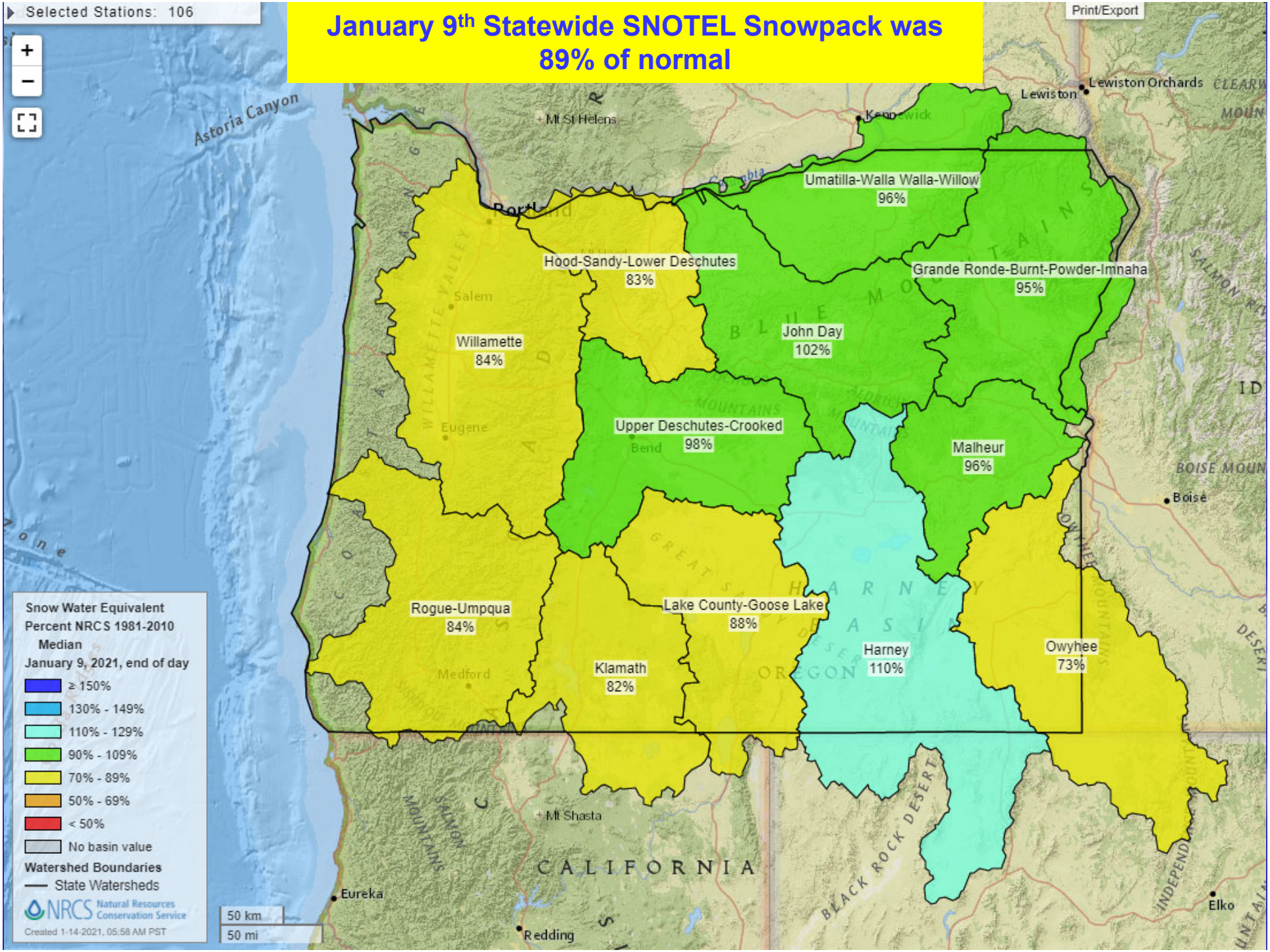
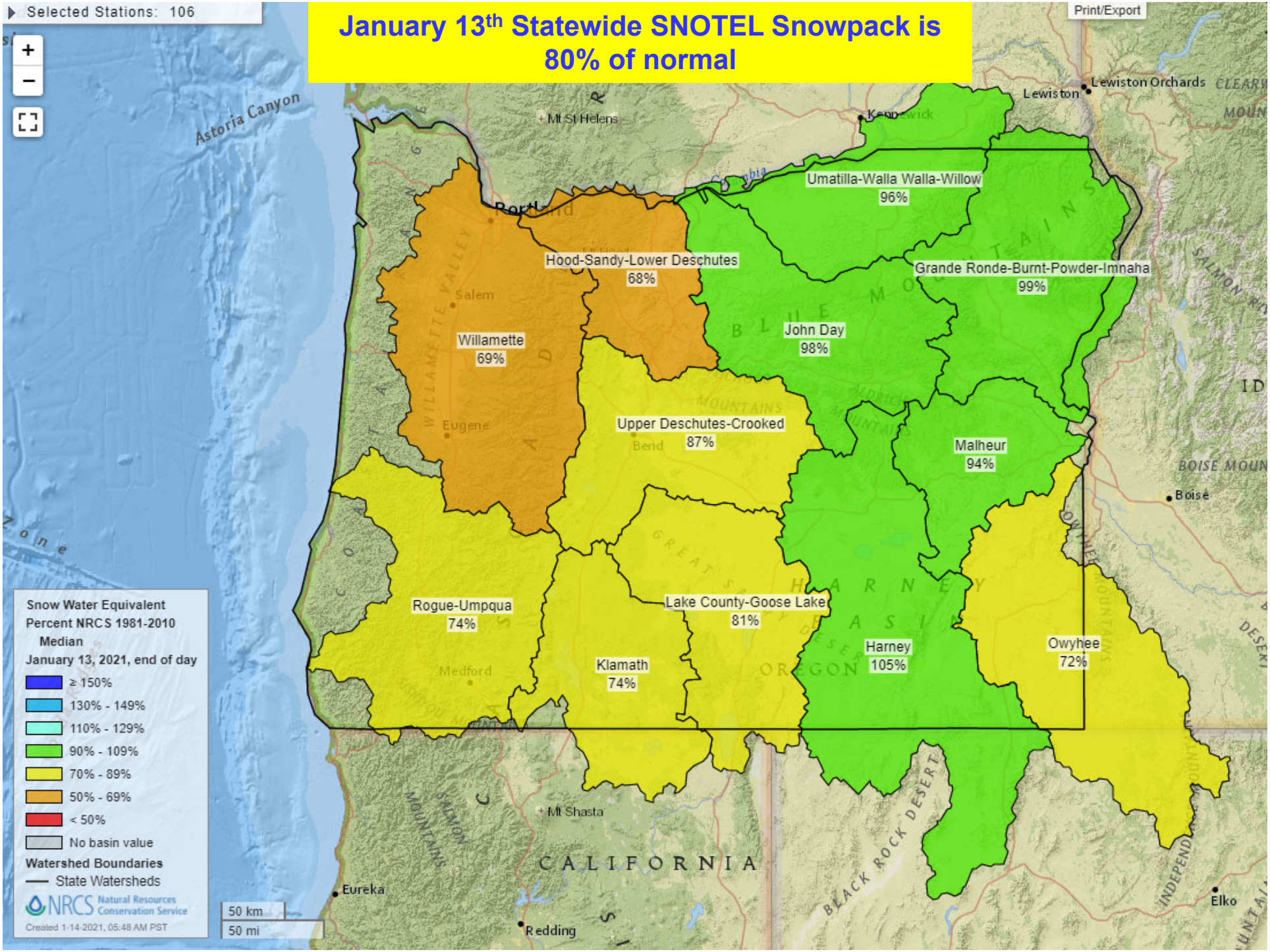
Oregon Water Supply Availability Committee
January 14, 2021

Little Meadows SNOTEL
South Santiam Watershed
December 15, 2020

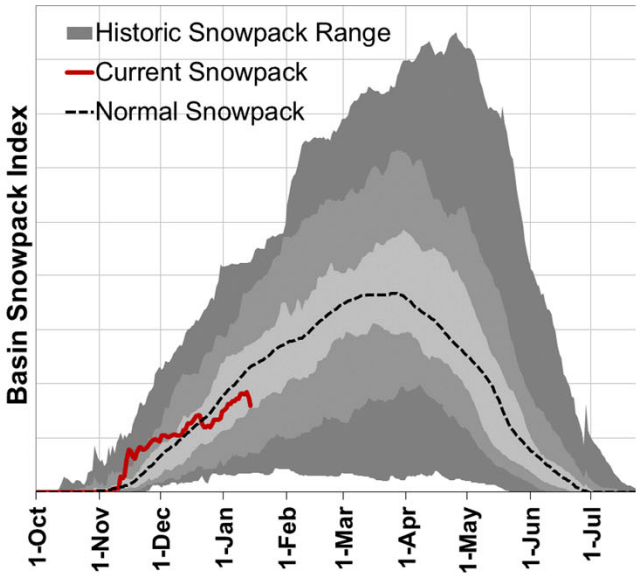
H. Scott Oviatt
USDA – Natural Resources Conservation Service
scott.oviatt@usda.gov
541-429-2359


Selected Stations: 106
Print/Export
January 9th Statewide SNOTEL Snowpack was 89% of normal
Umatilla-Walla Walla-Willow 96%
Hood-Sandy-Lower Deschutes 83%
Grande Ronde-Burnt-Powder-Imnaha 95%
John Day 102%
Willamette 84%
Upper Deschutes-Crooked 98%
Malheur 96%
Rogue-Umpqua 84%
Lake County-Goose Lake 88%
Harney 110%
Owyhee 73%
Klamath 82%
Lewiston
Lewiston Orchards
Mt St Helens
Portland
Salem
Eugene
Bend
Medford
Boise
Mt Shasta
CALIFORNIA
Eureka
Redding
Elko
Astoria Canyon
Snow Water Equivalent
Percent NRCS 1981-2010 Median
January 9, 2021, end of day
≥ 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 1-14-2021, 05:58 AM PST
50 km
50 mi

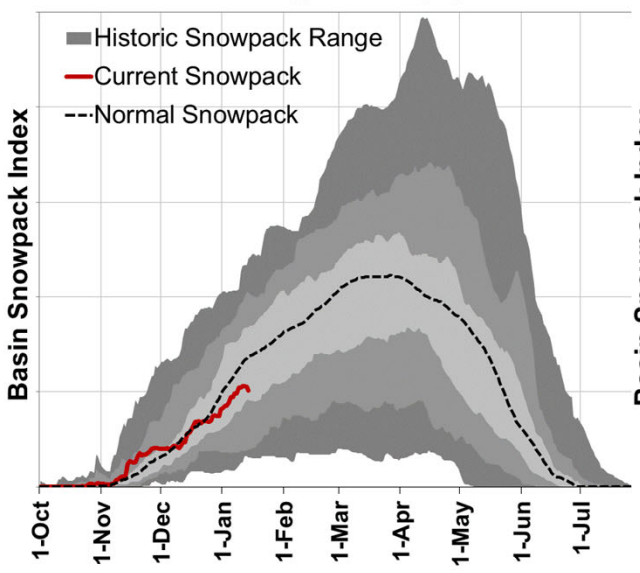

Selected Stations: 106
Print/Export
January 13th Statewide SNOTEL Snowpack is 80% of normal
Umatilla-Walla Walla-Willow
96%
Grande Ronde-Burnt-Powder-Imnaha
99%
Hood-Sandy-Lower Deschutes
68%
John Day
98%
Willamette
69%
Upper Deschutes-Crooked
87%
Malheur
94%
Rogue-Umpqua
74%
Lake County-Goose Lake
81%
Harney
105%
Owyhee
72%
Klamath
74%
Lewiston
Lewiston Orchards
Portland
Salem
Eugene
Bend
Medford
Boise
Eureka
Redding
Mt Shasta
Mt St Helens
CALIFORNIA
Astoria Canyon
Snow Water Equivalent
Percent NRCS 1981-2010
Median
January 13, 2021, end of day
≥ 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 1-14-2021, 05:48 AM PST
50 km
50 mi

