Latest Update on Atmospheric River Forecast to Impact the Pacific Northwest

Updated: 09 October 2023

A quick look at the current atmospheric river (AR) and approaching AR that are set to impact the Pacific Northwest over the next 36 hours.

Forecast Highlights:
• A weak AR is currently bringing AR1 conditions (based on the Ralph et al. 2019 AR Scale) to coastal Washington and northern Oregon today, 9 October.
• An additional weak AR is forecast to make landfall in Oregon this evening in association with an area of low pressure in the eastern North Pacific that eventually moves over Washington.
• The 06Z GEFS landfall tool is showing very high confidence (> 95% probability) in AR conditions for coastal locations in the Pacific Northwest through 5AM PT 11 October.
• Additional AR activity is possible in the Pacific Northwest and Northern California this weekend. There is high uncertainty in the exact timing, location, and strength of the AR.
• The NWS Weather Prediction Center (WPC) is forecasting an additional 3-4 inches of precipitation in the Olympic Mountains, Oregon Cascades, and Coastal Ranges over the next three days.
• Precipitation that falls during these ARs is expected to be mostly beneficial given increased drought conditions and wildfire activity in the region.
• For the weekend AR, the 00Z GEFS is showing large ensemble spread in the Queets-Quinault watershed, with some members forecasting several inches of mean areal precipitation during the 15-18 October period.
• Freezing levels will remain quite high with these storms and hydrologic responses are expected to be minimal.

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.
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Additional Considerations:


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

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