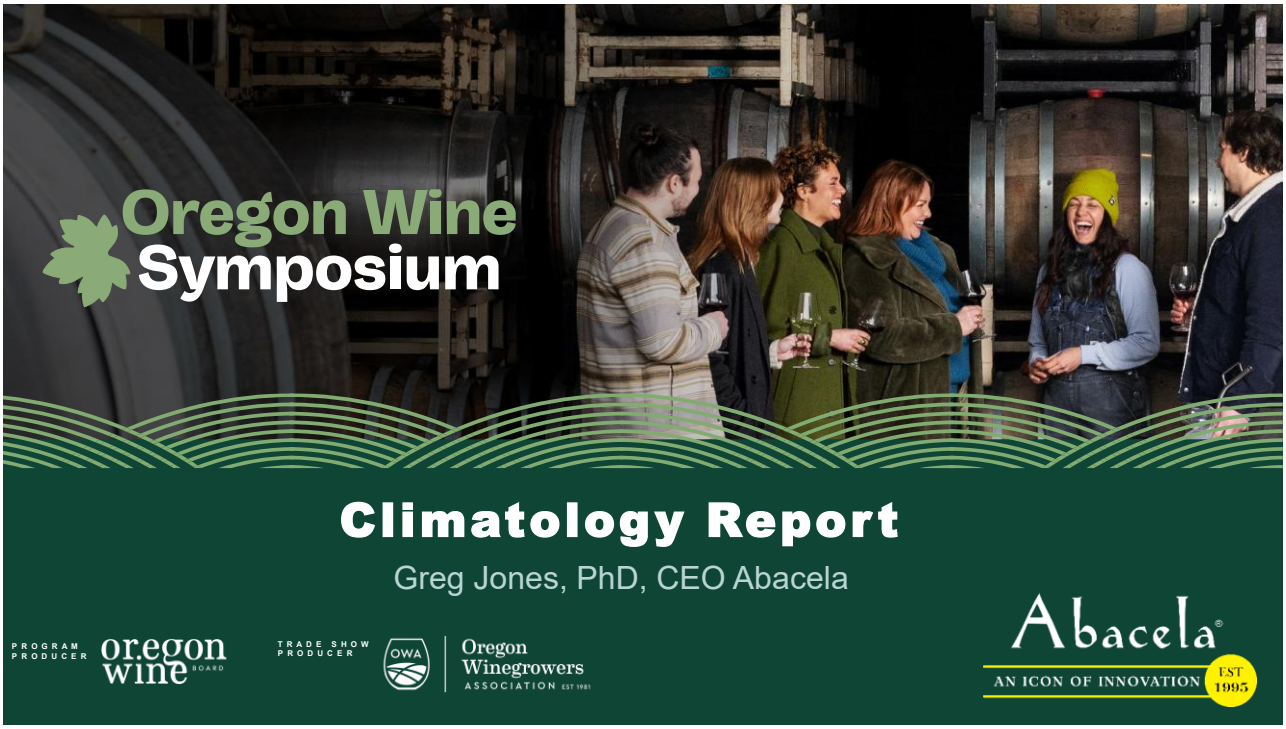


1

Talk Outline

- The State of the Climate
  - 2025 Global to Regional Perspective
- Current Conditions
- Summary and Seasonal Forecast

