

Oregon Water Supply Availability Committee

January 8, 2019



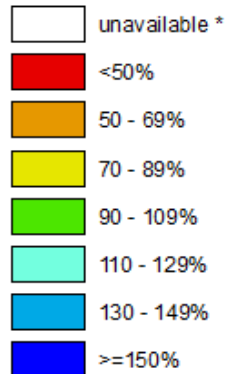
Rime Ice Crystals – Crater Lake N.P.

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

Statewide SNOTEL Snowpack is 39% of normal

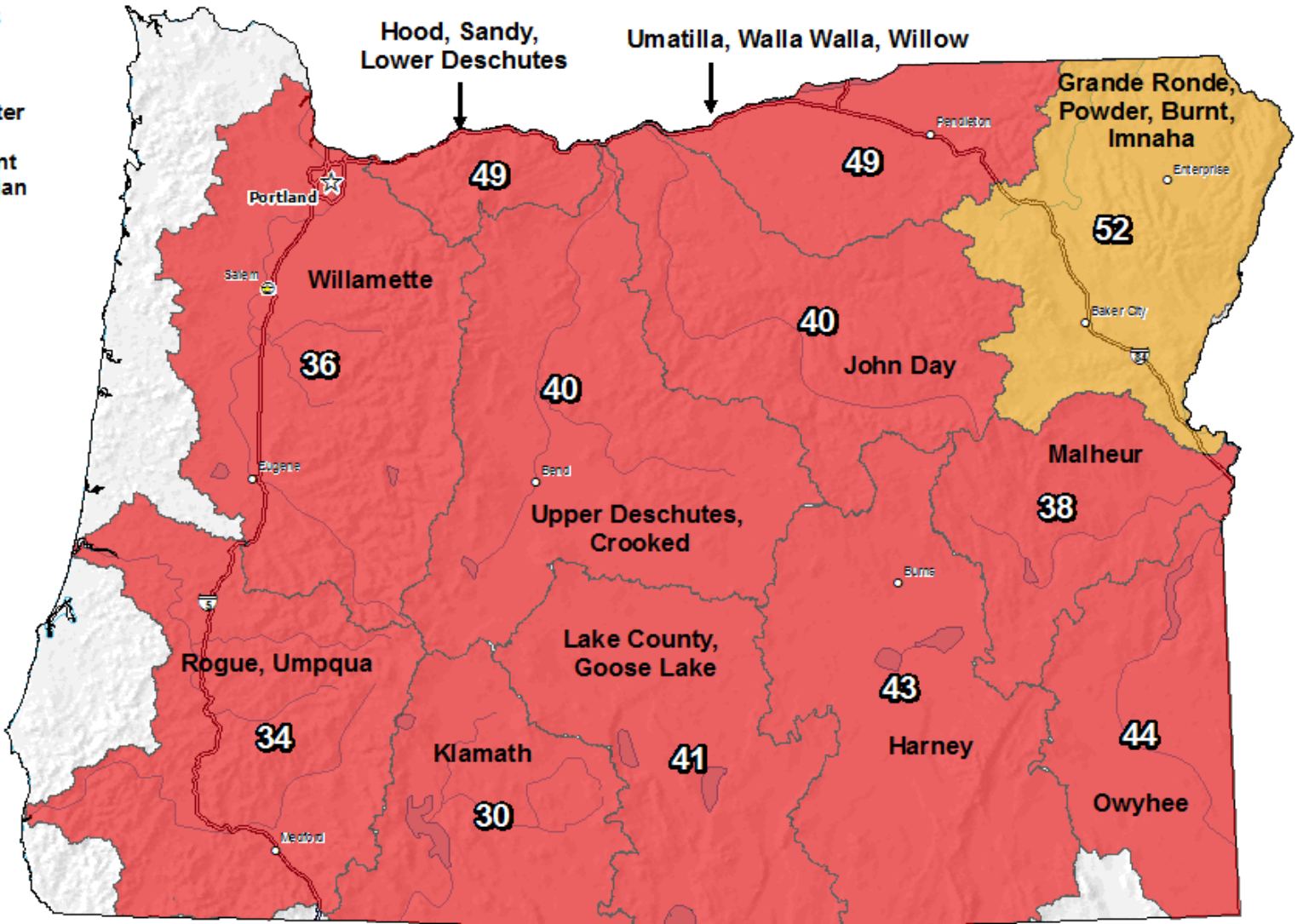
Jan 09, 2018

Current Snow Water Equivalent (SWE) Basin-wide Percent of 1981-2010 Median

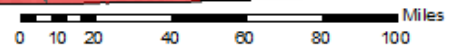


* Data unavailable at time of posting or measurement is not representative at this time of year

Provisional Data
Subject to Revision



The snow water equivalent percent of normal represents the current snow water equivalent 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).

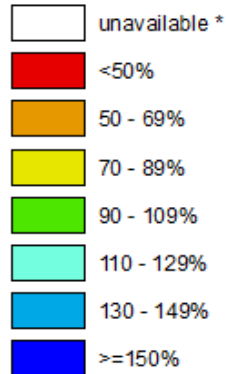


Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Statewide SNOTEL Snowpack is 73% of normal (01/08)

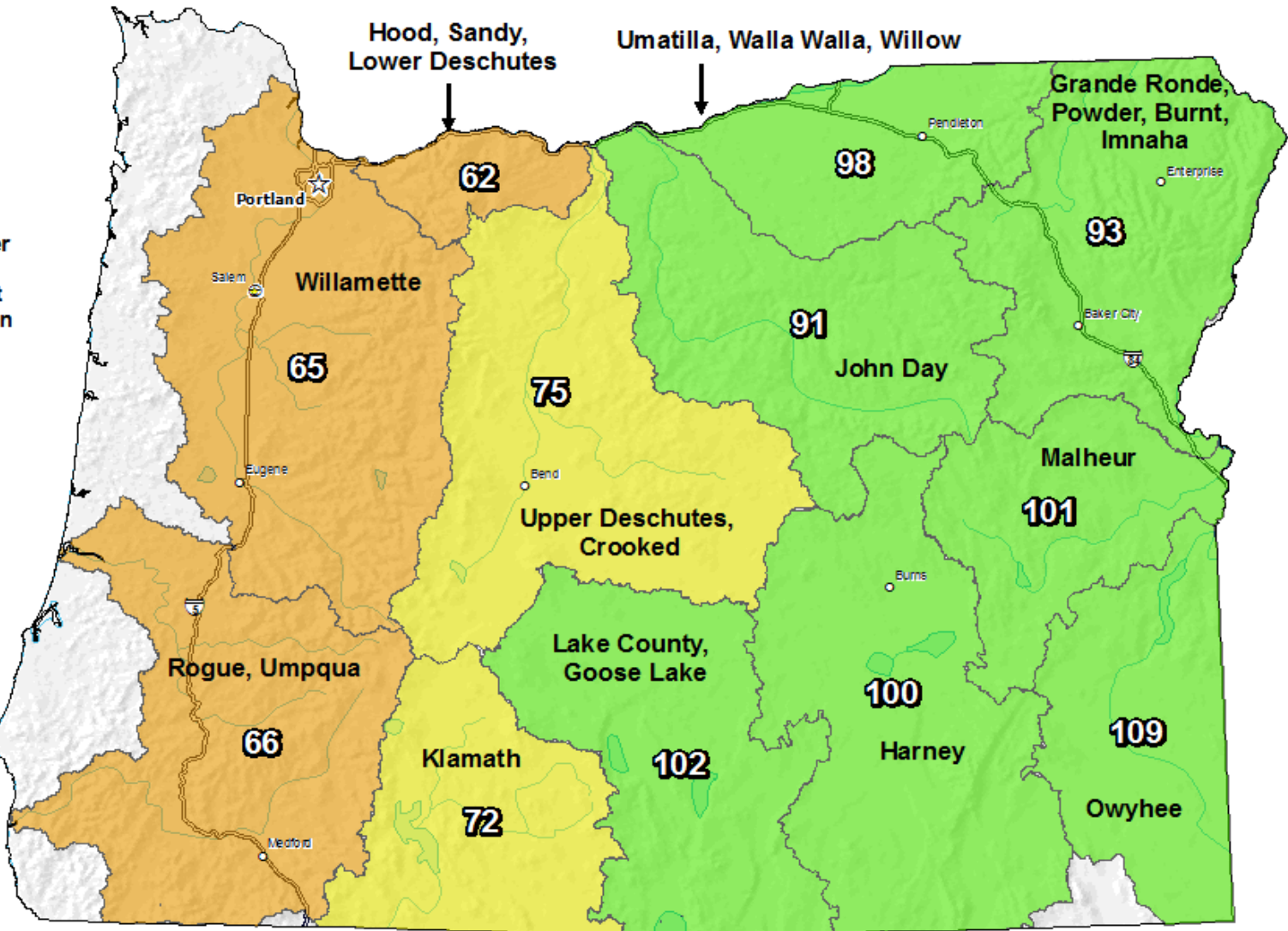
Jan 07, 2019

Current Snow Water Equivalent (SWE) Basin-wide Percent of 1981-2010 Median



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

Provisional Data
Subject to Revision



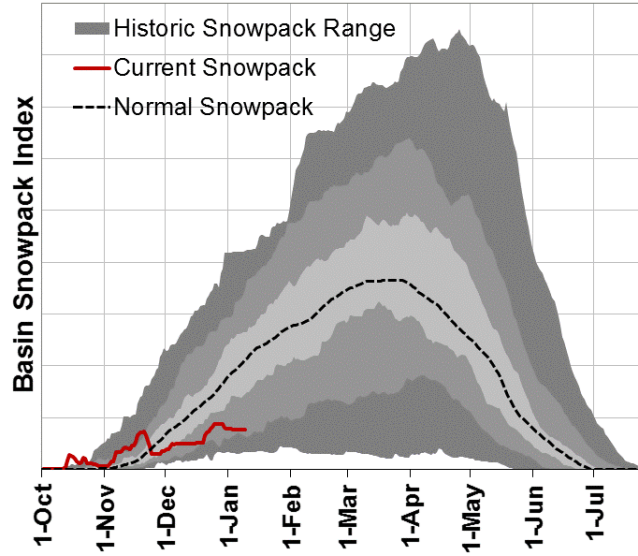
The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

0 10 20 40 60 80 100 Miles

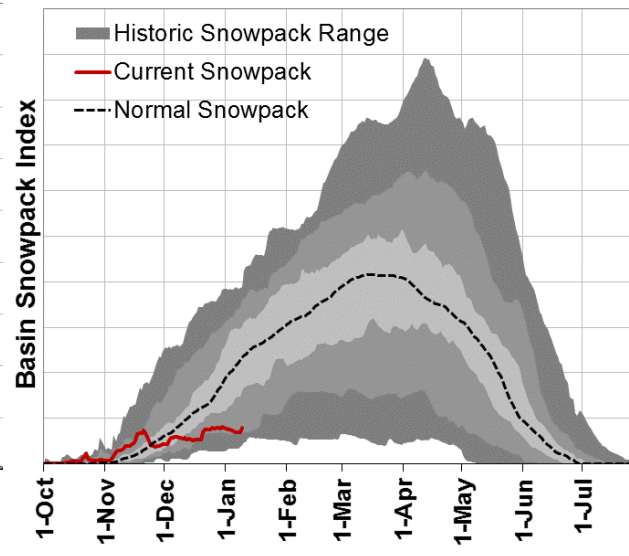
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

SNOWPACK GRAPHS – January 9, 2018

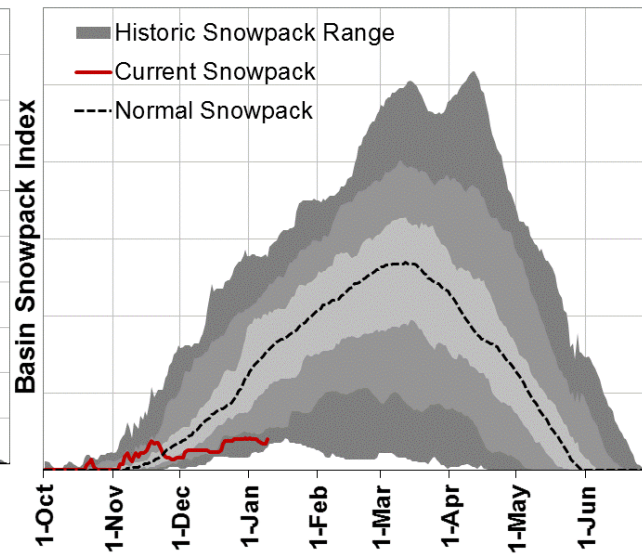
Willamette



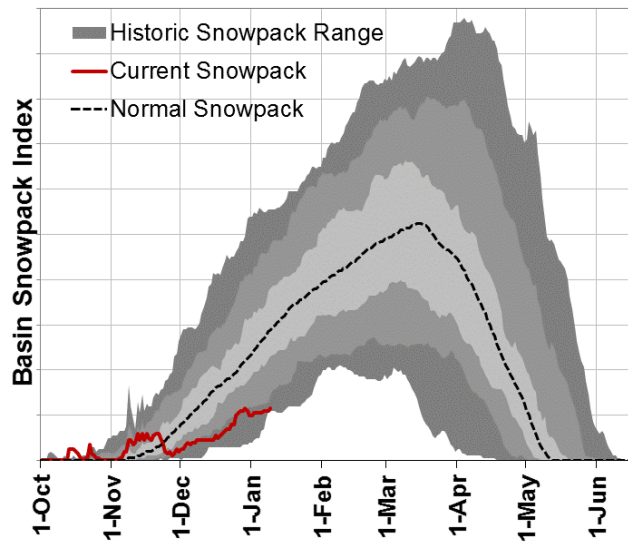
Rogue/Umpqua



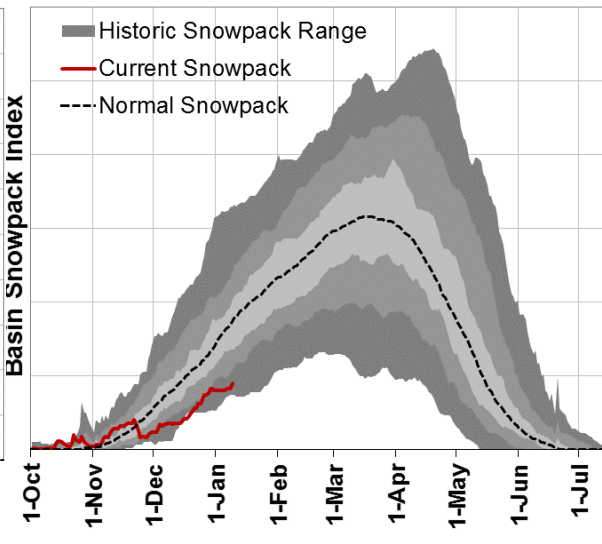
Klamath



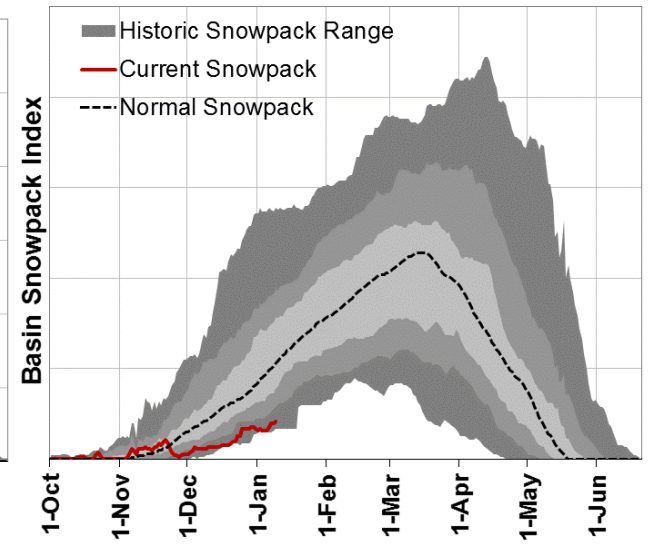
John Day



Grande Ronde/Powder/Burnt

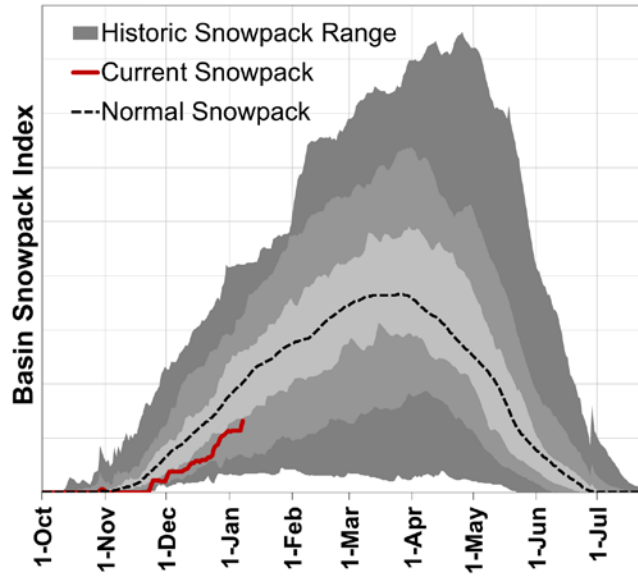


Owyhee/Malheur

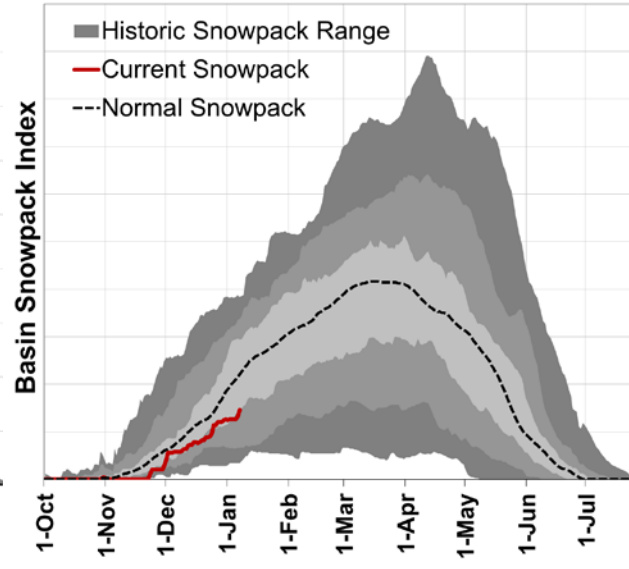


SNOWPACK GRAPHS – January 8, 2019

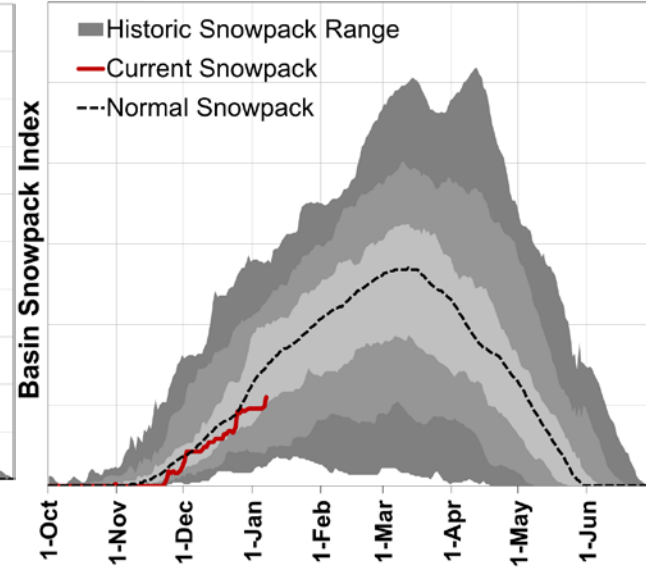
Willamette



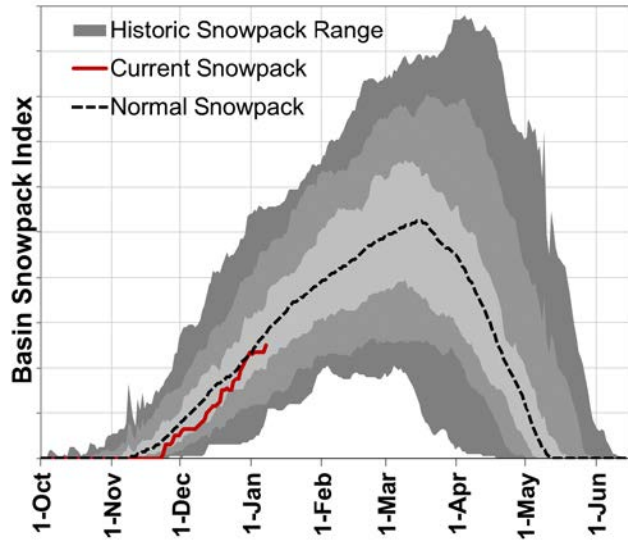
Rogue/Umpqua



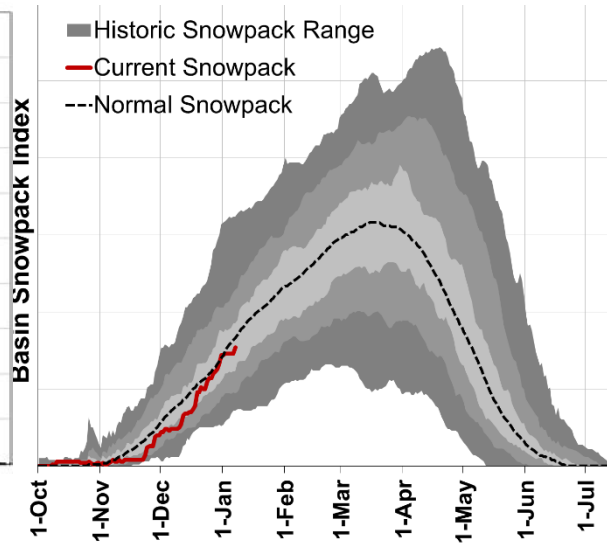
Klamath



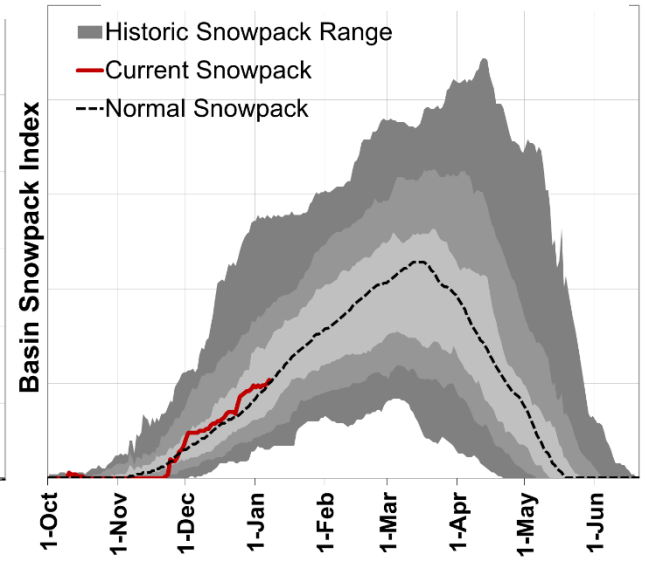
John Day



Grande Ronde/Powder/Burnt



Owyhee/Malheur

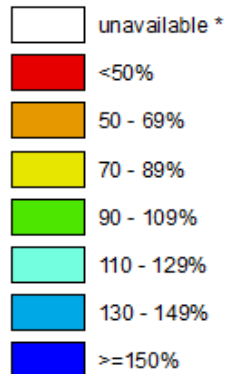


Statewide SNOTEL Precipitation is 85% of normal

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

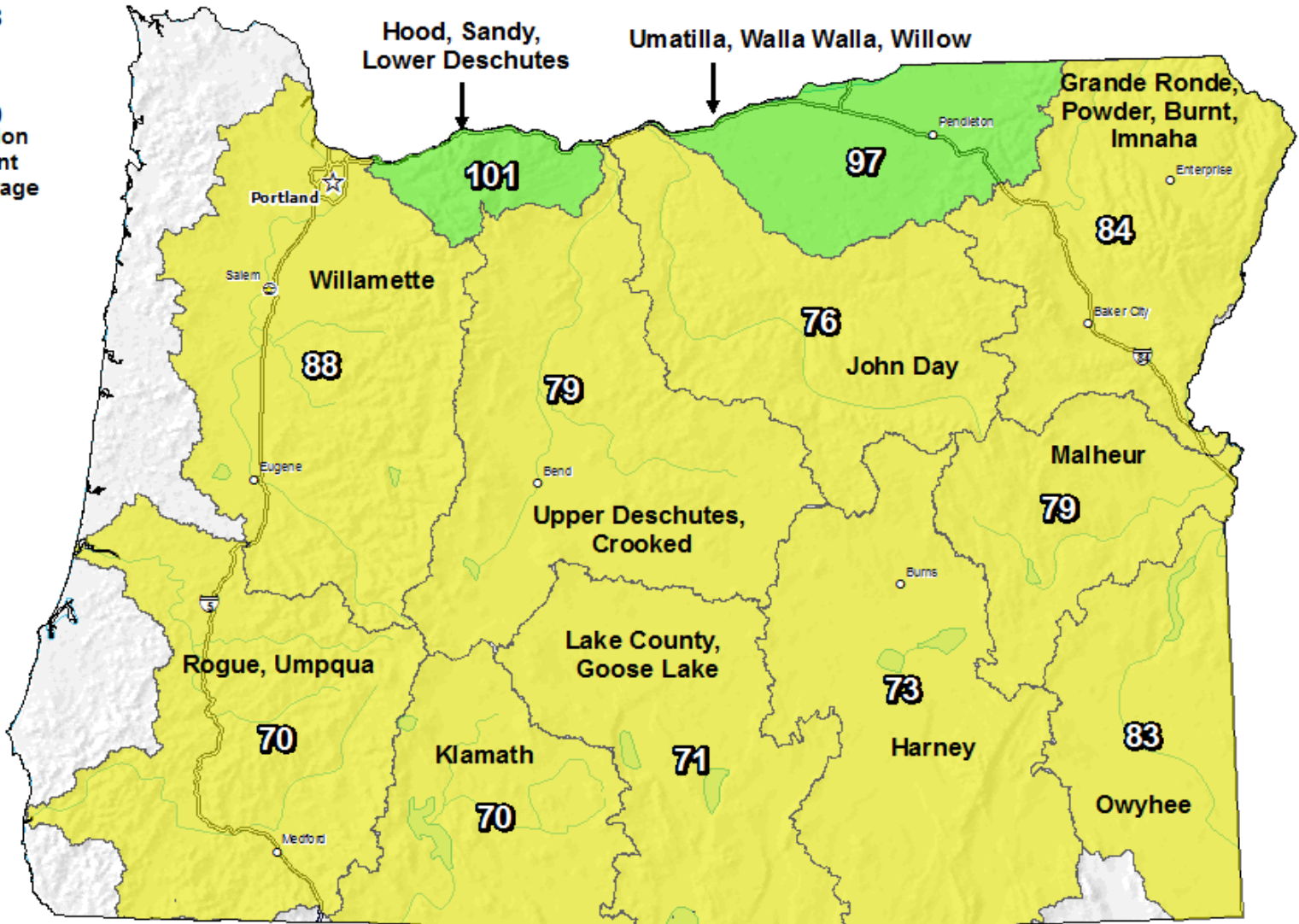
Jan 09, 2018

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

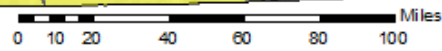


* Data unavailable at time of posting or measurement is not representative at this time of year

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).



