

Water Supply Conditions Report

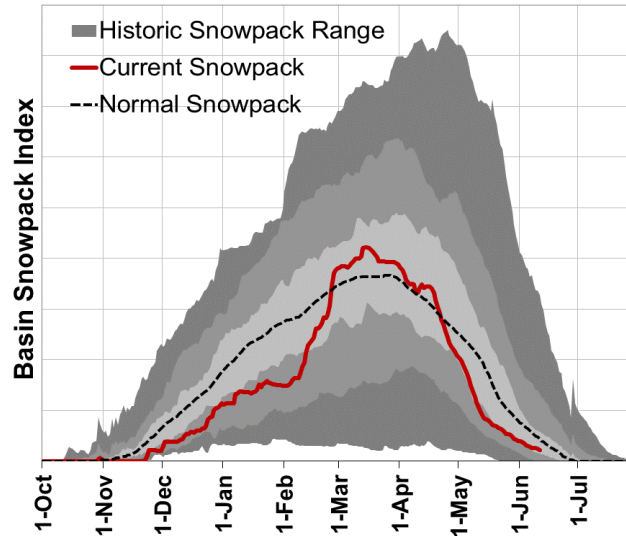
Drought Readiness Council



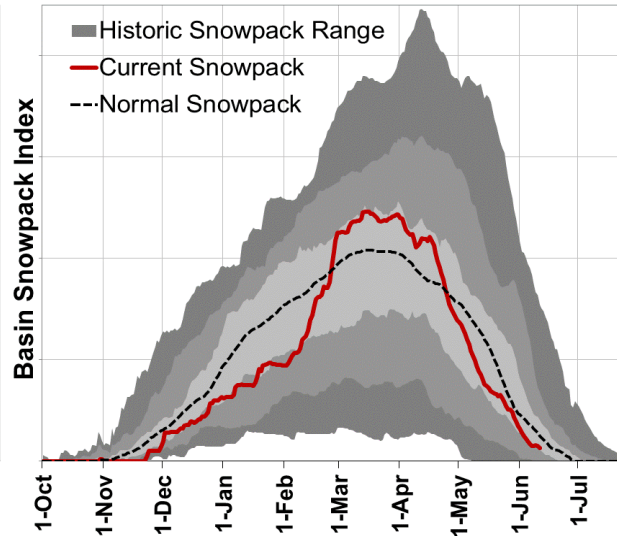
Ken Stahr
Oregon Water Resources
Department
June 13, 2019

Water Year 2019 – June 11th

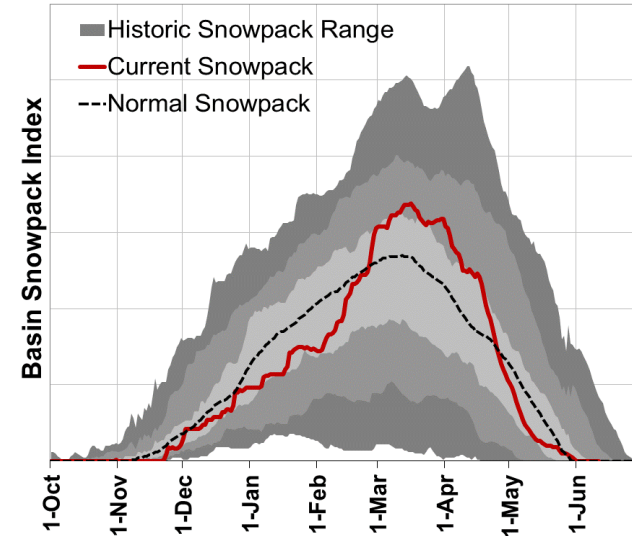
Willamette



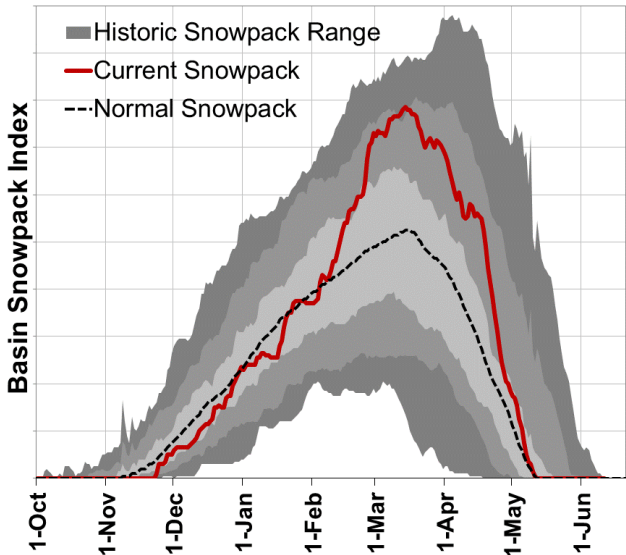
Rogue/Umpqua



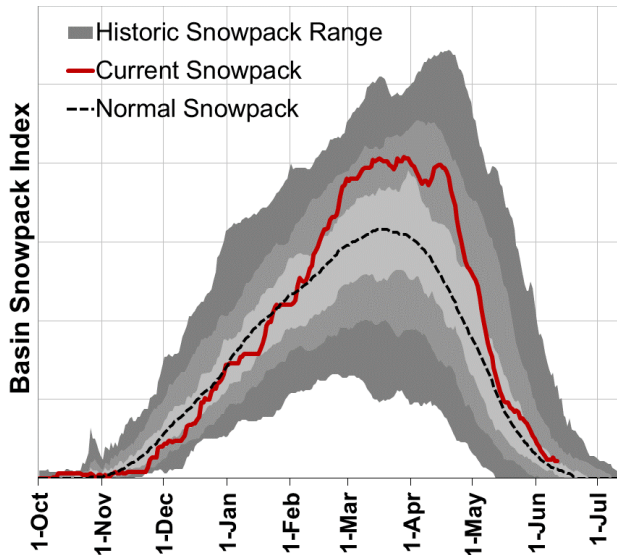
Klamath



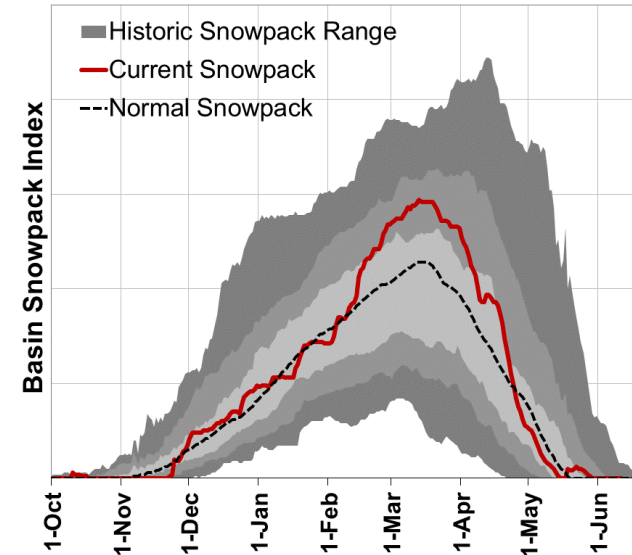
John Day



Grande Ronde/Powder/Burnt



Owyhee/Malheur

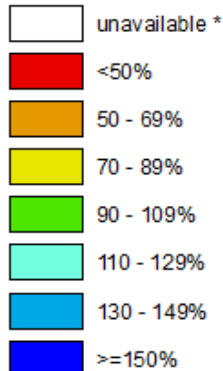


Statewide SNOTEL Precipitation is 95% of normal on June 11, 2019

Oregon SNOTEL Water Year (Oct 1) to Date Precipitation % of Normal

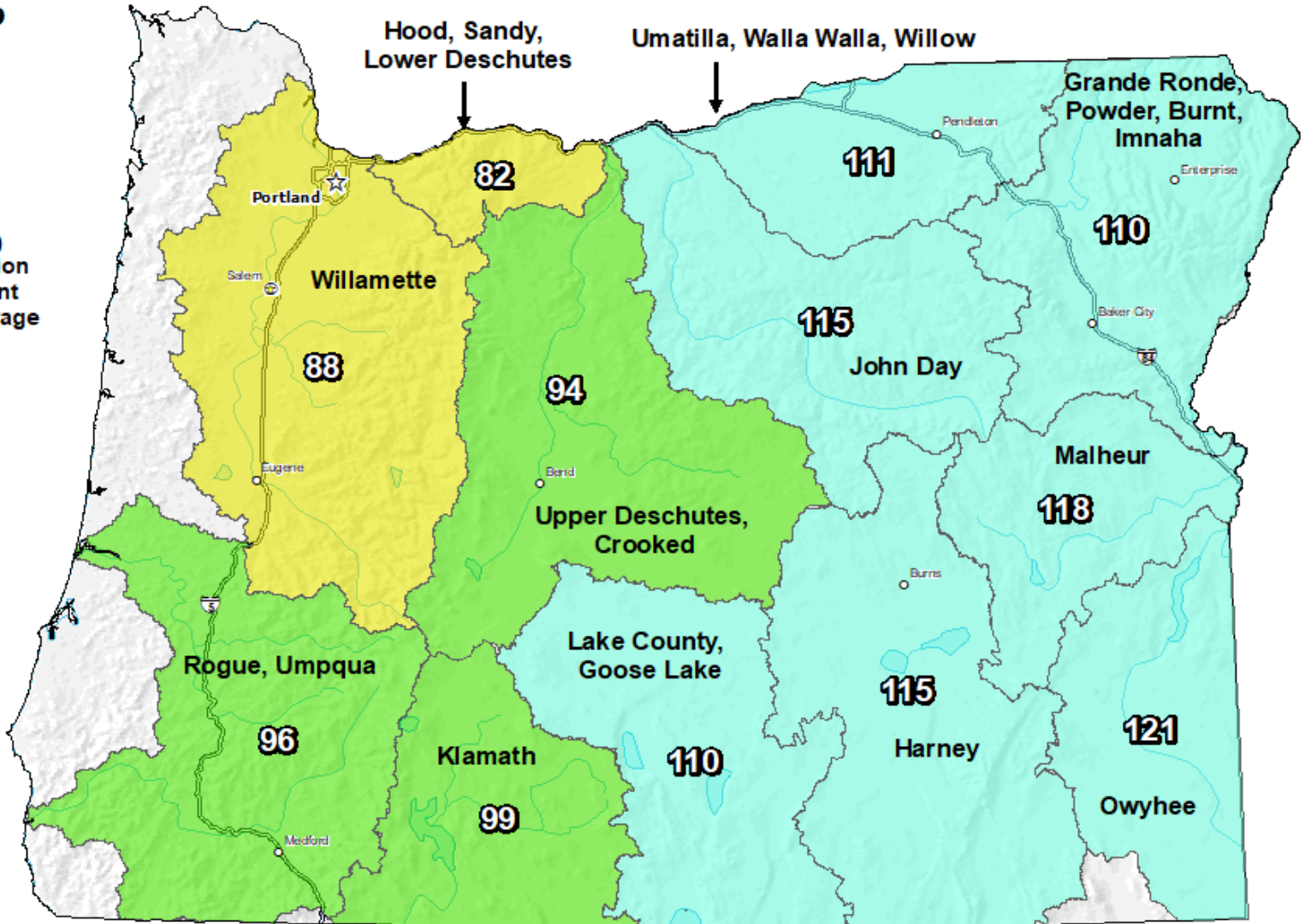
Jun 11, 2019

Water Year (Oct 1)
to Date Precipitation
Basin-wide Percent
of 1981-2010 Average

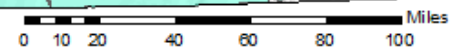


* Data unavailable at time of posting or measurement is not representative at this time of year

*Provisional Data
Subject to Revision*



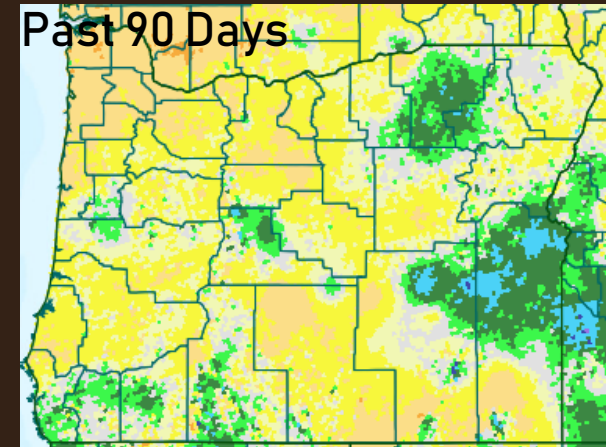
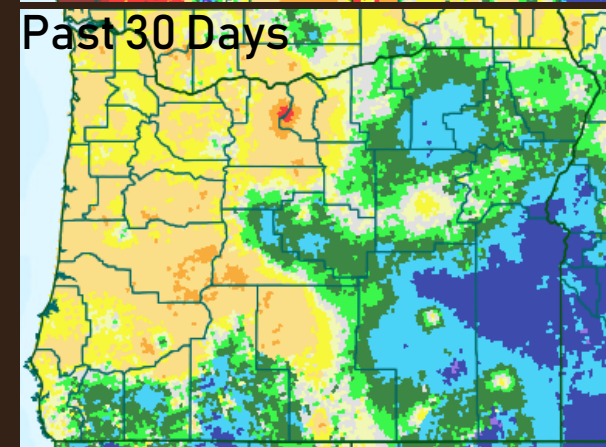
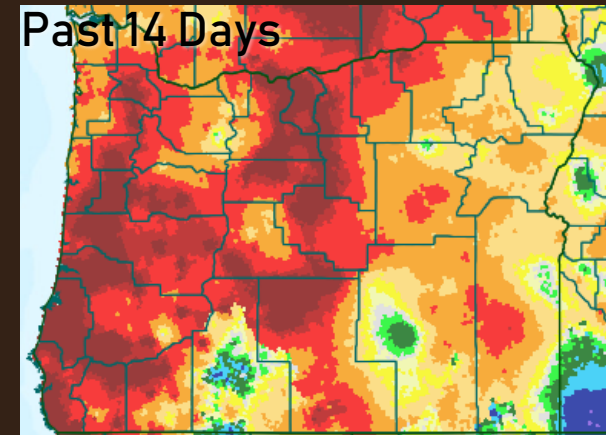
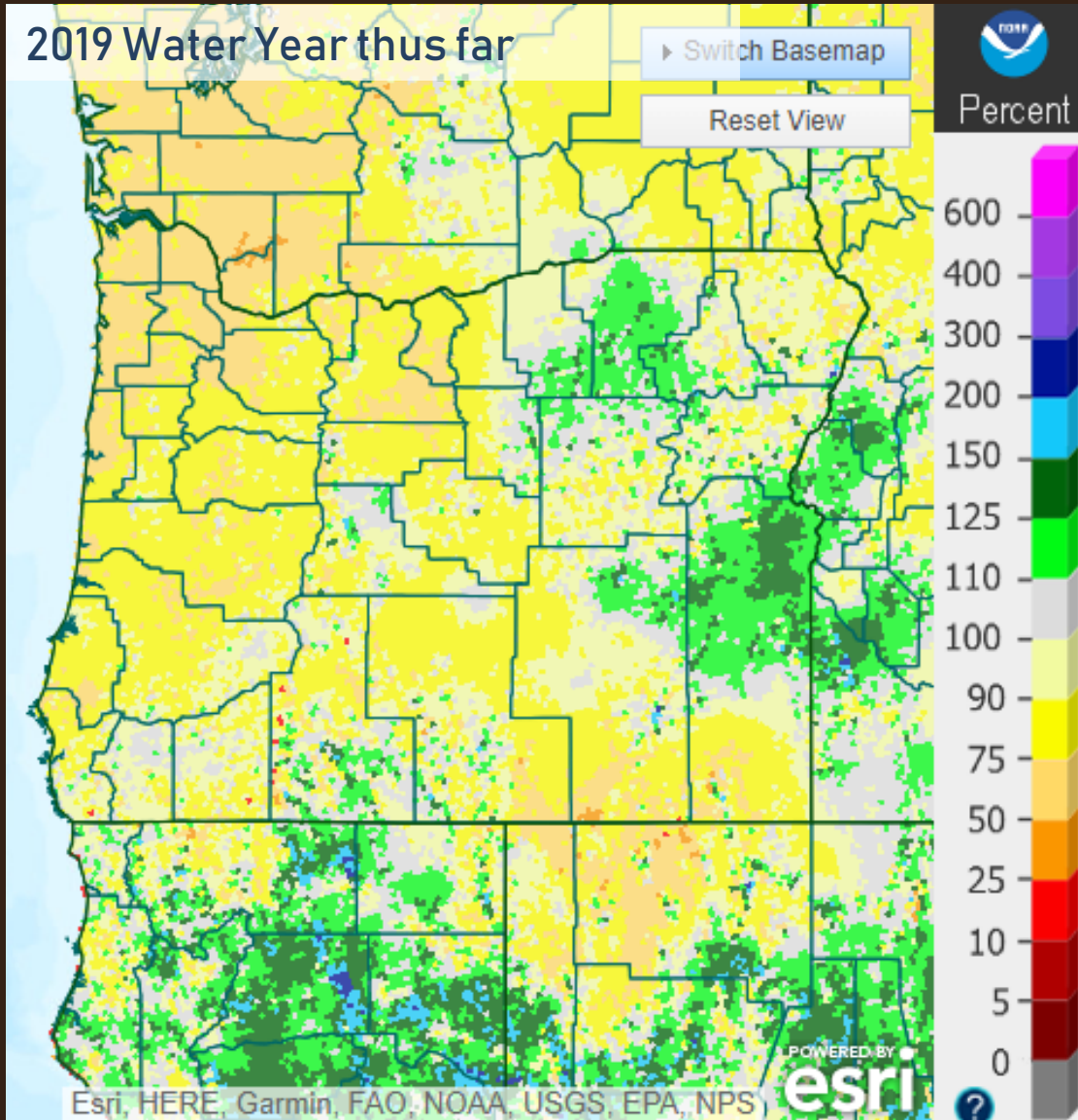
The water year to date precipitation percent of normal represents the accumulated precipitation found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).



Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>



Precipitation % of Average



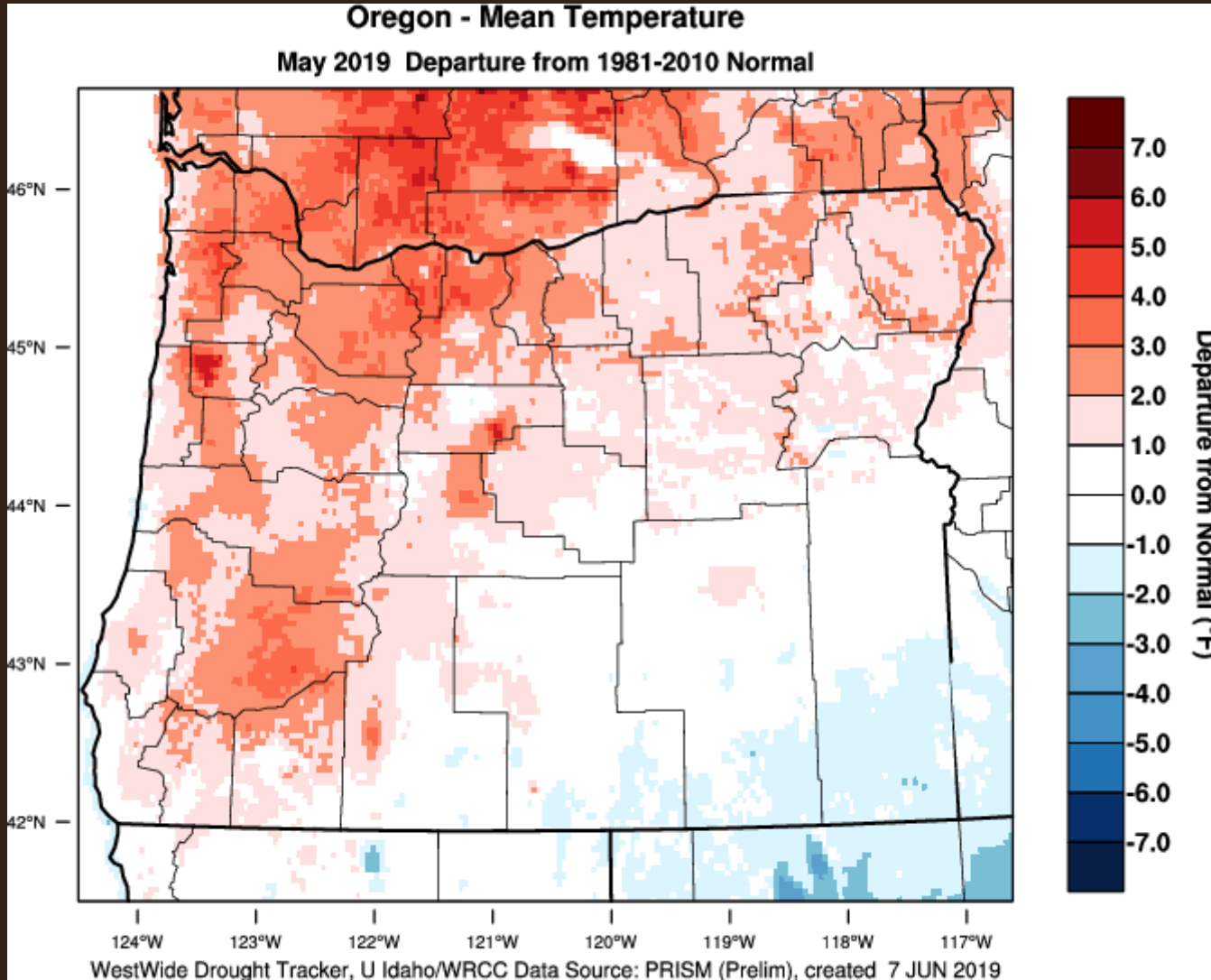
Precipitation Data as of June 9, 2019

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



Recent Temperatures

May 2019





Drought Monitor

U.S. Drought Monitor

May 7, 2019

West

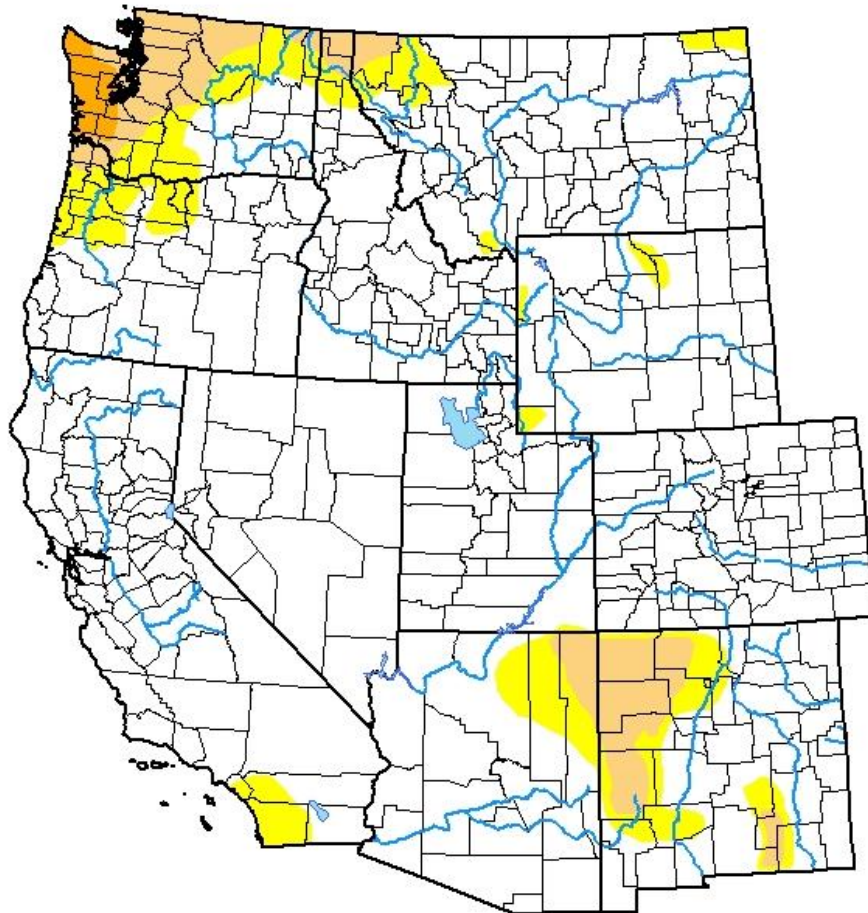
U.S. Drought Monitor

West







June 4, 2019

(Released Thursday, Jun. 6, 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:

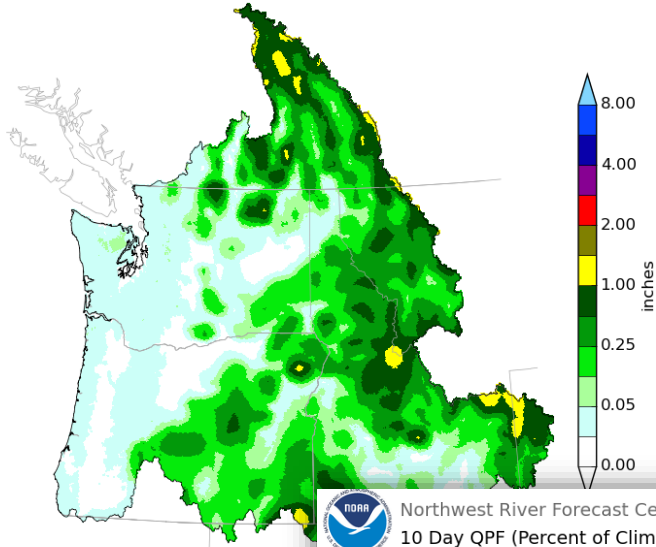
David Simeral
Western Regional Climate Center



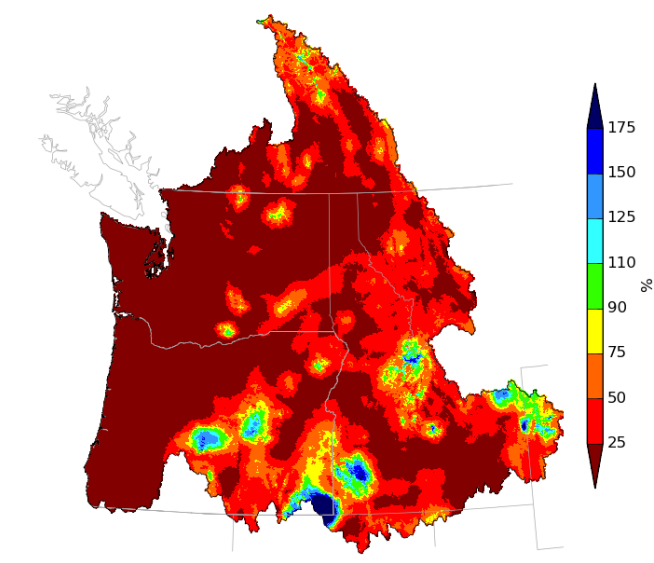


Mid/Late June Outlook

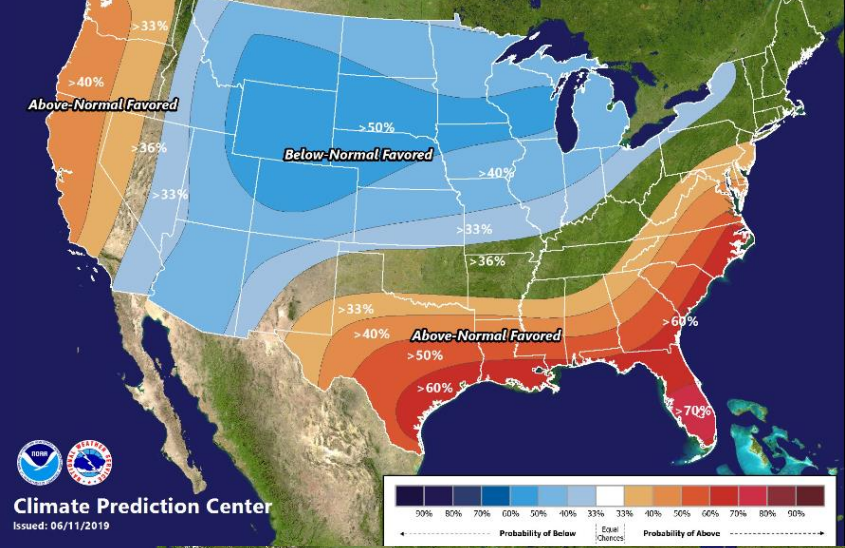
Northwest River Forecast Center
10 Day QPF, Ending 12Z, 06/20/19



Northwest River Forecast Center
10 Day QPF (Percent of Climatology), Ending 12Z, 06/20/19

