

# Update on Stockton Community Air Monitoring

Stockton CSC Meeting  
February 1, 2023

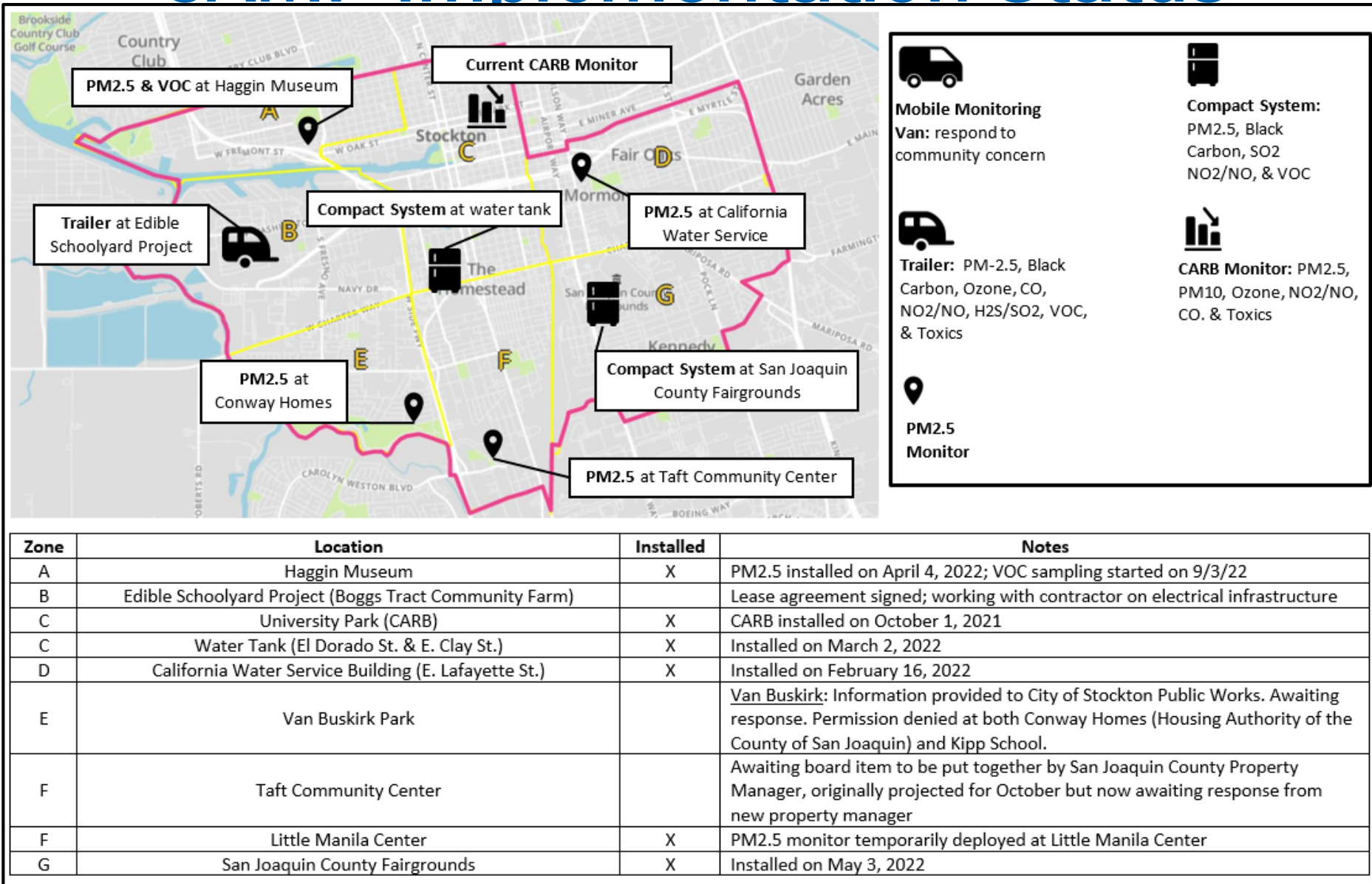
# Air Monitoring Update

Status of Community Air Monitoring Plan Implementation

Review Air Monitoring Data Collected

