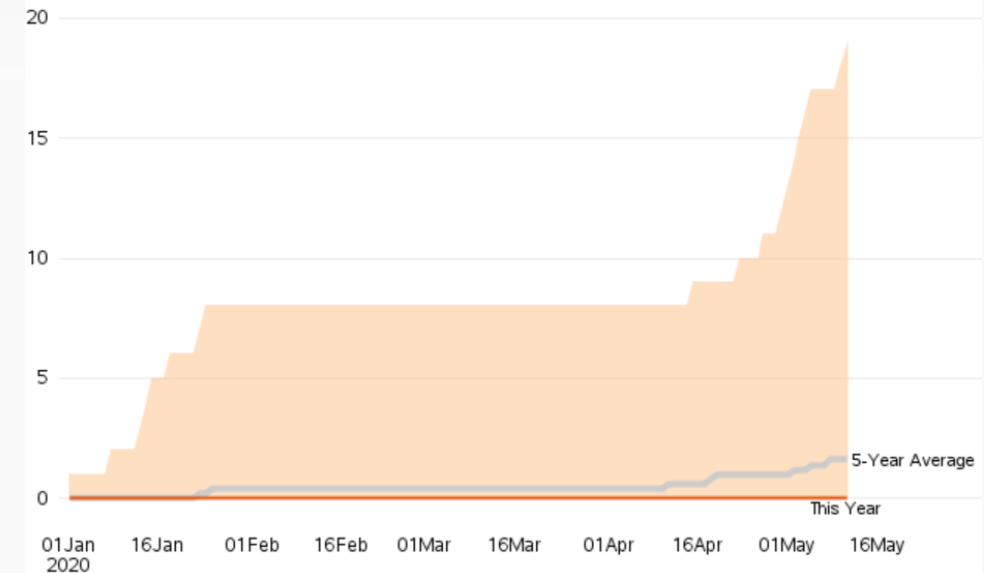
Cumulative Number of Good AQI Days (AQI<50)

