

2022 Air Quality Update for the Austin-Round Rock-Georgetown MSA

Clean Air Force of Central Texas'
Air Quality Professional's Forum

April 5, 2022



CAPCOG – Regional Planning Commission in Statute; more often called a COG.



- Emergency Communications 9-1-1
- Area Agency on Aging/Aging & Disability Resource Center
- Homeland Security Planning & Training
- Regional Law Enforcement Academy
- Air Quality Planning
- Solid Waste Planning
- Economic Development Analysis & Technical Assistance
- Transportation Planning

Ten – county service area; State of Texas planning region 12



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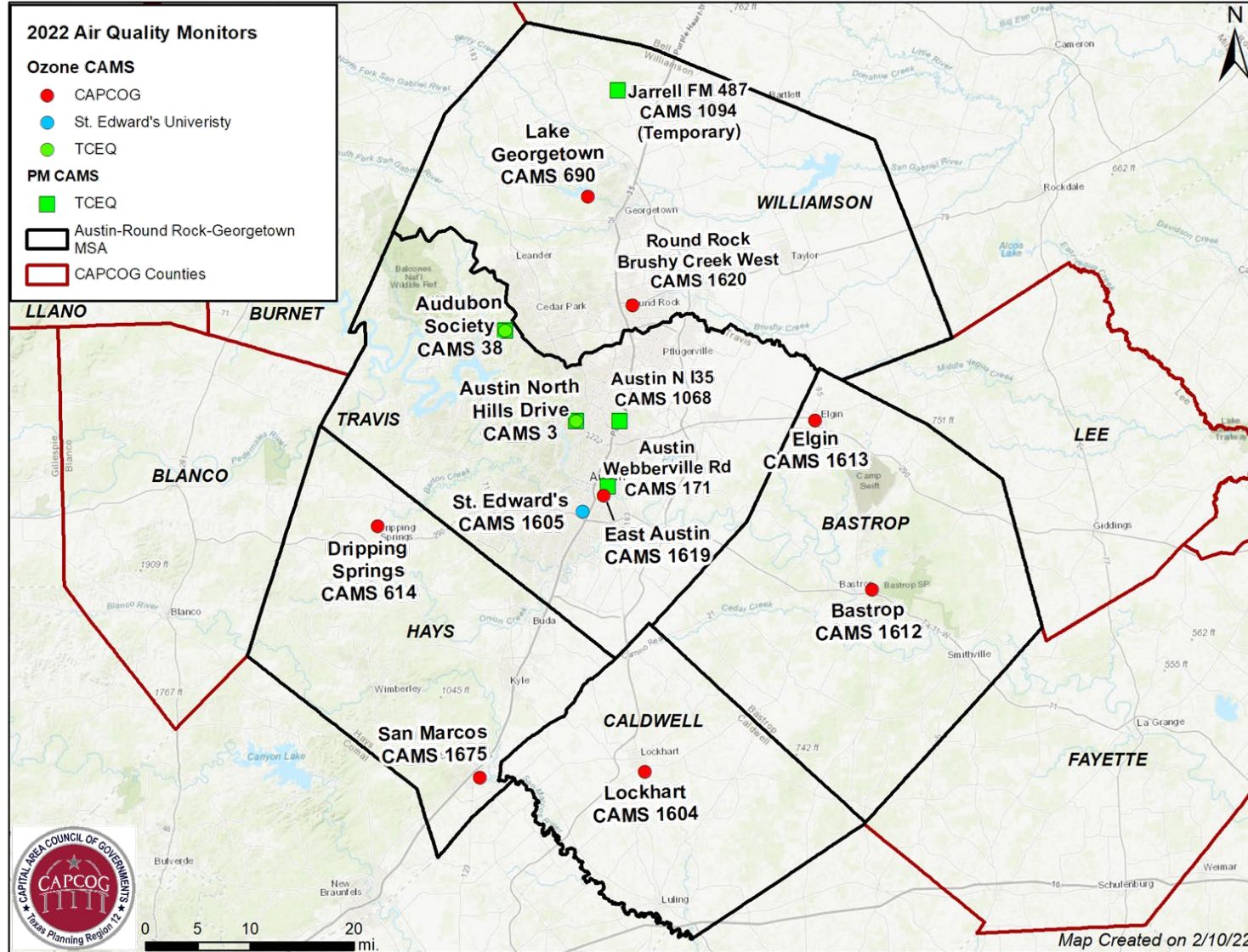
State
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Overview



