



Columbia River Policy Advisory Group Water Supply Update

July 6 2023

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Department of Ecology



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

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DEPARTMENT OF ECOLOGY DROUGHT ADVISORY

July 5, 2023

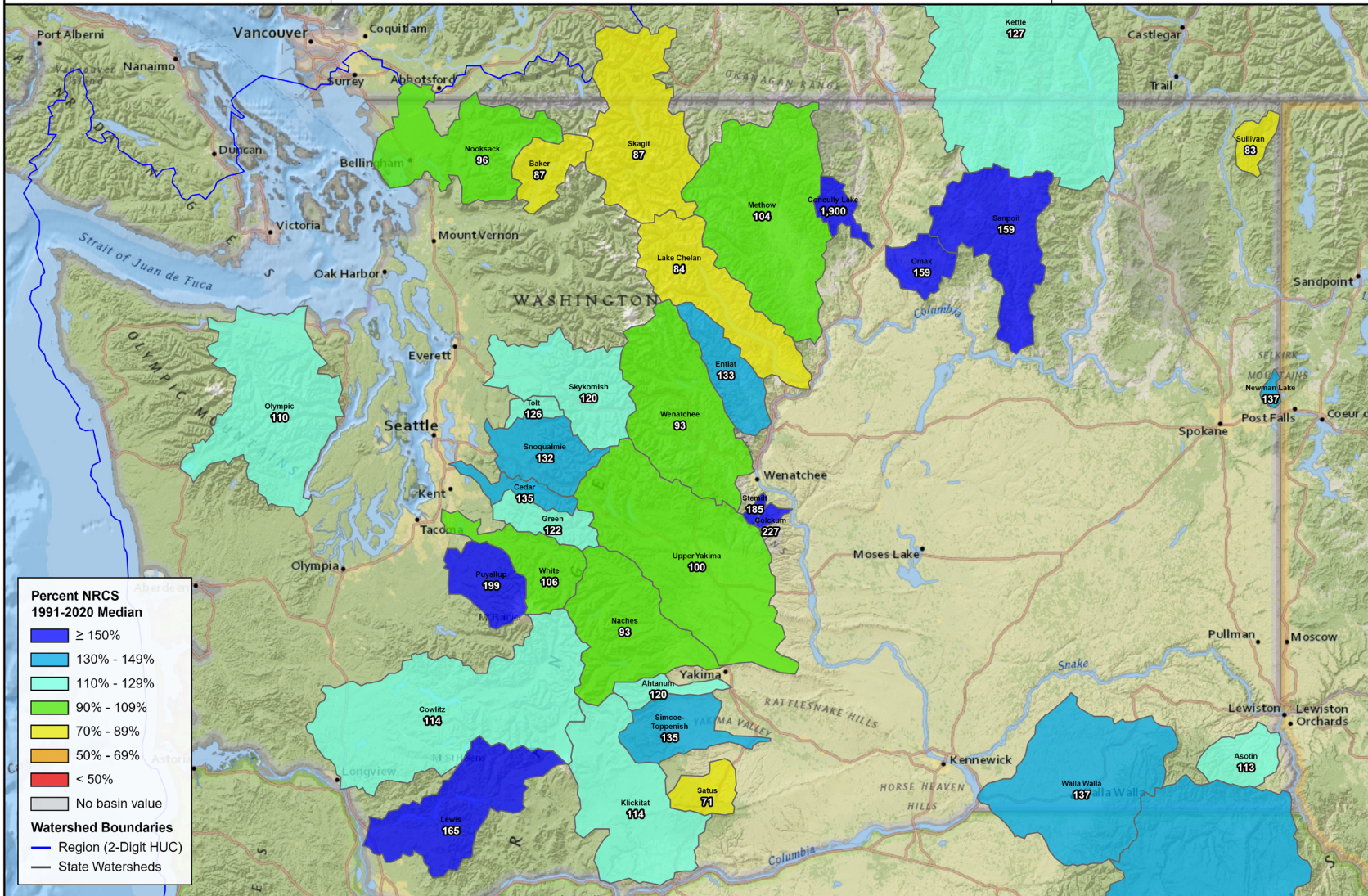
A Drought Advisory is in effect for all areas of Washington State.

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).

