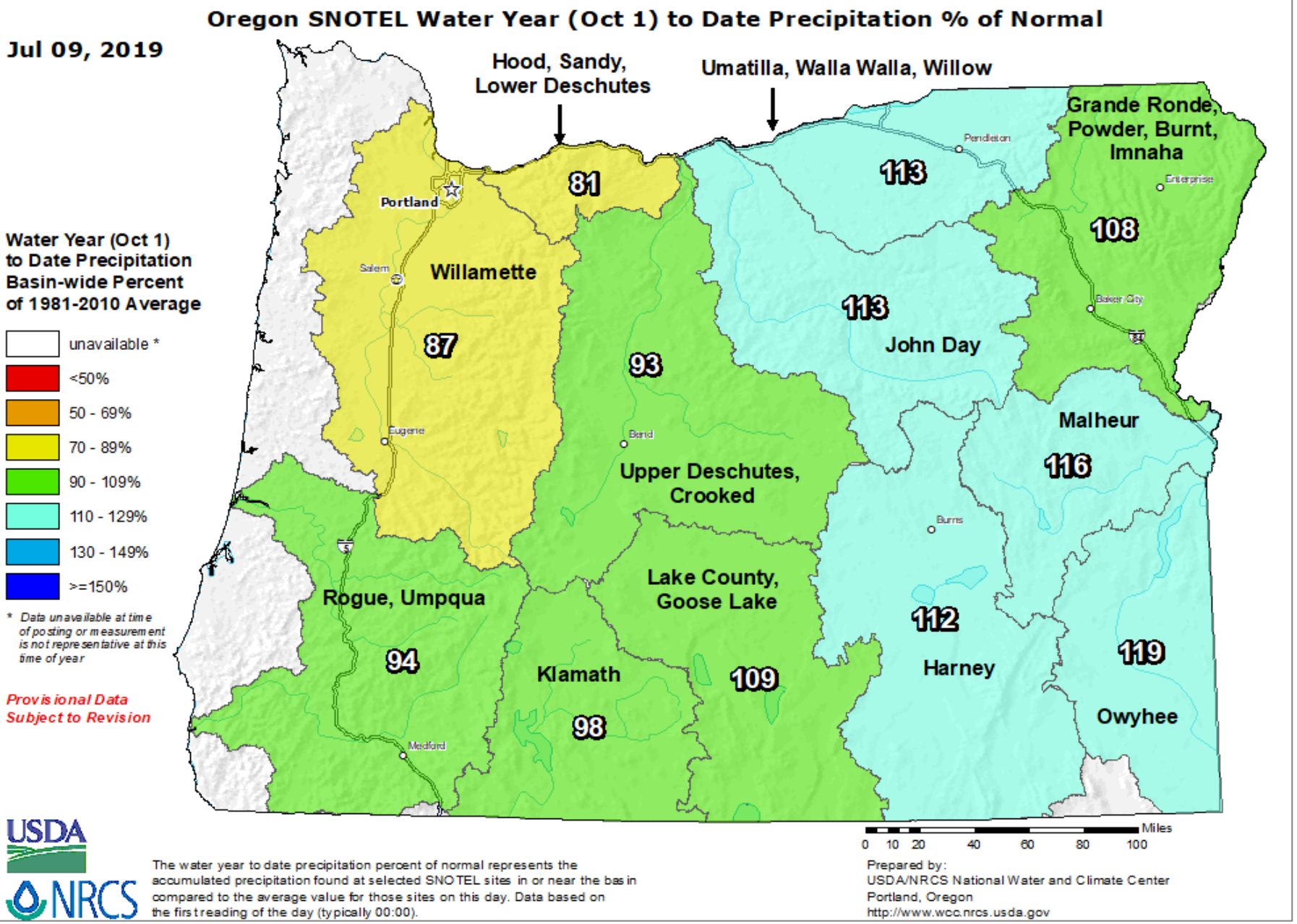
Water Supply Conditions Report

Drought Readiness Council

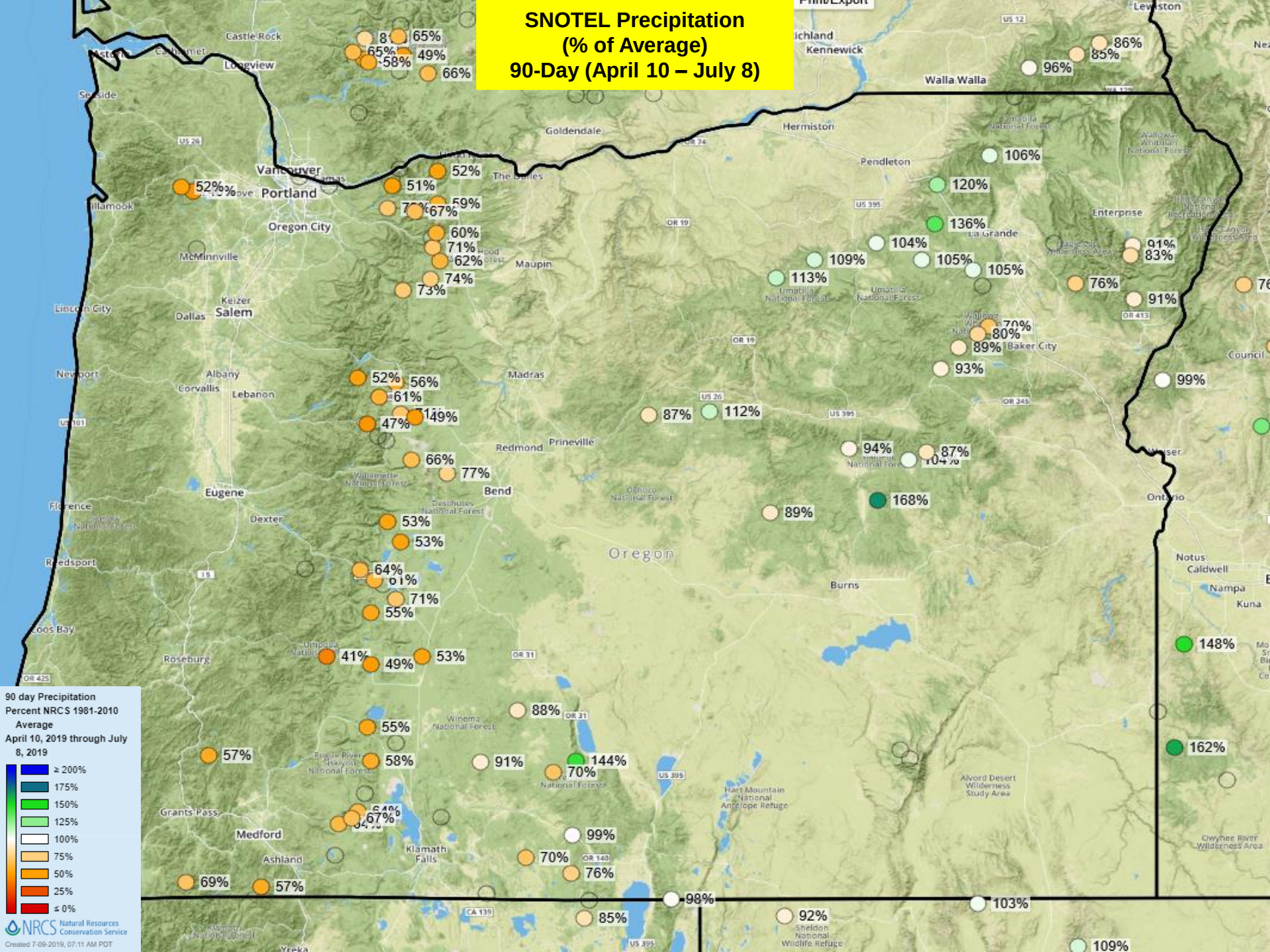
OREGON
WATER RESOURCES DEPARTMENT

Ken Stahr
Oregon Water Resources Department
July 11, 2019

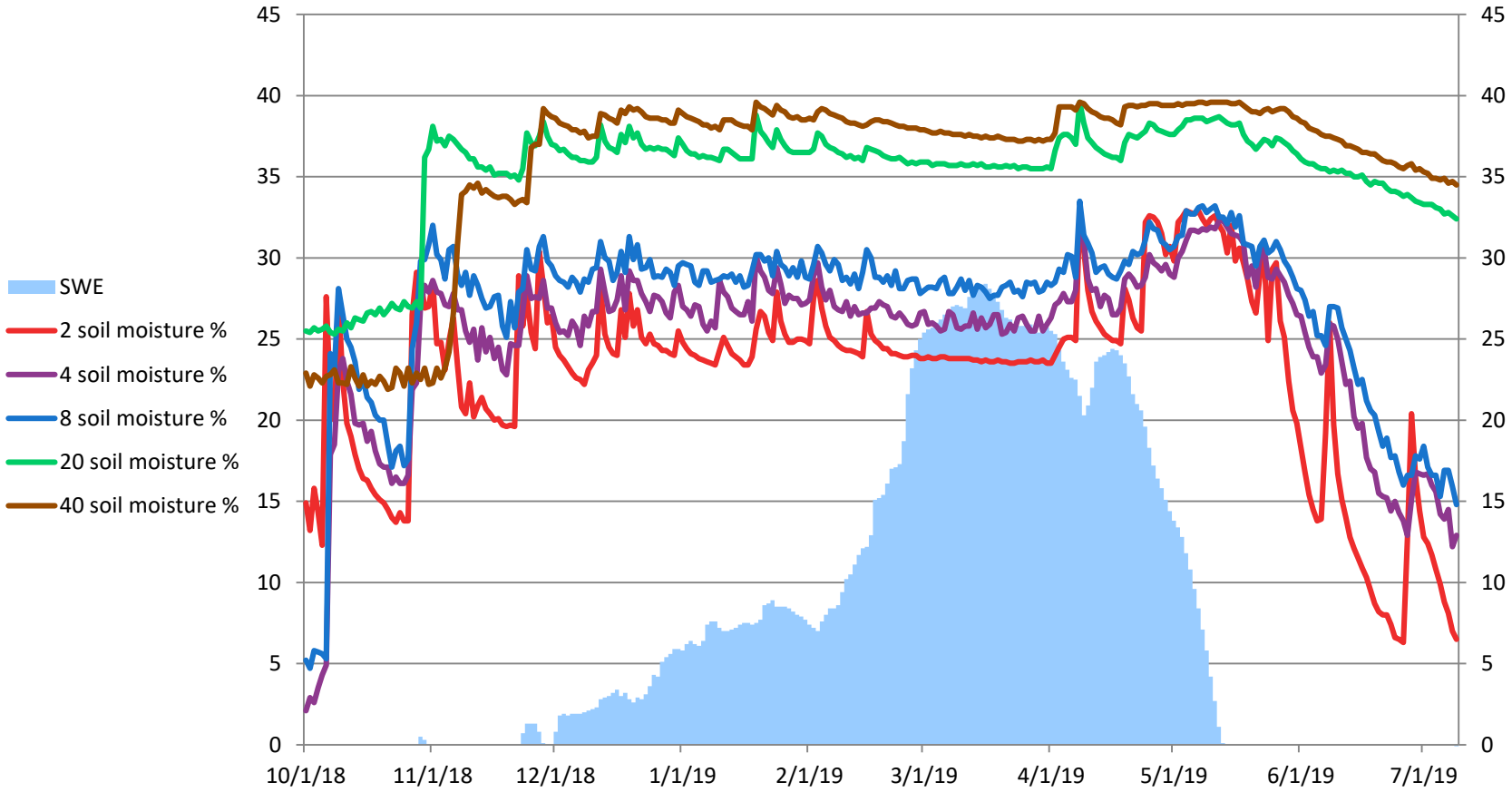
Statewide SNOTEL Precipitation is 93% of normal



