

Quick Look at the Atmospheric Rivers Impacting the US West Coast

Issued: 5 November 2025

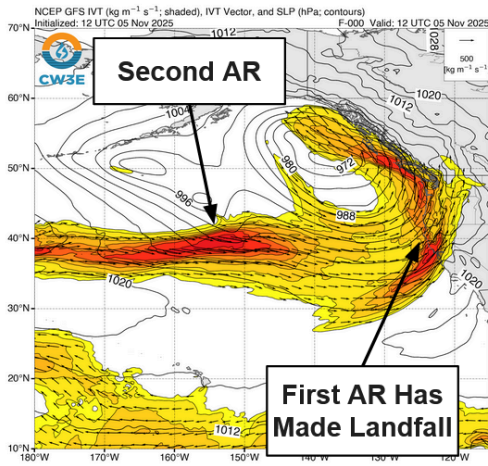
Two atmospheric rivers (AR) are forecast to bring precipitation to the Pacific Northwest and Northern CA over the next three days.

Forecast Highlights:

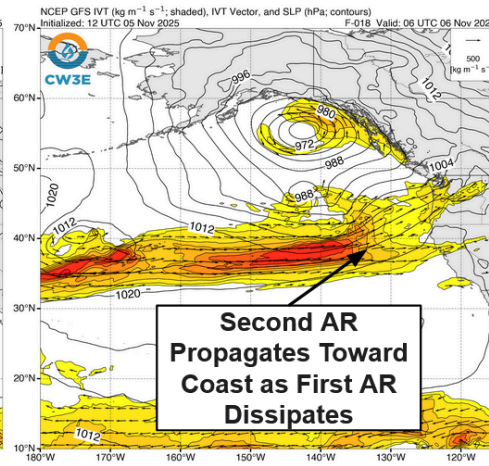
- A strong AR ($\text{IVT} > 750 \text{ kg m}^{-1} \text{ s}^{-1}$) has made landfall along the US West Coast and is forecast to continue impacting the region through this evening.
- A second AR is forecast to impact the West Coast tomorrow morning shortly after the first AR dissipates. The core of this AR is forecast to be weaker than the first ($\text{IVT} \sim 500 \text{ kg m}^{-1} \text{ s}^{-1}$) and shorter duration (≤ 24 hours)
- There is uncertainty as to whether there will be a break in AR conditions in Washington and Oregon. The GEFS AR Scale forecast is indicating AR3 to AR4 conditions for coastal Oregon and Washington, where AR4 conditions are forecast for locations with no break in AR conditions.
- Locations in Washington and North/Central California where a break in AR conditions is expected are forecast to see up to AR1 conditions with the second AR.
- The NWS Weather Prediction Center (WPC) is forecasting 48-hour precipitation totals (period ending 4 AM PT Fri 7 Nov) of $\sim 1.5\text{--}4$ in. over higher elevations in the Sierra Nevada, Cascades, Olympic Peninsula and Coastal Ranges and $\sim 0.5\text{--}1.5$ in. over lower elevations in Washington, Oregon and Northern California.
- The WPC has issued a **marginal** risk (level 1 of 4; $>5\%$ probability) excessive rainfall outlook (ERO) for 4 AM PT Thu 6 Nov through 4 AM PT Fri 7 Nov over the Olympic Peninsula and the Coastal Ranges along the Oregon-California border.
- Freezing levels are forecast to start around 8,000 feet in the Northern Cascades and fall below 5,000 feet late tomorrow, resulting in increased chances for heavy snowfall in the region. Most of the precipitation is expected to fall as rain elsewhere over the US West Coast due to high freezing levels.
- NWS snowfall forecasts indicate the potential for 66-hour snowfall totals (period ending 4 AM PT Sat 8 Nov) to exceed 18 inches across the Northern Cascades.
- The California-Nevada and Northwest River Forecast Centers are forecasting streamflow rises due to the precipitation from these ARs. Streamflow responses are forecast to be greater in Western Washington, where three stream gauges are forecast to exceed Action Stage.
- The NWS has issued watches and advisories for impacts associated with the two atmospheric rivers: Coastal Flood Warnings in Washington, Coastal Flood Watch in the Pacific Northwest and Northern California, Winter Weather Advisory in Northern Cascades and High Wind Warnings in Northern California and Southern Oregon.

