



Latest Update on Active Weather Pattern Over the Pacific Northwest

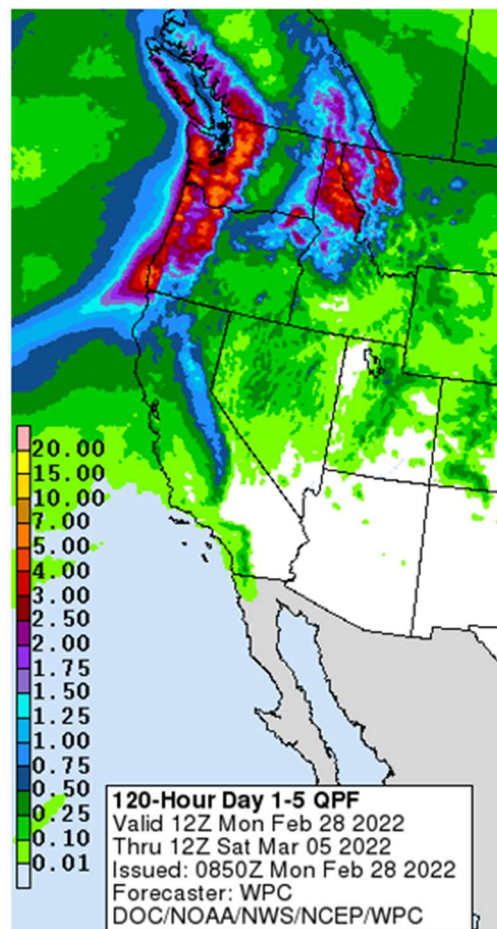
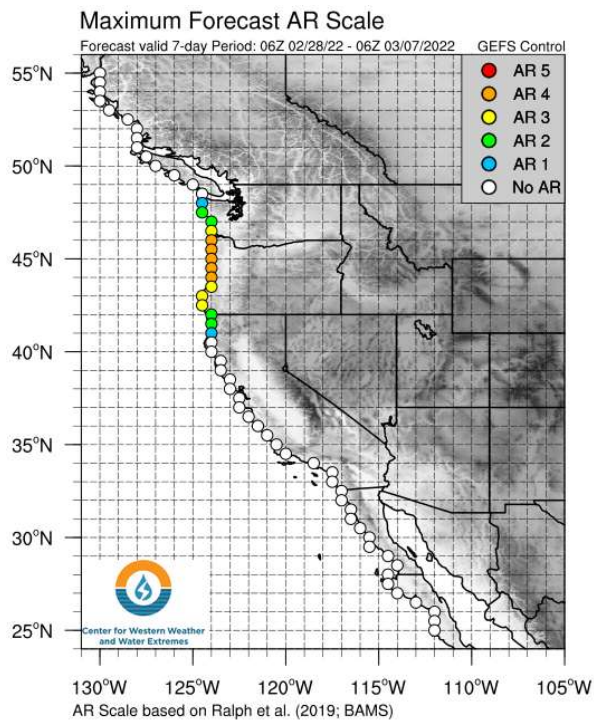
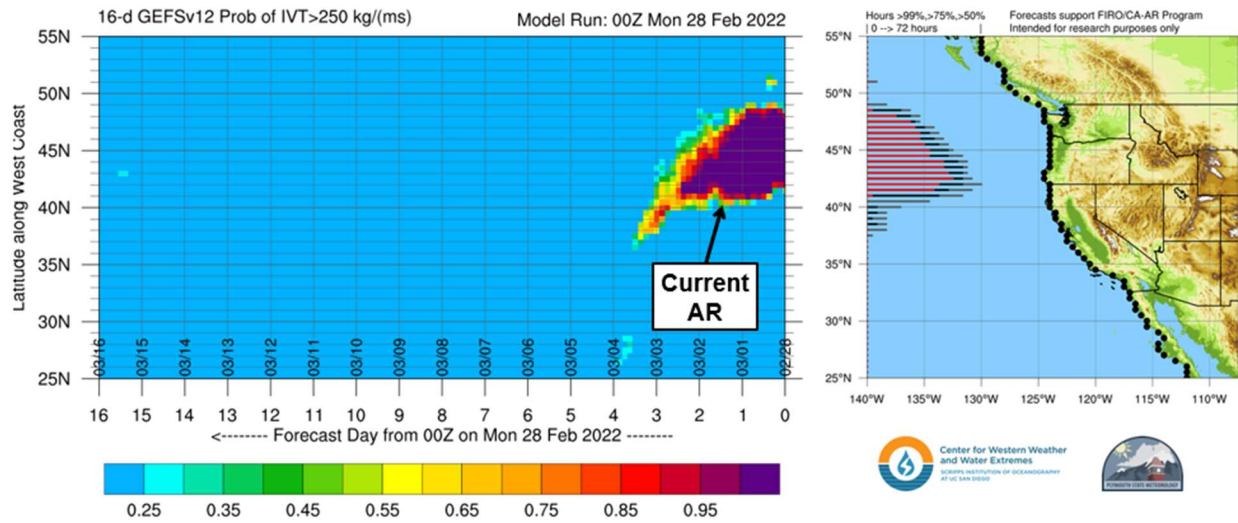
Updated: 28 February 2022

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.

