

# Clean Air Act Advisory Committee Meeting

May 20, 2020

12:45 – 5:15

# Meeting Agenda

- **Opening Session** **12:45 – 1:00**
  - **DFO opening statement Welcome by Chair/Other, Introductions**
- OAR Overview & Update on Priorities 1:00– 1:45
- OAR Regulatory Updates 1:45 – 2:45
- Break 2:45 – 3:00
- COVID-19 impacts, response and air issues 3:00 – 4:00
  - Air Trends, Indoor Air, Connecting with Partners and Stakeholders
- Air Now Relaunch 4:00 – 4:30
- 50<sup>th</sup> Anniversary of the Clean Air Act 4:30 – 5:00
  - Organization and discussion of future CAAAC report
- Public Comments 5:00 – 5:15

## Reminders for Using Teams

- We will mute your line to start
- Please
  - Keep your line muted unless called on to speak
  - Do not use your computer's camera unless speaking or needed
  - Please disconnect from a VPN while connected to this call
  - Use the chat function to “raise your hand”, if you have a question or a comment
  - If you are having trouble with sound quality, you can try to reconnect or call in. There is a phone number on the invite or you can ask Teams to call you.

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**Regulatory Update:  
Office of Air Quality Planning & Standards**

Michael Koerber

May 20, 2020



# Office of Air Quality Planning and Standards

Peter Tsirigotis, Office Director

## Quick Facts

- Regulatory “engine” of the Air Office – set air and emission standards
- Technical experts on stationary sources, air quality data, health and environment, and implementation
- Partner with states and tribes to achieve the goals of the Clean Air Act to protect public health

# 2020 Accomplishments and Upcoming Actions

## **National Emission Standards for Hazardous Air Pollutants**

- Risk and Technology Reviews: Finalized for 20 source categories; Upcoming actions for 16 source categories
- Ethylene Oxide: Developing proposal for commercial sterilization facilities; Supporting state-led efforts for higher risk areas/facilities

## **New Source Performance Standards**

- Oil & Natural Gas: Developing final action for Technical Package and Policy Package
- Woodheaters: Finalized amendments (March 11); Issued proposed sales period extension (May 15); Held test method workshop (January 15)

## **National Ambient Air Quality Standards**

- Particulate Matter: Issued proposed review (April 14)
- Ozone: Developing proposed review
- NO<sub>x</sub>/SO<sub>x</sub> Secondary: Working on draft policy assessment/risk exposure analysis

# 2020 Accomplishments and Upcoming Actions

## **AirNow Relaunch (April 15)**

## **Air Monitoring**

- Grants: Community Scale Air Toxics Monitoring Grants (February 13 – May 1); Targeted Airshed Grants (Nov 22 – April 10)

## **Emissions Inventories**

- Issued final 2017 NEI (April 30)
- Continued work on Combined Air Emissions Reporting

## **Air Trends Report**

# 2020 Accomplishments and Upcoming Actions

## **Permitting**

- Title V Permits: Issued final petitions rule (January 14); Issued orders in responded to petitions
- New Source Review: Finalized/proposed guidances (Adjacent, Ambient Air, Begin Actual Construction, Plant-wide Applicability Limits); Proposed/developing rules (NSR Error Corrections, Biogenic CO<sub>2</sub>, Project Emissions Accounting, 2007 Ethanol Rule Reconsideration, 2008 Fugitive Emissions Rule Reconsideration)

## **State Implementation Plans**

- SIPs Acted On, SIPs Acted On in 18 Months
- Reduced SIP Backlog
- Reduced Number of Nonattainment Areas

Clean Air Act  
Advisory  
Committee

May 20, 2020

**Benjamin Hengst**

Associate Director, Office of  
Transportation and Air Quality

# OTAQ Update



## Topics

- Regulatory actions: engines/vehicles
- Regulatory actions: fuels
- Other areas

# Light Duty Vehicles/Engines

Action	Description	Milestone Targets
<b>The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Passenger Cars and Light Trucks</b>	Rulemaking to revise MY2021 – MY2026 vehicle GHG standards, changes to California vehicle waiver	Final Rule Part 1, published 9/27/2019  Final Rule Part 2, published 4/30/2020
<b>Light-Duty Vehicle GHG Program Technical Amendments</b>	Action to correct errors in EPA regulations from program promulgated in 2012.	NPRM issued October 2018  Final Rule published 4/23/2020
<b>Vehicle Test Procedure Adjustments for Tier 3 Test Fuel</b>	Adjustments to EPA GHG and NHTSA CAFE test procedures to account for change to Tier 3 gasoline certification test fuel	NPRM published 5/13/2020  Comment period closes 8/11/2020
<b>F-factor guidance for MY 2020 and later flex-fueled vehicles (FFVs)</b>	The F-factor is used as part of the calculations to determine an automaker’s fleet average compliance with vehicle greenhouse gas standards (the f-factor weights emissions of E85/gasoline dual-fueled vehicles)	Target: issue guidance with proposed value this summer

# Heavy Duty Vehicles/Engines

Action	Description	Milestone
<b>Improvements for Heavy-Duty Engine and Vehicle Test Procedures, and other Amendments</b>	Rulemaking to propose changes to the test procedures for heavy-duty engines and vehicles to improve accuracy and reduce testing burden.	NPRM signed 3/16/2020  Comment period closes 6/26/20
<b>Cleaner Trucks Initiative</b>	Rulemaking to revise EPA emission standards for highway heavy-duty engines & vehicles	ANPRM published 1/21/2020  NPRM to be issued later this year

