

Oregon Water Supply Availability Committee

June 11, 2019

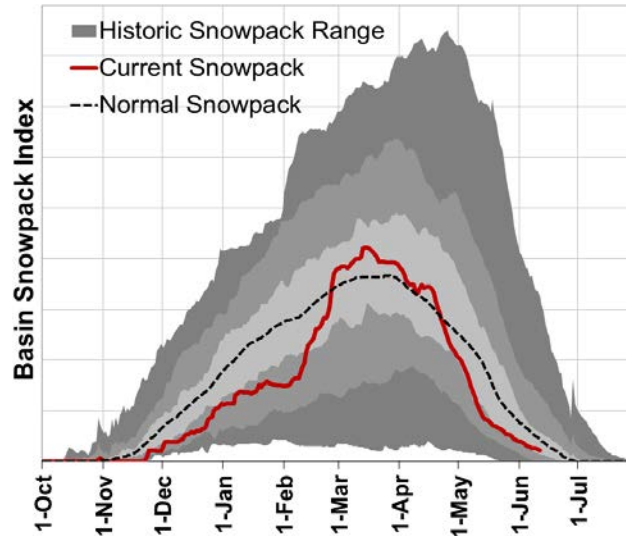


Snow Mountain SNOTEL Tree Removal
May 21, 2019
Elevation 6230'

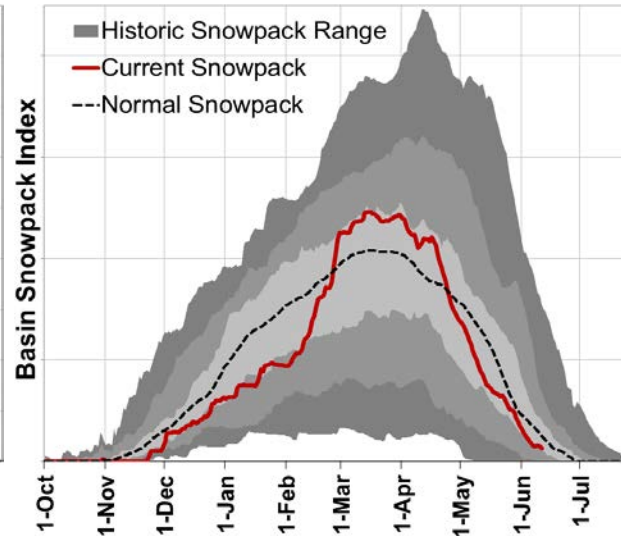
H. Scott Oviatt
USDA – Natural Resources Conservation Service
scott.oviat@usda.gov
503-414-3271

Water Year 2019 – June 11th

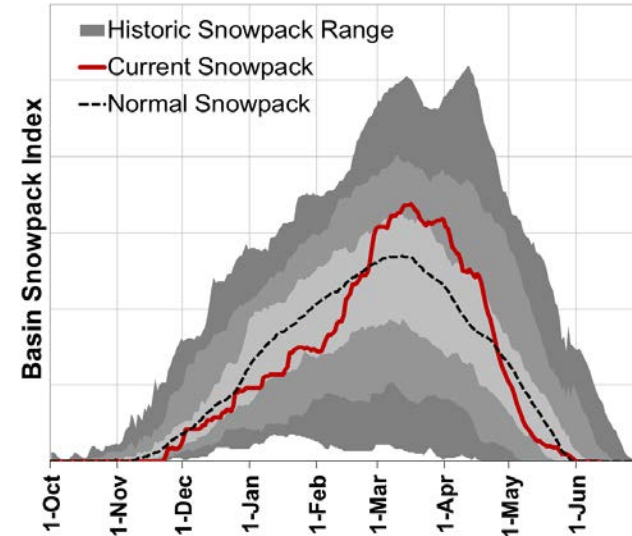
Willamette



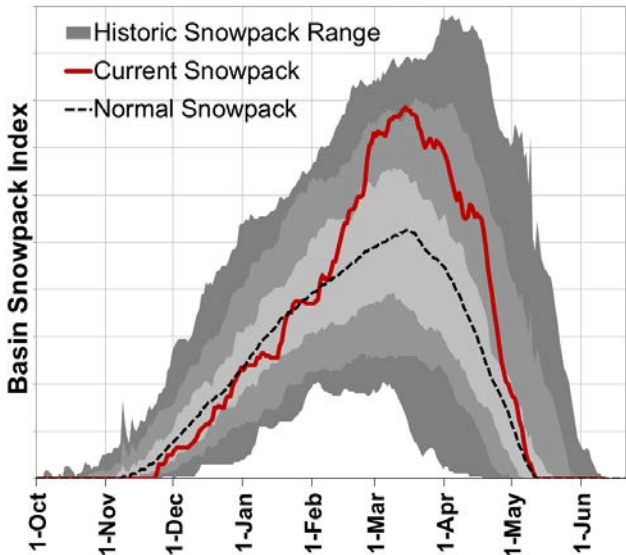
Rogue/Umpqua



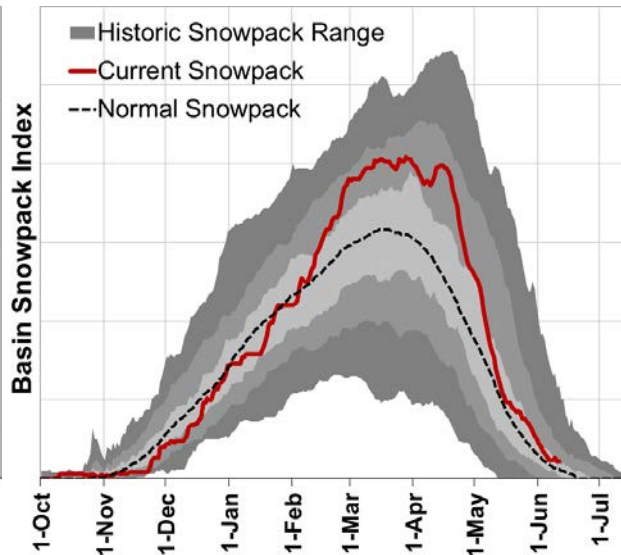
Klamath



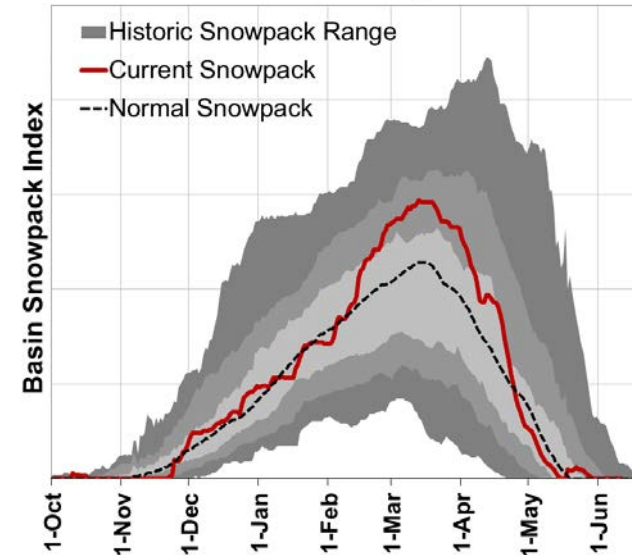
John Day



Grande Ronde/Powder/Burnt



Owyhee/Malheur

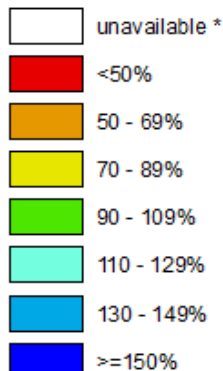


Statewide SNOTEL Precipitation is 95% of normal on June 11, 2019

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

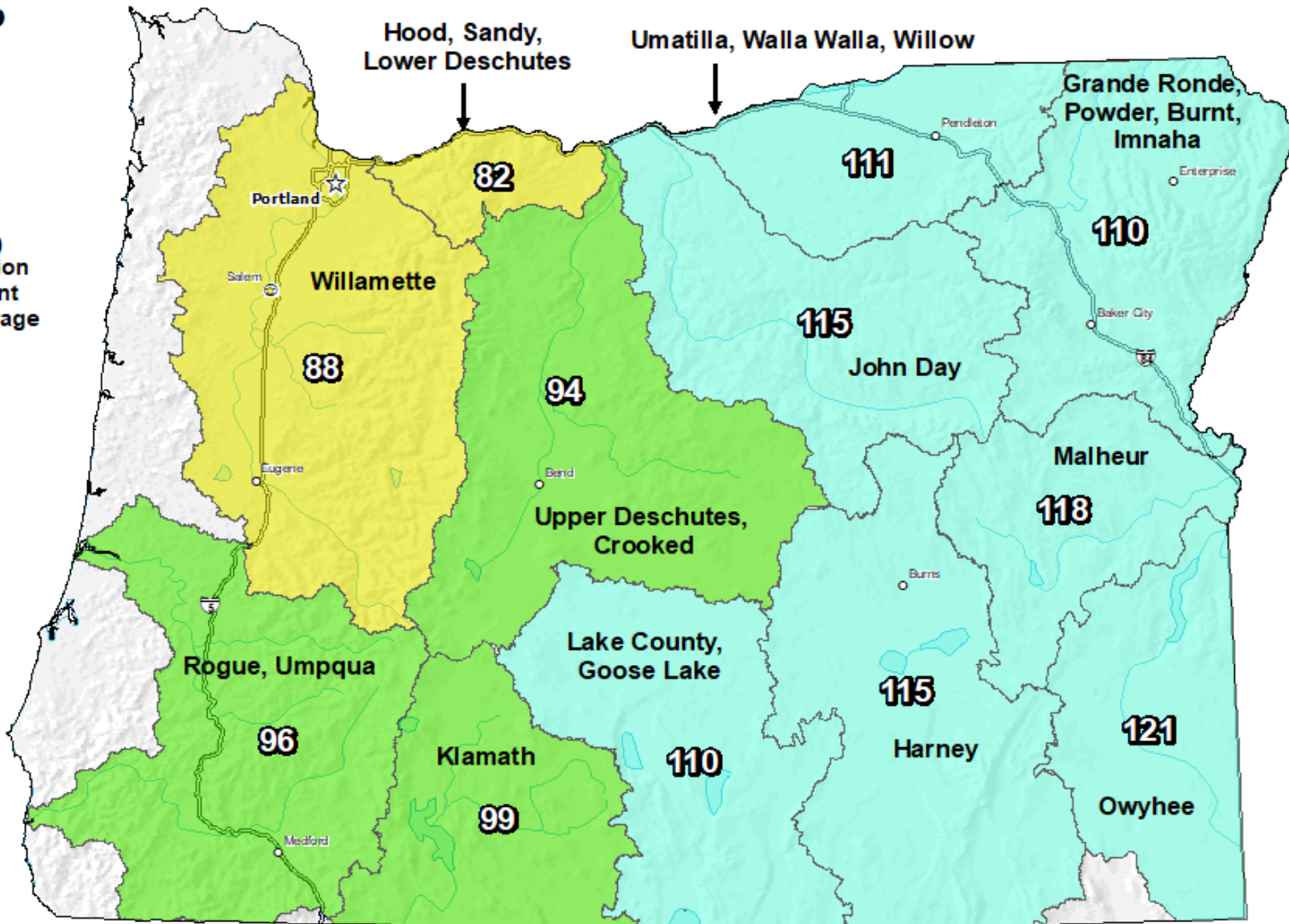
Jun 11, 2019

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

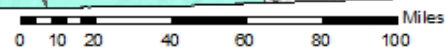


* Data unavailable at time
of posting or measurement
is not representative at this
time of year

*Provisional Data
Subject to Revision*

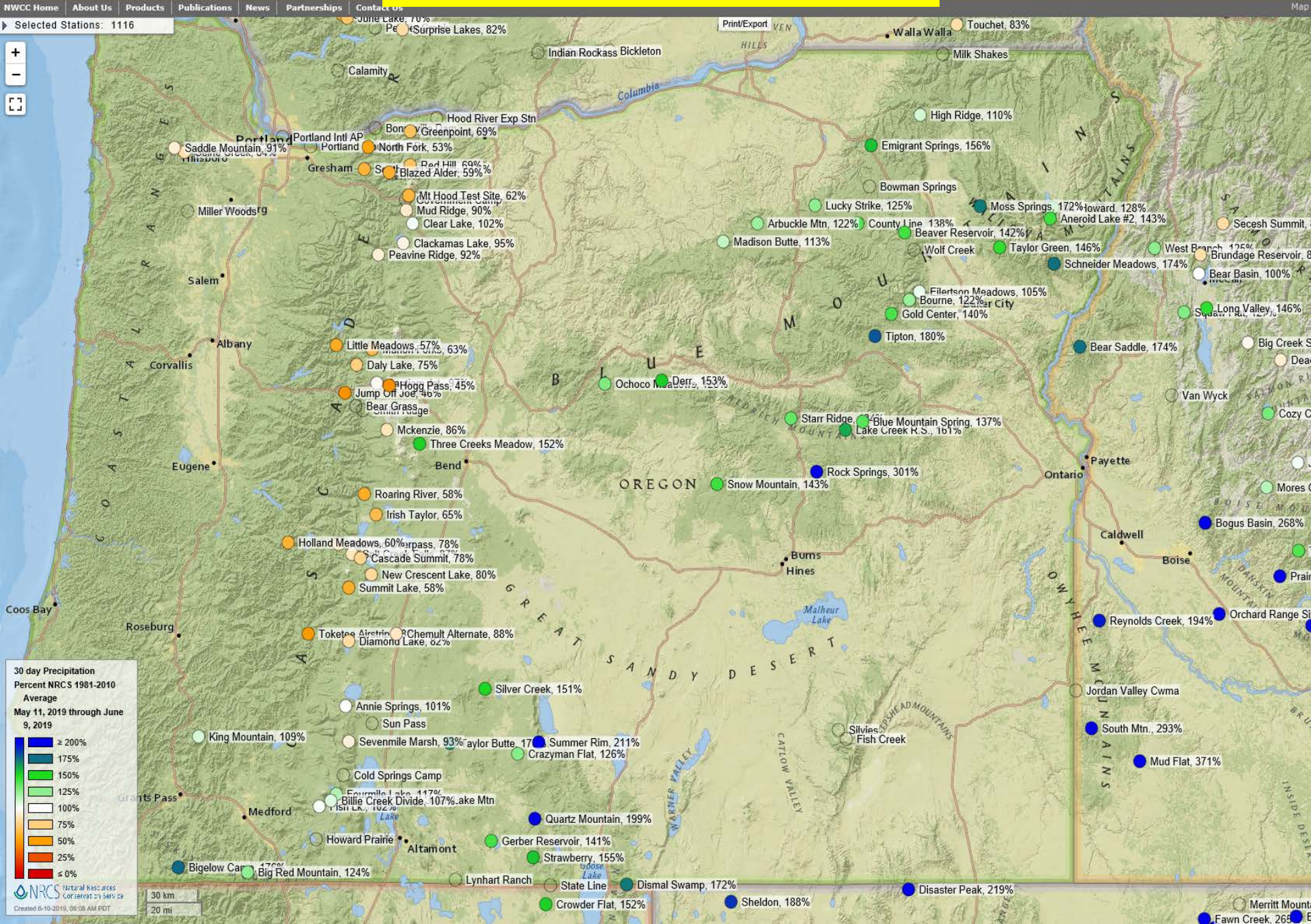


The water year to date precipitation percent of normal represents the accumulated precipitation found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).



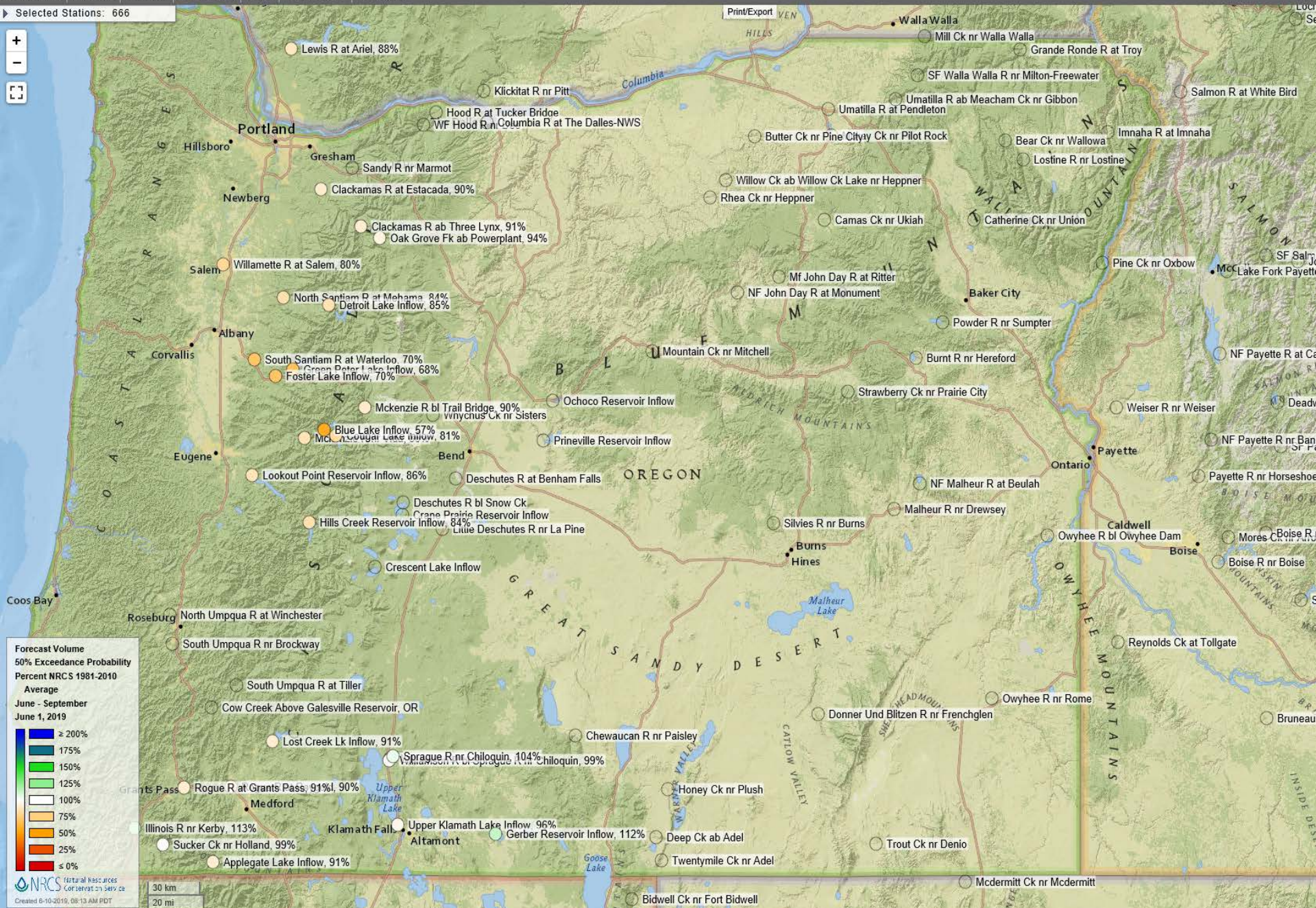
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

30-Day SNOTEL Precipitation % of Average May 11, 2019 – June 9, 2019



June 1, 2019 June-Sep Available Statistical Volumetric Streamflow Forecasts 50% Exceedance Probability

Selected Stations: 666



Forecast Volume
 50% Exceedance Probability
 Percent NRCS 1981-2010
 Average
 June - September
 June 1, 2019

Dark Blue	≥ 200%
Blue	175%
Light Blue	150%
Green	125%
Light Green	100%
Yellow	75%
Orange	50%
Red-Orange	25%
Red	≤ 0%

NRCS Natural Resources Conservation Service
 Created 6-10-2019, 08:13 AM PDT

30 km
 20 mi

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

June 11, 2019



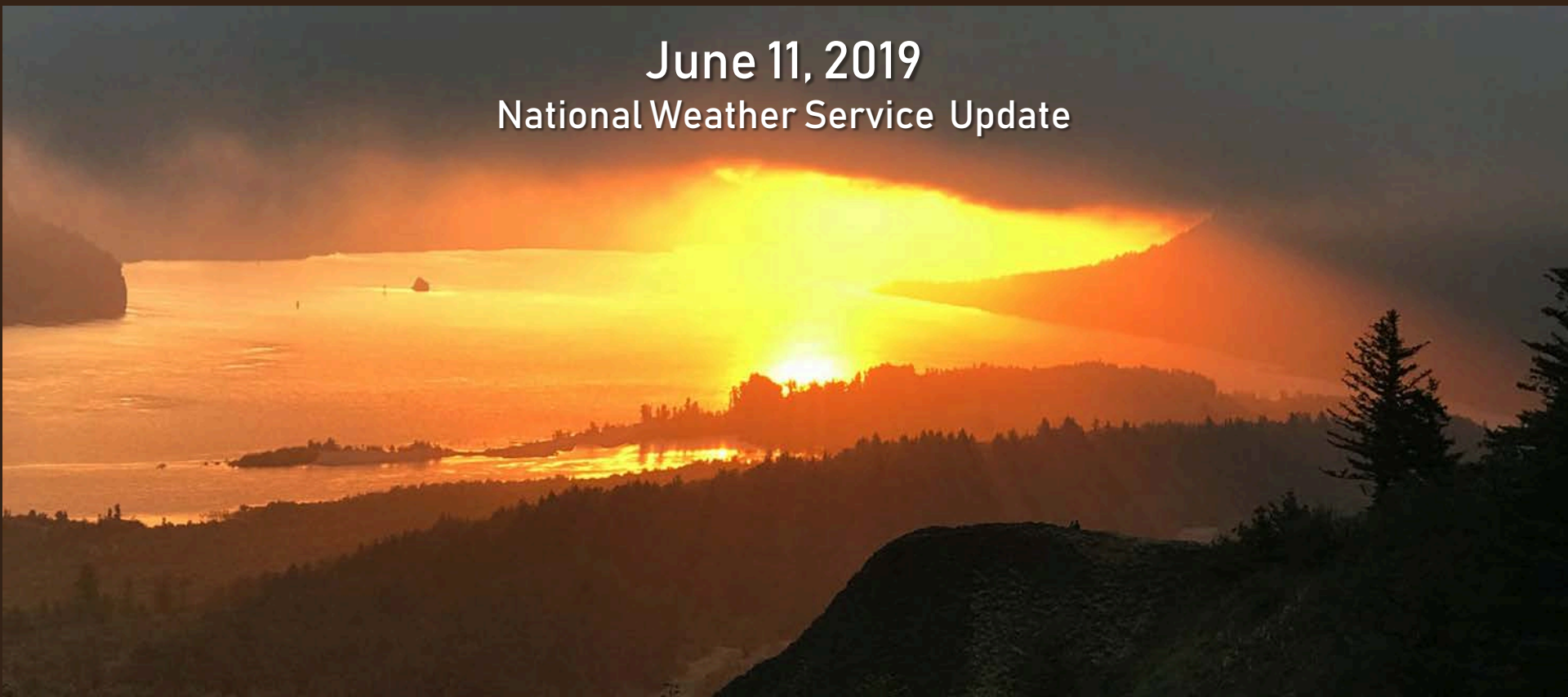
Snow Mountain SNOTEL Tree Removal
May 21, 2019
Elevation 6230'

H. Scott Oviatt
USDA – Natural Resources Conservation Service
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503-414-3271



Oregon Water Supply Availability

June 11, 2019
National Weather Service Update



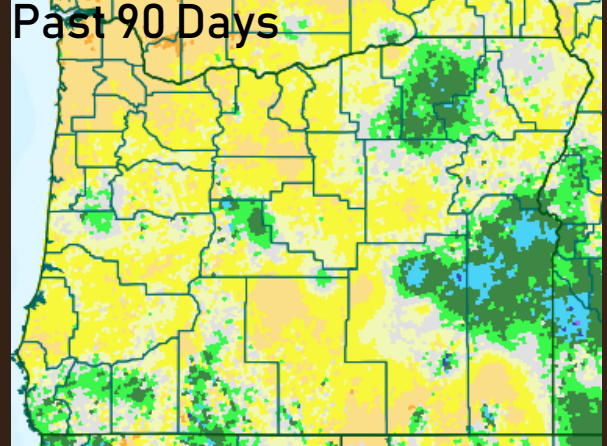
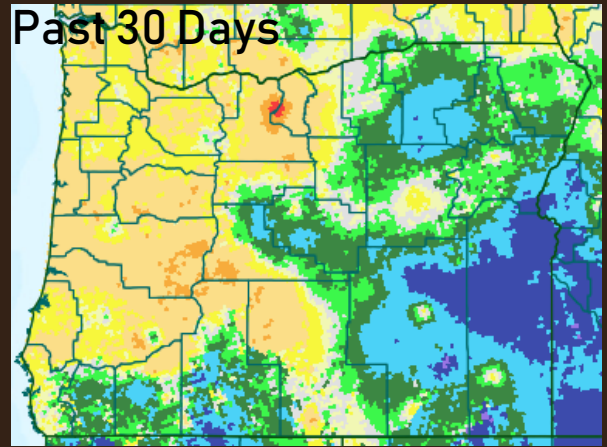
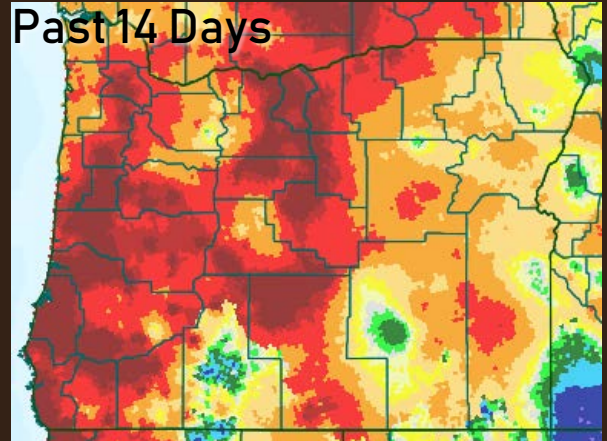
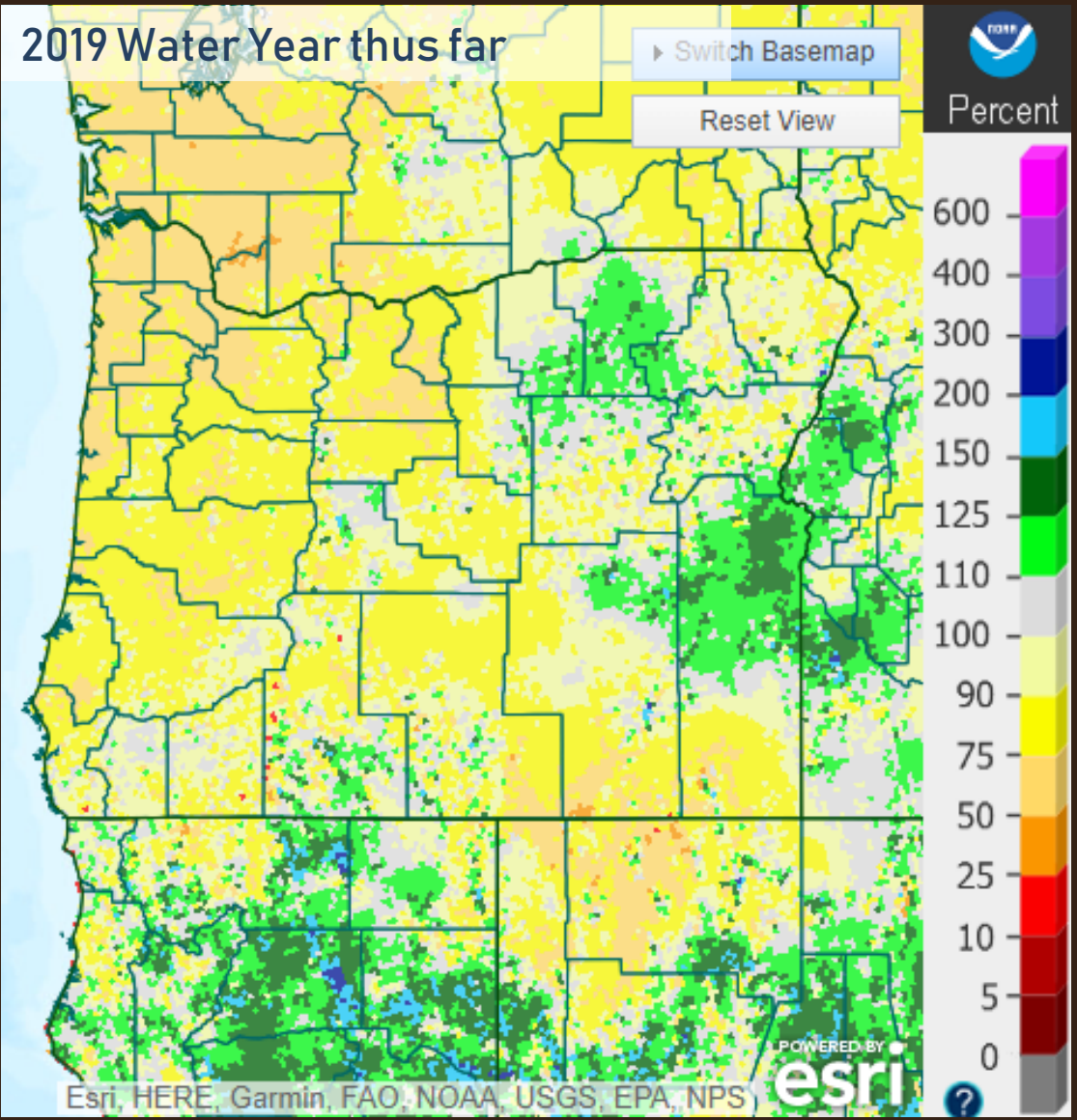
Sunrise, Columbia Gorge

