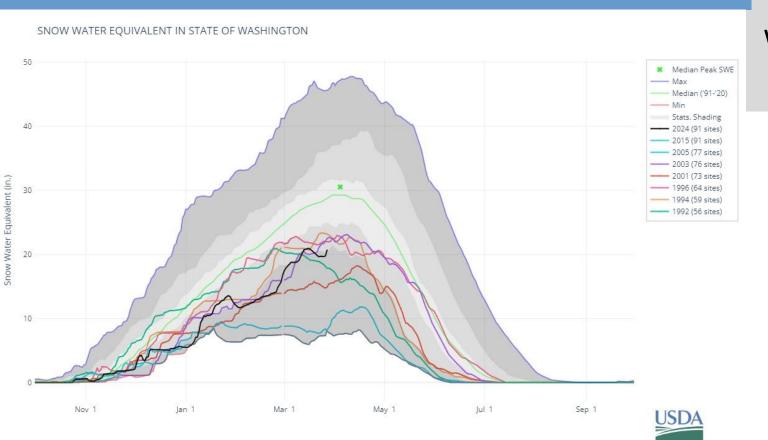


USDA Natural Resources Conservation Service Snow Survey and Water Supply Forecasting Program



Washington Water Supply Availability Committee March 27, 2024

Matt Warbritton Supervisory Hydrologist **USDA NRCS SSWSF** matt.warbritton@usda.gov

