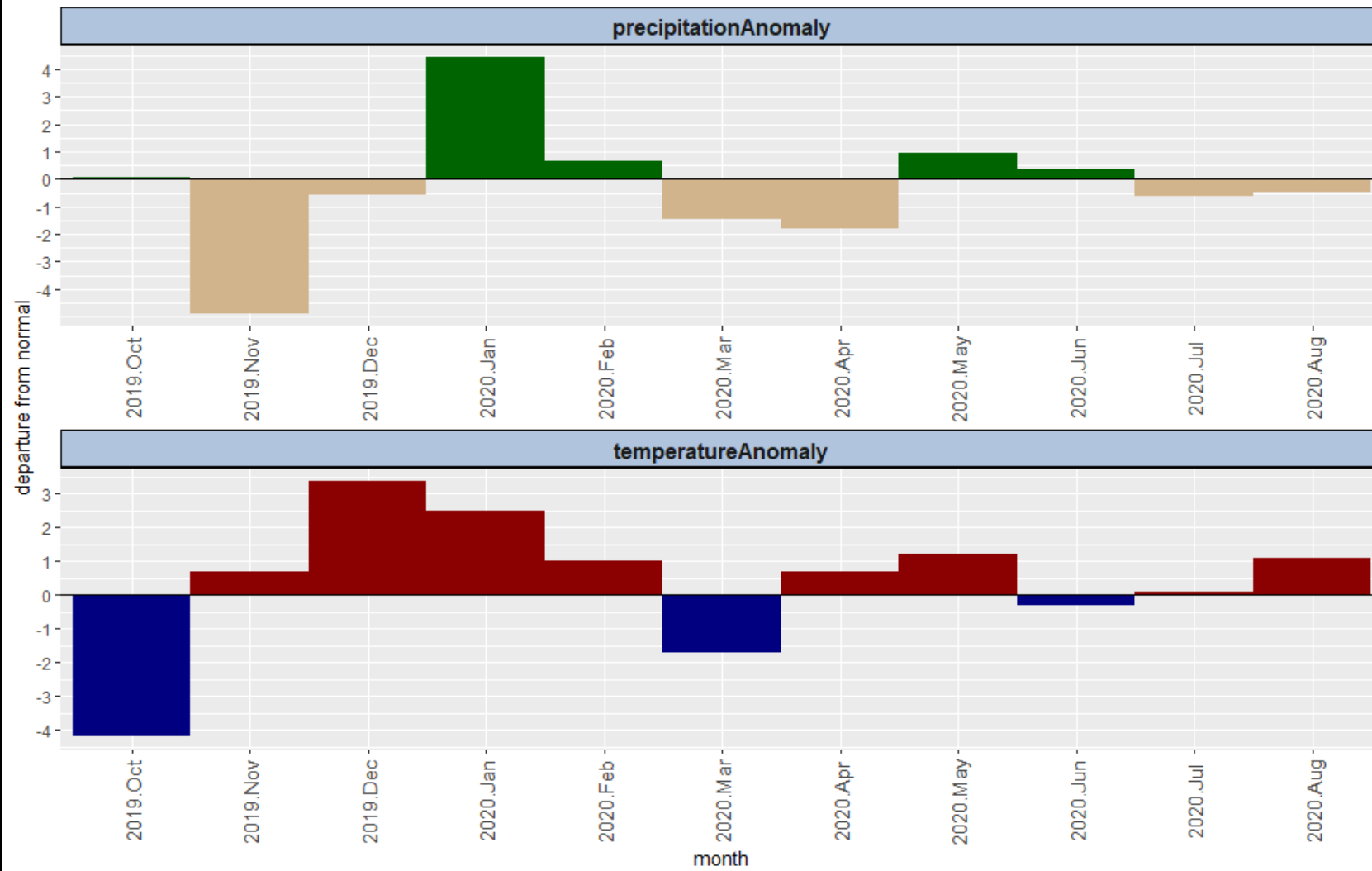




Water Supply Update  
Water Resources Advisory Committee  
September 14, 2020

Jeff Marti, Water Resources Program

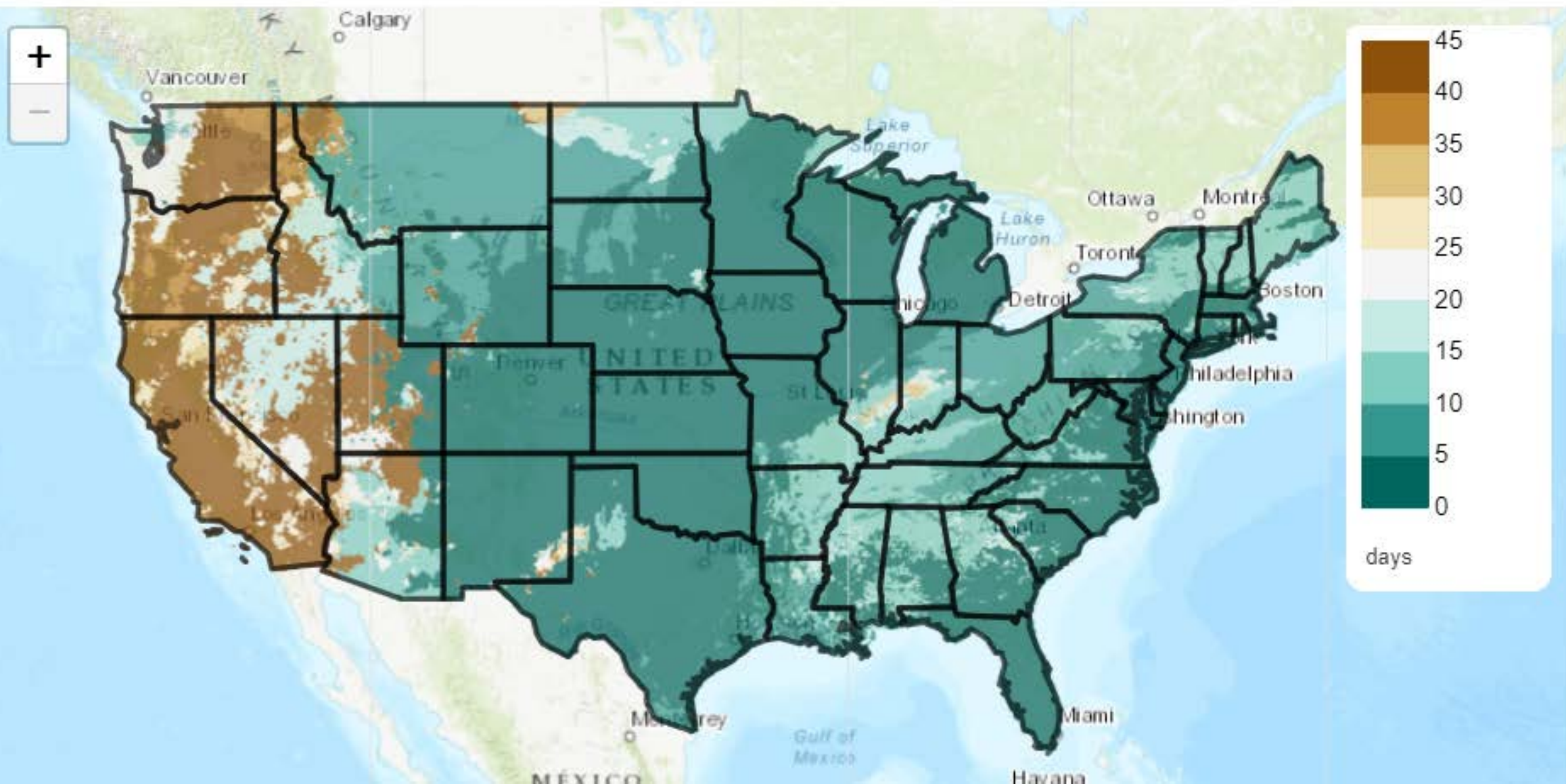
monthly precipitation (in) and temperature (°F) anomalies, washington state, 2019 - 2020  
(1981-2010 base period)



