

South Sacramento/Florin Community Air Protection

Steering Committee Meeting
Tuesday, May 25, 2021

SACRAMENTO METROPOLITAN



Agenda

6:00 – 6:20 pm	Welcome & Administrative Items
6:20 – 6:25 pm	District Update
6:25 – 6:40 pm	Recap Discussion on Land Use and Air Quality Impacts
6:40 – 7:00 pm	Outreach Subgroup Report Back
7:00 – 7:40 pm	Air Monitoring Data/Phase 3 Location Discussion
7:40 – 7:50 pm	New Business and Future Agenda Topics
7:50 – 8:00 pm	Public Comments
8:00 pm	Adjourn

Logistics

- Staff is available if you have technology trouble; please email AB617Clerk@airquality.org
- You can message the host or co-host if you are having technical difficulties.
- During the Steering Committee discussion period or during Public Comment period, each person who wants to speak will need to raise their virtual hand:
 - On Zoom web application – Click either Participants or Reactions, then press “Raise hand”
 - On the phone – Dial *9 to raise your virtual hand.
 - Please state your name and affiliation.
- When you are called – Please unmute yourself on the app or the phone (press *6)
- Email public comments to Clerk of the Committee at AB617Clerk@airquality.org



raise hand

Administrative Items



- 1) Approve previous meeting notes

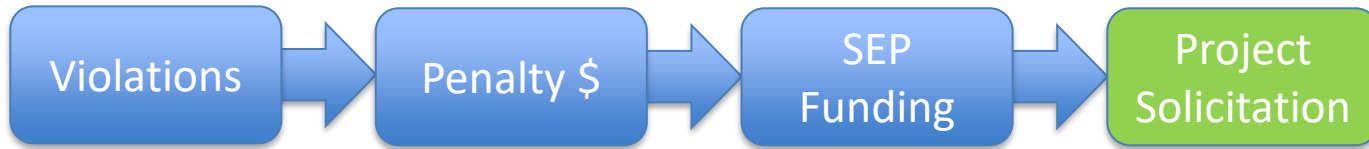
District Updates (5 minutes)

- New District SEP Program
- Reminder on Annual Required Documents

New Funding Opportunity - Supplemental Environmental Projects

Supplemental Environmental Projects (SEP)

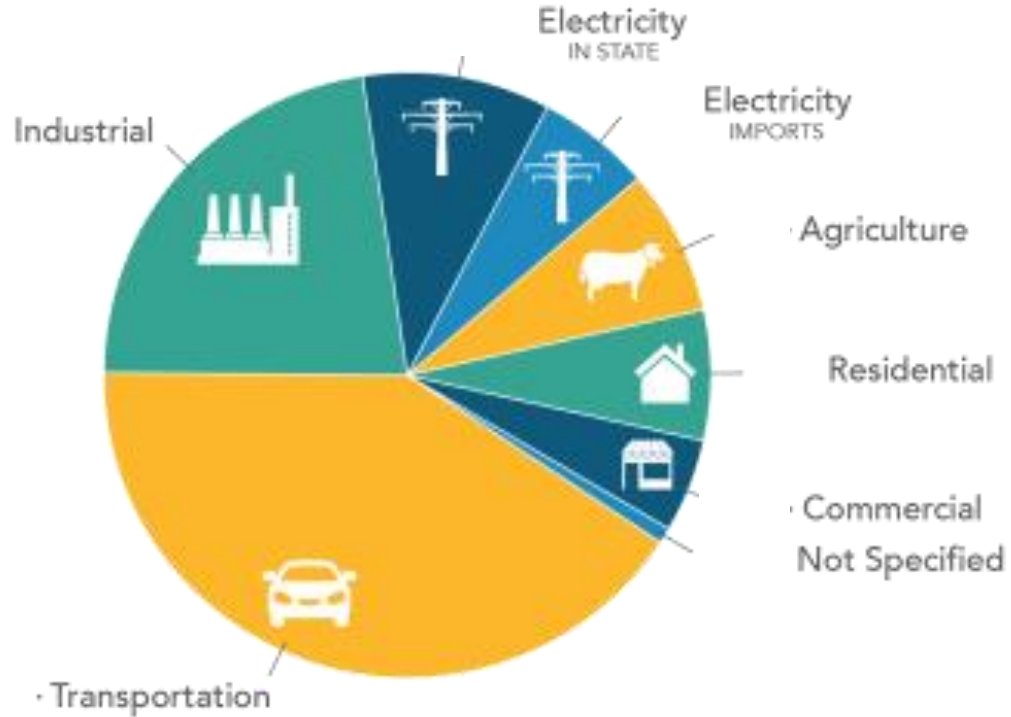
- SEP = a project that benefits air quality and public health
- Up to 50% of a penalty can go to a SEP (violator decides)
- District currently has funding available for SEPs
- Opening Public Solicitation: **June 1 to July 30, 2021**
- Information packet will be sent to Steering Committee



