


Water Supply Conditions Report

Drought Readiness Council



Ken Stahr
Oregon Water Resources
Department
November 14, 2018

Photo: East Fork Lewis River - Andy Bryant, NWS Portland

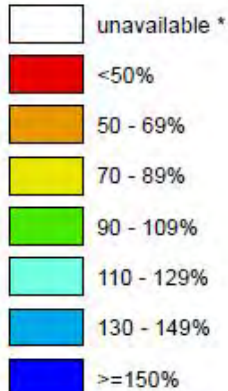
Statewide SNOTEL Precipitation is 101% of normal

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

Nov 05, 2018

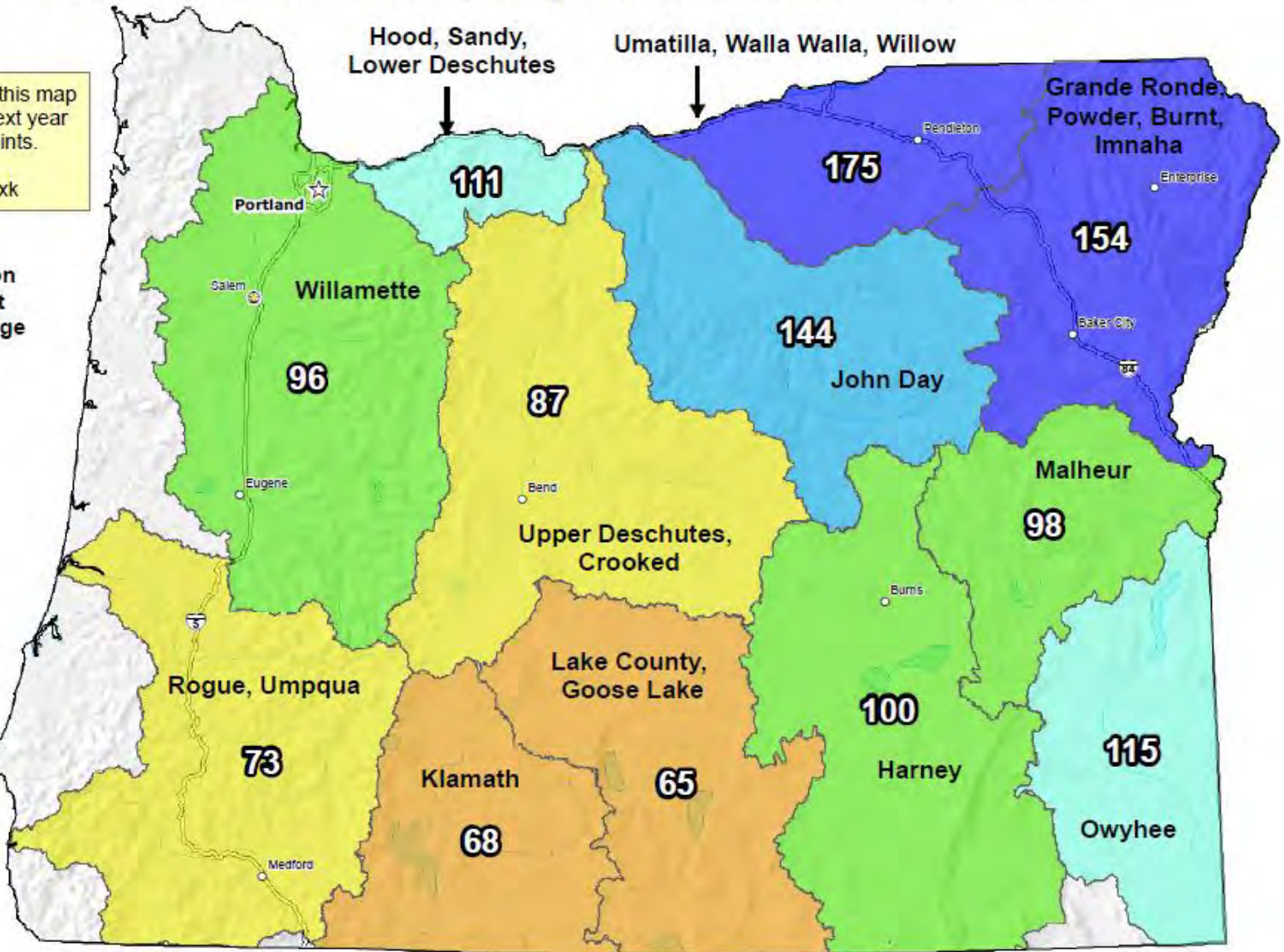
Notice: We anticipate this map will not be available next year due to staffing constraints. Alternate maps: <https://go.usa.gov/xnzxk>

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

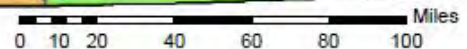


* Data unavailable at time of posting or measurement is not representative at this time of year

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>

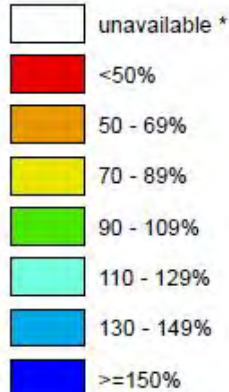
Statewide SNOTEL Precipitation is 76% of normal

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

Nov 13, 2018

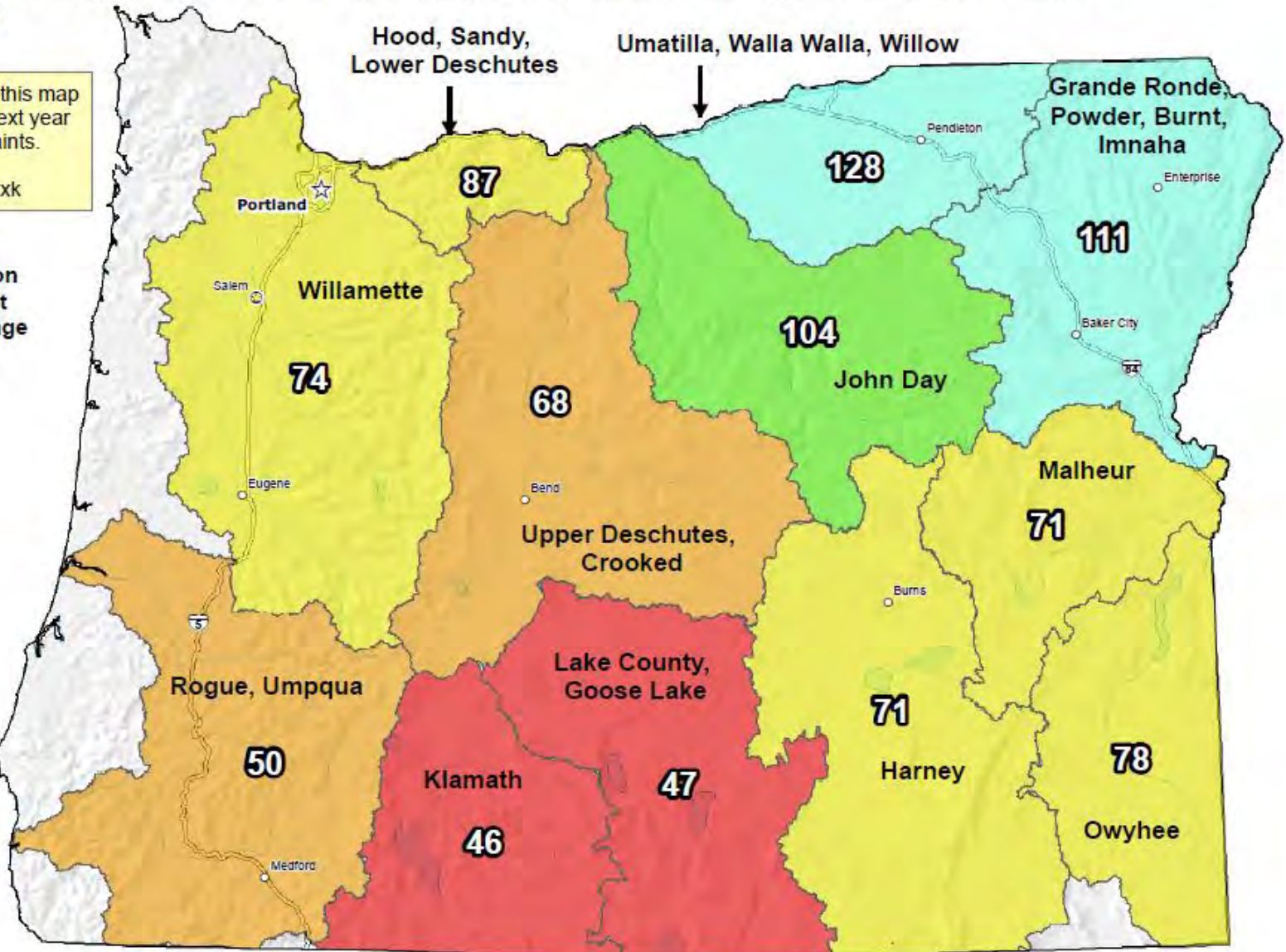
Notice: We anticipate this map will not be available next year due to staffing constraints. Alternate maps: <https://go.usa.gov/xnzxk>

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

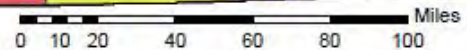


* Data unavailable at time of posting or measurement is not representative at this time of year

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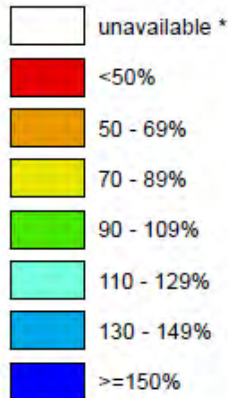
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Oregon SNOTEL Current Snow Water Equivalent (SWE) % of Normal

Nov 05, 2018

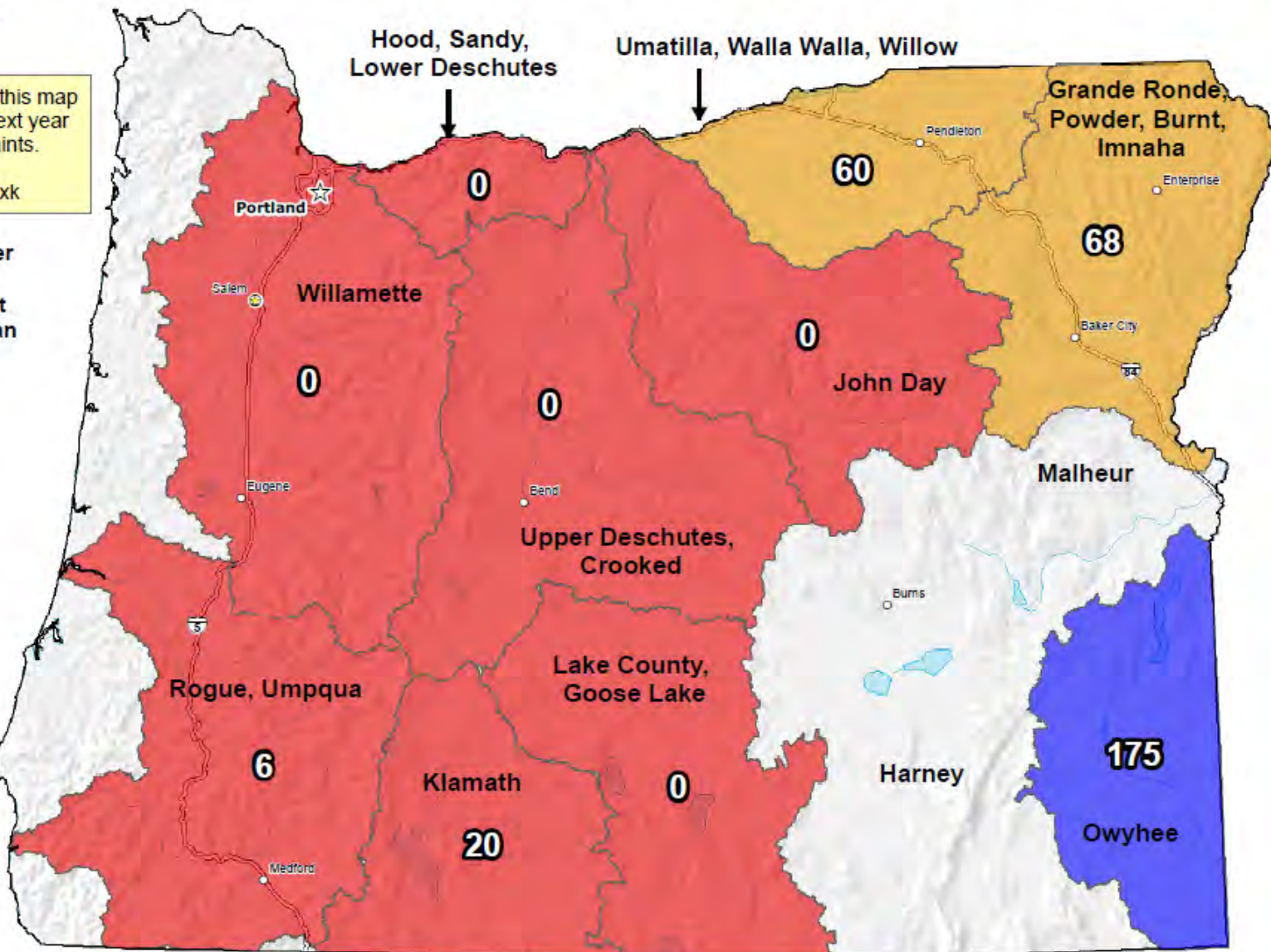
Notice: We anticipate this map will not be available next year due to staffing constraints. Alternate maps: <https://go.usa.gov/xnzxk>

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).

