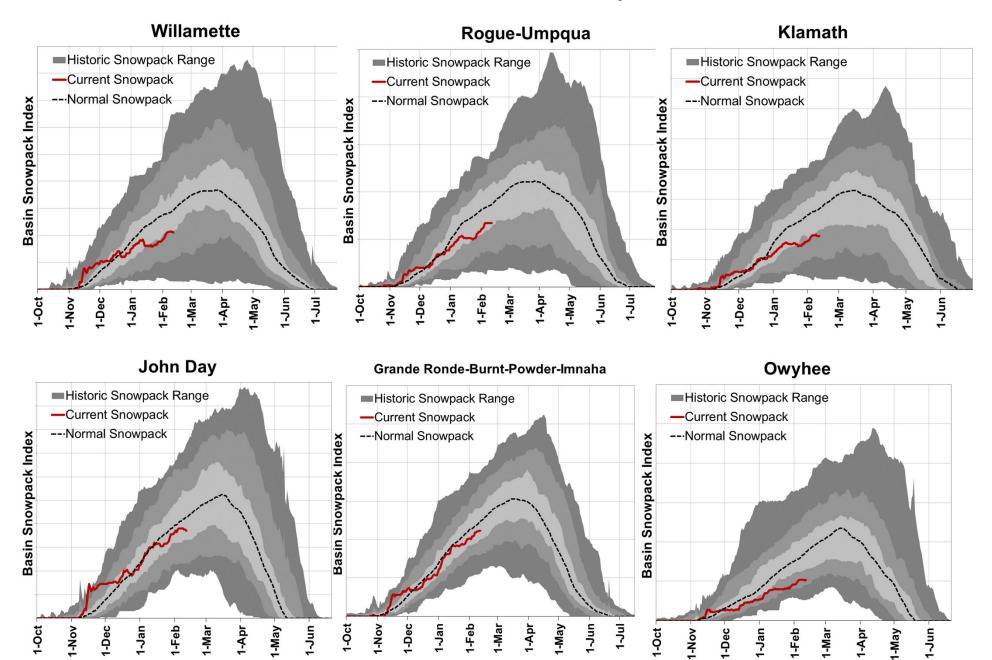
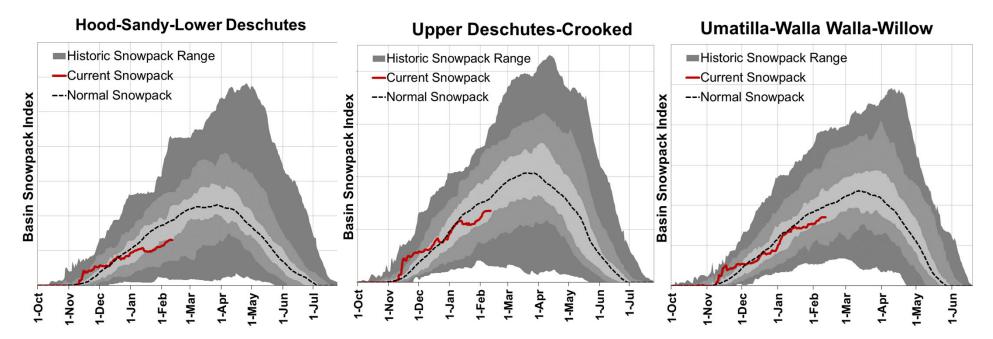