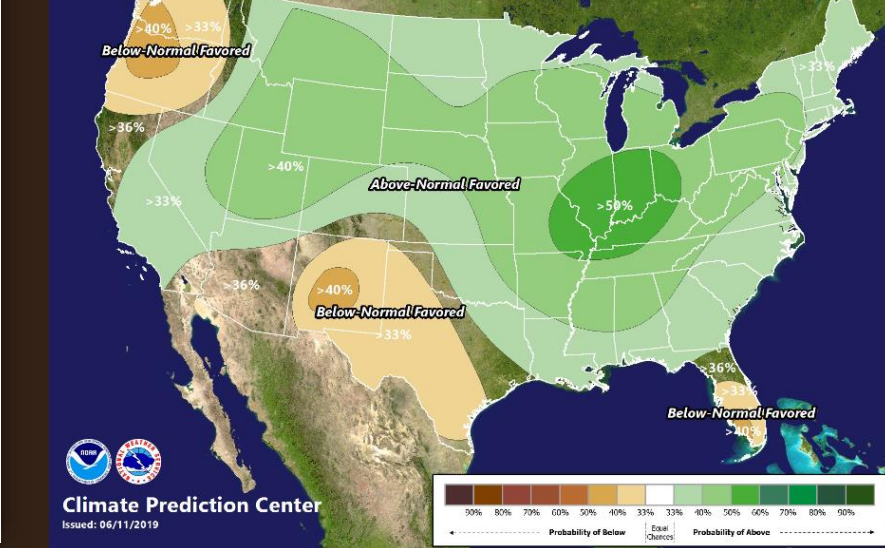


8-14 Day Temperature Outlook
Jun 19 - Jun 25, 2019



Climate Prediction Center
Issued: 06/11/2019

8-14 Day Precipitation Outlook
Jun 19 - Jun 25, 2019



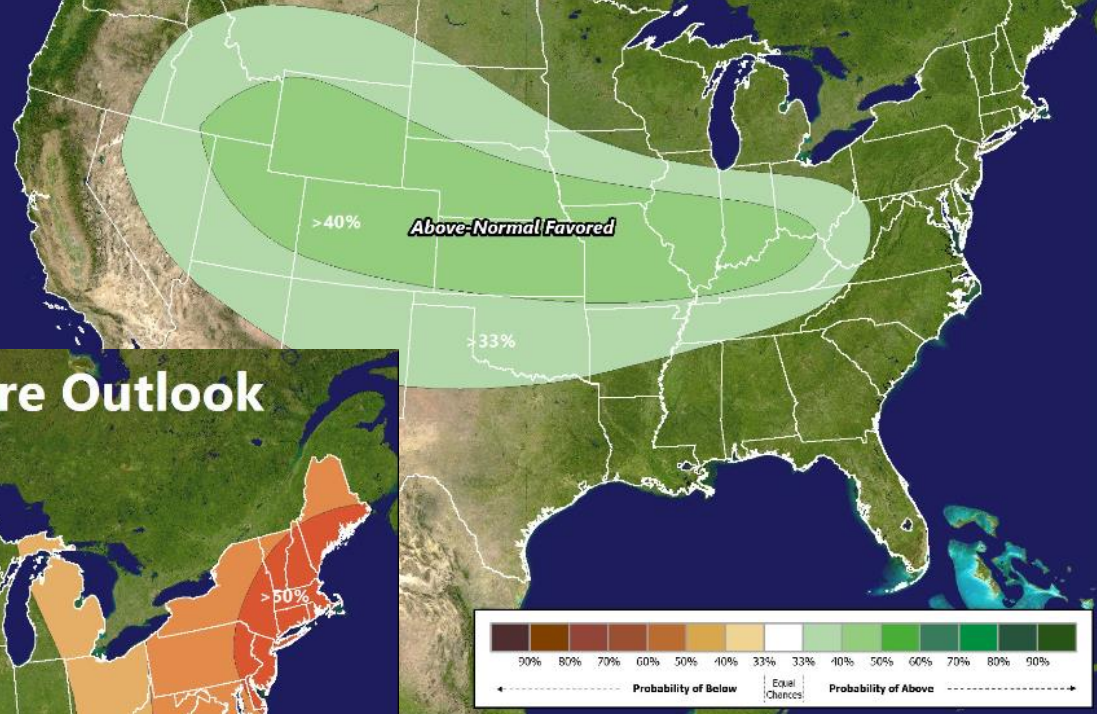
Climate Prediction Center
Issued: 06/11/2019



July-August-September Outlook

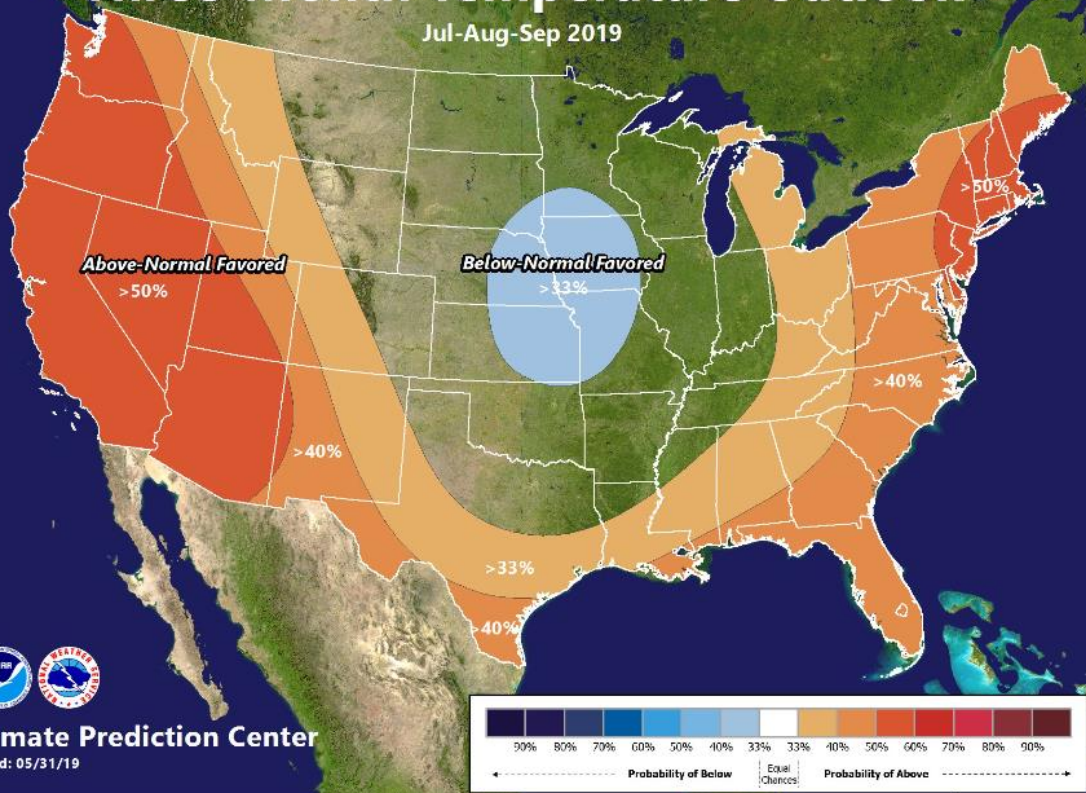
Three-Month Precipitation Outlook

Jul-Aug-Sep 2019



Three-Month Temperature Outlook

Jul-Aug-Sep 2019



Climate Prediction Center

Issued: 05/31/19



Observed WY2019 Runoff (so far)



Northwest River Forecast Center Observed Water Year Natural Runoff



River and Hydrology	Water Supply	Observations	Weather Forecasts	Climate	NWRFC
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Search
Enter NWS ID:

GO

Map Overlays
 NWRFC Boundary
 NWRFC Basins
 NWS HSAs
 Counties

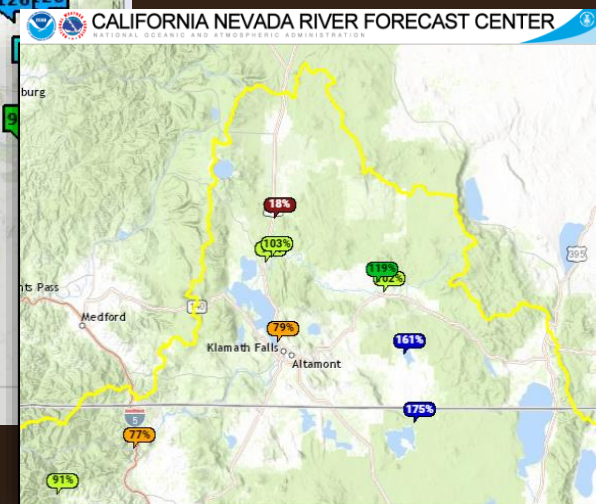
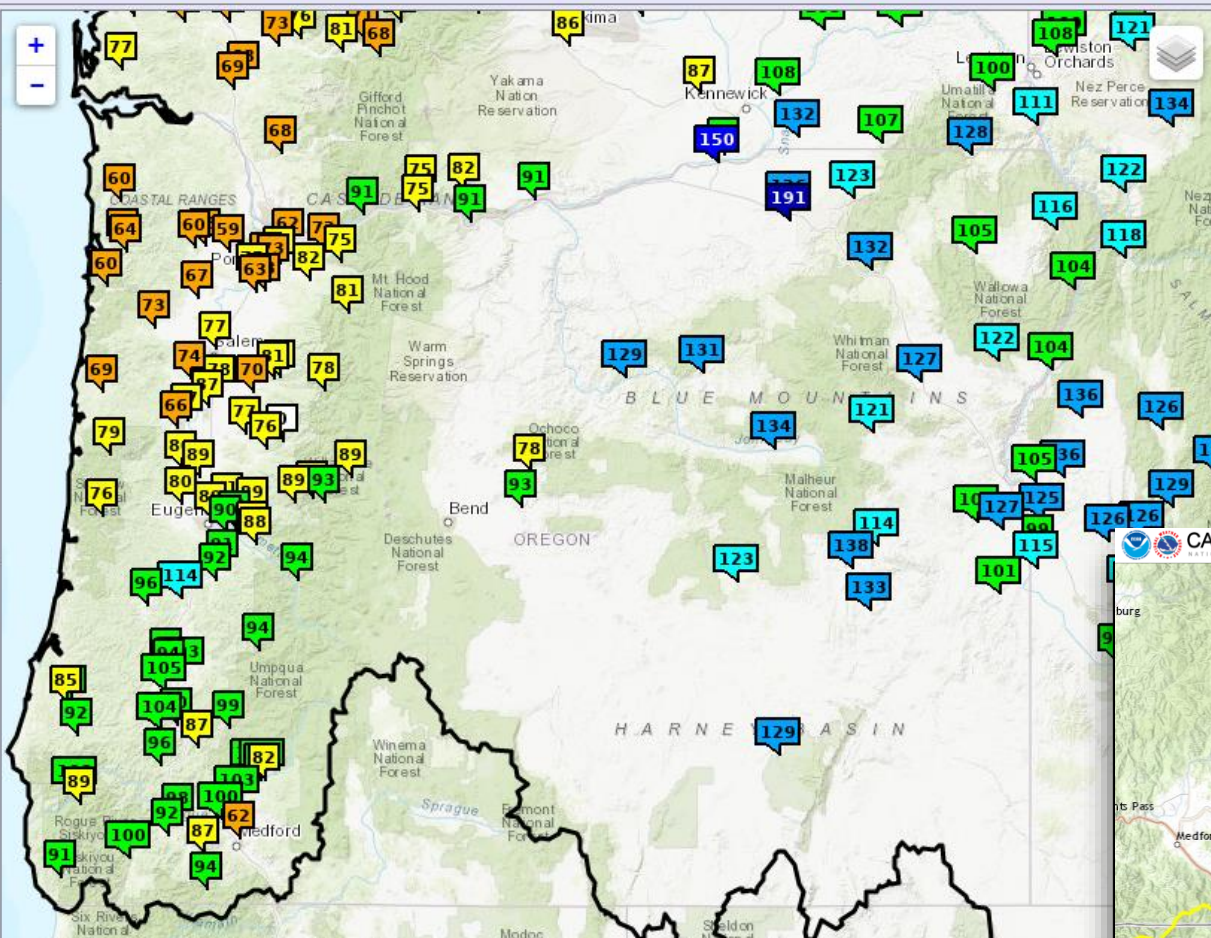
ESP Natural Forecast
 Natural Status
 Natural % of Normal
 Rank (ASC)
 Rank (DESC)
 Exceedance (%)
 Percentile (%)

Natural Runoff
 Runoff Status
 Runoff % of Normal

Natural Runoff

Period: Oct thru Curr
(% Normal)

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



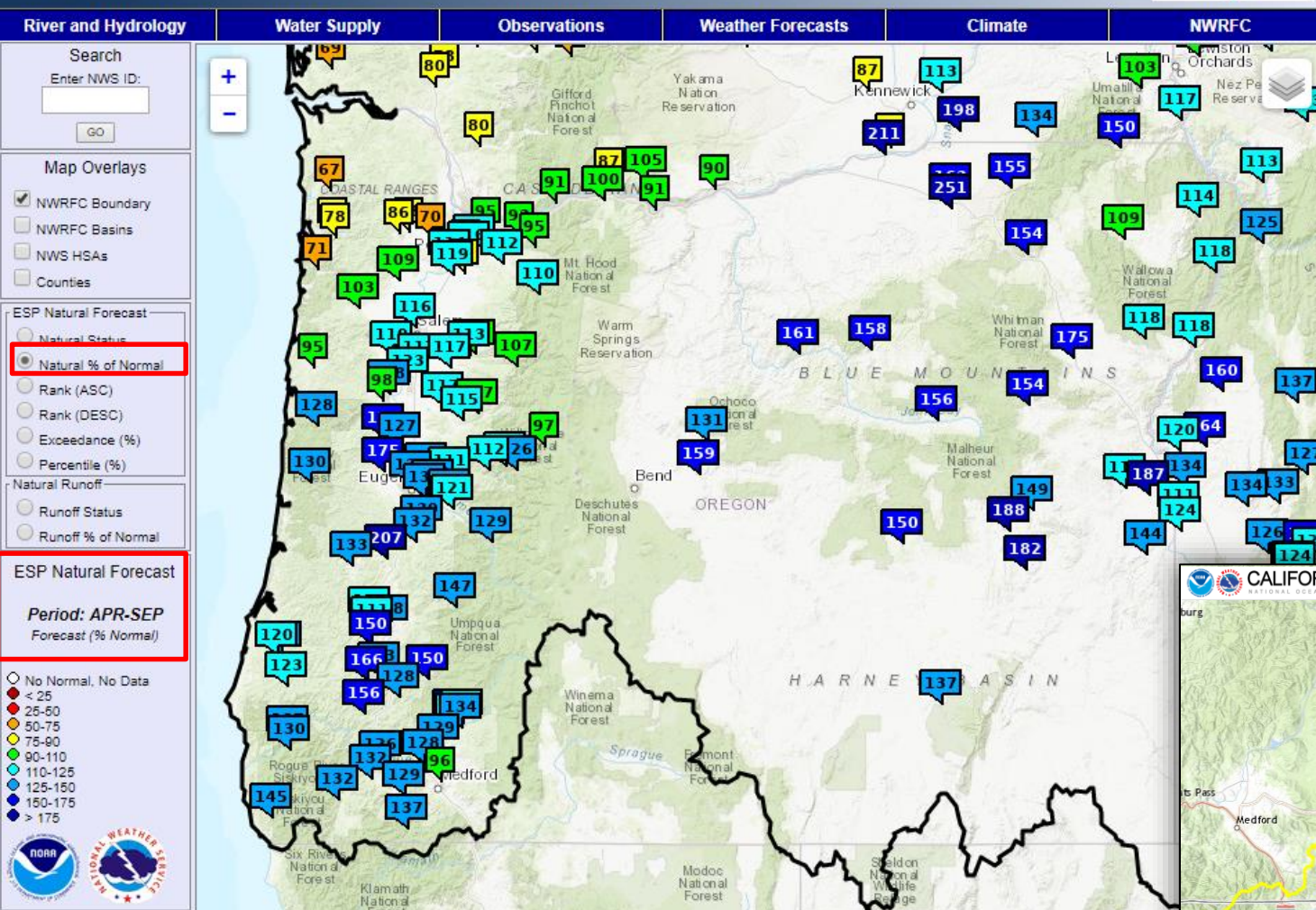
<https://www.nwrfc.noaa.gov/natural/index.html?version=20181015v2>
<https://www.cnrfc.noaa.gov/ol.php?product=espWS>



