



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

AGENDA: 17

Consider Authorization of Employee Compensation Plan

**Board of Directors Meeting
July 19, 2023**

**John Chiladakis
Acting DEO, Finance and Administration
jchiladakis@baaqmd.gov**

Requested Motion



- Adopt the Resolution authorizing employee compensation and benefits for Fiscal Year Ending 2024

Background



- The Human Resources Performance Audit report dated November 2, 2022 recommends comprehensive compensation plan authorized by the Board annually.
- The Memorandum of Understanding (MOU) between the District and Employees' Association expired on June 30, 2023. Contract negotiations are ongoing.
- The recommended authorization would continue the compensation unchanged for represented employees but provides an increase starting August 13th 2023 for non-represented employees.

Compensation Summary – Salaries and Benefits



Benefit		Confidential	Management	Executive*	Represented
General Wage Increase	Effective first full pay period after August 1, 2023: 4%				
	Effective first full pay period after July 1, 2024: 4%	X	X	X	
CalPERS Retirement	Employees pay their own mandatory contribution	X	X	X	X
Money Purchase Plan	\$119.72 per month In lieu of Social Security, effective July 1, 2023	X	X	X	X
Deferred Compensation	457 plan available. Employees may set aside up to the legal pre-tax maximum (up to \$22,500 per employee per year for 2023) \$30K includes age 50 catch up	X	X	X	X
Fringe Benefits Allowance (Cafeteria Plan)	Includes Health, Dental, Vision and supplemental life insurance. Current maximum value is \$2,334 per month for family	X	X	X	X
Retiree Health	Same benefit as active employee for employees who retire with 10 years + service (note, for those hire after 2010, they are subject to vesting schedule from 10-15 years of CalPERS service; for those hire prior to 2010, no vesting schedule; the fringe benefit allowance is frozen at the time of retirement)	X	X	X	X
Life Insurance	Up to \$500K District paid. Additional \$100K available for cost. Continues at retirement when dollar amount decreases with age.	X	X	X	X
Long Term Disability	\$6500 per month maximum	X	X	X	X

*Executive classifications are Deputy Air Pollution Control Officer and Deputy Executive Officer. Executive Officer and Counsel compensation are approved separately by the Board of Directors

Compensation Summary (cont.)



Benefit		Confidential	Management	Executive*	Represented
Vehicle Allowance	Assigned Vehicle or \$500 per month Directors and above		X	X	
Transit Subsidy	Transit subsidy up to \$300 per month	X	X	X	X
Educational Reimbursement	Maximum \$2,000 per fiscal year for employee educational pursuits. Maximum \$1,500 for fiscal skill enhancement pursuits. Maximum \$1,000 per fiscal year per employee for student loan payback. Total annual amount paid to all employees cannot exceed \$30,000	X	X	X	X
Holidays	14 paid holidays	X	X	X	X
Floating Holidays	Hours of leave given per fiscal year July 1.	36 40	72	72	36
Annual Leave	From 12 to 30 days per year depending on length of service. Maximum 460 hours accrual each January 1. Annual cash out of up to 40 hours allowed.	<u>X</u> <u>At 25 years and above, accrue 9.23 hours per PP. Max 500 hours expires 12/31/2024. Additional cash out of 40 hours.</u>	<u>X</u> <u>At 25 years and above, accrue 9.23 hours per PP. Max 500 hours expires 12/31/2024. Additional cash out of 40 hours.</u>	<u>X</u> <u>At 25 years and above, accrue 9.23 hours per PP. Max 500 hours expires 12/31/2024. Additional cash out of 40 hours.</u>	X
Sick Leave	12 days per year no accrual limit	X	X	X	X
Management Leave	Hours per year of Leave given July 1 (annual cash out allowed)		80	120	

*Executive classifications are Deputy Air Pollution Control Officer and Deputy Executive Officer. Executive Officer and Counsel compensation are approved separately by the Board of Directors

Compensation Summary (cont.)



	Practice	Confidential	Management	Executive*	Represented
Overtime Pay	Eligibility for 1.5 times hourly salary (or 2 times if working on holiday) for working hours more than 80 hours per pay period	X			X
Acting Assignment Pay	Eligibility for a pay increase during an assignment where an employee is temporarily acting in a higher paying position	Eligible for assignments longer than 15 days. Increased pay starts at day 16.	Eligible for assignments longer than 15 days. Increased pay starts at day 16.	Eligible for assignments longer than 15 days. Increased pay starts at day 16.	Eligible for assignments longer than 40 hours. Increased pay starts on hour 1.
Regular Hazard Pay	2.5% pay to employees who perform hazardous duties, including: 1) climb 30 feet or more; 2) wear Self-Contained Breathing Apparatus (SCBA) or safety harness; 3) perform confined space entries	X	X	X	X
Standby Pay	Standby duty hour	\$5 \$8 per hour			\$5 per hour
Dependent Care Assistance	Ability to set aside \$5,000 pre-tax income per year	X	X	X	X
Medical Care Account	Ability to set aside \$3,050 pre-tax income per year	X	X	X	X

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Recommendation for Motion



- Adopt the Resolution authorizing employee compensation and benefits for Fiscal Year Ending 2024



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AGENDA: 18

Amendment of Home Air Filtration Program Eligibility Criteria for James Cary Smith Community Grantee Partnerships

**Board of Directors Meeting
July 19, 2023**

**Anna Lee
Community Engagement Manager
alee@baaqmd.gov**

Outcome



- Provide an overview of the School and Home Air Filtration Program
- Clarify eligibility criteria for James Cary Smith Community Grantee partners

Outline



- Background
- Home Air Filtration Program Overview
- Target populations and communities served
- James Cary Smith (JCS) Community Grantee and Community Organization Partnerships
- JCS Grantee Partners Eligibility
- Summary of Requested Action

Requested Action



- Recommend the Board of Directors approve a clarification to the criteria for the Home Air Filtration Program James Cary Smith (JCS) Community Grantee partnerships to include, in addition to AB 617 communities, any other community with an overall score of 70 to 100 in CalEnviroScreen 4.0, an environmental health screening tool that shows cumulative impacts in California communities by census tract.

Background & Program Scope



- In July 2022, the Board of Directors (Board) approved staff's proposal to expand existing air filtration programs with the \$1 Million (M) Wildfire Mitigation Designation with the goal to equitably distribute air filtration units to impacted communities, including \$100,000 for partnerships with James Cary Smith Community Grantees and other community-based organizations to distribute air filtration to residents without a medical diagnosis or referral for asthma or respiratory disease

Current Program Overview



RAMP Partnership

- RAMP partnership to distribute to all clients with asthma or respiratory disease along with educational materials and a case study of the partnership
- The 7 home visiting programs are part of a larger statewide initiative

Local Health Centers

- Local health center partners in AB 617 communities to reach low-income clients with asthma or respiratory disease

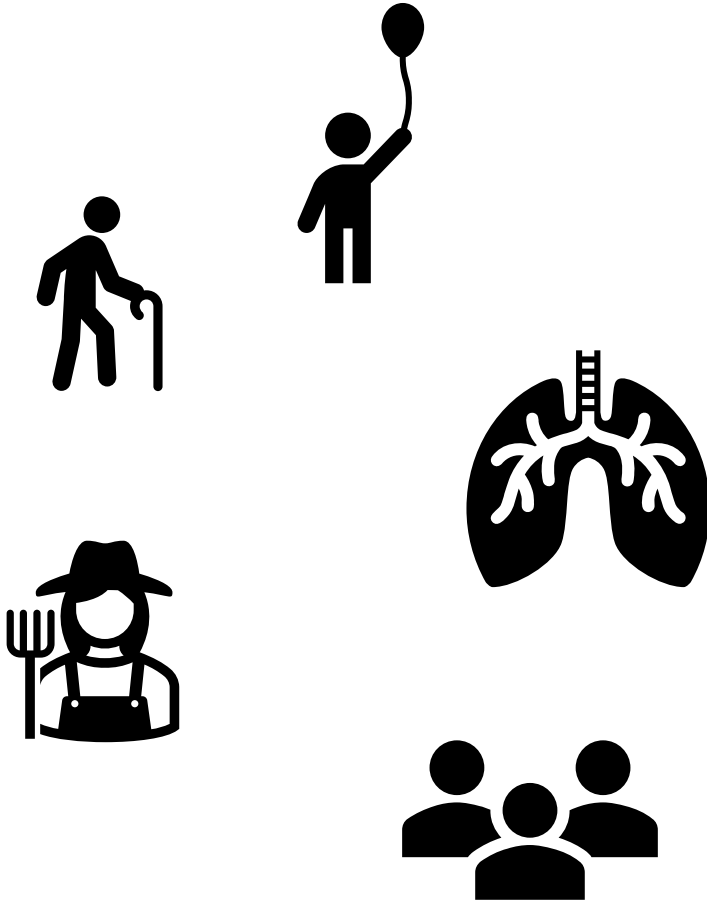
Schools

- Expanded to four elementary schools in Richmond – San Pablo area with remaining CARB SEP grant and wildfire mitigation reserve funds

Community-based organizations

- Partnerships with JCS Community Grantees to apply to distribute to residents in impacted communities, West Oakland and Richmond/ North Richmond/ San Pablo Resiliency Hubs and outdoor workers in Santa Clara County

Target Populations and Communities



- Children and youth
- Populations with pre-existing health conditions, respiratory disease
- Elders
- Outdoor workers
- Communities already impacted by cumulative health burdens

JCS Grantees and Community Organization Partnerships



Eligibility

- Recruit recipients from AB 617 communities and/ or census tracts CES 4.0 (70 and above), no need for a medical diagnosis or referral for asthma or respiratory disease

Partner Role and Responsibility

- Ensure eligibility, place orders with Air District
- Store and distribute air filtration units and factsheet on air filter
- Collect information about recipients and provide to Air District: date of delivery, City and Zip Code of recipient; (optional: age, race/ ethnicity and primary language of recipient)

Air District Role

- Purchase and schedule delivery of air filters from selected vendors to partner organizations
- Provide factsheet in multiple languages and general support
- Collect and analyze available data

JCS Community Grantee Partner Eligibility



- In July 2022, the Board approved to expand existing air filtration programs with the \$1M Wildfire Mitigation Designation, it specified using \$100,000 to purchase air filtration units and replacement filters **for AB 617 communities and outdoor workers** recruited by James Cary Smith Community Grantees and other community-based organizations and **inadvertently failed to separately specify the CES 4.0 criteria**, which is an eligibility requirement for the Grant Program.
- Today, staff is seeking a minor clarification to include the CES 4.0 criteria to meet the Program's equity goals, reduce barriers for all JCS Grantees to be eligible to distribute air filtration units to communities with an overall score of 70 to 100 in CES 4.0, including areas like Marin City and the Tenderloin neighborhood in SF, and fully utilize the \$100,000 funds.
- This allows JCS partners, like Brightline and Marin City Climate Resilience and Health Justice, to be eligible to distribute air filters to Tenderloin SRO and Marin City residents without a need for a medical diagnosis or referral for respiratory disease

Summary of Requested Action



- Recommend the Board of Directors approve a clarification to the criteria for the Home Air Filtration Program James Cary Smith (JCS) Community Grantee partnerships to include, in addition to AB 617 communities, any other community with an overall score of 70 to 100 in CalEnviroScreen 4.0, an environmental health screening tool that shows cumulative impacts in California communities by census tract.



Questions



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AGENDA: 19

Consider Authorization of Strategic Planning Contract

**Board of Directors Meeting
July 19, 2023**

**Dr. Philip M. Fine
Executive Officer / APCO
pfine@baaqmd.gov**

Discussion



- Board Retreat on Strategic Planning.
- RFP Responses Included Proposals from Nine Firms.
- BluePoint Scored Substantially Higher than the Next Highest Firm, and Received Excellent References.
- Integrate development of the Agency-Wide Environmental Justice Action Plan with the Strategic Plan.
- Ad Hoc Committee of the BOD established by Chair.
- Draft Final Plan May 2024.
- Next Steps.

Recommendation for Motion



- Recommend the Board of Directors authorize the Executive Officer/APCO to execute a contract with BluePoint Planning for the development of an agency-wide Strategic Plan in an amount not to exceed \$234,700.



