SLO Air Pollution Control Hearing Board

Groundhog Day Redux, aka April 30, 2018

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[Proposed] Stipulated Order of Abatement

Truth or Consequences

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Legal defects…

- Finding of “no public nuisance” is false; the case has not been heard
- No operating agreement exists between Parks and SLO County
- “Force majeure” inventions are excuses for delay and non-compliance
- “Negative externality” is, in fact, a taking; State Parks takes & neighbors suffer

Truth or Consequences

Operational deficiencies…

- CARB model should not trump reality
- Model measurements are not actual air pollution measurements at real monitors
- No control or baseline monitor, such as Oso Flaco in the non-riding, vegetated dunes
- Timetable ignores the urgency; 5 years!!
- Built-in process delays (SAG, for example)
- Tying abatement to “Public Works Plan” is unnecessary and irrelevant (see CCC)

Truth or Consequences

Mathematical reality…

- Model algorithms are poor substitutes for factual measurement
- 24-hour average PM threshold for “exceedence” is inappropriate and ignores the actual distribution of PM concentrations from ODSVRA
- PM magnitudes are more important than frequencies

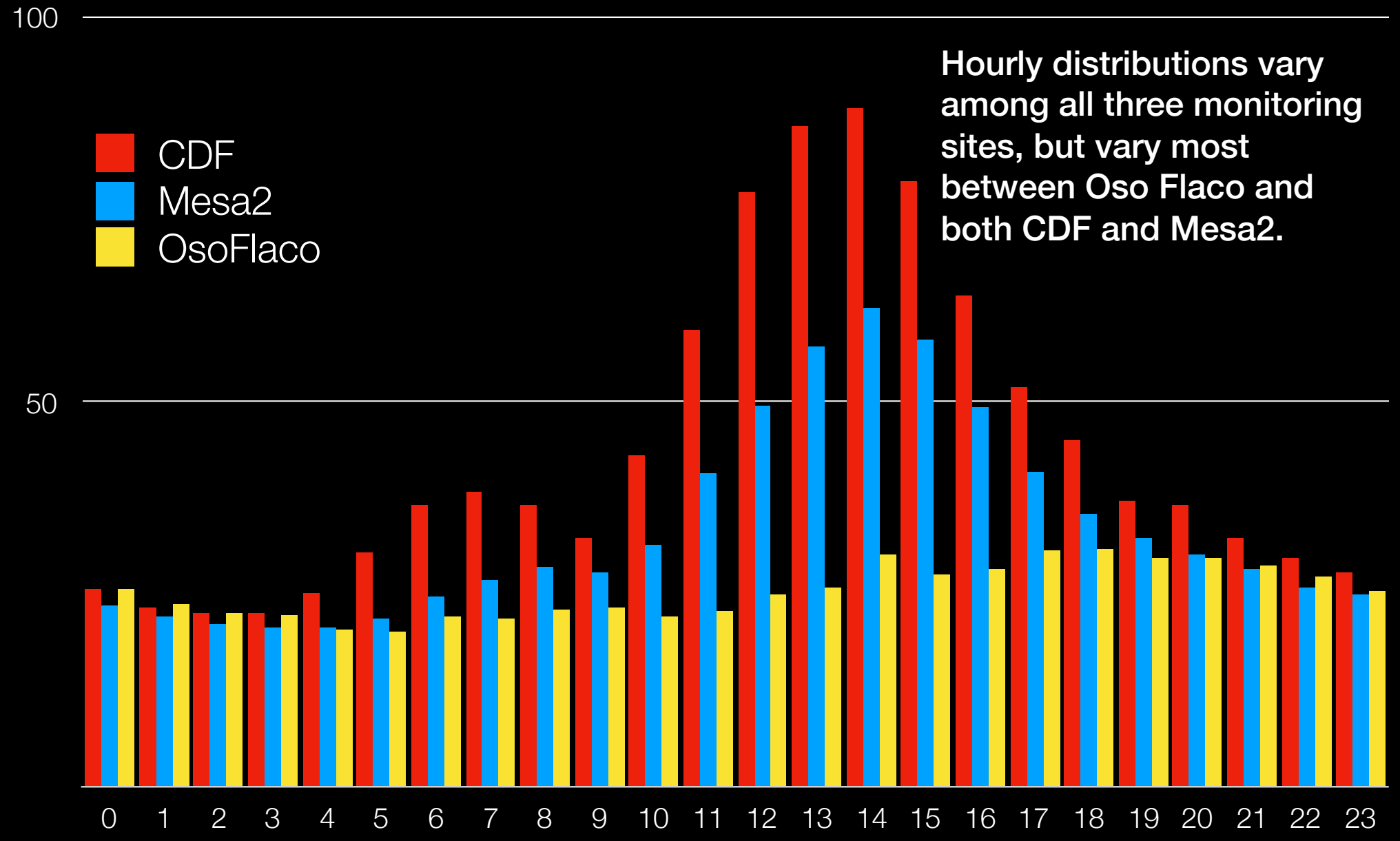
Actual Hourly Data from Three Monitors:

CDF, closest to the ODSVRA riding area

Mesa2, on Rt. 1 downwind of Phillips Refinery

Oso Flaco, closest to the shore in vegetated dunes

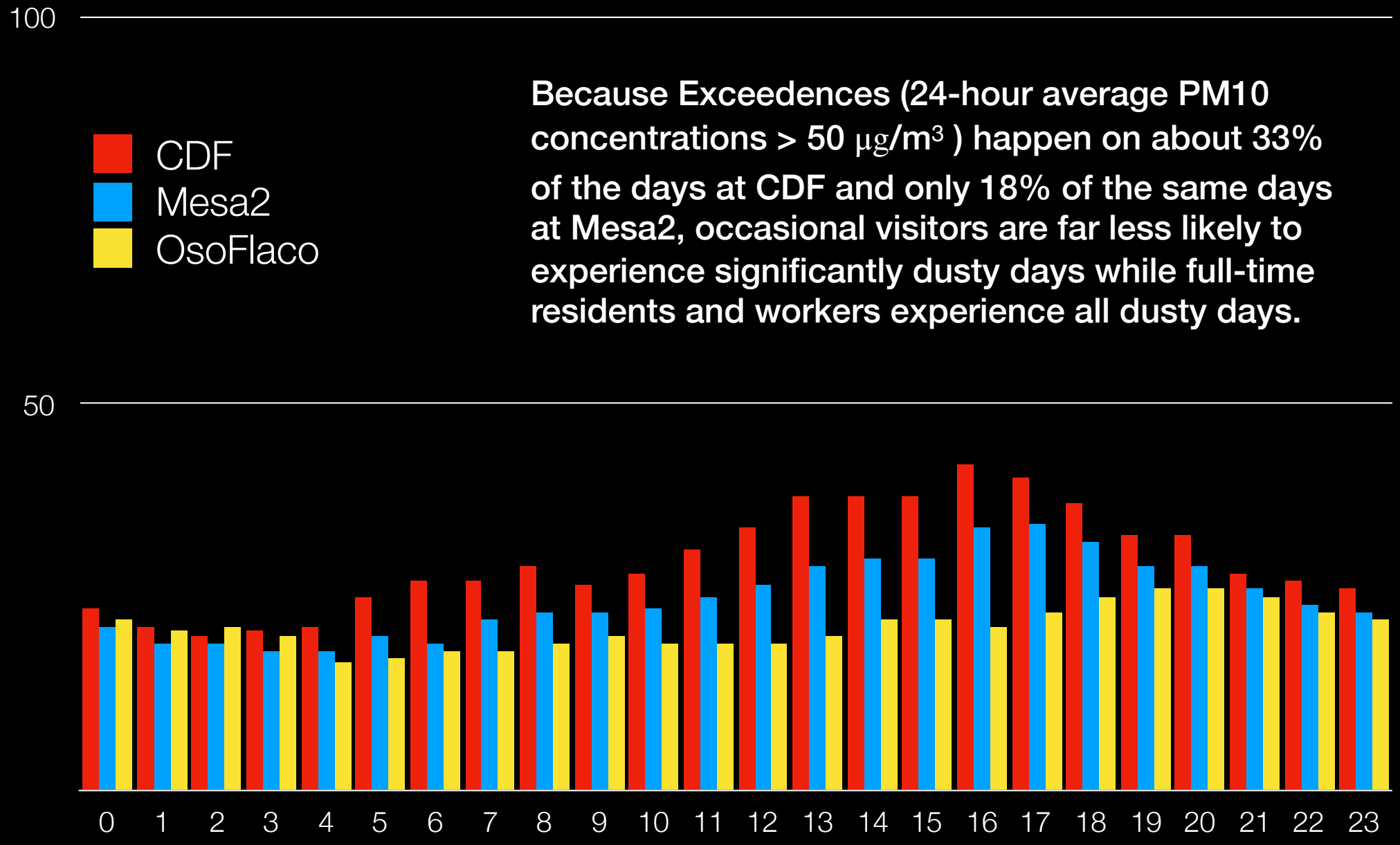
Hourly Average PM10 Concentrations at CDF, Mesa2, & Oso Flaco
3/24/2017 to 12/31/2017 (280 days)



