Coachella Valley Extreme Area Plan for 1997 8-hour Ozone Standard

Public Consultation Meeting

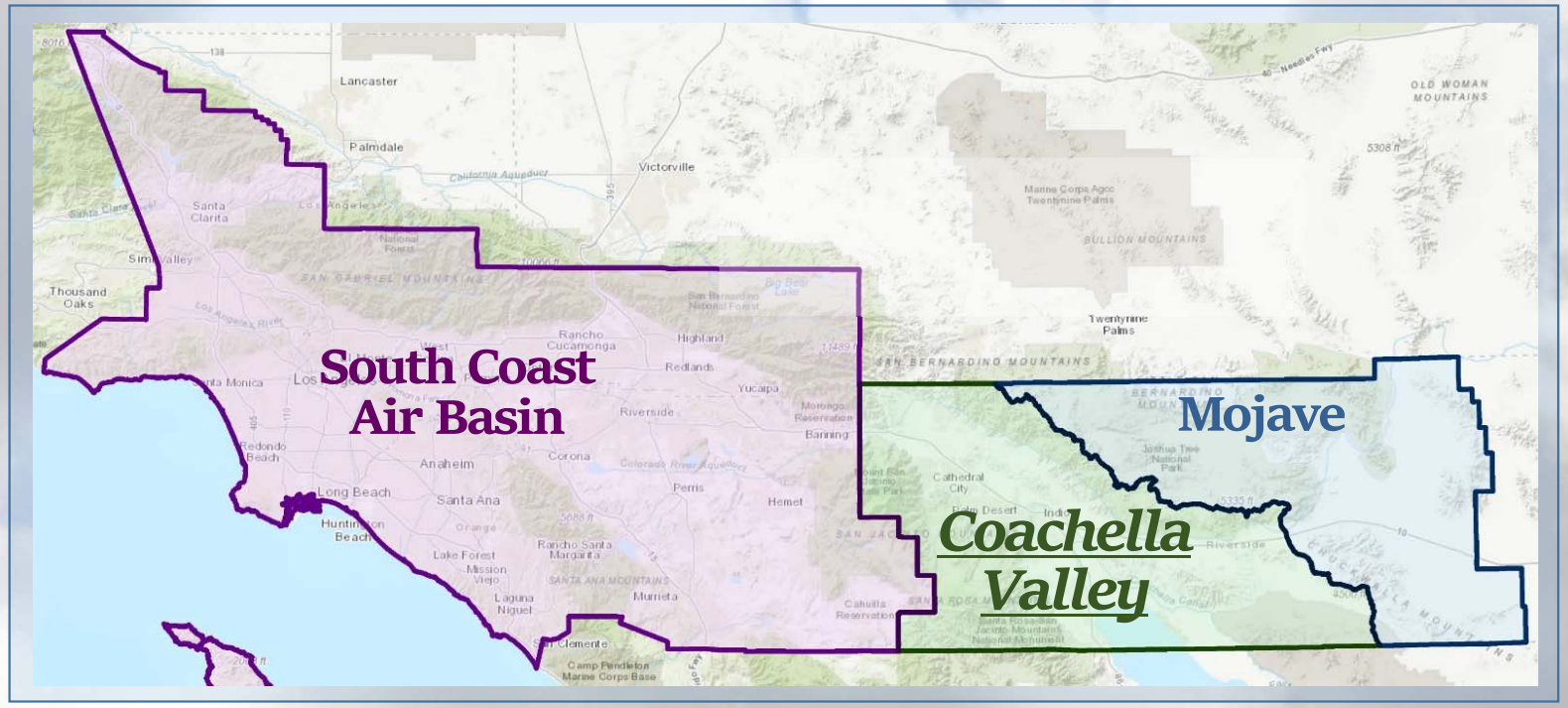
September 25, 2020

South Coast Air Quality Management District

- Local air pollution control agency
  - Largest of the 35 local air agencies in CA and in the U.S.
  - 10,743 square miles
  - 17 million residents

- Responsibilities
  - Regulate emissions from stationary sources
  - Develop and implement plans to meet national air quality standards
  - Permit and inspect 28,400 affected businesses
  - Administer over $100 million of incentive funding annually