SNOTEL Precipitation
(% of Average)
90-Day (April 10 – July 8)

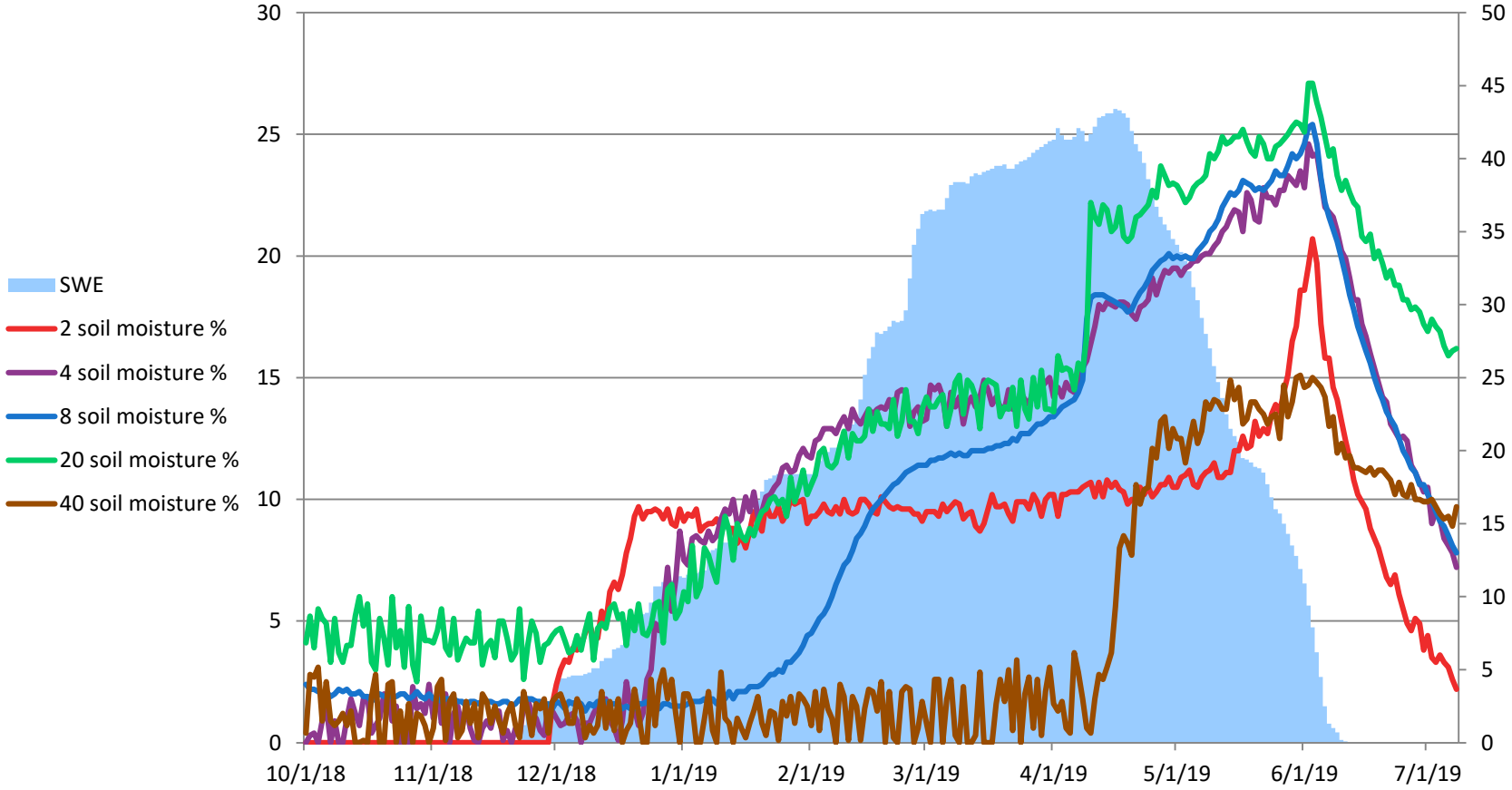


Holland Meadows SNOTEL
Soil Moisture WY2019
Elevation = 4930’
Lane County



Provisional data –Subject to future edits

Annie Springs SNOTEL
Soil Moisture WY2019
Elevation = 6010’
Klamath County



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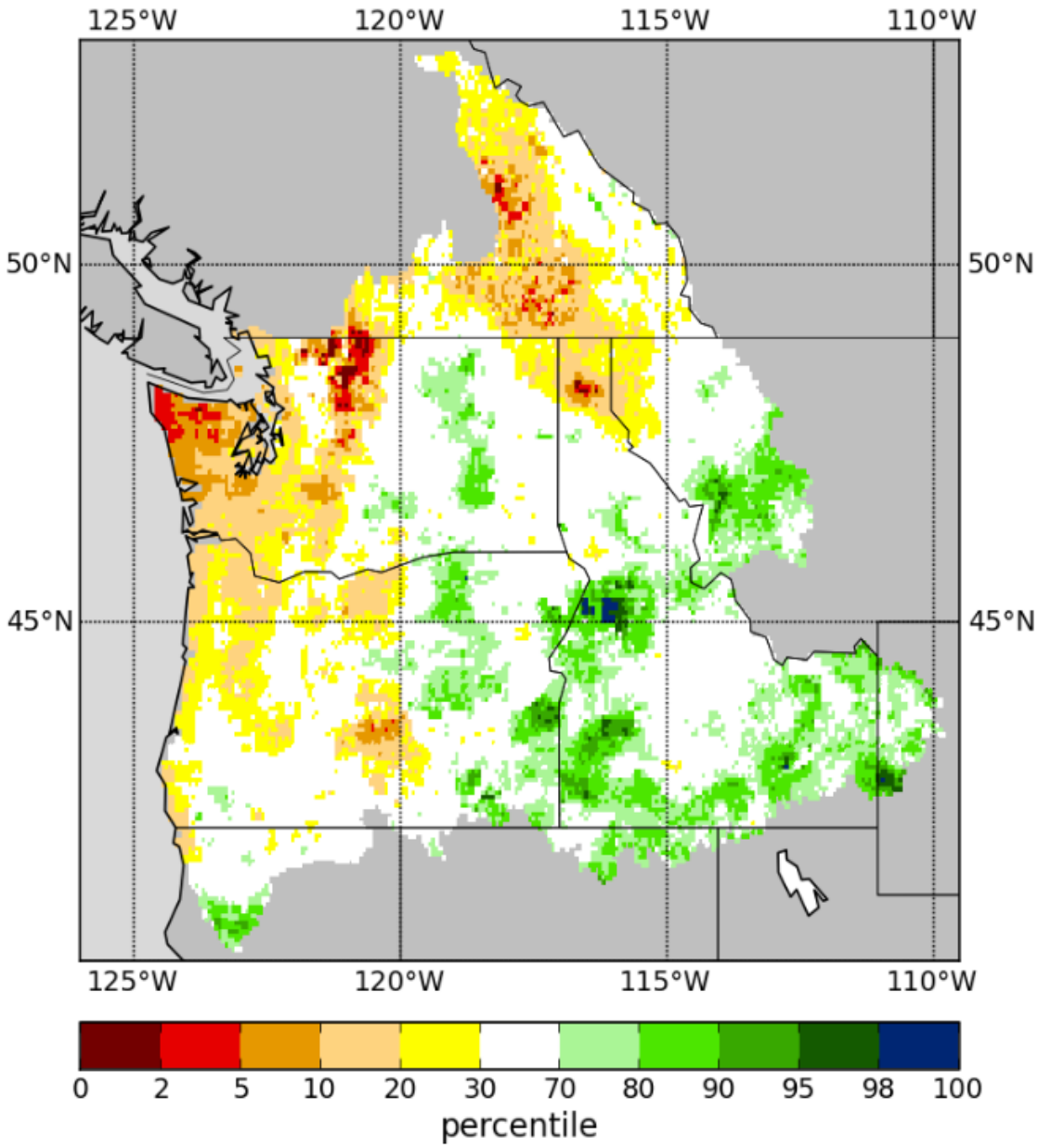
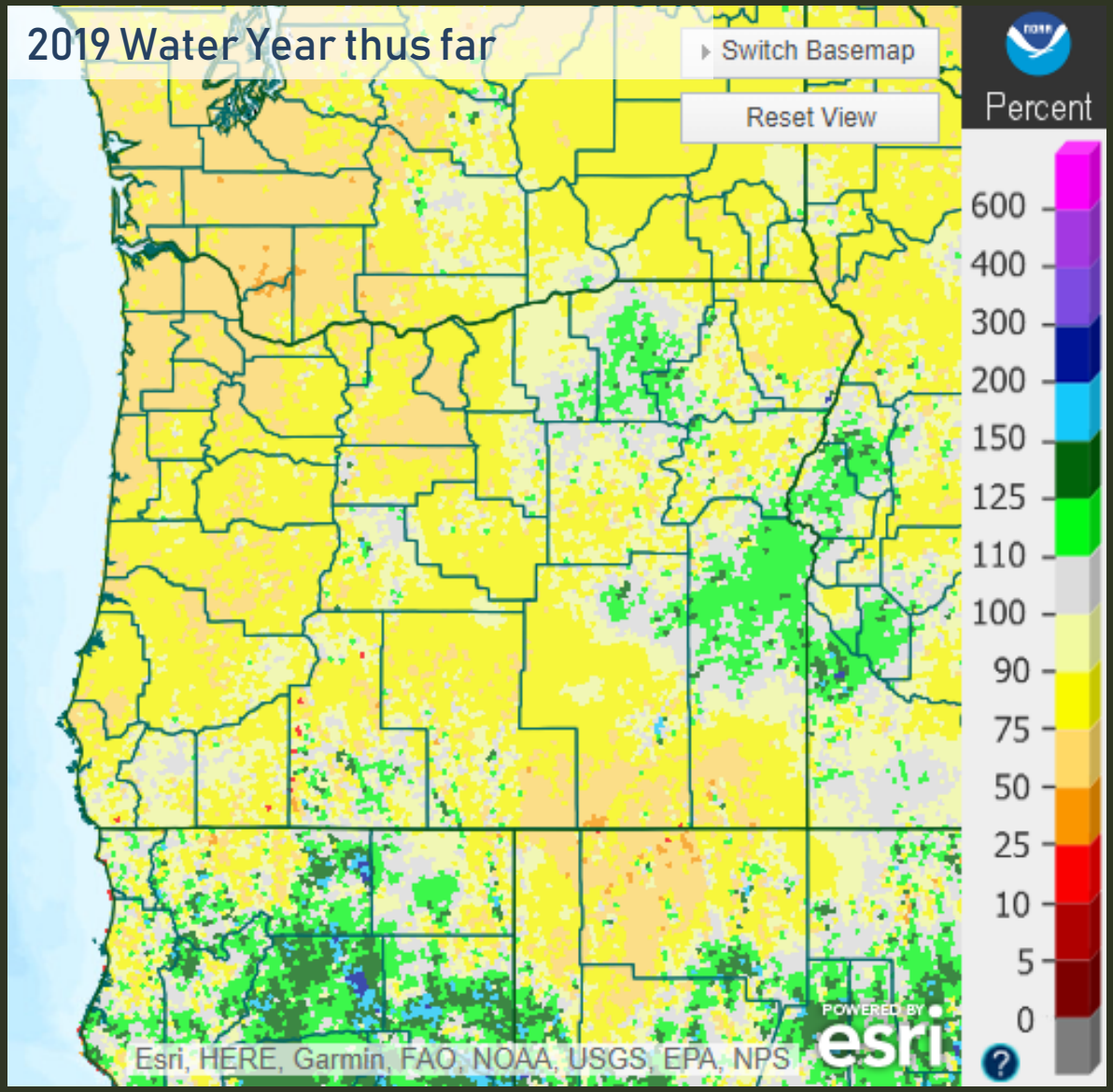
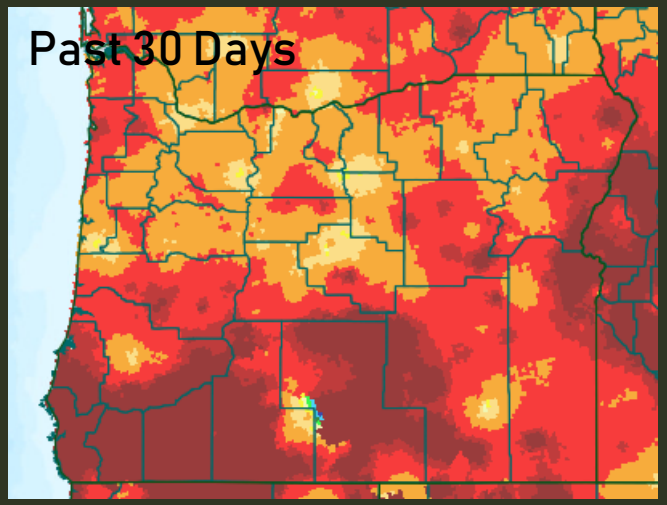
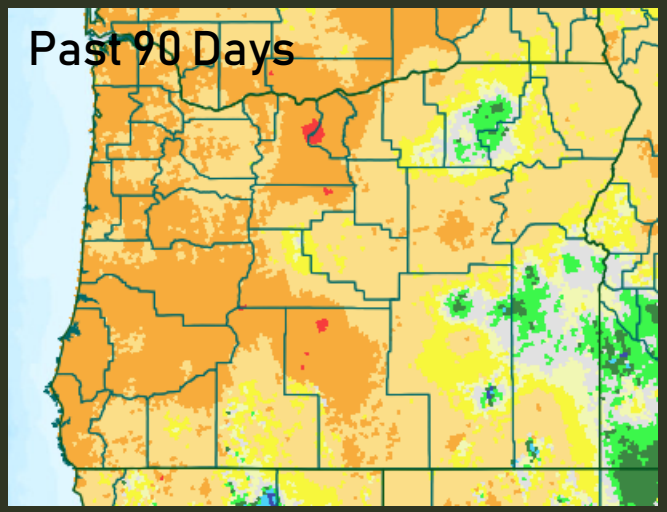


