

# Water Supply Update

## Water Resources Advisory Committee Meeting

Jeff Marti

July 10, 2023



STATE OF WASHINGTON  
**DEPARTMENT OF ECOLOGY**

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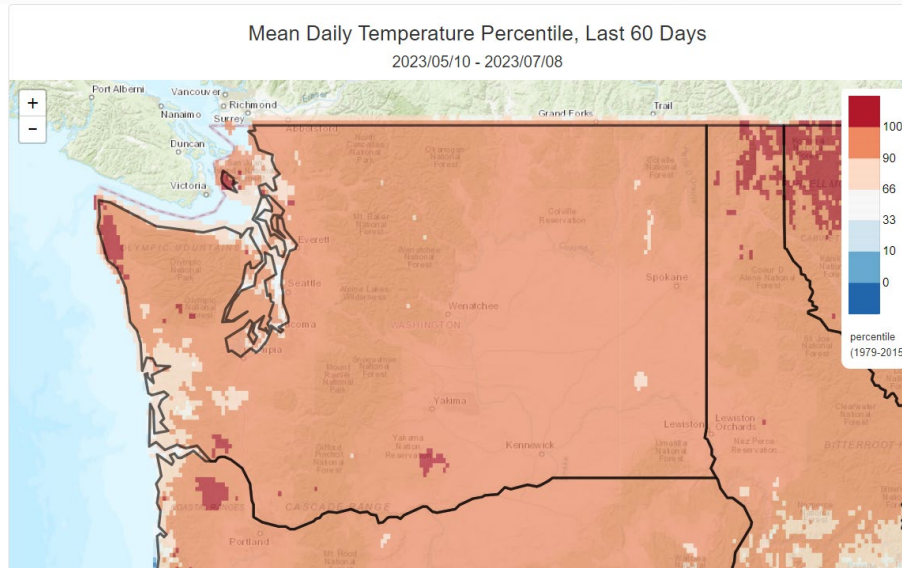
**DEPARTMENT OF ECOLOGY DROUGHT ADVISORY**  
**July 5, 2023**

A Drought Advisory is in effect for all areas of Washington State.

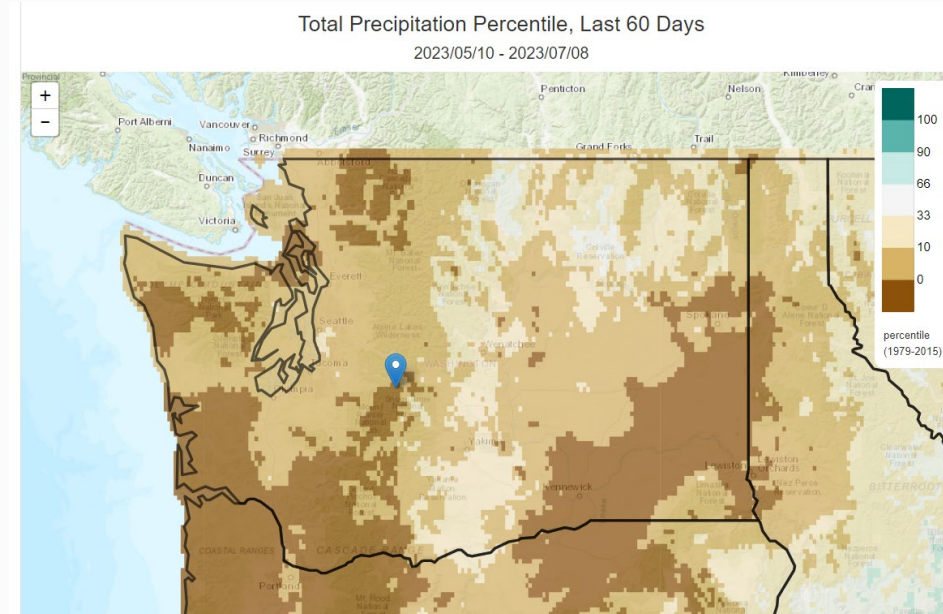
A Drought Advisory is intended to increase awareness of developing drought conditions and provide recommendations for voluntary actions to alleviate impacts, pursuant to RCW 43.83B.405(1).