Snow Water Equivalent

Percent NRCS 1991-2020 Median

May 1, 2023, end of day



Percent NRCS 1991-2020 Median

- ≥ 150%
- 130% - 149%
- 110% - 129%
- 90% - 109%
- 70% - 89%
- 50% - 69%
- < 50%
- No basin value

Watershed Boundaries

- Region (2-Digit HUC)
- State Watersheds

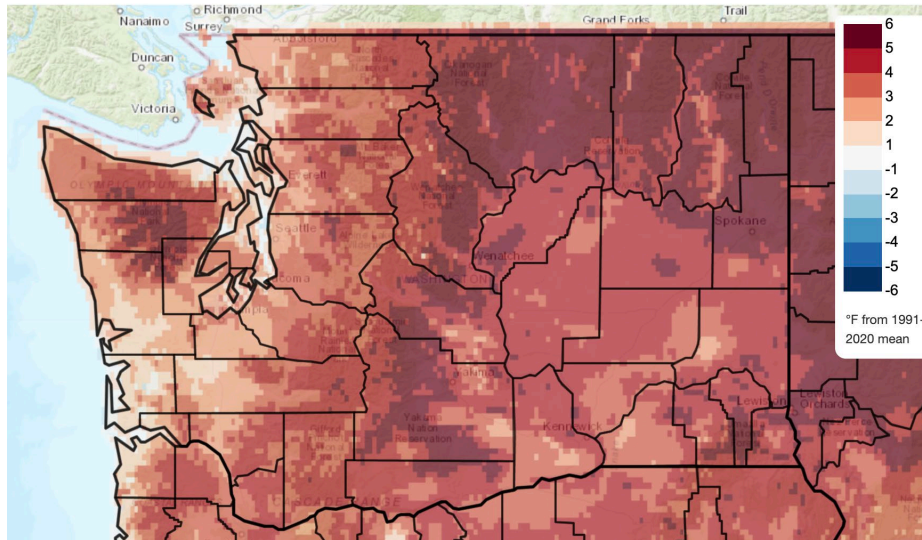


Last 60 Days

Temperature

Mean Daily Temperature Anomaly, Last 60 Days

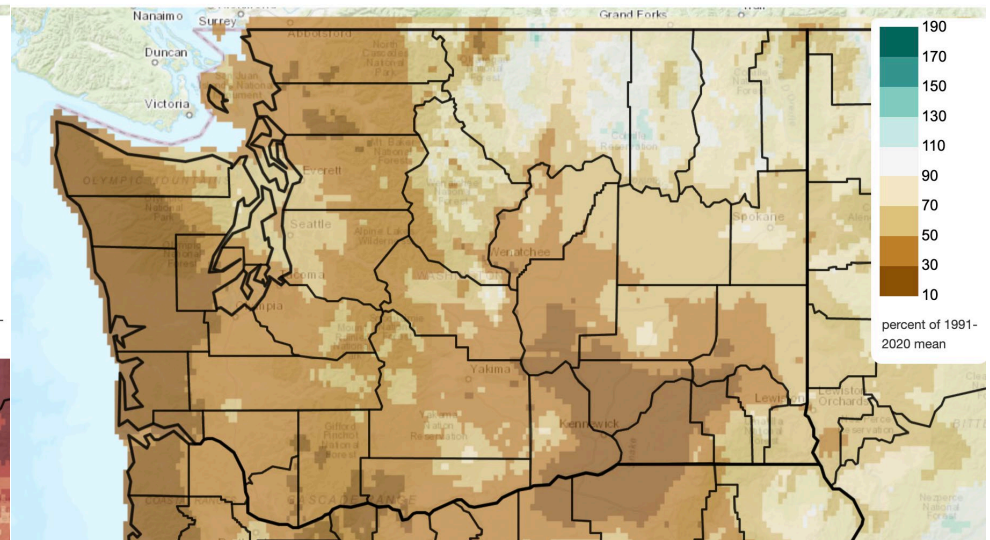
2023/04/28 - 2023/06/26



Precipitation

Total Precipitation Anomaly, Last 60 Days

2023/04/28 - 2023/06/26



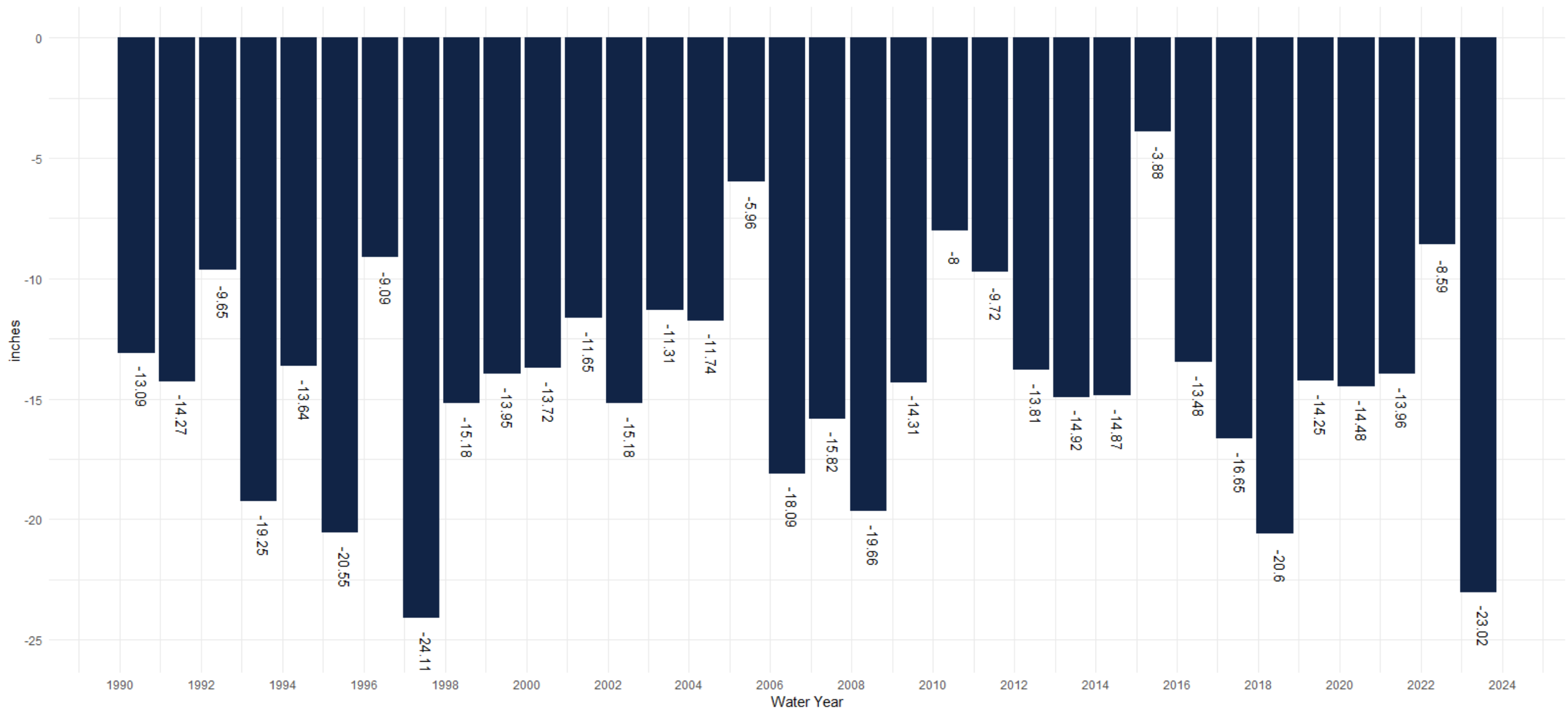
Climate Toolbox

- The warm temperatures over the last 60 days are in the 90th percentile or above* for the entire state
- Precipitation percentiles are less than the 10th percentile* for most of western WA and southeastern WA

*Records since 1979

Changes in Monthly Statewide Average SWE for May

Water Years 1990 -



Search

Enter NWS ID:

GO

Map Overlays

- NWRFC Boundary
- NWRFC Basins
- NWS HSAs
- Counties
- States

ESP Natural Forecast

- Natural Status
- Natural % of Normal
- Rank (ASC)
- Rank (DESC)
- Exceedance (%)
- Percentile (%)