Stay alert to official NWS forecasts, watches, and warnings at [weather.gov](https://www.weather.gov)

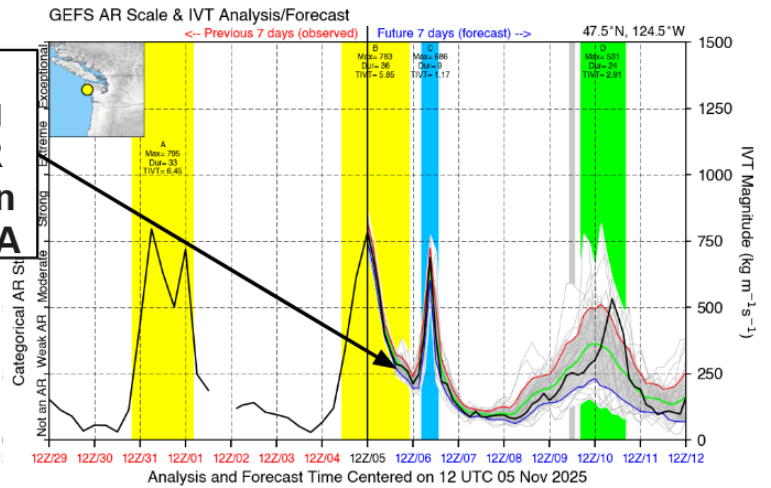
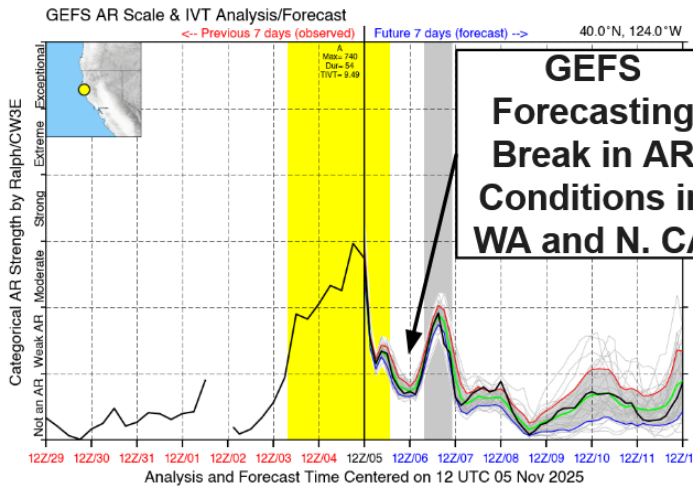
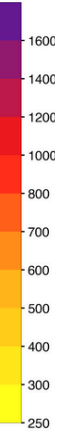
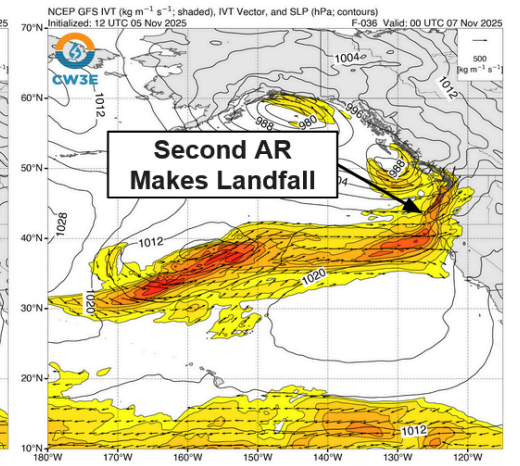
Valid: 4 AM PT Wed 5 Nov

