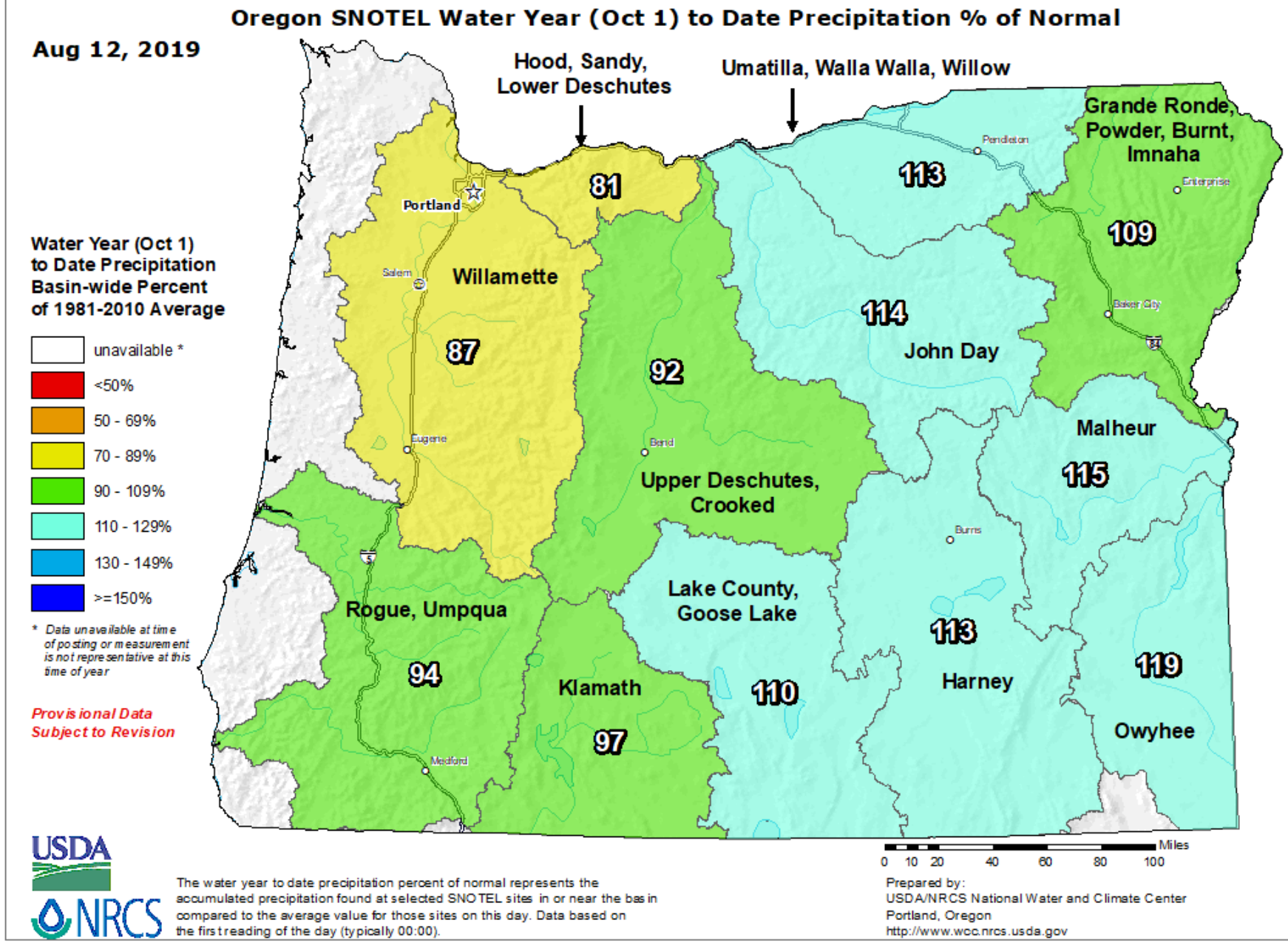
Oregon Water Supply Availability Committee - August 13, 2019

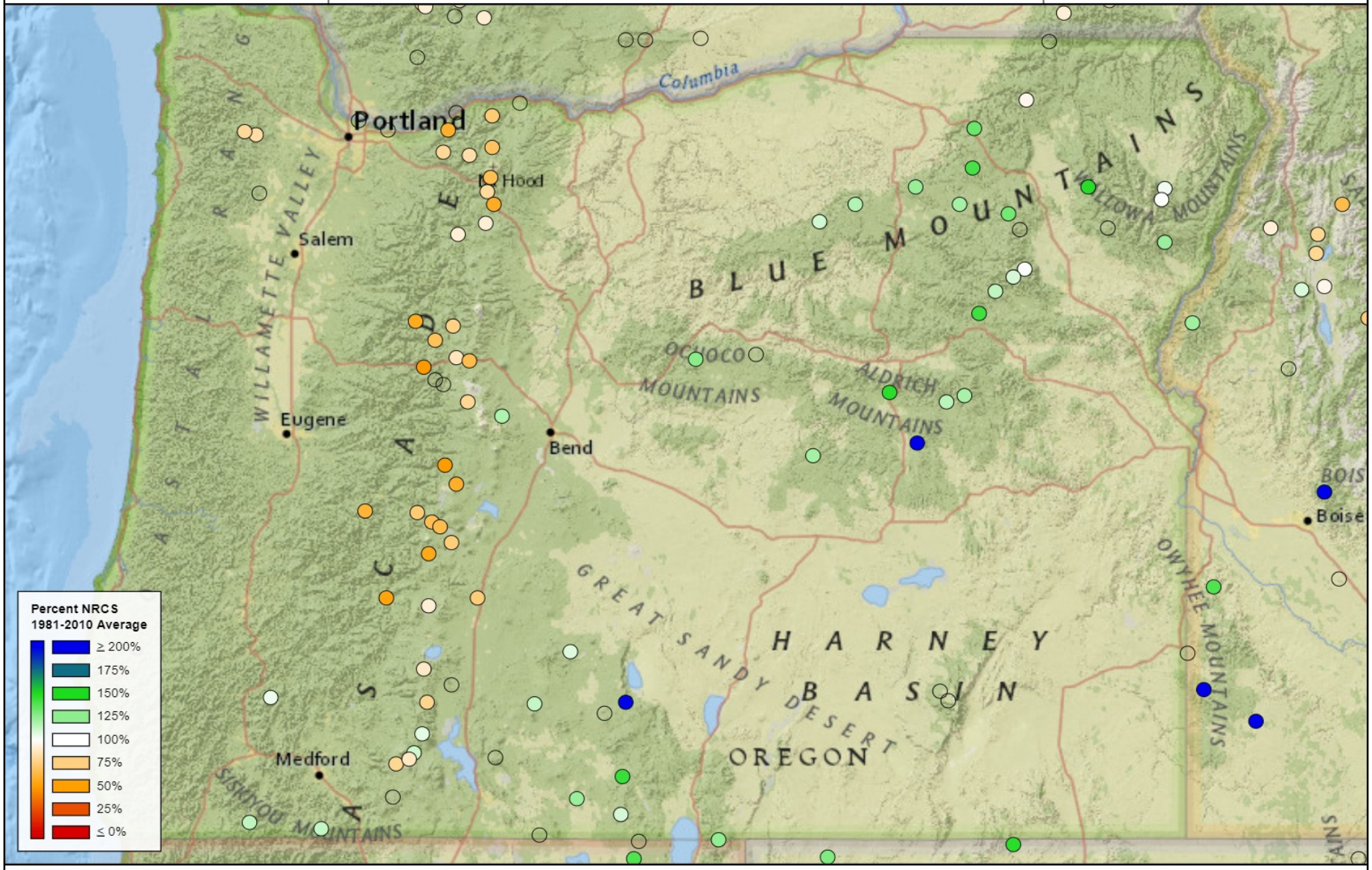
Muckamuck SNOTEL – Okanagon County, WA

H. Scott Oviatt
USDA – Natural Resources Conservation Service
scott.oviatt@usda.gov
503-414-3271

Statewide SNOTEL Precipitation is 93% of normal



90 day Precipitation	Percent NRCS 1981-2010 Average	May 14, 2019 - August 11, 2019



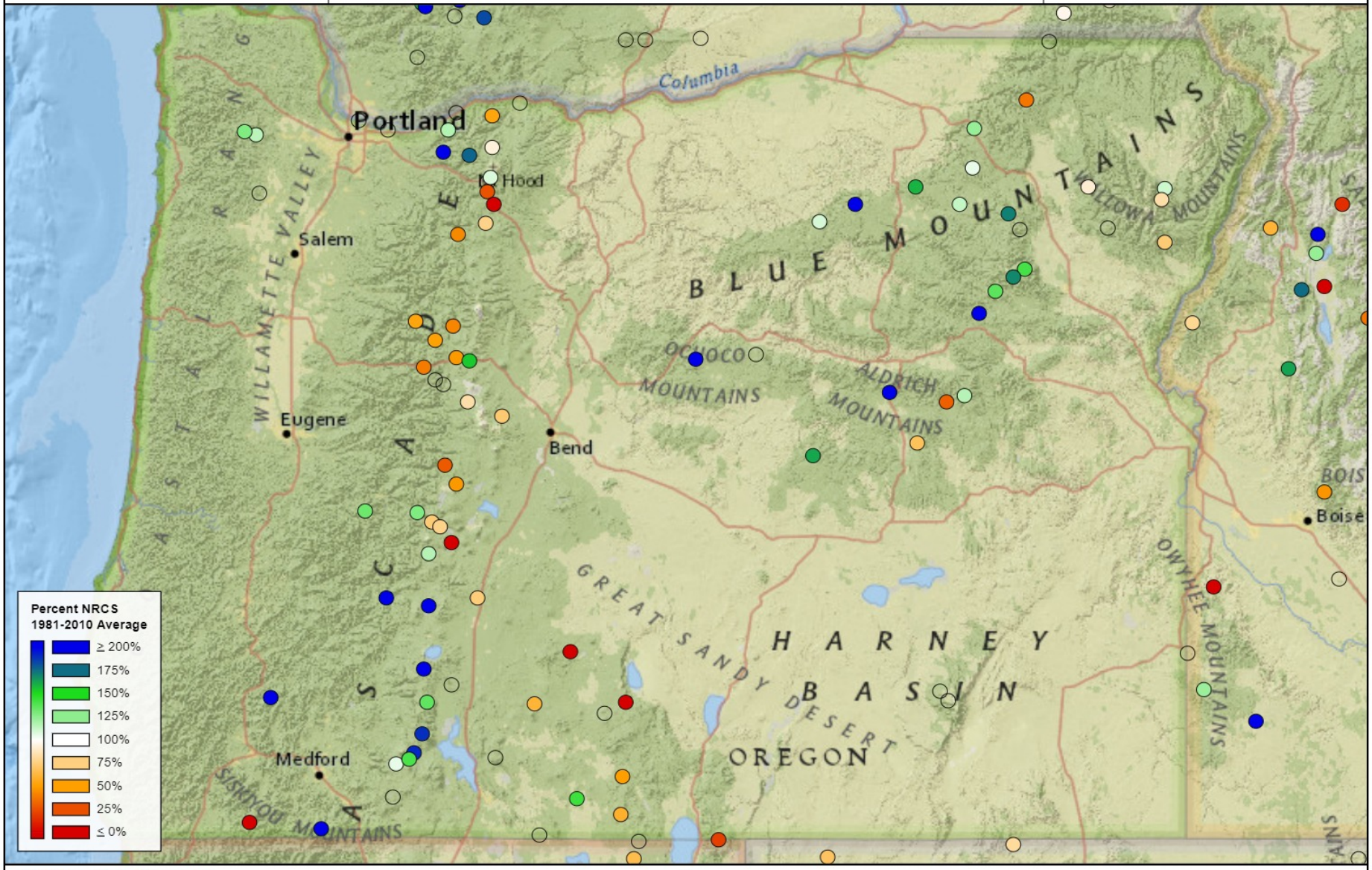
USDA Natural Resources Conservation Service
United States Department of Agriculture

N

0 10 20 40 60 80 100 Miles

Created 8-12-2019

30 day Precipitation	Percent NRCS 1981-2010 Average	July 13, 2019 - August 11, 2019



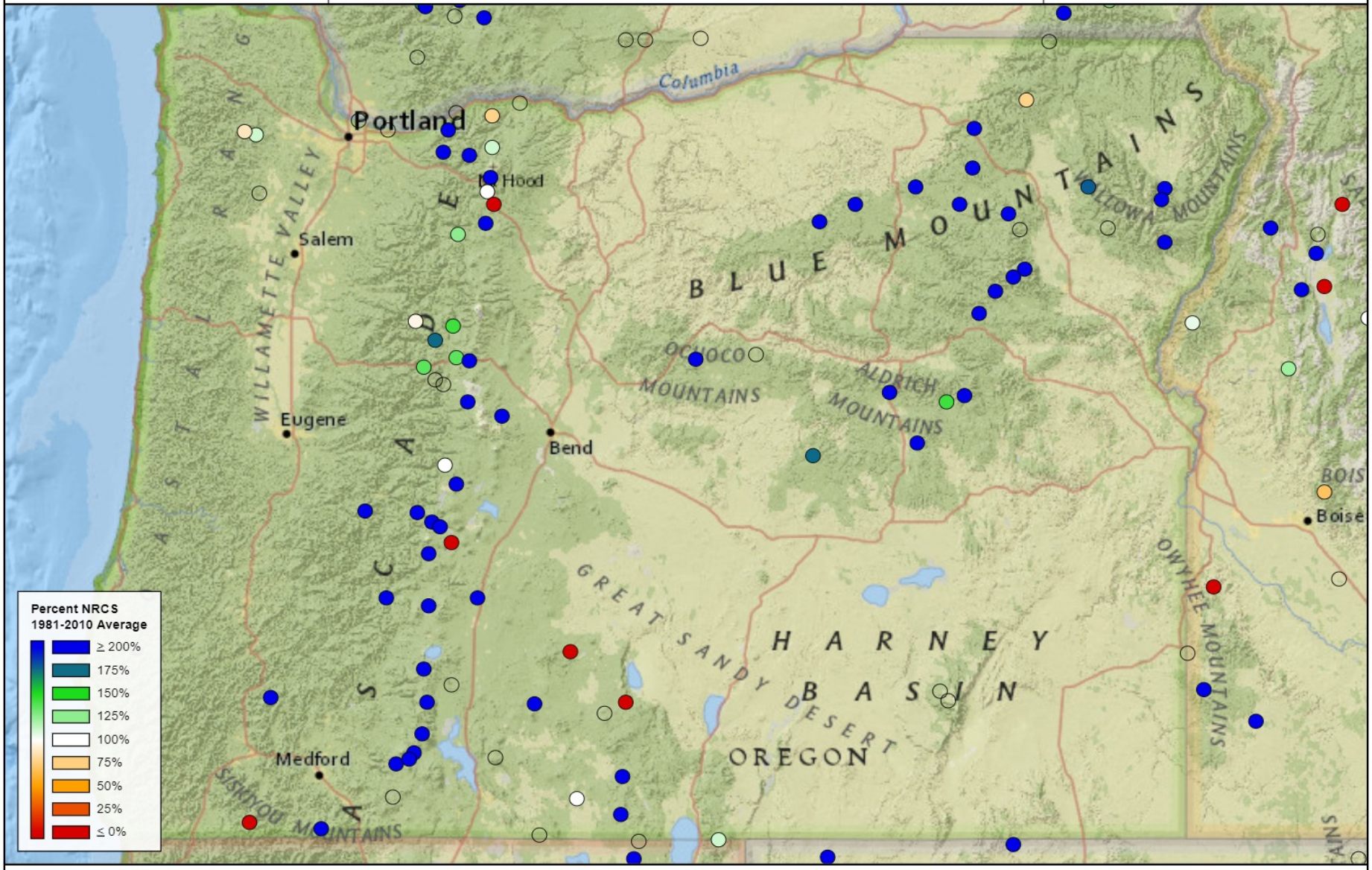
USDA Natural Resources Conservation Service
United States Department of Agriculture

N

0 10 20 40 60 80 100 Miles

Created 8-12-2019

7 day Precipitation	Percent NRCS 1981-2010 Average	August 5, 2019 - August 11, 2019



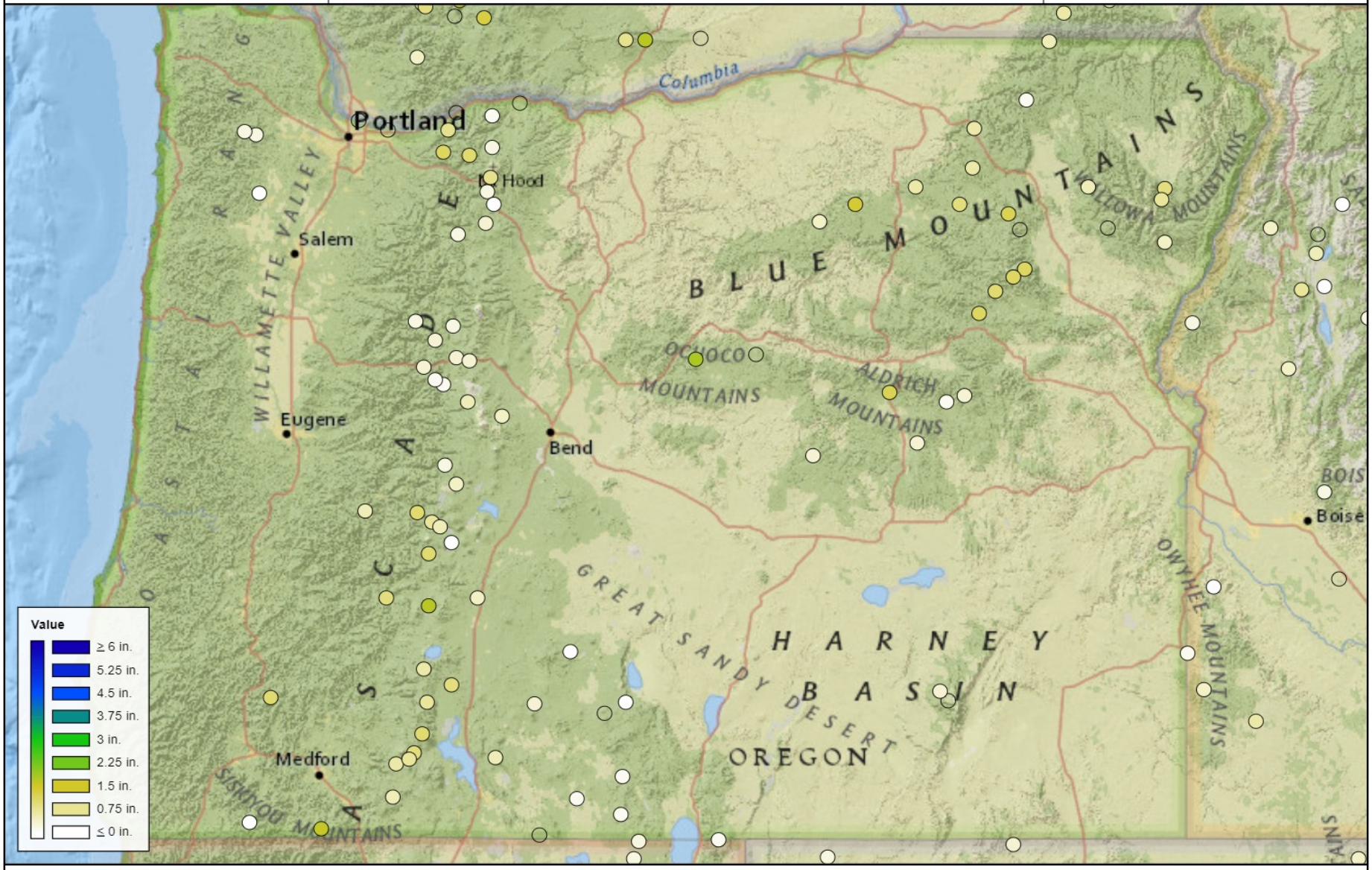
USDA Natural Resources Conservation Service
United States Department of Agriculture

N

0 10 20 40 60 80 100 Miles

Created 8-12-2019

7 day Precipitation	Value	August 5, 2019 - August 11, 2019



USDA Natural Resources Conservation Service
United States Department of Agriculture

N

0 10 20 40 60 80 100 Miles

Created 8-12-2019

Thank you

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

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Oregon Water Supply Availability Committee - August 13, 2019

