

05/12/2020 10:33:14 AM
Tollgate

Oregon Water Supply Availability Committee – May 13, 2020



Tollgate, Oregon Webcam
May 12, 2020
Elev = 5,045'

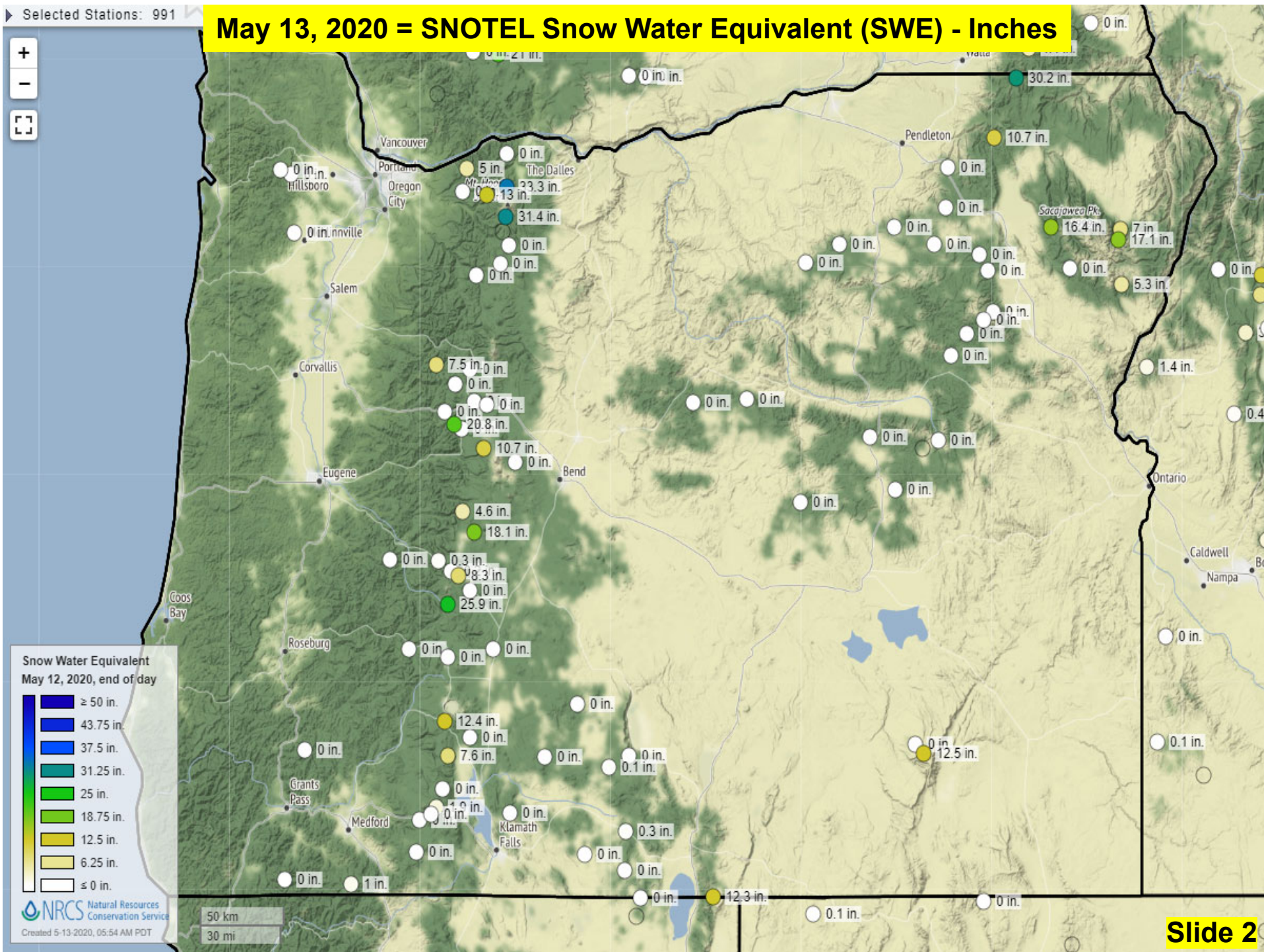
H. Scott Oviatt
USDA – Natural Resources Conservation Service
scott.oviatt@usda.gov
503-414-3271

Basin SWE Summary – May 13, 2020

Willamette	7/23	SNOTEL sites with measurable SWE	(2019 = 6/23)
Rogue, Umpqua	5/12	SNOTEL sites with measurable SW	(2019 = 5/12)
Hood, Sandy, Lower Deschutes	4/8	SNOTEL sites with measurable SWE	(2019 = 2/8)
Upper Deschutes, Crooked	5/14	SNOTEL sites with measurable SWE	(2019 = 5/14)
Klamath	3/18	SNOTEL sites with measurable SWE	(2019 = 4/18)
Lake County, Goose Lake	1/9	SNOTEL sites with measurable SWE	(2019 = 1/9)
Umatilla, Walla Walla, Willow	3/8	SNOTEL sites with measurable SWE	(2019 = 3/8)
John Day	0/13	SNOTEL sites with measurable SWE	(2019 = 0/13)
Harney	1/9	SNOTEL sites with measurable SWE	(2019 = 1/9)
Grand Ronde, Powder, Burnt, Imnaha	7/17	SNOTEL sites with measurable SWE	(2019 = 8/17)
Malheur	0/3	SNOTEL sites with measurable SWE	(2019 = 0/3)
Owyhee	0/8	SNOTEL sites with measurable SWE	(2019 = 1/8)

Selected Stations: 991

May 13, 2020 = SNOTEL Snow Water Equivalent (SWE) - Inches

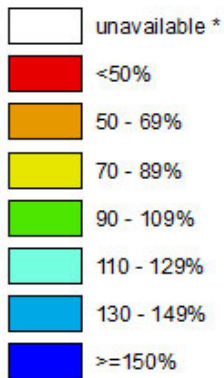


Statewide SNOTEL Snowpack is 99% of normal

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

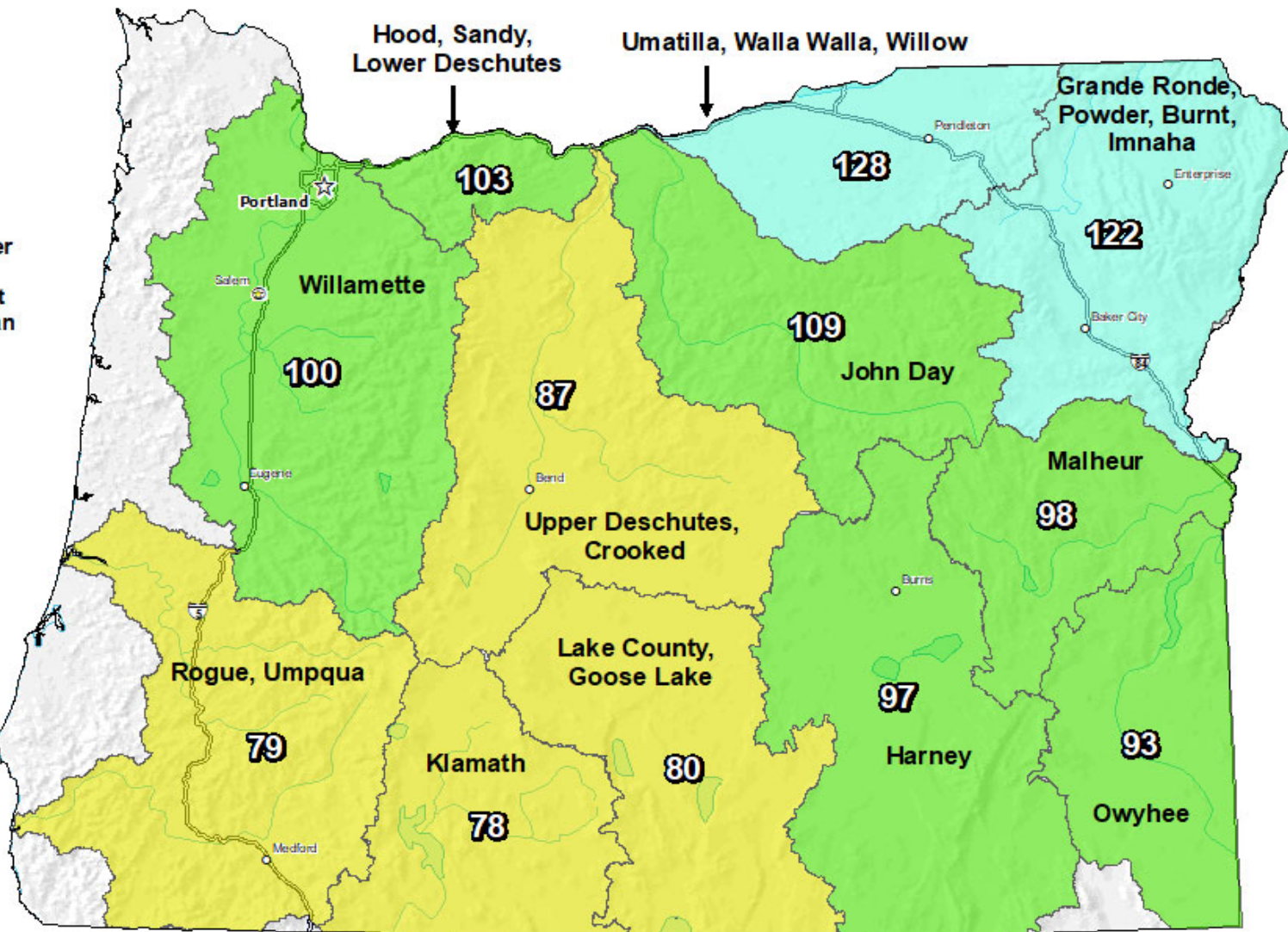
Apr 14, 2020

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

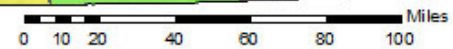


* Data unavailable at time of posting or measurement is not representative at this time of year

Provisional Data
Subject to Revision

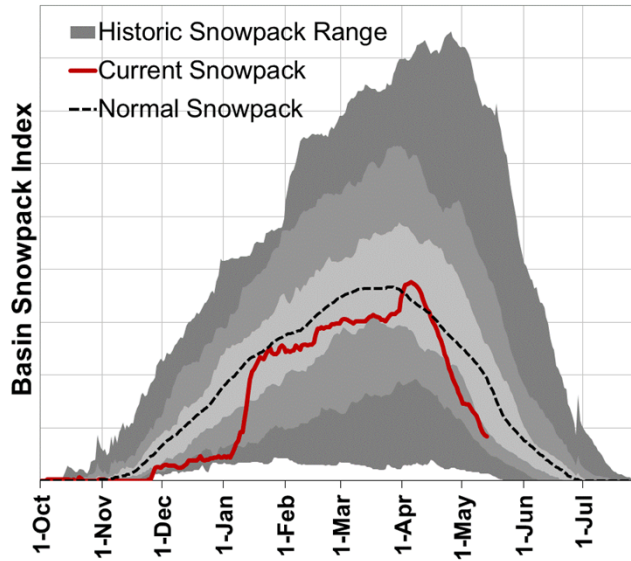


The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

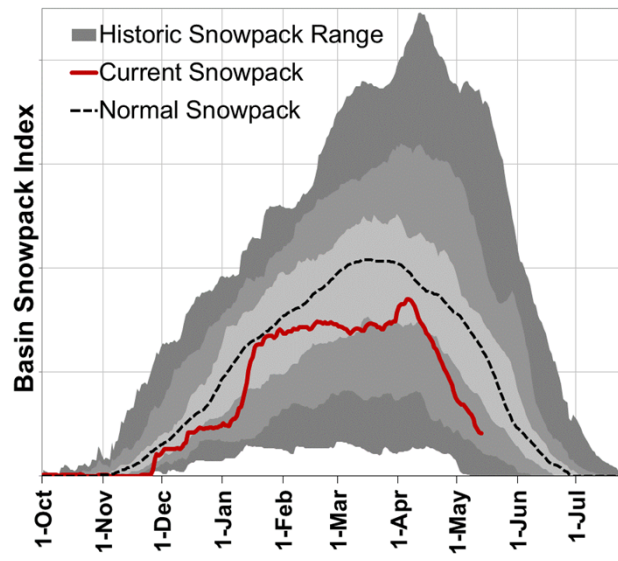


Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

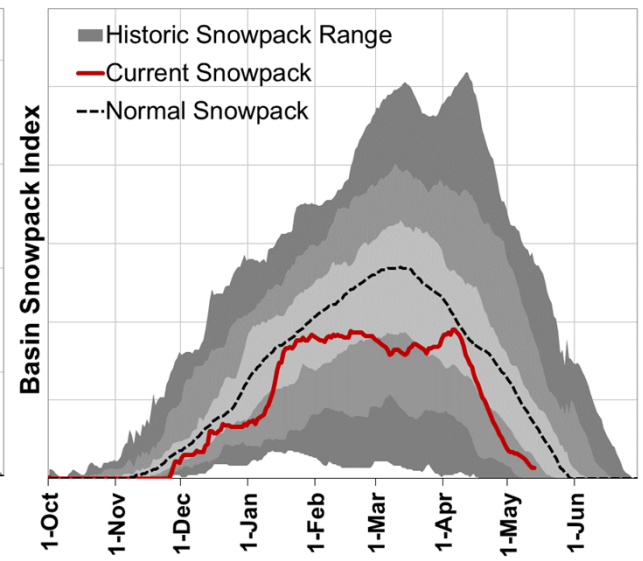
Willamette



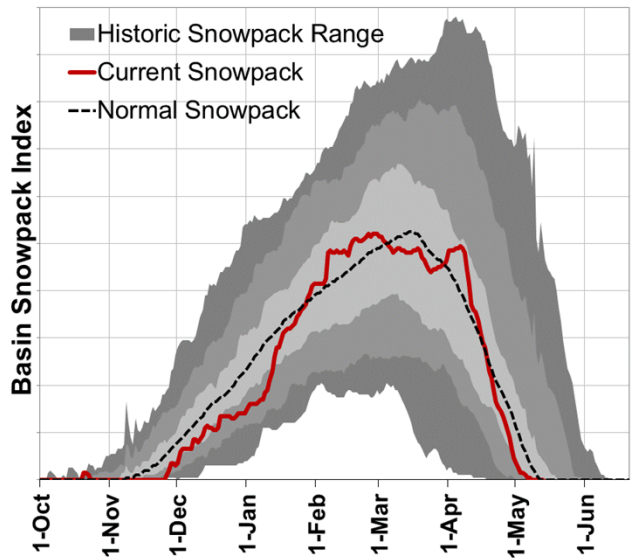
Rogue/Umpqua



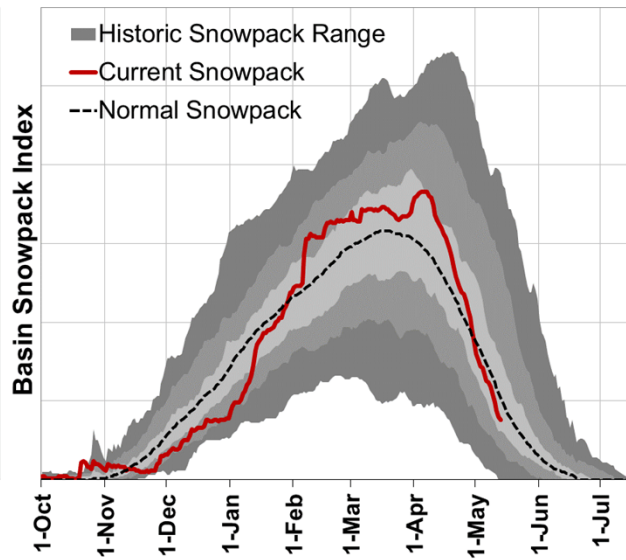
Klamath



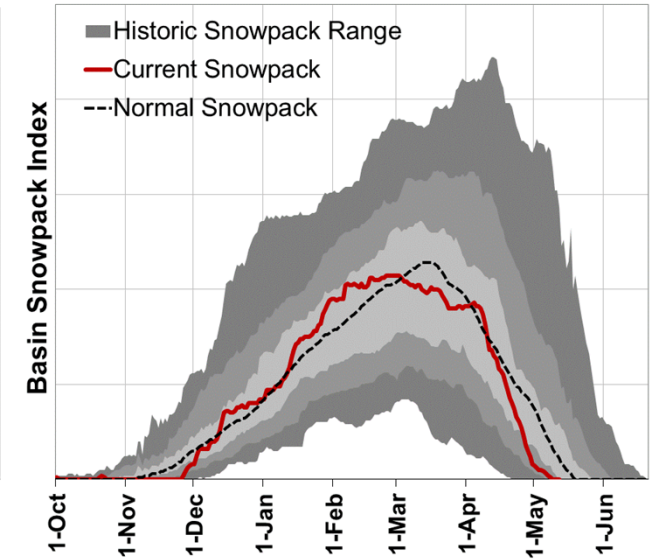
John Day



Grande Ronde/Powder/Burnt



Owyhee/Malheur

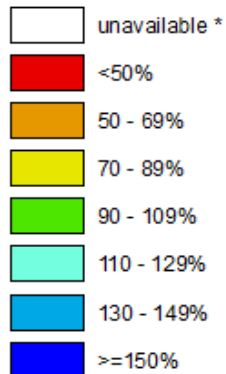


Statewide SNOTEL Precipitation is 77% of normal on May 13, 2020

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

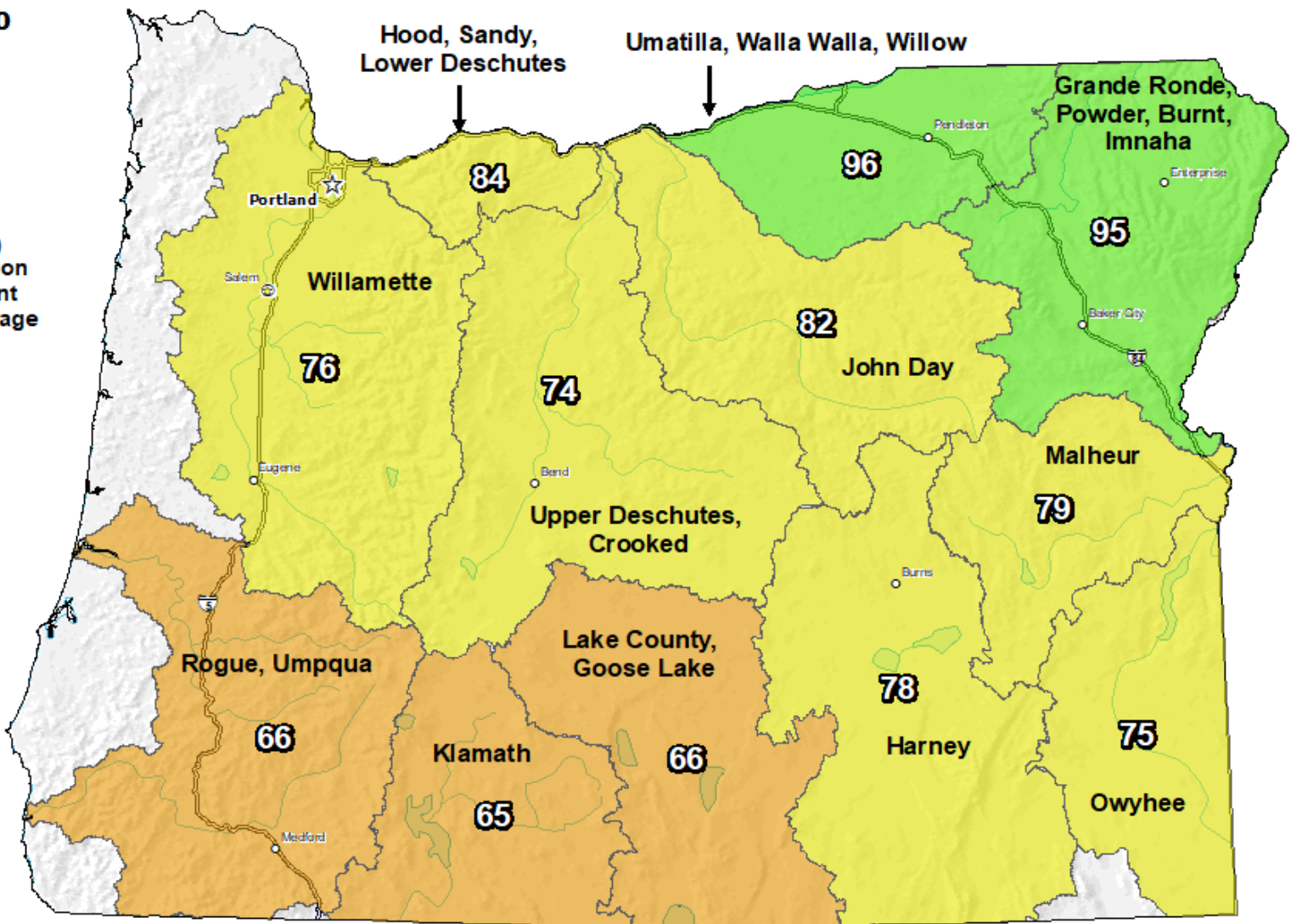
May 13, 2020

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



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

*Provisional Data
Subject to Revision*

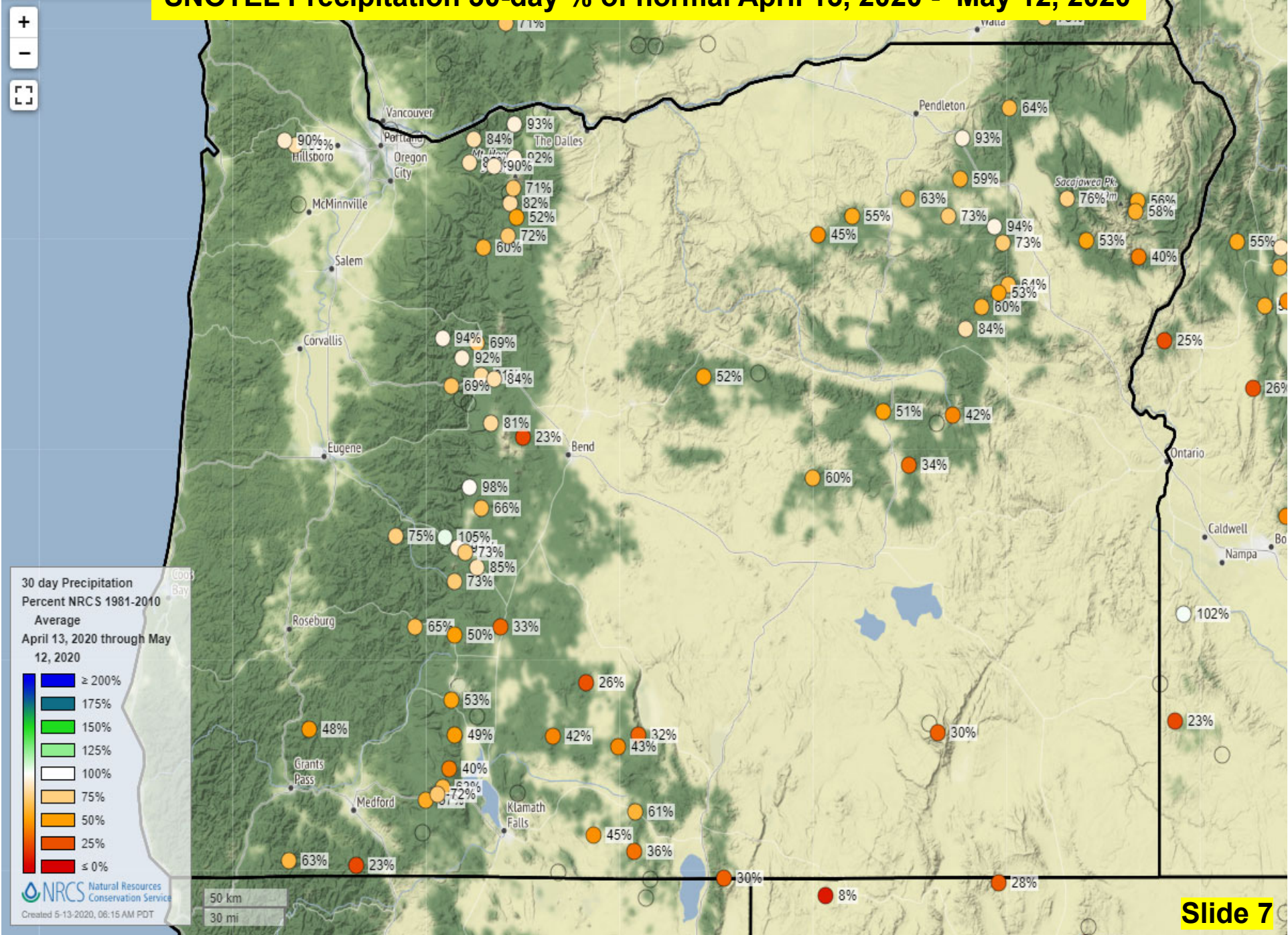


The water year to date precipitation percent of normal represents the accumulated precipitation found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

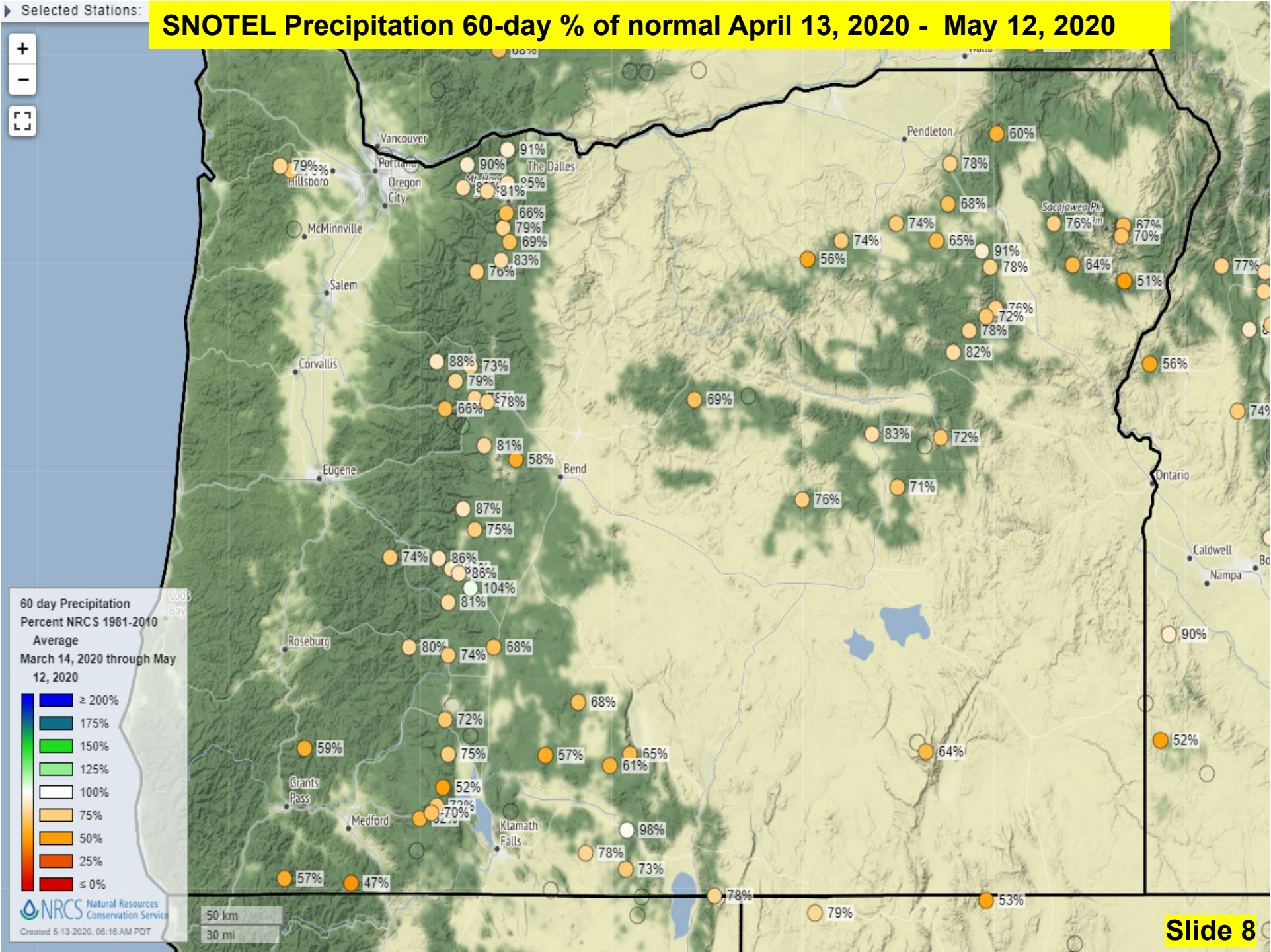
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Selected Stations:

SNOTEL Precipitation 30-day % of normal April 13, 2020 - May 12, 2020



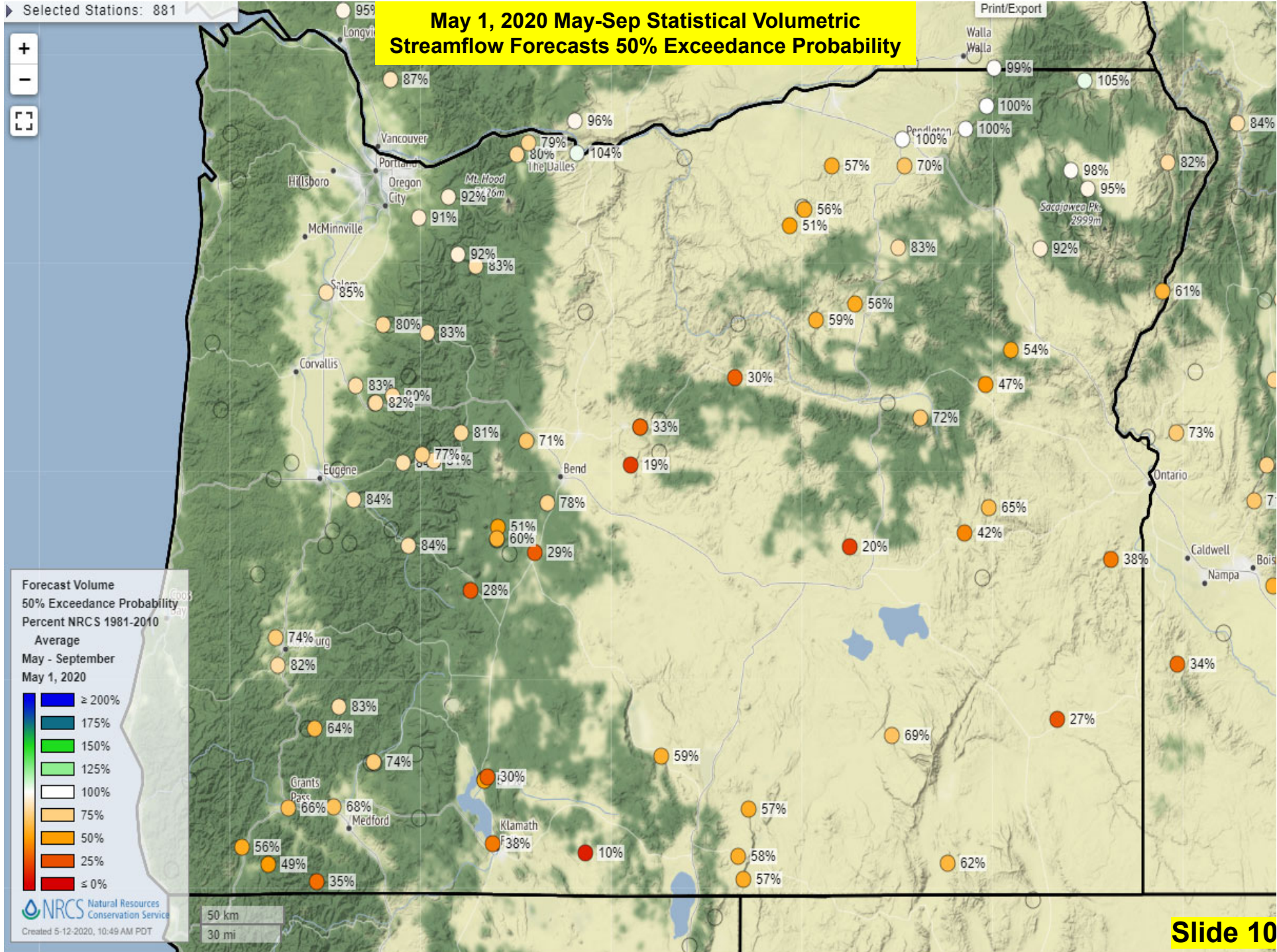
SNOTEL Precipitation 60-day % of normal April 13, 2020 - May 12, 2020



