

**UNPRECEDENTED
PARTICULATE MATTER LEVELS
IN THE COACHELLA VALLEY**

THE AFTEREFFECTS OF TROPICAL STORM HILARY?

OUTLINE

PM 10 – Public Health

SCAQMD & Control Measures

Natural Alluvial / Wind Systems

Recent Spike in PM 10 Levels

The Let's Blame Hilary Hypothesis

What We're Doing, Could Be Doing, and Should Be Doing

OUTLINE

PM 10 – Public Health

SCAQMD & Control Measures

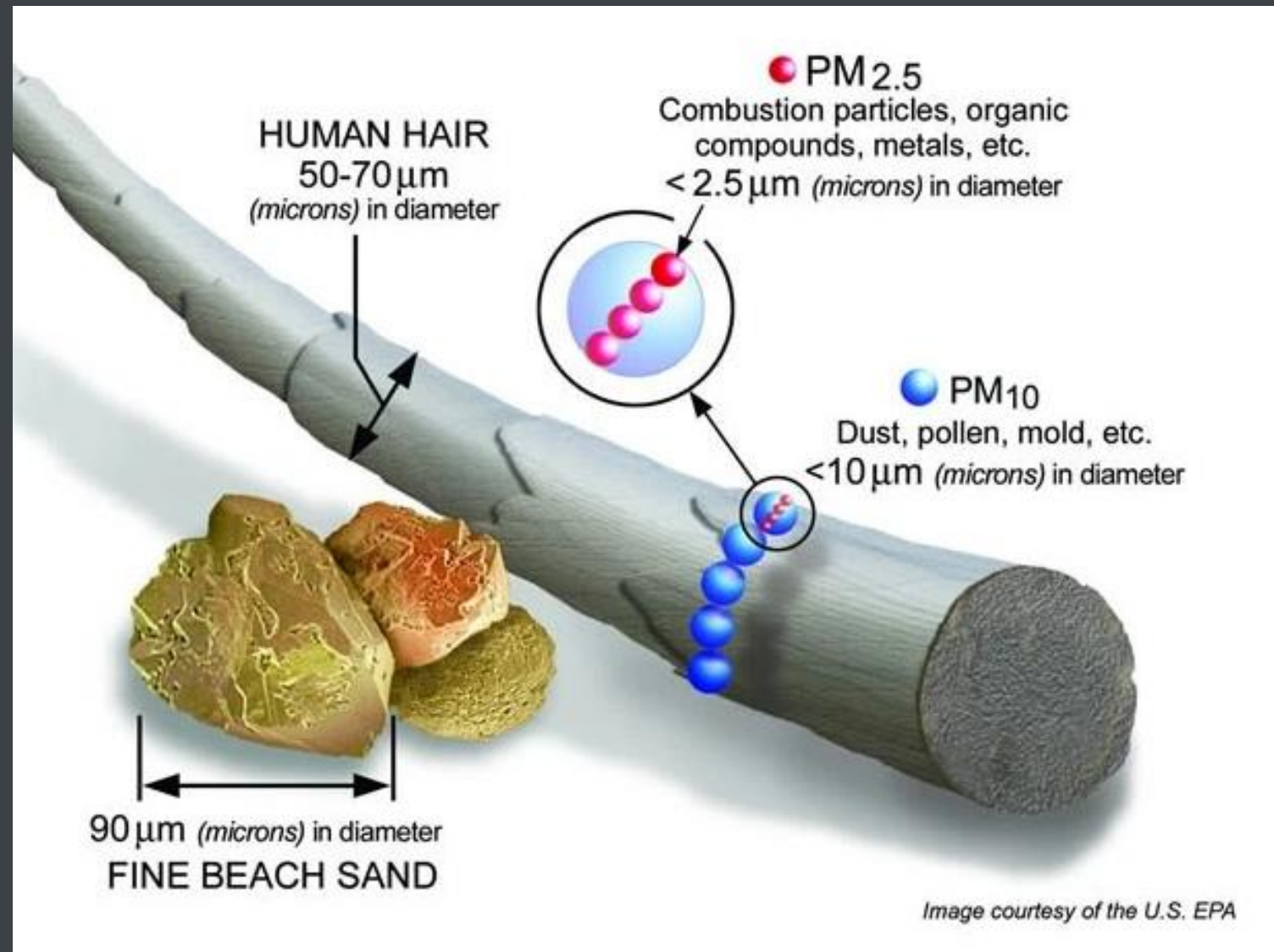
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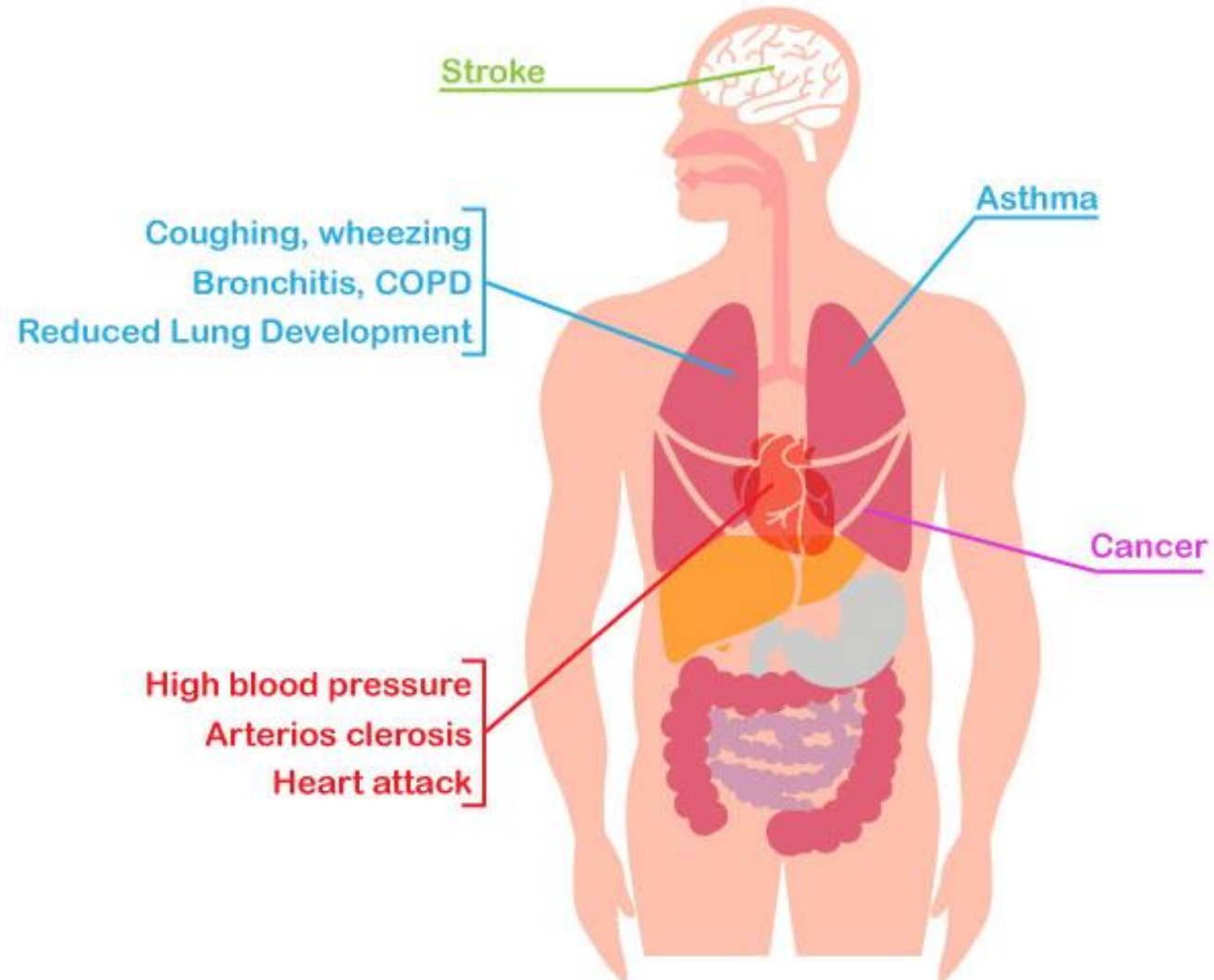
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WHAT IS PM10?