SNOWPACK GRAPHS – January 14, 2021

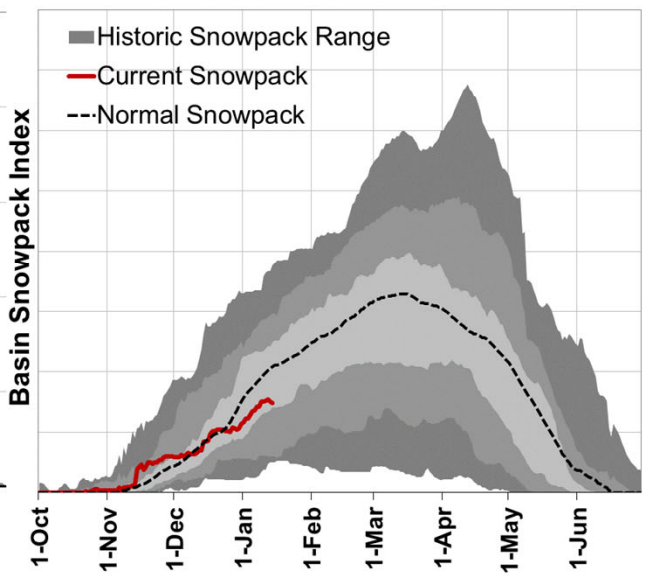
Willamette



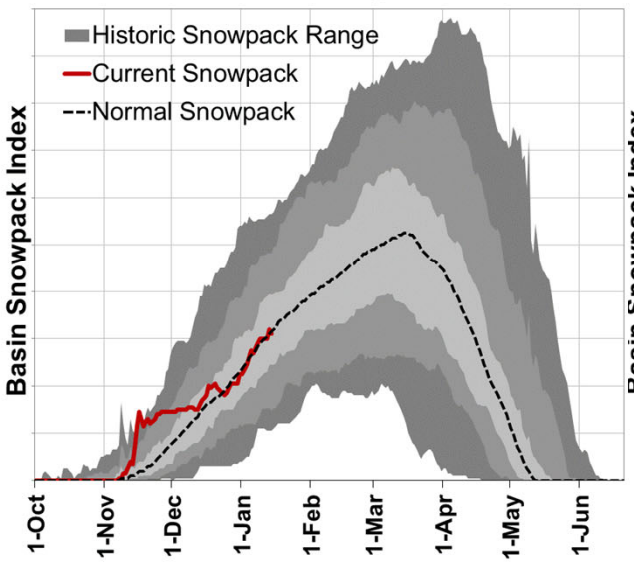
Rogue-Umpqua



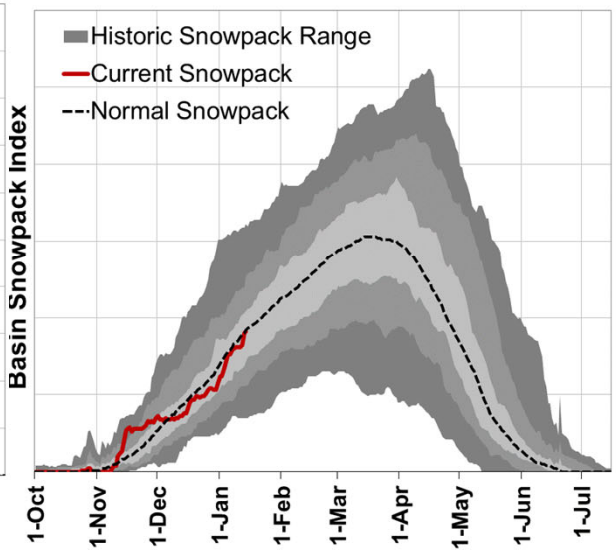
Klamath



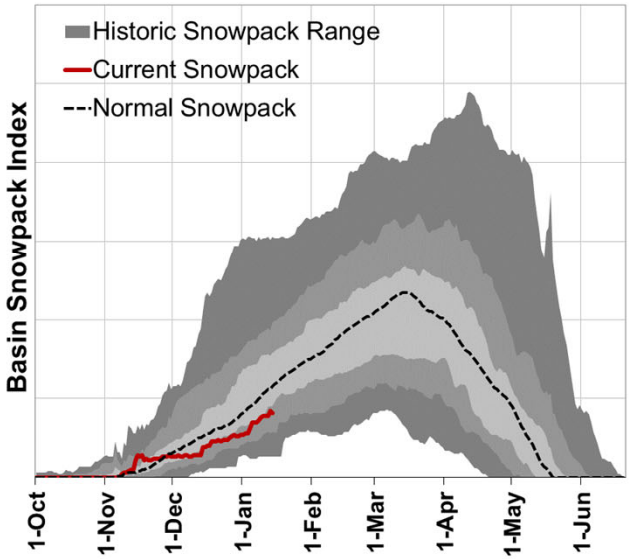
John Day



Grande Ronde-Burnt-Powder-Imnaha

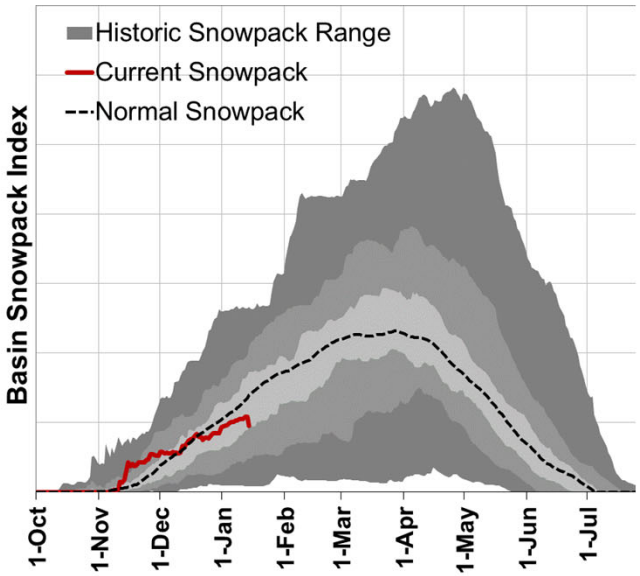


Owyhee

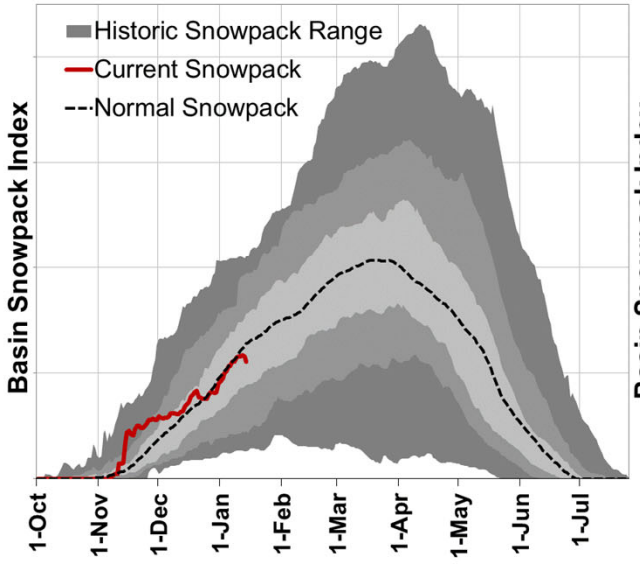


SNOWPACK GRAPHS – January 14, 2021

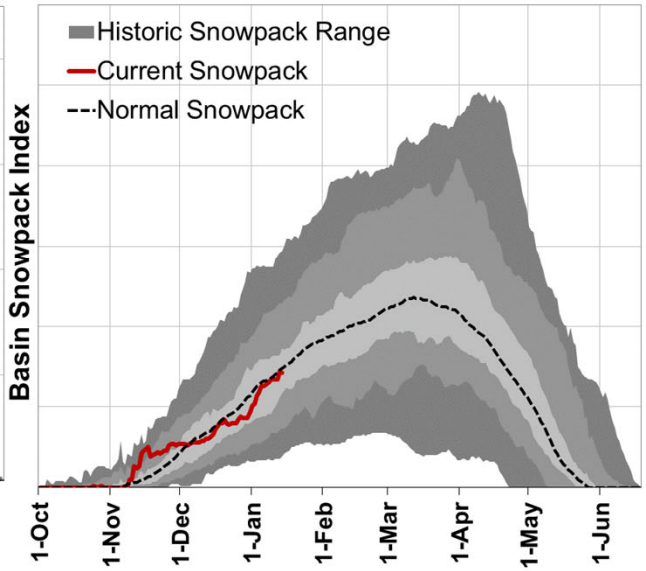
Hood-Sandy-Lower Deschutes



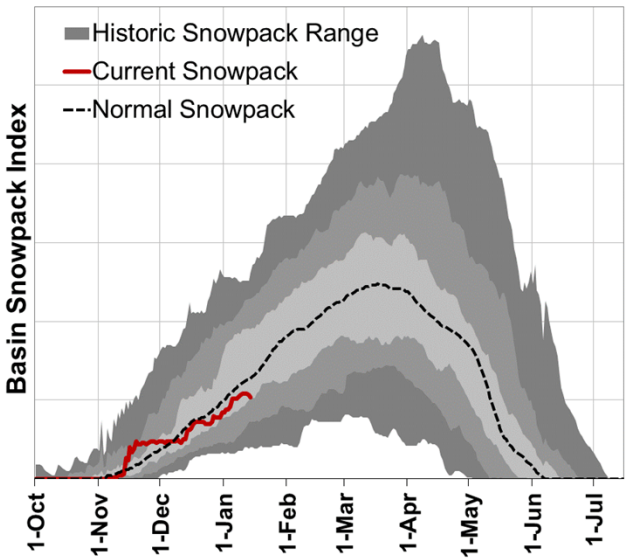
Upper Deschutes-Crooked



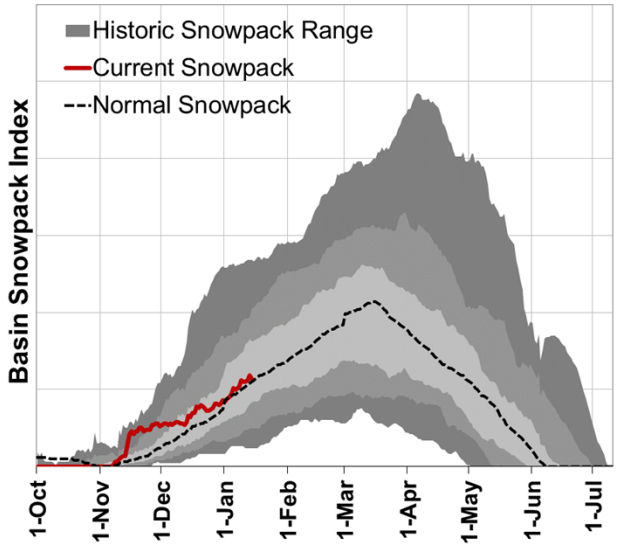
Umatilla-Walla Walla-Willow

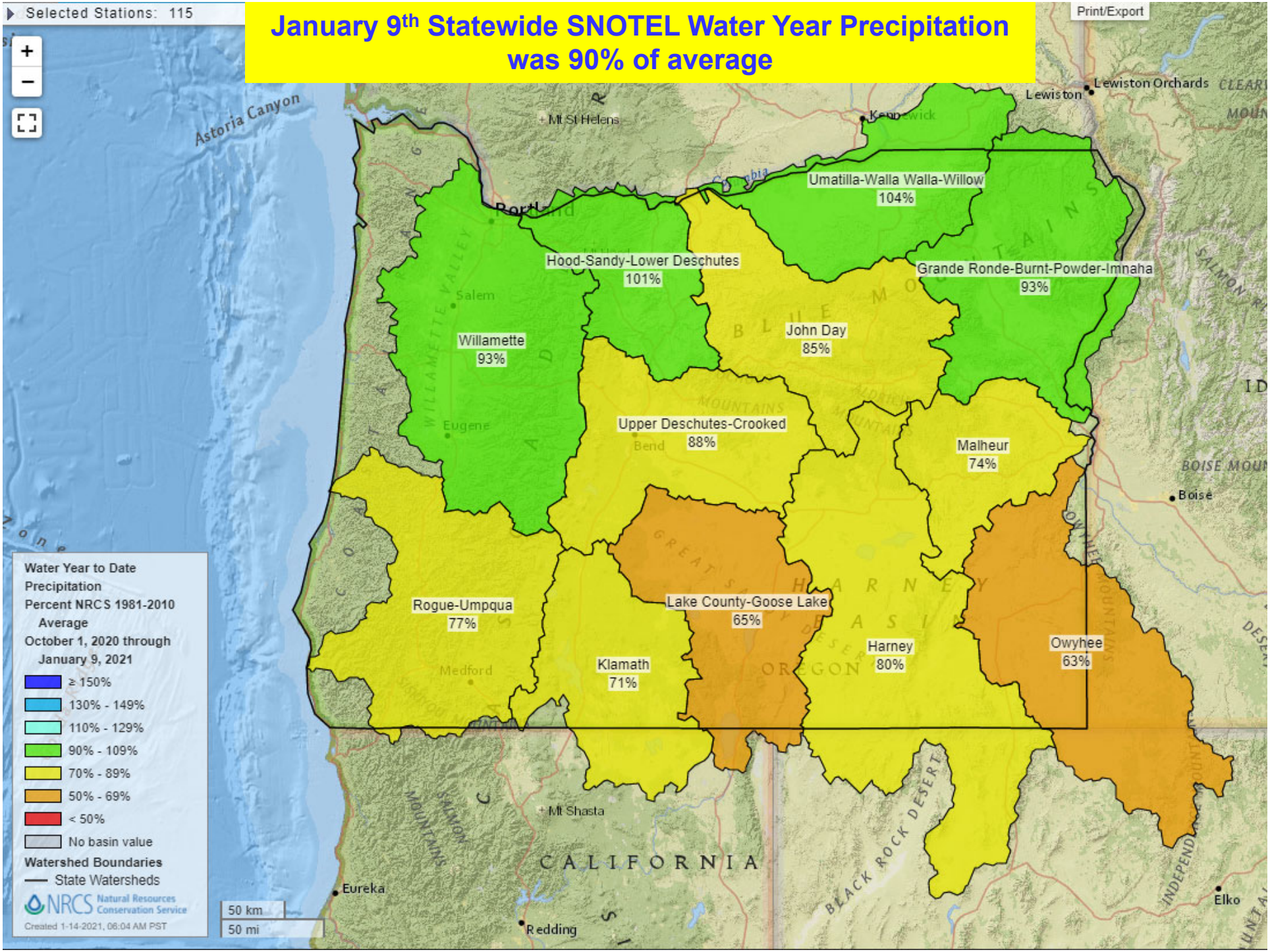


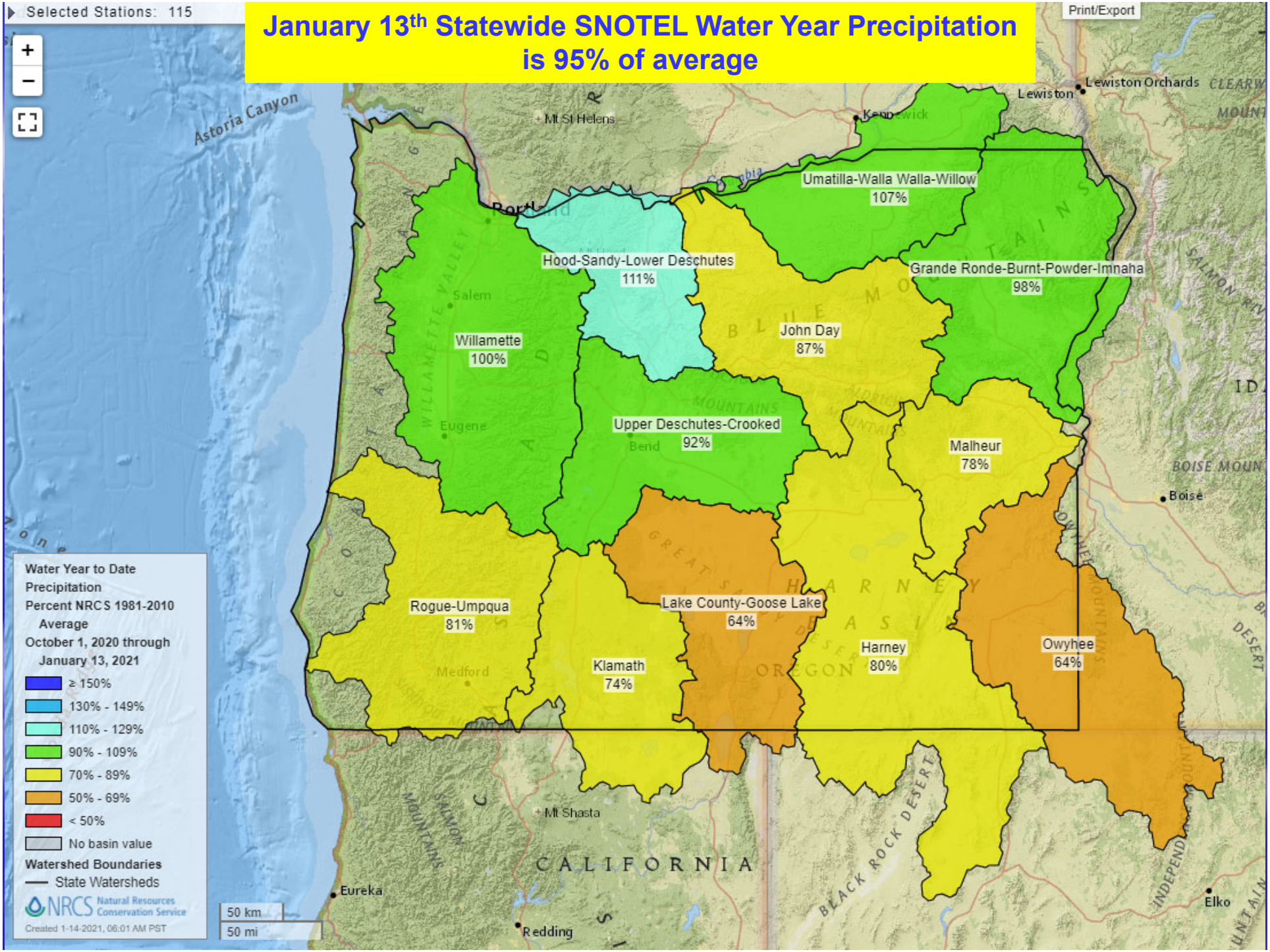
Lake County-Goose Lake

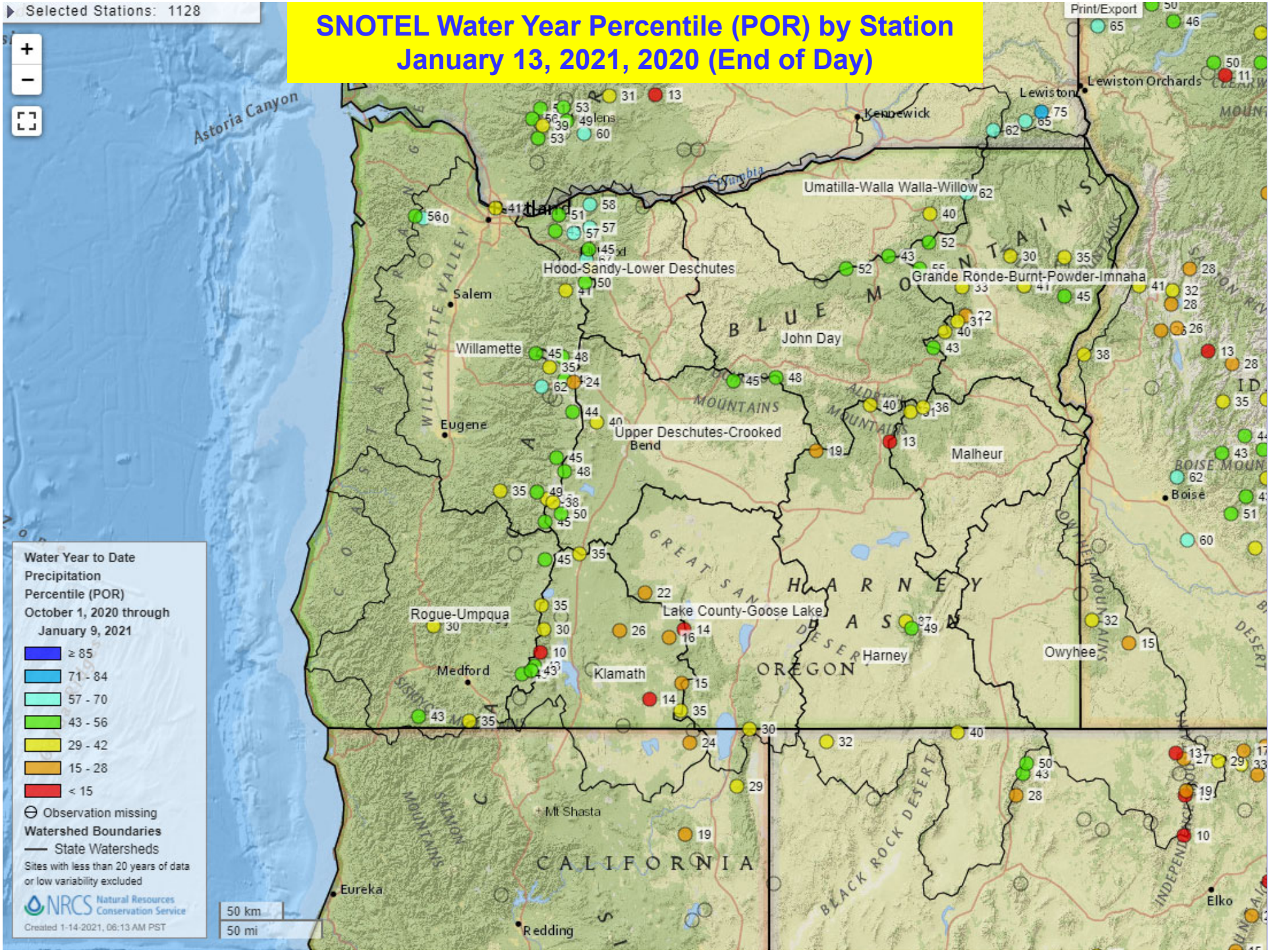


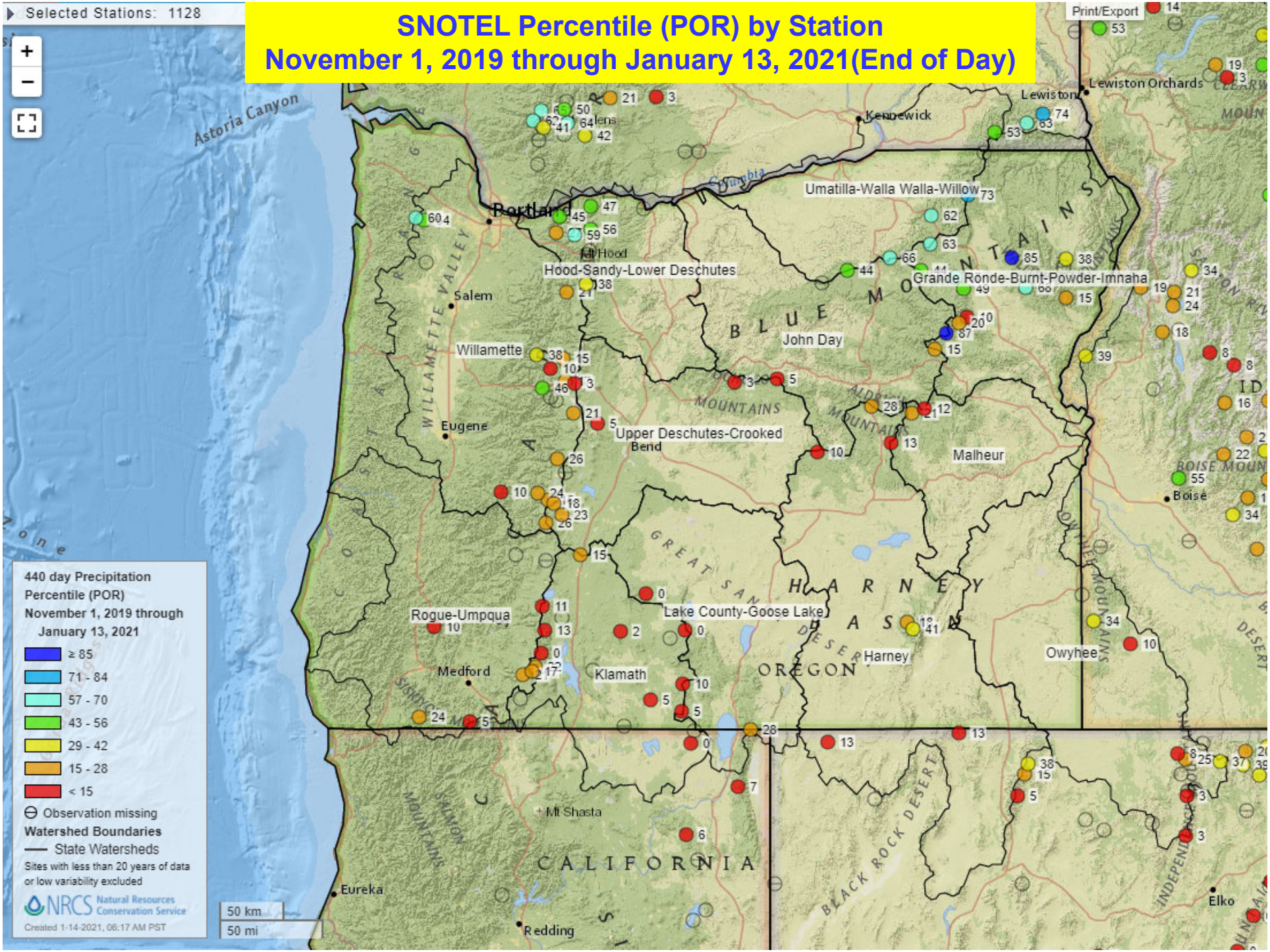
Harney

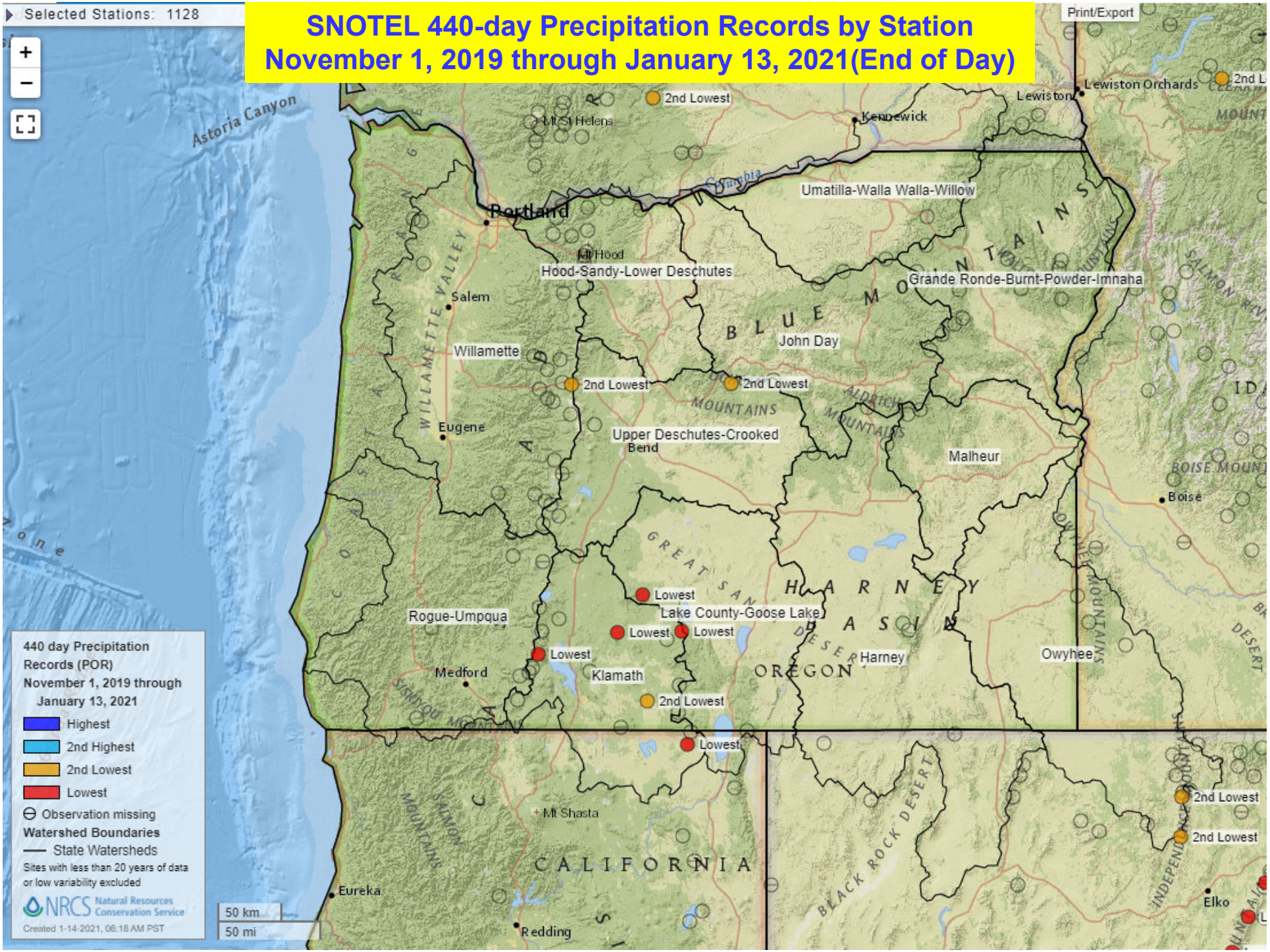



Selected Stations: 115
Print/Export
January 9th Statewide SNOTEL Water Year Precipitation was 90% of average
Umatilla-Walla Walla-Willow
104%
Hood-Sandy-Lower Deschutes
101%
Grande Ronde-Burnt-Powder-Imnaha
93%
Willamette
93%
John Day
85%
Upper Deschutes-Crooked
88%
Malheur
74%
Rogue-Umpqua
77%
Lake County-Goose Lake
65%
Harney
80%
Owyhee
63%
Klamath
71%
Water Year to Date Precipitation
Percent NRCS 1981-2010 Average
October 1, 2020 through January 9, 2021
≥ 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 1-14-2021, 06:04 AM PST
50 km
50 mi
Astoria Canyon
Mt St Helens
Lewiston
Lewiston Orchards
Portland
Salem
Eugene
Bend
Medford
Boise
Mt Shasta
CALIFORNIA
Eureka
Redding
Elko
OREGON


Selected Stations: 115
Print/Export
January 13th Statewide SNOTEL Water Year Precipitation is 95% of average
Umatilla-Walla Walla-Willow
107%
Hood-Sandy-Lower Deschutes
111%
Grande Ronde-Burnt-Powder-Imnaha
98%
Willamette
100%
John Day
87%
Upper Deschutes-Crooked
92%
Malheur
78%
Rogue-Umpqua
81%
Lake County-Goose Lake
64%
Harney
80%
Klamath
74%
Owyhee
64%
Water Year to Date Precipitation
Percent NRCS 1981-2010 Average
October 1, 2020 through January 13, 2021
≥ 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 1-14-2021, 06:01 AM PST
50 km
50 mi
Astoria Canyon
Mt St Helens
Lewiston
Lewiston Orchards
Portland
Salem
Eugene
Bend
Medford
Boise
Mt Shasta
CALIFORNIA
Eureka
Redding
Elko
OREGON


Selected Stations: 1128
SNOTEL Water Year Percentile (POR) by Station
January 13, 2021, 2020 (End of Day)
Print/Export
Water Year to Date
Precipitation
Percentile (POR)
October 1, 2020 through
January 9, 2021
≥ 85
71 - 84
57 - 70
43 - 56
29 - 42
15 - 28
< 15
Observation missing
Watershed Boundaries
State Watersheds
Sites with less than 20 years of data or low variability excluded
NRCS Natural Resources Conservation Service
Created 1-14-2021, 06:13 AM PST
50 km
50 mi
Astoria Canyon
Lewiston
Lewiston Orchards
Kennewick
Umatilla-Walla Walla-Willow
Hood-Sandy-Lower Deschutes
Grande Ronde-Burnt-Powder-Imnaha
Salem
Willamette
John Day
Eugene
Upper Deschutes-Crooked
Bend
Malheur
Boise
Rogue-Umpqua
Lake County-Goose Lake
Harney
Owyhee
Medford
Klamath
Mt Shasta
Eureka
Redding
Elko
OREGON
CALIFORNIA
BLUE MOUNTAINS
WILLAMETTE VALLEY
GREAT SALT LAKE DESERT
BLACK ROCK DESERT
SALMON MOUNTAINS
OWYHEE MOUNTAINS
BOISE MOUNTAINS


Selected Stations: 1128
SNOTEL Percentile (POR) by Station
November 1, 2019 through January 13, 2021(End of Day)
Print/Export
440 day Precipitation
Percentile (POR)
November 1, 2019 through
January 13, 2021
≥ 85
71 - 84
57 - 70
43 - 56
29 - 42
15 - 28
< 15
Observation missing
Watershed Boundaries
State Watersheds
Sites with less than 20 years of data or low variability excluded
NRCS Natural Resources Conservation Service
Created 1-14-2021, 06:17 AM PST
50 km
50 mi
Astoria Canyon
Portland
Salem
Eugene
Bend
Medford
Eureka
Redding
Mt Shasta
Klamath
Lake County-Goose Lake
Harney
Malheur
John Day
Umatilla-Walla Walla-Willow
Grande Ronde-Burnt-Powder-Imnaha
Hood-Sandy-Lower Deschutes
Willamette
Upper Deschutes-Crooked
Rogue-Umpqua
Kennewick
Lewiston
Lewiston Orchards
Owyhee
Boise
Elko
OREGON
CALIFORNIA
BLUE MOUNTAINS
WILLAMETTE VALLEY
CASCADE RANGE
GREAT SALT LAKE DESERT
BLACK ROCK DESERT
SILVER CREEK RANGE
SALMON MOUNTAINS
OWYHEE MOUNTAINS
BOISE MOUNTAINS
INDEPENDENCE MOUNTAINS

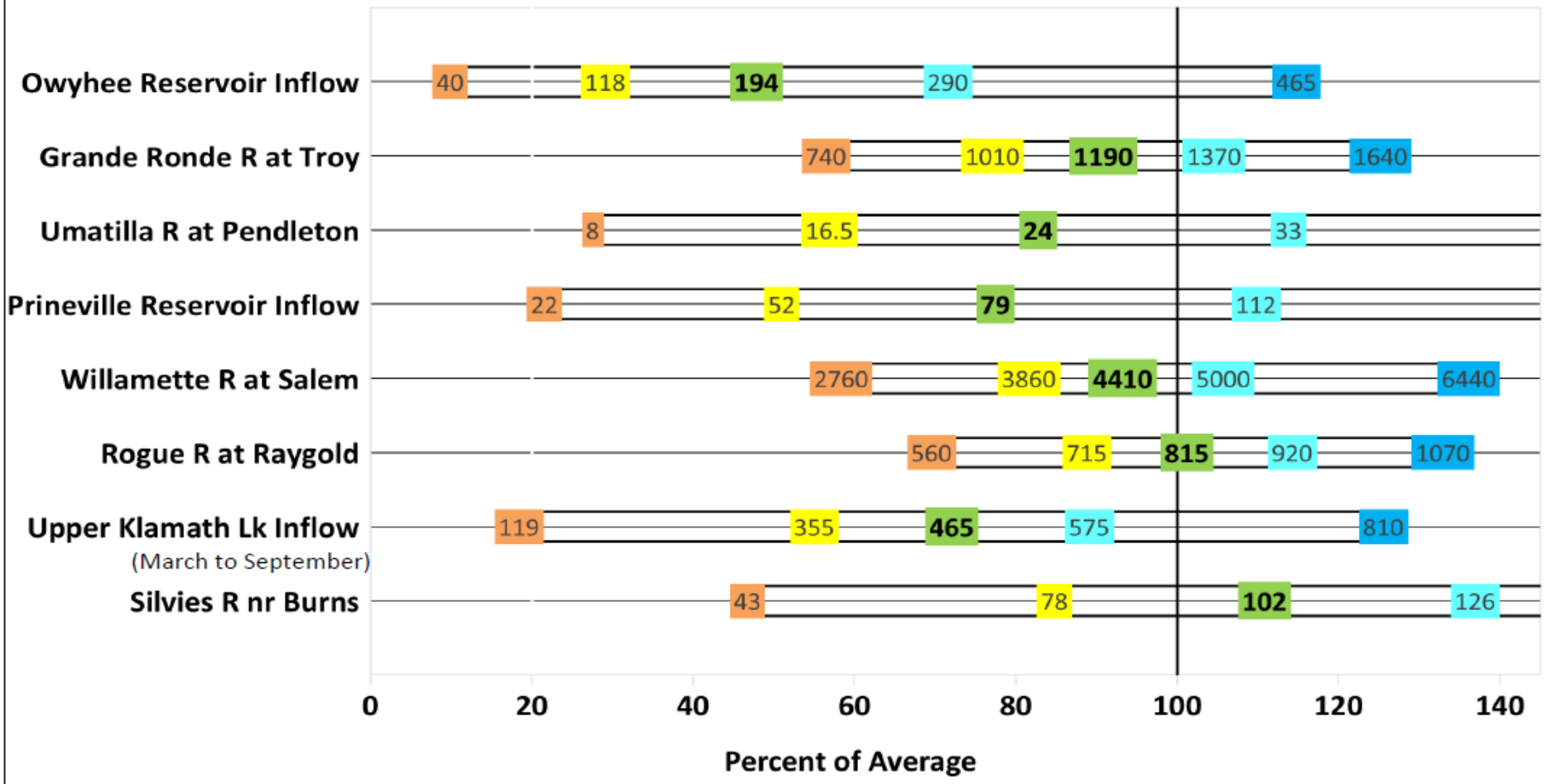

Selected Stations: 1128
SNOTEL 440-day Precipitation Records by Station
November 1, 2019 through January 13, 2021(End of Day)
Print/Export
Astoria Canyon
Mt St Helens
2nd Lowest
Kennewick
Lewiston
Lewiston Orchards
Umatilla-Walla Walla-Willow
Portland
Mt Hood
Hood-Sandy-Lower Deschutes
Grande Ronde-Burnt-Powder-Imnaha
Salem
Willamette
John Day
2nd Lowest
2nd Lowest
Eugene
Upper Deschutes-Crooked
Bend
Malheur
Boise
Lowest
Lake County-Goose Lake
Rogue-Umpqua
Lowest
Lowest
Lowest
Medford
Klamath
Harney
Owyhee
2nd Lowest
Lowest
Mt Shasta
2nd Lowest
2nd Lowest
Eureka
Redding
Elko
50 km
50 mi
440 day Precipitation Records (POR)
November 1, 2019 through January 13, 2021
Highest
2nd Highest
2nd Lowest
Lowest
Observation missing
Watershed Boundaries
State Watersheds
Sites with less than 20 years of data or low variability excluded
NRCS Natural Resources Conservation Service
Created 1-14-2021, 06:18 AM PST

January 2021

Summary of Streamflow Forecasts across Oregon

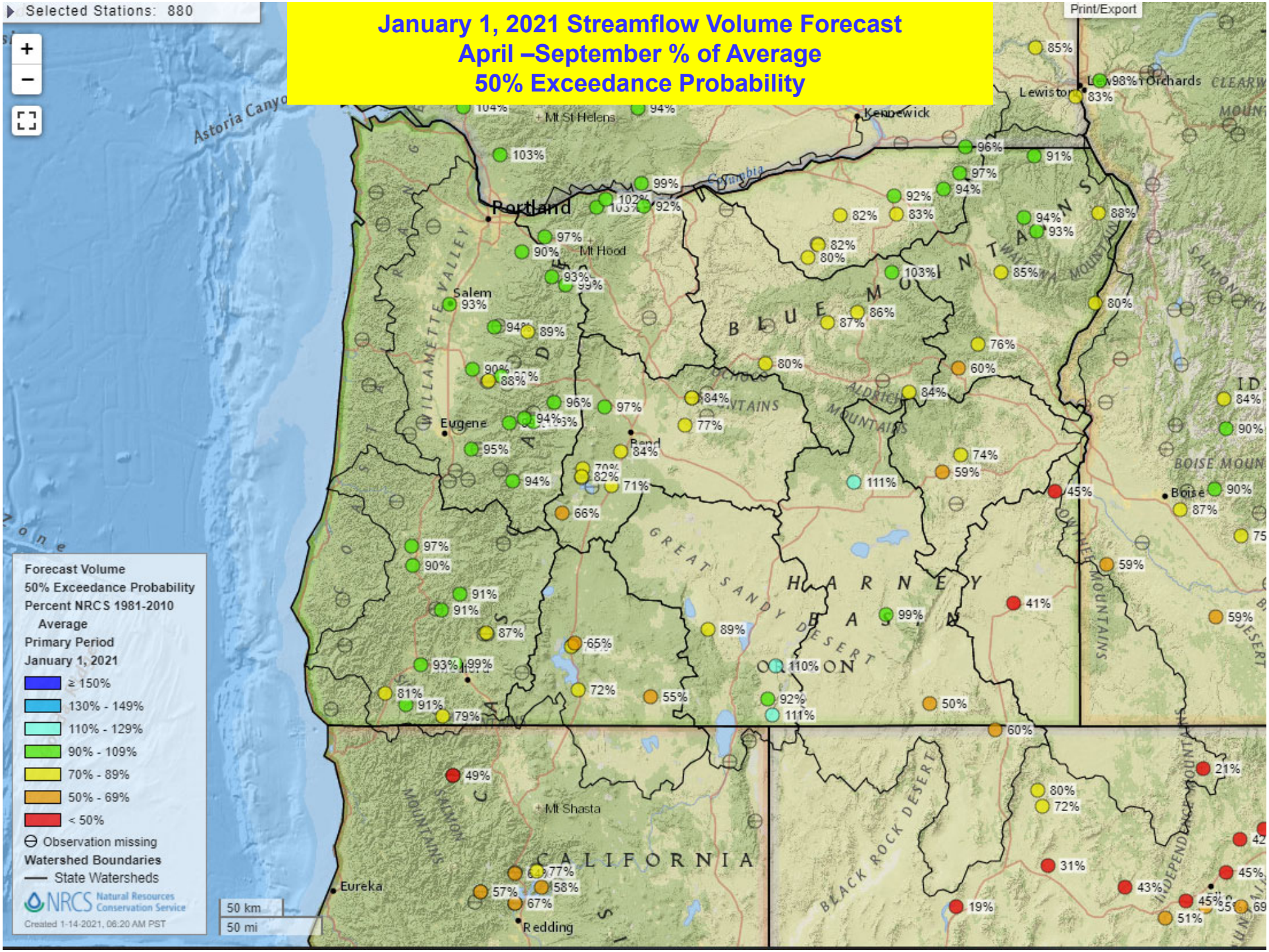
April through September Forecast Volumes at a Selection of Streamflow Points

(Volumes listed in KAF)



Legend: ←----------Drier----------**Future Conditions**----------Wetter----------→

90% Exceedance Forecast (KAF)	70% Exceedance Forecast (KAF)	50% Exceedance Forecast (KAF)	30% Exceedance Forecast (KAF)	10% Exceedance Forecast (KAF)
There is a 90% chance that flows will exceed this volume.	There is a 70% chance that flows will exceed this volume.	There is a 50% chance that flows will exceed this volume.	There is a 30% chance that flows will exceed this volume.	There is a 10% chance that flows will exceed this volume.


Selected Stations: 880
Print/Export
January 1, 2021 Streamflow Volume Forecast
April –September % of Average
50% Exceedance Probability
Forecast Volume
50% Exceedance Probability
Percent NRCS 1981-2010 Average
Primary Period
January 1, 2021
≥ 150%
130% - 149%
110% - 129%
90% - 109%
70% - 89%
50% - 69%
< 50%
Observation missing
Watershed Boundaries
State Watersheds
NRCS Natural Resources Conservation Service
Created 1-14-2021, 06:20 AM PST
50 km
50 mi
Portland
Salem
Eugene
Bend
Mt St Helens
Mt Hood
Mt Shasta
Kennewick
Lewiston
Boise
Eureka
Redding
OREGON
CALIFORNIA
BLUE MOUNTAINS
HARNEY BASIN
GREAT SANDY DESERT
BLACK ROCK DESERT
WILLAMETTE VALLEY
Columbia
Astoria Canyon

Thank you

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Oregon Water Supply Availability Committee
January 14, 2021

Little Meadows SNOTEL
South Santiam Watershed
December 15, 2020

H. Scott Oviatt
USDA – Natural Resources Conservation Service
scott.oviatt@usda.gov
541-429-2359

Oregon WSAC

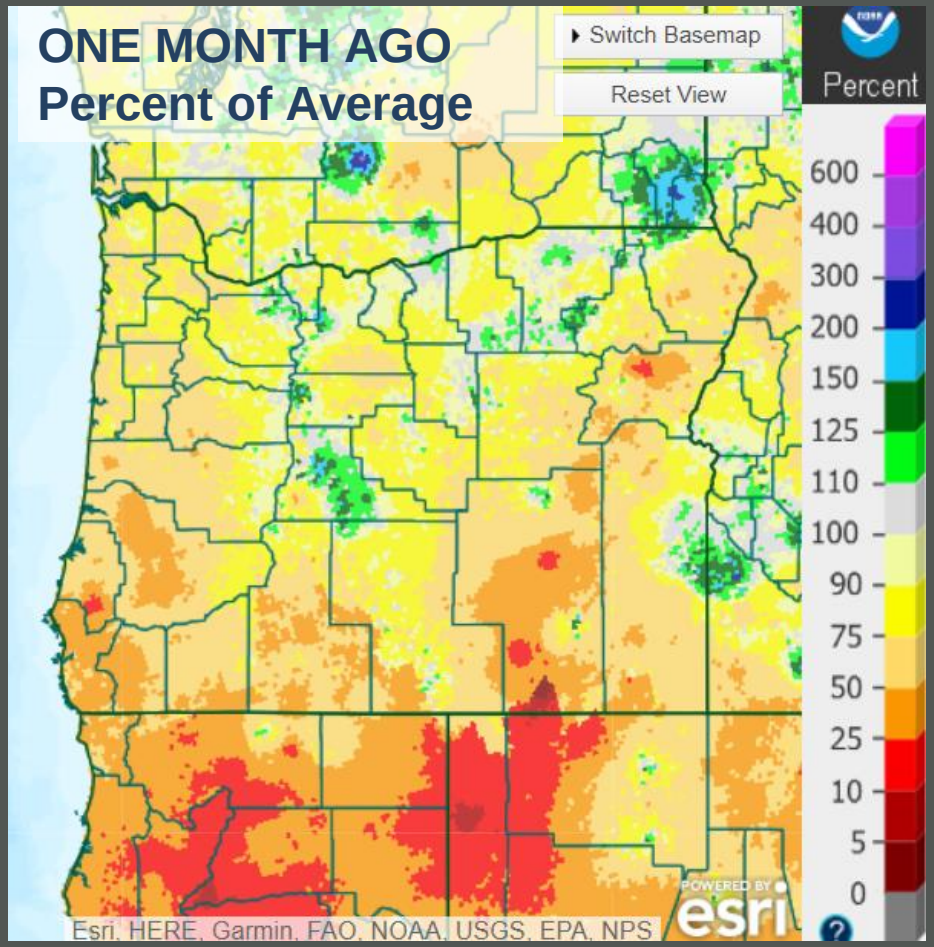
National Weather Service Precipitation & Temperatures Update

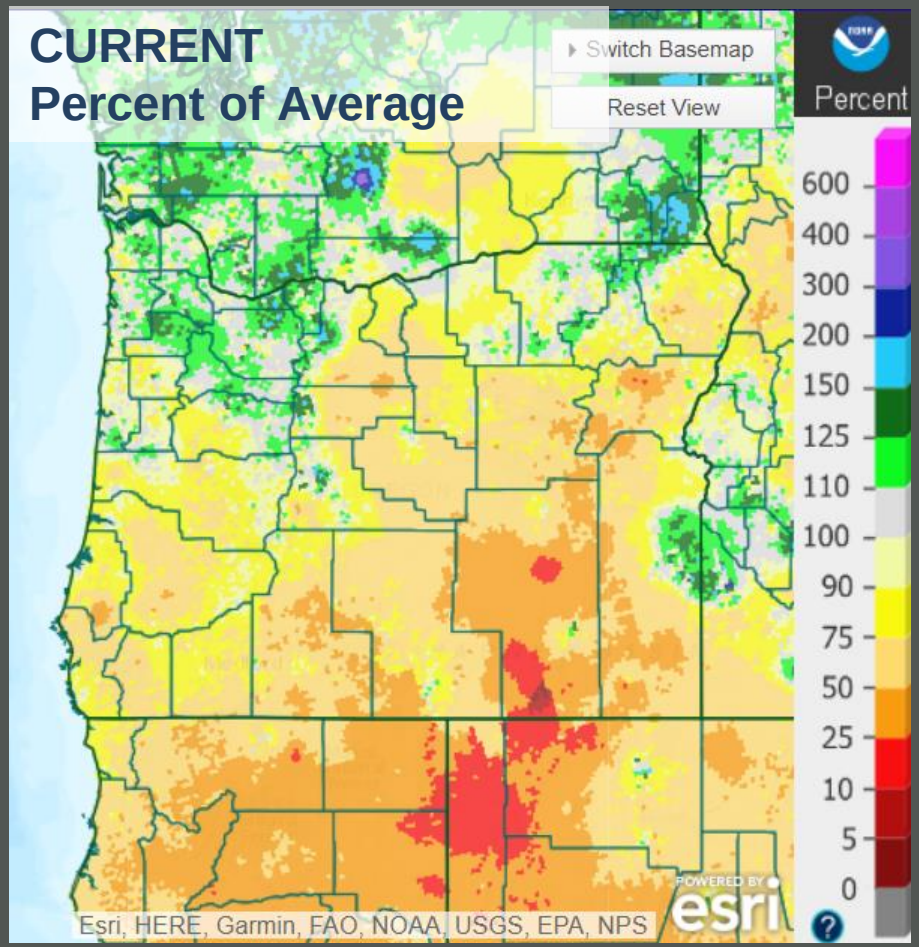
January 14, 2021

Andy Bryant
NOAA/NWS Portland
Weather Forecast Office

S Yamhill R near Sheridan

Water Year Precipitation



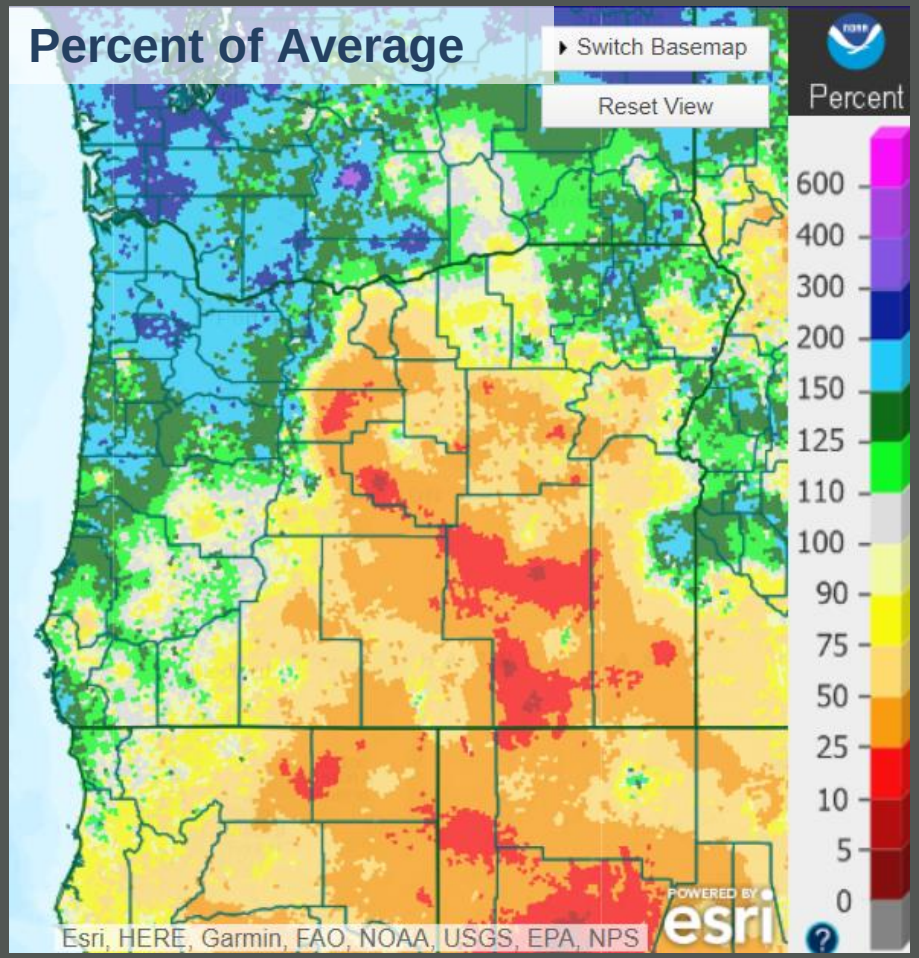


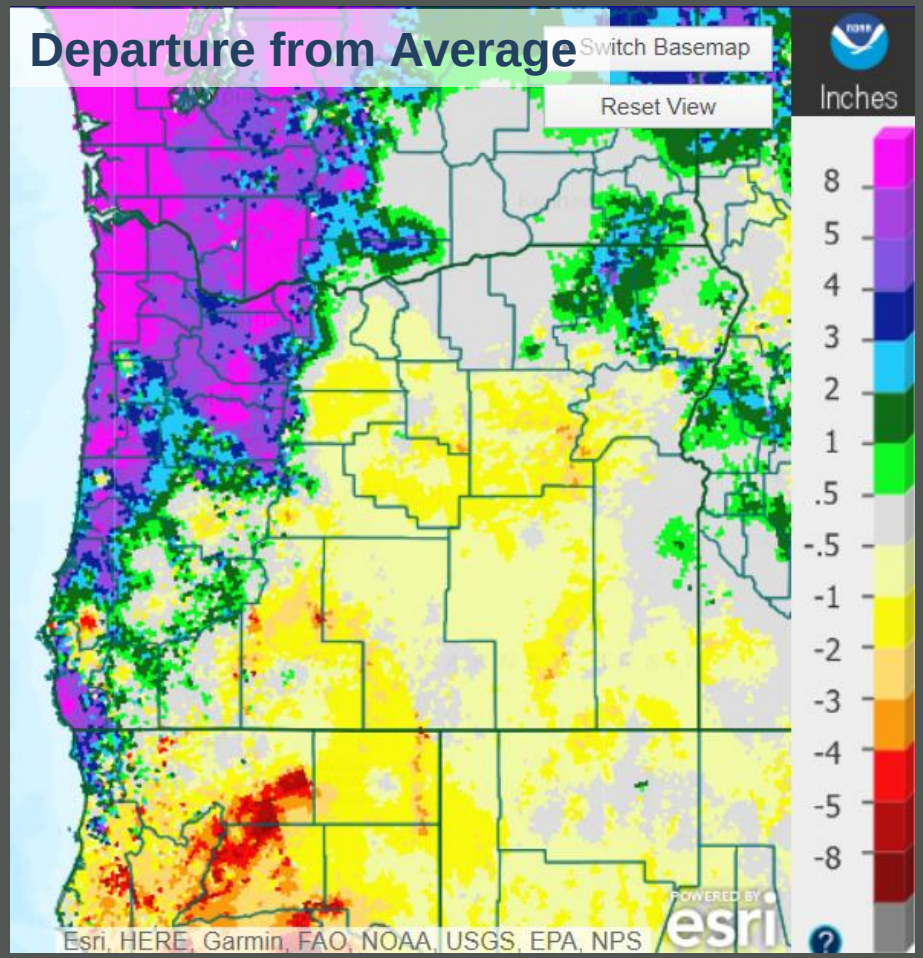
Improvement western third of state, little change elsewhere

