

STRONG SANTA ANA EVENT

Monday and Tuesday

Dr. Robbie Munroe - Meteorologist

Weather Forecast Office

Los Angeles, CA

Monday, December 9



Colby Fire (Whittier Daily News photo)

**Note: No Partner Email today, replaced by this webinar.
Shareable slides and recording of this webinar sent by 2pm**



Key Points: **EXTREME WIND & FIRE WEATHER**

Weather Forecast Office
Los Angeles, CA
Monday, December 9

1. EXTREME WIND AND FIRE WEATHER MONDAY NIGHT INTO TUESDAY

- a. **Particularly Dangerous Situation (PDS)** Red Flag Warning in effect **8 pm tonight through 2 pm Tuesday**
- b. Peak wind gusts **45 to 65 mph coasts/valleys** and **60 to 80 mph mountains/foothills** and **very dry**
- c. Extreme fire weather with rapid fire spread with any new fire
- d. Scattered downed trees and power outages
- e. **Palos Verdes will be added to Red Flag Warning** 8 pm tonight through 2 pm Tuesday.

2. EXTREME MARINE IMPACTS

- a. Peak wind gusts of **35 to 55 kts** in typical wind corridors including **Ventura to Malibu** and **San Pedro Channel to Catalina Island**
- b. Large breaking waves (**3-6 feet**) and coastal flooding possible for east facing harbors including Catalina Island harbors



Seven Day Hazards Matrix

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WEATHER RISK OUTLOOK

Risk levels incorporate potential impacts from weather hazards and likelihood of occurrence for a reasonable worse case scenario.

| | Mon 12/9 | Tue 12/10 | Wed 12/11 | Thu 12/12 | Fri 12/13 | Sat 12/14 | Sun 12/15 |
|-----------|-------------------|-------------------|-------------------|-------------------|-----------|---------------------------|-----------|
| Ocean | Wind | Wind | Wind | | | | |
| Coasts | Fire Weather Wind | Fire Weather Wind | Fire Weather Wind | | | Rain (SLO & SBA Counties) | |
| Valleys | Fire Weather Wind | Fire Weather Wind | Fire Weather Wind | Fire Weather Wind | | Rain (SLO & SBA Counties) | |
| Mountains | Fire Weather Wind | Fire Weather Wind | Fire Weather Wind | Fire Weather Wind | | Rain (SLO & SBA Counties) | |
| Deserts | Fire Weather Wind | Fire Weather Wind | Fire Weather Wind | Fire Weather Wind | | | |

Risk Levels

Little to None

Minor

Moderate

Major

Extreme



PARTICULARLY DANGEROUS SITUATION (PDS)