PM10 IS BAD FOR THE LUNGS

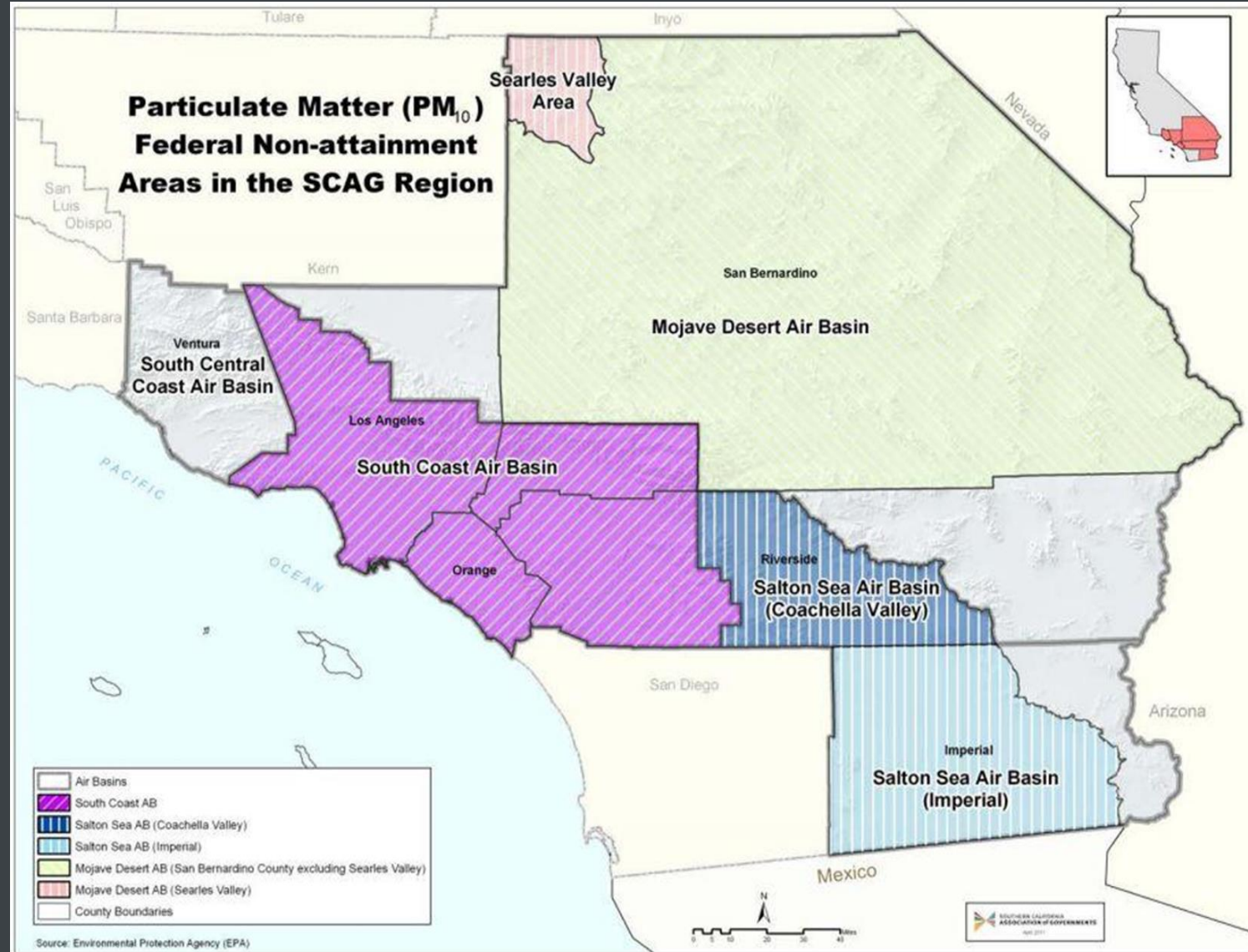




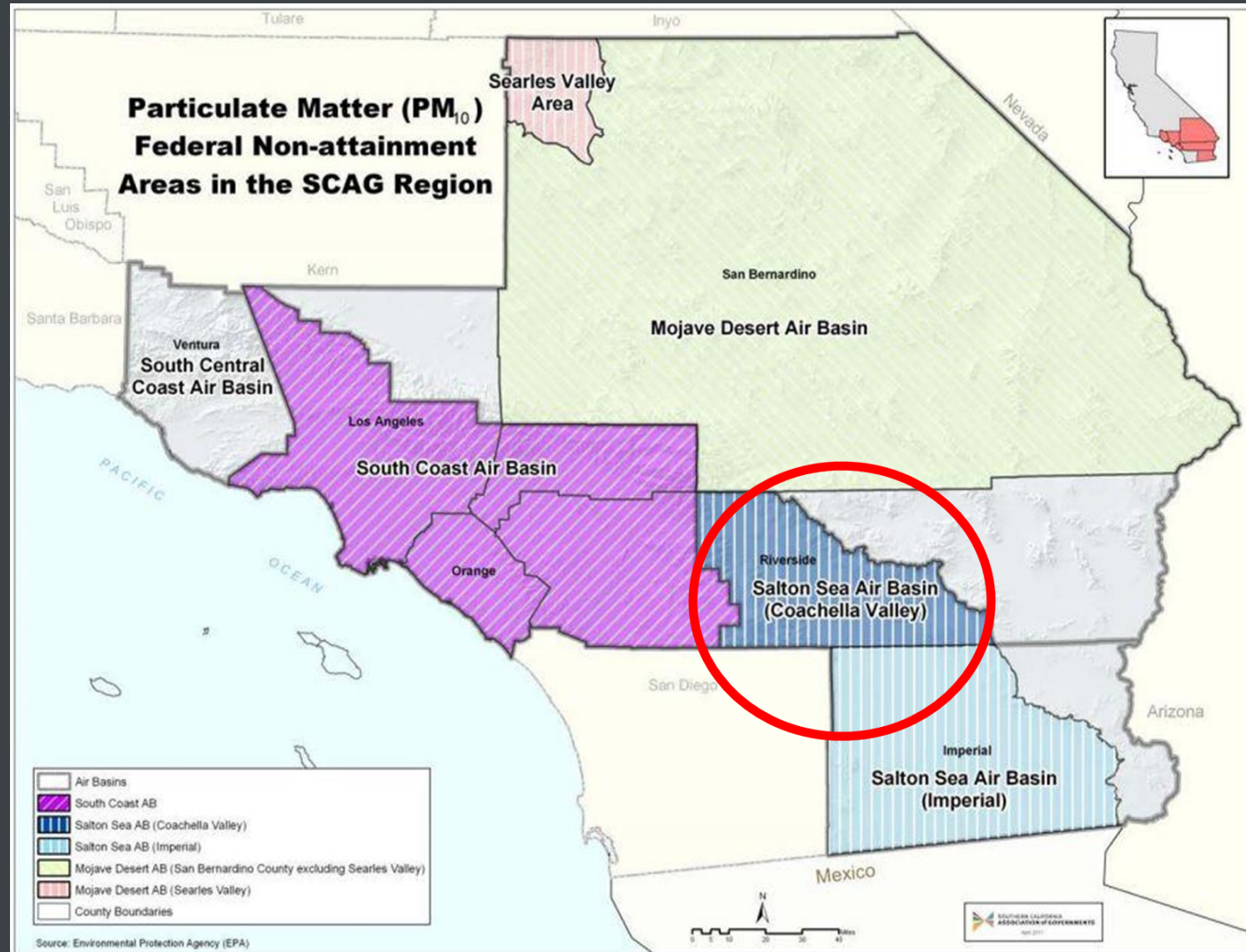
Dr. Emily Nelson, PhD

Consultant – CVAG

CV IS NON-ATTAINMENT AREA FOR PM10



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SCAQMD & CVAG PARTNERSHIP ON PM10



CONTROL MEASURES

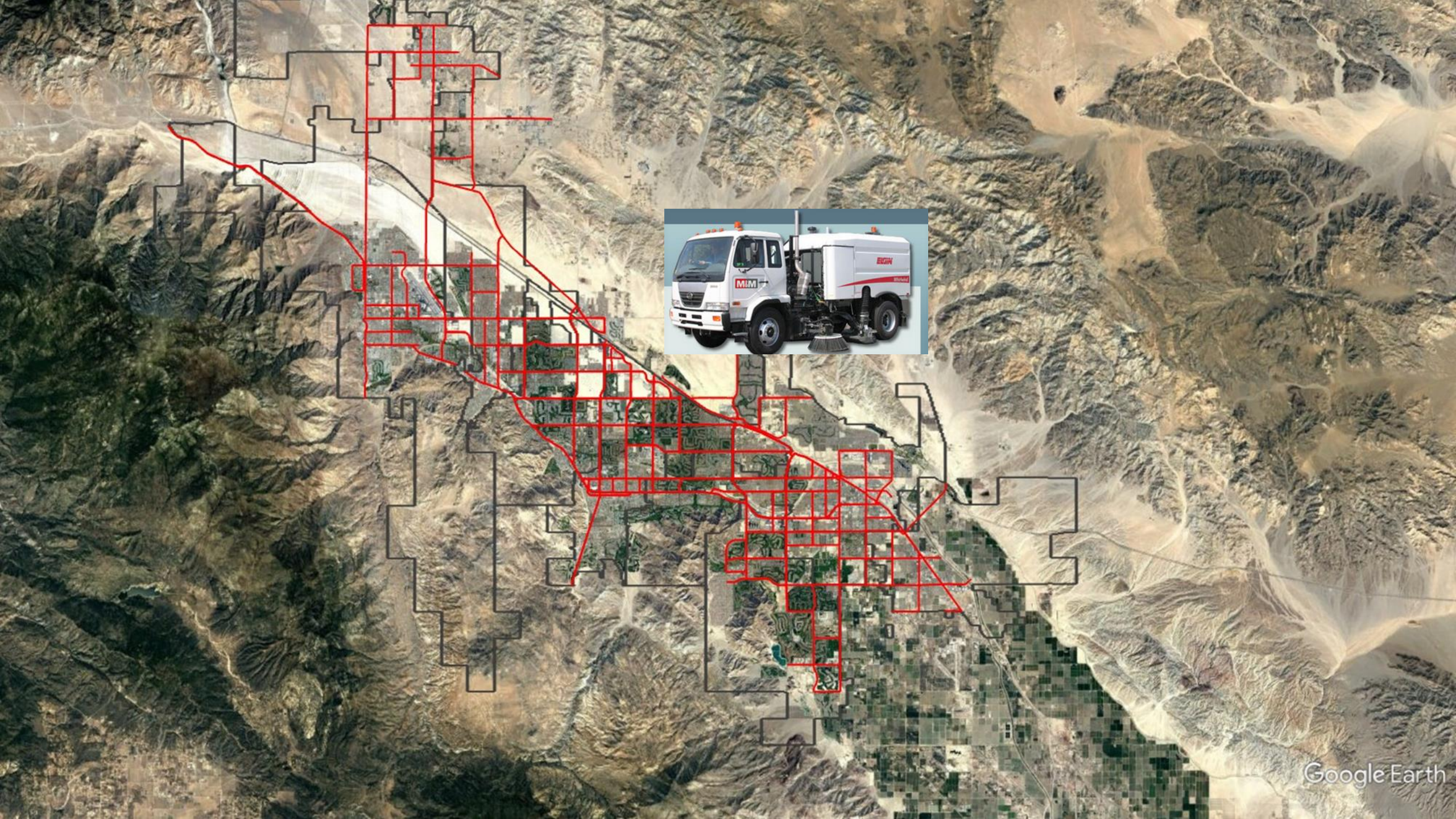




Ordinance Number or Code Citation	State Effective Date	EPA Approval Date
City of Cathedral City Ordinance No. 583	February 14, 2004	November 14, 2005, 70 FR 69081
City of Coachella Ordinance No. 896	November 8, 2003	November 14, 2005, 70 FR 69081
City of Desert Hot Springs Ordinance No. 2003-16	November 7, 2003	November 14, 2005, 70 FR 69081
City of Indian Wells Ordinance No. 545	December 6, 2003	November 14, 2005, 70 FR 69081
City of Indio Ordinance No. 1357	April 1, 2004	November 14, 2005, 70 FR 69081
City of La Quinta Ordinance No. 391	January 2, 2004	November 14, 2005, 70 FR 69081
City of Palm Desert Ordinance No. 1056	December 13, 2003	November 14, 2005, 70 FR 69081
City of Palm Springs Ordinance No. 1639	December 5, 2003	November 14, 2005, 70 FR 69081
City of Rancho Mirage Ordinance No. 855	January 19, 2004	November 14, 2005, 70 FR 69081
City of Rancho Mirage Ordinance No. 863	May 30, 2004	November 14, 2005, 70 FR 69081
County of Riverside Ordinance No. 742.1	February 11, 2004	November 14, 2005, 70 FR 69081

