

# Air Quality Update and Provisional Approval of the 2024 ARWP

October 15, 2024



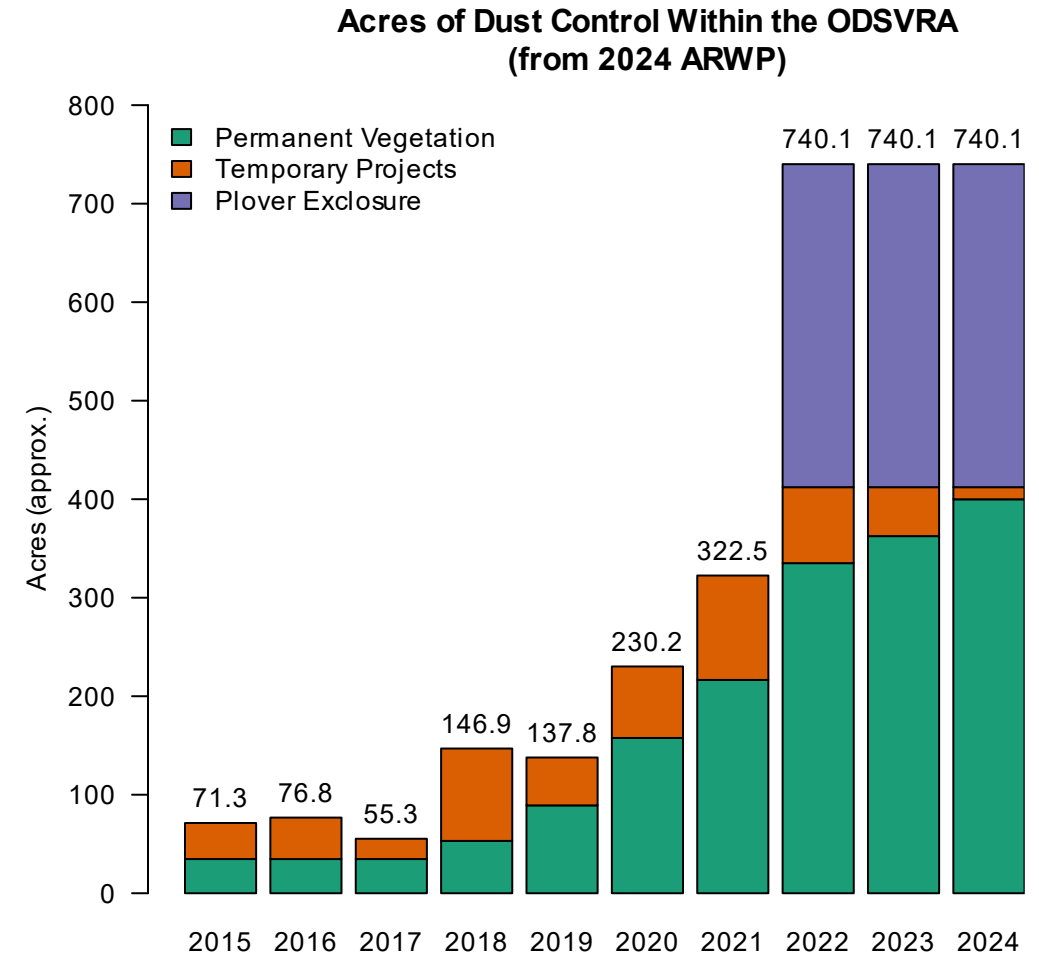
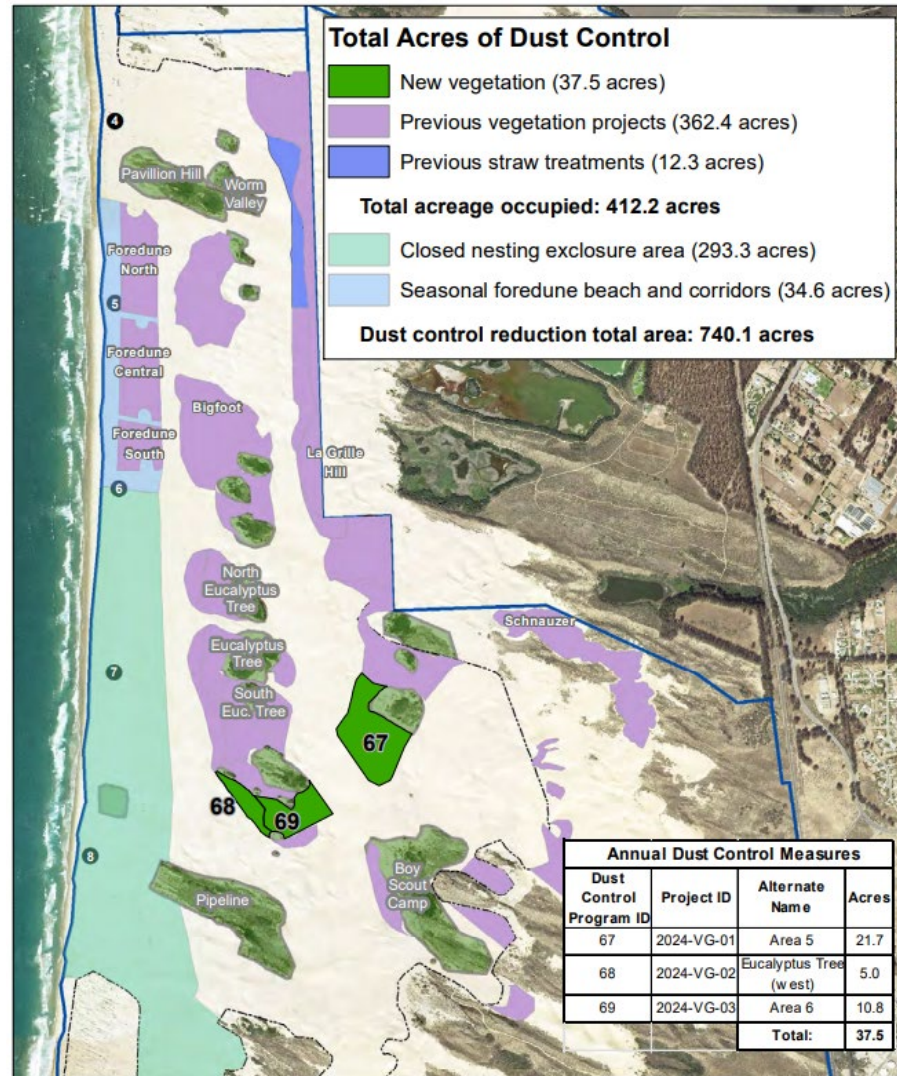
Karl Tupper, Assistant APCO