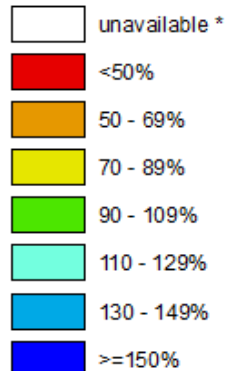
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Statewide SNOTEL Precipitation is 78% of normal (01/08)

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

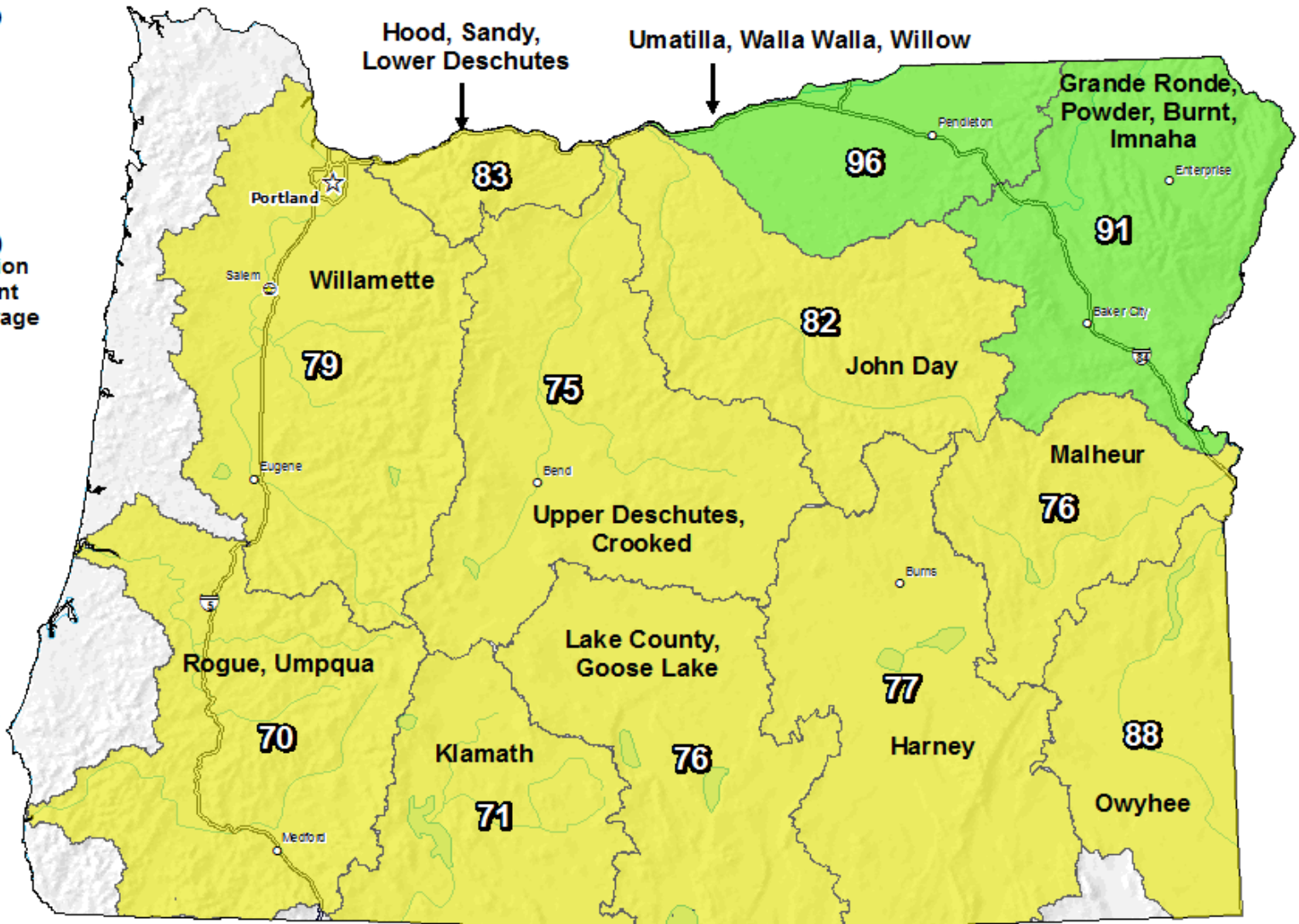
Jan 07, 2019

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

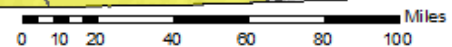


* Data unavailable at time
of posting or measurement
is not representative at this
time of year

*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>

January 1 Streamflow Volume Forecast % of Average 50% Exceedance Probability

Selected Stations: 885

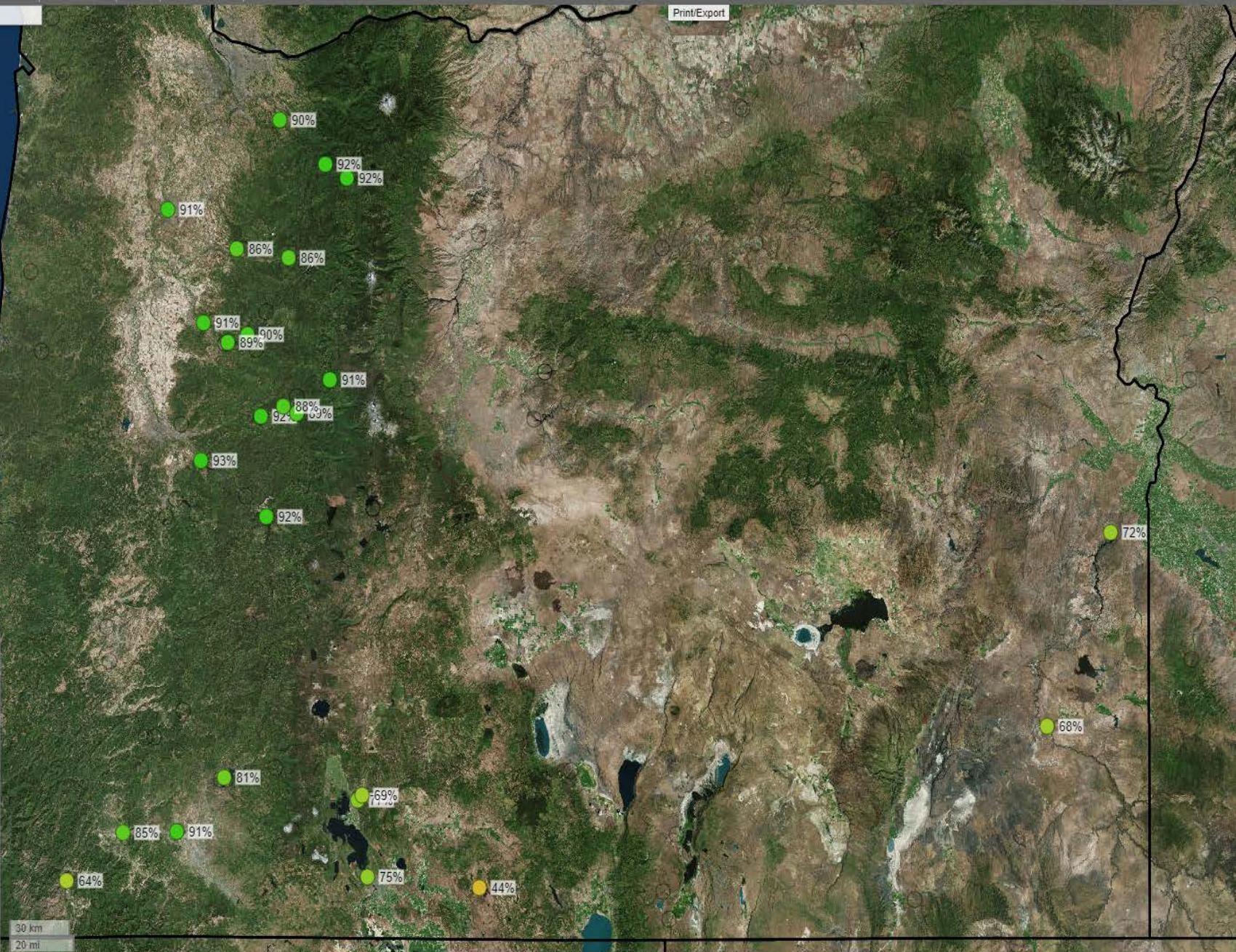
Print/Export



Forecast Volume
 50% Exceedance Probability
 Percent NRCS 1981-2010
 Average
 Primary Period/
 January 1, 2019

≥ 200%
175%
150%
125%
100%
75%
50%
25%
≤ 0%

NRCS Natural Resources Conservation Service
 Created 1-07-2019, 01:38 PM PST



Oregon Water Supply Availability Committee

January 8, 2019



Rime Ice Crystals – Crater Lake N.P.

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

Thank you

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Oregon Water Supply Availability

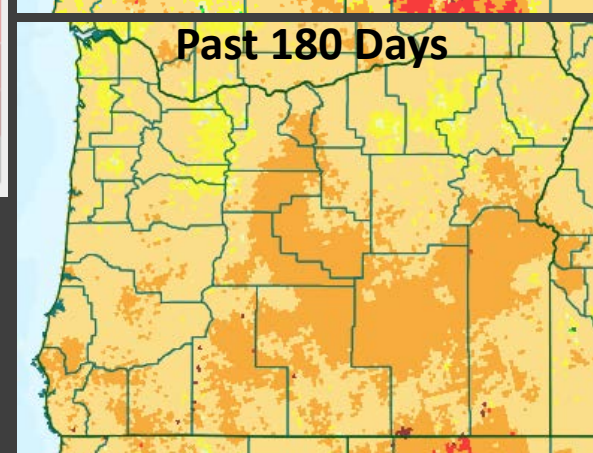
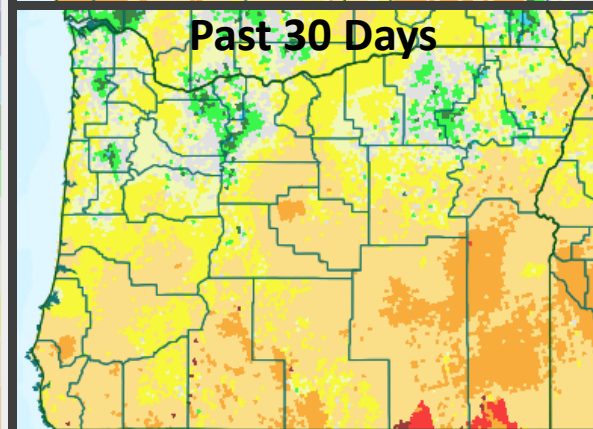
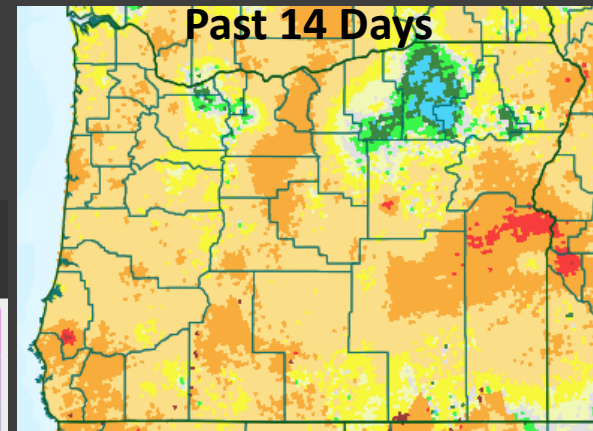
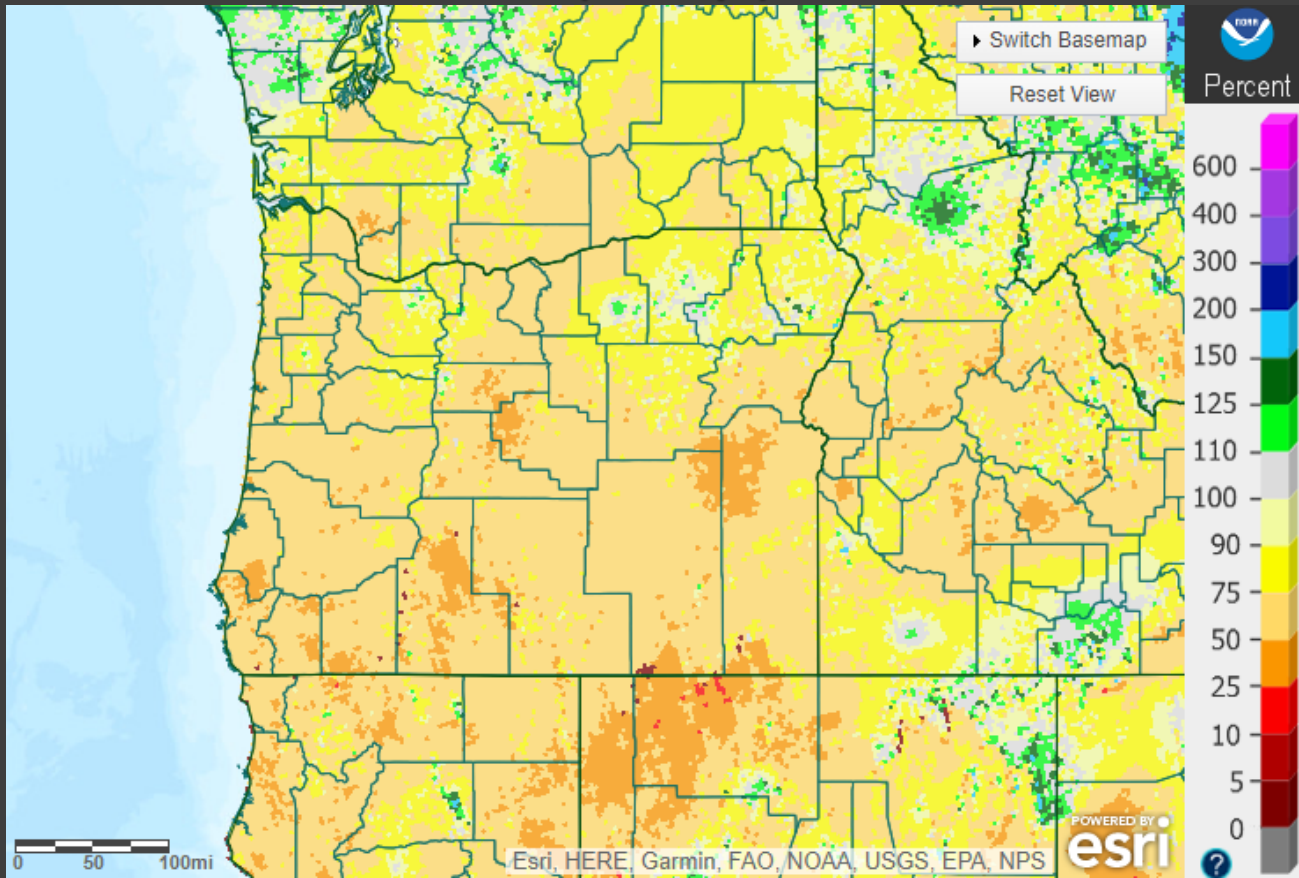
January 8, 2019
National Weather Service Update

Andy Bryant, NWS Portland Weather Forecast Office
Amy Burke & Steve King, NWS Northwest River Forecast Center



Precipitation % of Average

2019 Water Year thus far (98 days)

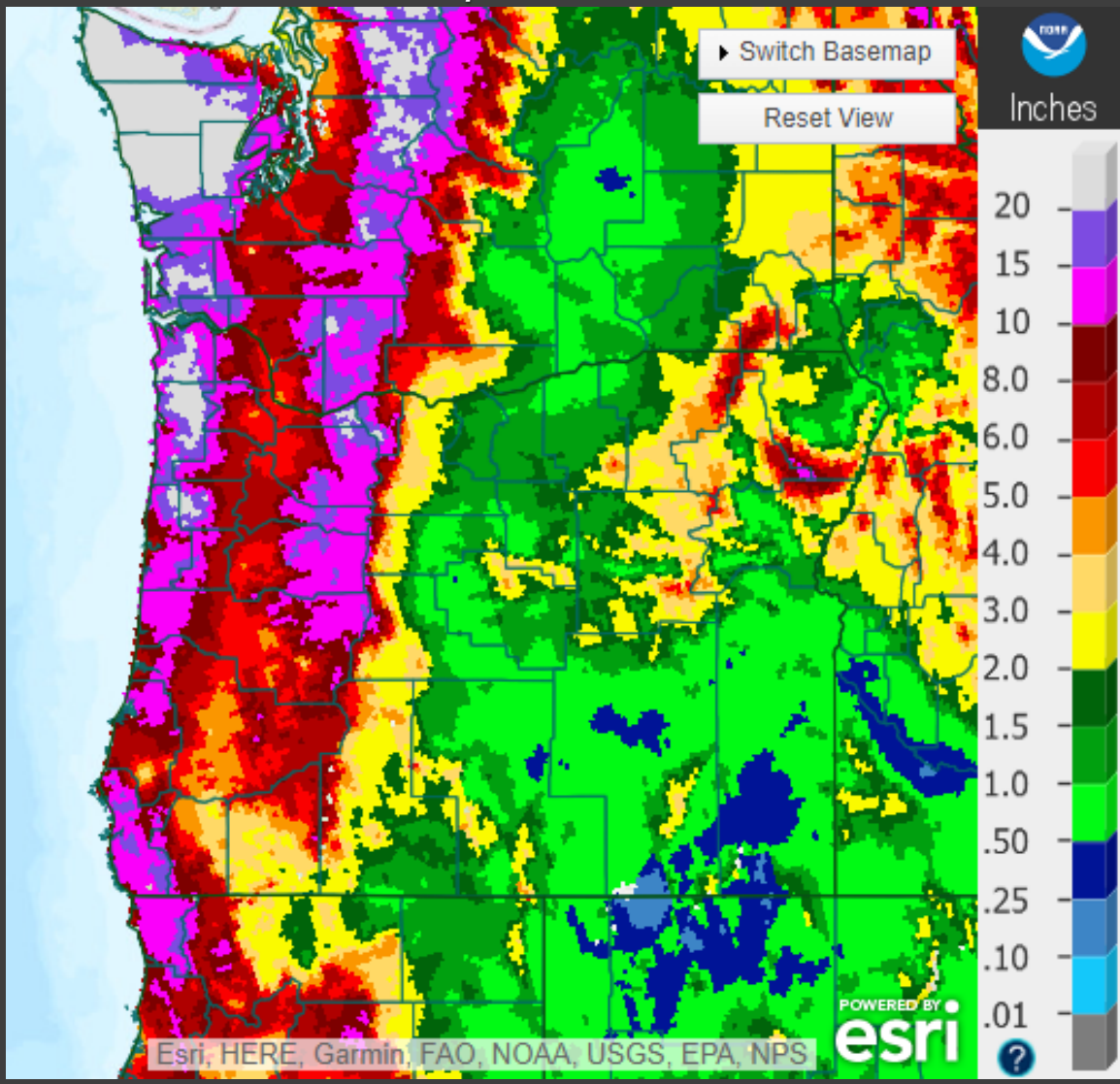


Precipitation Data as of January 7th, 2019

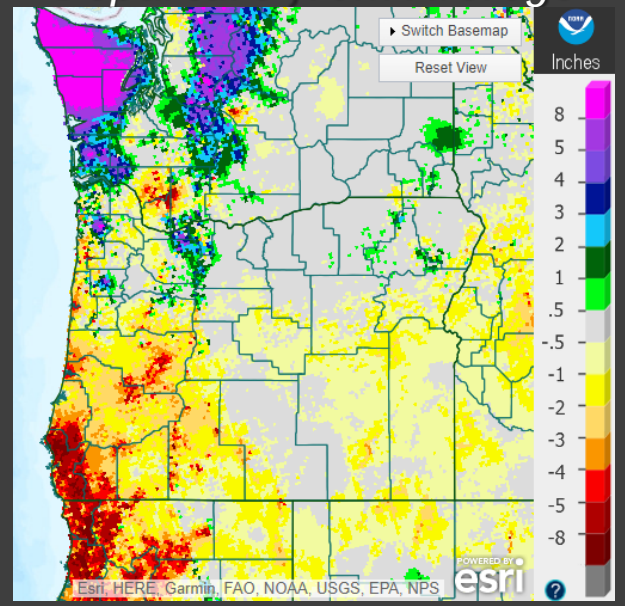


Precipitation Past 30 Days

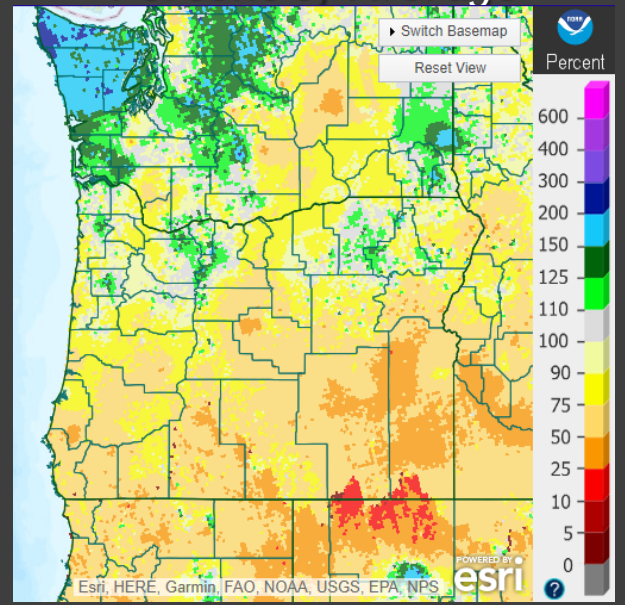
Precipitation Totals



Departure from Average



Percent of Average



Precipitation Data as of January 7th, 2018

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

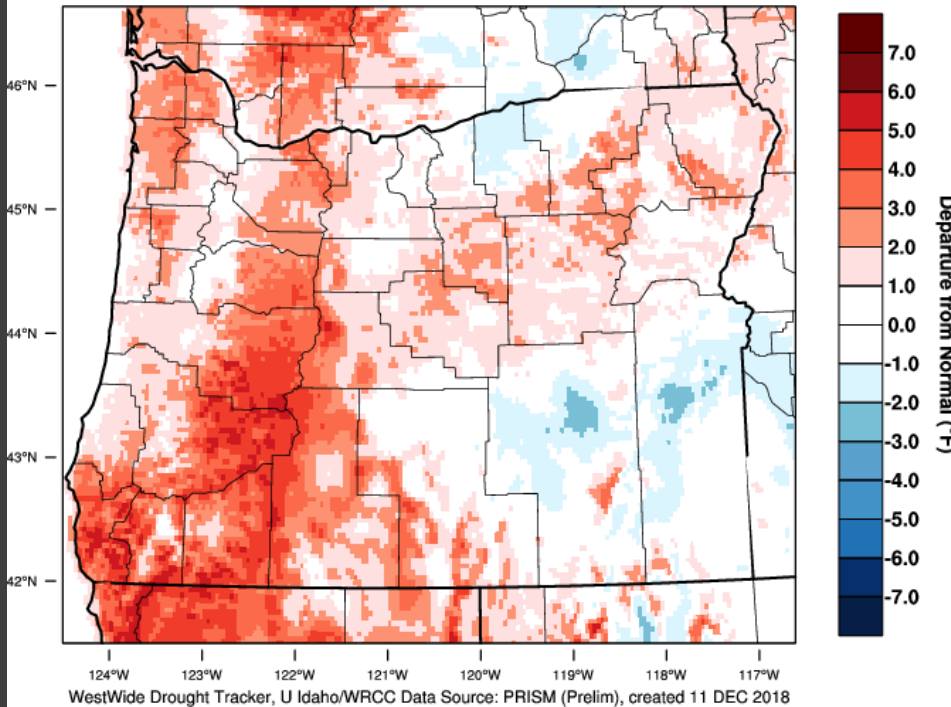


Recent Temperatures

November 2018

Oregon - Mean Temperature

November 2018 Departure from 1981-2010 Normal

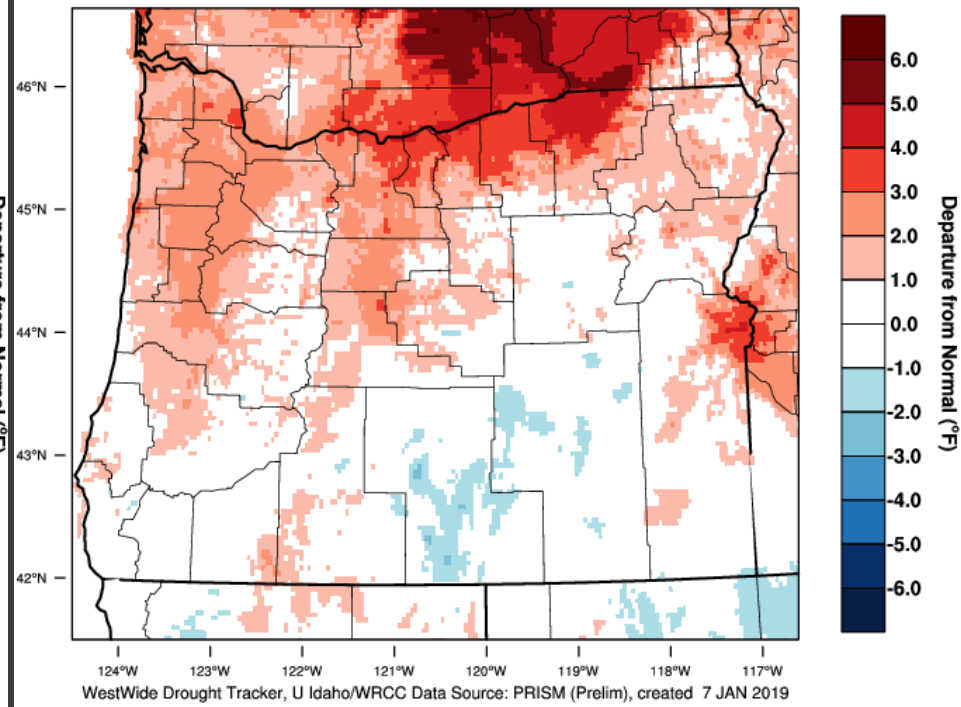


WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 11 DEC 2018

December 2018

Oregon - Mean Temperature

December 2018 Departure from 1981-2010 Normal



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 7 JAN 2019

Temperatures thus far in January are above-average in northern Oregon and below-average in southern Oregon.