Seasonal Water Supply Forecasts



Northwest River Forecast Center ESP Natural Forecast



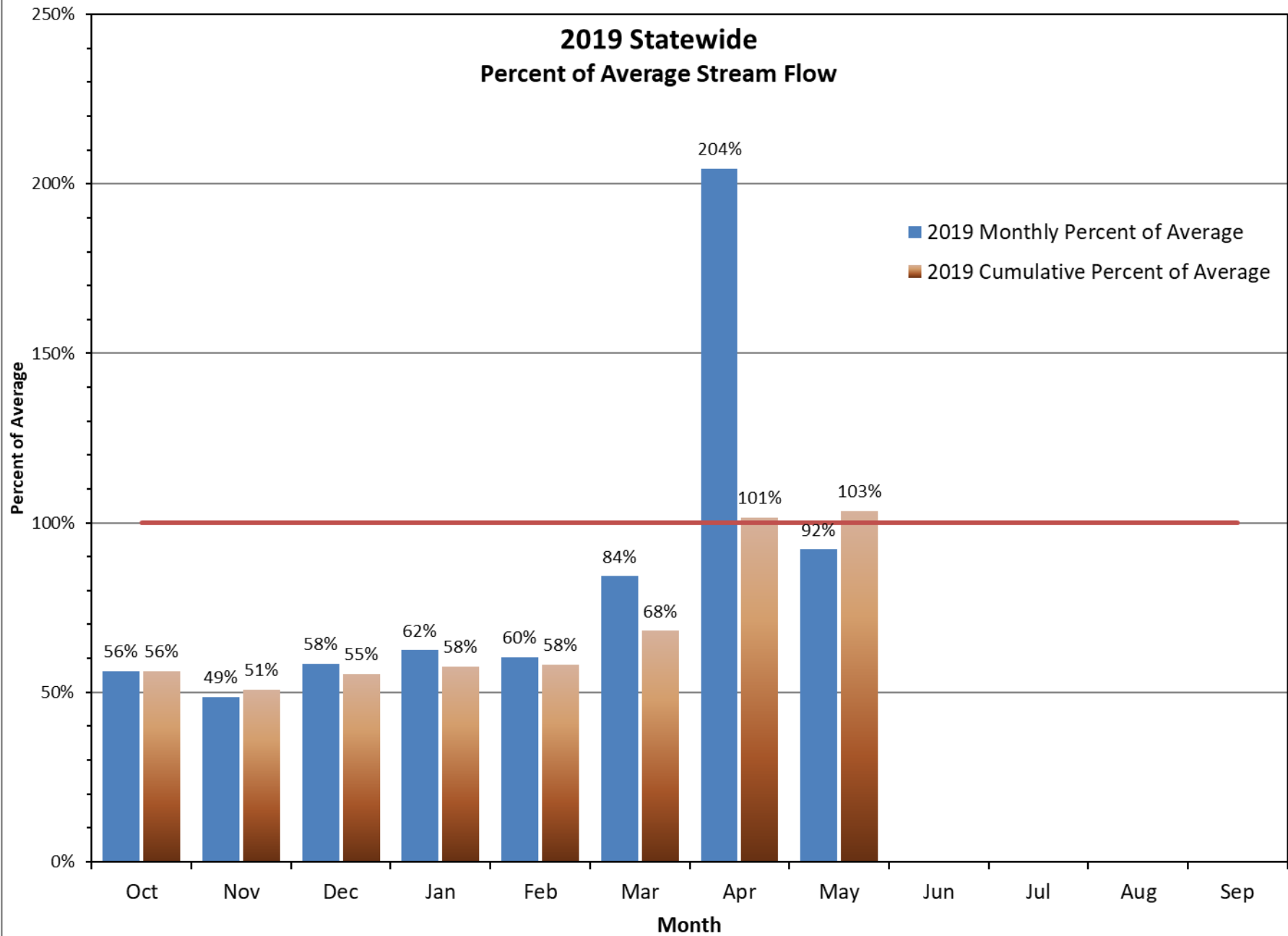
Forecast runoff volume for April – September 2019



<https://www.nwrfc.noaa.gov/natural/index.html?version=20181015v2>

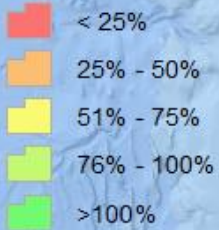
<https://www.cnrfc.noaa.gov/ol.php?product=espWS>

2019 Statewide Percent of Average Stream Flow

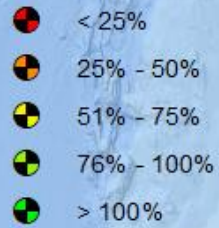


Percent of Average Streamflow April - 2019

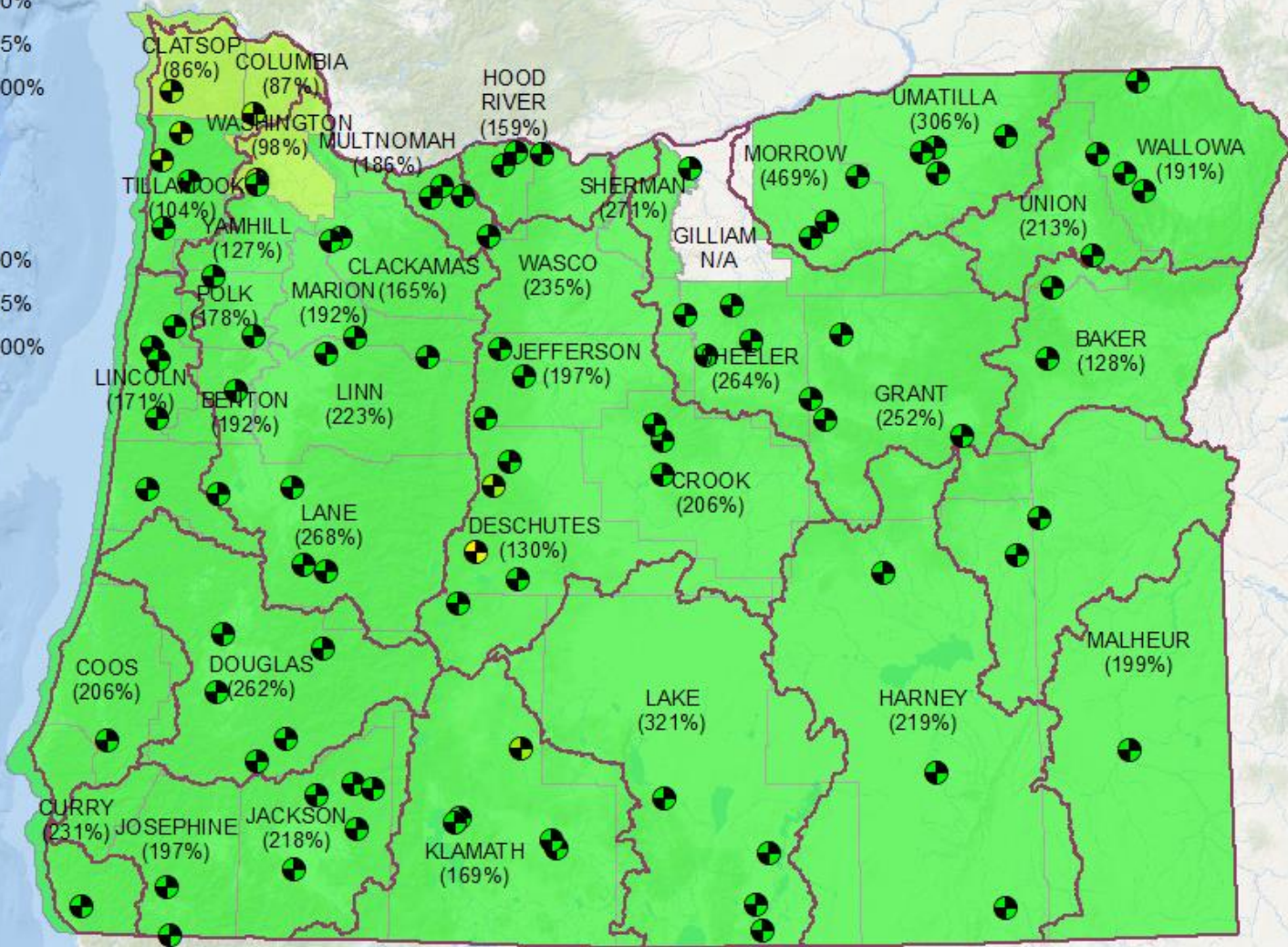
County



Stream Gage



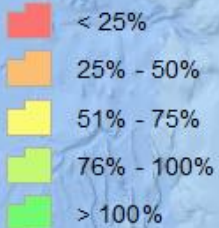
WRD Basin



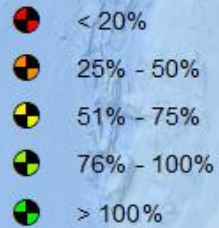
Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.

Percent of Average Streamflow May, 2019

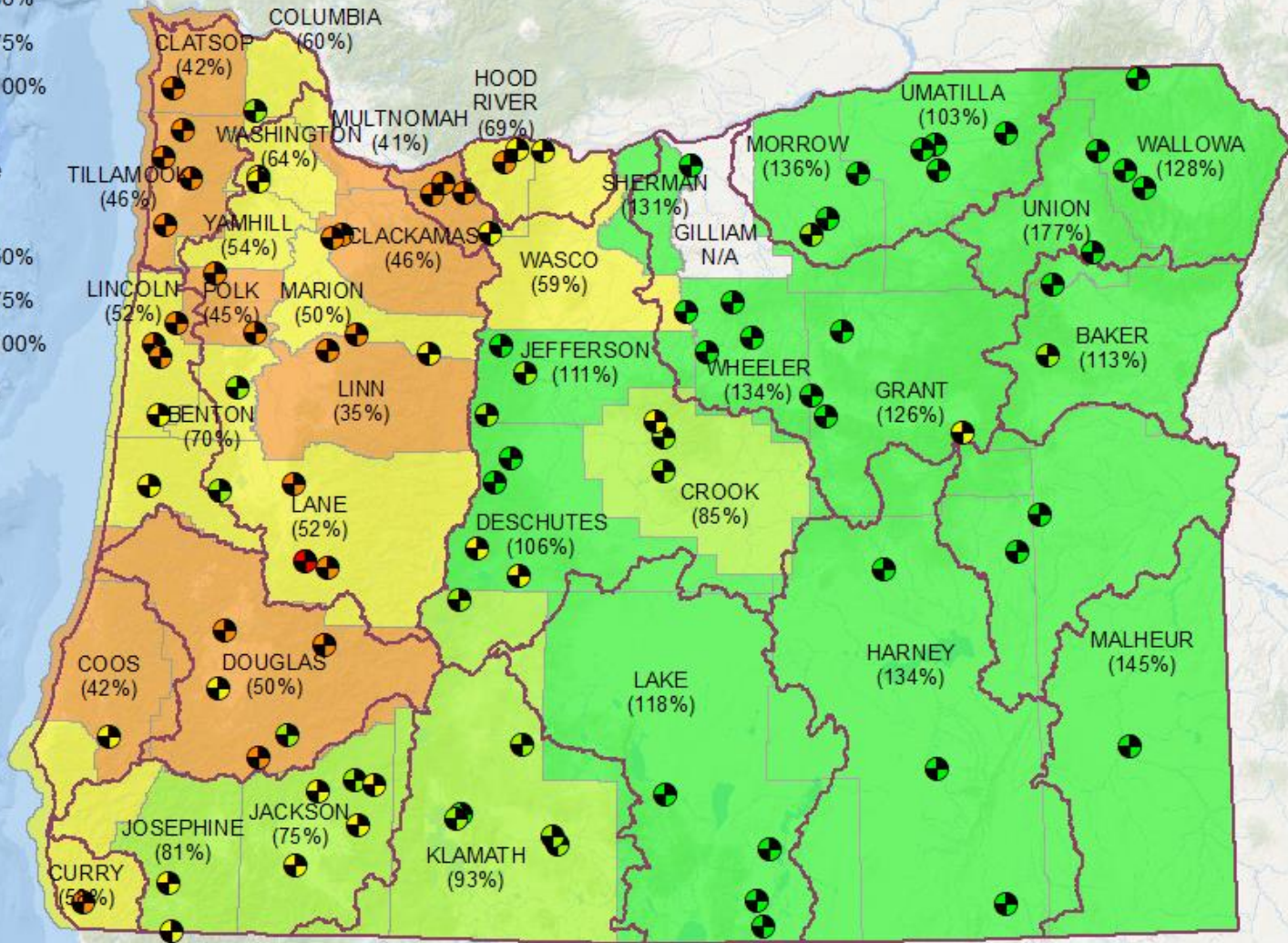
County



Stream Gage

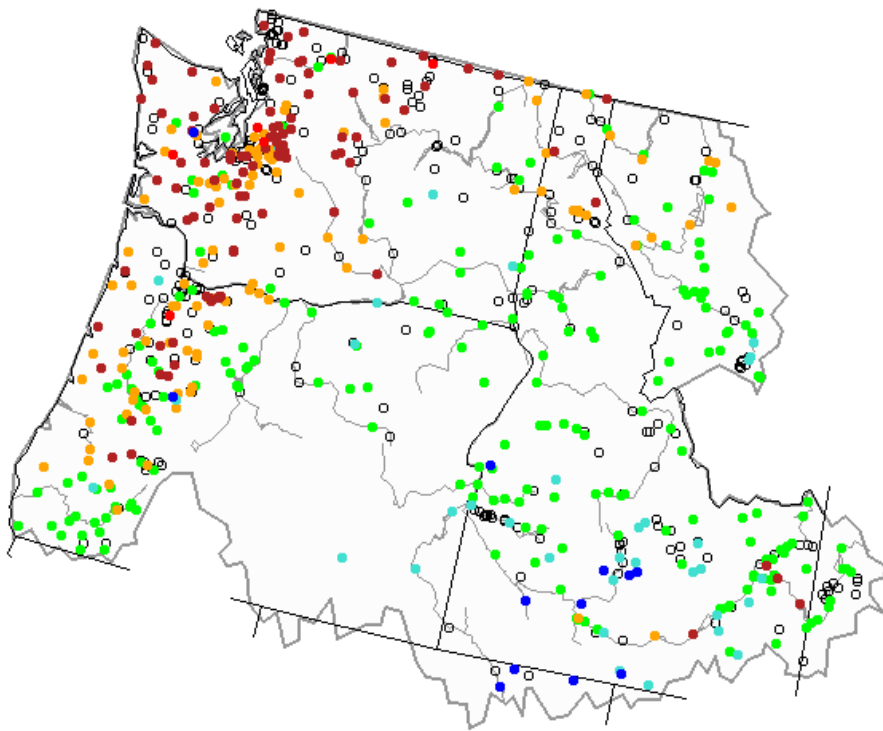


WRD Basin



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.

