

Quick Look at Atmospheric River Bringing Rain and Mountain Snow to US West Coast *Updated: 14 March 2025*

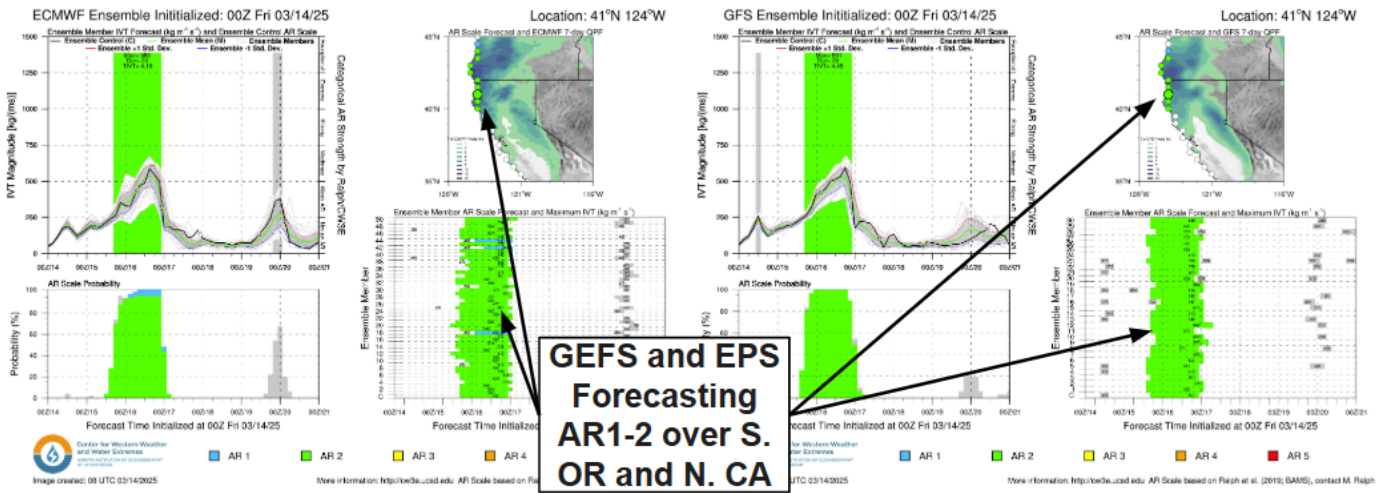
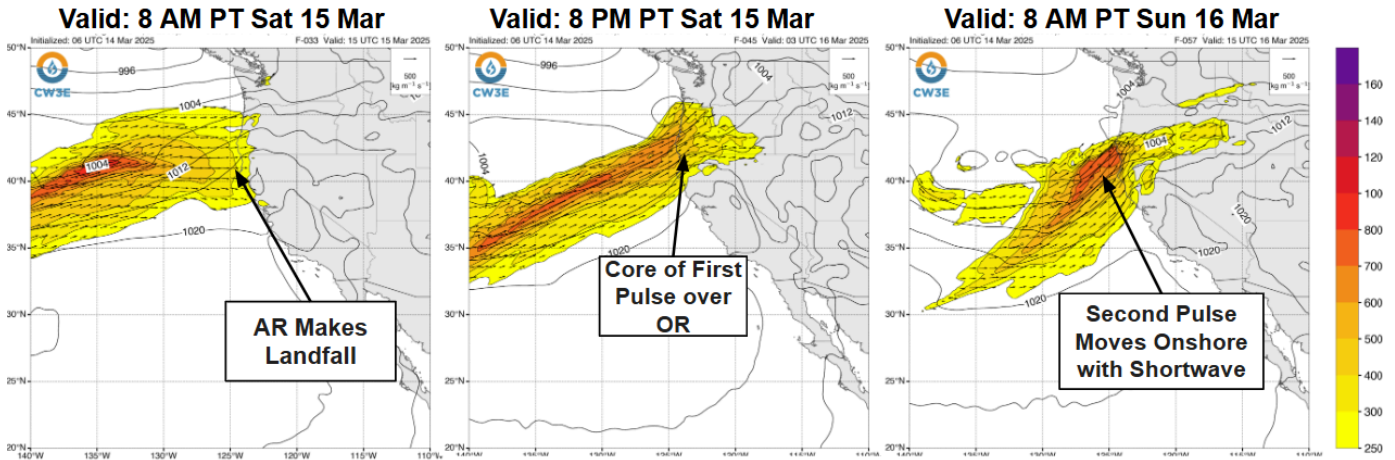
An atmospheric river ahead of a shortwave trough is forecast to bring substantial precipitation to Oregon and California through the weekend.

