

Latest Update on Atmospheric River Forecast to Impact the Pacific Northwest

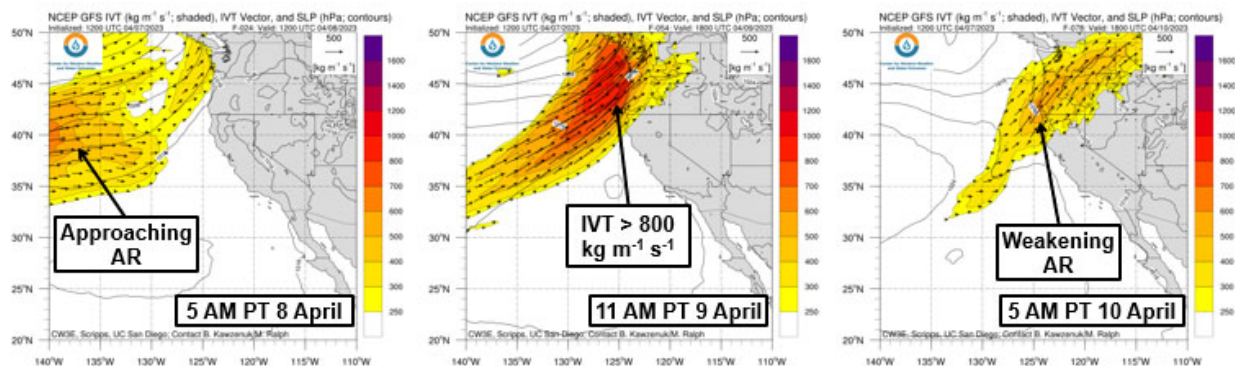
Updated: 07 April 2023

A quick look at the strong atmospheric river (AR) that is set to impact the Pacific Northwest this weekend.

