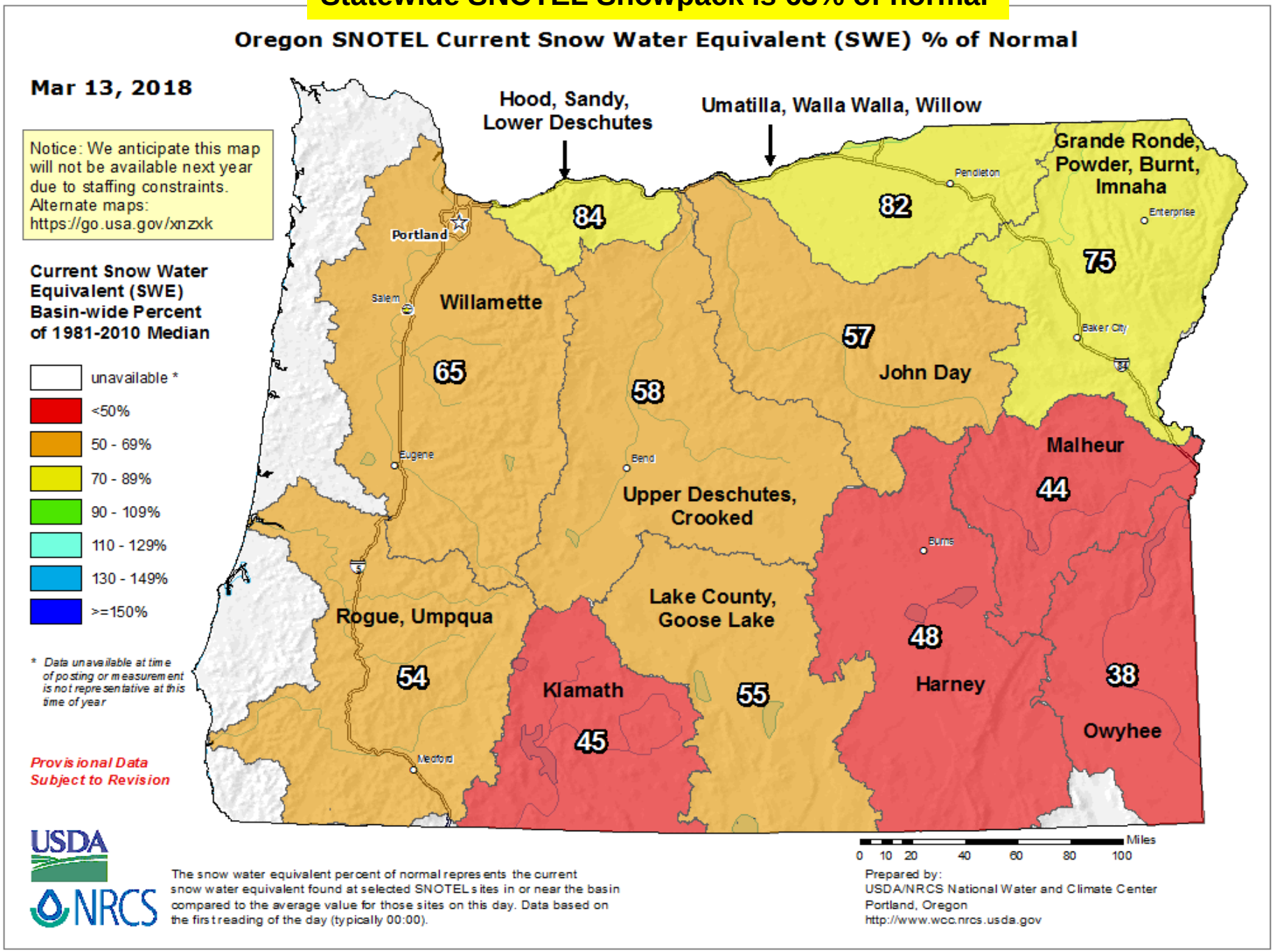
Oregon Water Supply Availability Committee
March 13, 2018

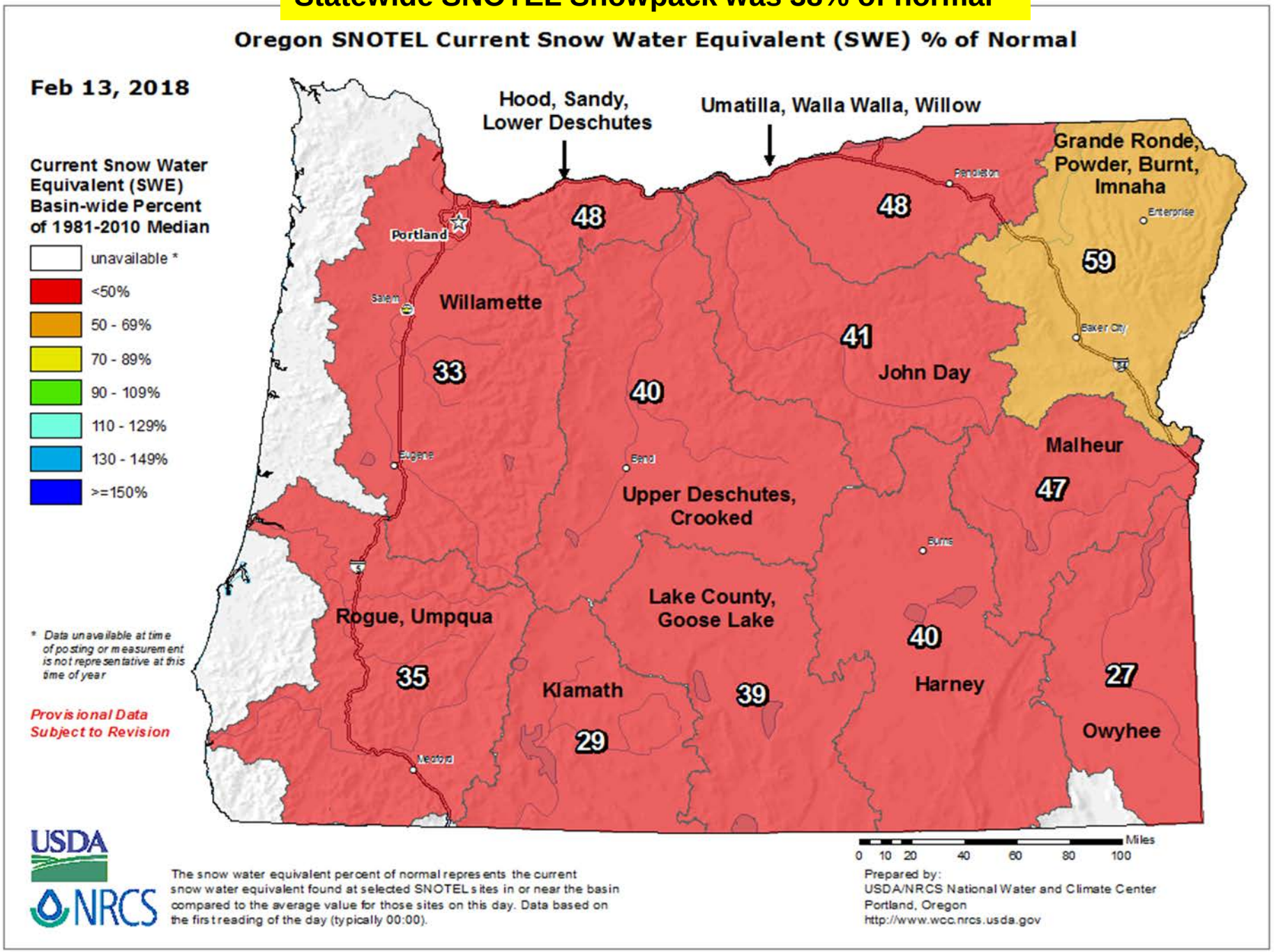
Hungry Flat Snow Course – 03/01/18
Upper Deschutes Elevation 4400'
10" Depth, 1.5" SWE - 71% Normal
Last year 5.9" SWE - 281% Normal

H. Scott Oviatt
Snow Survey Supervisory Hydrologist
USDA Natural Resources Conservation Service
Scott.Oviatt@or.usda.gov
503-414-3271
http://www.nrcs.usda.gov/wps/portal/nrcs/main/or/snow/

Statewide SNOTEL Snowpack is 63% of normal

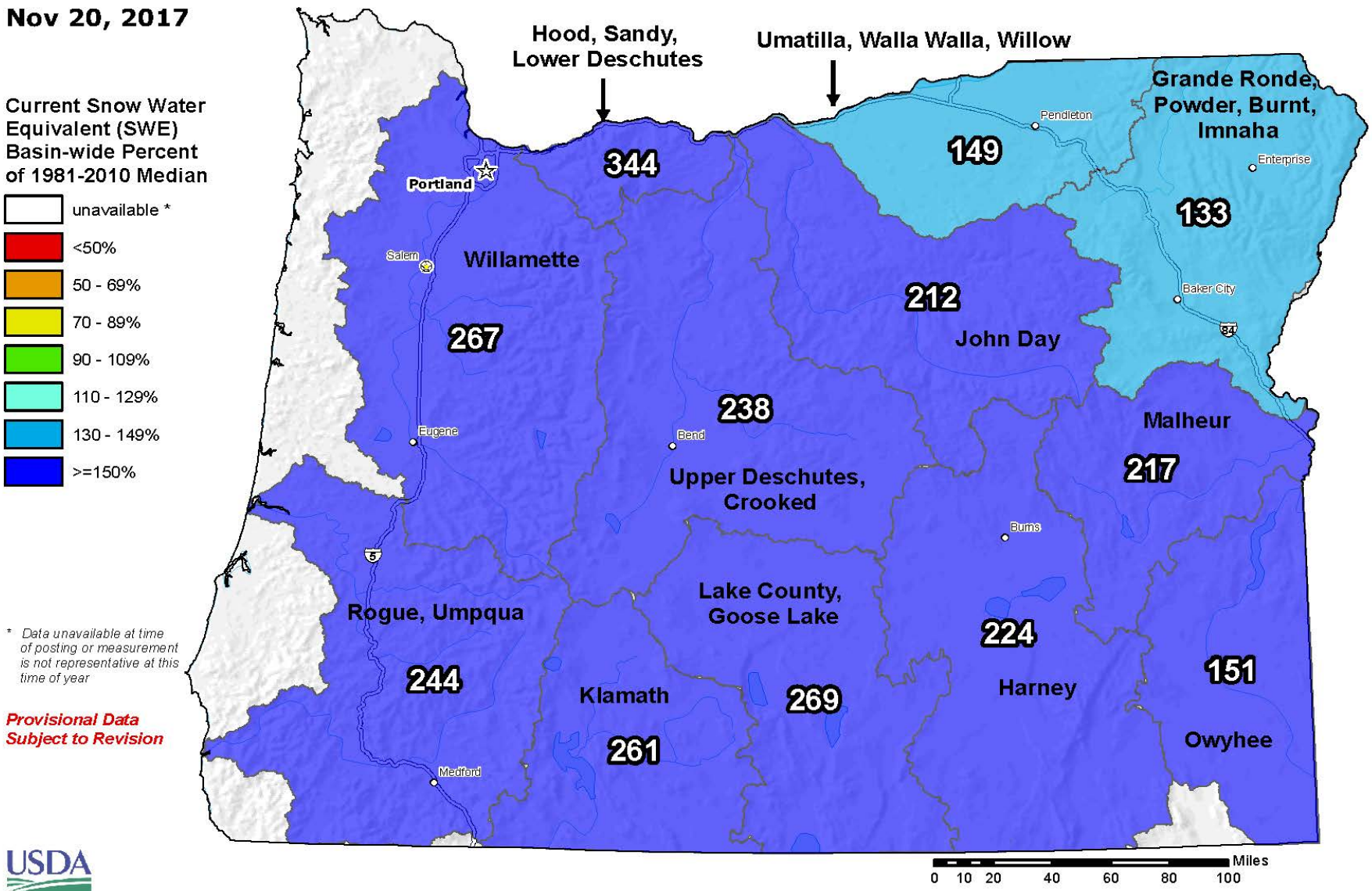


Statewide SNOTEL Snowpack was 38% of normal



Statewide SNOTEL Snowpack was 236% of normal

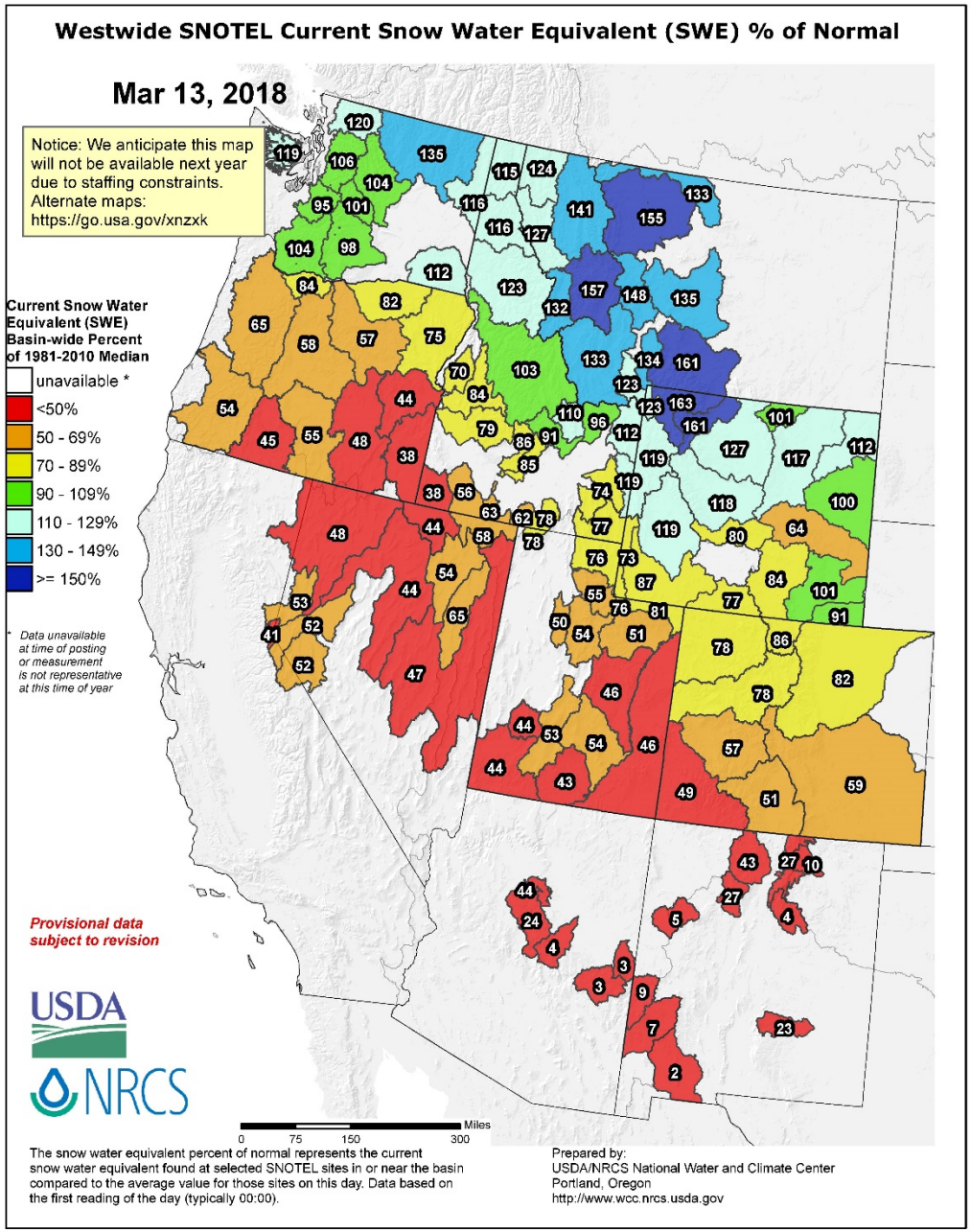
Oregon SNOTEL Current Snow Water Equivalent (SWE) % of Normal



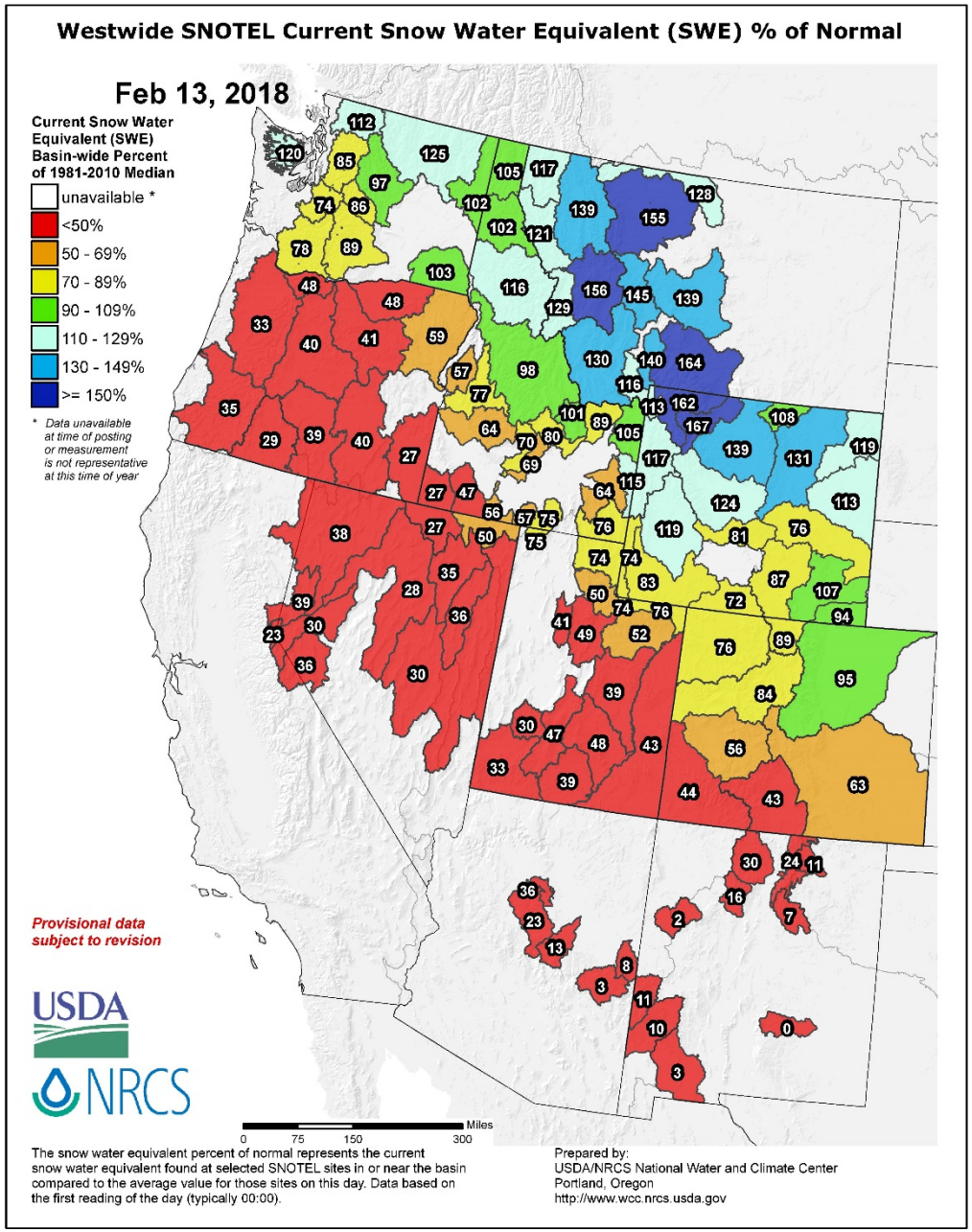
The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