Portland Data Collection Office 503-307-2829





Snowpack Conditions

Statewide Snowpack

Profile for Snow Water Equivalent



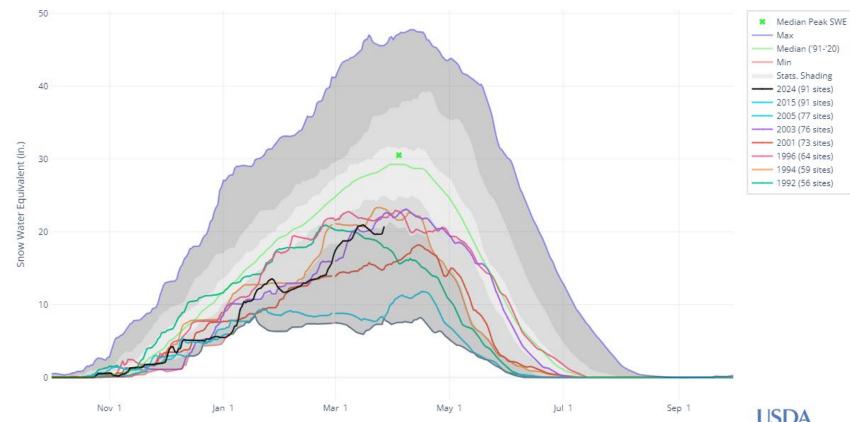
Statewide Snowpack: **68%** of normal

Last meeting: 64% of normal

% of median peak snowpack: 68% Days until median peak: 8

Snowpack Percentile: 10

SNOW WATER EQUIVALENT IN STATE OF WASHINGTON



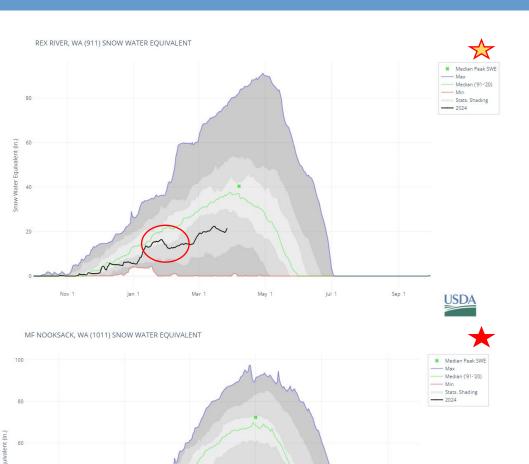


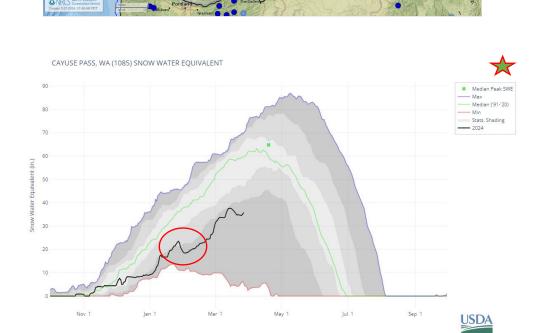
Winter 2024 Impact: Mid-Winter Heatwave

USDA



Natural Resources Conservation Service

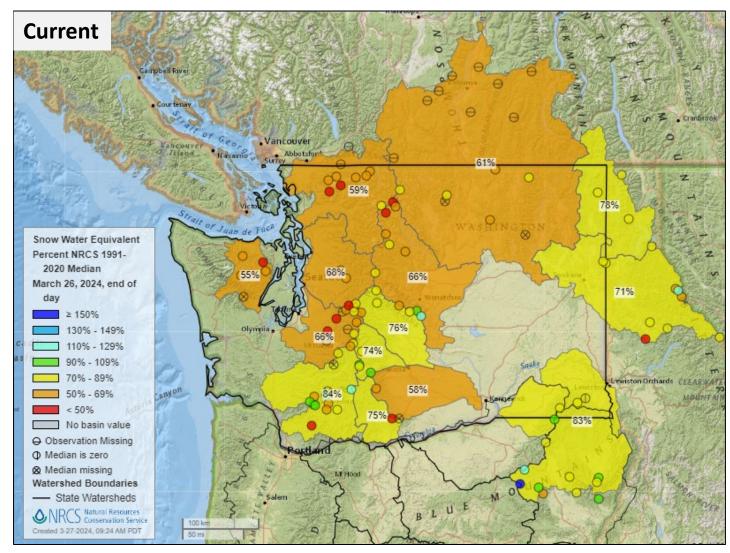




Watershed Boundaries

— Region (2-Digit HUC)

Snowpack Basin & Site Map

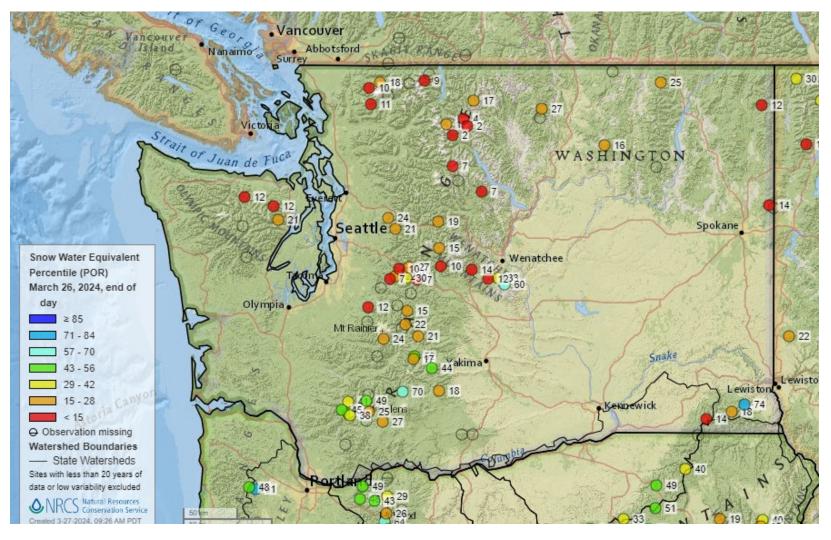




Snow Water Equivalent

Percentile (Period of Record)





Snow Drought Classification

(based on SWE percentiles)

D0 – Abnormally Dry (=< 30)

D1 – Moderate Drought (=< 20)

D2 – Severe Drought (=< 10)

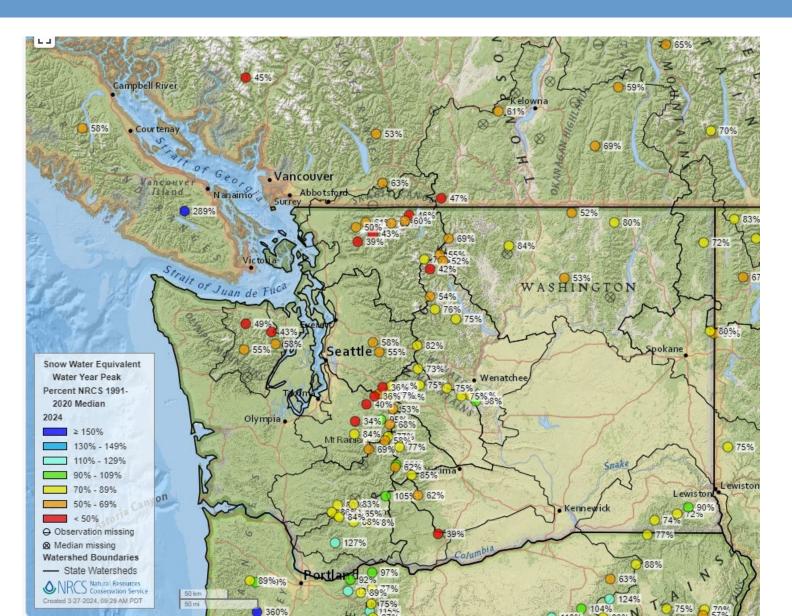
D3 – Extreme Drought (=< 5)

