



## Latest Update on Active Weather Pattern Over the Pacific Northwest

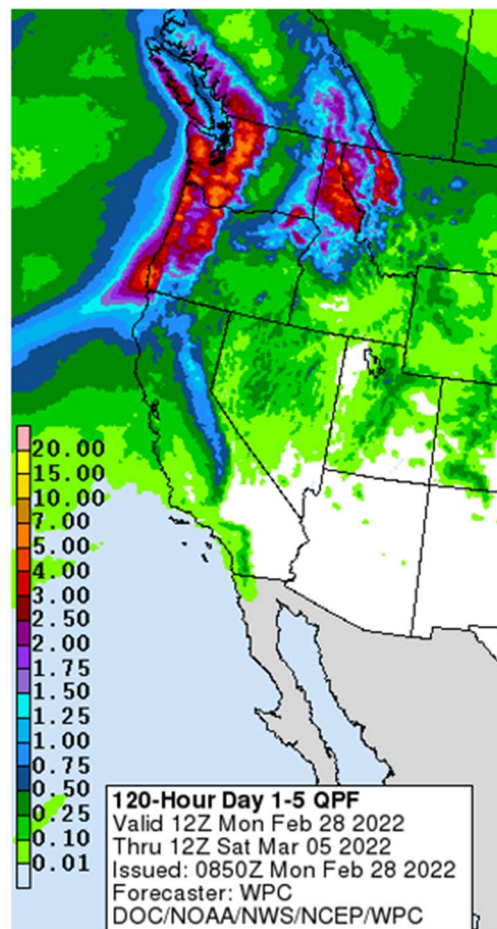
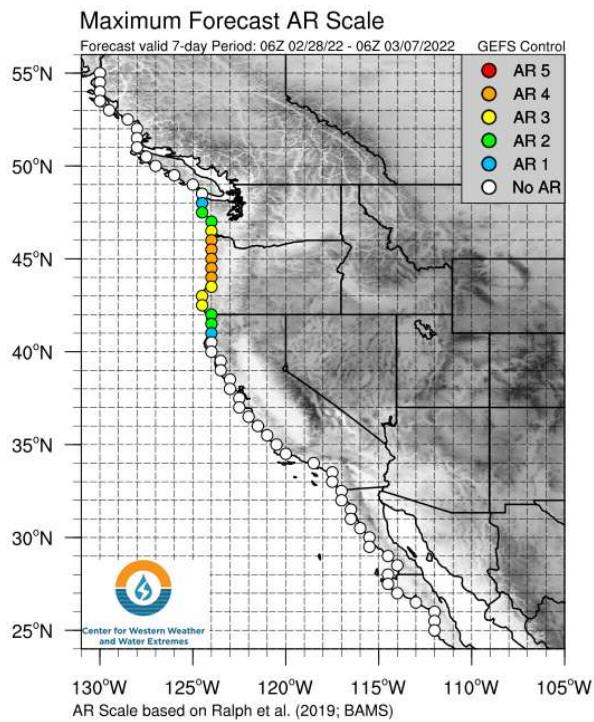
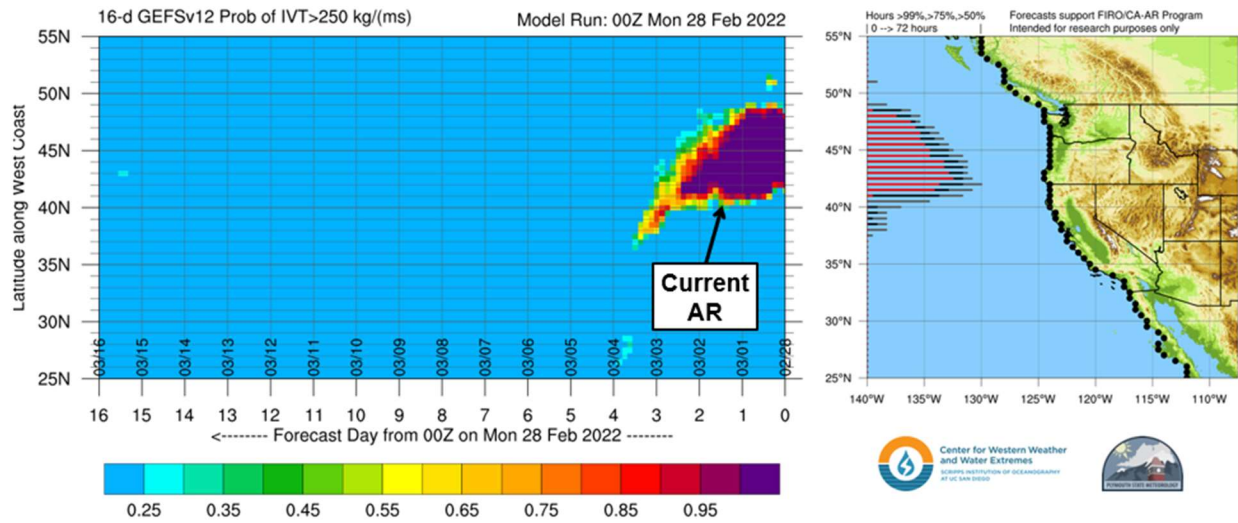
*Updated: 28 February 2022*

