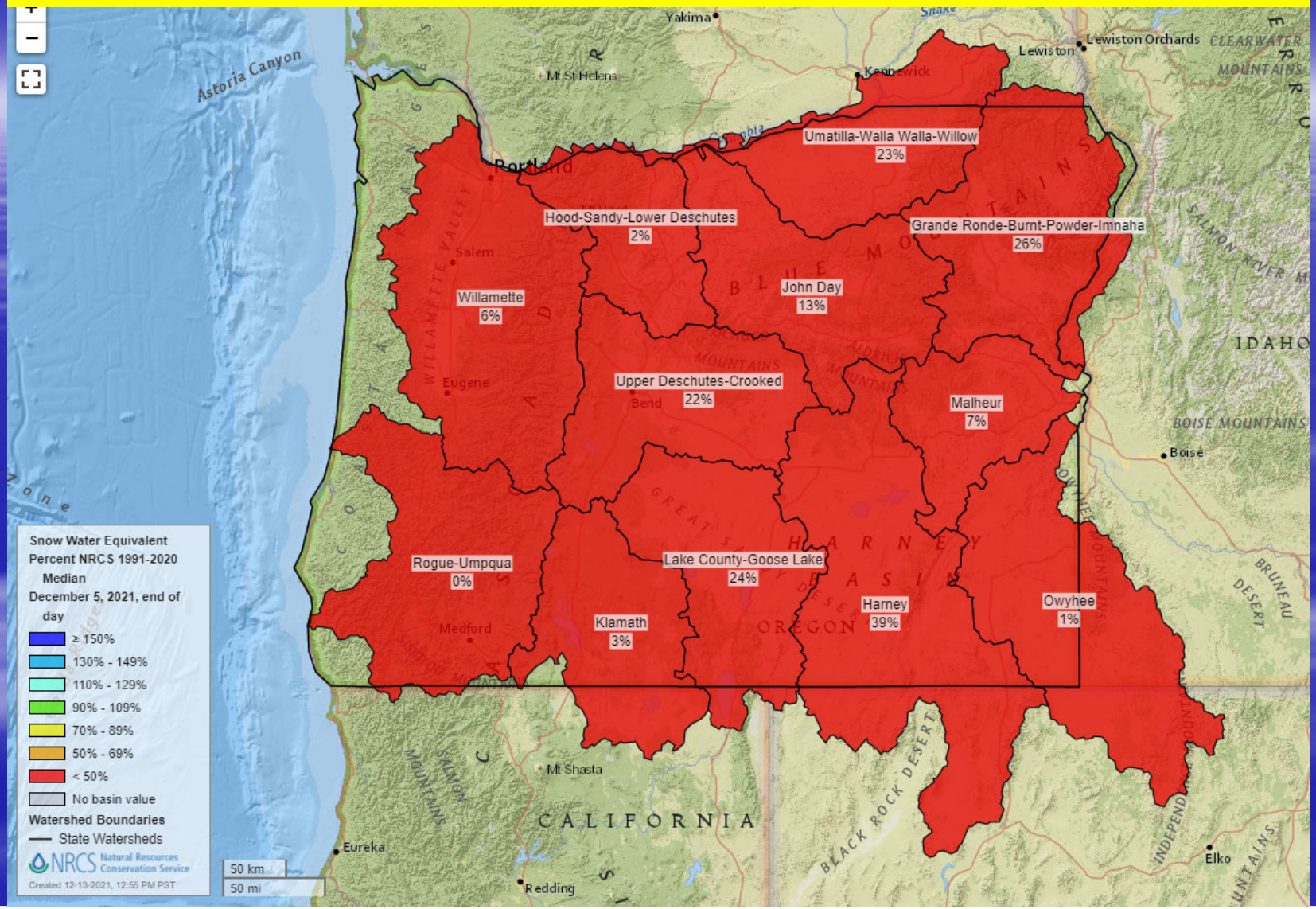
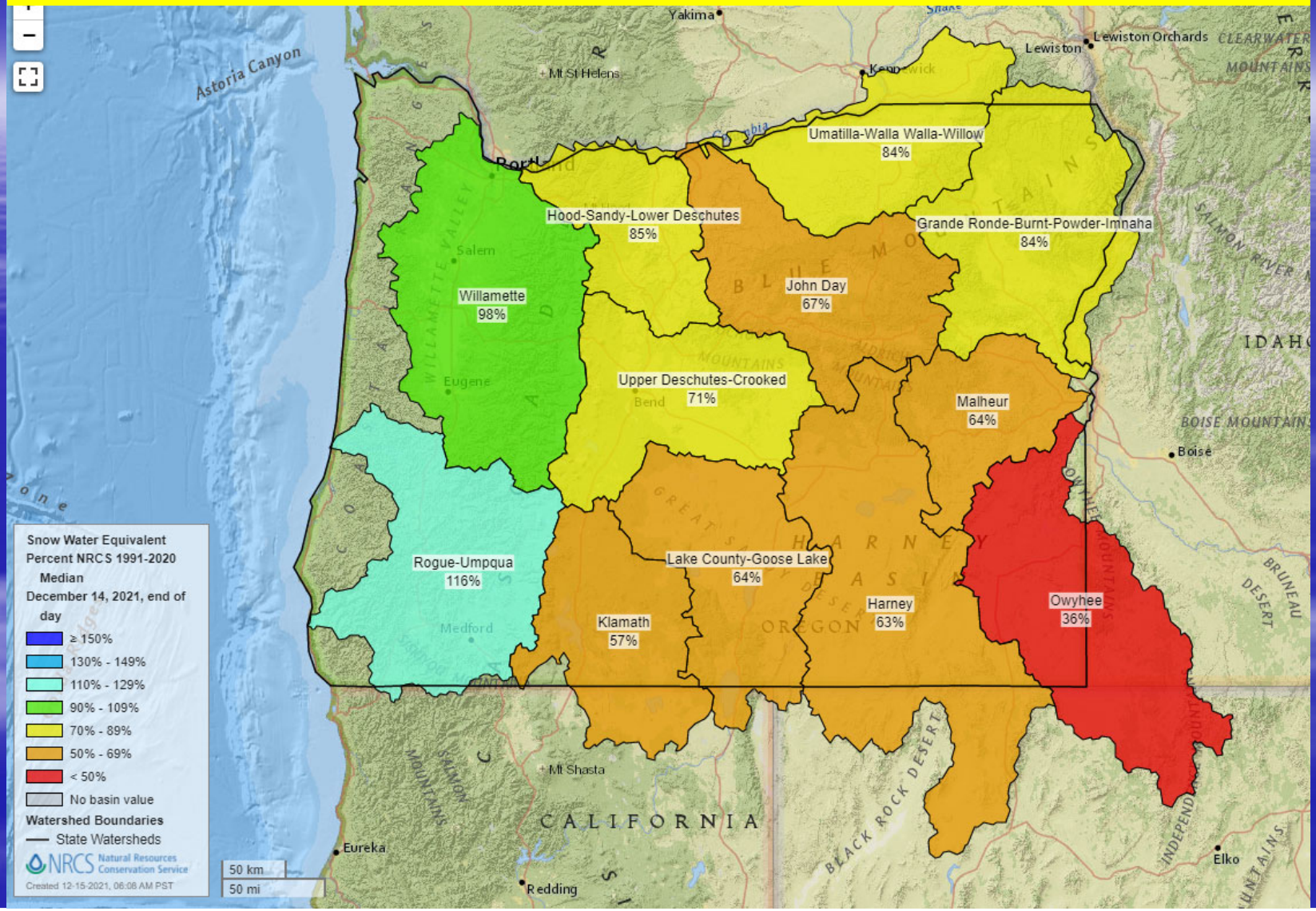
Oregon Water Supply Availability Committee - December 15, 2021

H. Scott Oviatt
Snow Survey Supervisory Hydrologist
USDA Natural Resources Conservation Service
Oregon State Office
Scott.Oviatt@usda.gov
503-414-3271

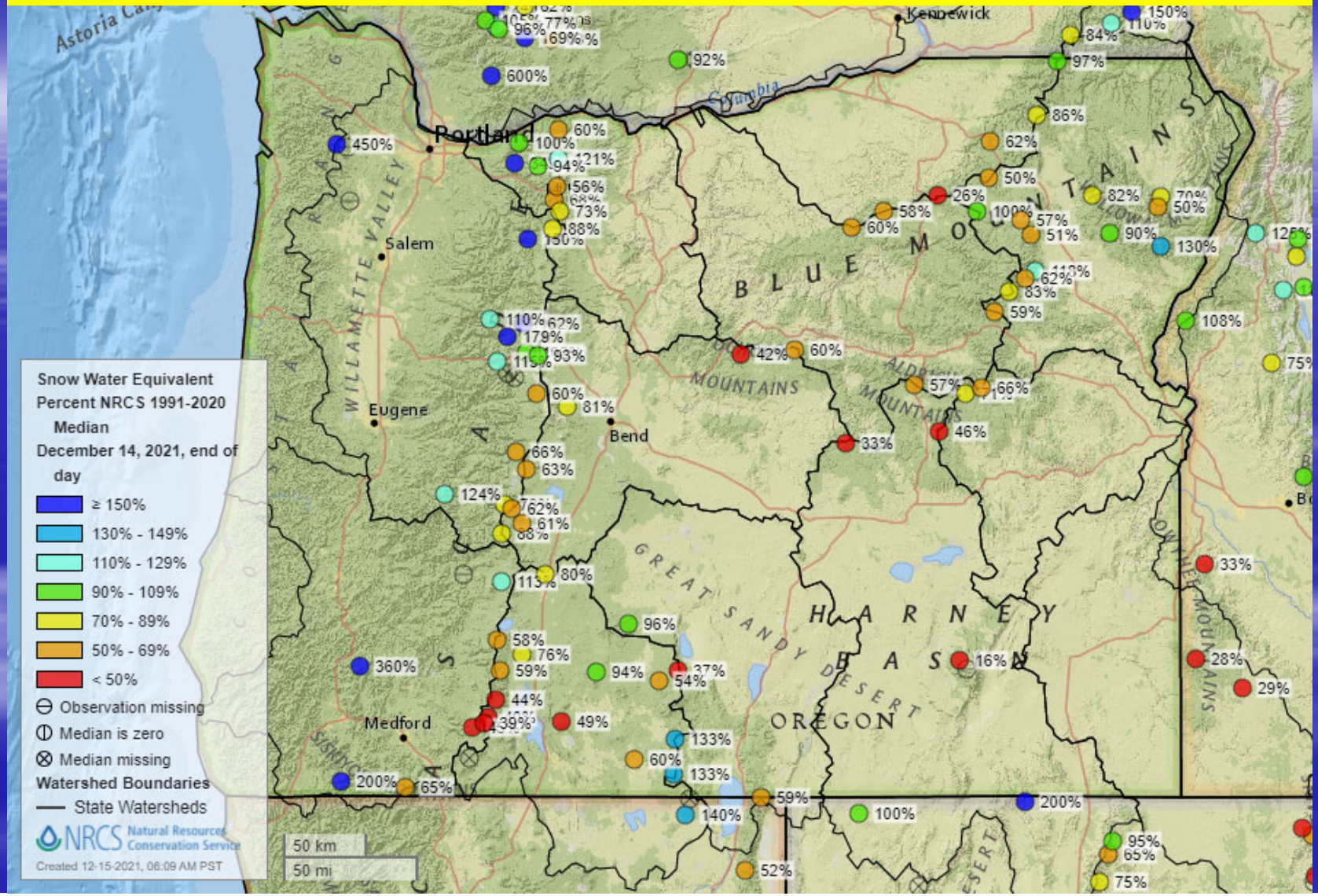
December 5, 2021, Statewide SNOTEL Snow Water Equivalent was 13% of 1991-2020 median



December 14, 2021, Statewide SNOTEL Snow Water Equivalent is 80% of 1991-2020 median

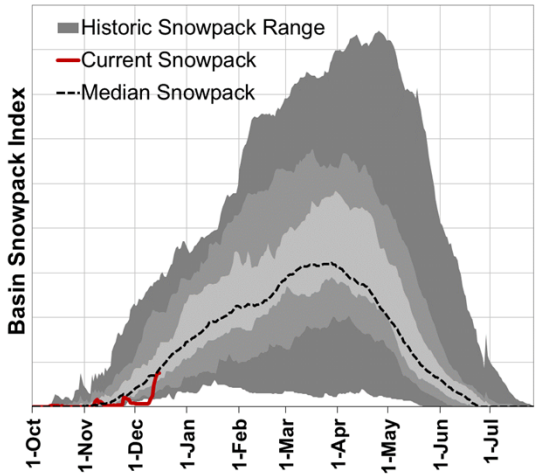


December 14, 2021, Statewide SNOTEL Snow Water Equivalent - % of 1991-2020 median