Website: http://www.hydro.ucla.edu/SurfaceWaterGroup/forecast/monitor_pnw/index.shtml

Precipitation % of Average





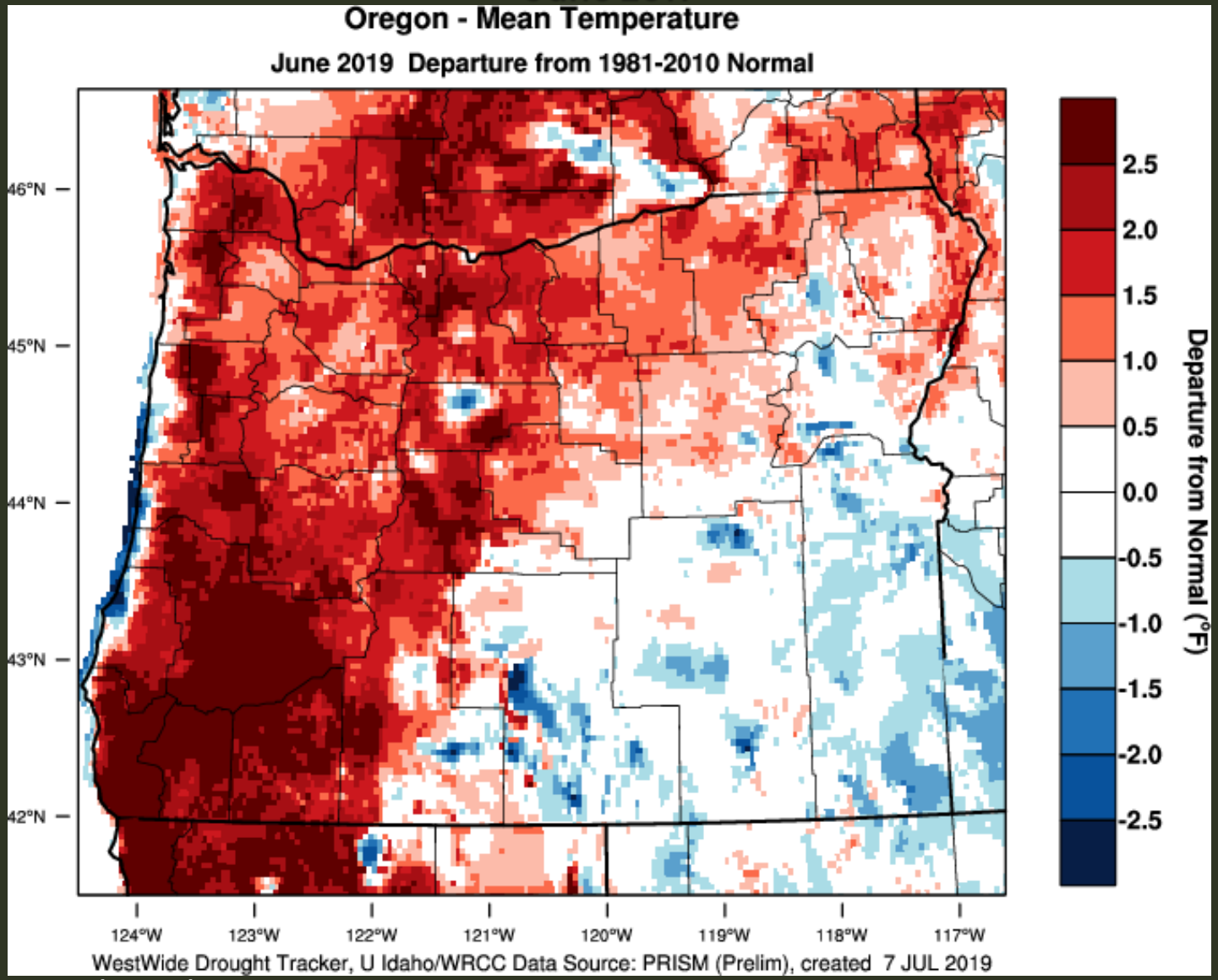


Precipitation Data as of July 8, 2019

Source: water.weather.gov/precip/index.php?location_type=wfo&location_name=pqr

Recent Temperatures

June 2019



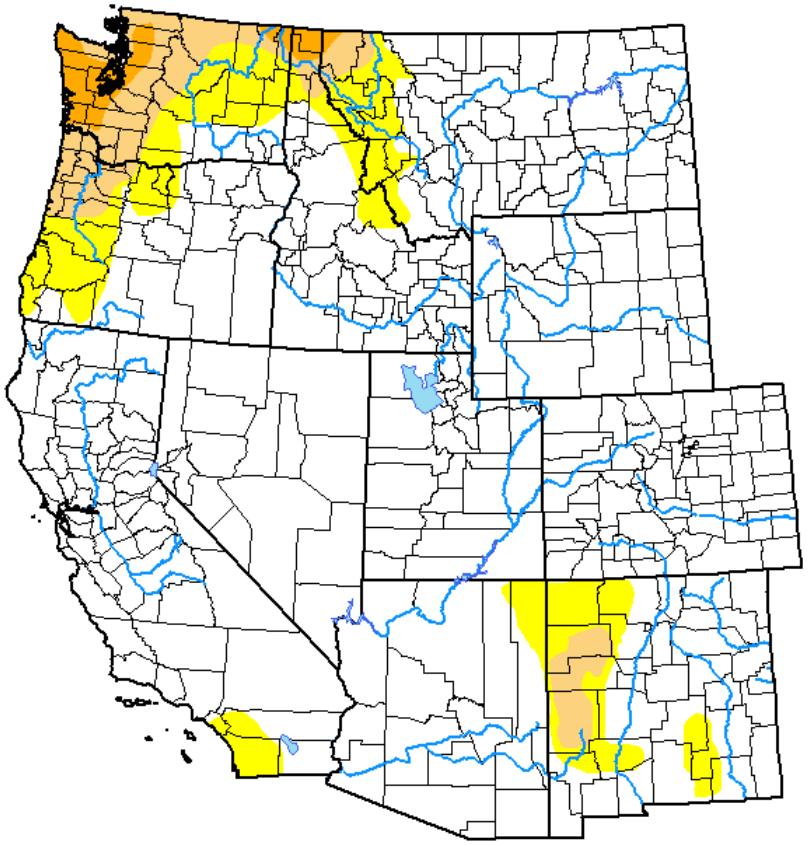
https://wrcc.dri.edu/wwdt/current.php?folder=mdn1

Drought Monitor

U.S. Drought Monitor
West

June 4, 2019
(Released Thursday, Jun. 6, 2019)
Valid 8 a.m. EDT

U.S. Drought Monitor
West



July 9, 2019
(Released Thursday, Jul. 11, 2019)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	85.38	14.62	5.68	1.26	0.00	0.00
Last Week 07-02-2019	86.89	13.11	5.53	1.24	0.00	0.00
3 Months Ago 04-09-2019	74.42	25.58	6.22	1.65	0.00	0.00
Start of Calendar Year 01-01-2019	28.03	71.97	53.25	27.22	8.35	2.88
Start of Water Year 09-25-2018	13.91	86.09	59.57	39.68	18.15	4.36
One Year Ago 07-10-2018	28.98	71.02	50.28	32.09	19.90	4.81

Intensity:

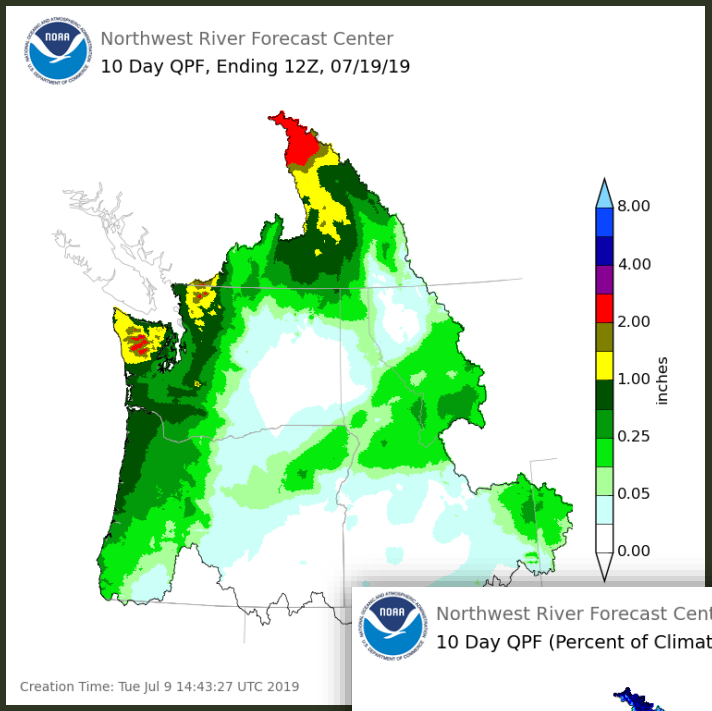
- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