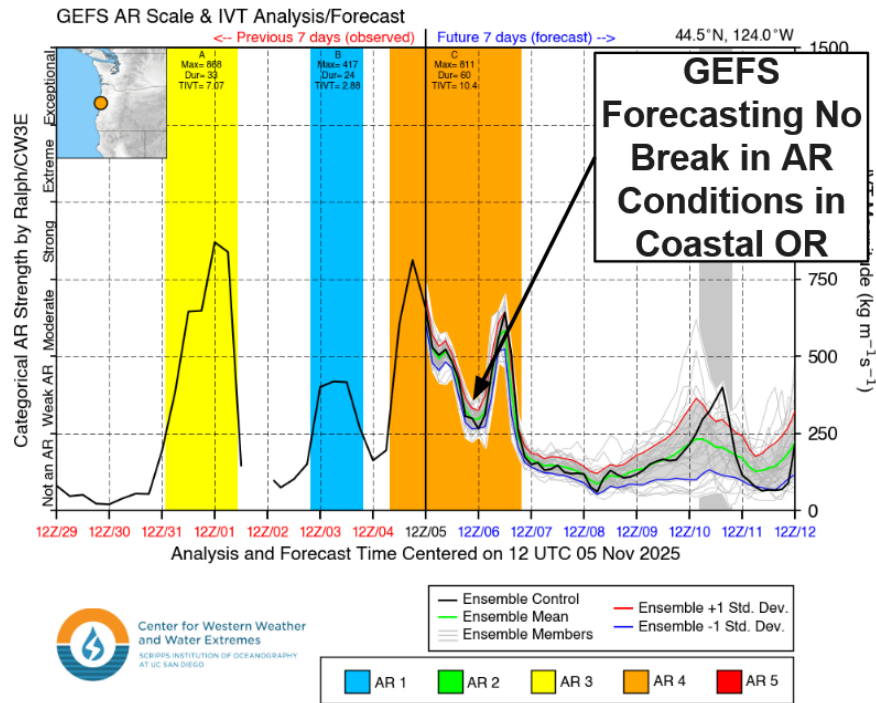


Valid: 10 PM PT Wed 5 Nov

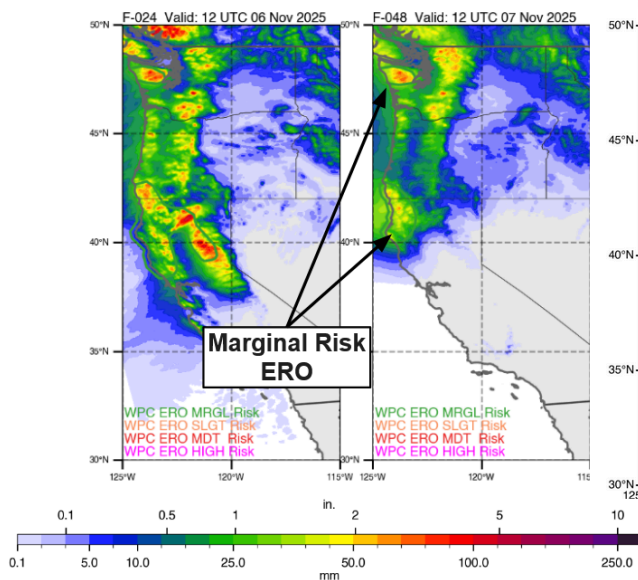


Valid: 4 PM PT Thu 6 Nov

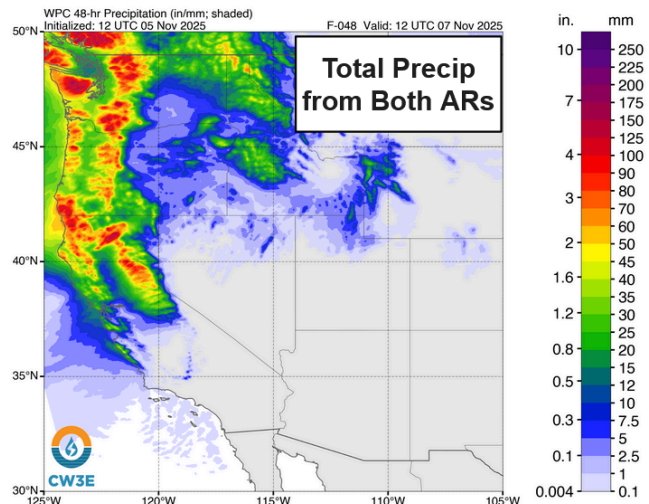


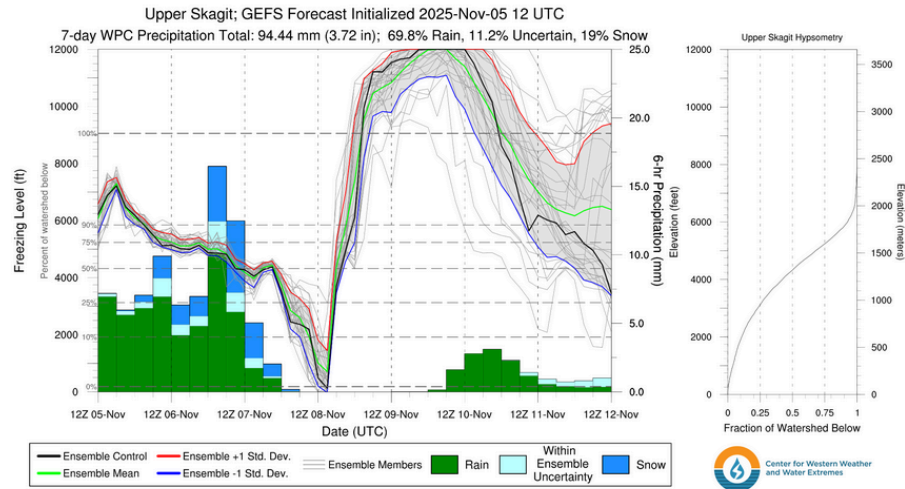
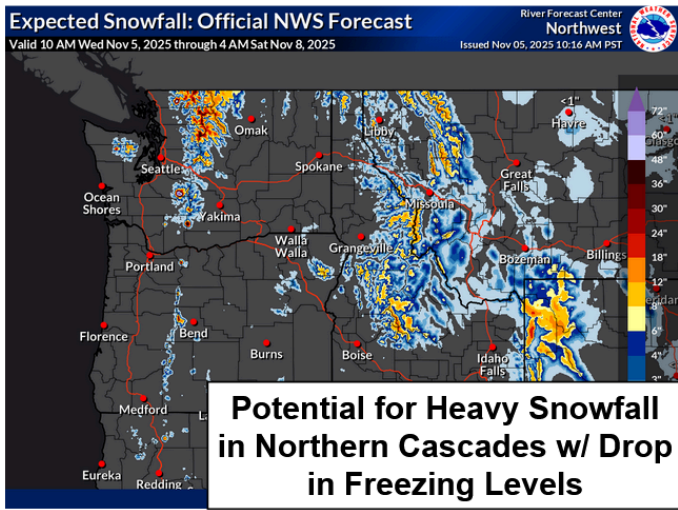