Air Basins under South Coast AQMD



Ozone National Ambient Air Quality Standards

Coachella Valley Attainment Status

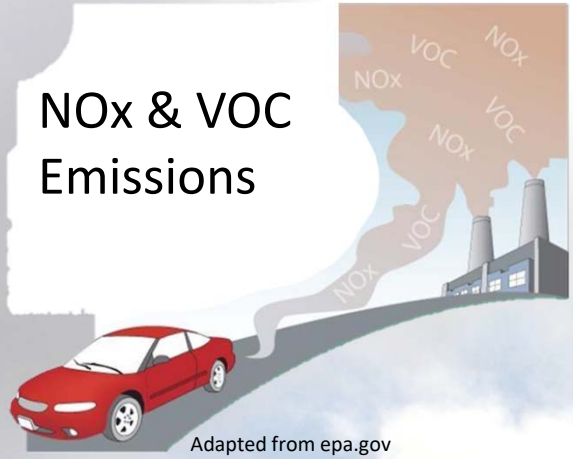
Criteria Pollutant	Averaging Time	Designation	Attainment Date
Ozone (O_3)	(1979) 1-Hour (0.12 ppm)	Attainment	11/15/2007 (attained 12/31/2013)
	(1997) 8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024
	(2008) 8-Hour (0.075 ppm)	Nonattainment (Severe)	7/20/2027
	(2015) 8-Hour (0.070 ppm)	Nonattainment (Severe)	8/3/2033