Muckamuck SNOTEL – Okanagon County, WA

H. Scott Oviatt
USDA – Natural Resources Conservation Service
scott.oviatt@usda.gov
503-414-3271

Oregon Water Supply Availability

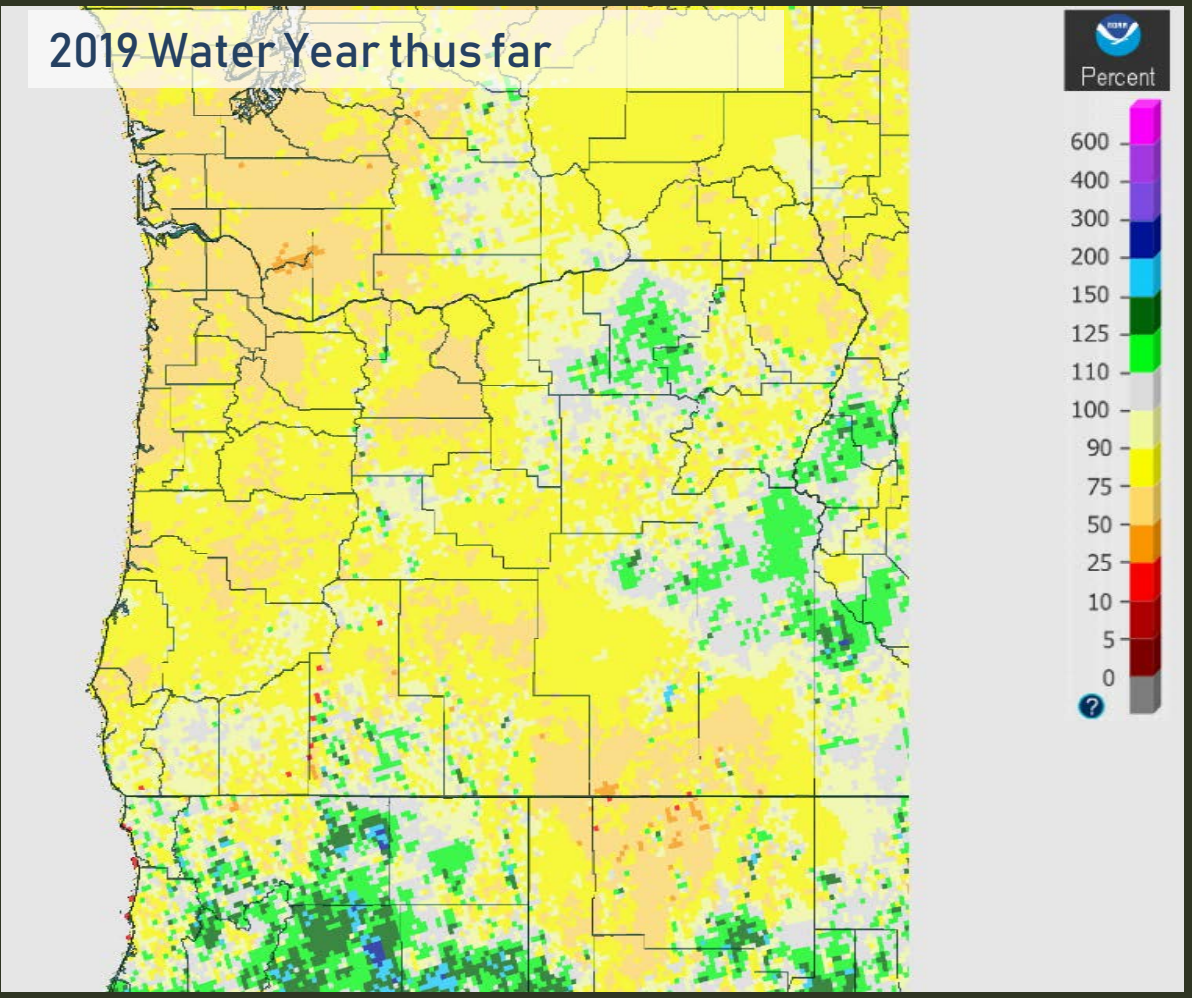
August 13, 2019

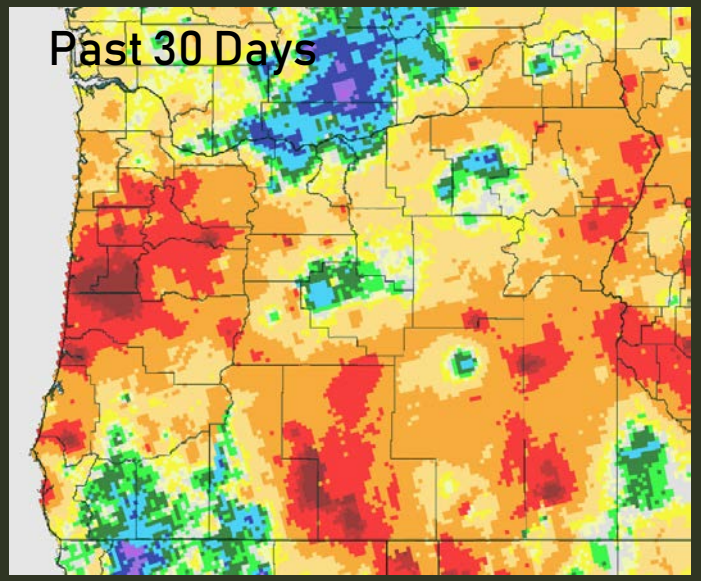
National Weather Service Update

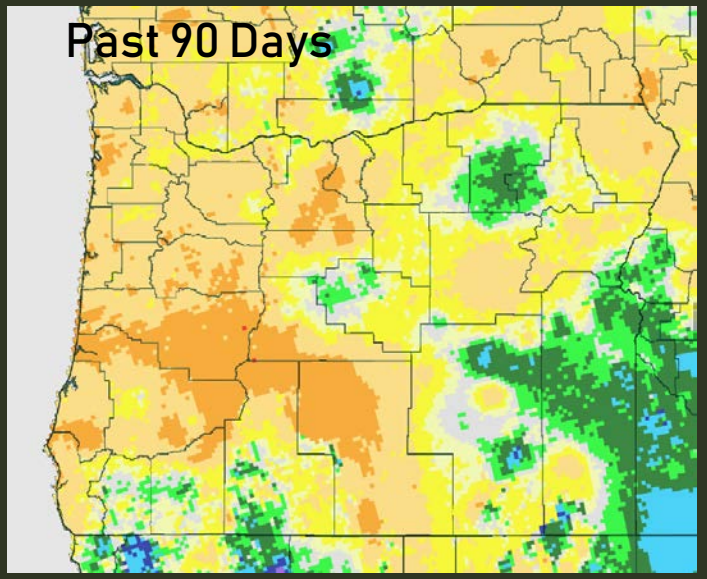
Andy Bryant
NOAA/NWS Portland
Weather Forecast Office

Amy Burke
NOAA/NWS/Northwest River Forecast Center

Precipitation % of Average



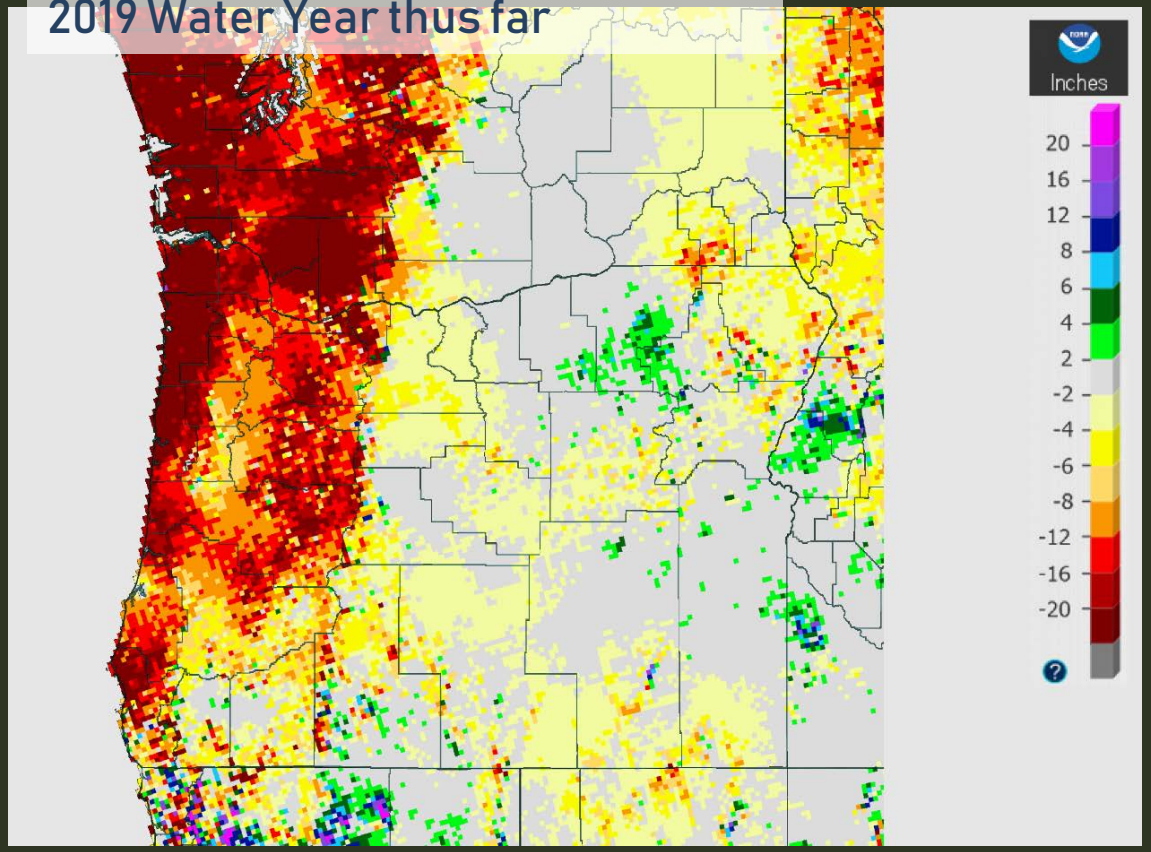


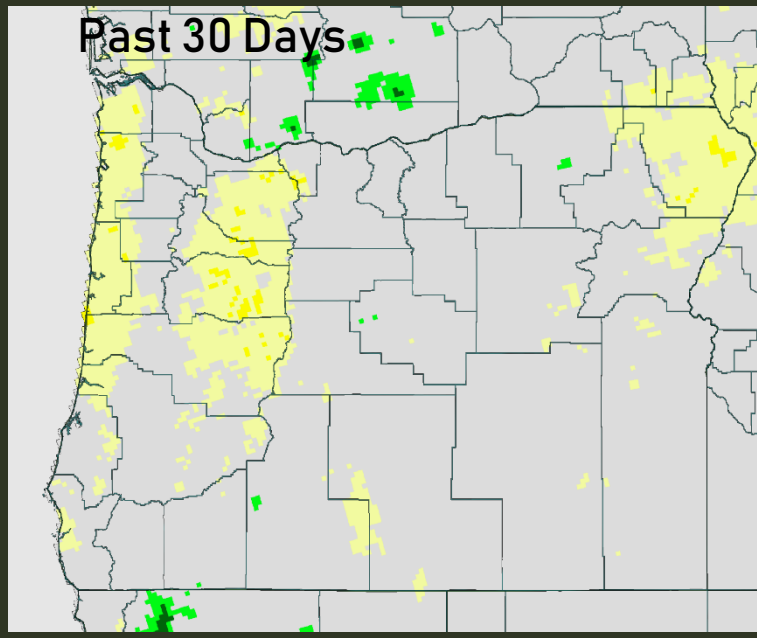


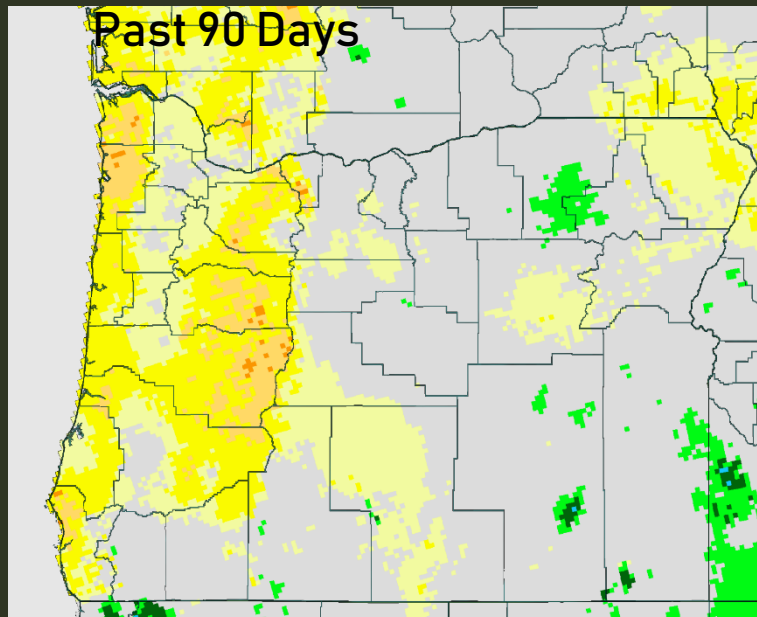
Precipitation Data as of August 13, 2019

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

Precipitation Departure from Normal





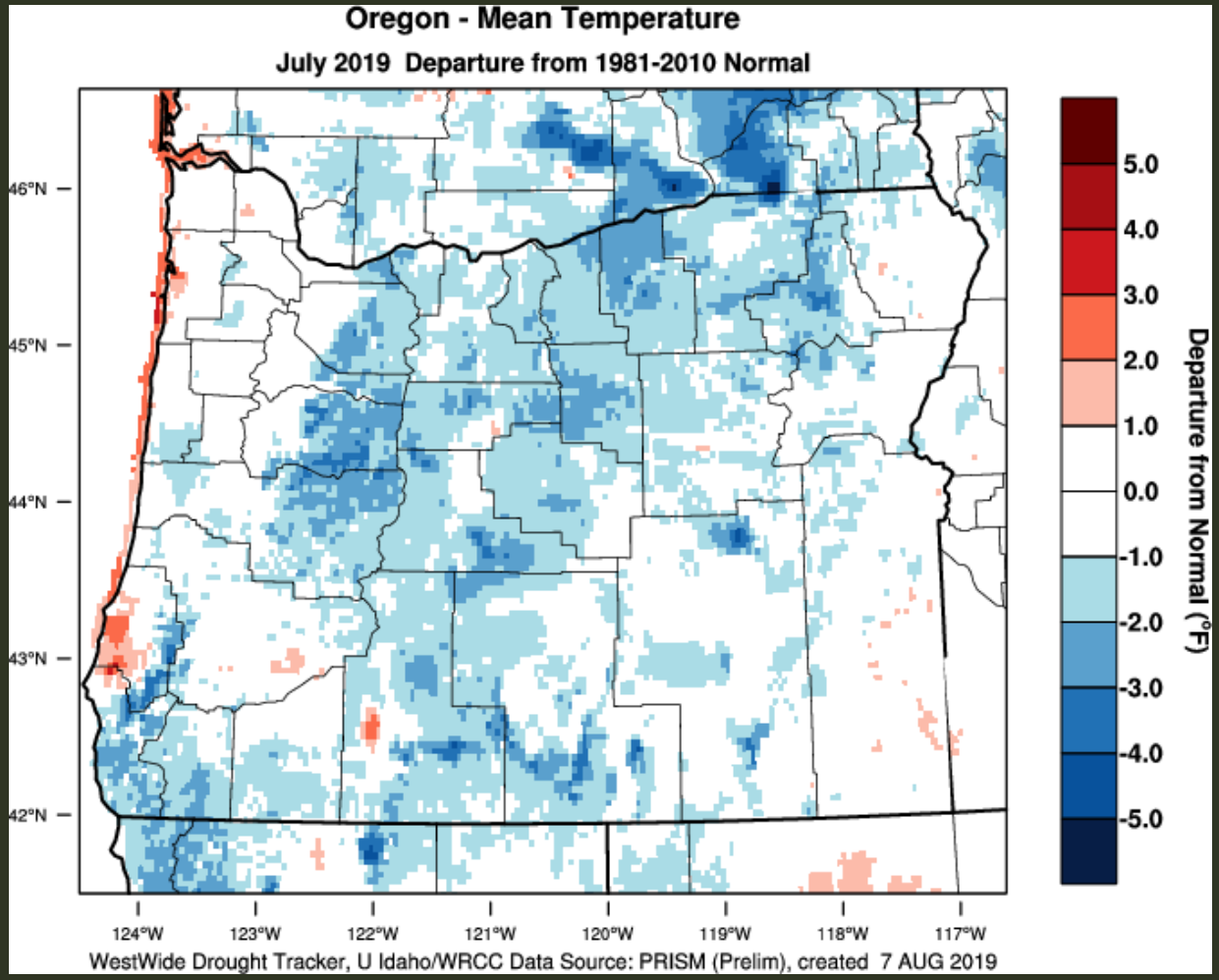


Precipitation Data as of August 13, 2019

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

Recent Temperatures

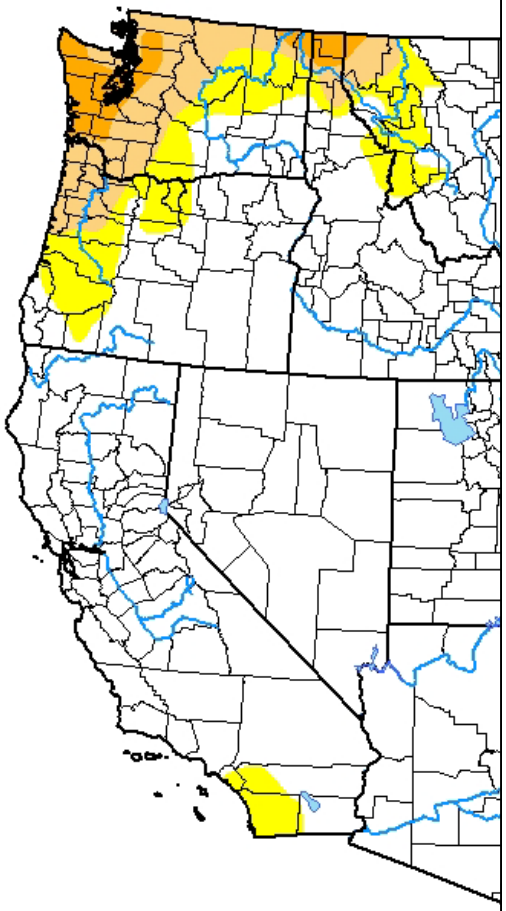
July 2019



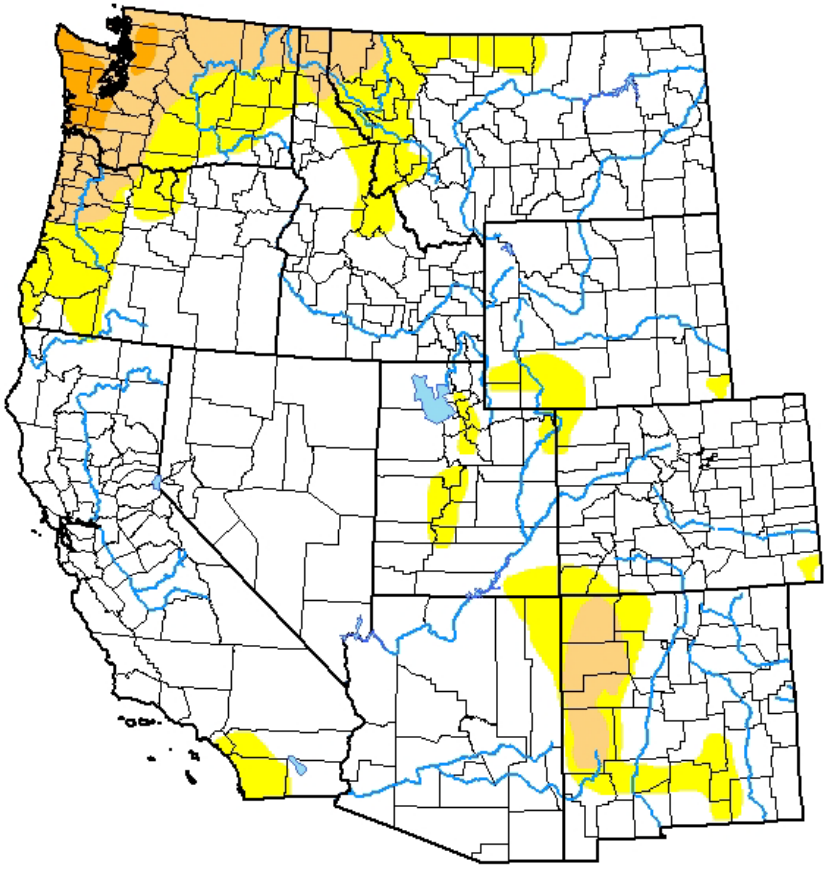
https://wrcc.dri.edu/wwdt/current.php?folder=mdn1