Questions, Comments, And Recommendations

# CAMP Implementation Status



# Community Air Monitoring Platforms



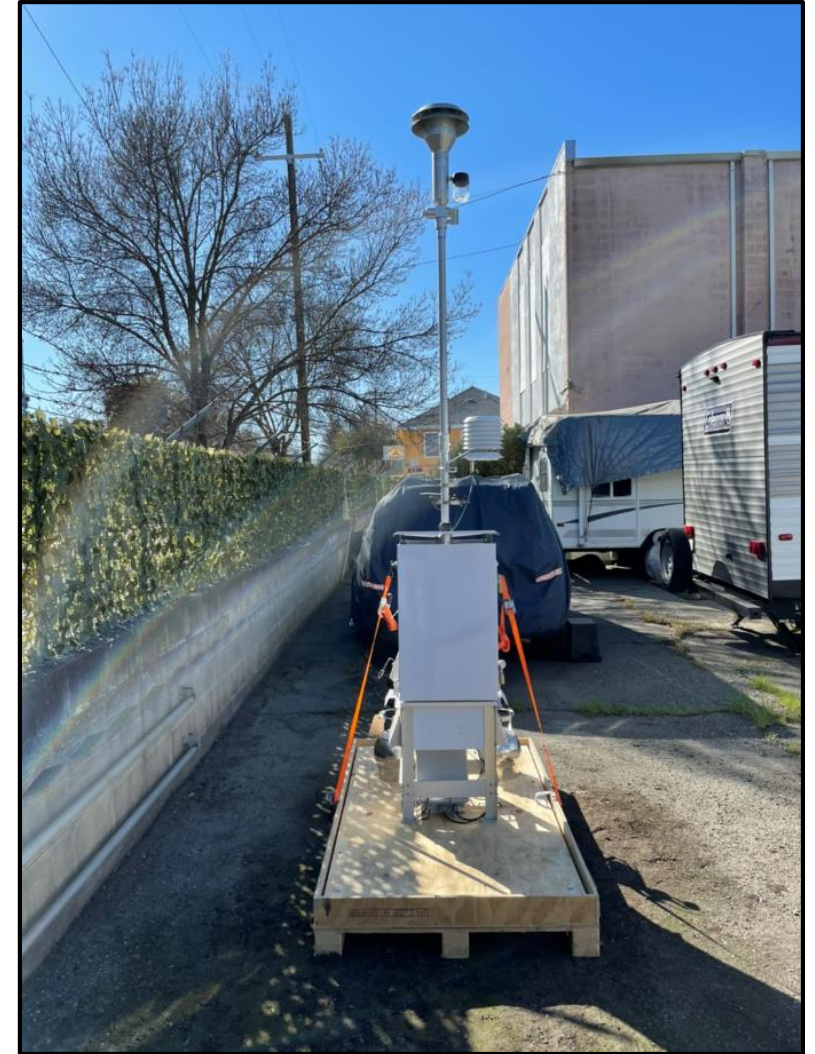


# Community Air Monitoring Platforms (cont'd)



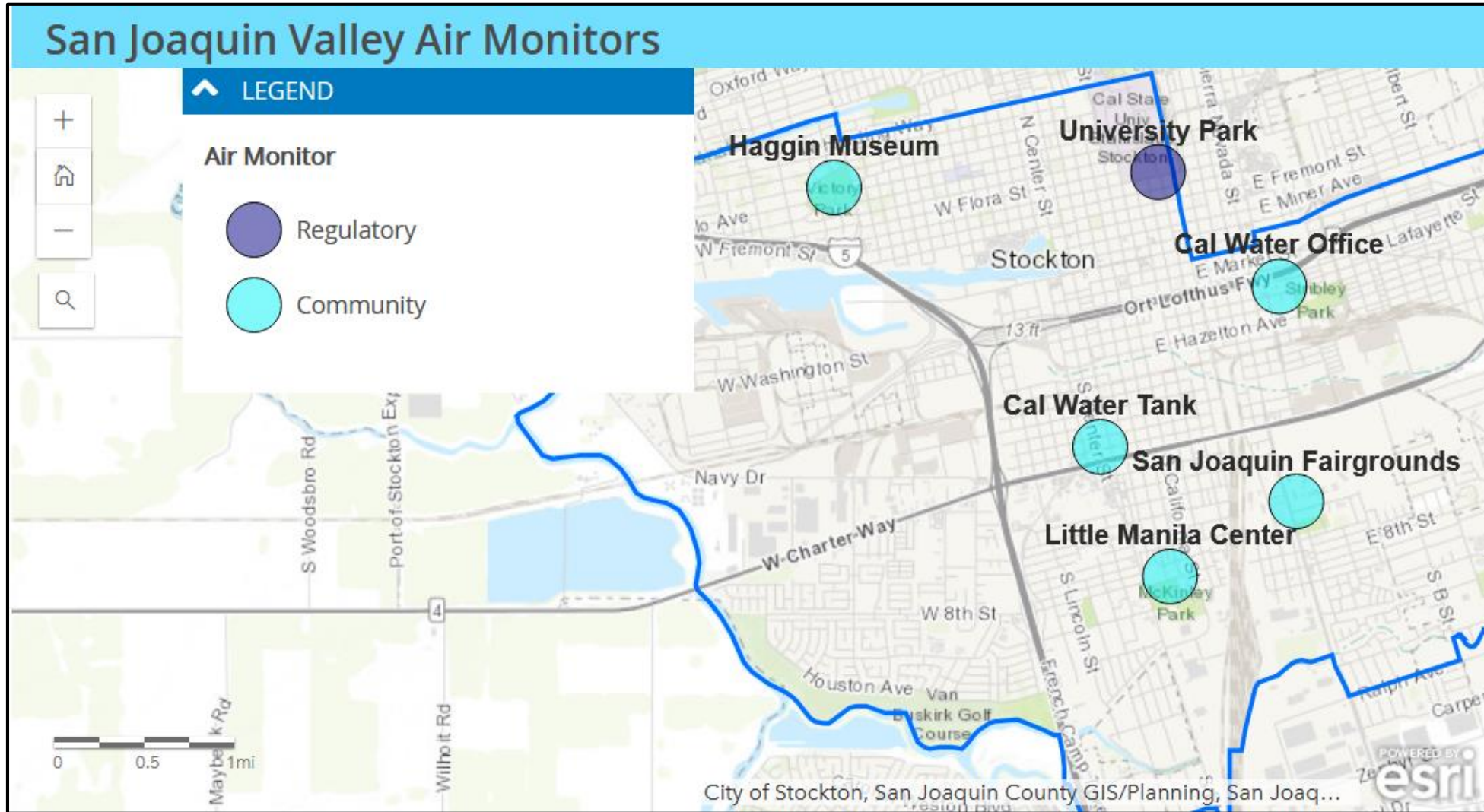