Washington-Arlington-Alexandria, DC-VA-MD-WV



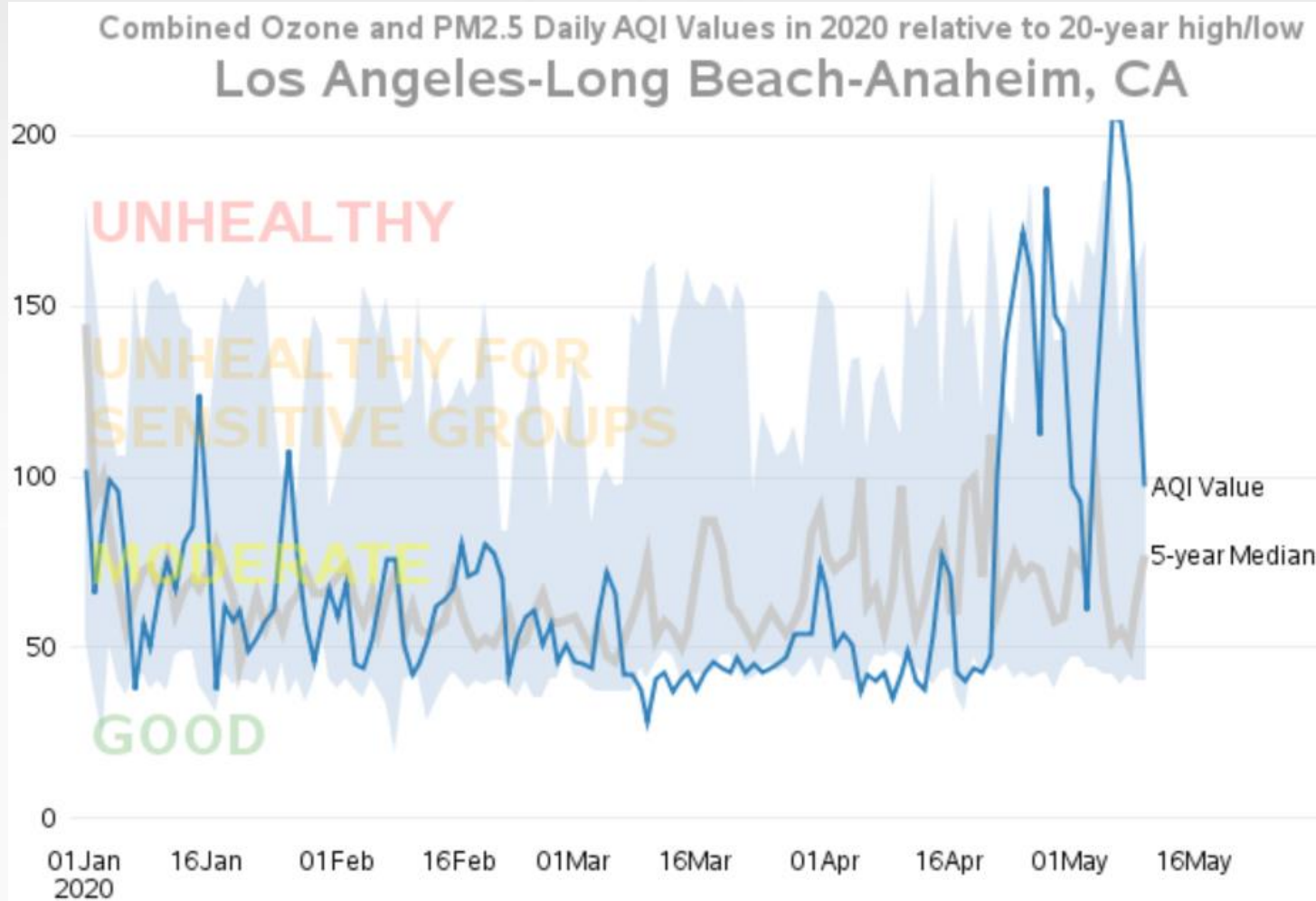
Cumulative Number of AQI Days >100

Washington-Arlington-Alexandria, DC-VA-MD-WV



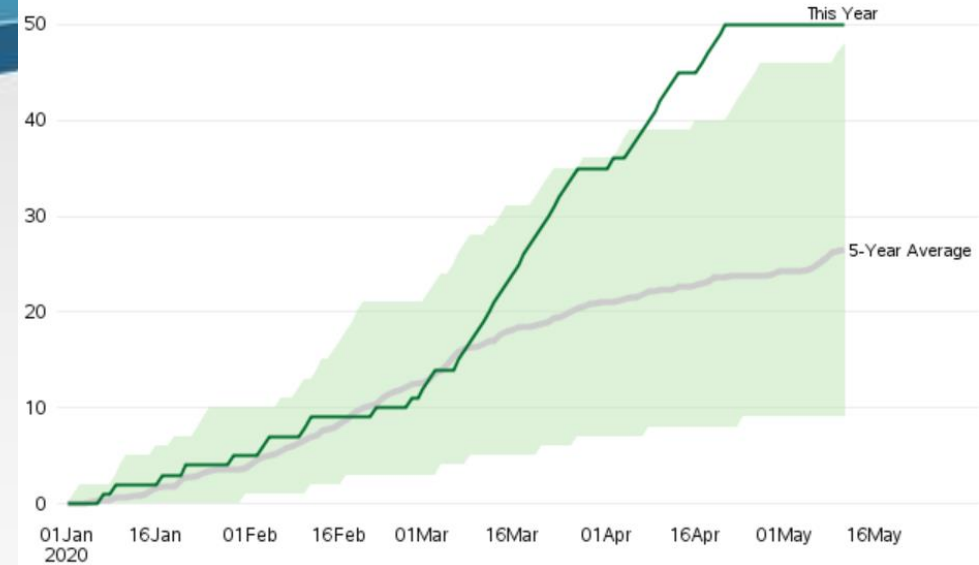