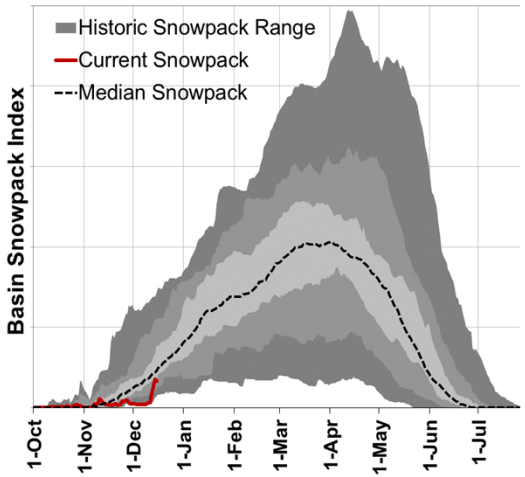


OREGON SNOWPACK GRAPHS – December 14, 2021

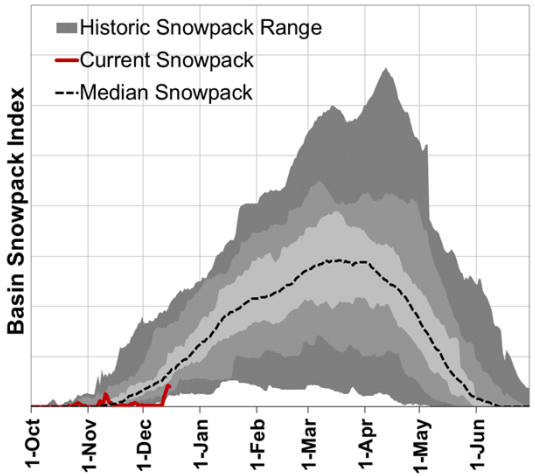
Willamette



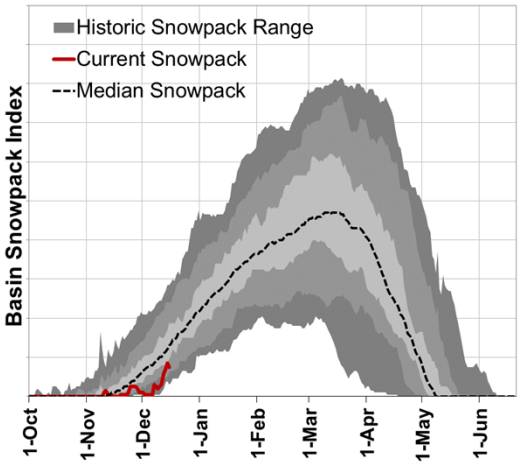
Rogue-Umpqua



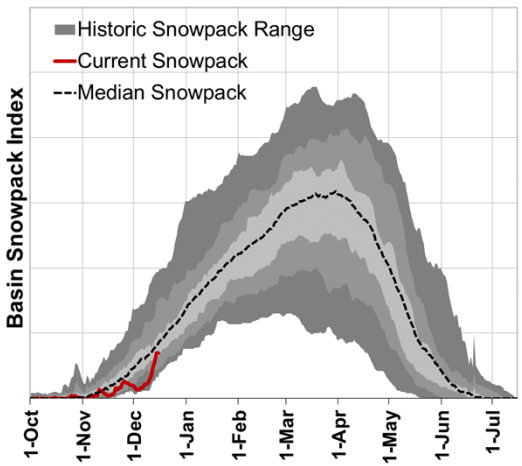
Klamath



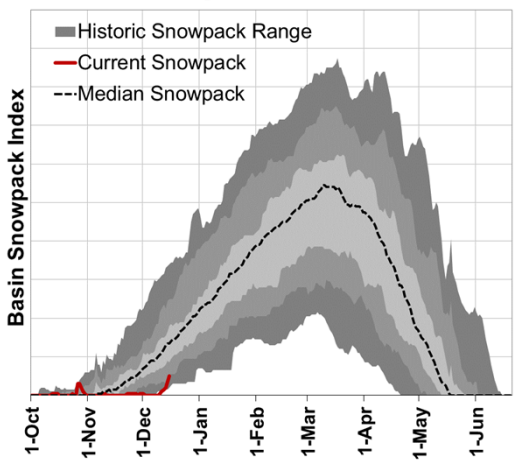
John Day



Grande Ronde-Burnt-Powder-Imnaha

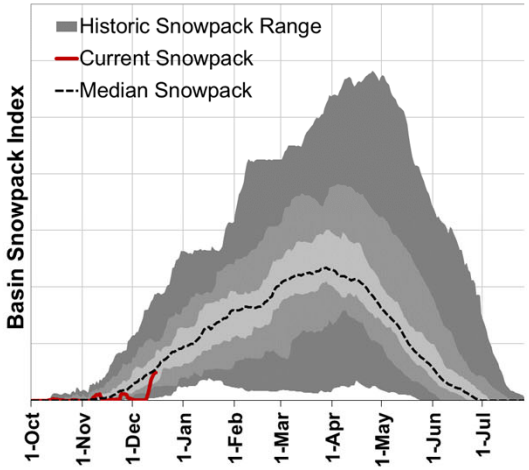


Owyhee-Malheur

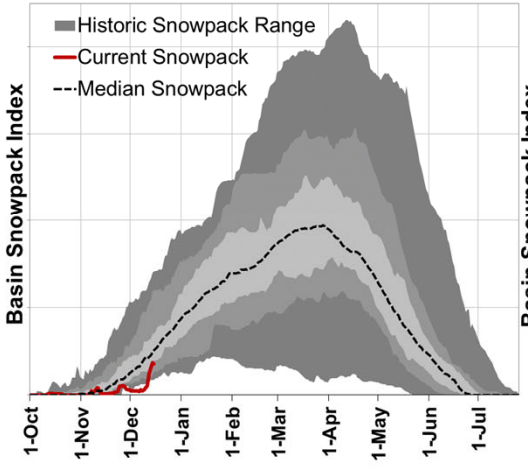


OREGON SNOWPACK GRAPHS – December 14, 2021

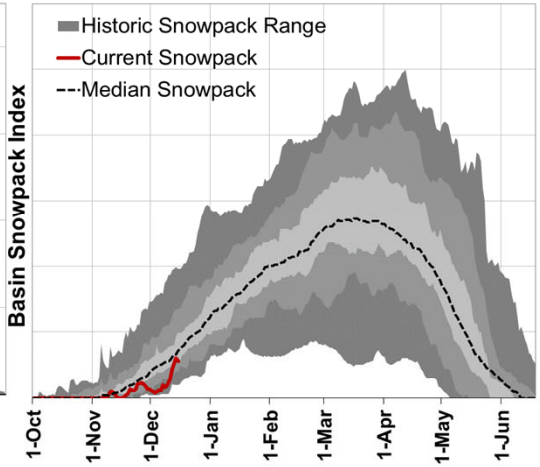
Hood-Sandy-Lower Deschutes



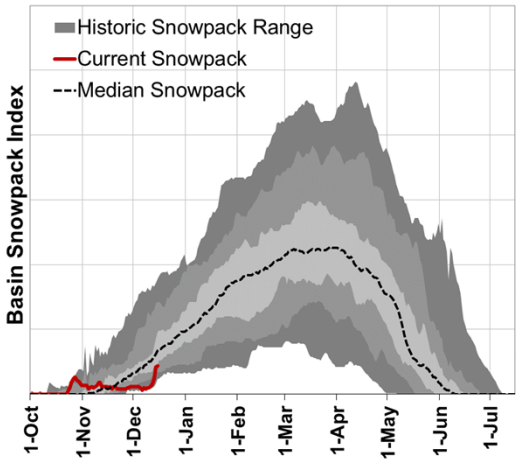
Upper Deschutes-Crooked



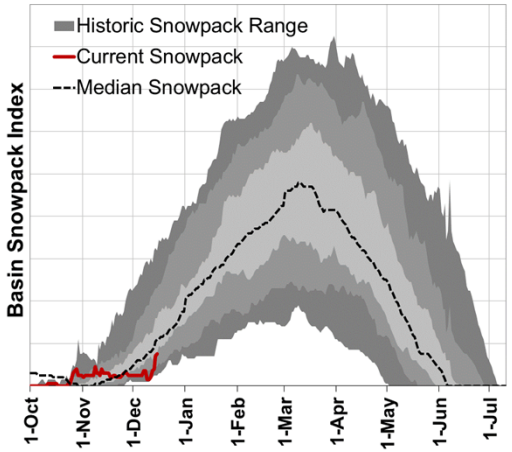
Umatilla-Walla Walla-Willow



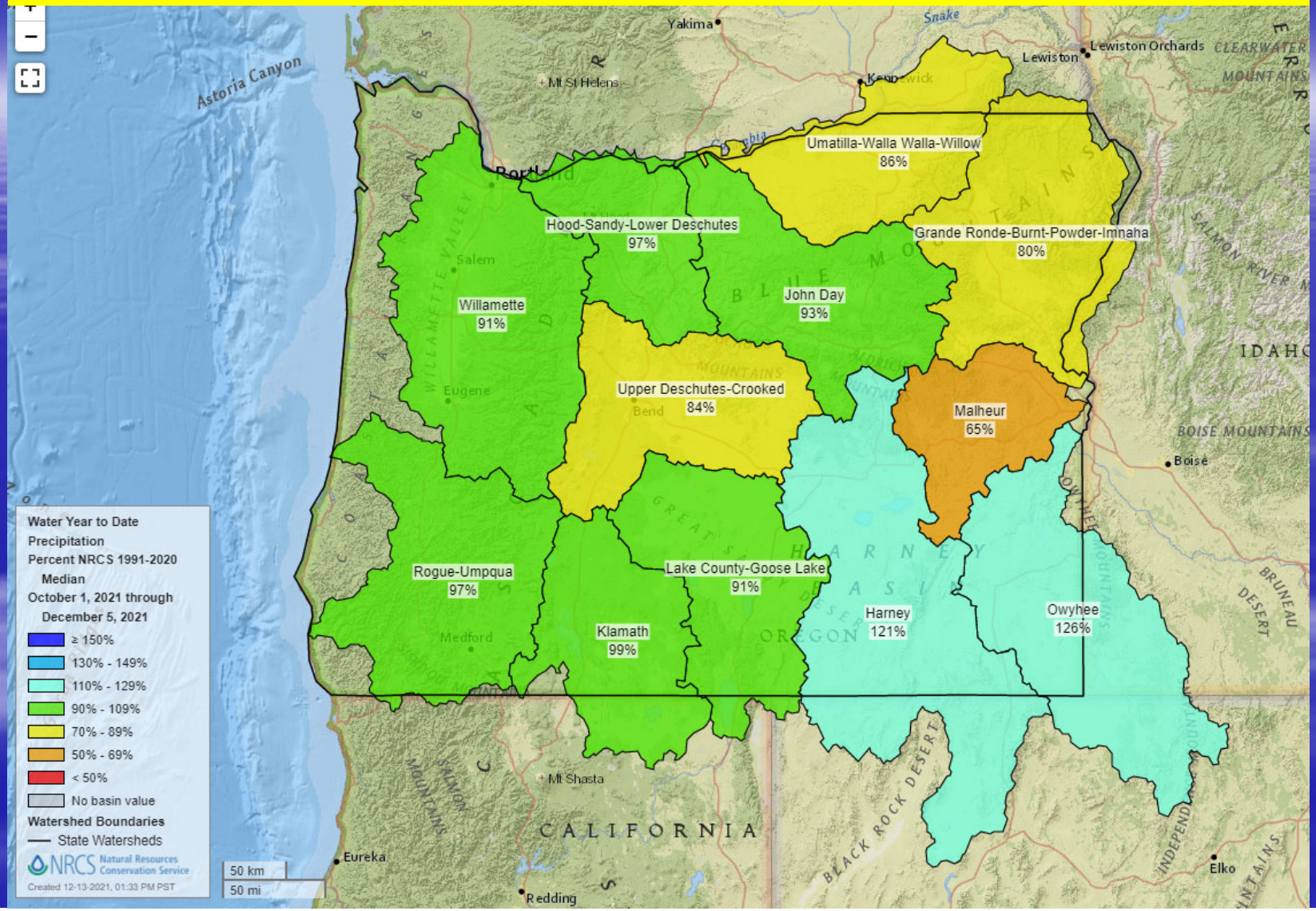
Lake County-Goose Lake



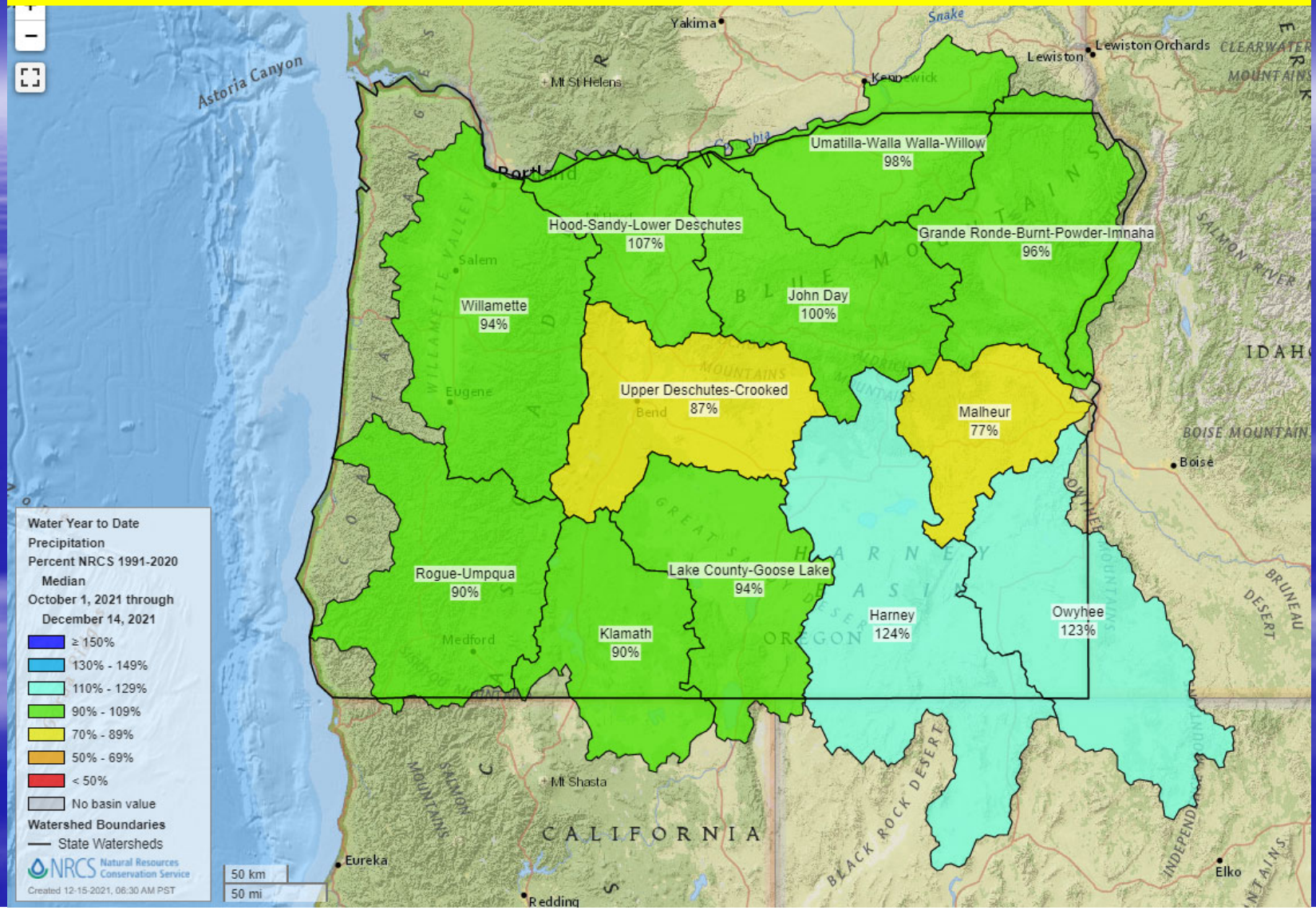
Harney



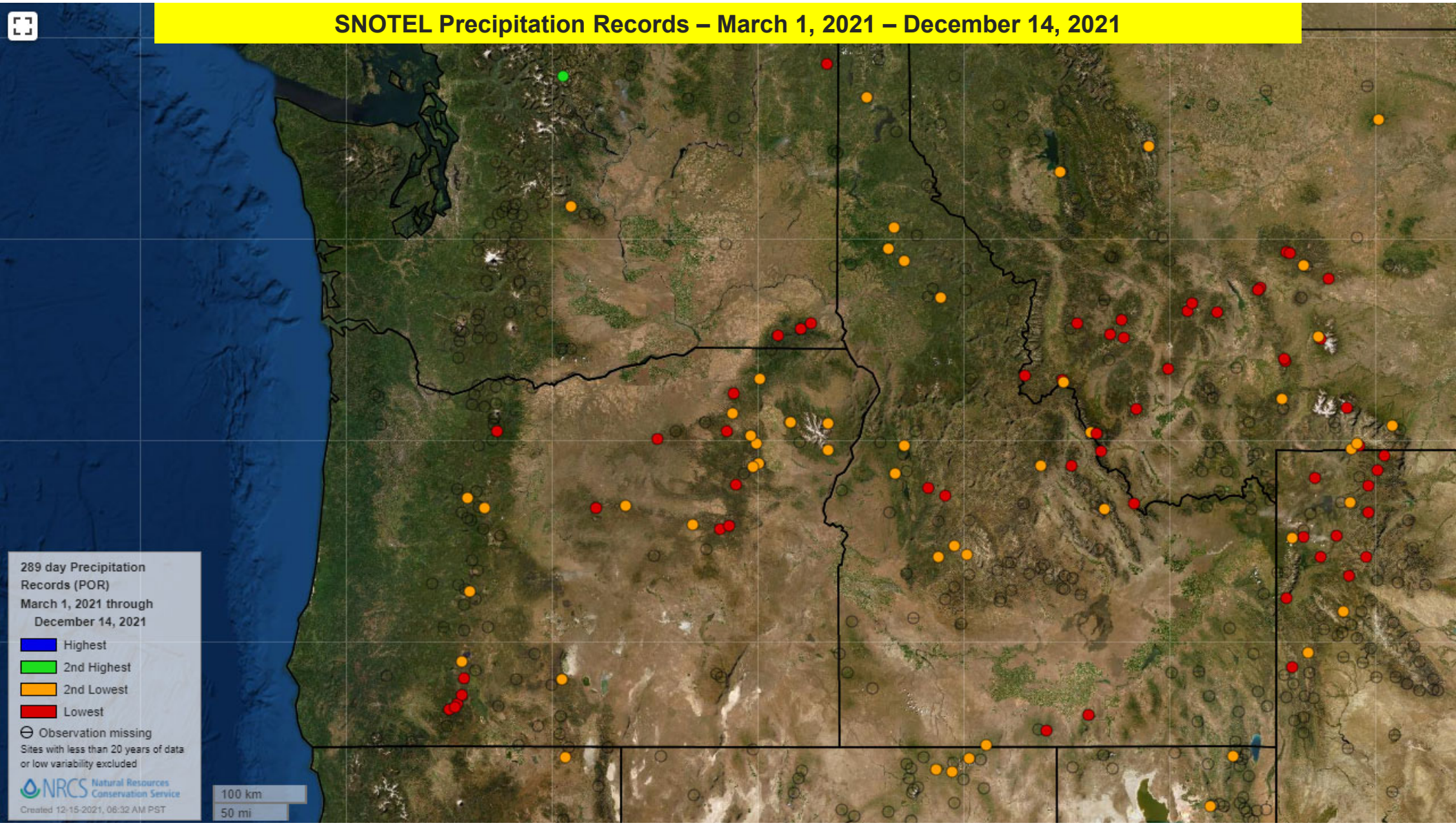
December 5, 2021, SNOTEL Water Year Precipitation is 91% of 1991-2020 median



December 14, 2021, SNOTEL Water Year Precipitation is 96% of 1991-2020 median



SNOTEL Precipitation Records – March 1, 2021 – December 14, 2021



SNOTEL Precipitation Records – October 1, 2019 – December 14, 2021

Thank you

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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.

Oregon Water Supply Availability Committee - December 15, 2021

H. Scott Oviatt
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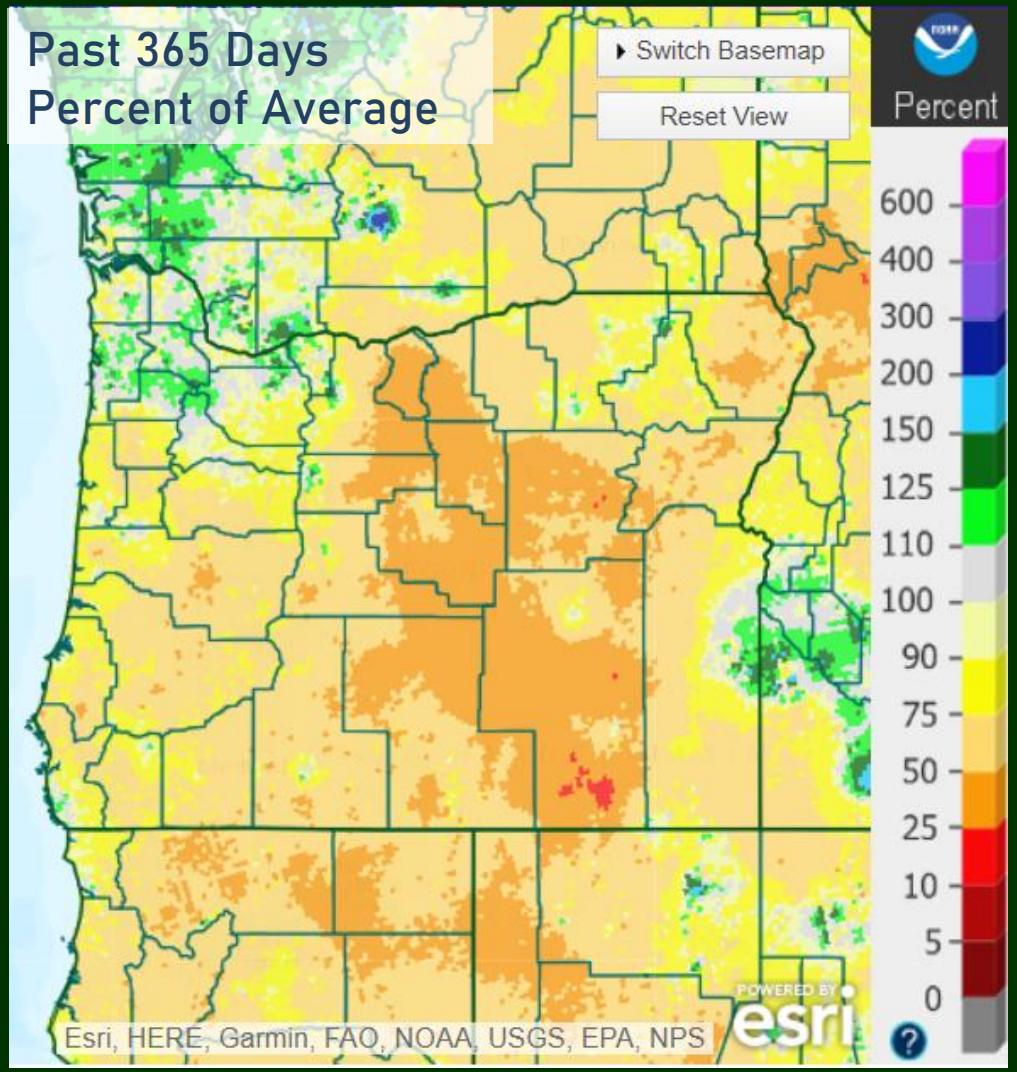
503-414-3271

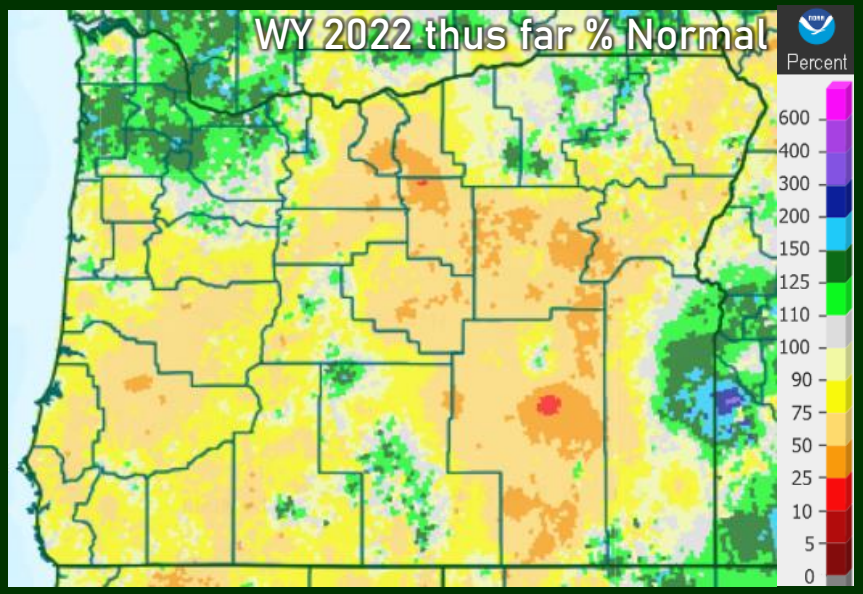
December 2021 Update for Precipitation, Temperatures, and Hydrological Conditions

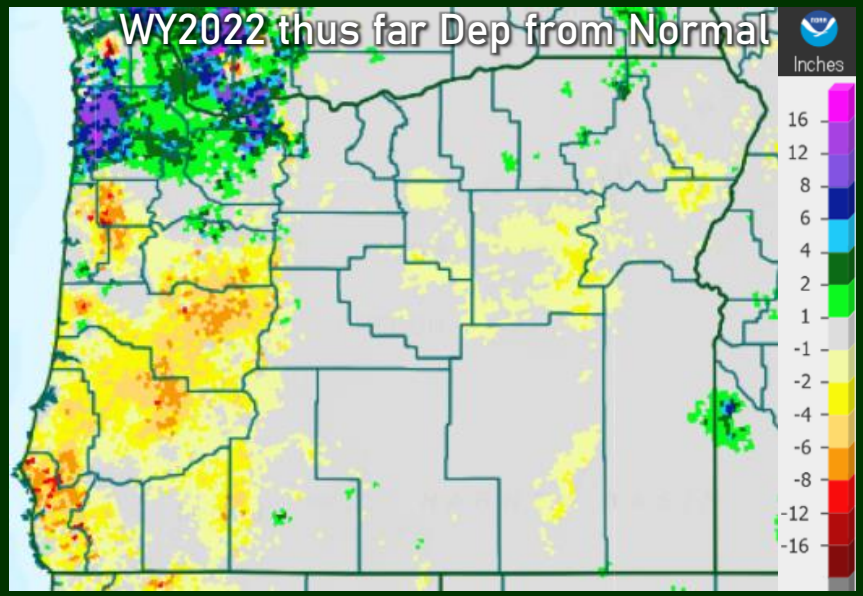
Andy Bryant
Service Hydrologist
NOAA/NWS Portland
Weather Forecast Office

Mt. Hood Meadows Live Cam

Precipitation





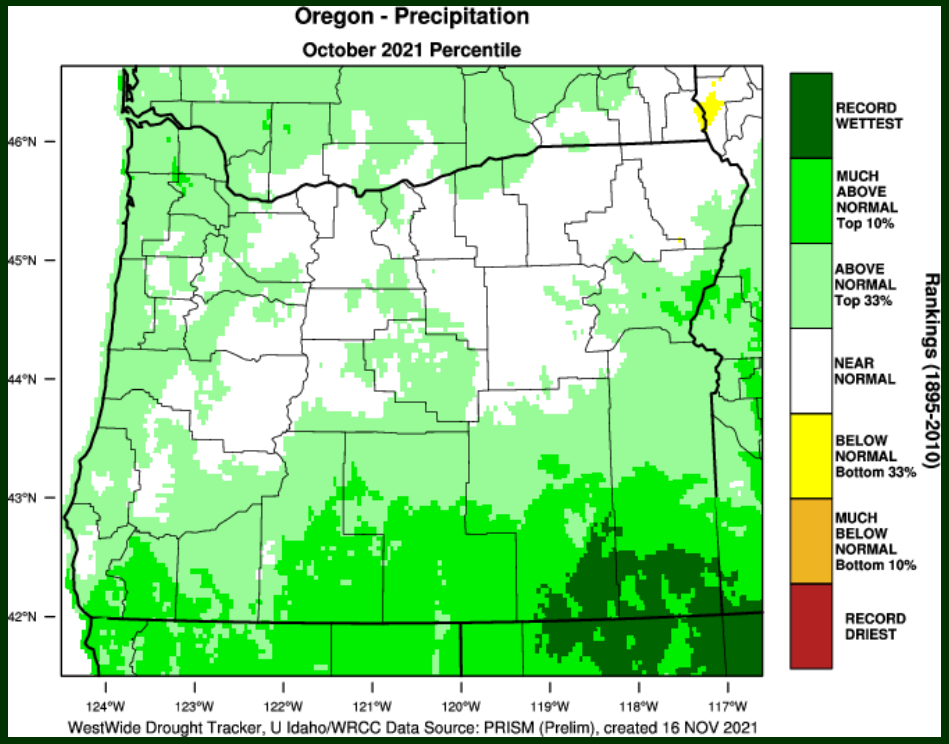


Precipitation Data as of Dec 14, 2021

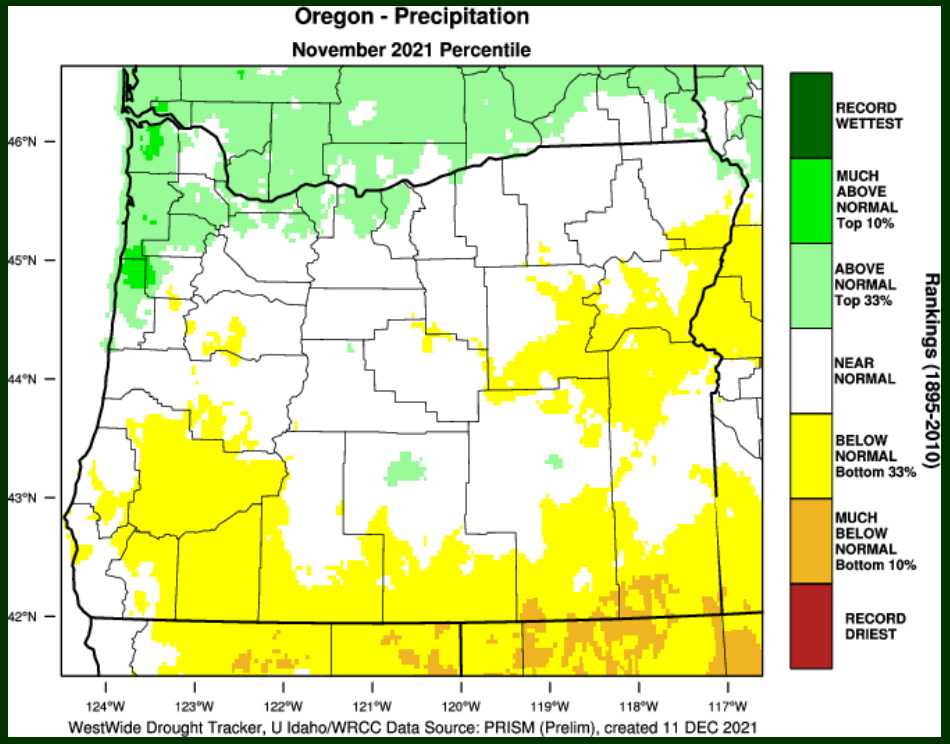
water.weather.gov/precip/index.php

Precipitation – Percentile / Ranking

October



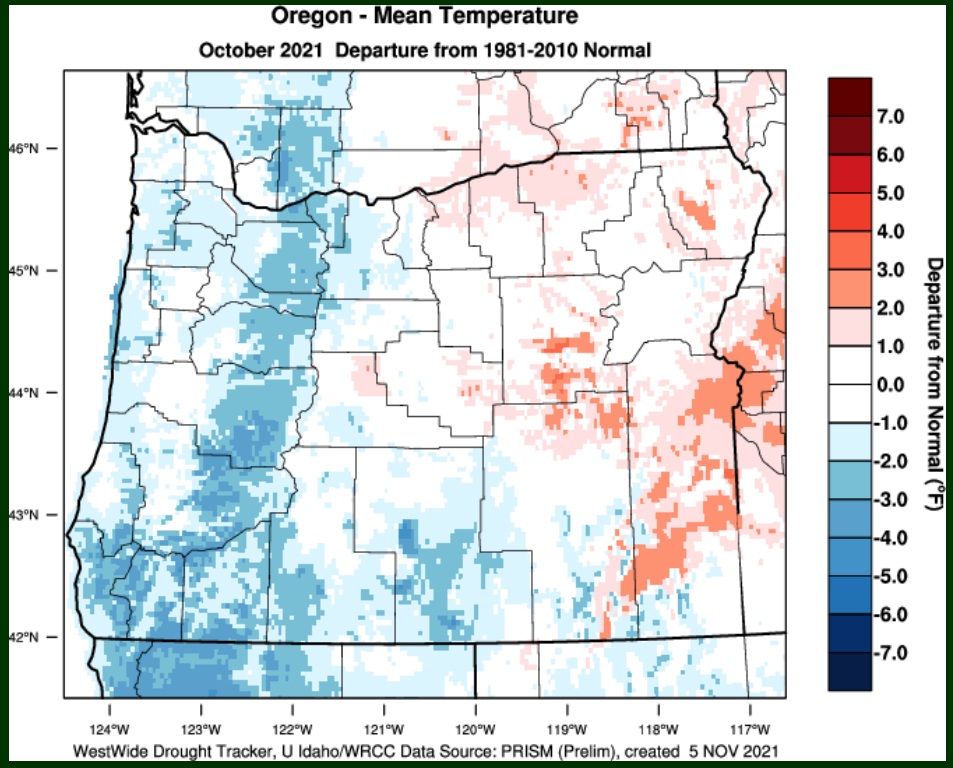
November



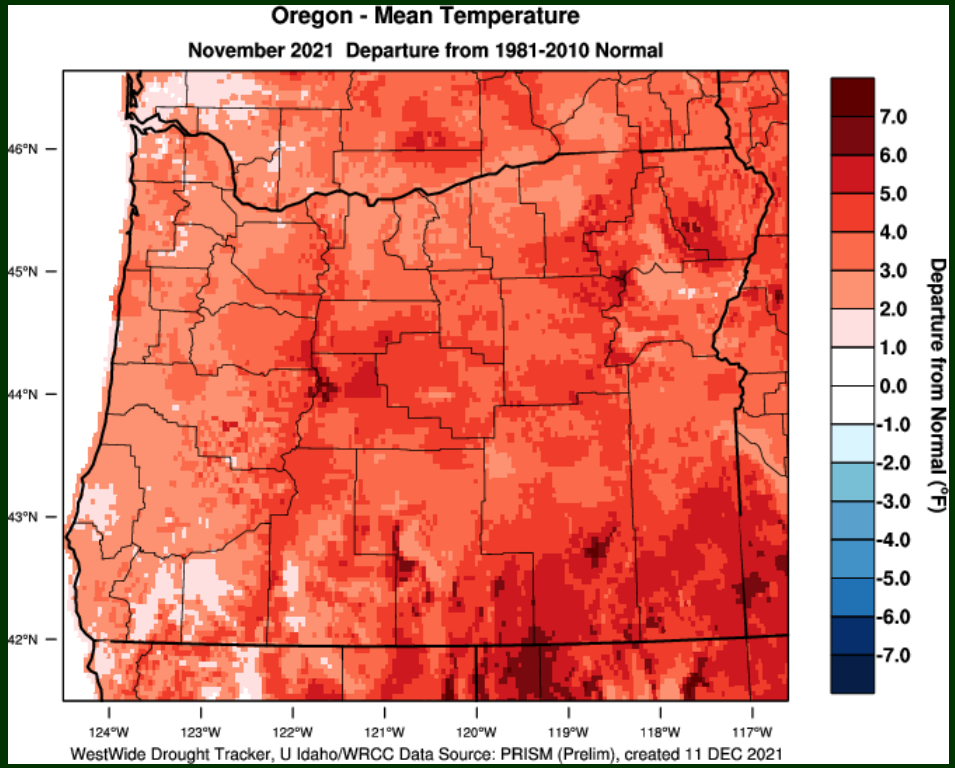
https://wrcc.dri.edu/wwdt/index.php?region=pnw