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Hazards

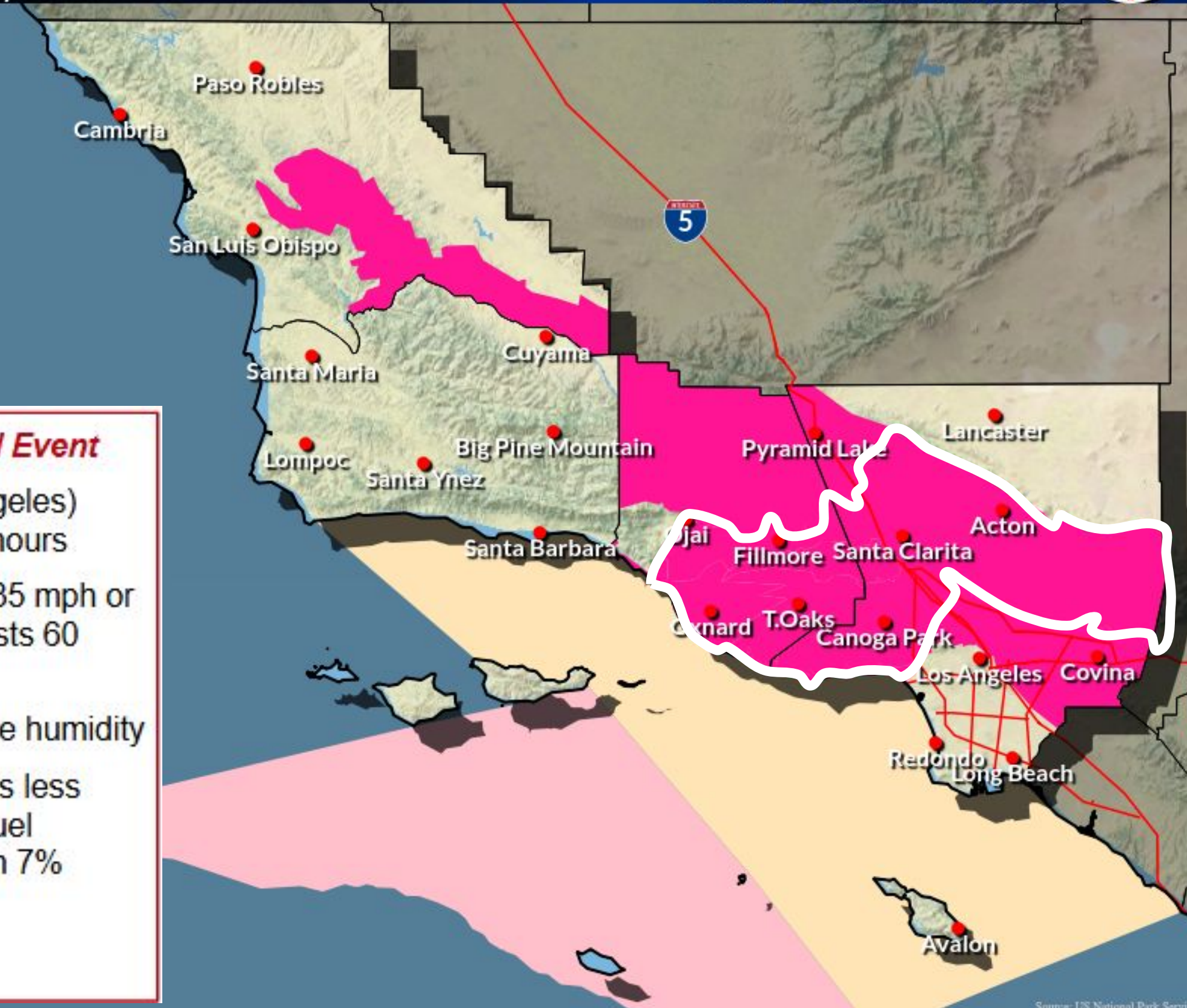
Monday Through Wednesday

Weather Forecast Office
Los Angeles/Oxnard, CA

Issued Dec 08, 2024 4:48 PM PST



| Hazards |
|------------------|
| Red Flag Warning |
| Storm Watch |
| Gale Watch |



Embedded PDS

Mountains, valleys, and coasts in the **Santa Ana Wind Prone Corridor** (including western San Fernando Valley, and beaches between Ventura and Malibu)

PDS Timing:

Monday 8 pm to Tuesday 2 pm

**Note Red Flag Warnings in effect Monday - Wednesday₄*

PDS Santa Ana Wind Event

Criteria (NWS Los Angeles)
Must coincide for ≥ 3 hours

- Sustained winds 35 mph or greater and/or gusts 60 mph or greater
- Single digit relative humidity
- Live fuel moistures less than 60%; dead fuel moisture less than 7%



What is a PDS Red Flag Warning

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National Weather Service
Los Angeles/Oxnard, CA



Red Flag Warning: Particularly Dangerous Situation (PDS)

Objective: Highlight exceptional fire weather conditions (combination of meteorological and fuels) considered rare and/or especially impactful to the firefighting community

PDS language included in the first bullet of the Red Flag Warning

- Not a new product
- Red Flag criteria unchanged
- Rare event (3 - 5 year interval of occurrence)
- May cover a portion of the Red Flag Warning area and/or duration
- Exact criteria may vary by region
- May be used by any California Weather Forecast Office

Santa Ana Wind Event (PDS)

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National Weather Service
Los Angeles/Oxnard, CA



Red Flag Warning Particularly Dangerous Situation (PDS)



The NWS issues a PDS Red Flag Warning for extremely rare and dangerous fire weather conditions, that have previously led to large and deadly wildfires. What does this mean?

High risk of...

- ❖ Extreme fire behavior and very rapid growth
- ❖ Many downed trees
- ❖ Power outages and Public Safety Power Shutoffs (PSPS)

Criteria

- ❖ Extremely low humidity
- ❖ Damaging winds
- ❖ Very dry vegetation
- ❖ Issued rarely, only for most extreme events

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from
NWS Los Angeles/Oxnard



Red Flag Warning

Monday through Wednesday

LA/Ventura County Santa Ana Wind Corridor

Particularly Dangerous Situation

8 PM Monday - 2 PM Tuesday

Extreme Risk - Take Action



Red Flag Warnings Mon-Wed LA/Ventura Co.