Drought Monitor

July 2, 2019
(Released Wednesday, Jul. 3, 2019)
Valid 8 a.m. EDT



U.S. Drought Monitor
West



August 6, 2019
(Released Thursday, Aug. 8, 2019)
Valid 8 a.m. EDT

Intensity:

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

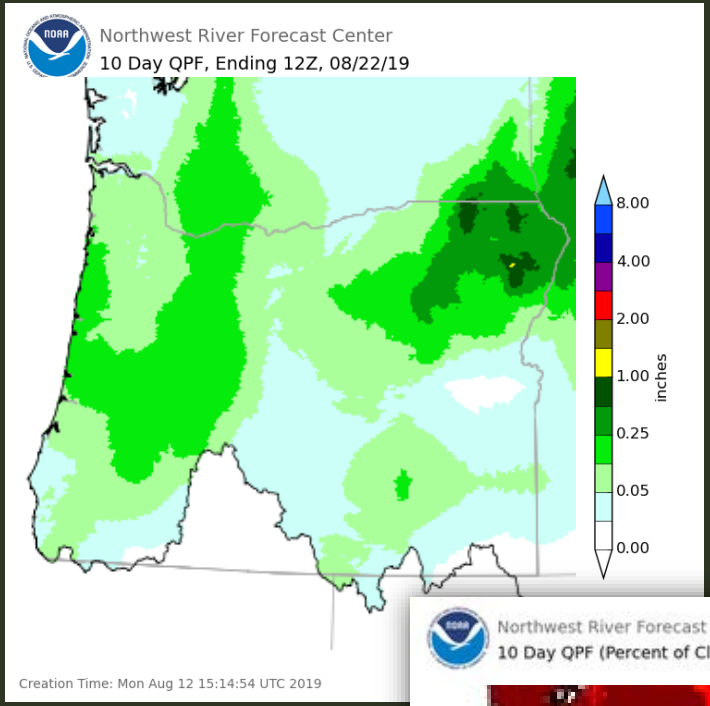
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

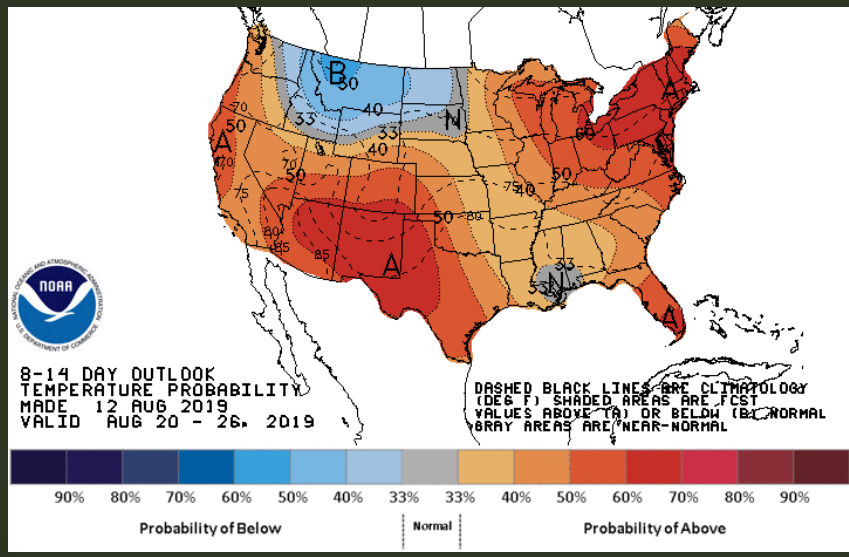
Author:

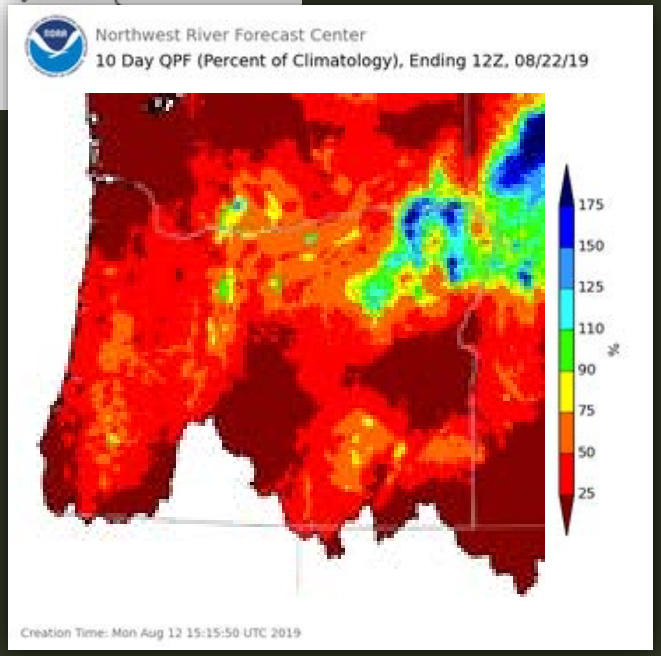
Richard Tinker
CPC/NOAA/NWS/NCEP

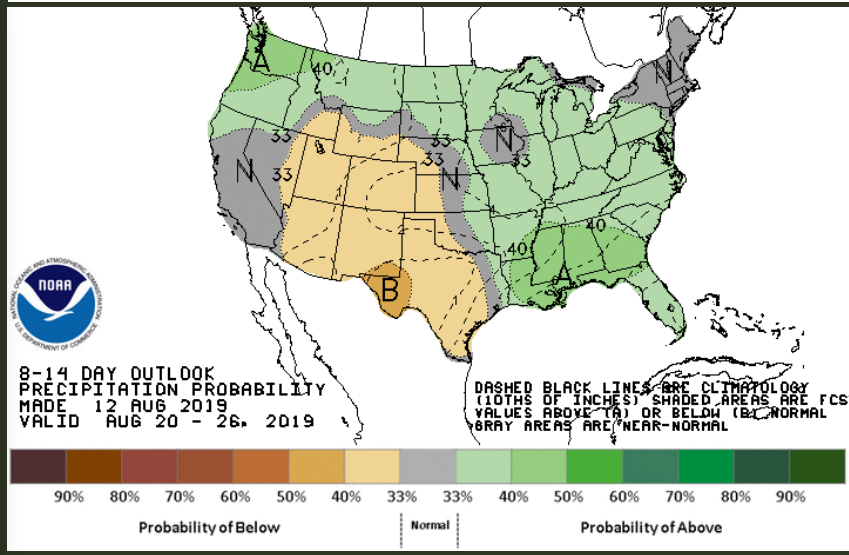
droughtmonitor.unl.edu

Outlook thru 14 days





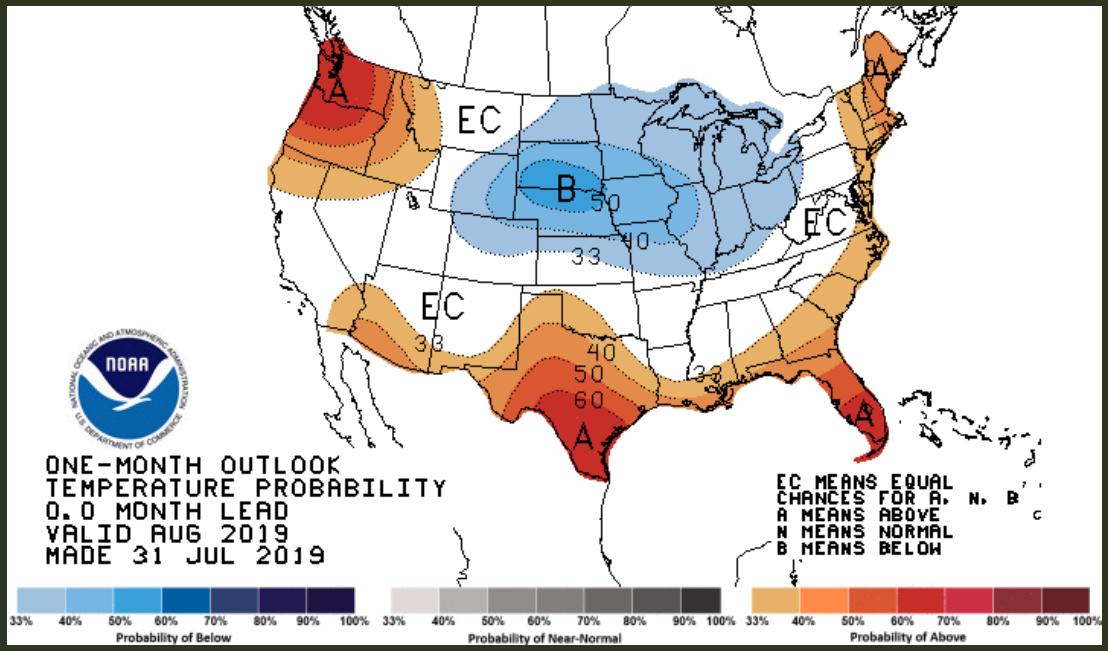


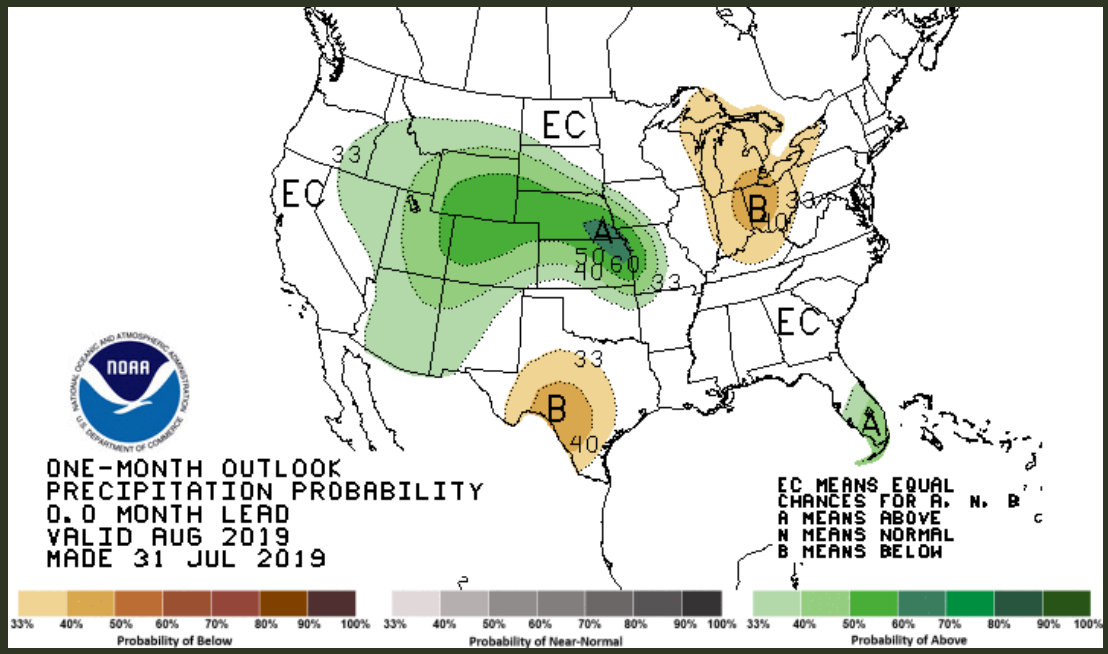


https://www.nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php?tab=3

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

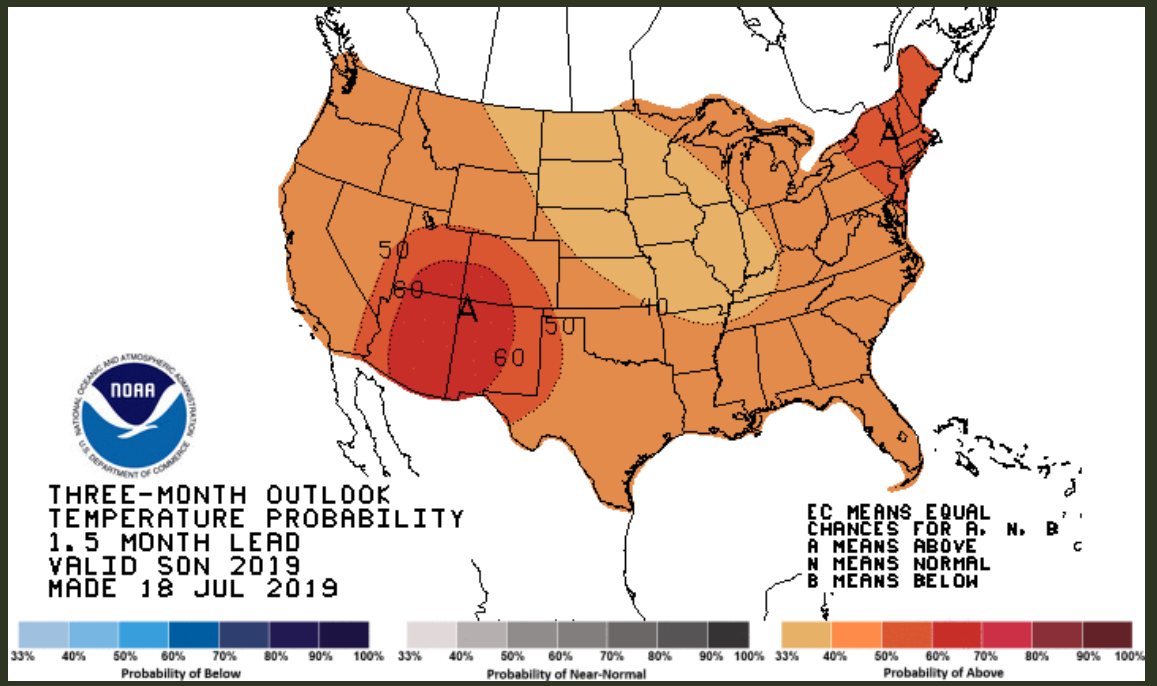
August Outlook

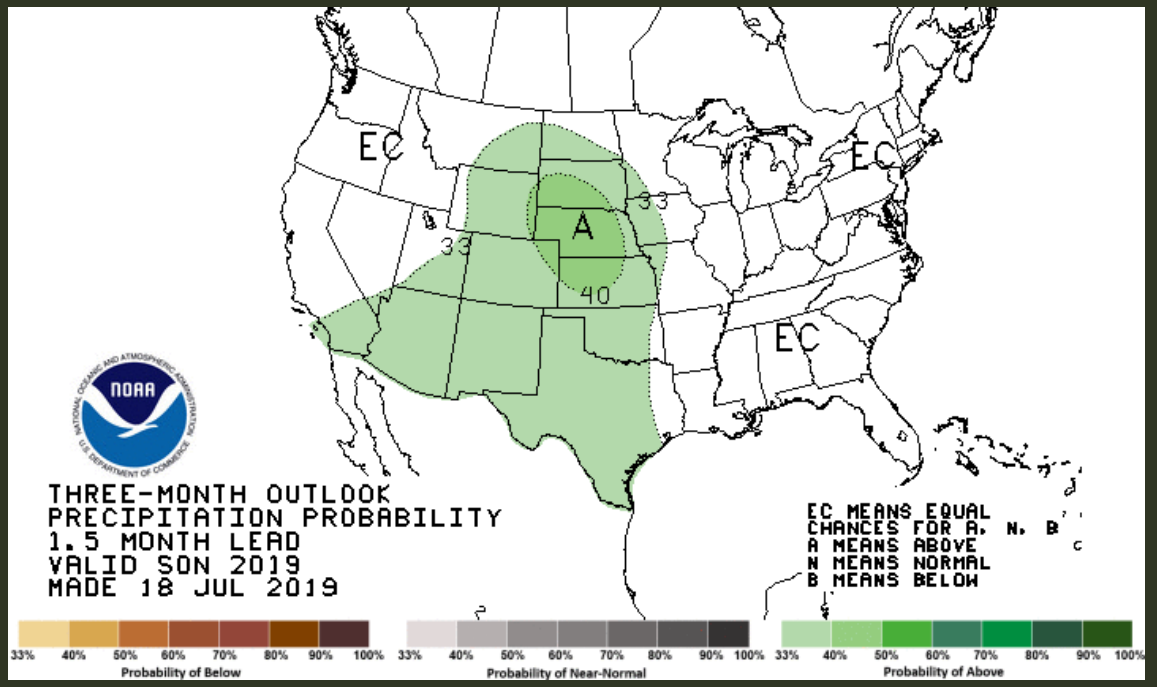




https://www.cpc.ncep.noaa.gov/products/predictions/long_range/lead14/

Sep-Oct-Nov Outlook





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

ENSO

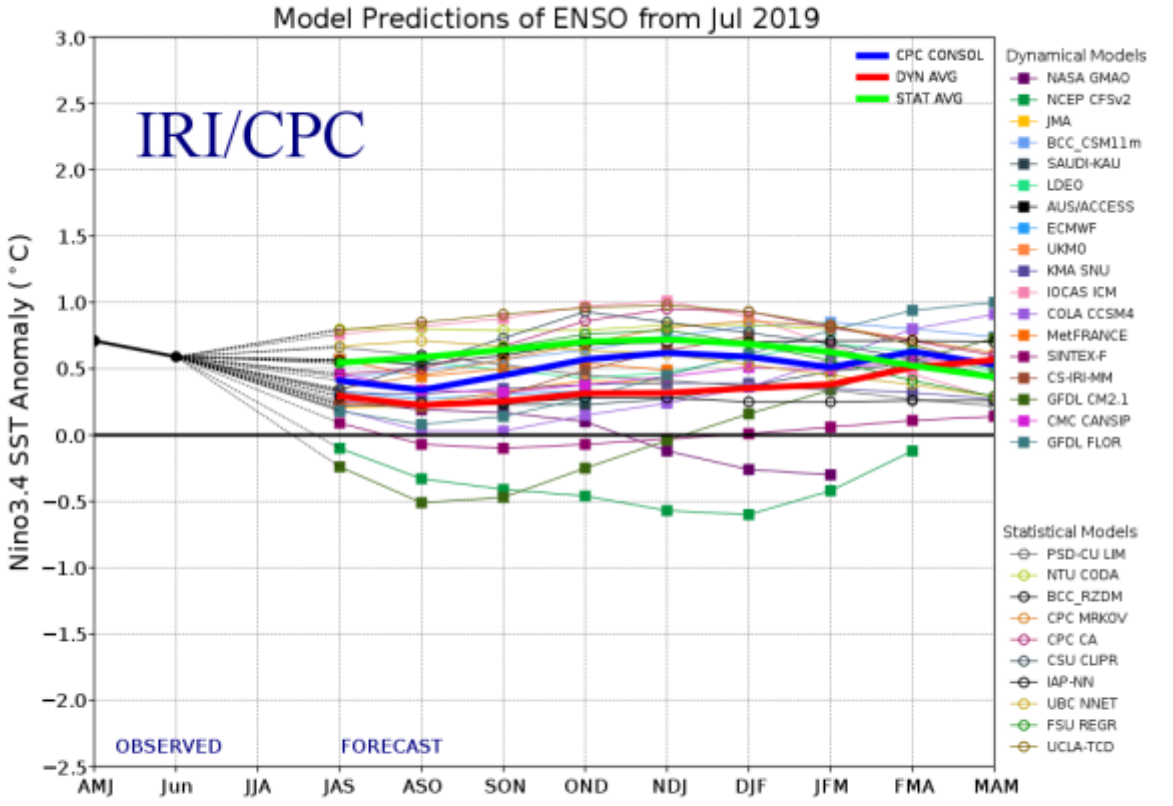
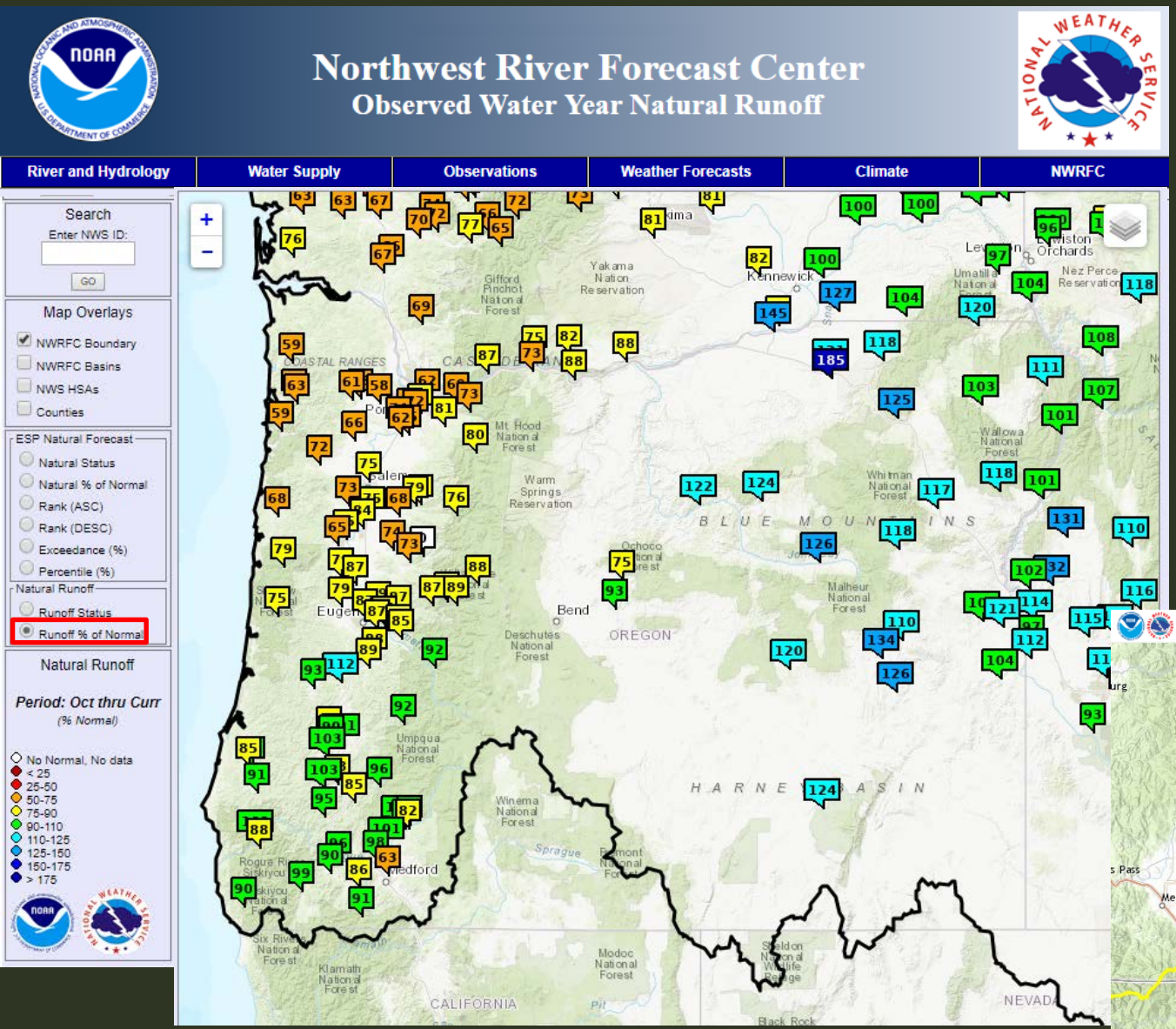
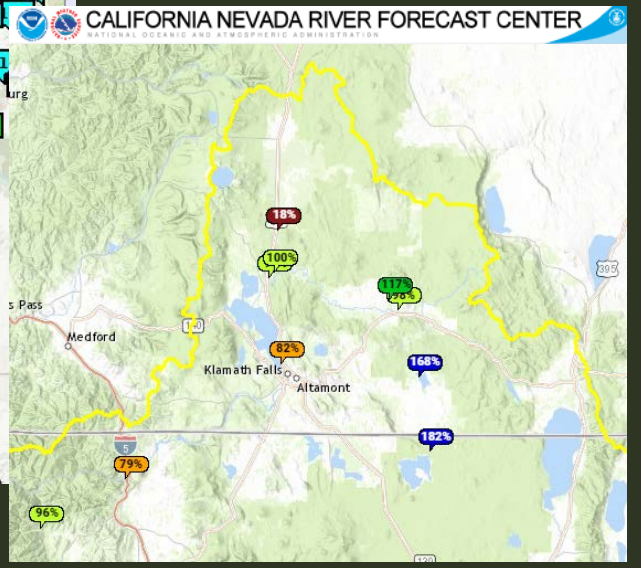