# Community Air Monitoring Platforms (cont'd)



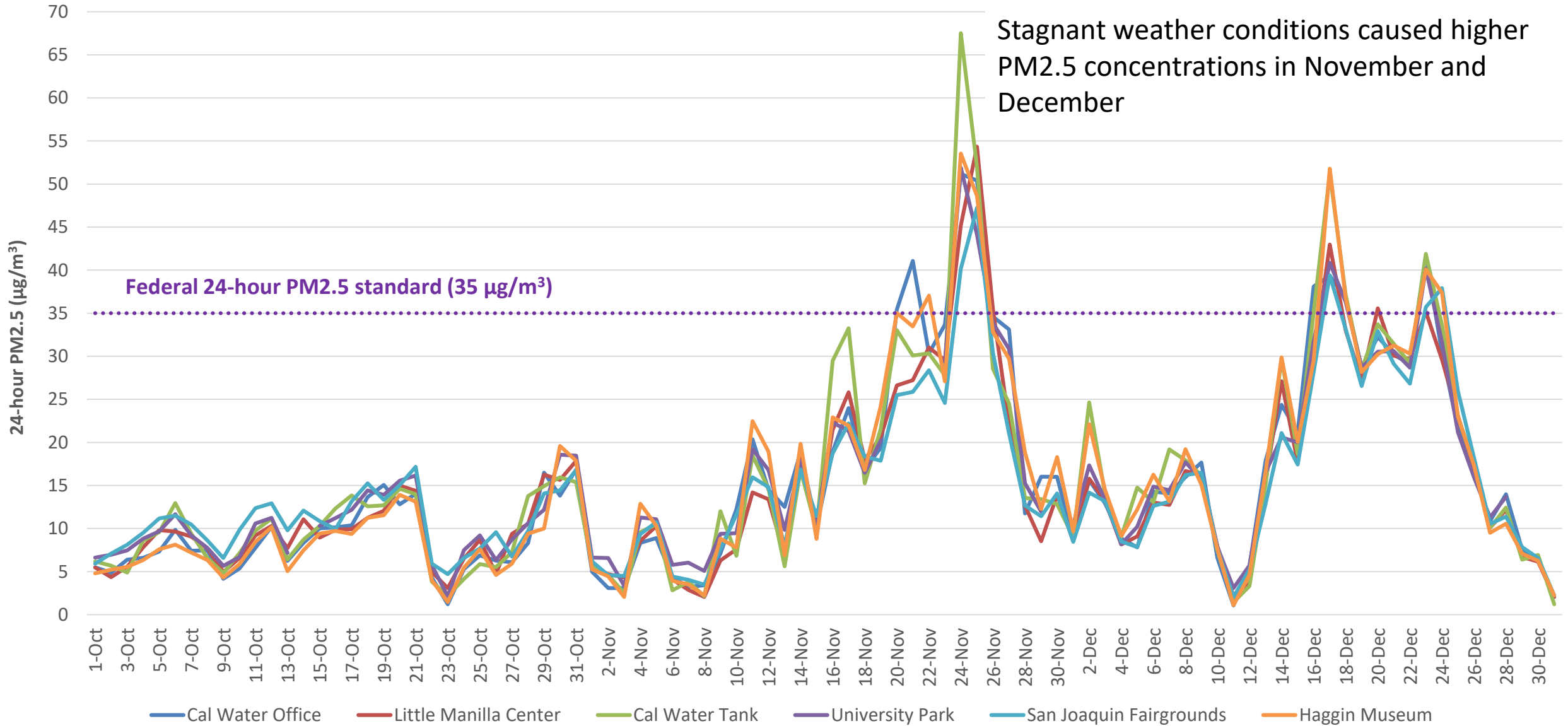


# Interactive Map



<https://community.valleyair.org/selected-communities/stockton/community-air-monitoring/>