# Last 60 Days

## Temperature



## Precipitation



Climate Toolbox

- The warm temperatures over the last 60 days are in the 90<sup>th</sup> percentile or above\* for the entire state
- Precipitation percentiles are less than the 10<sup>th</sup> percentile\* for most of western WA and southeastern WA
- May – June likely to rank near the 4<sup>th</sup> warmest, 4<sup>th</sup> driest such period since 1895 (PRISM Climate Group; official NOAA stats due July 11<sup>th</sup>)

\*Records since 1979

## Drought Rule (WAC 173-166)

The determination of drought conditions will consider seasonal water supply forecasts, other relevant hydro-meteorological factors (e.g., precipitation, snowpack, soil moisture, streamflow, and aquifer levels) and also may consider extreme departures from normal conditions over subseasonal time frames.



# Northwest River Forecast Center ESP Natural Forecast





River and Hydrology | Water Supply | Observations | Weather Forecasts | Climate | NWRFC

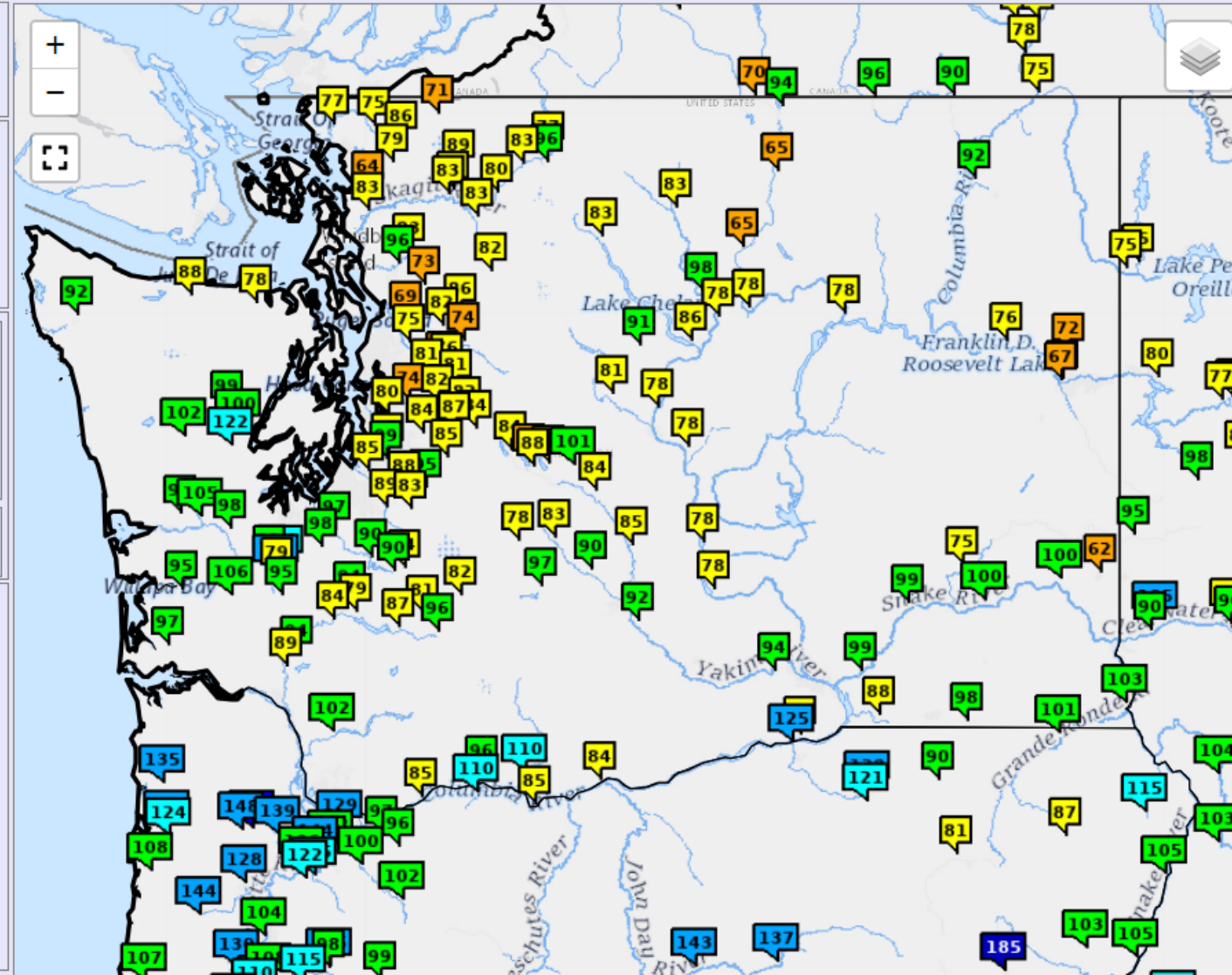
Home | Zoom Out | --- Quick Zooms --- | ESP Issued: 2023-07-09 | Ensemble Date: 2023-07-09 | [Permalink](#)