Tuesday, June 11, 2019



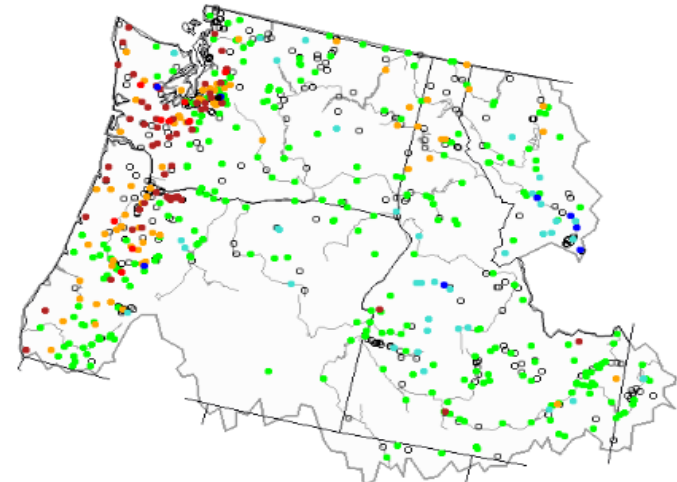
(Left) Map of current 7-day average streamflow compared to historical streamflow for the day of the year

7-day average streamflow for May 12

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

State or 17 Pacific Northwest All Days

Sunday, May 12, 2019



Search USGS streamgage

Explanation - Percentile classes

Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked



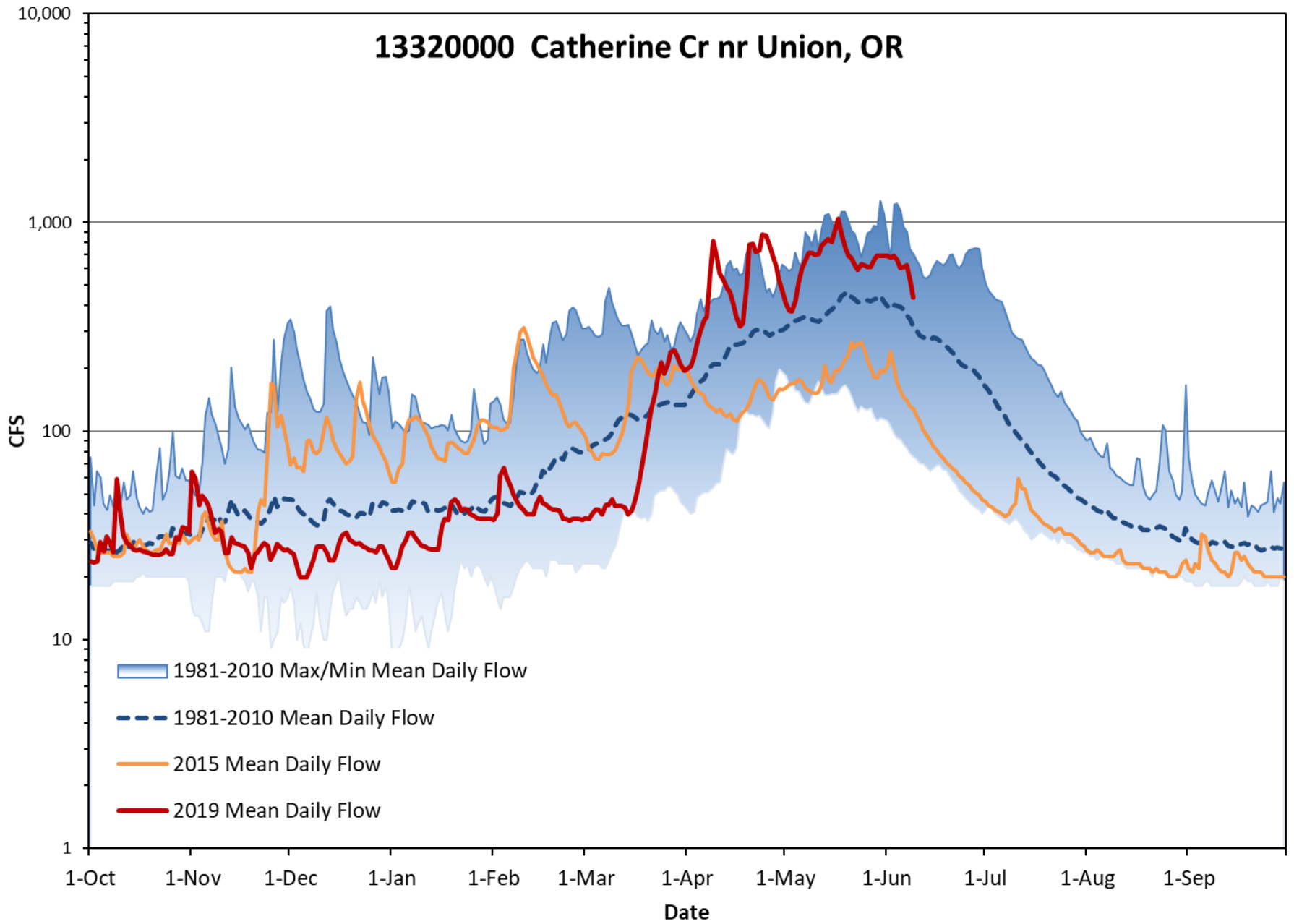
Search USGS streamgage

Explanation - Percentile classes

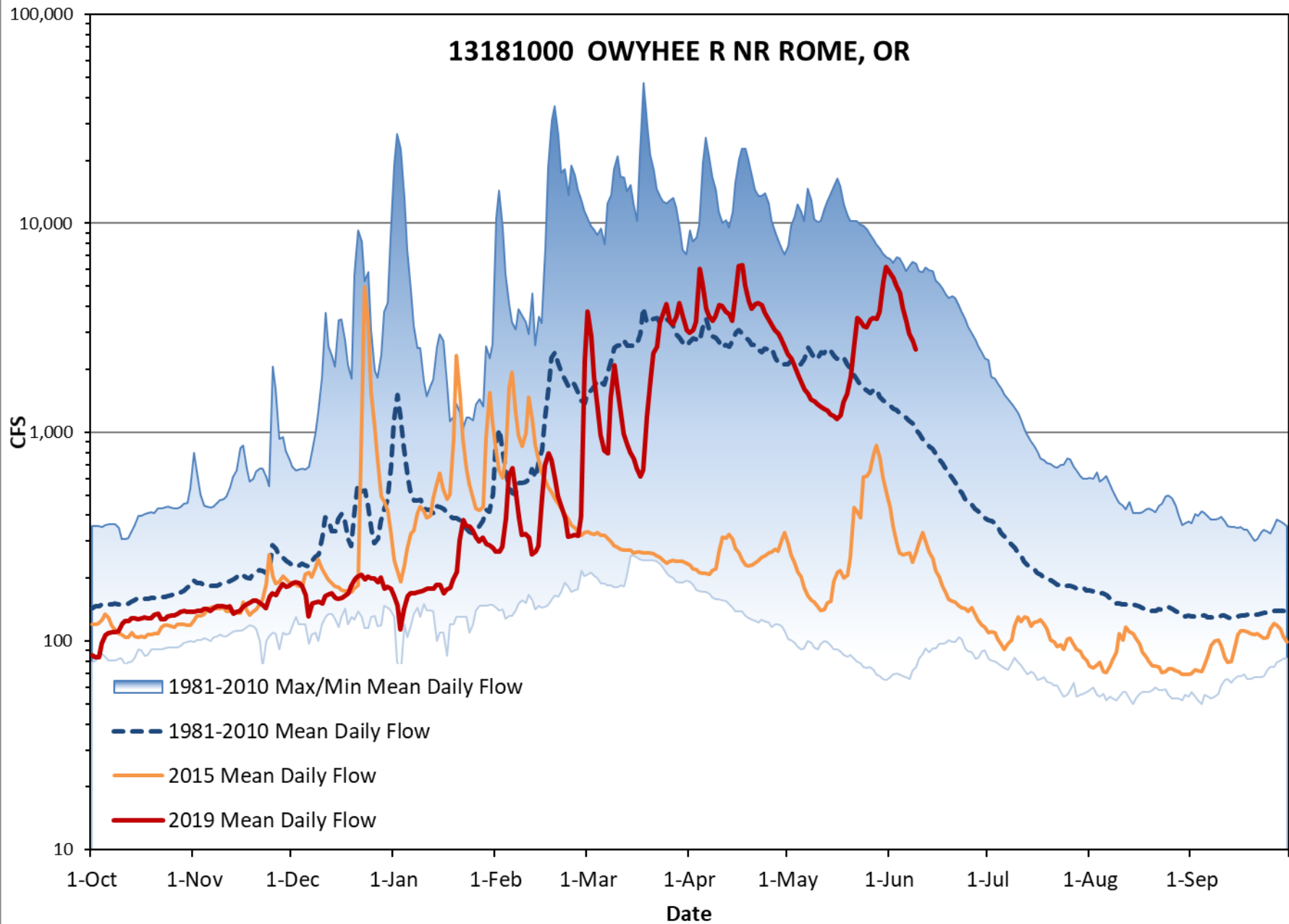
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked



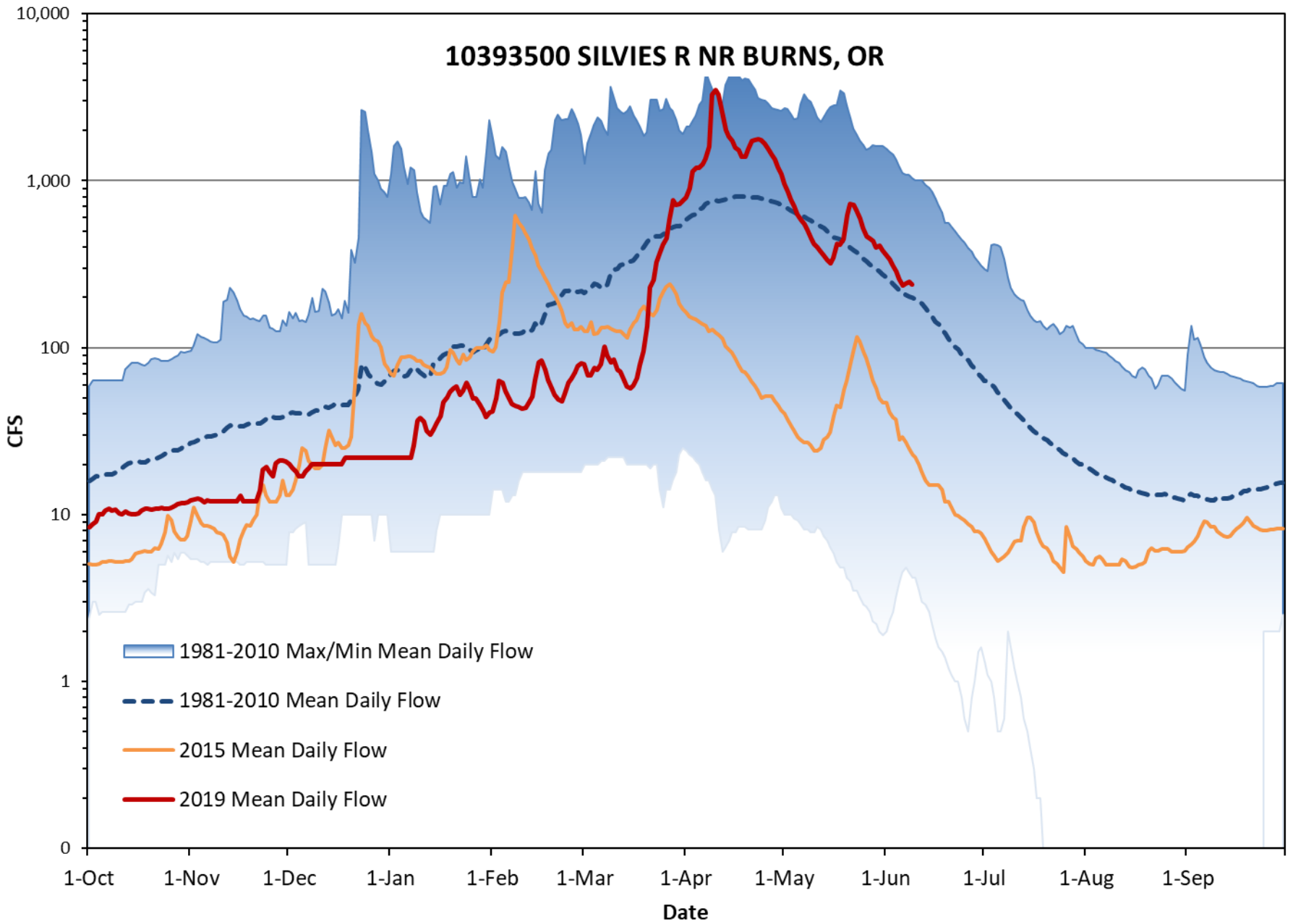
13320000 Catherine Cr nr Union, OR



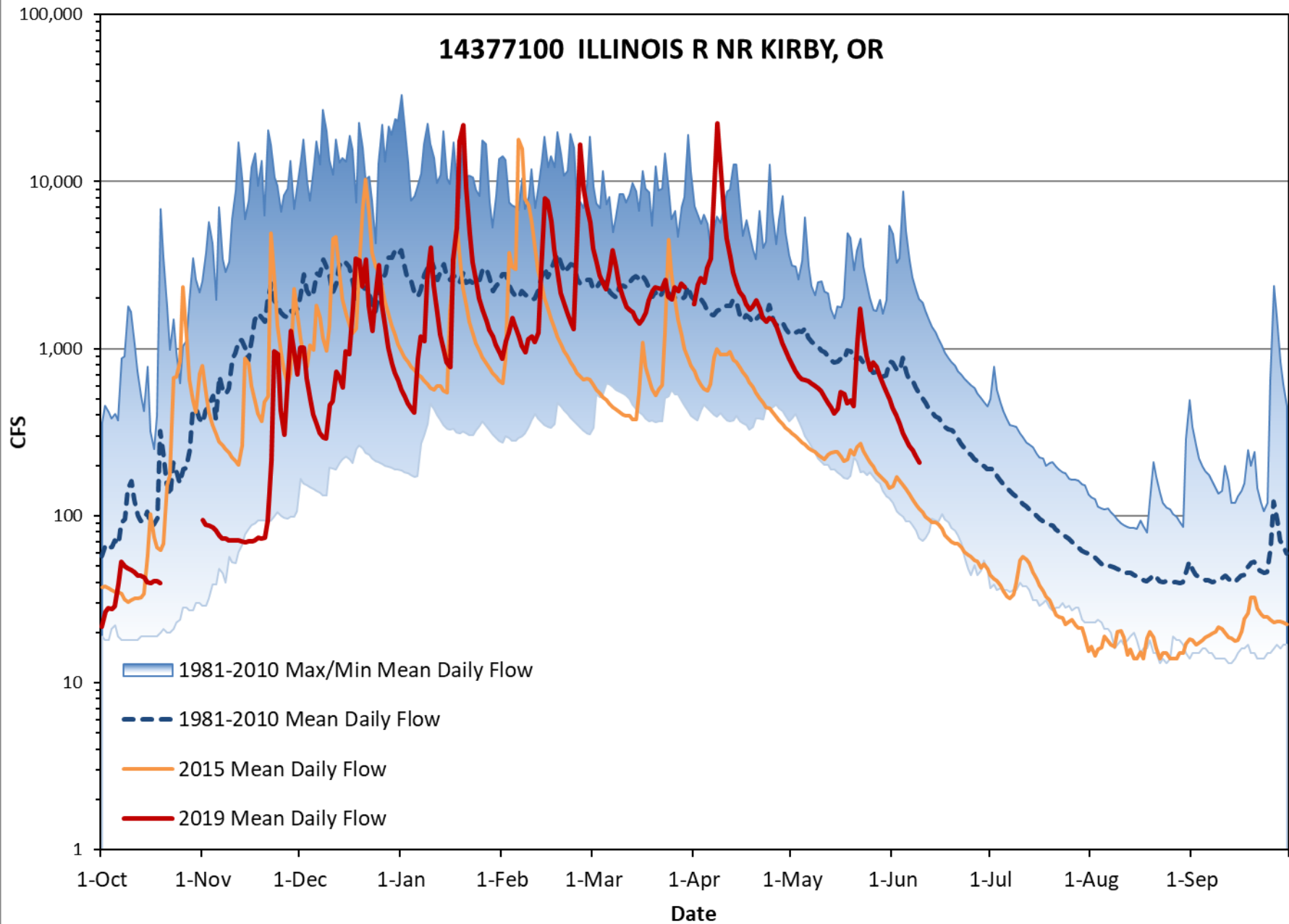
13181000 OWYHEE R NR ROME, OR



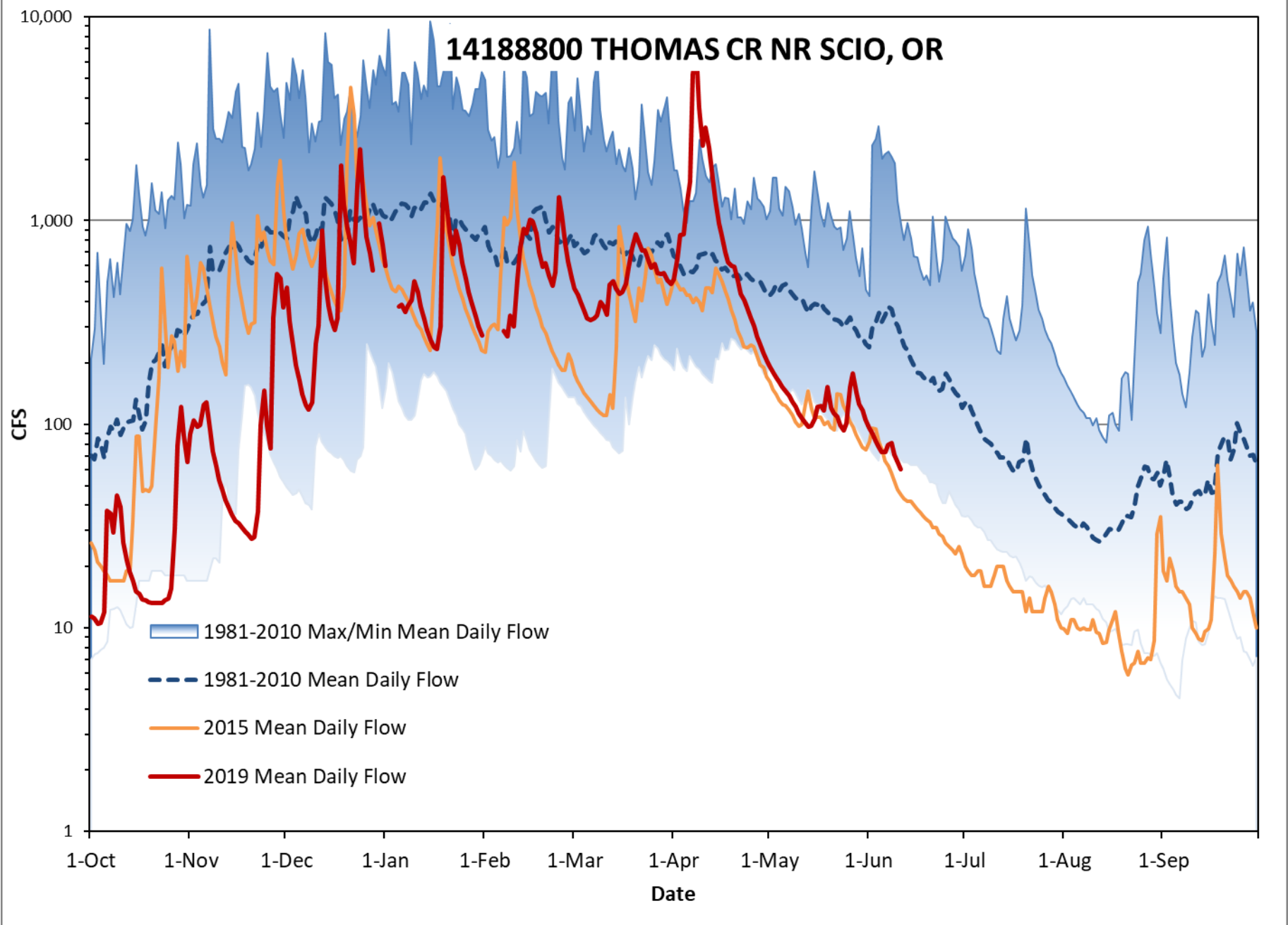
10393500 SILVIES R NR BURNS, OR



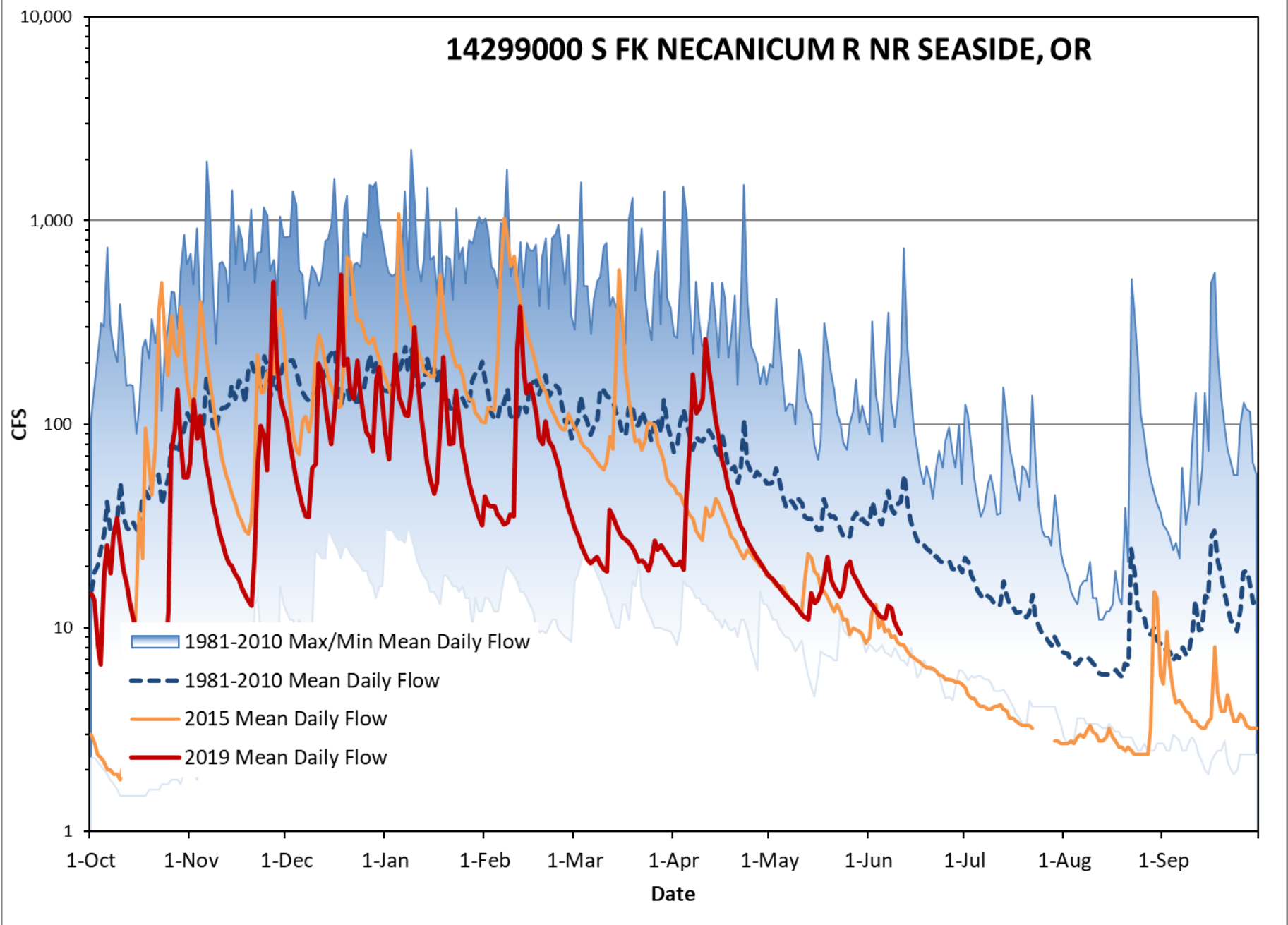
14377100 ILLINOIS R NR KIRBY, OR



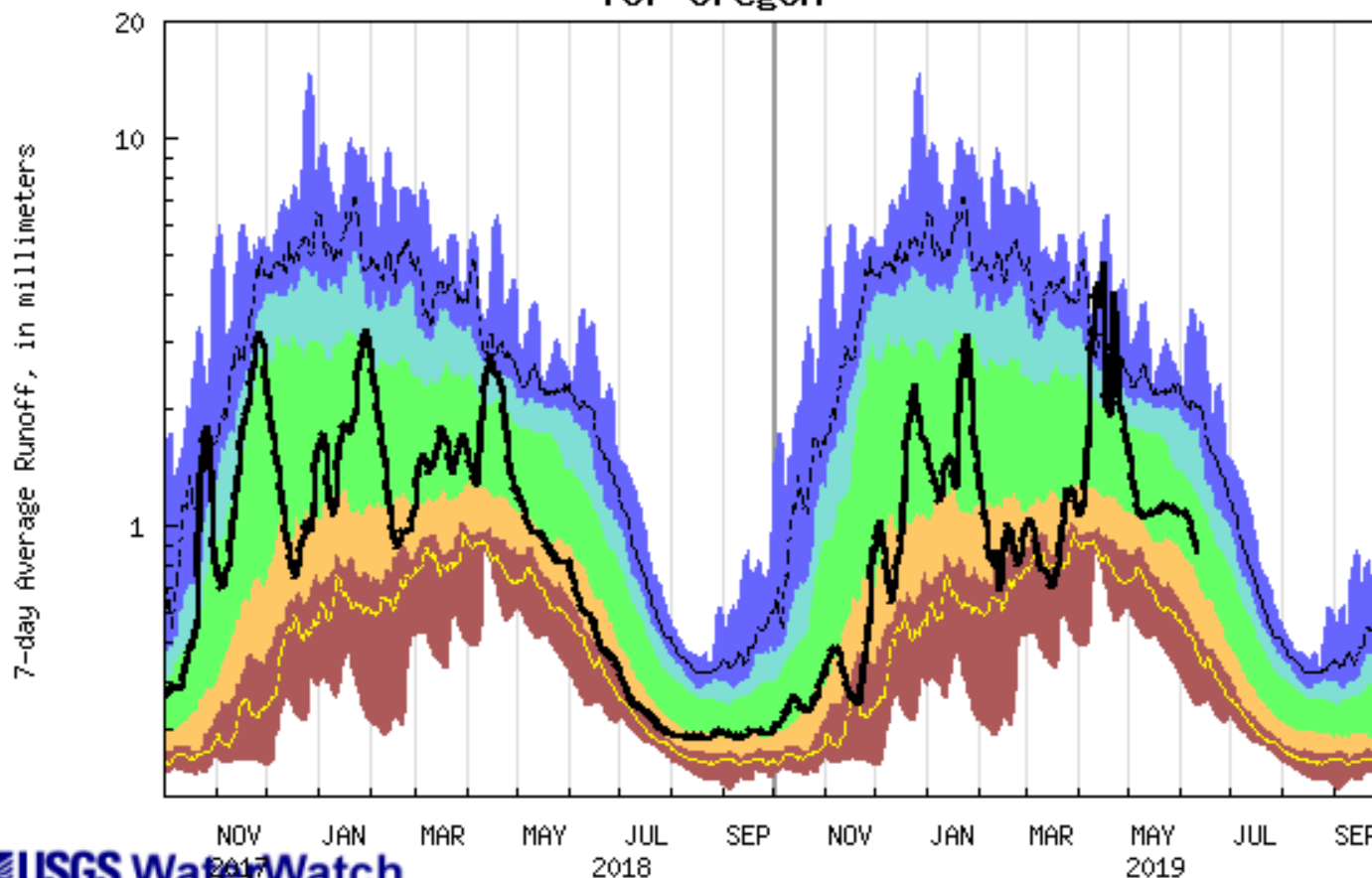
14188800 THOMAS CR NR SCIO, OR



14299000 S FK NECANICUM R NR SEASIDE, OR



Duration hydrograph of 7-day average runoff for Oregon

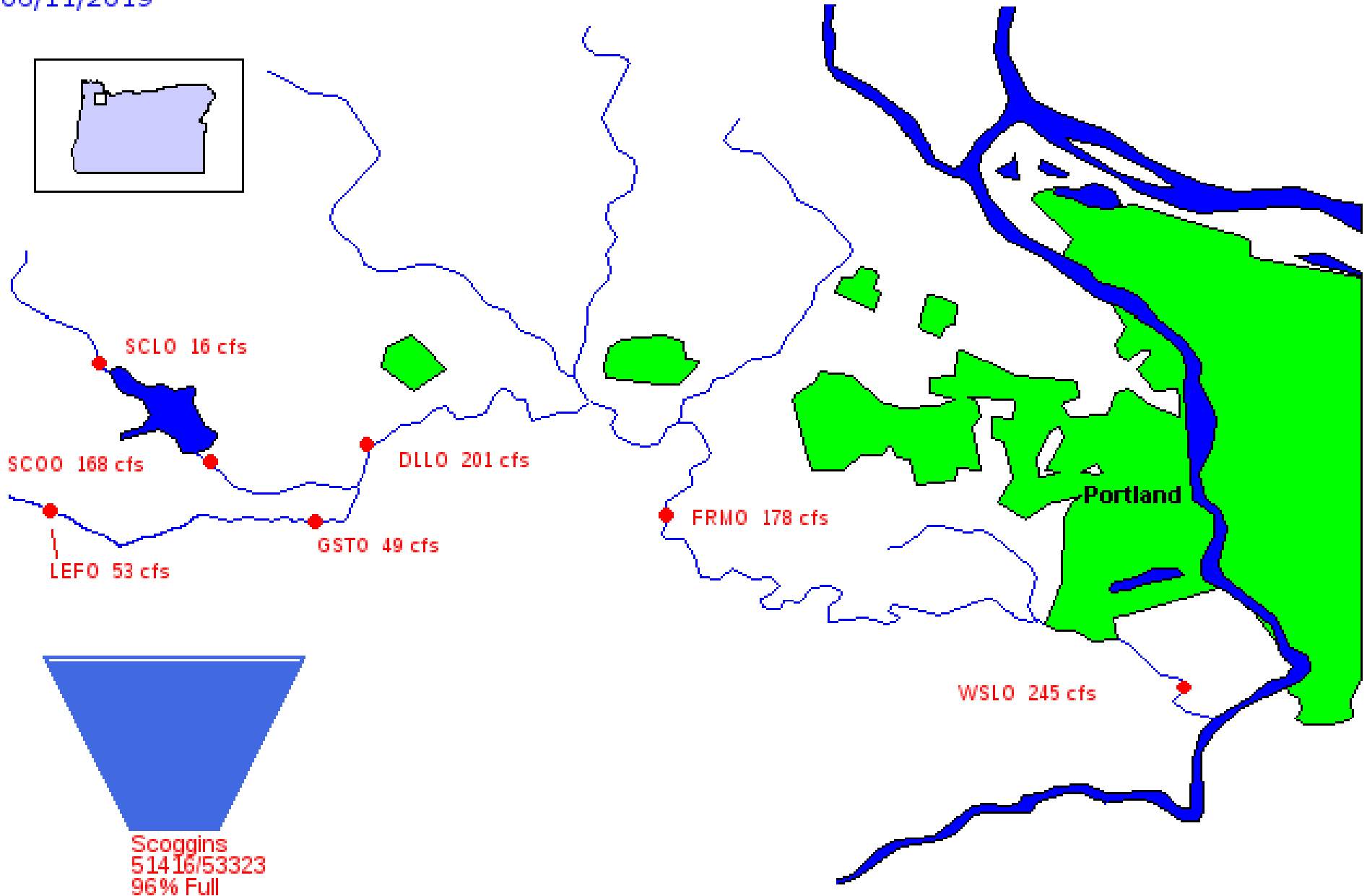
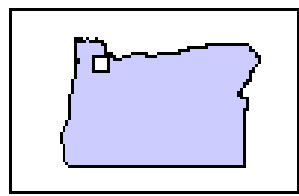