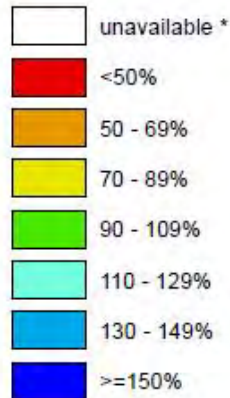
0 10 20 40 60 80 100 Miles
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Oregon SNOTEL Current Snow Water Equivalent (SWE) % of Normal

Nov 13, 2018

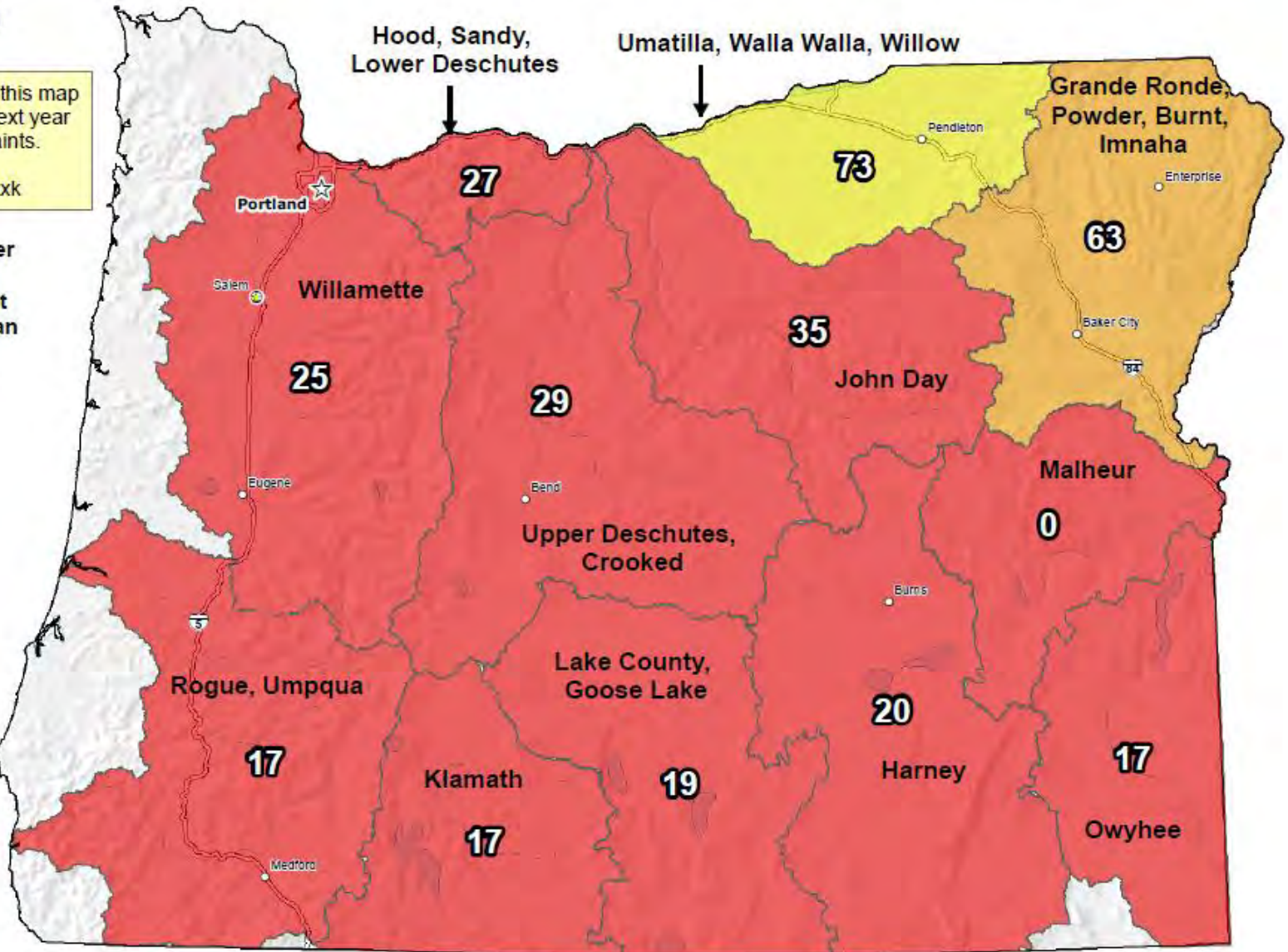
Notice: We anticipate this map will not be available next year due to staffing constraints. Alternate maps: <https://go.usa.gov/xnzxk>

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

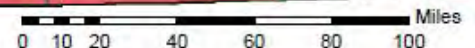


* Data unavailable at time of posting or measurement is not representative at this time of year

Provisional Data
Subject to Revision

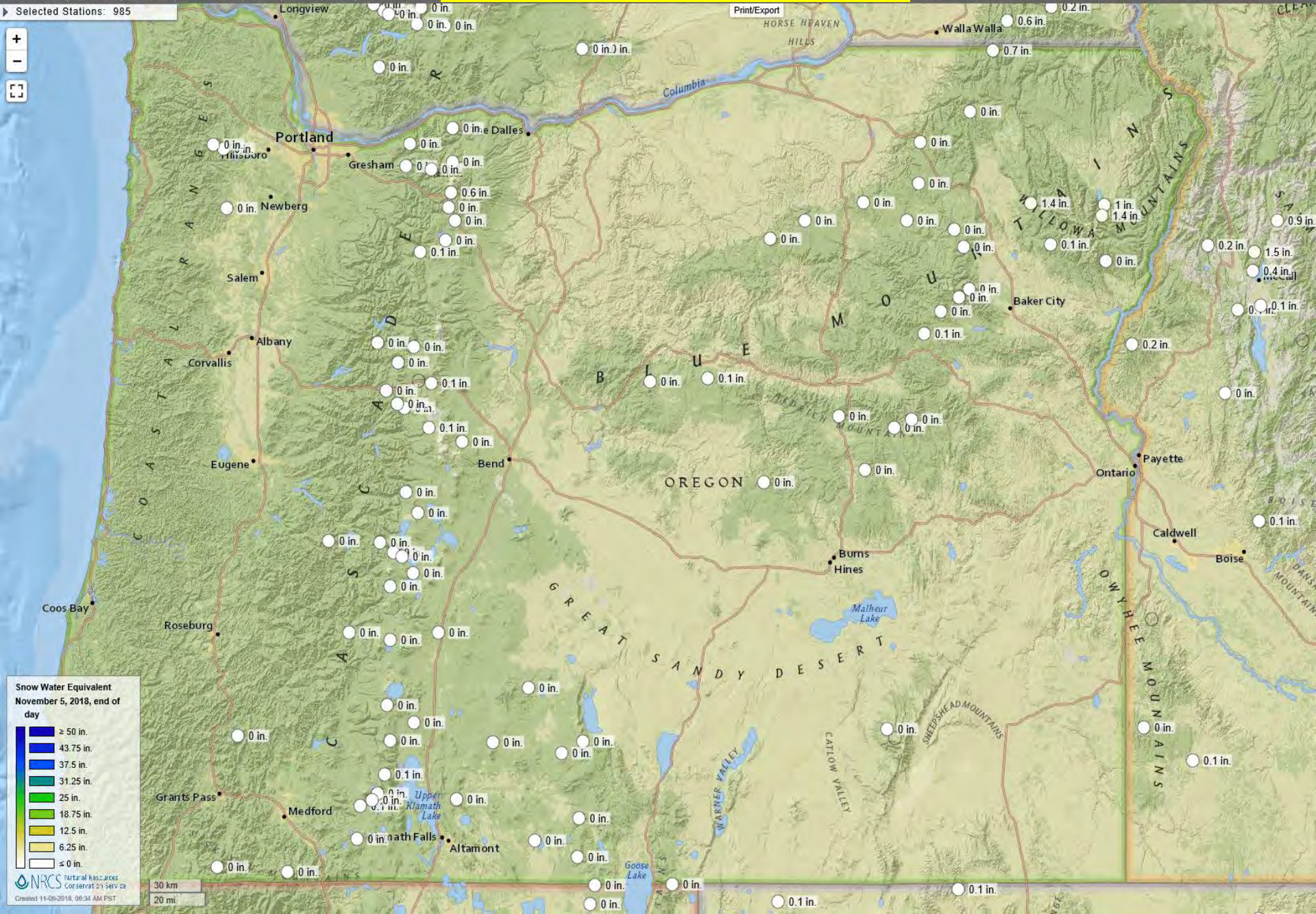


The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).



Prepared by:
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SNOTEL Snow Water Equivalent November 6, 2018



Snow Water Equivalent
 November 5, 2018, end of day

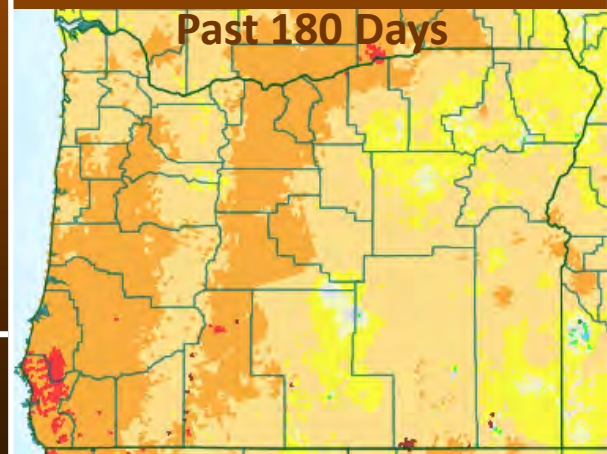
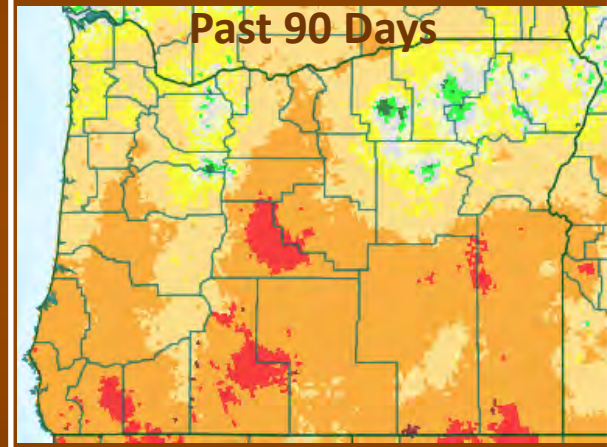
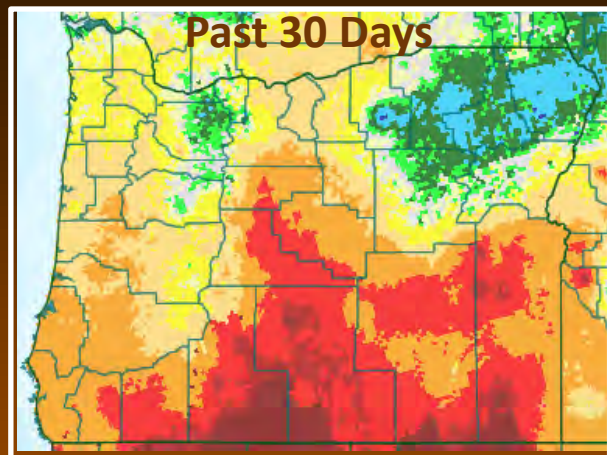
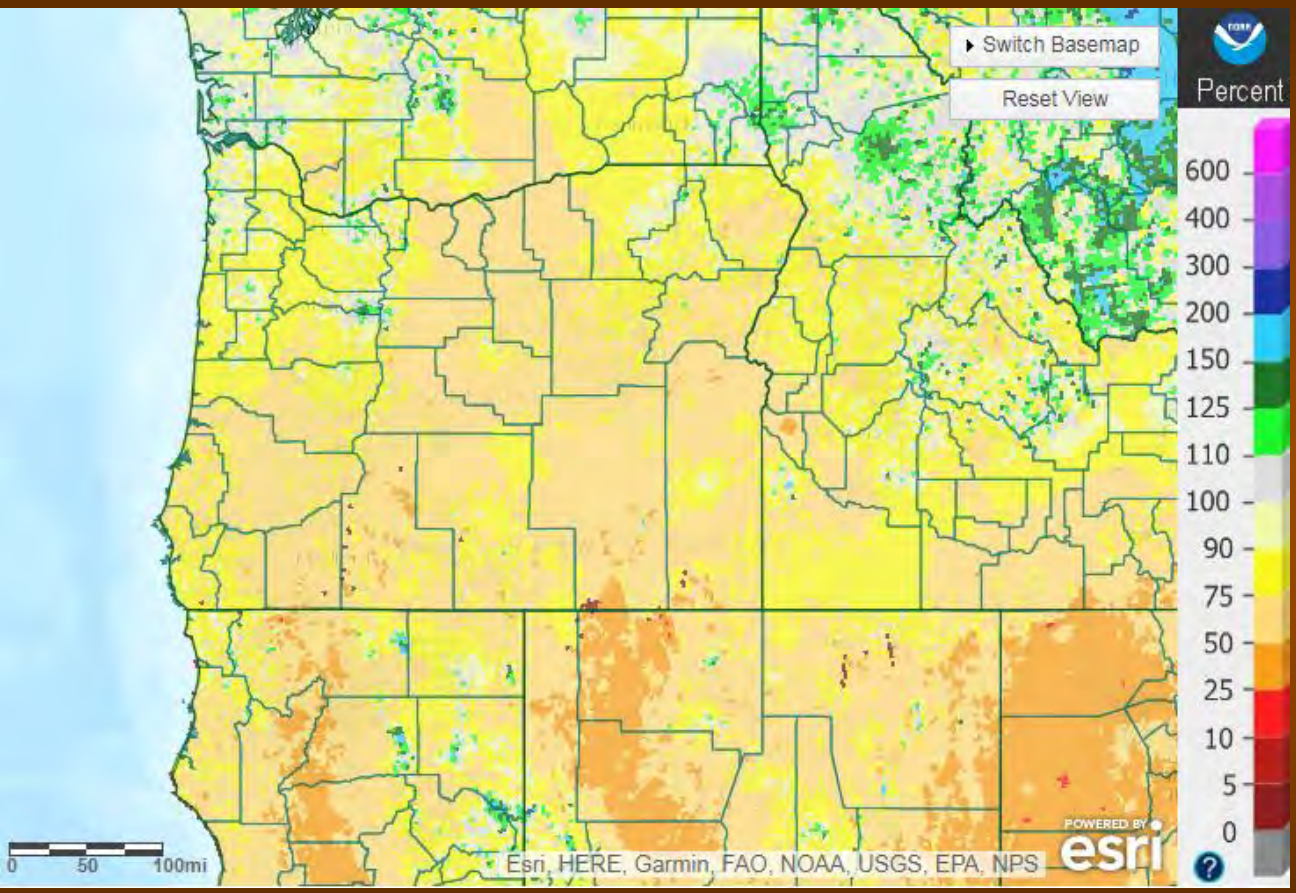
Dark Blue	≥ 50 in.
Blue	43.75 in.
Light Blue	37.5 in.
Teal	31.25 in.
Green	25 in.
Light Green	18.75 in.
Yellow-Green	12.5 in.
Yellow	6.25 in.
White	≤ 0 in.

