

Community Air Monitoring Plan Development

April 8, 2019

Jon Klassen

Director of Strategies and Incentives

San Joaquin Valley Air Pollution Control District

Drafting the Community Air Monitoring Plan

- District continuing to draft community air monitoring plan
 - Plan will address 14 elements required from AB 617 Blueprint
- Ongoing community feedback on air monitoring will assist District in developing draft plan
- Feedback on community air monitoring in Shafter has included:
 - Request for current DPR pesticide monitoring efforts to be included in plan
 - Request for expanded pesticide monitoring in and around Shafter community
 - Monitoring of VOC emissions from oil and gas facilities
 - Emissions monitoring from dairy operations around Shafter community
 - Monitoring of emissions from various mobile sources (vehicles, trucks, trains)
 - PM10 monitoring to capture emissions from harvesting activities
- District will bring drafted community air monitoring plan to committee for review and input

Planned Community Air Monitoring Resources

- **Mobile air monitoring trailer**

- PM2.5, Ozone, BC, CO, NO/NO2/NOx, VOC, H2S, SO2, Toxics, Speciated VOC, Meteorology



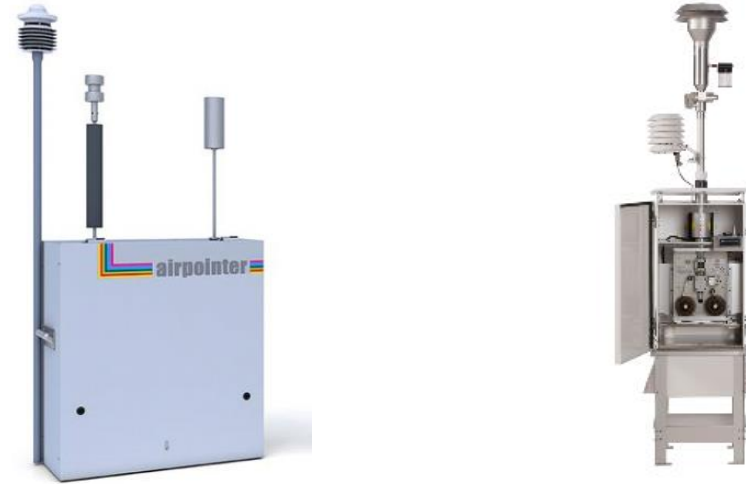
- **Mobile air monitoring van**

- PM2.5, Ozone, BC, CO, NO/NO2/NOx, VOC, H2S, SO2, Toxics, Meteorology



Planned Community Air Monitoring Resources

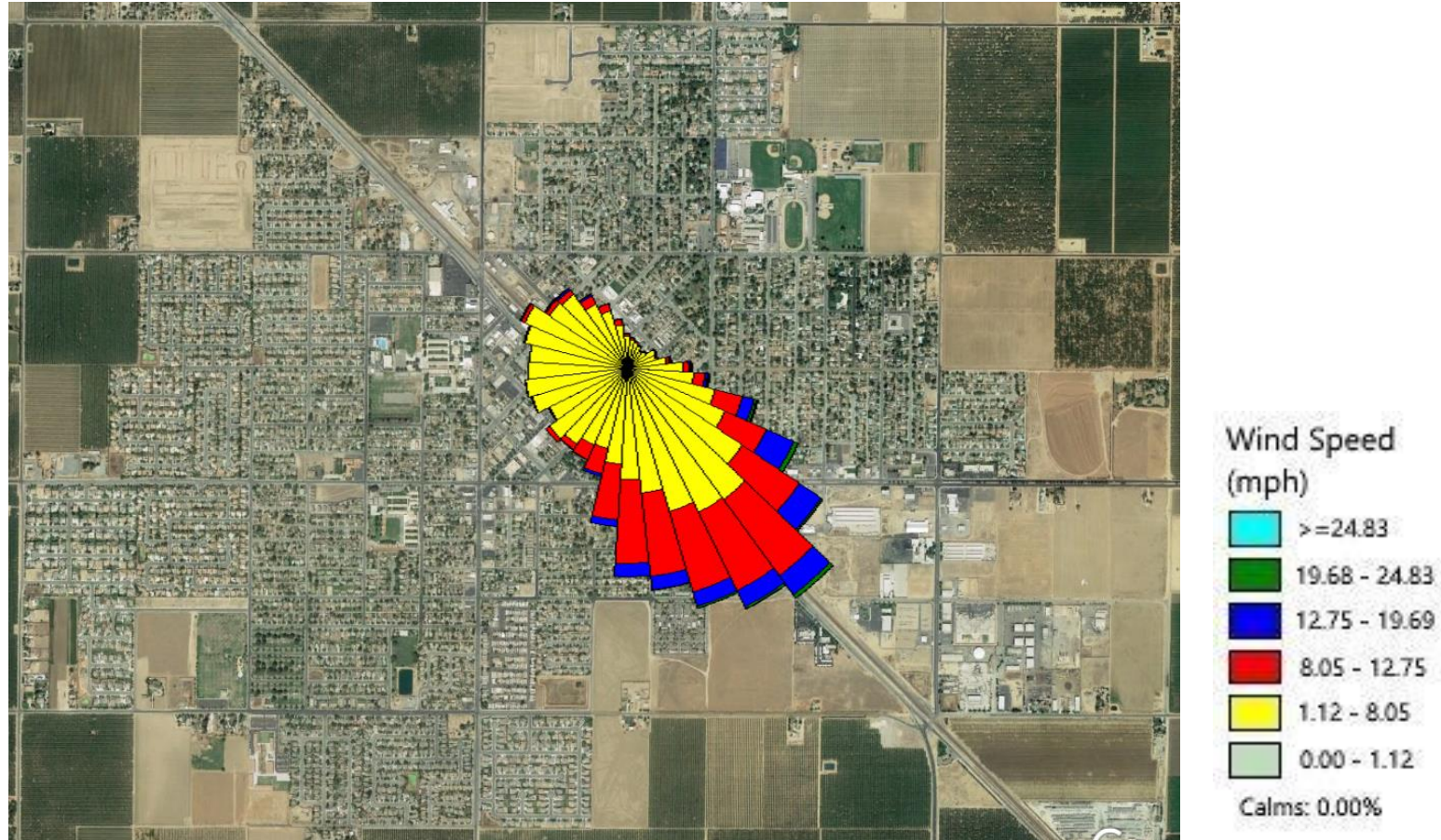
- Compact multi-pollutant air monitoring system
 - PM2.5, Ozone, BC, CO, NO/NO2/NOx, SO2, VOC, Meteorology
- Stand-alone PM2.5 instruments
- Ongoing monitoring at Shafter DMV site
- Saturation monitoring studies
- Leverage with CARB and other community monitoring resources