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AGENDA: 20

Air Quality Summary and Trends: PM_{2.5}

Board of Directors Meeting
July 19, 2023

Michael Flagg
Meteorology and Measurement
mflagg@baaqmd.gov

Presentation Outline



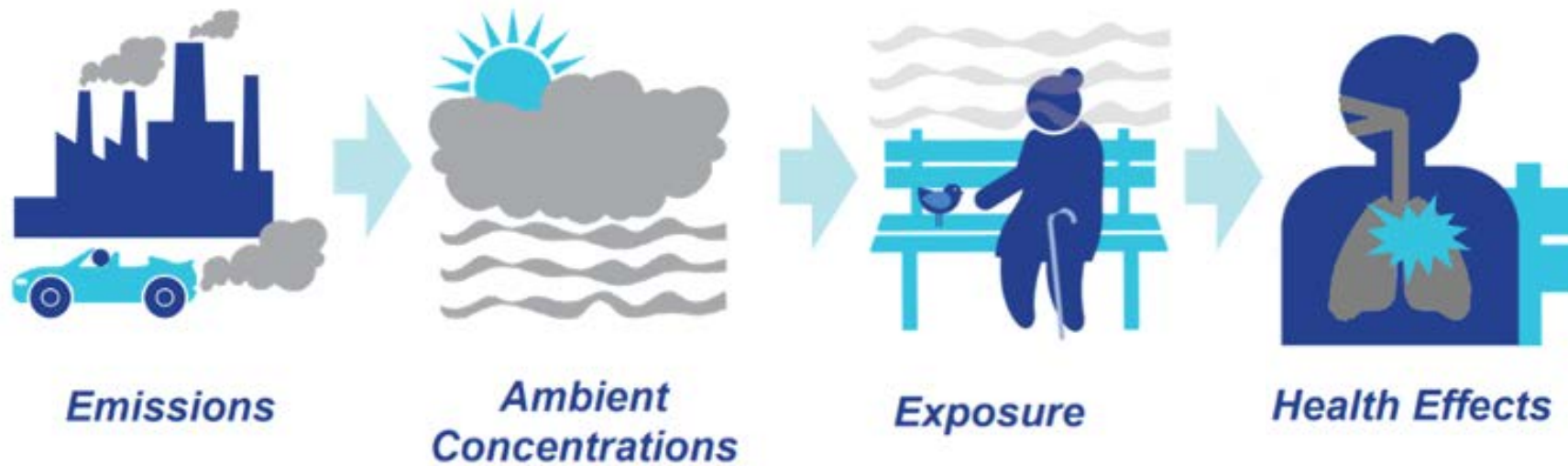
- Estimating Levels of Air Pollution
- Air Monitoring
- Key Takeaways
 - Examples given for fine particulate matter (PM_{2.5})
- Ongoing and Future work

Presentation Requested Action

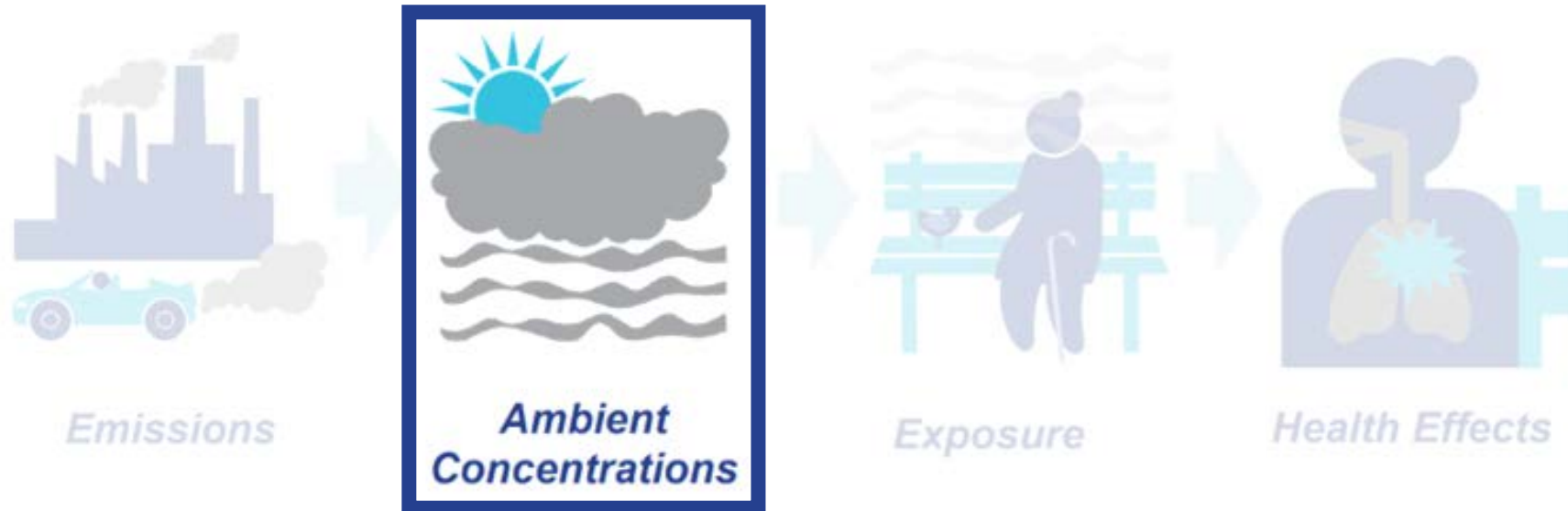


- None – Informational Presentation

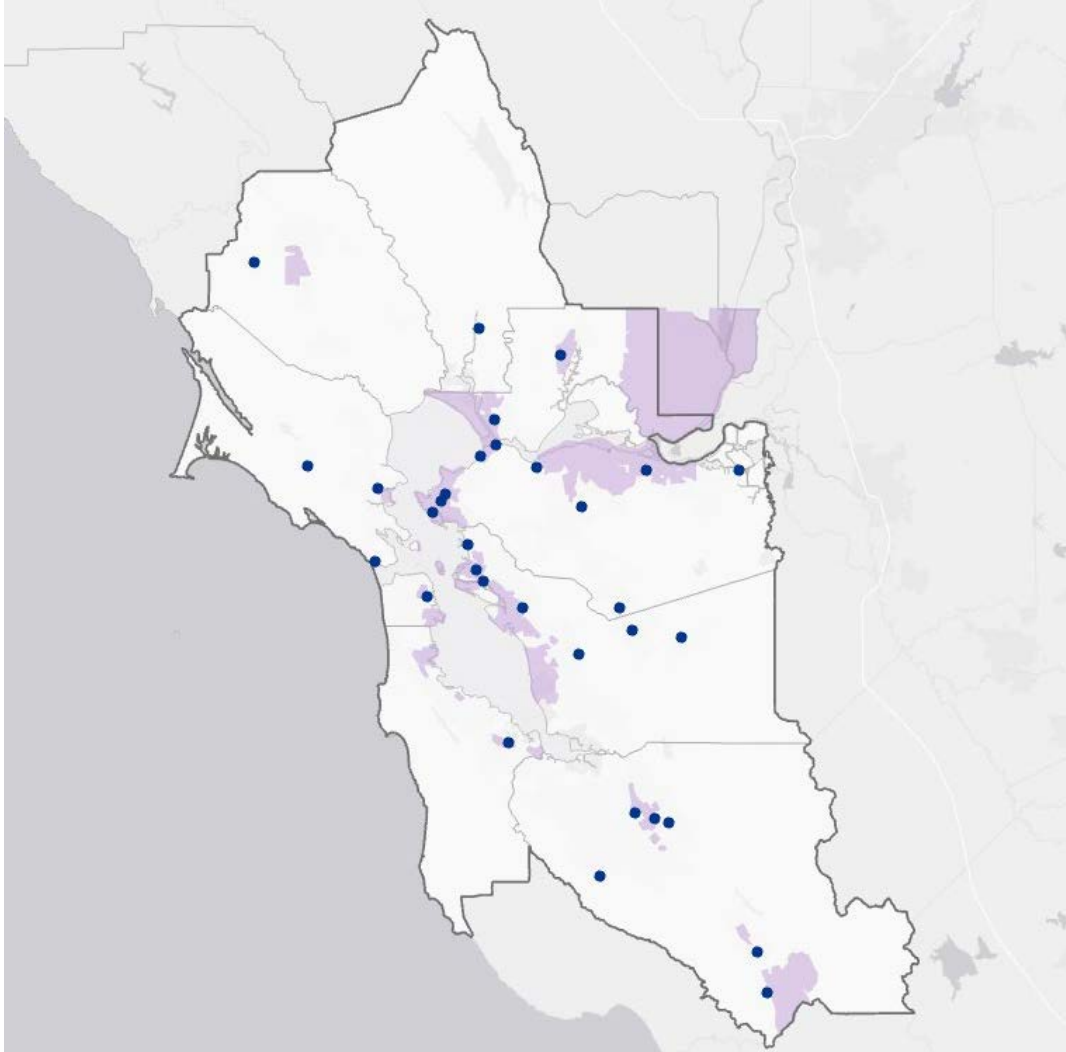
Estimating Levels of Air Pollution



Estimating Levels of Air Pollution



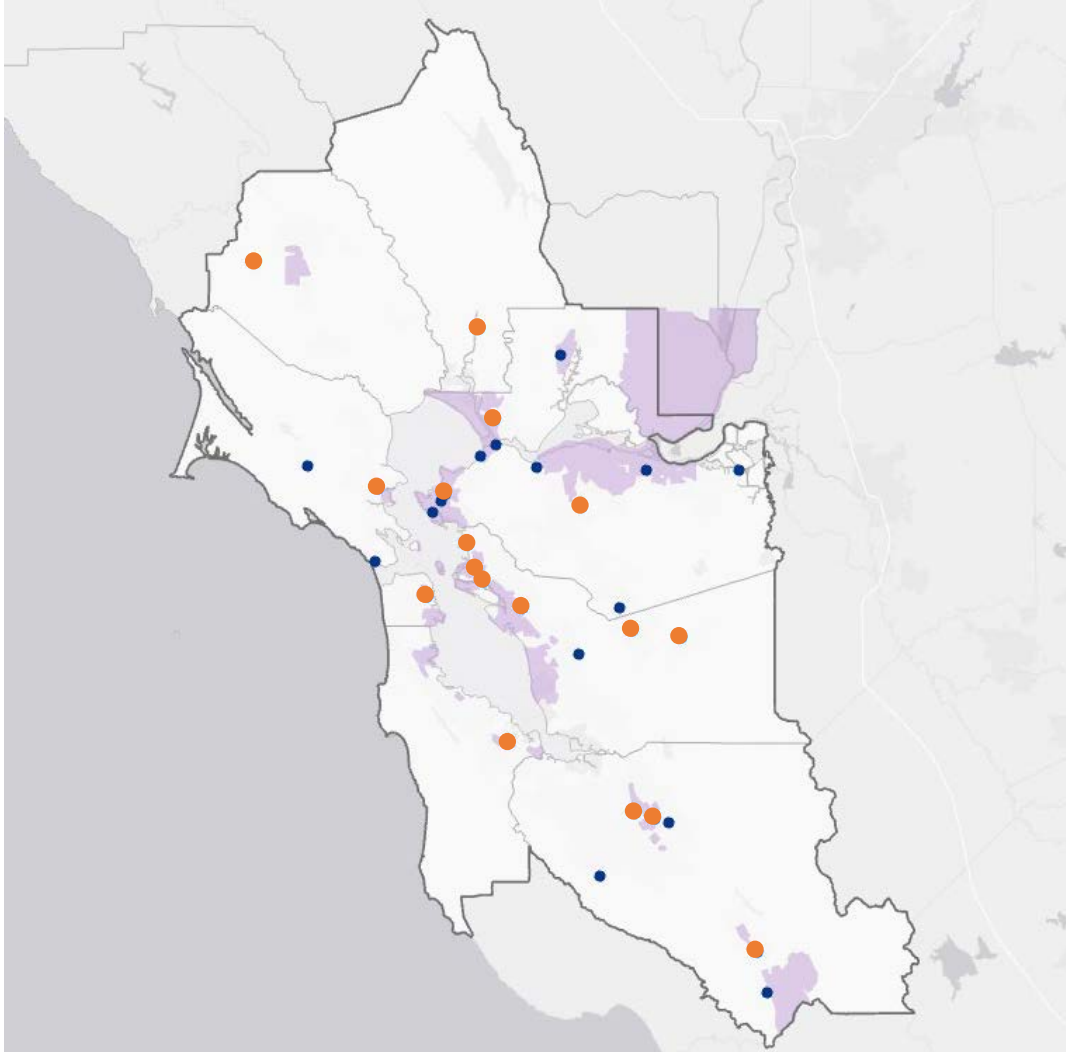
Air District Monitoring Network



- 32 monitoring sites
- Each site measures a different combination of pollutants
 - Criteria Pollutants
 - PM_{2.5}, PM₁₀, O₃, NO₂, SO₂, CO, Lead
 - Additional Measurements
 - Black Carbon, PM Speciation, Ultrafine Particles, Air Toxics

— Air District Jurisdiction
■ Overburdened Communities

Air District Monitoring Network



- 32 monitoring sites
- Each site measures a different combination of pollutants:
 - Criteria Pollutants
 - **PM_{2.5}**, PM₁₀, O₃, NO₂, SO₂, CO, Lead
 - Additional Measurements
 - Black Carbon, **PM Speciation**, Ultrafine Particles, Air Toxics

