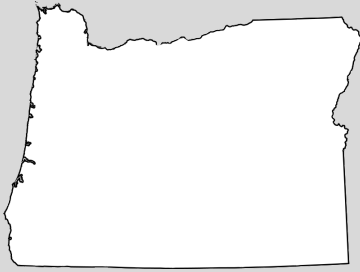




Oregon Snow Survey

Snow Survey and Water Supply Forecasting Program



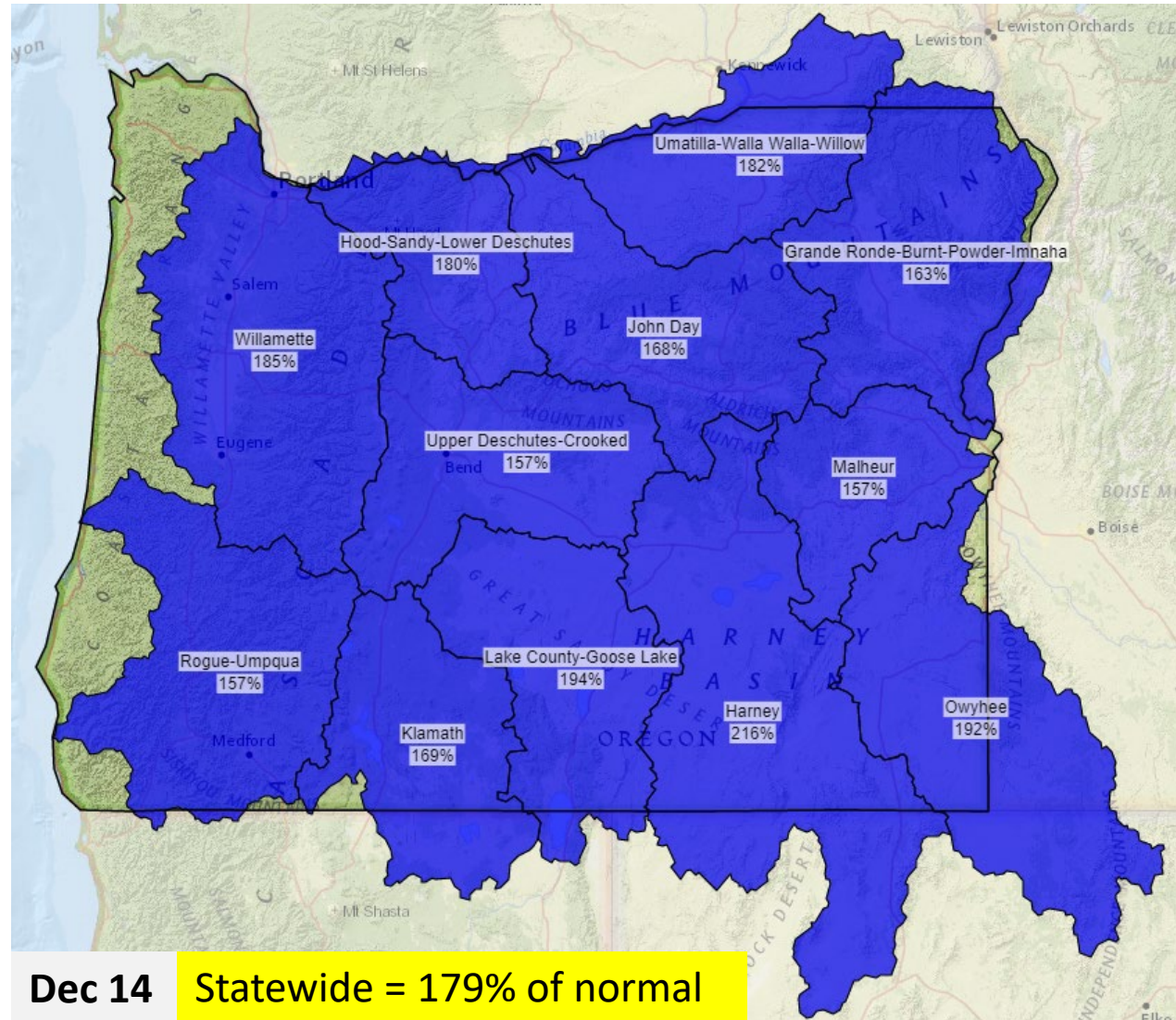
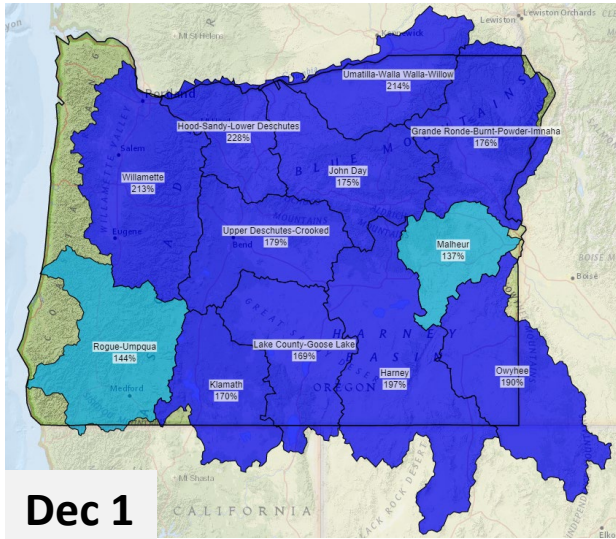
Oregon
Water Supply Availability Committee
December 15, 2022





Snowpack Conditions

Snow Water Equivalent Basin Map



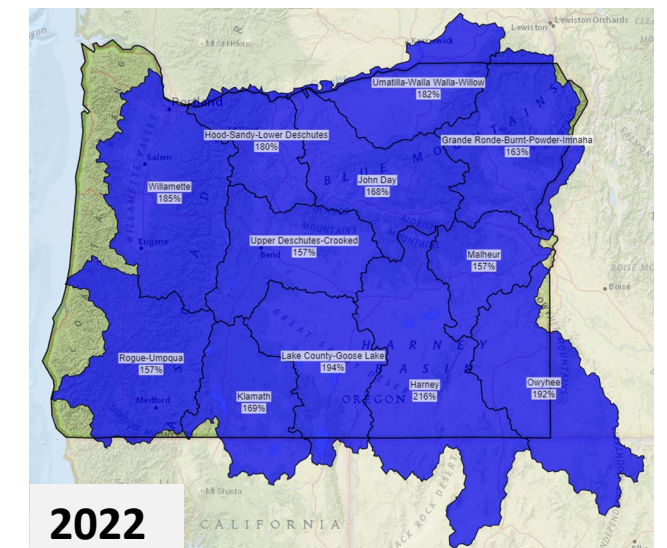
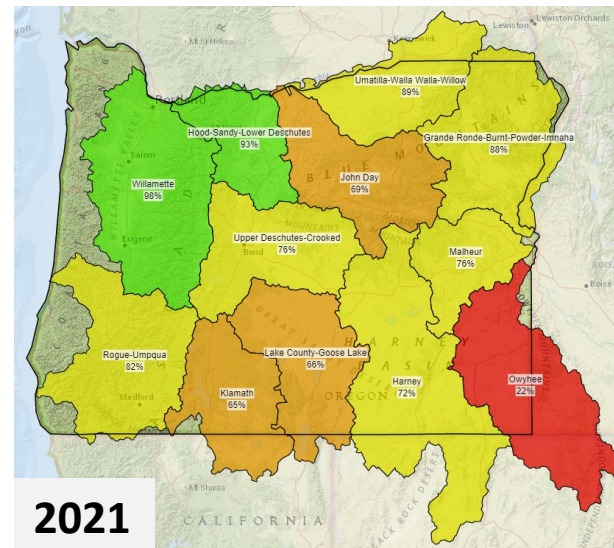
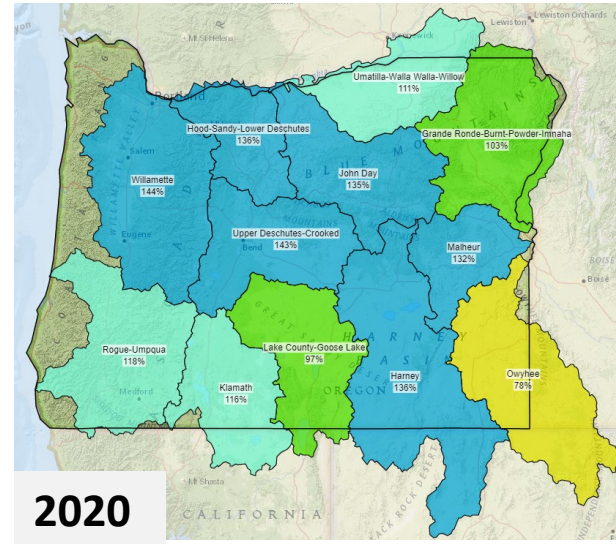
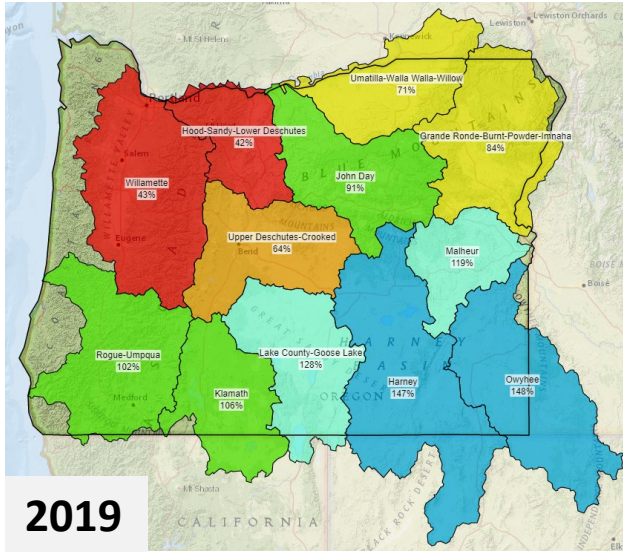
**Snow Water Equivalent
Percent NRCs 1991-2020
Median**



Watershed Boundaries
 — State Watersheds

Snow Water Equivalent

2019 to 2022 – Basin Maps



Snow Water Equivalent
Percent NRCs 1991-2020
Median

- ≥ 150%
- 130% - 149%
- 110% - 129%
- 90% - 109%
- 70% - 89%
- 50% - 69%
- < 50%
- No basin value

Watershed Boundaries
— State Watersheds

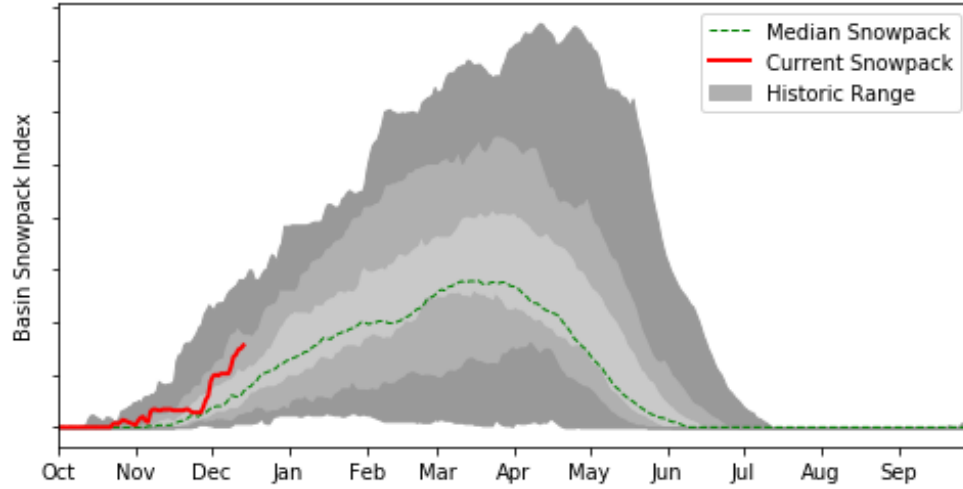
NRCS Natural Resources
Conservation Service

Created 11-21-2022, 12:21 PM PST

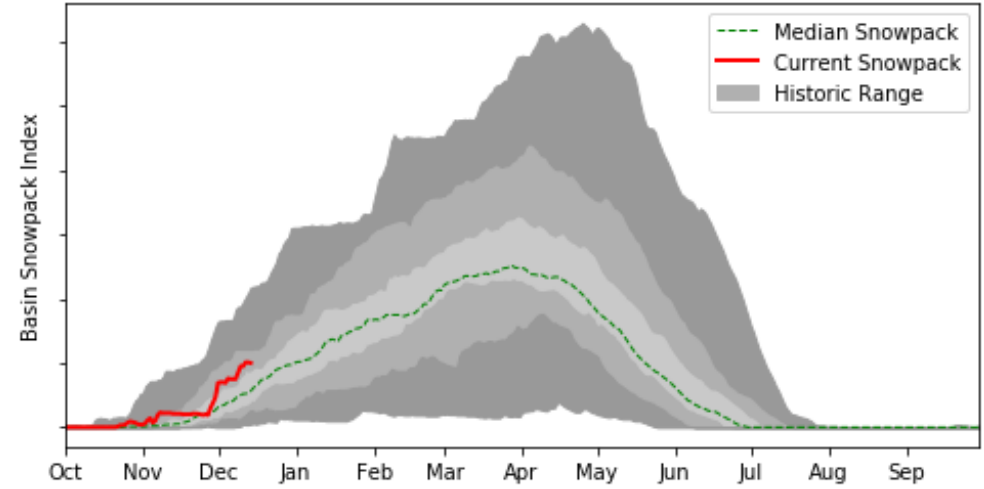
Snow Water Equivalent

WY 2023 Basin Charts

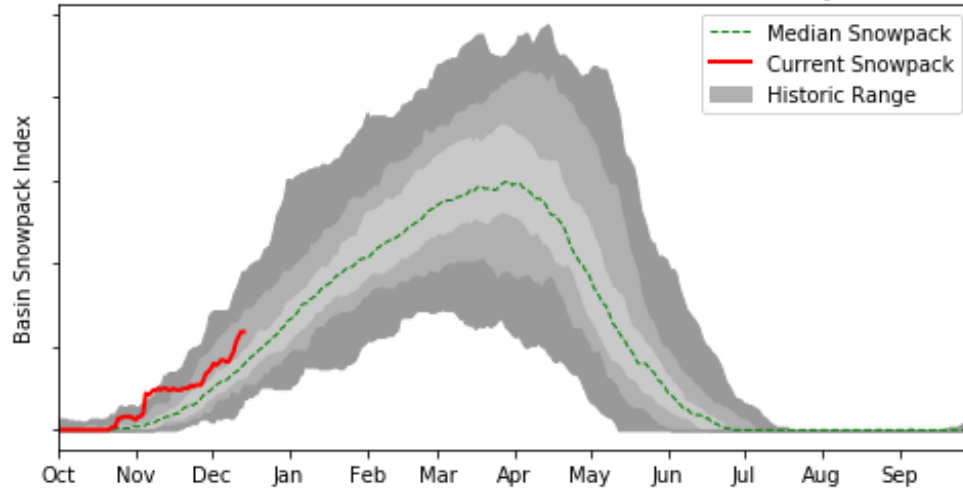
Willamette Basin Snowpack



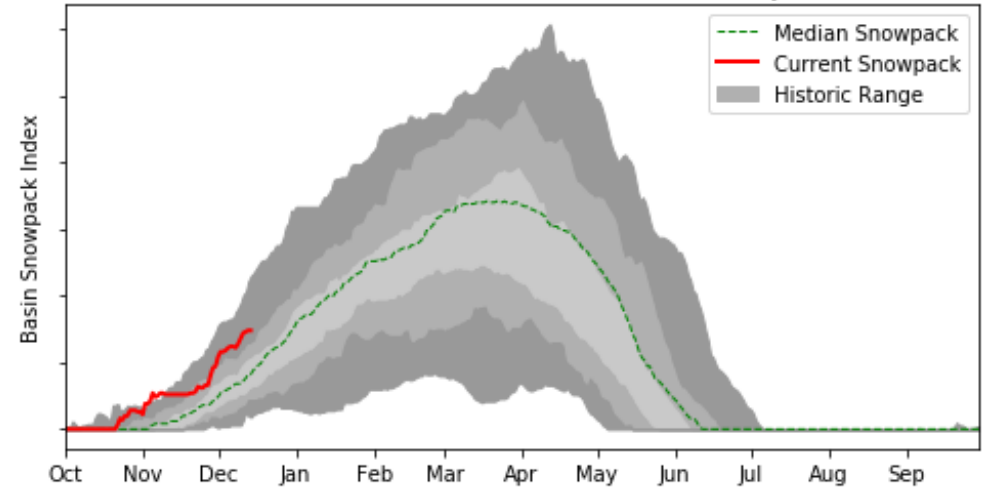
Hood-Sandy-Lower Deschutes Basin Snowpack



Grande Ronde-Burnt-Powder-Imnaha Basin Snowpack



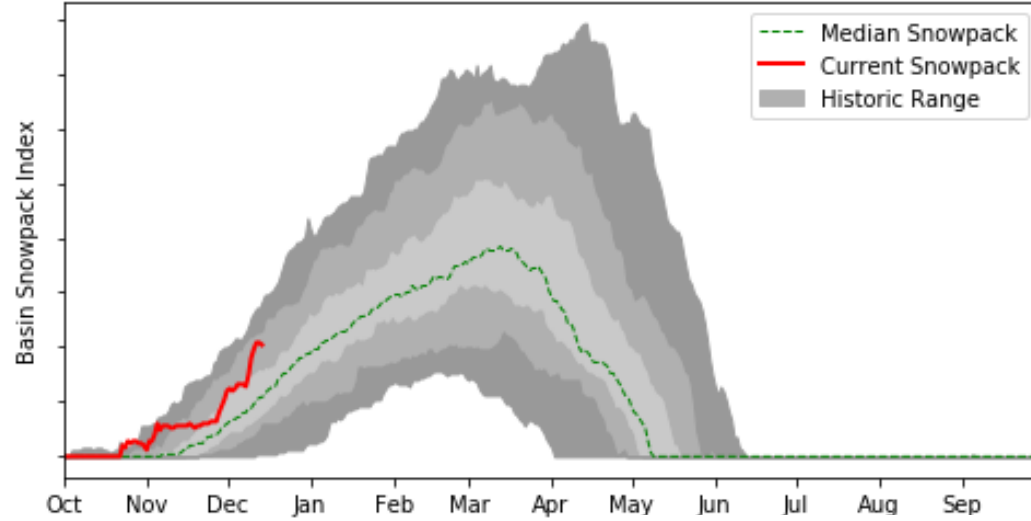
Umatilla-Walla Walla-Willow Basin Snowpack



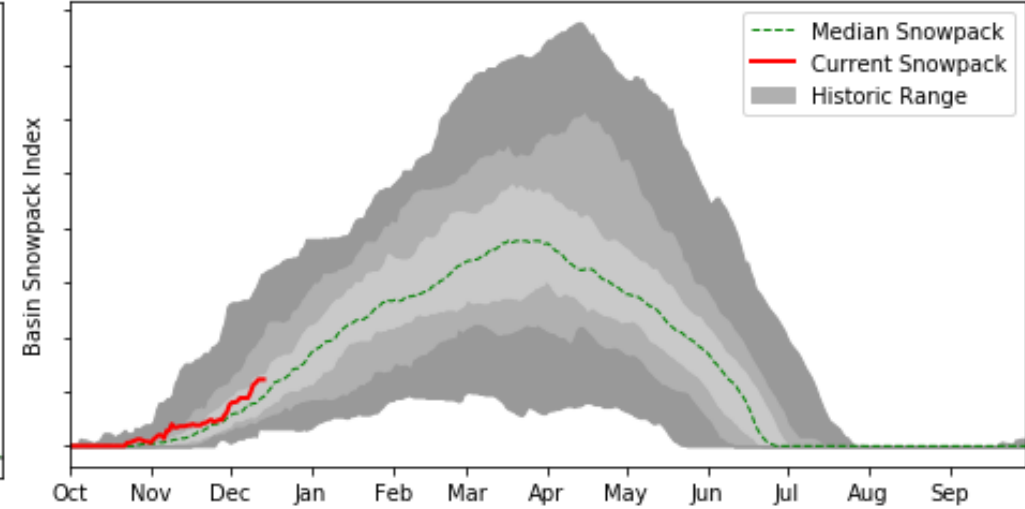
Snow Water Equivalent

WY 2023 Basin Charts

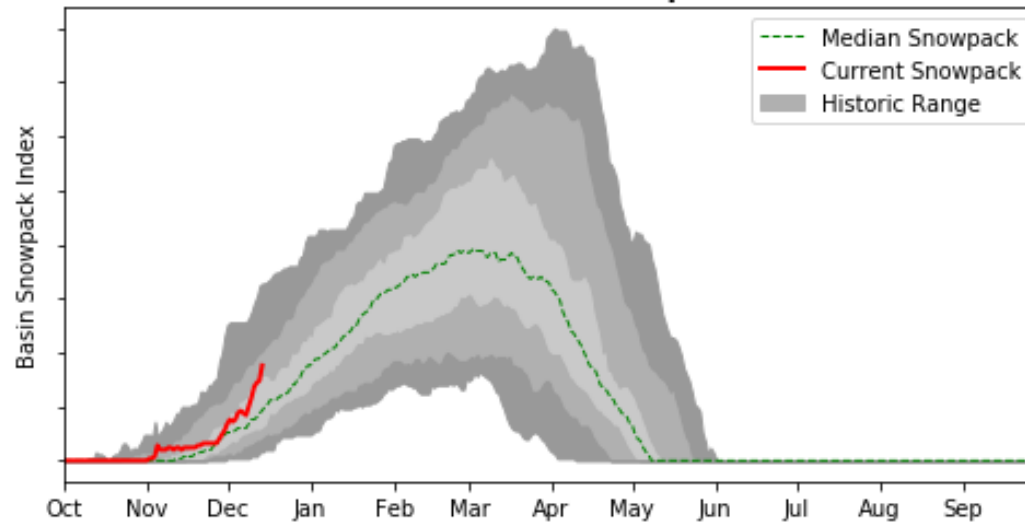
John Day Basin Snowpack



Upper Deschutes-Crooked Basin Snowpack



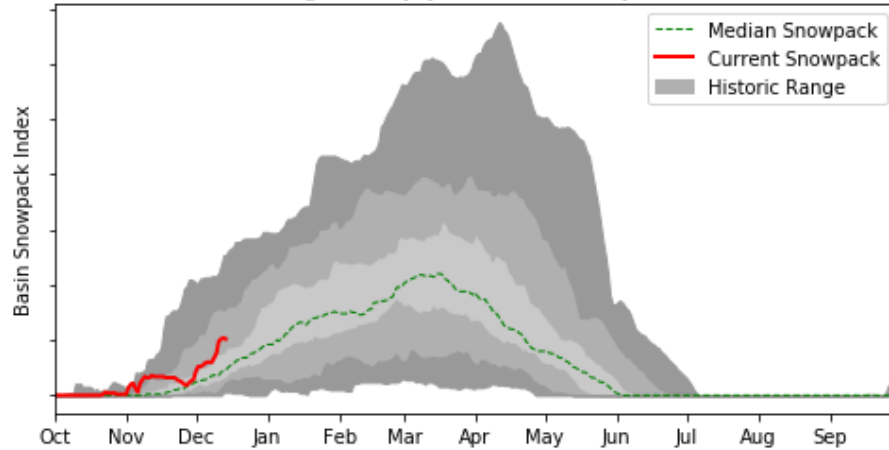
Malheur Basin Snowpack



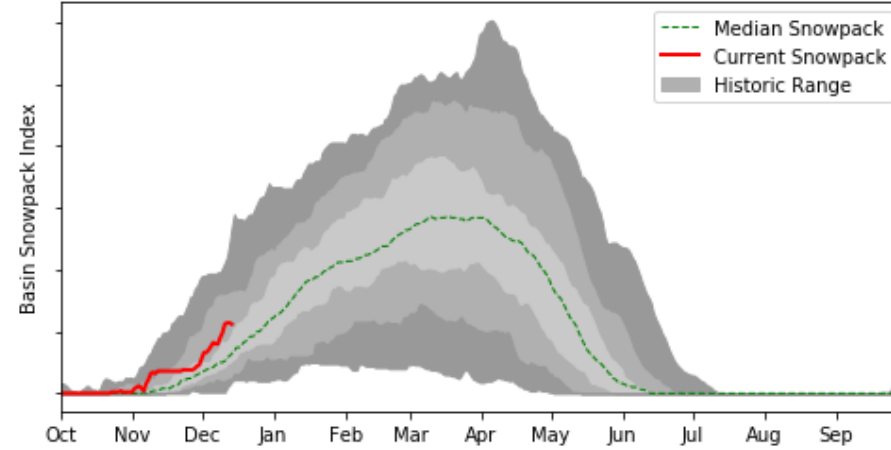
Snow Water Equivalent

WY 2023 Basin Charts

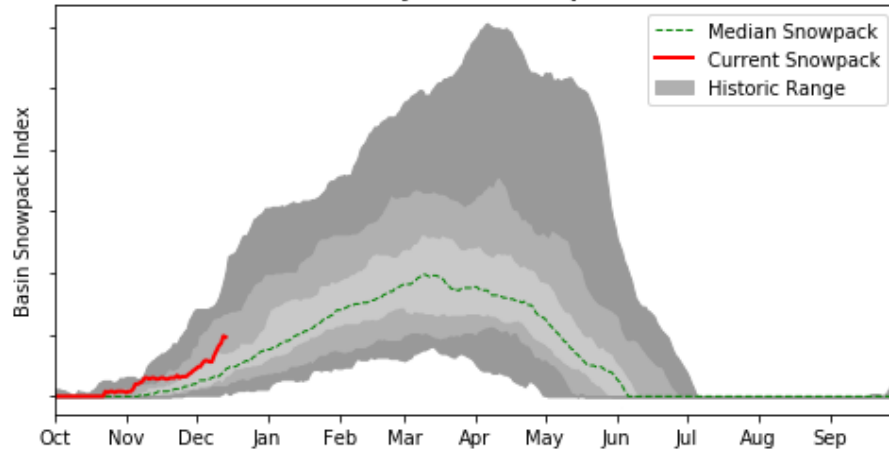
Rogue-Umpqua Basin Snowpack



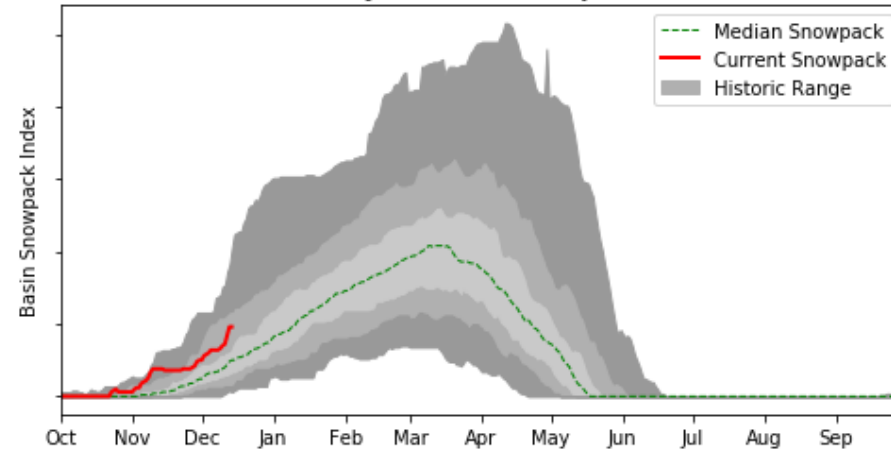
Klamath Basin Snowpack



Harney Basin Snowpack



Owyhee Basin Snowpack





Precipitation Conditions

Precipitation

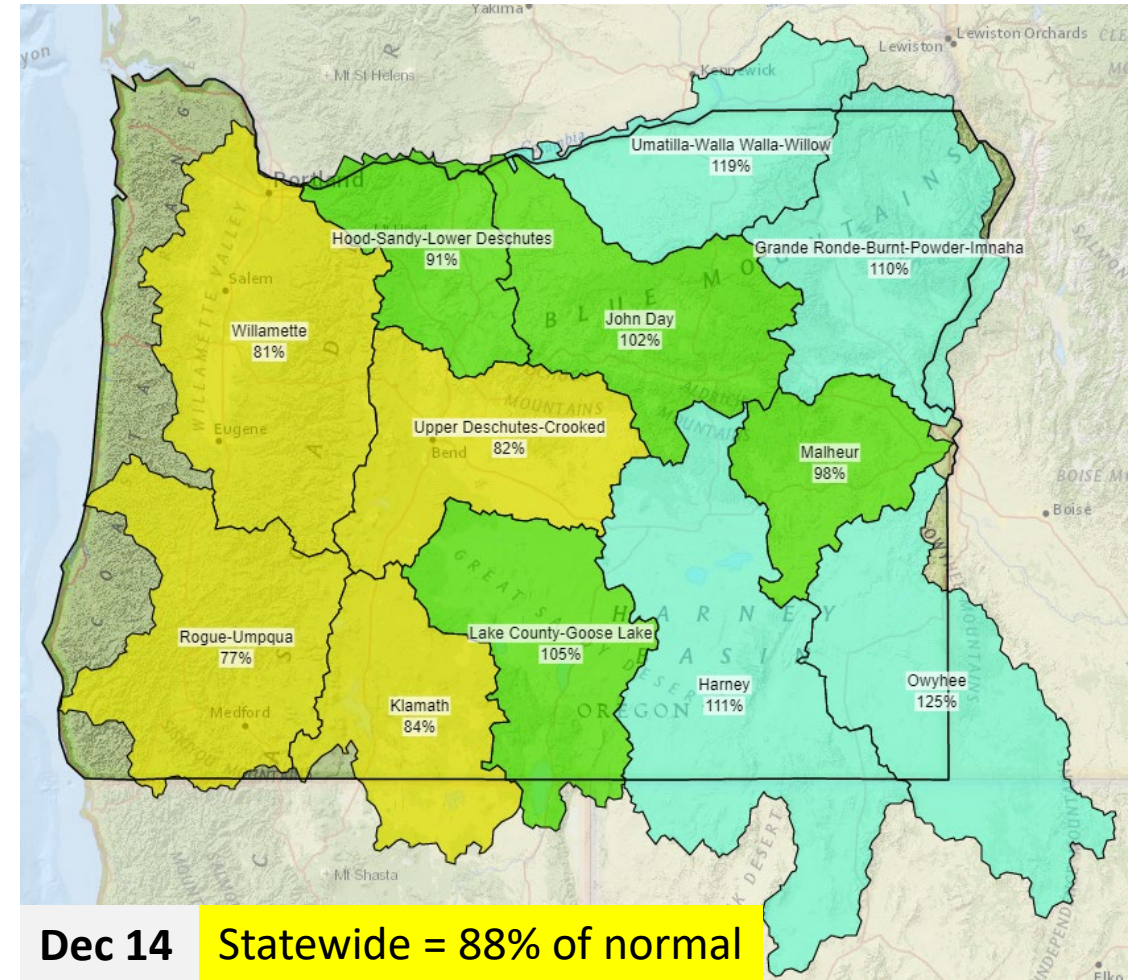
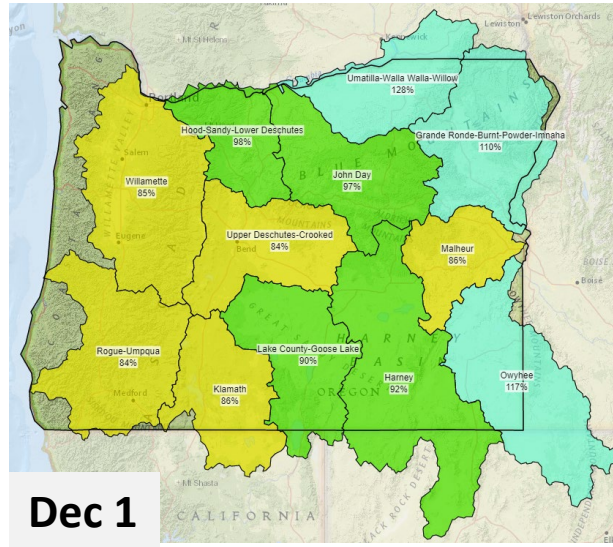
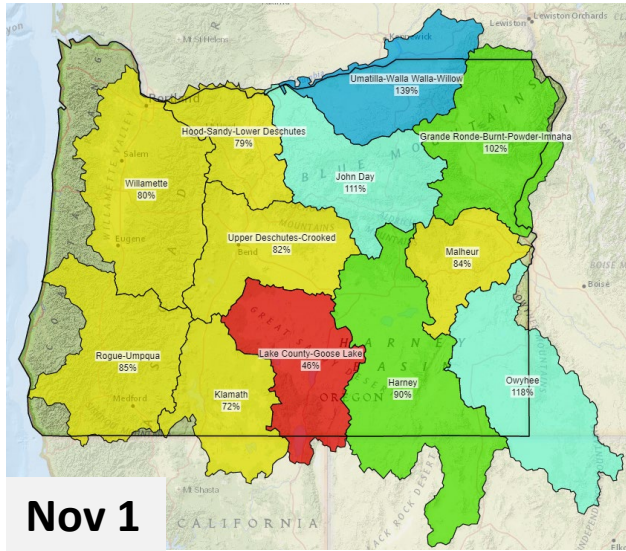
WY 2022 – Basin Map

23% of SNOTEL sites in Oregon at or near record low precipitation for the period 11/1/2019 to 12/14/2022



Snow Water Equivalent

December to June 2022 – Monthly Basin Map



Snow Water Equivalent
Percent NRCs 1991-2020
Median

- ≥ 150%
- 130% - 149%
- 110% - 129%
- 90% - 109%
- 70% - 89%
- 50% - 69%
- < 50%
- No basin value

Watershed Boundaries
— State Watersheds

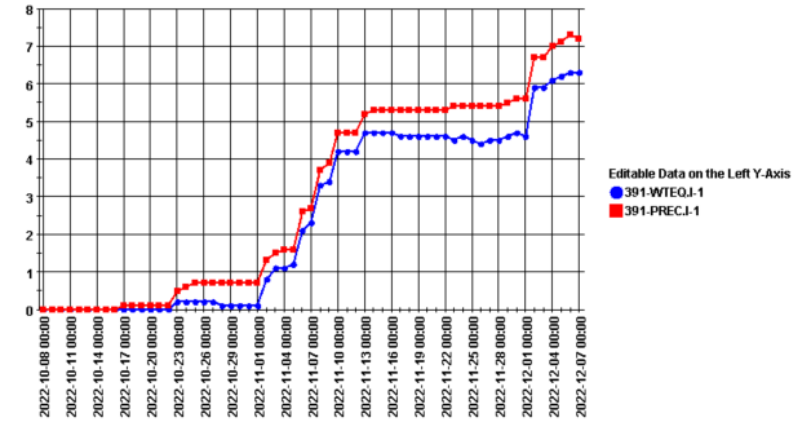
NRCS Natural Resources
Conservation Service

Created 11-21-2022, 12:21 PM PST

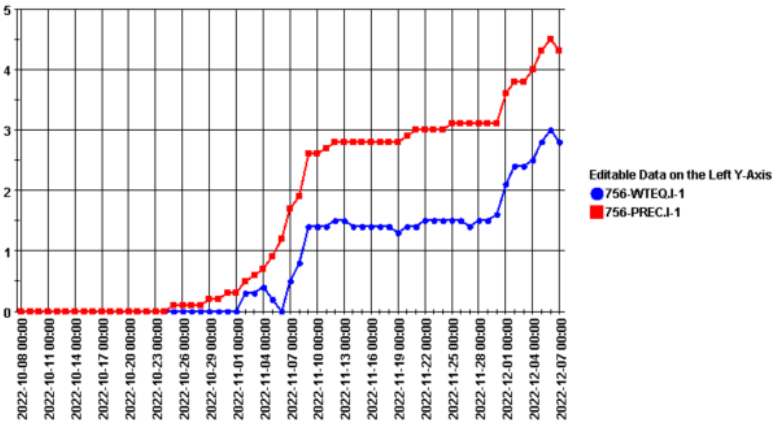
Early Season Precipitation and SWE

WY 2022 – Select Basin Charts

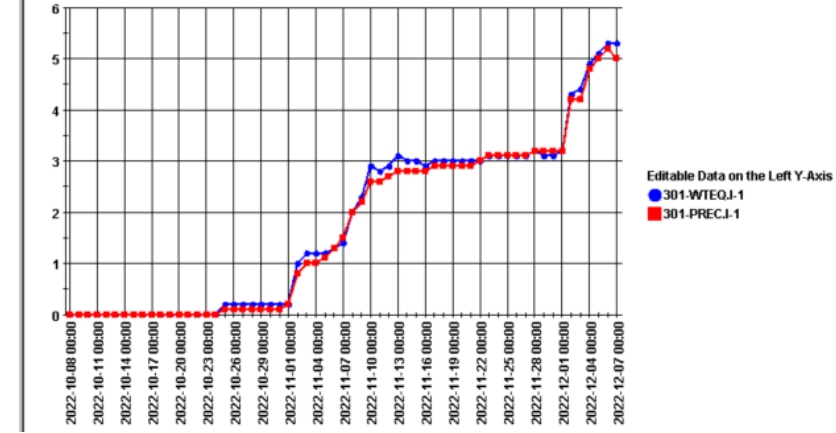
391-CEDAR PASS



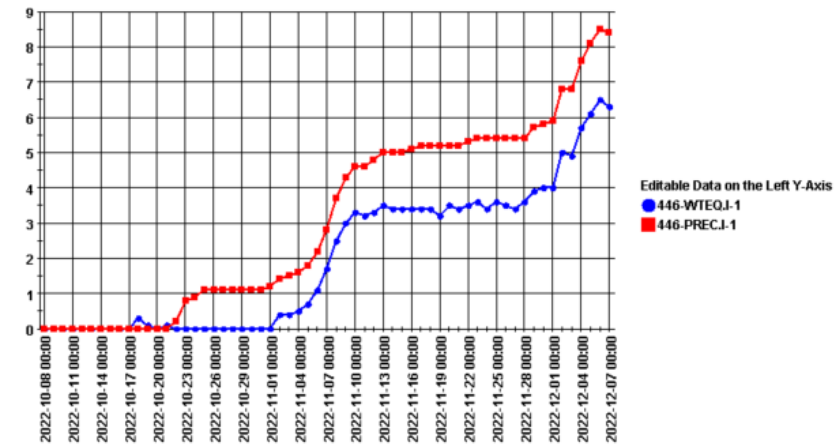
756-SILVER CREEK



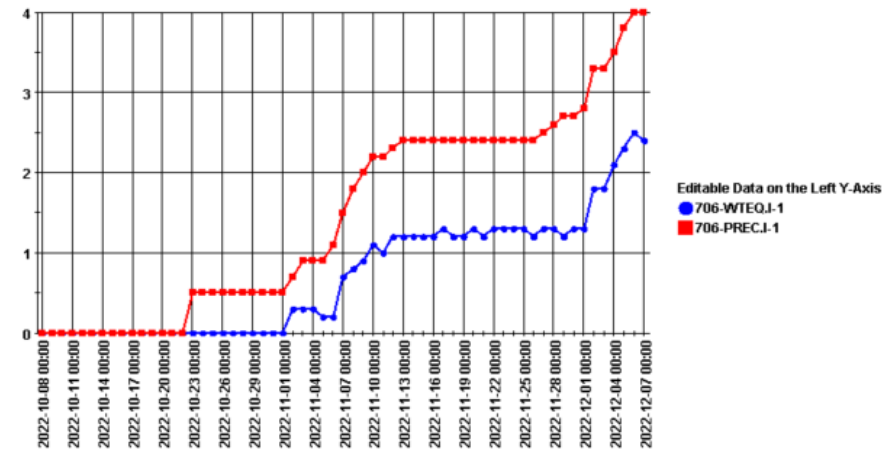
301-ADIN MTN



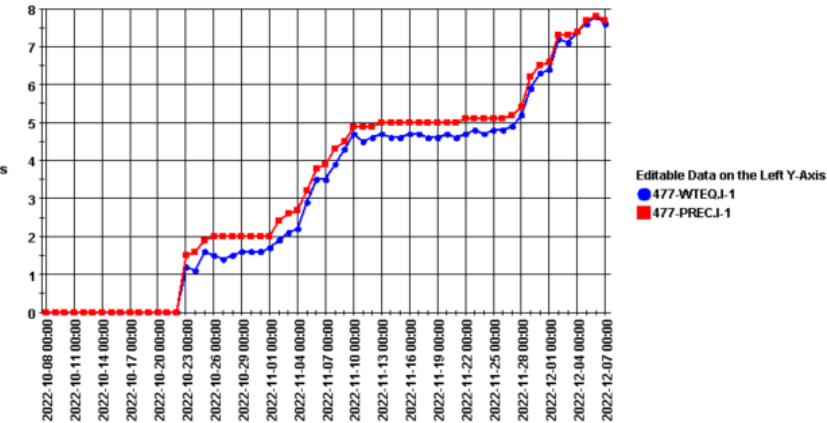
446-DISMAL SWAMP



706-QUARTZ MOUNTAIN



477-FISH CREEK

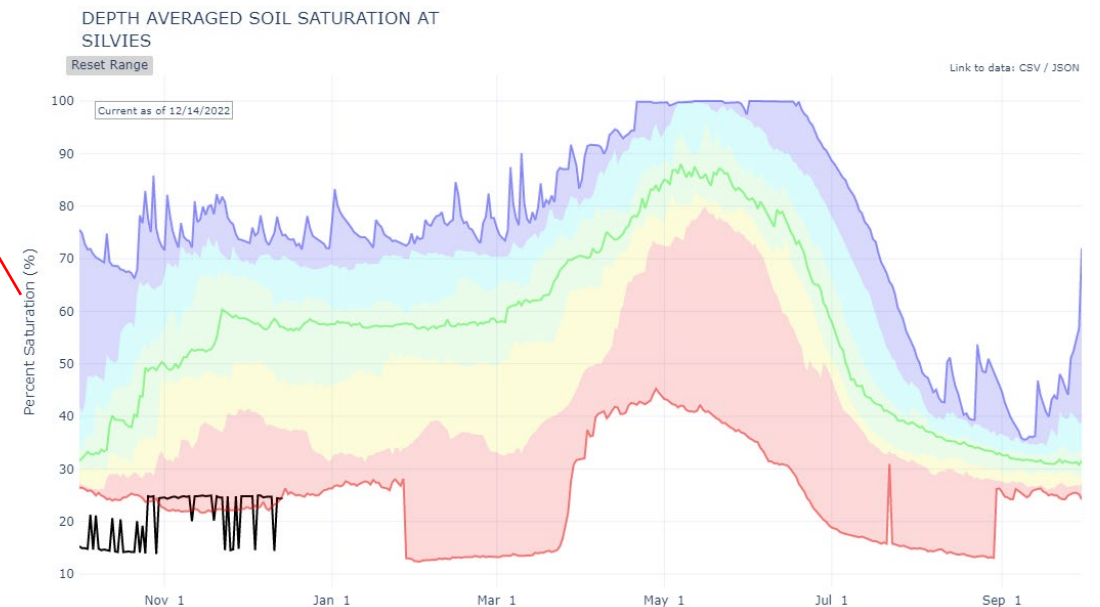
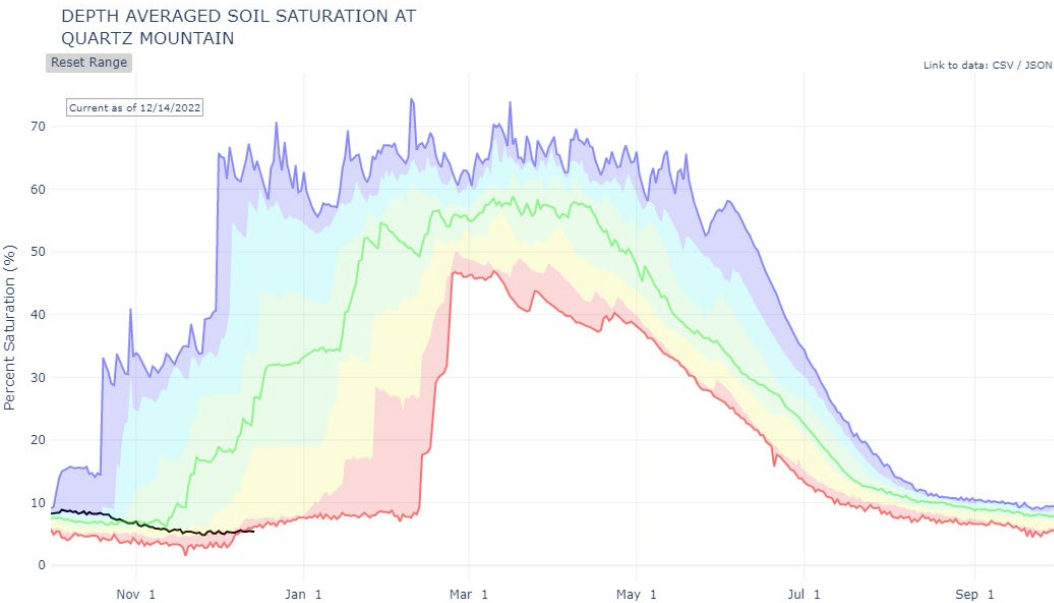
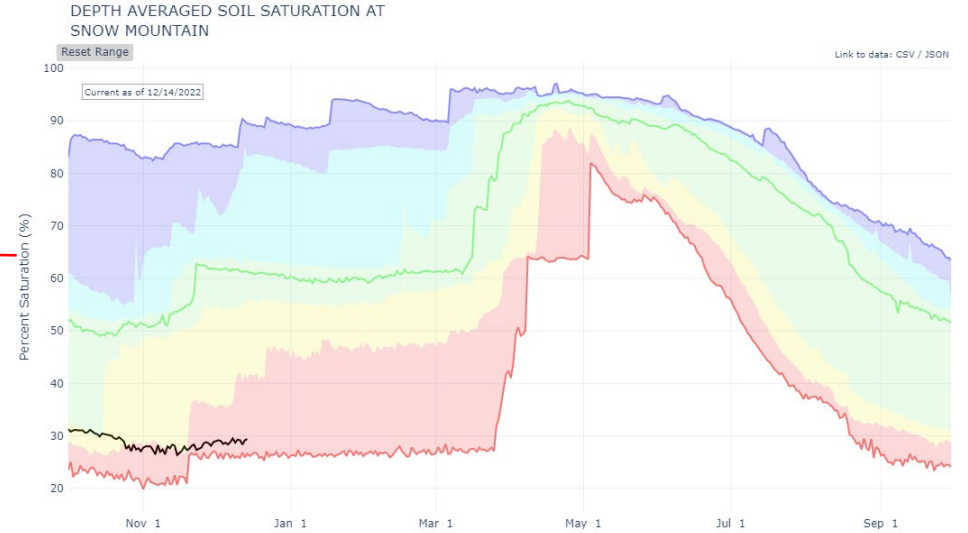
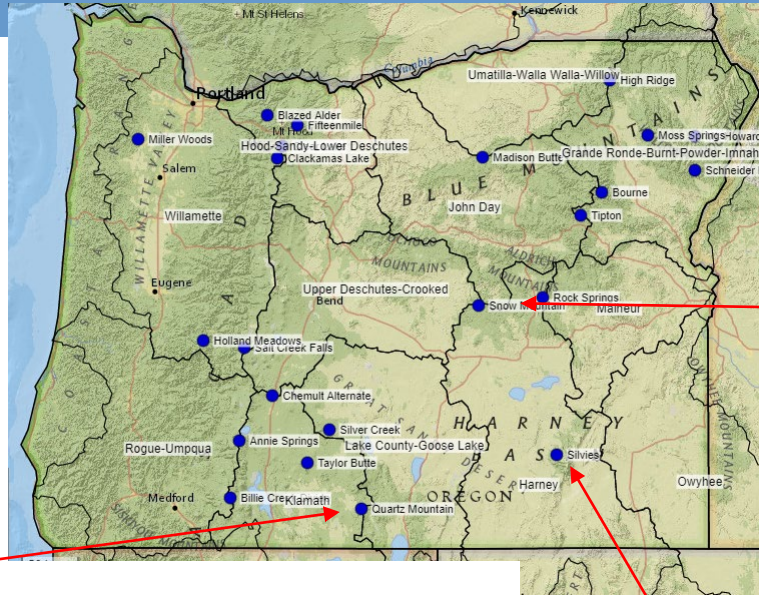