Figure 6. Forecasts of sea surface temperature (SST) anomalies for the Niño 3.4 region (5°N-5°S, 120°W-170°W). Figure updated 19 July 2019.

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

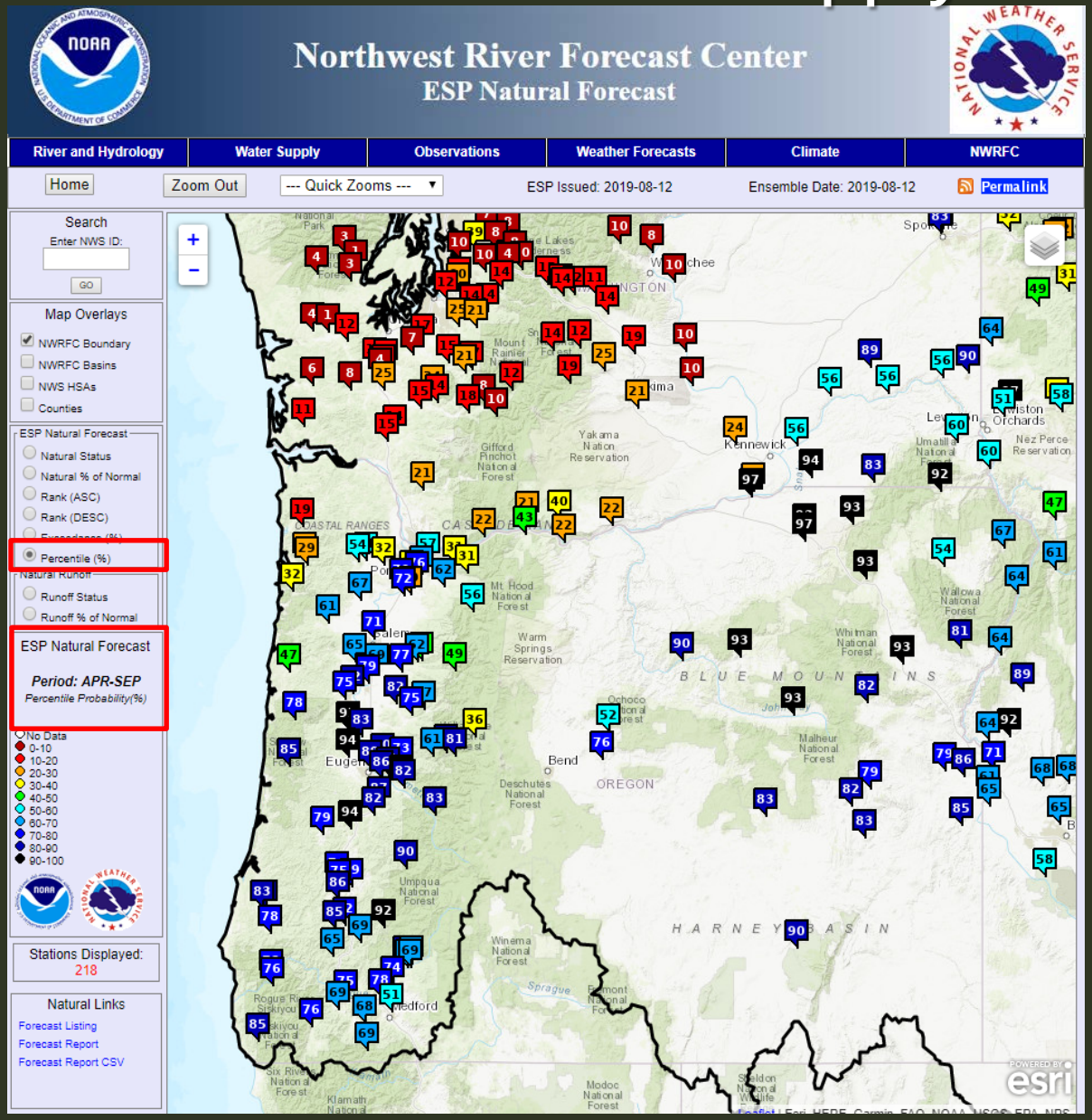
Observed WY19 Runoff thus far





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

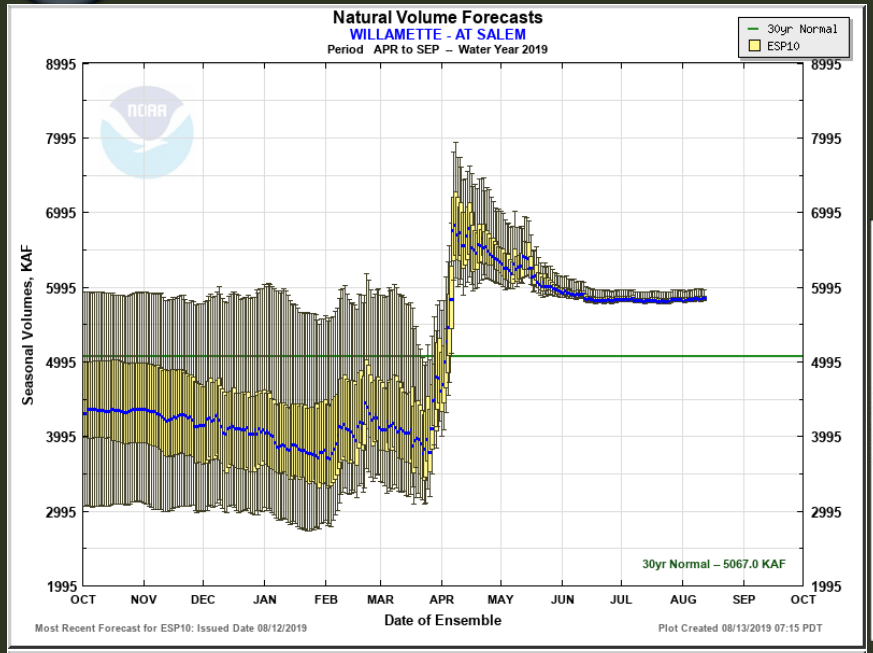
Ranked Seasonal Water Supply Forecasts



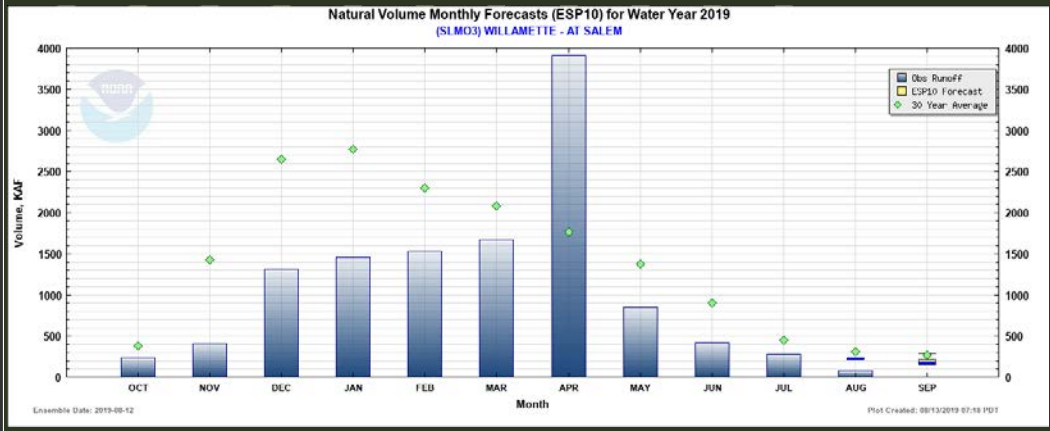
Forecast runoff volume for April – September 2019

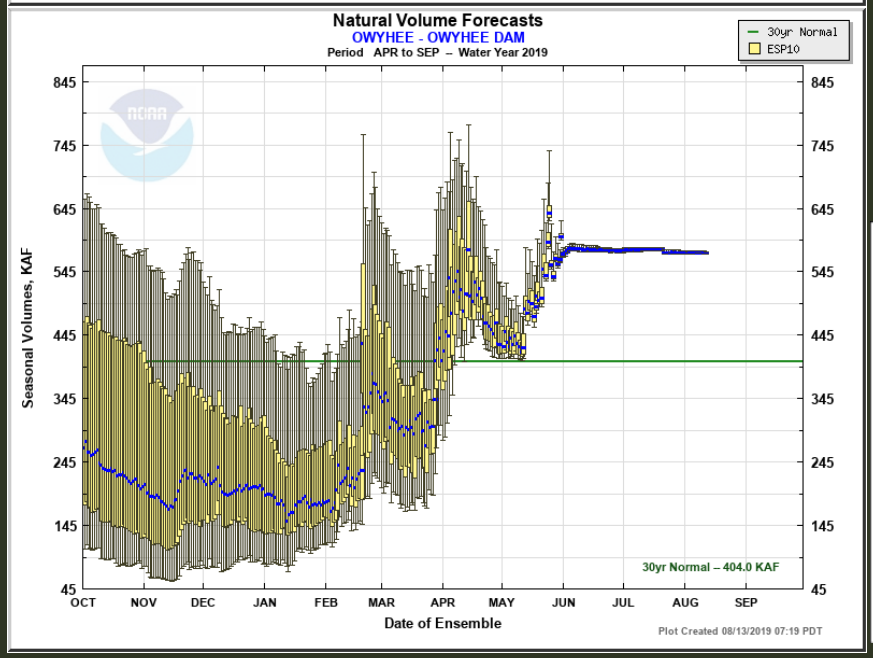
https://www.nwrfc.noaa.gov/natural/index.html?version=20181015v2
https://www.cnrfc.noaa.gov/ol.php?product=espWS

Natural Water Supply Forecasts

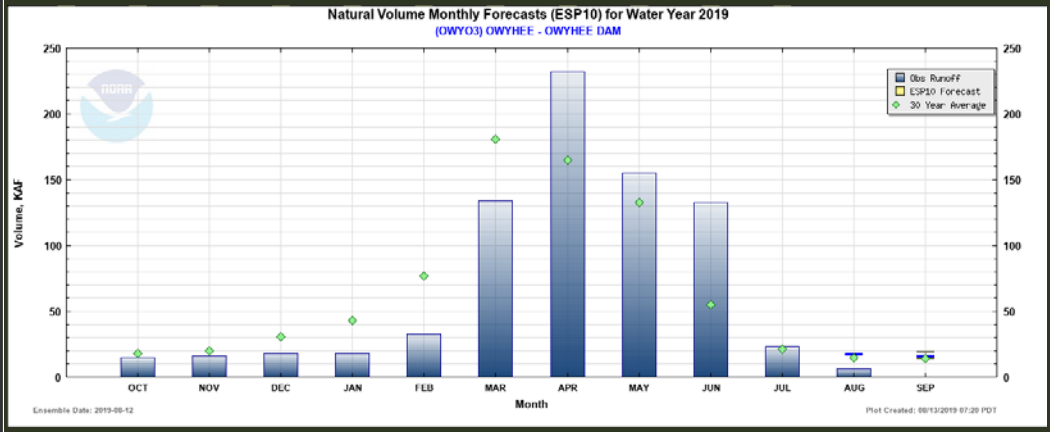


(West)

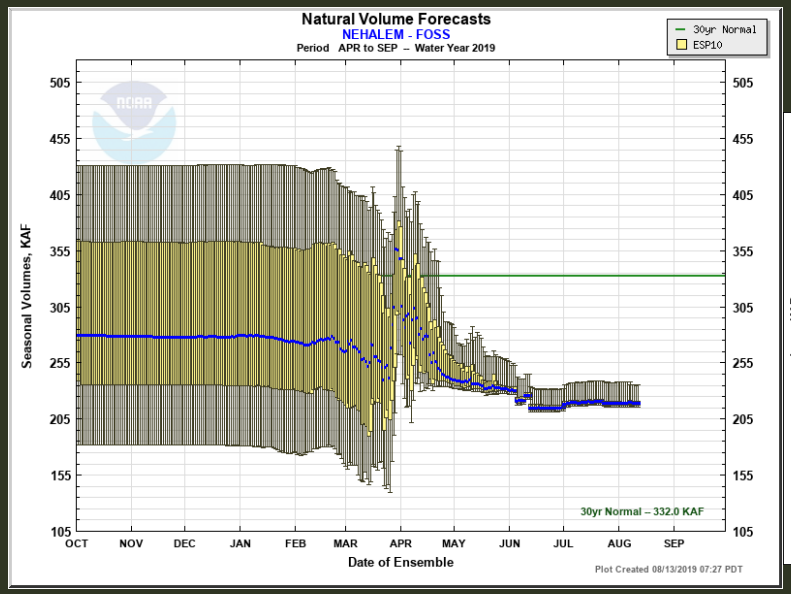


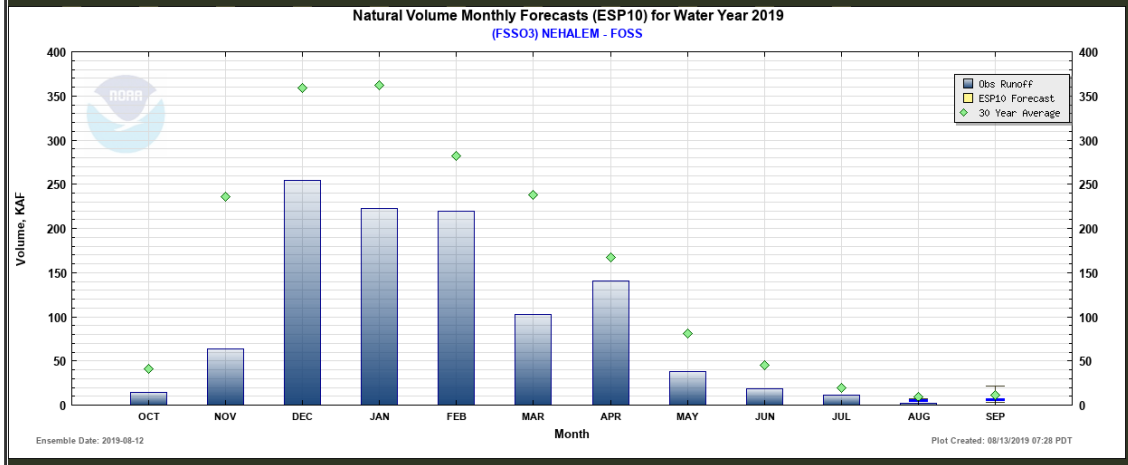


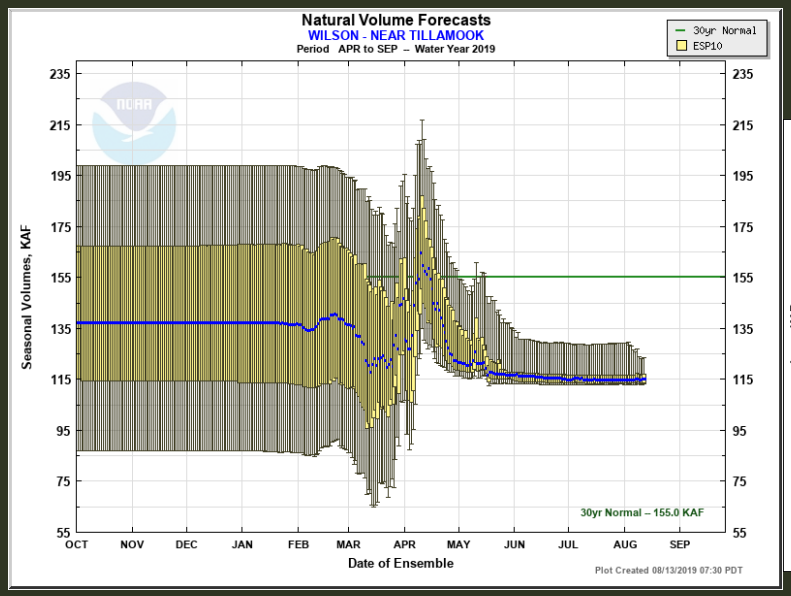
(East)

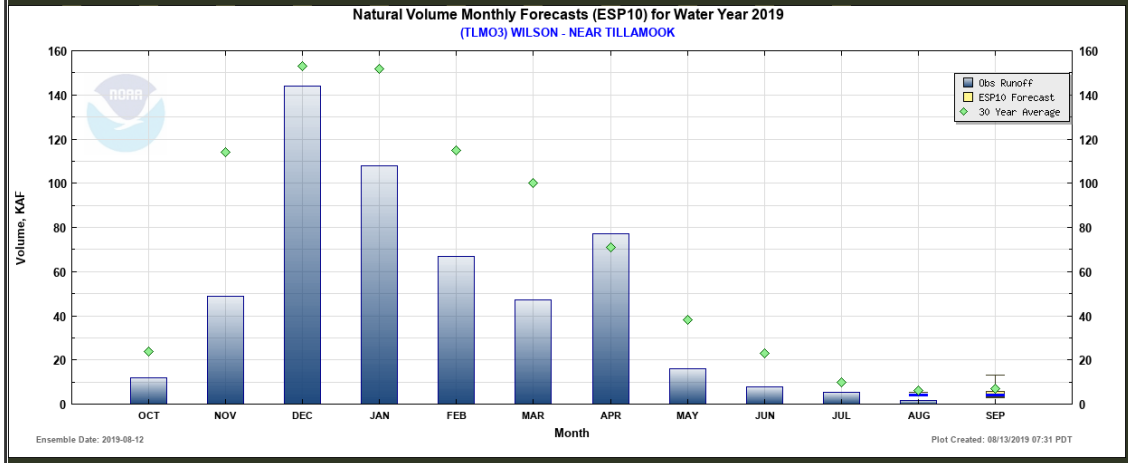


Natural Water Supply Forecasts (North Coast)









Link to Northwest River Forecast Center ESP Natural Forecasts

https://www.nwrfc.noaa.gov/natural

Live Water Supply Briefings

Tentatively scheduled for the first Thursday of each month January though late spring.