Precipitation Data as of January 13, 2021

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

Precipitation – Past 30 Days



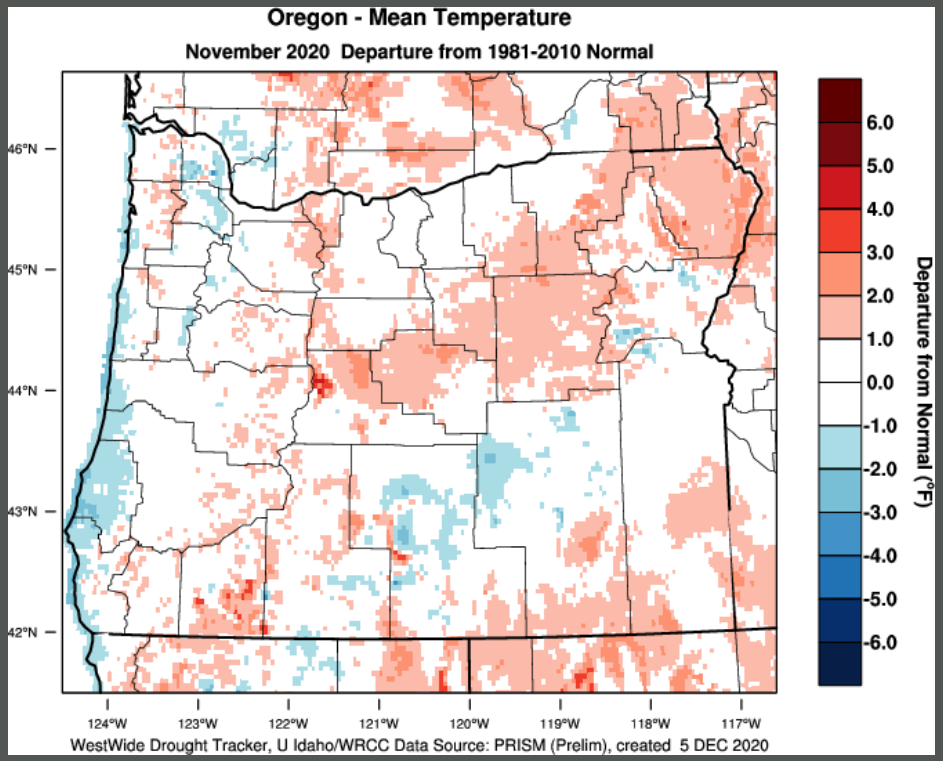


Precipitation Data as of December 9, 2020

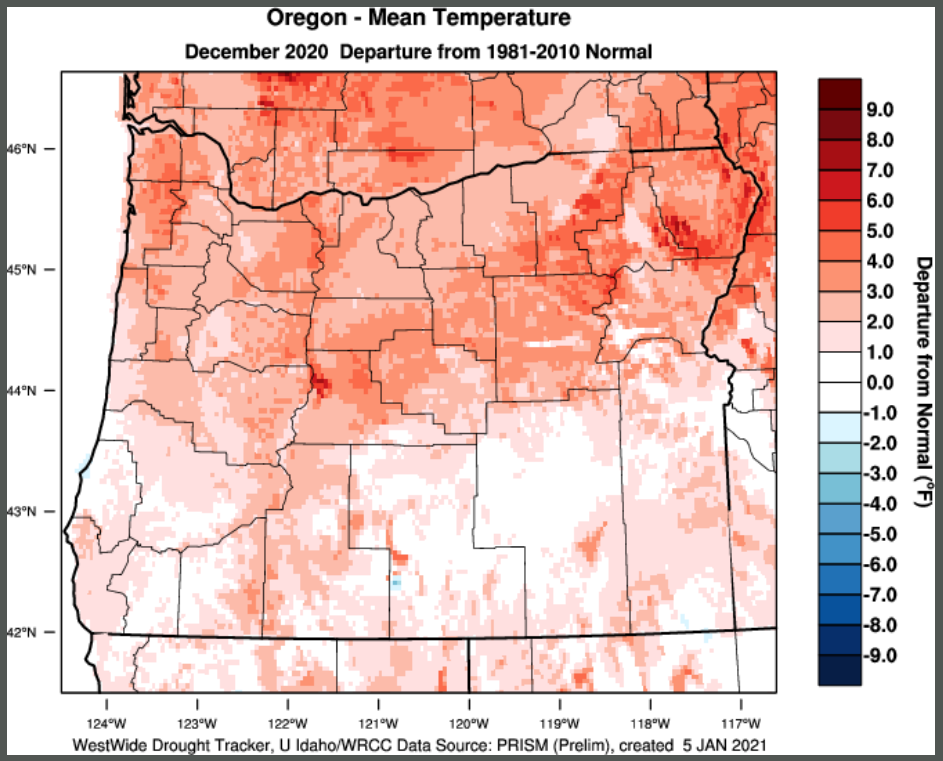
Source: water.weather.gov/precip/index.php?location_type=wfo&location_name=pqr

Recent Temperatures

November 2020



December 2020

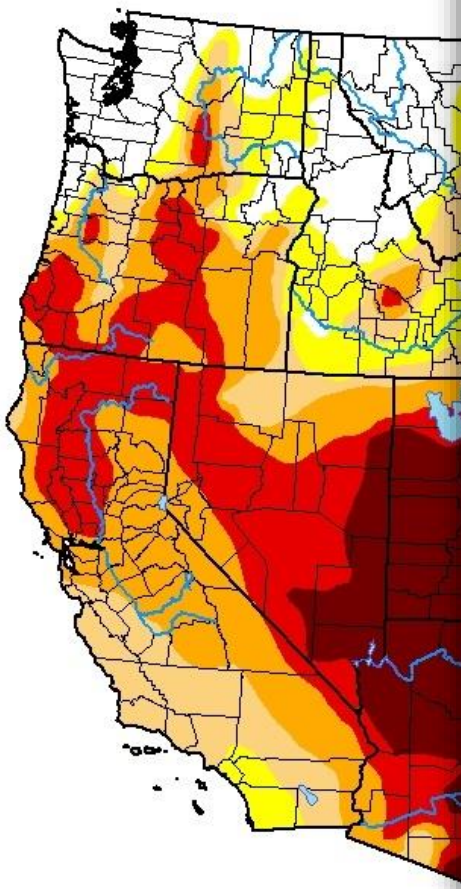


wrcc.dri.edu/wwdt/current.php?folder=mdn1

Drought Monitor

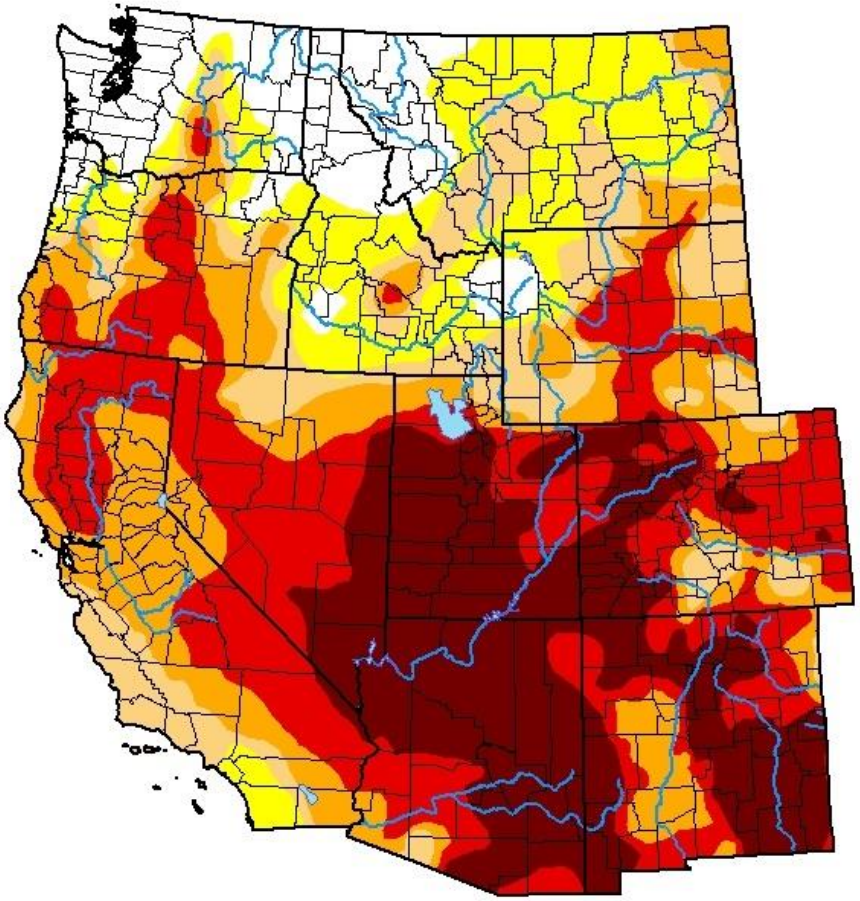
U.S. Drought Monitor
West

December 8, 2020
(Released Thursday, Dec. 10, 2020)



U.S. Drought Monitor
West

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

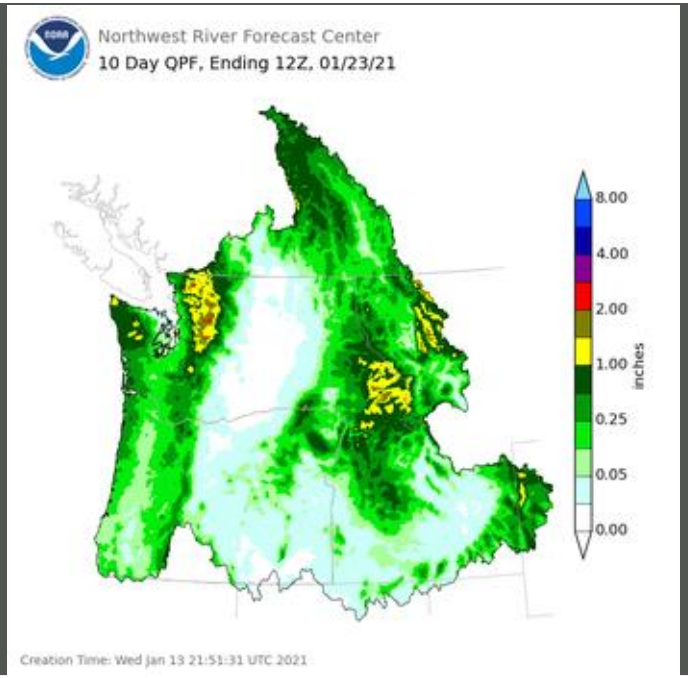
Author:

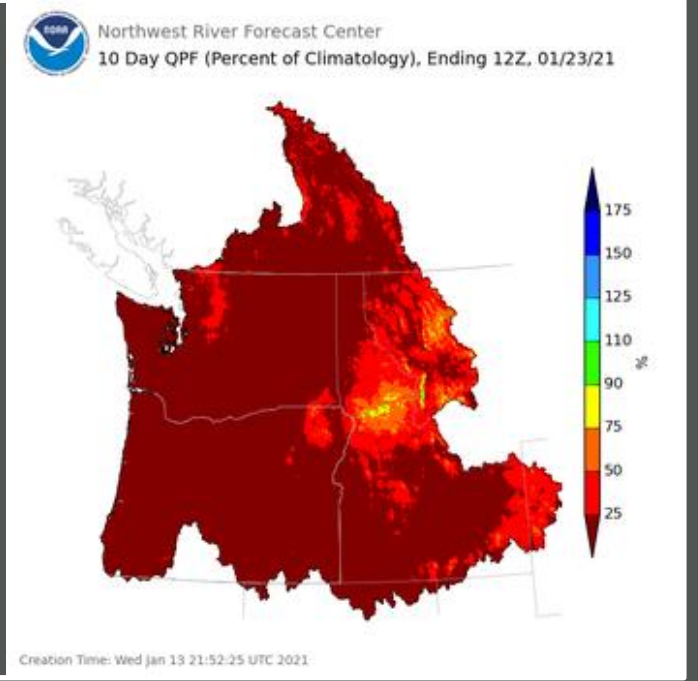
Deborah Bathke
National Drought Mitigation Center

droughtmonitor.unl.edu

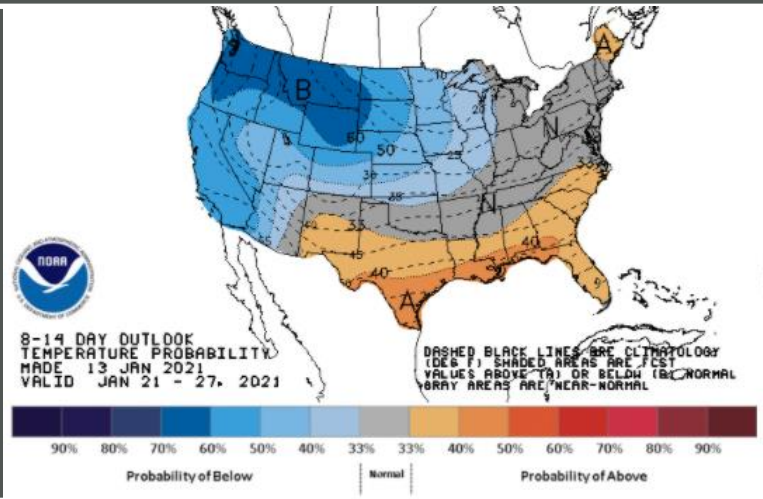
Mid January Outlook

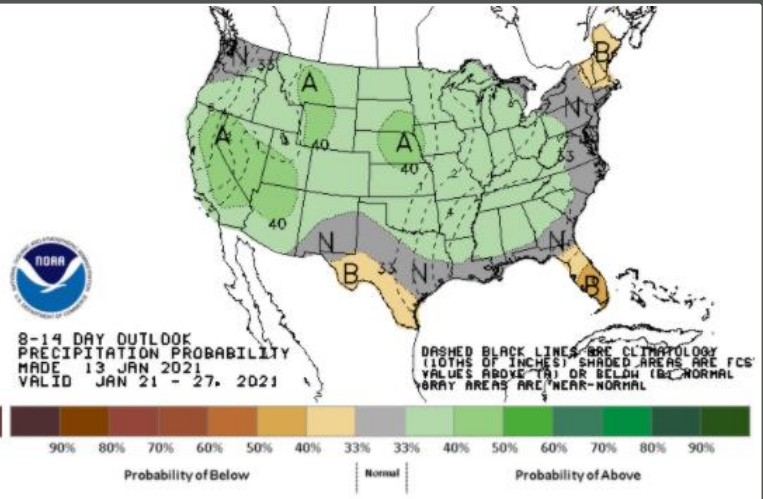
NWRFC
10-DAY
PRECIPITATION





CPC
8 – 14 DAY
OUTLOOK





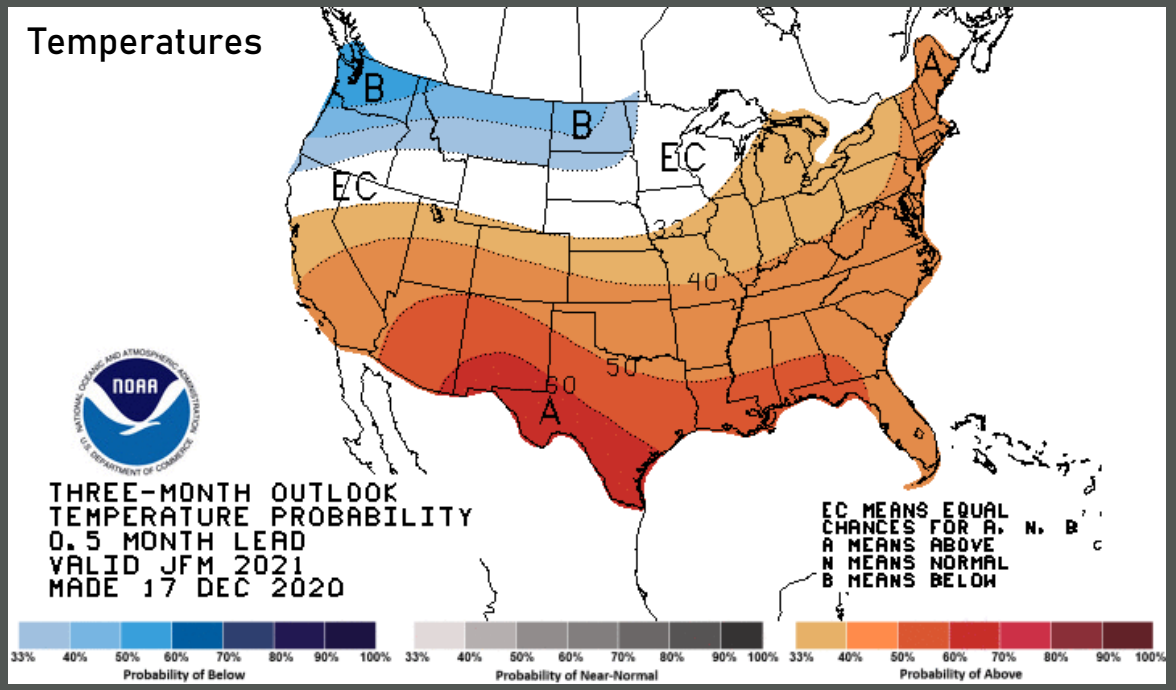
https://www.nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php?t

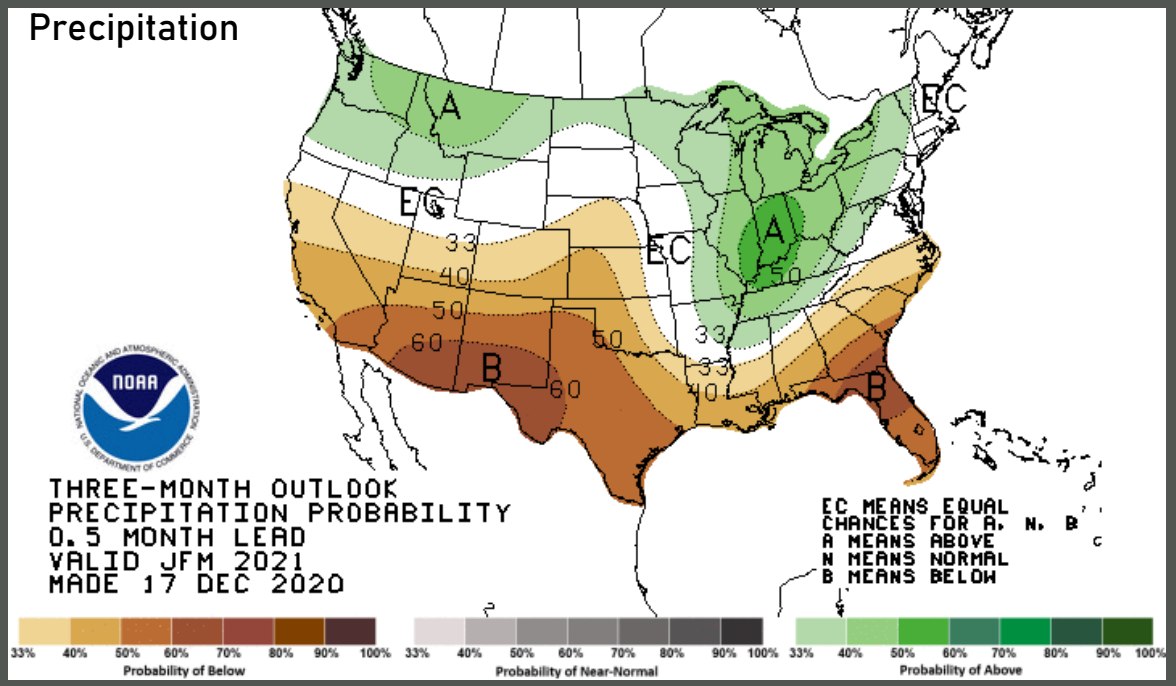
https://www.cpc.ncep.noaa.gov/products/predictions/814day/

Climate Prediction Center Outlook

Jan – Mar 2021

La Niña Advisory in effect



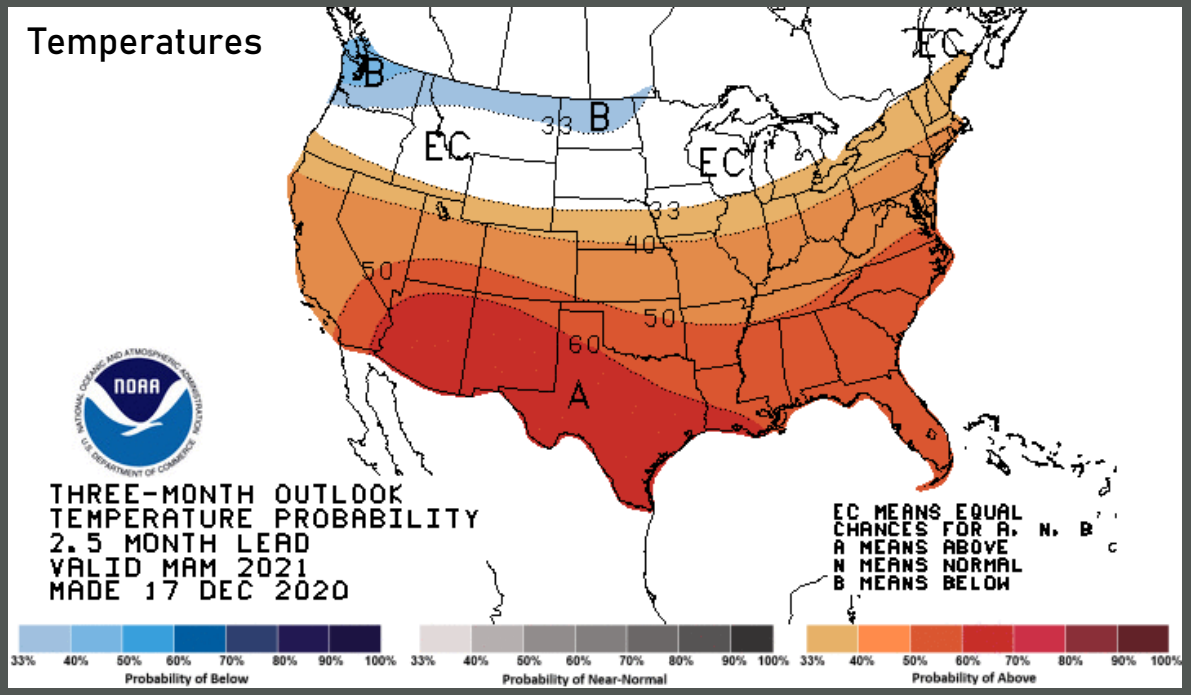


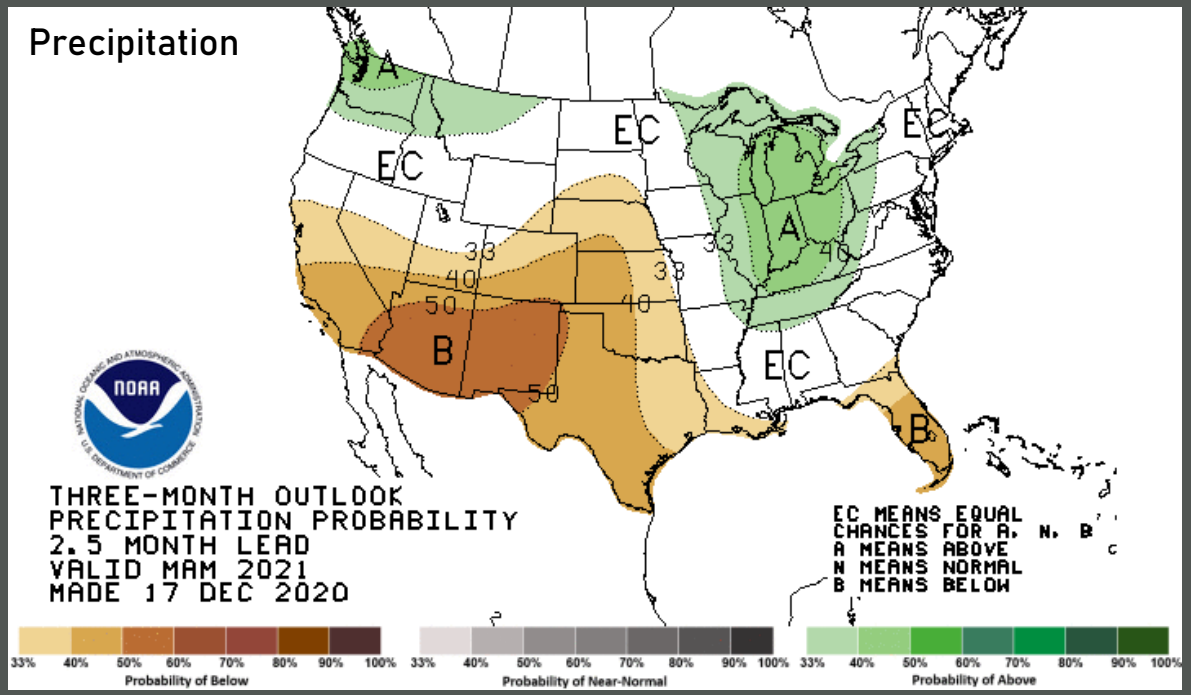
https://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=2