Andy Bryant
NOAA/NWS Portland
Weather Forecast Office

Amy Burke
NOAA/NWS/Northwest River Forecast Center



Precipitation % of Average

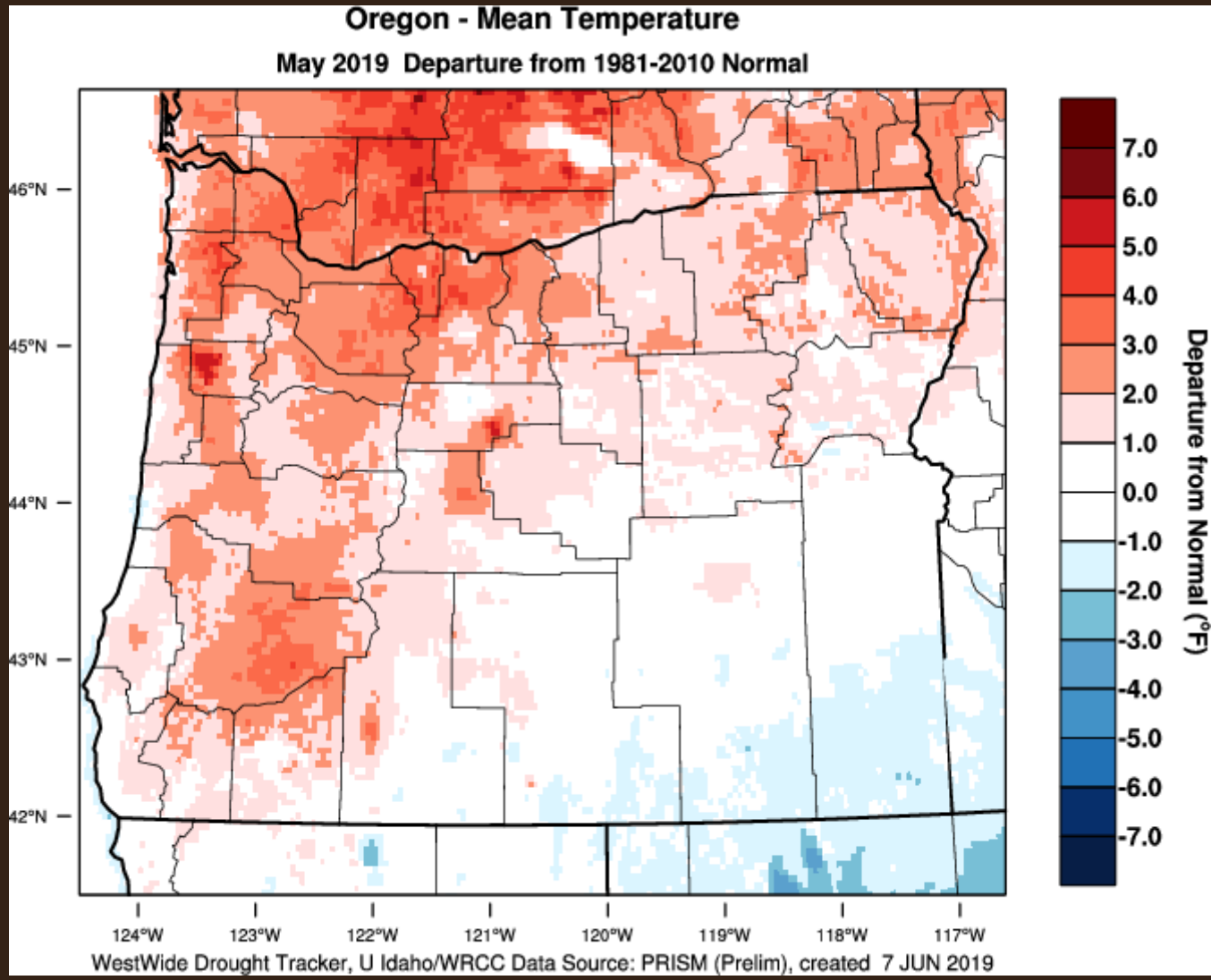


Precipitation Data as of June 9, 2019

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

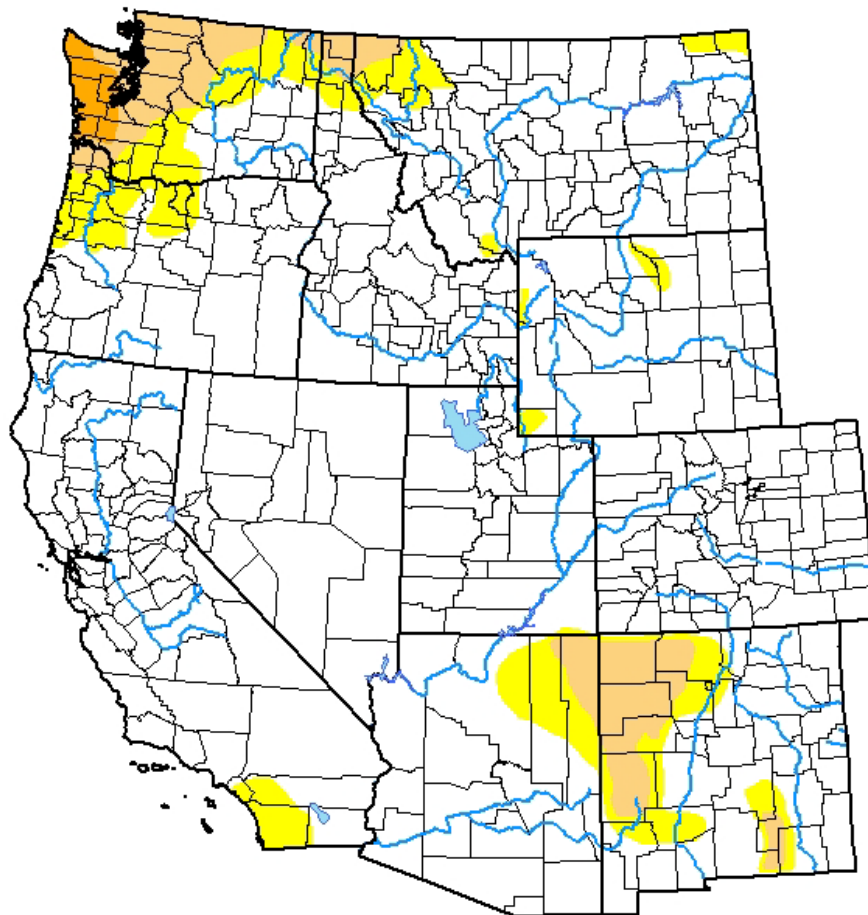
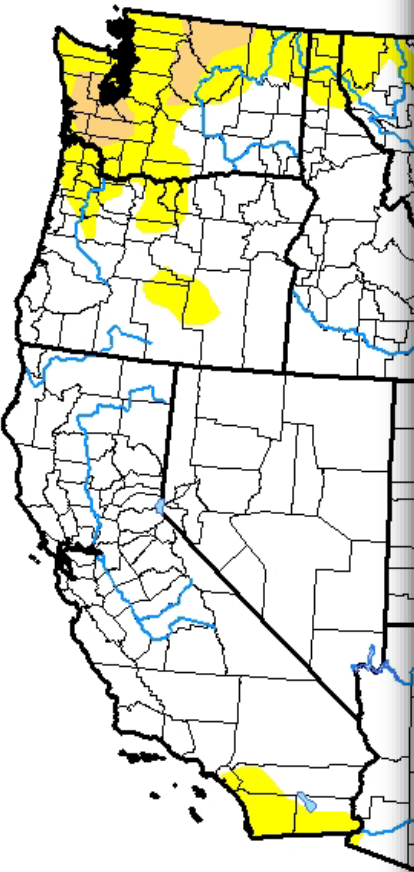
U.S. Drought Monitor

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:

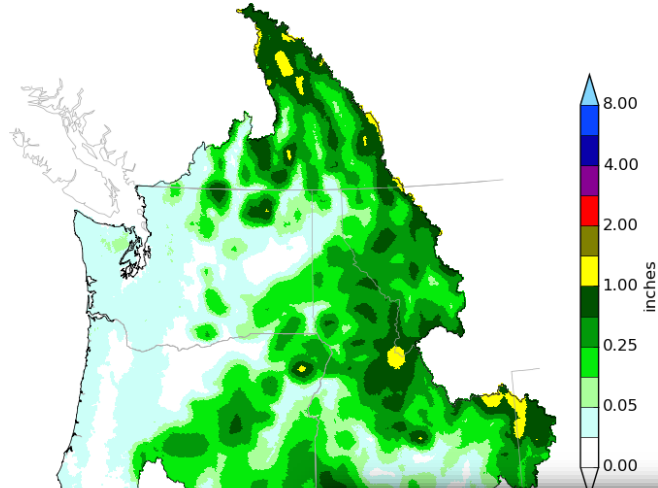
David Simeral
Western Regional Climate Center



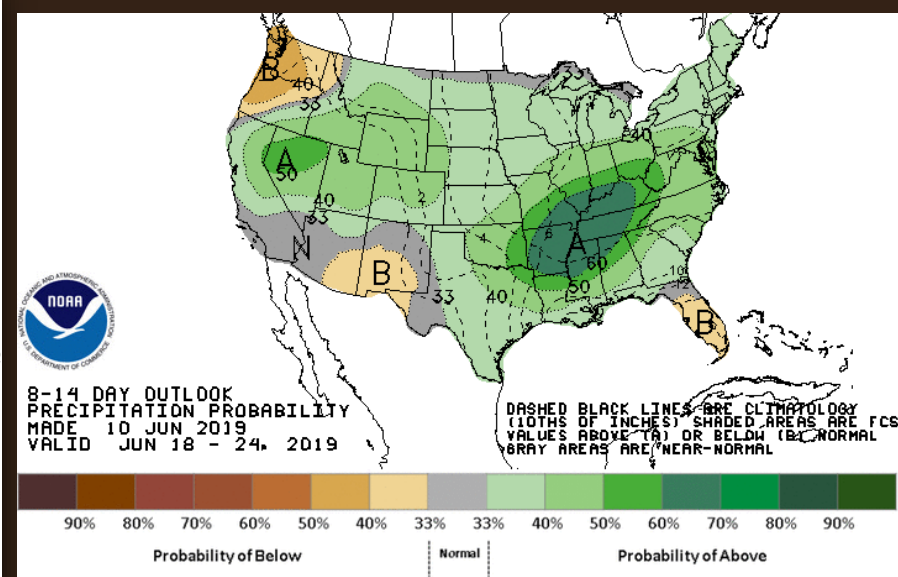
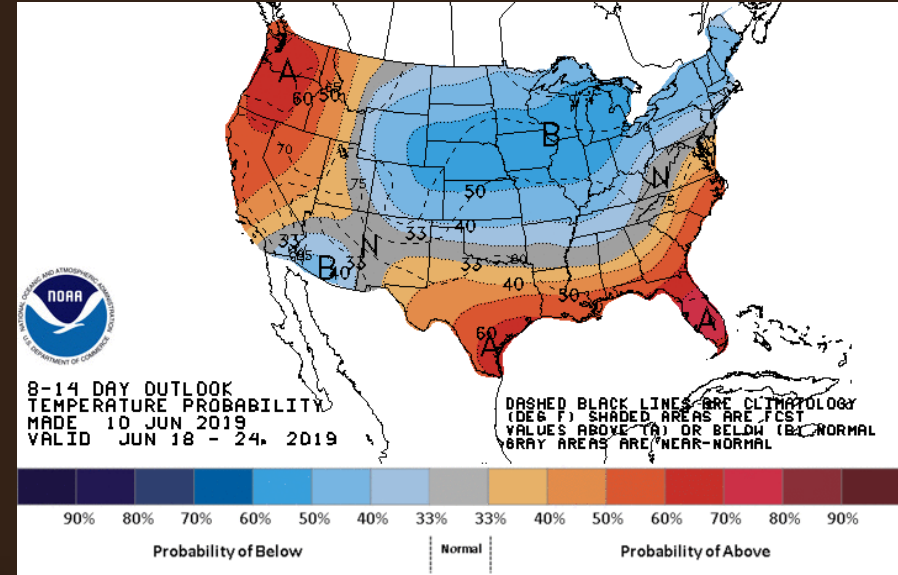
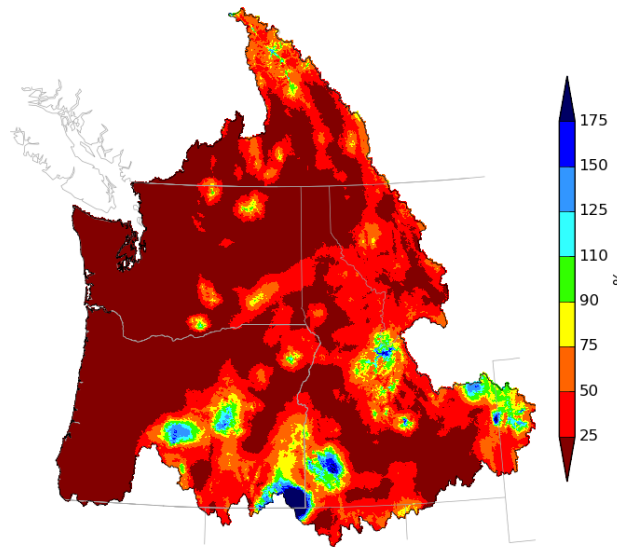


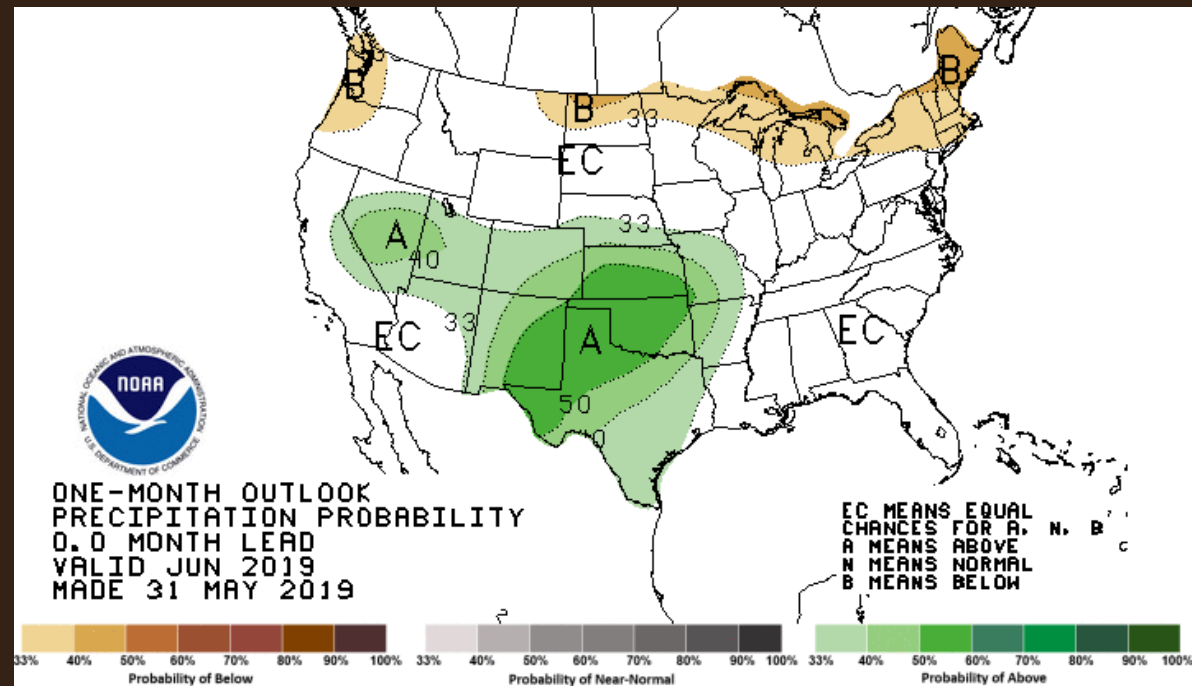
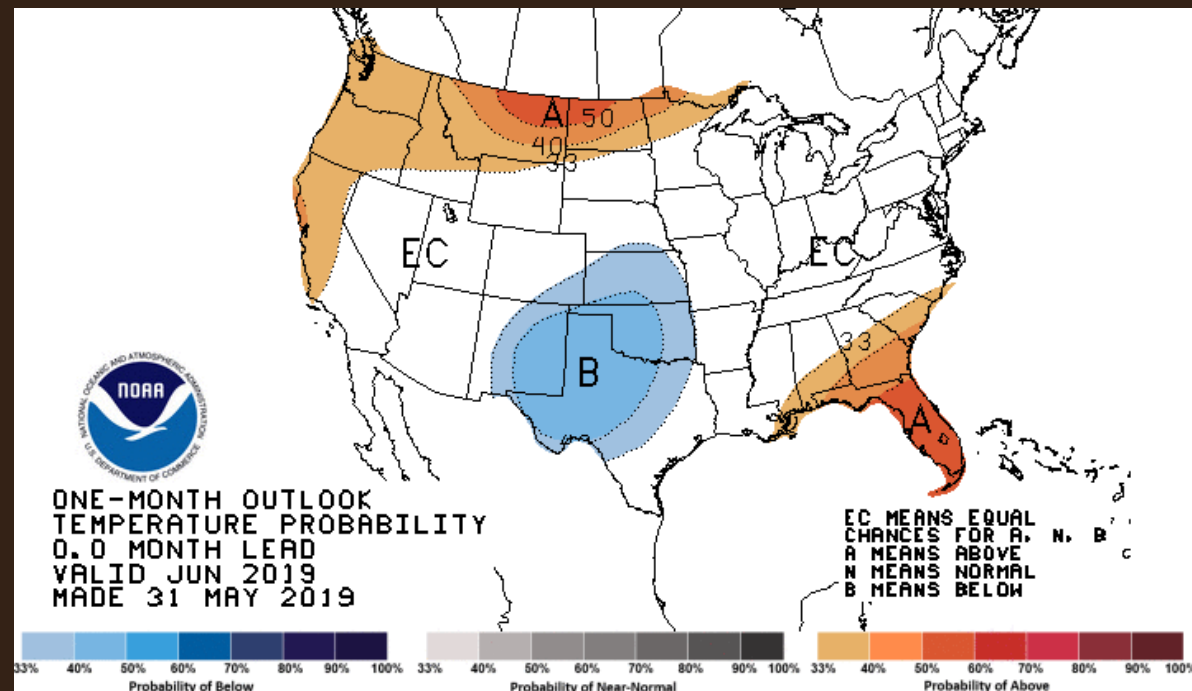
Mid/Late June Outlook

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

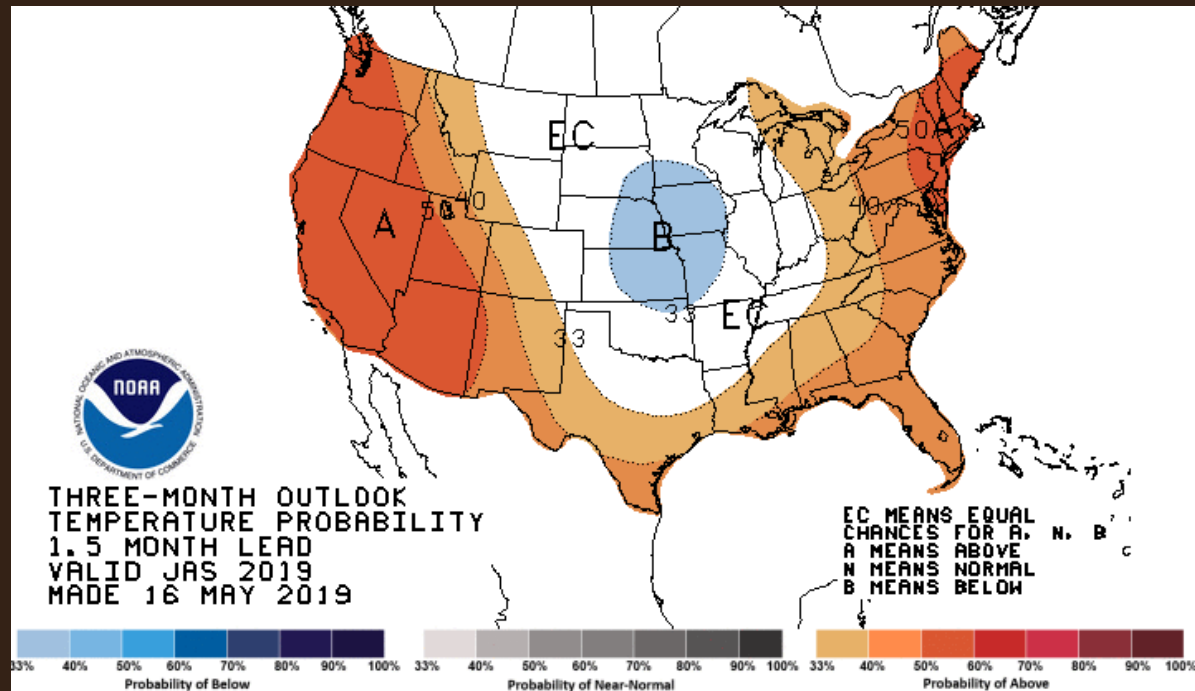


Northwest River Forecast Center
10 Day QPF (Percent of Climatology), Ending 12Z, 06/20/19

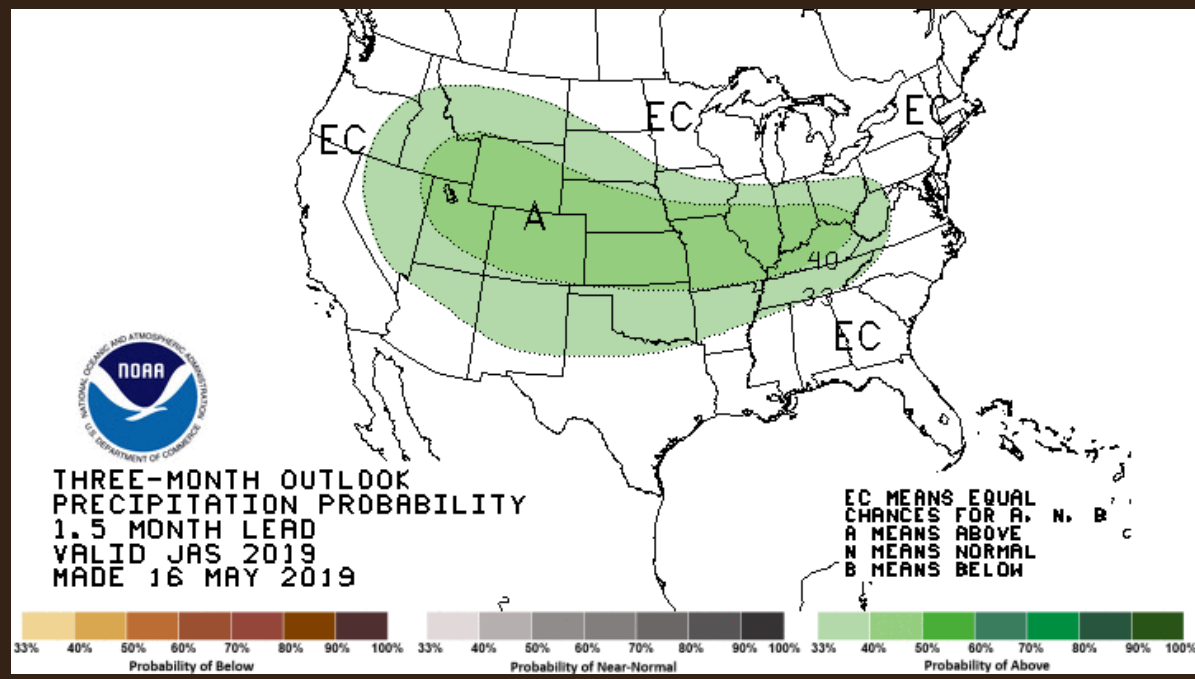




June Outlook



July-Aug-Sep Outlook





Observed WY19 Runoff thus 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

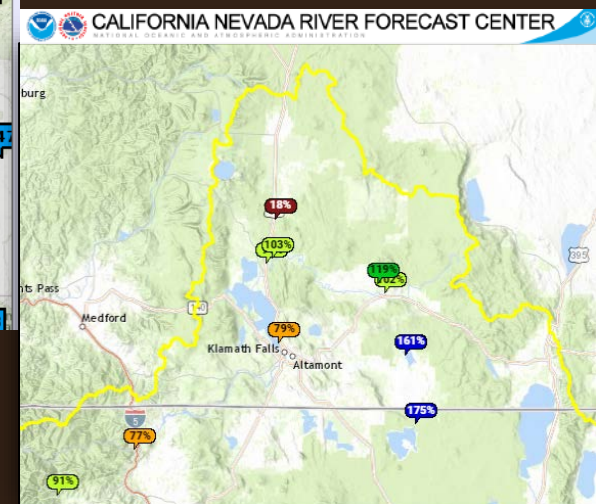
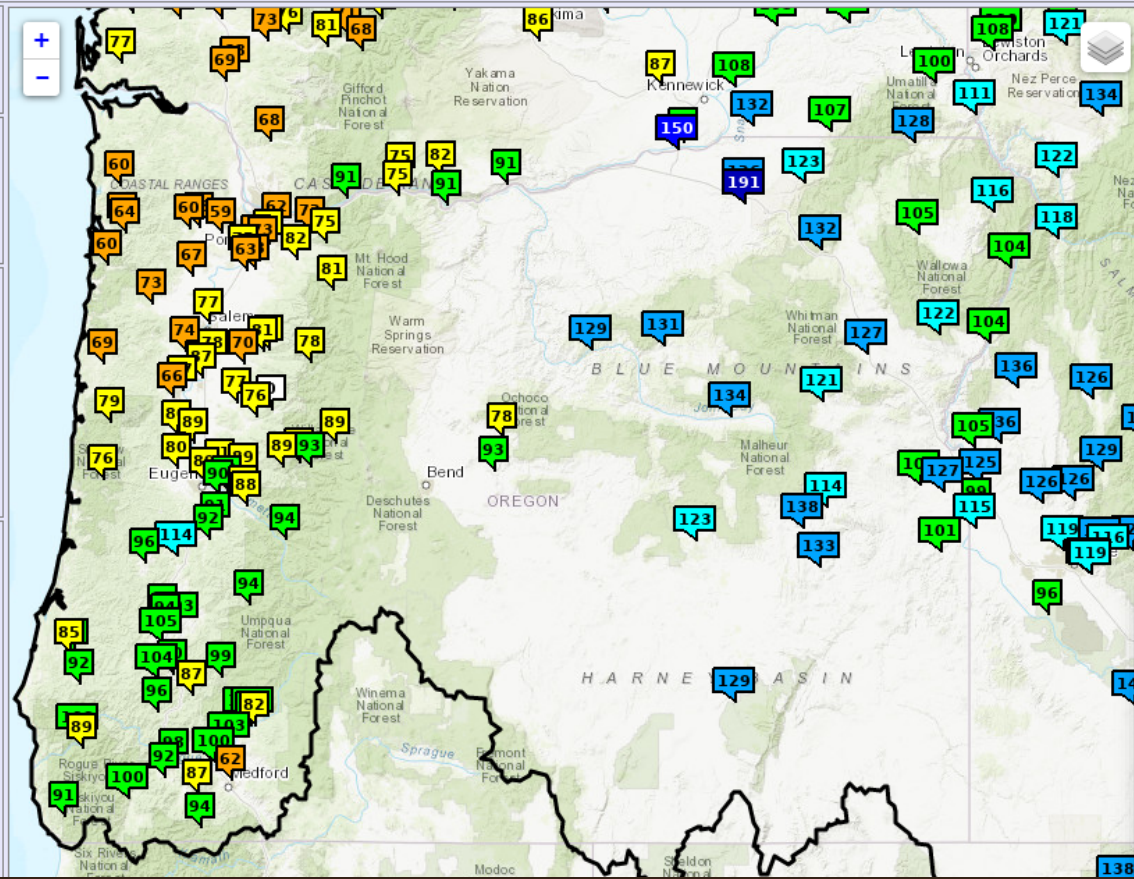
Map Overlays
 NWRFC Boundary
 NWRFC Basins
 NWS HSAs
 Counties

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



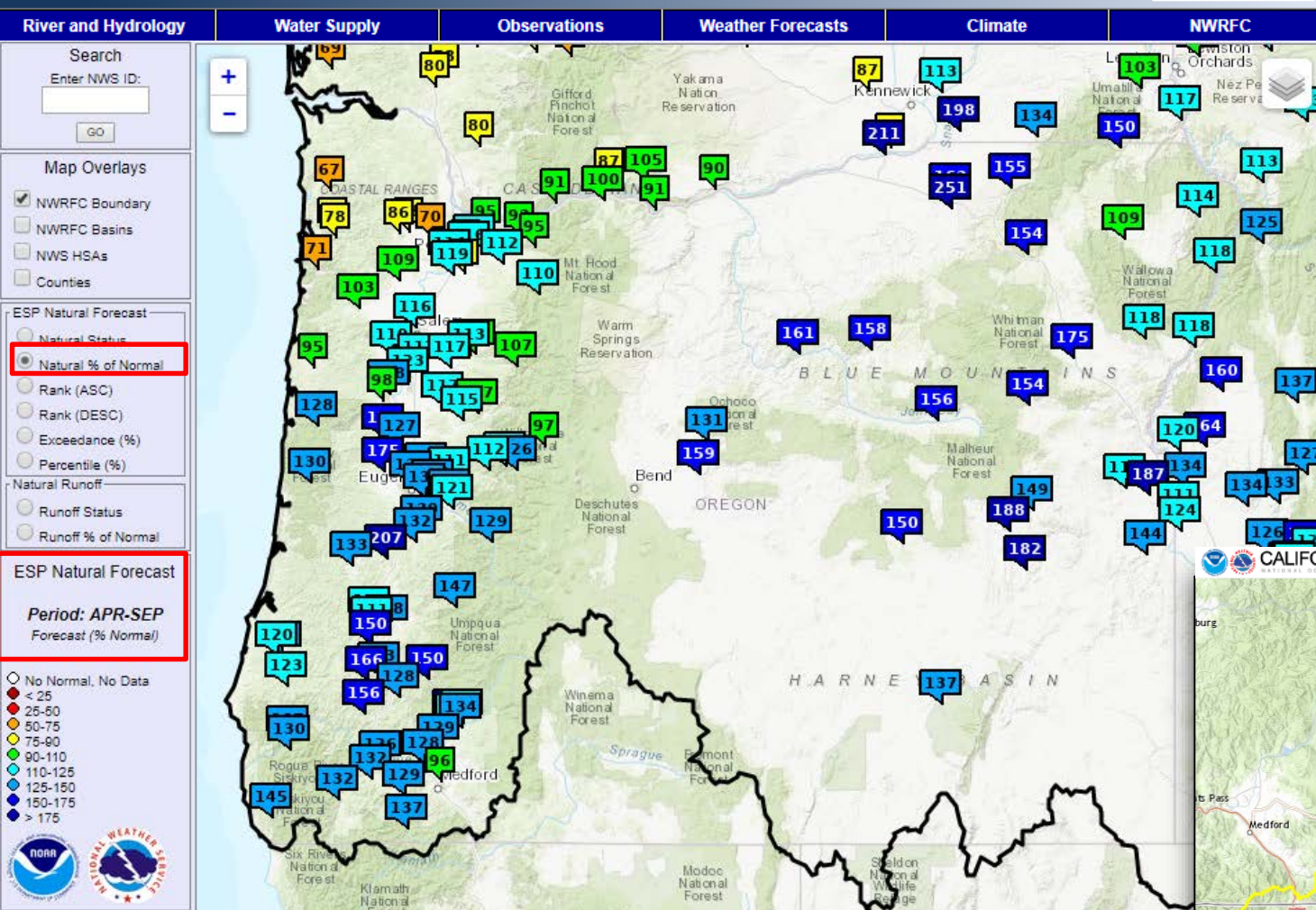
<https://www.nwrfc.noaa.gov/natural/index.html?version=20181015v2>
<https://www.cnrfc.noaa.gov/ol.php?product=espWS>



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>



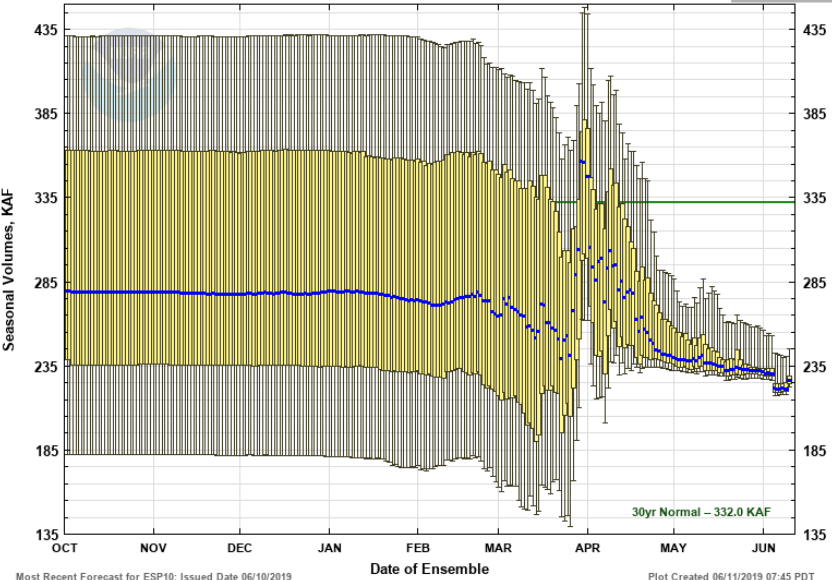
Natural Water Supply Forecasts (North Coast)