Search  
Enter NWS ID:

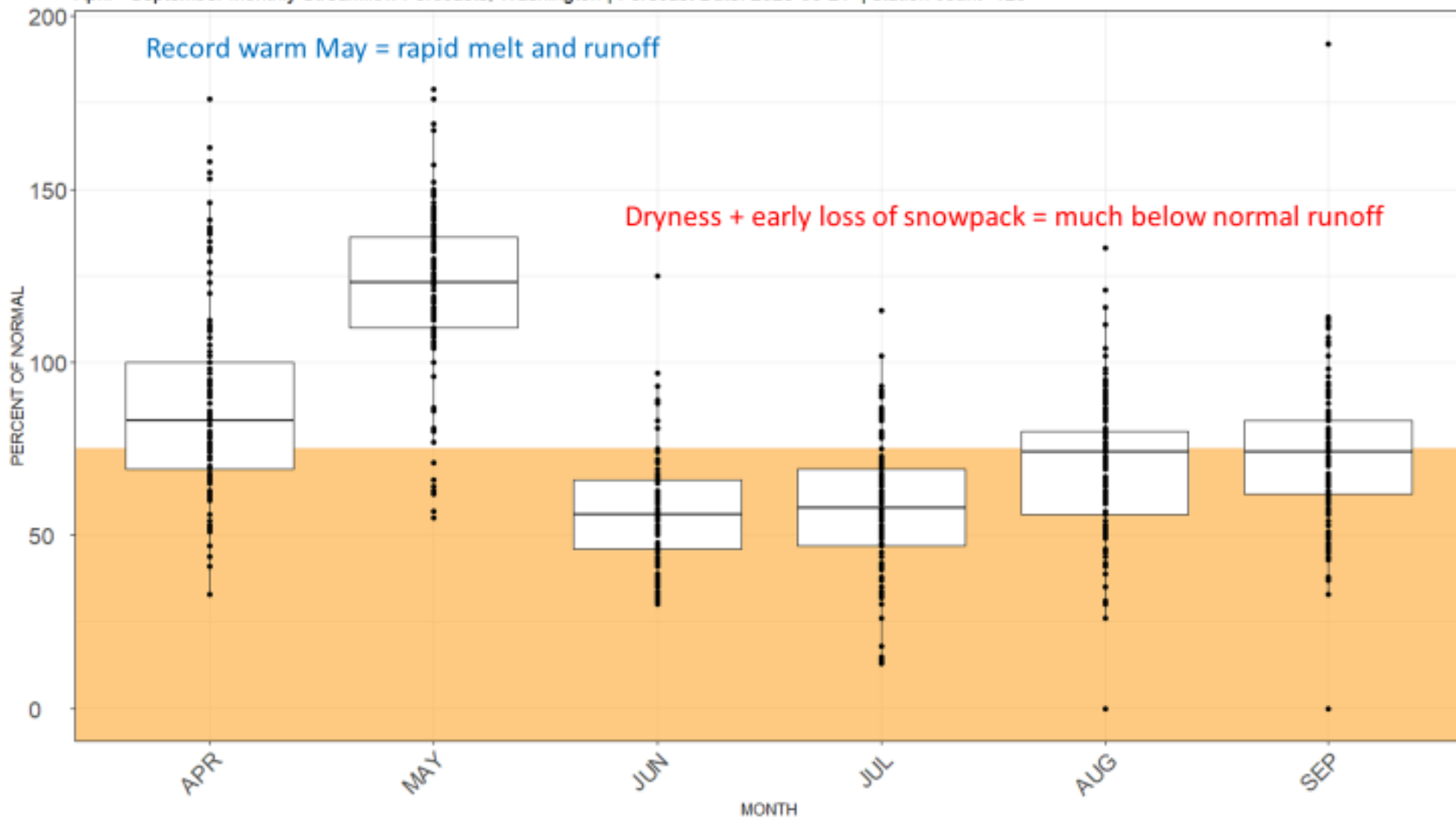
- Map Overlays
- ☒ NWRFC Boundary
  - ☐ NWRFC Basins
  - ☐ NWS HSAs
  - ☐ Counties
  - ☒ States