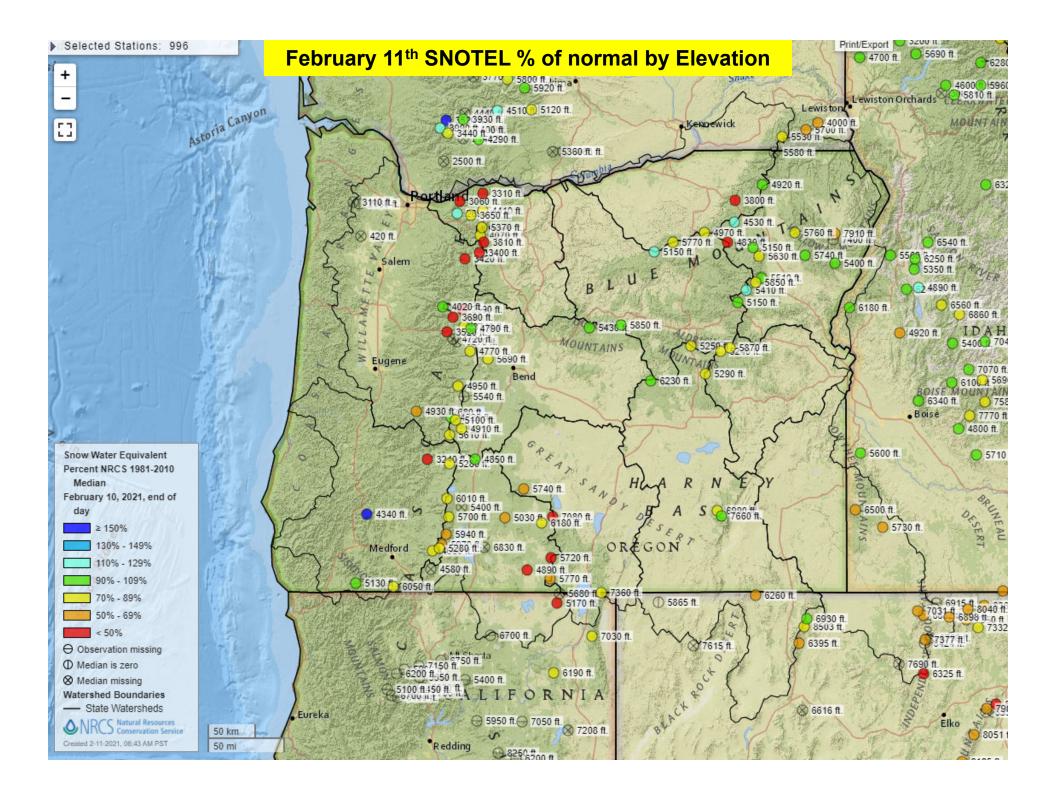
SNOWPACK GRAPHS – February 11, 2021

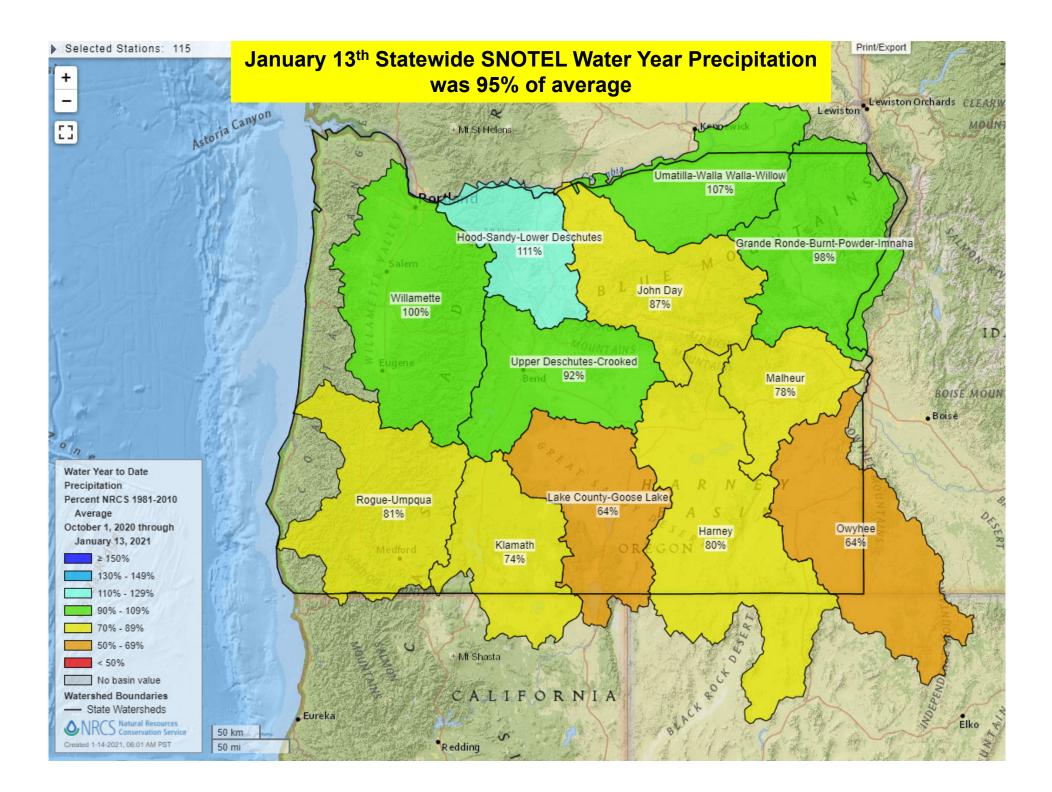


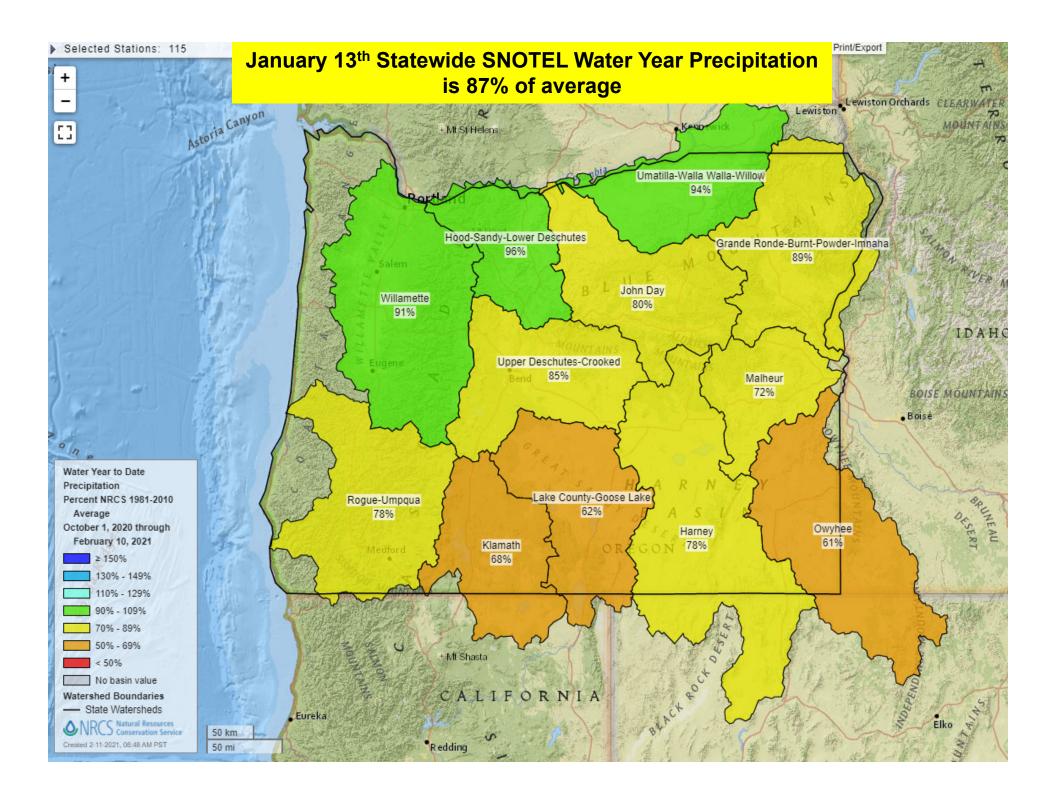
SNOWPACK GRAPHS – February 11, 2021

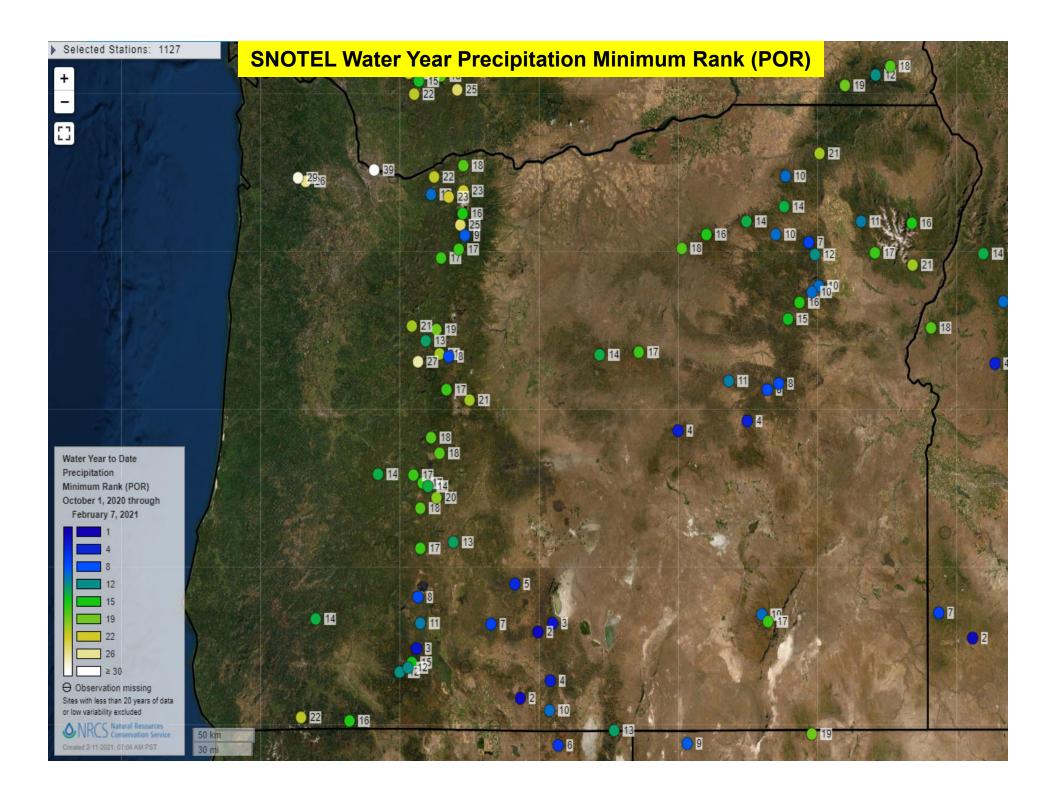


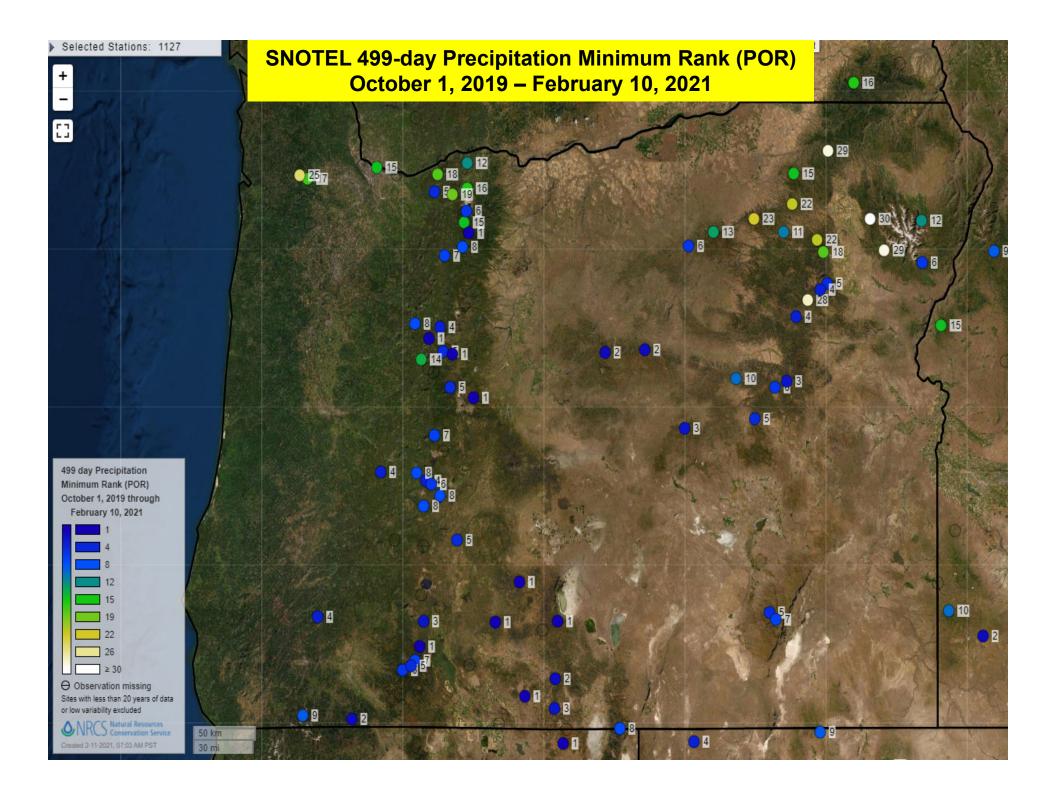
Lake County-Goose Lake Harney Historic Snowpack Range Historic Snowpack Range -Current Snowpack -Current Snowpack ---Normal Snowpack ---Normal Snowpack **Basin Snowpack Index Basin Snowpack Index** 1-Jun 1-Oct -Nov 1-Dec 1-Jan 1-Feb 1-Mar 1-Apr I-May 1-Jul 1-Jul 1-Oct 1-Nov 1-Dec 1-Jan 1-Feb 1-Mar 1-Apr 1-Jun 1-May

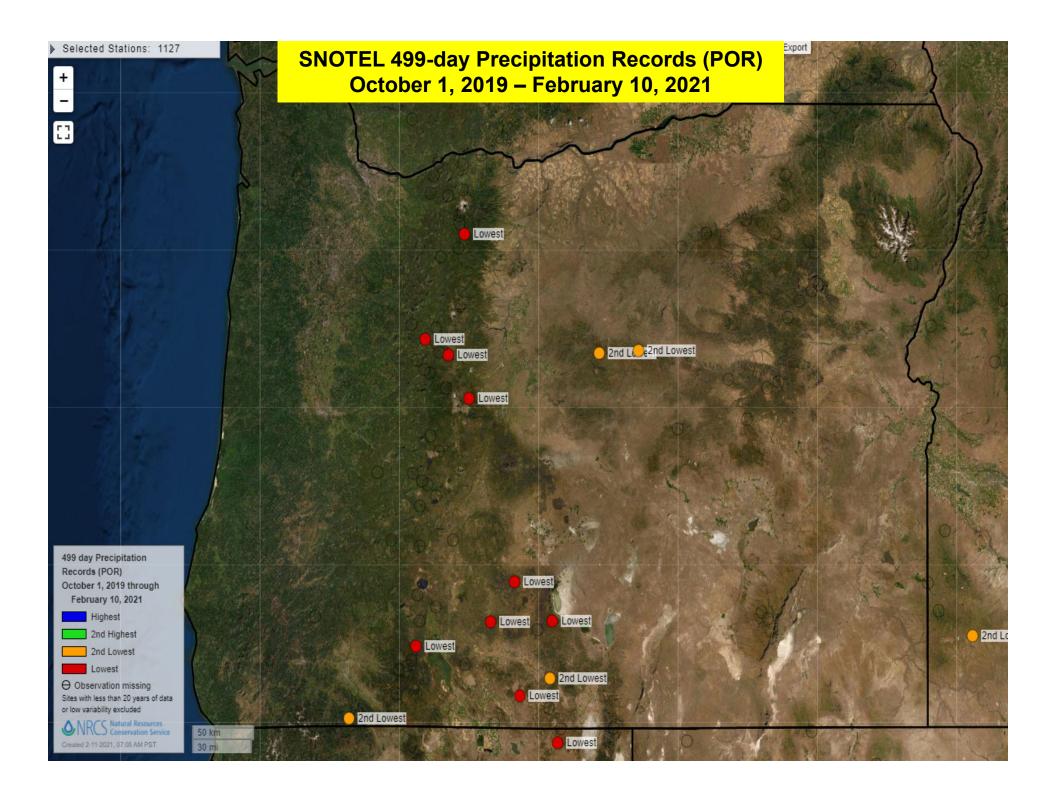


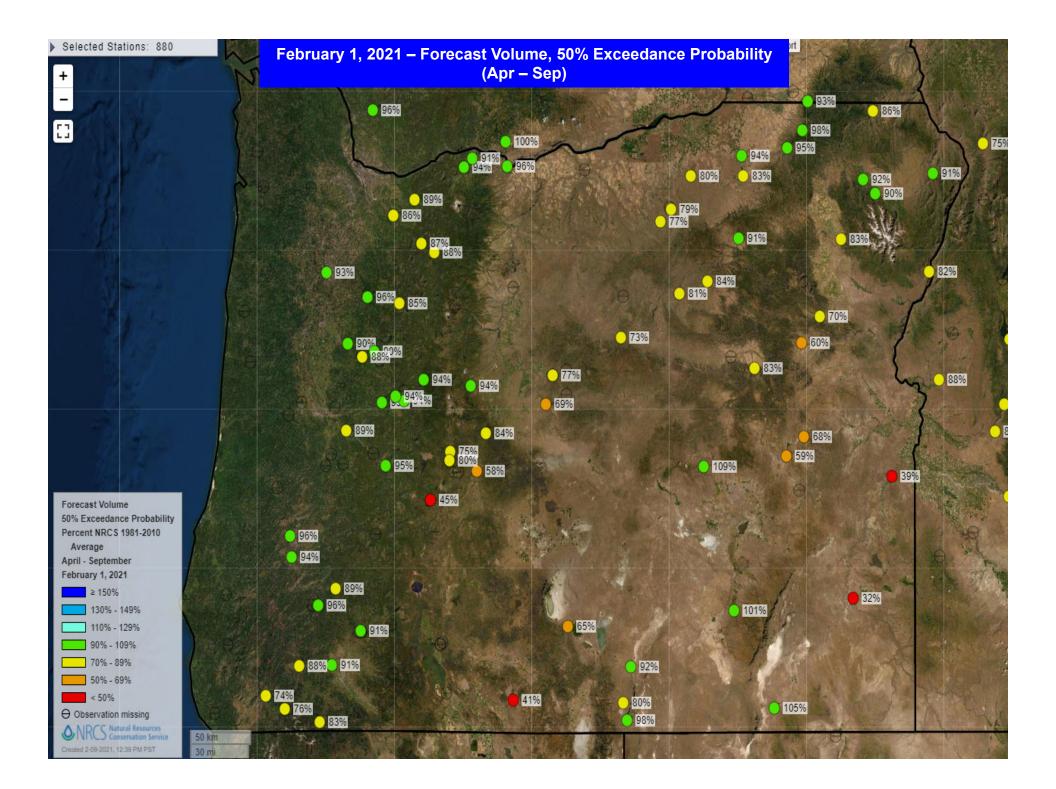


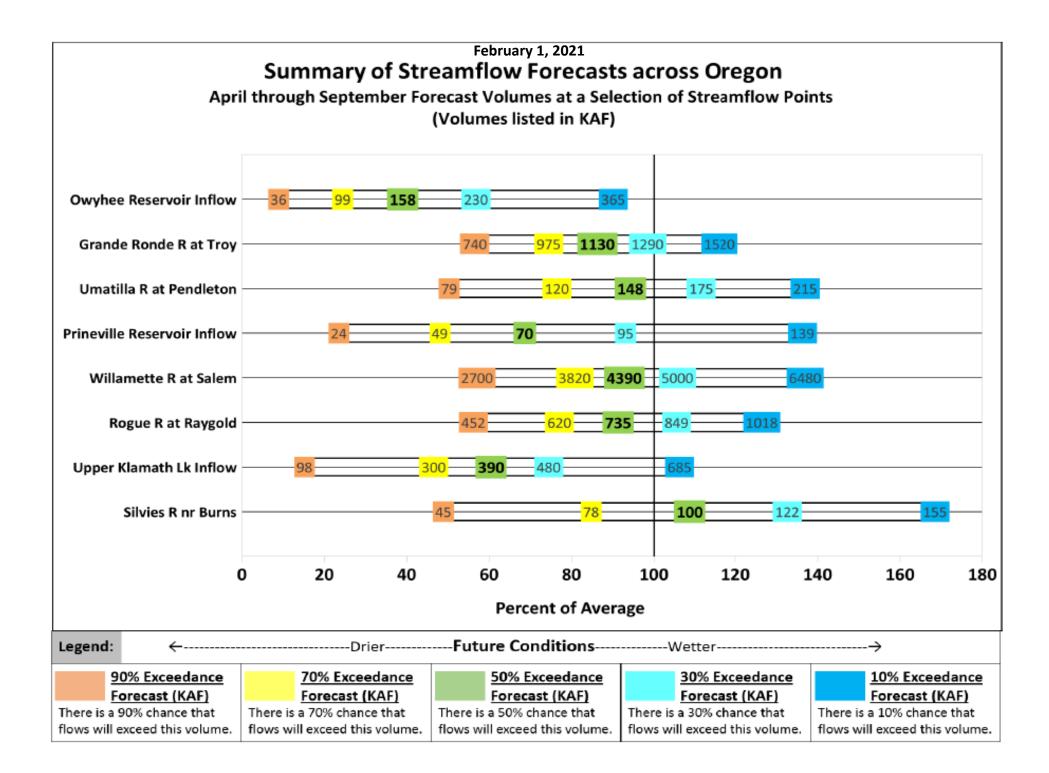










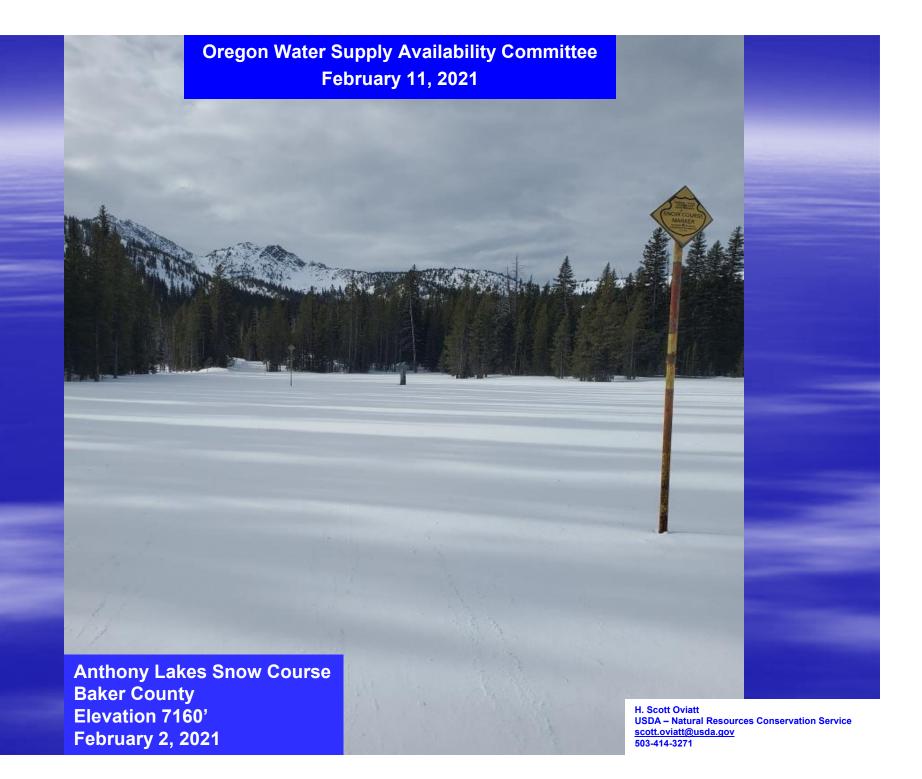


Thank you

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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To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.



