

Oregon Water Supply Availability Committee
February 13, 2020



New Dutchman #3 SC
January 31, 2020
Elev = 6,320'

Hungry Flat Snow Course
January 31, 2020
Elev = 4,400'

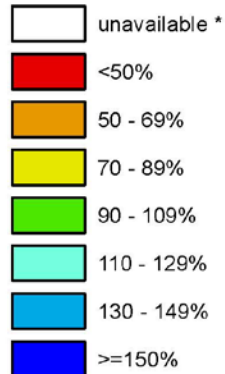
H. Scott Oviatt
USDA – Natural Resources Conservation Service
scott.oviatt@usda.gov
503-414-3271

Snowpack

Oregon SNOTEL Snowpack was 45% of normal

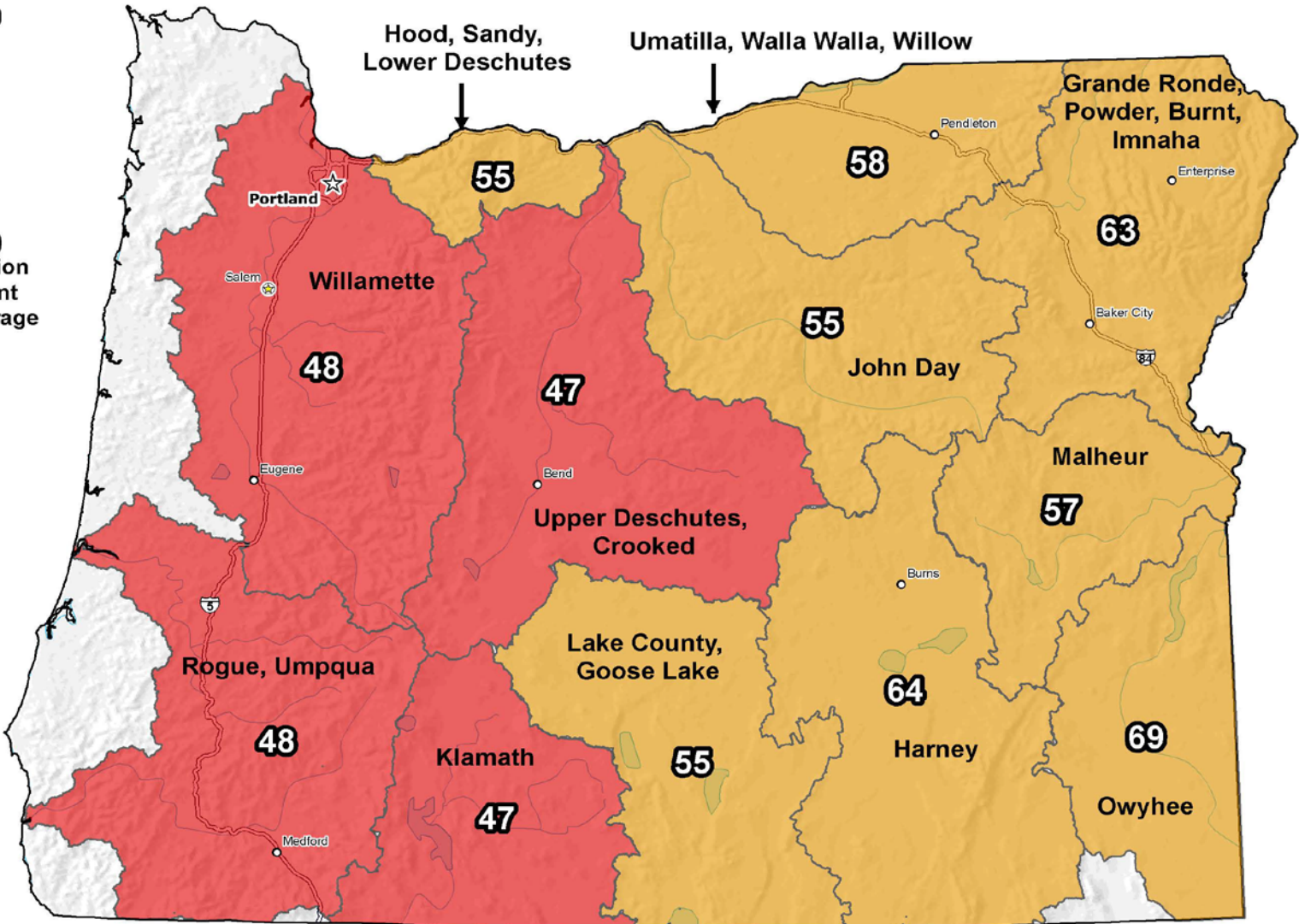
Jan 01, 2020

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).



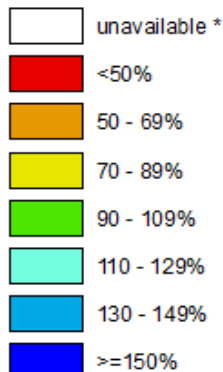
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Statewide SNOTEL Snowpack is 95% of normal

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

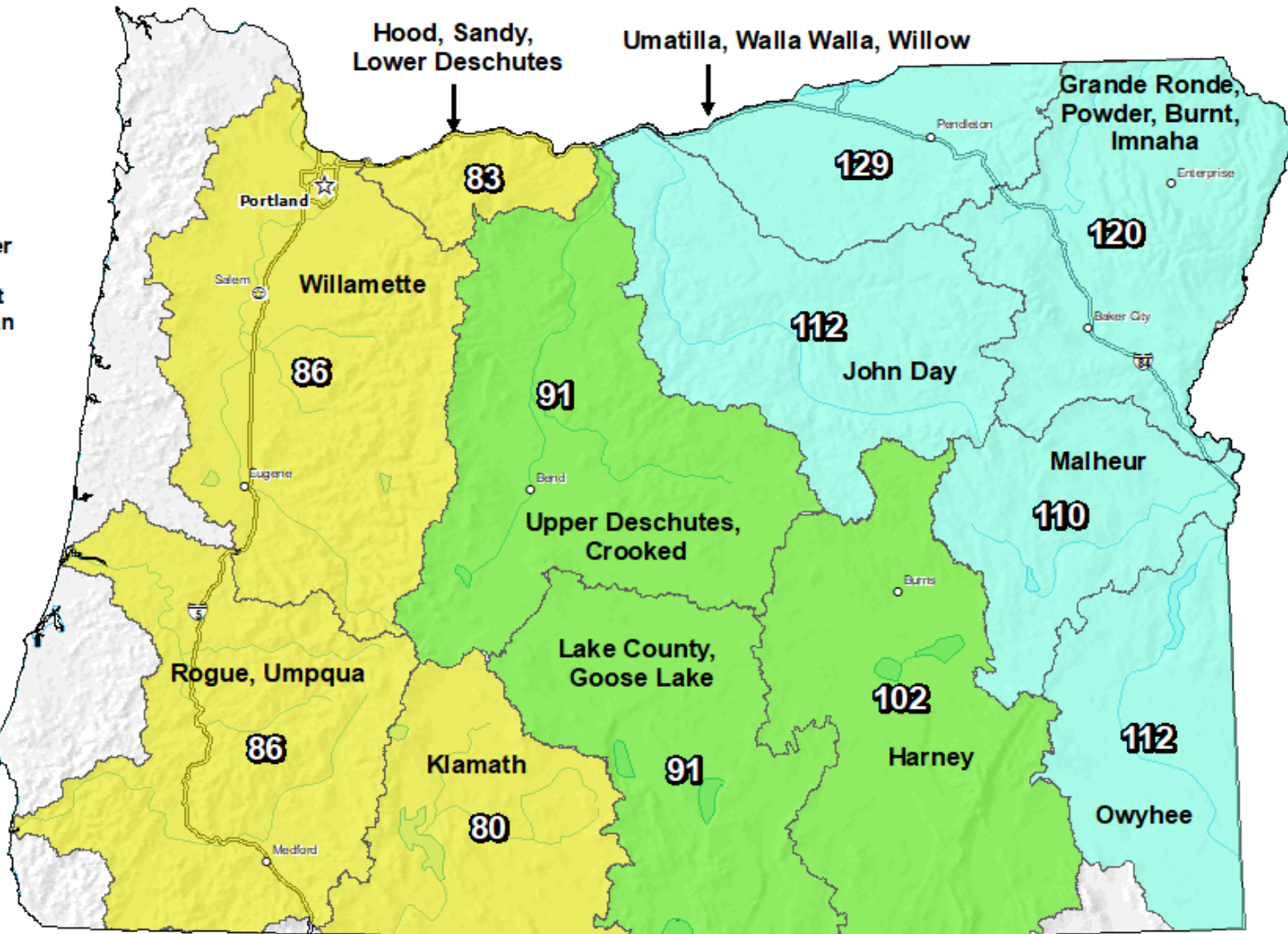
Feb 13, 2020

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

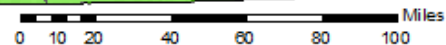


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Provisional Data
Subject to Revision



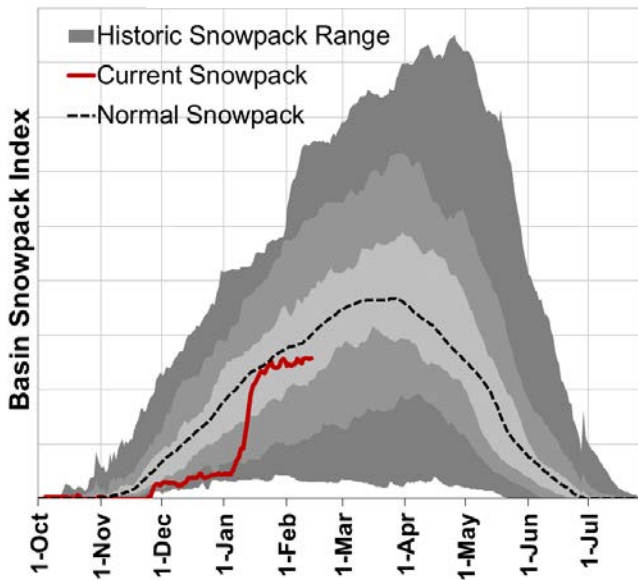
The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).



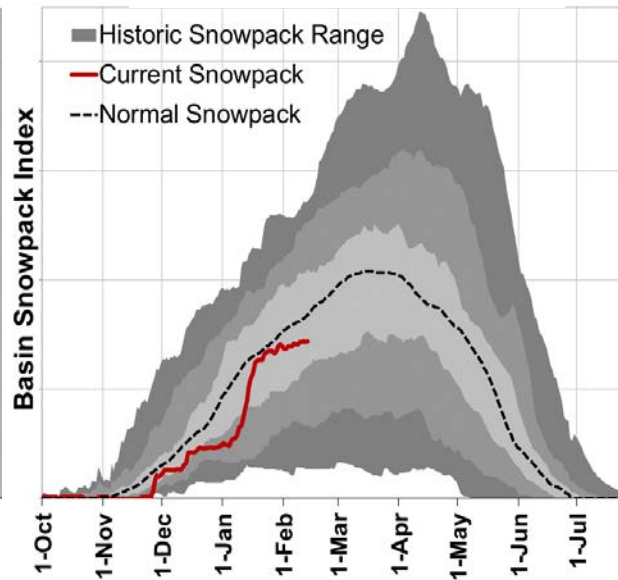
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