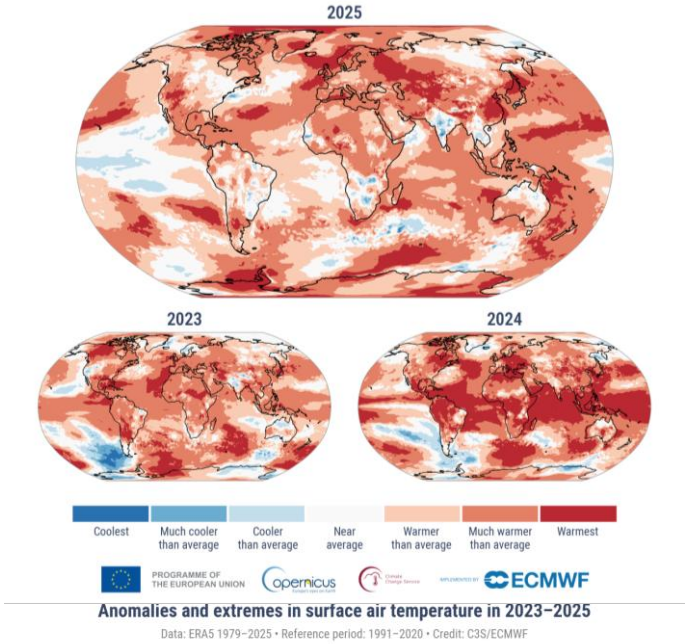
2

State of the Climate
2025 Global to Regional Perspective

3

Global Temperature Departures 2025

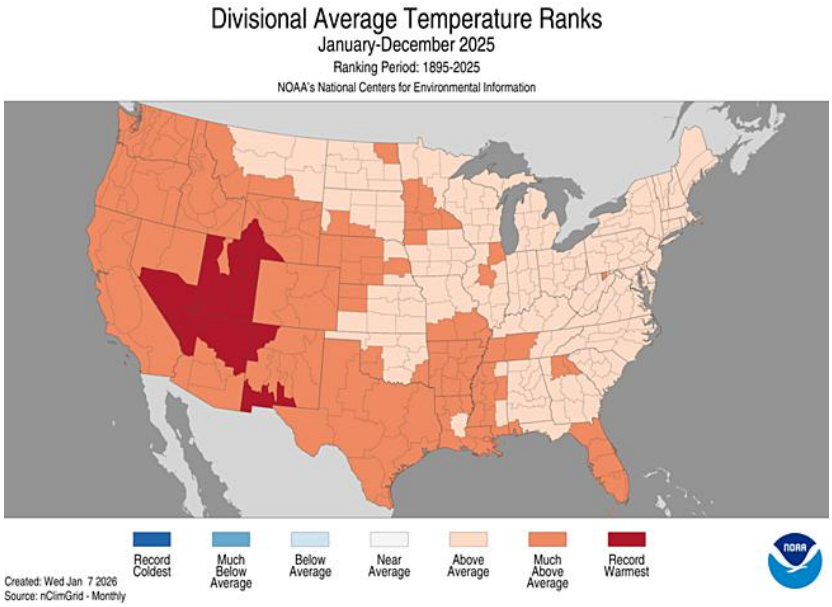
- 2025 was the 3rd warmest year on record (+2.65˚F) just behind 2023 and 2024
- 51st consecutive year with temperatures above average
- 2025 ocean heat content at a record high
- 2025 also was the Arctic's warmest year ever, continues to warm 4 times the rate of the rest of the globe



4

US Temperature Departures 2025

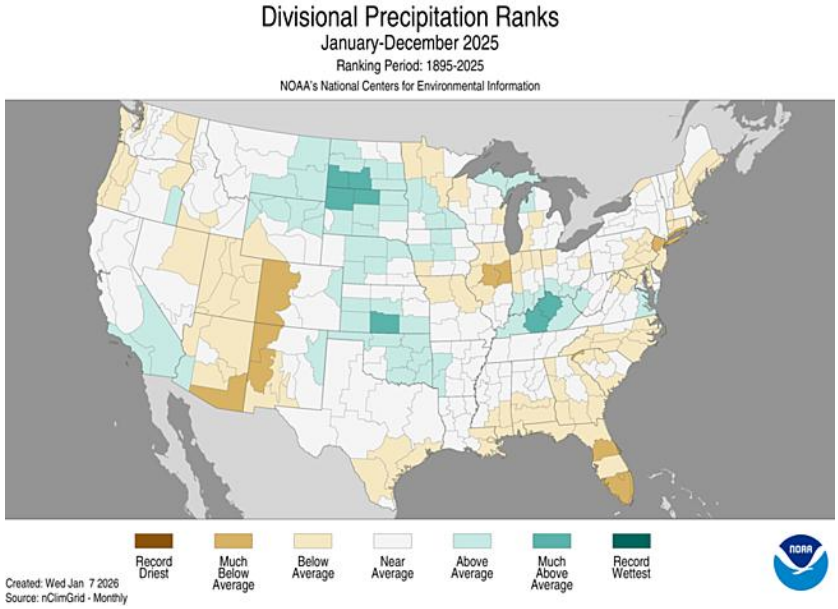
- CONUS 2.6°F above its long-term average in 2025
- 4th warmest year on record in the US
- 42nd consecutive year CONUS above average
- Tmax up slightly more than Tmin in 2025



5

US Precipitation Departures 2025

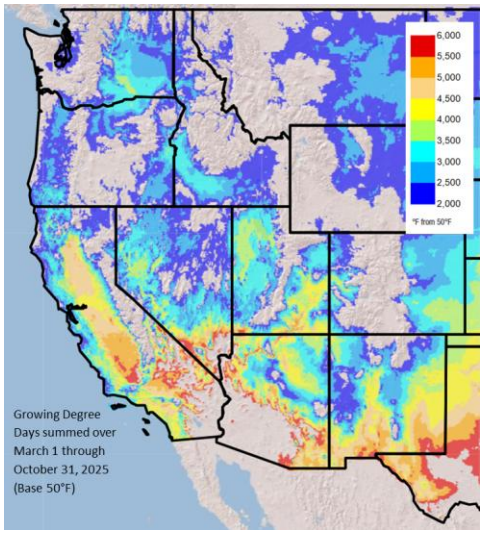
- CONUS slightly drier than average in 2025, but large differences across the county
- Southern California, the Plains, and the Ohio River valley wetter than average
- Dry in the Four Corners, Gulf and Southeast, and East