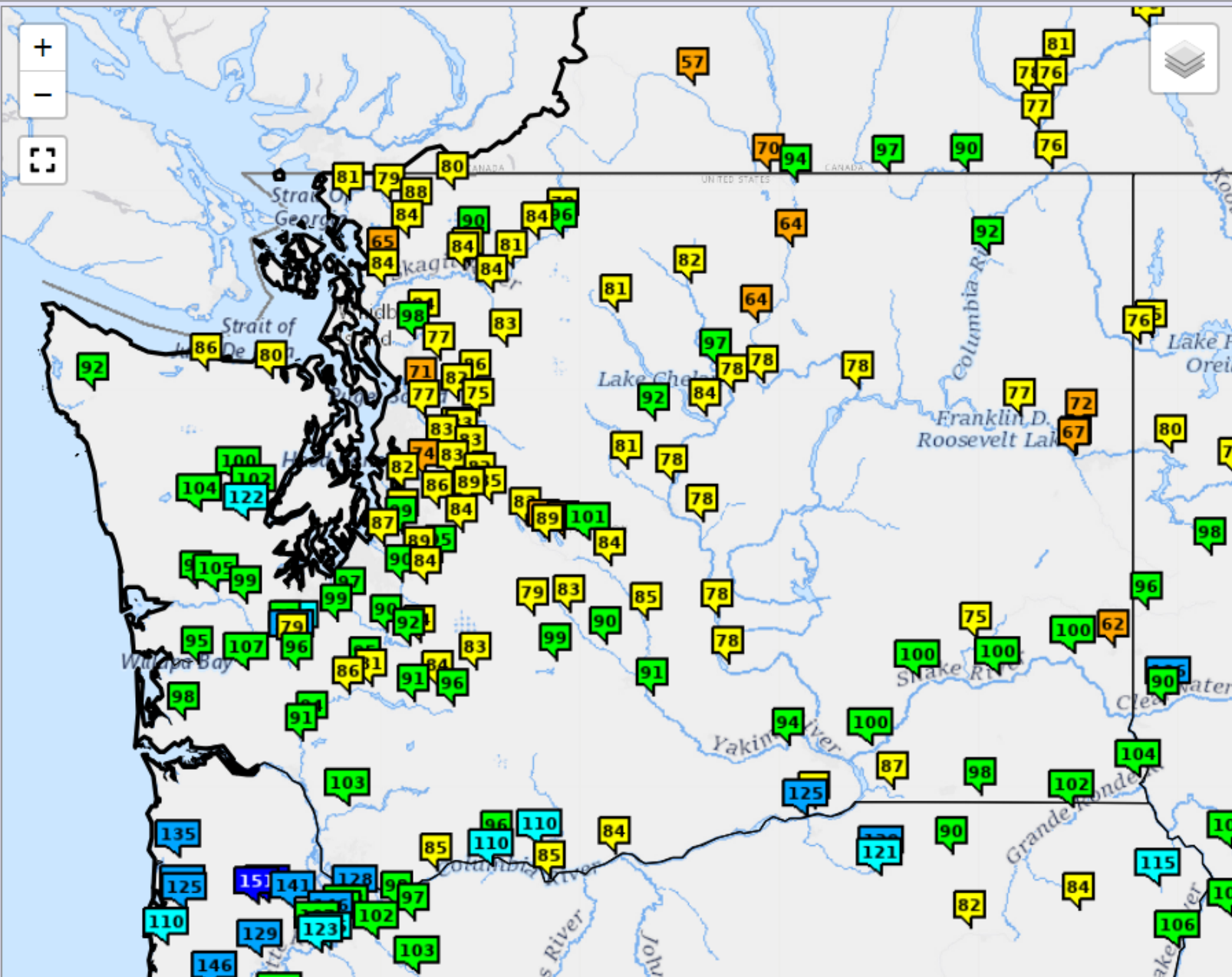
Natural Runoff

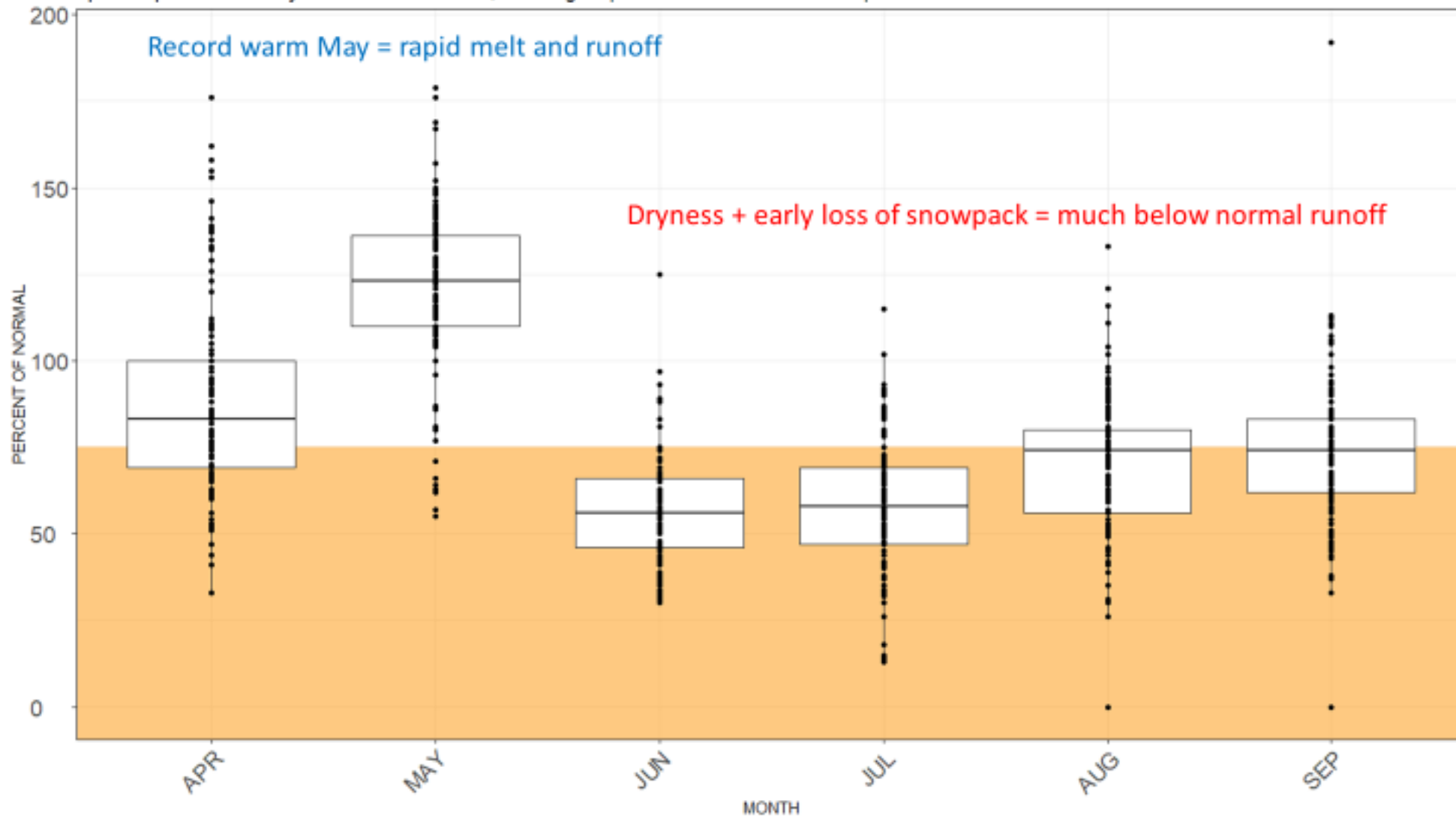
- Runoff Status
- Runoff % of Normal

ESP Natural Forecast

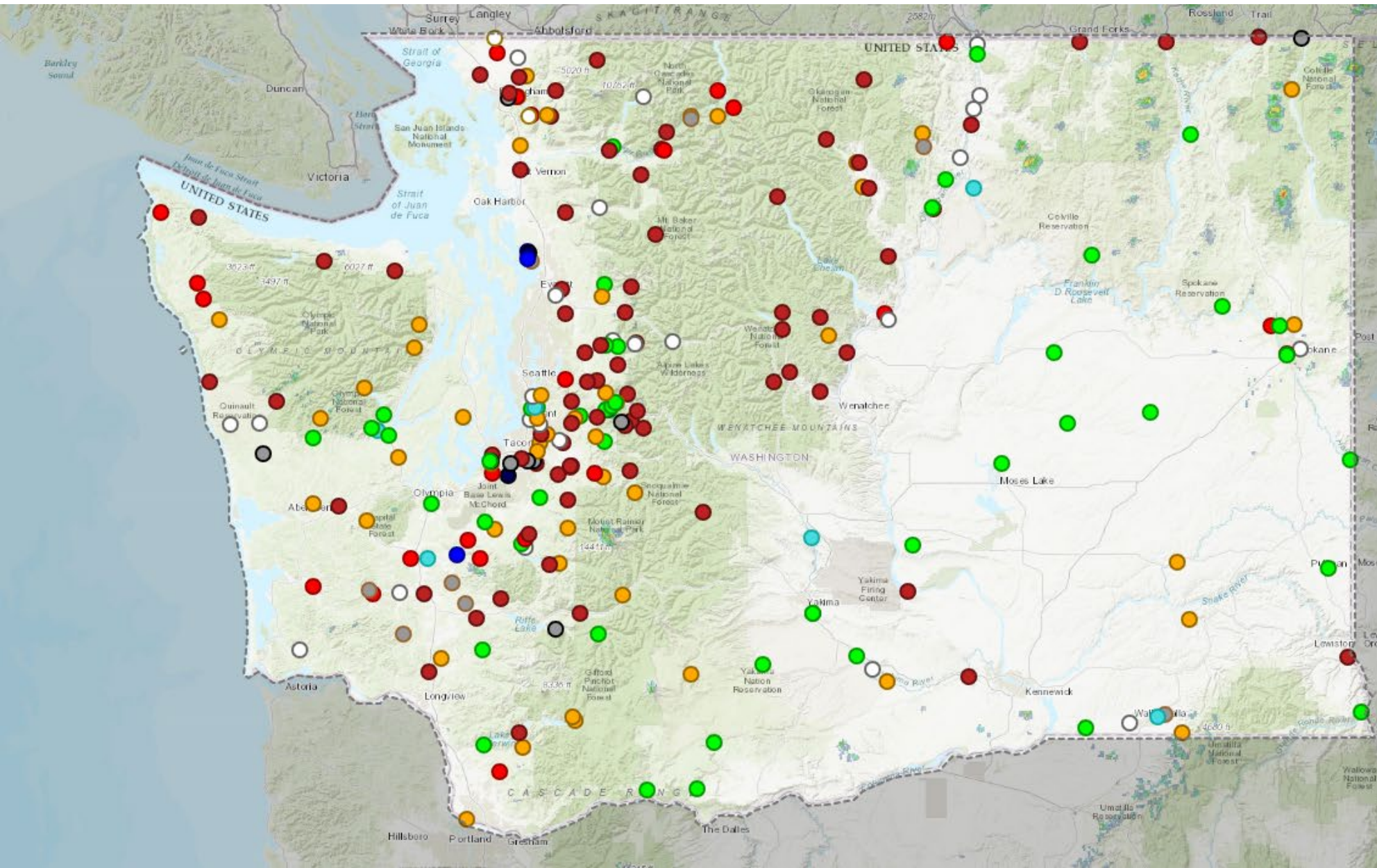
Period: APR-SEP
Forecast (% Normal)

- No Normal, No Data
- < 25
- 25-50
- 50-75
- 75-90
- 90-110
- 110-125
- 125-150
- 150-175
- > 175





Streamflow Status July 6, 2023 – USGS Water Dashboard



Streamflow: Status

- Above flood stage
- All-time high for this day
- Much above normal
- Above normal
- Normal
- Below normal
- Much below normal
- All-time low for this day
- Not flowing
- Not ranked
- Measurement flag
- Recent measurement unavailable

Comments: Marker color indicates the current streamflow condition. Categories are based on the percentile of existing streamflow records on this day-of-the-year. A streamgauge is not ranked when there is less than 10 years of record or a current streamflow value is unavailable. Flood stages are maintained by the National Weather Service (NWS) and are not established for all USGS streamgages.

Data Source: [USGS Water Data for the Nation](#)

Click streamflow stations to access real-time data, time-series graphs, and station information.