SLO County APCD

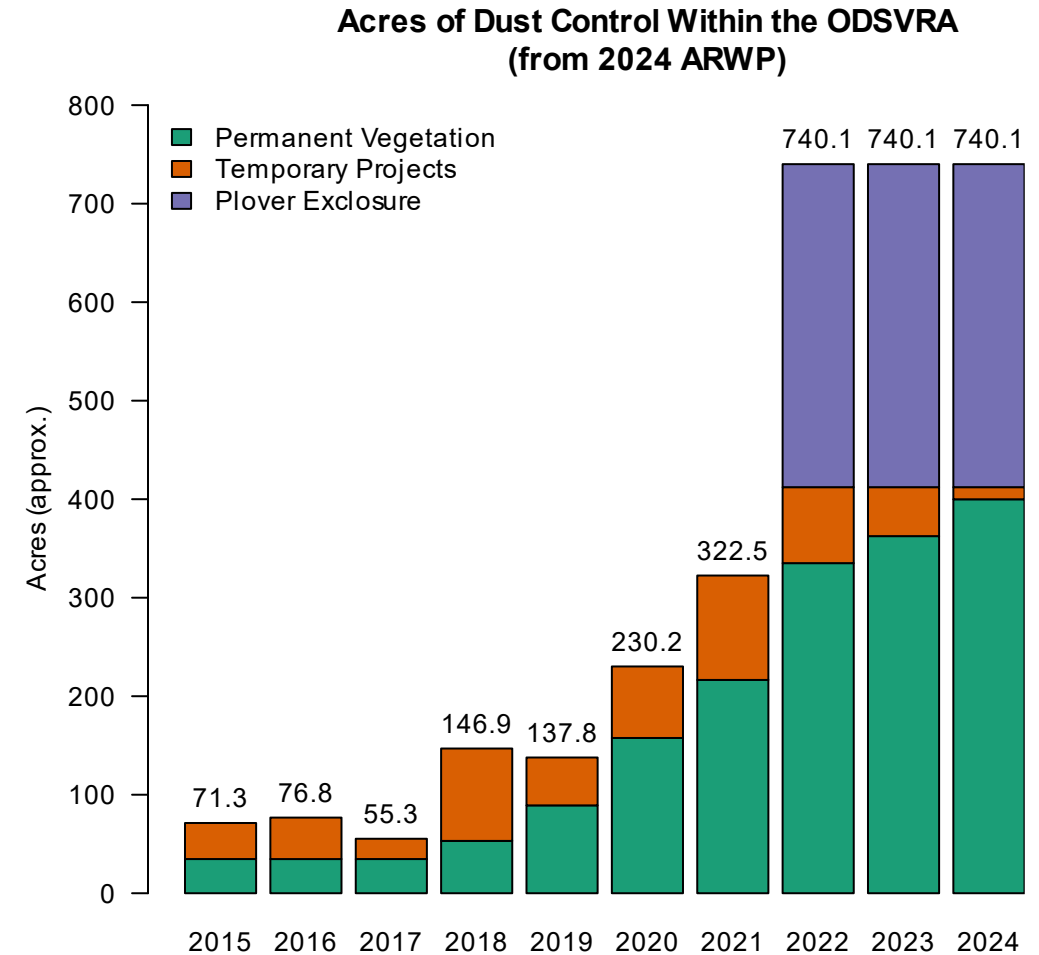
[ktupper@co.slo.ca.us](mailto:ktupper@co.slo.ca.us)



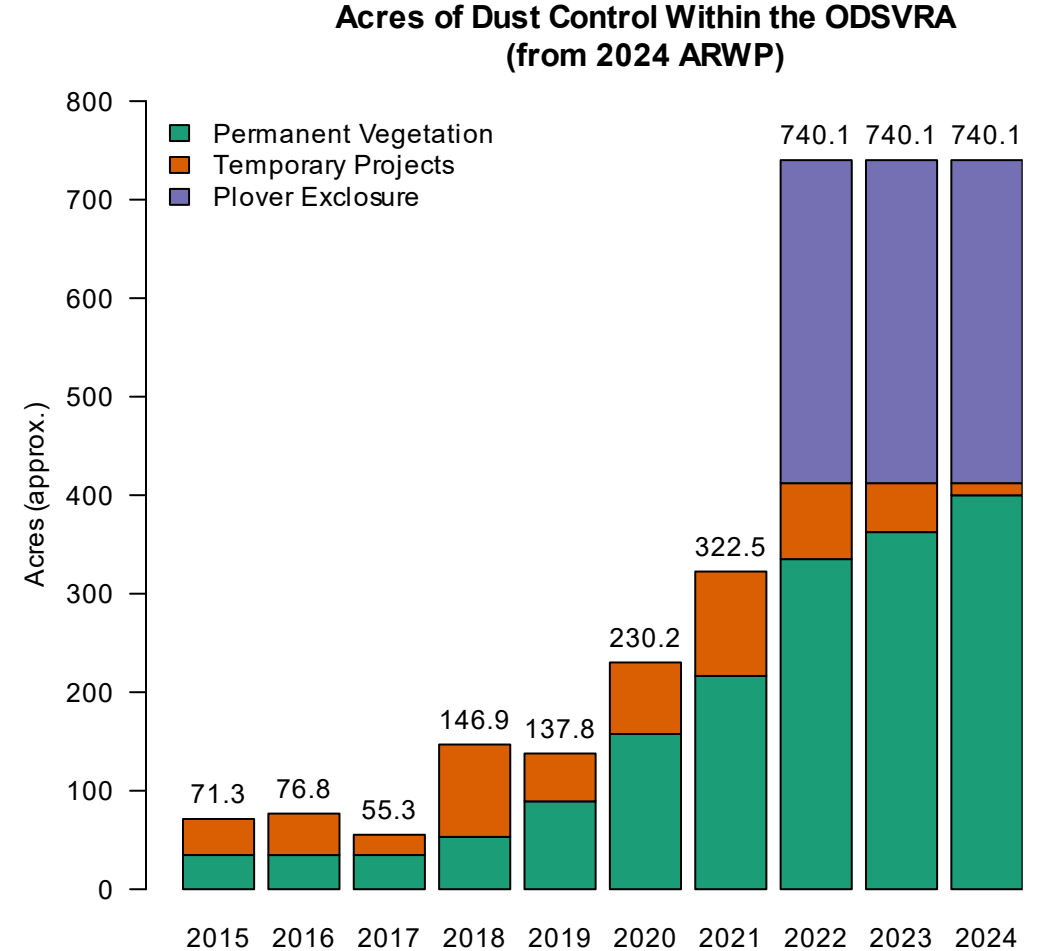
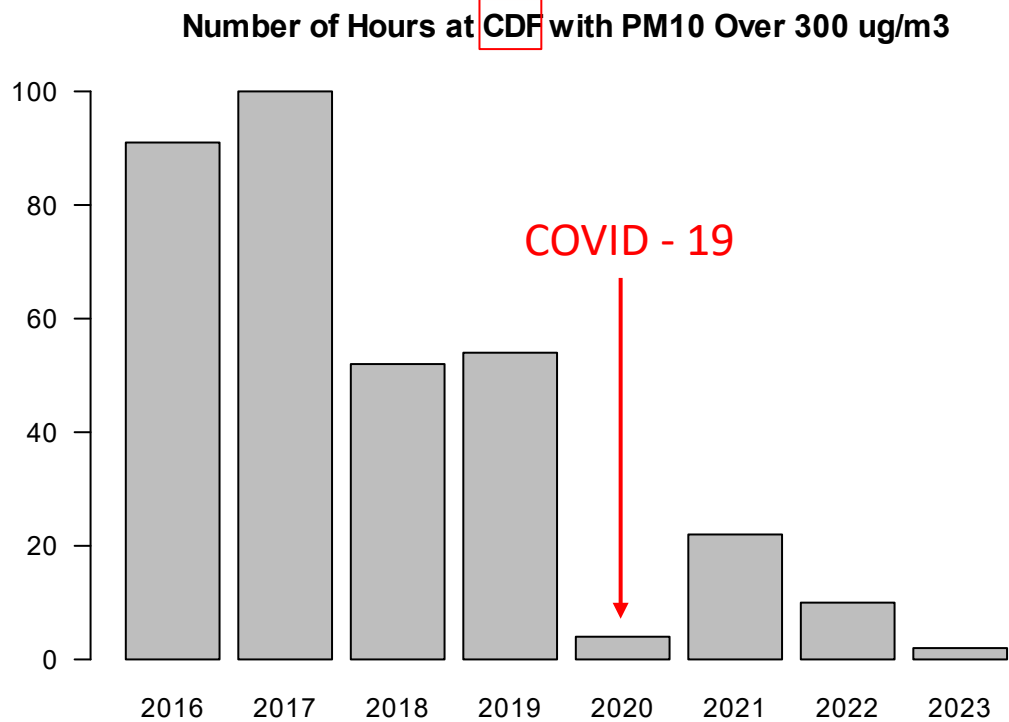
# Evolution of Dust Controls