Selected Stations: 881

May 1, 2020 May-Sep Statistical Volumetric Streamflow Forecasts 50% Exceedance Probability

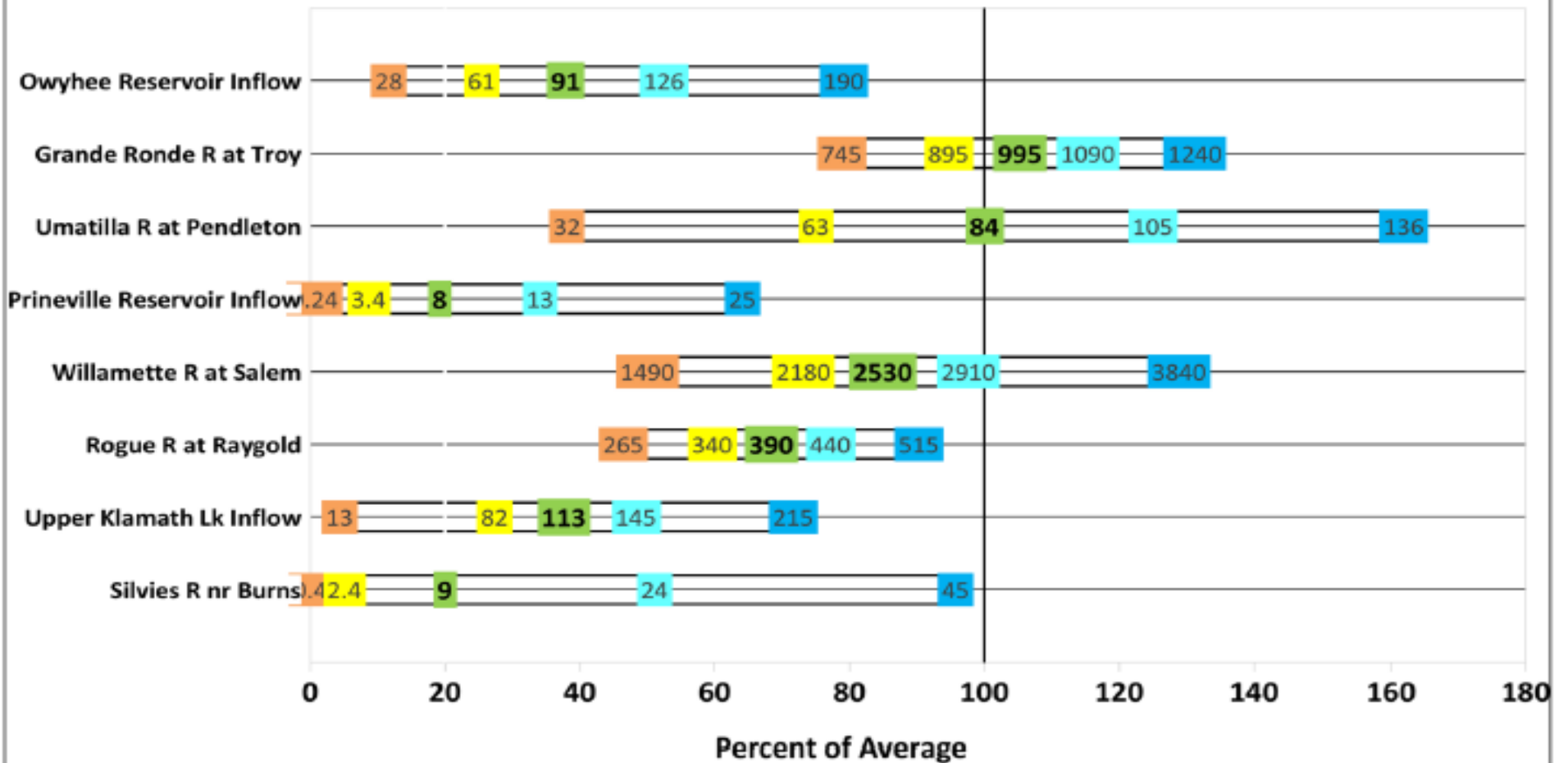
Print/Export



Slide 11

Summary of Streamflow Forecasts across Oregon

May through September Forecast Volumes at a Selection of Streamflow Points
(Volumes listed in KAF)



Legend:

←-----Drier-----Future Conditions-----Wetter-----→

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

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

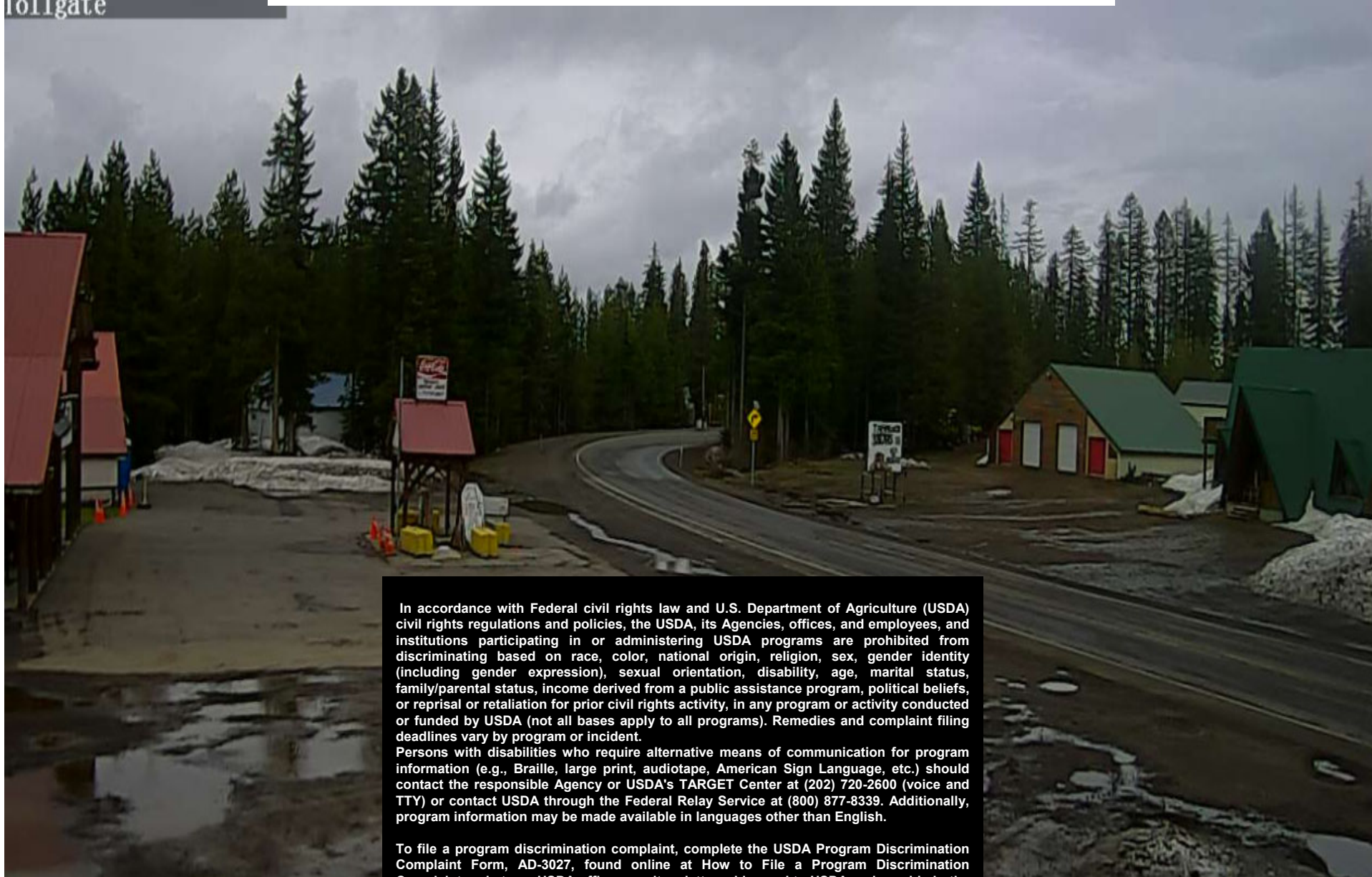
50% Exceedance Forecast (KAF)
There is a 50% chance that flows will exceed this volume.

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

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

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Oregon Water Supply Availability Committee – May 13, 2020



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Tollgate, Oregon Webcam
May 12, 2020
Elev = 5,045'

H. Scott Oviatt
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May 12, 2020

1

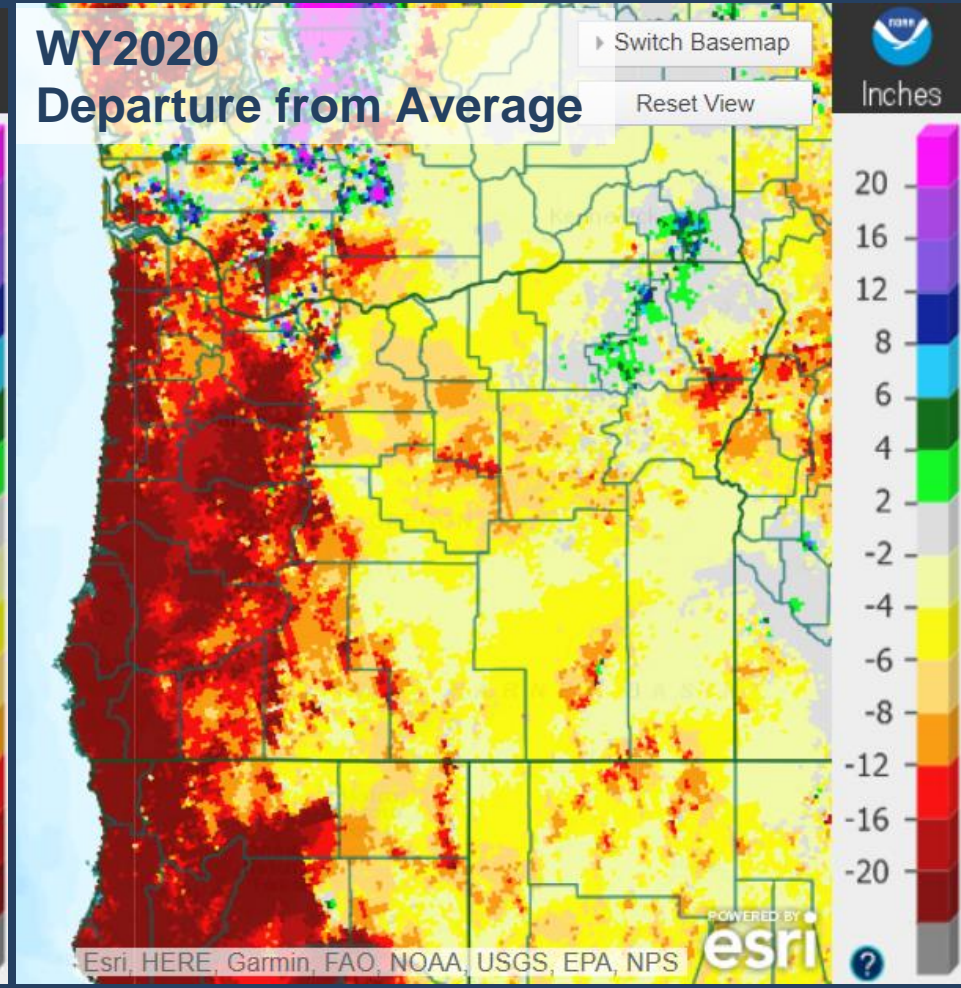
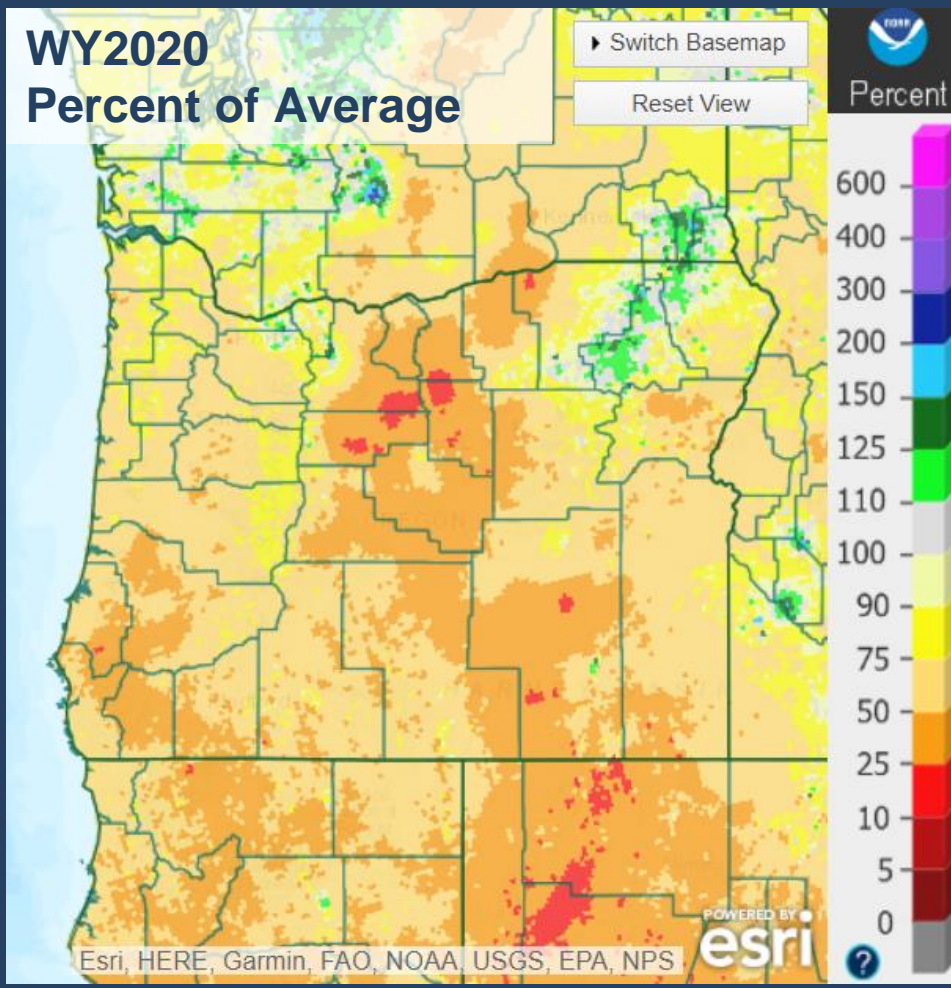
Oregon WSAC

National Weather Service Precipitation & Temperatures Update

Andy Bryant
NOAA/NWS Portland
Weather Forecast Office

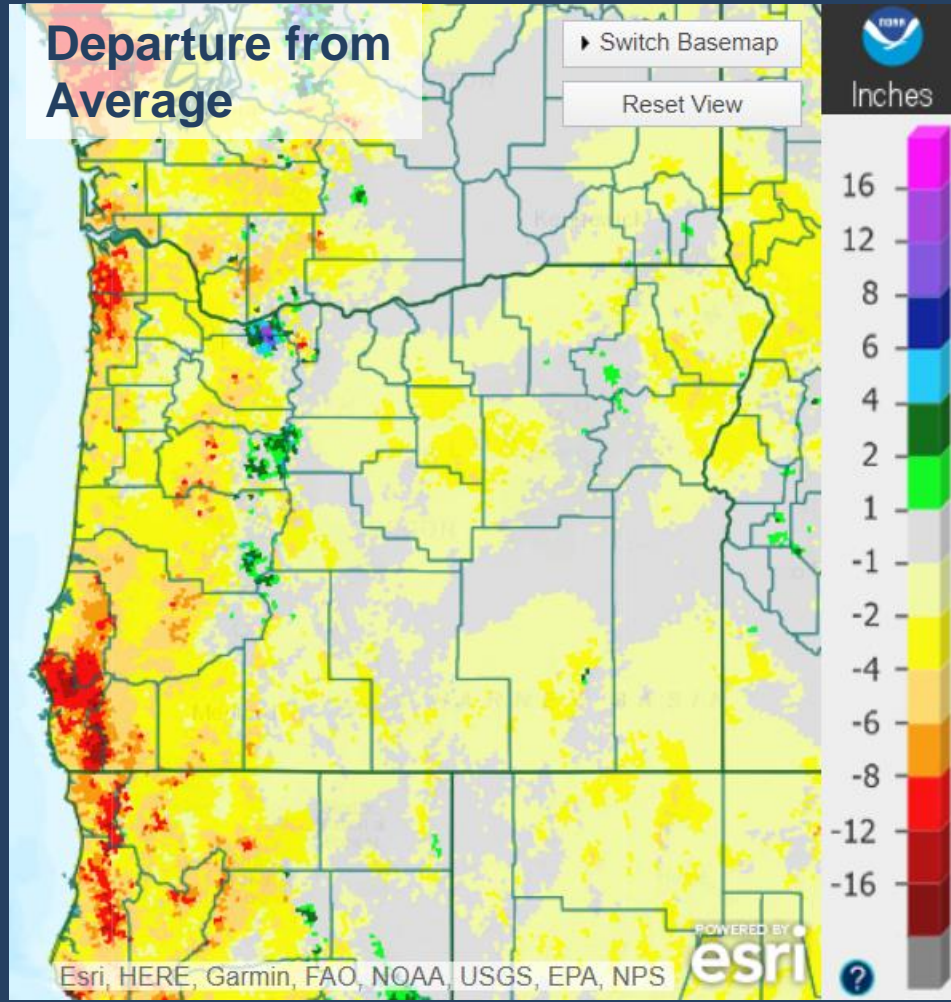
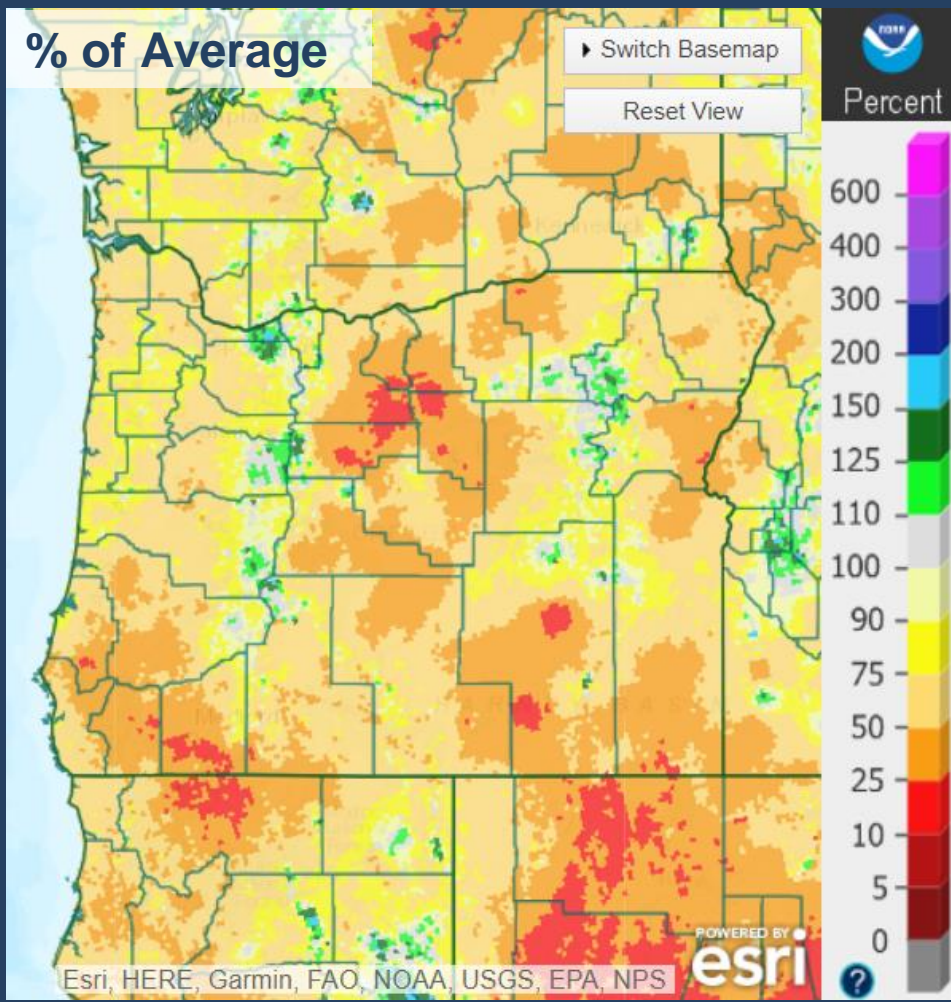


Water Year Precipitation





Precipitation – Past 60 Days



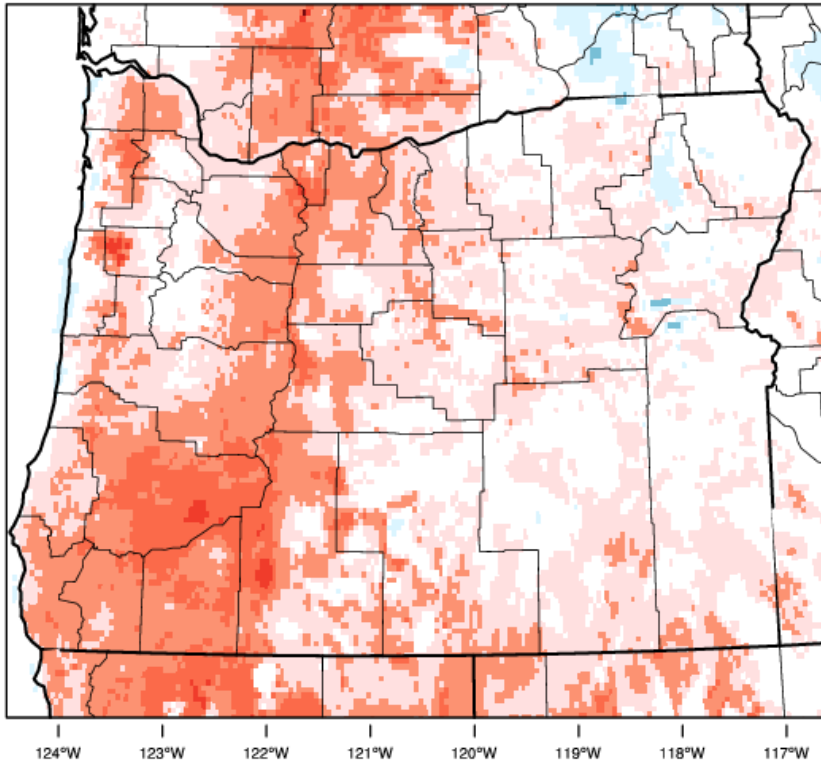
Precipitation Data as of May 12, 2020

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



Recent Temperatures

Oregon - Mean Temperature
April 2020 Departure from 1981-2010 Normal

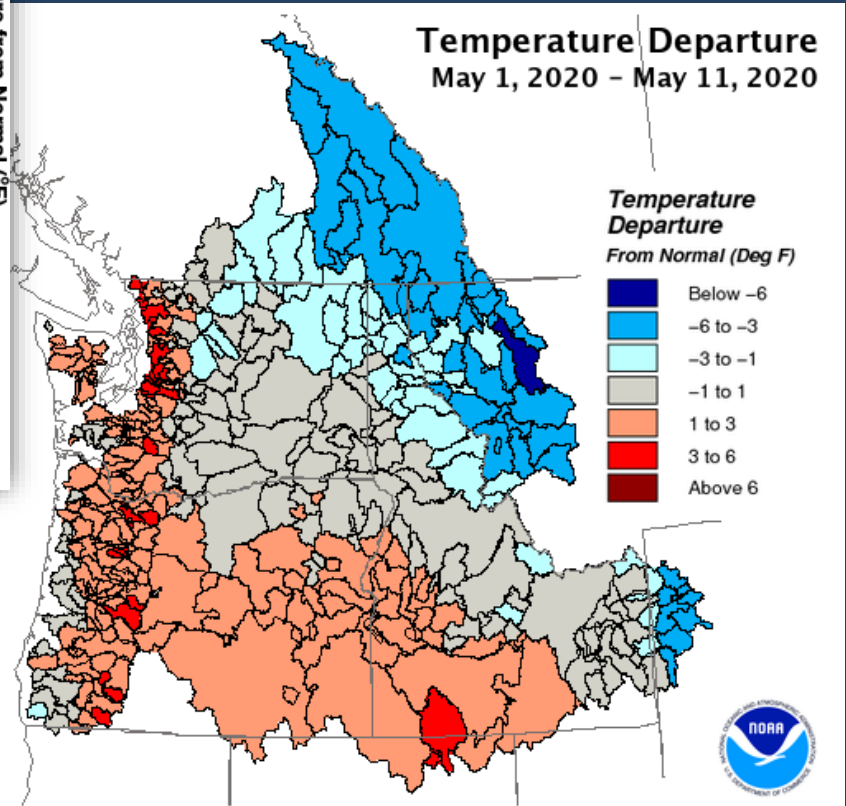


WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 11 MAY 2020

April 2020

May 1 - 11, 2020

Temperature Departure
May 1, 2020 - May 11, 2020



Creation Time: Tuesday, May 12, 2020

Northwest River Forecast Center





Drought Monitor

U.S. Drought Monitor

West

April 7, 2020

(Released Thursday, Apr. 9, 2020)

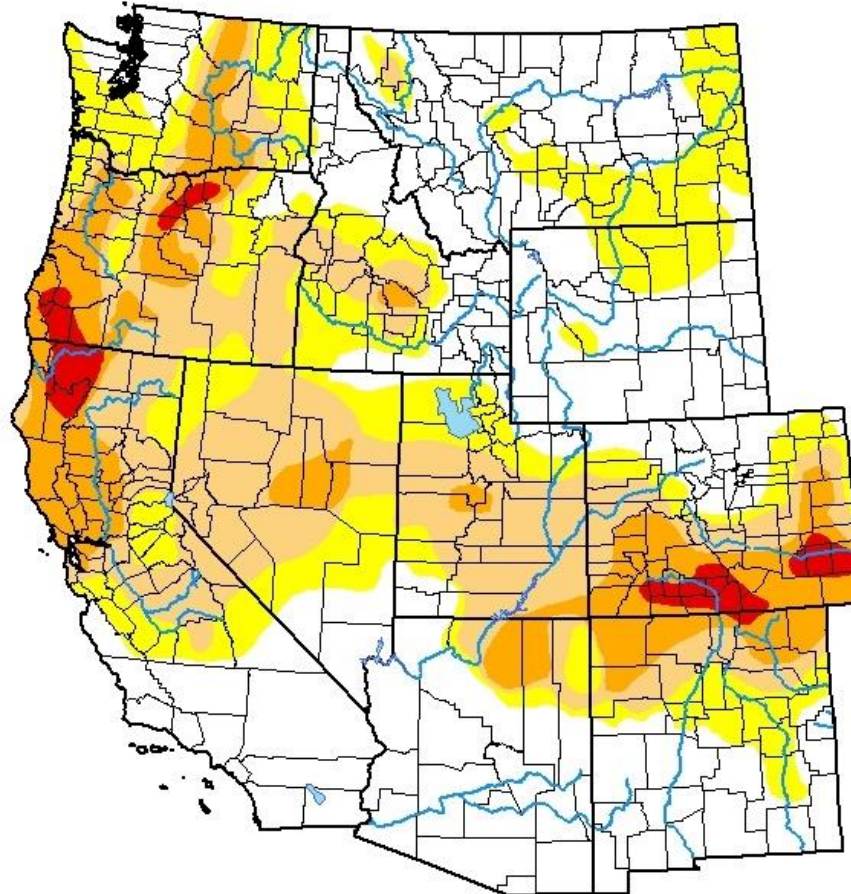
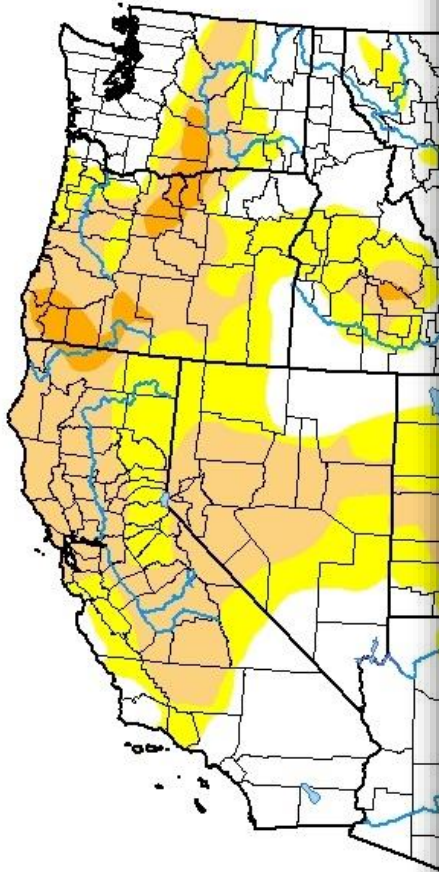
U.S. Drought Monitor

West

May 5, 2020

(Released Thursday, May. 7, 2020)

Valid 8 a.m. EDT



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:

Brad Pugh
CPC/NOAA



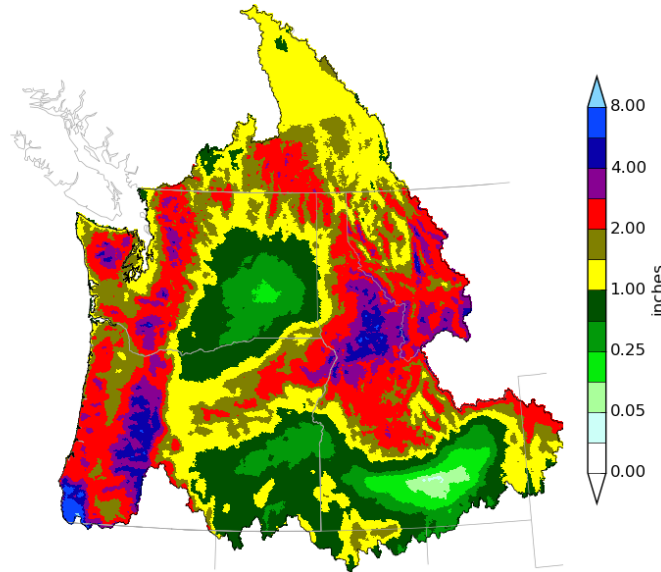


Mid/Late May Outlook

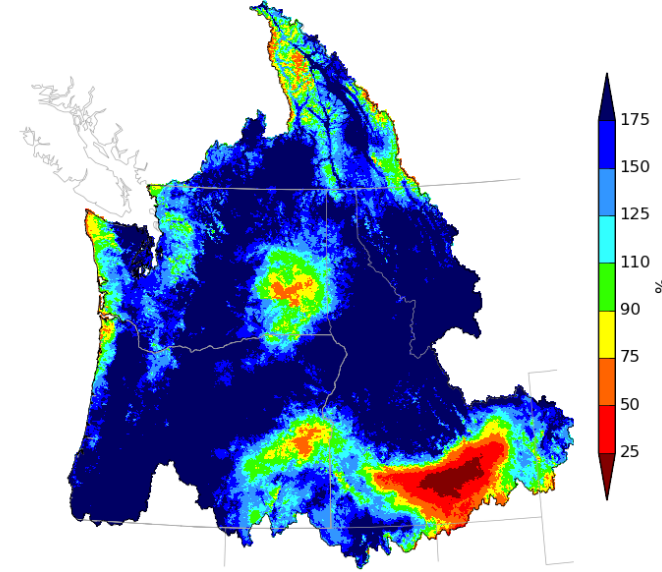
NWRFC 10-DAY PRECIPITATION



Northwest River Forecast Center
10 Day QPF, Ending 12Z, 05/22/20



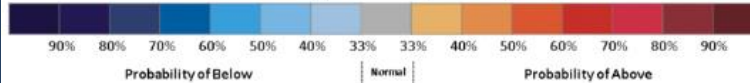
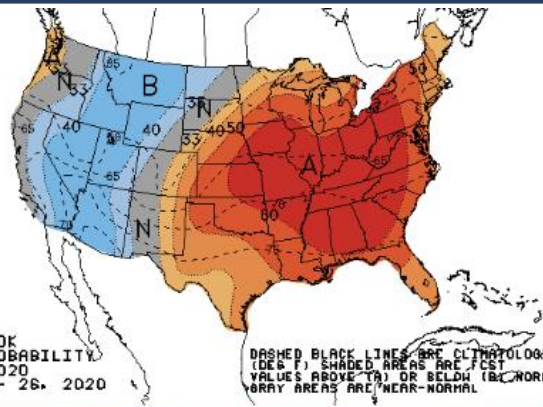
Northwest River Forecast Center
10 Day QPF (Percent of Climatology), Ending 12Z, 05/22/20