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, but may move meeting up to next week (July 11th).
- If a declaration is issued, Ecology would be authorized to process requests for emergency water right transfers.
- Funding for emergency drought response grants

Statutory Definition of Drought

RCW 43.83B.011

"Drought condition" means that the water supply for a geographic area, or for a significant portion of a geographic area, is below seventy-five percent of normal ***and*** the water shortage is likely to create undue hardships for water users or the environment. (emphasis added)

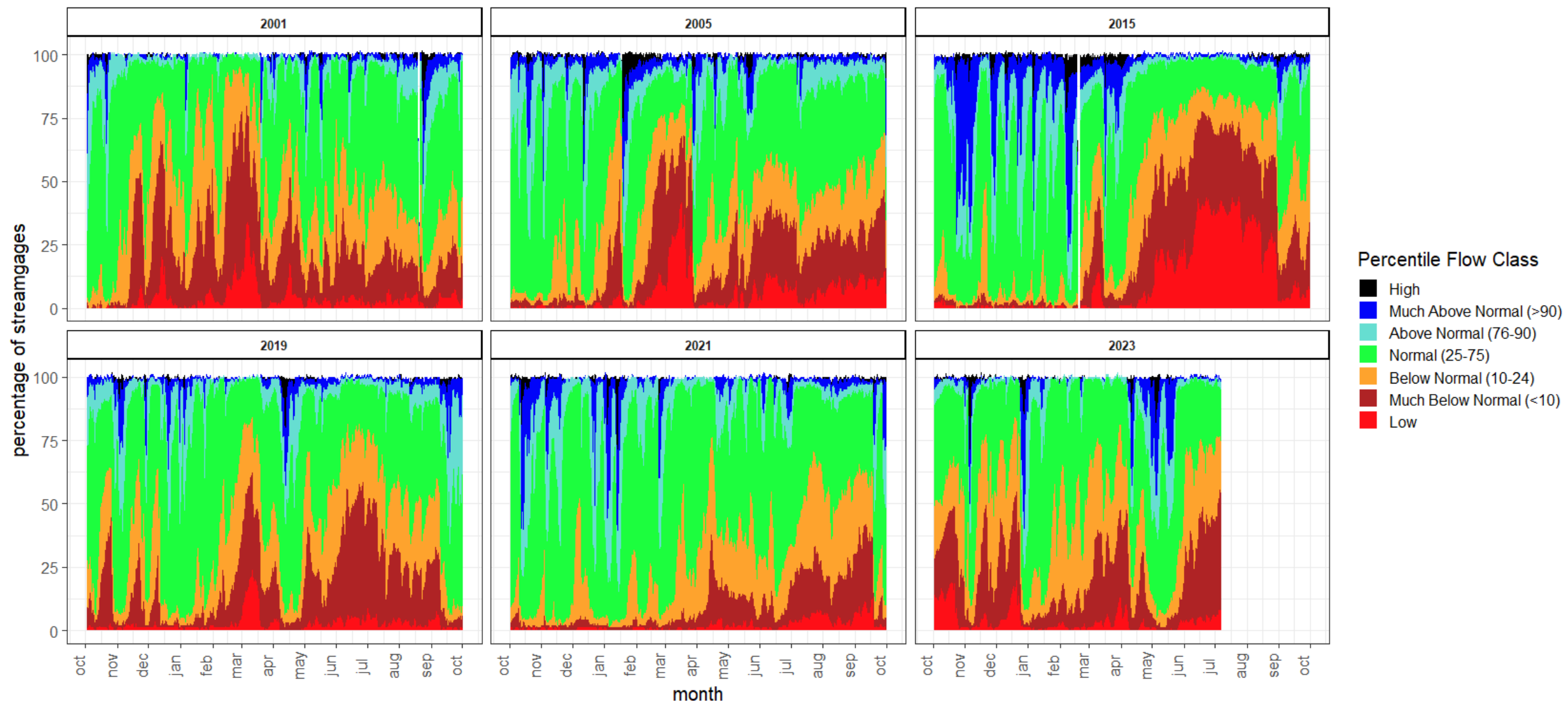
"Normal" water supply...means the median amount of water available to a geographical area, relative to the most recent thirty-year base period used to define climate normals.

Options exist for Advisory or Emergency Order

1) Whenever it appears to the department, based on the definitions of drought condition and normal water supply set forth in RCW 43.83B.011, that drought conditions may develop, the department may issue a drought advisory. The drought advisory should seek to increase the awareness and readiness of affected water users and may recommend voluntary actions to alleviate drought impacts.