Recent Temperatures

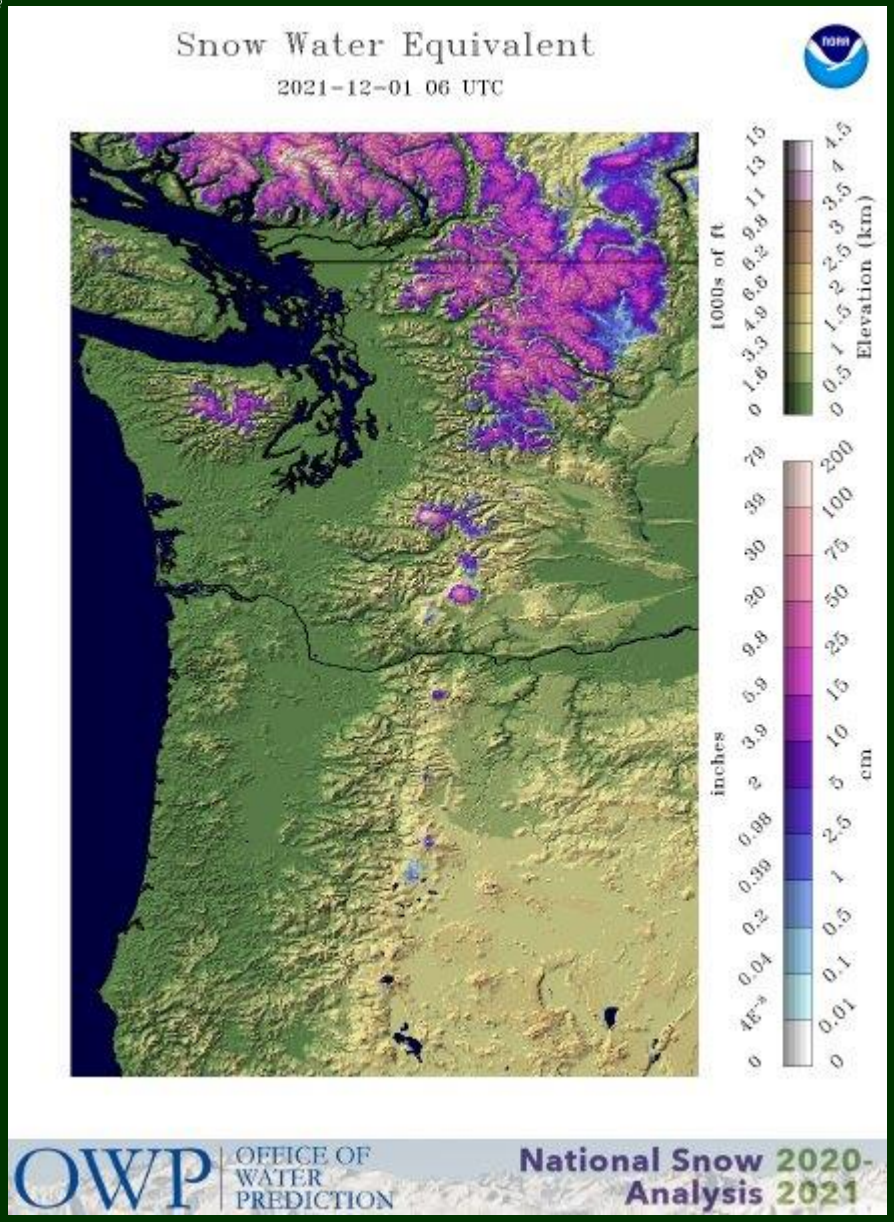
October

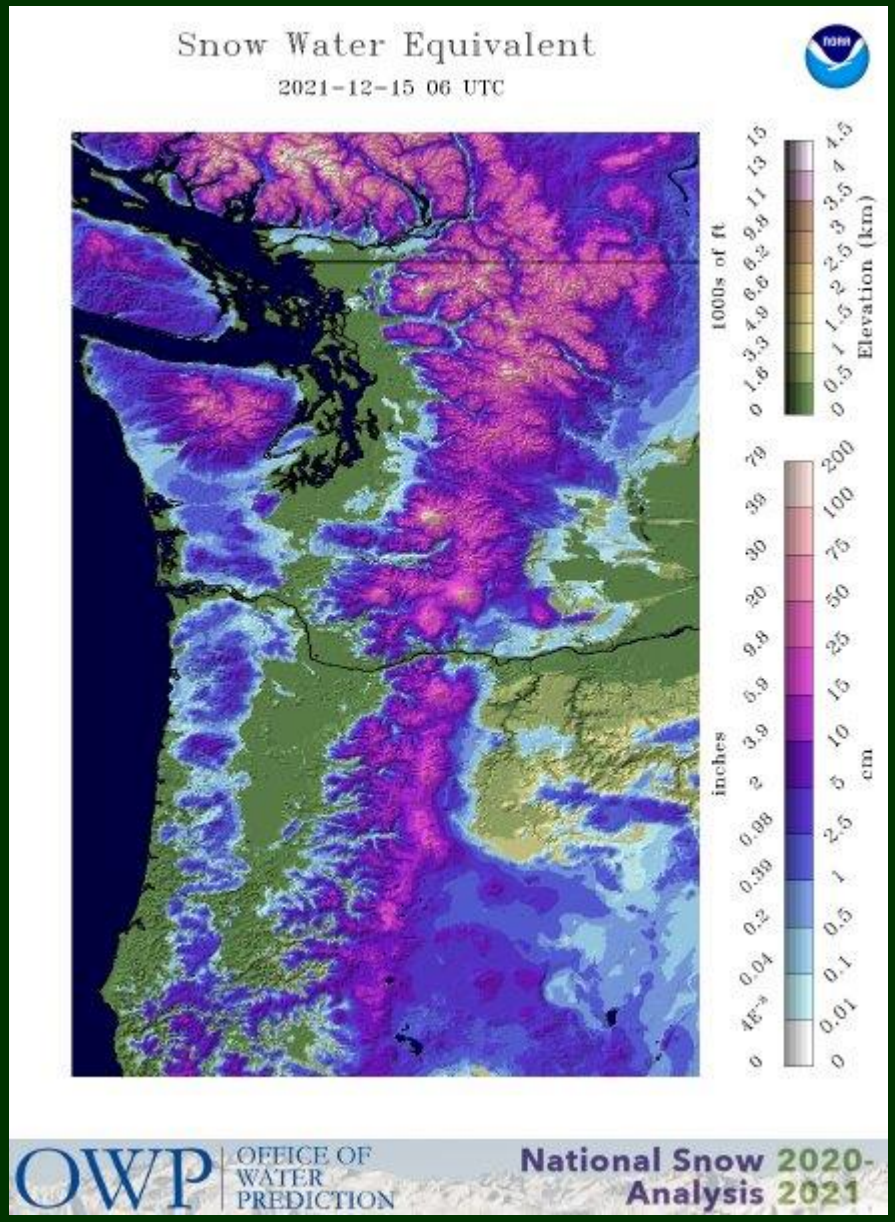


November



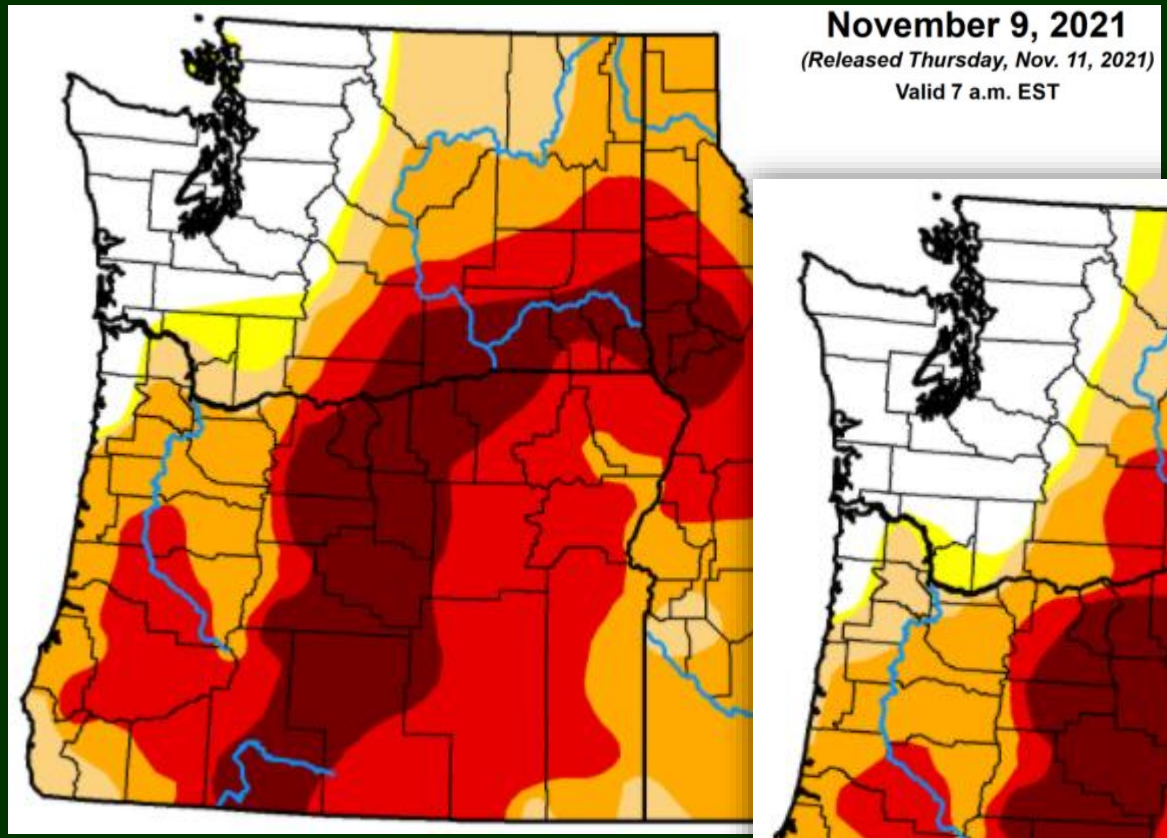
https://wrcc.dri.edu/wwdt/index.php?region=pnw

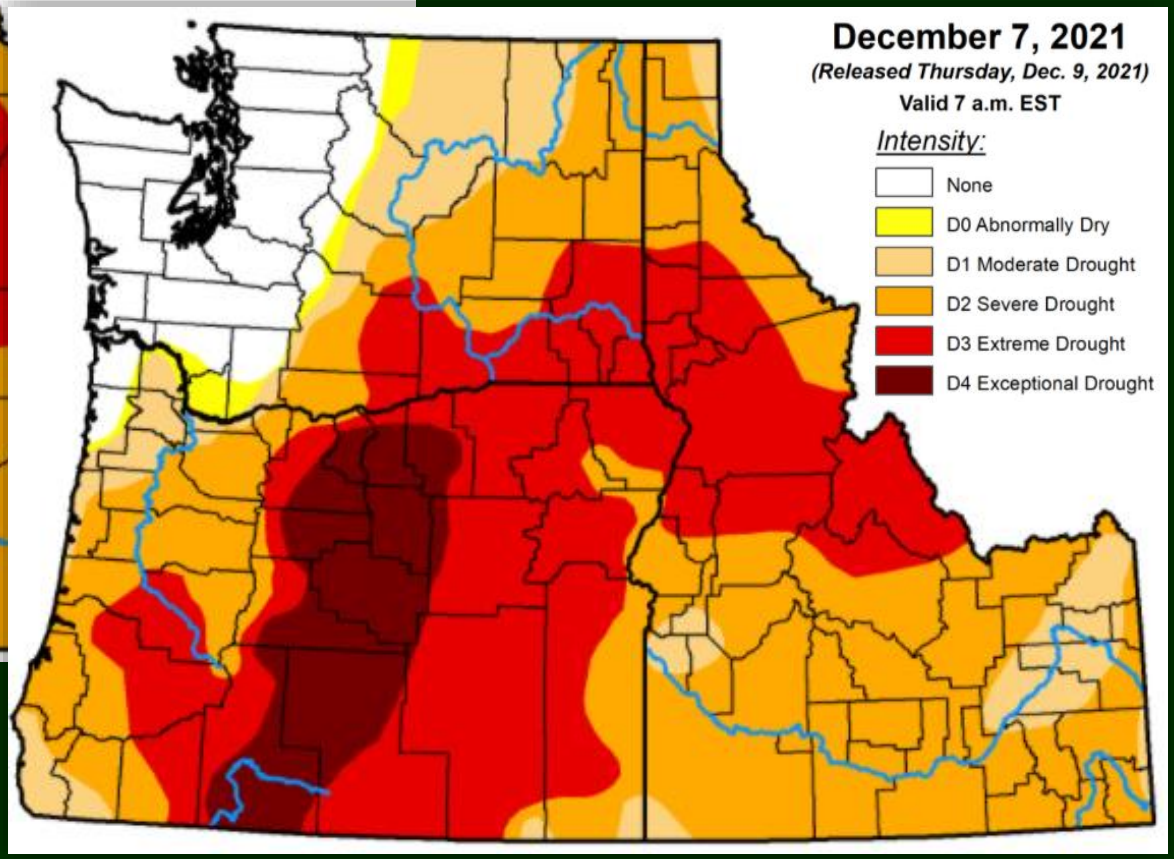




https://www.nohrsc.noaa.gov/nsa/index.html

Drought Monitor



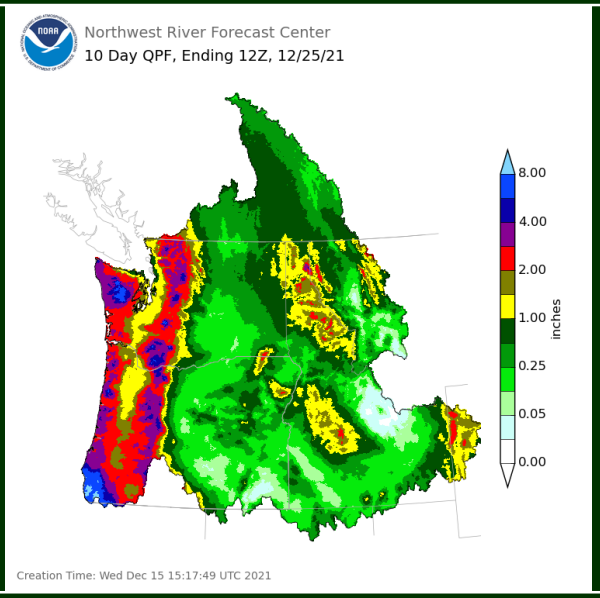


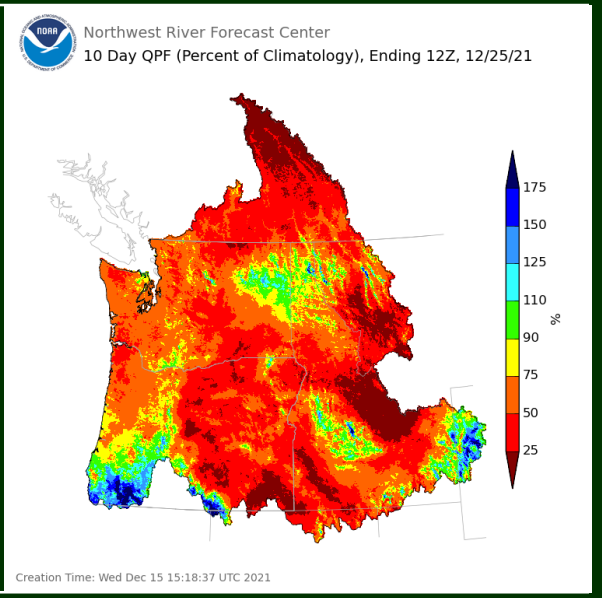
https://droughtmonitor.unl.edu

Mid December Outlook

NWRFC
10-DAY
PRECIPITATION
FORECAST

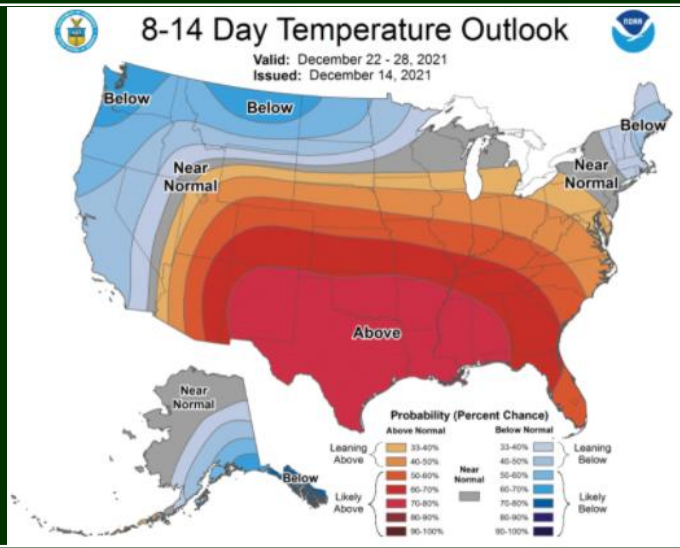
www.nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php