data: NCEI; chart by Jeff Marti WDOE

Days Since Precipitation  $\geq 0.1$ " (days)

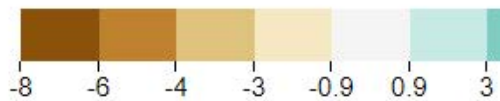
2020/09/11



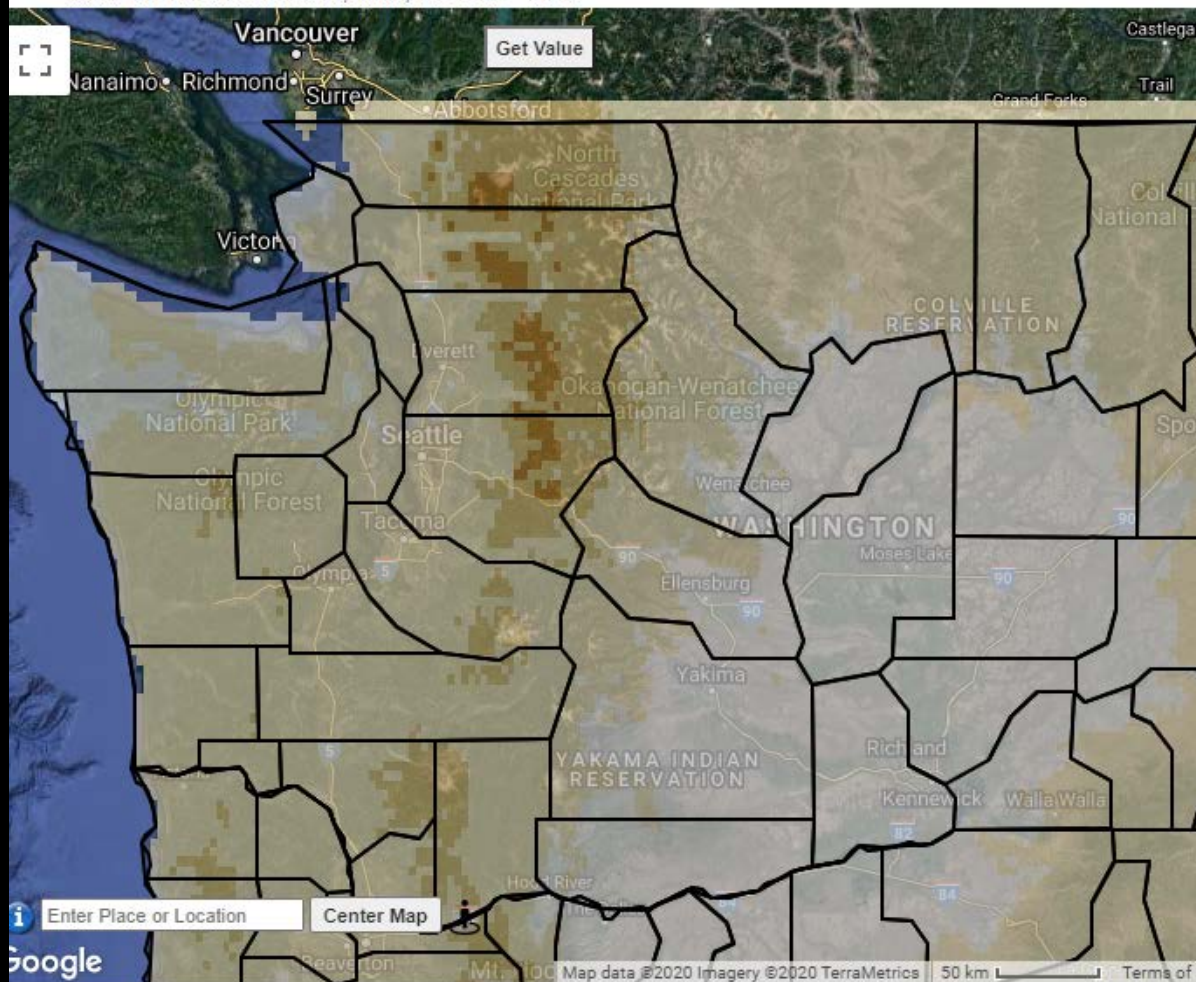


# Precipitation Difference from Average (gridMET)

2020-07-13 to 2020-09-10, Total, vs. 1981 - 2010



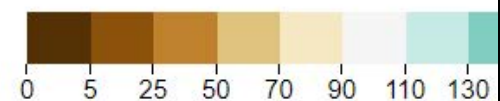
Precipitation Difference from Ave



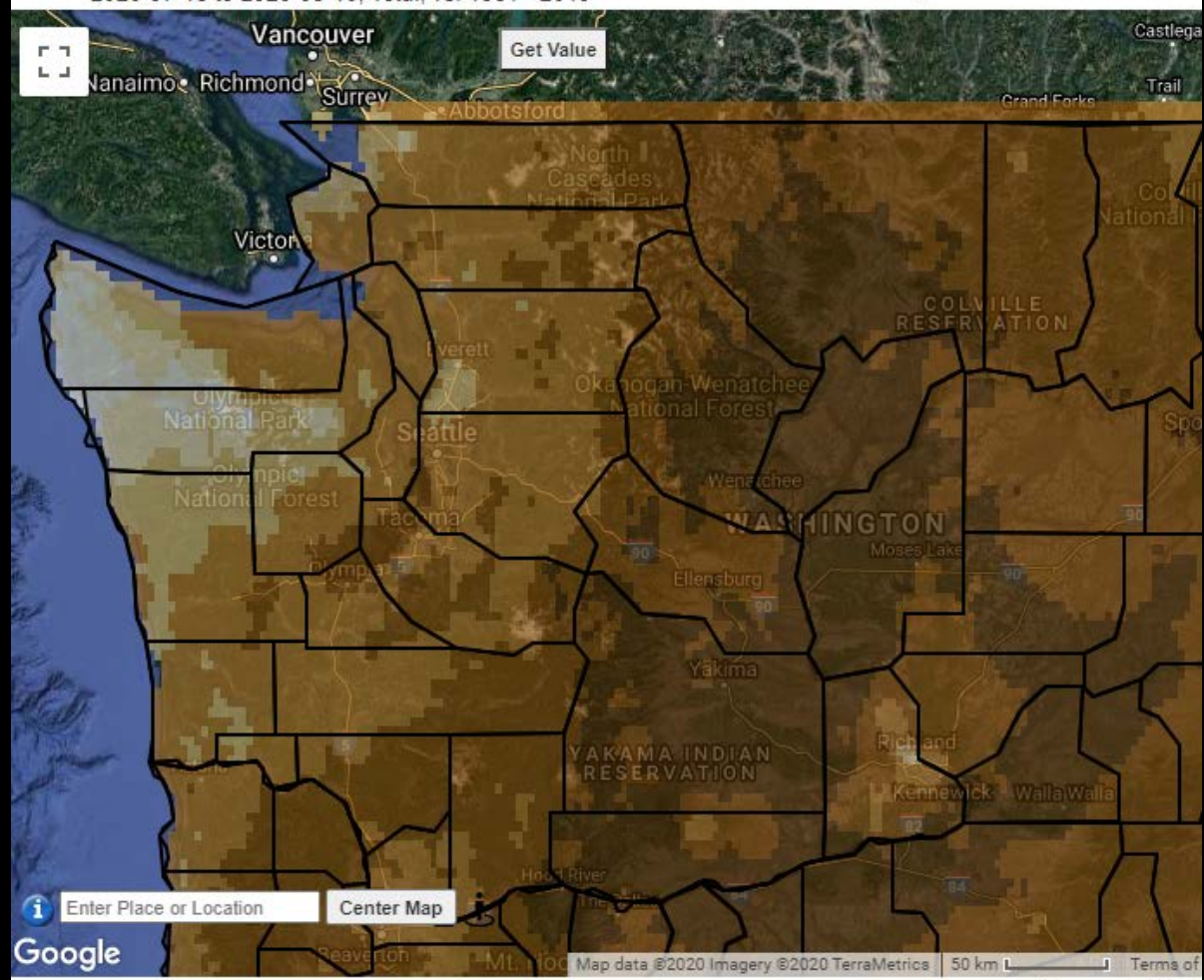