— Air District Jurisdiction
■ Overburdened Communities



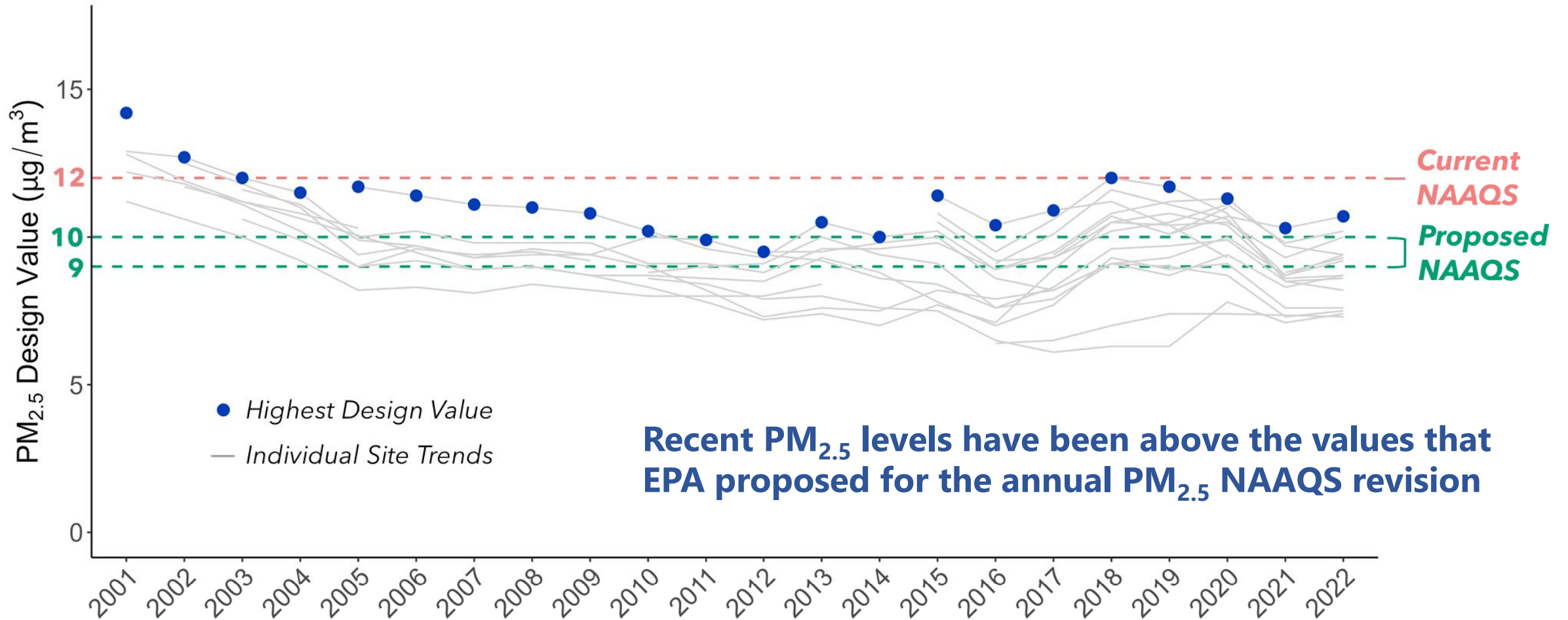
Key Takeaway #1:

While PM_{2.5} levels are currently at or below the National Ambient Air Quality Standards (NAAQS), trends show that progress has slowed in recent years

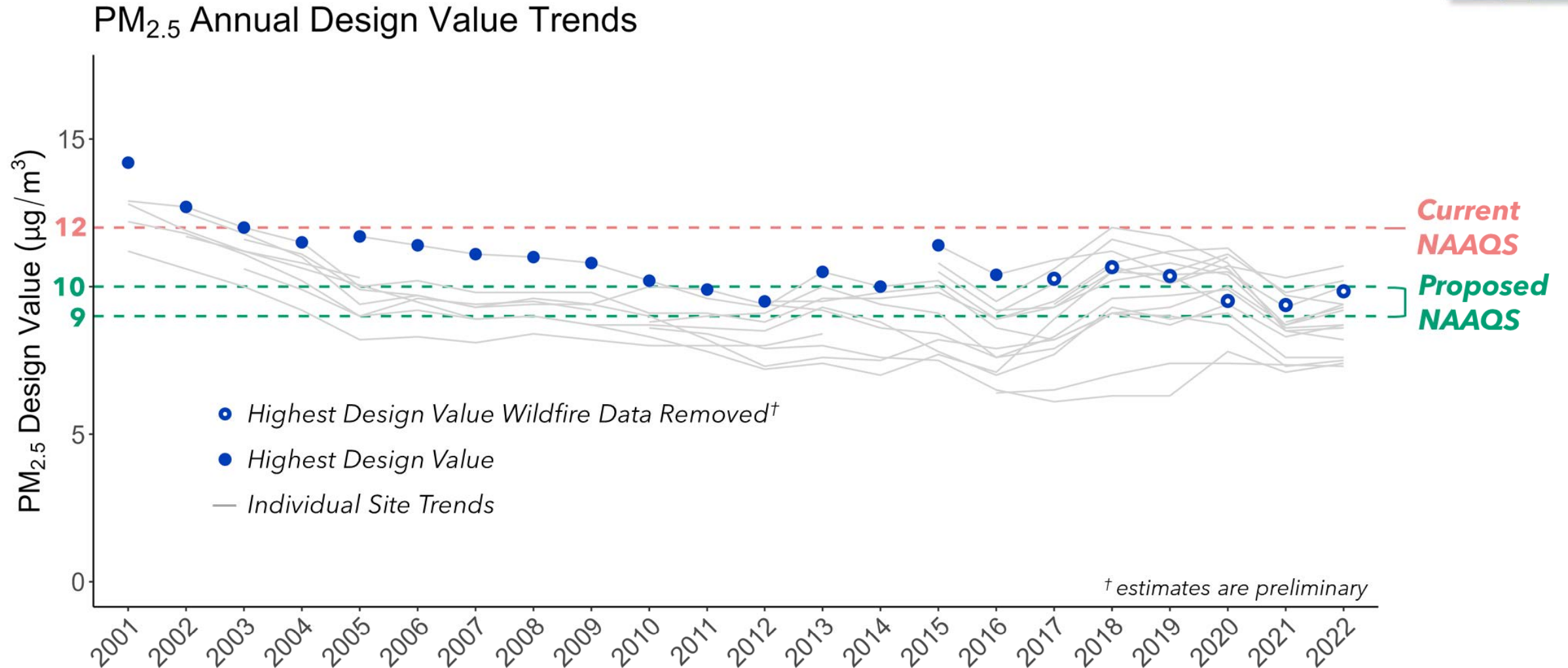
Annual PM_{2.5}



PM_{2.5} Annual Design Value Trends



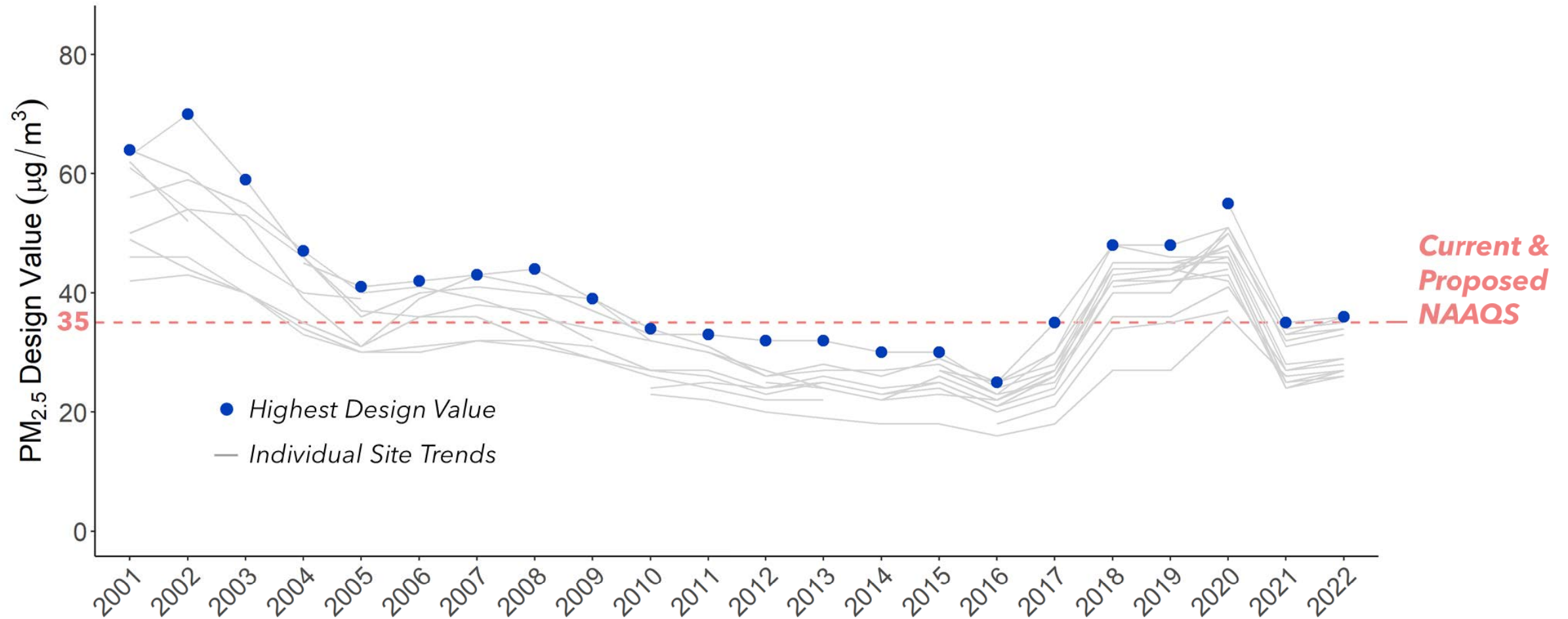
Annual PM_{2.5} (cont.)



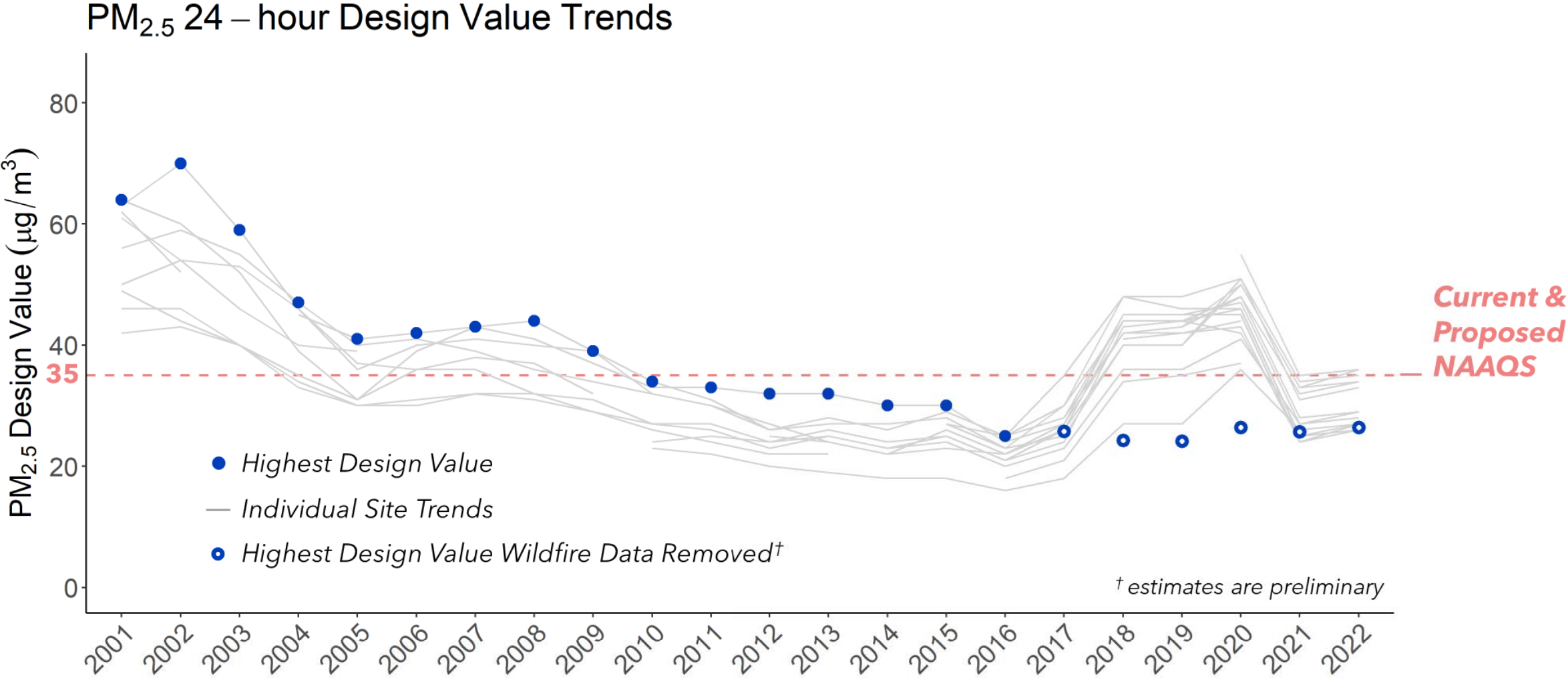
24-Hour PM_{2.5}



PM_{2.5} 24 – hour Design Value Trends



24-Hour PM_{2.5} (cont.)