USGS WaterWatch

Last updated: 2019-06-12

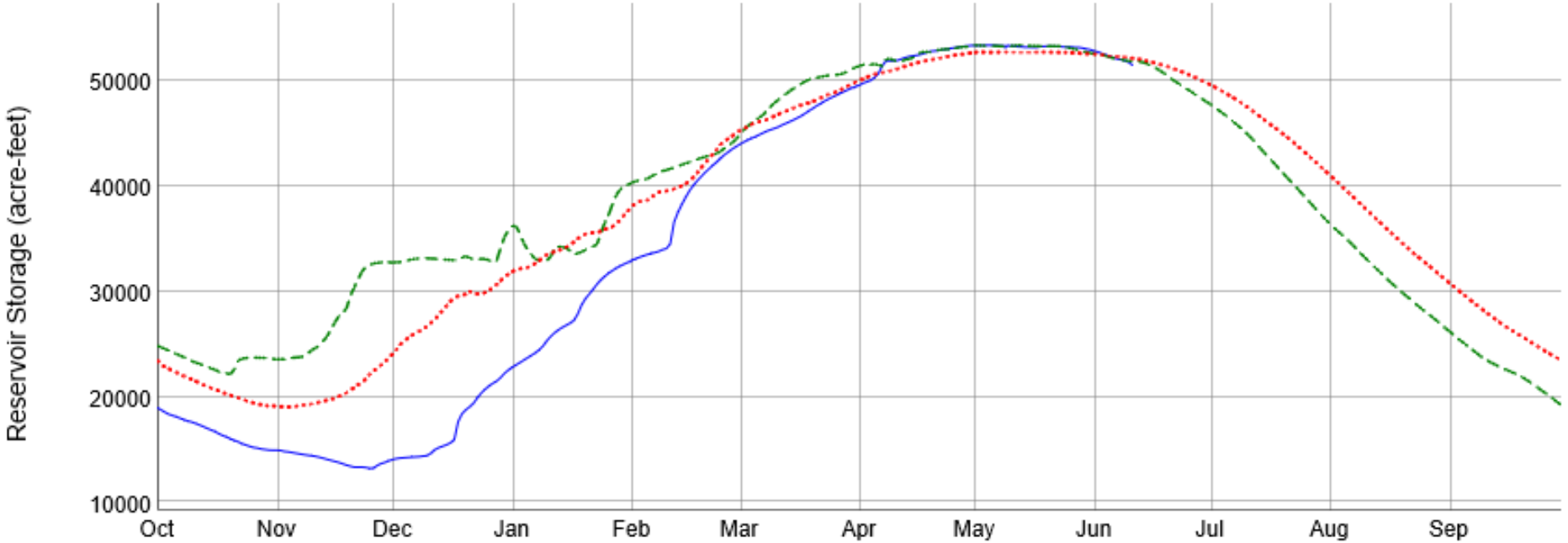
Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Runoff

06/11/2019



Scoggins Dam & Henry Hagg Lake nr Forest Grove, OR

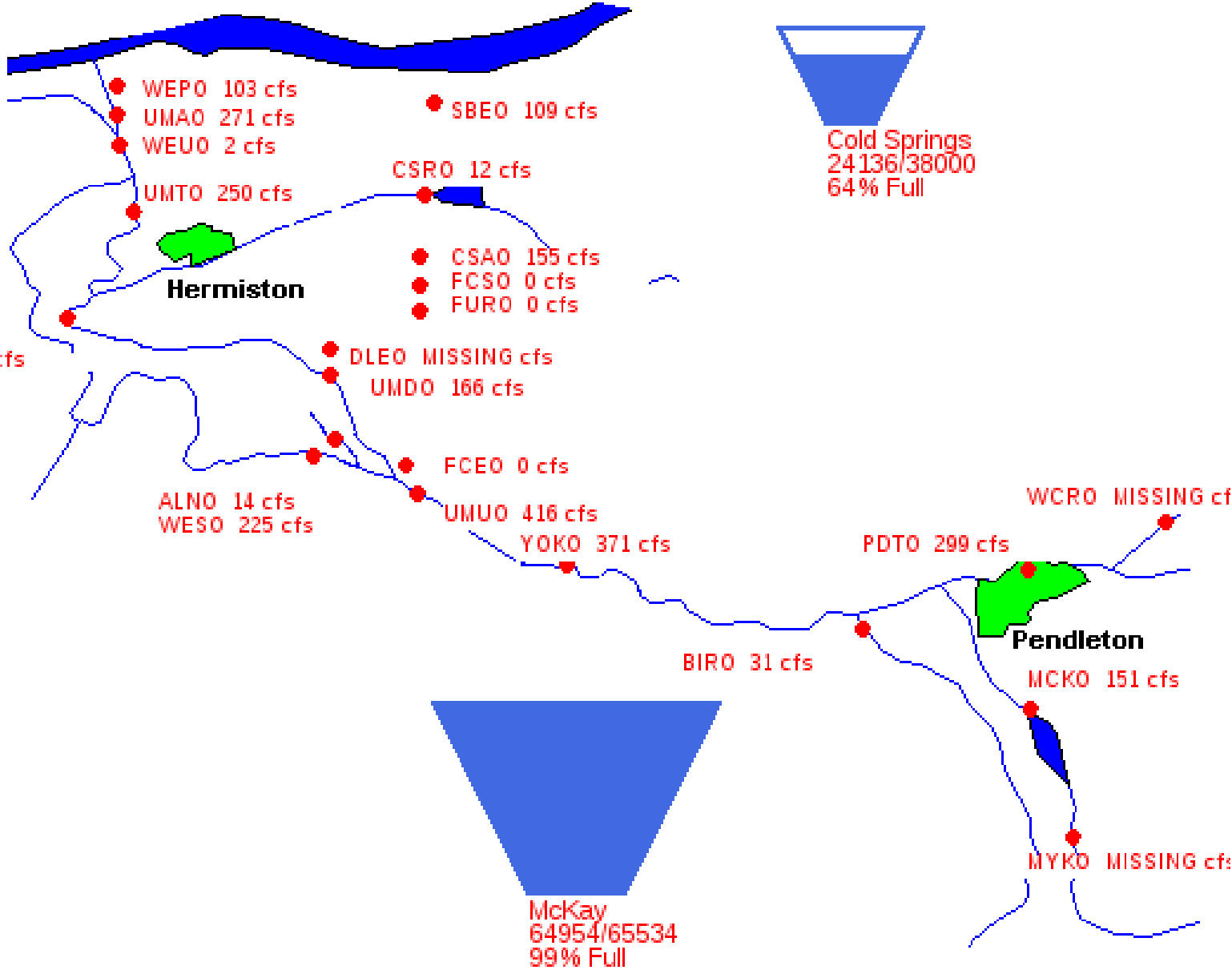
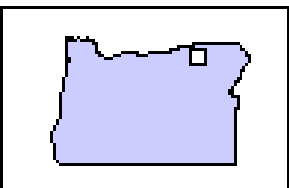
- Current Year
- - Previous Year
- ... Average



Current Data Graph

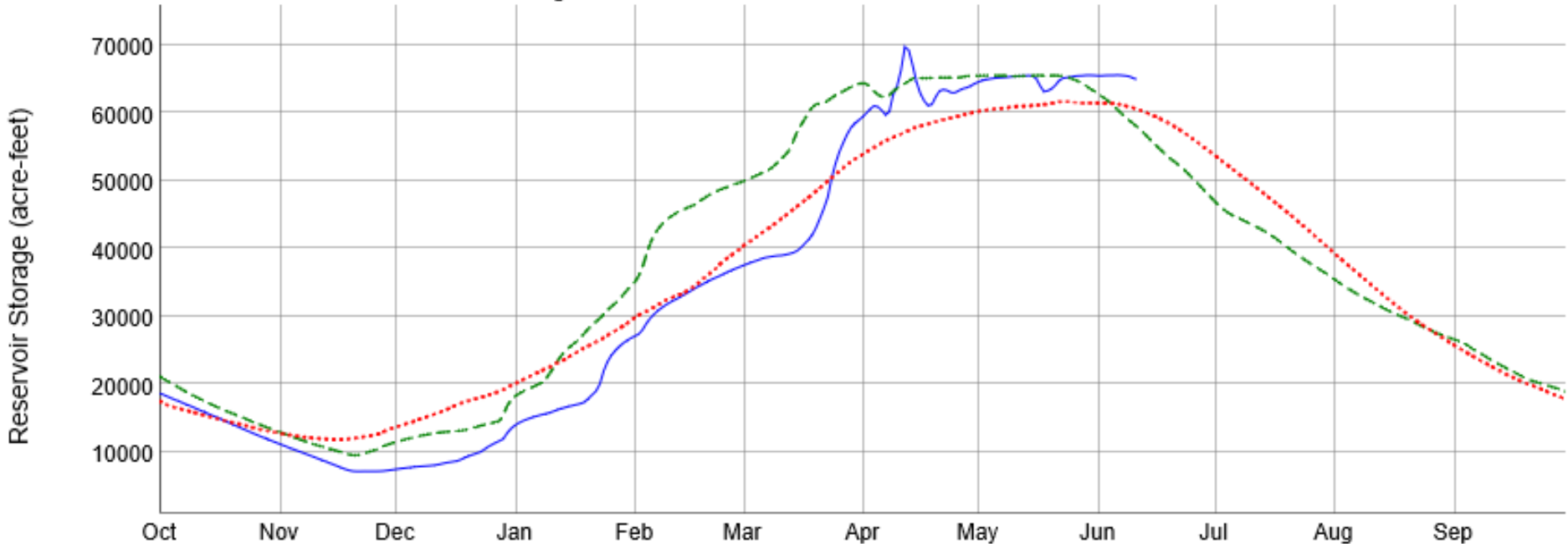
PROVISIONAL DATA - Subject to change

06/11/2019



- Current Year
- - Previous Year
- ... Average

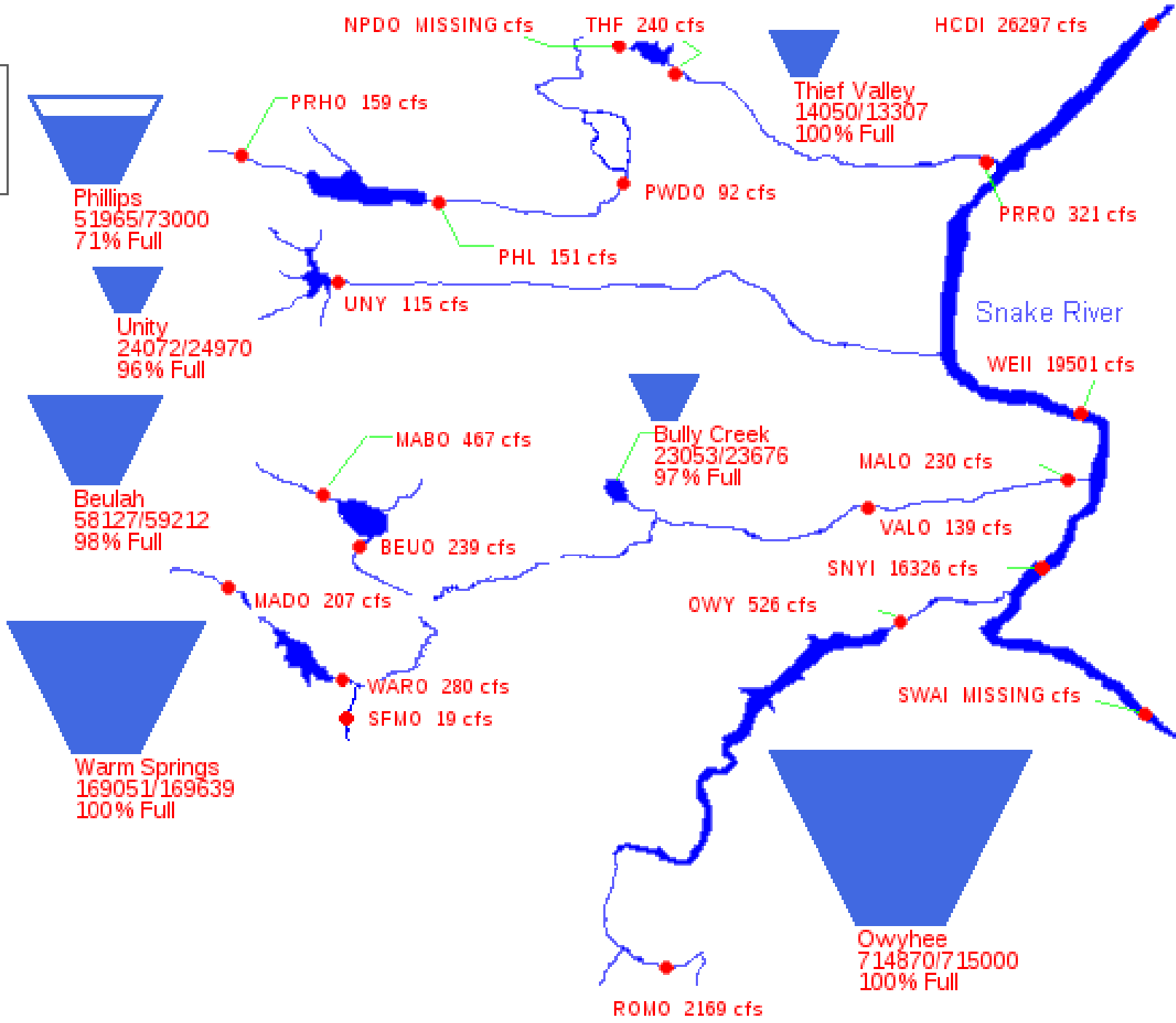
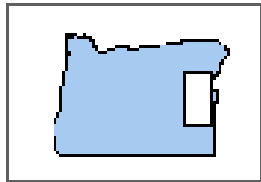
McKay Reservoir near Pendleton, OR



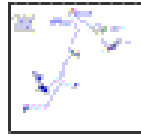
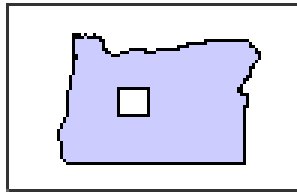
Current Data Graph