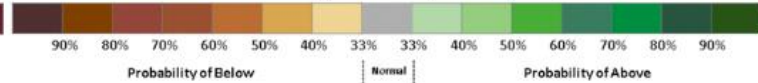
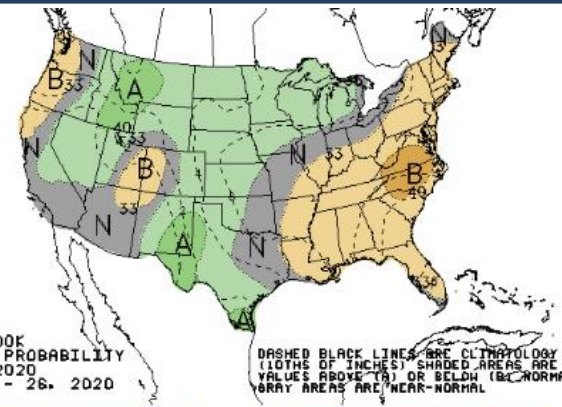
CPC 8 - 14 DAY OUTLOOK



8-14 DAY OUTLOOK
TEMPERATURE PROBABILITY
MADE 12 MAY 2020
VALID MAY 20 - 26, 2020



8-14 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 12 MAY 2020
VALID MAY 20 - 26, 2020

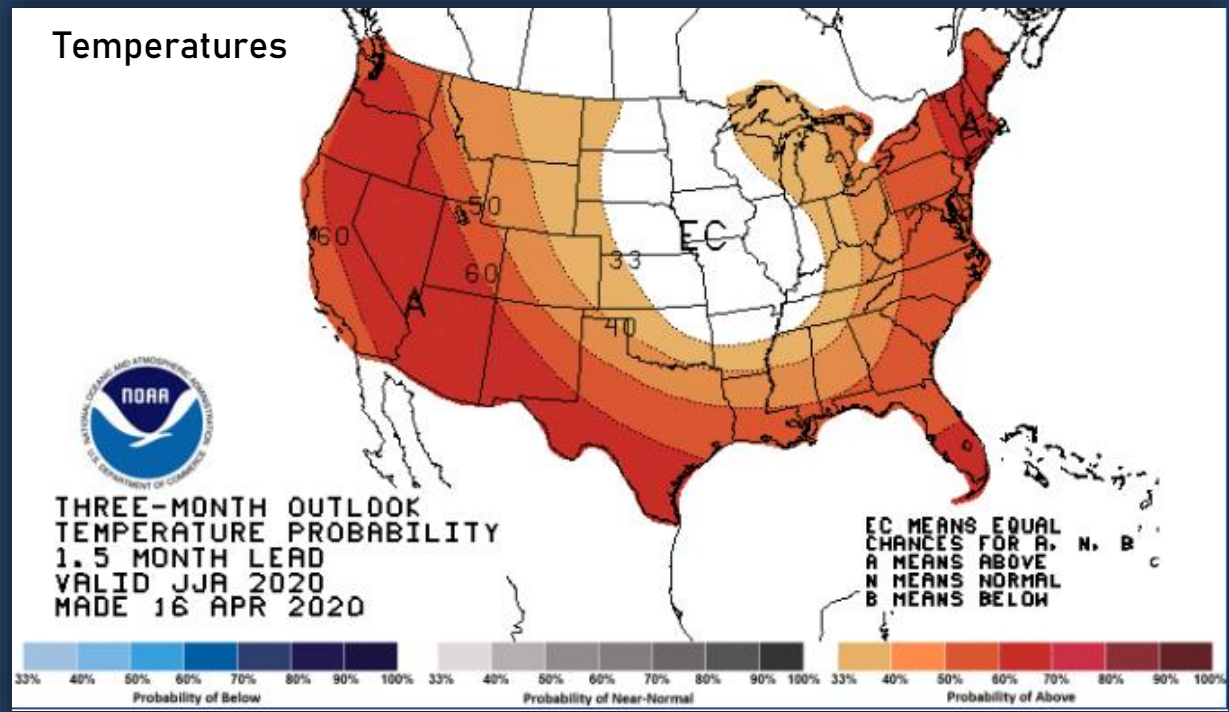




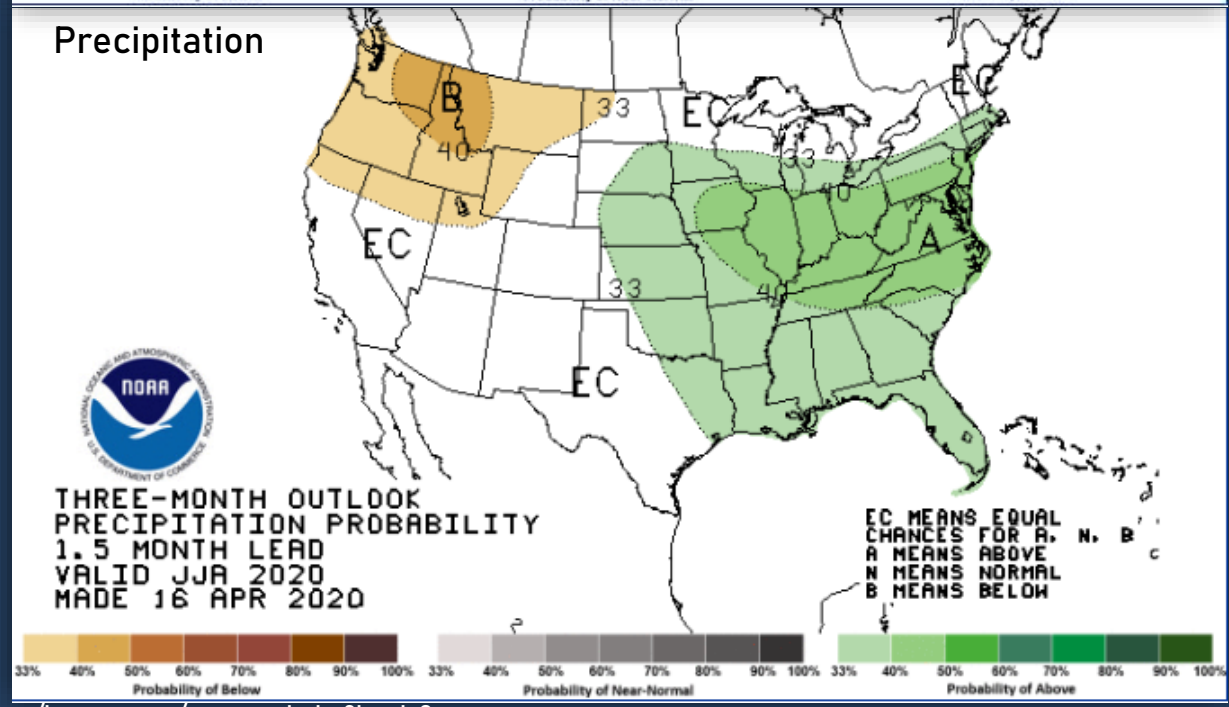
Climate Prediction Center Outlook

June - July - Aug 2020

Temperatures

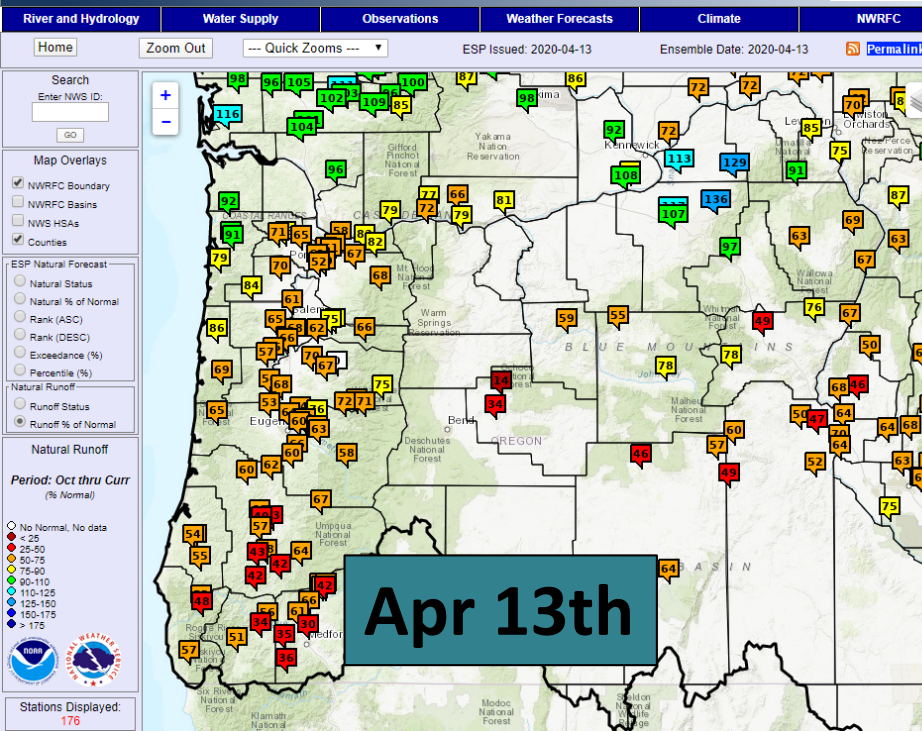


Precipitation

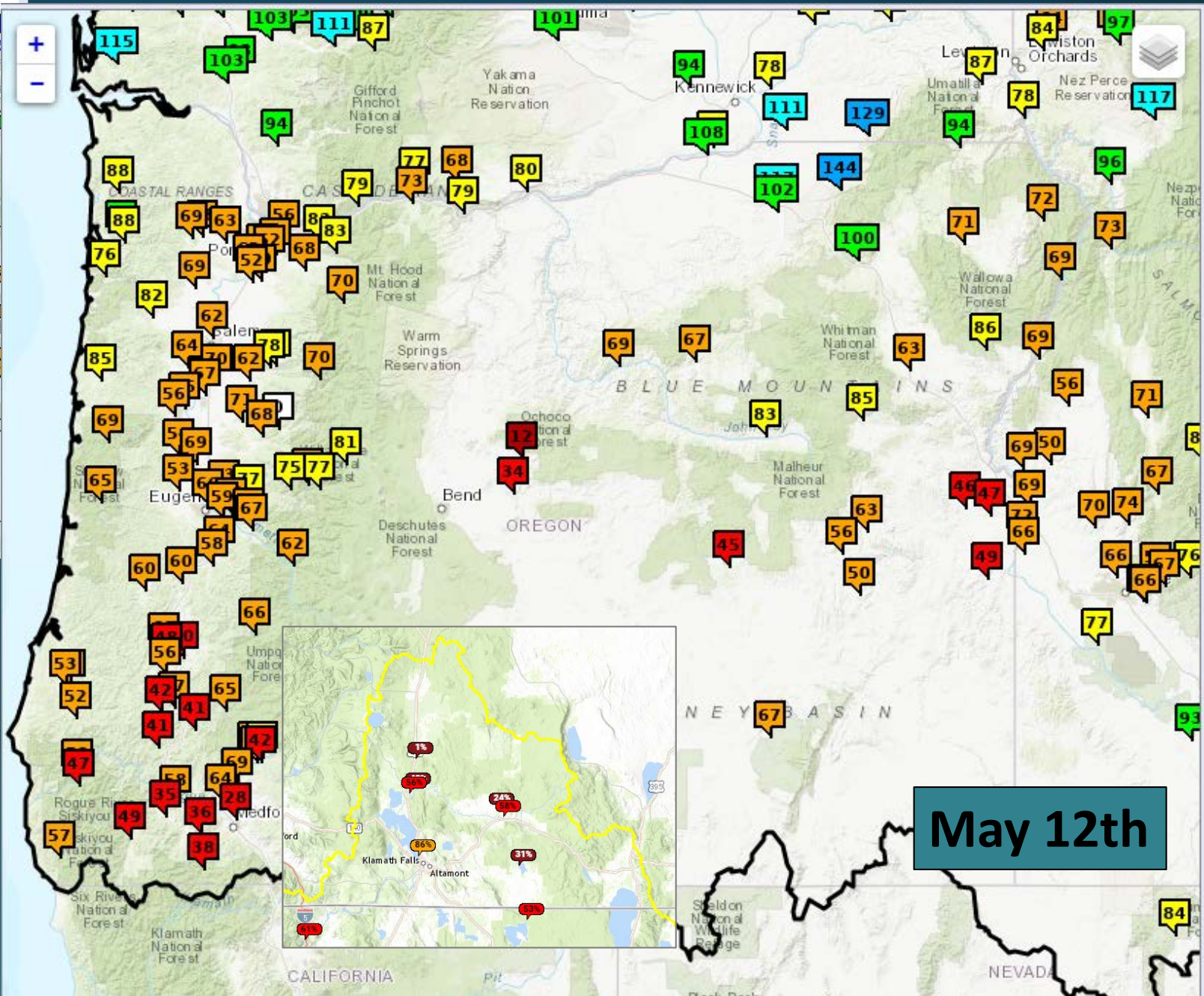




Northwest River Forecast Center Observed Water Year Natural Runoff



Apr 13th



May 12th





Northwest River Forecast Center ESP Natural Forecast



River and Hydrology | Water Supply | Observations | Weather Forecasts | Climate | NWRFC

Home | Zoom Out | --- Quick Zooms --- | ESP Issued: 2020-04-13 | Ensemble Date: 2020-04-13 | Permalink

Search
Enter NWS ID:
GO

- Map Overlays
- NWRFC Boundary
 - NWRFC Basins
 - NWS HSAs
 - Counties

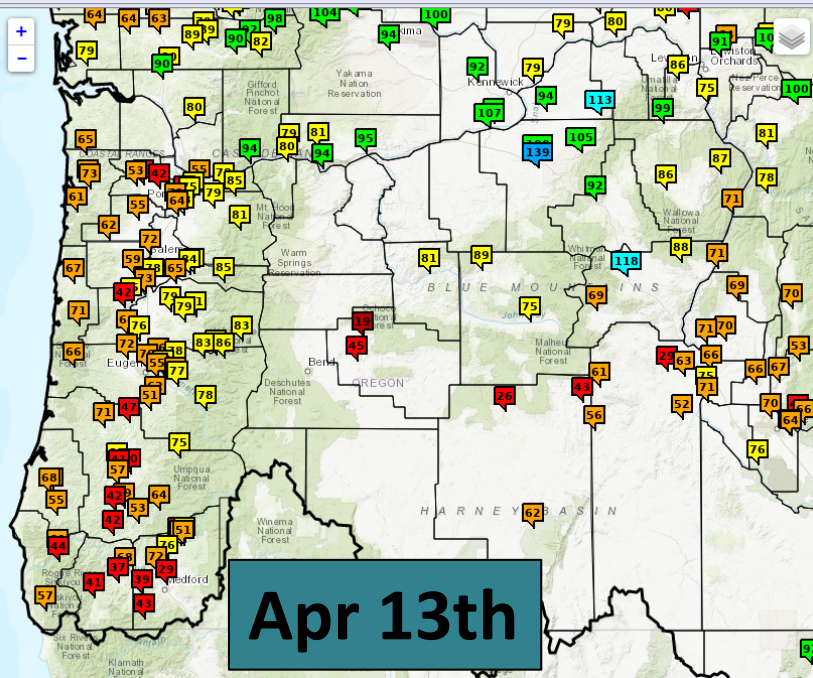
- ESP Natural Forecast
- Natural Status
 - Natural % of Normal
 - Rank (ASC)
 - Rank (DESC)
 - Exceedance (%)
 - Percentile (%)
- Natural Runoff
- Runoff Status
 - Runoff % of Normal

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

Stations Displayed:
176



Northwest River Forecast Center ESP Natural Forecast



River and Hydrology | Water Supply | Observations | Weather Forecasts | Climate | NWRFC

Home | Zoom Out | --- Quick Zooms --- | ESP Issued: 2020-05-12 | Ensemble Date: 2020-05-12 | Permalink

Search
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- Map Overlays
- NWRFC Boundary
 - NWRFC Basins
 - NWS HSAs
 - Counties

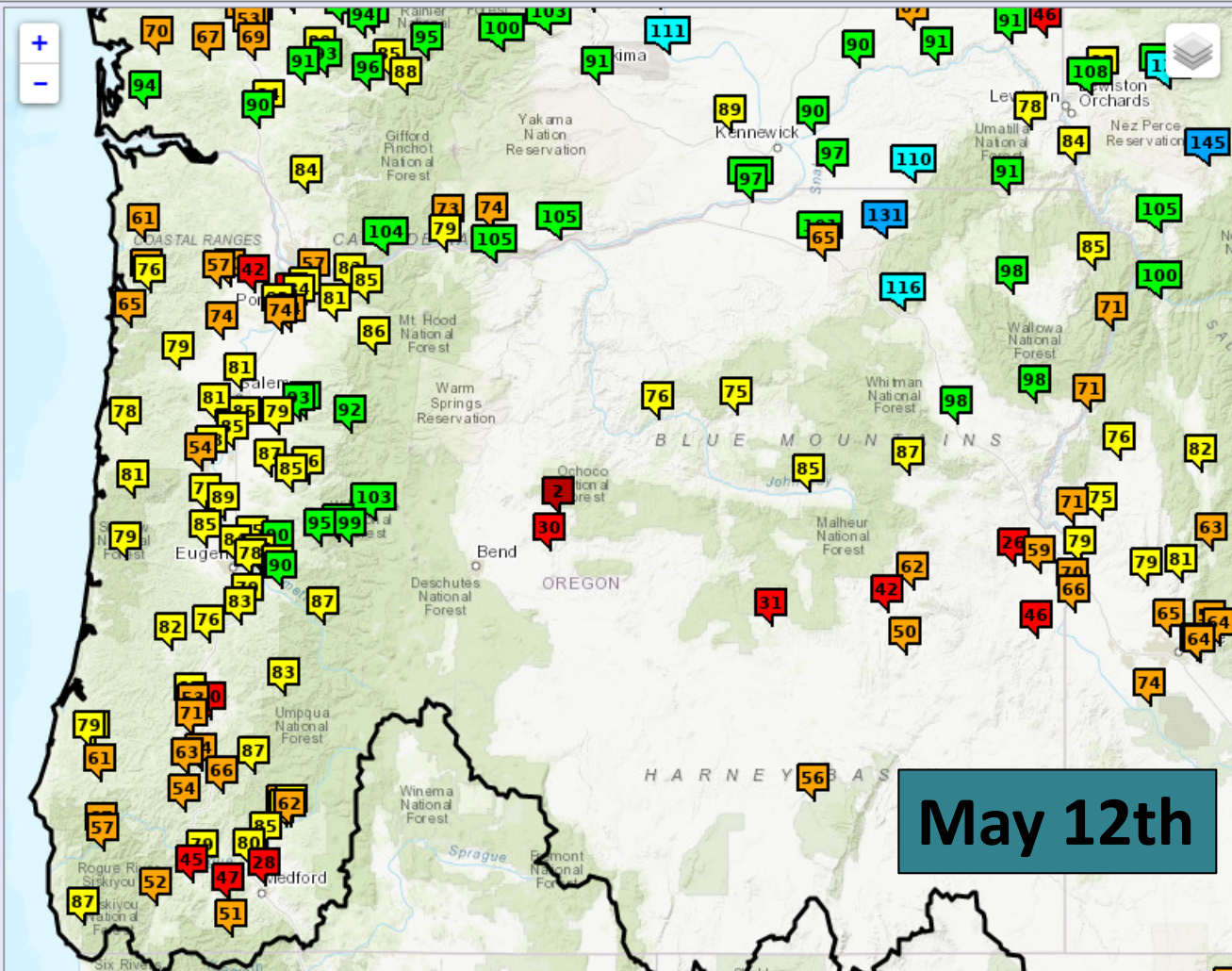
- ESP Natural Forecast
- Natural Status
 - Natural % of Normal
 - Rank (ASC)
 - Rank (DESC)
 - Exceedance (%)
 - Percentile (%)
- Natural Runoff
- Runoff Status
 - Runoff % of Normal

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

Stations Displayed:





Northwest River Forecast Center ESP Natural Forecast



River and Hydrology

Water Supply

Observations

Weather Forecasts

Climate

NWRFC

[Home](#)

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--- Quick Zooms ---

ESP Issued: 2020-05-12

Ensemble Date: 2020-05-12

[Permalink](#)

Search

Enter NWS ID:

[GO](#)

Map Overlays

- NWRFC Boundary
- NWRFC Basins
- NWS HSAs
- Counties

ESP Natural Forecast

- Natural Status
- Natural % of Normal
- Rank (ASC)
- Rank (DESC)
- Exceedance (%)
- Percentile (%)

Natural Runoff

- Runoff Status
- Runoff % of Normal

ESP Natural Forecast

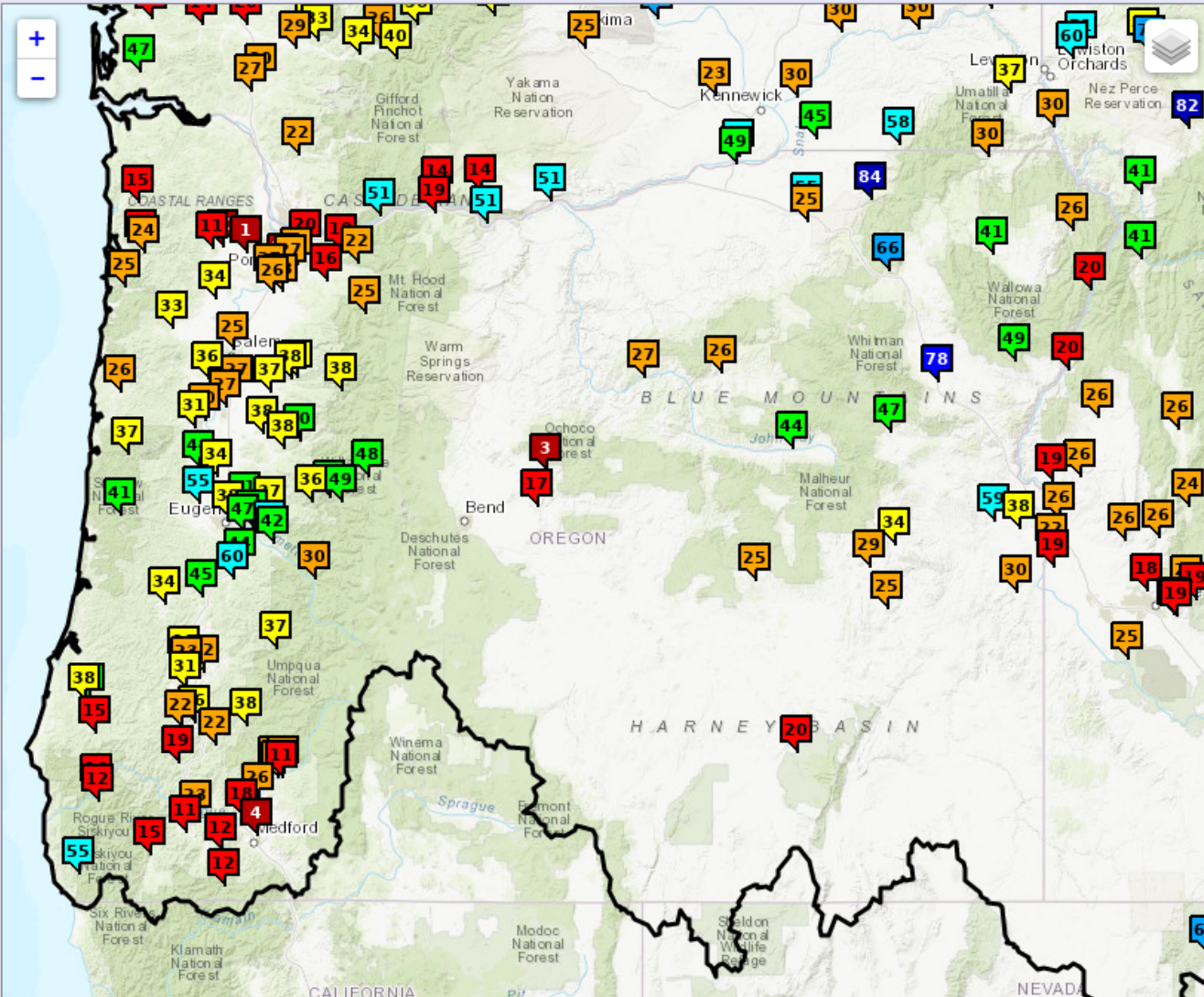
Period: APR-SEP
Percentile Probability(%)

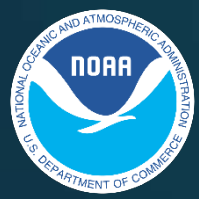
- No Data
- 0-10
- 10-20
- 20-30
- 30-40
- 40-50
- 50-60
- 60-70
- 70-80
- 80-90
- 90-100



Stations Displayed:

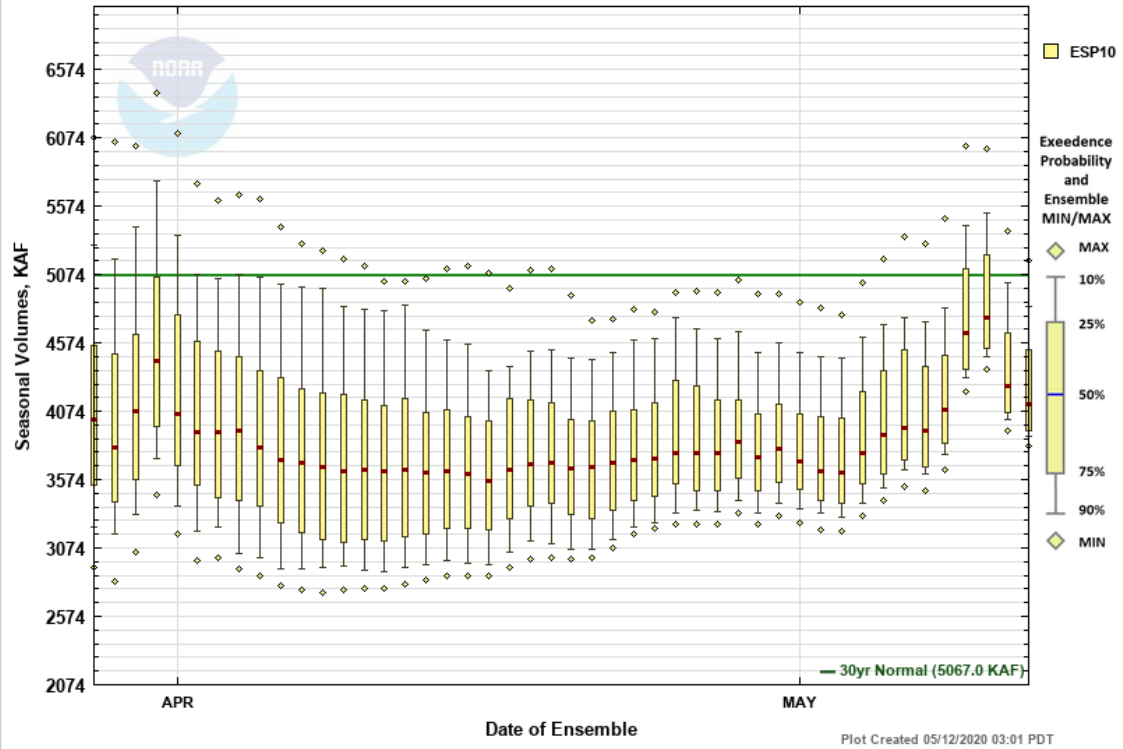
171





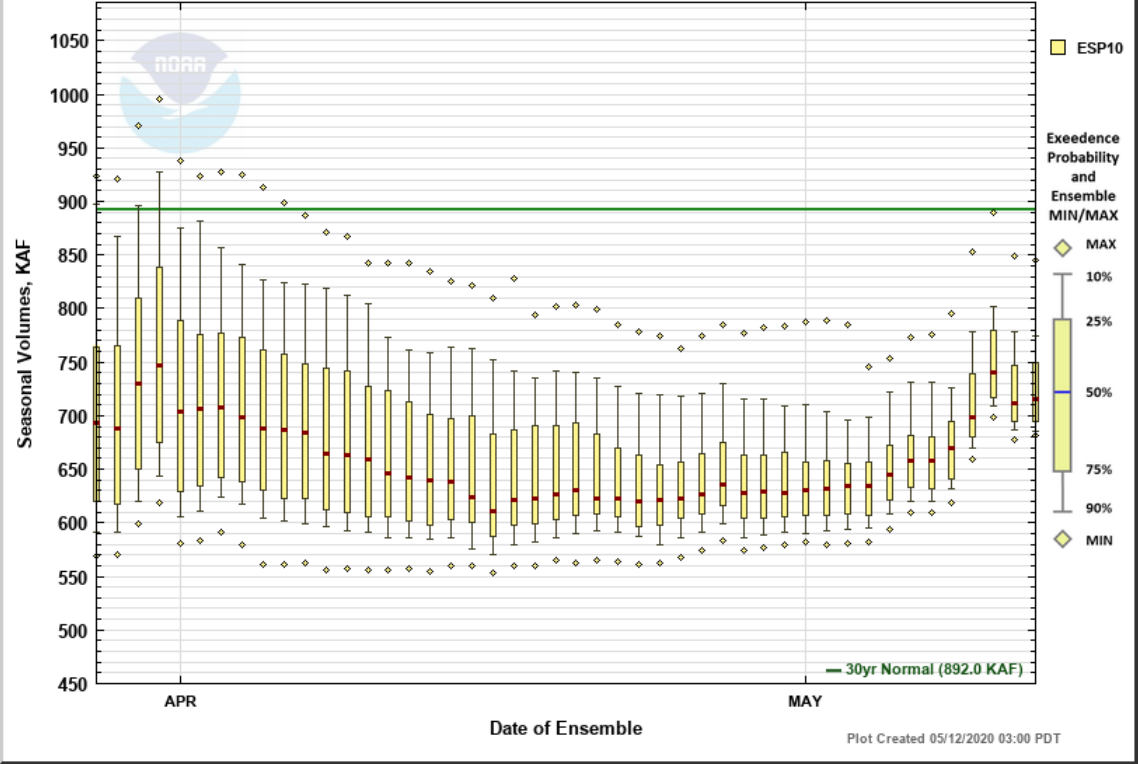
Natural Volume Forecasts WILLAMETTE - AT SALEM