Climate Prediction Center Outlook

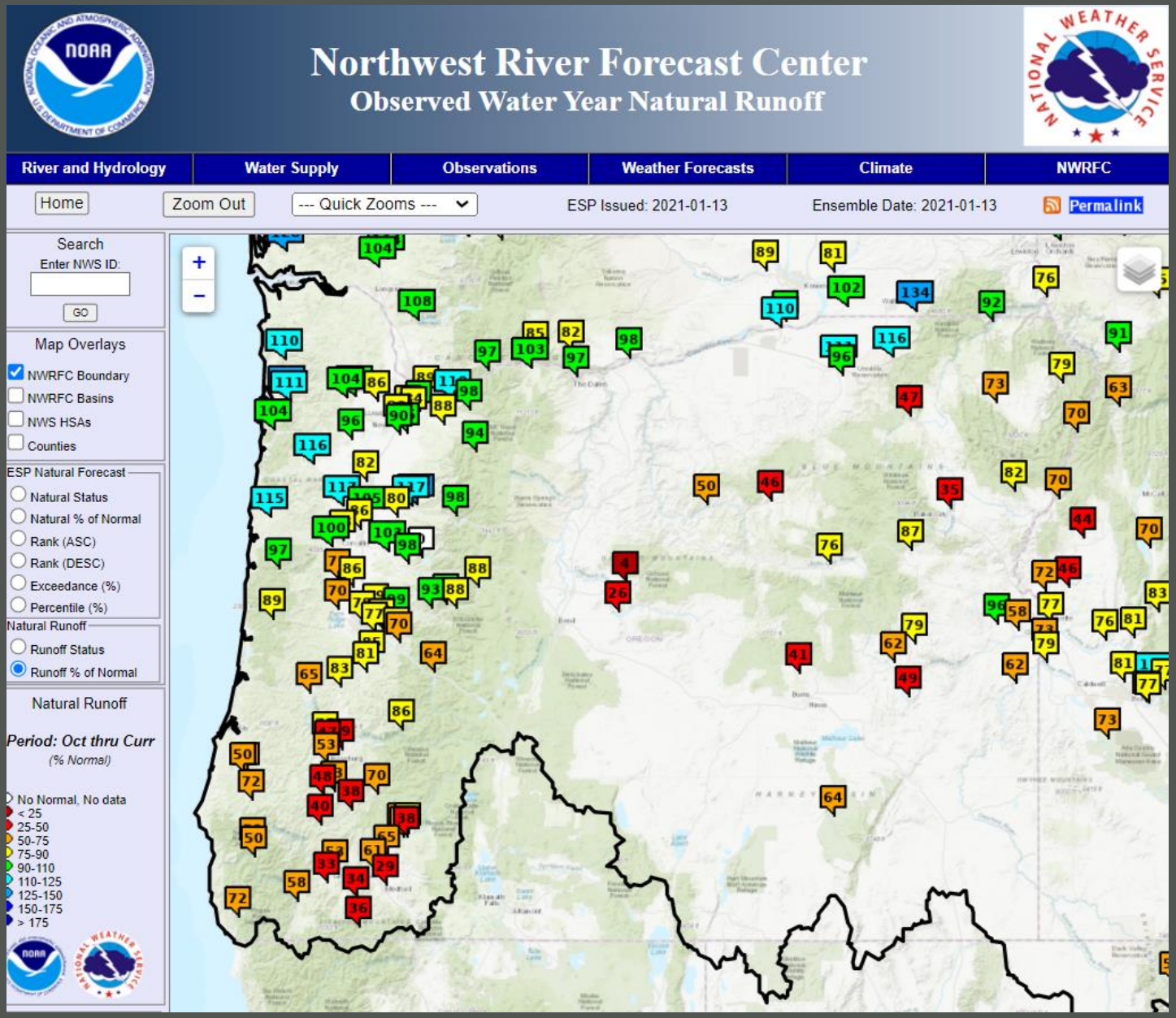
Mar – May 2021

La Niña Advisory in effect



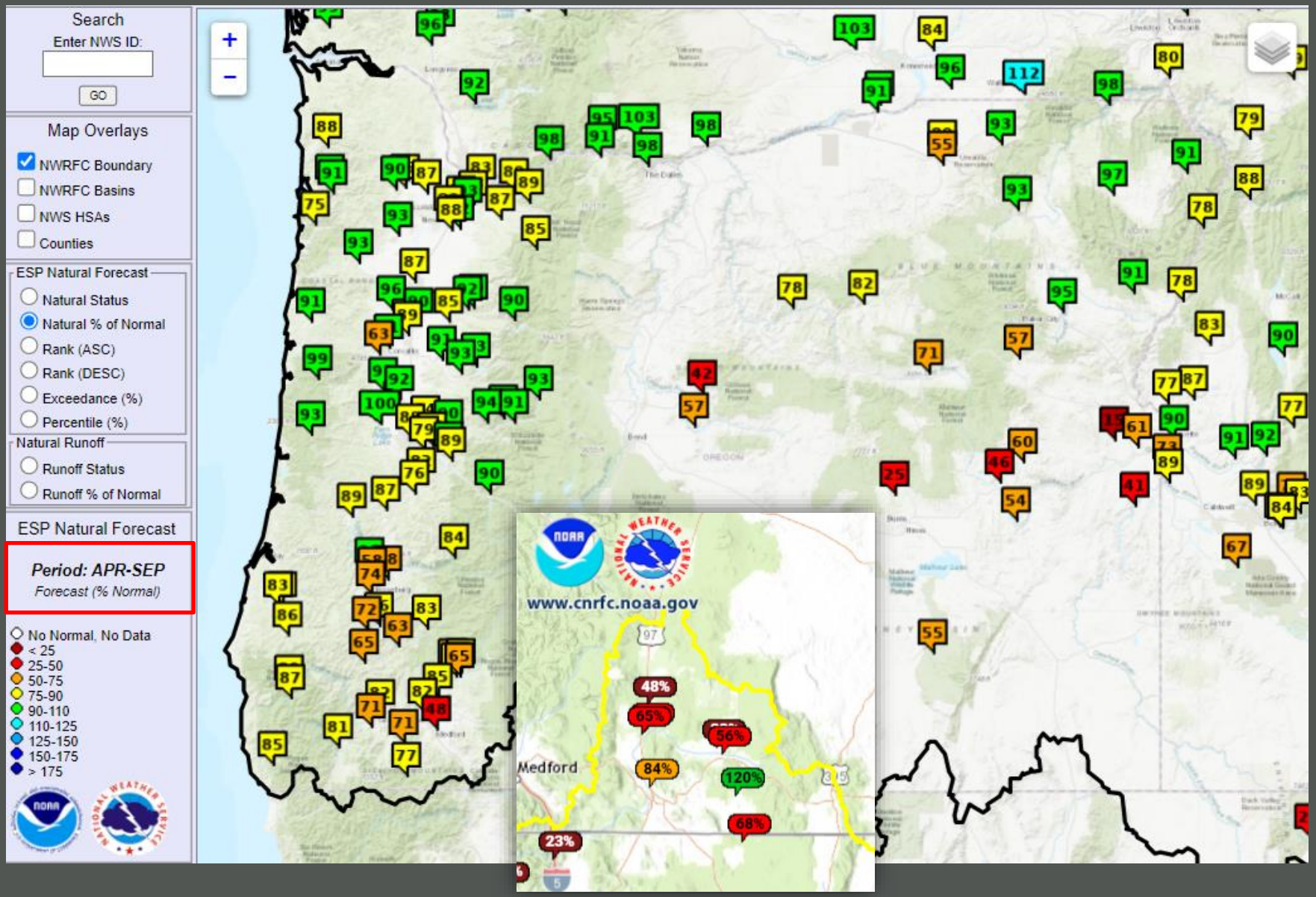


Water Year Runoff

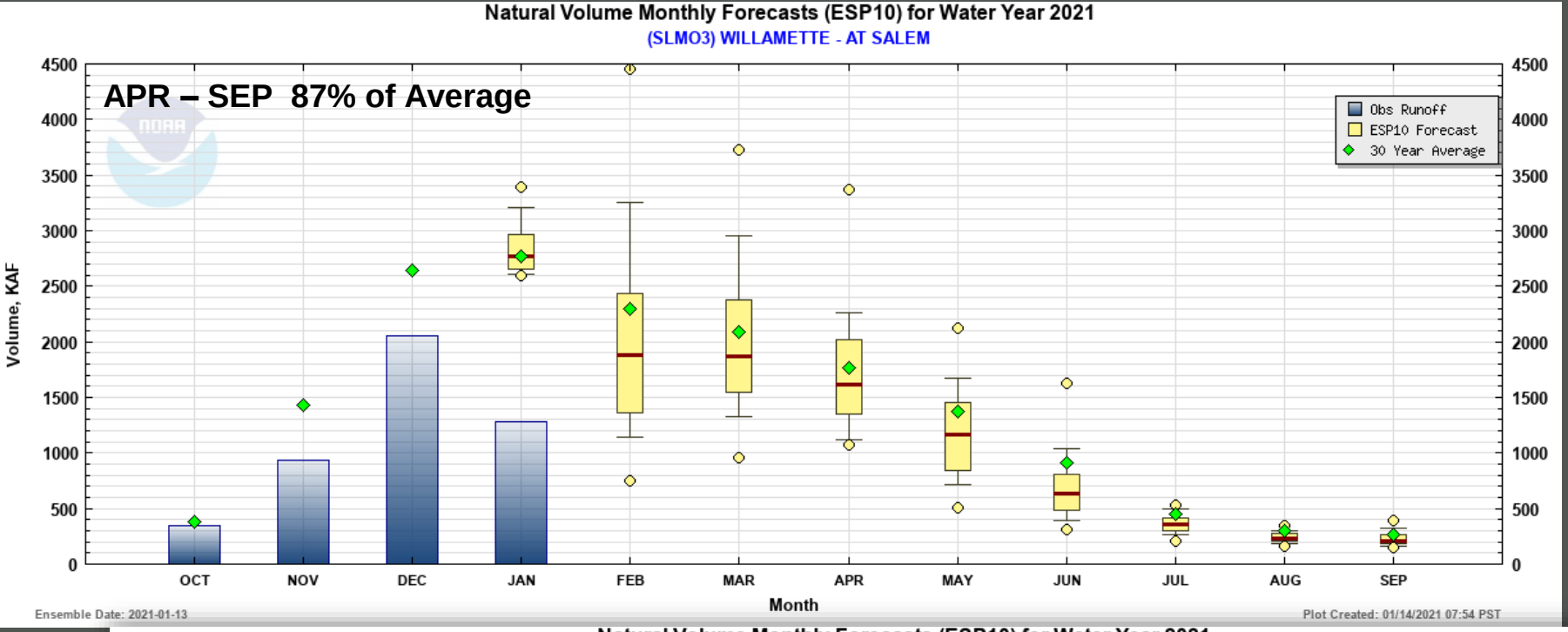


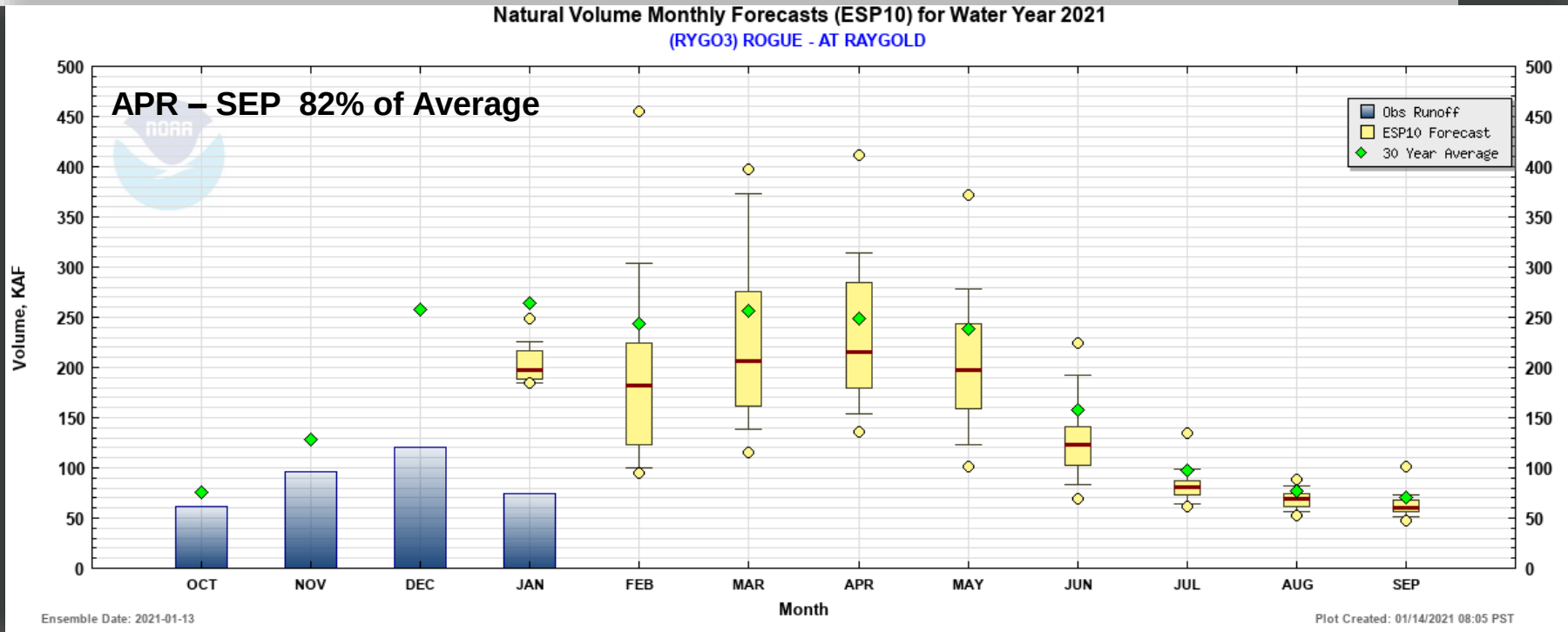
www.nwrfc.noaa.gov/natural/index.html?version=20190313v1

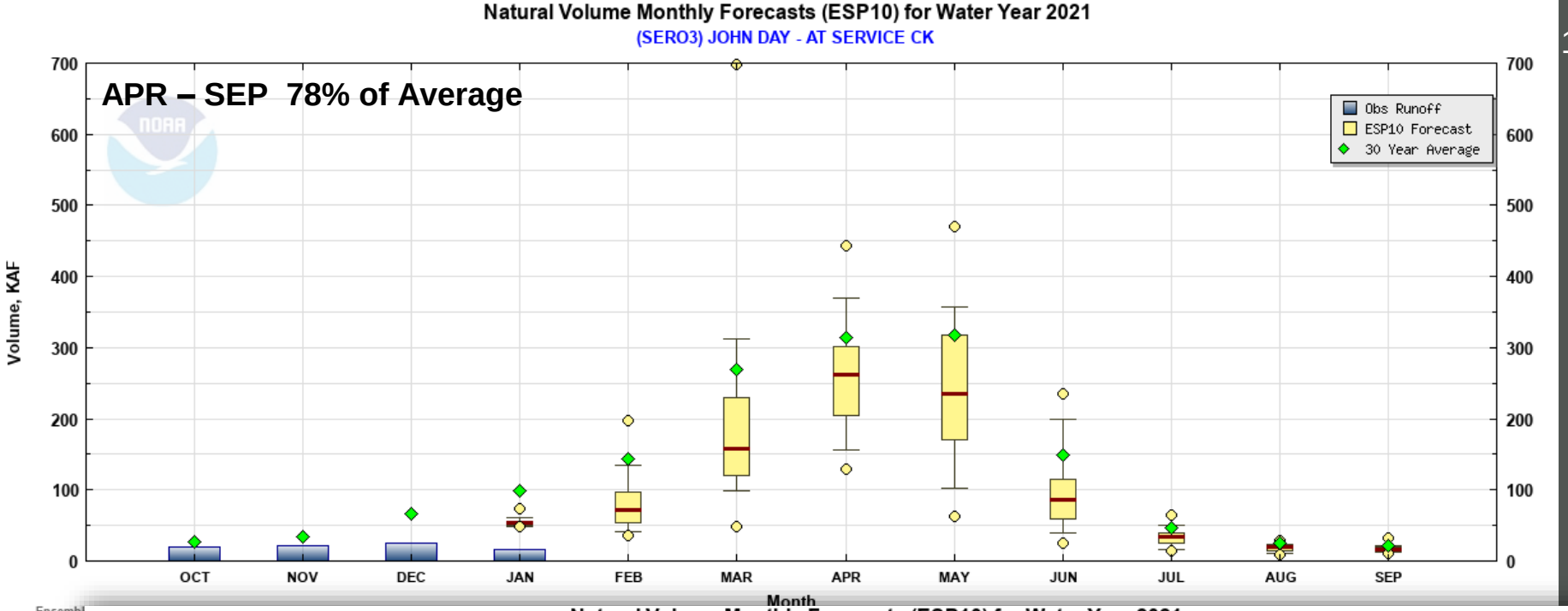
Seasonal Water Supply Forecasts



www.nwrfc.noaa.gov/ws/index.html & www.cnrfc.noaa.gov/water_resources_update.php


Natural Volume Monthly Forecasts (ESP10) for Water Year 2021
(SLMO3) WILLAMETTE - AT SALEM
APR – SEP 87% of Average
Obs Runoff
ESP10 Forecast
30 Year Average
Volume, KAF
Month
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
Ensemble Date: 2021-01-13
Plot Created: 01/14/2021 07:54 PST


Natural Volume Monthly Forecasts (ESP10) for Water Year 2021
(RYGO3) ROGUE - AT RAYGOLD
APR – SEP 82% of Average
Obs Runoff
ESP10 Forecast
30 Year Average
Volume, KAF
Month
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
Ensemble Date: 2021-01-13
Plot Created: 01/14/2021 08:05 PST


Natural Volume Monthly Forecasts (ESP10) for Water Year 2021
(SERO3) JOHN DAY - AT SERVICE CK
APR – SEP 78% of Average
Obs Runoff
ESP10 Forecast
30 Year Average
Volume, KAF
Month
OCT
NOV
DEC
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SEP
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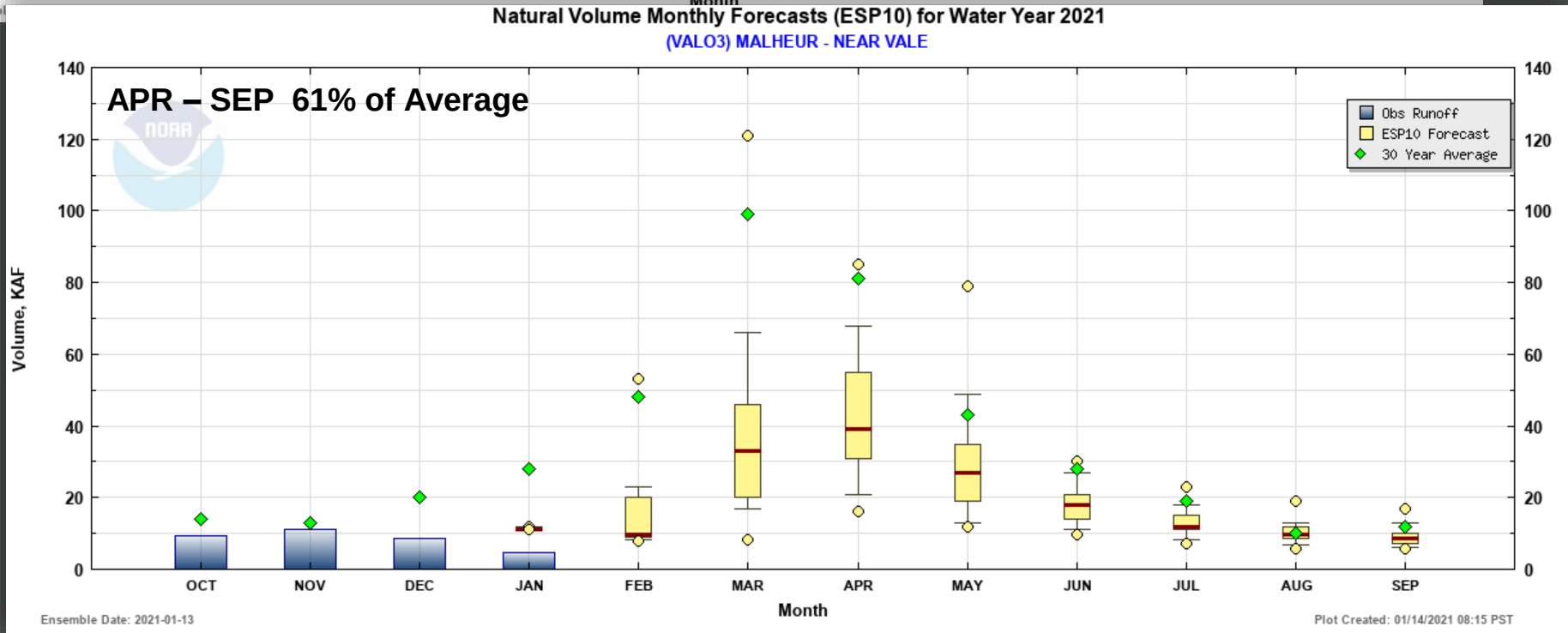
200
300
400
500
600
700


Natural Volume Monthly Forecasts (ESP10) for Water Year 2021
(VALO3) MALHEUR - NEAR VALE
APR – SEP 61% of Average
Obs Runoff
ESP10 Forecast
30 Year Average
Volume, KAF
Month
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
0
20
40
60
80
100
120
140
Ensemble Date: 2021-01-13
Plot Created: 01/14/2021 08:15 PST

Water Supply Briefings

NWRFC Water Supply Forecast
Monthly Briefing Schedule

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

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

Telephone Conference Call Number (same for all briefings):
(415) 930-5321
Pass Code:
524-795-021

USGS
science for a changing world

Oregon Water Supply Availability Meeting

January 2021

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

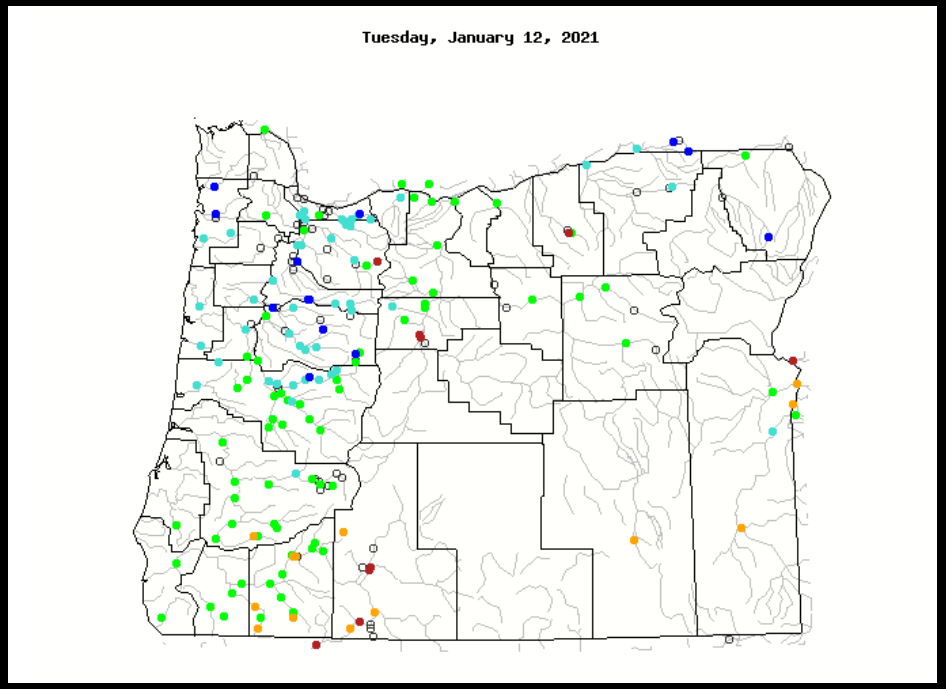
USGS Update on Surface Water Conditions

Carrie Boudreau & Marc Stewart
Oregon Water Science Center

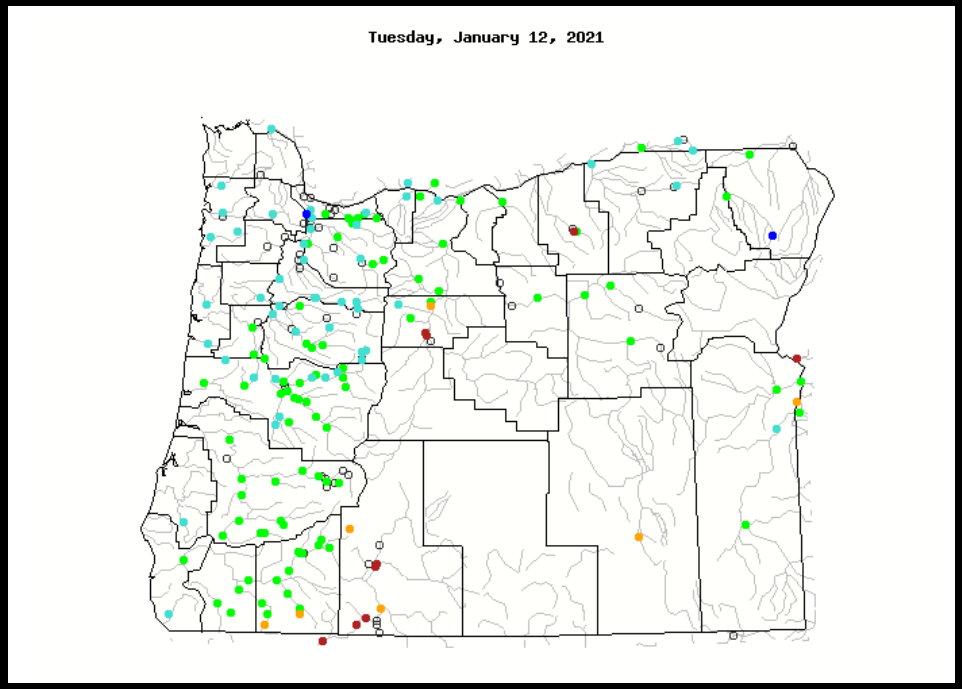
Photo: Clackamas River 1/12/2021 (twitter.com/usgs_or)

Streamflow Conditions

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



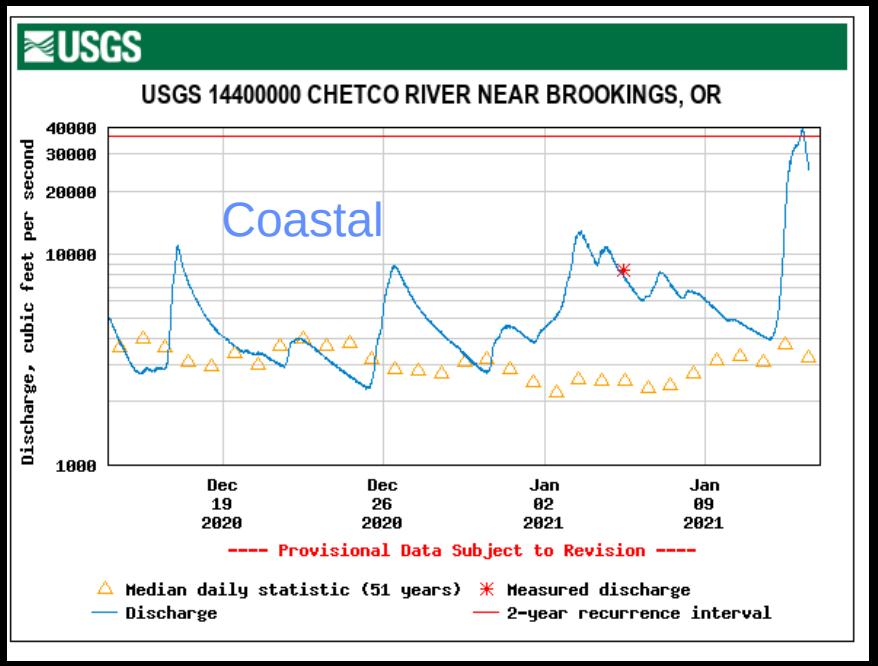
7-day Average Streamflow (as compared to Historical Record)

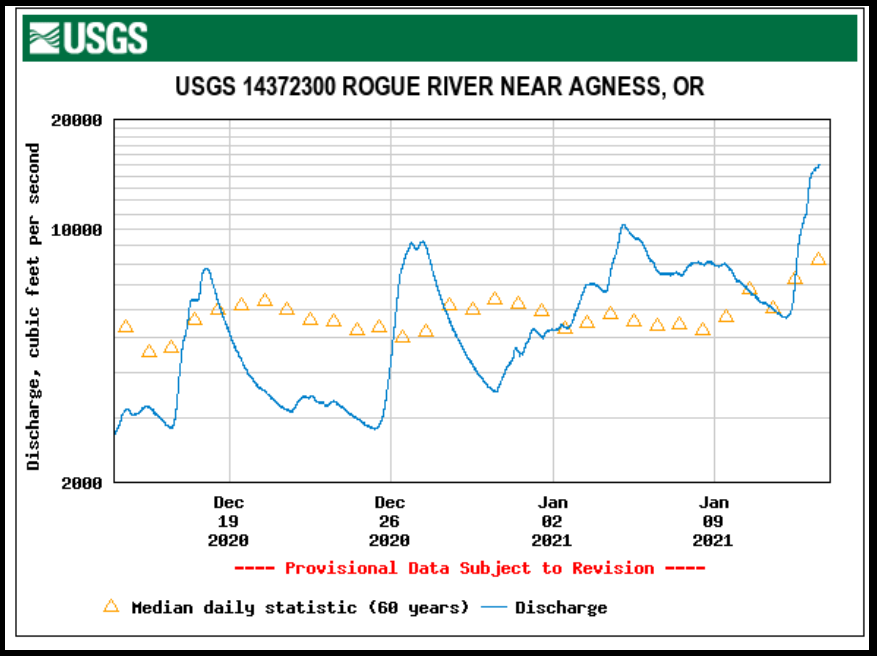


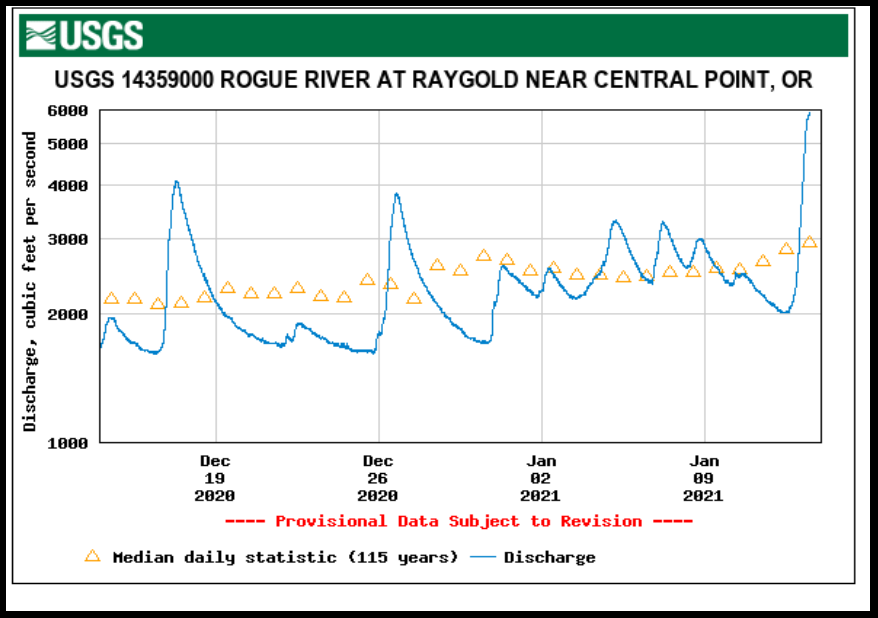
Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