# Evolution of Dust Controls – Monitor Locations

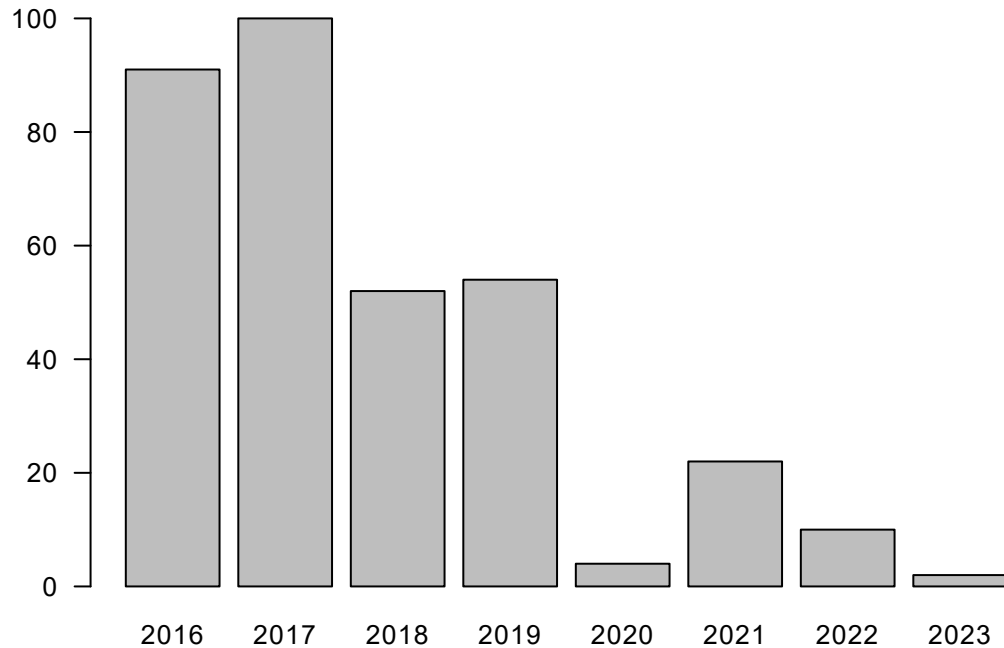


# Air Quality Trends: Hours over 300 $\mu\text{g}/\text{m}^3$



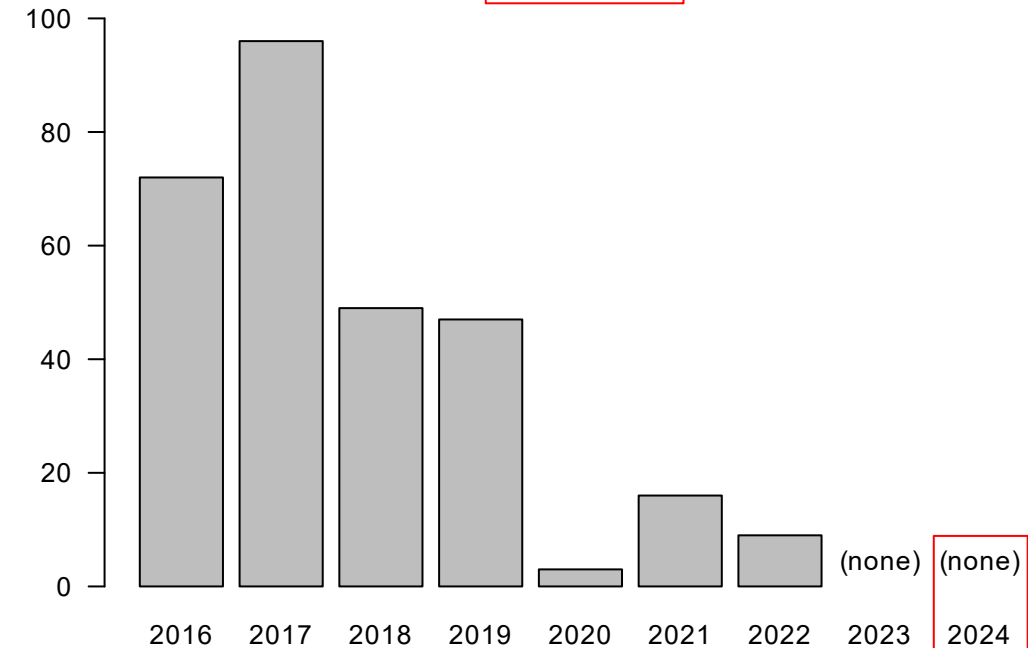
# Air Quality Trends: Hours over 300 $\mu\text{g}/\text{m}^3$

