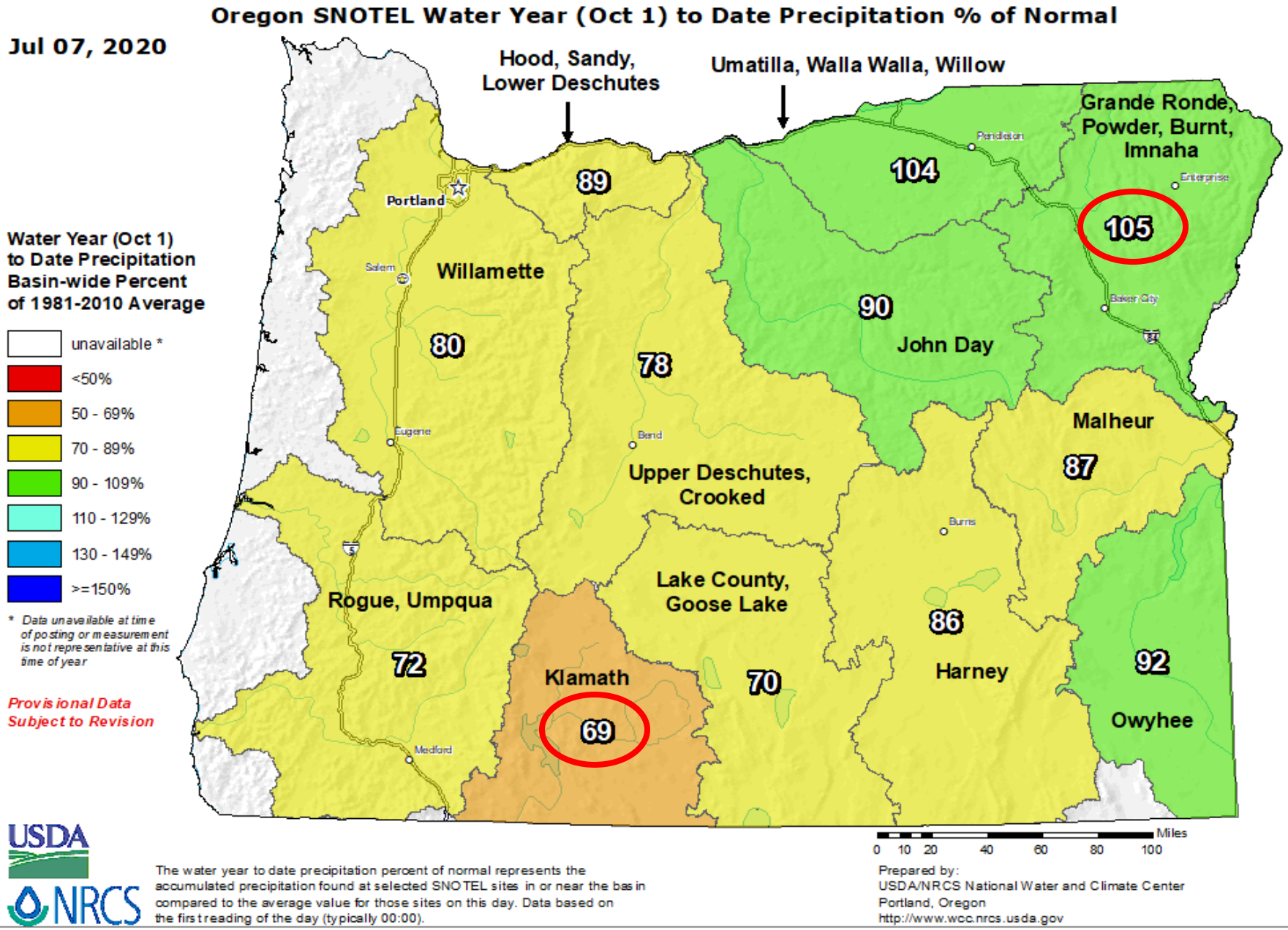
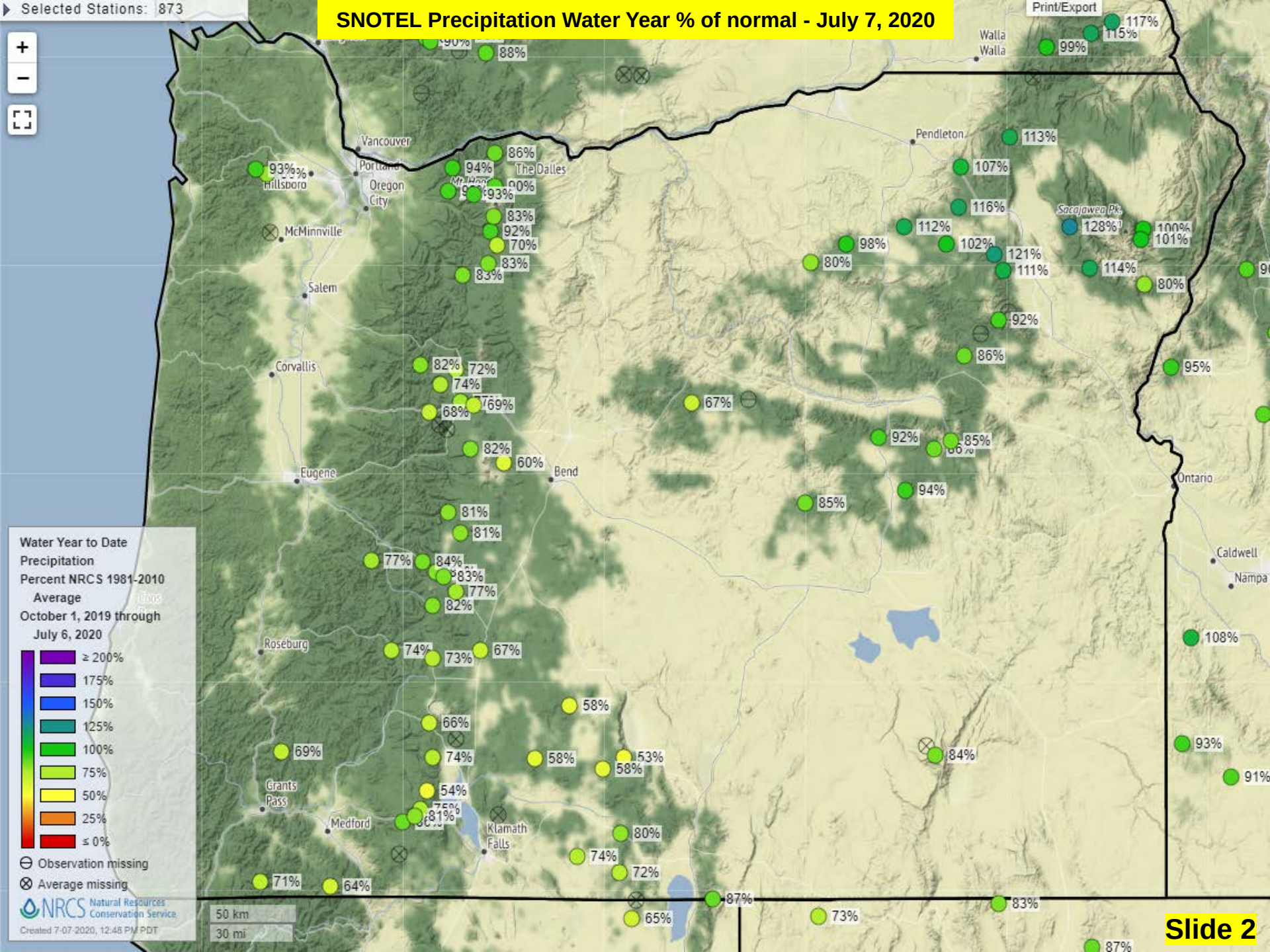
# Oregon Water Supply Availability Committee – July 8, 2020

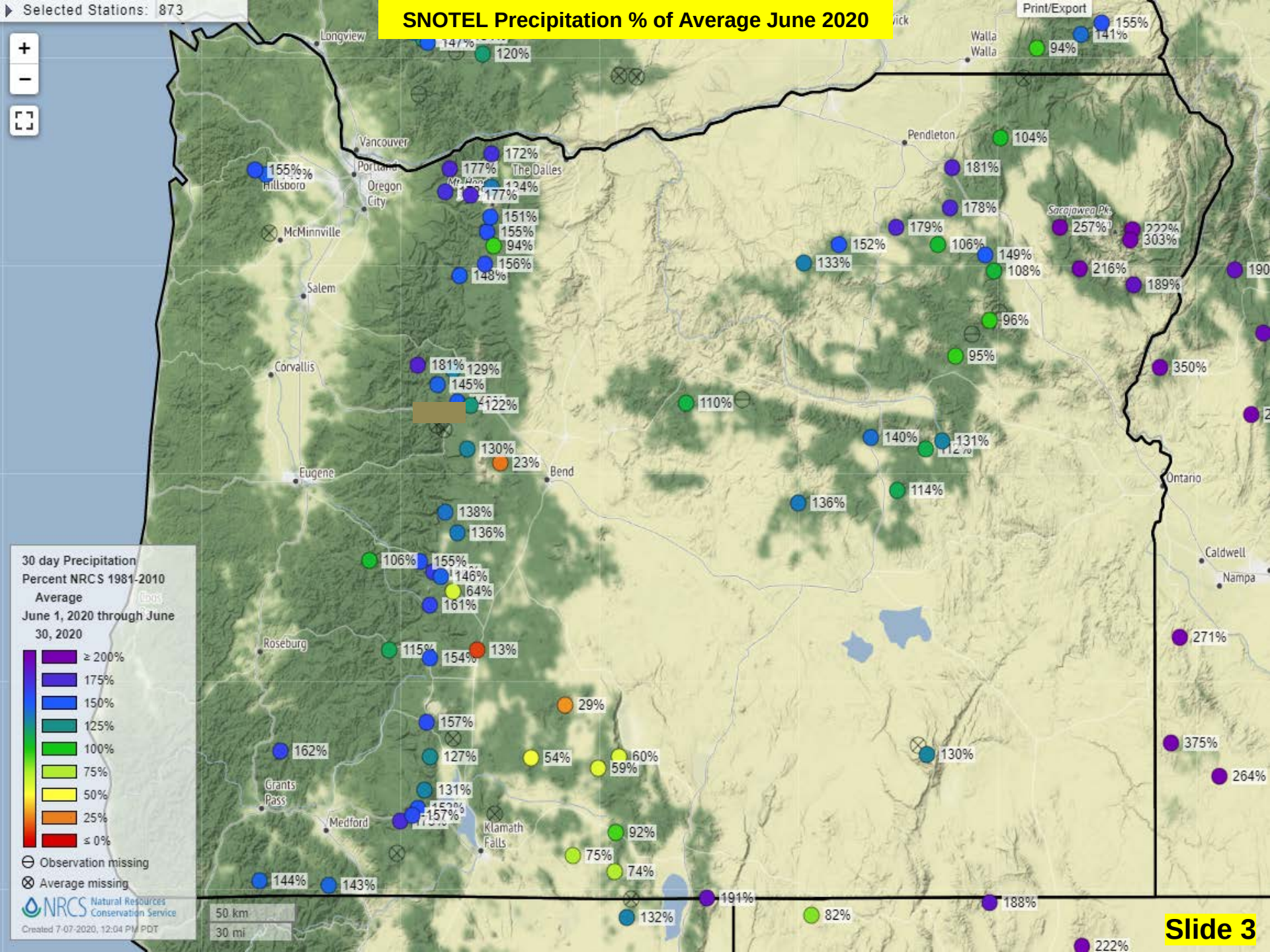
**Bear Grass SNOTEL**
**Central Cascades**
**Willamette Basin June 21, 2020**

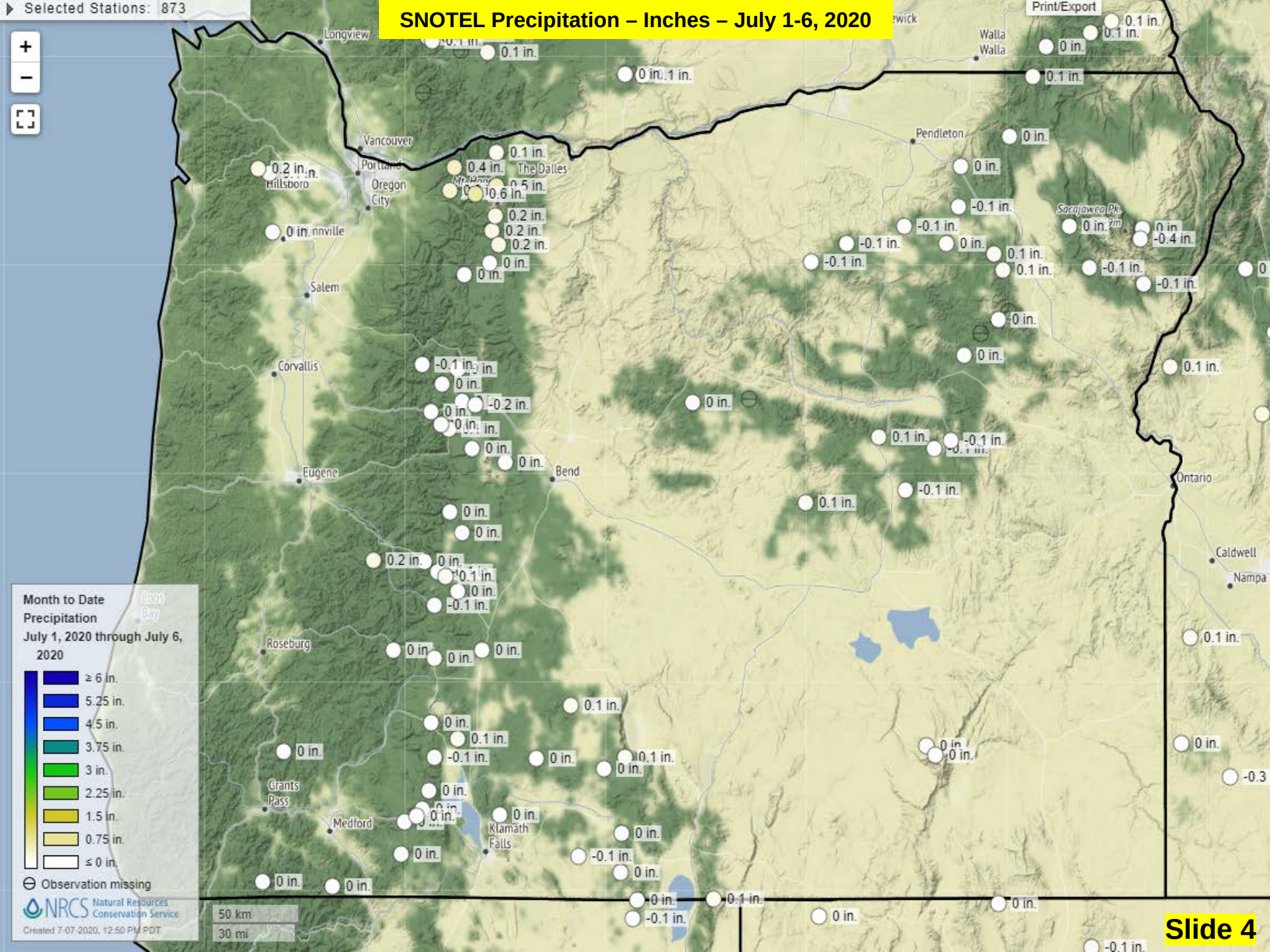
**H. Scott Oviatt**
**USDA – Natural Resources Conservation Service**
**scott.oviatt@usda.gov**
**503-414-3271**

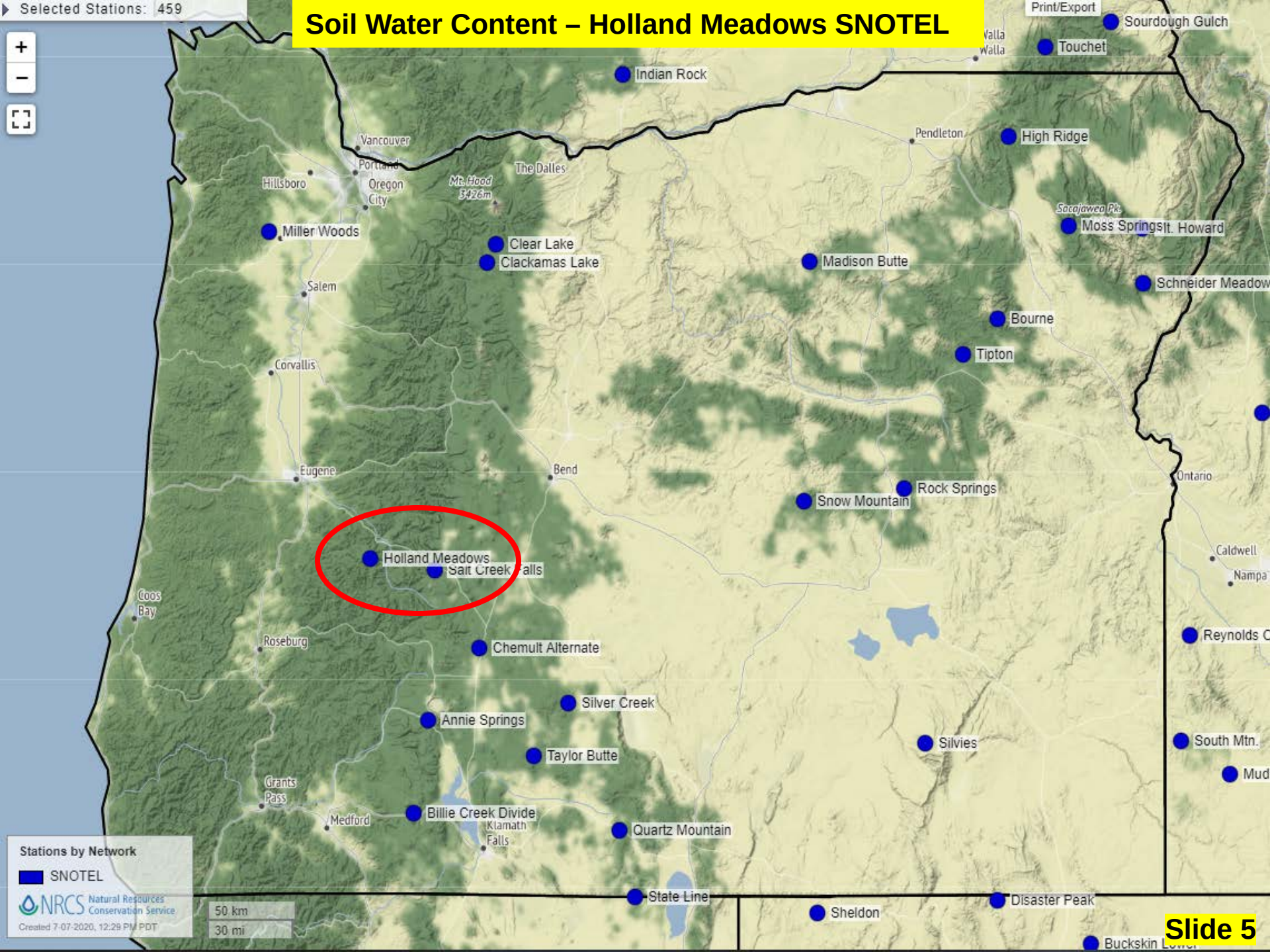
# Statewide SNOTEL Precipitation is 83% of normal on July 7, 2020



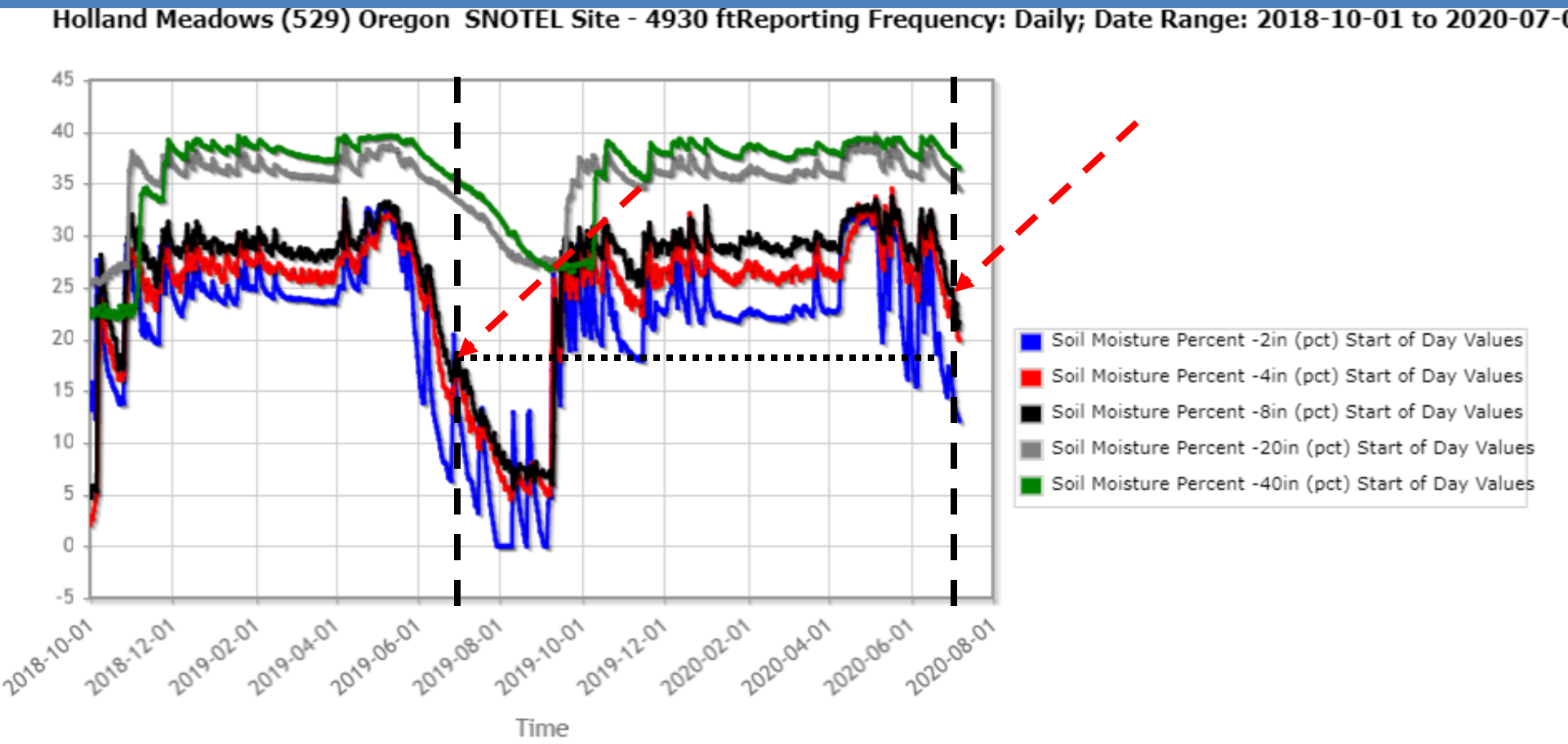

Selected Stations: 873
SNOTEL Precipitation Water Year % of normal - July 7, 2020
Print/Export
Water Year to Date
Precipitation
Percent NRCS 1981-2010
Average
October 1, 2019 through
July 6, 2020
≥ 200%
175%
150%
125%
100%
75%
50%
25%
≤ 0%
Observation missing
Average missing
NRCS Natural Resources Conservation Service
Created 7-07-2020, 12:48 PM PDT
50 km
30 mi
Vancouver
Portland
Hillsboro
Oregon City
The Dalles
McMinnville
Salem
Corvallis
Eugene
Bend
Roseburg
Grants Pass
Medford
Klamath Falls
Pendleton
Walla Walla
Ontario
Caldwell
Nampa
Slide 2

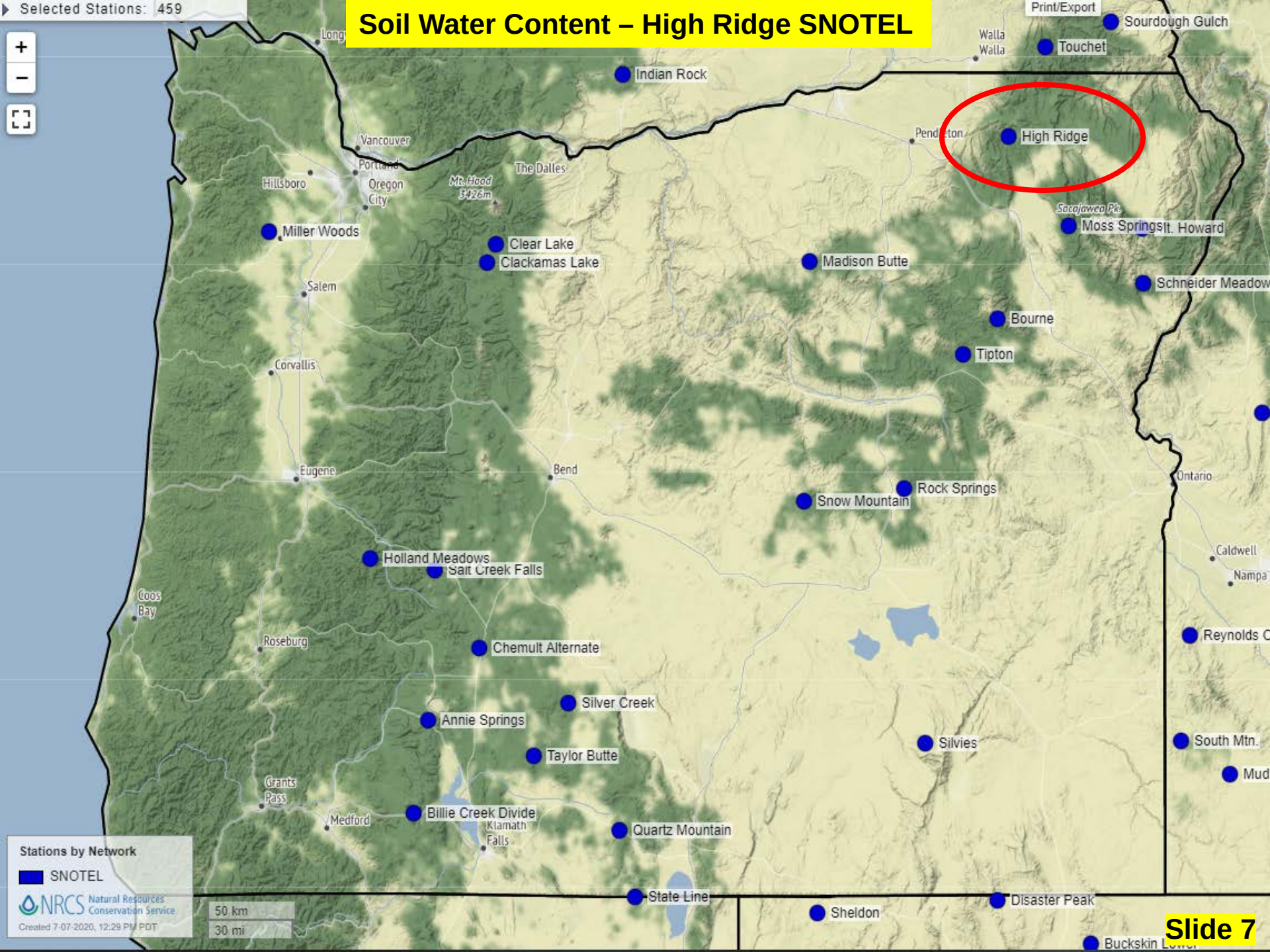

SNOTEL Precipitation % of Average June 2020
Selected Stations: 873
Print/Export
30 day Precipitation
Percent NRCS 1981-2010 Average
June 1, 2020 through June 30, 2020
≥ 200%
175%
150%
125%
100%
75%
50%
25%
≤ 0%
Observation missing
Average missing
NRCS Natural Resources Conservation Service
Created 7-07-2020, 12:04 PM PDT
50 km
30 mi
Slide 3


SNOTEL Precipitation – Inches – July 1-6, 2020
Selected Stations: 873
Print/Export
Month to Date Precipitation
July 1, 2020 through July 6, 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.
Observation missing
NRCS Natural Resources Conservation Service
Created 7-07-2020, 12:50 PM PDT
50 km
30 mi
Longview
Vancouver
Portland
Hillsboro
Oregon City
The Dalles
Pendleton
Walla Walla
Salem
Corvallis
Eugene
Bend
Roseburg
Grants Pass
Medford
Klamath Falls
Ontario
Caldwell
Nampa
Coos Bay
Snoqualmie Pk.
Slide 4

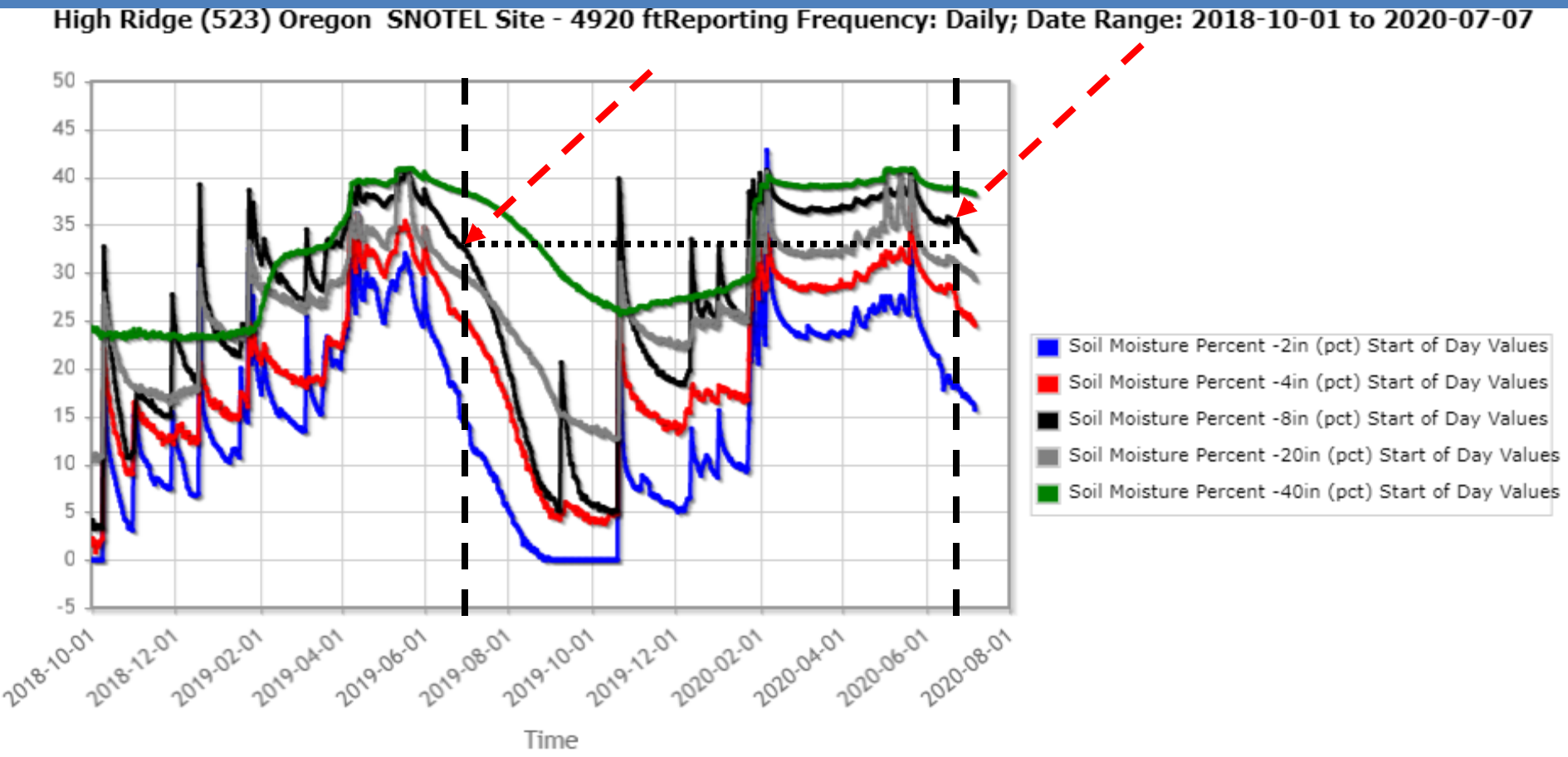

Soil Water Content – Holland Meadows SNOTEL
Selected Stations: 459
Print/Export
Sourdough Gulch
Touchet
Indian Rock
Pendleton
High Ridge
Vancouver
Portland
Hillsboro
Oregon City
The Dalles
Mt. Hood 5426m
Miller Woods
Clear Lake
Clackamas Lake
Madison Butte
Moss Springs
Mt. Howard
Schneider Meadow
Salem
Bourne
Tipton
Corvallis
Eugene
Bend
Rock Springs
Snow Mountain
Ontario
Holland Meadows
Salt Creek Falls
Caldwell
Nampa
Coos Bay
Roseburg
Chemult Alternate
Reynolds C
Silver Creek
Annie Springs
Silvies
South Mtn.
Taylor Butte
Grants Pass
Medford
Billie Creek Divide
Klamath Falls
Quartz Mountain
Stations by Network
SNOTEL
NRCS Natural Resources Conservation Service
Created 7-07-2020, 12:29 PM PDT
50 km
30 mi
State Line
Sheldon
Disaster Peak
Buckskin
Slide 5

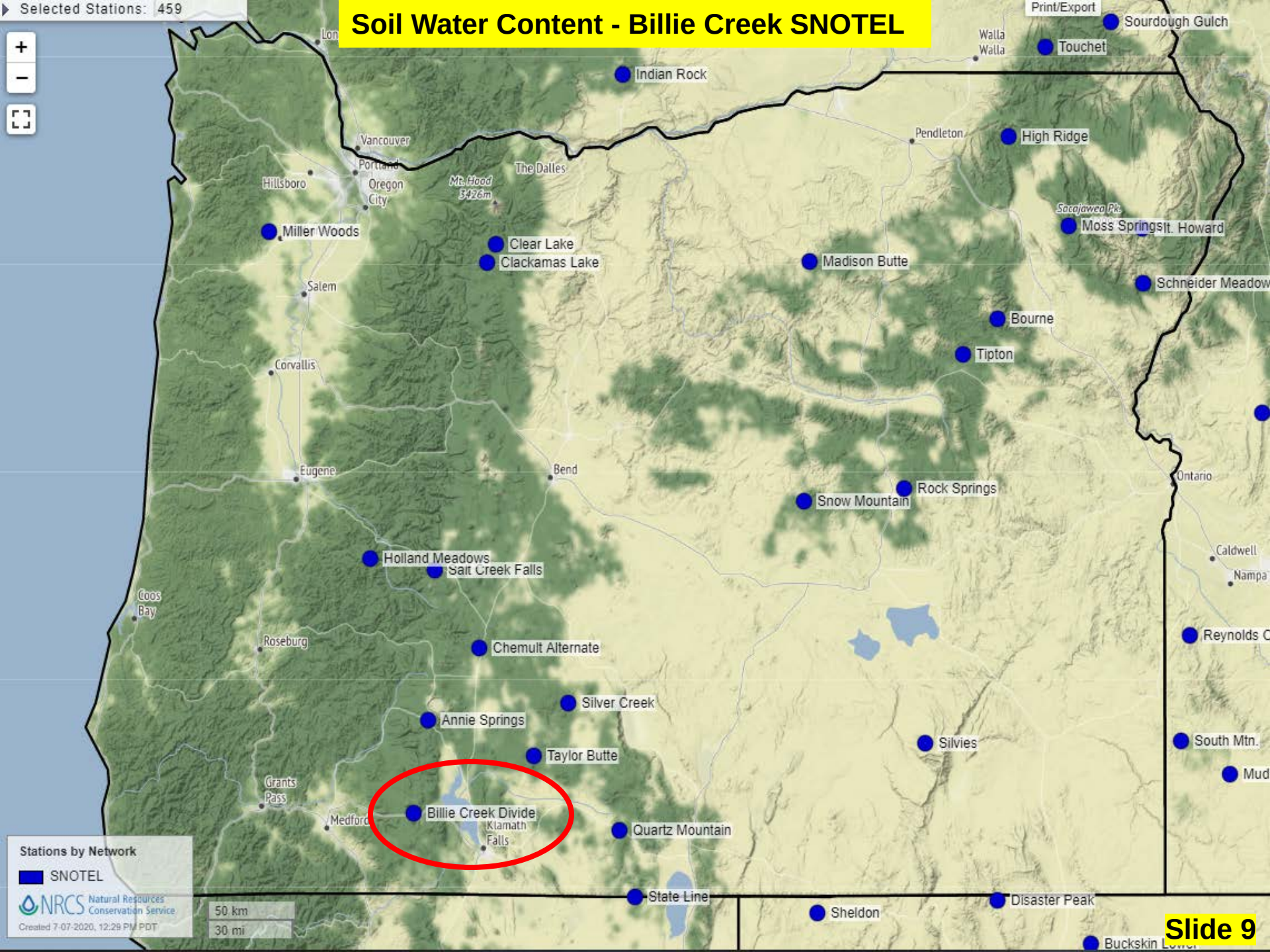
# Soil Water Content – Holland Meadows SNOTEL



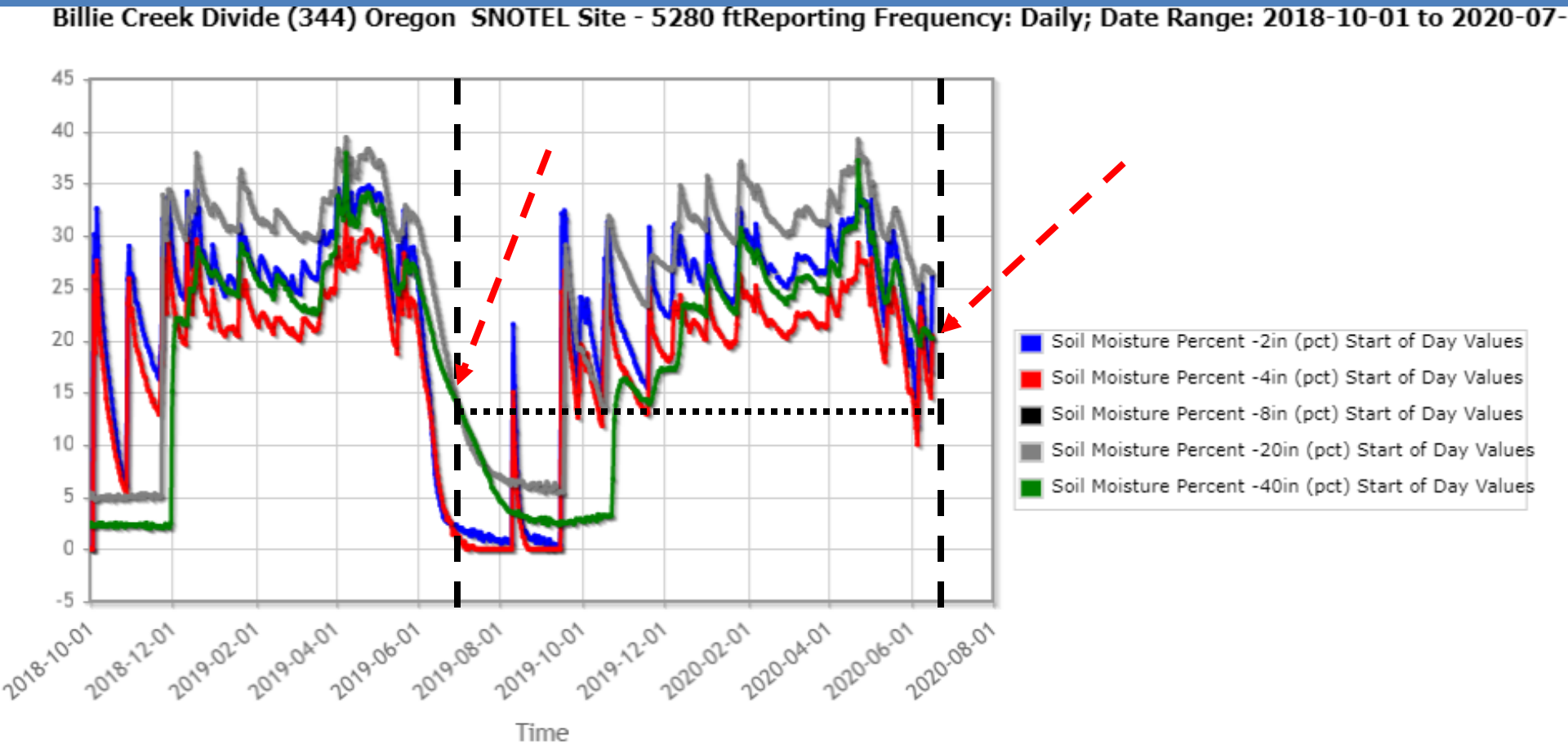

Selected Stations: 459
Soil Water Content – High Ridge SNOTEL
Print/Export
Sourdough Gulch
Touchet
Indian Rock
High Ridge
Vancouver
Portland
Hillsboro
Oregon City
The Dalles
Mt. Hood 5426m
Miller Woods
Clear Lake
Clackamas Lake
Madison Butte
Moss Springs
Schneider Meadow
Salem
Bourne
Tipton
Corvallis
Eugene
Bend
Rock Springs
Snow Mountain
Ontario
Holland Meadows
Salt Creek Falls
Caldwell
Nampa
Coos Bay
Roseburg
Chemult Alternate
Reynolds
Silver Creek
Annie Springs
Silvies
South Mtn.
Taylor Butte
Grants Pass
Medford
Billie Creek Divide
Klamath Falls
Quartz Mountain
Stations by Network
SNOTEL
NRCS Natural Resources Conservation Service
Created 7-07-2020, 12:29 PM PDT
50 km
30 mi
State Line
Sheldon
Disaster Peak
Slide 7

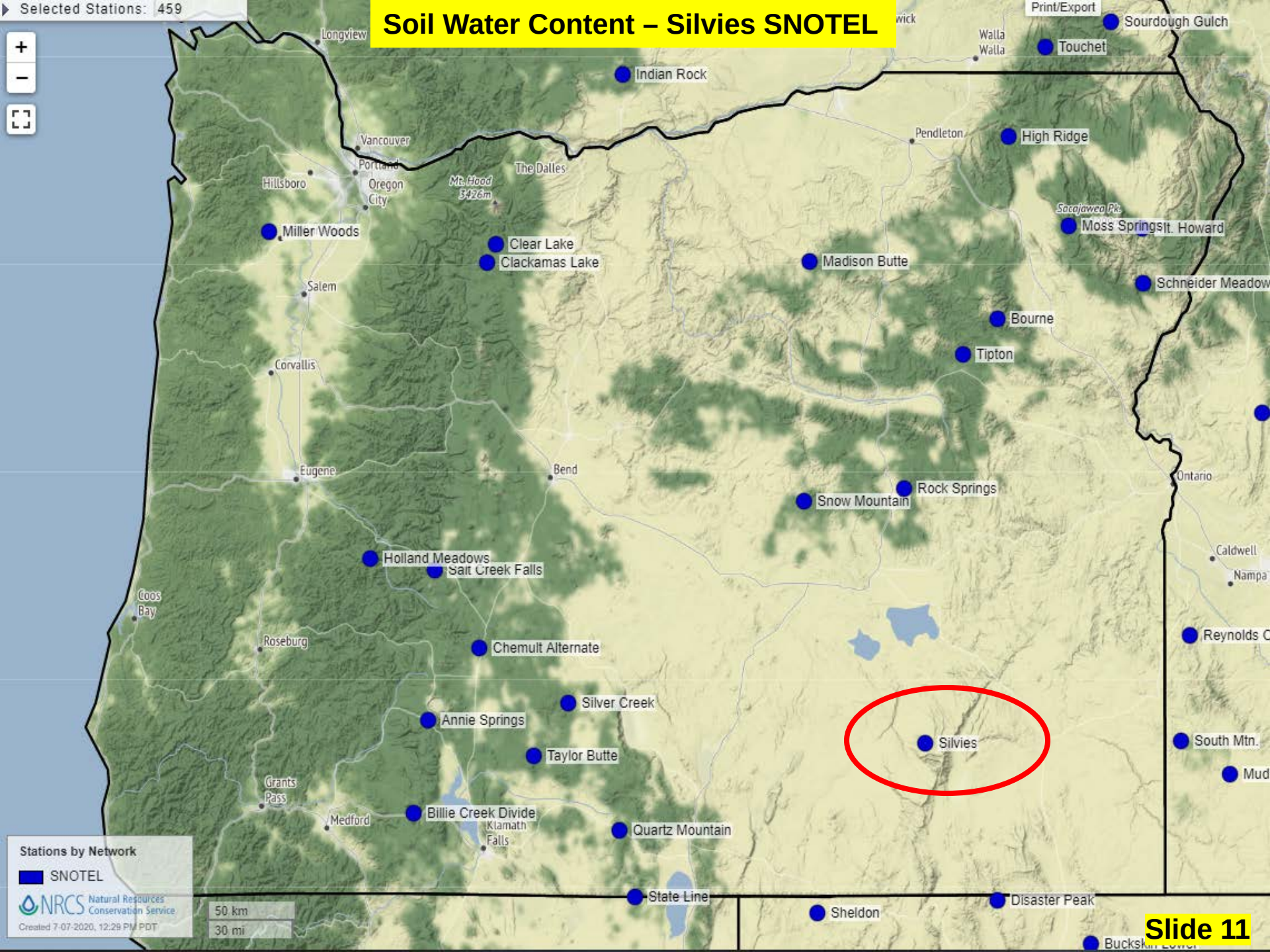
# Soil Water Content – High Ridge SNOTEL