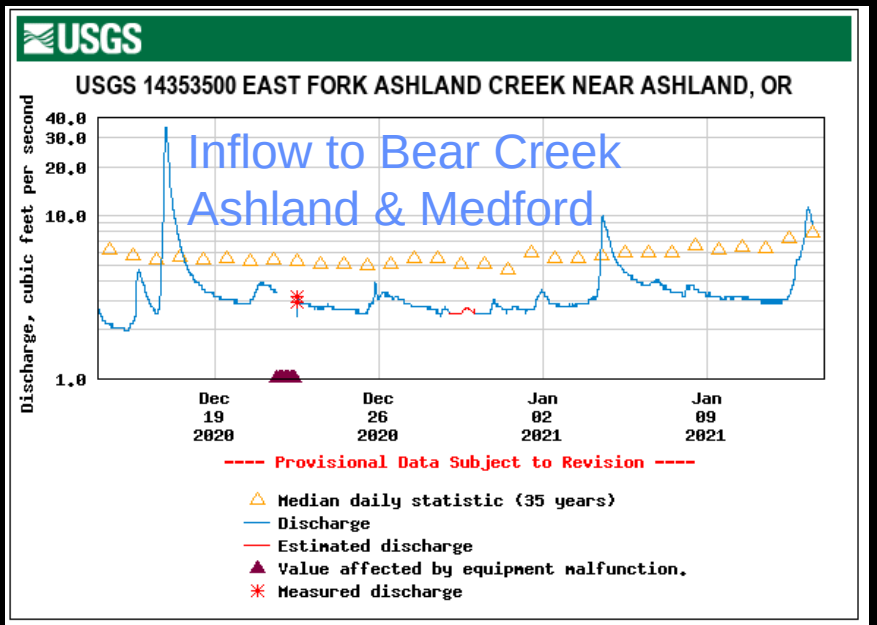
USGS

Southern Oregon

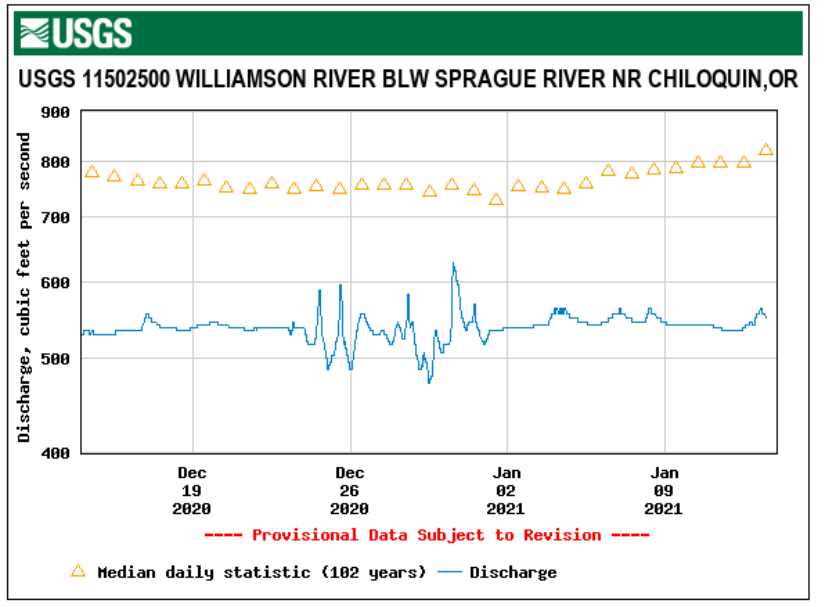


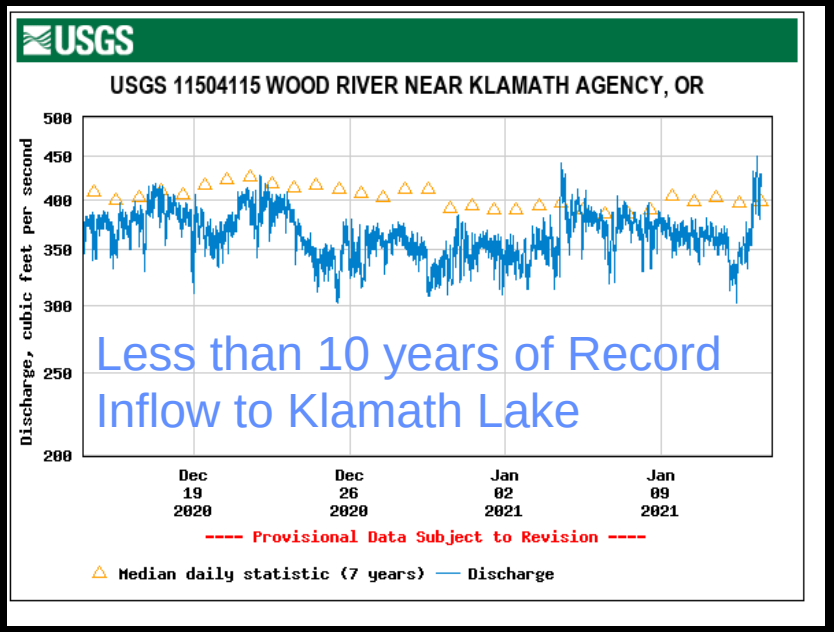


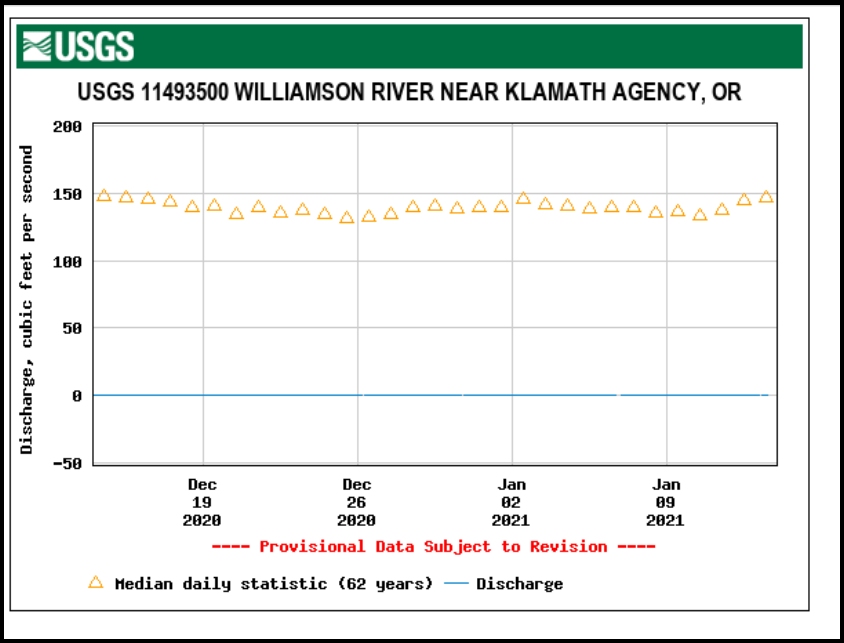


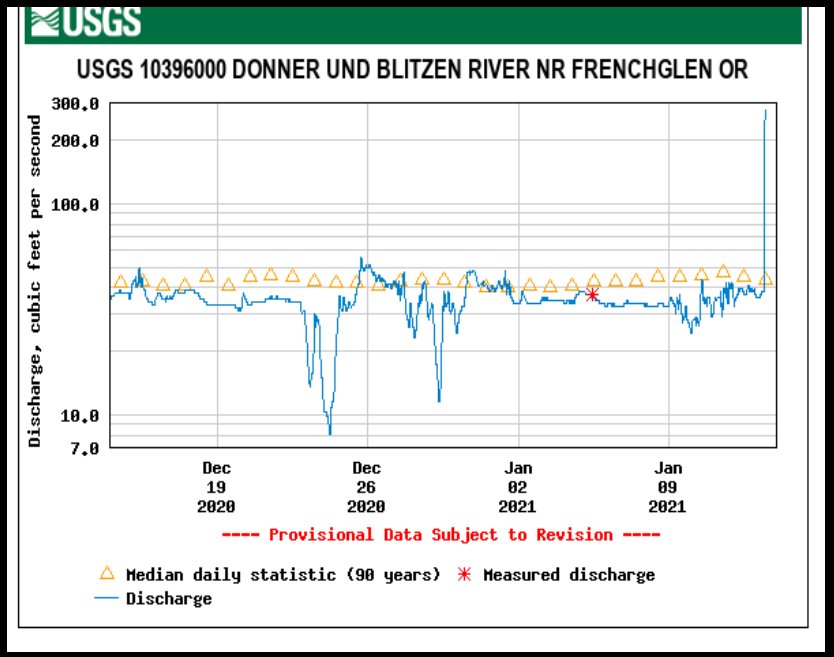


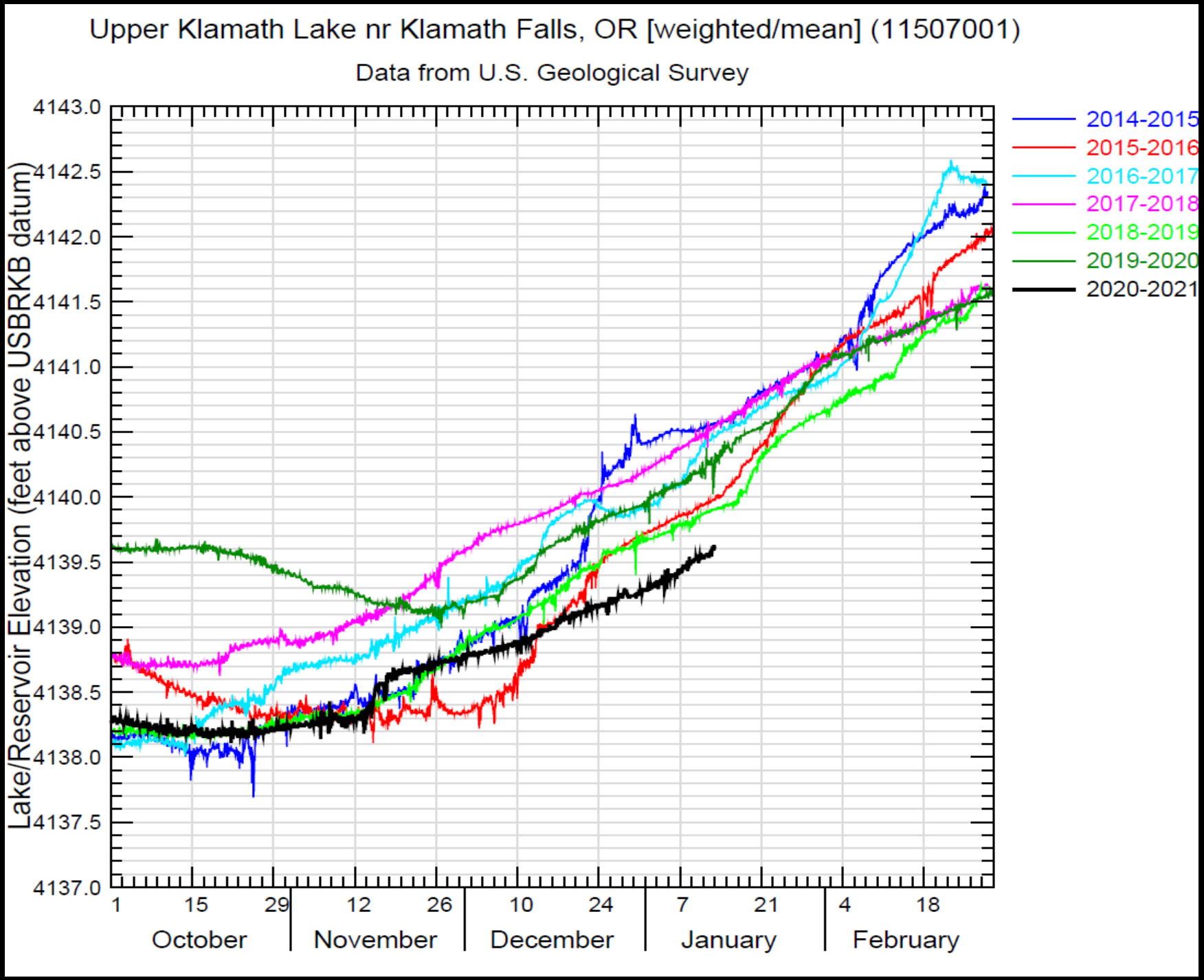
Southern Oregon

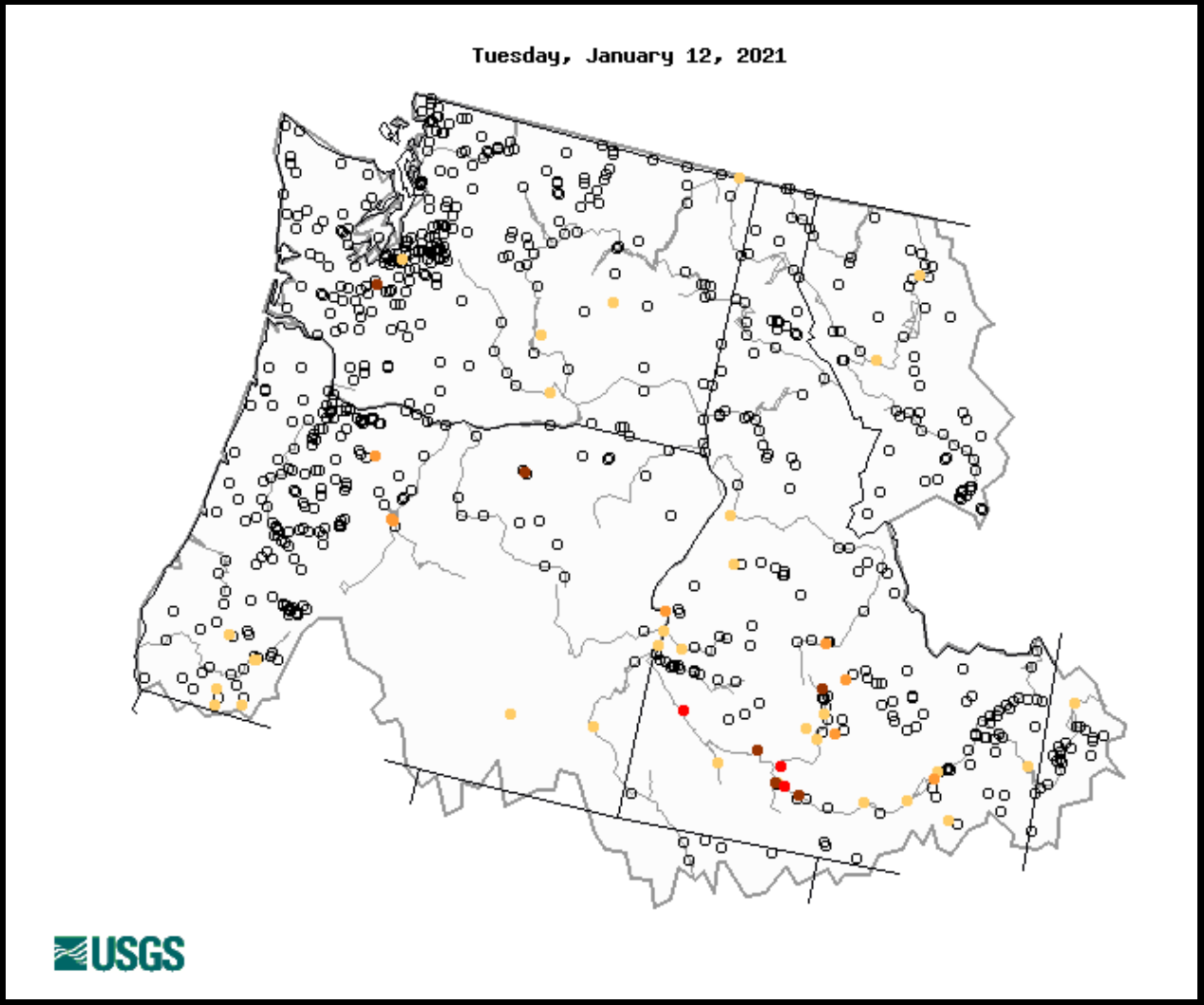








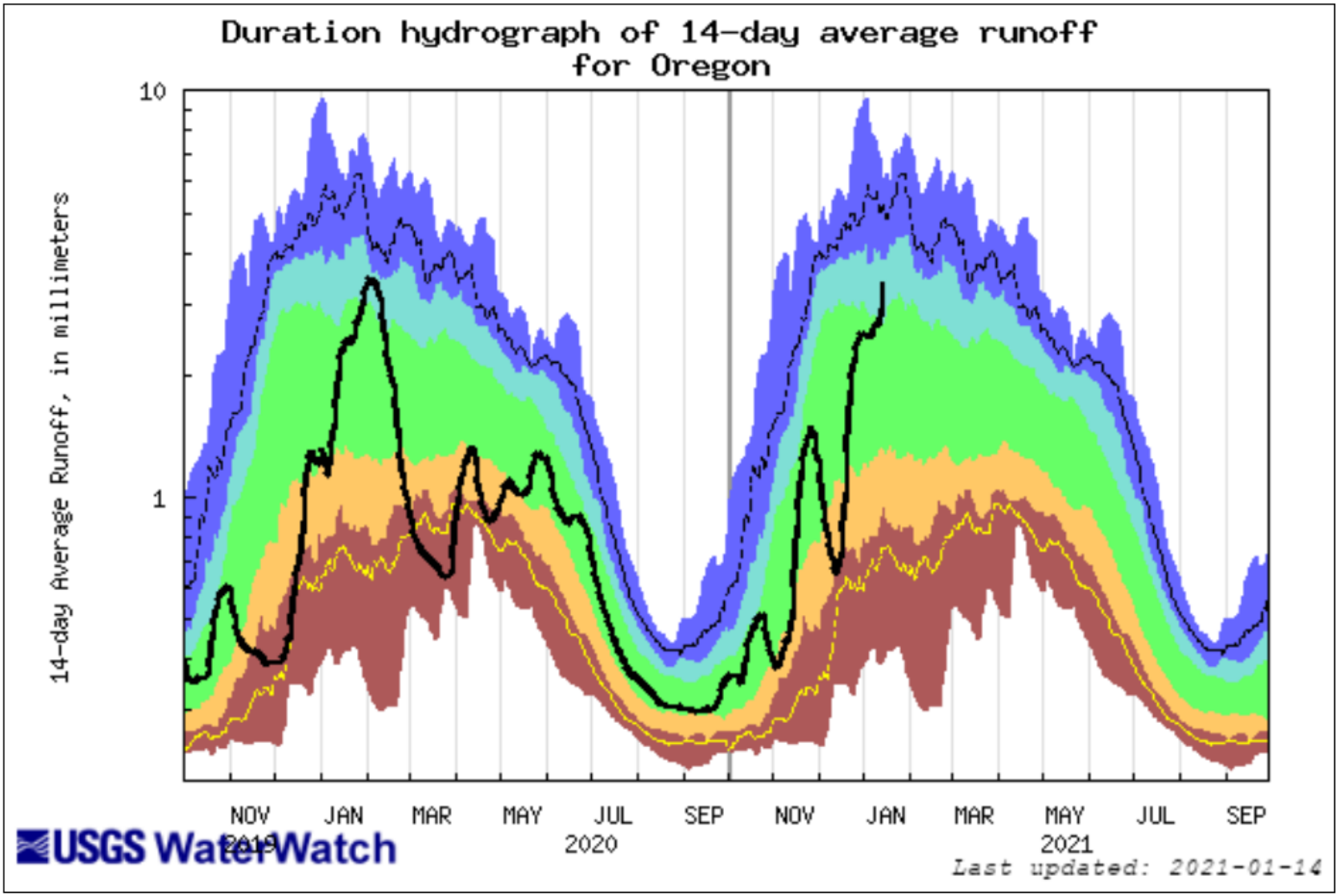

Upper Klamath Lake nr Klamath Falls, OR [weighted/mean] (11507001)
Data from U.S. Geological Survey
Lake/Reservoir Elevation (feet above USBRKB datum)
4143.0
4142.5
4142.0
4141.5
4141.0
4140.5
4140.0
4139.5
4139.0
4138.5
4138.0
4137.5
4137.0
1
15
29
12
26
10
24
7
21
4
18
October
November
December
January
February
2014-2015
2015-2016
2016-2017
2017-2018
2018-2019
2019-2020
2020-2021



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

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

USGS



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 Conditions Report

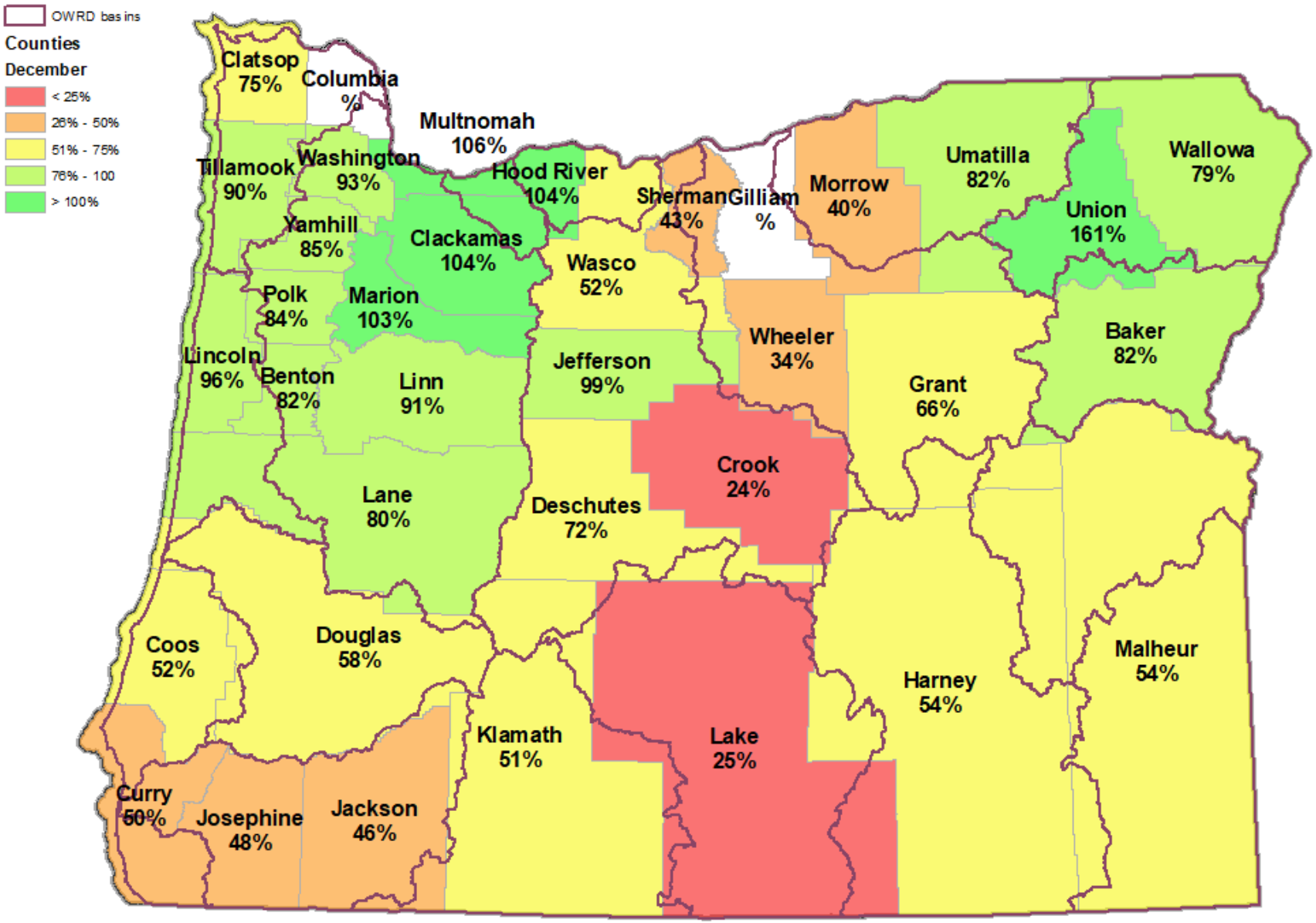
Water Supply Availability Committee

Stream: Willamina Cr.

Ryan Andrews
Oregon Water Resources Department

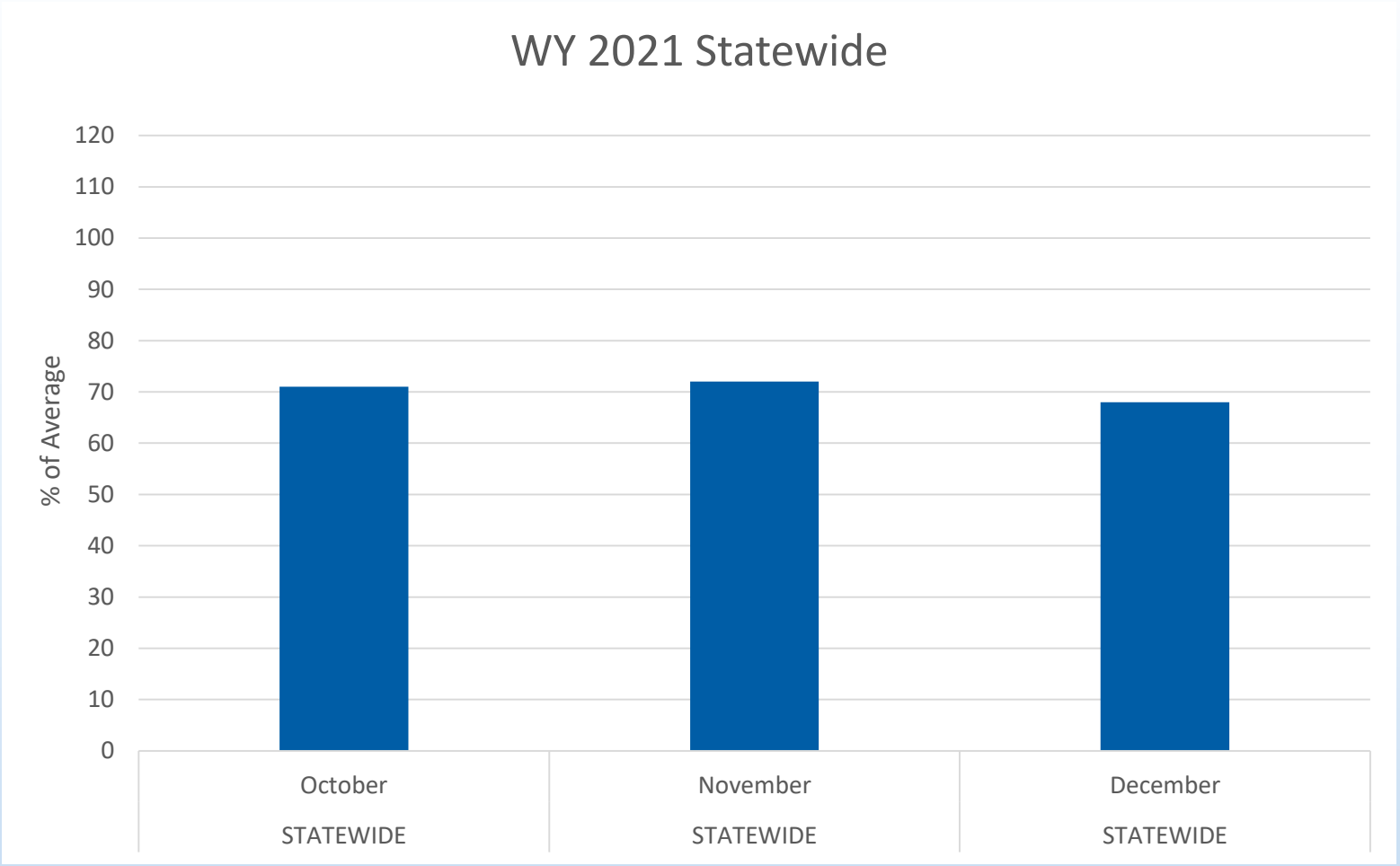
January 14th, 2021

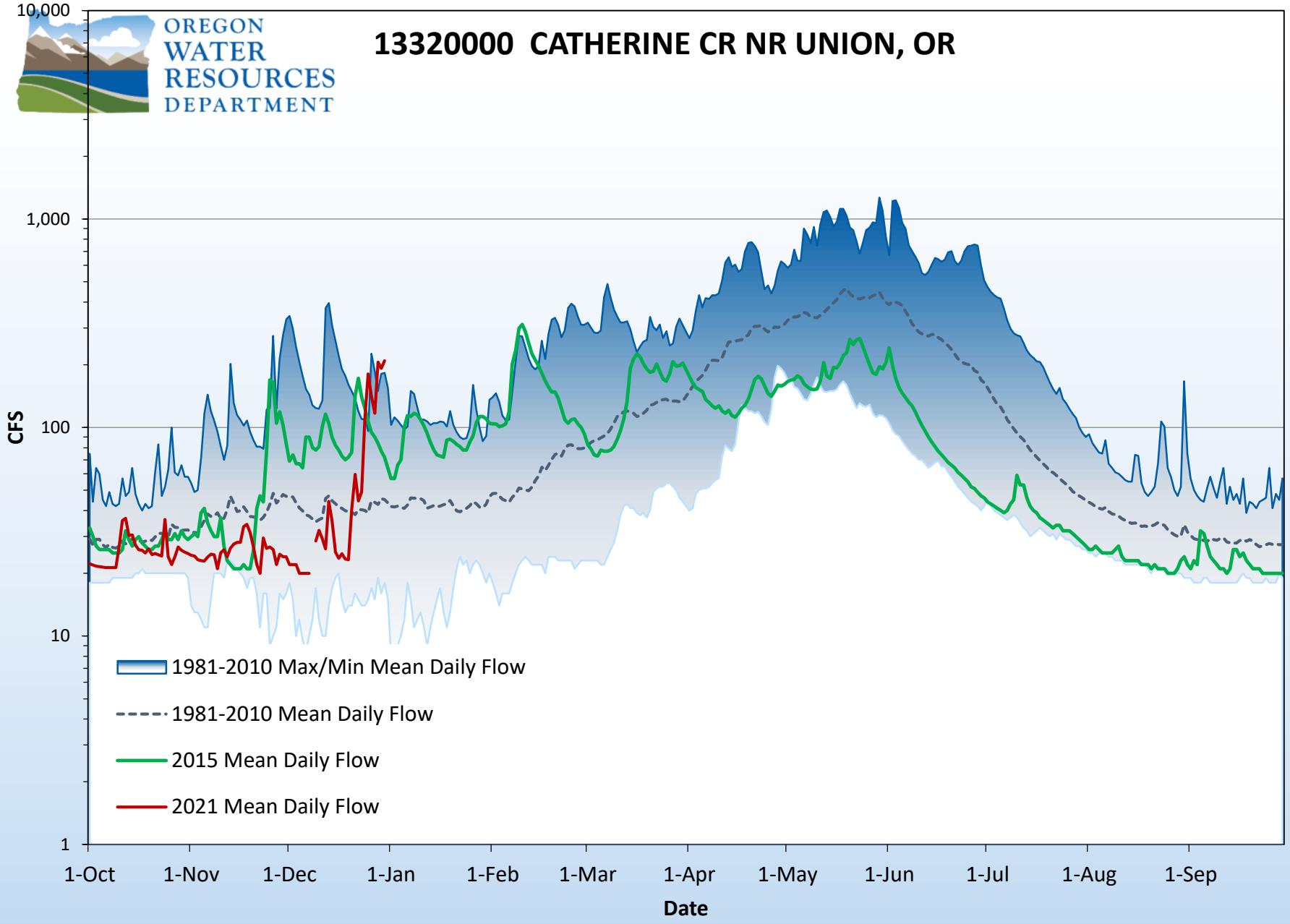
Percent of Average Streamflow - December 2020

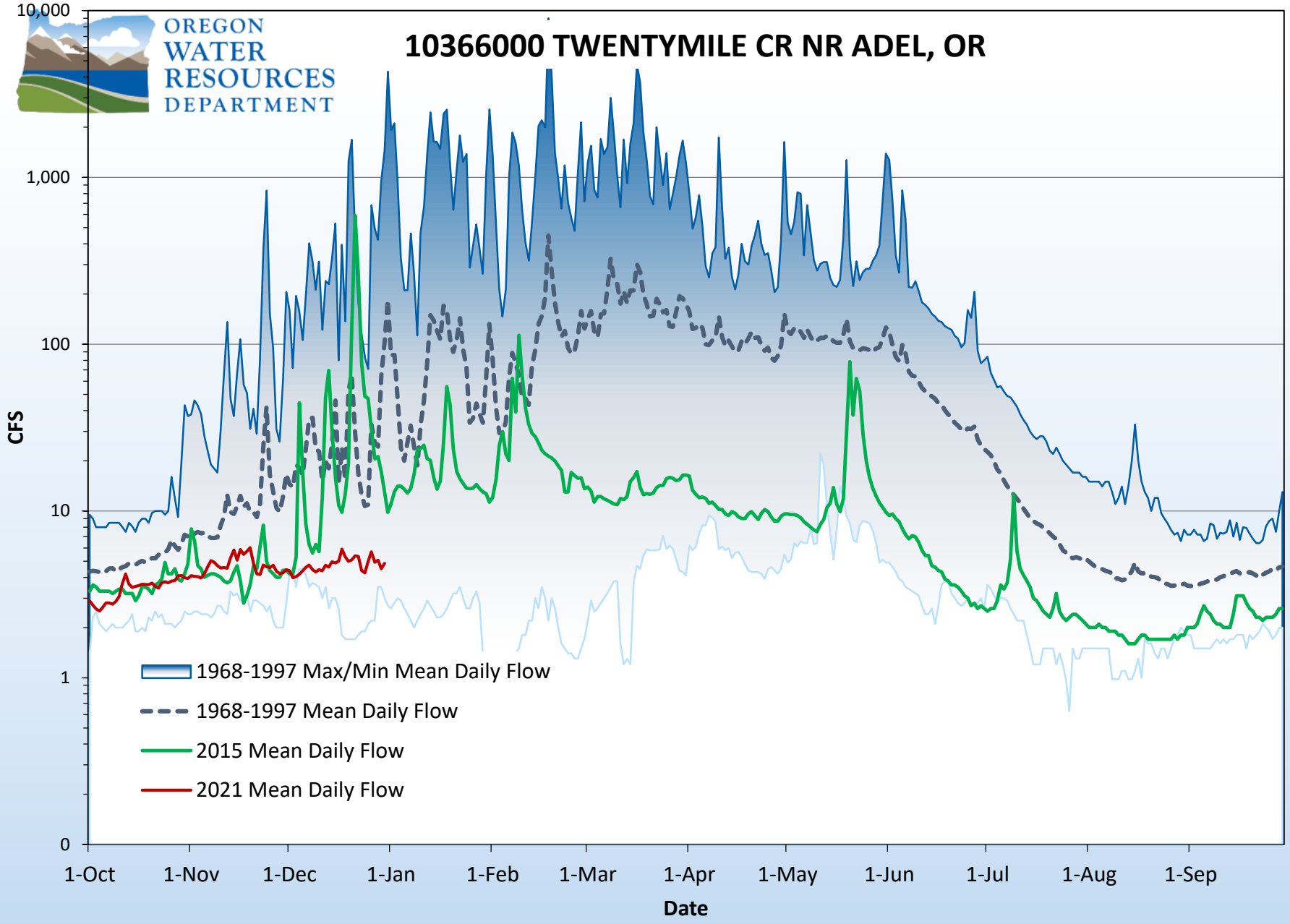


	% of Average			
Basin	October	November	December	# of Data Points
East	73	73	63	45
West	76	73	80	42
Statewide	71	72	68	87

OREGON WATER RESOURCES DEPARTMENT




OREGON WATER RESOURCES DEPARTMENT
13320000 CATHERINE CR NR UNION, OR
10,000
1,000
100
10
1
CFS
1981-2010 Max/Min Mean Daily Flow
1981-2010 Mean Daily Flow
2015 Mean Daily Flow
2021 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date


OREGON WATER RESOURCES DEPARTMENT
10366000 TWENTYMILE CR NR ADEL, OR
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1,000
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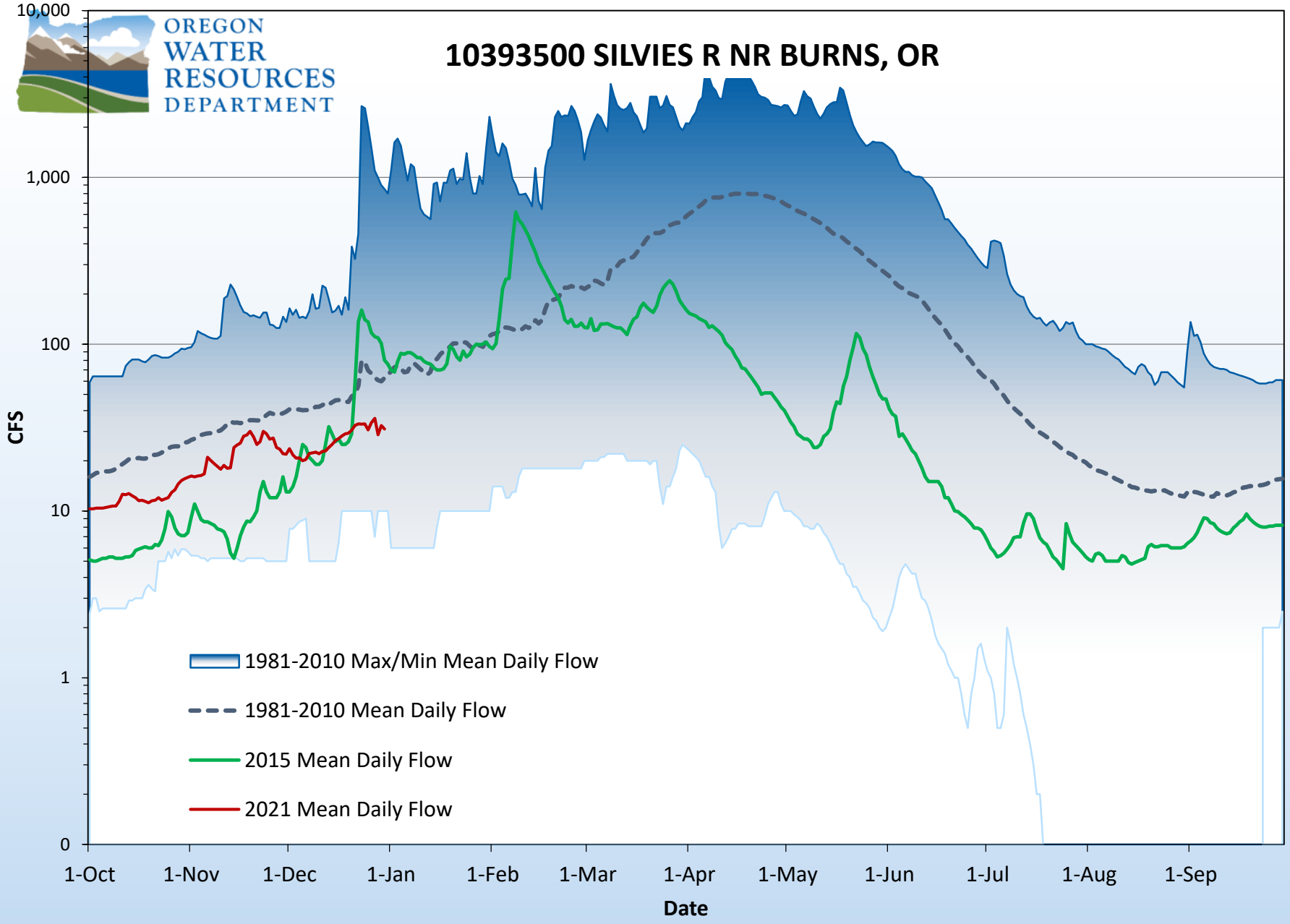
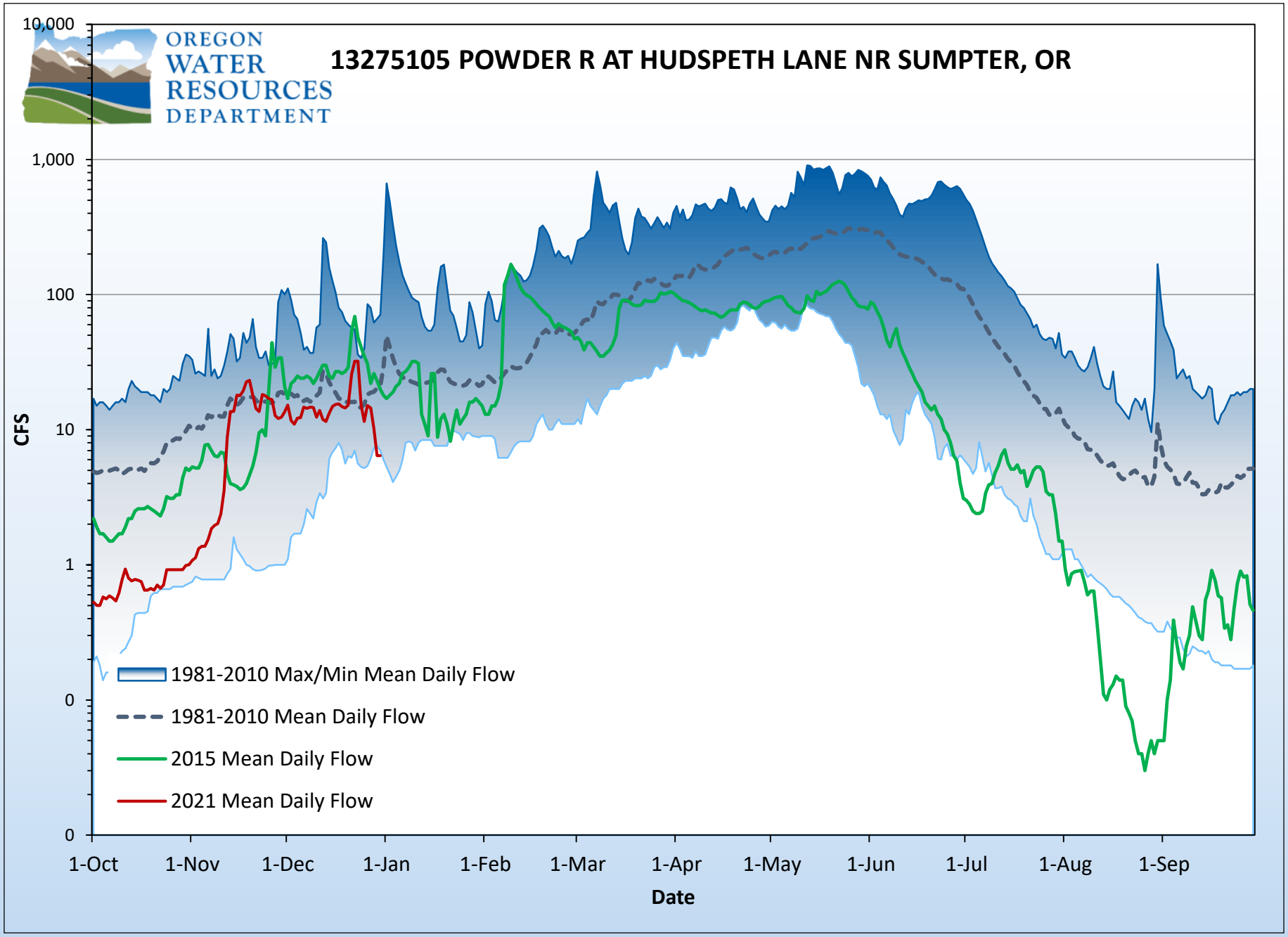
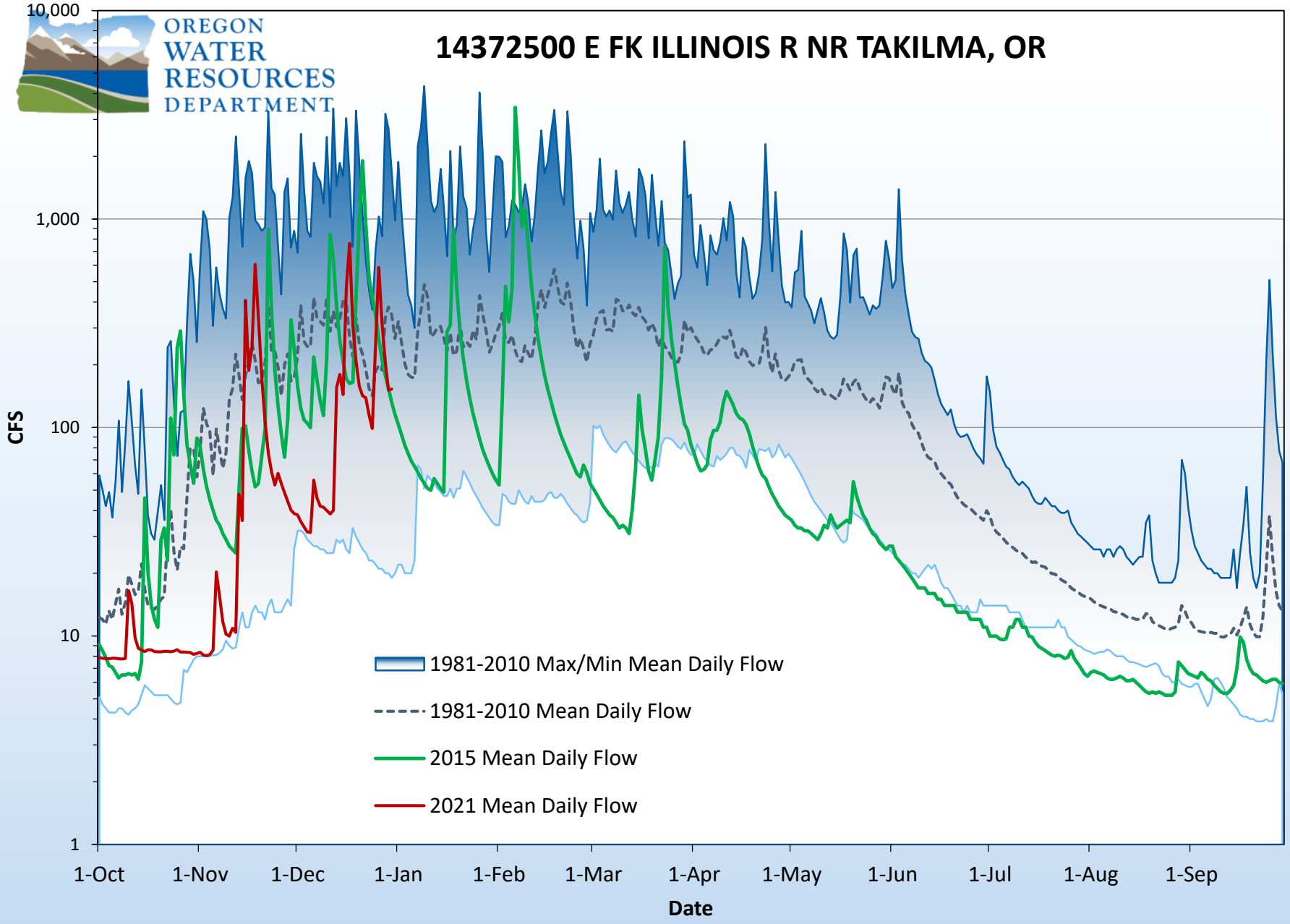
1
0
CFS
1968-1997 Max/Min Mean Daily Flow
1968-1997 Mean Daily Flow
2015 Mean Daily Flow
2021 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date