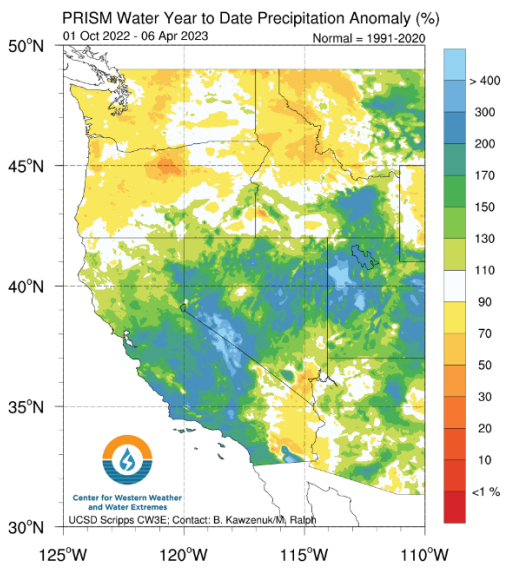
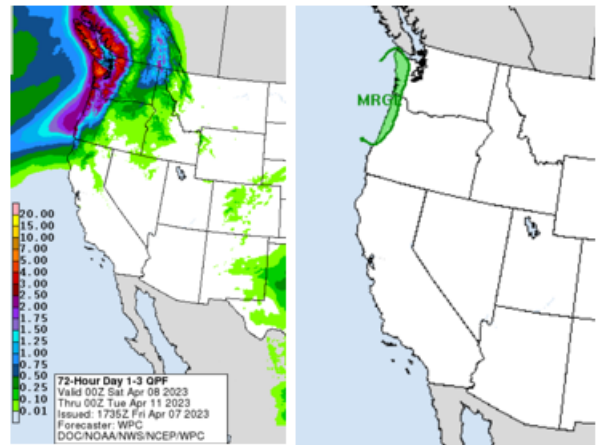
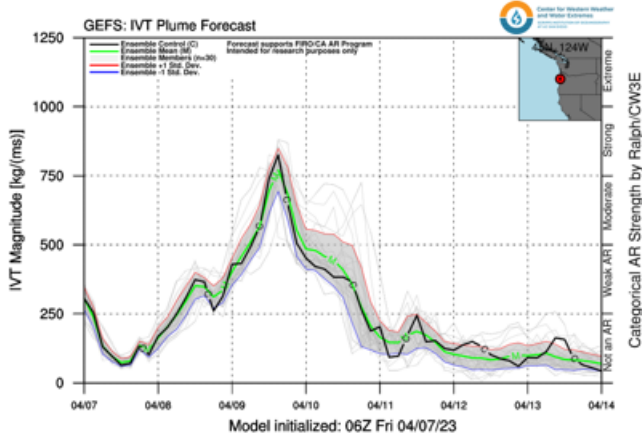
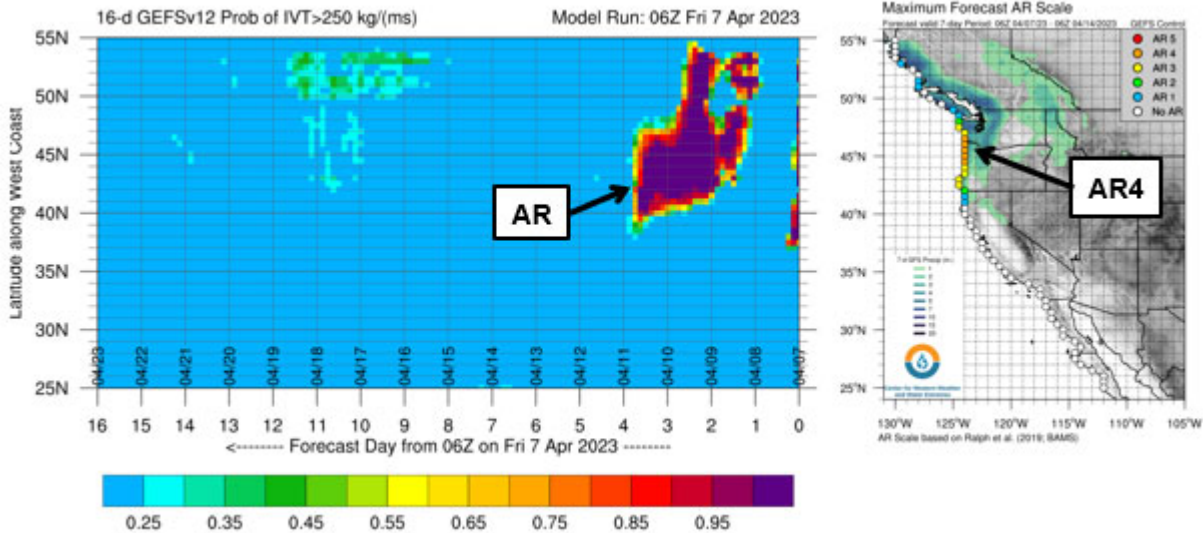
Forecast Highlights:

- A weak to moderate AR that brought AR1 and AR2 conditions (based on the Ralph et al. 2019 AR Scale) to coastal Washington and Oregon made landfall over the Pacific Northwest on 6 April
- A second, stronger AR is forecast to make landfall tomorrow morning in association with a strong low-pressure system in the Gulf of Alaska
- The 06Z GEFS landfall tool is showing very high confidence (> 95% probability) in AR conditions for coastal locations in the Pacific Northwest and far Northern California
- The 06Z GEFS control member is showing AR3 and AR4 conditions for coastal Oregon with maximum IVT magnitudes > 750 $\text{kg m}^{-1} \text{s}^{-1}$ and duration of AR conditions up to 60 hours
- The NWS Weather Prediction Center (WPC) is forecasting up to an additional 7 inches of precipitation in the Olympic Mountains and 2-5 inches in the Washington Cascades and Coastal Ranges by Monday afternoon
- According to PRISM water year to date precipitation anomalies, precipitation from this AR will generally be beneficial since the region is below normal for this time of year
- The NWS WPC has issued a marginal risk of rainfall exceeding flash flood guidance along the coast from central Oregon to the Olympic Peninsula for Sunday morning into Monday morning
- Several rivers in Washington and Oregon are forecast to rise to or above action stage during the next 7 days. The Skokomish River near Potlach which crested above minor flood stage (16.5 ft) near 17 ft early Friday morning is forecast to recede slightly before cresting near minor flood stage again on Monday morning
- With freezing levels forecast to be >1500m (~5,000 ft) during this AR, precipitation is forecast to fall as rain in the higher elevation watersheds of the Pacific Northwest