Please refer to online schedule which will be updated in the fall.

https://www.nwrfc.noaa.gov/water_supply/ws_schd.cgi

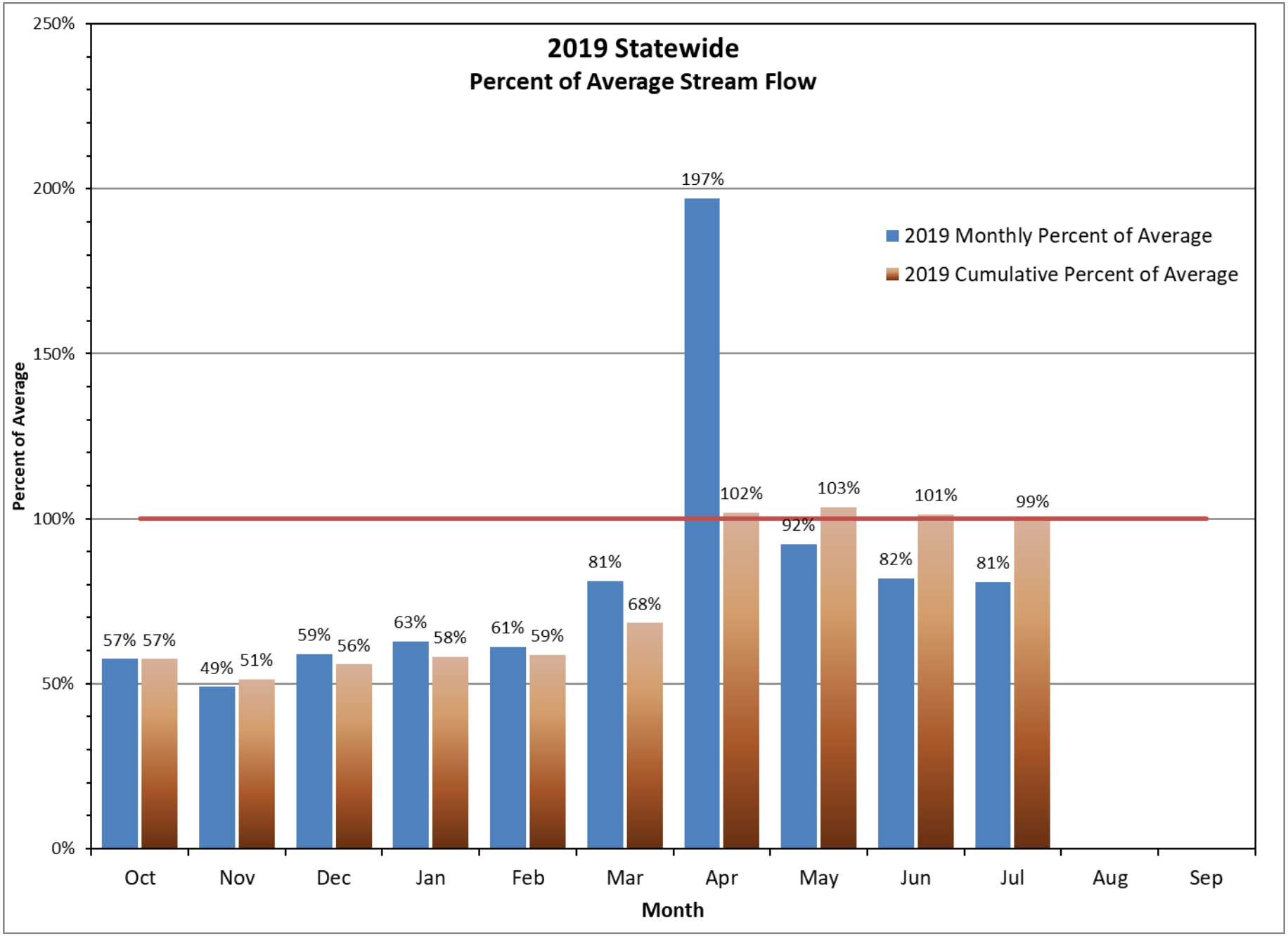
Water Supply Conditions Report

Water Supply Availability Committee

OREGON
WATER RESOURCES DEPARTMENT

Ken Stahr
Oregon Water Resources Department

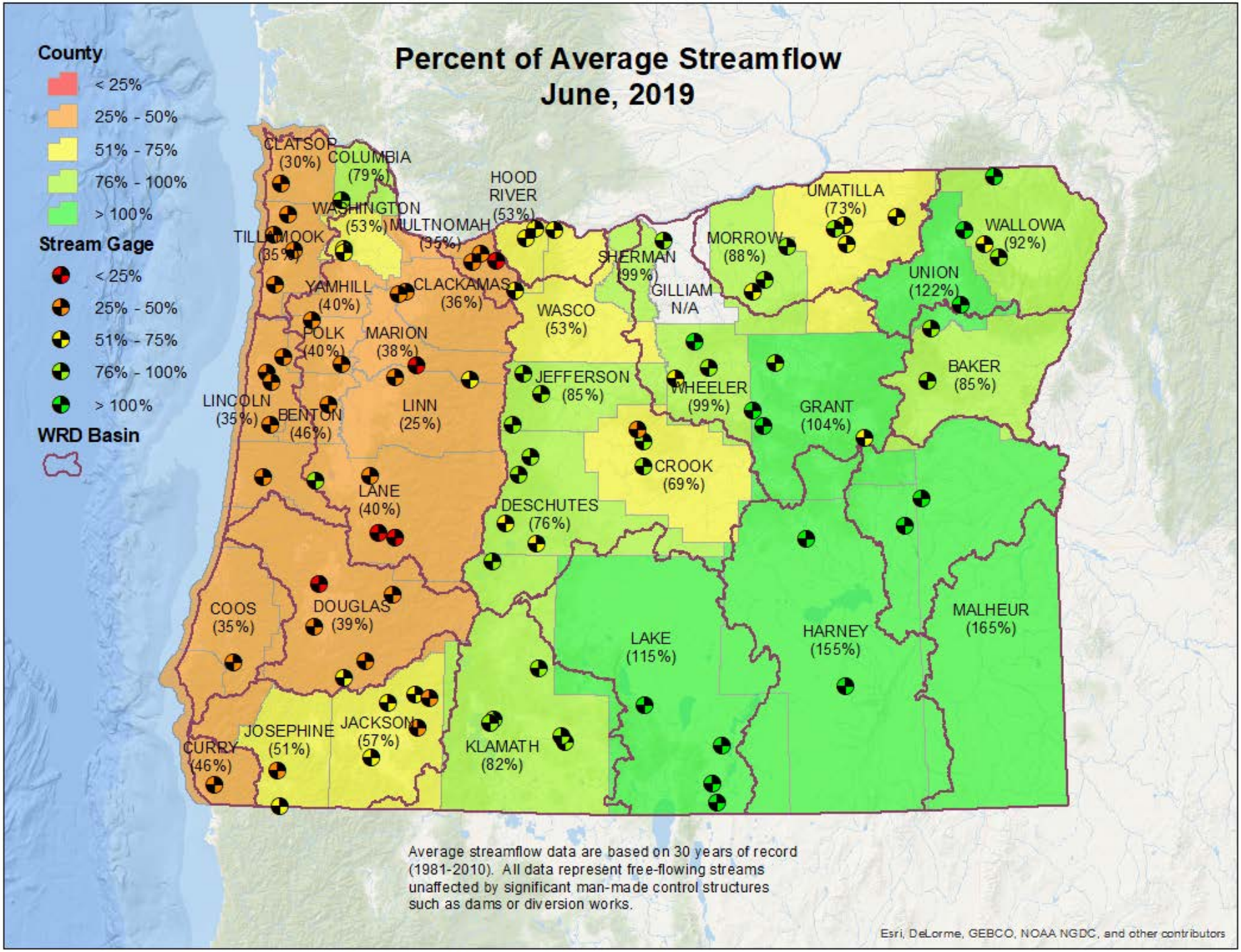
August 13, 2019


2019 Statewide
Percent of Average Stream Flow
2019 Monthly Percent of Average
2019 Cumulative Percent of Average
Percent of Average
Month
250%
200%
150%
100%
50%
0%
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
57%
57%
49%
51%
59%
56%
63%
58%
61%
59%
81%
68%
197%
102%
92%
103%
82%
101%
81%
99%

OREGON
WATER RESOURCES DEPARTMENT

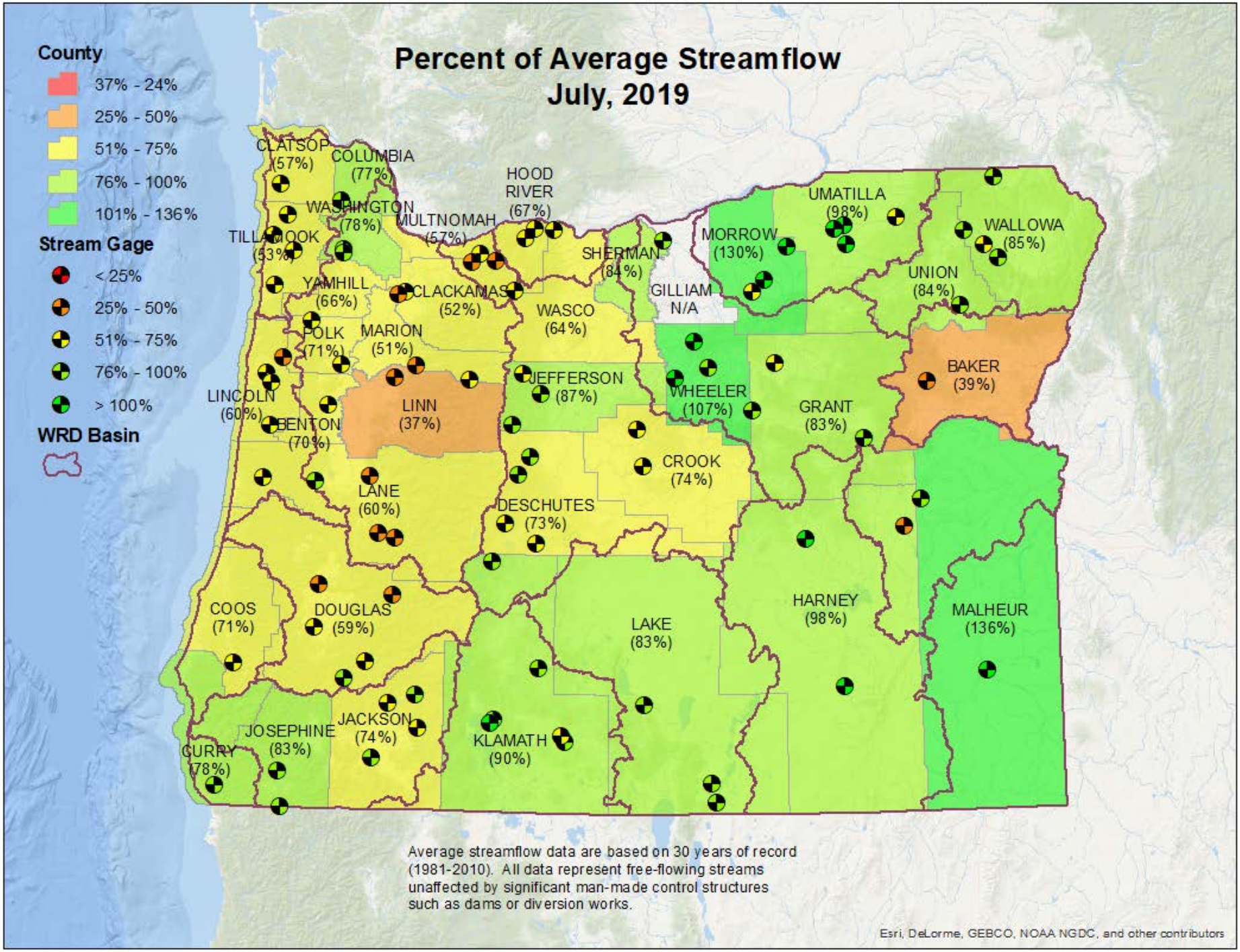
Basin	Water Year percent of average thru July	Percent of average for month of July	Percent of average for 08/09/2019	Number of data points
West Side	79%	63%	74%	43
East Side	112%	92%	124%	45
State	99%	81%	105%	88

Percent of Average Streamflow
June, 2019

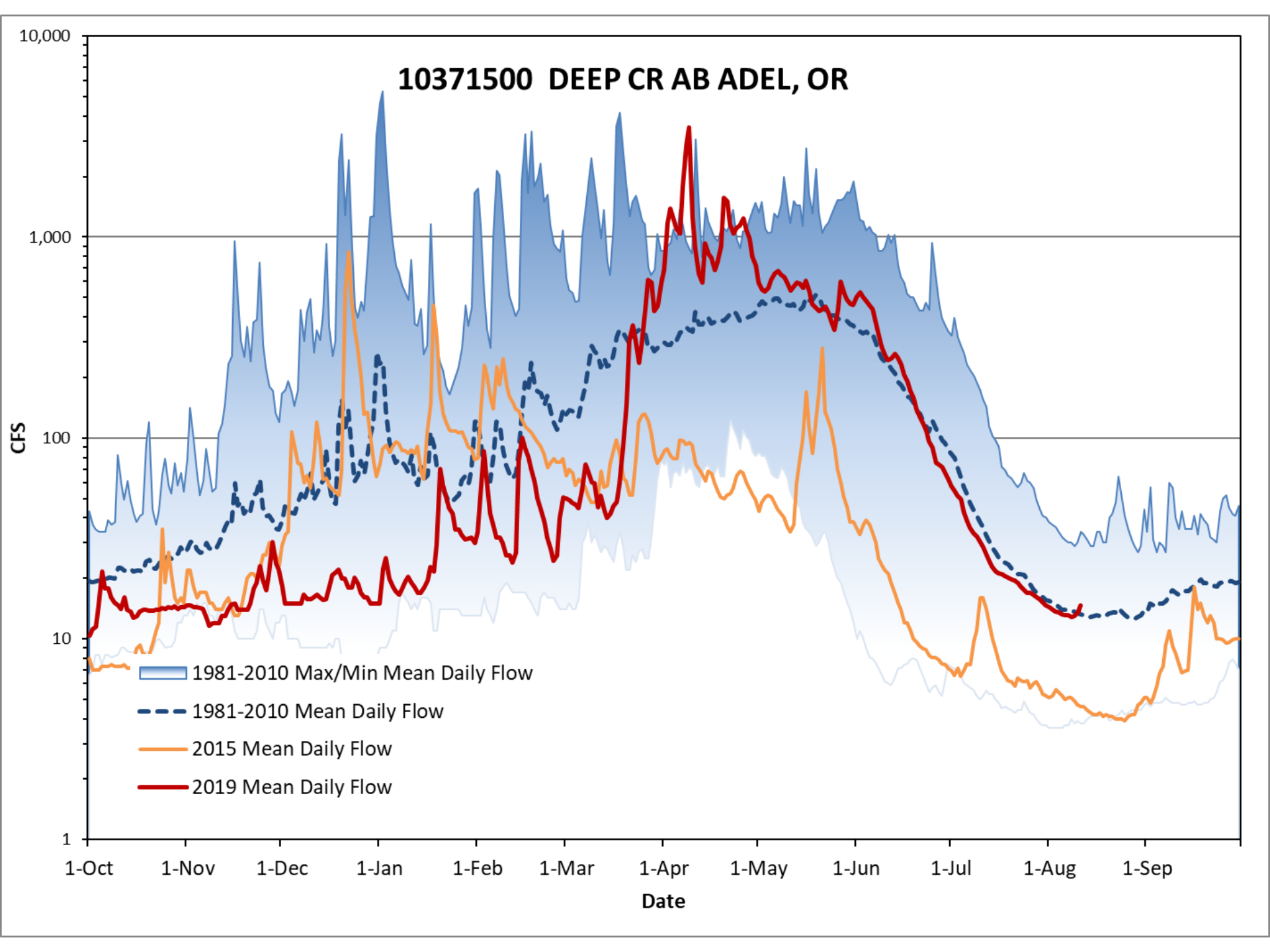


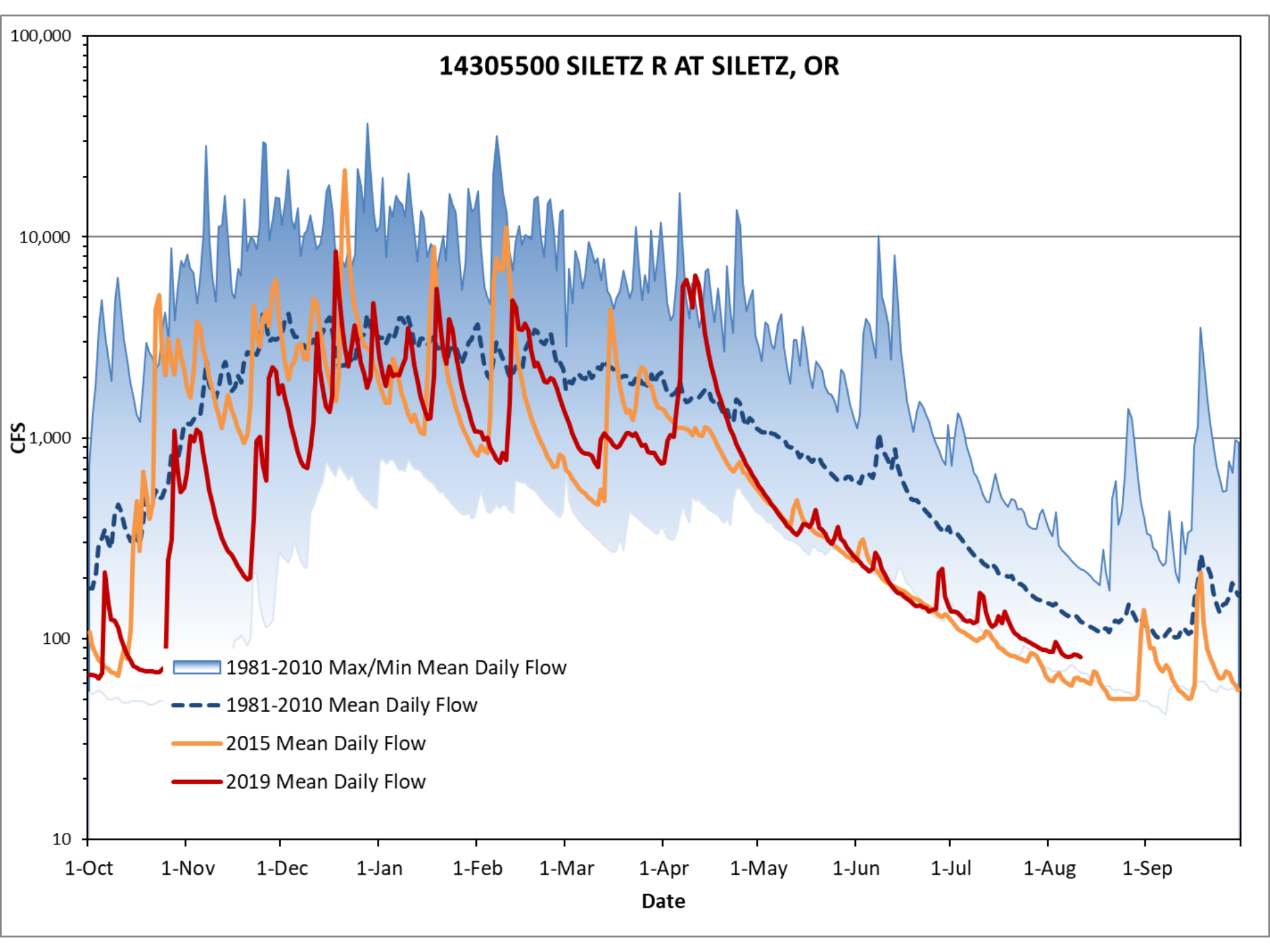
Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.