Oregon WSAC

1

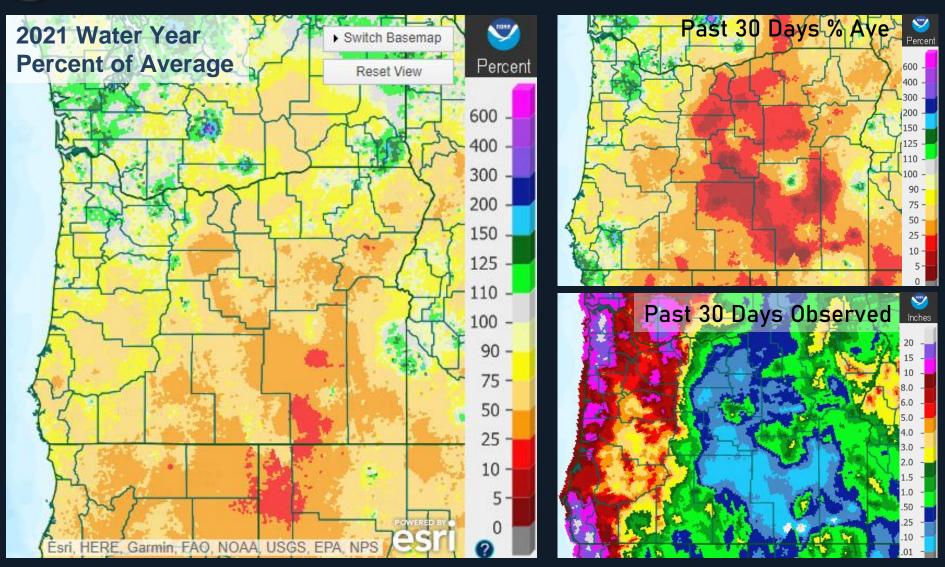
Feb 1996 Flood, Portland Riverfront

February 11, 2020 NWS Update on Precipitation & Temperatures

Andy Bryant NOAA/NWS Portland Weather Forecast Office



Precipitation



Precipitation Data as of Feb 10, 2020

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

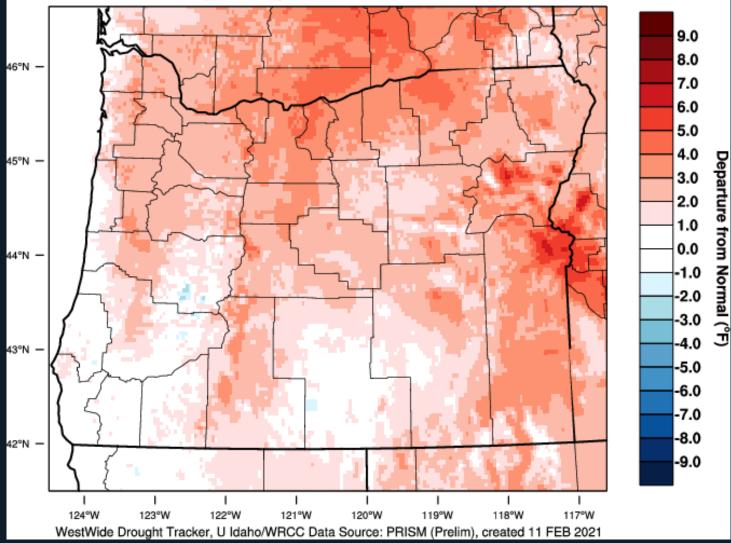


Recent Temperatures

January 2021

Oregon - Mean Temperature

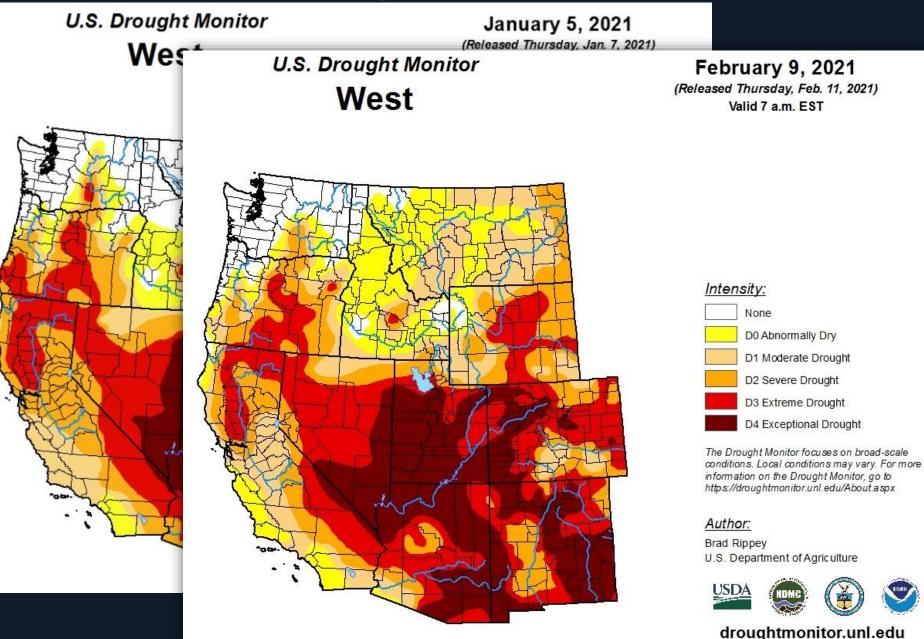
January 2021 Departure from 1981-2010 Normal



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

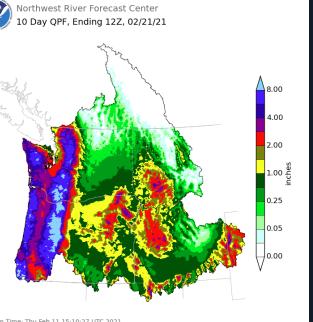
Drought Monitor

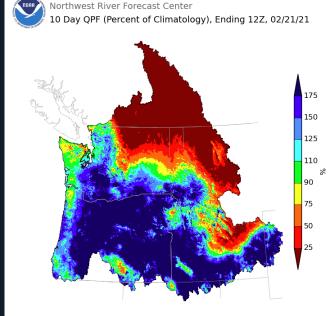
NOAA



Mid/Late February Outlook

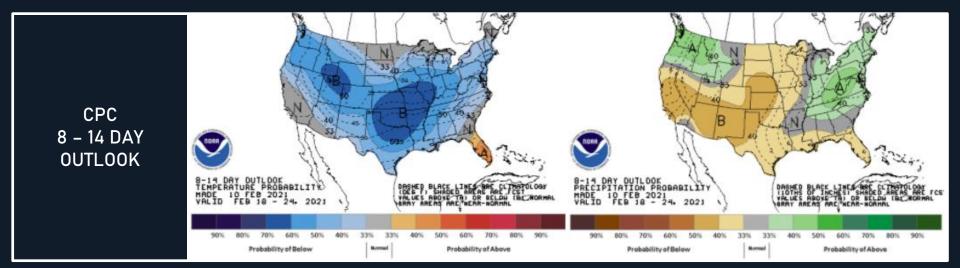
NWRFC 10-DAY PRECIPITATION





Creation Time: Thu Feb 11 15:10:27 UTC 2021

Creation Time: Thu Feb 11 15:11:24 UTC 2021

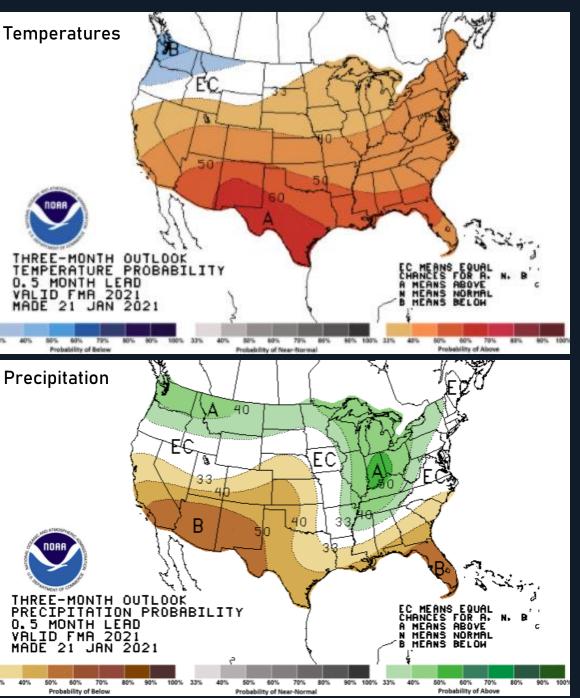


https://www.nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php?t

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

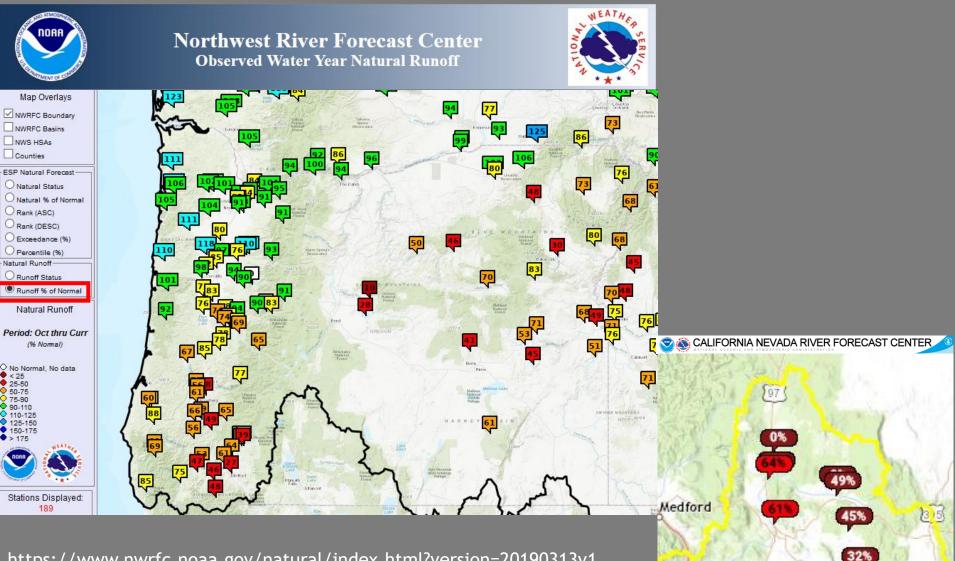


Climate Prediction Center Outlook Feb – Mar – Apr 2021



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

Observed Adjusted WY21 Runoff thus far



https://www.nwrfc.noaa.gov/natural/index.html?version=20190313v1 https://www.cnrfc.noaa.gov/ol.php?product=espWS



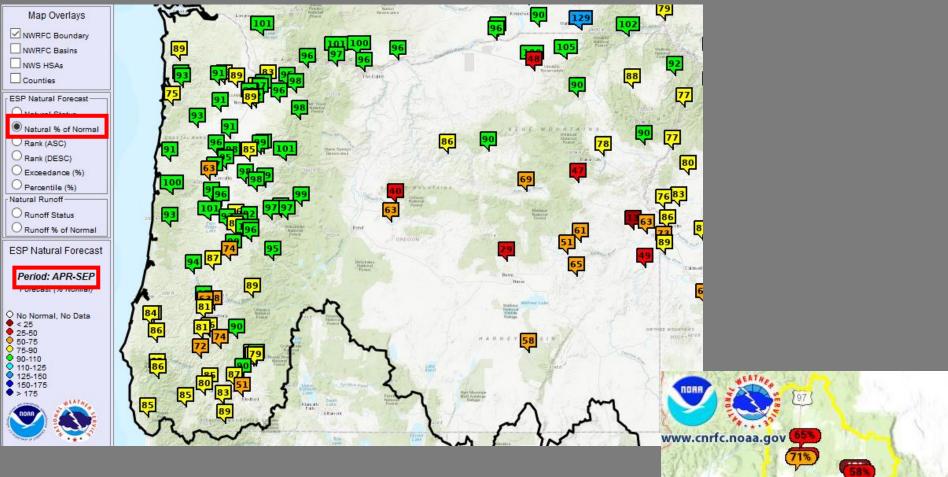
WY21 Apr-Sep Forecast, Percent of Normal