(2)(a) Whenever it appears to the department, based on the definitions of drought condition and normal water supply set forth in RCW 43.83B.011, that a drought condition either exists or is forecast to occur within the state or portions thereof, the department is authorized to issue orders of drought emergency....

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



data: USGS WaterWatch

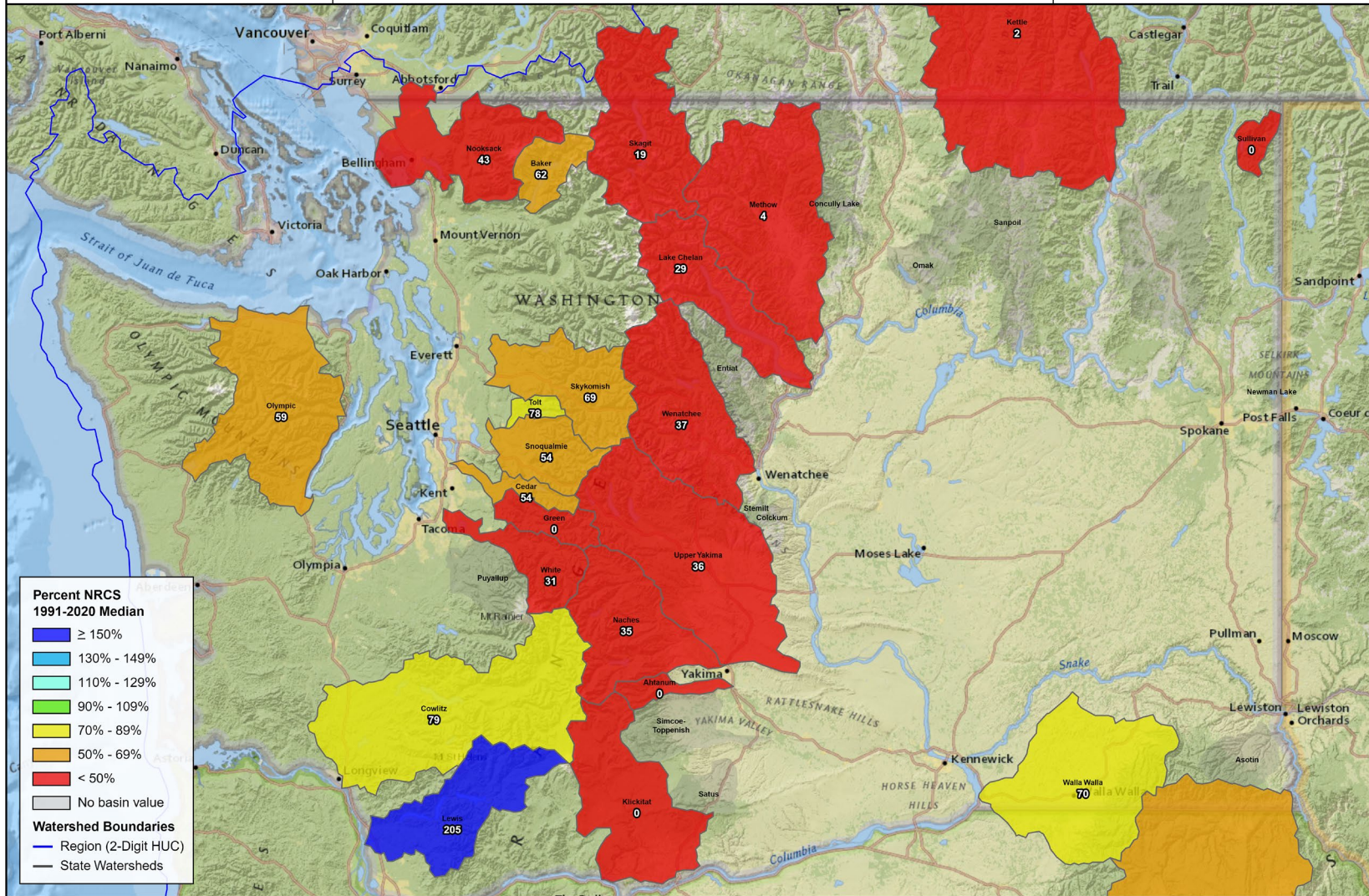
Drought Rule (WAC 173-166)

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.

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