February 13, 2019

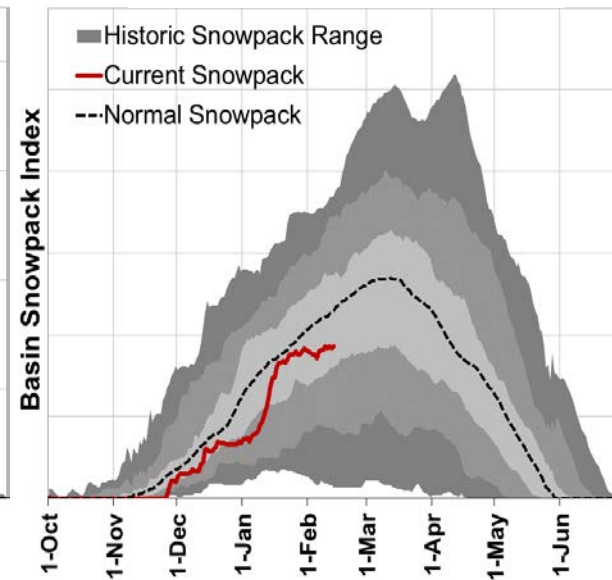
Willamette



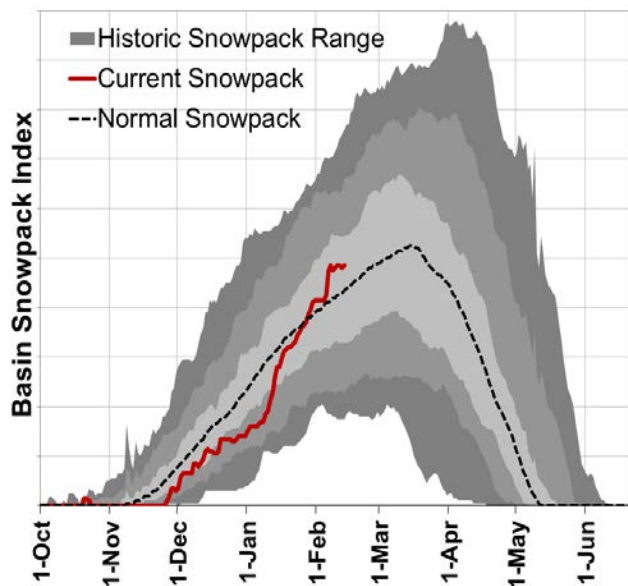
Rogue/Umpqua



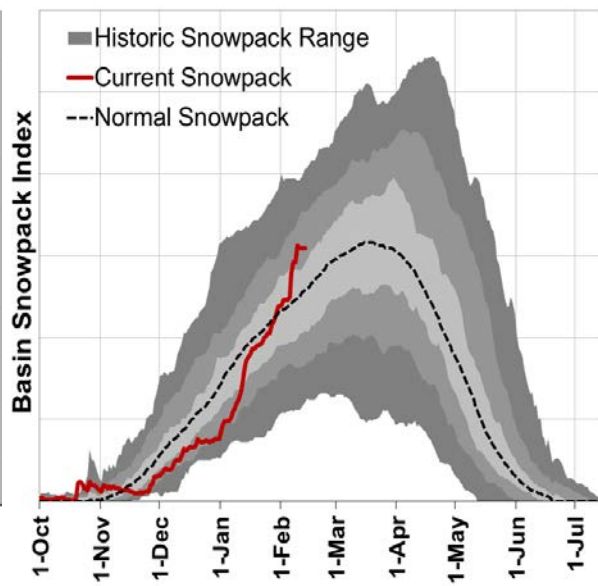
Klamath



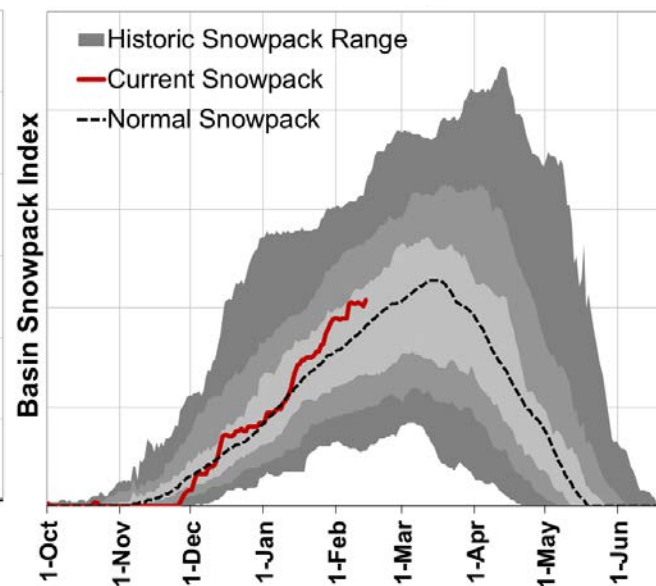
John Day



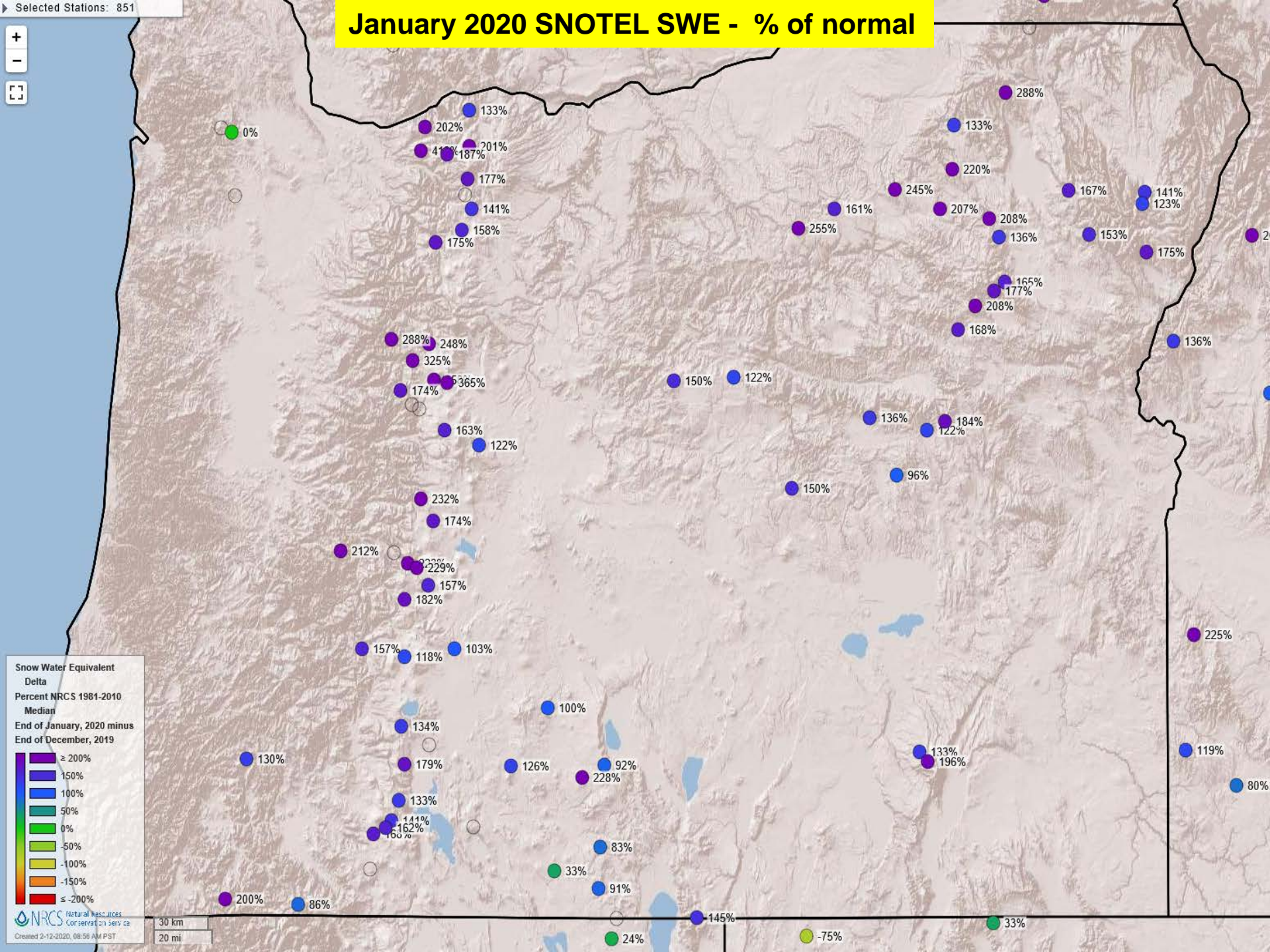
Grande Ronde/Powder/Burnt



Owyhee/Malheur



January 2020 SNOTEL SWE - % of normal



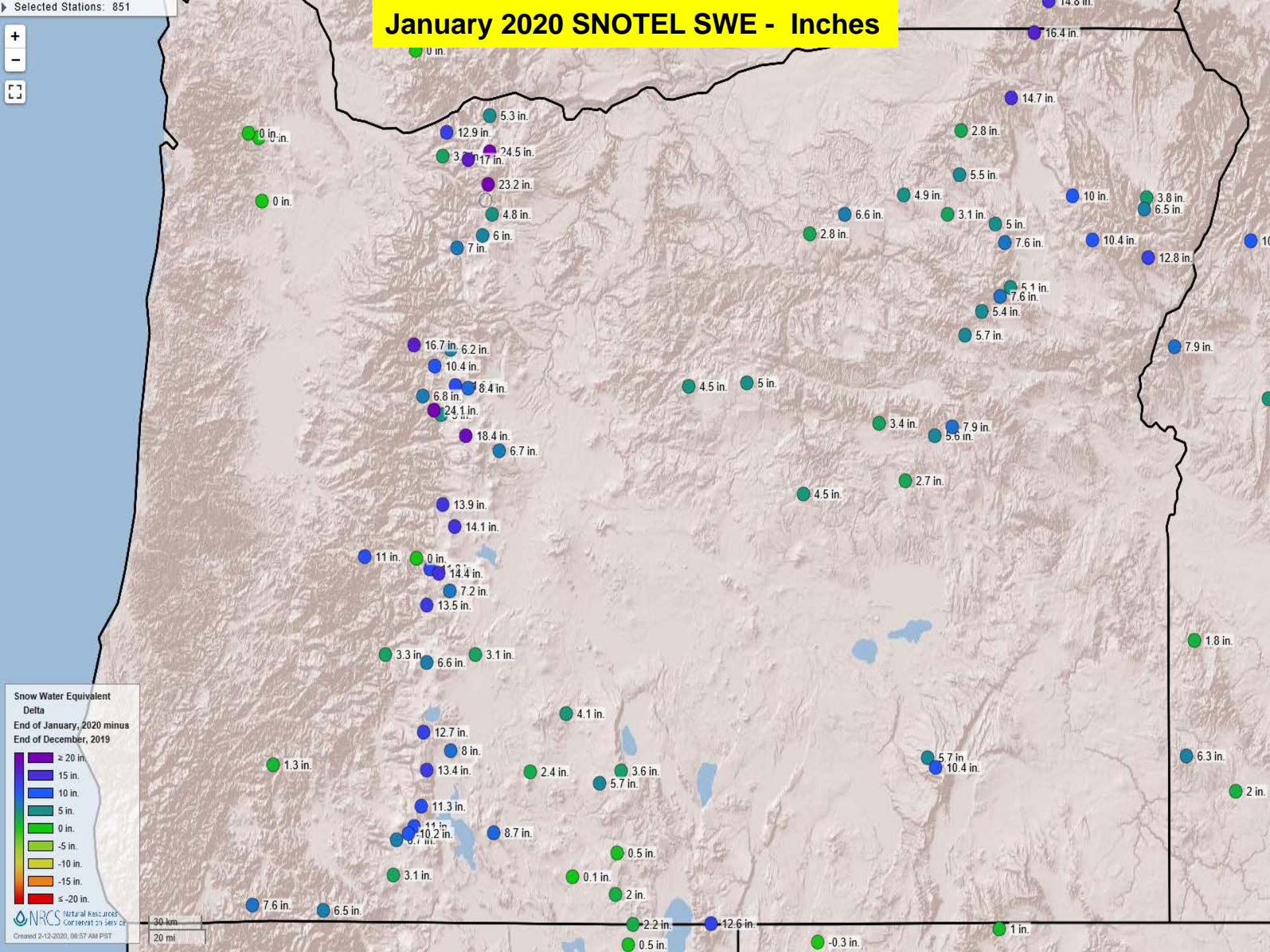
Snow Water Equivalent Delta
Percent NRCS 1981-2010 Median
End of January, 2020 minus
End of December, 2019

- $\geq 200\%$
- 150%
- 100%
- 50%
- 0%
- 50%
- 100%
- 150%
- $\leq -200\%$

30 km
20 mi

- 0%
- 133%
- 202%
- 41%
- 187%
- 201%
- 177%
- 141%
- 158%
- 175%
- 133%
- 288%
- 245%
- 207%
- 208%
- 167%
- 141%
- 123%
- 153%
- 175%
- 255%
- 161%
- 220%
- 136%
- 153%
- 175%
- 165%
- 177%
- 208%
- 168%
- 136%
- 136%
- 184%
- 122%
- 150%
- 96%
- 150%
- 225%
- 232%
- 174%
- 212%
- 223%
- 229%
- 157%
- 182%
- 157%
- 118%
- 103%
- 225%
- 232%
- 174%
- 212%
- 223%
- 229%
- 157%
- 182%
- 157%
- 118%
- 103%
- 130%
- 134%
- 179%
- 100%
- 126%
- 92%
- 228%
- 133%
- 141%
- 162%
- 100%
- 83%
- 91%
- 133%
- 196%
- 119%
- 80%
- 200%
- 86%
- 145%
- 33%
- 24%
- 75%
- 33%

January 2020 SNOTEL SWE - Inches



Snow Water Equivalent Delta
 End of January, 2020 minus
 End of December, 2019

- ≥ 20 in.
- 15 in.
- 10 in.
- 5 in.
- 0 in.
- 5 in.
- 10 in.
- 15 in.
- ≤ -20 in.