Number of Hours at CDF with PM10 Over 300  $\mu\text{g}/\text{m}^3$

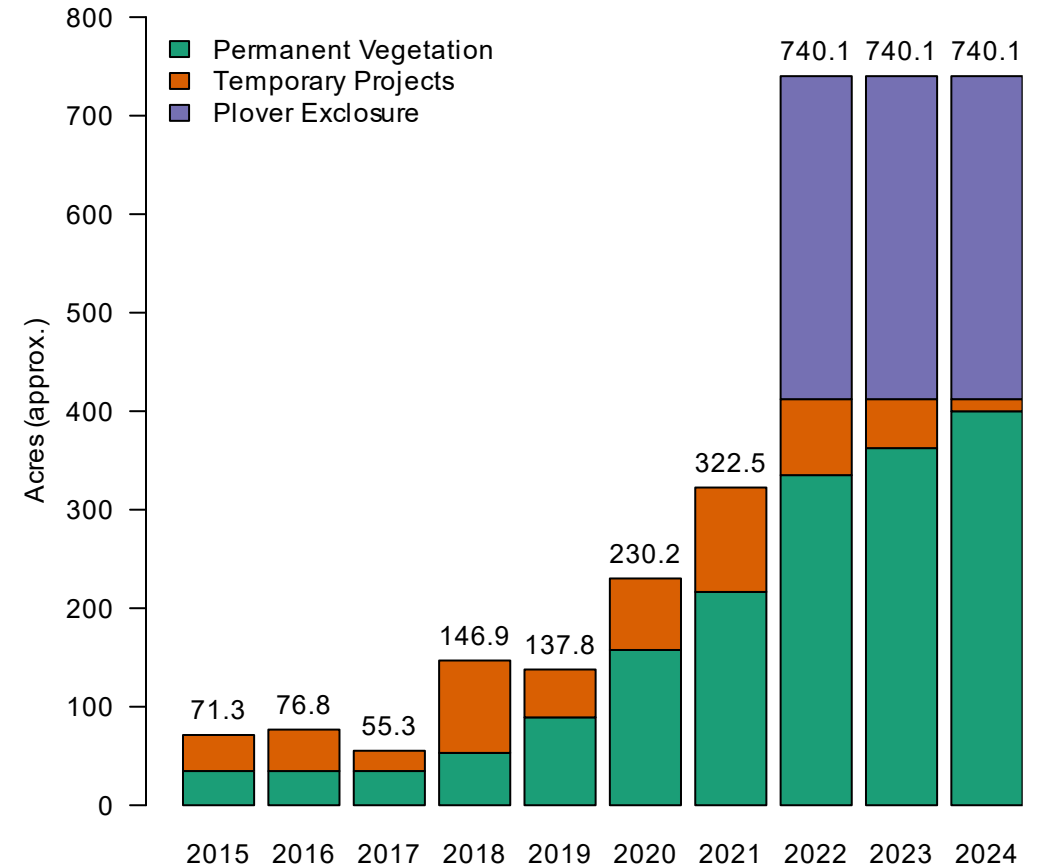
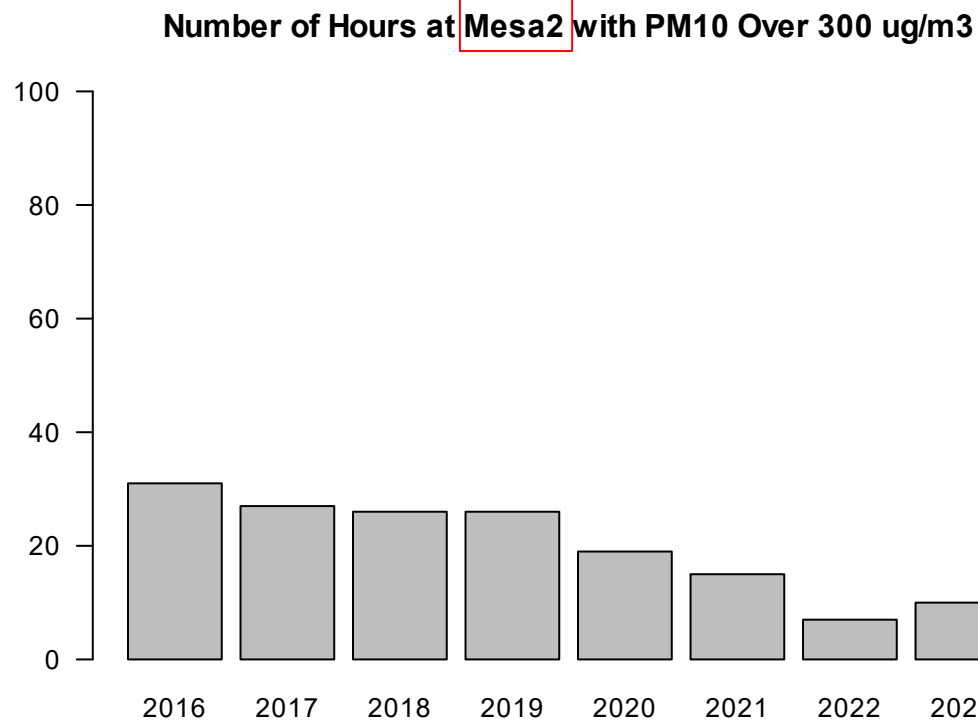