Recap: Land Use and Air Quality Impacts

(15 minutes)

Air Quality Sources



Sac Metro Air District Land Use = Lower Impacts from Emissions

Two paths to this:

1. Lower Emissions at the Source
2. Reduce Exposure to Emissions

Lower Emissions at the Source

	Land Use Role	Source	Infrastructure
Fewer Vehicle Trips	Promote walk, bike, roll, & transit		Transit, sharing, pooling, hubs
Shorter Vehicle Trips	Plan land uses closer together		Street design, land use patterns
Cleaner Vehicles	Plan infrastructure	Low emission and alternative fuels, engine technology	EV Chargers, Hydrogen fueling
Building Efficiency	Require efficient technology	Heating, cooling, appliances	
Cleaner Operations	Promote cleaner technology	Low emission equipment	

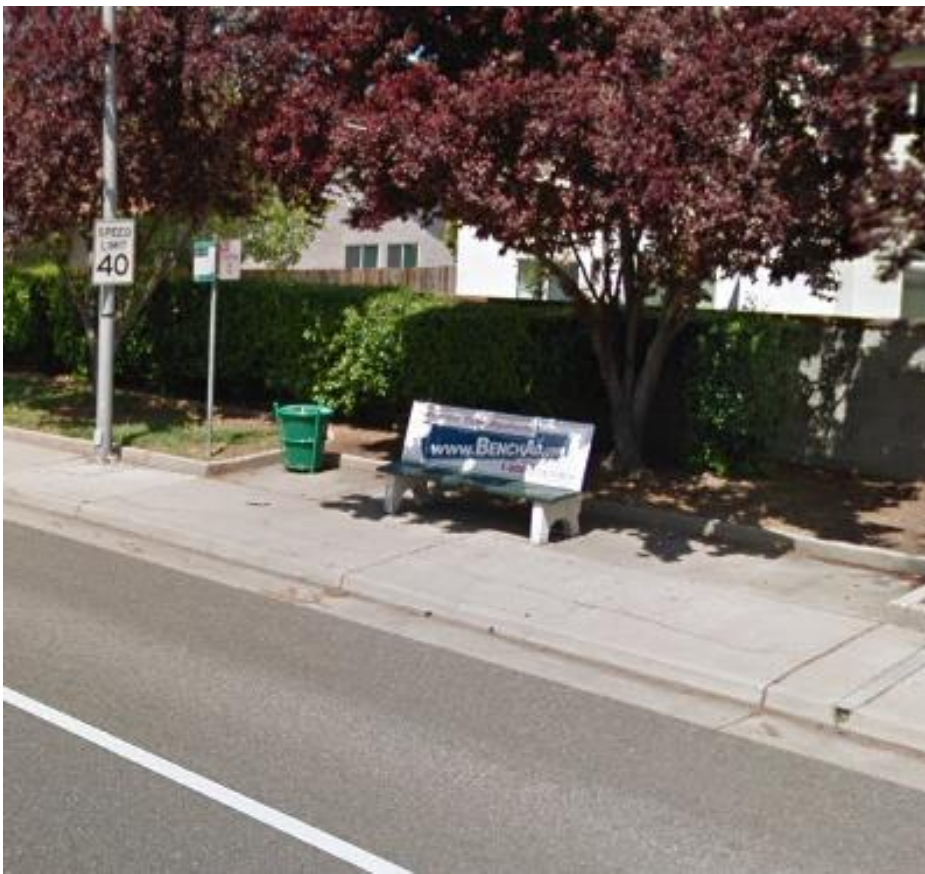
Reduce Exposure to Emissions

	Land Use Role	Infrastructure
Move Source	Zoning / Land Use designation	Encourage rerouted trips, moved emitters, and separated future emitters