30 km
 20 mi

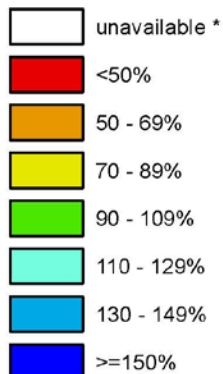
Precipitation

Statewide SNOTEL Precipitation was 51% of normal

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

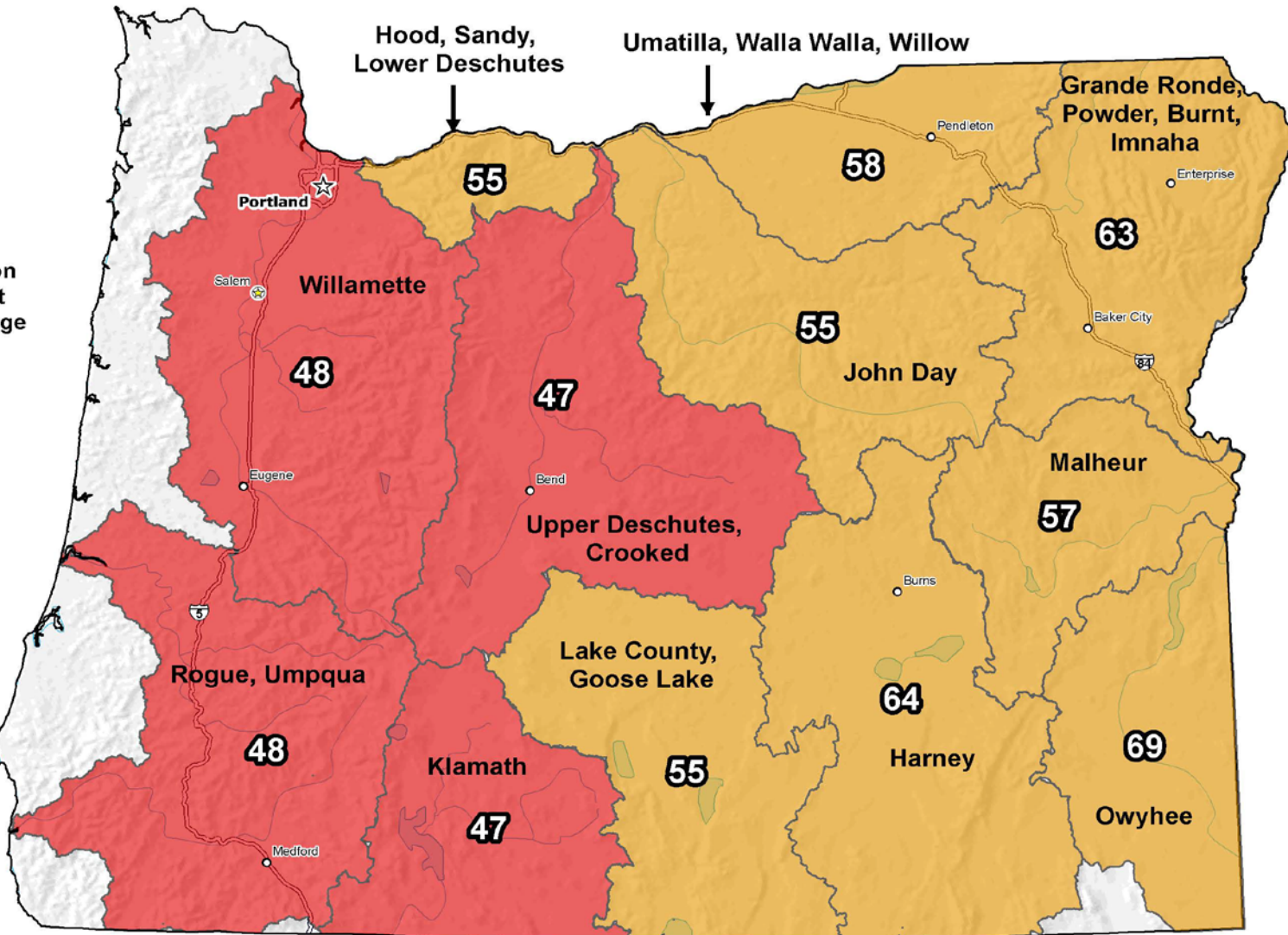
Jan 01, 2020

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).

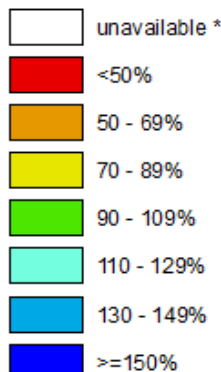


Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

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

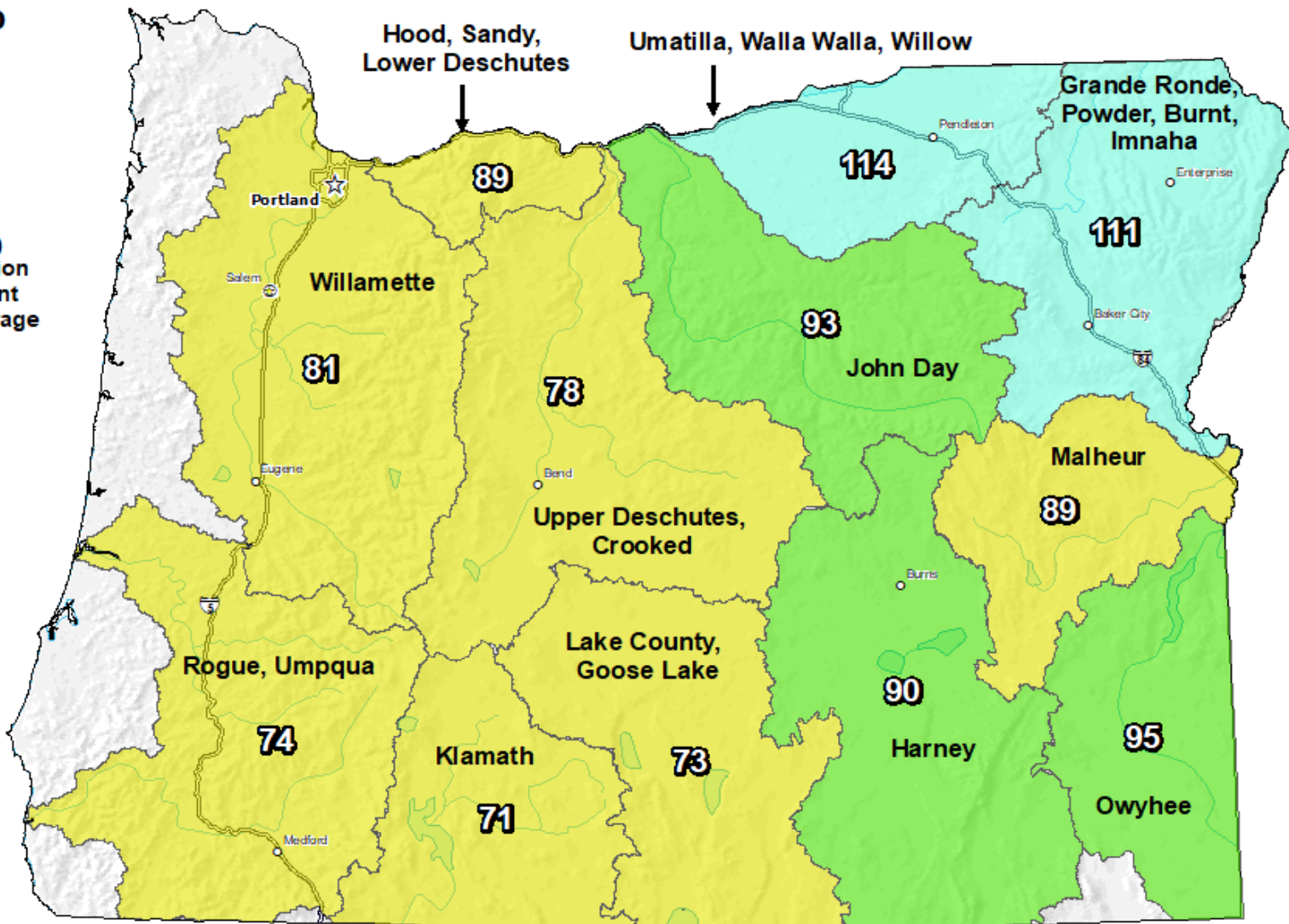
Feb 13, 2020

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

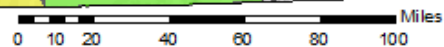


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Provisional Data
Subject to Revision

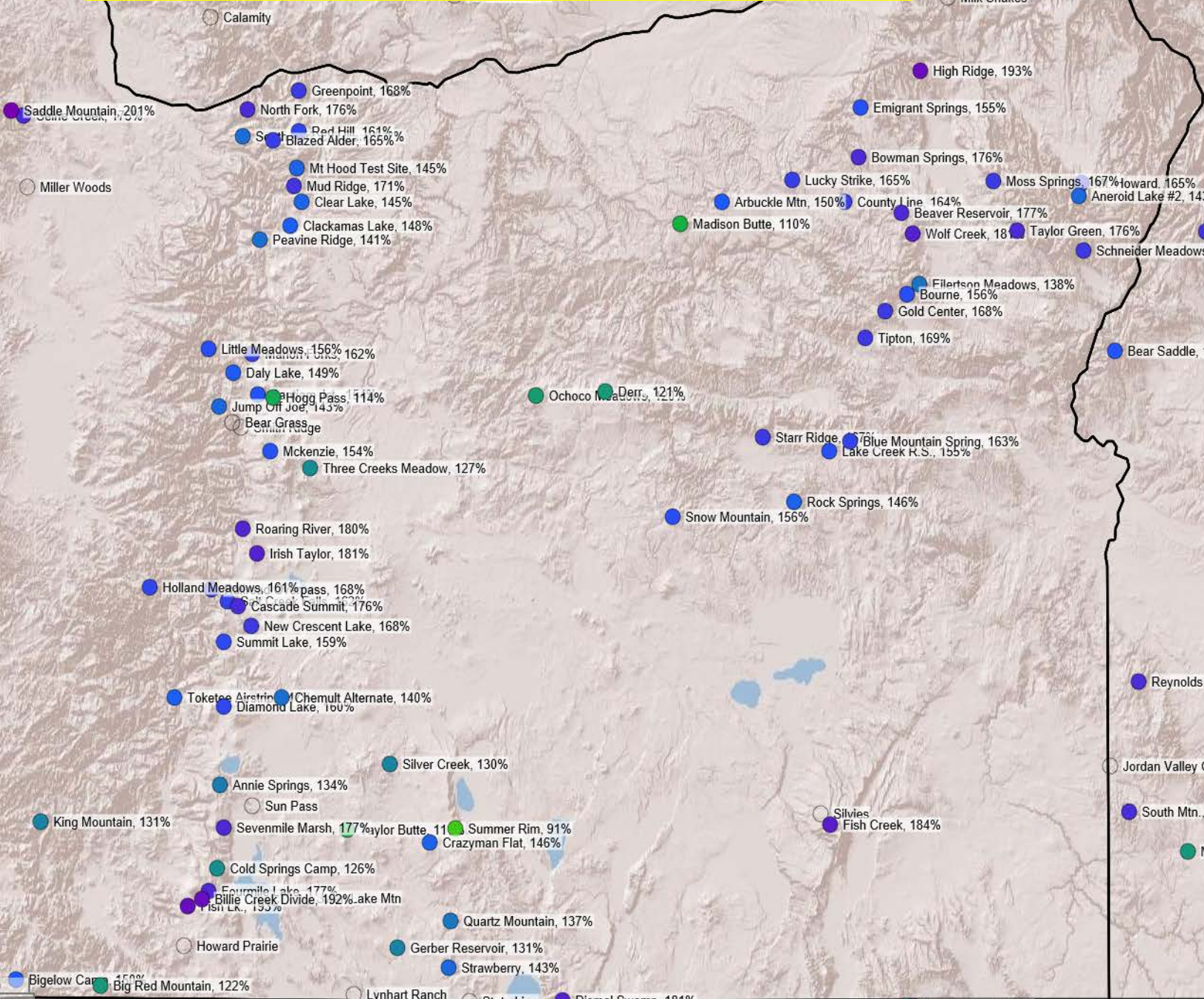


The water year to date precipitation percent of normal represents the accumulated precipitation found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).



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January 2020 SNOTEL Precipitation - % of Average



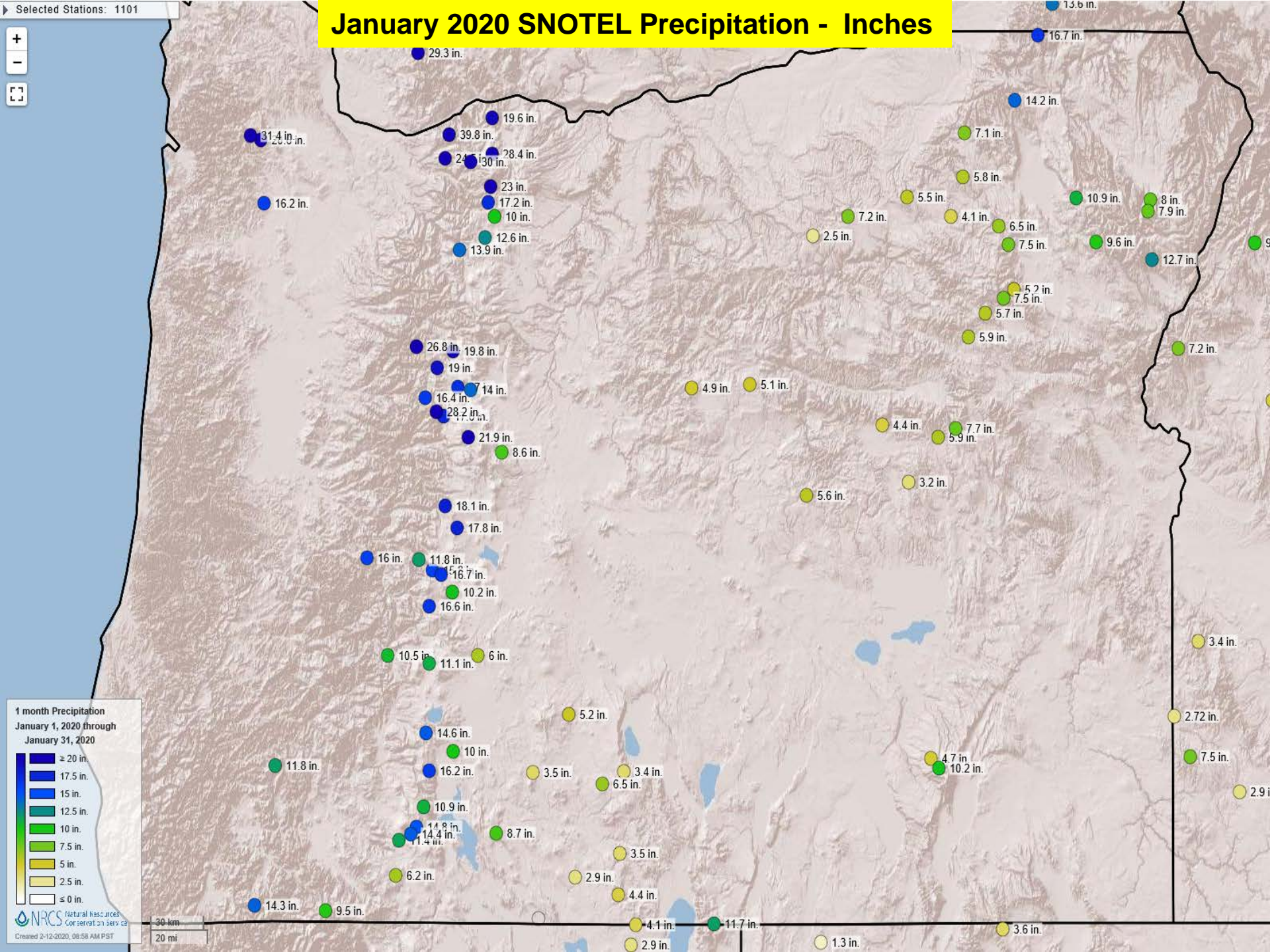
Month to Date Precipitation
Percent NRCS 1981-2010 Average
January 1, 2020 through January 31, 2020