30 km
 20 mi



Precipitation % of Average

2018 Water Year



Precipitation Data as of November 6, 2018

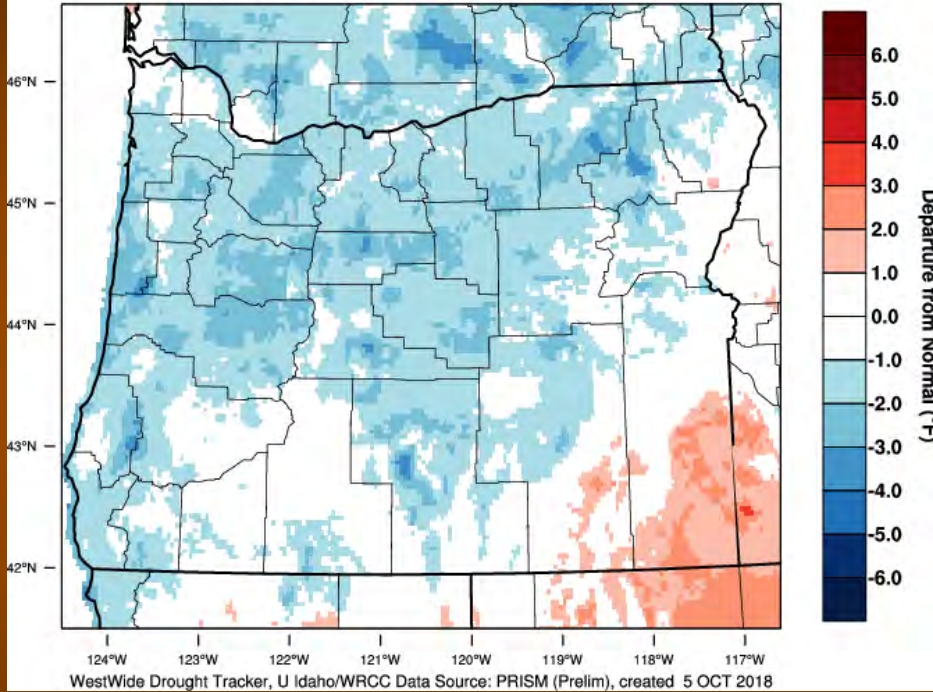
Recent Temperatures

September 2018

October 2018

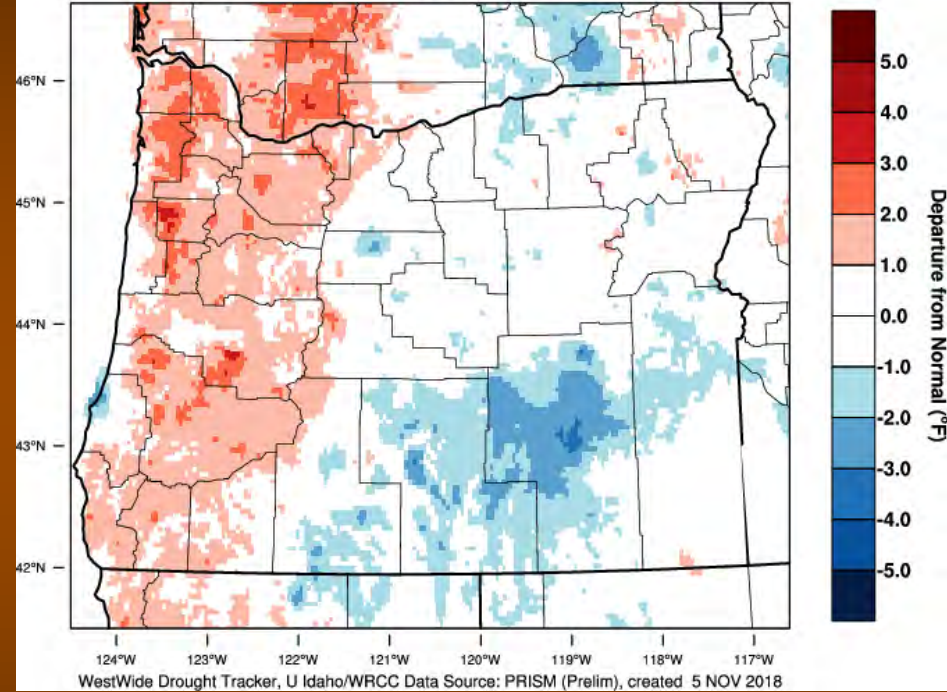
Oregon - Mean Temperature

September 2018 Departure from 1981-2010 Normal



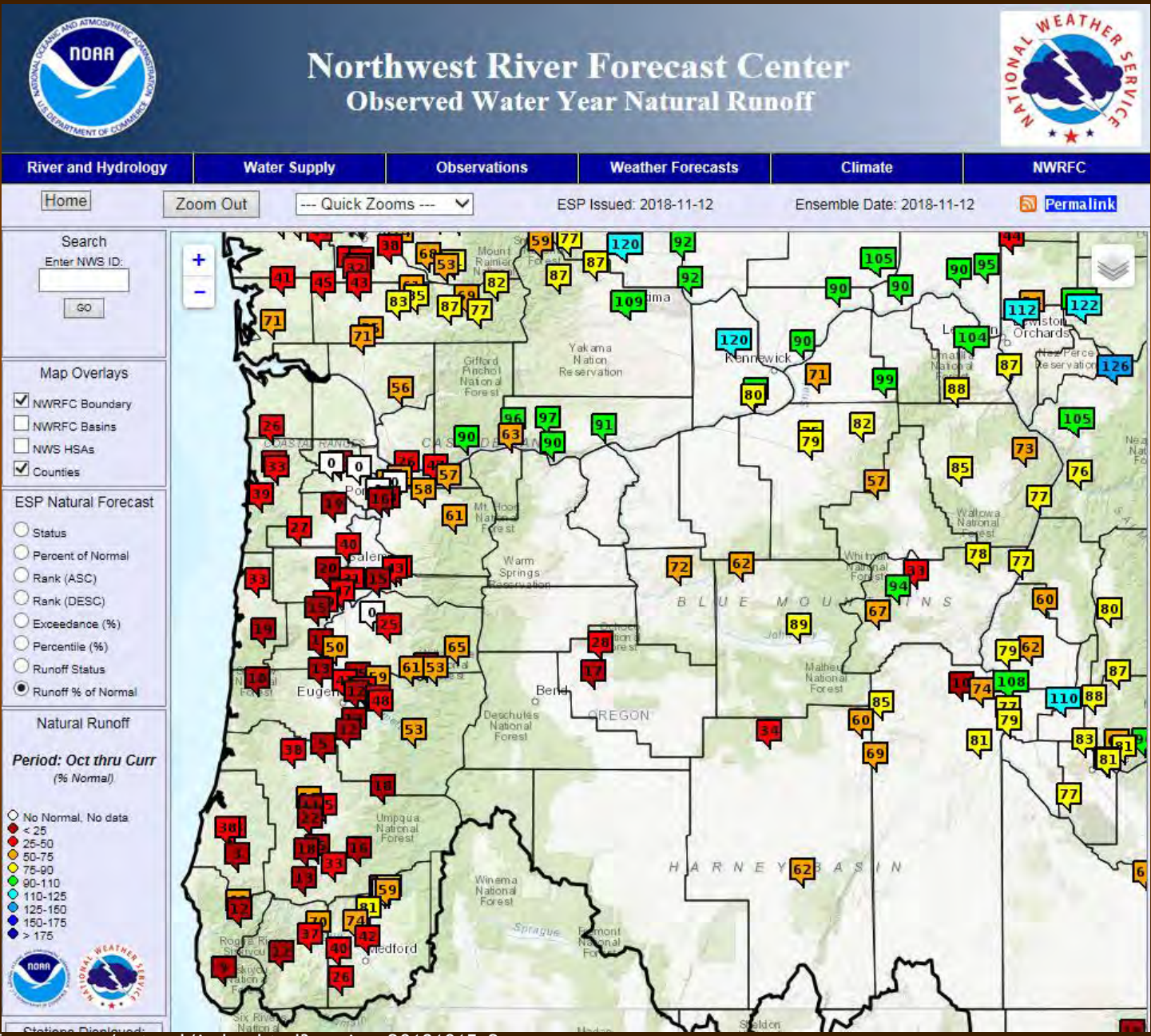
Oregon - Mean Temperature

October 2018 Departure from 1981-2010 Normal





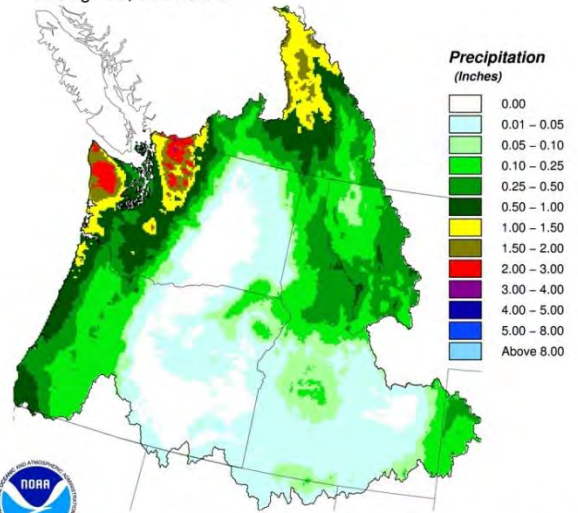
Observed WY19 Runoff thus far





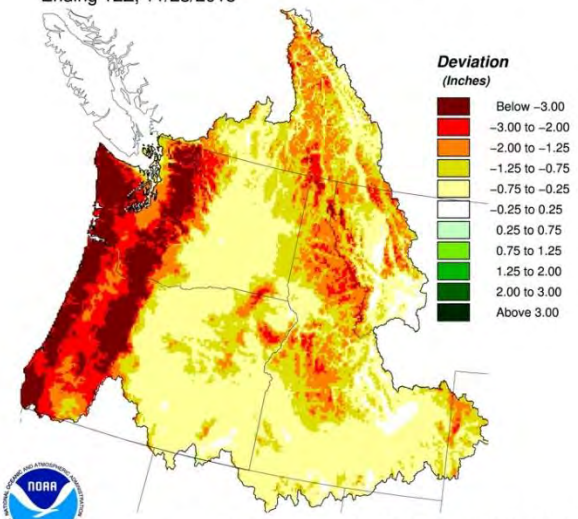
Mid-November Outlook

10 Day QPF
Ending 12Z, 11/23/2018