Selected Stations: 459
Soil Water Content - Billie Creek SNOTEL
Print/Export
Sourdough Gulch
Touchet
Walla Walla
Indian Rock
Pendleton
High Ridge
Vancouver
Portland
Hillsboro
Oregon City
Mt. Hood 5426m
The Dalles
Miller Woods
Clear Lake
Clackamas Lake
Madison Butte
Moss Springs
Mt. Howard
Schneider Meadow
Salem
Bourne
Tipton
Corvallis
Eugene
Bend
Rock Springs
Snow Mountain
Ontario
Holland Meadows
Salt Creek Falls
Caldwell
Nampa
Coos Bay
Roseburg
Chemult Alternate
Reynolds C
Silver Creek
Annie Springs
Silvies
South Mtn.
Taylor Butte
Mud
Grants Pass
Billie Creek Divide
Medford
Klamath Falls
Quartz Mountain
Stations by Network
SNOTEL
NRCS Natural Resources Conservation Service
Created 7-07-2020, 12:29 PM PDT
50 km
30 mi
State Line
Sheldon
Disaster Peak
Buckskin
Slide 9

# Soil Water Content - Billie Creek SNOTEL




Soil Water Content – Silvies SNOTEL
Selected Stations: 459
Print/Export
Sourdough Gulch
Touchet
Indian Rock
High Ridge
Pendleton
Vancouver
Portland
Hillsboro
Oregon City
Mt. Hood 5426m
The Dalles
Miller Woods
Clear Lake
Clackamas Lake
Madison Butte
Moss Springs
Mt. Howard
Schneider Meadow
Salem
Bourne
Tipton
Corvallis
Eugene
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Snow Mountain
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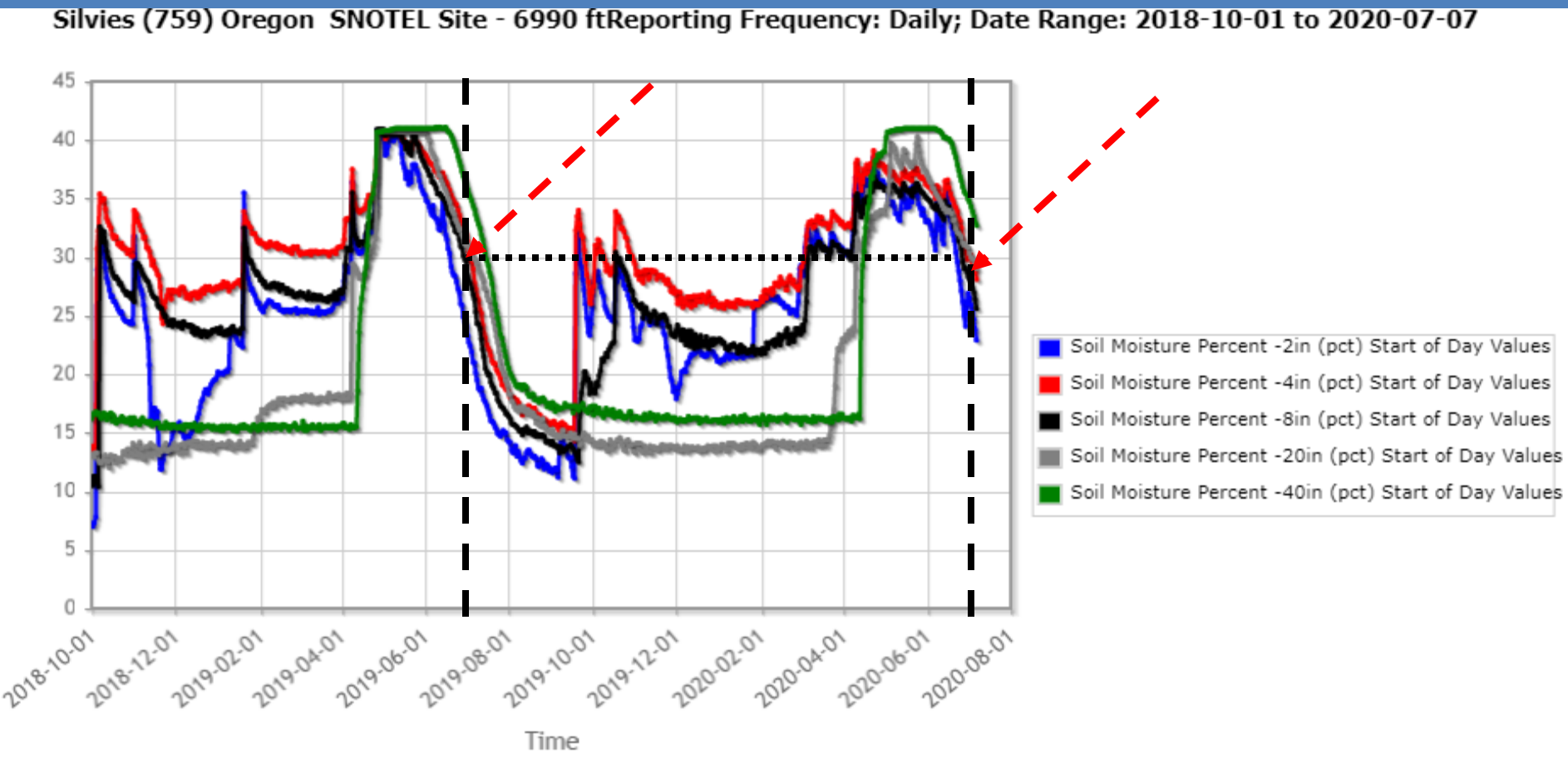
Holland Meadows
Salt Creek Falls
Caldwell
Nampa
Coos Bay
Roseburg
Chemult Alternate
Reynolds C
Silver Creek
Annie Springs
Silvies
South Mtn.
Taylor Butte
Grants Pass
Medford
Billie Creek Divide
Klamath Falls
Quartz Mountain
State Line
Sheldon
Disaster Peak
Stations by Network
SNOTEL
NRCS Natural Resources Conservation Service
Created 7-07-2020, 12:29 PM PDT
50 km
30 mi
Slide 11

# Soil Water Content – Silvies SNOTEL



# Oregon Water Supply Availability Committee – July 8, 2020

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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.

**Bear Grass SNOTEL**
**Central Cascades**
**Willamette Basin June 21, 2020**

**H. Scott Oviatt**
**USDA – Natural Resources Conservation Service**
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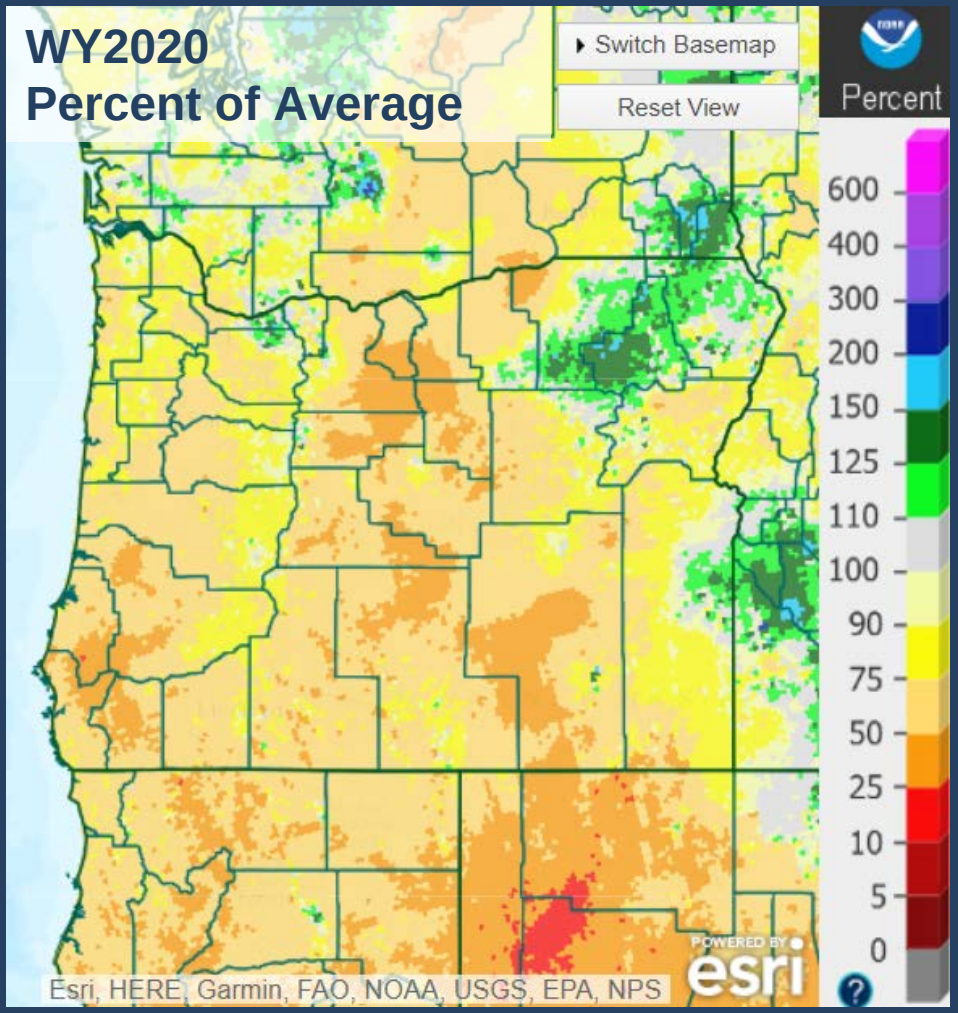
**503-414-3271**

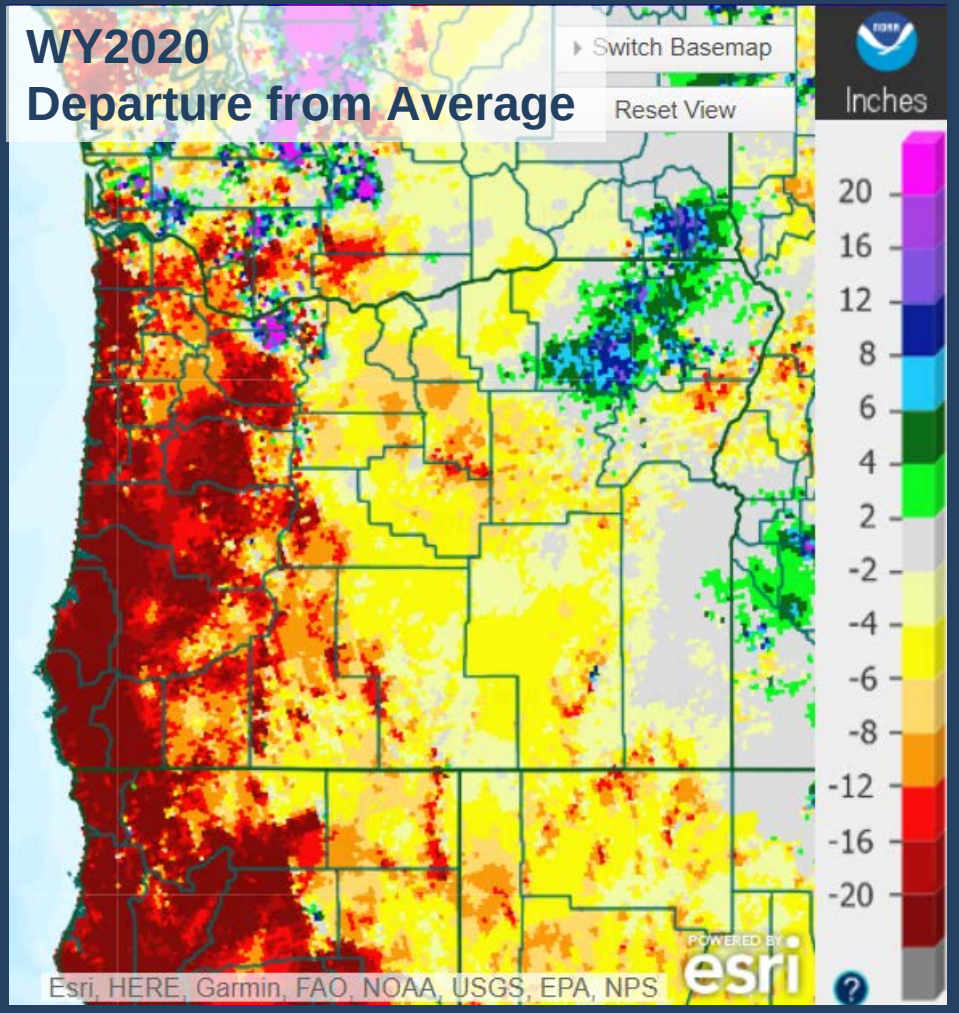
# Oregon WSAC
## National Weather Service
## Precipitation & Temperatures Update