- ≥ 200%
- 175%
- 150%
- 125%
- 100%
- 75%
- 50%
- 25%
- ≤ 0%

NRCS Natural Resources Conservation Service
Created 2-12-2020 12:28 PM PST

30 km
20 mi

January 2020 SNOTEL Precipitation - Inches



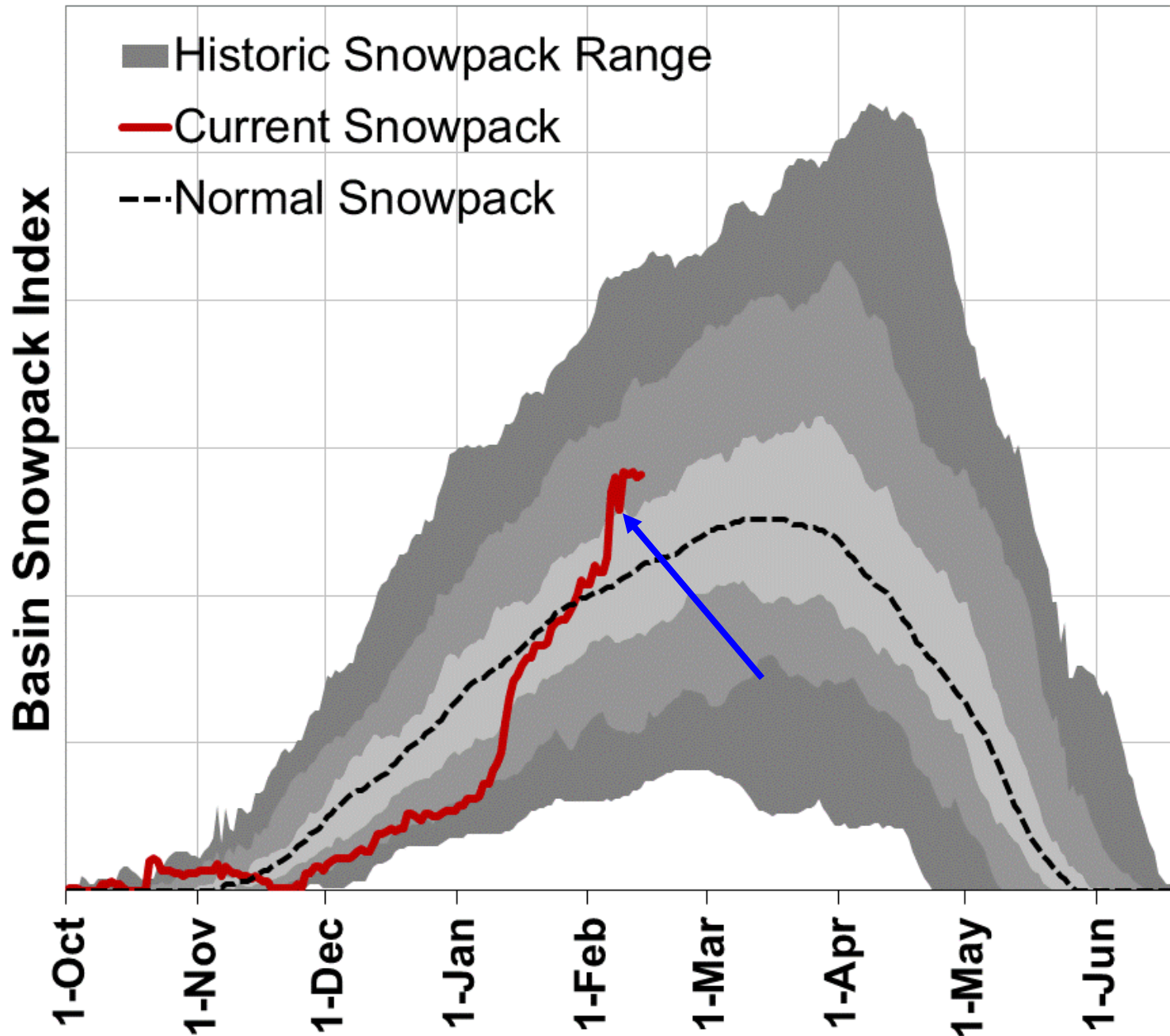
1 month Precipitation
January 1, 2020 through January 31, 2020

- ≥ 20 in.
- 17.5 in.
- 15 in.
- 12.5 in.
- 10 in.
- 7.5 in.
- 5 in.
- 2.5 in.
- ≤ 0 in.



Umatilla and Walla Conditions

Umatilla – February 13, 2020



February 1-8, 2020 SNOTEL SWE - Inches

| | |
|------------------|------|
| ARBUCKLE MTN | 5770 |
| MOSS SPRINGS | 5760 |
| TAYLOR GREEN | 5740 |
| SPRUCE SPRINGS | 5700 |
| WOLF CREEK | 5630 |
| MILK SHAKES | 5580 |
| TOUCHET | 5530 |
| MADISON BUTTE | 5150 |
| BEAVER RESERVOIR | 5150 |
| LUCKY STRIKE | 4970 |
| HIGH RIDGE | 4920 |
| COUNTY LINE | 4830 |
| BOWMAN SPRINGS | 4530 |
| SOUSDOUGH GULCH | 4000 |
| EMIGRANT SPRINGS | 3800 |

-1.1 in.

Milk Shakes, 12.6 in.

Sourdough Gulch, -0.1 in.
Spruce Springs, 1.9 in.

Touchet, 9.7 in.

High Ridge, 4.7 in.

Emigrant Springs, 1.7 in.

Bowman Springs, 1.5 in.

Lucky Strike, 1.4 in.

Moss Springs, 9.5 in.

Mt. Howard, 2.2 in.

Aneroid Lake #2, 2.1 in.

Arbuckle Mtn, 2.7 in.

County Line, 1.3 in.

Beaver Reservoir, 2.6 in.

Madison Butte, 1.5 in.

Wolf Creek, 2.9 in.

Taylor Green, 7.8 in.

Schneider Meadows, 1 in.

Snow Water Equivalent Delta
February 8, 2020 minus February 1, 2020, end of day

≥ 6 in.
 4.5 in.
 3 in.
 1.5 in.
 0 in.
 -1.5 in.
 -3 in.
 -4.5 in.
 ≤ -6 in.

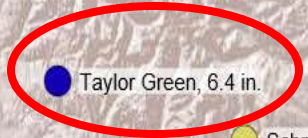
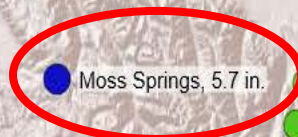
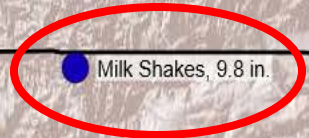
NRCS Natural Resources Conservation Service
Created 2-12-2020, 09:52 AM PST

20 km
10 mi

February 1-8, 2020 SNOTEL Precipitation - Inches

| | |
|------------------|------|
| ARBUCKLE MTN | 5770 |
| MOSS SPRINGS | 5760 |
| TAYLOR GREEN | 5740 |
| SPRUCE SPRINGS | 5700 |
| WOLF CREEK | 5630 |
| MILK SHAKES | 5580 |
| TOUCHET | 5530 |
| MADISON BUTTE | 5150 |
| BEAVER RESERVOIR | 5150 |
| LUCKY STRIKE | 4970 |
| HIGH RIDGE | 4920 |
| COUNTY LINE | 4830 |
| BOWMAN SPRINGS | 4530 |
| SOURDOUGH GULCH | 4000 |
| EMIGRANT SPRINGS | 3800 |

0.3 in.

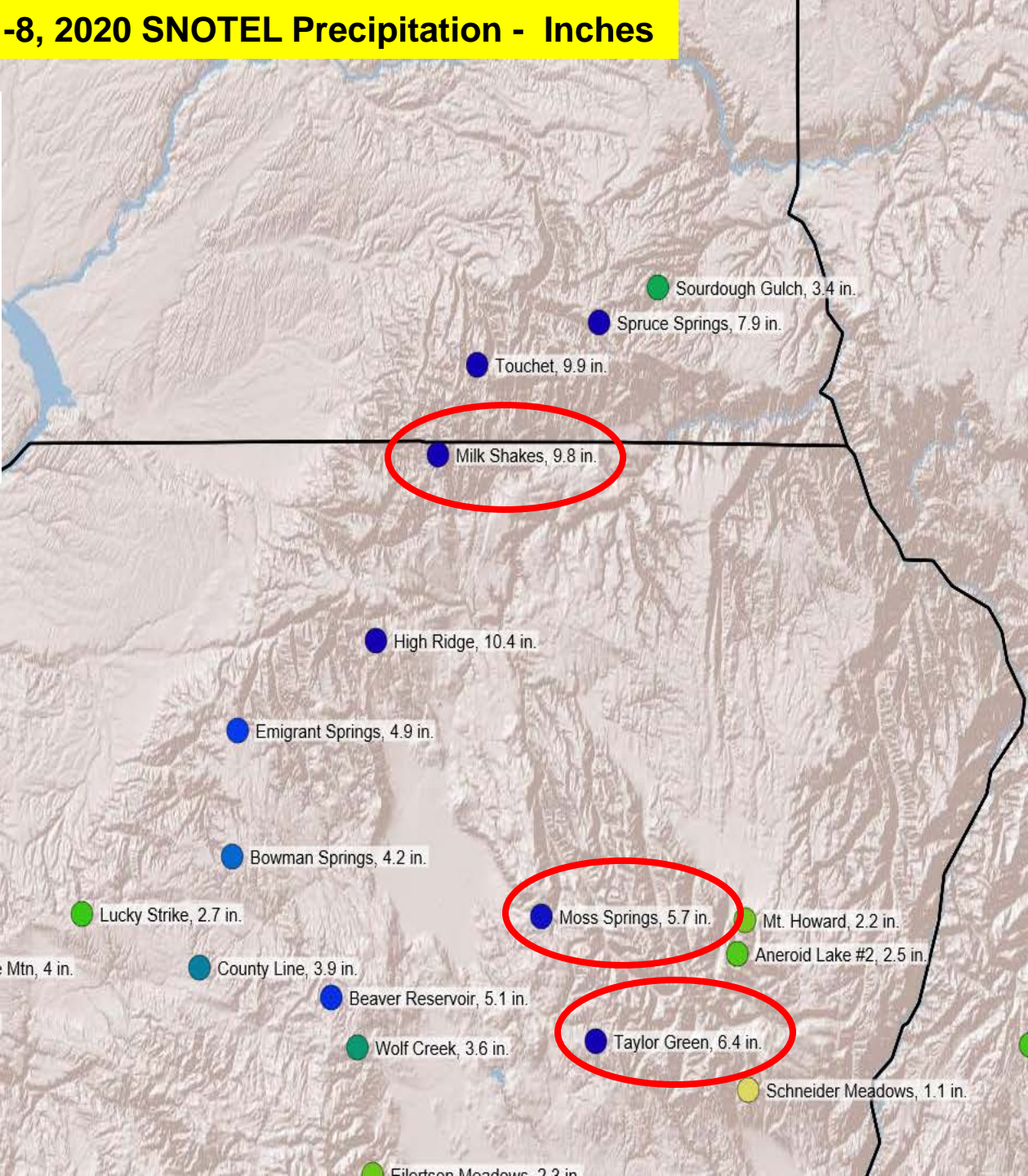


7 day Precipitation
February 2, 2020 through February 8, 2020

- ≥ 6 in.
- 5.25 in.
- 4.5 in.
- 3.75 in.
- 3 in.
- 2.25 in.
- 1.5 in.
- 0.75 in.
- ≤ 0 in.

NRCS Natural Resources Conservation Service
Created 2-12-2020, 09:53 AM PST

20 km
10 mi



Sourdough Gulch, 3.4 in.

Spruce Springs, 7.9 in.

Touchet, 9.9 in.

Milk Shakes, 9.8 in.