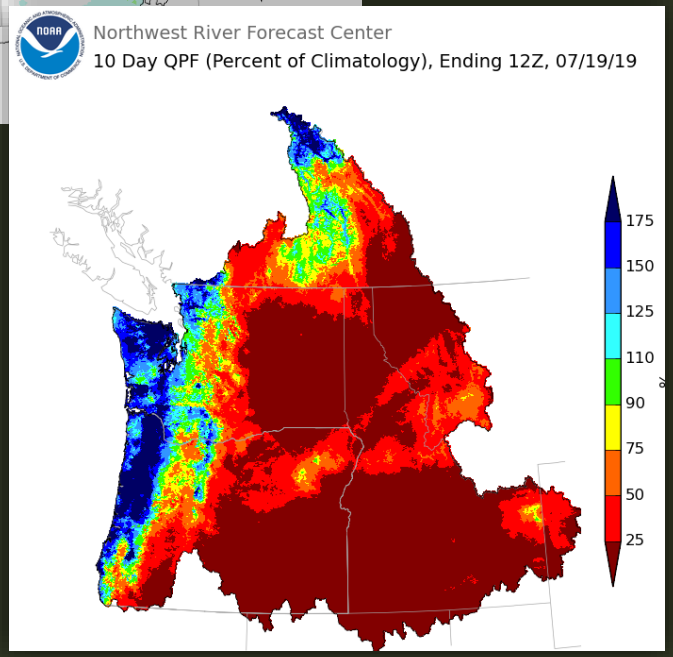
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

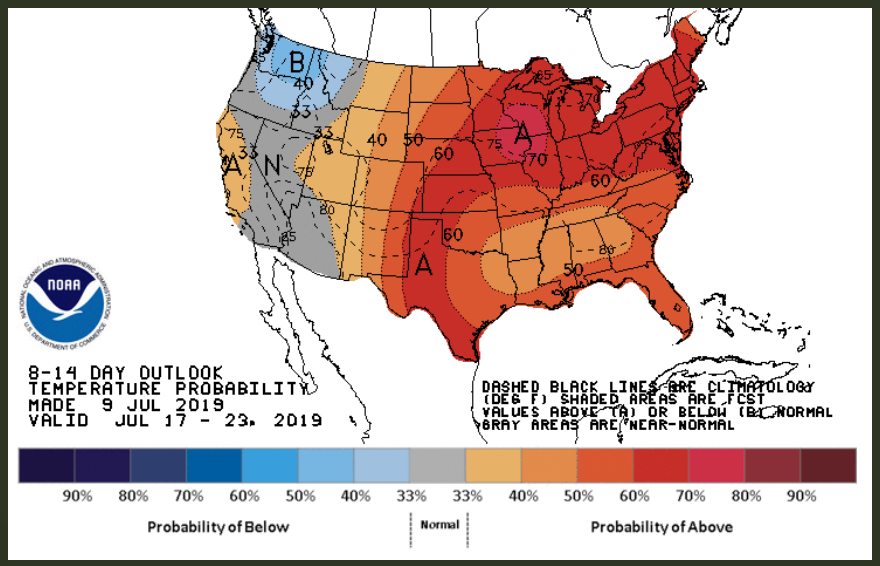
Author:
Richard Tinker
CPC/NOAA/NWS/NCEP