July 8, 2020

Andy Bryant
NOAA/NWS Portland
Weather Forecast Office

# Water Year Precipitation

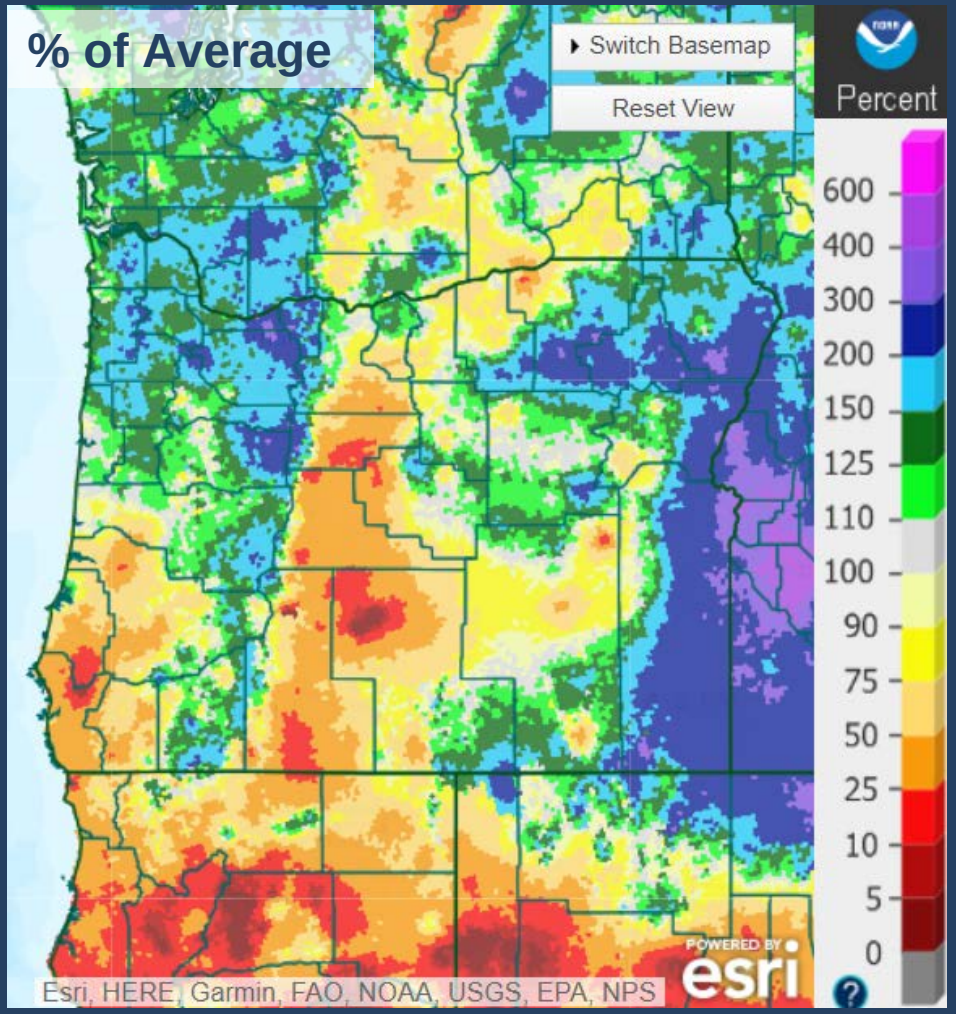


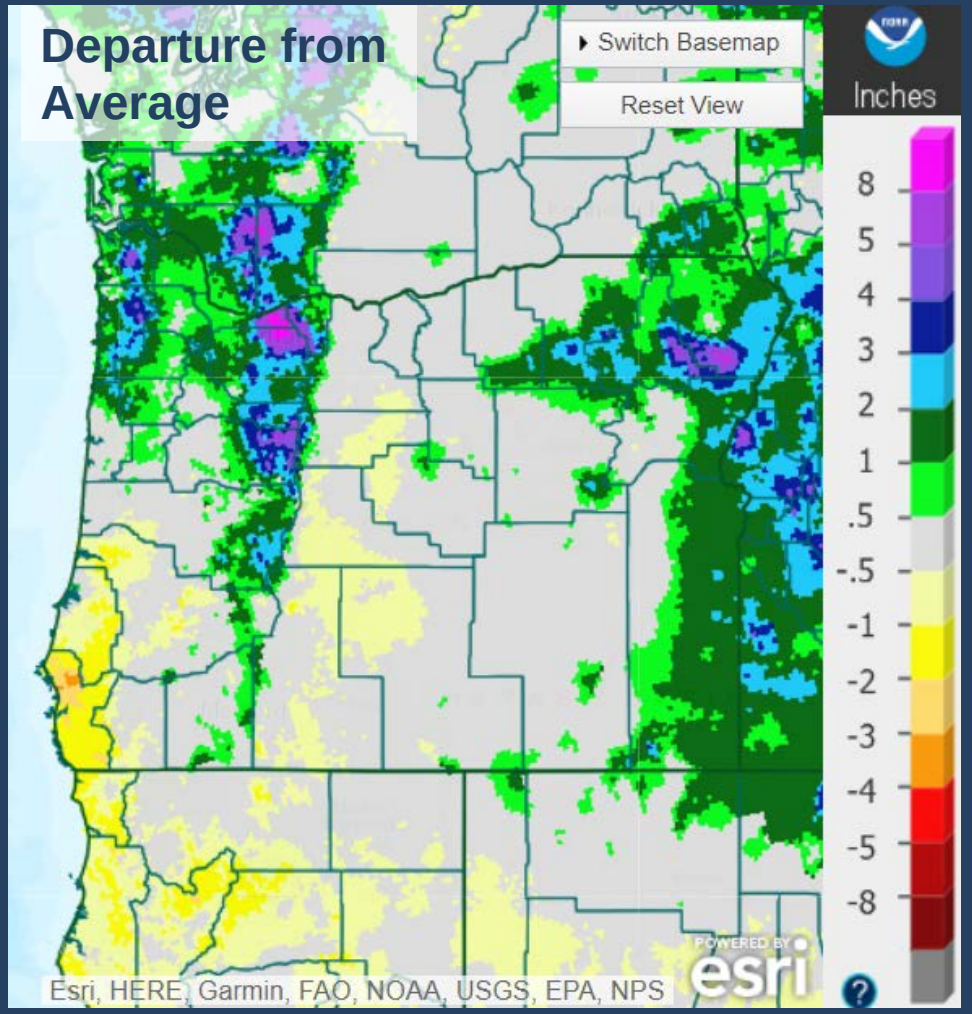




Precipitation Data as of July 7, 2020

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

# Precipitation – Past 30 Days



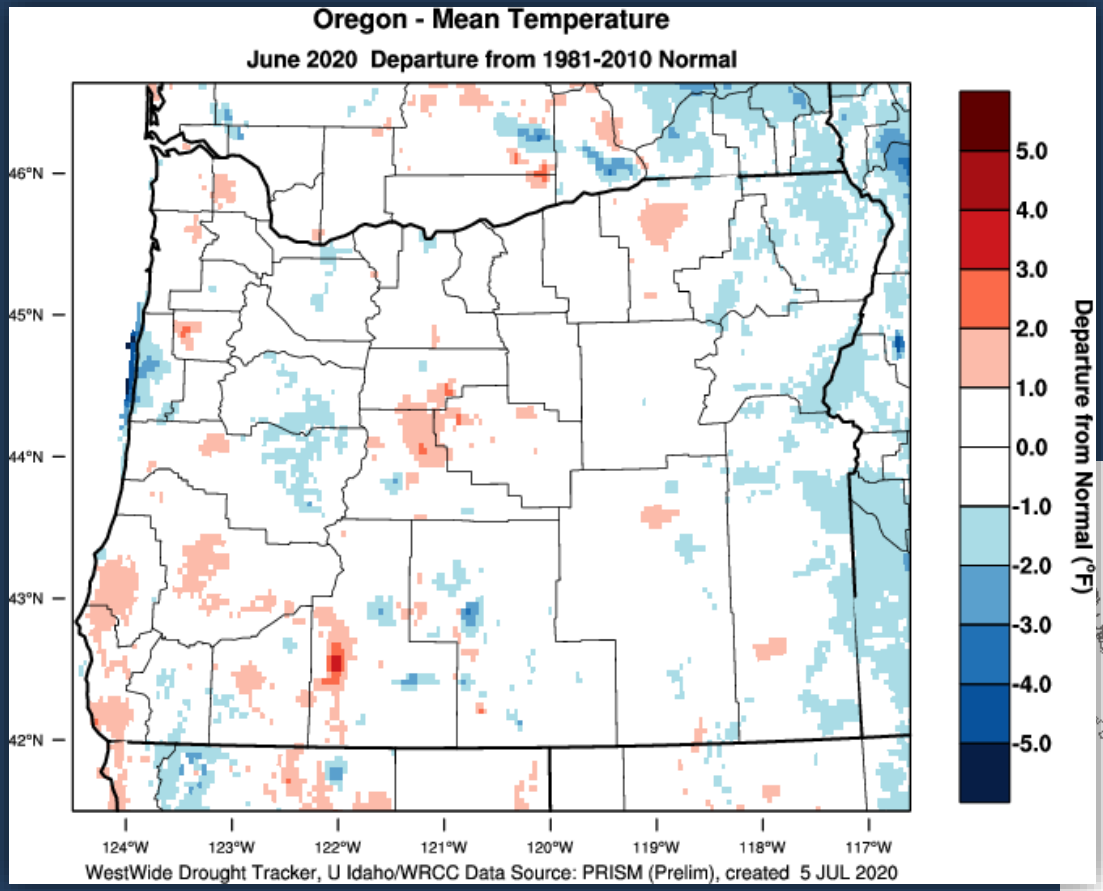

Precipitation Data as of July 7, 2020

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

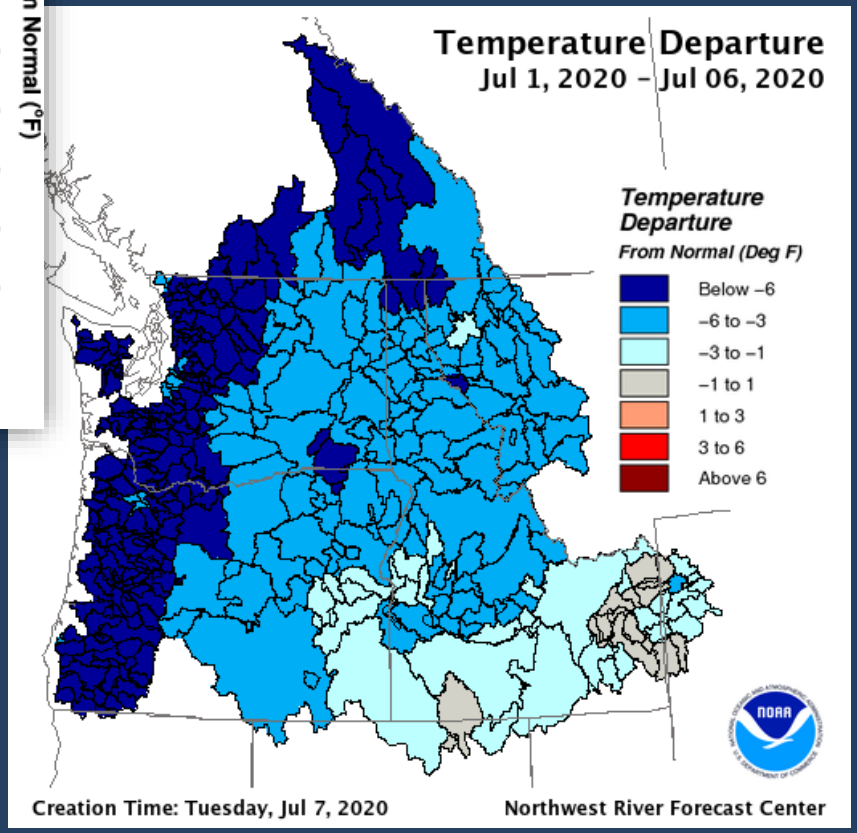
# Recent Temperatures



June 2020




July 1-6, 2020

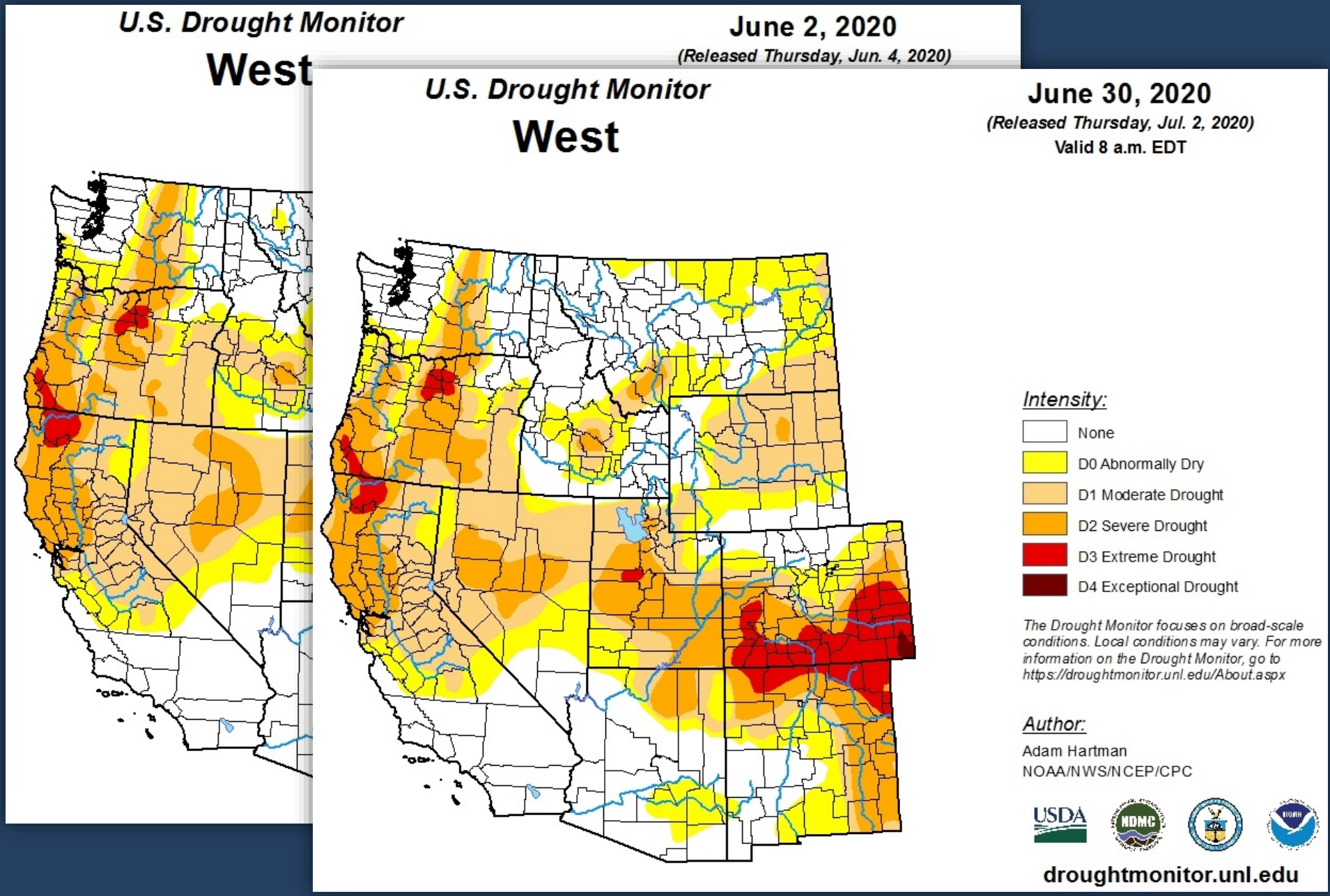



wrcc.dri.edu/wwdt/current.php?folder=mdn1

www.nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php?tab=2

# Drought Monitor

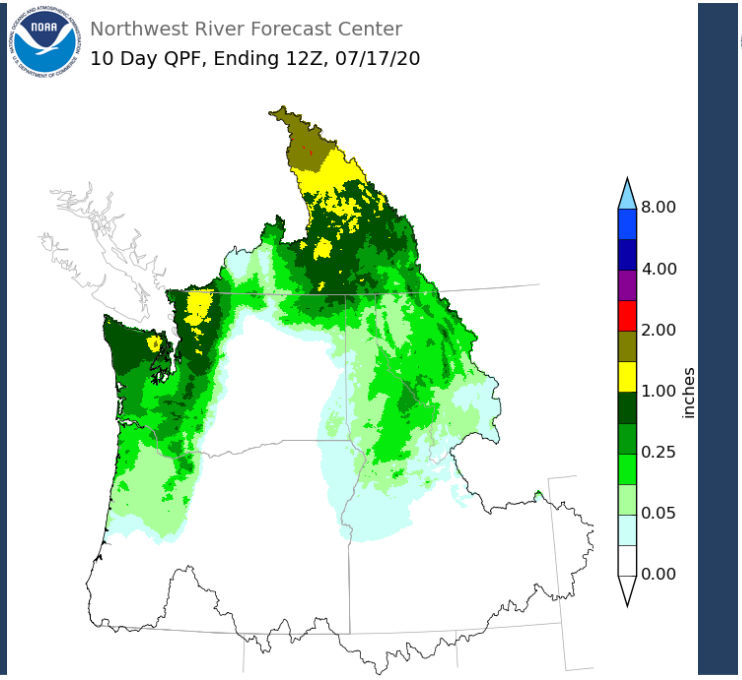


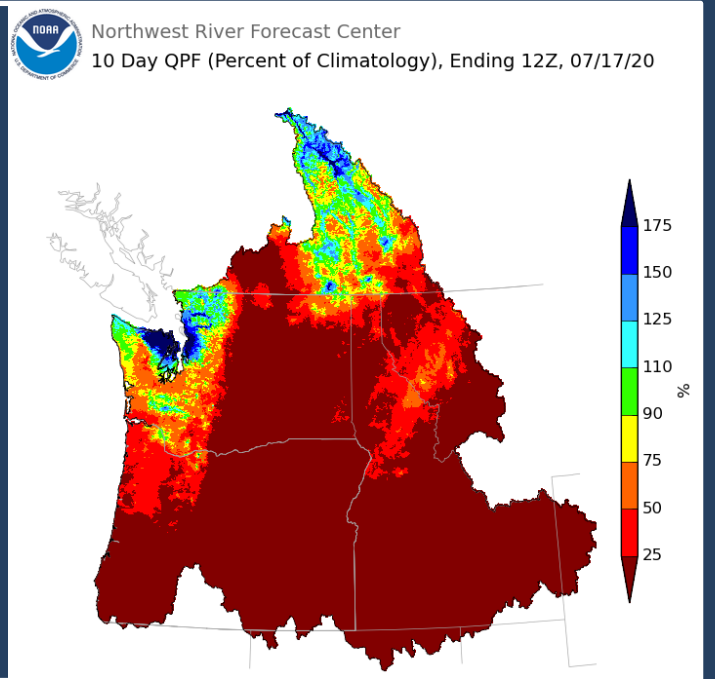


# Mid/Late July Outlook

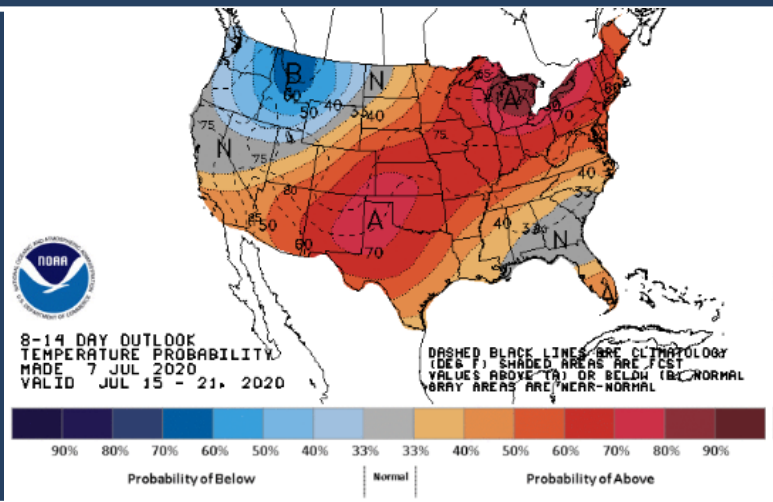


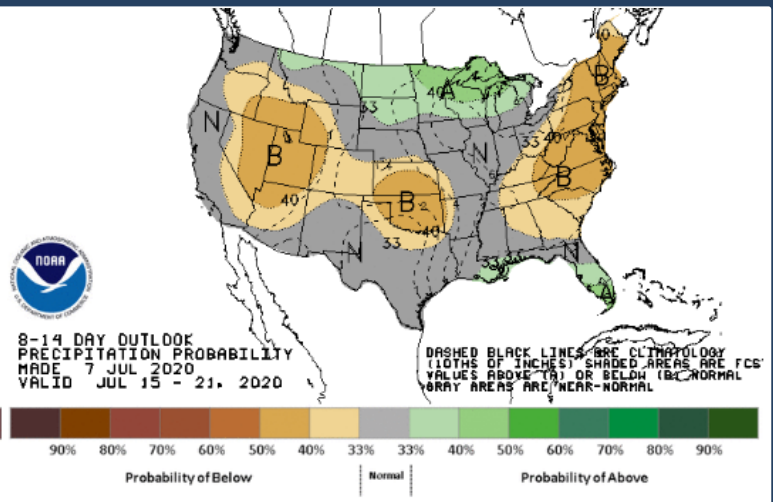
NWRFC
10-DAY
PRECIPITATION




CPC
8 – 14 DAY
OUTLOOK



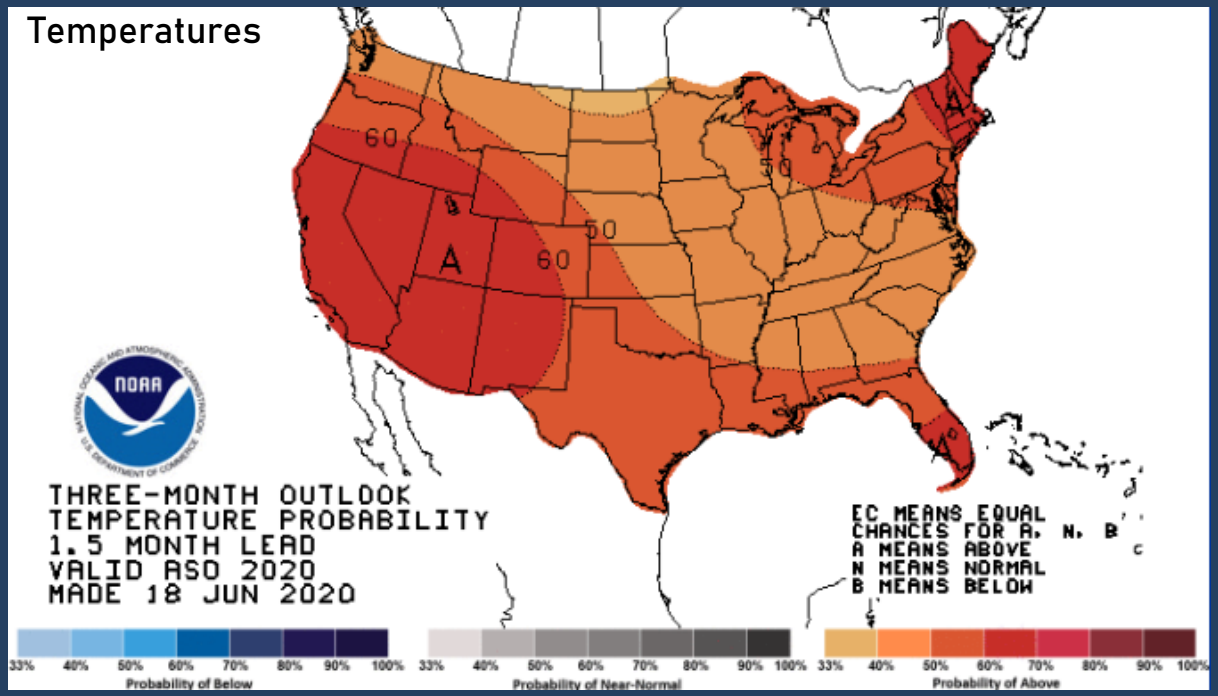



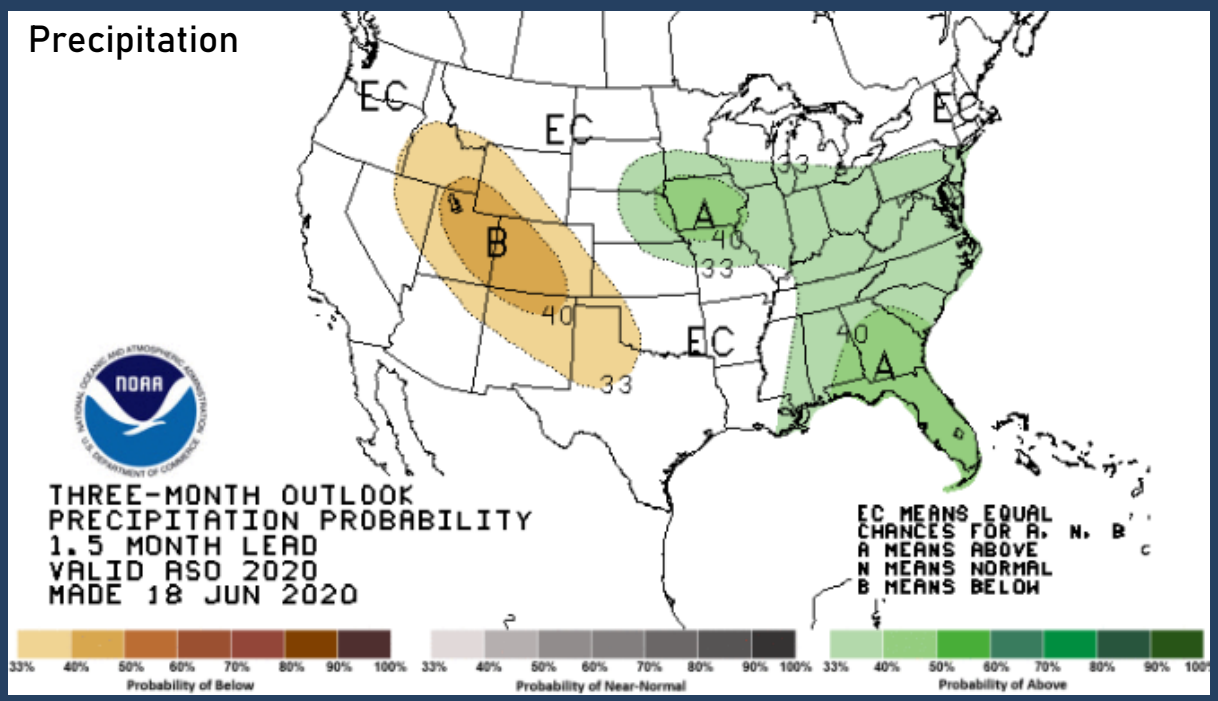

https://www.nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php?t

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

# Climate Prediction Center Outlook

Aug – Sep – Oct 2020



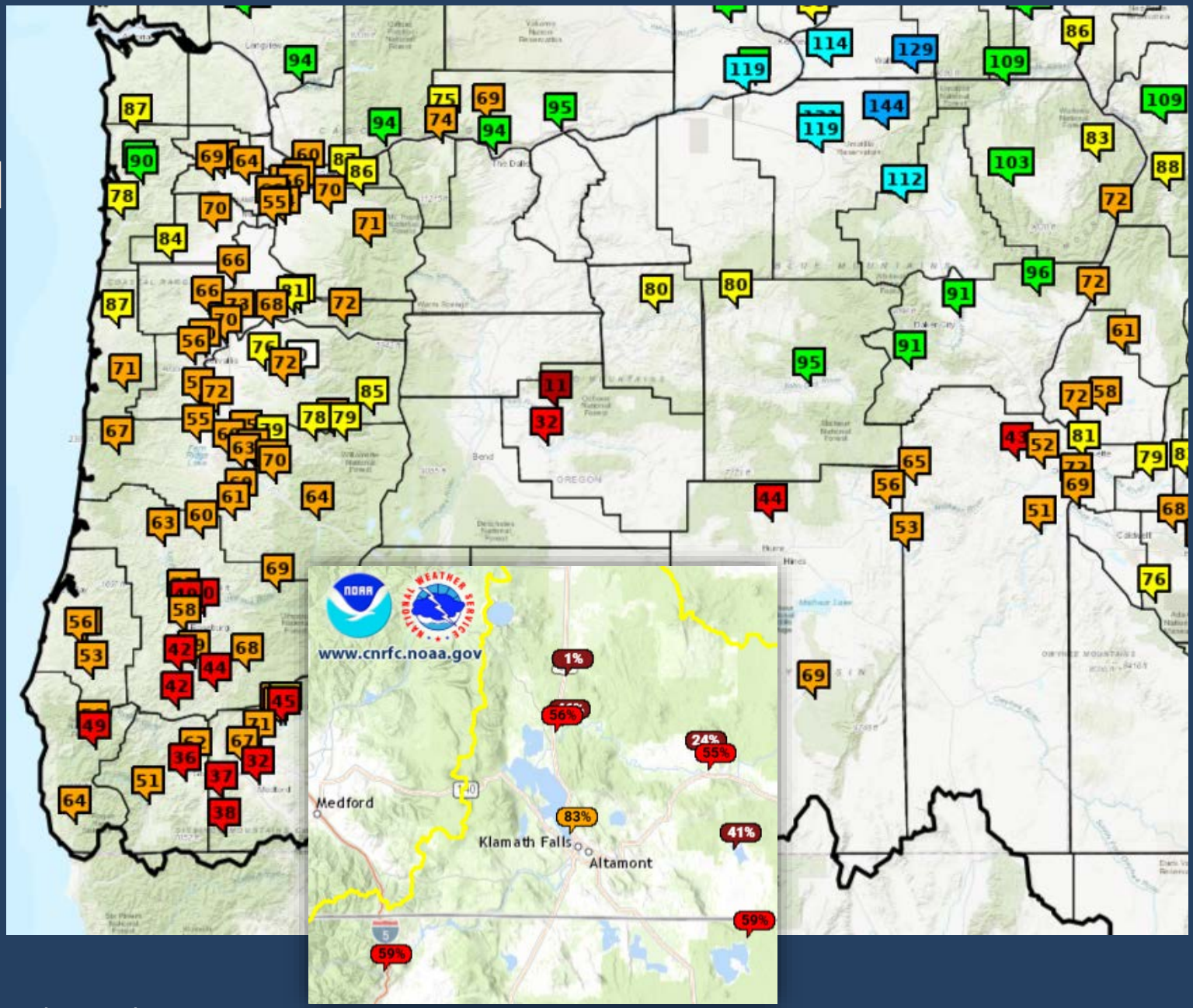




https://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=2

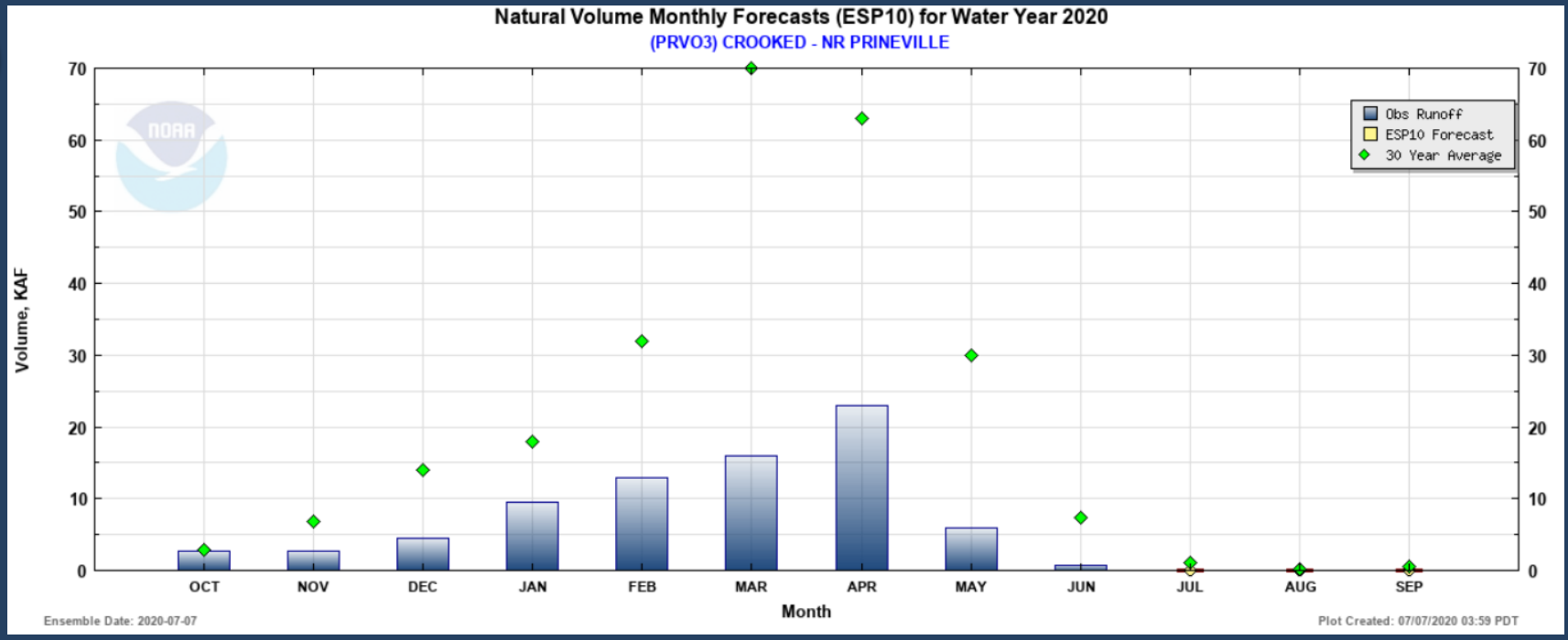
# Observed Water Year Runoff

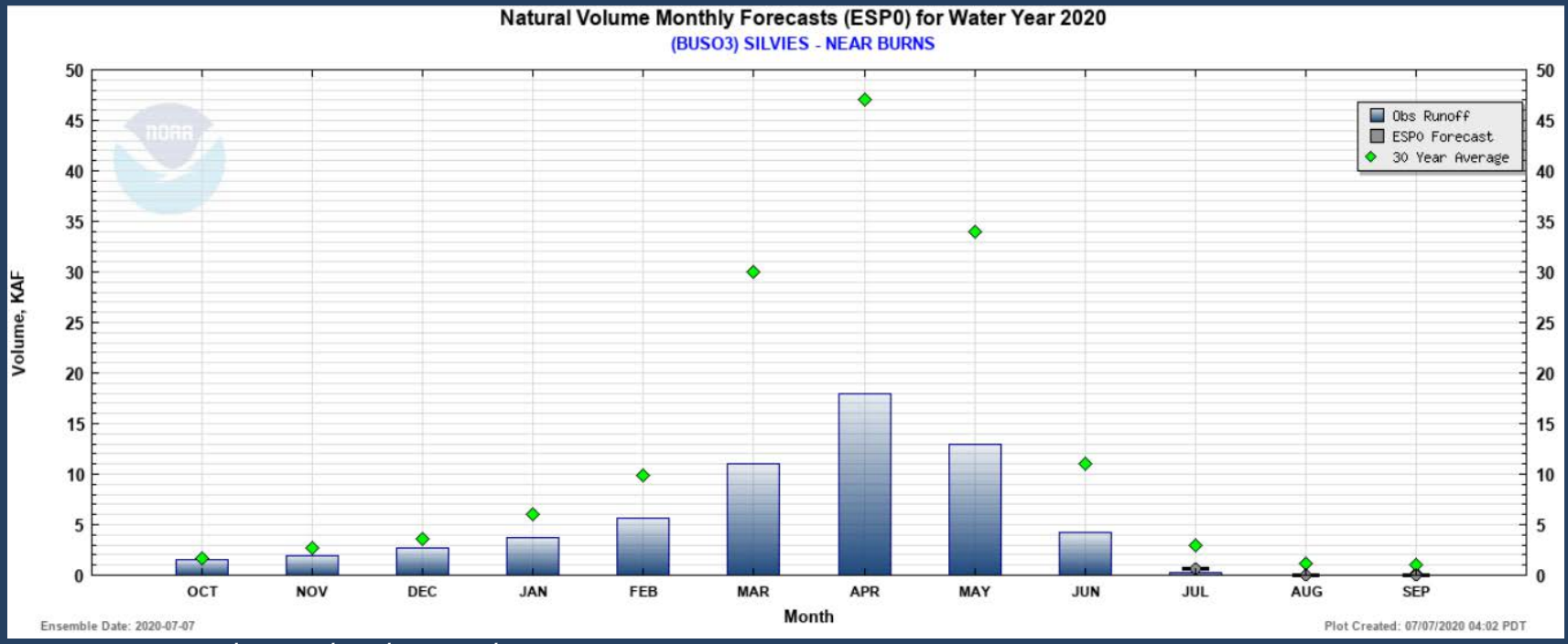
through July 6, 2020

Percent of Normal

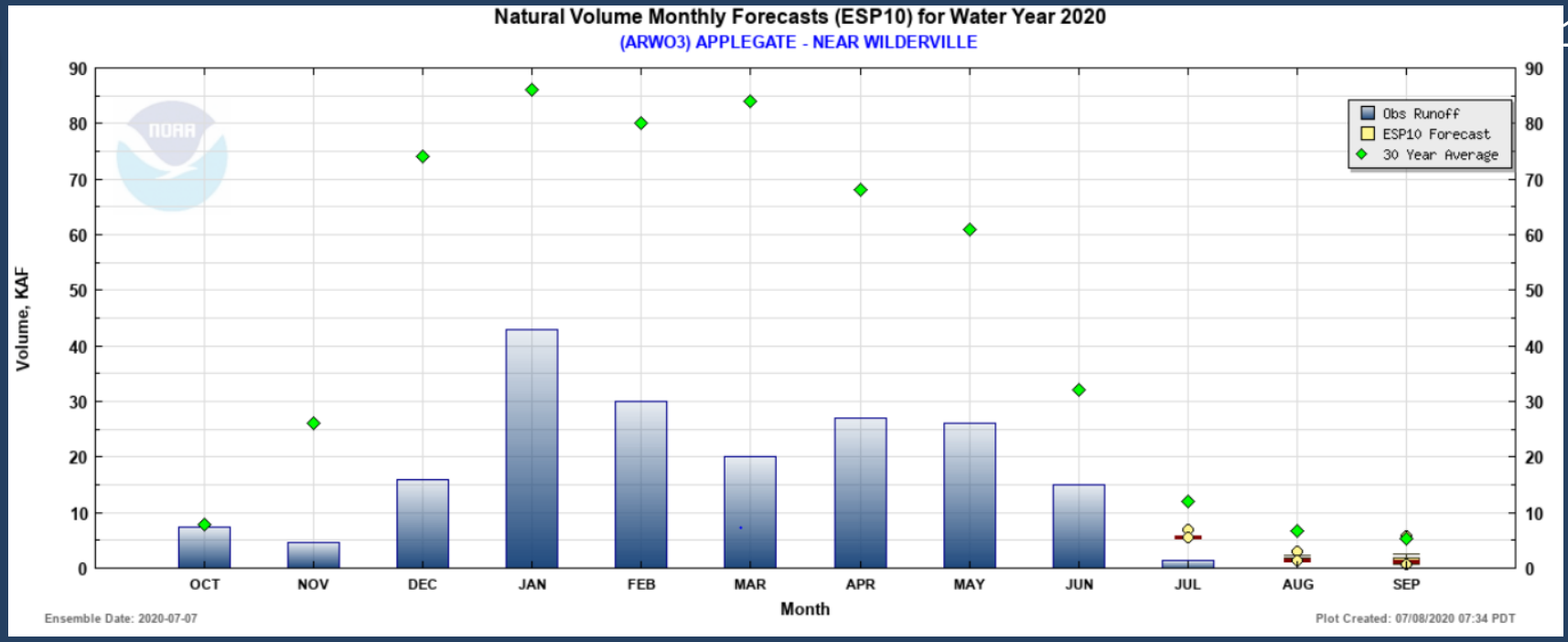


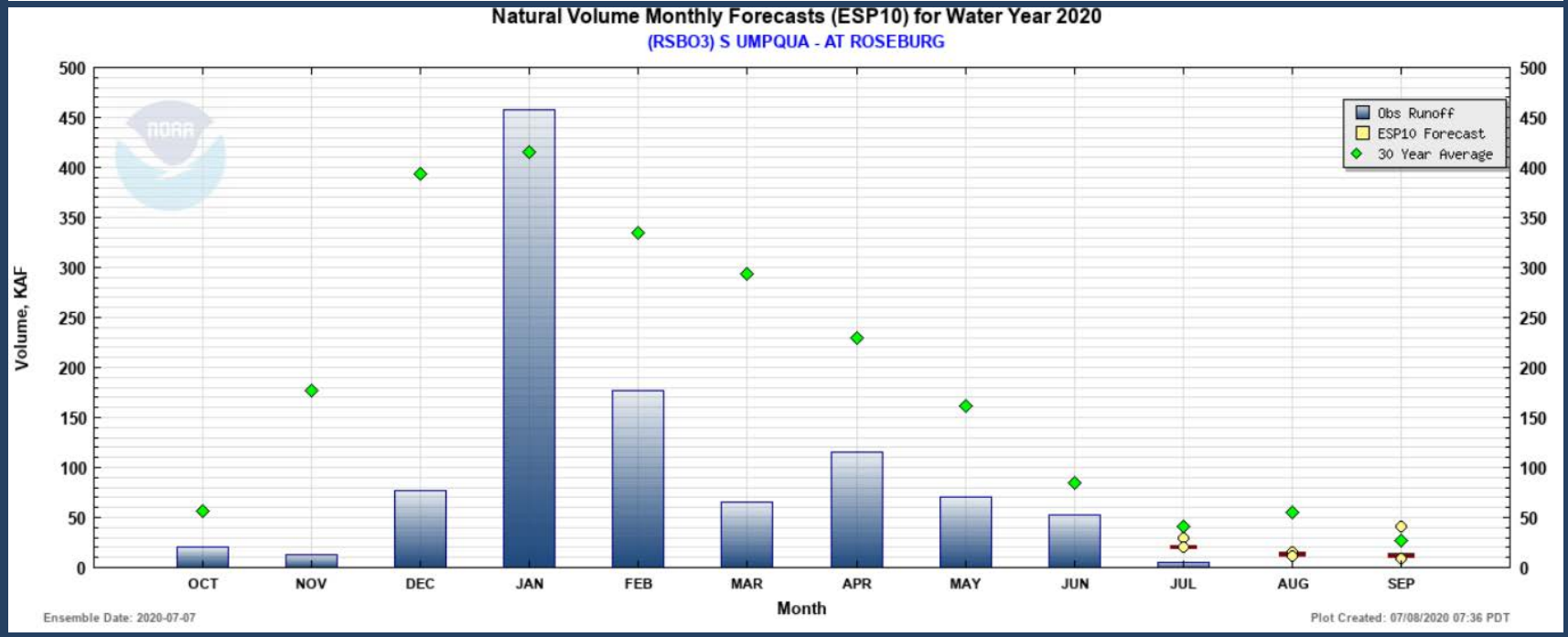

https://www.nwrfc.noaa.gov/natural/index.html
https://www.cnrfc.noaa.gov/water_resources_update.php




https://www.nwrfc.noaa.gov/natural/plot/monthly/monthly_natural_forecasts.php




https://www.nwrfc.noaa.gov/natural/plot/monthly/monthly_natural_forecasts.php

# WSAC/DRC Meeting
# Drought Monitor Overview
# July 2020

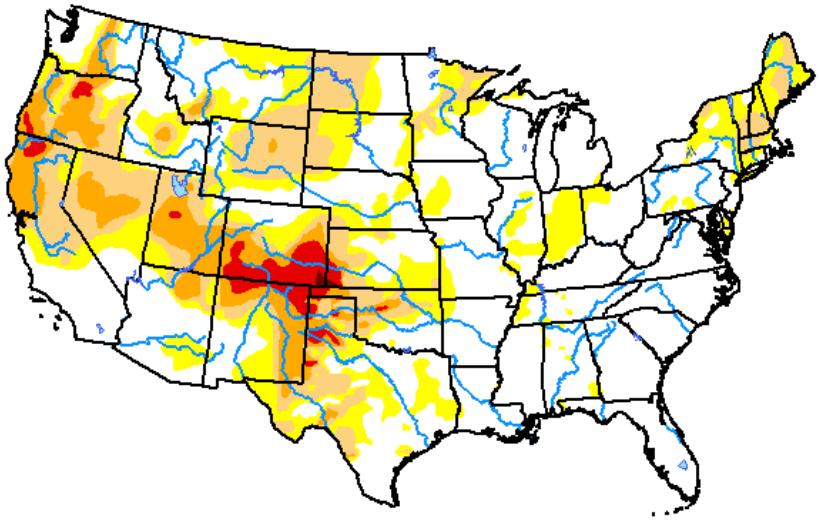

Larry O'Neill

*Oregon State University*

*State Climatologist of Oregon*

*U.S. Drought Monitor*

# Continental U.S. (CONUS)



## June 30, 2020

***(Released Thursday, Jul. 2, 2020)***

**Valid 8 a.m. EDT**

*Drought Conditions (Percent Area)*

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|---|---|---|---|---|---|
| **Current** | 54.58 | 45.42 | 25.52 | 10.51 | 2.49 | 0.08 |
| **Last Week** *06-23-2020* | 55.26 | 44.74 | 25.45 | 9.85 | 2.28 | 0.00 |
| **3 Months Ago** *03-31-2020* | 74.79 | 25.21 | 14.54 | 3.04 | 0.48 | 0.03 |
| **Start of Calendar Year** *12-31-2019* | 75.80 | 24.20 | 11.20 | 3.82 | 0.06 | 0.00 |
| **Start of Water Year** *10-01-2019* | 60.59 | 39.41 | 19.28 | 5.95 | 0.79 | 0.00 |
| **One Year Ago** *07-02-2019* | 90.04 | 9.96 | 3.22 | 0.59 | 0.00 | 0.00 |

*Intensity:*

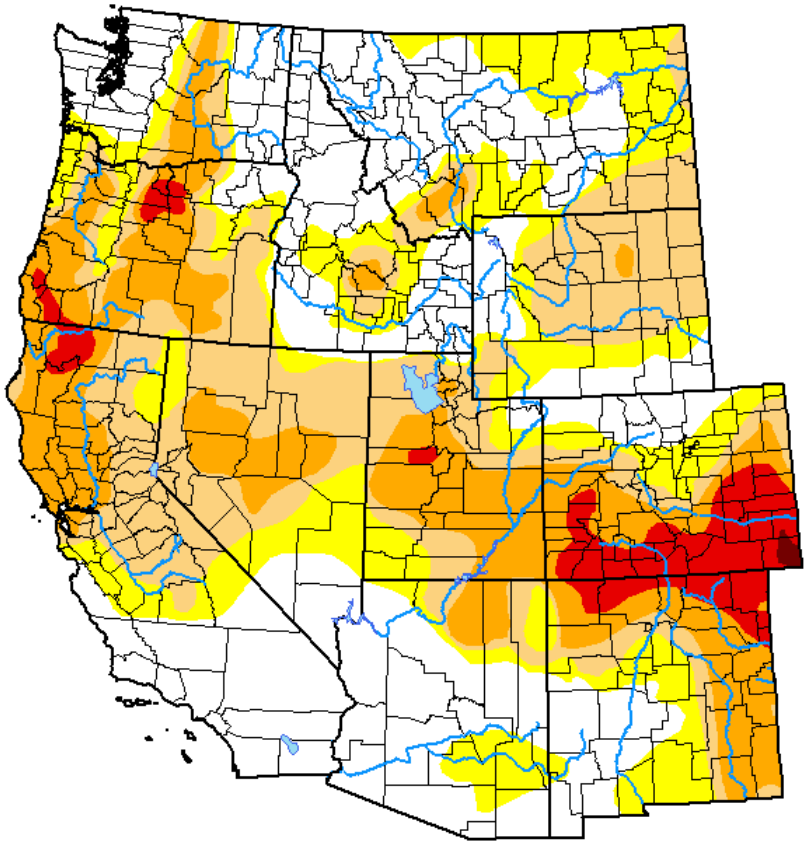
- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

*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:*
Adam Hartman
NOAA/NWS/NCEP/CPC

**droughtmonitor.unl.edu**

# *U.S. Drought Monitor*
# West



## June 30, 2020
***(Released Thursday, Jul. 2, 2020)***
**Valid 8 a.m. EDT**

*Drought Conditions (Percent Area)*

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|---|---|---|---|---|---|
| **Current** | 35.15 | 64.85 | 45.24 | 22.93 | 5.00 | 0.12 |
| **Last Week** *06-23-2020* | 33.43 | 66.57 | 46.04 | 21.34 | 4.86 | 0.00 |
| **3 Months Ago** *03-31-2020* | 51.87 | 48.13 | 27.82 | 4.20 | 0.00 | 0.00 |
| **Start of Calendar Year** *12-31-2019* | 59.17 | 40.83 | 18.17 | 7.12 | 0.00 | 0.00 |
| **Start of Water Year** *10-01-2019* | 68.40 | 31.60 | 16.32 | 3.16 | 0.00 | 0.00 |
| **One Year Ago** *07-02-2019* | 86.89 | 13.11 | 5.53 | 1.24 | 0.00 | 0.00 |

*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*

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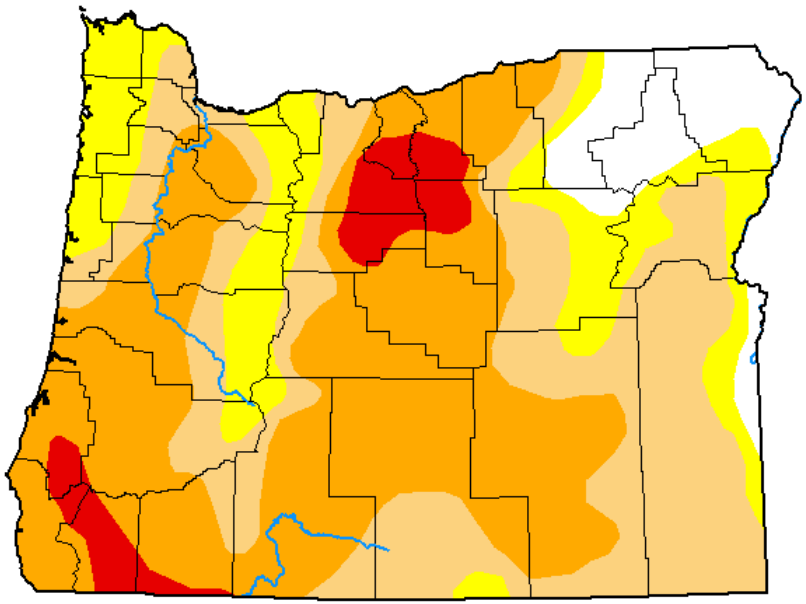
Adam Hartman
NOAA/NWS/NCEP/CPC

**droughtmonitor.unl.edu**

# Current Oregon USDM depiction

***U.S. Drought Monitor***

## Oregon



**June 30, 2020**

***(Released Thursday, Jul. 2, 2020)***

**Valid 8 a.m. EDT**

*Drought Conditions (Percent Area)*

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|---|---|---|---|---|---|
| **Current** | 7.49 | 92.51 | 76.67 | 45.51 | 5.33 | 0.00 |
| **Last Week** *06-23-2020* | 5.49 | 94.51 | 78.38 | 45.40 | 4.78 | 0.00 |
| **3 Months Ago** *03-31-2020* | 15.43 | 84.57 | 56.84 | 13.23 | 0.00 | 0.00 |
| **Start of Calendar Year** *12-31-2019* | 2.40 | 97.60 | 24.46 | 0.00 | 0.00 | 0.00 |
| **Start of Water Year** *10-01-2019* | 88.54 | 11.46 | 0.00 | 0.00 | 0.00 | 0.00 |
| **One Year Ago** *07-02-2019* | 71.07 | 28.93 | 9.21 | 0.00 | 0.00 | 0.00 |

*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:*

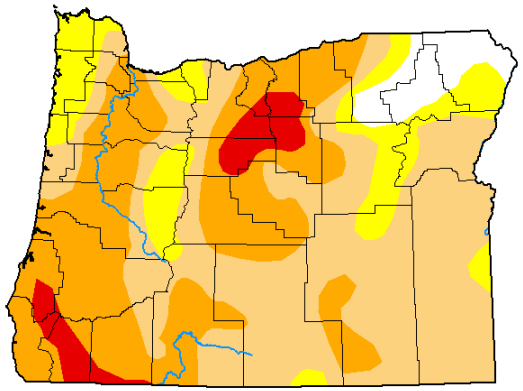
Adam Hartman
NOAA/NWS/NCEP/CPC

**droughtmonitor.unl.edu**

# Changes during June 2020

- 1-2 category improvements in NE Oregon and Malheur county
- D2 expansion in Klamath, Lake, and Harney counties
- D3 expansion into Sherman county and small part of Wasco county
- Small improvements in south Oregon Cascades
- D2-> in and around Portland

***U.S. Drought Monitor***
**Oregon**



**June 2, 2020**
***(Released Thursday, Jun. 4, 2020)***
**Valid 8 a.m. EDT**

*Drought Conditions (Percent Area)*

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|---|---|---|---|---|---|
| **Current** | 4.84 | 95.16 | 81.69 | 37.35 | 4.88 | 0.00 |
| **Last Week** 05-26-2020 | 4.33 | 95.67 | 82.31 | 38.08 | 7.00 | 0.00 |
| **3 Months Ago** 03-03-2020 | 19.88 | 80.12 | 42.91 | 0.00 | 0.00 | 0.00 |
| **Start of Calendar Year** 12-31-2019 | 2.40 | 97.60 | 24.46 | 0.00 | 0.00 | 0.00 |
| **Start of Water Year** 10-01-2019 | 88.54 | 11.46 | 0.00 | 0.00 | 0.00 | 0.00 |
| **One Year Ago** 06-04-2019 | 83.05 | 16.95 | 1.80 | 0.00 | 0.00 | 0.00 |

*Intensity:*
None
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought

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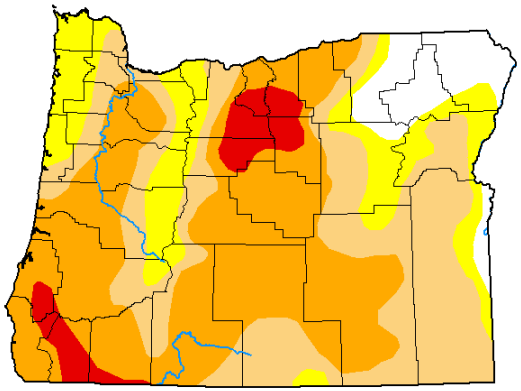
*Author:*
Curtis Riganti
National Drought Mitigation Center

droughtmonitor.unl.edu

***U.S. Drought Monitor***
**Oregon**



**June 30, 2020**
***(Released Thursday, Jul. 2, 2020)***
**Valid 8 a.m. EDT**

*Drought Conditions (Percent Area)*

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|---|---|---|---|---|---|
| **Current** | 7.49 | 92.51 | 76.67 | 45.51 | 5.33 | 0.00 |
| **Last Week** 06-23-2020 | 5.49 | 94.51 | 78.38 | 45.40 | 4.78 | 0.00 |
| **3 Months Ago** 03-31-2020 | 15.43 | 84.57 | 56.84 | 13.23 | 0.00 | 0.00 |
| **Start of Calendar Year** 12-31-2019 | 2.40 | 97.60 | 24.46 | 0.00 | 0.00 | 0.00 |
| **Start of Water Year** 10-01-2019 | 88.54 | 11.46 | 0.00 | 0.00 | 0.00 | 0.00 |
| **One Year Ago** 07-02-2019 | 71.07 | 28.93 | 9.21 | 0.00 | 0.00 | 0.00 |

*Intensity:*
None
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought

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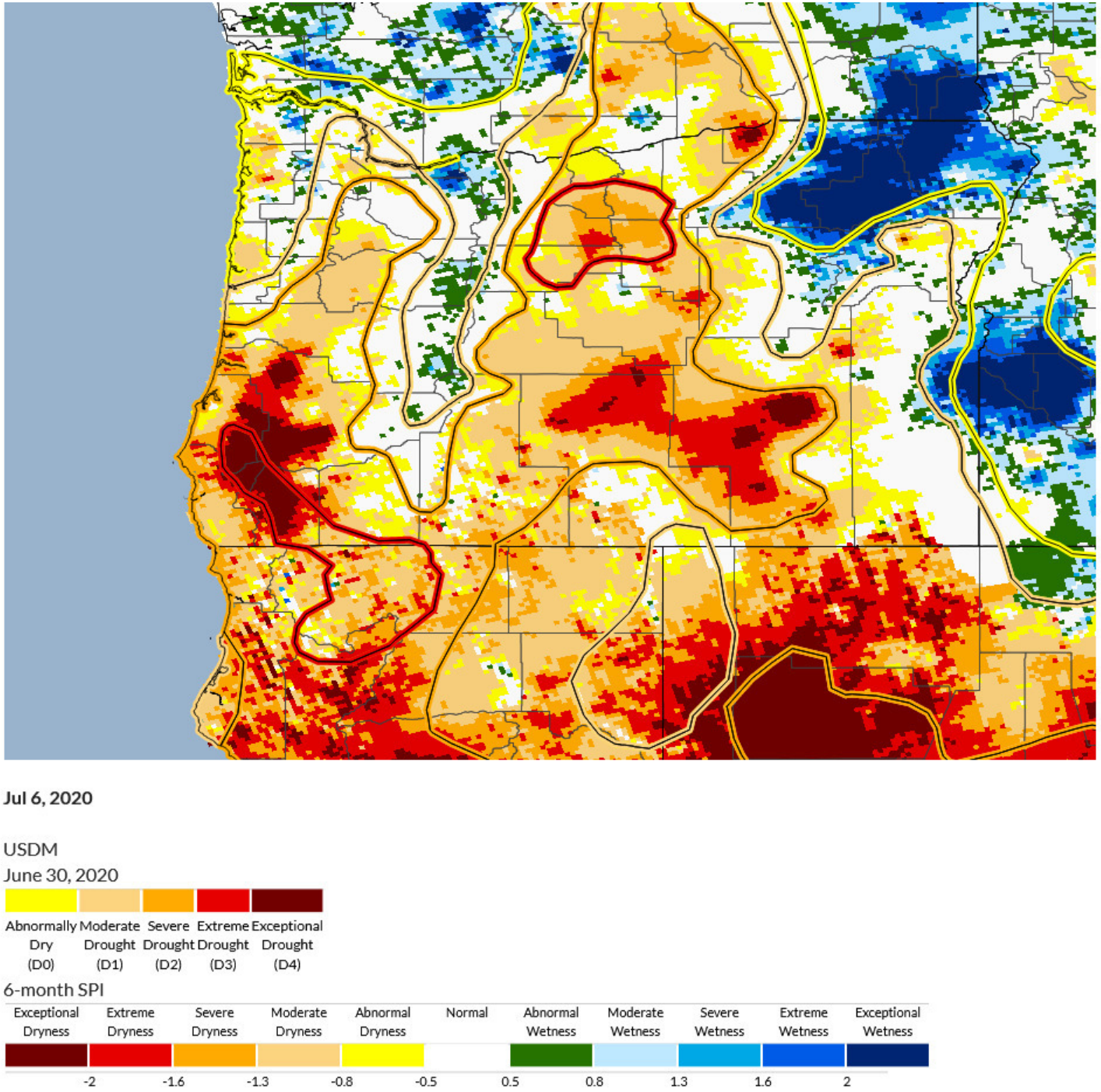
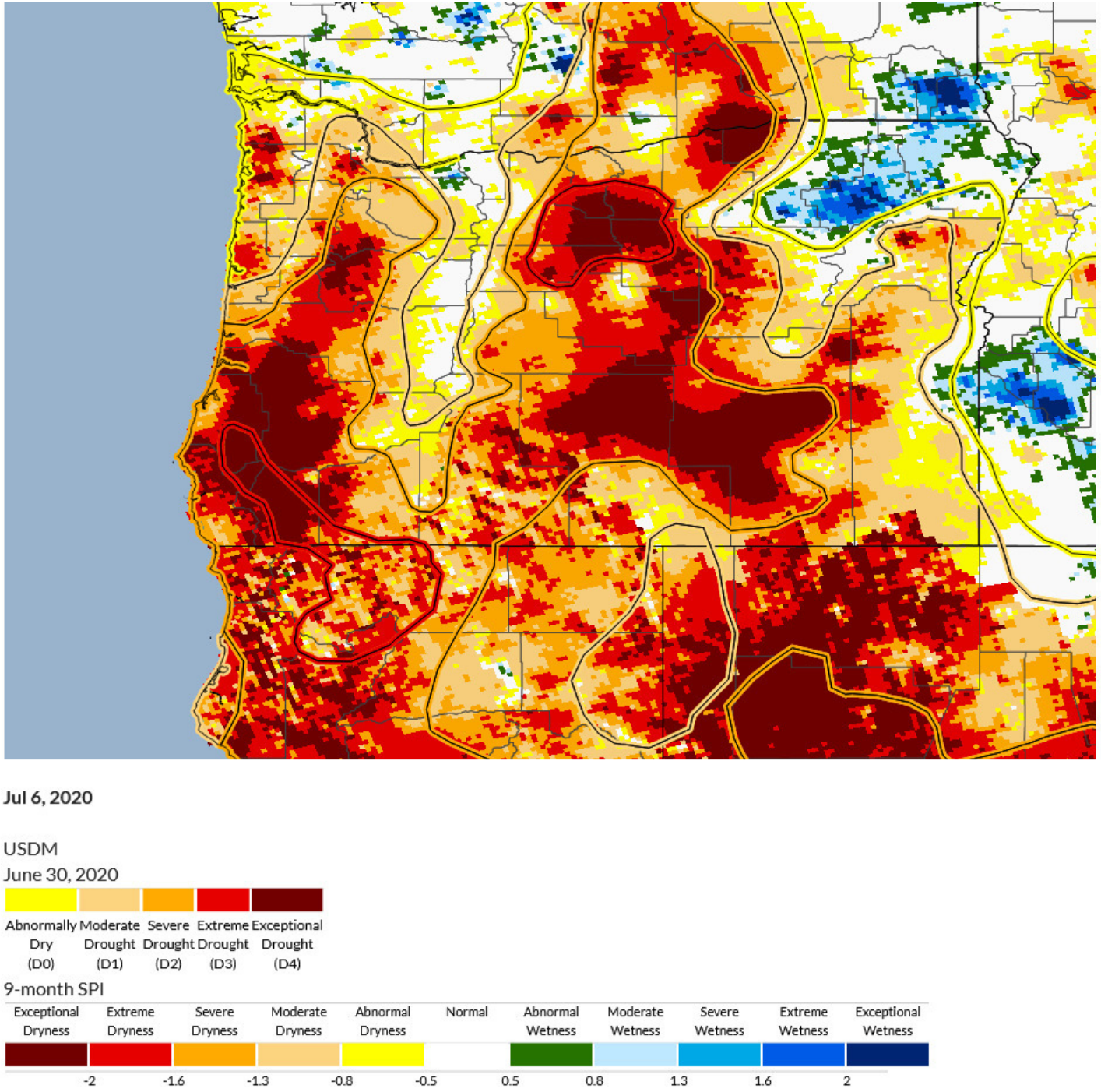
*Author:*
Adam Hartman
NOAA/NWS/NCEP/CPC

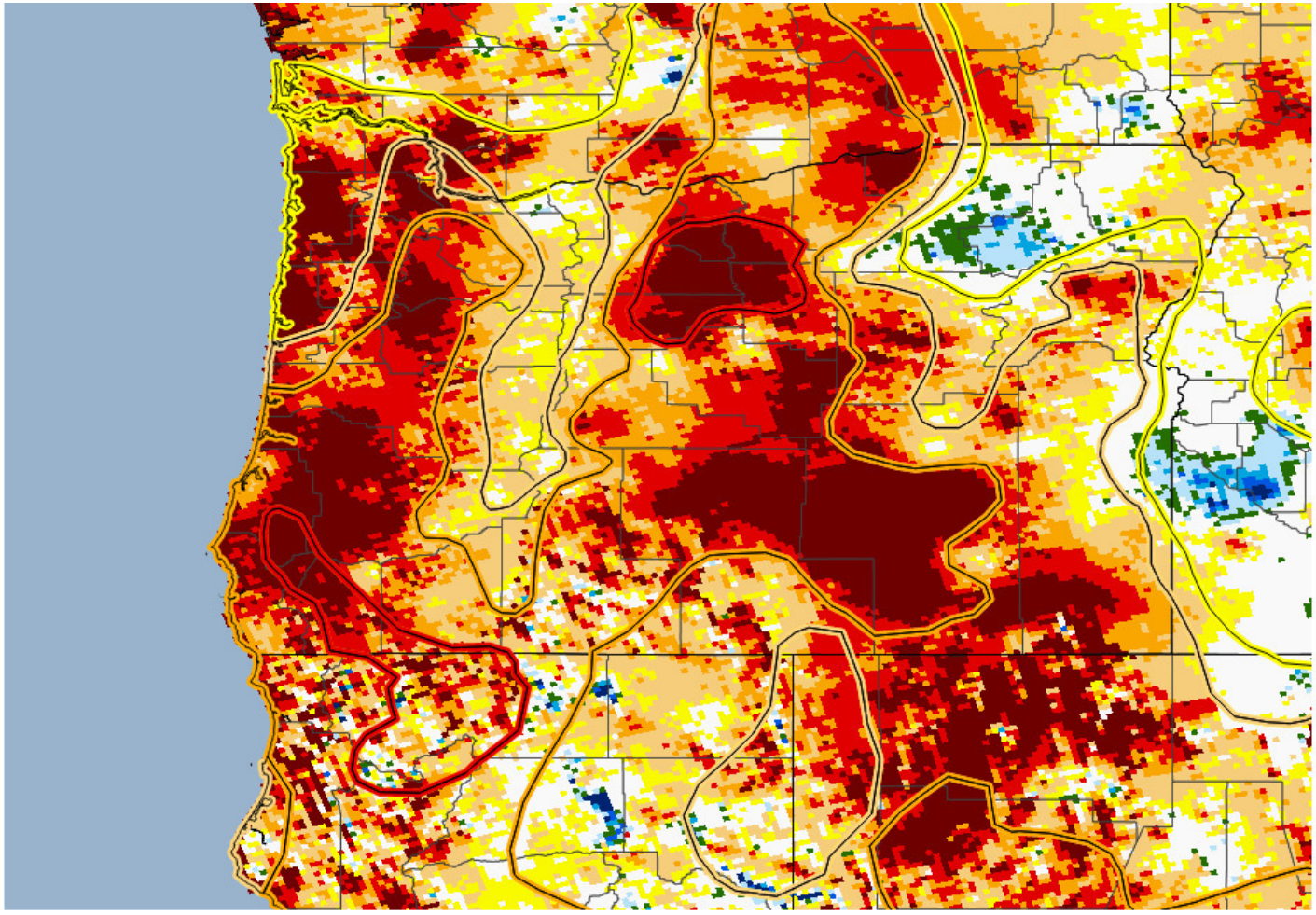
# AHPS 6-month SPI



# AHPS 9-month SPI



# AHPS 24-month SPI



**Jul 6, 2020**

USDM

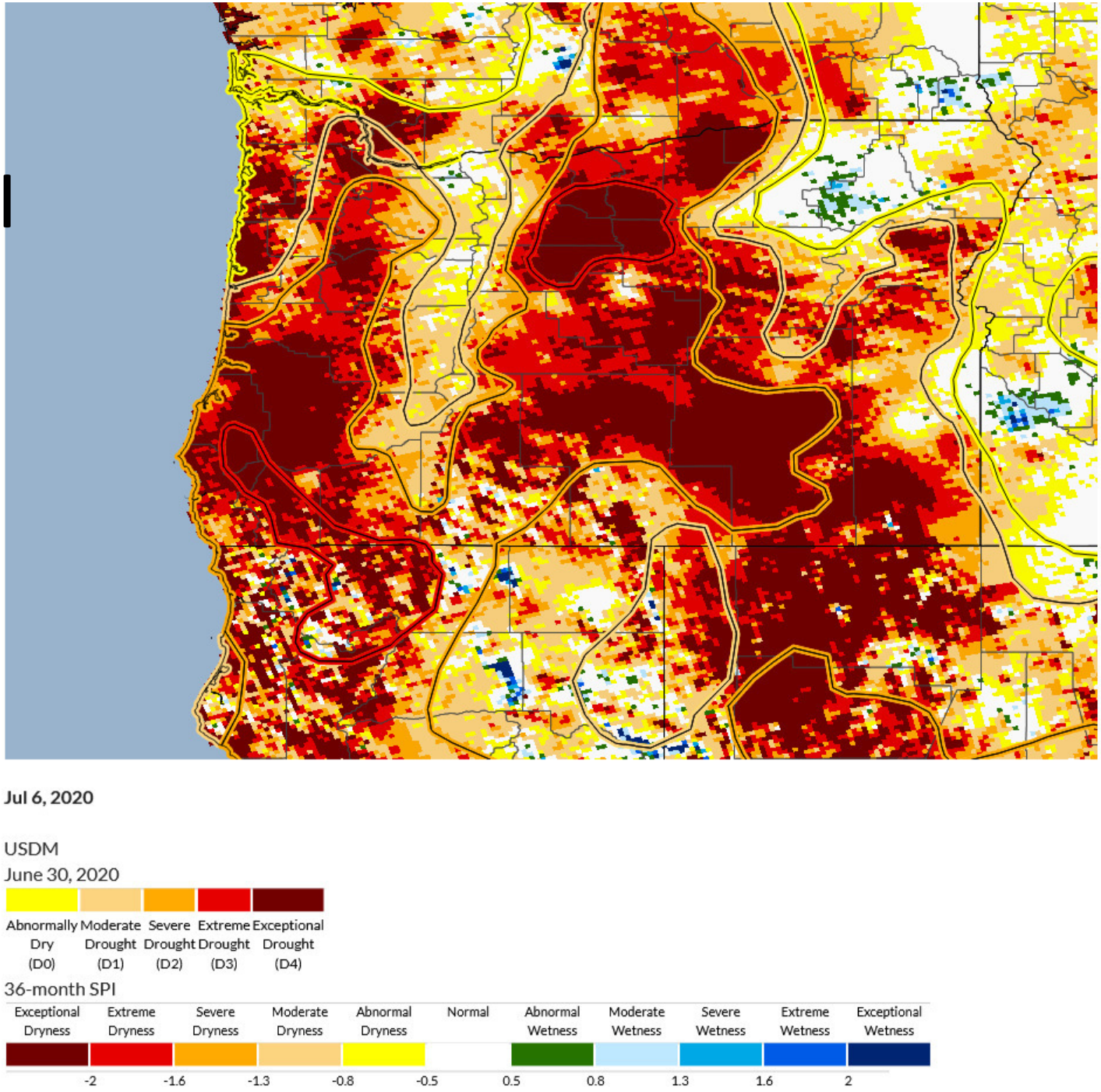
June 30, 2020

| Abnormally Dry (D0) | Moderate Drought (D1) | Severe Drought (D2) | Extreme Drought (D3) | Exceptional Drought (D4) |
|---|---|---|---|---|

24-month SPI

| Exceptional Dryness | Extreme Dryness | Severe Dryness | Moderate Dryness | Abnormal Dryness | Normal | Abnormal Wetness | Moderate Wetness | Severe Wetness | Extreme Wetness | Exceptional Wetness |
|---|---|---|---|---|---|---|---|---|---|---|
| -2 | -1.6 | -1.3 | -0.8 | -0.5 | | 0.5 | 0.8 | 1.3 | 1.6 | 2 |

# AHPS 36-month SPI

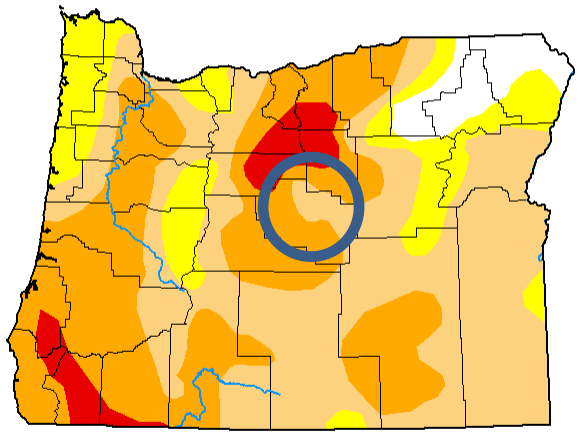


# Ochoco Mtns

Why the notch of D1 over the eastern Ochoco Mtns?