Move People	Design	Sidewalks, bike lanes, on street parking, separate land uses
Block Exposure	Design	Trees, shade, etc

Lower Impacts from Emissions

	Land Use	Source	Infrastructure
Vehicle Trips	Walk, bike, roll, and transit, plan destinations closer together		Transit, rideshare, carpool, vanpool, Transportation Network company (TNC), mobility hubs
Cleaner Vehicles	Plan infrastructure	Low emission and alternative fuels, engine technology	
Move Source	Zoning / Land Use designation, Reroute		Reroute Trips
Move People	Design		Sidewalks, bike lanes, on street parking
Block Exposure	Design		Trees, shade, etc
Building Efficiency	Require efficient technology	Heating, cooling, appliances	
Cleaner Operations	Promote cleaner technology	Low emission equipment	

Project Example



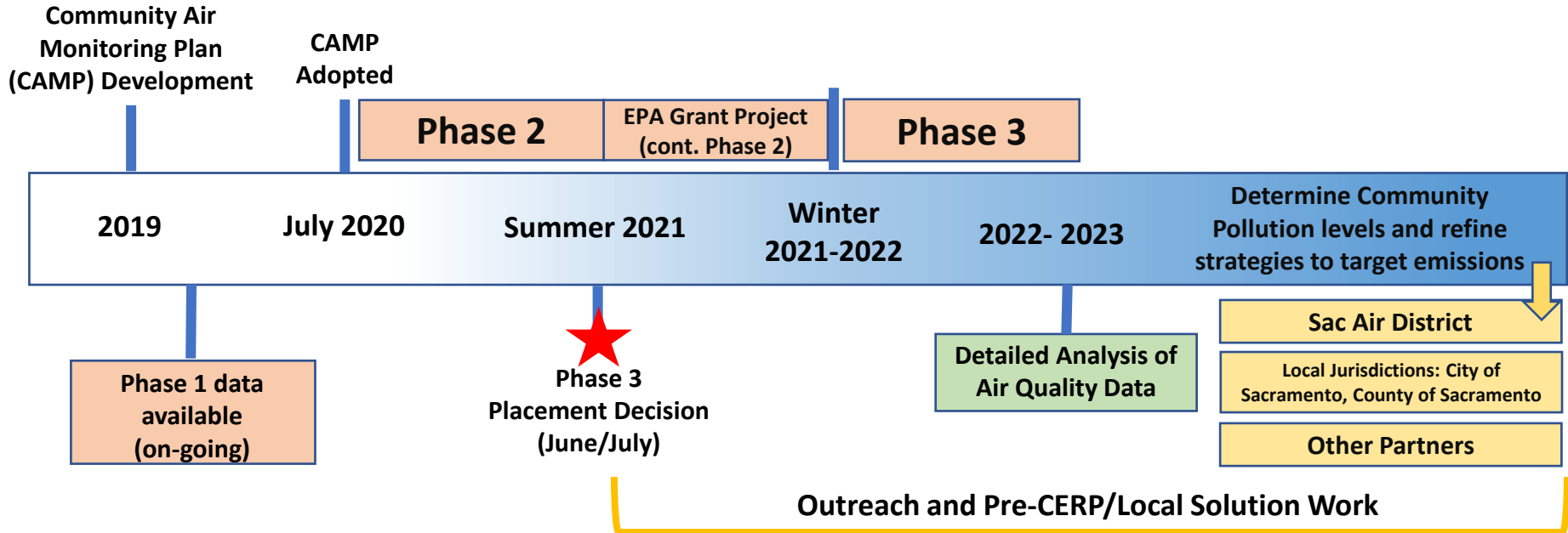
Add solar-powered lighting and shelter to 11 bus stop sites
Photo shows (WB) Sheldon Blvd at Freesia Dr in Elk Grove