OREGON
WATER
RESOURCES
DEPARTMENT
10393500 SILVIES R NR BURNS, OR
10,000
1,000
100
10
1
0
CFS
1981-2010 Max/Min Mean Daily Flow
1981-2010 Mean Daily Flow
2015 Mean Daily Flow
2021 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date


OREGON WATER RESOURCES DEPARTMENT
13275105 POWDER R AT HUDSPETH LANE NR SUMPTER, OR
10,000
1,000
100
10
1
0
0
CFS
1981-2010 Max/Min Mean Daily Flow
1981-2010 Mean Daily Flow
2015 Mean Daily Flow
2021 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date


OREGON WATER RESOURCES DEPARTMENT
14372500 E FK ILLINOIS R NR TAKILMA, OR
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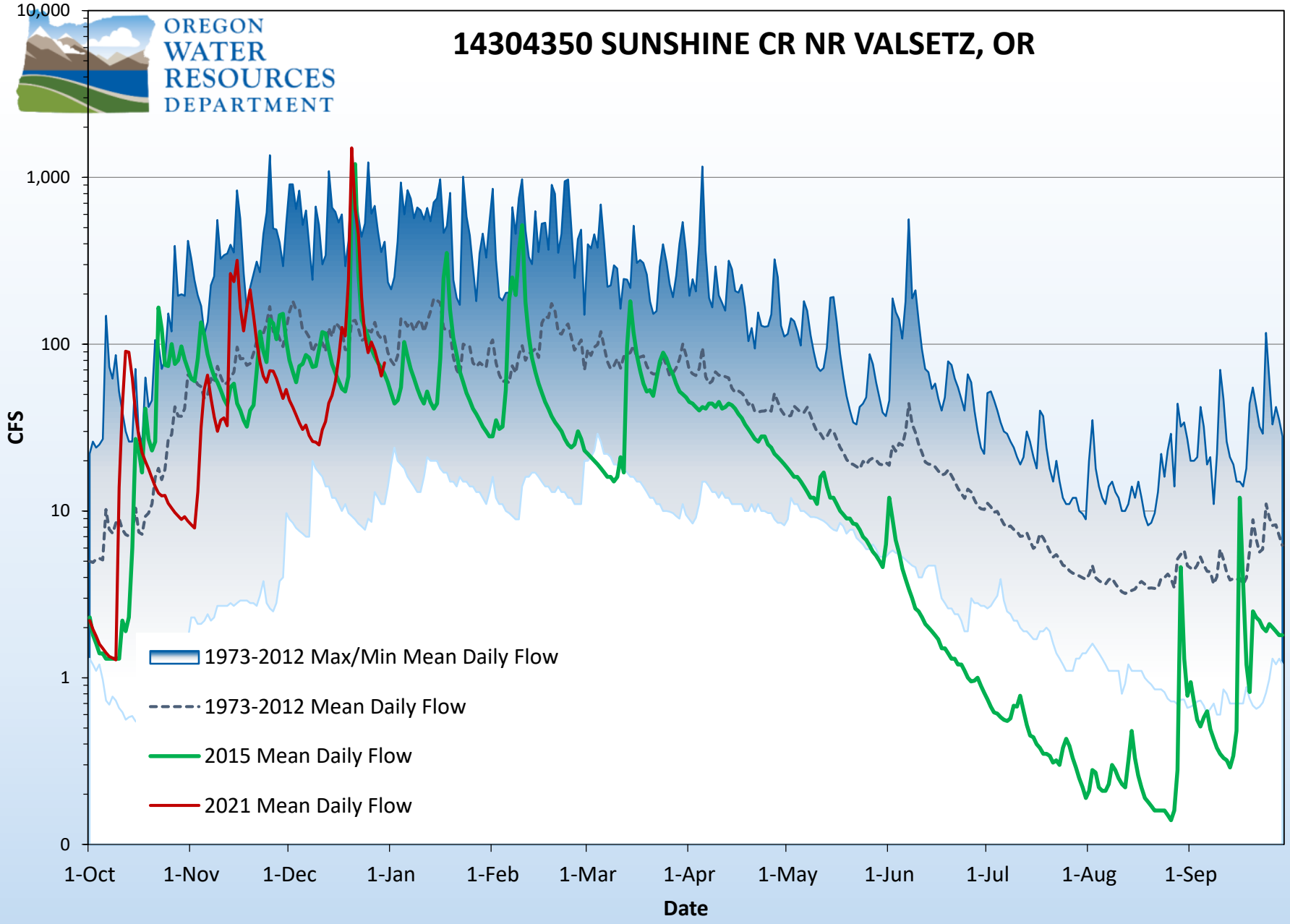
100
10
1
CFS
1981-2010 Max/Min Mean Daily Flow
1981-2010 Mean Daily Flow
2015 Mean Daily Flow
2021 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date


OREGON WATER RESOURCES DEPARTMENT
14304350 SUNSHINE CR NR VALSETZ, OR
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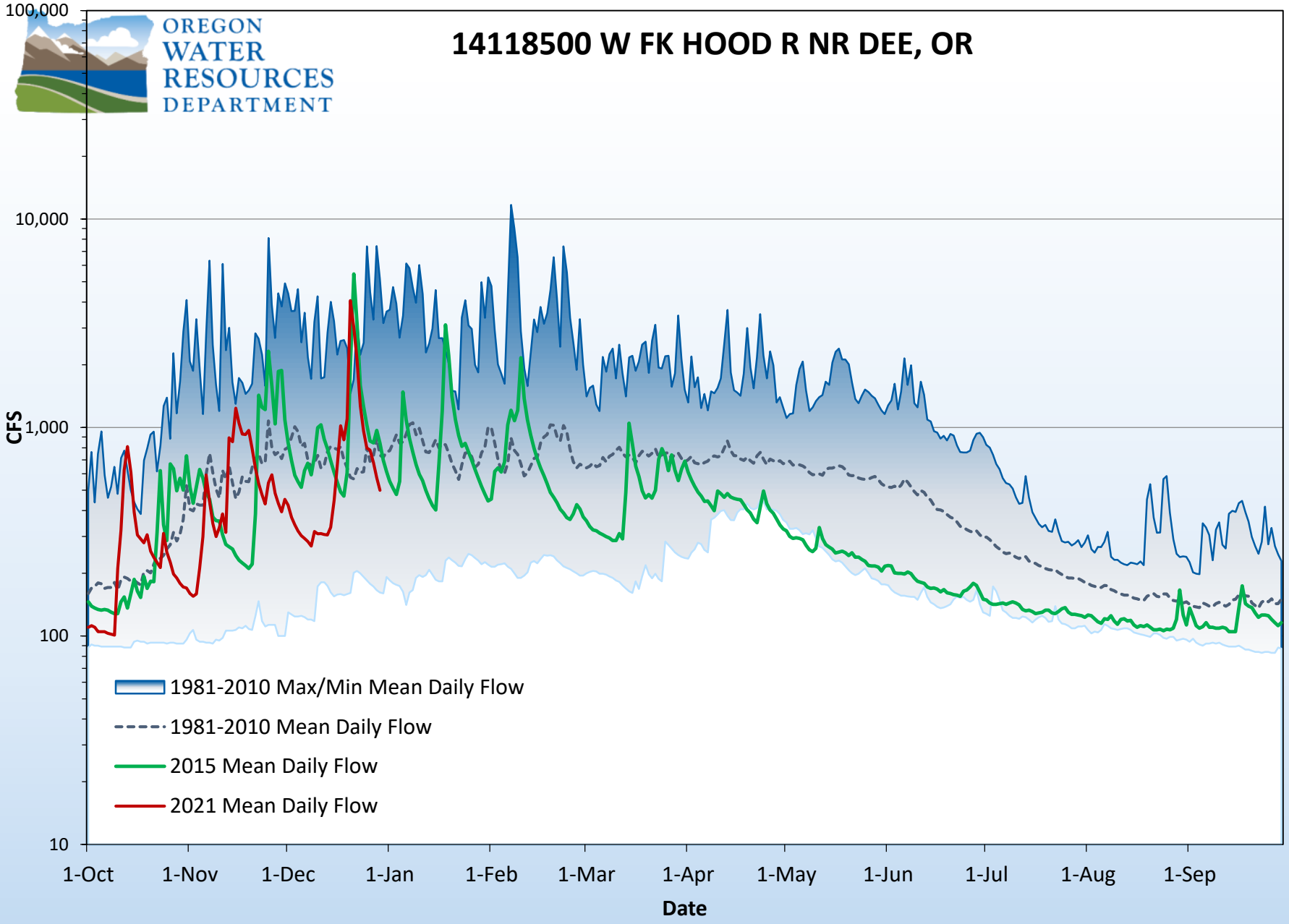
CFS
1973-2012 Max/Min Mean Daily Flow
1973-2012 Mean Daily Flow
2015 Mean Daily Flow
2021 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date


OREGON WATER RESOURCES DEPARTMENT
14118500 W FK HOOD R NR DEE, OR
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10,000
1,000
100
10
CFS
1981-2010 Max/Min Mean Daily Flow
1981-2010 Mean Daily Flow
2015 Mean Daily Flow
2021 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date

Thank you!