High Ridge, 10.4 in.

Emigrant Springs, 4.9 in.

Bowman Springs, 4.2 in.

Lucky Strike, 2.7 in.

Arbuckle Mtn, 4 in.

County Line, 3.9 in.

Madison Butte, 1.8 in.

Beaver Reservoir, 5.1 in.

Wolf Creek, 3.6 in.

Moss Springs, 5.7 in.

Mt. Howard, 2.2 in.

Aneroid Lake #2, 2.5 in.

Taylor Green, 6.4 in.

Schneider Meadows, 1.1 in.

Filbertson Meadows, 2.2 in.

Streamflow Forecasts

February 1, 2020 – Forecast Volume, 50% Exceedance Probability (Apr – Sep)



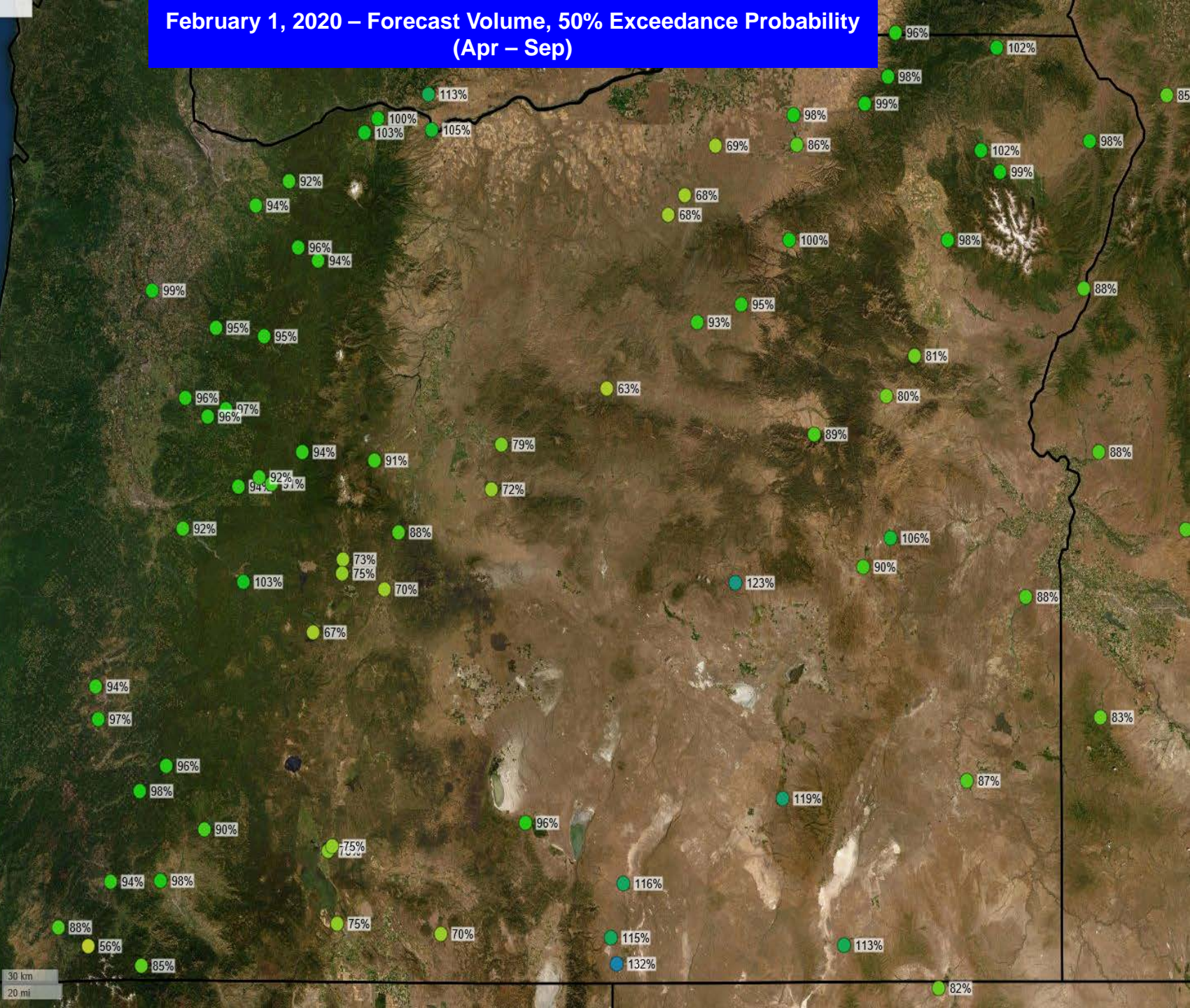
Forecast Volume
50% Exceedance Probability
Percent NRCs 1981-2010
Average

Primary Period
February 1, 2020

- ≥ 200%
- 175%
- 150%
- 125%
- 100%
- 75%
- 50%
- 25%
- ≤ 0%

Natural Resources Conservation Service

Created 2-12-2020, 08:20 AM PST

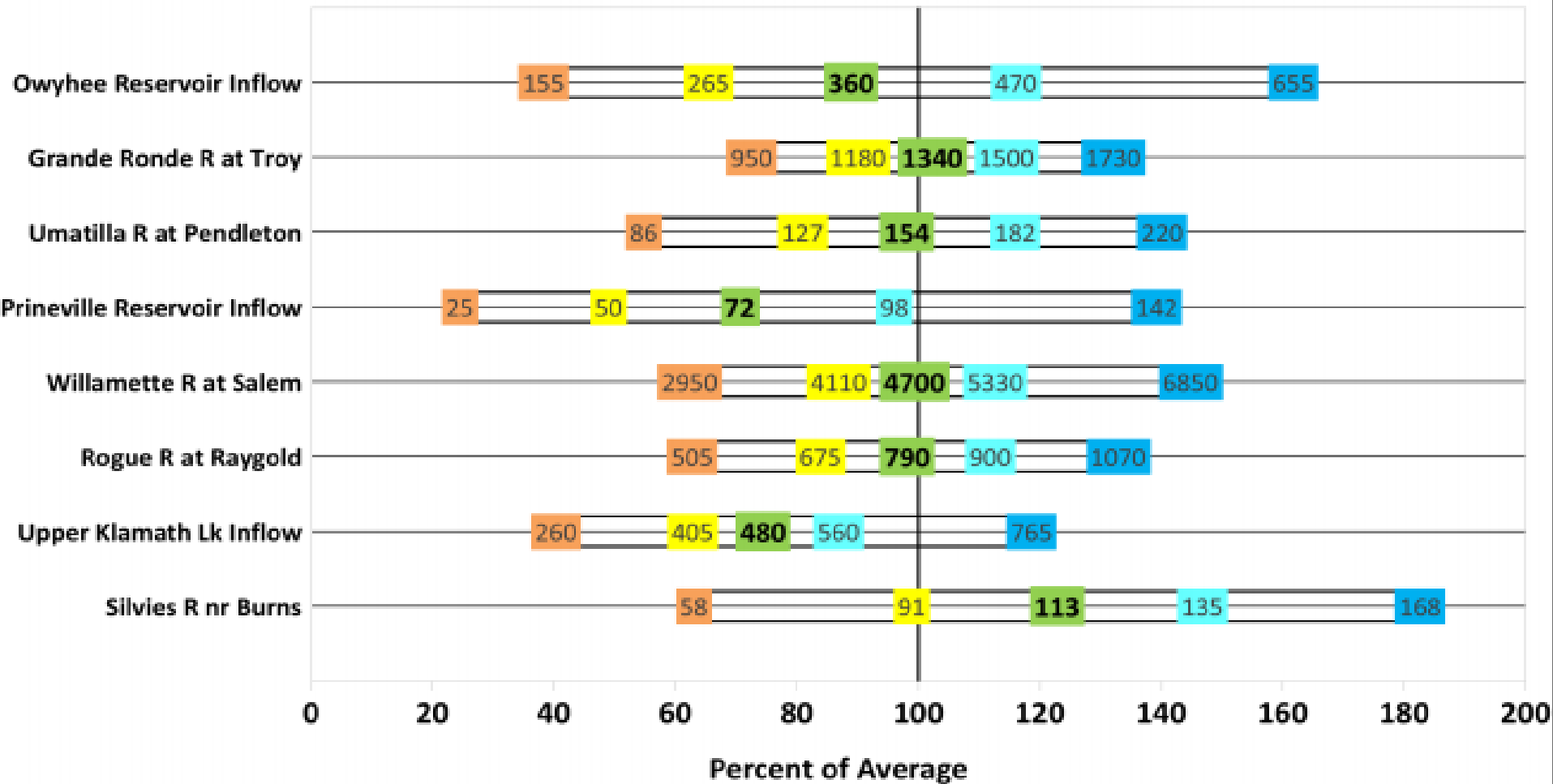


30 km
20 mi






February 1, 2020

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. |
|---|---|--|---|---|

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To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

Oregon Water Supply Availability Committee
February 13, 2020



New Dutchman #3 SC
January 31, 2020
Elev = 6,320'



Hungry Flat Snow Course
January 31, 2020
Elev = 4,400'

H. Scott Oviatt
USDA – Natural Resources Conservation Service
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Links used by NWS for WSAC presentation on 2/13/2020

https://water.weather.gov/precip/index.php?location_type=state&location_name=or

<https://wrcc.dri.edu/wwdt/index.php?folder=mdn1>

<https://droughtmonitor.unl.edu/>

https://www.nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php?tab=3

<https://www.cpc.ncep.noaa.gov/>

<https://www.nwrfc.noaa.gov/natural/index.html?version=20190313v1>

Water Supply Conditions Report

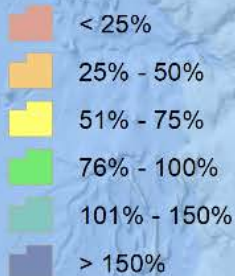
Water Supply Availability Committee



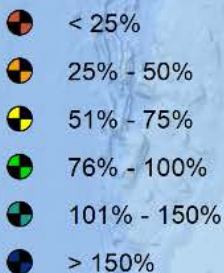
Ken Stahr
Oregon Water Resources
Department
February 13, 2020

Percent of Average Streamflow December, 2019

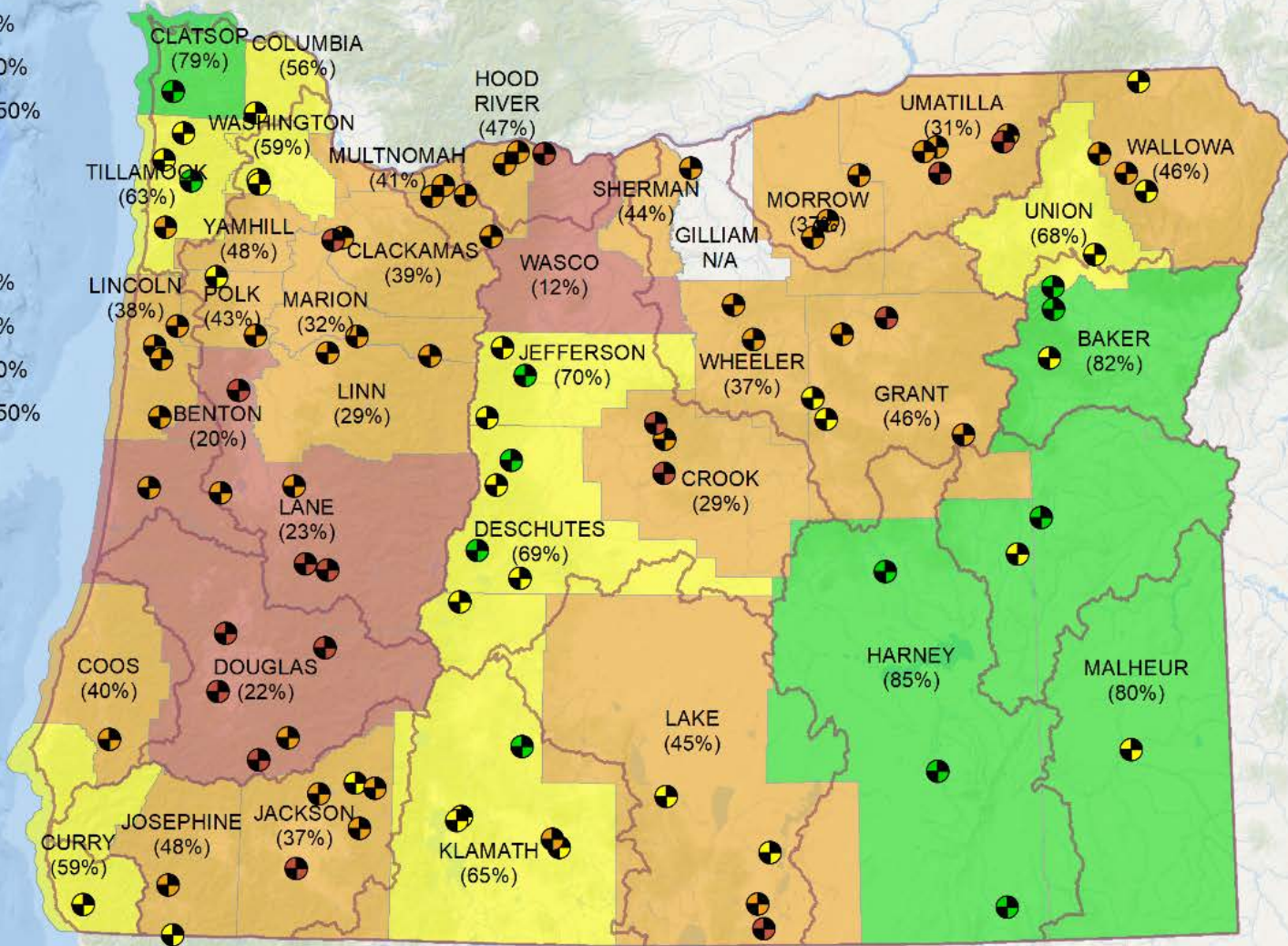
County



Stream gage



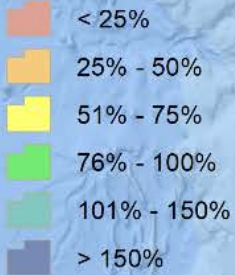
WRD Basin



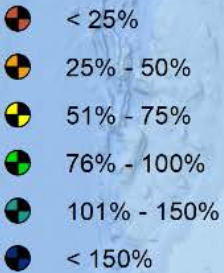
Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.