- ESP Natural Forecast
- ☐ Natural Status
  - ☒ Natural % of Normal
  - ☐ Rank (ASC)
  - ☐ Rank (DESC)
  - ☐ Exceedance (%)
  - ☐ Percentile (%)
- Natural Runoff
- ☐ Runoff Status
  - ☐ Runoff % of Normal

- ESP Natural Forecast
- Period: APR-SEP  
Forecast (% Normal)
- ☐ No Normal, No Data
  - ☐ < 25
  - ☐ 25-50
  - ☐ 50-75
  - ☐ 75-90
  - ☐ 90-110
  - ☐ 110-125
  - ☐ 125-150
  - ☐ 150-175
  - ☐ > 175
- 
- 

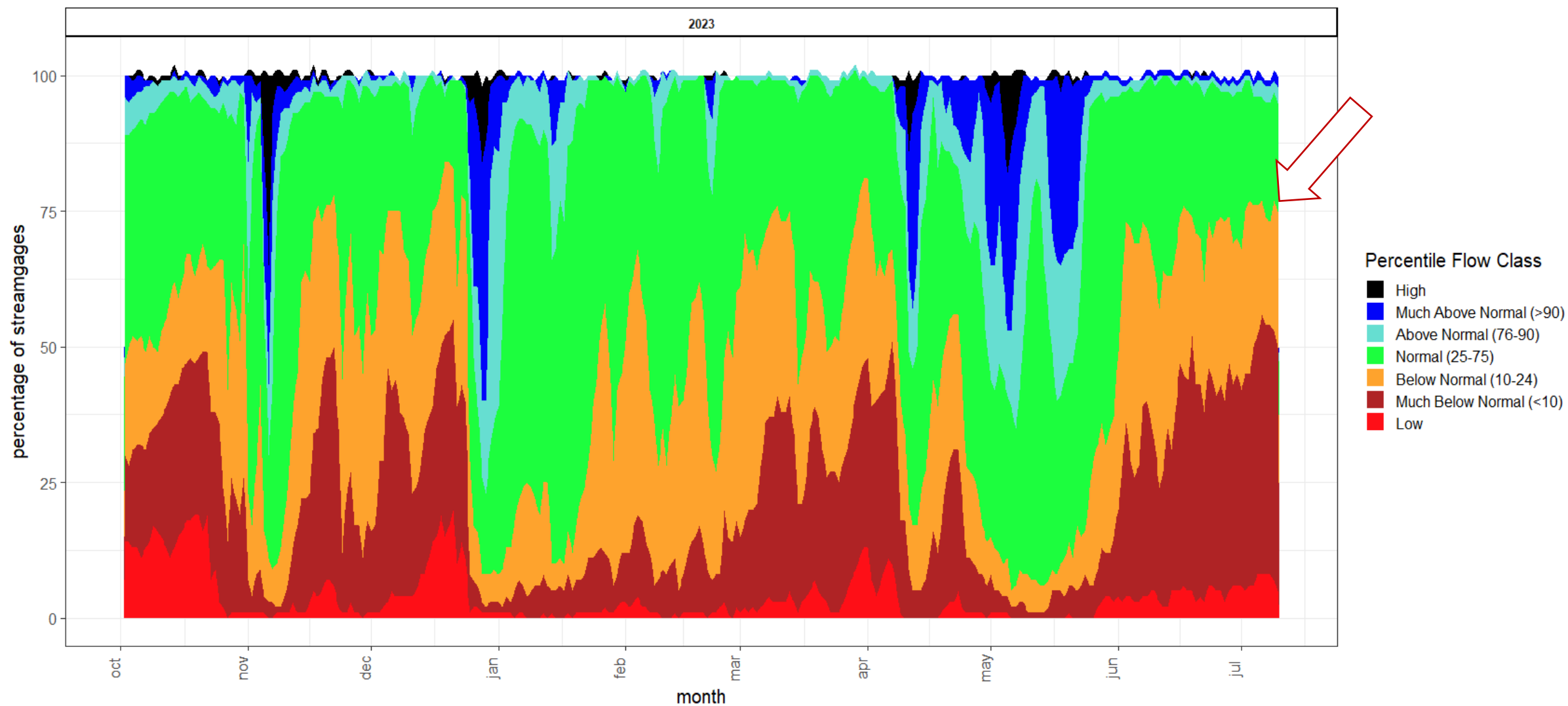


April - September Monthly Streamflow Forecasts, Washington | Forecast Date: 2023-06-21 | station count=125



NWRFC DATA

Time series plot of daily streamflow compared to historical streamflow for the day of the water year (Washington)