**REGIONAL STREET
SWEEPING PROGRAM**







\$1.1M



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

FINAL

**2003 COACHELLA VALLEY
PM10 STATE IMPLEMENTATION PLAN**

(A Revision to the 2002 Coachella Valley PM10 State Implementation Plan)

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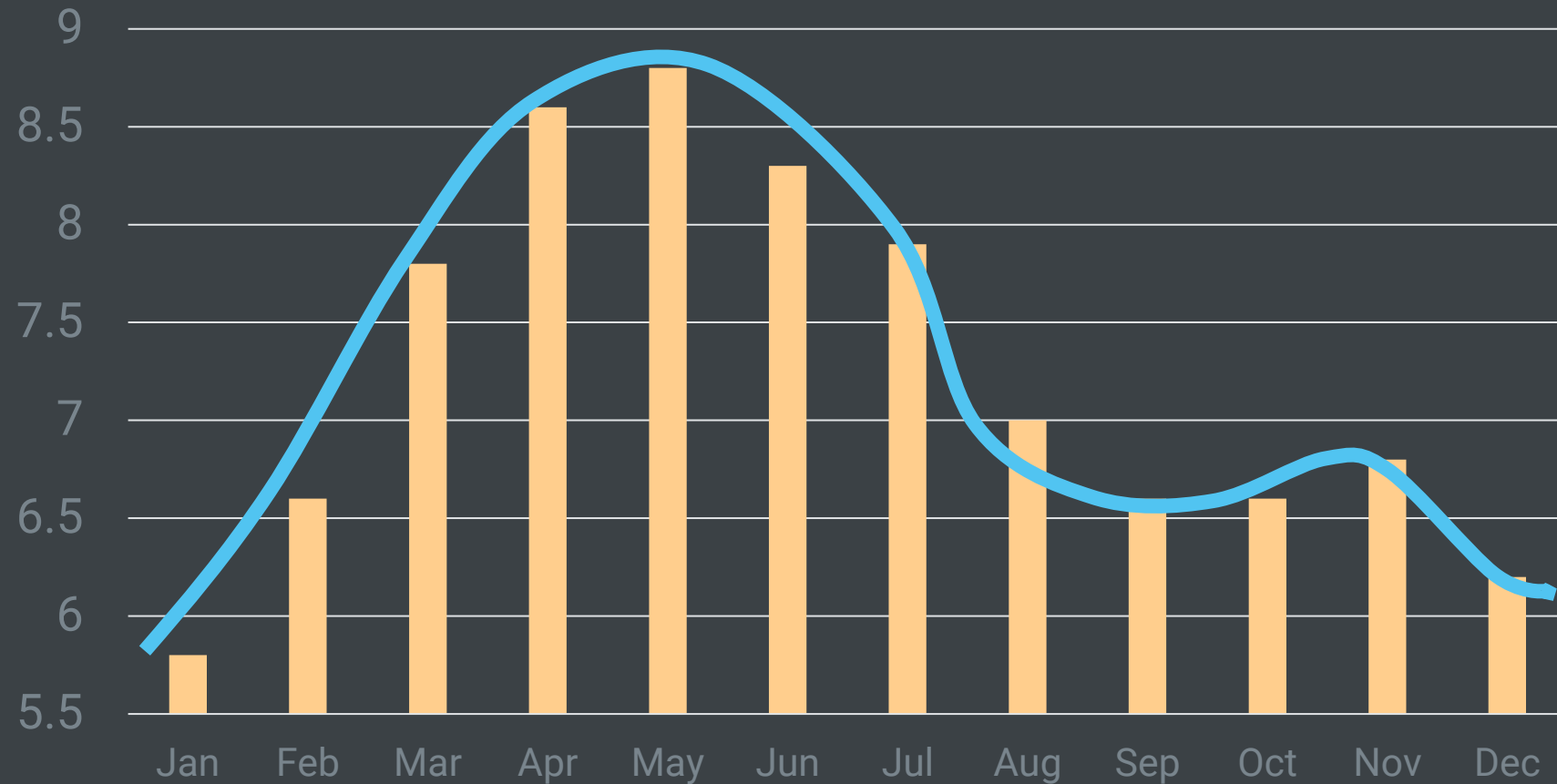
THE WHITEWATER RIVER







WHAT TIME OF YEAR IS TYPICALLY THE WINDIEST?



■ MPH, Cathedral City

SAND DUNES – PROTECTED HABITAT



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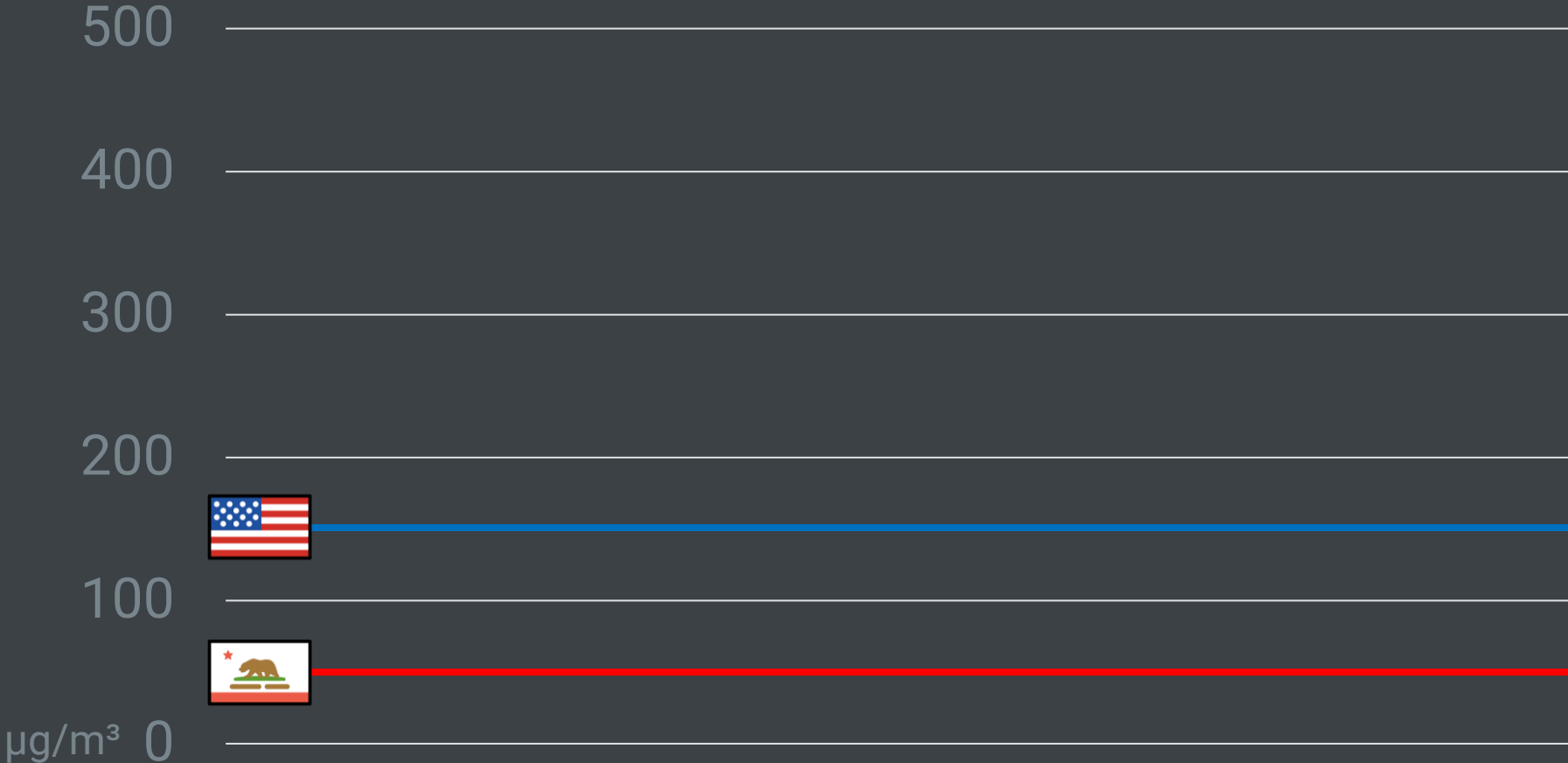
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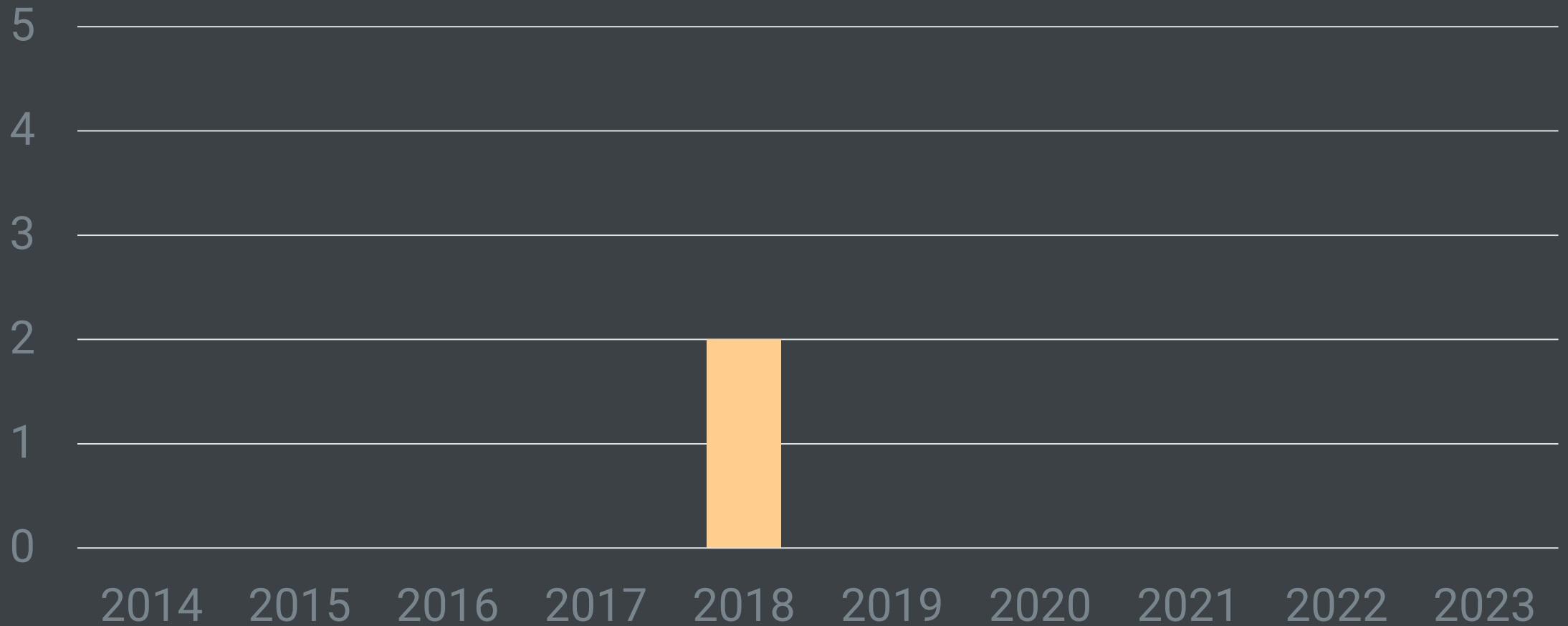
FEDERAL AND STATE PM10 STANDARDS