***U.S. Drought Monitor***

**Oregon**



**June 9, 2020**

***(Released Thursday, Jun. 11, 2020)***

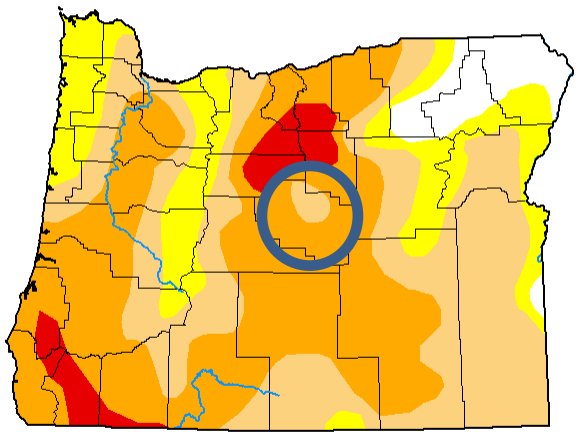
**Valid 8 a.m. EDT**

*Drought Conditions (Percent Area)*



***U.S. Drought Monitor***

**Oregon**



**June 16, 2020**

***(Released Thursday, Jun. 18, 2020)***

**Valid 8 a.m. EDT**

*Drought Conditions (Percent Area)*

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|---|---|---|---|---|---|
| **Current** | 5.49 | 94.51 | 78.38 | 44.30 | 4.79 | 0.00 |
| **Last Week** 06-09-2020 | 4.88 | 95.12 | 81.33 | 38.77 | 4.79 | 0.00 |
| **3 Months Ago** 03-17-2020 | 15.69 | 84.31 | 55.37 | 7.63 | 0.00 | 0.00 |
| **Start of Calendar Year** 12-31-2019 | 2.40 | 97.60 | 24.46 | 0.00 | 0.00 | 0.00 |
| **Start of Water Year** 10-01-2019 | 88.54 | 11.46 | 0.00 | 0.00 | 0.00 | 0.00 |
| **One Year Ago** 06-18-2019 | 75.59 | 24.41 | 8.91 | 0.00 | 0.00 | 0.00 |

*Intensity:*

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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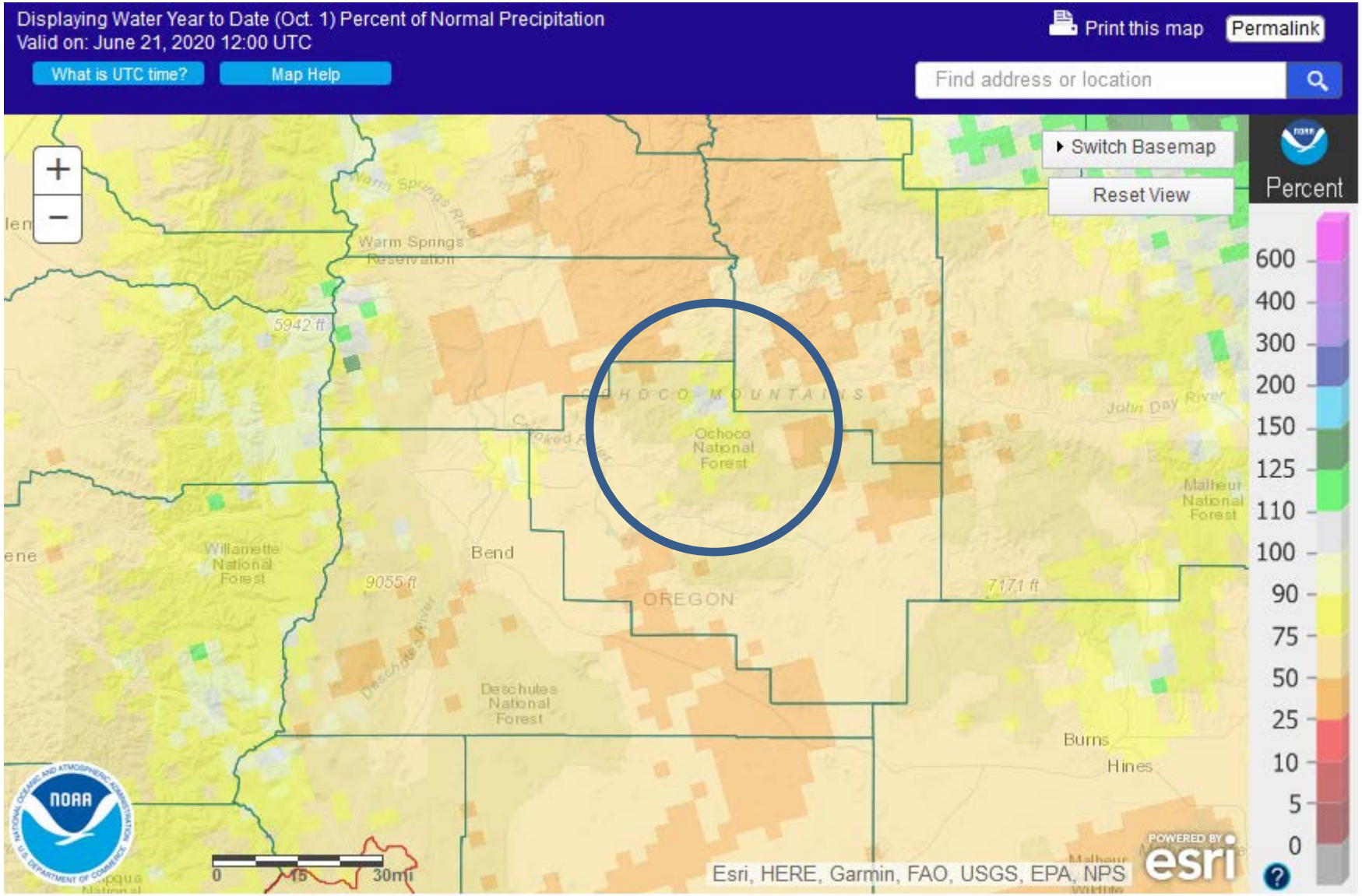
*Author:*

Richard Tinker

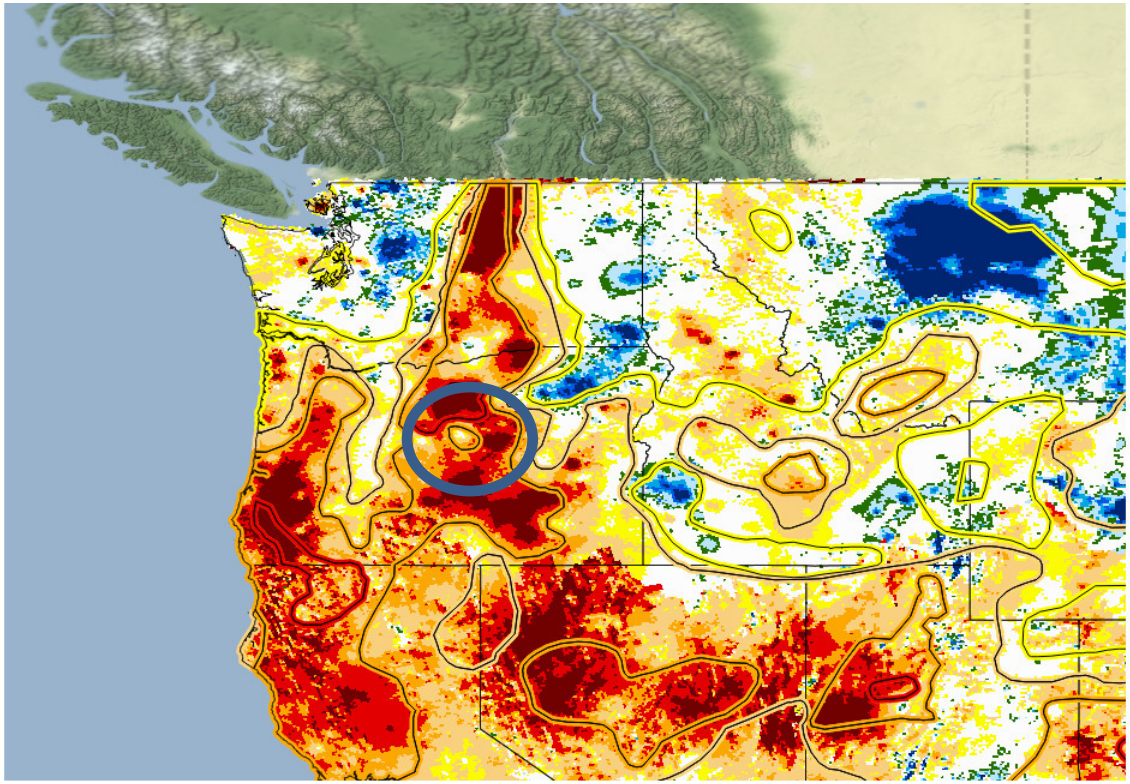
CPC/NOAA/NWS/NCEP

**droughtmonitor.unl.edu**

# AHPS WYTD precipitation % of average



# 8-month SPI



**Jun 17, 2020**

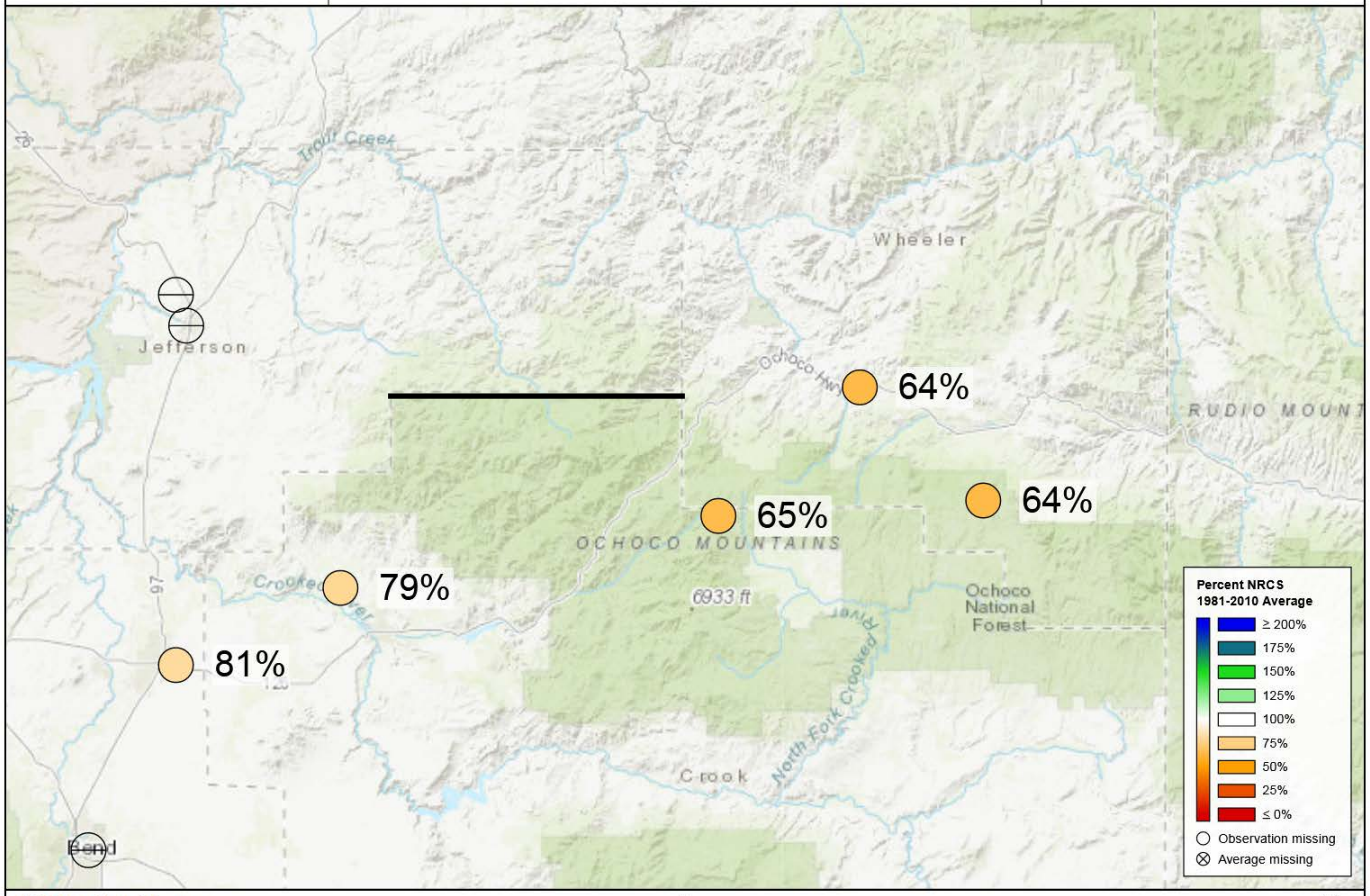
USDM June 16, 2020

| Abnormally Dry (D0) | Moderate Drought (D1) | Severe Drought (D2) | Extreme Drought (D3) | Exceptional Drought (D4) |
|---|---|---|---|---|

8-month SPI

| Exceptional Dryness | Extreme Dryness | Severe Dryness | Moderate Dryness | Abnormal Dryness | Normal | Abnormal Wetness | Moderate Wetness | Severe Wetness | Extreme Wetness | Exceptional Wetness |
|---|---|---|---|---|---|---|---|---|---|---|
| -2 | -1.6 | -1.3 | -0.8 | -0.5 | | 0.5 | 0.8 | 1.3 | 1.6 | 2 |

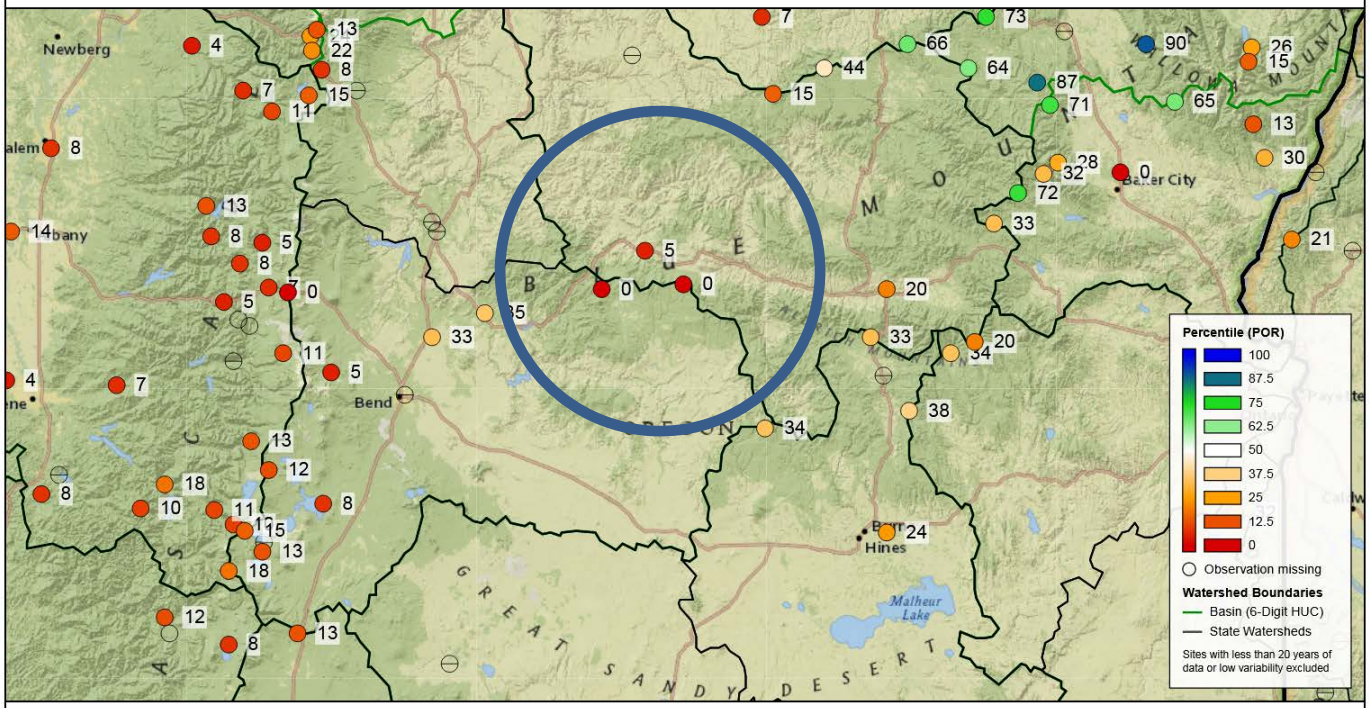
| Water Year to Date Precipitation | Percent NRCS 1981-2010 Average | October 1, 2019 - May 31, 2020 |
|---|---|---|




USDA Natural Resources Conservation Service
United States Department of Agriculture

# Percentile ranking of WYTD

| Water Year to Date Precipitation | Percentile (POR) | October 1, 2019 - May 31, 2020 |
|---|---|---|



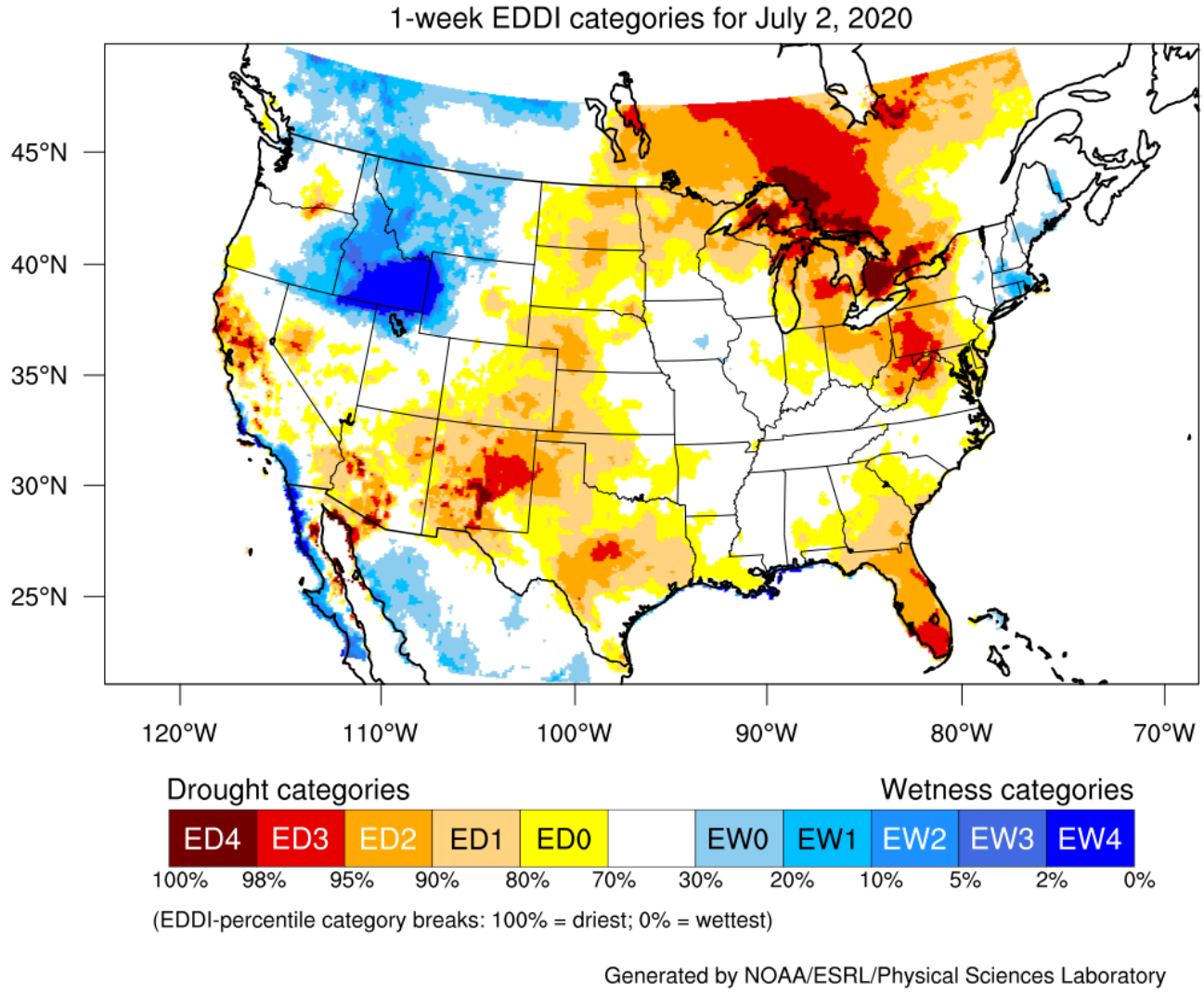

USDA Natural Resources Conservation Service
United States Department of Agriculture

N

0 10 20 40 60 80 100 Miles

Created 6-22-2020

# 1-week EDDI as of July 2

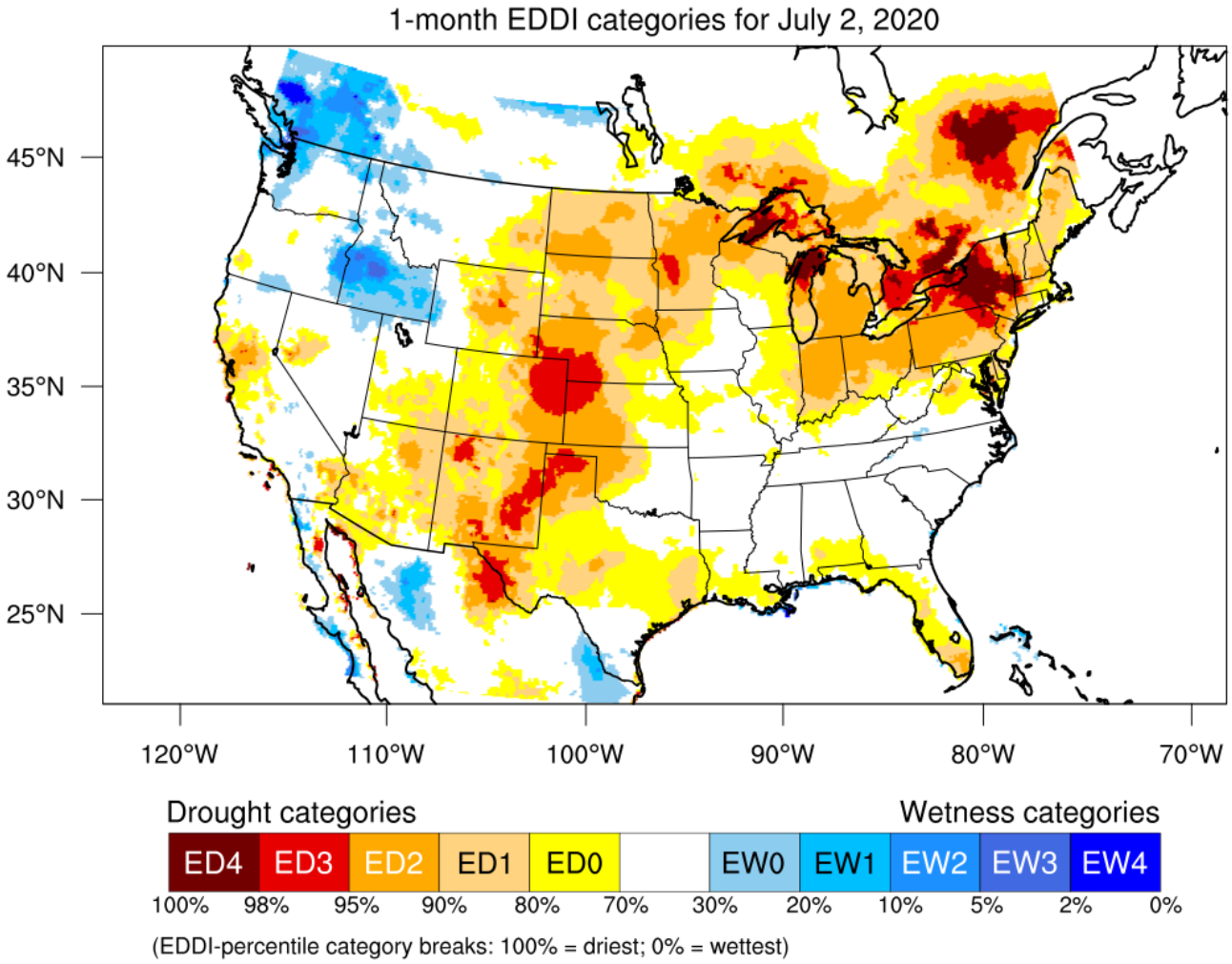



EDDI = Evaporative Demand Drought Index

A measure of evaporative loss

This week, evaporative demand is mostly within normal range, other than less evaporation in eastern Oregon and slightly more in SW Oregon and far north central Oregon

# 1 month EDDI as of July 2



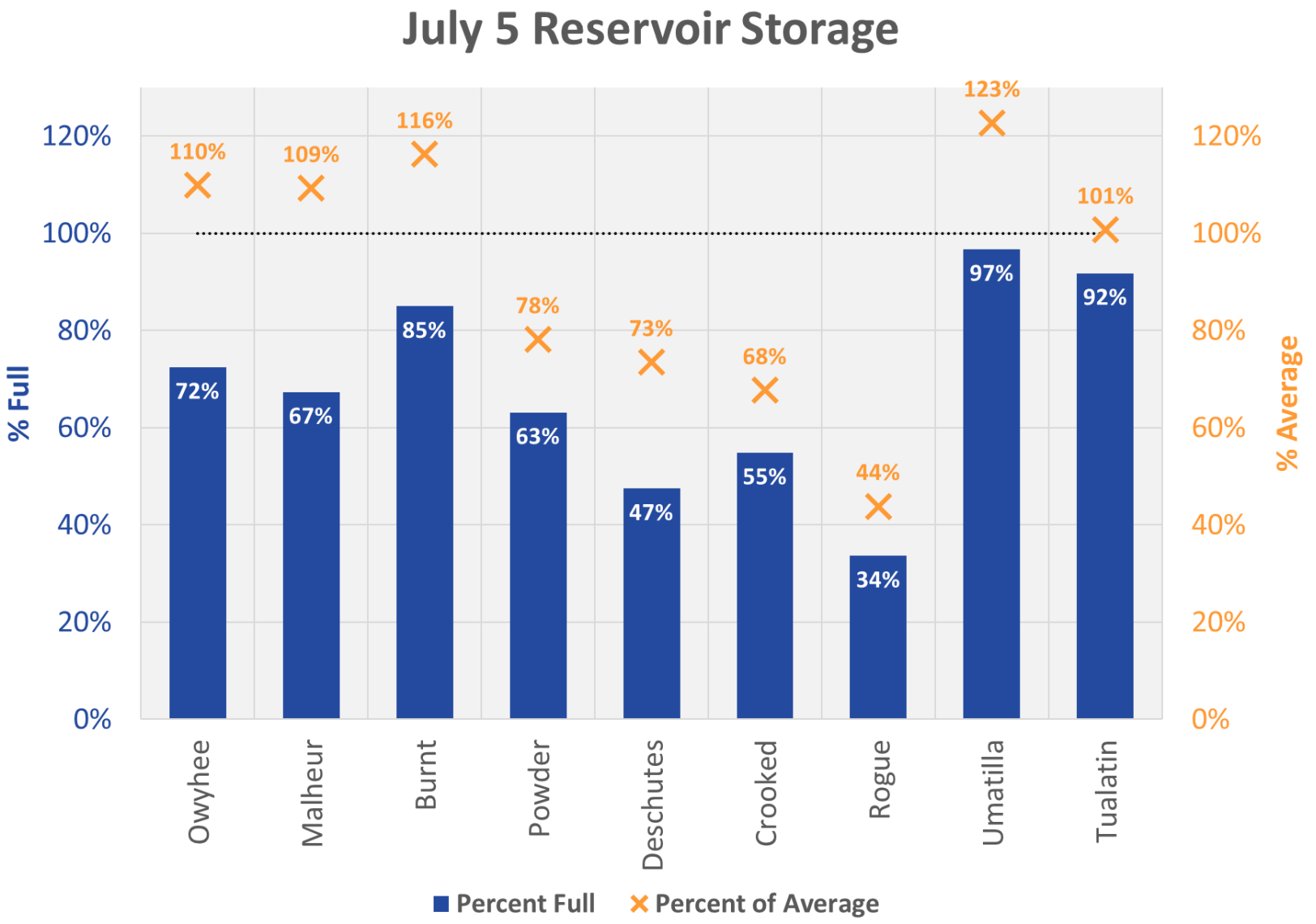
BUREAU OF RECLAMATION

# Reclamation Storage Update

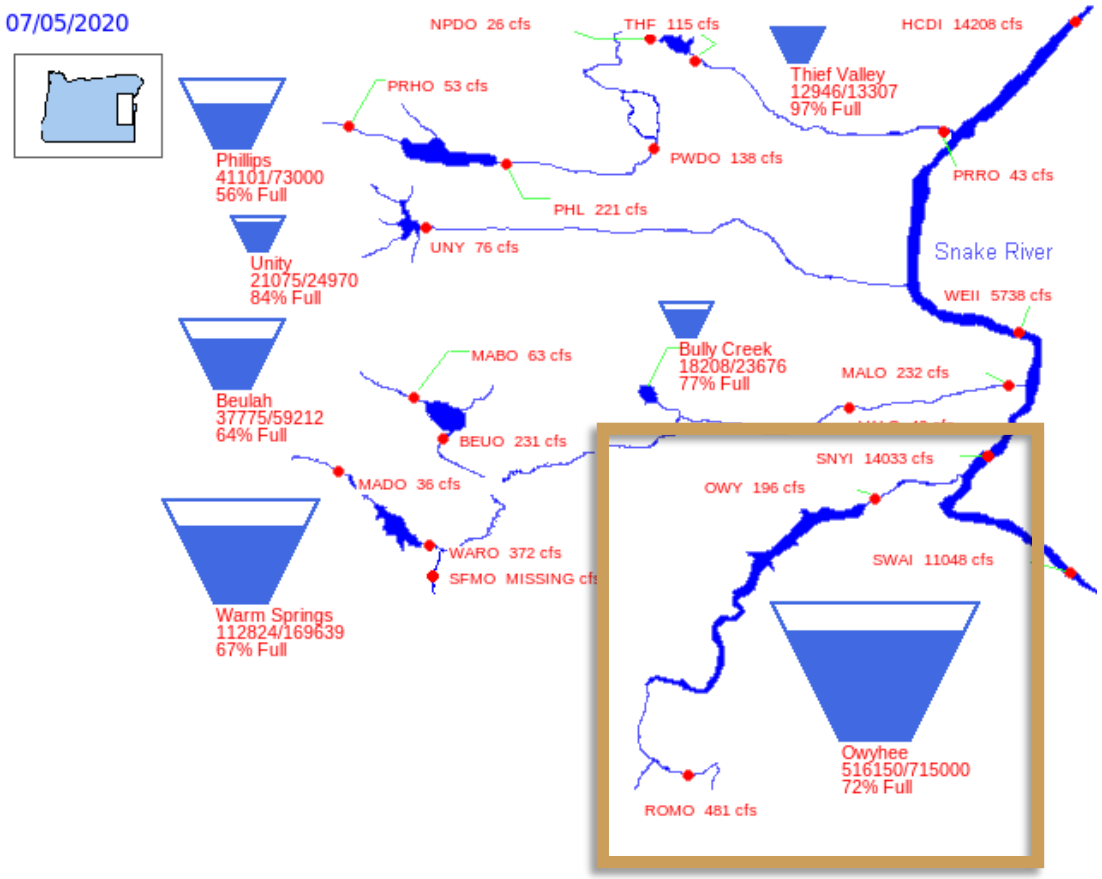
## Oregon Water Supply Availability Committee Meeting