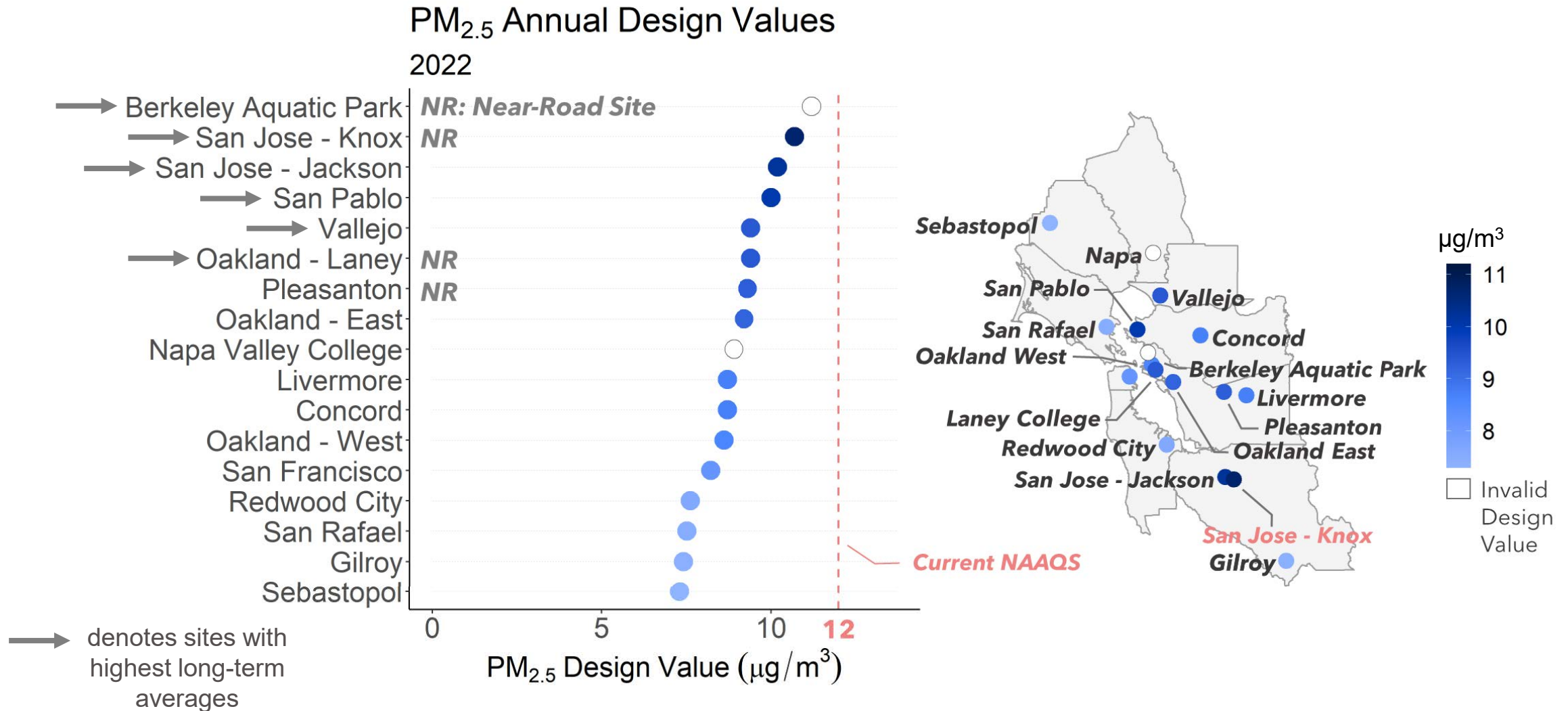




Key Takeaway #2:

Some areas have higher day-to-day levels of pollution and some areas have higher peak levels of pollution during short episodes

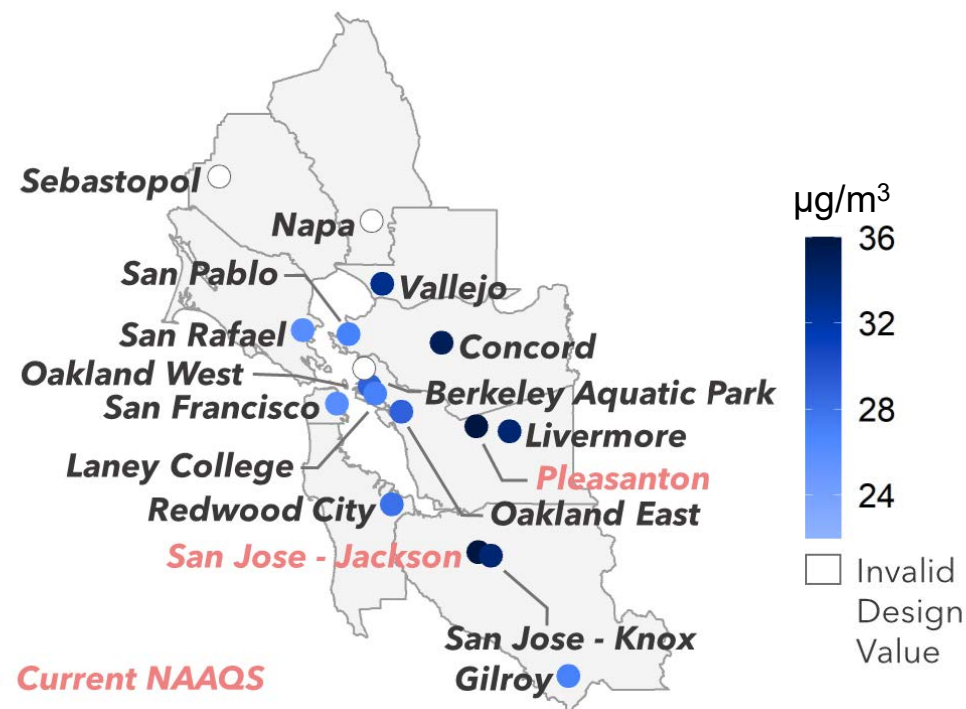
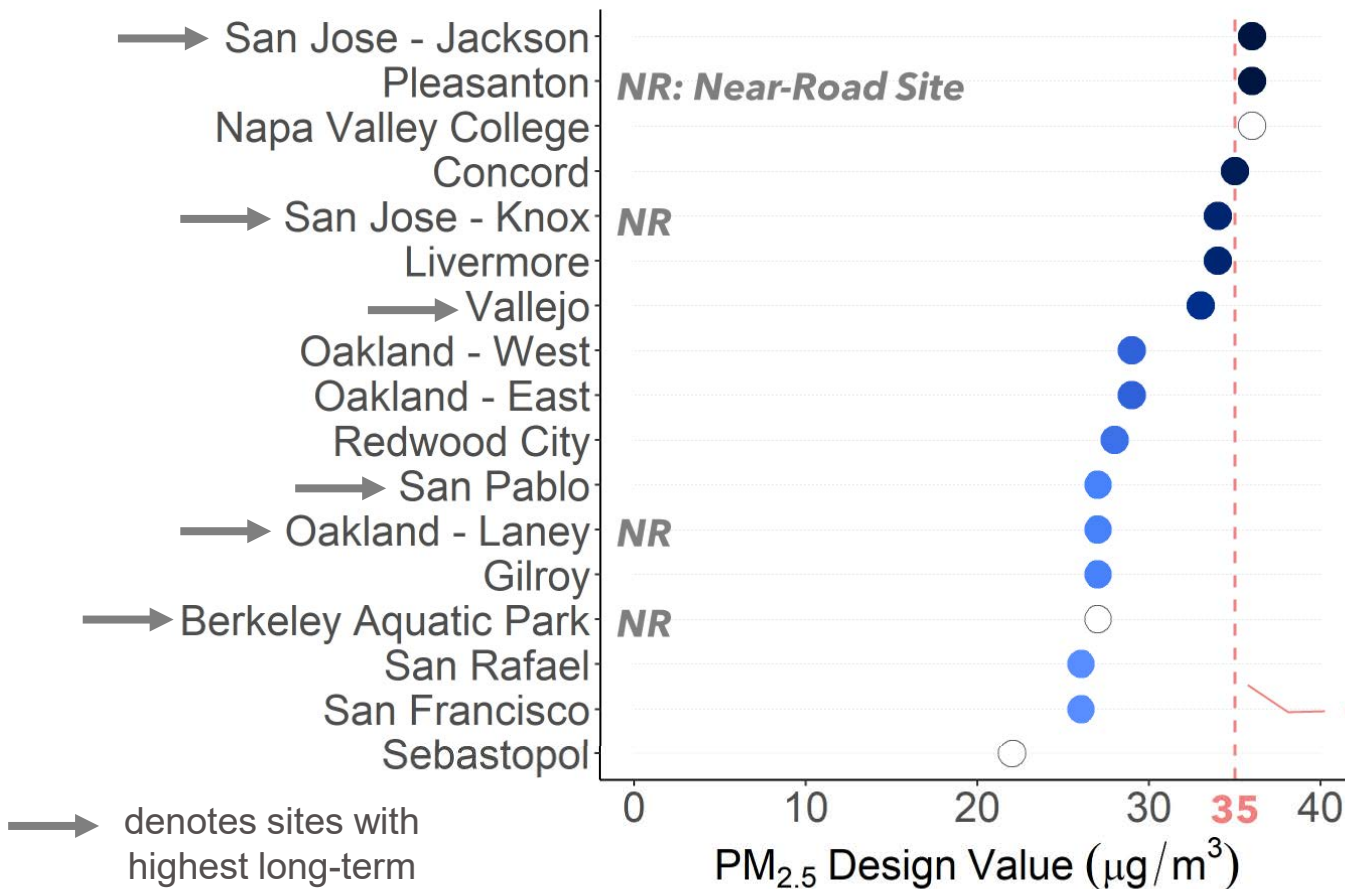
Long-term Averages Worse in Dense Urban Areas and Near the Bay