Source: SLO APCD

Note: Hours are PST

Hourly Median PM10 Concentrations at CDF, Mesa2, & Oso Flaco
3/24/2017 to 12/31/2017 (280 days)

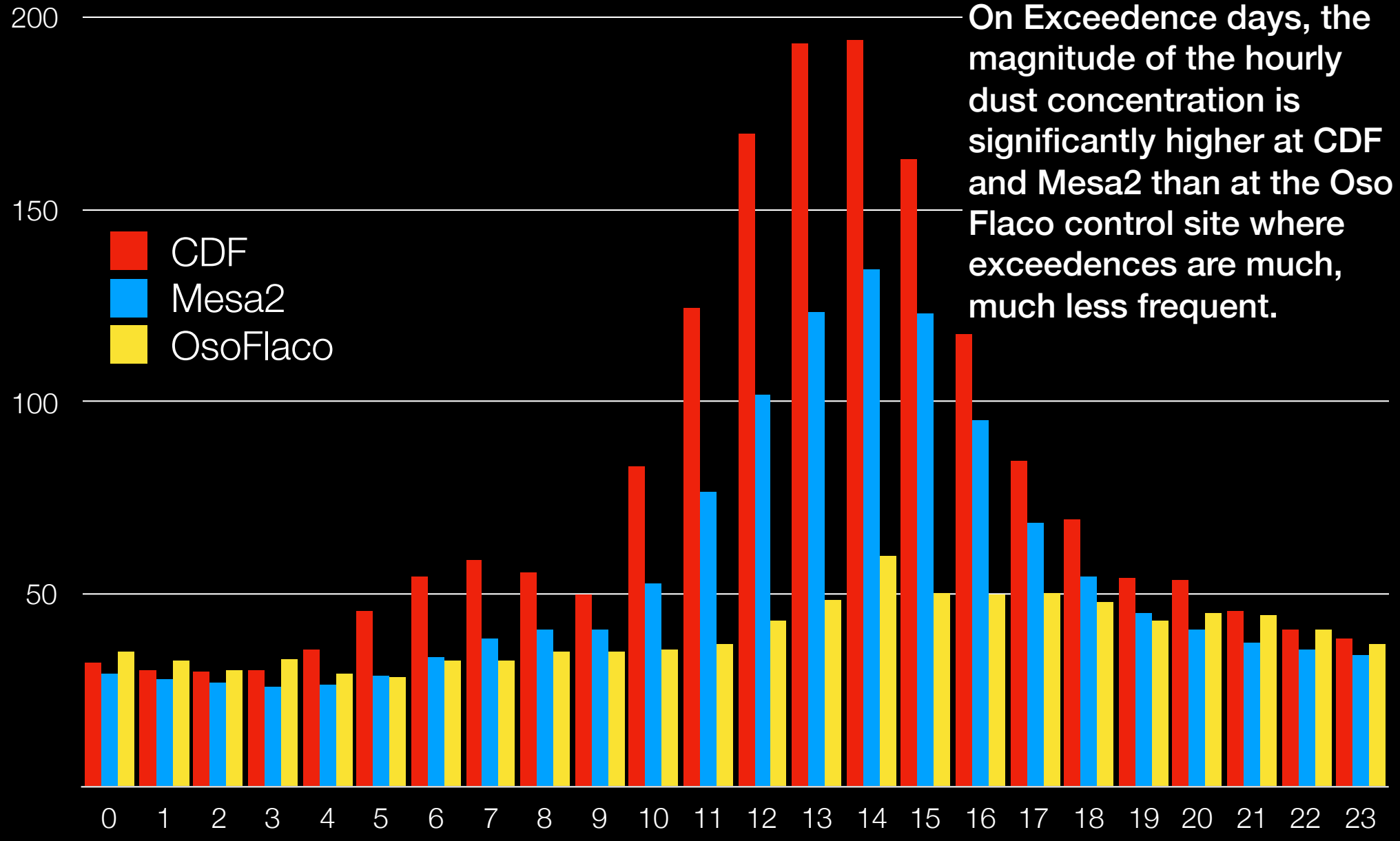


Because Exceedences (24-hour average PM10 concentrations > 50 μg/m³) happen on about 33% of the days at CDF and only 18% of the same days at Mesa2, occasional visitors are far less likely to experience significantly dusty days while full-time residents and workers experience all dusty days.