****Particularly Dangerous Situation
OUTLINED IN YELLOW****



from
NWS Los Angeles/Oxnard



Red Flag Warning

Monday through Wednesday

LA/Ventura County Santa Ana Wind Corridor

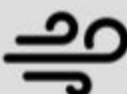
Particularly Dangerous Situation

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Extreme Risk – Take Action


EXTREME & LIFE-THREATENING FIRE BEHAVIOR


 LA & Ventura Counties

 Wind gusts up to 50 to 80 mph. **Downed trees and power outages**

 Humidities 5-15%

 **Hazardous crosswinds** and driving conditions

 Use extreme caution with any potential ignition sources

 Stay alert to the forecast and follow instruction from emergency officials



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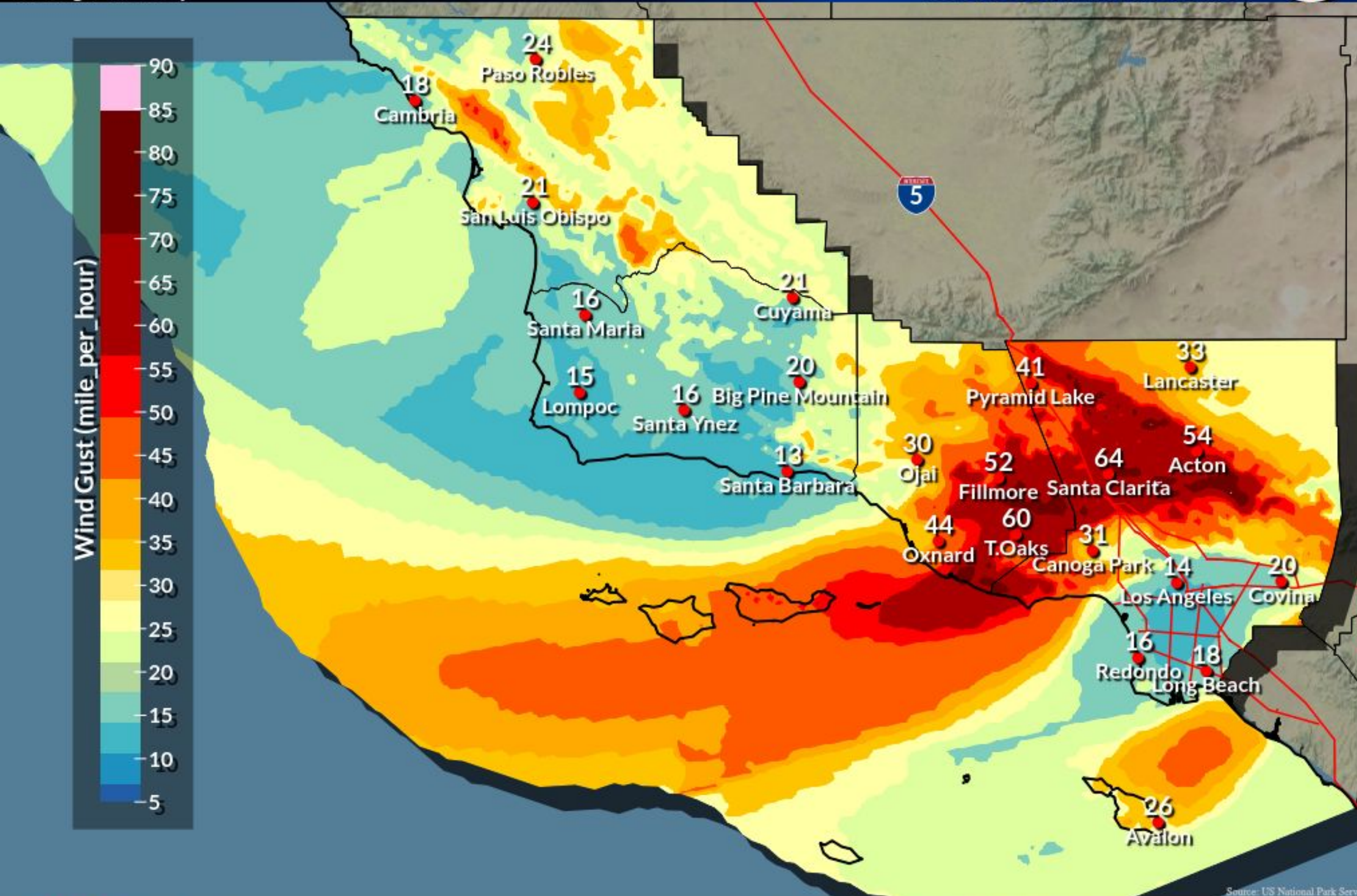
Damaging Wind