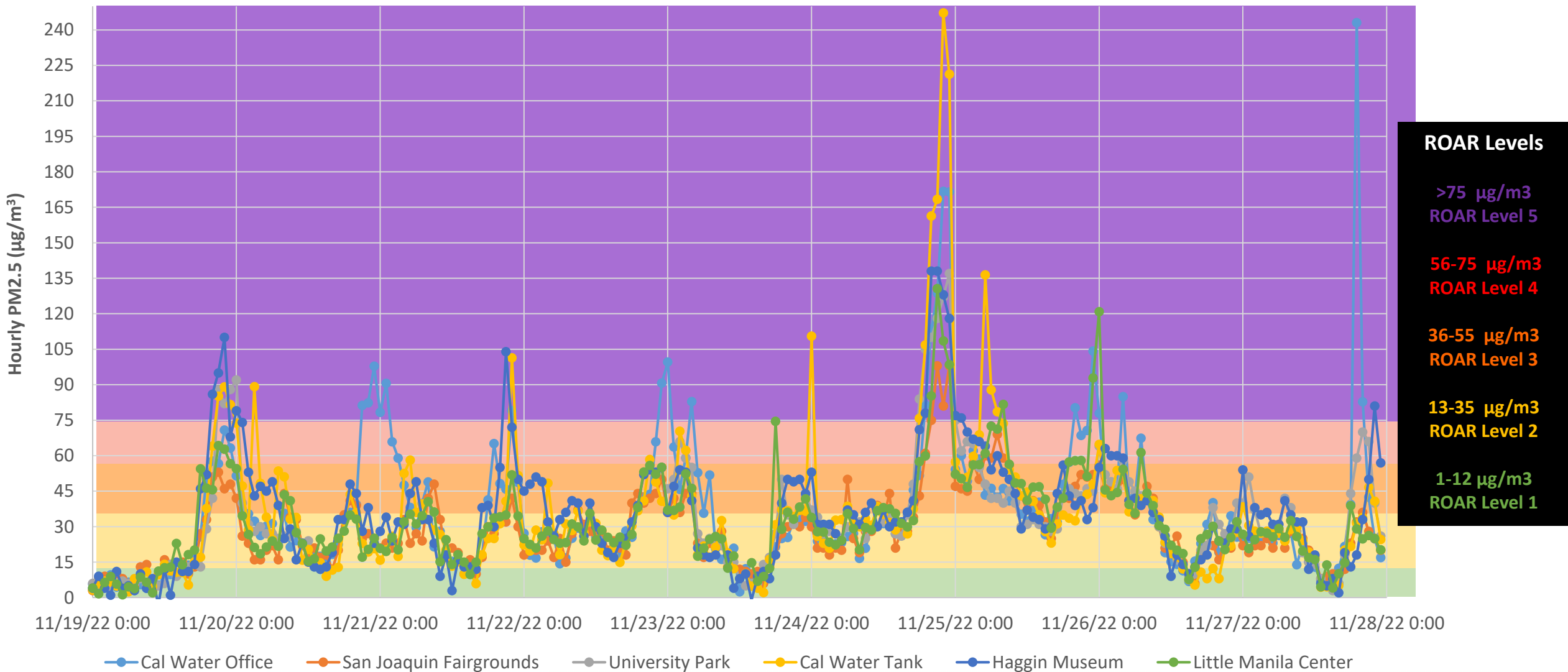
# PM2.5 Daily Average Comparison





# PM2.5 Hourly Comparison

## November 19, 2022 – November 27, 2022



# Nearby Construction Activities





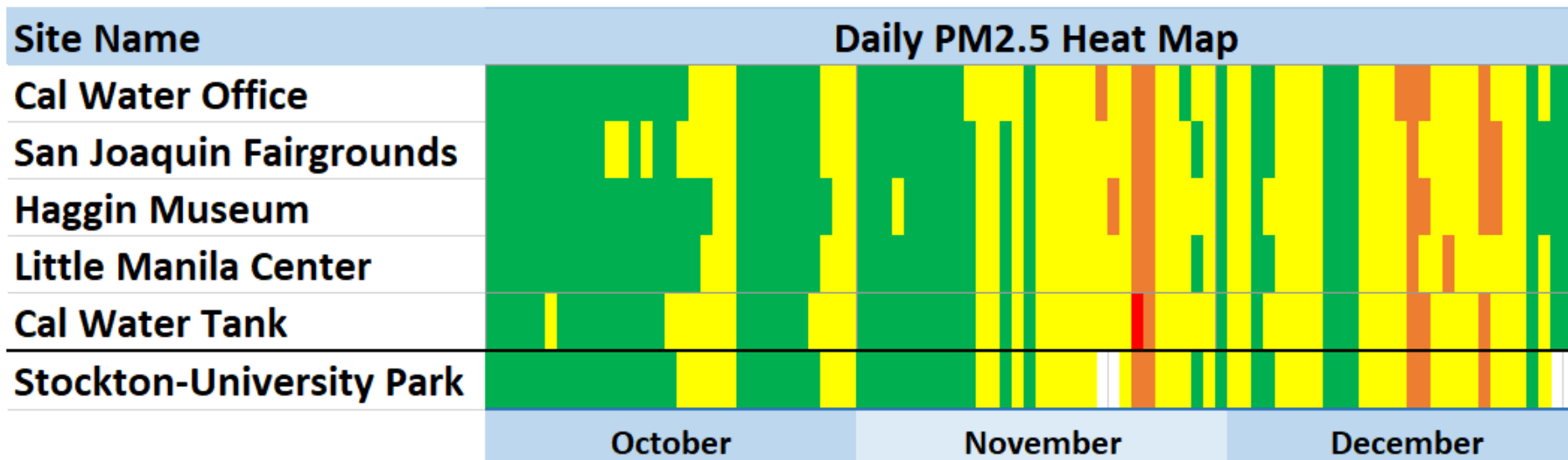
# Hourly ROAR Levels - Night vs. Day

October 1, 2022 – December 31, 2022

- Most hourly readings in this quarter were in Level 1 and 2 for all sites
- PM2.5 hourly readings in ROAR Level 3, 4, and 5 happen more often during nighttime hours than daytime hours

	Cal Water Office		Little Manila Center		Cal Water Tank		Haggin Museum		San Joaquin Fairground		University Park	
	Day 6 AM-5PM	Night 6PM-5AM	Day 6 AM-5PM	Night 6PM-5AM	Day 6 AM-5PM	Night 6PM-5AM	Day 6 AM-5PM	Night 6PM-5AM	Day 6 AM-5PM	Night 6PM-5AM	Day 6 AM-5PM	Night 6PM-5AM
≤12 µg/m <sup>3</sup> ROAR Level 1	744	428	702	571	685	582	724	554	600	278	663	485
13-35 µg/m <sup>3</sup> ROAR Level 2	318	399	357	433	365	375	328	371	457	435	352	430
36-55 µg/m <sup>3</sup> ROAR Level 3	39	<b>86</b>	38	<b>71</b>	45	<b>100</b>	50	<b>127</b>	41	<b>73</b>	29	<b>96</b>
56-75 µg/m <sup>3</sup> ROAR Level 4	2	<b>32</b>	6	<b>20</b>	5	<b>27</b>	2	<b>32</b>	6	<b>10</b>	0	<b>19</b>
>75 µg/m <sup>3</sup> ROAR Level 5	0	<b>25</b>	1	<b>9</b>	4	<b>21</b>	0	<b>18</b>	0	<b>6</b>	0	<b>12</b>

# PM2.5 Daily Average Concentration Comparison



Levels of Concern	Daily Concentration (µg/m <sup>3</sup> )	Description of Air Quality