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

West-Wide Snowpack – March 13, 2018

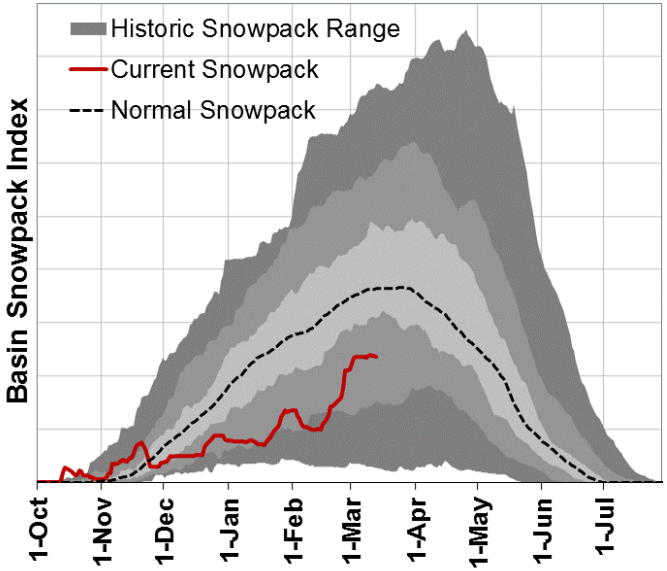


West-Wide Snowpack – February 13, 2018



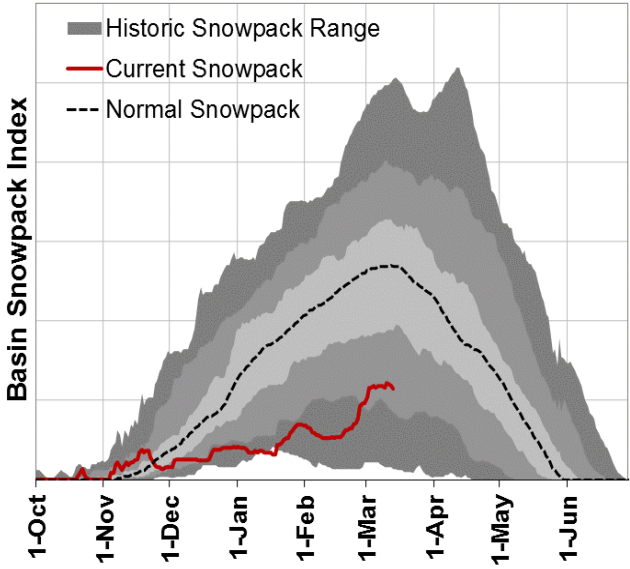
Water Year 2018

Willamette

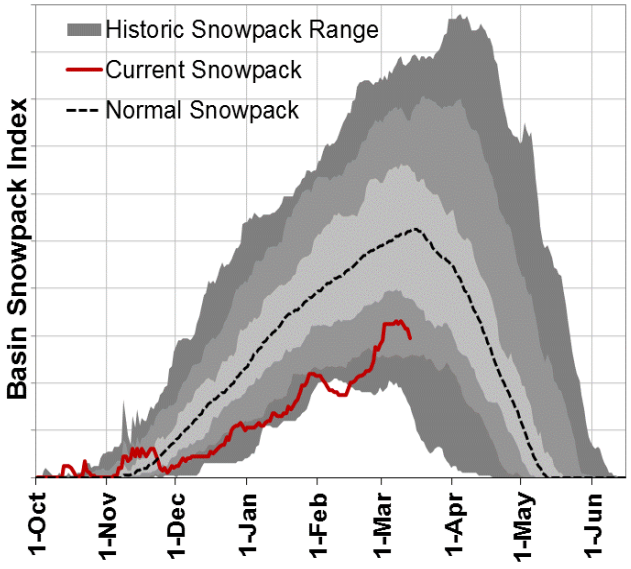


Rogue/Umpqua

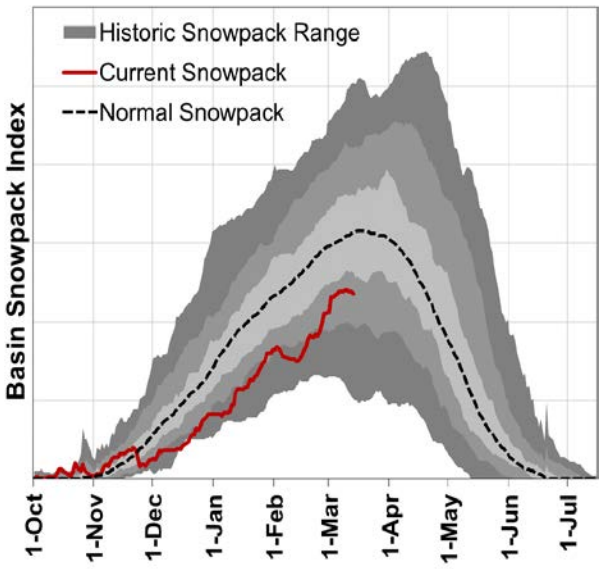
Klamath



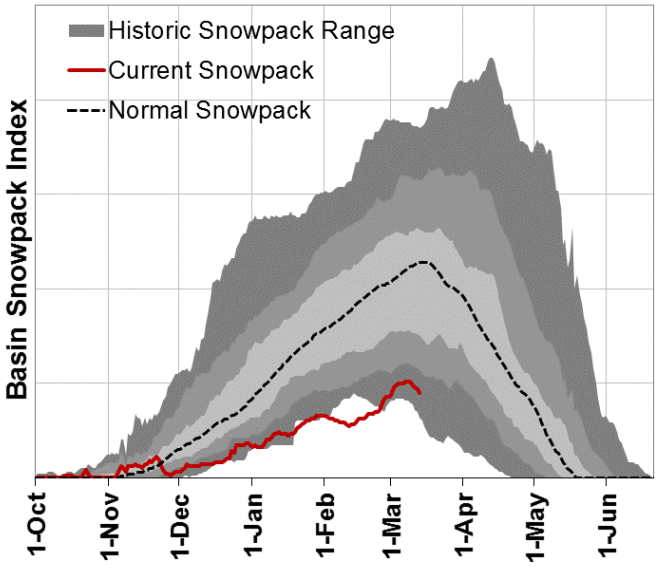
John Day



Grande Ronde/Powder/Burnt

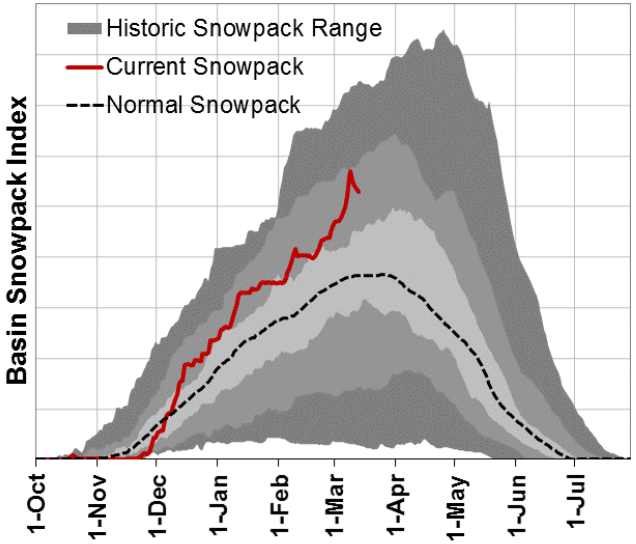


Owyhee/Malheur

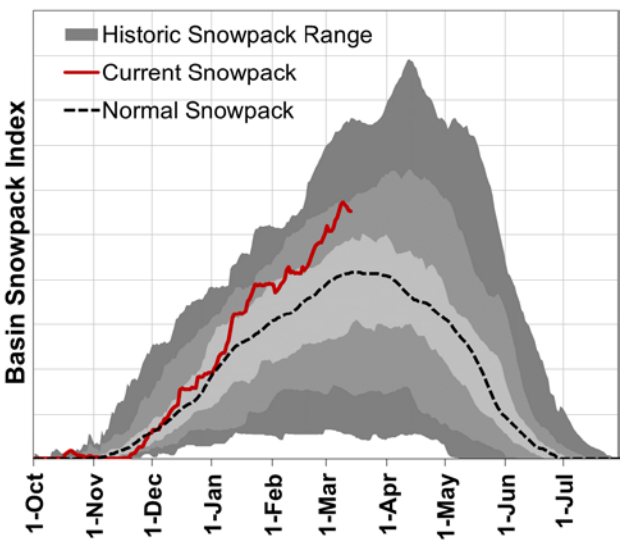


Water Year 2017

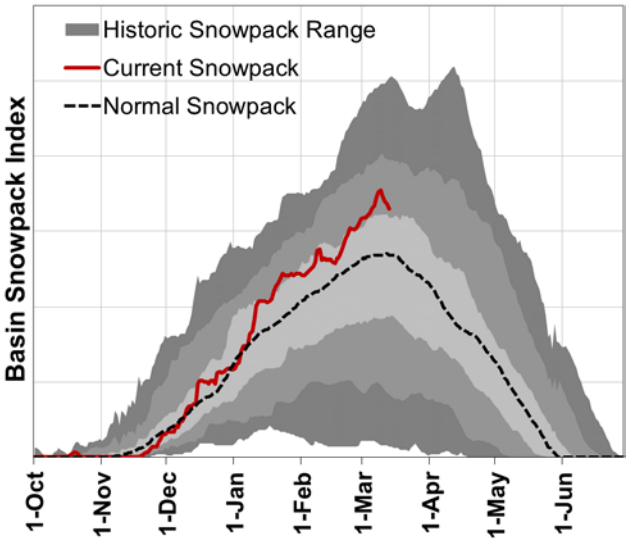
Willamette



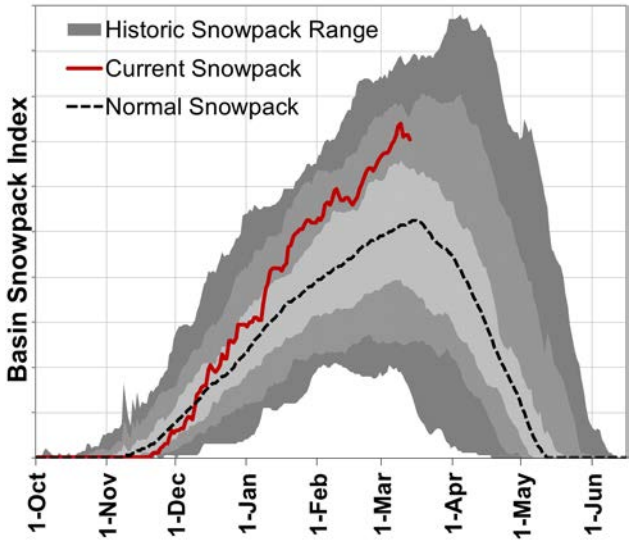
Rogue/Umpqua



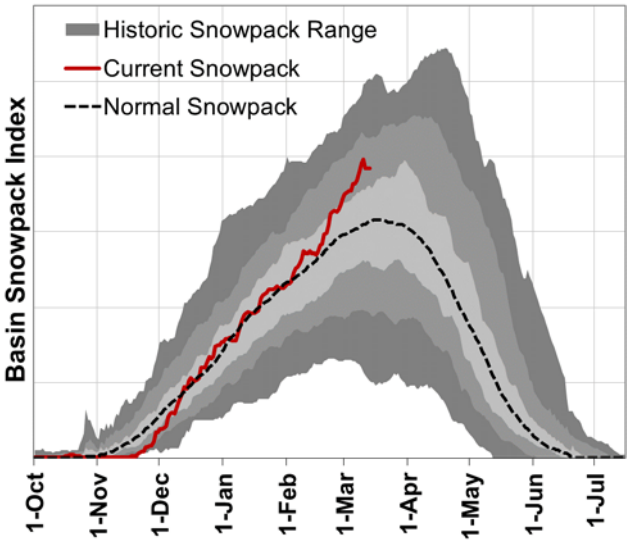
Klamath



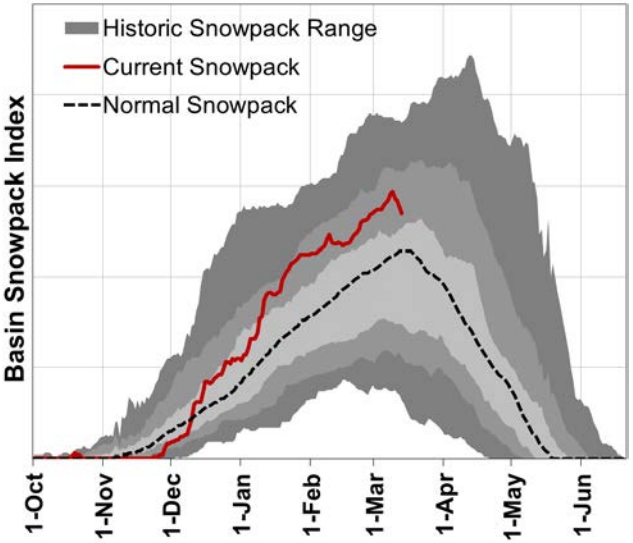
John Day



Grande Ronde/Powder/Burnt



Owyhee/Malheur



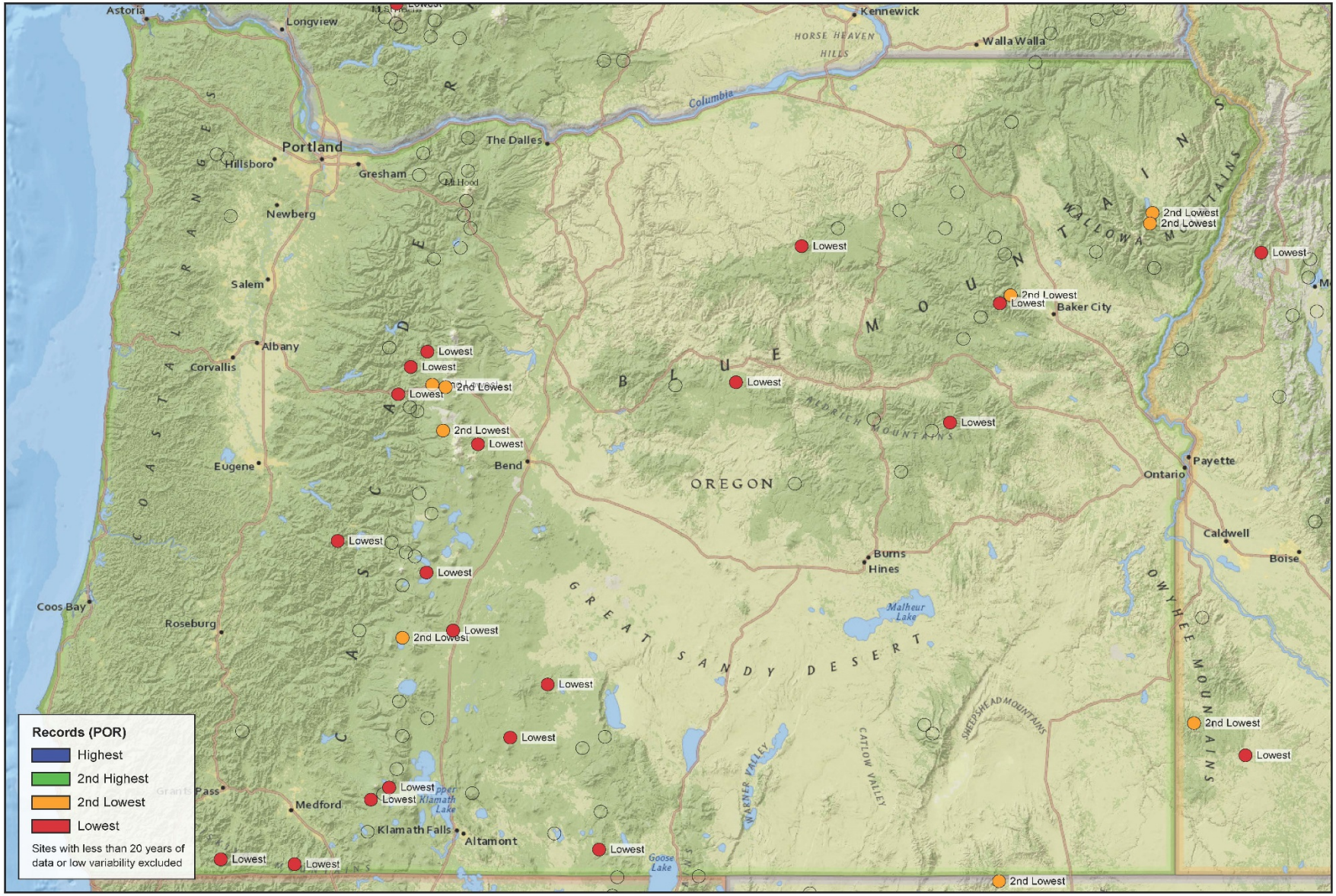
Snow Water Equivalent **Records (POR)** **March 12, 2018, end of day**

0 100 mi

Created 3-13-2018, 06:28 AM PDT

USDA Natural Resources Conservation Service
United States Department of Agriculture