- Focus on Ozone (O_3) and Fine Particulate Matter ($PM_{2.5}$) as those are the two pollutants of concern to the Austin-Round Rock-Georgetown MSA for the National Ambient Air Quality Standards (NAAQS)
 - Map of 2022 O_3 and $PM_{2.5}$ Monitors in the MSA
 - Overview of the Air Quality Index (AQI)
 - 2022 AQI Days by Month and Monitor as of 3/31/22
 - High O_3 Days and Ozone Action Days (OADs) in March
 - $PM_{2.5}$ and O_3 NAAQS Reconsideration Updates

O₃ and PM_{2.5} 2022 Monitoring Locations



Air Quality Index (AQI)

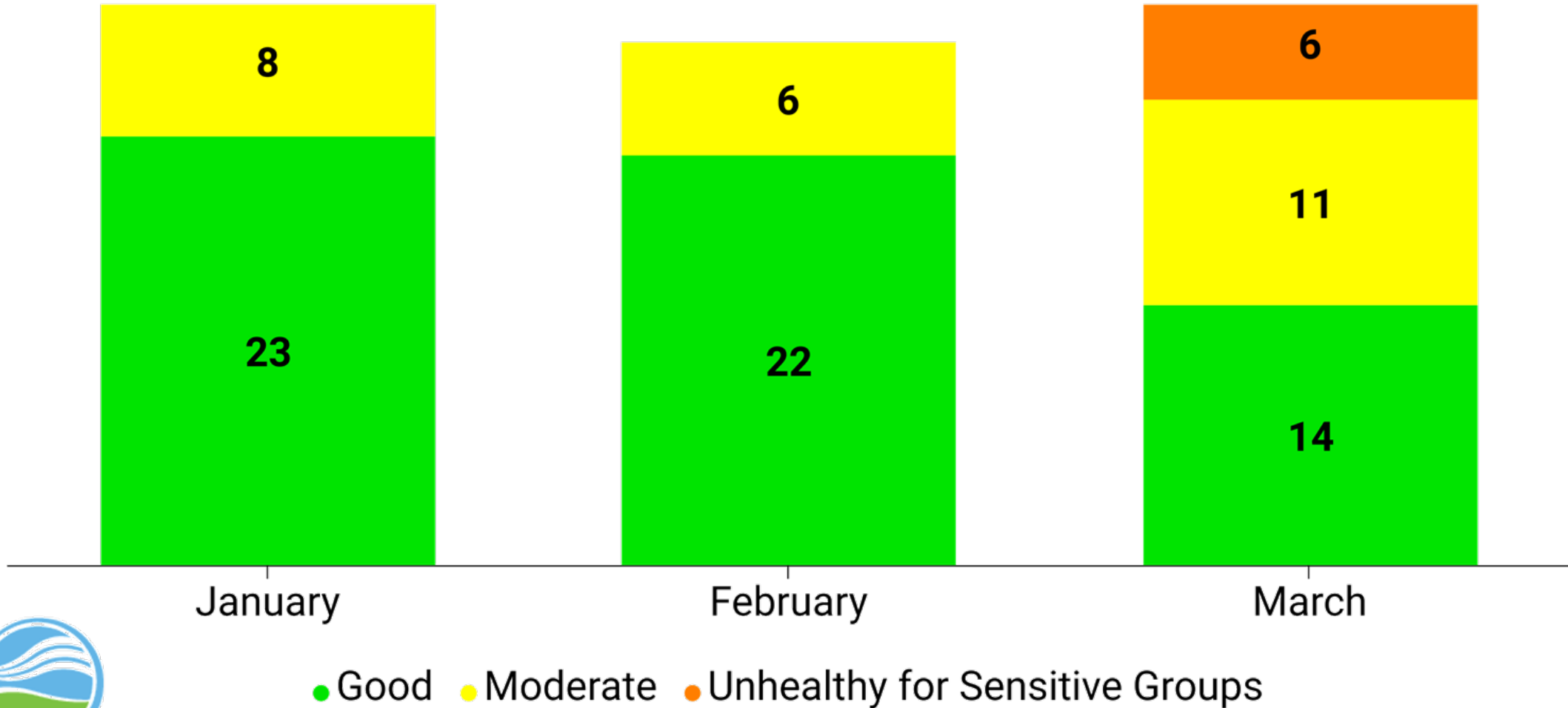


Daily AQI Color	Levels of Concern	Values of Index	Description of Air Quality
Green	Good	0 to 50	Air quality is satisfactory, and air pollution poses little or no risk.