A quick look at the atmospheric river currently affecting the Pacific Northwest bringing rain-on-snow conditions to the mountains with the possibility of avalanches and flooding conditions.

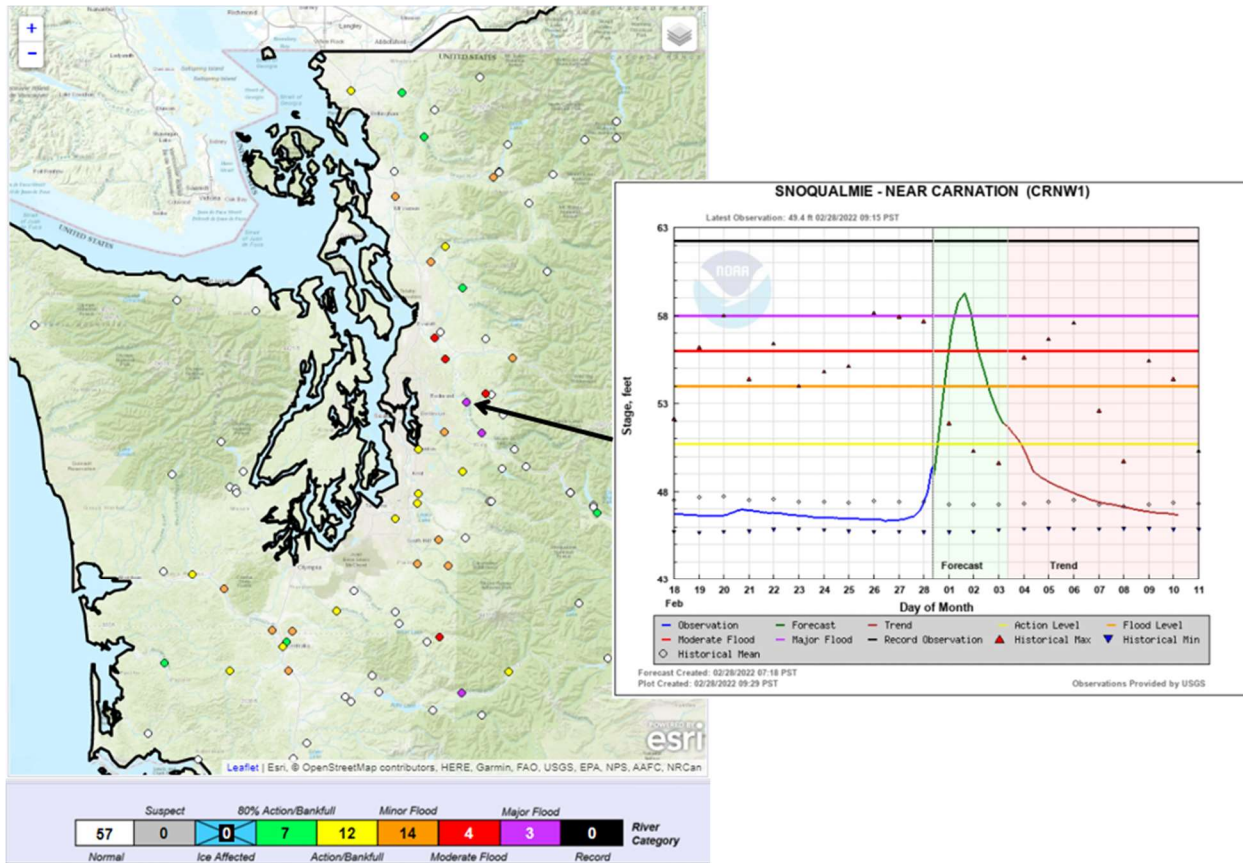
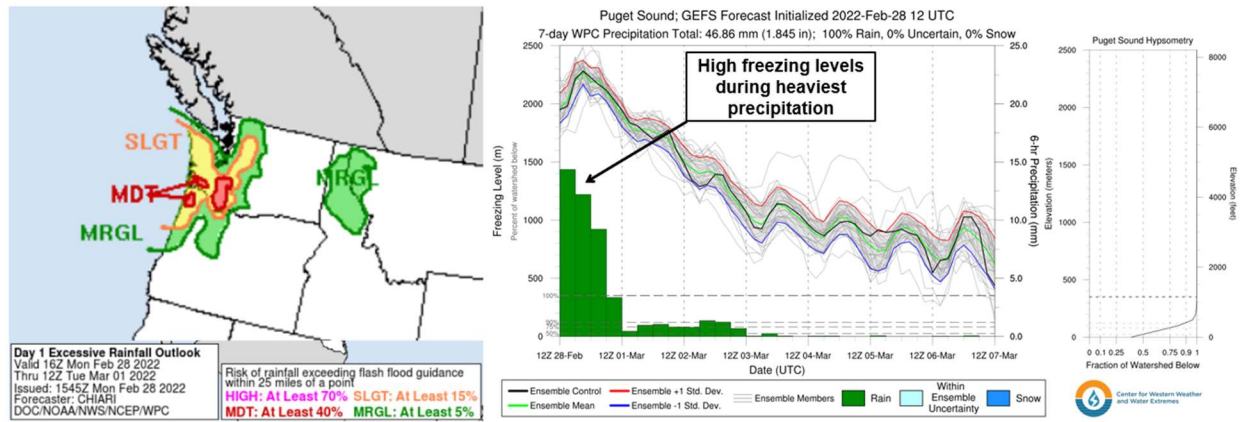
### Forecast Highlights:

- After an extended break in atmospheric river (AR) activity along the US West Coast, two ARs affected the Pacific Northwest (PNW) over the weekend extending into this week
- The Global Ensemble Forecast System (GEFS) is showing very high probabilities (> 95%) of AR conditions ( $IVT \geq 250 \text{ kg m}^{-1} \text{ s}^{-1}$ ) continuing over Washington, Oregon, and northwestern CA, ending 12Z 03 March
- The 06Z GEFS control and ensemble mean are both forecasting AR4 conditions through 06Z 02 March for much of coastal Oregon due to the combination of maximum IVT magnitude (>  $750 \text{ kg m}^{-1} \text{ s}^{-1}$ ) and AR duration (> 48 hours)
- AR 1 to AR 3 conditions are expected for coastal Washington with AR 1/AR 2 conditions for far northwestern CA
- AR 2/AR 3 conditions are expected to extend inland into north-central Oregon and south-central Washington
- The National Weather Service (NWS) is forecasting an additional 4-5 inches of precipitation for the Cascades, Olympic, and Oregon Coast Ranges over the next three days with an inch over the Sierra Nevada over the next five days
- With the potential for heavy precipitation, the NWS has issued a slight-to-moderate risk of excessive rainfall for western Washington and northwestern Oregon today into tomorrow
- Freezing levels are expected to be quite high (>1500m) during the time of heaviest precipitation leading to substantial amounts of rain-on-snow.
- 21 river gauges in western Washington are forecast to exceed flood stage between today and 02 March with three gauges forecast to reach major flood stage

**Stay tuned to the CW3E webpage for a full AR Update**



Stay tuned to the CW3E webpage for a full AR Update



**Additional Considerations:**

- Visit <https://nwrfc.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/>

Update provided by Shawn Roj  
[sroj@ucsd.edu](mailto:sroj@ucsd.edu)

**Stay tuned to the CW3E webpage for a full AR Update**