Generated by C

# Precipitation Percent Of Average (gridMET)

2020-07-13 to 2020-09-10, Total, vs. 1981 - 2010



Precipitation Percent of Avera

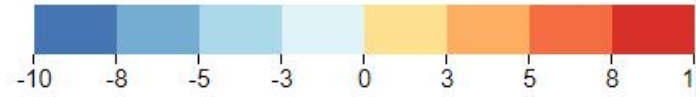


Generated by C

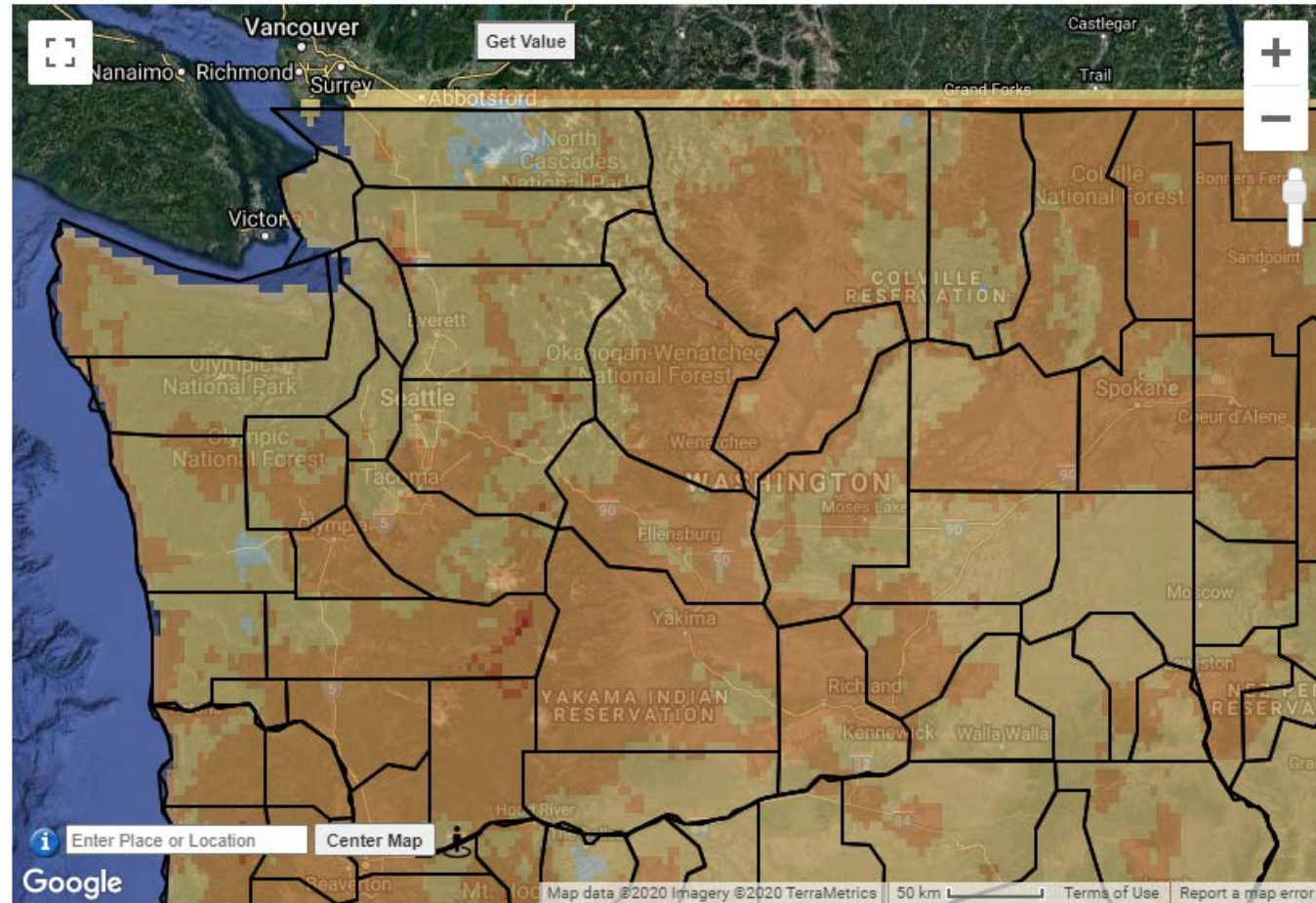


# Max Temperature Difference from Average (gridMET)

2020-07-13 to 2020-09-10, Mean, vs. 1981 - 2010



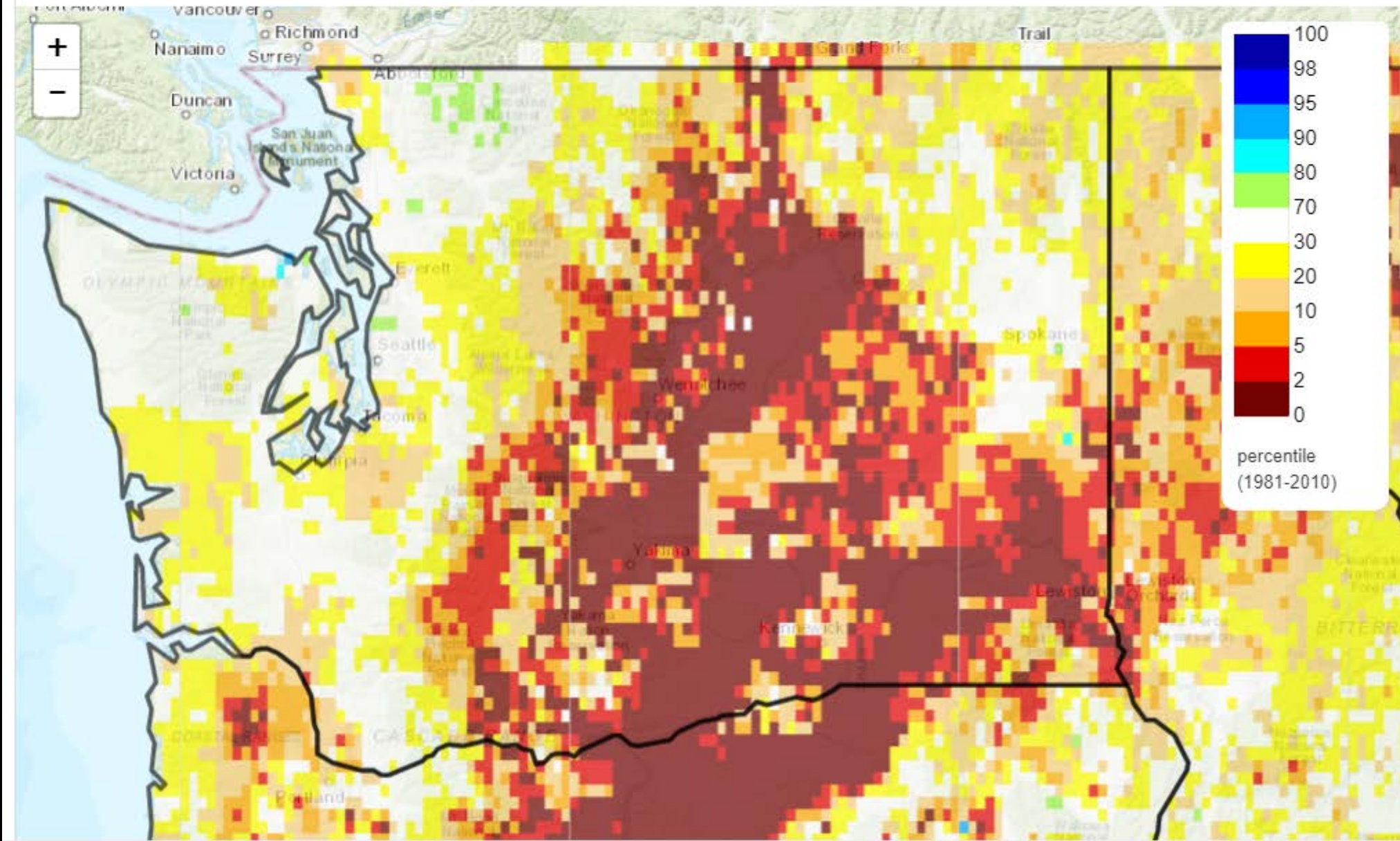
Max Temperature Difference from Average (deg F)



Generated by ClimateEngine.org

# Soil Moisture Percentile

2020/08/30







# Northwest River Forecast Center ESP Natural Forecast



River and Hydrology

Water Supply

Observations

Weather Forecasts

Climate

NWRFC

Home

Zoom Out

--- Quick Zooms ---

ESP Issued: 2020-09-13

Ensemble Date: 2020-09-13

[Permalink](#)

Search

Enter NWS ID:

GO

Map Overlays

- ☒ NWRFC Boundary
- ☐ NWRFC Basins
- ☐ NWS HSAs
- ☐ Counties

ESP Natural Forecast

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

Natural Runoff

- ☐ Runoff Status
- ☐ Runoff % of Normal

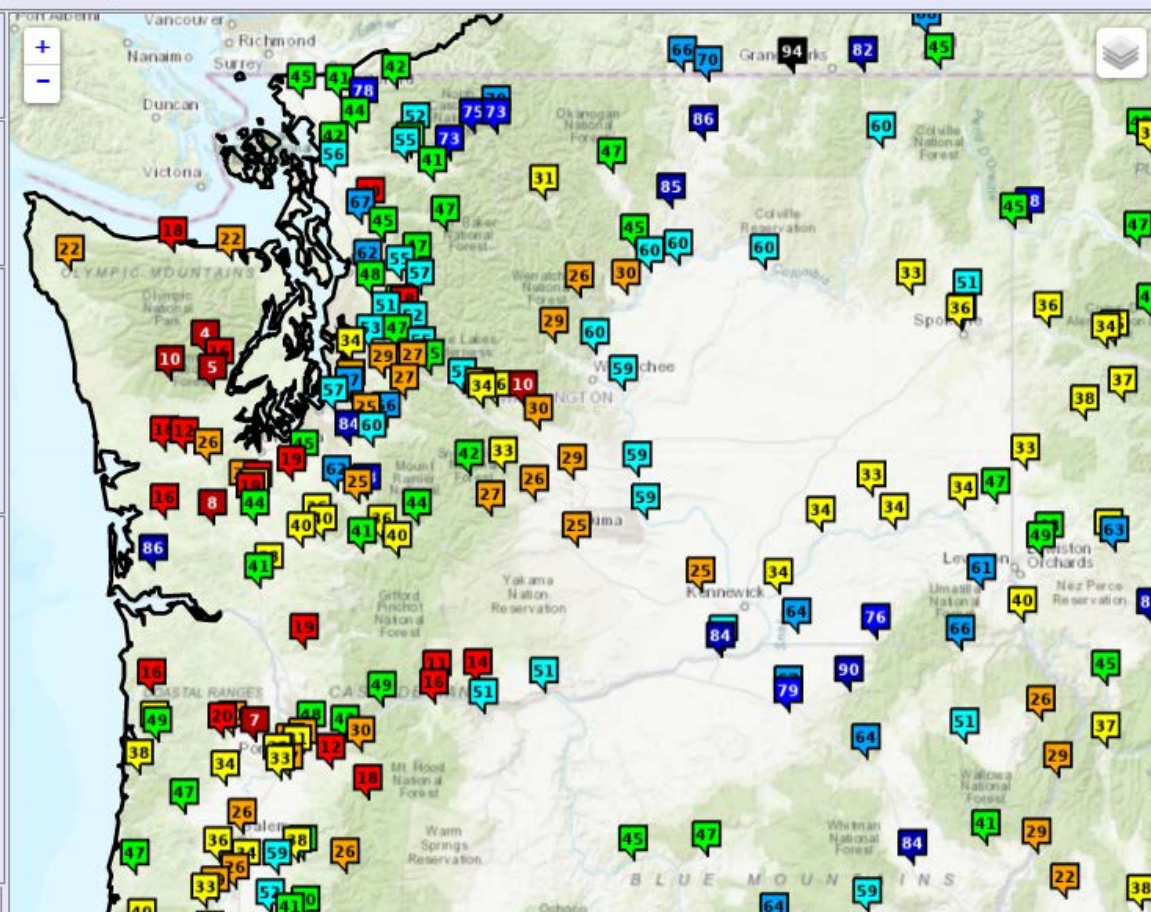
ESP Natural Forecast

Period: APR-SEP  
Percentile Probability(%)

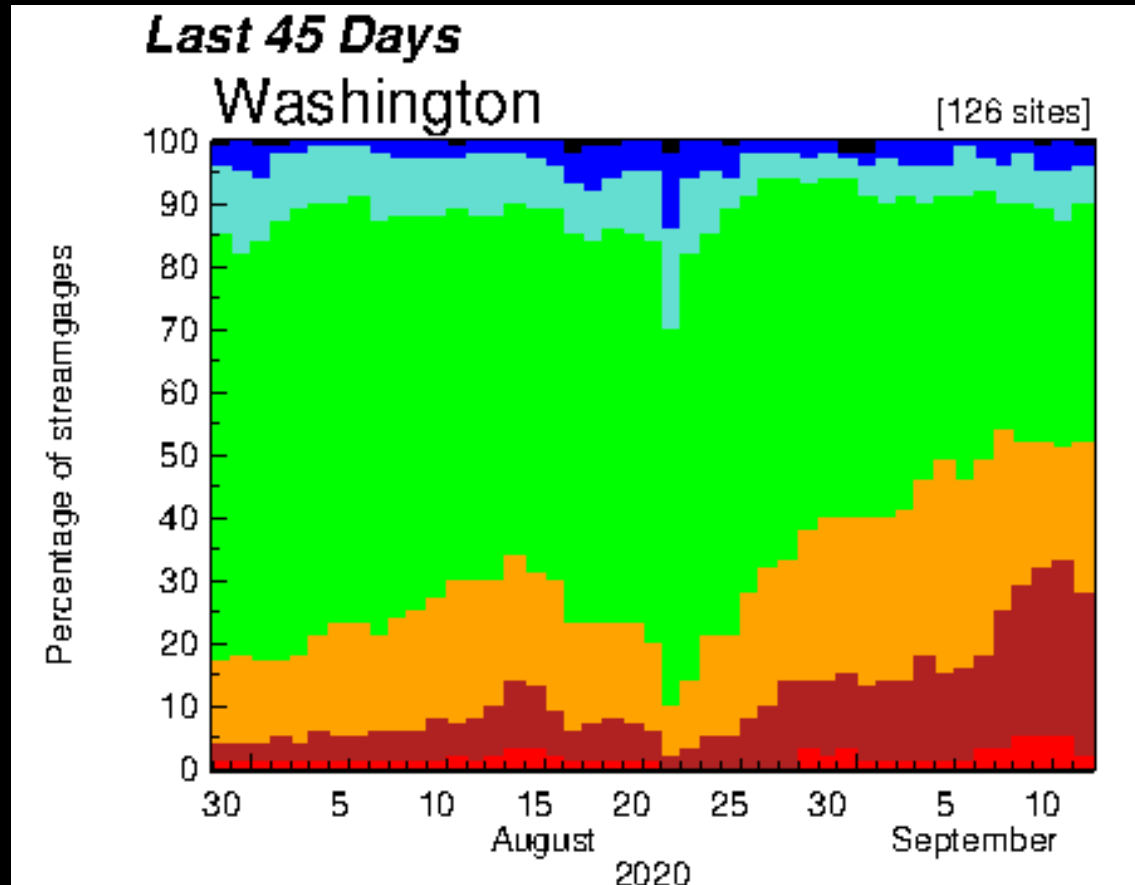
- ☐ No Data
- ☐ 0-10
- ☐ 10-20
- ☐ 20-30
- ☐ 30-40
- ☐ 40-50
- ☐ 50-60
- ☐ 60-70
- ☐ 70-80
- ☐ 80-90
- ☐ 90-100