Short-term High Episodes Worse in South Bay and Eastern Valleys



PM_{2.5} 24 – hour Design Values
2022

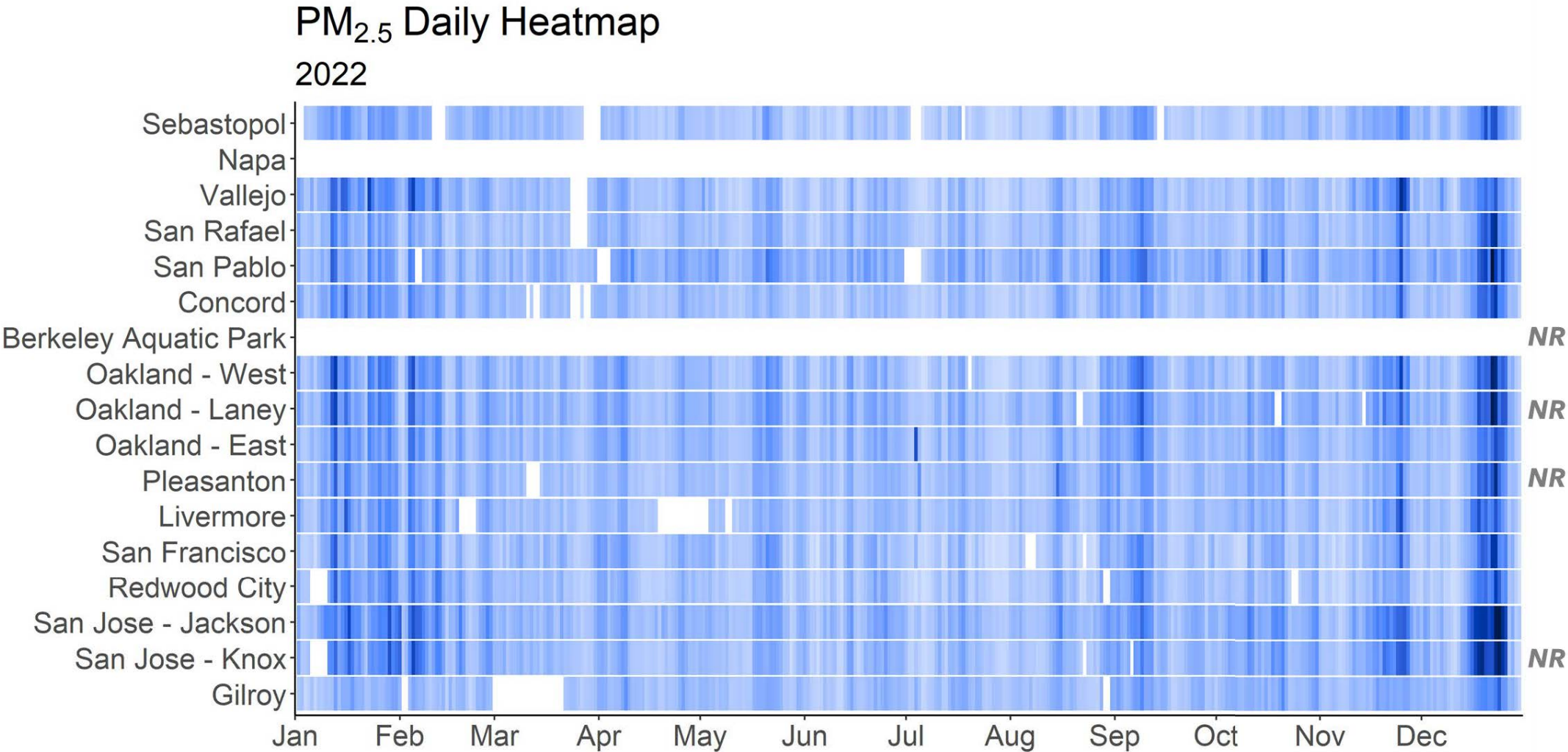




Key Takeaway #3:

Some higher pollution episodes are region-wide or seasonal, but others are more localized; these patterns also change from year-to-year

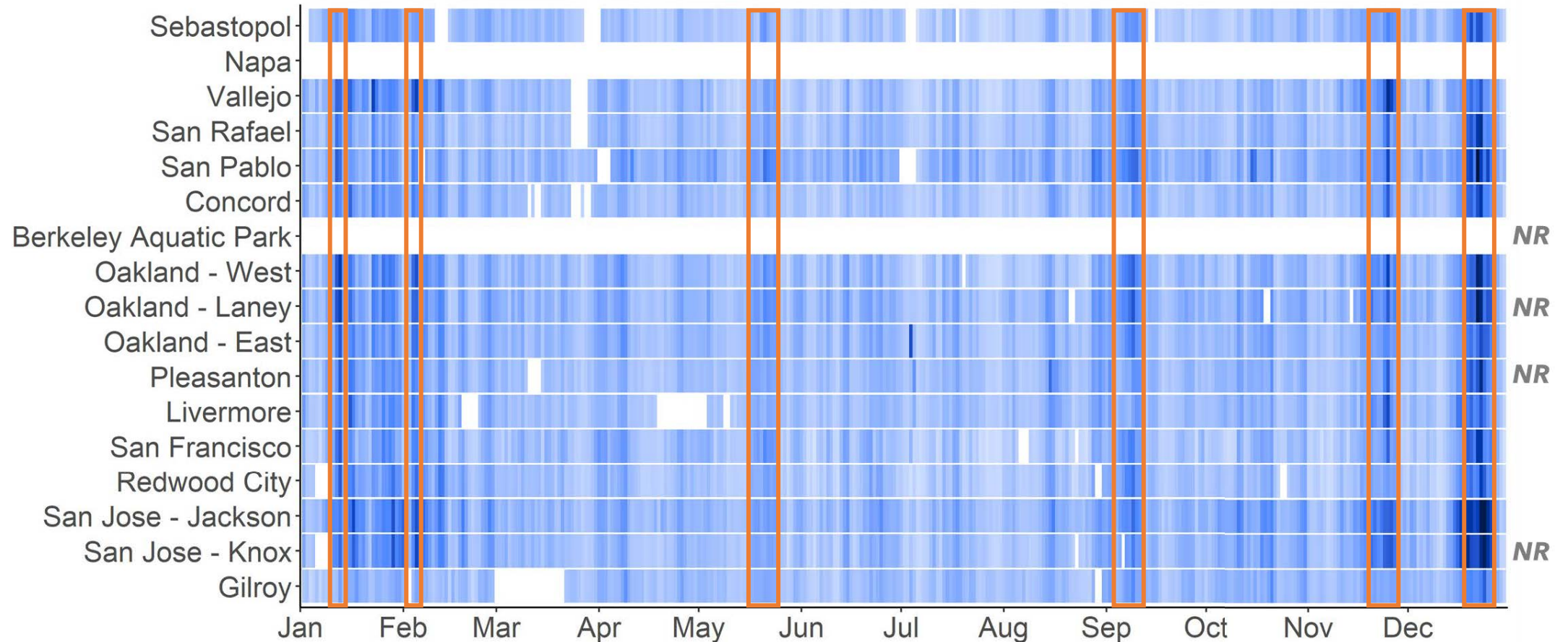
2022 PM_{2.5} - All Monitoring Sites



Region-wide Higher Pollution Episodes



PM_{2.5} Daily Heatmap
2022

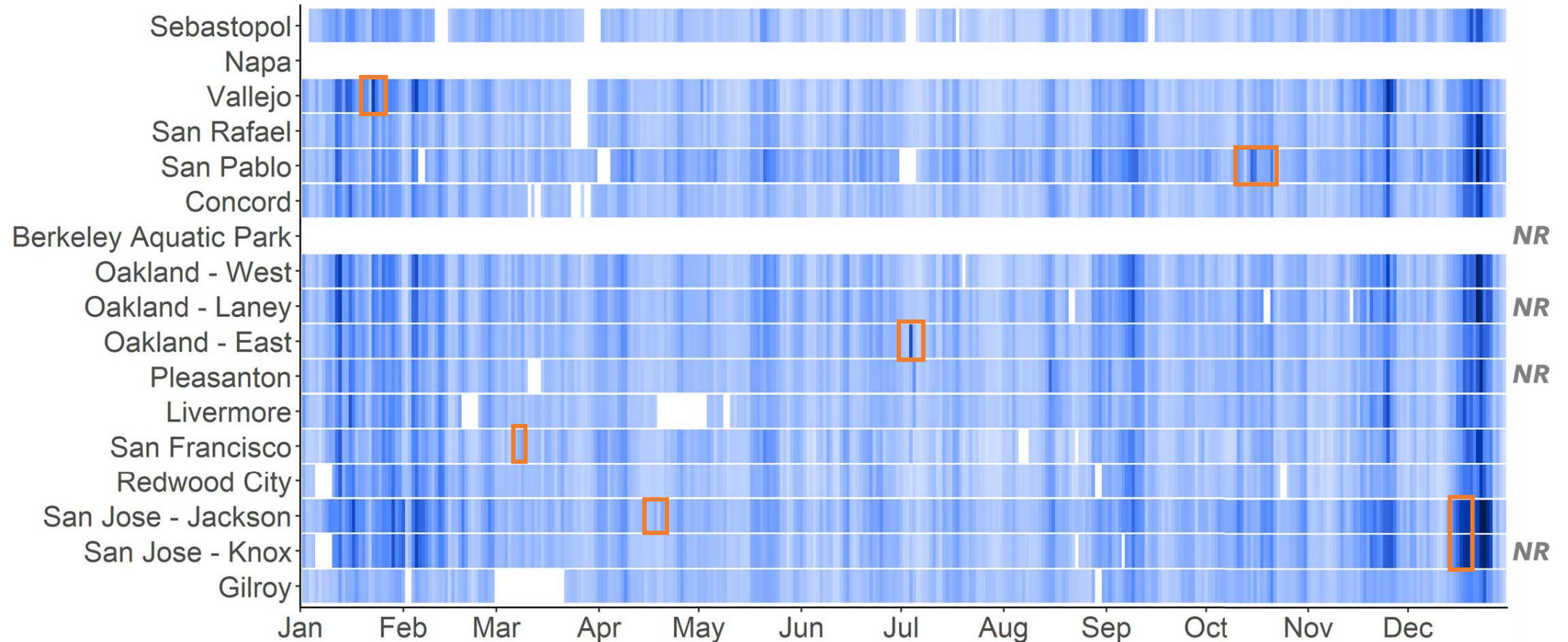


Localized Higher Pollution Episodes



PM_{2.5} Daily Heatmap

2022

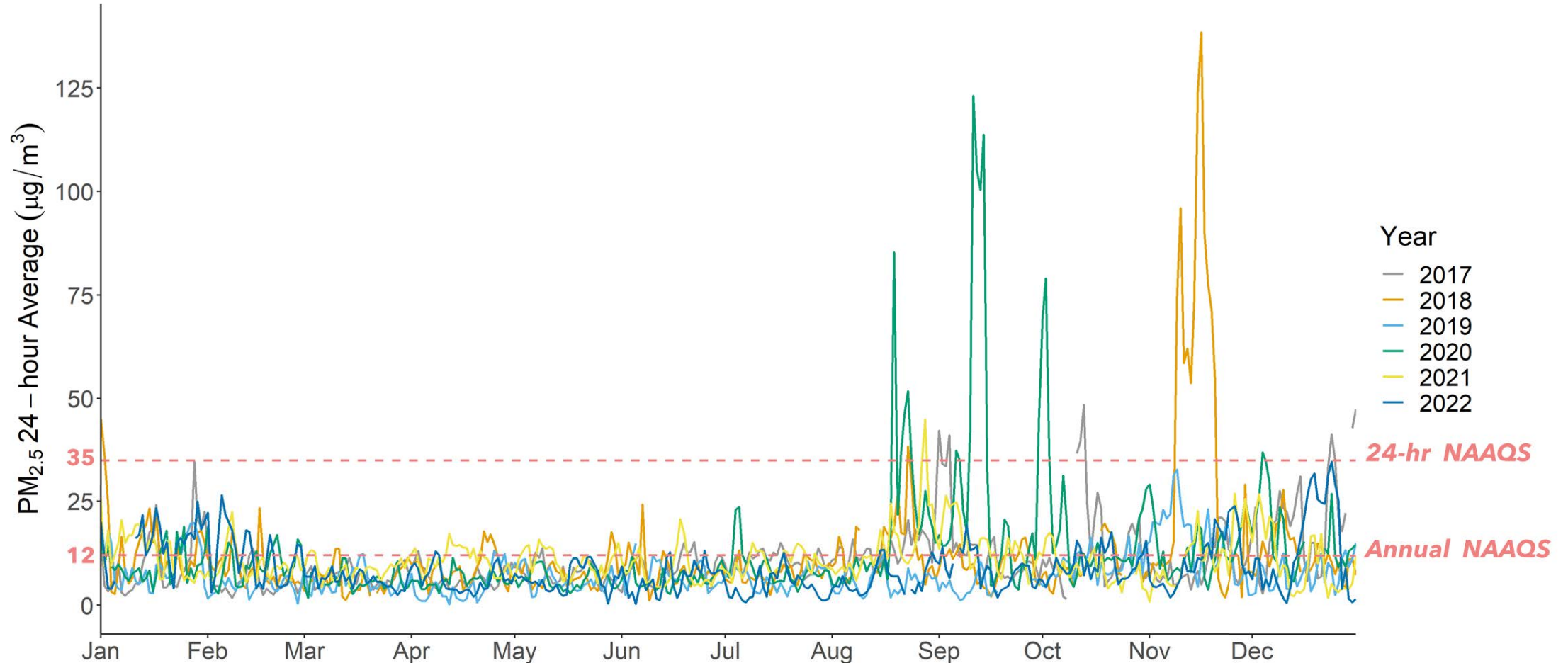


San Jose – Knox (Near-Road) (cont.)