D4 – Exceptional Drought (=< 2)

Hatchet et al. 2022

Water Year Peak SWE (% of normal)





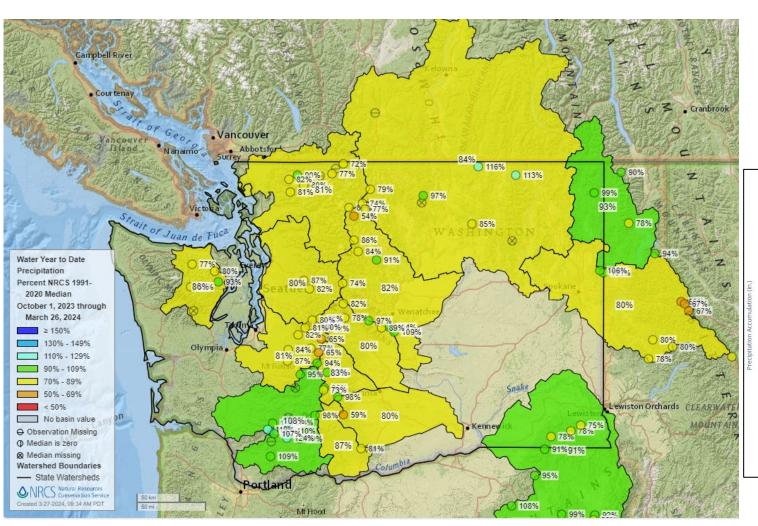




Precipitation Conditions

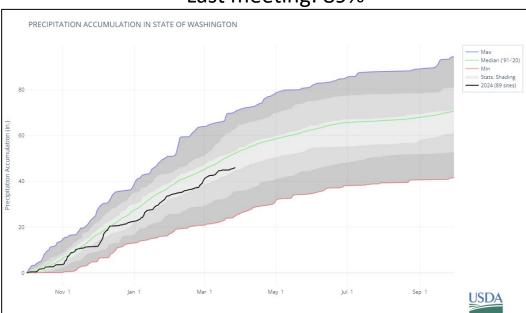
WYTD Precipitation – Basin Map





Statewide WYTD Precipitation: 88% of normal 38 – percentile (normal period)

Last meeting: 89%



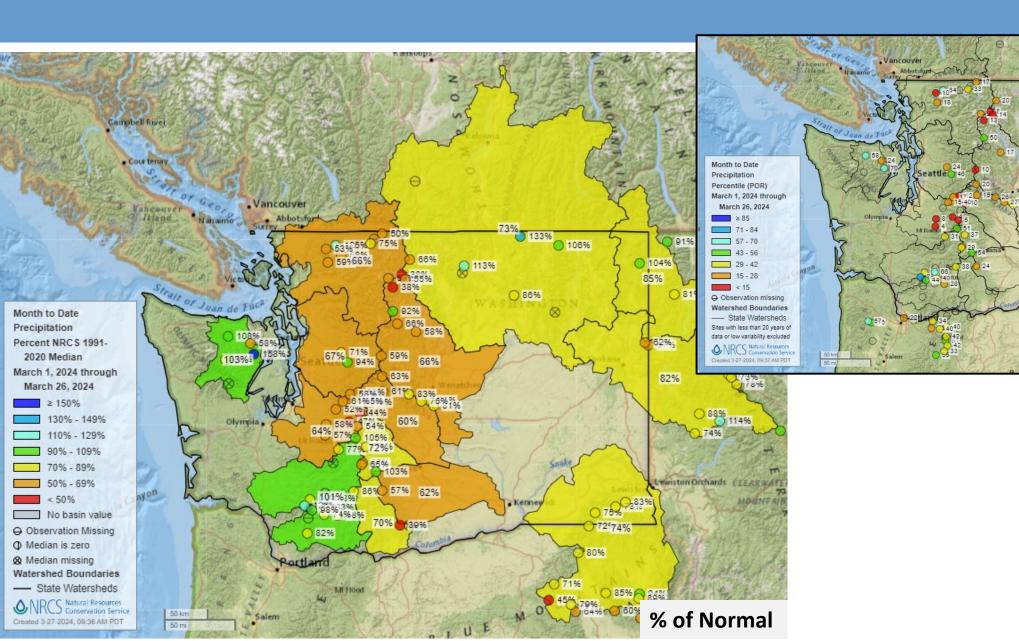
Month-to-Date Precipitation – Basin and Site Map