Ozone Formation

VOC = Volatile Organic Compounds; NOx = Oxides of Nitrogen

Factors that Influence Ozone Levels

NOx & VOC Emissions

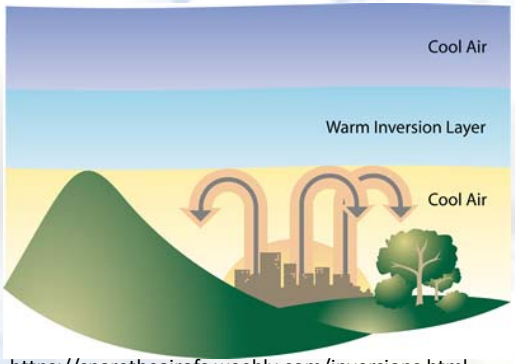


Adapted from epa.gov

US National Park Service

Wikimedia Commons

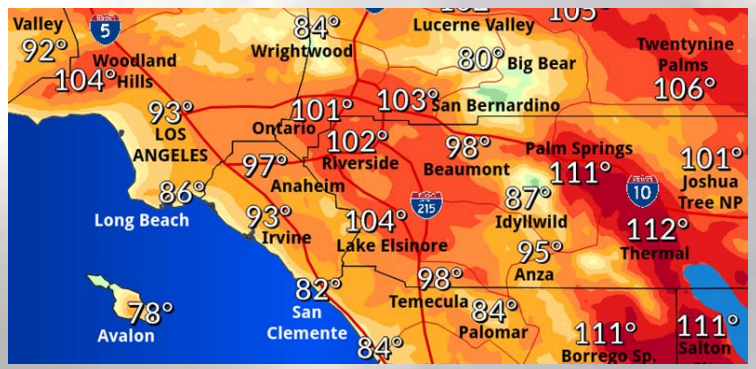
Mixing and Ventilation



https://sparetheairofs.weebly.com/inversions.html

Season

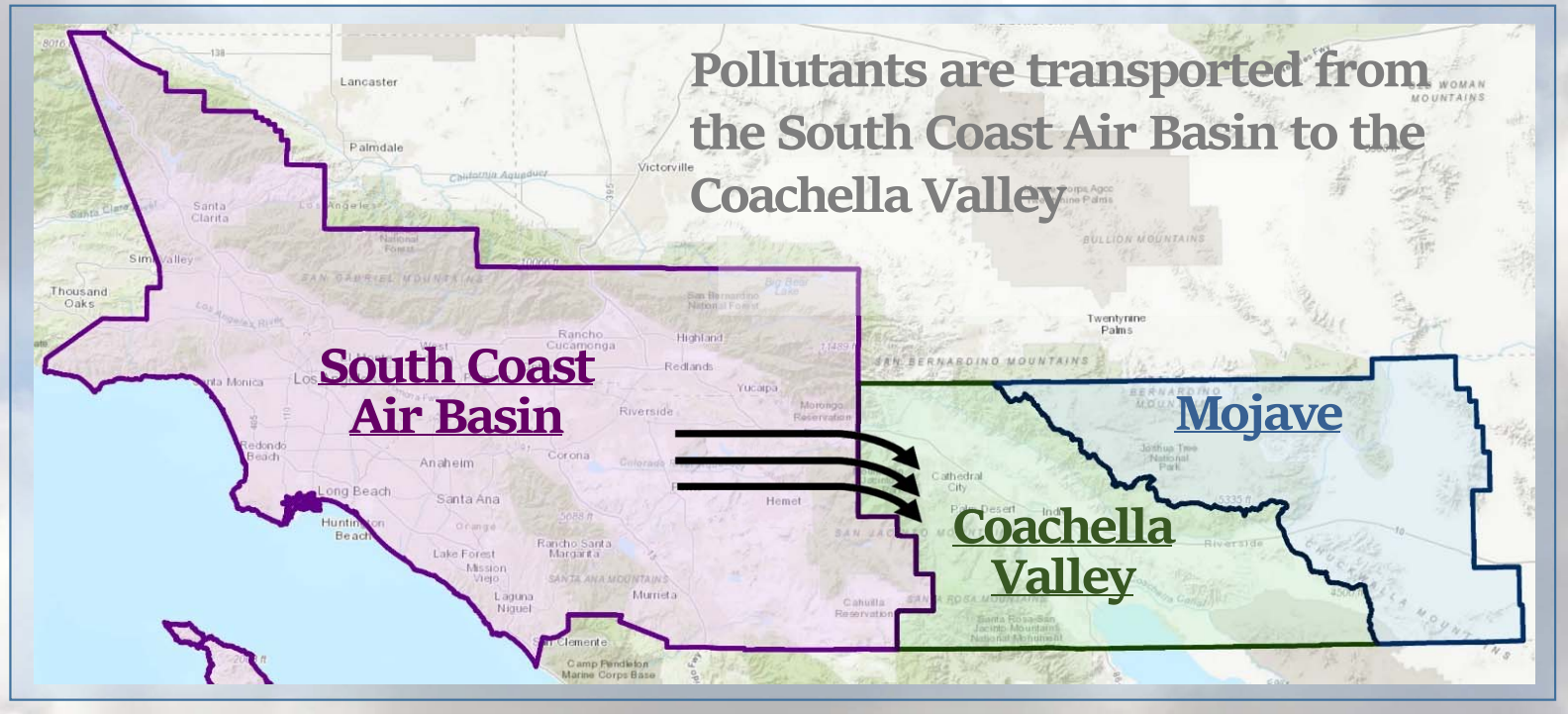
Temperature



National Weather Service San Diego Office

Air Quality Setting

- **Ozone exceedances in Coachella Valley are primarily due to the direct transport of ozone and its precursors from the South Coast Air Basin**