PM_{2.5} Daily Trends

San Jose - Knox: 2017-2022



Board of Directors Meeting

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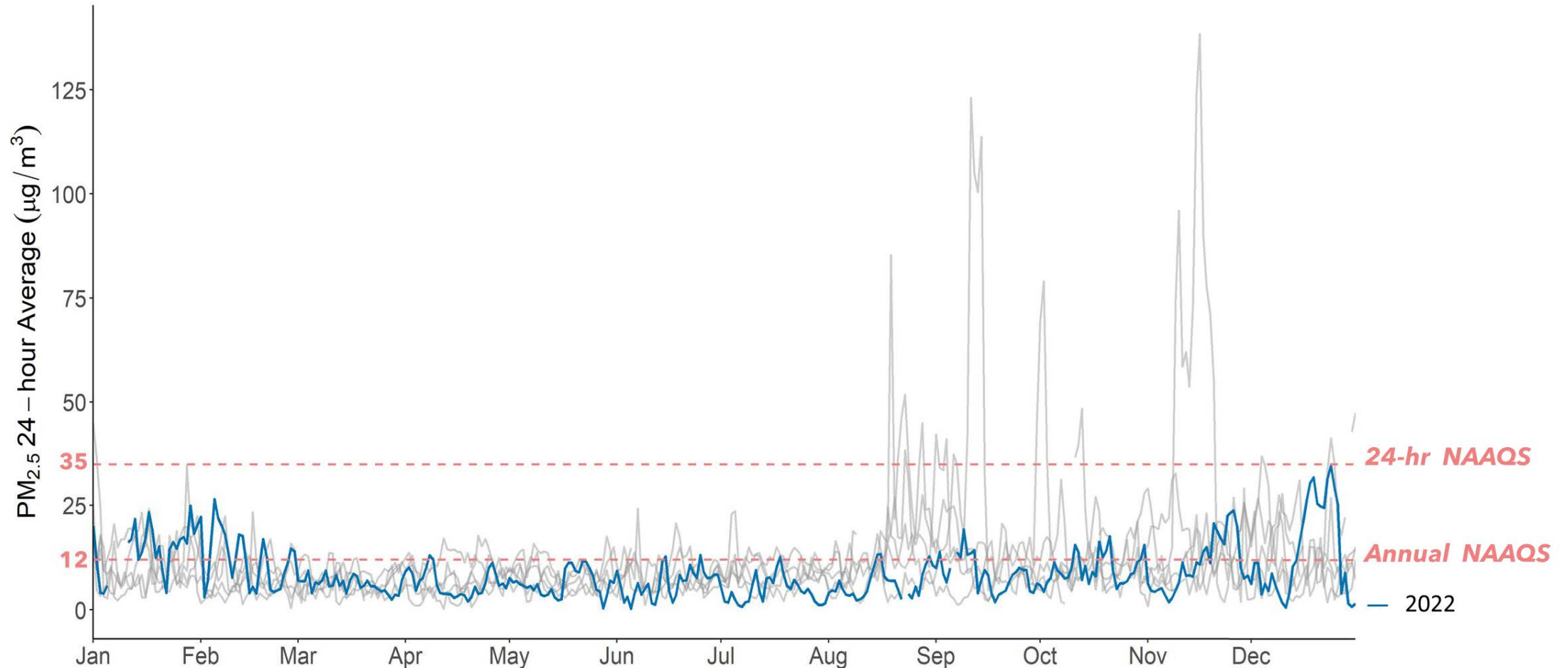
Bay Area Air Quality Management District

San Jose – Knox (Near-Road)



PM_{2.5} Daily Trends

San Jose - Knox: 2017-2021



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Bay Area Air Quality Management District



Key Takeaway #4:

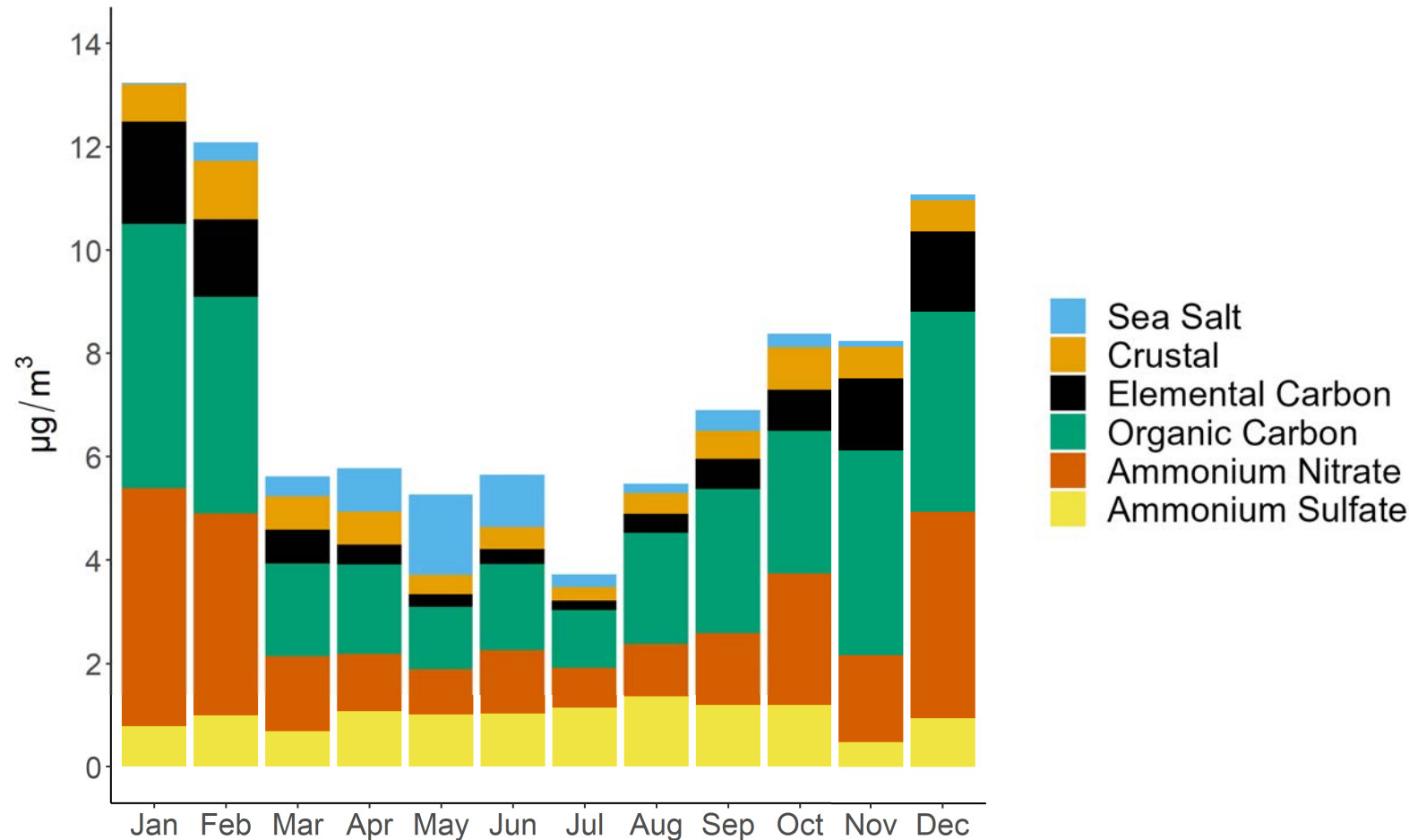
Characteristics of PM_{2.5} provide insights about where PM is coming from, help development of effective pollution reduction strategies, and inform ongoing health research

Composition of PM



PM_{2.5} Speciation Monthly Averages

San Jose - Jackson: 2022



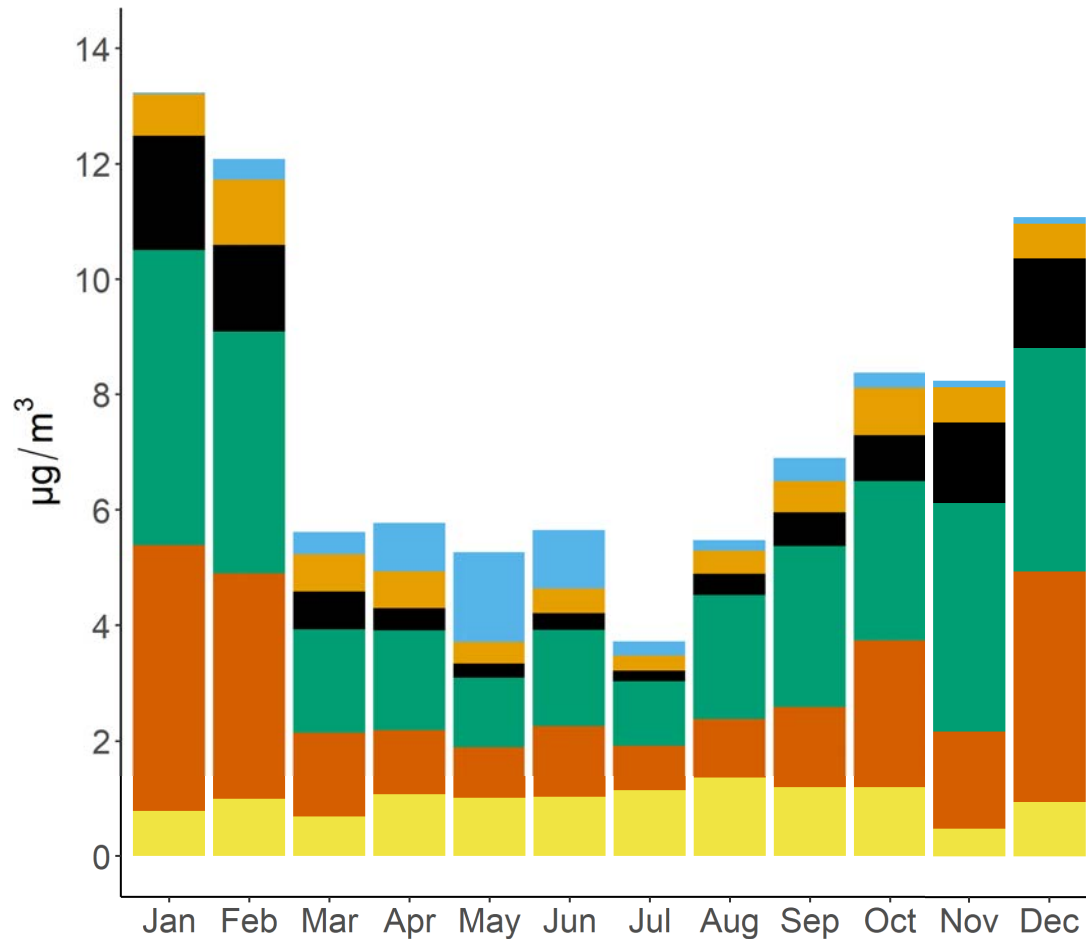
- Analyze filter samples in the lab
- One method to assess the composition of particles in the air is to calculate six main components from lab results
- Filters collect PM_{2.5} emitted or formed in the Bay Area, but also PM_{2.5} transported from farther away

Composition of PM (cont.)



PM_{2.5} Speciation Monthly Averages

San Jose - Jackson: 2022



Sources Include

Sea Salt

Sea spray, salt ponds

Anthropogenic/
Natural

Mostly natural *

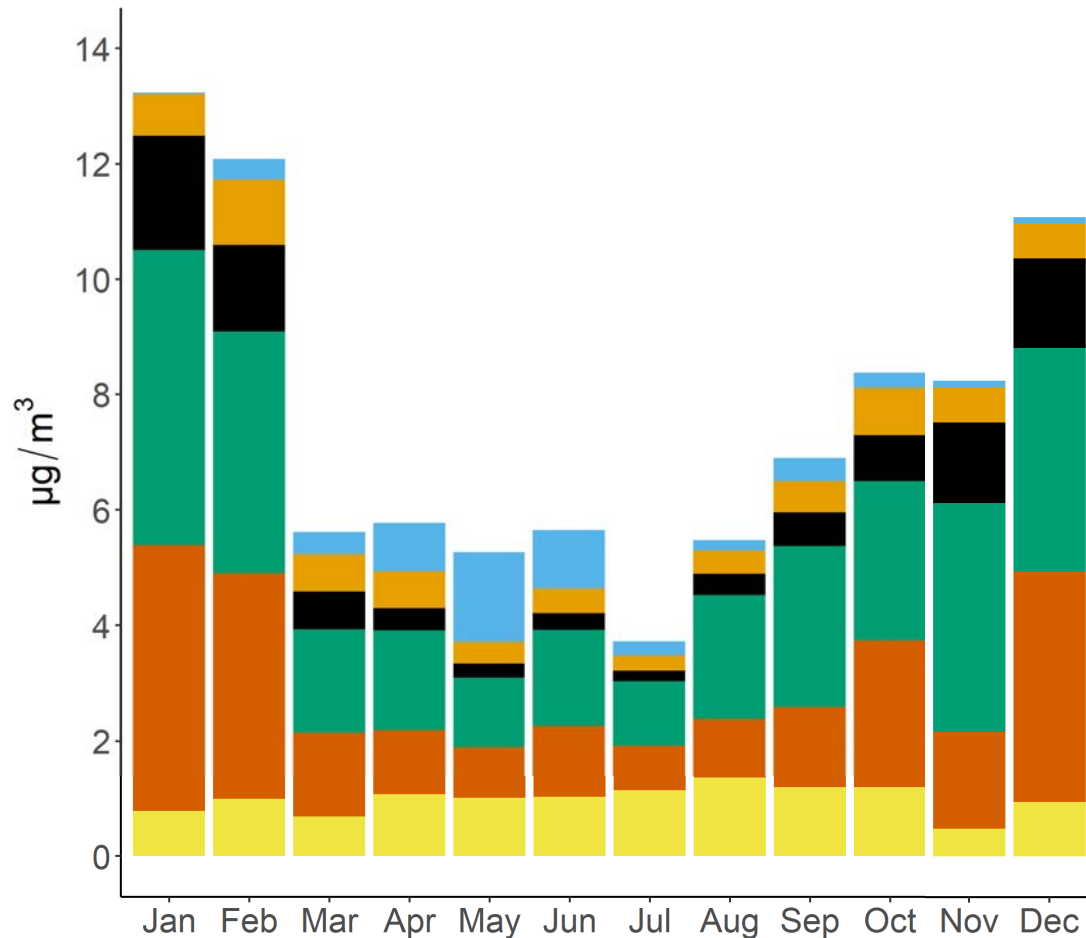
- * Direct emissions
- ** Secondary formation
- */** Direct and secondary

Composition of PM (cont.)