Yellow	Moderate	51 to 100	Air quality is acceptable. However, there may be a risk for some people, particularly those who are unusually sensitive to air pollution.
Orange	Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is less likely to be affected.
Red	Unhealthy	151 to 200	Some members of the general public may experience health effects; members of sensitive groups may experience more serious health effects.
Purple	Very Unhealthy	201 to 300	Health alert: The risk of health effects is increased for everyone.
Maroon	Hazardous	301 and higher	Health warning of emergency conditions: everyone is more likely to be affected.

2022 AQI Days by Month



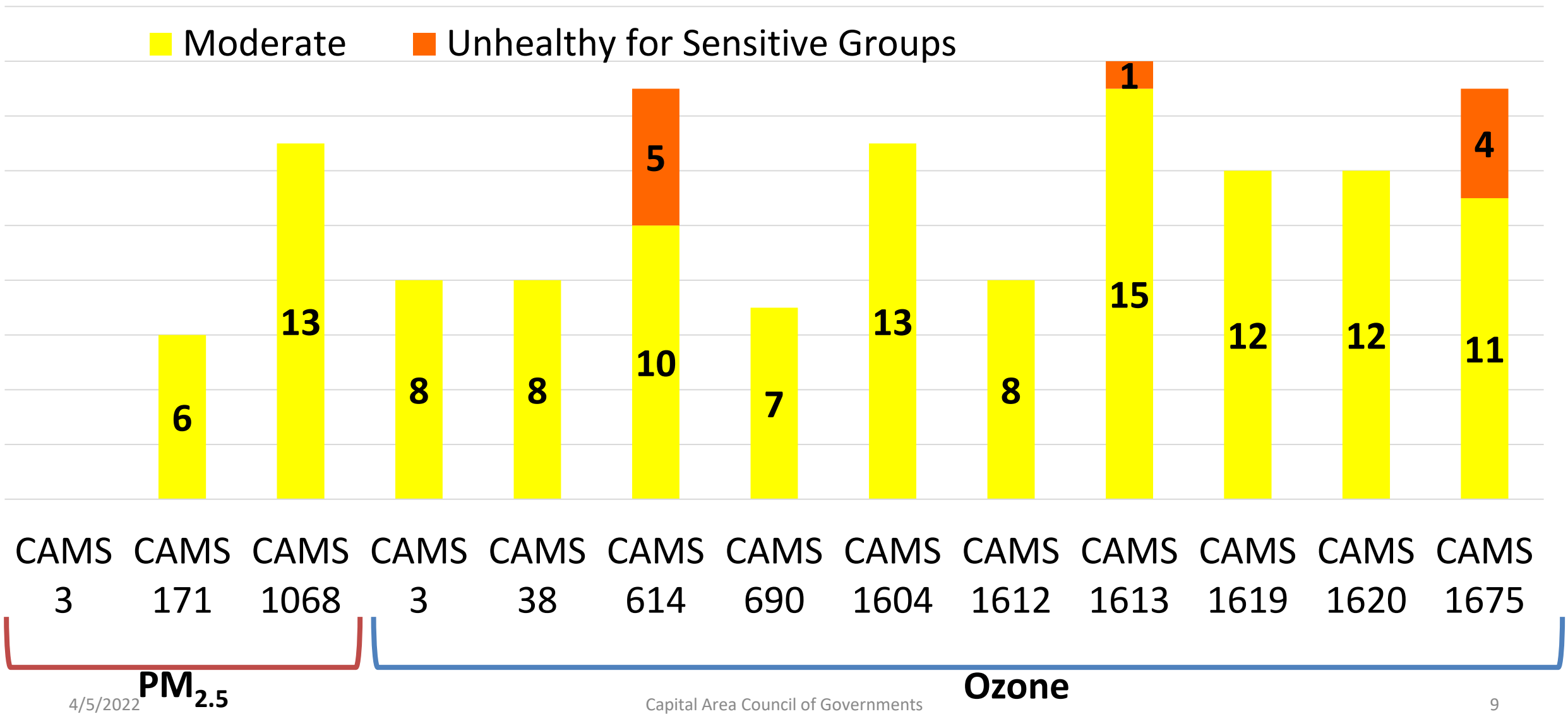
Austin Area Air Quality Index Days by Month, 2022