WPC Days 1-2 QPF: Periods Ending 4 AM PT 6-7 Nov

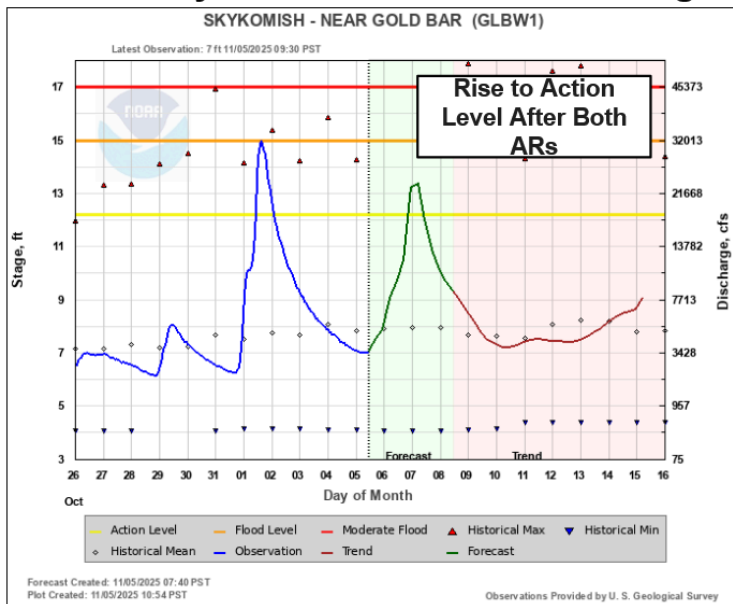


WPC 2-Day QPF: Period Ending 4 AM PT 7 Nov

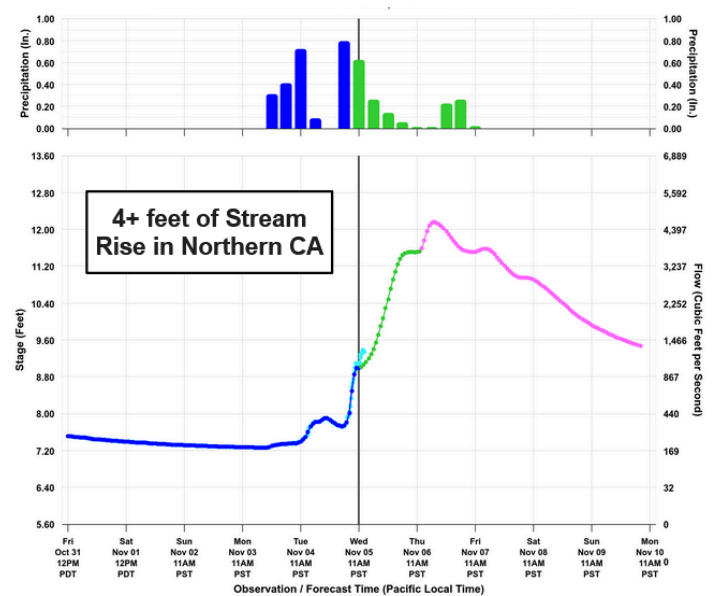




NWRFC: Skykomish River in NW Washington



CNRFC: Eel River in N California



Additional Considerations:

Visit <https://www.weather.gov/cnrfc/> and <https://www.weather.gov/nwrfc/> for specific river and stream forecasts and <https://www.weather.gov/> for point specific forecasts.

In-depth AR forecasts products can be found here:

<http://cw3e.ucsd.edu/iwv-and-ivt-forecasts/>

Update by M. Steen

msteen@ucsd.edu