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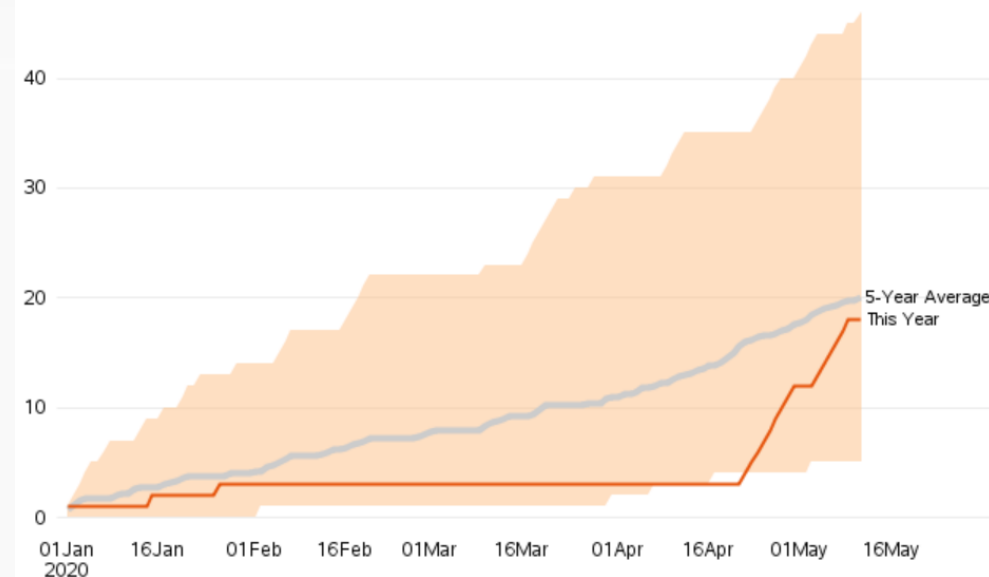
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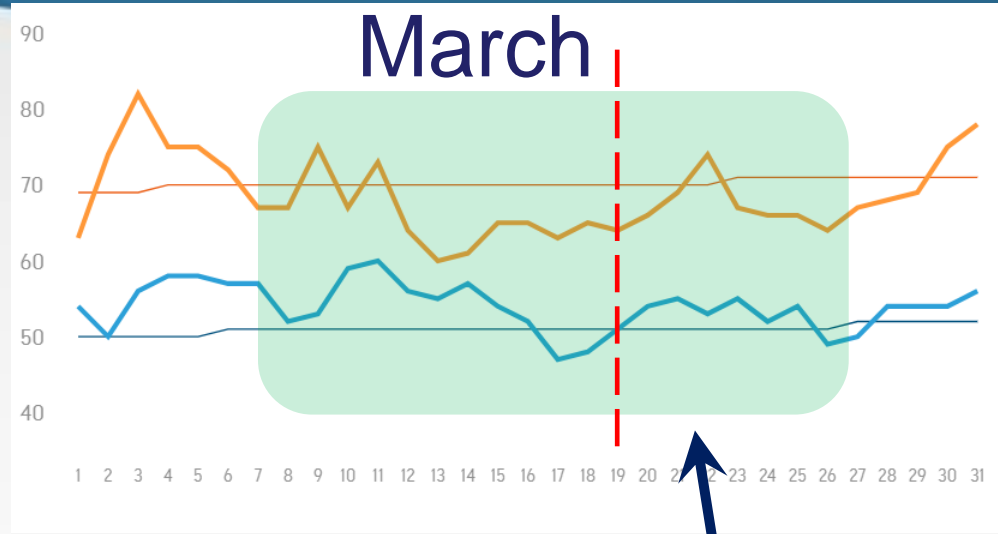