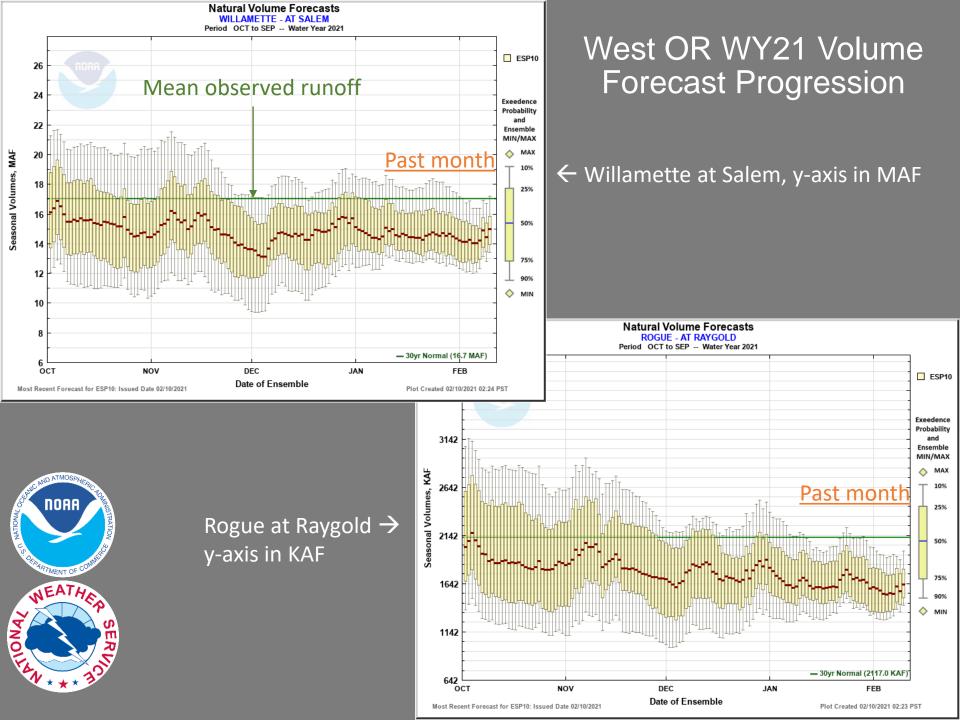


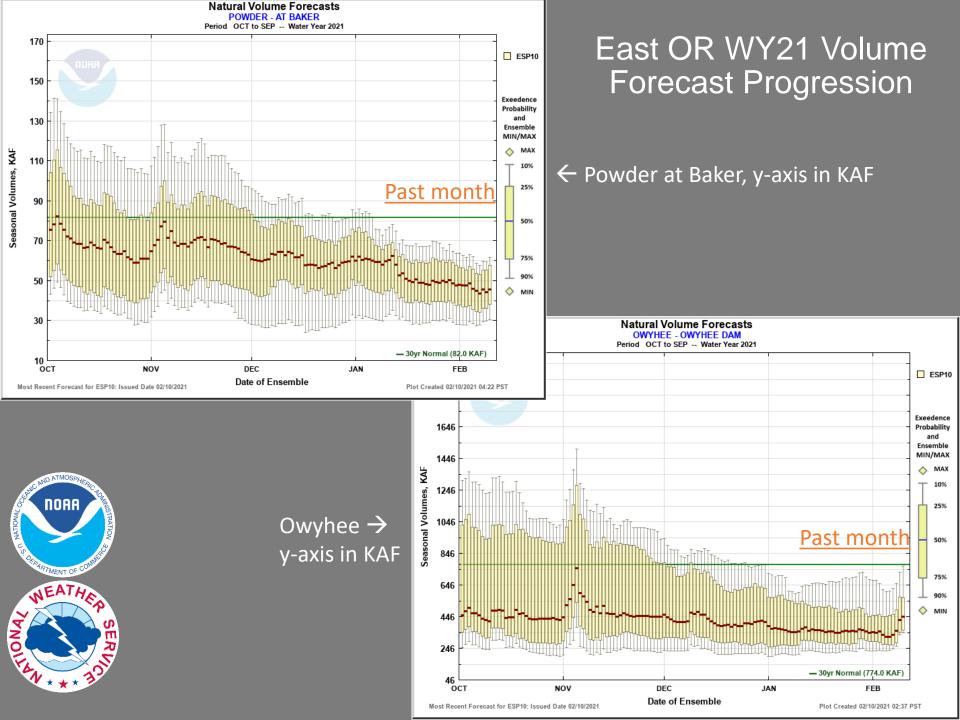
Medford

87%

137%









NWRFC Water Supply Briefings Schedule



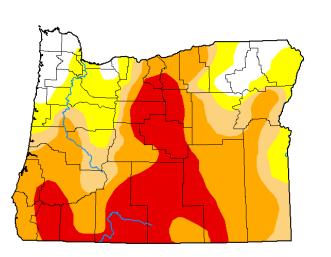
2021 Schedule for Live Water Supply Briefings								
Jan	Feb		Mar		Арг	May		
7	4		4		1	6		
All pres	All presentations held at 10:00am PDT/PST, unless noted otherwise							
Click here for Registration Information								

https://register.gotowebinar.com/register/534626944494756623

WSAC/DRC February 2021 Climate Updates

Larry O'Neill Oregon State University

U.S. Drought Monitor Oregon



	Drought Conditions (Percent Area)							
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4		
Current	8.91	91.09	75.17	60.94	25.97	0.00		
Last Week 01-05-2021	8.91	91.09	78.46	62.68	28.26	0.00		
3 Month s Ago 10-13-2020	6.51	93.49	86.44	69.99	37.31	0.00		
Start of Calendar Year 12-29-2020	8.57	91.43	83.53	68.71	27.74	0.00		
Start of Water Year 09-29-2020	6.50	93.50	84.77	65.53	33.59	0.00		
One Year Ago 01-14-2020	2.81	97.19	19.09	0.00	0.00	0.00		

January 12, 2021 (Released Thursday, Jan. 14, 2021)

Valid 7 a.m. EST

Intensity:



The Drough Local condit Drought Mo

<u>Author:</u> Deborah E National D

<u>USDA</u>

U.S. Drought Monitor Oregon

February 9, 2021 (Released Thursday, Feb. 11, 2021) Valid 7 a.m. EST

	Drought Conditions (Percent Area)						
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	
Current	11.55	88.45	75.70	55.26	22.23	0.00	
Last Week 02-02-2021	9.05	90.95	76.68	55.56	21.97	0.00	
3 Month s Ago 11-10-2020	7.40	92.60	85.30	71.13	39.99	0.00	
Start of Calendar Year 12-29-2020	8.57	91.43	83.53	68.71	27.74	0.00	
Start of Water Year 09-29-2020	6.50	93.50	84.77	65.53	33.59	0.00	
One Year Ago 02-11-2020	18.93	81.07	25.33	0.00	0.00	0.00	



D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

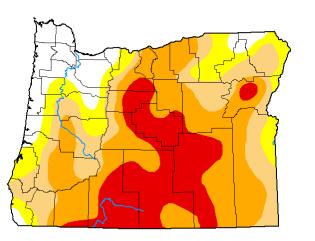
<u>Author:</u> Brad Rippey U.S. Department of Agriculture



Improvements in drought severity in SW and central Oregon

Deterioration in NE Oregon

Areal extent of drought has not improved much, but some improvements in drought severity



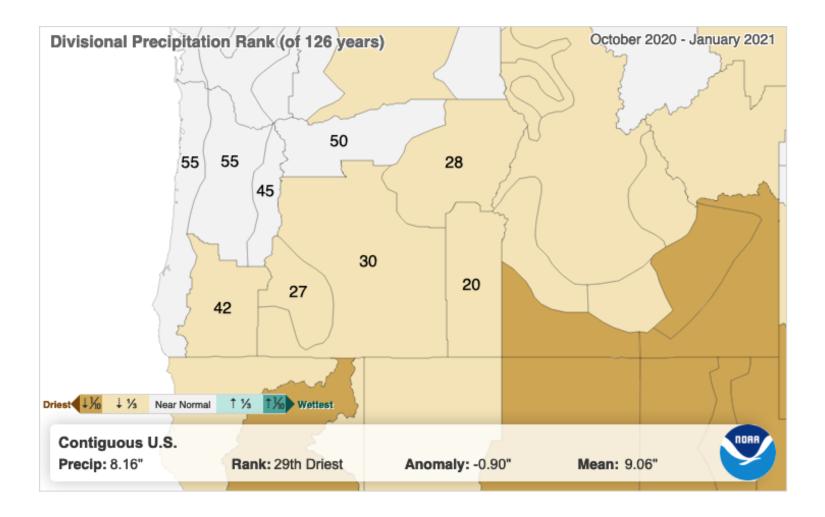
Oregon Precipitation WYTD



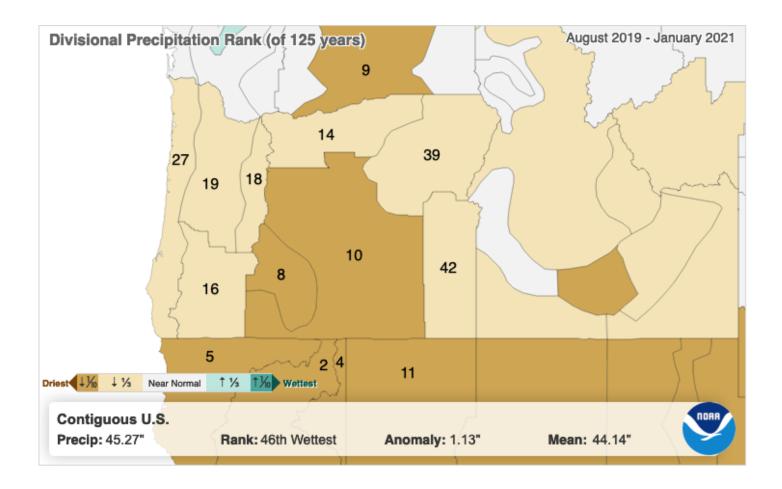
Statewide, we are not doing much better than the last couple of years

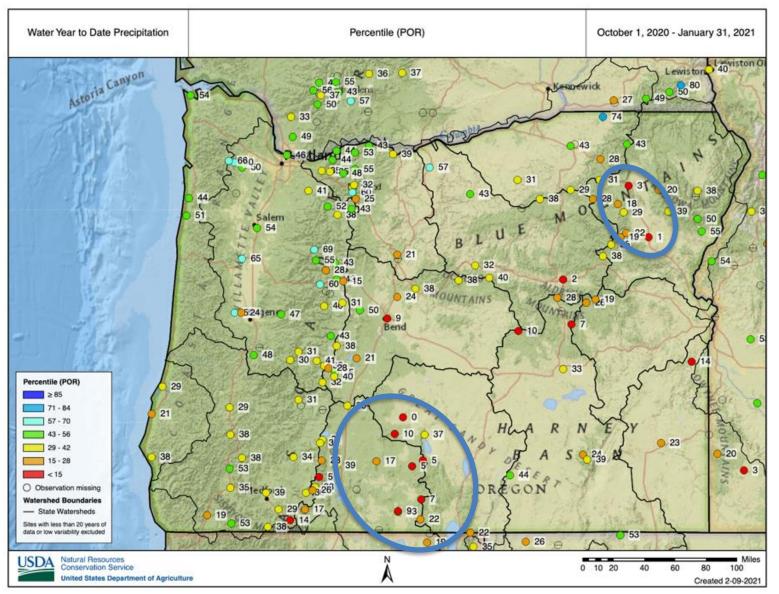
40th driest from out of 127 years (1895-2021)

WYTD precipitation ranking



18-month precipitation ranking

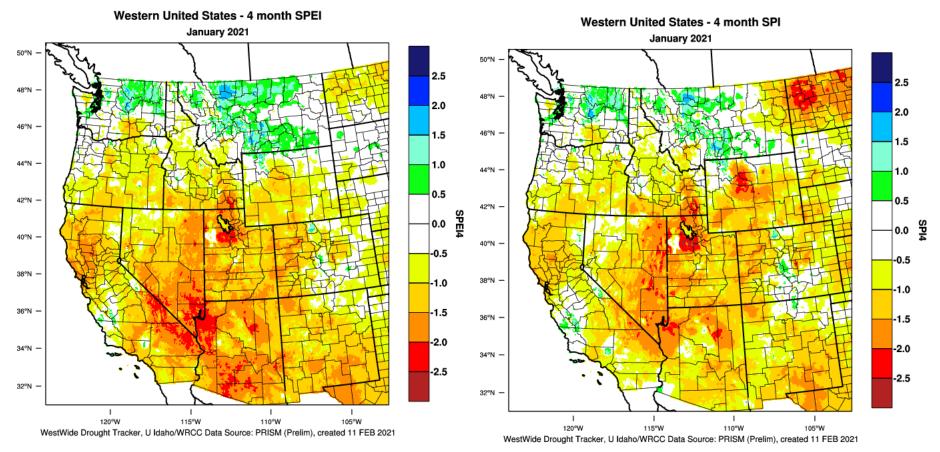




La Grande (3rd driest WYTD) and Baker City (driest WYTD)

Klamath and Lake Basins very dry

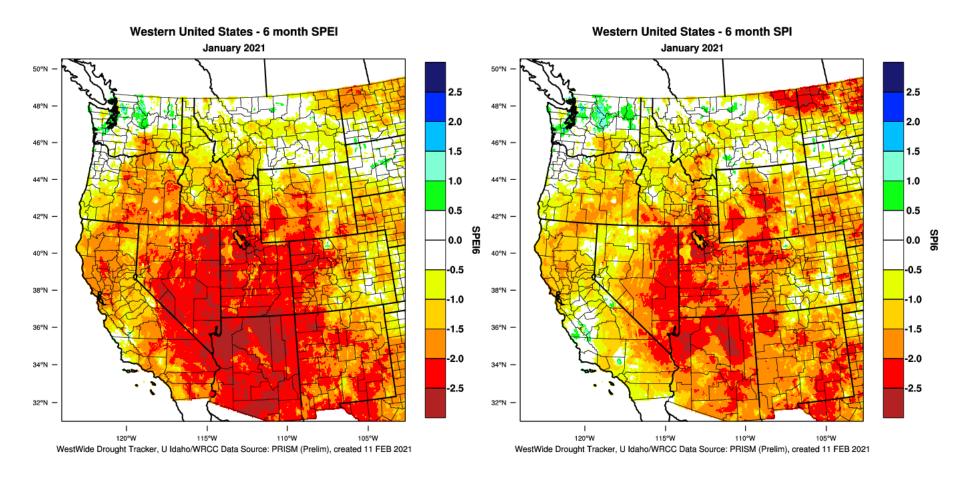
WYTD SPEI and SPI comparison



Difference between SPEI and SPI is due to temperature-driven evaporation. SPEI correlates well with hydrological drought indicators on seasonal to annual timescale

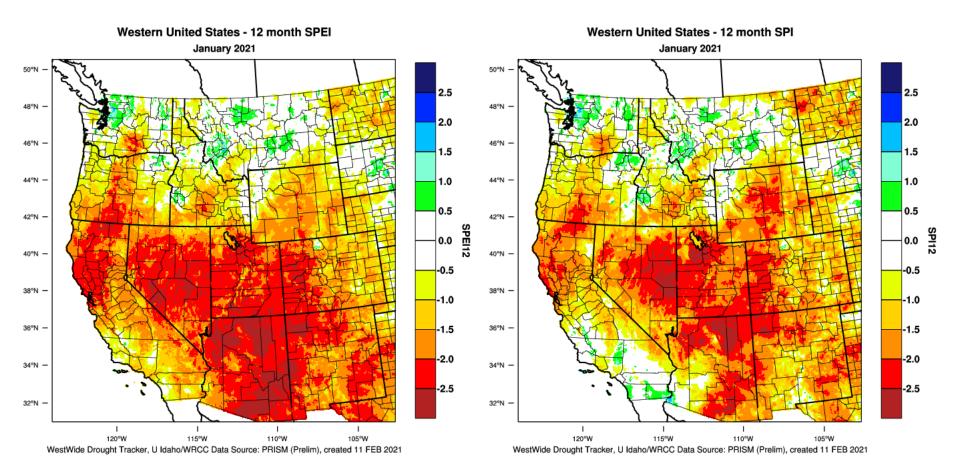
Not much excessive evaporation signal for WYTD in Oregon, so the SPEI and SPI is almost the same