2022 Moderate or Worse AQI Days by Monitor



■ Moderate
 ■ Unhealthy for Sensitive Groups



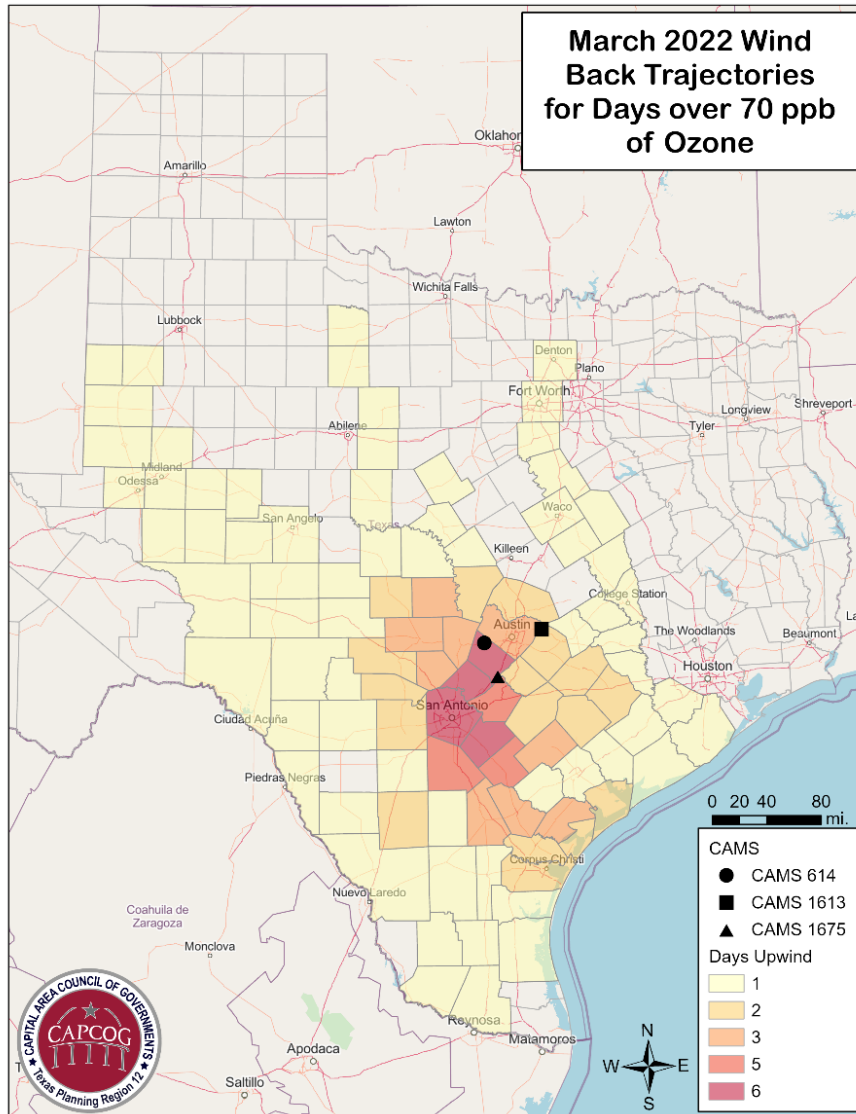
High O₃ Days and Ozone Action Days in March



- The beginning of ozone season started out with a bang in March!
 - 6 days when O₃ levels exceeded 70 ppb or “unhealthy for sensitive groups” at CAPCOG monitors - No TCEQ regulatory monitors measured such levels
- The TCEQ issued 2 OADs in March.
- On days when no OAD was issued, AQI forecast text indicated that “light winds, mild to warm temperatures, abundant afternoon sunshine, and/or elevated lingering background levels could be enough for ozone to reach the upper end of the ‘Moderate’ range or possibly higher in parts of the Austin area.”