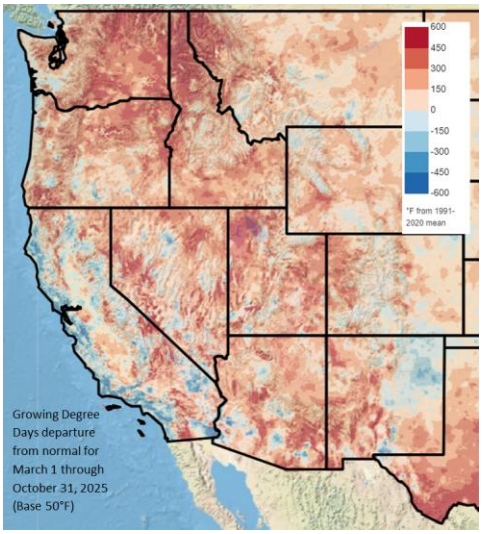
6

2025 Growing Degree-Days

GDD Total - March through October



GDD Departure - March through October

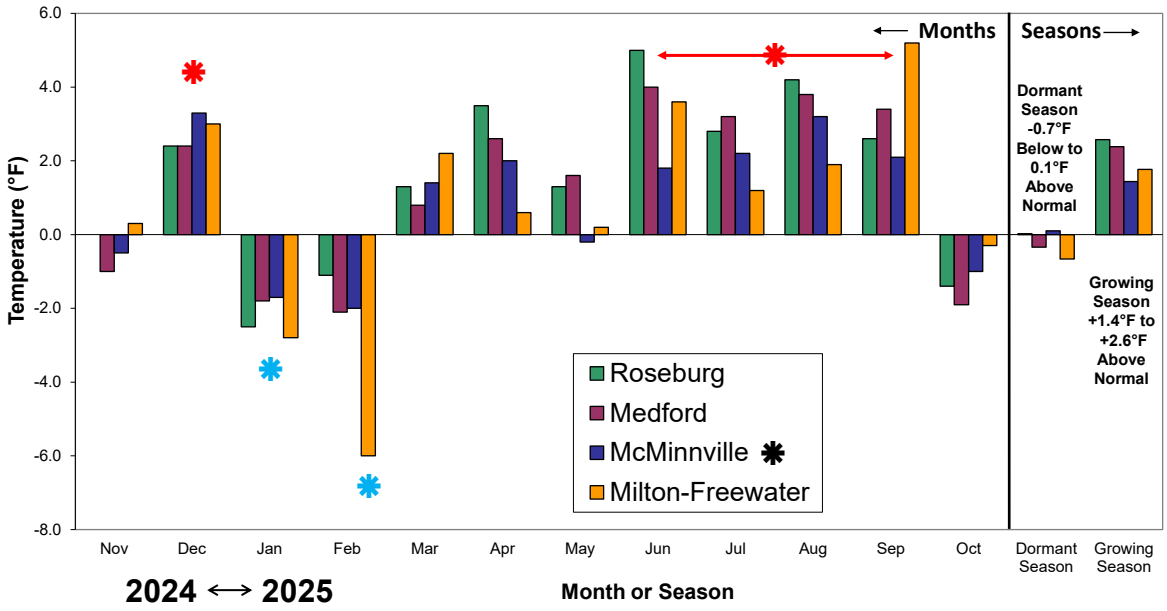


7

Oregon 2024-25 Weather/Climate Summary

8

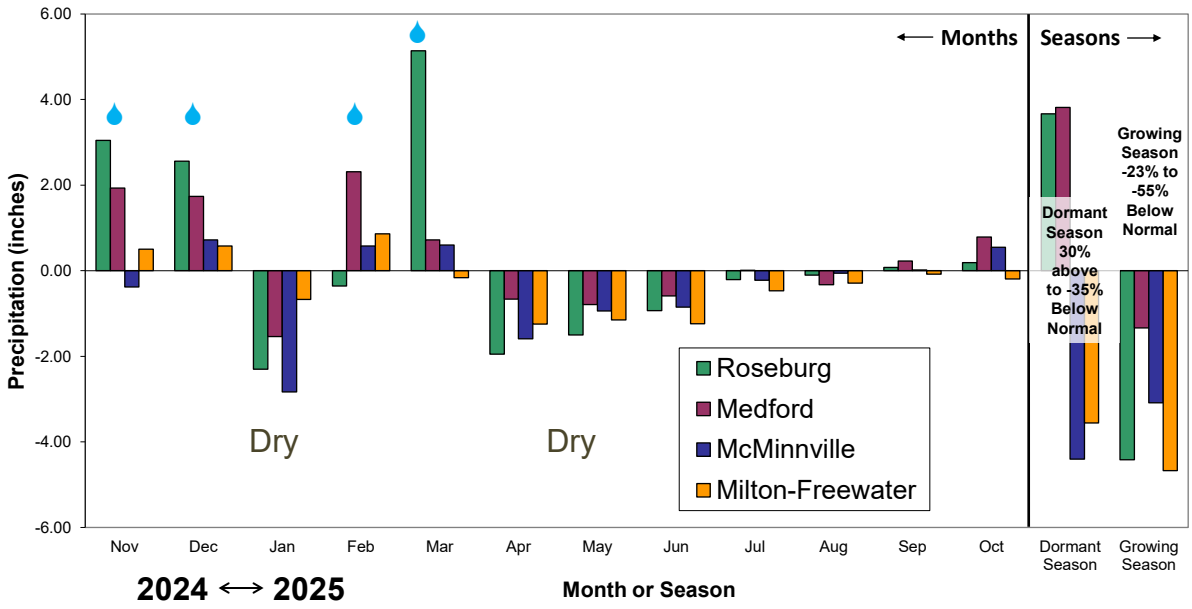
2024-25 Regional Temperature Departures from Normal



Summation of daily temperature departures by month, the dormant period (Nov-Mar) and the growing season (Apr-Oct) compared to the 1991-2020 climate normals from the NWS stations (www.noaa.gov)