Soil Moisture Conditions

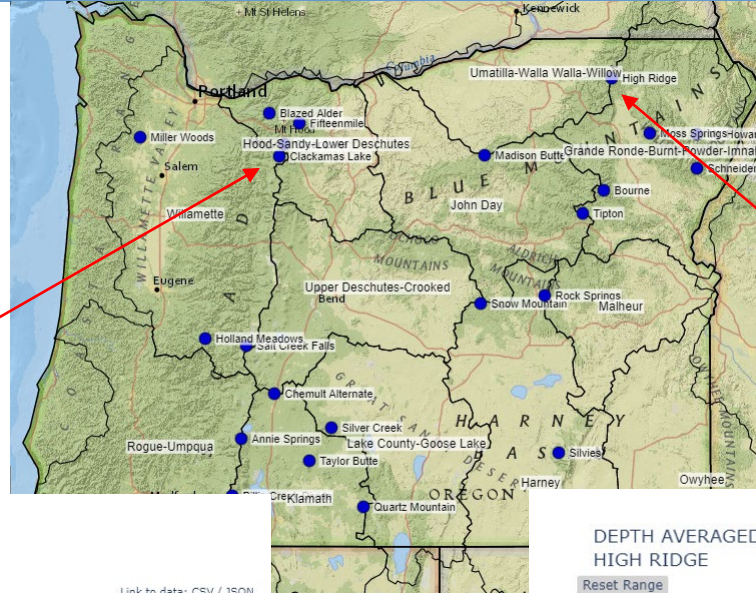
Soil Moisture

WY 2023 – Select Site Charts

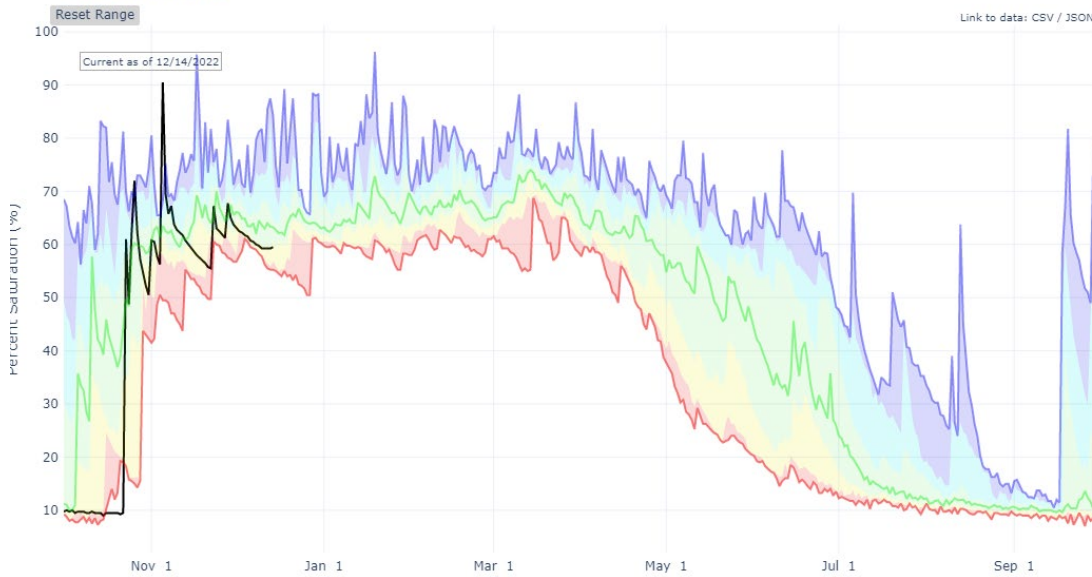


Soil Moisture

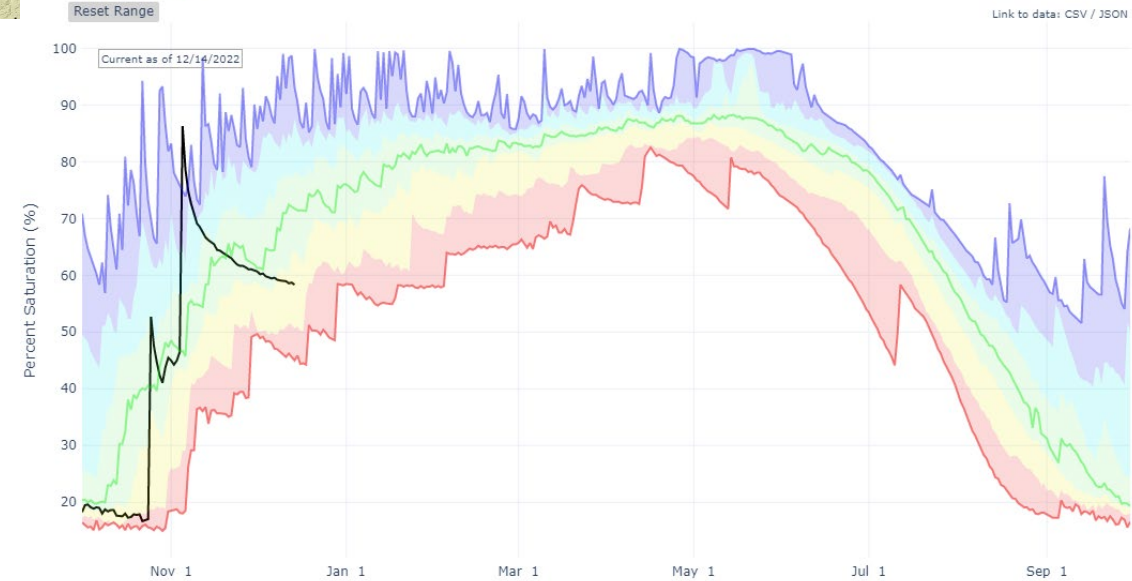
WY 2023 – Select Site Charts



DEPTH AVERAGED SOIL SATURATION AT
CLACKAMAS LAKE



DEPTH AVERAGED SOIL SATURATION AT
HIGH RIDGE





Thank you!

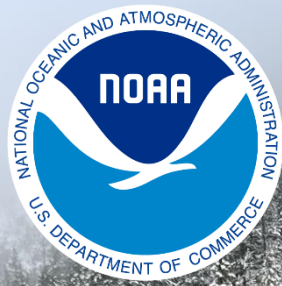
Matt Warbritton
Hydrologist
USDA NRCS Oregon Snow Survey
matt.warbritton@usda.gov
503-307-2829

[Oregon Snow Survey Website](#)

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Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

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.



December 2022 Update for Precipitation & Temperatures

NOAA National Weather Service

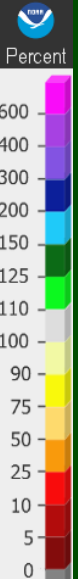
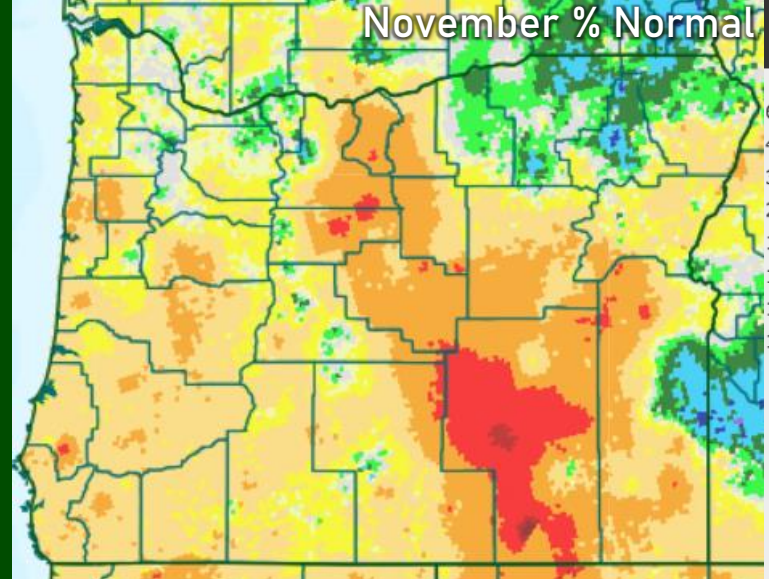
Hood River (photo by NWS employee)



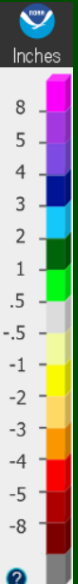
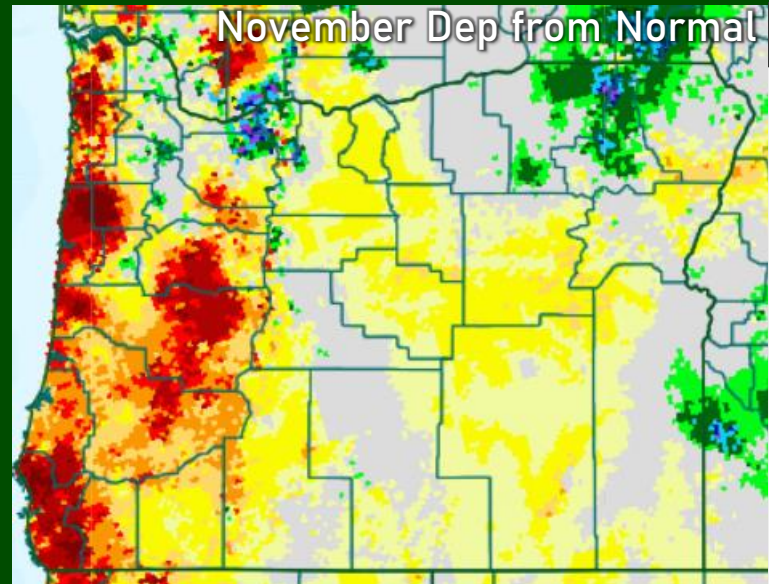
Precipitation

Water Year
Percent of Normal

Switch Basemap
Reset View



November Dep from Normal



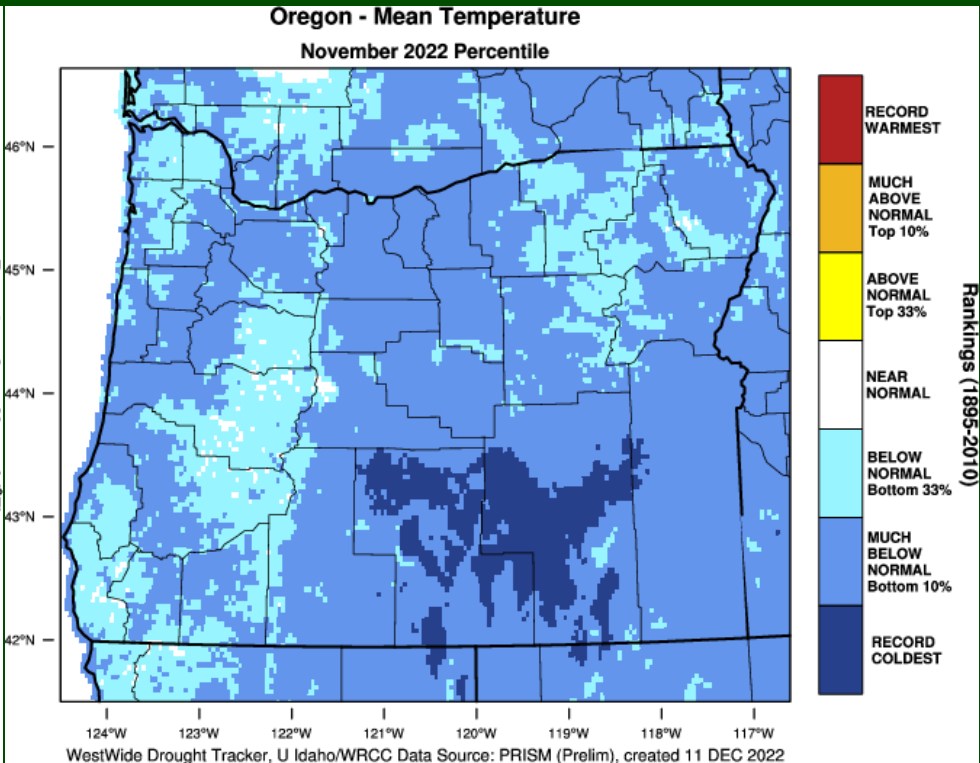
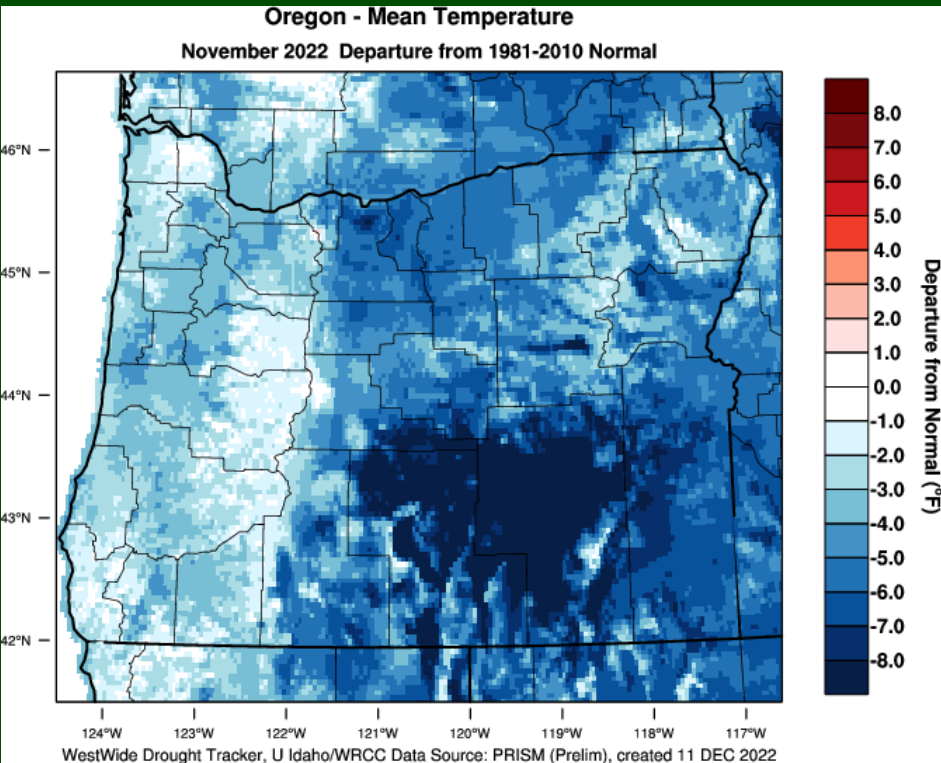
Precipitation Data as of December 12, 2022
water.weather.gov/precip/index.php



November Temperatures

Departure from Normal

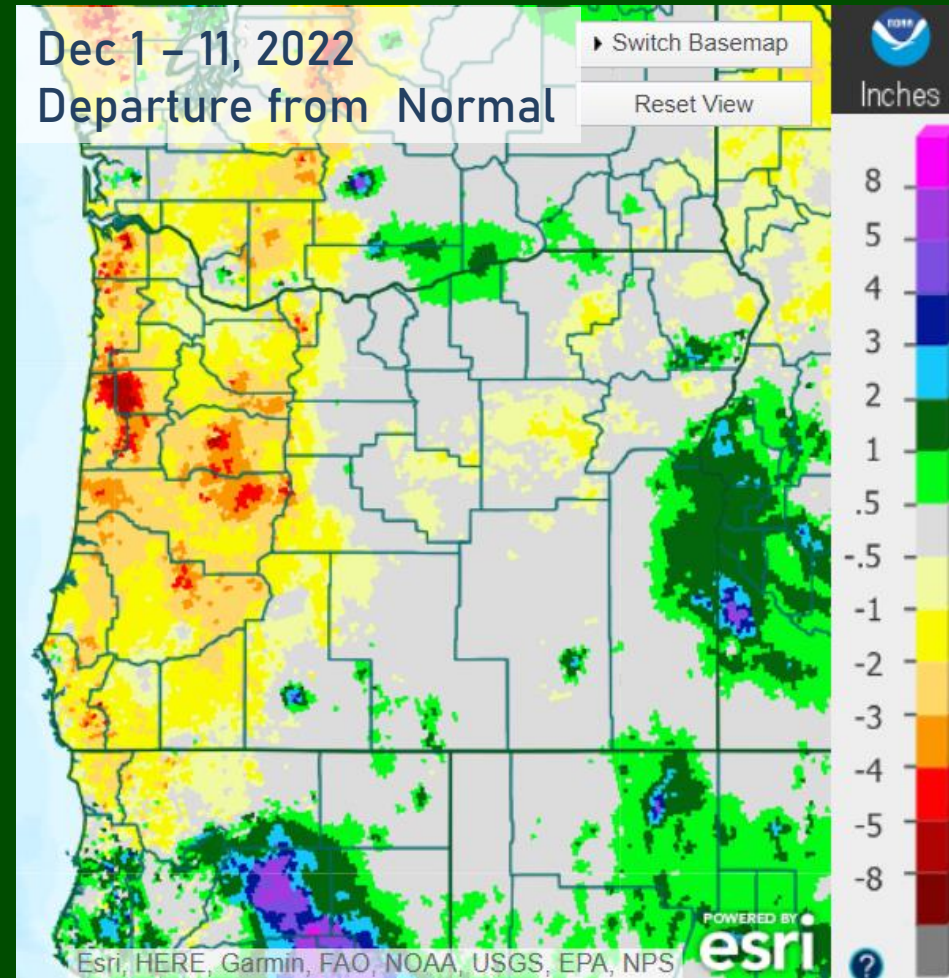
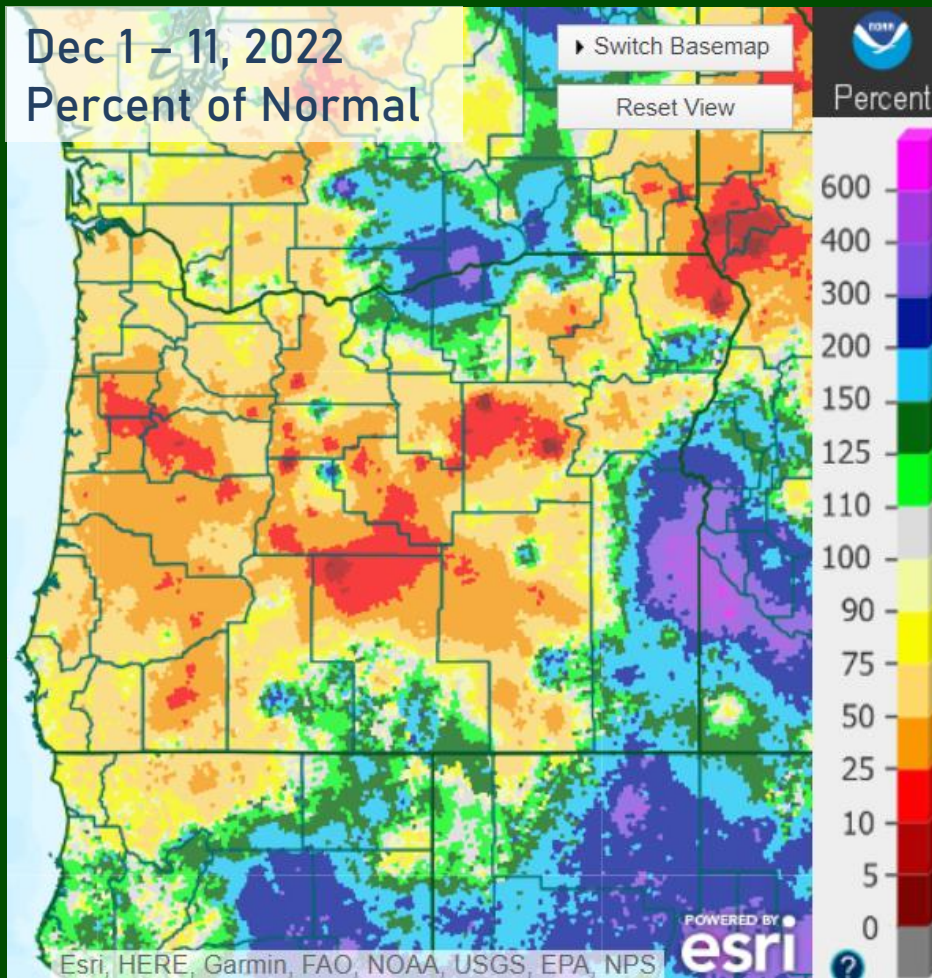
Percentile



<https://wrcc.dri.edu/wwdt/index.php?region=pnw>



Precipitation – December thus far



Precipitation Data as of December 12, 2022

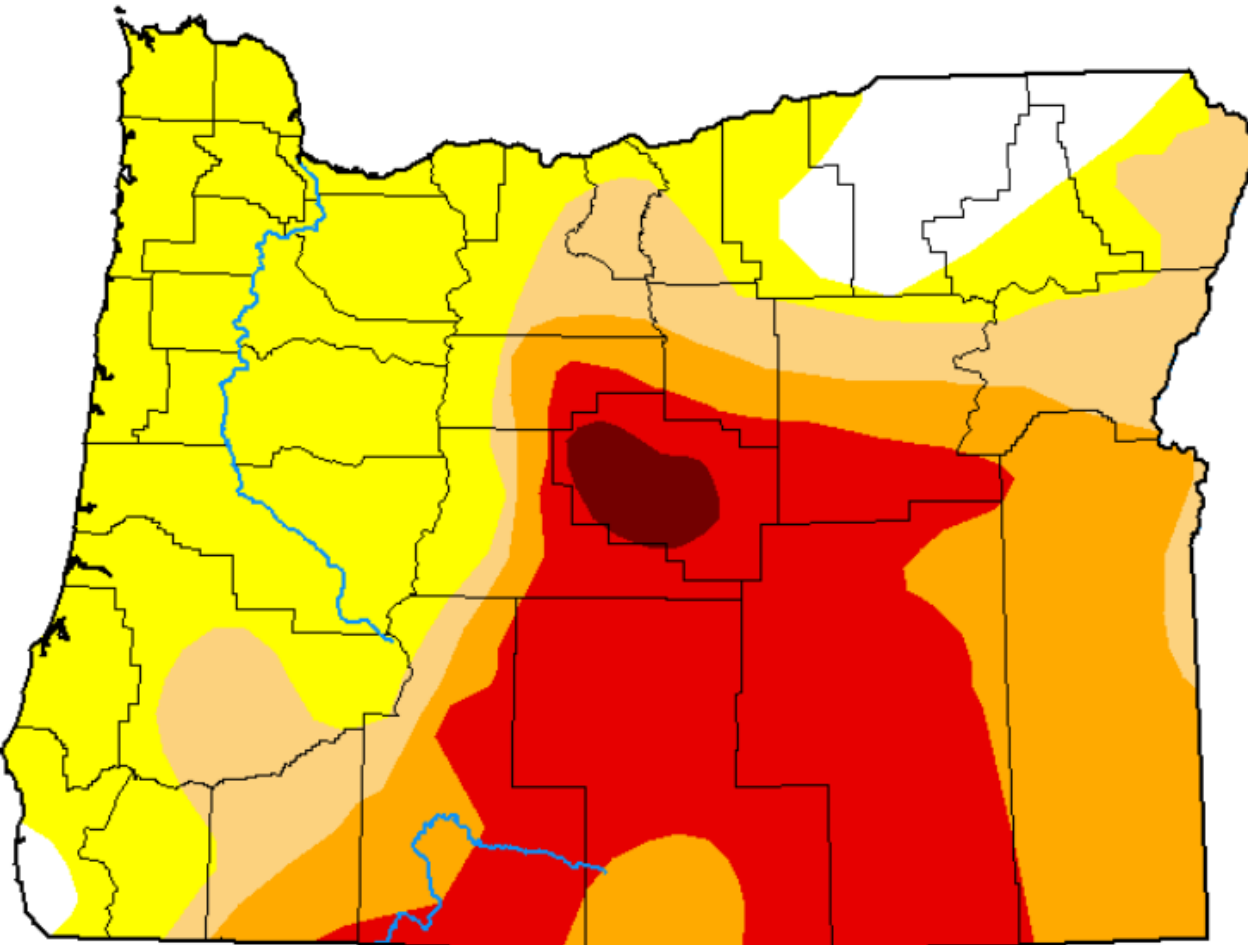
water.weather.gov/precip/index.php









Drought Monitor

U.S. Drought Monitor Oregon

December 6, 2022
(Released Thursday, Dec. 8, 2022)
Valid 7 a.m. EST



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. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>



droughtmonitor.unl.edu

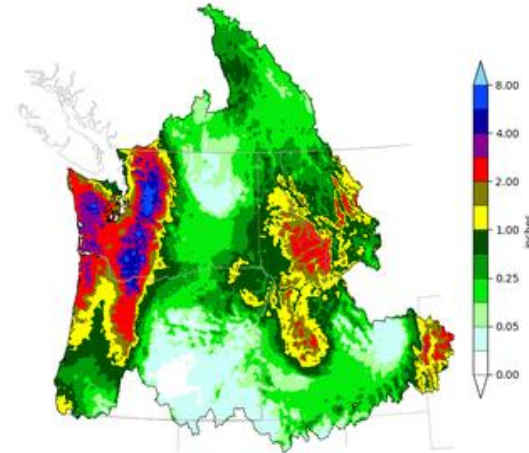


Mid December Outlook

NWRFC 10-DAY PRECIPITATION FORECAST

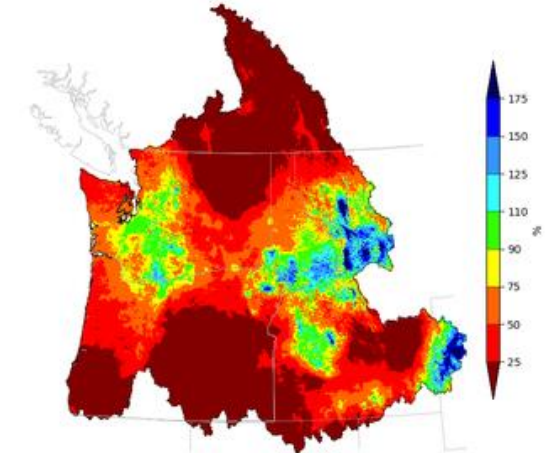
www.nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php

Northwest River Forecast Center
10 Day QPF, Ending 12Z, 12/24/22



Creation Time: Wed Dec 14 14:48:25 UTC 2022

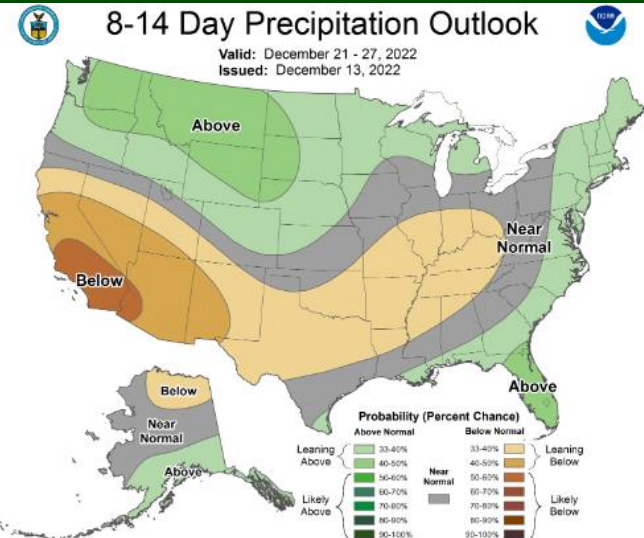
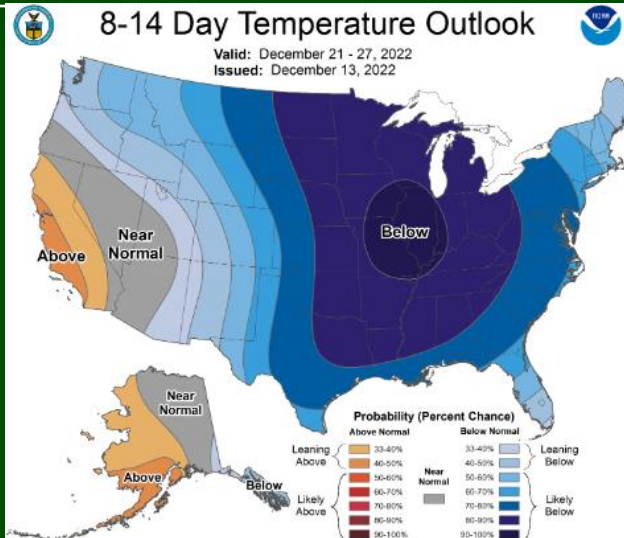
Northwest River Forecast Center
10 Day QPF (Percent of Climatology), Ending 12Z, 12/24/22



Creation Time: Wed Dec 14 14:49:31 UTC 2022

CPC 8 - 14 DAY OUTLOOK

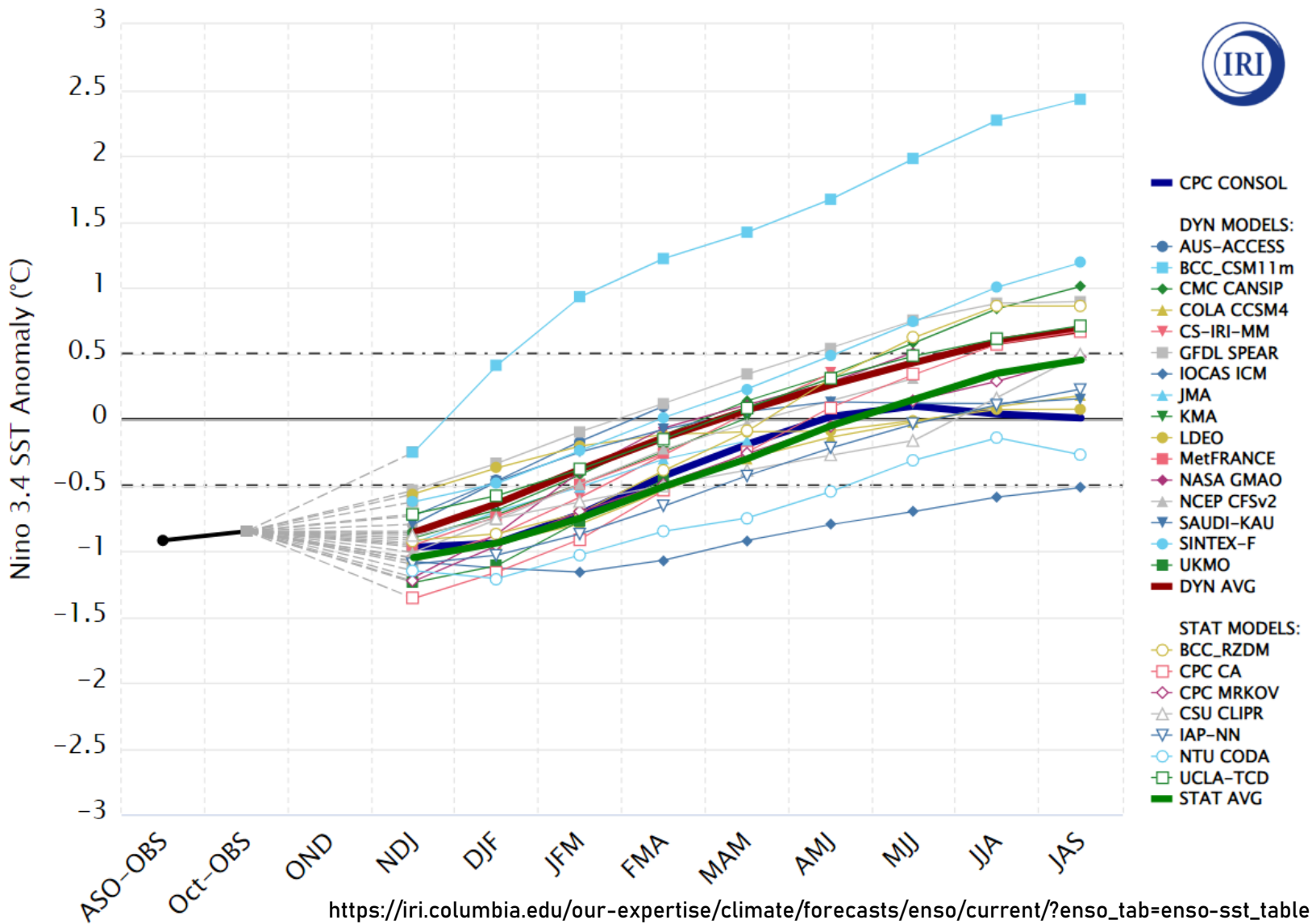
www.cpc.ncep.noaa.gov





ENSO Status & Prediction

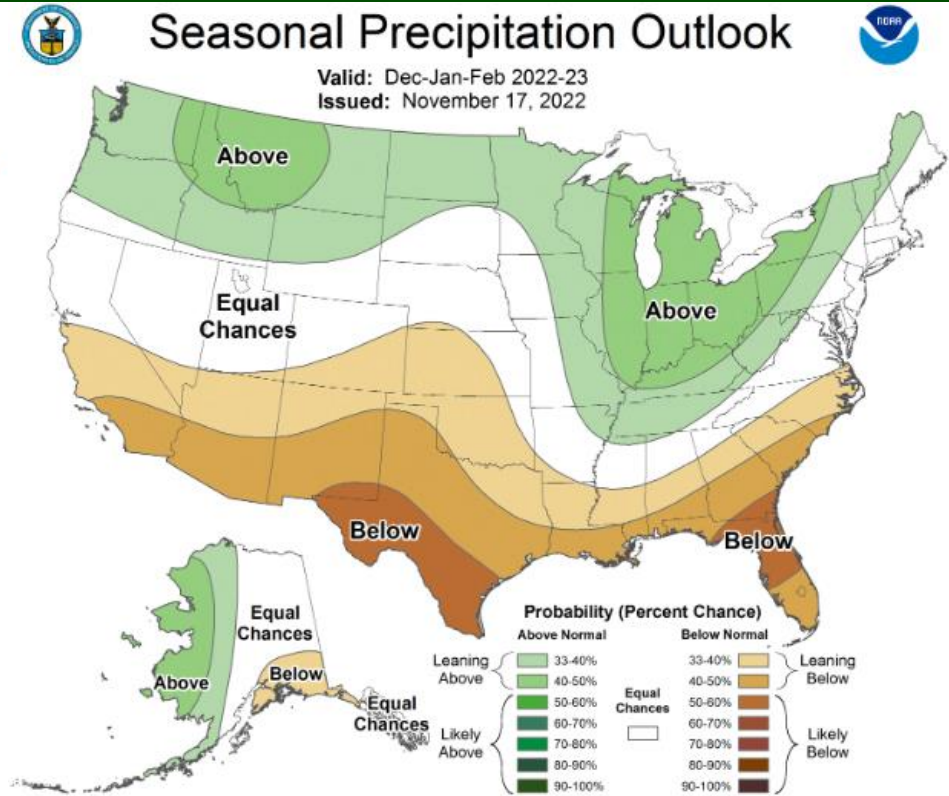
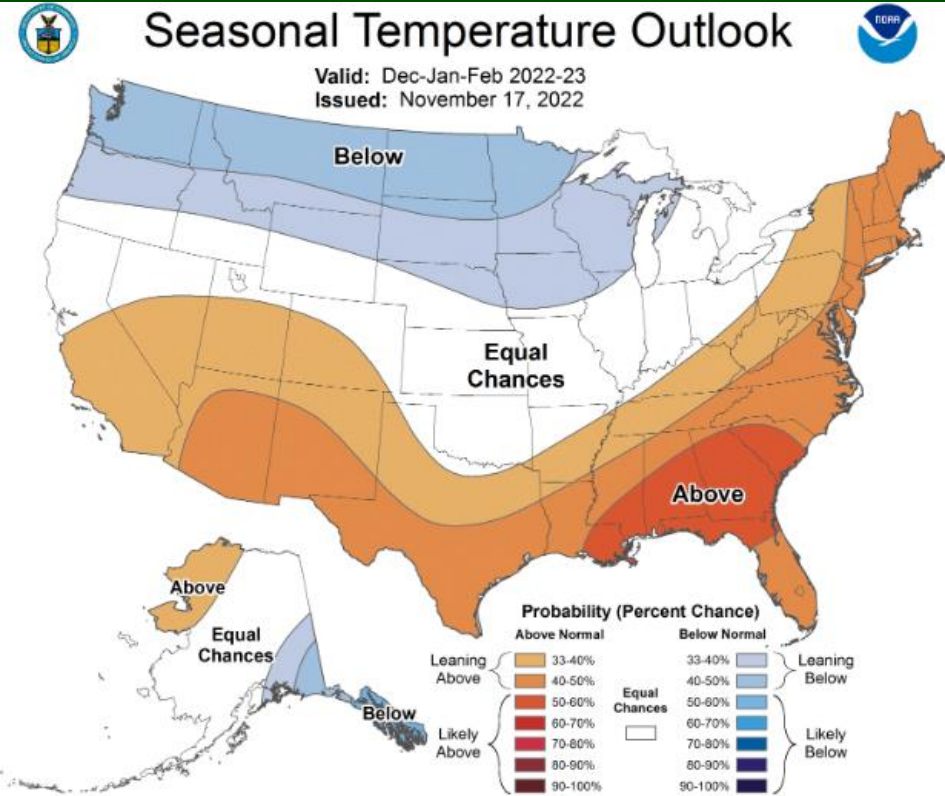
Model Predictions of ENSO from Nov 2022