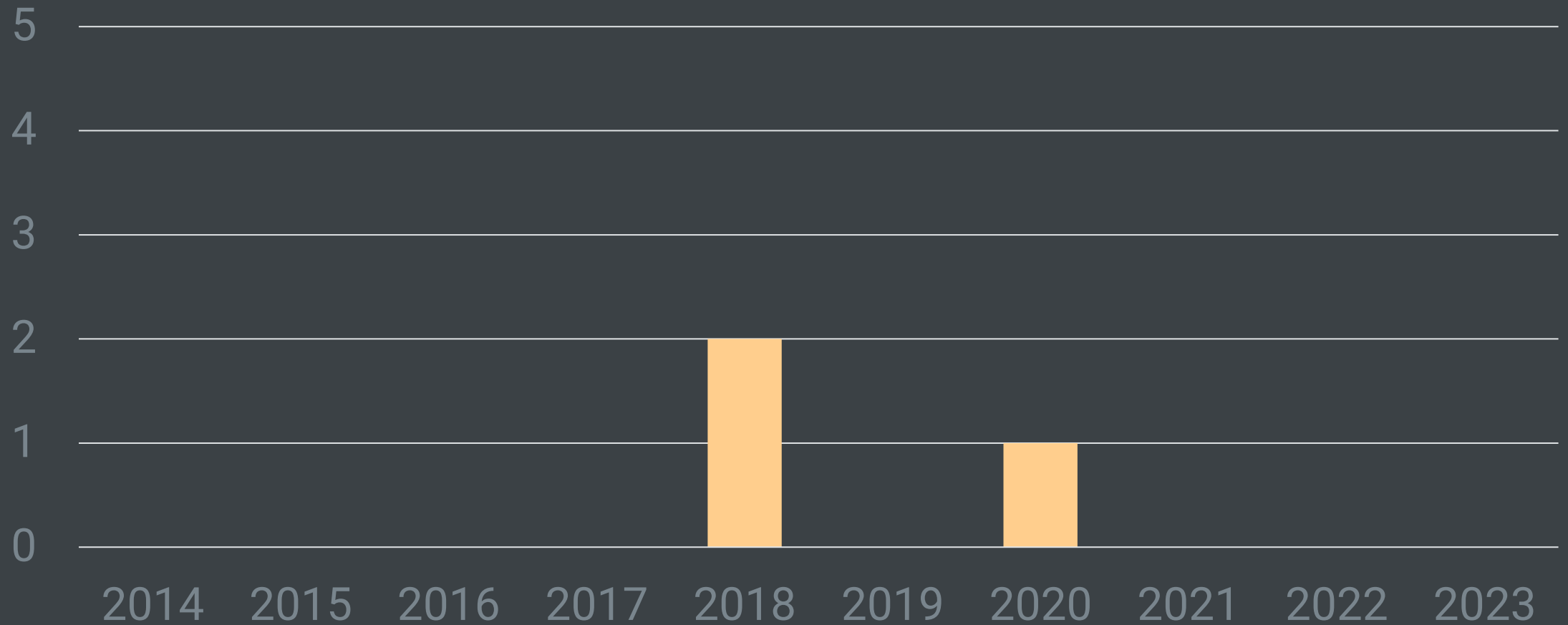
OF DAYS/YEAR EXCEEDING FEDERAL STANDARDS



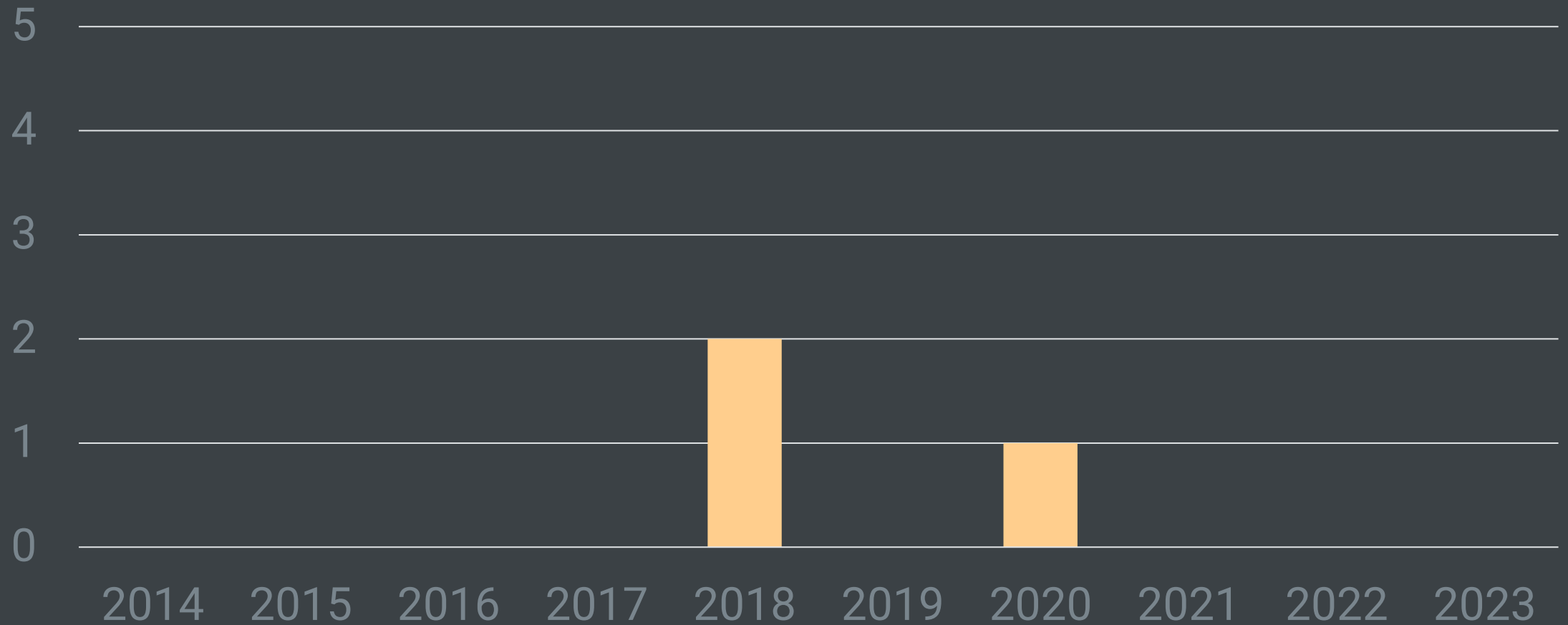
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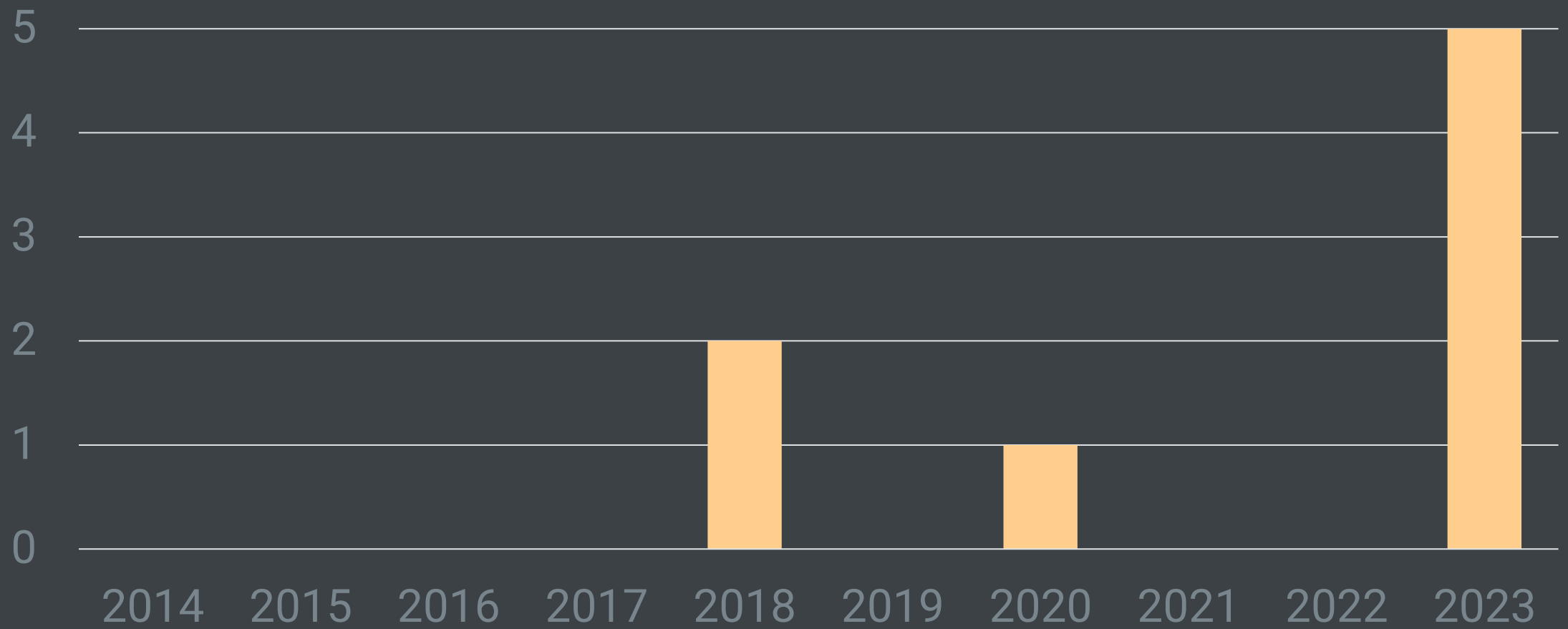
OF DAYS/YEAR EXCEEDING FEDERAL STANDARDS



OF DAYS/ *Sep/Oct* EXCEEDING FEDERAL STANDARDS



OF DAYS/ *Sep/Oct* EXCEEDING FEDERAL STANDARDS



THESE 5+ DAYS HAVE BEEN MISERABLE!!