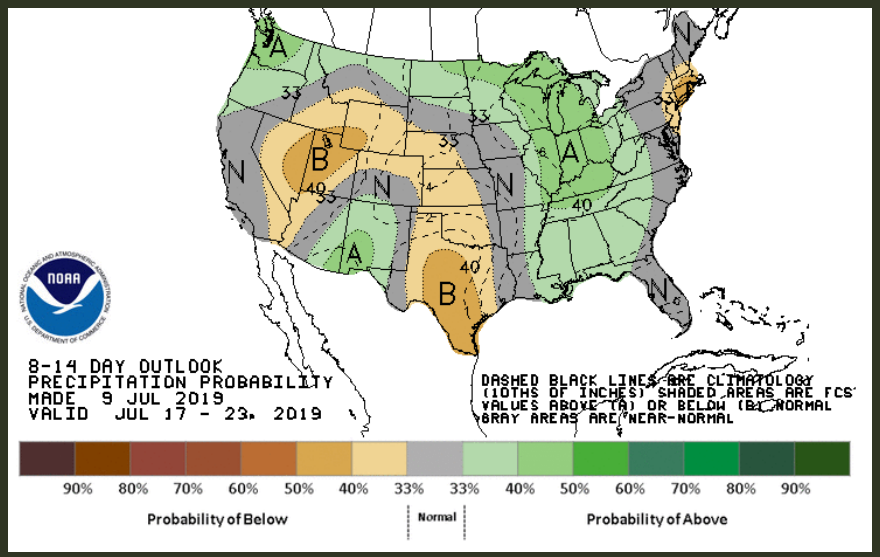
droughtmonitor.unl.edu

Mid/Late July Outlook





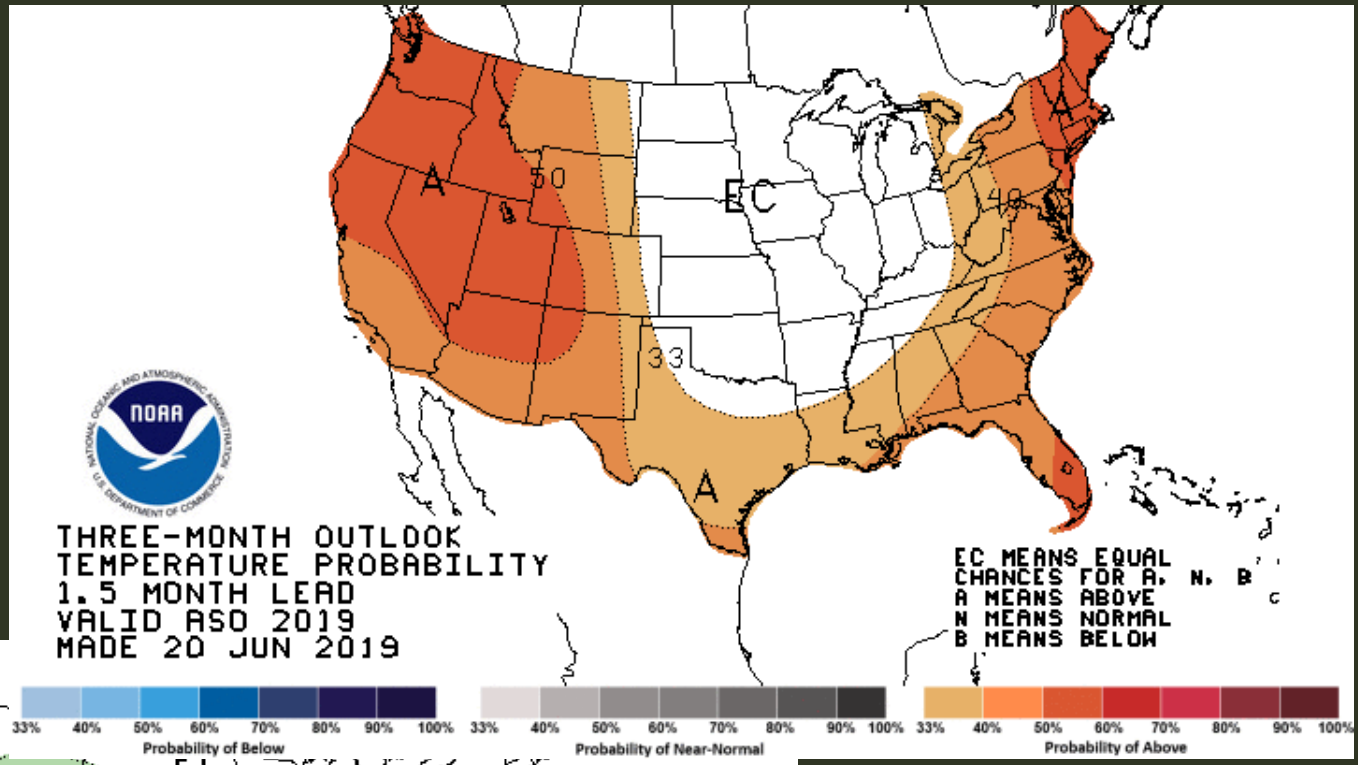


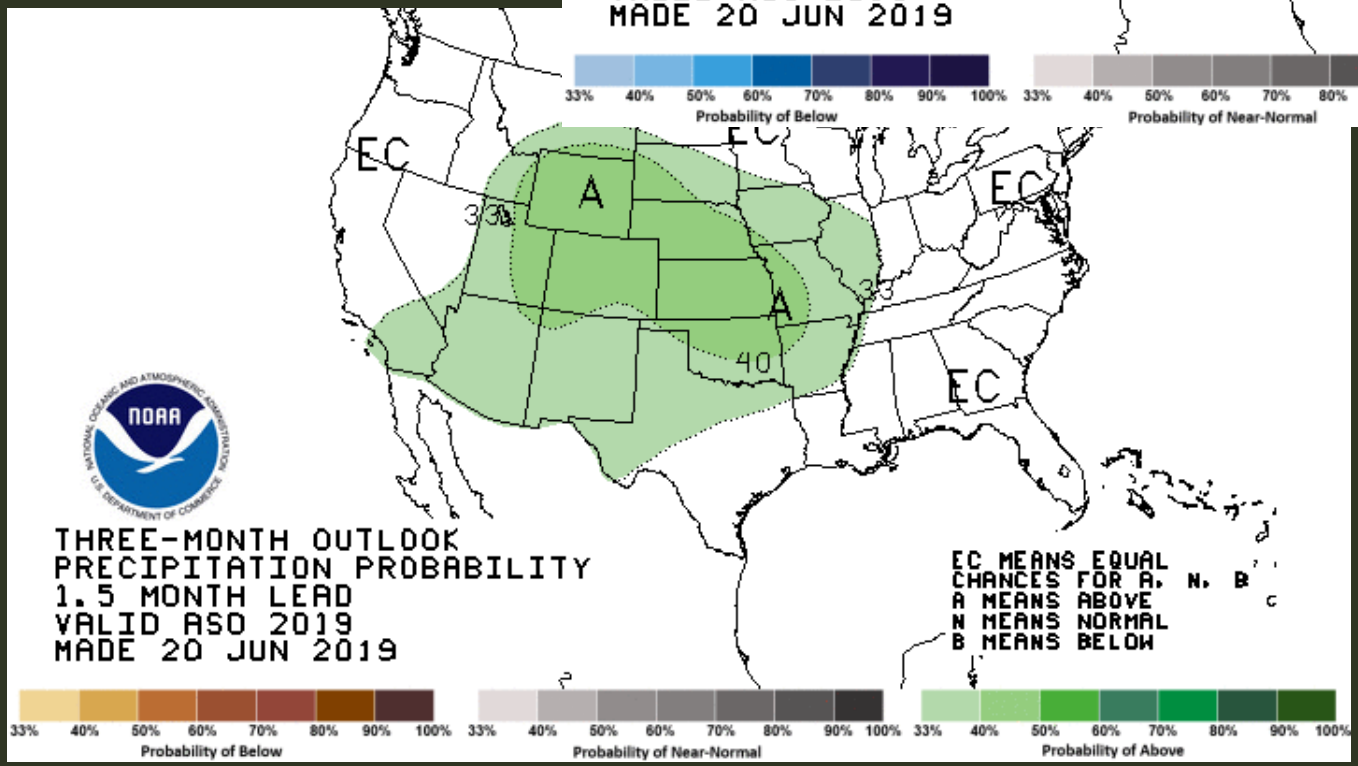


https://www.nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php?tab=3

https://www.cpc.ncep.noaa.gov/products/predictions/814day/

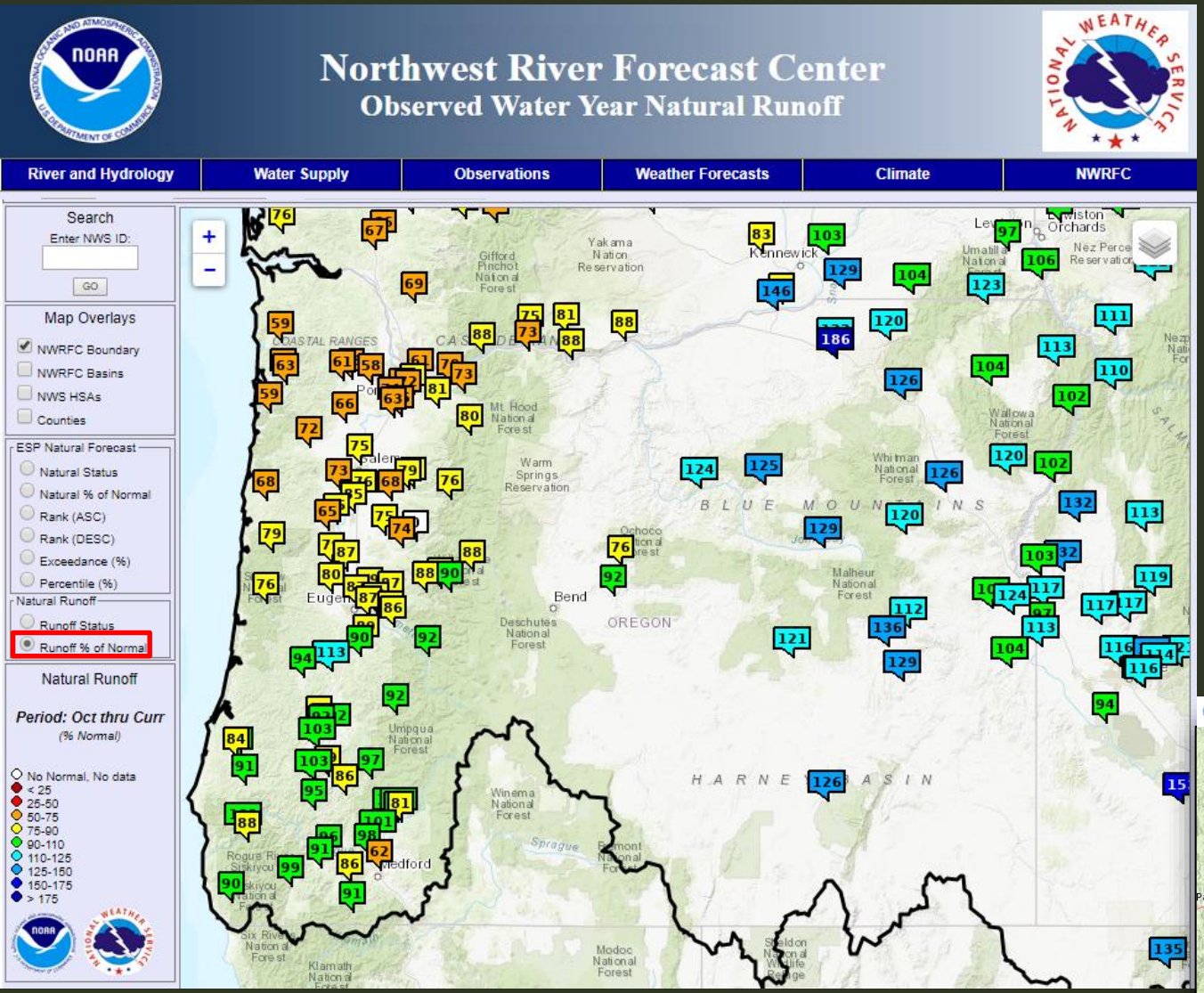
Aug-Sep-Oct Outlook

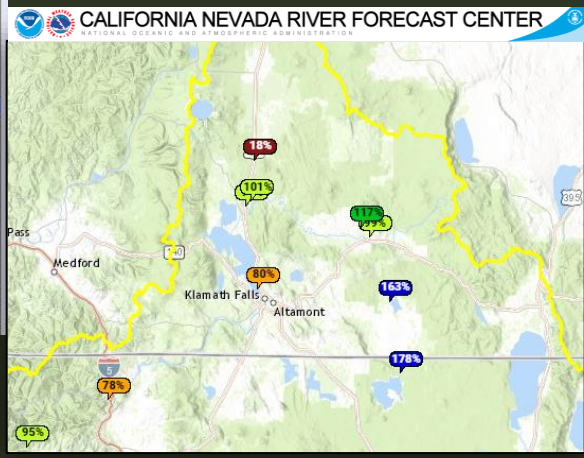




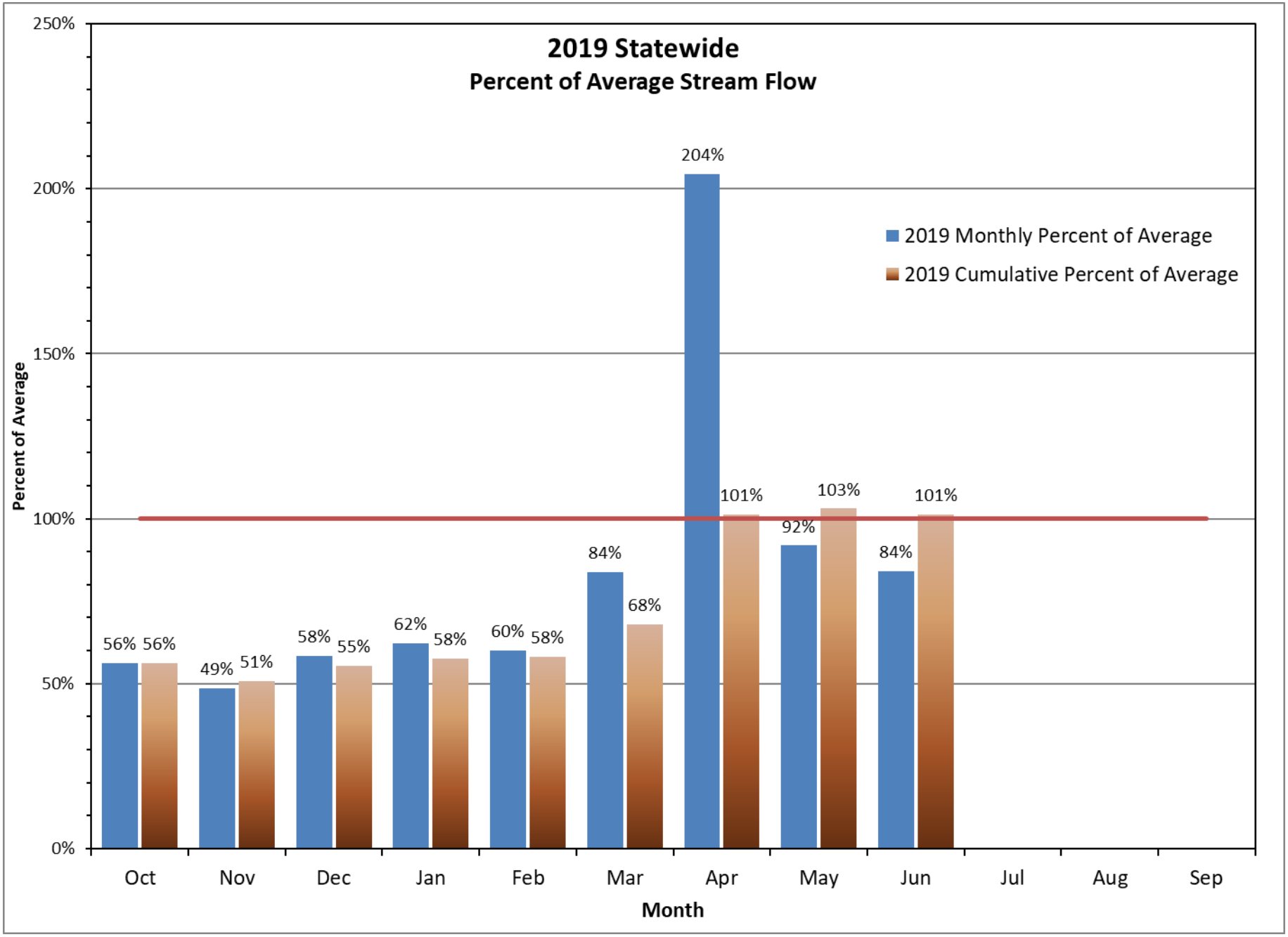
https://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=2