<b>Good</b>	0-12	Air Quality is Satisfactory, and air pollution poses little or no risk
<b>Moderate</b>	12.1- 35.4	Air quality is acceptable. However there may be a risk for some people, particularly those who are unusually sensitive to air pollution
<b>Unhealthy for Sensitive Groups</b>	35.5 -55.4	Members of sensitive groups may experience health effects. The general public is less likely to be affected.
<b>Unhealthy</b>	55.5 – 150.4	Some members of the general public may experience health effects; members of sensitive groups may experience more serious health effects.
<b>Very Unhealthy</b>	150.5-250.4	Health Alert: The risk of health effects is increased for everyone



# PM2.5 Daily Average Comparison

## October 1, 2022 – December 31, 2022

	Highest 24-hour Average PM2.5 ( $\mu\text{g}/\text{m}^3$ )	Quarterly Average PM2.5 ( $\mu\text{g}/\text{m}^3$ )
<b>Stockton Community Monitors</b>		
Little Manila Center	54.4	14.8
Cal Water Office	51.2	15.4
Cal Water Tank	67.5	16.0
Haggin Museum	53.5	15.6
San Joaquin Fairgrounds	47.3	14.9
<b>Nearby Regulatory Monitor</b>		
University Park	51.9	15.6

- Peak and quarterly average PM2.5 concentrations at community monitors are comparable to the regulatory monitor at University Park
- Community monitors impacted by nearby construction and other activities averaged higher than the regulatory monitor