Cumulative Number of AQI Days >100

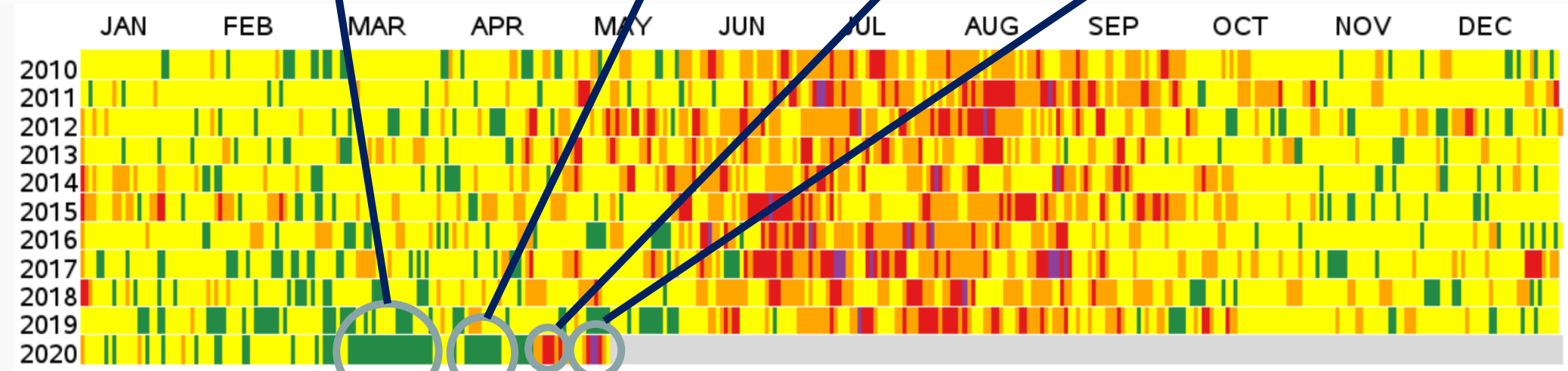
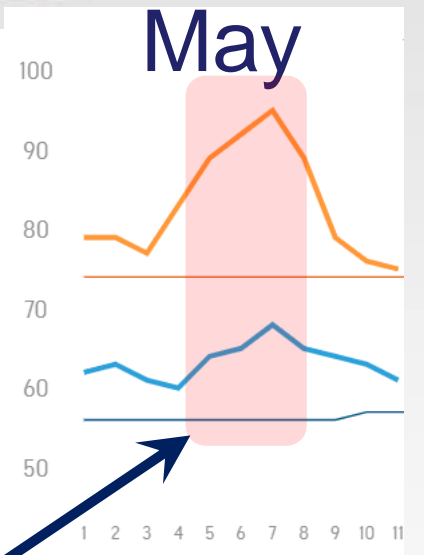
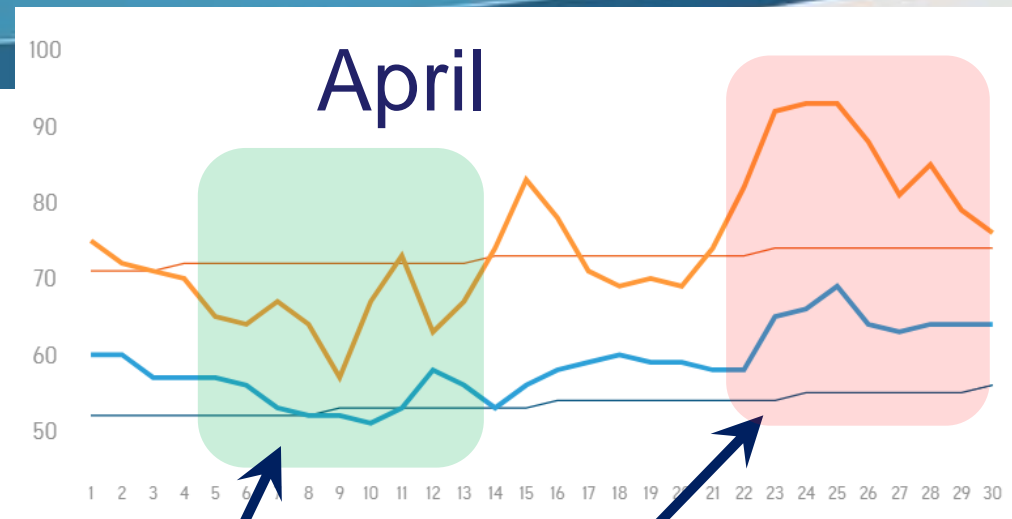
Los Angeles-Long Beach-Anaheim, CA