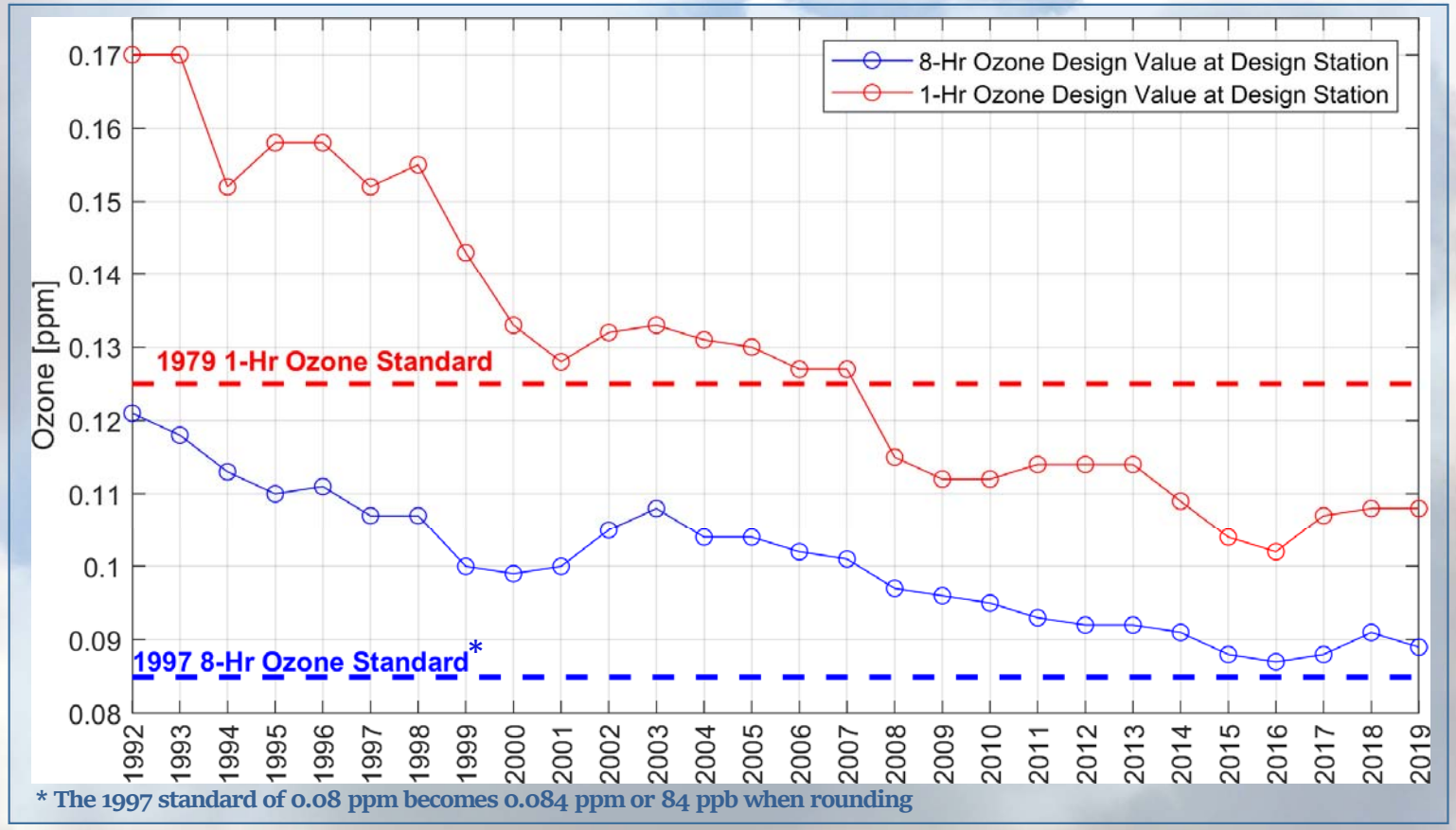


Attainment Determination Based on Design Value

- **Ozone design value is the average of each year's 99th percentile over a three year period**