6-month SPEI and SPI comparison

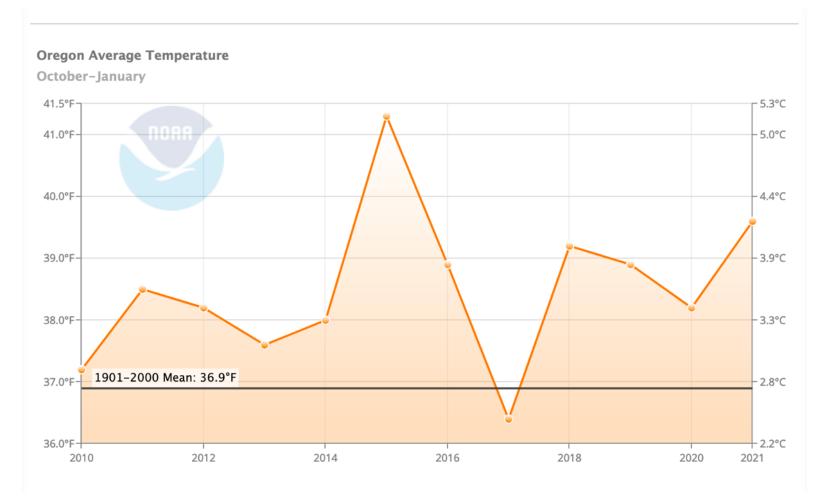


Very warm end to last summer lead to excessive evaporation and lead to SPEI quite a bit lower than SPI NE Oregon has SPEI <-1.5, which is about D3 drought category

12-month SPEI and SPI comparison



Oregon Average Temperature WYTD



Rank of 118 out of 126 Oct-Jan periods 1895-2021

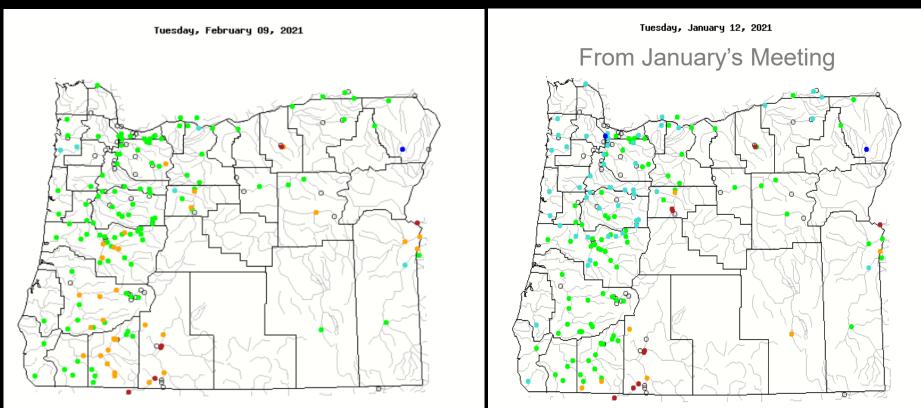


Oregon Water Supply Availability Meeting February 2021

U.S. Department of the Interior U.S. Geological Survey USGS Update on Surface Water Conditions Carrie Boudreau & Marc Stewart Oregon Water Science Center

Streamflow Conditions

28-day Average Streamflow (as compared to Historical Record)

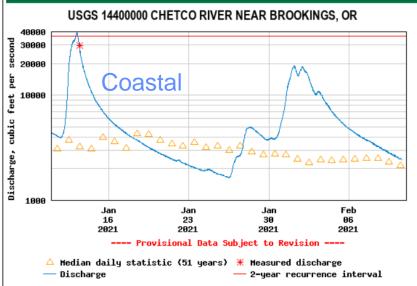


Explanation - Percentile classes								
•		•	•			•	0	
Low	<10	10-24	25-75	76-90	>90	LUM	Not-ranked	
	Much below normal	Below normal	Normal	Above normal	Much above normal	High		

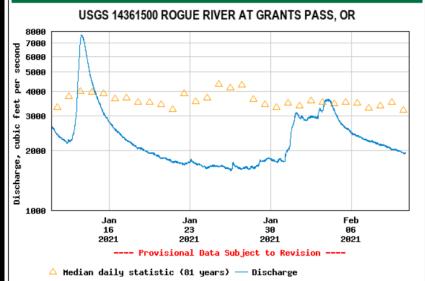


Southern Oregon

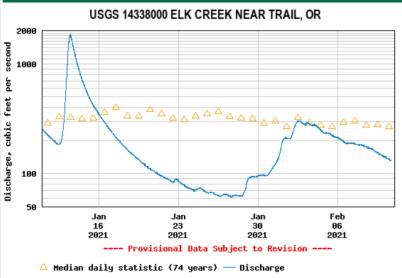
≥USGS



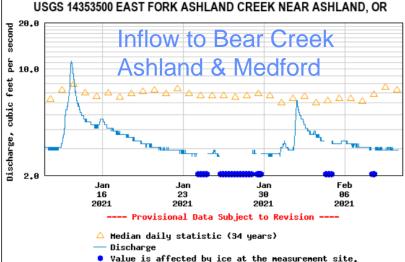
≊USGS



≊USGS

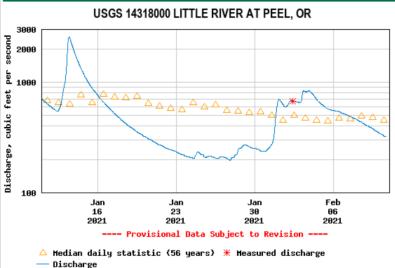


≊USGS

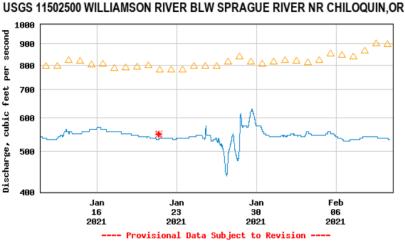


Southern Oregon



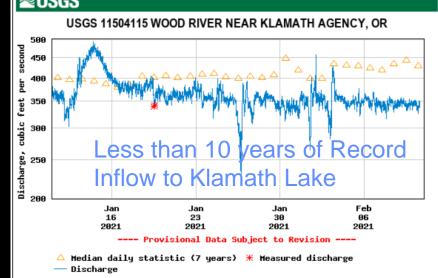


≊USGS

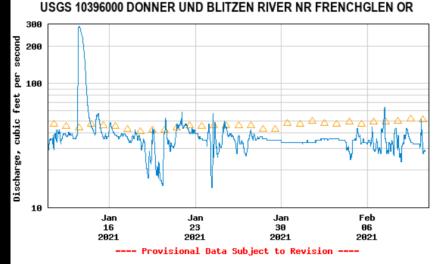


riangle Median daily statistic (102 years) imes Measured discharge — Discharge

≊USGS



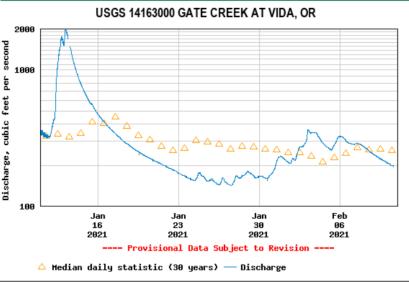
≥USGS



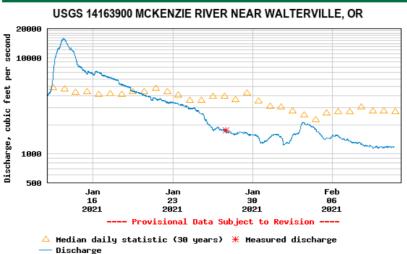
🛆 Median daily statistic (91 years) — Discharge

McKenzie Basin

≊USGS

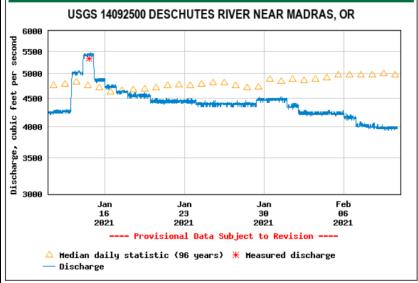


≈USGS



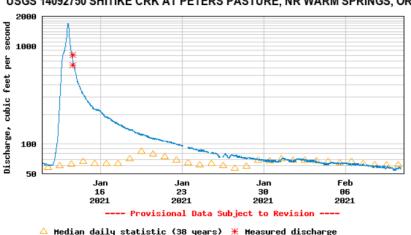
Deschutes Basin

≊USGS

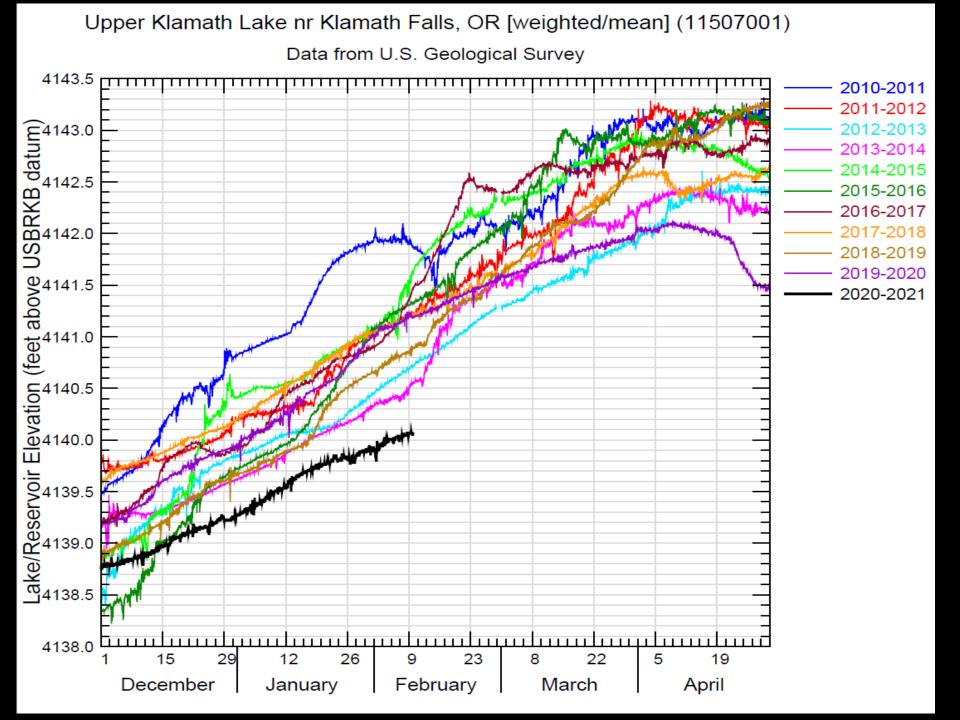


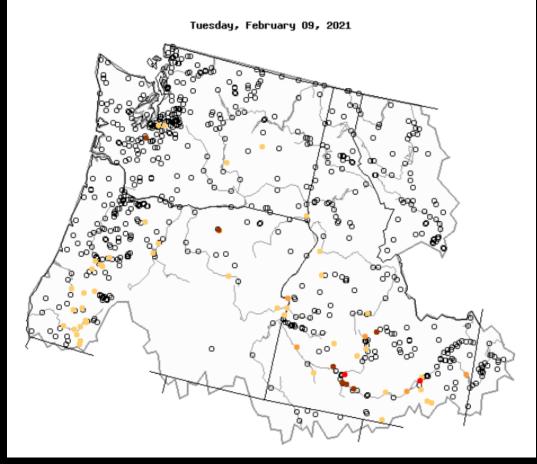
≈USGS

Discharge



USGS 14092750 SHITIKE CRK AT PETERS PASTURE, NR WARM SPRINGS, OR

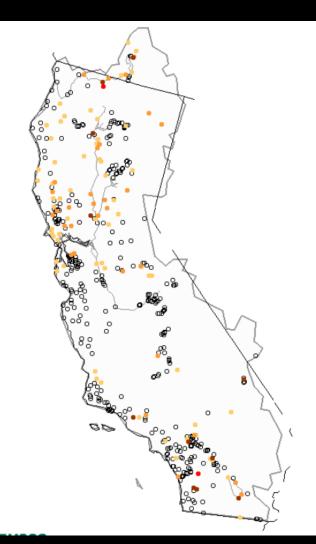




Explanation - Percentile classes							
	•		•	0			
New low	<=5	6-9 10-24		Not replied			
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	Not ranked			



Map of below normal 28-day average streamflow compared to historical streamflow for the day of year (Pacific Northwest & CA)



Breitenbush view from real time camera

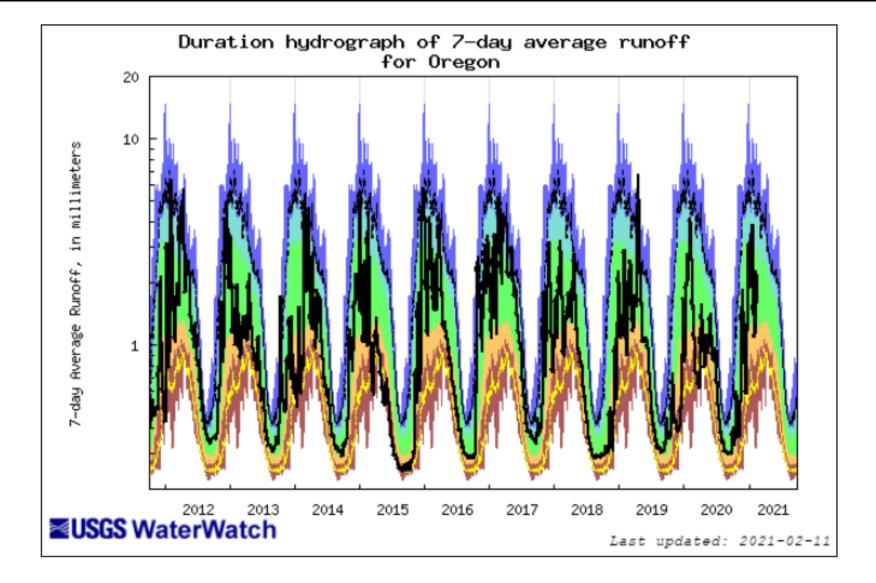




	NRCS	Monthly disch Cubic	y mean harge Percent	in dis- charge from previous	Accumulated Runoff For the Period Oct. to Jan.
Station	SWSI Basin			month (percent)	Percent of average
Donner Und Blitzen nr Frenchglen	Harney	40	61	18	65
(*)Deep Creek above Adel	Lake County	24	29	60	29
(*)Chewaucan River near Paisley	Lake County	43	43	39	52
Williamson River near Chiloquin	Klamath	546	52	3	65
Owyhee River near Rome	Owyhee	193	37	23	50
(*)NF Malheur River near Beulah	Malheur	55	75	38	76
Grande Ronde R at Troy	Grande Ronde Powder/Burnt	1,950	100	59	95
Umatilla River nr Gibbon	Umatilla Lower John Day	345	132	53	117
John Day River at Service Crk	Upper John Day	863	53	96	52
(*)Little Deschutes River nr LaPine	Upper Deschutes	87	53	10	65
Hood River nr Hood River	Lower Deschutes Mt.Hood	1,910	135	63	106
Willamette River at Salem	Willamette	51,200	113	40	93
Wilson River near Tillamook	North Coast	3,690	149	53	119
Umpqua River near Elkton	Rogue/Umpqua	11,600	79	57	64
Rogue River near Agness	Rogue/Umpqua	6,480	63	92	52
SF Coquille River at Powers	South Coast	2,170	129	123	77
Chetco River near Brookings	South Coast	6,230	126	124	79