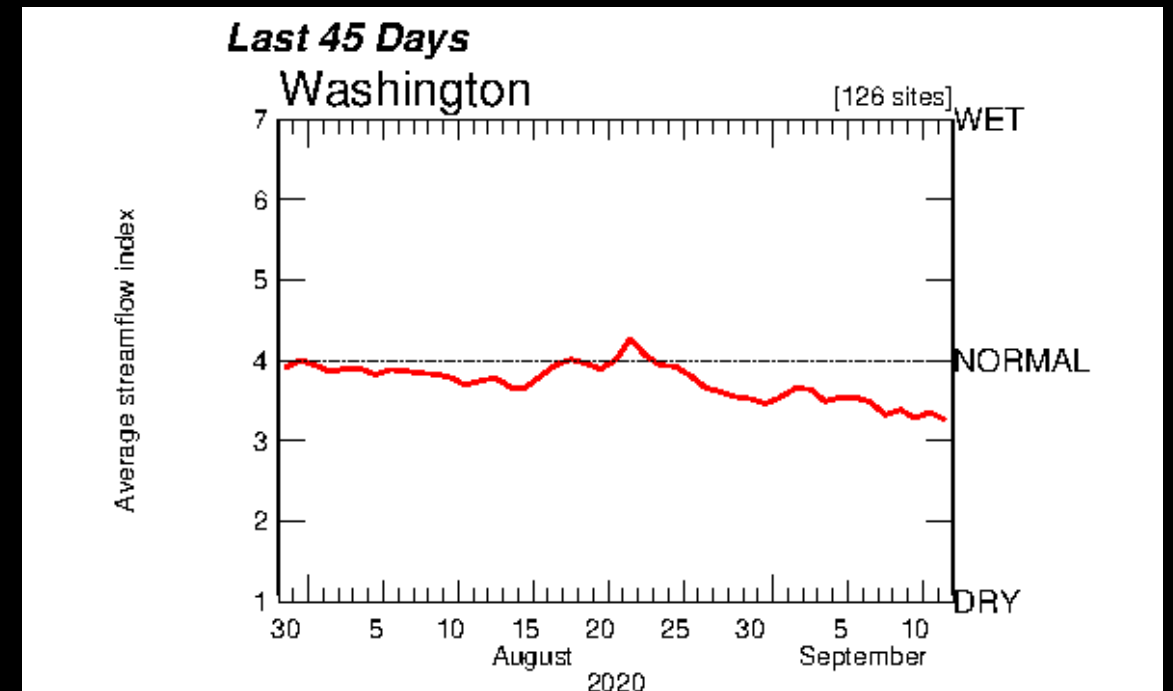
Stations Displayed: 250



# Statewide Streamflow Percentile

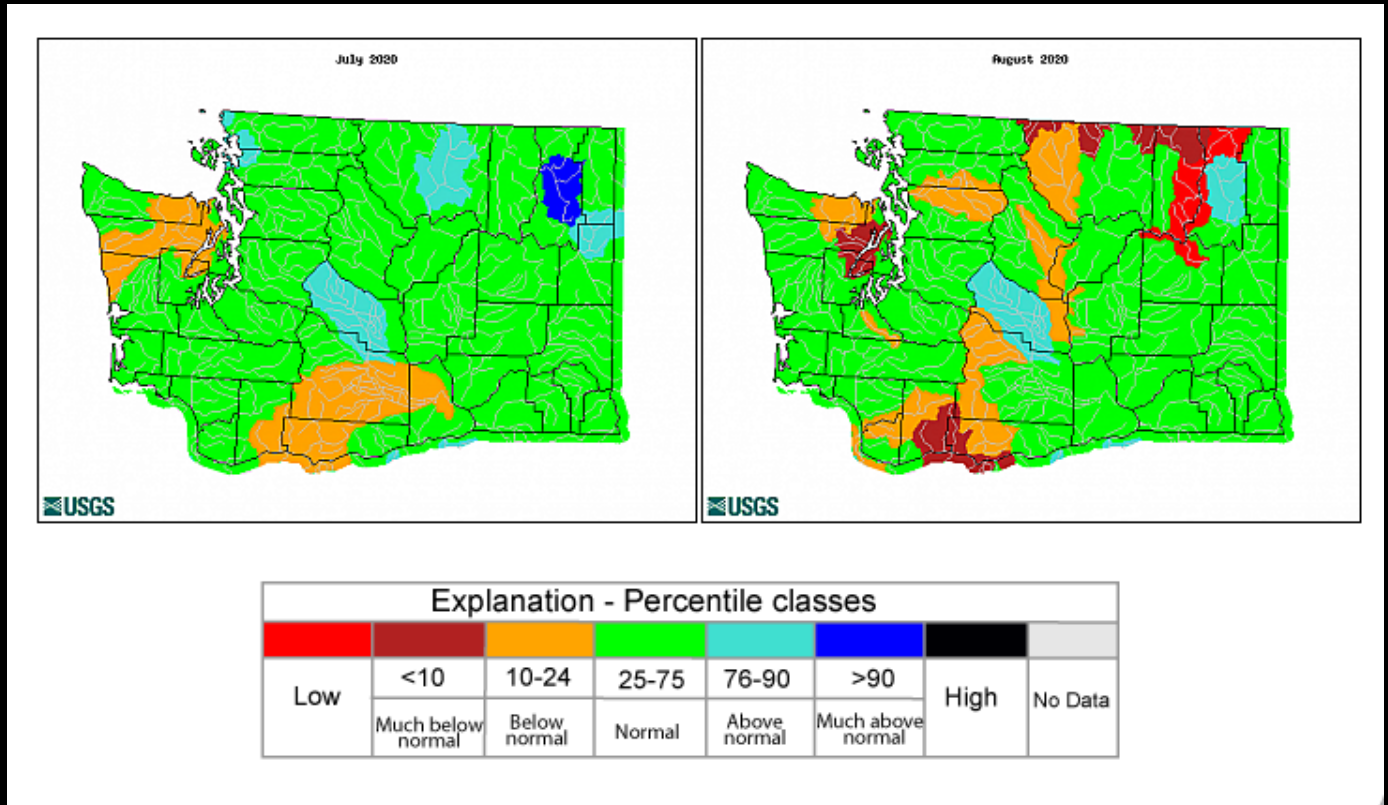


# Statewide Streamflow Index





# Monthly Average Streamflow Percentile: July vs August



# 14 day average Streamflow (Sept 10, 2020)

## Summary of the percentage of streamgages in each class

Region: Washington

Date: 20200910

Low: 2 %

Much below normal: 21 %

Below normal: 27 %

Normal: 43 %

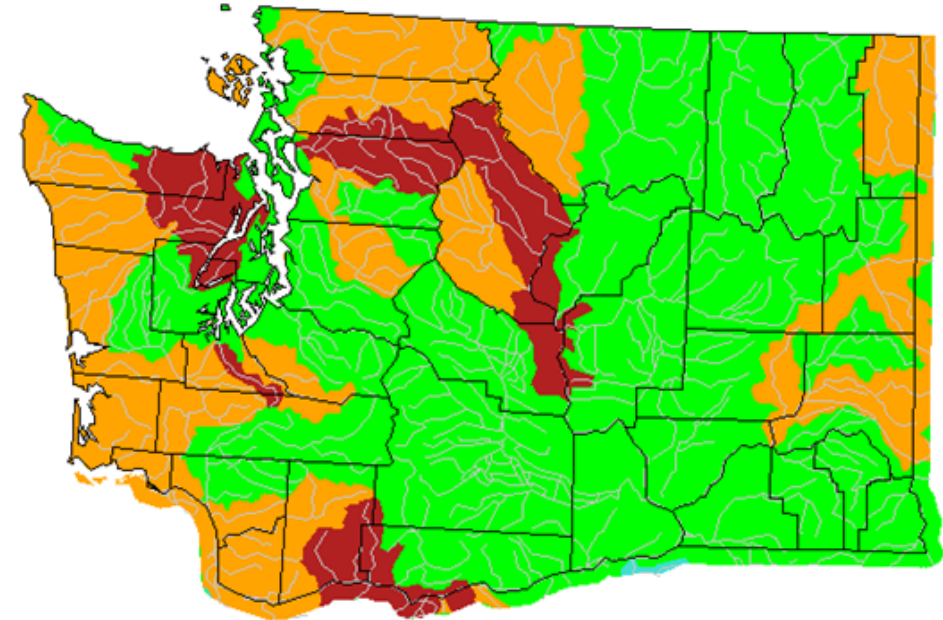
Above normal: 5 %

Much above normal: 2 %

High: 0 %

No. of streamgages: 150

Thursday, September 10, 2020

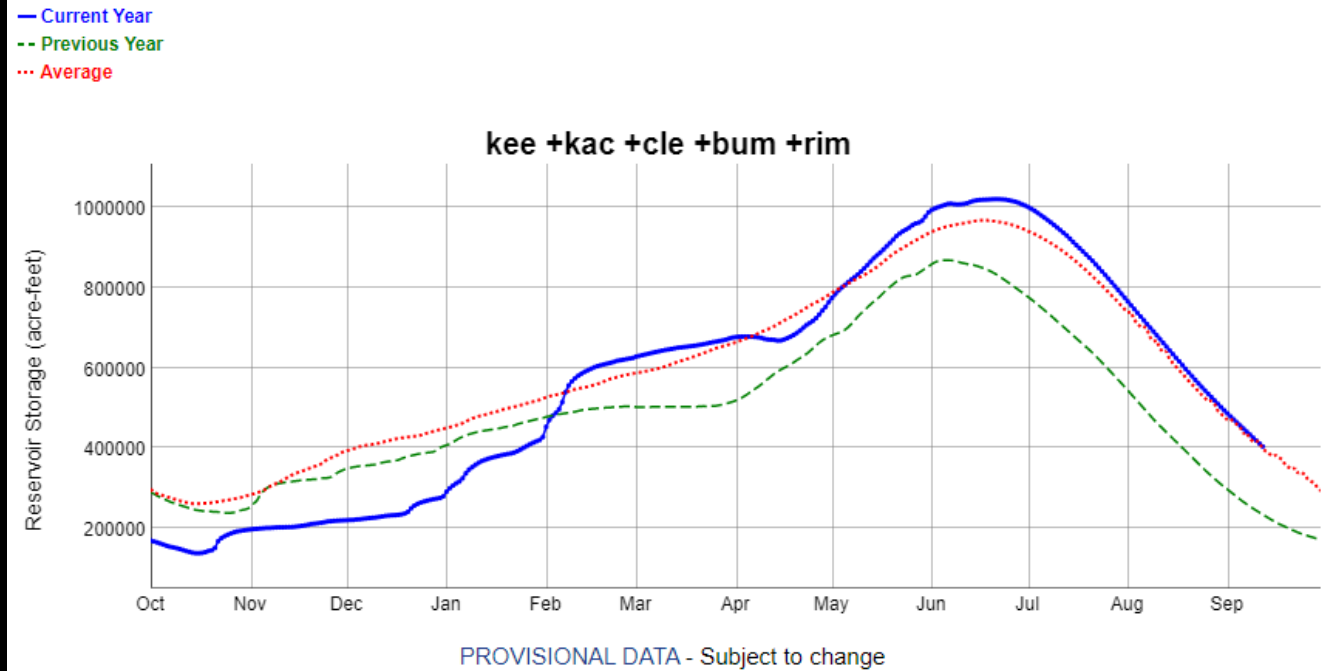


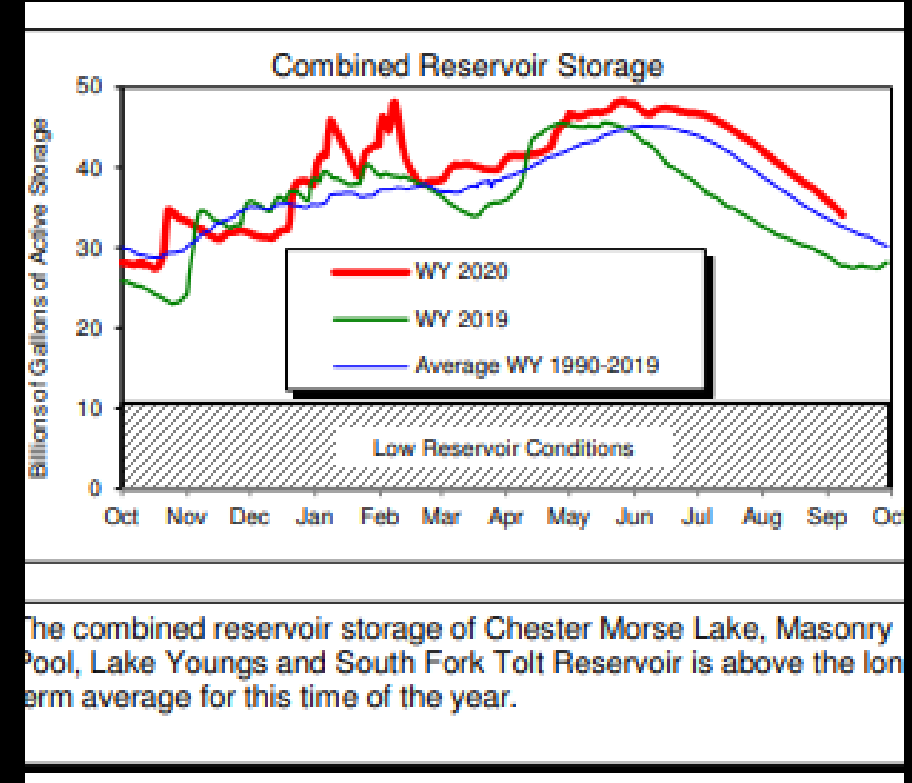
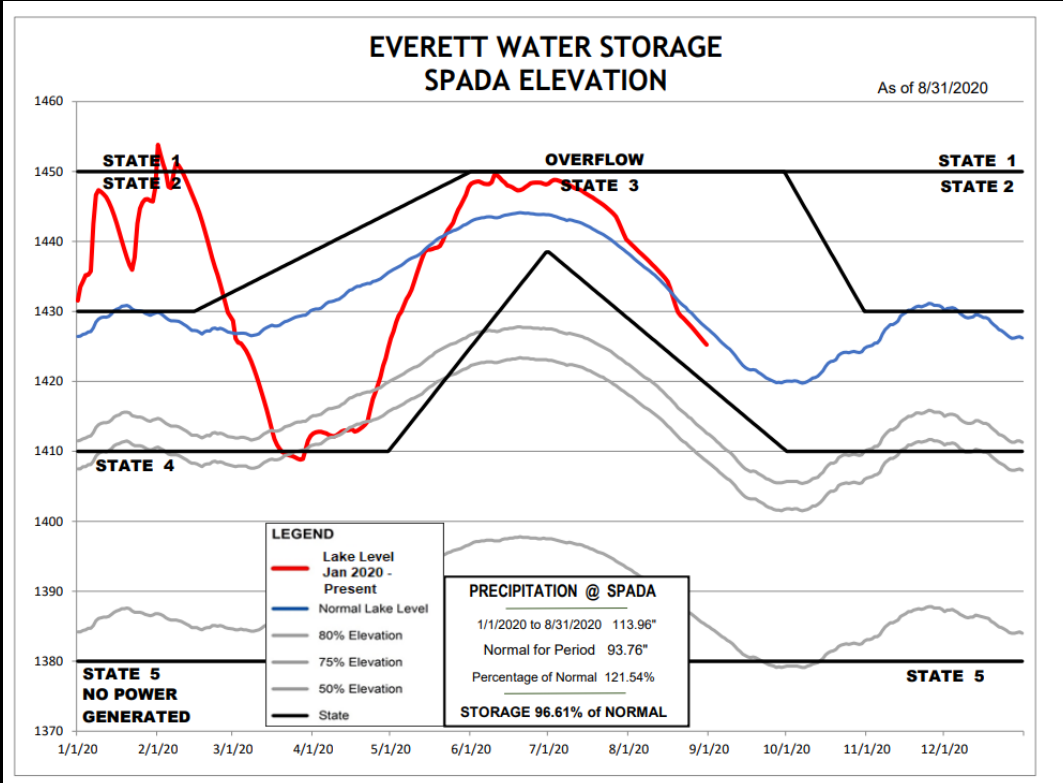
USGS