PM_{2.5} Speciation Monthly Averages

San Jose - Jackson: 2022



Sources Include

	Sources Include		Anthropogenic/ Natural	
	Sea Salt			
		Sea spray, salt ponds	Mostly natural	*
	Crustal	Dust from roads, windblown dust from construction sites, vacant lots, aggregate piles	Anthropogenic and natural	*

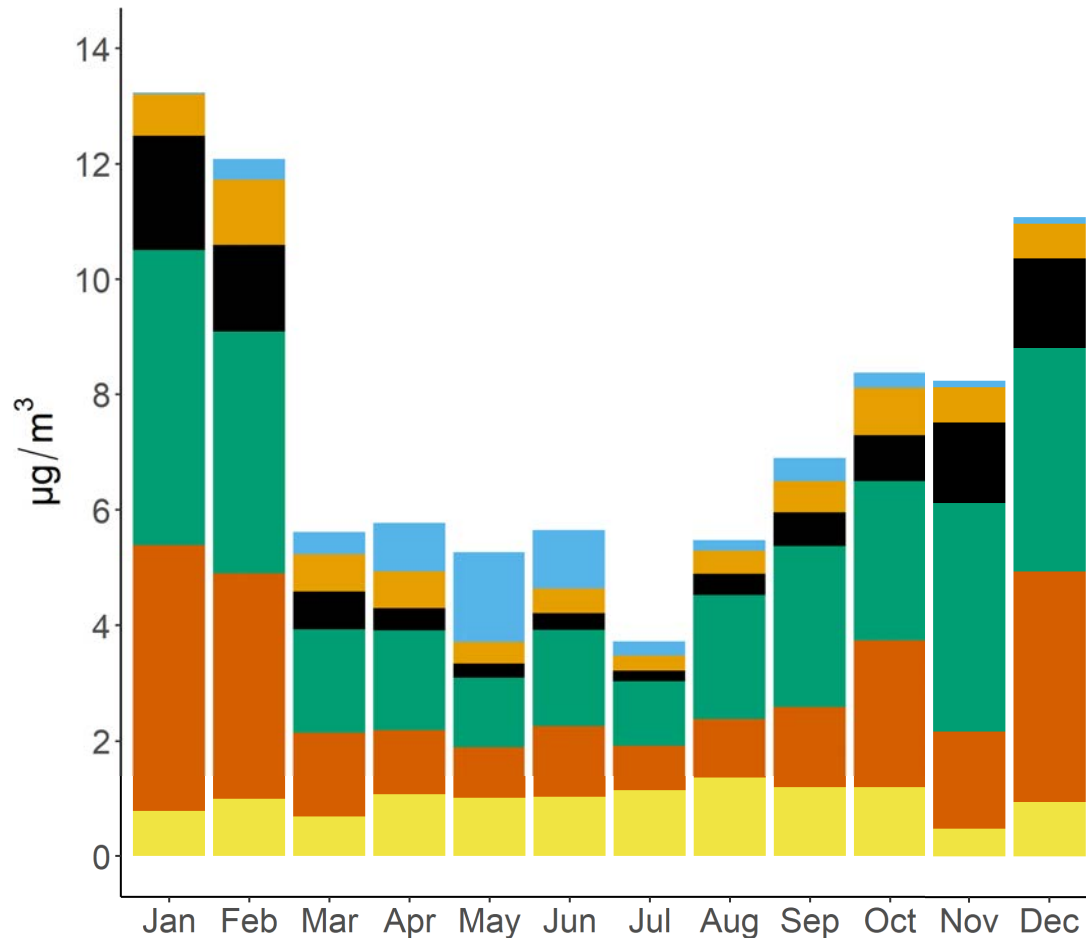
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Composition of PM (cont.)



PM_{2.5} Speciation Monthly Averages

San Jose - Jackson: 2022



	Sources Include	Anthropogenic/ Natural	
Sea Salt	Sea spray, salt ponds	Mostly natural	*
Crustal	Dust from roads, windblown dust from construction sites, vacant lots, aggregate piles	Anthropogenic and natural	*
Elemental Carbon	Combustion of fossil fuels, residential woodsmoke, wildfires	Anthropogenic and natural	*

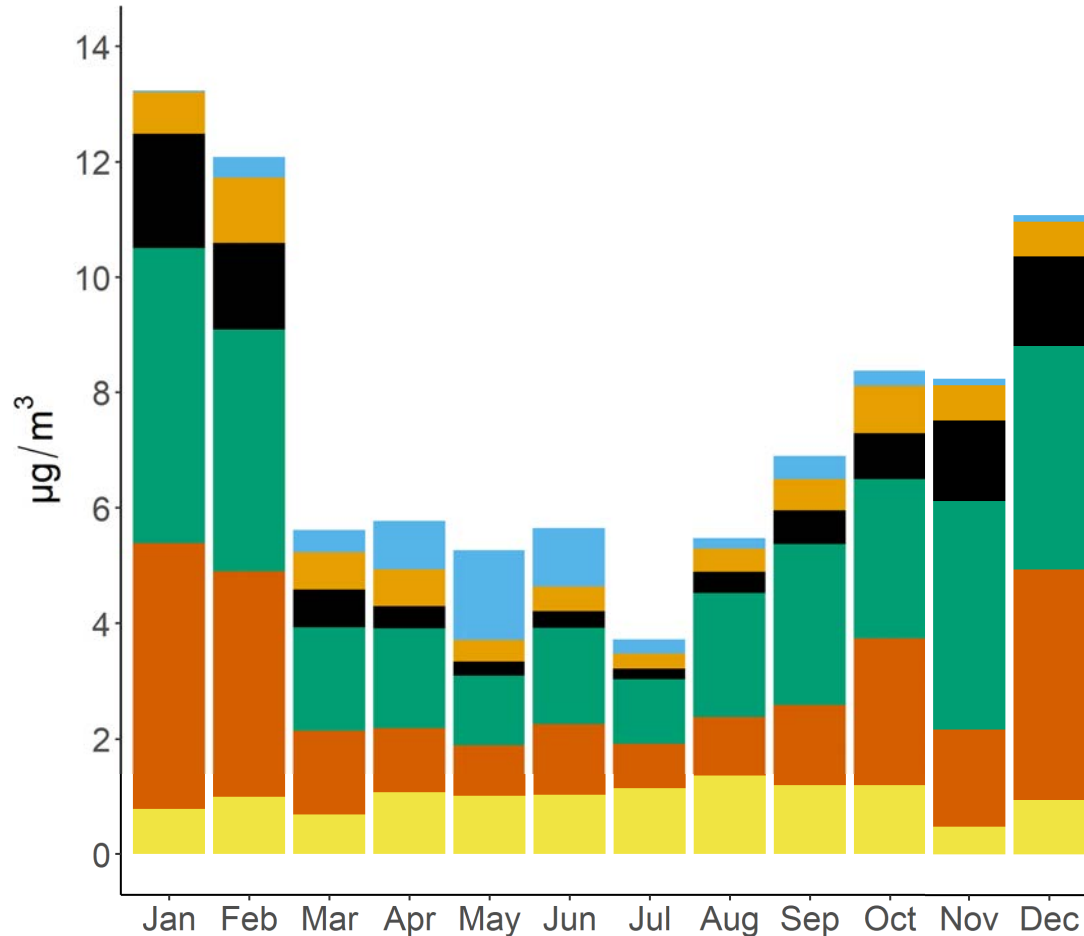
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Composition of PM (cont.)



PM_{2.5} Speciation Monthly Averages

San Jose - Jackson: 2022



Board of Directors Meeting

July 19, 2023

Bay Area Air Quality Management District

Sources Include		Anthropogenic/ Natural	
Sea Salt	Sea spray, salt ponds	Mostly natural	*
Crustal	Dust from roads, windblown dust from construction sites, vacant lots, aggregate piles	Anthropogenic and natural	*
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Organic Carbon	Combustion of fossil fuels, residential woodsmoke, wildfires, chemical reactions of VOCs	Anthropogenic and natural	*/**

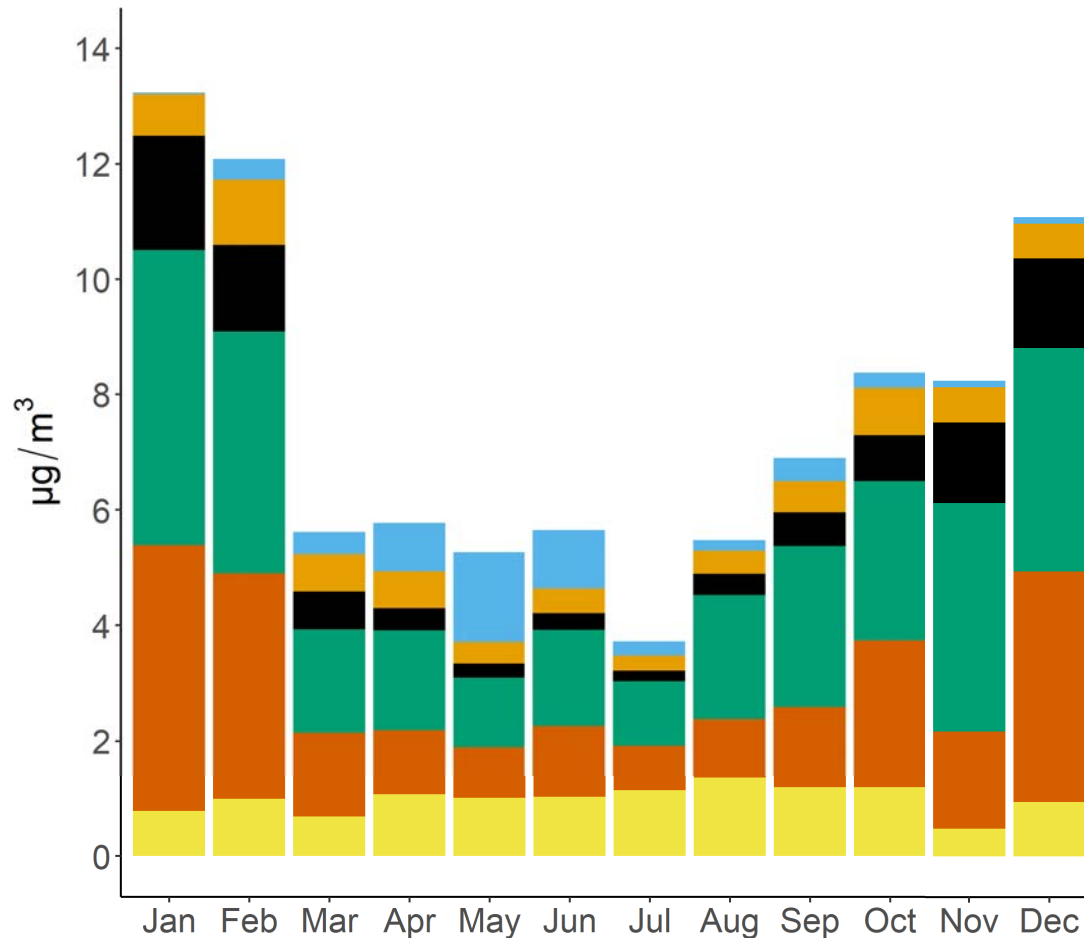
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Composition of PM (cont.)