9

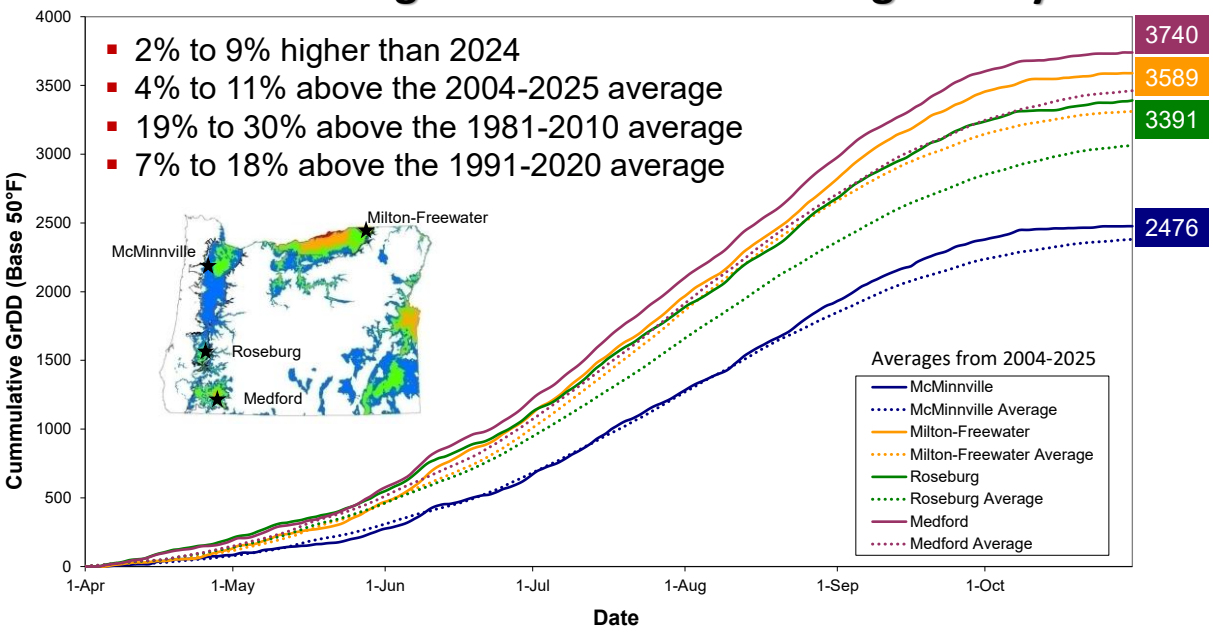
2024-25 Regional Precipitation Departures from Normal



Summation of daily precipitation departures by month, the dormant period (Nov-Mar) and the growing season (Apr-Oct) compared to the 1991-2020 climate normals from the NWS stations (www.noaa.gov)

10

2025 Growing Season Cumulative Degree-Days



This chart represents the 2025 cumulative growing degree-days compared to the average for 2004-2025 for the growing season (Apr-Oct) from the NWS stations (www.noaa.gov)

11

2025 Vintage Observations

- Dry and warm with fewer extremes
- Phenology mostly early, especially harvest
- Decent fruit set across regions and varieties
- Sunburn from heat/sun during peak véraison
- Disease, bird/pest pressure average to down
- Yields mixed -20% to +20%
- Excellent fruit quality, wines showing well

