Quick Look at Potential Precipitation Events Over the US West Coast

Updated: 28 February 2025

Models are indicating the potential for a pair of troughs and an atmospheric river to drive precipitation over the US West Coast in early March.

Forecast Highlights:

- A trough is forecast to deepen in the Northeast Pacific over the next 24 hours as it propagates toward the US West Coast, reaching the coast late Sat 1 Mar to early Sun 2 Mar.
- This trough is forecast to bring light-to-moderate precipitation and some mountain snow to the Sierra Nevada through late Mon 3 Mar.
- A second trough is forecast to reach the USWC on Thu 6 Mar and pass through the region by Fri 7 Mar bringing another period of light-to-moderate precipitation to higher elevations in the Sierra Nevada and the Transverse Ranges.
- Even though the precipitation is not expected to be major with either of these events, any precipitation should be beneficial for improving the current drought conditions and increasing seasonal snowpack in the Sierra Nevada.
- The NOAA Climate Prediction Center's (CPC) Day 8–14 (valid 7–13 Mar) hazards outlook identifies a moderate risk of heavy precipitation and snow as well as potential for flooding over Northern California and Southern Oregon on Sat 8 and Sun 9 Mar.
- CW3E's AR Landfall tool using GEFS and EPS data both identify a potential atmospheric river for 8-9 Mar, with the EPS showing higher probabilities (70–80%) of AR conditions (IVT ≥ 250 kg m^{-1} s^{-1}) over coastal Oregon than the GEFS (40–50%).
- The CPC hazard outlook also shows slight risks of heavy precipitation, wind hazards and snow across the USWC between Sat 8 Mar and Fri 14 Mar.

Stay alert to official NWS forecasts, watches, and warnings at weather.gov and follow guidance from local emergency management officials

Stay tuned to the CW3E webpage for a full AR Update

Center for Western Weather and Water Extremes
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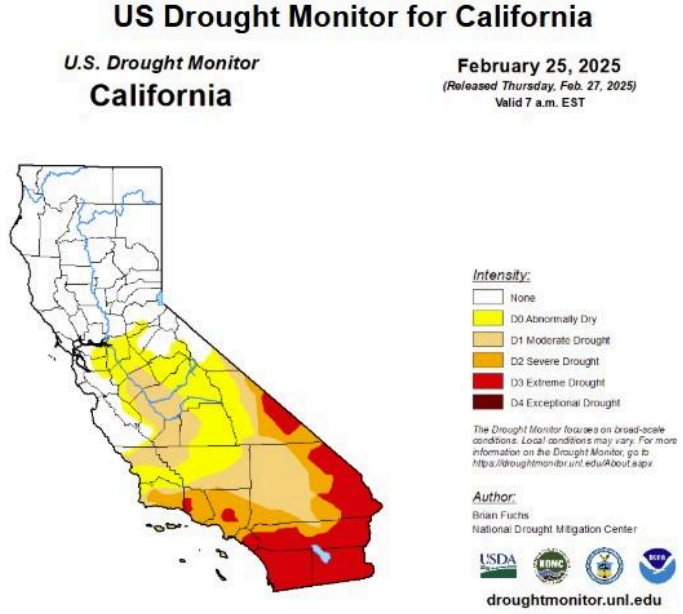
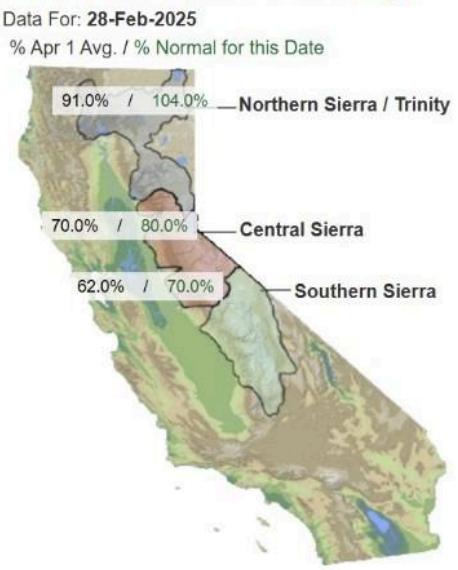
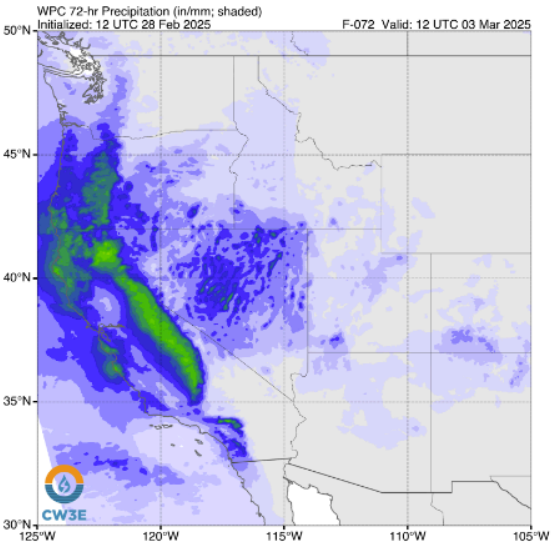
US Drought Monitor for California