Drought Monitor

U.S. Drought Monitor

December 4, 2018

(Released Thursday, Dec. 6, 2018)

West

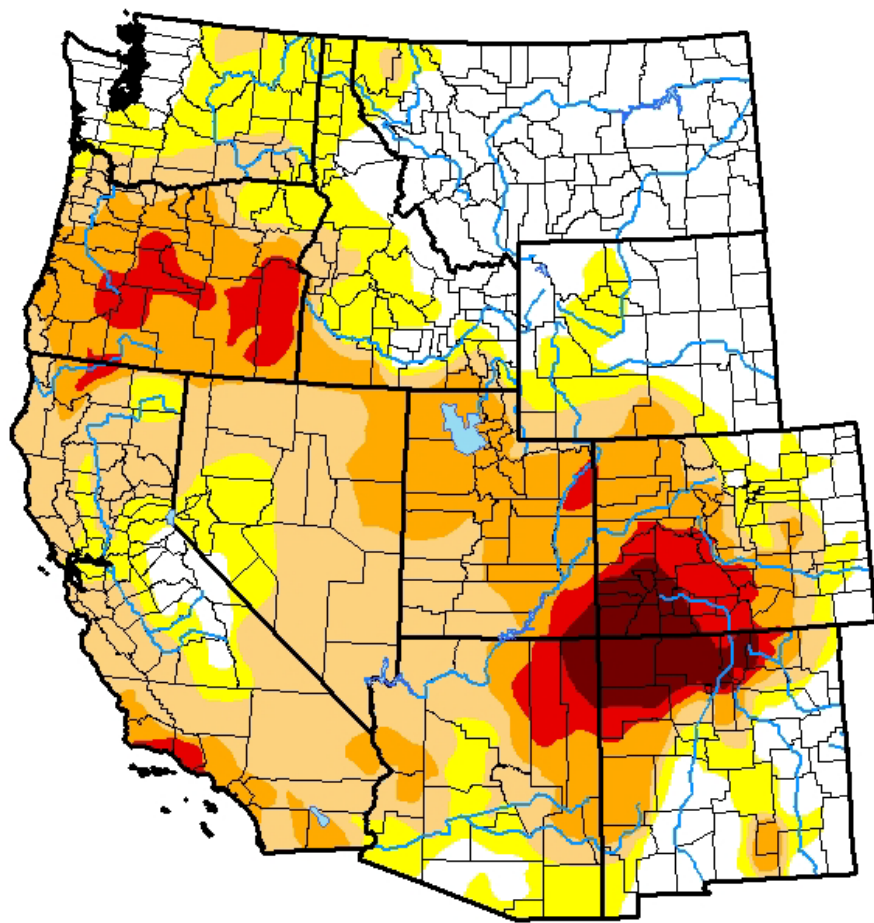
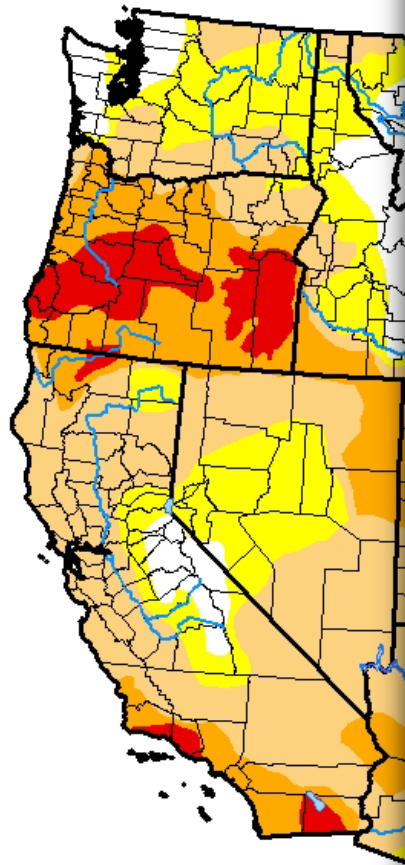
U.S. Drought Monitor

West

January 1, 2019

(Released Thursday, Jan. 3, 2019)

Valid 7 a.m. EST



Intensity:

-  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.

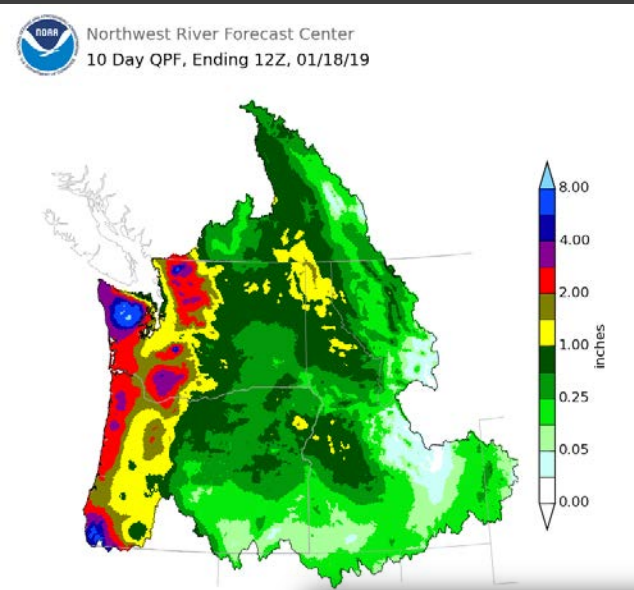
Author:

David Miskus
NOAA/NWS/NCEP/CPC

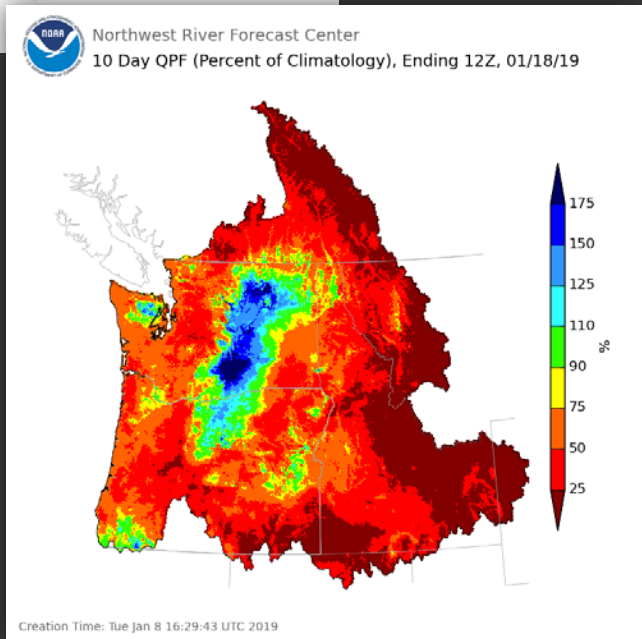




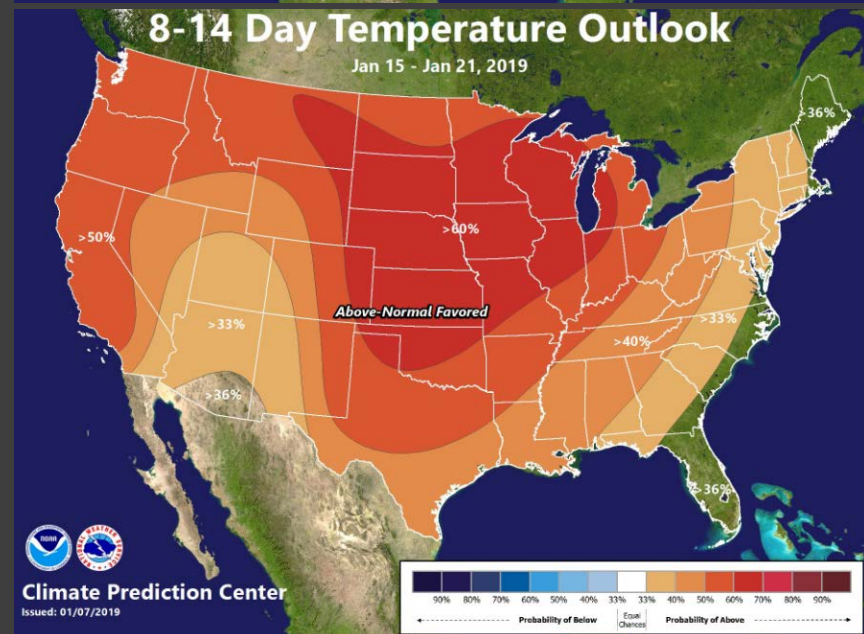
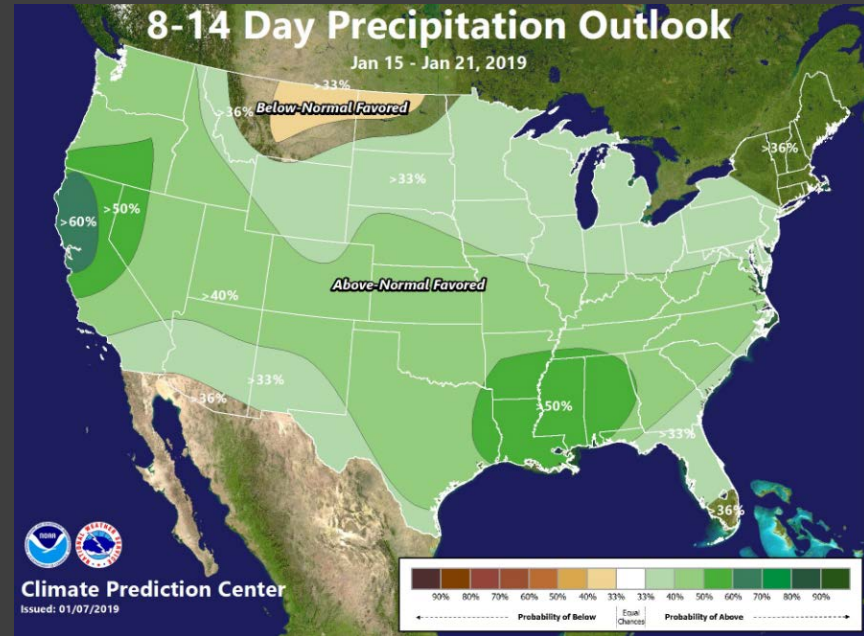
Mid-January Outlook



Creation Time: Tue Jan 8 16:28:56 UTC 2019



Creation Time: Tue Jan 8 16:29:43 UTC 2019

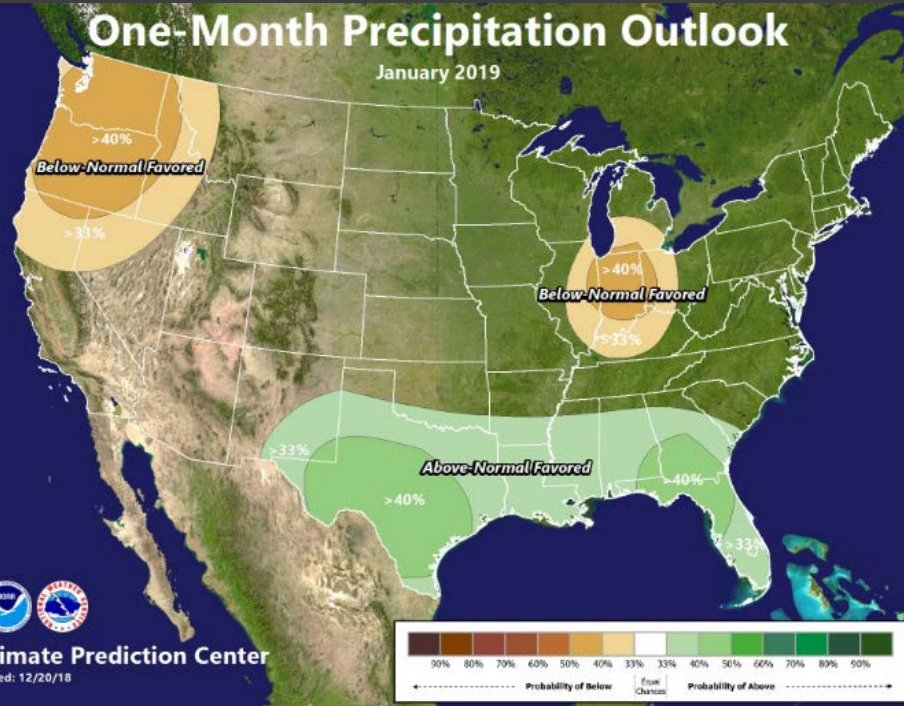




January Outlook

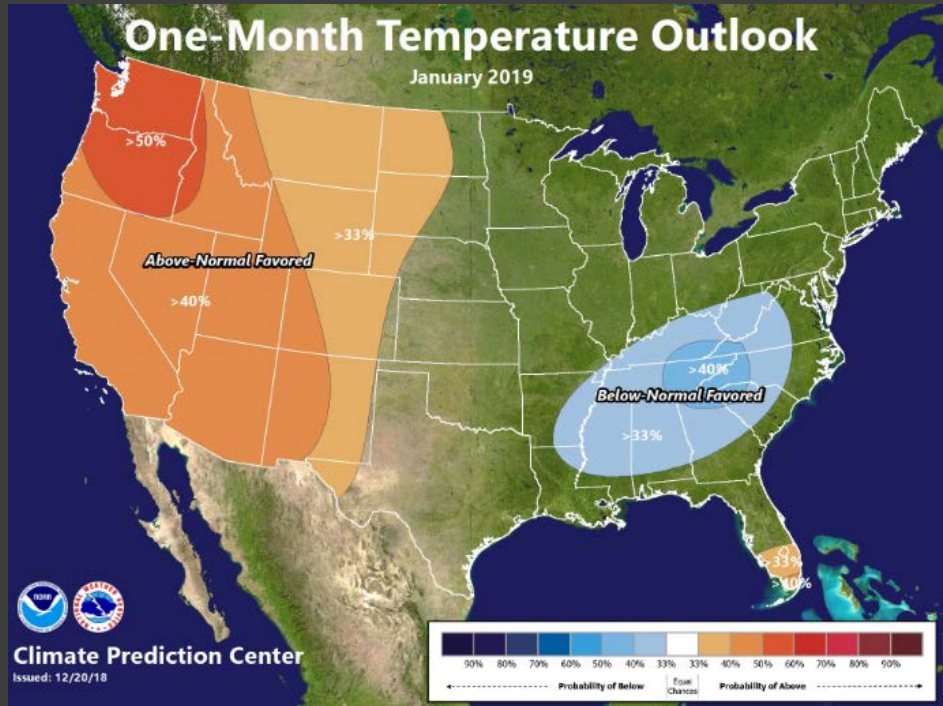
One-Month Precipitation Outlook

January 2019



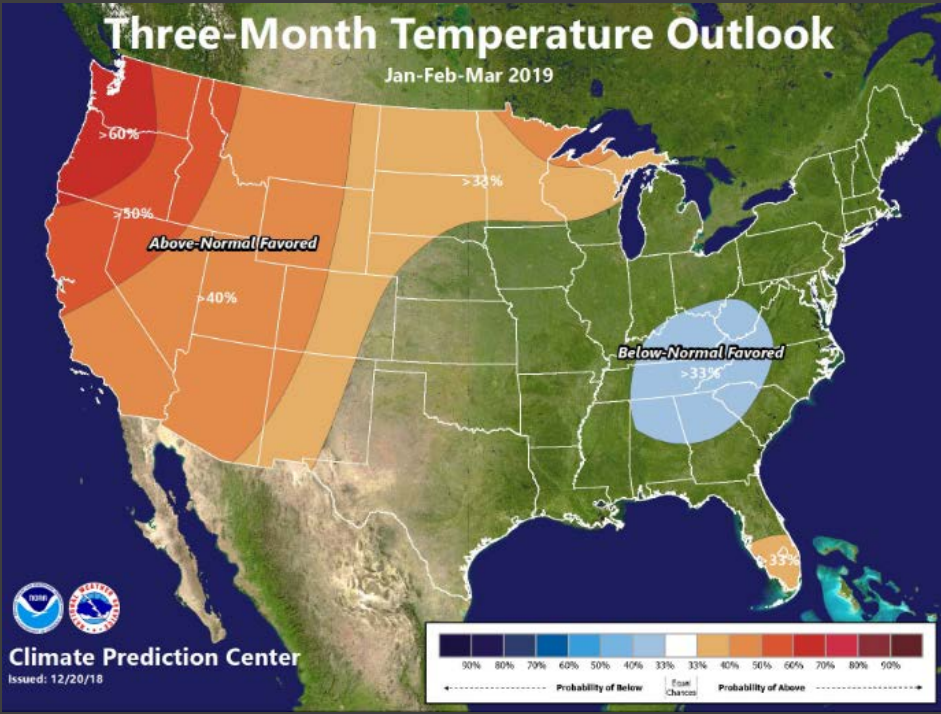
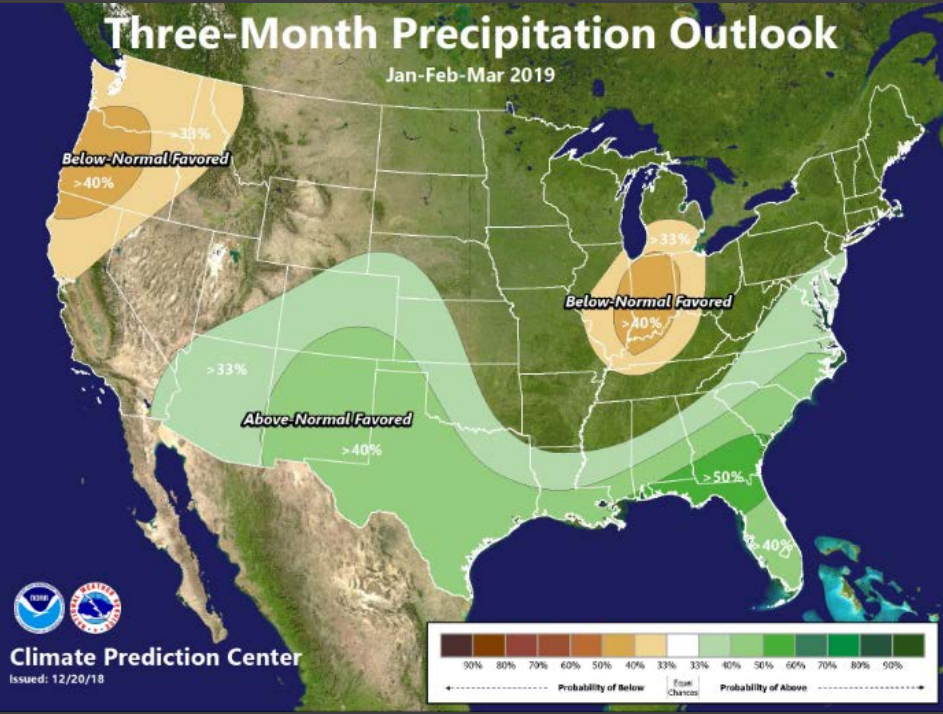
One-Month Temperature Outlook

January 2019



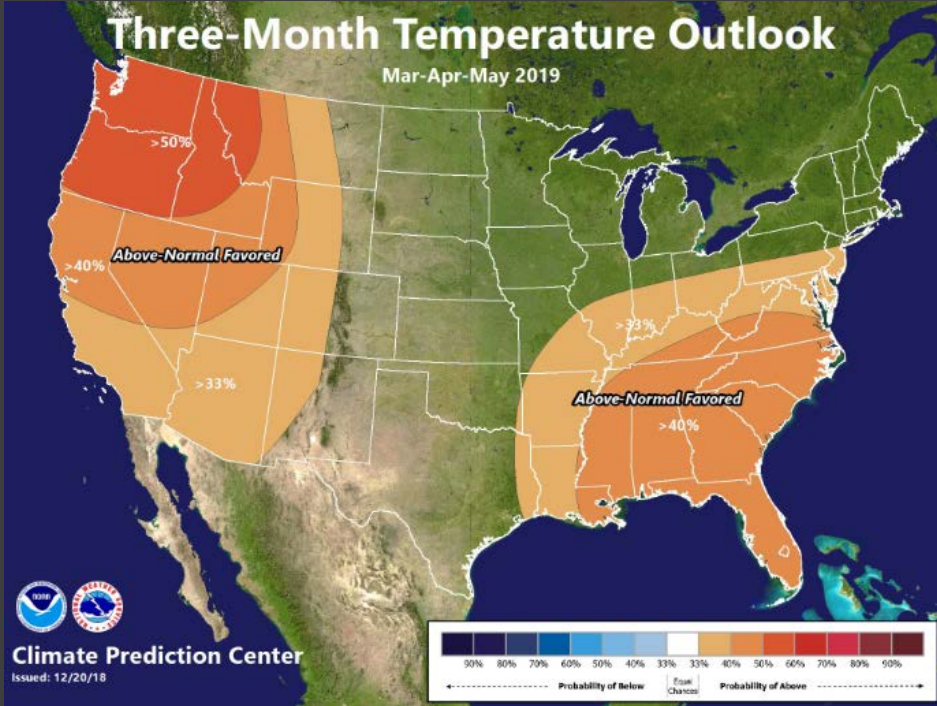
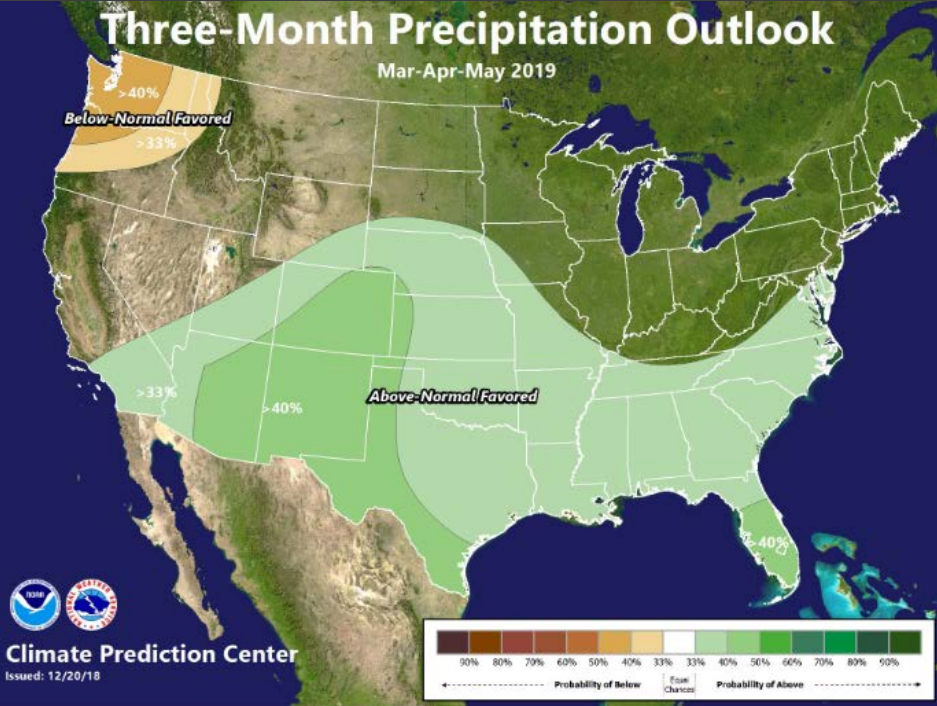


Outlook for January - March 2019





Outlook for March-April-May 2019





Observed WY19 Runoff thus far



Northwest River Forecast Center Observed Water Year Natural Runoff



- River and Hydrology
- Water Supply
- Observations
- Weather Forecasts
- Climate
- NWRFC

Search
Enter NWS ID:

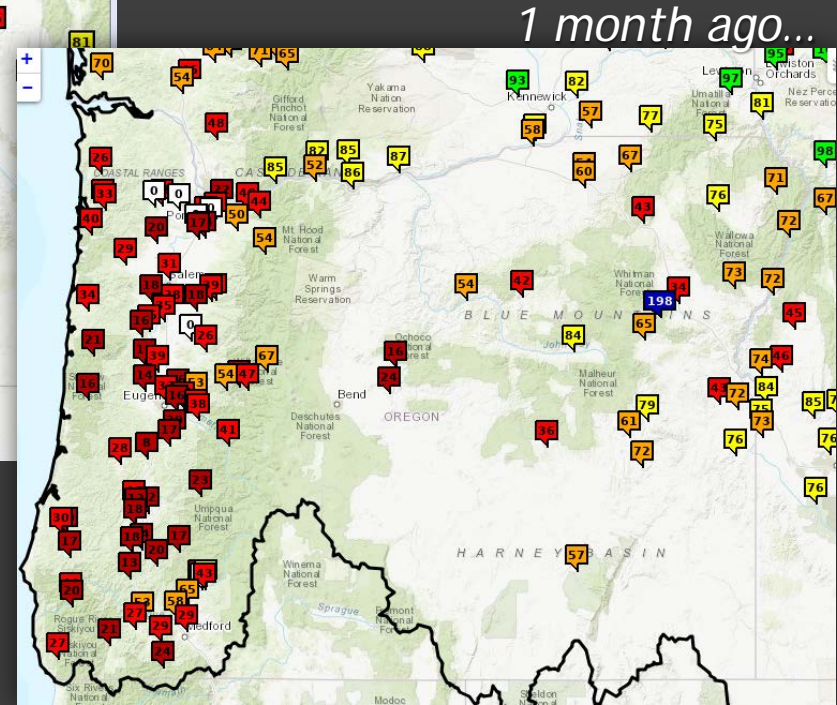
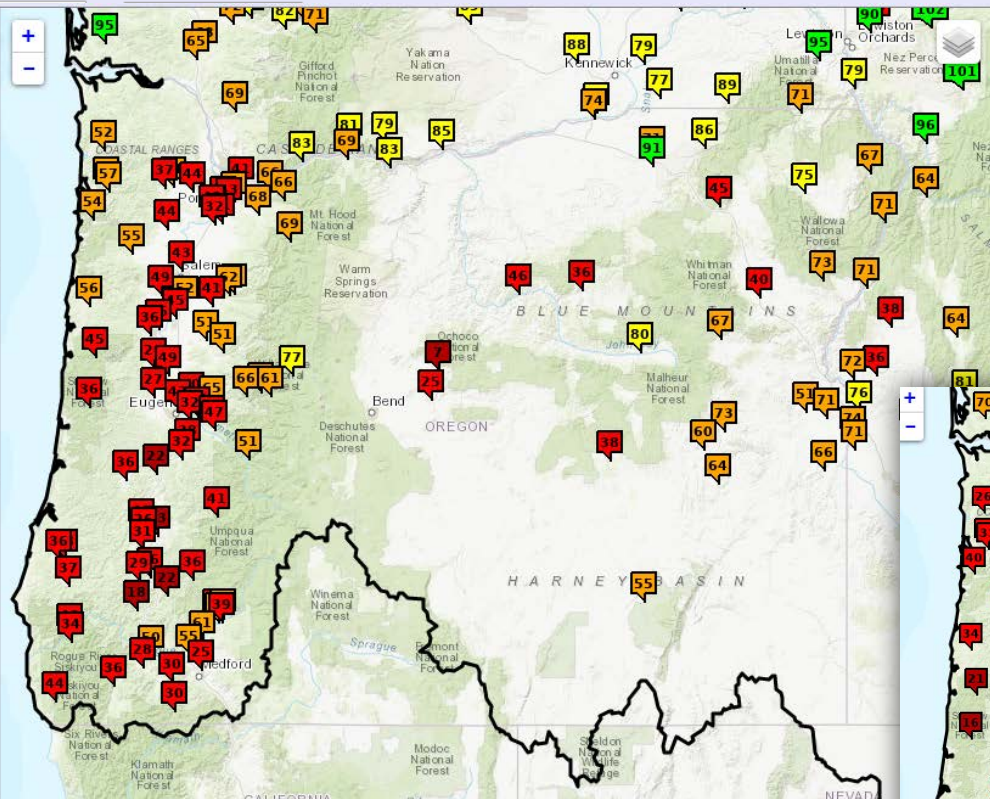
GO

- Map Overlays
- NWRFC Boundary
 - NWRFC Basins
 - NWS HSAs
 - Counties

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





Seasonal Water Supply Forecasts



Northwest River Forecast Center ESP Natural Forecast



River and Hydrology

Search
Enter NWS ID:

GO

Map Overlays

- NWRFC Boundary
- NWRFC Basins
- NWS HSAs
- Counties

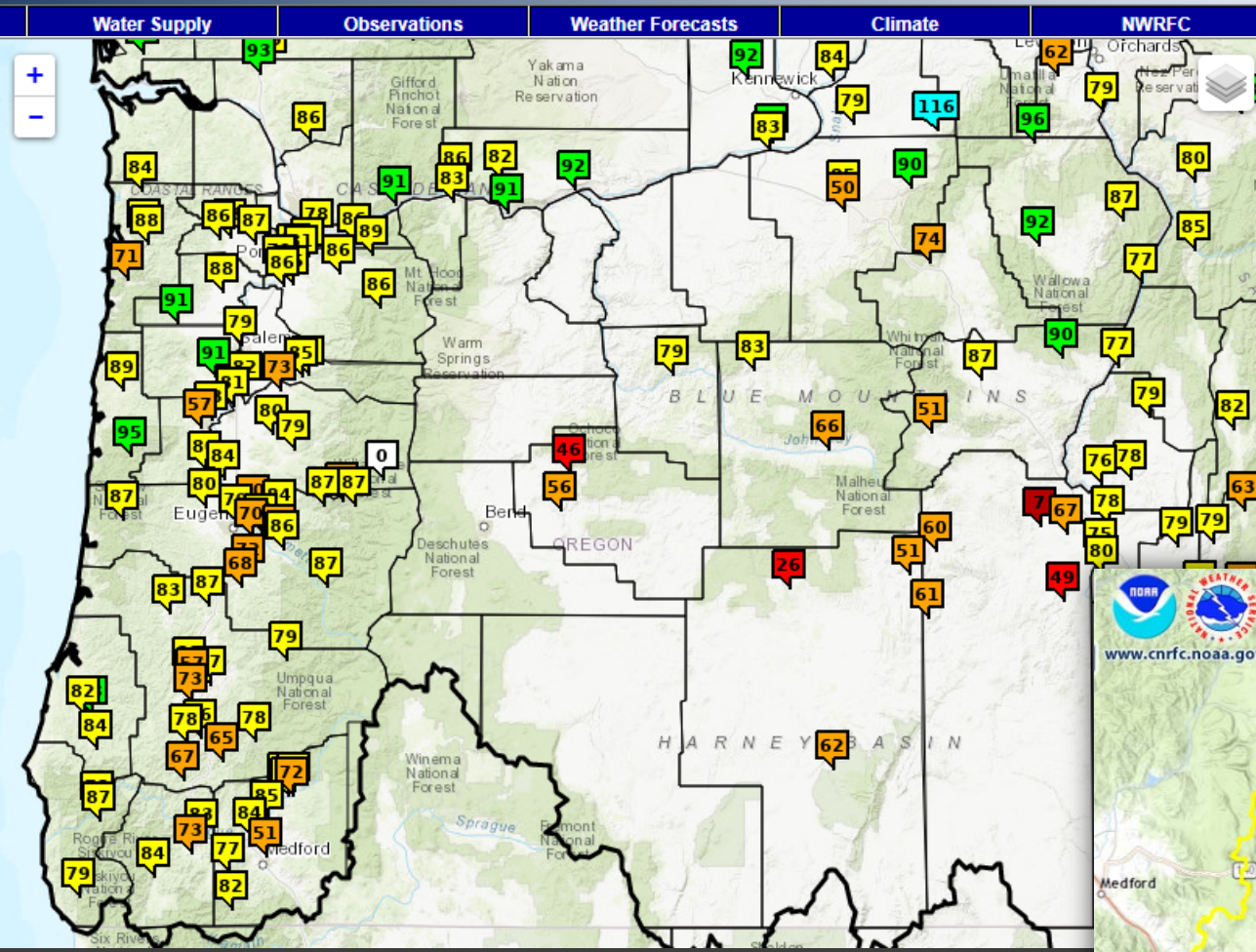
ESP Natural Forecast

- Status
- Percent of Normal
- Rank (ASC)
- Rank (DESC)
- Exceedance (%)
- Percentile (%)
- Runoff Status
- Runoff % of Normal

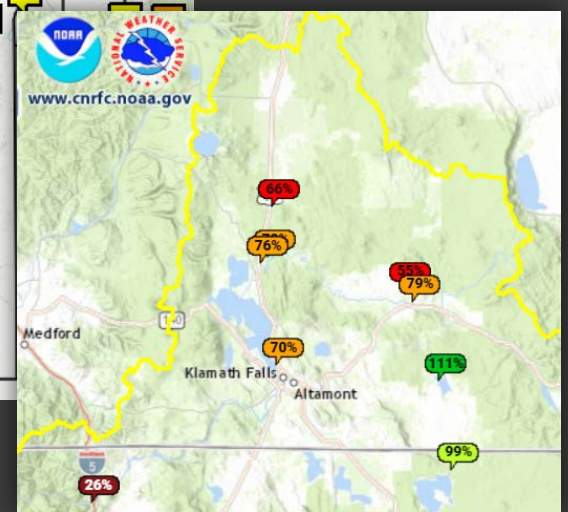
ESP Natural Forecast

Period: APR-SEP
Forecast (% Normal)

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

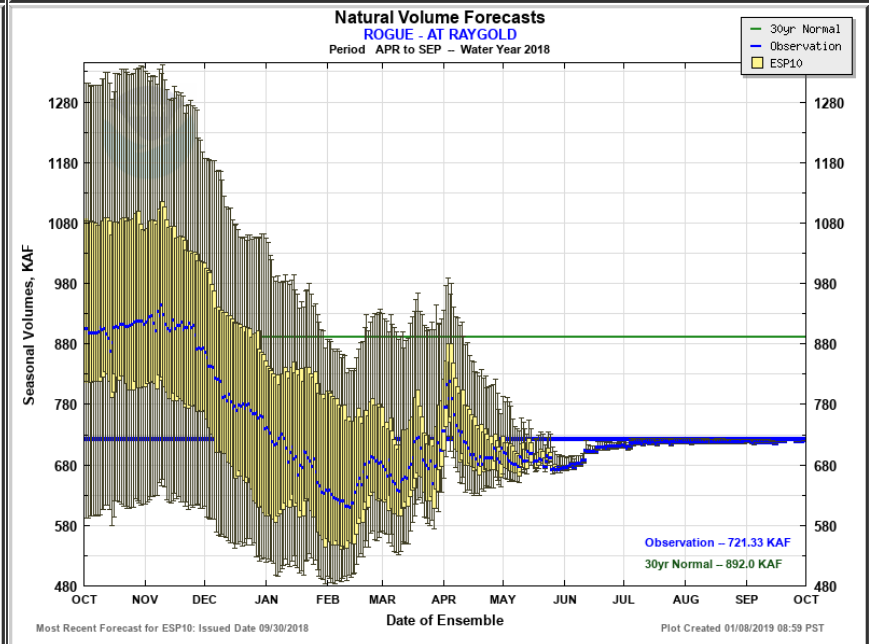
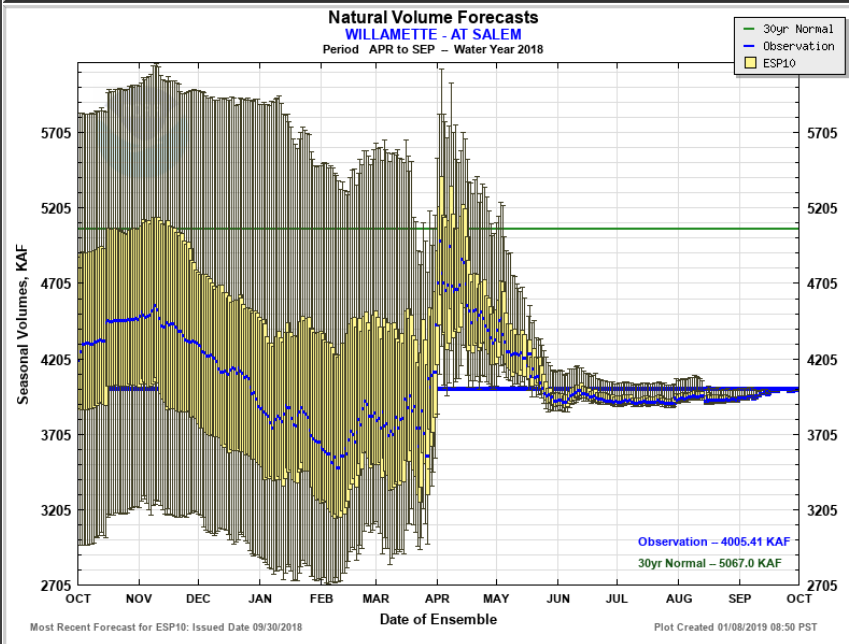
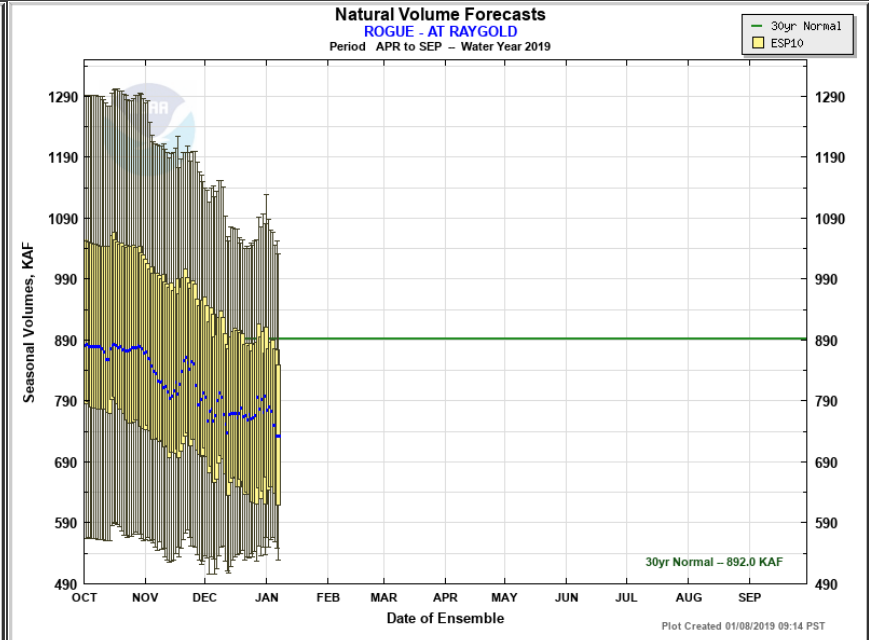
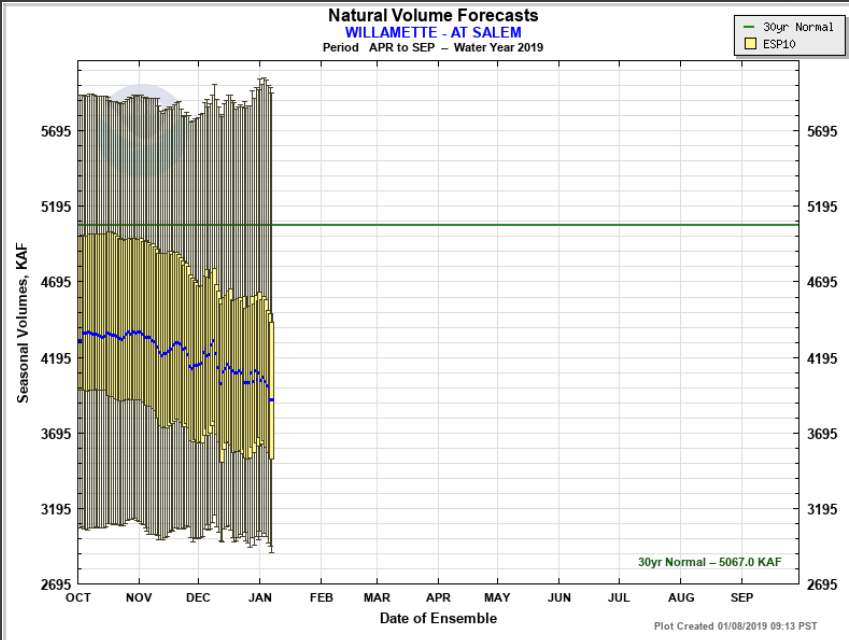


Forecast runoff volume for April - September 2019



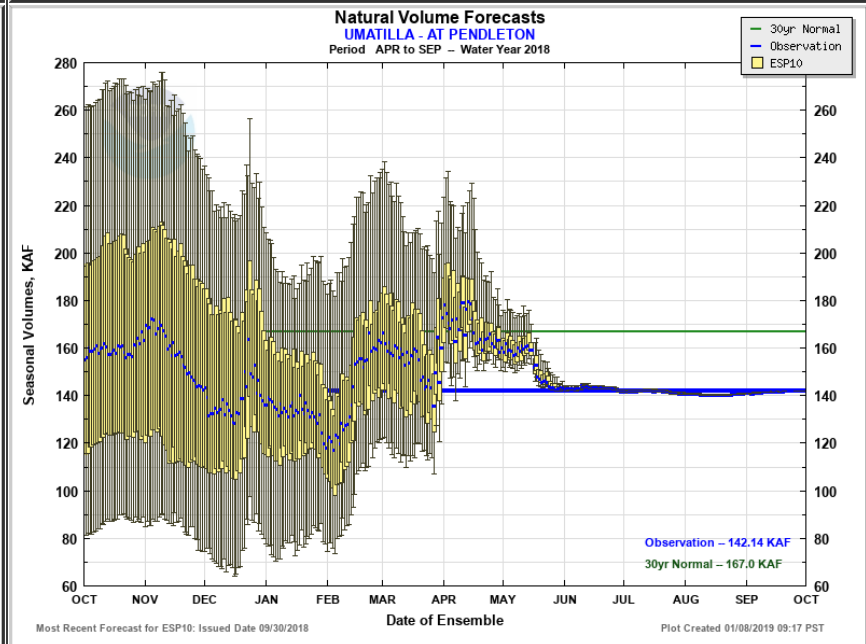
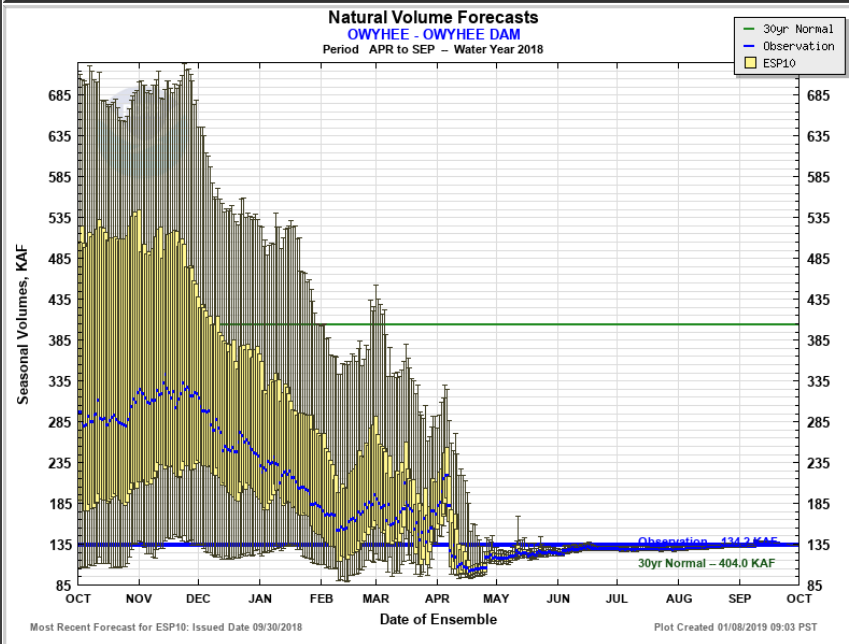
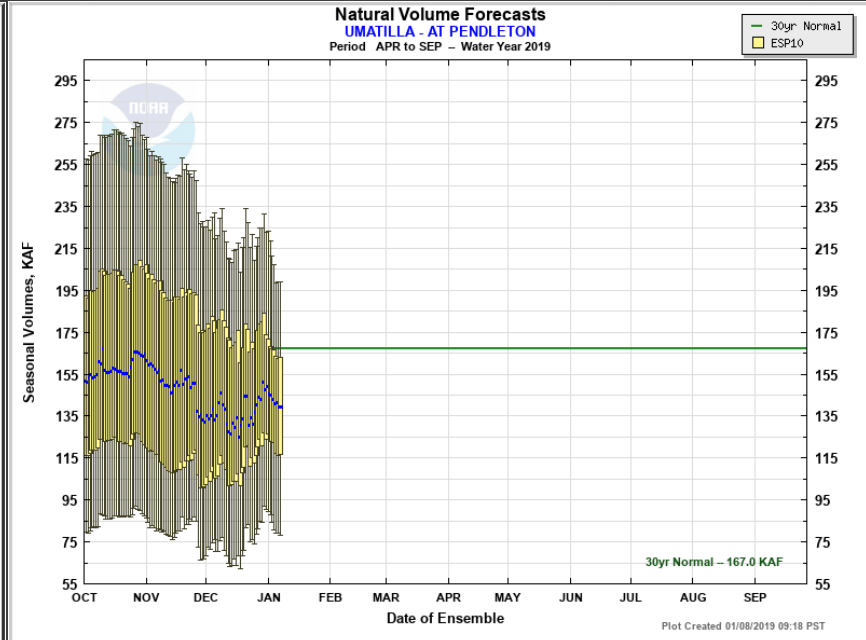
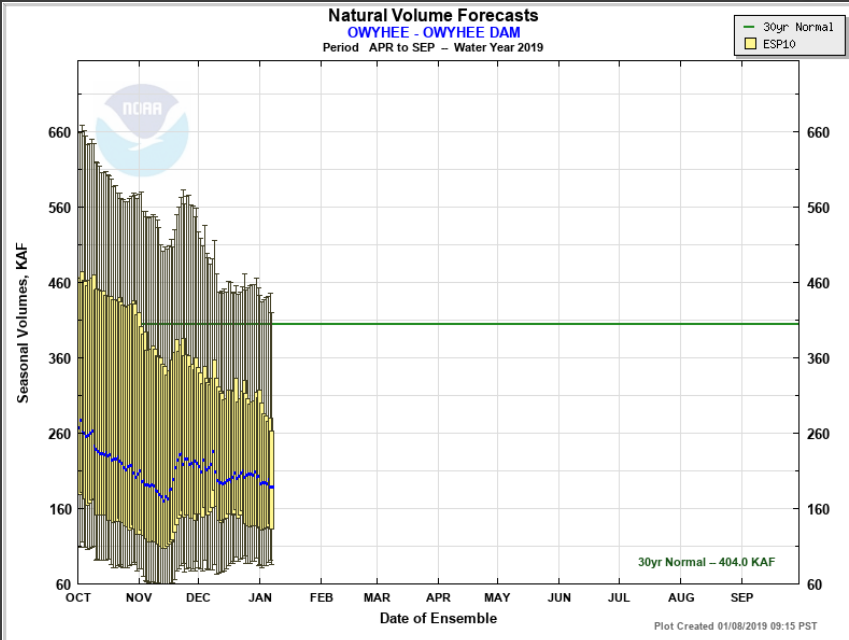


Natural Water Supply Forecasts (West)





Natural Water Supply Forecasts (East)





Link to Northwest River Forecast Center ESP Natural Forecasts

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

Live Water Supply Briefings

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

NWRFC Water Supply Forecast Monthly Briefing Schedule

Monthly water supply briefings will be held January through late spring on the first Thursday of each month. Please refer to the schedule below for briefing dates and times. The briefings are composed of two parts, a telephone conference call and a web-based presentation. The conference call can be joined by calling the number provided below prior to start of the briefing. Enter the provided access code when prompted. To view the web-based presentations, you will need to [register](#) prior to each briefing. The briefing slides will be available from the [NWRFC presentations](#) page soon after the briefing.