Observed WY19 Runoff thus far

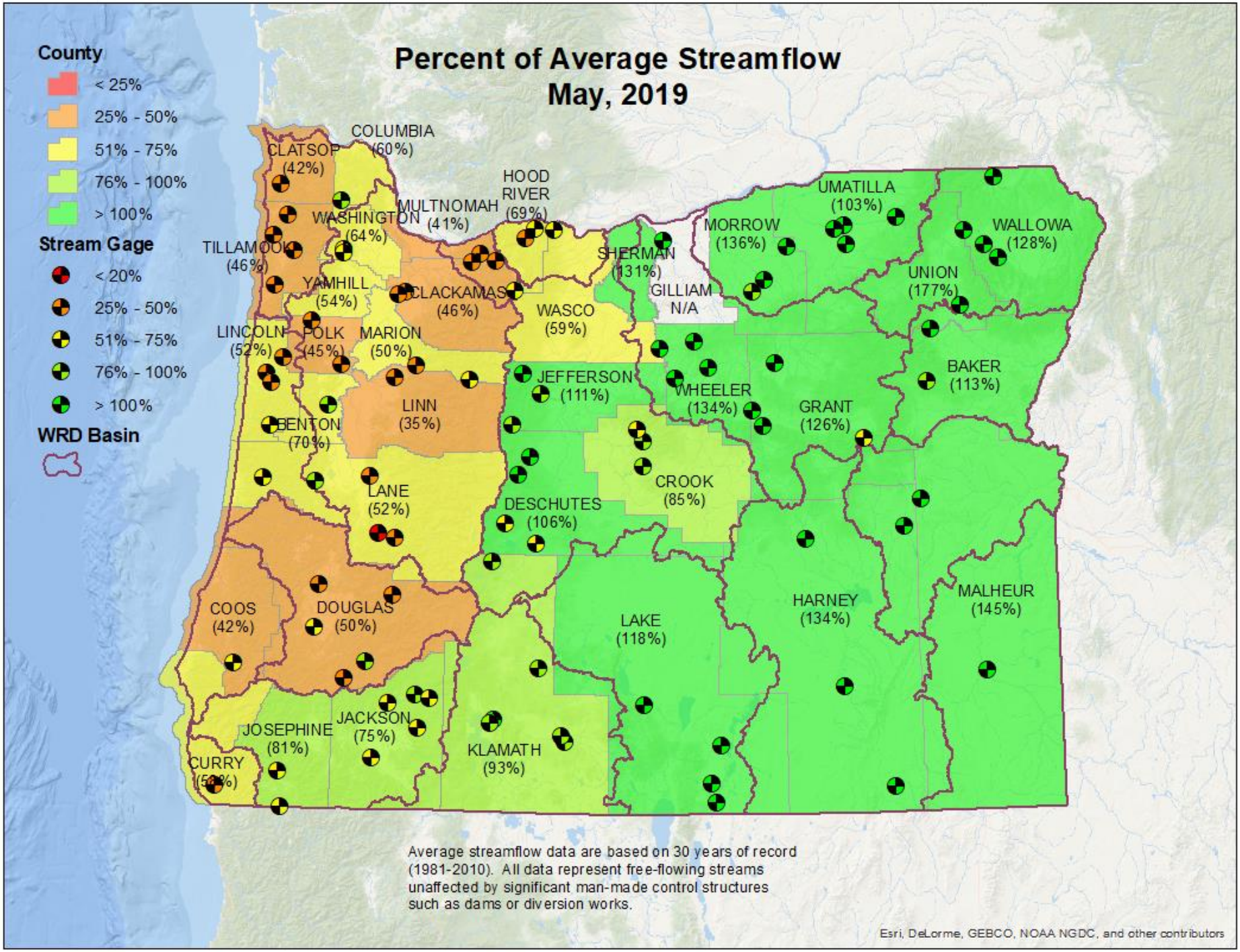




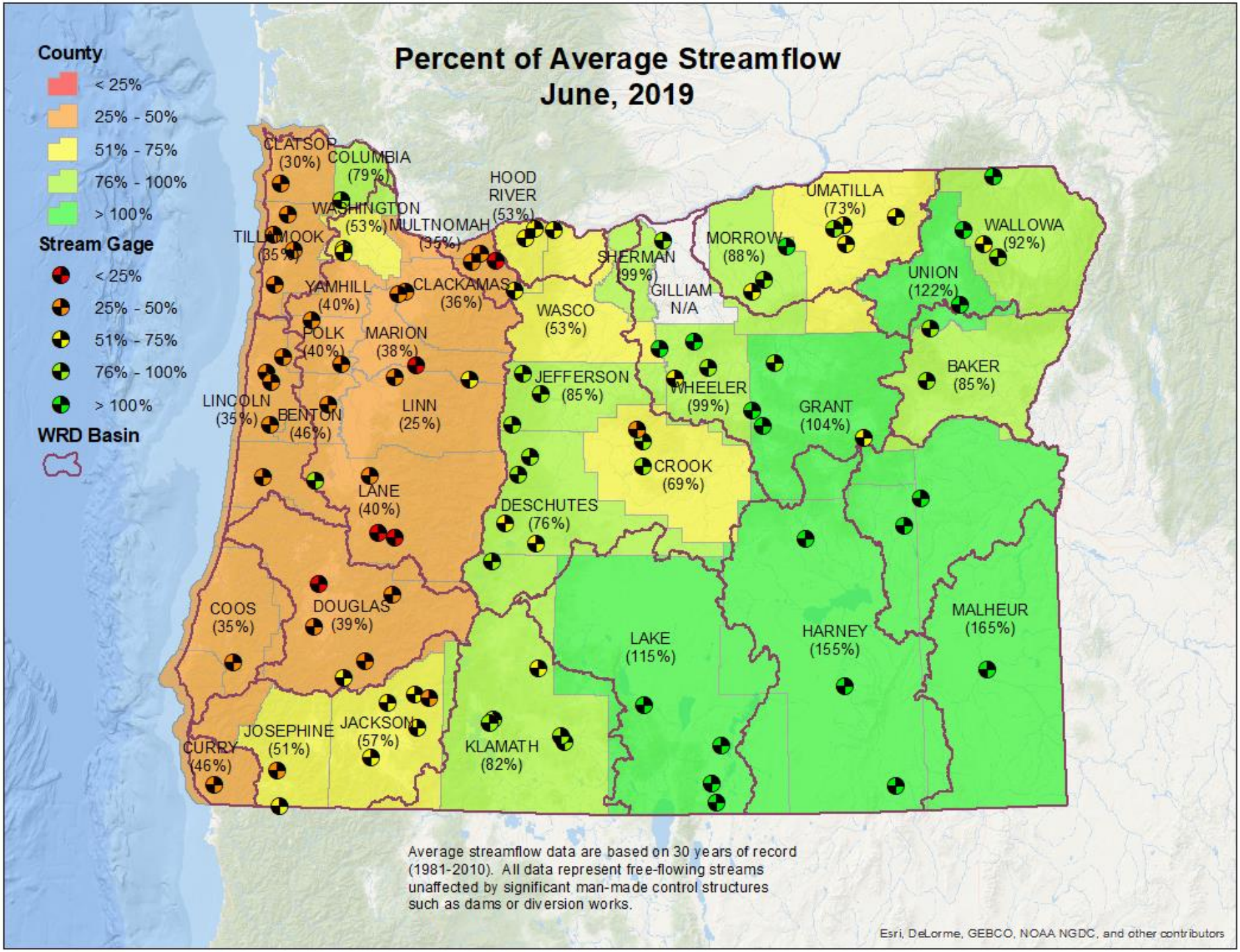
https://www.nwrfc.noaa.gov/natural/index.html?version=20181015v2
https://www.cnrfc.noaa.gov/ol.php?product=espWS


2019 Statewide
Percent of Average Stream Flow
250%
200%
150%
100%
50%
0%
Percent of Average
2019 Monthly Percent of Average
2019 Cumulative Percent of Average
56% 56%
49% 51%
58% 55%
62% 58%
60% 58%
84% 68%
204% 101%
92% 103%
84% 101%
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Month

Basin	Water Year % of average thru June	% of average for June	% of average for 07/07/2019	# of data points
West Side	78%	42%	58%	44
East Side	116%	111%	91%	50
State	101%	84%	78%	94


Percent of Average Streamflow
May, 2019
County
< 25%
25% - 50%
51% - 75%
76% - 100%
> 100%
Stream Gage
< 20%
25% - 50%
51% - 75%
76% - 100%
> 100%
WRD Basin
COLUMBIA (60%)
CLATSOP (42%)
HOOD RIVER (69%)
MULTNOMAH (41%)
WASHINGTON (64%)
TILLAMOOK (46%)
UMATILLA (103%)
MORROW (136%)
WALLOWA (128%)
SHERMAN (131%)
GILLIAM N/A
UNION (177%)
YAMHILL (54%)
CLACKAMAS (46%)
WASCO (59%)
LINCOLN (52%)
POLK (45%)
MARION (50%)
JEFFERSON (111%)
WHEELER (134%)
BAKER (113%)
GRANT (126%)
LINN (35%)
BENTON (70%)
CROOK (85%)
LANE (52%)
DESCHUTES (106%)
COOS (42%)
DOUGLAS (50%)
HARNEY (134%)
MALHEUR (145%)
LAKE (118%)
JOSEPHINE (81%)
JACKSON (75%)
KLAMATH (93%)
CURRY (58%)
Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.
Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

Percent of Average Streamflow
June, 2019



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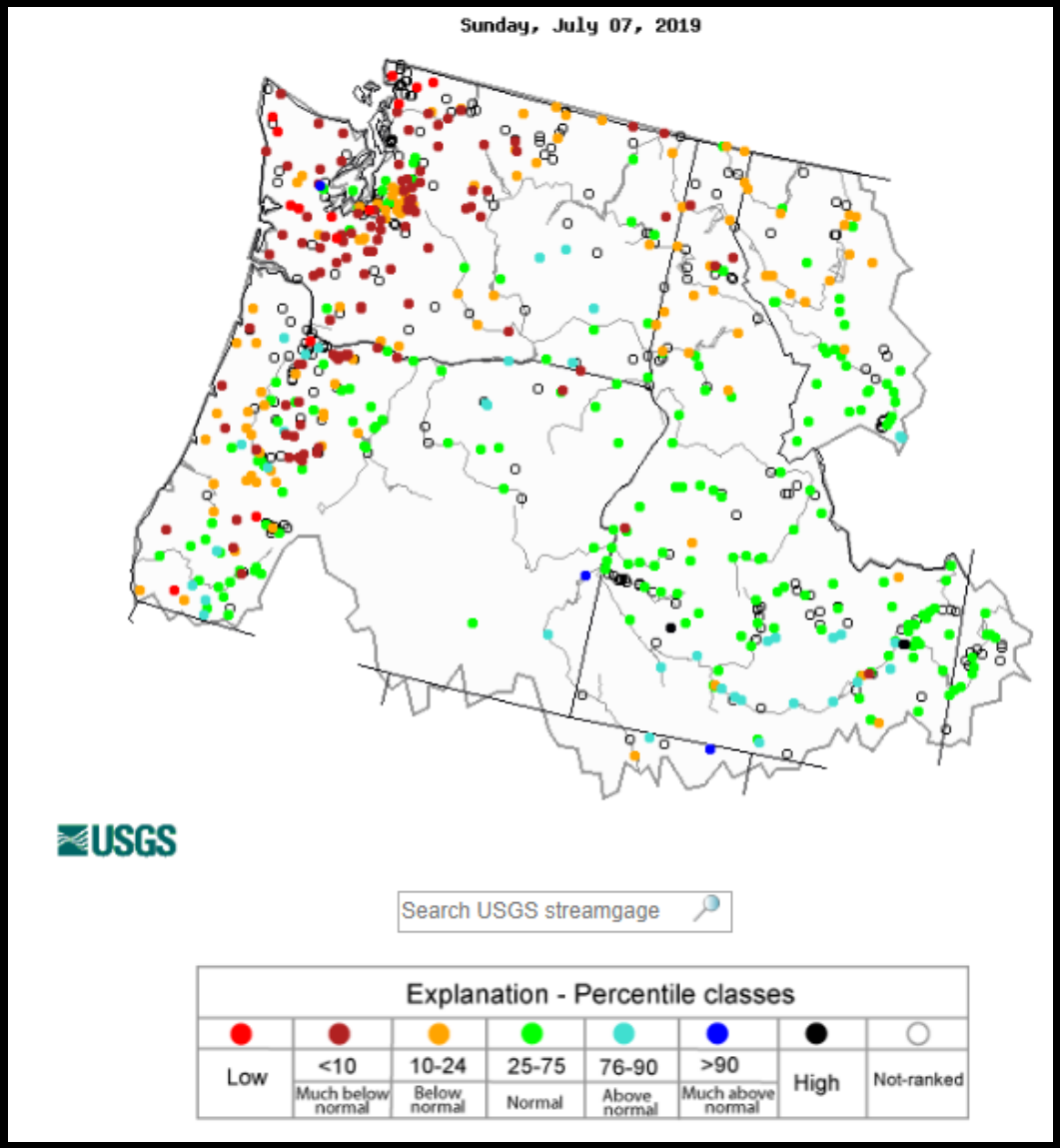
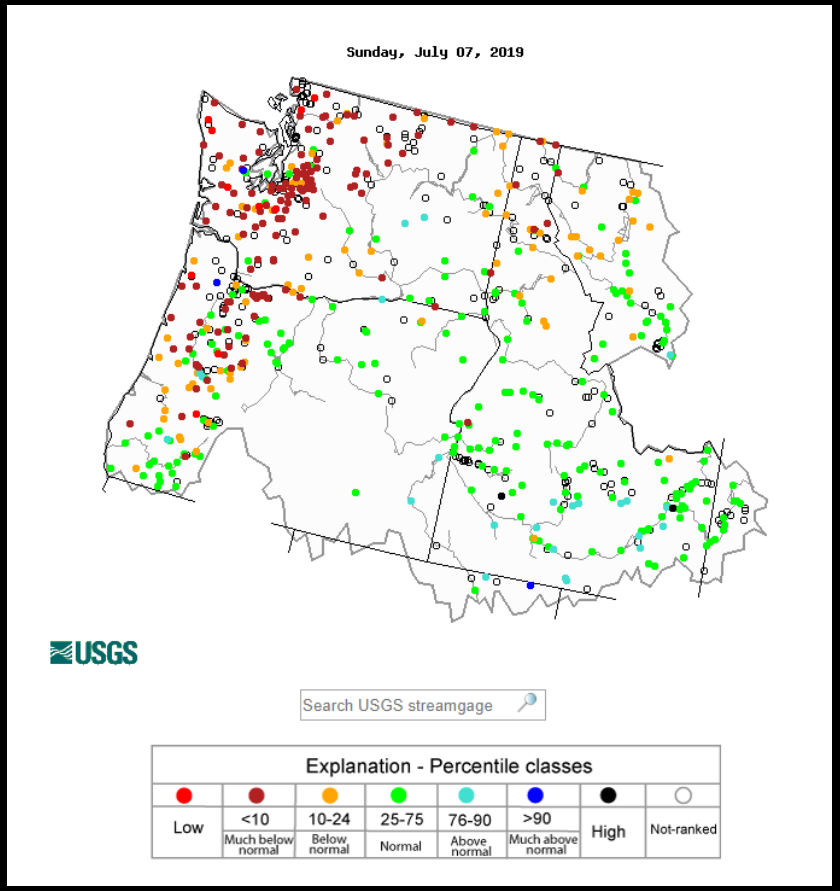