OCTOBER 11

UPDATE: Dust Advisory in Effect Until 8 a.m. Wednesday for Coachella Valley

LOCAL



COACHELLA VALLEY

DUST ADVISORY

RIVERSIDE COUNTY

SAN GORGONIO PASS

IT ISN'T JUST BAD DAYS...

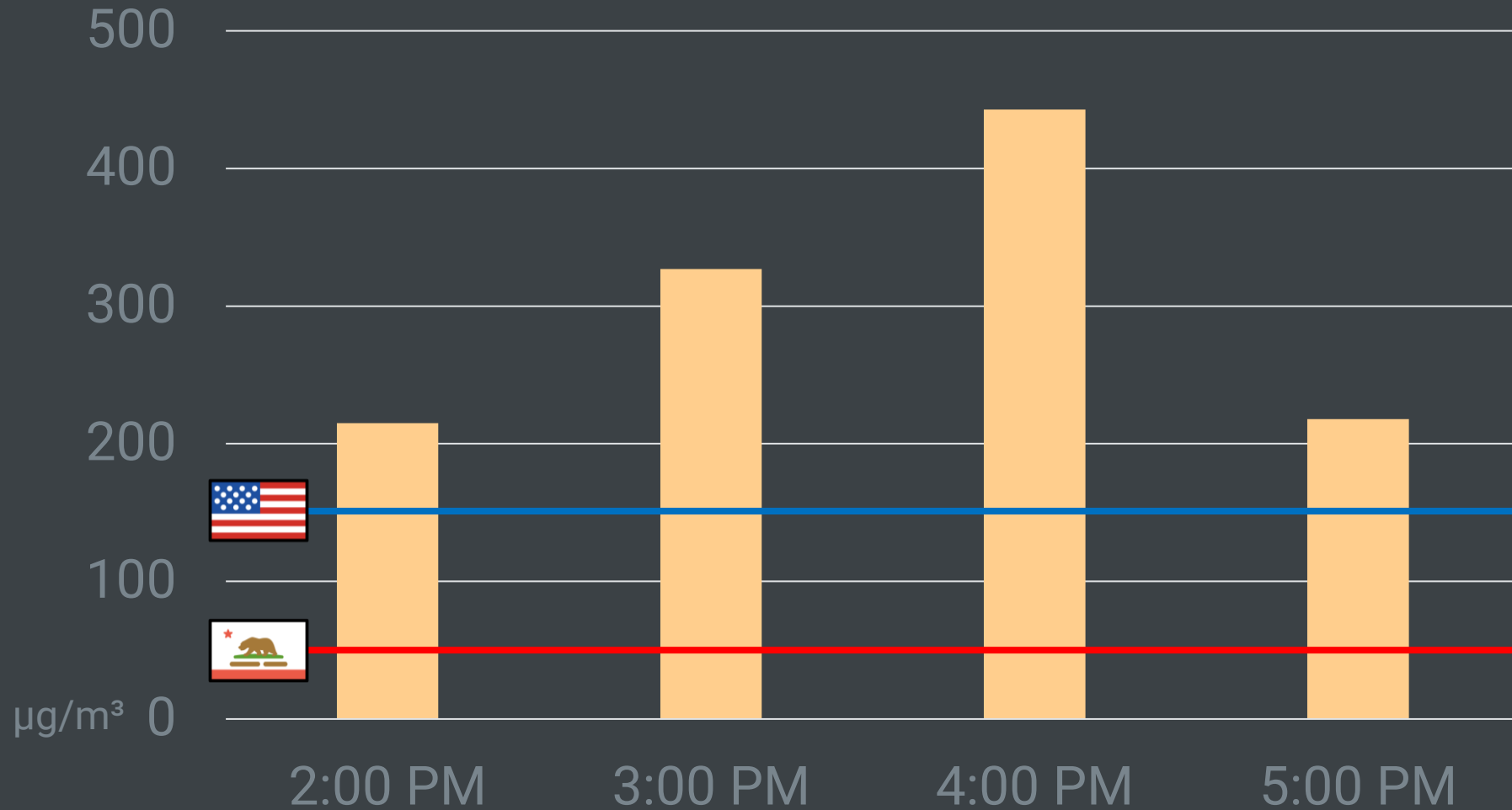


IT ISN'T JUST BAD DAYS...

HOURLY READINGS FROM MECCA – NOVEMBER 7

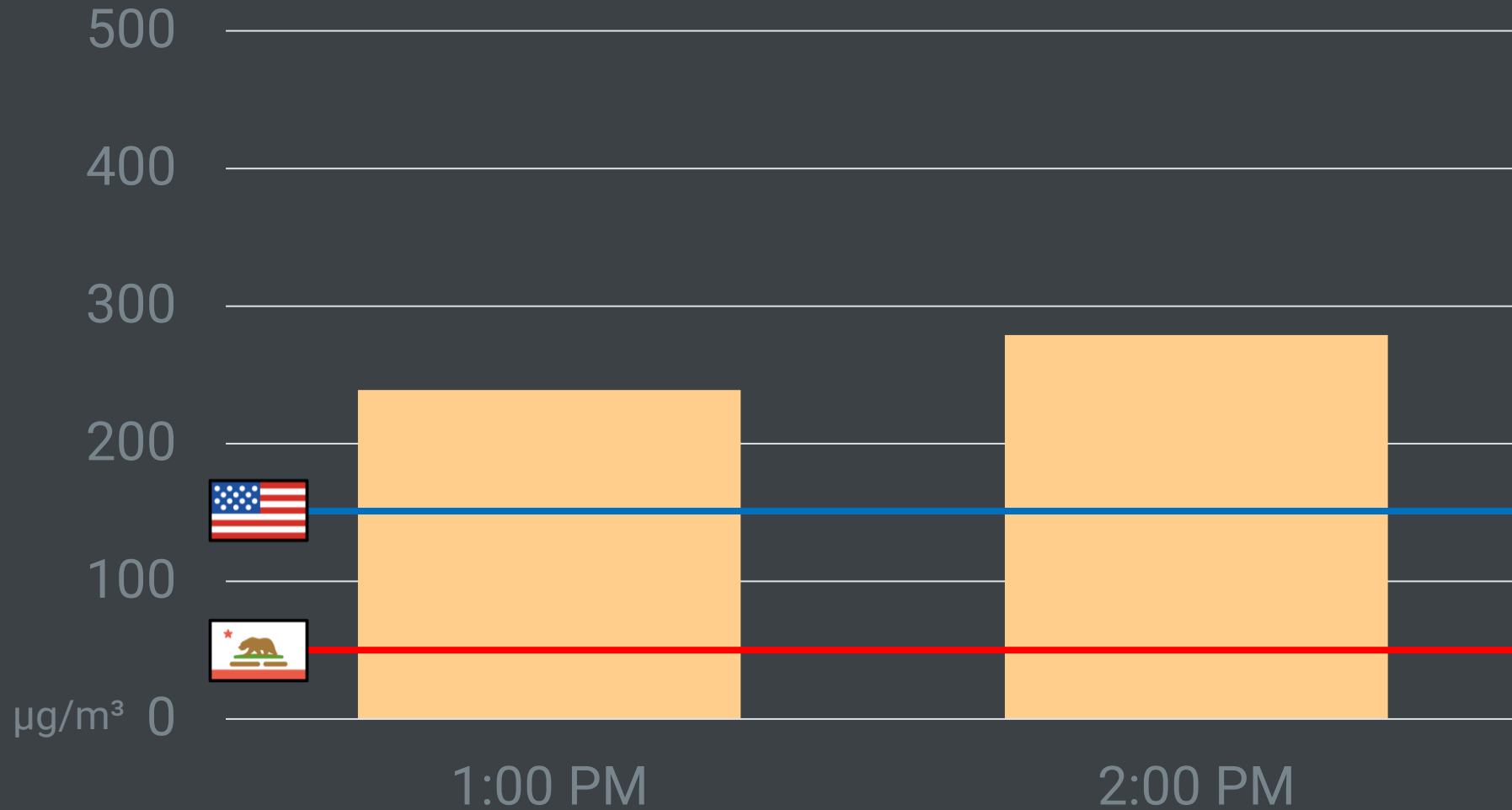
IT ISN'T JUST BAD DAYS...

HOURLY READINGS FROM MECCA – NOVEMBER 7



IT ISN'T JUST BAD DAYS...