Outreach Subgroup Report Back

(20 minutes)

Data Presentation from Phase 2 of Community Air Monitoring (40 minutes)

Review: Big Picture Timeline



3 Phase Monitoring Approach

Phase I

Deploy 22 sensors



Phase II

Deploy 6 stand alone monitors



Phase III

Deploy 1 Mobile Laboratory

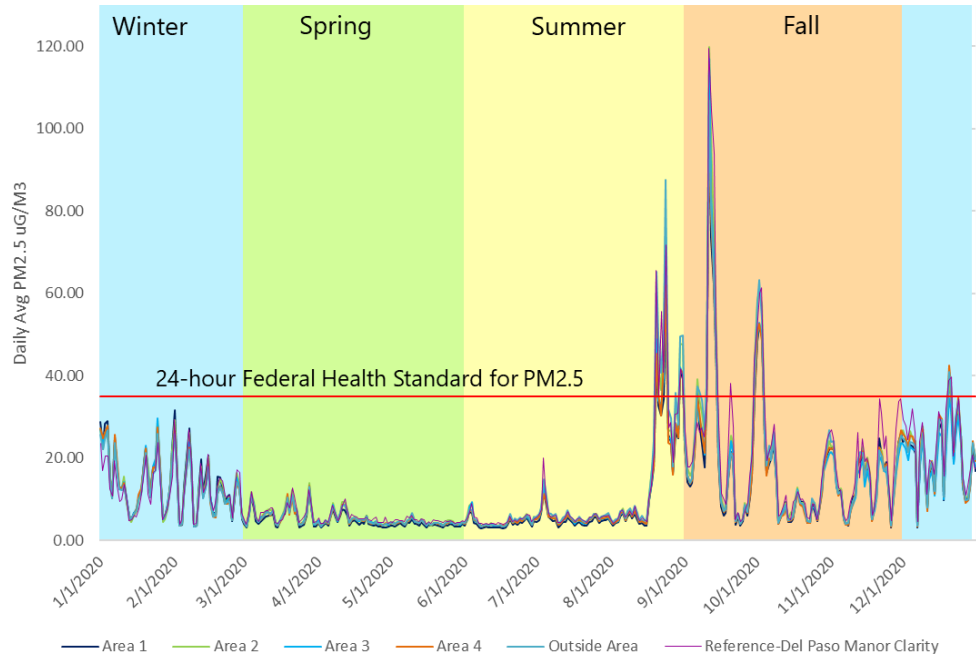


Recap: Phase 1 PM2.5 Monitoring

Summary:

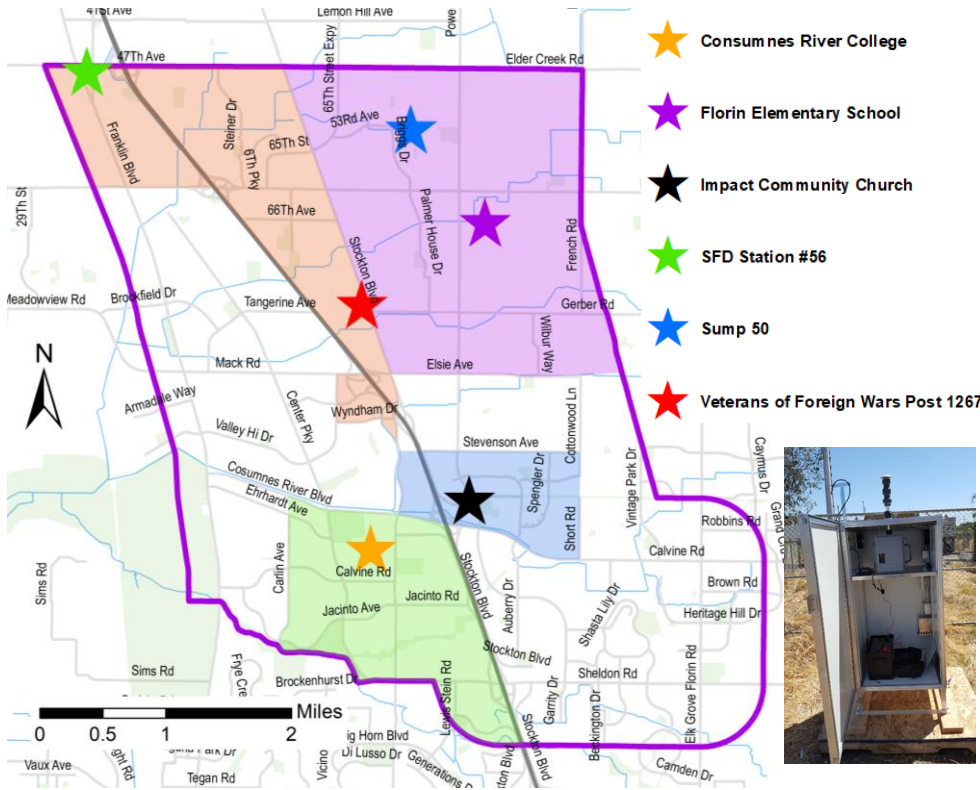
- 21 sites, 22 sensors
- Helps increase air quality awareness
- All sites generally had similar levels

PM2.5 Daily Average per Area



Data is displayed at: <http://www.airquality.org/Air-Quality-Health/Community-Air-Protection/Community-Air-Monitoring>

Phase 2 Monitoring



Where?

- 6 sites

What is being monitored?

- Toxic metals – Discussed at February 2021 meeting
- Toxic gases (VOCs)
- Black carbon

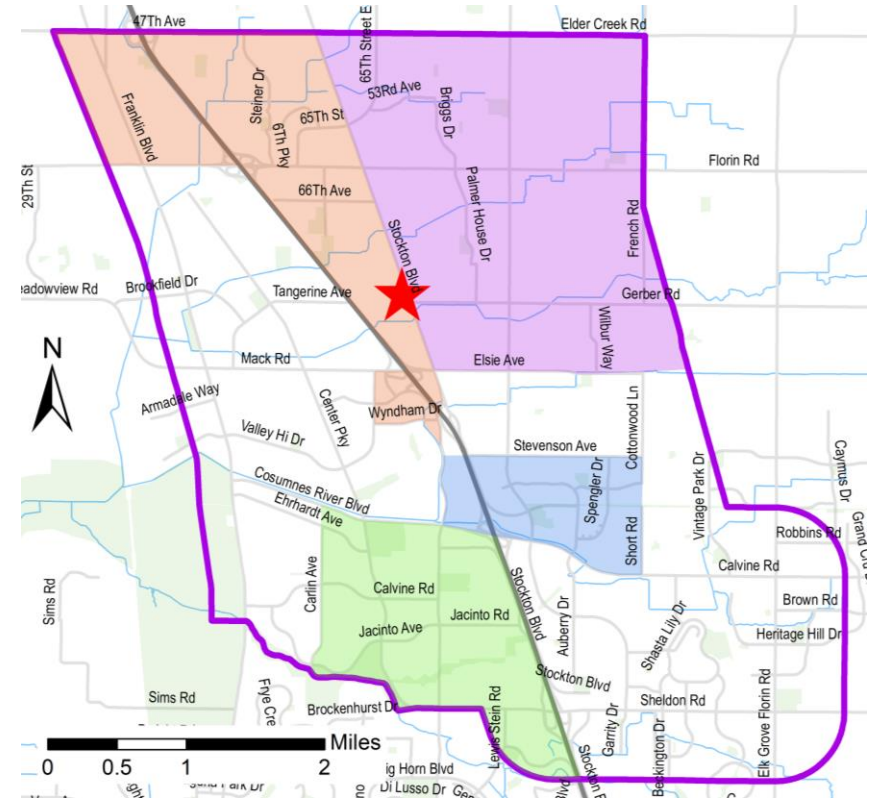
Why?