Shafter Prevailing Wind Direction

2015-2017 Average

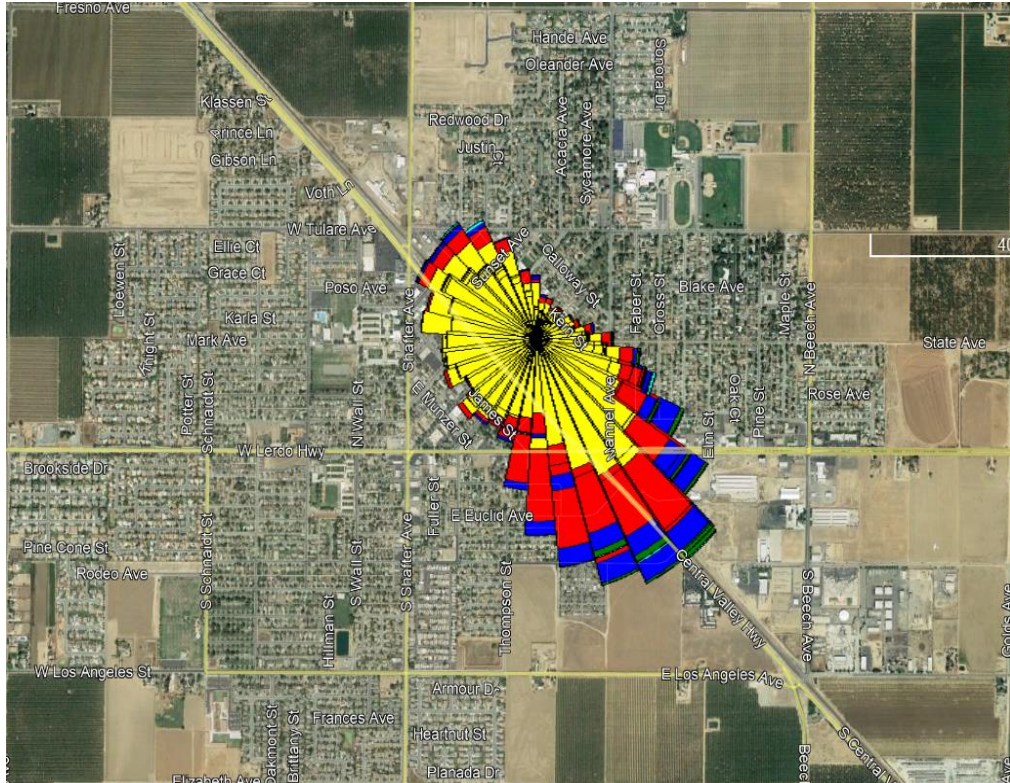
Annual Average



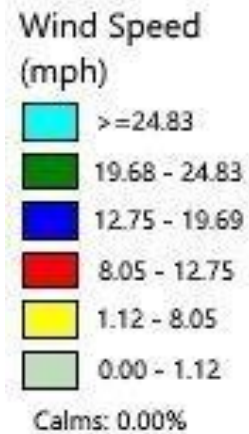
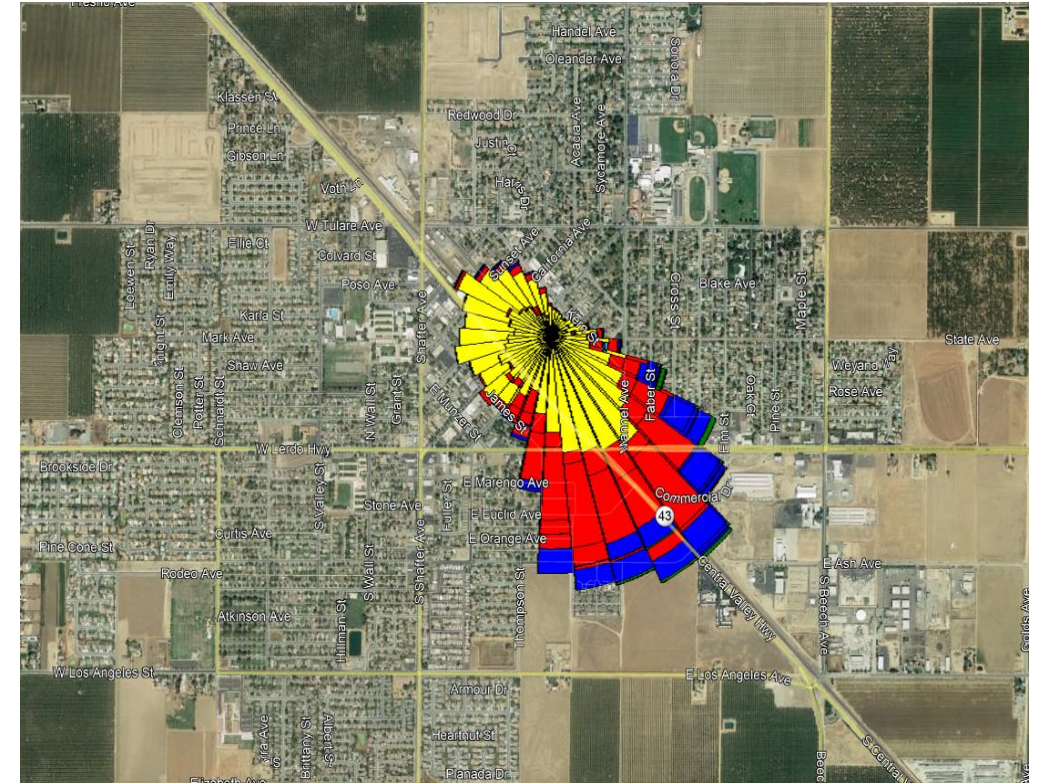
Shafter Prevailing Wind Direction