Percent of Average Streamflow
July, 2019



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.


10371500 DEEP CR AB ADEL, OR
10,000
1,000
100
10
1
CFS
1981-2010 Max/Min Mean Daily Flow
1981-2010 Mean Daily Flow
2015 Mean Daily Flow
2019 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date


14305500 SILETZ R AT SILETZ, OR
100,000
10,000
1,000
100
10
CFS
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
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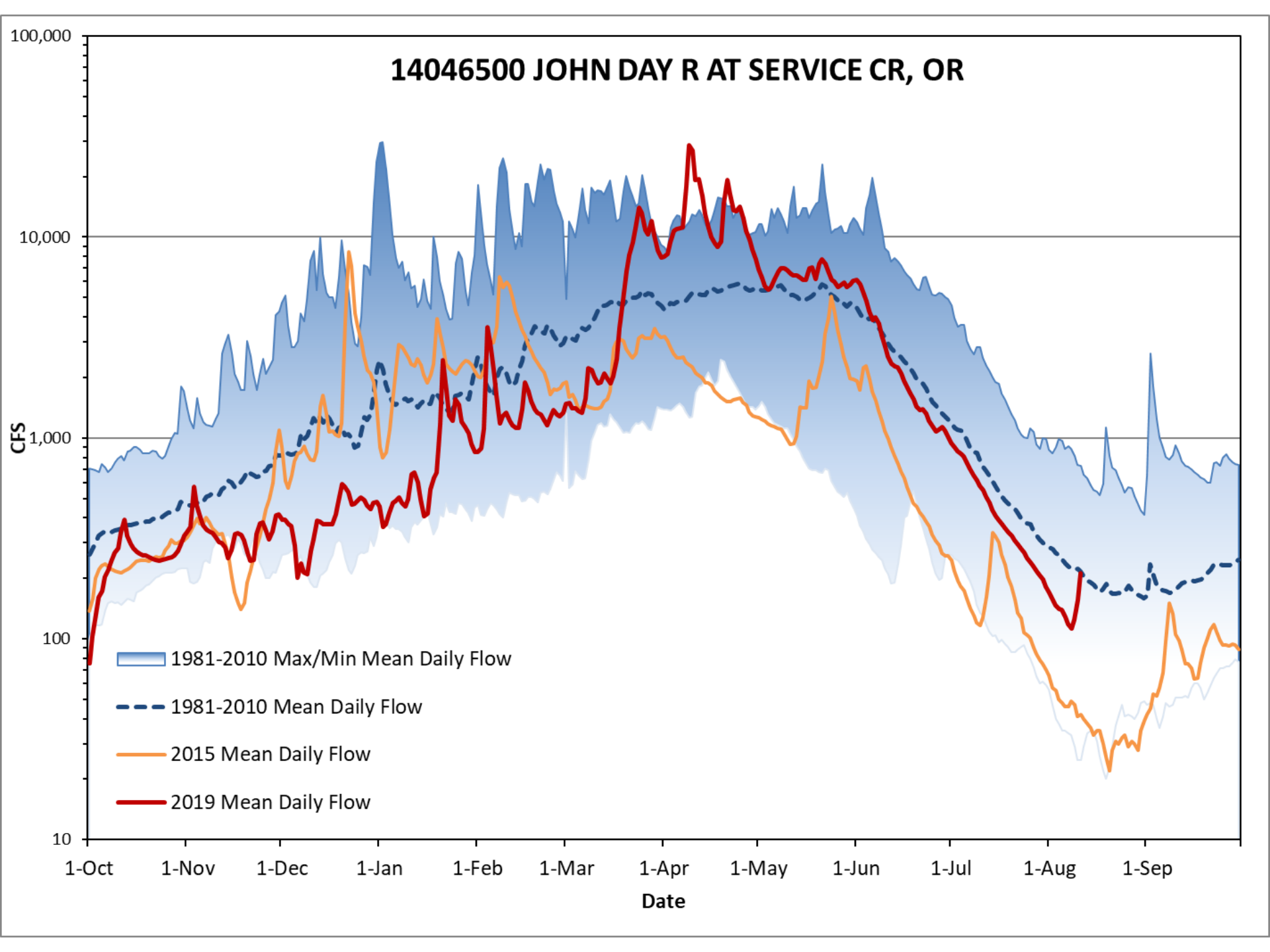
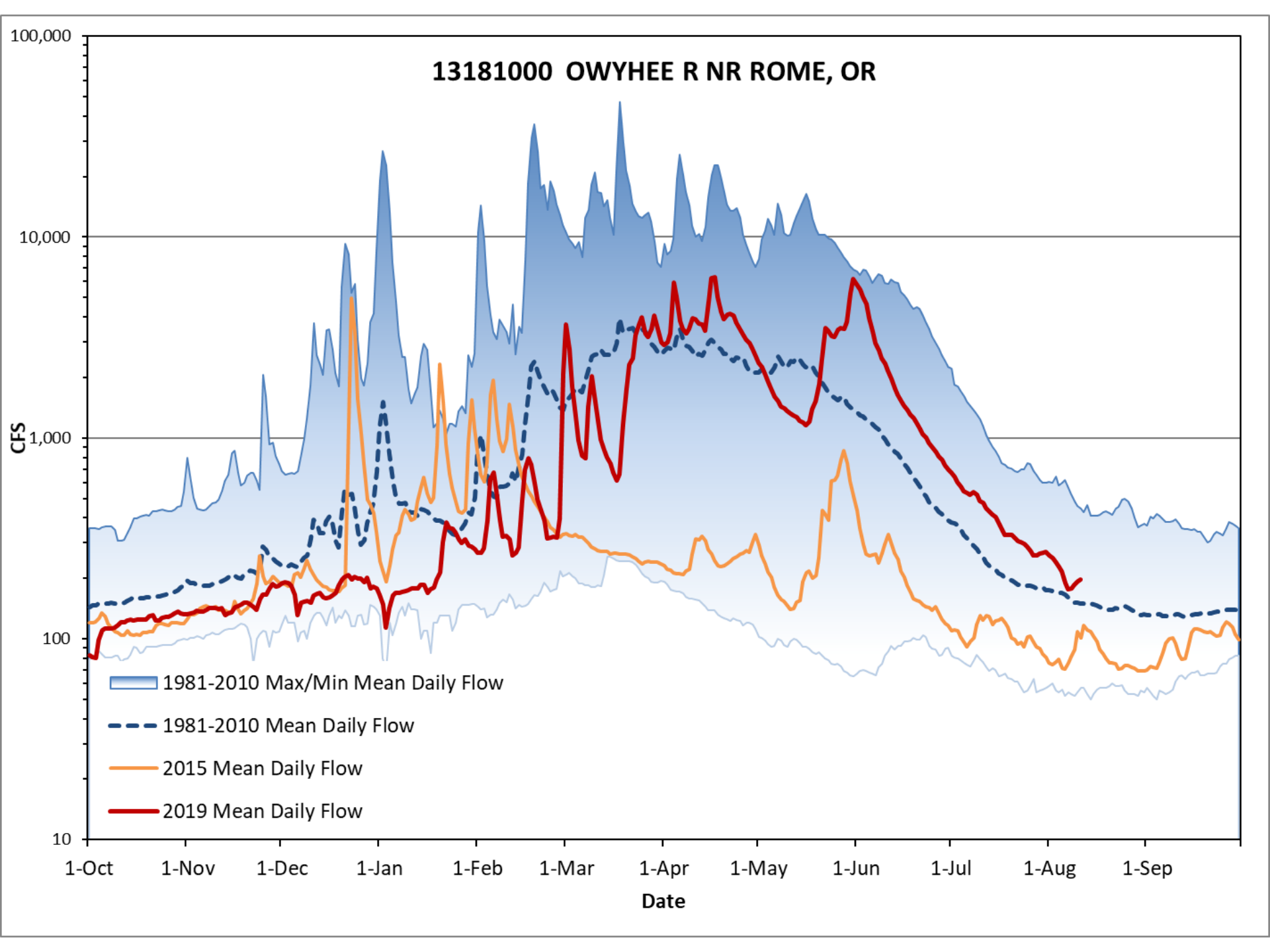
1-Jul
1-Aug
1-Sep
Date
1981-2010 Max/Min Mean Daily Flow
1981-2010 Mean Daily Flow
2015 Mean Daily Flow
2019 Mean Daily Flow


14046500 JOHN DAY R AT SERVICE CR, OR
100,000
10,000
1,000
100
10
CFS
1981-2010 Max/Min Mean Daily Flow
1981-2010 Mean Daily Flow
2015 Mean Daily Flow
2019 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date


13181000 OWYHEE R NR ROME, OR
100,000
10,000
1,000
100
10
CFS
1981-2010 Max/Min Mean Daily Flow
1981-2010 Mean Daily Flow
2015 Mean Daily Flow
2019 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date

OREGON
WATER RESOURCES
DEPARTMENT

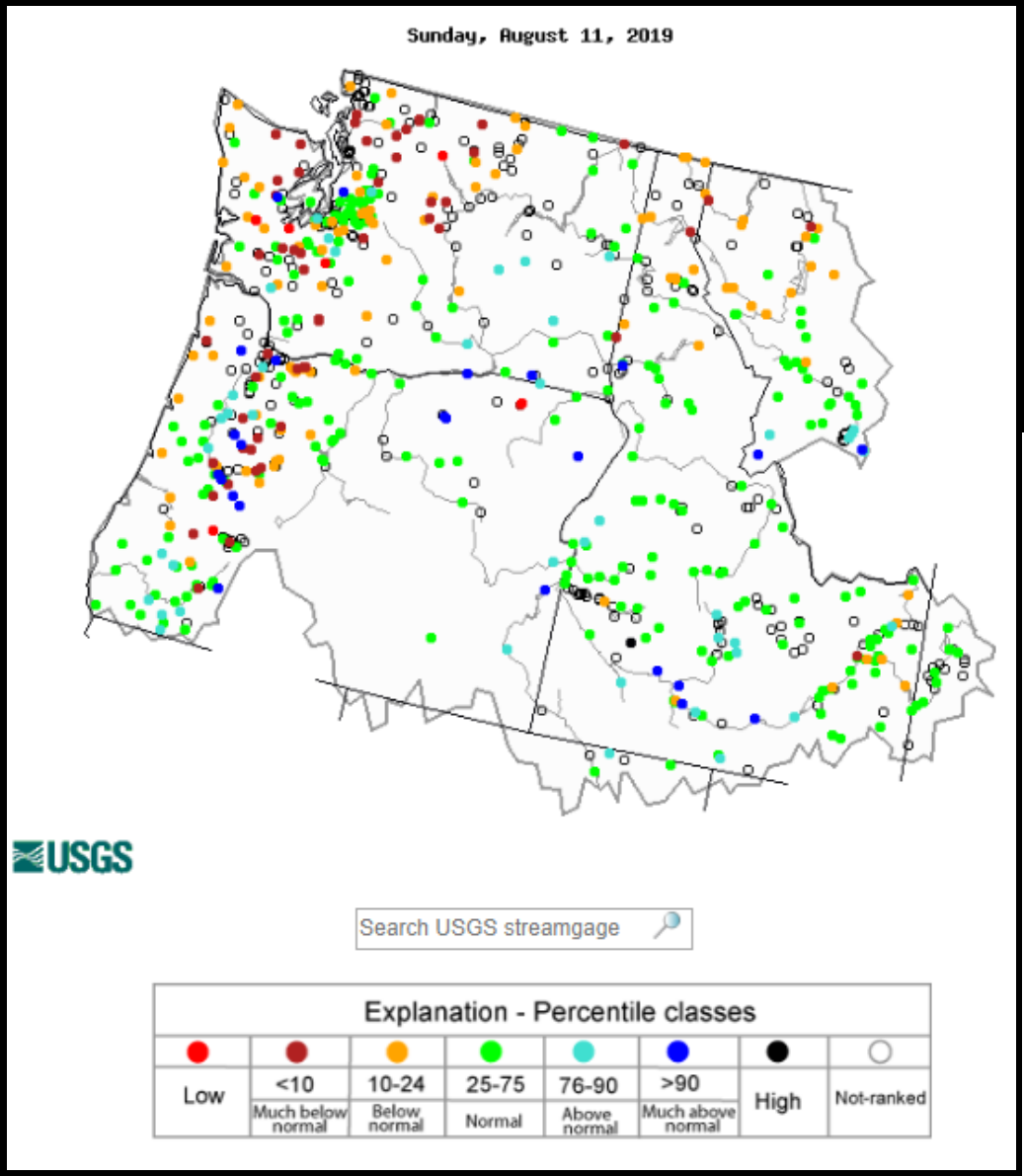
Thank you.

Oregon Water Supply Availability Meeting

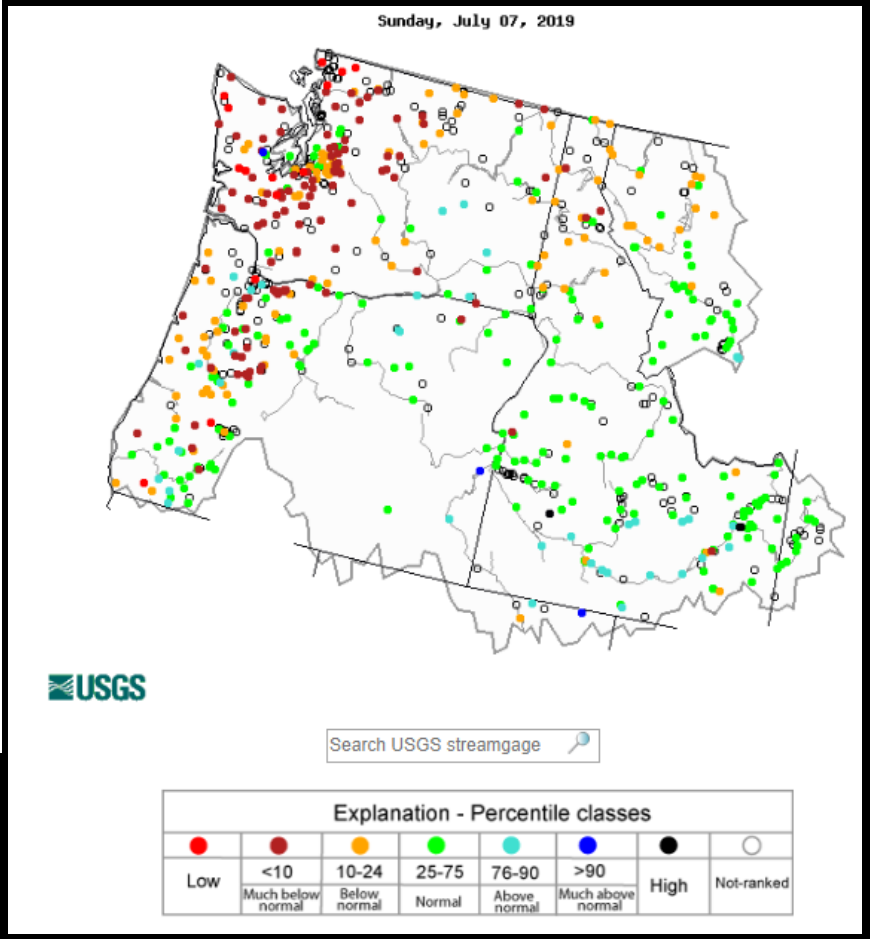
August 2019

USGS
science for a changing world

USGS Update on Surface Water Conditions
Carrie Boudreau & Marc Stewart
Oregon Water Science Center
(photo by: Matt Yates, USGS gage 14103000)

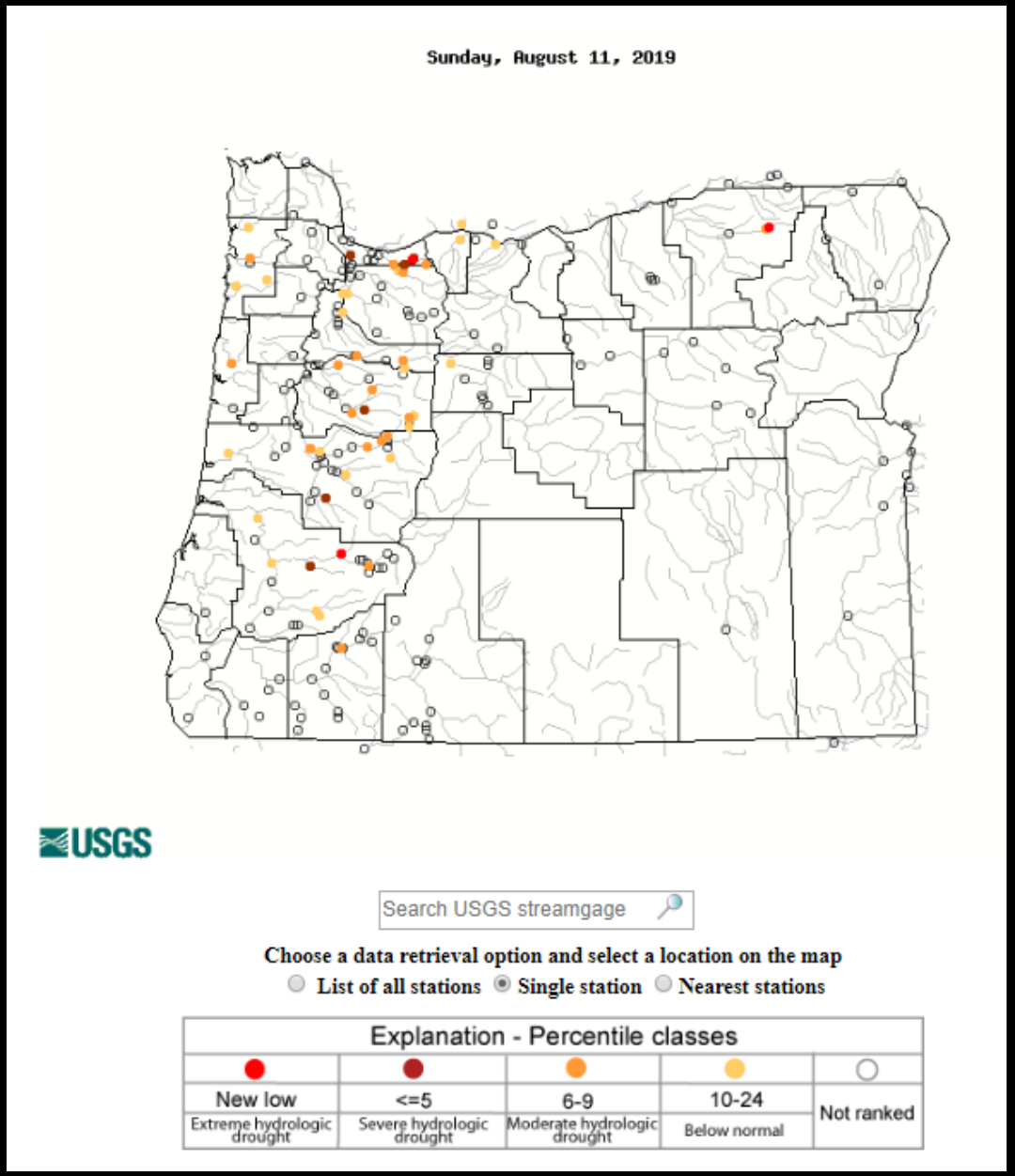


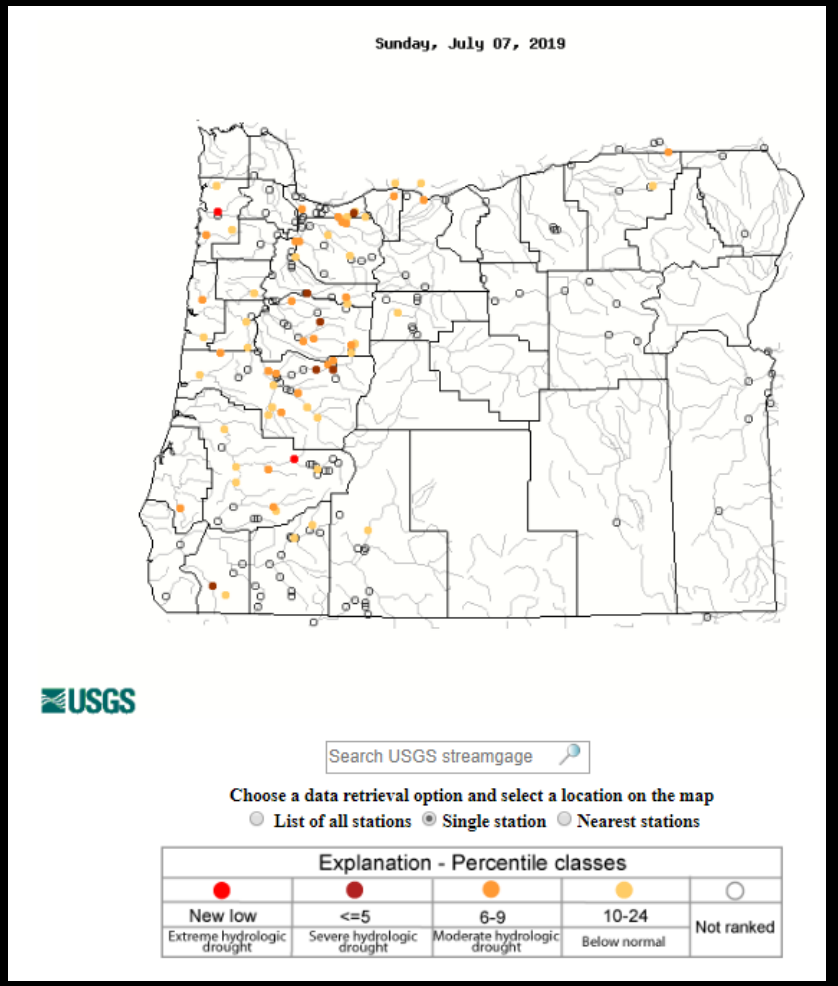
(Left) Map Current 7-day average streamflow compared to historical streamflow for the day of the year (Pacific Northwest)