Climate Prediction Center Outlook

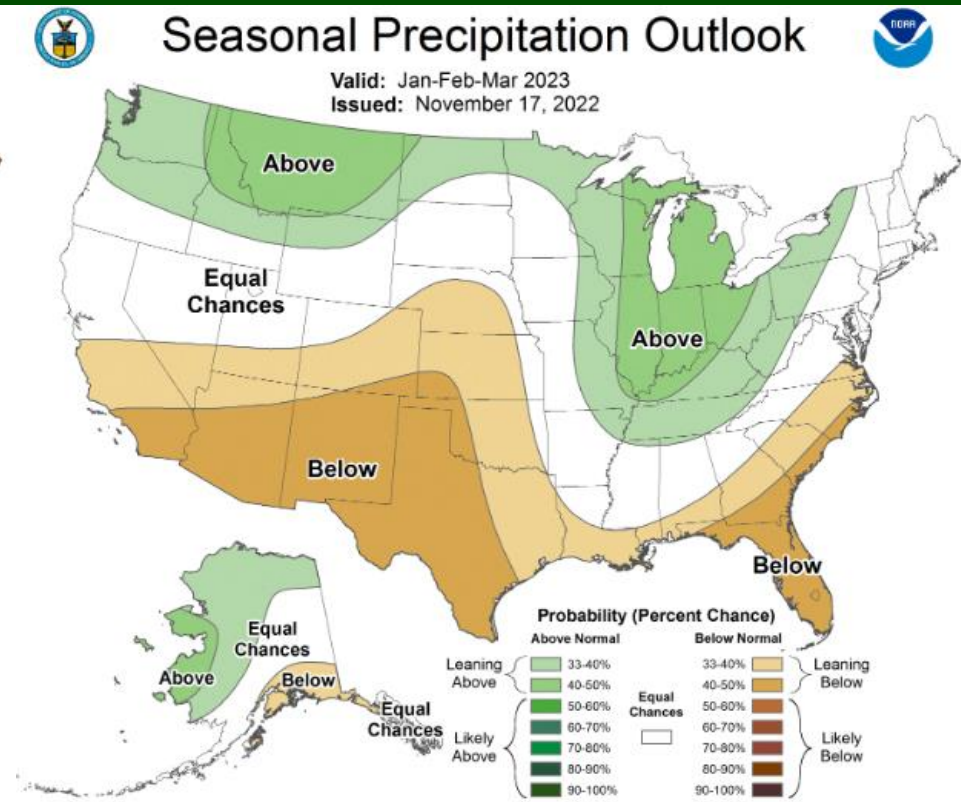
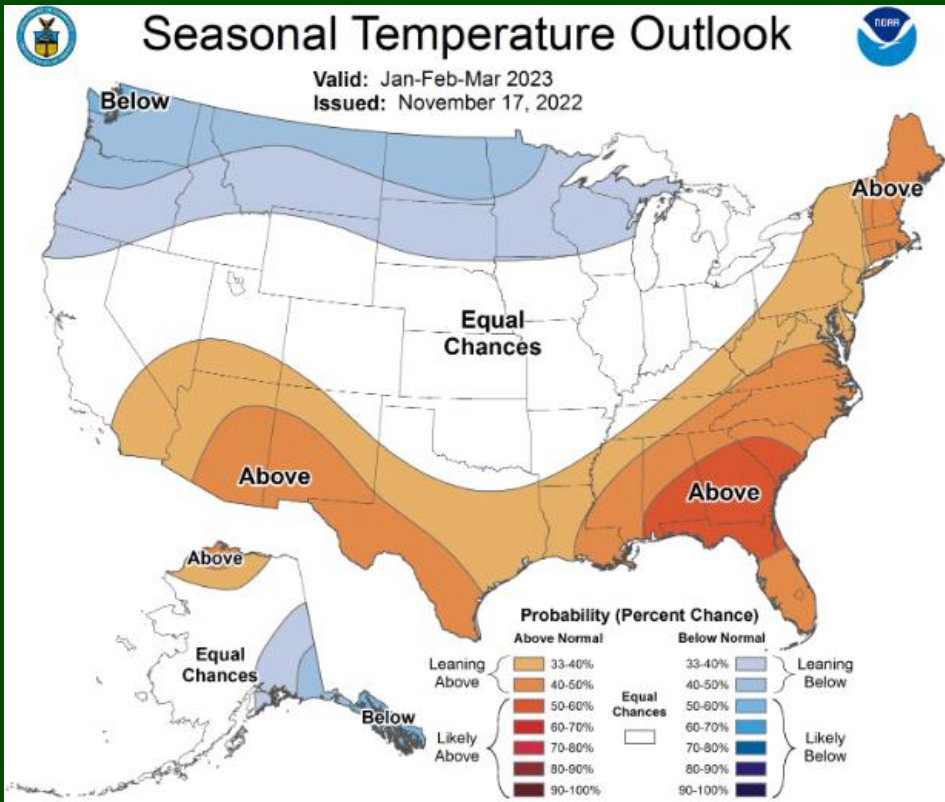
December 2022 – February 2023



www.cpc.ncep.noaa.gov



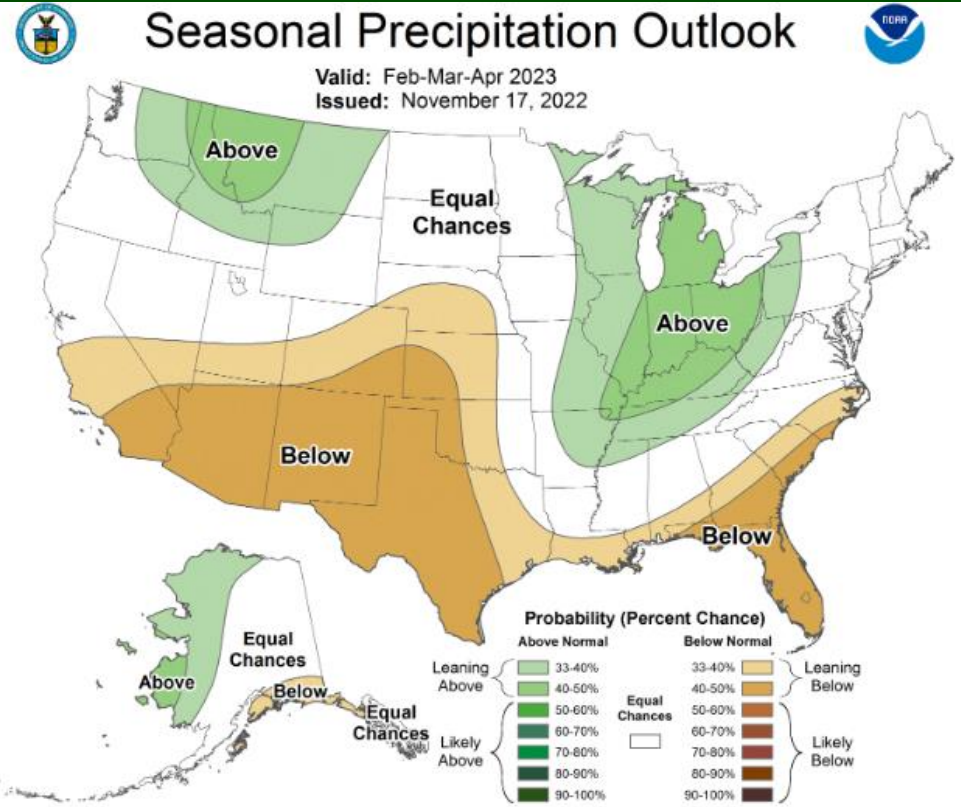
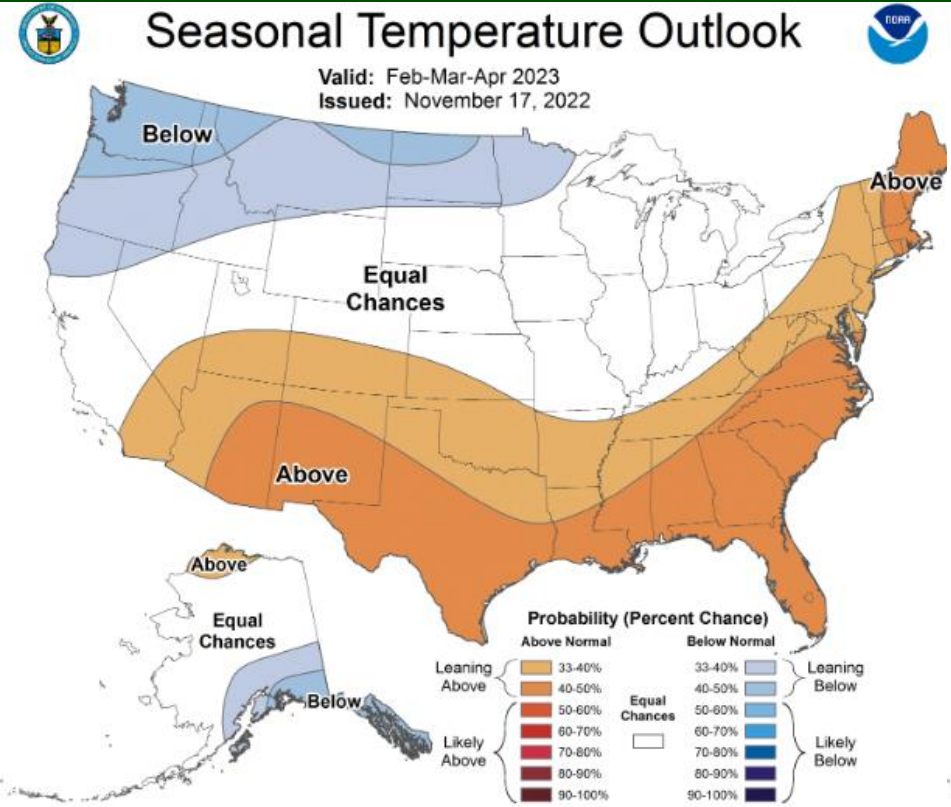
Climate Prediction Center Outlook January – March 2023



www.cpc.ncep.noaa.gov



Climate Prediction Center Outlook February – April 2023



www.cpc.ncep.noaa.gov

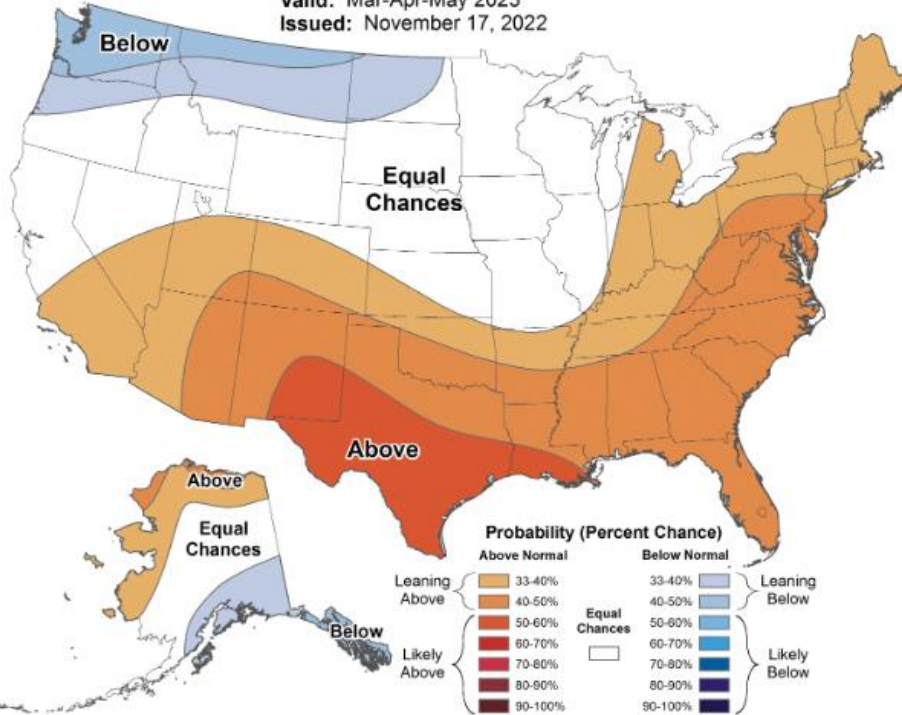


Climate Prediction Center Outlook

March – May 2023

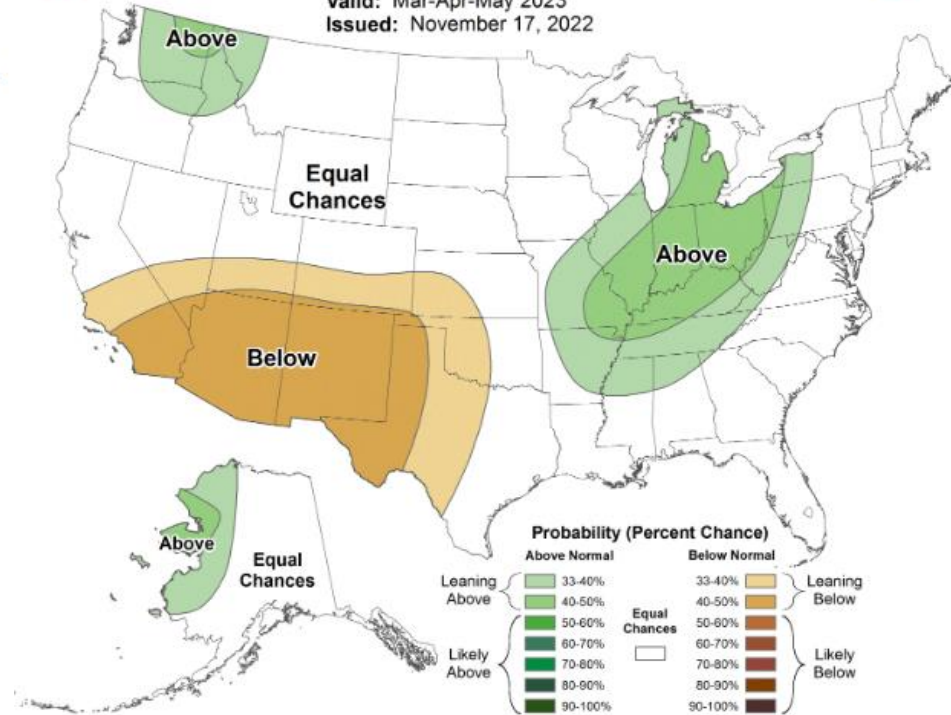
Seasonal Temperature Outlook

Valid: Mar-Apr-May 2023
Issued: November 17, 2022



Seasonal Precipitation Outlook

Valid: Mar-Apr-May 2023
Issued: November 17, 2022



www.cpc.ncep.noaa.gov



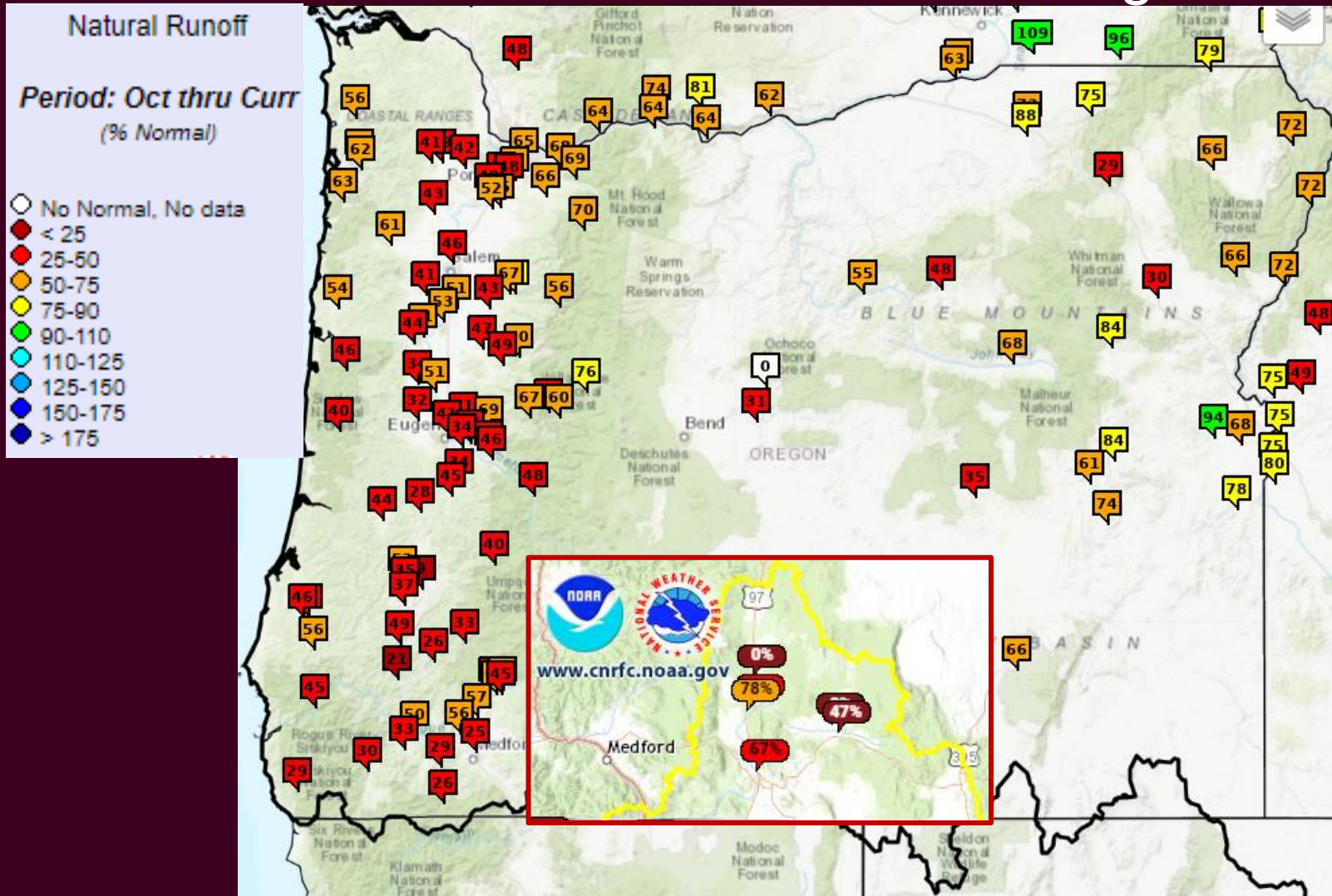
December 2022 NWRFC Update

NOAA National Weather Service



Runoff Volume

October – Present % of Average





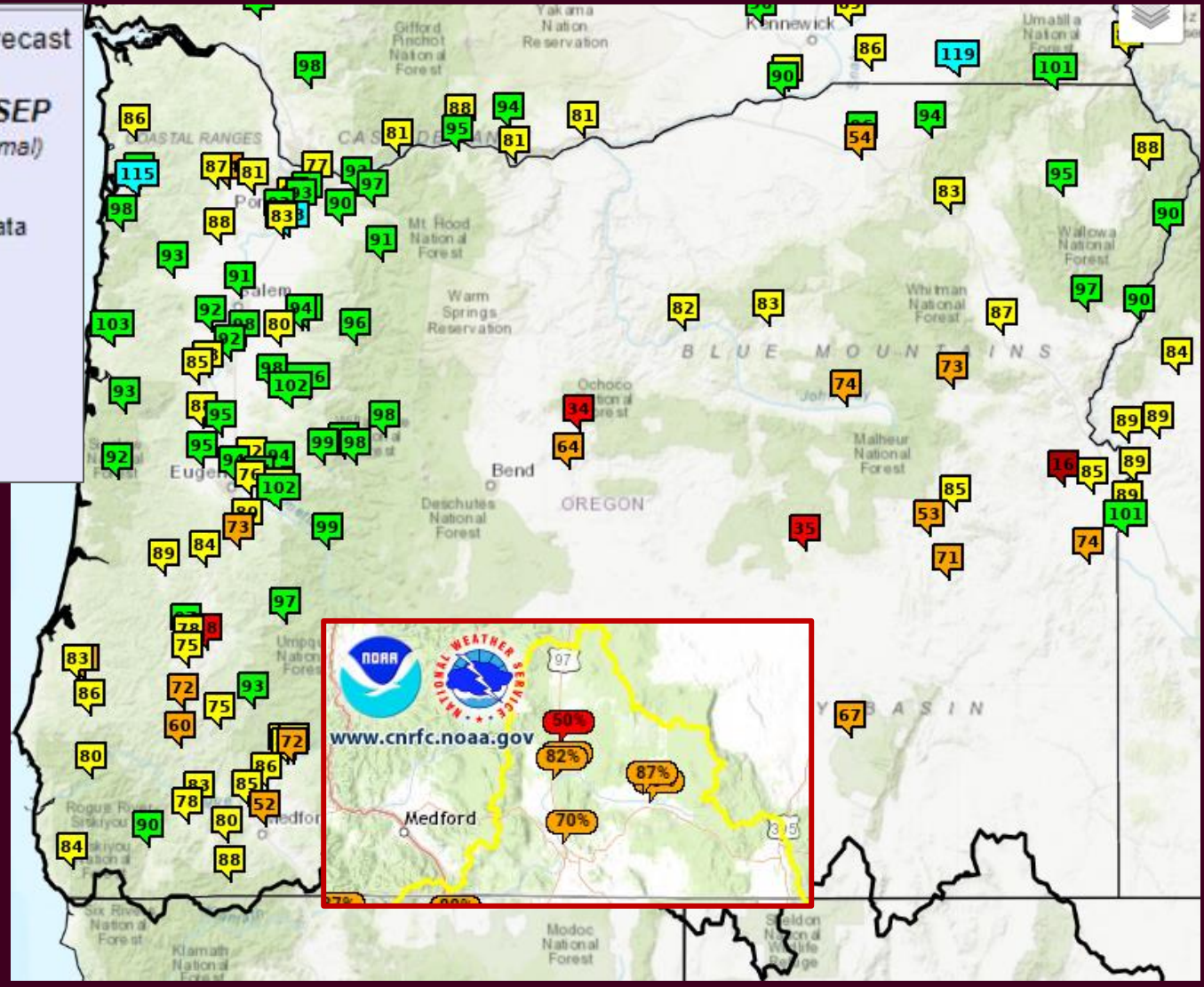
Forecast Seasonal Volume

April – September % of Average

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





Natural Volume Forecast Willamette R at Salem

WILLAMETTE - AT SALEM (SLMO3) Forecasts for Water Year 2023

Natural Forecast

ESP with 10 Days QPF Ensemble: 2022-12-13 Issued: 2022-12-13

Forecast Period	Forecasts Are in KAF				30 Year Average (1991-2020)
	90 %	50 %	% Average	10 %	
APR-SEP	3093	4592	91	6243	5067
APR-JUL	2747	4125	91	5666	4509
JAN-SEP	6694	10358	85	13393	12139
JAN-JUL	6225	9865	85	12891	11581
OCT-SEP	8470	12051	73	15902	16497

Experimental

HEFS with 15 days EQPF Ensemble: 2022-12-13 Issued: 2022-12-13

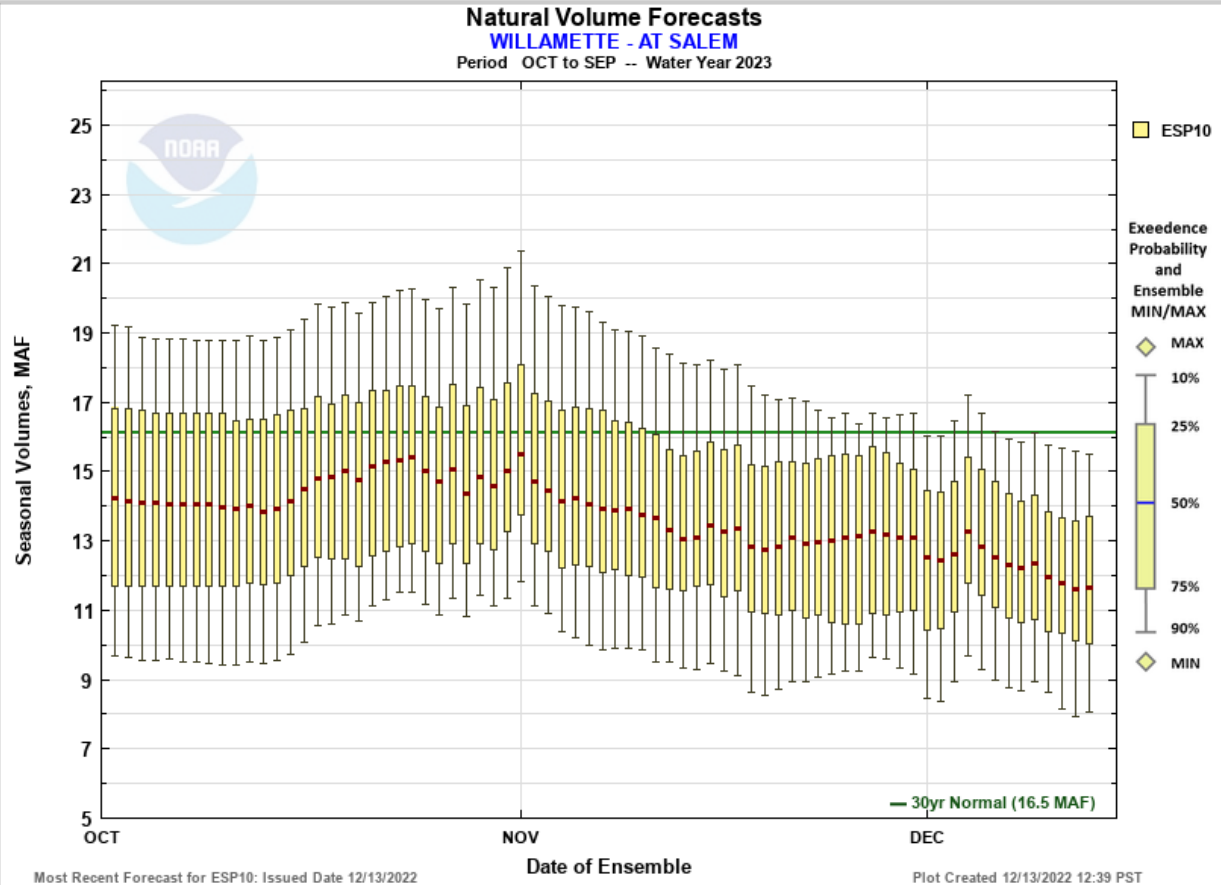
APR-SEP	3170	4578	90	6252	5067
APR-JUL	2817	4124	91	5673	4509
JAN-SEP	7000	10485	86	13542	12139
JAN-JUL	6569	9926	86	12951	11581
OCT-SEP	9066	12375	75	16527	16497

Reference

ESP with 0 Days QPF Ensemble: 2022-12-13 Issued: 2022-12-13

APR-SEP	3326	4682	92	6321	5067
APR-JUL	2970	4249	94	5733	4509
JAN-SEP	7330	10708	88	13828	12139
JAN-JUL	6975	10198	88	13368	11581
OCT-SEP	9307	13013	79	16864	16497

Move the mouse over the desired "Forecast Period" to display a graph.

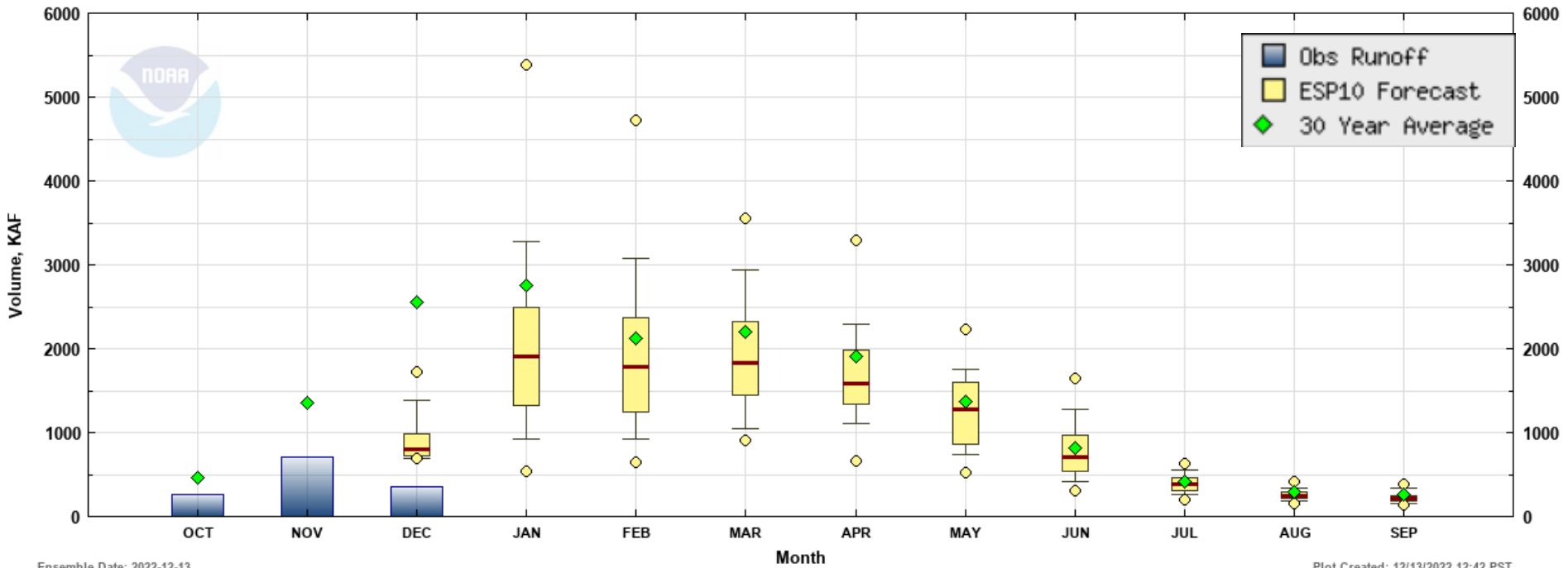


https://www.nwrfc.noaa.gov/natural/plot/nat_forecasts.php?id=SLMO3



Monthly Natural Volumes Willamette R at Salem

Natural Volume Monthly Forecasts (ESP10) for Water Year 2023
(SLMO3) WILLAMETTE - AT SALEM



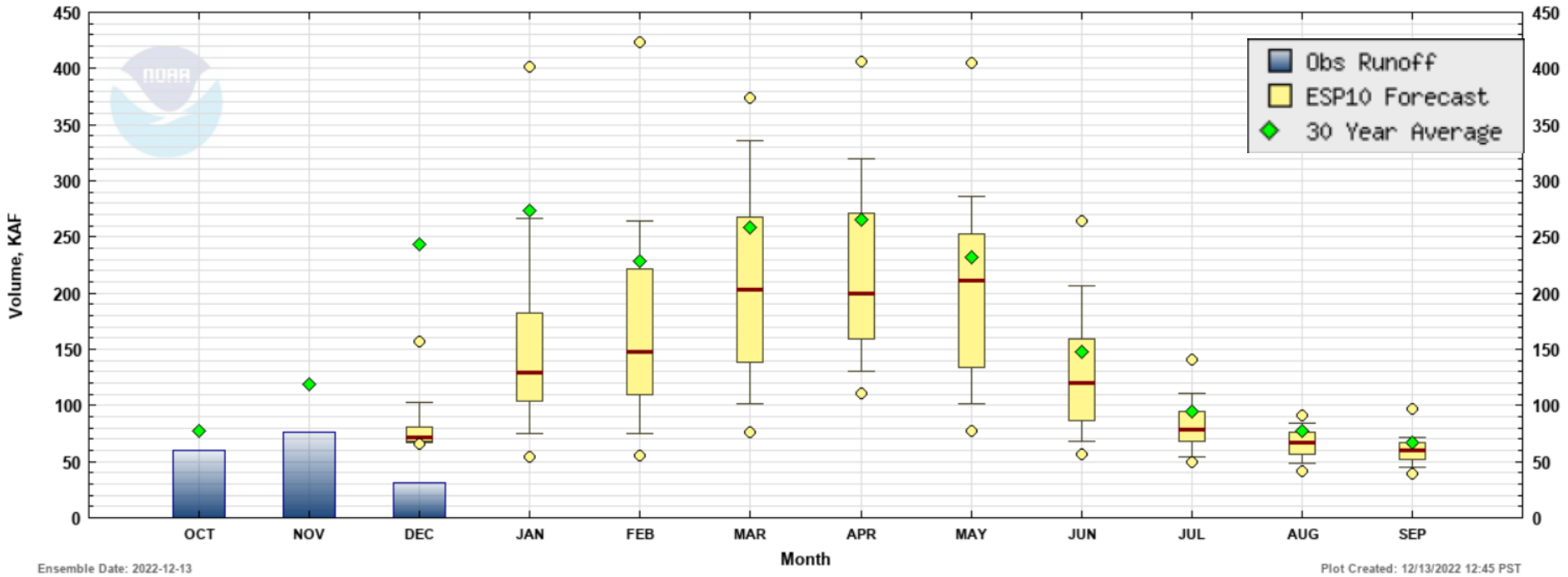
https://www.nwrfc.noaa.gov/natural/plot/nat_forecasts.php?id=SLMO3



Monthly Natural Volumes

Rogue R near Raygold

Natural Volume Monthly Forecasts (ESP10) for Water Year 2023
(RYG03) ROGUE - AT RAYGOLD



Ensemble Date: 2022-12-13

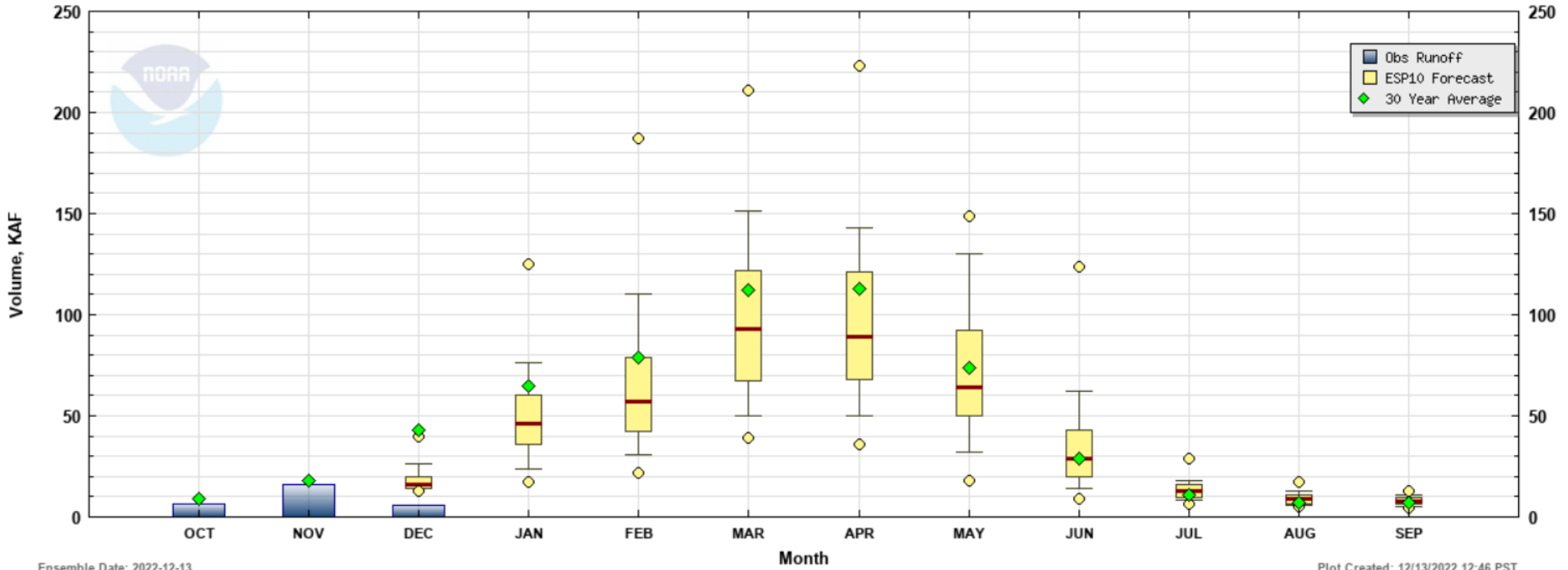
Plot Created: 12/13/2022 12:45 PST



Monthly Natural Volumes

Umatilla R near Umatilla

Natural Volume Monthly Forecasts (ESP10) for Water Year 2023
(UMAO3) UMATILLA - NEAR UMATILLA



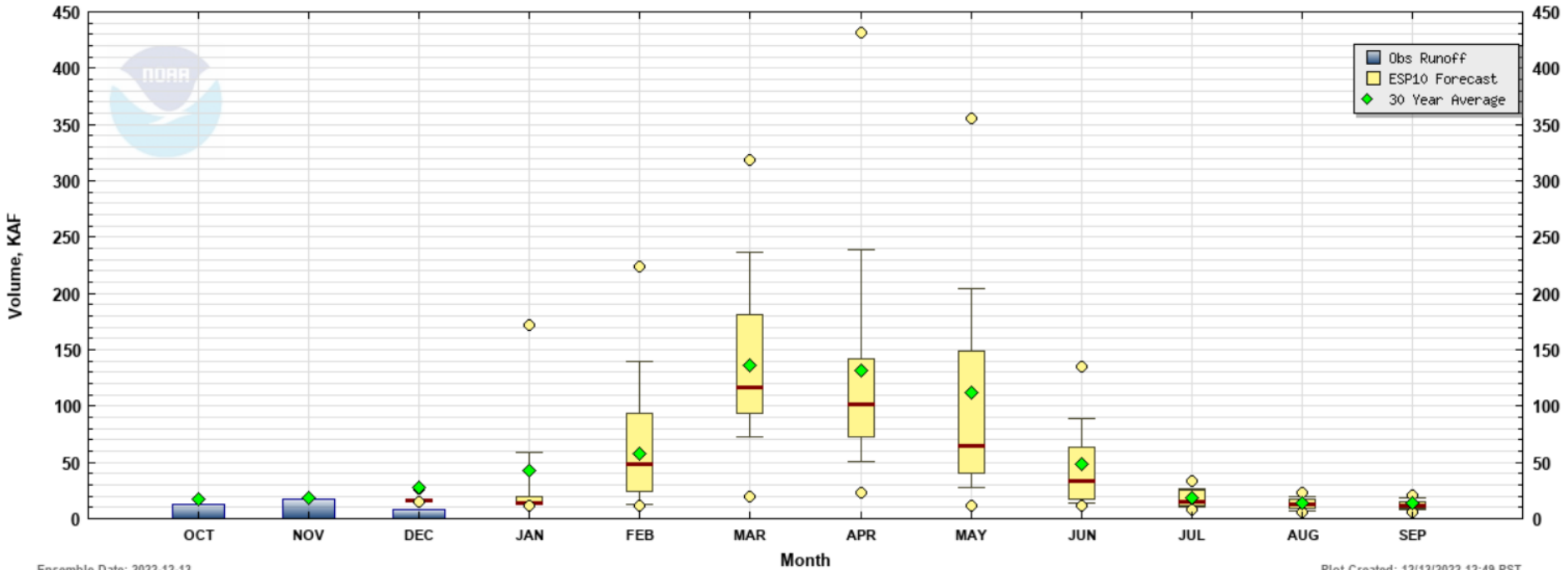
Ensemble Date: 2022-12-13

Plot Created: 12/13/2022 12:46 PST



Monthly Natural Volumes Owyhee R at Owyhee Dam

Natural Volume Monthly Forecasts (ESP10) for Water Year 2023
(OWYO3) OWYHEE - OWYHEE DAM



Ensemble Date: 2022-12-13

Plot Created: 12/13/2022 12:49 PST



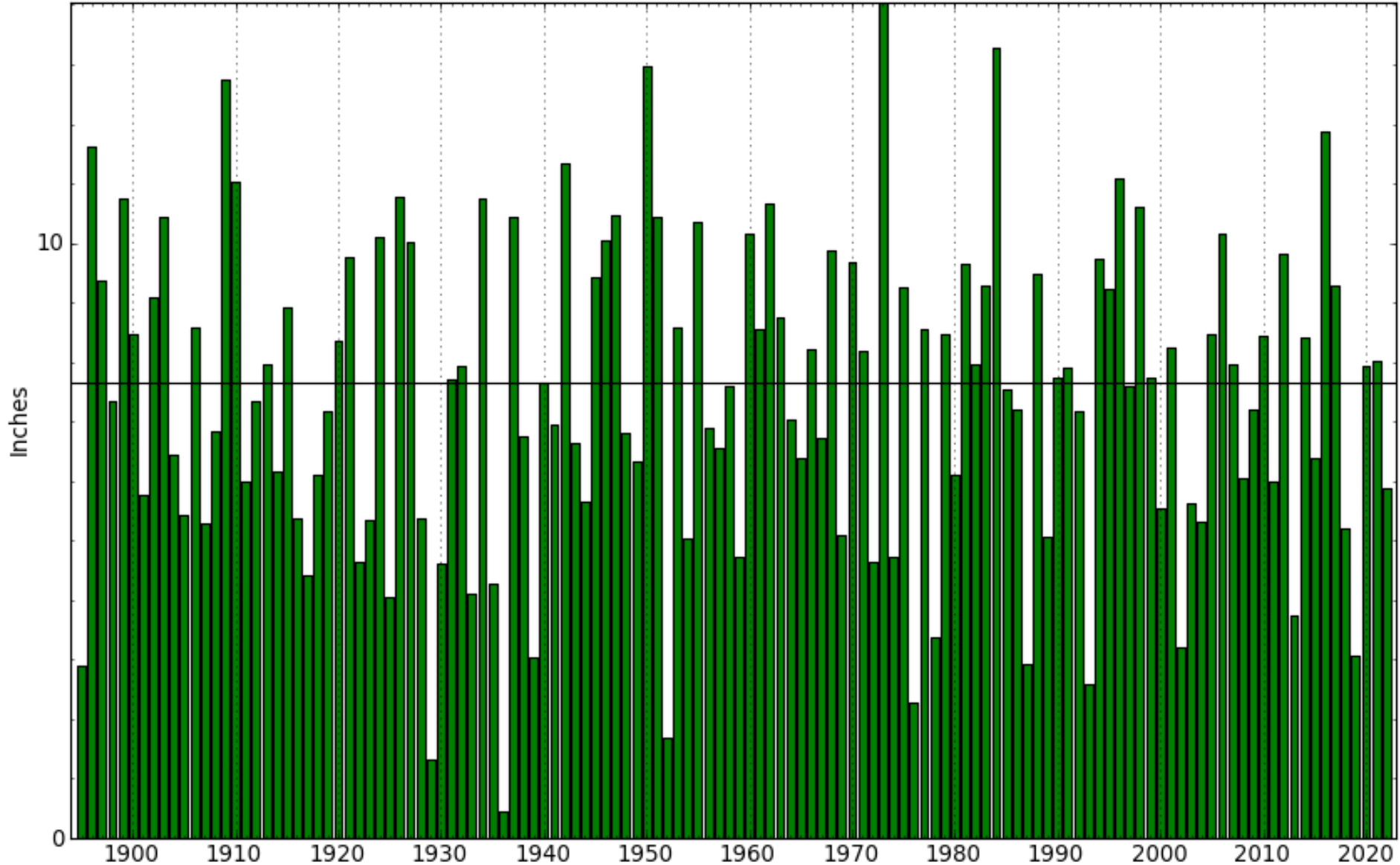
Monthly Natural Volumes

Owyhee R at Owyhee Dam

2023 Schedule for <i>Live Water Supply Briefings</i>					
Jan	Feb	Mar	Apr	May	Jun
5	2	2	6	4	TBD
<i>All presentations held at 10:00am PDT/PST, unless noted otherwise</i>					
Click here for Registration Information					

Info: https://www.nwrfc.noaa.gov/water_supply/ws_schd.cgi?version=20190204v1
Webinar Registration: <https://register.gotowebinar.com/rt/9001532798339394573>

Precipitation, 2-Months Ending in November Oregon



37th driest start to the water year statewide

Oct-Nov 2022: 5.56"