Snow Water Equivalent **Records (POR)** **January 15, 2018, end of day**

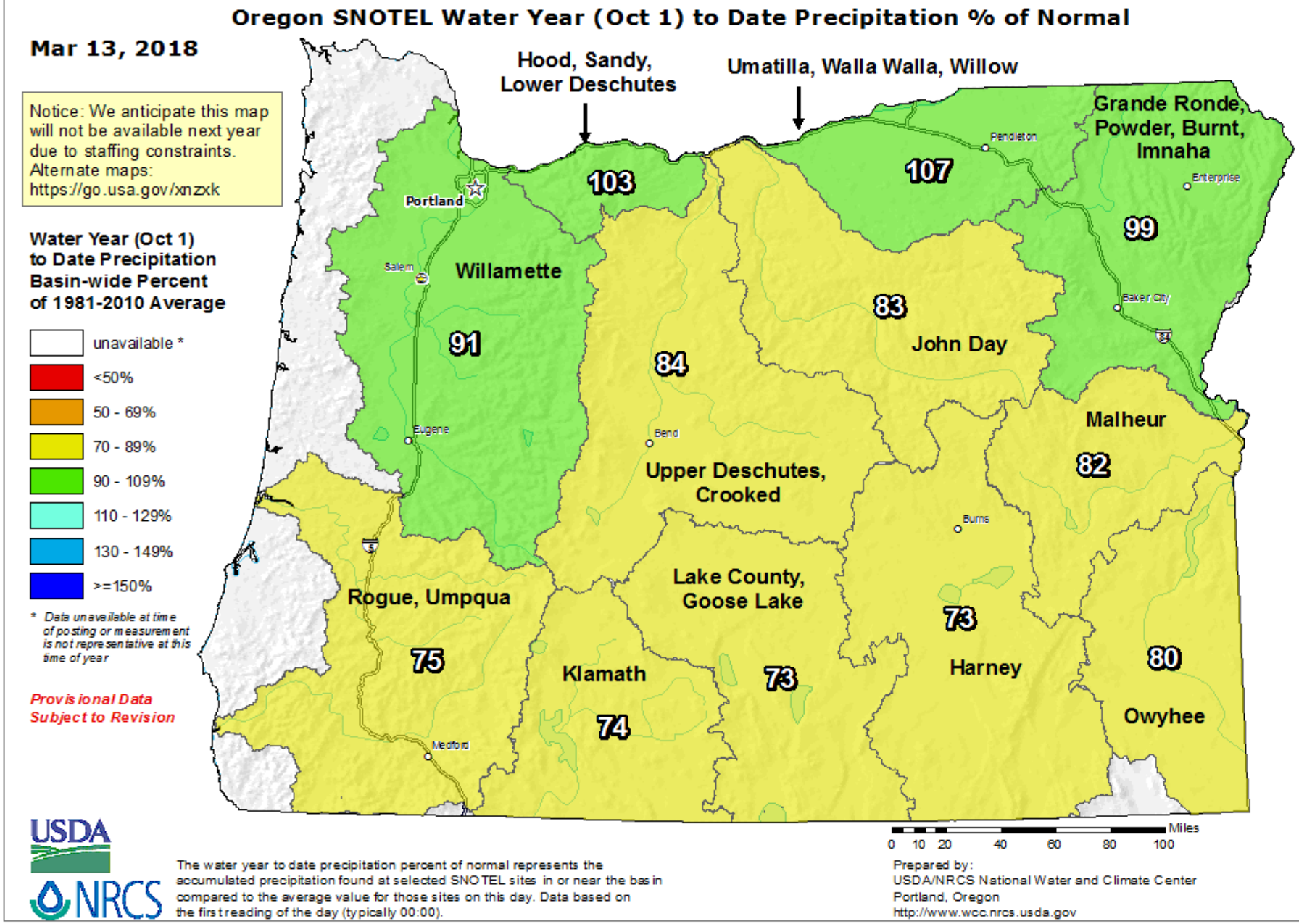


0 100 mi

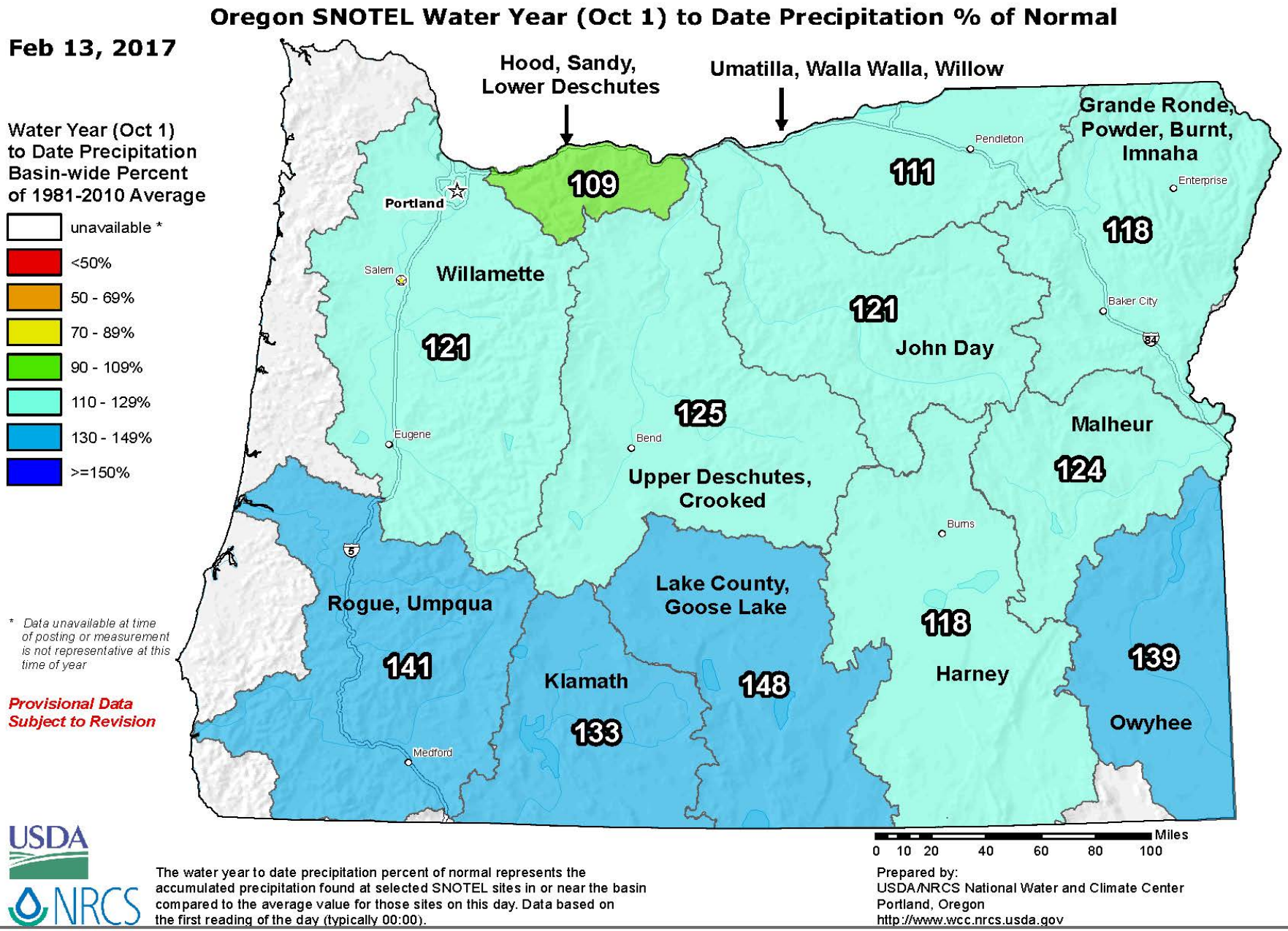
Created 3-12-2018, 02:46 PM PDT

USDA Natural Resources Conservation Service
United States Department of Agriculture

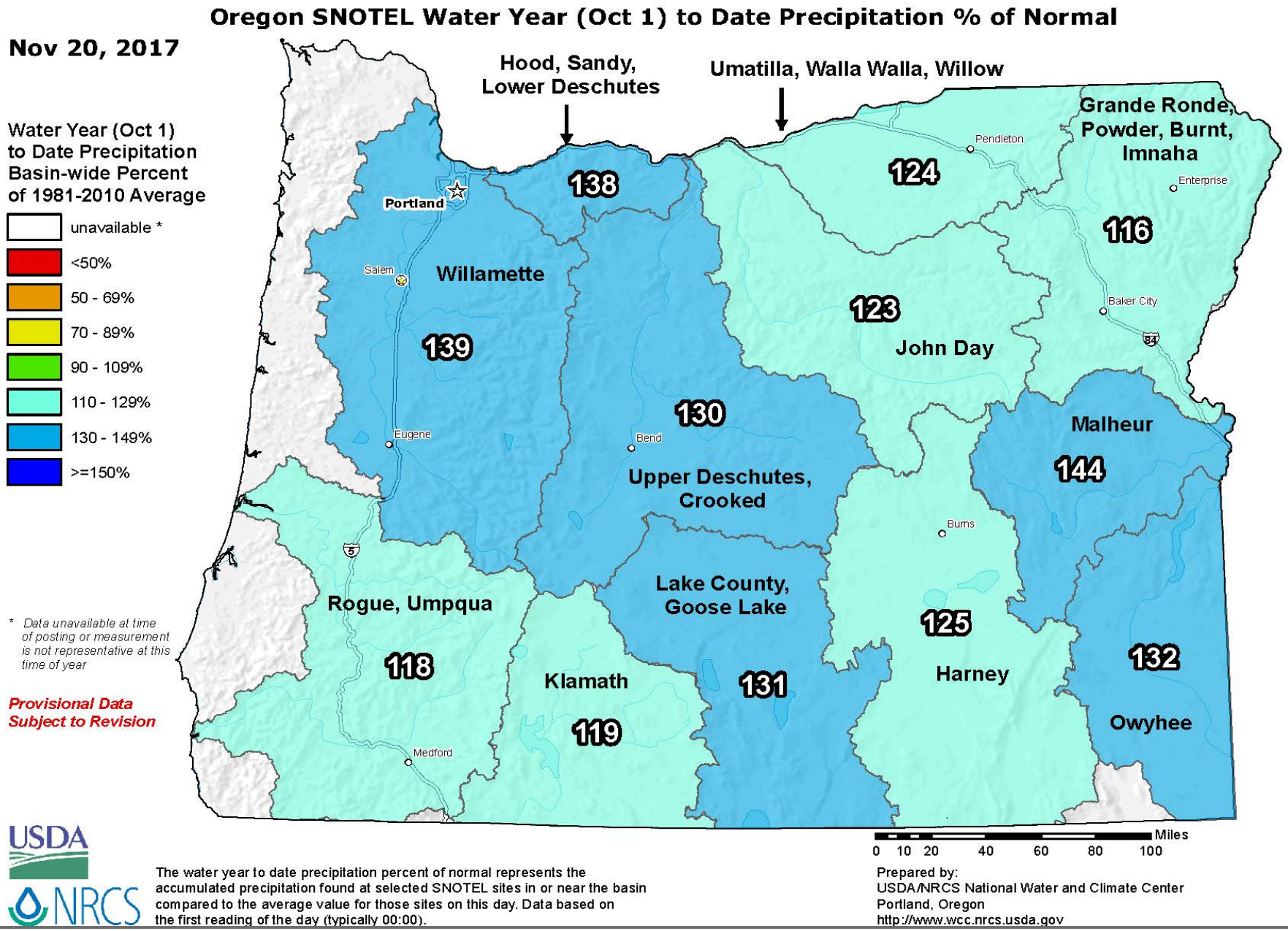
Statewide SNOTEL Precipitation is 89% of normal



Statewide SNOTEL Precipitation was 86% of normal



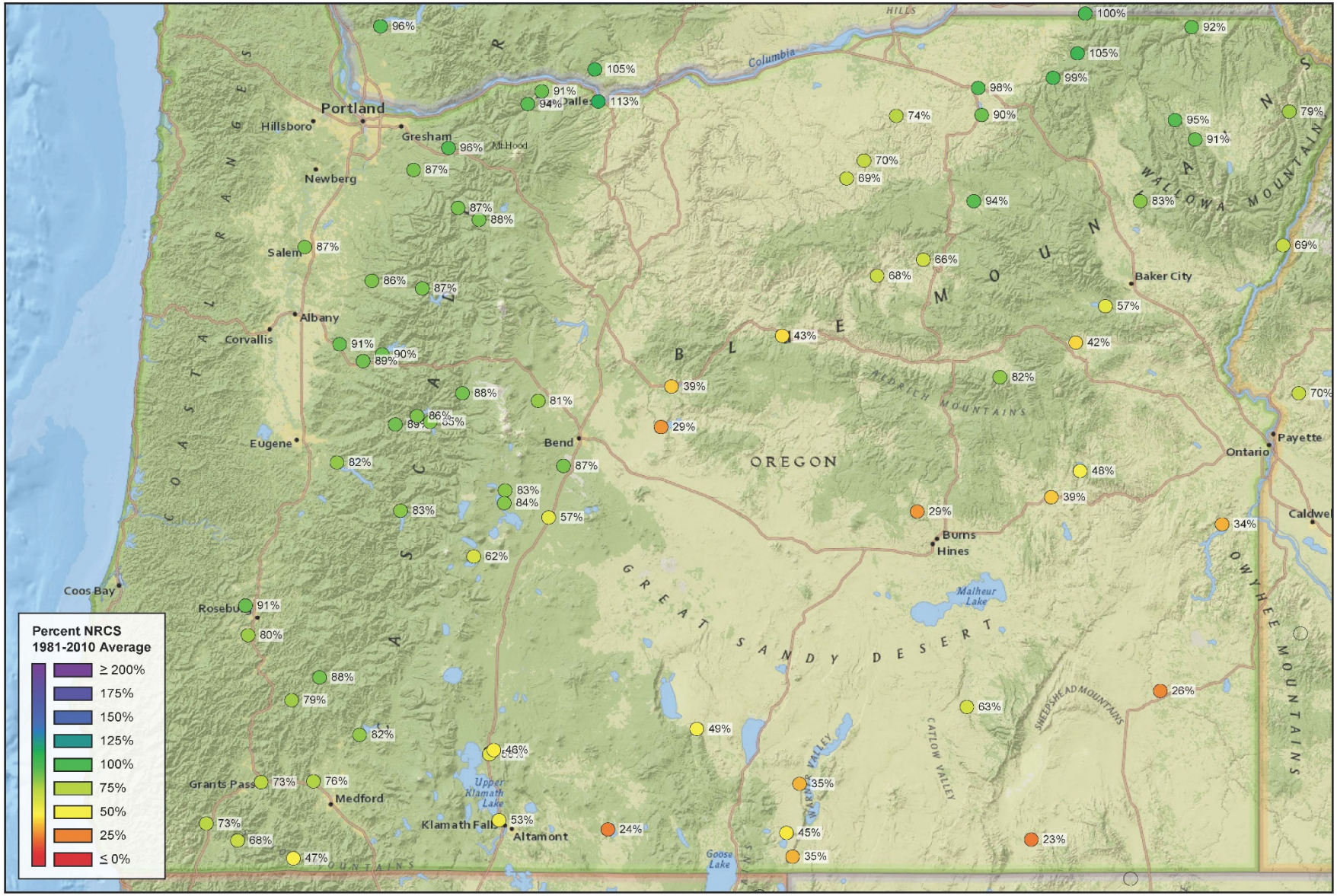
Statewide SNOTEL Precipitation was 131% of normal



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

Forecast Volume, 50% Exceedance Probability **Percent NRCS 1981-2010 Average** **April - September, March 1, 2018**

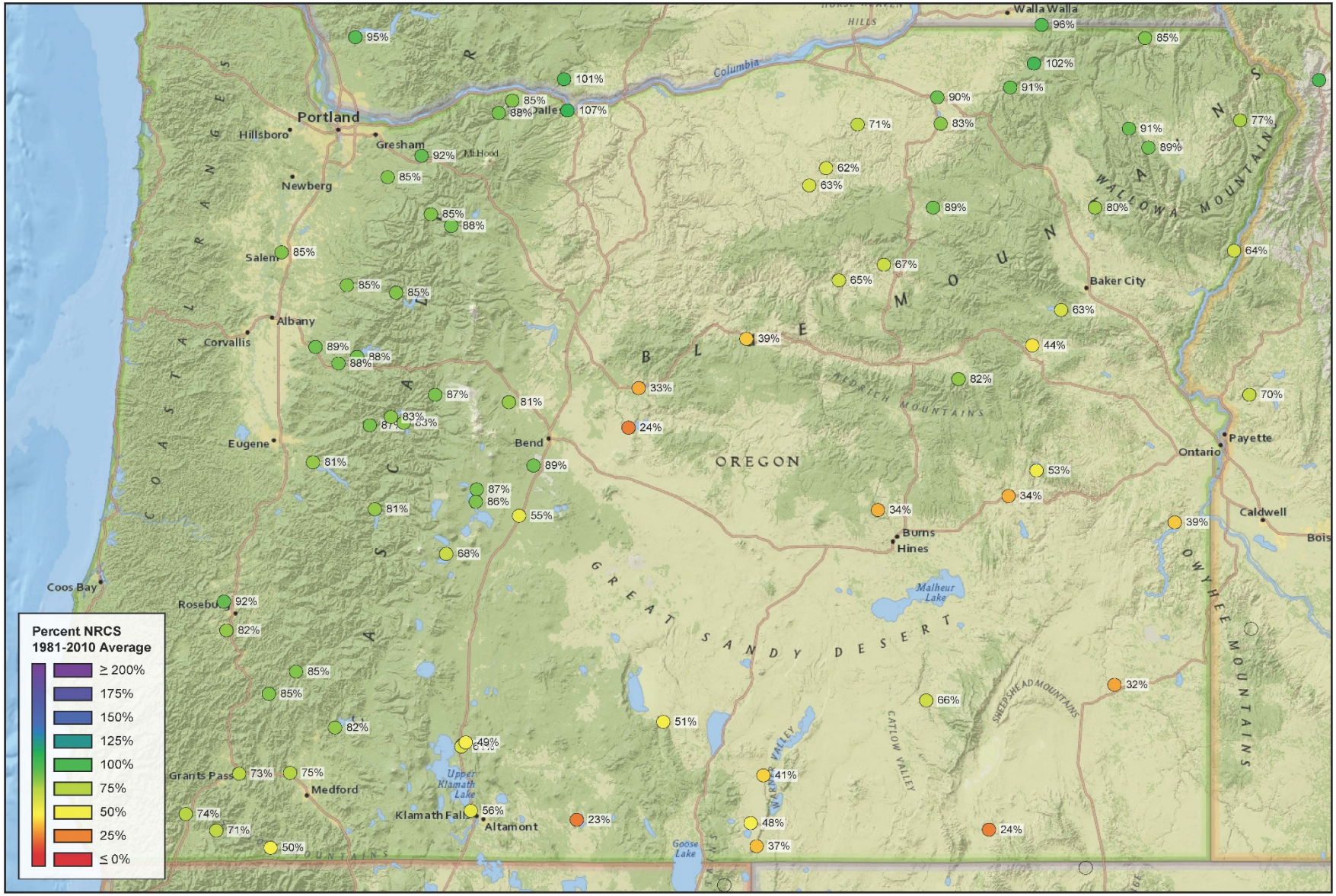


0 100 mi

Created 3-06-2018, 09:03 AM PST

USDA Natural Resources Conservation Service
United States Department of Agriculture

Forecast Volume, 50% Exceedance Probability **Percent NRCS 1981-2010 Average** **April - September, February 1, 2018**



0 100 mi

Created 3-06-2018, 09:08 AM PST

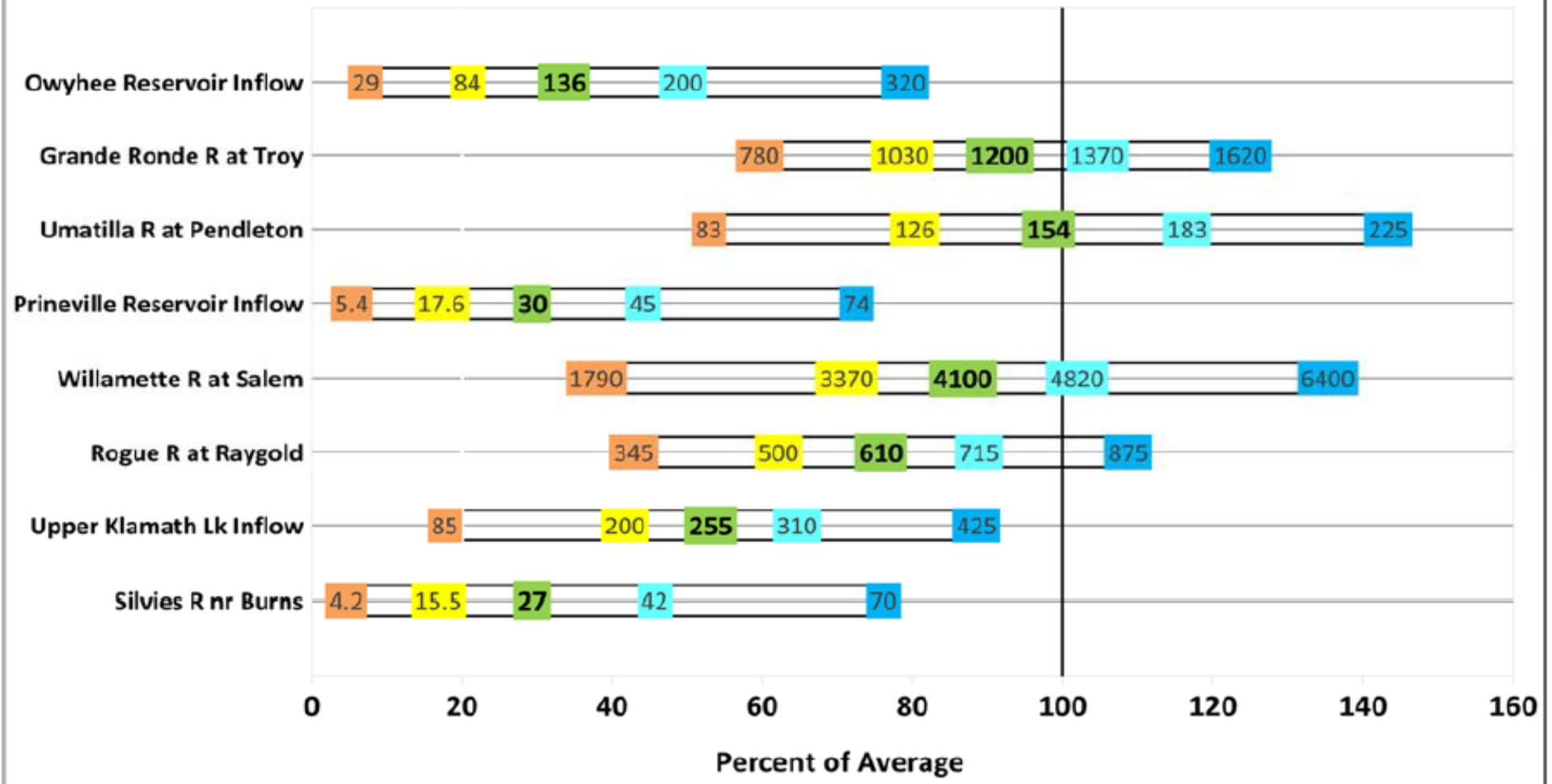
USDA Natural Resources Conservation Service
United States Department of Agriculture

March 1, 2018

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----------→

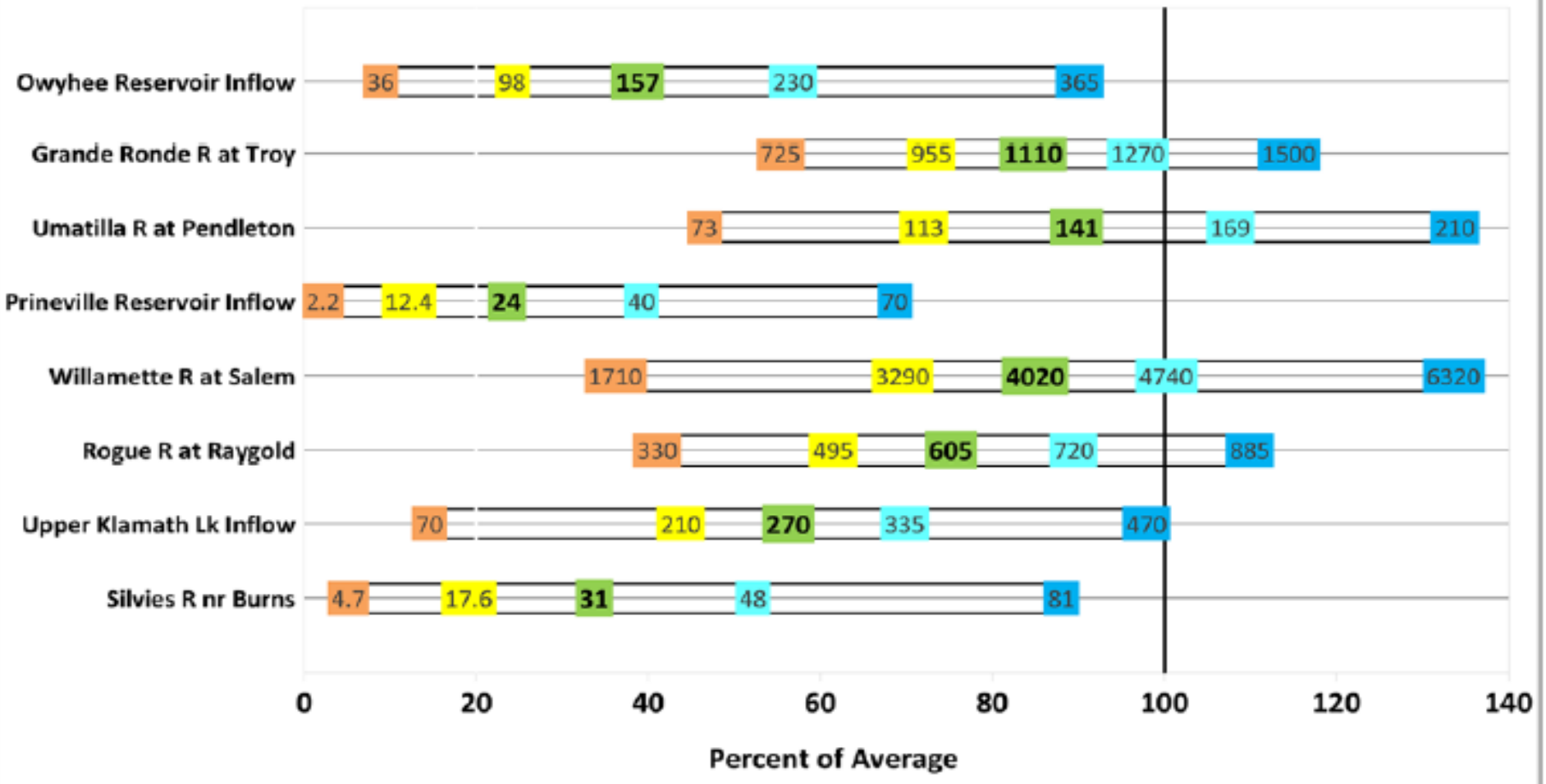
90% Exceedance Forecast (KAF)	70% Exceedance Forecast (KAF)	50% Exceedance Forecast (KAF)	30% Exceedance Forecast (KAF)	10% Exceedance Forecast (KAF)
There is a 90% chance that flows will exceed this volume.	There is a 70% chance that flows will exceed this volume.	There is a 50% chance that flows will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

February 1, 2018

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)
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.