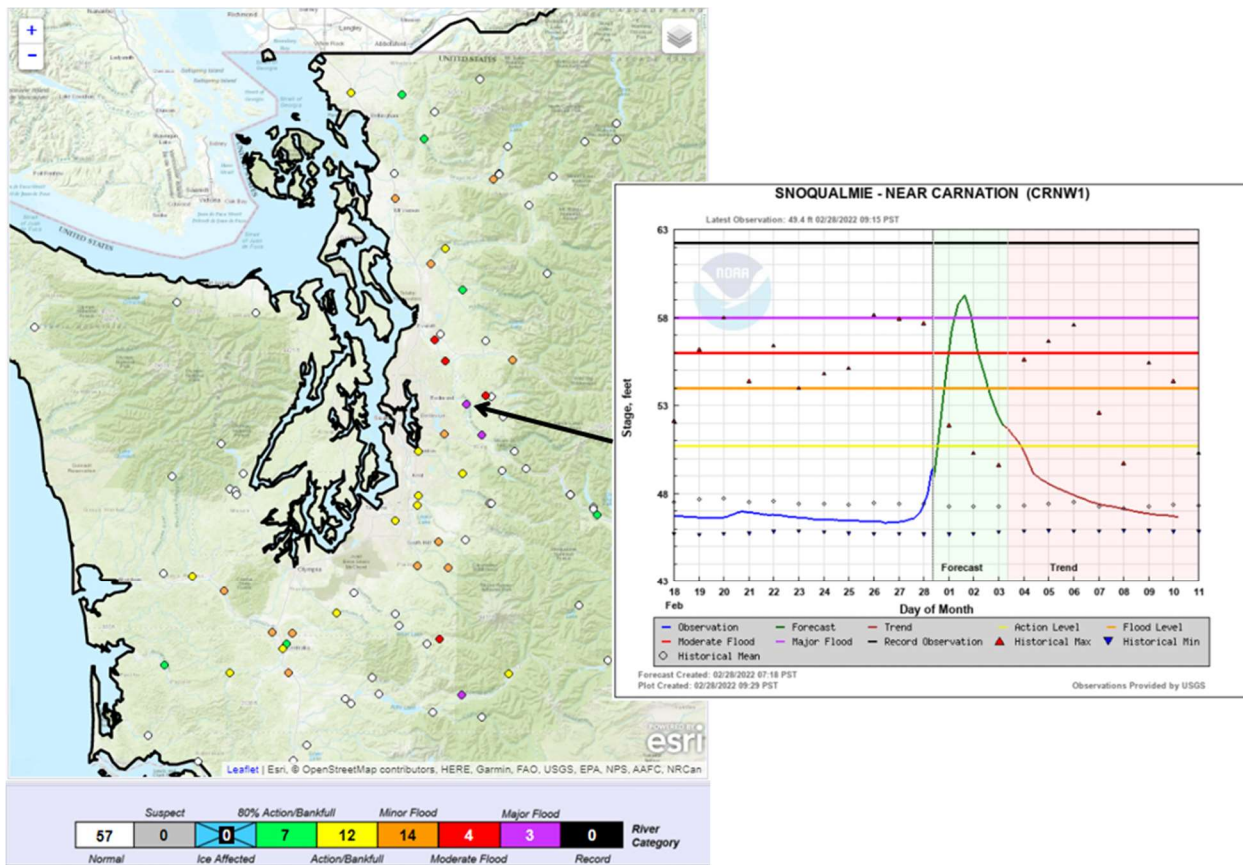
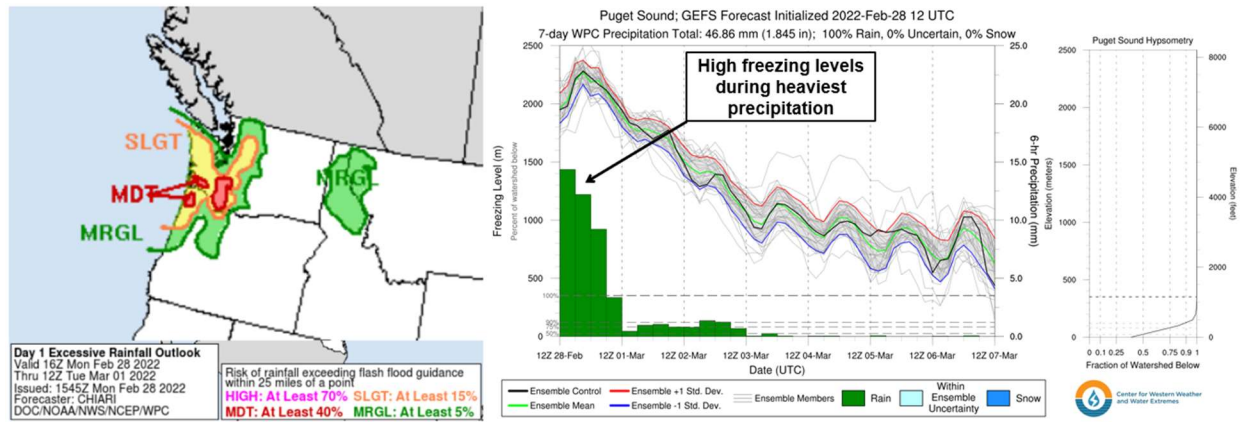
Forecast Highlights:

- 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

Stay tuned to the CW3E webpage for a full AR Update