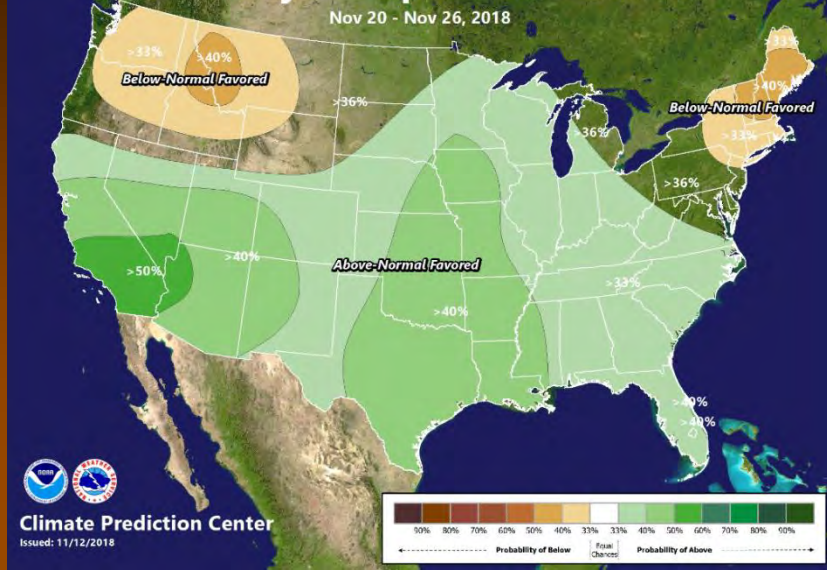
Creation Time: Tue Nov 13 16:19:22 UTC 2018

10 Day QPF (Deviation from Climatology)
Ending 12Z, 11/23/2018

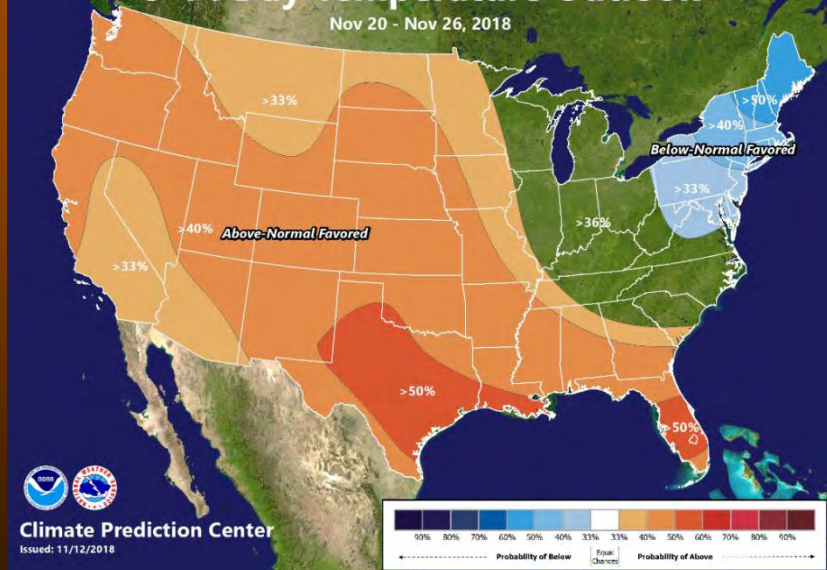


Creation Time: Tue Nov 13 16:19:43 UTC 2018

8-14 Day Precipitation Outlook
Nov 20 - Nov 26, 2018

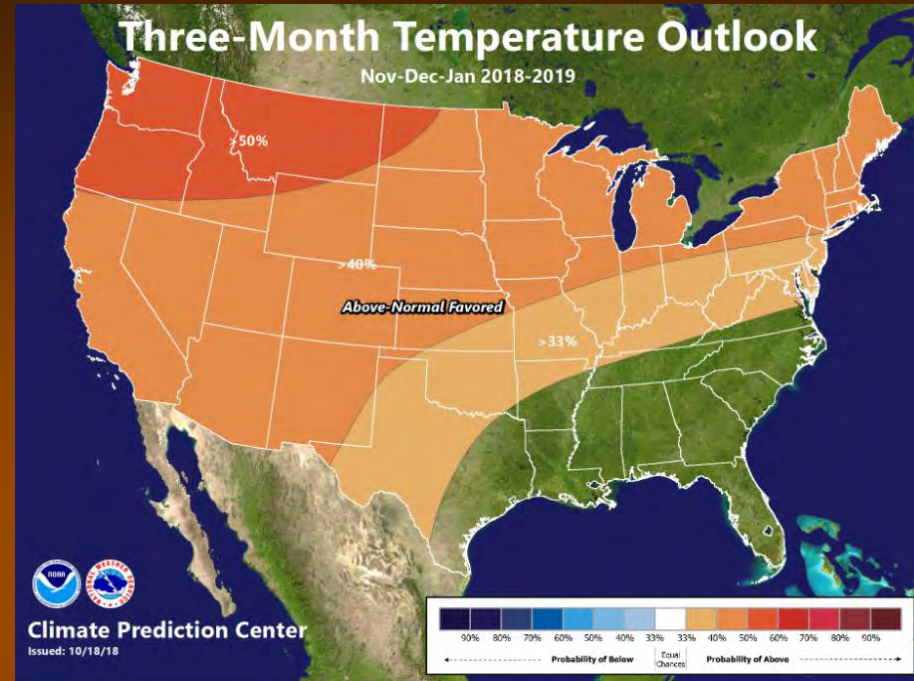
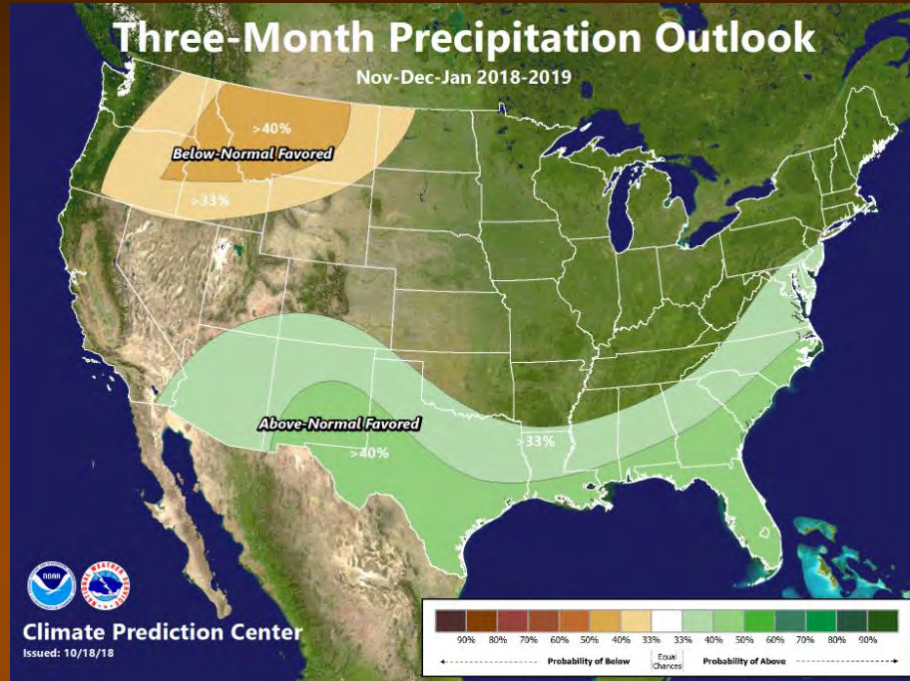


8-14 Day Temperature Outlook
Nov 20 - Nov 26, 2018



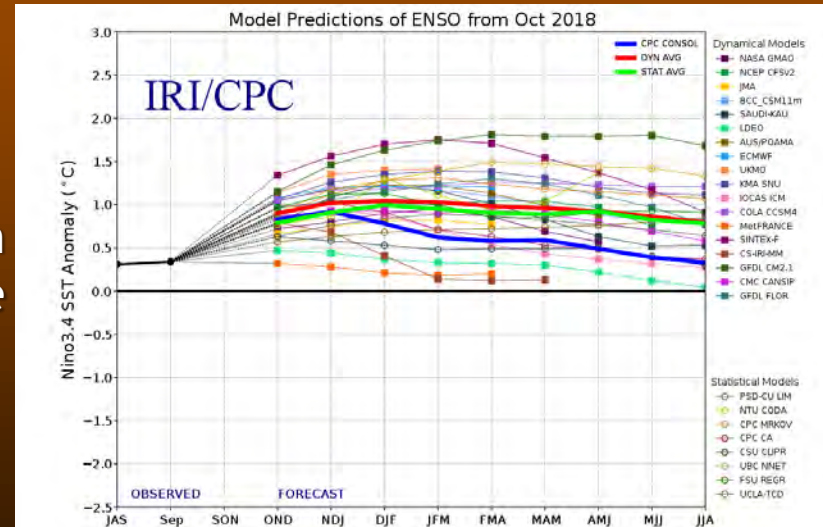


Outlook for November 2018 - January 2019



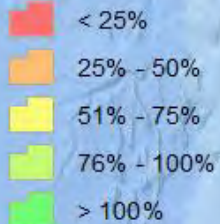
https://www.wrh.noaa.gov/images/sto/GIS_NEW/