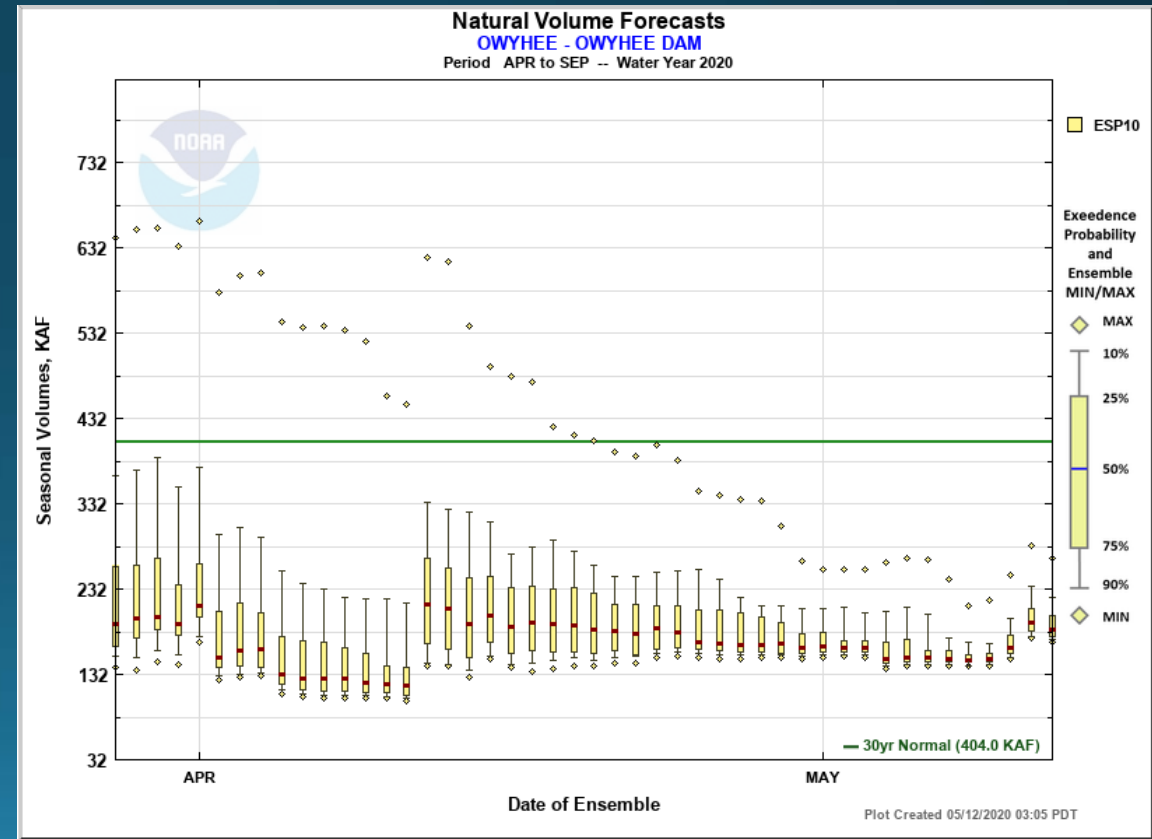
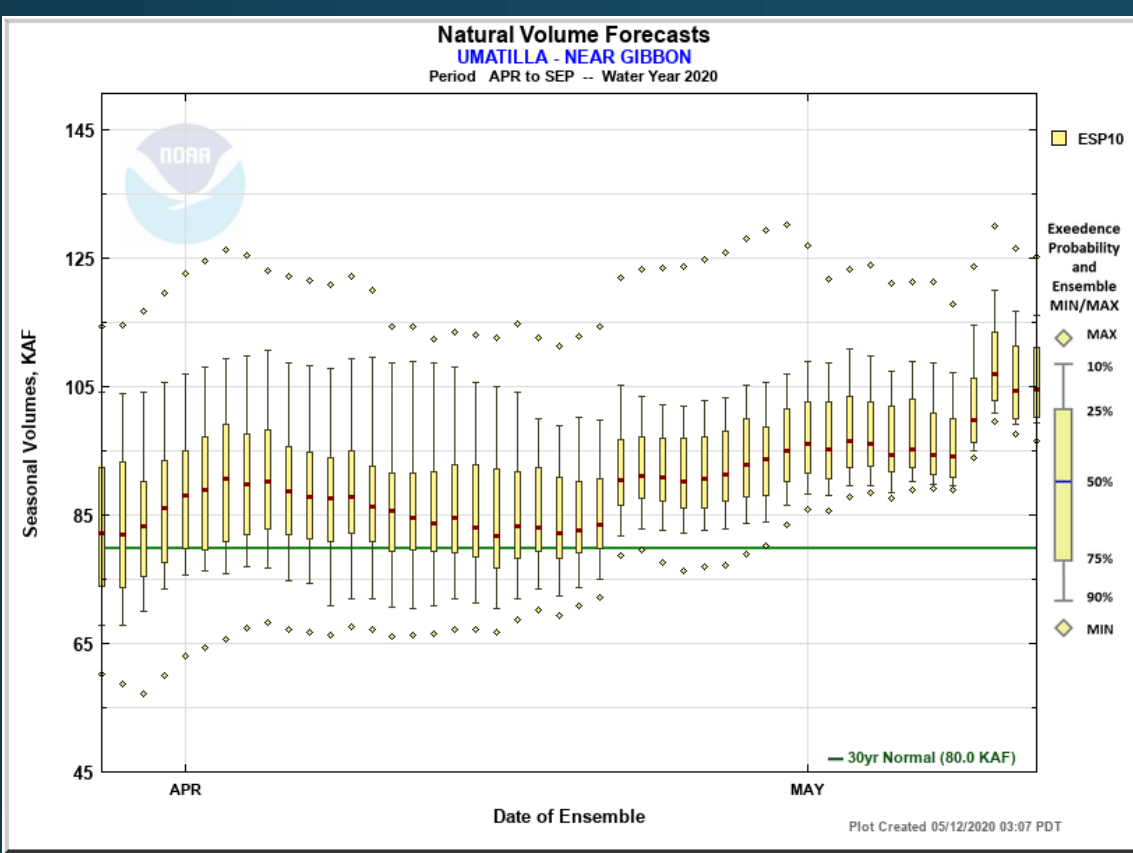
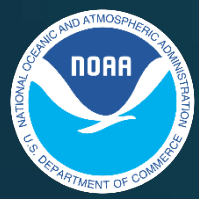
Period APR to SEP -- Water Year 2020



Natural Volume Forecasts ROGUE - AT RAYGOLD

Period APR to SEP -- Water Year 2020

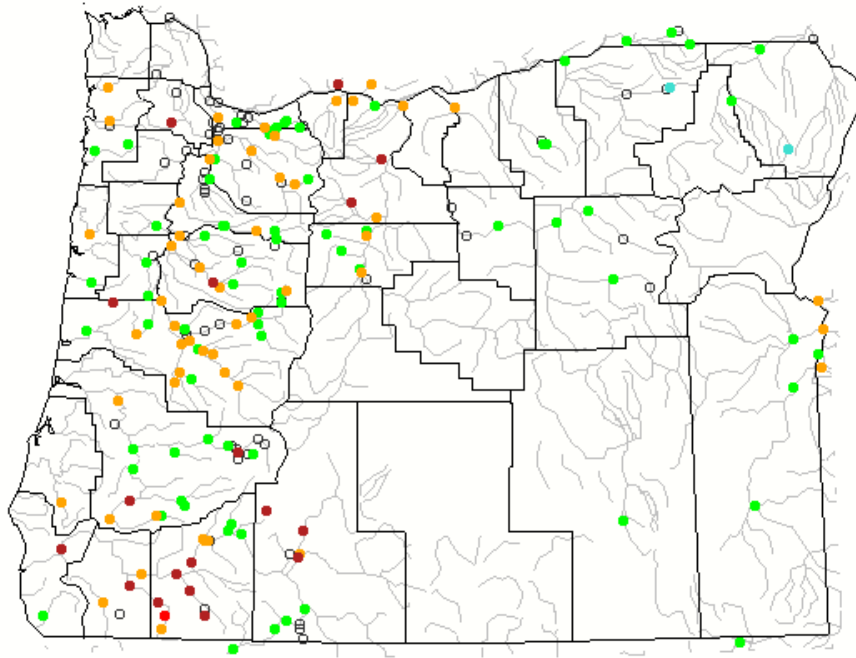




Oregon Water Supply Availability Meeting

May 2020

April 2020



Search USGS streamgage

Choose a data retrieval option and select a location on the map

- List of all stations Single station Nearest stations Peak flow

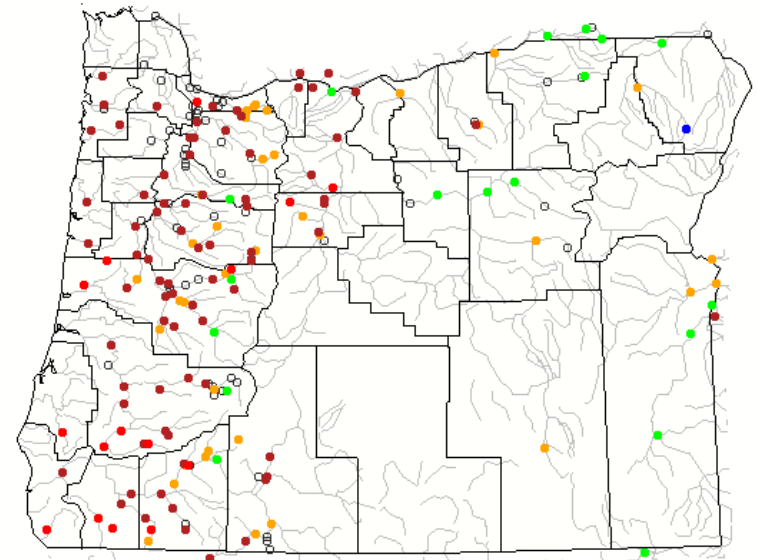
Explanation - Percentile classes

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

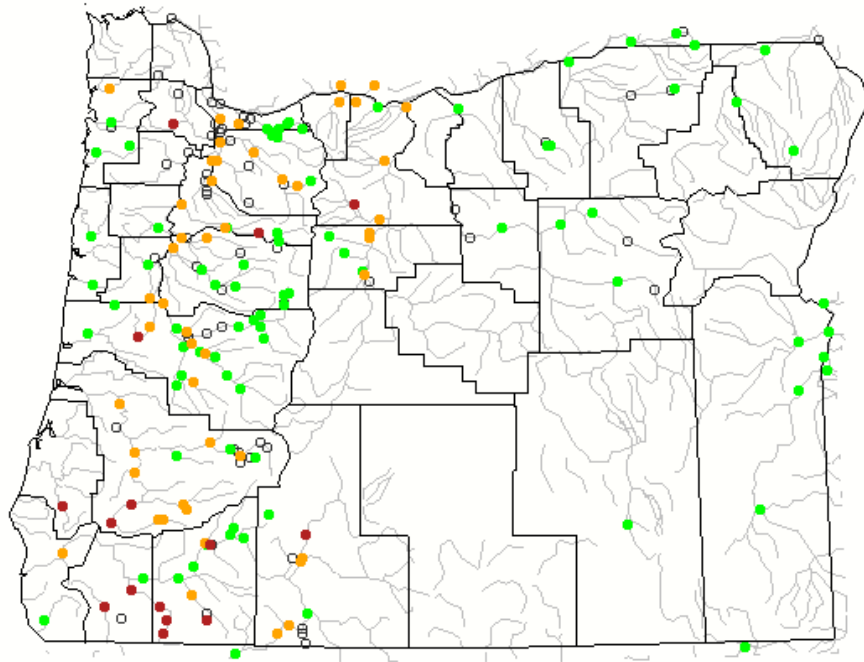


Monthly Average Streamflow (as compared to Historical Record)

March 2020



Monday, May 11, 2020



Search USGS streamgage

Choose a data retrieval option and select a location on the map

List of all stations Single station Nearest stations

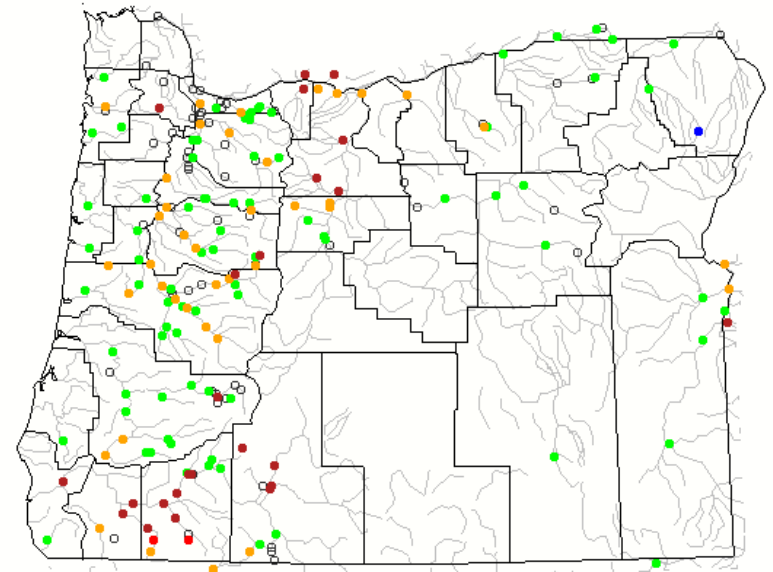
Explanation - Percentile classes

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

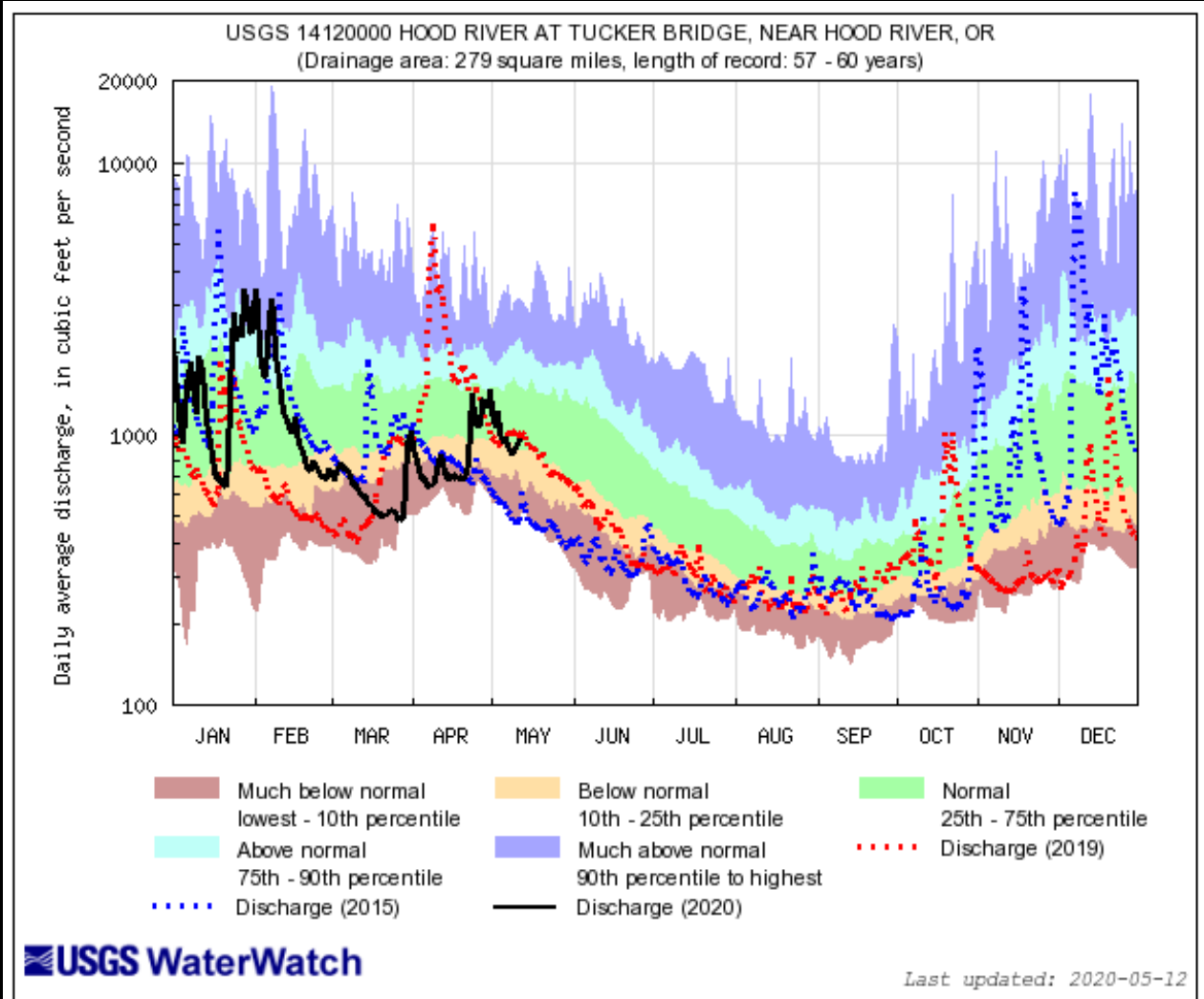


7-day Average Streamflow (as compared to Historical Record)

Sunday, April 12, 2020



14120000 Hood R at Tucker Bridge

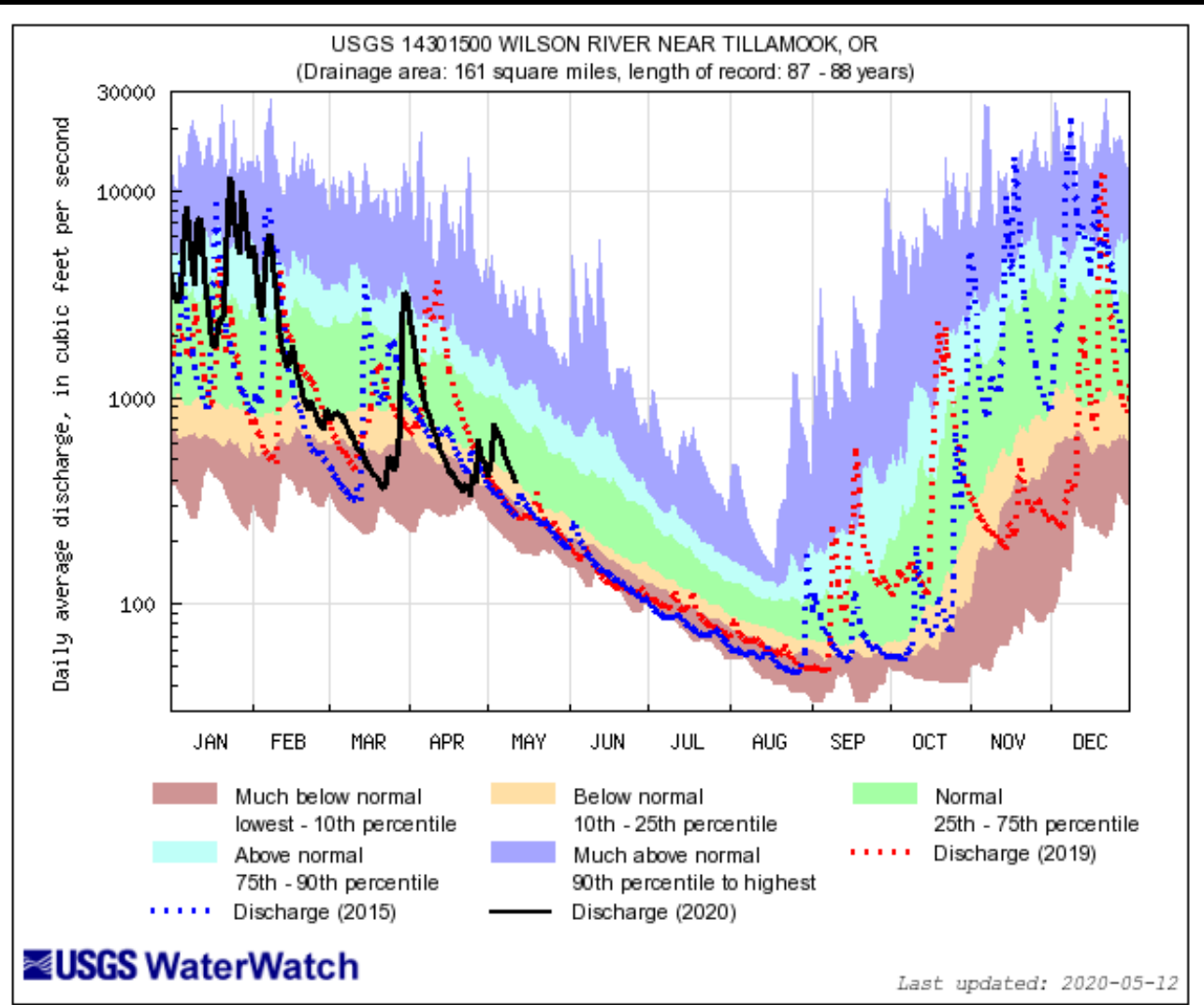


Explanation - Percentile classes

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



14301500 Wilson R near Tillamook



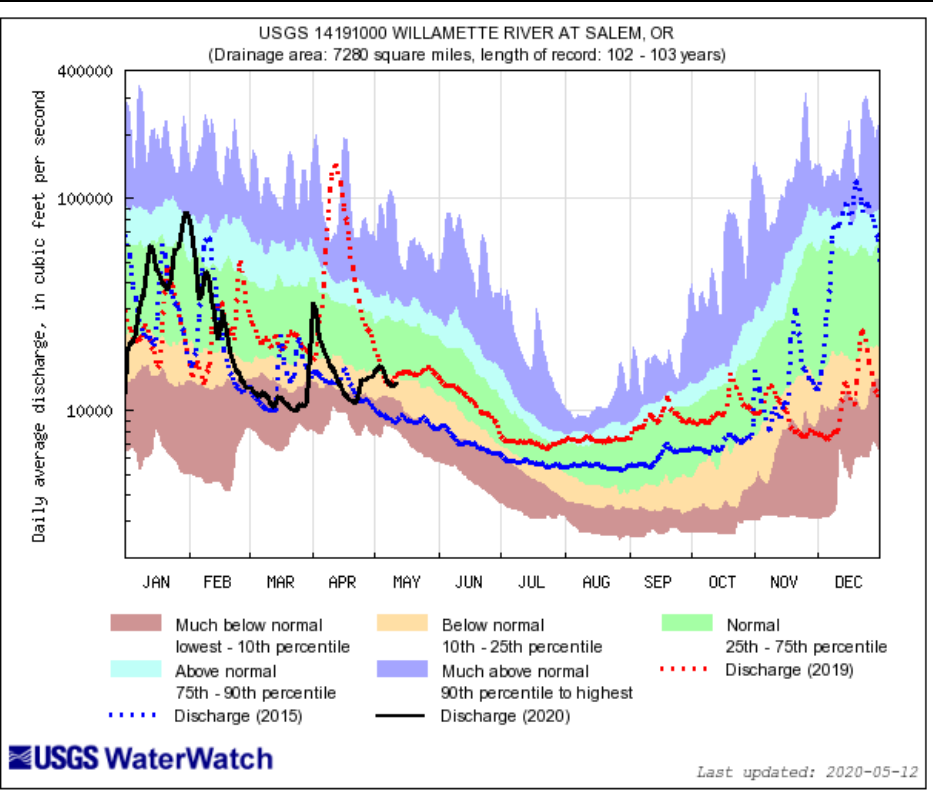
Explanation - Percentile classes

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

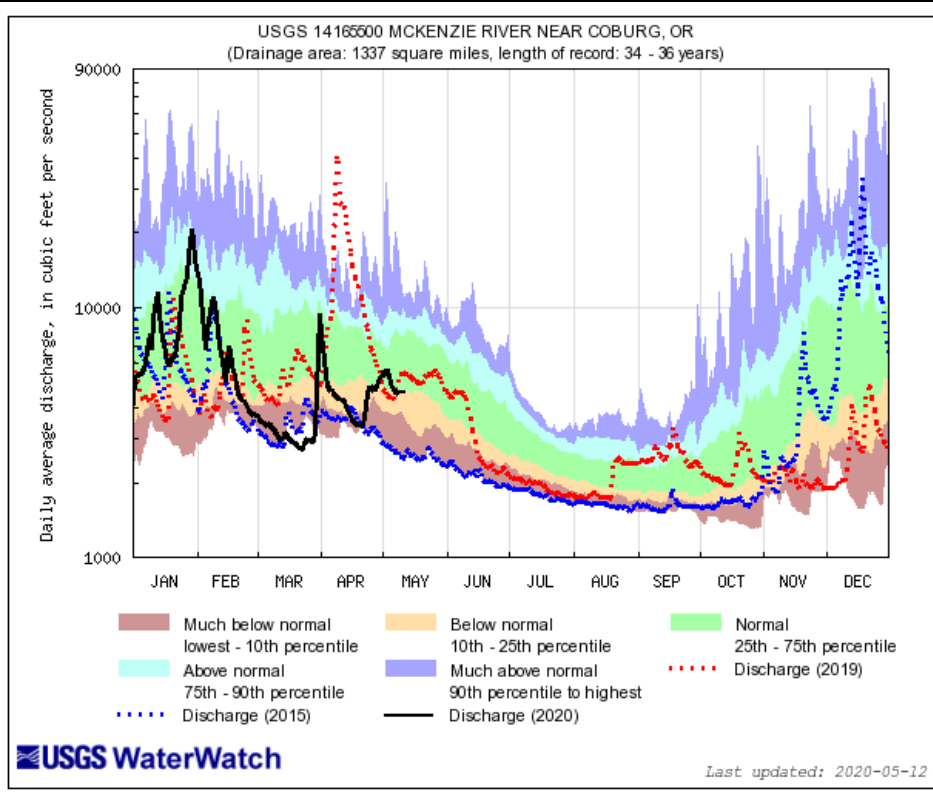


14191000 Willamette R at Salem (Left)

14165500 McKenzie R nr Coburg (Right)



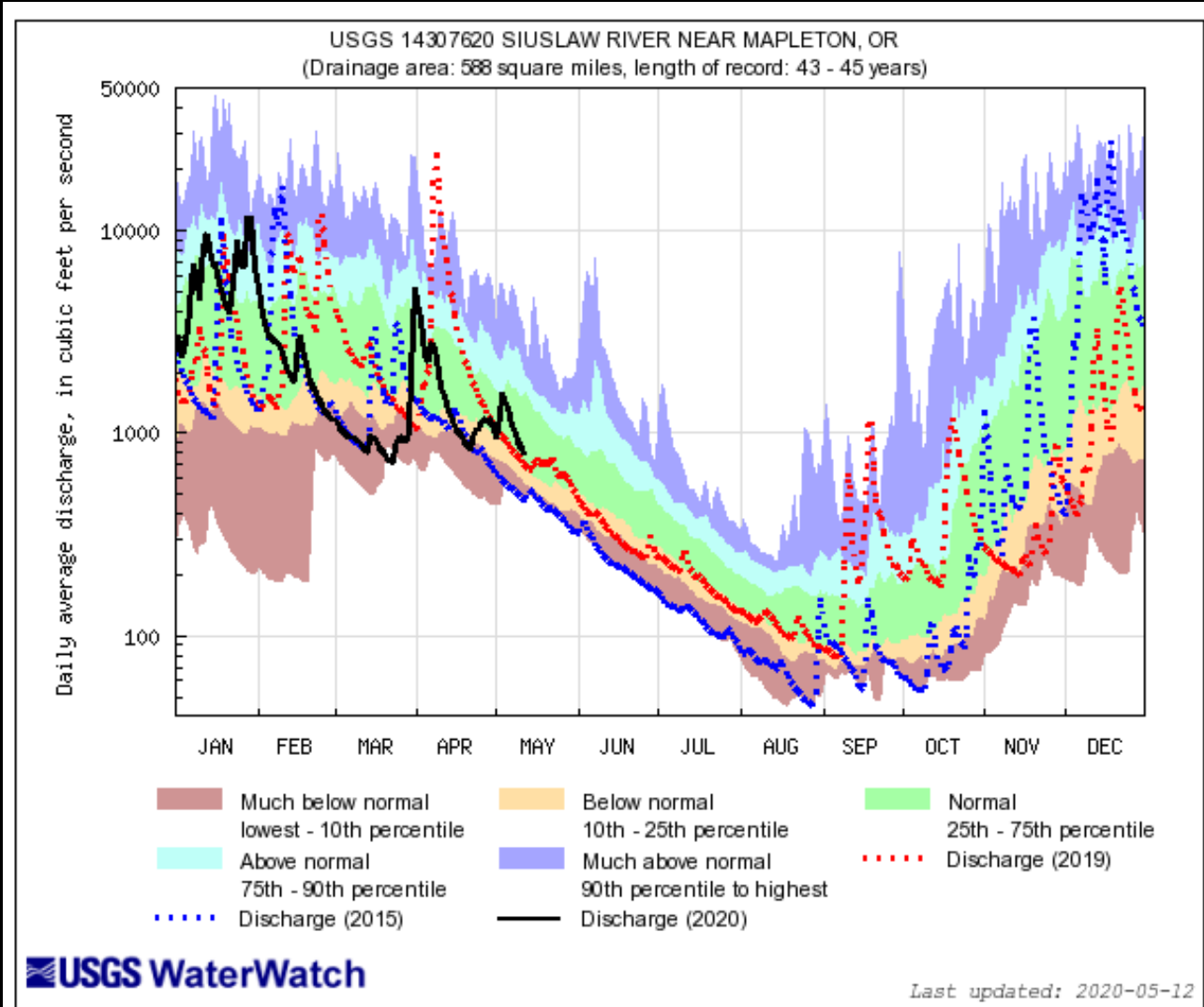
Explanation - Percentile classes					Flow
lowest-10th percentile	10-24	25-75	76-90	90th percentile - highest	
Much below normal	Below normal	Normal	Above normal	Much above normal	