2019 Schedule for Live Water Supply Briefings					
Jan	Feb	Mar	Apr	May	June
3	7	7	4	2	6
<i>All presentations held at 10:00am PDT/PST, unless noted otherwise</i>					
Click here for Registration Information					

Telephone Conference Call Number (same for each month's brief):
(415) 655-0060
Pass Code:
217-076-304

[Presentation Archive Download Link](#)

Water Supply Conditions Report

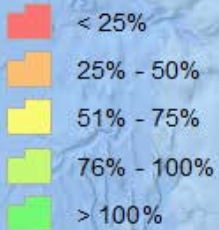
Water Supply Availability Committee



Ken Stahr
Oregon Water Resources
Department
January 8, 2019

Percent of Average Streamflow December - 2018

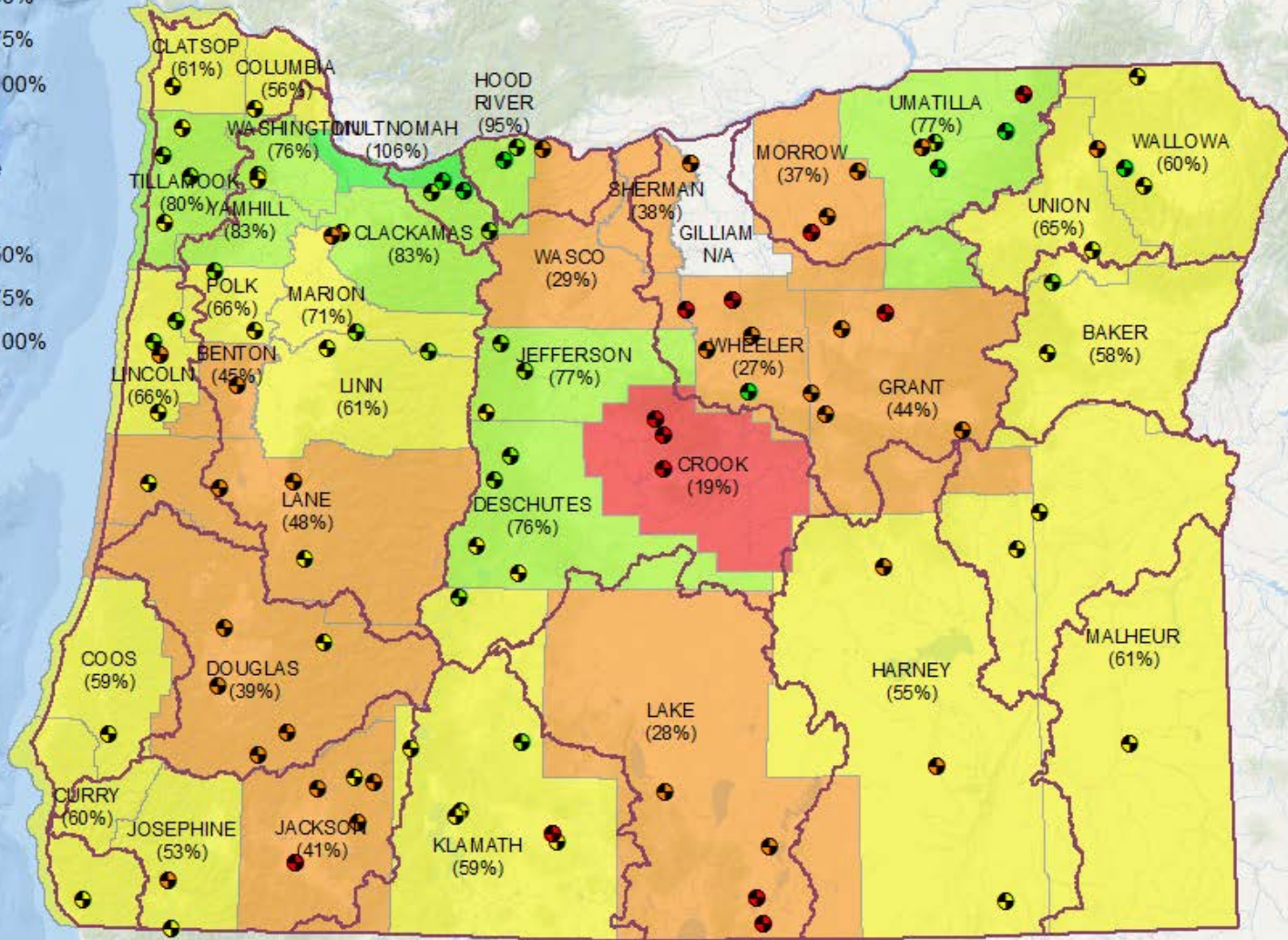
County



Stream Gage



WRD Basin

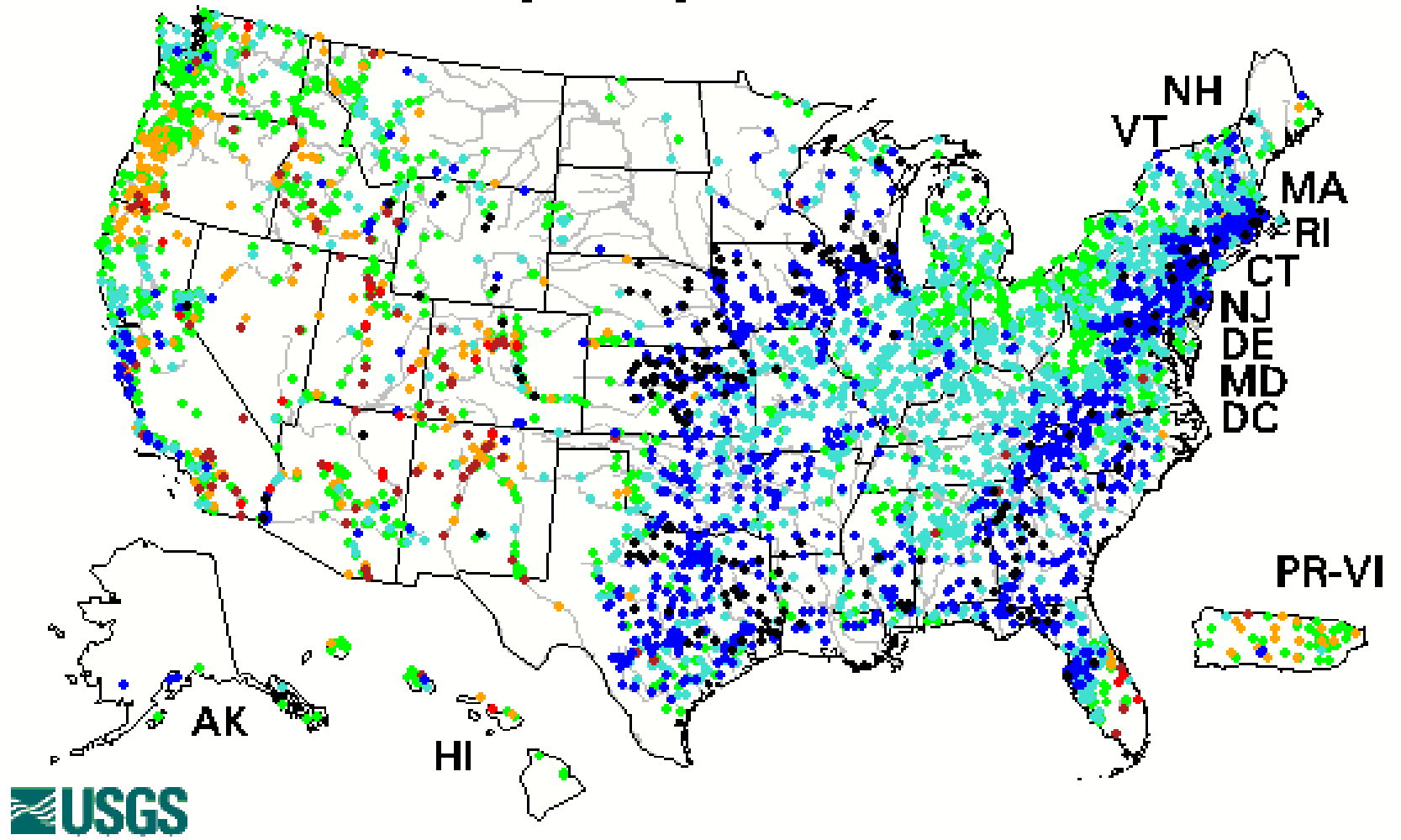


Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.



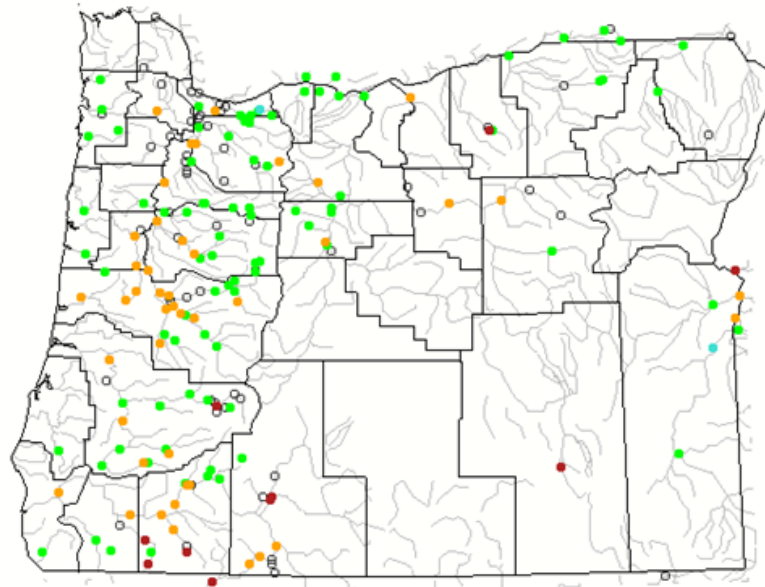
Region	Water Year % of average through December, 2019	% of average for December	% of average for 01/05/2019	# of data points
West Side	51%	65%	42%	44
East Side	56%	53%	54%	42
State	53%	59%	47%	86

Monday, January 07, 2019 15:30ET



Map of 28-day average streamflow compared to historical streamflow for the day of the year (Oregon)

Sunday, January 06, 2019



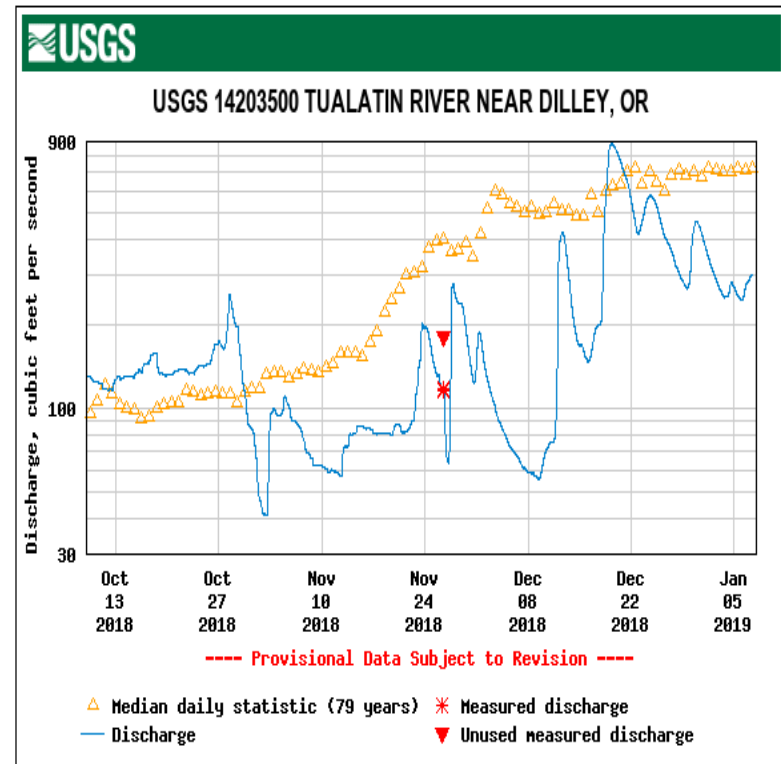
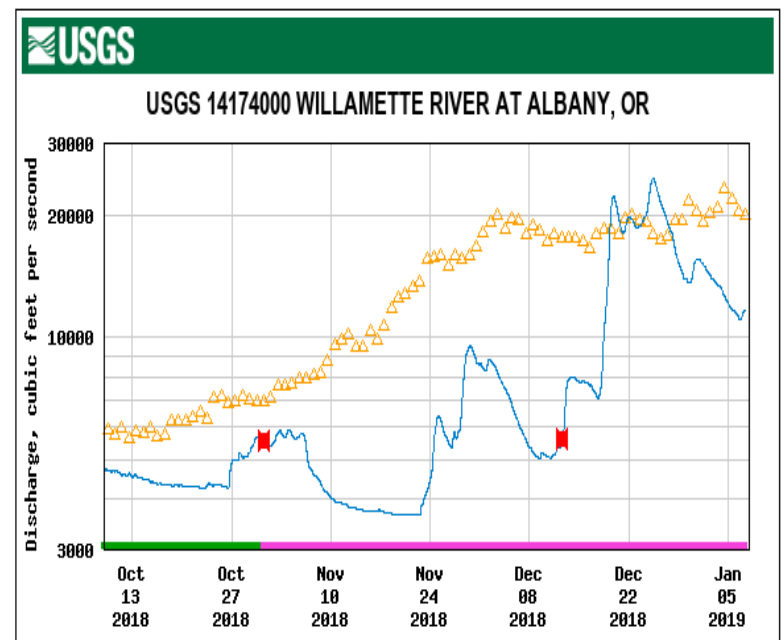
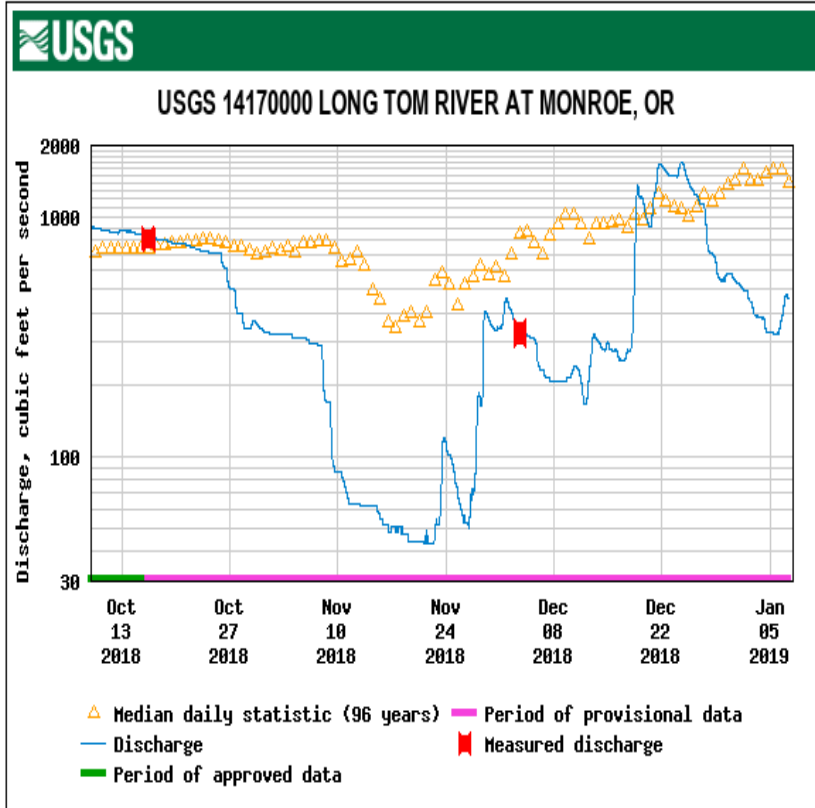
Search USGS streamgage

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

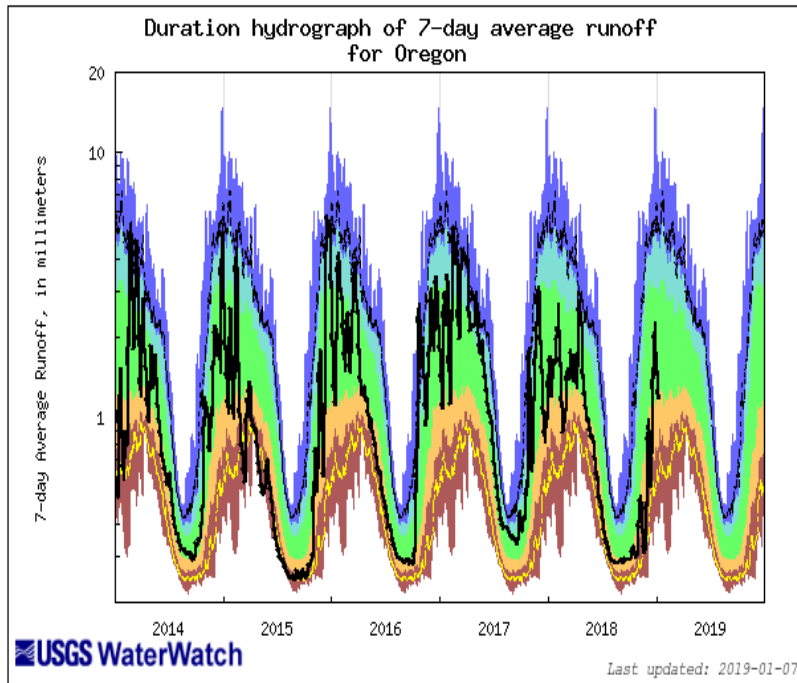
- List of all stations
 Single station
 Nearest stations

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

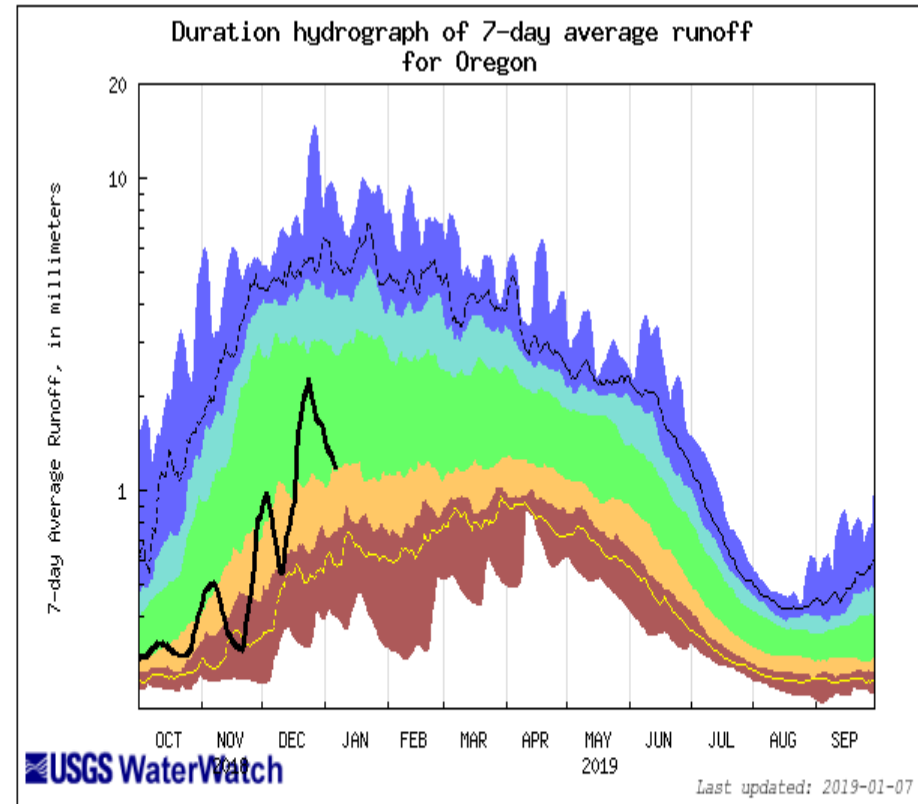
Willamette



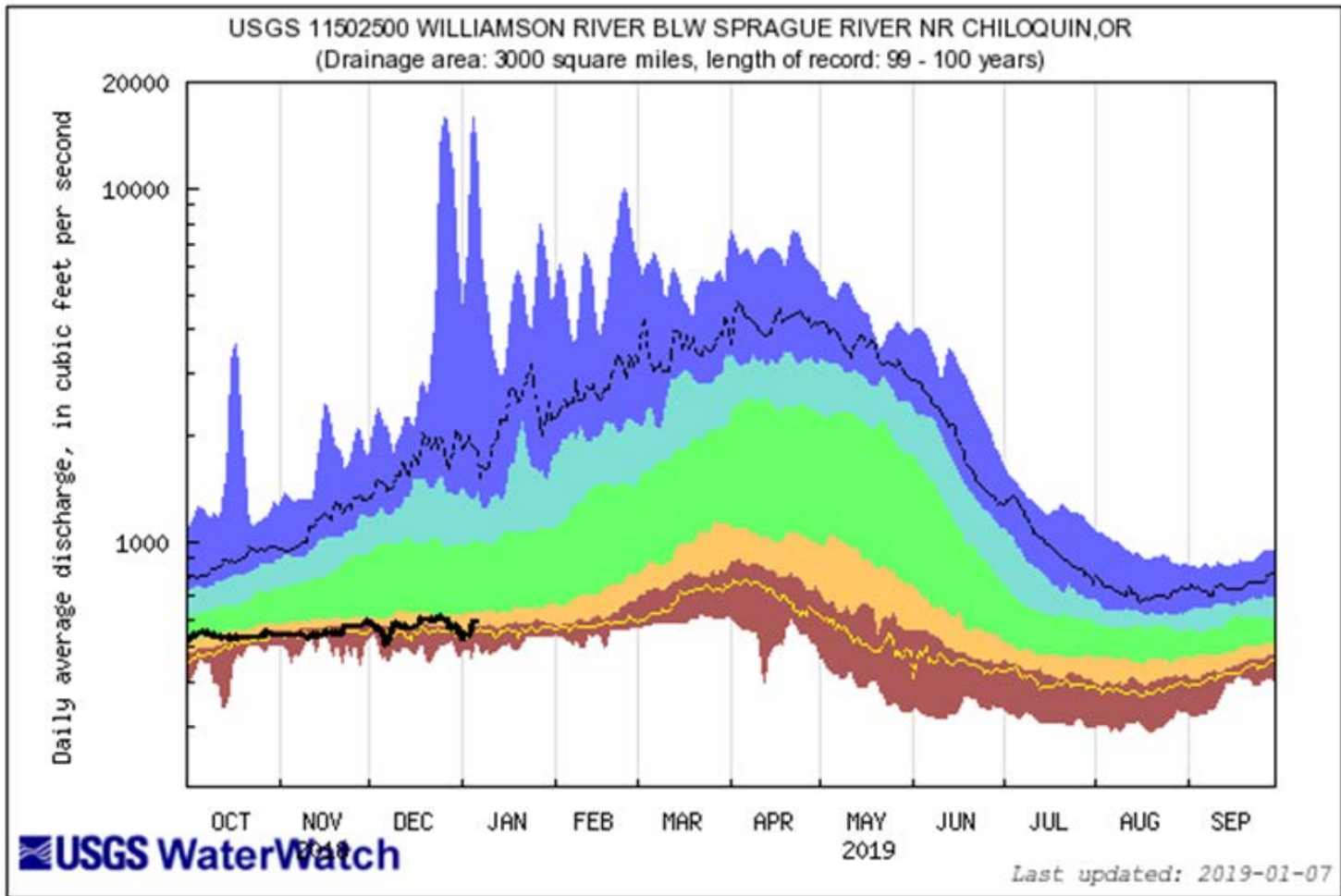
These are interesting Both are plots of the 7 day average for all USGS Oregon sites



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

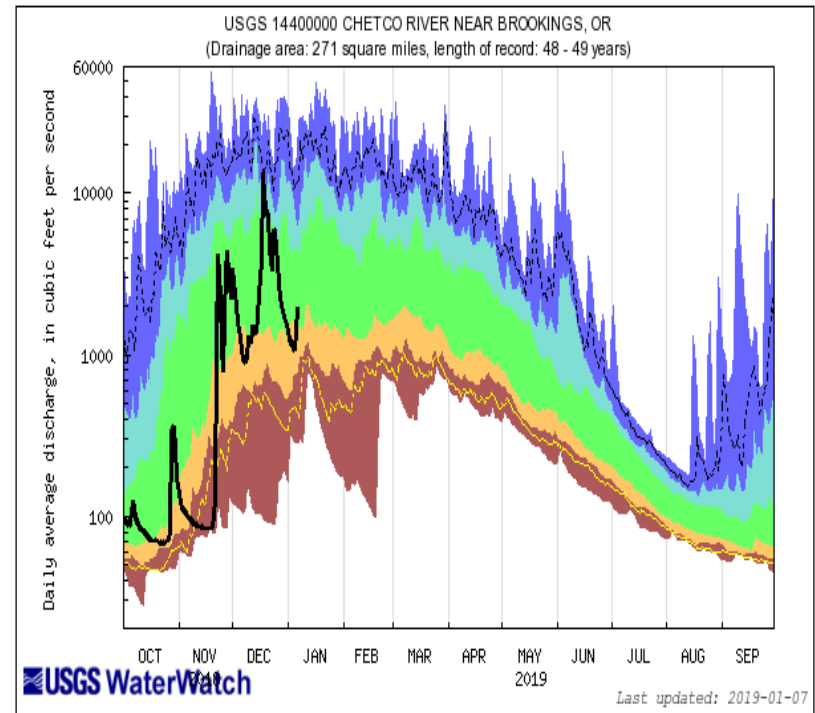
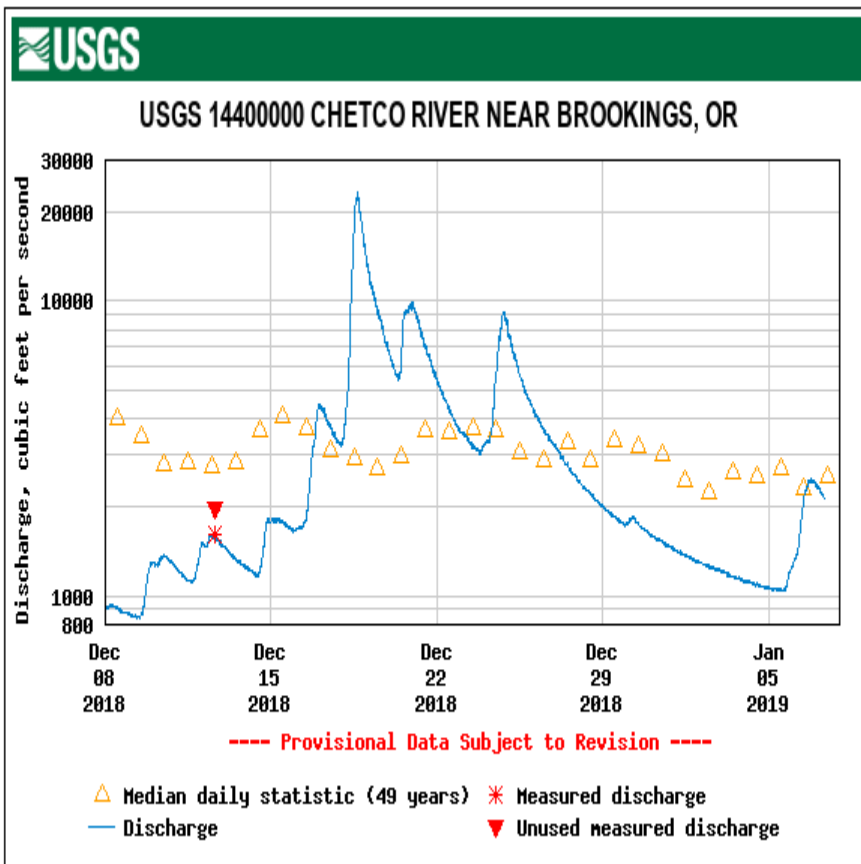