USGS

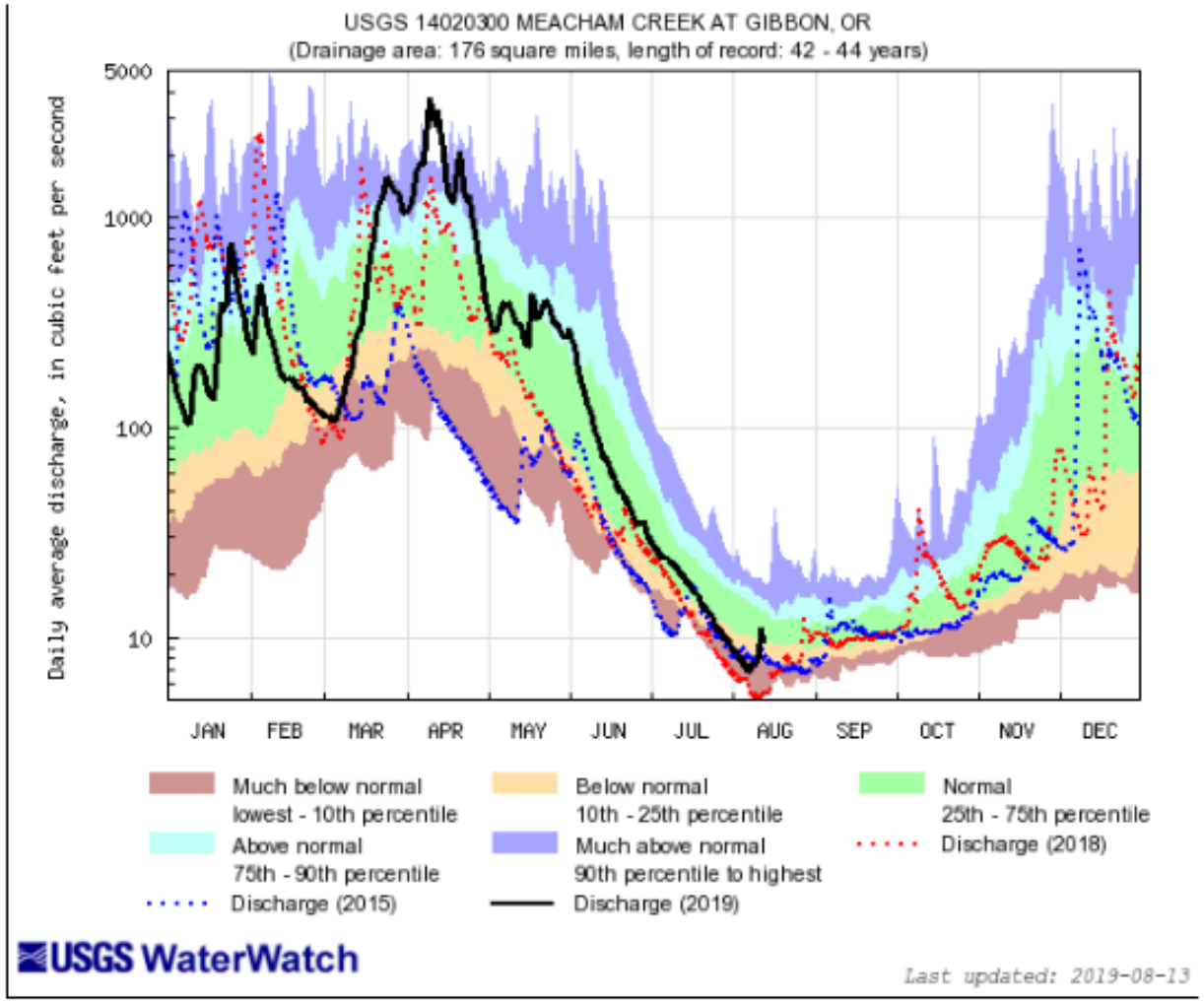
Map of below normal 14-day average streamflow compared to historical streamflow for the day of year (Oregon)





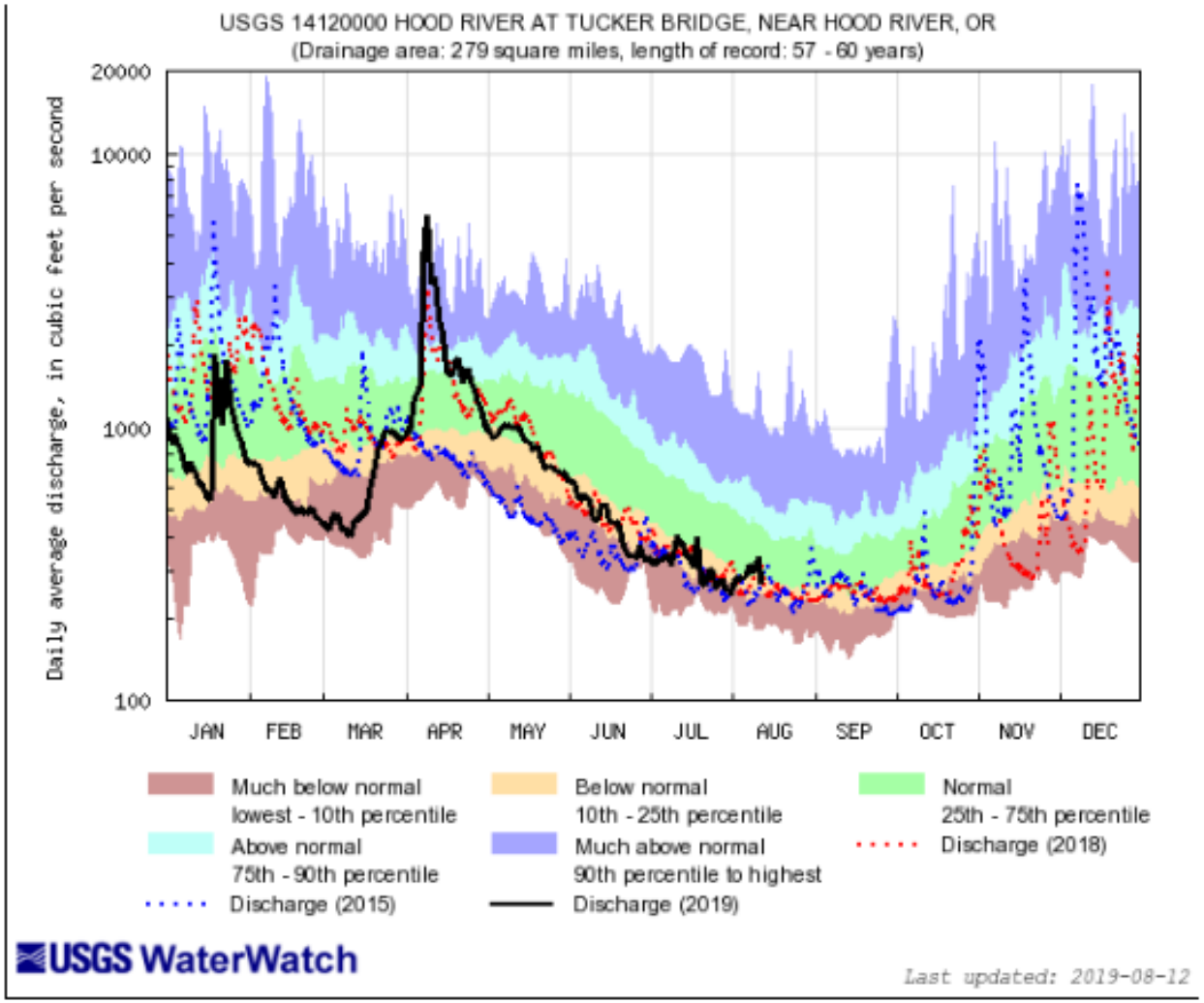
USGS

14020300 Meacham Ck at Gibon



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

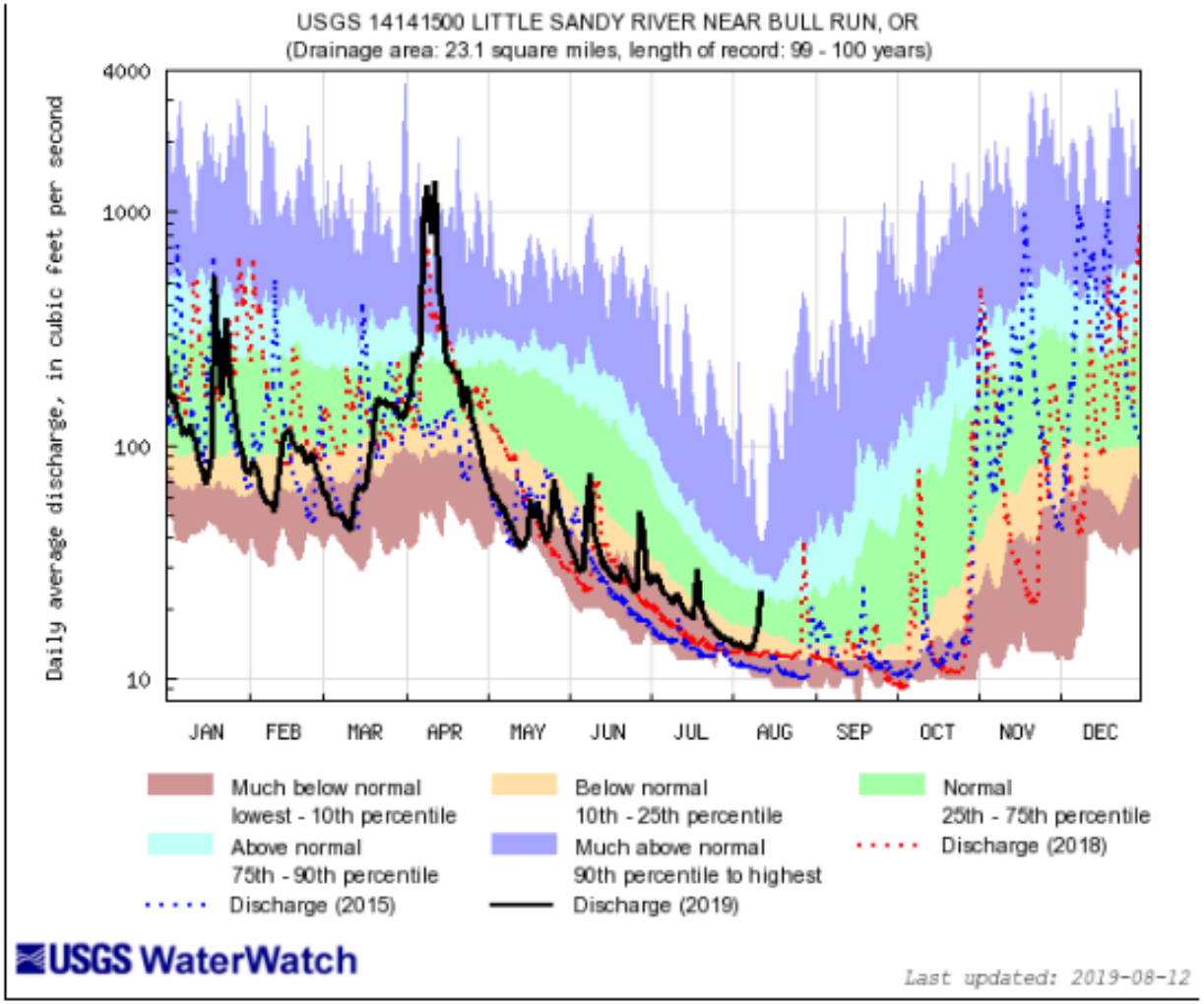
14120000 Hood R at Tucker Bridge

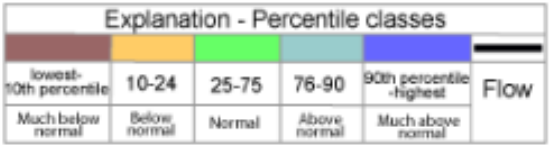


Explanation - Percentile classes					
lowest-10th percentile	10-24	25-75	76-90	90th percentile -highest	Flow
Much below normal	Below normal	Normal	Above normal	Much above normal	