Source: SLO APCD

Note: Hours are PST

Hourly Average PM10 Concentrations at CDF, Mesa2, & Oso Flaco On 91 "Exceedence Days" at CDF

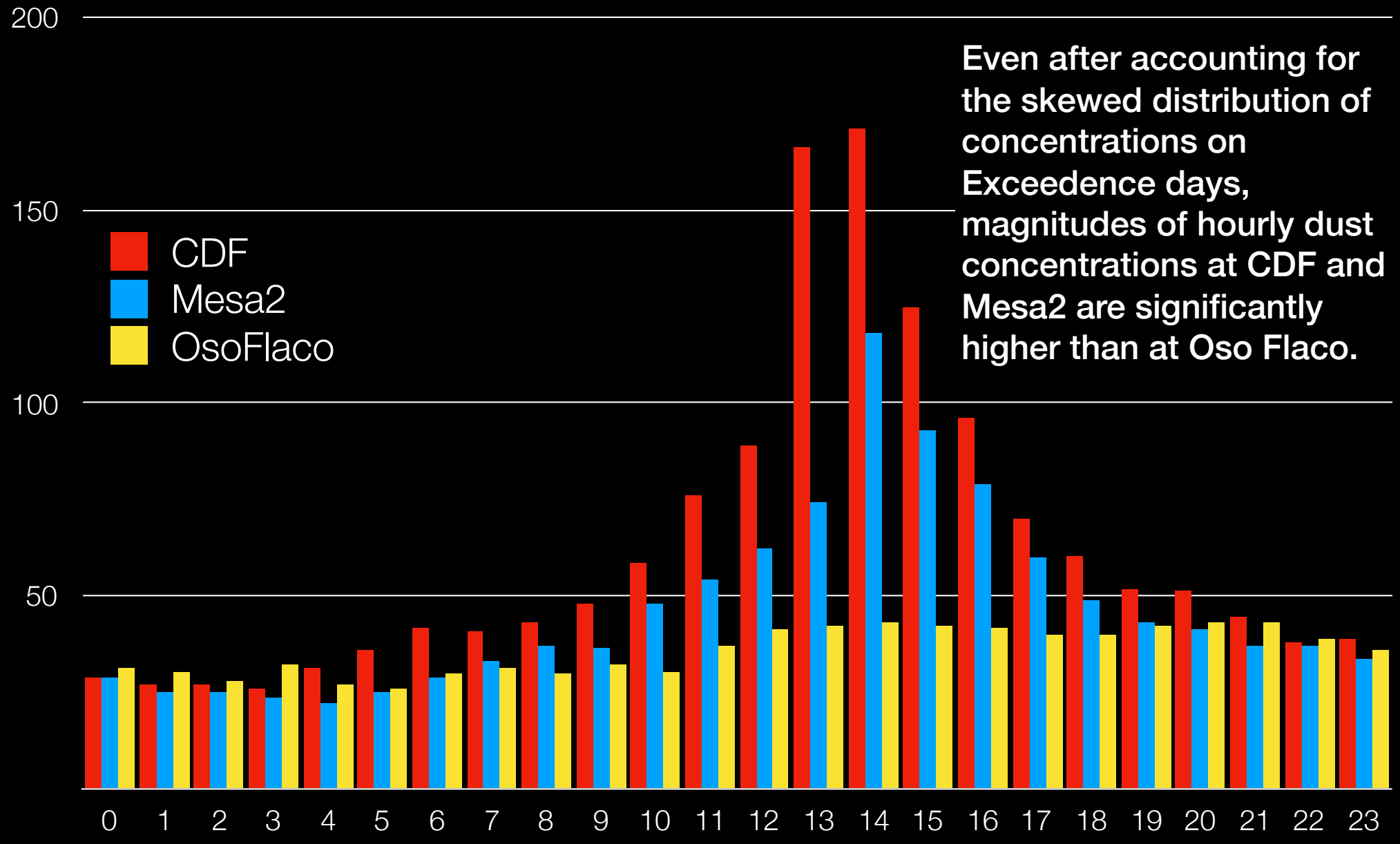


On Exceedence days, the magnitude of the hourly dust concentration is significantly higher at CDF and Mesa2 than at the Oso Flaco control site where exceedences are much, much less frequent.