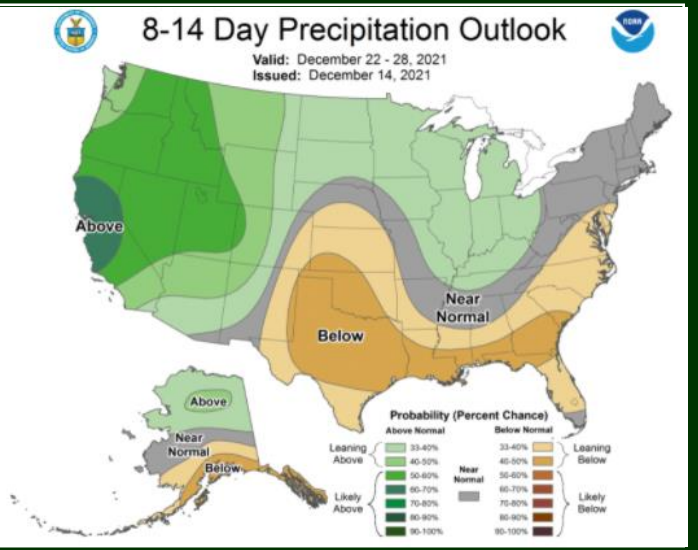




CPC
8 – 14 DAY
OUTLOOK

www.cpc.ncep.noaa.gov

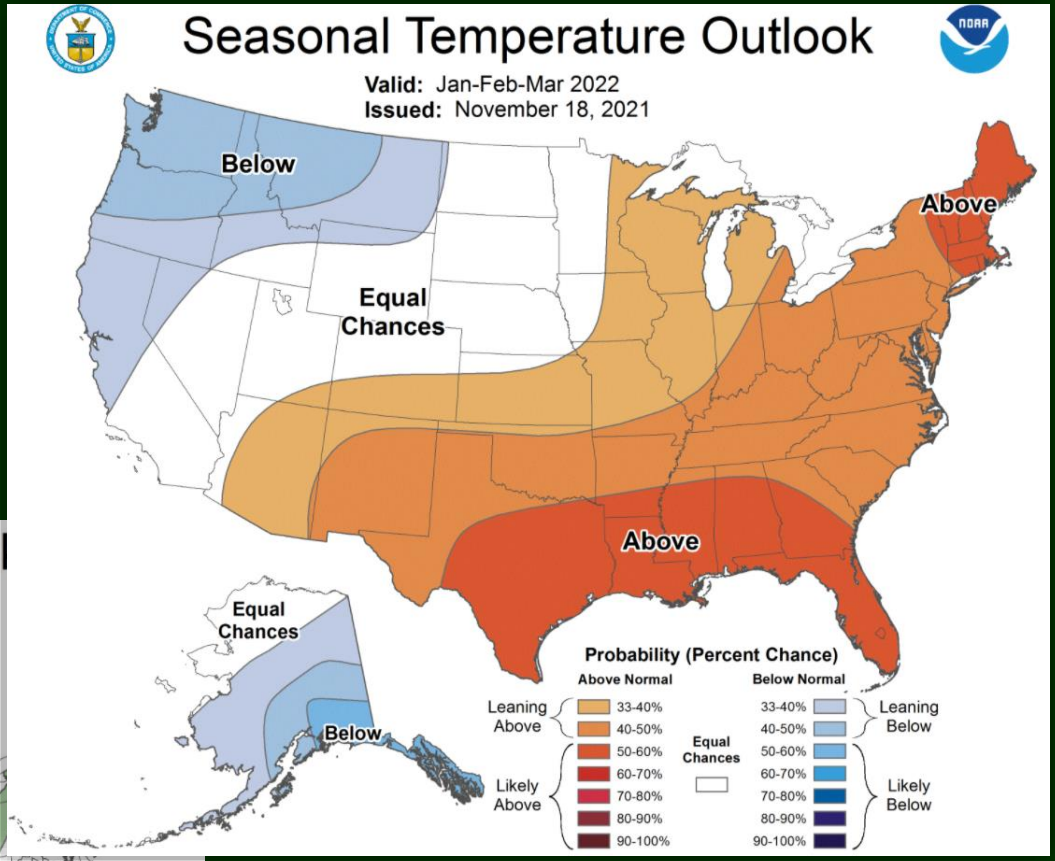


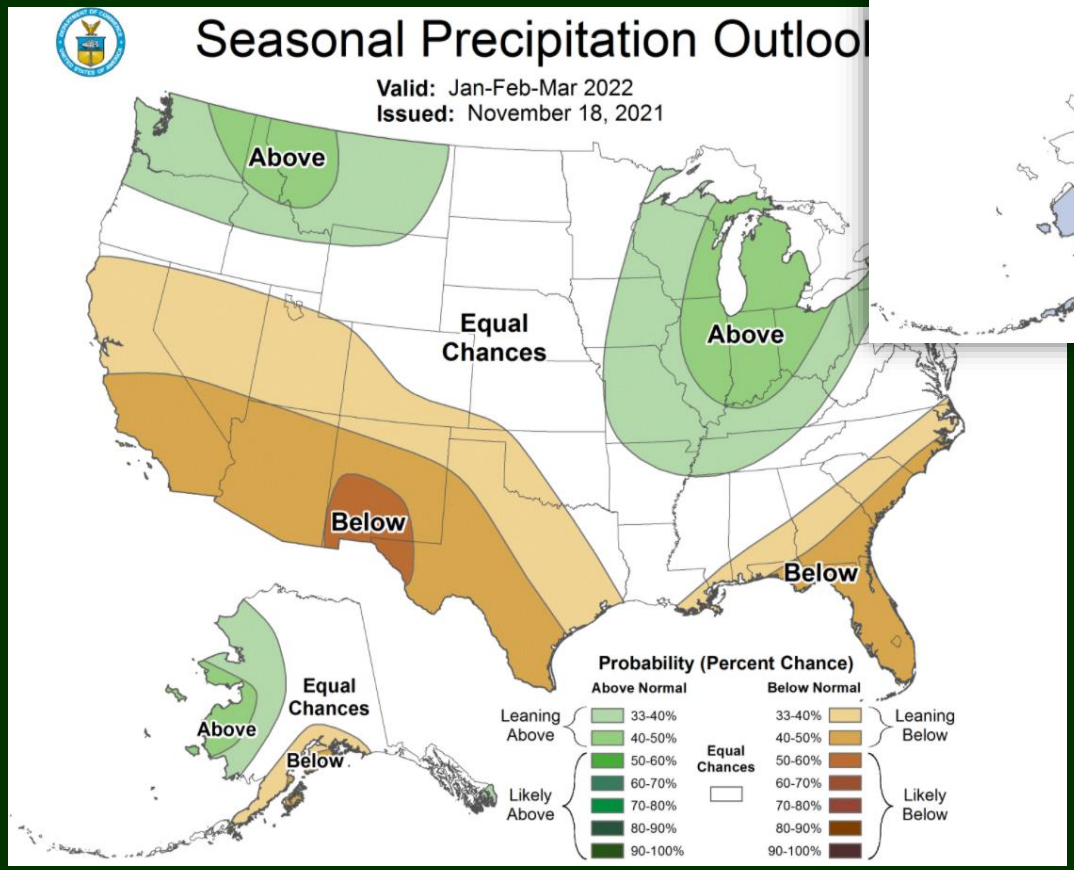


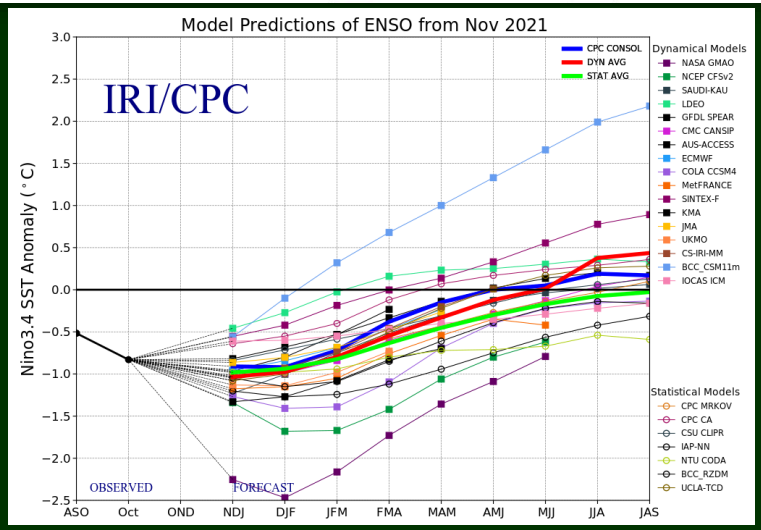
Climate Prediction Center Outlook

Jan-Feb-Mar 2022

www.cpc.ncep.noaa.gov



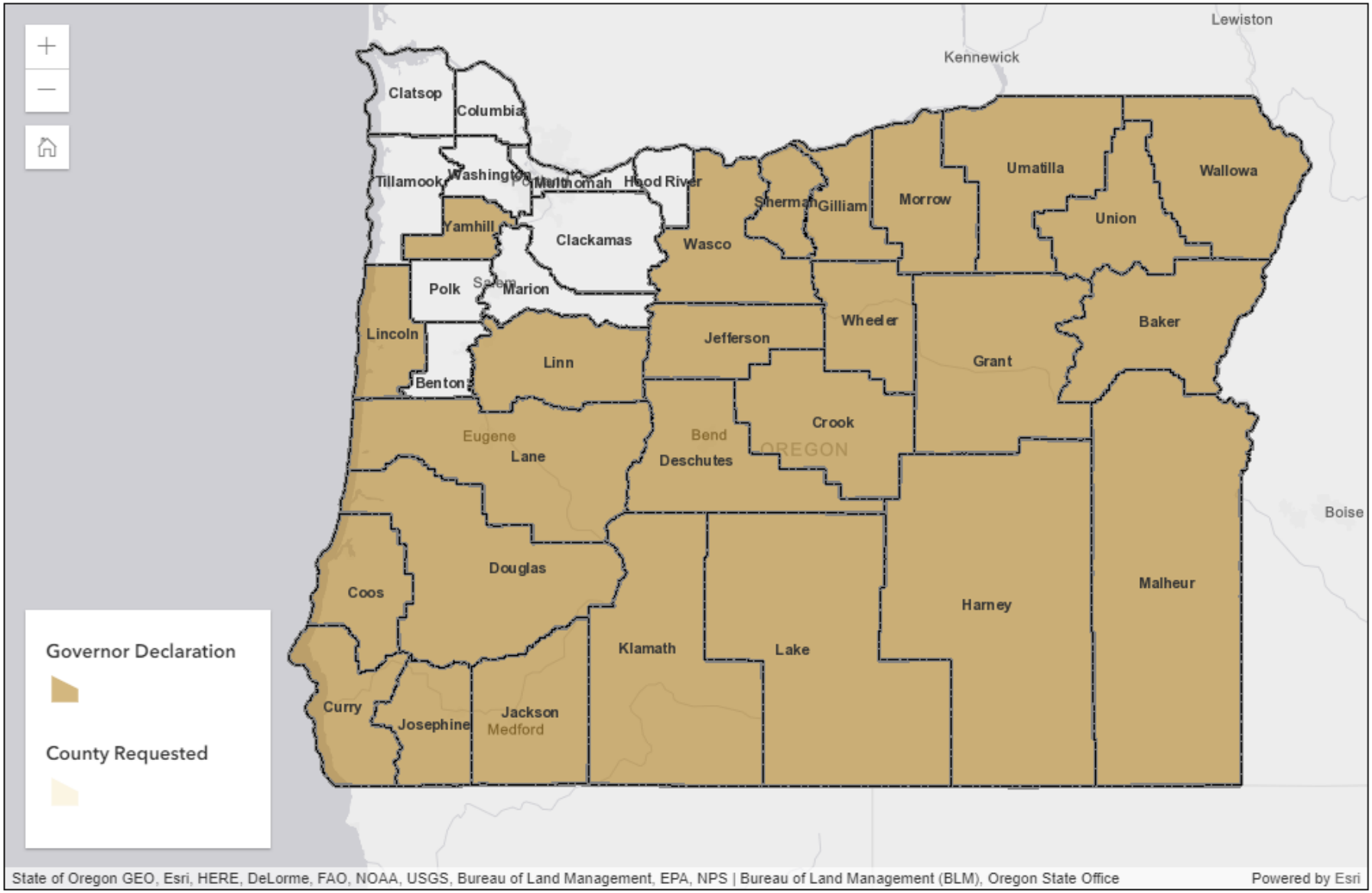


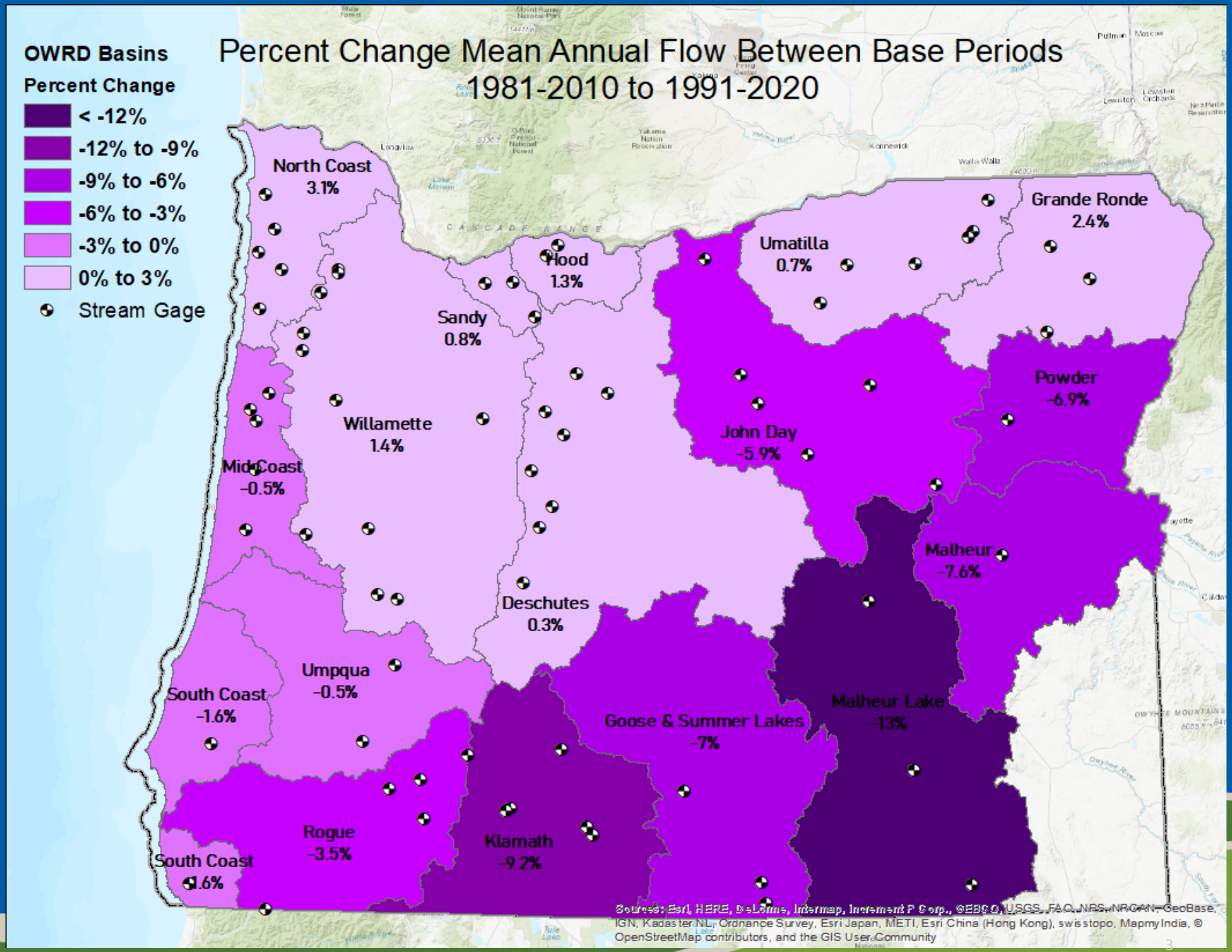


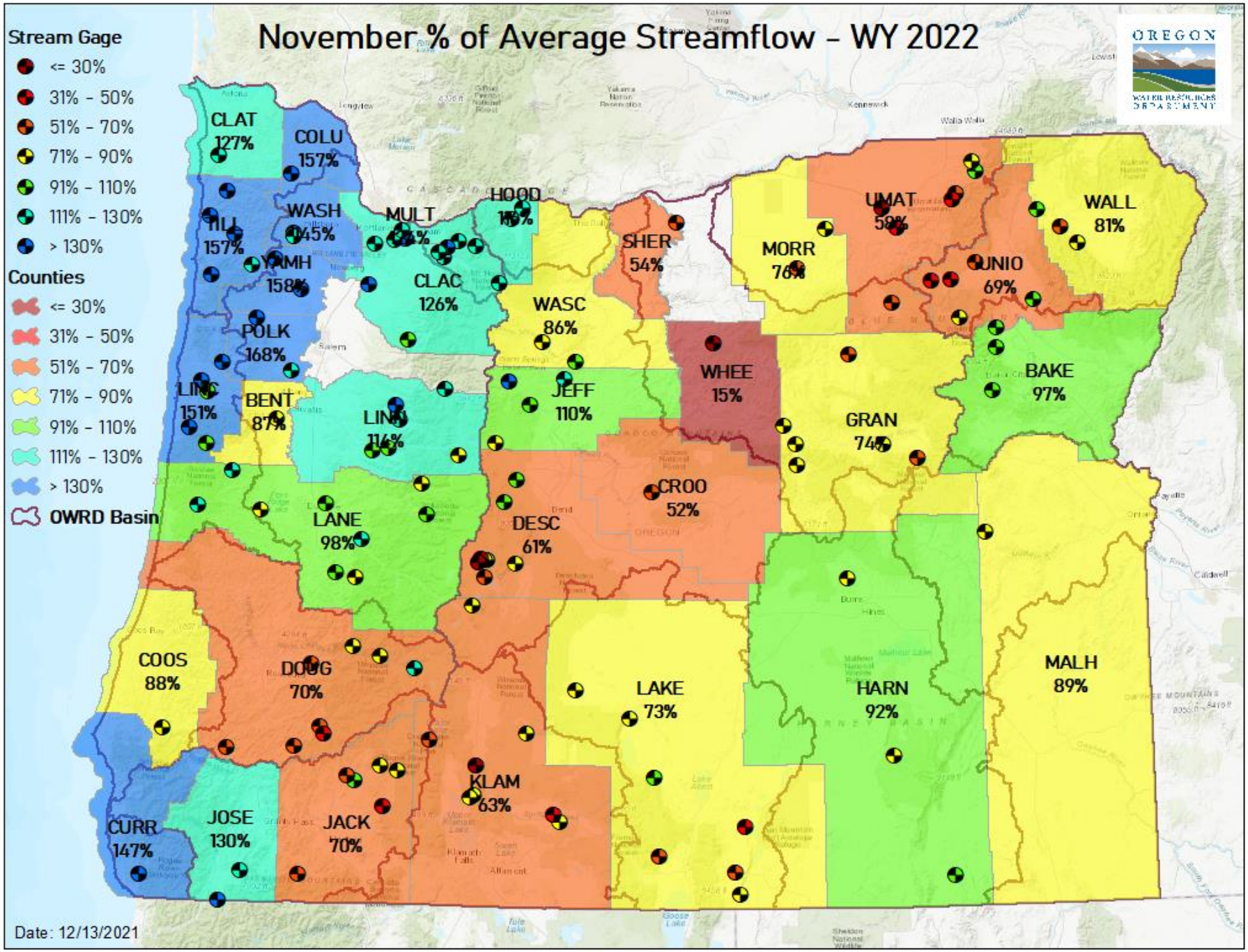
Water Supply Availability Committee
Ryan Andrews
December 15th, 2021

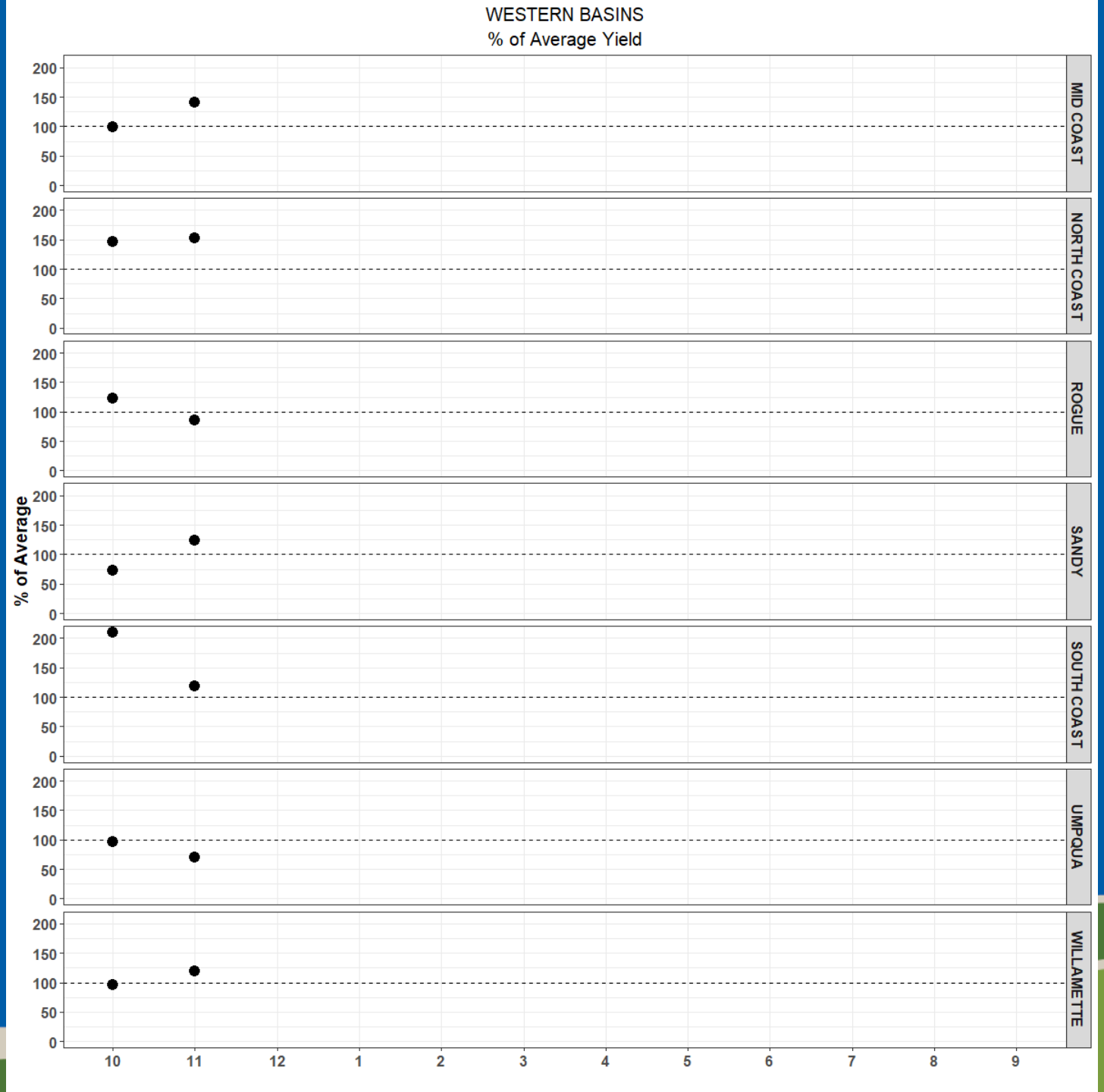
Drought Declaration Status Map

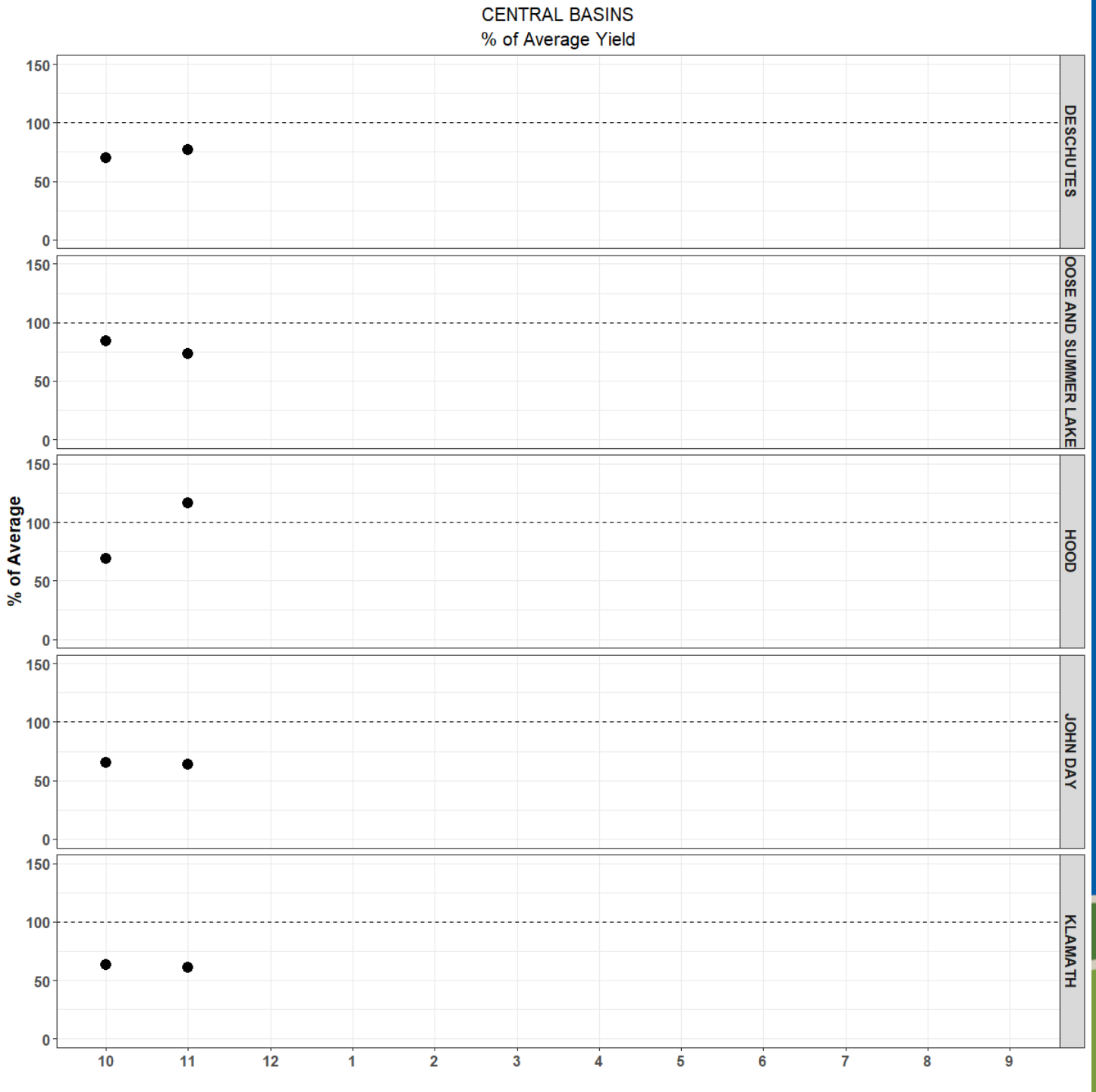
Select Year: 2021 Search Clear

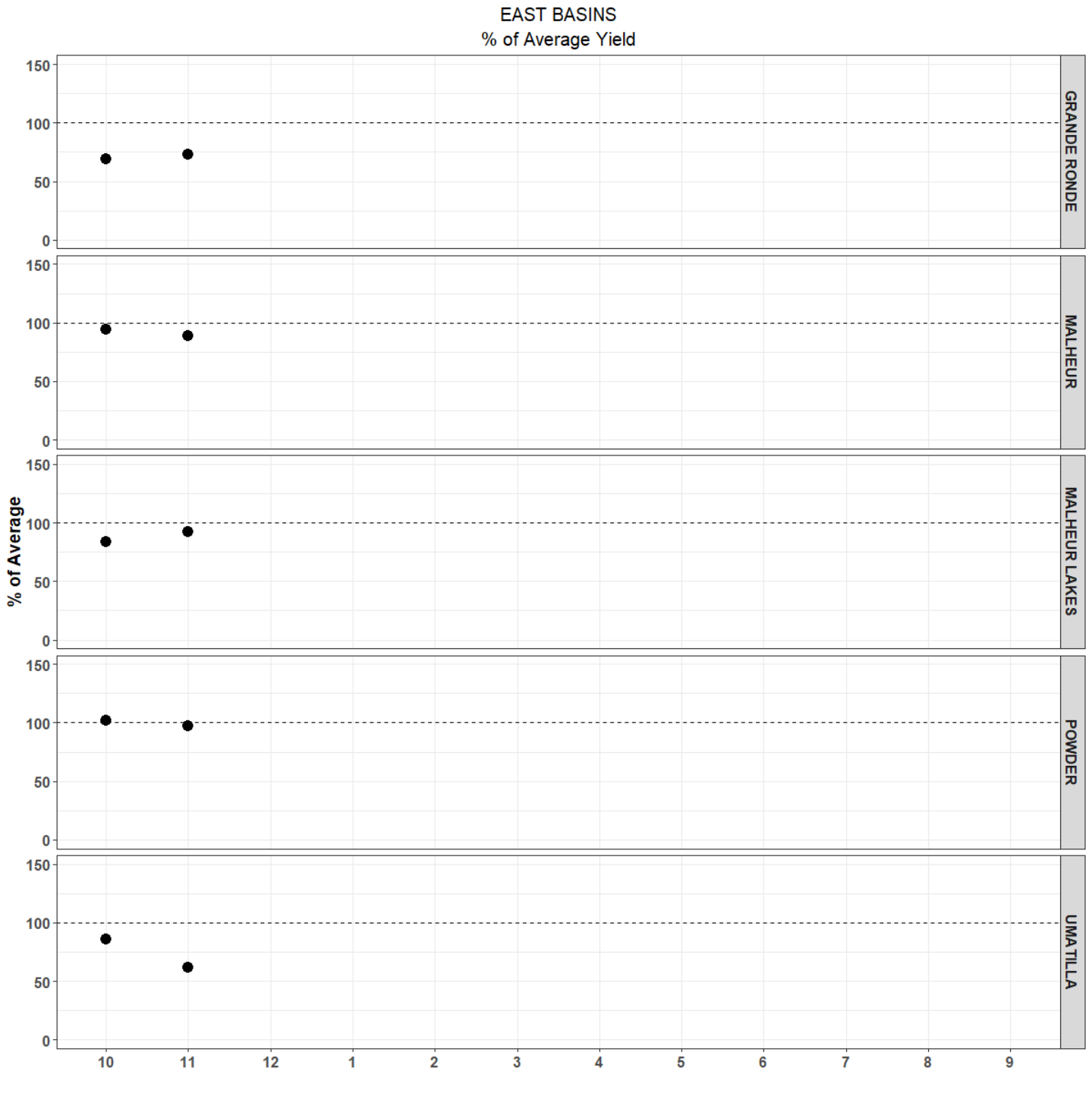


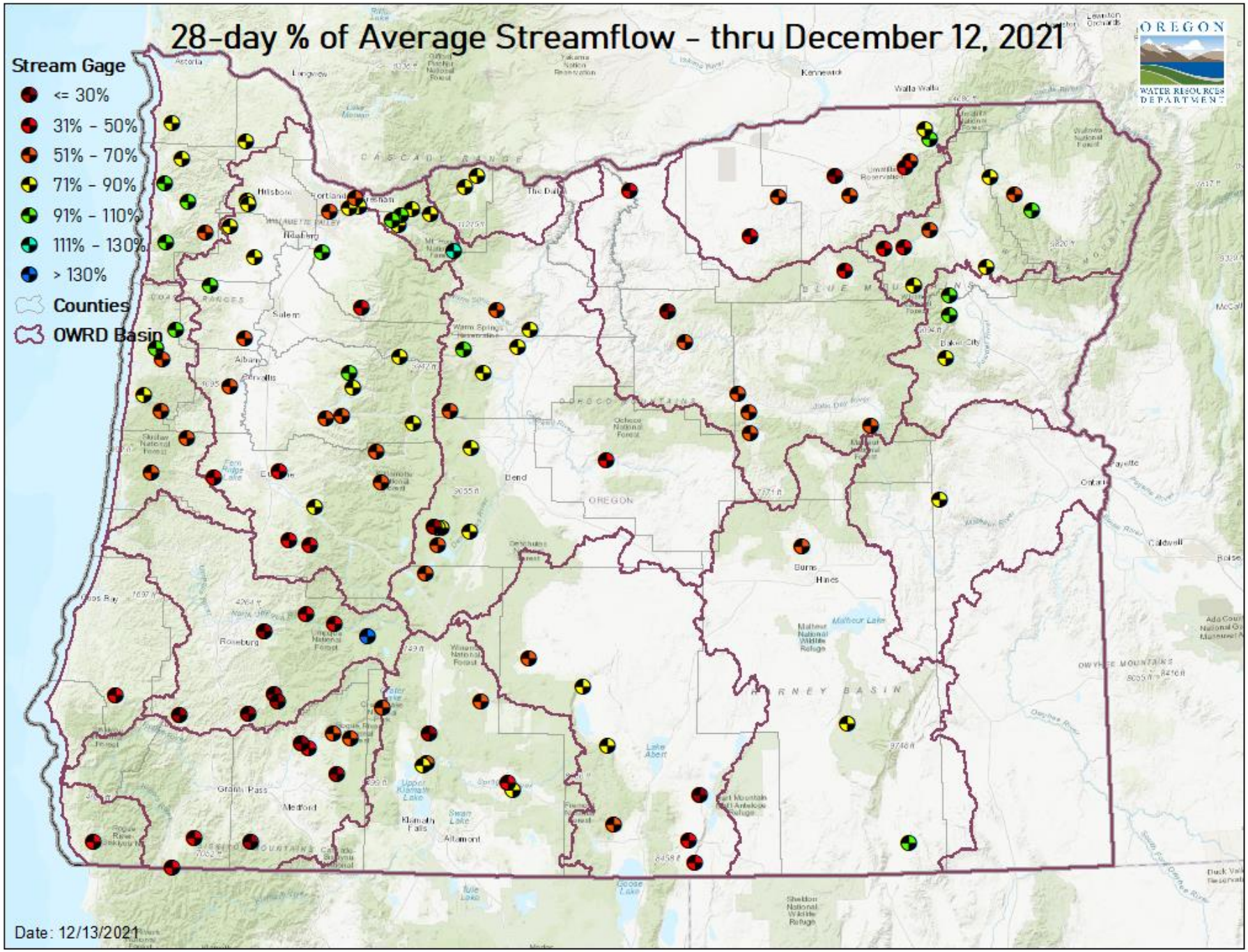

OWRD Basins
Percent Change
< -12%
-12% to -9%
-9% to -6%
-6% to -3%
-3% to 0%
0% to 3%
Stream Gage
Percent Change Mean Annual Flow Between Base Periods
1981-2010 to 1991-2020
North Coast
3.1%
Hood
1.3%
Sandy
0.8%
Umatilla
0.7%
Grande Ronde
2.4%
Powder
-6.9%
John Day
-5.9%
Willamette
1.4%
Mid Coast
-0.5%
Deschutes
0.3%
Malheur
-7.6%
Umpqua
-0.5%
South Coast
-1.6%
Goose & Summer Lakes
-7%
Malheur Lake
-13%
Rogue
-3.5%
Klamath
-9.2%
South Coast
1.6%
Sources: Esri, HERE, DeLorme, Intermap, Increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

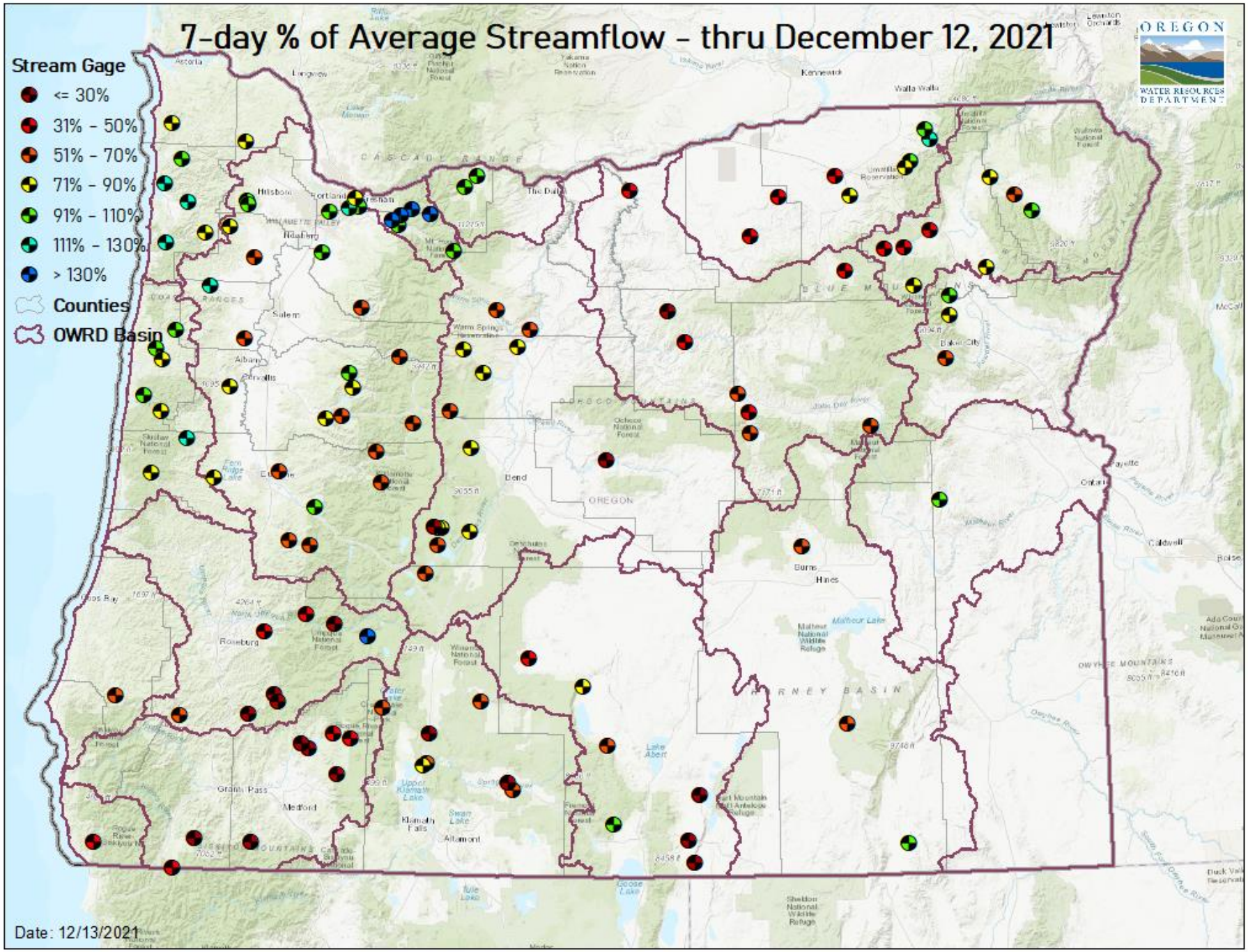

November % of Average Streamflow - WY 2022
Stream Gage
<= 30%
31% - 50%
51% - 70%
71% - 90%
91% - 110%
111% - 130%
> 130%
Counties
<= 30%
31% - 50%
51% - 70%
71% - 90%
91% - 110%
111% - 130%
> 130%
OWRD Basin
OREGON
WATER RESOURCES DEPARTMENT
CLAT 127%
COLU 157%
WASH 145%
TILL 157%
YAMH 158%
MULT
HOOD
CLAC 126%
POLK 168%
LINC 151%
BENT 87%
LINN 114%
LANE 98%
WASC 86%
SHER 54%
JEFF 110%
MORR 76%
UMAT 59%
UNIO 69%
WALL 81%
WHEE 15%
BAKE 97%
GRAN 74%
CROO 52%
DESC 61%
COOS 88%
DOUG 70%
LAKE 73%
HARN 92%
MALH 89%
KLAM 63%
CURR 147%
JOSE 130%
JACK 70%
Date: 12/13/2021