Natural Volume Forecasts

NEHALEM - FOSS

Period APR to SEP - Water Year 2019

30yr Normal
ESP10

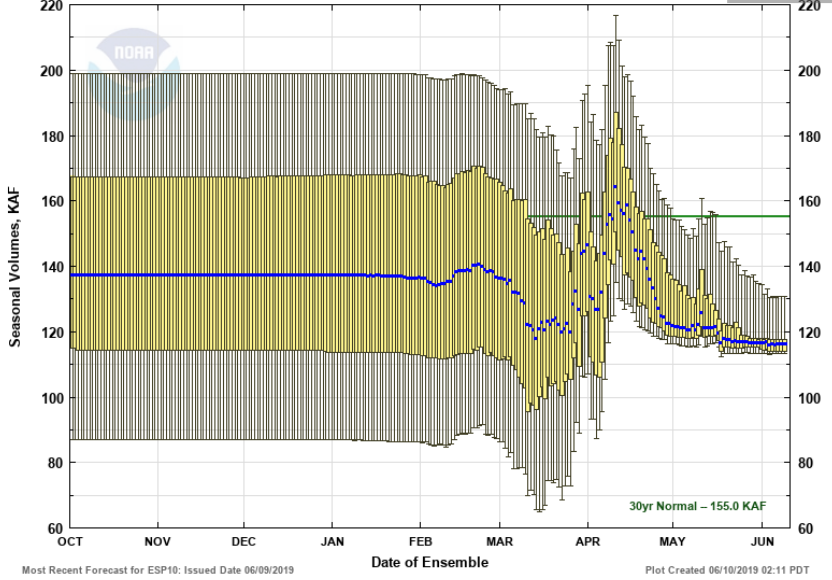


Natural Volume Forecasts

WILSON - NEAR TILLAMOOK

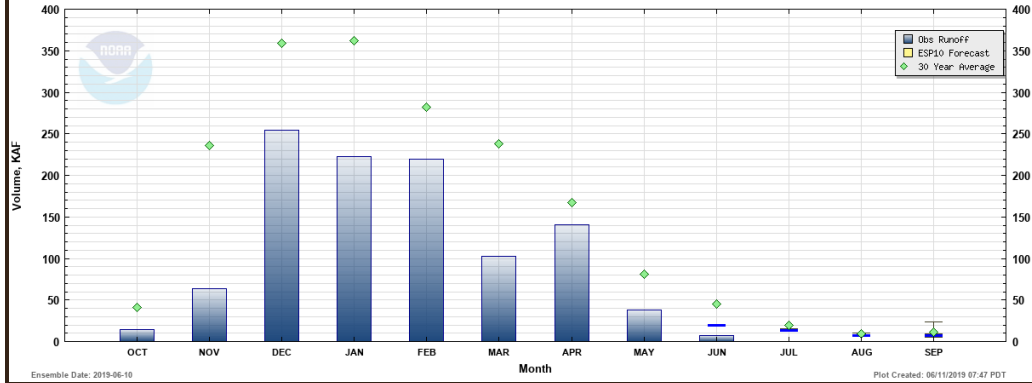
Period APR to SEP - Water Year 2019

30yr Normal
ESP10



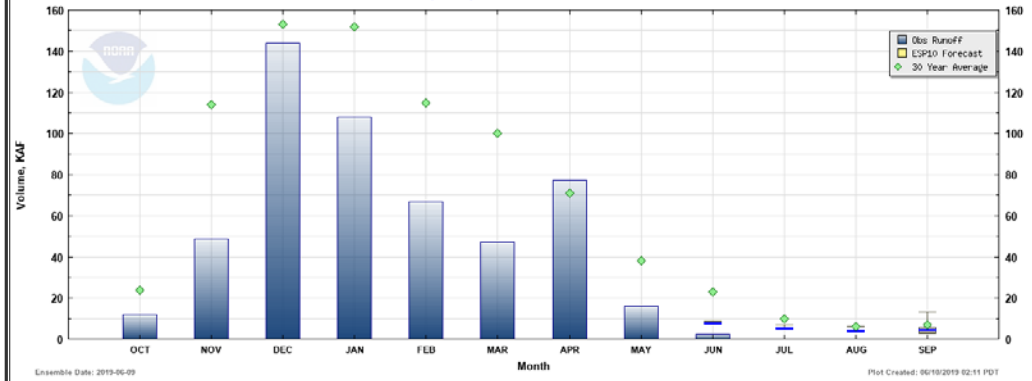
Natural Volume Monthly Forecasts (ESP10) for Water Year 2019

(FSS03) NEHALEM - FOSS



Natural Volume Monthly Forecasts (ESP10) for Water Year 2019

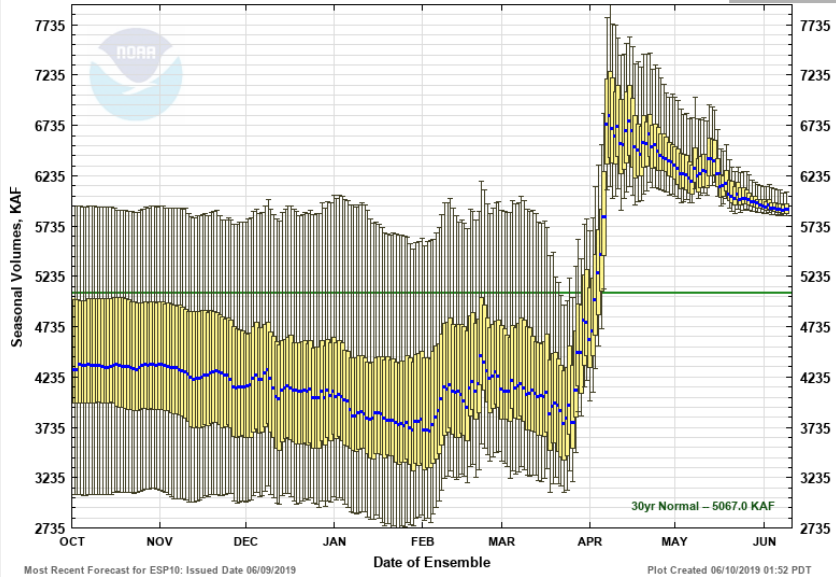
(TLM03) WILSON - NEAR TILLAMOOK





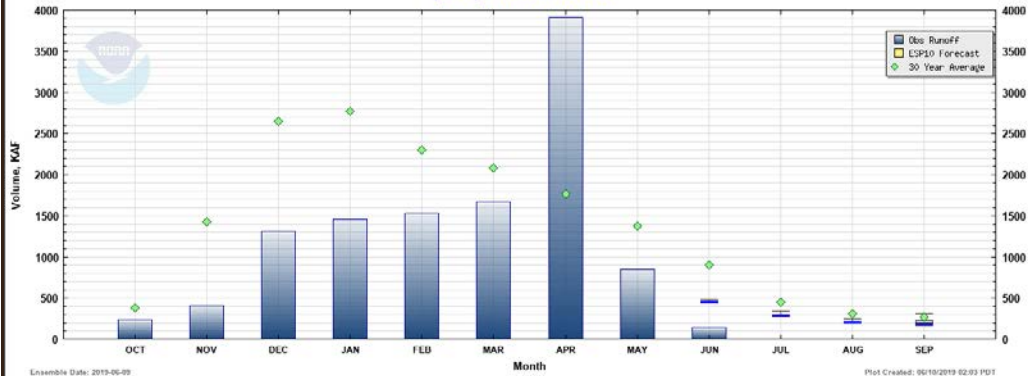
Natural Water Supply Forecasts (West)

Natural Volume Forecasts
WILLAMETTE - AT SALEM
Period APR to SEP - Water Year 2019



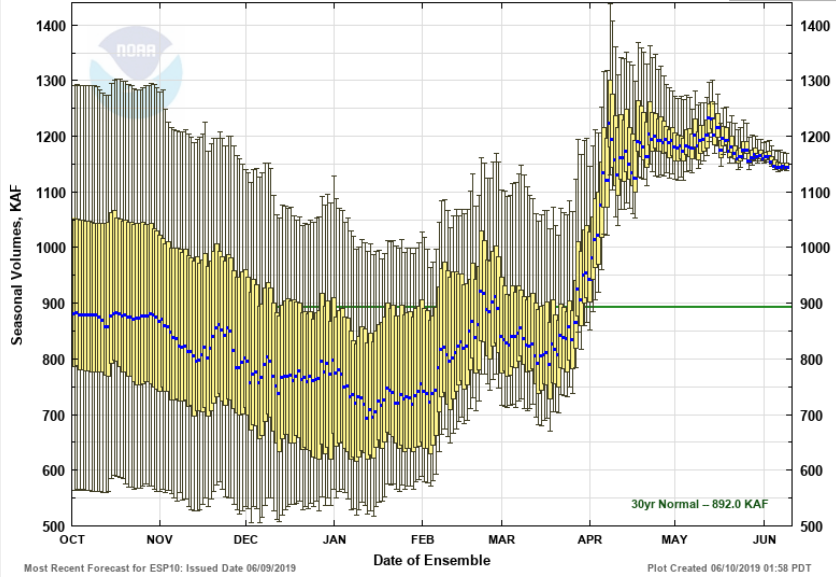
Most Recent Forecast for ESP10: Issued Date 06/09/2019 Plot Created 06/10/2019 01:52 PDT

Natural Volume Monthly Forecasts (ESP10) for Water Year 2019
(SI.MO3) WILLAMETTE - AT SALEM



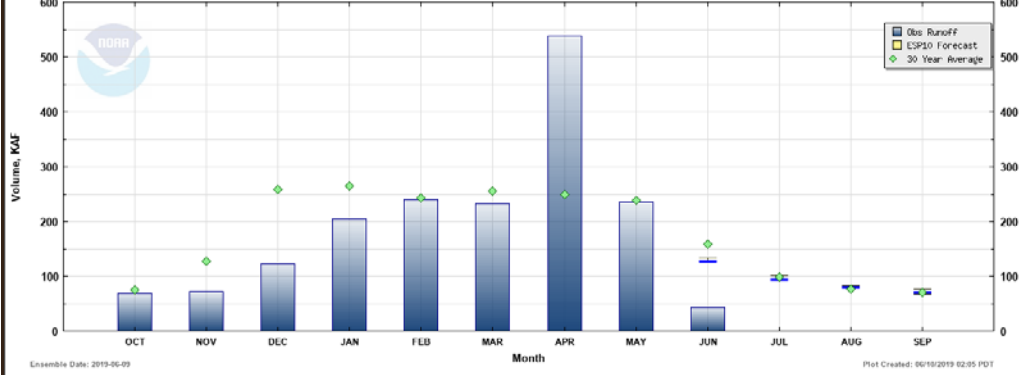
Ensemble Date: 2019-06-09 Plot Created: 06/10/2019 02:03 PDT

Natural Volume Forecasts
ROGUE - AT RAYGOLD
Period APR to SEP - Water Year 2019



Most Recent Forecast for ESP10: Issued Date 06/09/2019 Plot Created 06/10/2019 01:58 PDT

Natural Volume Monthly Forecasts (ESP10) for Water Year 2019
(RYGO3) ROGUE - AT RAYGOLD

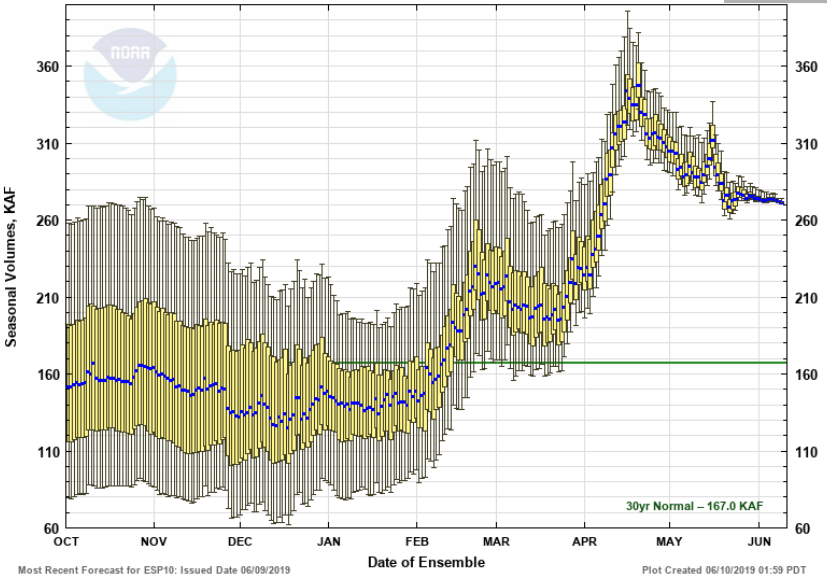


Ensemble Date: 2019-06-09 Plot Created: 06/10/2019 02:05 PDT

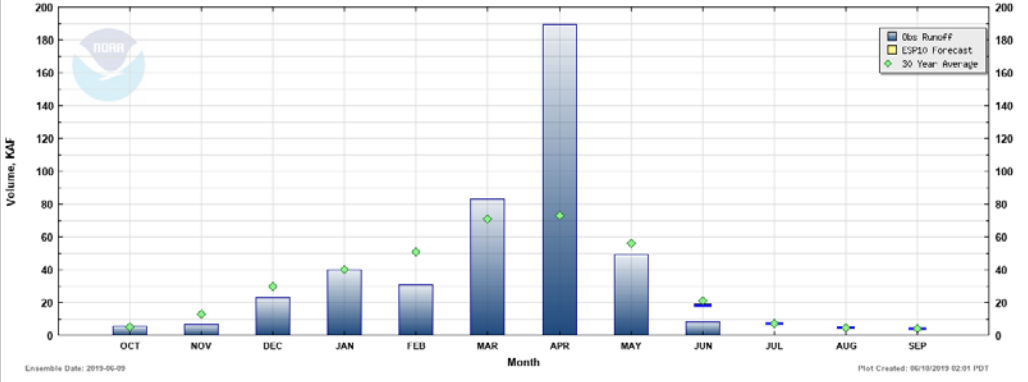


Natural Water Supply Forecasts (East)

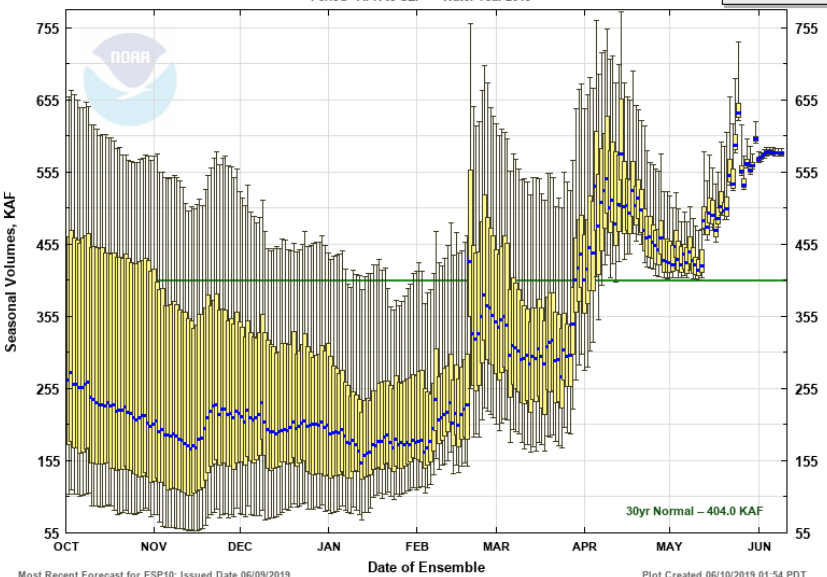
Natural Volume Forecasts
UMATILLA - AT PENDLETON
Period: APR to SEP - Water Year 2019



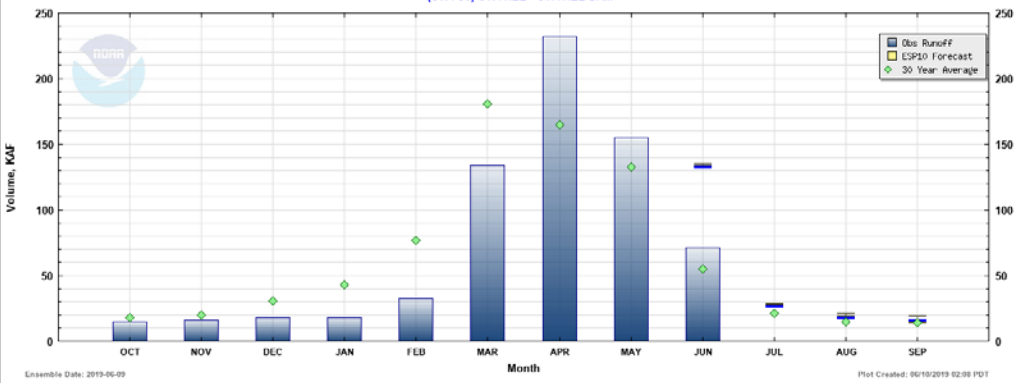
Natural Volume Monthly Forecasts (ESP10) for Water Year 2019
(PDO3) UMATILLA - AT PENDLETON



Natural Volume Forecasts
OWYHEE - OWYHEE DAM
Period: APR to SEP - Water Year 2019



Natural Volume Monthly Forecasts (ESP10) for Water Year 2019
(OWYO3) OWYHEE - OWYHEE DAM





Link to Northwest River Forecast Center ESP Natural Forecasts

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

Live Water Supply Briefings

Monthly water supply briefings will be tentatively held January through late spring on the first Thursday of each month. Please refer to our 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

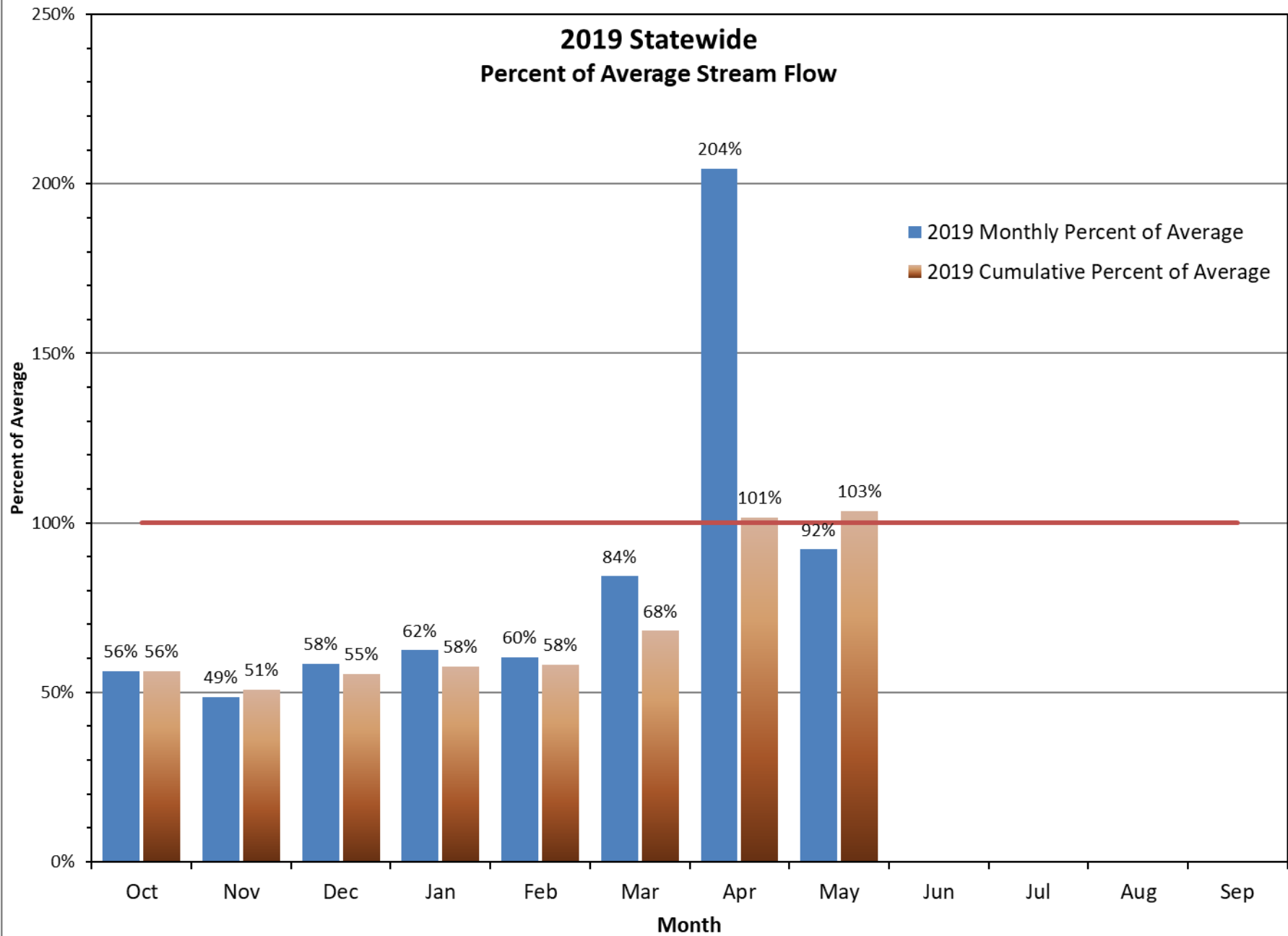


Ken Stahr
Oregon Water Resources
Department

June 11, 2019

04/14/2011

2019 Statewide Percent of Average Stream Flow

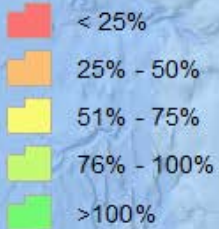




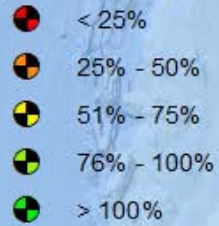
Basin	Water Year % of average thru May	% of average for May	# of data points
West Side	81%	54%	44
East Side	118%	116%	50
State	103%	92%	94

Percent of Average Streamflow April - 2019

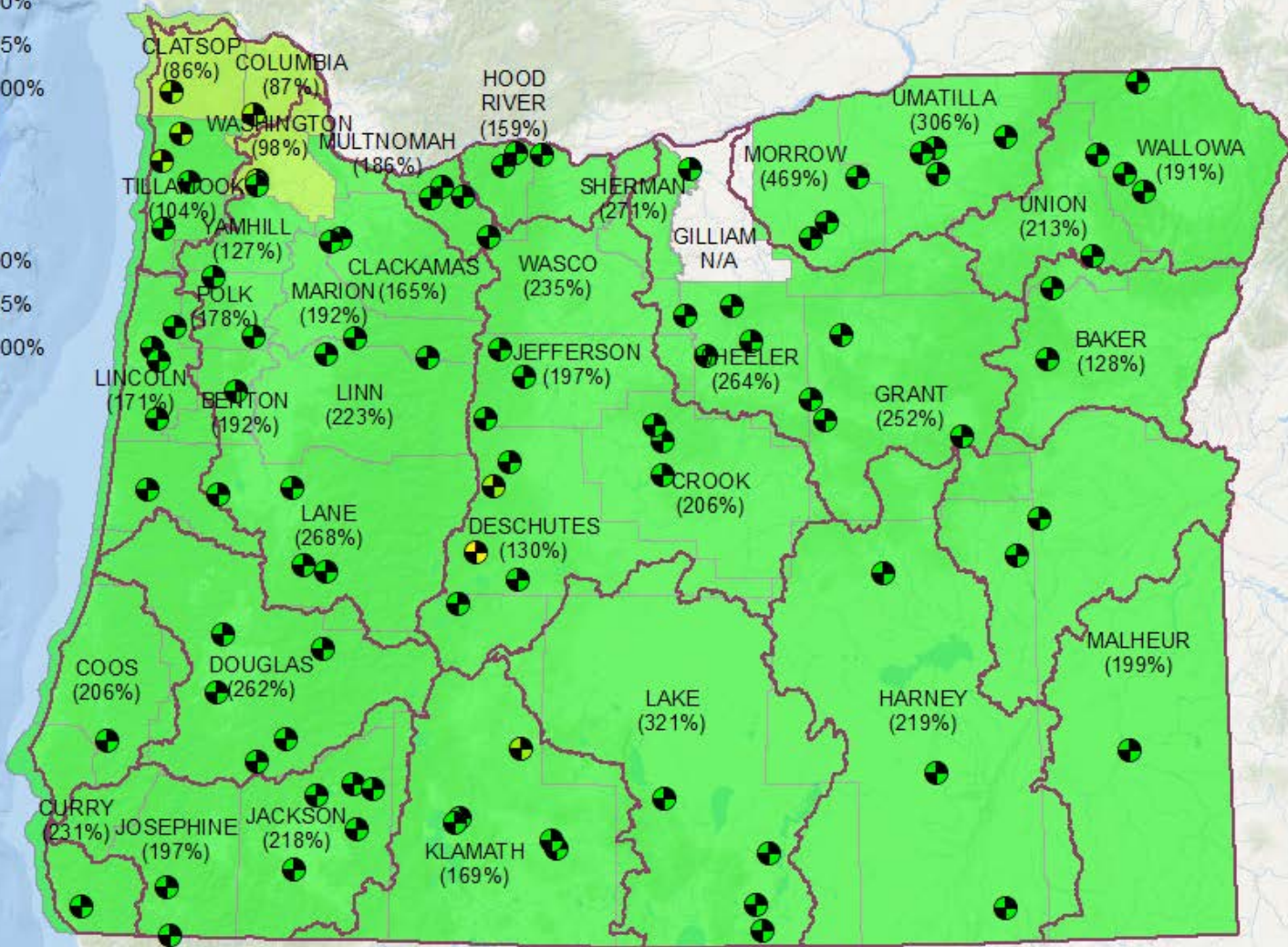
County



Stream Gauge



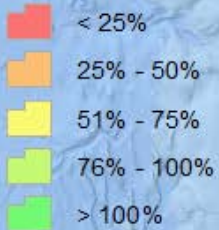
WRD Basin



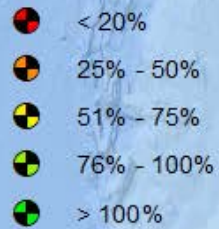
Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.