Source: SLO APCD

Note: Hours are PST

Hourly Median PM10 Concentrations at CDF, Mesa2, & Oso Flaco On 91 "Exceedence Days" at CDF

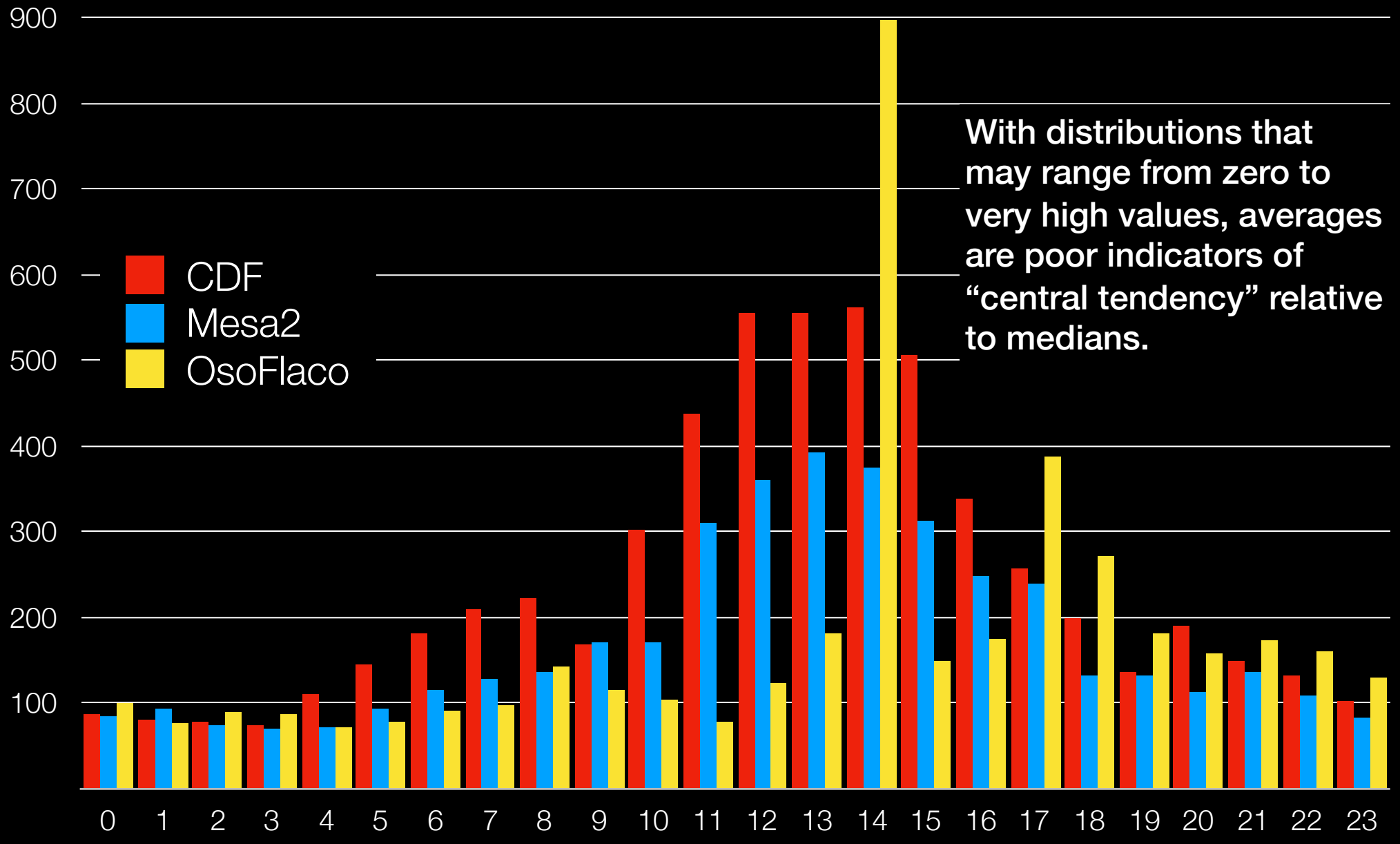


Even after accounting for the skewed distribution of concentrations on Exceedence days, magnitudes of hourly dust concentrations at CDF and Mesa2 are significantly higher than at Oso Flaco.