Year-to-Date Hours at CDF with PM10 Over 300  $\mu\text{g}/\text{m}^3$

Jan - Sept

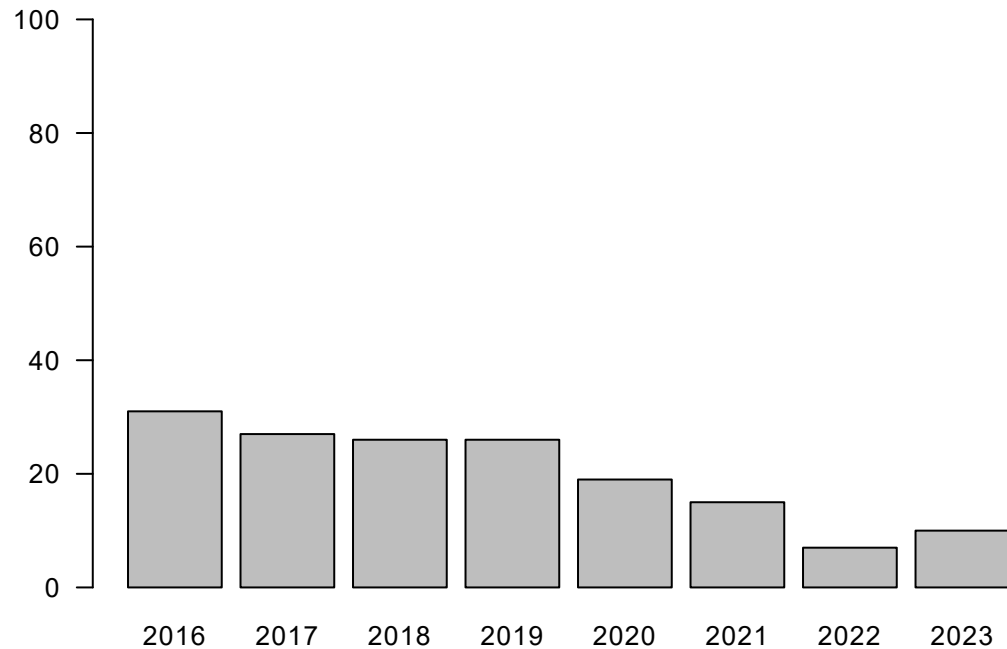


# Air Quality Trends: Hours over 300 $\mu\text{g}/\text{m}^3$

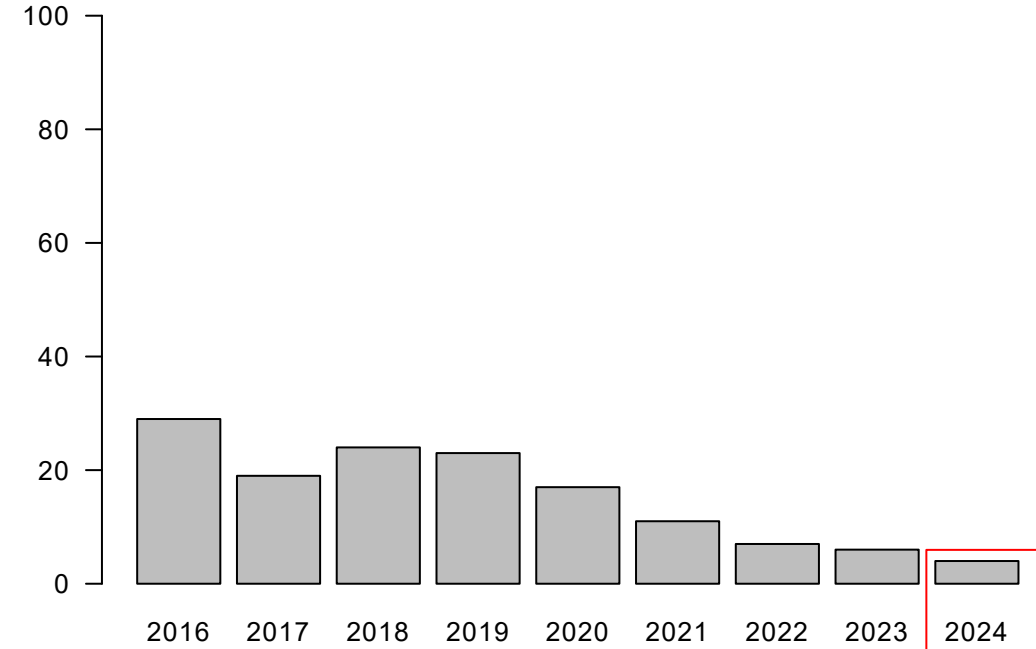


# Air Quality Trends: Hours over 300 $\mu\text{g}/\text{m}^3$

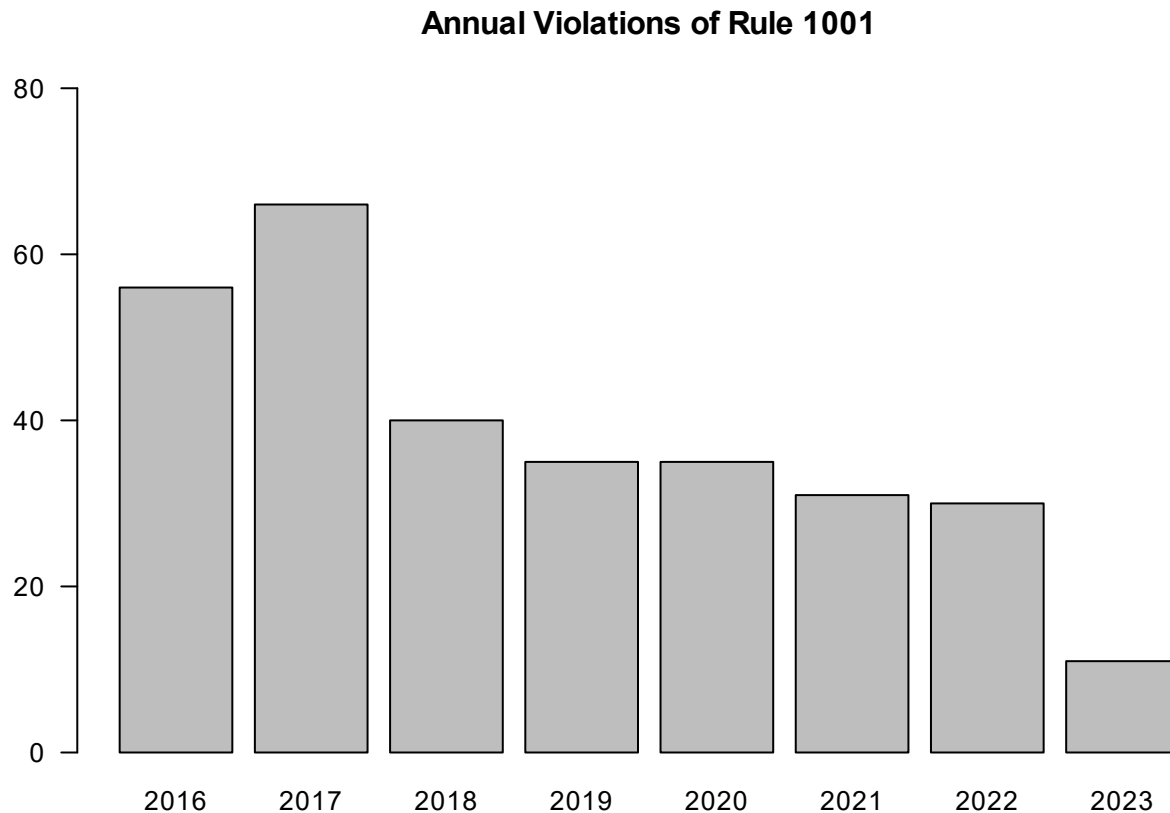
**Number of Hours at Mesa2 with PM10 Over 300  $\mu\text{g}/\text{m}^3$**