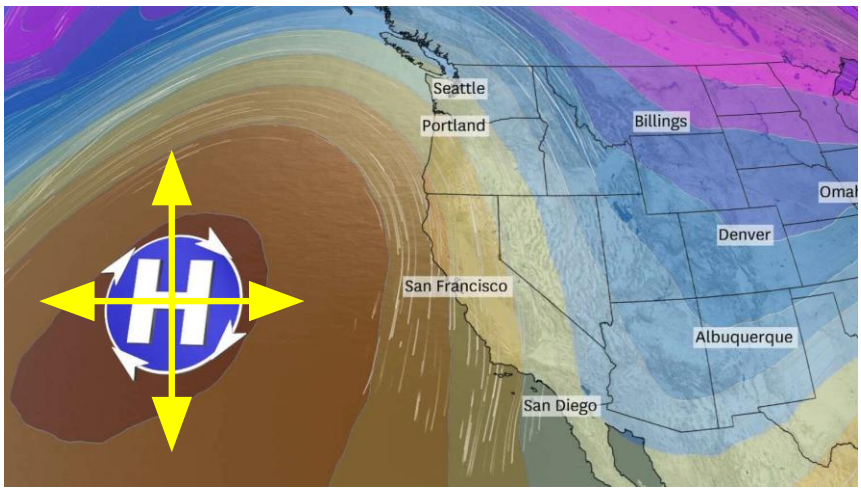
12

Current Conditions

13

Current Regional Circulation

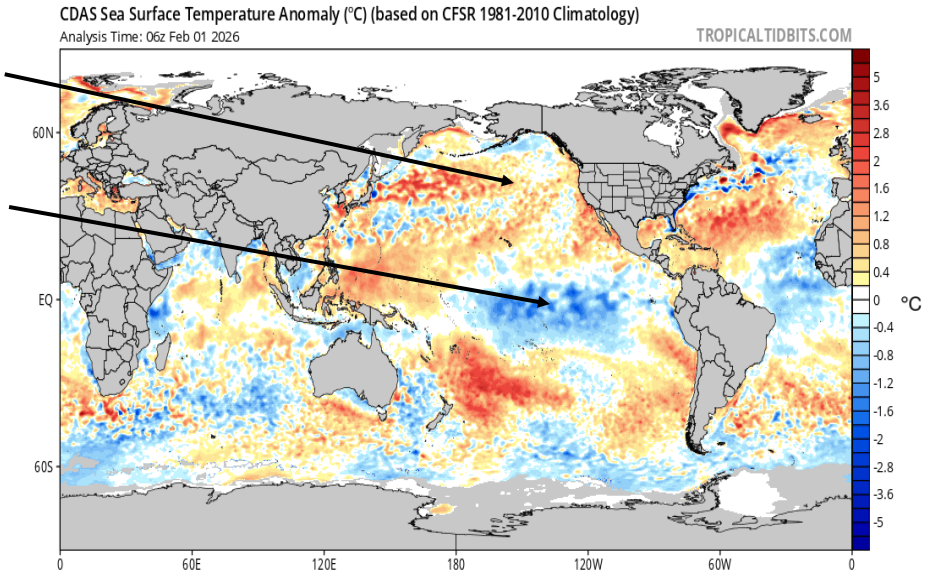
- Strong ridge of high pressure has dominated the western US weather
- N-S and E-W movements have been limited
- The ridge is also responsible for the downstream cold in the eastern US



14

Current Sea Surface Temperatures

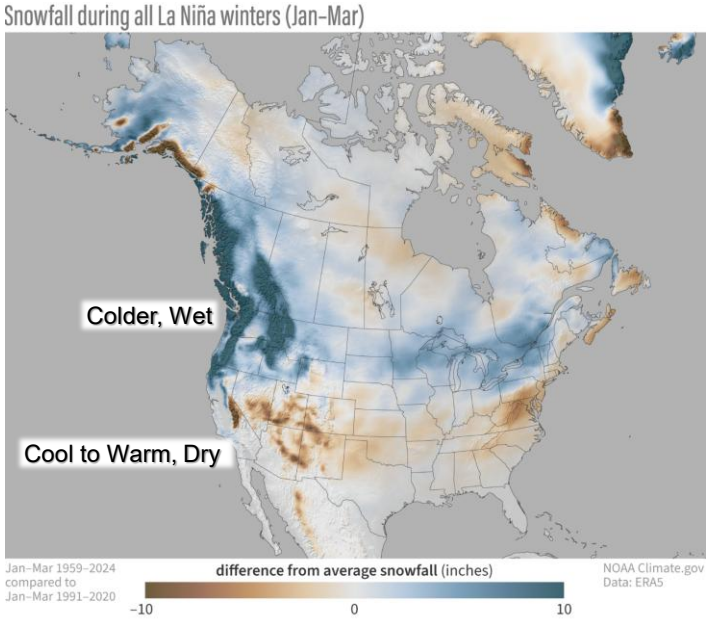
- Strong negative PDO in the North Pacific, possibly weakening to neutral in 2026
- Weak La Niña, likely to transition to neutral and possibly El Niño by summer



15

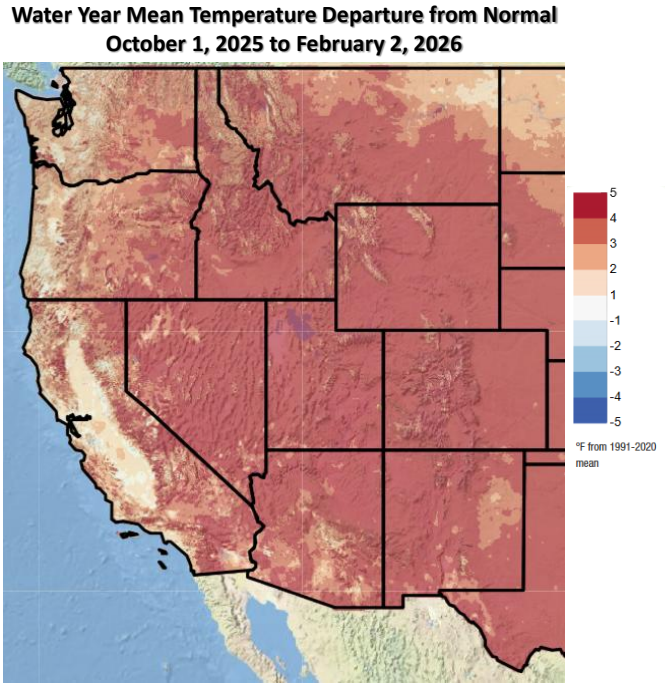
Typical La Niña Conditions

- La Niña has historically had a predictable winter/spring pattern for the western US and North America
- Atypical conditions so far this winter
- Forecasts pointing to the PNW being cool and wet this winter have been a bust



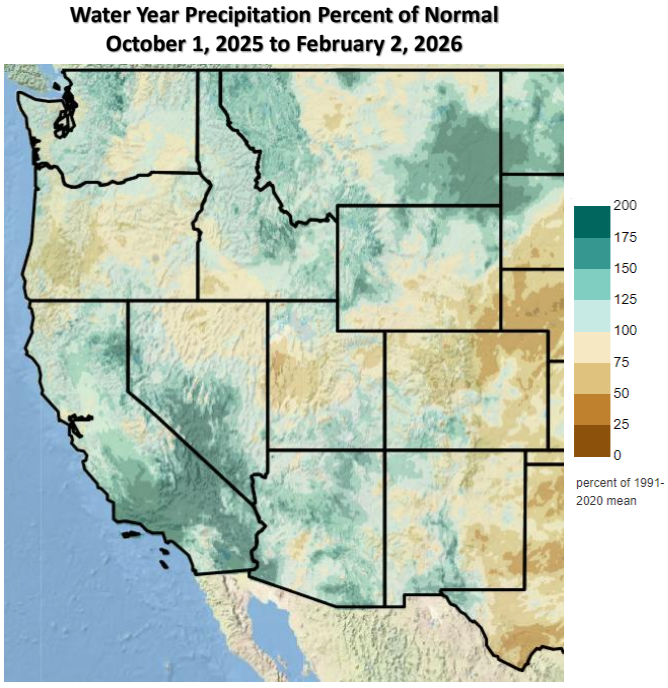
16

- Temperatures much warmer than expected from a La Niña winter, large influences from the Arctic and North Pacific driving the differences