# Marine

Action	Description	Milestone Targets
<b>Amendments Related to Global Marine Fuel</b>	Technical amendment to diesel fuel regulations to allow distribution of 5,000 ppm S distillate marine fuel in the U.S., consistent with IMO 2020 std.	NPRM published September 2019  Final Rule issued December 2019
<b>Amendments Related to Marine Diesel Engine Emission Standards</b>	Action to amend regulatory schedule for smallest power category of Tier 4 marine standards to provide additional lead time or other accommodations.	NPRM published September 2019  Final rule currently at OMB for interagency review

# Aircraft

Action	Description	Milestone Targets
<b>Control of Air Pollution From Aircraft and Aircraft Engines: Proposed GHG Emissions Standards and Test Procedures</b>	<p>This rulemaking follows on the EPA's final endangerment and cause or contribute findings for aircraft GHG emissions, which was published on August 15, 2016. As a result of these positive findings, the EPA is obligated under section 231 of the Clean Air Act to set emission standards applicable to GHG emissions from the classes of aircraft engines used in certain types of aircraft covered in the finding.</p>	<p>NPRM currently at OMB for interagency review</p>
<b>Advancing Clean Aircraft Engines and Reforming Test Procedures (Aircraft PM)</b>	<p>This rulemaking follows on the International Civil Aviation Organization (ICAO) agreement on the first-ever international particulate matter (PM) emission standards for commercial aircraft engines in February 2019.</p>	<p>NPRM TBD</p>

# Fuels



# Regulatory Actions: Fuels

Action	Description	Milestone Targets
<b>2020 Renewable Fuel Volume Annual Standards Rule</b>	Rulemaking to put in place the renewable fuel obligations for the 2020 Calendar Year.	NPRM – July 2019 Supplemental – Oct 2019  Final rule signed December 2019
<b>2021 Renewable Fuel Volume Annual Standards Rule</b>	Rulemaking to put in place the renewable fuel obligations for the 2021 Calendar Year.	NPRM currently at OMB for interagency review  Final rule due Nov. 30, 2020
<b>Fuels Streamlining Rule</b>	Purpose of rule: update EPA's existing gasoline, diesel, and other fuels regulations to help reduce compliance costs for industry as well as EPA, while improving overall compliance assurance and maintaining environmental performance	NPRM – published 5/14/2020  Comment period closes 6/29/2020  Target date for final rule: end of 2020

# Fuels: other

- Litigation
  - Challenges to national actions (E15 rule, 2019 RVO rule, 2020 RVO rule, others)
  - Multiple challenges to small refinery exemptions
- Various petitions currently before EPA
- Other items

# Recent and Upcoming DERA Funding Opportunities

## National Program

- FY 19: More than \$50 million awarded to 43 projects
- FY 20: ~\$44 million in funding. 139 applications were received by the deadline. Awards will be made in the fall

## State Program

- FY 19: \$22.5 million to 53 participating states
- FY 20: ~\$24 million to 52 participating states. Awards will be finalized in the fall

## Tribal Program

- FY 18 / 19: \$2.5 million awarded to 8 projects
- FY 20: RFA offering \$2 million is currently open. Applications are due by July 9

## School Bus Rebates

- FY 19: \$11.5 million in DERA funding to replace 580 older diesel school buses
- FY 20: Expected in the fall

# EPA's Ports Initiative



- Recently released:
  - Updated port and goods movement inventory methods (draft available for use)
  - Updated community-port collaboration tools (Ports Primer, Community Action Roadmap, EJ Primer)
- Stay tuned:
  - Operational strategy factsheets
  - In-depth case study on Clean Air Plan for Ports of Los Angeles and Long Beach
  - Fuel cell technology assessment
  - Enhanced best practices area of website, including interactive map highlighting clean air practices at major ports (emissions inventories, DERA projects, and more)

**Thank you.**



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# OAQPS Air Monitoring & Air Quality Update

Richard “Chet” Wayland  
EPA Office of Air Quality Planning & Standards  
CAAAC Meeting  
May 20, 2020