- Compare the 4 priority areas to pick the Phase 3 Mobile Laboratory location



Recap: Preliminary Results from Phase 2 – Toxic Metals

- VFW Post and Impact Church had one PM2.5 reading higher than the federal standard
- No sites were above the health standard for lead
- ★ VFW Post - Highest average concentration for PM2.5 and most metals



What are Volatile Organic Compounds (VOCs)?

- Volatile Organic Compounds (VOCs) are a category of hundreds of gaseous air pollutants
- Some VOCs have known adverse health effects, including cancer, while others do not
- VOCs are regulated by local, state and federal regulations



Volatile Organic Compounds (VOCs)

Exposure to VOCs can cause:

- **Short-term**
 - Dizziness
 - Headache
 - Eyes, nose, throat irritation
- **Long-term**
 - Damage to liver, kidney, or central nervous system
 - Increased risk of cancer (carcinogenic)

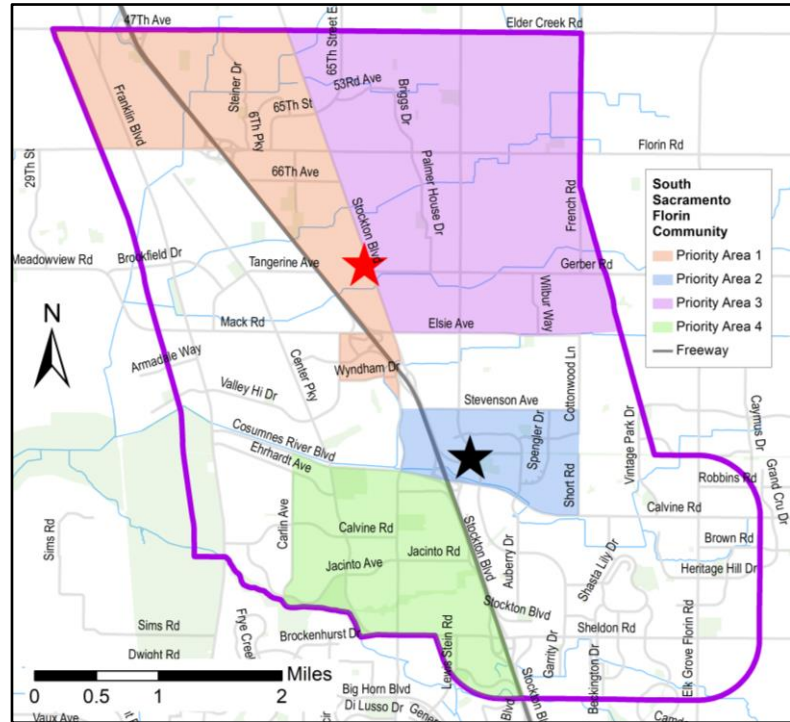


Toxic VOC data

- Analyzed for 117 pollutants
- 24 sample days (124 valid samples)
 - August 2020 – February 2021
- Wildfire impacts Aug-Oct 2020
- For each pollutant and site:
 - highest average concentration
 - maximum concentration

Toxic VOC data – Preliminary Findings

- Two highest sites*
 - ★ VFW Post (Area 1)
 - ★ Impact Church (Area 2)
 - Excluding wildfire days
 - VFW Post



* Using the EPA Compendium Method TO-15 for determination of VOCs in air collected in specially-prepared canisters and analyzed by gas chromatography/mass spectrometry (GC/MS); <https://www3.epa.gov/ttnamti1/files/ambient/airtox/to-15r.pdf>.