WASHINGTON

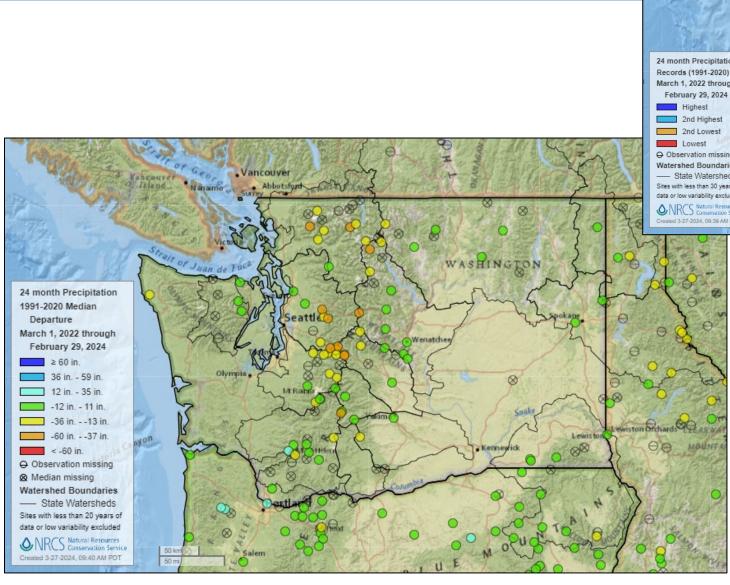
Natural Resources Conservation Service

Percentile



Precipitation: Compounding Deficits

24-month Precipitation – Normal Departure



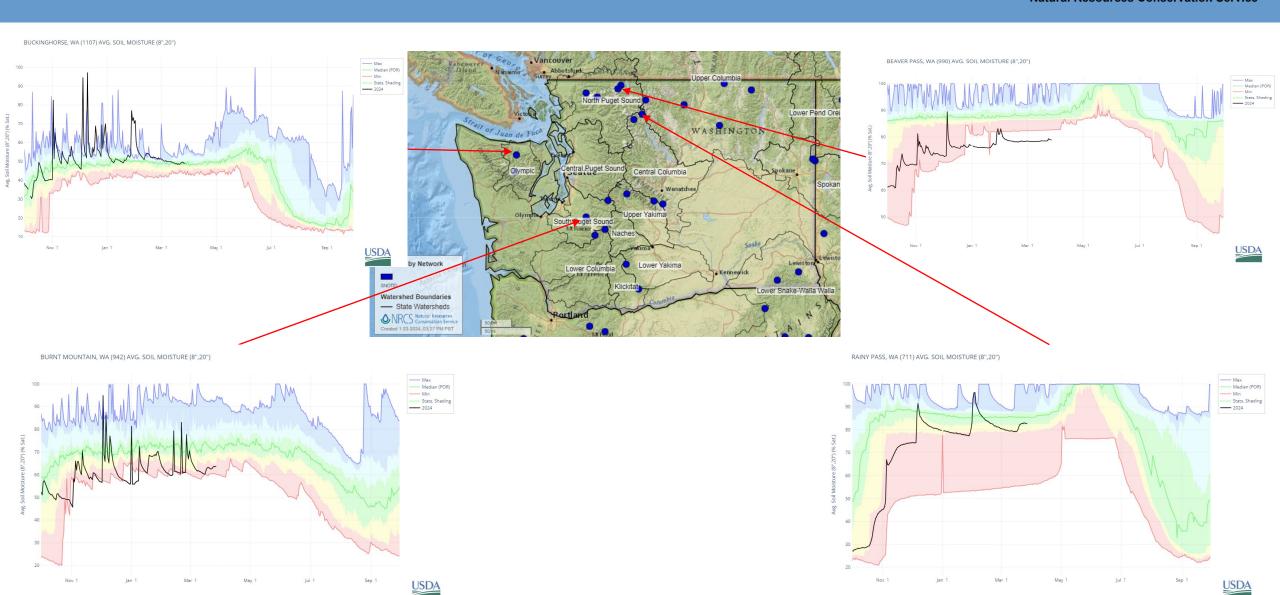






WY 2024 – Select Site Charts

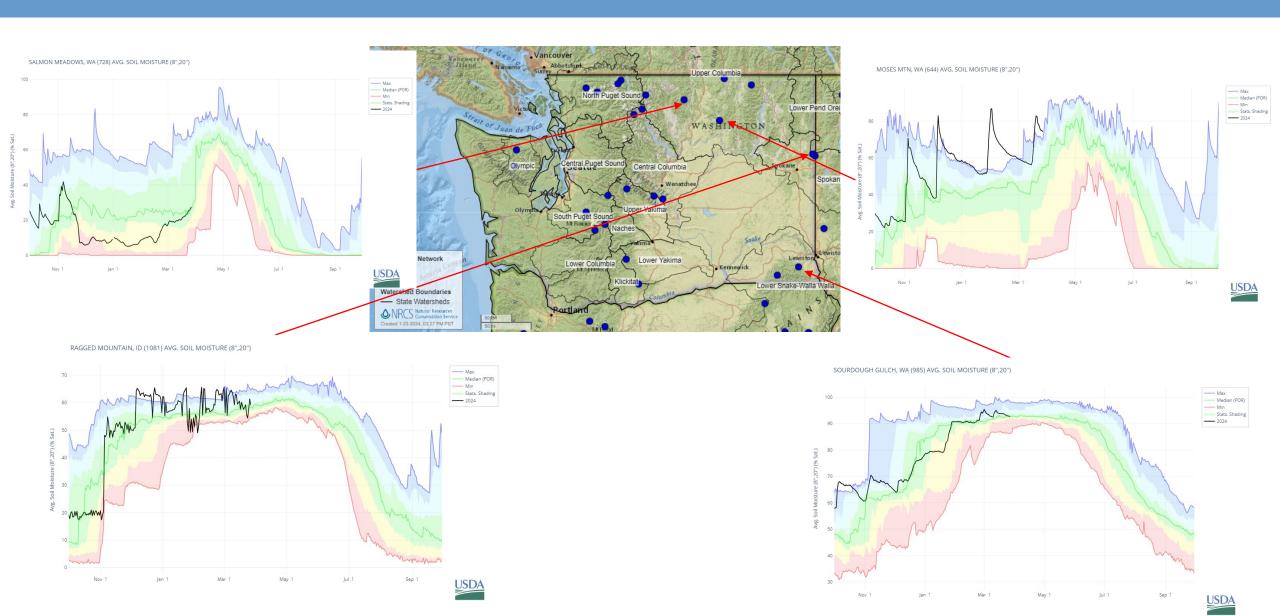




WY 2024 – Select Site Charts



Natural Resources Conservation Service