Percent of Average Streamflow January, 2020

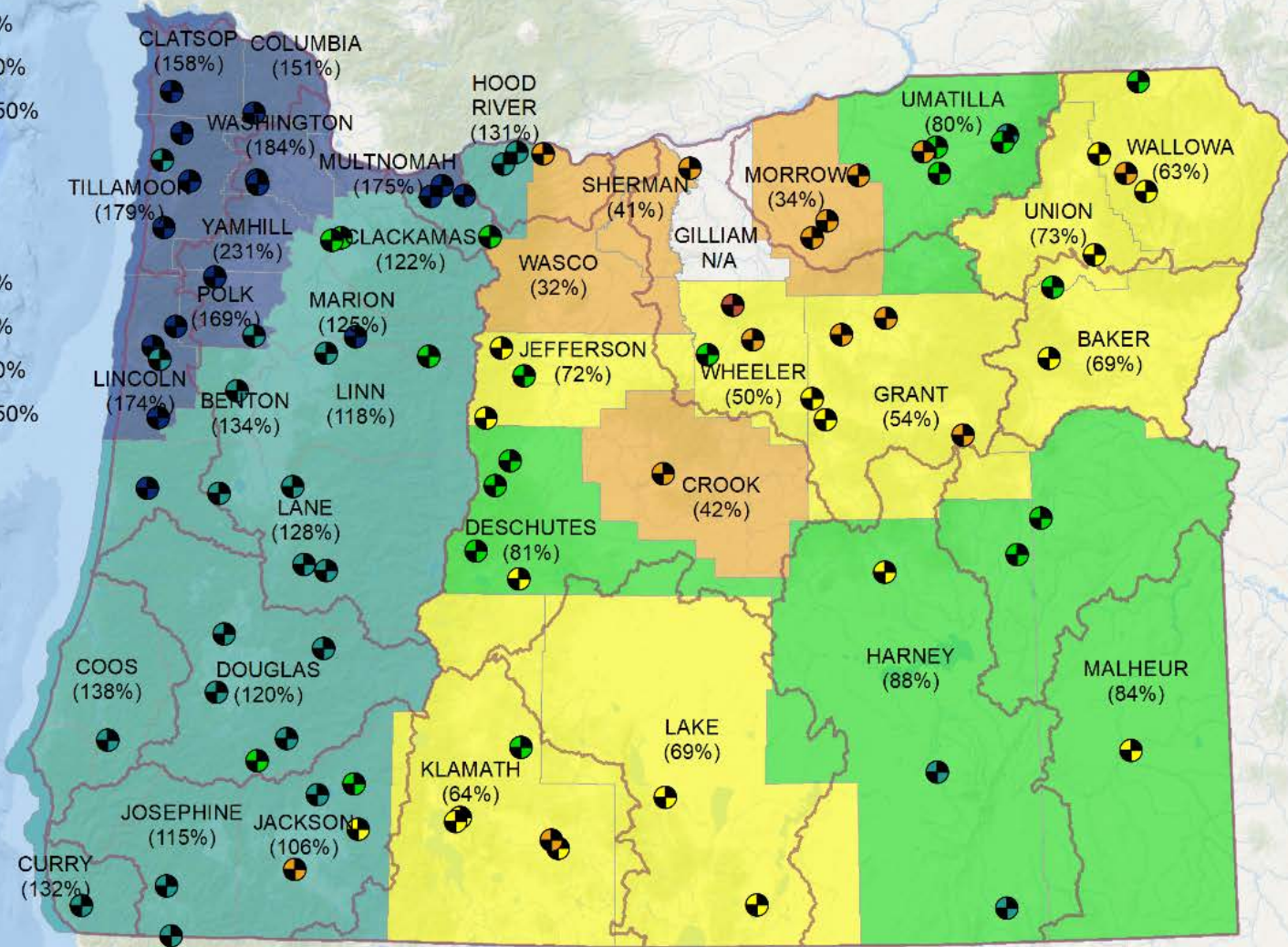
County



Stream gage



WRD Basin

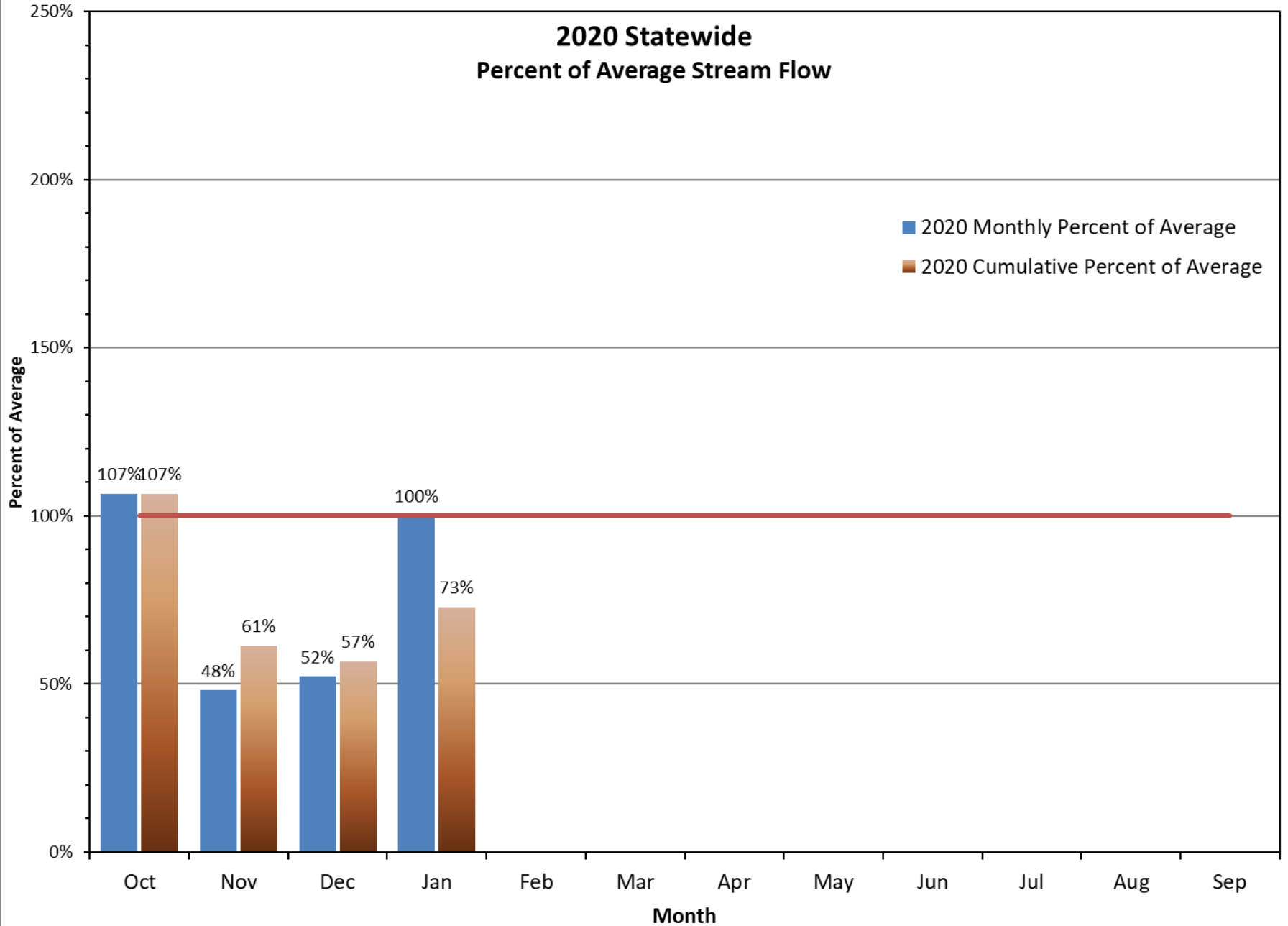


Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.

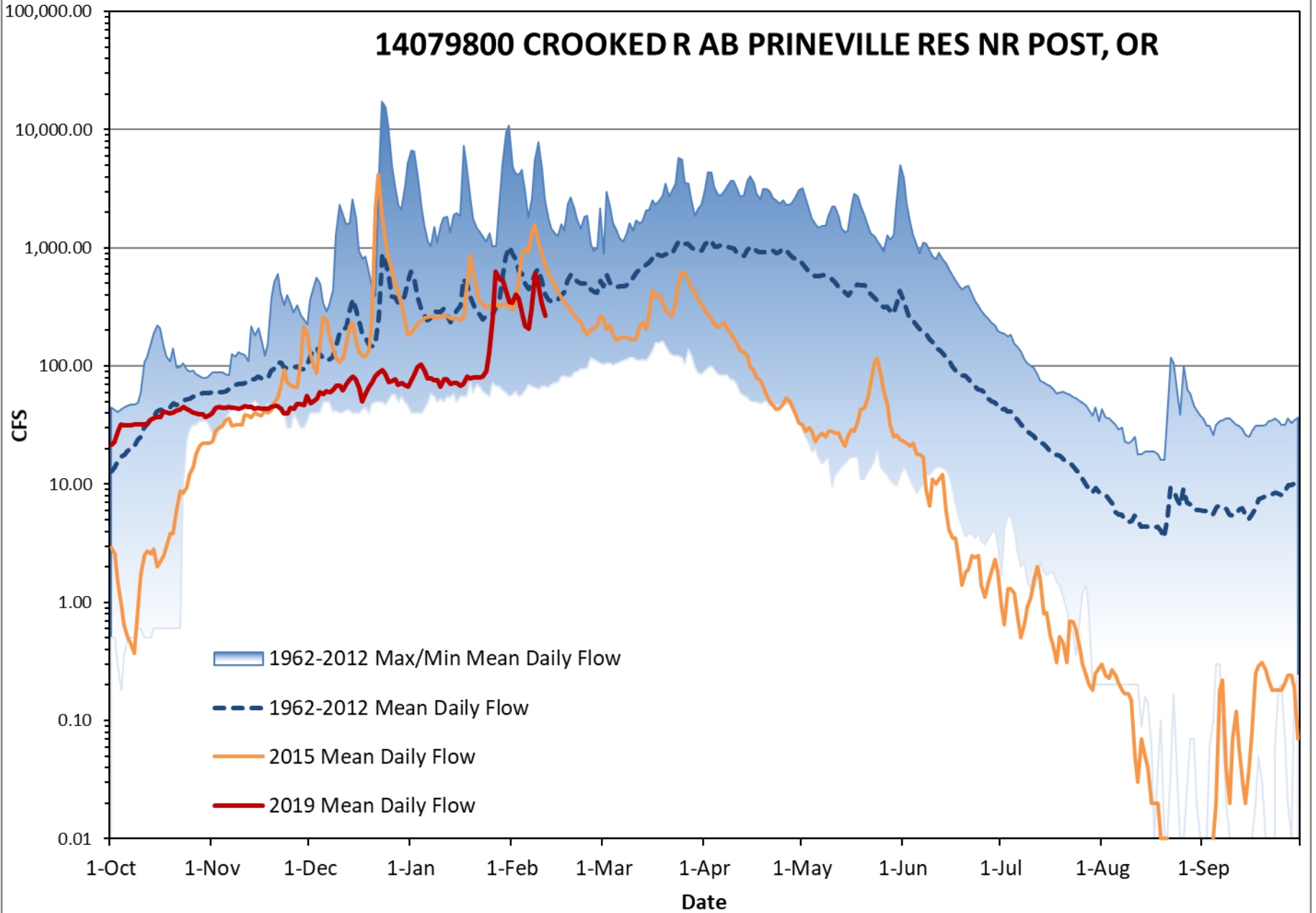


| Basin | Water Year % of average through January, 2020 | % of average for January | % of average for 02/06/2020 | # of data points |
|------------------|--|---------------------------------|------------------------------------|-------------------------|
| West Side | 76% | 144% | 209% | 40 |
| East Side | 72% | 73% | 252% | 49 |
| State | 73% | 101% | 236% | 89 |