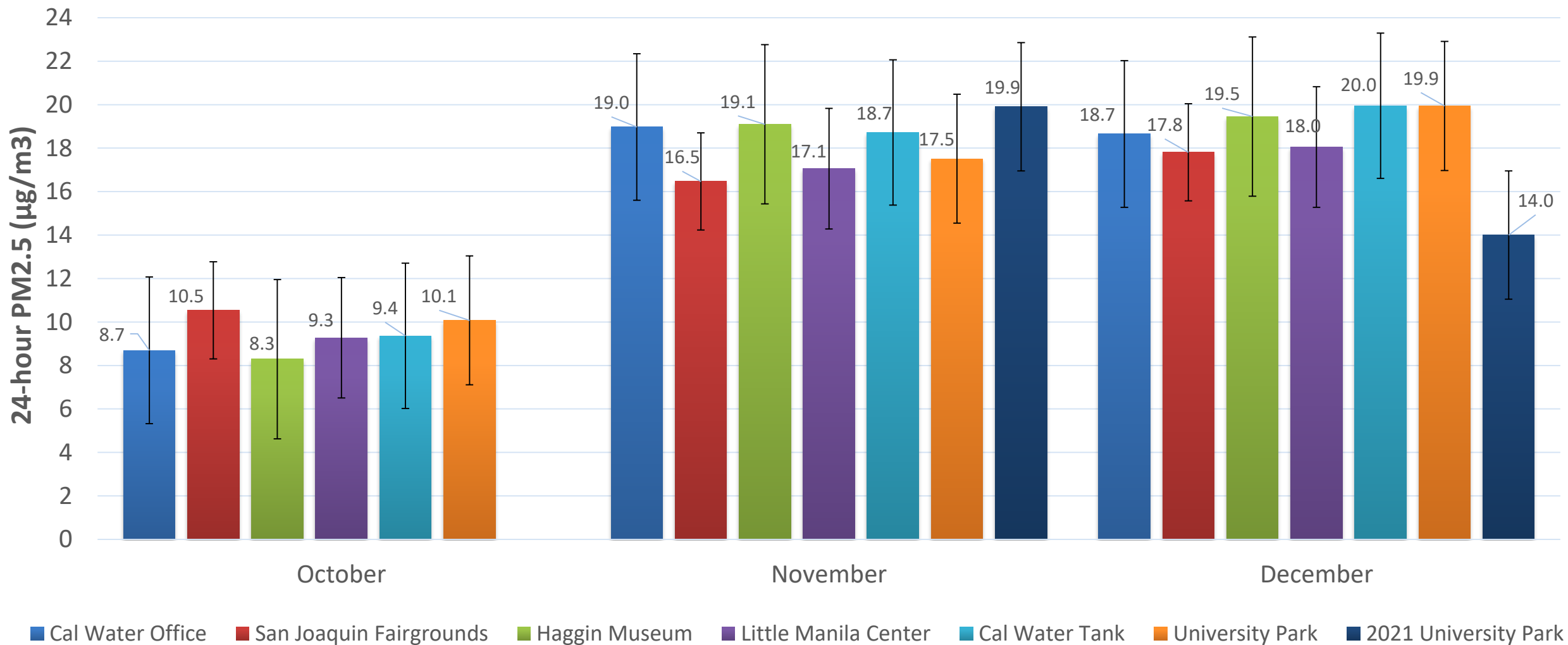
# VOC Speciation Summary – Haggin Museum

- There were 22 samples taken from October to December.
- Acetaldehyde, methanol, ethanol, 2-proponal, and acetone were the primary VOCs detected.
- Only acetaldehyde and methanol have an associated Reference Exposure Level (REL), a health risk metric established by the Office of Environmental Health Hazard Assessment (OEHHA).

Pollutant	Potential Sources of Emission	Short Term Impact		Long Term Impact	
		Max Measured [24-hour] (ppb)	OEHHA Acute REL [1-hour] (ppb)	Average Measured [Annual] (ppb)	OEHHA Chronic REL [Annual] (ppb)
<b>Methanol</b>	Automobile exhaust, solvent use, and naturally from vegetation and microbes	<b>25.0</b>	21,367	<b>10.8</b>	3,052
<b>Acetaldehyde</b>	Wood combustion in fireplaces and woodstoves, coffee roasting, burning of tobacco, vehicle exhaust fumes, and coal refining and waste processing	<b>7.9</b>	261	<b>2.7</b>	78