Explanation - Percentile classes						Runoff
lowest-10th percentile	5	10-24	25-75	76-90	95	
Much below Normal	Below normal	Normal	Above normal	Much above normal		



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		Flow

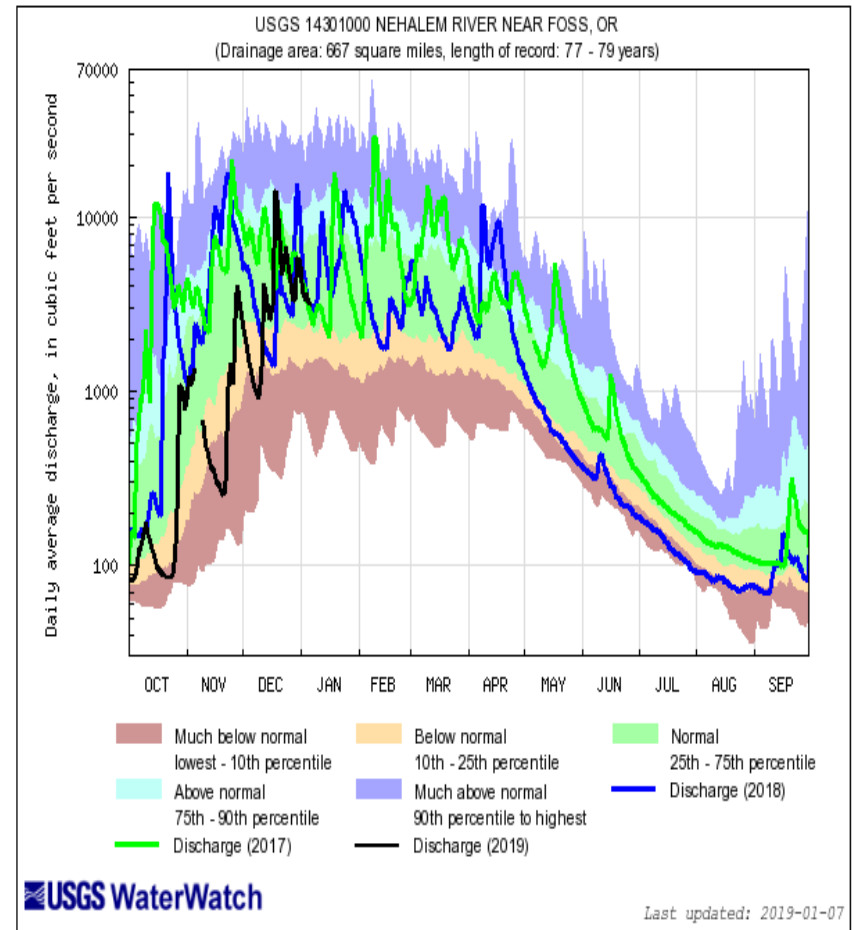
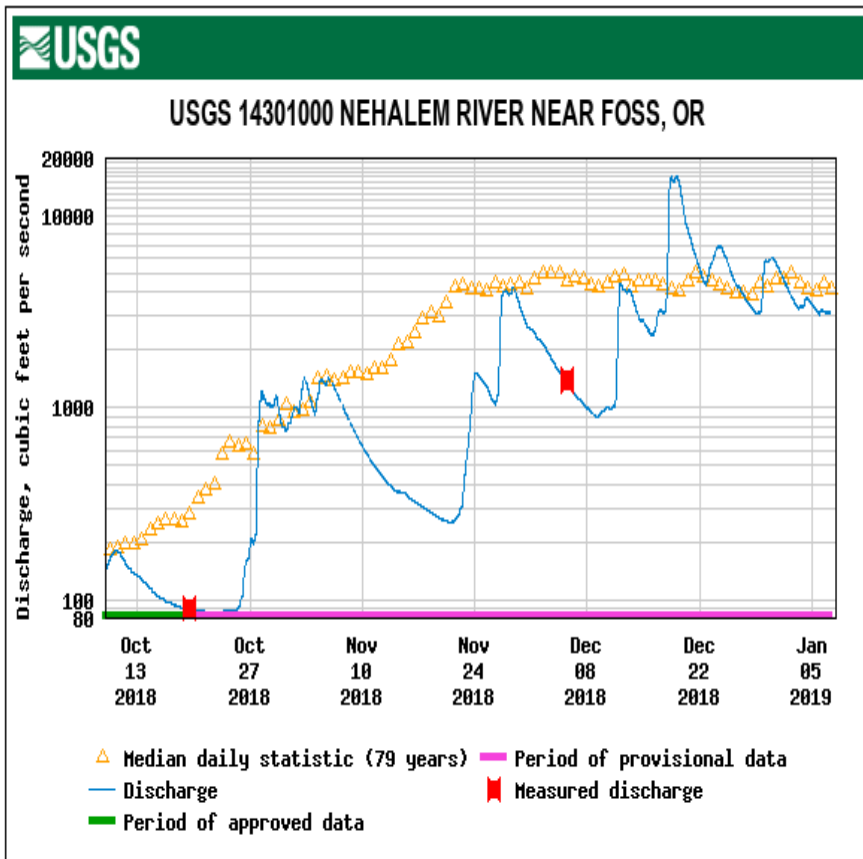
Peaks are pretty unimpressive this water year.



Explanation - Percentile classes

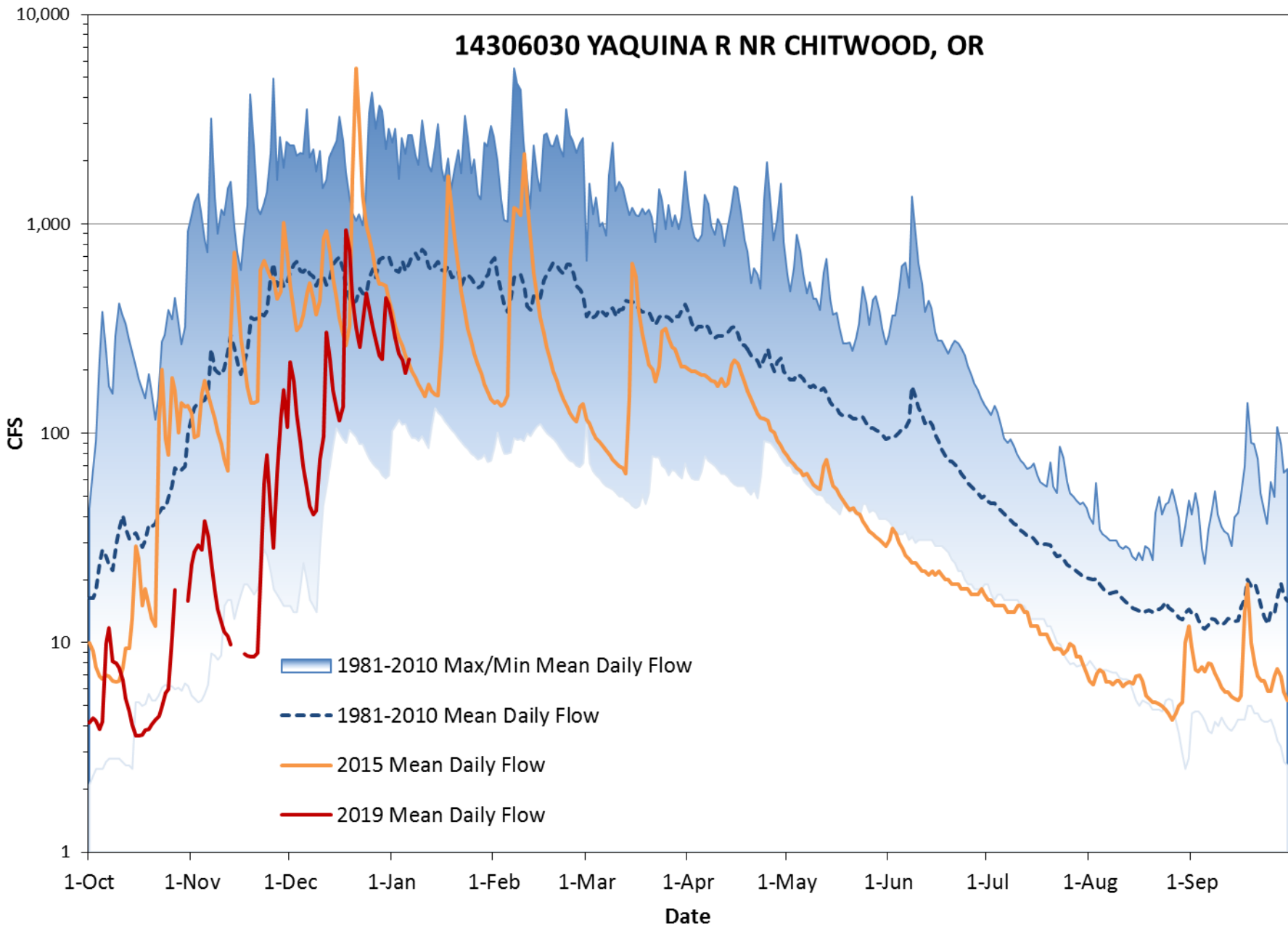
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest	Flow
Much below Normal	Below normal	Normal	Above normal	Much above normal			

Second plot has 2017 & 2018 water years overlaid. Illustrates what a poor start we have had....maybe we will return to low flow fairly easily without a push of events in Jan/Feb

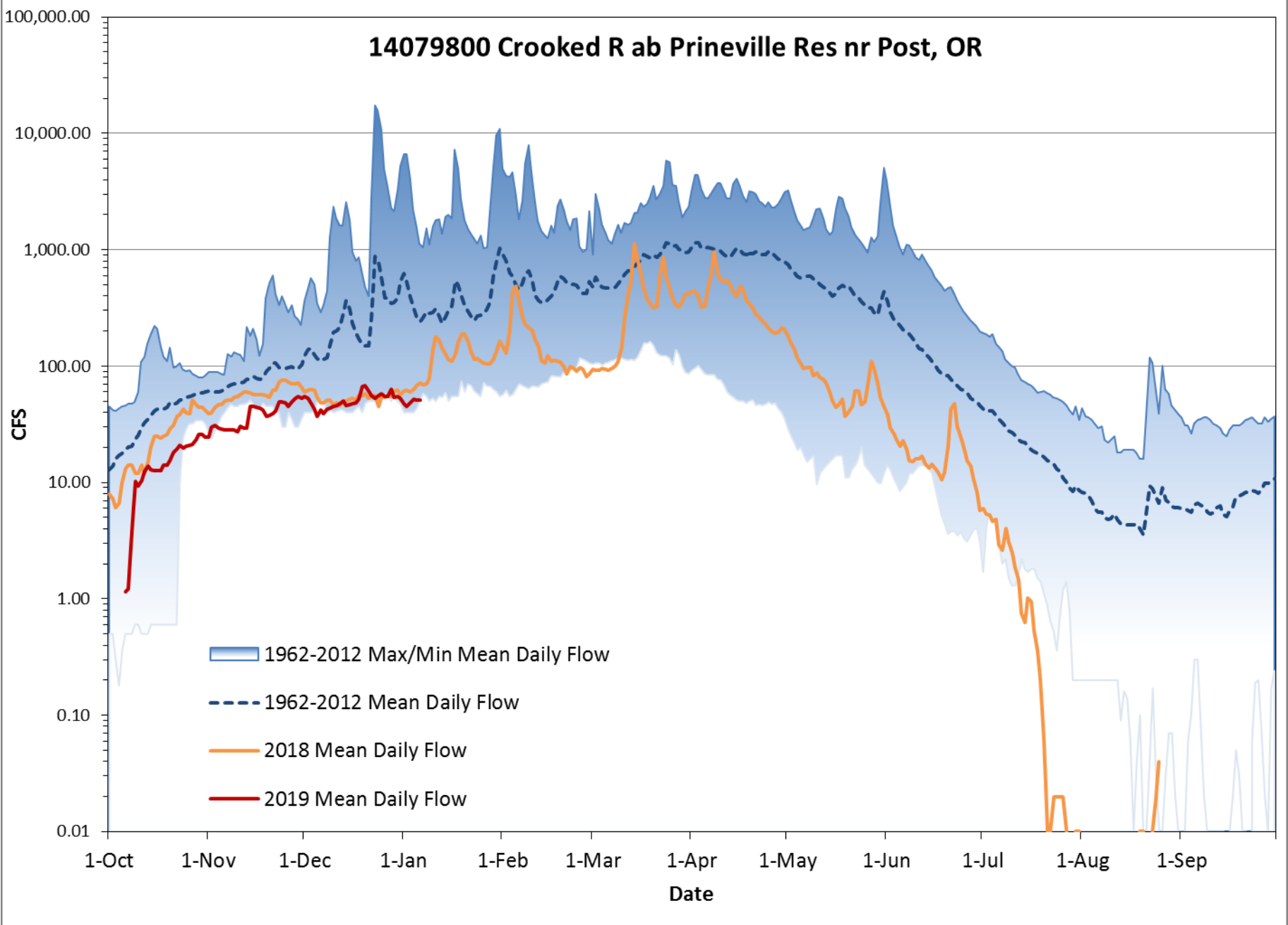


Explanation - Percentile classes					Flow
lowest-10th percentile	10-24	25-75	76-90	90th percentile - highest	
Much below normal	Below normal	Normal	Above normal	Much above normal	

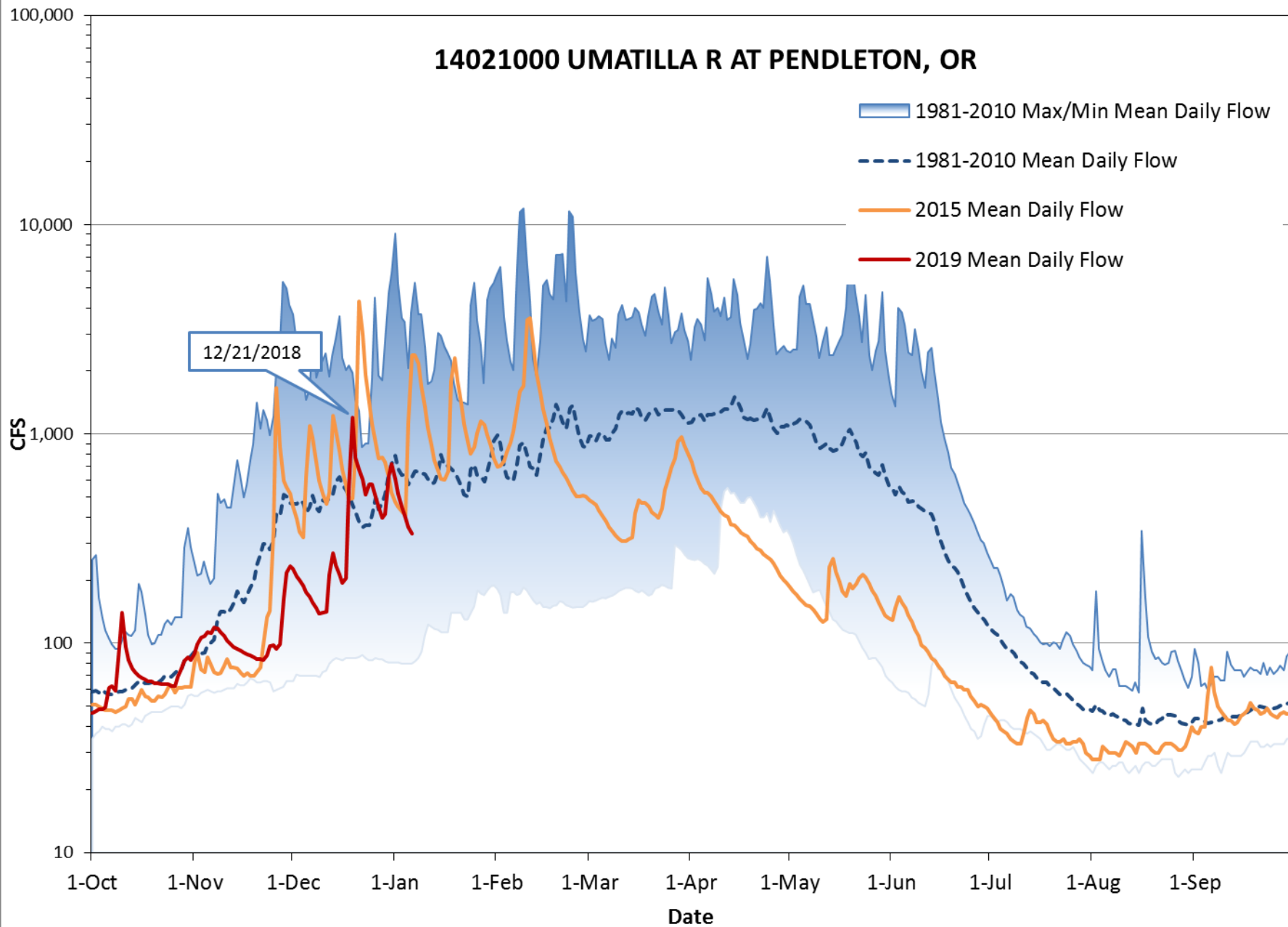
14306030 YAQUINA R NR CHITWOOD, OR



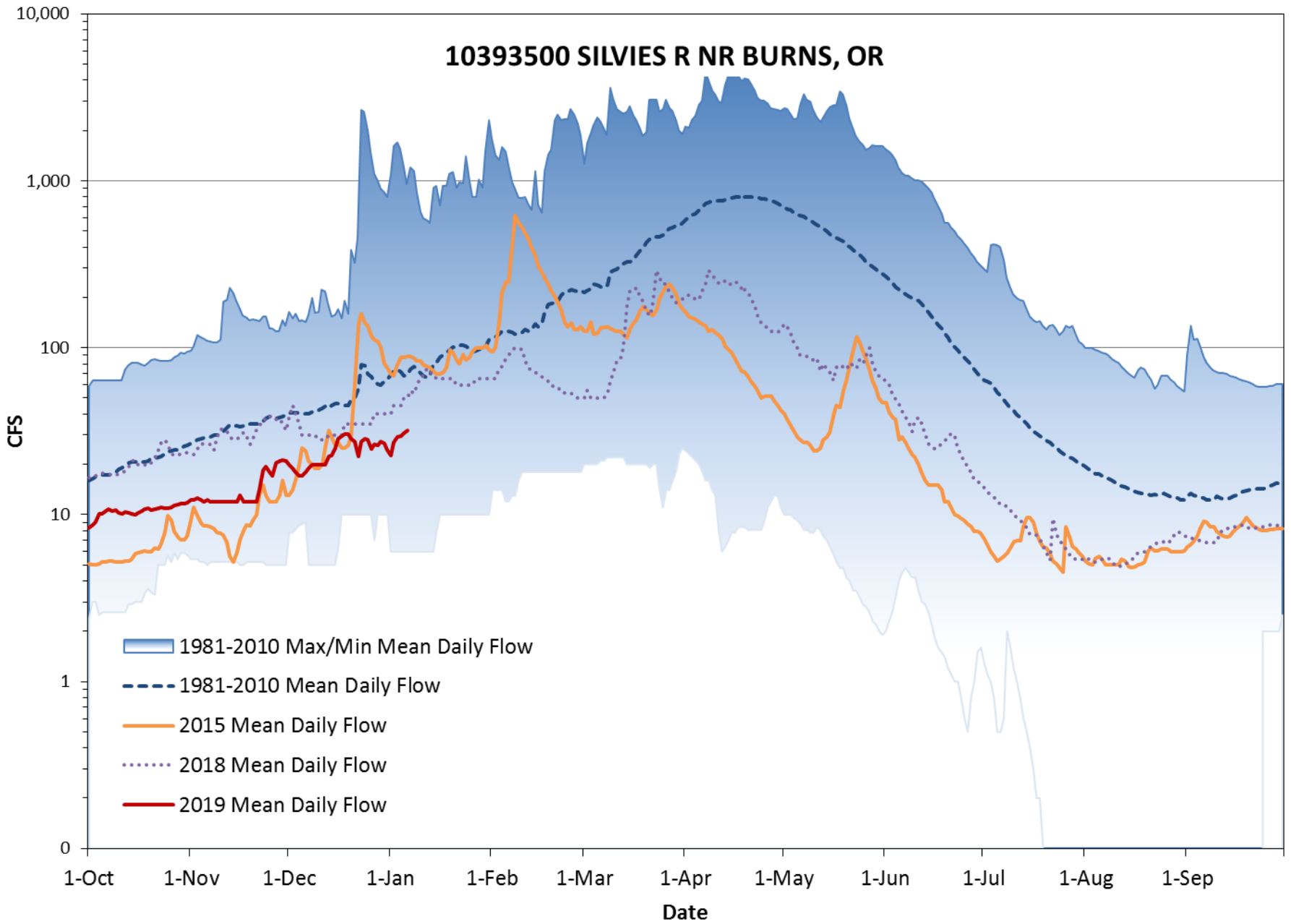
14079800 Crooked R ab Prineville Res nr Post, OR



14021000 UMATILLA R AT PENDLETON, OR



10393500 SILVIES R NR BURNS, OR



OREGON



WATER RESOURCES
DEPARTMENT

Thank you.

RECLAMATION

Managing Water in the West

Oregon Water Supply Availability Committee Meeting

Pacific Northwest Regional Office
River and Reservoir Operations
January 8, 2019



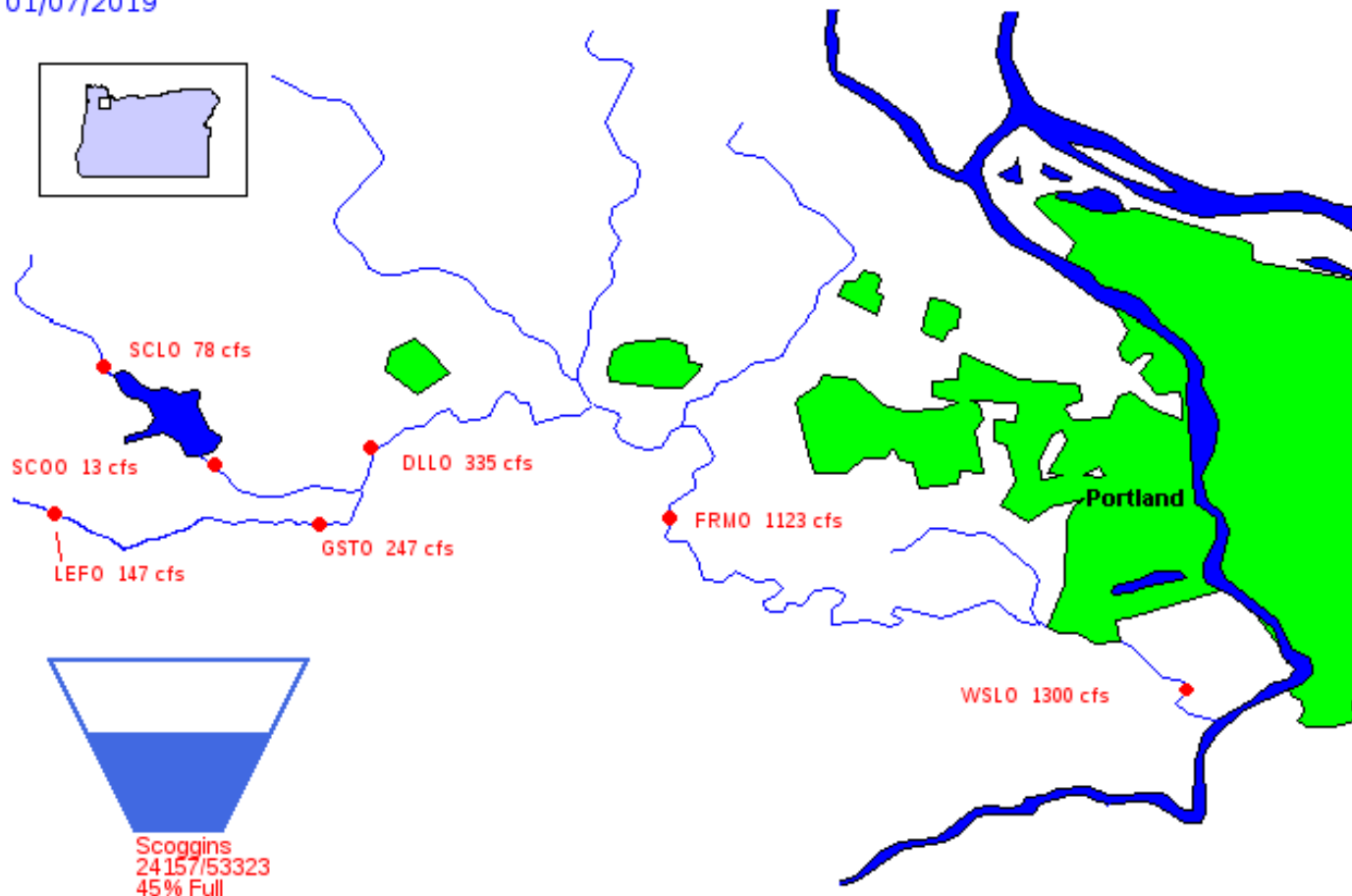
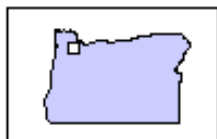
U.S. Department of the Interior
Bureau of Reclamation