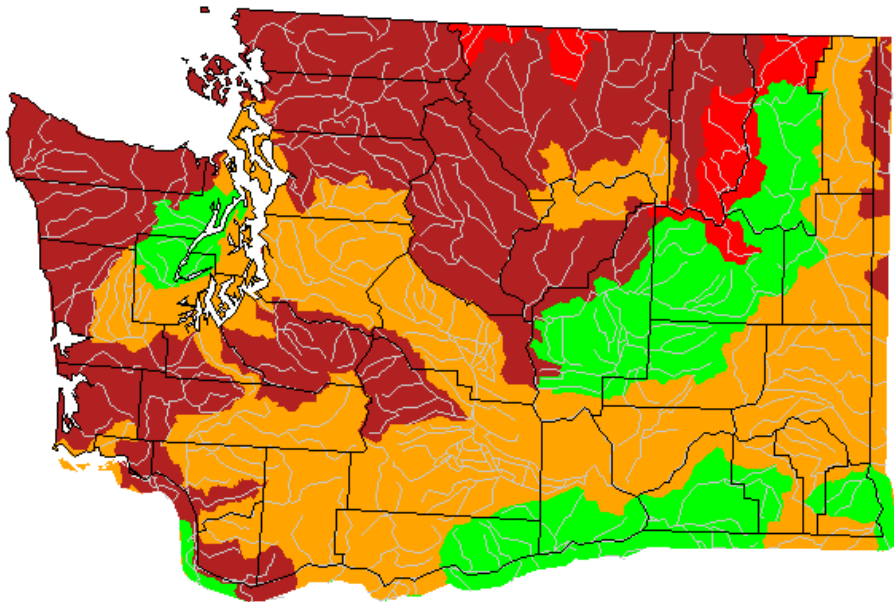
data: USGS WaterWatch



## Map of 28-day average streamflow compared to historical streamflow for the day of the year (Washington)

Washington ▼ or Water-Resources Regions ▼

Saturday, July 08, 2023



Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

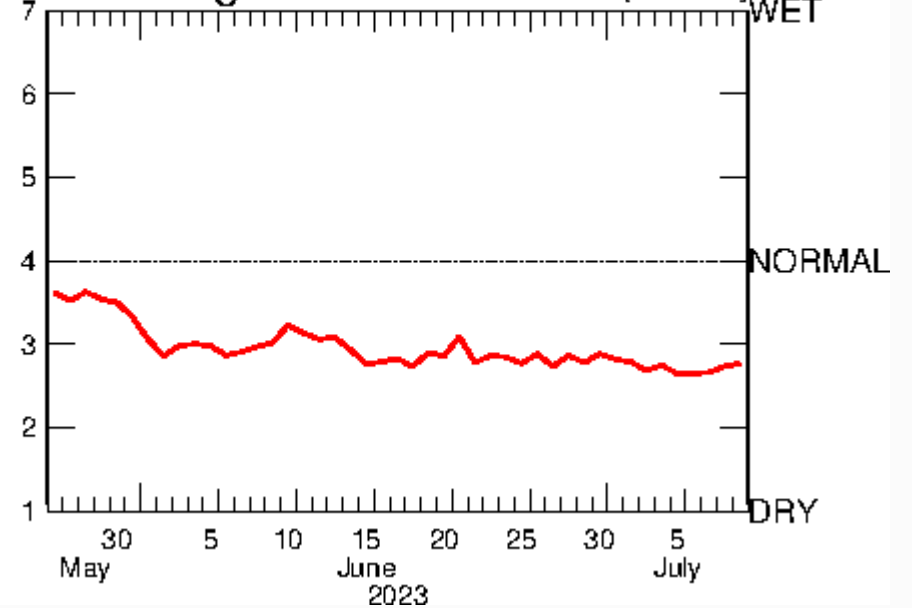
## Time series plot of real-time streamflow compared to historical streamflow for the day of the year (Washington)

Last 45 Days

Washington

[129 sites]

Average streamflow index





# Most affected users

Irrigation users with junior water rights may be required to restrict their diversions to protect senior water rights.

Small water systems and private homeowners dependent on shallow wells or lacking storage are most vulnerable to impacts in dry years.

Drought conditions can cause severe stress to fish coping with low streamflows and high water temperatures. Wildlife can struggle to find water sources and forage.

The Northwest Interagency Coordination Center forecasts above normal potential for significant wildfire risk in Washington during the months of July, August, and September.

# Less affected users

Farms and communities receiving water from the Columbia River and Lake Roosevelt are not expected to experience shortages this year if current weather trends continue.

Mid- to large-size water systems plan to meet customer water requirements during critical years and are not expected to encounter shortage issues.

Runoff forecasts for major rivers in Klickitat and Skamania Counties – which benefitted from much above normal snowpack – are not expected to fall below drought levels, but low precipitation will still affect lower elevation streams, pasture lands, and increase wildfire risk.

# Next steps: reassessing the need for a declaration

- Information regarding impacts and the potential for hardship is critical to a decision whether a declaration should be issued.
- A declaration could be for specific areas of the state, or the whole state.
- Executive Water Emergency Committee scheduled to meet July 18.
- If a declaration is issued, Ecology would be authorized to process requests for emergency water right transfers.
- Funding for emergency drought response grants would become available.

Thank you