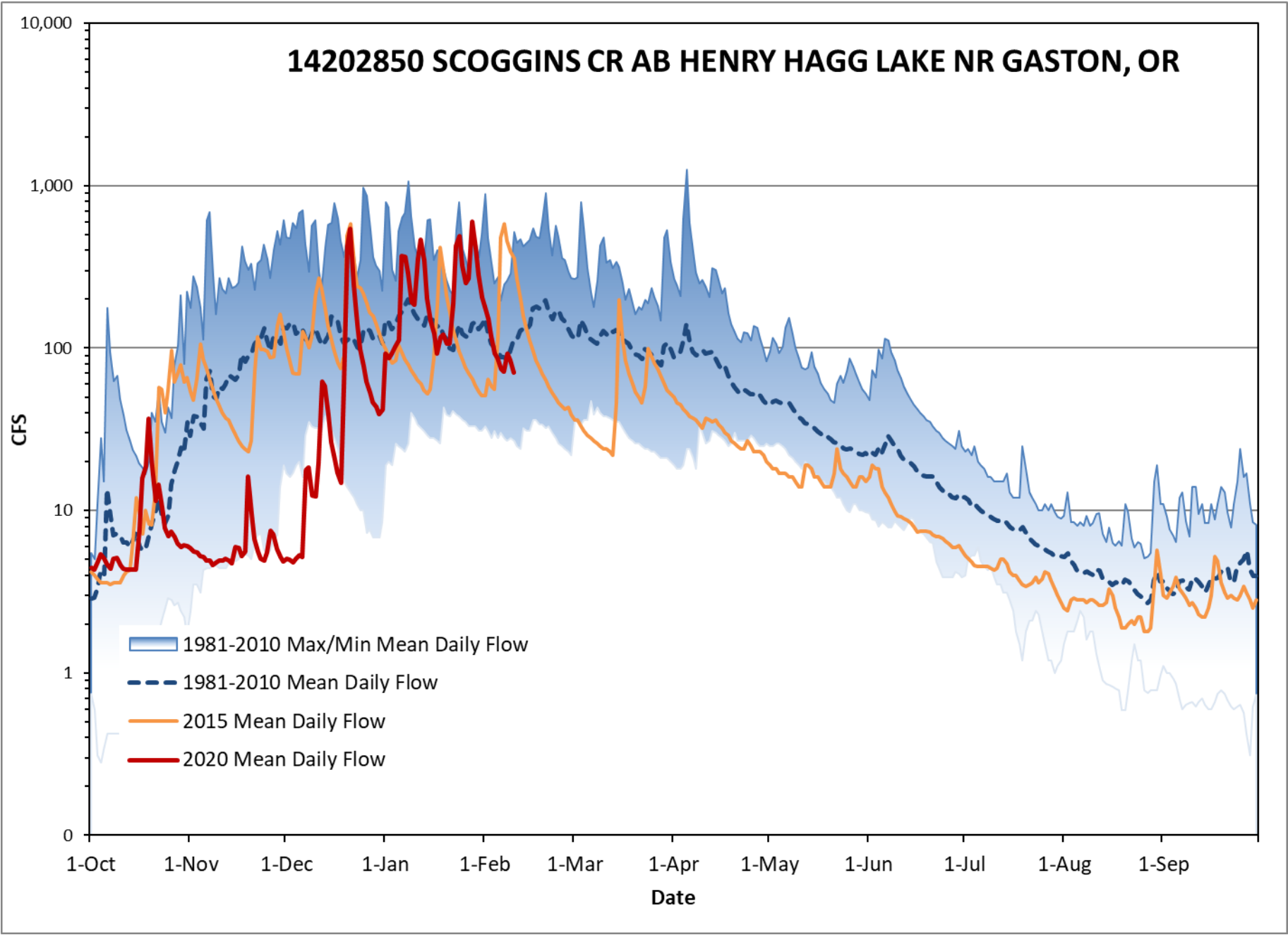
2020 Statewide Percent of Average Stream Flow



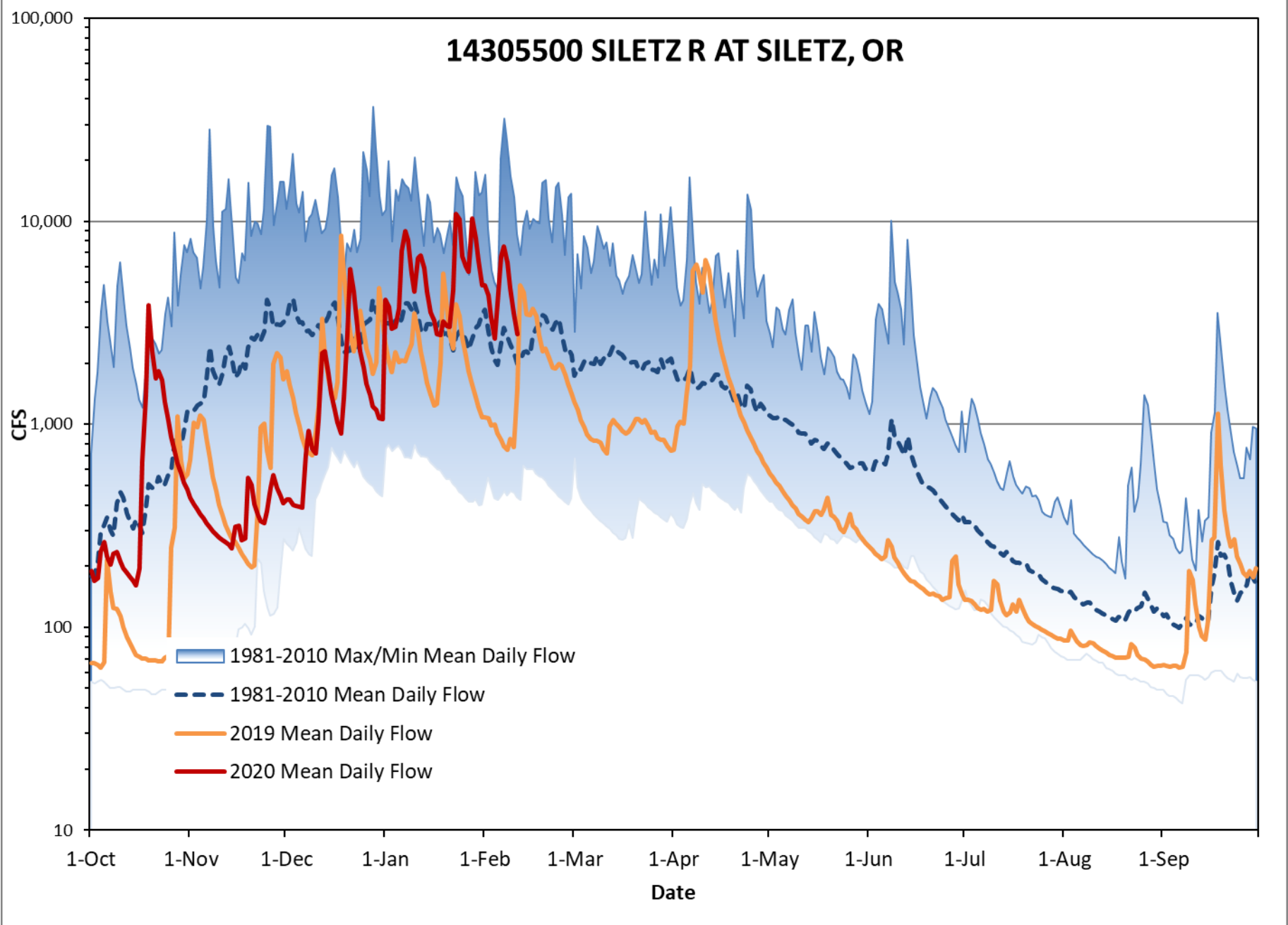
14079800 CROOKED R AB PRINEVILLE RES NR POST, OR



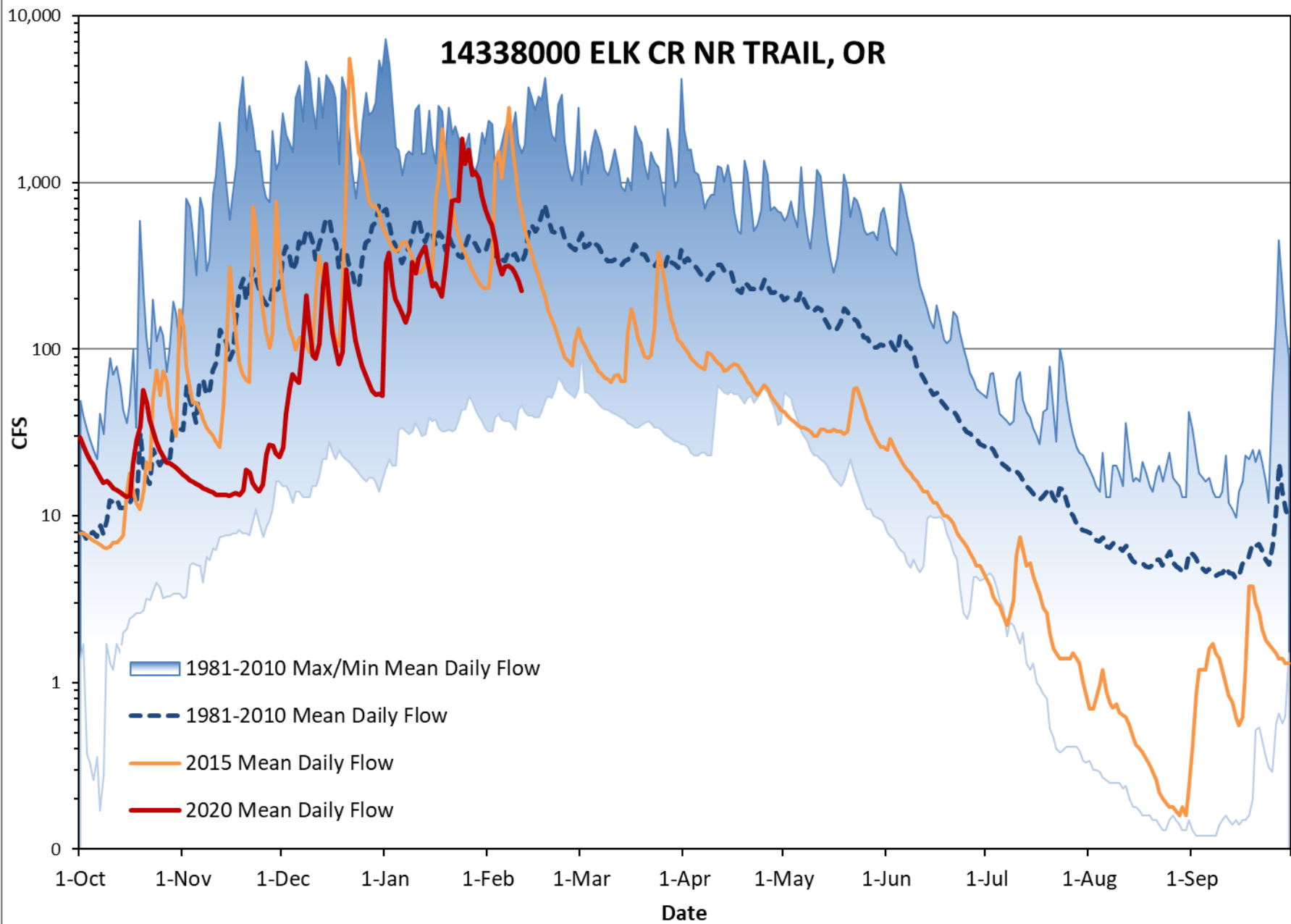
14202850 SCOGGINS CR AB HENRY HAGG LAKE NR GASTON, OR