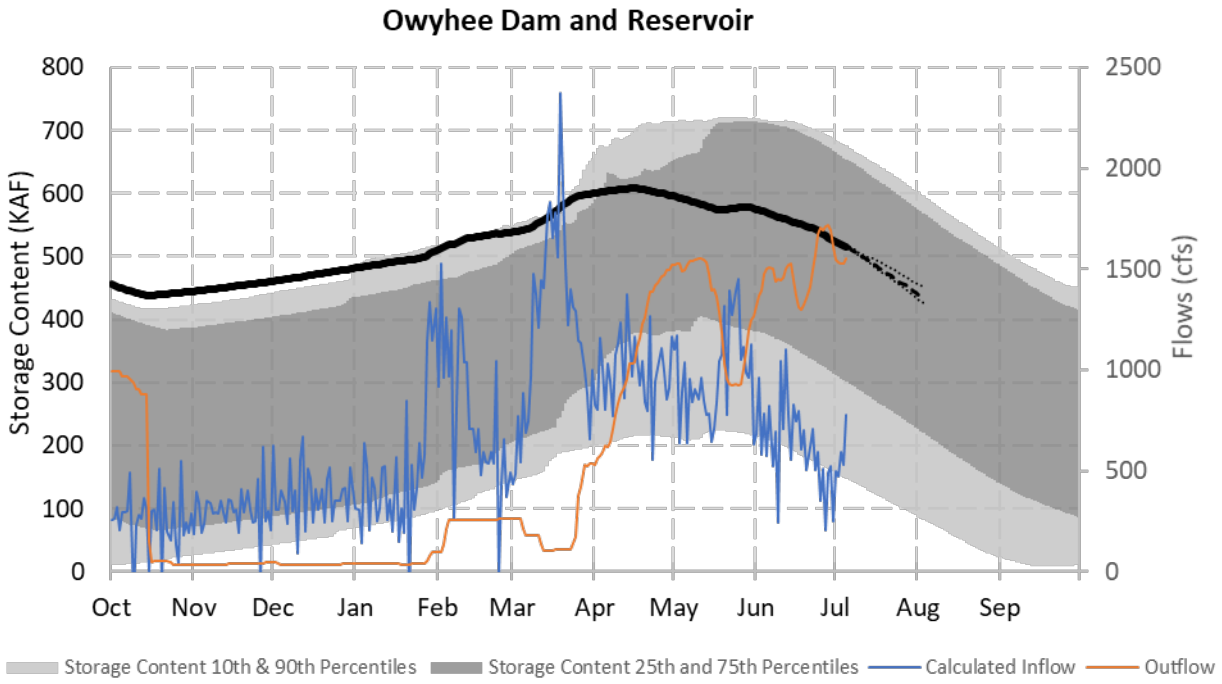
July 8, 2020

# Reservoir Storage Conditions



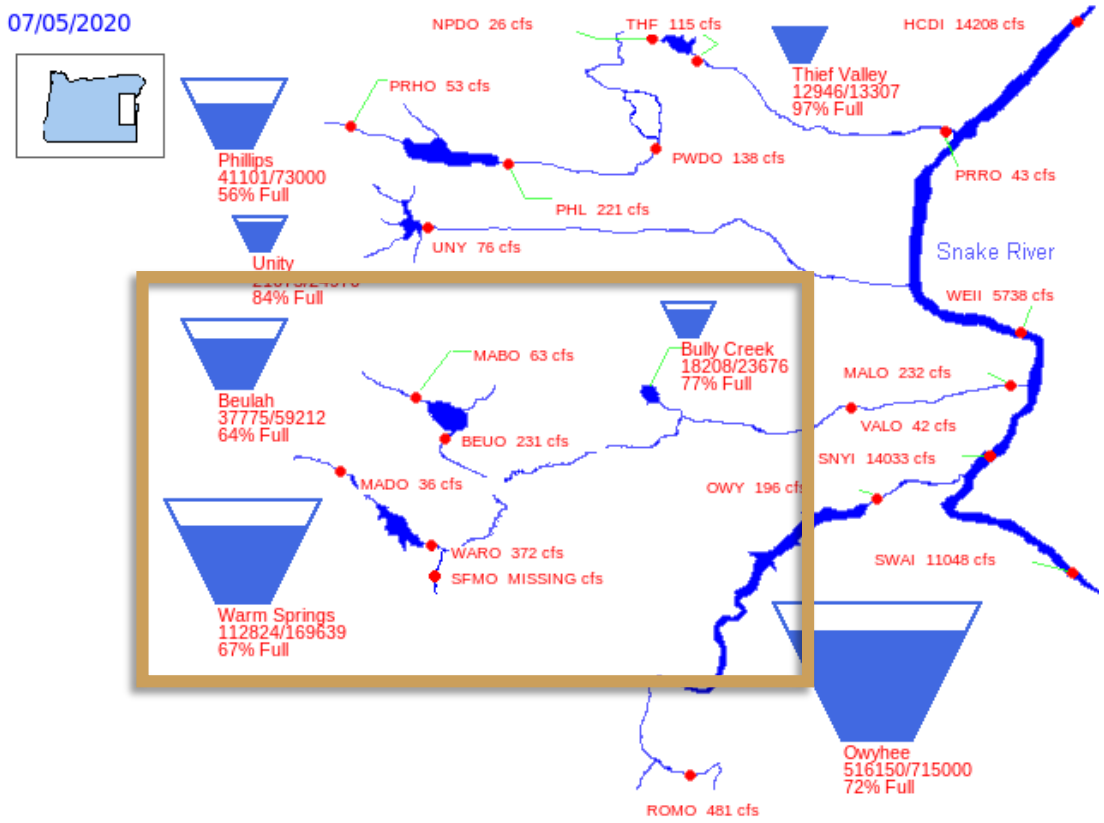
# Owyhee River Basin

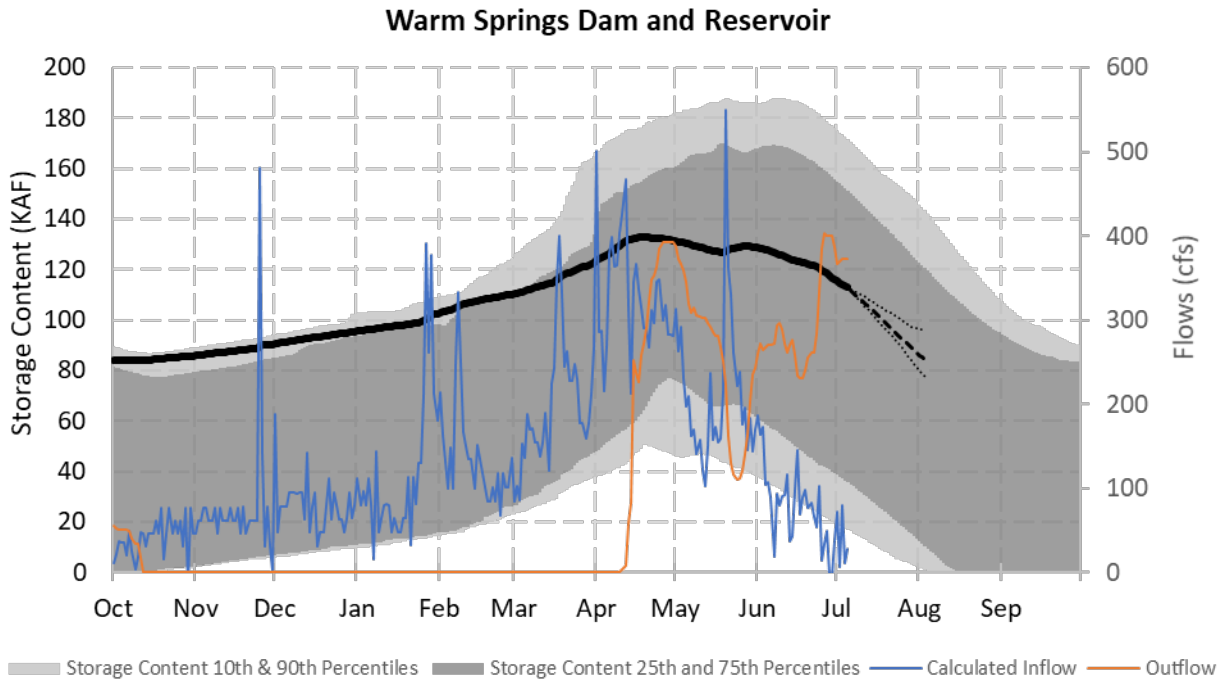


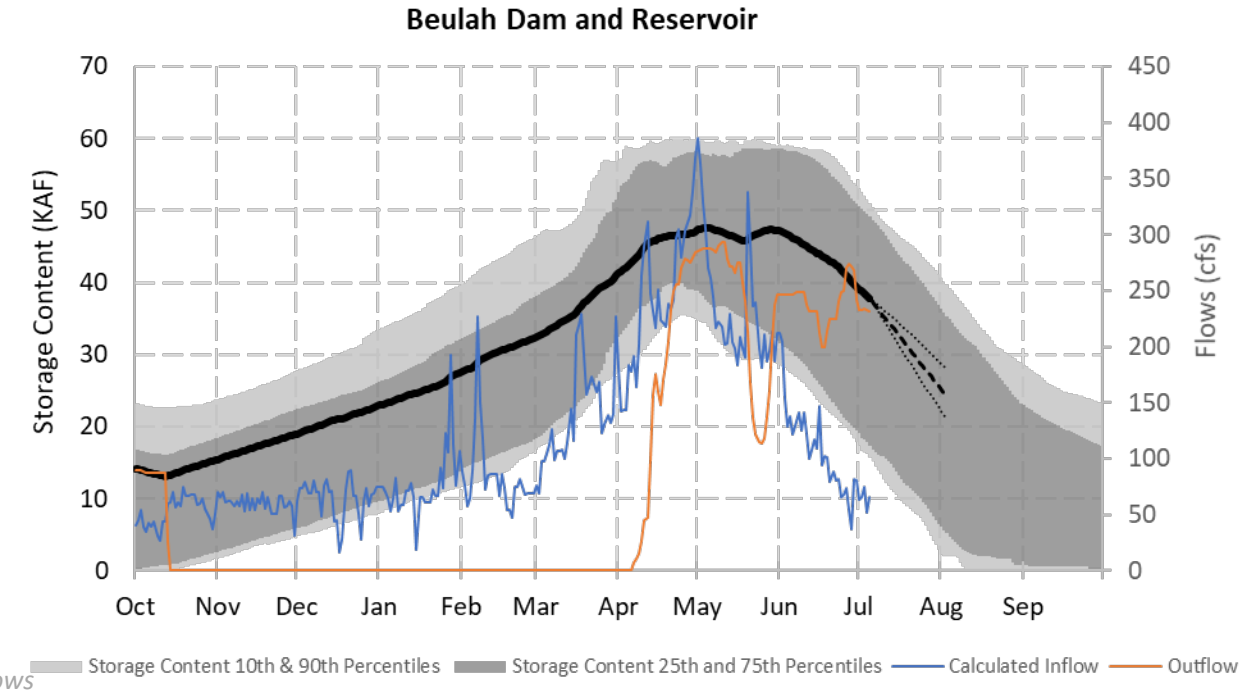




*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

# Malheur River Basin

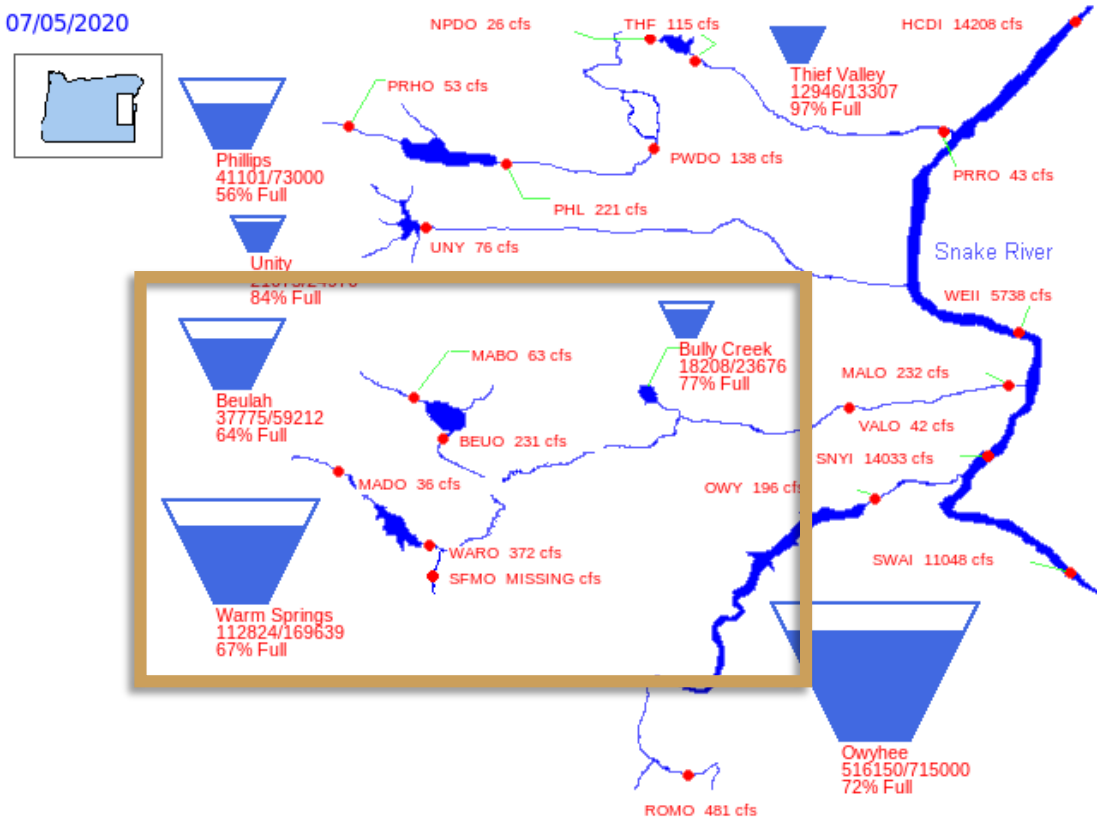


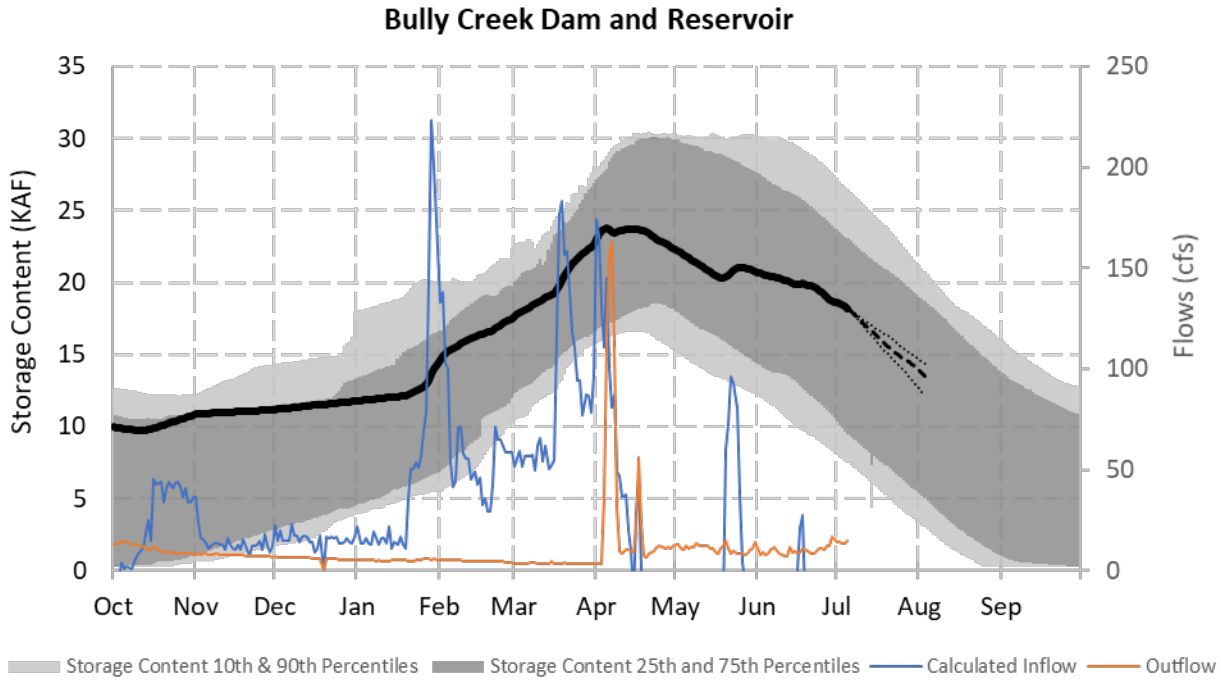




*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

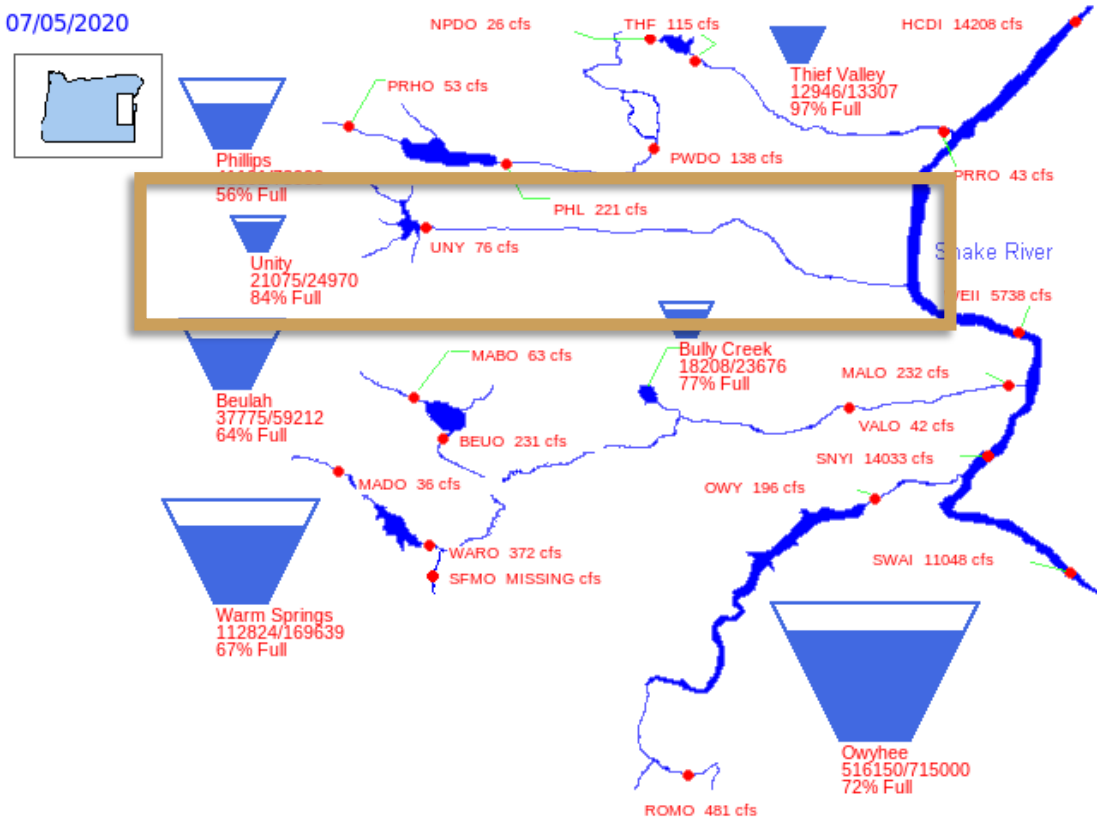
# Malheur River Basin

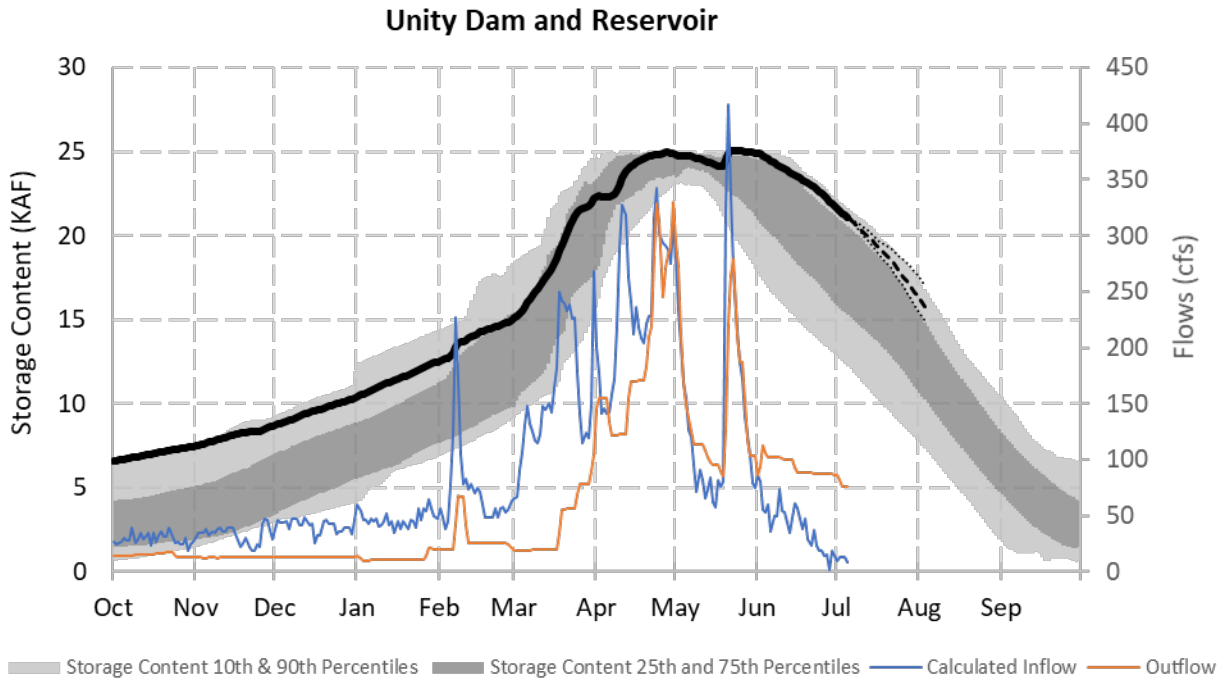



*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

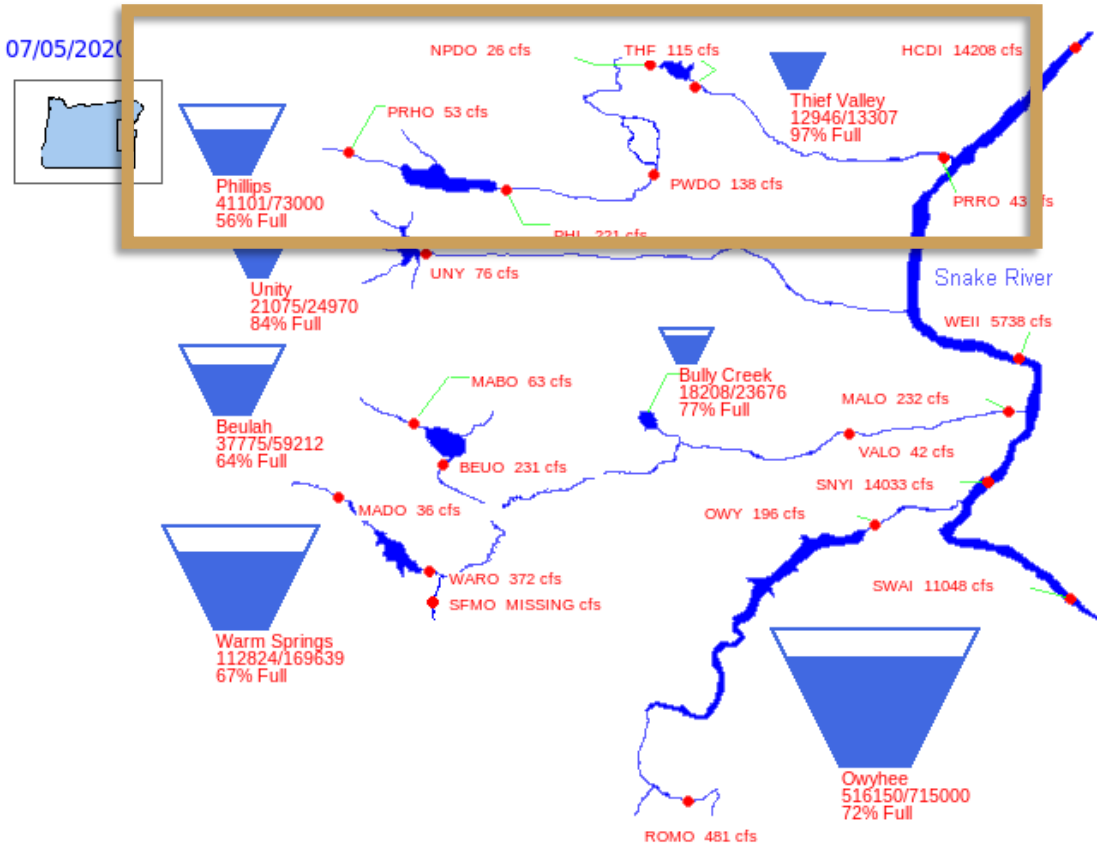
# Burnt River Basin

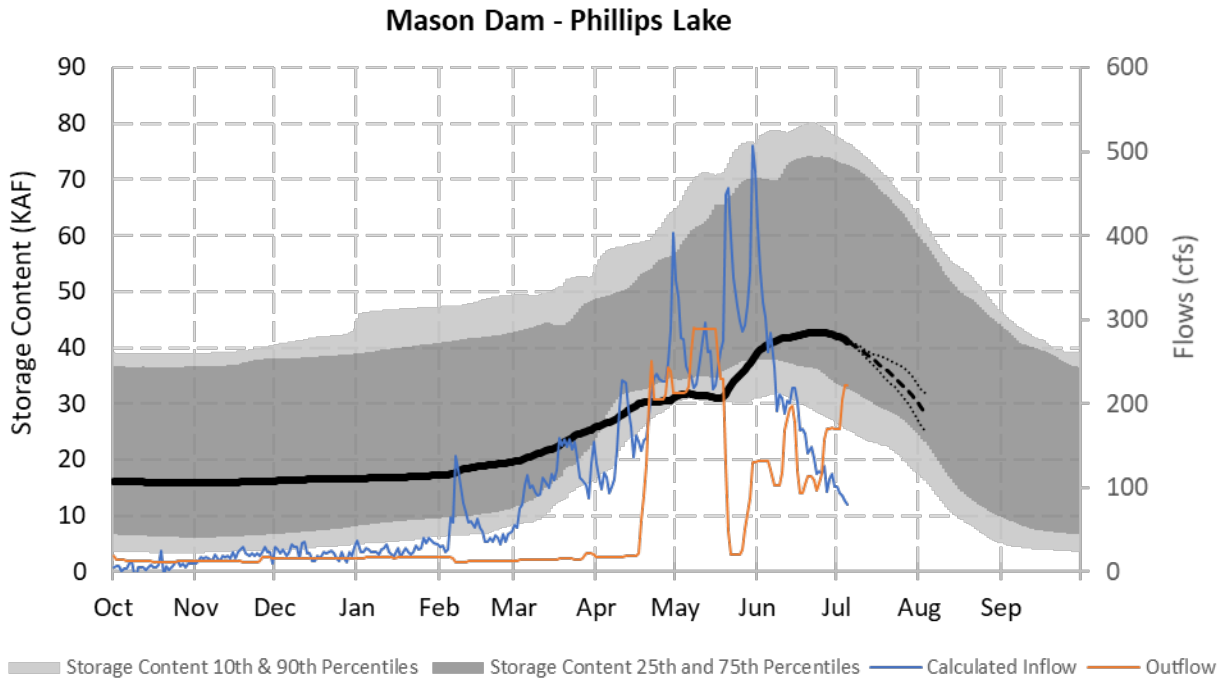



*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

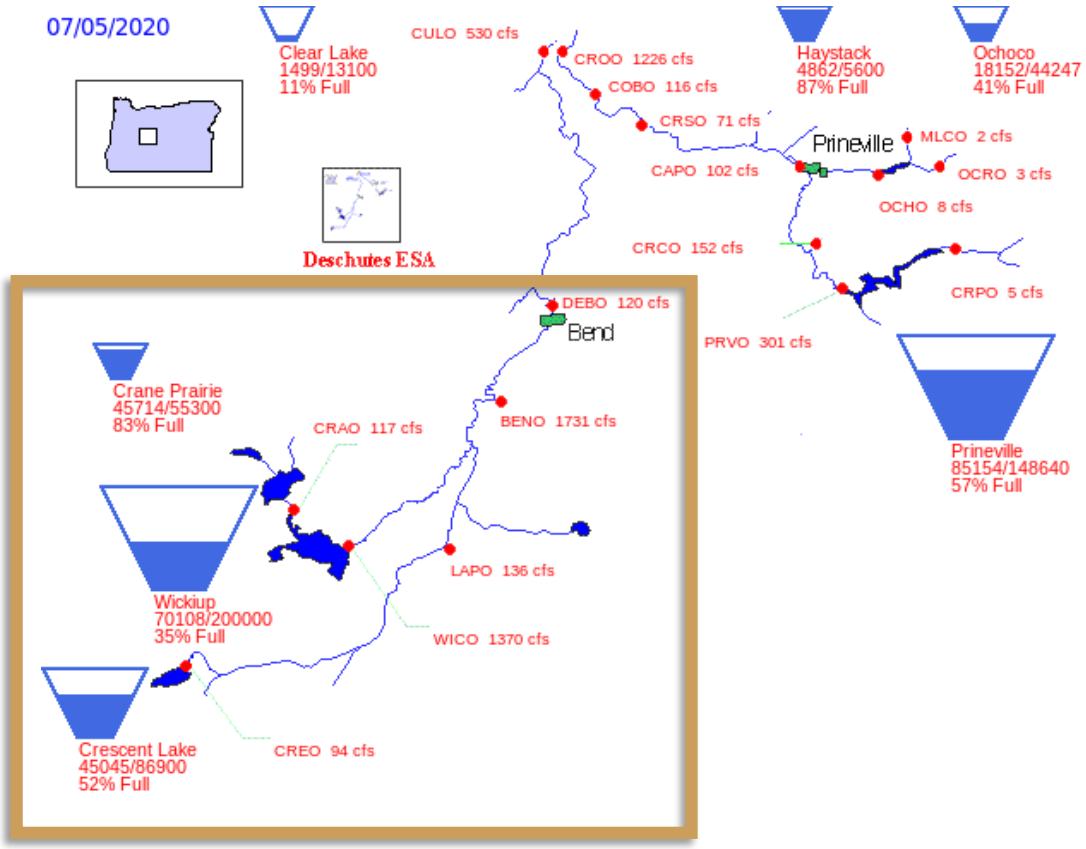
# Powder River Basin

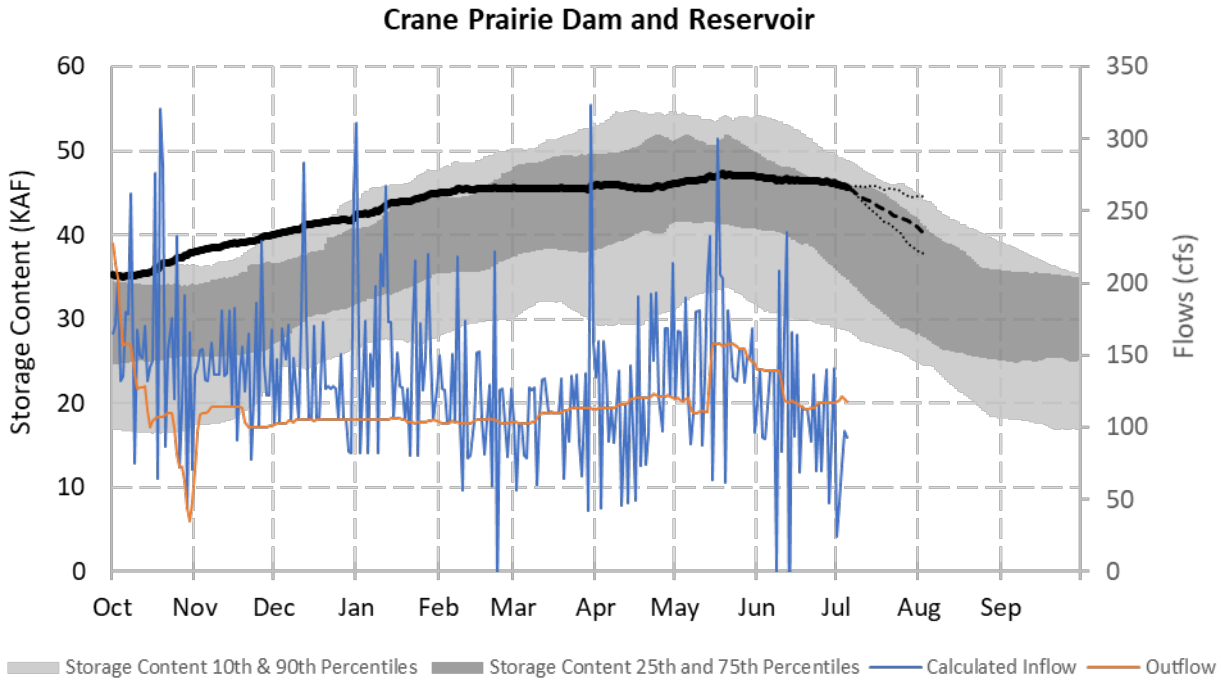


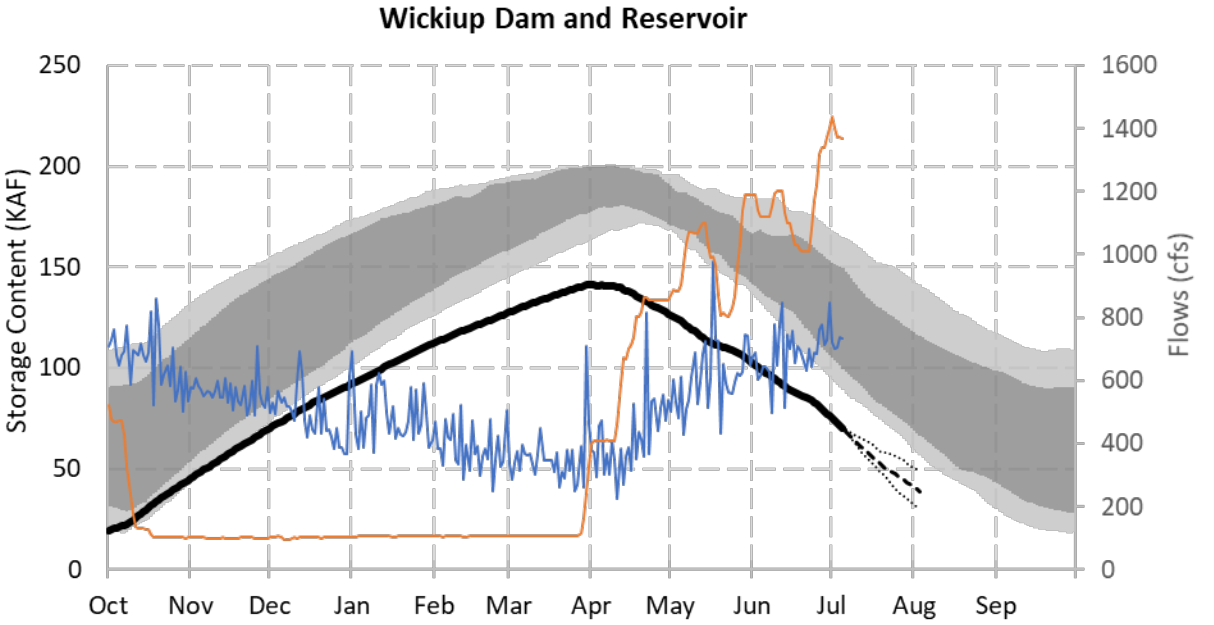




*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

# Deschutes River Basin

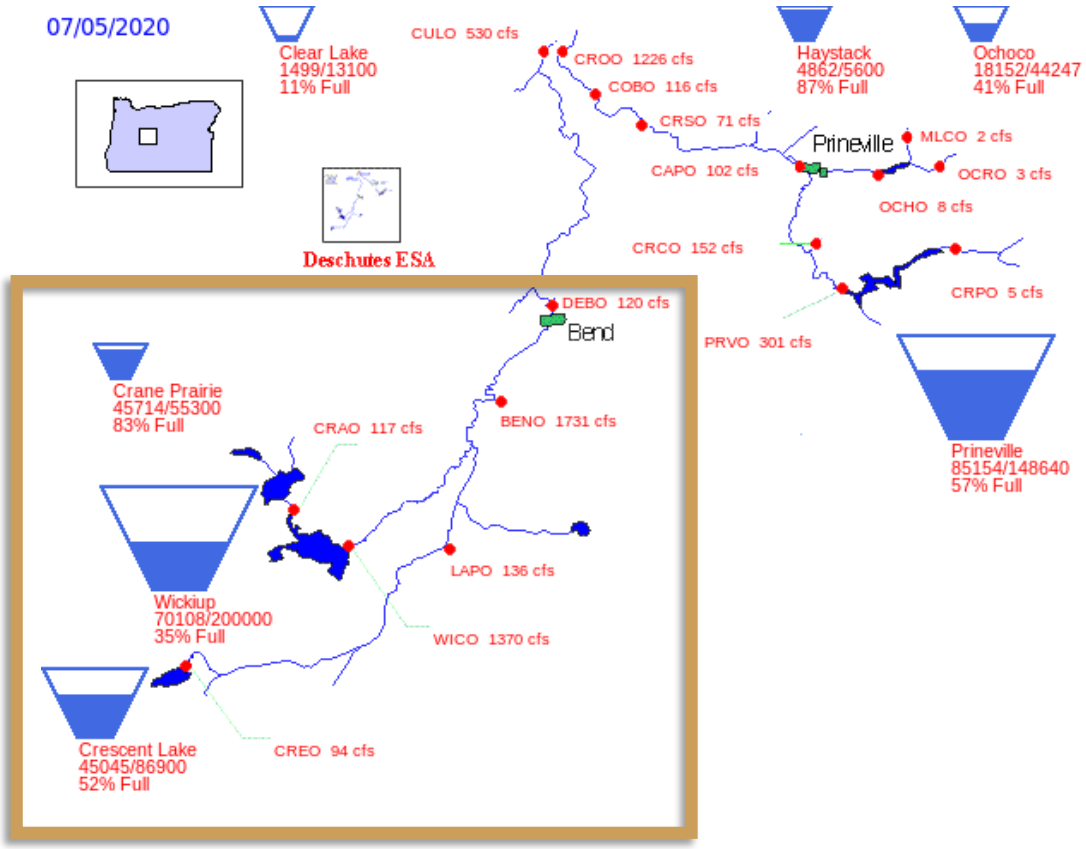


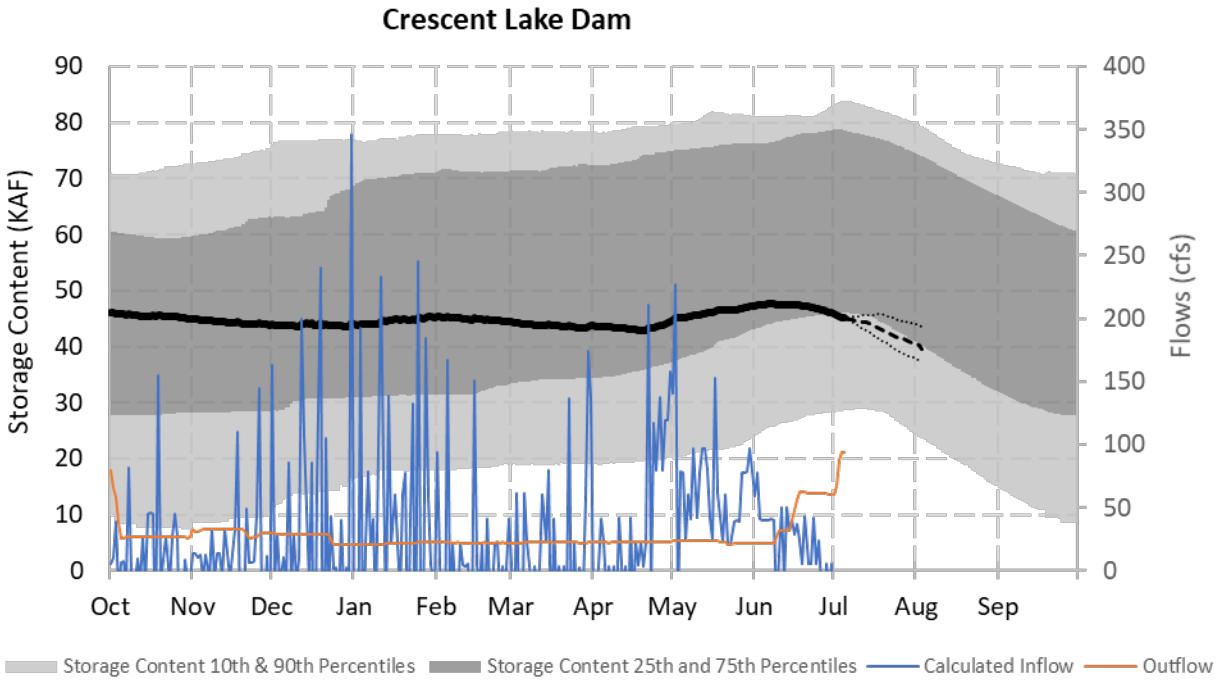




*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

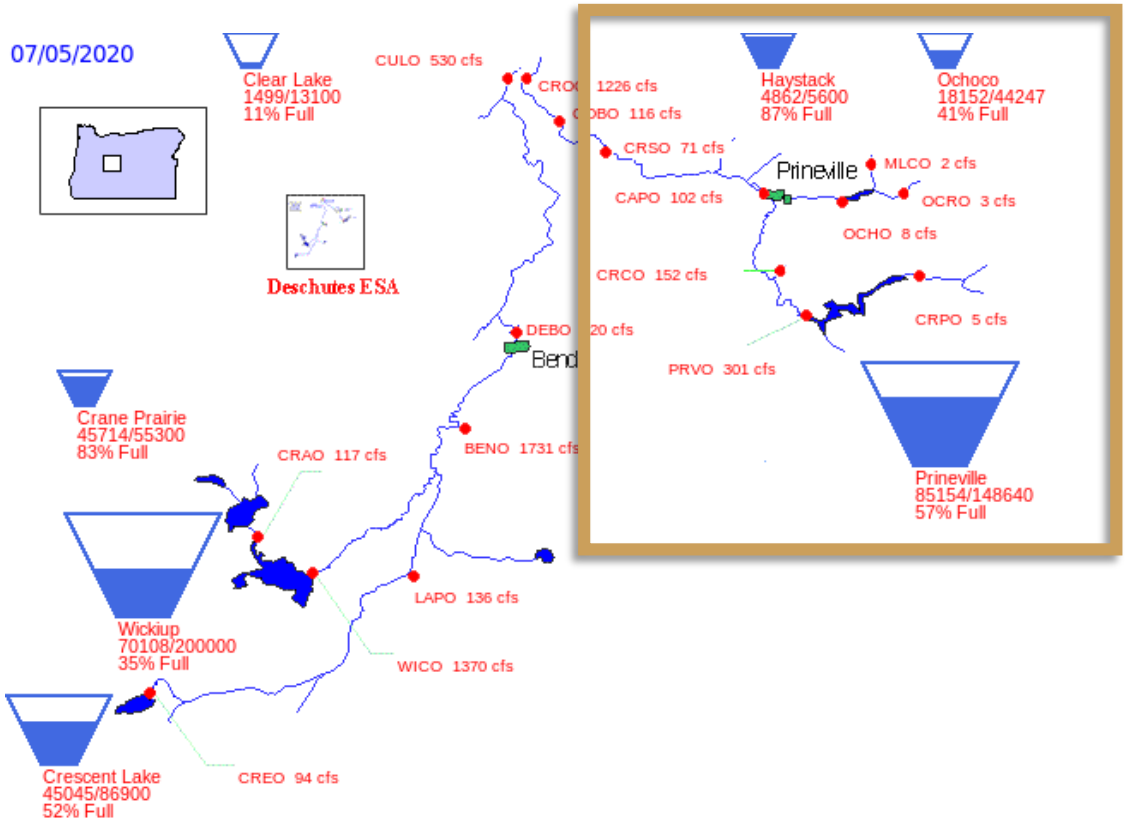
# Deschutes River Basin

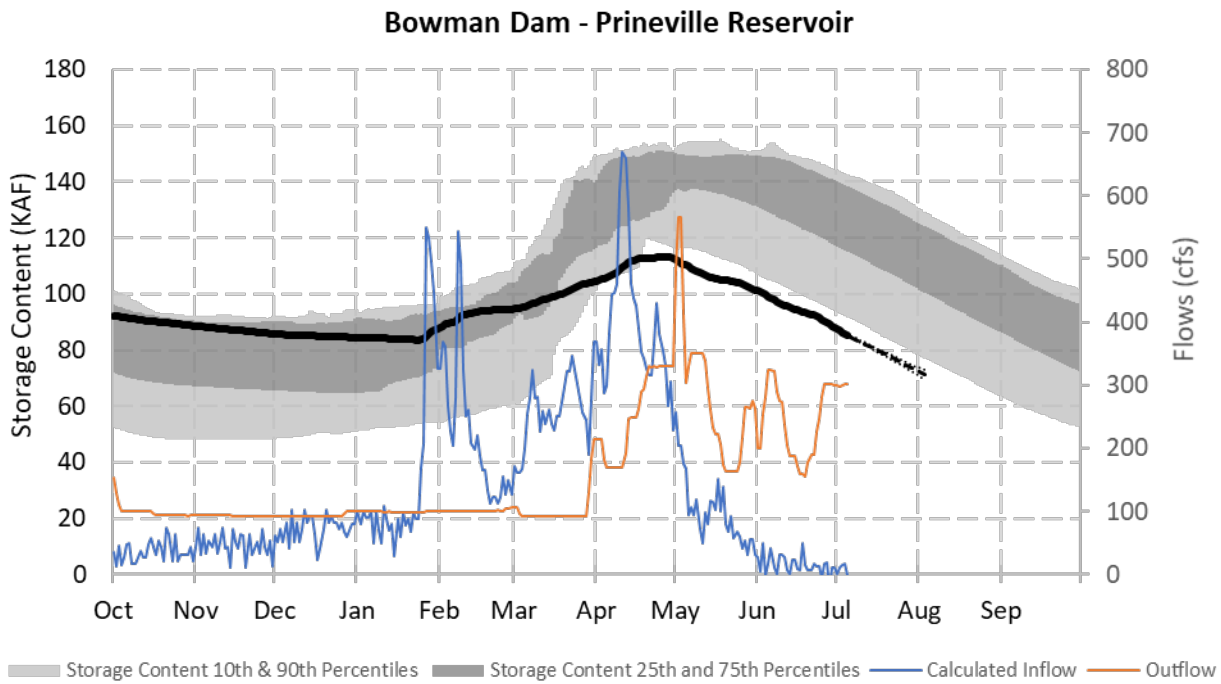


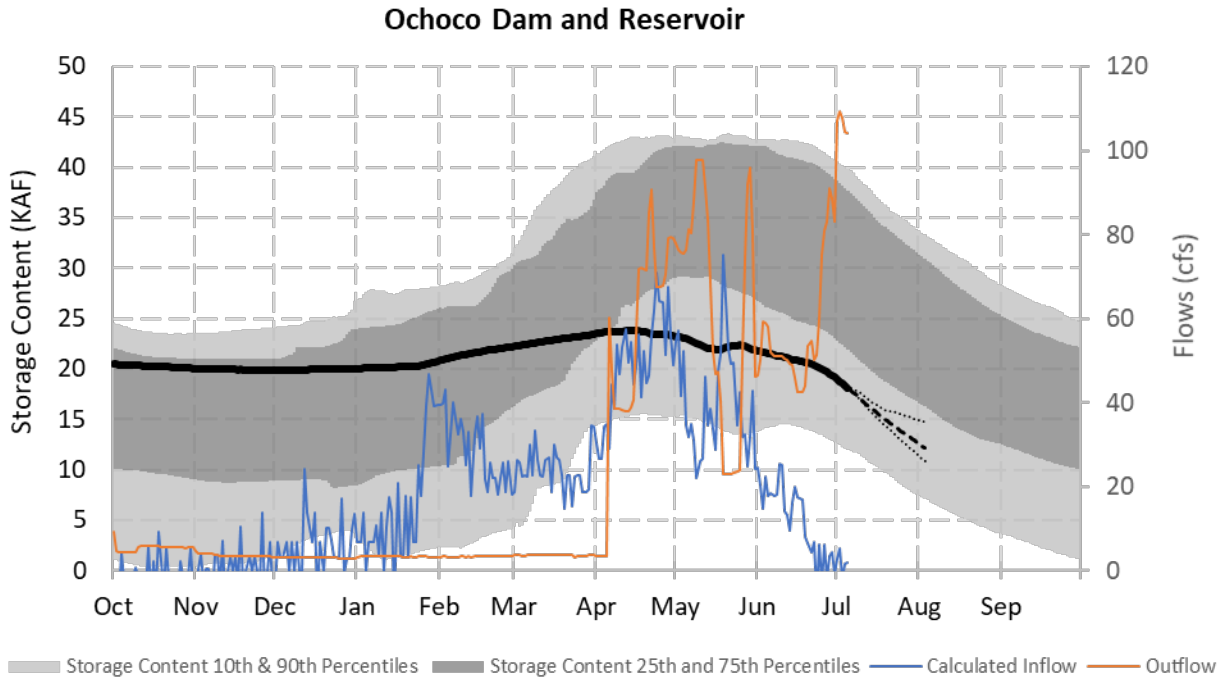




*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

# Crooked River Basin

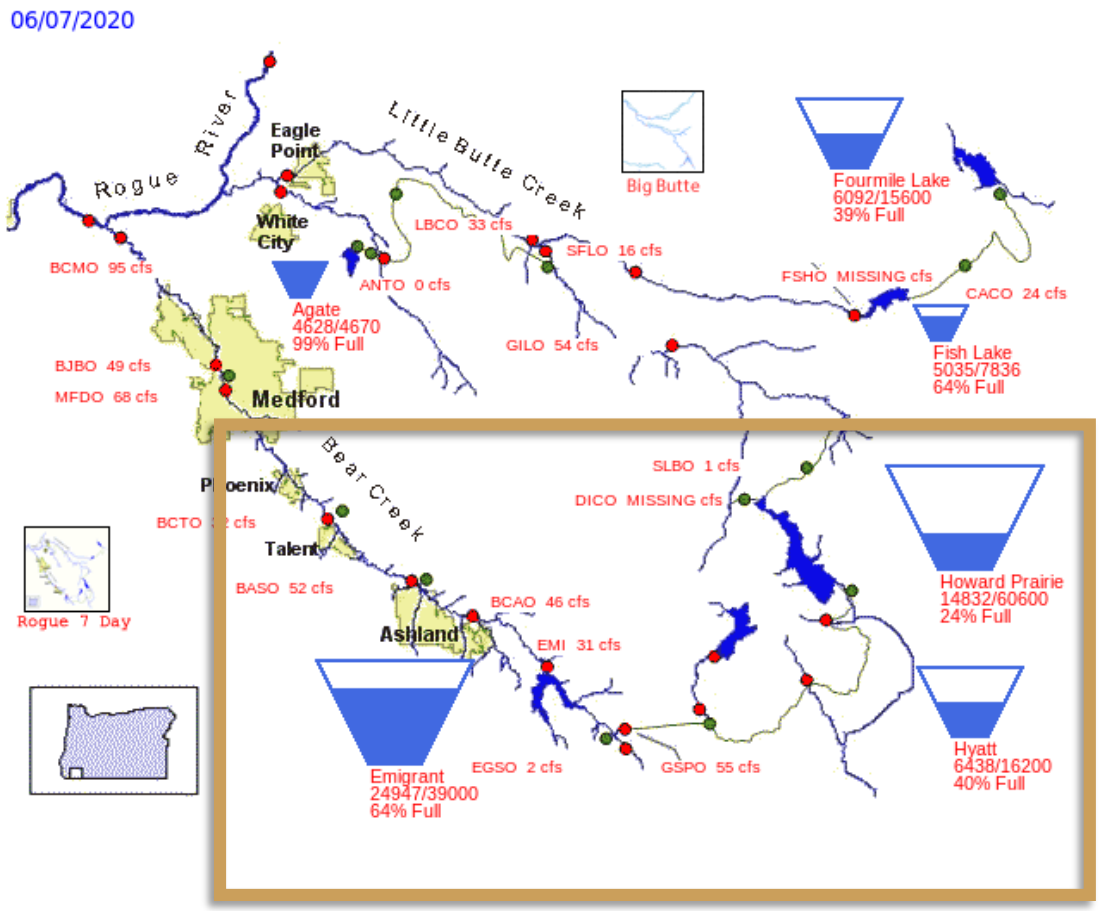


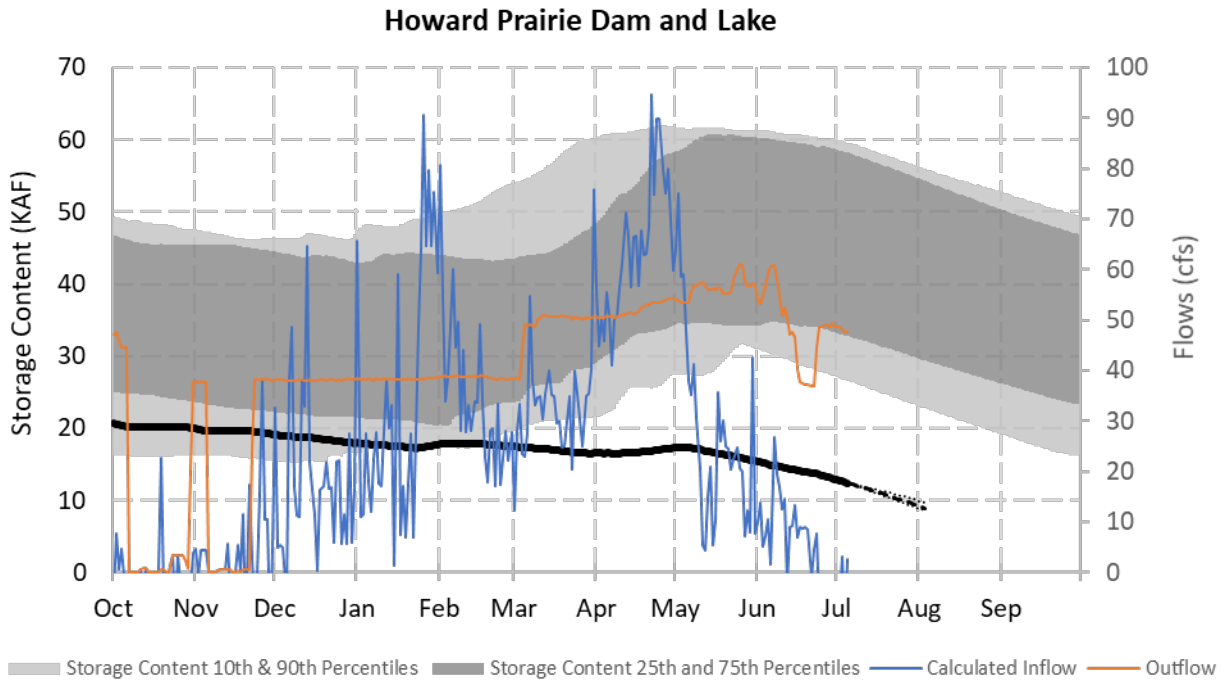



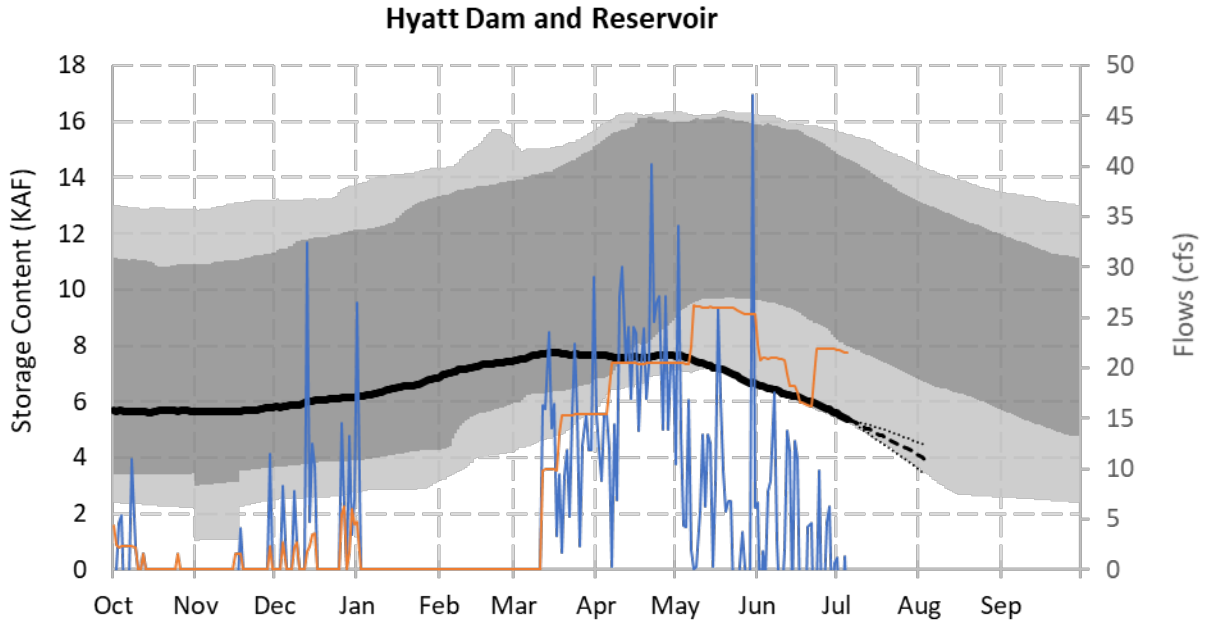




*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

# Rogue River Basin



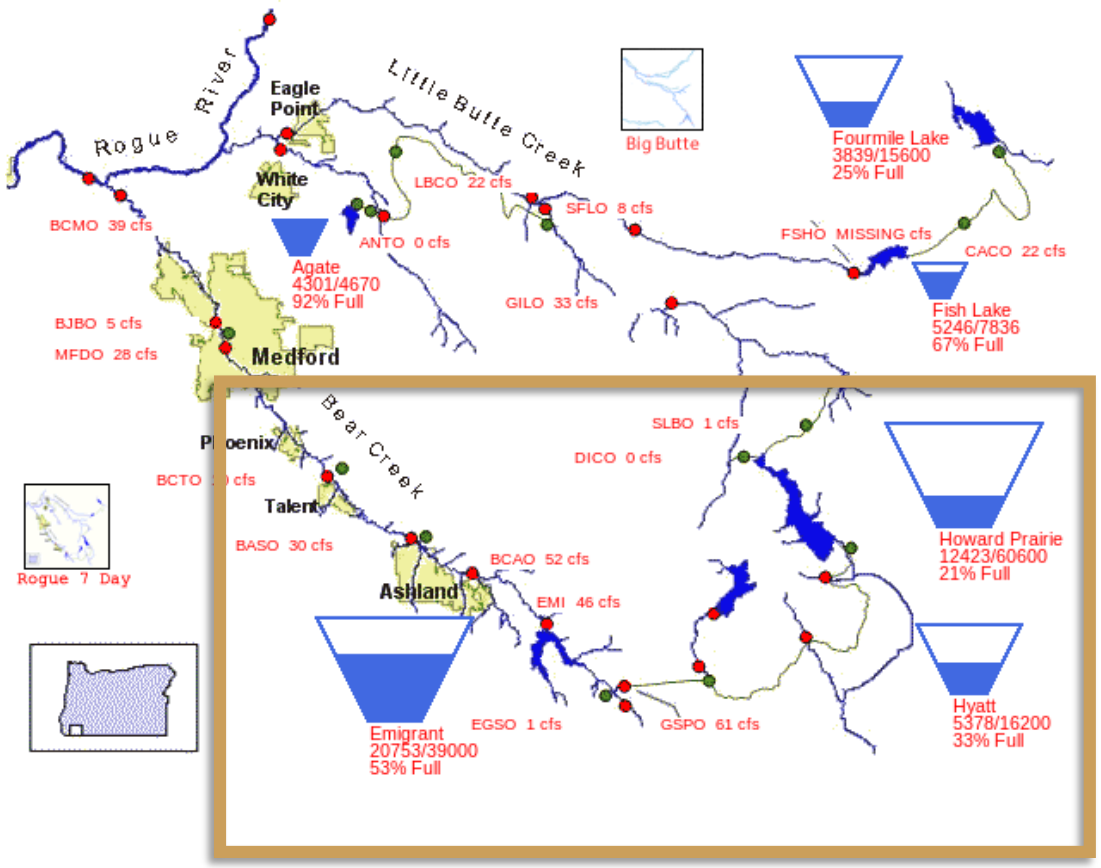



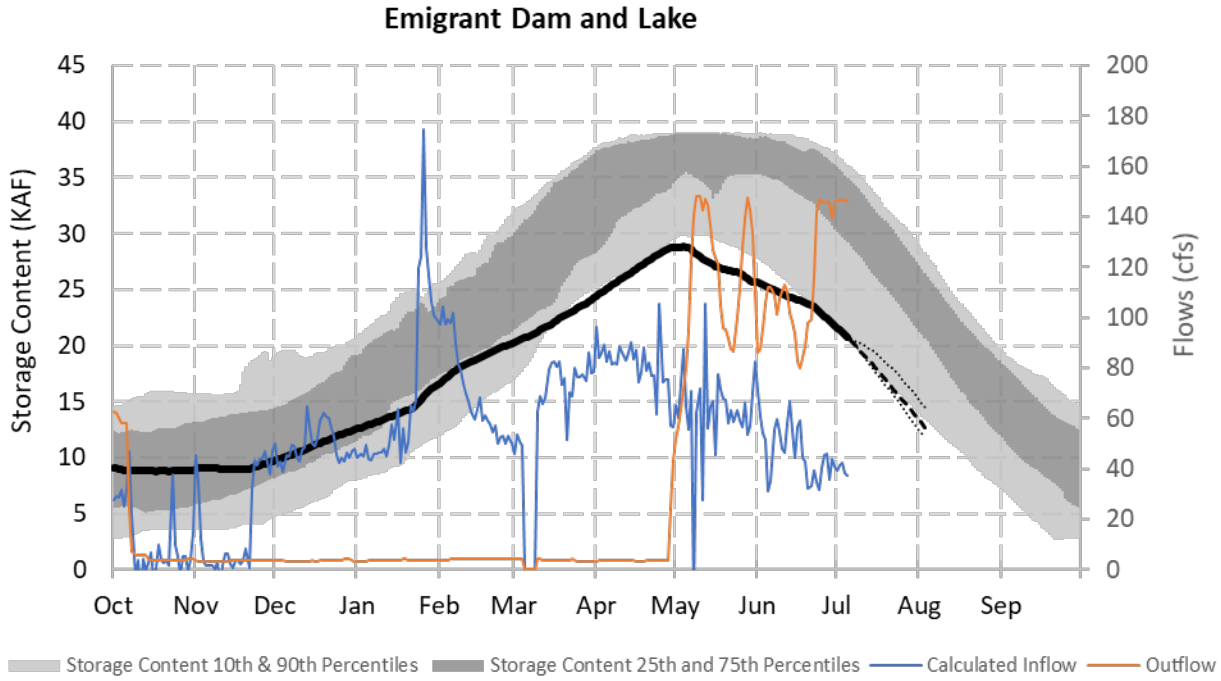




*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

# Rogue River Basin

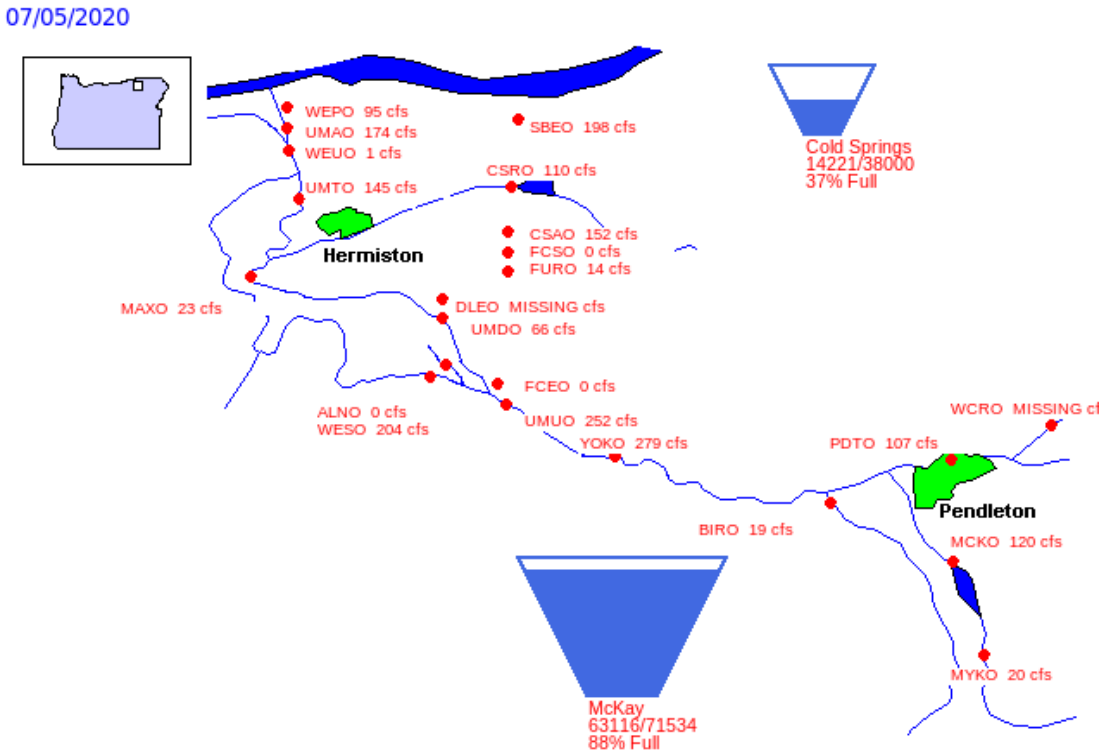
07/05/2020

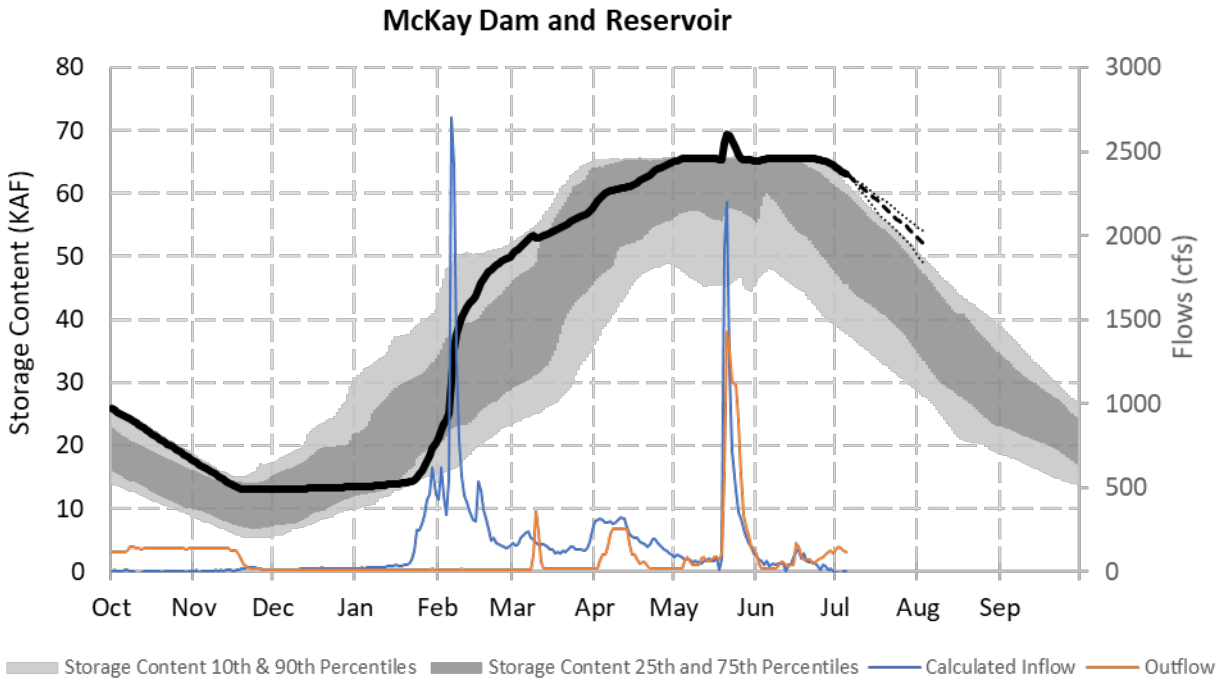



*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

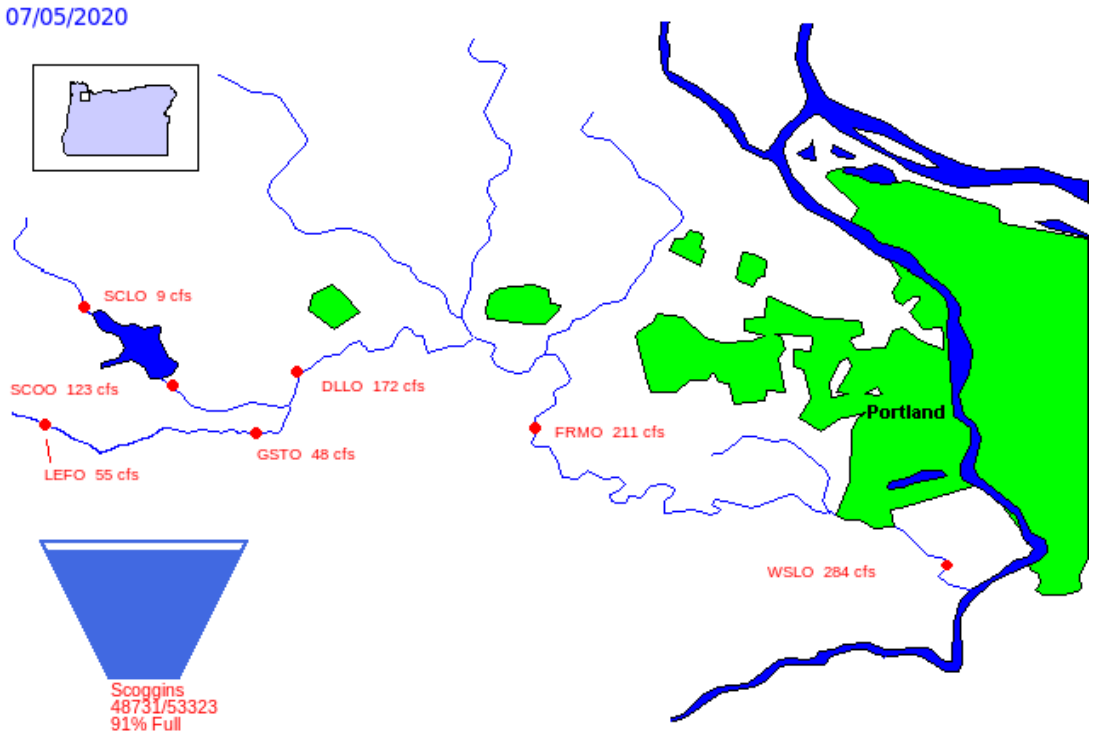
# Umatilla River Basin

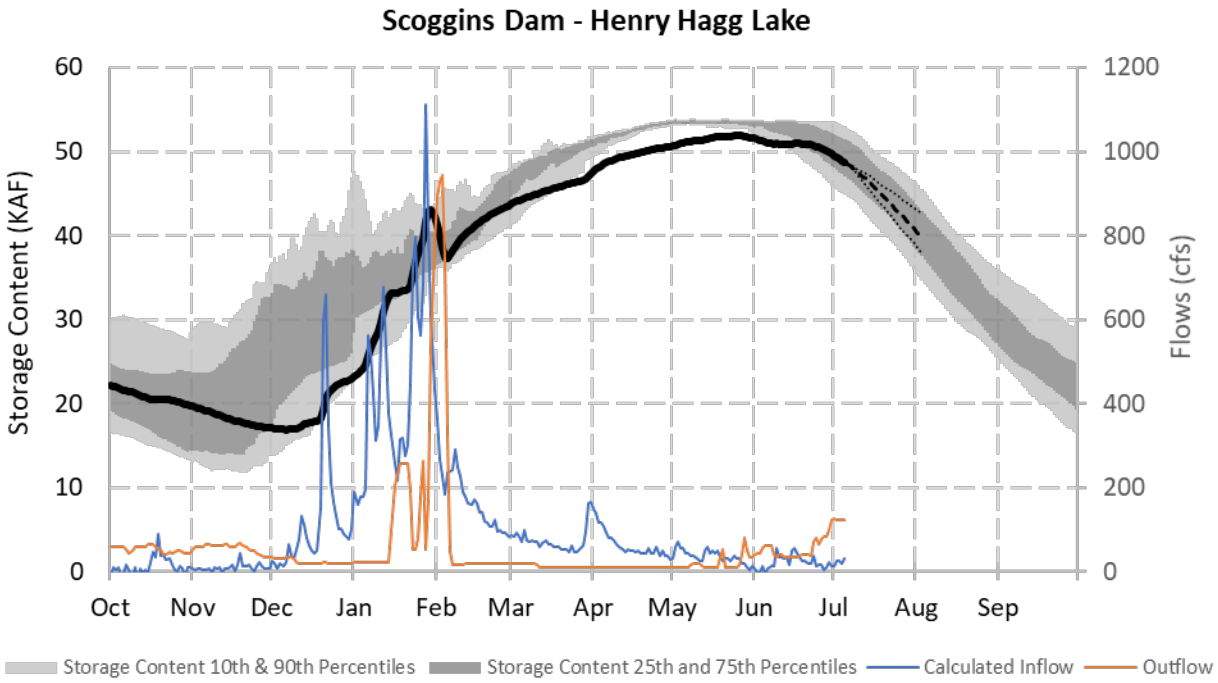



*Graphed projections are the 10th, 50th, and 90th percentile storage values based on historical inflows and outflows