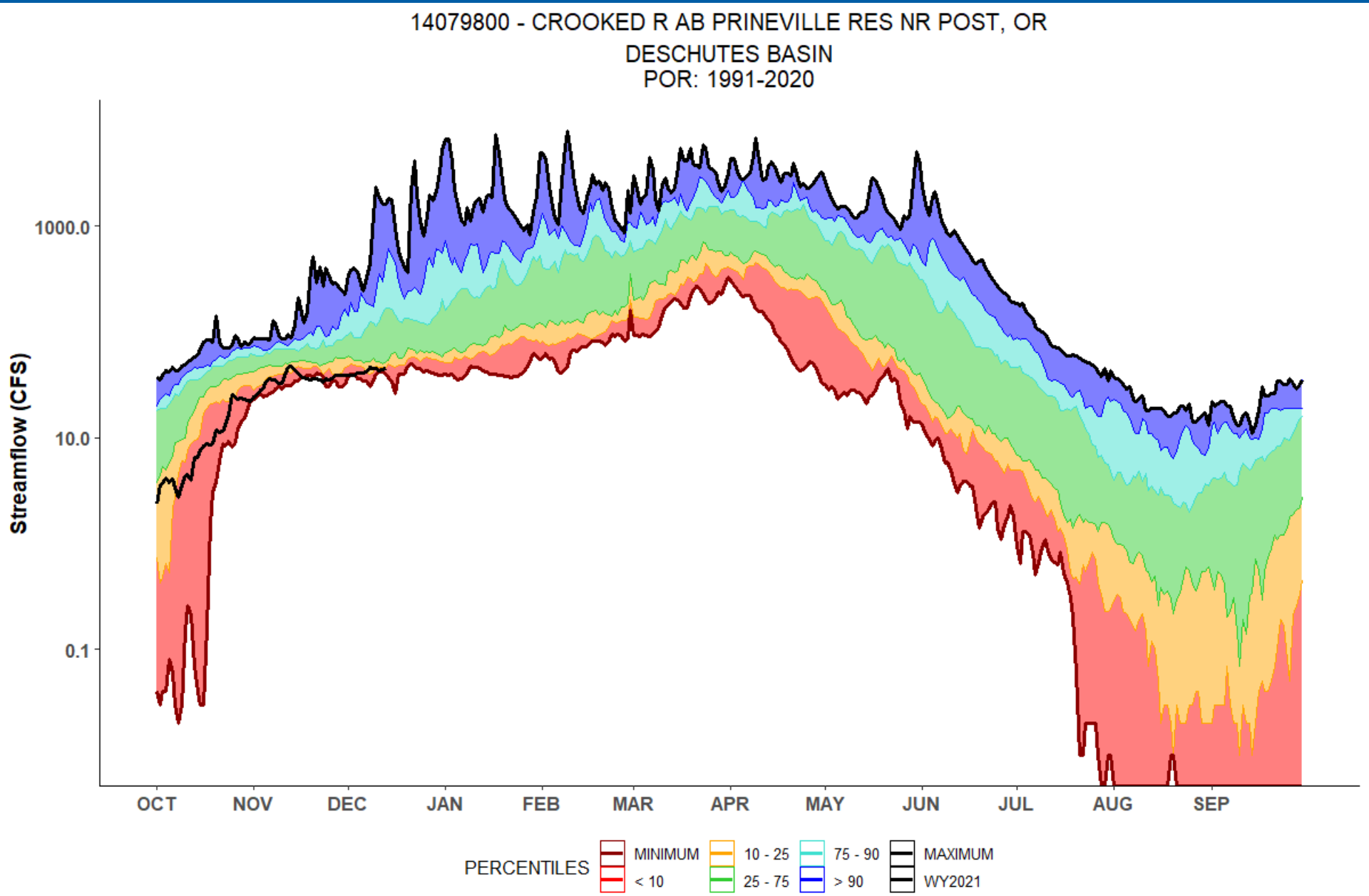

WESTERN BASINS
% of Average Yield
% of Average
MID COAST
NORTH COAST
ROGUE
SANDY
SOUTH COAST
UMPQUA
WILLAMETTE
200
150
100
50
0
10
11
12
1
2
3
4
5
6
7
8
9

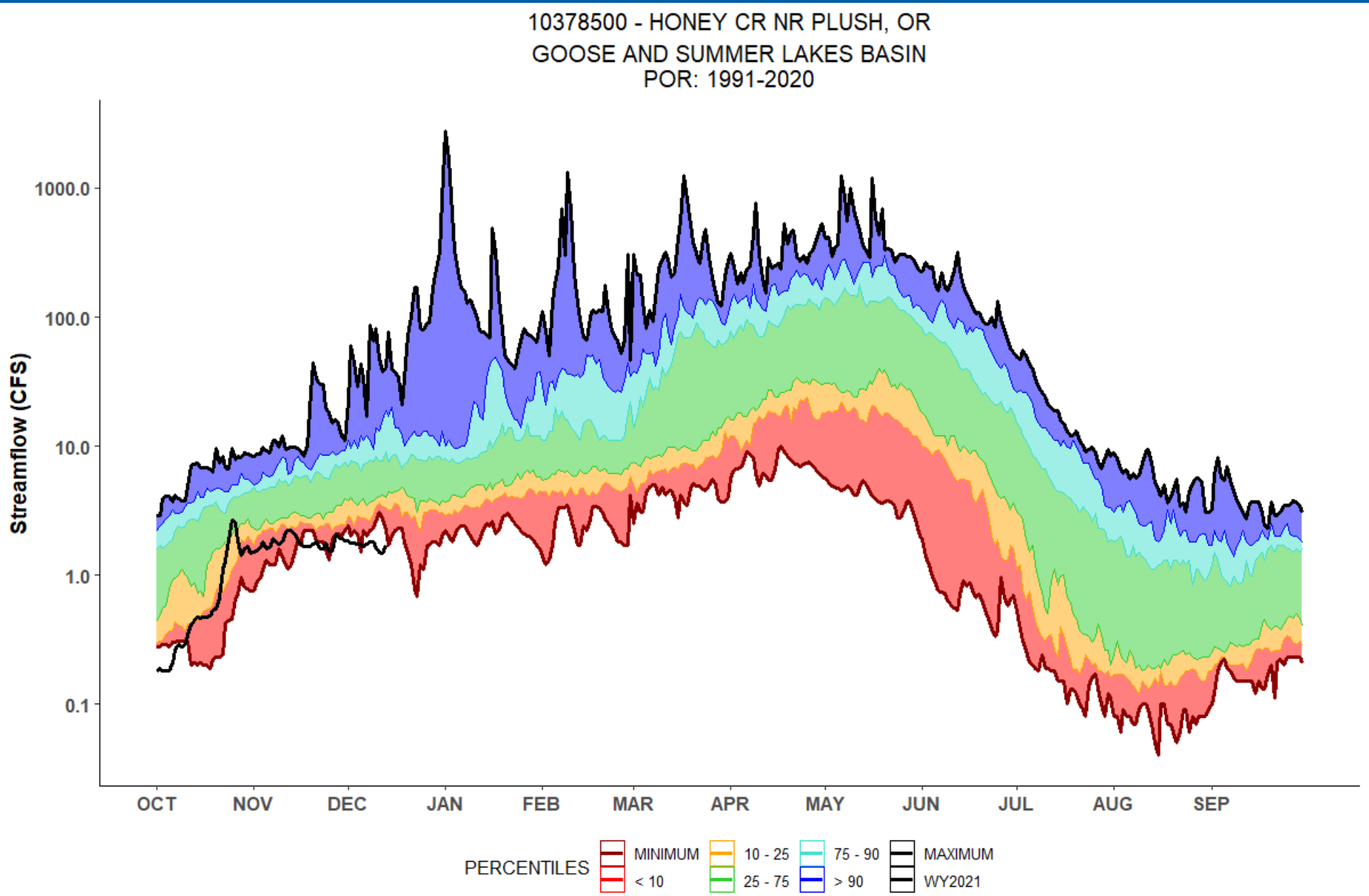

CENTRAL BASINS
% of Average Yield
% of Average
DESCHUTES
OOSE AND SUMMER LAKE
HOOD
JOHN DAY
KLAMATH
150
100
50
0
10
11
12
1
2
3
4
5
6
7
8
9

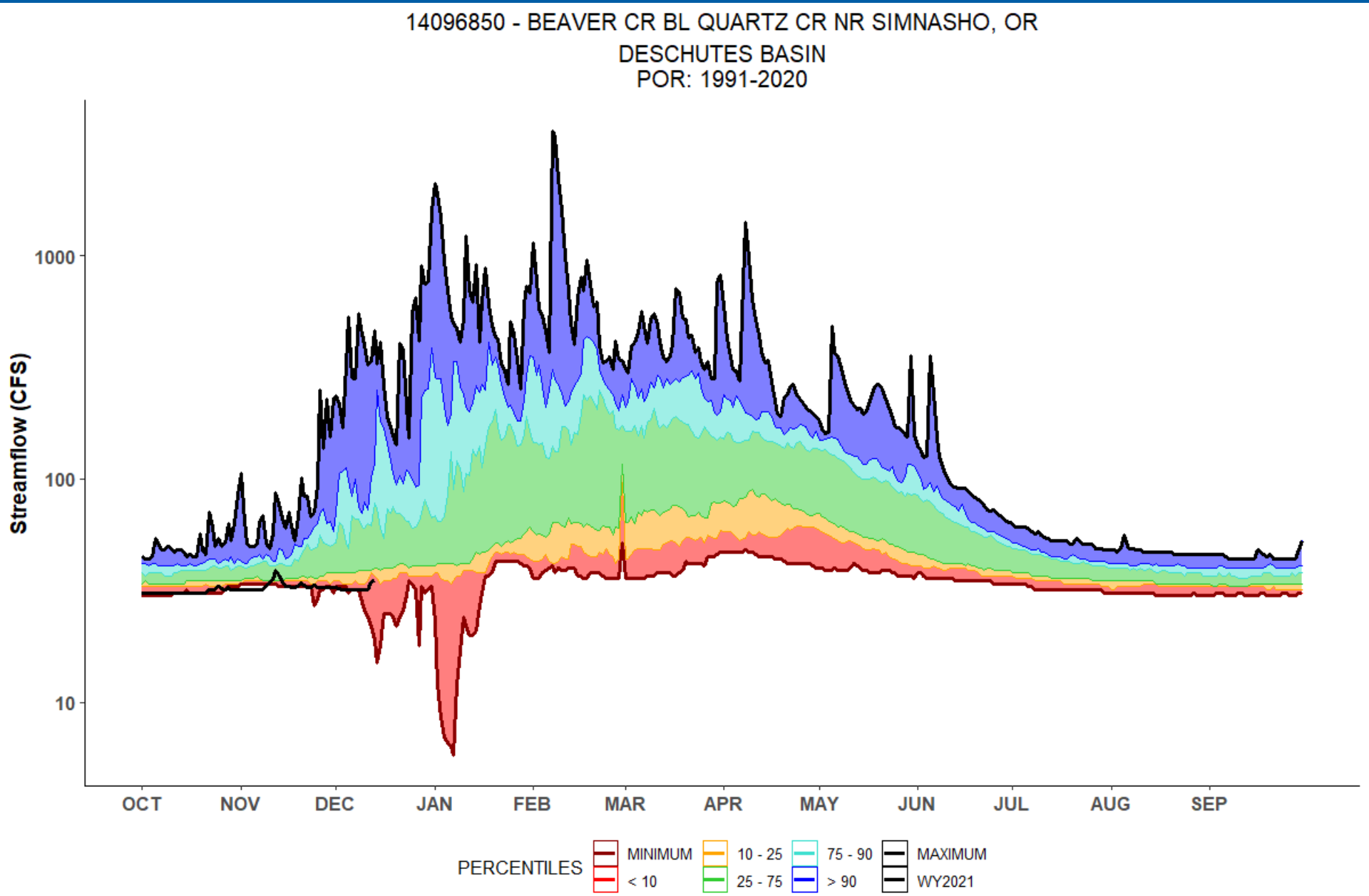

EAST BASINS
% of Average Yield
% of Average
150
100
50
0
GRANDE RONDE
MALHEUR
MALHEUR LAKES
POWDER
UMATILLA
10
11
12
1
2
3
4
5
6
7
8
9

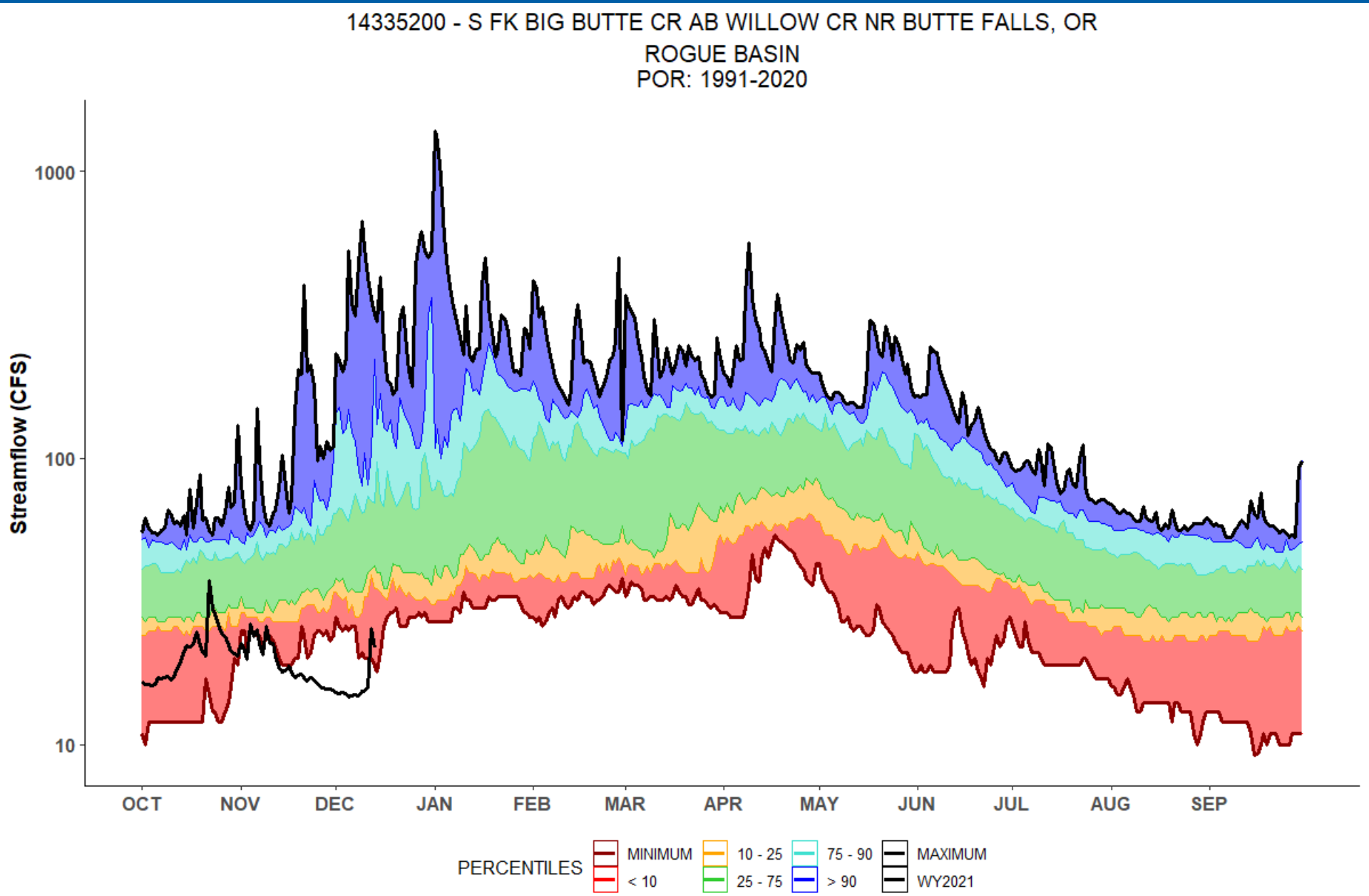

28-day % of Average Streamflow - thru December 12, 2021
OREGON
WATER RESOURCES DEPARTMENT
Stream Gage
<= 30%
31% - 50%
51% - 70%
71% - 90%
91% - 110%
111% - 130%
> 130%
Counties
OWRD Basin
Date: 12/13/2021

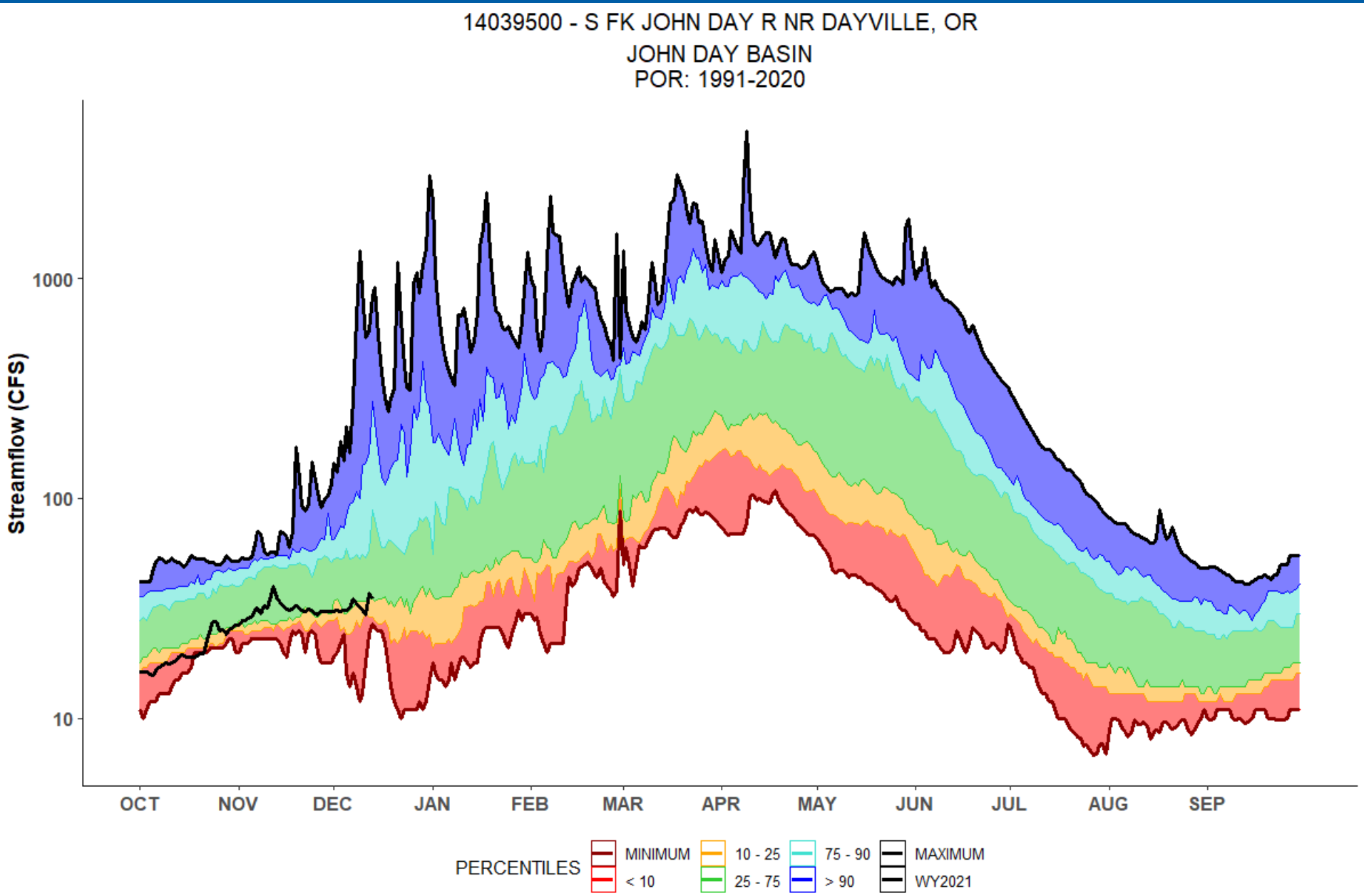

7-day % of Average Streamflow - thru December 12, 2021
Stream Gage
<= 30%
31% - 50%
51% - 70%
71% - 90%
91% - 110%
111% - 130%
> 130%
Counties
OWRD Basin
OREGON
WATER RESOURCES DEPARTMENT
Date: 12/13/2021


14079800 - CROOKED R AB PRINEVILLE RES NR POST, OR
DESCHUTES BASIN
POR: 1991-2020
Streamflow (CFS)
1000.0
10.0
0.1
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
PERCENTILES
MINIMUM
< 10
10 - 25
25 - 75
75 - 90
> 90
MAXIMUM
WY2021


10378500 - HONEY CR NR PLUSH, OR
GOOSE AND SUMMER LAKES BASIN
POR: 1991-2020
Streamflow (CFS)
1000.0
100.0
10.0
1.0
0.1
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
PERCENTILES
MINIMUM
< 10
10 - 25
25 - 75
75 - 90
> 90
MAXIMUM
WY2021


14096850 - BEAVER CR BL QUARTZ CR NR SIMNASHO, OR
DESCHUTES BASIN
POR: 1991-2020
Streamflow (CFS)
1000
100
10
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
PERCENTILES
MINIMUM
< 10
10 - 25
25 - 75
75 - 90
> 90
MAXIMUM
WY2021


14335200 - S FK BIG BUTTE CR AB WILLOW CR NR BUTTE FALLS, OR
ROGUE BASIN
POR: 1991-2020
Streamflow (CFS)
1000
100
10
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
PERCENTILES
MINIMUM
< 10
10 - 25
25 - 75
75 - 90
> 90
MAXIMUM
WY2021


14039500 - S FK JOHN DAY R NR DAYVILLE, OR
JOHN DAY BASIN
POR: 1991-2020
Streamflow (CFS)
1000
100
10
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
PERCENTILES
MINIMUM
< 10
10 - 25
25 - 75
75 - 90
> 90
MAXIMUM
WY2021

OREGON

WATER RESOURCES DEPARTMENT

QUESTIONS?