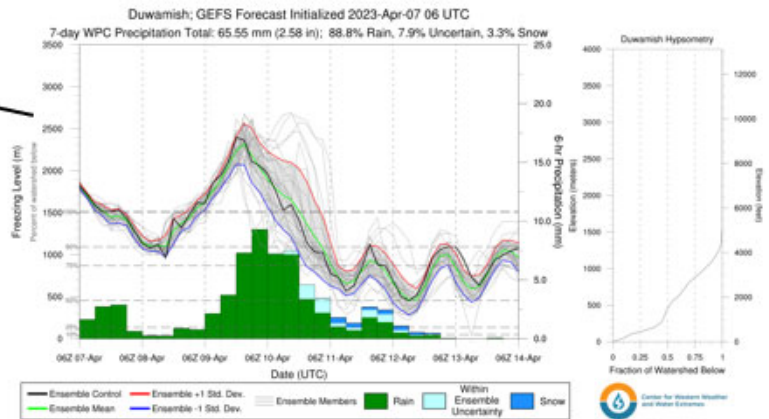
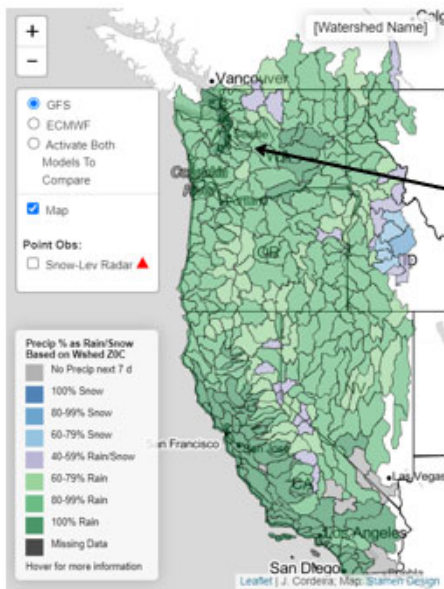
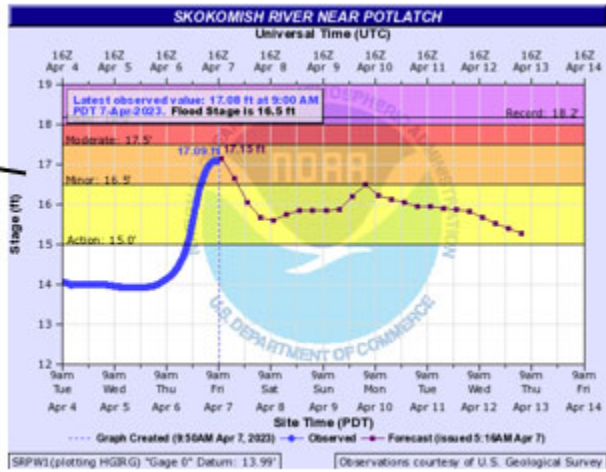
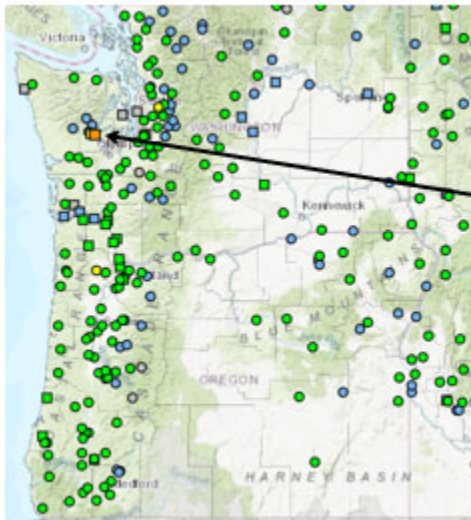
Stay alert to official NWS forecasts, watches, and warnings at [weather.gov](https://www.weather.gov) and follow guidance from local emergency management officials



Stay tuned to the CW3E webpage for a full AR Update



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Additional Considerations:

- Visit <https://nwrwc.noaa.gov/> 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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