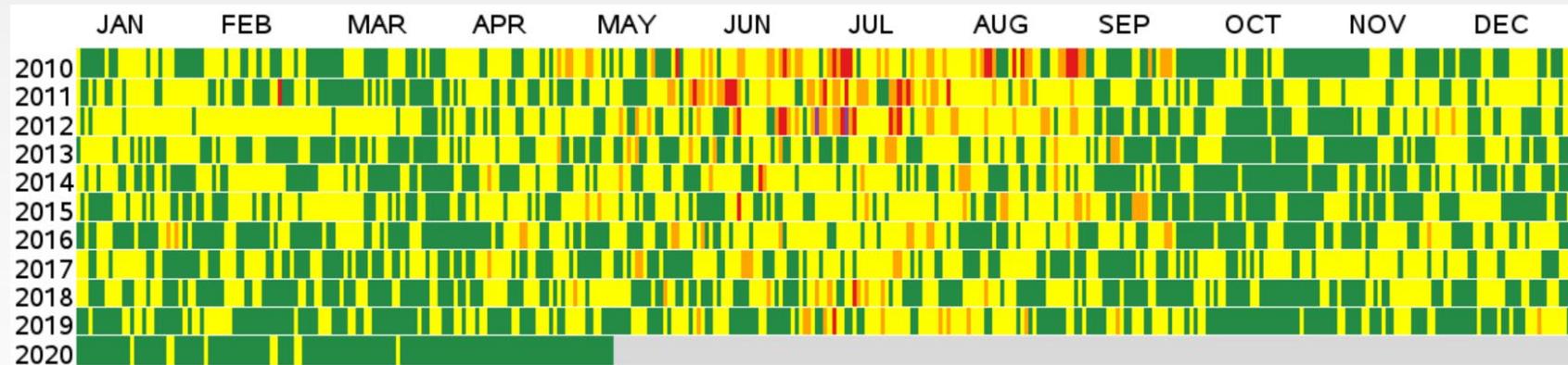
# COVID-19 Response

- 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

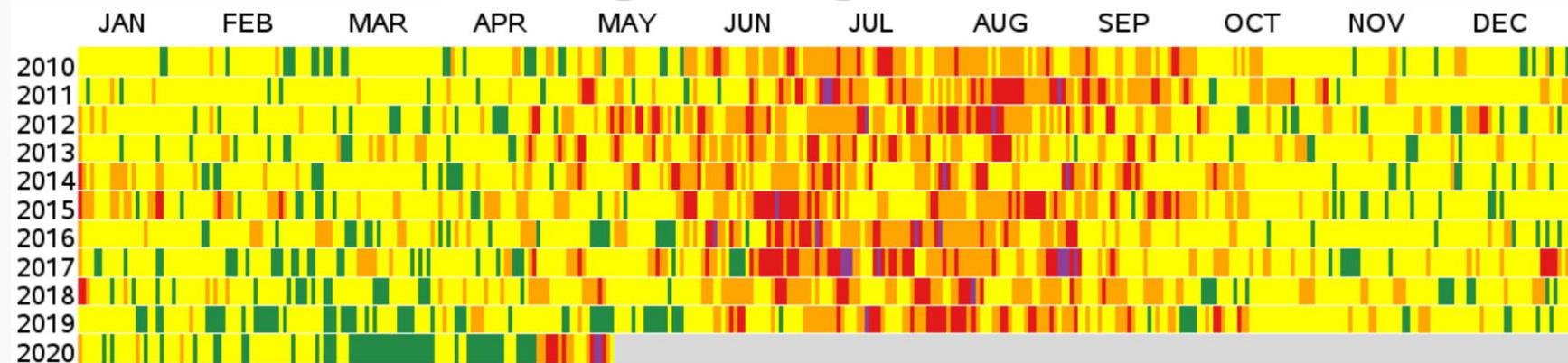
# Air Quality in 2020 – AQI Tile Plots

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

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