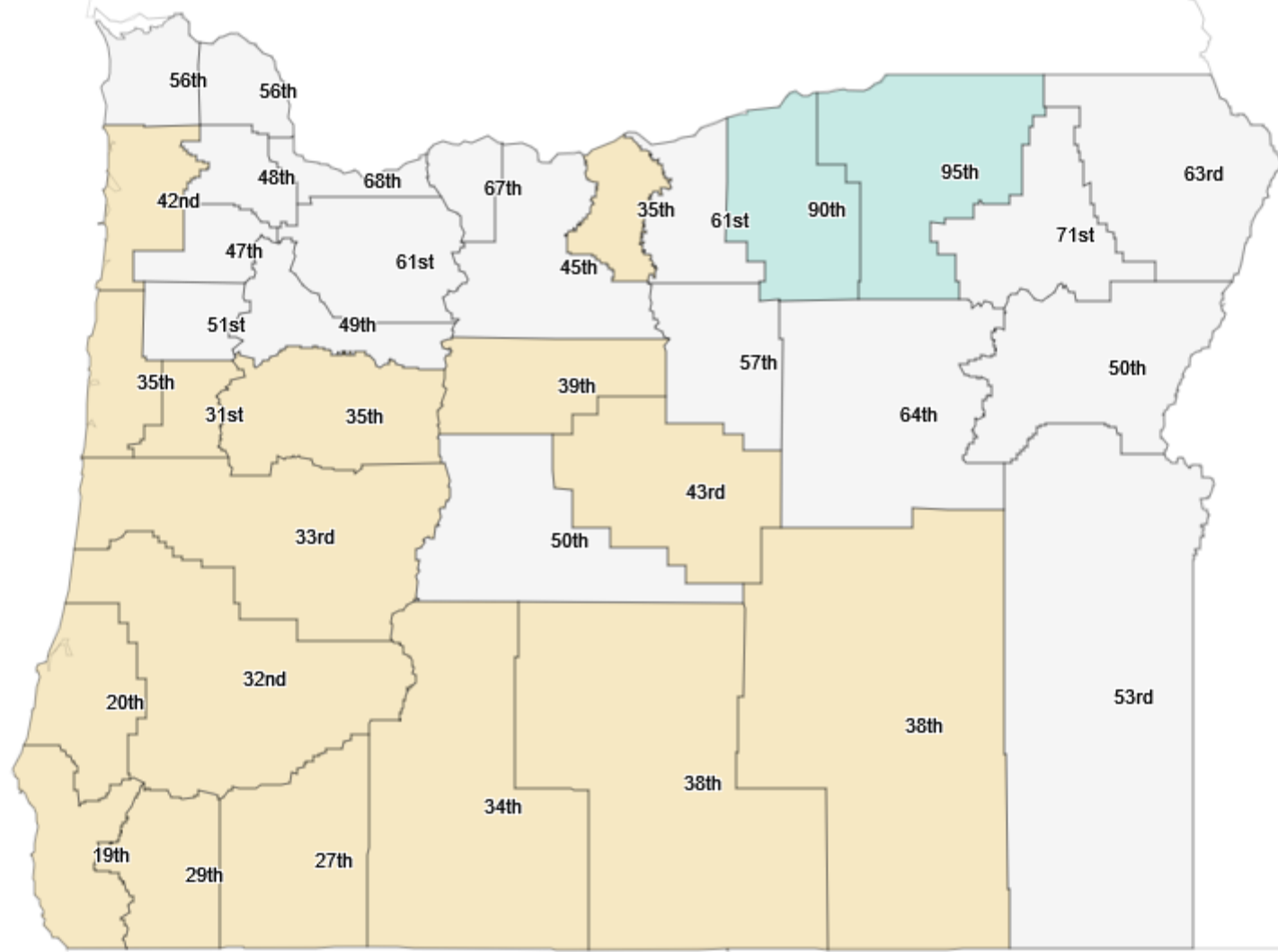
This is 1.42" less than the 1981-2010 average of 6.98" (equivalent to 79.7% of average)

— Normal Period: 1981-2010

Data Source: WRCC/UI, Created: 12-13-2022

County Precipitation Rank (128 years)

October - November 2022



Driest $\downarrow 1/10$ $\downarrow 1/2$ Near Normal $\uparrow 1/2$ $\uparrow 1/10$ Wettest

Oregon (Hover over a county)

Precip: 5.56"

Rank: 37th

Anomaly: -1.42"

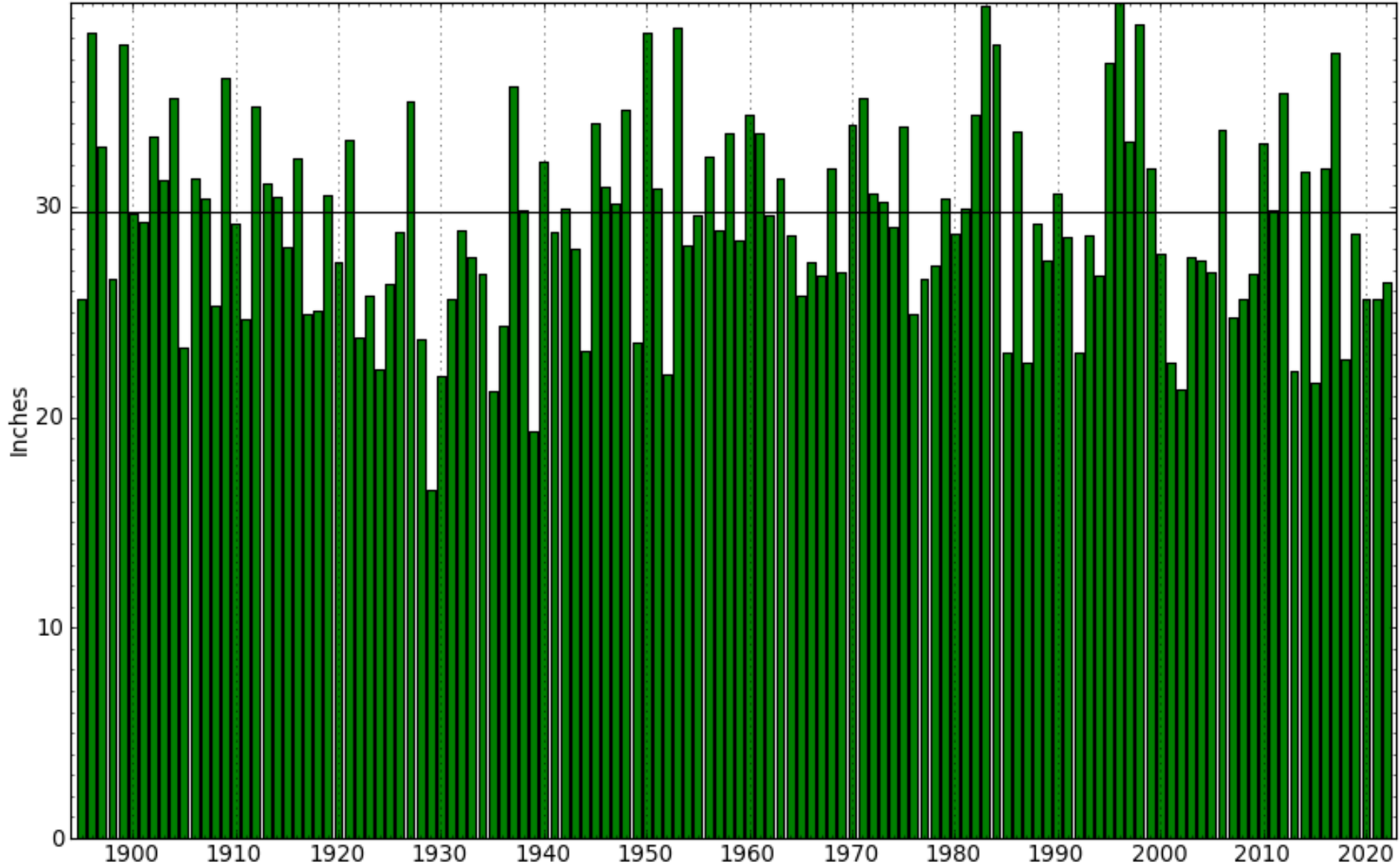
Mean: 6.98"



Historically dry start to the water year

- Eugene and Salem
 - No measurable precipitation from Oct 1 to Oct 21, which was the second longest dry start to the water year (1987 was the other) since at least 1940
 - Salem had similar dry starts in their data record during 1895, 1901, 1907, and 1917
- Portland
 - No measurable precipitation from Oct 1 to Oct 20 , which was the second longest dry start to the water year (1987 was the other) since at least 1938

Precipitation, 11-Months Ending in November Oregon



32nd driest Jan-Nov since 1895

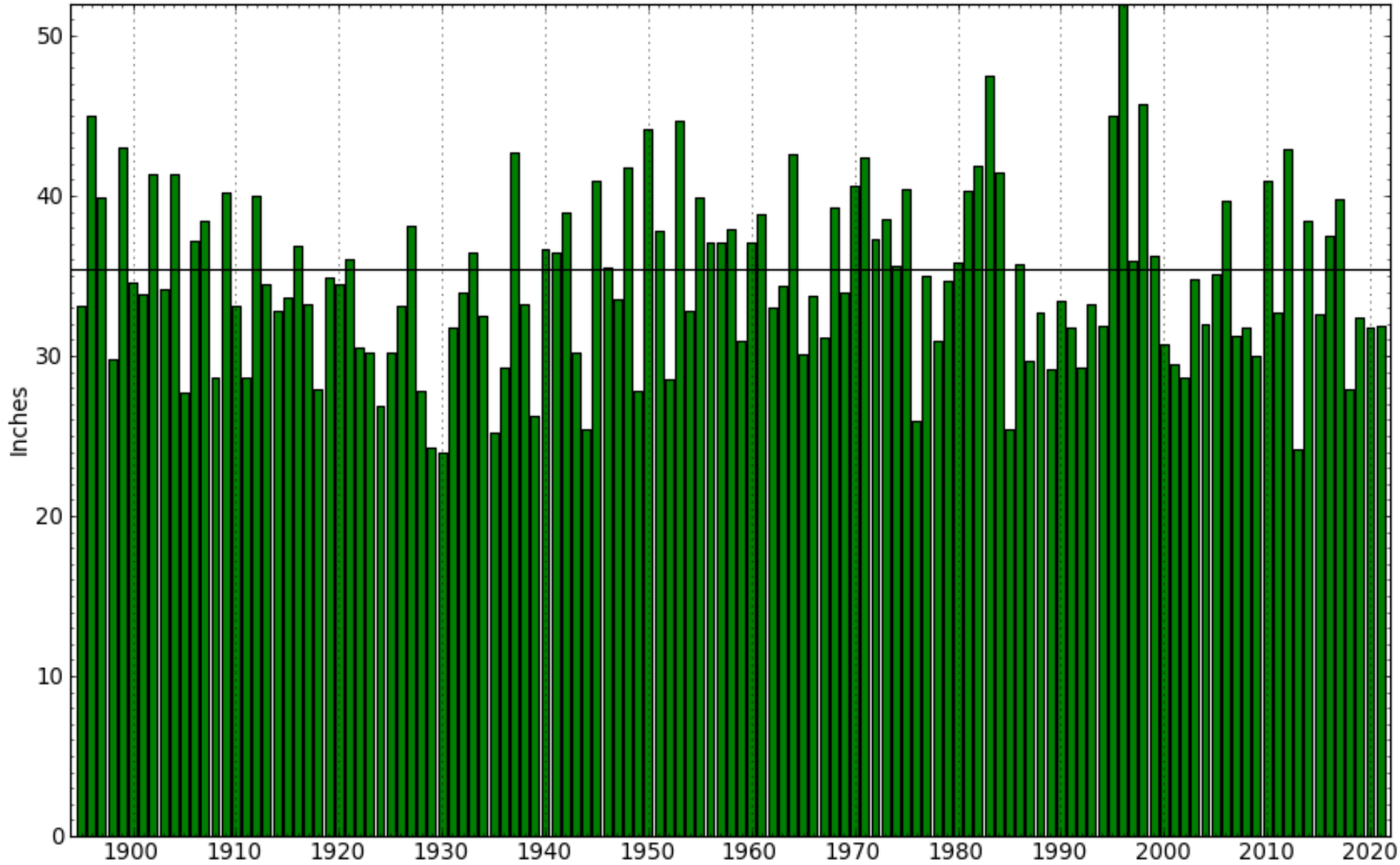
Jan-Nov 2022: 26.41"

This is 88.8% of the 1981-2010 average

— Normal Period: 1981-2010

Data Source: WRCC/UI, Created: 12-13-2022

Precipitation, 12-Months Ending in December Oregon



Calendar year
accumulated
precipitation

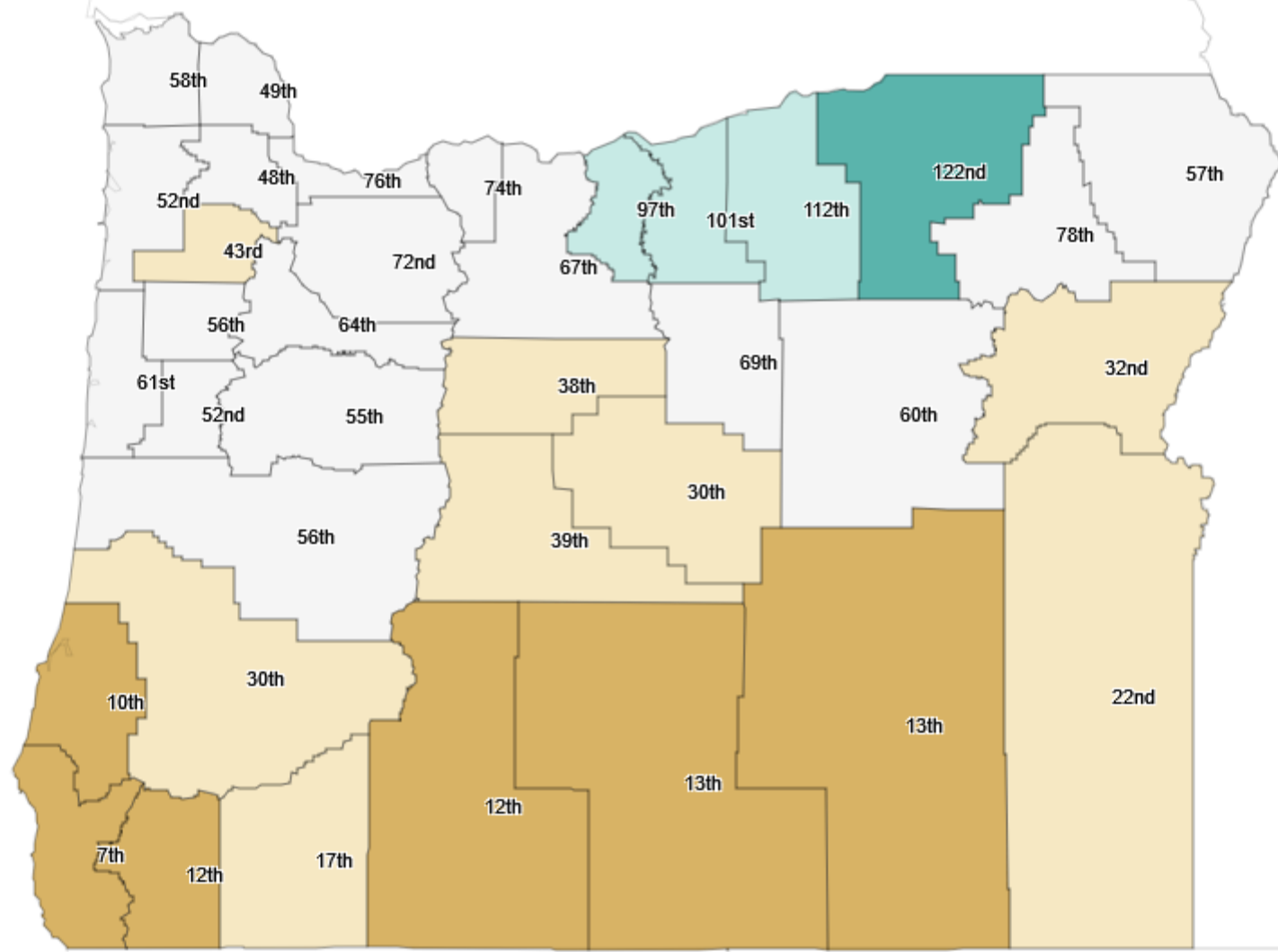
2022 is on track to be the
5th consecutive calendar
year of below average
precipitation statewide

— Normal Period: 1981-2010

Data Source: WRCC/UI, Created: 12-13-2022

County Precipitation Rank (128 years)

January - November 2022



Driest $\downarrow \frac{1}{10}$ $\downarrow \frac{1}{2}$ Near Normal $\uparrow \frac{1}{2}$ $\uparrow \frac{1}{10}$ Wettest

Oregon (Hover over a county)

Precip: 23.85"

Rank: 32nd

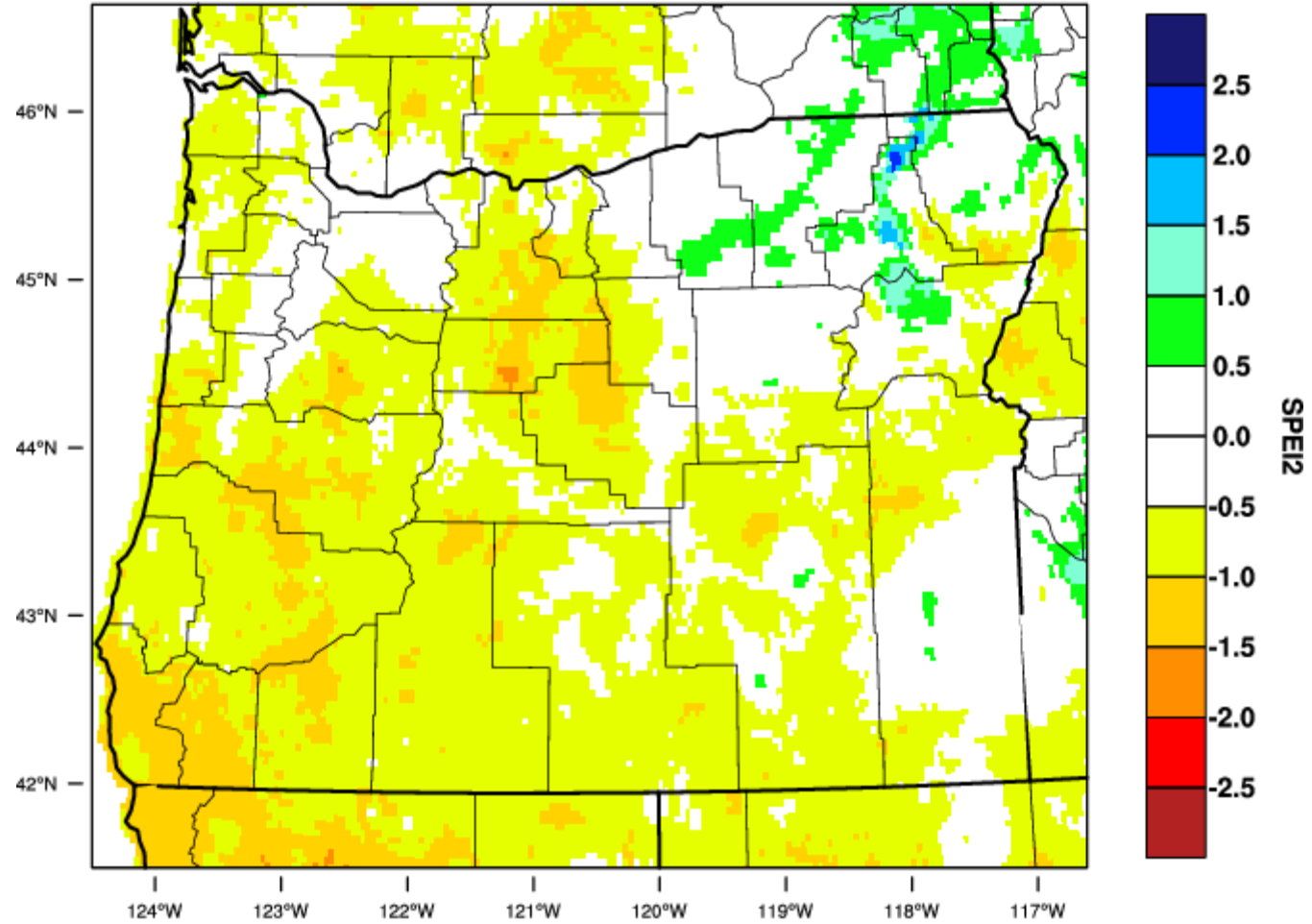
Anomaly: -3.53"

Mean: 27.38"