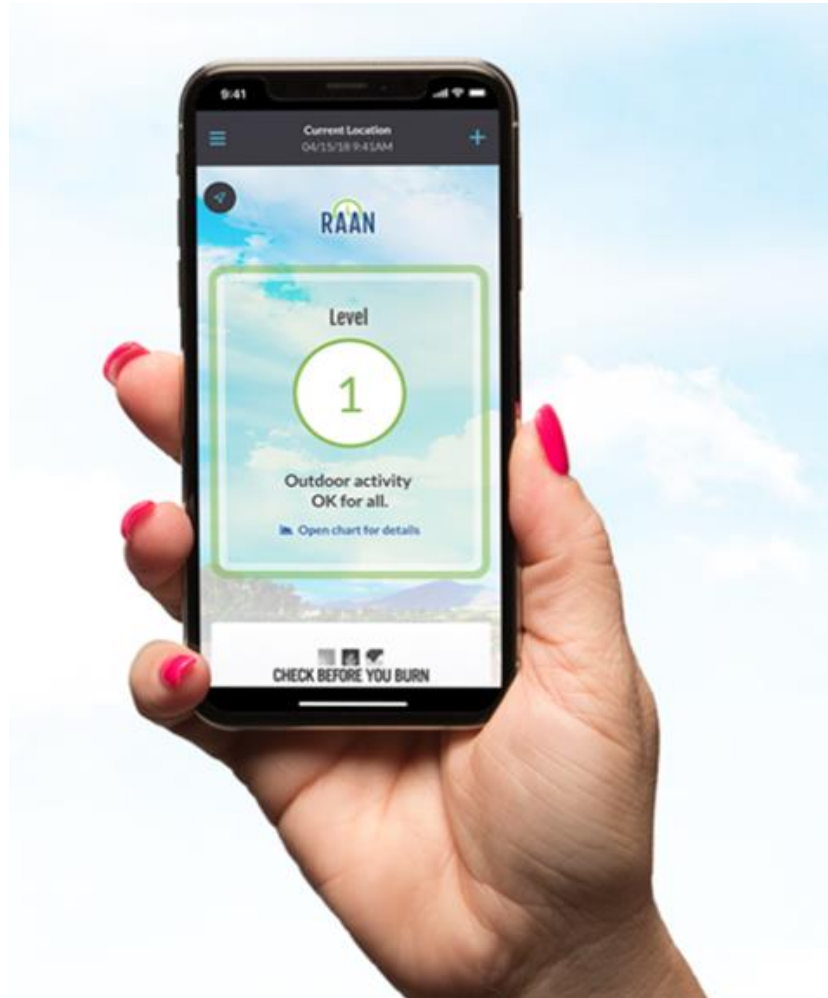
# PM2.5 Monthly Average Comparison



# Community Air Quality Data

- District AB 617 webpage at:  
<https://community.valleyair.org/community-air-monitoring>
  - Real-time community air monitoring data
  - Quarterly reports
  - Weekly air monitoring updates
- CARB's statewide air quality data portal (AQview) displays and provides community air monitoring data from AB 617 communities
  - AQview website located at: <https://aqview.arb.ca.gov/>
  - Air quality data from Valley AB 617 communities available at this website
  - Development ongoing, new features to be added

# Valley Air App

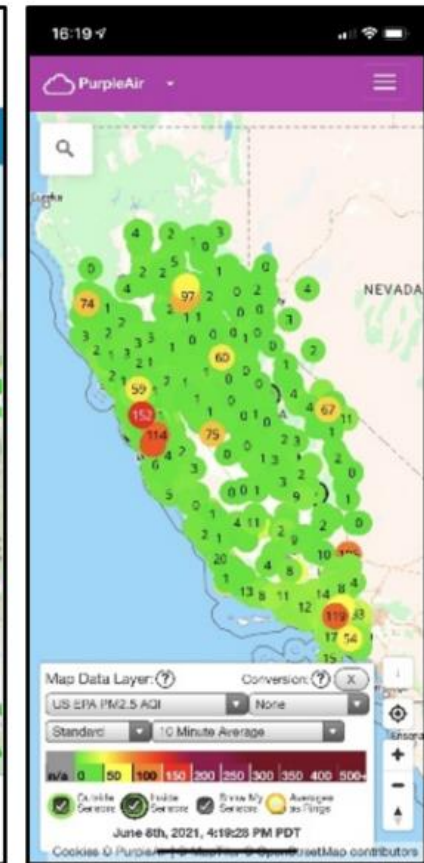
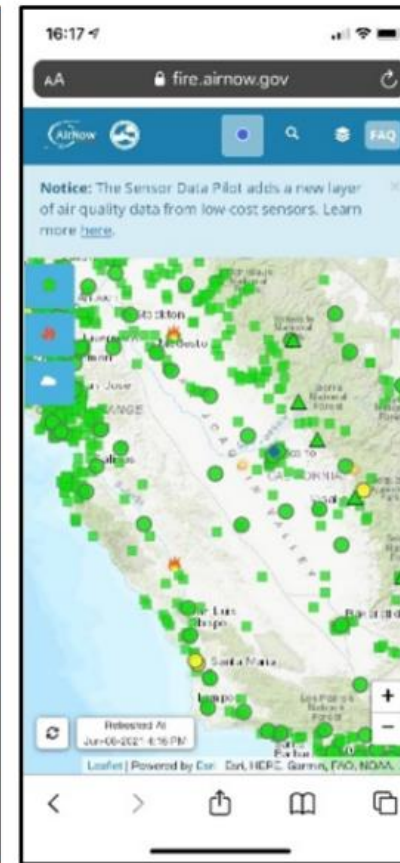
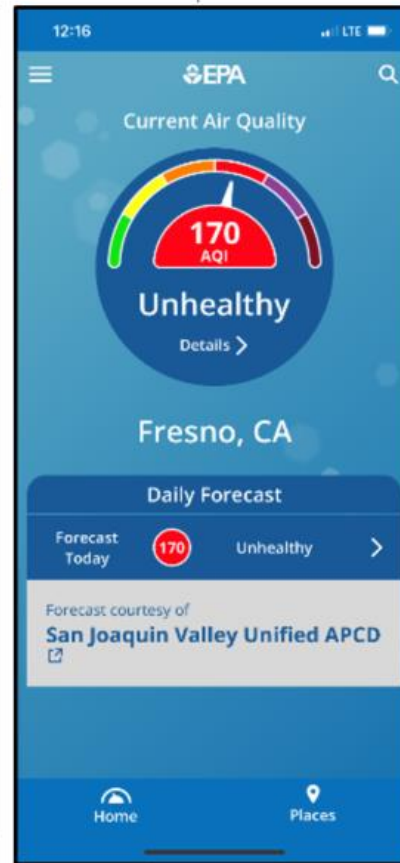
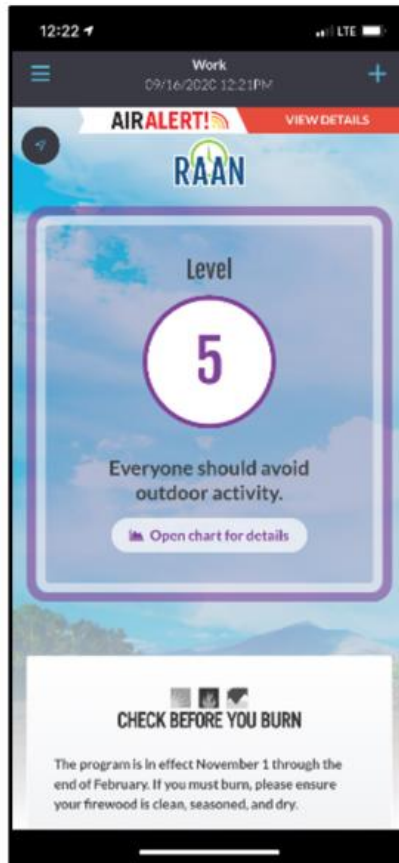