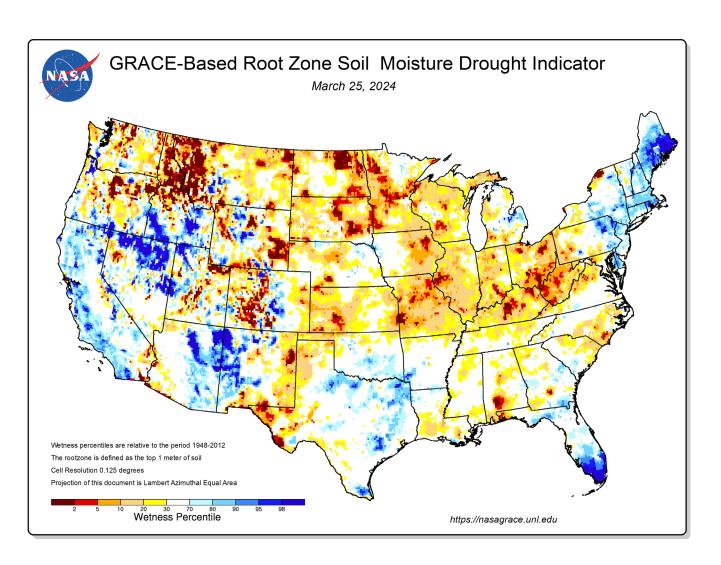


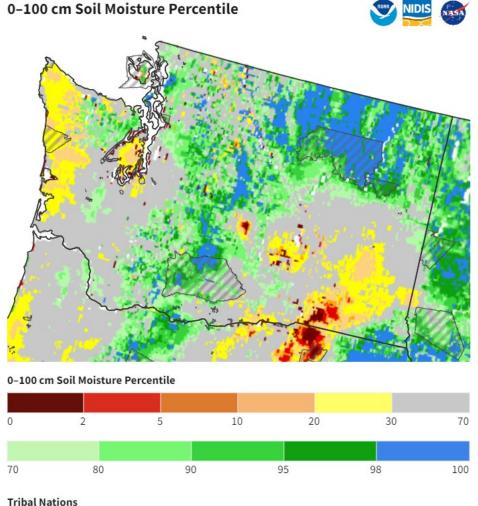
NASA GRACE and SPORT-LIS



Drought.gov

Natural Resources Conservation Service





Tribal Nation Boundaries

Source(s): NASA

Data Valid: 03/27/24

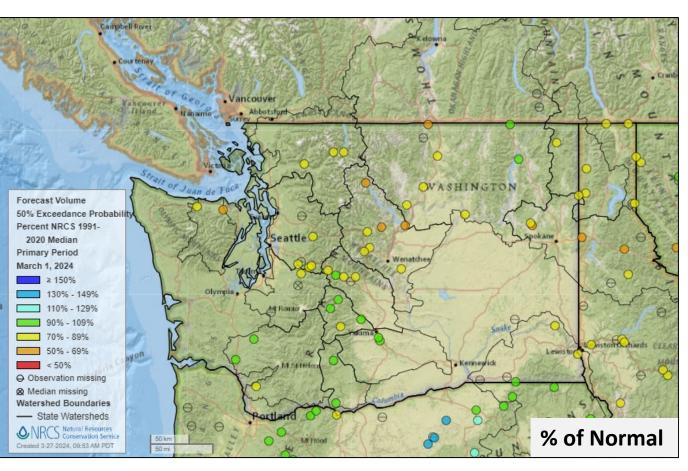




Water Supply Outlook

March 1: Water Supply Forecasts

April-September Volumetric Streamflow





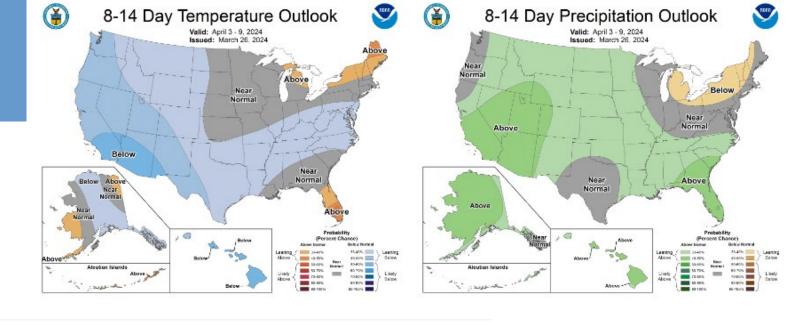