Thank you!

Oregon Water Supply Availability Committee
March 13, 2018

Hungry Flat Snow Course – 03/01/18
Upper Deschutes Elevation 4400'
10" Depth, 1.5" SWE - 71% Normal
Last year 5.9" SWE - 281% Normal

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Surface Water Conditions Report

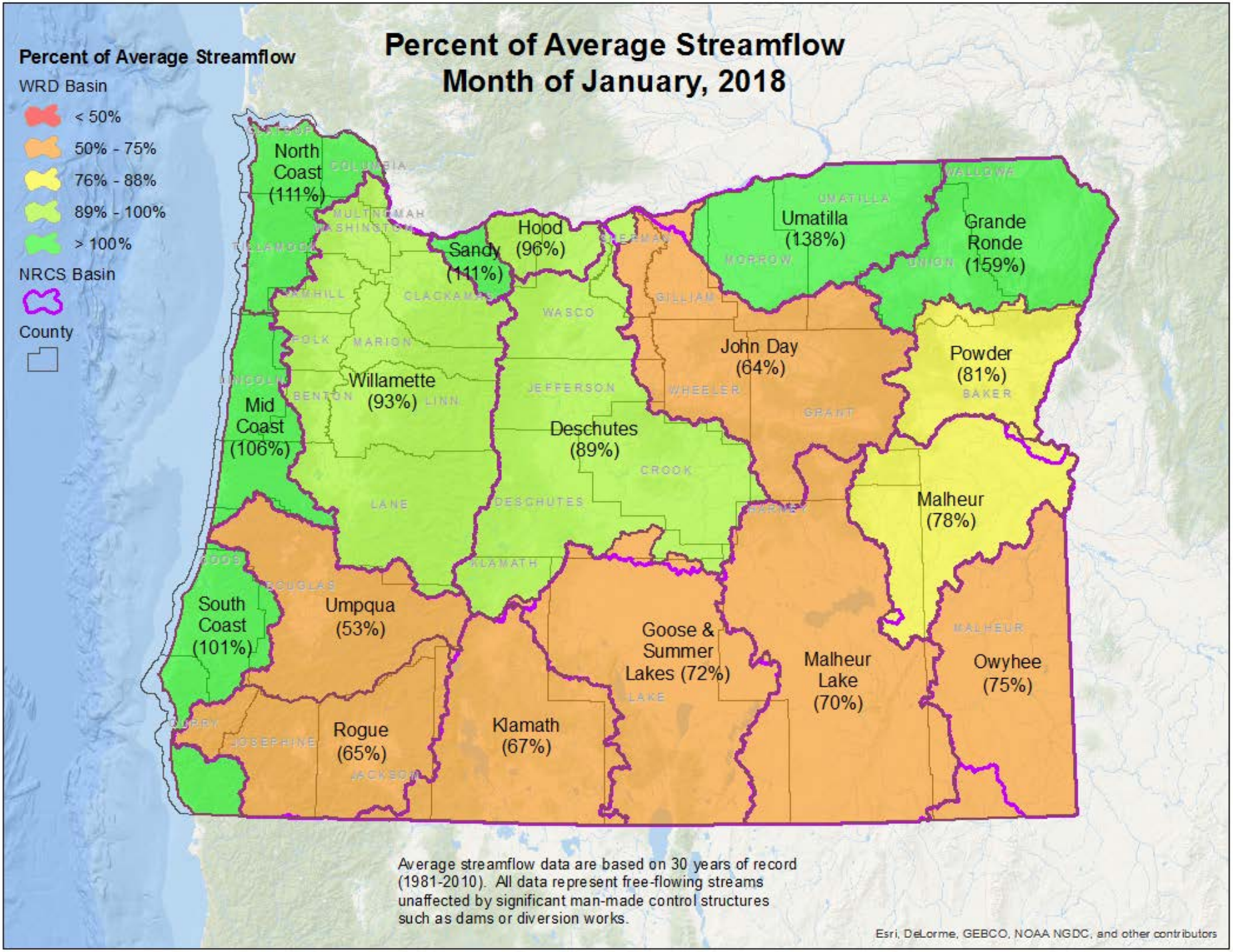
Water Supply Availability Committee

OREGON
WATER RESOURCES DEPARTMENT

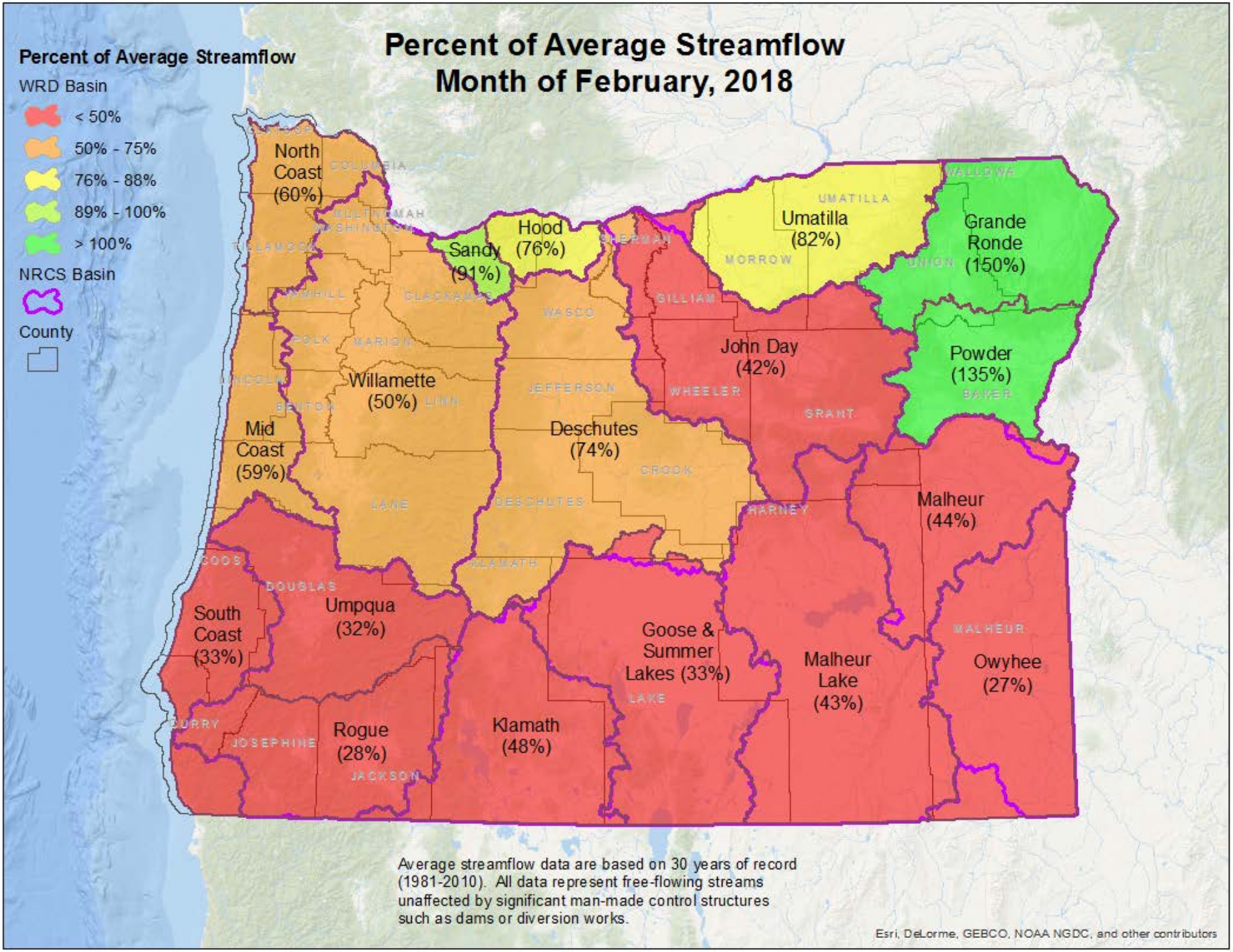
Ken Stahr
Oregon Water Resources Department

March 13, 2018

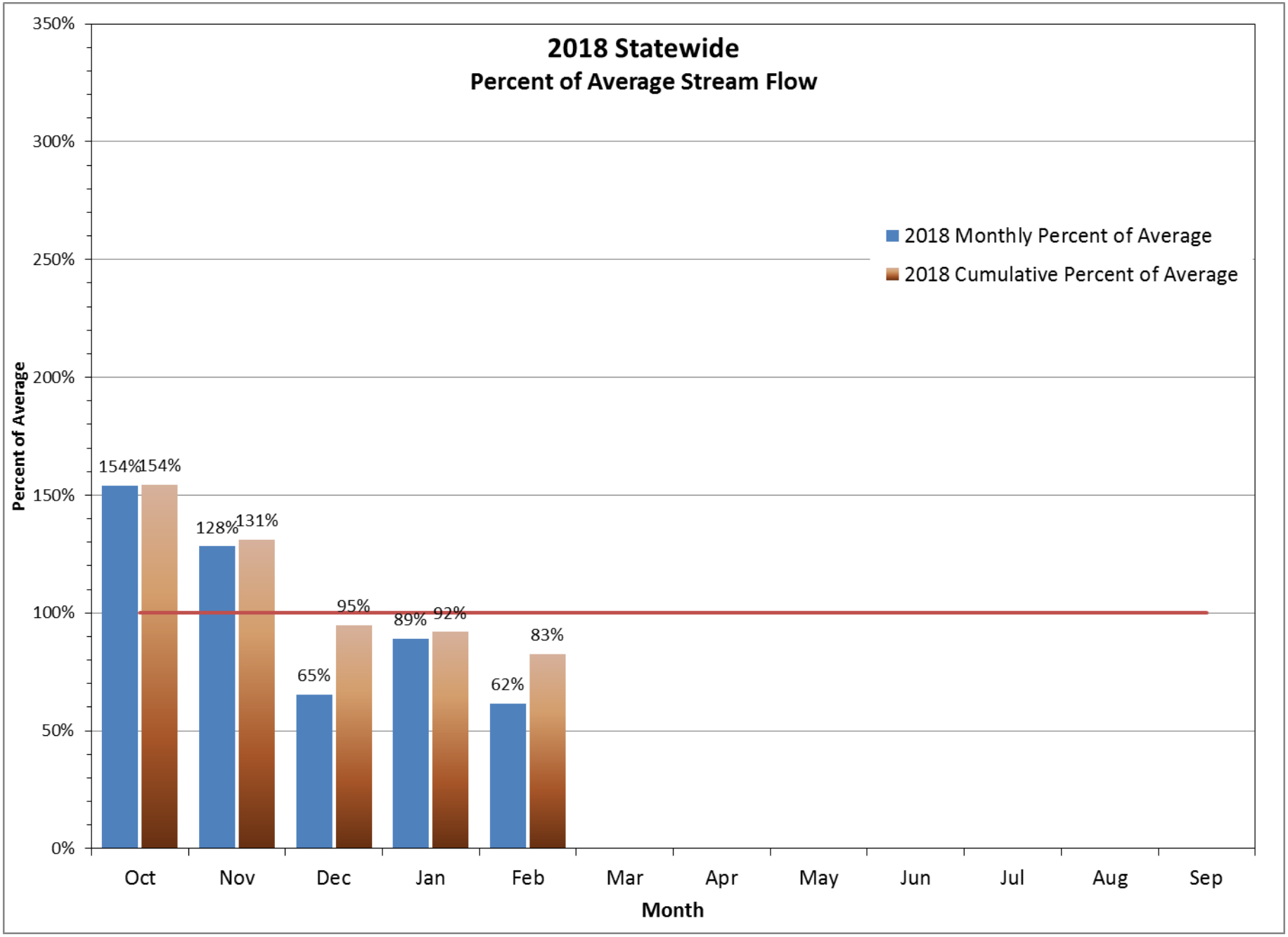
Percent of Average Streamflow
Month of January, 2018

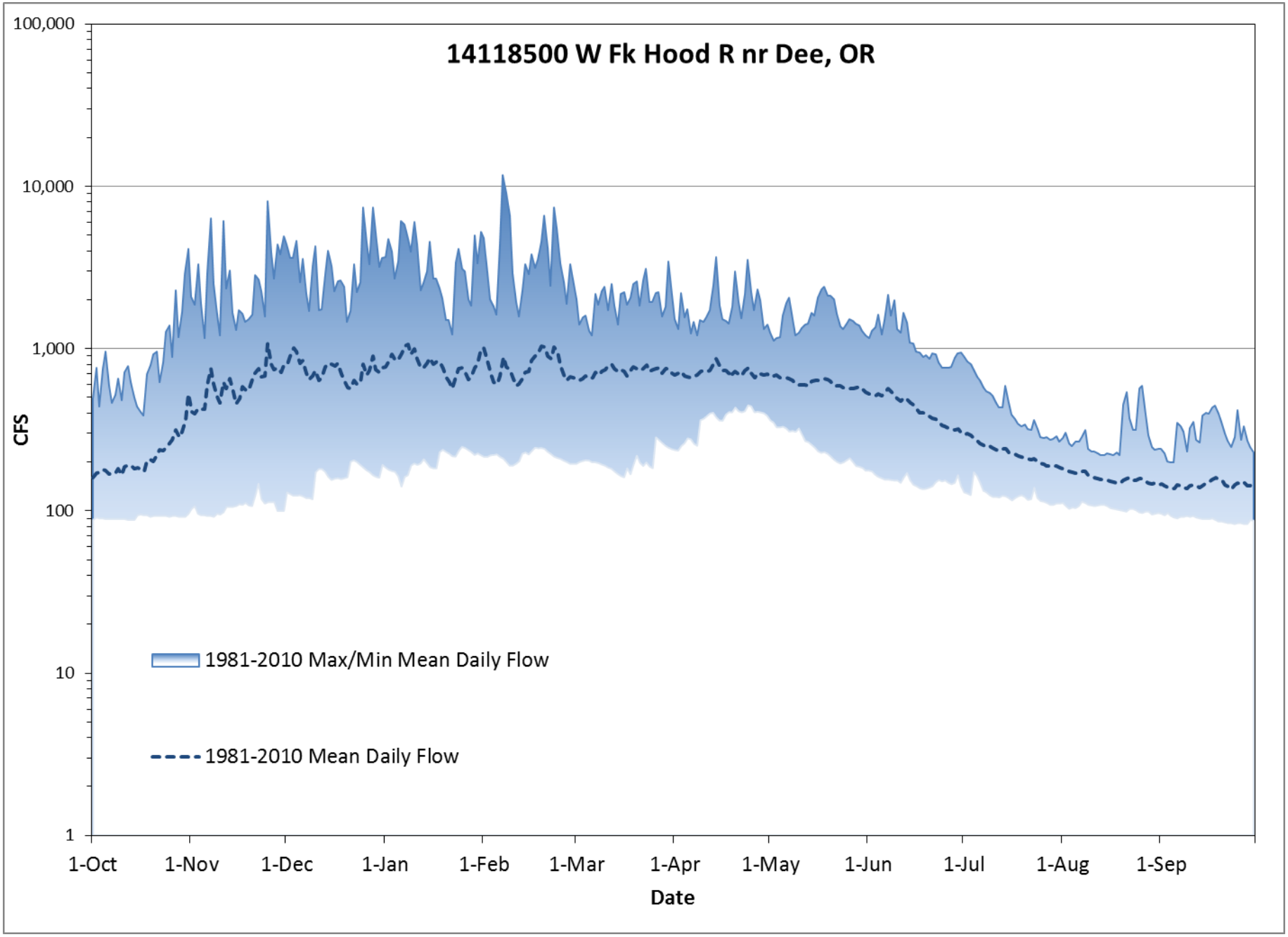


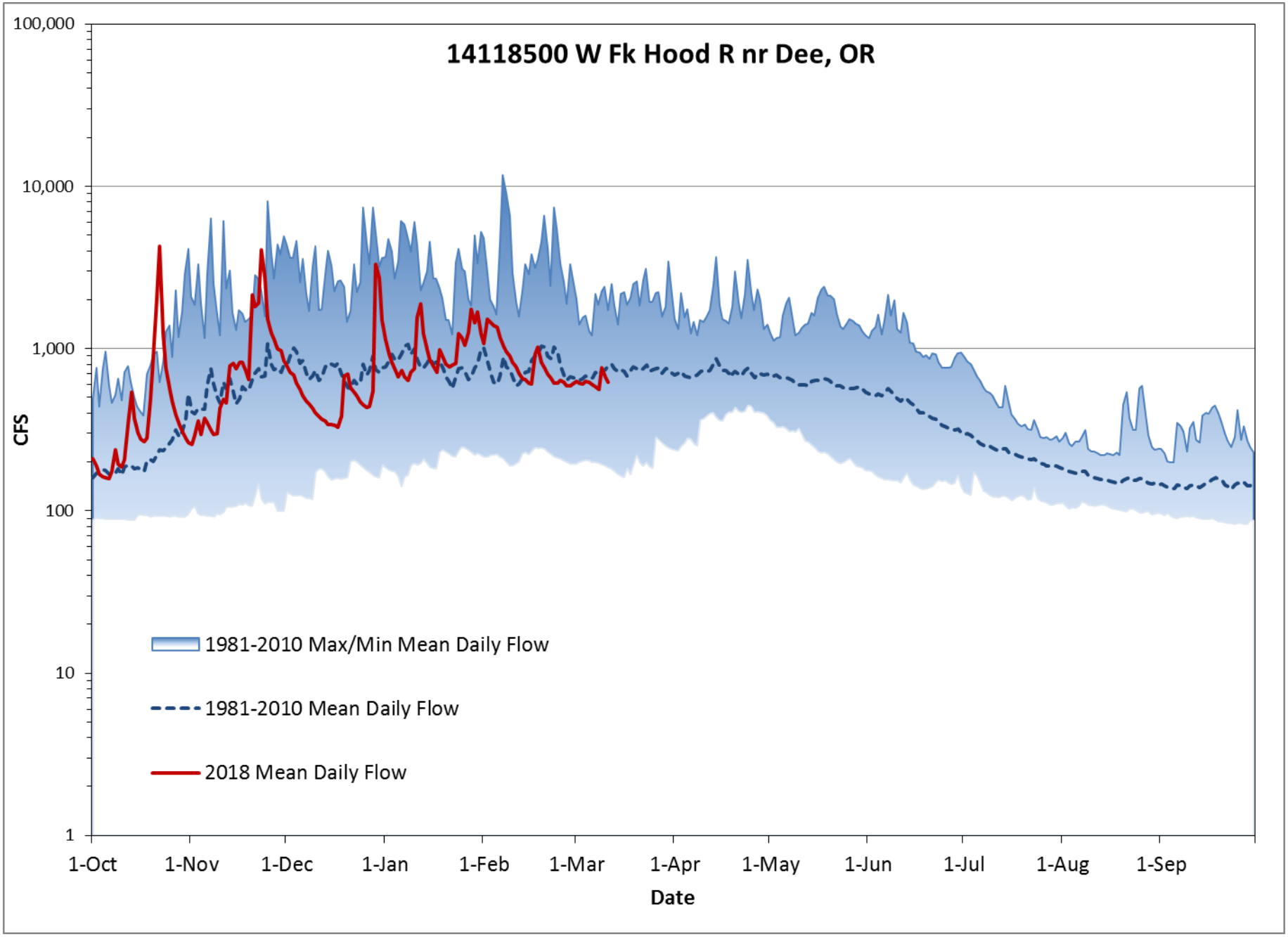
Percent of Average Streamflow
Month of February, 2018