Forecast Highlights:

- An atmospheric river (AR) is forecast to make landfall along the Oregon coast early tomorrow, Sat 15 Mar, and continue to impact the region into Mon 17 Mar.
- A shortwave trough will deepen behind the AR, strengthening the IVT on the back end of the system. This will bring a second, stronger pulse of IVT over Southern Oregon/Northern California.
- Both the GEFS and EPS are forecasting AR2 conditions (based on the Ralph et al. 2019 AR Scale) over coastal Southern Oregon and Northern California for 15-16 Mar.
- The Weather Prediction Center (WPC) is forecasting 6-8 inches over the mountains along the Oregon/California border and 3-5 inches over the Oregon Coast Ranges, Oregon Cascades, Northern California Coast Ranges and Northern Sierra Nevada for 5 AM PT 15-18 Mar.
- The WPC has issued a **marginal risk** Excessive Rainfall Outlook (level 1 of 4, 5% chance of flooding) across Western Oregon and the Northern California Coast Ranges on Day 2 and Western Oregon, Northern California Coast Ranges and Northern Sierra Nevada on Day 3 (periods ending 5 AM PT Sun 16 Mar and Mon 17 Mar).
- The Northwest River Forecast Center is forecasting 14 stream gages to exceed action stage and 4 gages to exceed minor flood stage with the precipitation from this event. The California-Nevada River Forecast Center is forecasting 4 stations to exceed action stage.
- Several GEFS and EPS members are showing precipitation exceeding 5% of normal annual precipitation by the end of this event in the Upper Yuba watershed. Many more ensemble members are showing precipitation totals exceeding 5% of normal annual precipitation in the watersheds near the Oregon/California border.
- Freezing levels are forecast to rise in the Northern Sierra Nevada, Klamath Mountains and Oregon Cascades as the AR makes landfall. Despite the rise, the higher elevations of these ranges are still expected to receive heavy snowfall.
- The National Weather Service is forecasting 1-2 feet of snow across the Northern Sierra Nevada and Northern California Coast Ranges today into early Sat 15 Mar with a low-pressure system ahead of the AR.
- Total snowfall accumulations of 1-3 feet are expected over the Northern Sierra Nevada, Klamath Mountains, and Washington Cascades by Mon 17 Mar, with 2-4 feet likely over the Oregon Cascades.

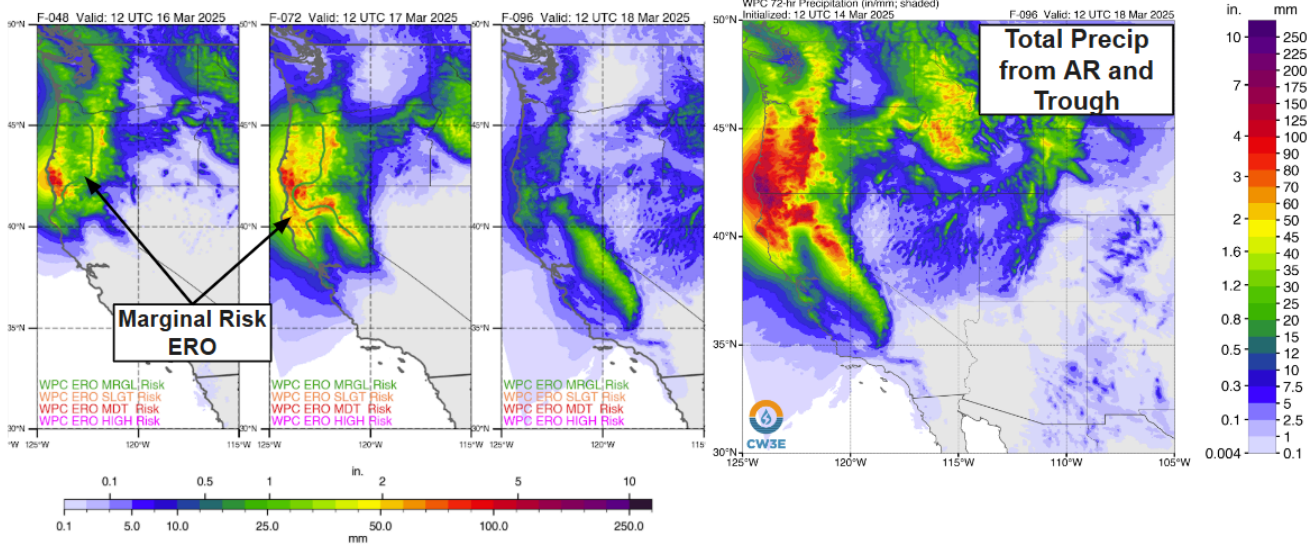
Stay alert to official NWS forecasts, watches, and warnings at [weather.gov](https://www.weather.gov) and follow guidance from local emergency management officials