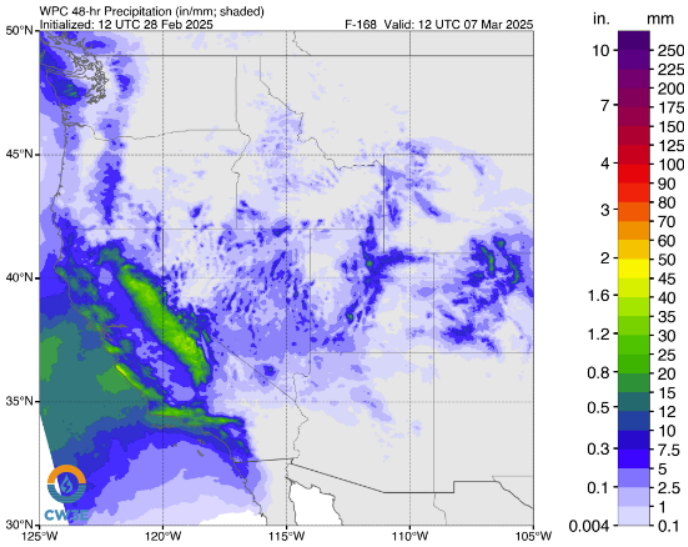
Current Snowpack Percentages



WPC 72-Hr Total Precipitation
Valid: 4 AM PST 3 Mar 2025



WPC 48-Hr Total Precipitation
Valid: 4 AM PST 7 Mar 2025



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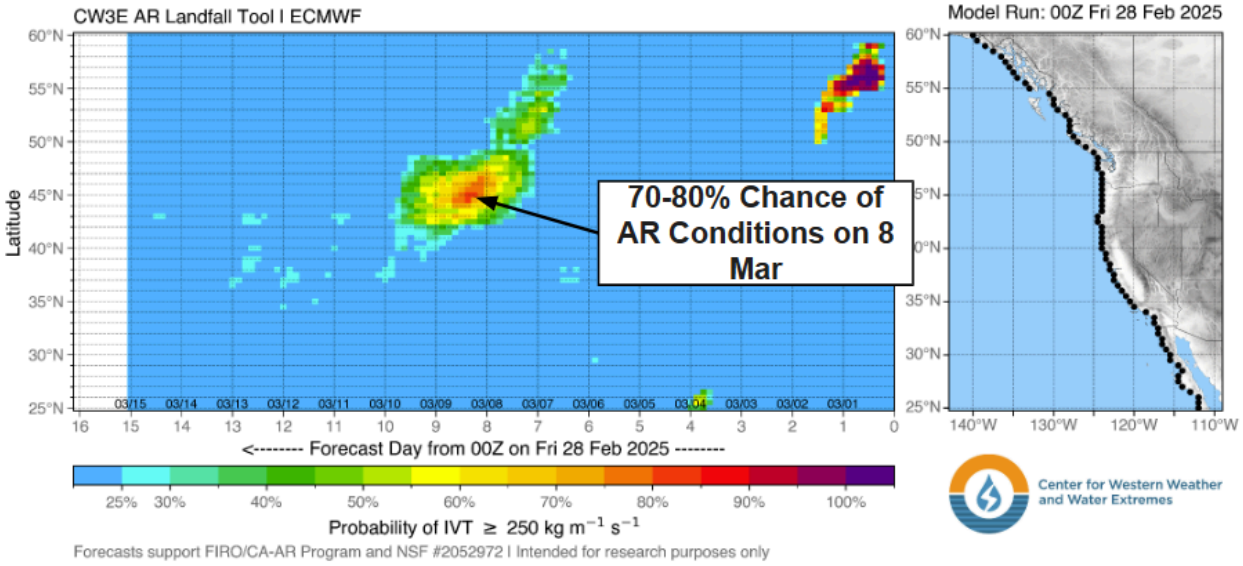
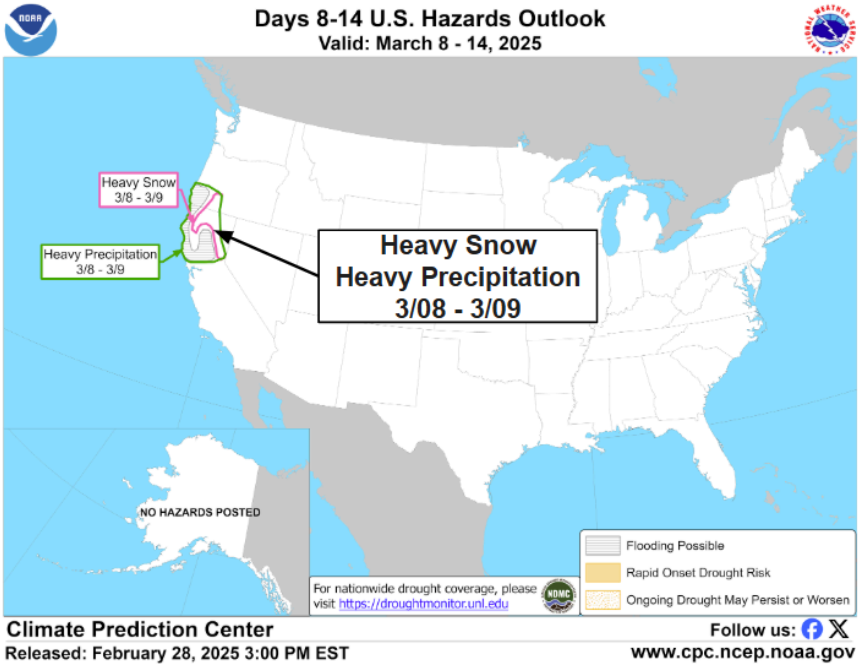
CW3E AR Landfall Tool



CPC Day 8-14 Hazard Outlook



Additional Considerations:

- Visit https://www.weather.gov/cnrfc/ for specific river and stream forecasts and https://www.weather.gov/ for point specific watches, warnings, and forecasts.

In-depth AR forecasts products can be found here: http://cw3e.ucsd.edu/iwv-and-ivt-forecasts/

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