2015-2017 Average

Quarter 1



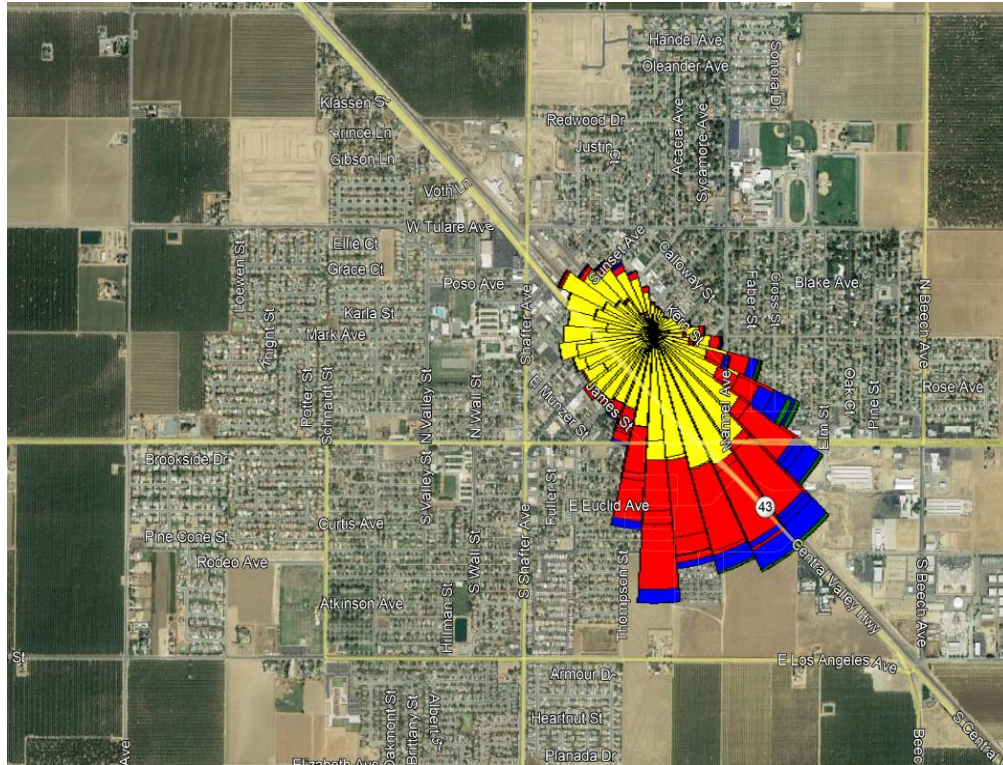
Quarter 2



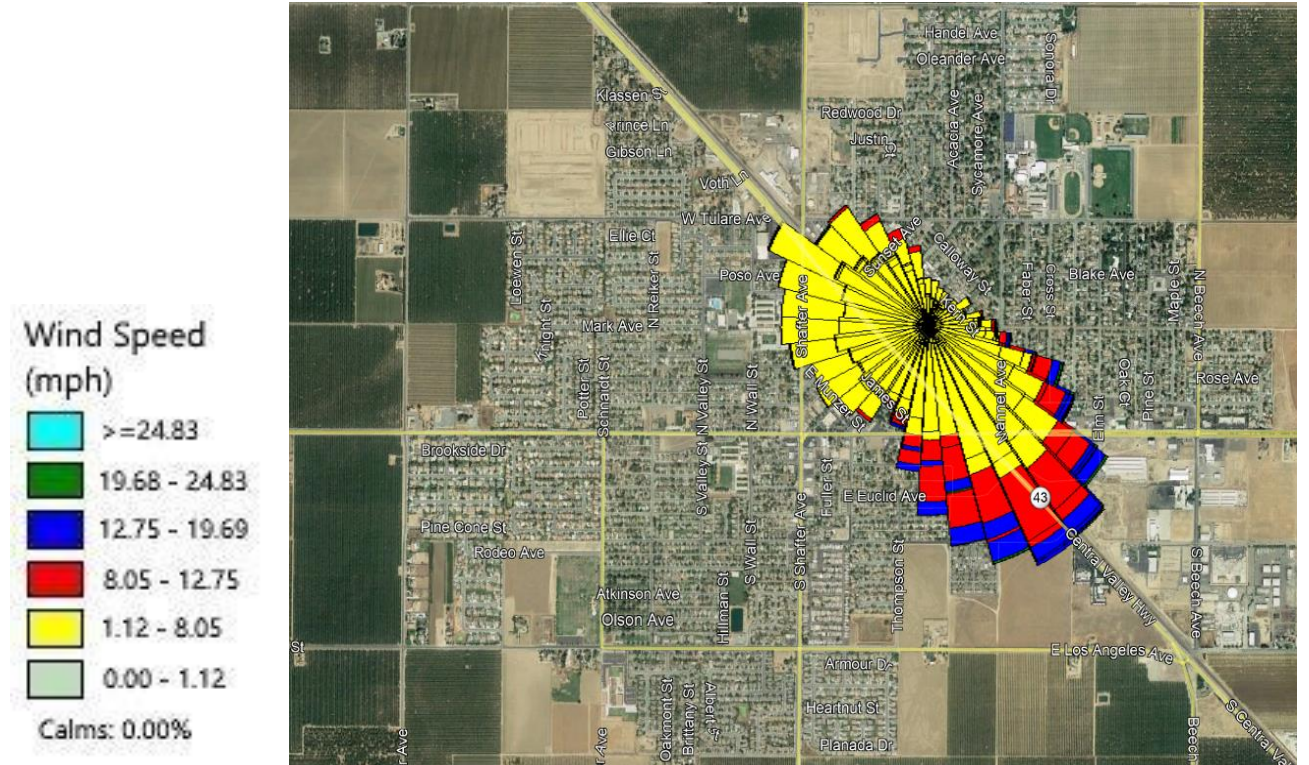
Shafter Prevailing Wind Direction

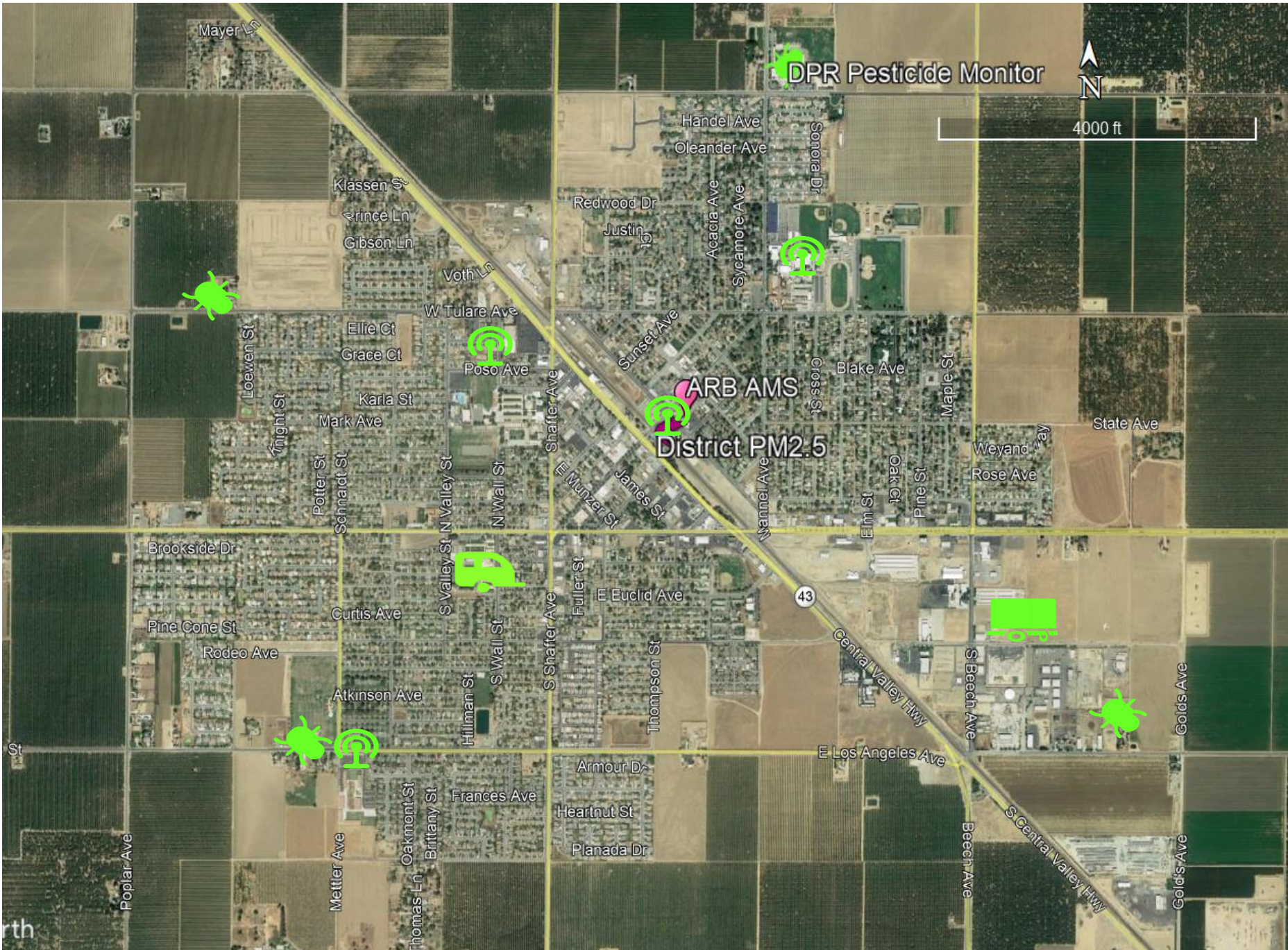
2015-2017 Average

Quarter 3



Quarter 4





Potential Locations for AB 617 Monitoring Resources

Compact Multi
Pollutant System
PM2.5, Ozone, BC, CO, SO2,
NO, NO2, NOx, VOC, met



Stand-alone PM2.5



Large Trailer
PM2.5, Ozone, BC, CO, NO, NO2,
NOx, VOC, H2S, SO2, Toxics, met



Pesticide Monitoring



Mobile Monitoring
(PM2.5, Ozone, BC, CO,
NO/NO2/NOx, VOC, SO2, Toxics, met)



Questions for Steering Committee

- Additional feedback needed to assist District design and implement Shafter community air monitoring network