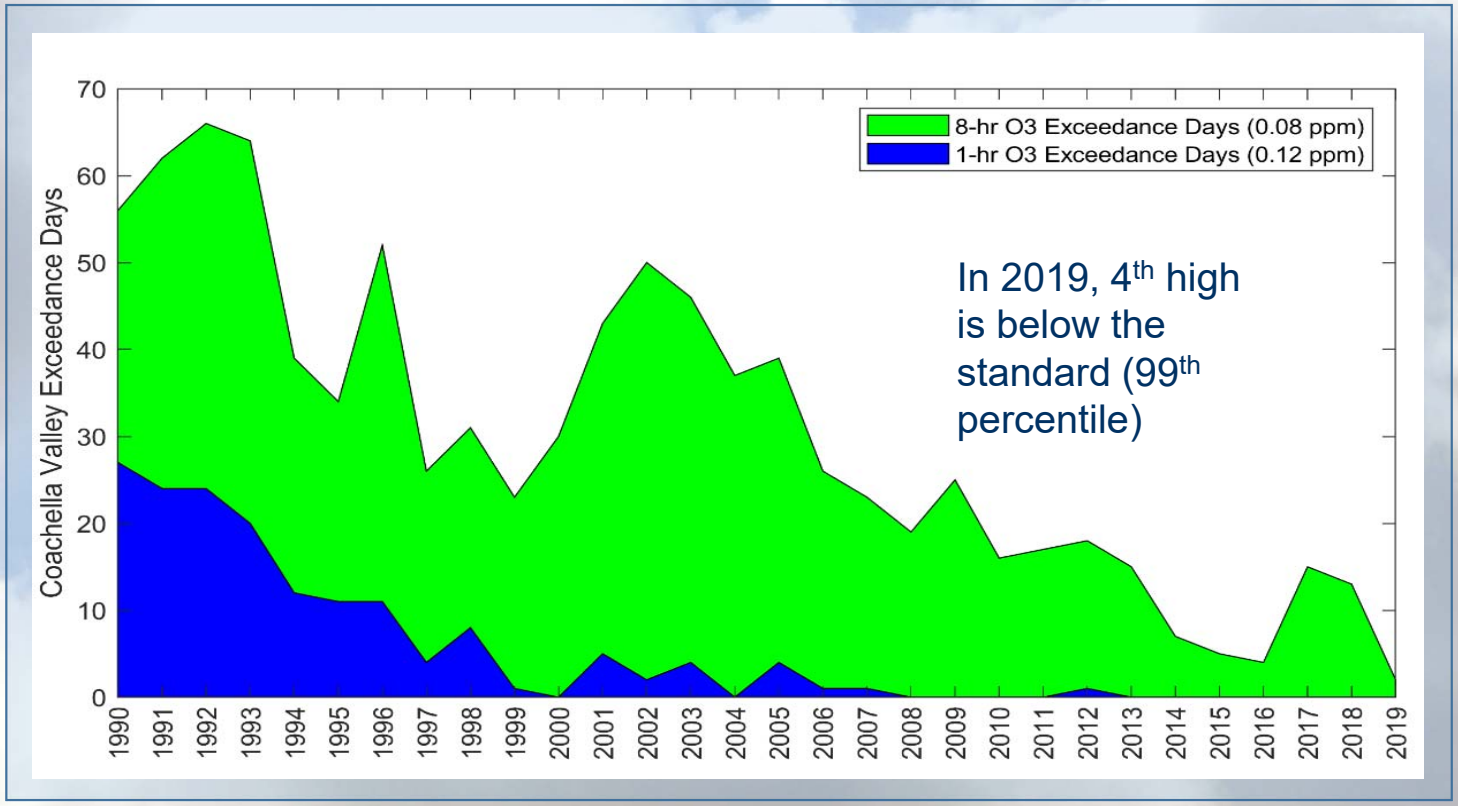
Year 1	Year 2	Year 3
99th percentile (4th highest) 8-hr daily max	99th percentile (4th highest) 8-hr daily max	99th percentile (4th highest) 8-hr daily max
Average = Design value		

Ozone Trend in Coachella Valley (Design Value)