# Tualatin River Basin




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


Jon Rocha – Columbia Pacific Northwest Regional Office

jrocha@usbr.gov

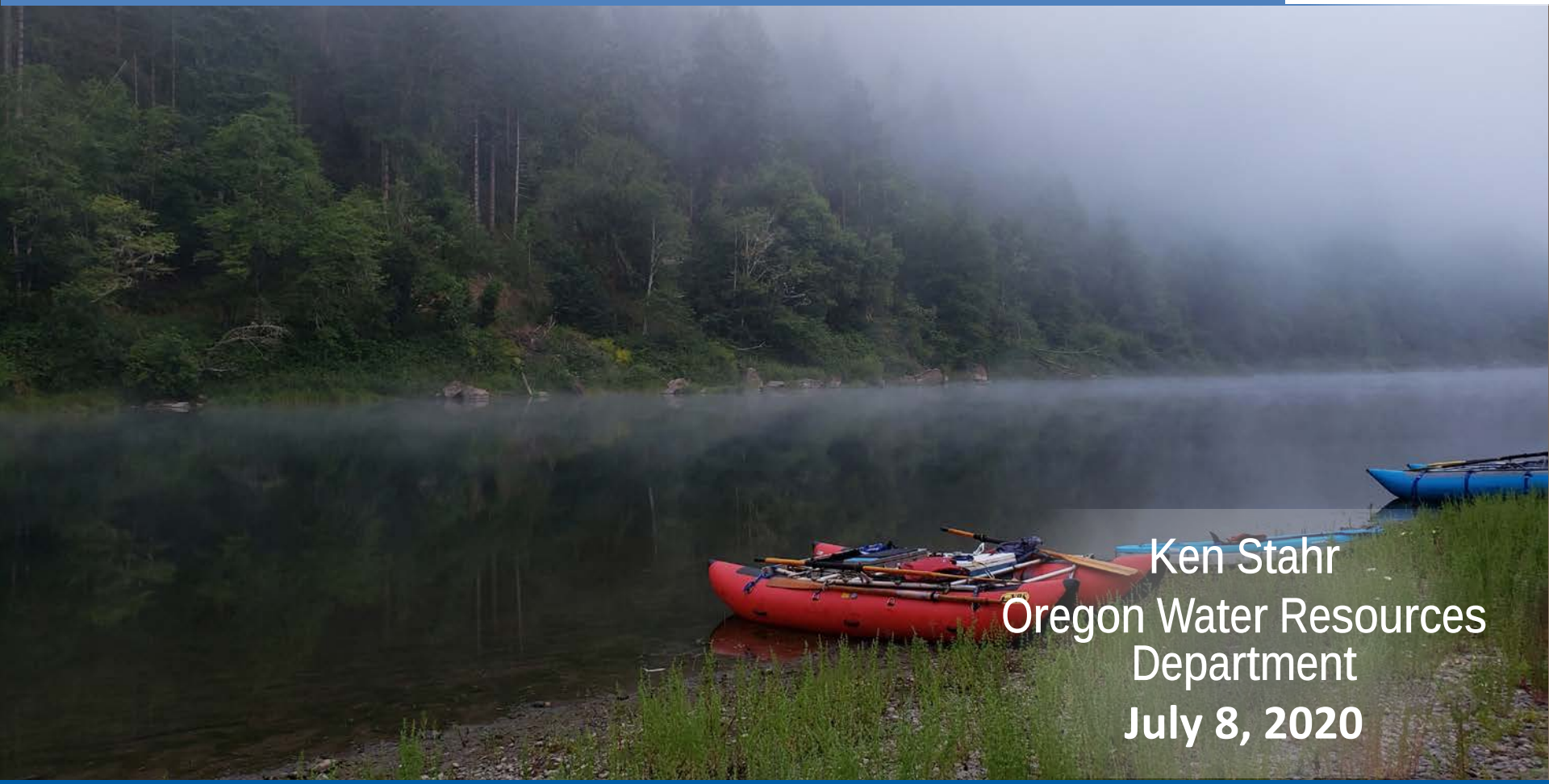
208.378.6213


BUREAU OF RECLAMATION

# Water Supply Conditions Report

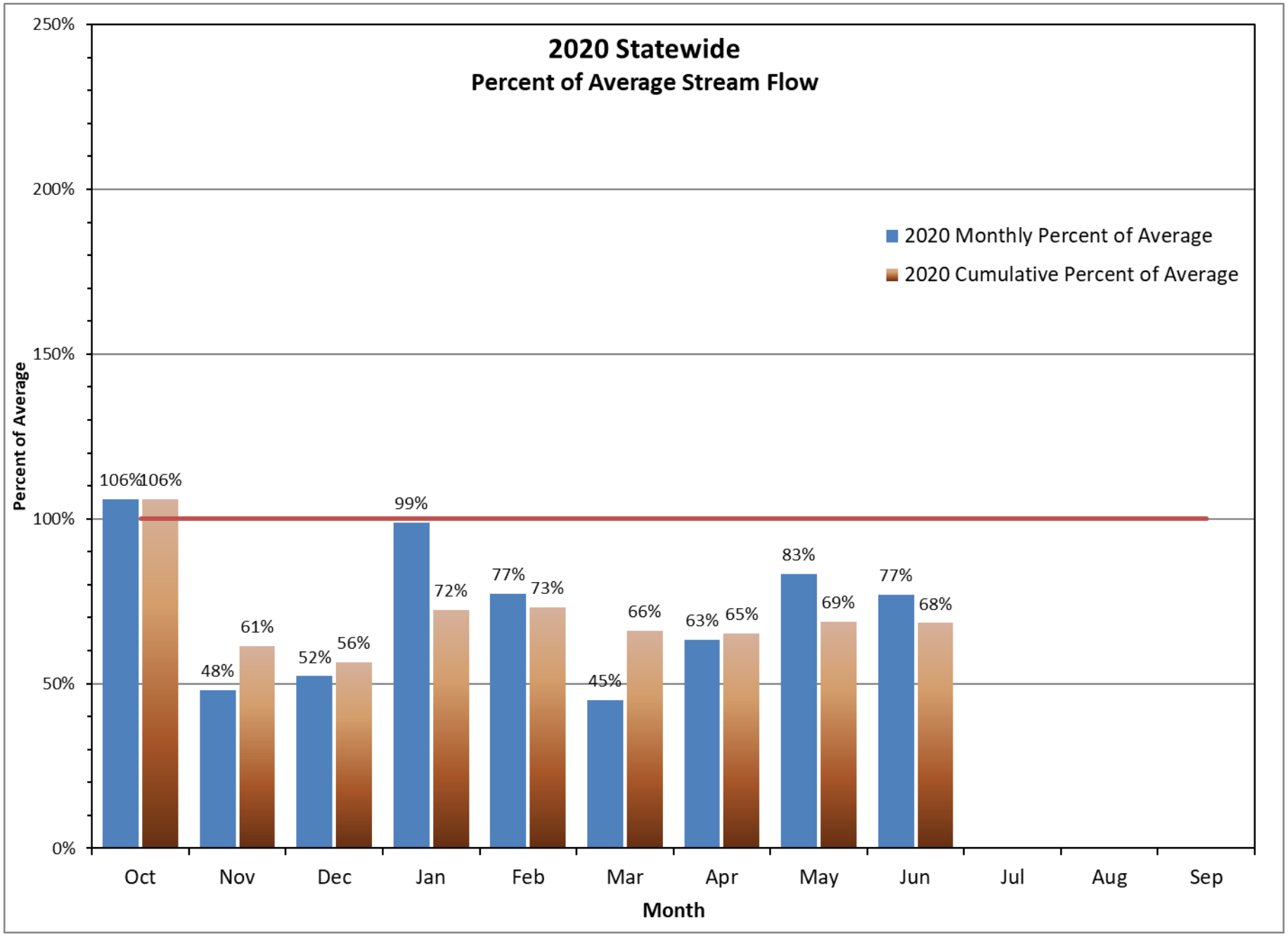
# Water Supply Availability Committee

OREGON
WATER RESOURCES
DEPARTMENT



Ken Stahr
Oregon Water Resources Department

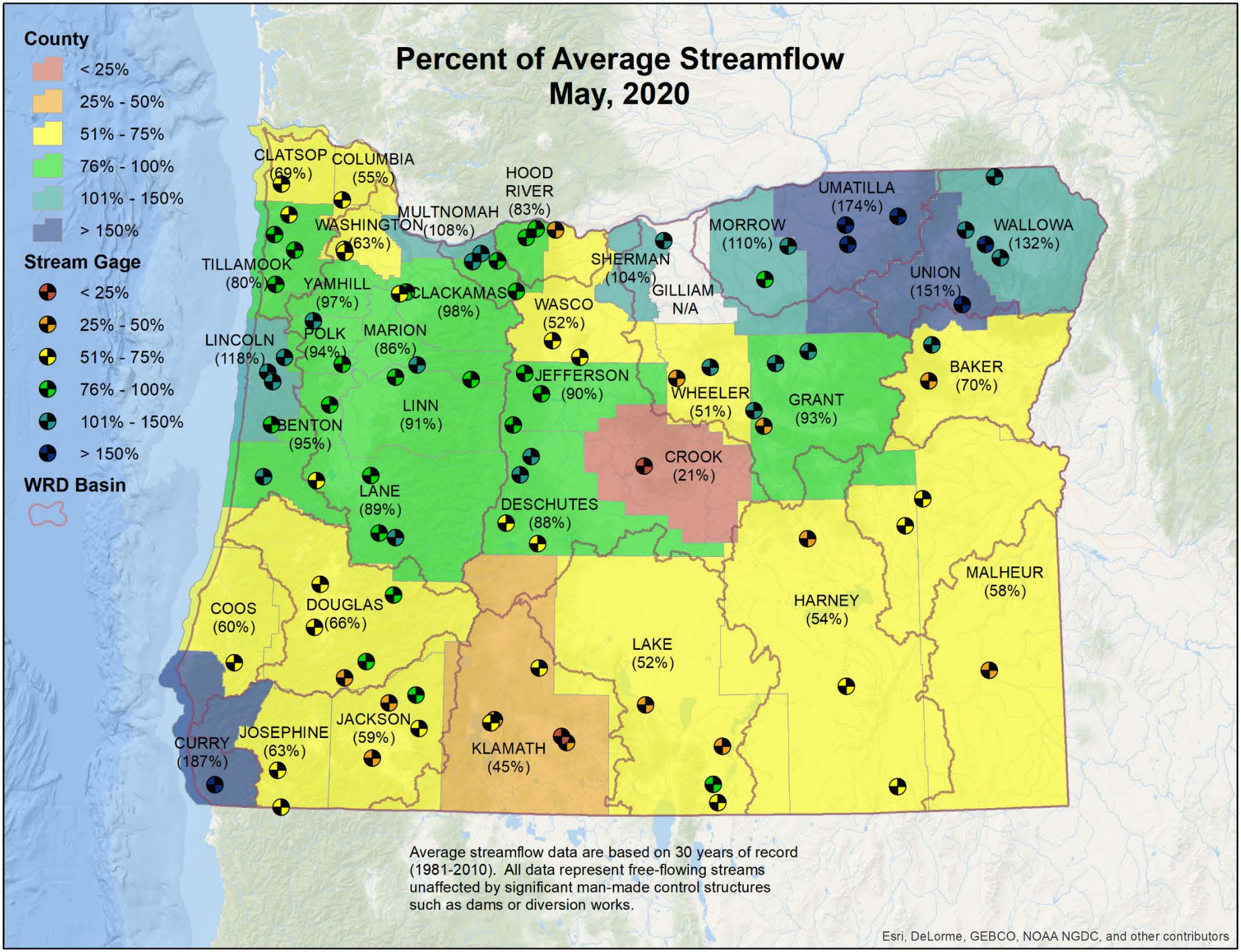
**July 8, 2020**


2020 Statewide
Percent of Average Stream Flow
2020 Monthly Percent of Average
2020 Cumulative Percent of Average
Percent of Average
250%
200%
150%
100%
50%
0%
106%
106%
48%
61%
52%
56%
99%
72%
77%
73%
45%
66%
63%
65%
83%
69%
77%
68%
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Month

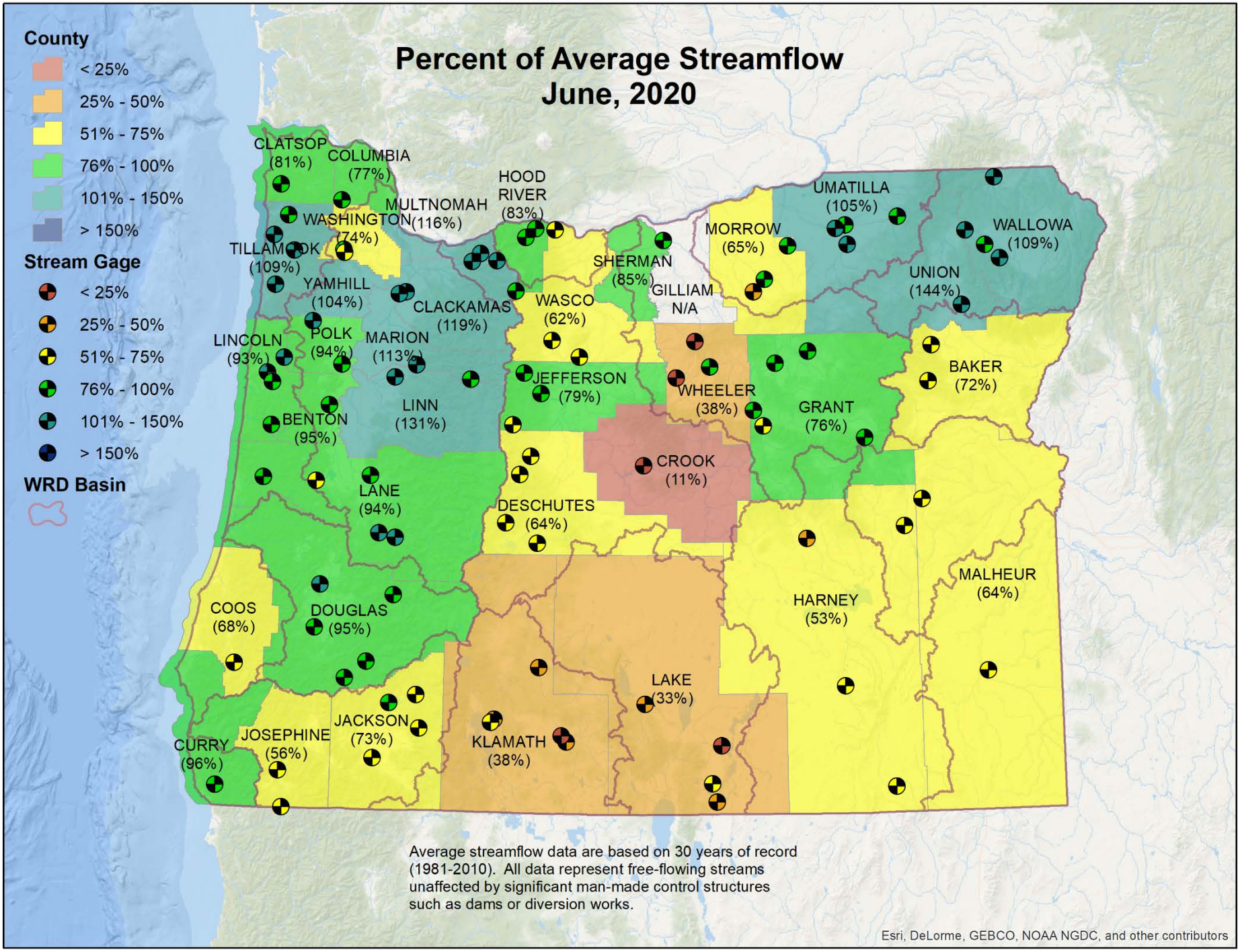
OREGON
WATER RESOURCES DEPARTMENT

| Basin | Water Year % of average thru June | % of average for June | % of average for 07/06/2020 | # of data points |
|---|---|---|---|---|
| North Coast | 85% | 99% | 106% | 6 |
| Willamette | 71% | 102% | 107% | 15 |
| Sandy | 89% | 115% | 102% | 4 |
| Hood | 62% | 75% | 68% | 3 |
| Deschutes | 69% | 63% | 68% | 10 |
| John Day | 68% | 65% | 66% | 10 |
| Umatilla | 94% | 88% | 121% | 7 |
| Grande Ronde | 107% | 116% | 127% | 5 |
| Powder | 72% | 72% | 72% | 1 |
| Malheur | 63% | 62% | 63% | 2 |
| Owyhee | 47% | 60% | 131% | 1 |
| Malheur Lake | 56% | 52% | 60% | 3 |
| Goose & Summer Lakes | 46% | 33% | 24% | 4 |
| Klamath | 44% | 38% | 43% | 4 |
| Rogue | 55% | 67% | 74% | 6 |
| Umpqua | 60% | 95% | 95% | 5 |
| South Coast | 60% | 82% | 116% | 2 |
| Mid Coast | 74% | 91% | 82% | 5 |
| **West Side** | **71%** | **93%** | **97%** | **43** |
| **East Side** | **66%** | **66%** | **77%** | **50** |
| **State** | **68%** | **77%** | **85%** | **93** |

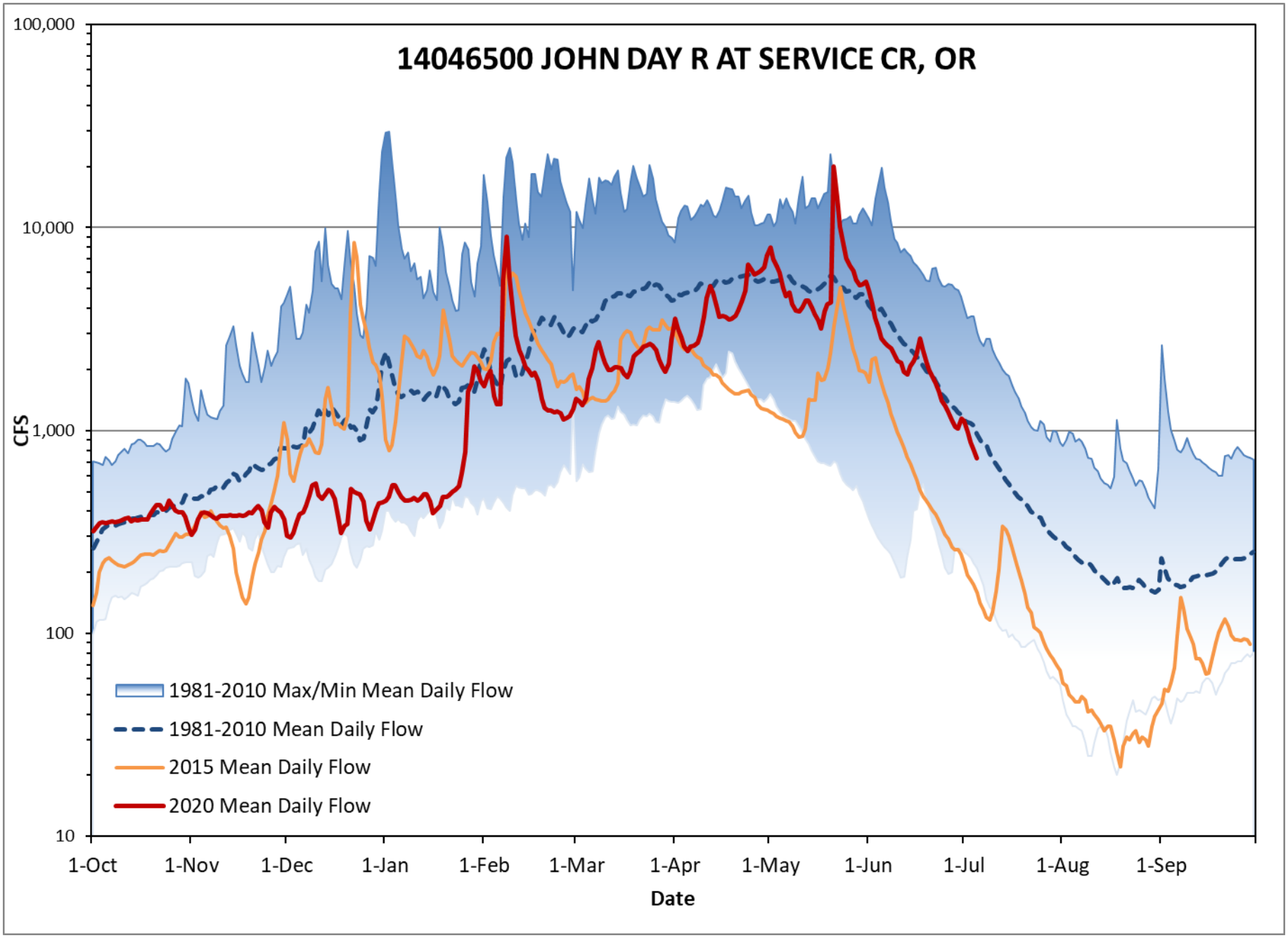
# Percent of Average Streamflow
## May, 2020

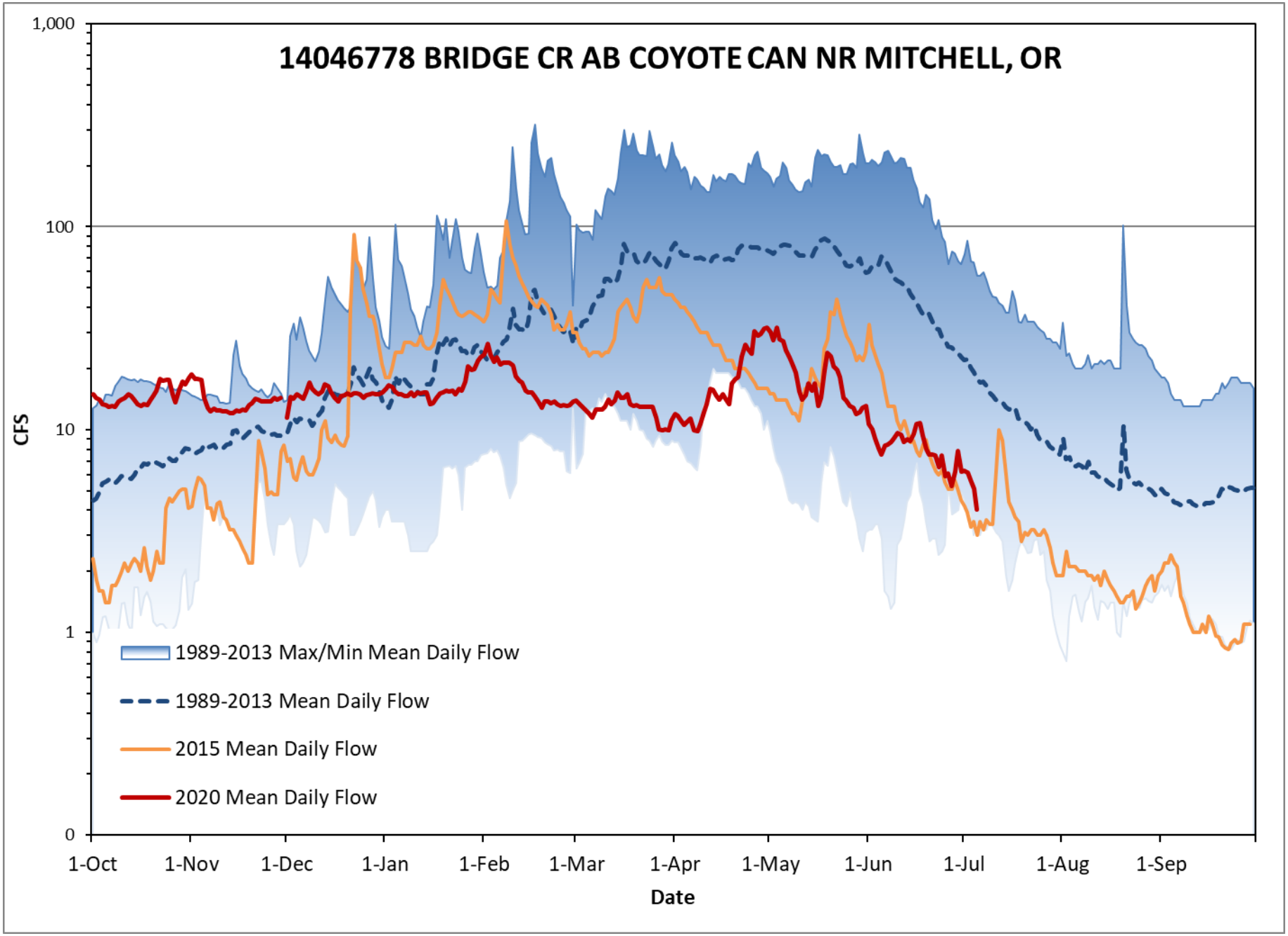


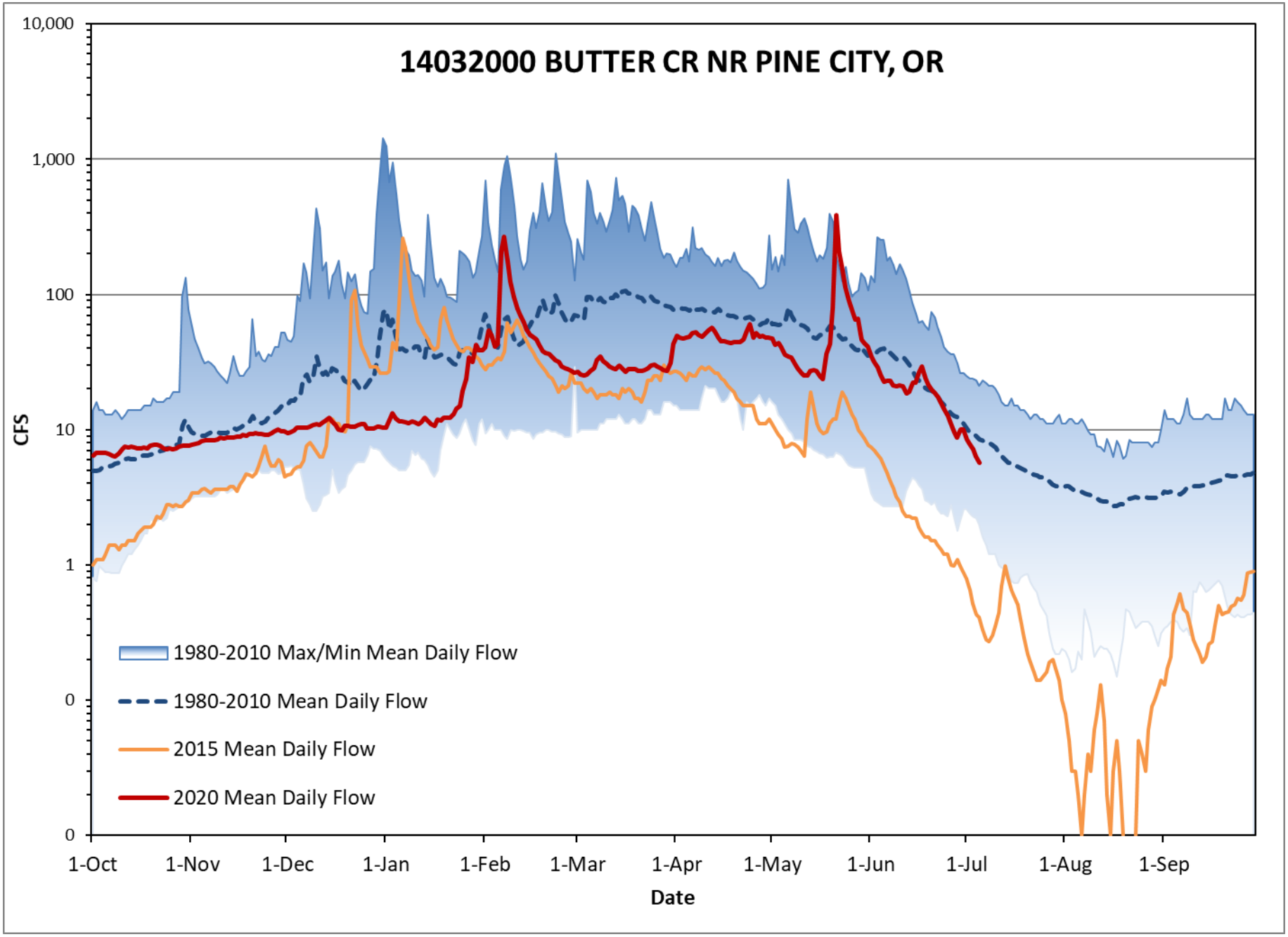
# Percent of Average Streamflow
# June, 2020