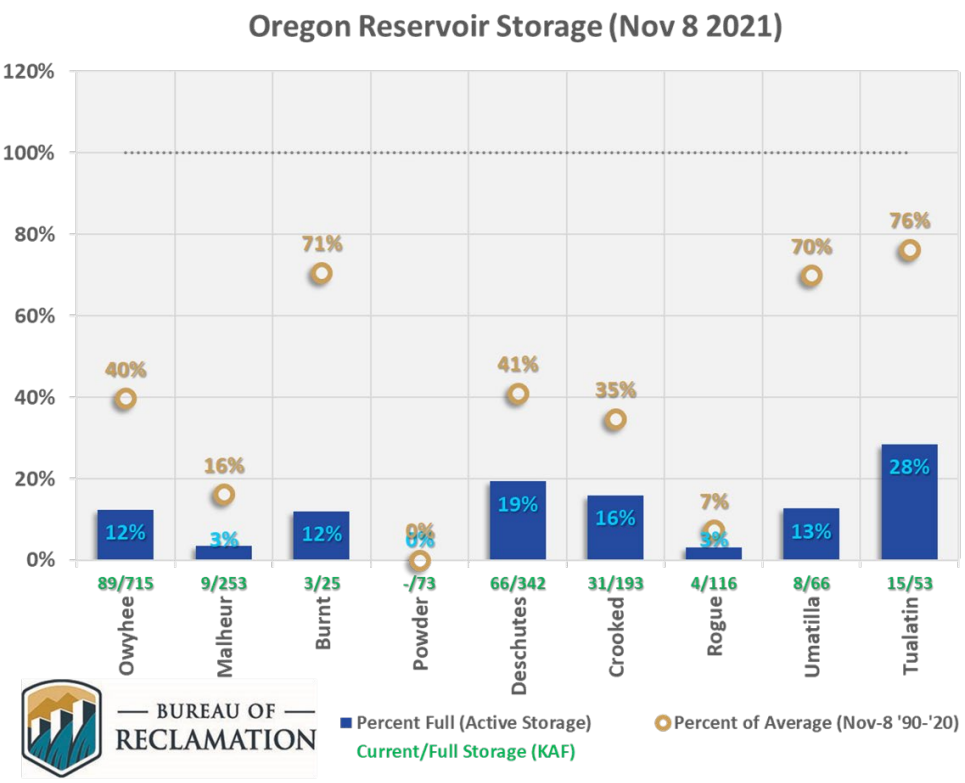
BUREAU OF RECLAMATION

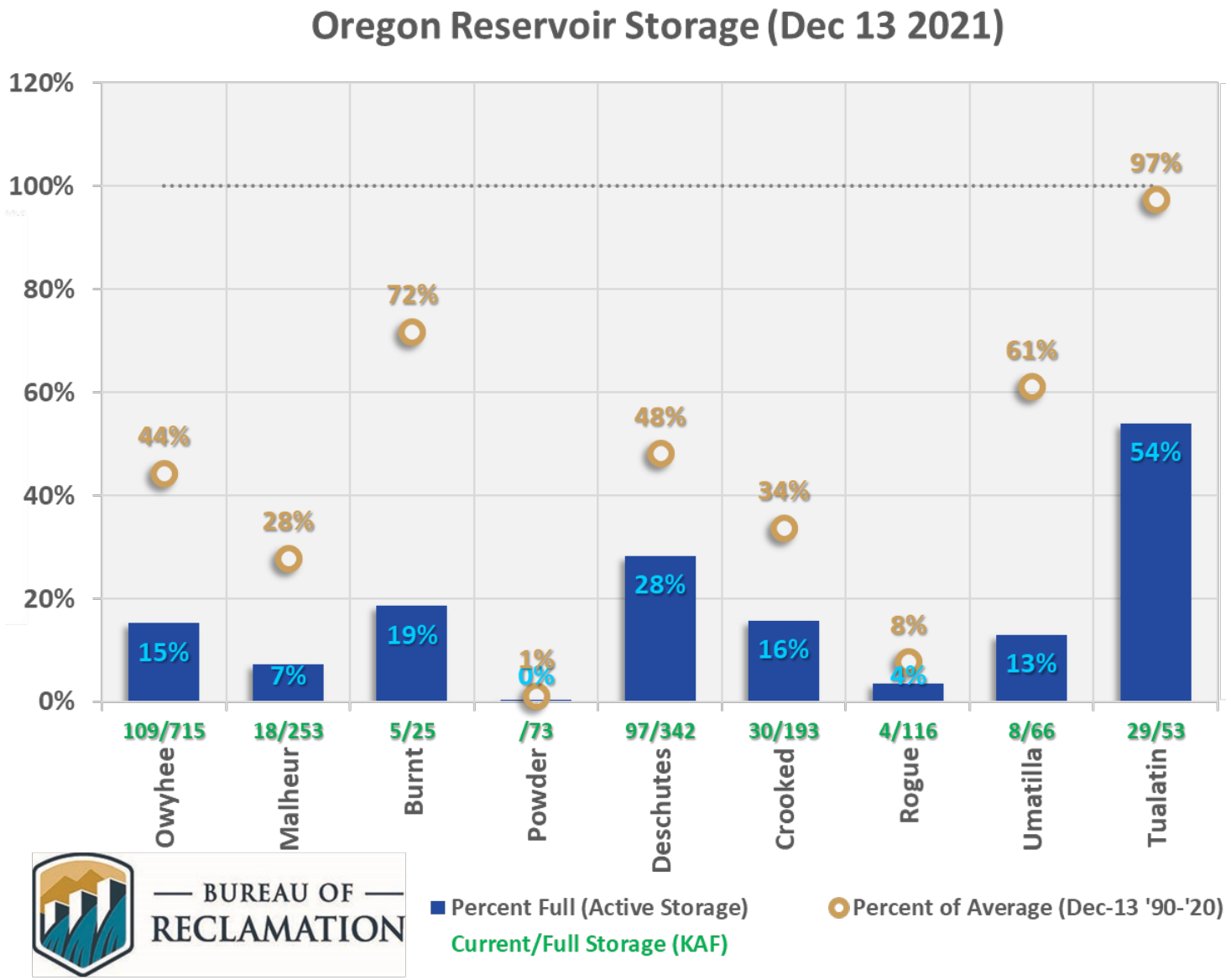
Reclamation Storage Update

Oregon Water Supply Availability Committee Meeting

December 15, 2021

Storage Conditions



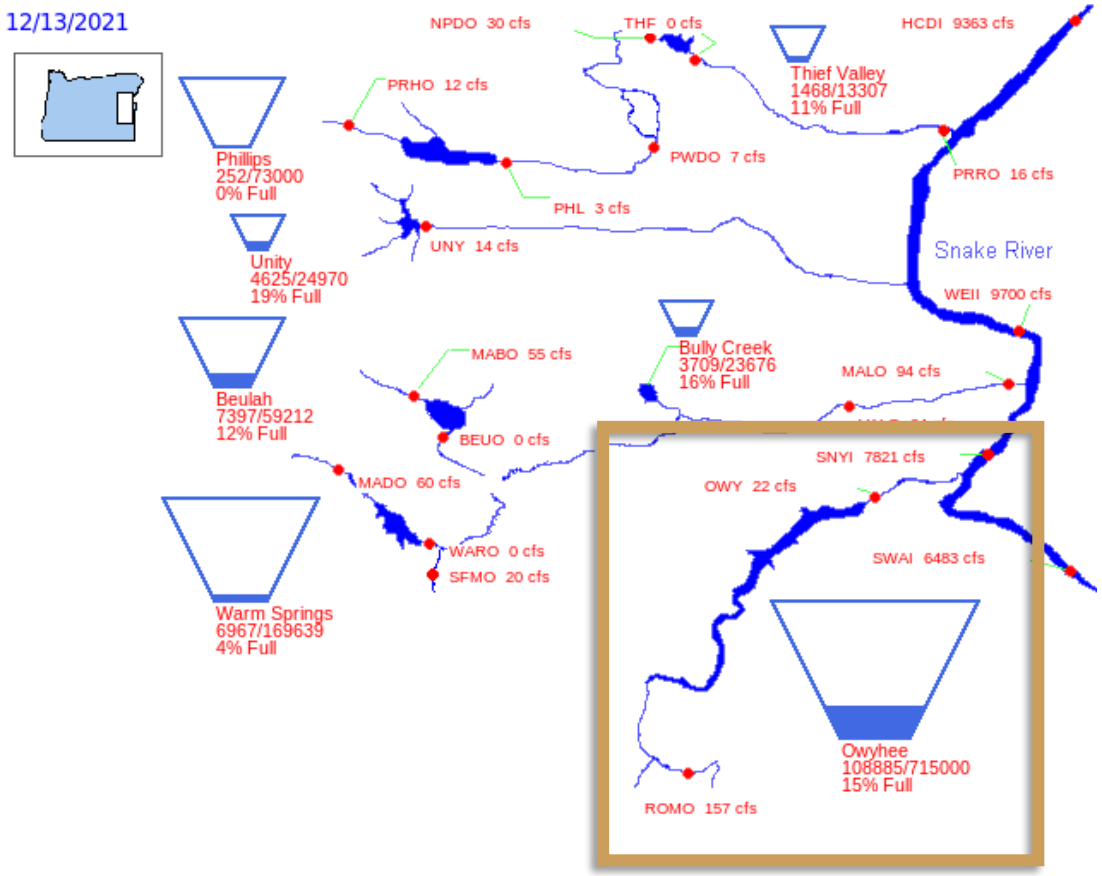


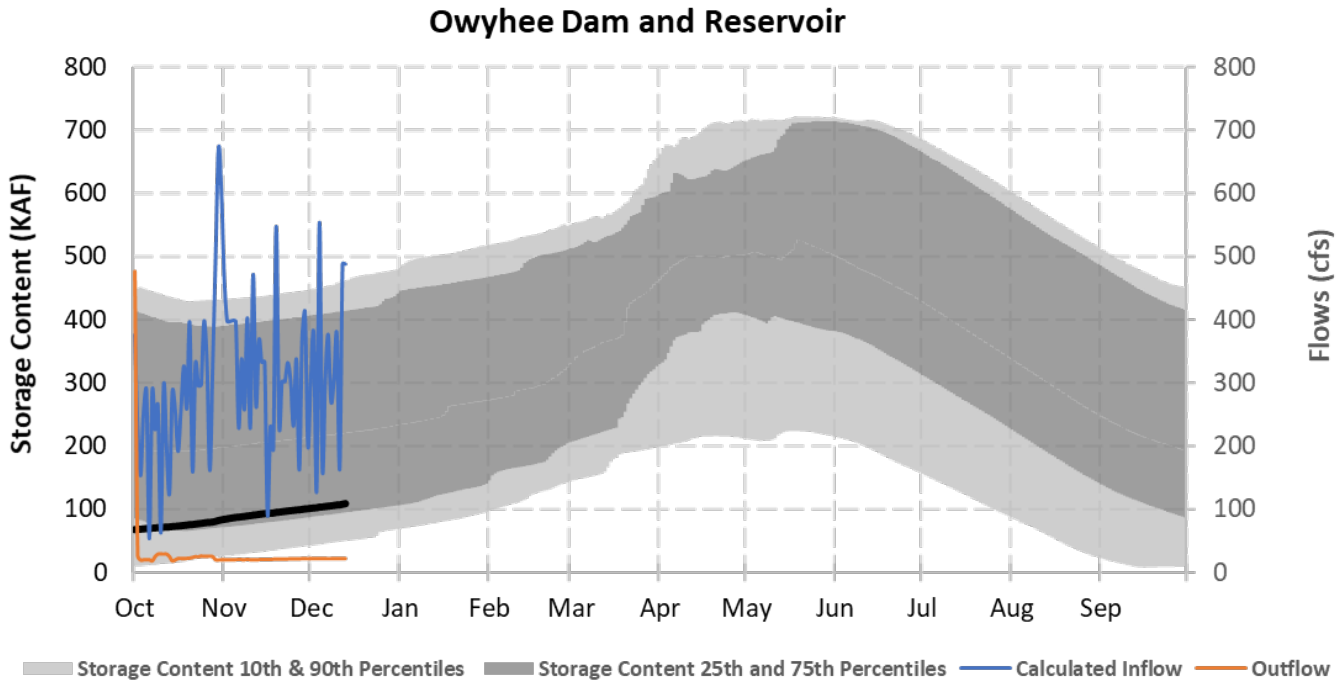
Basin Operations Summary

- Operations Activities:
  - All Oregon projects continue with typical winter operations – Storage Season
  - Flood Risk Management operations could begin at Scoggins in the next week

- Water Supply Notes
  - Below Average reservoir content continues at Reclamation Oregon reservoirs (except Scoggins)
  - Need wet conditions to continue, particularly in the southern Oregon basins
  - Most river basins will need above to much above normal runoff this WY to refill

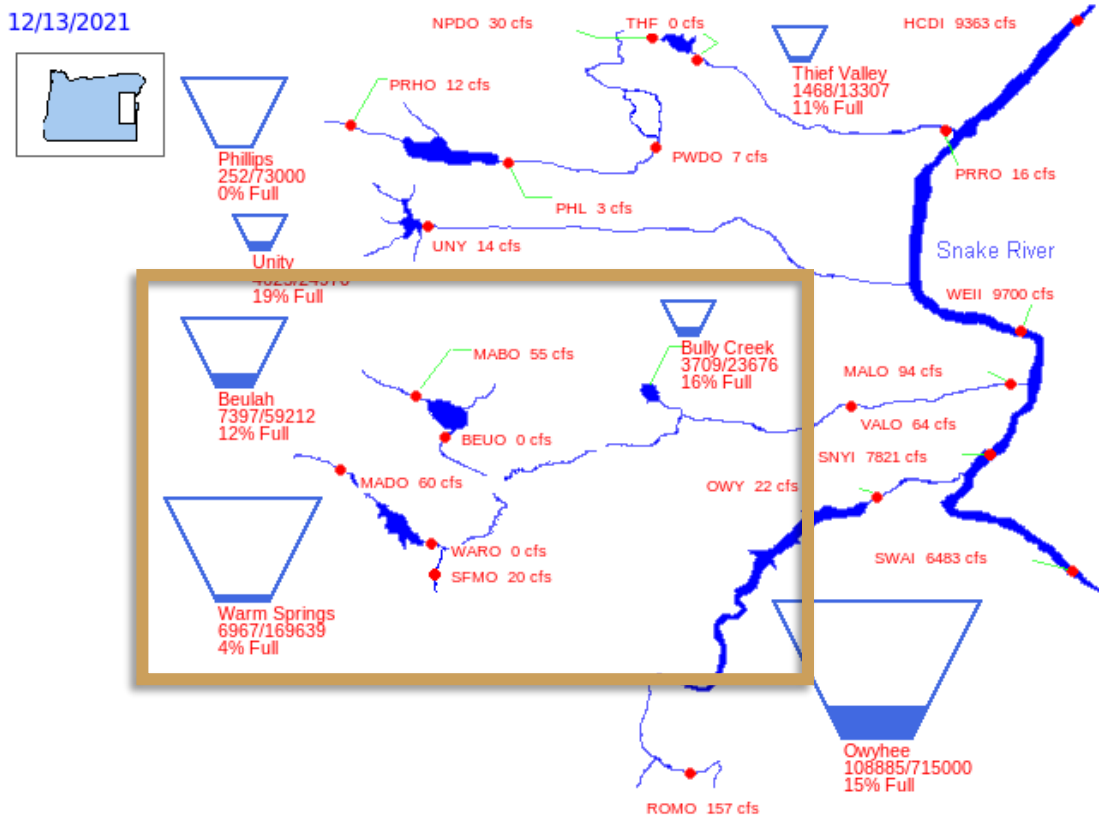
Owyhee River Basin

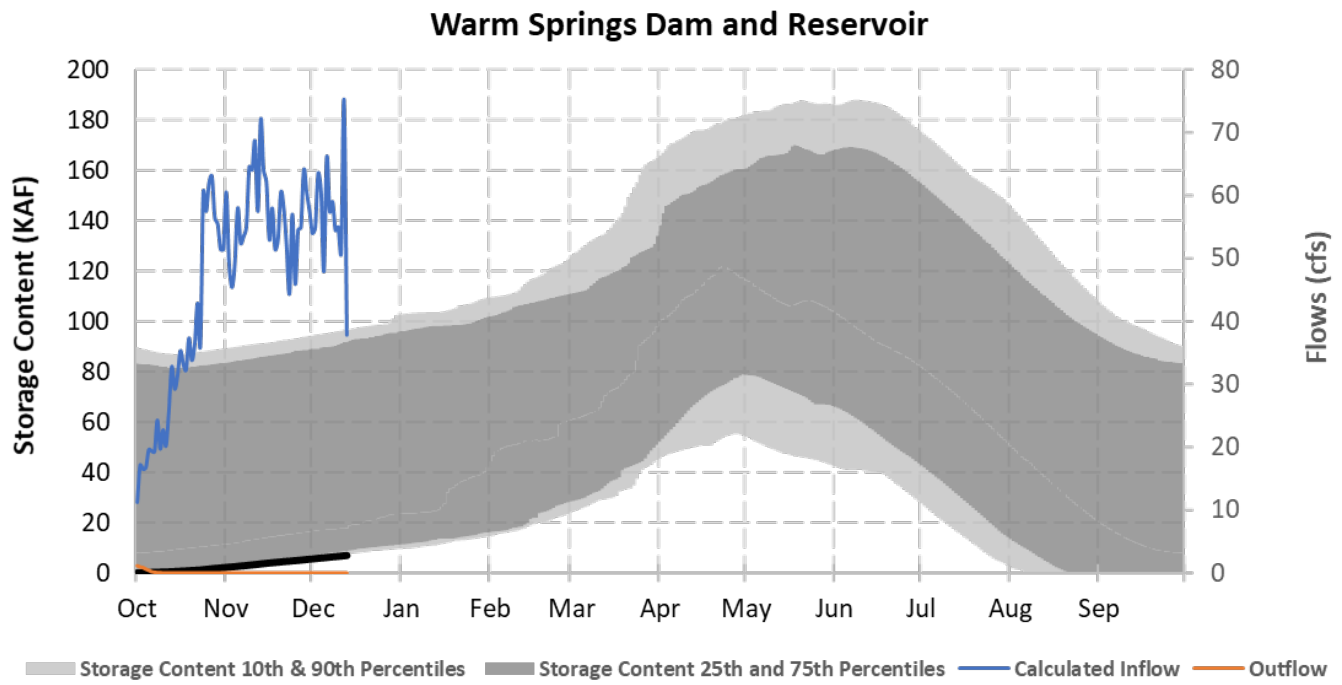


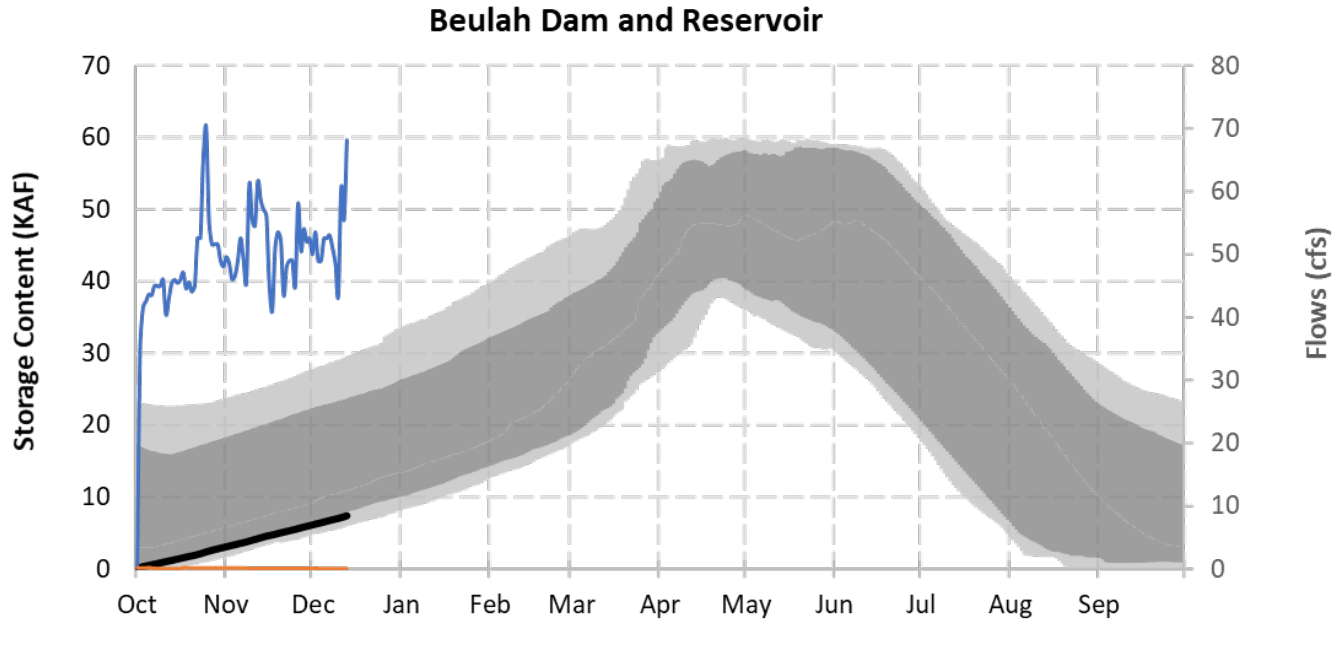


*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

Malheur River Basin







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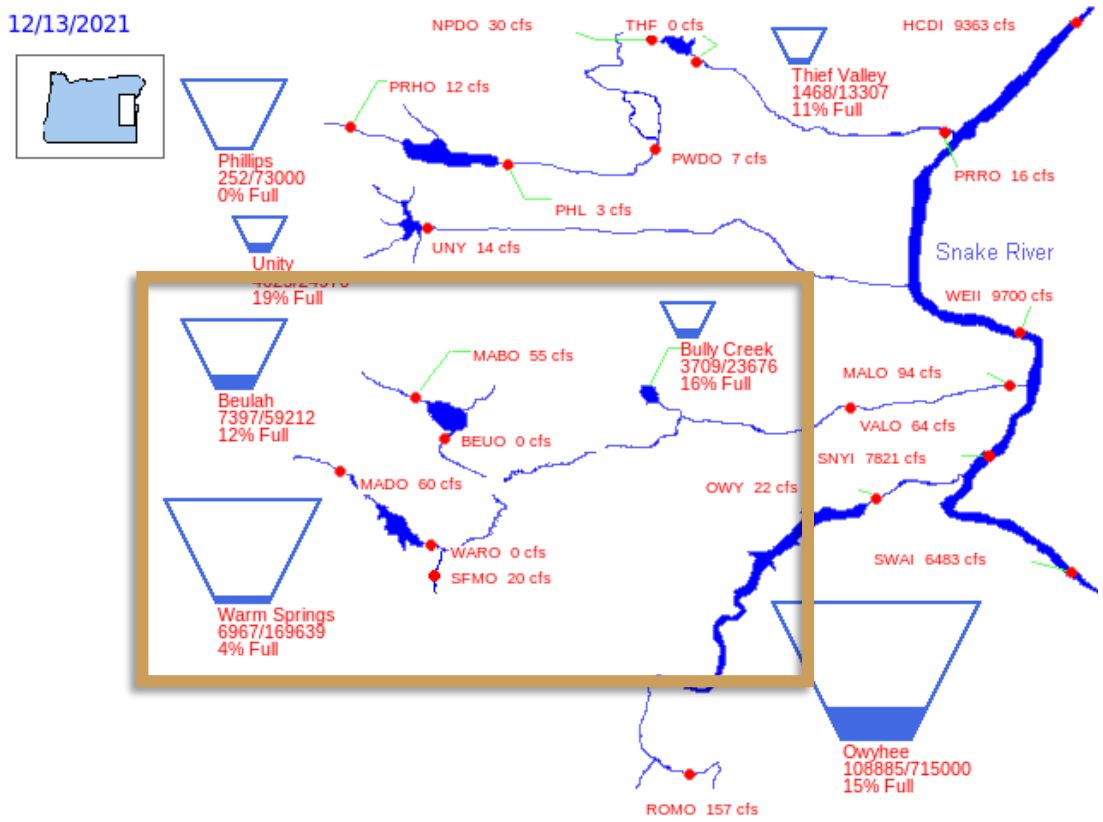
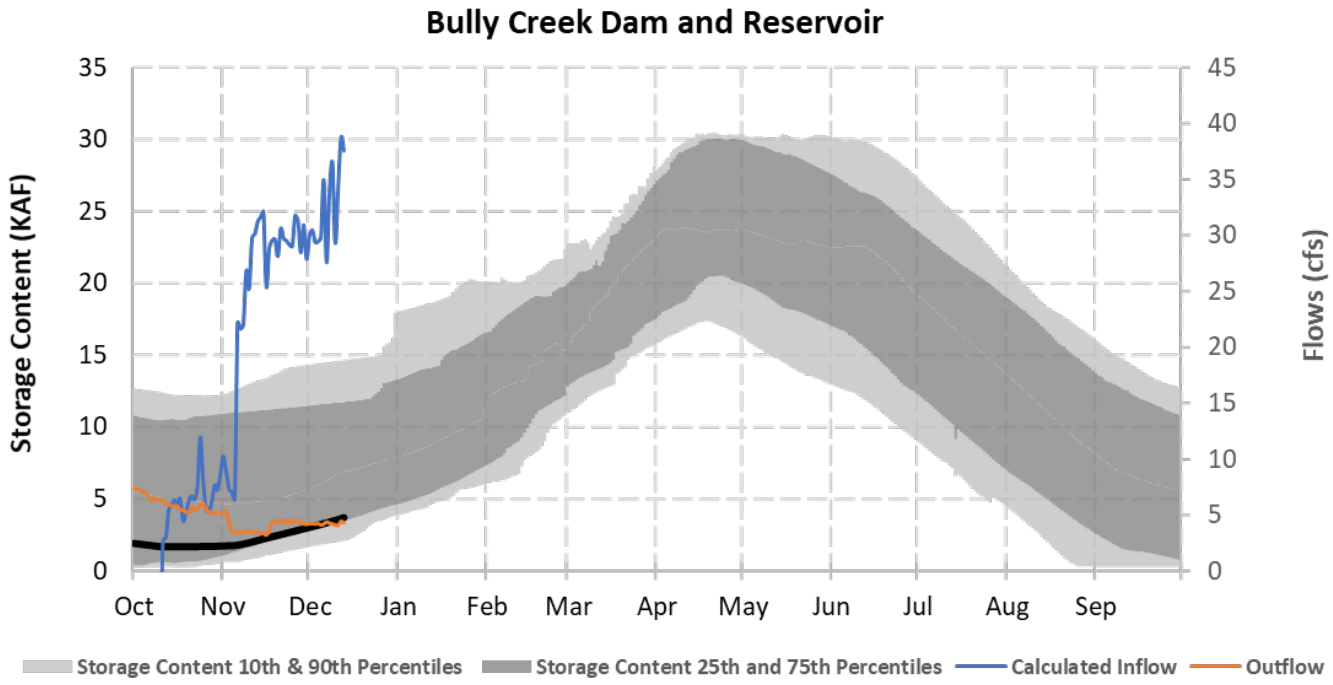
Malheur River Basin





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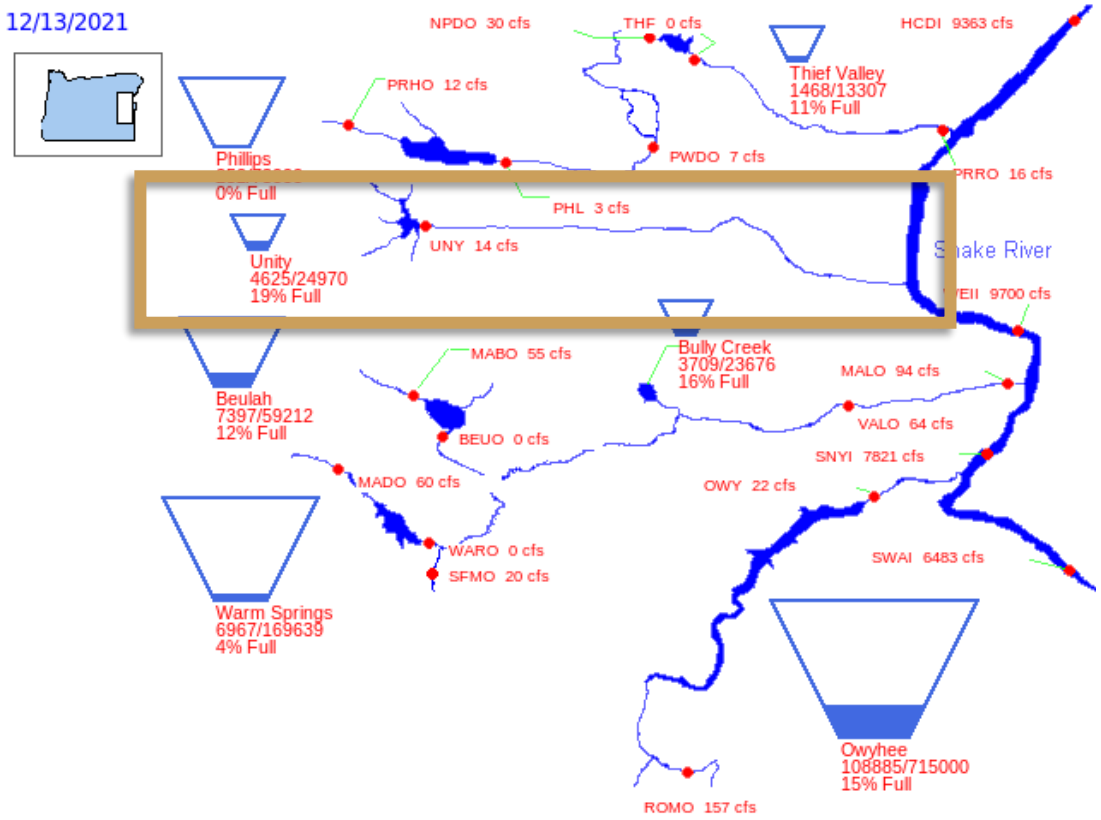
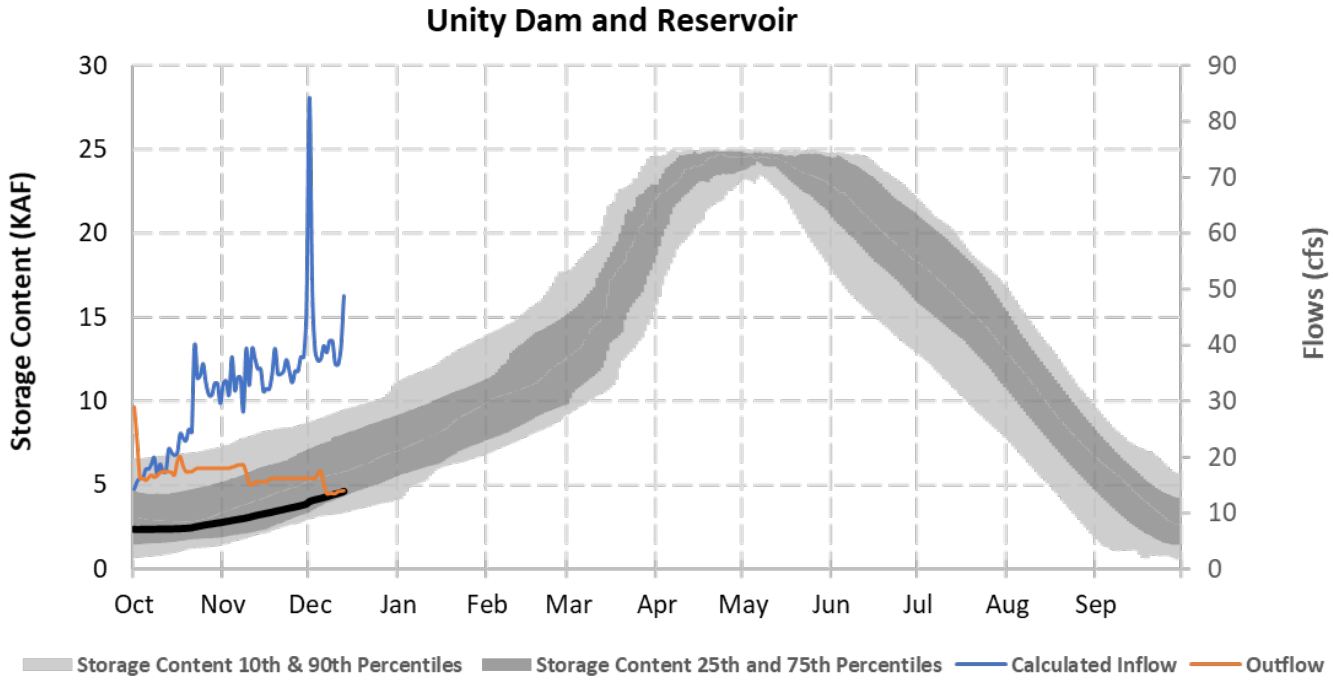
Burnt River Basin