PM_{2.5} Speciation Monthly Averages

San Jose - Jackson: 2022



Board of Directors Meeting
July 19, 2023

Sources Include		Anthropogenic/ Natural	
Sea Salt	Sea spray, salt ponds	Mostly natural	*
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Organic Carbon	Combustion of fossil fuels, residential woodsmoke, wildfires, chemical reactions of VOCs	Anthropogenic and natural	*/**
Ammonium Nitrate	Combustion, industrial sources Agricultural operations, fertilizer production	Mostly anthropogenic	**

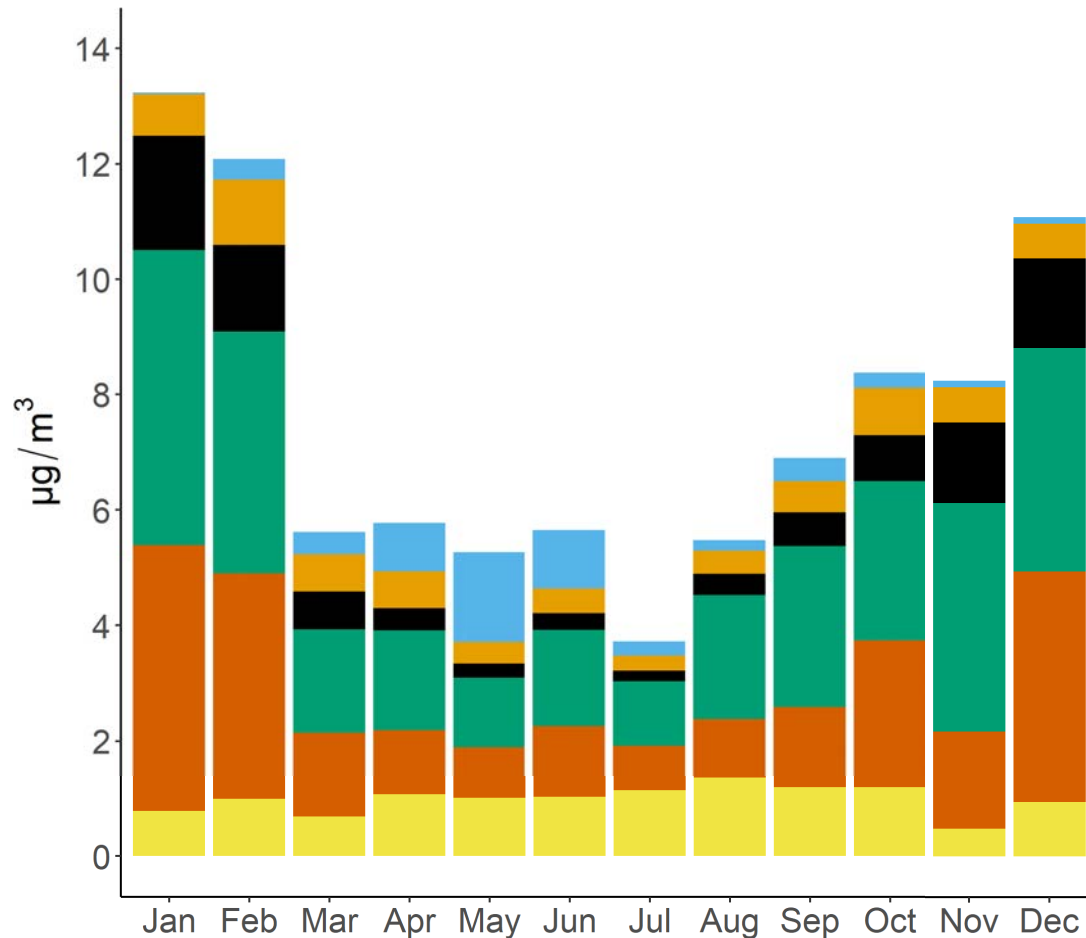
* Direct emissions
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Composition of PM (cont.)



PM_{2.5} Speciation Monthly Averages

San Jose - Jackson: 2022



Board of Directors Meeting
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Sources Include		Anthropogenic/ Natural	
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Elemental Carbon	Combustion of fossil fuels, residential woodsmoke, wildfires	Anthropogenic and natural	*
Organic Carbon	Combustion of fossil fuels, residential woodsmoke, wildfires, chemical reactions of VOCs	Anthropogenic and natural	*/**
Ammonium Nitrate	Combustion, industrial sources Agricultural operations, fertilizer production	Mostly anthropogenic	**
Ammonium Sulfate	Combustion, industrial sources (fuel refining) Agricultural operations, fertilizer production	Mostly anthropogenic	**

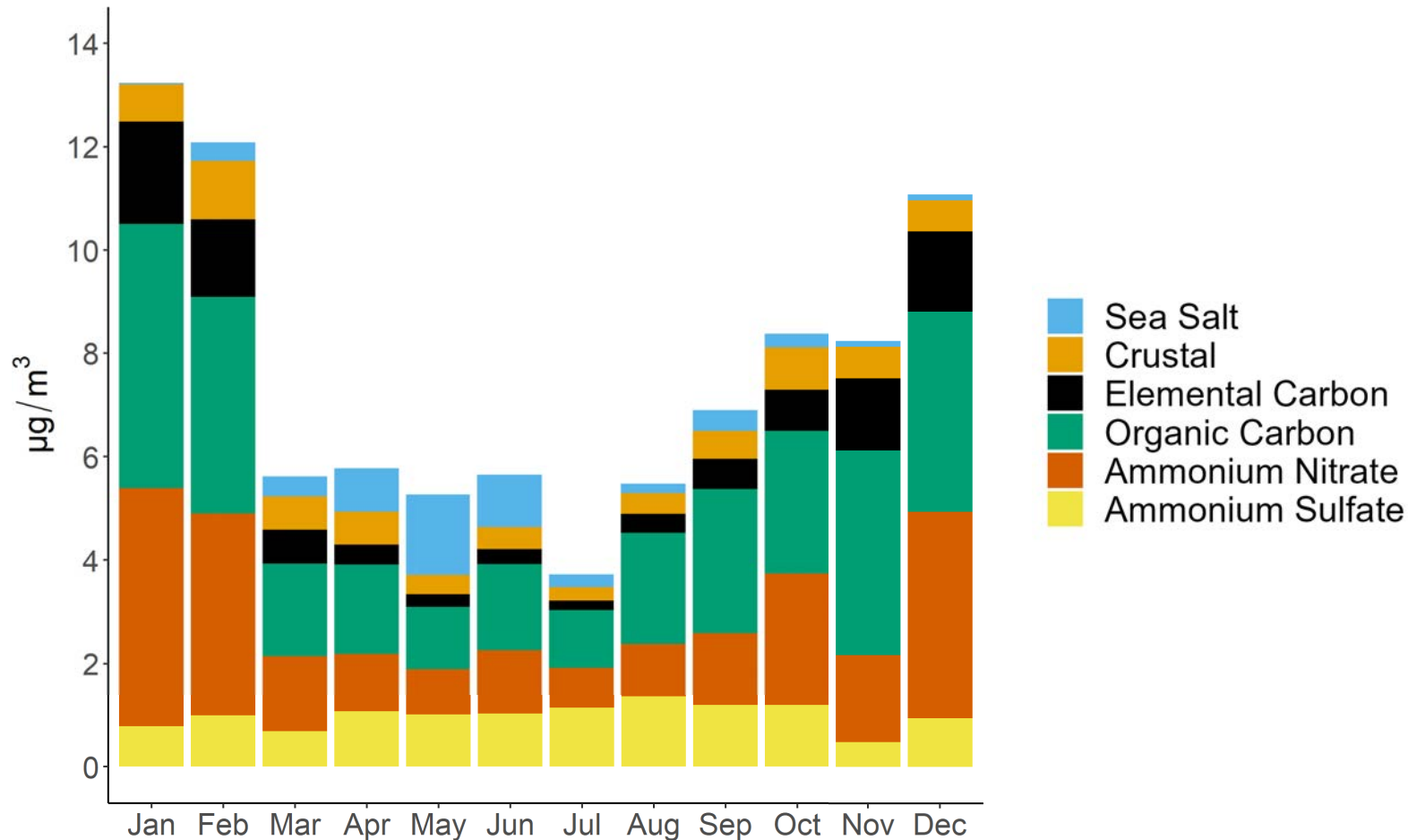
* Direct emissions
** Secondary formation
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Composition of PM (cont.)



PM_{2.5} Speciation Monthly Averages

San Jose - Jackson: 2022



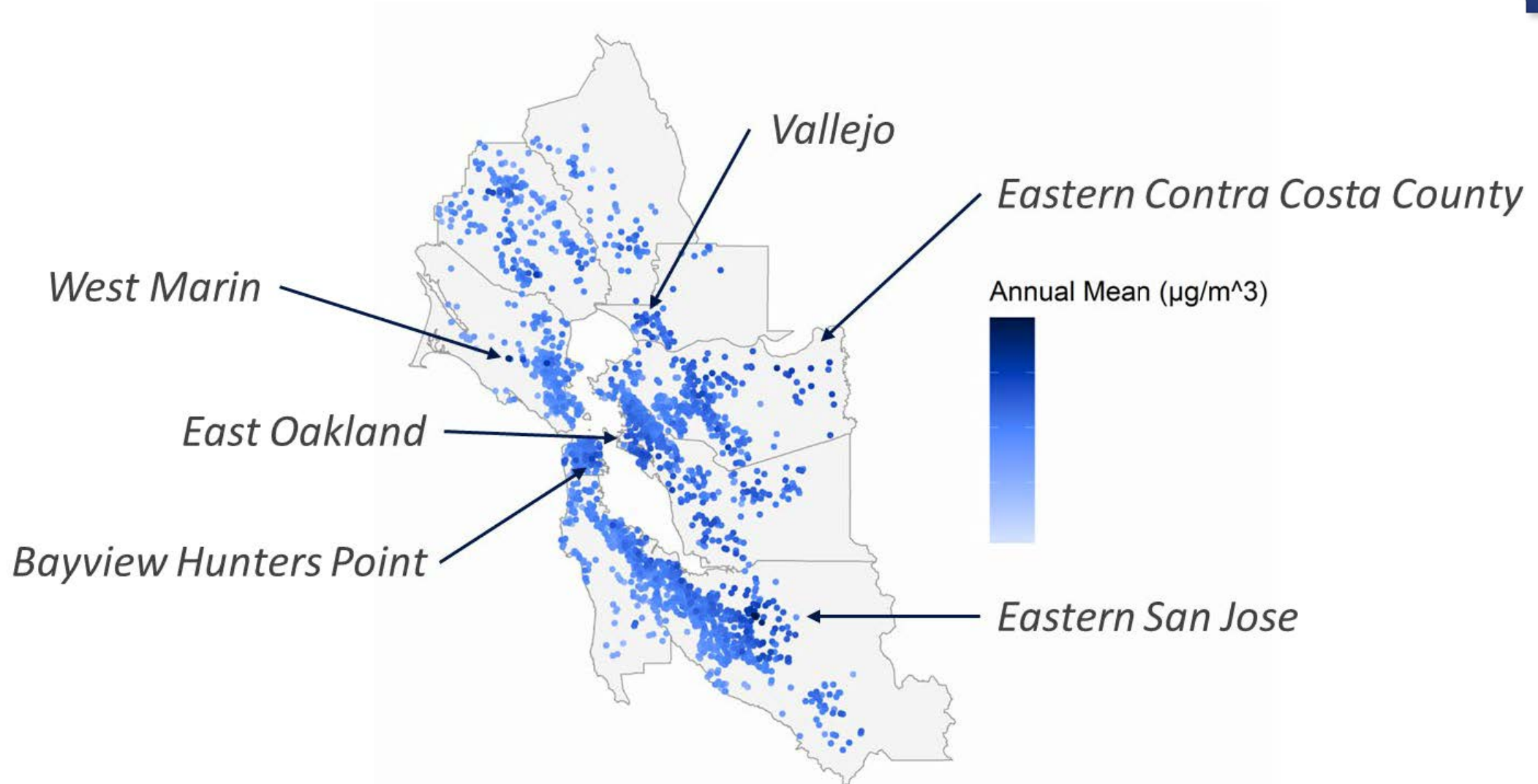
- Half or more of the PM_{2.5} is secondary
- Organic carbon is a significant portion of the PM_{2.5} year-round
- Winter months have higher percentages of EC, OC, and ammonium nitrate
- Sea salt much higher in spring

Ongoing and Future Work



- Further analysis on what is causing high PM in the Bay Area
- Continued evaluation of wildfire smoke impacts
- Using other datasets like air sensors, fenceline networks, air toxics for a more comprehensive picture of air quality beyond PM
- Partner with communities interested in community-led air monitoring and/or analysis of existing data
- Making data and insights more accessible

Upcoming Analyses of Air Sensor Data



Summary



- Long-term trends show progress, but recent years have slowed
- “Where is the worst air quality?” depends on location and averaging time (and pollutant)
- Air pollution levels have both regional and local components that change from year-to-year
- Understanding the characteristics of PM can be helpful in better understanding where air pollution is coming from

Discussion



Q & A