* The 1997 standard of 0.08 ppm becomes 0.084 ppm or 84 ppb when rounding

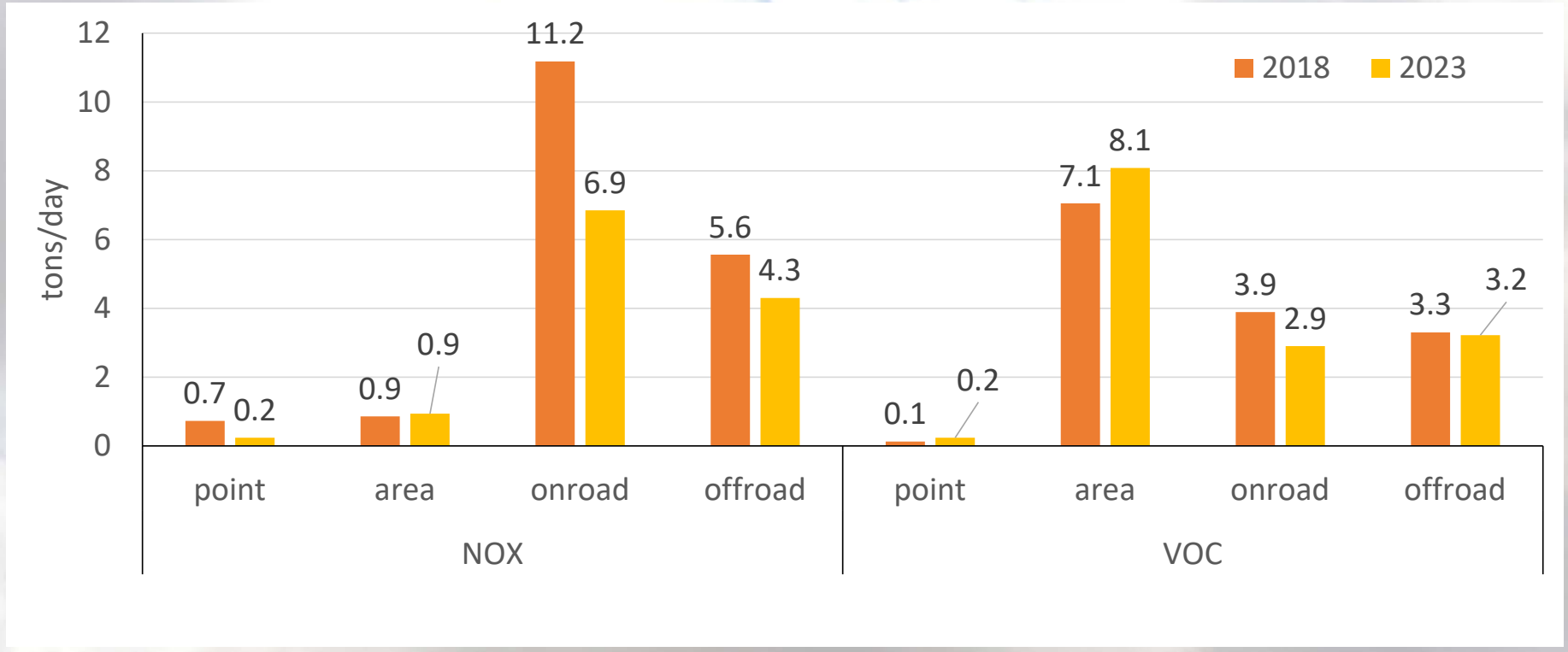
Ozone Trend in Coachella Valley (Number of Exceedance Days)