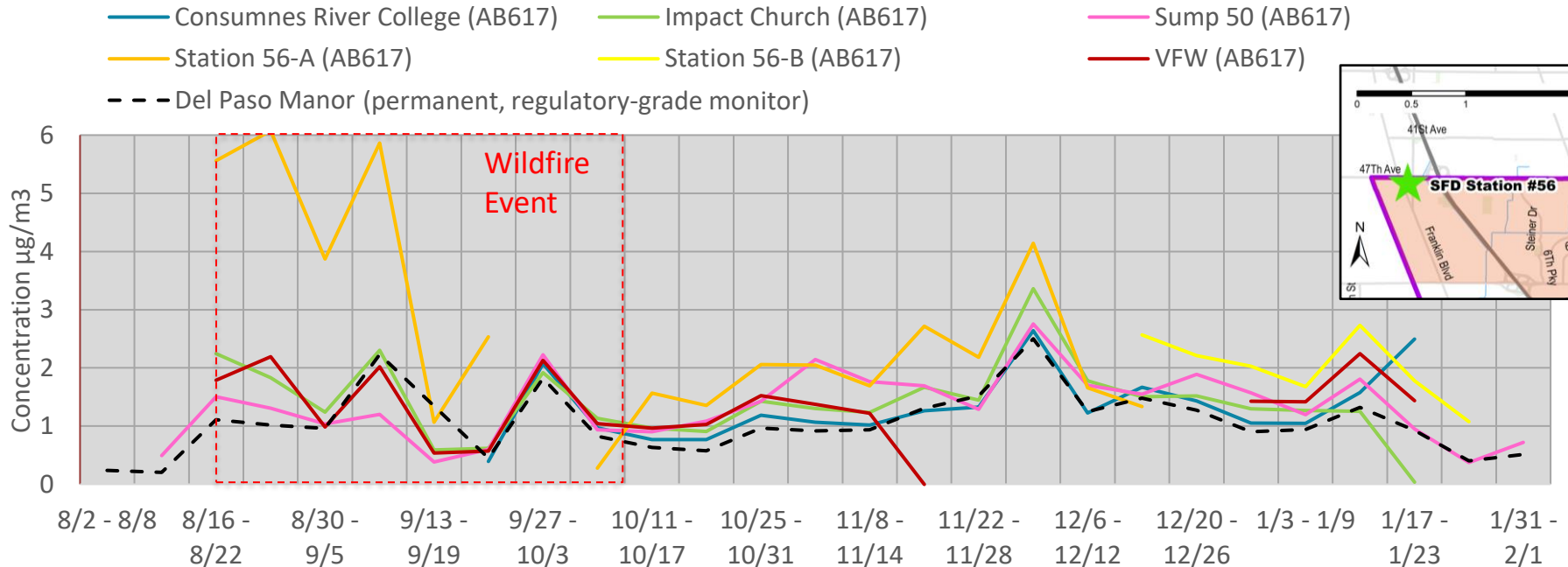
Black Carbon

- Black carbon is a part of PM_{2.5}
- Primarily from cars, trucks, forest fires, fireplaces, etc.



Black Carbon AB617 data

Black Carbon Weekly Average



Note: The black carbon monitor at Florin Elementary School malfunctioned and did not collect any data.