# Yakima System

Water Year Graph

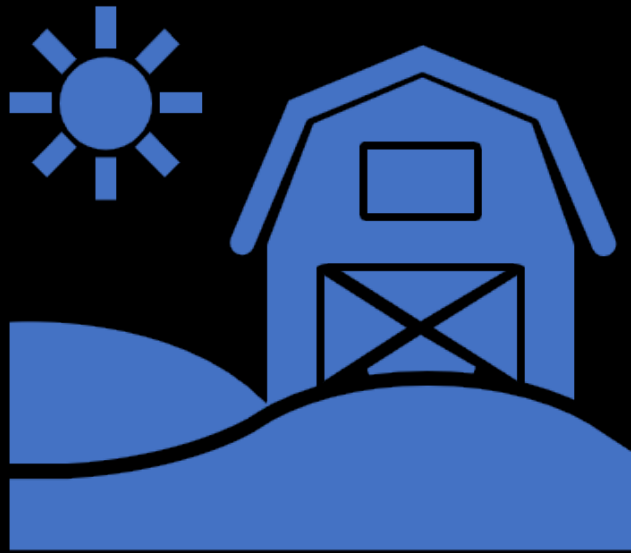






# Water Systems Continued

- A quiet year with respect to water availability
- Some systems on the upper Olympic Peninsula have activated drought responses calling for voluntary water conservation (Clallam PUD, City of Port Angeles).
- Multiple systems on the east side are under boil-water orders due to fire damage/depressurizing of water system



# Agriculture

- Production statistics won't be available until next year
- Reports of much decreased hay and alfalfa yields in Klickitat County
- Dept of Agriculture has noted that >135,000 of active fire areas overlaps with cropland, including some orchard areas
- Power outages from downed powerlines interrupt irrigation, but overall impact is not yet known



# Curtailment

## Northwest

- Skagit
- Nooksack

## Southwest

- Chehalis/Newaukum (Late Spring but then conditions improved)
- Satsop (5 junior users)
- Case-by-case water right limitations

## Central

- Methow, Wenatchee, Entiat
- Skagit, Nooksack

## Eastern

- Touchet

# Box Canyon Creek

08/26/19

09/10/20



# Summary

- Decent snowpack, mild spring made a huge difference for our summer
- Irrigated and stored water supplies fared well
- Dryland areas on east side have been stressed
- Small systems without storage also are being challenged in some areas
- Forecasts for La Nina conditions is great news for water supply, but effects on quarantining are an open question