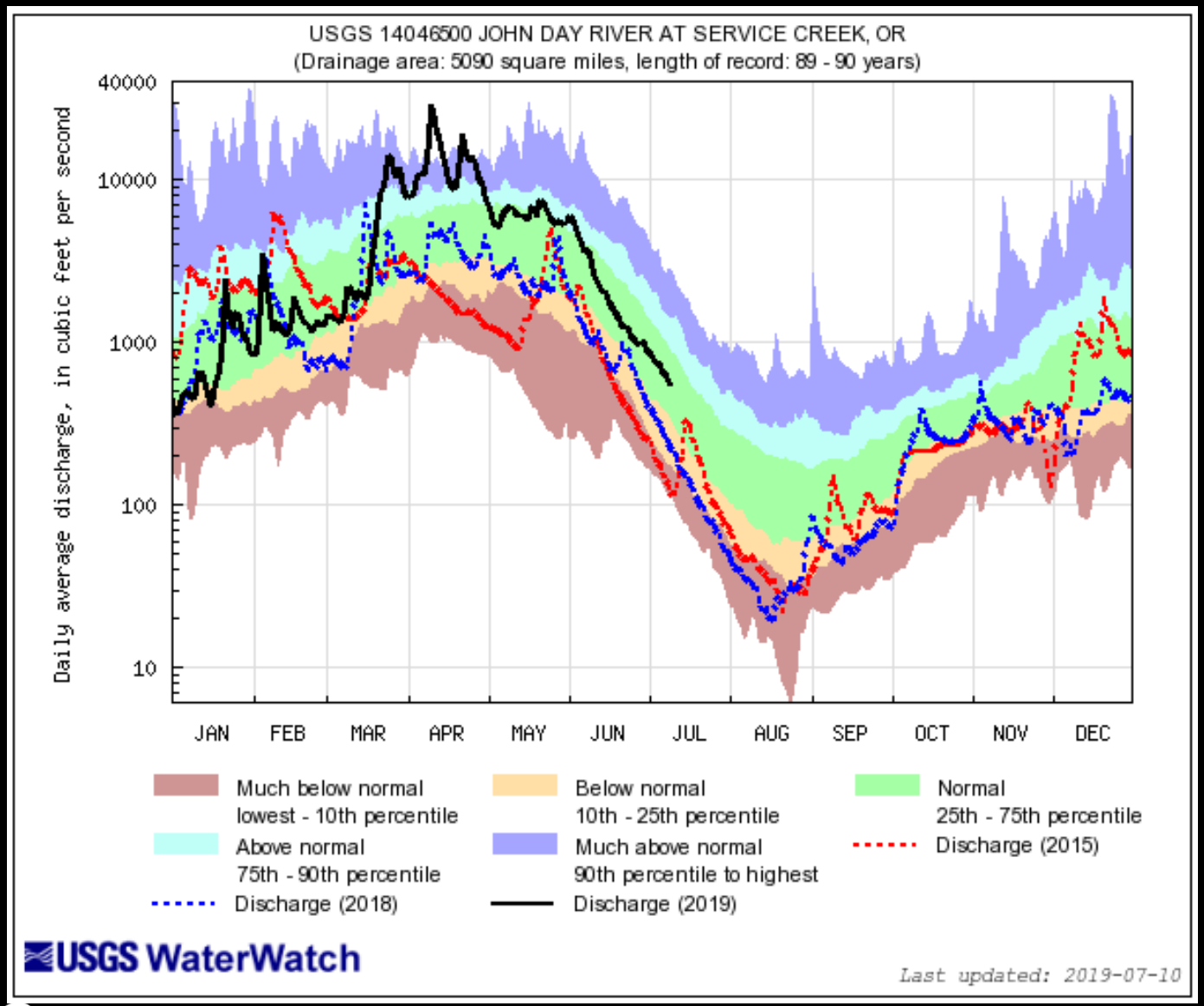
(Left) Map Current 7-day average streamflow compared to historical streamflow for the day of the year (Pacific Northwest)

(Below) Map of 28-day average streamflow compared to historical streamflow for the day of the year (Pacific Northwest)