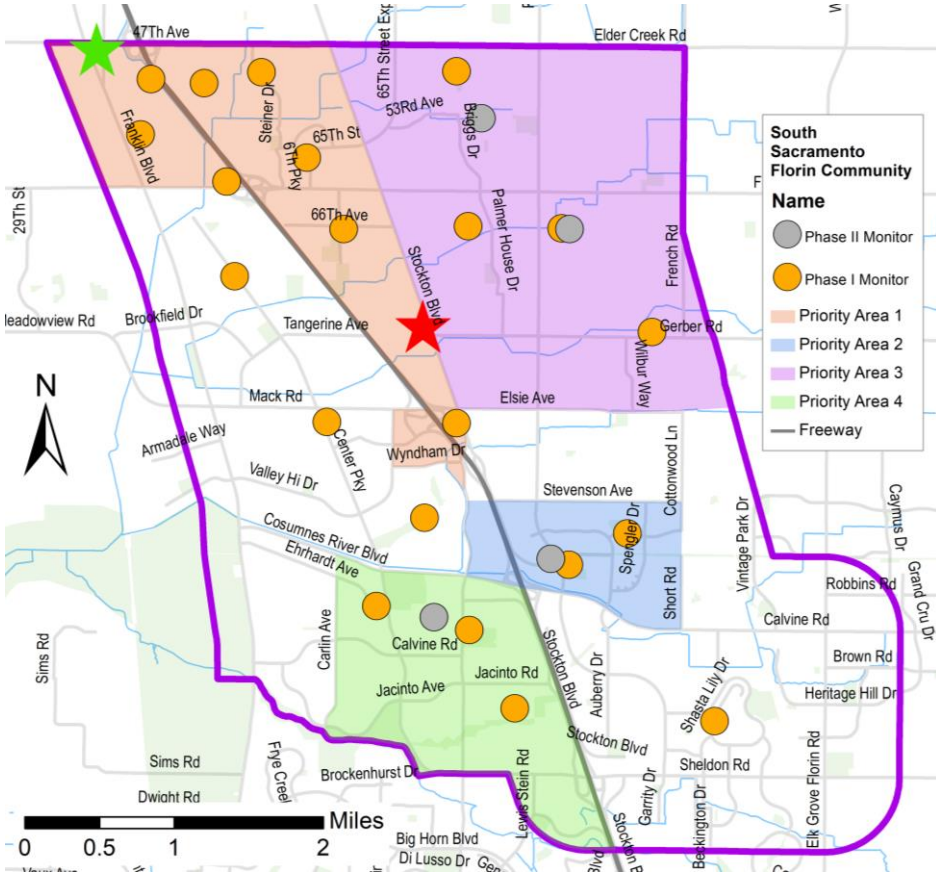
Black Carbon in the AB 617 Area

1. Station 56 Site

- Higher in August/September, needs further investigation
- Slightly higher than other sites after September

2. All sites trend up and down with each other

Summary of Highest Sites



Low-Cost Sensors		PM2.5
All sites had similar levels		
★	Station 56	Black Carbon
★	VFW Post	Phase 2: PM2.5 Toxic Metals Toxic VOCs

Next Step:
 Recommendation for placement of the Phase 3 Mobile Laboratory

Discussion and Observations

- Monitoring and analysis:
 - On-going process
 - EPA grant extended monitoring, more information to come at all six locations

- Location recommendation:
 - Can be revisited after monitoring 6+ months plus time for data review
 - On-going process

Discussion and Observations

- Phase 3 monitoring:
 - Ozone
 - Carbon Monoxide (CO)
 - Nitrogen Dioxide (NO₂)
 - Weather
 - Particulate Matter 2.5 (PM_{2.5})
 - Black Carbon
 - Toxic Metals
 - Toxic Gases

Discussion and Observations

- 1) Consistent with SC member areas of concern: Area 1
- 2) Sampling for toxics generally was higher at VFW, which is in the central part of the community
- 3) Near the freeway, within half mile

What should we consider for the Phase 3 location?

- Monitoring at where we see highest readings? Or closer to where people live and play?
- Within half mile to a 1 mile from freeway?
- Area 1 – closer to VFW? Or Station 56?



Other things to consider?

New Business and Future Agenda Topics (10 minutes)

- CARB's Community Air Grant Opportunity

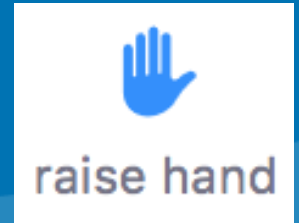
Brainstorm – June Agenda Topics?

Tentative Agenda Items?
Continued Phase 3 Location Discussion
AB 617 Program Budget Update
Potential Additional/Future Topics
Outreach – further discussion
Discussion with Elected Officials (Depending on availability)
Next Steps/Emission Reduction Solutions (Pre-CERP) discussion: a) Emission reduction strategies & solutions b) Subgroup?
Partnership building: City planning? County Planning? Health care? Education? Industry? Transportation?
Urban Heat Island presentation

Public Comments

(10 minutes)

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Adjourn

Next Meeting Date: Tuesday, June 22, 2021