Next distribution: week of Apr. 1 Reports available <u>here</u>



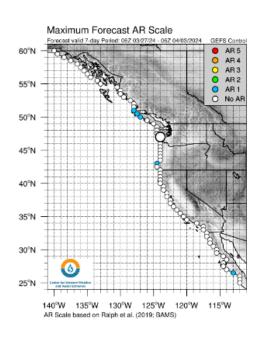


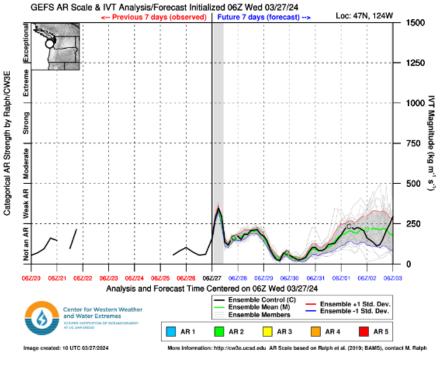
Climatic Outlook

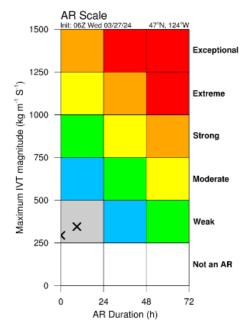
Near-term



Atmospheric River Forecast











Thank you!

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503-307-2829

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