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

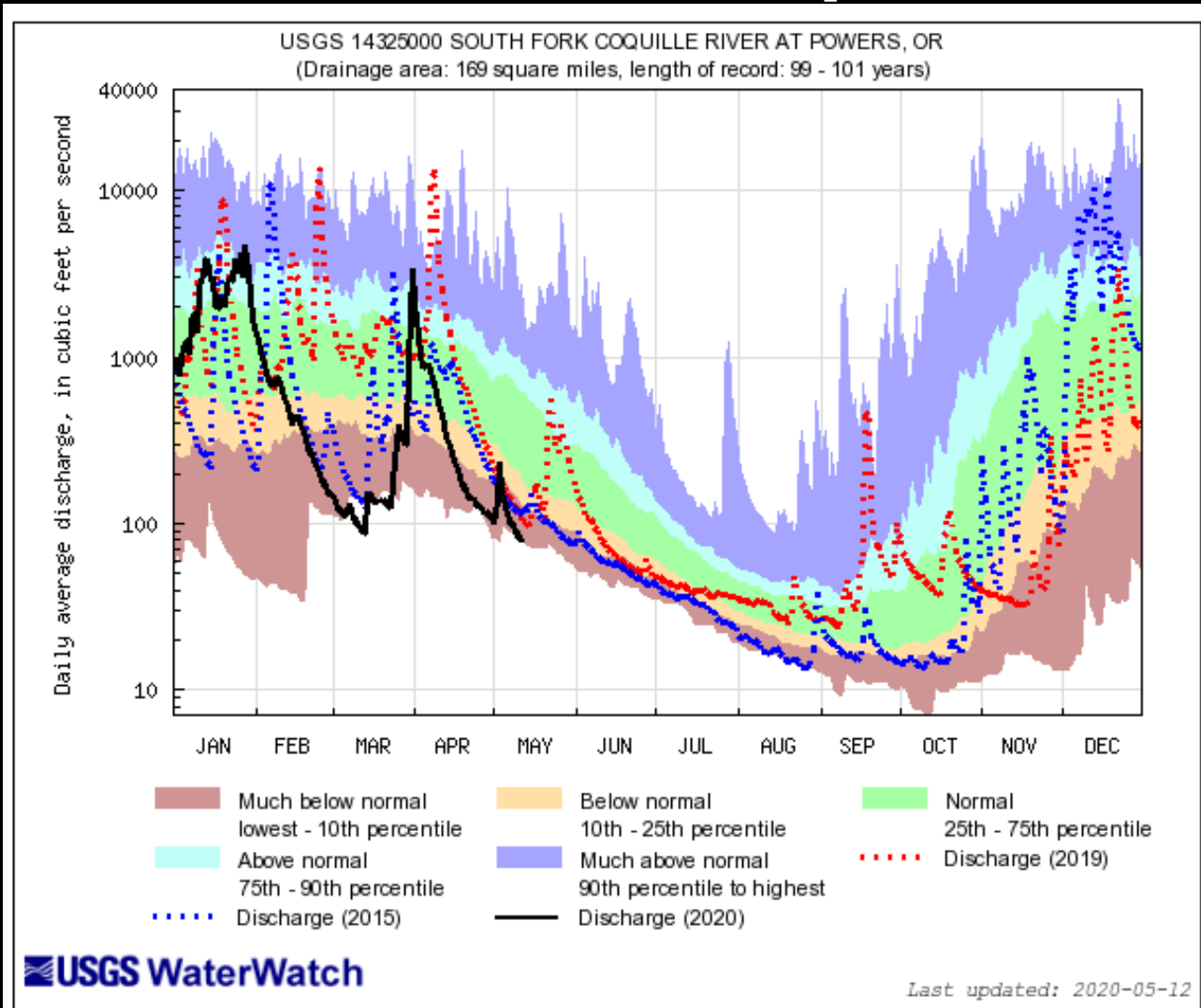


14307620 Siuslaw River nr Mapleton



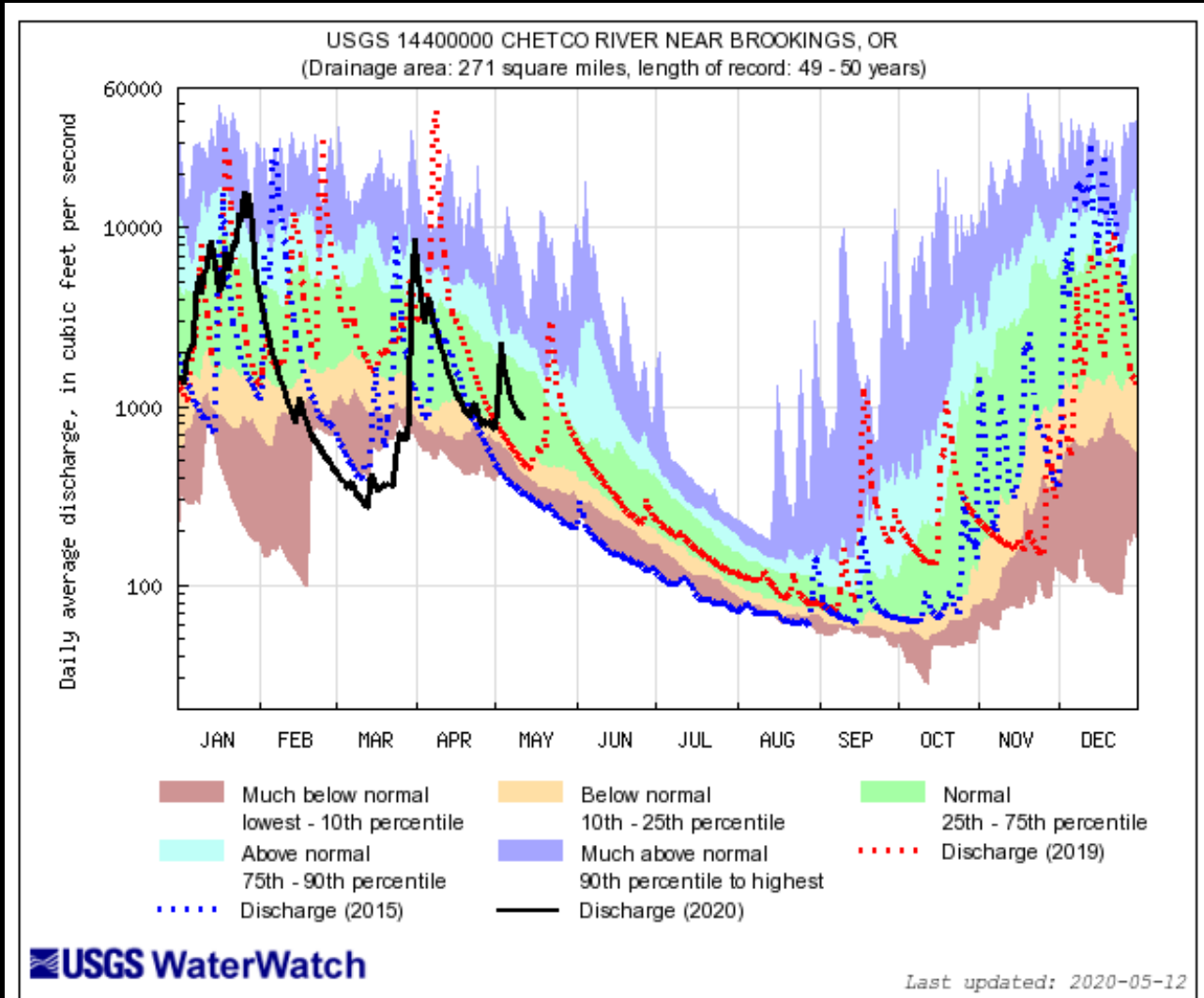
Explanation - Percentile classes					
lowest-10th percentile	10-24	25-75	76-90	90th percentile -highest	Flow
Much below normal	Below normal	Normal	Above normal	Much above normal	

14325000 South Fork Coquille River at Powers



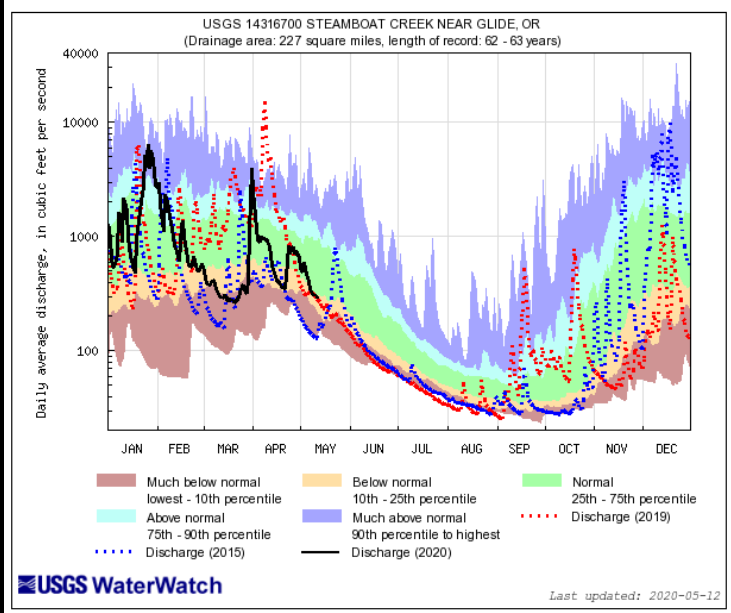
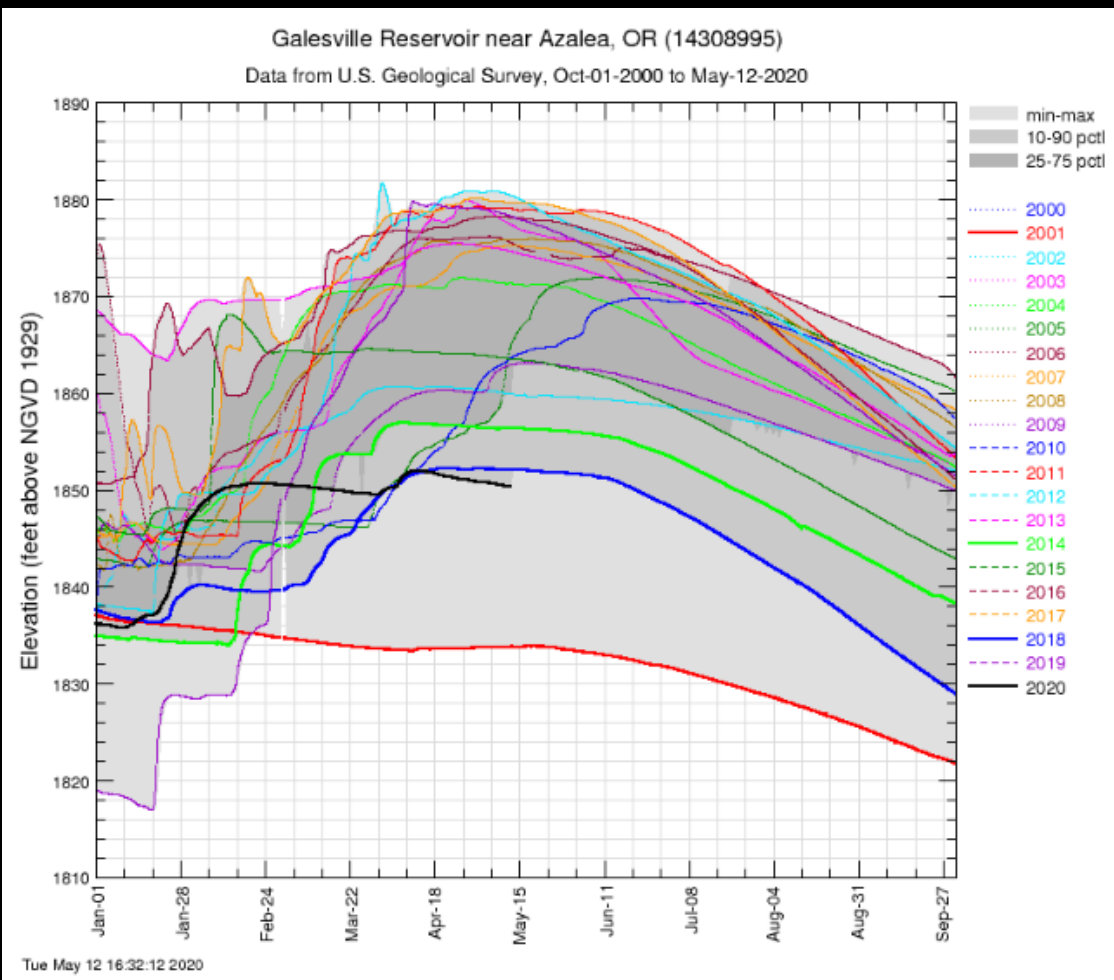
Explanation - Percentile classes					
lowest-10th percentile	10-24	25-75	76-90	90th percentile - highest	Flow
Much below normal	Below normal	Normal	Above normal	Much above normal	

14400000 Chetco River nr Brookings

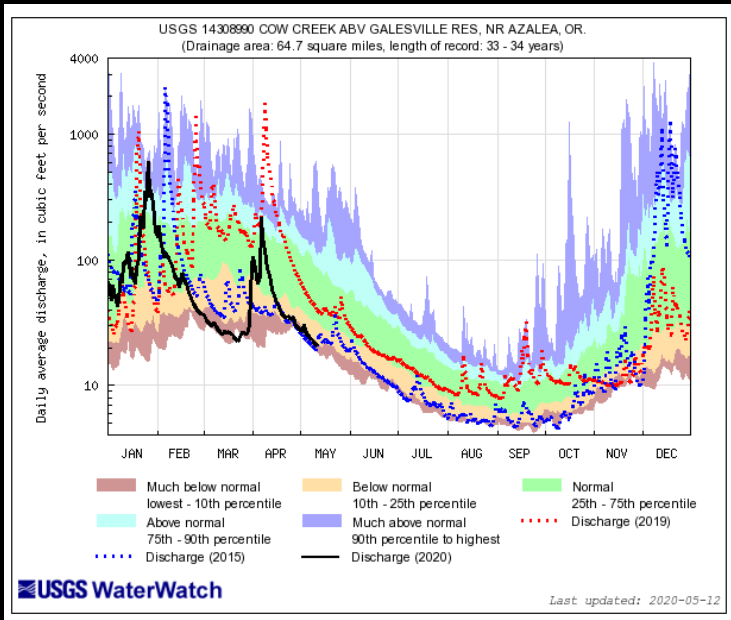


Explanation - Percentile classes					
lowest-10th percentile	10-24	25-75	76-90	90th percentile -highest	Flow
Much below normal	Below normal	Normal	Above normal	Much above normal	

14308995 Galesville Reservoir



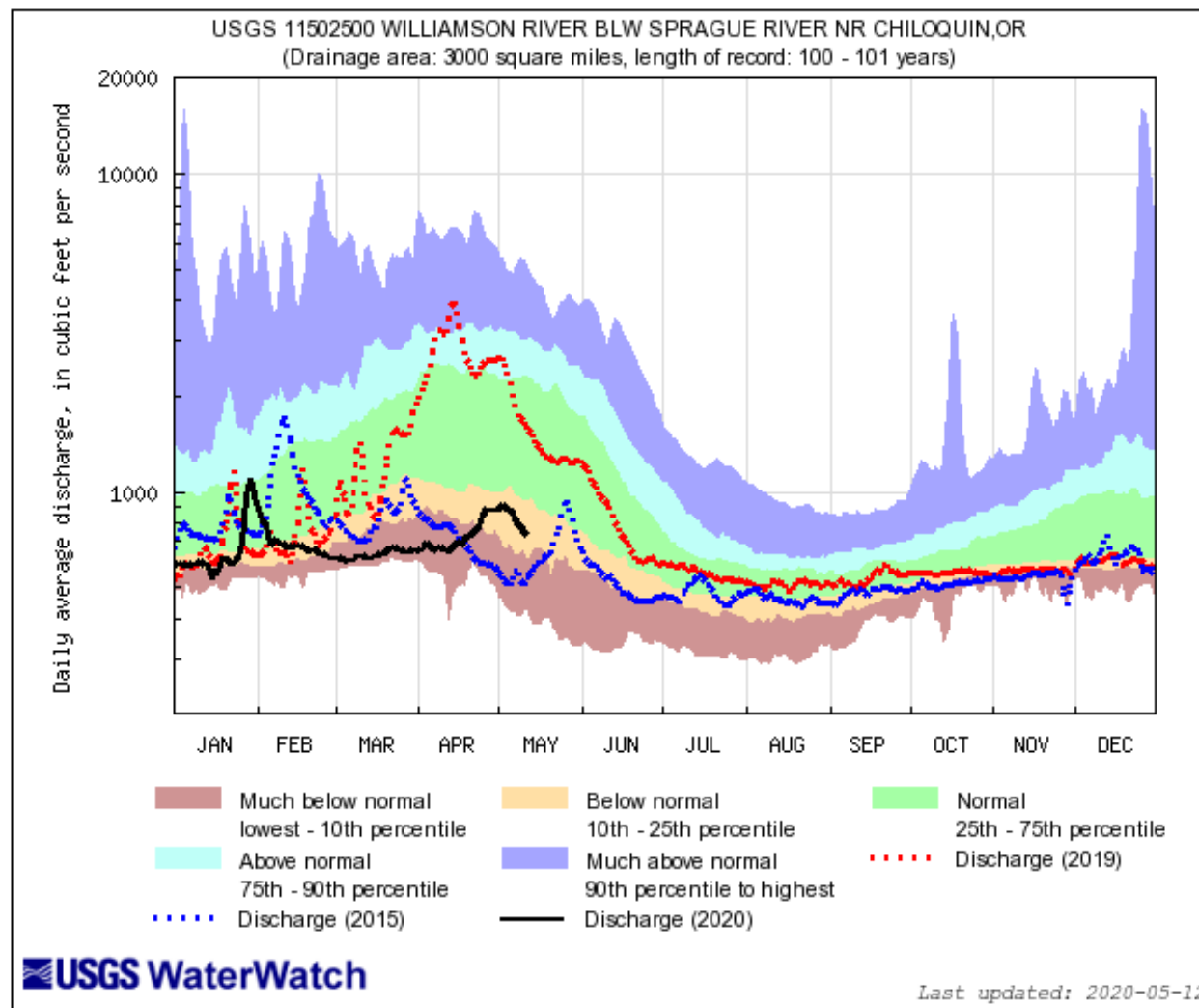
Steamboat Creek nr Glide



Cow Creek abv Galesville Res.



11502500 Williamson River blw Sprague

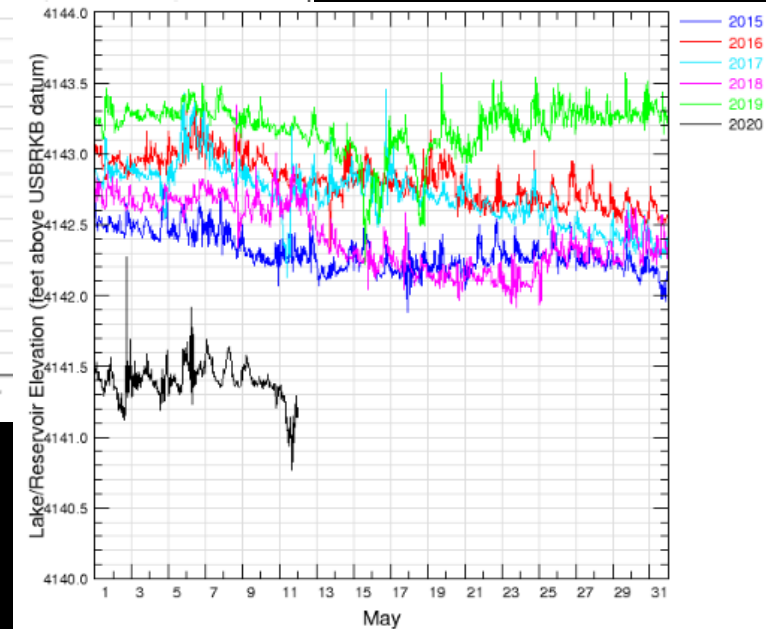
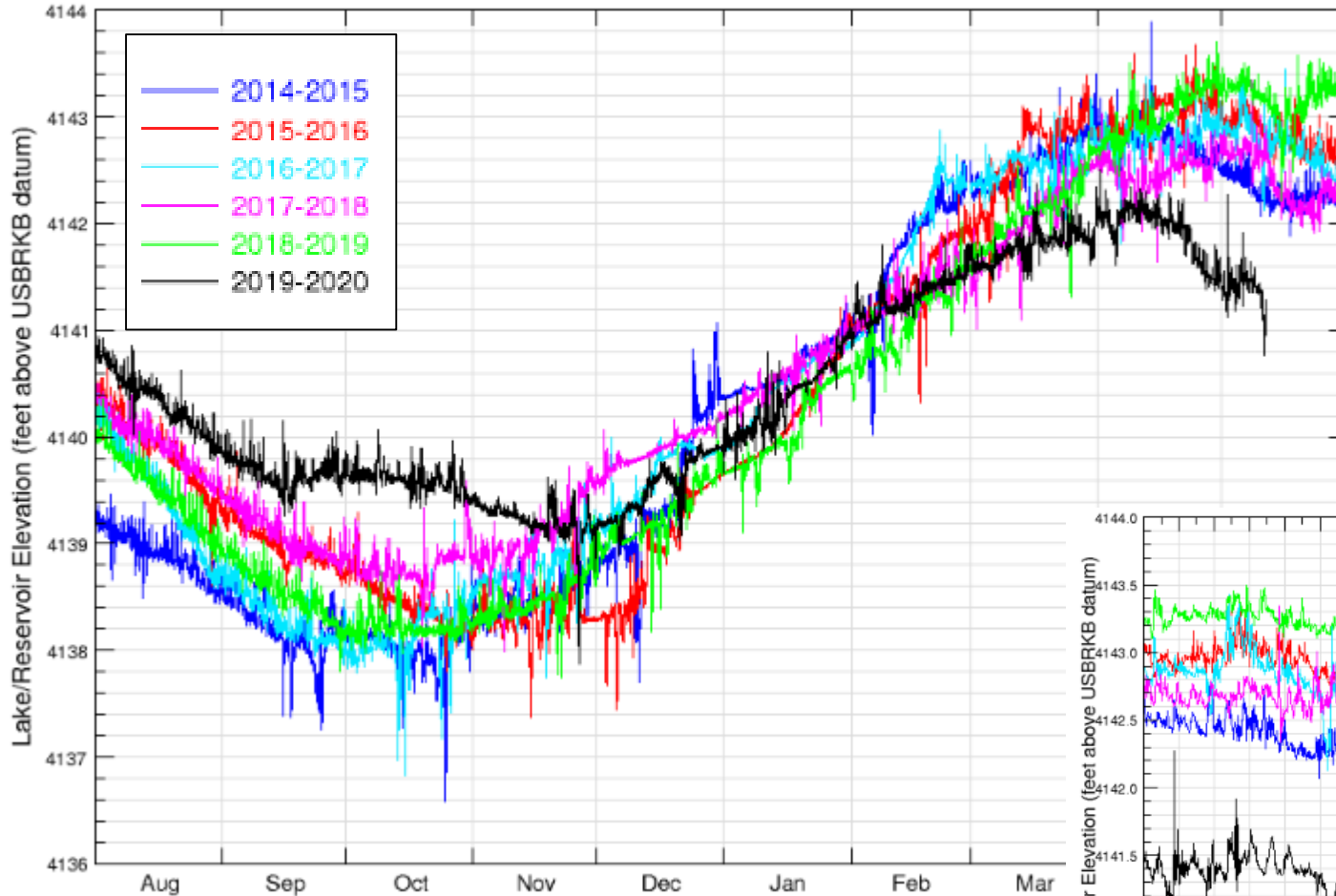


Explanation - Percentile classes					
lowest-10th percentile	10-24	25-75	76-90	90th percentile - highest	Flow
Much below normal	Below normal	Normal	Above normal	Much above normal	

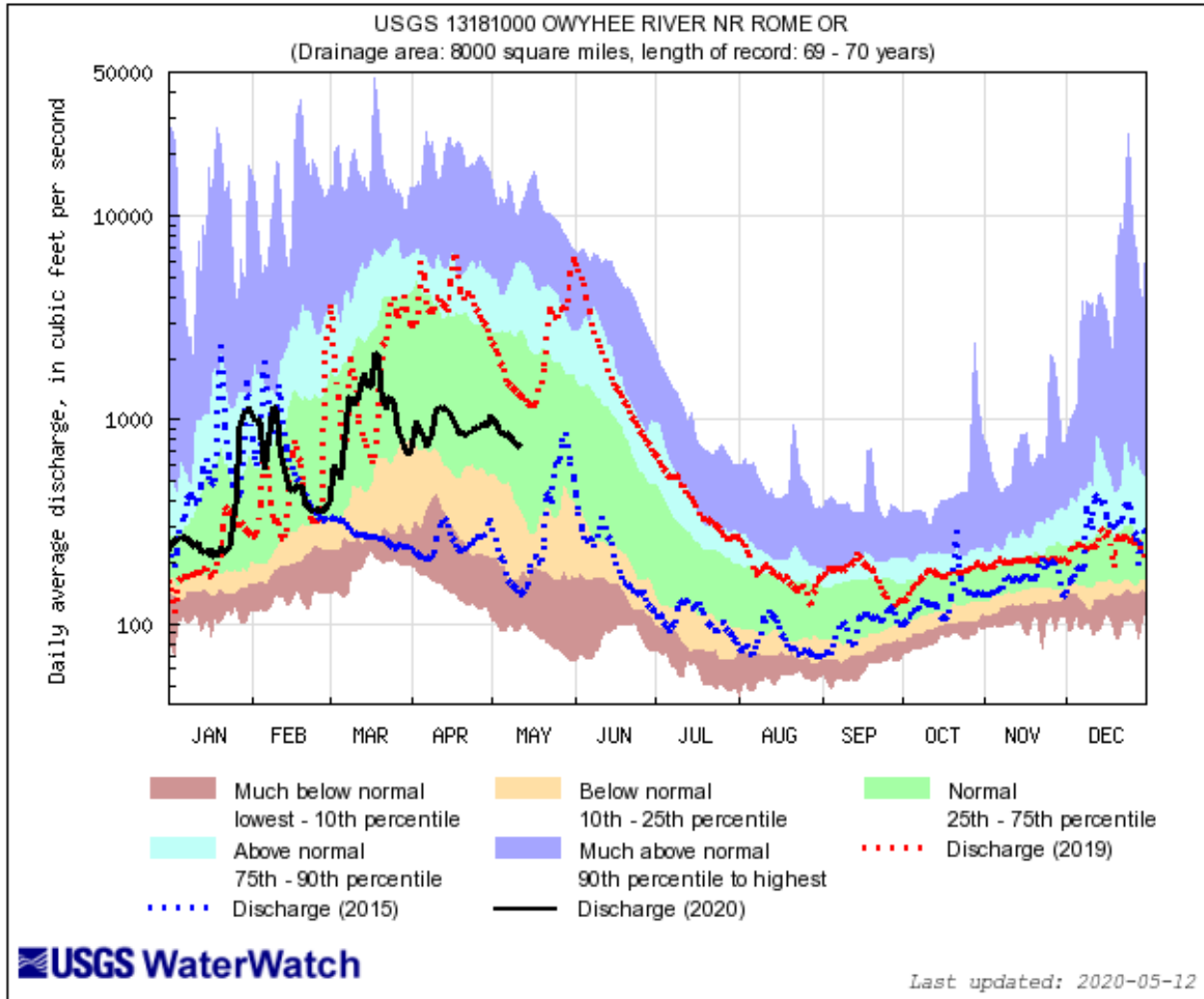
11507000 Upper Klamath Lake

Upper Klamath Lake near Klamath Falls, OR (11507000)

Data from U.S. Geological Survey



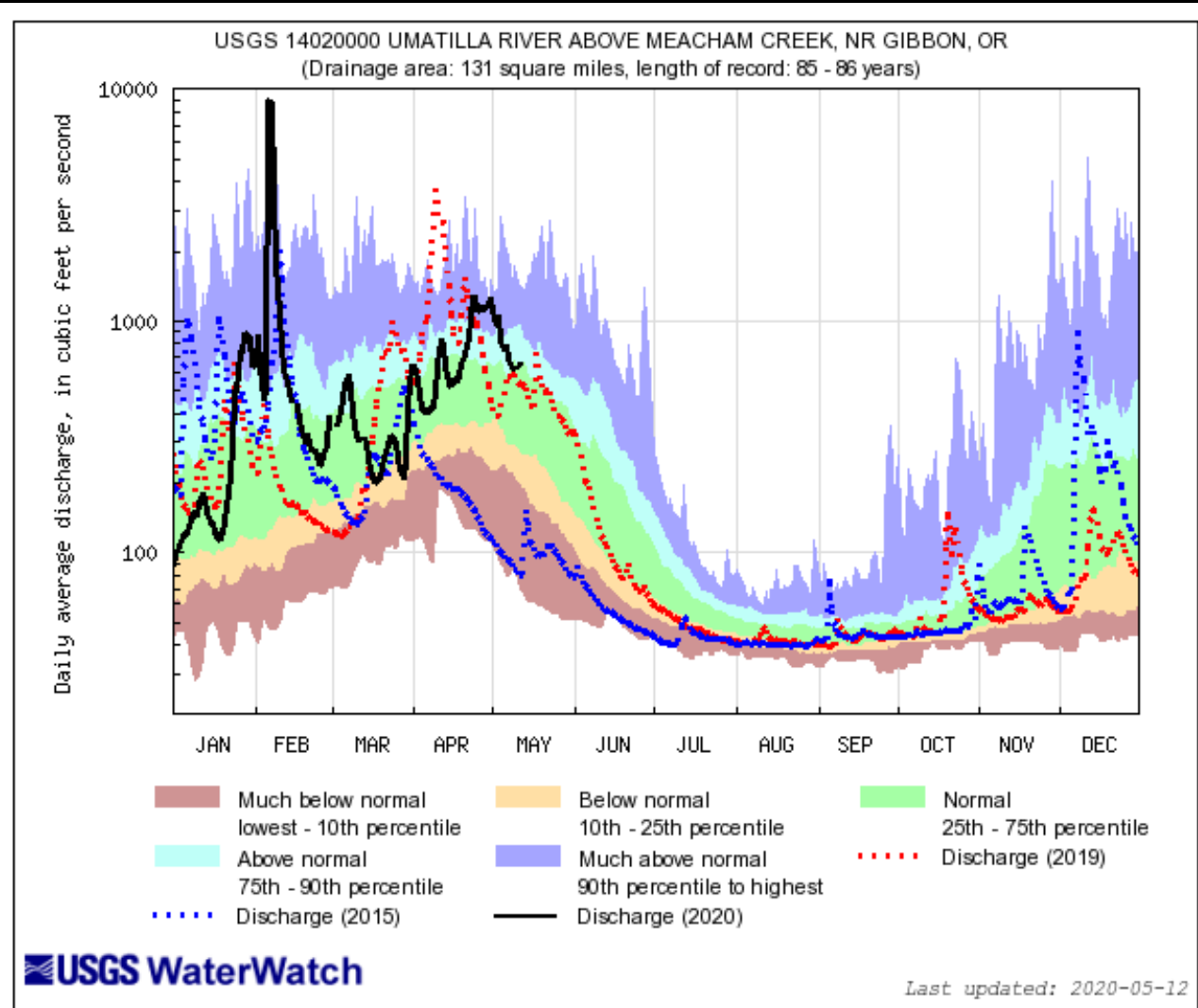
13181000 Owyhee R nr Rome



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



14020000 Umatilla R abv Meacham Cr



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	



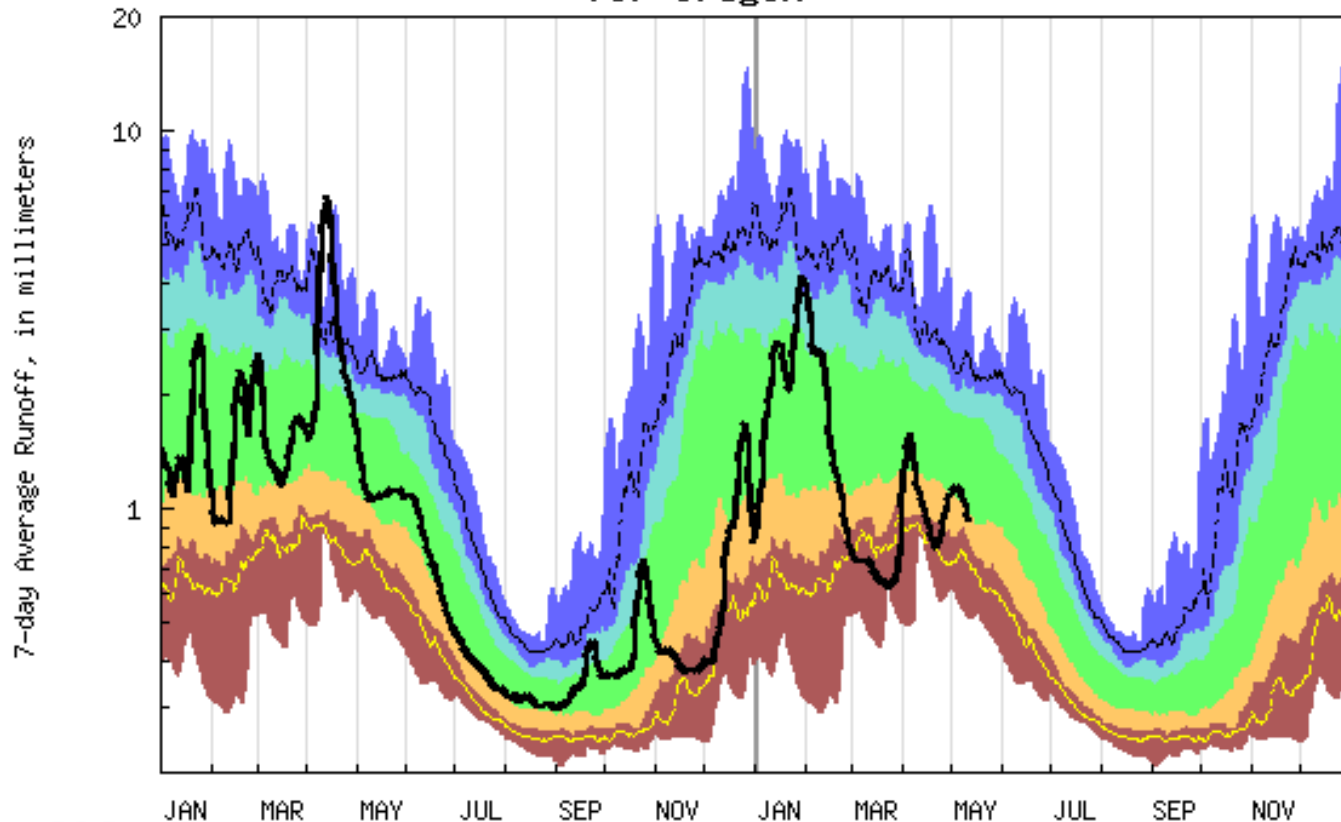
US GEOLOGICAL SURVEY, OREGON WATER SCIENCE CENTER
WATER AVAILABILITY REPORT FOR APRIL 2020