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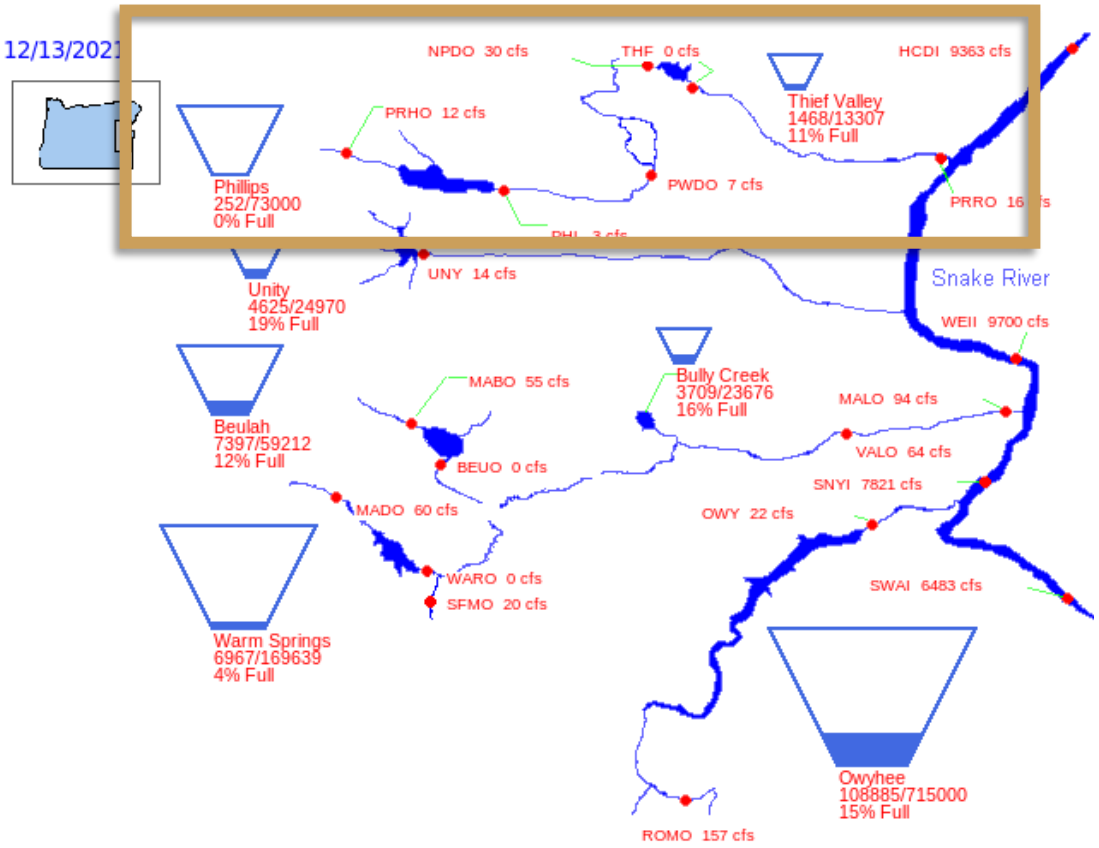
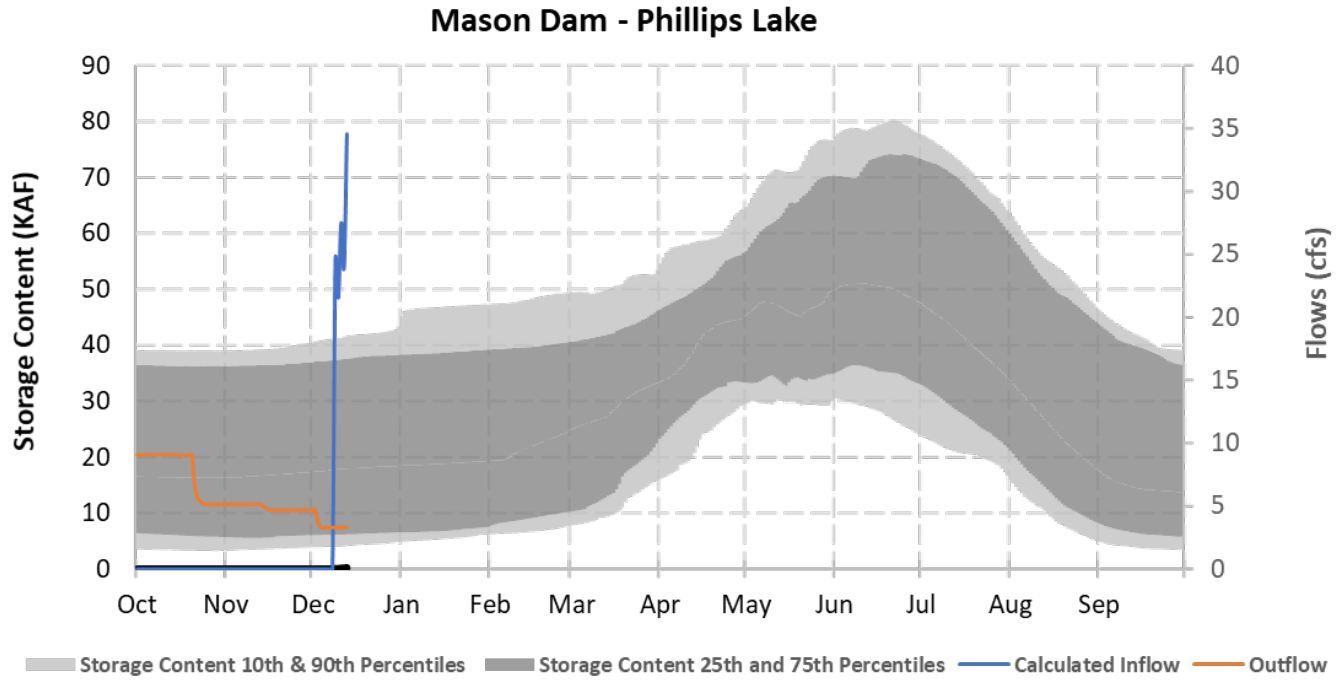
Powder River Basin





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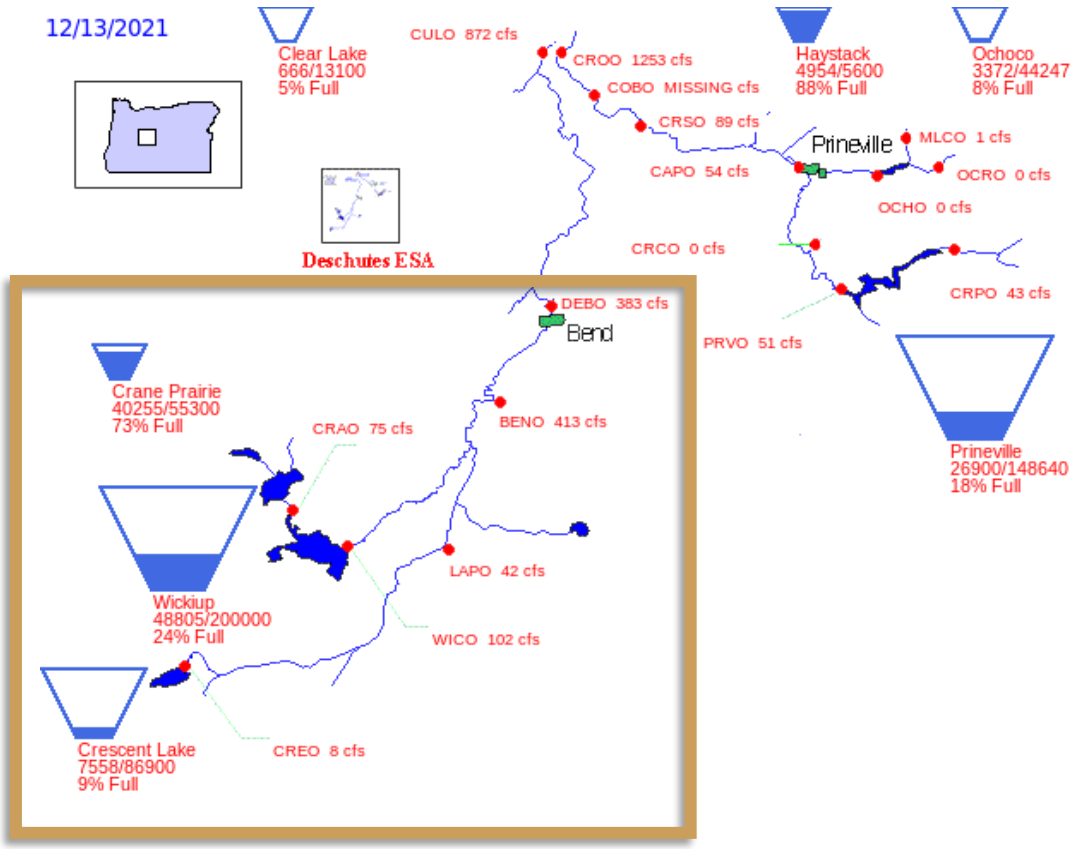
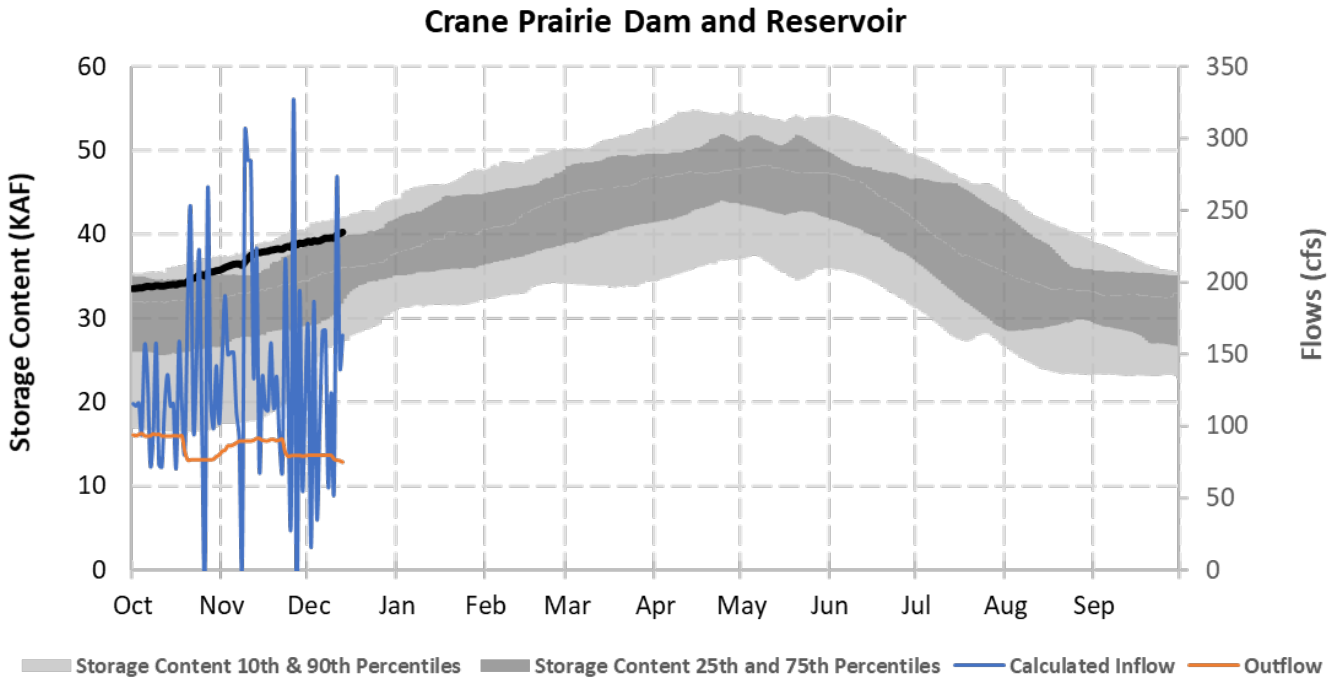
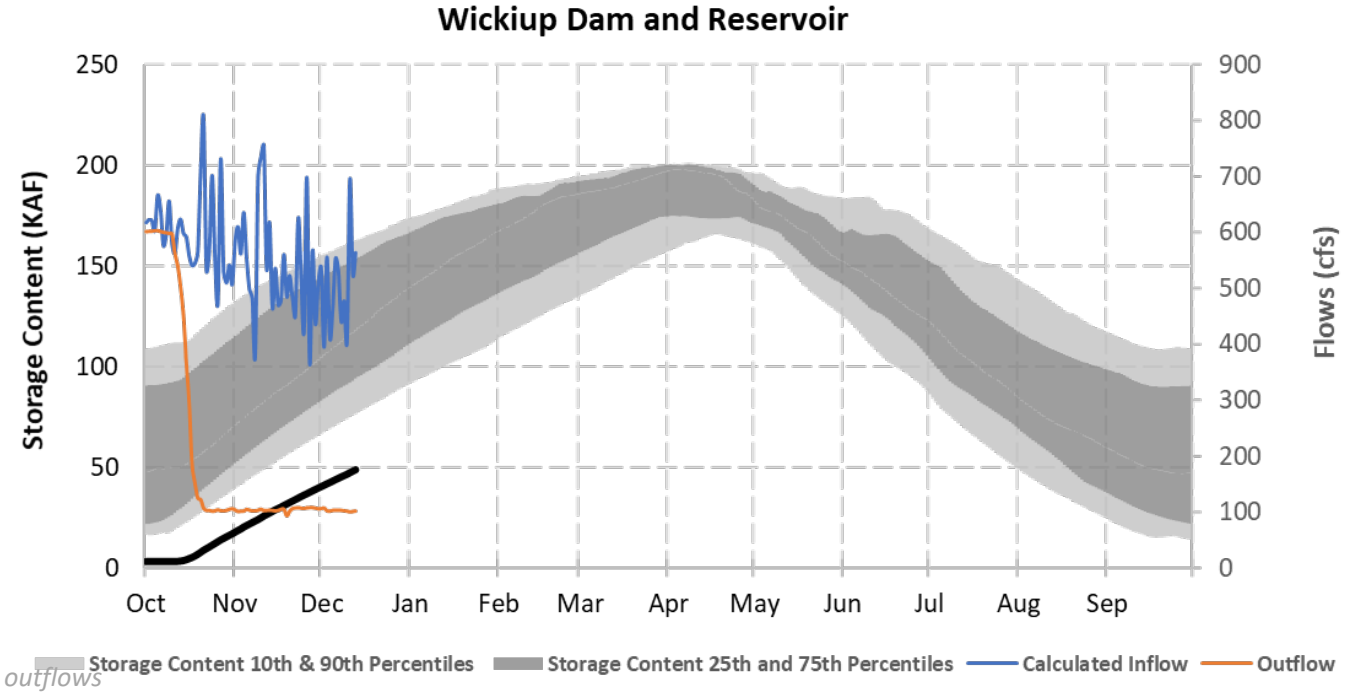
Deschutes River Basin







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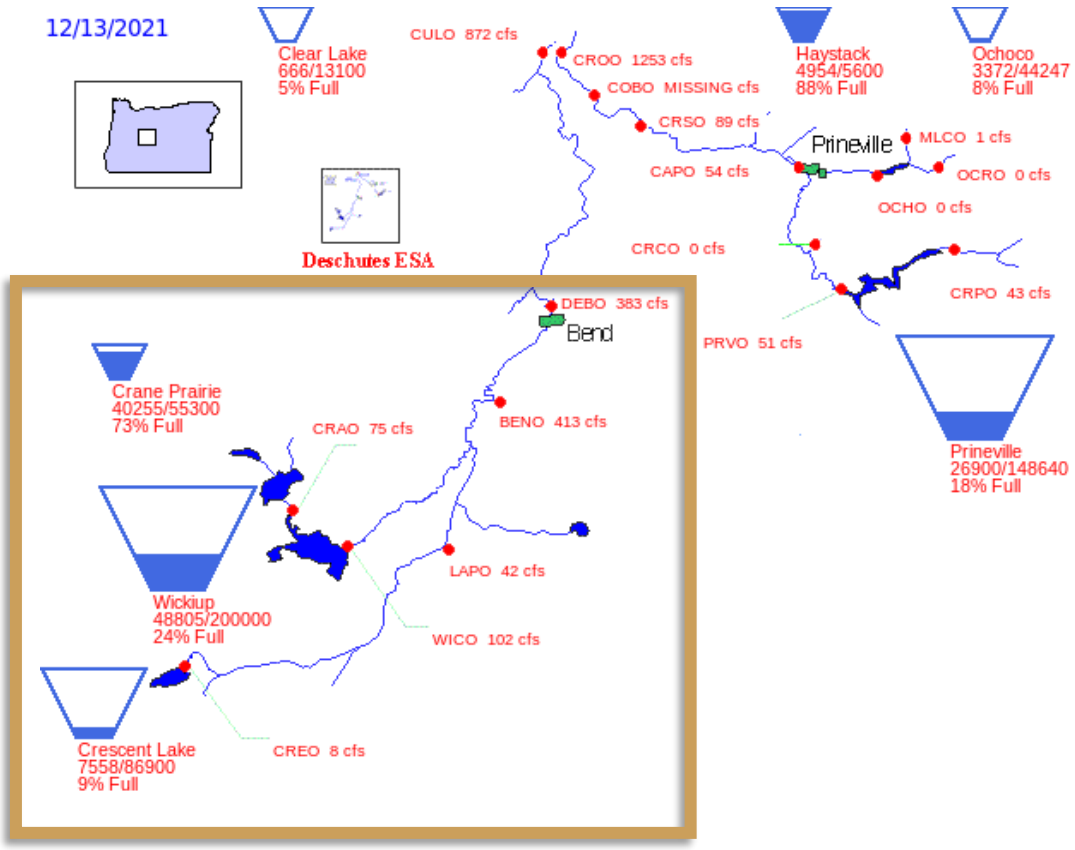
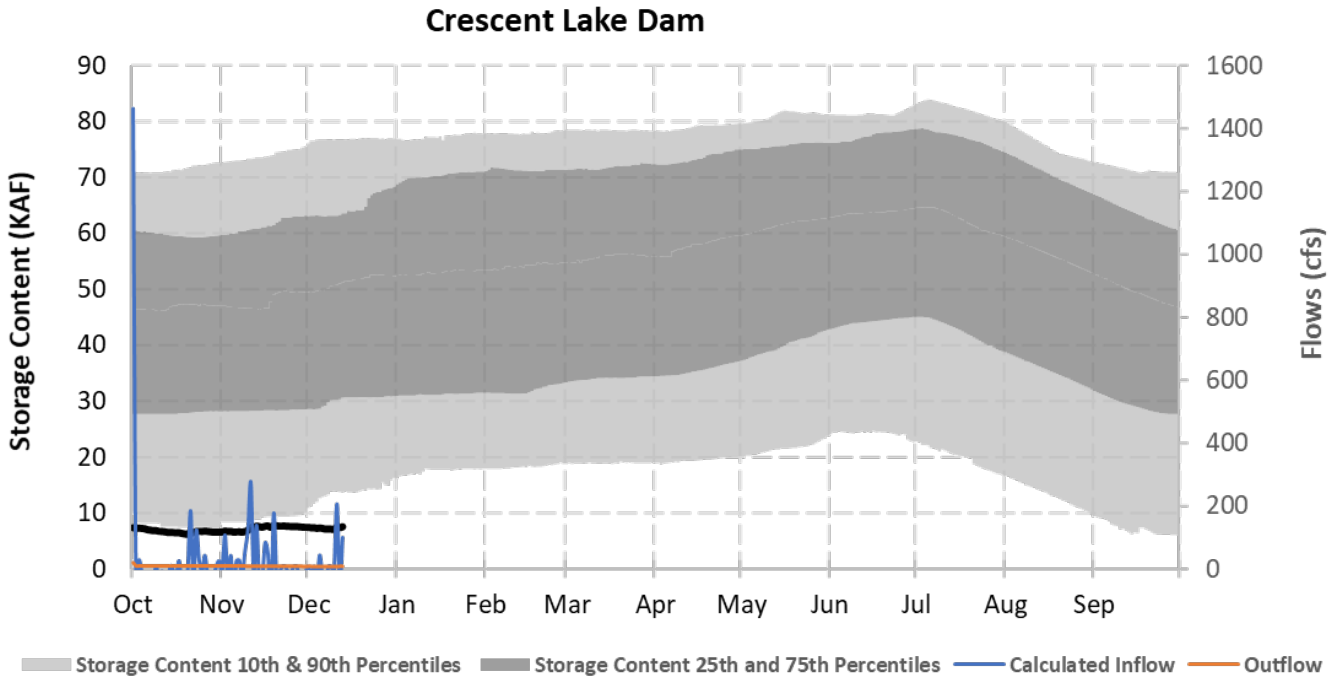
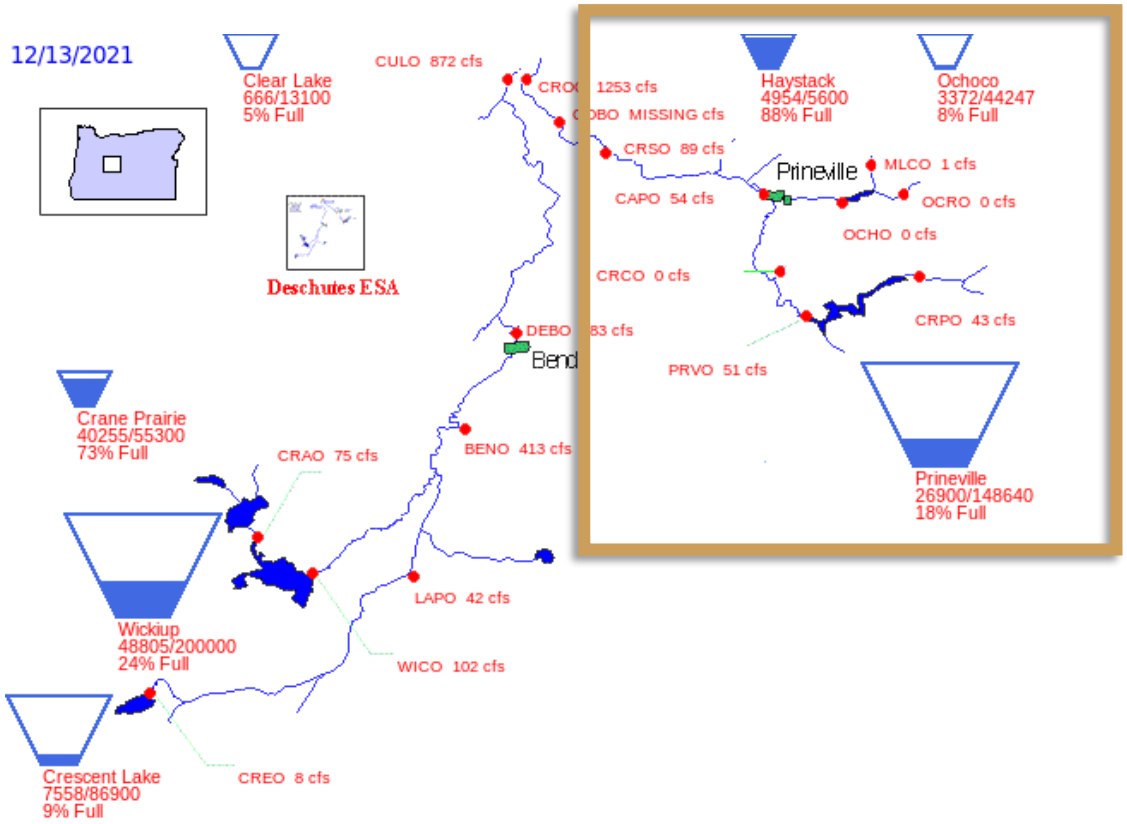
Deschutes River Basin