17

- Temperatures much warmer than expected from a La Niña winter, large influences from the Arctic and North Pacific driving the differences
- Very mixed, wet south and mostly dry in the PNW; not a typical La Niña winter



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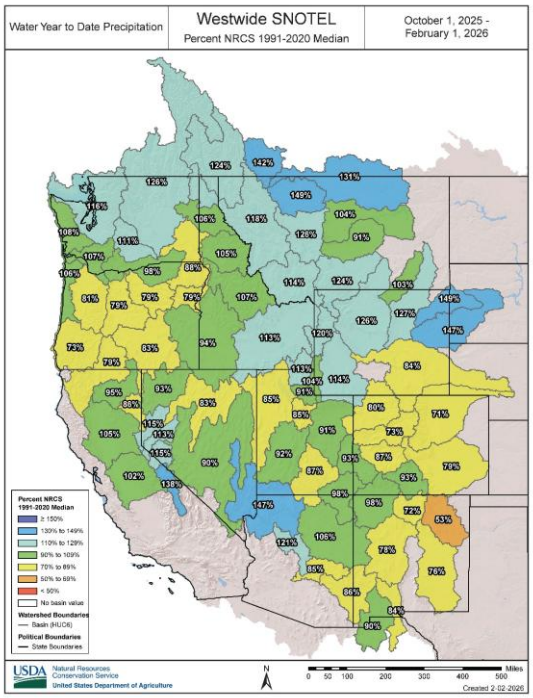
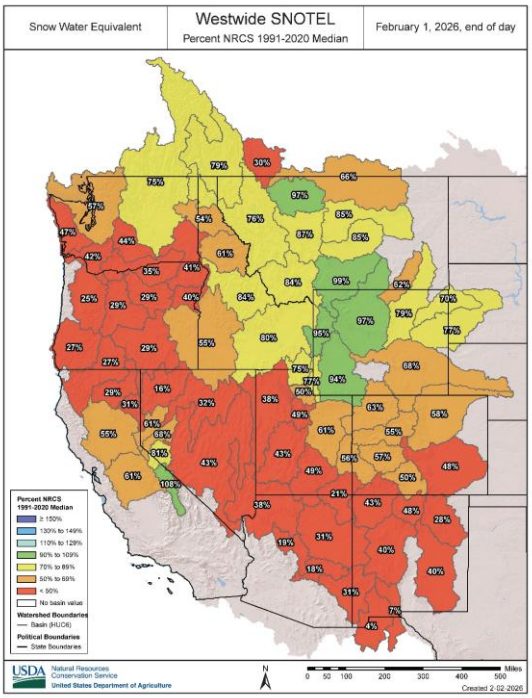


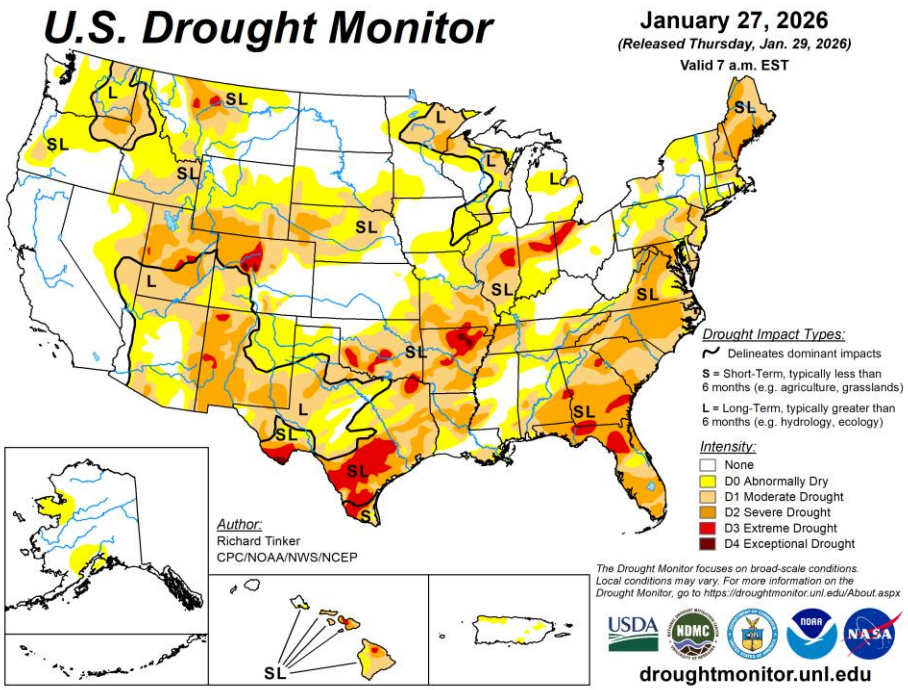
Water year precipitation index is up for most areas, except for portions of Oregon, Colorado, and New Mexico