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Peak Wind Gusts

Through Tuesday

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Peak Wind Gusts:

45-65 mph Coasts/valleys

60-80 mph foothills/mountains

Santa Ana Wind Corridor of Los Angeles and Ventura Counties

Impacts:

Numerous Downed trees & Power Outages

Dangerous seas & harbors

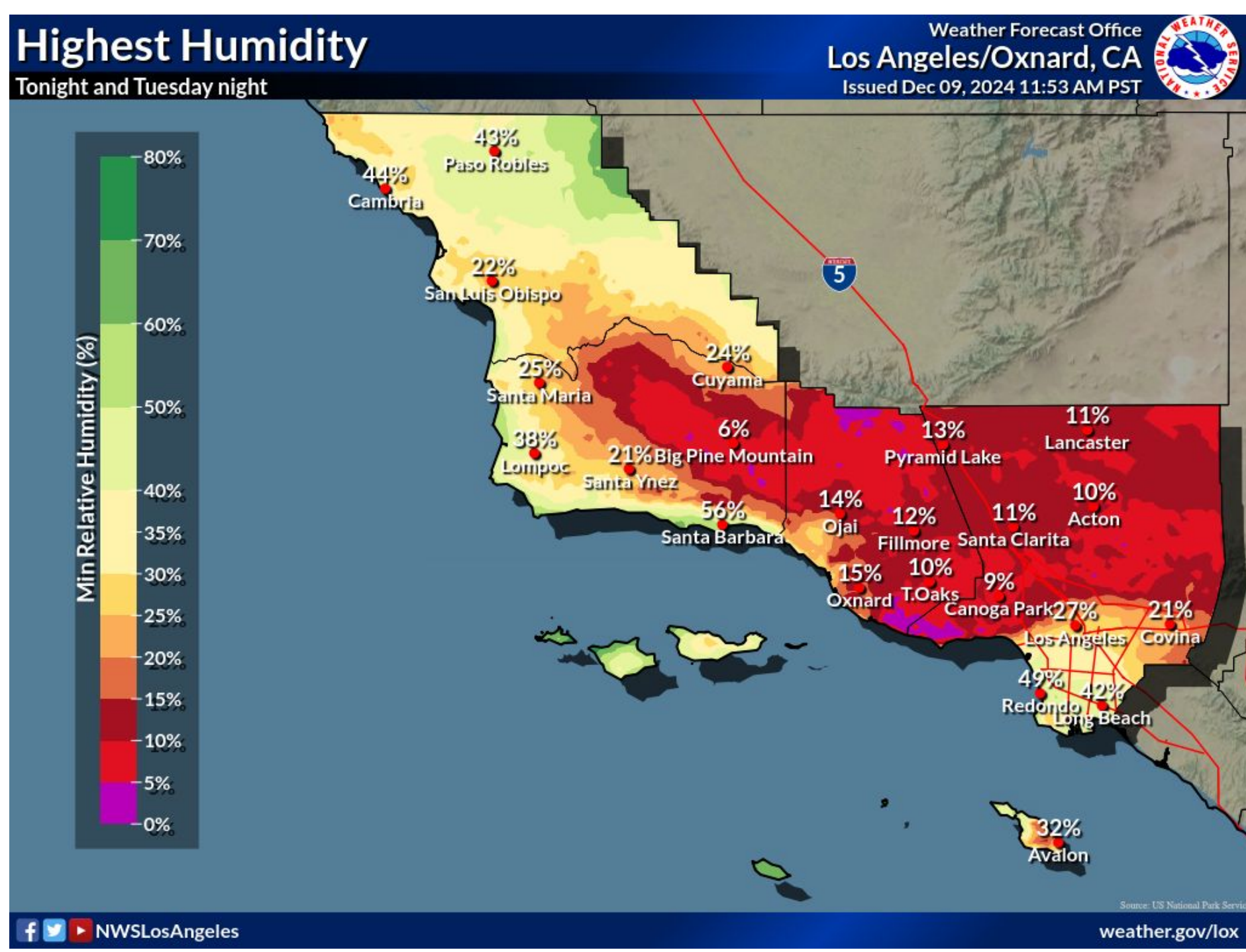
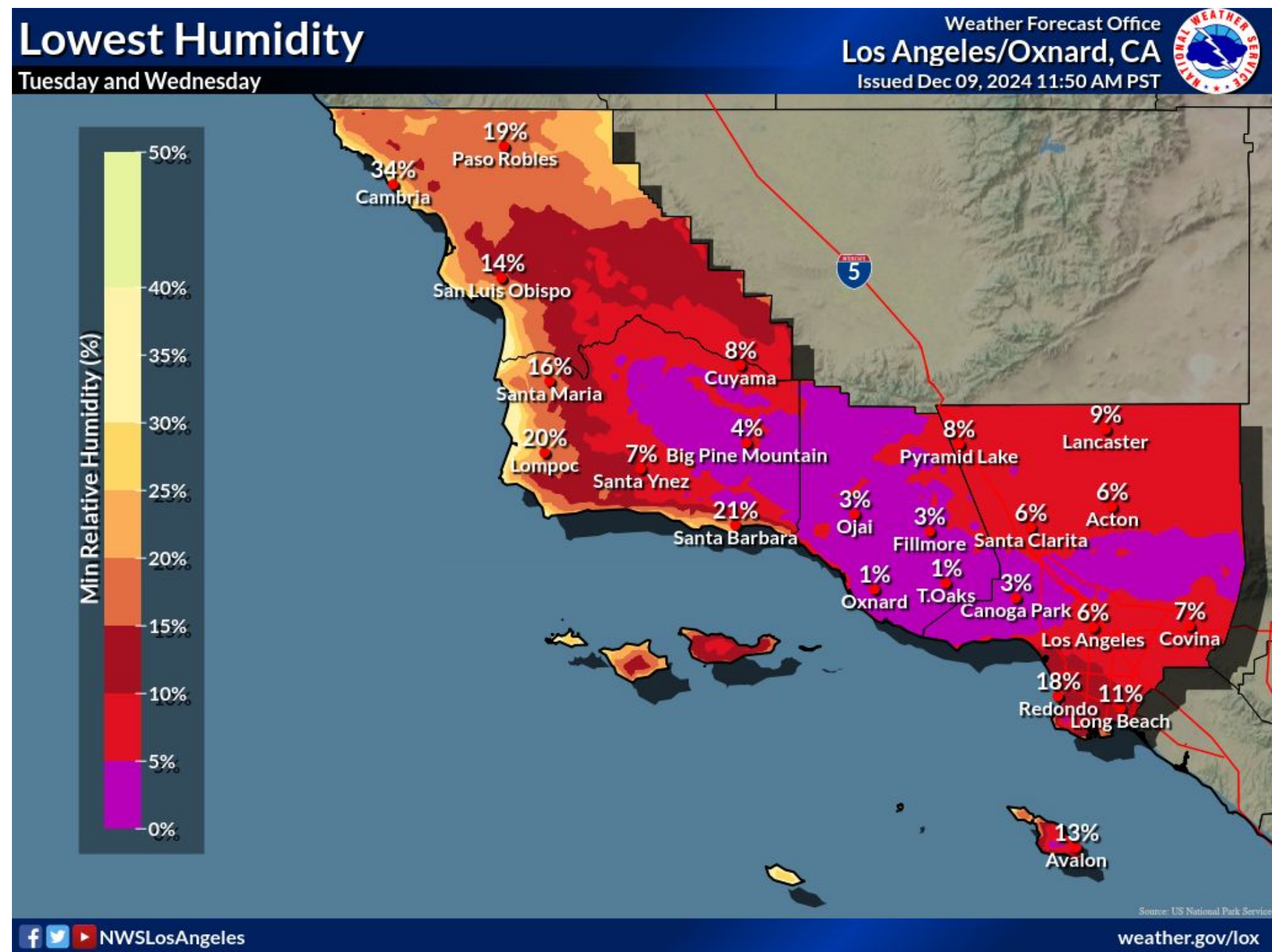
Travel Delays





Very Dry

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