Station	NRCS SWSI Basin	Monthly mean discharge		Change in dis- charge from previous month	Accumulated Runoff For the Period Oct. to Apr.
		Cubic feet per second	Percent of average	(percent)	Percent of average
Donner Und Blitzen nr Frenchglen	Harney	158	70	147	69
(*)Deep Creek above Adel	Lake County	267	72	178	58
(*)Chewaucan River near Paisley	Lake County	281	78	231	63
Williamson River near Chiloquin	Klamath	732	40	14	55
Owyhee River near Rome	Owyhee	943	35	-16	47
(*)NF Malheur River near Beulah	Malheur	241	65	85	68
Grande Ronde R at Troy	Grande Ronde Powder/Burnt	5,556	91	59	93
Umatilla River nr Gibbon	Umatilla Lower John Day	749	139	128	137
John Day River at Service Crk	Upper John Day	4,231	80	84	66
(*)Little Deschutes River nr LaPine	Upper Deschutes	133	49	43	56
Hood River nr Hood River	Lower Deschutes Mt.Hood	869	70	39	72
Willamette River at Salem	Willamette	15,886	67	36	63
Wilson River near Tillamook	North Coast	722	61	-9	92
Umpqua River near Elkton	Rogue/Umpqua	6,874	74	82	60
Rogue River near Agness	Rogue/Umpqua	2,708	42	11	49
SF Coquille River at Powers	South Coast	459	50	59	55
Chetco River near Brookings	South Coast	1,870	74	136	58

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



Duration hydrograph of 7-day average runoff for Oregon











USGS WaterWatch

2019

2020

Last updated: 2020-05-12

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	

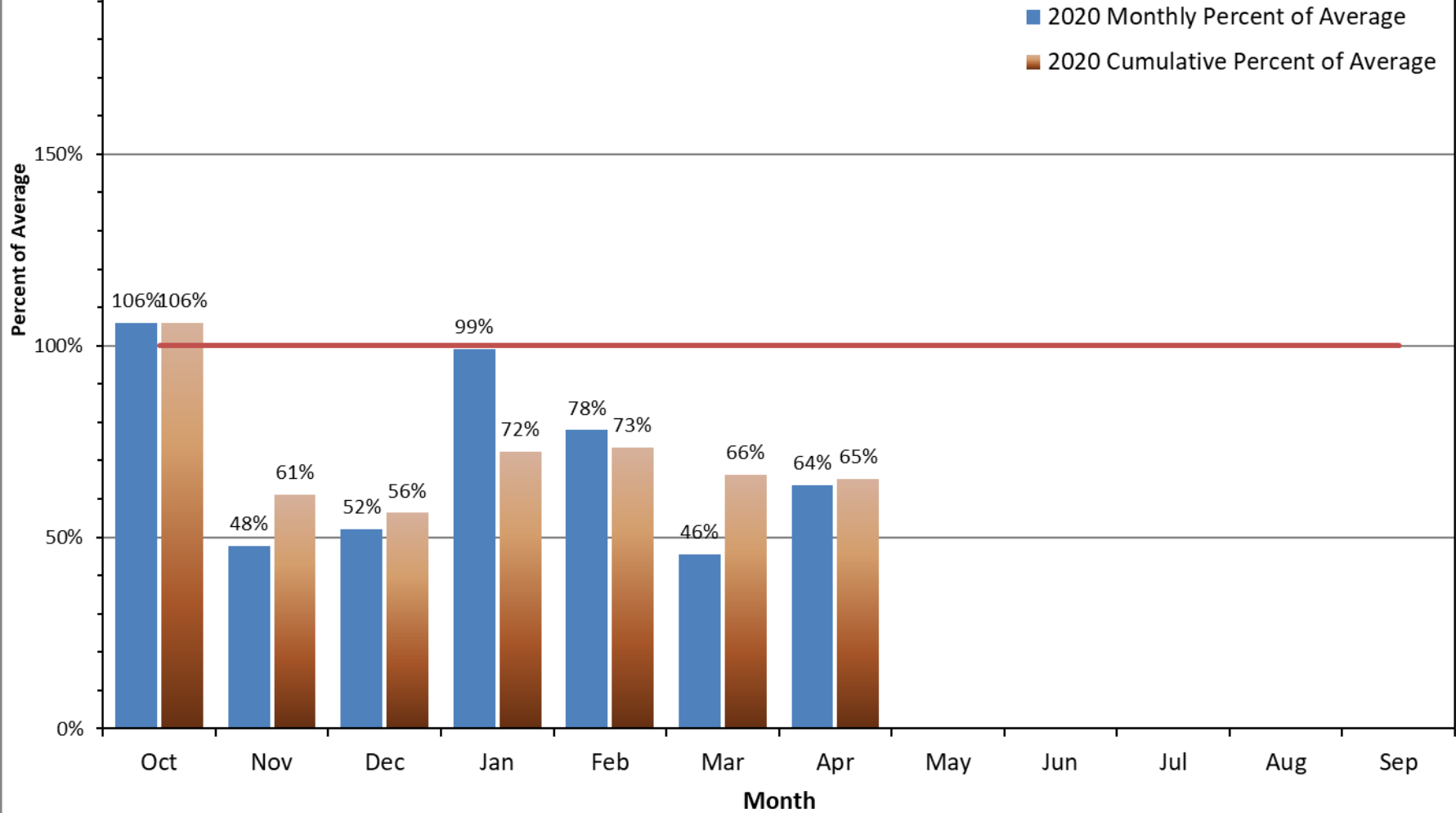
Water Supply Conditions Report

Water Supply Availability Committee



Ken Stahr
Oregon Water Resources
Department
May 13, 2020

2020 Statewide Percent of Average Stream Flow

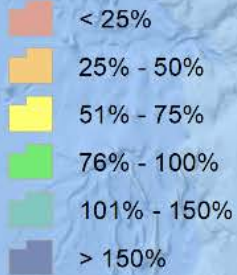




Basin	Water Year % of average thru April	% of average for April	% of average for 05/11/2020	# of data points
West Side	69%	67%	55%	45
East Side	63%	62%	63%	48
State	65%	64%	60%	93

Percent of Average Streamflow March, 2020

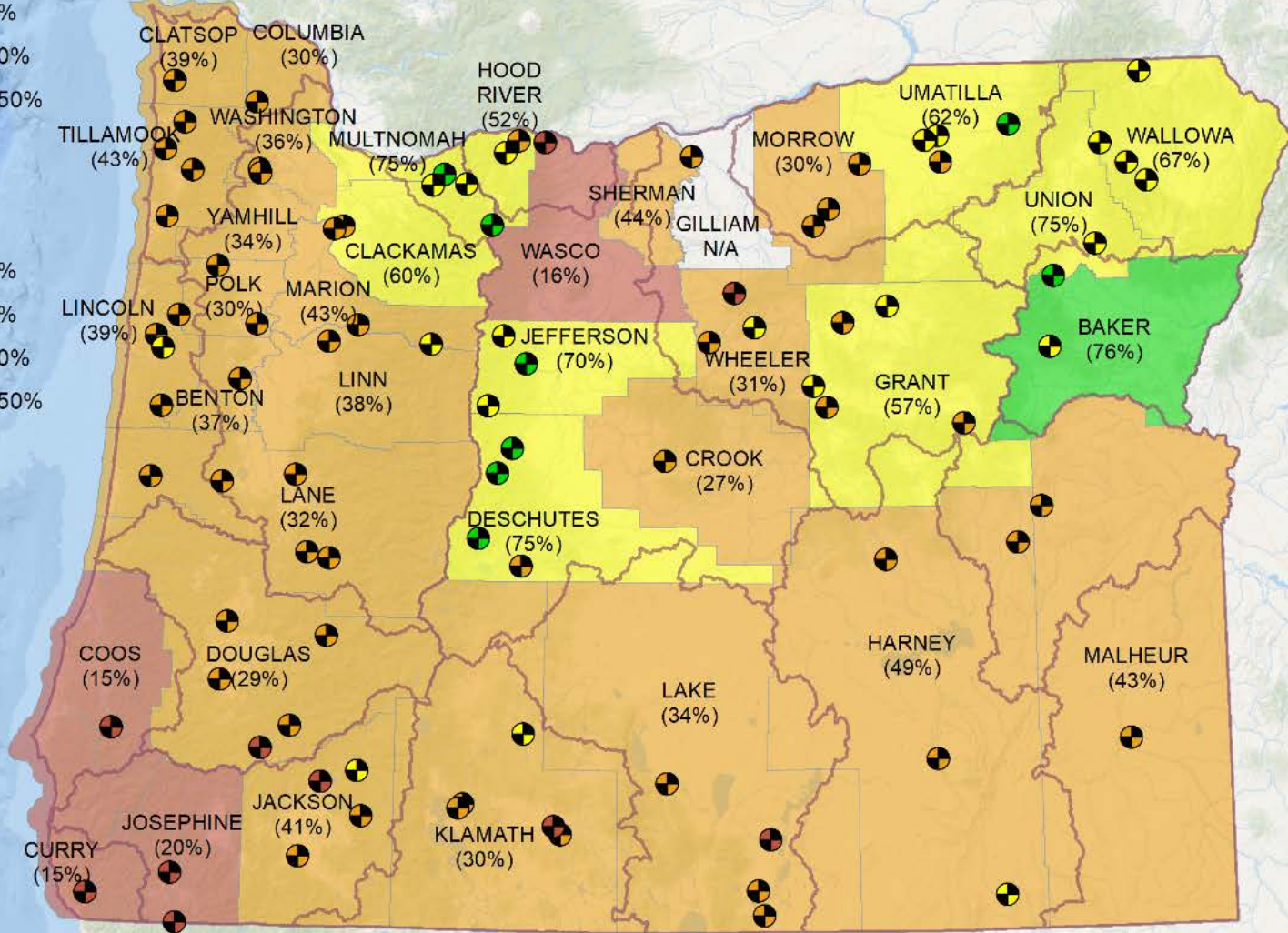
County



Stream Gage



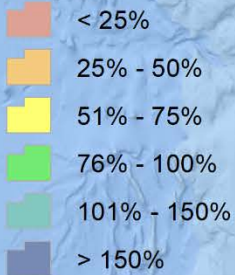
WRD Basin



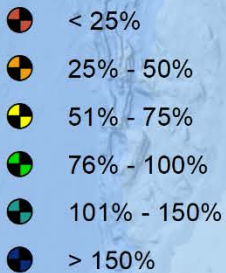
Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.

Percent of Average Streamflow April, 2020

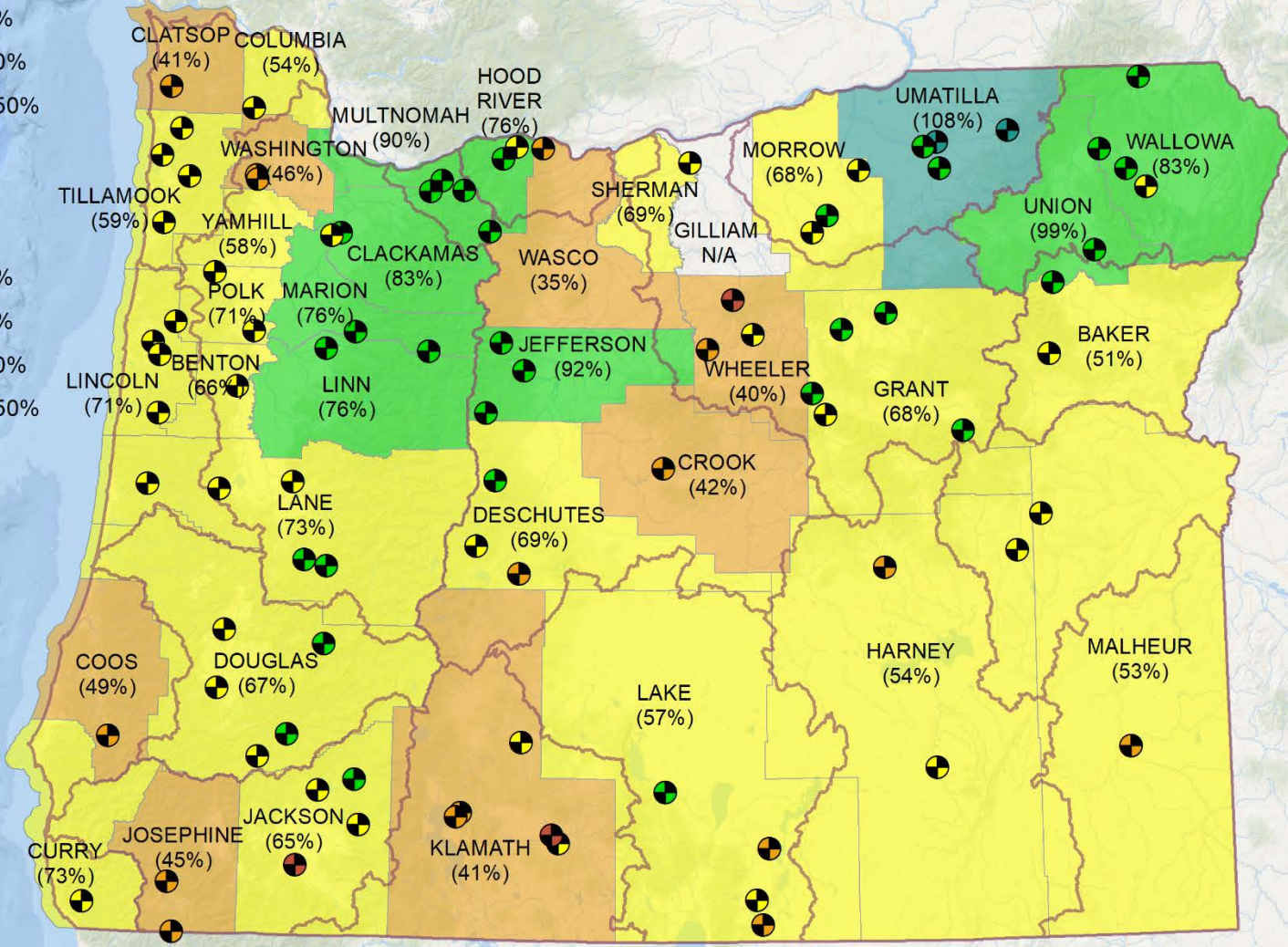
County



Stream Gage

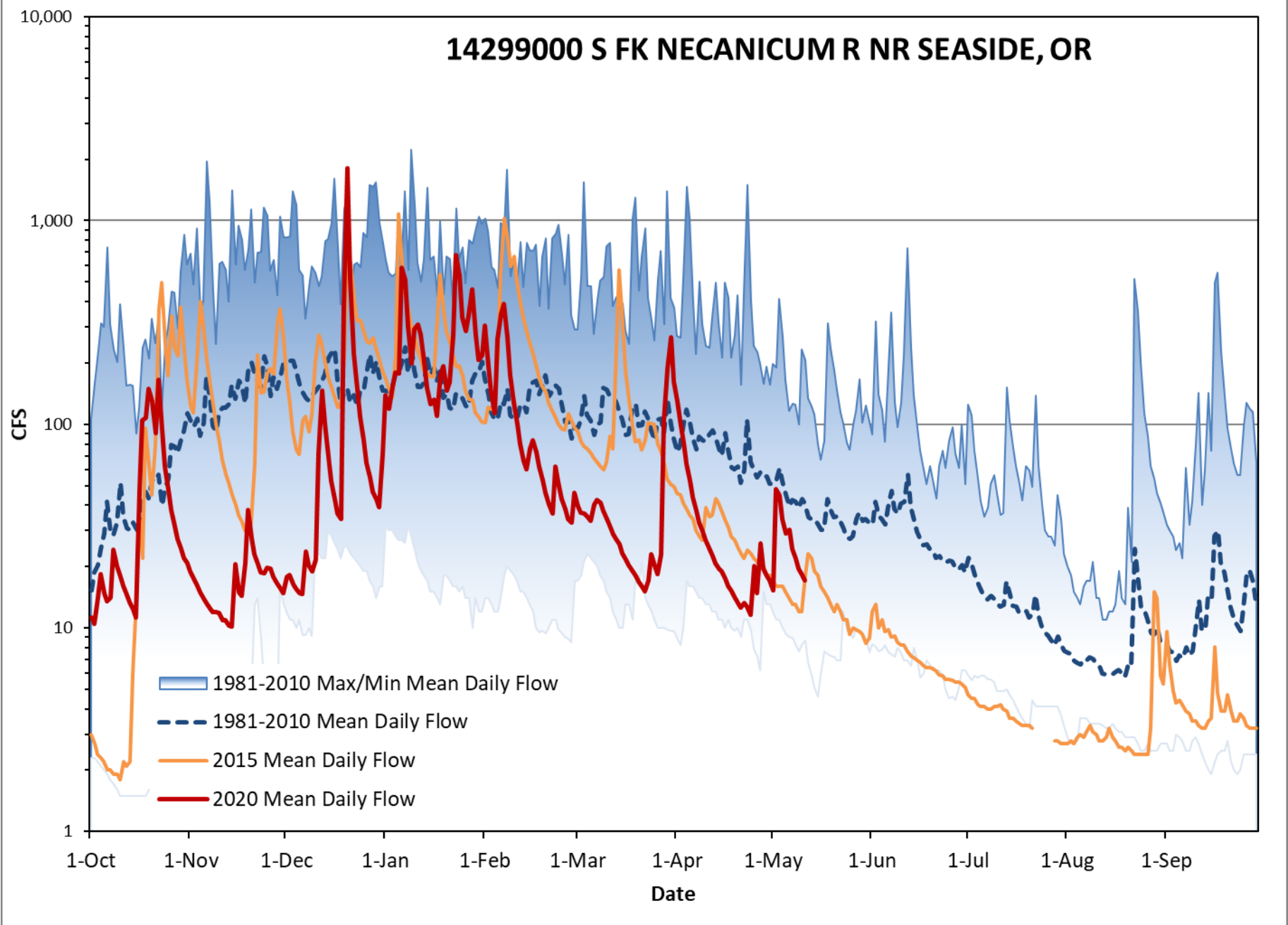


WRD Basin

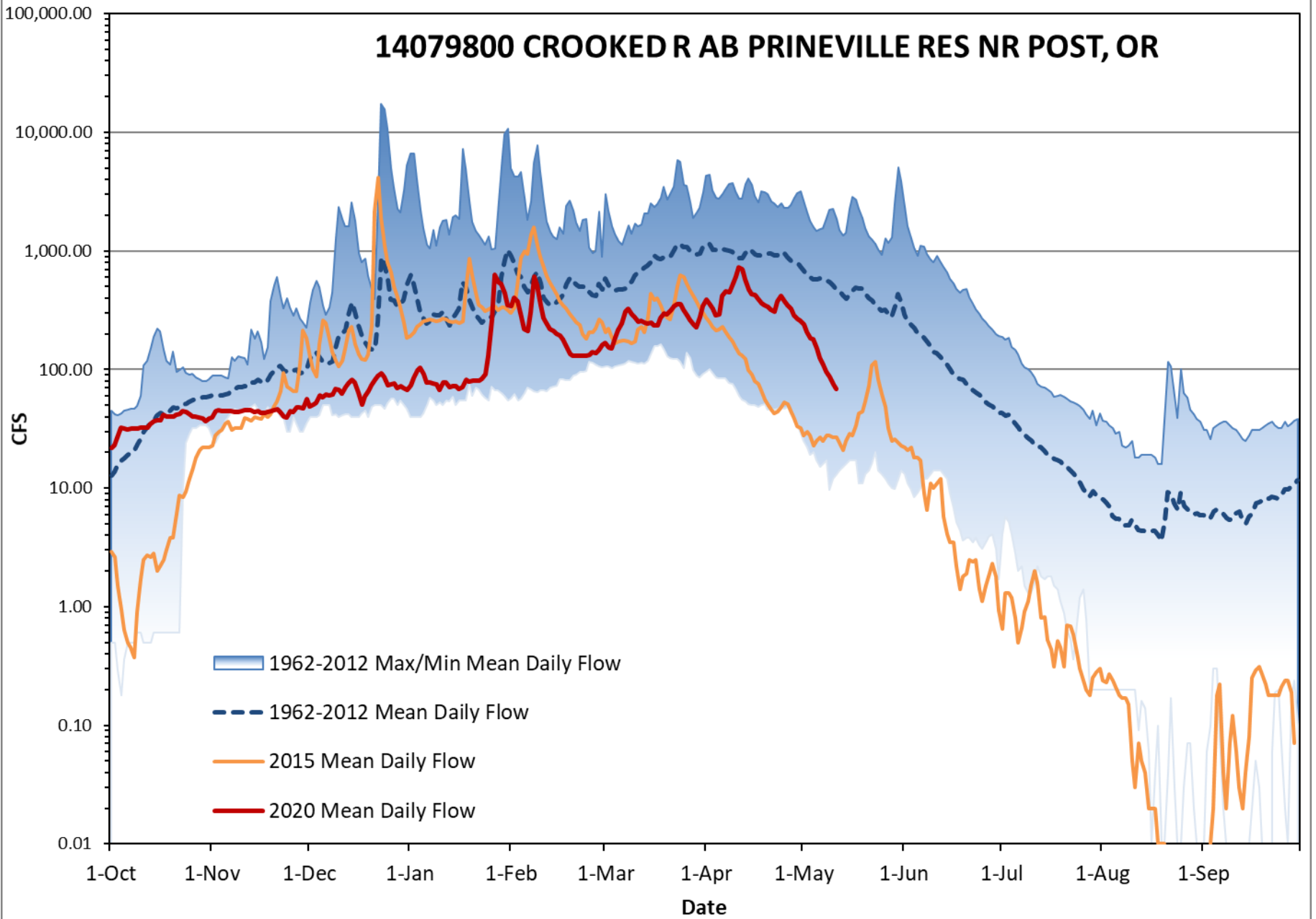


Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.

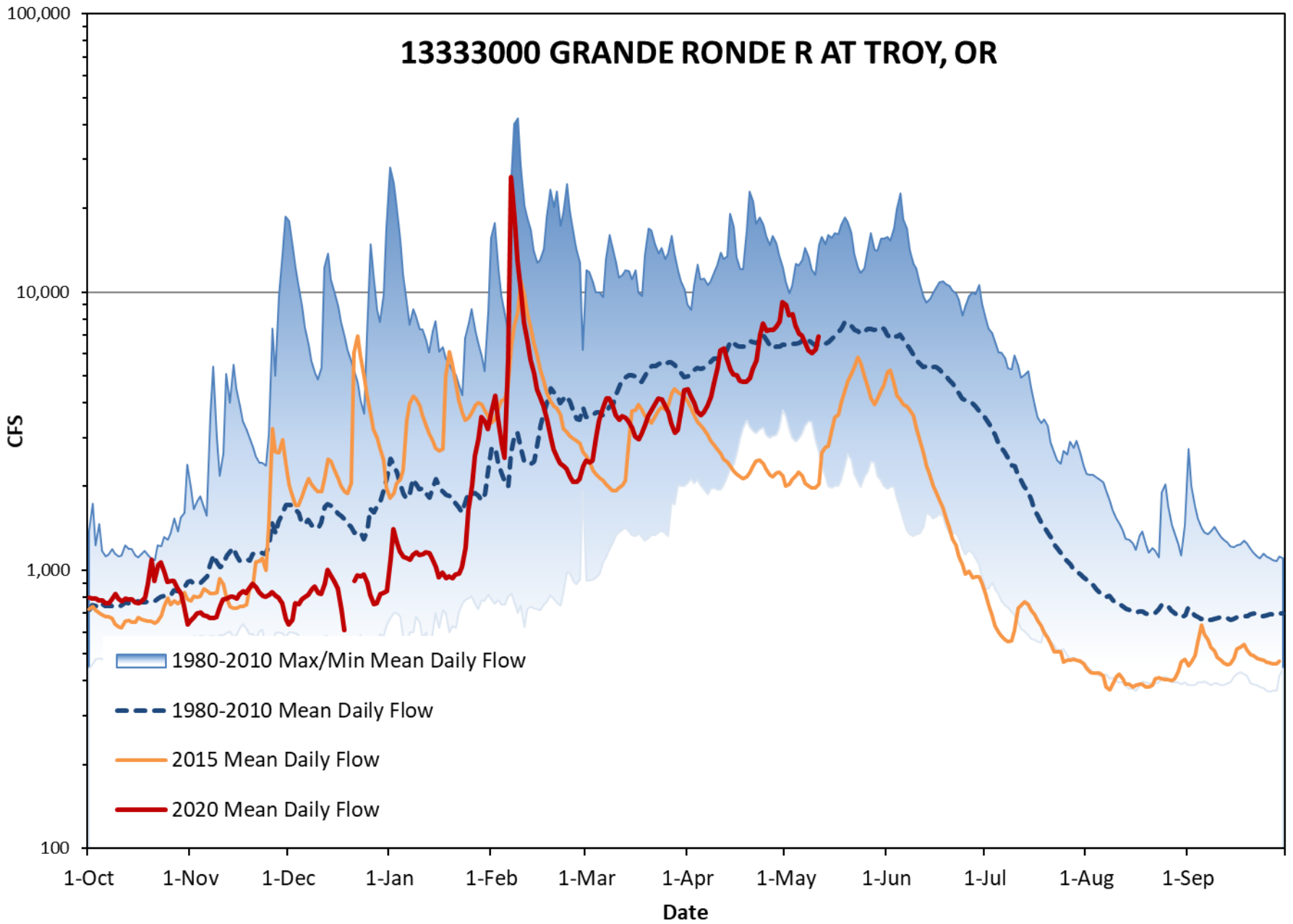
14299000 S FK NECANICUM R NR SEASIDE, OR



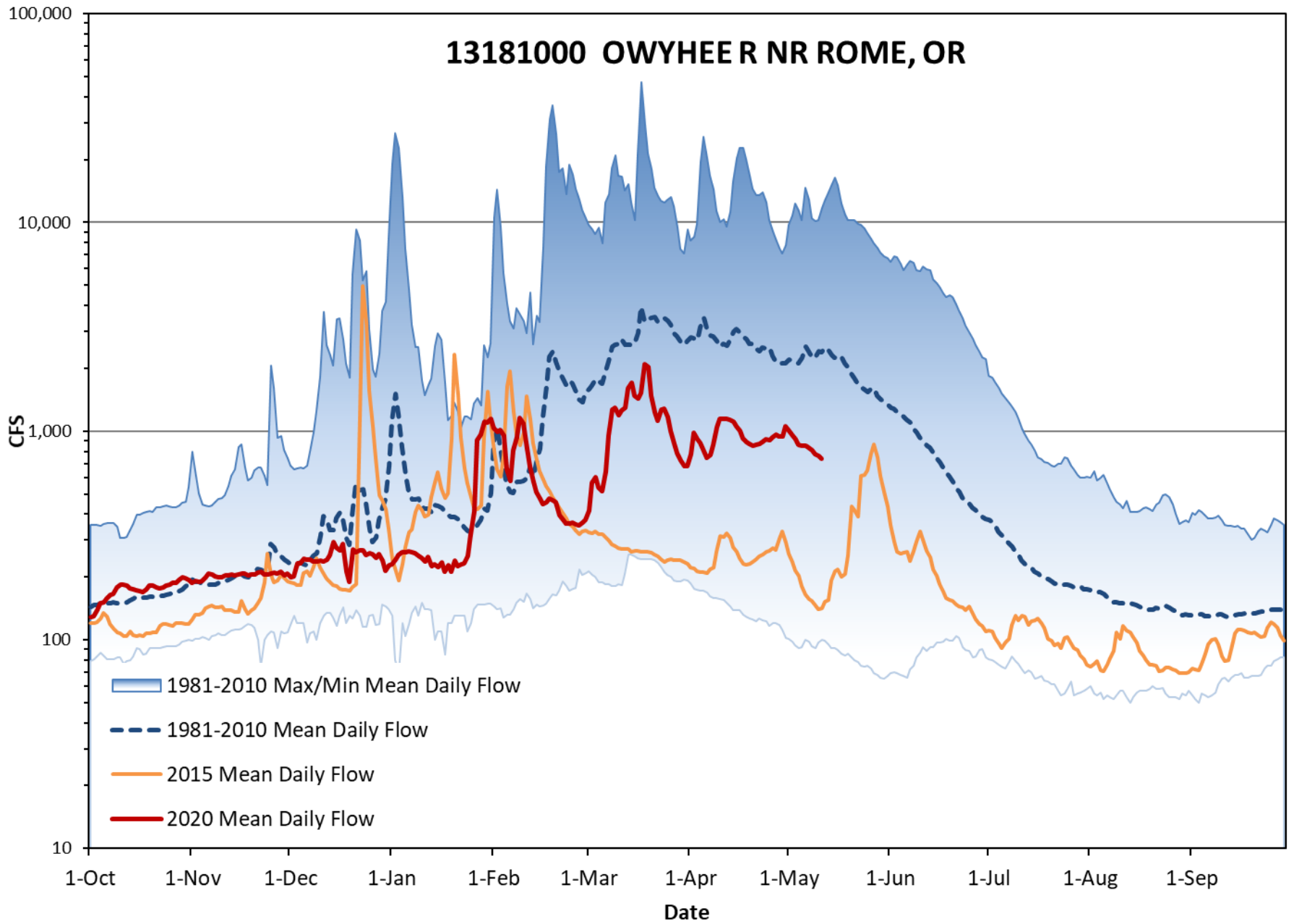
14079800 CROOKED R AB PRINEVILLE RES NR POST, OR