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



	E	xplana	tion - Pe	rcentile	classes	5	
lowest- 10th percentile	5	10-24	25-75	76-90	95	90th percentile -highest	Runoff
Much below Normal		Below	Normal	Above normal	Much above normal		

Water Supply Conditions Report Water Supply Availability Committee

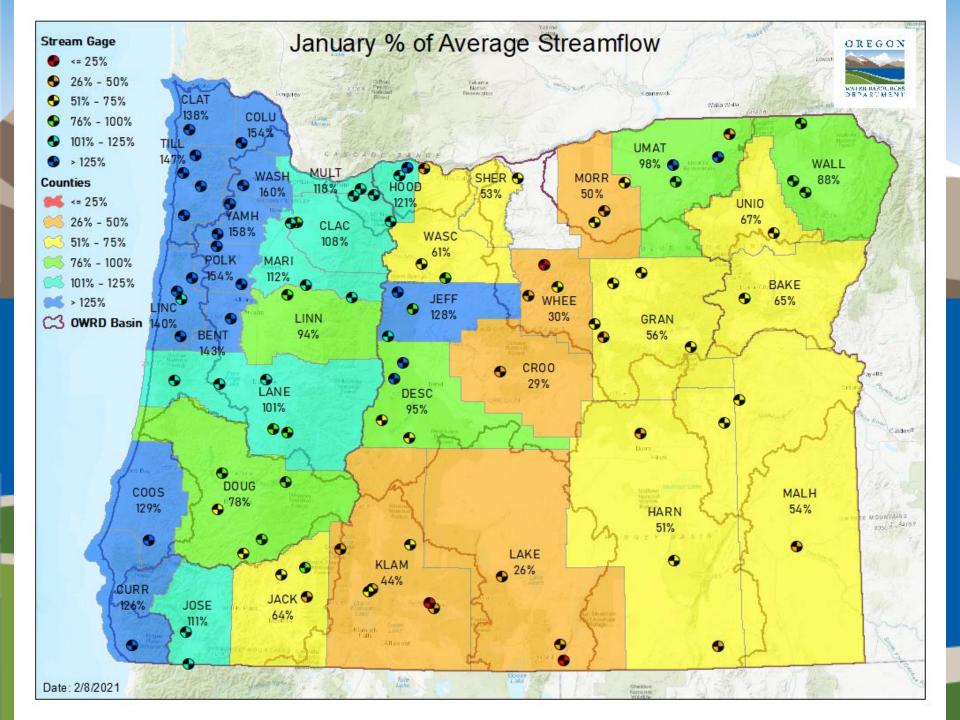


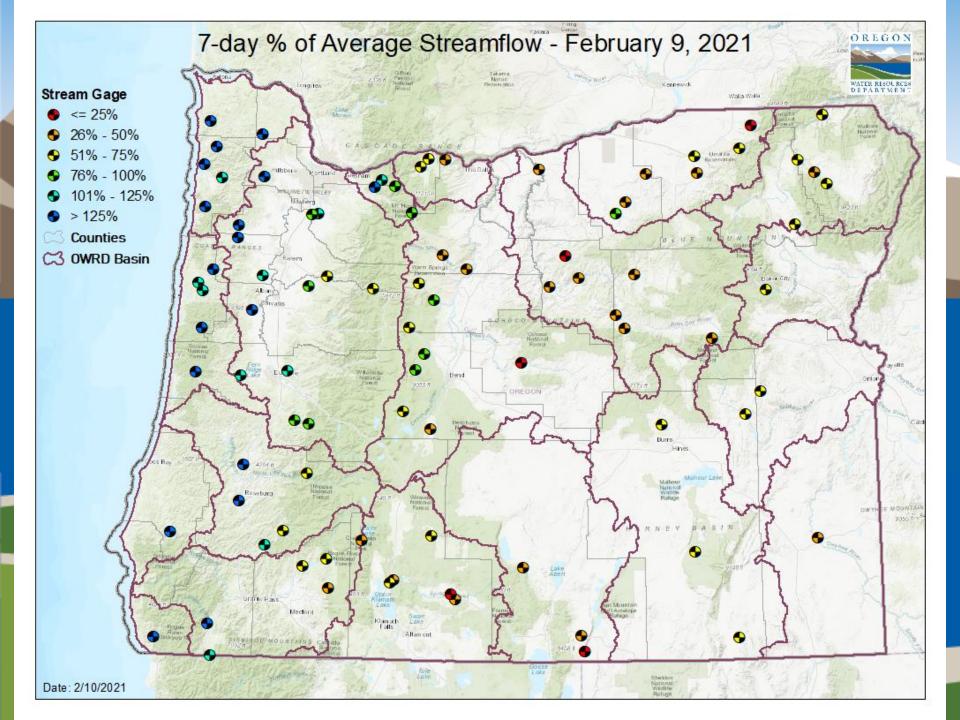
WATER RESOURCES D E P A R T M E N T

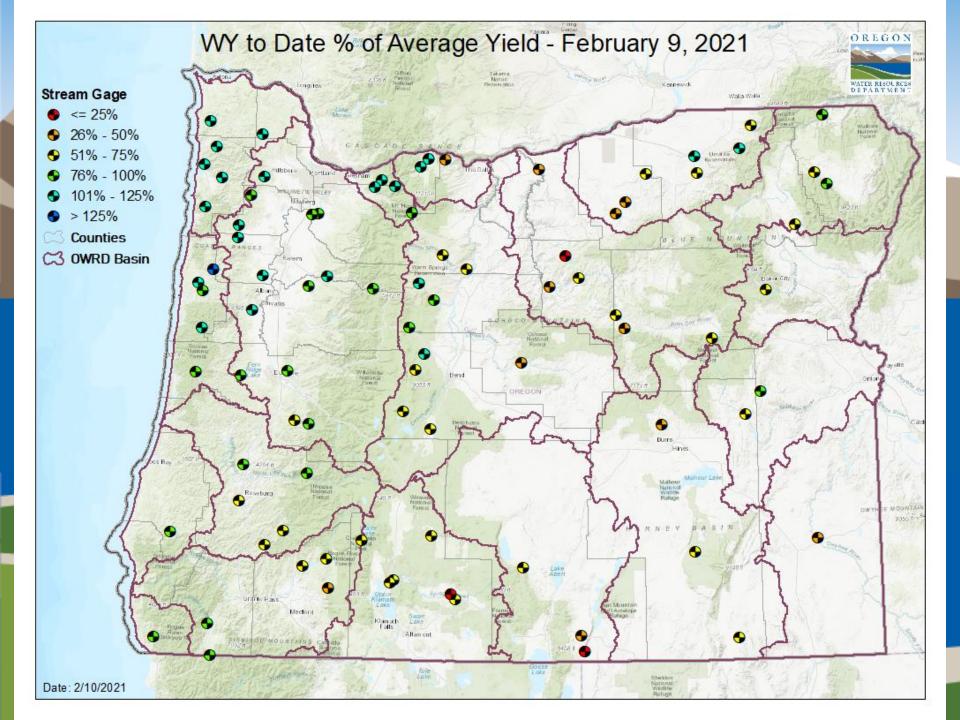
Ryan Andrews Oregon Water Resources Department February 11th, 2021

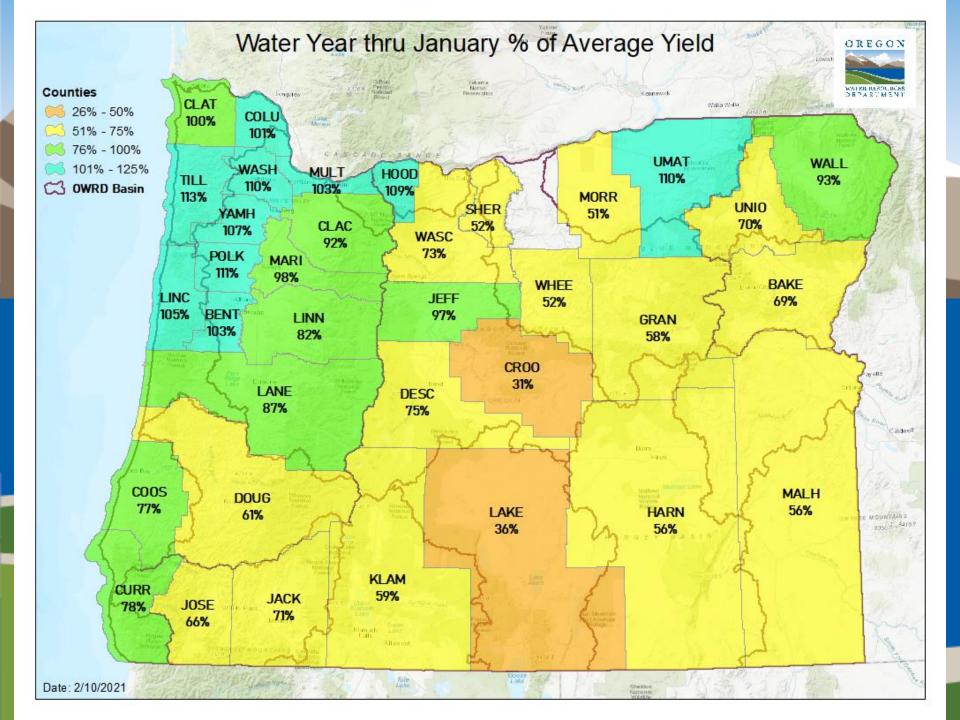


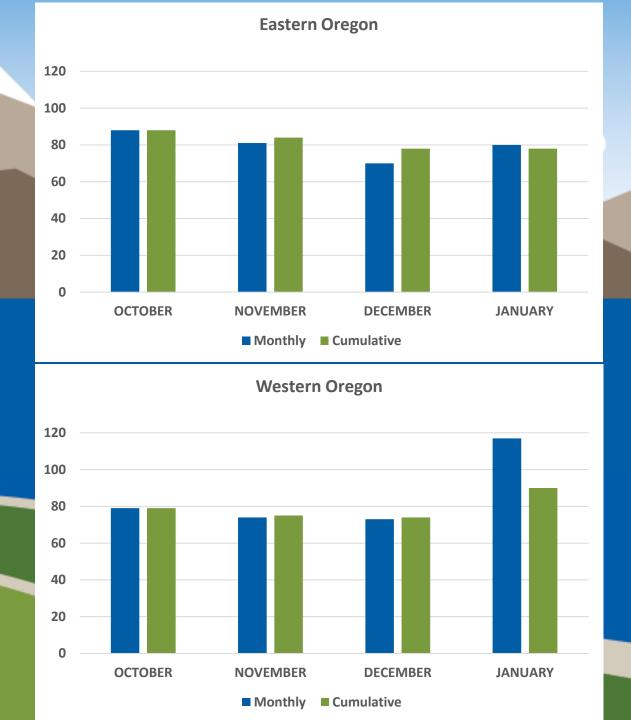
Stream: Willamina Cr. 1



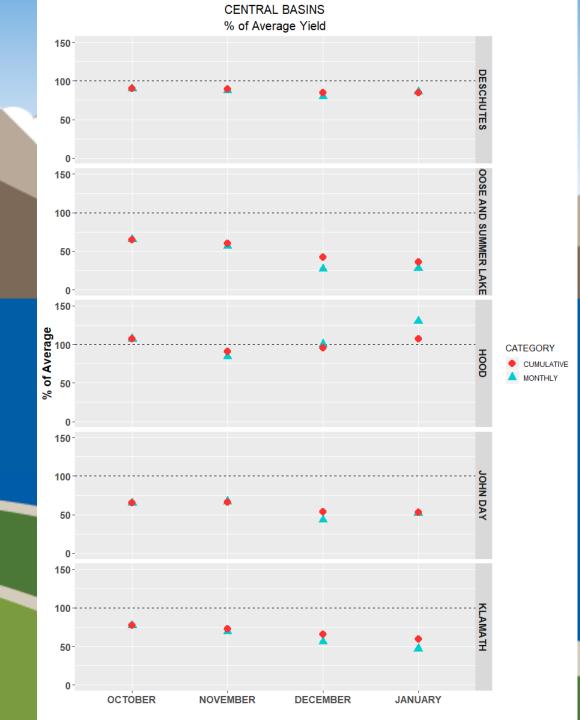


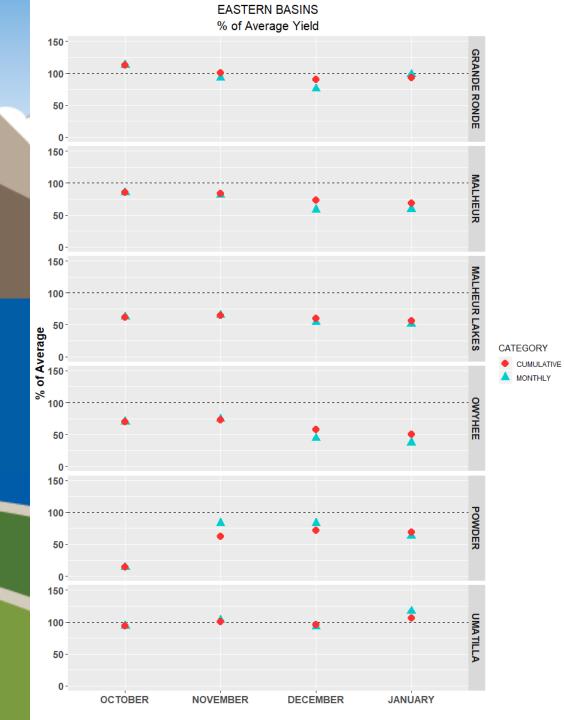












Thank you!