Oregon - 2 month SPEI

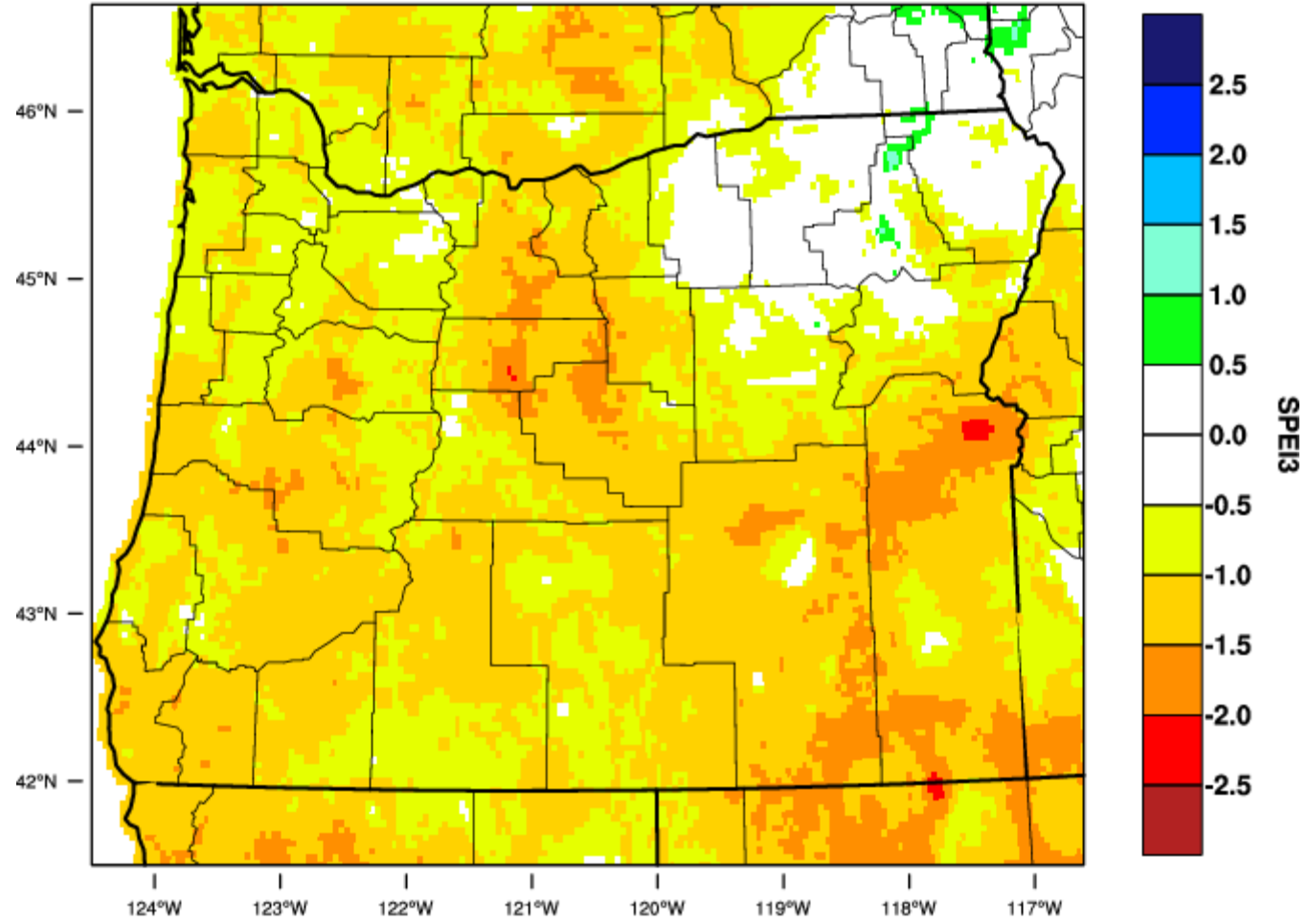
November 2022



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 11 DEC 2022

Oregon - 3 month SPEI

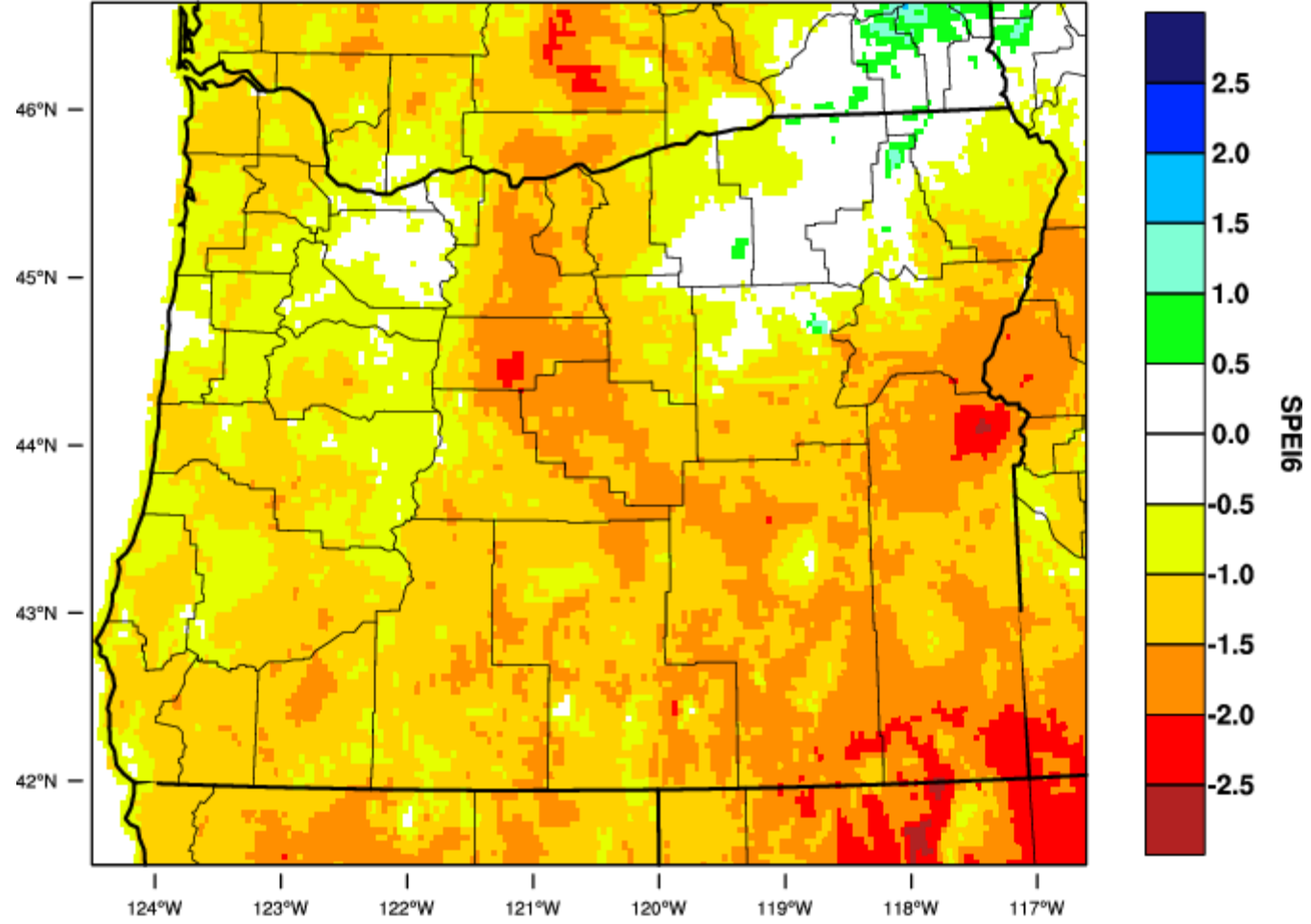
November 2022



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 11 DEC 2022

Oregon - 6 month SPEI

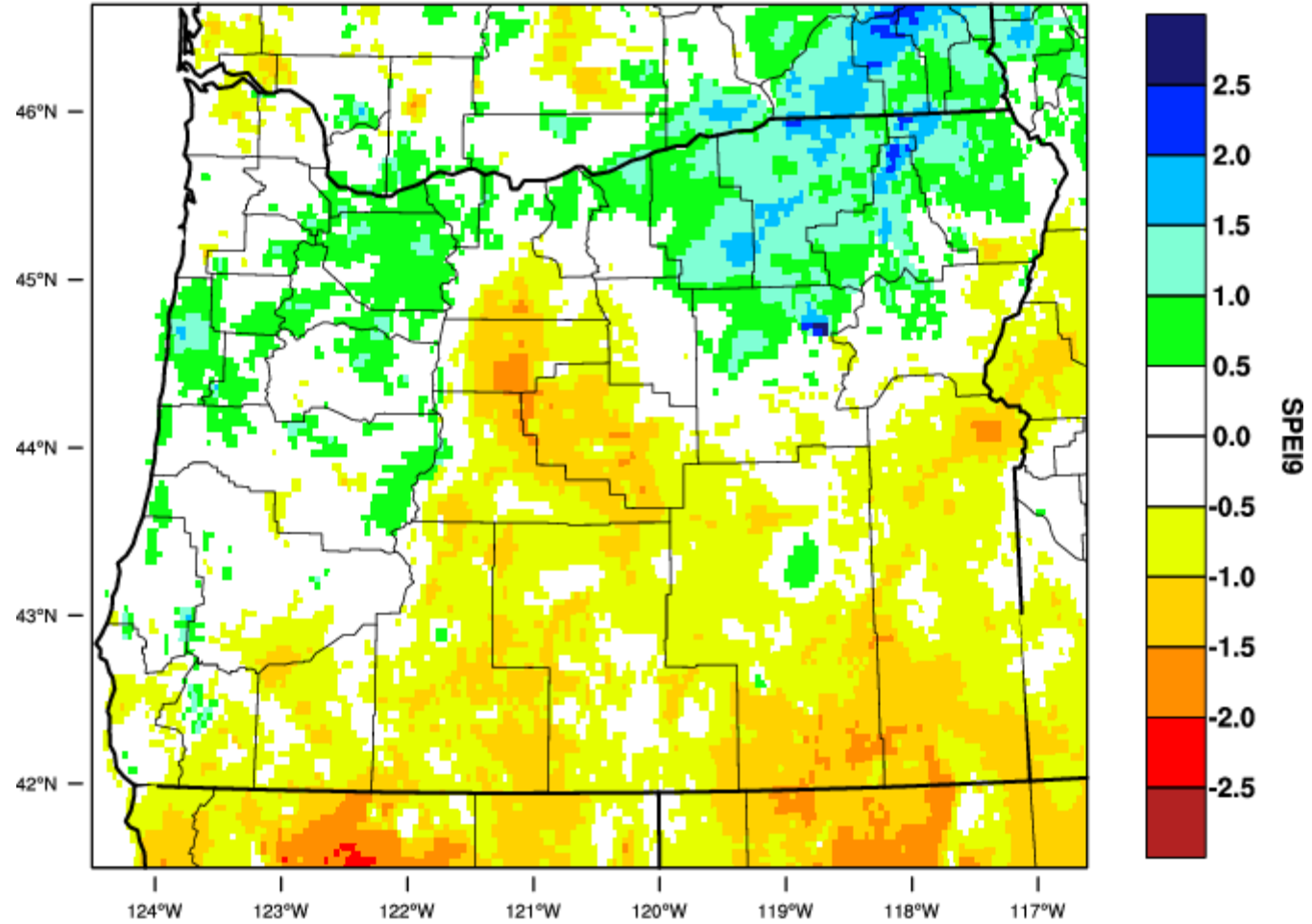
November 2022



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 11 DEC 2022

Oregon - 9 month SPEI

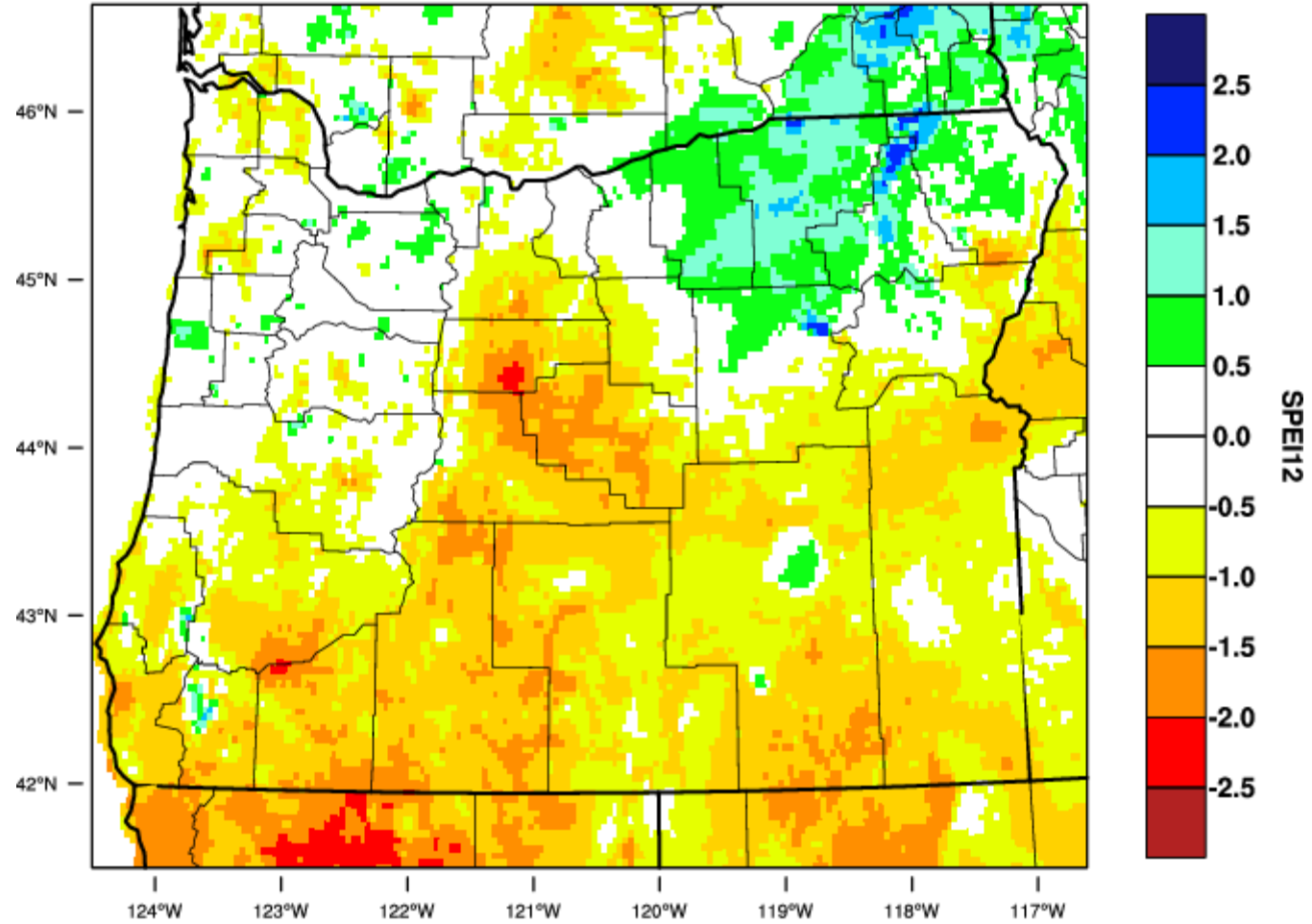
November 2022



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 11 DEC 2022

Oregon - 12 month SPEI

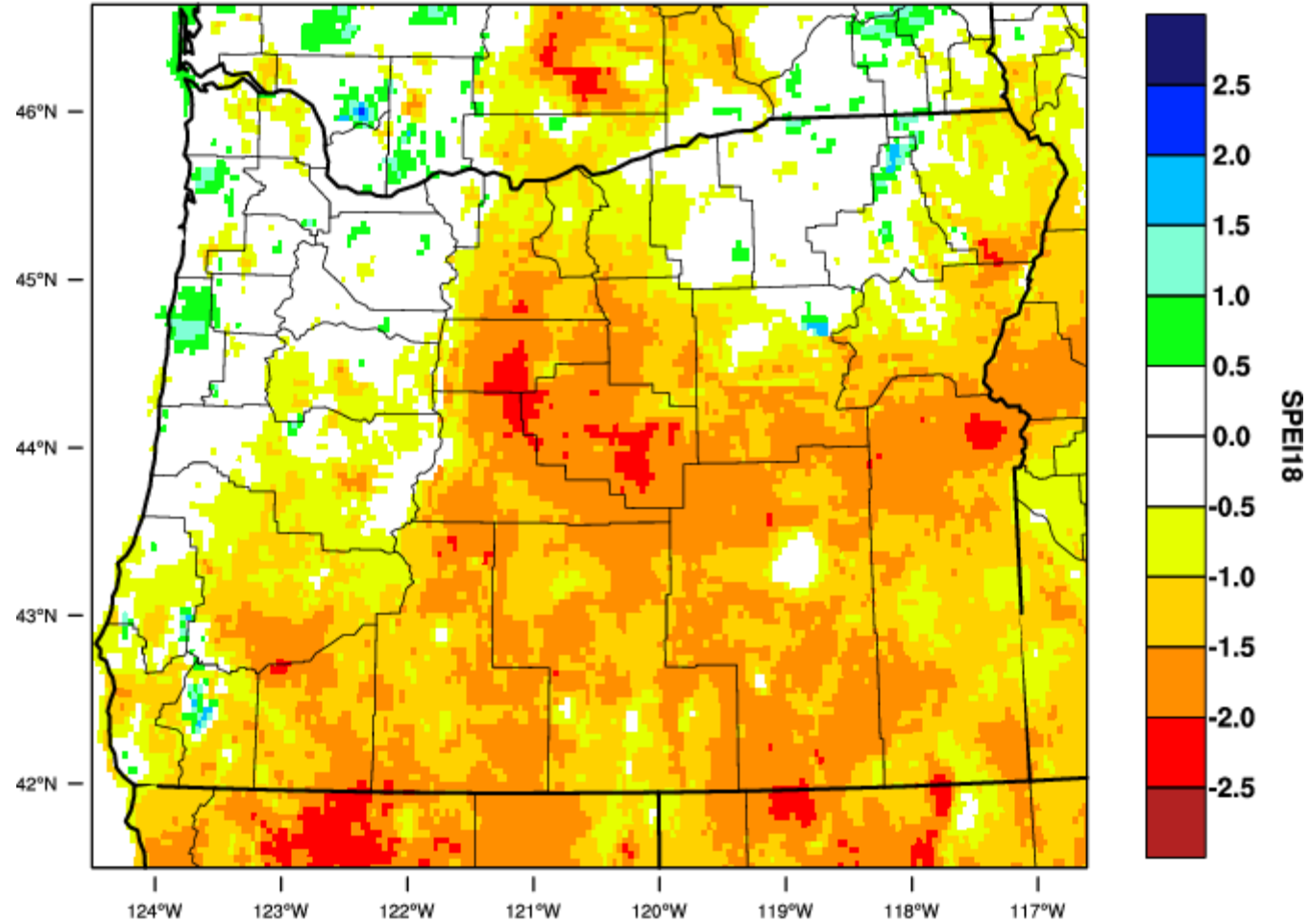
November 2022



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 11 DEC 2022

Oregon - 18 month SPEI

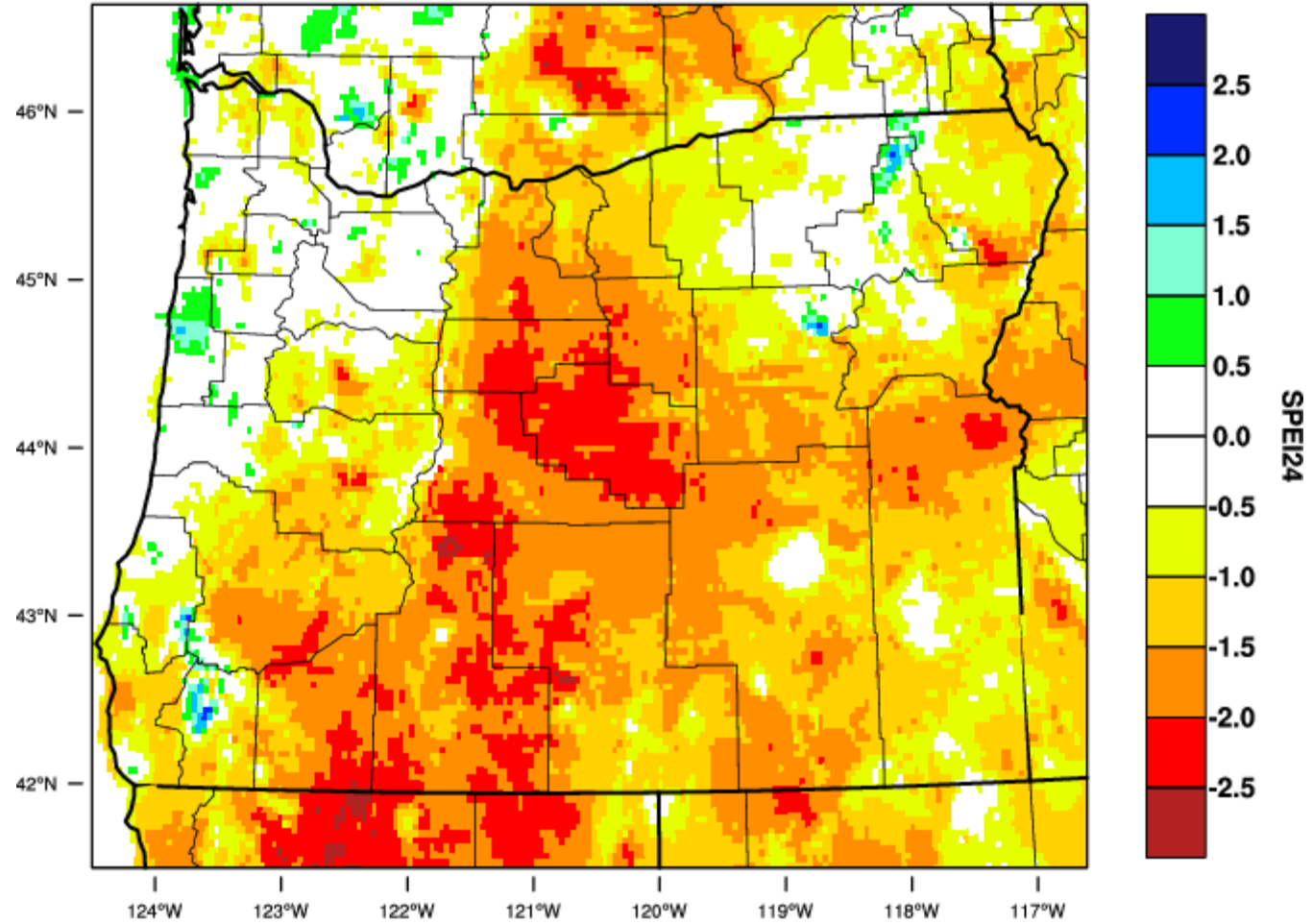
November 2022



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 11 DEC 2022

Oregon - 24 month SPEI

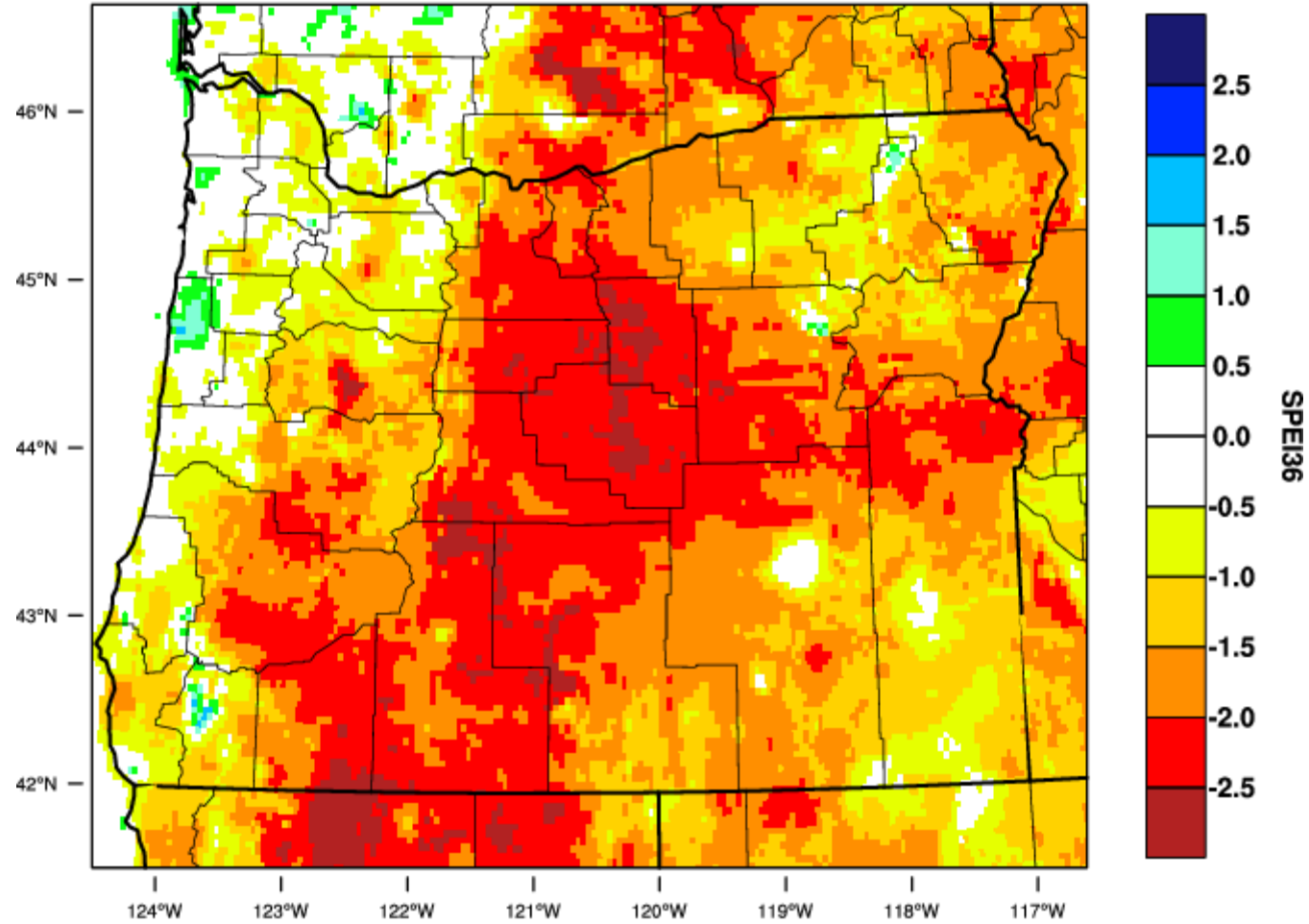
November 2022



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 11 DEC 2022

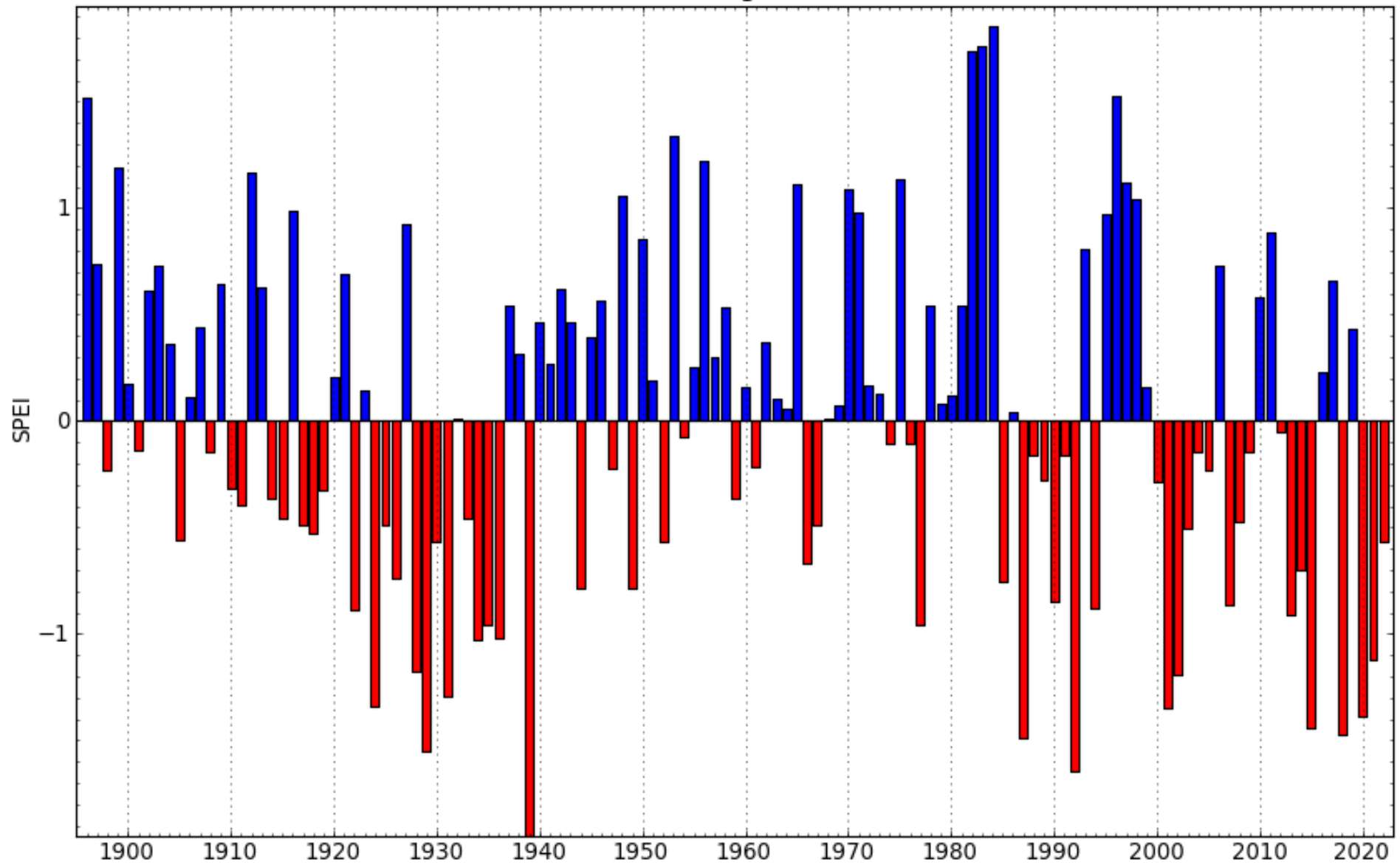
Oregon - 36 month SPEI

November 2022

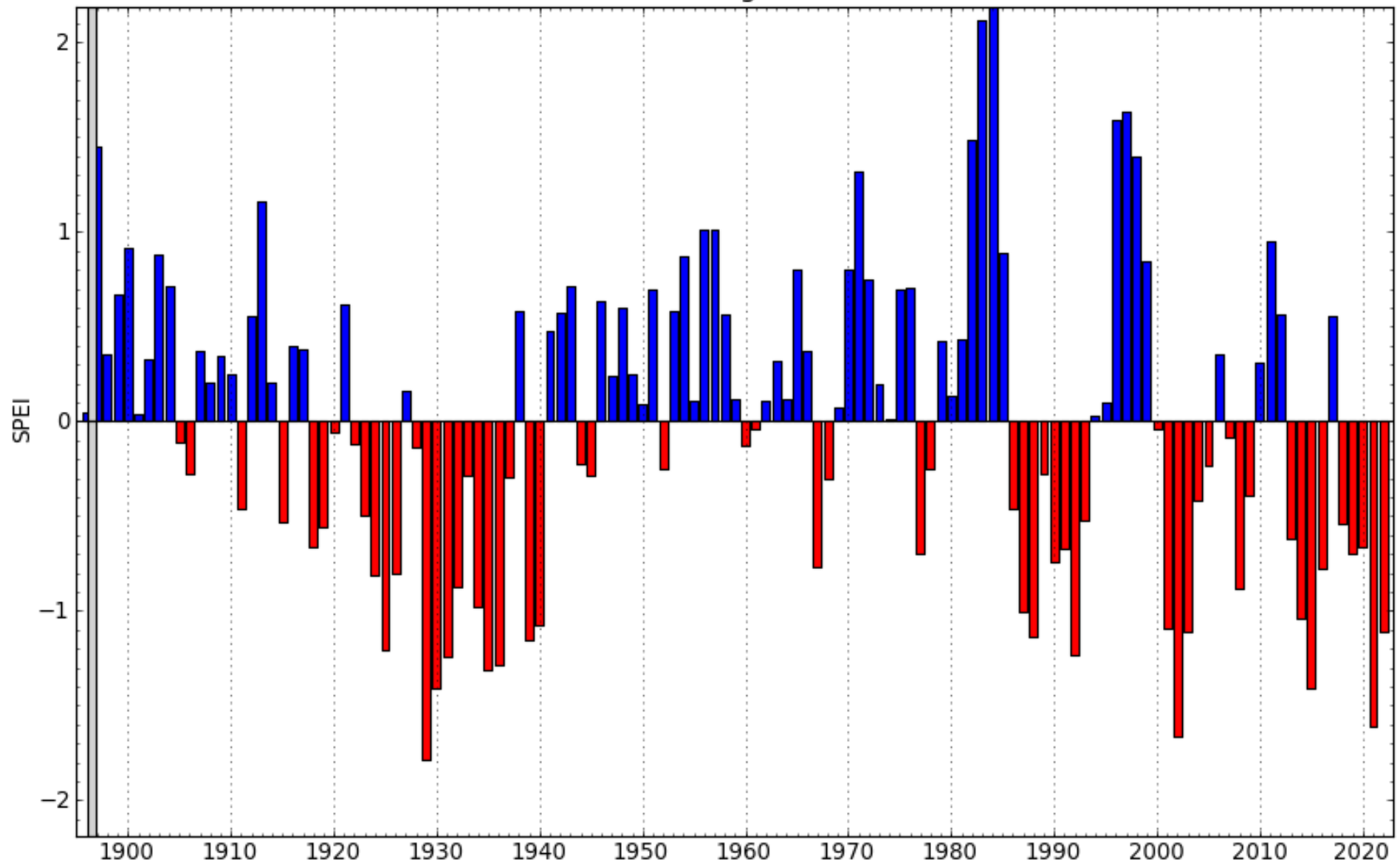


WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 11 DEC 2022

Standardized Precipitation-Evapotranspiration Index, 12-Months Ending in November Oregon



Standardized Precipitation-Evapotranspiration Index, 24-Months Ending in November Oregon



No Record

Data Source: WRCC/UI, Created: 12-13-2022



Oregon Water Supply Availability Meeting

December 2022

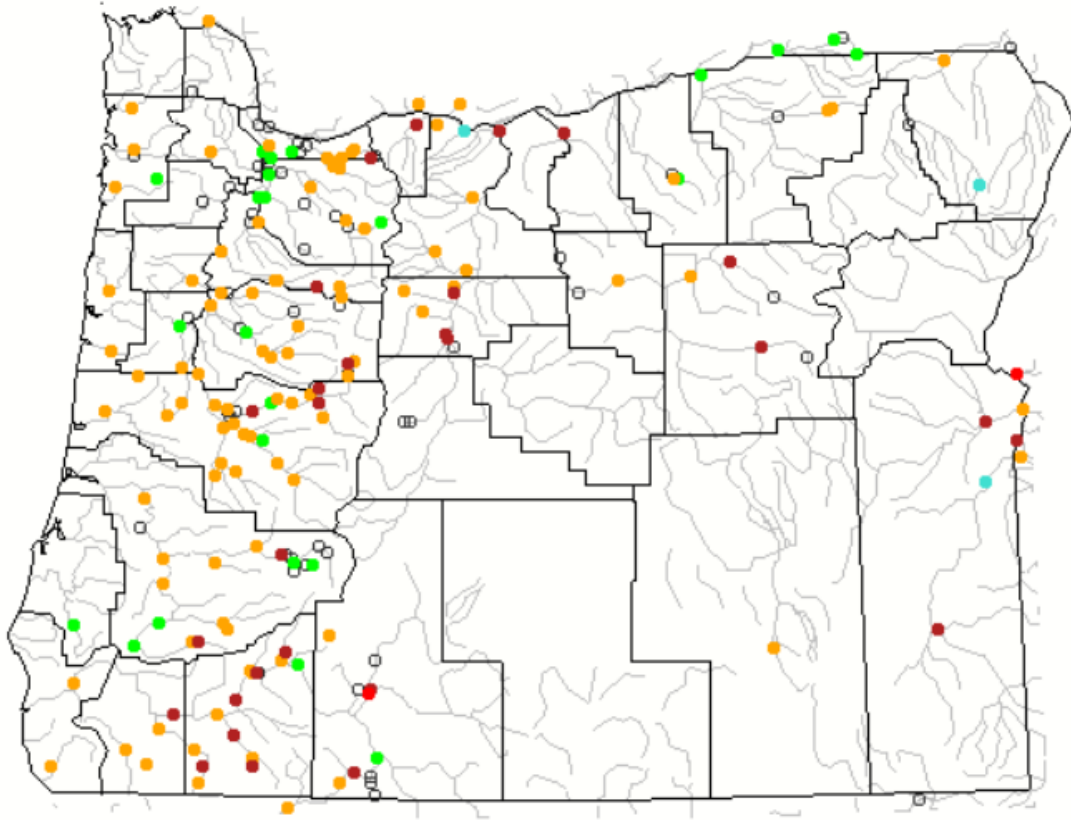
U.S. Department of the Interior
U.S. Geological Survey

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

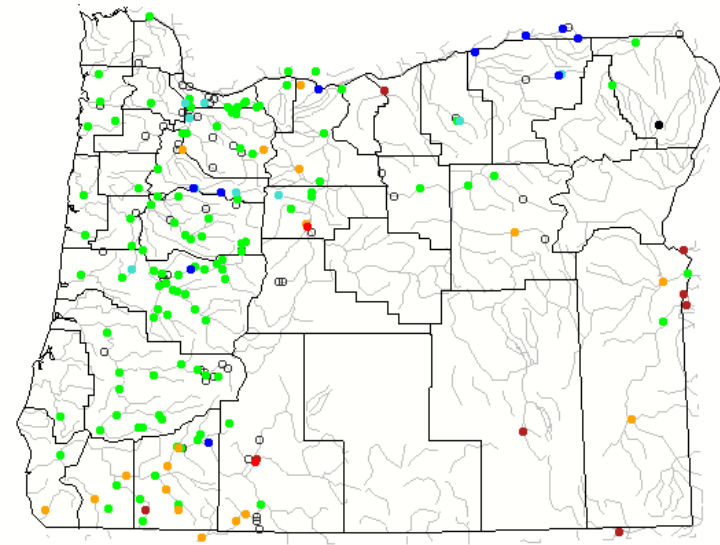
Streamflow Conditions

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

Monday, December 12, 2022



Tuesday, November 15, 2022



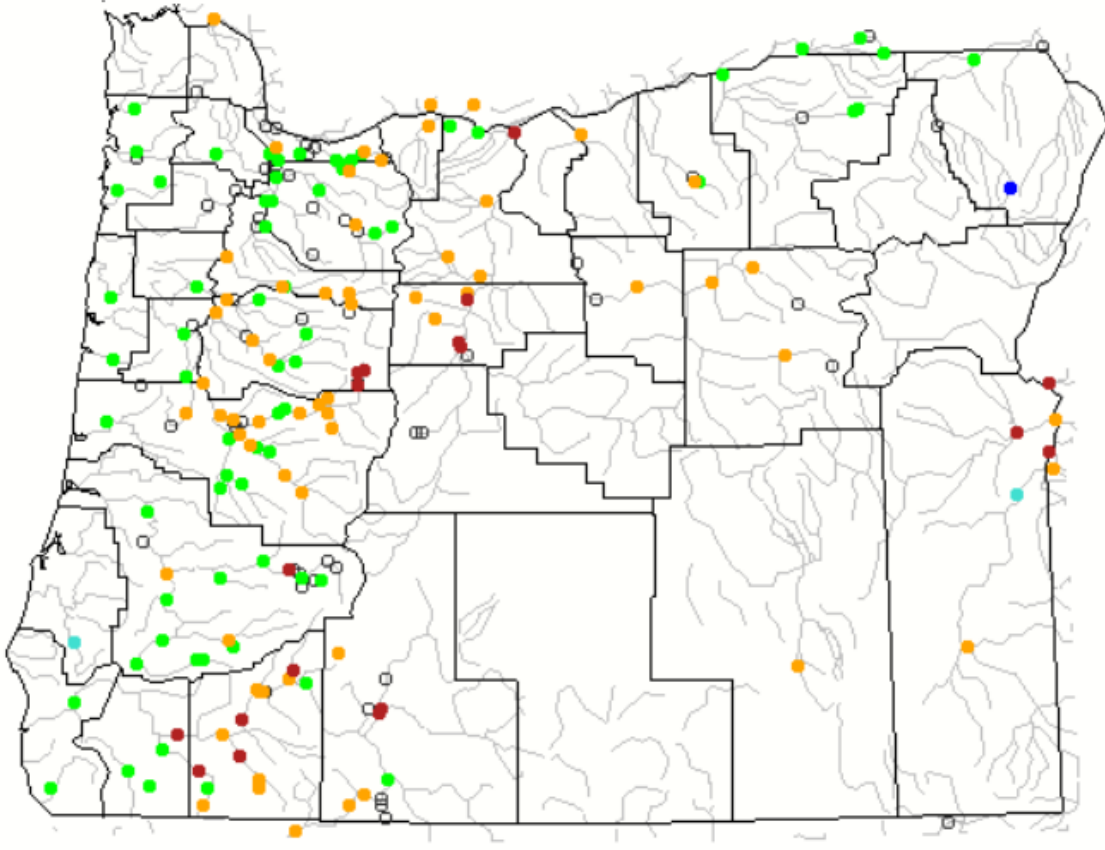
Explanation - Percentile classes

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

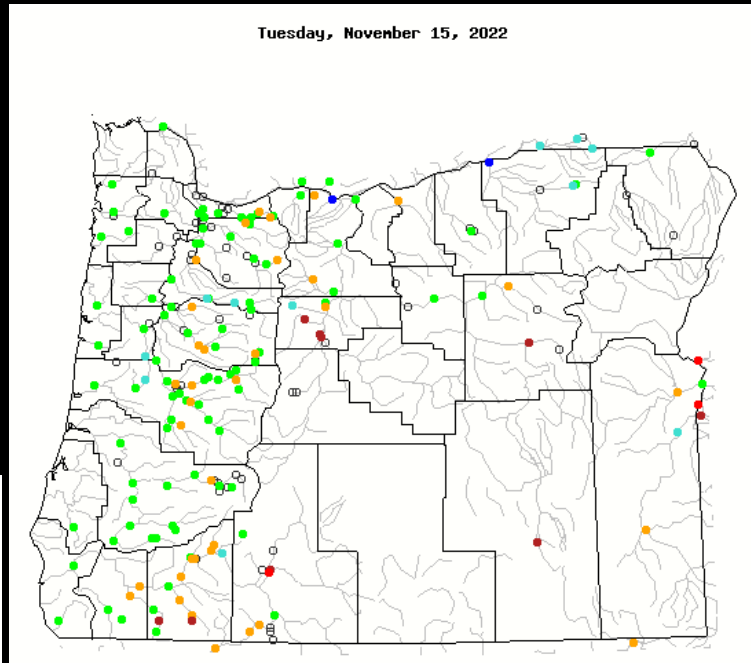
Streamflow Conditions

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

Monday, December 12, 2022



Tuesday, November 15, 2022

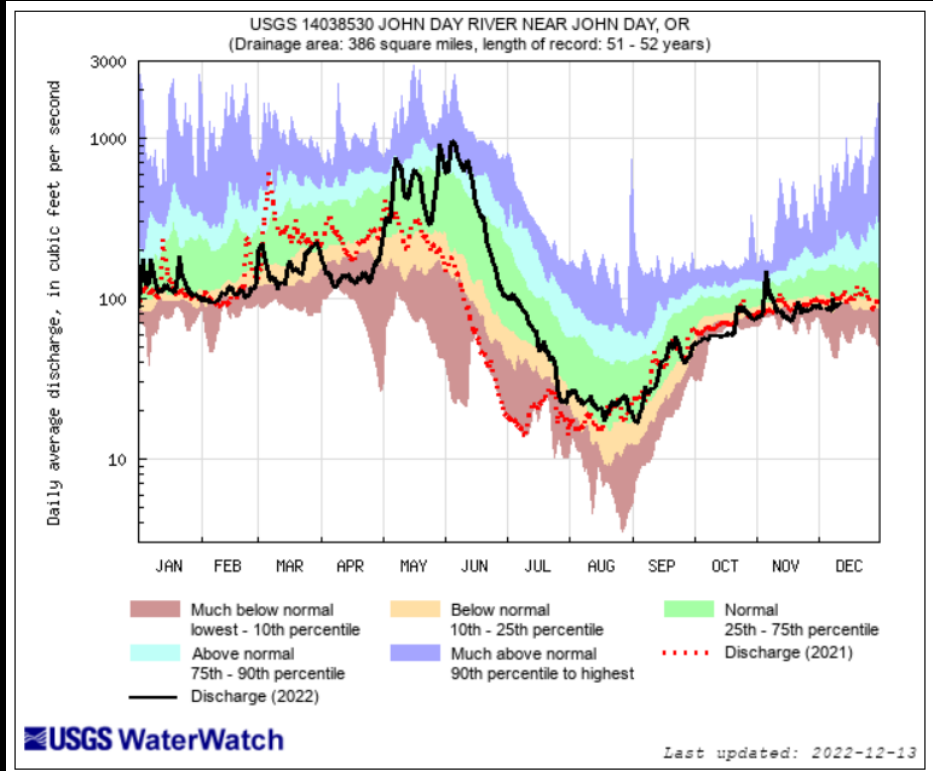
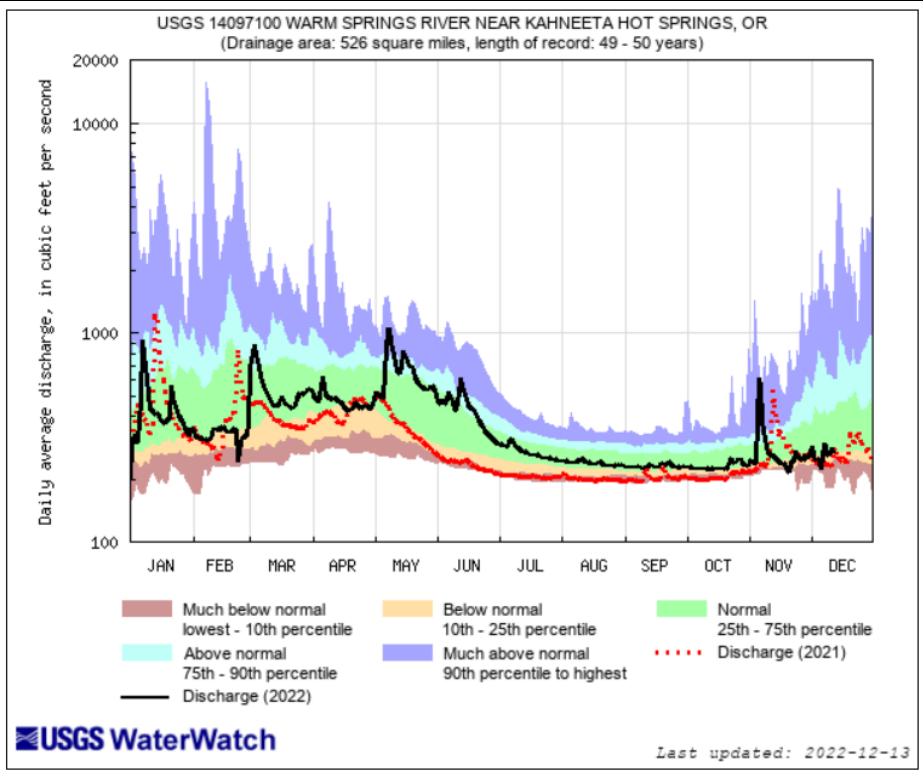
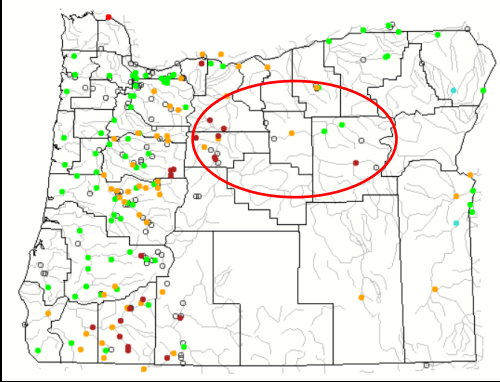


Explanation - Percentile classes

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



Northeastern OR

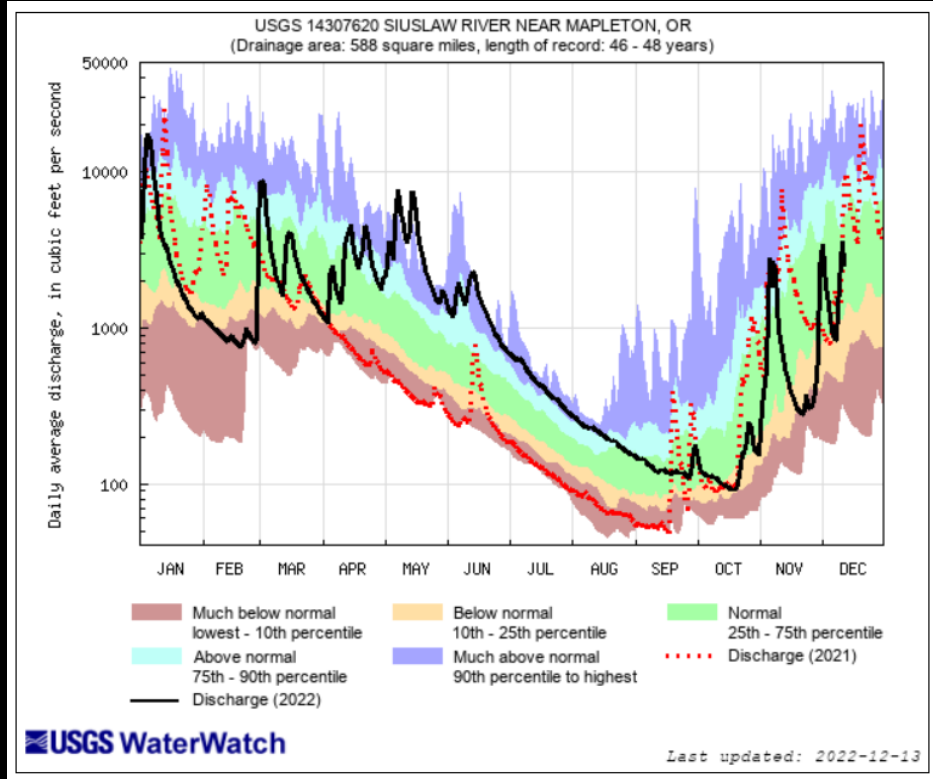
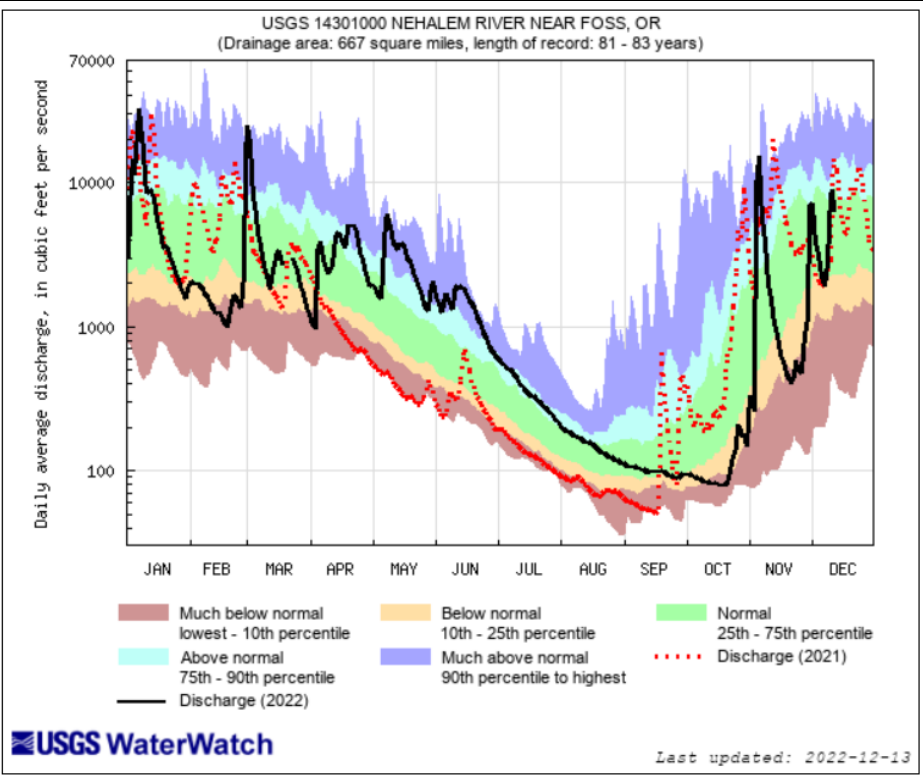
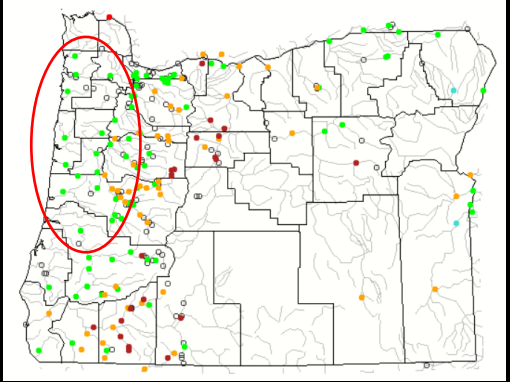


Explanation - Percentile classes

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



Northwestern OR

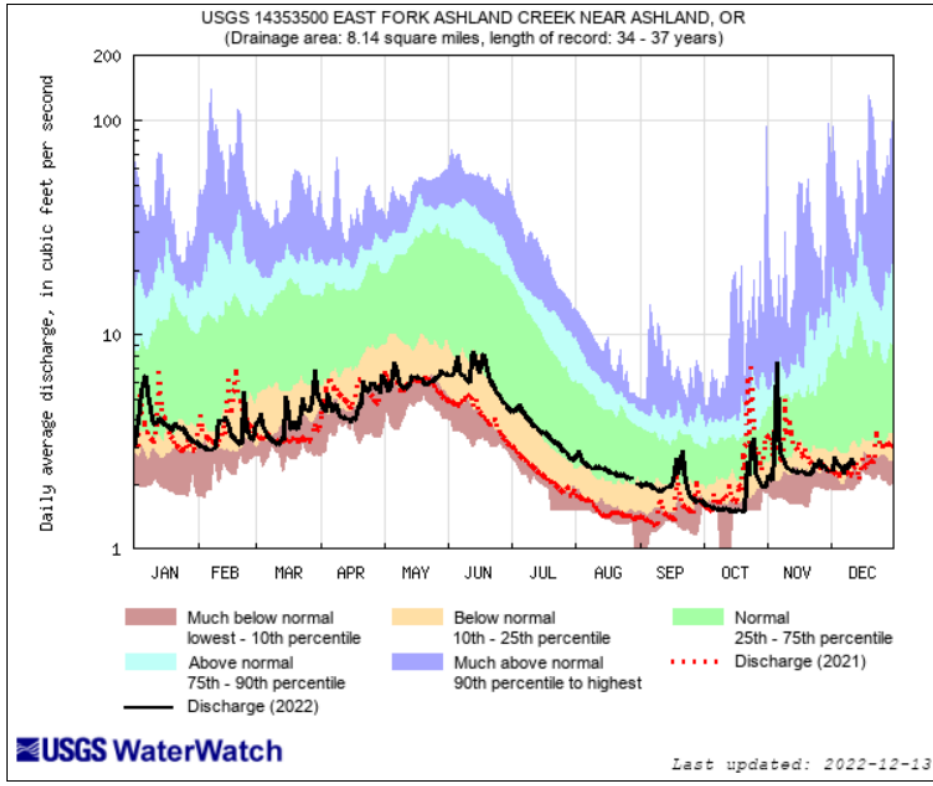
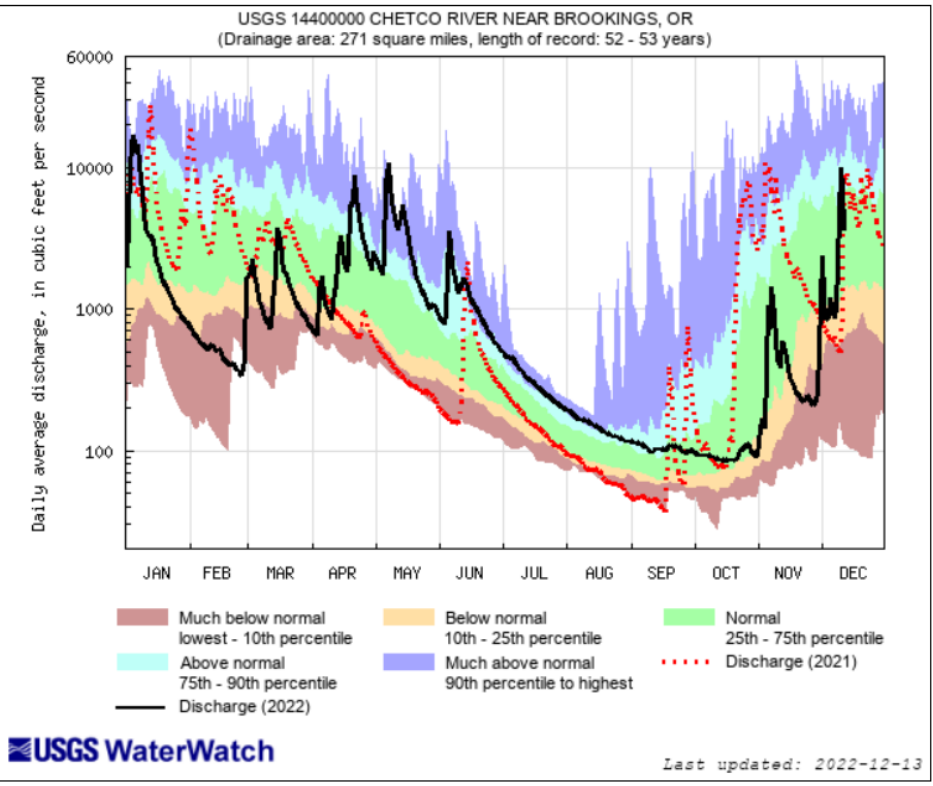
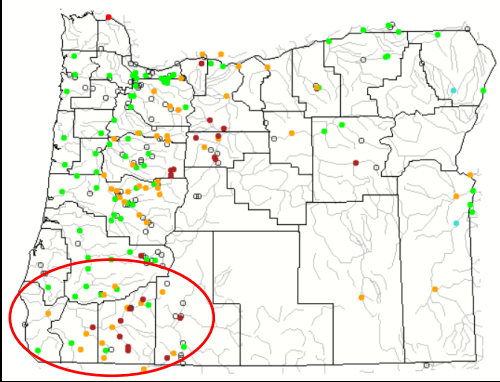


Explanation - Percentile classes

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



Southwestern OR



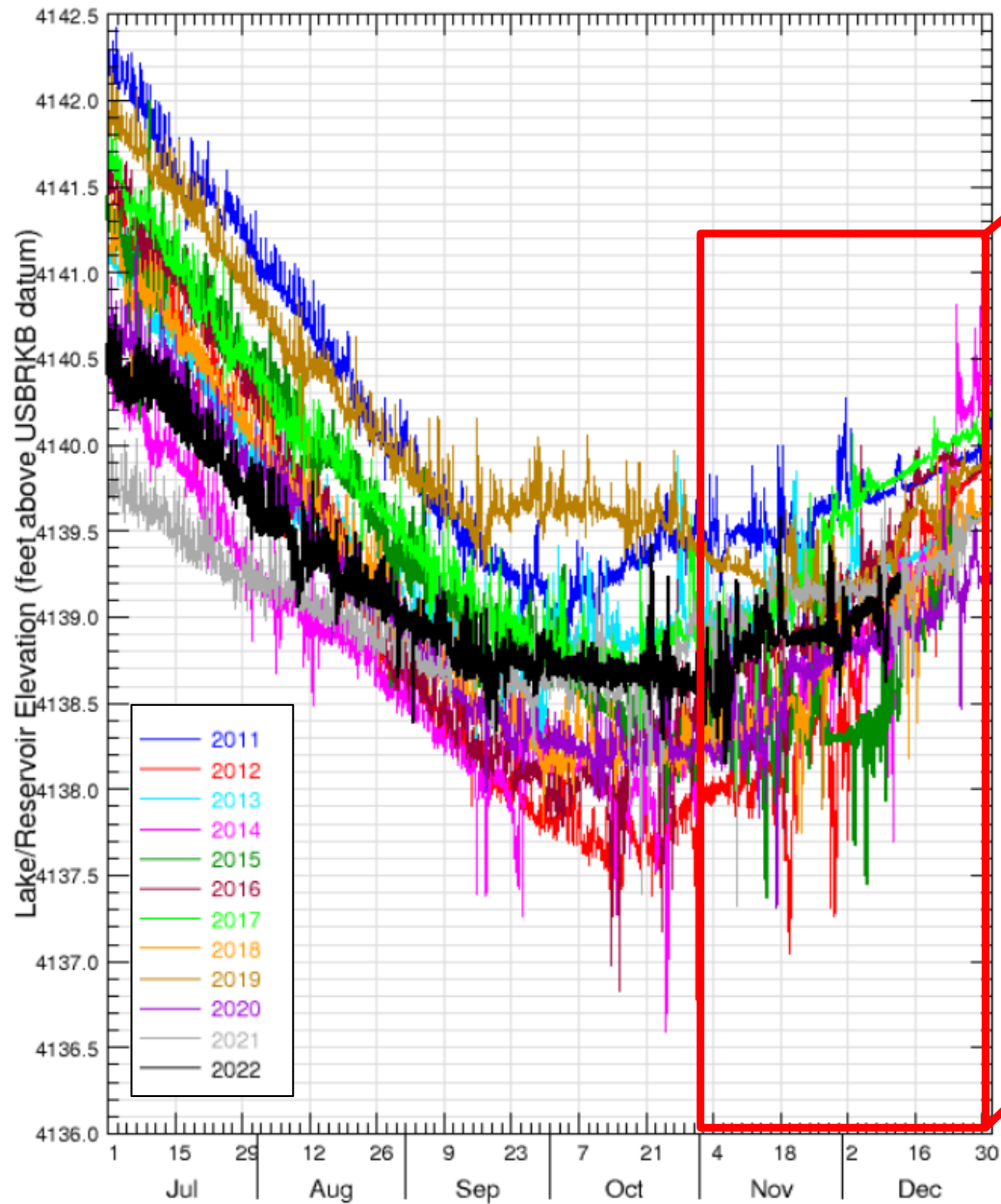
Explanation - Percentile classes

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

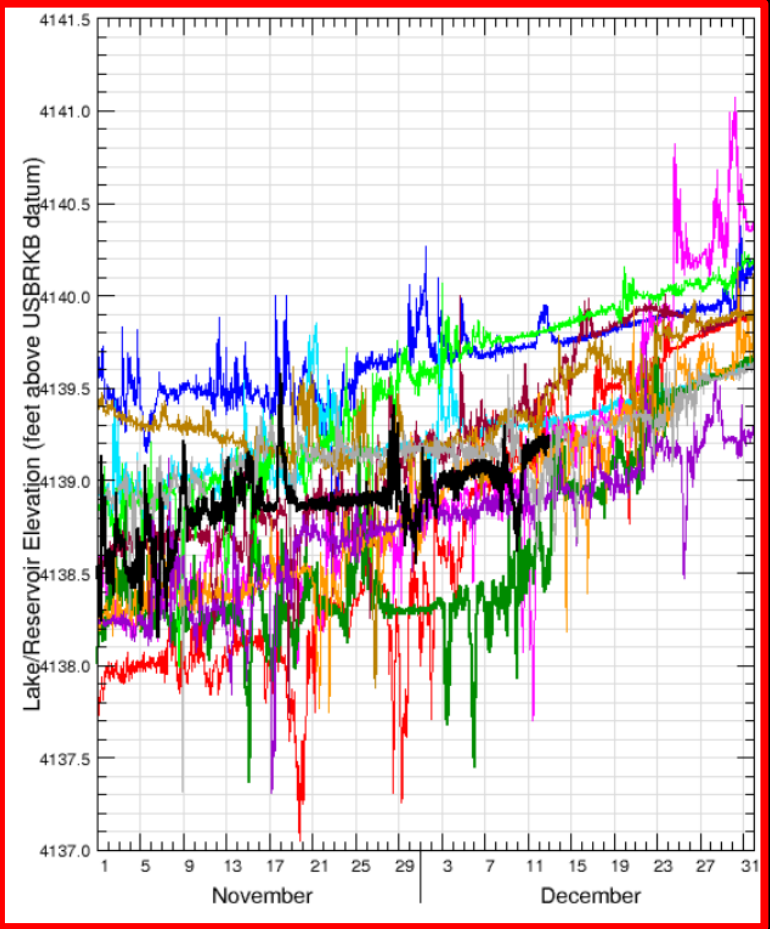


Upper Klamath Lake near Klamath Falls, OR (11507000)