More concerning is that the SWE index is down for most every basin except southern Sierra Mountains and some basins in the northern Rockies



19

- Drought footprint across CONUS at 62%, some decline likely after this week's map update
- California completely out of drought, maybe?
- PNW has recovered some, Rockies and southwest have increased



20

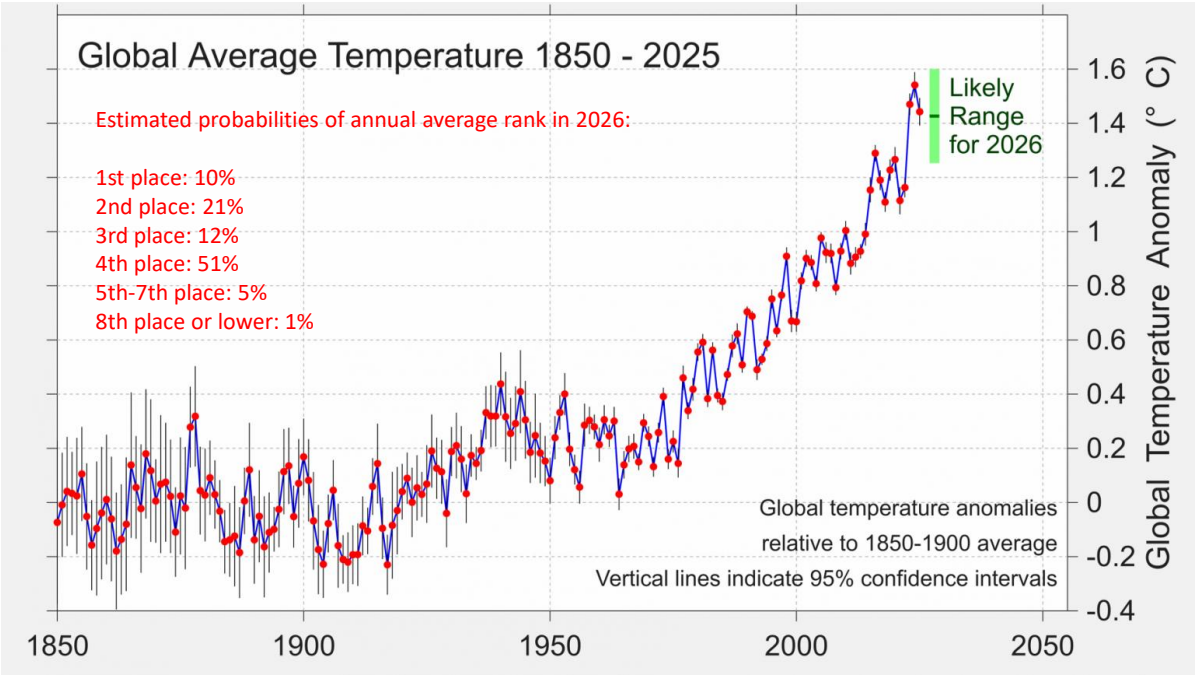
Summary and Forecast

21

Global Forecast for 2026

- Persistence in the climate system means warming will likely continue
- 2026 likely to end up as a top five warmest year on record globally

22



Data from Berkeley Earth (www.BerkeleyEarth.org)

23

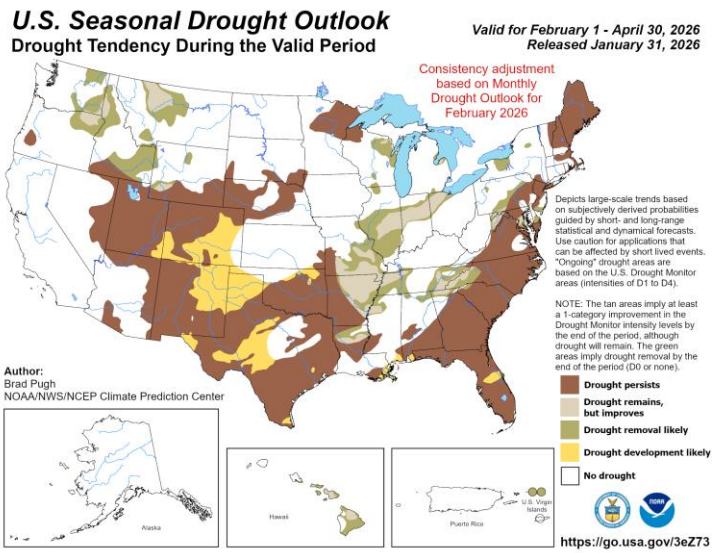
Global Forecast for 2026

- Persistence in the climate system means warming will likely continue
- 2026 likely to end up as a top five warmest year on record globally
- Hydro-climatic variability enhanced in a warmer atmosphere, evidence pointing to increasing variability in weather/climate factors