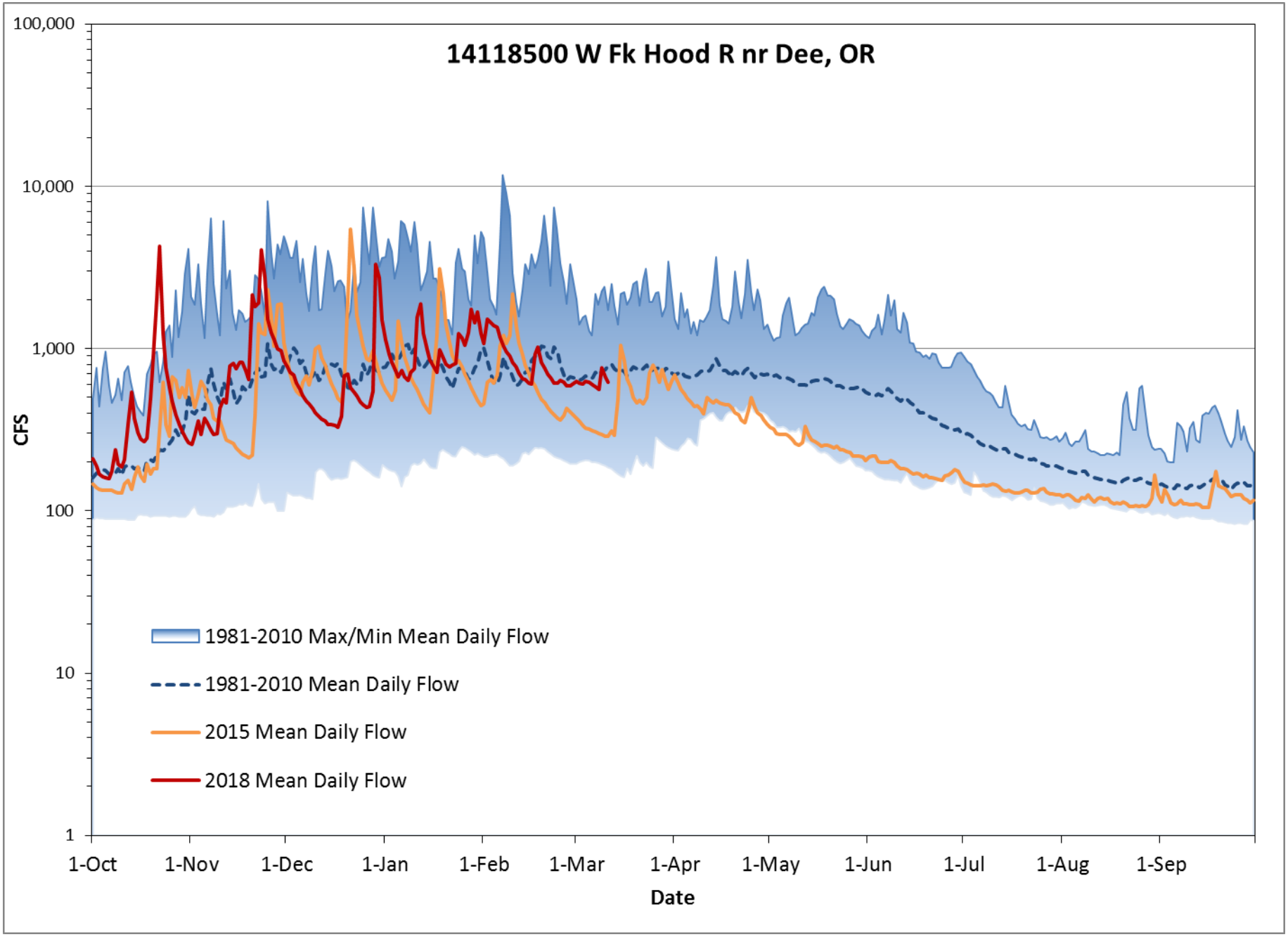


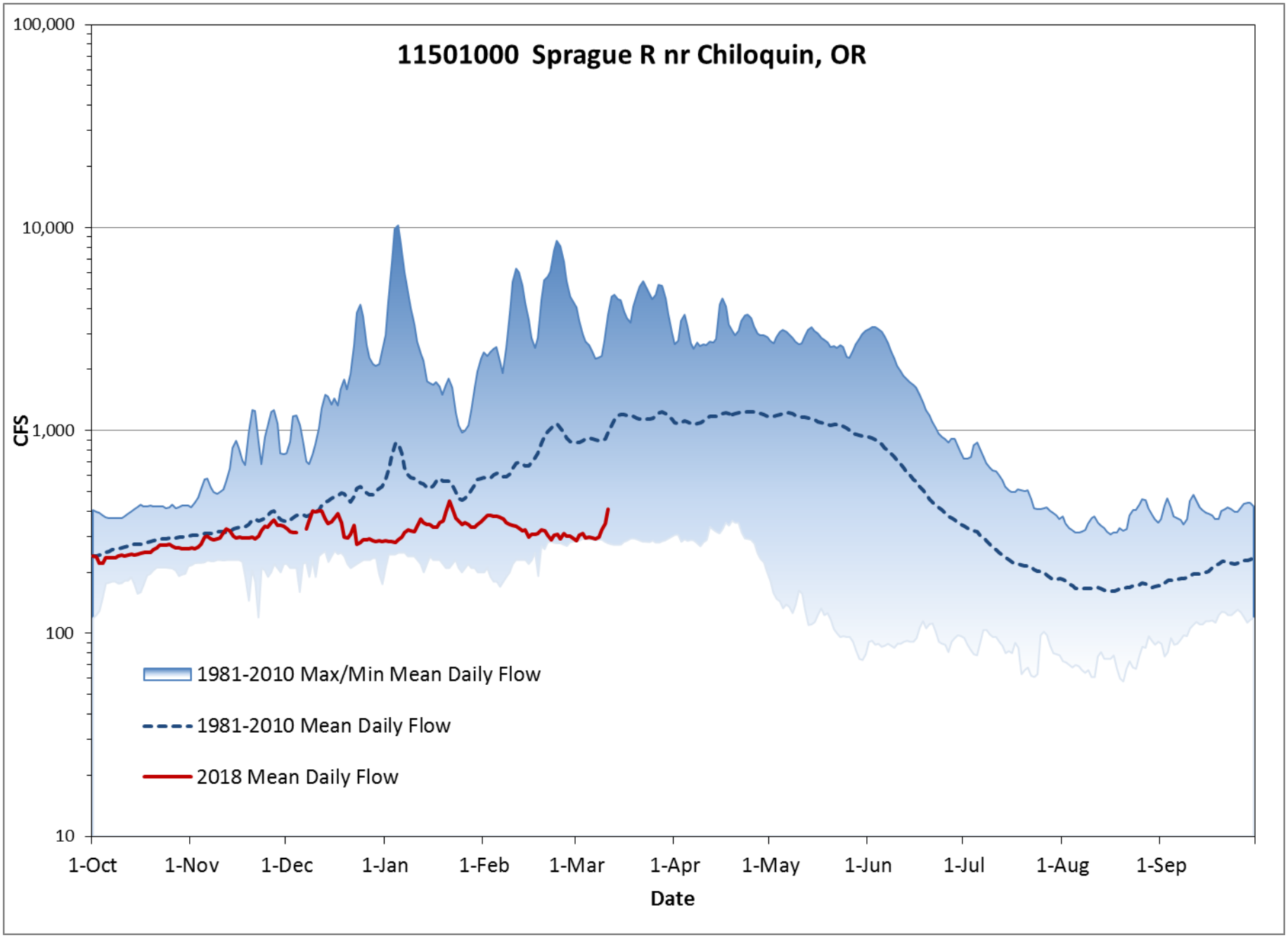
Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.

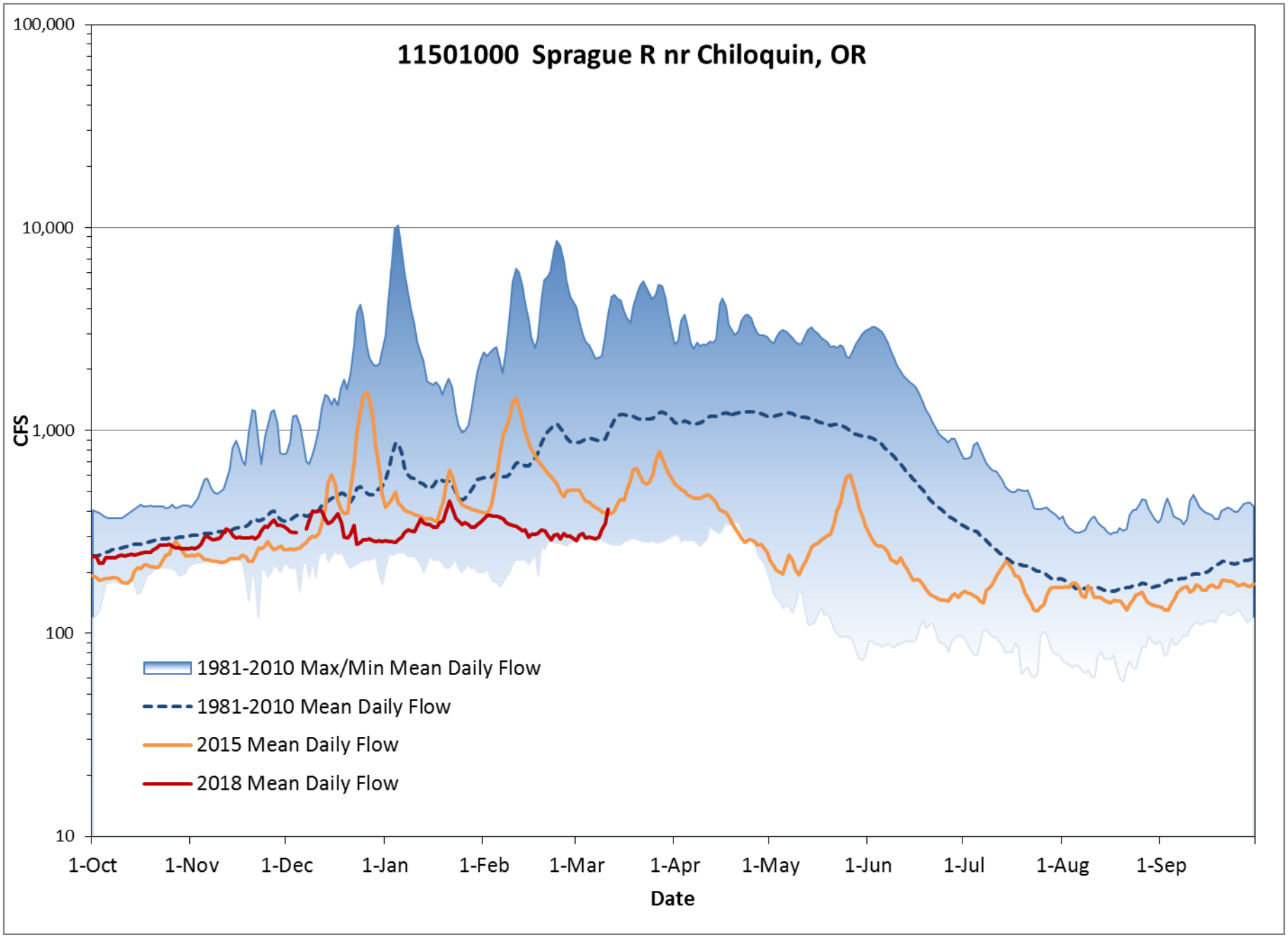

2018 Statewide
Percent of Average Stream Flow
2018 Monthly Percent of Average
2018 Cumulative Percent of Average
Percent of Average
350%
300%
250%
200%
150%
100%
50%
0%
154%
154%
128%
131%
65%
95%
89%
92%
62%
83%
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Month

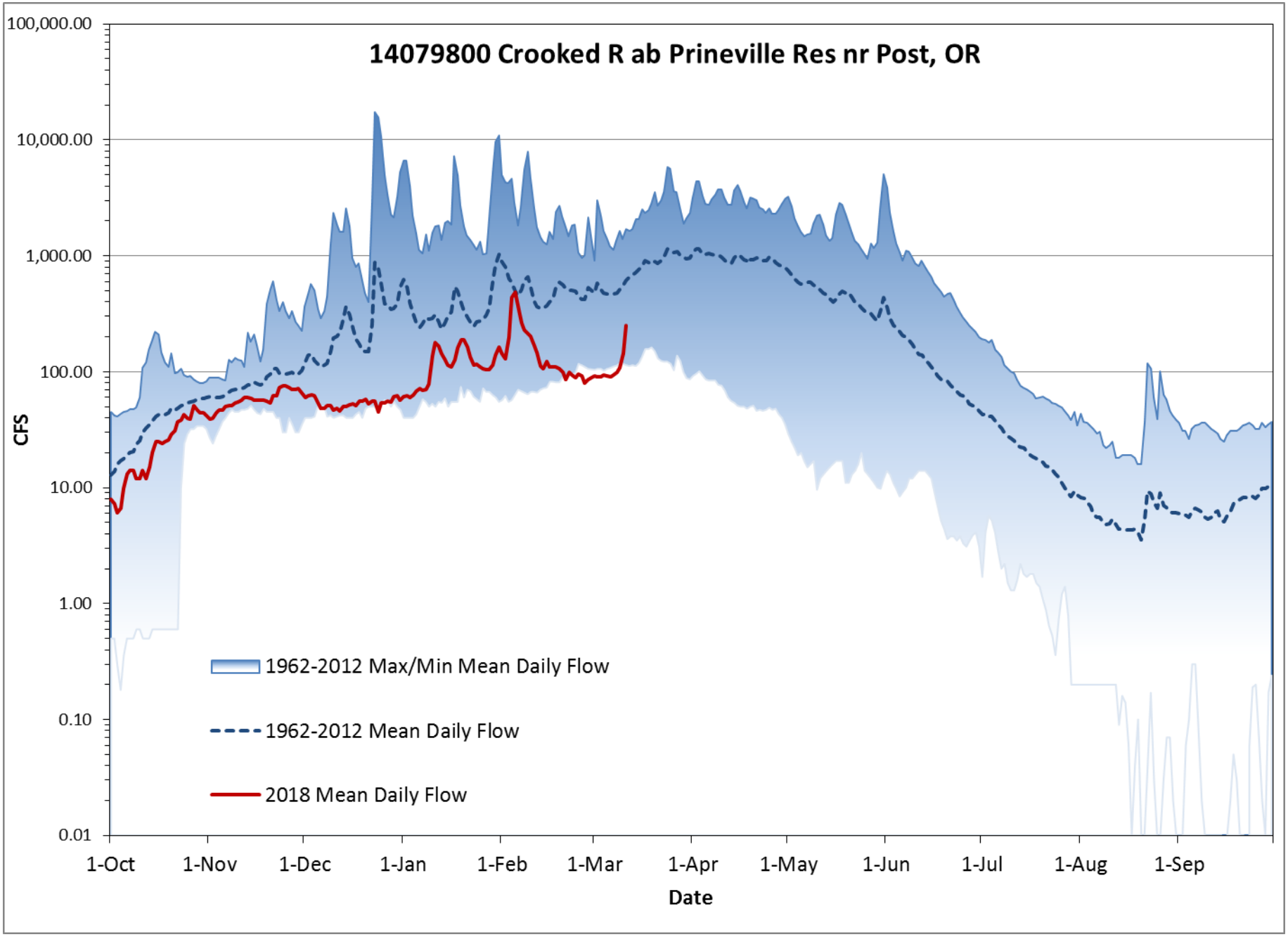

14118500 W Fk Hood R nr Dee, OR
100,000
10,000
1,000
100
10
1
CFS
1981-2010 Max/Min Mean Daily Flow
1981-2010 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date

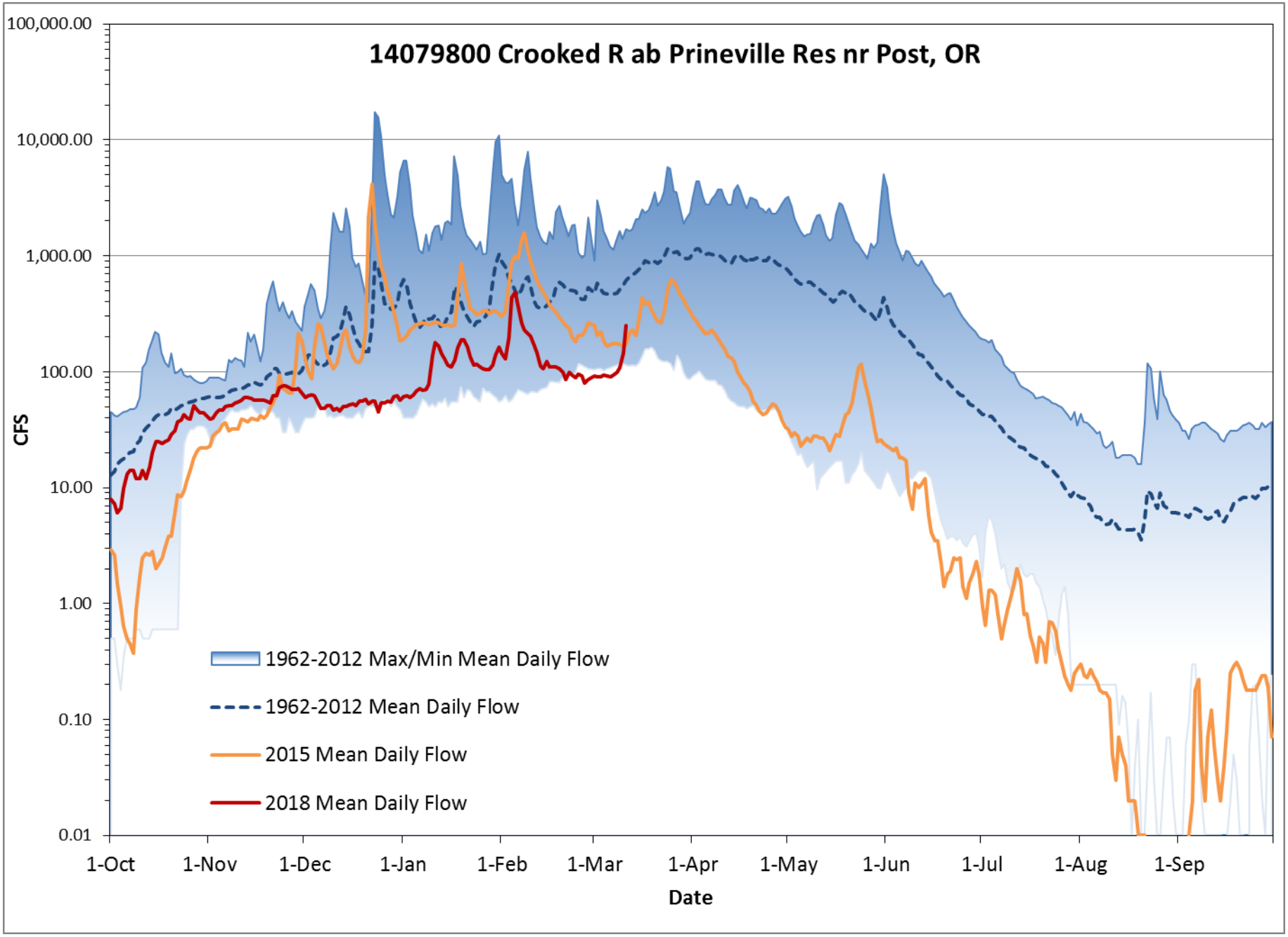

14118500 W Fk Hood R nr Dee, OR
100,000
10,000
1,000
100
10
1
CFS
1981-2010 Max/Min Mean Daily Flow
1981-2010 Mean Daily Flow
2018 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date