Stay tuned to the CW3E webpage for a full AR Update

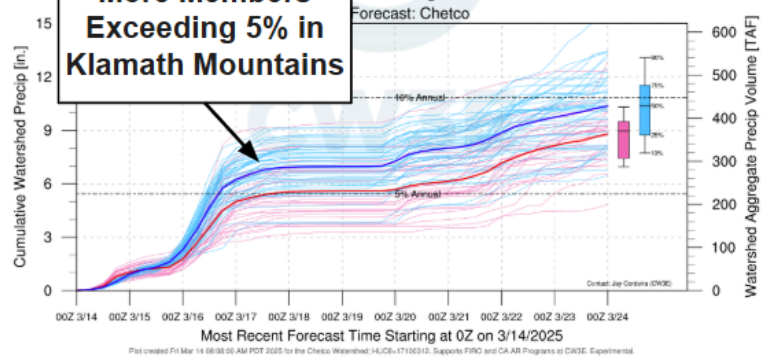
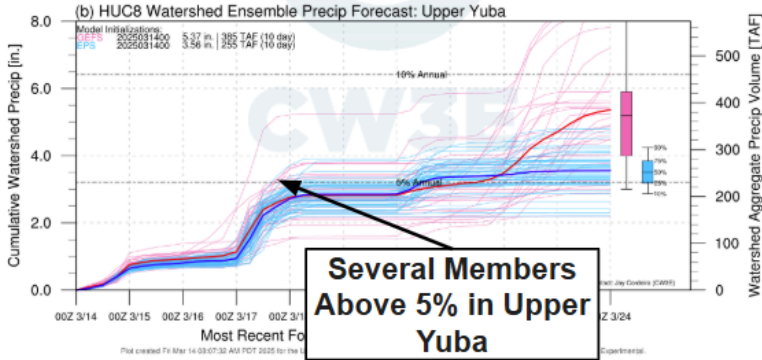
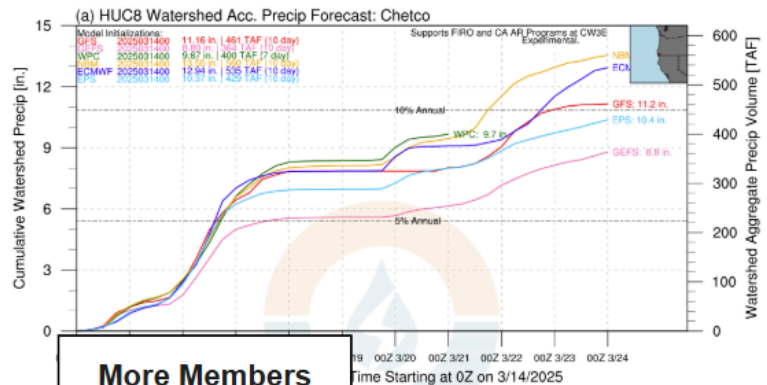
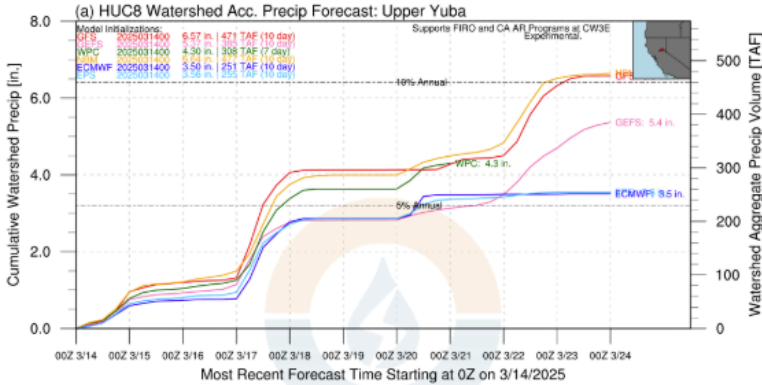