Current Conditions

RECLAMATION

Tualatin River Basin

01/07/2019

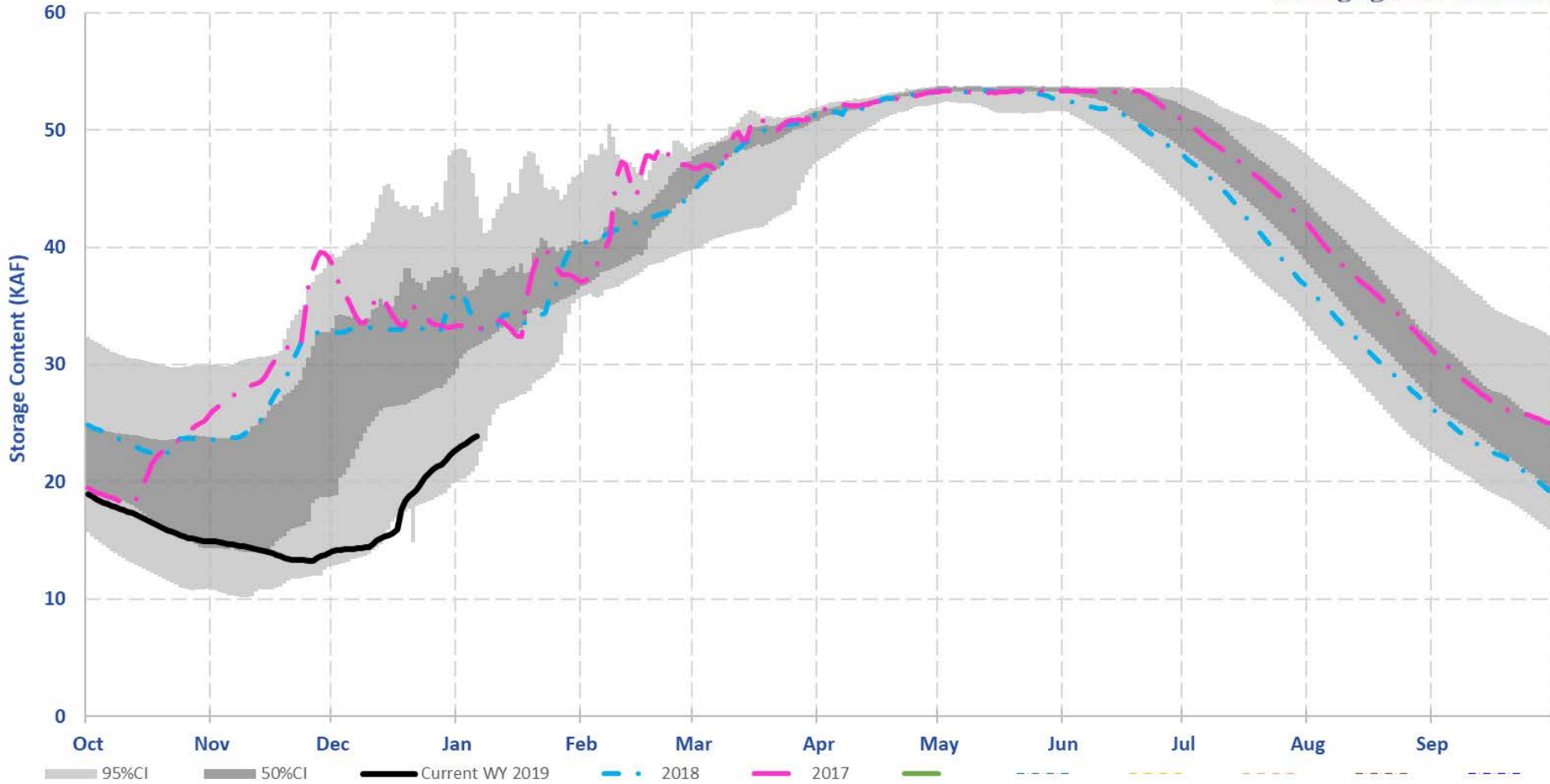


RECLAMATION

Tualatin River Basin: Scoggins

RECLAMATION
Managing Water in the West

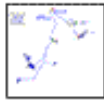
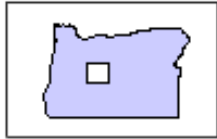
SCO AF



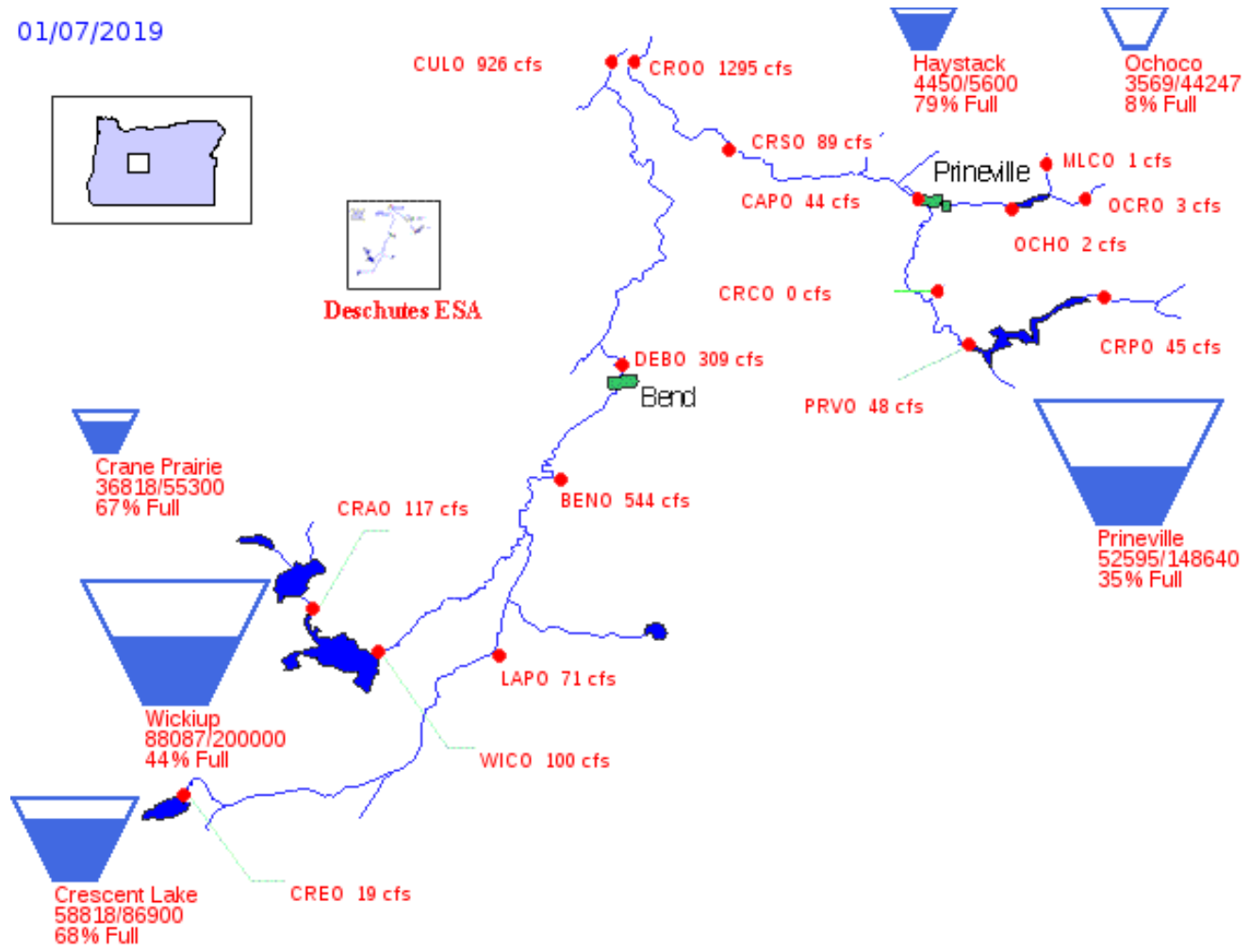
RECLAMATION

Deschutes River Basin

01/07/2019



Deschutes ESA

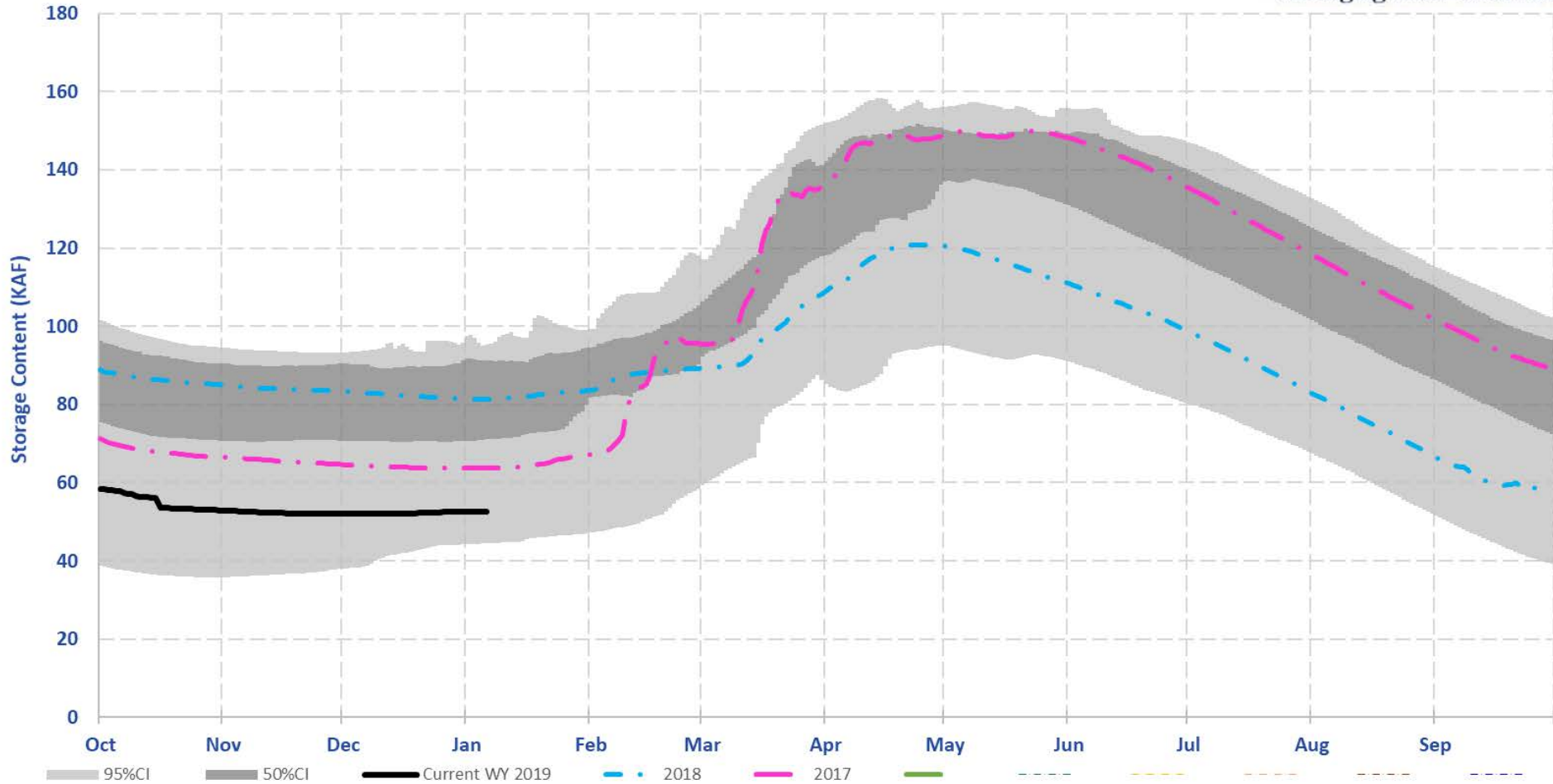


RECLAMATION

Deschutes River Basin: Prineville

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PRV AF

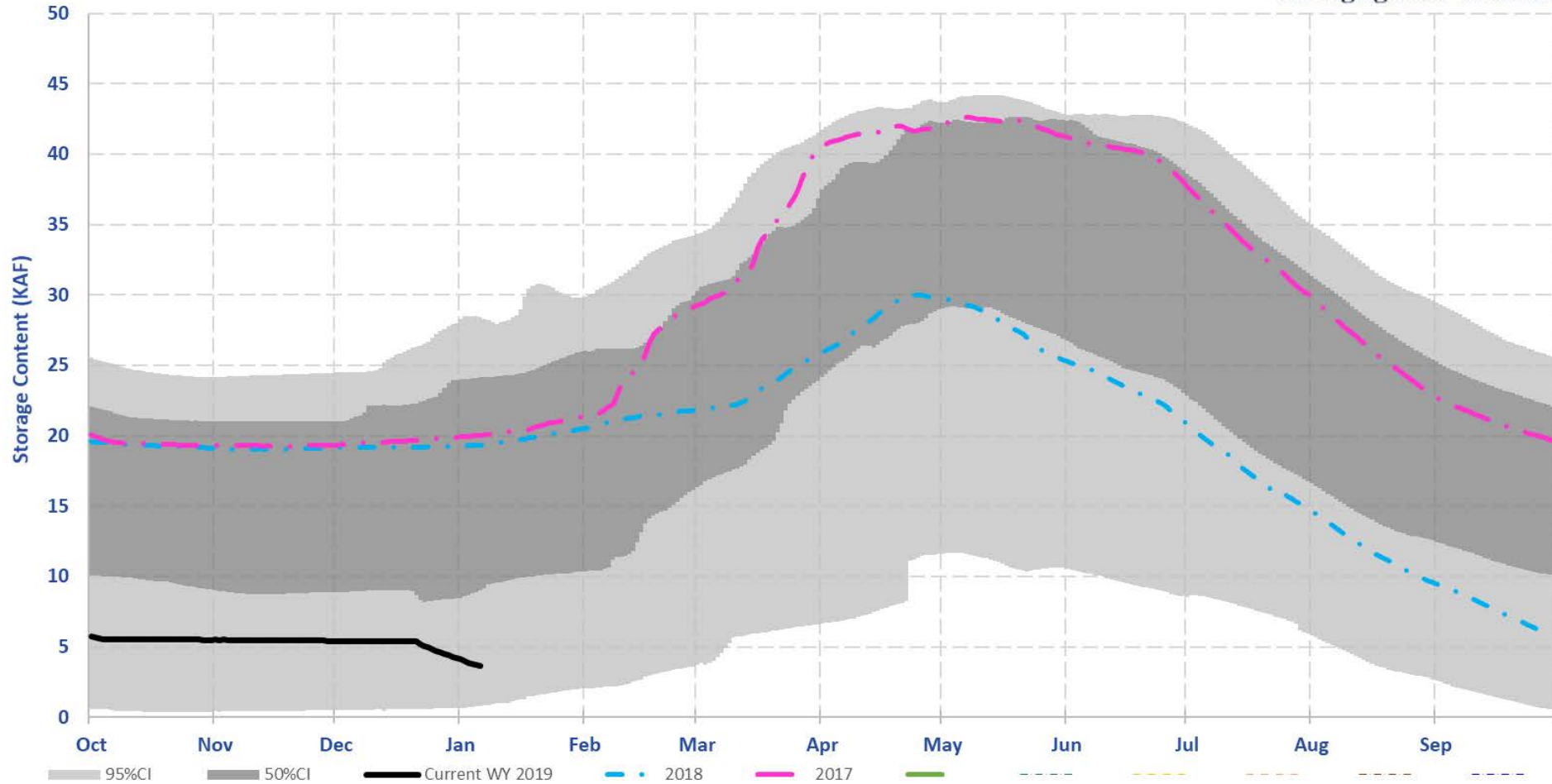


RECLAMATION

Deschutes River Basin: Ochoco

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OCH AF

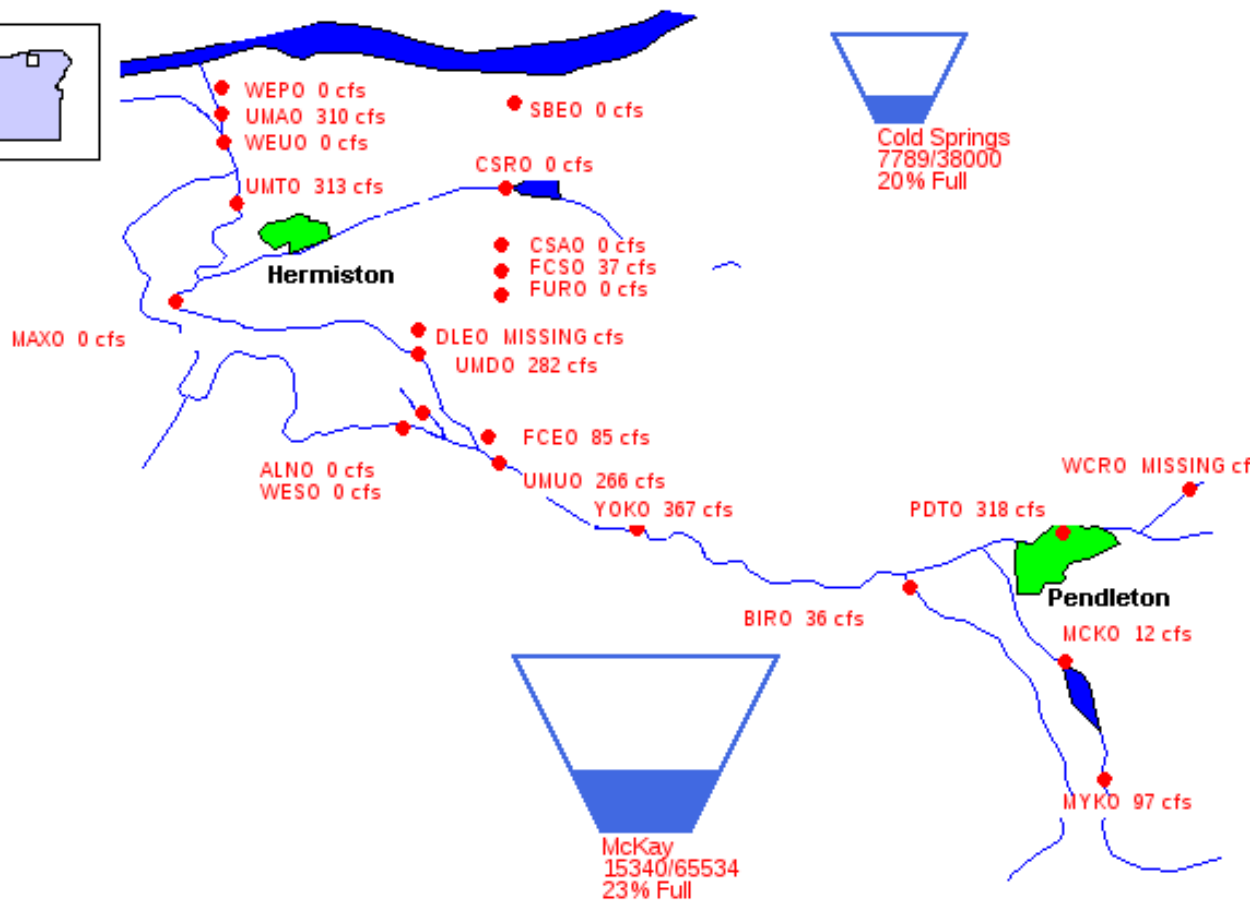
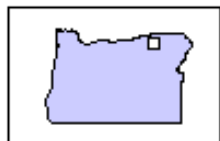


We are currently having issues with this gage – data is likely to be erroneous.

RECLAMATION

Umatilla River Basin

01/07/2019

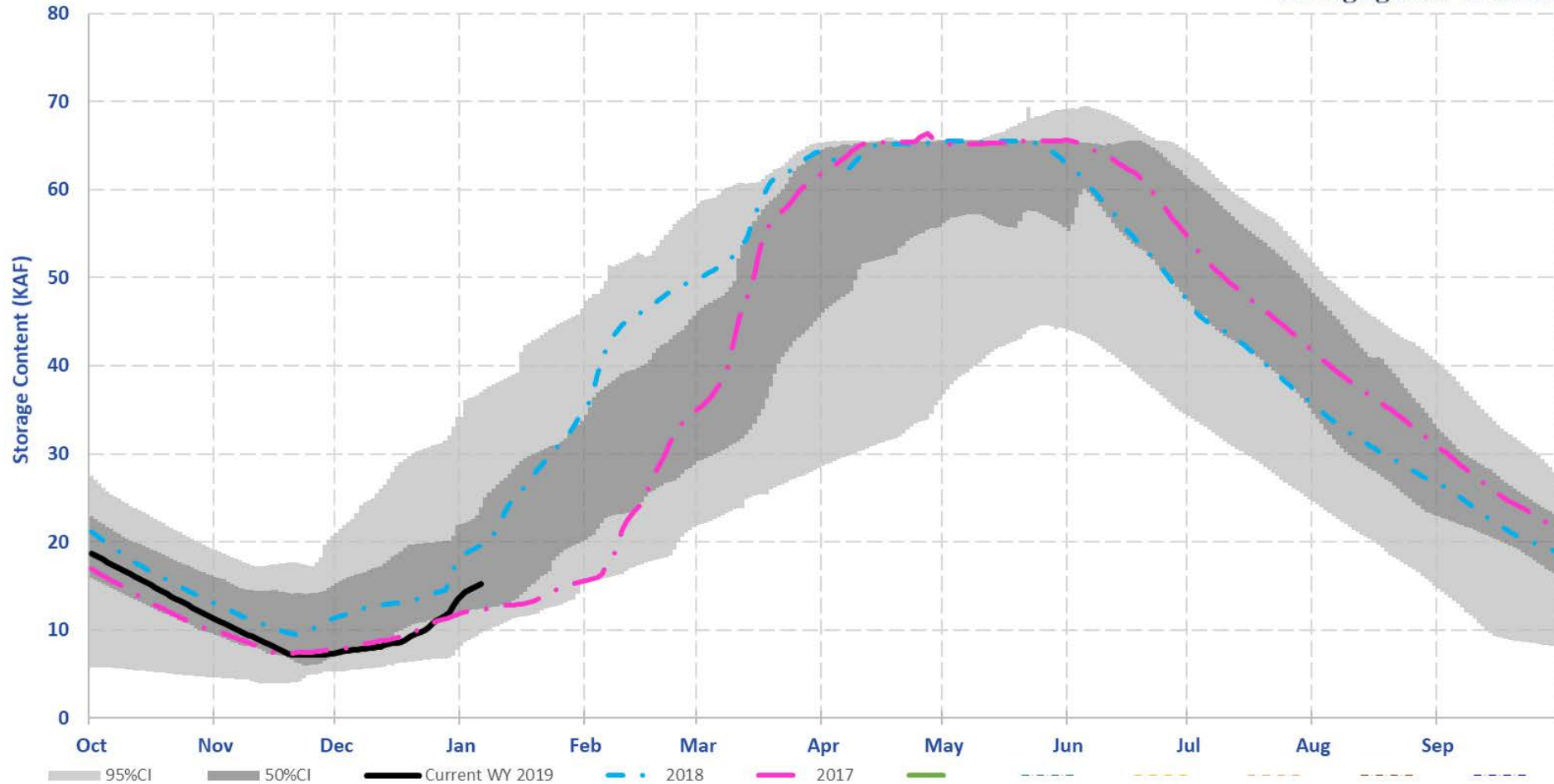


RECLAMATION

Umatilla River Basin: McKay

MCK AF

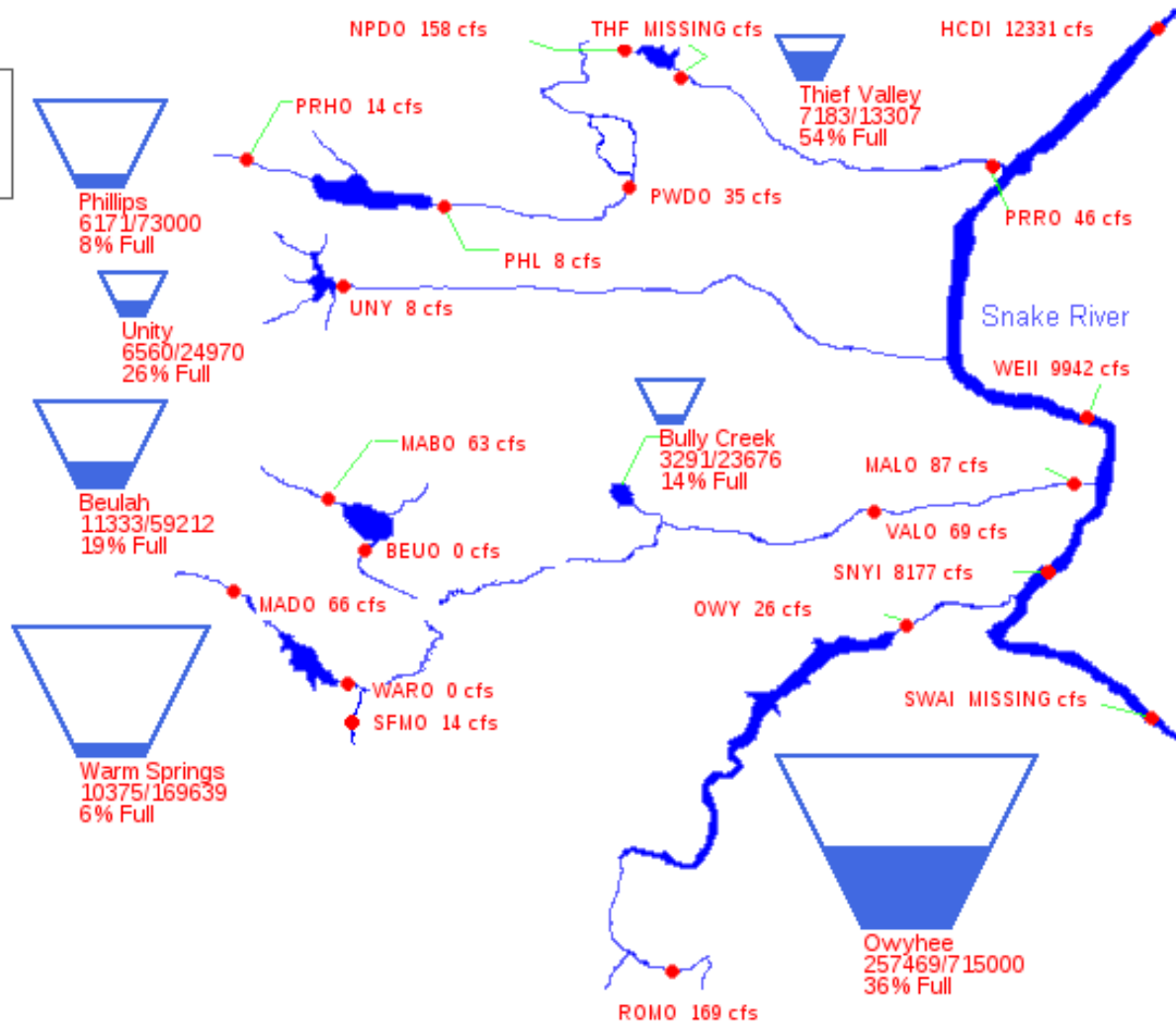
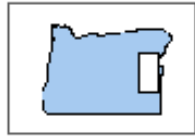
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RECLAMATION