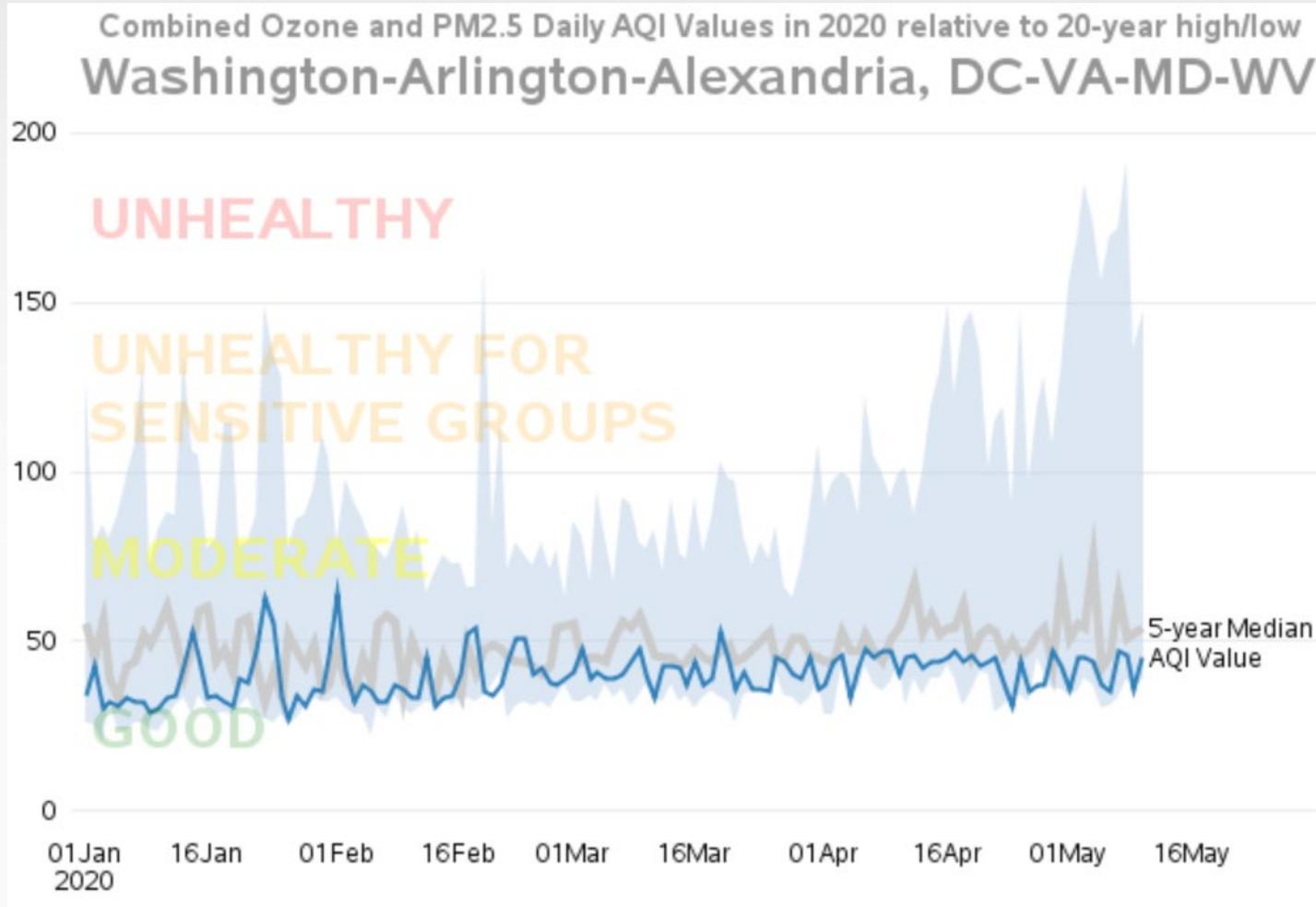


Daily AQI Values, 2010 to 2020  
Los Angeles-Long Beach-Anaheim, CA



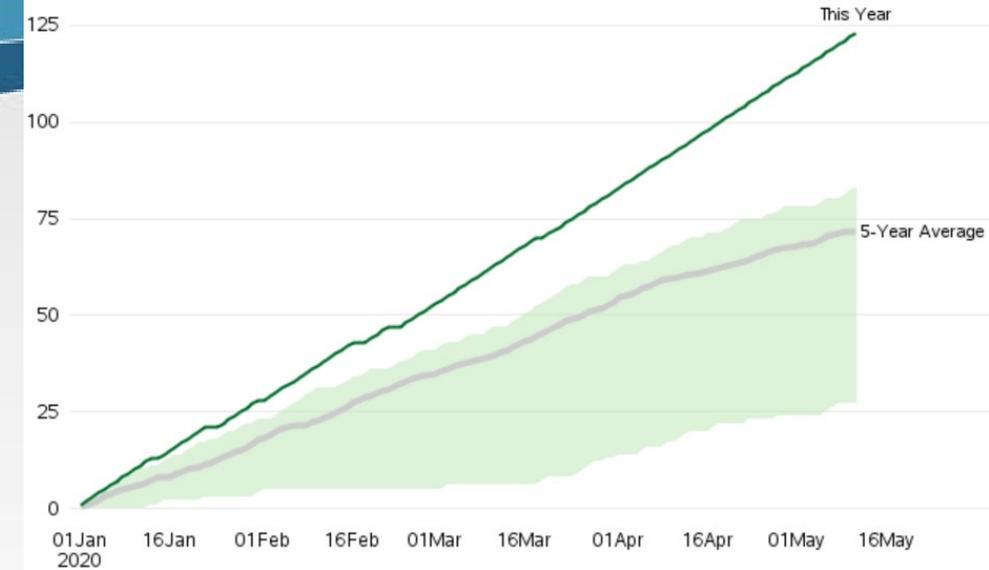
# Daily AQI vs last 20 years

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



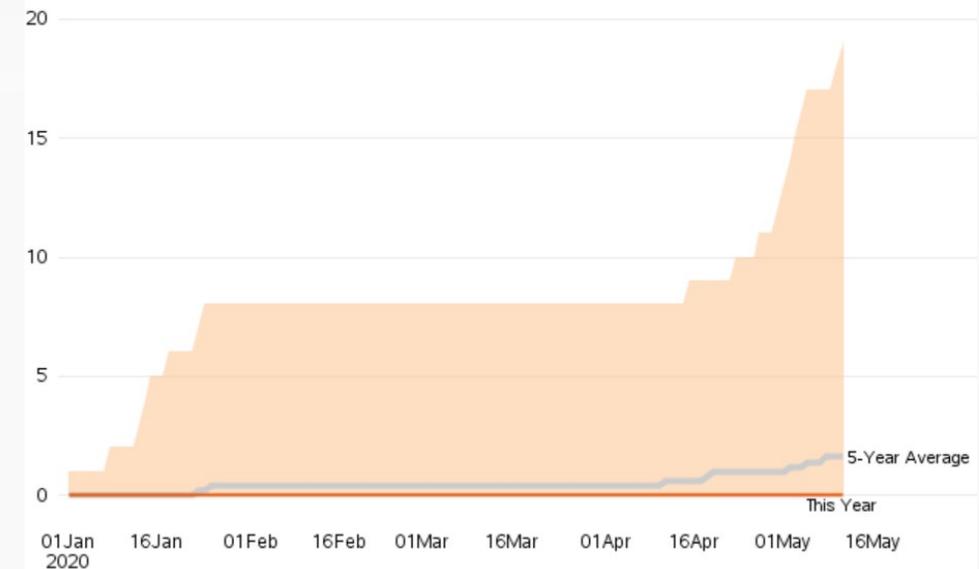
## Cumulative Number of Good AQI Days (AQI<50)