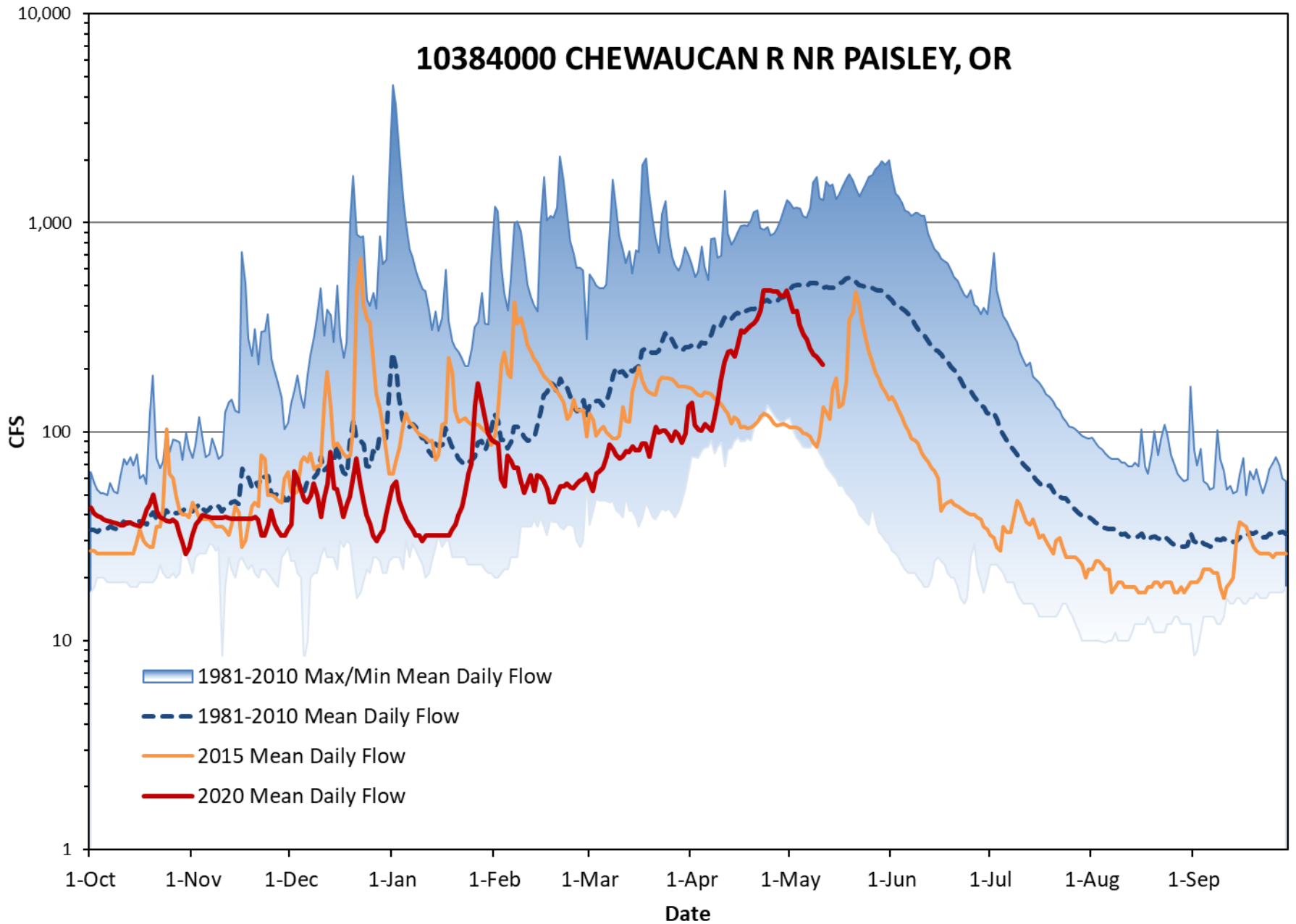
13333000 GRANDE RONDE R AT TROY, OR



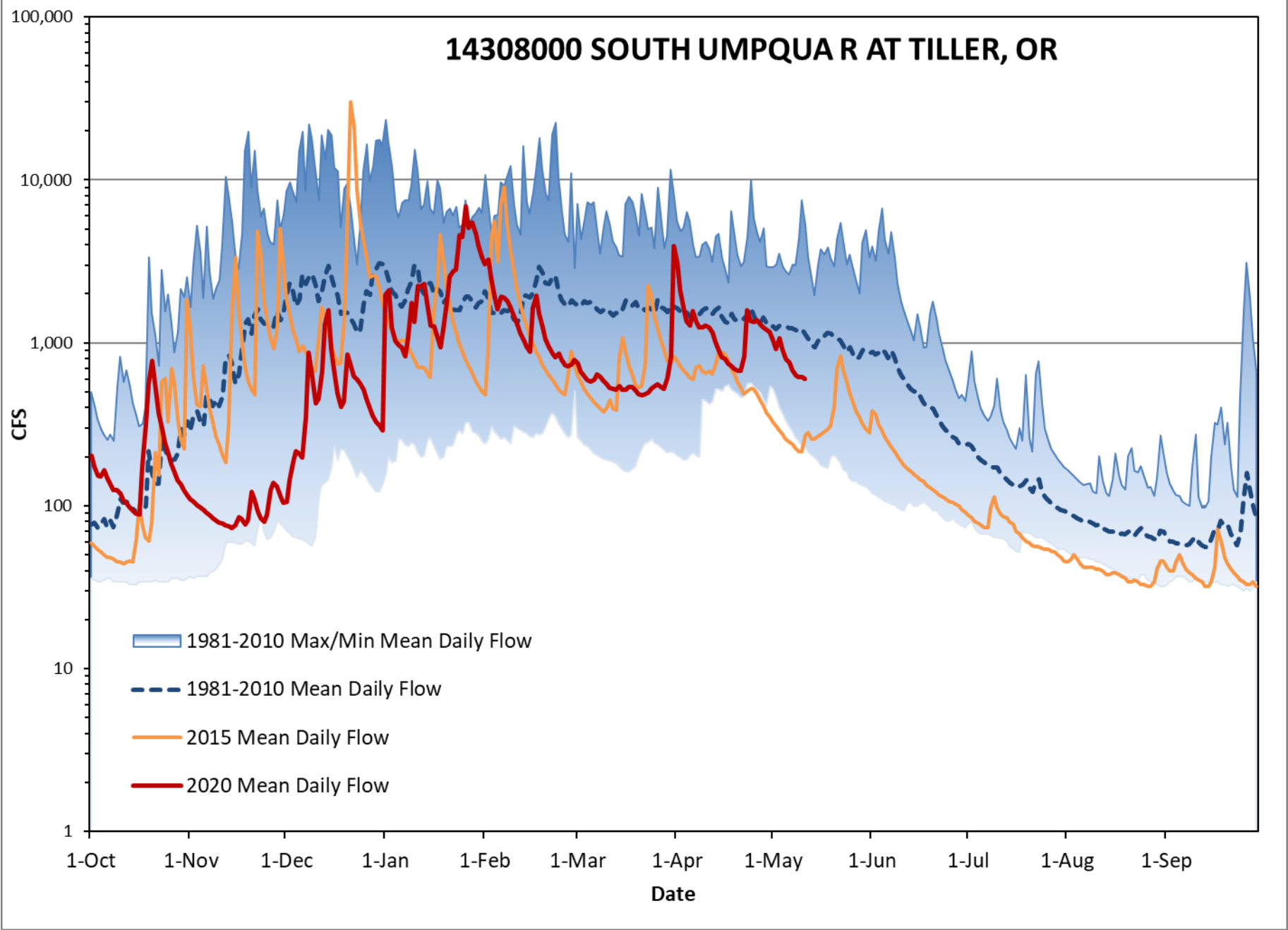
13181000 OWYHEE R NR ROME, OR



10384000 CHEWAUCAN R NR PAISLEY, OR



14308000 SOUTH UMPQUA R AT TILLER, OR



OREGON



WATER RESOURCES
DEPARTMENT

Thank you

RECLAMATION

Managing Water in the West

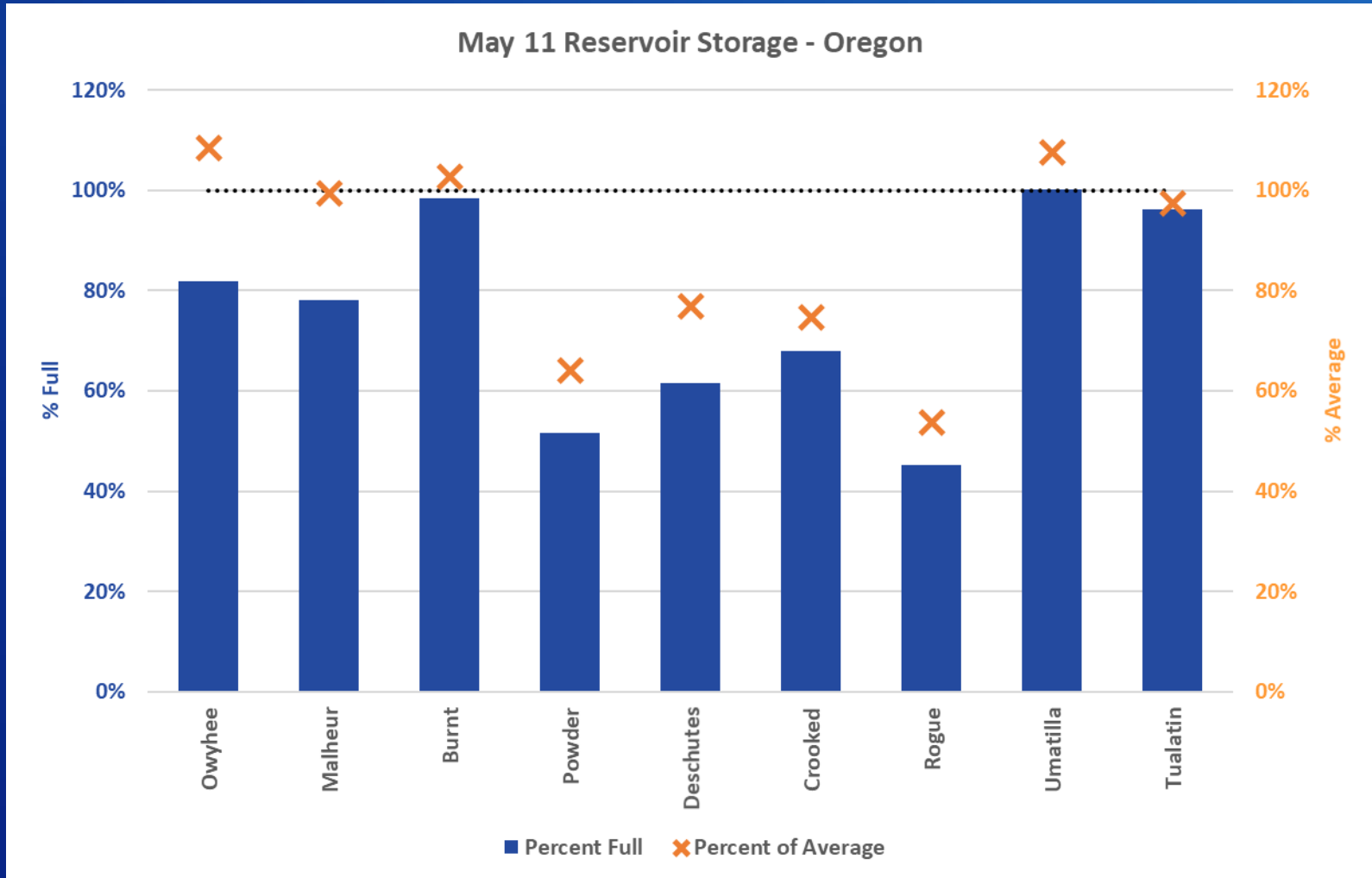
Oregon Water Supply Availability Committee Meeting

Pacific Northwest Regional Office
River and Reservoir Operations
May 12, 2020



U.S. Department of the Interior
Bureau of Reclamation

Current Storage Conditions

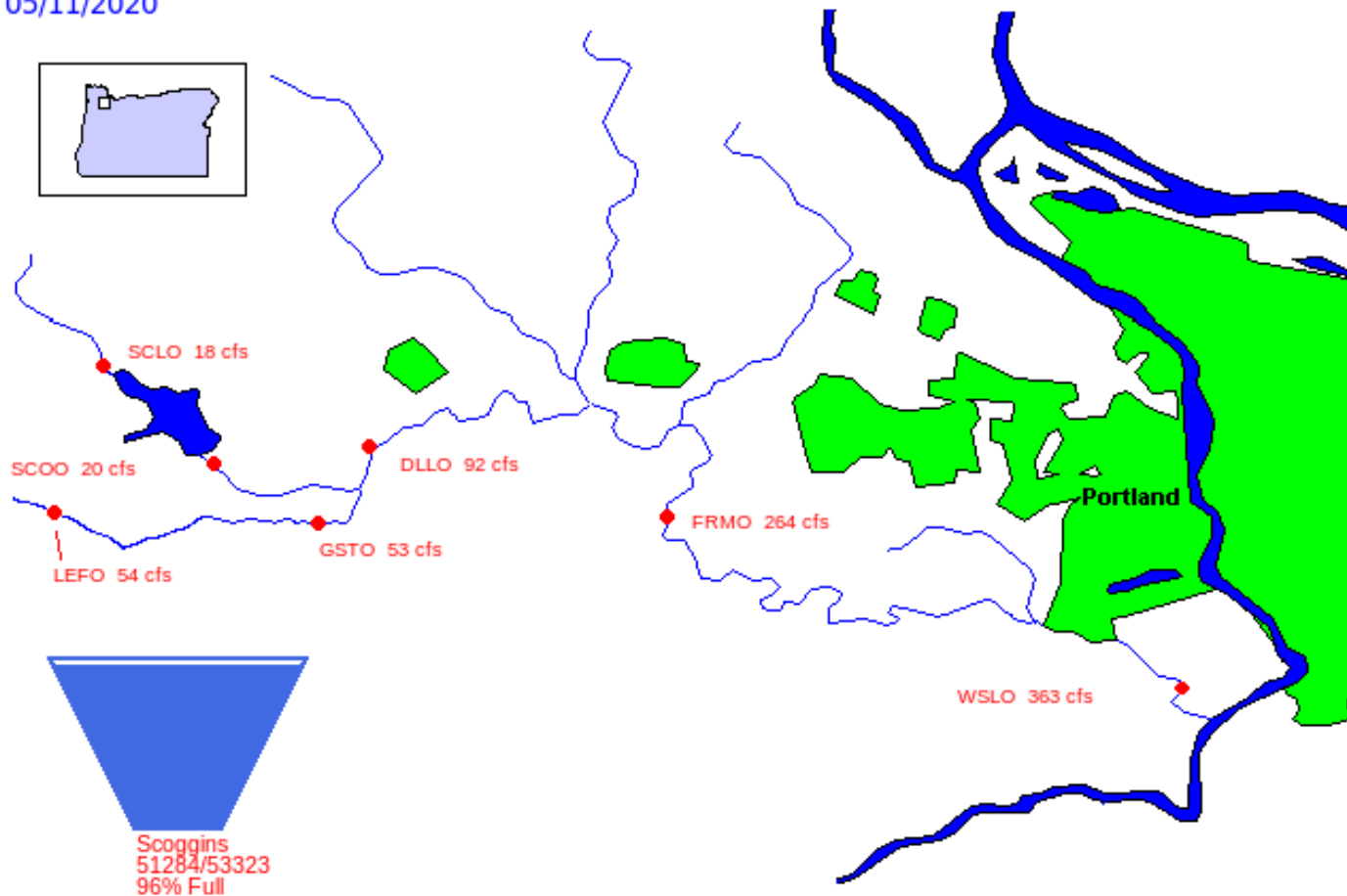
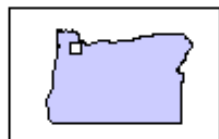


Current Conditions by Reservoir

RECLAMATION

Tualatin River Basin

05/11/2020

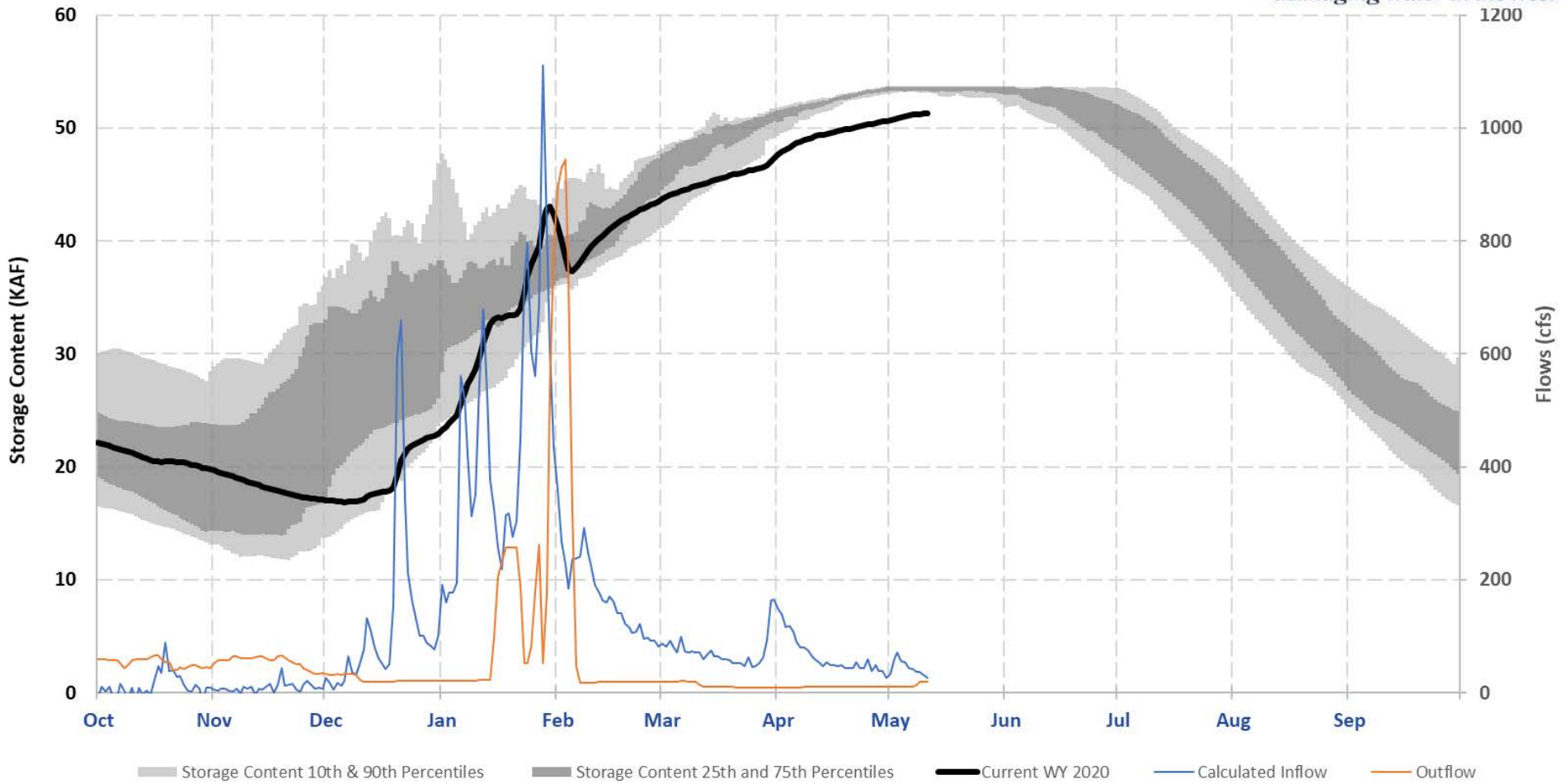


RECLAMATION

Tualatin River Basin: Scoggins

RECLAMATION
Managing Water in the West

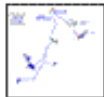
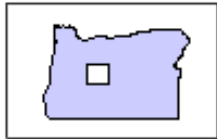
Scoggins Dam - Henry Hagg Lake



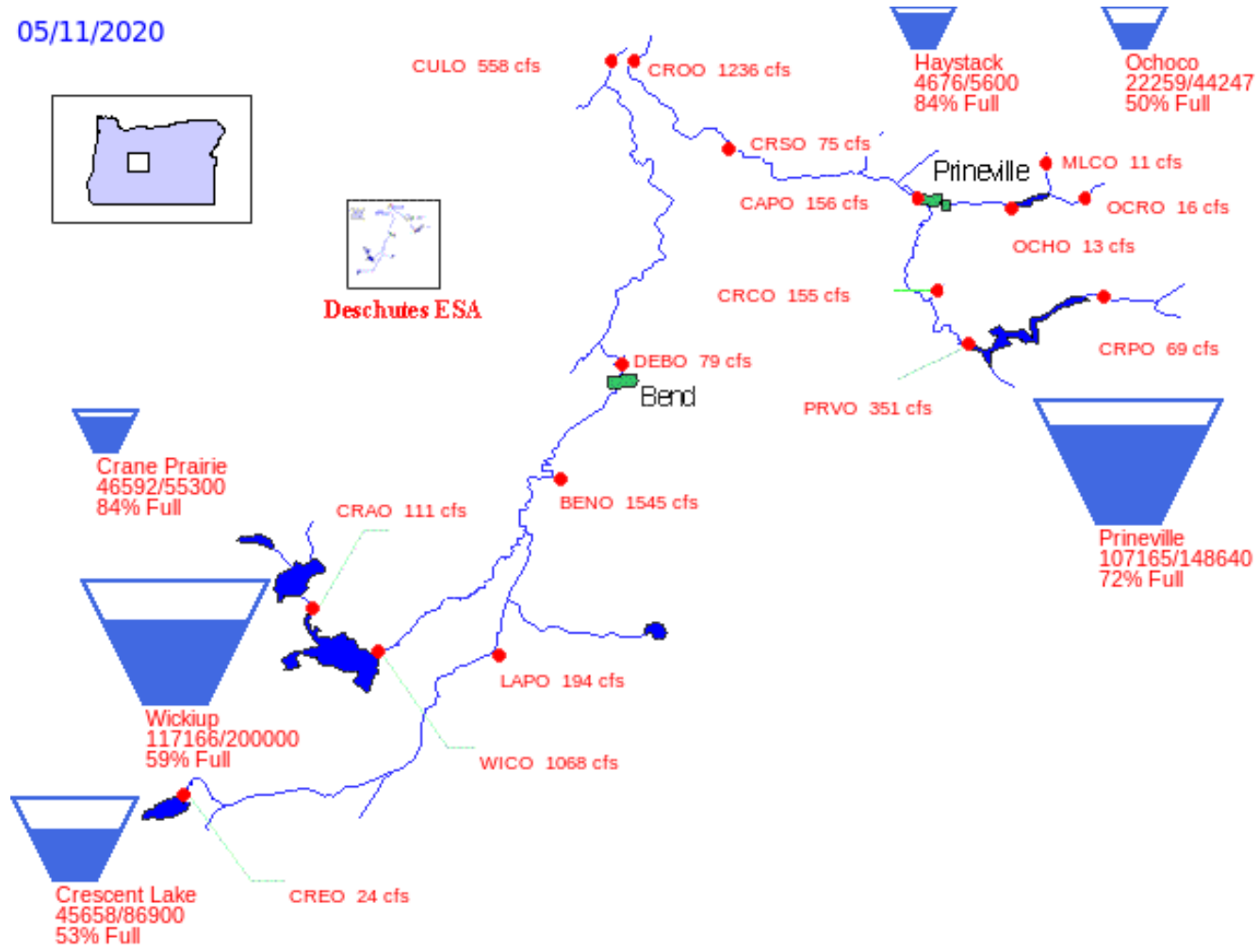
RECLAMATION

Deschutes River Basin

05/11/2020



Deschutes ESA

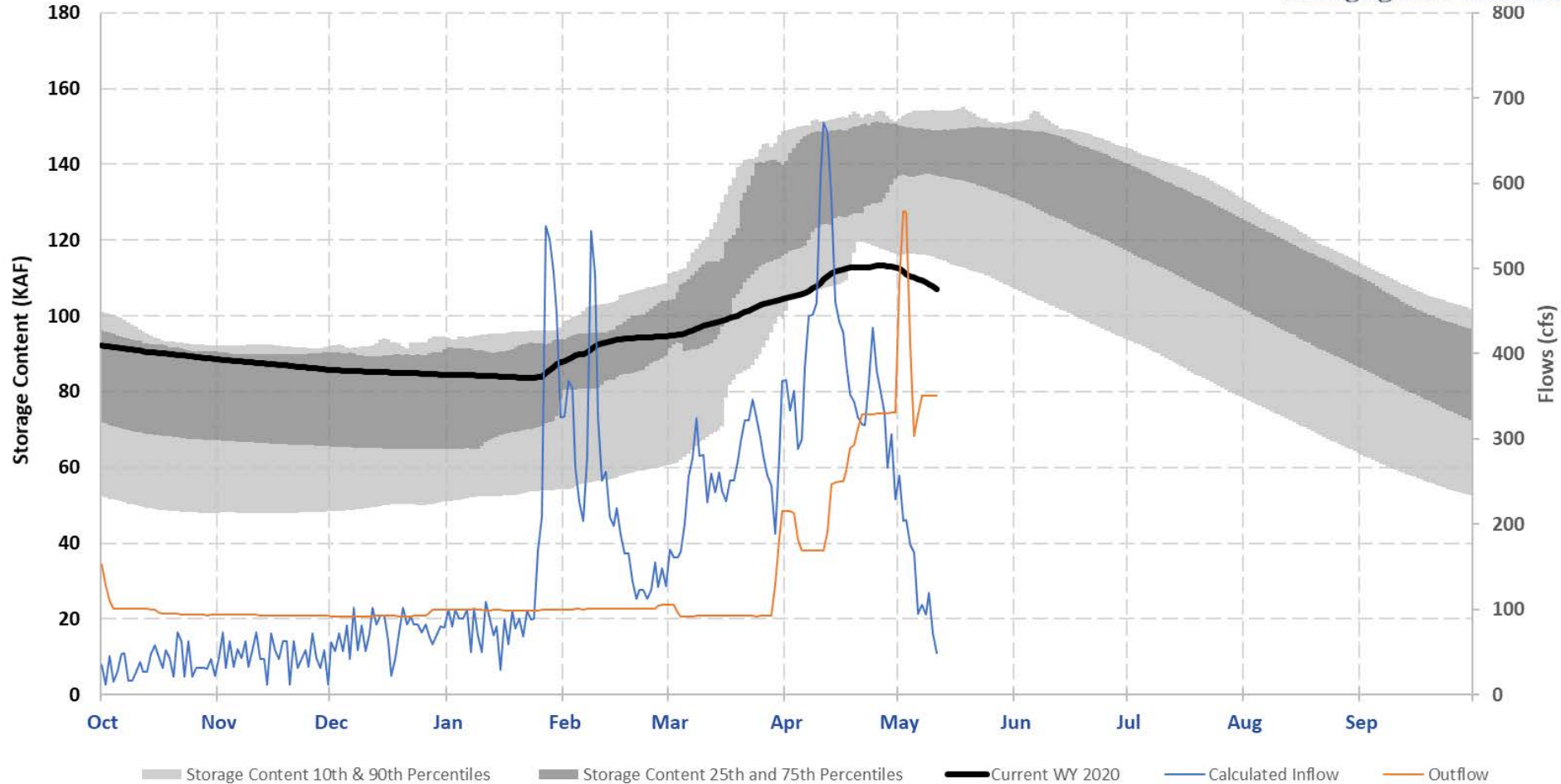


RECLAMATION

Deschutes River Basin: Prineville

RECLAMATION
Managing Water in the West

Bowman Dam - Prineville Reservoir

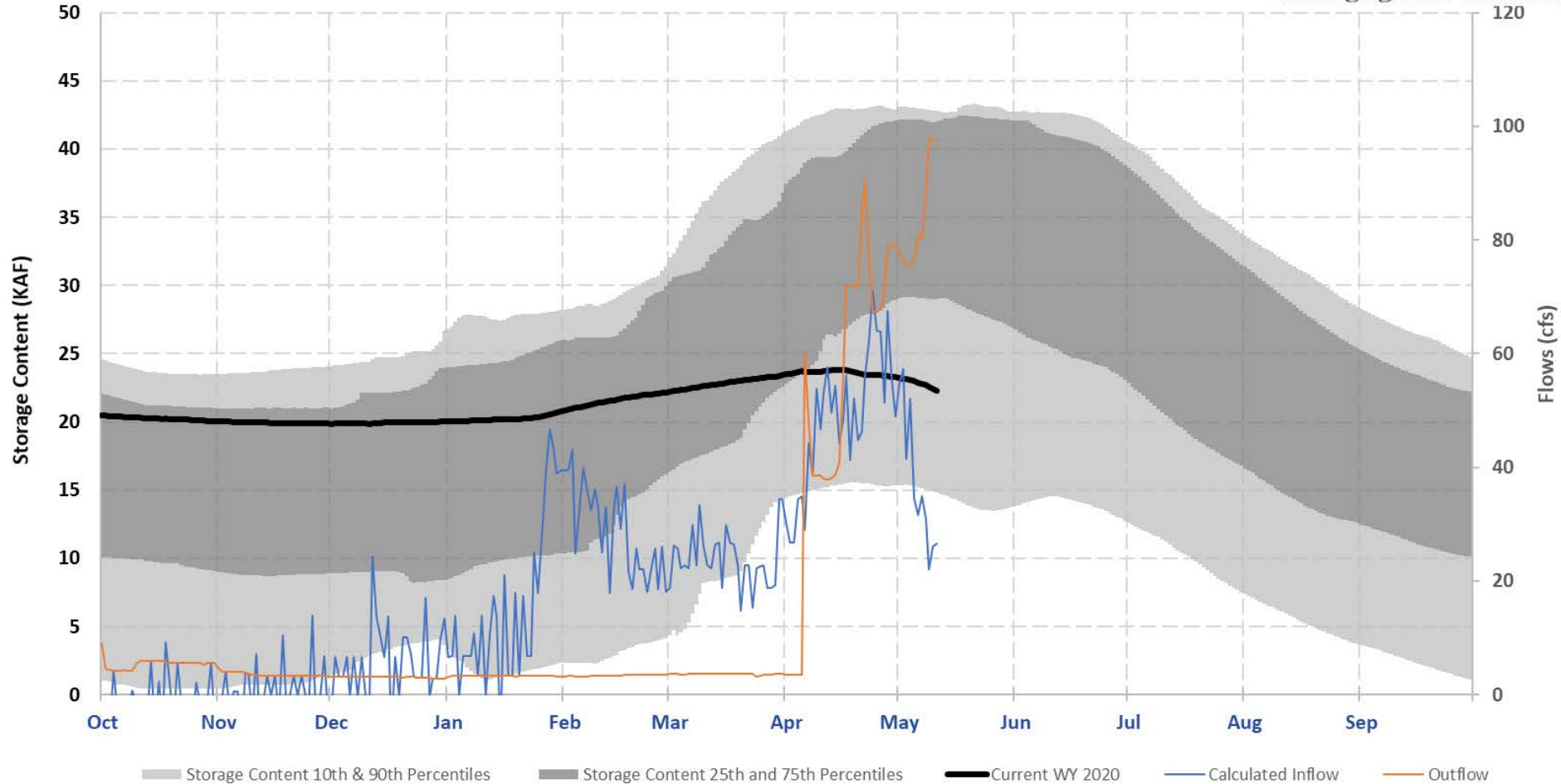


RECLAMATION

Deschutes River Basin: Ochocho

RECLAMATION
Managing Water in the West

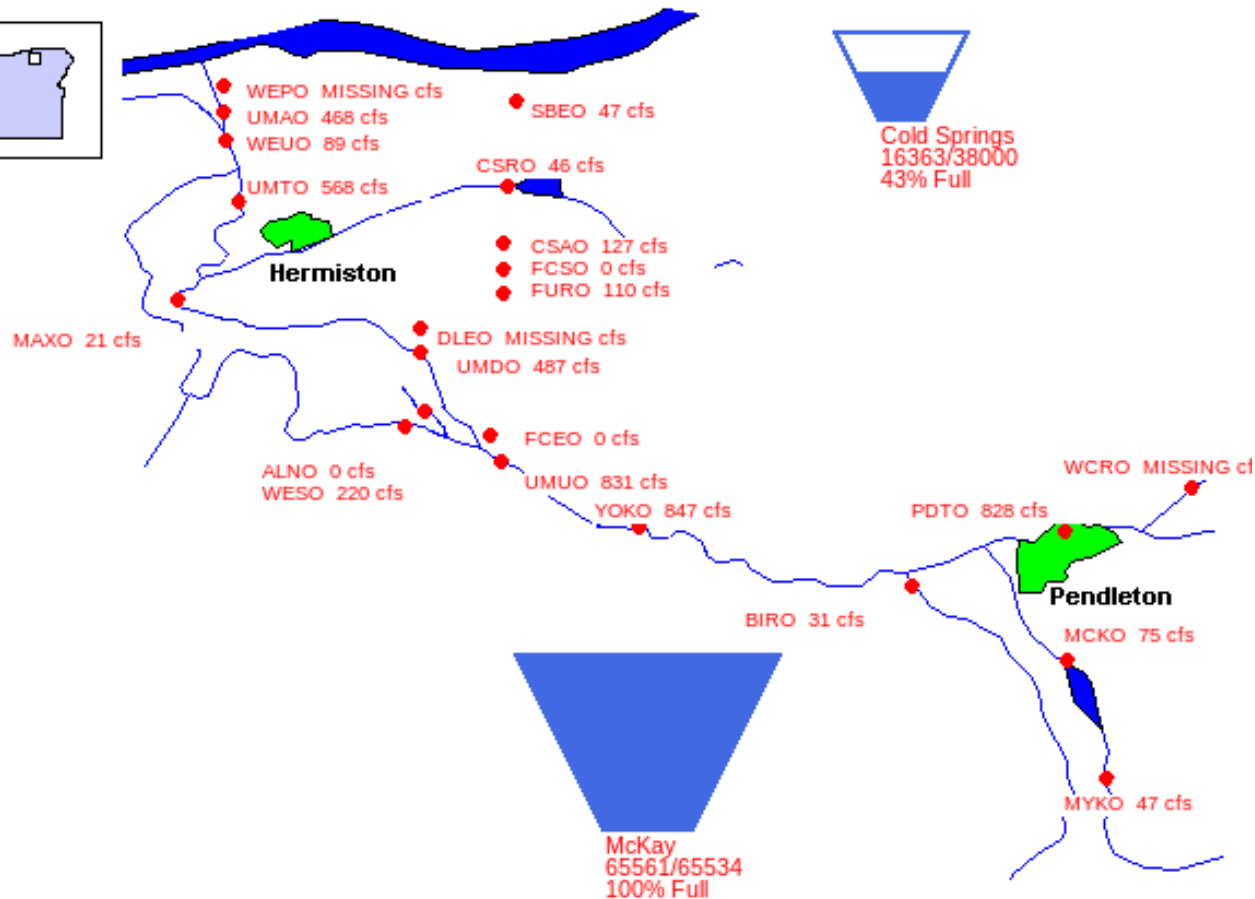
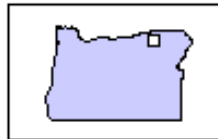
Ochocho Dam and Reservoir