ENSO Prediction based on consensus of model guidance

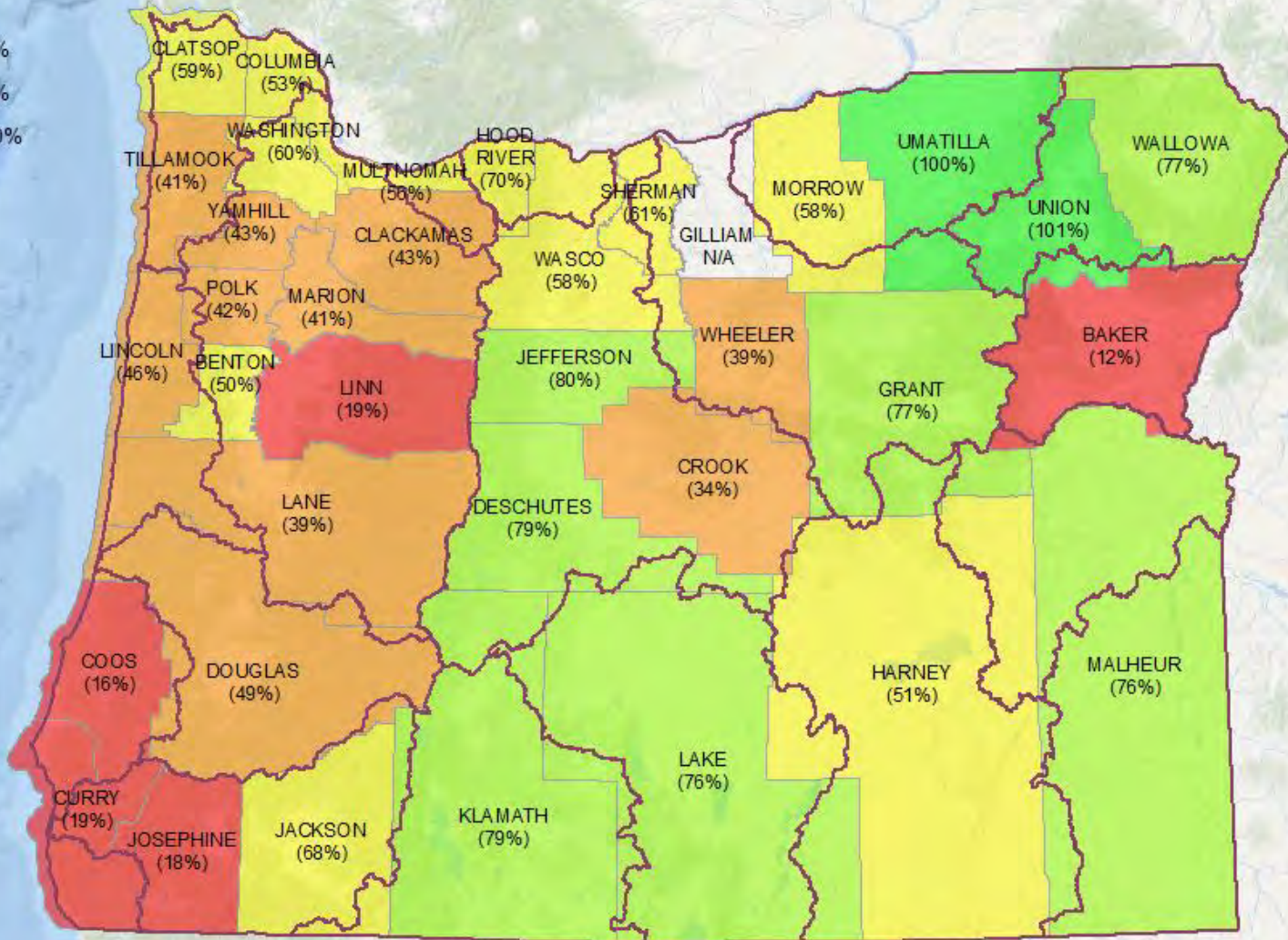


Percent of Average Streamflow October - 2018

County

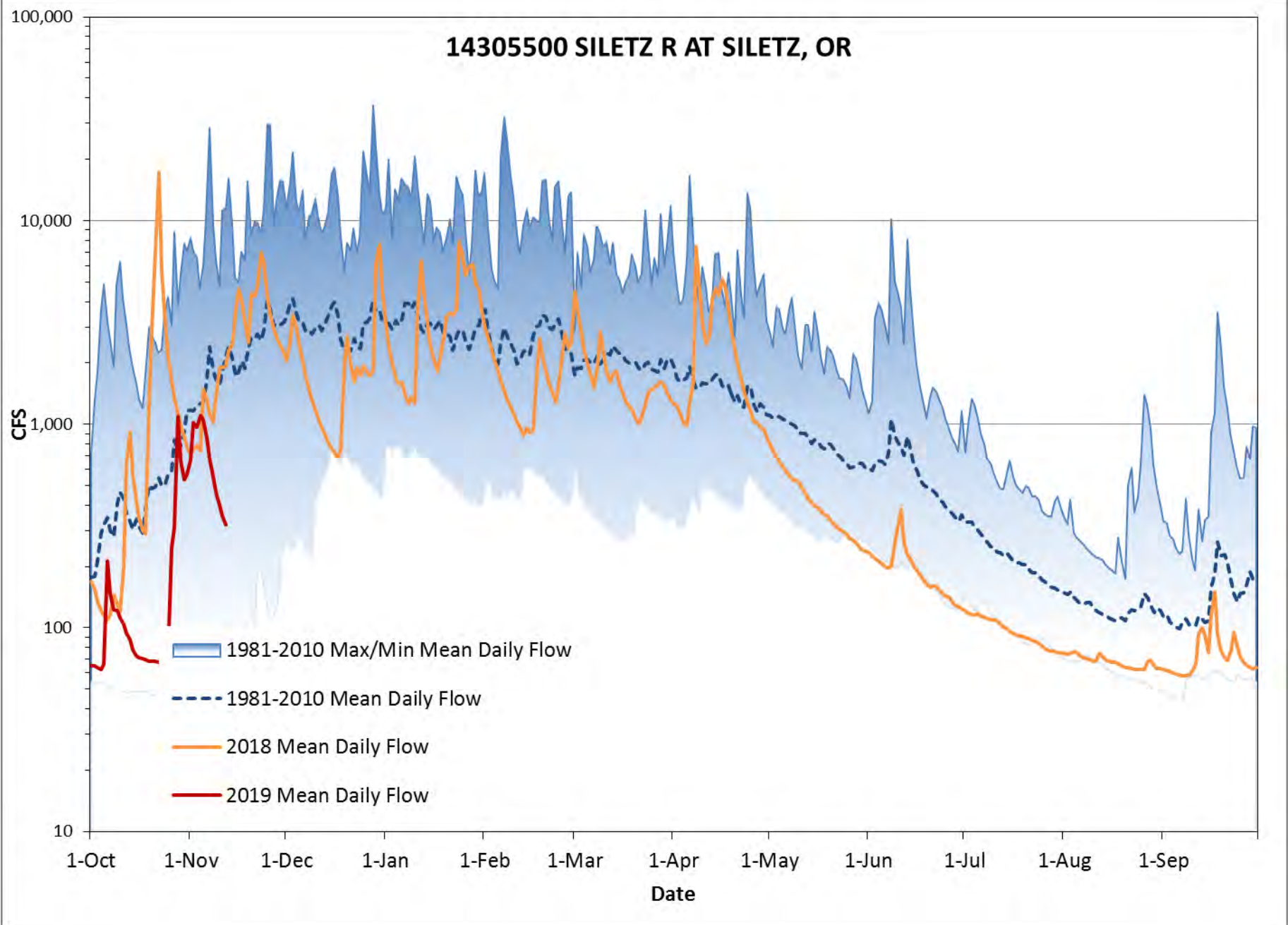


WRD Basin

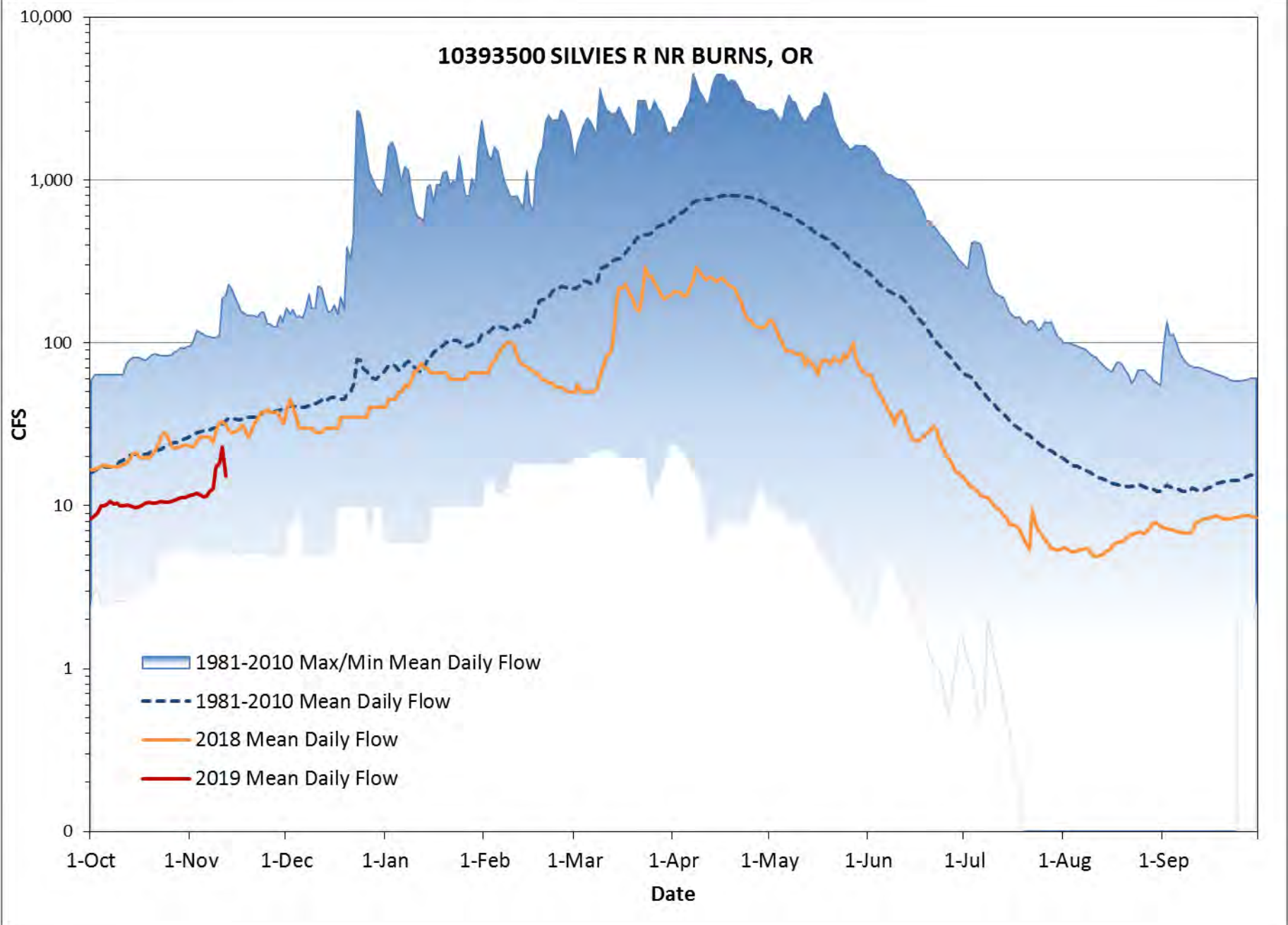


Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.