USGS

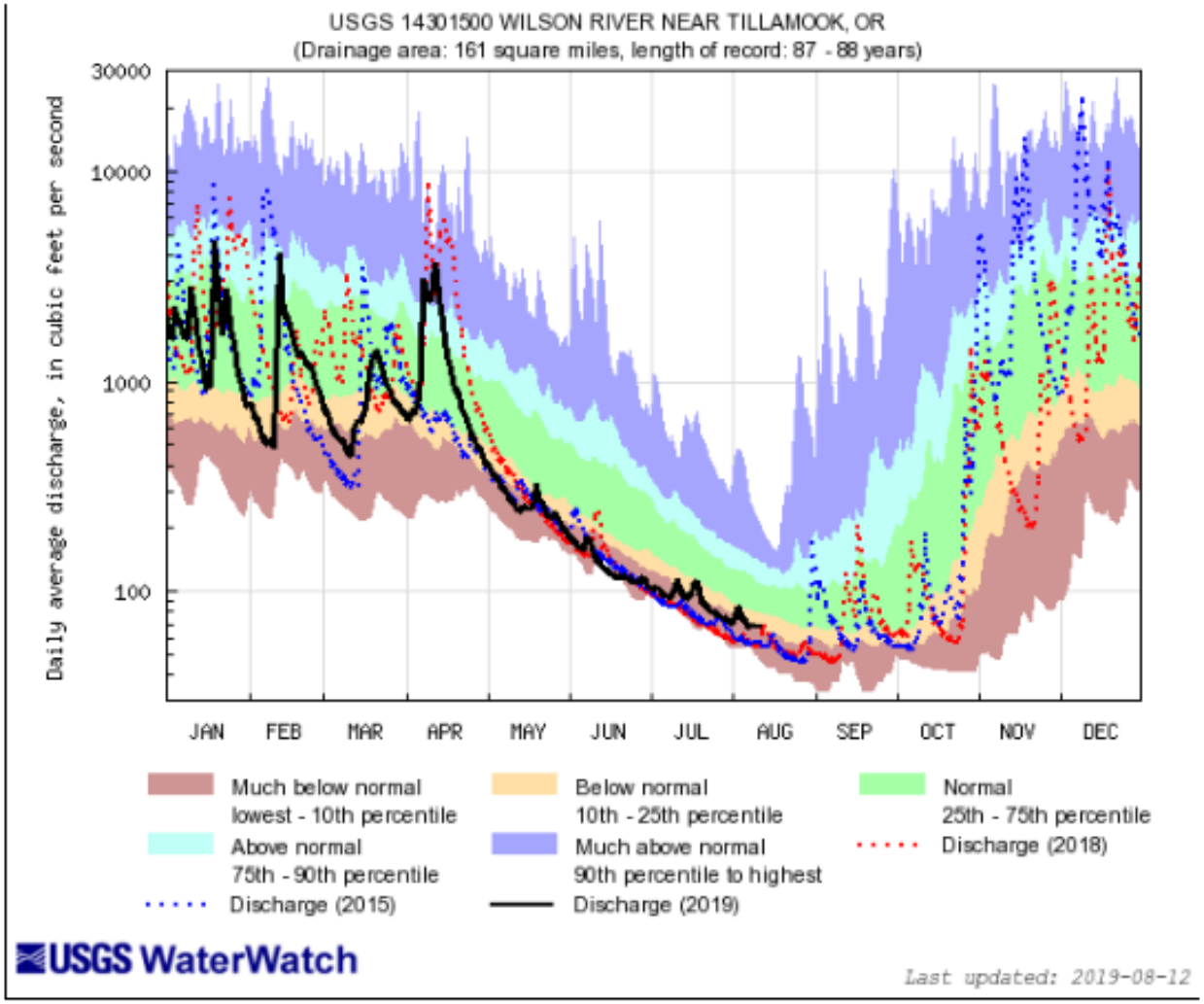
14141500 Little Sandy R nr Bull Run





USGS

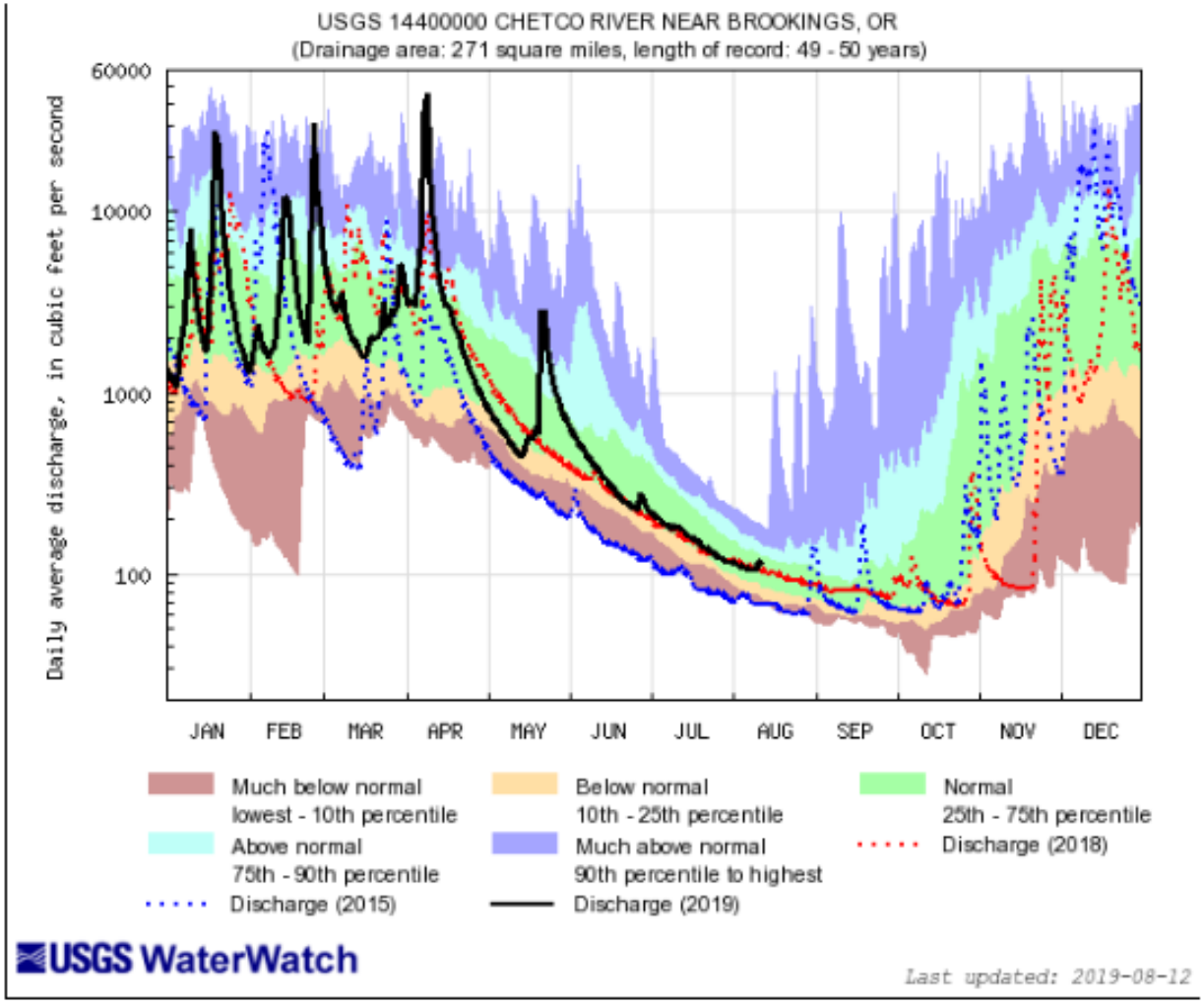
14301500 Wilson R nr Tillamook



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

USGS

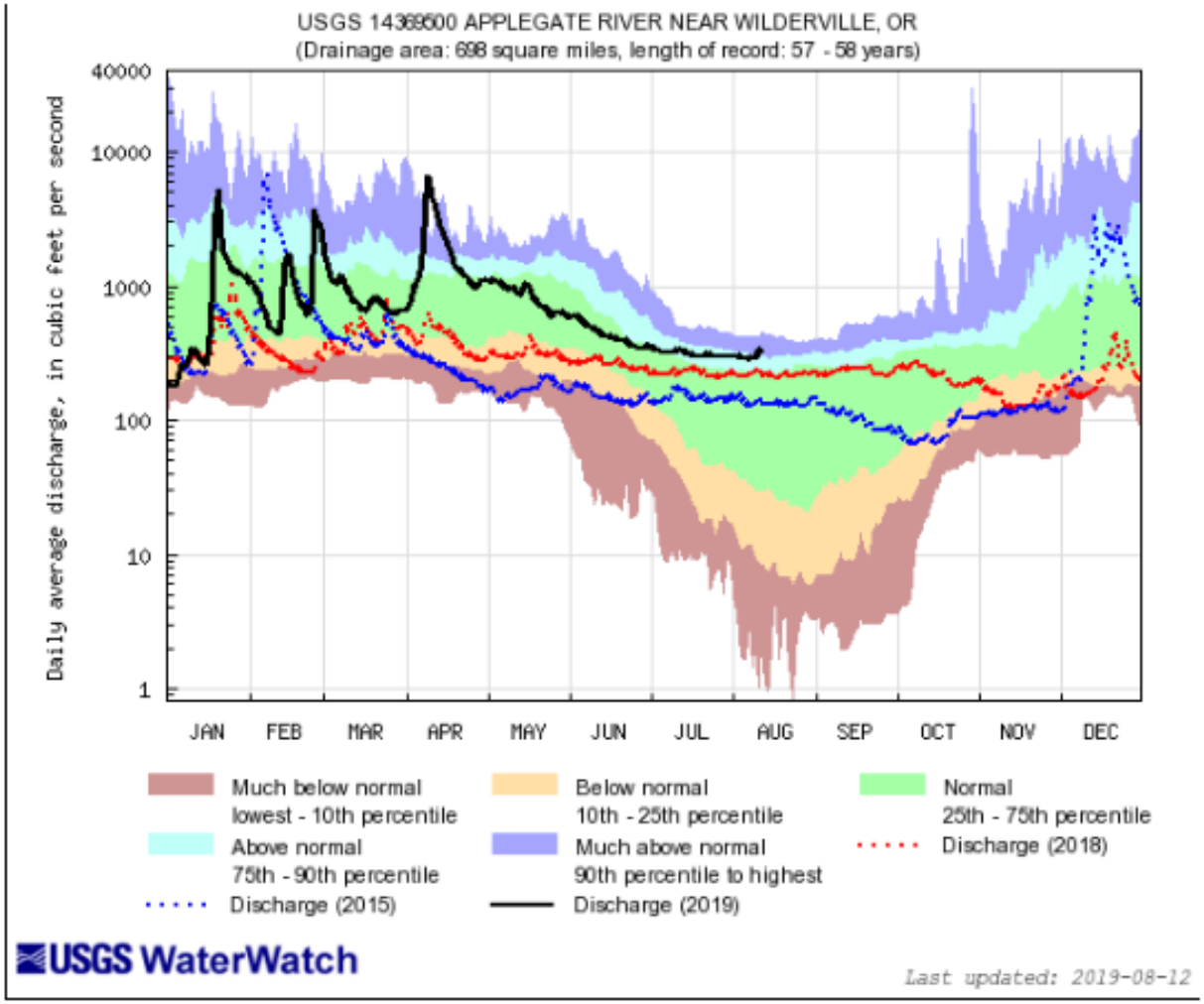
14400000 Chetco R near Brookings



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

USGS

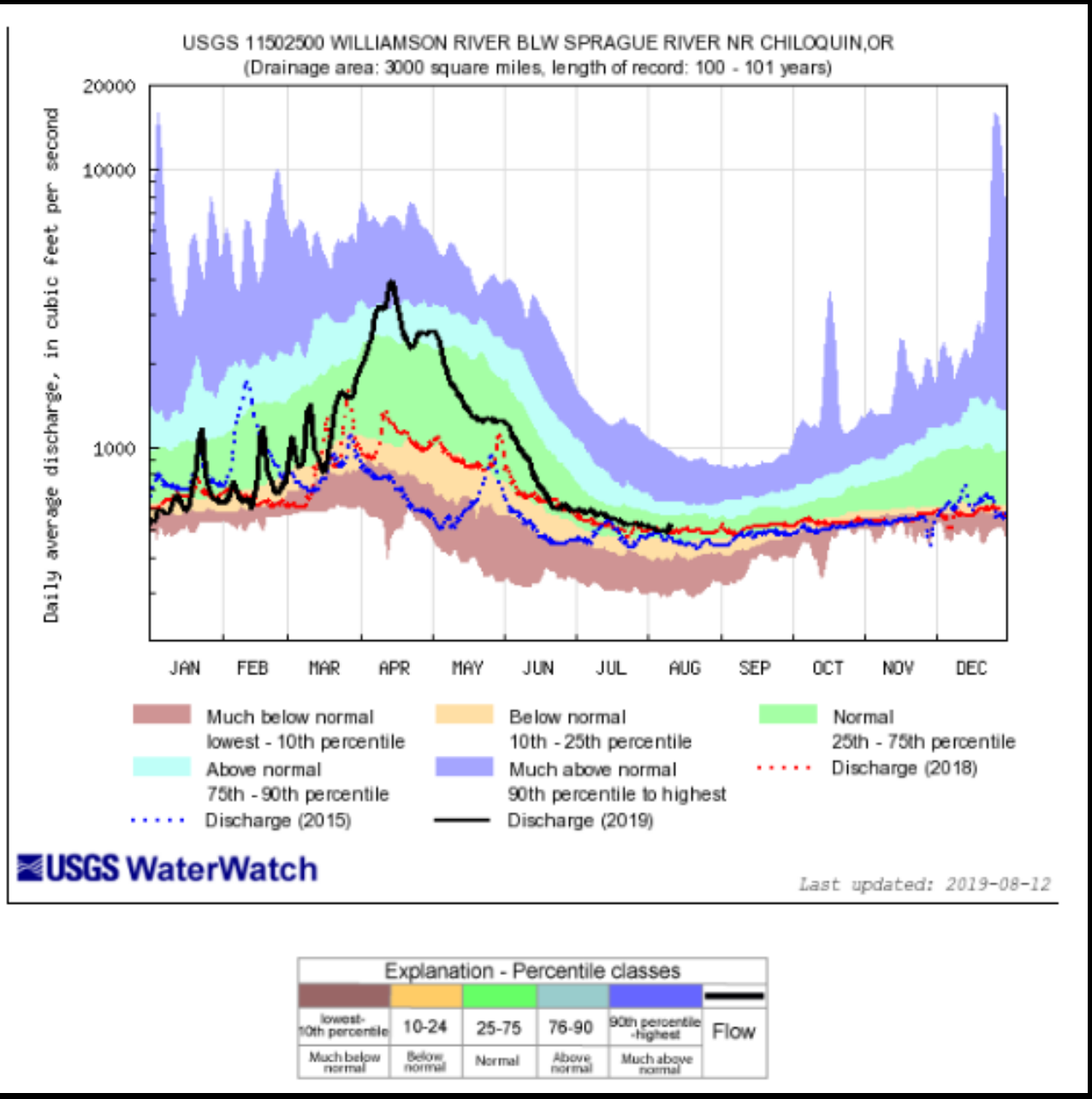
14369500 Applegate River nr Wilderville



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

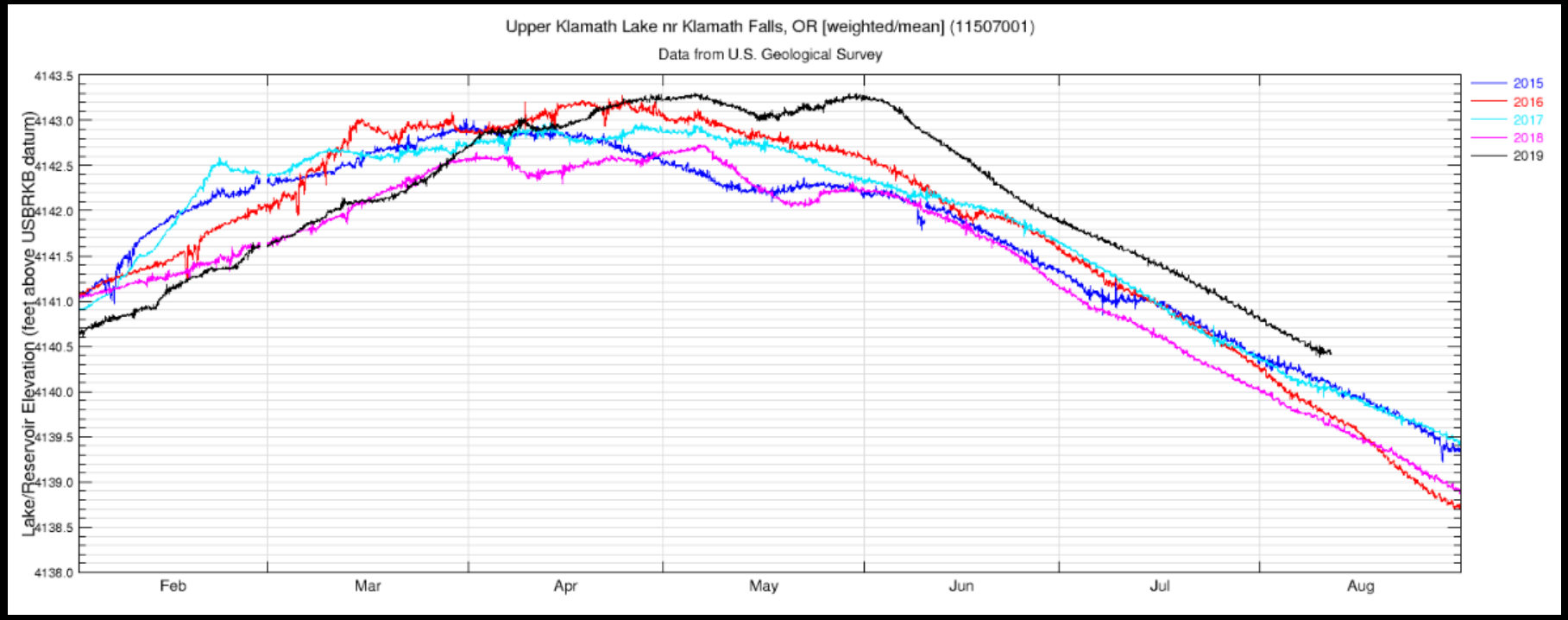
USGS

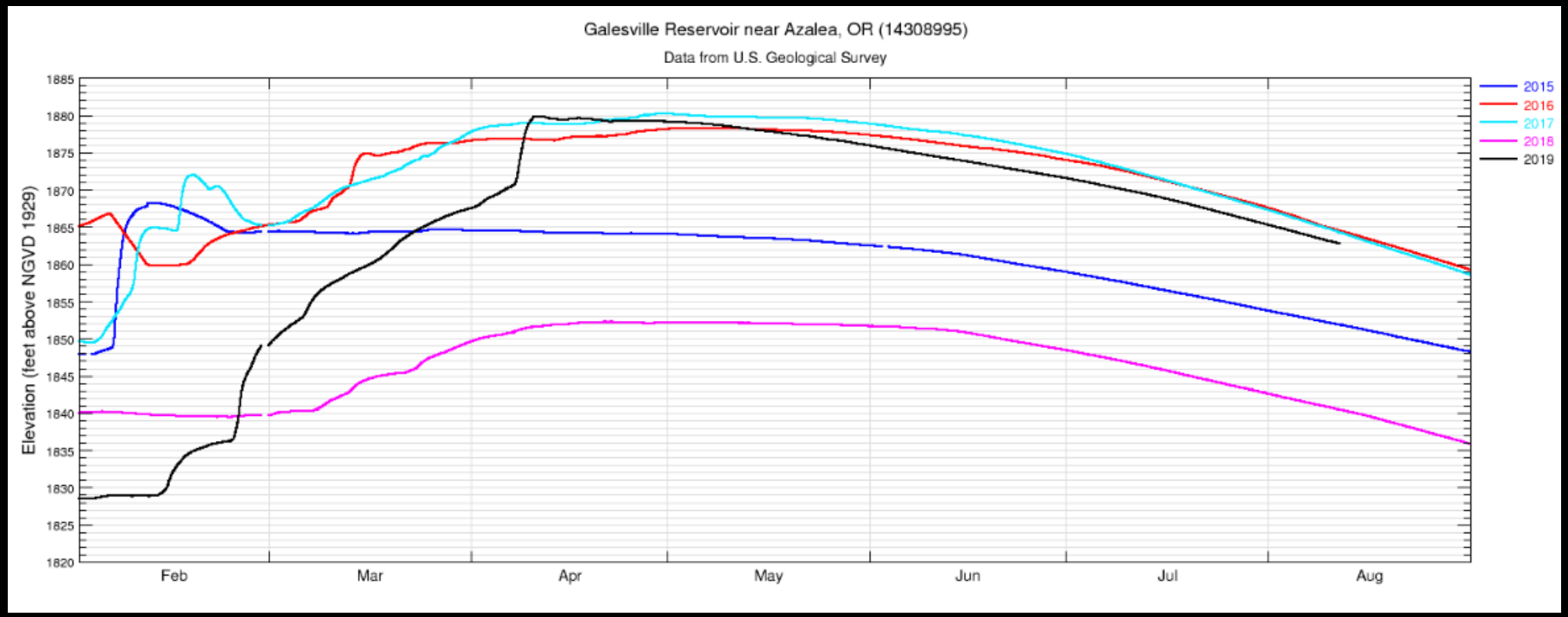
11502500 Williamson R blw Sprague R



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

USGS


Upper Klamath Lake nr Klamath Falls, OR [weighted/mean] (11507001)
Data from U.S. Geological Survey
Lake/Reservoir Elevation (feet above USBRKB datum)
4143.5
4143.0
4142.5
4142.0
4141.5
4141.0
4140.5
4140.0
4139.5
4139.0
4138.5
4138.0
Feb
Mar
Apr
May
Jun
Jul
Aug
2015
2016
2017
2018
2019


Galesville Reservoir near Azalea, OR (14308995)
Data from U.S. Geological Survey
Elevation (feet above NGVD 1929)
1885
1880
1875
1870
1865
1860
1855
1850
1845
1840
1835
1830
1825
1820
Feb
Mar
Apr
May
Jun
Jul
Aug
2015
2016
2017
2018
2019

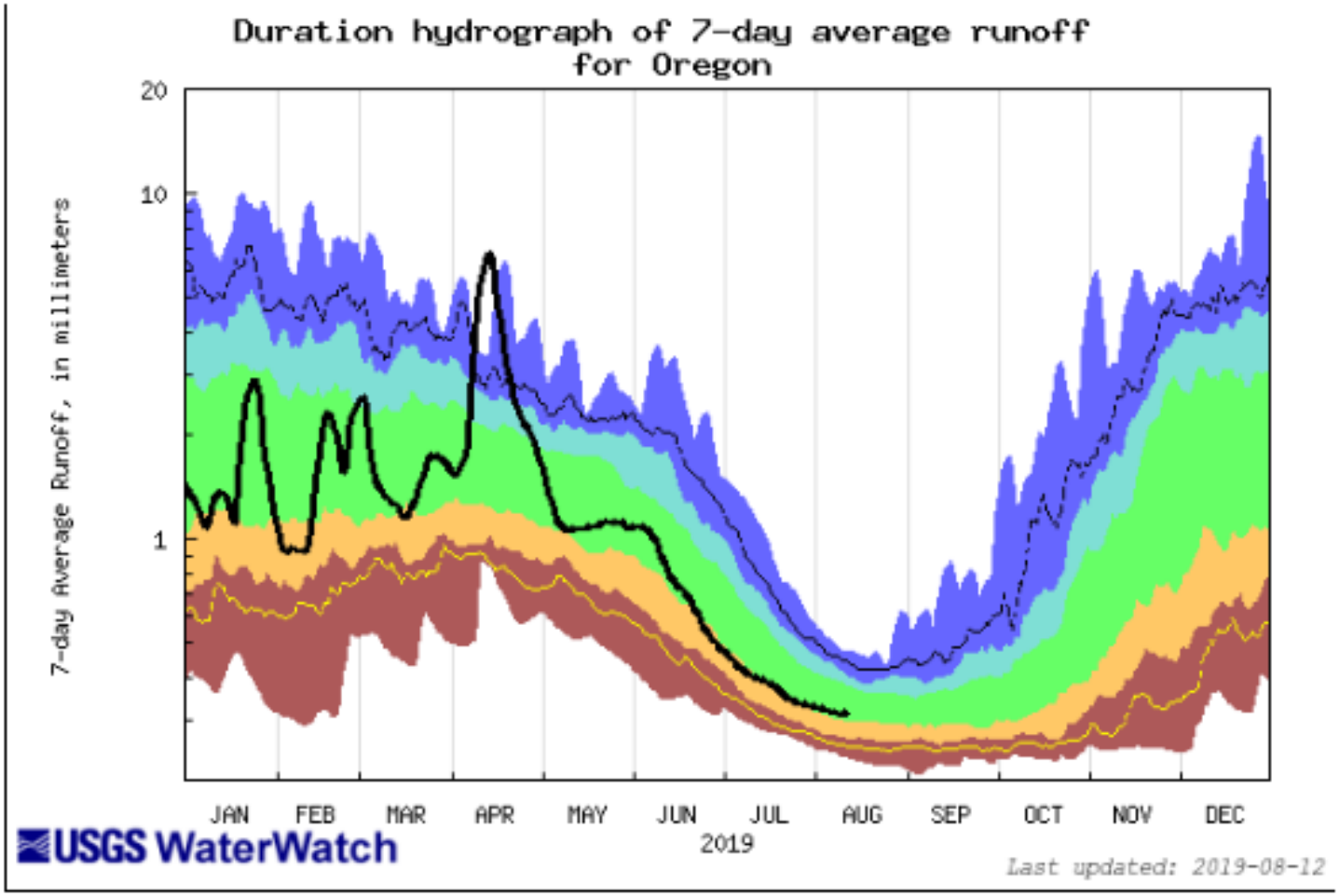
US GEOLOGICAL SURVEY, OREGON WATER SCIENCE CENTER
WATER AVAILABILITY REPORT FOR JULY 2019

Station	NRCS SWSI Basin	Monthly mean discharge: Cubic feet per second	Monthly mean discharge: Percent of average	Change in discharge from previous month (percent)	Accumulated Runoff For the Period Oct. to July: Percent of average
Donner Und Blitzen nr Frenchglen	Harney	112	110	-73	124
(*)Deep Creek above Adel	Lake County	27	79	-88	137
(*)Chewaucan River near Paisley	Lake County	52	79	-80	119
Williamson River near Chiloquin	Klamath	559	103	-30	90
Owyhee River near Rome	Owyhee	407	169	-81	111
(*)NF Malheur River near Beulah	Malheur	66	99	-66	126
Grande Ronde R at Troy	Grande Ronde Powder/Burnt	1,550	82	-71	121
Umatilla River nr Gibbon	Umatilla Lower John Day	40	68	-67	120
John Day River at Service Crk	Upper John Day	467	78	-80	124
(*)Little Deschutes River nr LaPine	Upper Deschutes	111	65	-34	77
Hood River nr Hood River	Lower Deschutes Mt.Hood	315	64	-31	73
Willamette River at Salem	Willamette	7,057	93	-37	80
Wilson River near Tillamook	North Coast	92	56	-29	67
Umpqua River near Elkton	Rogue/Umpqua	1,175	72	-41	93
Rogue River near Agness	Rogue/Umpqua	2,222	90	-38	101
SF Coquille River at Powers	South Coast	42	69	-44	96
Chetco River near Brookings	South Coast	160	76	-54	90

All data should be considered provisional and subject to revision.
Percent of average computed using 30-year base period, water years 1981-2010.
(*) provided by Oregon Water Resources Department

8/1/2019

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