Latest update on Atmospheric River Forecast to Bring AR 4 Conditions to the Pacific Northwest

Updated: 30 Jan. 2020

Due to the combination of recent precipitation and the forecast precipitation produced by AR 4 conditions, the Northwest River Forecast Center is predicting five rivers in western Washington to rise above major flood stage.

Forecast Highlights:
- Two separate pulses of high IVT are forecast to produce over 40 hours of AR conditions and IVT magnitudes as high as 800 kg m\(^{-1}\) s\(^{-1}\) over Coastal Washington
- While a majority of GEFS ensemble members are suggesting AR 4 conditions over Coastal Washington, there is still some ensemble disagreement in overall magnitude of IVT along the coast
- As much as 5 – 7 inches of precipitation has fallen over portions of Washington during the previous week due to several pulses of AR conditions into the region, which has created wet soil moisture conditions and primed the region for high runoff with additional precipitation

A long duration and strong magnitude AR is forecast increase the potential for river flooding and landslides in western Washington
- The AR 4 conditions that are forecast to impact Washington over the next several days could potentially produce >10 inches of precipitation over some high elevation locations in Western Washington
- The Northwest River Forecast Center is currently predicting five stream gauges to rise into Major Flood Stage and an additional 14 stream gauges to rise above Flood Stage in western Washington

Additional Considerations:
- Visit [cnrfc.noaa.gov](http://cnrfc.noaa.gov/) for specific river and stream forecasts and [weather.gov/sew/](http://weather.gov/sew/) for point specific watches and warnings

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/)

Stay tuned to the CW3E webpage for a full AR Update