Date	OAD Issued for this Date?	Peak 8-Hour O ₃ (ppb)	Peak O ₃ Monitor
3/1/2022	No	75	CAMS 614 (Dripping Springs)
3/2/2022	No	83	CAMS 614 (Dripping Springs)
3/3/2022	No	75	CAMS 614 (Dripping Springs)
3/16/2022	No	72	CAMS 1675 (San Marcos)
3/19/2022	Yes	61	CAMS 1613 (Elgin)
3/25/2022	Yes	73	CAMS 614 (Dripping Springs)
3/26/2022	No	75	CAMS 614 (Dripping Springs)

High O₃ Days and Wind Patterns



- In March, there were many wildfires around the state.
 - Wind patterns on high O₃ days may have passed over wildfire areas which can carry O₃ and O₃ precursors (NO_x and VOCs) into the region.
- Additionally, on high O₃ days, wind blew into the region from major metro areas such as San Antonio, Dallas, and Houston.
- **While there probably was some degree of local O₃ formation due to ideal O₃-formation weather, high O₃ levels also can be attributed to statewide wildfire activity and O₃ transport from other large cities.**

PM_{2.5} NAAQS Reconsideration



- On March 18th, the Clean Air Scientific Advisory Committee (CASAC) and CASAC PM Panel released their [Final CASAC Review of the EPA's Policy Assessment \(PA\) for the Reconsideration of the NAAQS for PM](#).
- In the report, the CASAC makes the following recommendations regarding revising the PM NAAQS to EPA Administrator Regan.
 - “Regarding the **annual PM_{2.5}** standard, all CASAC members agree that the current level of the annual standard is not sufficiently protective of public health and should be lowered.”
 - “The **majority** of CASAC members find that an annual average in the range of **8-10 µg/m³** would be appropriate.”
 - “A **minority** of CASAC members find that a range of **10-11 µg/m³** would be appropriate.”
 - **The unofficial 2019-2021 annual PM_{2.5} design value for the Austin area is 9.5 µg/m³!**
 - “Regarding the **24-hour PM_{2.5}** standard, the majority of CASAC members find that the available evidence calls into question the adequacy of the current 24-hour standard” with a revision in the range of 25-30 µg/m³.

PM_{2.5} NAAQS Reconsideration Timeline

<https://casac.epa.gov/ords/sab/f?p=113:19:14538376097957:::19:P19 ID:961>



Key Milestones in the PM NAAQS Reconsideration		
Date	EPA	CASAC and Public Review
June 2021	Announcement of Reconsideration	
September 30, 2021	Release of Draft PM ISA Supplement	Comment period closes November 29
October 8, 2021	Release of Draft PA	Comment period closes December 14
October 14, 2021		CASAC Public Meeting: Overview of Reconsideration and Draft PM ISA Supplement and Draft PA
November 17-19 and December 1-2, 2021		CASAC Meeting to Review the Draft PM ISA Supplement and Draft PA
Winter 2022		CASAC Follow-up Meeting Final CASAC Letters
Spring 2022	Final PM ISA Supplement	
	Final PA	
Summer 2022	Proposed decision	Public comment period and public hearings
Early 2023	Final decision	

O₃ NAAQS Reconsideration



- On Nov. 1st, EPA announced its decision to reconsider the previous administration's decision to retain 2015 O₃ NAAQS.
 - EPA is targeting the end of 2023 to complete this reconsideration.
- The CASAC's 2014 review of EPA's draft policy assessment advised for a O₃ NAAQS “lower than 70 ppb within a range down to 60 ppb.”
- In the 2020 Review, the CASAC:
 - Concluded that EPA's scientific assessment lacked evidence to understand changes in exposure to health impacts.
 - Was split on whether the assessment supported leaving the O₃ NAAQS at 70 ppb or tightening the NAAQS.
- Currently, a CASAC O₃ Panel is being formed to review the policy relevant science.
- **The unofficial 2019-2021 O₃ design value for the Austin area is 63 ppb.**

Thank You



Capital Area Council of Governments

www.capcog.org

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