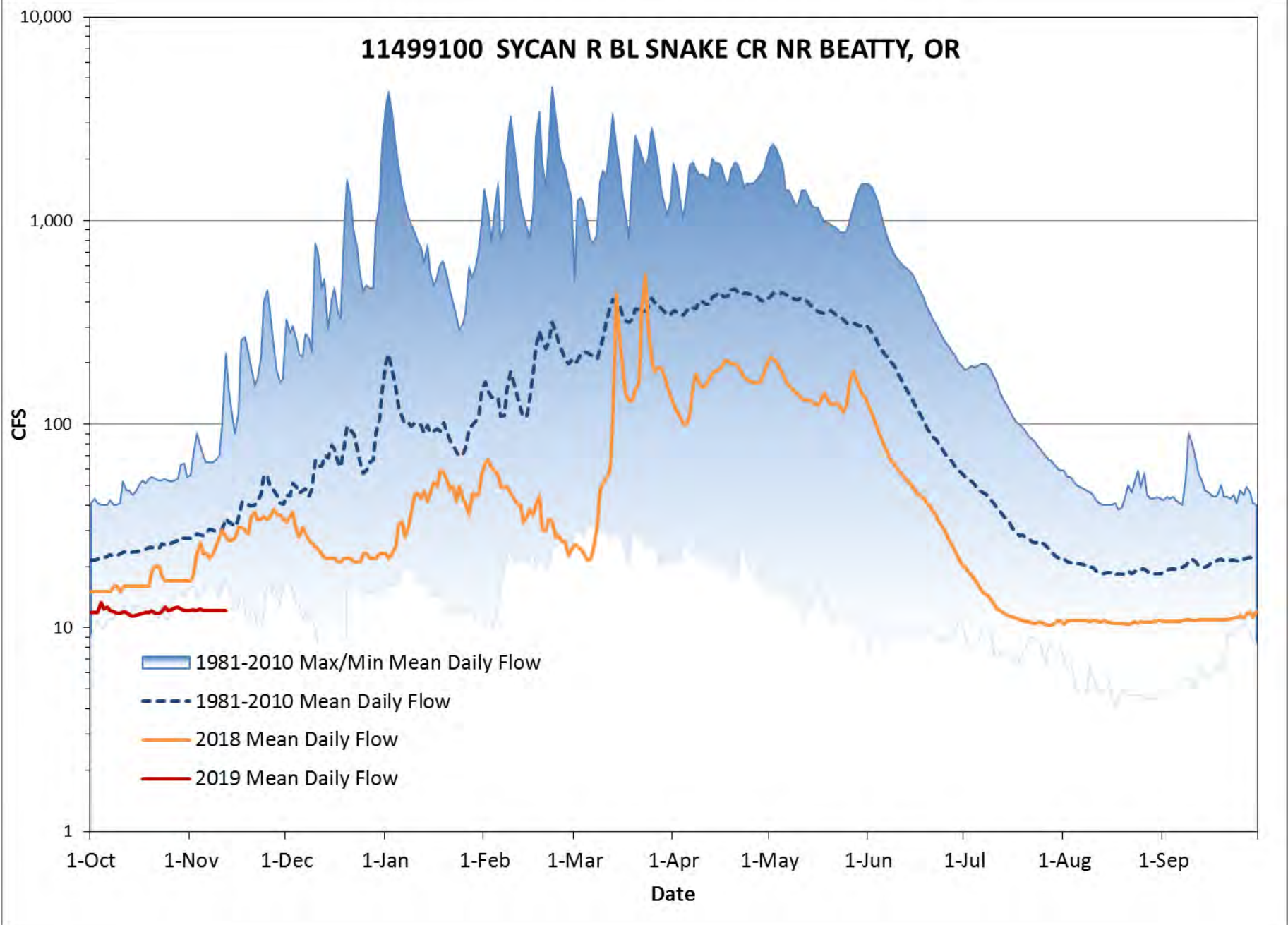
14305500 SILETZ R AT SILETZ, OR



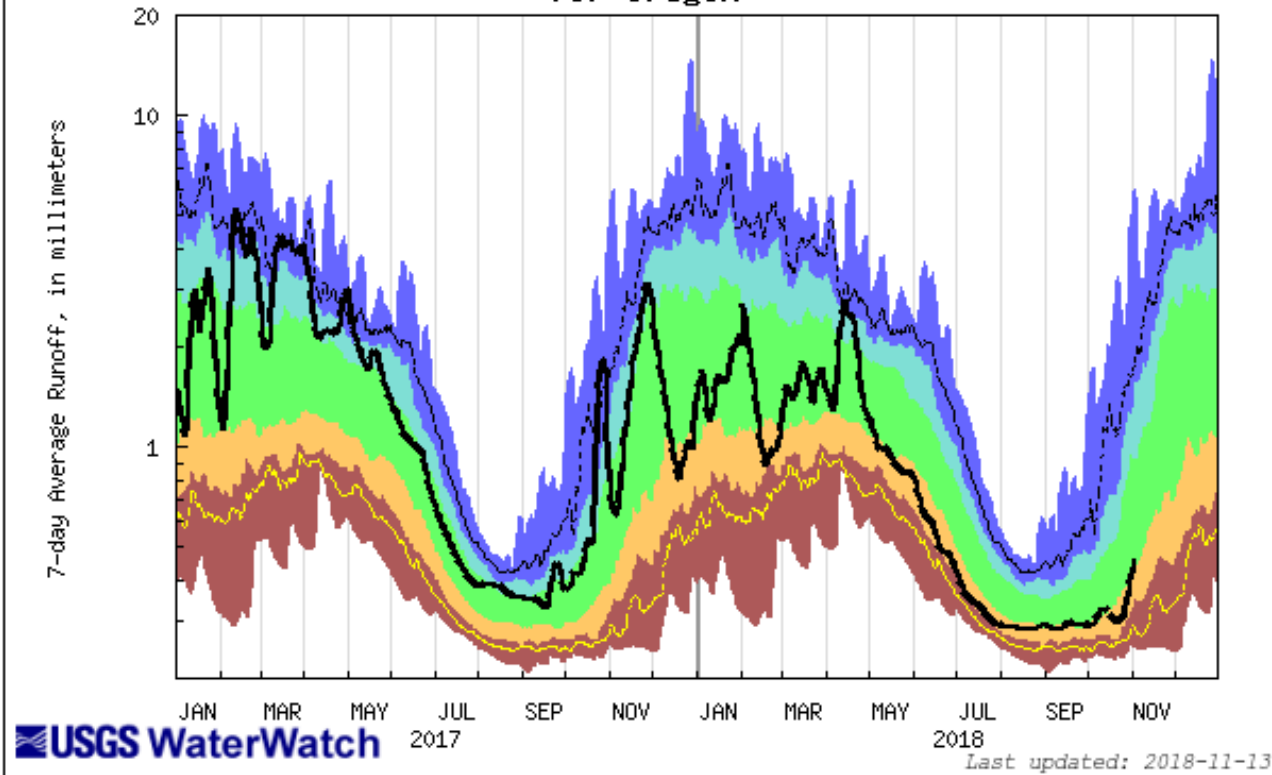
10393500 SILVIES R NR BURNS, OR



11499100 SYCAN R BL SNAKE CR NR BEATTY, OR



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

Power Point “USGS Update on Surface Water Conditions”

By: Marc Stewart & Carrie Boudreau USGS ORWSC
 Water Availability Report By: Tiffany Rae Jacklin
 USGS ORWSC



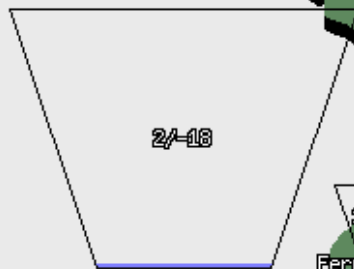
The Willamette Basin

LEGEND

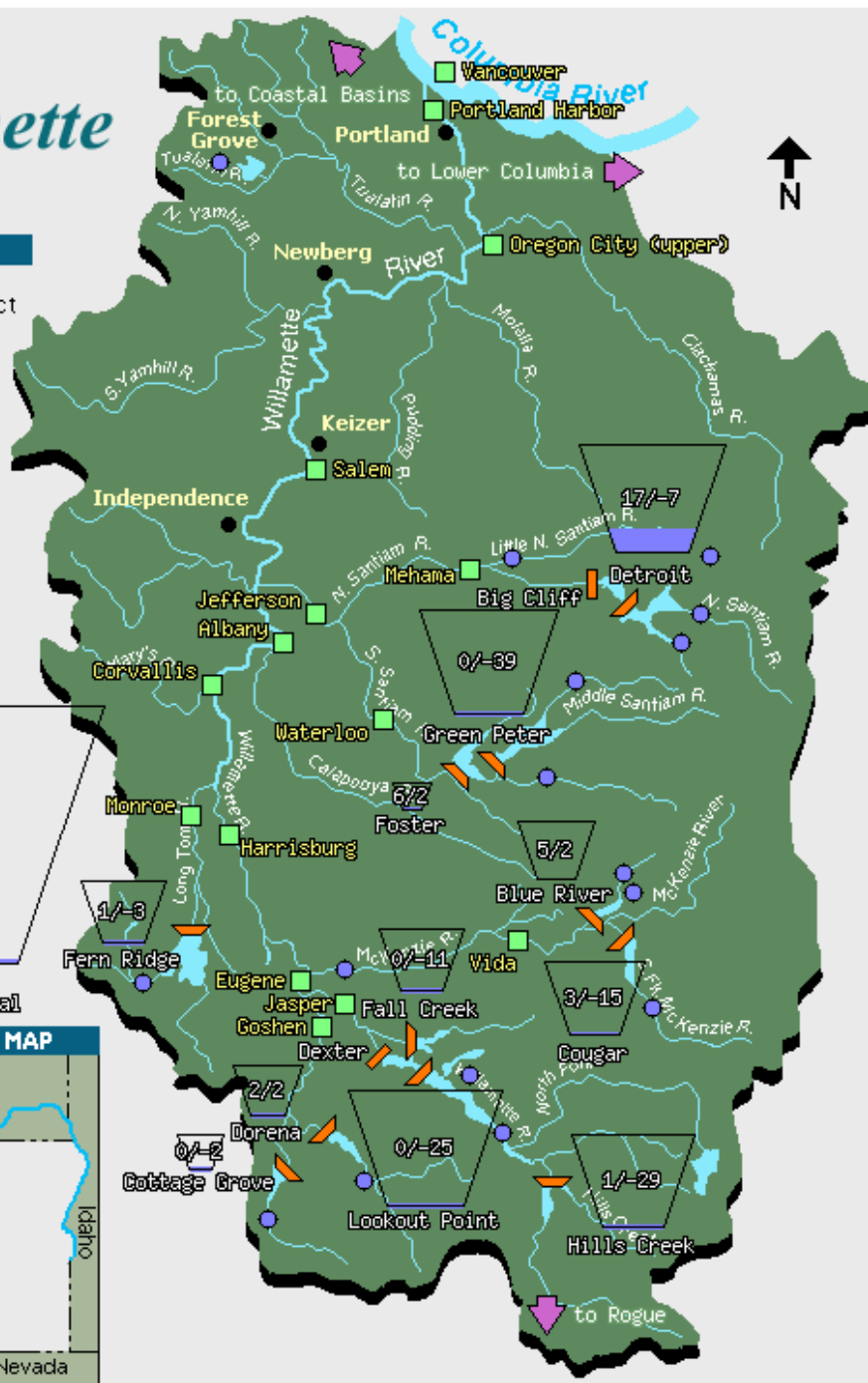
-  Storage Project
-  Run of River
-  Gage
-  No Alerts
-  Bank Full
-  Flood Stage

Overview

Annual



Willamette Total



Rogue Basin Teacup Diagram



Created: Tue Nov 13 11:25:21 2018

WCD: Water Control Diagram

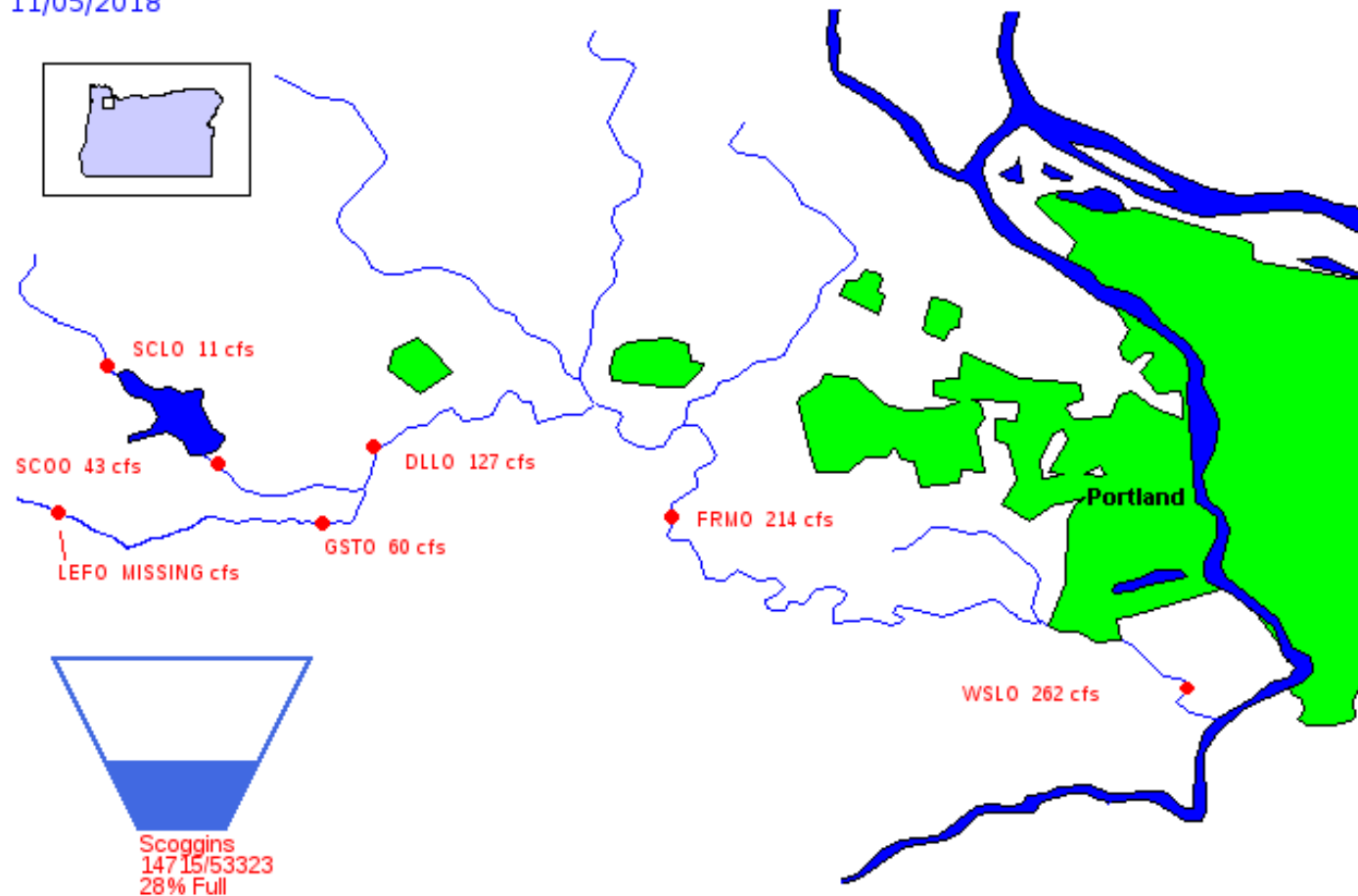
Project numbers: percent full / percent above WCD, where

percent full = $(\text{current storage} - \text{minimum conservation storage}) / (\text{maximum conservation storage} - \text{minimum conservation storage})$

percent above water control diagram = $(\text{current storage} - \text{WCD storage}) / (\text{maximum conservation storage} - \text{minimum conservation storage})$