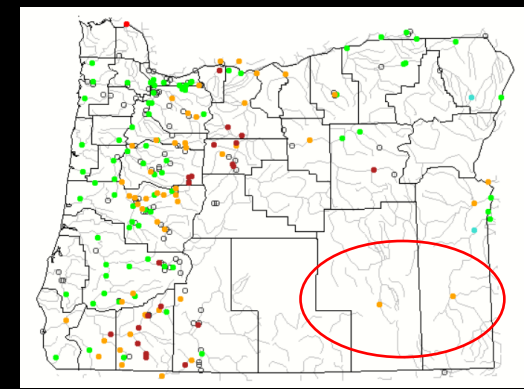
Data from U.S. Geological Survey



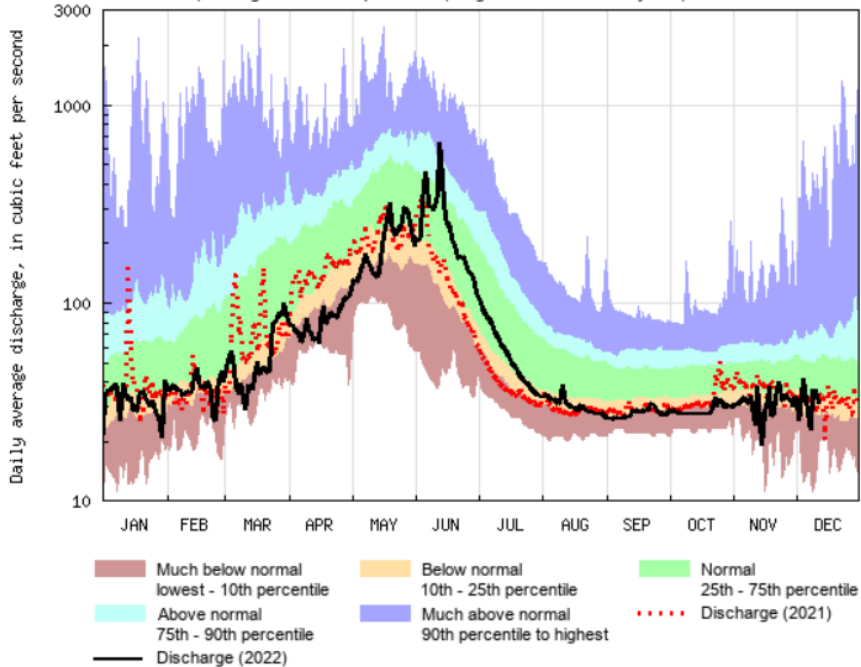
Klamath Lake



Southeastern OR



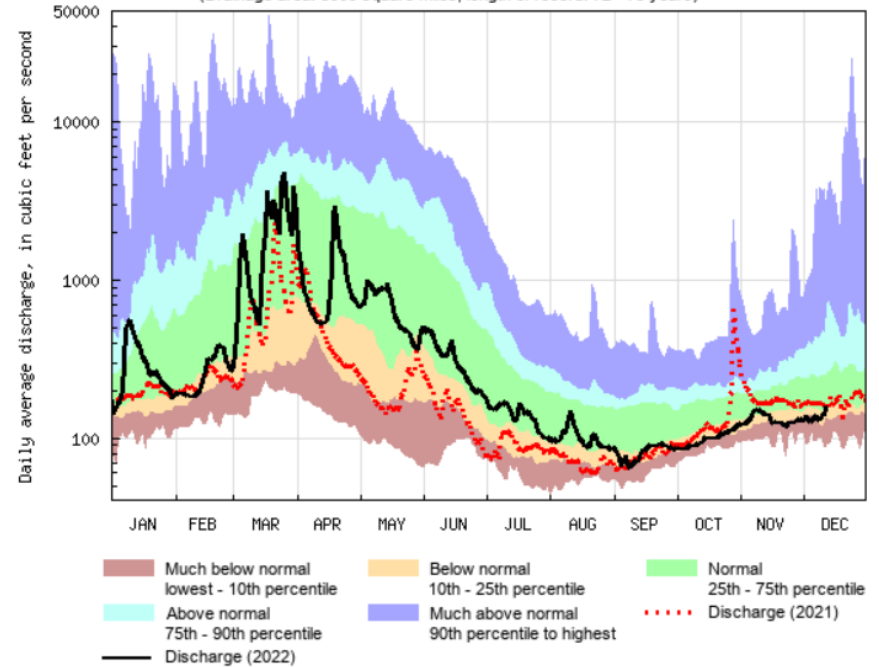
USGS 10396000 DONNER UND BLITZEN RIVER NR FRENCHGLEN OR
(Drainage area: 200 square miles, length of record: 92 - 94 years)



USGS WaterWatch

Last updated: 2022-12-13

USGS 13181000 OWYHEE RIVER NR ROME OR
(Drainage area: 8000 square miles, length of record: 72 - 73 years)



USGS WaterWatch

Last updated: 2022-12-13

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	



US GEOLOGICAL SURVEY, OREGON WATER SCIENCE CENTER
 WATER AVAILABILITY REPORT FOR NOVEMBER 2022

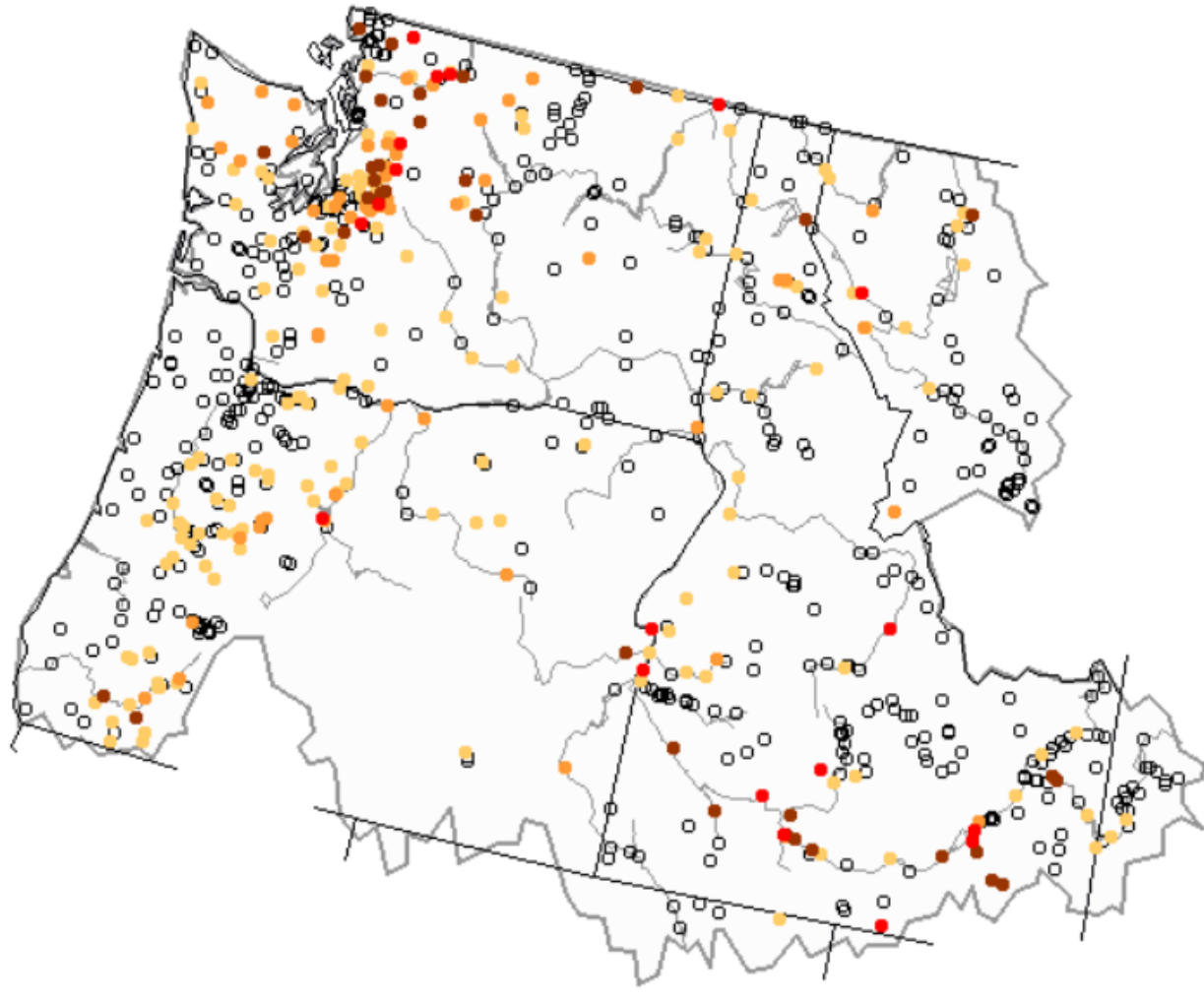
Station	NRCS SWSI Basin	Monthly mean discharge		Change in dis- charge from	Accumulated Runoff For the Period Oct. to Nov.
		Cubic feet per second	Percent of average	previous month (percent)	Percent of average
Donner Und Blitzen nr Frenchglen	Harney	32	74	10	73
(*)Deep Creek above Adel	Lake County	10	34	25	37
(*)Chewaucan River near Paisley	Lake County	33	77	14	79
Williamson River near Chiloquin	Klamath	521	83	5	85
Owyhee River near Rome	Owyhee	132	77	32	75
(*)NF Malheur River near Beulah	Malheur	47	87	4	88
Grande Ronde R at Troy	Grande Ronde Powder/Burnt	1,110	98	67	93
Umatilla River nr Gibbon	Umatilla Lower John Day	119	103	143	99
John Day River at Service Crk	Upper John Day	349	71	85	65
(*)Little Deschutes River nr LaPine	Upper Deschutes	53	56	51	52
Hood River nr Hood River	Lower Deschutes Mt.Hood	748	77	119	74
Willamette River at Salem	Willamette	17,600	68	43	78
Wilson River near Tillamook	North Coast	1,290	64	1,454	53
Umpqua River near Elkton	Rogue/Umpqua	2,610	51	129	54
Rogue River near Agness	Rogue/Umpqua	1,900	54	24	63
SF Coquille River at Powers	South Coast	267	33	1,013	30
Chetco River near Brookings	South Coast	404	16	334	16

All data should be considered provisional and subject to revision.
 Percent of average computed using 30-year base period, water years 1991-2020.
 (*) provided by Oregon Water Resources Department

12/05/2022



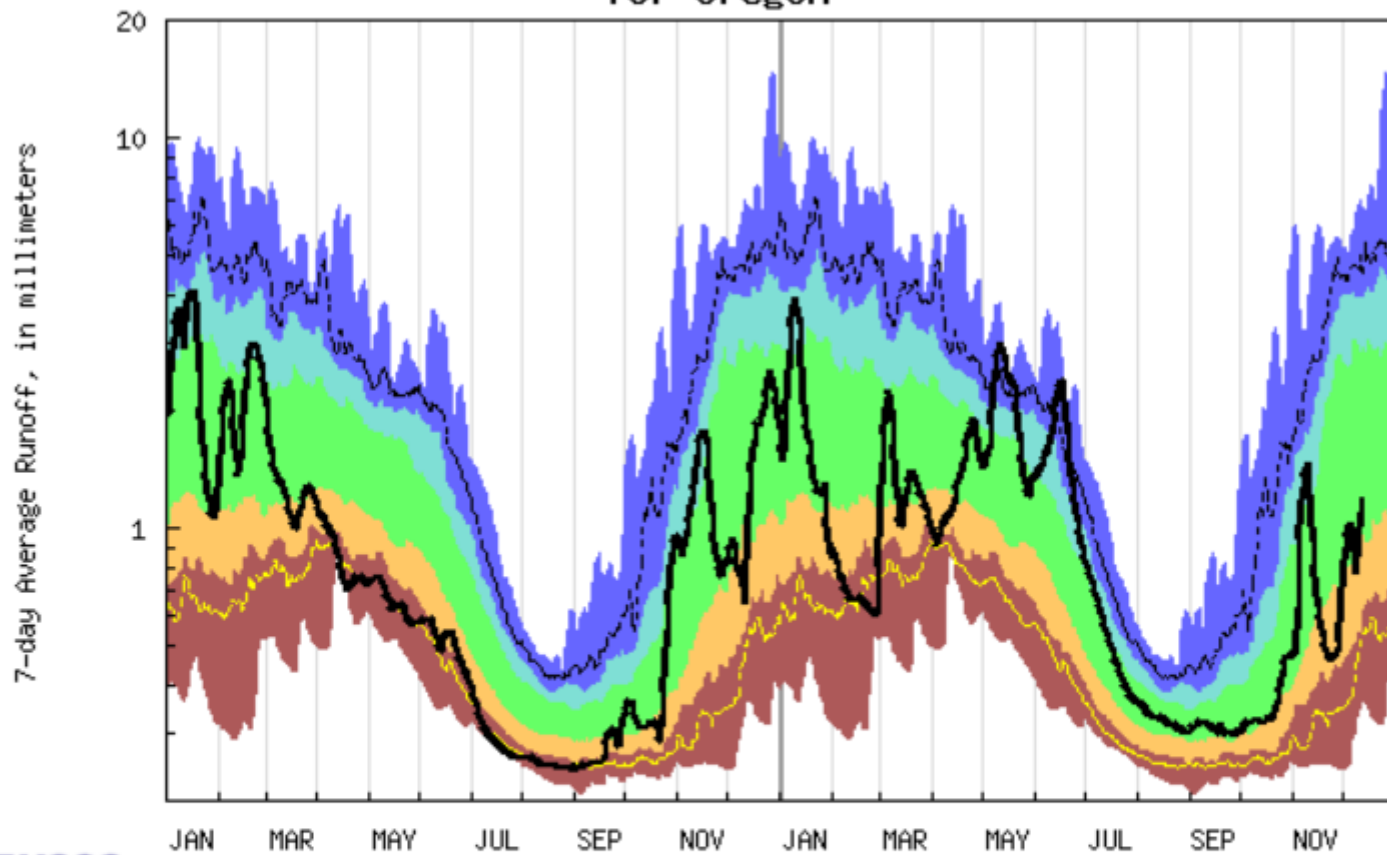
Monday, December 12, 2022



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

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

Duration hydrograph of 7-day average runoff for Oregon



USGS WaterWatch

2021

2022

Last updated: 2022-12-13

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



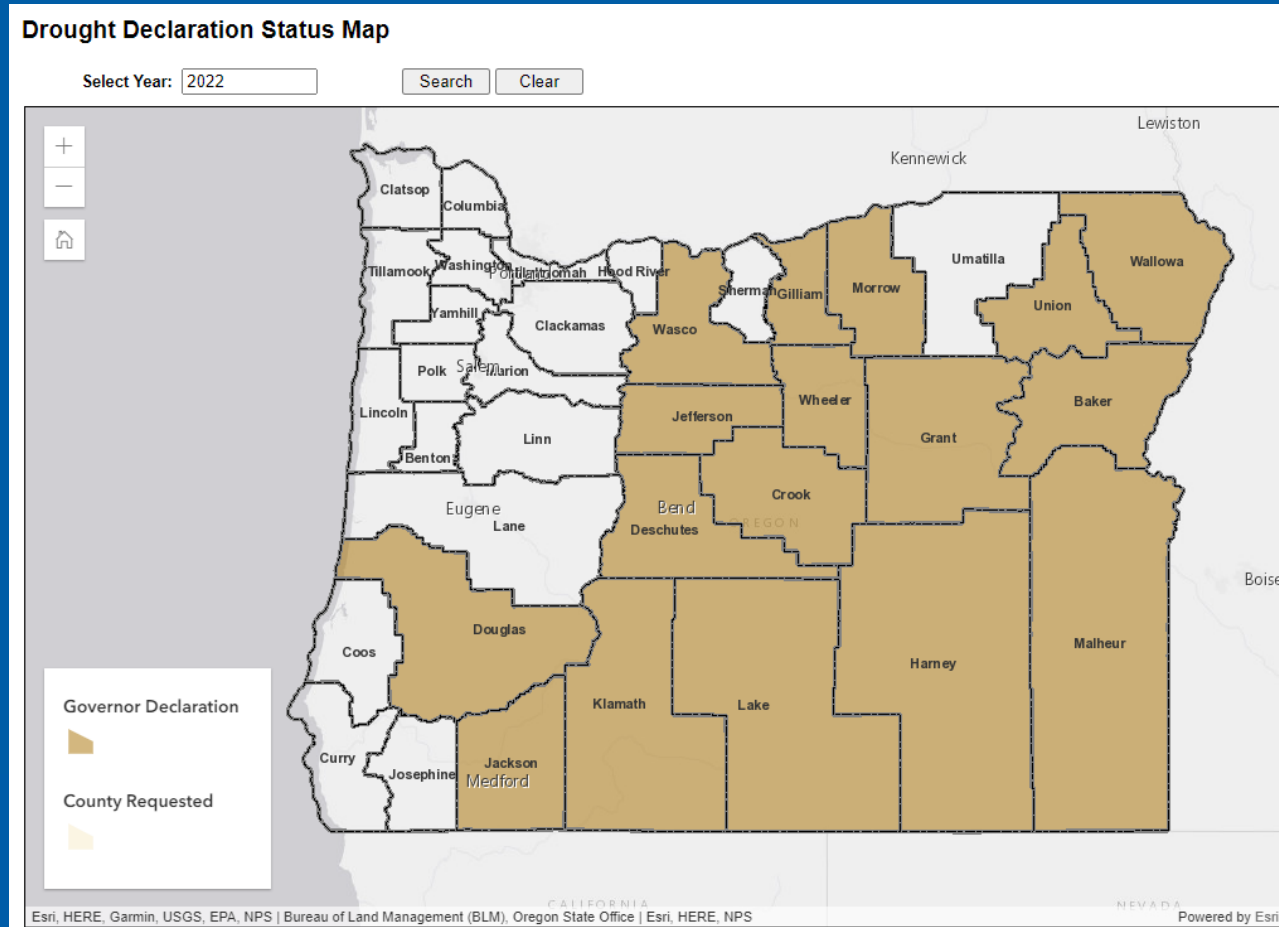
Water Supply Availability Committee
Oregon Water Resources Department

Ryan Andrews
December 14th, 2022

Drought Declarations



- 17 counties with ORS 536 declarations
- 29 counties with USDA crop disaster designations due to drought
- Expire end of calendar year



November % of Average Streamflow - WY 2023

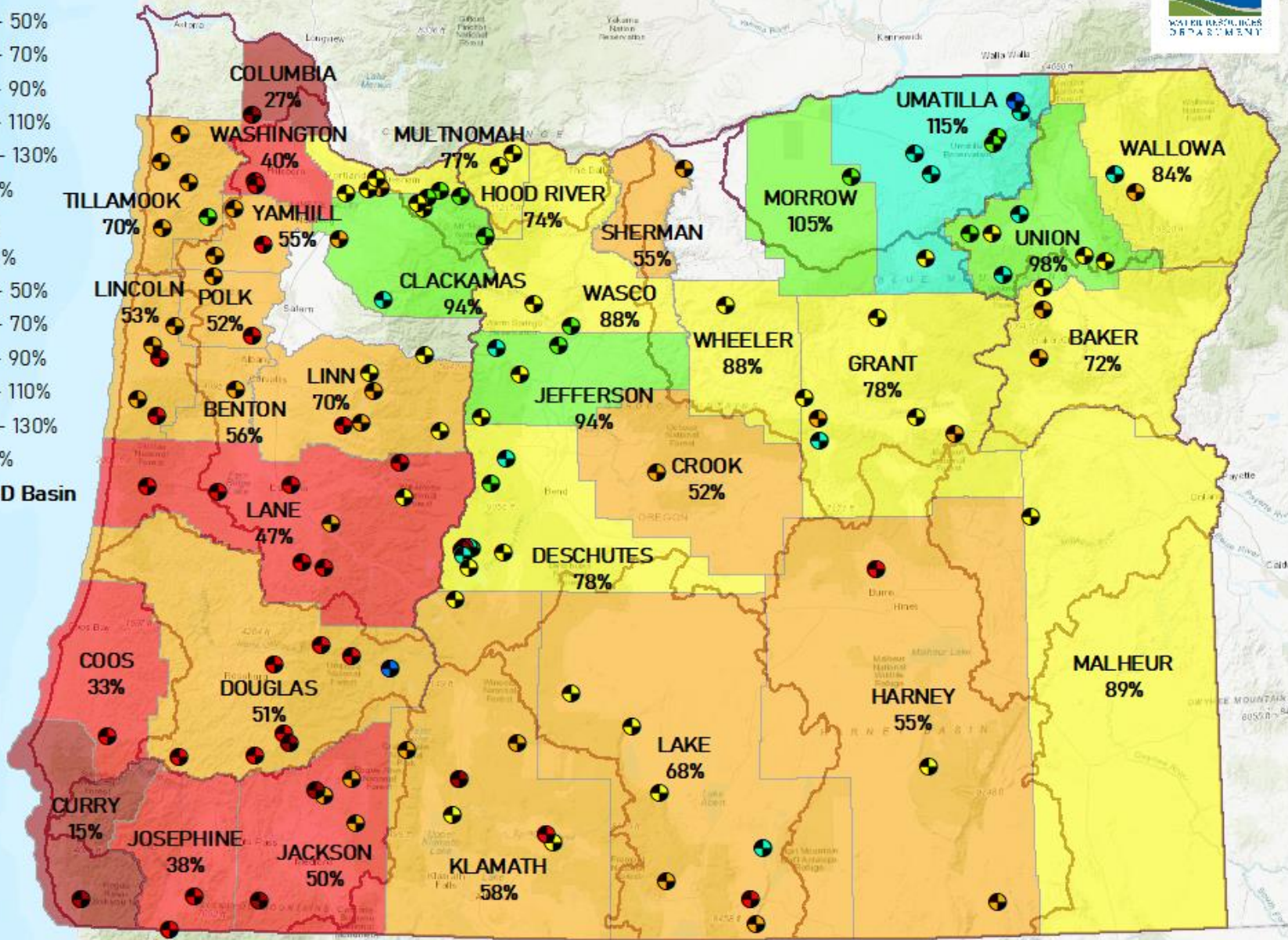


Stream Gage

- <= 30%
- 31% - 50%
- 51% - 70%
- 71% - 90%
- 91% - 110%
- 111% - 130%
- > 130%

Counties

- <= 30%
- 31% - 50%
- 51% - 70%
- 71% - 90%
- 91% - 110%
- 111% - 130%
- > 130%
- OWRD Basin



Date: 12/12/2022

Water Year To Date % of Average Streamflow - December 11, 2022



Stream Gage

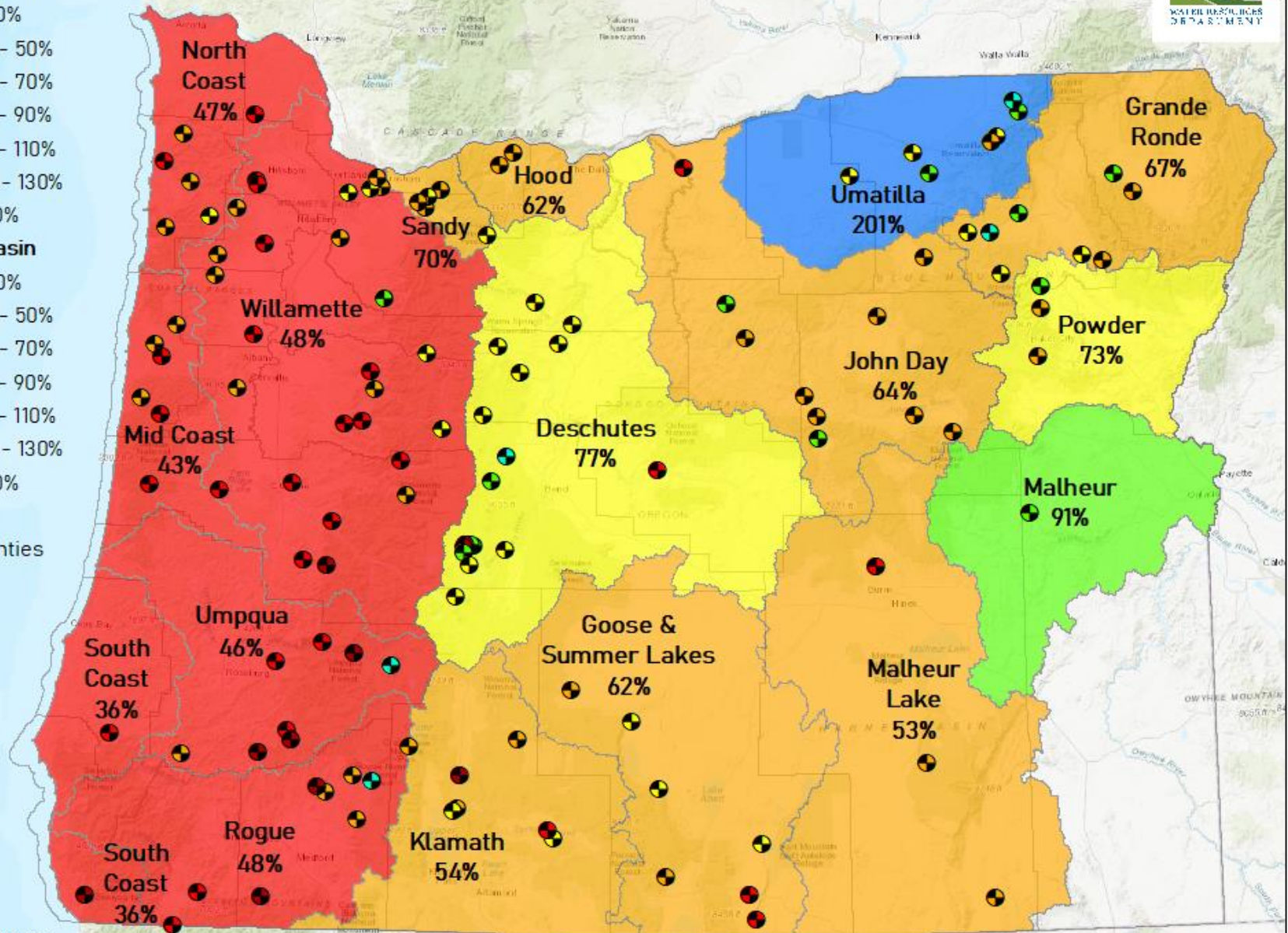
- <= 30%
- 31% - 50%
- 51% - 70%
- 71% - 90%
- 91% - 110%
- 111% - 130%
- > 130%

OWRD Basin

- <= 30%
- 31% - 50%
- 51% - 70%
- 71% - 90%
- 91% - 110%
- 111% - 130%
- > 130%

Counties

- Counties



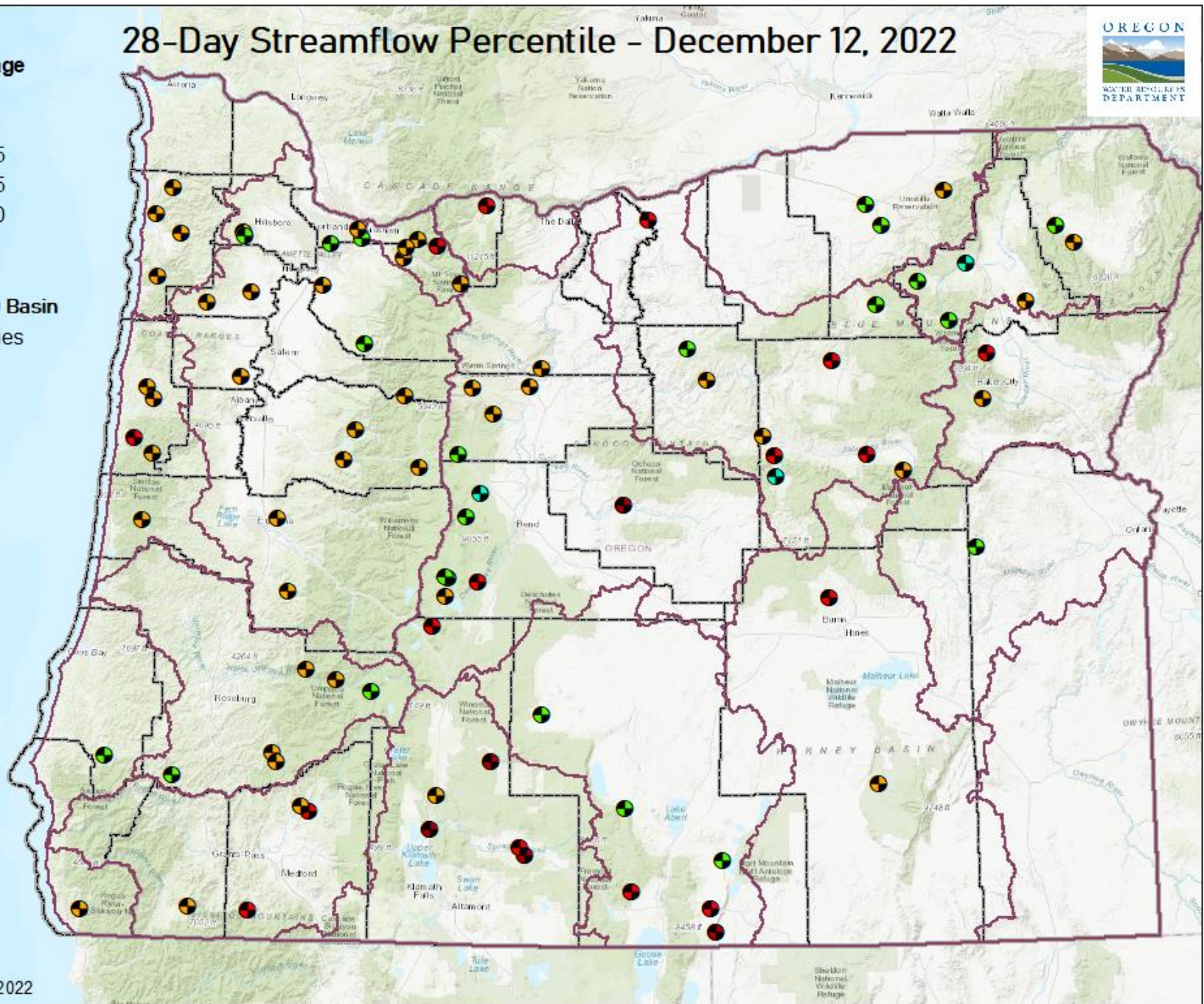
Date: 12/12/2022

28-Day Streamflow Percentile - December 12, 2022



Stream Gage

- LOW
- < 10
- 10 - 25
- 25 - 75
- 75 - 90
- > 90
- HIGH
- 🗺️ OWRD Basin
- 🗺️ Counties



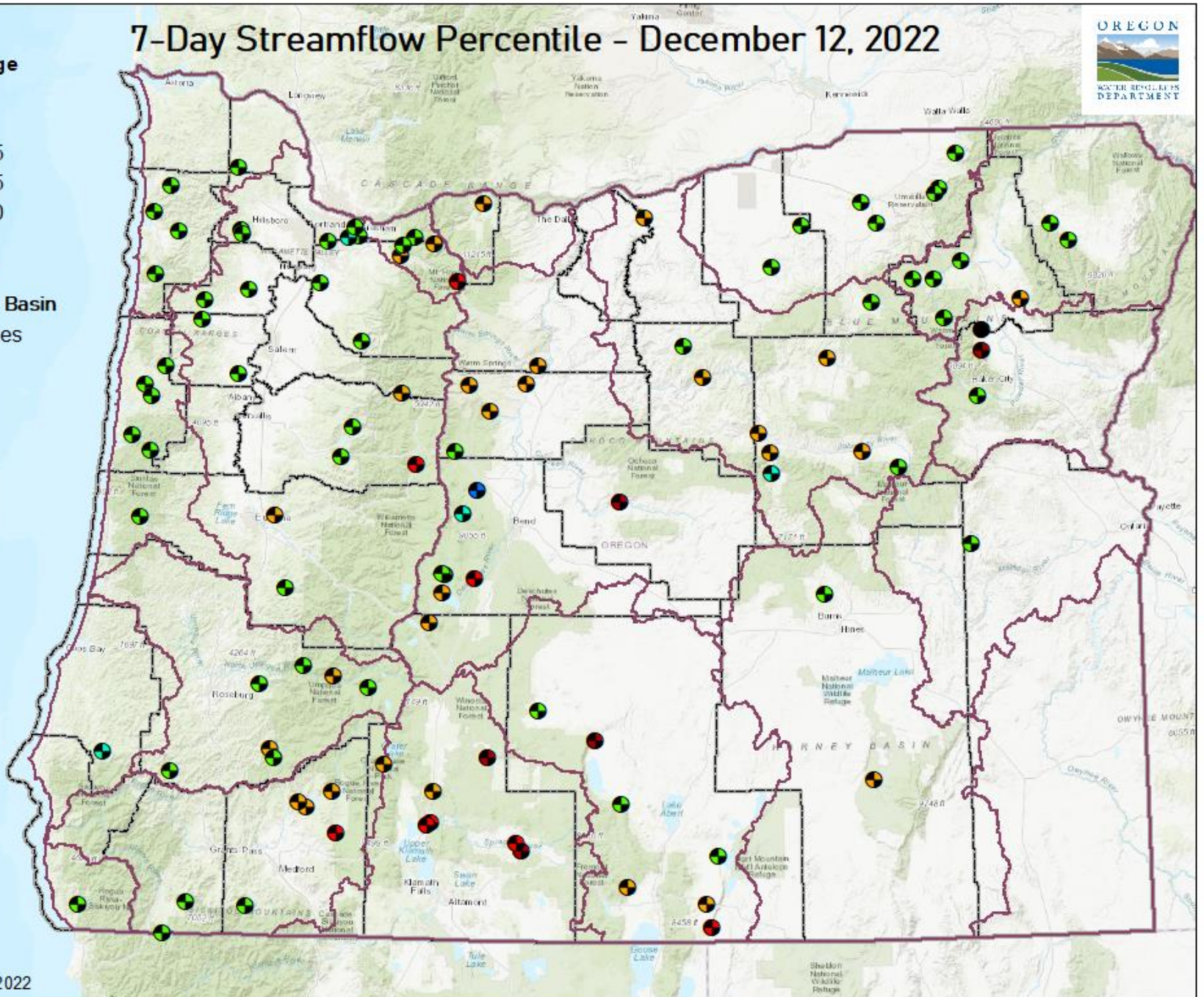
Date: 12/14/2022

7-Day Streamflow Percentile - December 12, 2022



Stream Gage

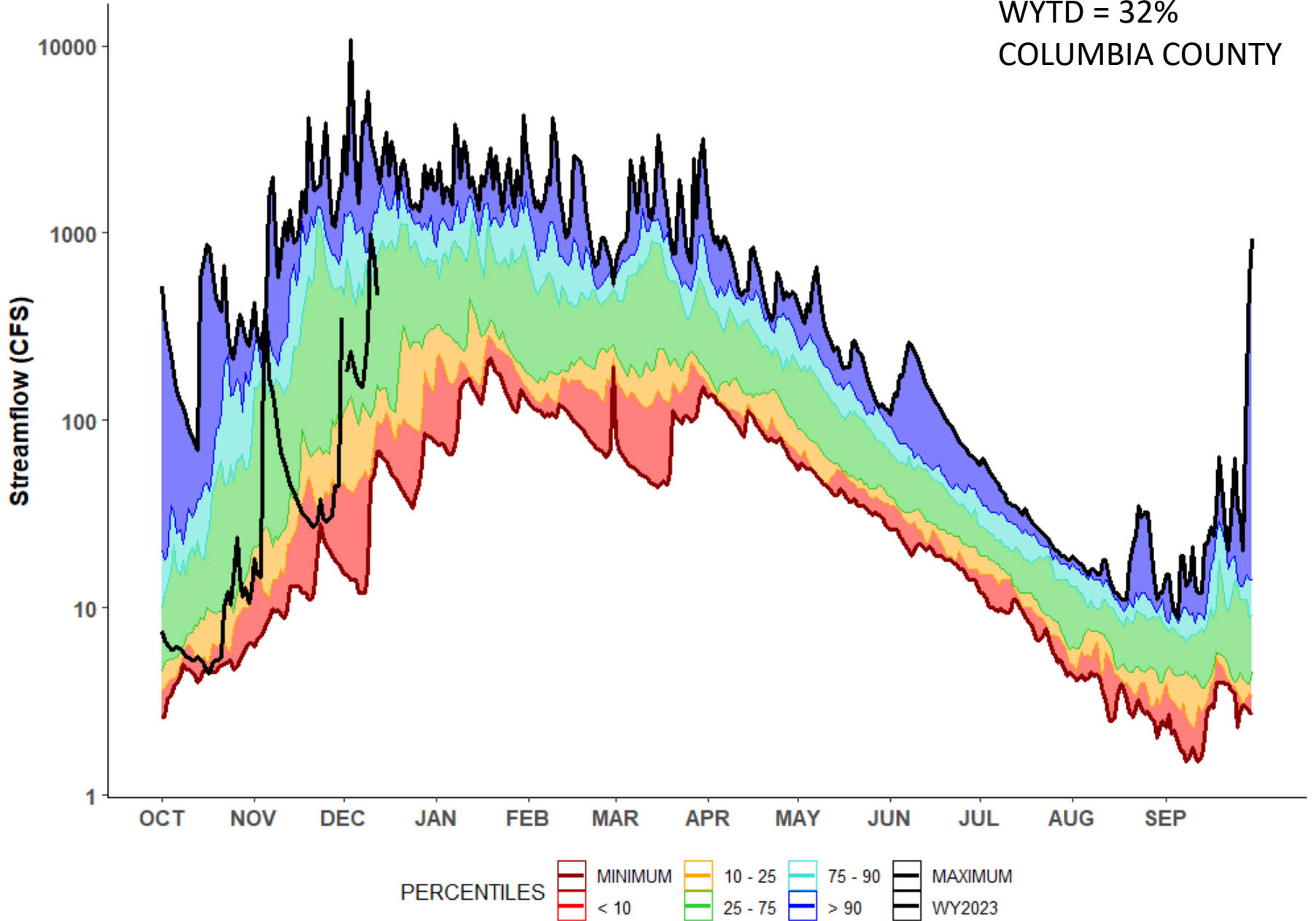
- LOW
- < 10
- 10 - 25
- 25 - 75
- 75 - 90
- > 90
- HIGH
- OWRD Basin
- Counties



Date: 12/14/2022

14299800 - NEHALEM R NR VERNONIA, OR
WILLAMETTE BASIN
POR: 1991-2020

WYTD = 32%
COLUMBIA COUNTY



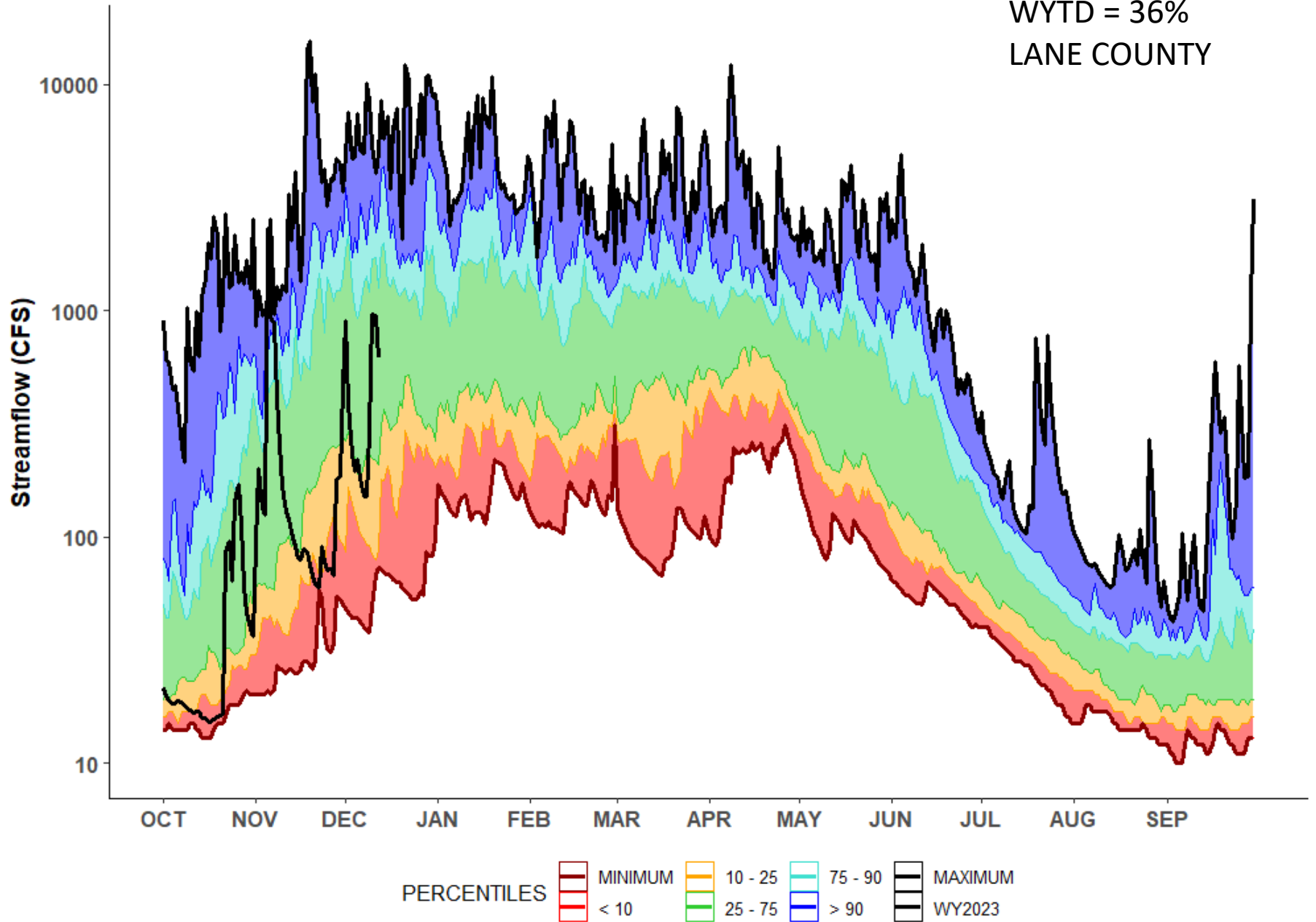
14154500 - ROW R AB PITCHER CR NR DORENA, OR

WILLAMETTE BASIN

POR: 1991-2020

WYTD = 36%

LANE COUNTY



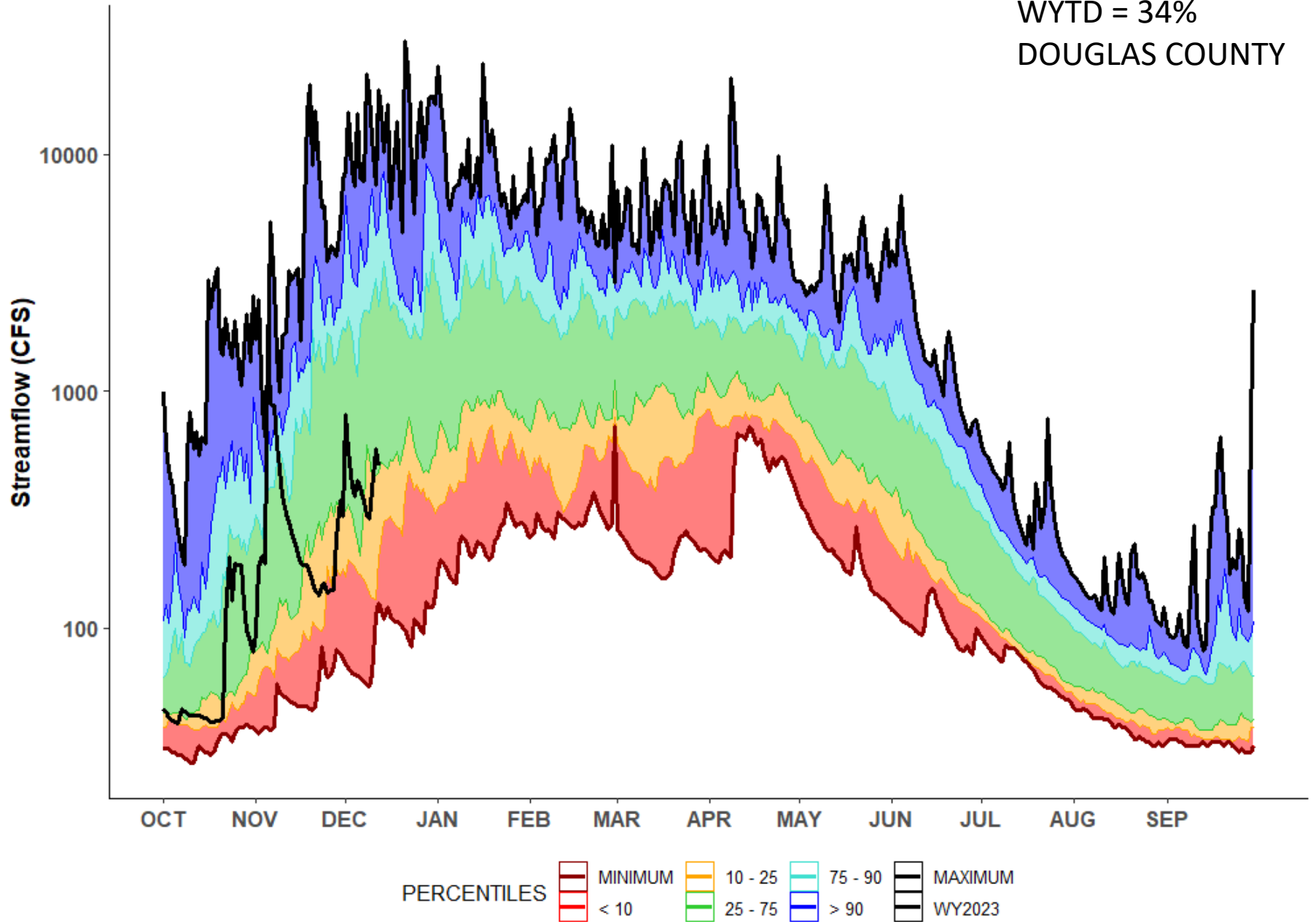
14308000 - S UMRQUA R AT TILLER, OR

UMPQUA BASIN

POR: 1991-2020

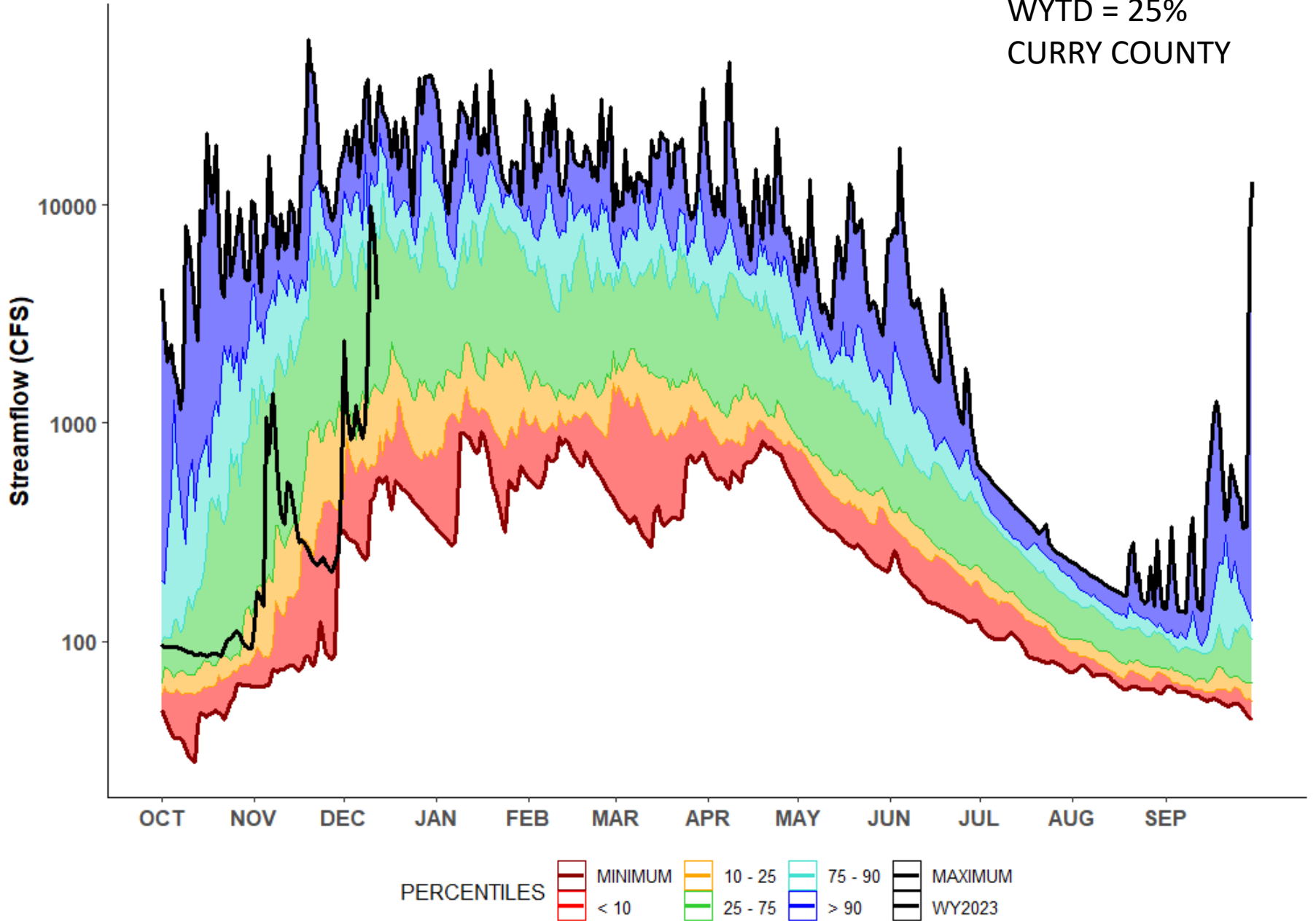
WYTD = 34%

DOUGLAS COUNTY



14400000 - CHETCO R NR BROOKINGS, OR
SOUTH COAST BASIN
POR: 1991-2020

WYTD = 25%
CURRY COUNTY



Summary



- Very low streamflows outside of Umatilla Basin
 - Combined effect of below average precipitation, cold temperatures, and above average snowpack
- Drought declarations to expire at start of new calendar year

OREGON



WATER RESOURCES
DEPARTMENT

QUESTIONS?