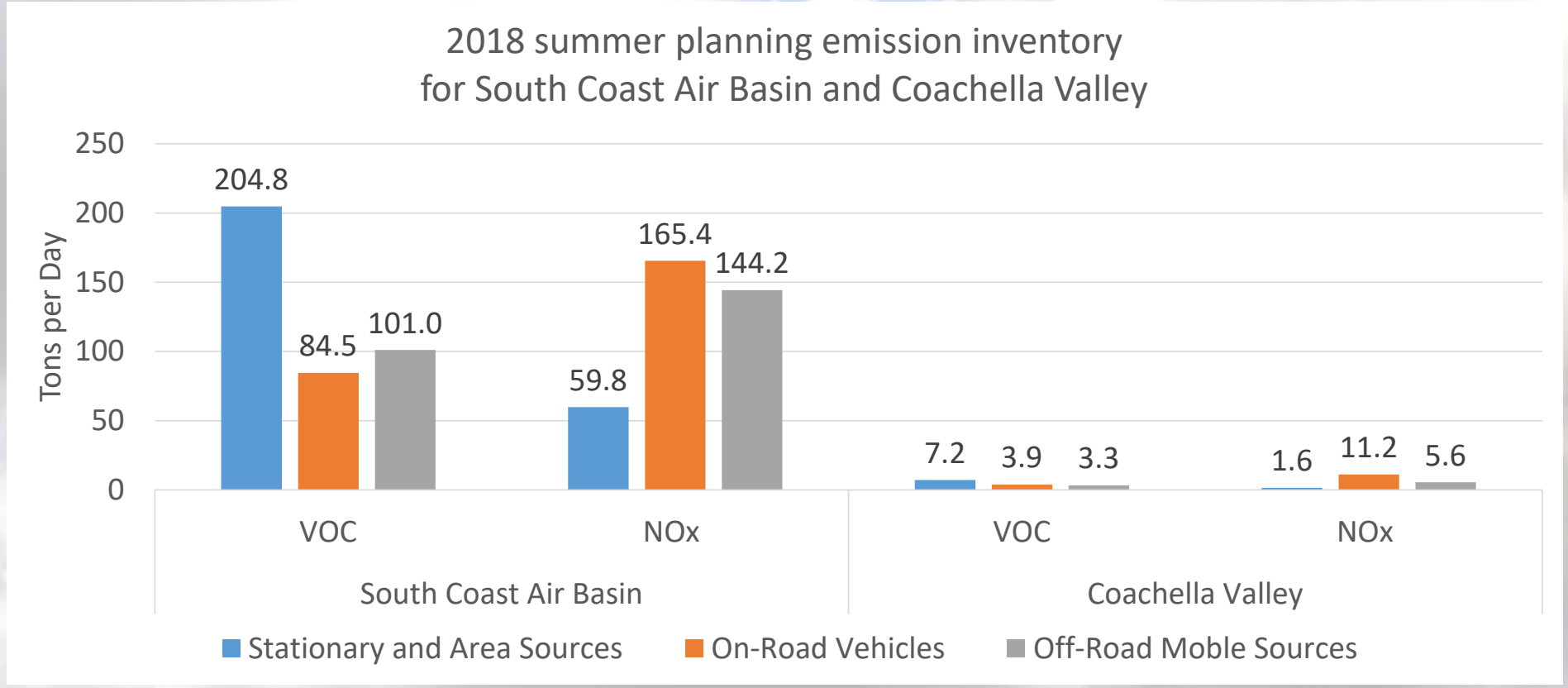
1997 8-hour Ozone Attainment Status

- Coachella Valley was previously classified as a "Severe" nonattainment area, with an attainment date of June 15, 2019
  - Monitoring data (2016-2018) showed that the area did not attain the standard by the deadline
- On July 10, 2019, Coachella Valley was granted a voluntary reclassification from "Severe" to "Extreme" by the U.S. EPA
  - New attainment date is June 15, 2024
  - A revision to the State Implementation Plan (SIP) is required (due February 2021)
  - Stricter permitting requirements on stationary sources (lower major source threshold)

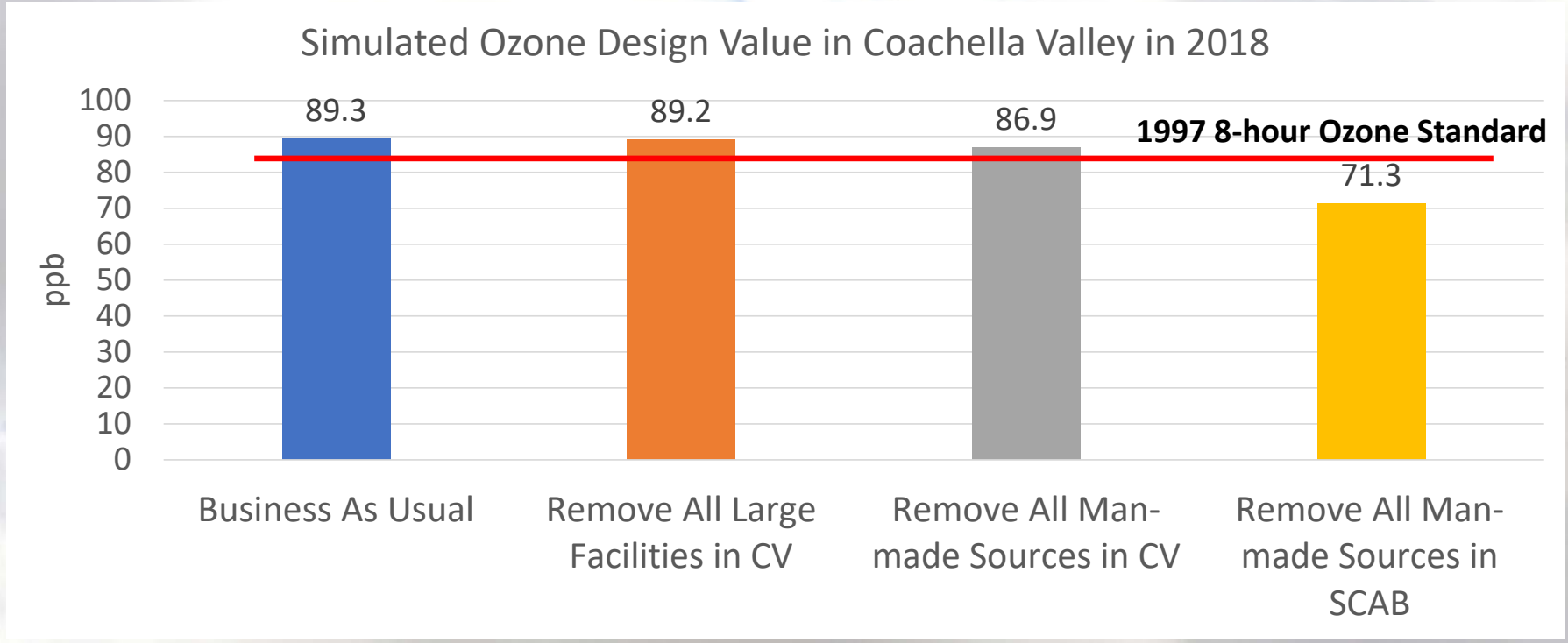
Local Emissions Trends in Coachella Valley