**Year-to-Date Hours at Mesa2 with PM10 Over 300  $\mu\text{g}/\text{m}^3$   
Jan - Sept**



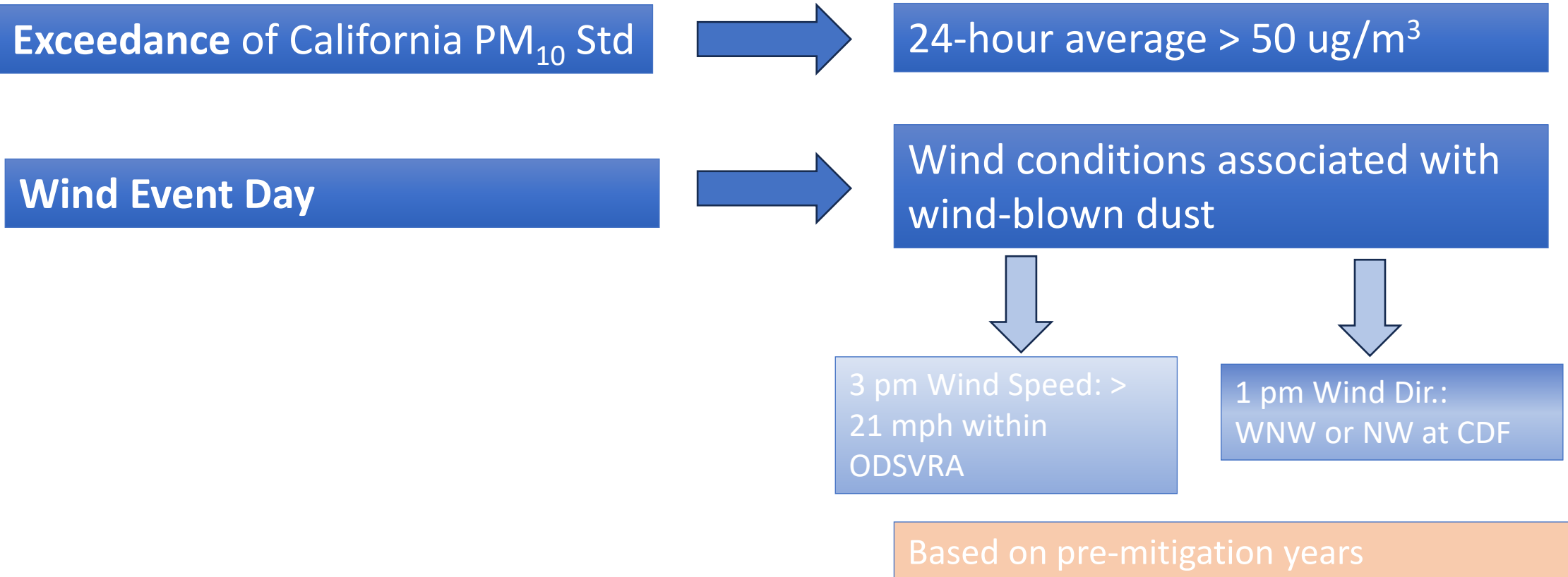
# Air Quality Trends: Rule 1001



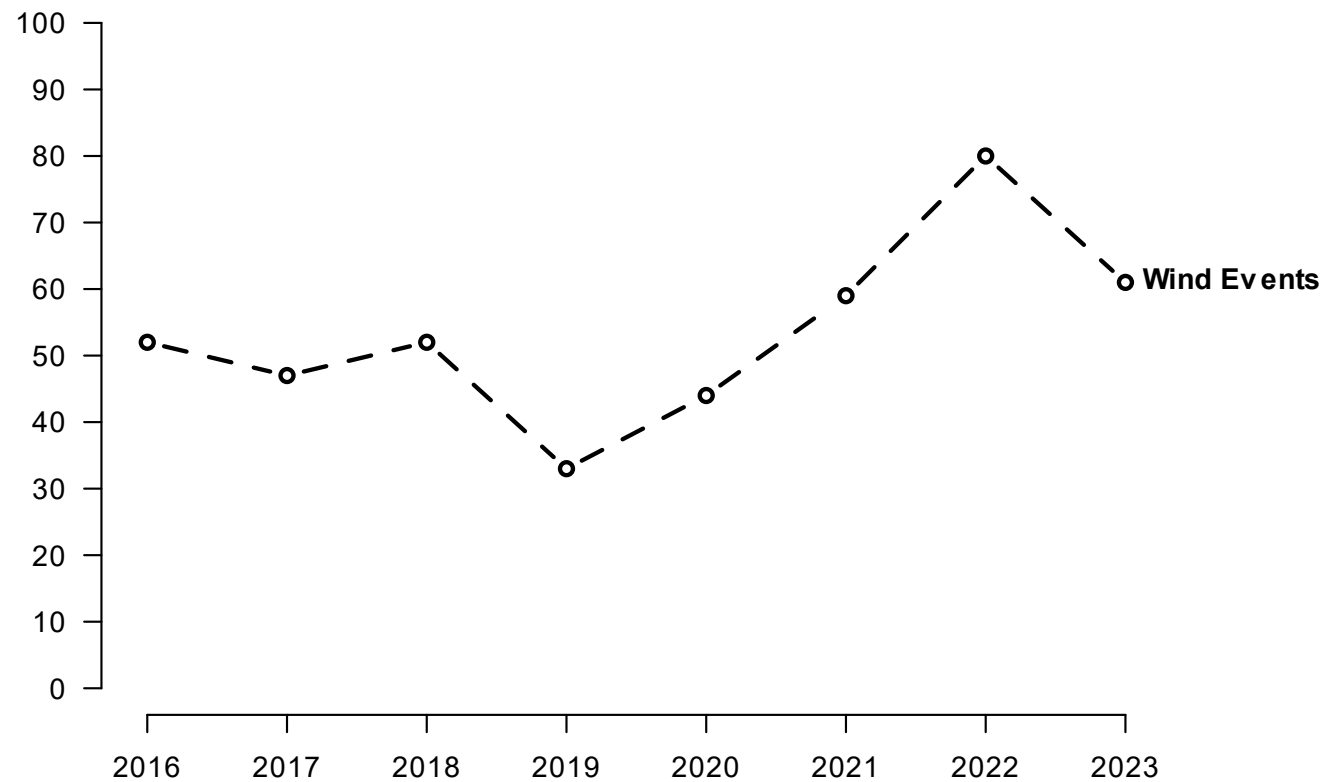
- Compare:
  - CDF (downwind of riding)
  - Oso Flaco (downwind of non-riding)
- Exceedance:
  - CDF > 55  $\mu\text{g}/\text{m}^3$  and
  - CDF > 20% above Oso Flaco



