Regional Climate Perspective

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24 January 2020
2020 Water Year

- Averaged statewide, near-normal temperatures (+0.1°F) but with obvious spatial variability

- Averaged statewide, WY 2020 precipitation is the 13th driest* on record (-5.52”; 67% of normal)

*records since 1895
December 2019

- Above normal Dec temperatures (+3.5°F averaged statewide); in the upper third of the historical record

- Averaged statewide, December precipitation anomalies balance to some extent (-0.70” averaged statewide)
January 2020 so far

Departure from Normal Temperature (F)
1/1/2020 – 1/22/2020

Percent of Normal Precipitation (%)
1/1/2020 – 1/22/2020
## Huge Improvement in Snow

<table>
<thead>
<tr>
<th>Snow Water Equivalent Delta</th>
<th>Value</th>
<th>January 22, 2020 - December 31, 2019, end of day</th>
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<td>[Map showing snow water equivalent deltas across Washington state]</td>
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*Note: Values represent snow water equivalent (SWE) in inches.*
January improved WY-to-date precipitation in some locations, but still below normal in eastern WA.
Sea Surface Temperature Anomalies 12-18 January 2020
El Niño/La Niña Forecasts Indicate Elevated Odds of Near-Neutral Conditions through Summer 2020
Latest Set of Week 3-4 Forecasts from CFSv2

Anomally high 500 hPa Z over west coast of lower 48 states: Stronger than normal onshore-directed flow and relatively warm and wet weather for WA.
Climate Model Ensemble Projections for FMA Temperature from Jan 2020

NMME

NMME Forecast of TMP2m Anom IC=202001 for Lead 1 2020 FMA

IMME

C3S multi-system seasonal forecast
Mean 2m temperature anomaly
Nominal forecast start: 01/01/20
Variance-standardized mean

< 2.0°C  2.0−1.0  1.0−0.5  0.5−0.2  0.2−0.2  0.2−0.5  0.5−1.0  1.0−2.0  > 2.0°C
Variation among Models: Precipitation
Climate Model Ensemble Projections for JFM Temperature from Dec 2019

NMME

IMME
Early January Model Runs

Latest Model Runs

CFSv2 monthly z700 anomalies (m; shaded) and total (dm; contours)

Feb 2020

Initial conditions: 13Jan2020–22Jan2020

Latest Simulations
From NOAA’s CFS
Model Indicate a
Warmer February
Final Remarks

- Water year 2020 still warm and dry despite the wetter than normal January in western WA
- Remarkable early January mountain snowfall that made great improvements
- ENSO not liable to be a significant player in the climate system during the next 6 months
- Expecting temperatures to run moderately above normal for the rest of winter into summer due to multi-year trends and climate model output
- My storm water system should continue to get challenged