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



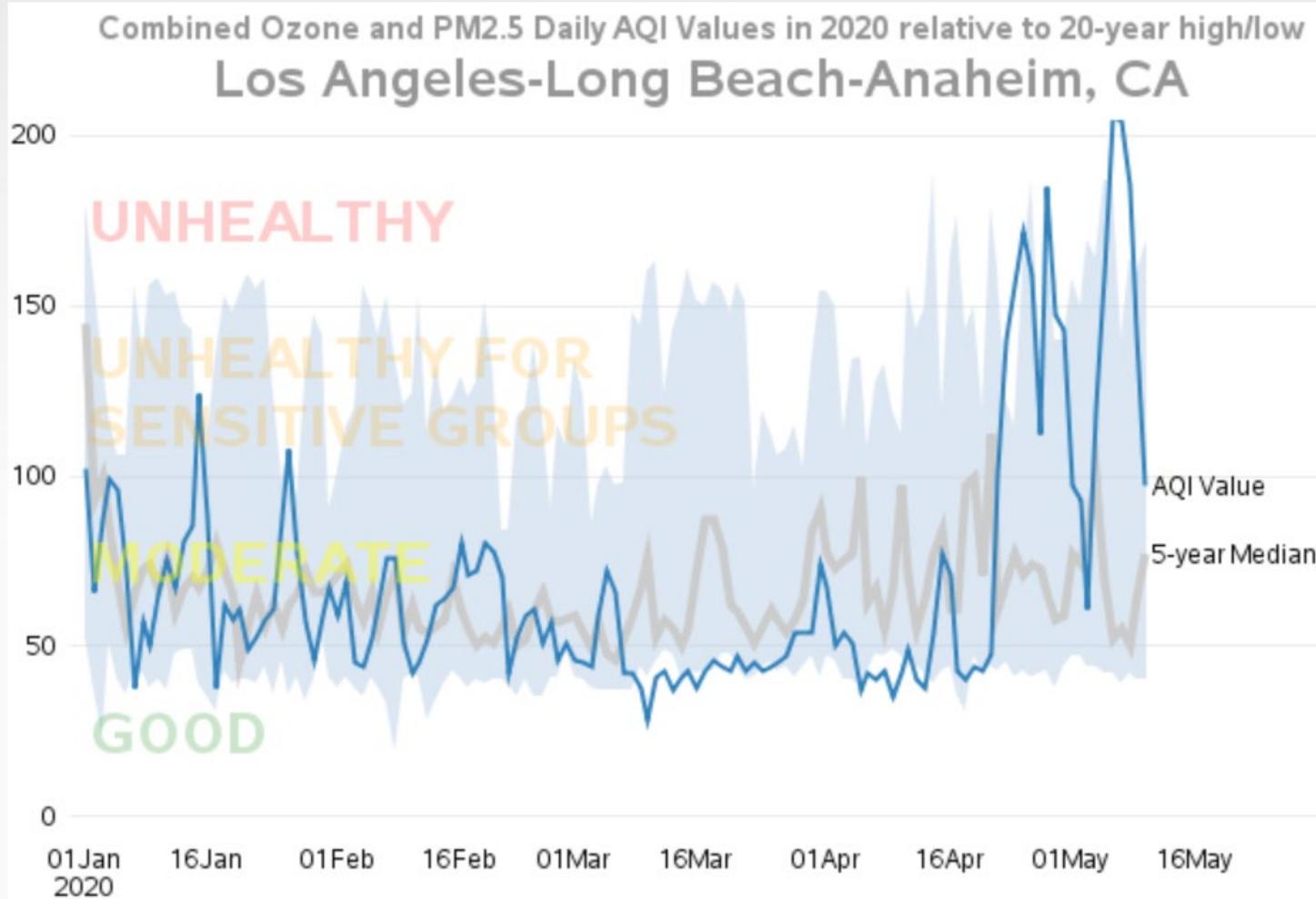
## Cumulative Number of AQI Days >100

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



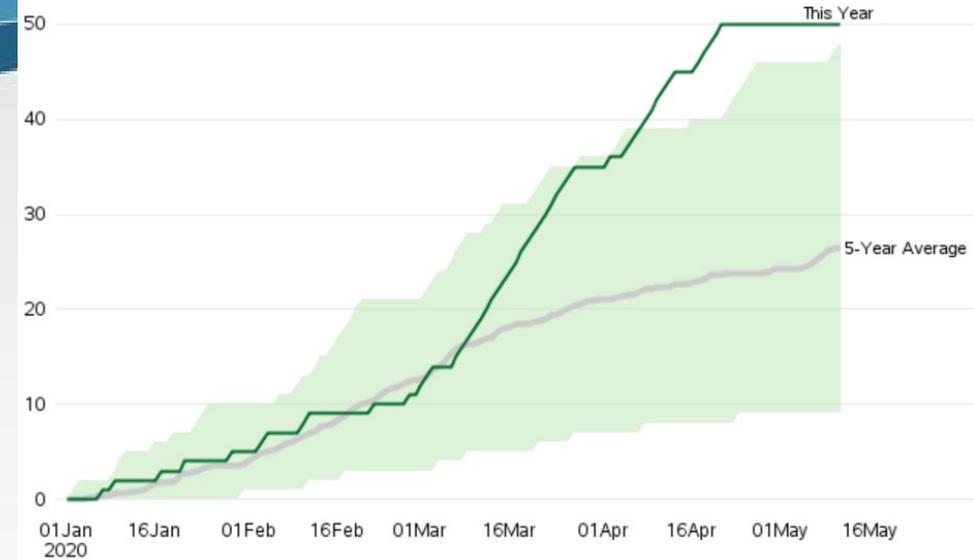
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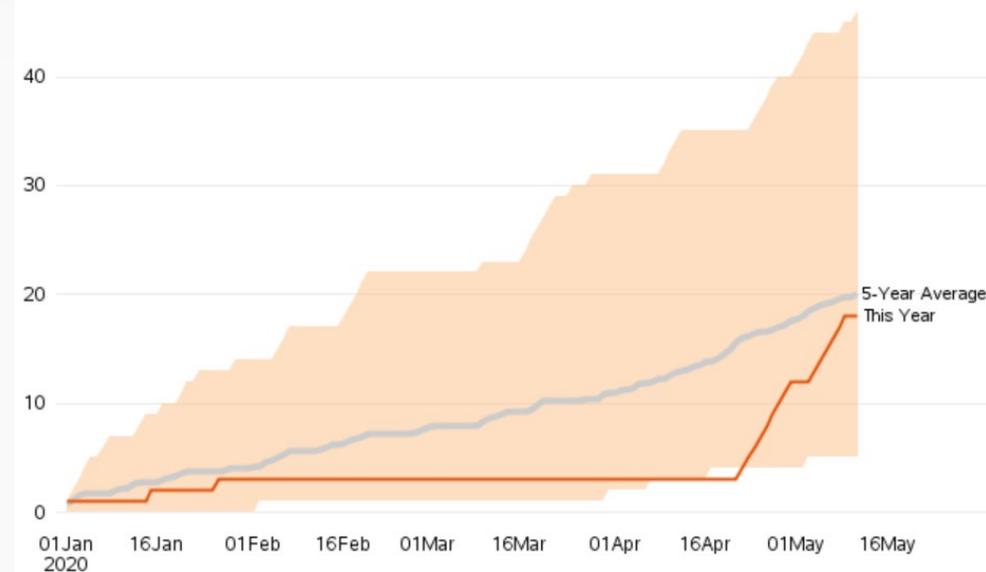
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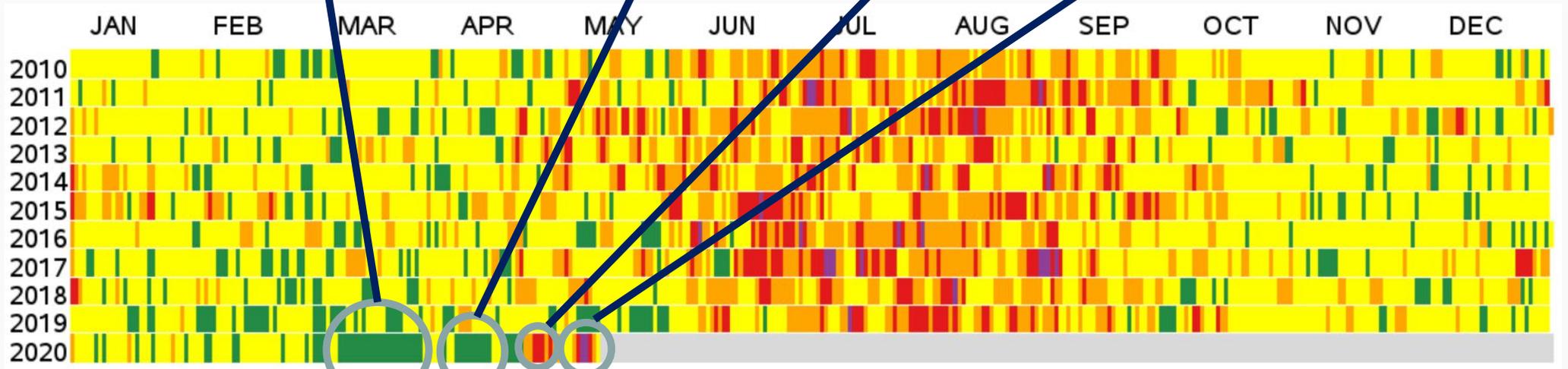
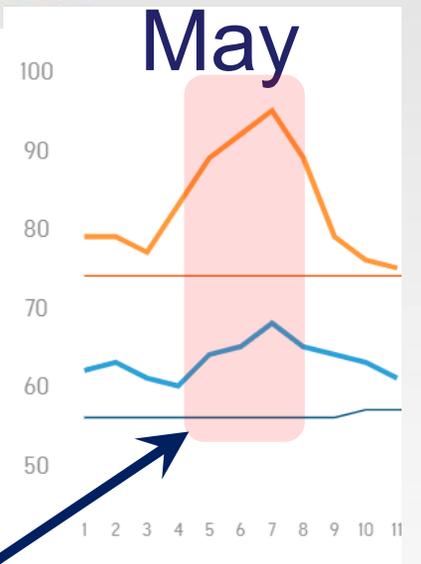
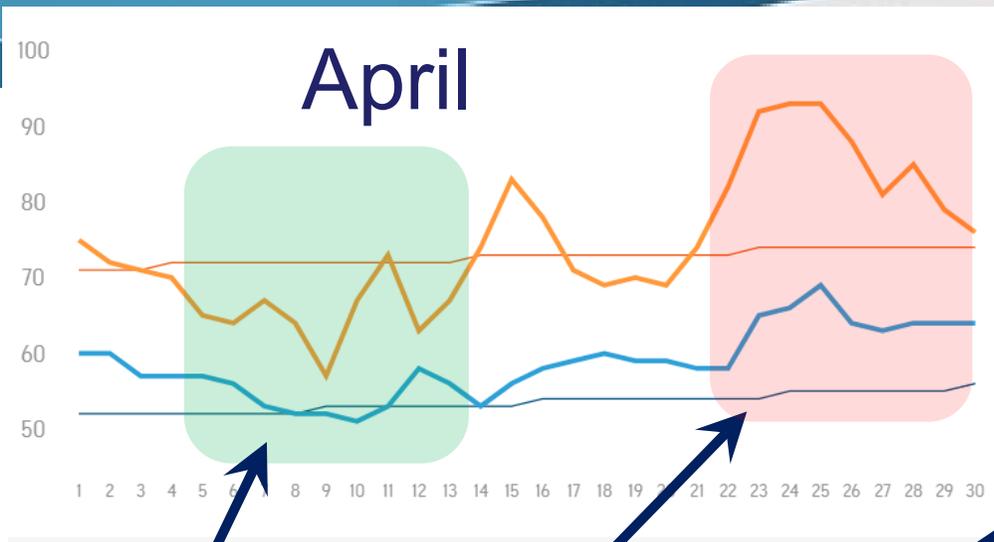


## Cumulative Number of AQI Days >100

Los Angeles-Long Beach-Anaheim, CA



# Temperature: Los Angeles





# Office of Radiation and Indoor Air

## Indoor Environments Division

Contact: Laura Kolb [kolb.laura@epa.gov](mailto:kolb.laura@epa.gov)  
Vito Ilacqua [ilacqua.vito@epa.gov](mailto:ilacqua.vito@epa.gov)

# Indoor Air Quality (IAQ) overview & discussion

Discuss what **IAQ control measures or guidance**, such as increasing ventilation, should be considered **to address exposures from increased use of cleaning products and disinfectants** (and exposure to chemical by-products) used to control or prevent the spread of COVID-19 indoors.