WPC Days 2-4 QPF: Periods Ending 5 AM PT 16-18 Mar

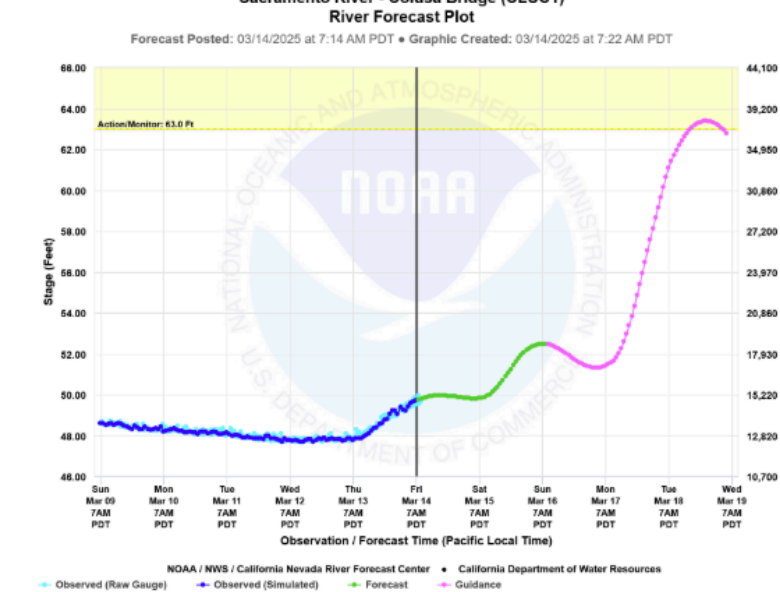
WPC 3-Day QPF: Period Ending 5 AM PT 18 Mar