ROAR Level	Guidelines
<b>LEVEL 1</b>	Outdoor activity OK for all
<b>LEVEL 2</b>	Sensitive individuals should consider reducing prolonged and/or vigorous outdoor activities.
<b>LEVEL 3</b>	Sensitive individuals should exercise indoors or avoid vigorous activities.
<b>LEVEL 4</b>	Sensitive individuals should exercise indoors. Everyone should avoid prolonged or vigorous outdoor activities.
<b>LEVEL 5</b>	Everyone should avoid outdoor activity.



# Available Air Quality Tools

- Residents have found mobile applications useful
- New air quality tools have become available in recent years



# Stockton Fireplace Show-and-Tell Event

- ***Tentative:***  
Thursday, February 23, 4 to 7:00pm
- **Location:**  
TBD, District working with several locations
- **District actions:**
  - Connect with Stockton area hearth retailers
  - Social media & email blasts to advertise event





# Additional Outreach

**Hey Stockton\***  
Reduce air pollution and save money!  
Update your fireplace with a cleaner device



**SAVE UP TO \$4,150**  
ON A **NATURAL GAS INSERT**  
- OR - **FREESTANDING STOVE**



**FOLLOW US ON SOCIAL MEDIA:**  
Search "Valley Air"



**PROGRAM STEPS**

- 1 Visit [valleyair.org/change-up](http://valleyair.org/change-up) to complete your voucher application online and submit photos of your existing fireplace. Need help with the application? Give us a call 559-230-5800
- 2 Once you receive your Approved Voucher, present it at one of the participating retailers to receive up to \$4,150 off.
- 3 Retailer will schedule installation of your new device!




\*\$4,150 incentive level only for Stockton residents living within the above boundary

**QUESTIONS?**

[grants@valleyair.org](mailto:grants@valleyair.org) | 559.230.5800

Interested in Electric Heat Pumps? Give us a call. Up to \$5,000 is available for electric heat pump vouchers.



**Valley Air District @ValleyAir · Dec 16, 2022**

Smoke from wood burning is a form of fine particulate matter (PM2.5). It aggravates breathing-related illnesses and increases the risk of heart attack and stroke. Please consider how it impacts air quality. Visit [valleyair.org/Rule4901](http://valleyair.org/Rule4901) for more information.

**CHECK DAILY WOOD BURNING DECLARATIONS**

**ON THE VALLEY AIR APP**  
[VALLEYAIR.ORG/APP](http://VALLEYAIR.ORG/APP)



# Comments/Questions?