Emissions in South Coast Air Basin and Coachella Valley



Impact of Local and Regional Emissions on Coachella Valley Ozone Levels



ppb : part per billion.

Base and Future Year Design Values

Station	2018 Base Year Design Values (ppb)	2023 Future Year Design value (ppb)*
Palm Springs	89.3	83.2
Indio	84.3	79.1

* Based on preliminary modeling, 2022 design value is also expected to be below the standard.

Pathway to Attainment

- Attainment is expected to be achieved by 2023 based on emission reductions from existing regulations and programs
- Recently adopted regulations since 2016 AQMP provide further assurance for attainment by 2023
- Earlier attainment was evaluated; however not considered since no additional feasible measures were identified which could be adopted and implemented in time to accelerate attainment date
- Based on preliminary modeling, attainment may be earlier by 2022

Extreme Area Plan – Key Requirements

Emission Inventory and Attainment Demonstration

- ✓ Updated emissions inventory;
- ✓ Expeditious attainment expected by 2023 based on baseline emissions (existing regulations)

Control Strategy Analysis

- ✓ Continued implementation of control strategy in 2016 Air Quality Management Plan
- ✓ Analysis of Reasonably Available Control Technology / Reasonably Available Control Measures (RACT/RACM)

Reasonable Further Progress

- ✓ Achieved based on reductions in baseline emissions

Change Major Source and Major Modification Thresholds for Both NOx and VOC

- ✓ Amendments to New Source Review, RECLAIM, and Title V Programs underway

Contingency Measures

- ✓ Contingency provisions to be included in a rule

Public Process

Summer

Aug 26 – AB 617 East Coachella Valley Community Steering Committee

Sep 3 – AQMP Advisory Group

Sep 11 – Release Draft Plan

Fall

Sep 18 – South Coast AQMD Mobile Source Committee

Sep 25 – Public Consultation Meeting

Oct 13 – Public Comments Due

Nov 3 – Release Draft Final Plan

Nov 20 – South Coast AQMD Mobile Source Committee

Winter

Dec 4 – South Coast AQMD Board Consideration

Submittal to CARB/U.S. EPA following Board Approval

Supporting Documents Available

- Draft Coachella Valley Extreme Area Ozone Plan
- Notice of Public Consultation Meeting for Coachella Valley Extreme Area Ozone Plan for 1997 8-Hour Ozone Standard and Public Workshop for Proposed Amended Regulations XIII, XX, and XXX
- Fact Sheet for Coachella Valley Extreme Area Ozone Plan

http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/other-state-implementation-plan-(sip)-revisions

Submission of Documents or Comments

Please address questions, comments, documents or other relevant information to:

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Written comments should be submitted no later than Tuesday, October 13, 2020