OREGON

WATER RESOURCES
DEPARTMENT

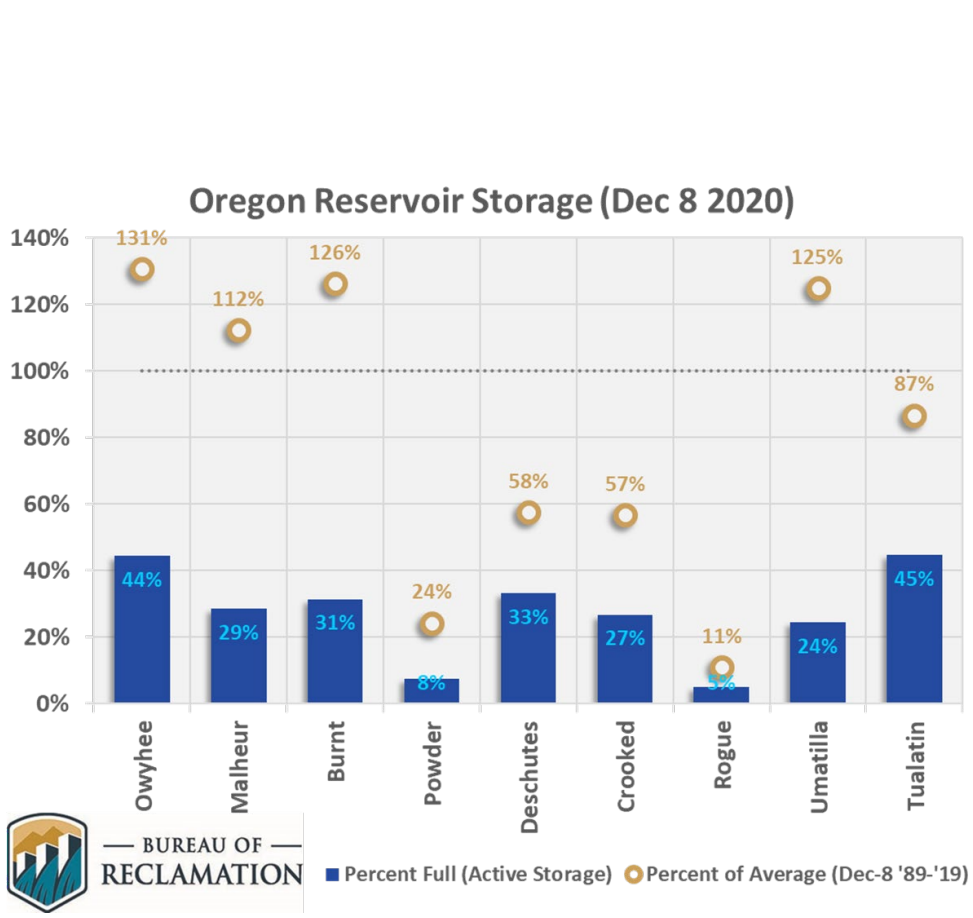
BUREAU OF RECLAMATION

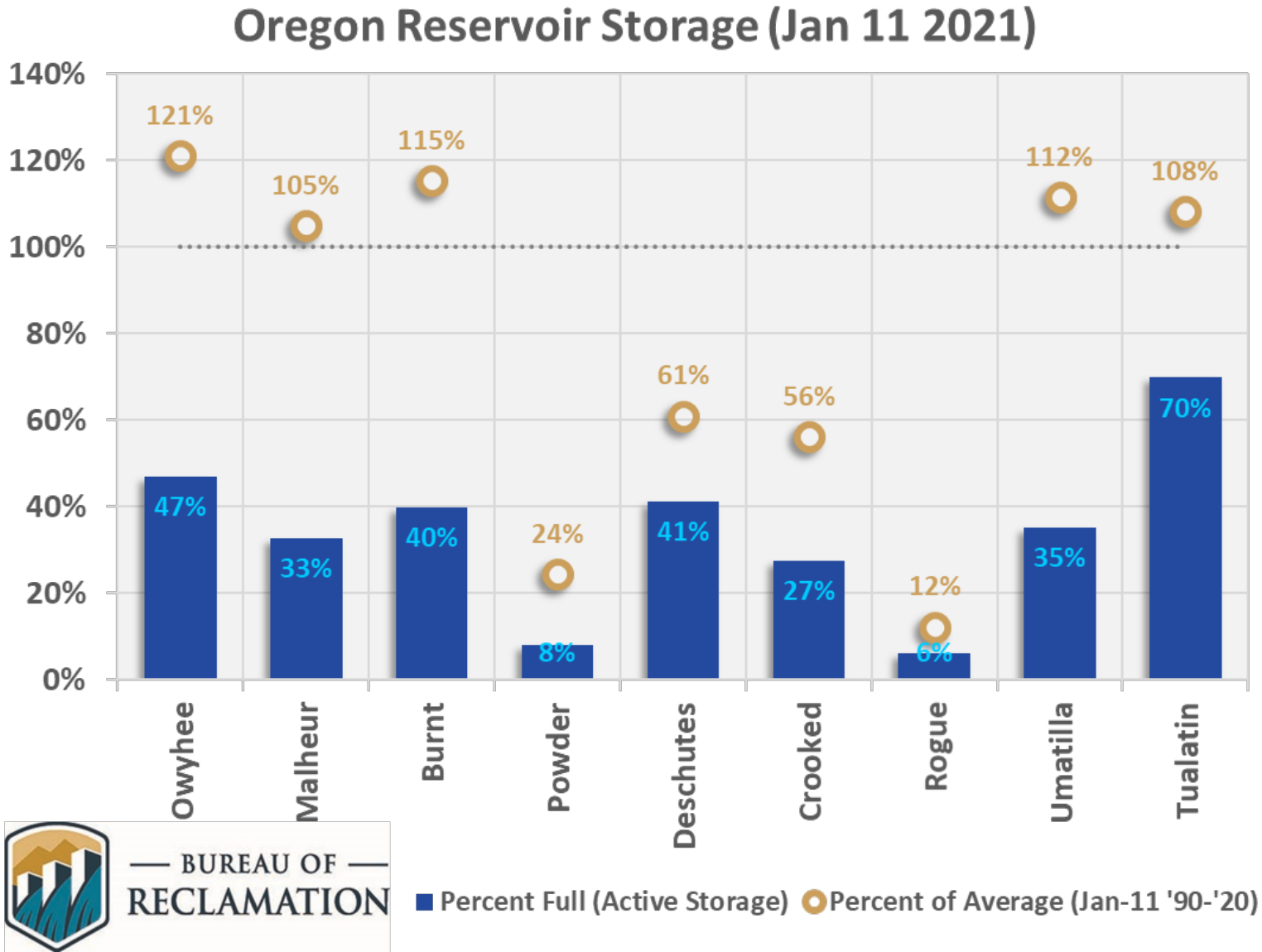
Reclamation Storage Update

Oregon Water Supply Availability Committee Meeting

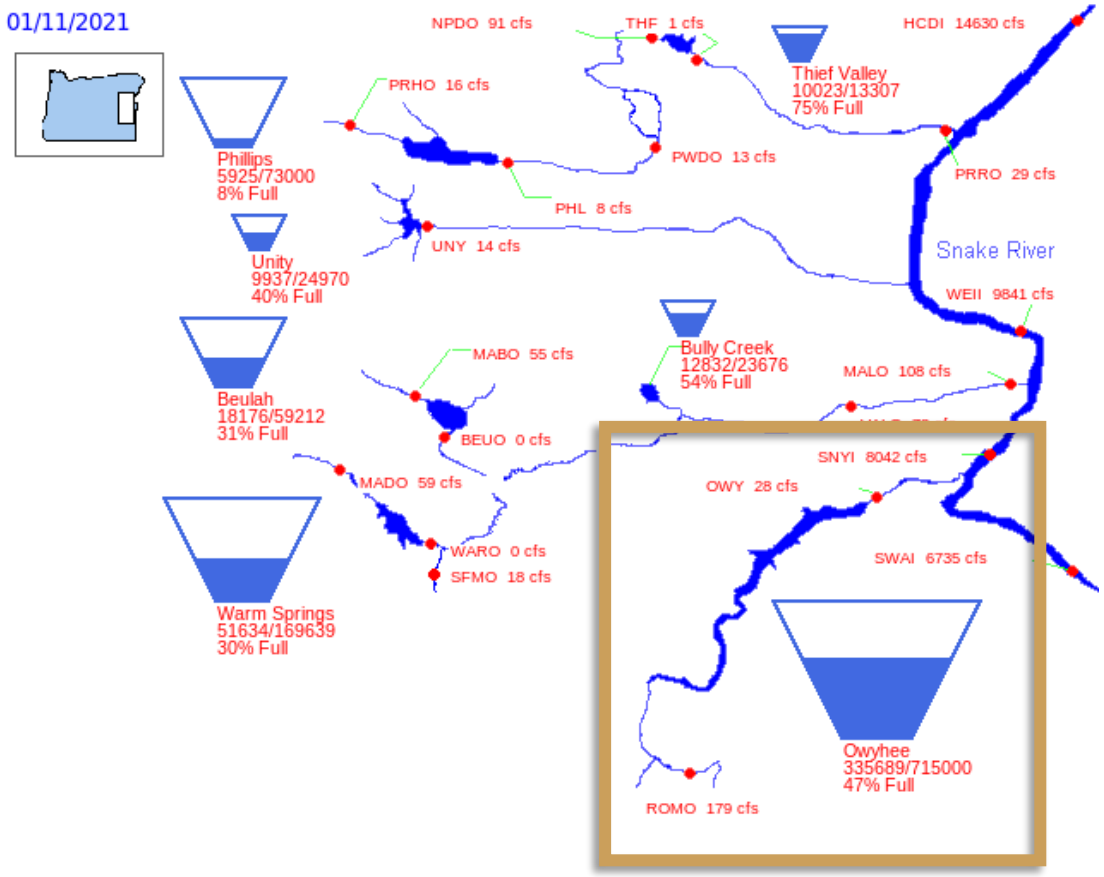
January 14, 2021

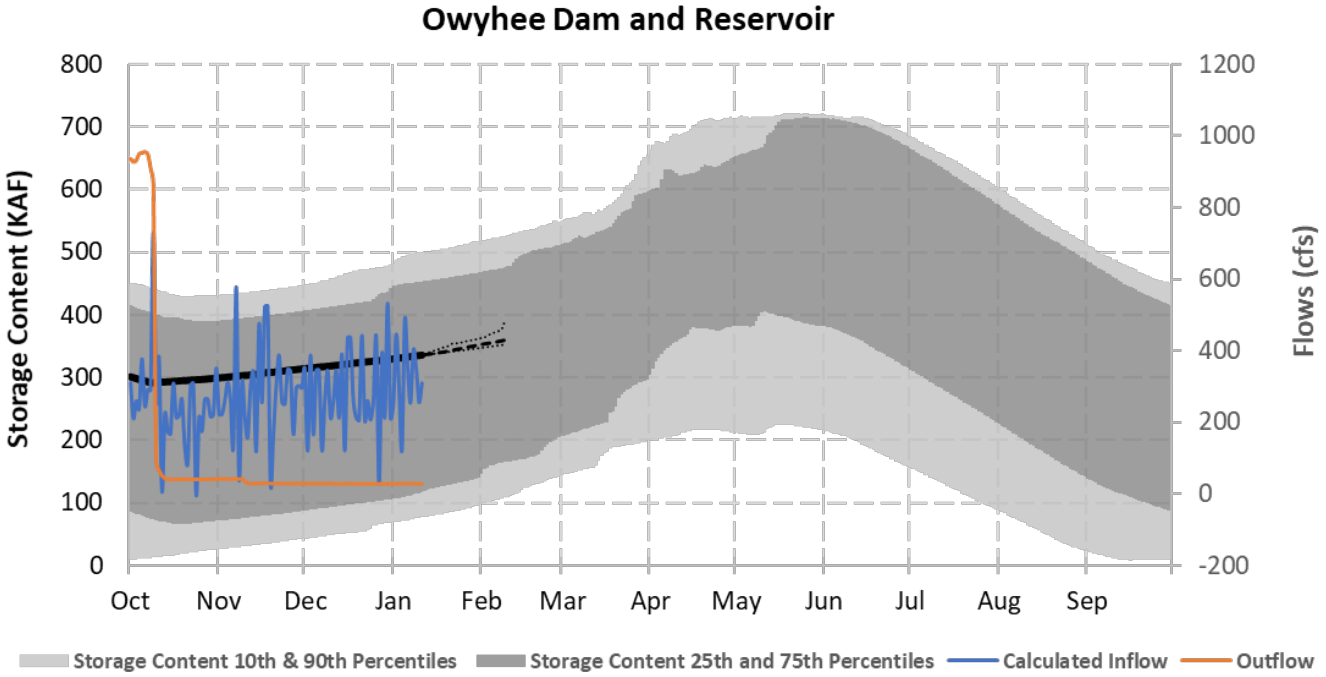
Reservoir Storage Conditions





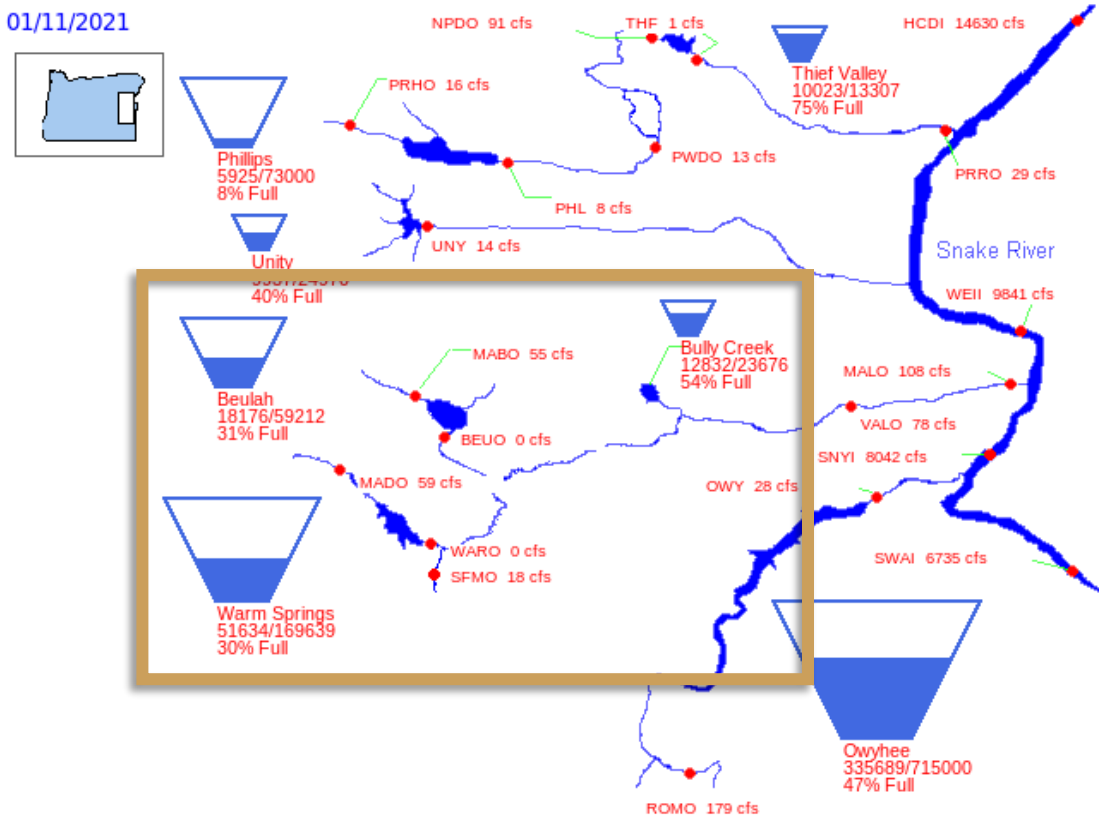
Owyhee River Basin

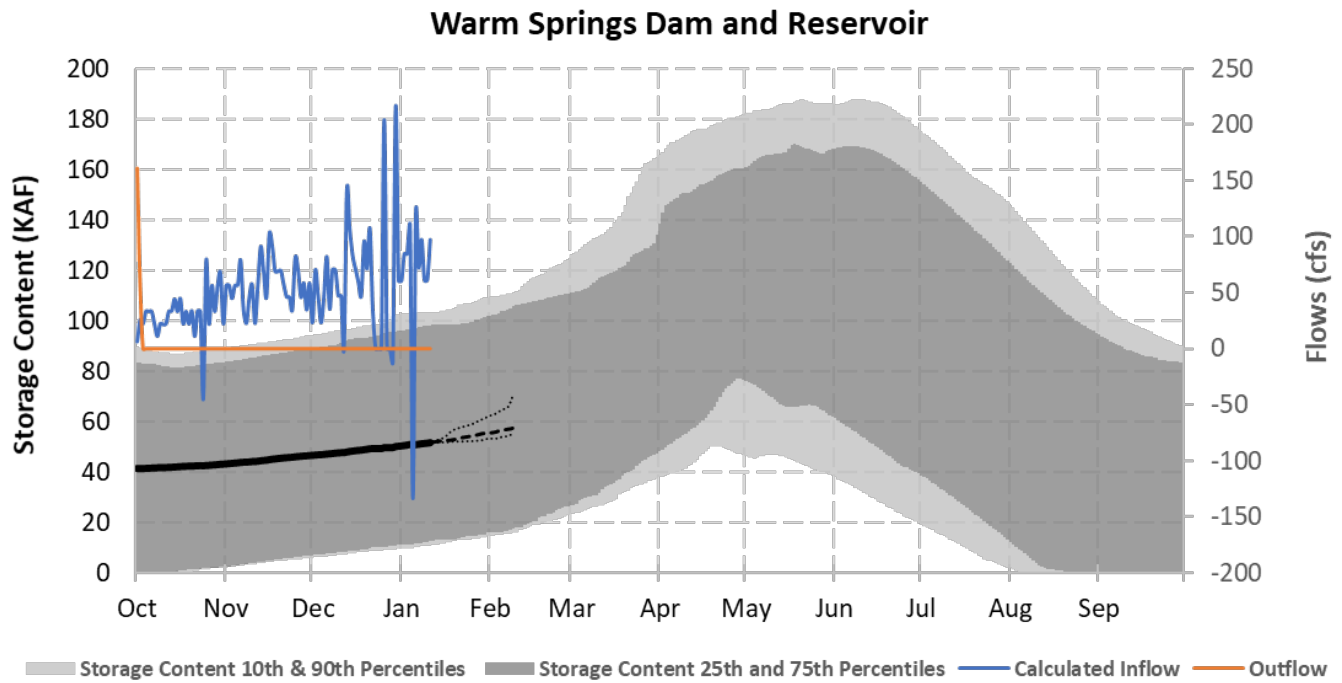


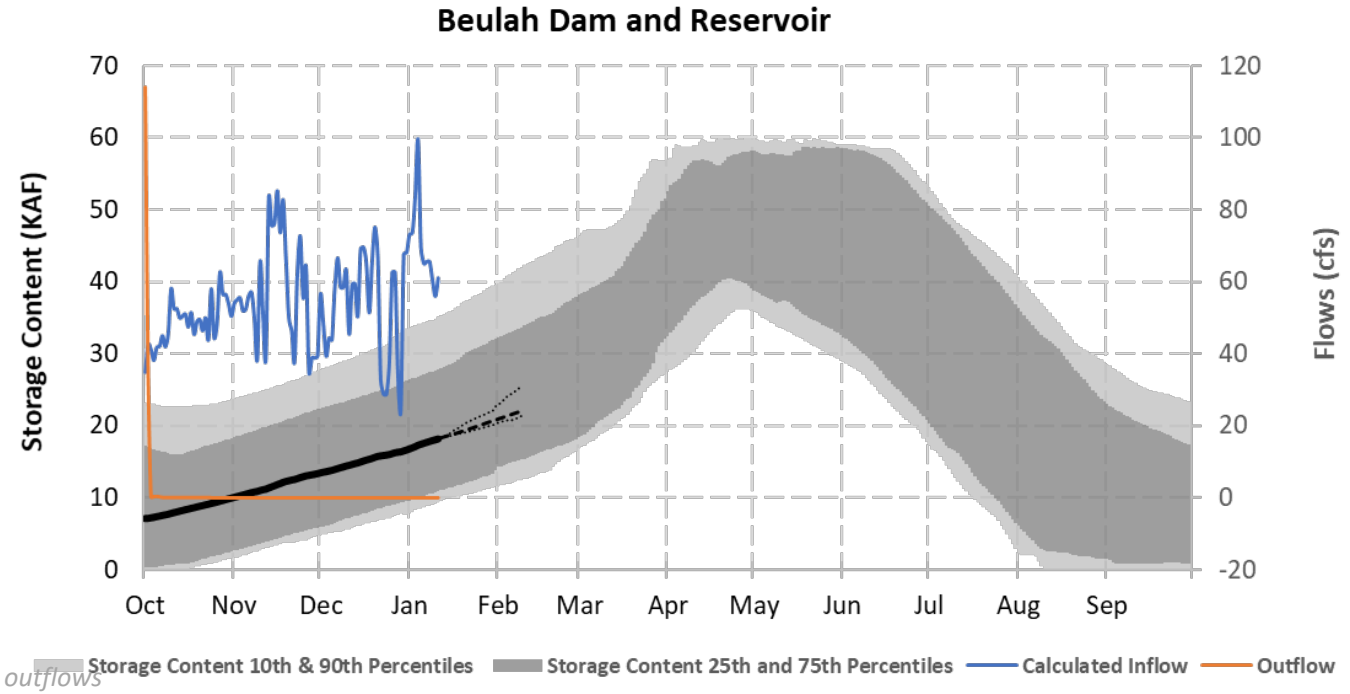


*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

Malheur River Basin

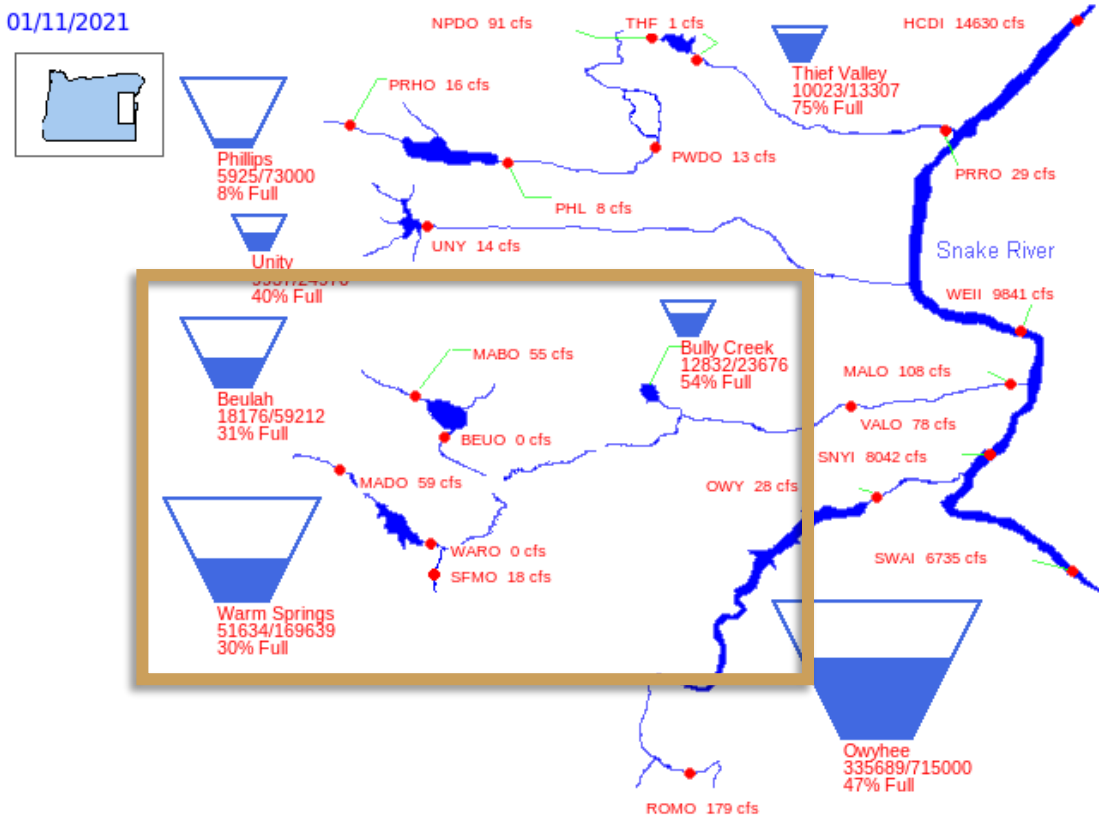


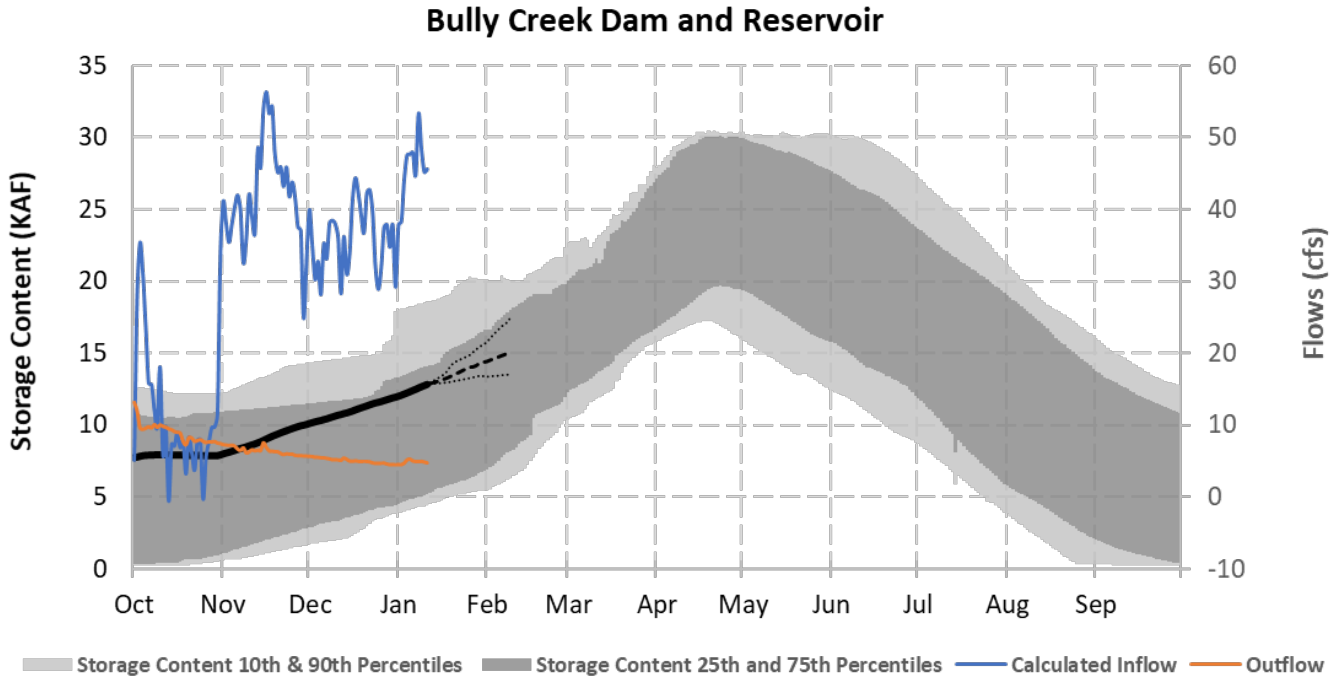




Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

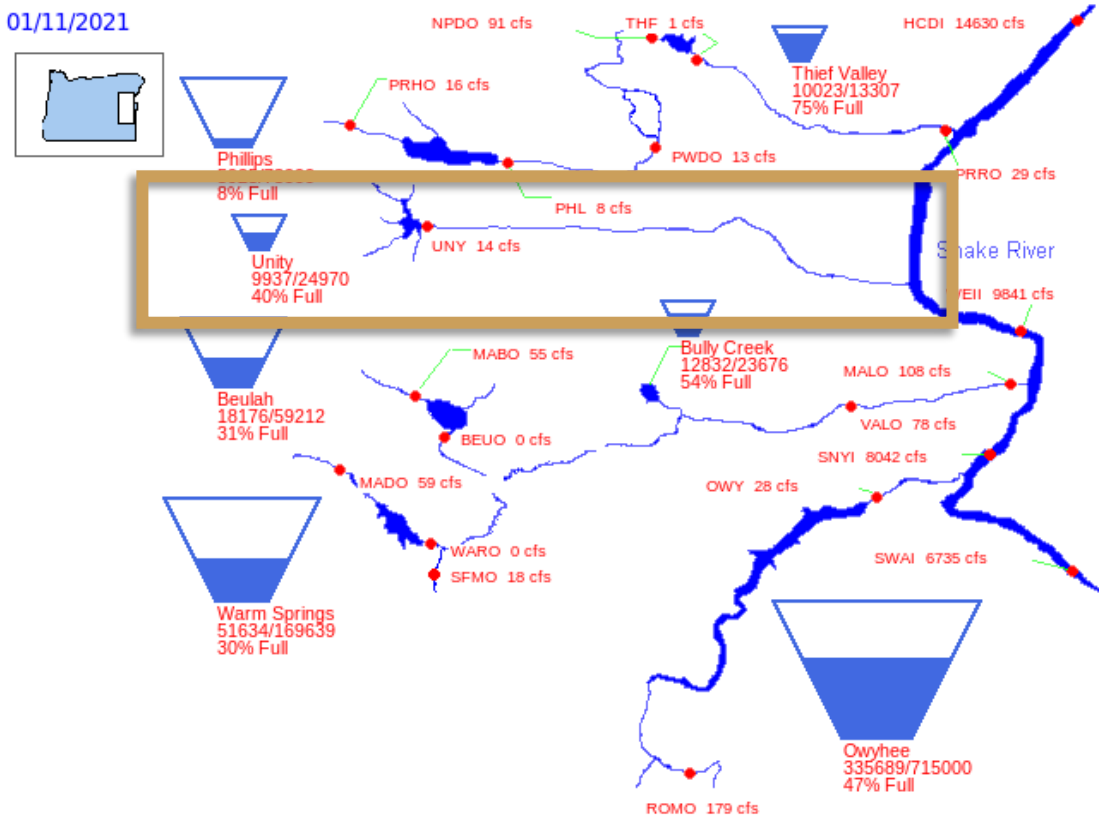
Malheur River Basin

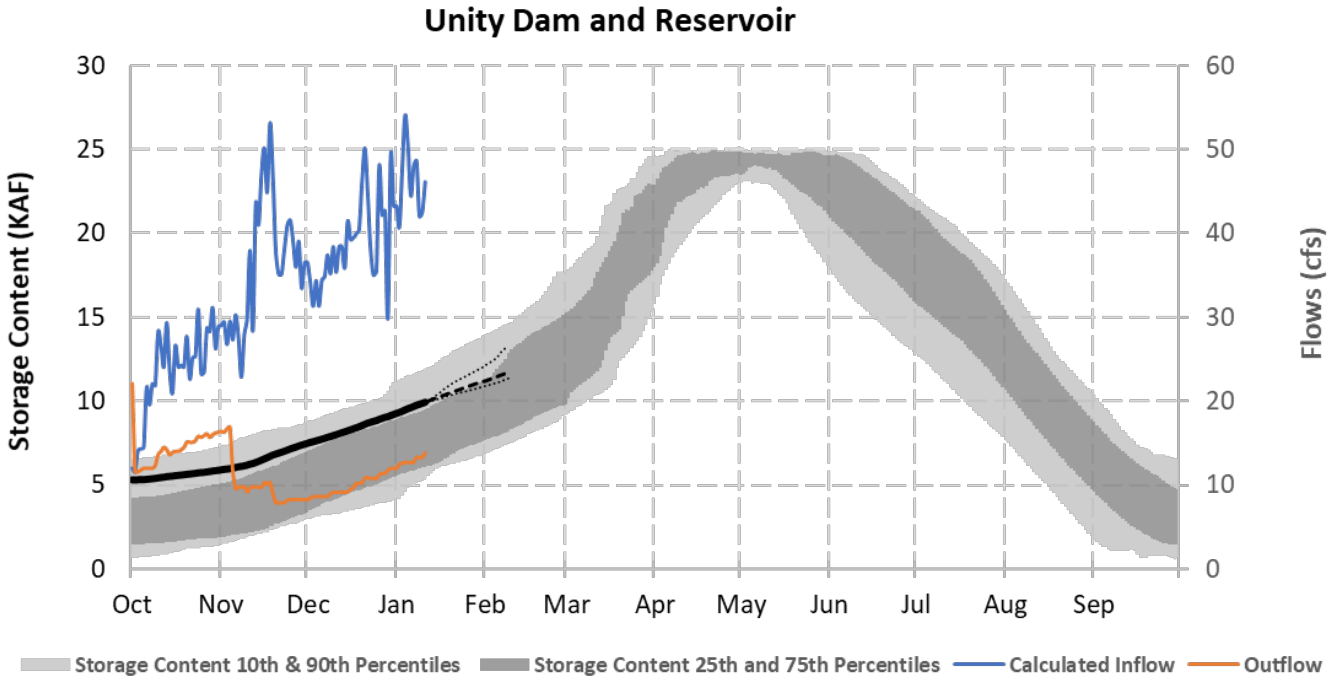




*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

Burnt River Basin





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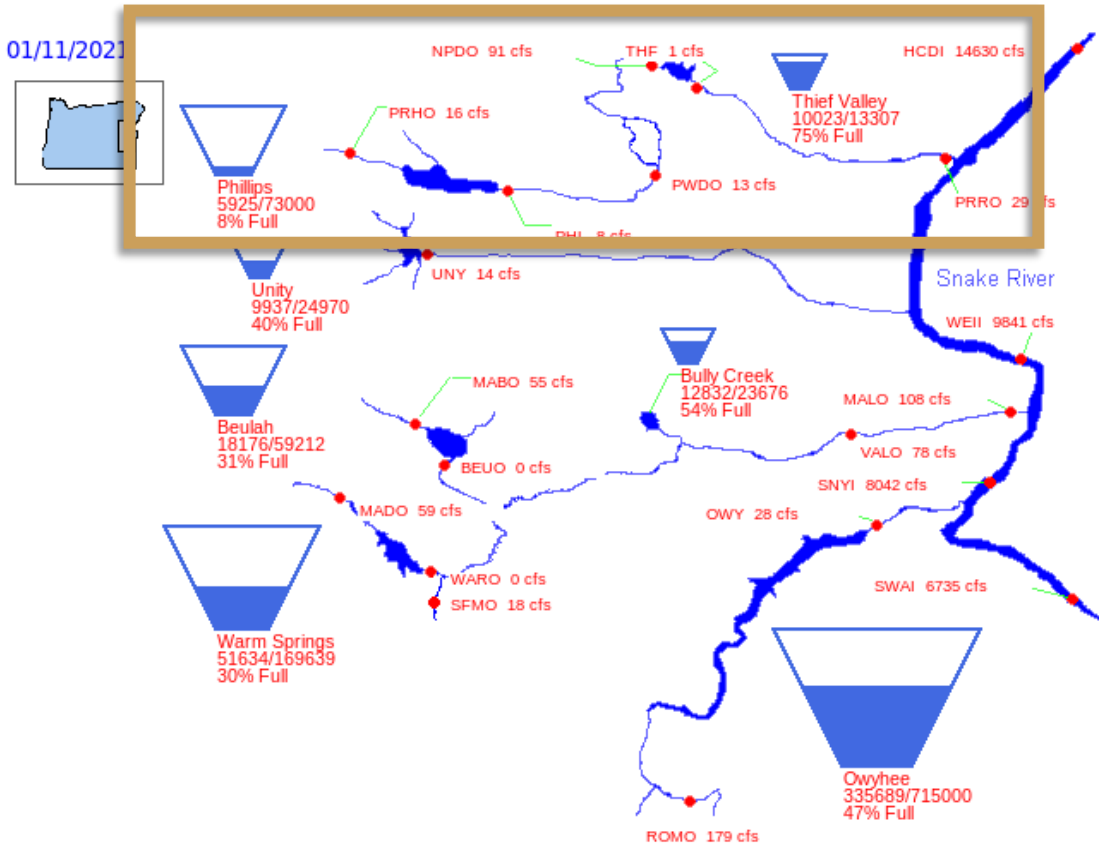
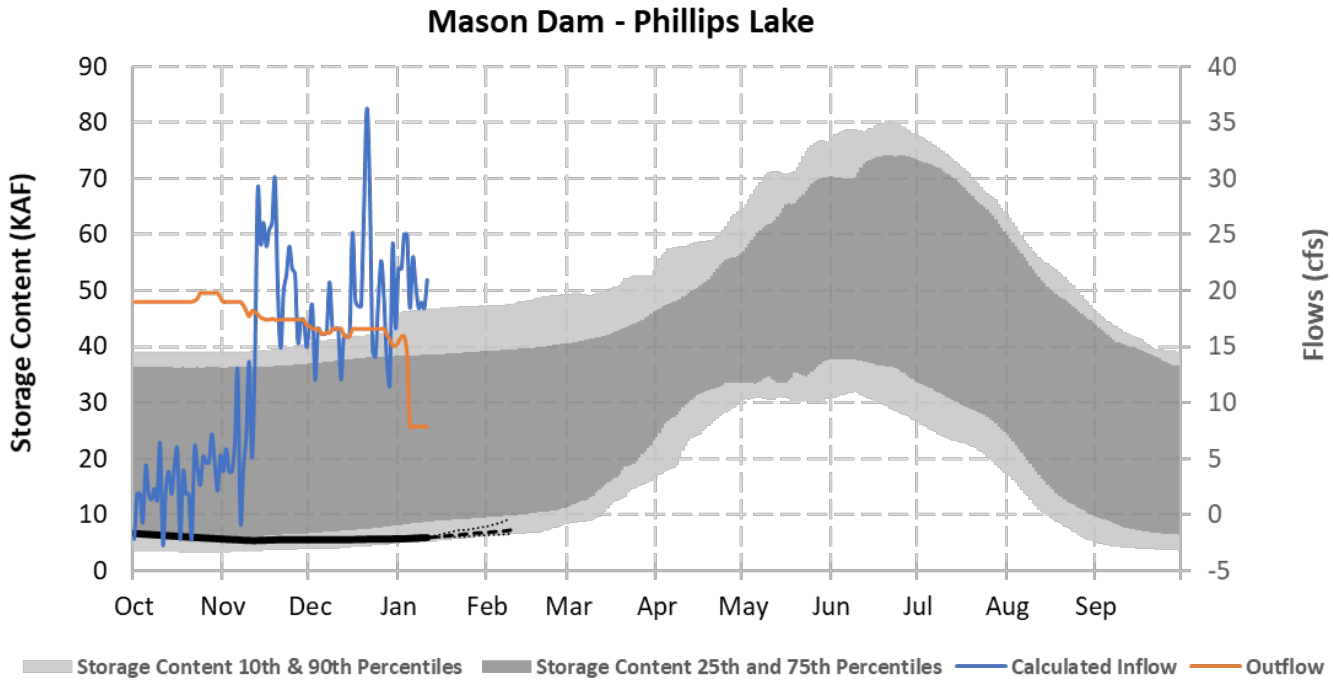
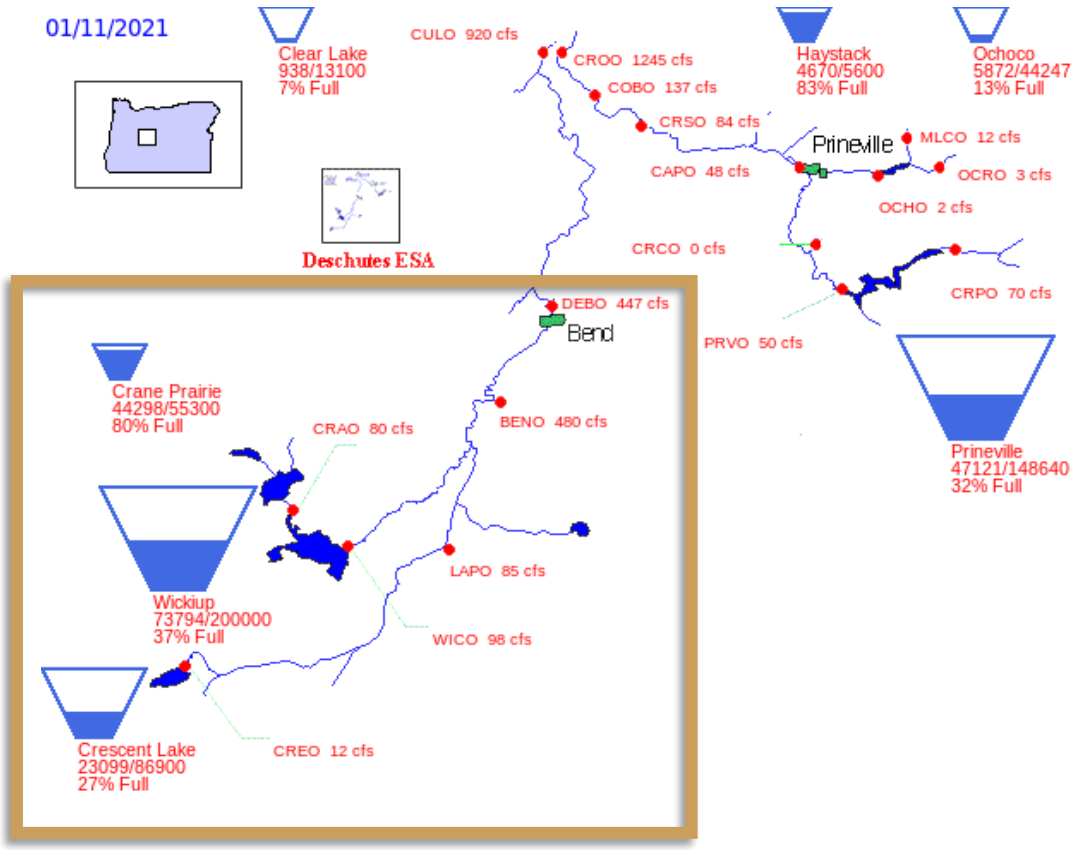
Powder River Basin

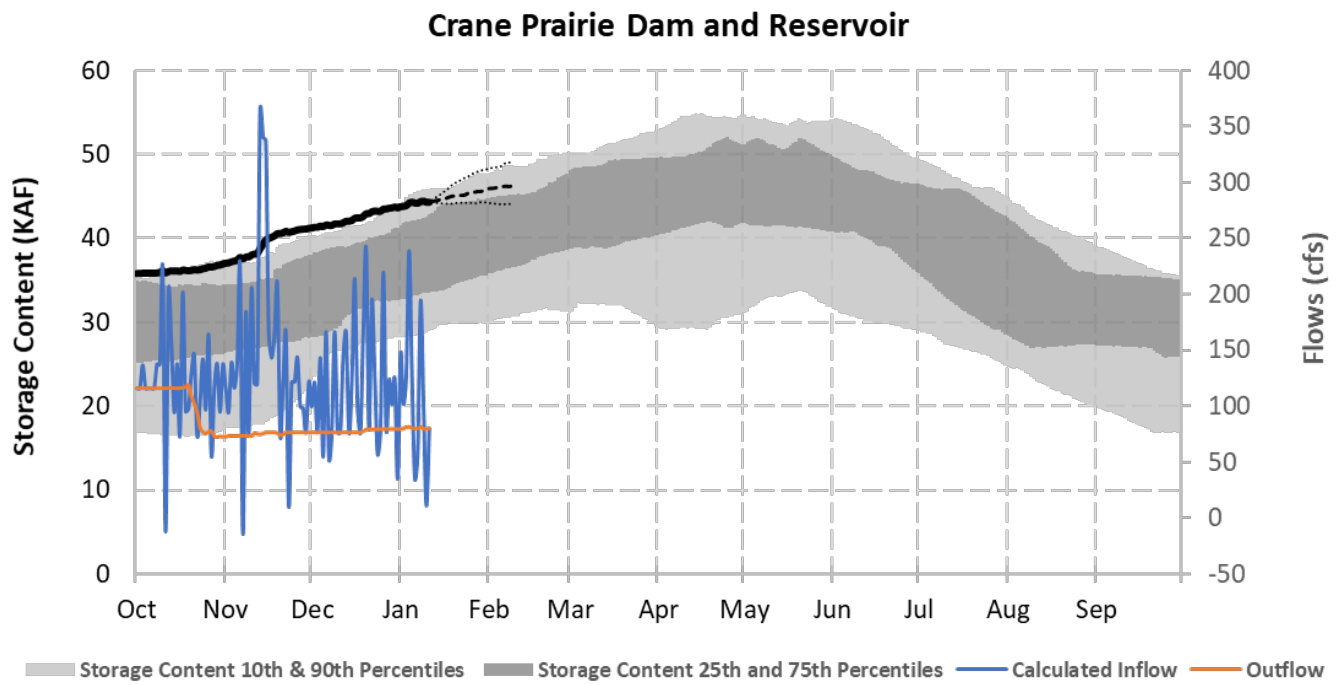


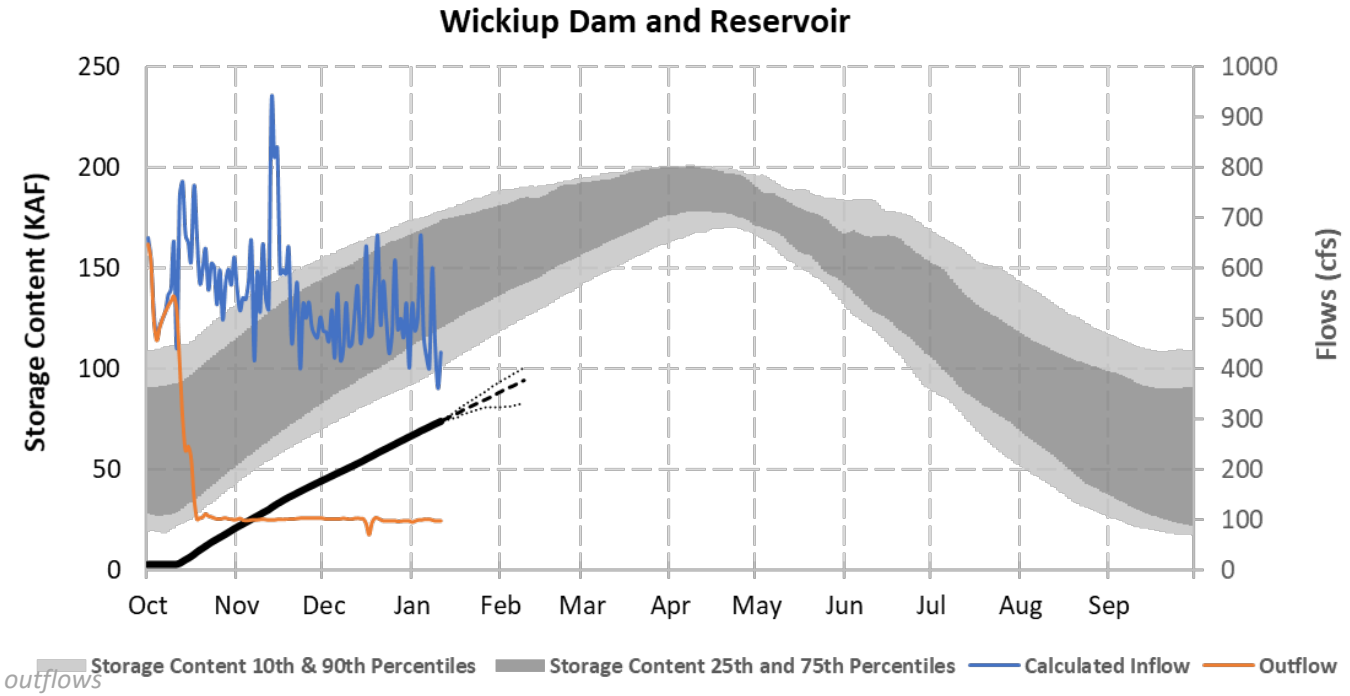


*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

Deschutes River Basin







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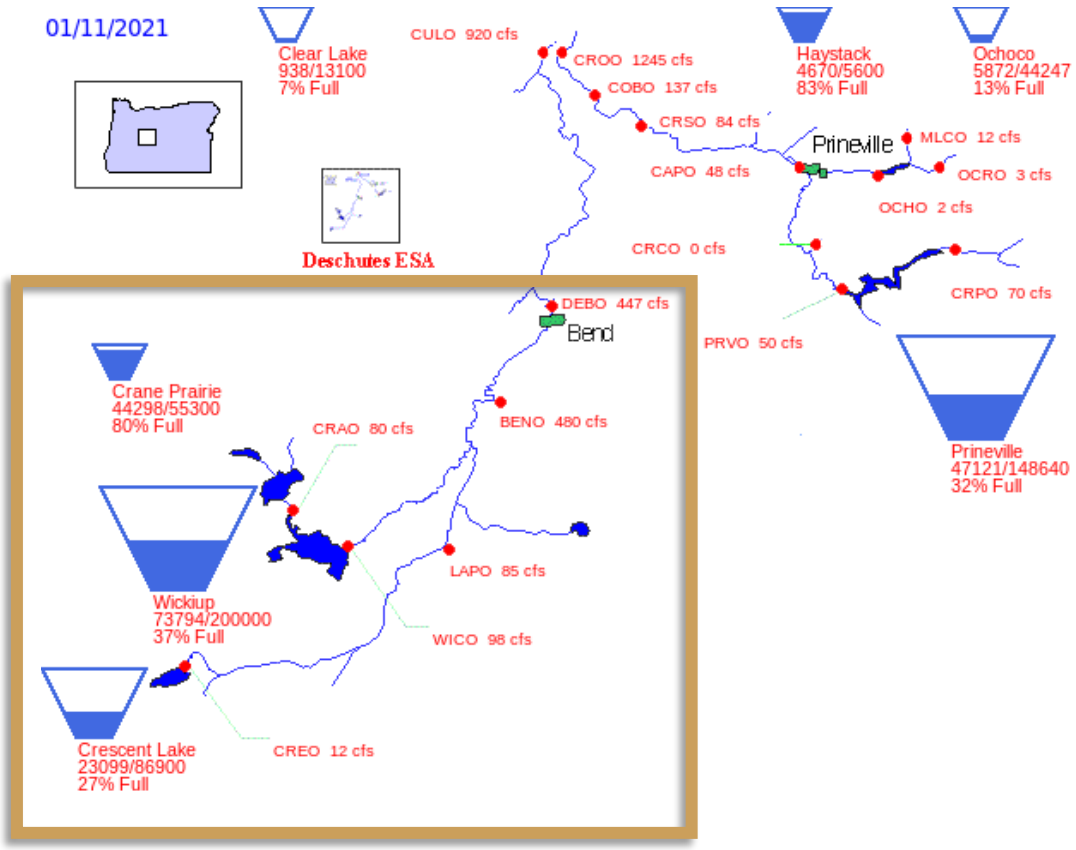
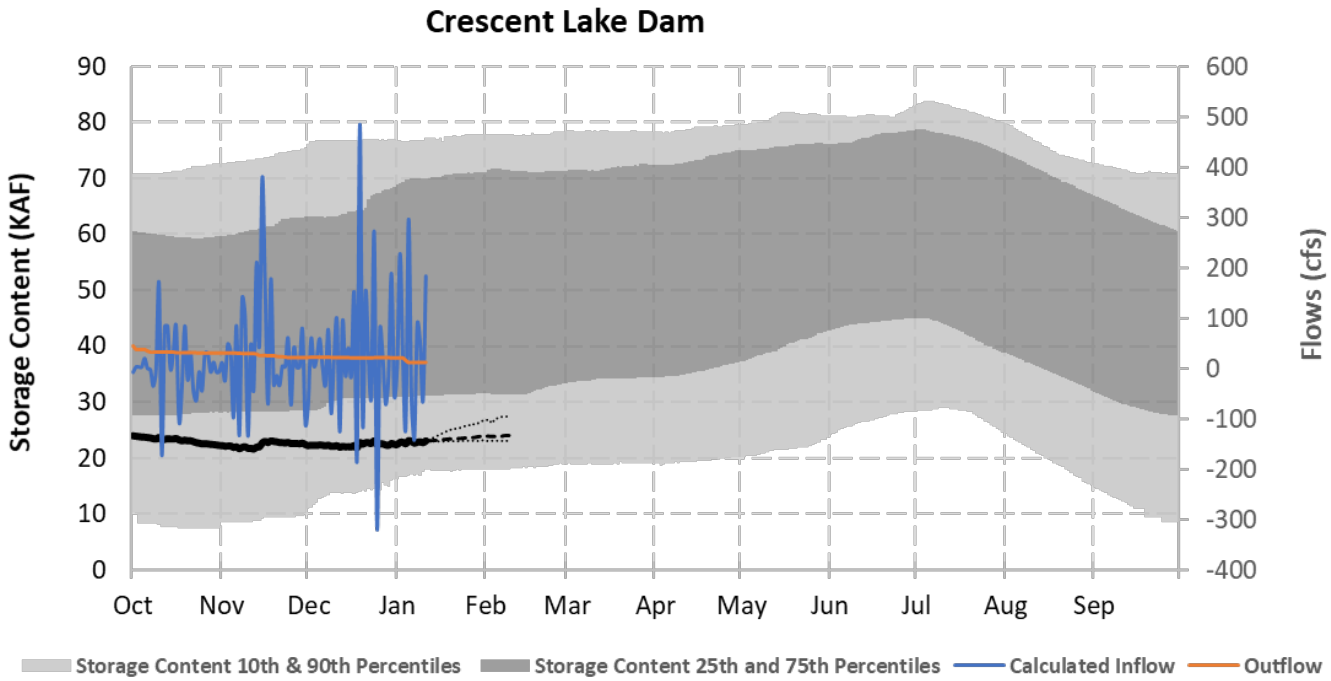
Deschutes River Basin