Tualatin River Basin

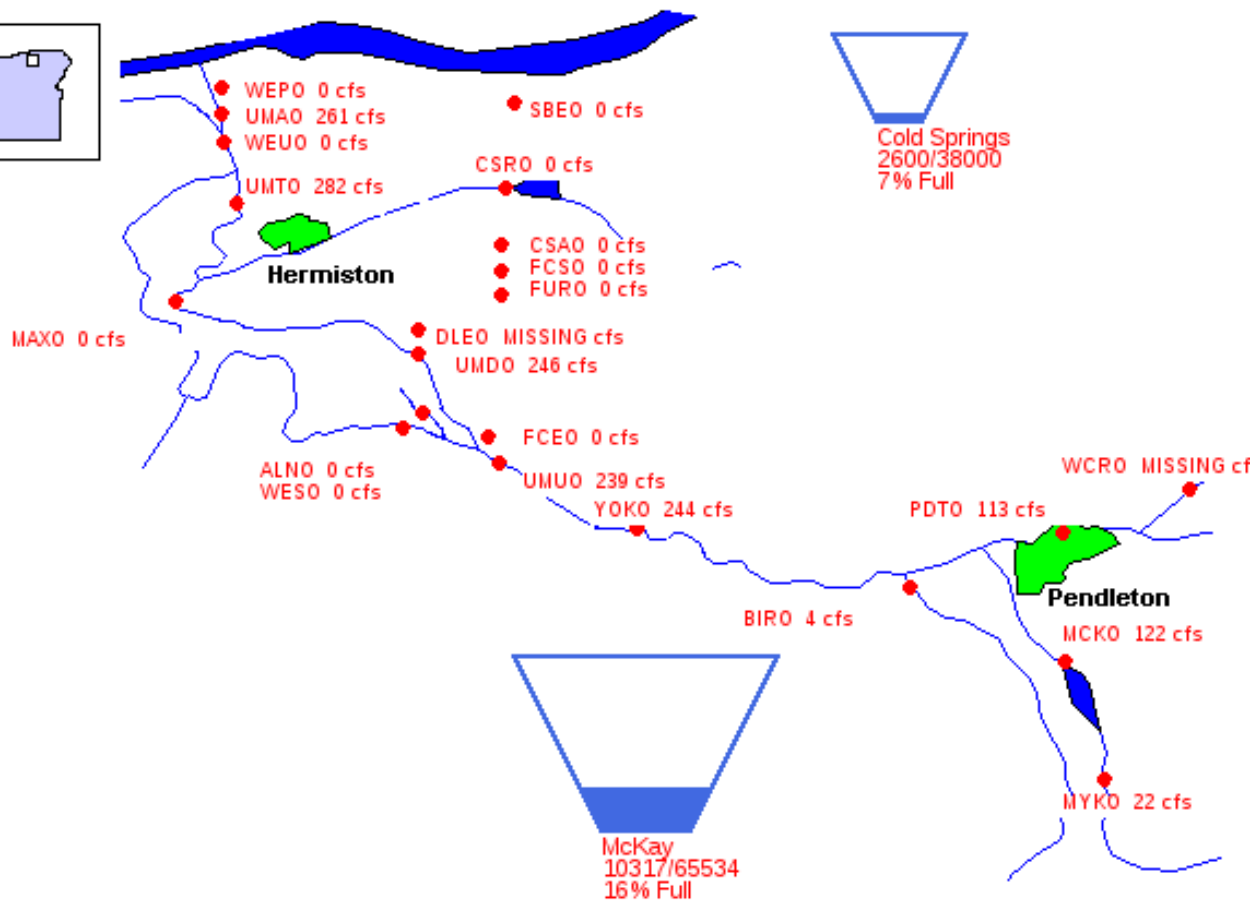
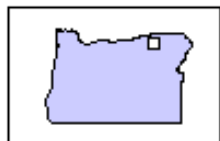
11/05/2018



RECLAMATION

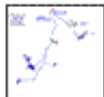
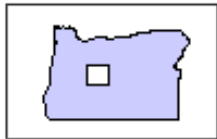
Umatilla River Basin

11/05/2018

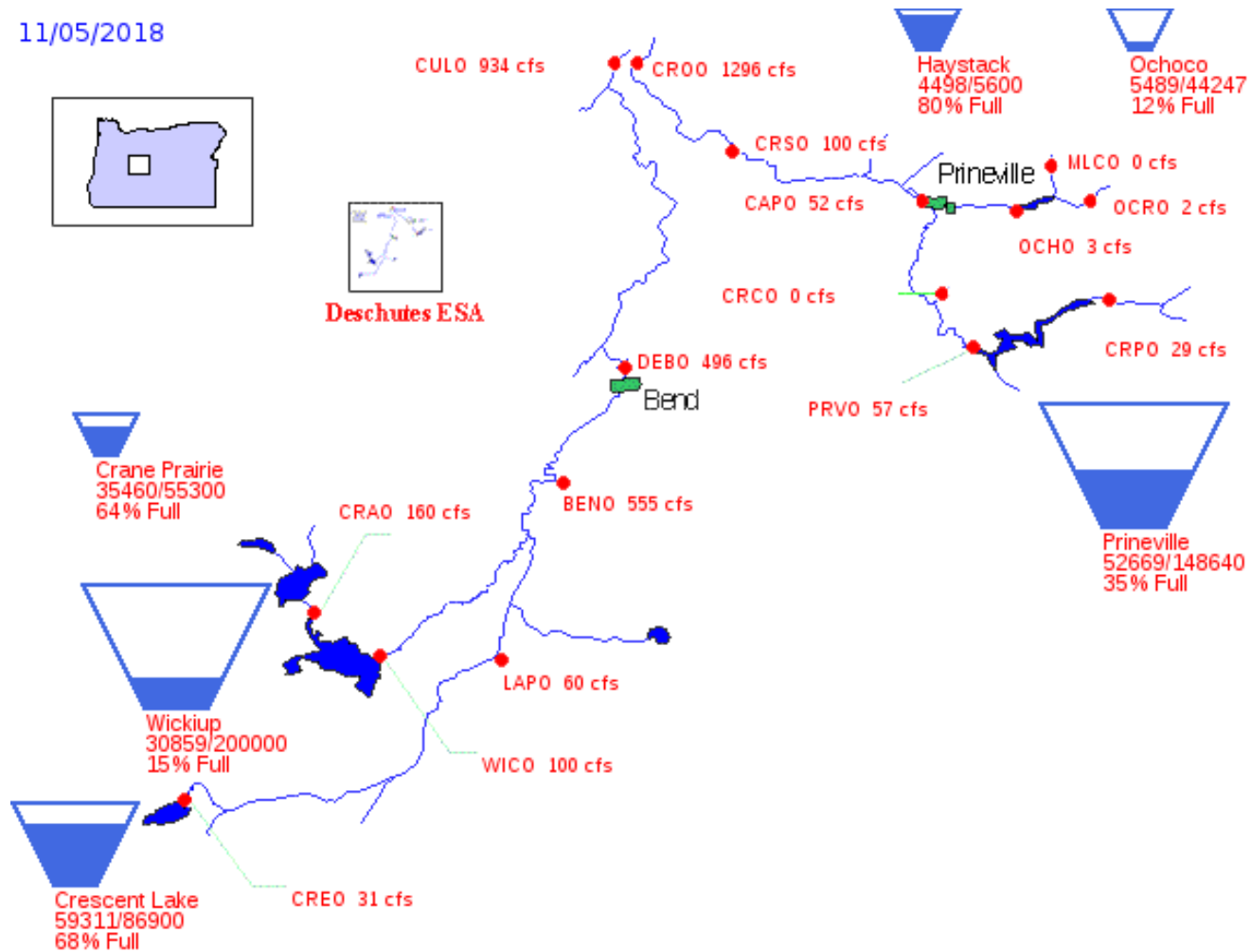


Deschutes River Basin

11/05/2018



Deschutes ESA

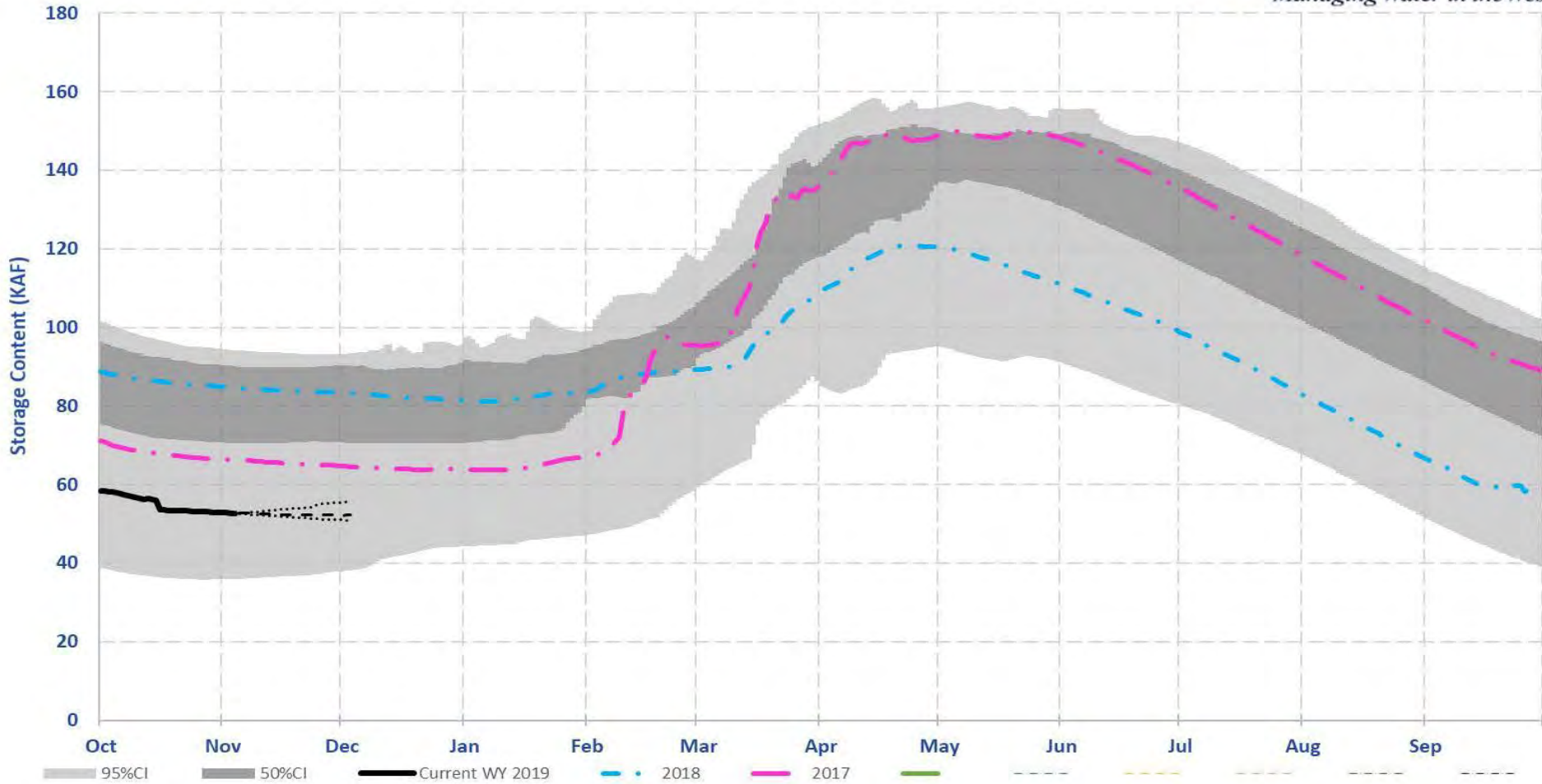


RECLAMATION

Deschutes River Basin: Prineville

RECLAMATION
Managing Water in the West

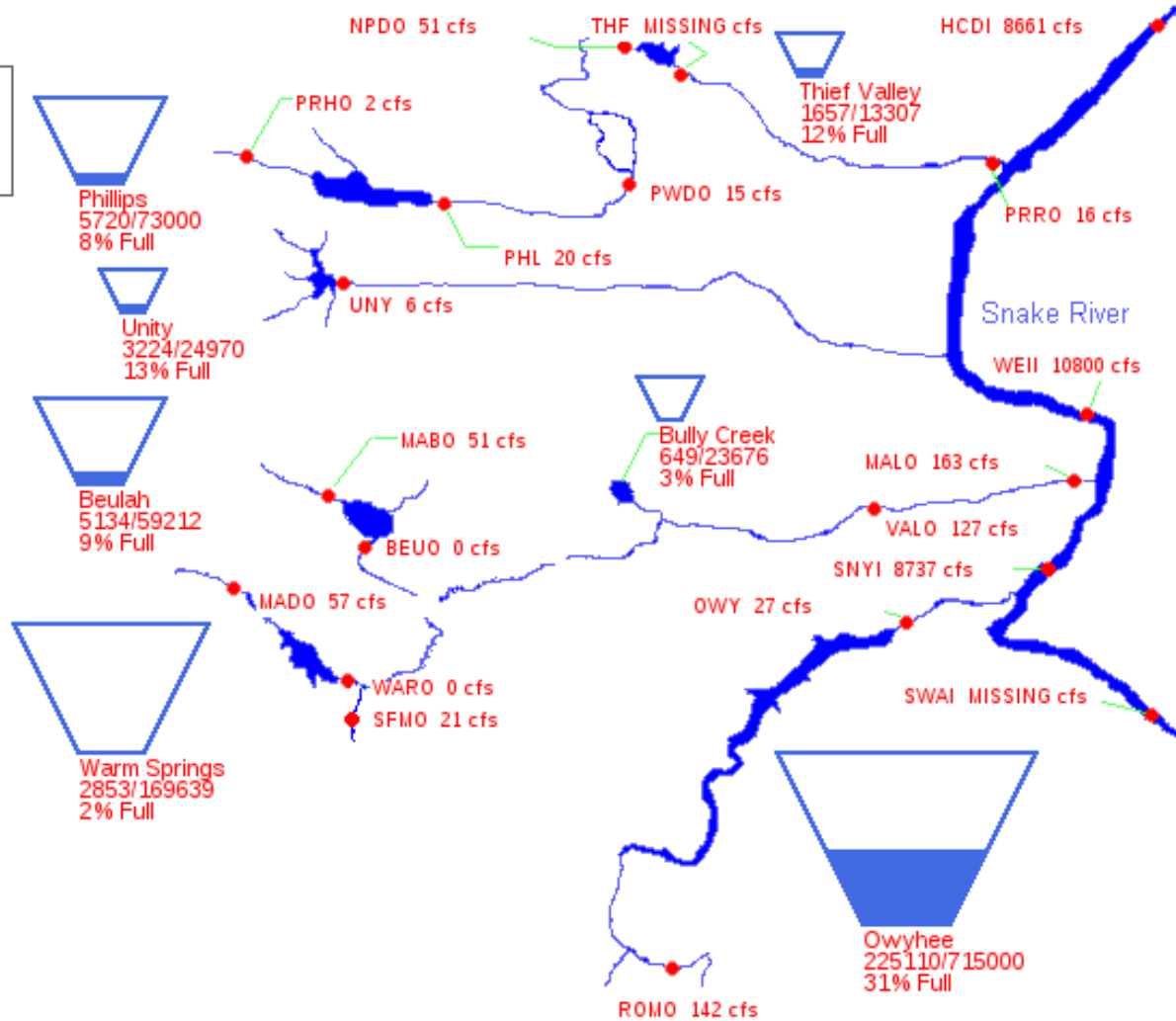
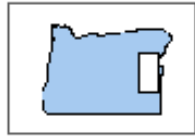
PRV AF