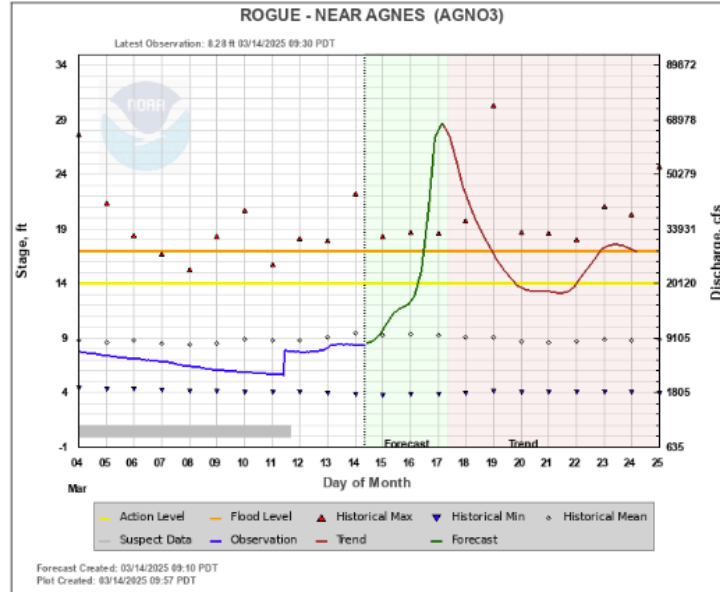
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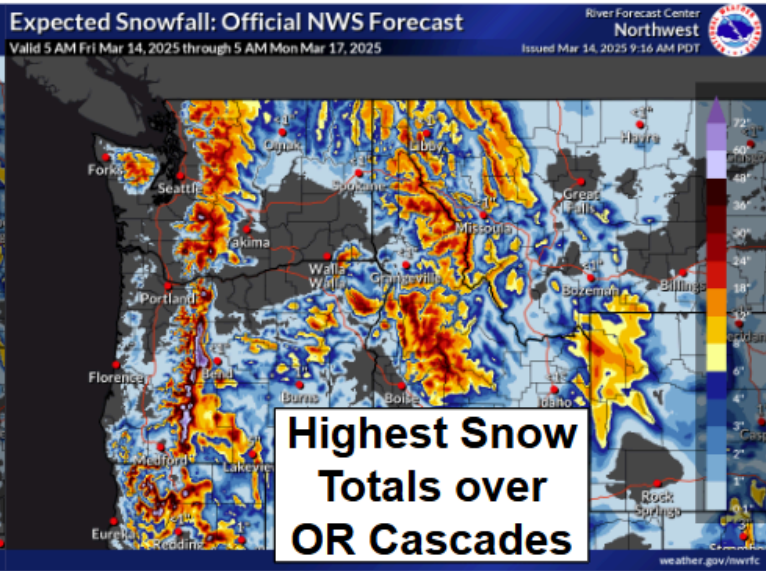
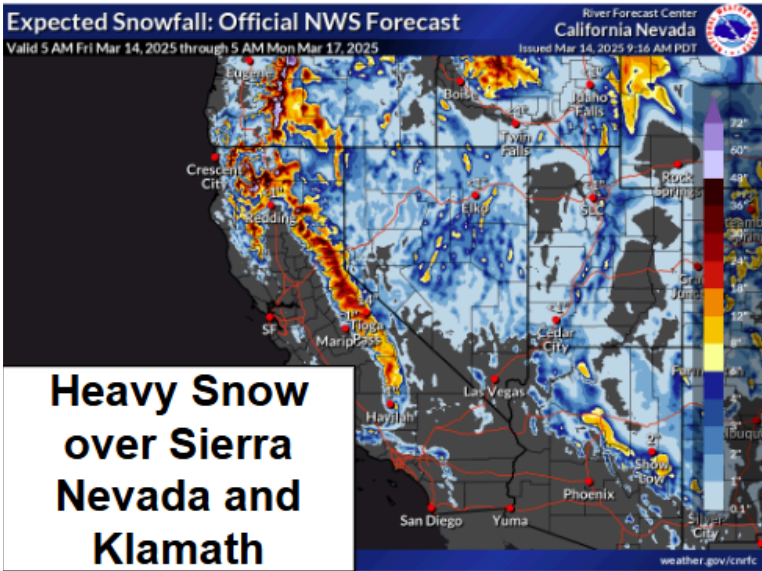
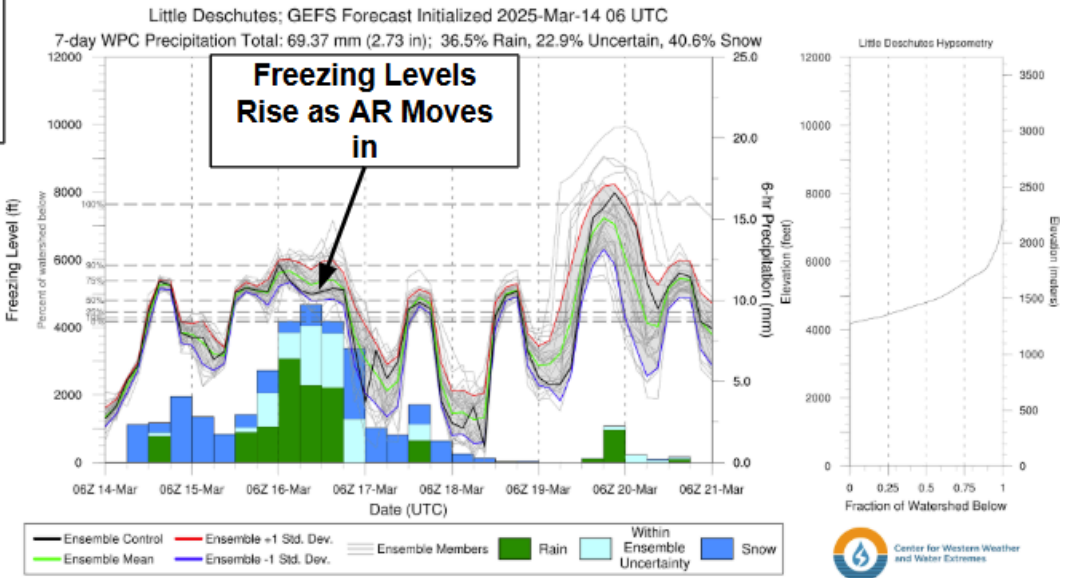
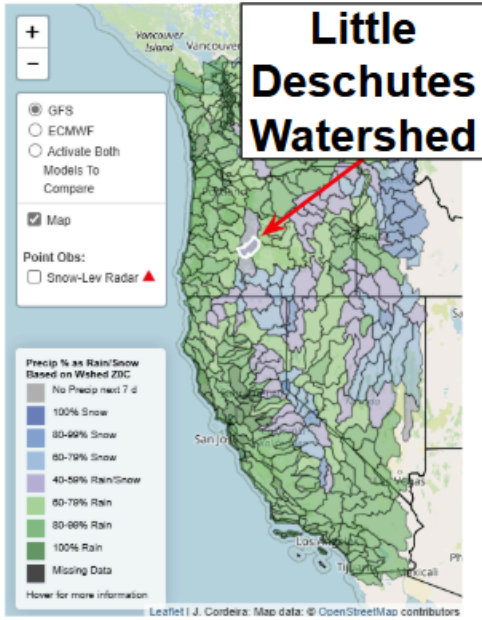
NRF: Sacramento River in Northern California



NWRFC: Rogue River in SE Oregon



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Additional Considerations:

- Visit cnrfc.noaa.gov and nwrfc.noaa.gov for specific river and stream forecasts and 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/>

Update by M. Steen

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