Southeastern Oregon

01/07/2019

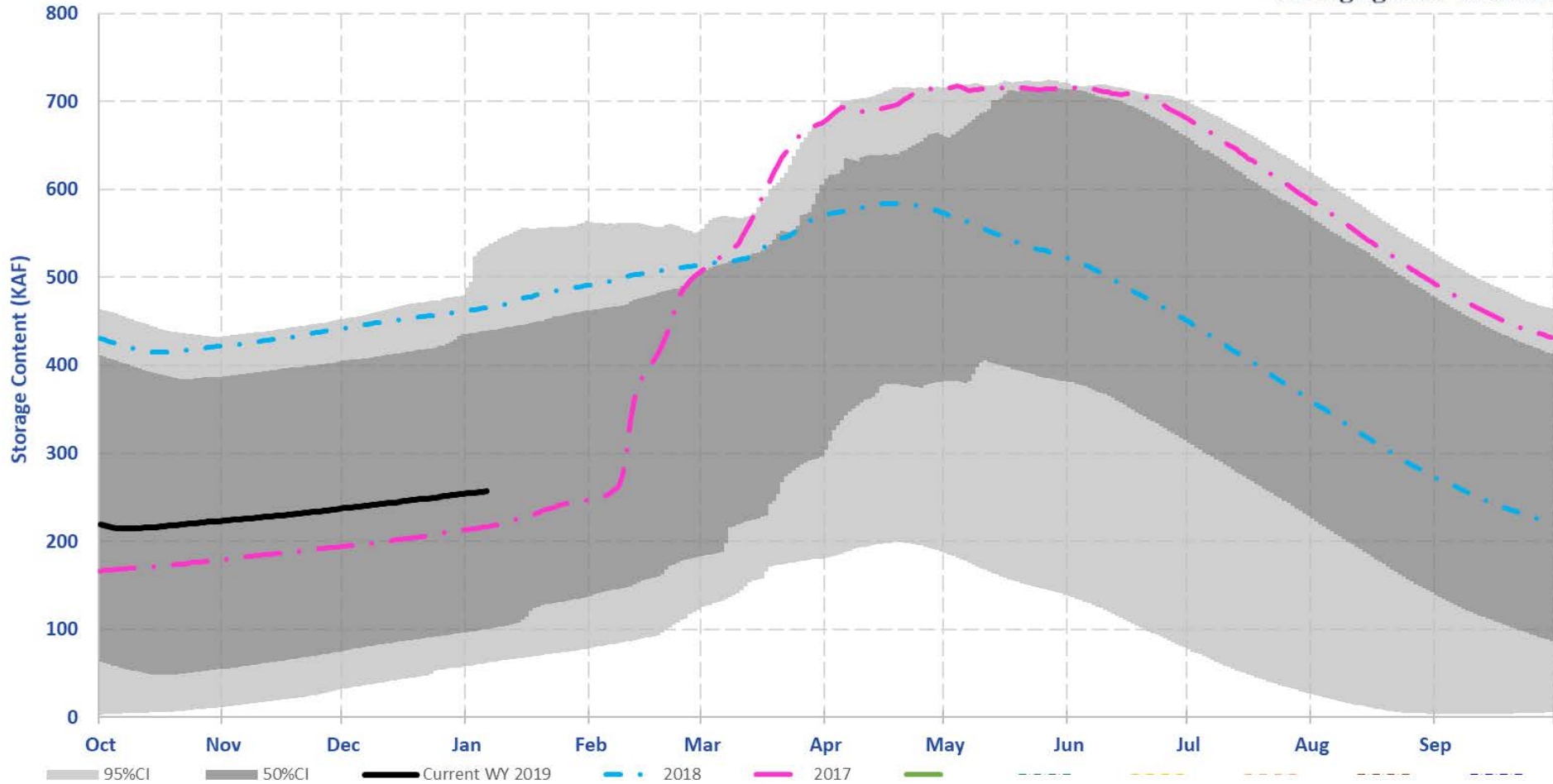


RECLAMATION

Owyhee River Basin: Owyhee

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OWY AF

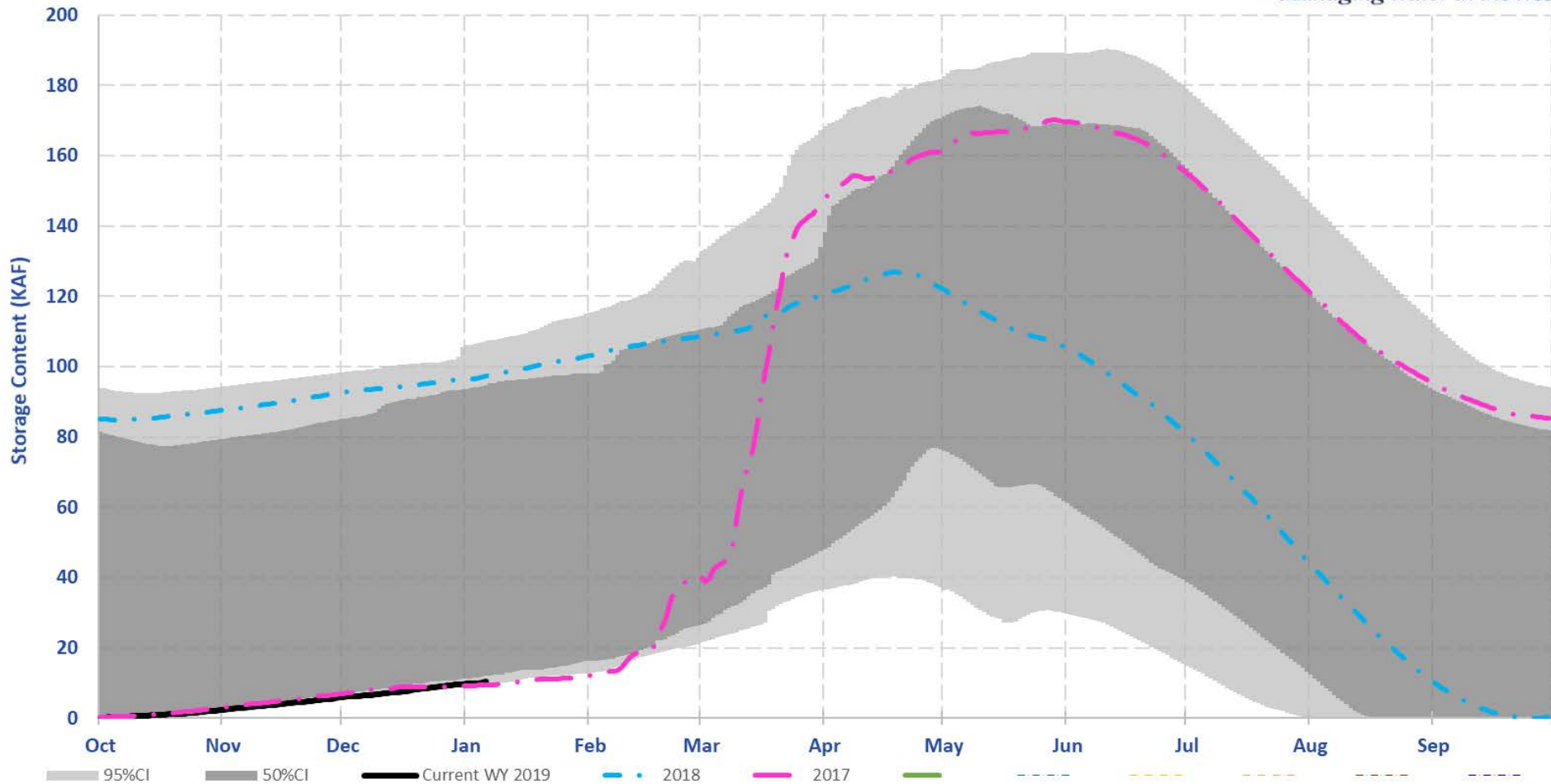


RECLAMATION

Malheur River Basin: Warm Springs

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WAR AF

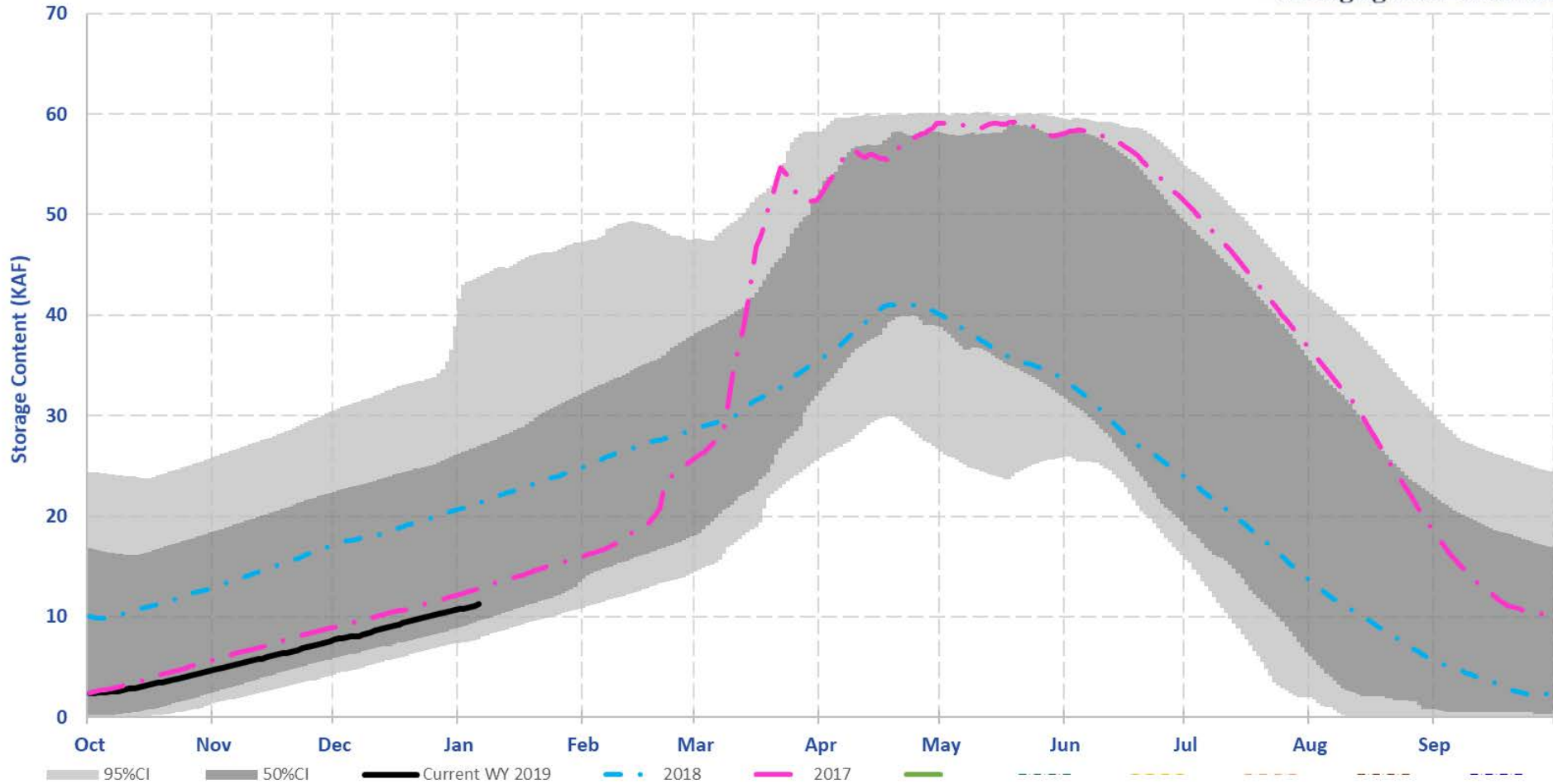


RECLAMATION

Malheur River Basin: Beulah

RECLAMATION
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BEU AF

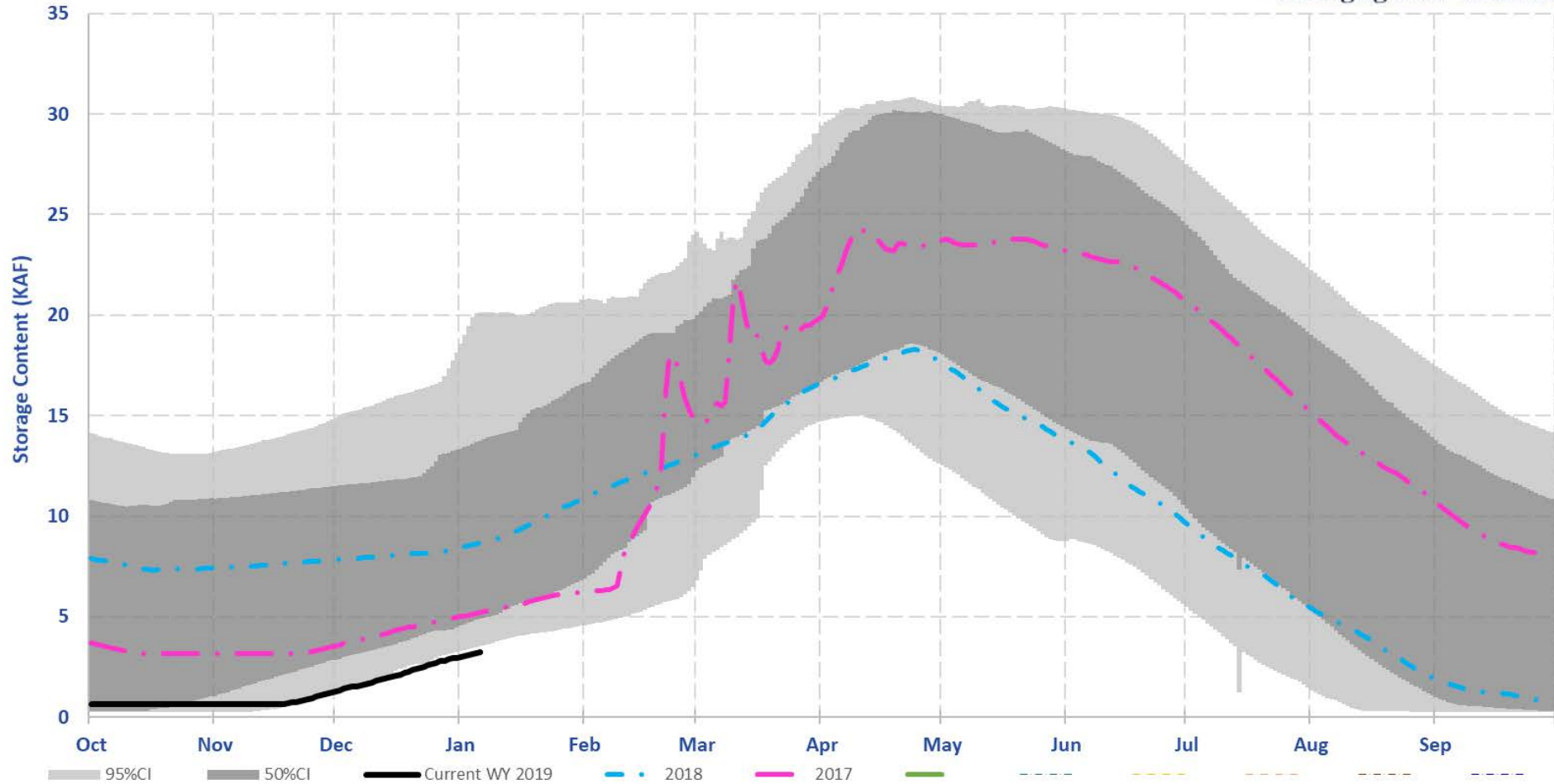


RECLAMATION

Malheur River Basin: Bully Creek

RECLAMATION
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BUL AF

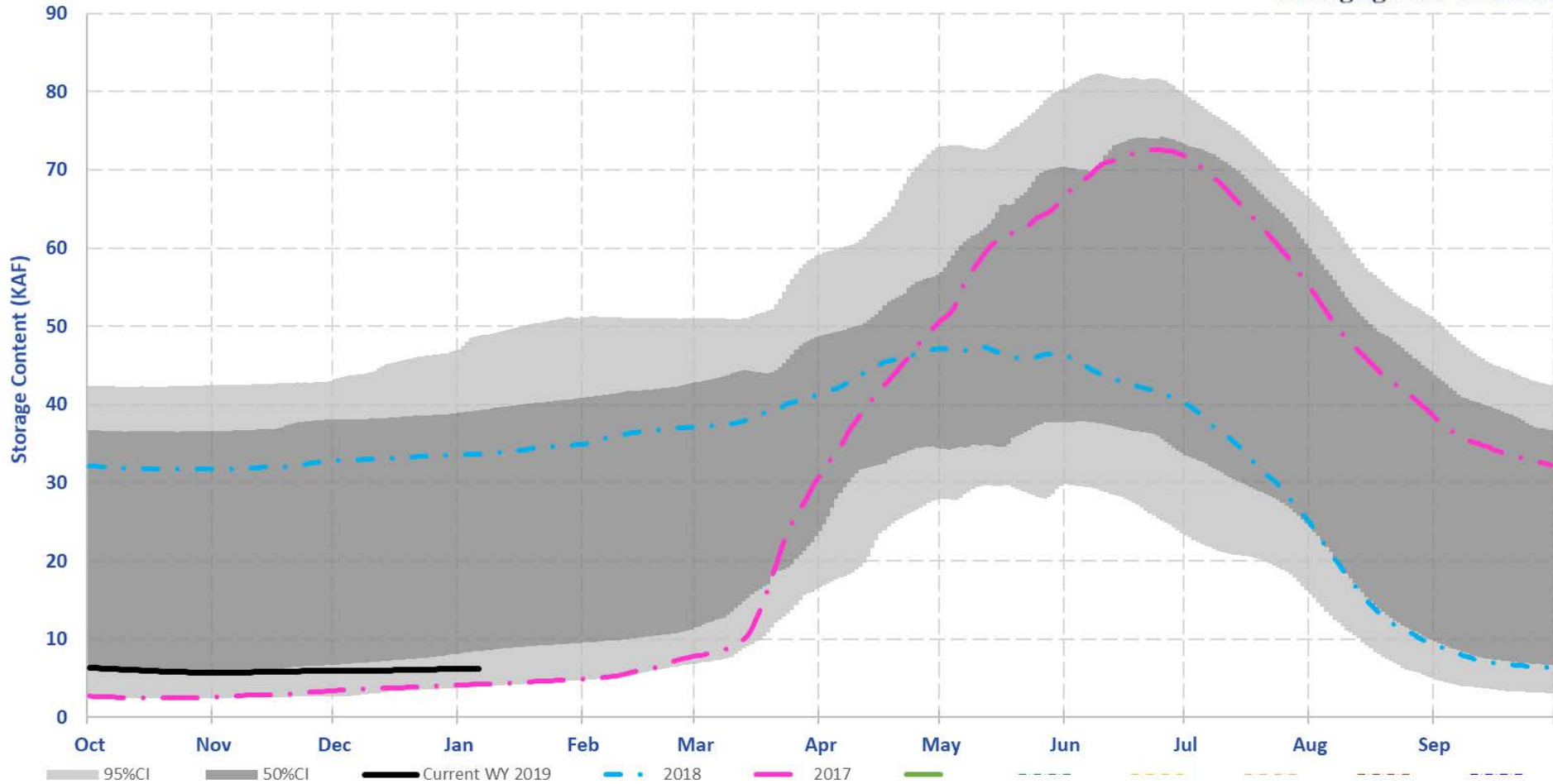


RECLAMATION

Powder River Basin: Phillips

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PHL AF

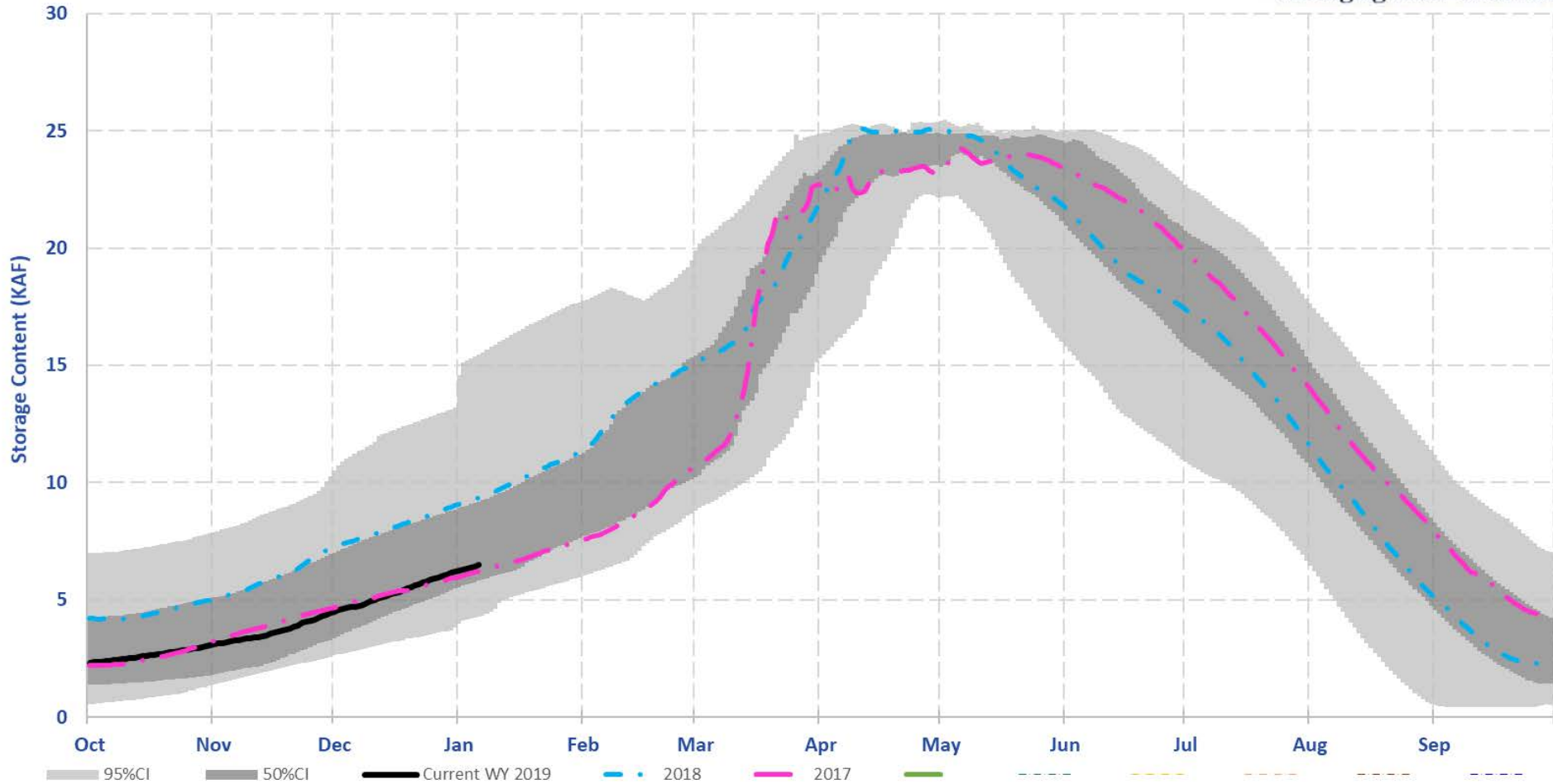


RECLAMATION

Burnt River Basin: Unity

RECLAMATION
Managing Water in the West

UNY AF



RECLAMATION

Reservoir Inflow Forecasts

Forecast Reservoir	Forecast Period	1981-2010 Average (KAF)	USBR Forecast (KAF)	% Avg	NWRFC Forecast (KAF)	% Avg	Available Space (KAF)
Beulah	Jan-Jun	86	66	77%	44	51%	49
Bully Creek	Jan-Jun	38	26	69%	6	16%	28
McKay	Jan-Jun	69	75	109%	59	86%	50
Ochoco	Jan-Jun	46	32	69%	24	52%	38
Owyhee	Jan-Jun	655	525	80%	322	49%	450
Prineville	Jan-Aug	221	165	75%	101	46%	100
Unity	Jan-Jul	55	42	77%	26	48%	18
Warm Springs	Jan-Jun	137	105	77%	72	52%	170

*Forecasts dated 01-JAN
Space as of 07-JAN*

Questions



RECLAMATION