HOURLY READINGS FROM MECCA – JANUARY 7



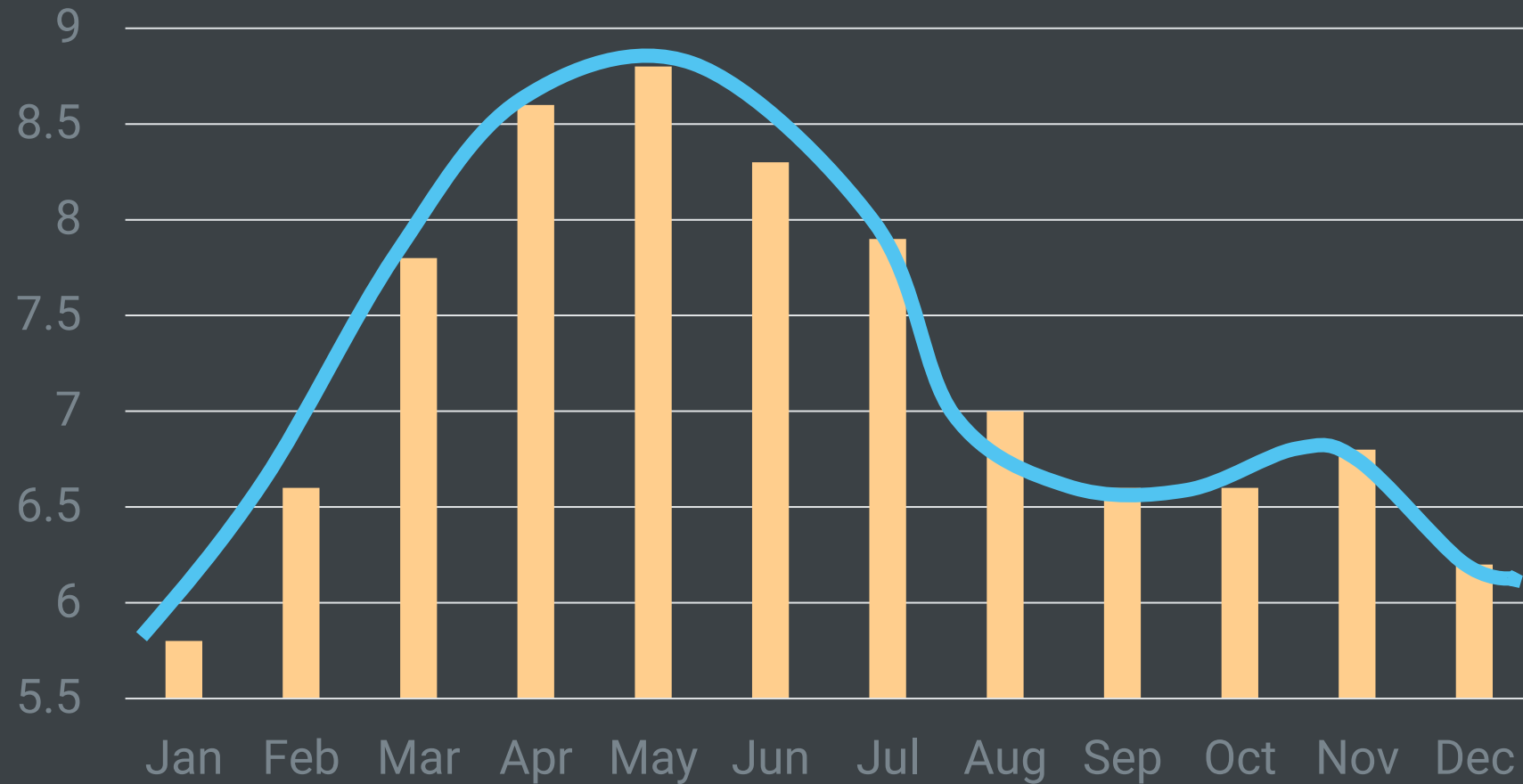
SOME COMPARISON CHALLENGES



**FOR “COMPLIANCE”
PURPOSES EPA EXEMPTS
HIGH WINDS**

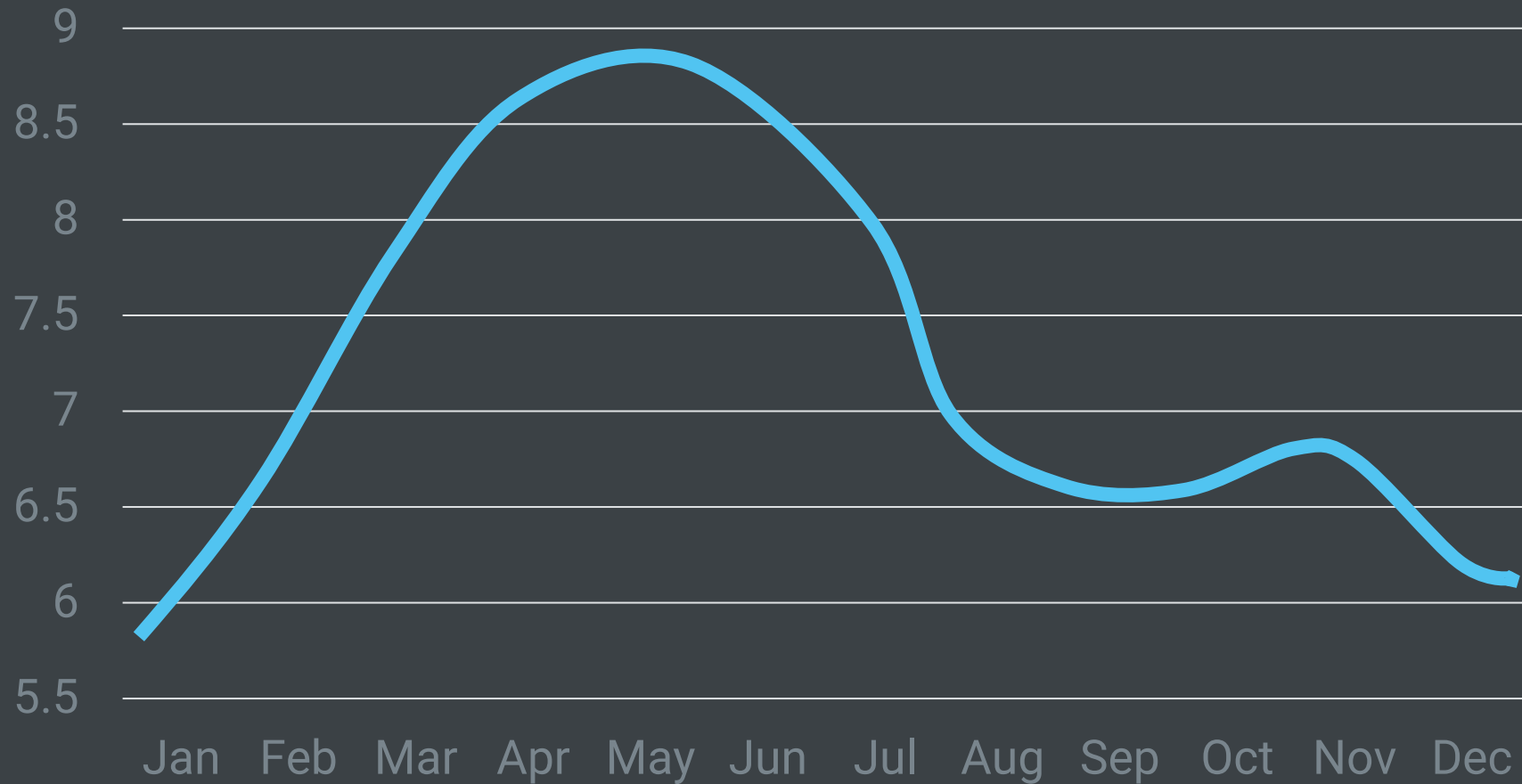


WHAT TIME OF YEAR IS TYPICALLY THE WINDIEST?



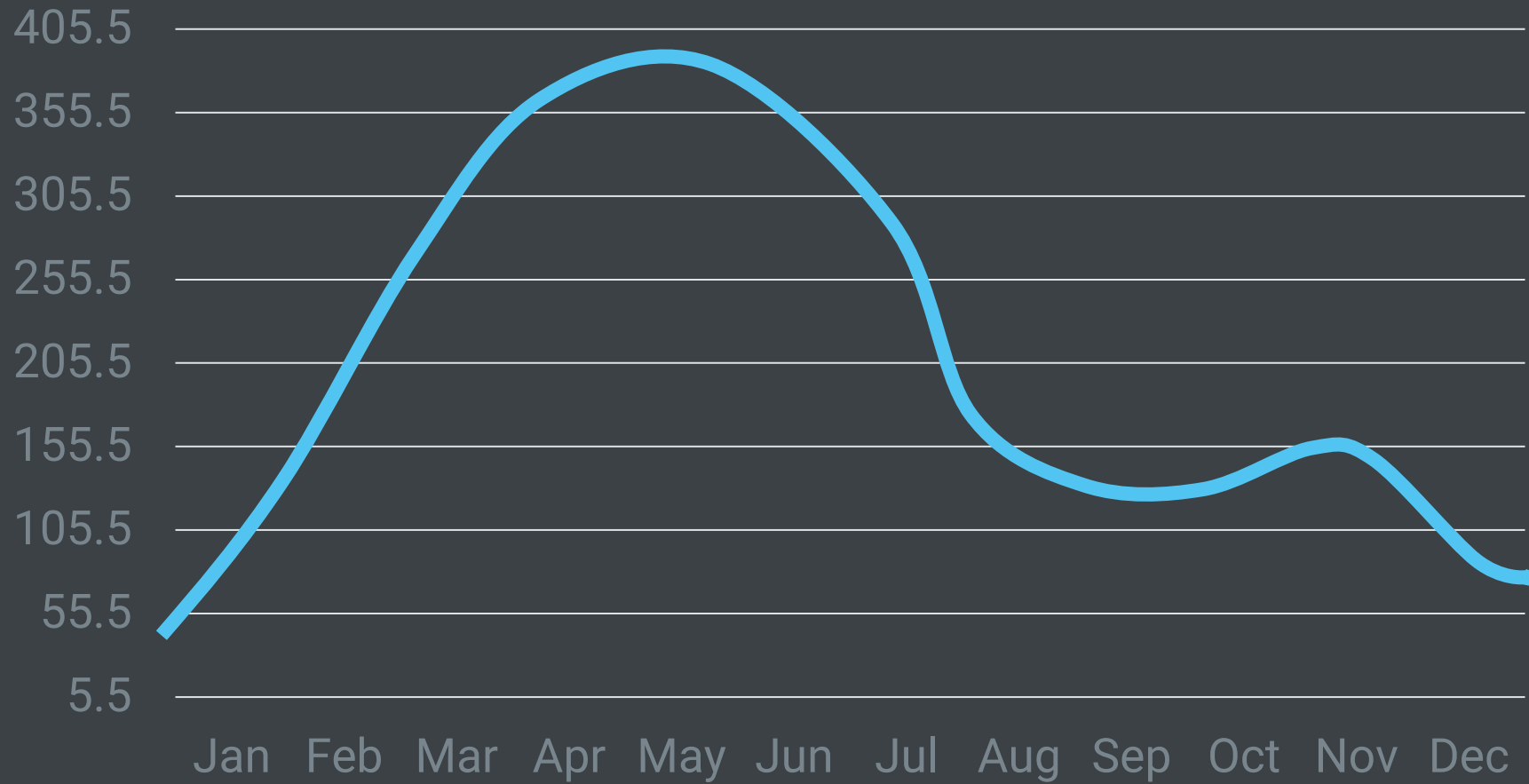
■ MPH, Cathedral City

WHAT TIME OF YEAR DO STREET SWEEPERS PICK UP MOST SAND/DUST?