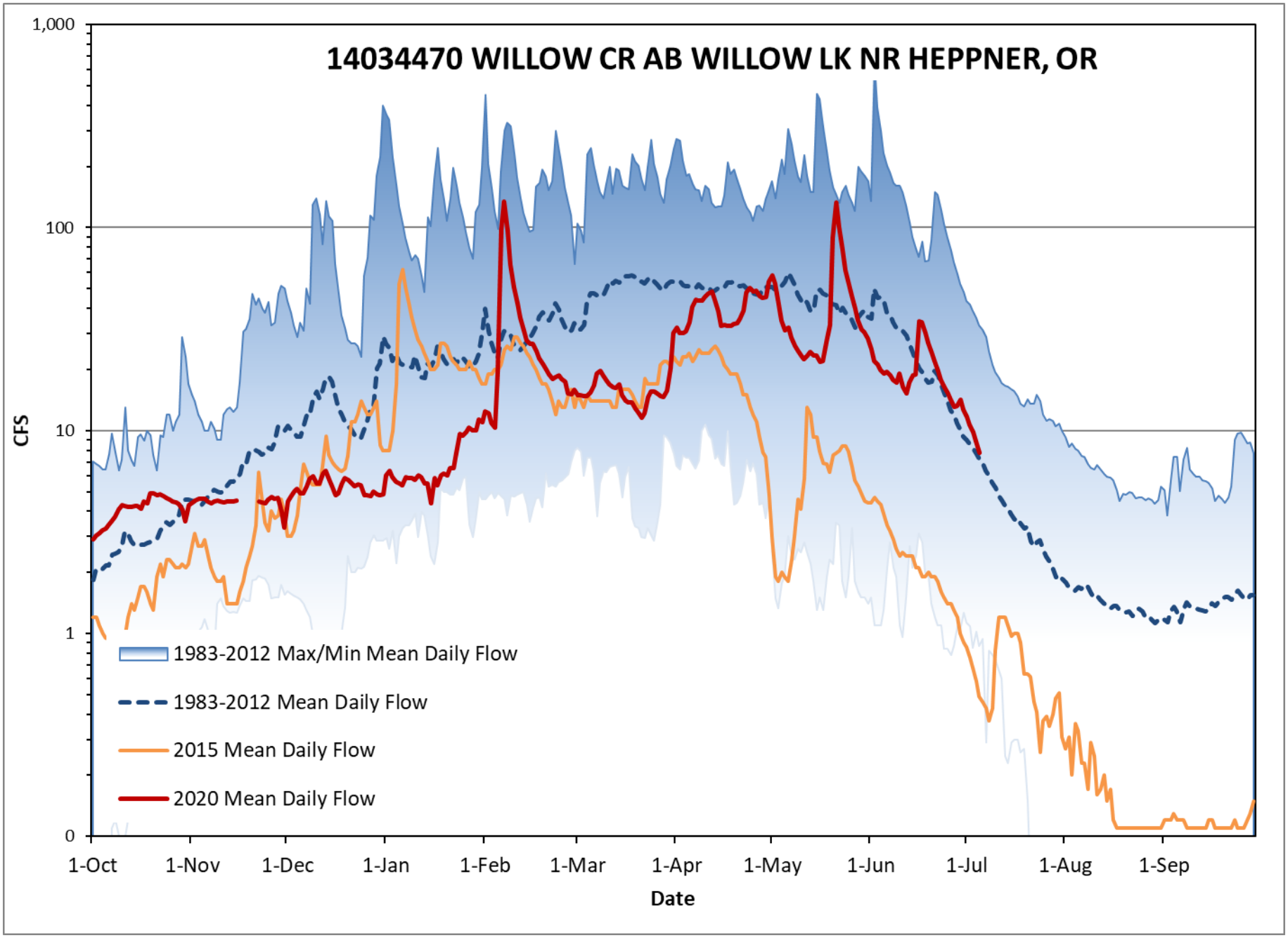


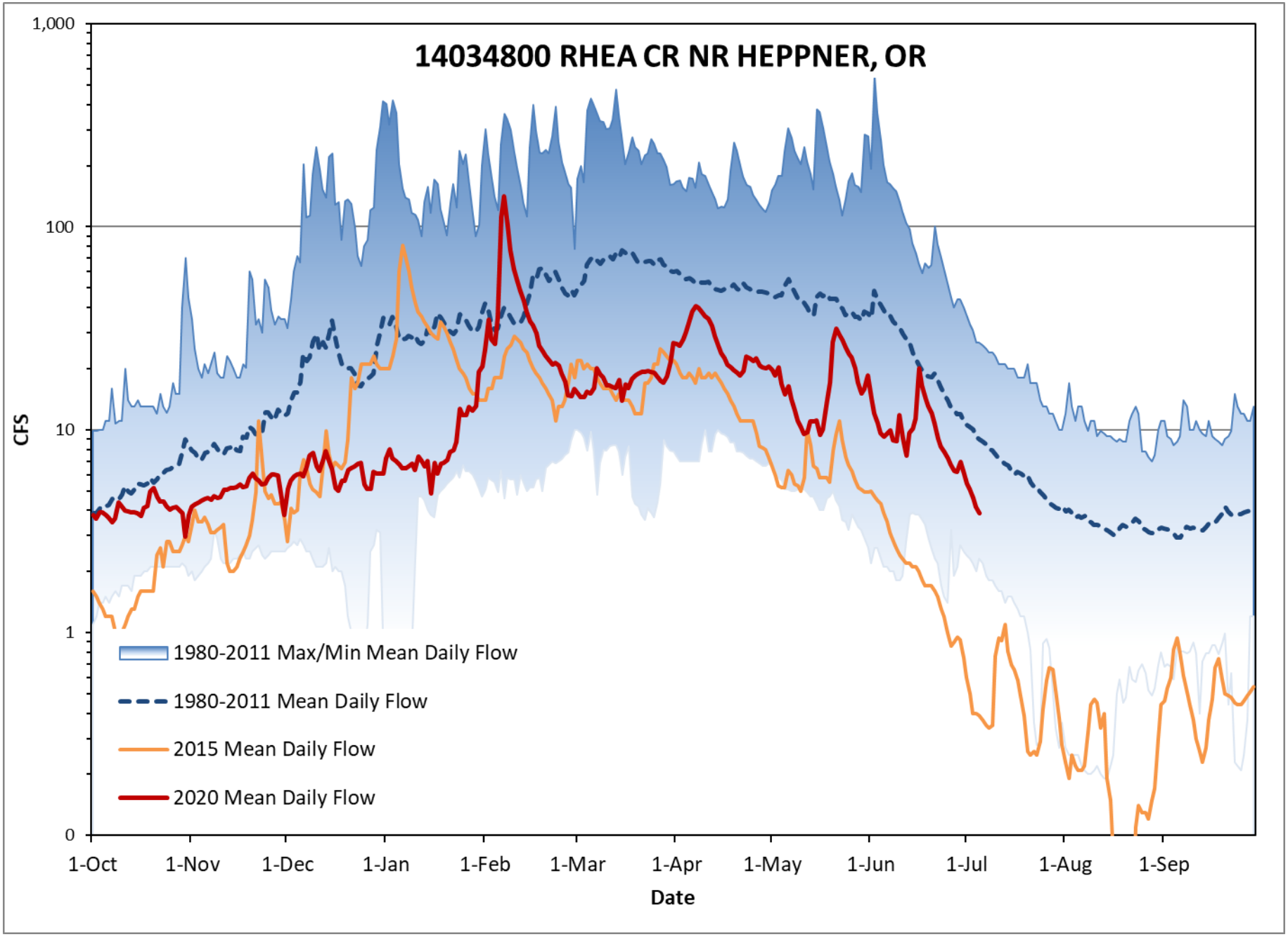

Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.

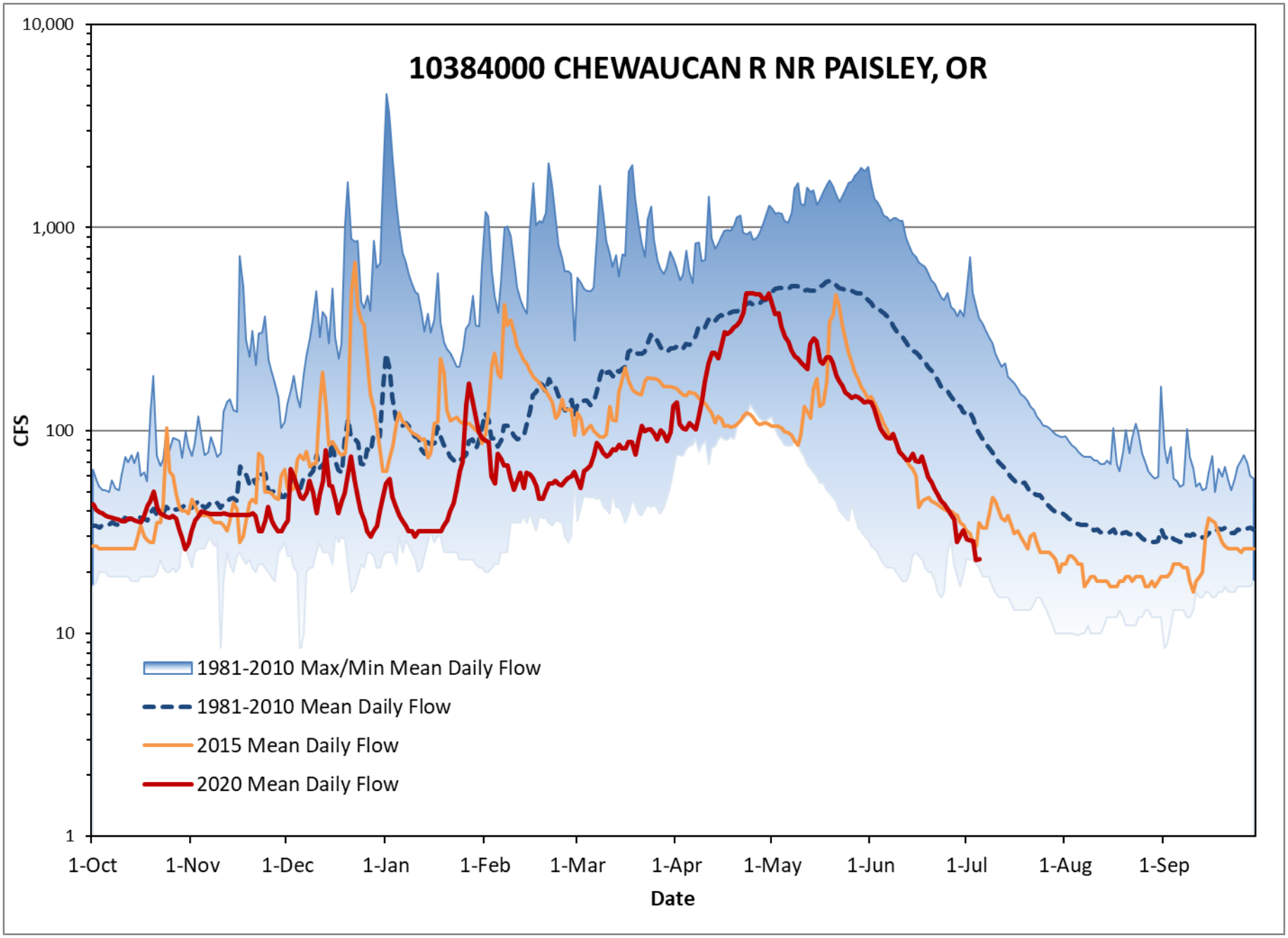

14046500 JOHN DAY R AT SERVICE CR, OR
100,000
10,000
1,000
100
10
CFS
1981-2010 Max/Min Mean Daily Flow
1981-2010 Mean Daily Flow
2015 Mean Daily Flow
2020 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date


14046778 BRIDGE CR AB COYOTE CAN NR MITCHELL, OR
1,000
100
10
1
0
CFS
1989-2013 Max/Min Mean Daily Flow
1989-2013 Mean Daily Flow
2015 Mean Daily Flow
2020 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


14032000 BUTTER CR NR PINE CITY, OR
10,000
1,000
100
10
1
0
0
CFS
1980-2010 Max/Min Mean Daily Flow
1980-2010 Mean Daily Flow
2015 Mean Daily Flow
2020 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

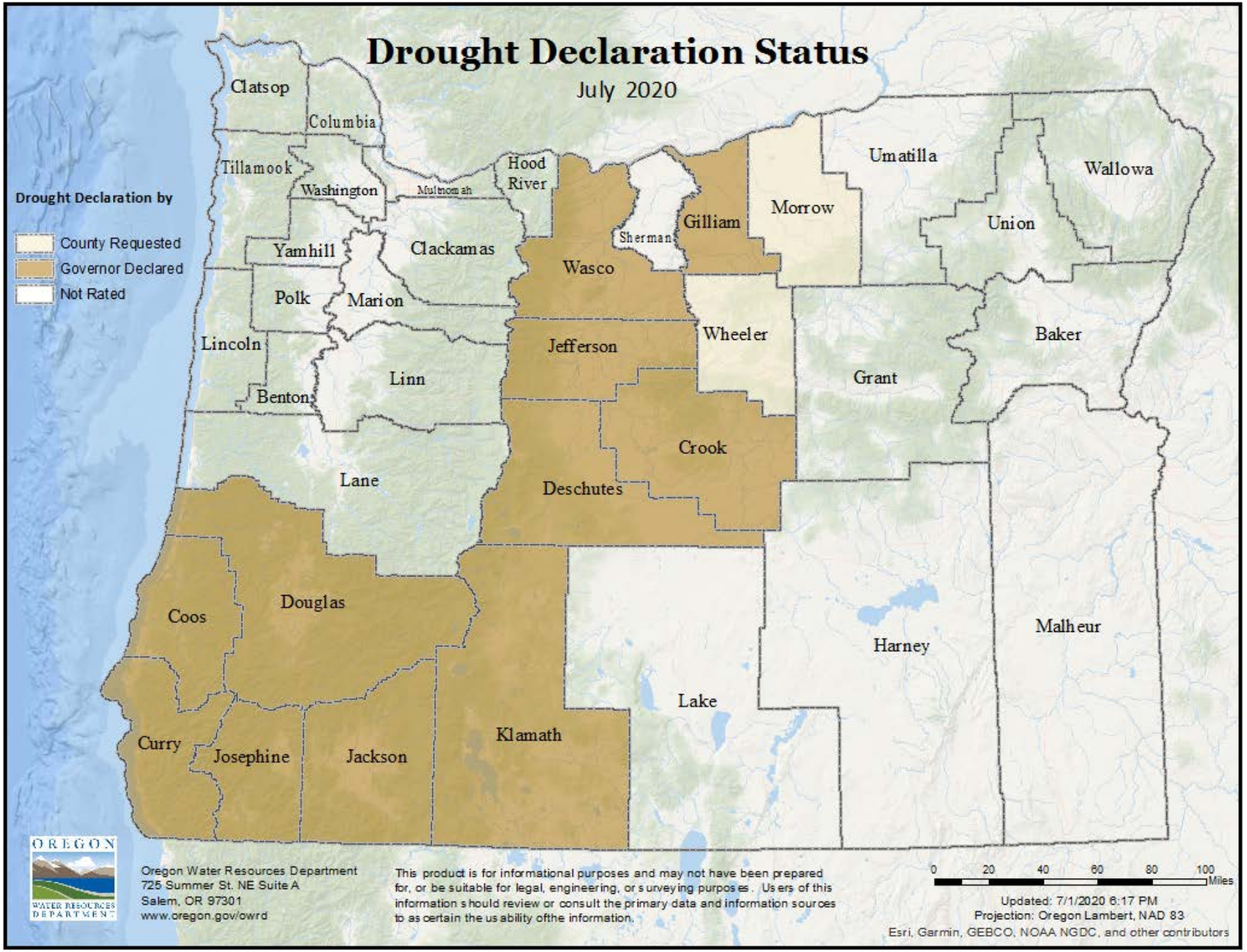

14034470 WILLOW CR AB WILLOW LK NR HEPPNER, OR
1,000
100
10
1
0
CFS
1983-2012 Max/Min Mean Daily Flow
1983-2012 Mean Daily Flow
2015 Mean Daily Flow
2020 Mean Daily Flow
1-Oct
1-Nov
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
Date


14034800 RHEA CR NR HEPPNER, OR
1,000
100
10
1
0
CFS
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
1980-2011 Max/Min Mean Daily Flow
1980-2011 Mean Daily Flow
2015 Mean Daily Flow
2020 Mean Daily Flow


10384000 CHEWAUCAN R NR PAISLEY, 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
2020 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

# Drought Declaration Status

July 2020





Oregon Water Resources Department
725 Summer St. NE Suite A
Salem, OR 97301
www.oregon.gov/owrd




Updated: 7/1/2020 6:17 PM
Projection: Oregon Lambert, NAD 83
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

OREGON
WATER RESOURCES
DEPARTMENT

# Thank you

# Oregon Water Supply Availability Meeting

## July 2020

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

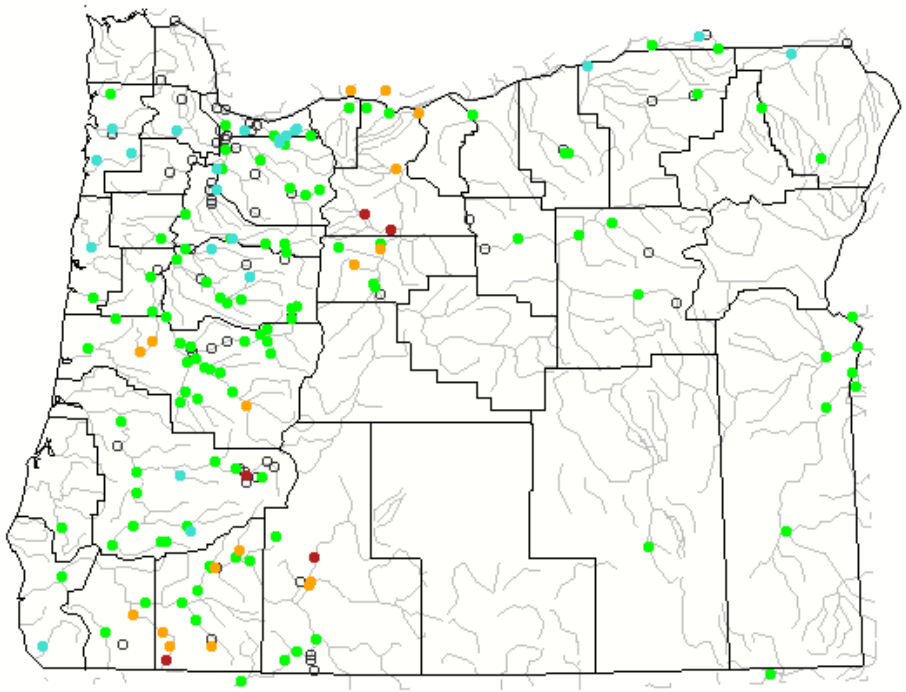
**USGS Update on Surface Water Conditions**

**Carrie Boudreau & Marc Stewart**
**Oregon Water Science Center**

# Monthly Average Streamflow

## (as compared to Historical Record)

June 2020



USGS

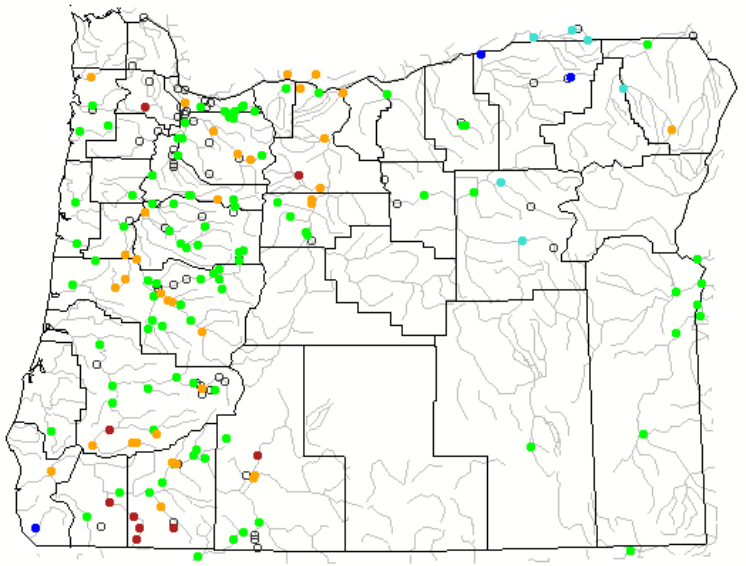
Search USGS streamgage

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

○ List of all stations ◉ Single station ○ Nearest stations ○ Peak flow

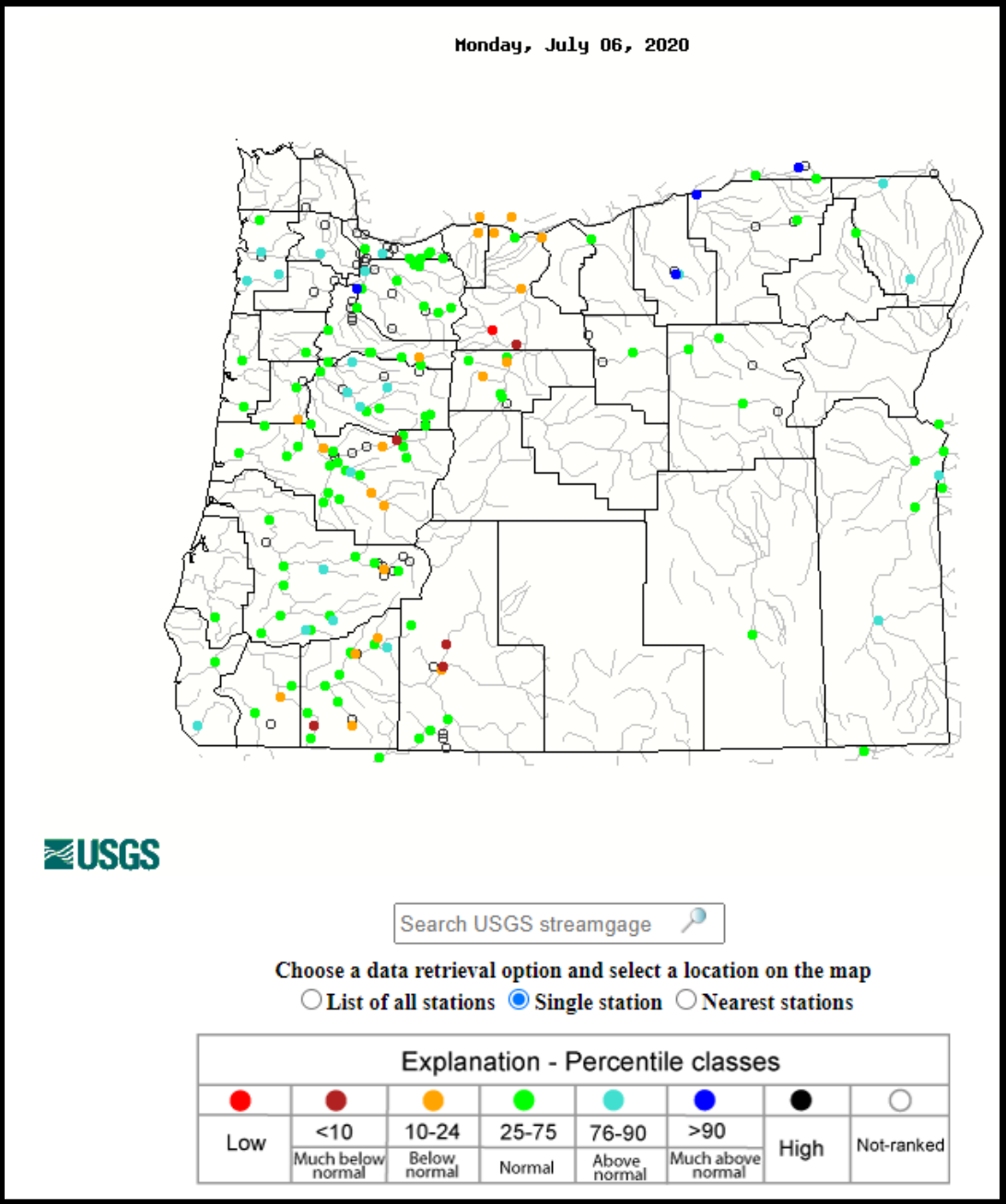
| Explanation - Percentile classes | | | | | | | |
|---|---|---|---|---|---|---|---|
| ● | ● | ● | ● | ● | ● | ● | ○ |
| Low | <10 Much below normal | 10-24 Below normal | 25-75 Normal | 76-90 Above normal | >90 Much above normal | High | Not-ranked |

May 2020



USGS

USGS



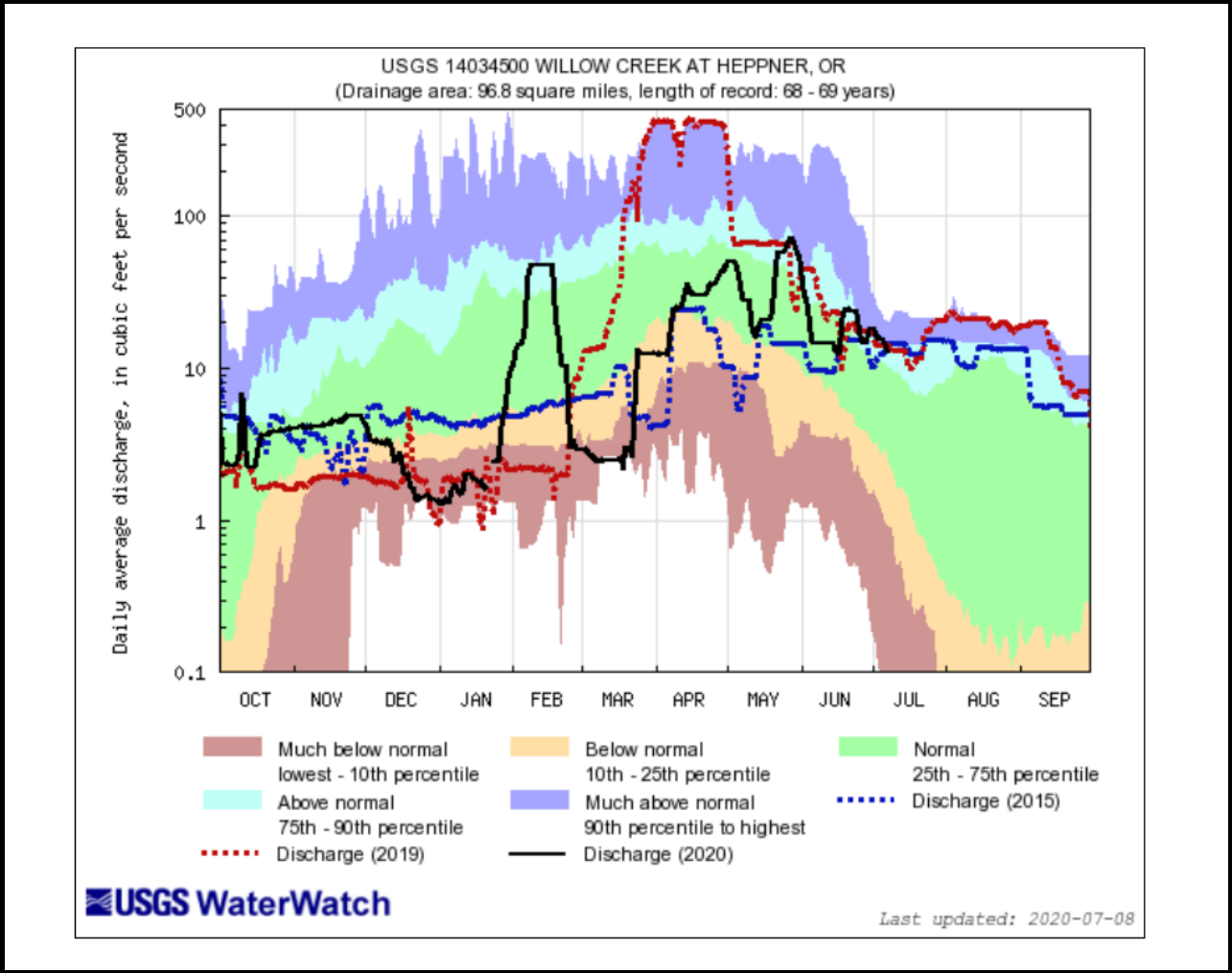

# 7-day Average Streamflow

## (as compared to Historical Record)

USGS

# Morrow County

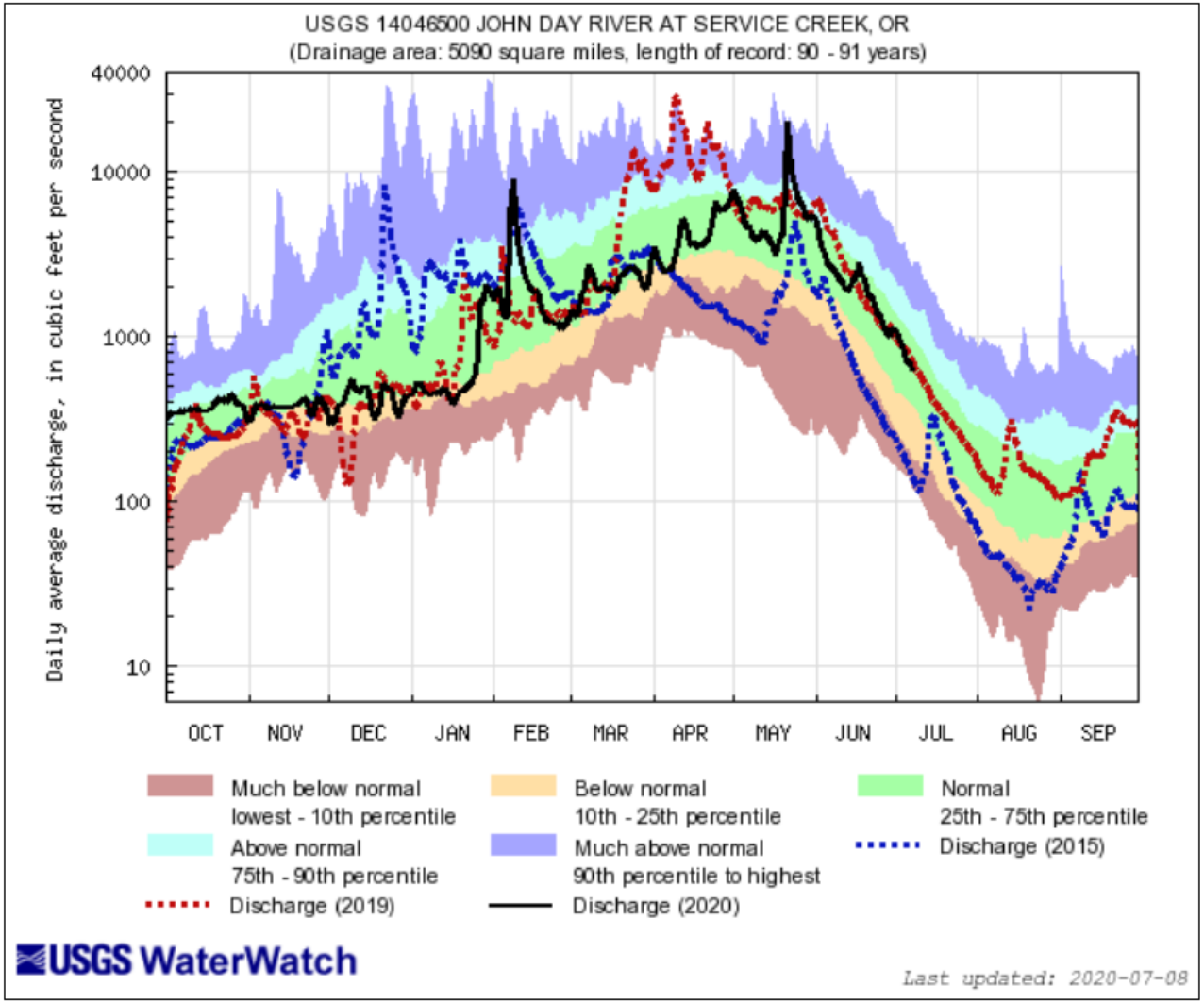
**14034500 WILLOW CREEK AT HEPPNER, OR -- Regulated by Willow Reservoir.**




USGS

# Wheeler County

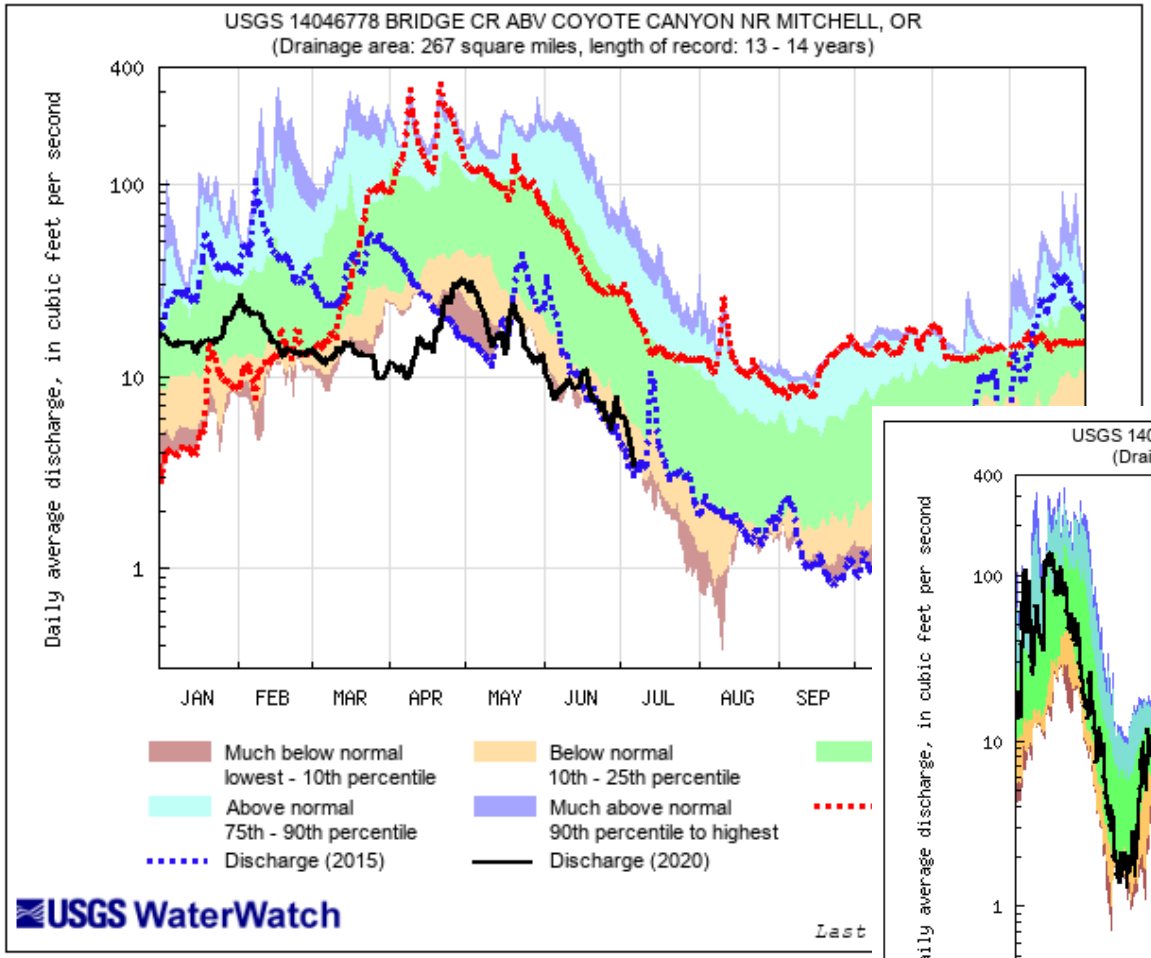
## 14046500 JOHN DAY RIVER AT SERVICE CREEK, OR

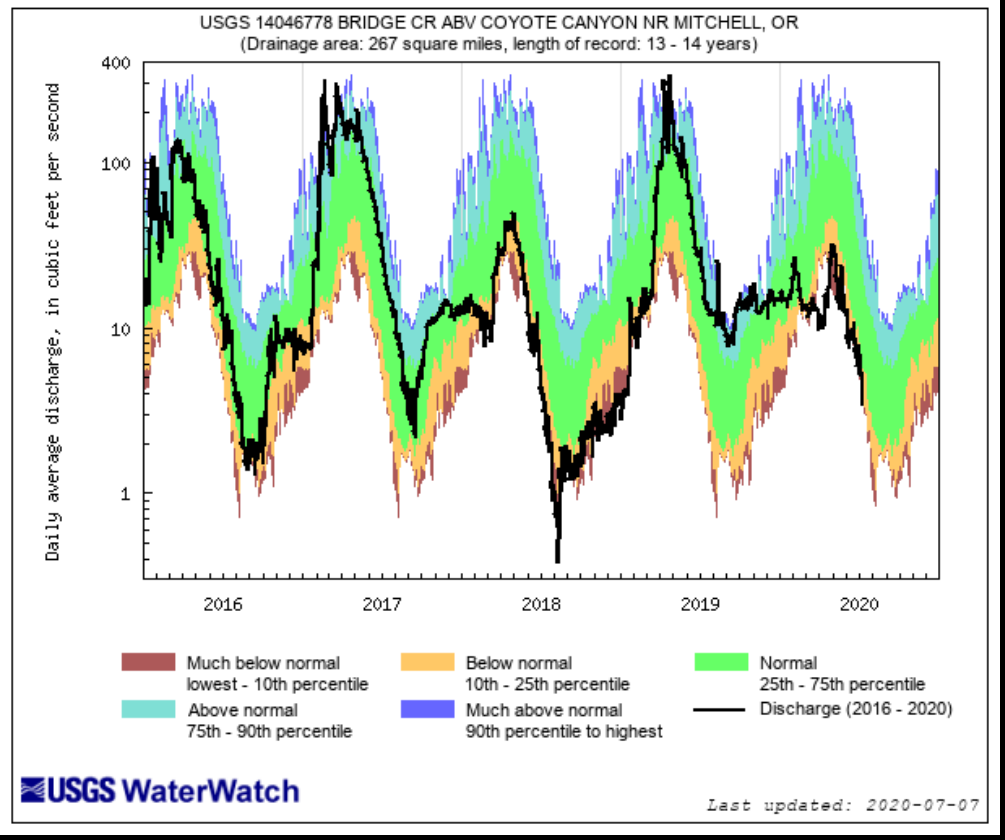


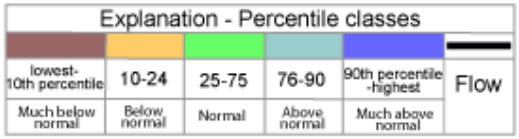

USGS

# 14046778 Bridge Cr abv Coyote Canyon

Wheeler Co.