Percent of Average Streamflow May, 2019

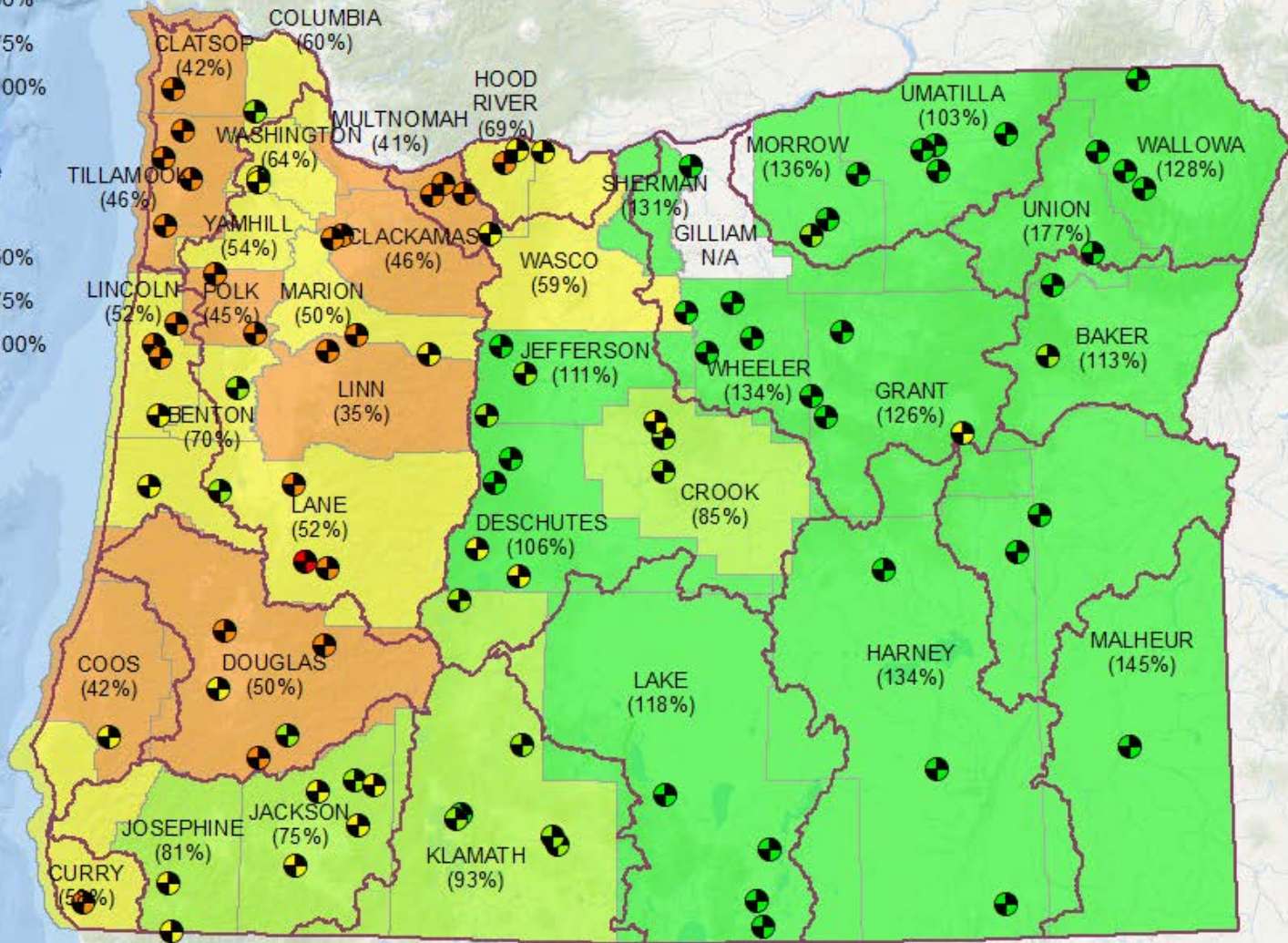
County



Stream Gage

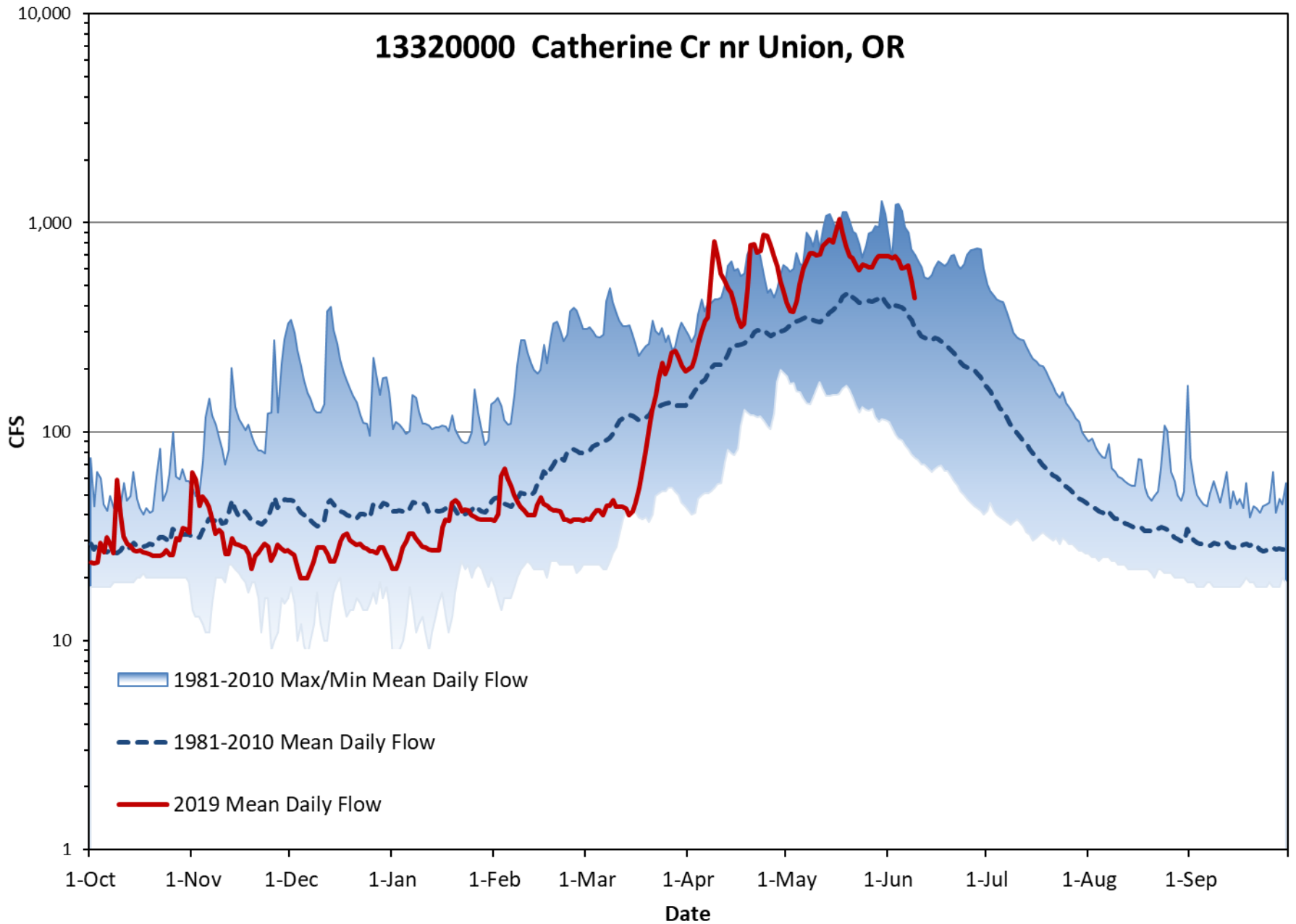


WRD Basin

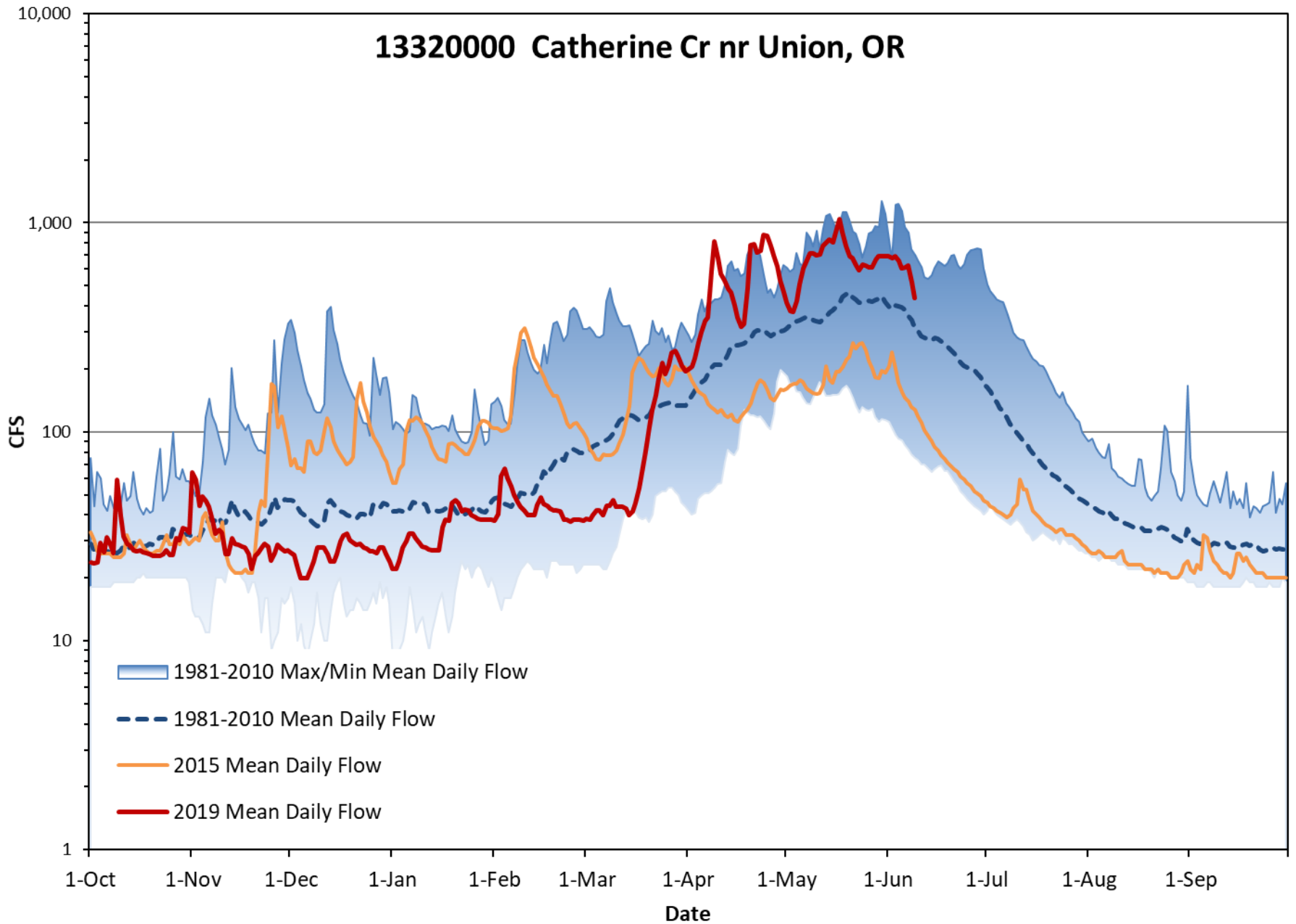


Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.