24

US Drought Forecast

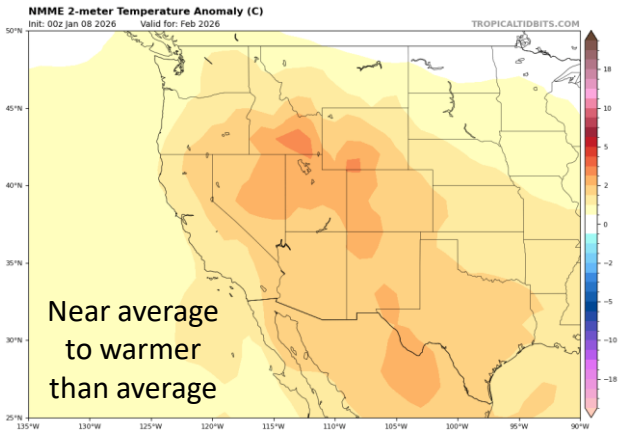
- Spatial extent of drought in the US has expanded in the eastern half of the country
- Rockies and Southwest likely to stay in drought, California likely to remain drought-free for the short-term, inland PNW likely to improve

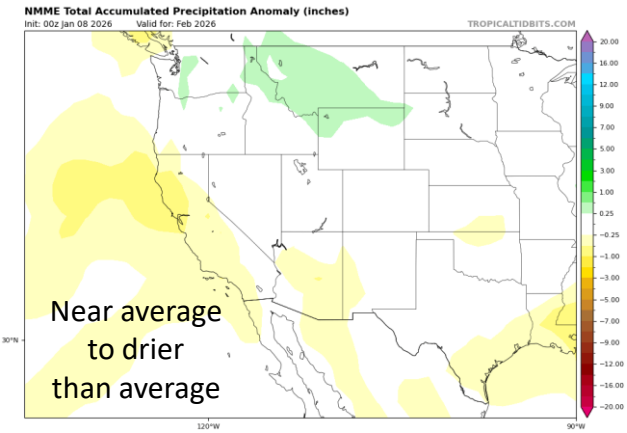


25

Short Term Forecast

- February likely to see more of the same





26

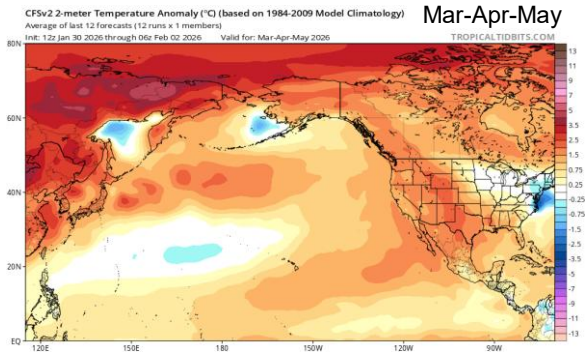
Second Half of Winter & Spring Forecast

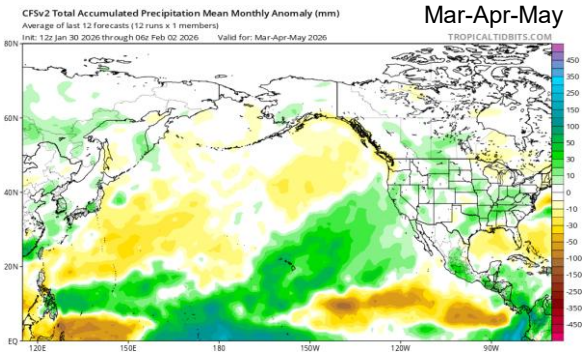
- Weak La Niña likely gives way to neutral ENSO
- North Pacific SST likely to stay in a weak negative PDO
- Arctic is erratic, vortex instability lowers forecast skill
- These conditions do not give more than an iffy seasonal forecast for the western US

27

Second Half of Winter & Spring Forecast

- Best guidance that I can discern;
  - Average to warmer than average for the western US
  - Average to drier than average for the western US
  - 50/50 chance to make up SWE deficits





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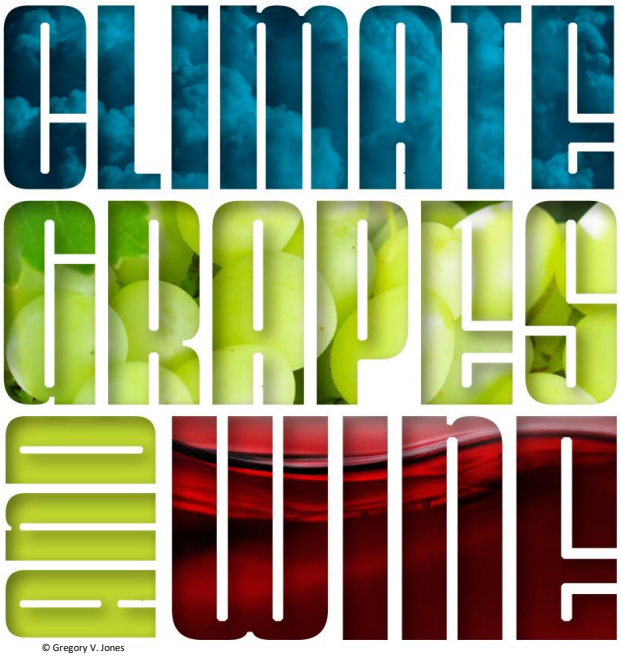

For my publications, videos, podcasts, etc. visit www.climateofwine.com where you can also find my Monthly Weather-Climate Reports for the western US at www.climateofwine.com/reports

Thank You!

Gregory V. Jones, PhD.
CEO, Abacela Vineyards and Winery

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29