- District asking Shafter Community Steering Committee for thoughts and comments in the following areas:
 - What pollutants/types of sources should be considered in the Monitoring Plan?
 - Where should air monitoring assets be placed in the community?
 - How frequently should air monitoring assets be moved around the community?

Contact Information

Contact the Valley Air District at:

AB617@valleyair.org

Fresno office (559) 230-6000

Modesto office (209) 557-6400

Bakersfield office (661) 392-5500

Jaime Holt Cell: (559) 309-3336

For information visit:

www.valleyair.org/community

www.valleyair.org

Follow us on
social media



Use the Valley Air
App for the latest
air quality info.



City of Shafter Community Emissions Reduction Program (CERP) Outline Review

April 8, 2019

Jessica Coria, Senior Air Quality Specialist
San Joaquin Valley Air Pollution Control District

California Community Air Protection Program

- AB 617 Legislation established community-focused framework
- CARB's Community Air Protection Program implements AB 617
 - Community Grant Funding
 - Expanded Air Monitoring
 - Improved Data Accessibility
 - Partnerships with Communities
 - Statewide strategies to reduce emissions
 - Community Emission Reduction Programs (CERPs)
- Community Emission Reduction Programs:
 - Advised by Community Steering Committee process
 - Lays out plan to reduce pollution in each selected community