RECLAMATION

Umatilla River Basin

05/11/2020

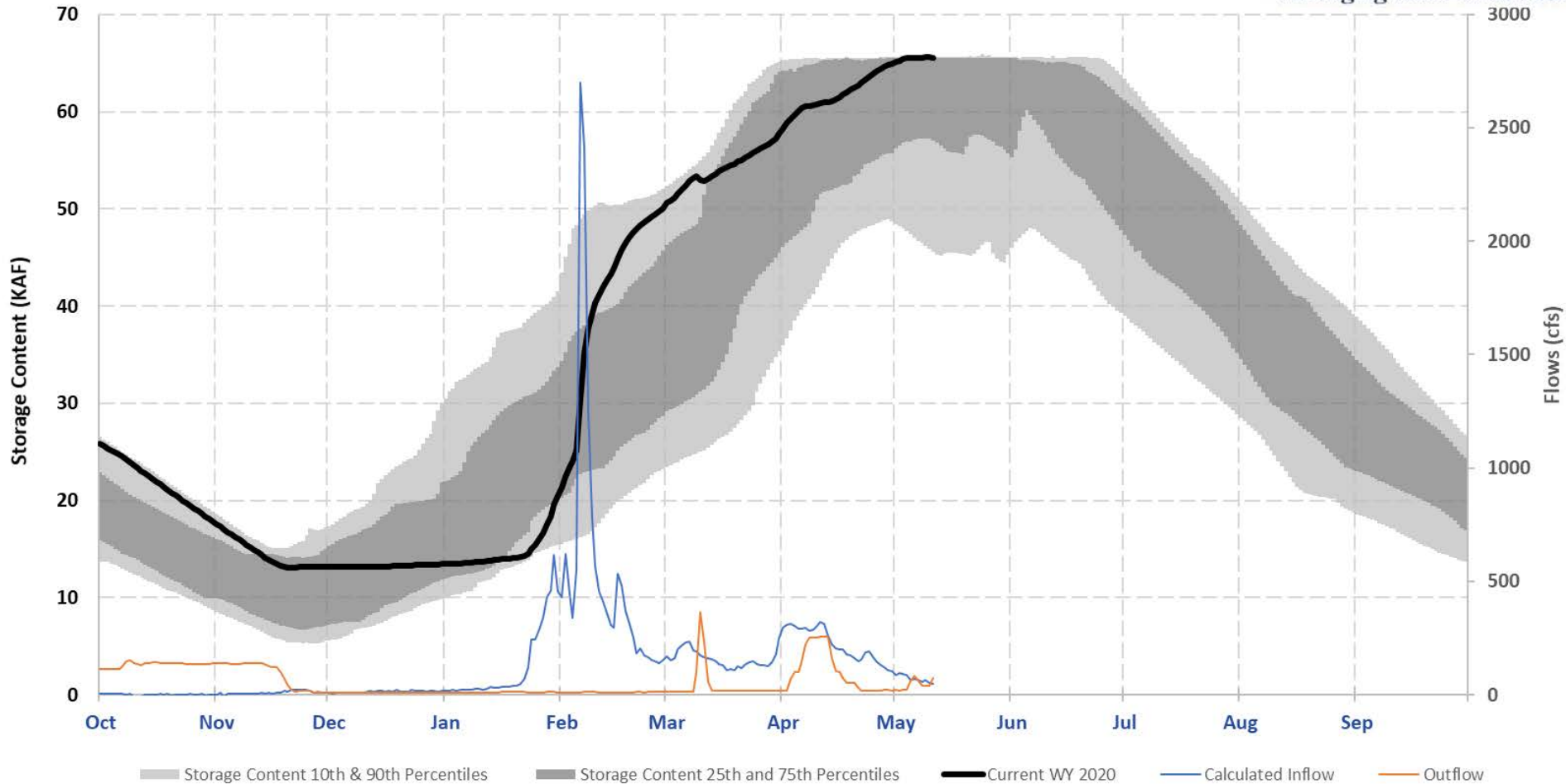


RECLAMATION

Umatilla River Basin: McKay

RECLAMATION
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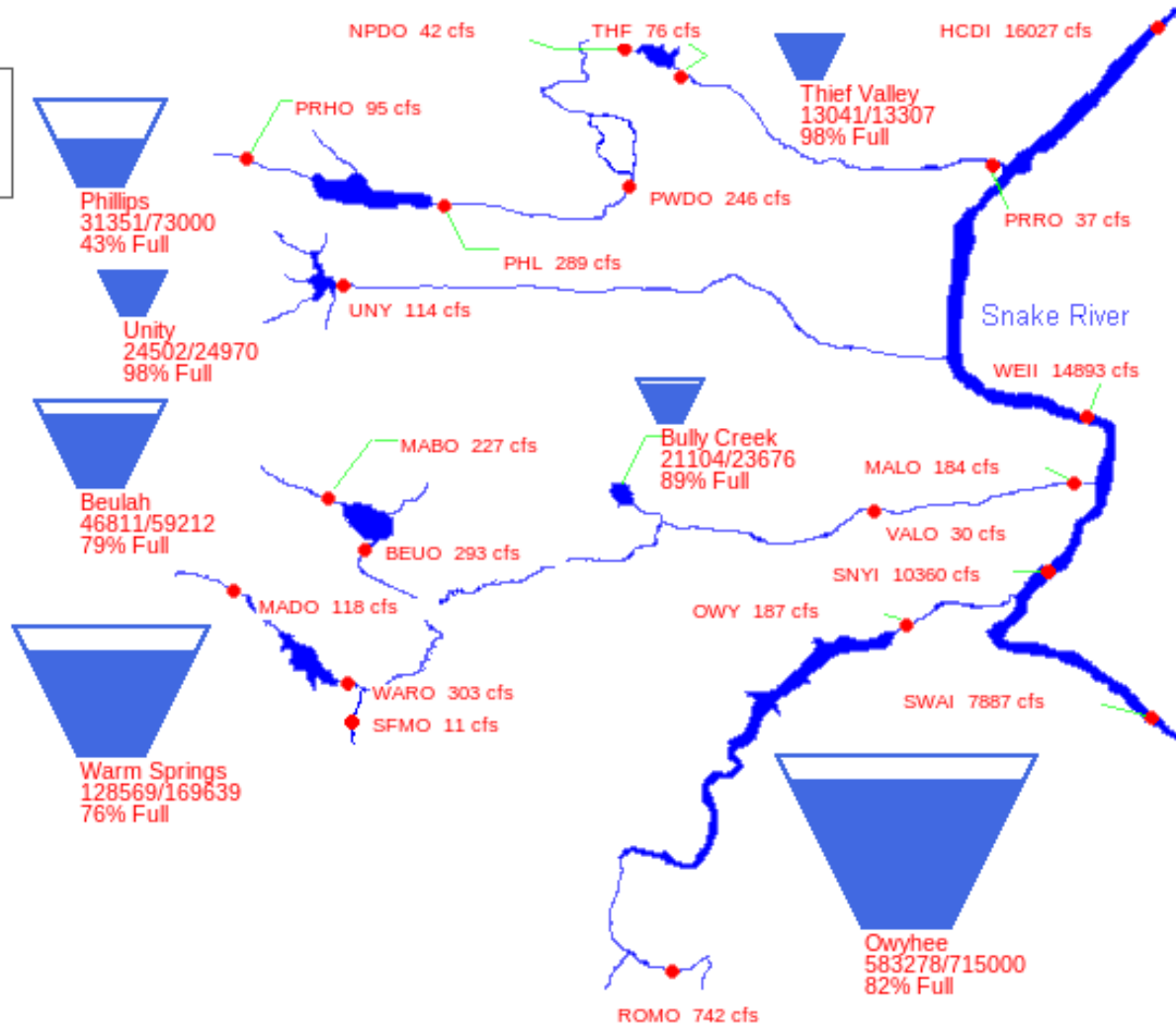
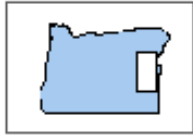
McKay Dam and Reservoir



RECLAMATION

Southeastern Oregon

05/11/2020

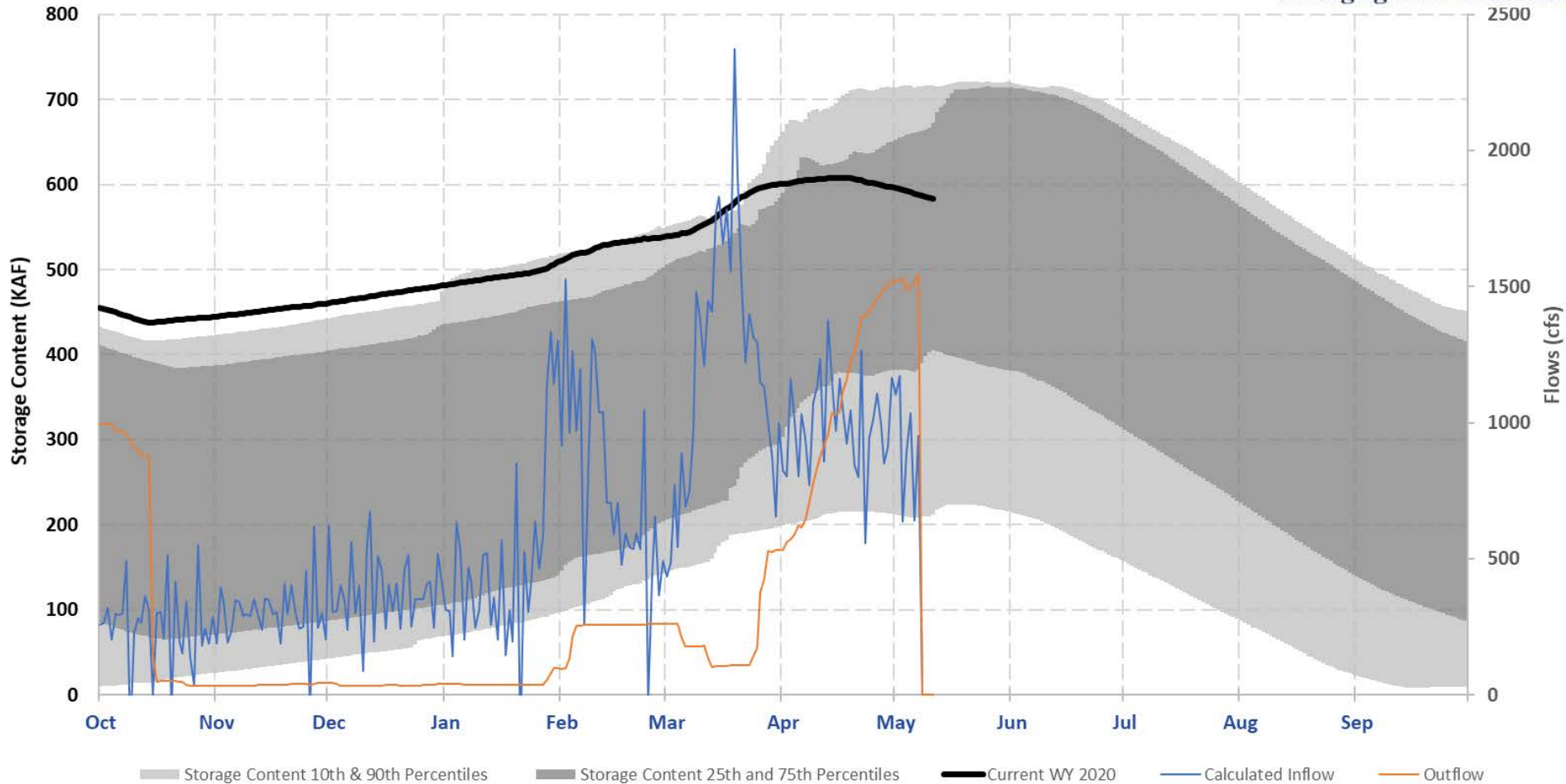


RECLAMATION

Owyhee River Basin: Owyhee

RECLAMATION
Managing Water in the West

Owyhee Dam and Reservoir

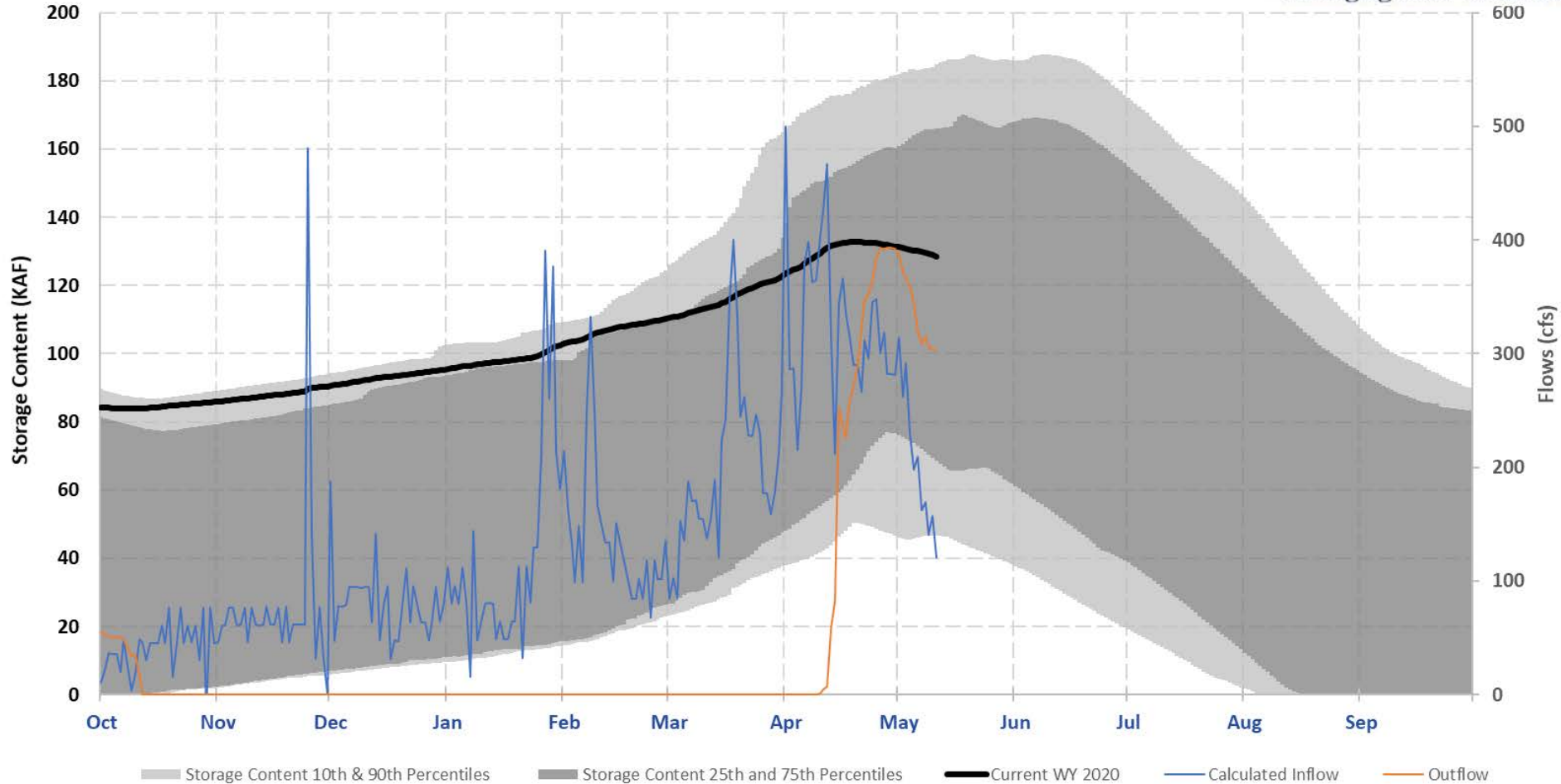


RECLAMATION

Malheur River Basin: Warm Springs

Warm Springs Dam and Reservoir

RECLAMATION
Managing Water in the West

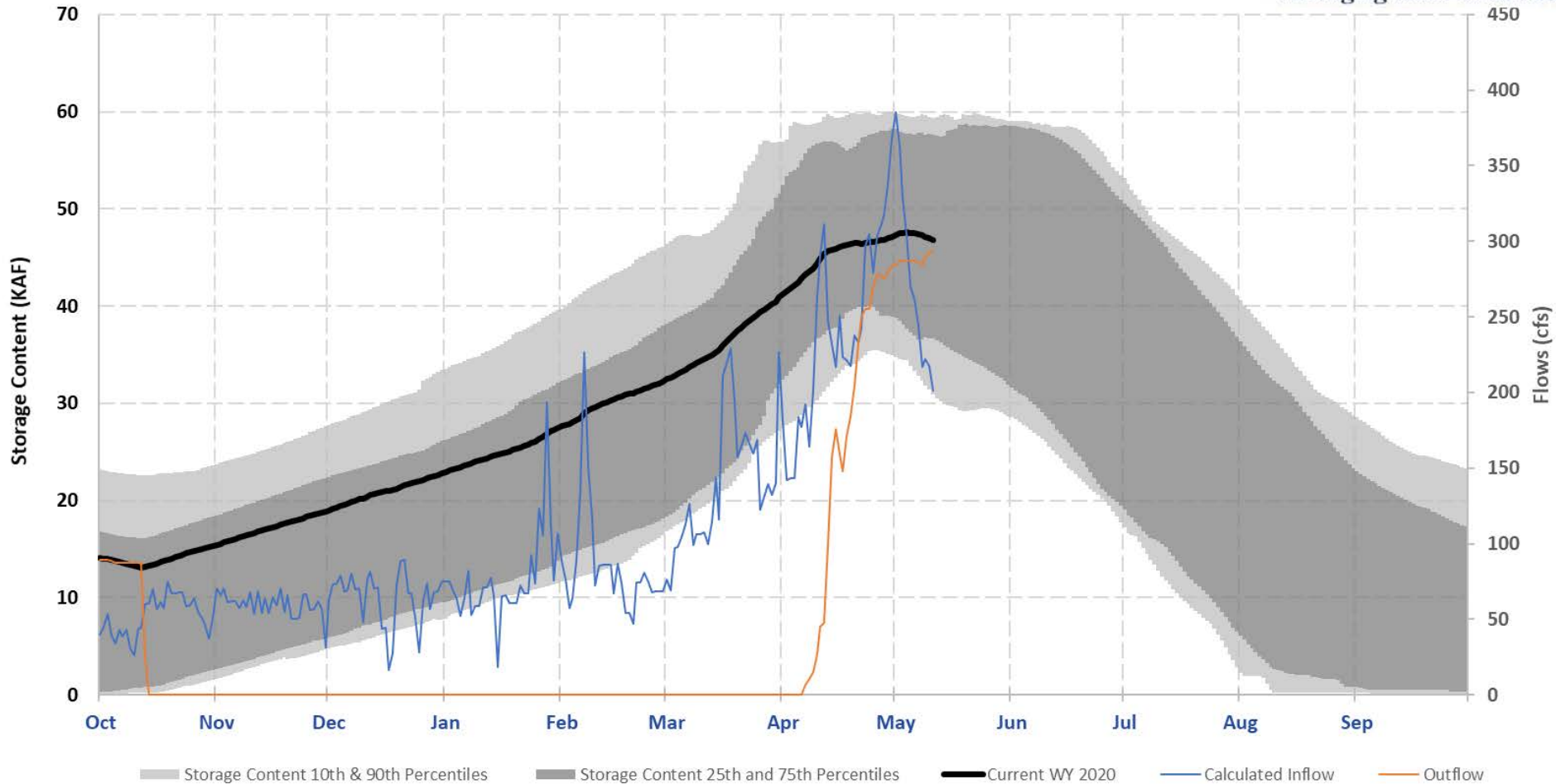


RECLAMATION

Malheur River Basin: Beulah

RECLAMATION
Managing Water in the West

Beulah Dam and Reservoir



Storage Content 10th & 90th Percentiles

Storage Content 25th and 75th Percentiles

Current WY 2020

Calculated Inflow

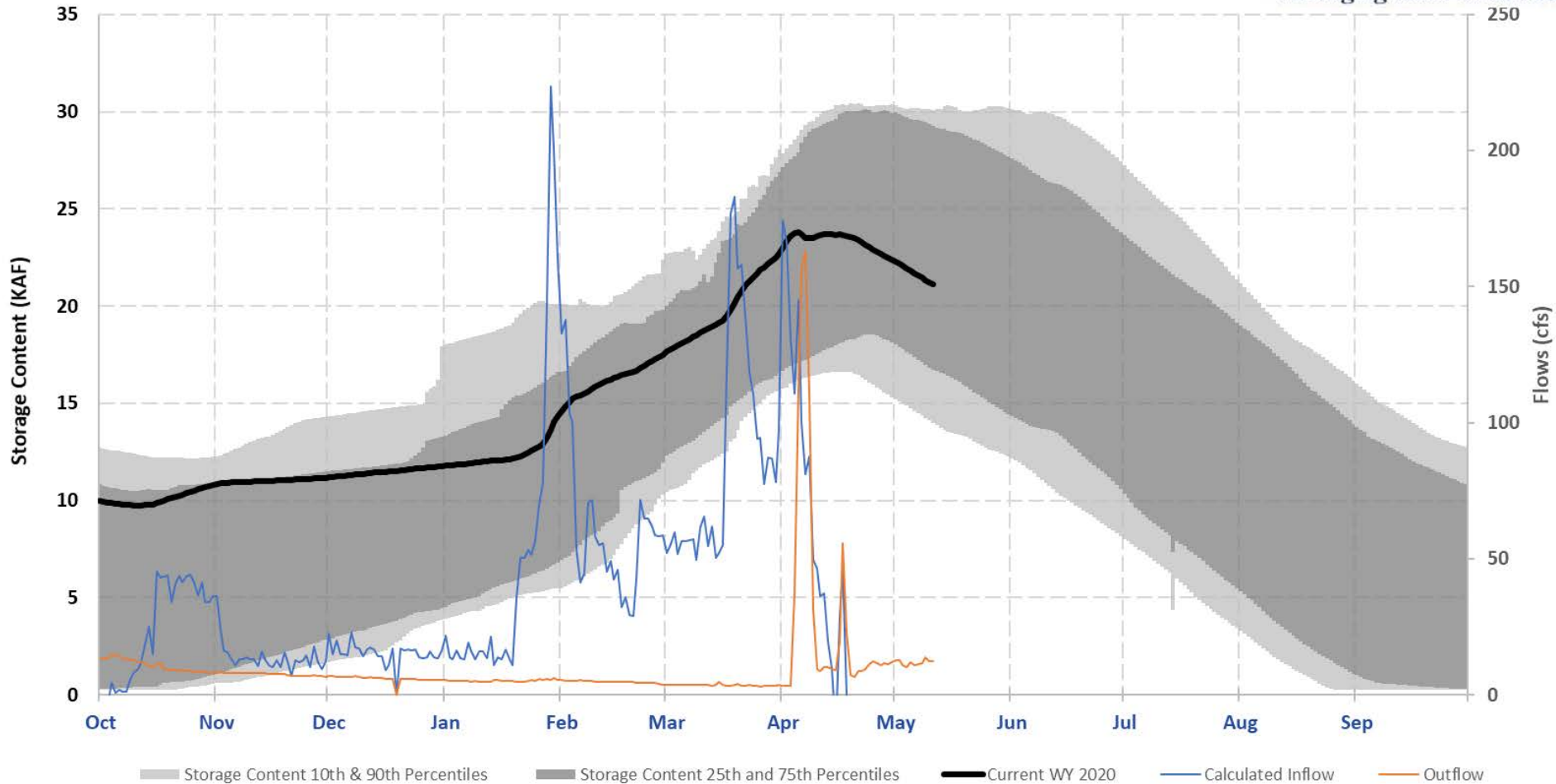
Outflow

RECLAMATION

Malheur River Basin: Bully Creek

RECLAMATION
Managing Water in the West

Bully Creek Dam and Reservoir

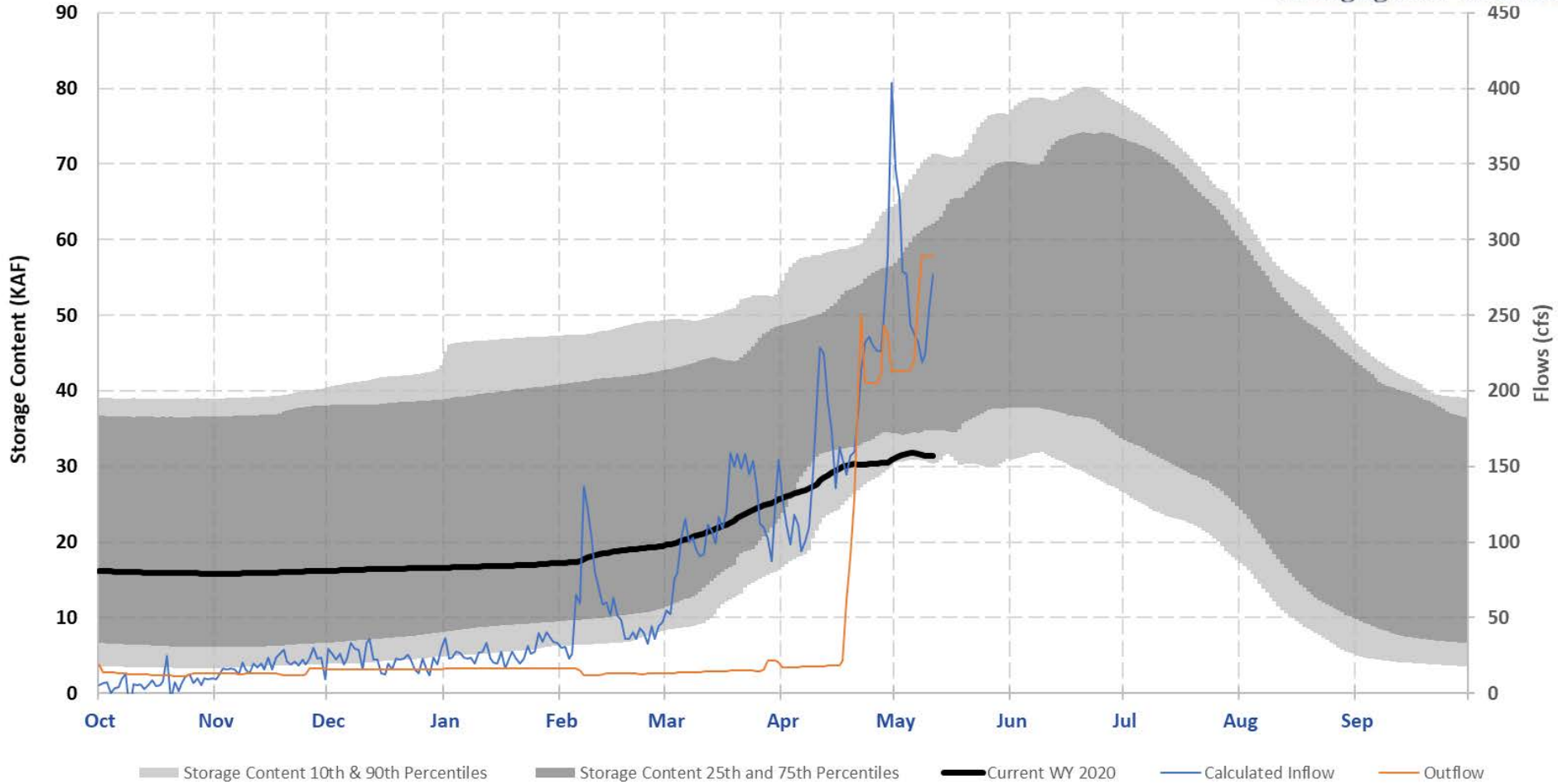


RECLAMATION

Powder River Basin: Phillips

RECLAMATION
Managing Water in the West

Mason Dam - Phillips Lake

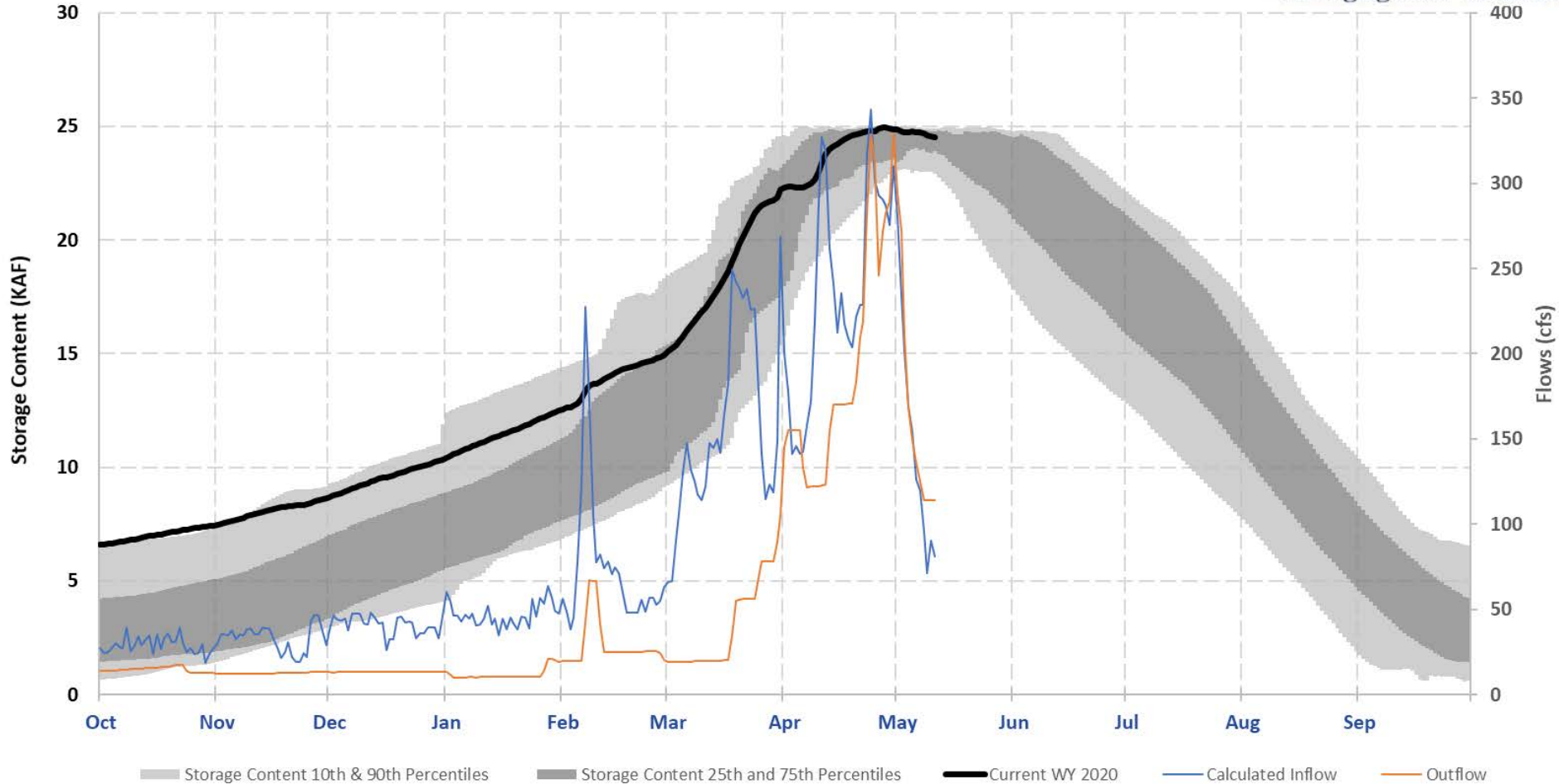


RECLAMATION

Burnt River Basin: Unity

RECLAMATION
Managing Water in the West

Unity Dam and Reservoir



RECLAMATION

Questions



RECLAMATION