DEPARTMENT

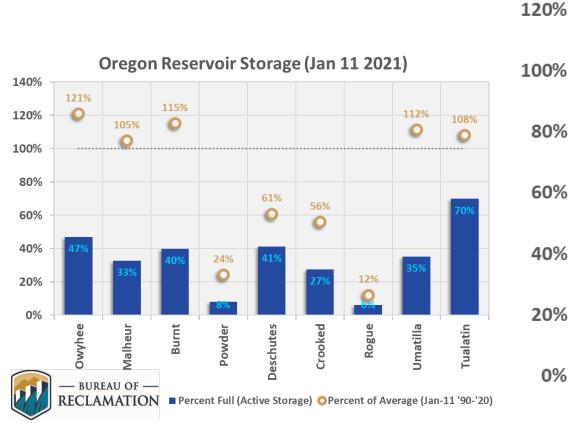


Reclamation Storage Update

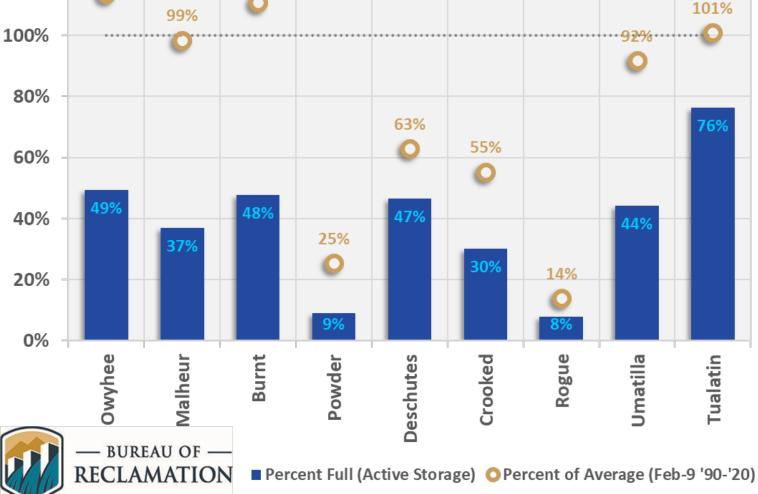
Oregon Water Supply Availability Committee Meeting

February 10, 2021

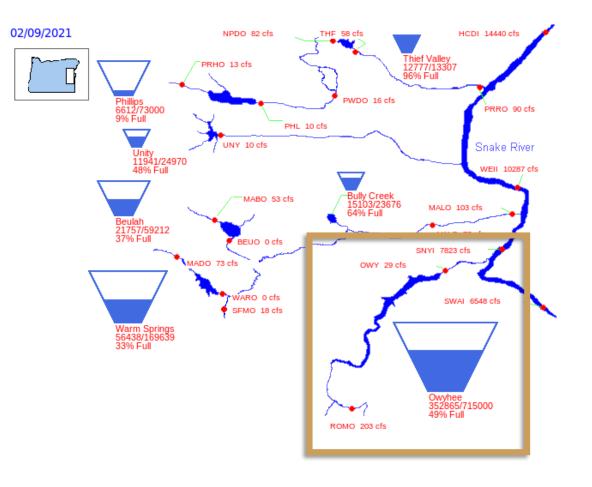
Reservoir Storage Conditions

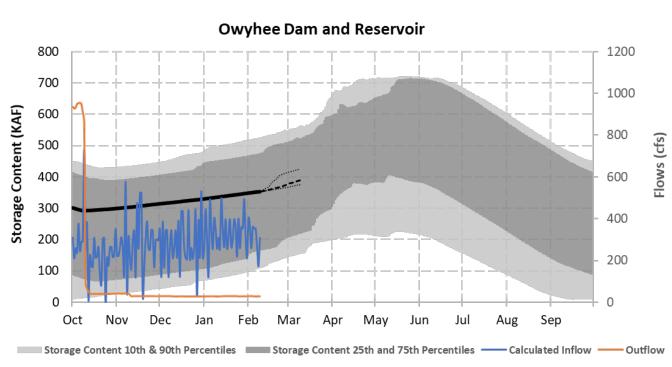


Oregon Reservoir Storage (Feb 9 2021)

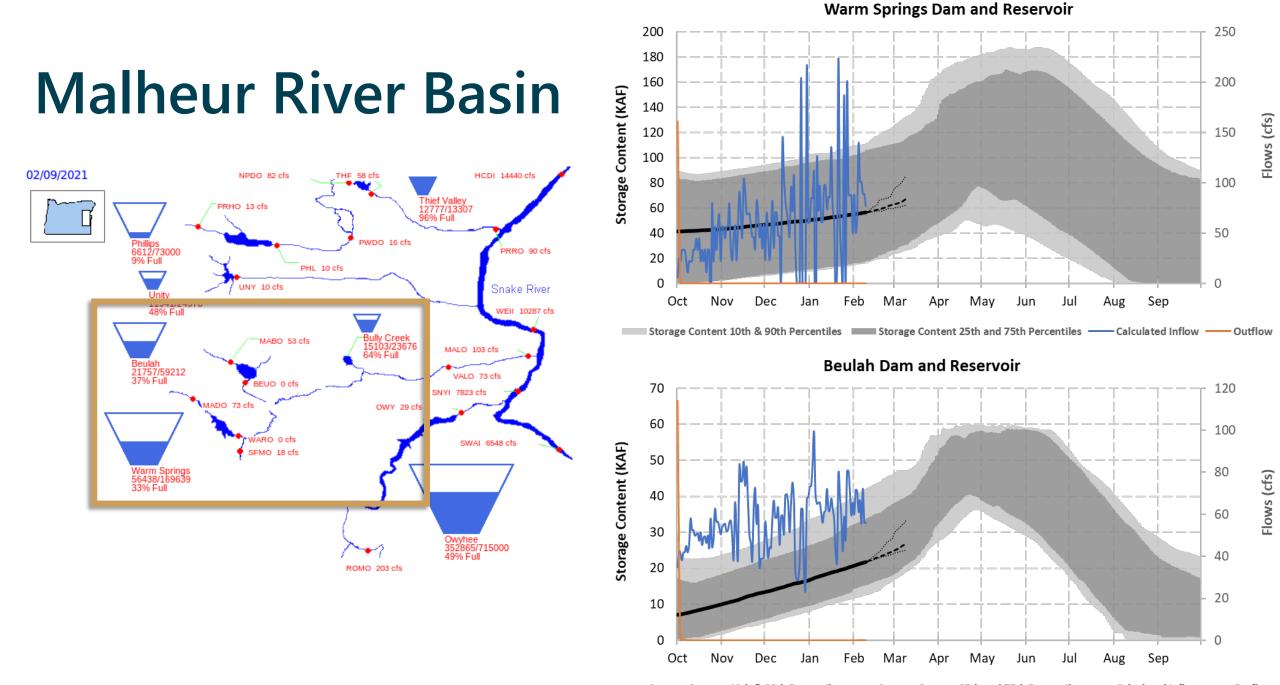


Owyhee River Basin

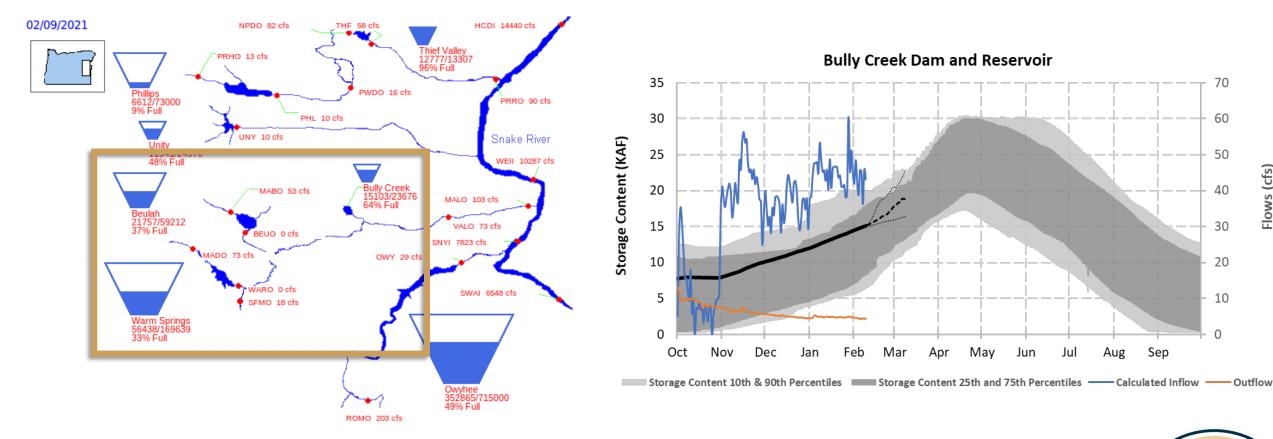








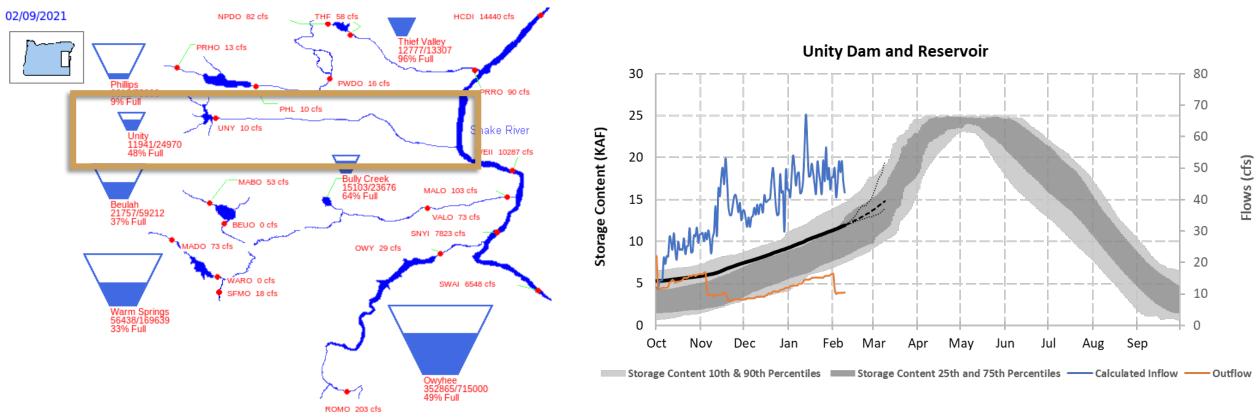
Malheur River Basin





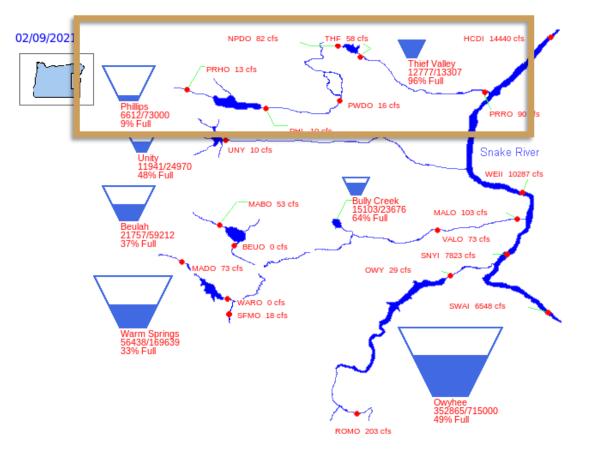
Flows (cfs)