Community Emissions Reduction Programs

- Guidance on CERPs included in CARB's Community Air Protection Blueprint: Appendix C
- Elements of a CERP include:
 - Understanding the Community
 - Community partnerships and public engagement
 - What are the Air Pollution Challenges facing the community?
 - What are solutions for these challenges?
 - Implementation schedule
 - Enforcement plan
 - Metrics to track progress over time

Understanding the Community

- Description of community boundaries, public health and socioeconomic factors, types of pollution impacting community
- Technical assessment to understand community pollution impacts
 - List of the key pollutants and emission sources driving community exposure
 - Analysis that assesses share of mobile, stationary, and area-wide source emissions contributing to community exposure
 - Sensitive receptor locations within community (schools, day care, hospitals, etc.)
- Analysis of existing air quality programs in reducing emissions in community (emission reductions, local compliance, etc.)

Community Partnerships and Engagement

- Community Steering Committee Activities and Input
 - Committee makeup and Charter information
 - Meeting details and minutes
 - Website information
- Public Outreach Efforts and Results
 - Community engagement efforts (workshops, Steering Committee meetings, other community engagement)
 - Plan for public engagement moving forward upon adoption of CERP
 - Key takeaways from public input

Identifying Community Air Quality Concerns

- Summary of Community Emission Sources
- Community-Identified Air Quality Priorities
 - Discussion of pollution concerns as indicated by Steering Committee members and the public, including:
 - Pesticides
 - Oil and Gas
 - Dairy operations
 - Harvesting activities
 - Pollution sources of priority will be highlighted and potential emission reduction measures will be analyzed for each source category

Identifying Community Air Quality Concerns

- Technical analysis of pollution sources impacting community
 - List of the key sources and source categories within and surrounding the community
 - Use tools (emissions inventory, emissions modeling, air monitoring) to better define emissions sources of concern & potential controls

Pollution Reduction Targets

- Health Based Air Quality Objectives
 - e.g. reductions in PM2.5, air toxics
- Emissions reduction targets to be achieved within five years
- District will include numerical goals for mobile, stationary and area-wide sources of criteria air pollutants and toxic air contaminants impacting the community, including:
 - Compliance goals
 - Goals for deploying or implementing available technologies or control techniques
 - Measureable goals for deploying or implementing exposure reduction measures at sensitive receptor locations

Pollution Reduction Strategies

- Emission Reduction Incentive Funding Strategies
 - Targeted funding to reduce pollution in the community (replace fireplaces, older cars, trucks, tractors, transit and school buses, lawnmowers, nut harvesters, etc.)
 - Additional outreach and education events (Drive Clean in the San Joaquin events, etc.)
- Regulatory Strategies
- Mitigation Strategies
- Other Strategies requiring communication with other agencies (Dept. of Pesticide Regulation, land use, transportation)
- Implementation Schedule