PROVISIONAL DATA - Subject to change

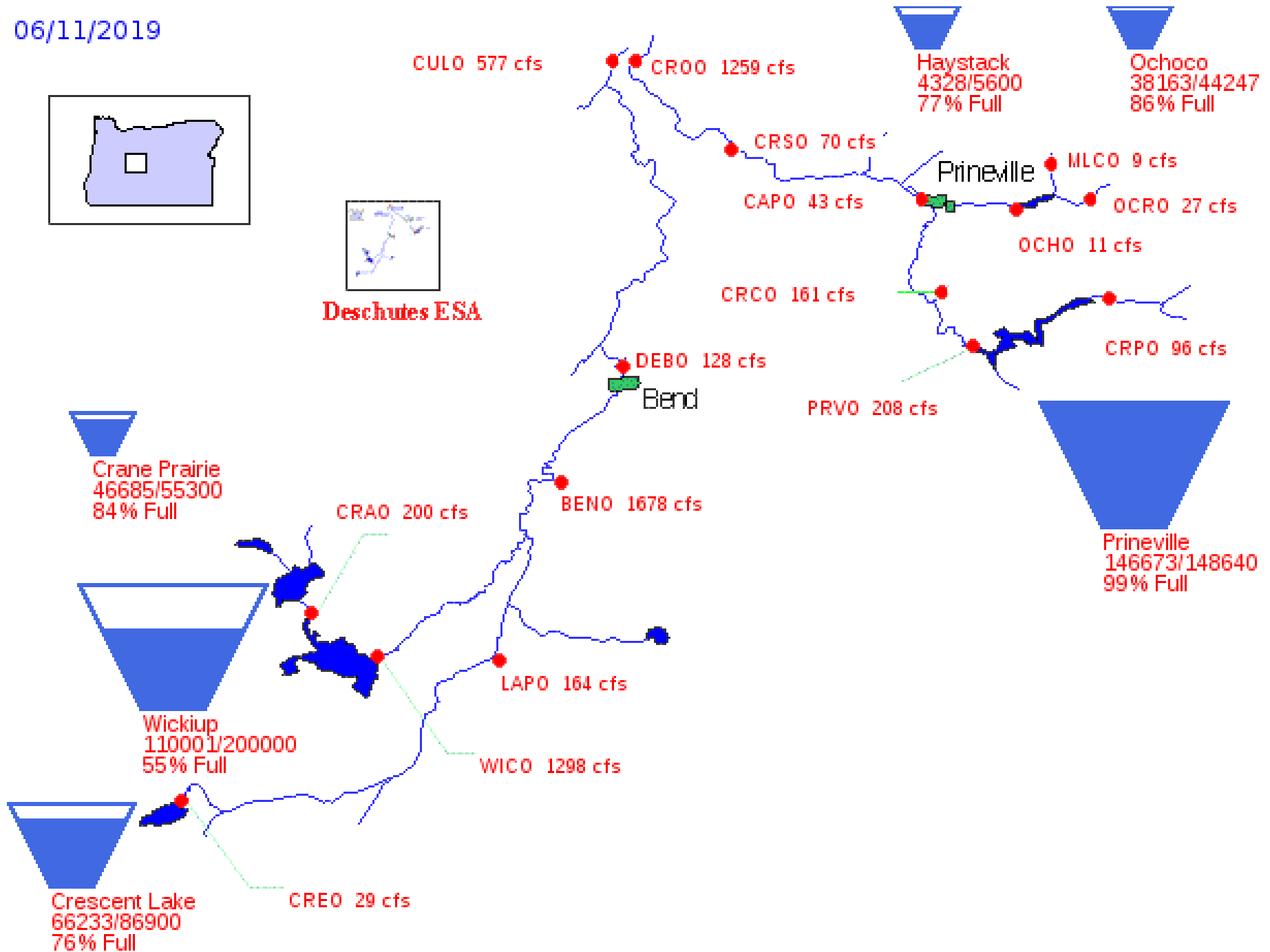
06/11/2019

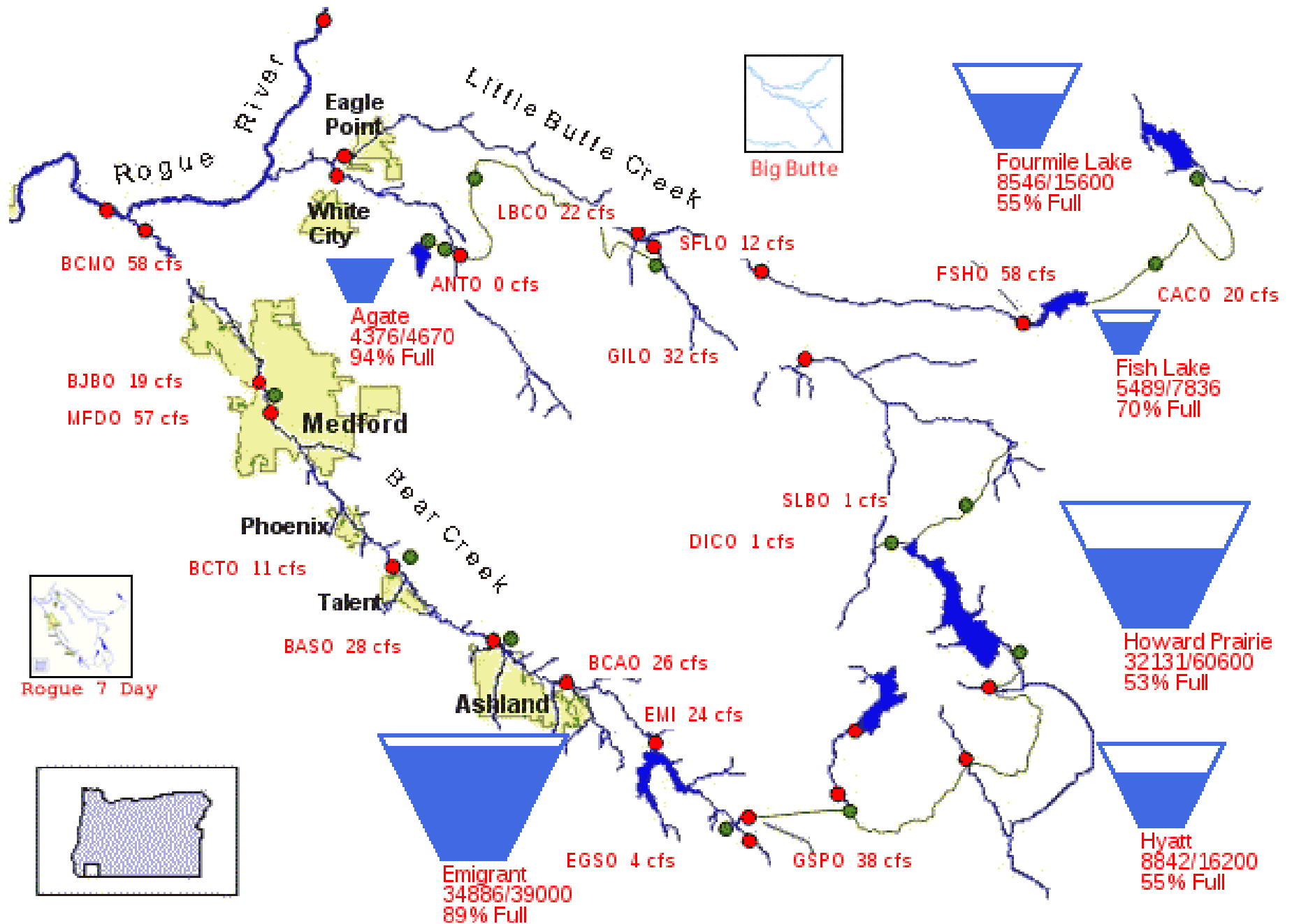


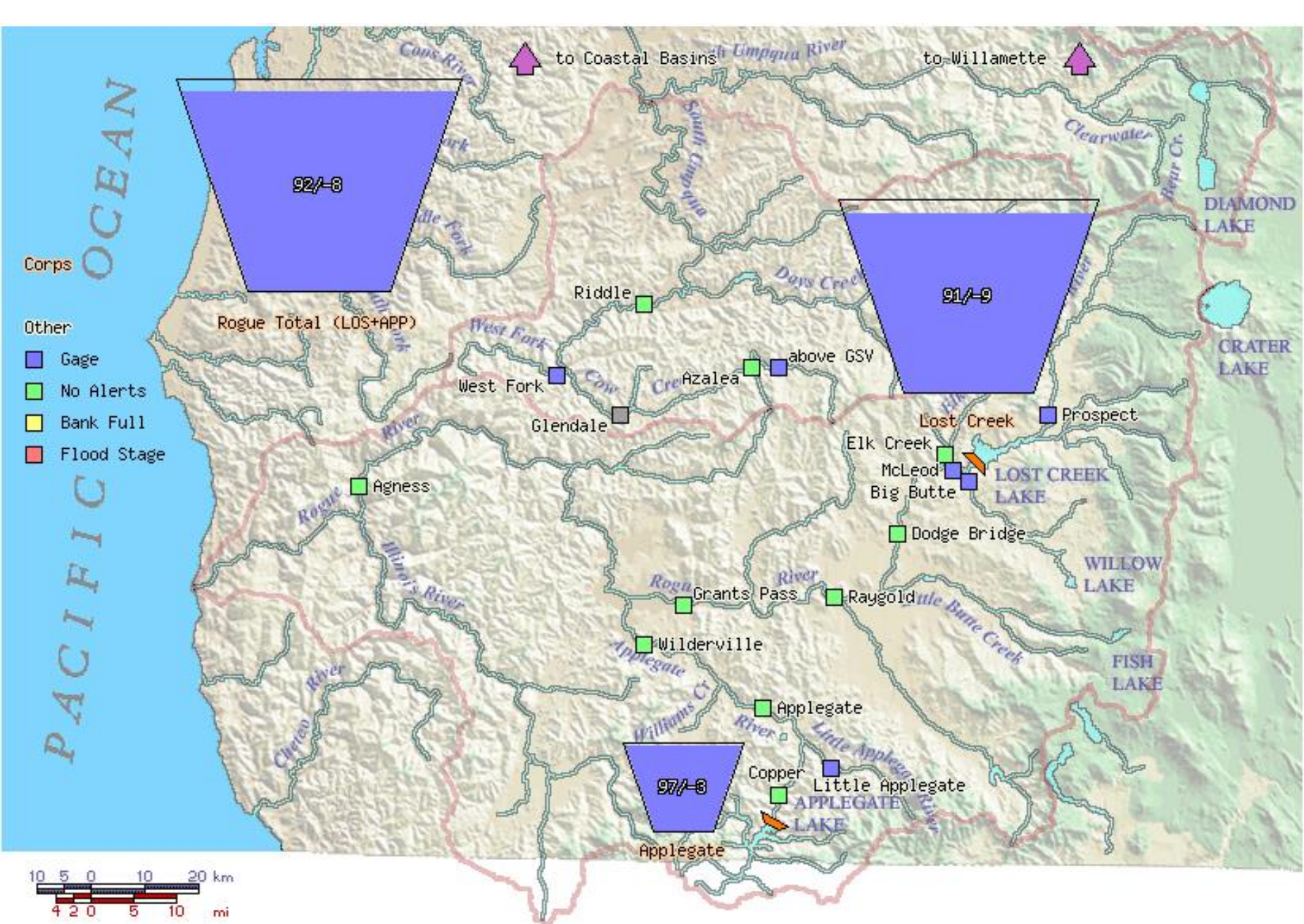
06/11/2019



Deschutes ESA







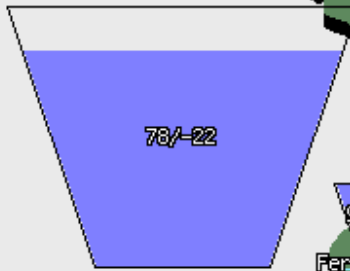
The Willamette Basin

LEGEND

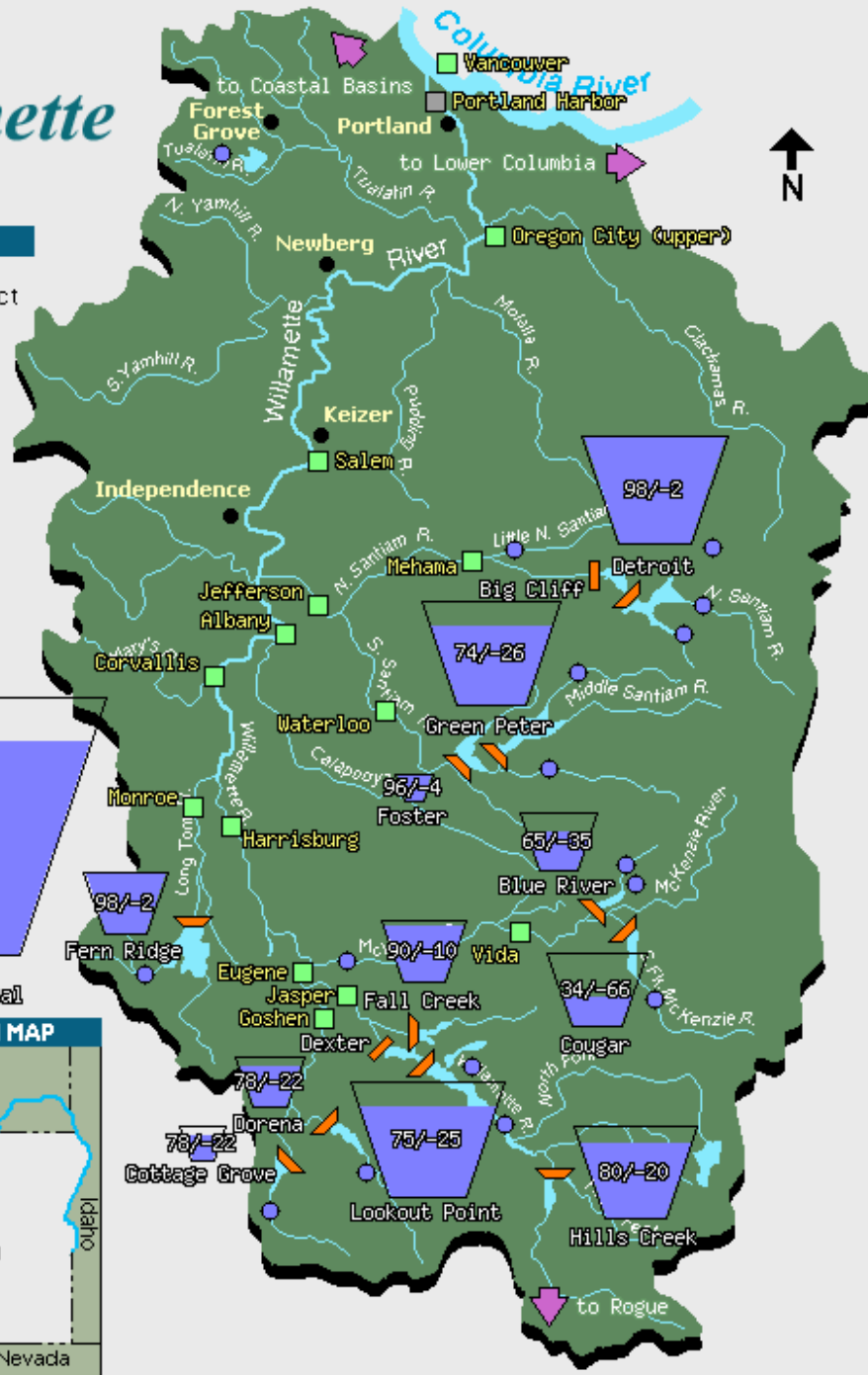
-  Storage Project
-  Run of River
-  Gage
-  No Alerts
-  Bank Full
-  Flood Stage

Overview

Annual



Willamette Total



OREGON



WATER RESOURCES
DEPARTMENT

Thank you.