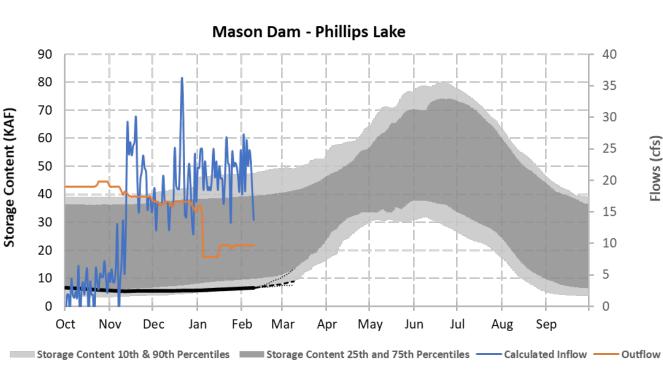
Burnt River Basin





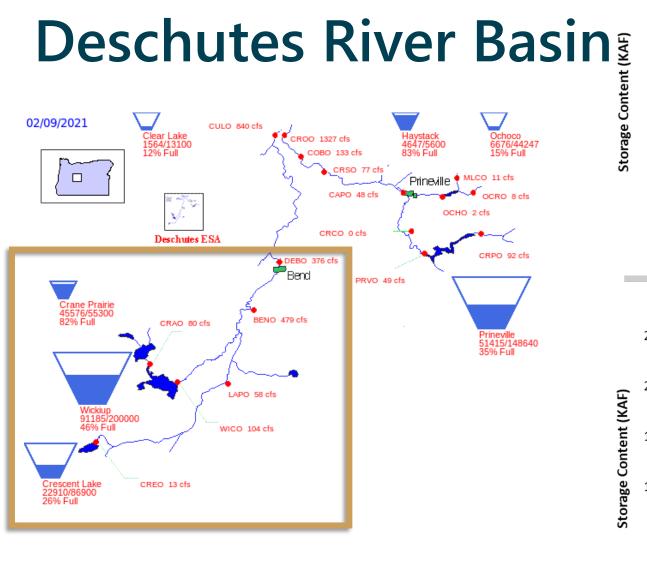
Powder River Basin

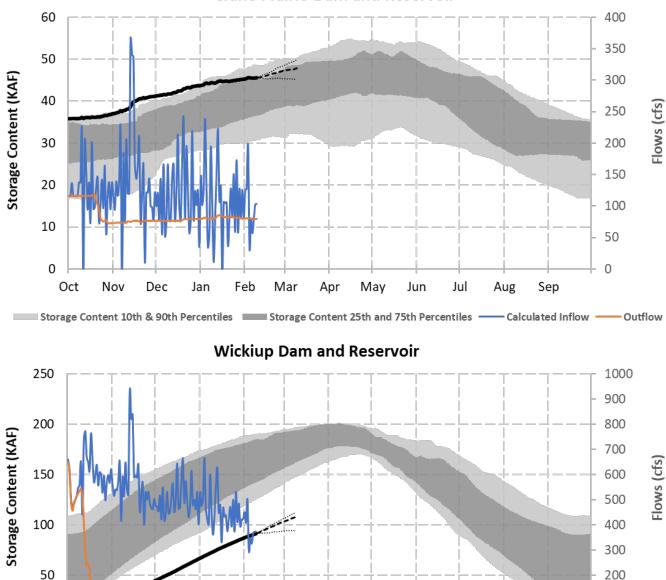






Crane Prairie Dam and Reservoir





May

Jun

Jul

Apr

100

0

Sep

Aug

*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

0

Oct

Nov

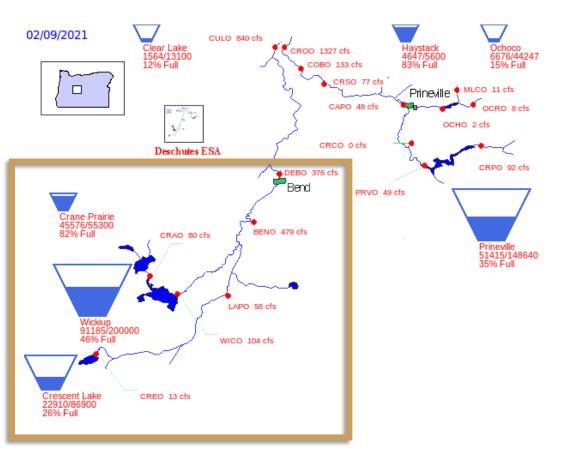
Dec

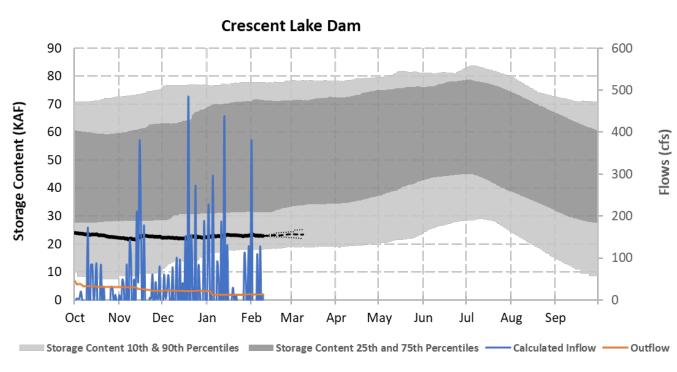
Jan

Feb

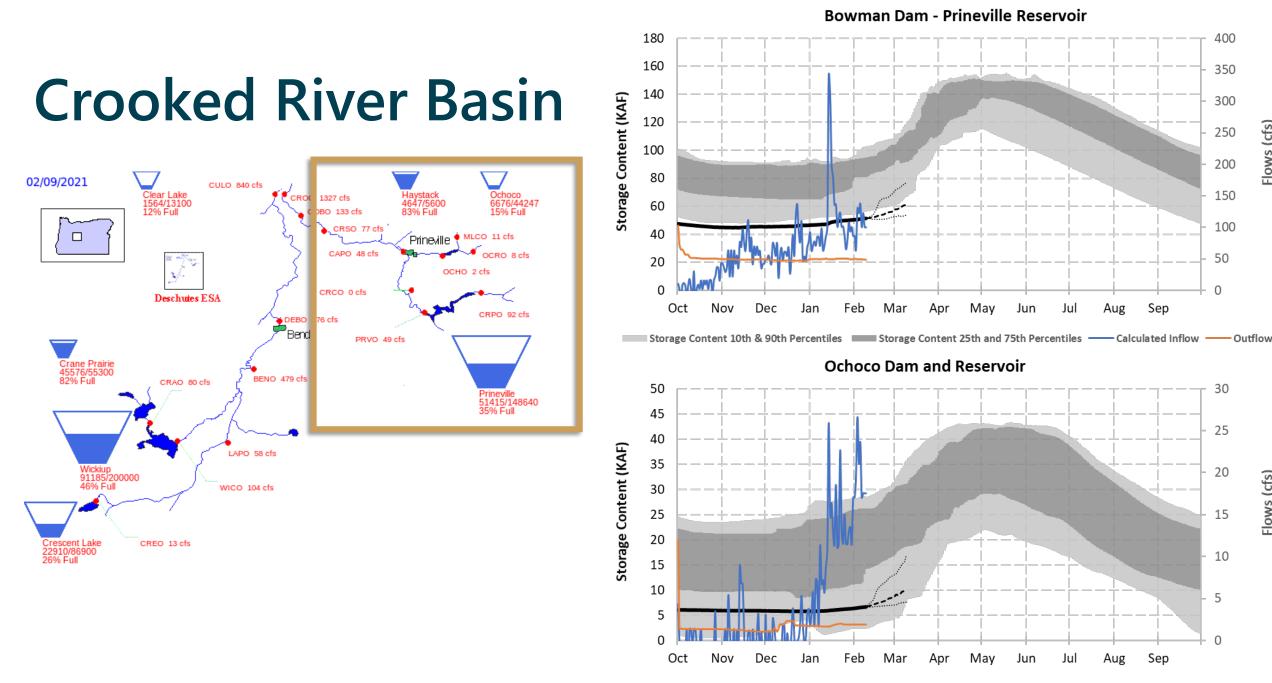
Mar

Deschutes River Basin









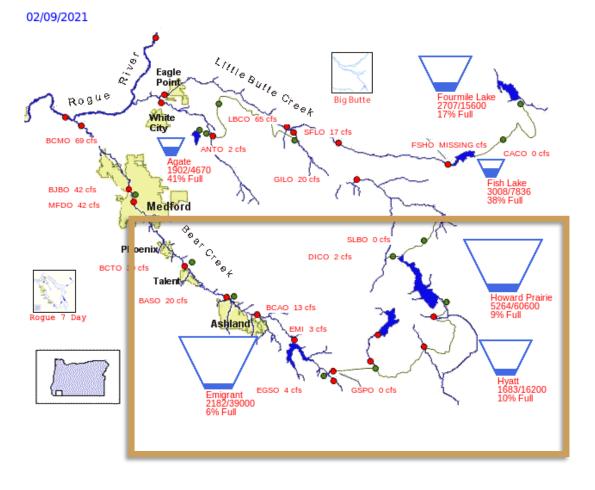
*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

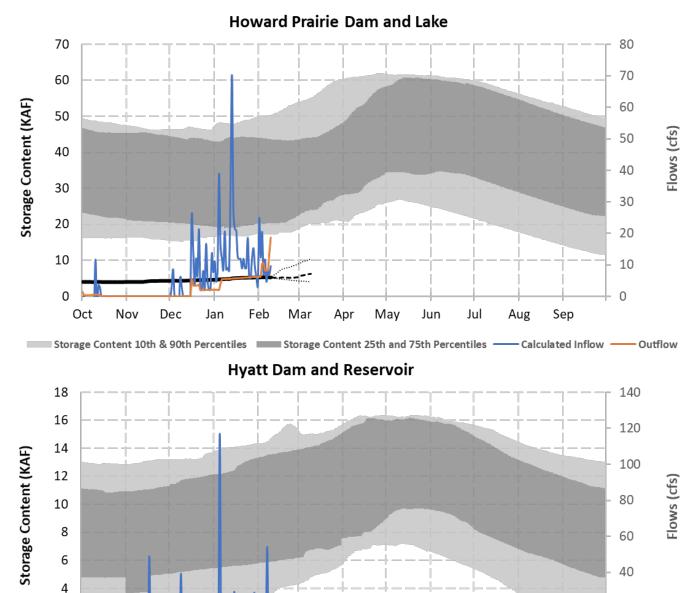
 Outflow Storage Content 10th & 90th Percentiles Storage Content 25th and 75th Percentiles —— Calculated Inflow —

Flows (cfs)

Flows (cfs)

Rogue River Basin





Storage Content 10th & 90th Percentiles 🛛 Storage Content 25th and 75th Percentiles —— Calculated Inflow —— Outflow

Apr

May

Jun

Jul

2

0

Oct

Nov

Dec

Jan

Feb

Mar

20

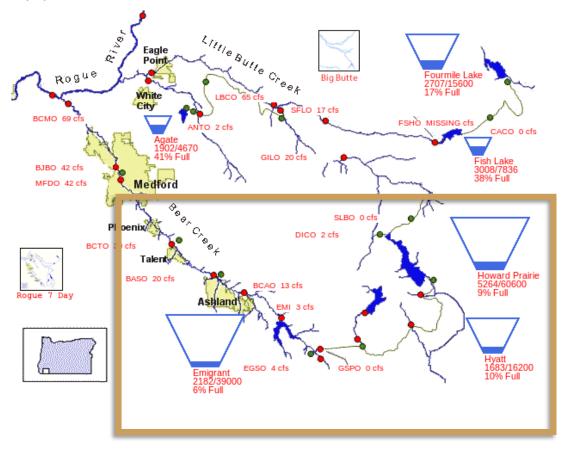
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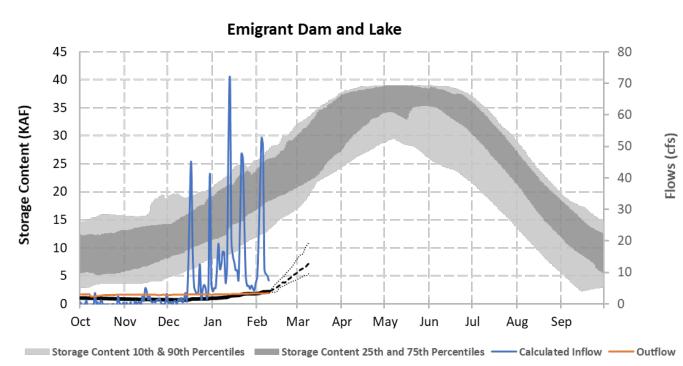
Sep

Aug

Rogue River Basin

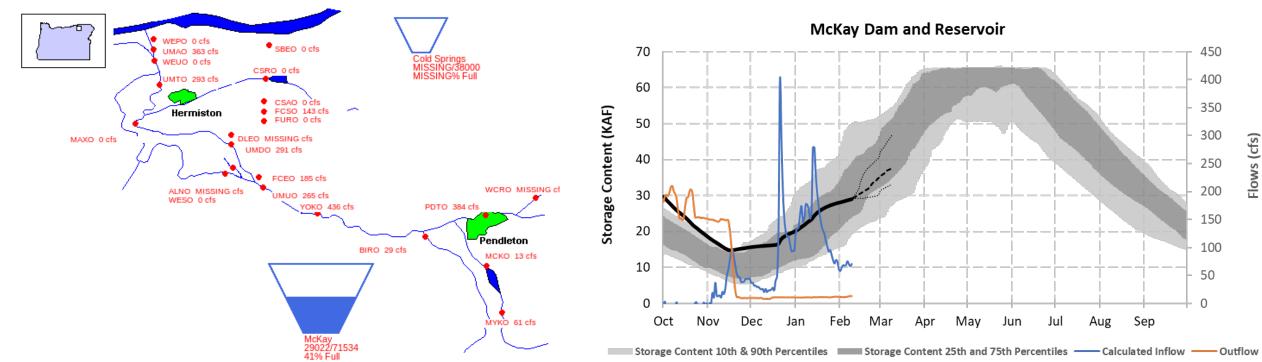
02/09/2021





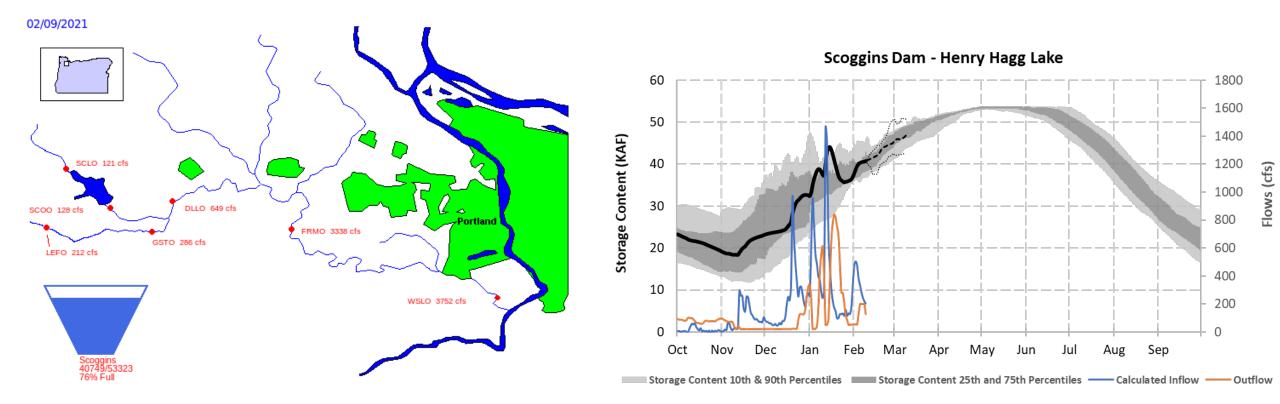
Umatilla River Basin

02/09/2021





Tualatin River Basin





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