Temperature: Los Angeles



Average Hi Actual Hi Average Lo Actual Lo





Ambient Monitoring Updates

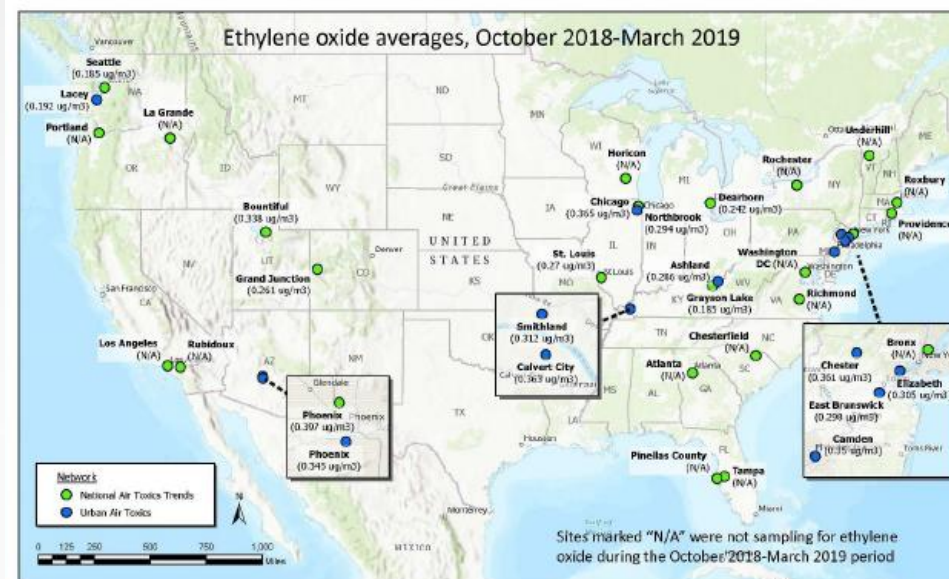
Ambient Air Monitoring Updates

- NAAQS Reviews for PM and Ozone
 - No planned monitoring or QA/QC changes at this time
- Community-Scale Air Toxics Ambient Monitoring (CSATAM) Grants Competition
 - Application date closed May 1, 2020
 - Received 34 applications
- Annual Monitoring Network Plans and Network Assessments
 - Due July 1, 2020
 - Work with your Regional Office if there are challenges to submitting on time
- 2020 National Ambient Air Monitoring Conference
 - August 9-13, 2020 in Pittsburgh, Pennsylvania
 - <https://www.epa.gov/amtic/2020-national-ambient-air-monitoring-conference>
- PAMS Final Rule Change
 - Revision extends start date to June 1, 2021

Air Toxics Monitoring Update

- Reported initial ethylene oxide (EtO) ambient data from NATTS through March 2019 – additional data being validated for reporting this spring
- Current work to train additional state and local NATTS labs on EtO analytical methods
- Ongoing research to improve EtO methods for source, near-source, and ambient applications. Looking for improved sensitivity and real-time measurements.
- Working with state and local partners to add two new sites to NATTS – replacing sites discontinued in 2018

National Air Toxics Trends and Urban Air Toxics monitoring sites



<https://www.epa.gov/hazardous-air-pollutants-ethylene-oxide/ethylene-oxide-data-summary-national-air-toxics-trends>



Sensor Updates

Ongoing Sensor Work

- **Data Quality**

- Evaluation protocols and performance targets for O₃ and PM_{2.5} are drafted and in review
- Literature review report and workshop summary for additional pollutants (NO₂, SO₂, PM₁₀, and CO) have been drafted and submitted for publication
- Sensors best practices document is being updated

- **Data Interpretation & Management**

- Actively working with State organizations and private companies on communication of air quality information including planning a second AQ Exchange Workshop and analyzing screen shots of various public facing websites

- **Air Sensors International Conference (ASIC) 2021**

- Rescheduled for April 27-30, 2021 at the Pasadena Convention Center
- A virtual series of presentations will be offered this summer – one hour long each with 15 minute presentations



Emission Inventory Updates

2017 National Emissions Inventory

Release	Includes	Notes
August 2019	Point sources	Includes airports
February 2020	Point update Nonroad mobile Wildfires and Rx burning	Added rail yards, offshore, and other to point
April 2020 (Complete)	Point update (minor) Fires update (minor) Onroad mobile Nonpoint	Nonpoint includes biogenics, commercial marine, and rail lines
TBD	Point update	Ethylene oxide update

Combined Air Emissions Reporting

- February: Completed Minimal Viable Product (MVP) features
- March: MVP testing and documentation review
 - By EPA, Georgia staff, and pilot facilities
 - Fixing any problems found before deployment
- April: Production release to report 2019 emissions
 - Help desk deployed
 - About 125 facilities in Georgia
 - Supports NEI and TRI workflows
- May and beyond
 - Additional co-regulator features
 - Additional emissions programs
 - Additional states, locals, and tribes