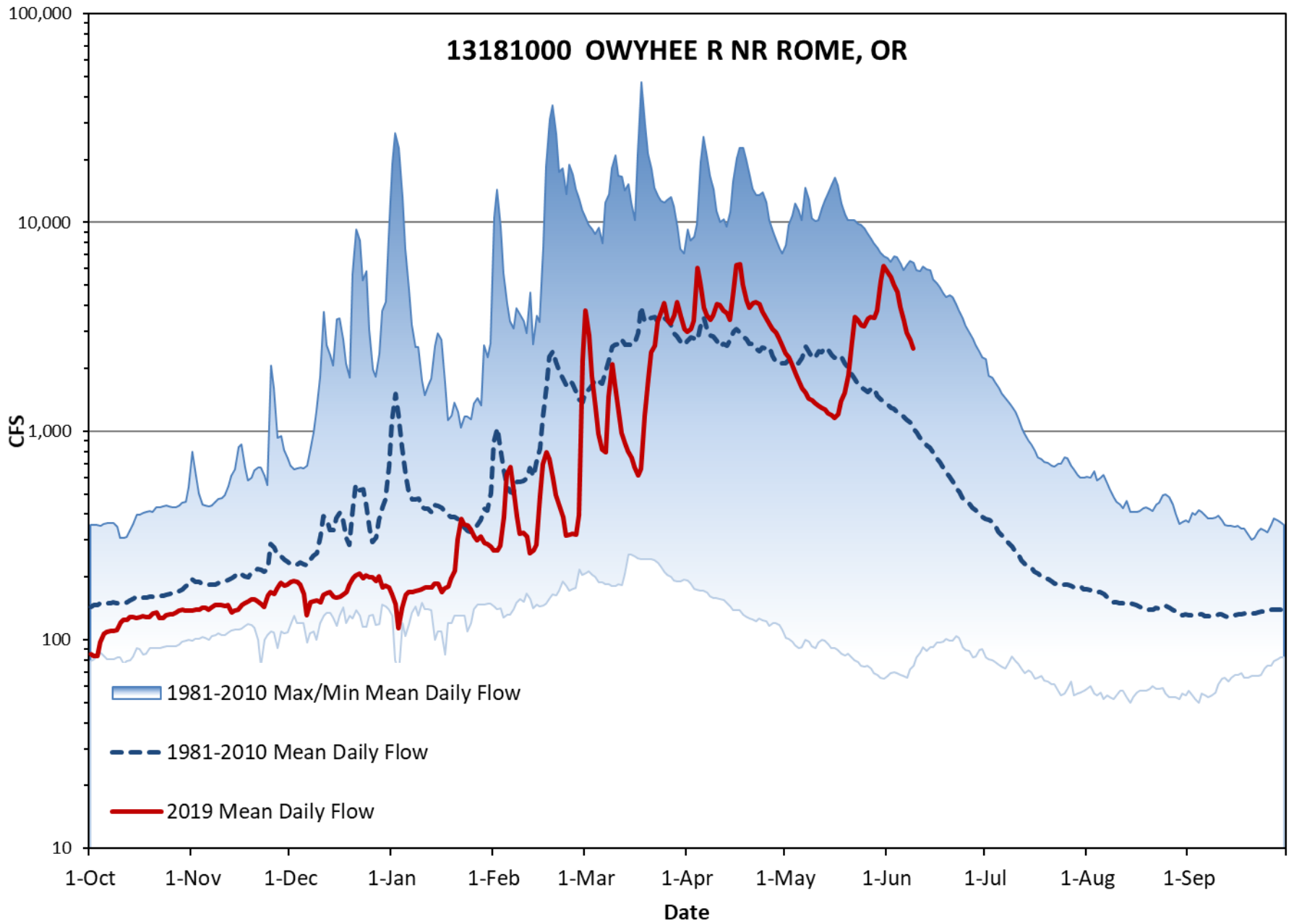
13320000 Catherine Cr nr Union, OR



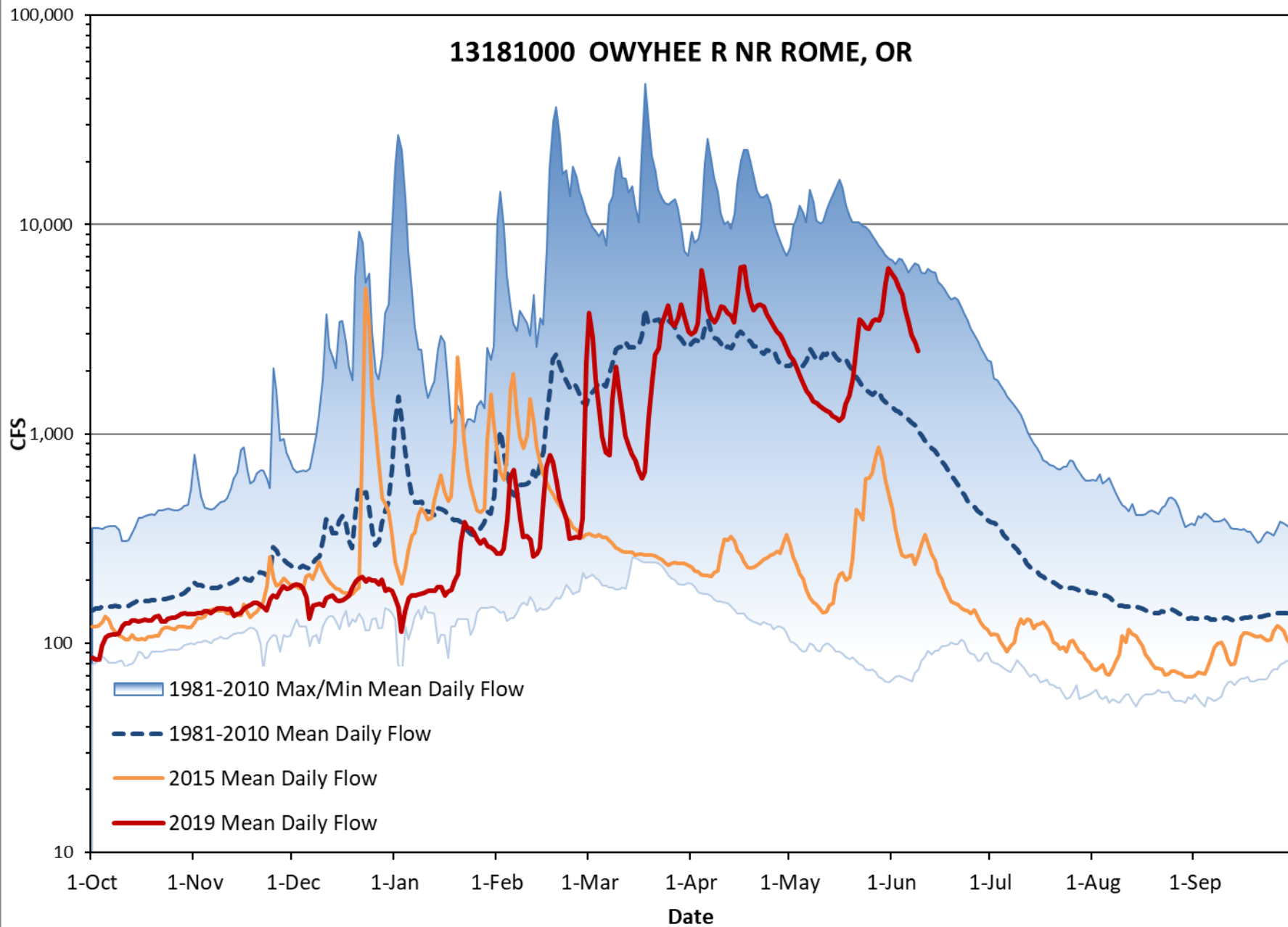
13320000 Catherine Cr nr Union, OR



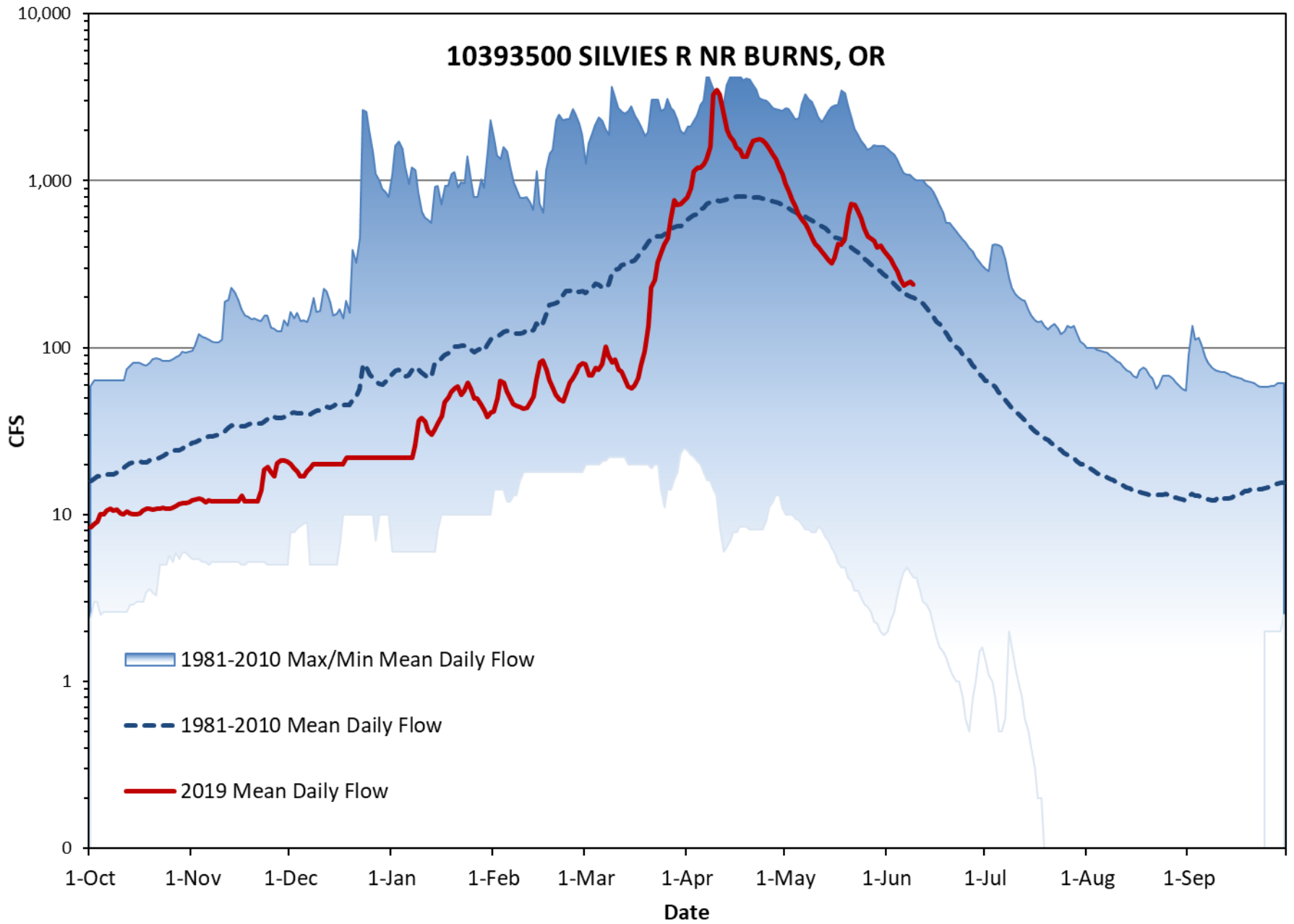
13181000 OWYHEE R NR ROME, OR



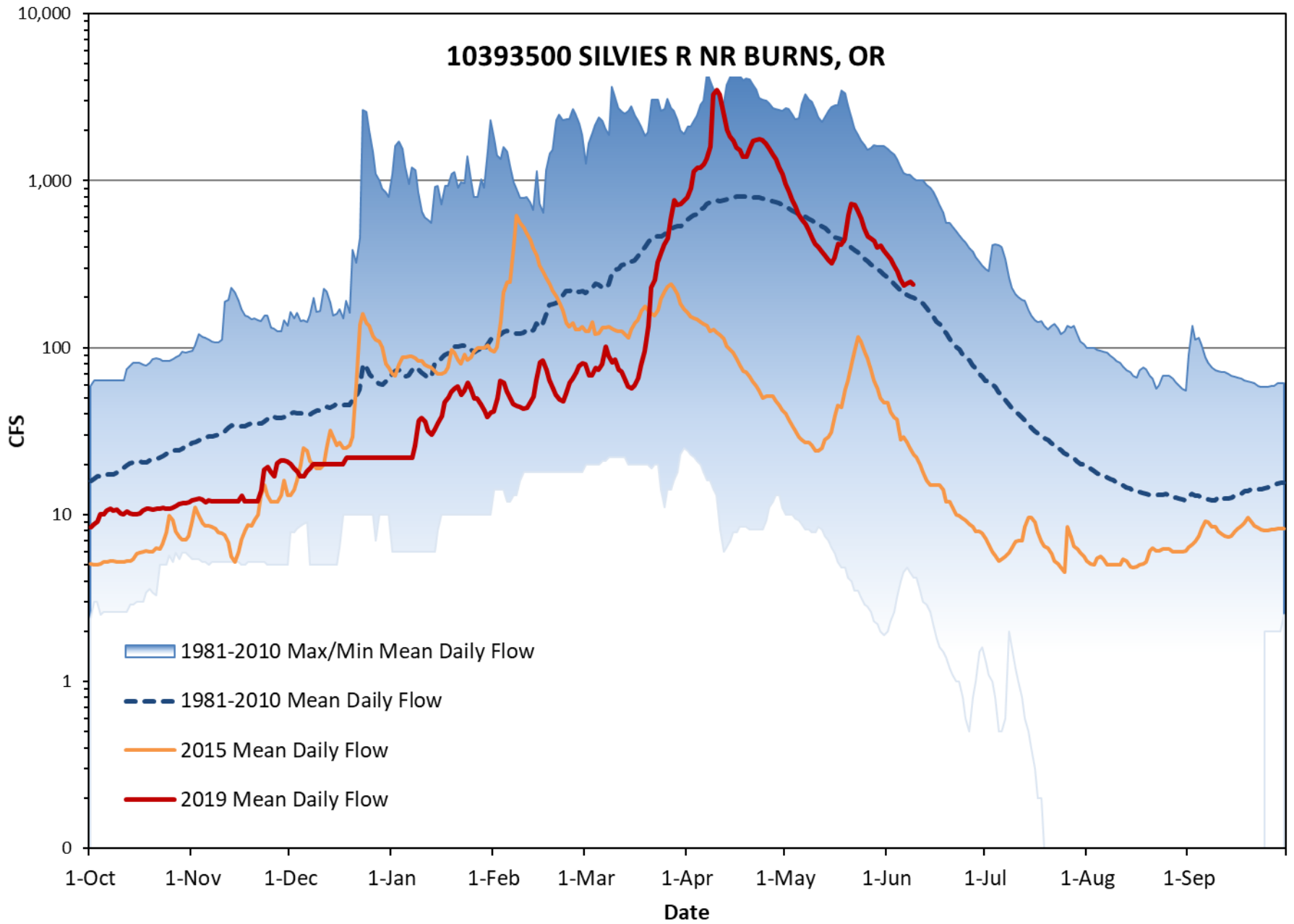
13181000 OWYHEE R NR ROME, OR



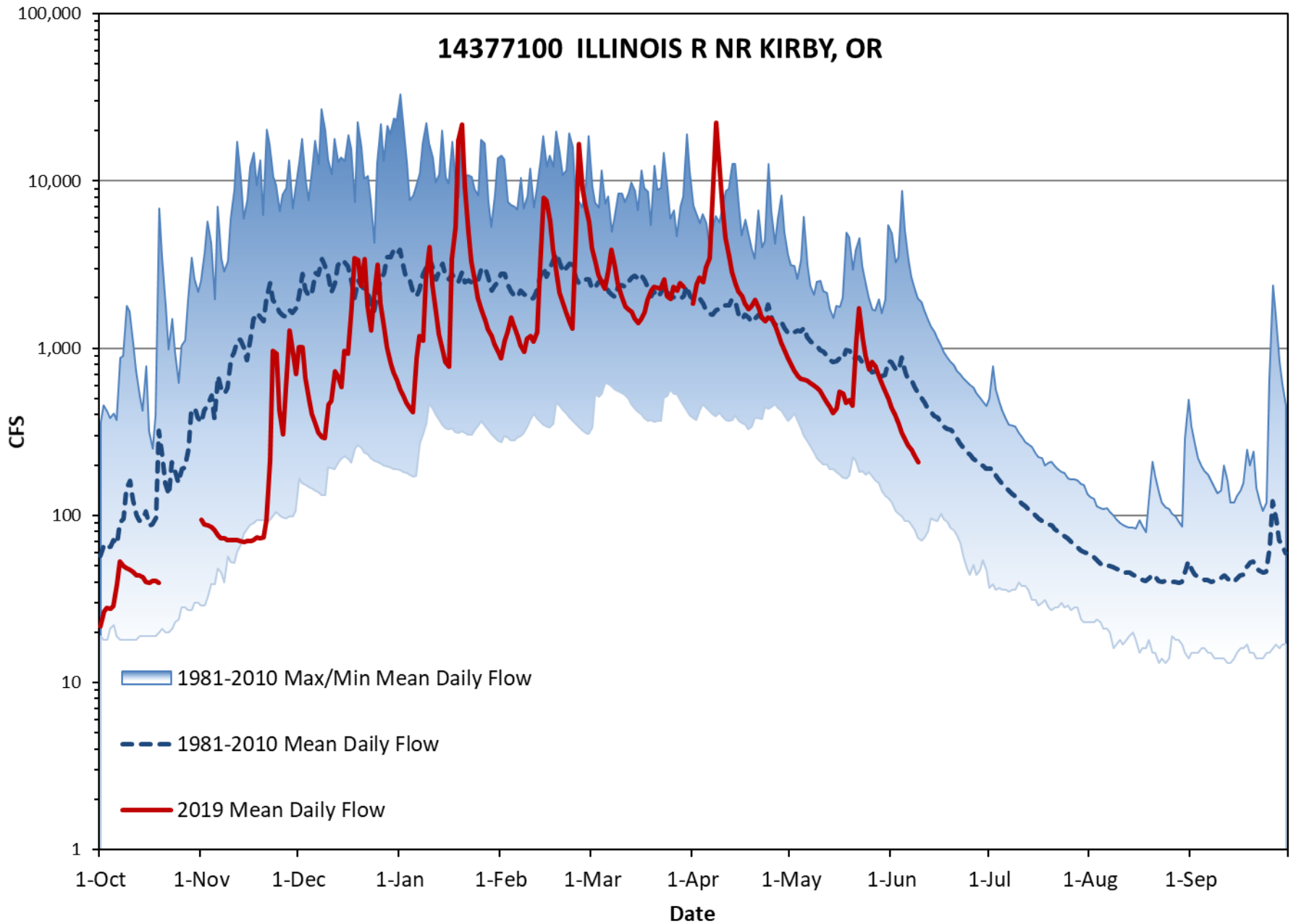
10393500 SILVIES R NR BURNS, OR



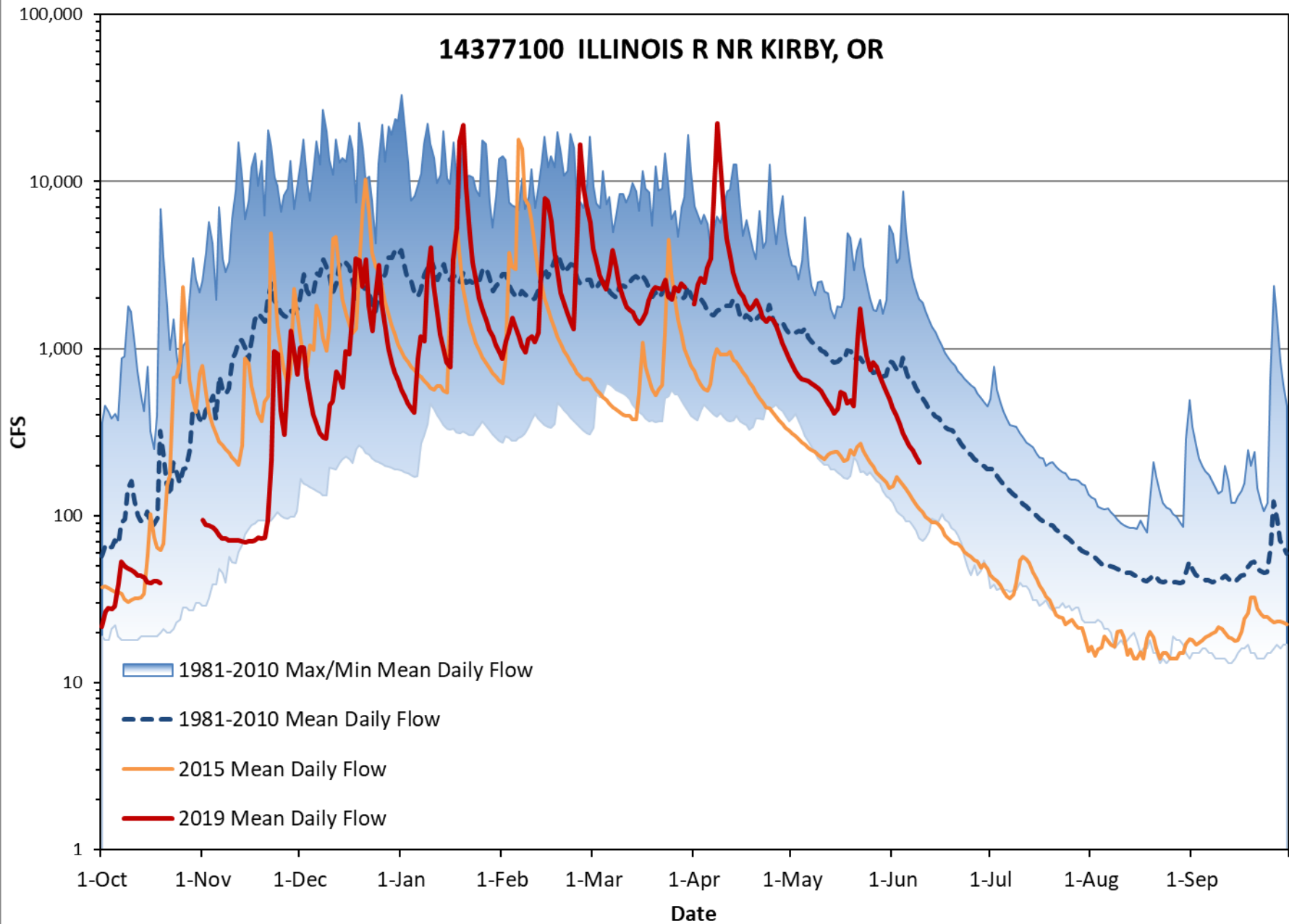
10393500 SILVIES R NR BURNS, OR



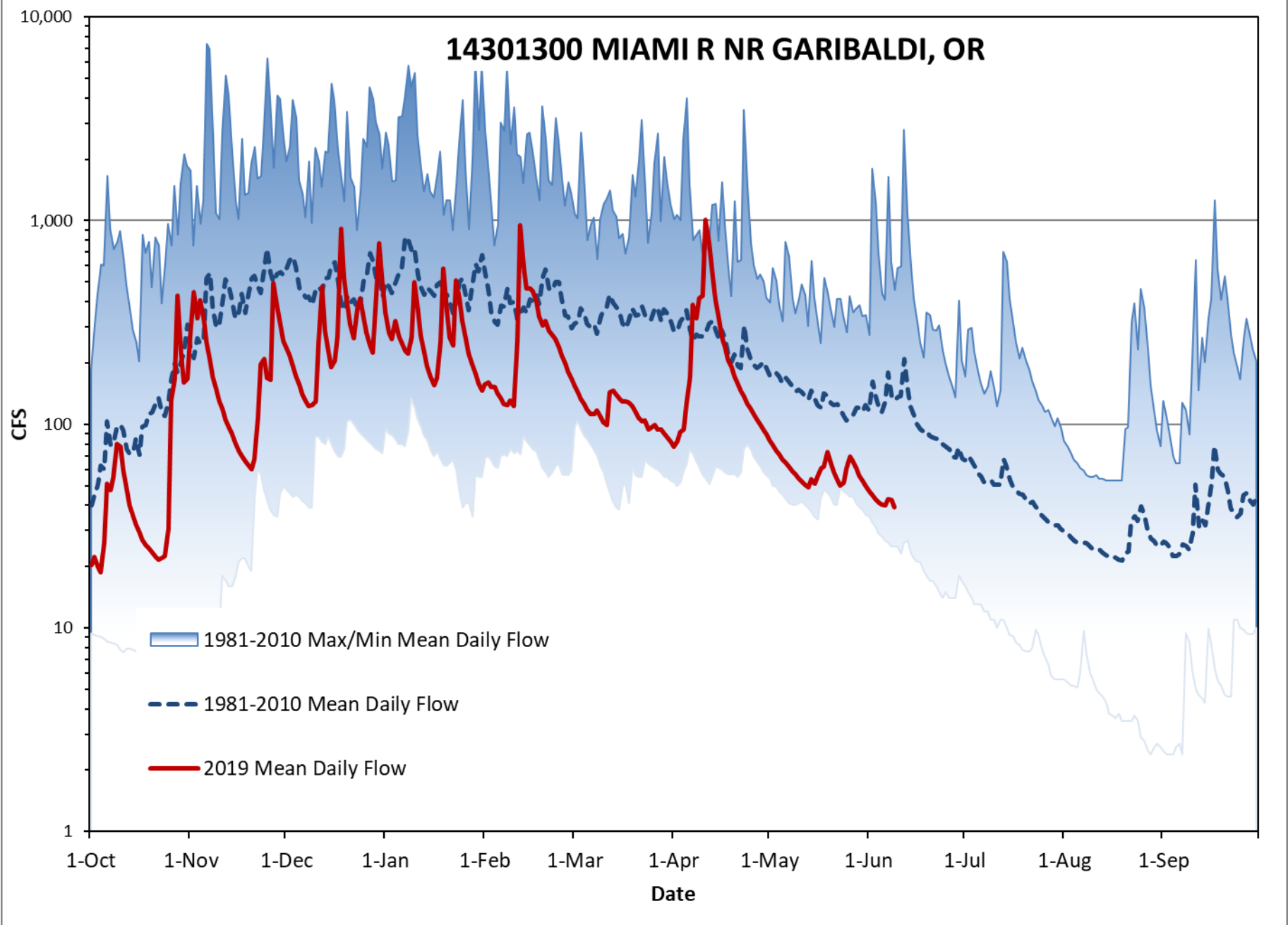
14377100 ILLINOIS R NR KIRBY, OR



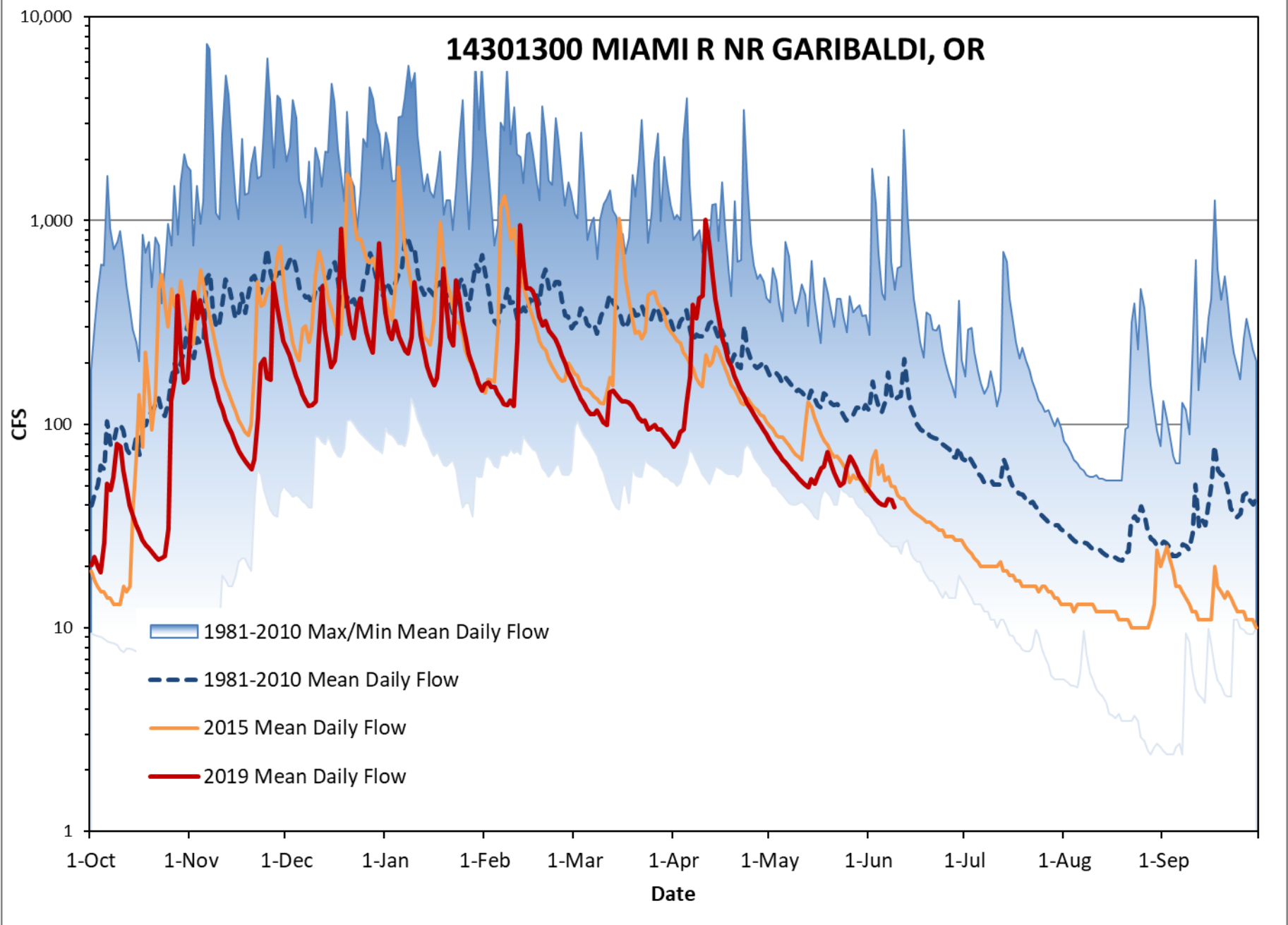
14377100 ILLINOIS R NR KIRBY, OR



14301300 MIAMI R NR GARIBALDI, OR



14301300 MIAMI R NR GARIBALDI, OR



OREGON



WATER RESOURCES
DEPARTMENT

Thank you.



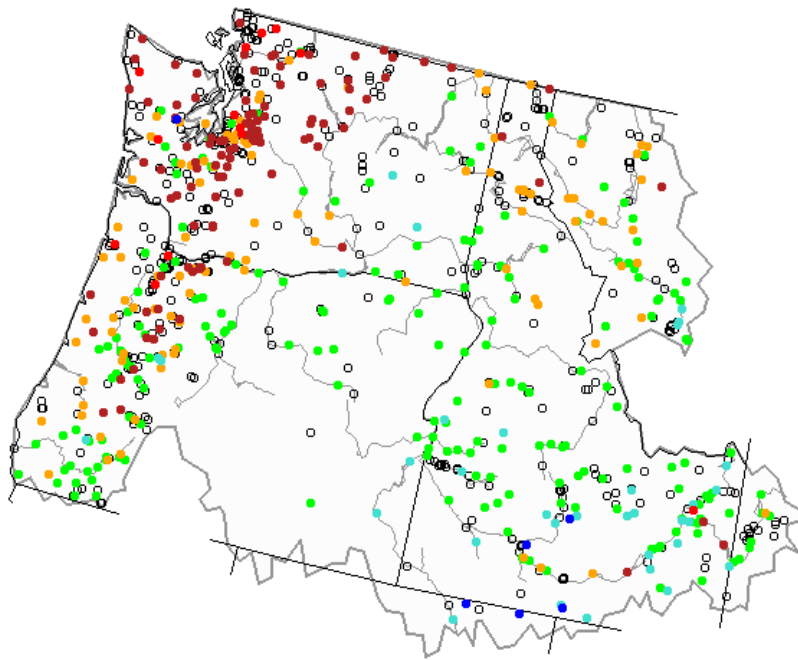
Oregon Water Supply Availability Meeting

June 2019

U.S. Department of the Interior
U.S. Geological Survey

USGS Update on Surface Water Conditions
Marc Stewart & Carrie Boudreau
Oregon Water Science Center

Monday, June 10, 2019 15:30ET



Search USGS streamgage

Choose a data retrieval option and select a location on the map

Single station Peak flow

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

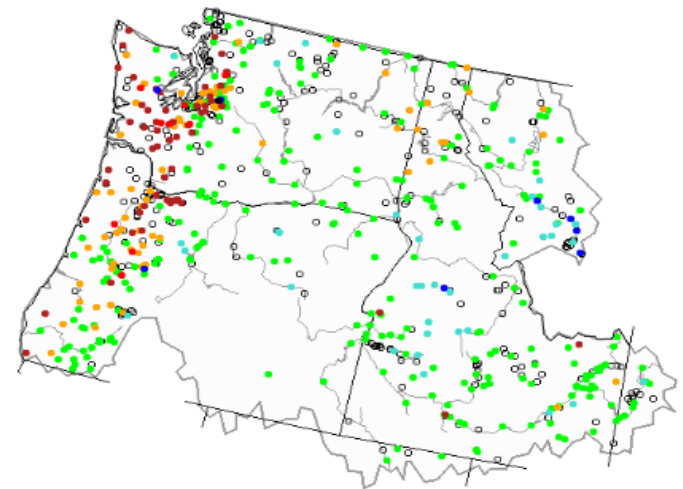
(Left) Map Current 7-day average streamflow compared to historical streamflow for the day of the year

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

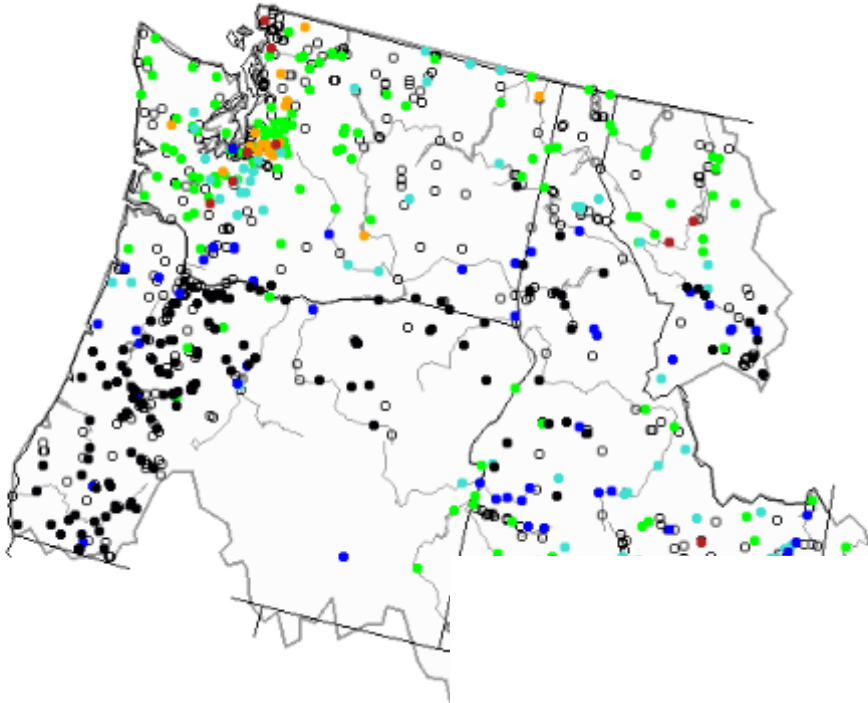
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked



Map of real-time streamflow compared to historical streamflow for the day of the year (Pacific Northwest)

State or 17 Pacific Northwest

Monday, April 08, 2019 23:30ET



Search USGS stre

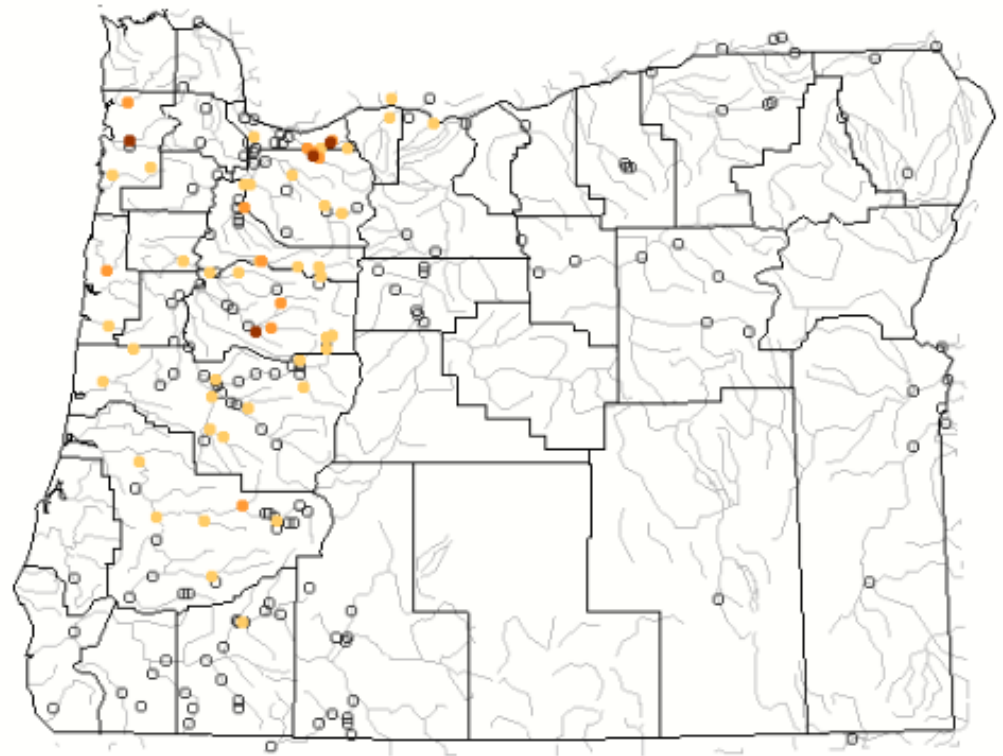
Choose a data retrieval option :

Single statio

Explanation - f			
●	●	●	
Low	<10 Much below normal	10-24 Below normal	25-75 Normal

Region	Above action stage	Above minor flood stage	Above moderate flood stage	Above major flood stage	Total
United States	79	79	33	18	209
California	2	1			3
Oregon	12	8	5		25
Washington	1				1

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



Search USGS streamgage

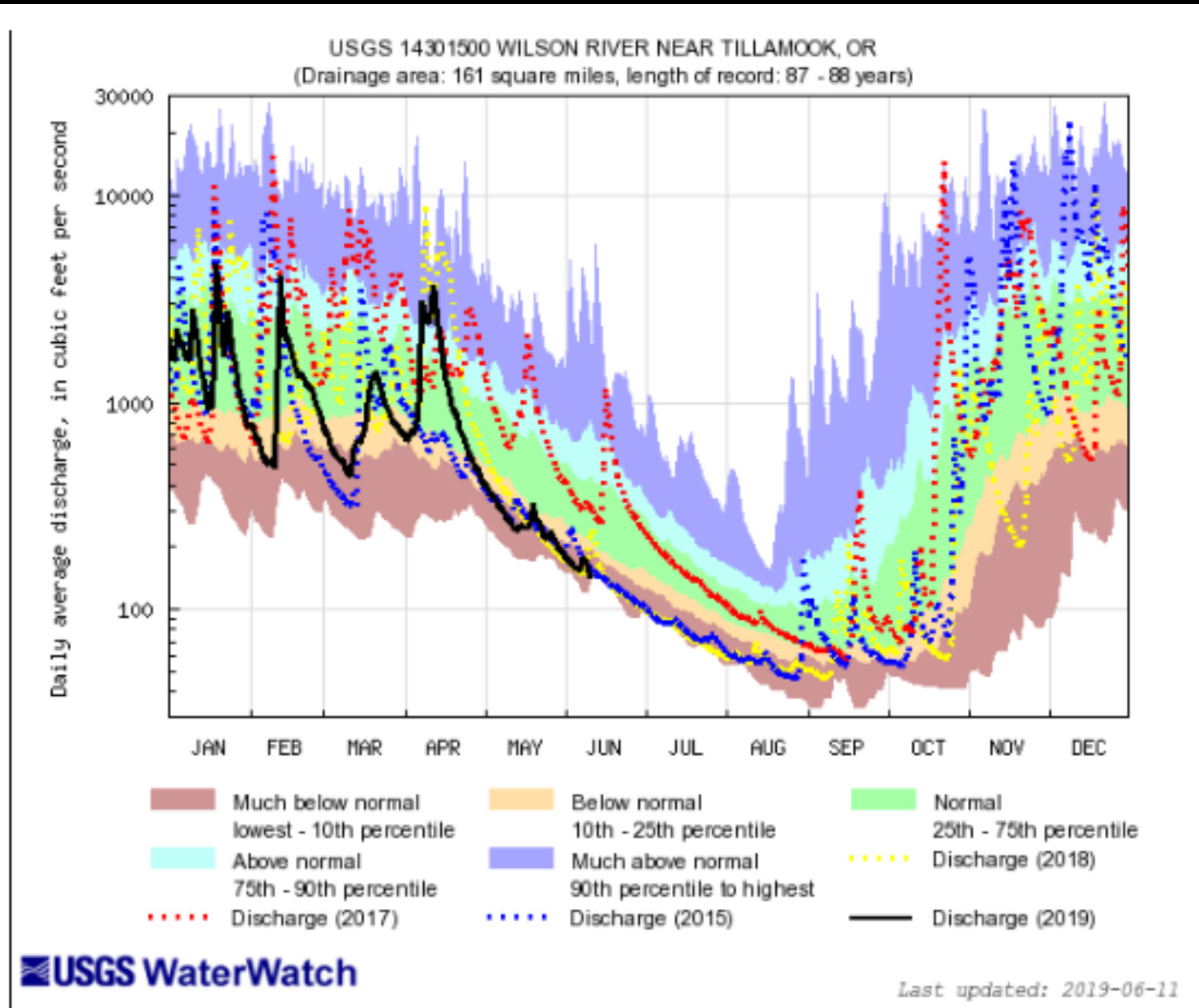
Choose a data retrieval option and select a location on the map

- List of all stations Single station Nearest stations

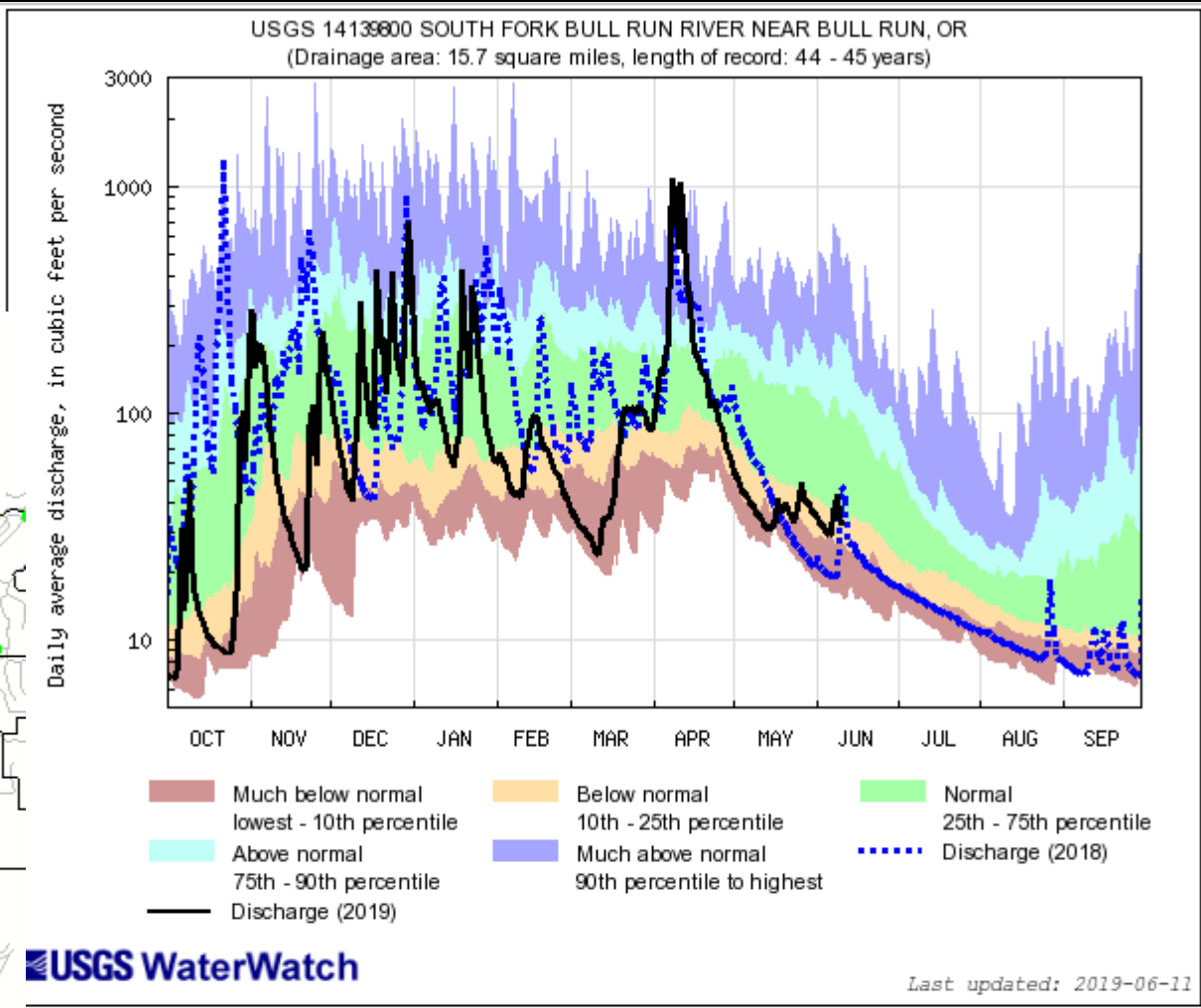
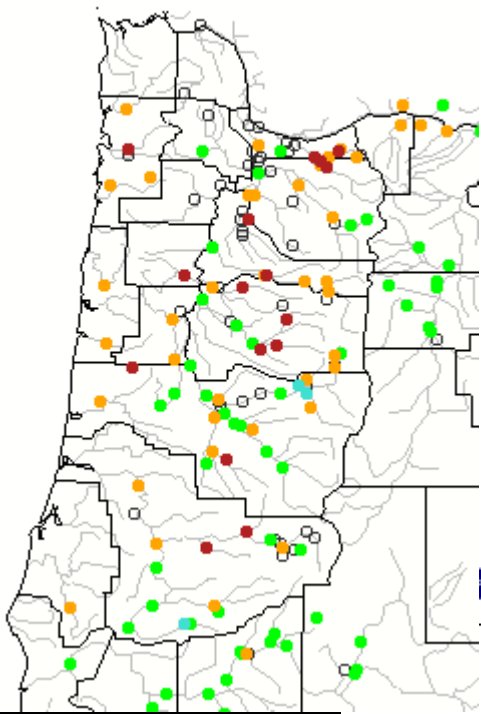
Explanation - Percentile classes				
New low	<=5	6-9	10-24	Not ranked
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	



14301500 Wilson River near Tillamook



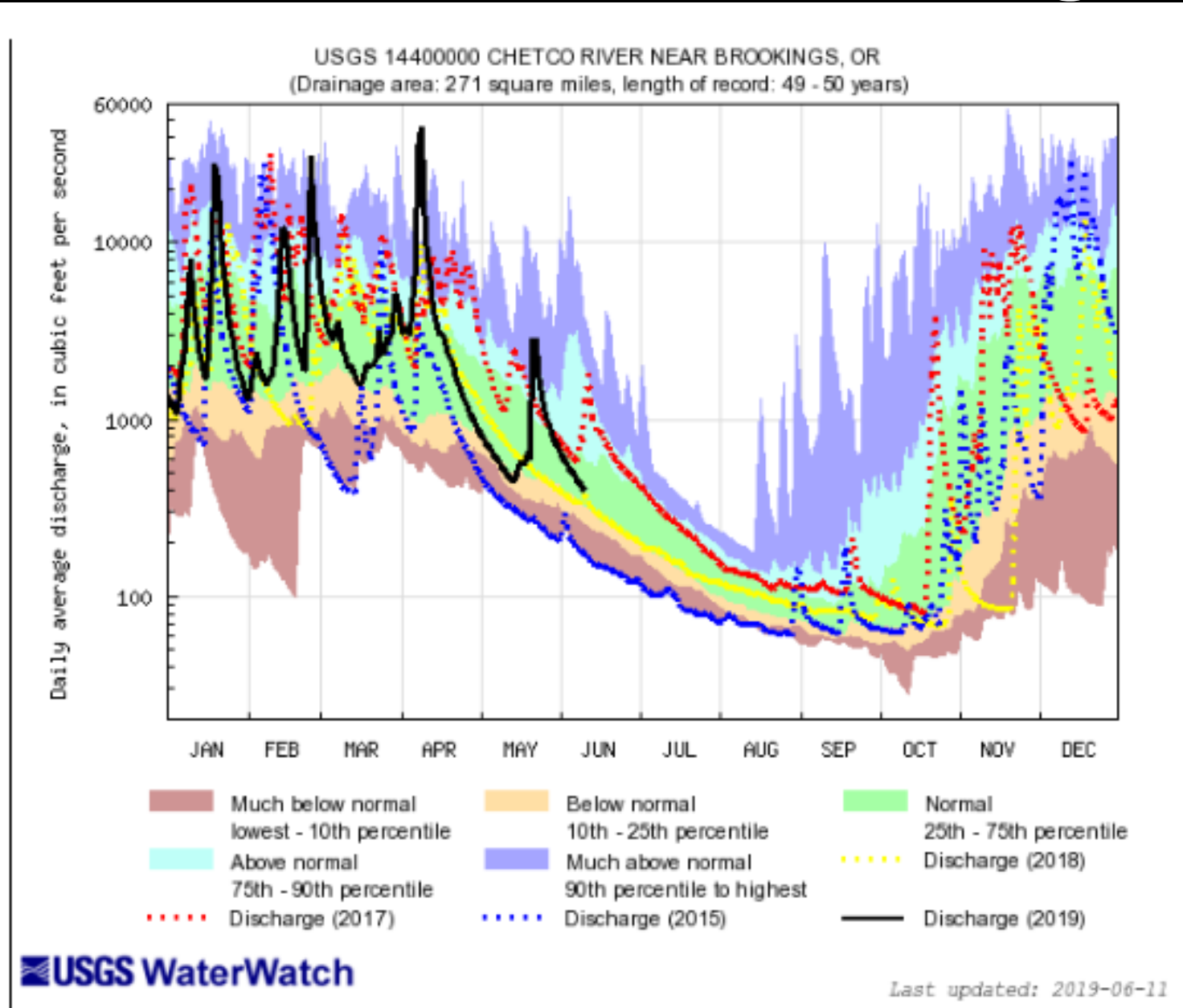
14139800 SOUTH FORK BULL RUN RIVER NEAR BULL RUN



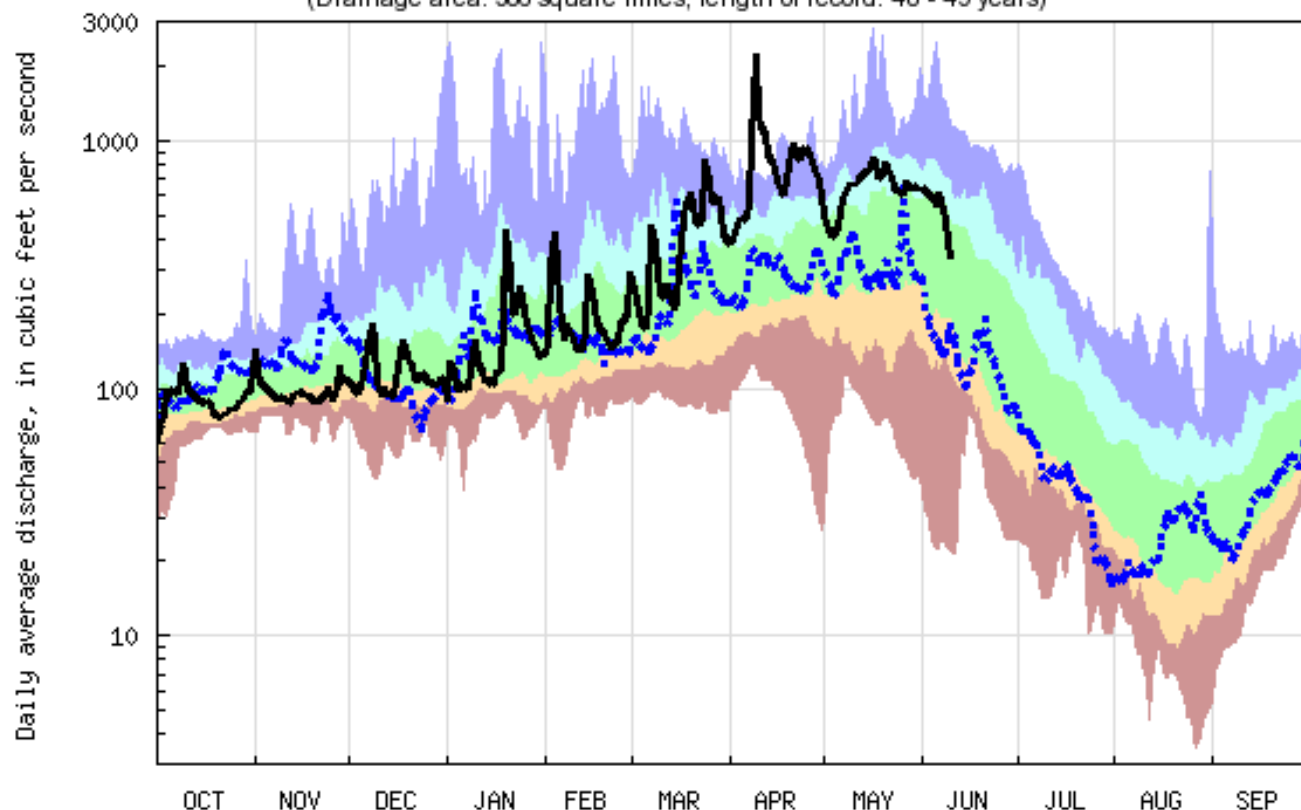
Explanation - Percentile classes					
lowest-10th percentile	10-24	25-75	76-90	90th percentile-highest	Flow
Much below normal	Below normal	Normal	Above normal	Much above normal	