Source: SLO APCD

Note: Hours are PST

Hourly Maximum PM10 Concentrations at CDF, Mesa2, & Oso Flaco On 91 "Exceedence Days" at CDF



With distributions that may range from zero to very high values, averages are poor indicators of "central tendency" relative to medians.

Source: SLO APCD

Note: Hours are PST

Exceedence Days

vs.

Magnitude of PM10 Concentration on Exceedence Days

Hourly Average PM10 Concentrations at CDF, Mesa2, & Oso Flaco
Exceedence Days: Number vs. Magnitude-Adjusted Number

	For the Period 3/24/2017 to 12/31/2017 (280 days)					
	Number of Days			Magnitude-Adj Days		
	Hours 0 to 23	Hours 10 to 17	Hours 0-9 & 18-23	Hours 0 to 23	Hours 10 to 17	Hours 0-9 & 18-23
CDF	91 PM>50	112 PM>50	42 PM>50			
Mesa2	51	69	12			
Oso Flaco	17	27	15			

Number of Exceedence Days = Days with Ave Hourly Concentration > 50 $\mu g/m^3$

Magnitude-Adj Exceedence Days = Ave Hourly Concentration on Exceedence Day / 50 $\mu g/m^3$

Hourly Average PM10 Concentrations at CDF, Mesa2, & Oso Flaco
Exceedence Days: Number vs. Magnitude-Adjusted Number

For the Period 3/24/2017 to 12/31/2017 (280 days)

	Number of Days			Magnitude-Adj Days		
	Hours 0 to 23	Hours 10 to 17	Hours 0-9 & 18-23	Hours 0 to 23	Hours 10 to 17	Hours 0-9 & 18-23
CDF	91 PM>50	112 PM>50	42 PM>50	141 PM=77	298 PM=133	52 PM=62
Mesa2	51	69	12	68 PM=67	158 PM=114	14 PM=58
Oso Flaco	17	27	15	21 PM=62	40 PM=74	18 PM=60

Number of PM10 Exceedence Days = Days with Ave Hourly Concentration > 50 $\mu g/m^3$

Magnitude-Adj PM 10 Exceedence Days = Ave Hourly Concentration on Exceedence Day / 50 $\mu g/m^3$

Ratio of PM10 Exceedence Days at CDF, Mesa2, & Oso Flaco
Baseline Control is Oso Flaco Indexed to 100

For the Period 3/24/2017 to 12/31/2017 (280 days)

	Number of Days			Magnitude-Adj Days		
	Hours 0 to 23	Hours 10 to 17	Hours 0-9 & 18-23	Hours 0 to 23	Hours 10 to 17	Hours 0-9 & 18-23
CDF	535 PM>50	415 PM>50	280 PM>50	671 PM=77	745 PM=133	289 PM=62
Mesa2	300	256	80	324 PM=67	395 PM=114	78 PM=58
Oso Flaco	100	100	100	100 PM=62	100 PM=74	100 PM=60

Number of PM10 Exceedence Days = Days with Ave Hourly Concentration > 50 $\mu g/m^3$

Magnitude-Adj PM10 Exceedence Days = Ave Hourly Concentration on Exceedence Day / 50 $\mu g/m^3$

Truth or Consequences

Fatal flaws in the SOA…

- **No** true responsibility and no urgency
- **No** goal to reduce air pollution levels to ambient, background levels (*e.g.* Oso Flaco)
- **No** appreciation for the hourly distribution of PM concentrations or their magnitudes
- **No** measurement metrics based on real data
- **No** consequences for non-compliance
- **No** effective dispute resolution scheme

JUST SAY NO…

To this unresponsive, ineffective, and insulting SOA is unworthy of your signatures.

The citizens of SLO County deserve and demand better.