# Air Quality Trends: Exceedances & Wind Events

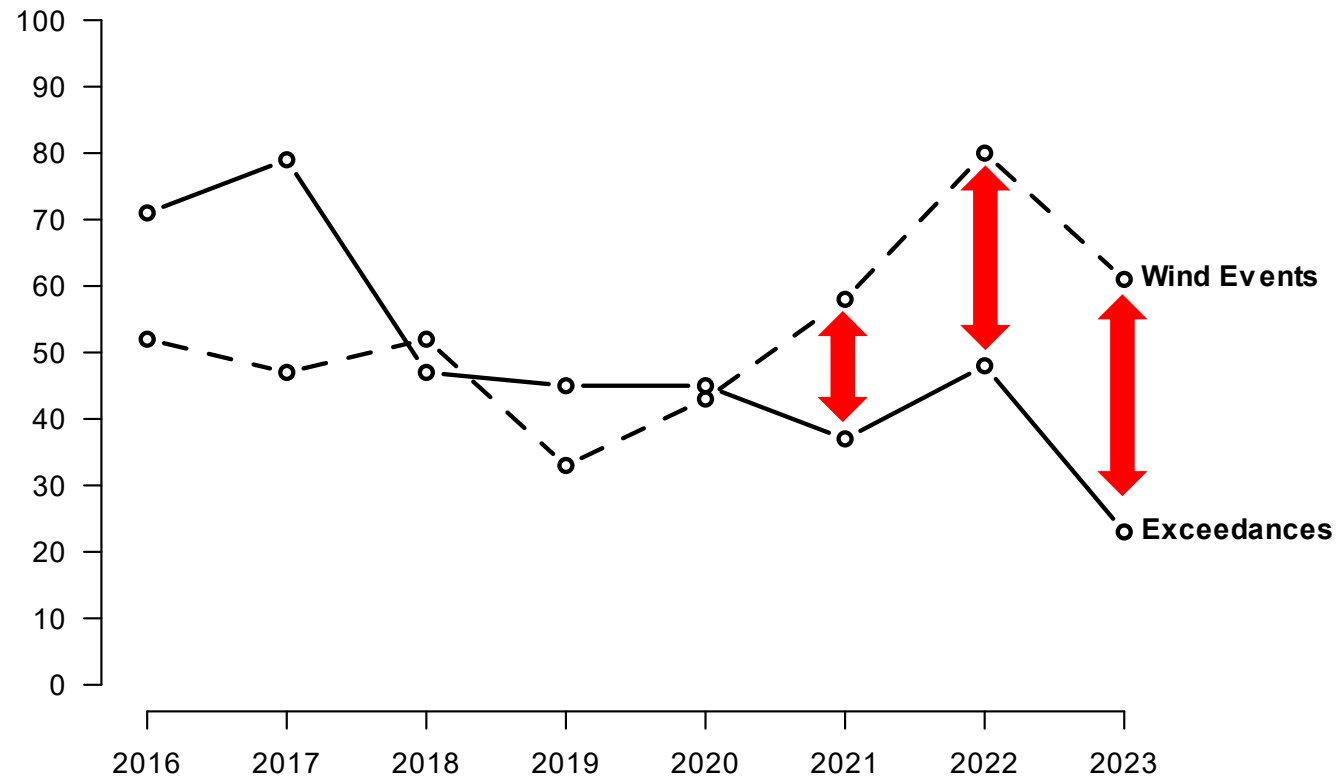


# Air Quality Trends: Exceedances & Wind Events



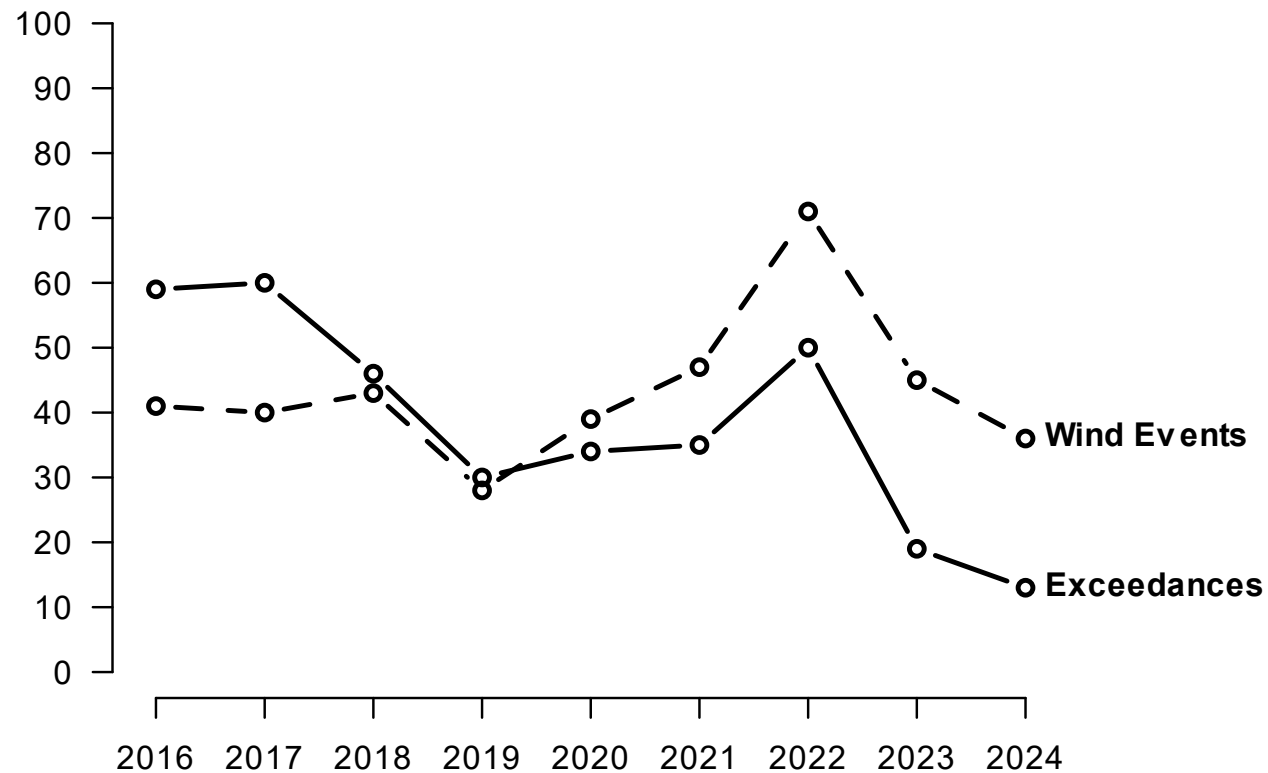
# Air Quality Trends: Exceedances & Wind Events

Wind Events and PM10 Exceedances at CDF  
Wildfire & SJV Dust Omitted



# Air Quality Trends: Exceedances & Wind Events: YTD

Wind Events and PM10 Exceedances at CDF  
Wildfire & SJV Dust Omitted  
Jan - Sept





# Air Quality Trends: Difference-in-Differences

- Focus only on wind-event days
- Remove Wildfire and SJV dust days
- Look at ratio of CDF (or Mesa2) to Oso Flaco
  - Implicitly controls for wind, non-ODSRVA impacts
- How does ratio change from year to year?
  - 2017 as baseline year
- See Annual Air Quality Report for details (on District website)
  - “Diff-in-diff” refers to type of statistical analysis