14400000 Chetco River near Brookings

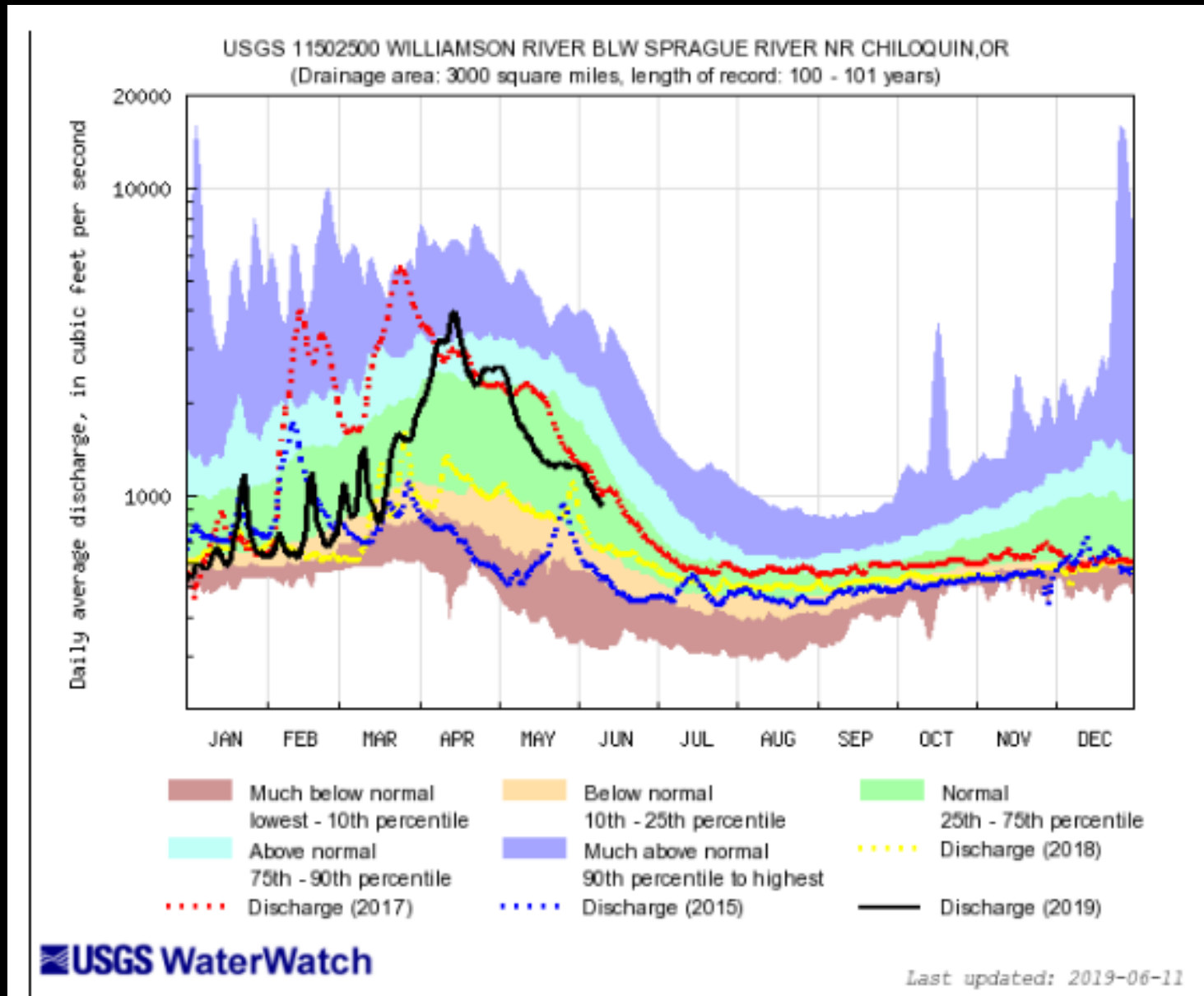


USGS 14038530 JOHN DAY RIVER NEAR JOHN DAY, OR
(Drainage area: 386 square miles, length of record: 48 - 49 years)

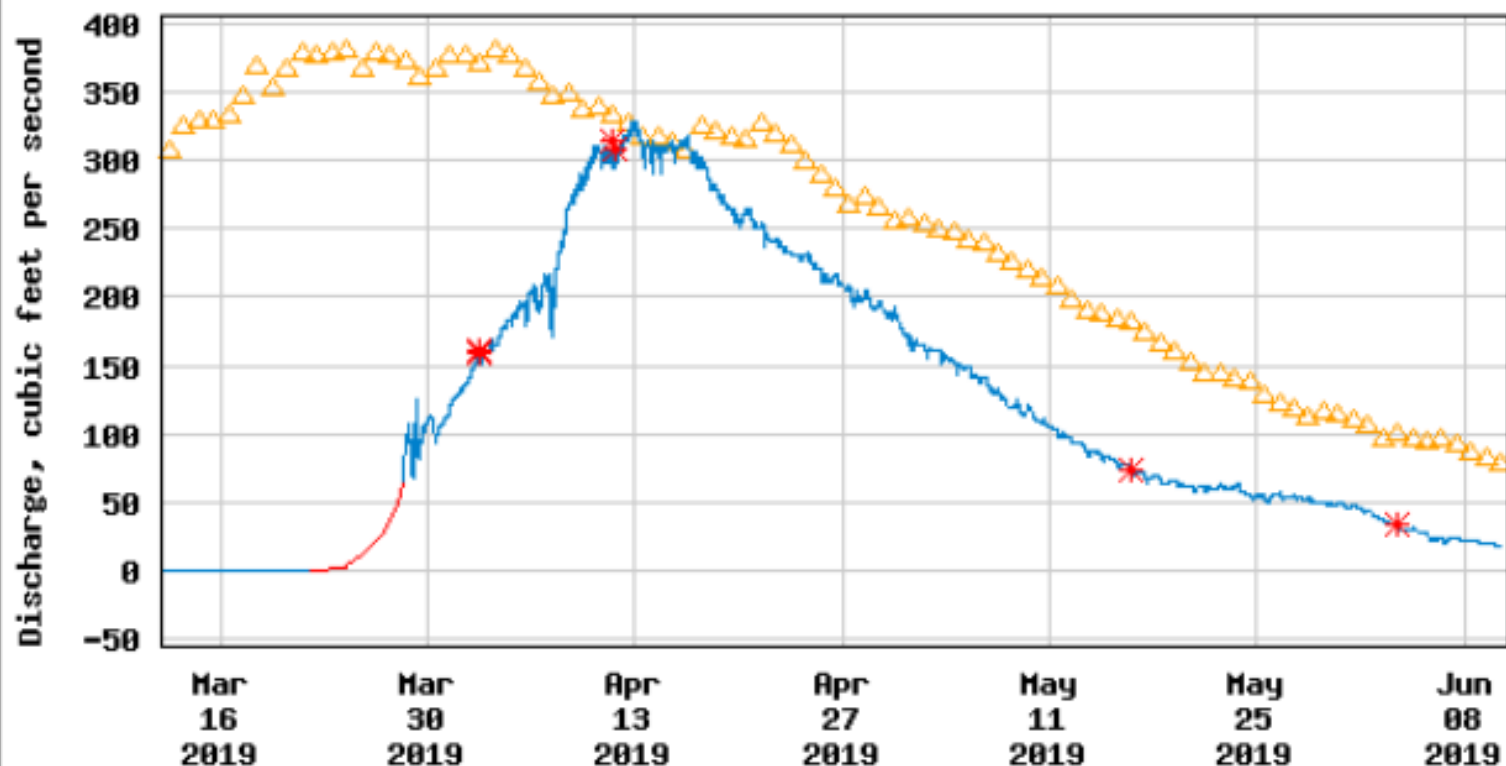


- | | | |
|---|---|----------------------------------|
| Much below normal
lowest - 10th percentile | Below normal
10th - 25th percentile | Normal
25th - 75th percentile |
| Above normal
75th - 90th percentile | Much above normal
90th percentile to highest | Discharge (2018) |
| Discharge (2019) | | |

11502500 Williamson River blw Sprague



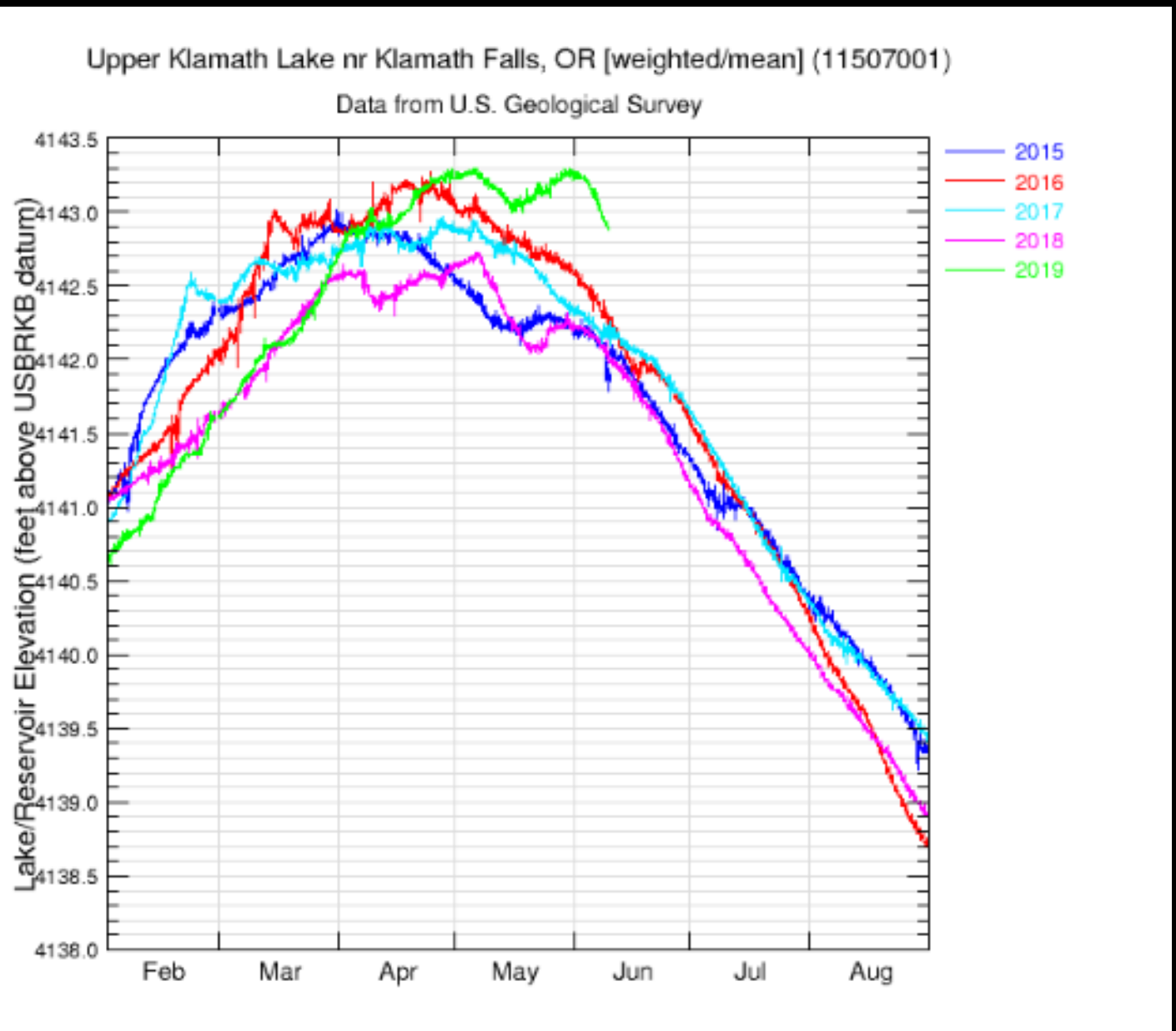
USGS 11493500 WILLIAMSON RIVER NEAR KLAMATH AGENCY, OR



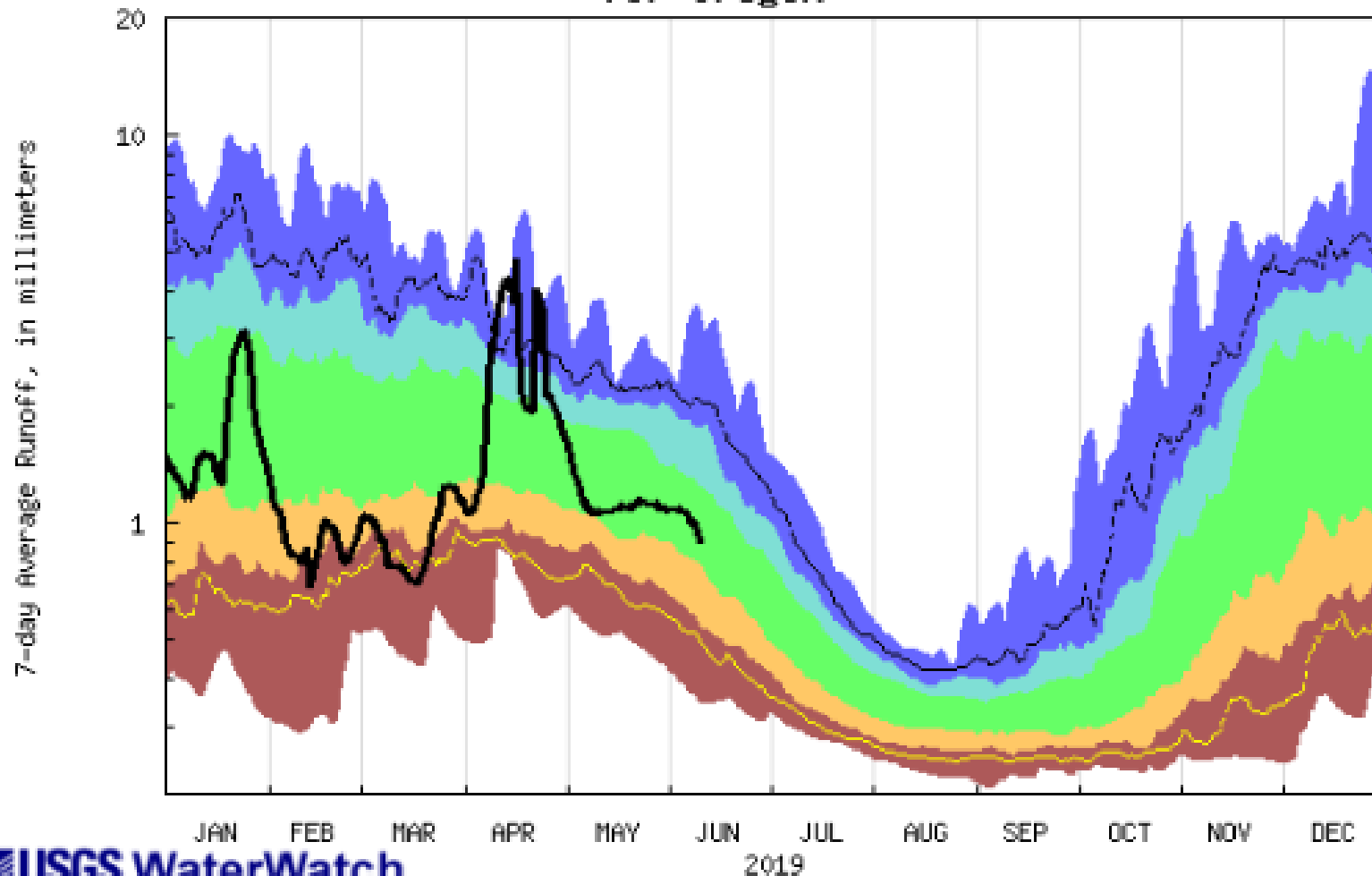
---- Provisional Data Subject to Revision ----

- △ Median daily statistic (61 years)
- Discharge
- Estimated discharge
- * Measured discharge

Klamath Lake



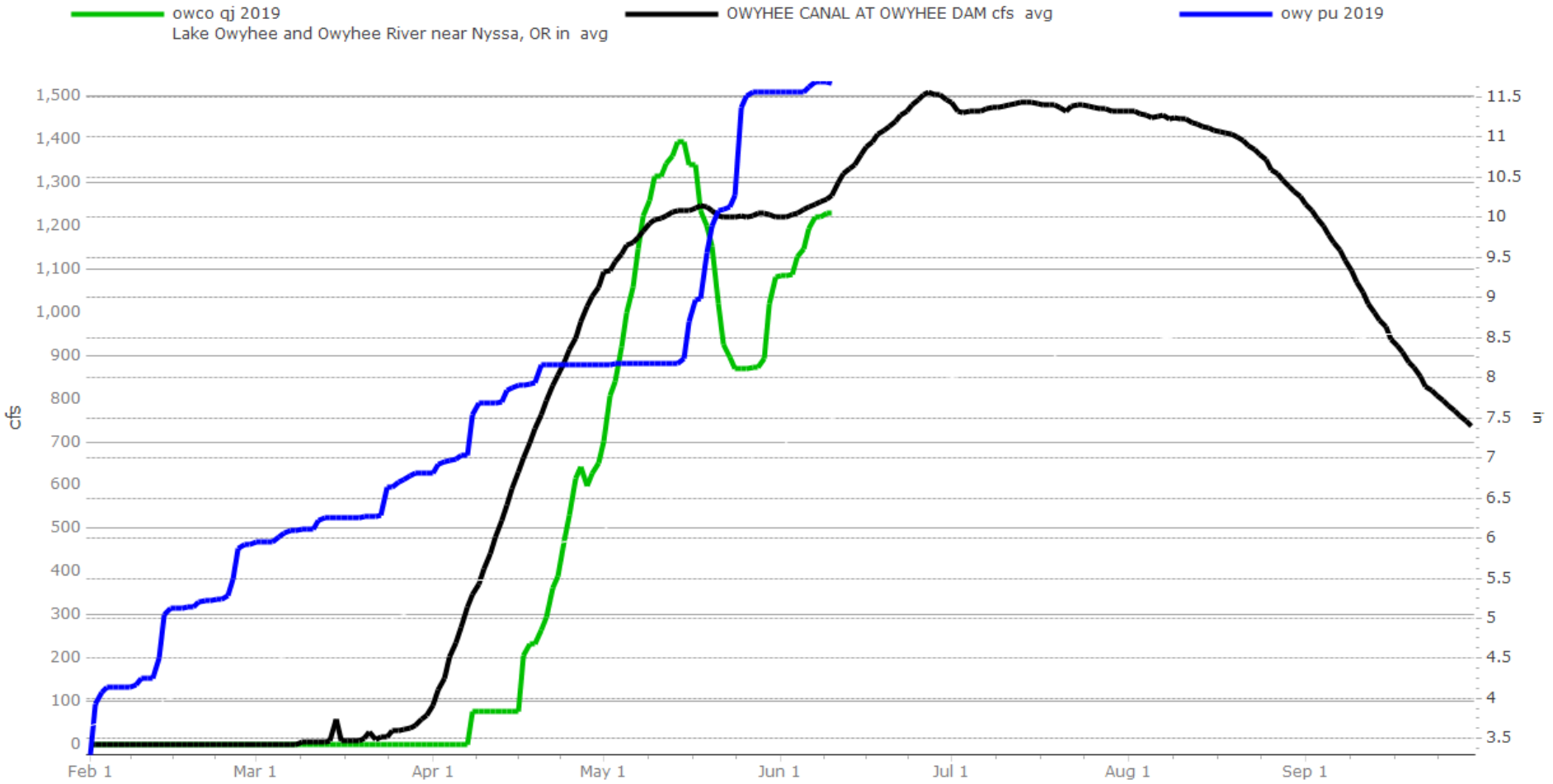
Duration hydrograph of 7-day average runoff for Oregon



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

Oregon WSAC

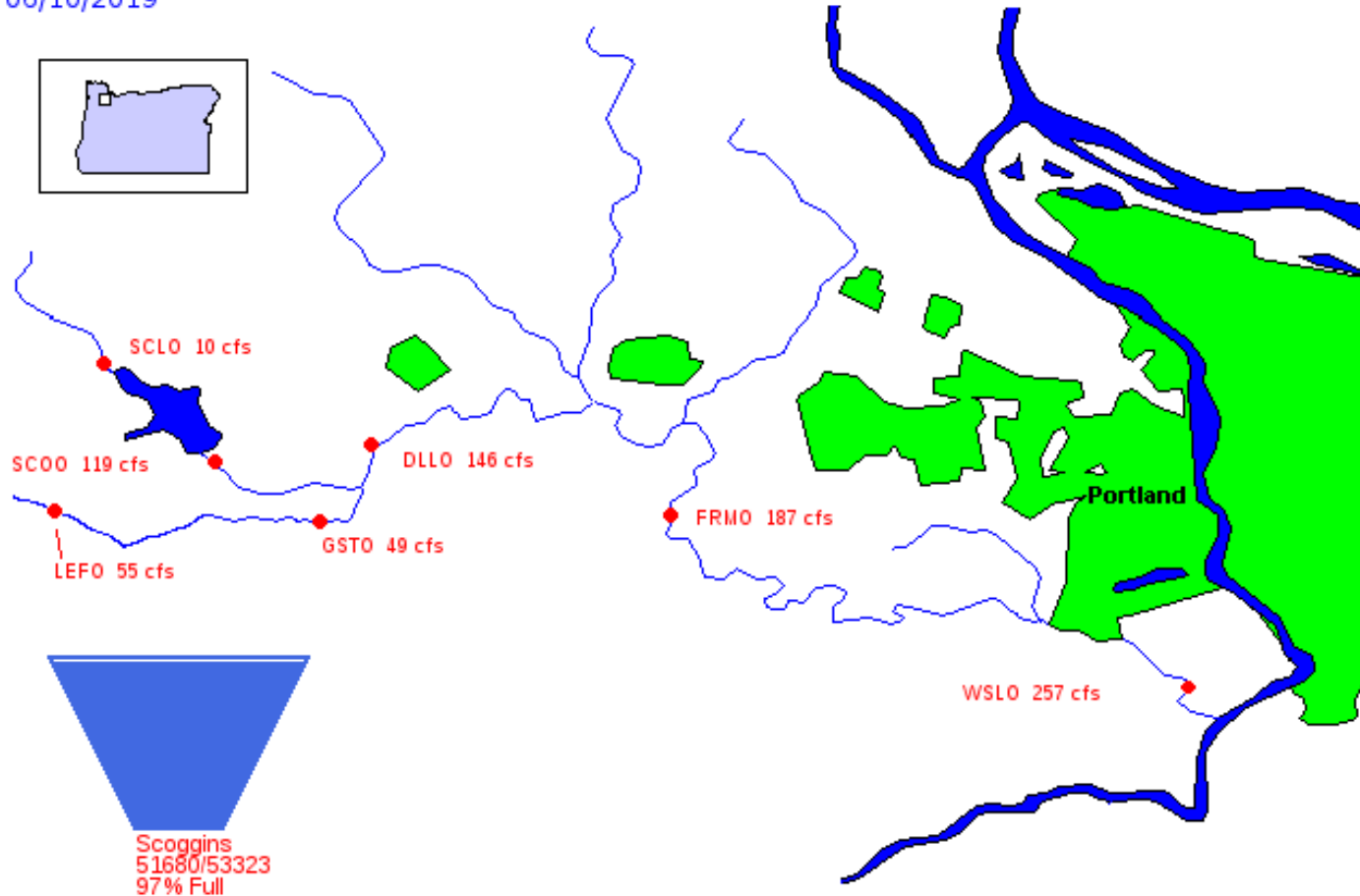
June 11, 2019



Current Conditions

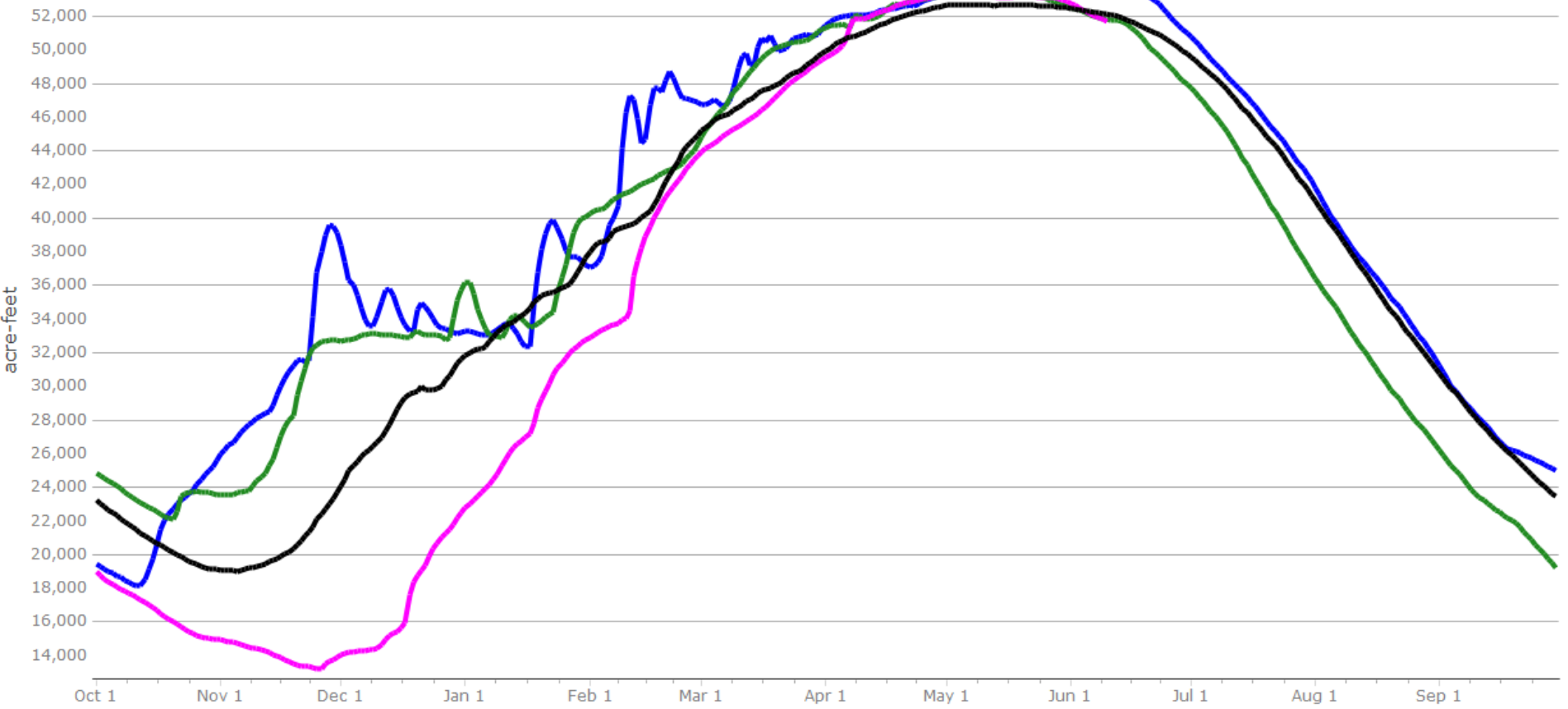
Tualatin River Basin

06/10/2019



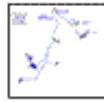
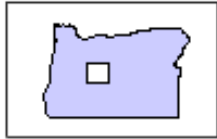
Scoggins Dam & Henry Hagg Lake nr Forest Grove, OR Elevation:

2017 2018 2019 avg

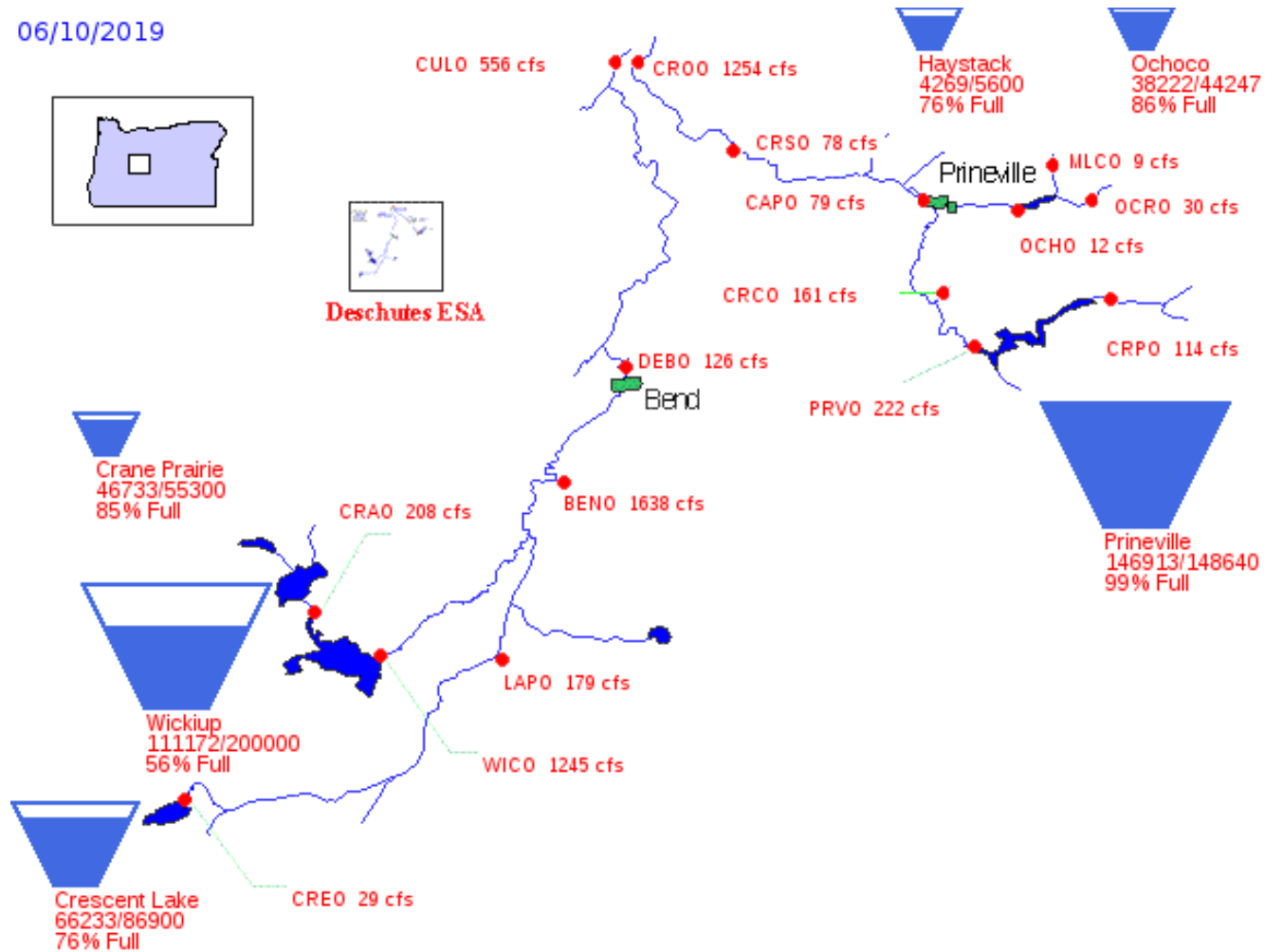


Deschutes River Basin

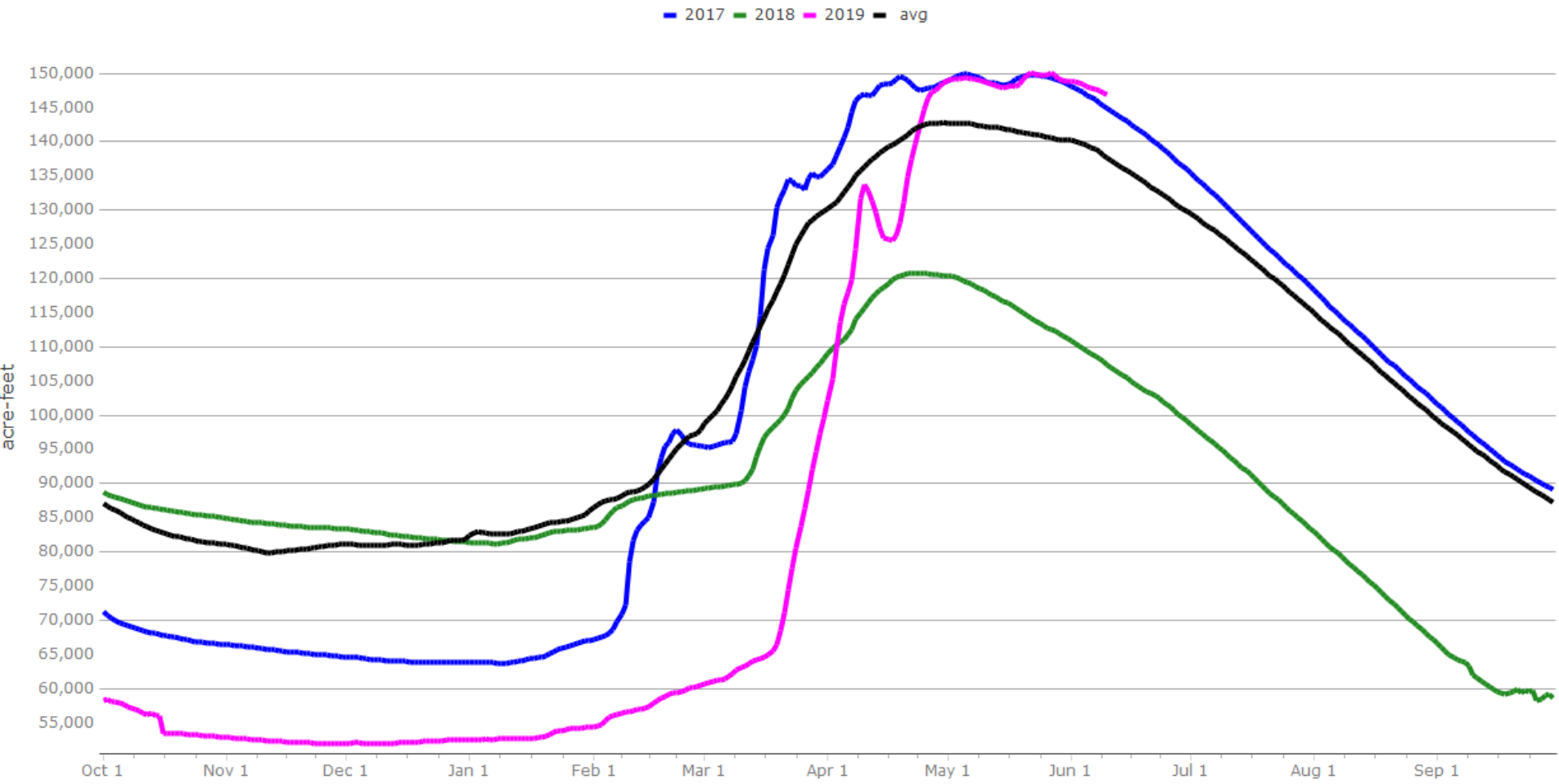
06/10/2019



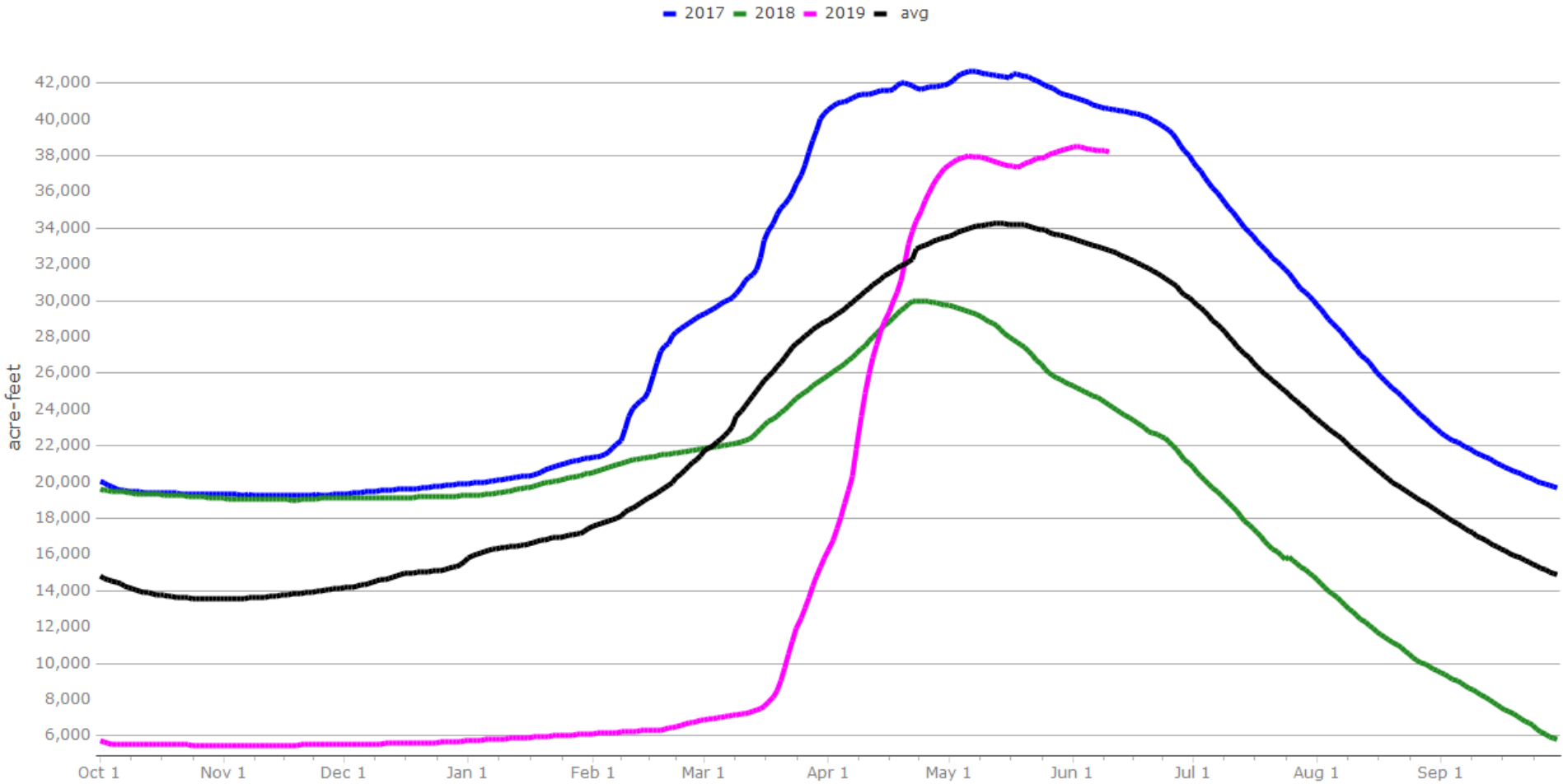
Deschutes ESA



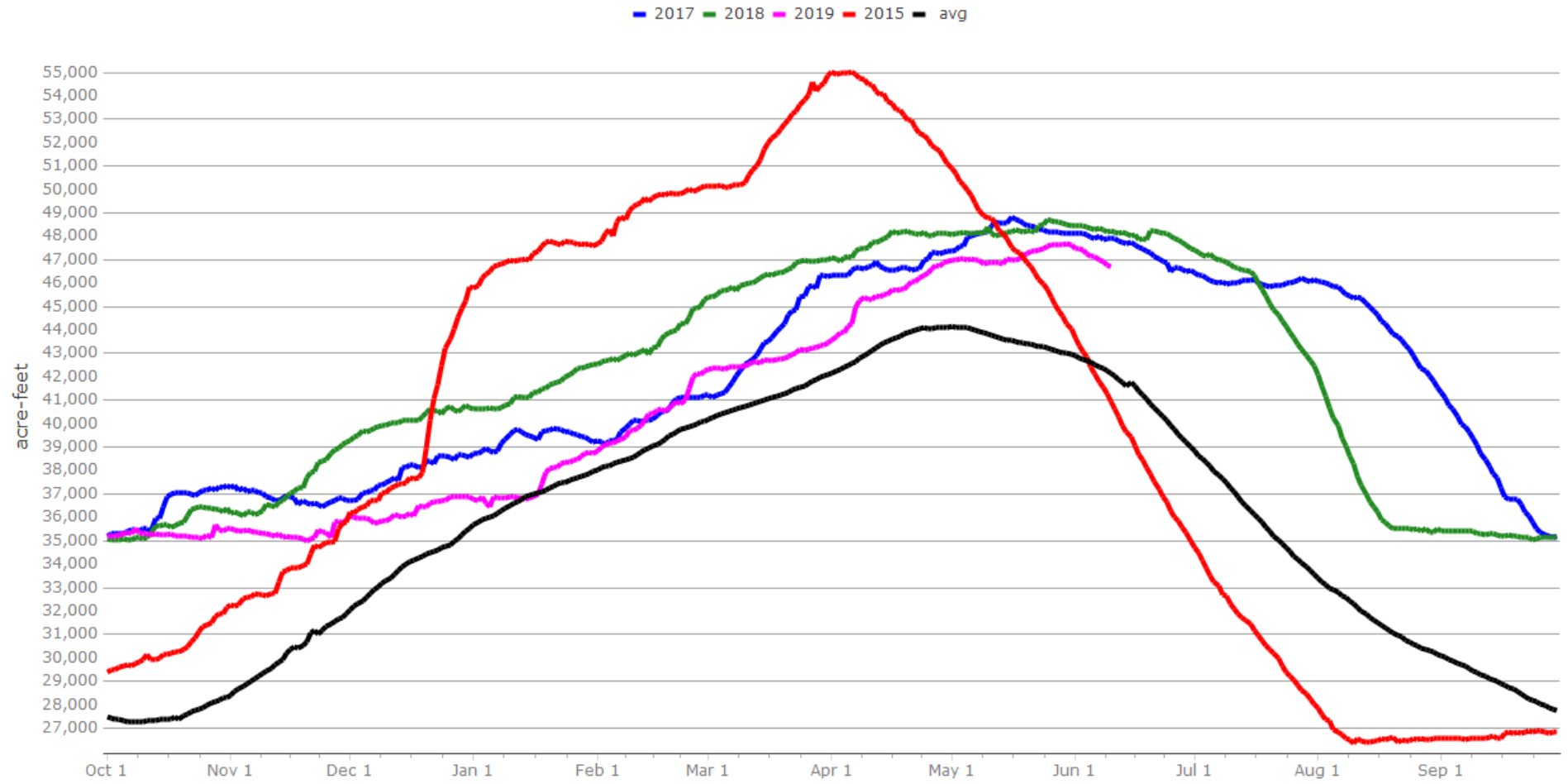
Prineville Reservoir nr Prineville, OR Elevation:



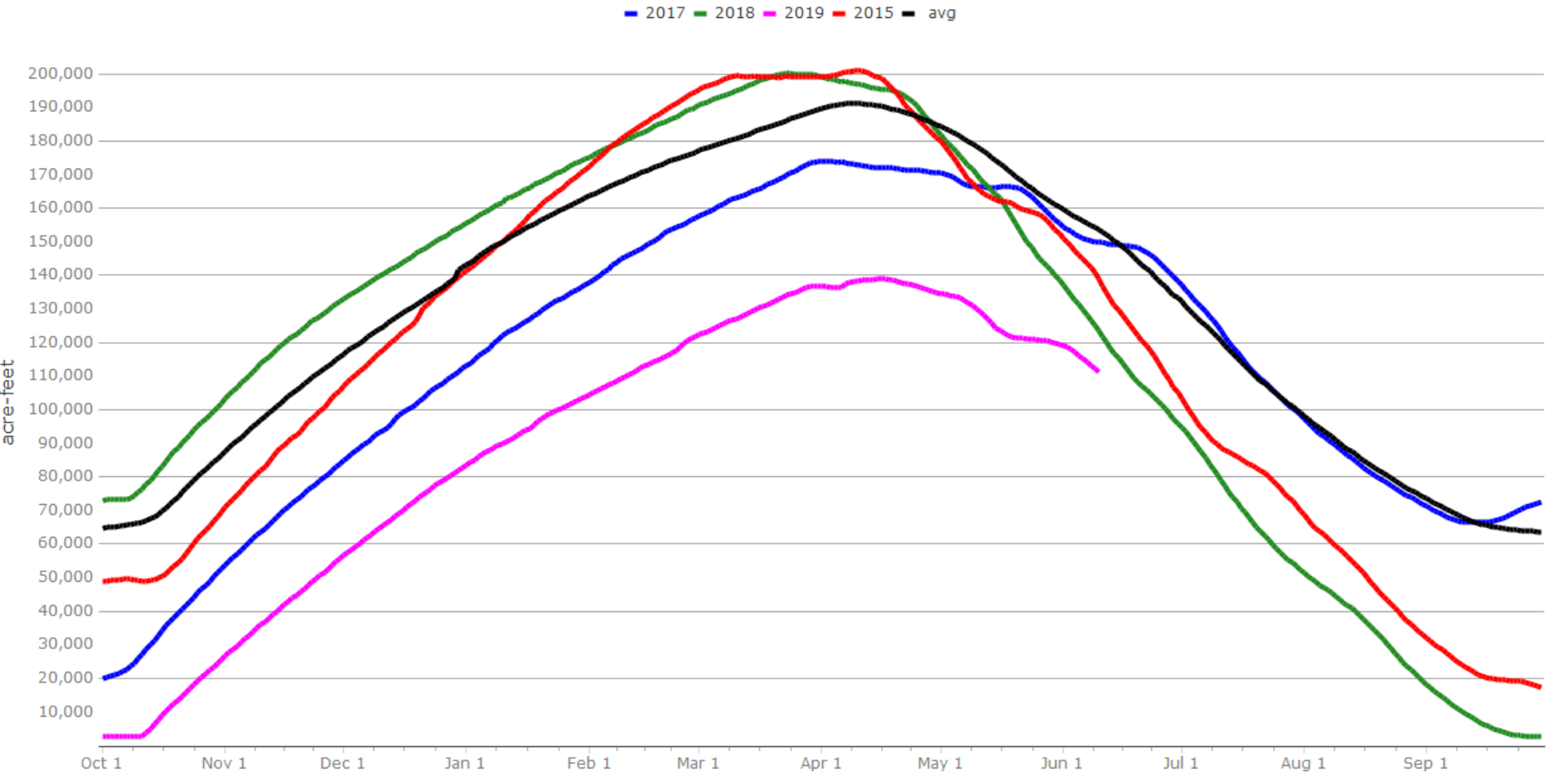
Ochoco Reservoir near Prineville, OR Elevation:



Crane Prairie Reservoir nr. LaPine, OR Elevation:

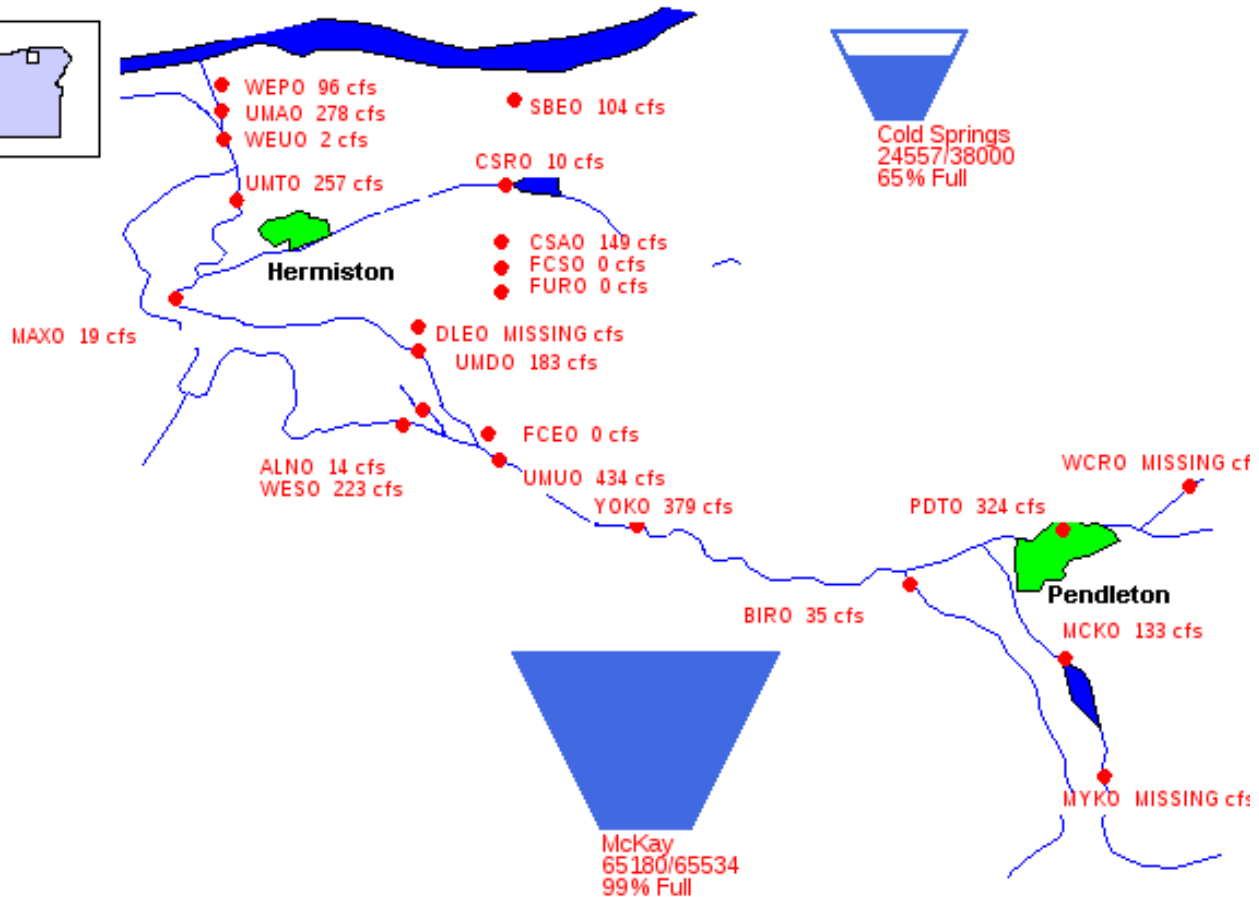
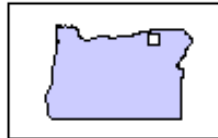


Wickiup Reservoir near LaPine, OR Elevation:

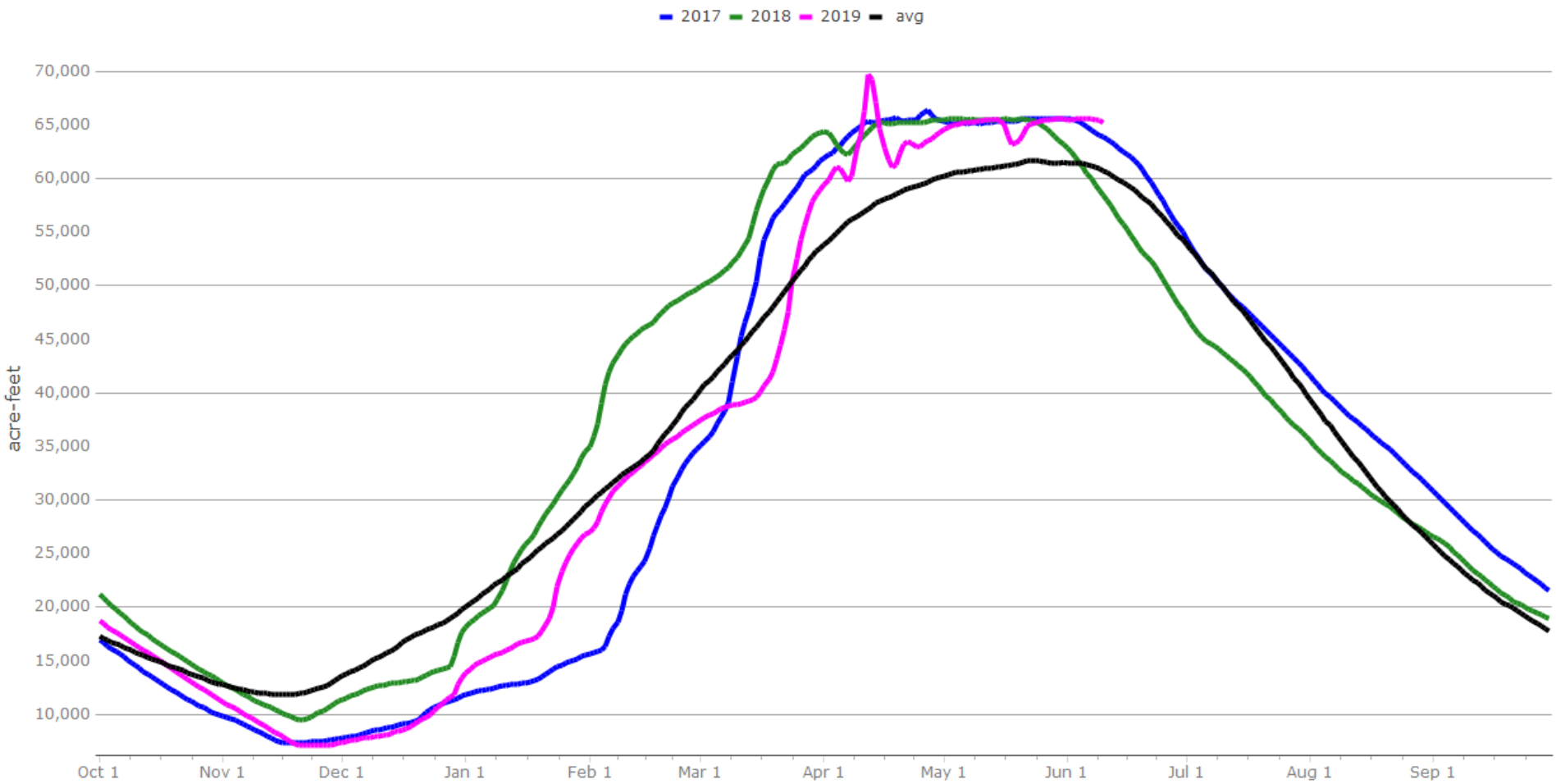


Umatilla River Basin

06/10/2019

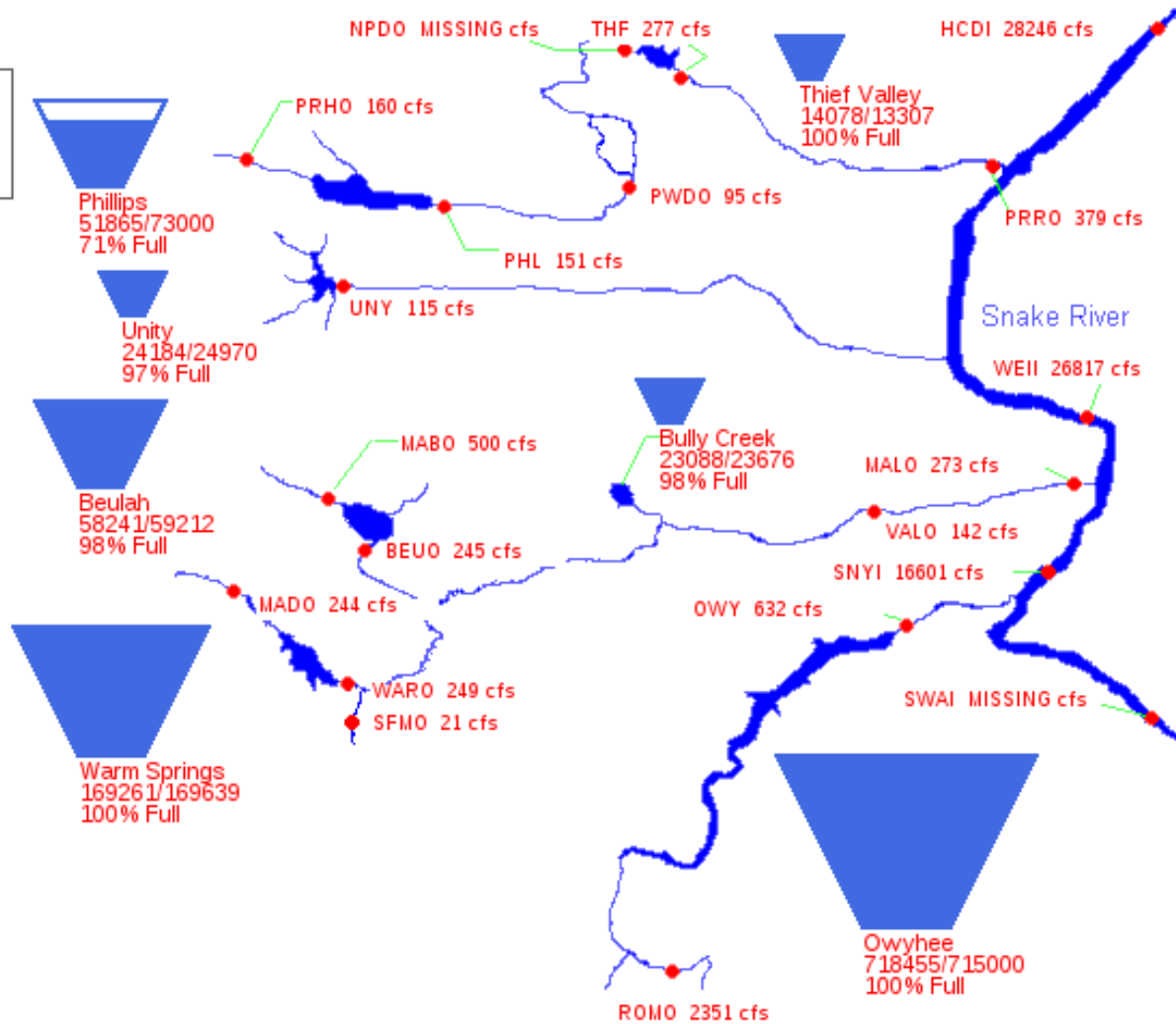
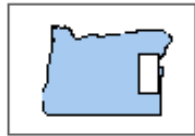


McKay Reservoir near Pendleton, OR Elevation:

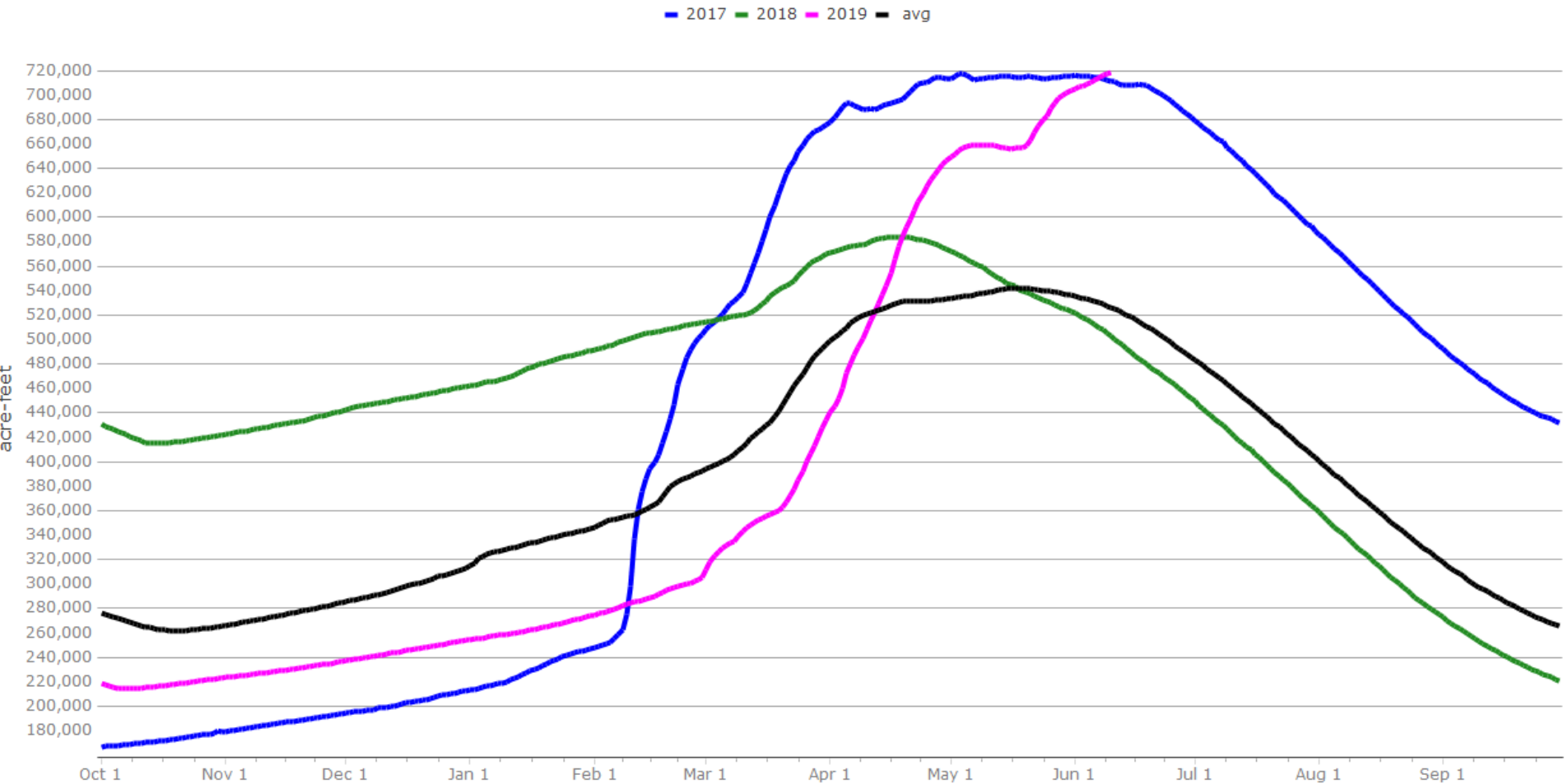


Southeastern Oregon

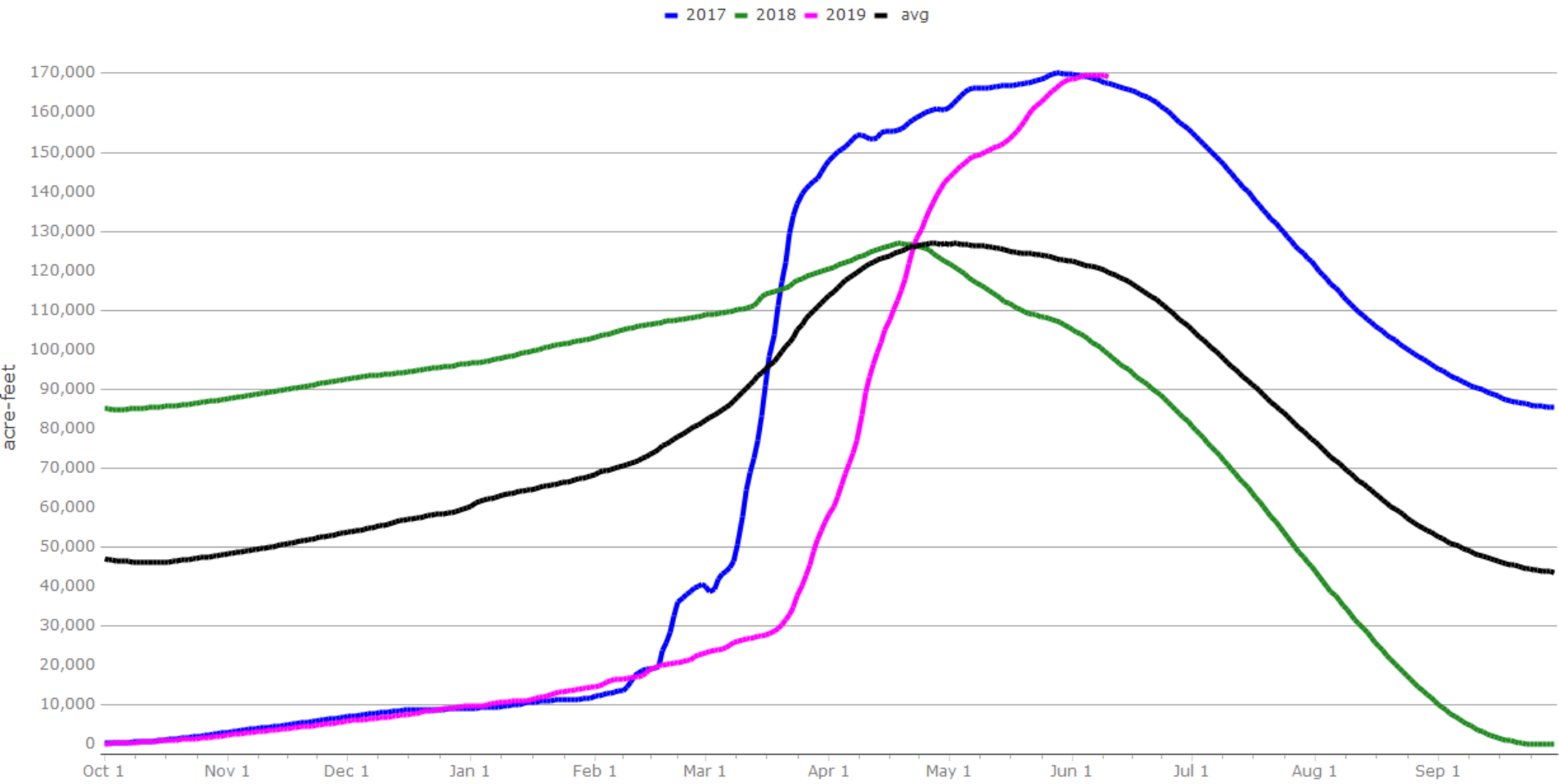
06/10/2019



Lake Owyhee and Owyhee River near Nyssa, OR Elevation:

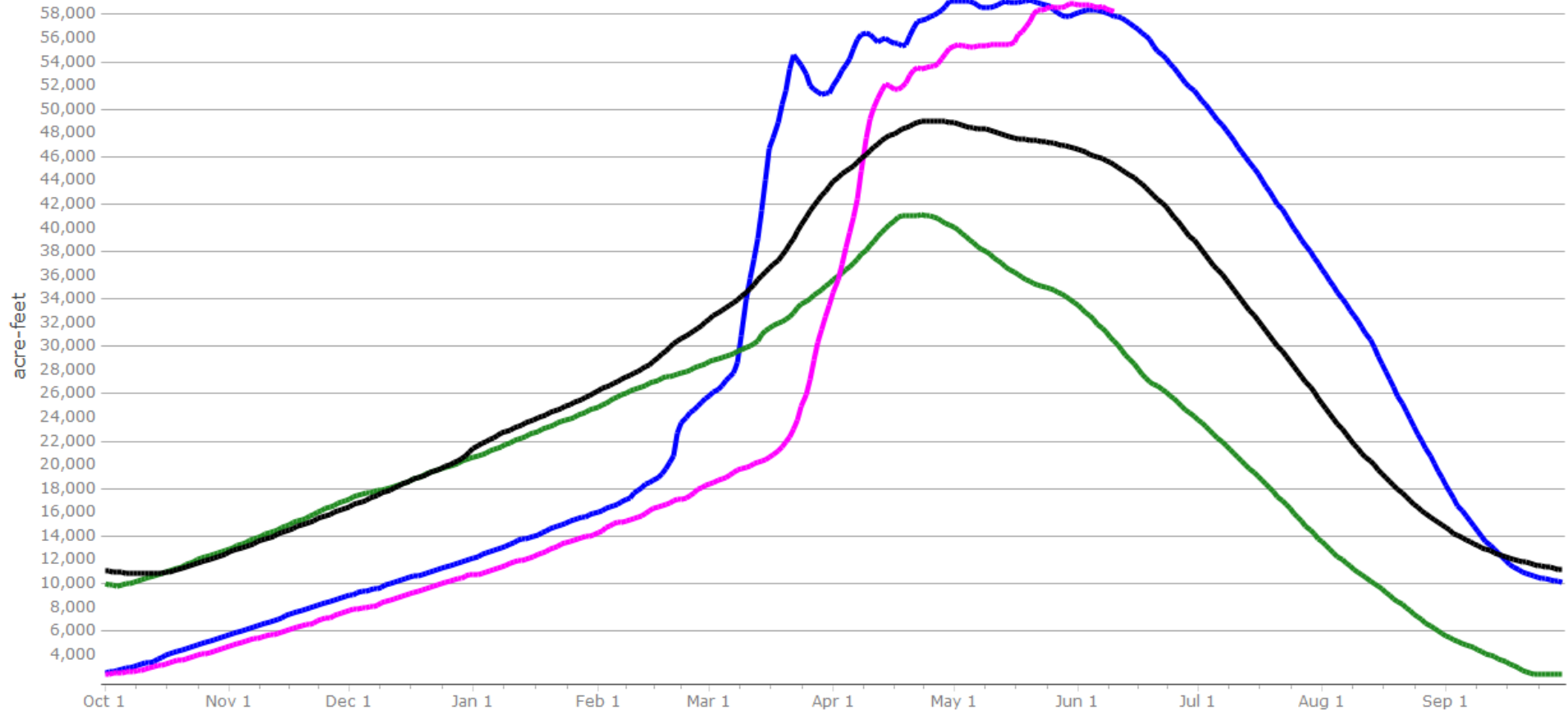


Warm Springs Dam and Reservoir nr Riverside, OR Elevation:

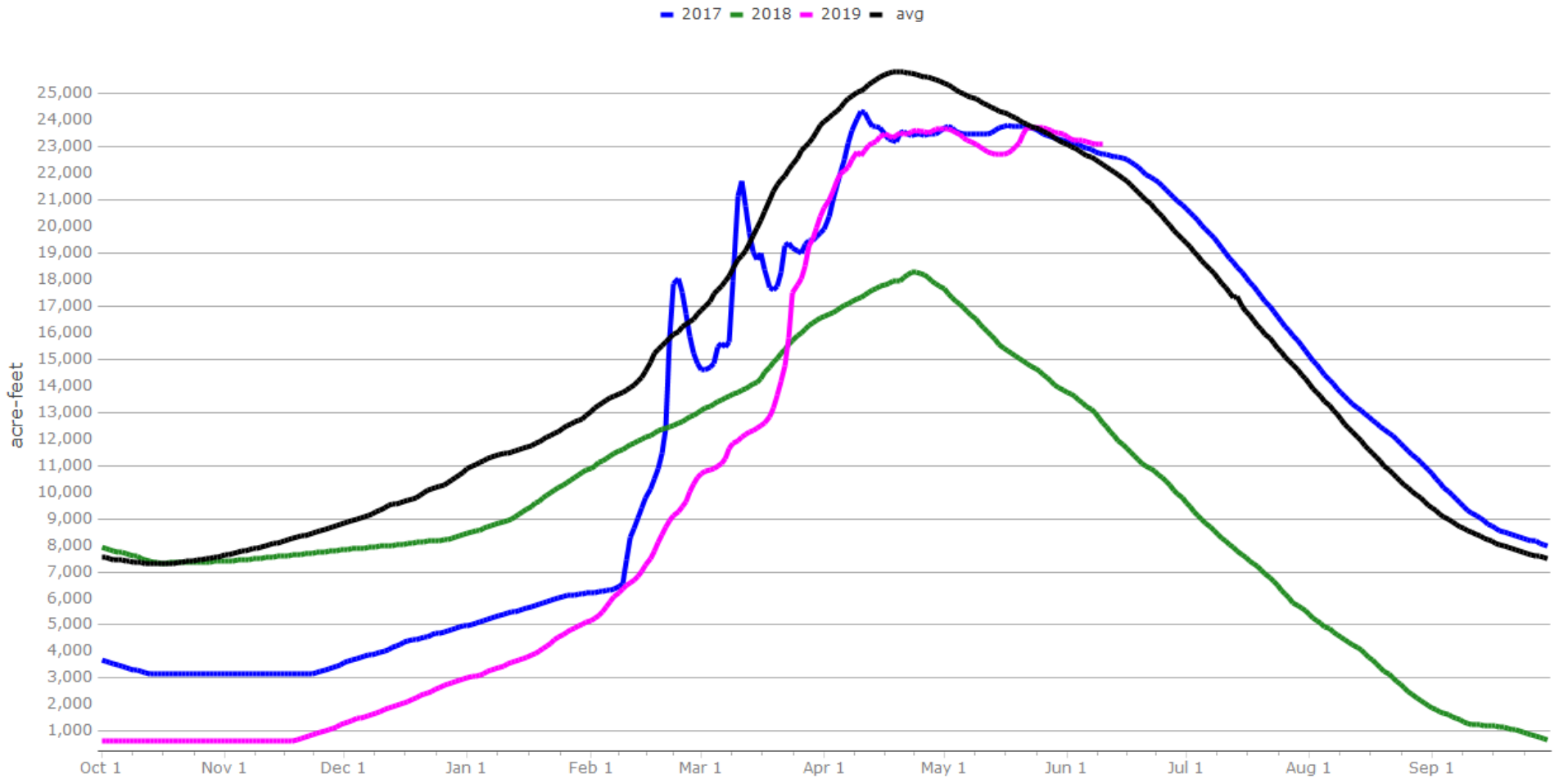


Agency Valley (Beulah) Dam and Reservoir Elevation:

2017 2018 2019 avg

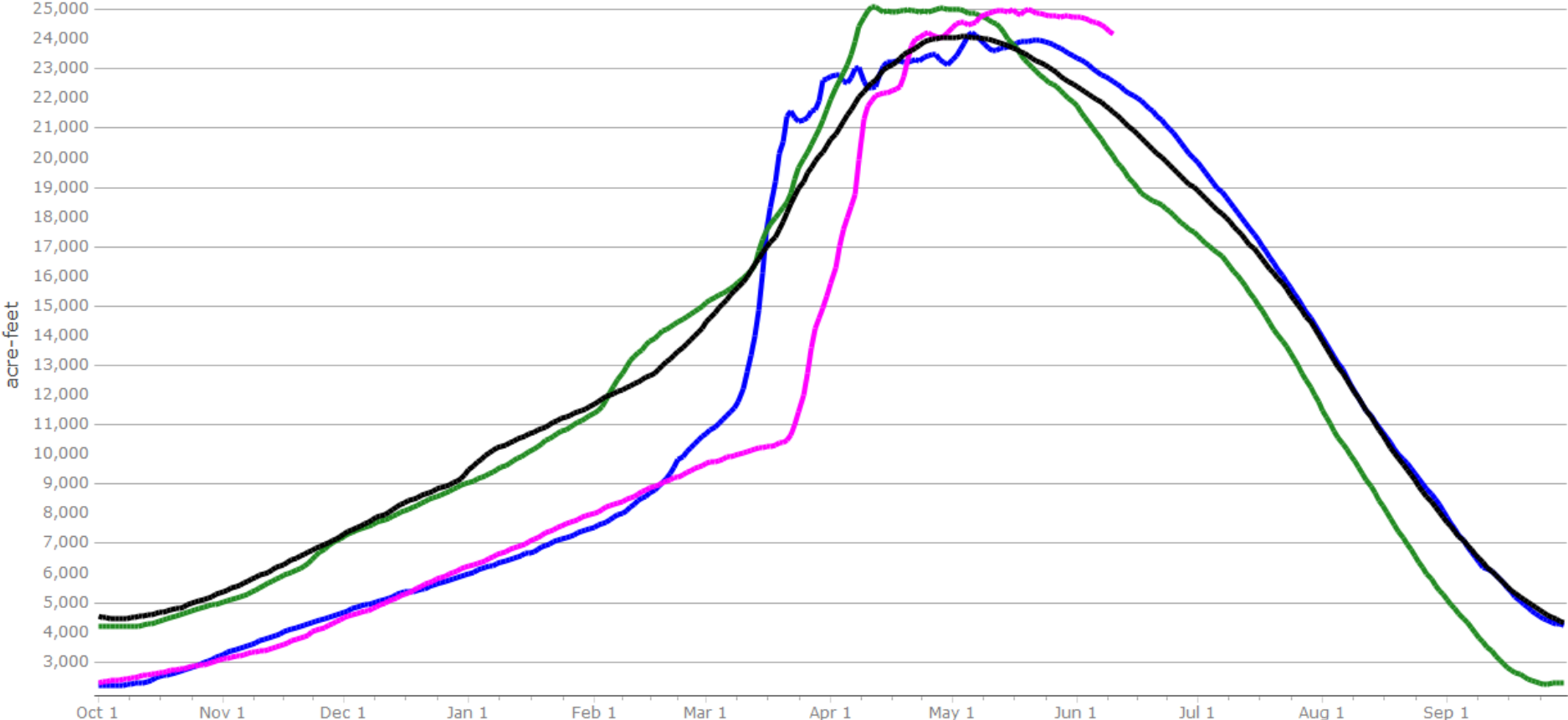


Bully Creek Dam and Reservoir near Vale, OR Elevation:



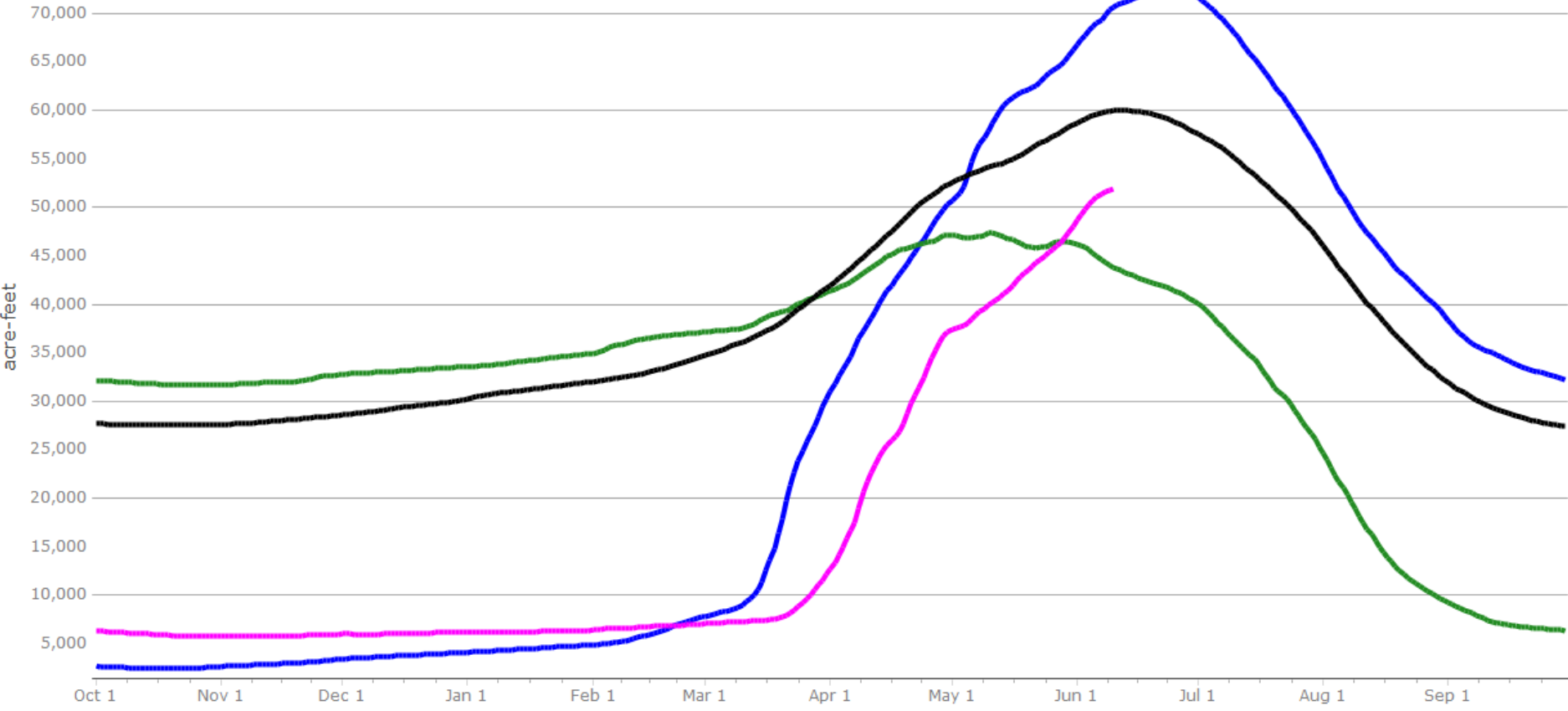
Unity Reservoir and Burnt River near Unity, Oregon Elevation:

2017 2018 2019 avg

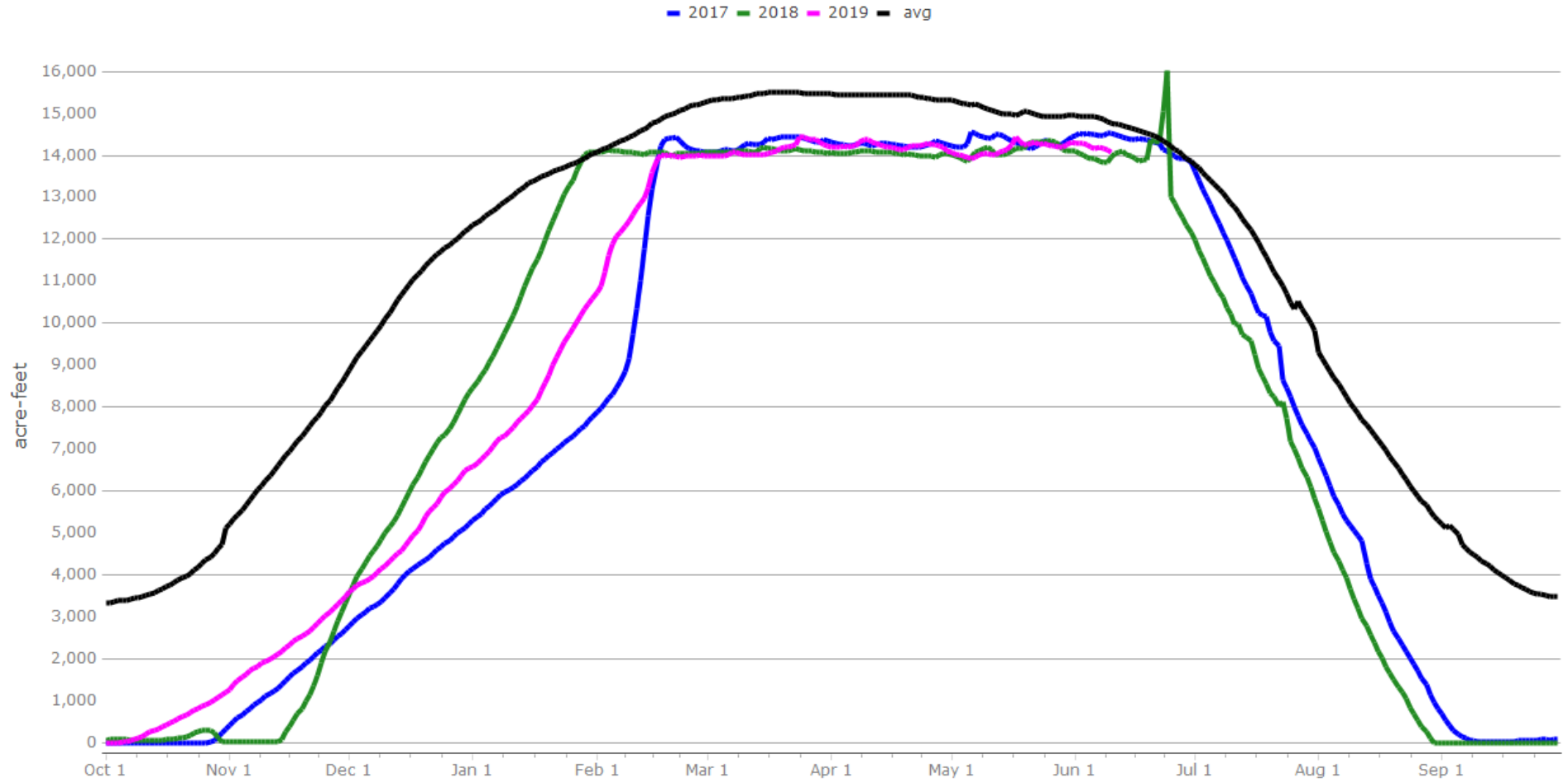


Mason Dam and Phillips Lake near Sumpter, OR Elevation:

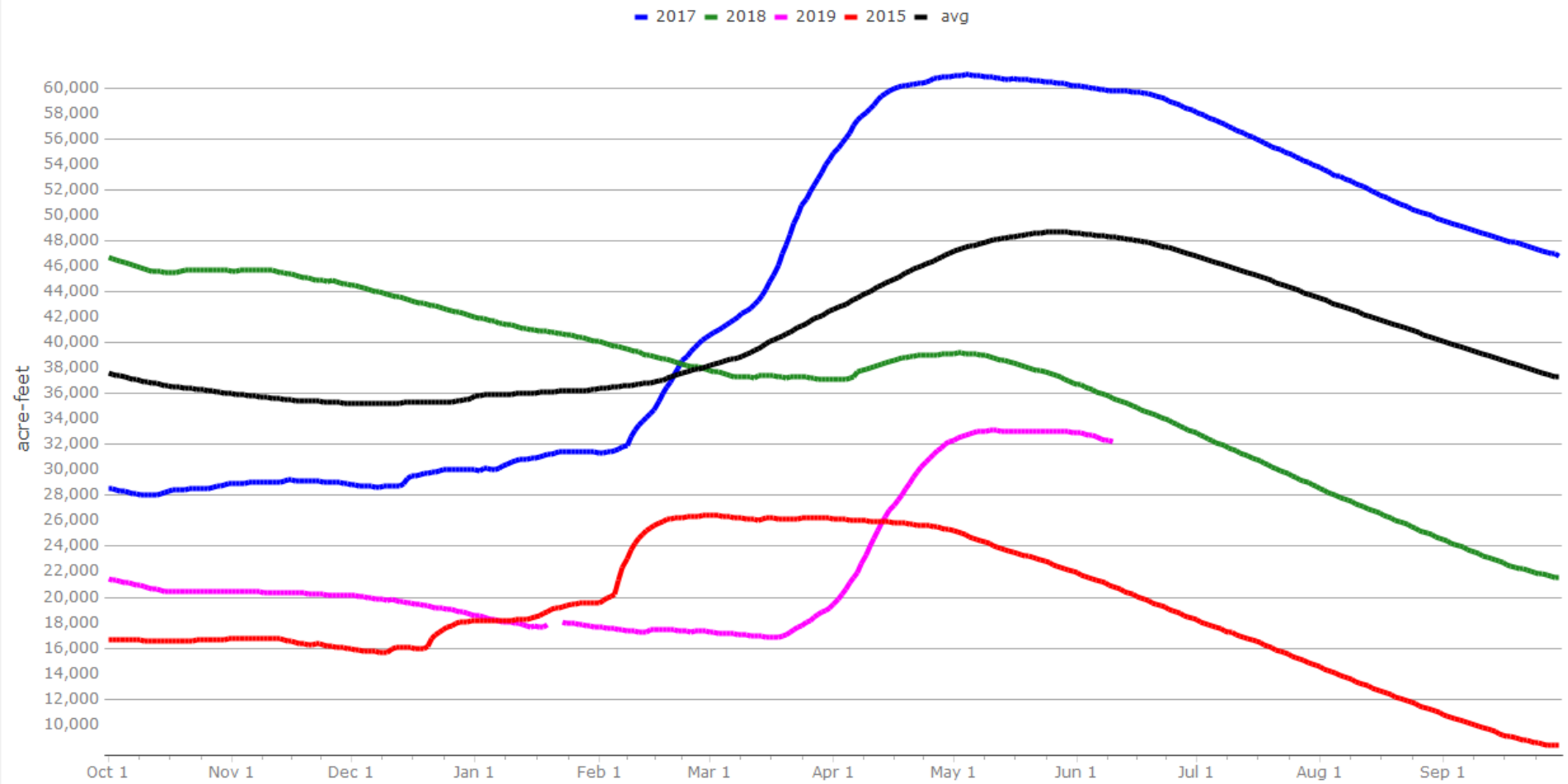
2017 2018 2019 avg



Thief Valley Dam and Reservoir near North Powder, OR Elevation:

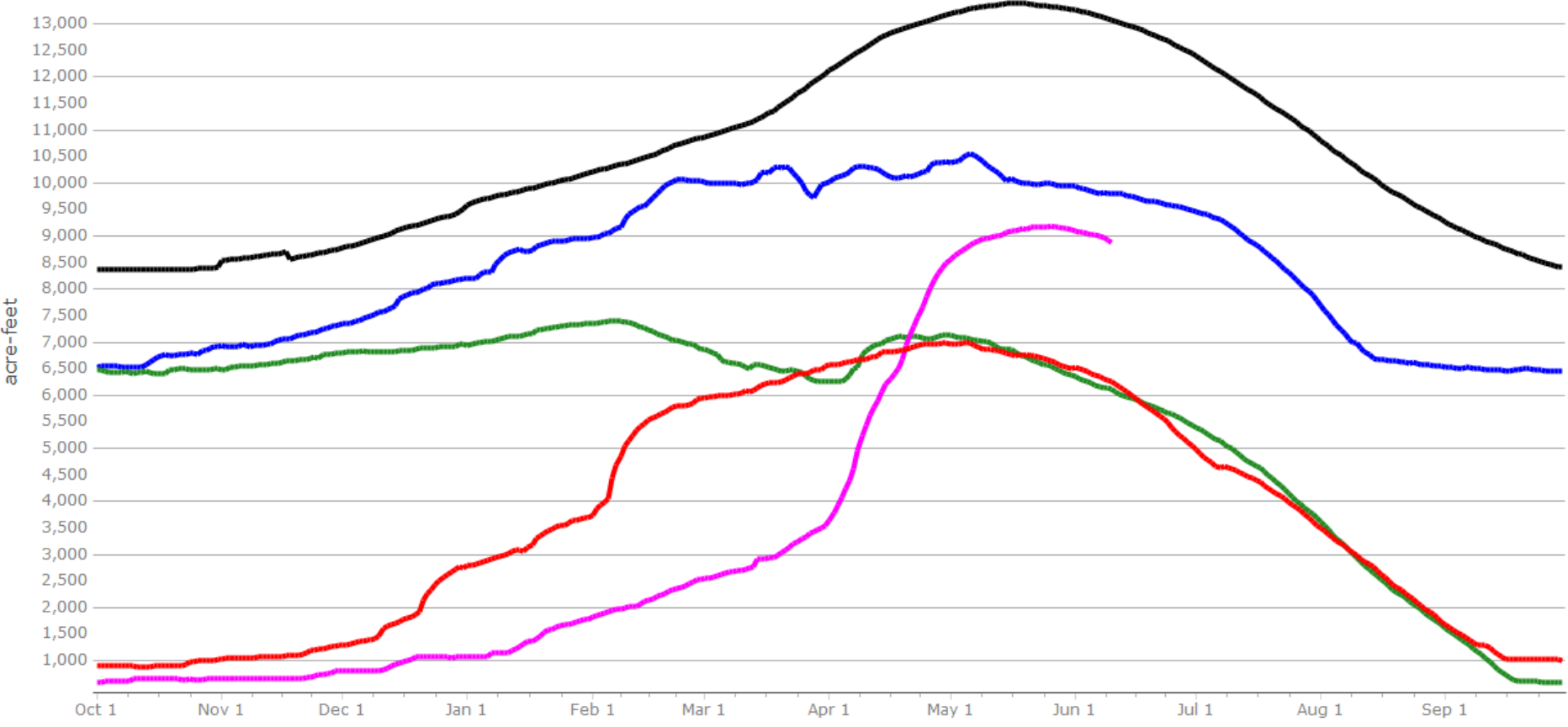


Howard Prairie Lake and Dam near Ashland, OR Elevation:



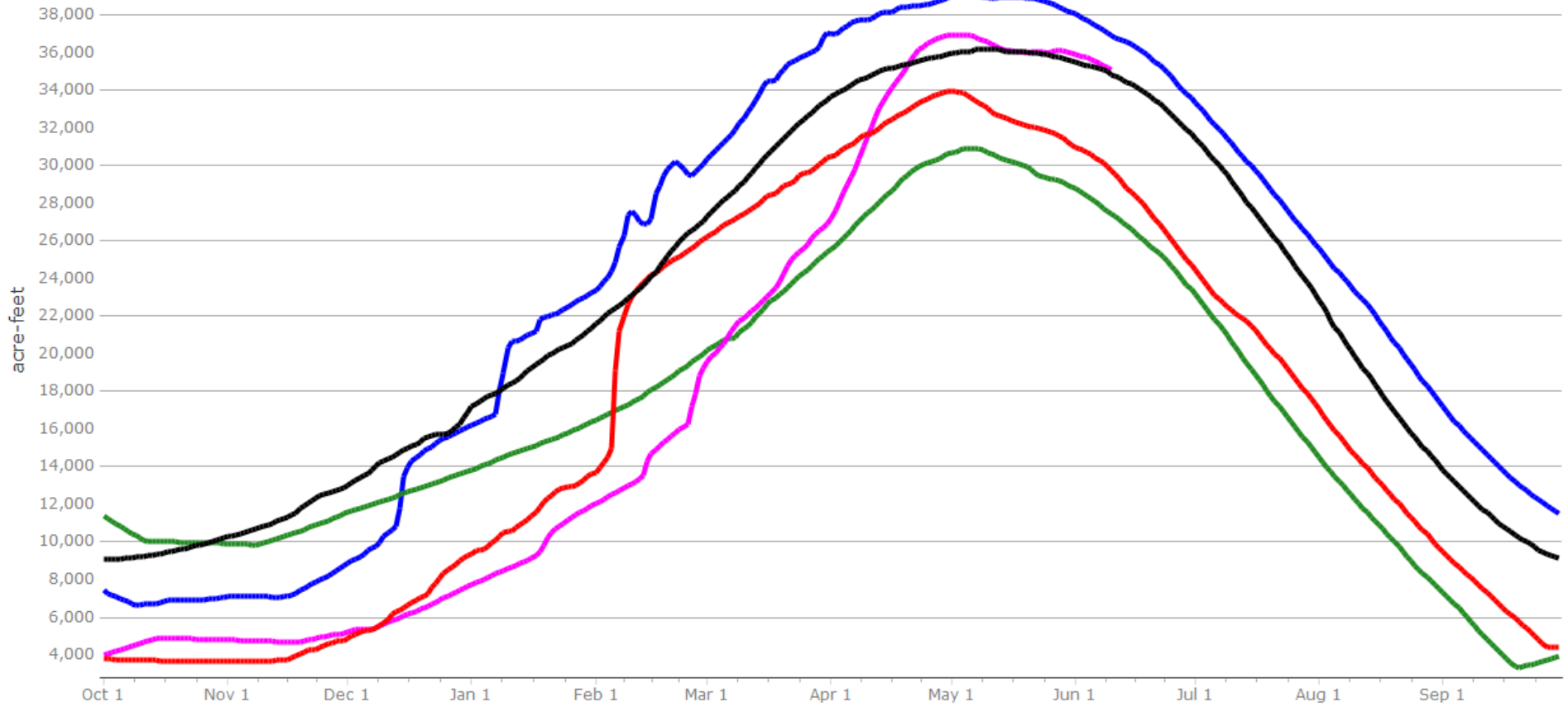
Hyatt Dam and Reservoir near Ashland, OR Elevation:

2017 2018 2019 2015 avg



Emigrant Dam and Lake near Ashland, OR Elevation:

2017 2018 2019 2015 avg



Peter Cooper
USBR PN Region
River and Reservoir Operations Group
pcooper@usbr.gov



RECLAMATION
Managing Water in the West

- April 2019 Flooding Story Map: <https://storymaps-nextgen.arcgis.com/beta/stories/2cfe3ce9706045c585b5f1f3d1c79bb0>
- Past Disasters Website: <https://www.oregon.gov/oem/emops/Pages/Past-Disasters.aspx>