— BUREAU OF —
RECLAMATION

Beulah Reservoir
June 22, 2005
52,420 acre-feet (89% full)

Reclamation Storage Update

Oregon Water Supply Availability
Committee Meeting

December 14, 2022

Basin Operations Summary

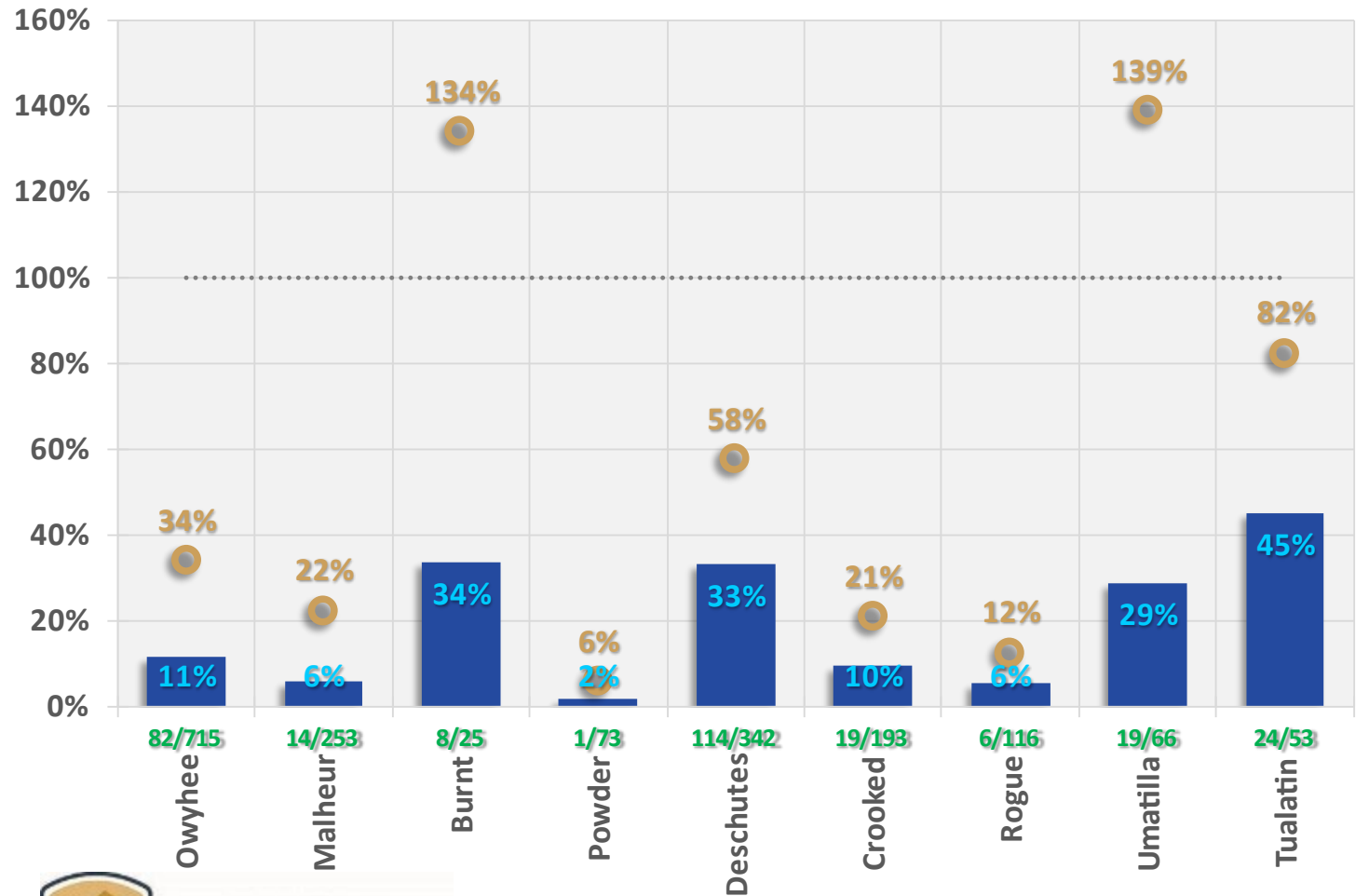
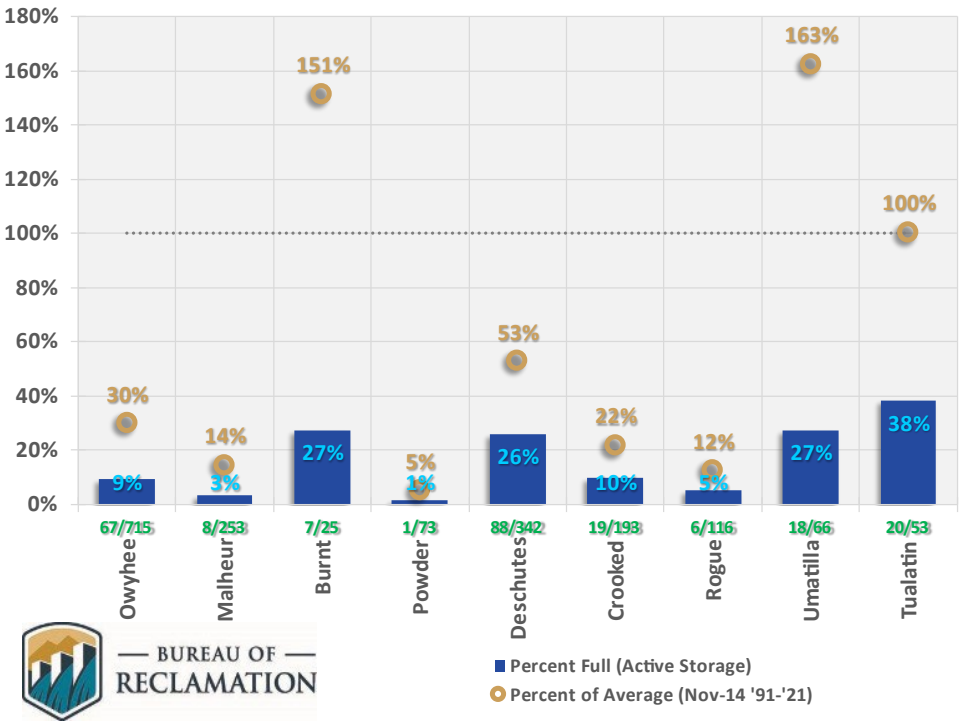
- **Operations Activities:**
 - Reservoirs are releasing winter minimums to continue filling
 - No FRM operations
- **Water Supply Notes**
 - Below Normal Inflows
 - Much below normal storage content in the southern, central and southeastern basins (Rogue, Deschutes, Crooked, Malheur, Powder, Owyhee) => similar to WY2022
 - Below normal storage content at Scoggins but will catch up to normal quickly if we get some storms
 - Above normal and higher storage content than WY2022 in the northern basins (Unity, McKay)



Storage Conditions

Oregon Reservoir Storage (Dec 12 2022)

Oregon Reservoir Storage (Nov 14 2022)

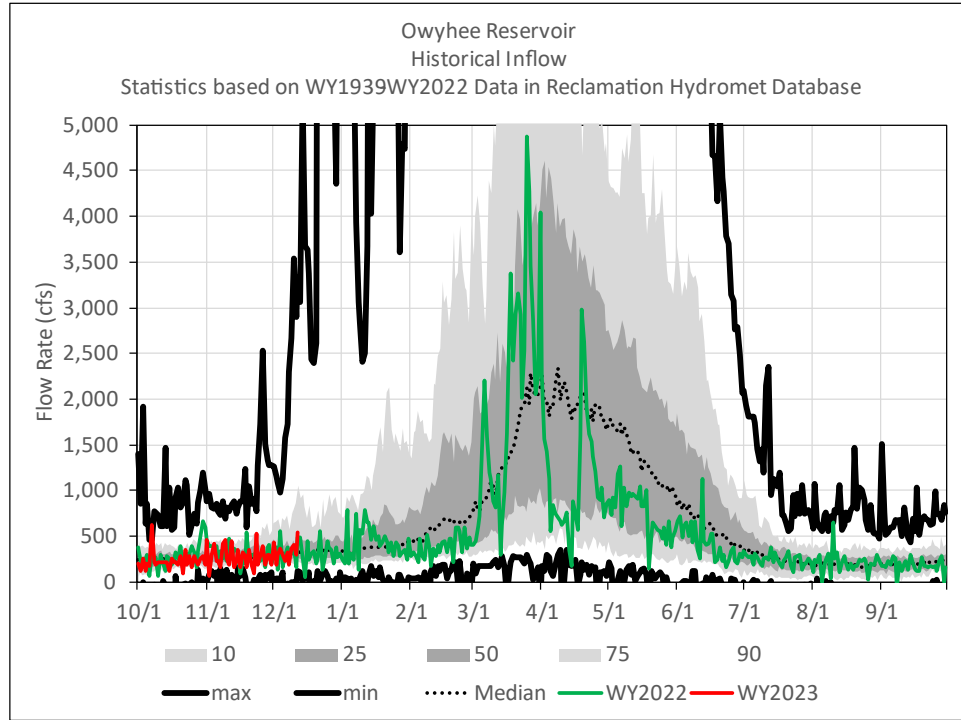
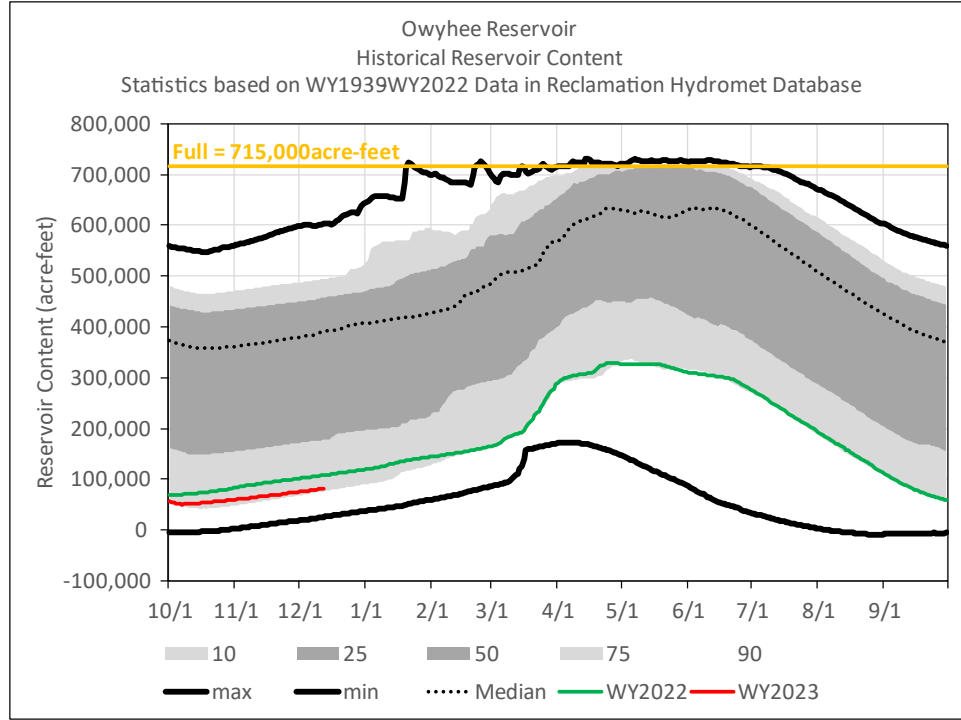
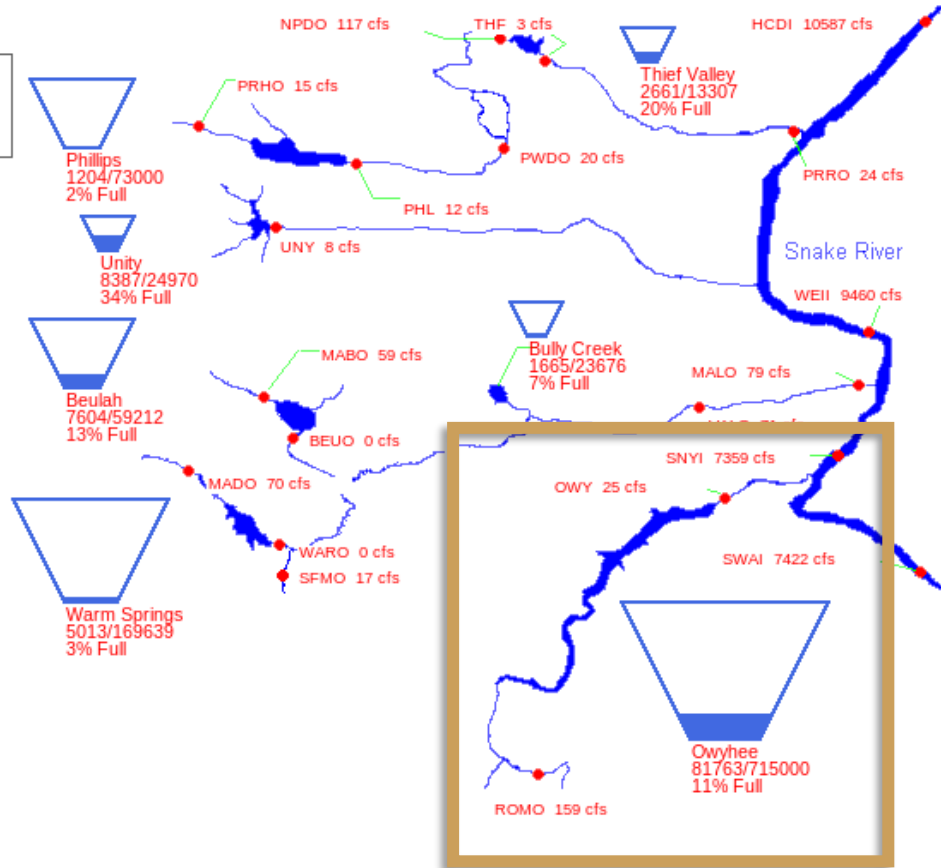
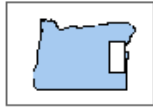


■ Percent Full (Active Storage)
 ■ Current/Full Storage (KAF)

● Percent of Average (Dec-12 '91-'21)

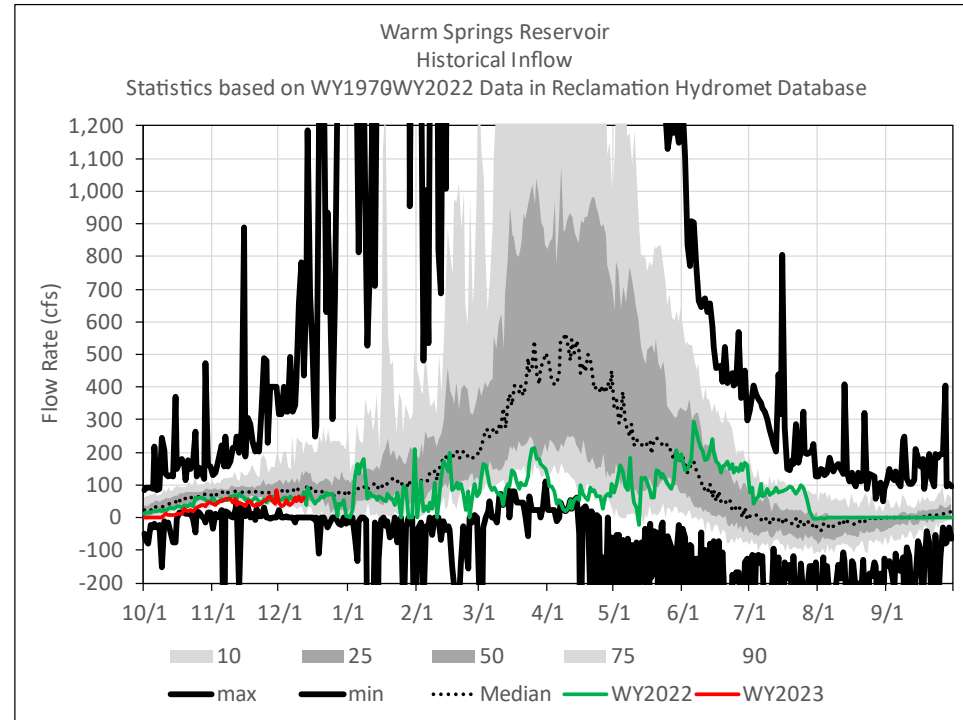
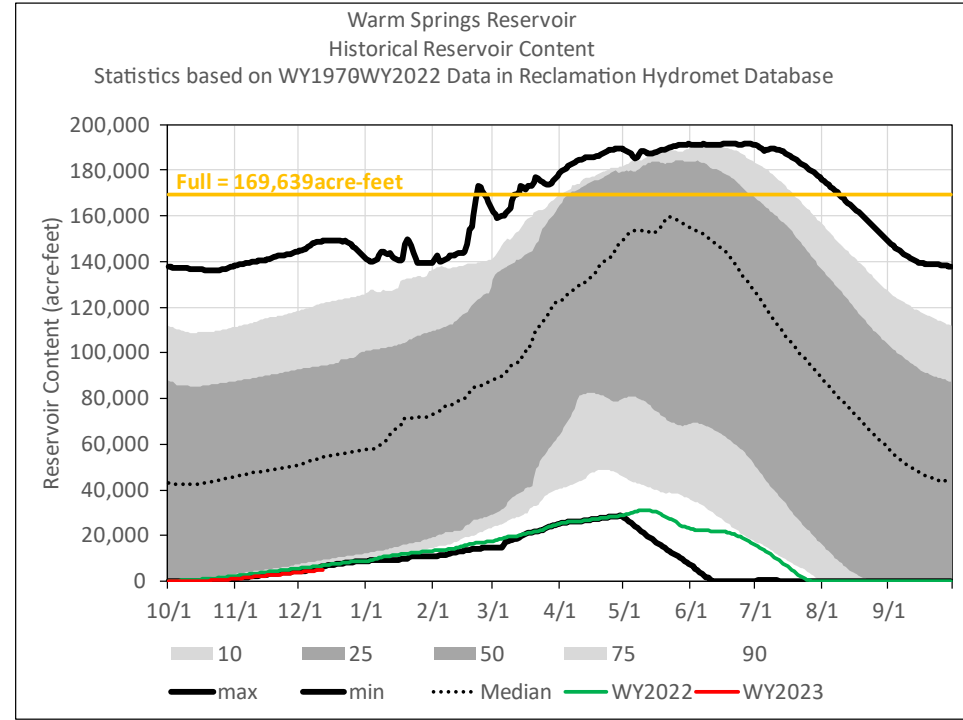
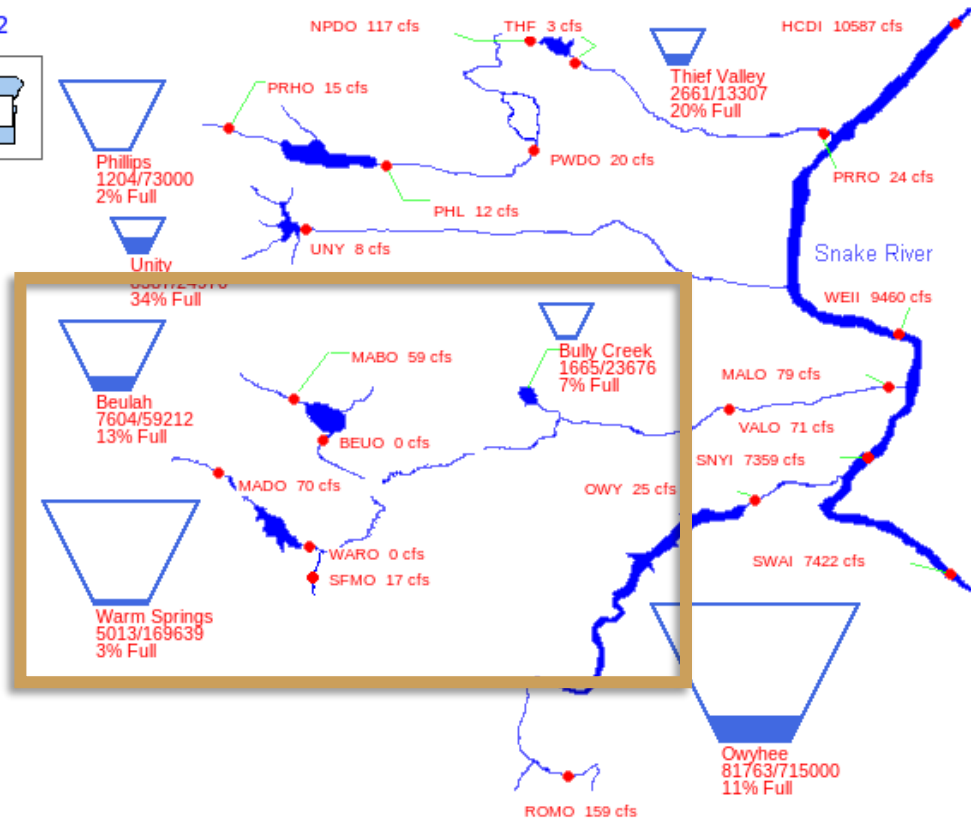
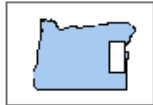
Owyhee River Basin

12/12/2022



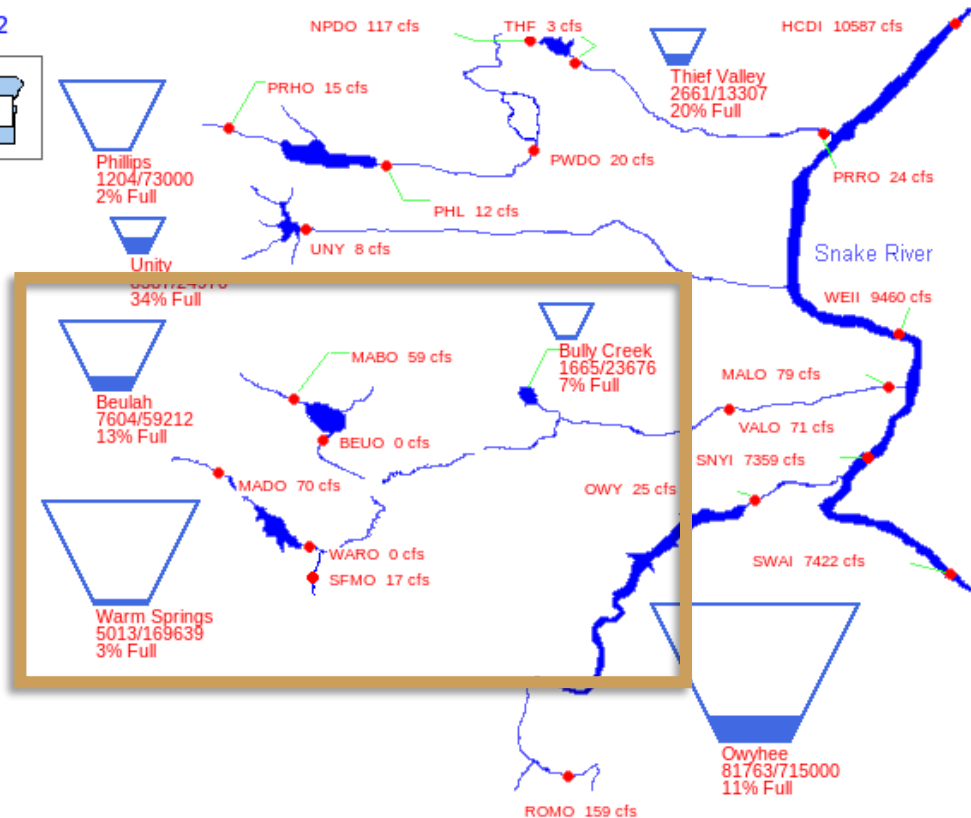
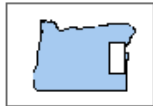
Malheur River Basin

12/12/2022

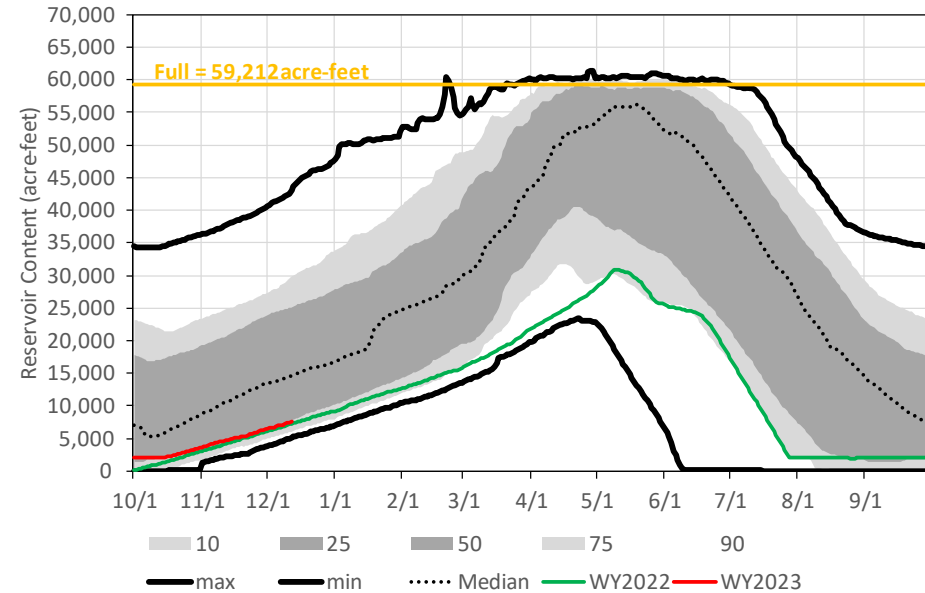


Malheur River Basin

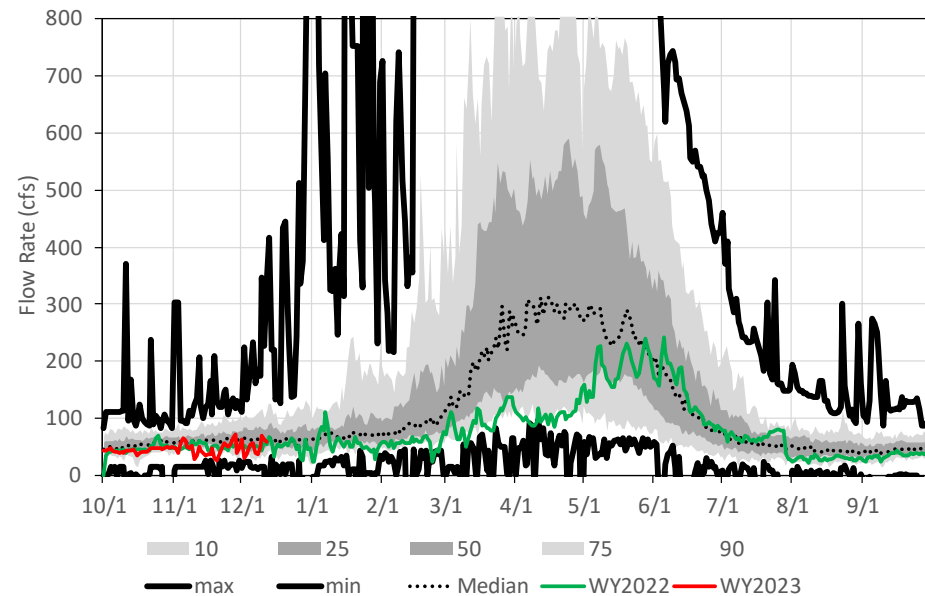
12/12/2022



Beulah Reservoir
Historical Reservoir Content
Statistics based on WY1970WY2022 Data in Reclamation Hydromet Database

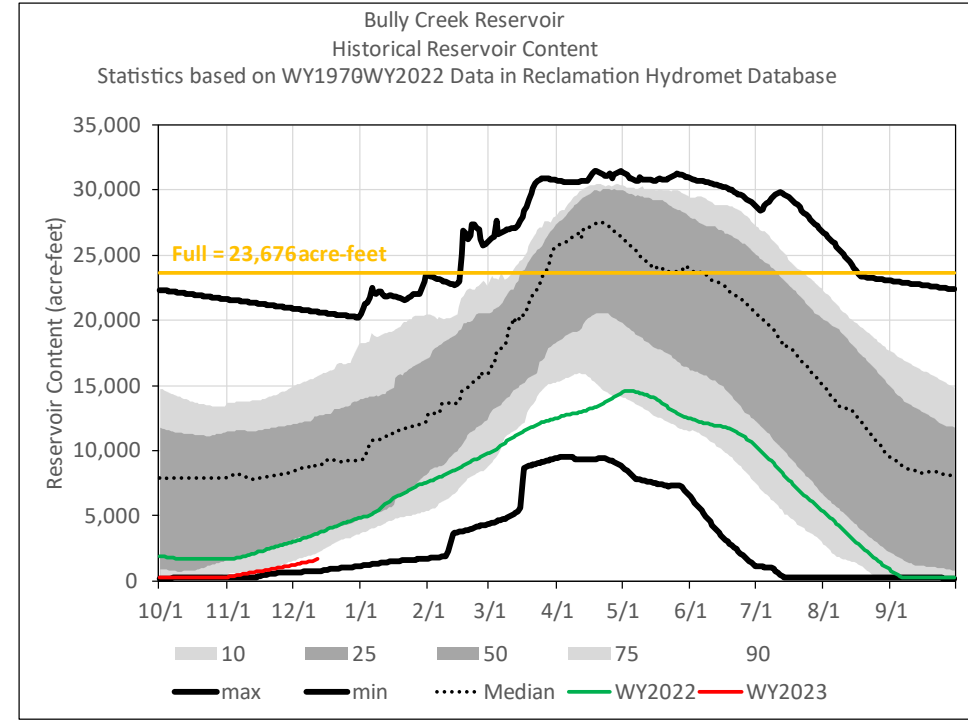
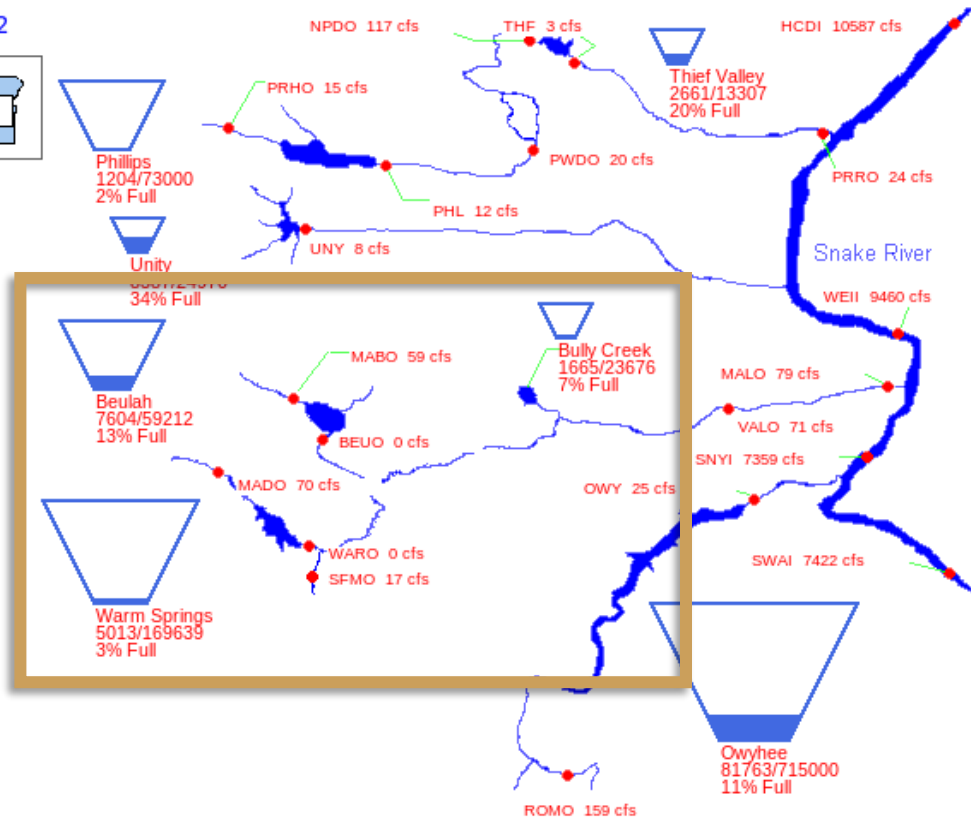
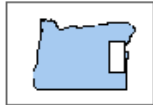


Beulah Reservoir
Historical Inflow
Statistics based on WY1970WY2022 Data in Reclamation Hydromet Database



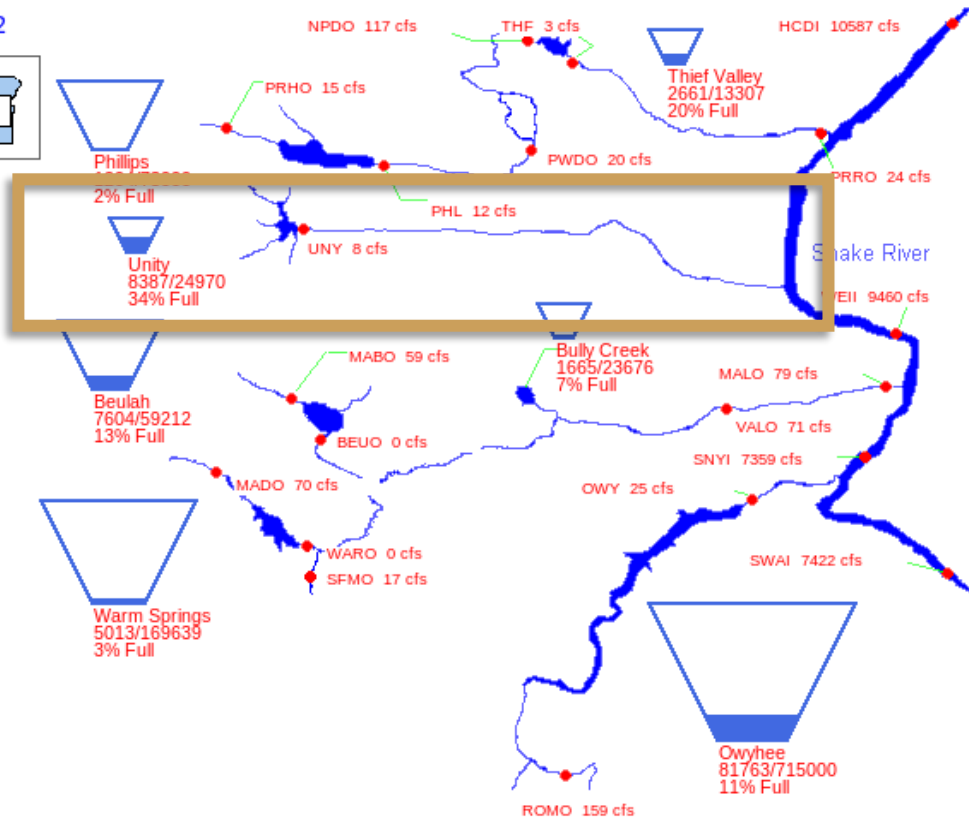
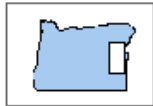
Malheur River Basin

12/12/2022

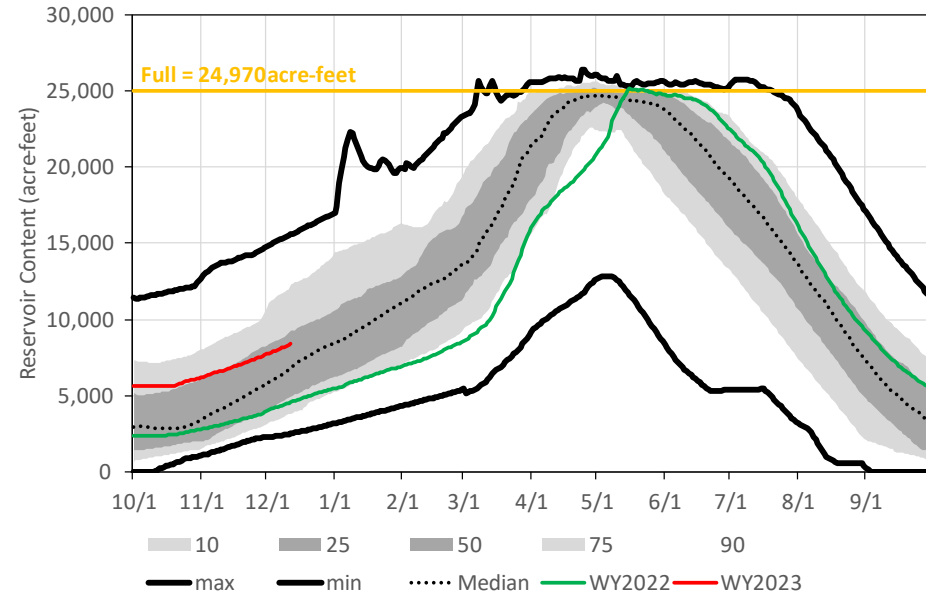


Burnt River Basin

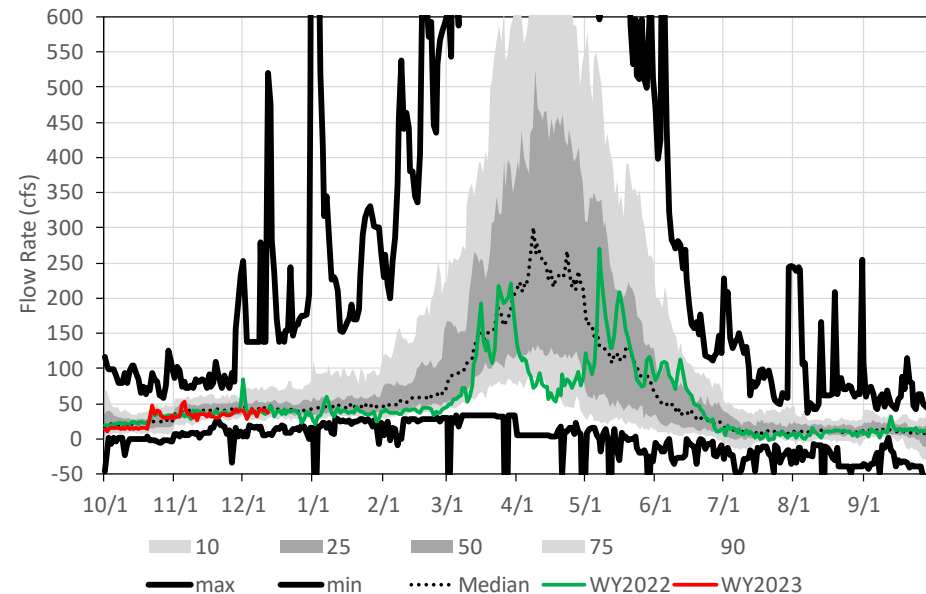
12/12/2022



Unity Reservoir
Historical Reservoir Content
Statistics based on WY1961-WY2022 Data in Reclamation Hydromet Database