2016 Platform Updates

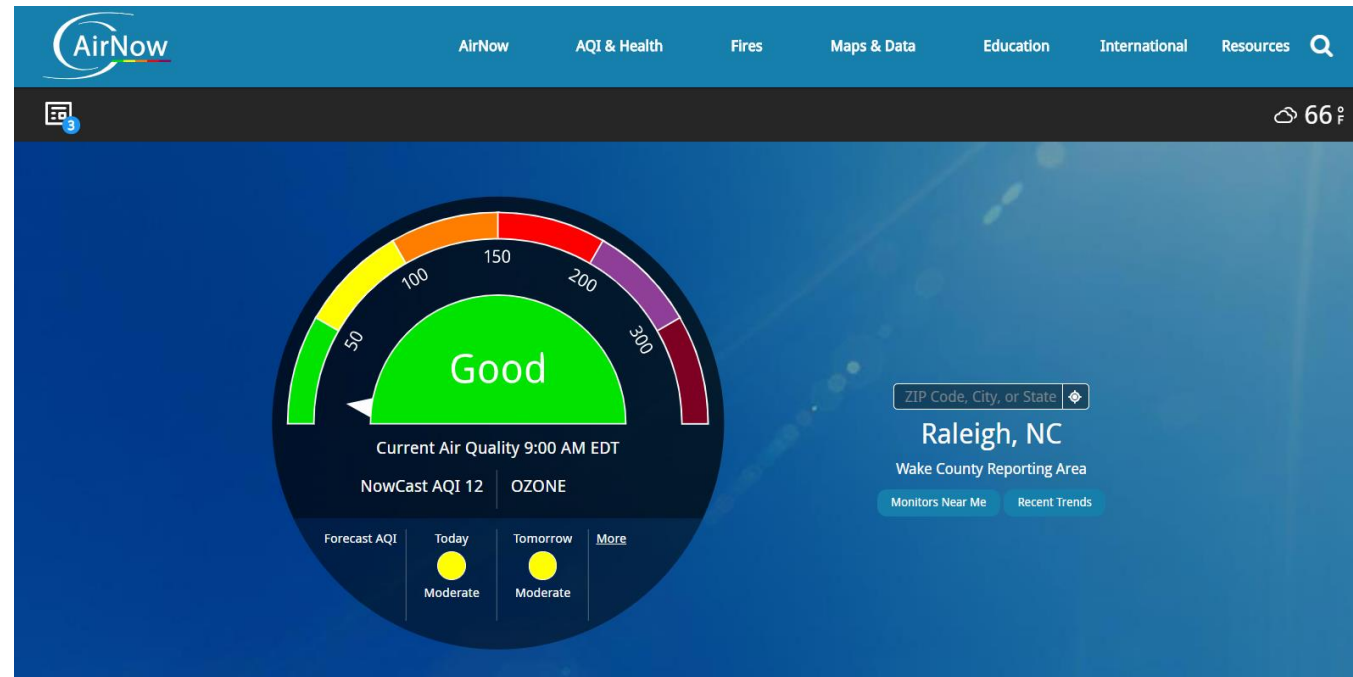
- The platform is available on the IWDW:
<http://views.cira.colostate.edu/wiki/wiki/10202>
- Commercial marine vessel (CMV) inventories updated in January, 2020 for stationary ships (i.e., “hoteling”) and days of the week
- Summary reports and the new CMV emissions are available on the EPA emissions modeling FTP site:
<ftp://newftp.epa.gov/air/emismod/2016/v1/>
- EPA reviewed WRAP oil and gas base and future inventories and prepared a “plug-in” package for the IWDW
- January 2020 Power Sector Modeling IPM reference case available, including inventories:
<https://www.epa.gov/airmarkets/clean-air-markets-power-sector-modeling>



AIRNow Update

AirNow.gov – Updated Website

- Updated site went live April 15th
- Mobile friendly, operates on cloud architecture
- Redesigned to be more user focused