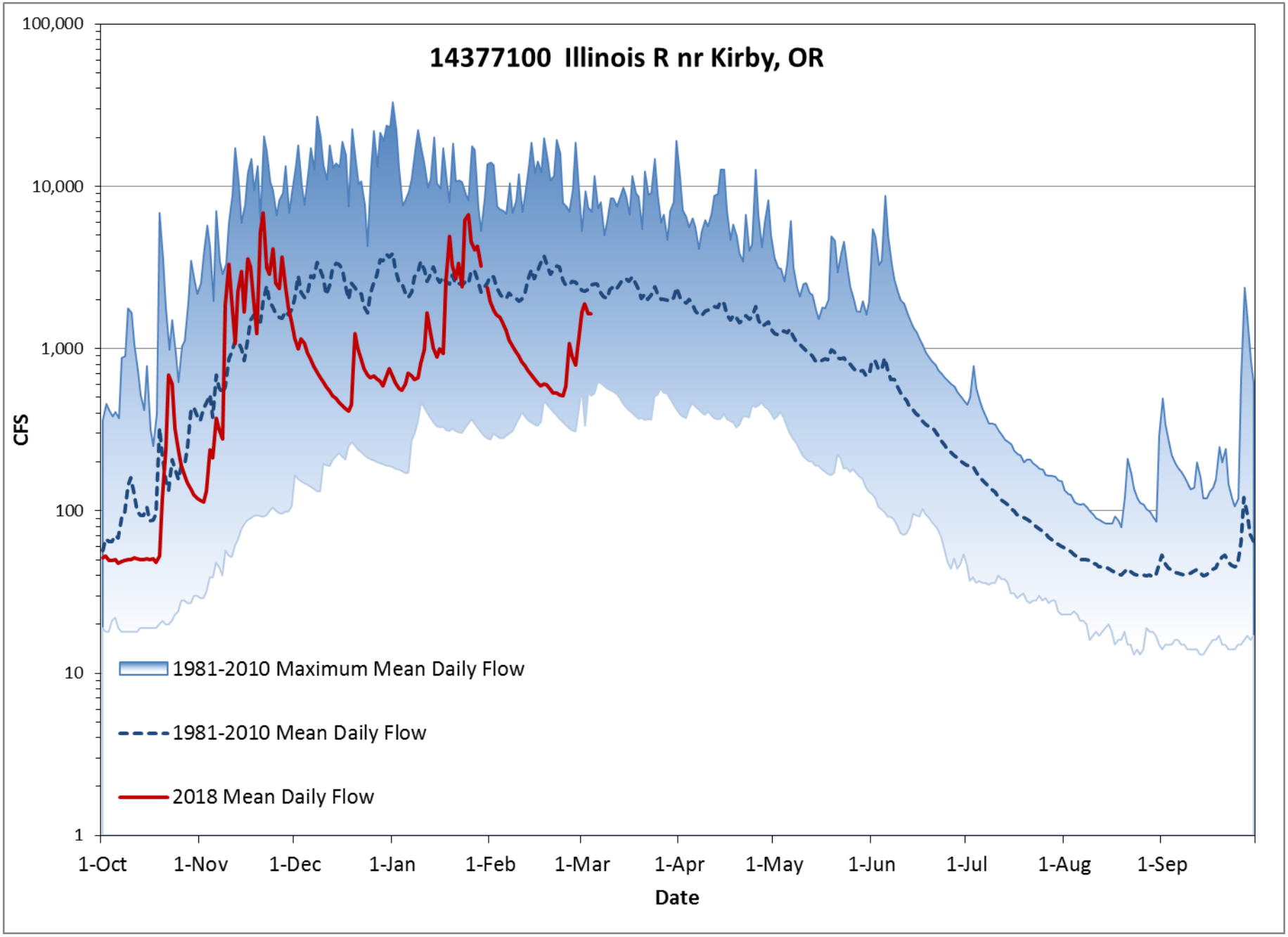

14118500 W Fk Hood R nr Dee, OR
100,000
10,000
1,000
100
10
1
CFS
1981-2010 Max/Min Mean Daily Flow
1981-2010 Mean Daily Flow
2015 Mean Daily Flow
2018 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date

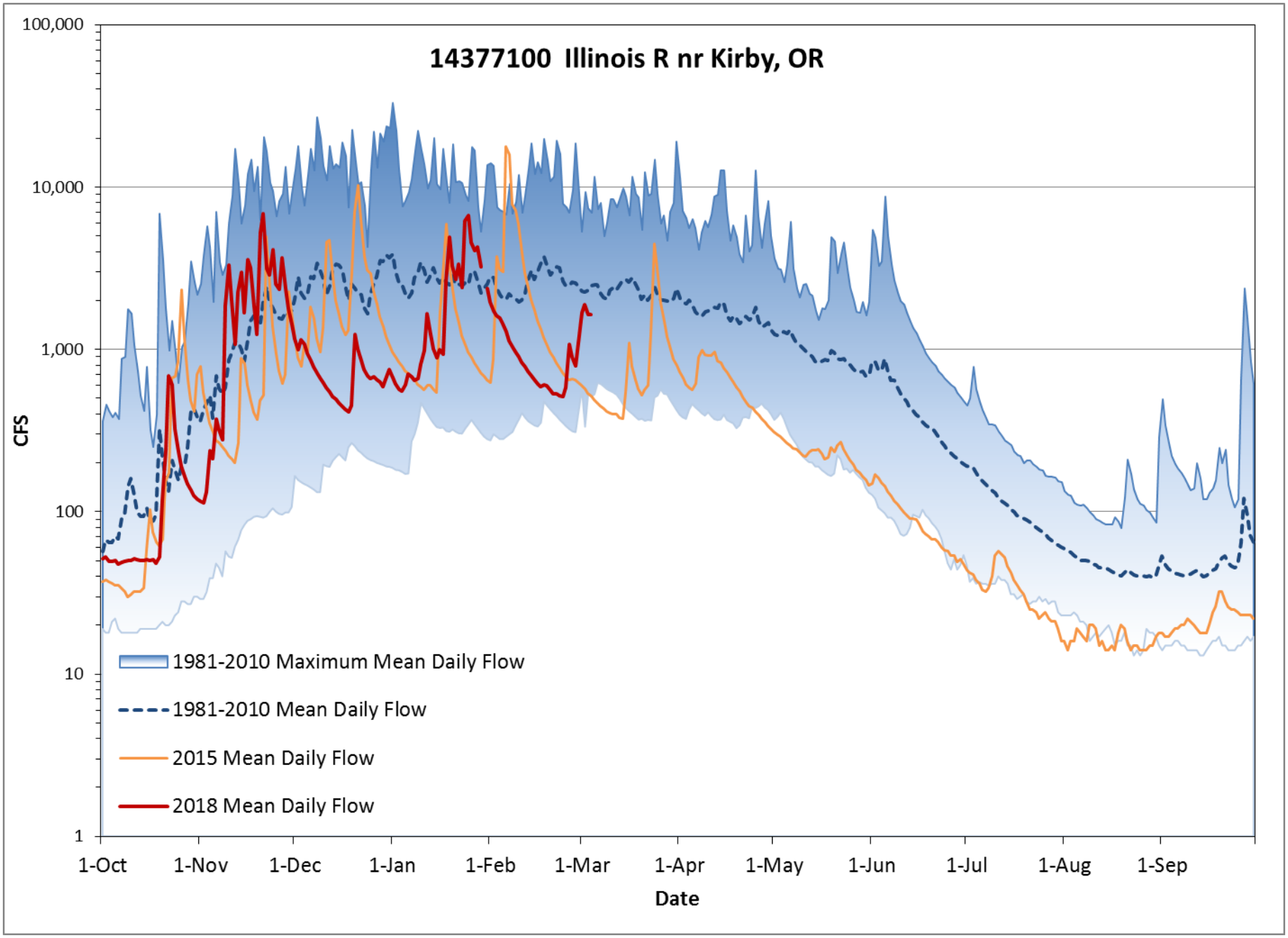

11501000 Sprague R nr Chiloquin, OR
100,000
10,000
1,000
100
10
CFS
1981-2010 Max/Min Mean Daily Flow
1981-2010 Mean Daily Flow
2018 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date


11501000 Sprague R nr Chiloquin, OR
100,000
10,000
1,000
100
10
CFS
1981-2010 Max/Min Mean Daily Flow
1981-2010 Mean Daily Flow
2015 Mean Daily Flow
2018 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


14079800 Crooked R ab Prineville Res nr Post, OR
100,000.00
10,000.00
1,000.00
100.00
10.00
1.00
0.10
0.01
CFS
1962-2012 Max/Min Mean Daily Flow
1962-2012 Mean Daily Flow
2018 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


14079800 Crooked R ab Prineville Res nr Post, OR
100,000.00
10,000.00
1,000.00
100.00
10.00
1.00
0.10
0.01
CFS
1962-2012 Max/Min Mean Daily Flow
1962-2012 Mean Daily Flow
2015 Mean Daily Flow
2018 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


14377100 Illinois R nr Kirby, OR
100,000
10,000
1,000
100
10
1
CFS
1981-2010 Maximum Mean Daily Flow
1981-2010 Mean Daily Flow
2018 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


14377100 Illinois R nr Kirby, OR
100,000
10,000
1,000
100
10
1
CFS
1981-2010 Maximum Mean Daily Flow
1981-2010 Mean Daily Flow
2015 Mean Daily Flow
2018 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

Thank you.

Water Supply Availability Committee

March 2018

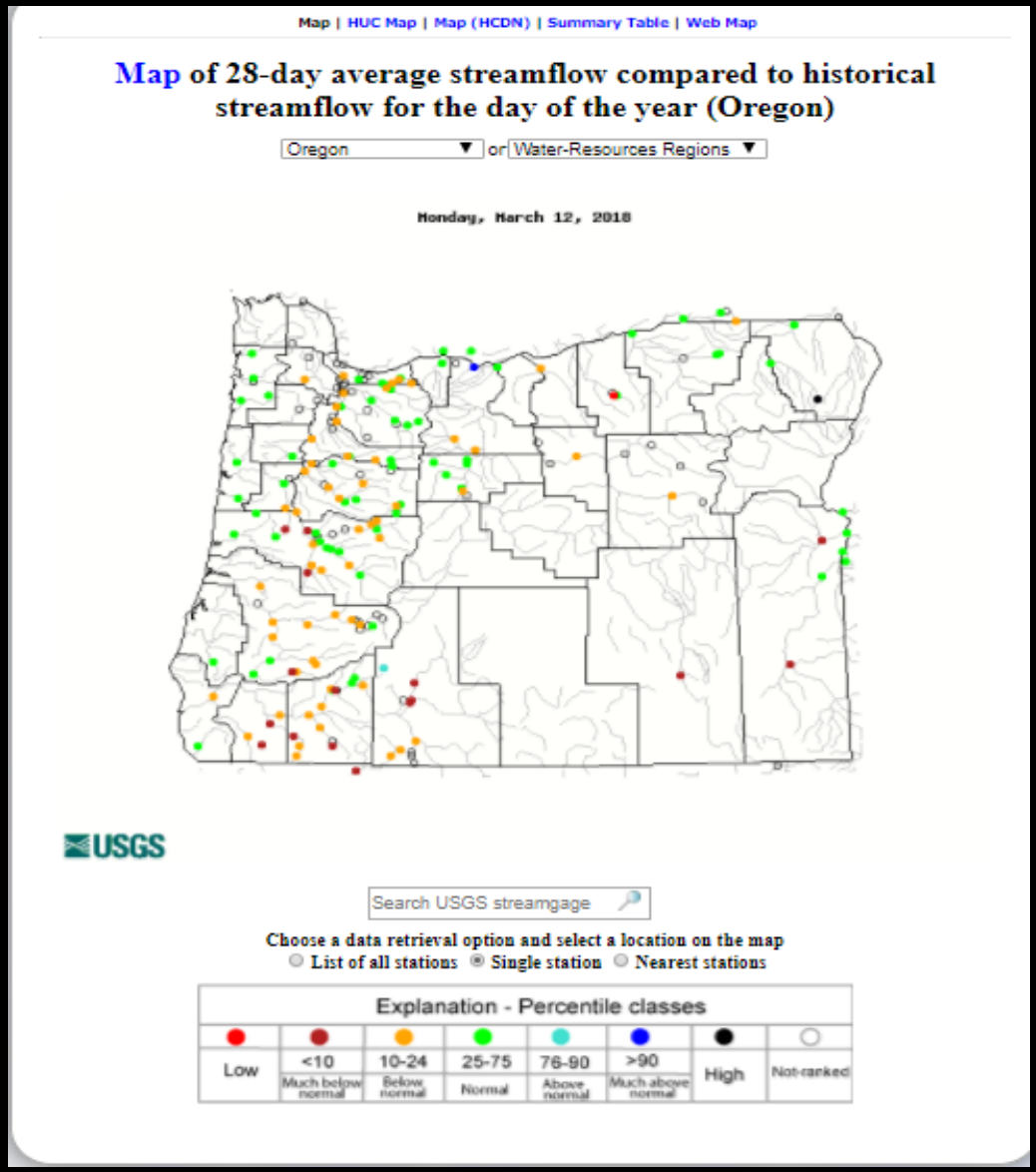
USGS Update on Surface Water Conditions

Marc Stewart USGS ORWSC

Provisional Data Statement
Data are provisional and subject to revision until they have been thoroughly reviewed and received final approval.

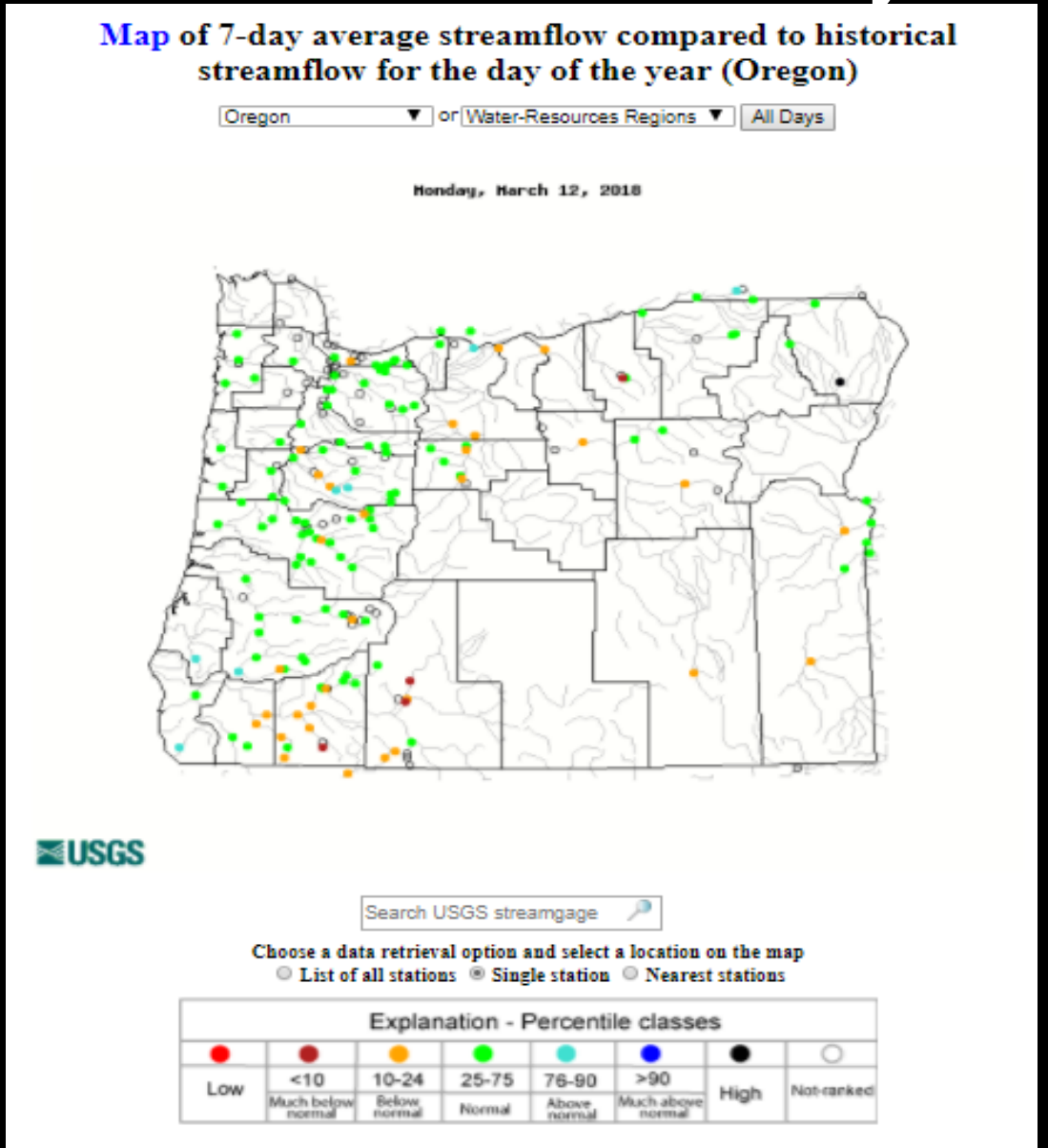
U.S. Department of the Interior
U.S. Geological Survey

Oregon Map of 28-day average streamflow compared to historical streamflow for the day of the year

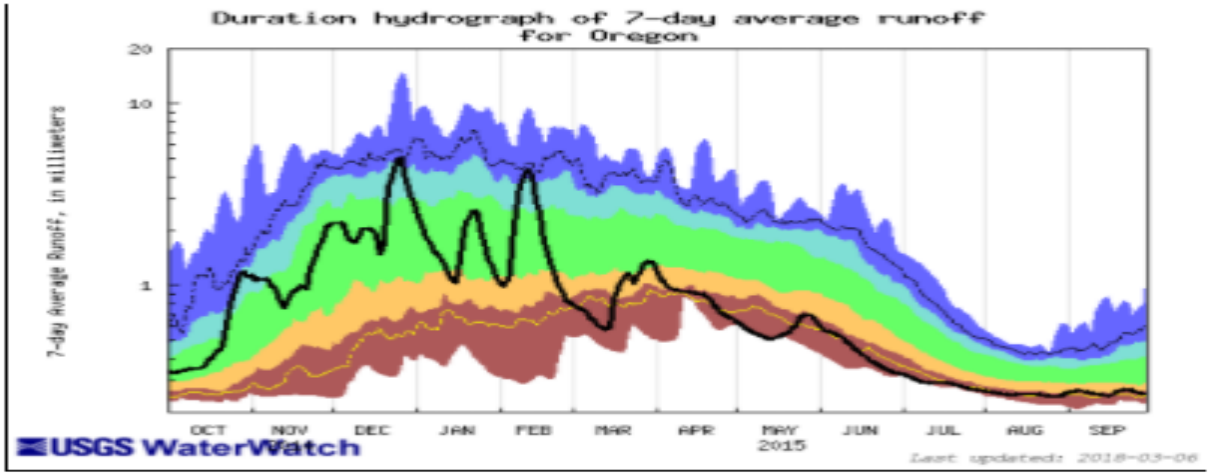


USGS

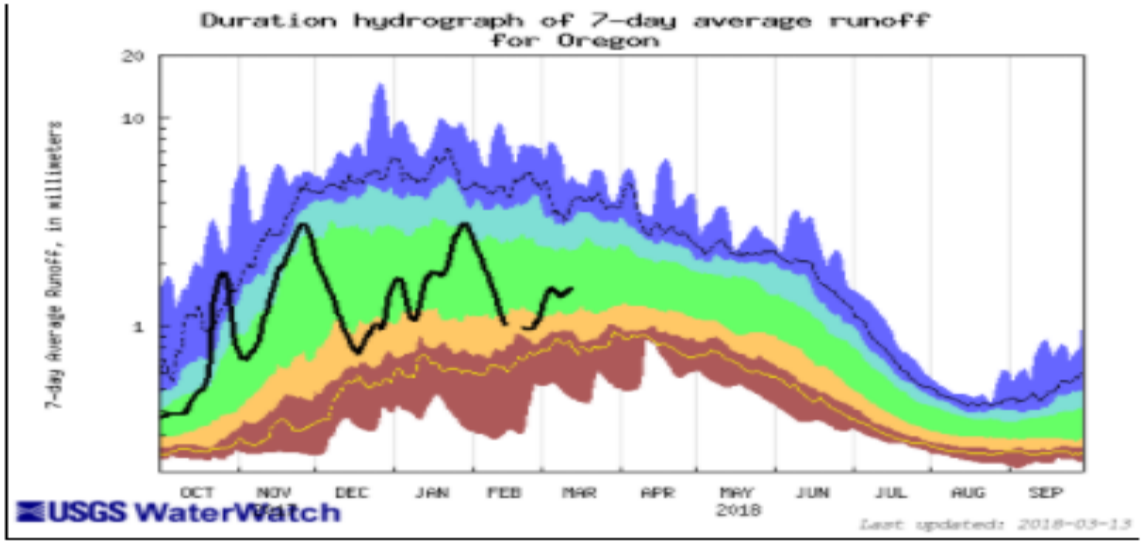
Oregon Map of 7-day average streamflow compared to historical streamflow for the day of the year