# **CONNECTING WITH PARTNERS AND STAKEHOLDERS**

Requesting CAAAC Feedback On The Best Ways  
For EPA To Get Public Input Virtually

## Questions for the Committee

- Is the platform we are using today, Teams, an effective way to hold this and similar meetings?
- Are there better platforms or features that EPA should use?
- Are there suggestions for how best to conduct a Virtual Public Hearing?
- Are there lessons from this or other experiences that we should keep in mind for continued engagement and the post-Covid future?
- Other thoughts and suggestions

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# **Update on the AirNow Program**

**Phil Dickerson**

**Group Leader, Information Transfer Group**

**U.S. EPA, Office of Air Quality Planning & Standards**

**CAAAC**

**May 20, 2020**

## AirNow – Current and Upcoming Projects

- **Current**
  - AirNow.gov updated site relaunched
- **Coming up**
  - Updated AirNow smartphone app
  - AirNow Sensor Data Pilot



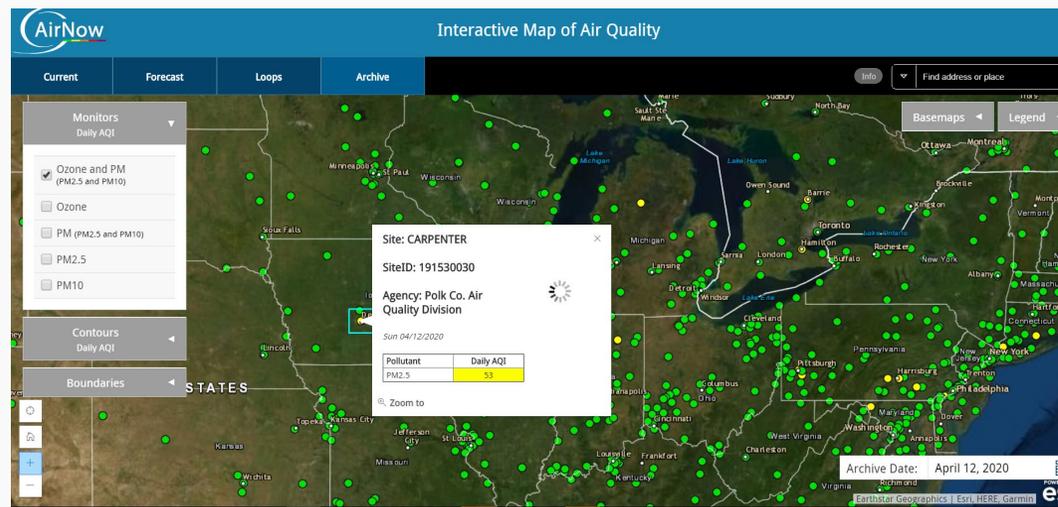
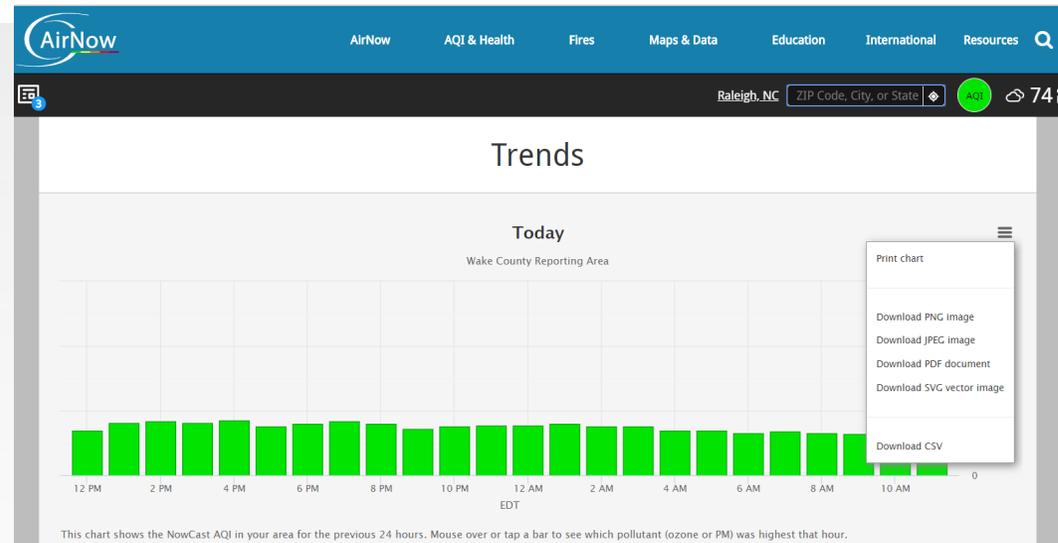
## AirNow – Updated Website



- Users have been able to preview the site since February
- Updated, mobile-friendly site went live April 15<sup>th</sup>
- Usage is higher than normal!
  - About 46,000 page views per day (1,375,000 per month)
  - About 22,000 users per day (650,000/ month)
  - Significantly higher than the same time window in 2018 (280,000 users/ month) and 2019 (320,000 users/month)
- YouTube home video walkthrough of the site for Earth Day
  - <https://www.youtube.com/watch?v=uEaalzKSPal&feature=youtu.be>