Updated AirNow App

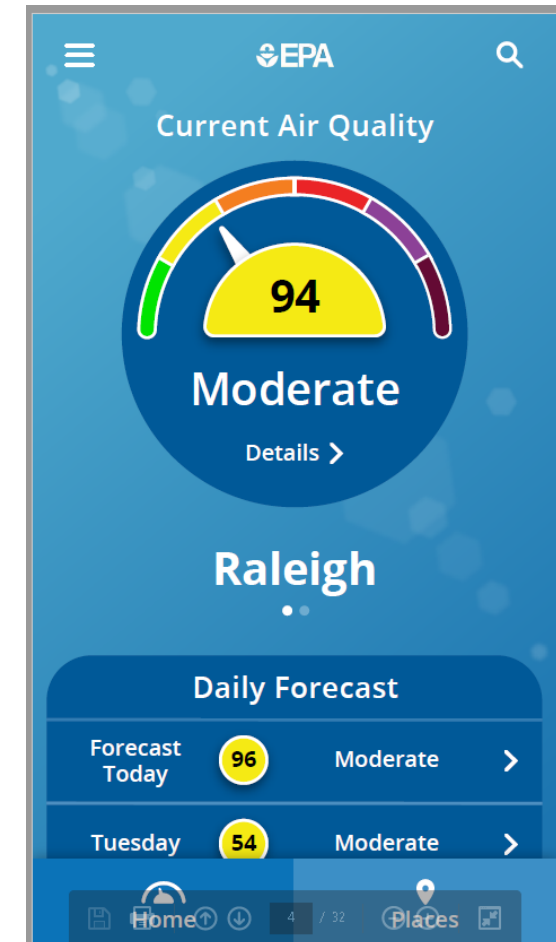
New App Features

- Will be added in phases starting this Spring and into late summer/ early Fall

Spring Update

- New look and feel experience
- Air quality for the most recent hour at user-customized location
- Ability to save multiple locations
- Daily forecasts
- Actions and “plan your day” messages
- Help and definitions for air quality information

Updated App





AirNow Sensor Data Pilot

- Partnership between EPA and the US Forest Service (USFS)
- Interactive map layer that integrates publicly available PM 2.5 data from Purple Air sensors with AirNow monitoring data and (during wildfires), USFS temporary monitor data and smoke information
 - Goal to provide broader coverage during wildfires,
 - Adjustment factor and NowCast will be applied
- Expect to have password-protected national map for state evaluation this summer
- Plan to make publicly available on AirNow for states that agree to have the sensor data included for their state
- Will be scheduling webinars shortly to walk you through the pilot, answer questions and get your feedback



Woodstove Rulemaking and Test Method Update

Notice of Proposed Rulemakings NRPM & ANPRM

November, 2018

- **NPRM:**

- Proposed the addition of a “sell-through” period for Step 1 compliant hydronic heaters and forced-air furnaces manufactured before May 2020.
- Solicited comment on whether a “sell through” period is appropriate for wood heaters (wood stoves and pellet stoves) manufactured before May 2020.
- Solicited comment on whether the minimum pellet fuel requirements should be retained, revised, or eliminated.

- **ANPRM:**

- Solicited comment on a number of compliance test issues including:
 - Cordwood compliance test approach
 - Emissions standard appropriateness for Wood heaters, Hydronic heaters and Forced-air furnaces
 - Audit testing
 - Electronic Reporting

Current Status of NPRM:

- NPRM:
 - On March 11th the Administrator signed the final amendments to the 2015 NSPS. These amendments were published in the Federal Register on April 2, 2020 (85 FR 18448)
 - Deleted the pellet fuel minimum requirements, but retained the prohibited fuels list in the regulation for clarity and continuity;
 - Clarified that the determination of moisture content is made at the end of the manufacturing process, and the prohibition on unseasoned wood does not prohibit the use of unseasoned wood earlier in the pellet fuel manufacturing process; and
 - Decided to not provide a sell-through period, which would have allowed retailers additional time to sell certain wood heating devices beyond the May 2020 compliance date.
 - On March 24th 2020 the Hearth, Patio and Barbeque Association (HPBA) petitioned the Agency for relief from the May 15th date due to impact from COVID-19, and this is currently under review by the Agency.

Current Status of the ANPRM

- ANPRM:
 - EPA has reviewed the comments received on the ANPR and intends to address those comments, and associated issues, when we undertake the next NSPS review which is due in 2023. EPA is also:
 - Undertaking work with stakeholders to develop and characterize a cordwood test method and Integrated Duty Cycle fueling protocol;
 - Undertaking work to develop and characterize a new PM measurement technique for wood burning appliance certification testing; and
 - Collecting sufficient precision and variability test data for this method/protocol; and
 - Continuing to incorporate the Electronic Reporting Tool (ERT) for test report submittals.
 - New test method development timeline is several years and expected completion dates vary with availability of funding and availability of supporting data from stakeholders.