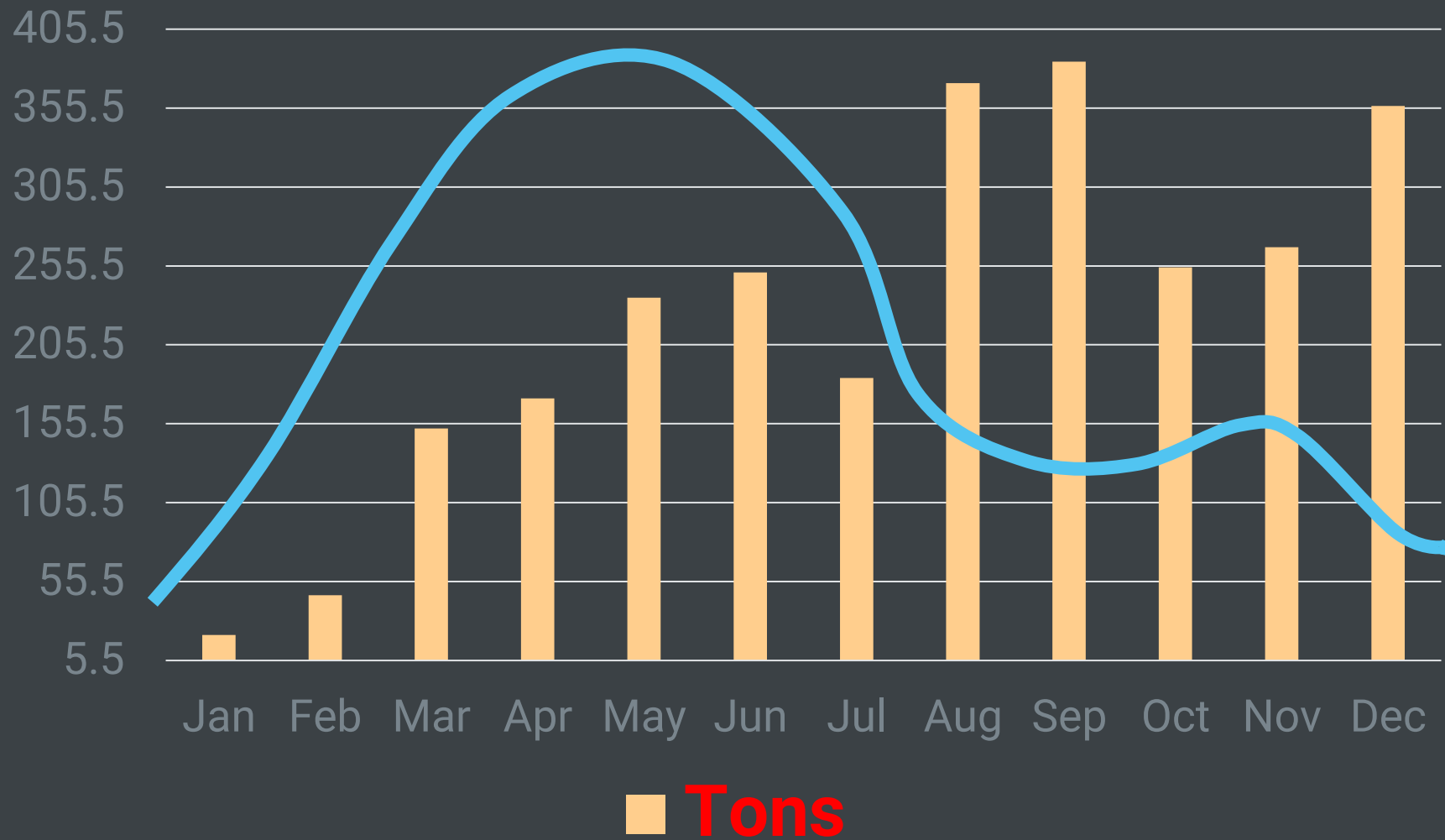
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Tons

WHAT TIME OF YEAR DO STREET SWEEPERS PICK UP MOST SAND/DUST?



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AUGUST 20-21, 2023



50 MPH Winds



**Over \$144 million in
Estimated Damages**



Pending

Typical Water-Borne Sand



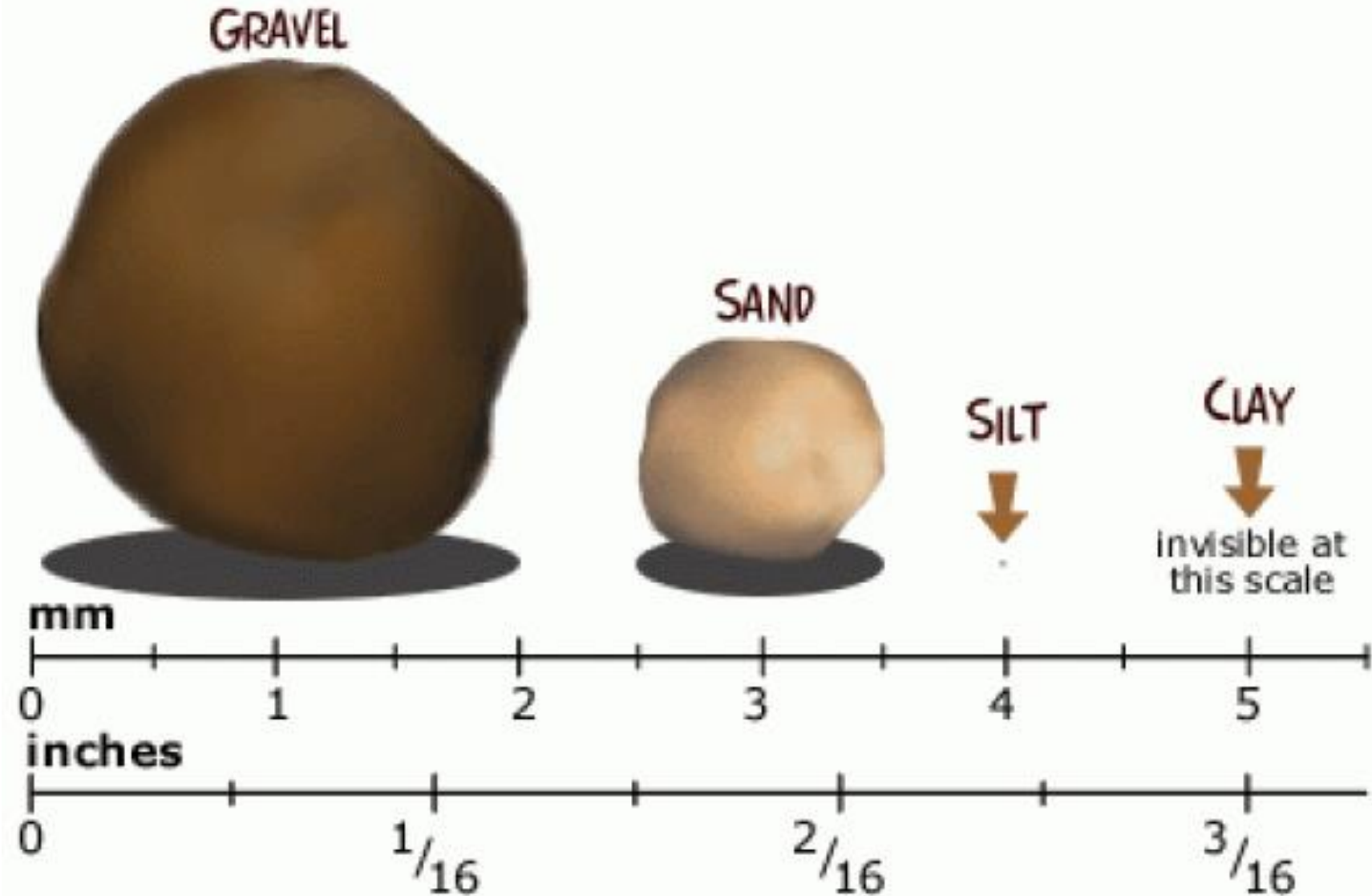
HARDEST HIT LOCATION: UPPER MISSION CREEK