USGS

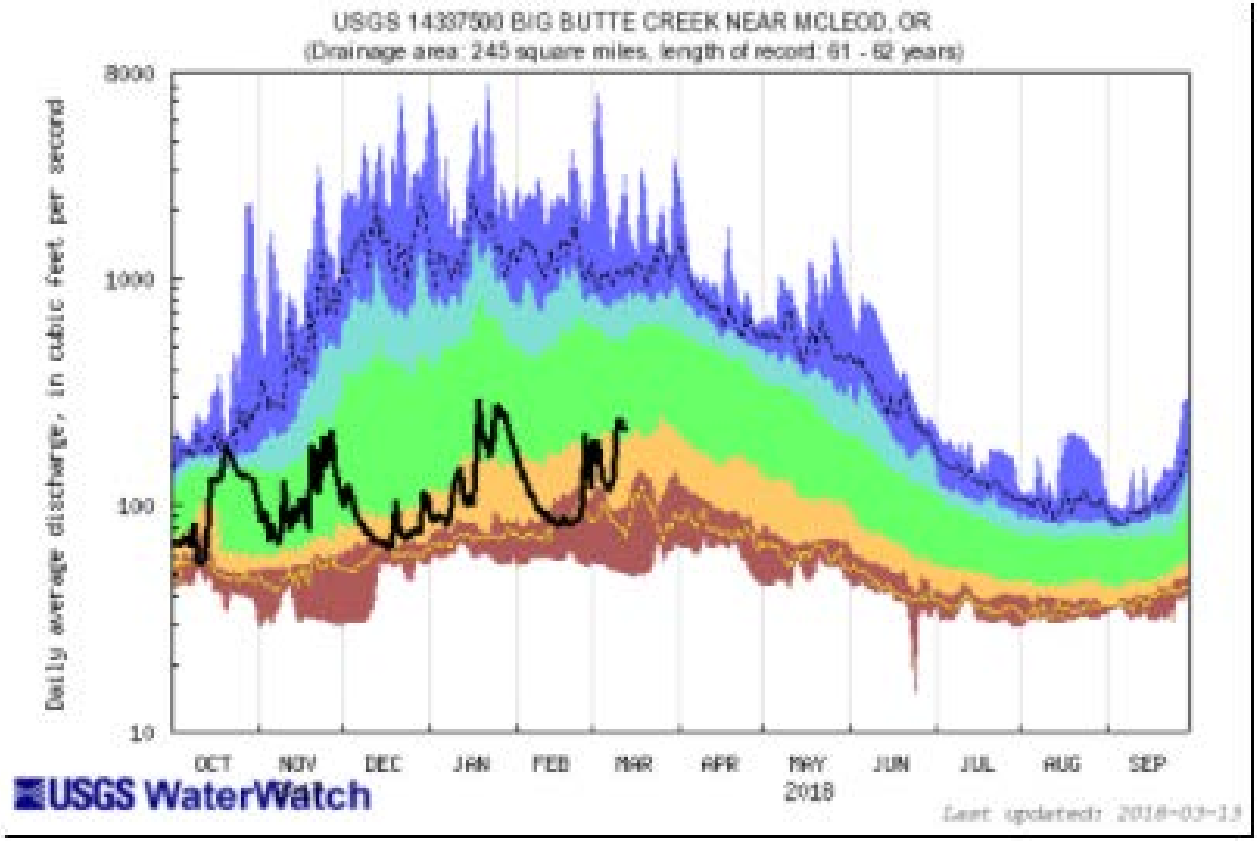

Duration hydrograph of 7-day average runoff
for Oregon
7-day Average Runoff, in millimeters
20
10
1
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
2015
JUN
JUL
AUG
SEP
USGS WaterWatch
Last updated: 2018-03-06

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

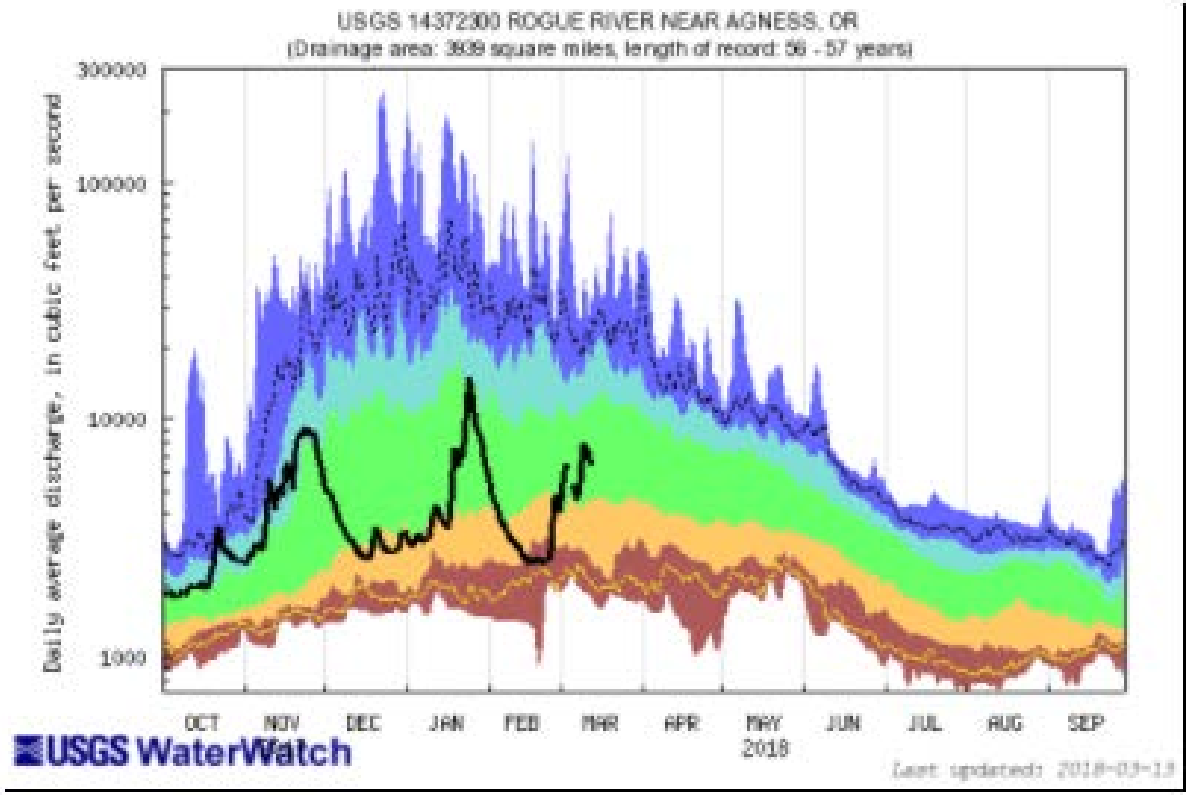

Duration hydrograph of 7-day average runoff
for Oregon
7-day Average Runoff, in millimeters
20
10
1
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
2018
JUN
JUL
AUG
SEP
USGS WaterWatch
Last updated: 2018-03-13

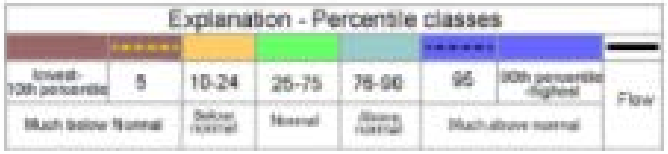
Explanation - Percentile classes
lowest-10th percentile
5
10-24
25-75
76-90
95
90th percentile -highest
Runoff
Much below Normal
Below normal
Normal
Above normal
Much above normal

ROGUE/UMPQUA BASIN

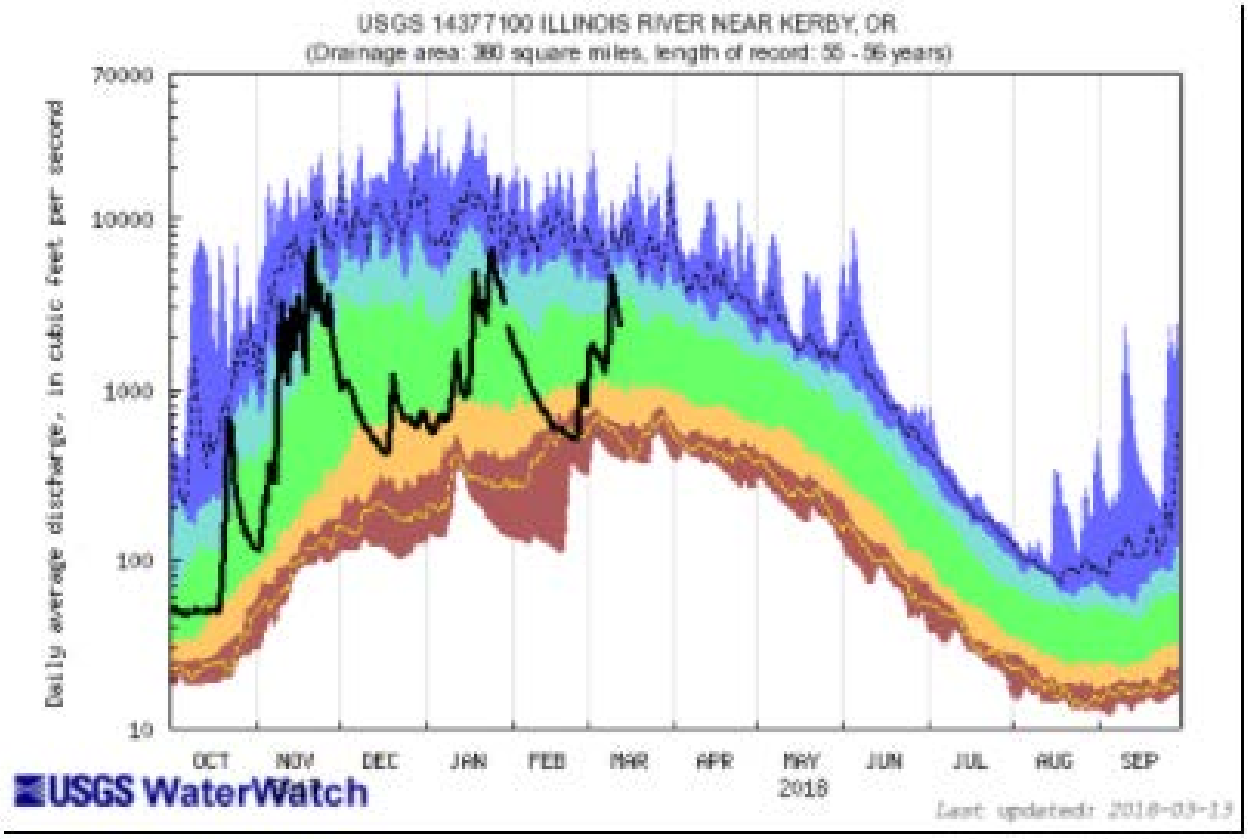


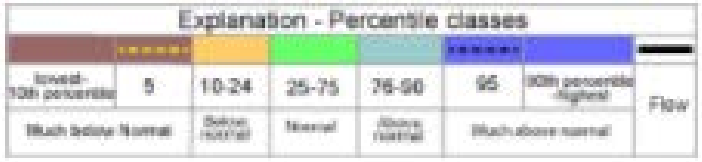
ROGUE/UMPQUA BASIN





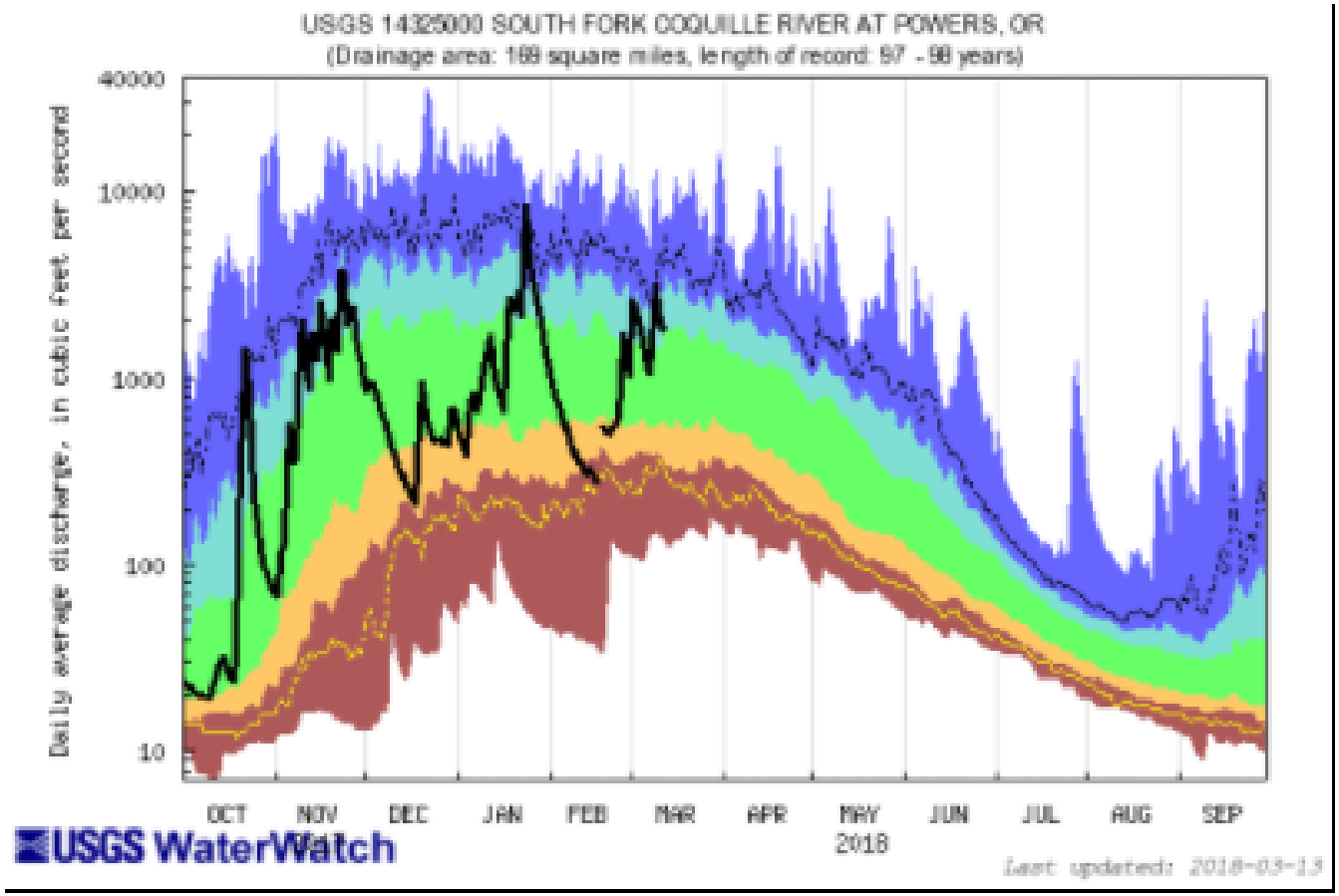
USGS

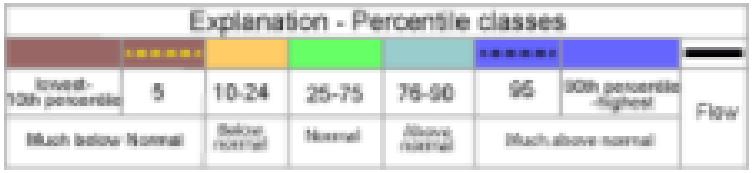

USGS 14377100 ILLINOIS RIVER NEAR KERBY, OR
(Drainage area: 380 square miles, length of record: 55 - 56 years)
Daily average discharge, in cubic feet per second
70000
10000
1000
100
10
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
2018
USGS WaterWatch
Last updated: 2018-03-13


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

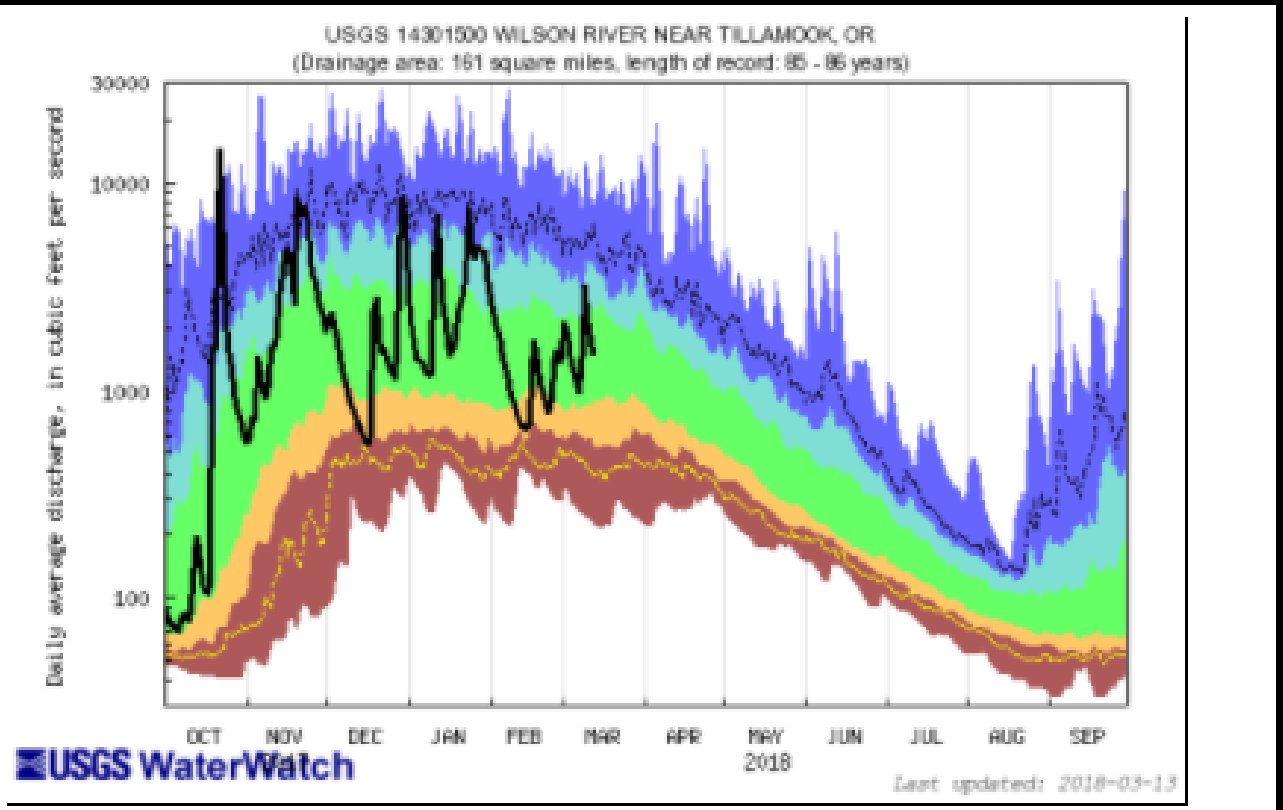
USGS

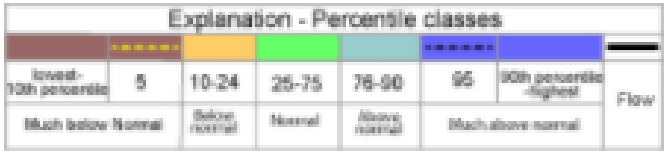
SOUTH COAST


USGS 14325000 SOUTH FORK COQUILLE RIVER AT POWERS, OR
(Drainage area: 169 square miles, length of record: 97 - 98 years)
Daily average discharge, in cubic feet per second
40000
10000
1000
100
10
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
2018
USGS WaterWatch
Last updated: 2018-03-13