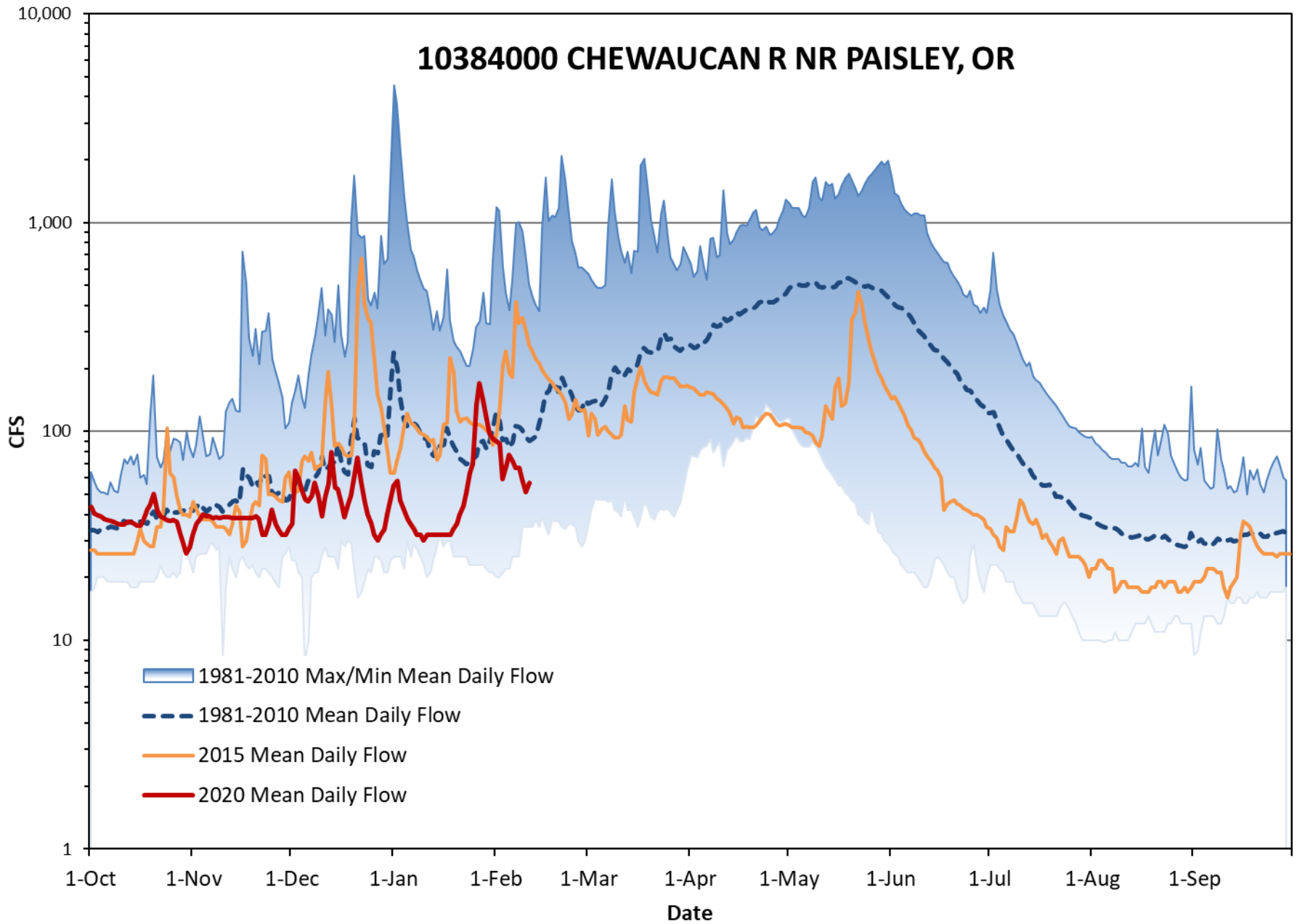
14305500 SILETZ R AT SILETZ, OR



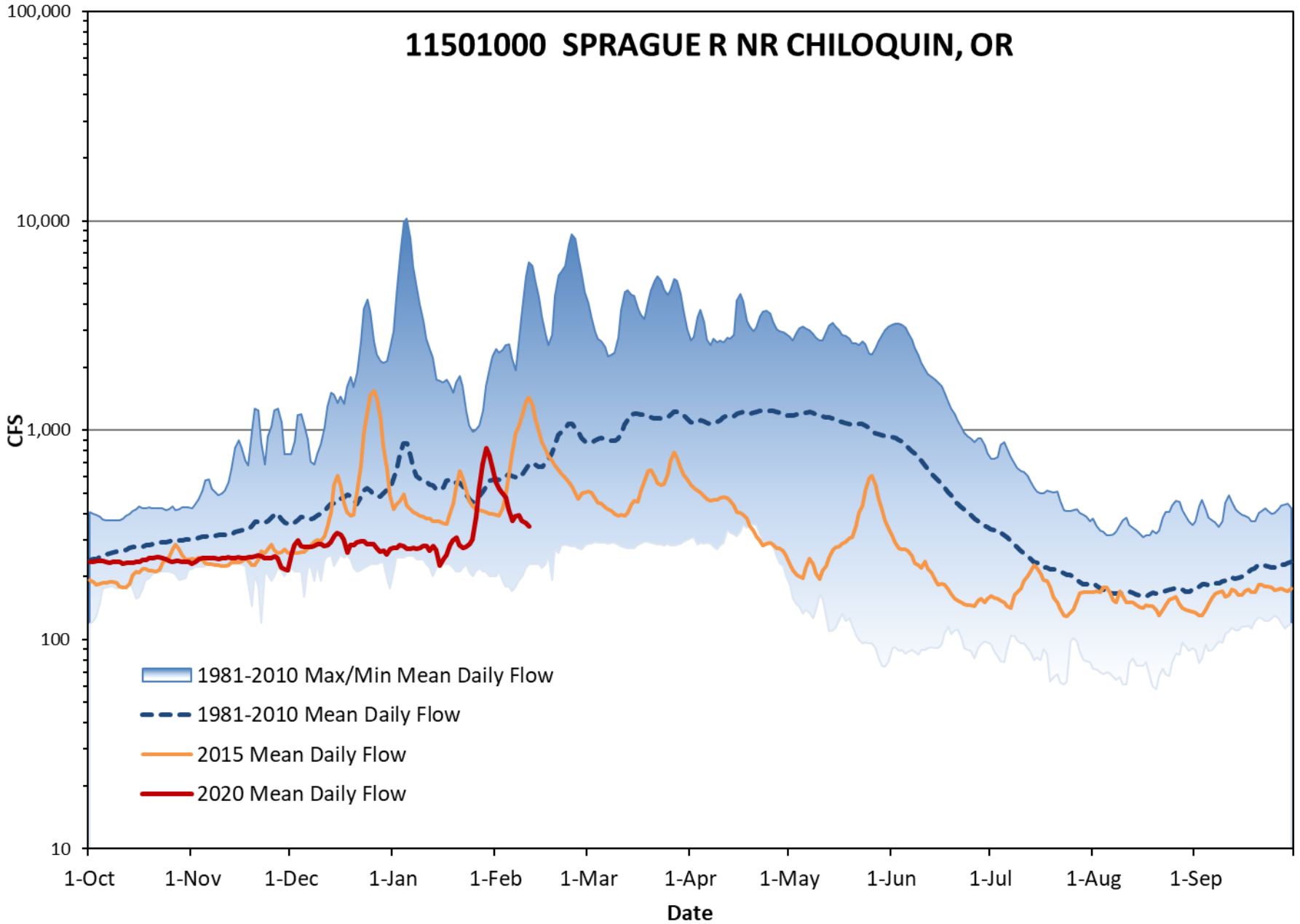
14338000 ELK CR NR TRAIL, OR



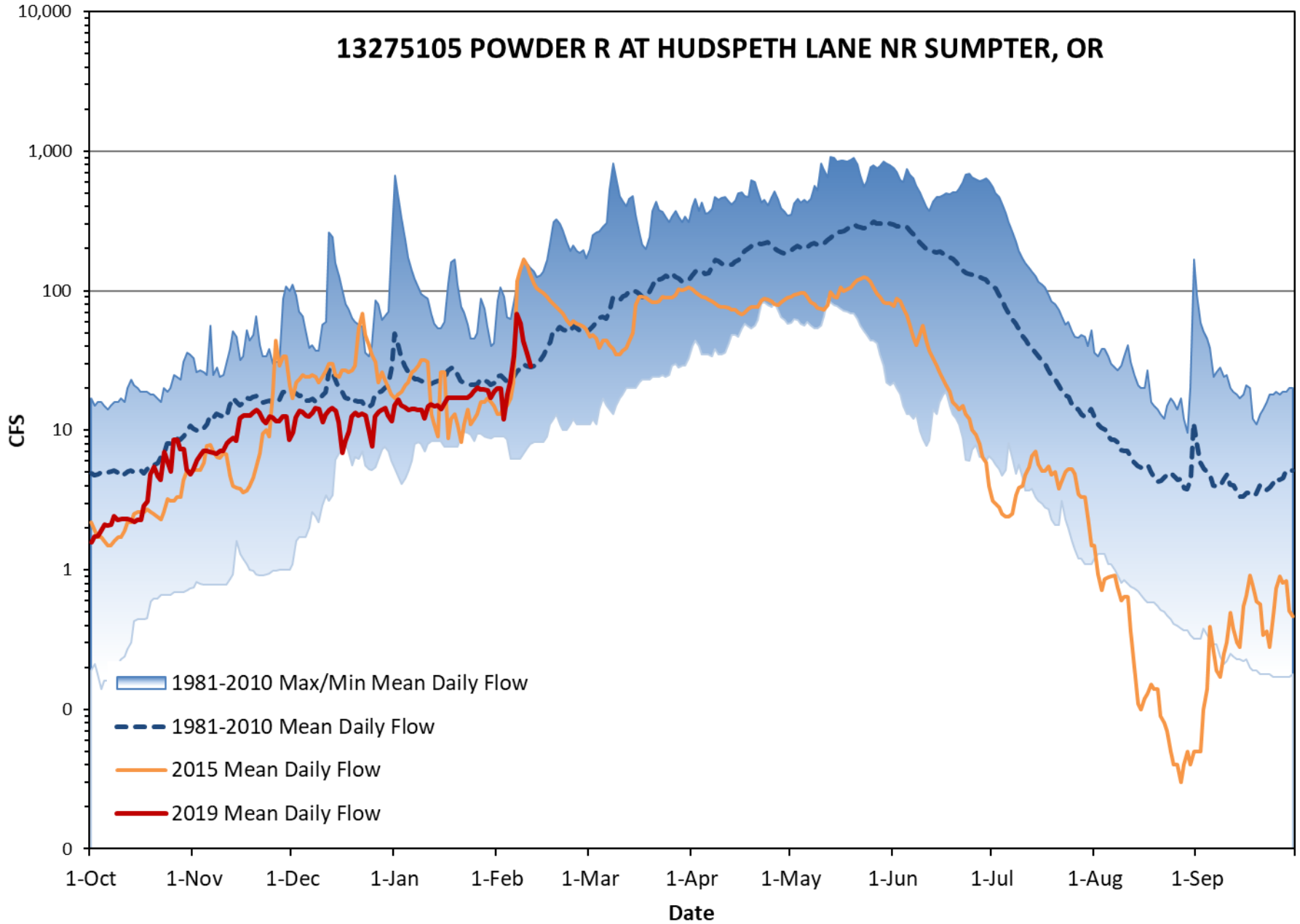
10384000 CHEWAUCAN R NR PAISLEY, OR



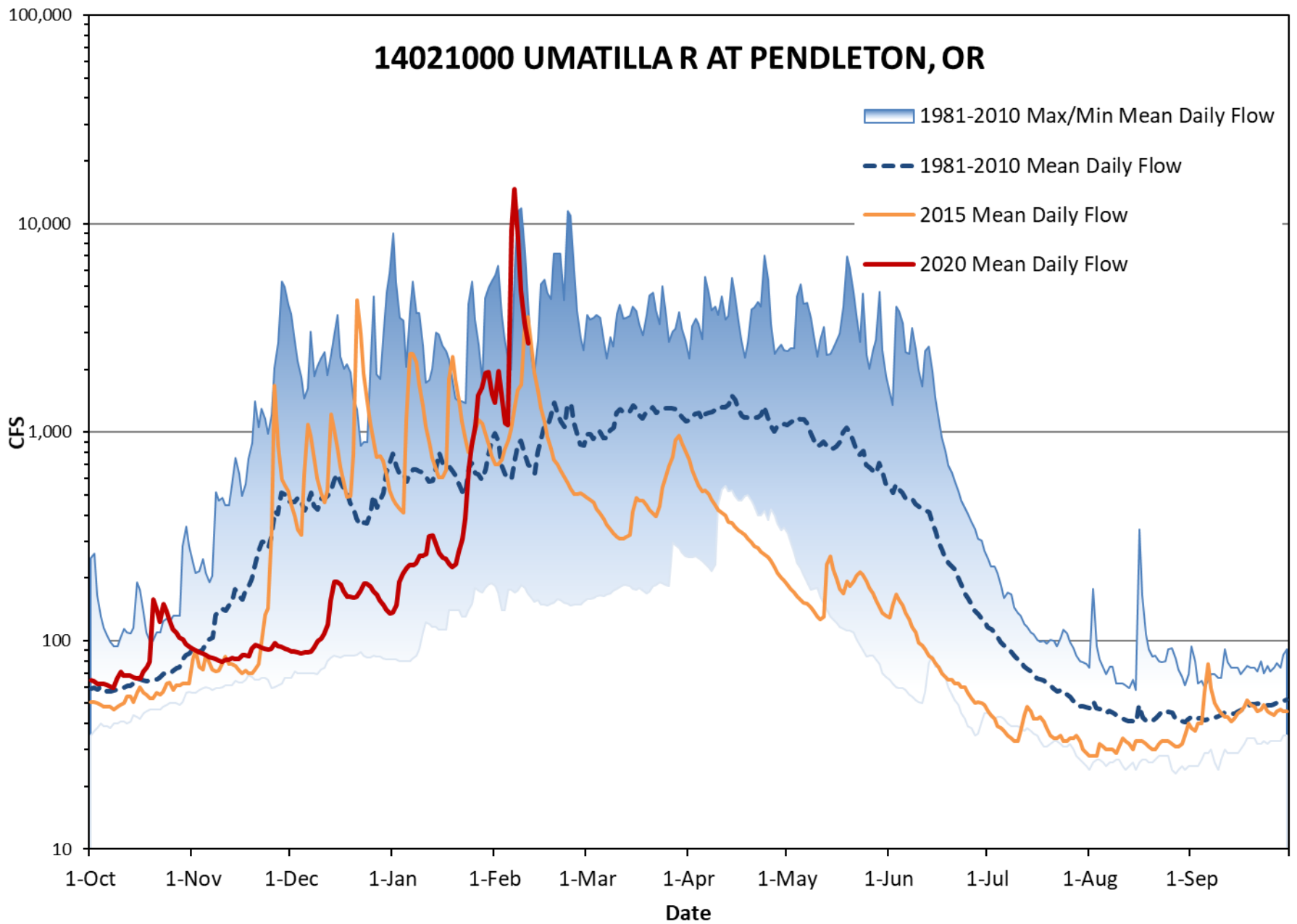
11501000 SPRAGUE R NR CHILOQUIN, OR



13275105 POWDER R AT HUDSPETH LANE NR SUMPTER, OR



14021000 UMATILLA R AT PENDLETON, OR







OREGON



WATER RESOURCES
DEPARTMENT

Thank you