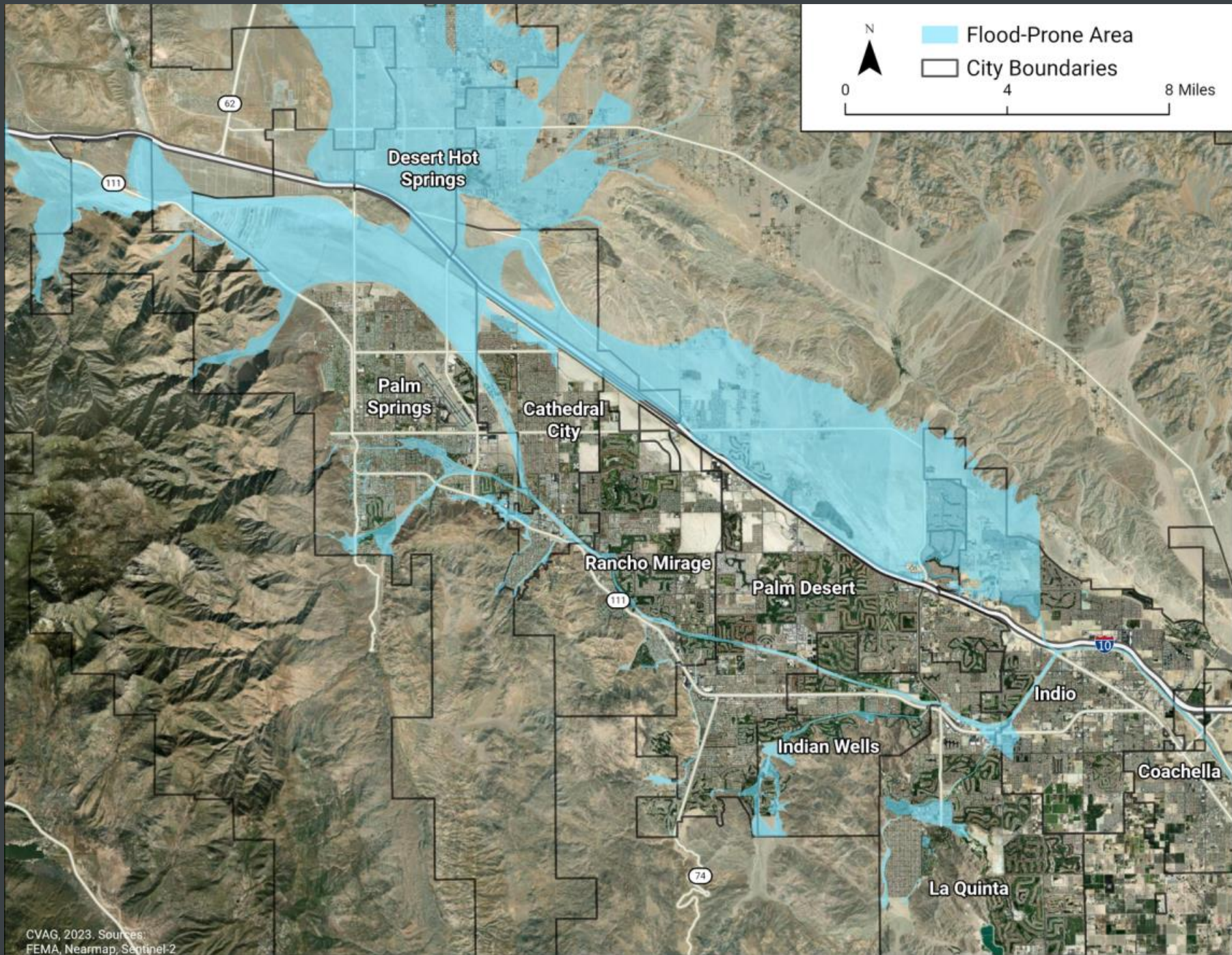
9 inches in 6 hours

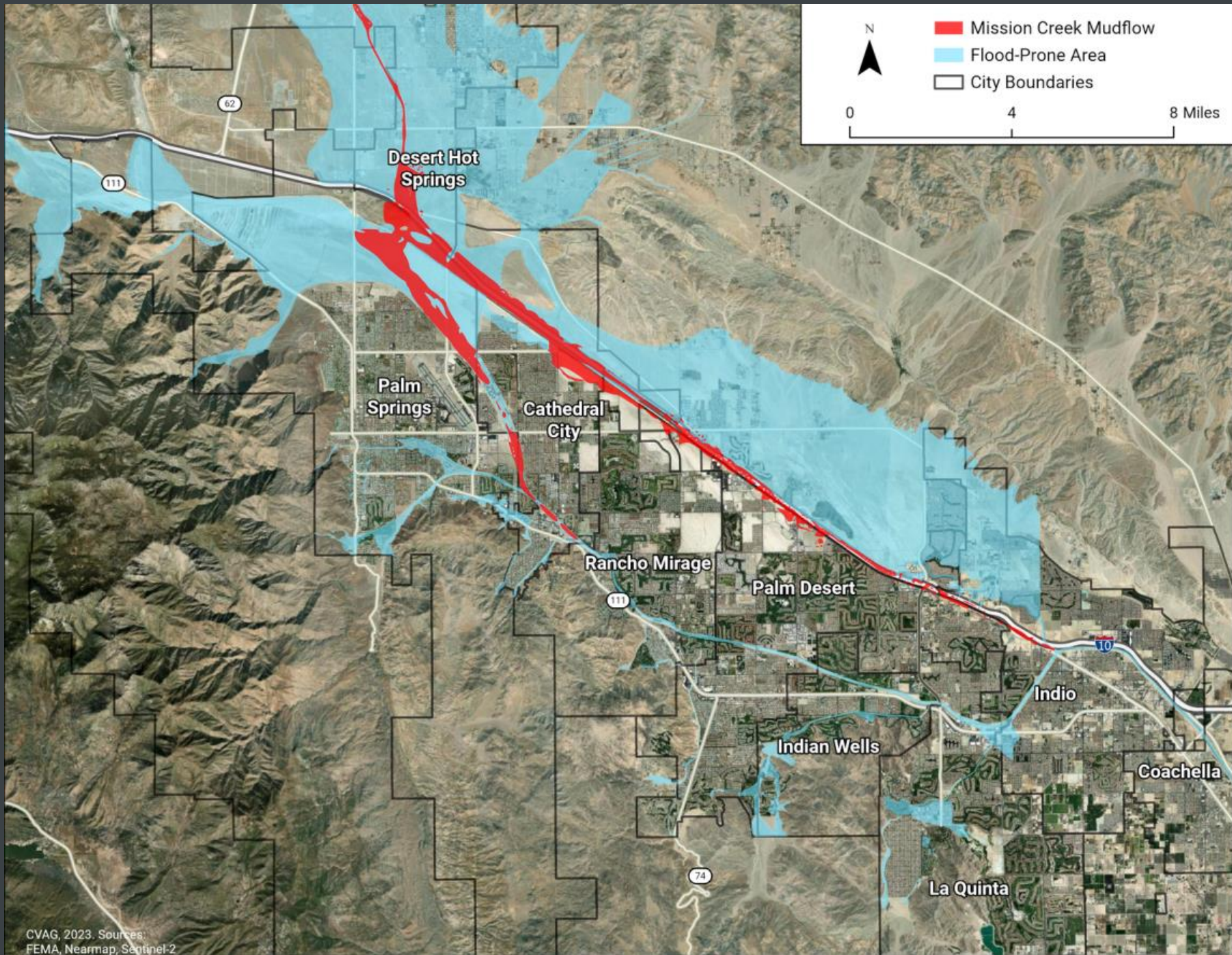
13.07 inches in 24 hours

Once in a 1,000-year storm event

MUD, NOT SAND AND GRAVEL













VISTA CHINO DRIVE



**PILES OF THIS MATERIAL LOCATED
ALONG FREEWAY/RAILROAD IN
WINDIEST CORRIDOR**

NORTH INDIAN CANYON DRIVE



GENE AUTRY TRAIL



DATE PALM DRIVE



VARNER ROAD



RAMON ROAD



I-10 CORRIDOR / BOB HOPE DRIVE



**INSTEAD OF FLAT GROUND ...
WE HAVE MORE SURFACE AREA
AND TURBULENCE TO DEAL WITH**



N

- Mission Creek Mudflow
- Flood-Prone Area
- City Boundaries

0 4 8 Miles



SO, WILL THE SKY CONTINUE TO FALL?



**But, probably wise
We don't know
to be proactive...**

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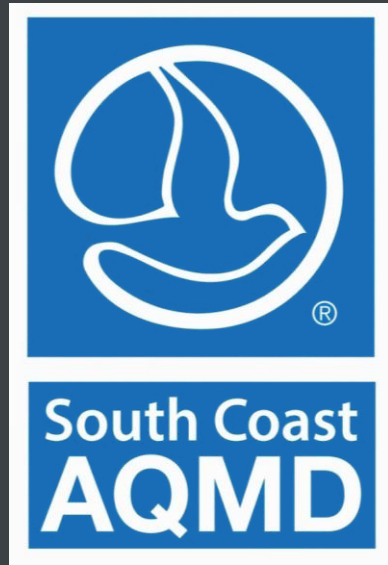
ARE DOING

Adjusting Advisory Models



ARE DOING

Adjusting Advisory Models

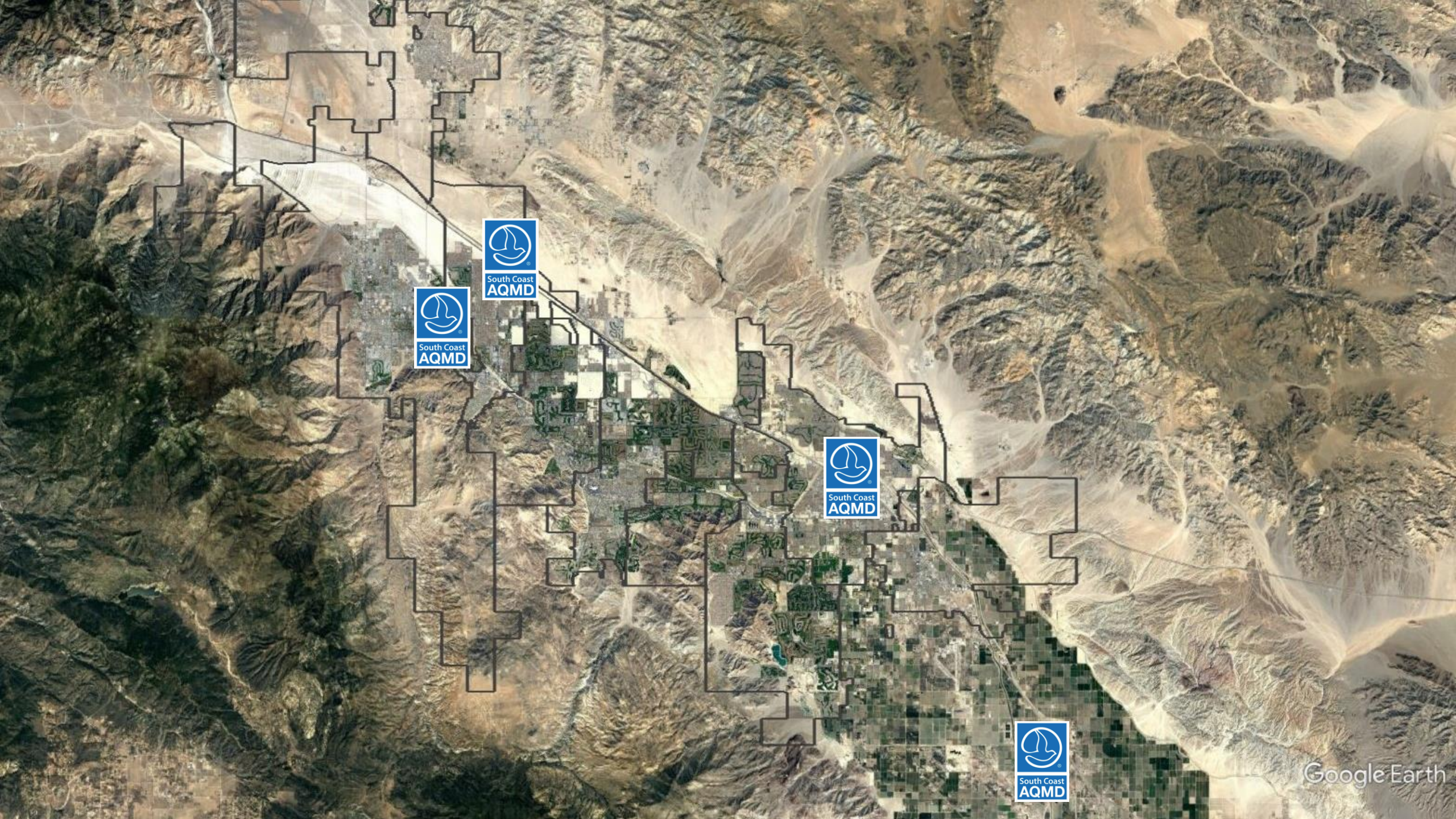


ARE DOING

Adding Temporary PM 10 Monitors







ARE DOING

Cathedral City, County Flood Control, Etc.

Applying Soil Stabilizer

CATHEDRAL CITY EFFORTS



**\$4.56 Million
for Soil
Removal**

**2023 Hilary Damages
Soil Storage Areas**



ARE DOING

Understanding Impacts



visit  *greater*
palm springs

The logo for Greater Palm Springs. It features the word "visit" in a white, cursive font, followed by a white, stylized sunburst or flower icon, and the words "greater palm springs" in a white, sans-serif font.

ARE DOING

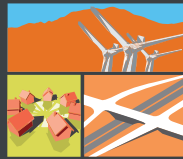
Understanding Impacts



***Emergency
Management
Department***

WHAT WILL HAPPEN THIS SPRING?





CVAG