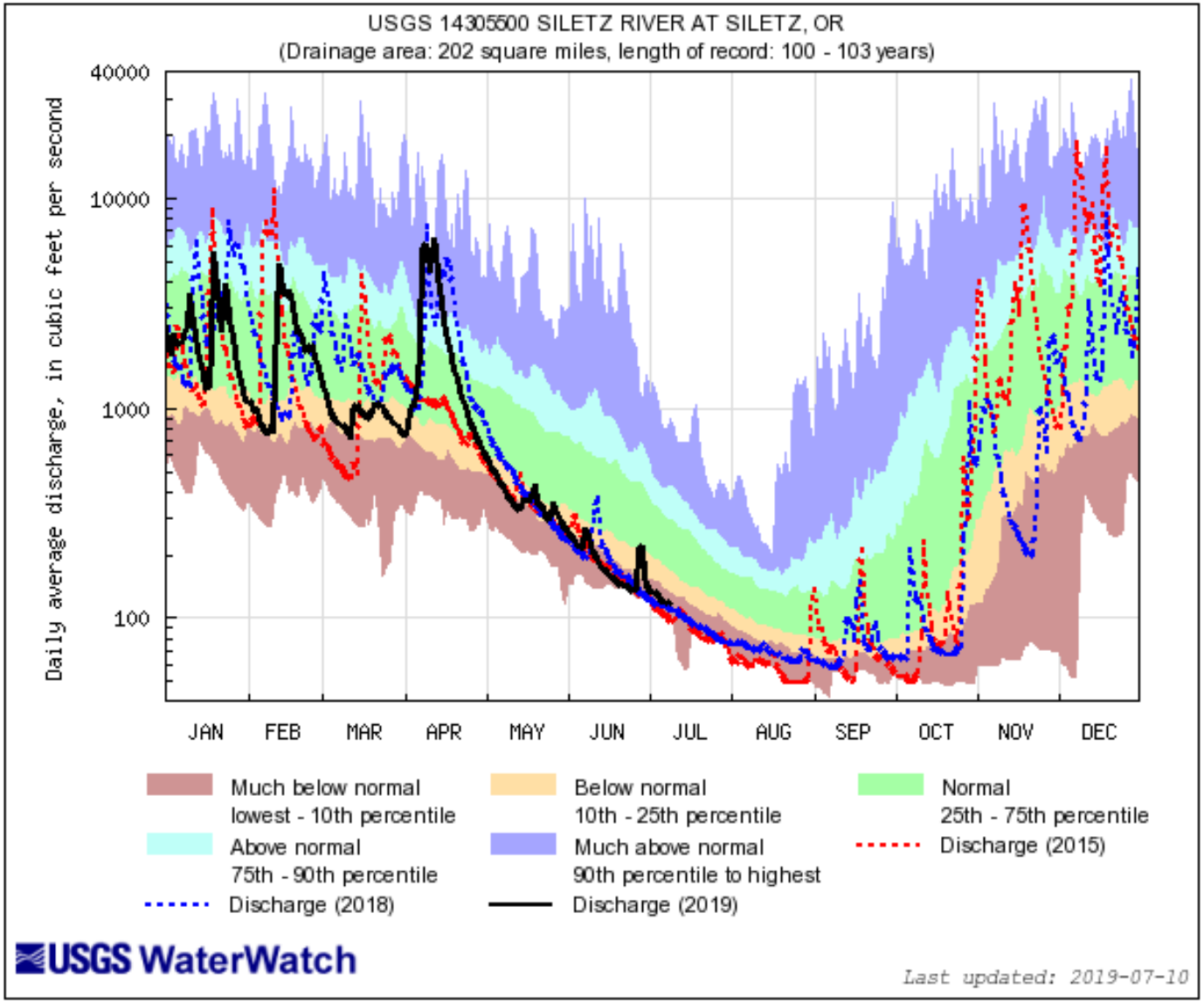
USGS

14046500 John Day R at Service Cr, OR



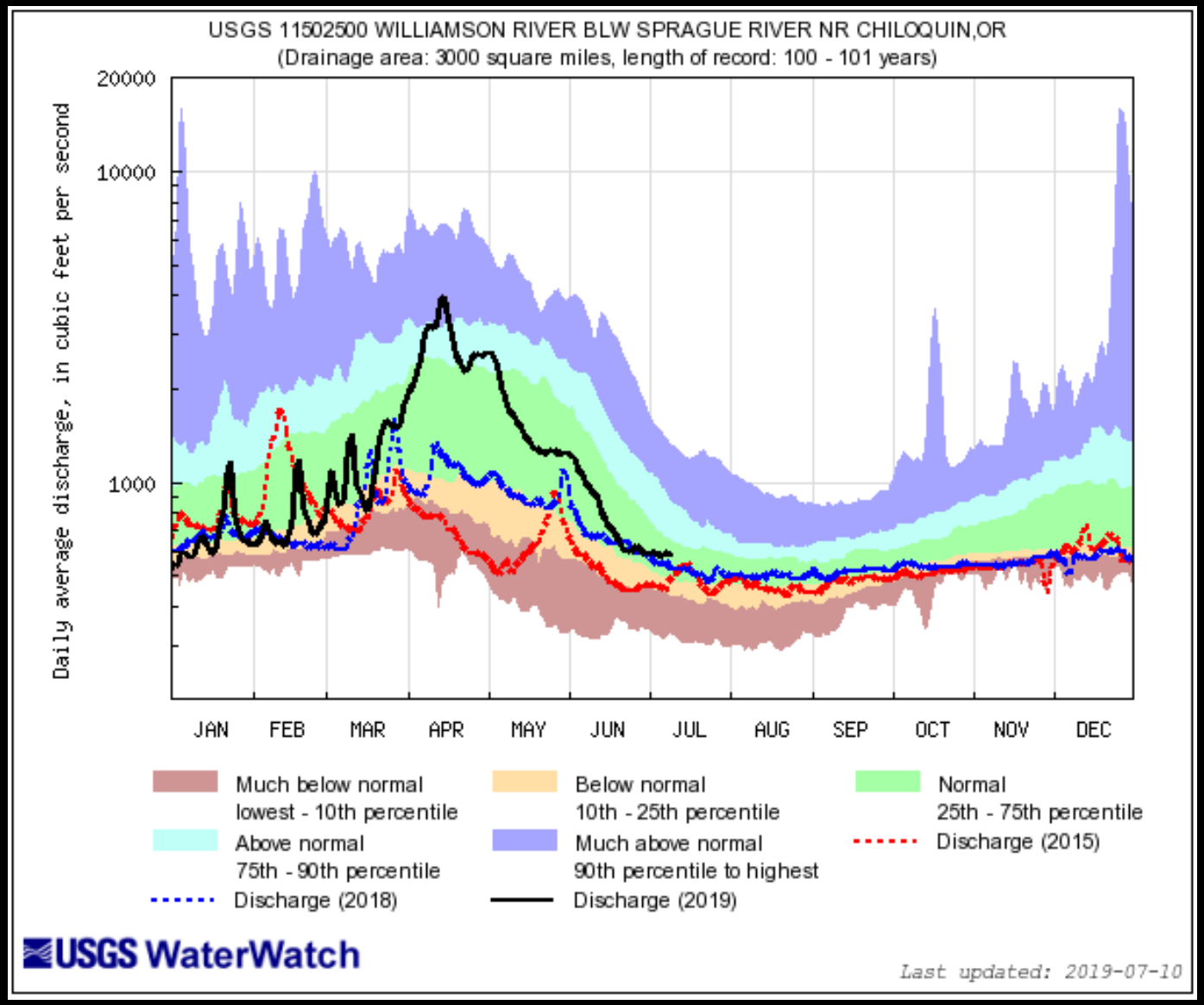
USGS

14305500 Siletz R at Siletz, OR



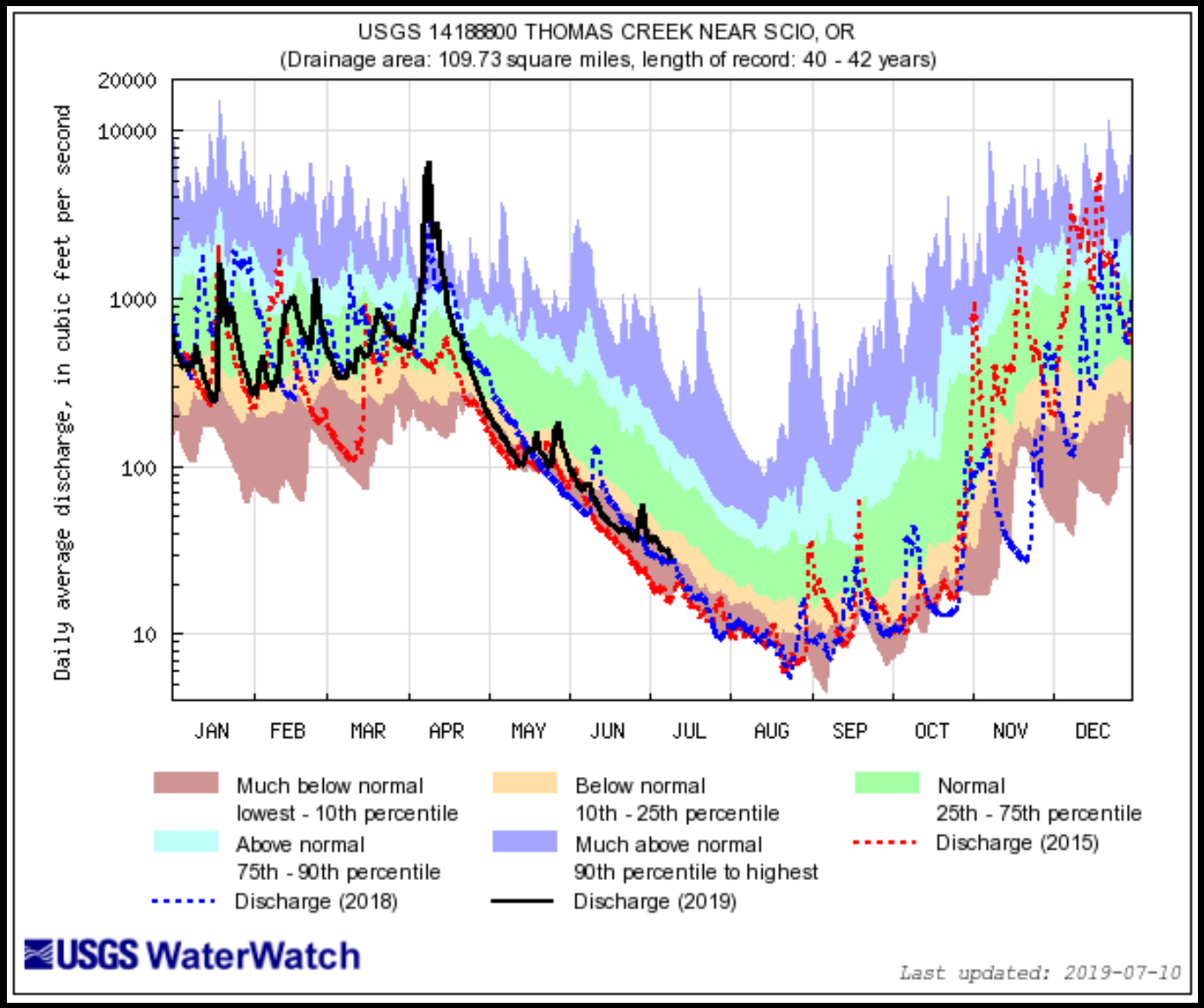
USGS

11502500 Williamson R bl Sprague R

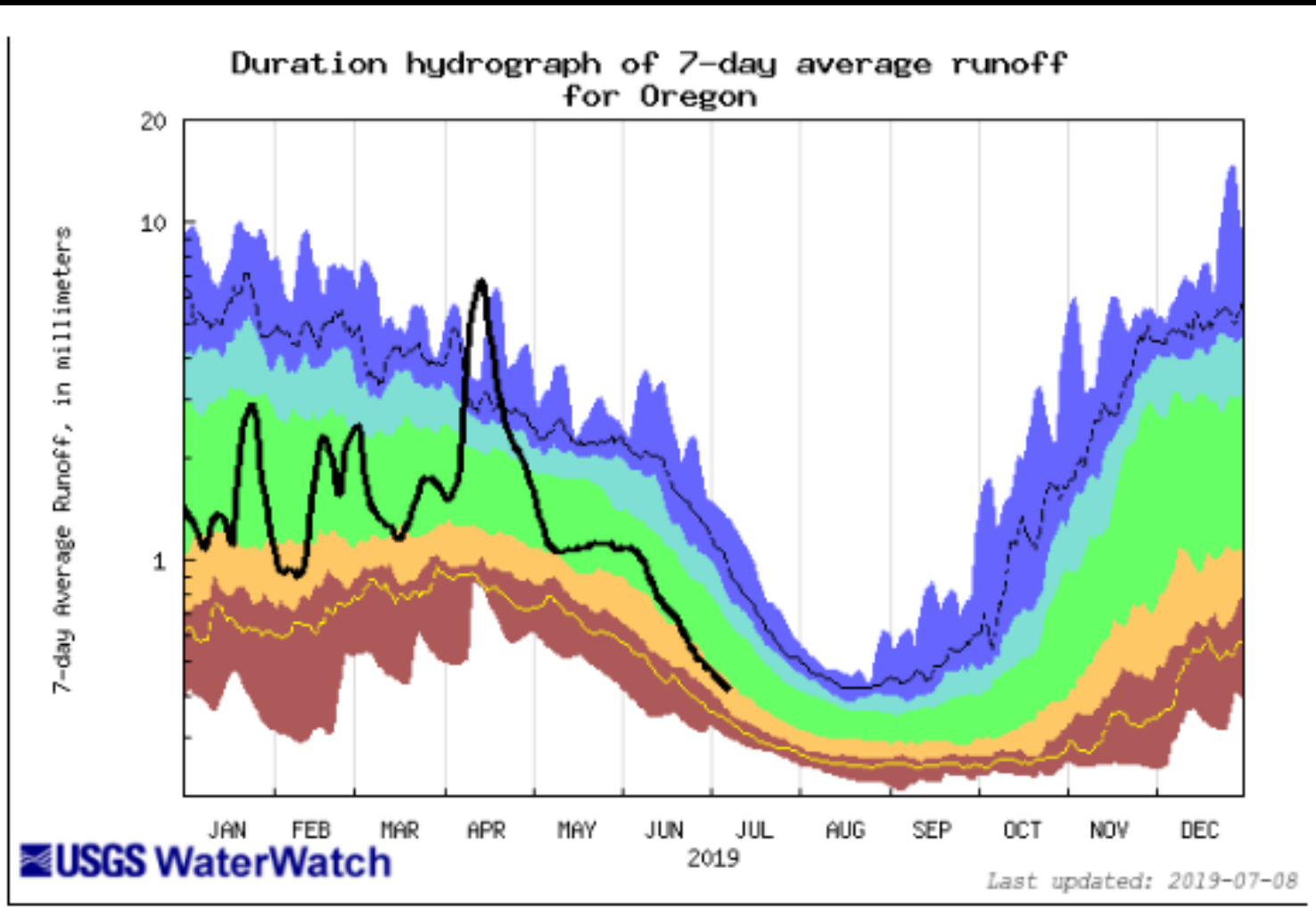


USGS

14188800 Thomas Cr nr Scio, OR



USGS



Explanation - Percentile classes							
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile -highest	Runoff
Much below Normal		Below normal	Normal	Above normal	Much above normal		

USGS

USBR Reservoirs

- Tualatin – Scoggins is 84% full
- Umatilla - McKay is 85% full
- Eastern – Ranges from 94% (Owyhee) to 66% (Phillips)
- Upper Deschutes – 85% (Crane Prairie) to 37% (Wickiup)
- Crooked – 91% (Prineville) to 75% (Ochoco)
- Rogue – 74% (Emigrant) to 36% (Fourmile)

USACE Reservoirs

- Rogue – 75% full, 25% below WCD
- Willamette - 66% full, 34% below WCD
- Lower Columbia – 89% full, 11% below WCD

WCD: Water Control Diagram

Thank you.