# Air Quality Trends: Difference-in-Differences

Percent Change in Wind-Event Day PM10

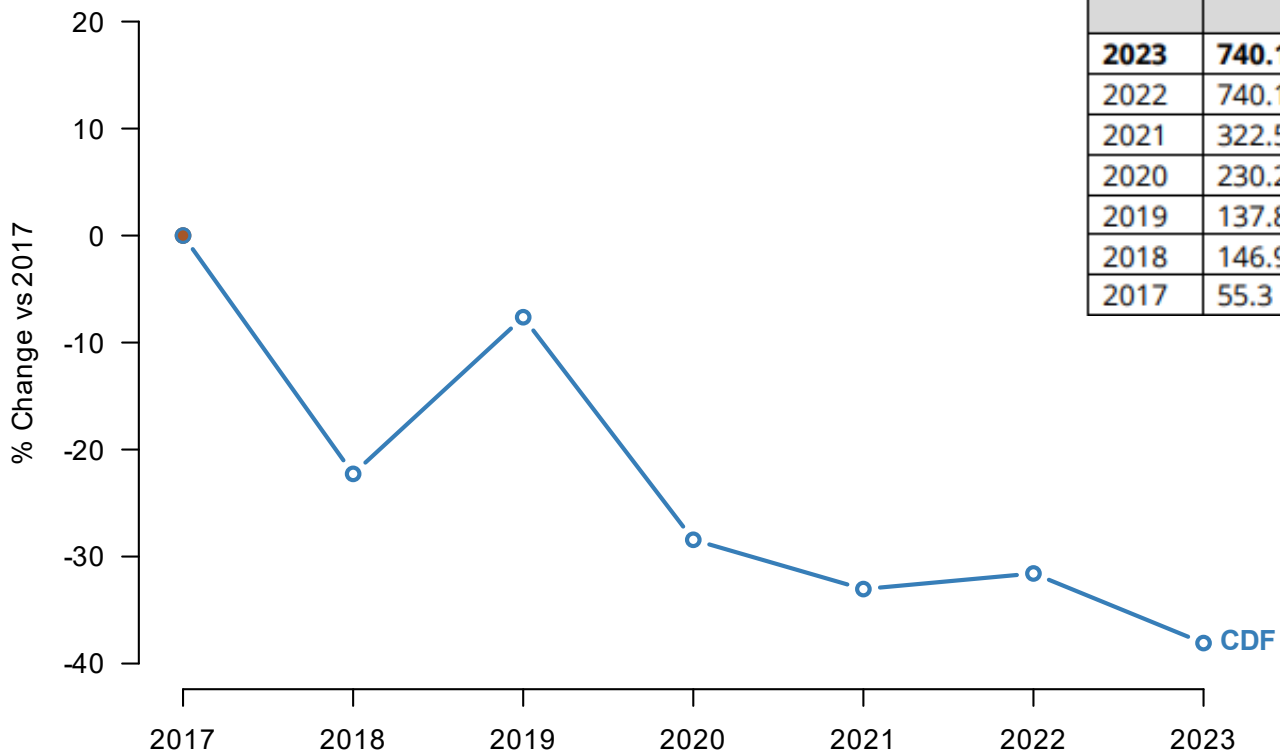
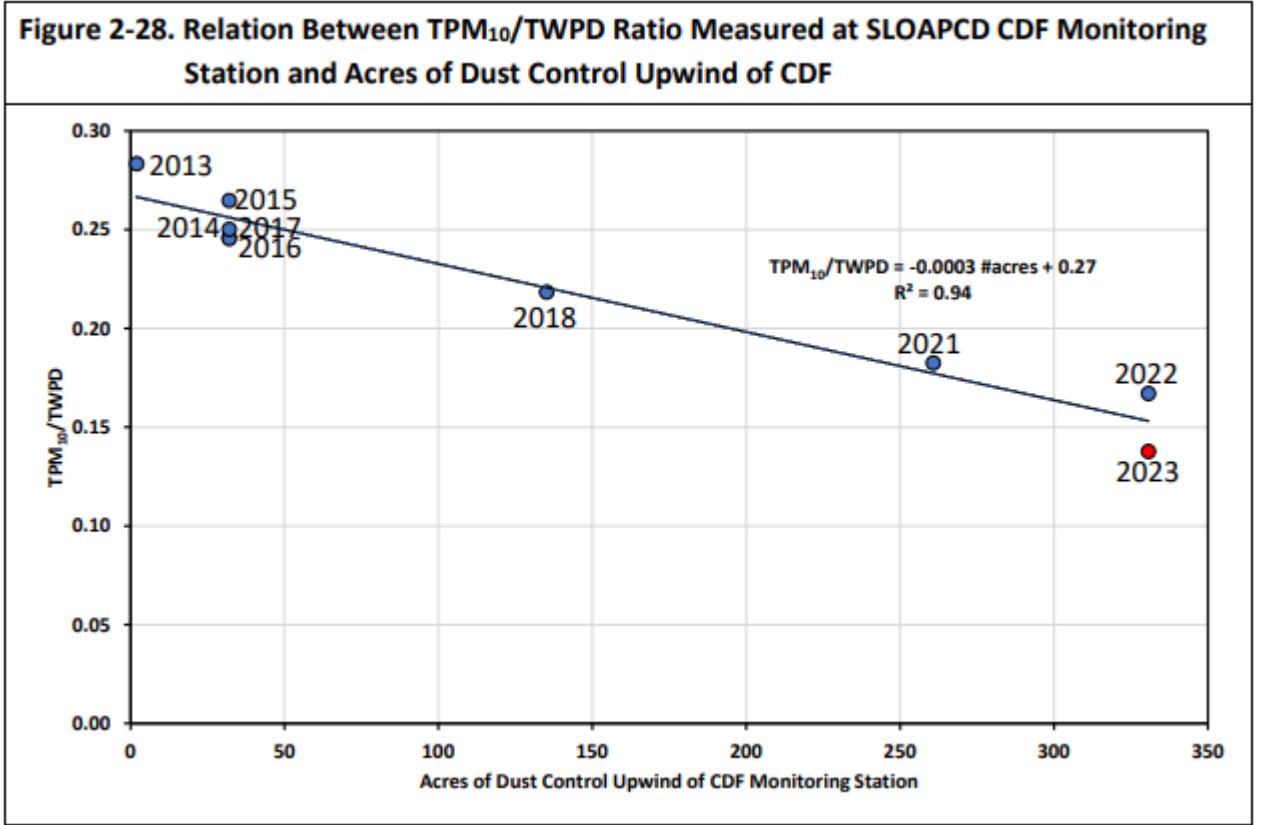


Table 1: Difference-in-differences results, 2016-2023					
Year	Total Dust Mitigation Extent (approx. acres)	Change, vs 2017 baseline, in Event-Day PM <sub>10</sub> Ratio			
		CDF vs Oso Flaco		Mesa2 vs Oso Flaco	
		Percent Change	95% Confidence Interval	Percent Change	95% Confidence Interval
2023	740.1	- 38.1 %	-24.9% to -48.9%	- 22.2%	-6.8% to -35.0%
2022	740.1	- 31.6%	-18.5% to -42.6%	- 13.8%	+1.4% to -26.7%
2021	322.5	- 33.5%	-16.1% to -47.3%	- 7.0%	+11.8% to -22.6%
2020	230.2	- 28.4%	-13.9% to -40.4%	+ 4.6%	+25.4% to -12.9%
2019	137.8	- 7.6%	+23.2% to -30.7%	+ 14.9%	+41.4% to -6.7%
2018	146.9	- 22.4%	-7.4% to -34.9%	- 2.3%	+14.3% to -16.4%
2017	55.3	0 %	n. a.	0 %	n. a.

# State Parks: TPM<sub>10</sub>:TWPD ratio

- Ratio of **T**otal **PM**<sub>10</sub> to **T**otal **W**ind **P**ower **D**ensity
- Look only at hours with high onshore winds
- Compare PM<sub>10</sub> downwind to wind-power



# Proposed AWRP Approval

Aug 1

- State Parks' First Draft ARWP
- SAG & APCD Comment Letters (Aug 13, Aug 21)

Sept 11

- State Parks' Second Draft ARWP
- SAG Comment Letter (Sept 13)

Sept 17

- APCO Provisionally Approved Second Draft

Oct 15

- Public Workshop on ARWP
- Required by SOA; APCO to receive input from the public

Oct 22

- APCO to issue final approval/denial of plan within 7 days of workshop



# Proposed AWRP Approval



Current ODSVRA : 148 m tons/day

Pre-disturbance : 166 m tons/day

Net:

-  
-18 m tons/day



# Conclusions

- Multiple metrics all show continued improvement in air quality downwind of ODSVRA
- Even as mitigation footprint remains constant
- 2024 looking good so far
- Modeling shows significant “buffer”—even with 2025 refinements, compliance is expected



# Contact / Additional Info

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www.slocleanair.org

## ODSVRA-related materials:

<https://www.slocleanair.org/air-quality/oceano-dunes-efforts.php>  
<https://bit.ly/2ThvaFf>

## Hearing Board-related materials:

<https://www.slocleanair.org/who/board/hearing-board.php>  
<https://bit.ly/3dQRRtu>

## Oceano Dunes Particulate Emissions Reduction Efforts

► [Chronological Flowchart of Particulate Matter Reduction Efforts](#)

► [APCD Hearing Board](#)

### Summer / Fall 2024 Update

State Parks submitted their First Draft 2024 Annual Report and Work Plan (ARWP) on August 1 and the Second Draft on September 11. The Provisional Final Draft is currently under review by the SLO County APCD.

#### Provisional Final Draft ARWP and Attachments

[Provisional Final Draft ARWP](#)

[Provisional Final Draft ARWP Attachments](#)

[SAG Review Memo of Provisional Final Draft 2024 ARWP](#)

[APCD's Provisional Approval of the 2024 ARWP](#)

#### First Draft ARWP and Attachments

[Draft 2024 ARWP](#)

[Draft 2024 ARWP Attachments](#)

[SAG Review Memo of Draft 2024 ARWP](#)

[SLO County APCD Comments on Draft 2024 ARWP](#)

### Spring 2024 Update

In accordance with the conditions of approval of the 2023 ARWP, on March 15, 2024, State Parks submitted the following modeling results, which incorporate the emissivity assumptions recommended by the SAG and approved by the Air Pollution Control Officer.

[State Parks Submittal Letter to APCD](#)