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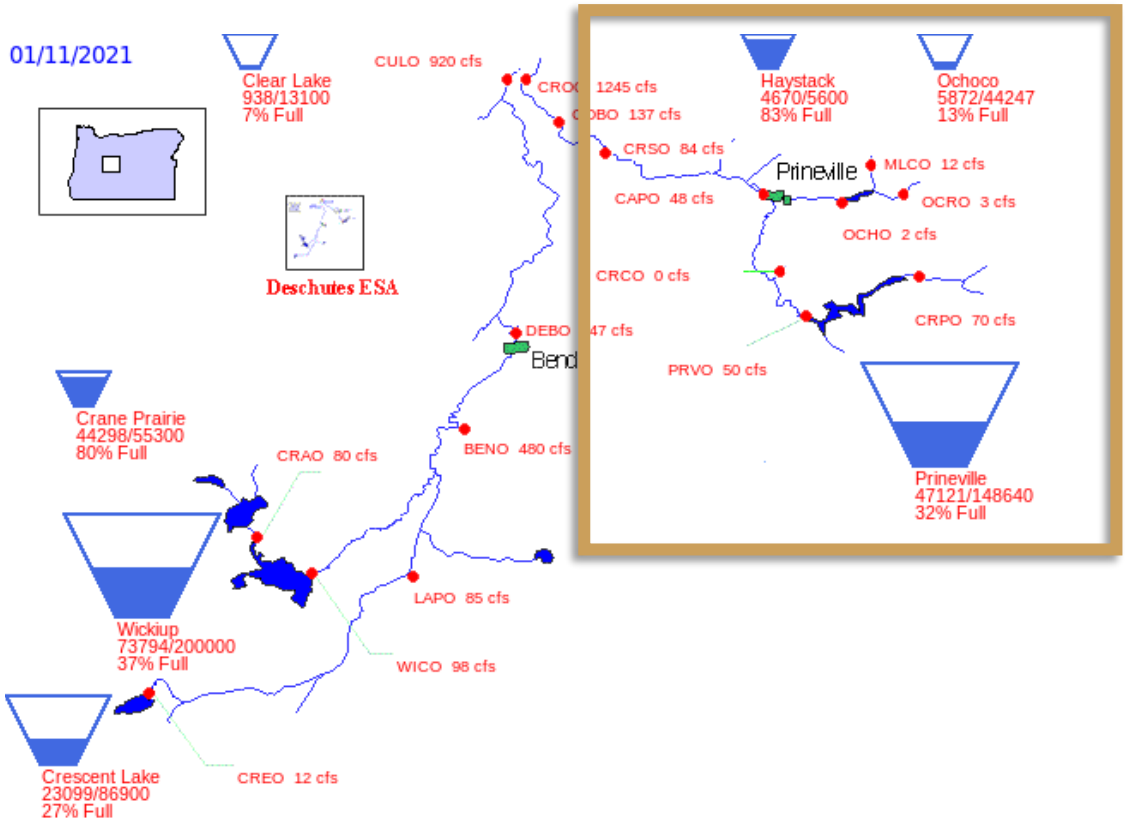
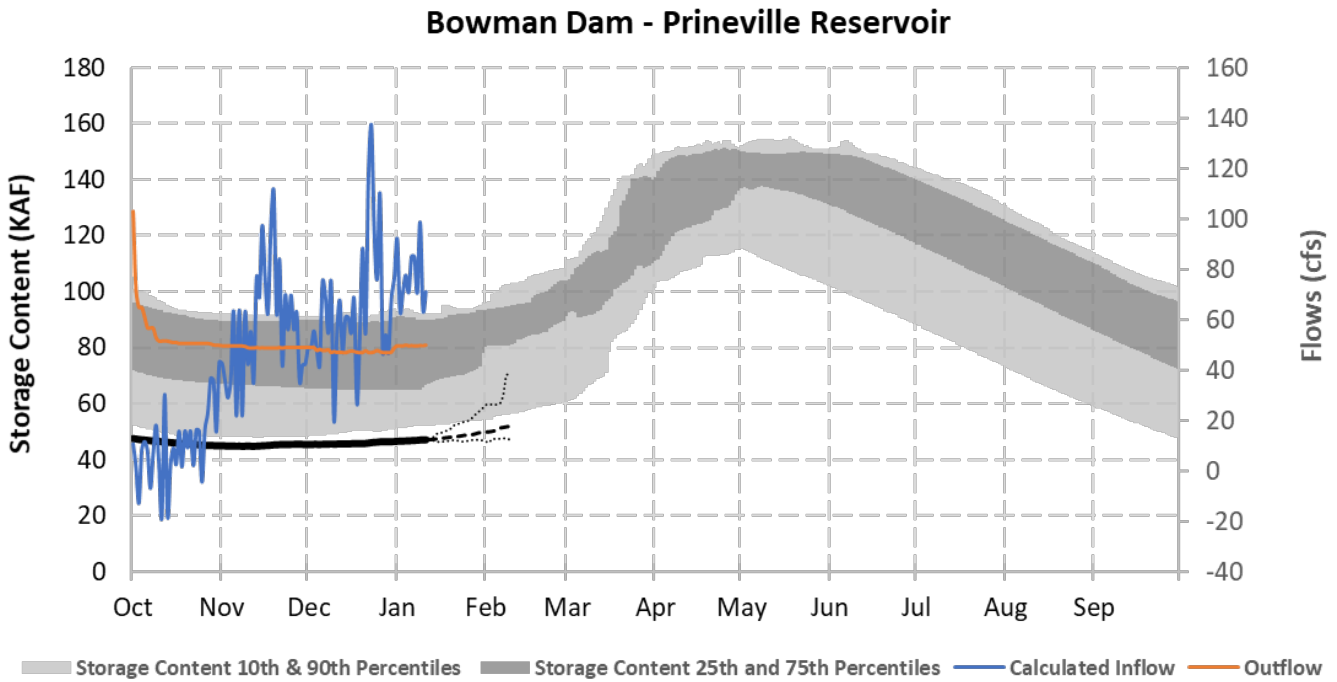
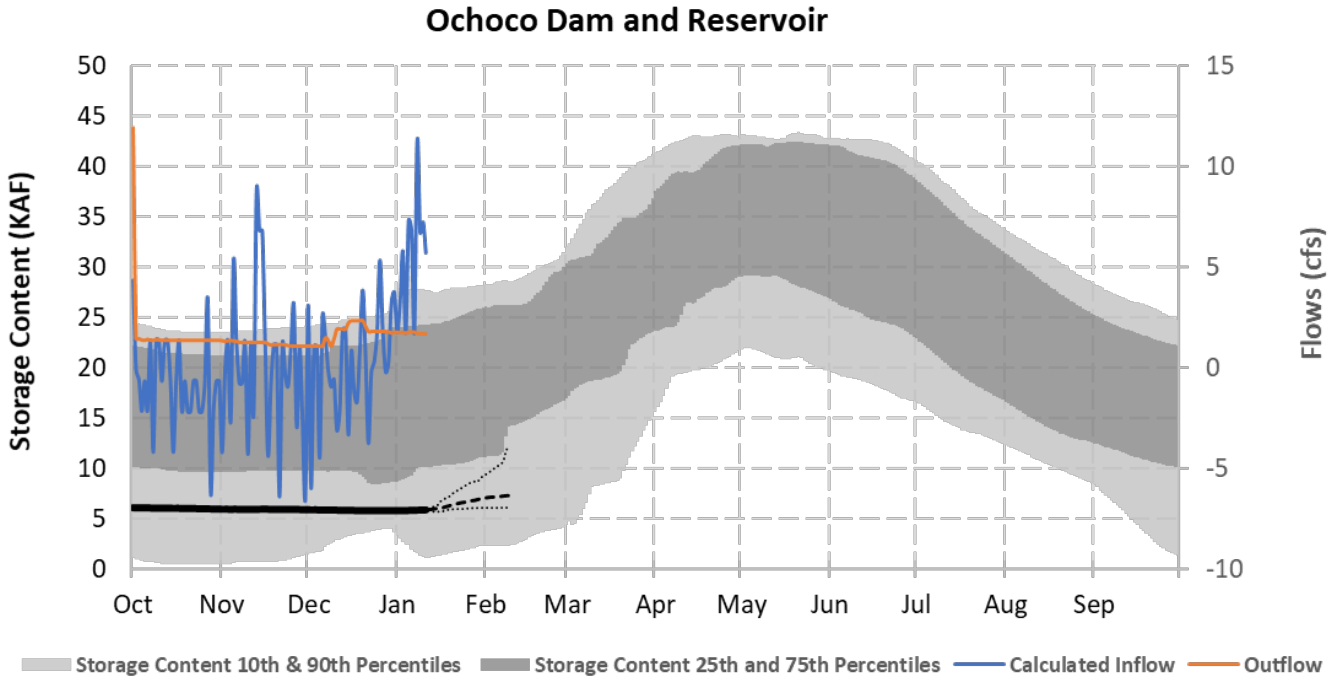
Crooked River Basin

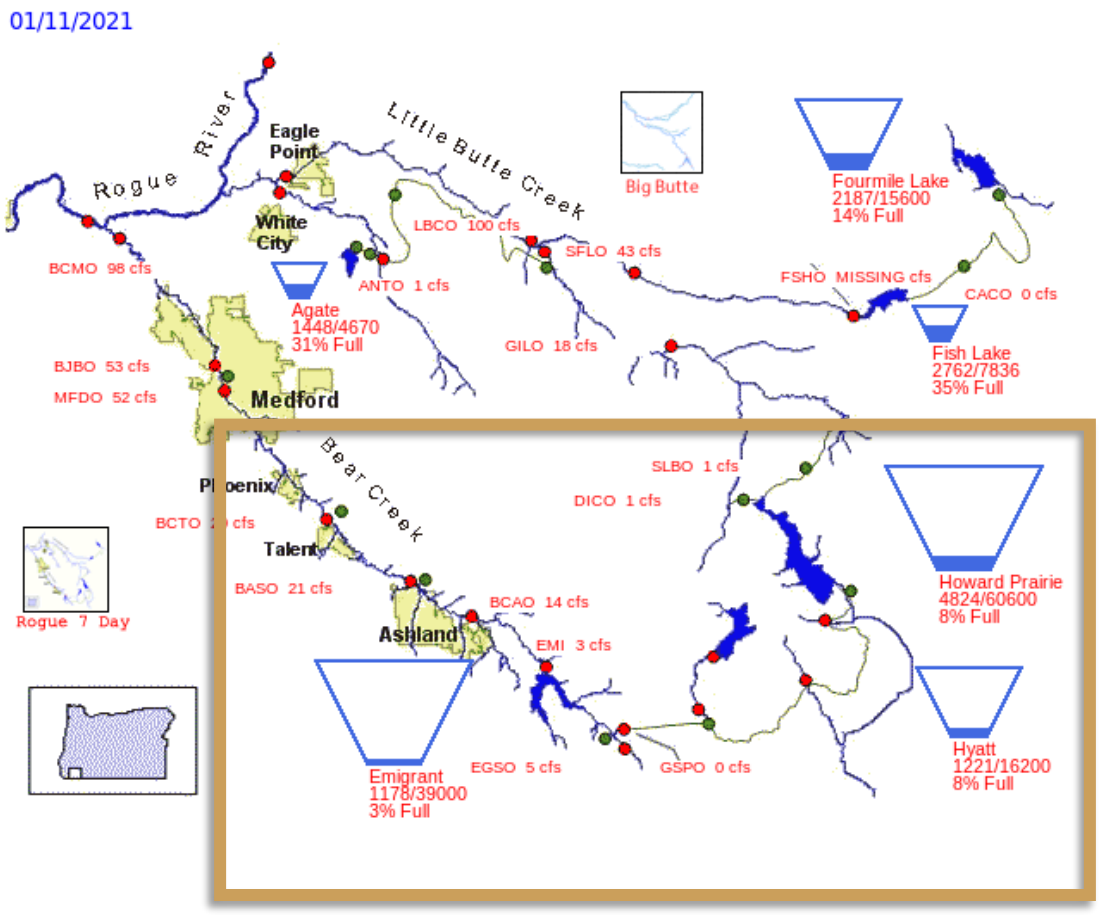


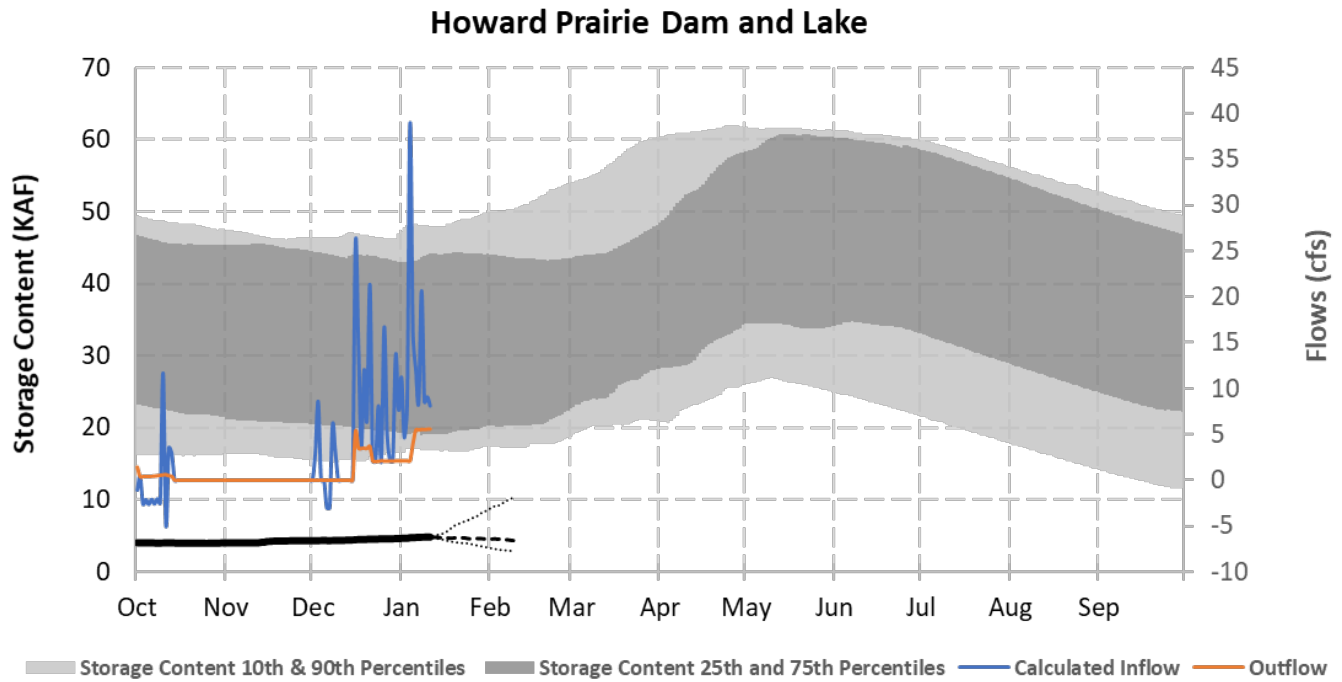


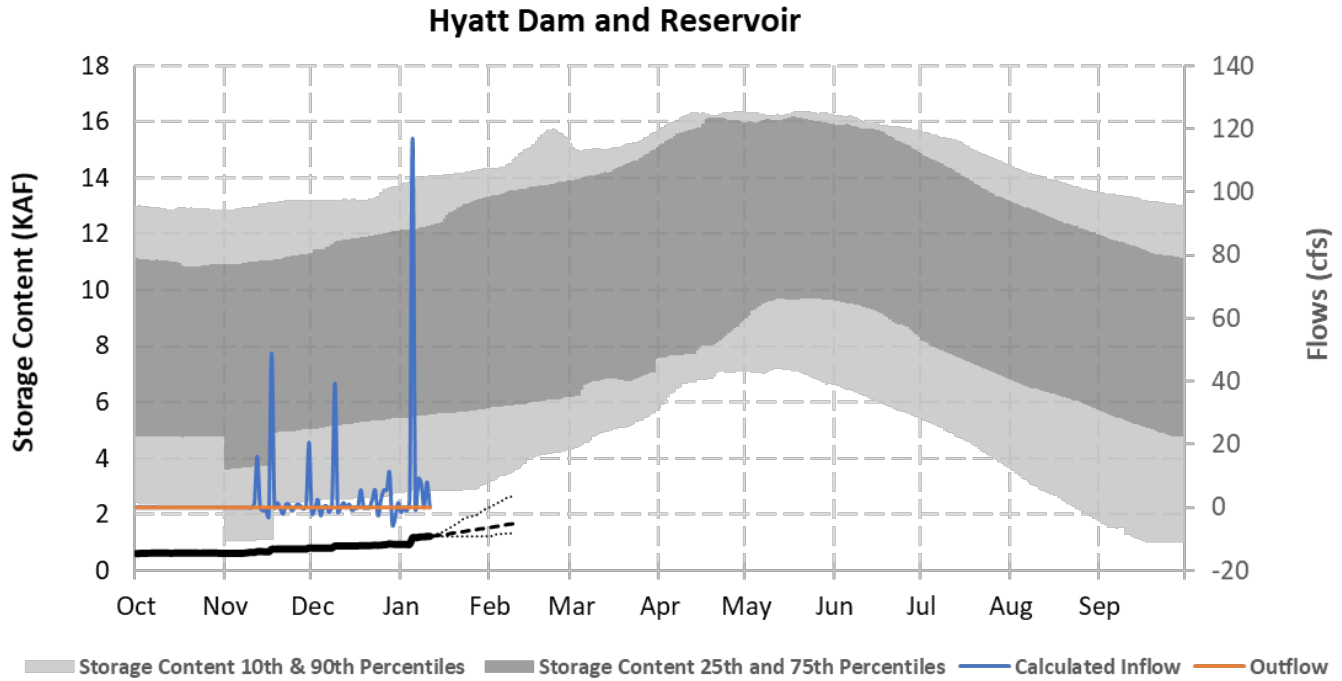


*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

Rogue River Basin



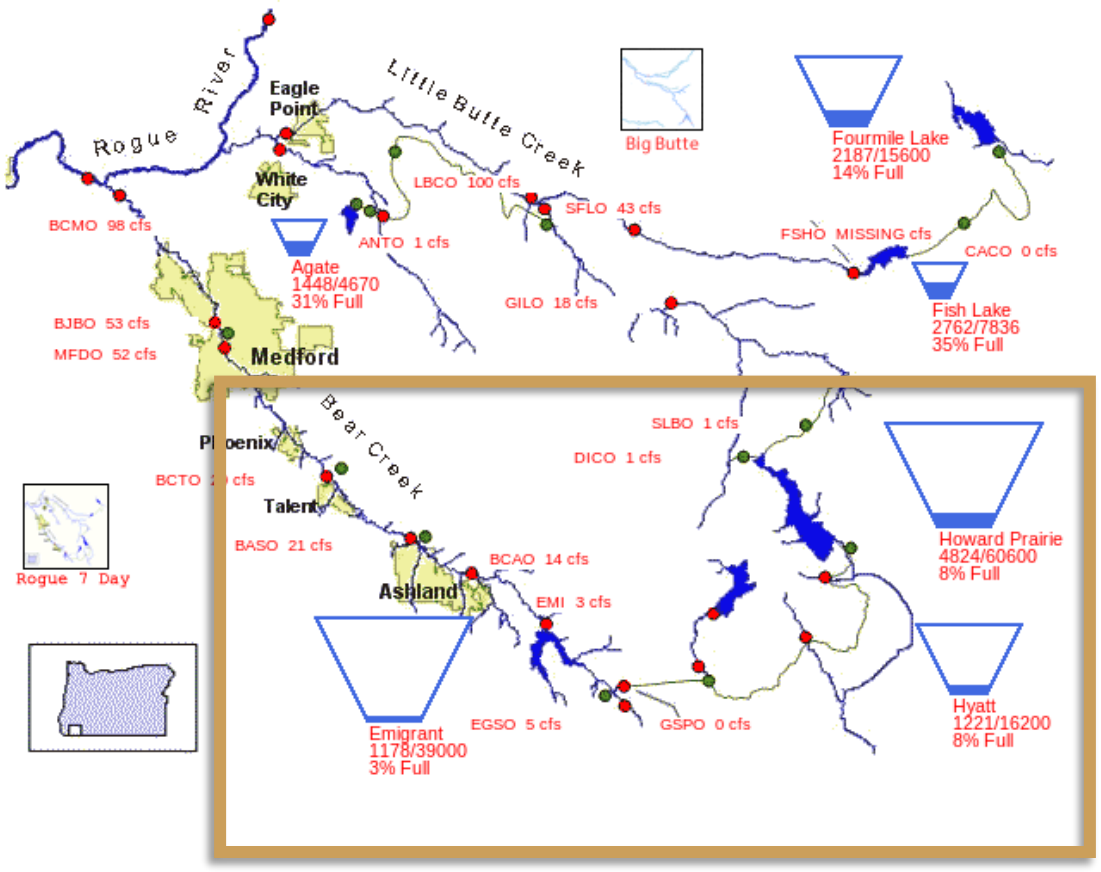


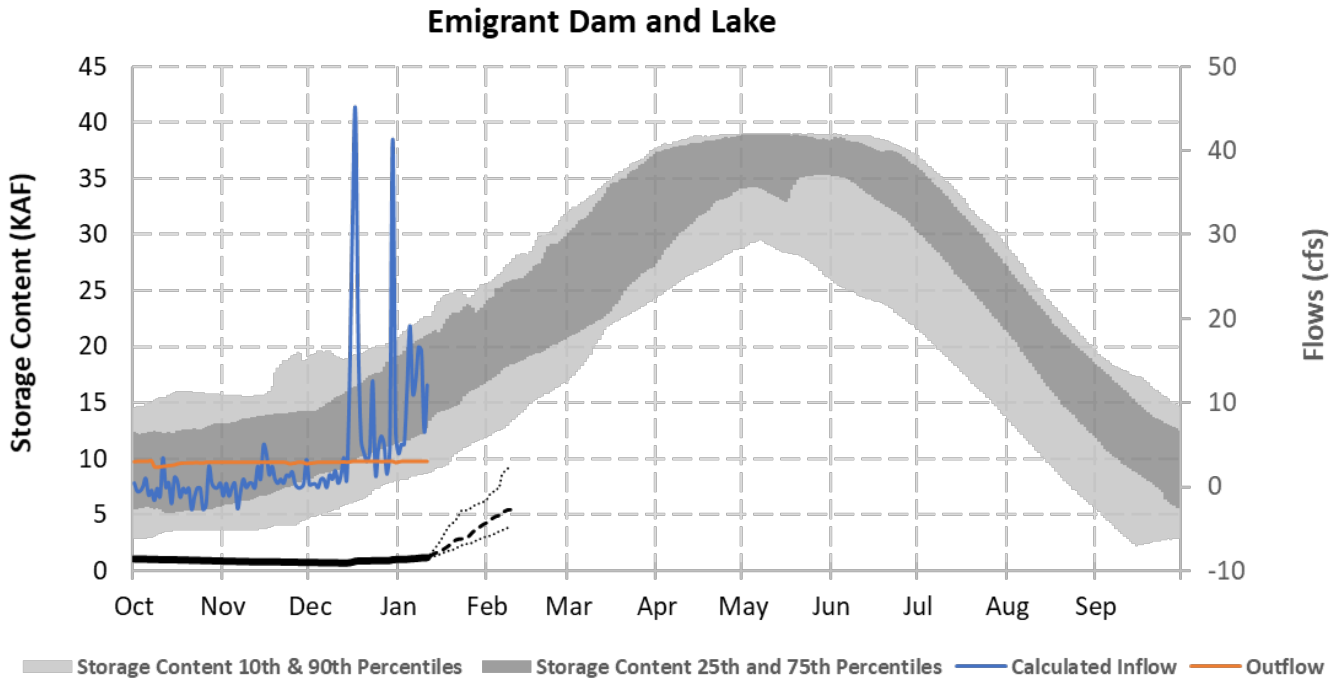


*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

Rogue River Basin

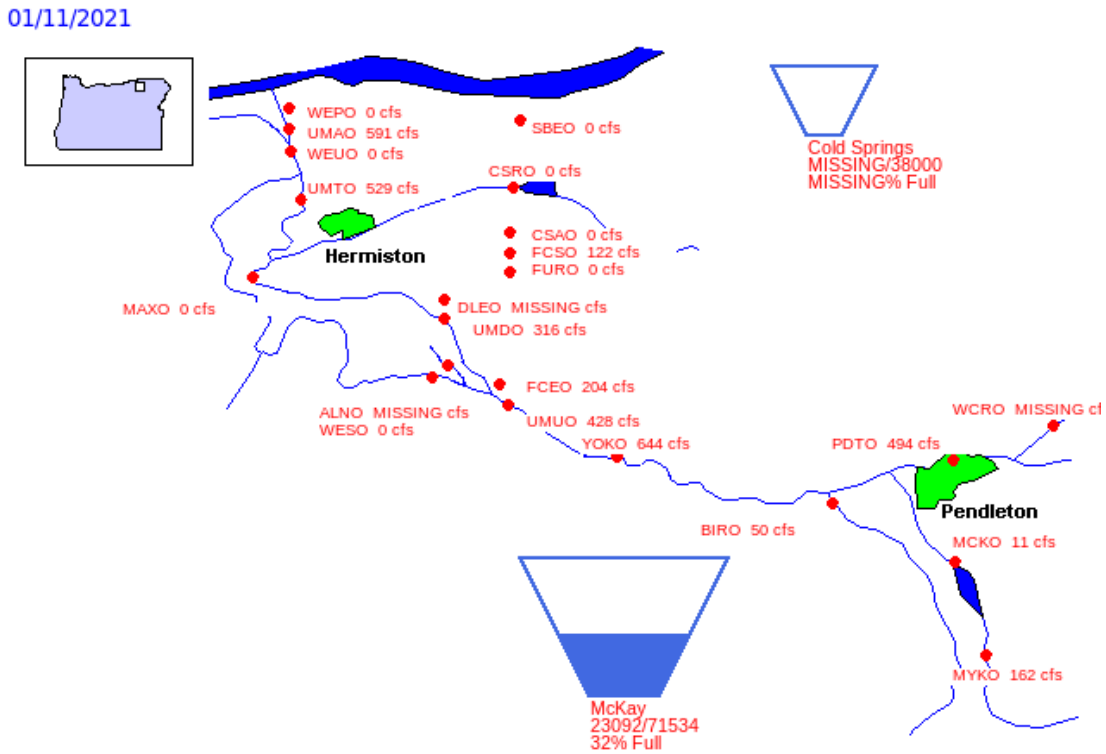
01/11/2021

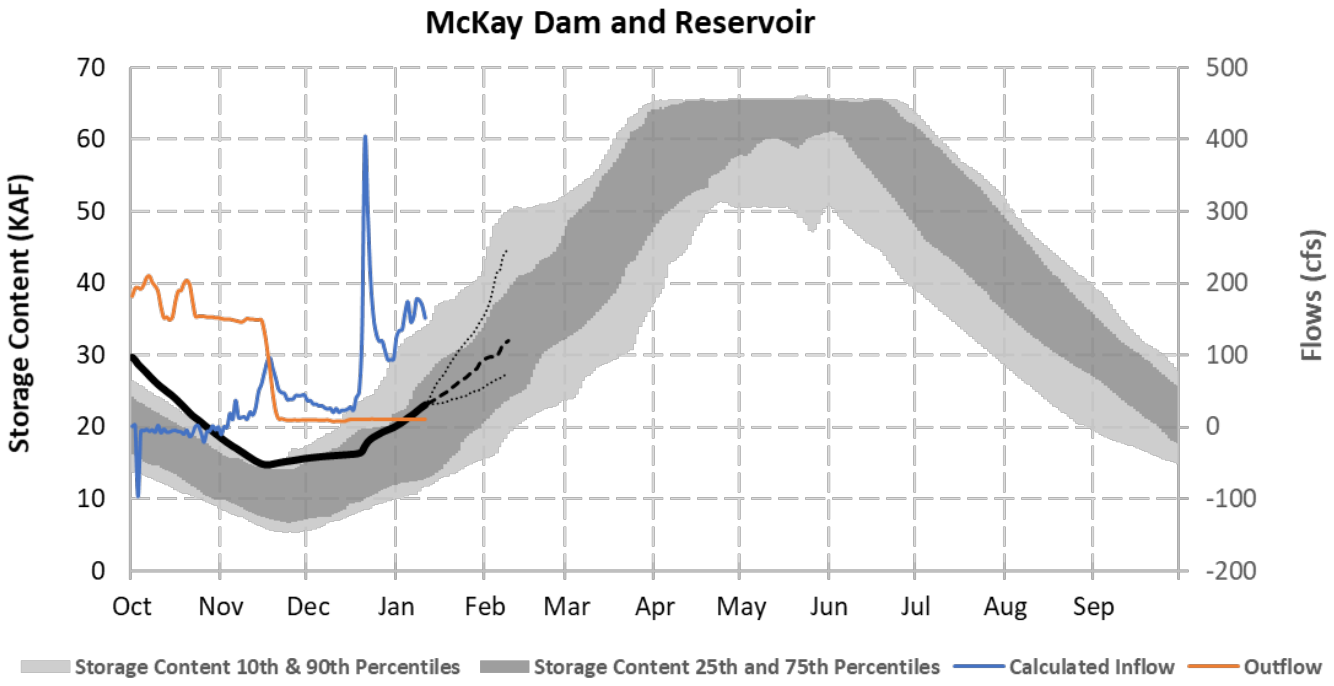




*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

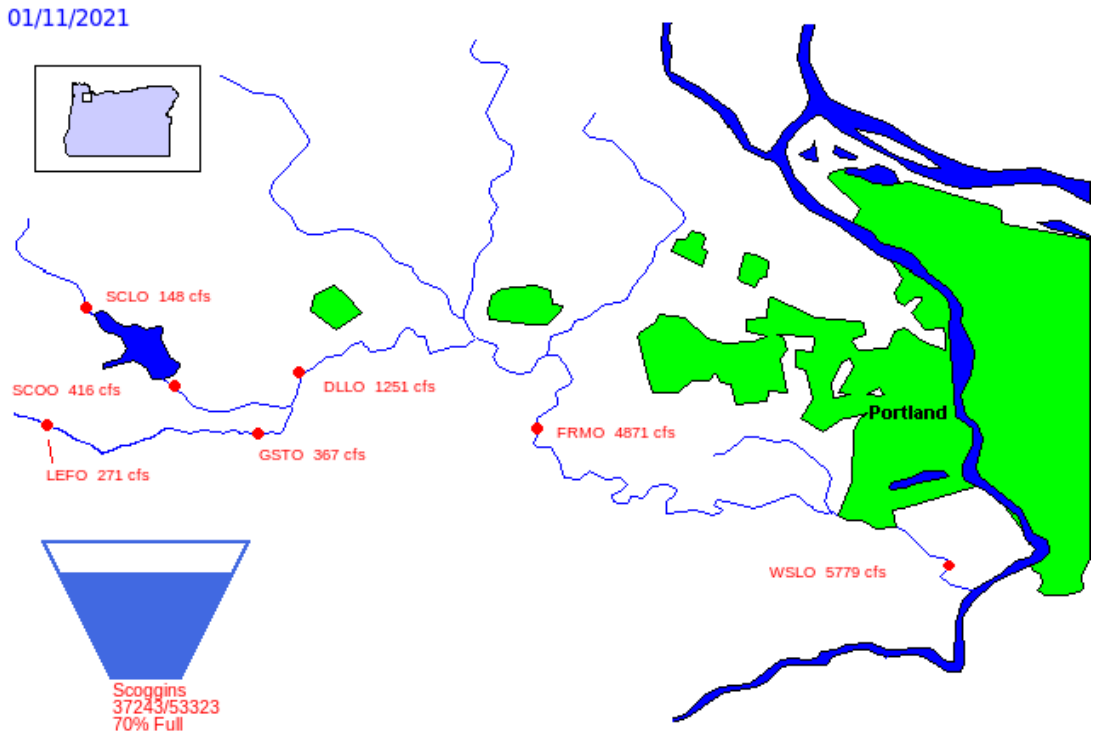
Umatilla River Basin

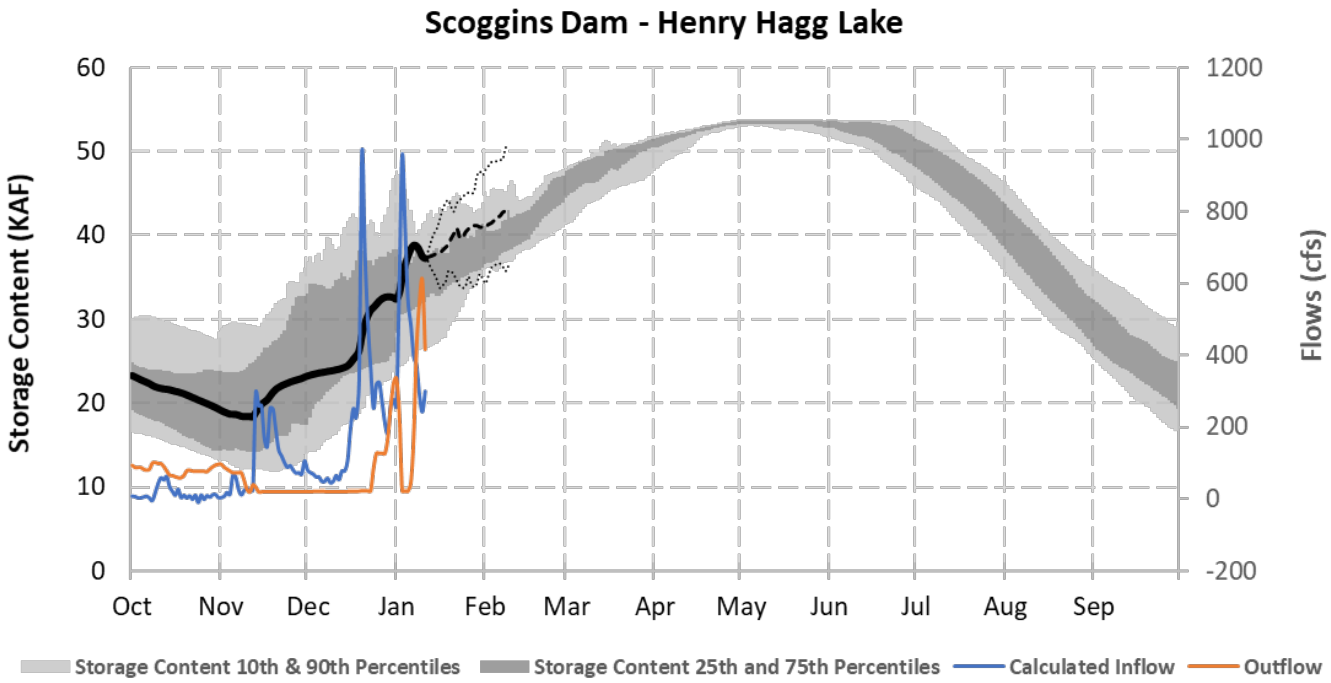




*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

Tualatin River Basin





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208.378.6213

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RECLAMATION