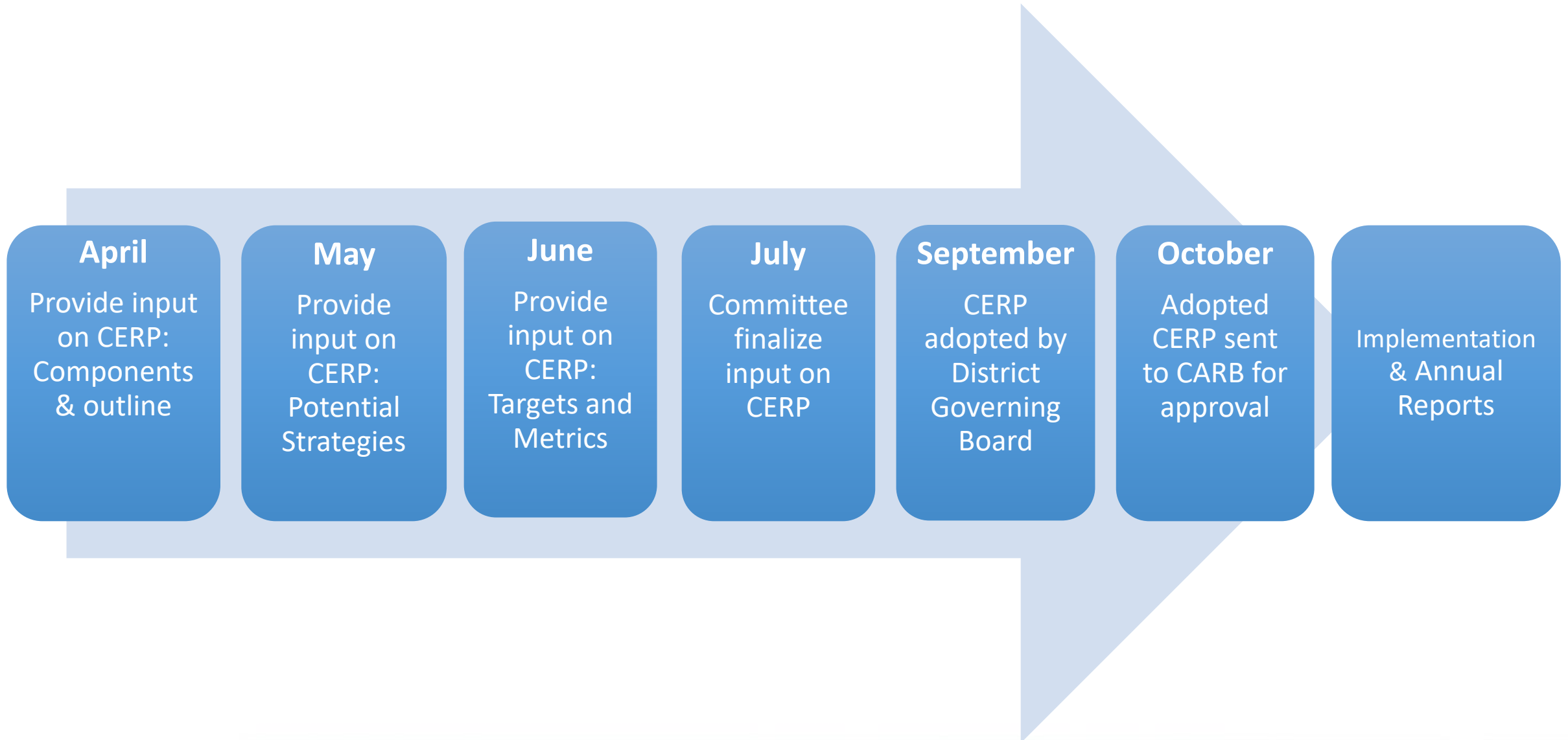
Enforcement Plan

- Enforcement history for Community Sources
 - Three-year inspection and violation history for regulated sources
 - Public complaints and responses
- Commitment to compliance strategies for achieving emission reduction targets

Metrics to Track Progress

- Specify required annual metrics to track progress
 - Emission reductions achieved and progress towards meeting the individual emissions reduction targets for each pollutant
 - Dollars invested, reductions achieved, number of projects implemented in and/or benefitting the community for incentive strategies
 - Compliance, deployment and implementation goals for sources of identified pollutants
 - Emissions exposure reductions for sensitive receptors
 - Status of rules and regulations adopted or other strategies implemented
 - Additional enforcement activities
- Specify approaches for evaluating air quality and exposure at the five-year milestone

2019 Timeline for CERP Development



Contact Information

AB 617 contacts and information at Valley Air District:

AB617@valleyair.org

Jaime Holt Cell: (559) 309-3336

www.valleyair.org/community

General Air District Contacts and Information:

Fresno office (559) 230-6000

Modesto office (209) 557-6400

Bakersfield office (661) 392-5500

www.valleyair.org

Follow us on
social media



Use the Valley Air
App for the latest
air quality info.



Questions for Steering Committee

- District asking Community Steering Committee for thoughts and comments in the following areas:
 - ☐ Comments or questions on lay-out and components of CERP
 - ☐ Emission reduction funding programs that you would like to receive more information about, or see increased funding or outreach occurring in the community
 - ☐ What other topics would you like presentations on or opportunities to discuss to support the development of CERP Strategies?
 - ☐ How can the District work to increase awareness of air quality programs and public engagement in the community?