RECLAMATION

Southeastern Oregon

11/05/2018

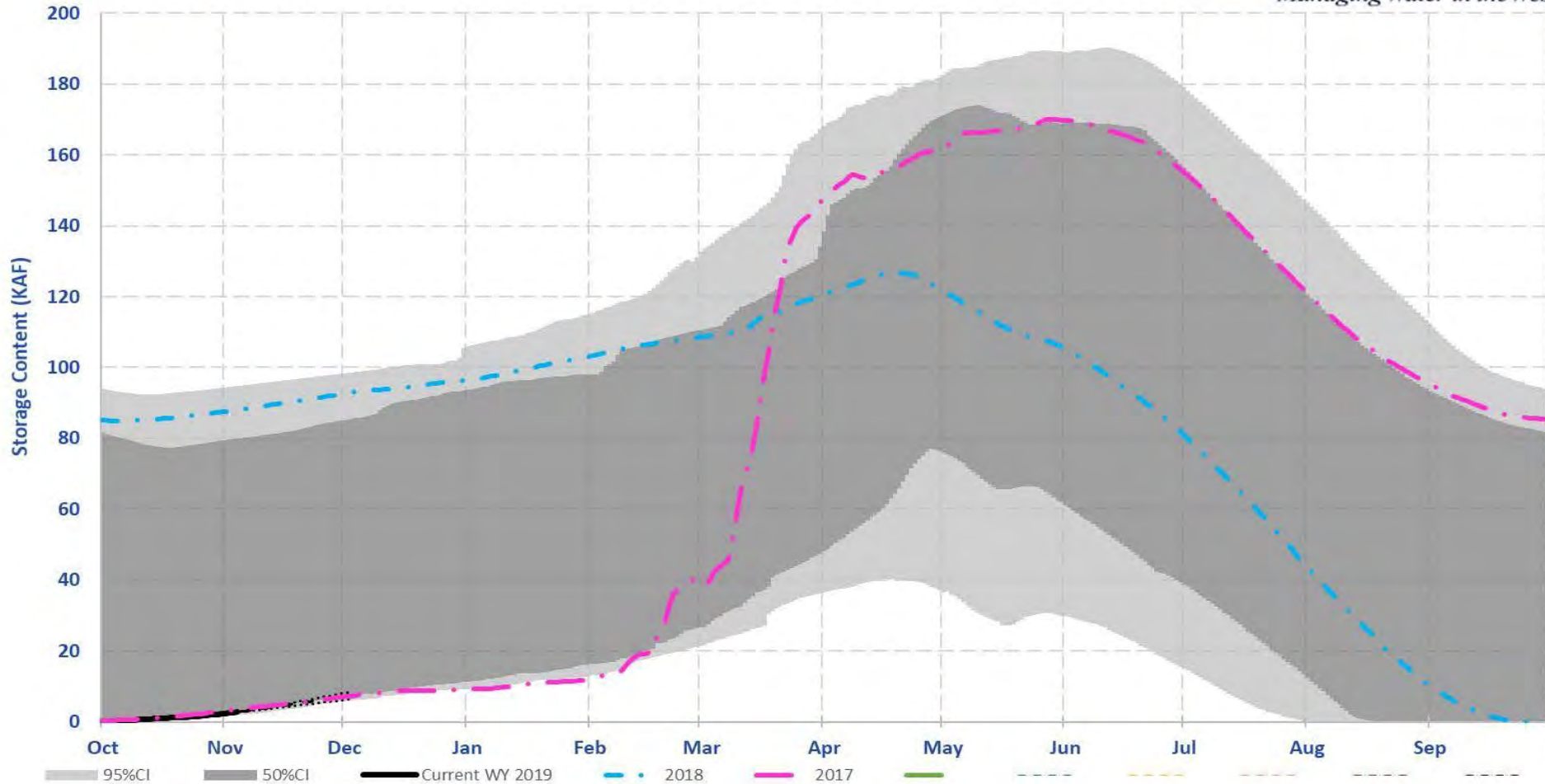


RECLAMATION

Malheur River Basin: Warm Springs

RECLAMATION
Managing Water in the West

WAR AF

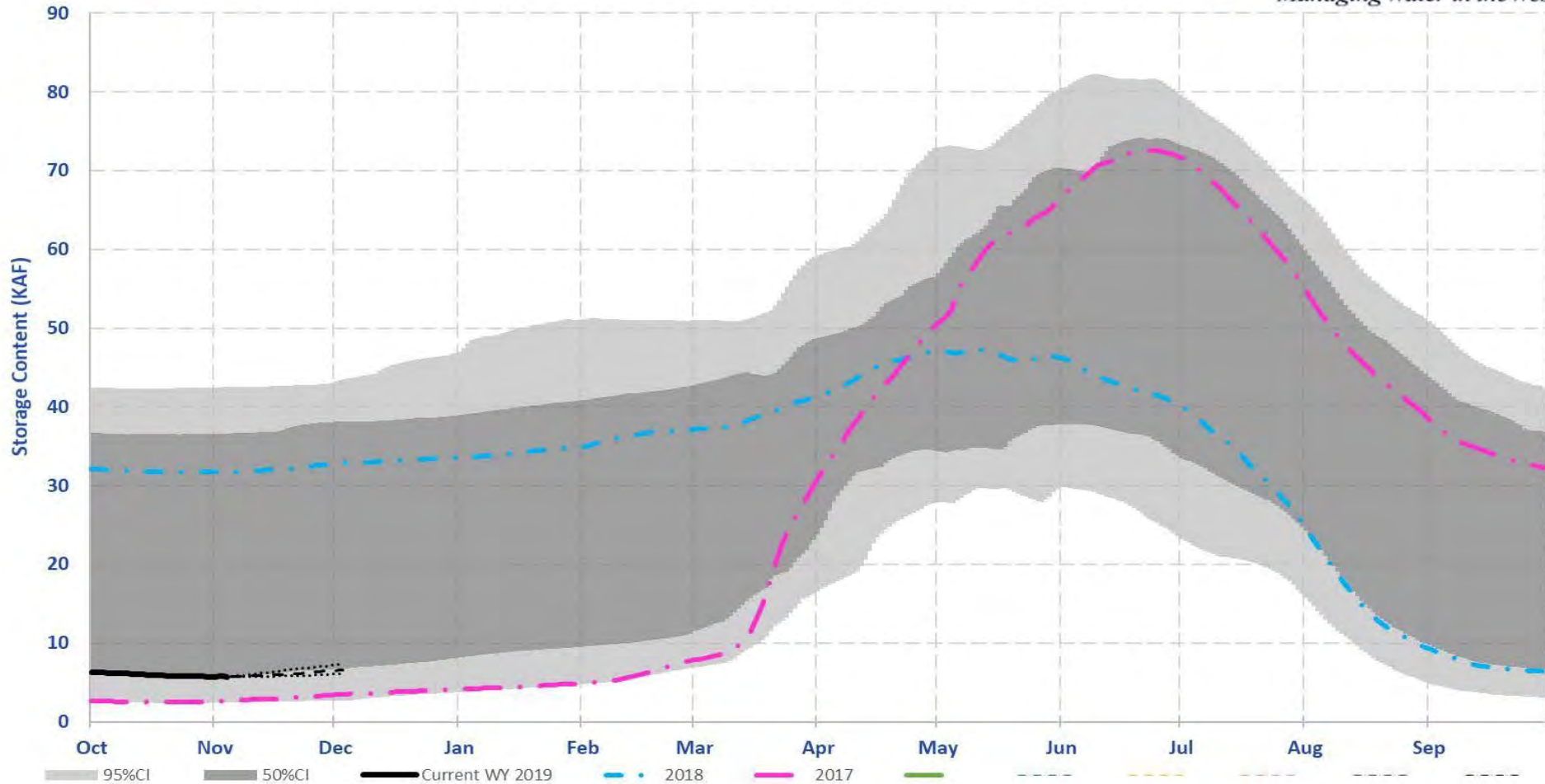


RECLAMATION

Powder River Basin: Phillips

RECLAMATION
Managing Water in the West

PHL AF



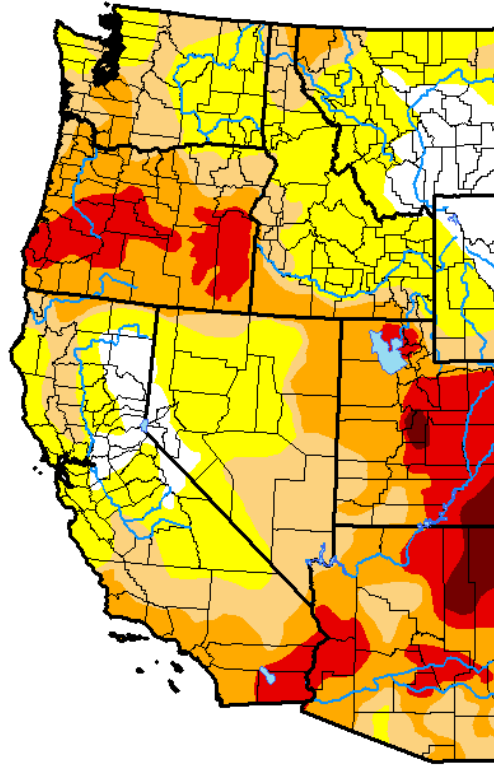
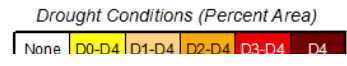
RECLAMATION



Drought Monitor

U.S. Drought Monitor West

October 2, 2018
(Released Thursday, Oct. 4, 2018)
Valid 8 a.m. EDT

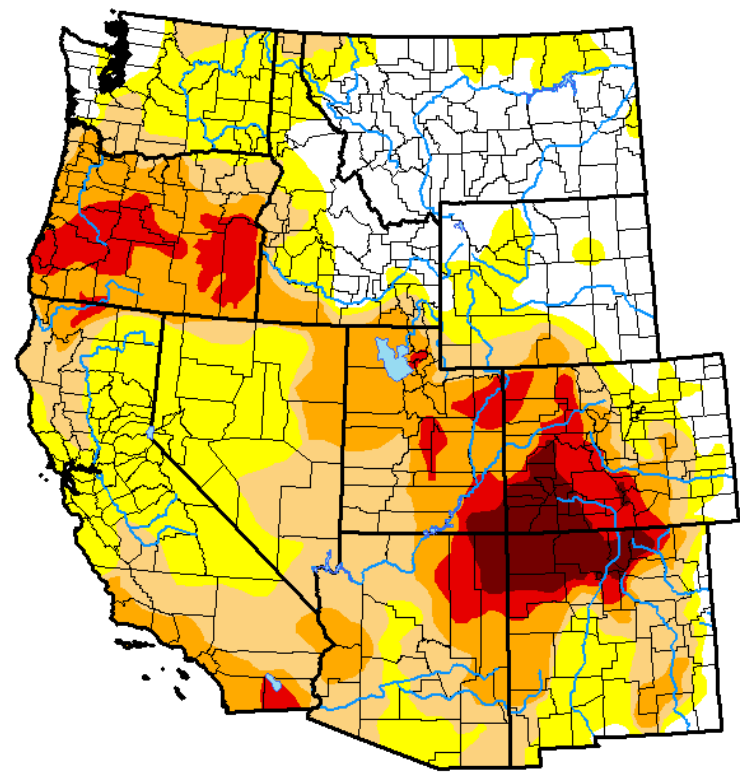


U.S. Drought Monitor West

November 6, 2018
(Released Thursday, Nov. 8, 2018)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	21.15	78.85	50.95	29.55	10.95	3.39
Last Week 10-30-2018	21.83	78.17	52.75	31.31	11.80	3.42
3 Months Ago 08-07-2018	21.77	78.23	56.53	35.94	15.89	3.77
Start of Calendar Year 01-02-2018	48.76	51.24	29.03	8.60	1.52	0.00
Start of Water Year 09-25-2018	13.91	86.09	59.57	39.68	18.15	4.36
One Year Ago 11-07-2017	61.38	38.62	14.52	3.94	1.52	0.00



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 Simeral
Western Regional Climate Center



OREGON



WATER RESOURCES
DEPARTMENT

Thank you.