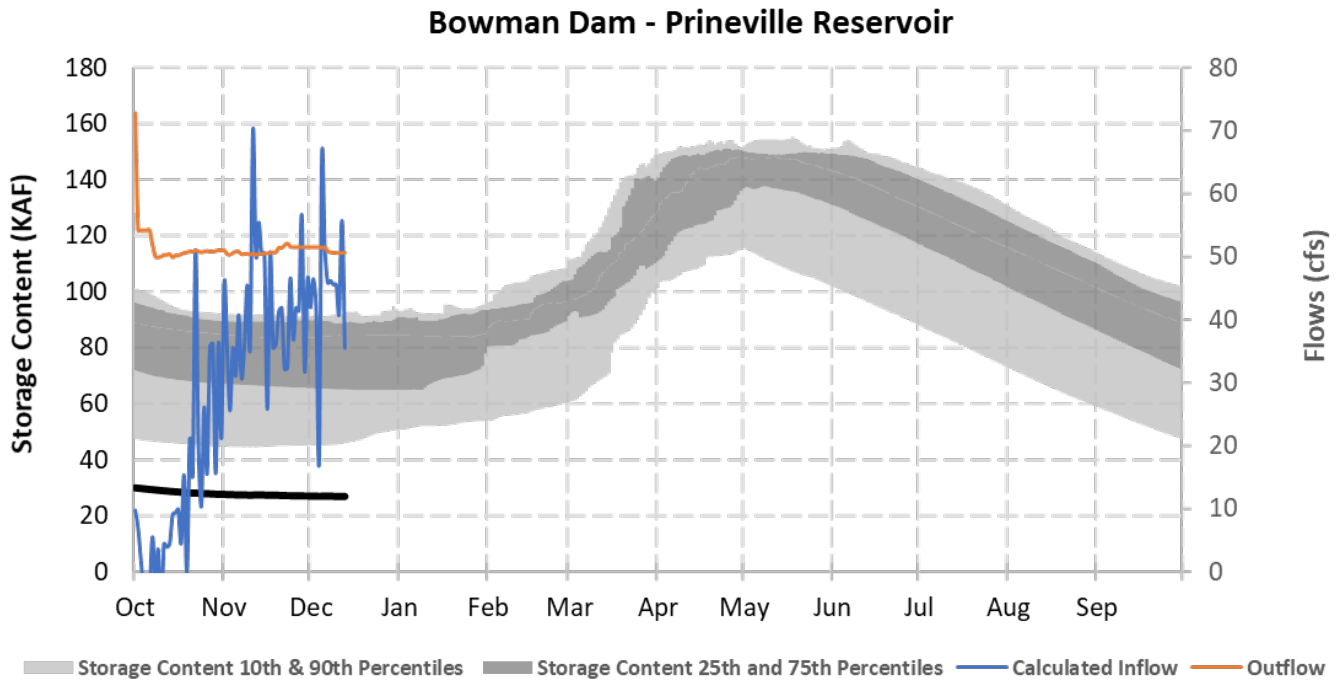


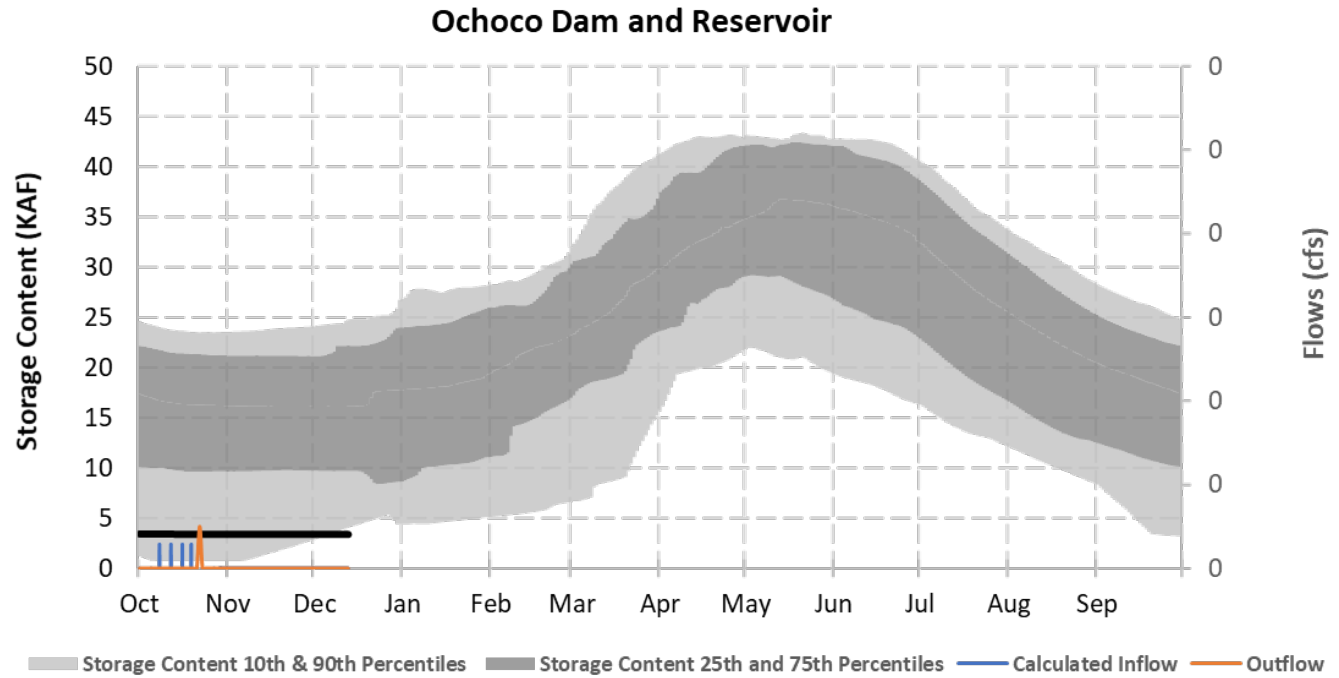


*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

Crooked River Basin







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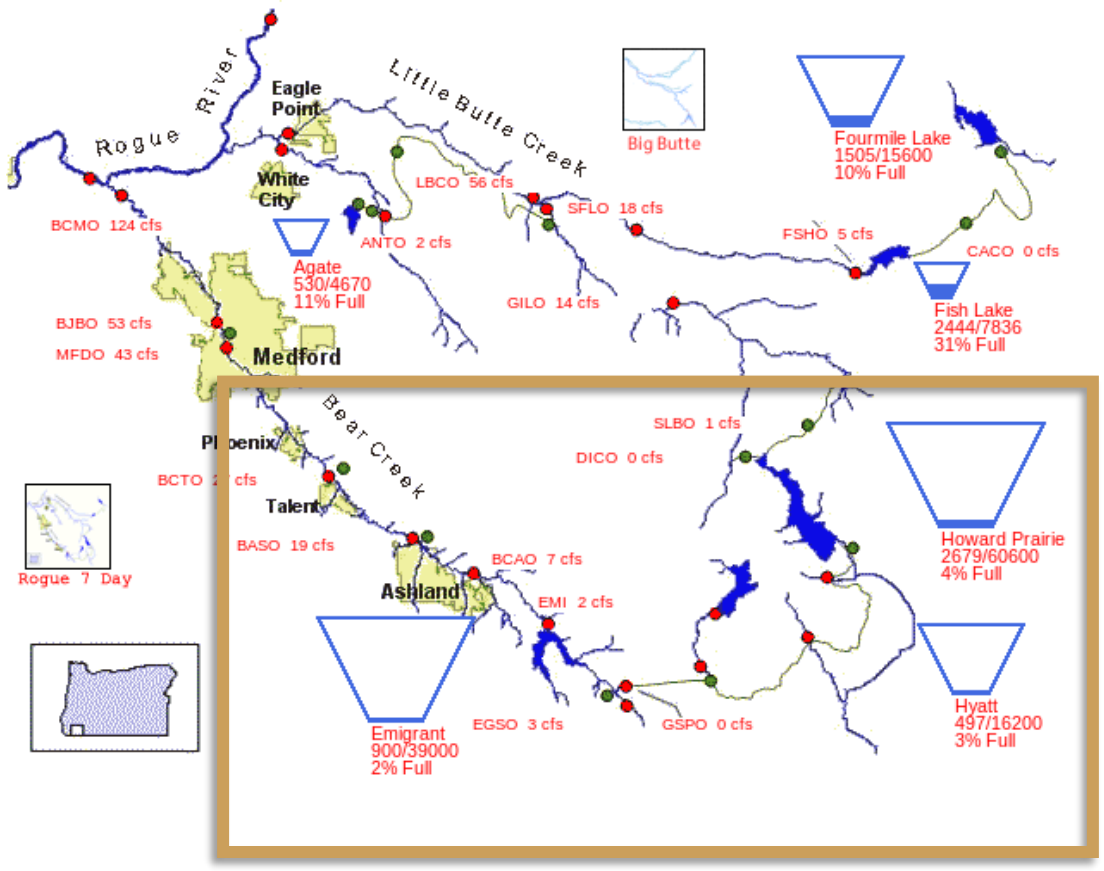
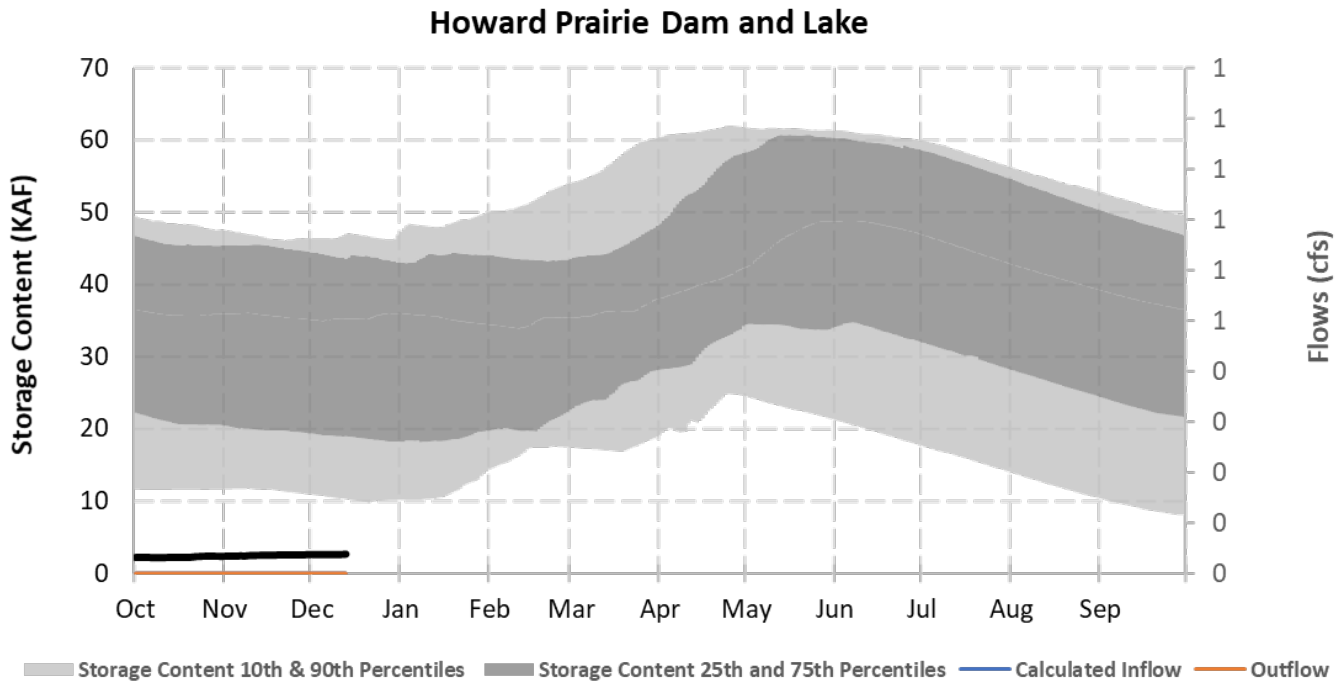
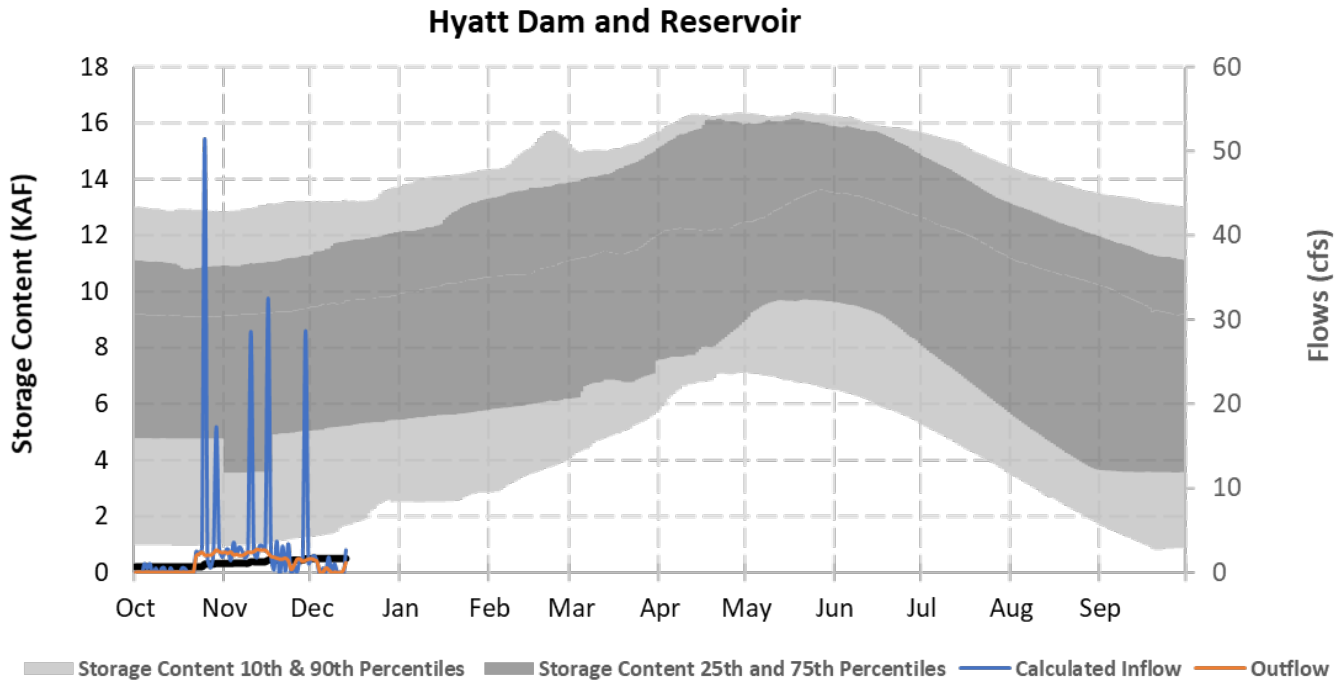
Rogue River Basin

12/13/2021







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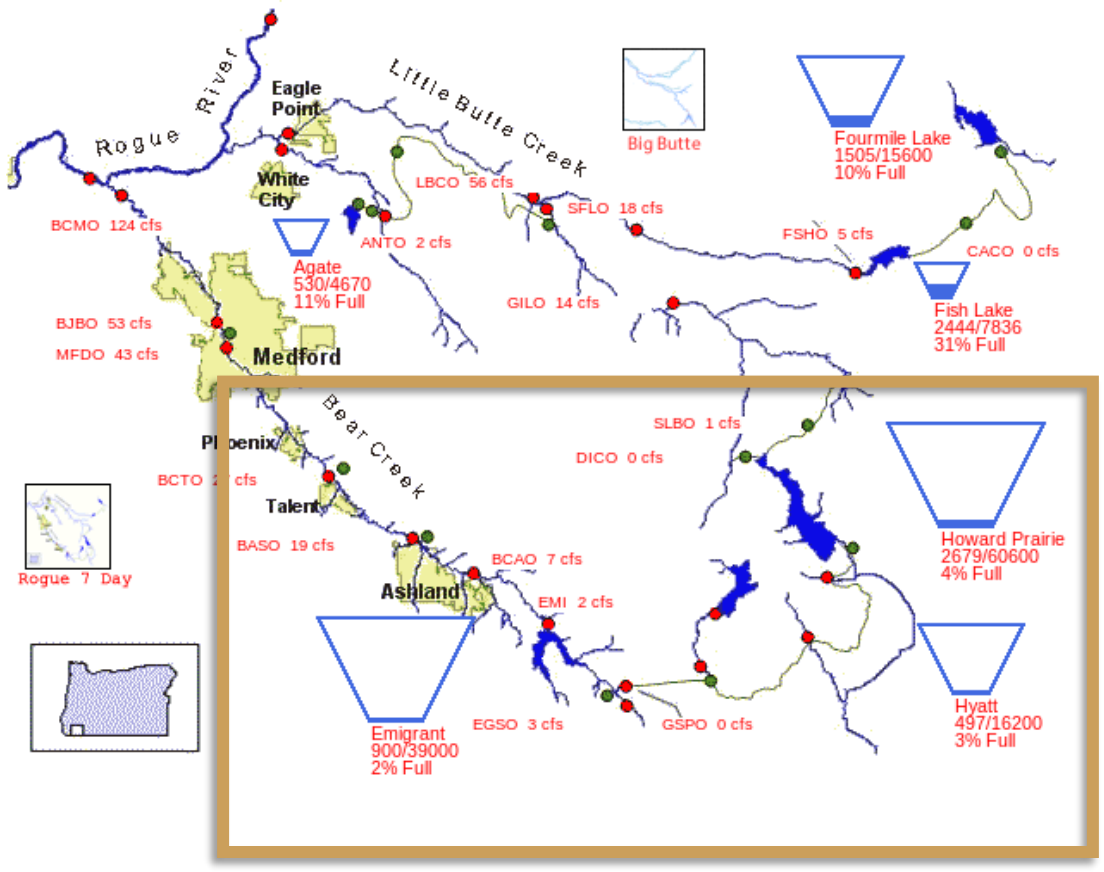
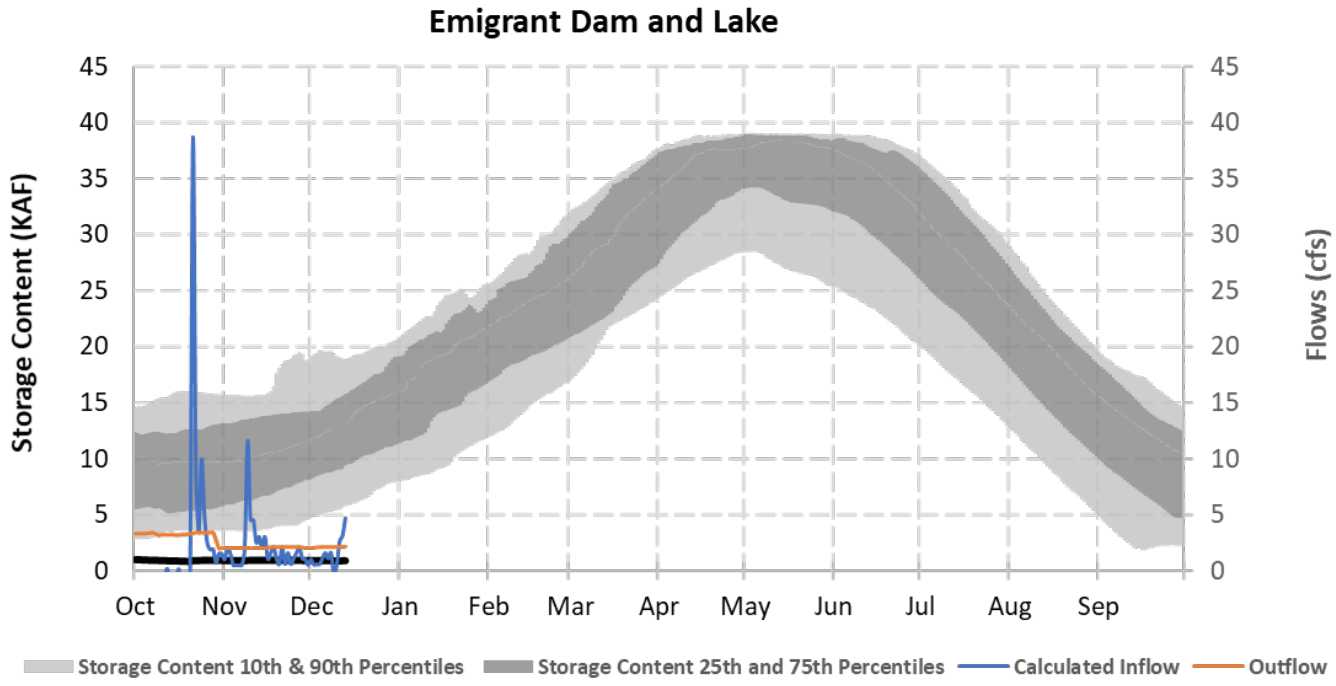
Rogue River Basin

12/13/2021





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Umatilla River Basin

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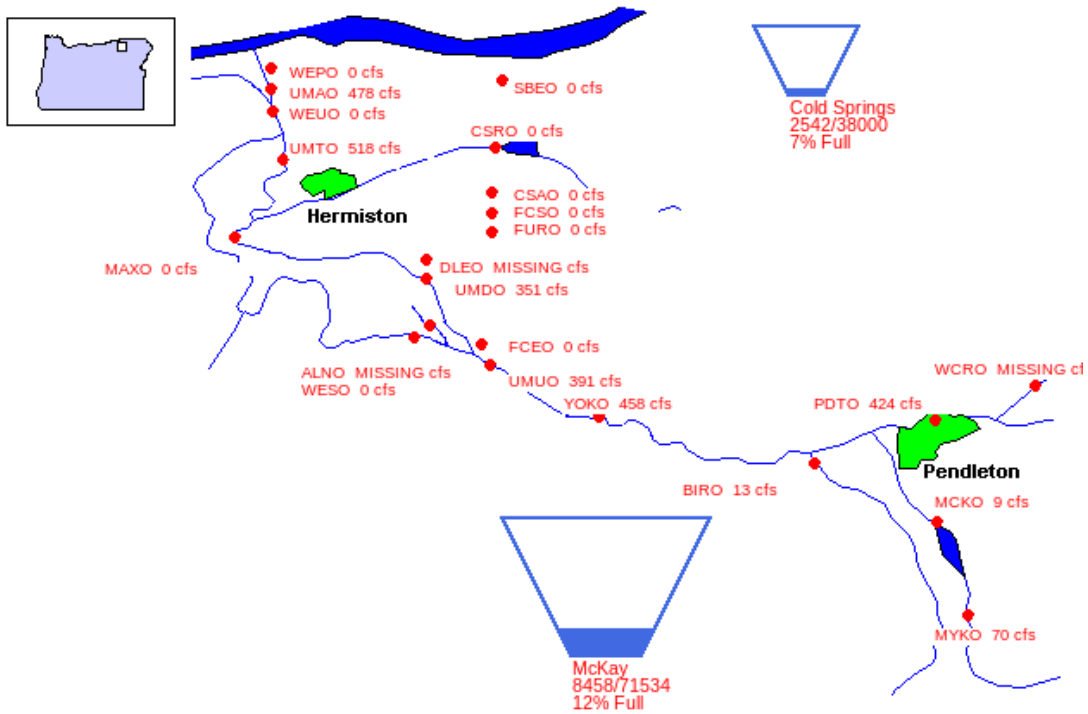

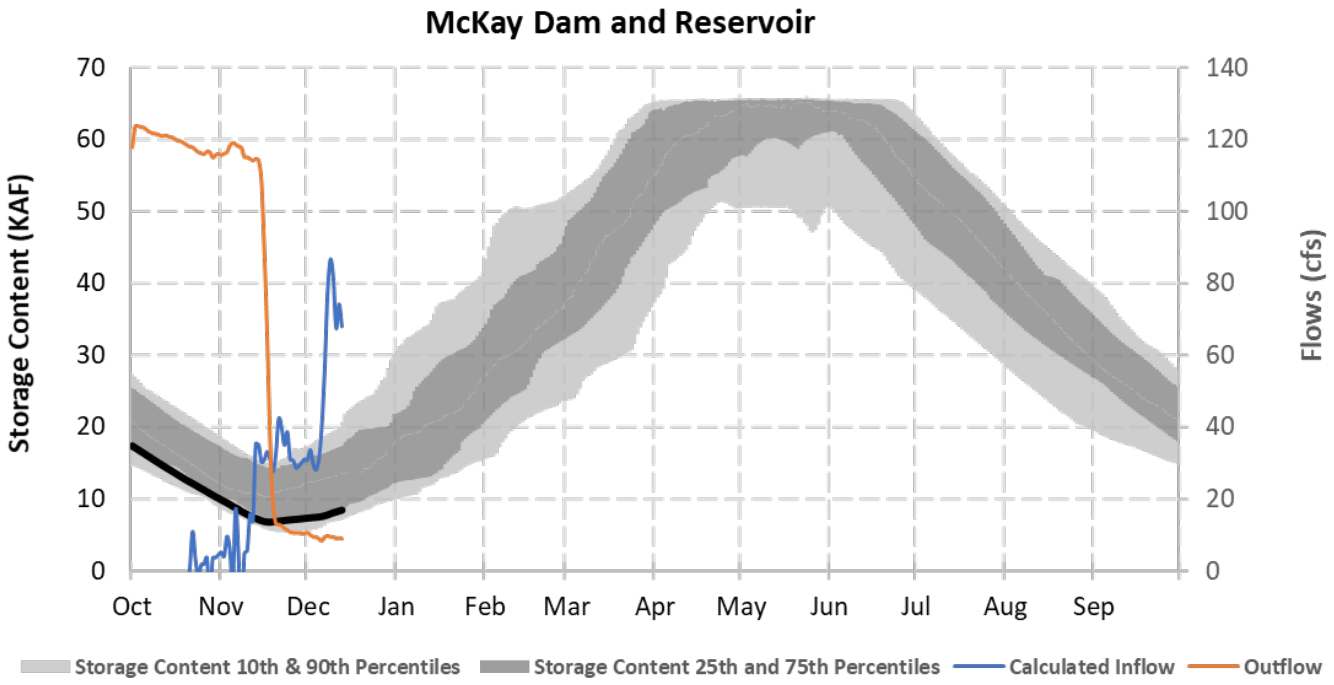

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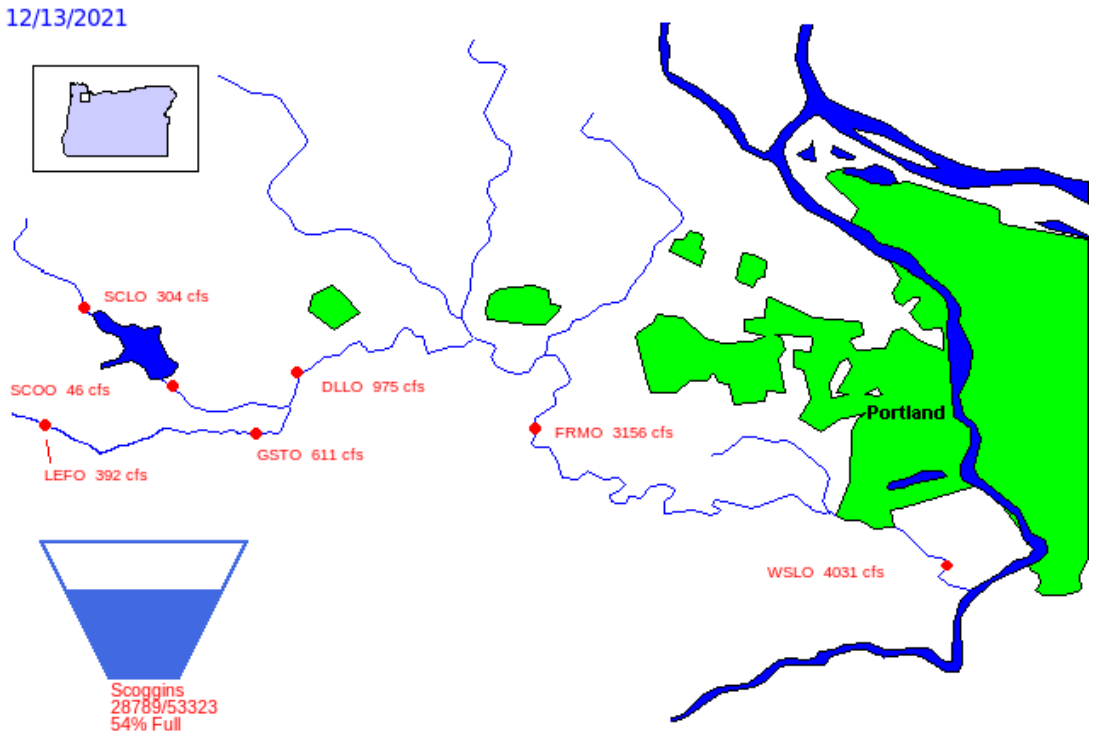
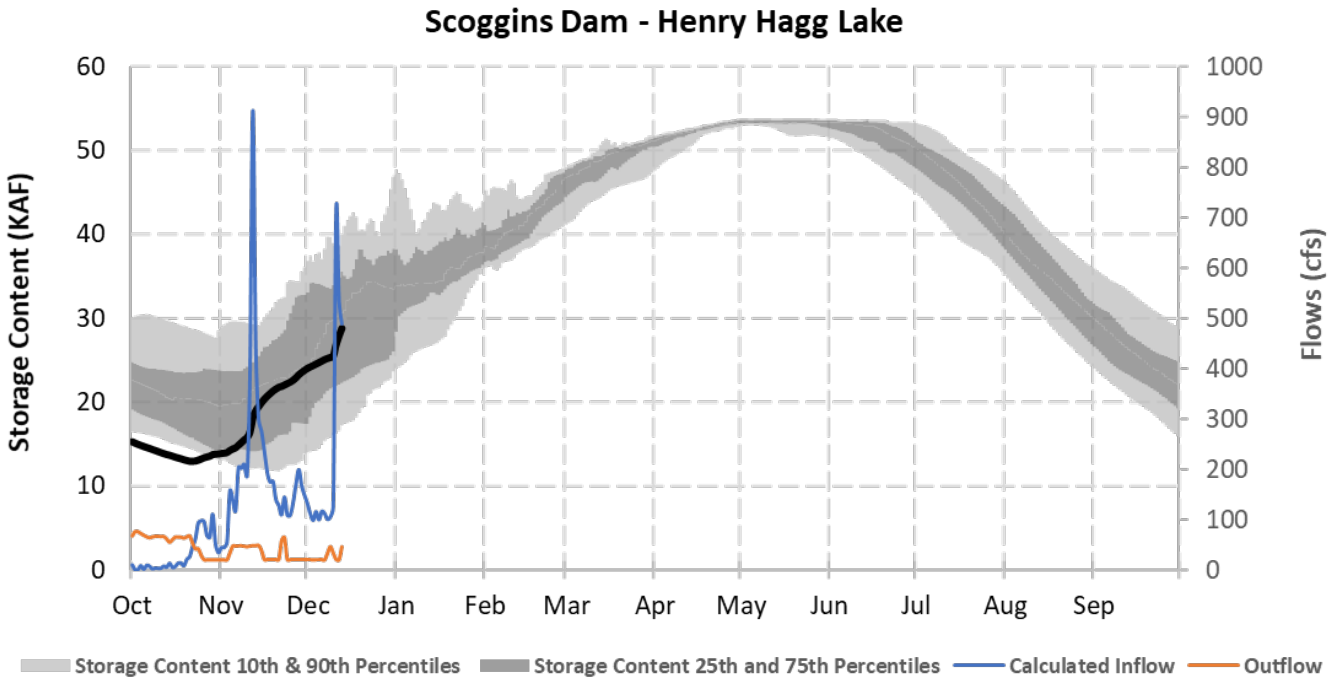
Tualatin River Basin





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

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