# AirNow –Updated Website Features

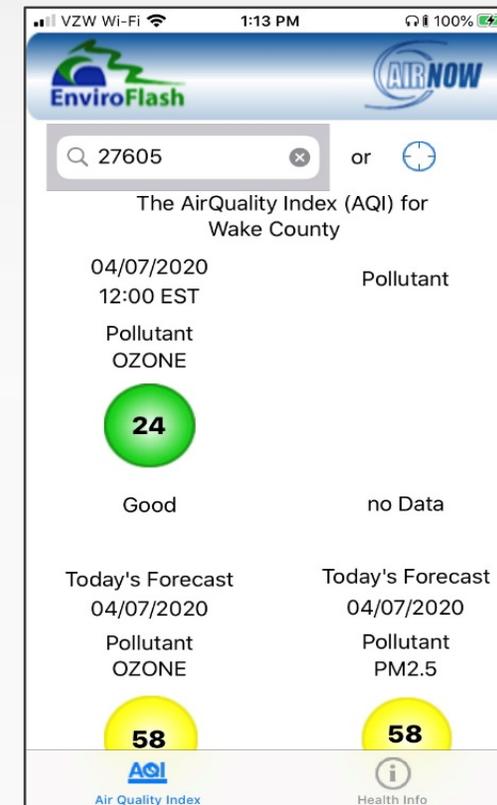
- Trends information available for each reporting area
- New interactive map lets users explore monitors nearest them



## Updated AirNow App Coming Soon

- Analytics show that the public is choosing air quality apps over websites
- Having updated app will help divert traffic load from the AirNow website during peak events, such as wildfires
- Current app very outdated
- Updated app will have more features

### Current, outdated app





# Updated AirNow App

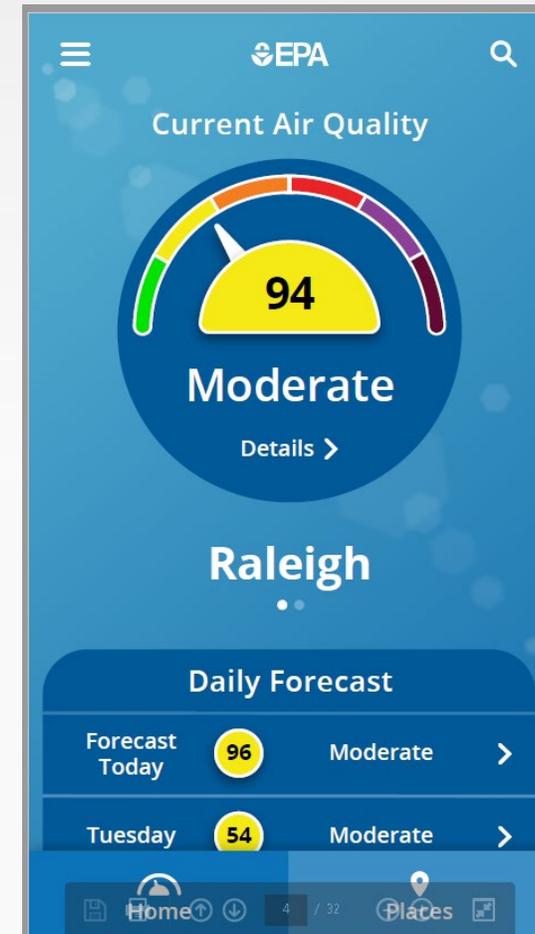
## New App Features

- Will be added in phases starting this Spring and into late summer/ early Fall
- Rapid prototype being tested now

## 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

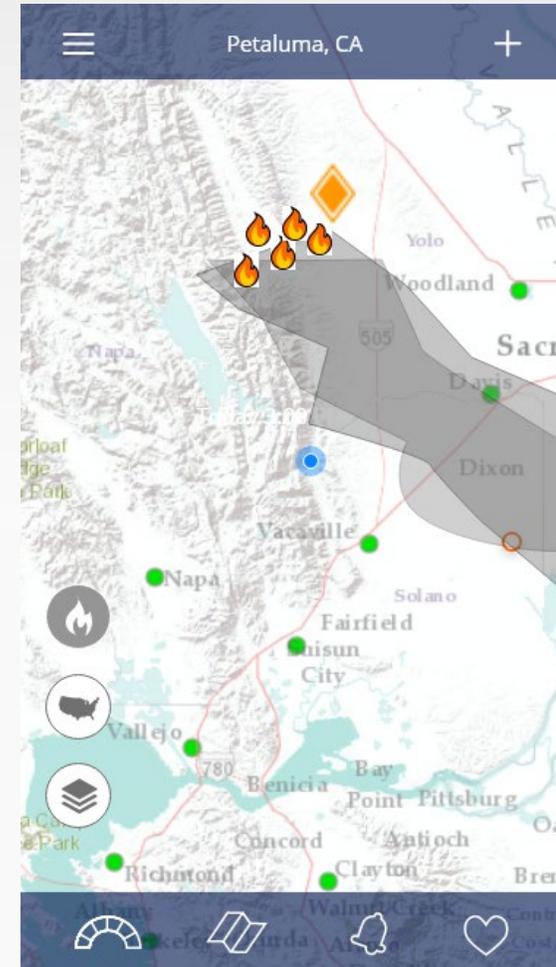
Updated App



## Updated AirNow App Features, cont.

### Late Summer/Early Fall update

- Air Quality Map
- Fire and Smoke information
- Notifications
  - Real-time alerts based on user-saved location and/or actual location
  - Potentially replace EnviroFlash emails in the future



# 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 opt in to have the sensor data included for their state
- Communicating with States/Locals/Tribes through the pilot, answer questions and get feedback

# Questions?

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# 50<sup>th</sup> Anniversary of the Clean Air Act

## Report Concept & Path Forward

### Draft Report sections

- Review CAA Accomplishments, e.g., by Title
- Remaining/Future Challenges

### Organization

- Two workgroups (one for each section) with co-chairs
- Work inter-sessionally – draft over summer with intent to complete before Fall CAAAC meeting and present/discuss then for finalization.

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