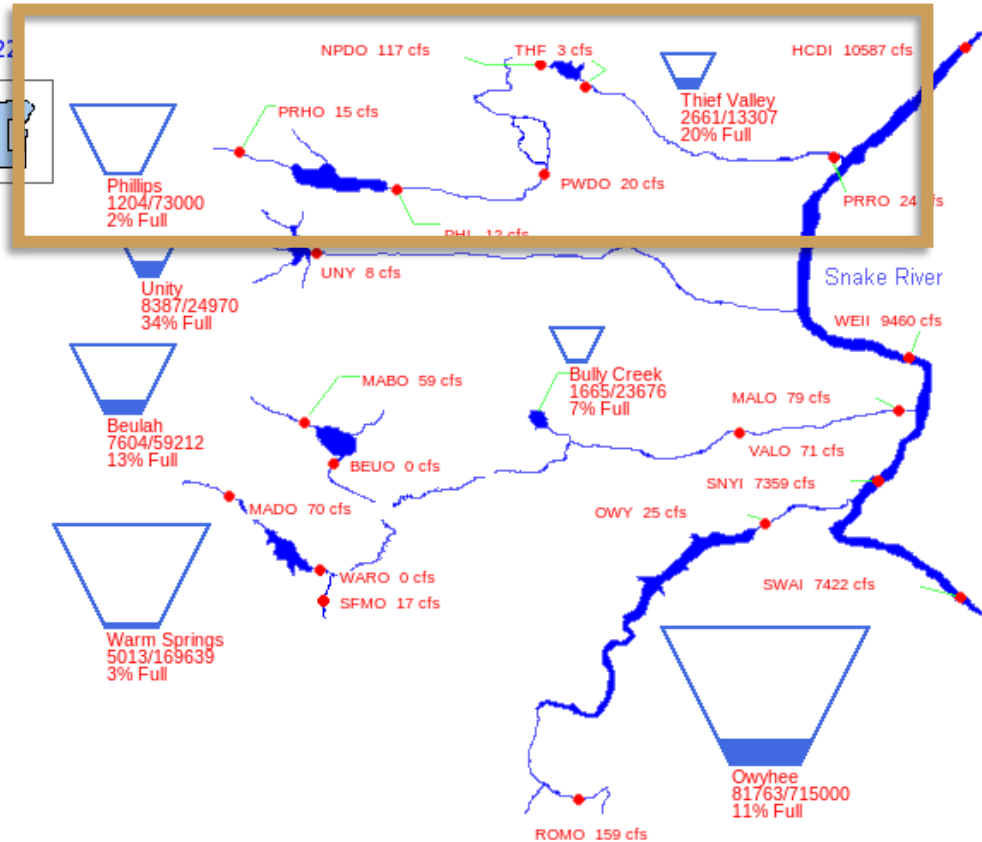


Unity Reservoir
Historical Inflow
Statistics based on WY1961-WY2022 Data in Reclamation Hydromet Database

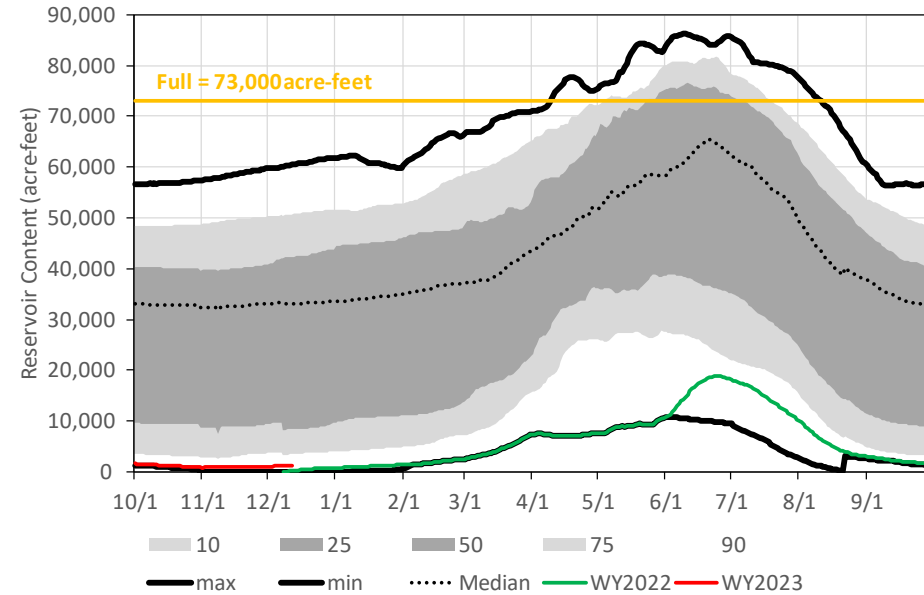


Powder River Basin

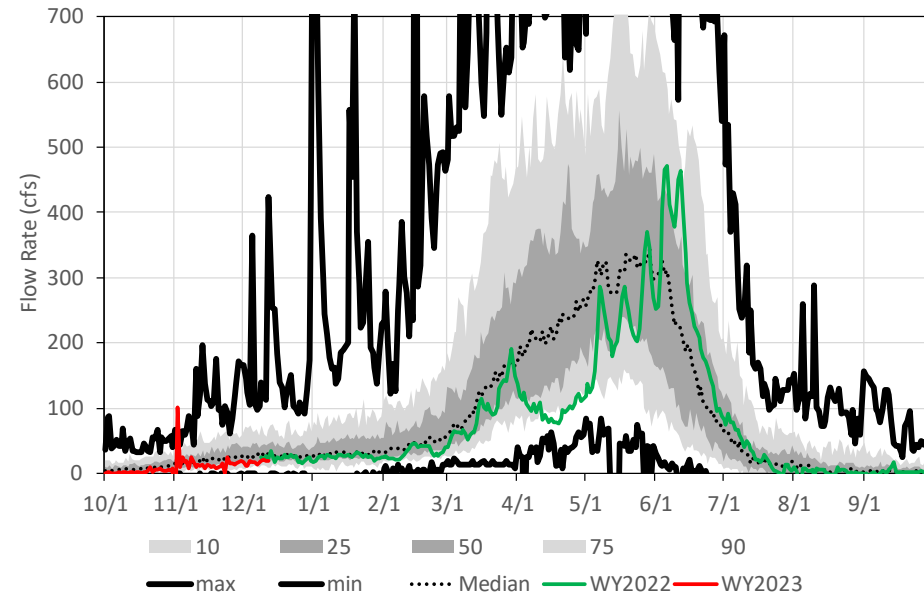
12/12/2022



Phillips Reservoir
Historical Reservoir Content
Statistics based on WY1968WY2022 Data in Reclamation Hydromet Database

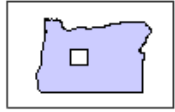


Phillips Reservoir
Historical Inflow
Statistics based on WY1968WY2022 Data in Reclamation Hydromet Database

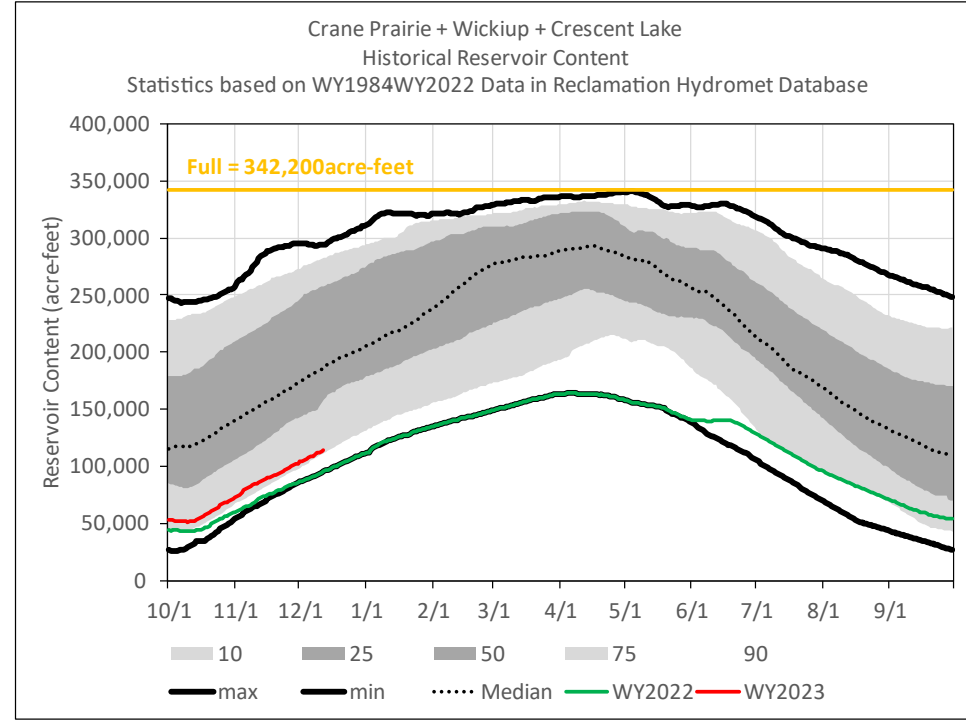
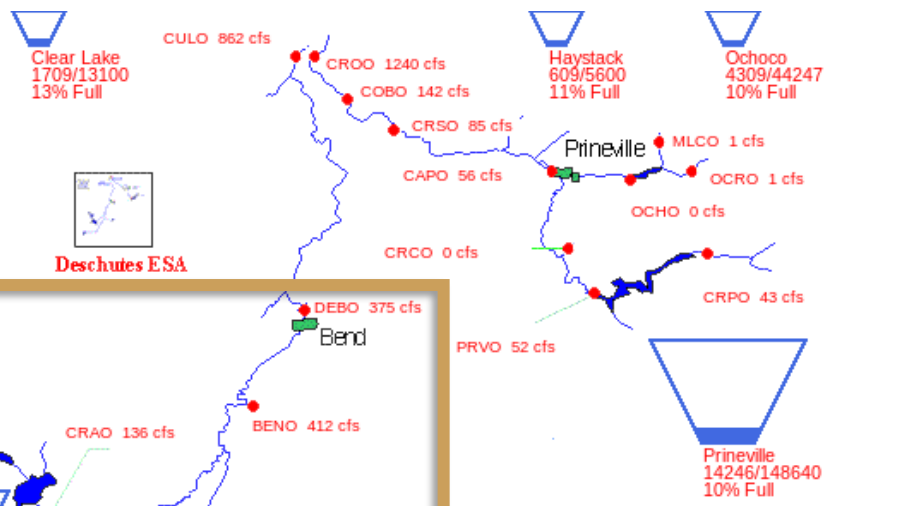
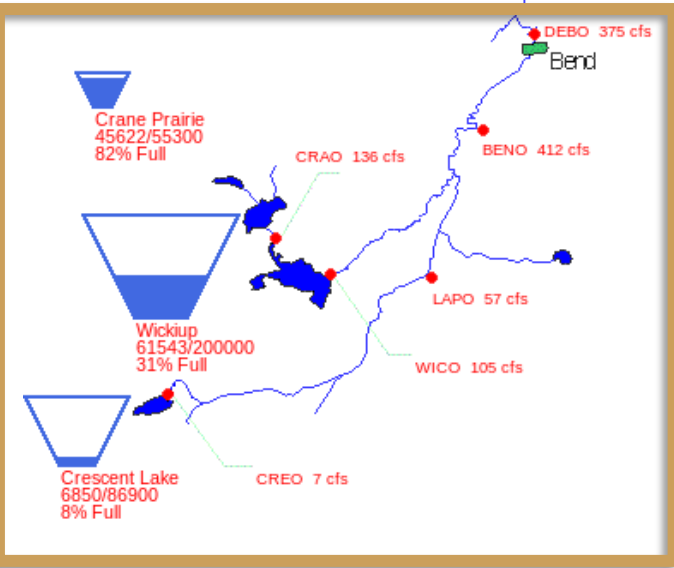


Deschutes River Basin

12/12/2022

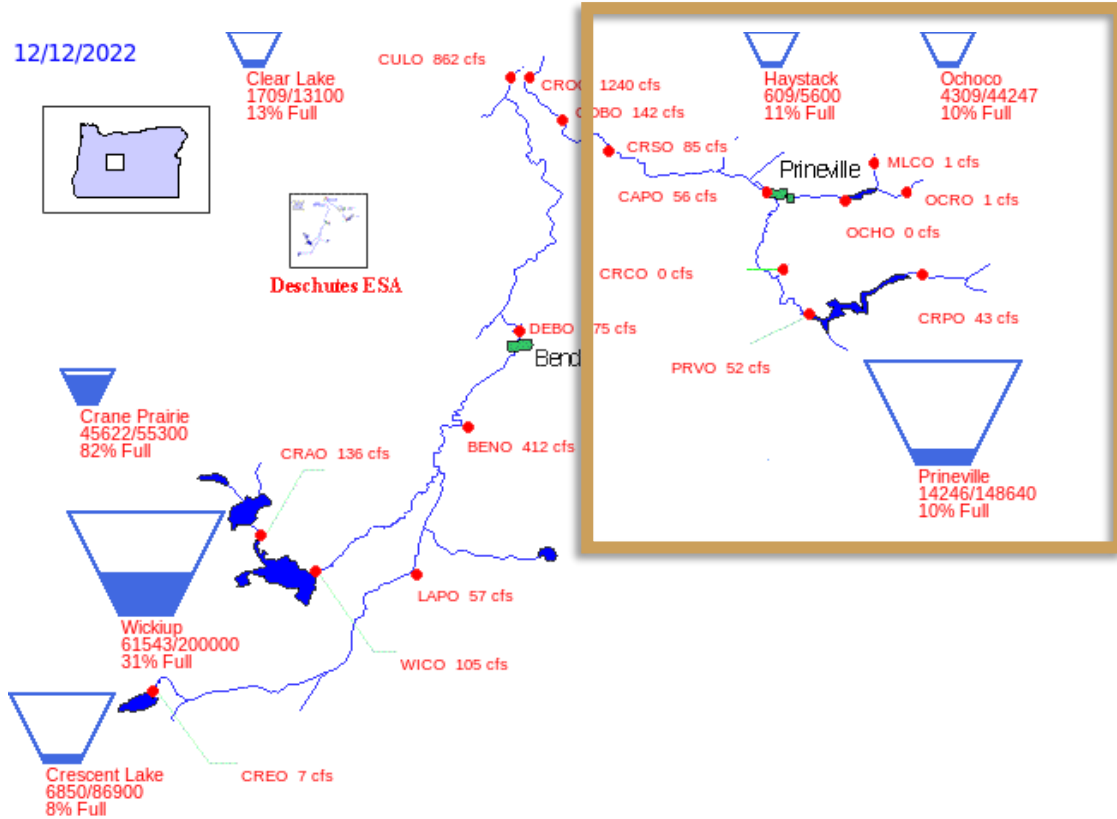


Deschutes ESA

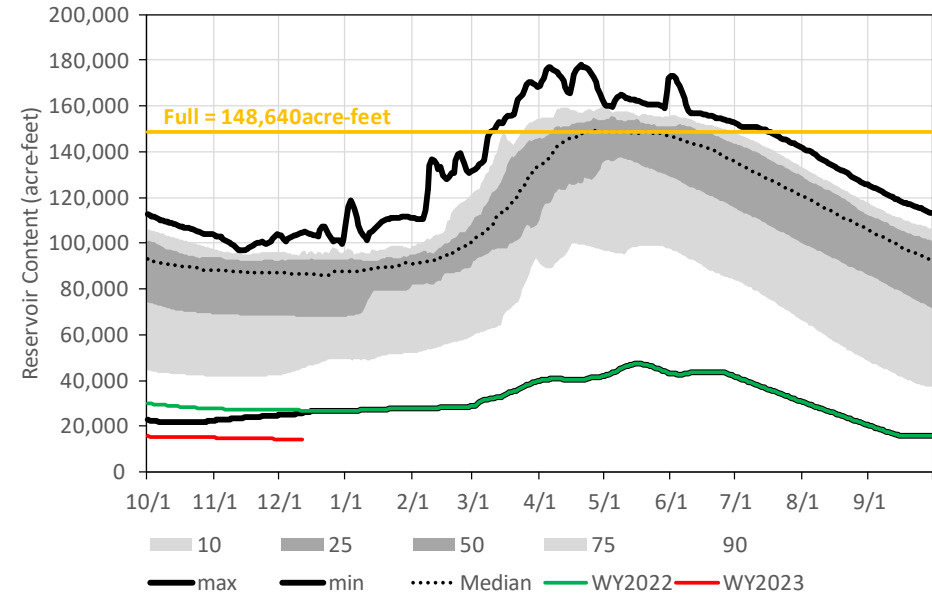


Crooked River Basin

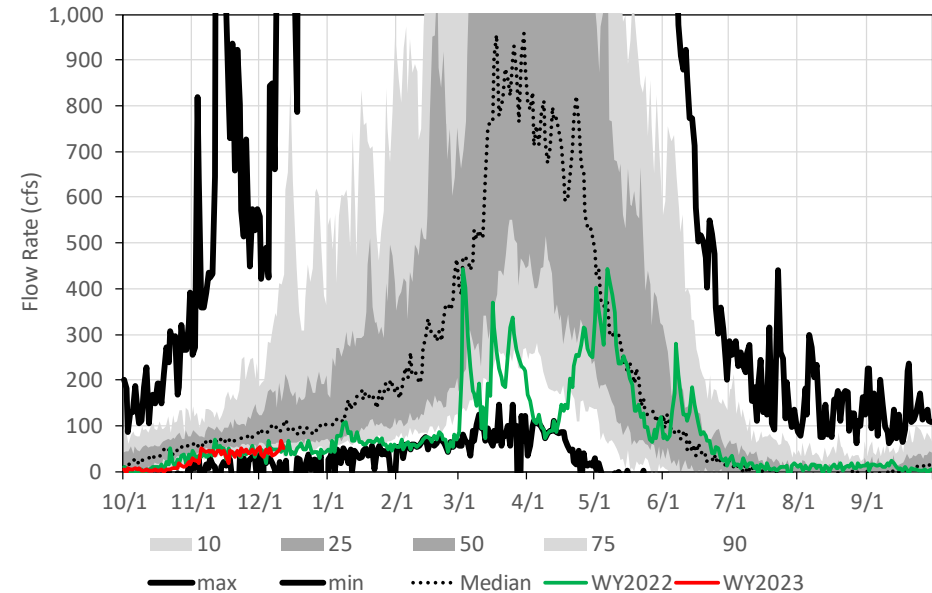
12/12/2022



Prineville Reservoir
Historical Reservoir Content
Statistics based on WY1976WY2022 Data in Reclamation Hydromet Database

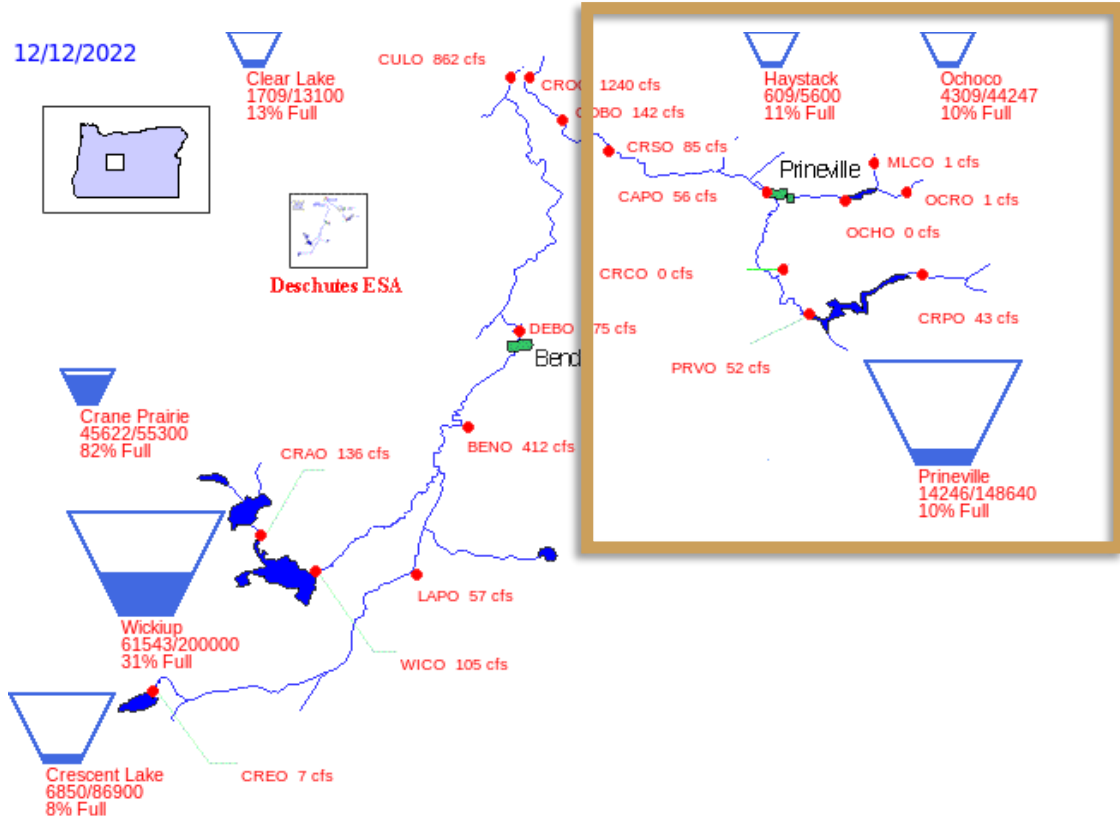


Prineville Reservoir
Historical Inflow
Statistics based on WY1976WY2022 Data in Reclamation Hydromet Database

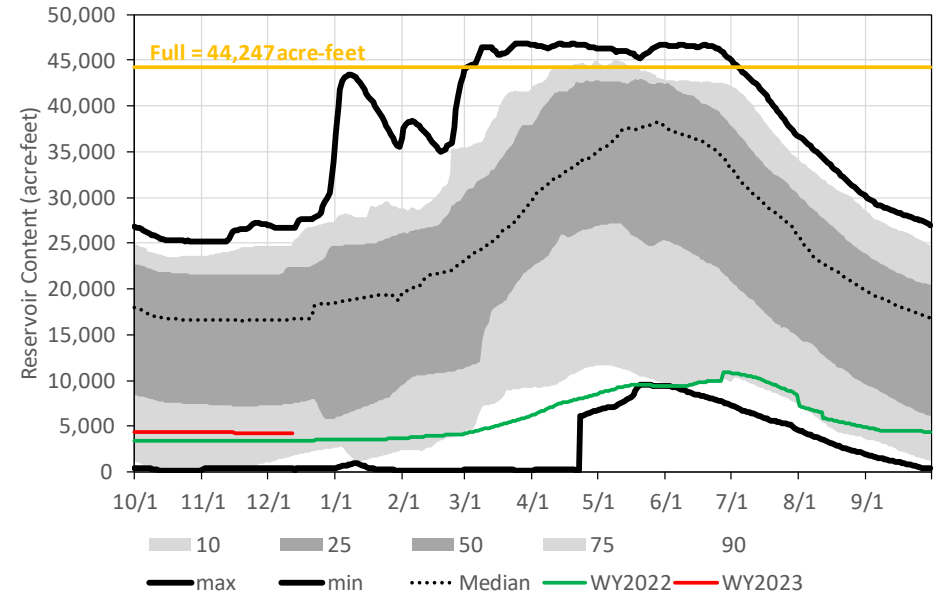


Crooked River Basin

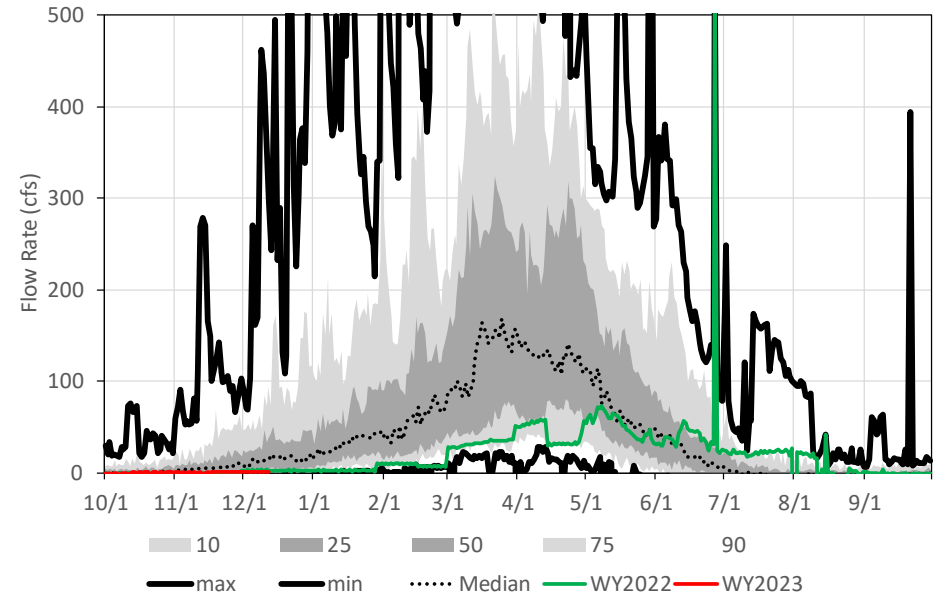
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Ochoco Reservoir
Historical Reservoir Content
Statistics based on WY1984WY2022 Data in Reclamation Hydromet Database

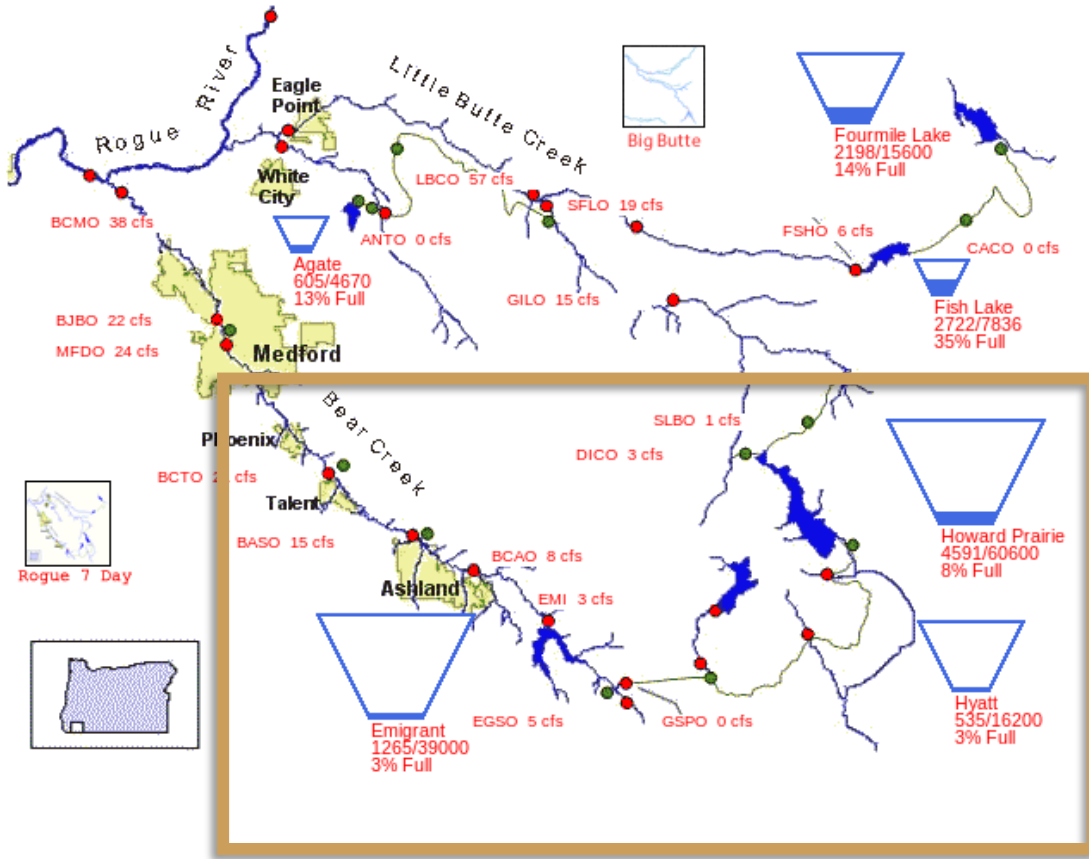


Ochoco Reservoir
Historical Inflow
Statistics based on WY1984WY2022 Data in Reclamation Hydromet Database

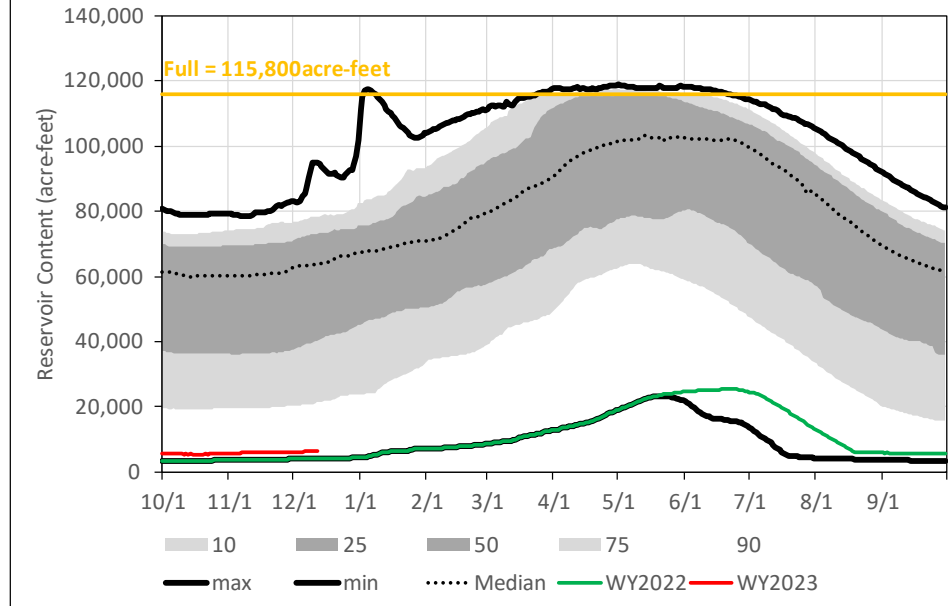


Rogue River Basin

12/12/2022

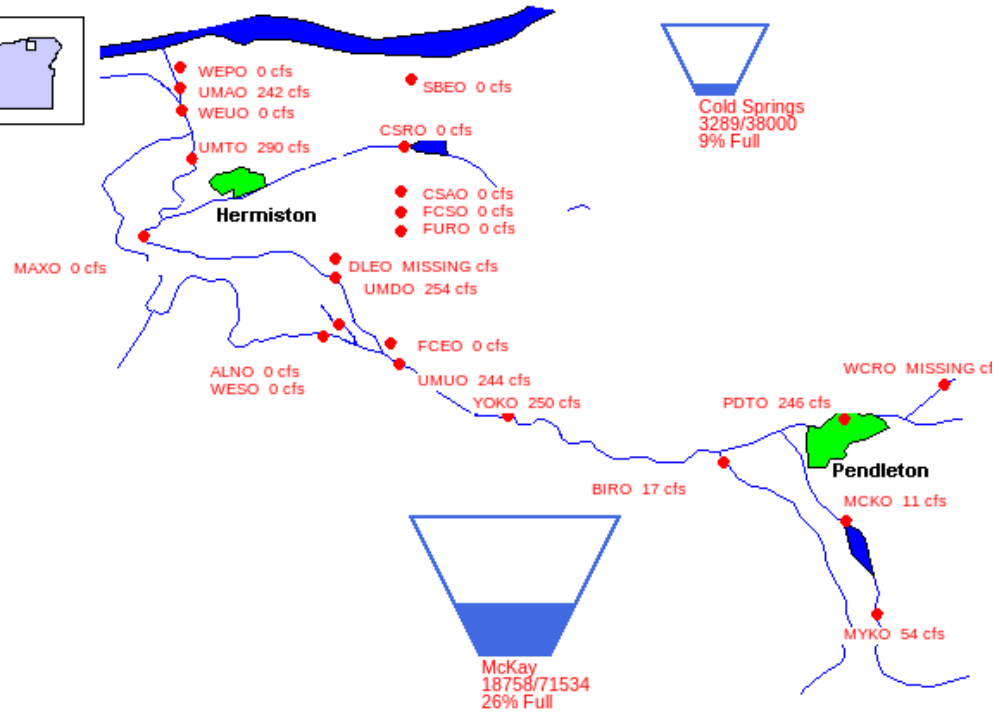
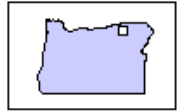


Hyatt + Howard Prairie + Emigrant Reservoirs
Historical Reservoir Content
Statistics based on WY1969WY2022 Data in Reclamation Hydromet Database

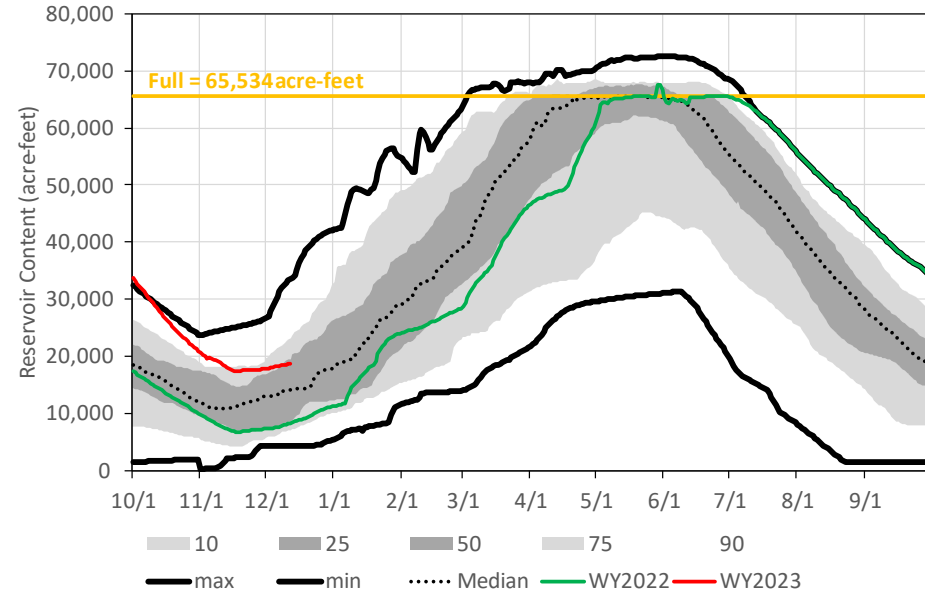


Umatilla River Basin

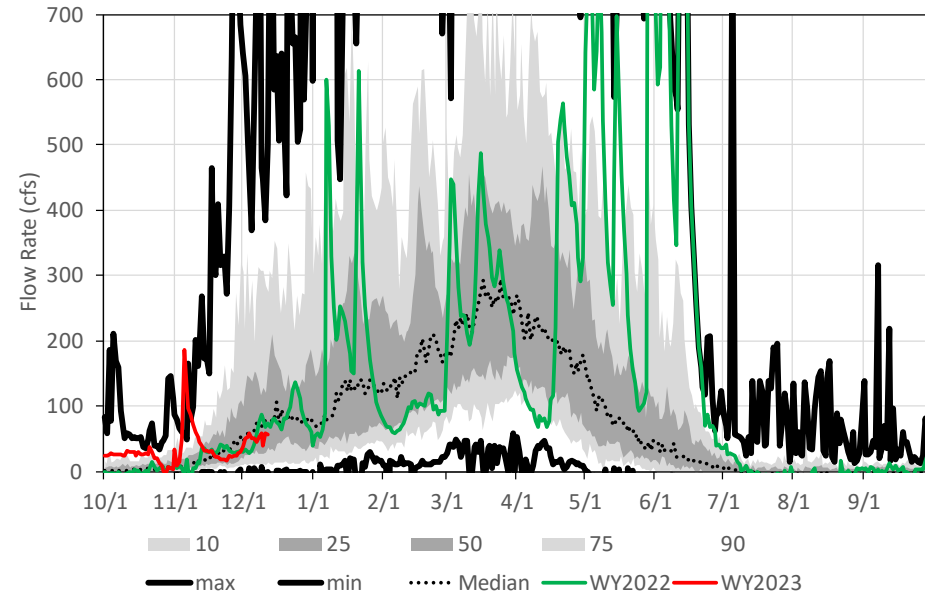
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McKay Reservoir
Historical Reservoir Content
Statistics based on WY1974-WY2022 Data in Reclamation Hydromet Database

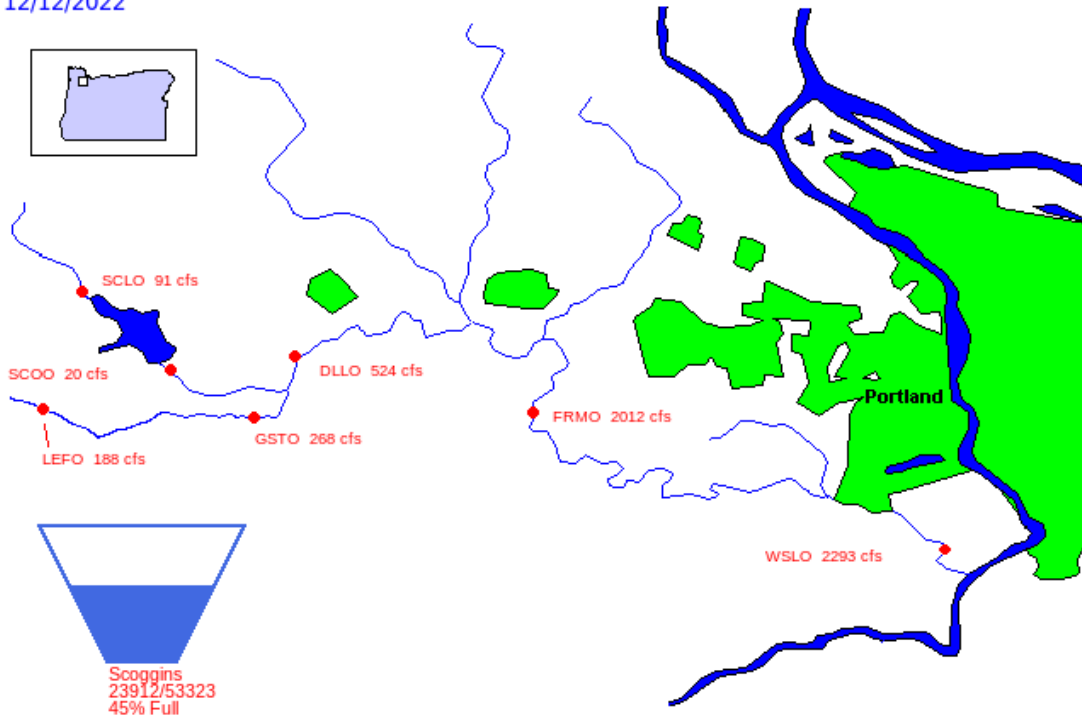


McKay Reservoir
Historical Inflow
Statistics based on WY1974-WY2022 Data in Reclamation Hydromet Database

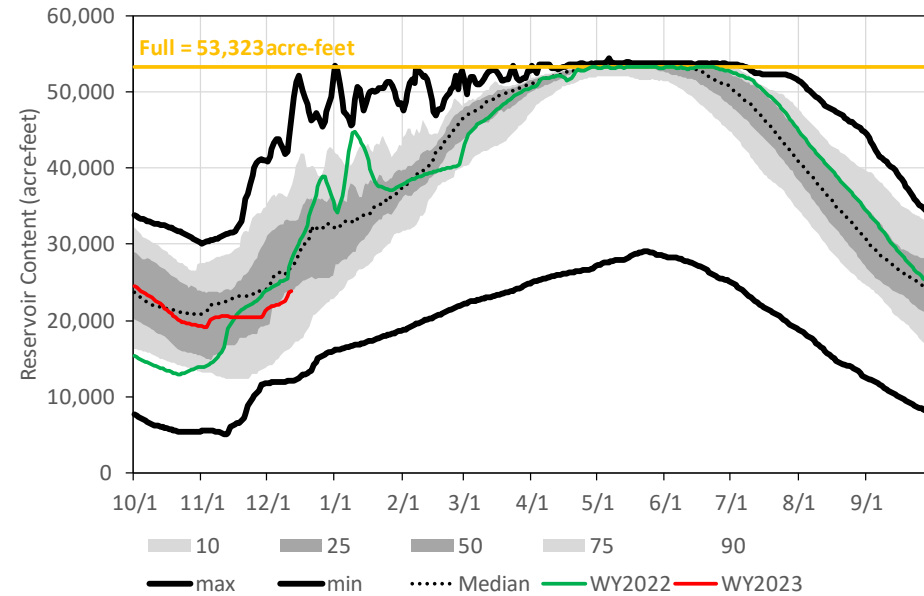


Tualatin River Basin

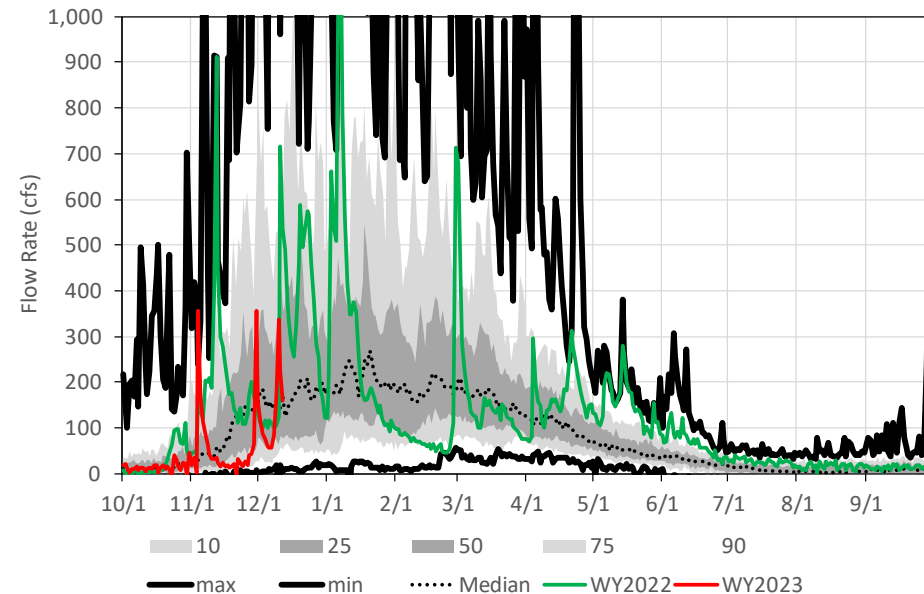
12/12/2022



Scoggins Reservoir
Historical Reservoir Content
Statistics based on WY1977WY2022 Data in Reclamation Hydromet Database



Scoggins Reservoir
Historical Inflow
Statistics based on WY1977WY2022 Data in Reclamation Hydromet Database



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208.378.5037

Warm Springs Reservoir

June 22, 2005

99,010 acre-feet (58% full)



— BUREAU OF —
RECLAMATION