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

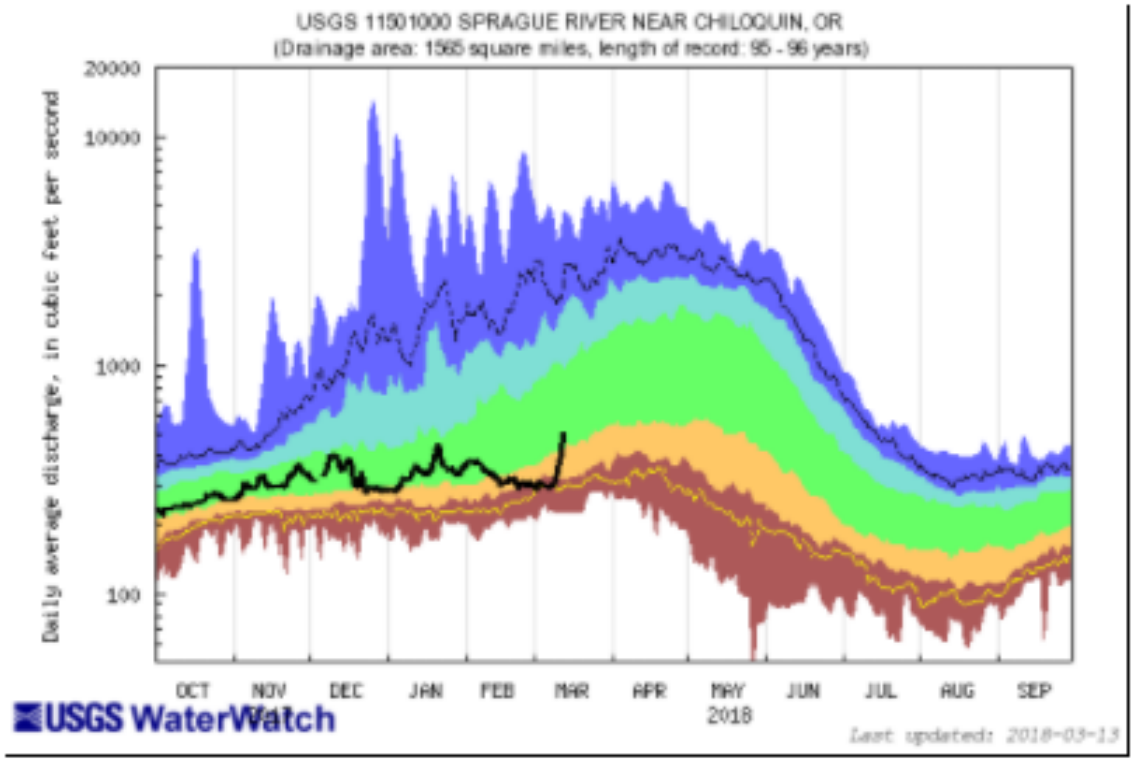
NORTH COAST





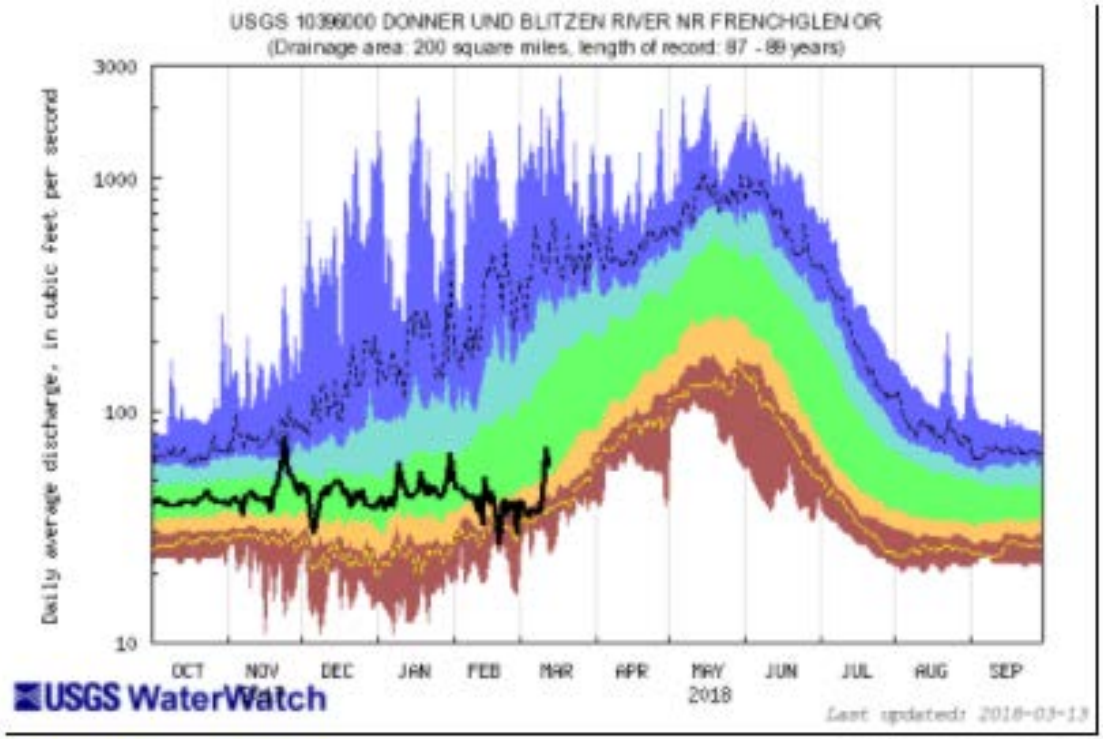
USGS

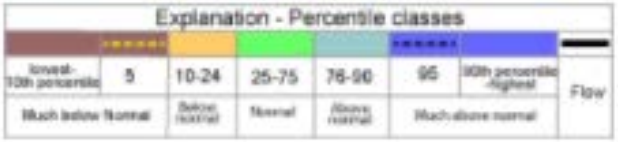
KLAMATH BASIN



USGS

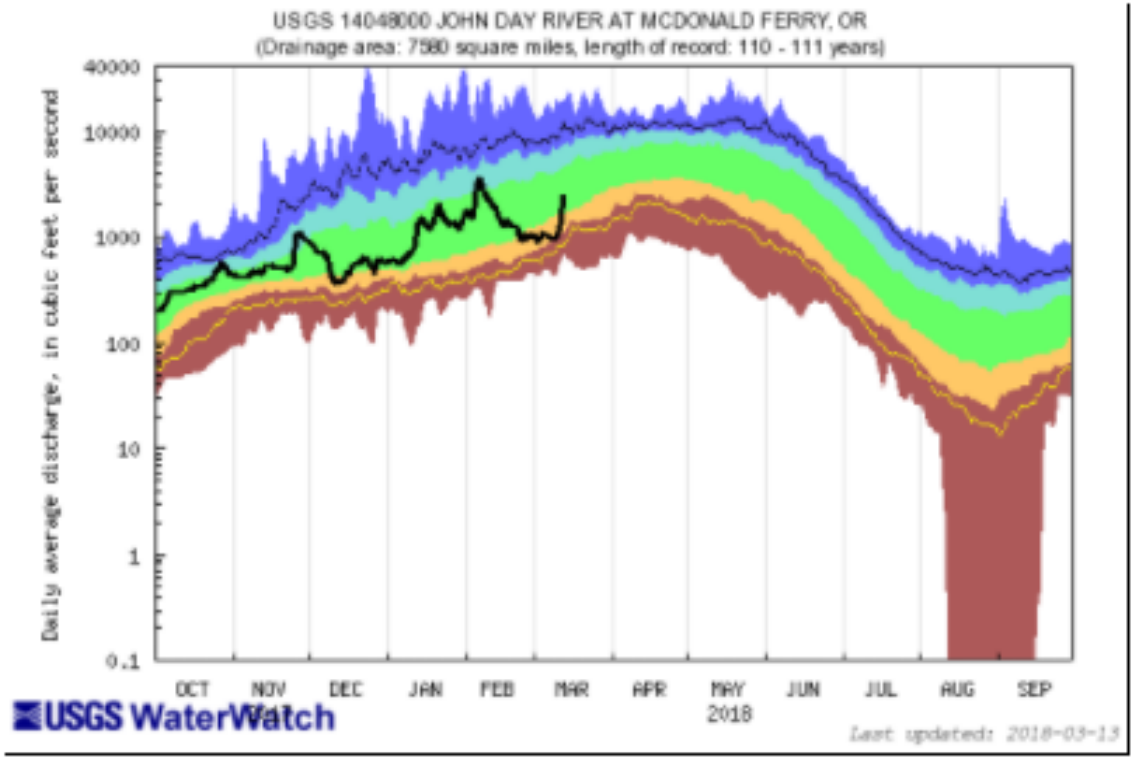
DONNER BLITZEN HARNEY COUNTY





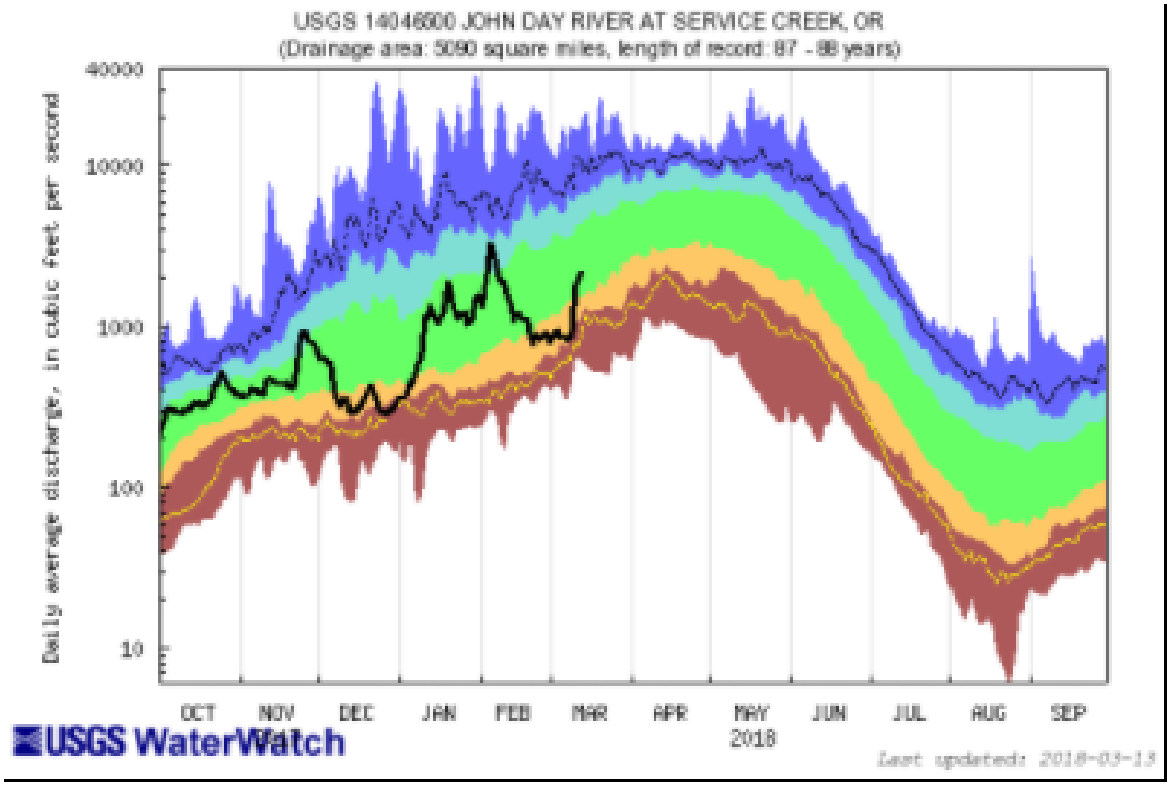
USGS

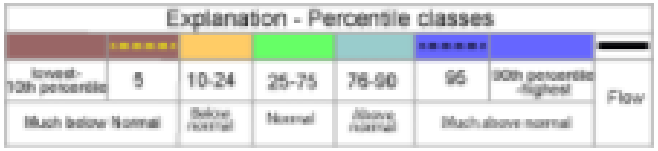
JOHN DAY



USGS

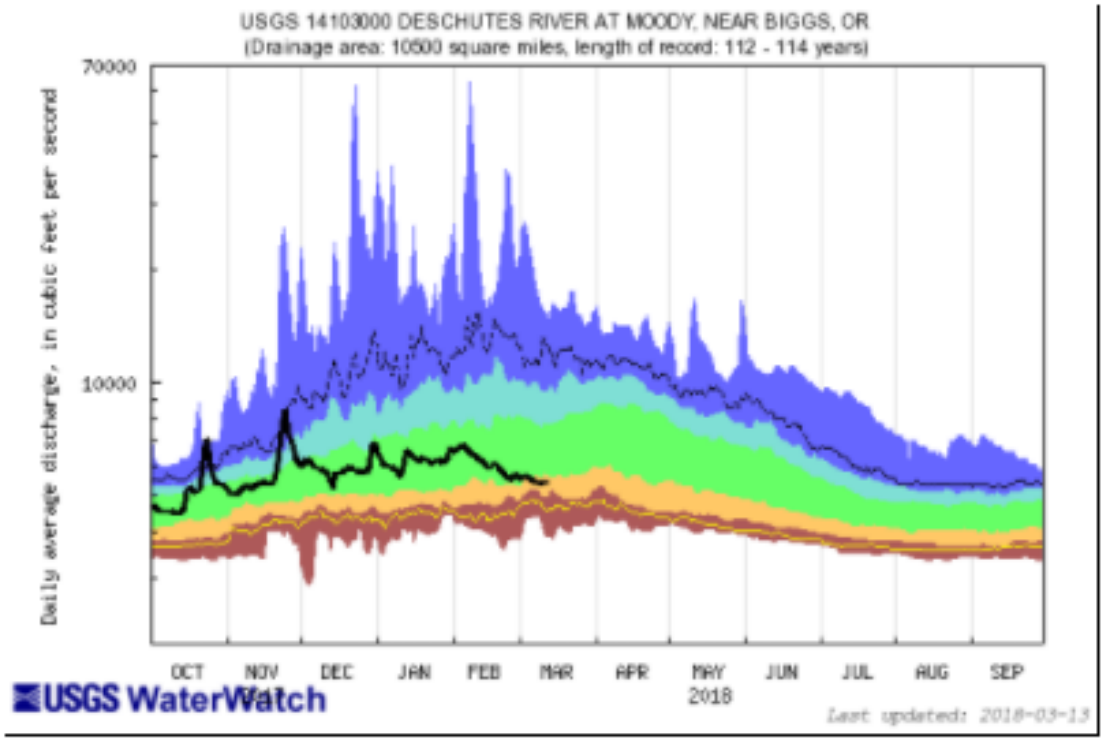
UPPER JOHN DAY





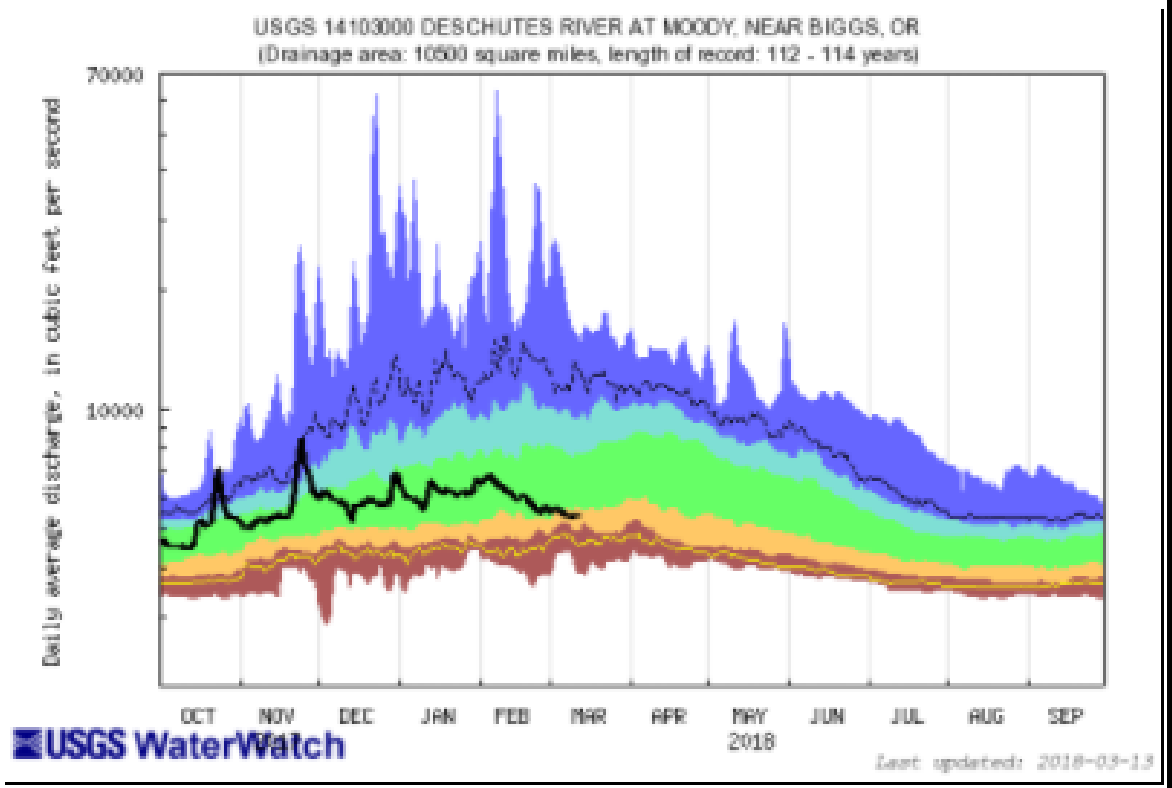
USGS

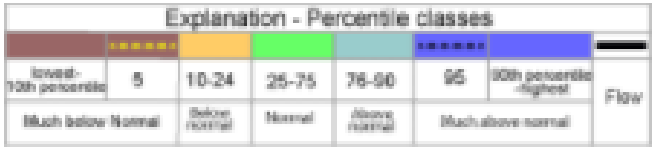
LOWER DESCHUTES BASIN



USGS

LOWER DECHUSTES/ HOOD RIVER BASIN





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US GEOLOGICAL SURVEY, OREGON WATER SCIENCE CENTER
WATER AVAILABILITY REPORT FOR FEBRUARY 2018

Station	NRCS SWSI Basin	Monthly mean discharge: Cubic feet per second	Monthly mean discharge: Percent of average	Change in discharge from previous month (percent)	Accumulated Runoff For the Period Oct. to Feb.: Percent of average
Donner Und Blitzen nr Frenchglen	Harney	41	45	-11	70
(*)Deep Creek above Adel	Lake County	55	46	-14	69
(*)Chewaucan River near Paisley	Lake County	56	45	-14	77
Williamson River near Chiloquin	Klamath	658	51	-2	72
Owyhee River near Rome	Owyhee	346	29	-8	58
(*)NF Malheur River near Beulah	Malheur	66	56	5	87
Grande Ronde R at Troy	Grande Ronde Powder/Burnt	4,813	151	58	138
Umatilla River nr Gibbon	Umatilla Lower John Day	614	173	10	167
John Day River at Service Crk	Upper John Day	1,463	56	39	62
(*)Little Deschutes River nr LaPine	Upper Deschutes	136	76	-1	101
Hood River nr Hood River	Lower Deschutes Mt.Hood	1,369	94	-17	124
Willamette River at Salem	Willamette	22,473	66	-39	88
Wilson River near Tillamook	North Coast	1,249	60	-59	114
Umpqua River near Elkton	Rogue/Umpqua	5,653	42	-34	58
Rogue River near Agness	Rogue/Umpqua	3,357	36	-42	58
SF Coquille River at Powers	South Coast	624	40	-66	73
Chetco River near Brookings	South Coast	1,475	32	-66	70

All data should be considered provisional and subject to revision

https://or.water.usgs.gov/data_dir/war_dir/war1709.html

USGS

Power Point “USGS Update on Surface Water Conditions”

By: Marc Stewart USGS ORWSC

Water Availability Report By: Tiffany Rae Jacklin
USGS ORWSC

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