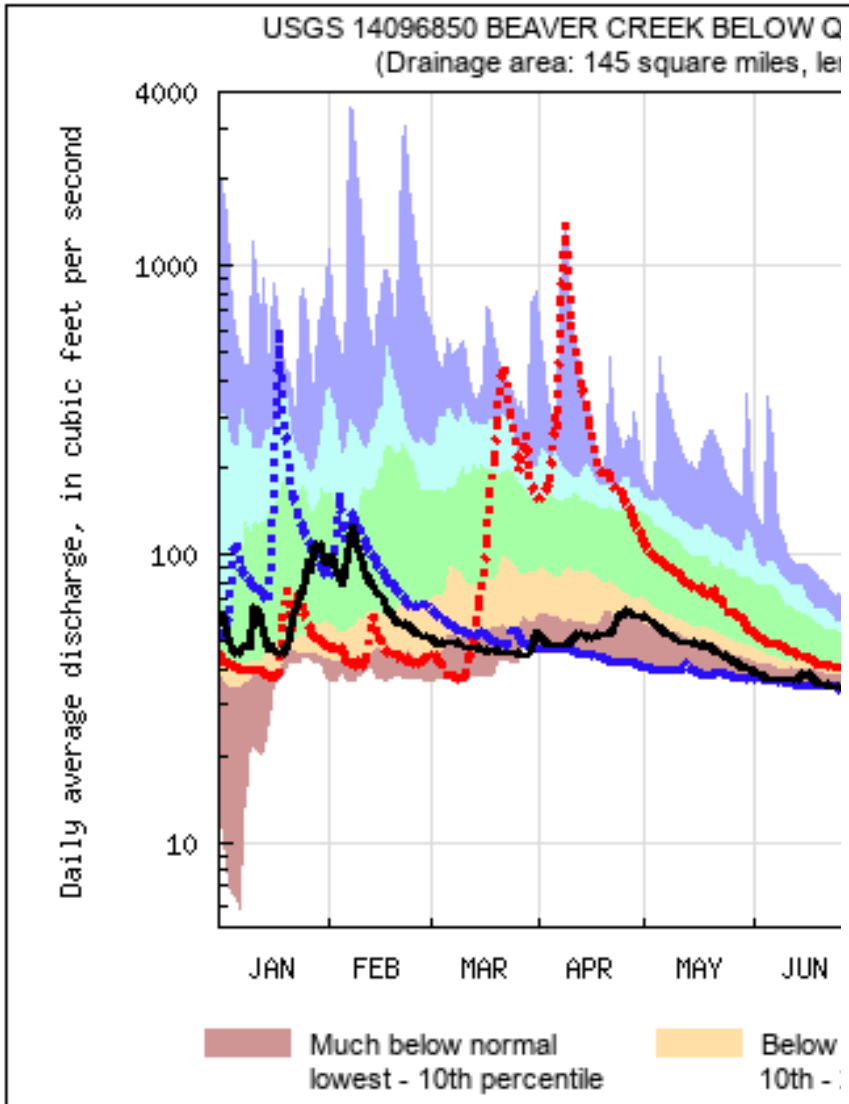



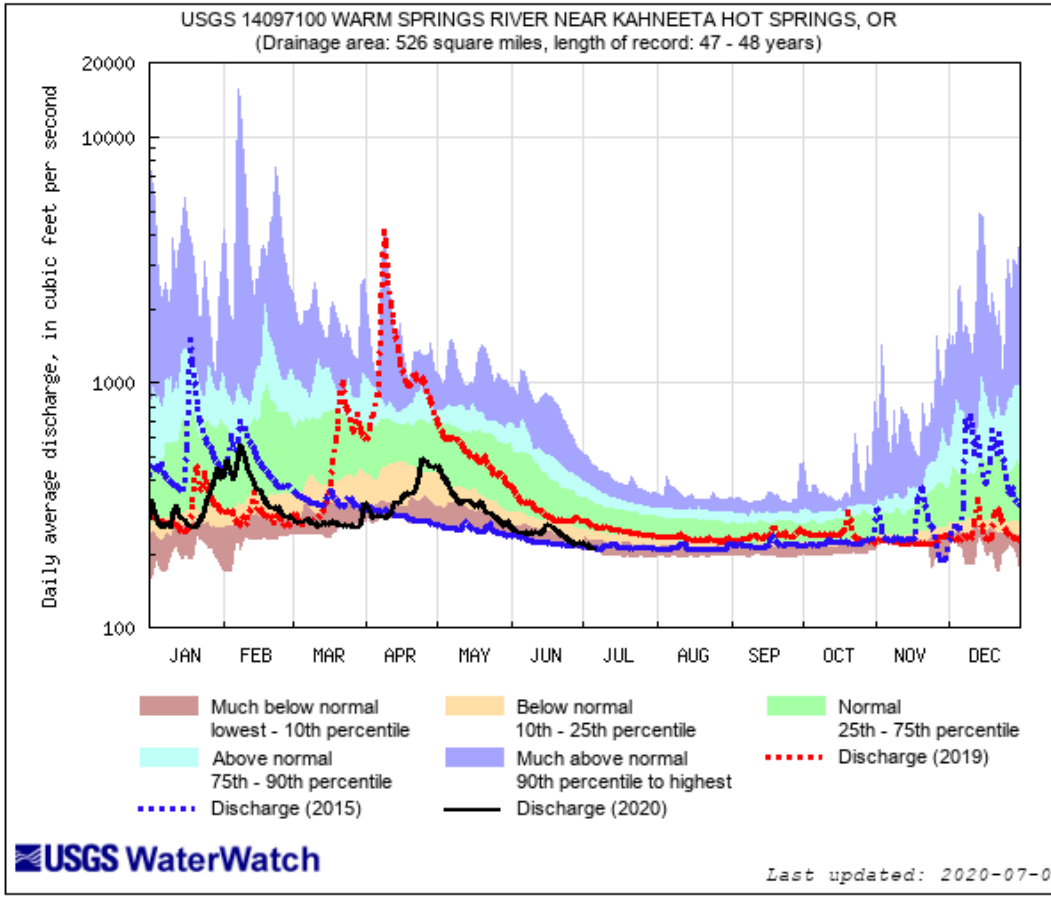

USGS

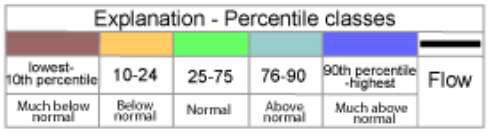
# Wasco County

14096850 Beaver Cr blw Quartz Cr, nr Shimnasho, OR

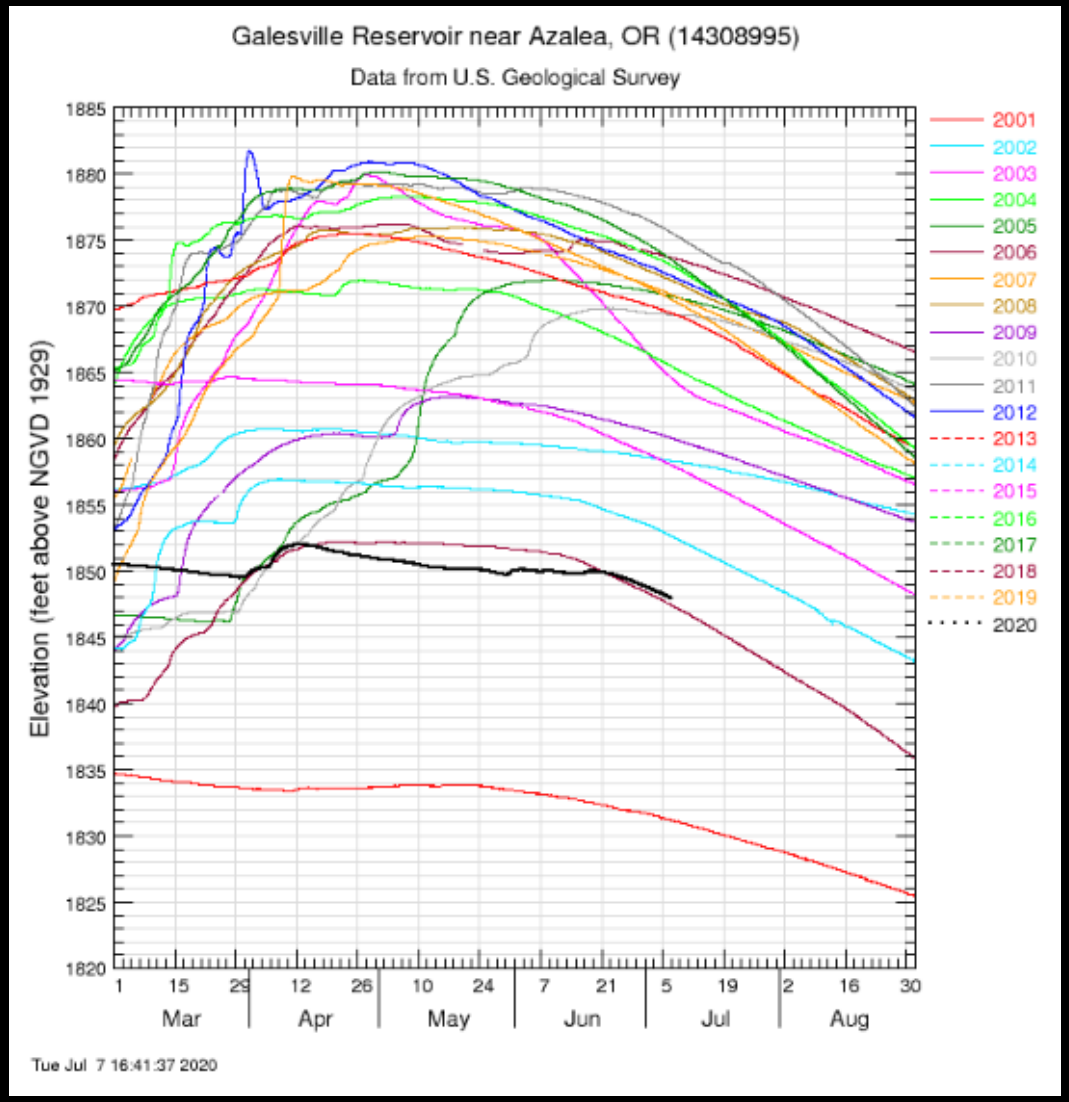



14097100 Warm Springs R nr Kahneeta Hot Springs, OR



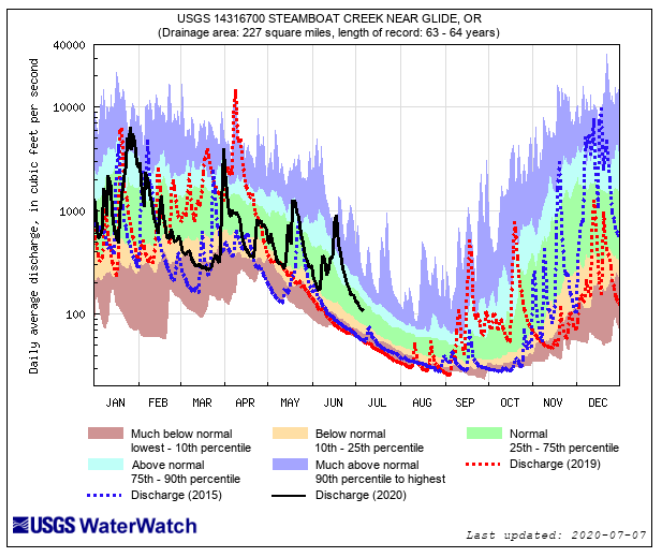



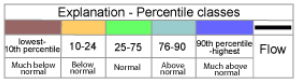
# 14308995
# Galesville Reservoir



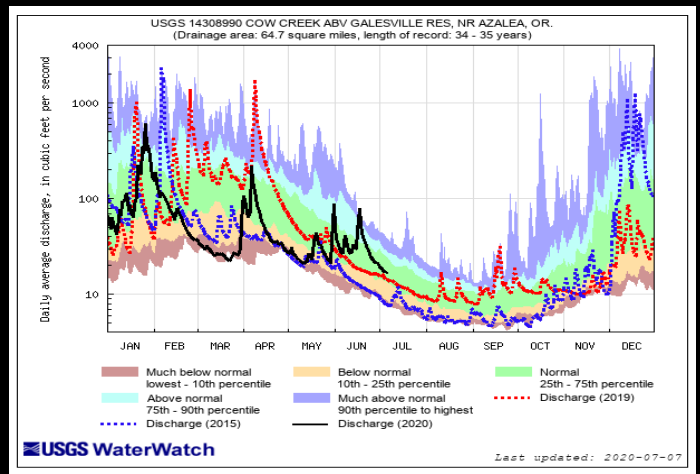

USGS

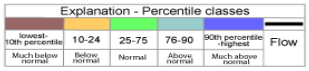
## Steamboat Creek nr Glide

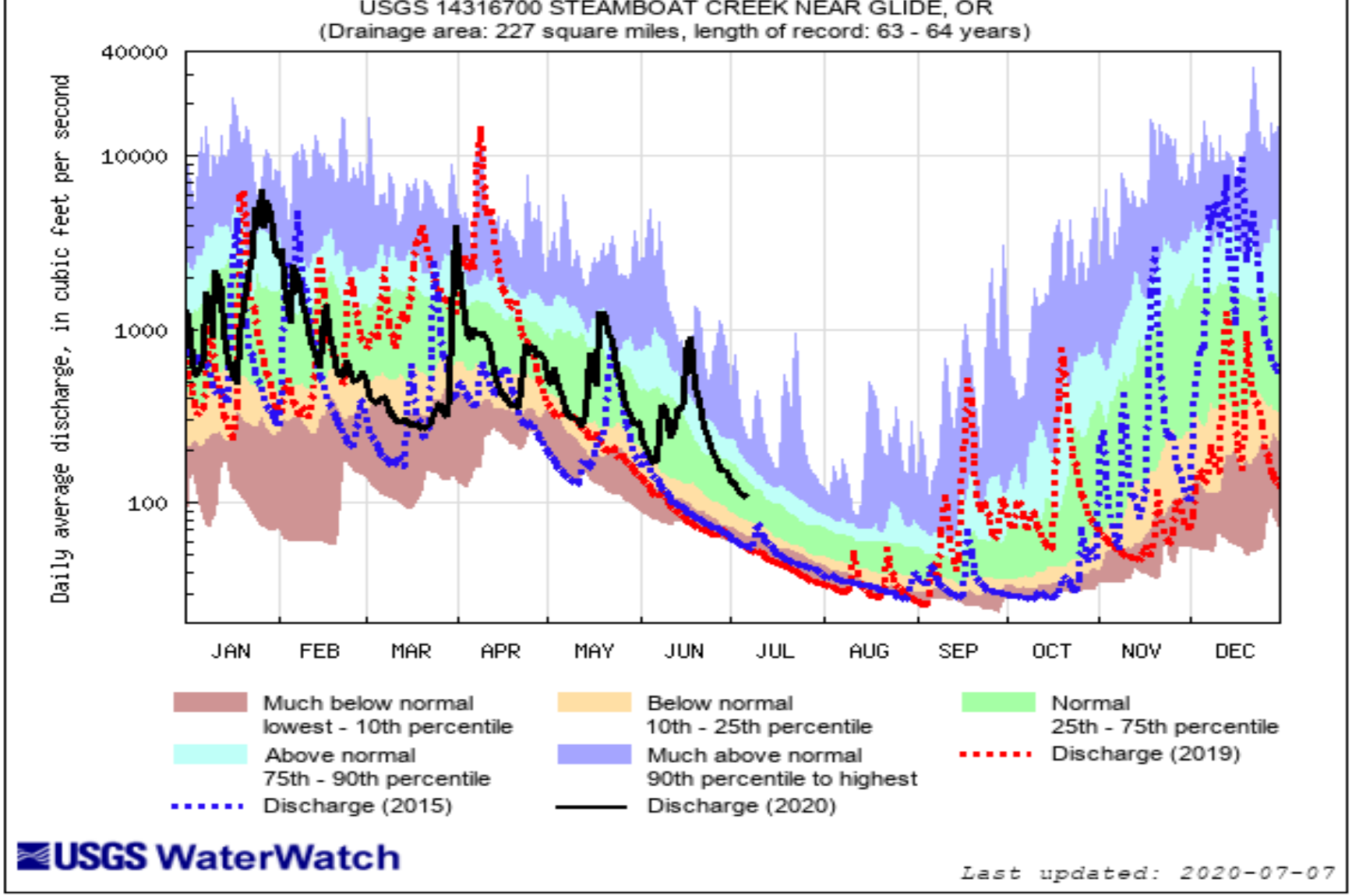


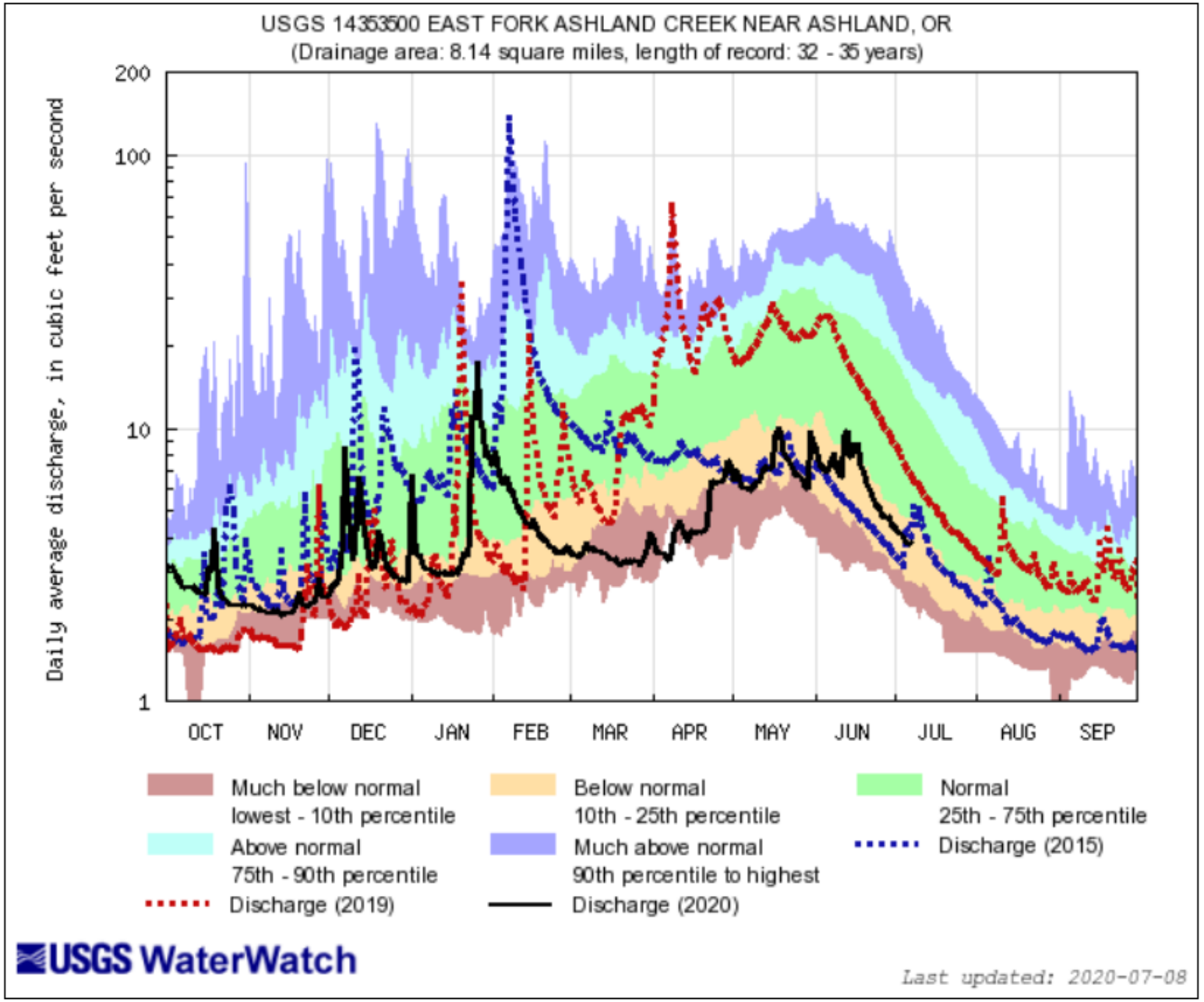

## Cow Creek abv Galesville Res.



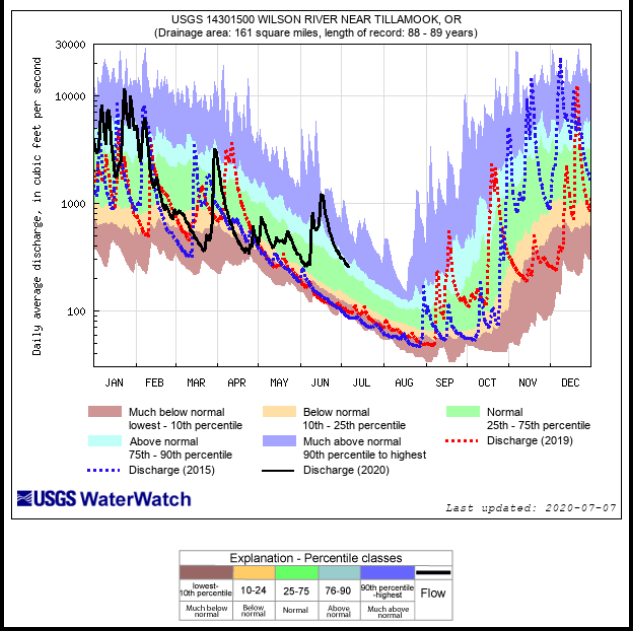





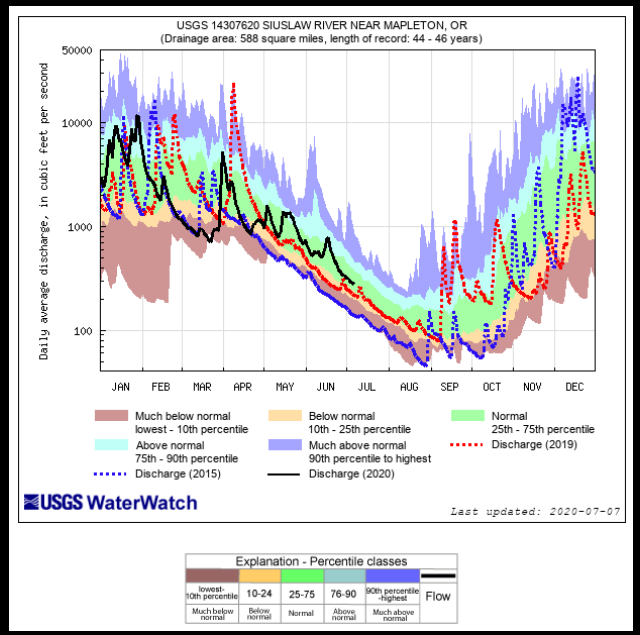

| Explanation - Percentile classes | | | | | |
|---|---|---|---|---|---|
| lowest-10th percentile | 10-24 | 25-75 | 76-90 | 90th percentile -highest | Flow |
| Much below normal | Below normal | Normal | Above normal | Much above normal | |


USGS 14353500 EAST FORK ASHLAND CREEK NEAR ASHLAND, OR
(Drainage area: 8.14 square miles, length of record: 32 - 35 years)
Daily average discharge, in cubic feet per second
200
100
10
1
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
Much below normal
lowest - 10th percentile
Below normal
10th - 25th percentile
Normal
25th - 75th percentile
Above normal
75th - 90th percentile
Much above normal
90th percentile to highest
Discharge (2015)
Discharge (2019)
Discharge (2020)
USGS WaterWatch
Last updated: 2020-07-08

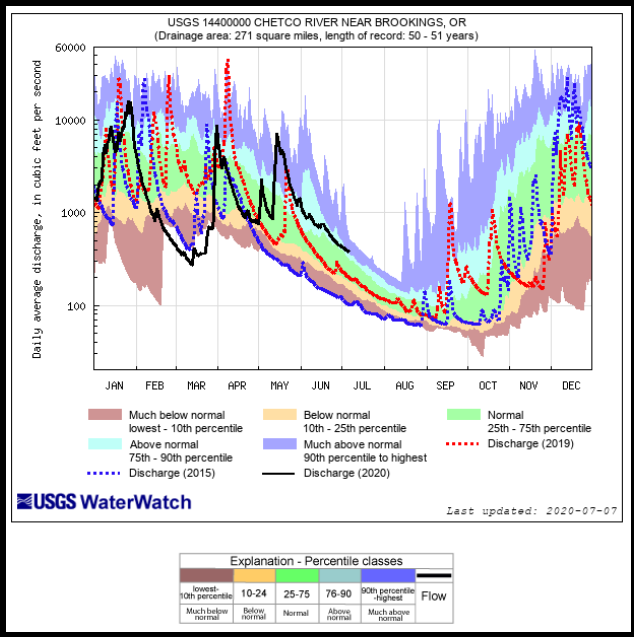
# Coastal Oregon




14301500 Wilson R nr Tillamook, OR



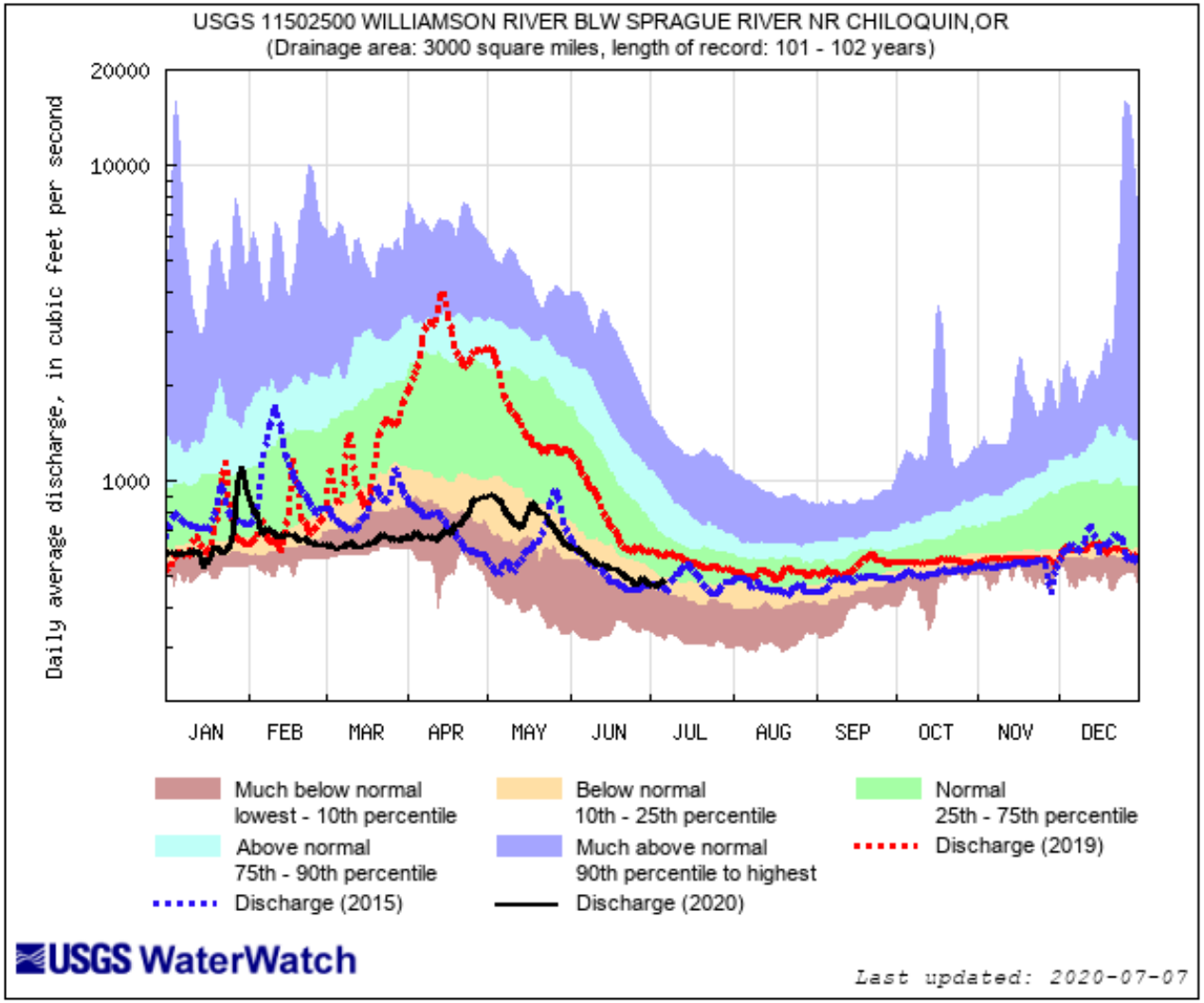

14307620 Siuslaw R nr Mapleton, OR




USGS

14400000 Chetco R nr Brookings, OR

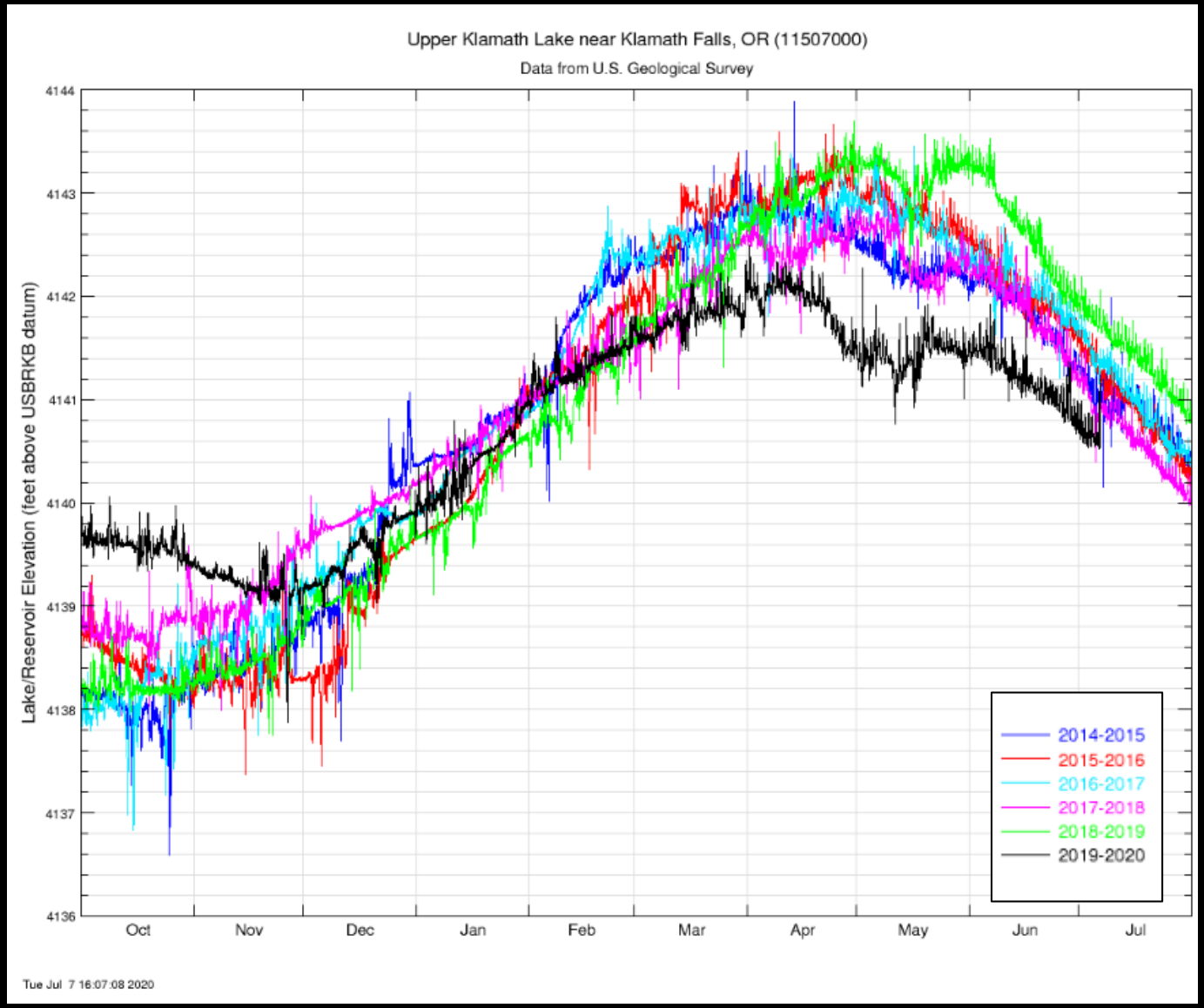
# 11502500 Williamson River blw Sprague




| 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 | |

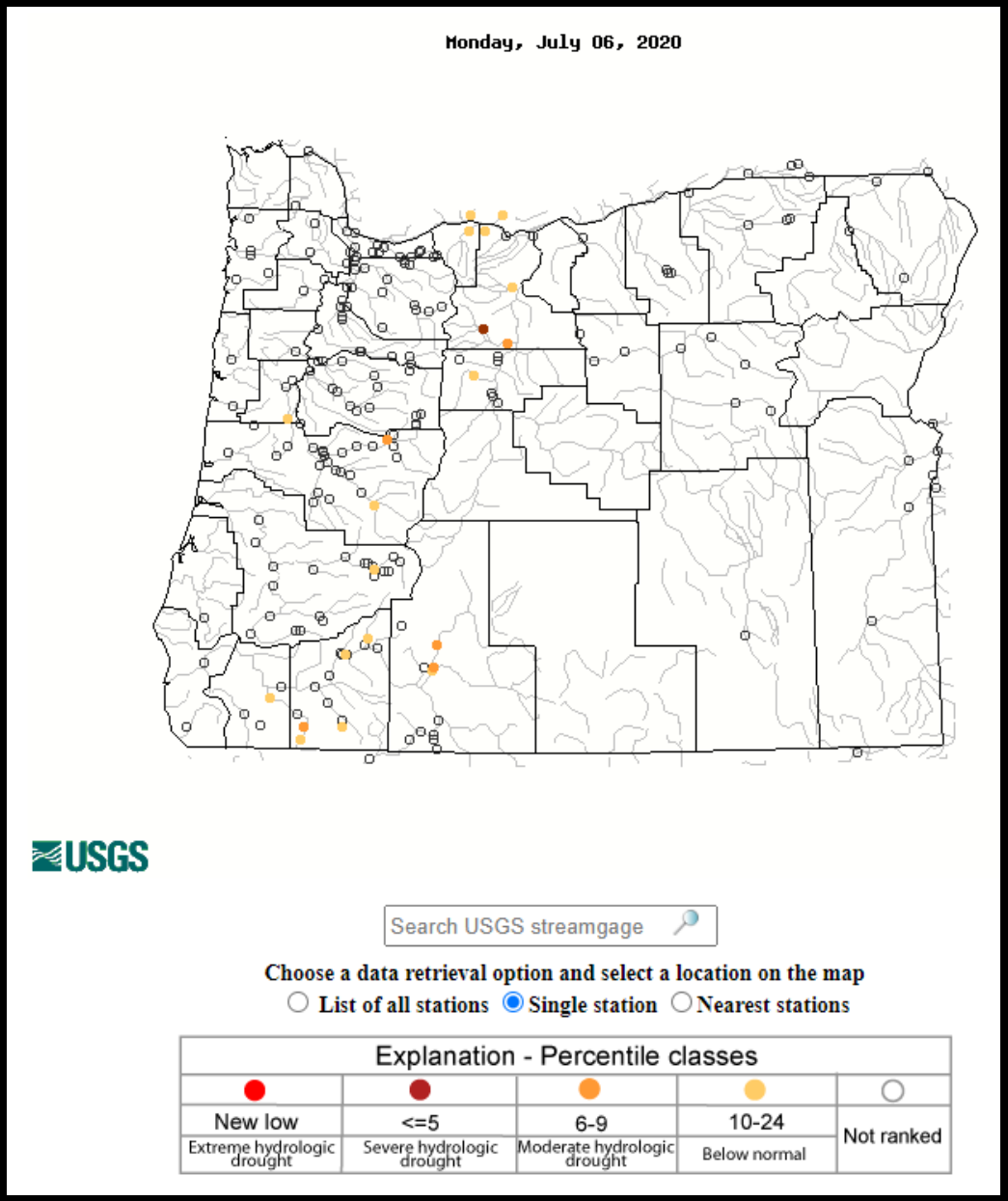
USGS

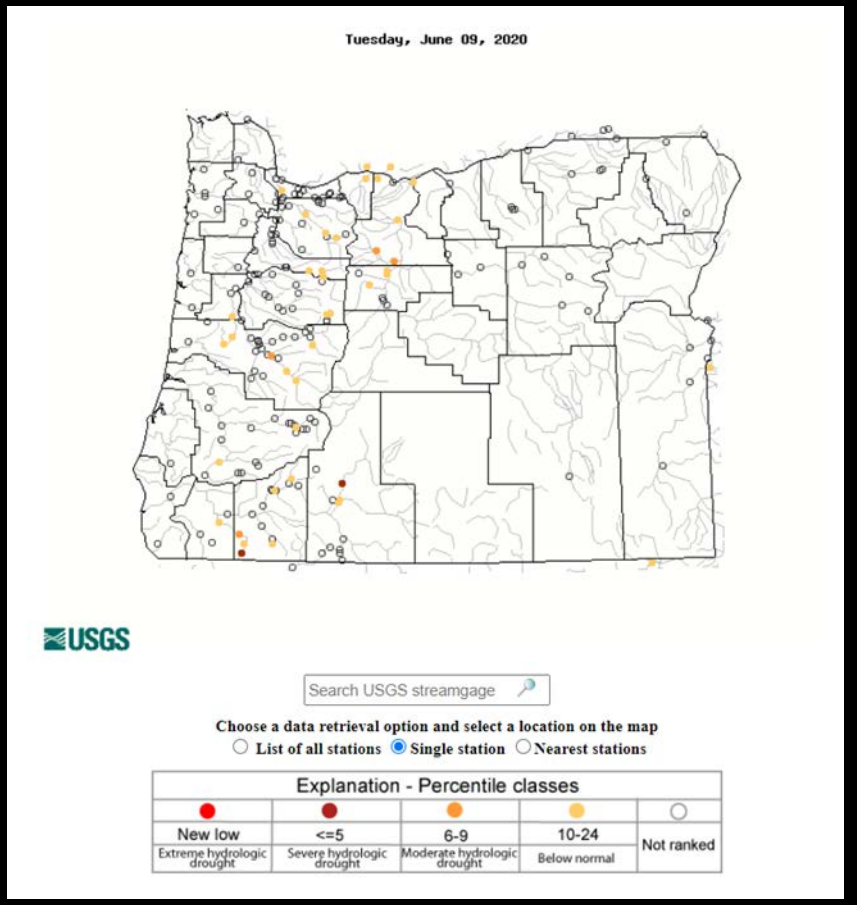
# 11507000 Upper Klamath Lake




USGS

# 14-day *below normal* Average Streamflow (as compared to Historical Record)




USGS

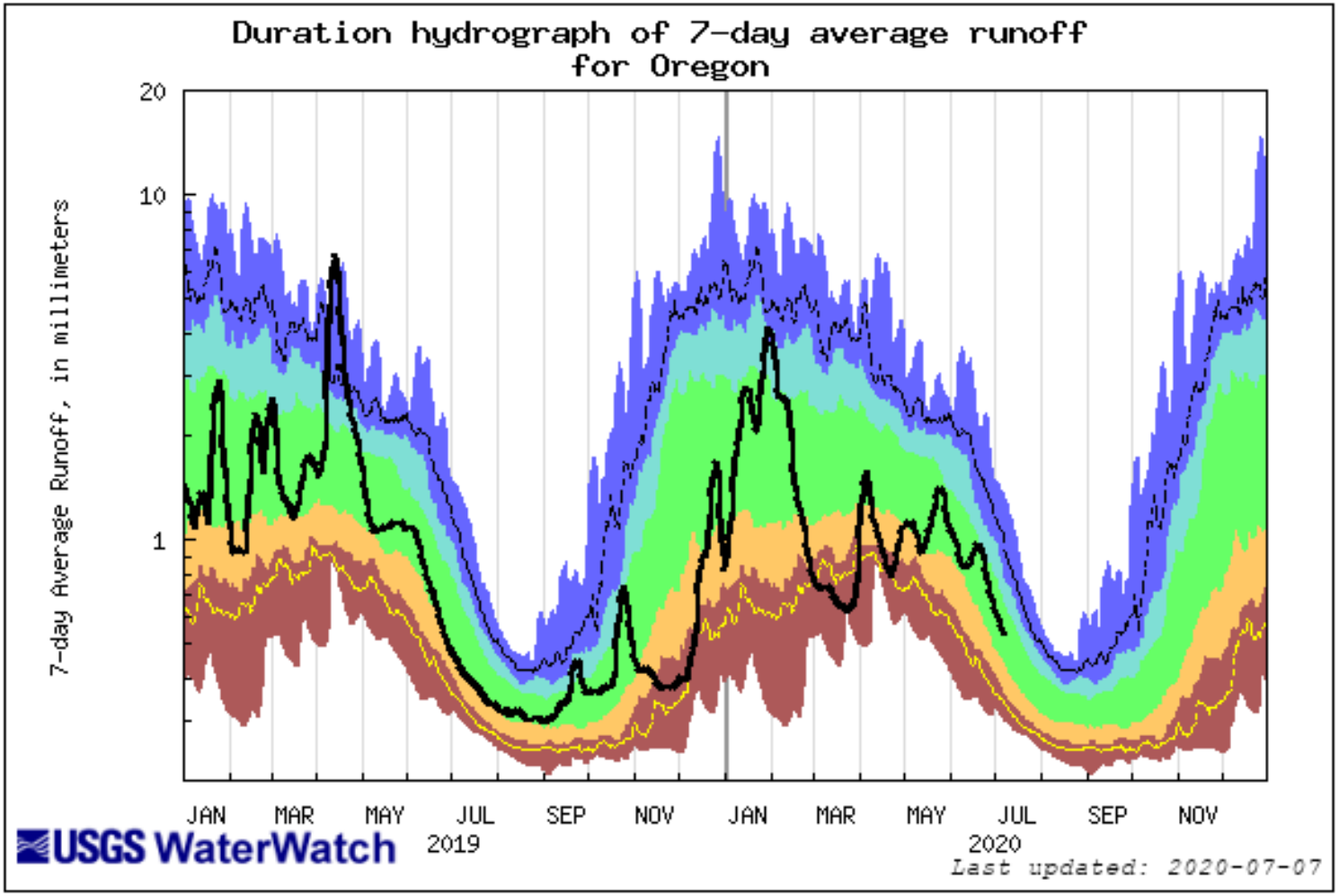
US GEOLOGICAL SURVEY, OREGON WATER SCIENCE CENTER
WATER AVAILABILITY REPORT FOR JUNE 2020

| 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 June: Percent of average |
|---|---|---|---|---|---|
| Donner Und Blitzen nr Frenchglen | Harney | 193 | 65 | -32 | 68 |
| (*)Deep Creek above Adel | Lake County | 106 | 53 | -68 | 62 |
| (*)Chewaucan River near Paisley | Lake County | 70 | 28 | -69 | 53 |
| Williamson River near Chiloquin | Klamath | 535 | 56 | -31 | 55 |
| Owyhee River near Rome | Owyhee | 487 | 61 | -44 | 47 |
| (*)NF Malheur River near Beulah | Malheur | 115 | 70 | -52 | 69 |
| Grande Ronde R at Troy | Grande Ronde Powder/Burnt | 6,820 | 129 | -23 | 107 |
| Umatilla River nr Gibbon | Umatilla Lower John Day | 153 | 86 | -82 | 141 |
| John Day River at Service Crk | Upper John Day | 2,227 | 89 | -63 | 80 |
| (*)Little Deschutes River nr LaPine | Upper Deschutes | 145 | 58 | -32 | 58 |
| Hood River nr Hood River | Lower Deschutes Mt.Hood | 649 | 77 | -27 | 73 |
| Willamette River at Salem | Willamette | 13,372 | 91 | -13 | 66 |
| Wilson River near Tillamook | North Coast | 544 | 139 | 15 | 92 |
| Umpqua River near Elkton | Rogue/Umpqua | 3,308 | 90 | -31 | 62 |
| Rogue River near Agness | Rogue/Umpqua | 3,407 | 91 | -5 | 53 |
| SF Coquille River at Powers | South Coast | 144 | 69 | -46 | 55 |
| Chetco River near Brookings | South Coast | 719 | 97 | -70 | 65 |

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

7/1/2020

USGS



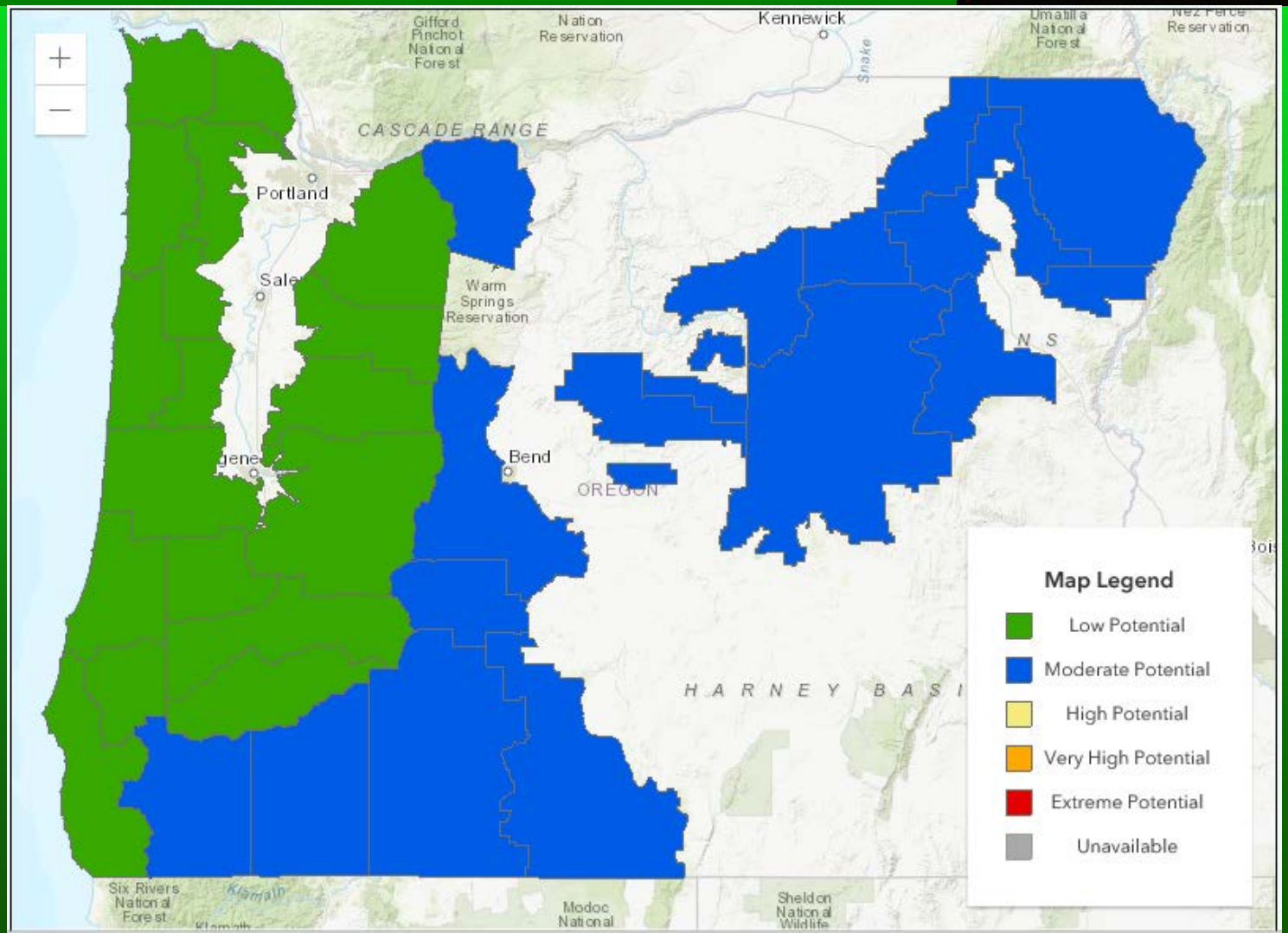

| Explanation - Percentile classes | | | | | | | |
|---|---|---|---|---|---|---|---|
| lowest-10th percentile | 5 | 10-24 | 25-75 | 76-90 | 95 | 90th percentile -highest | Runoff |
| Much below Normal | | Below normal | Normal | Above normal | Much above normal | | |

USGS

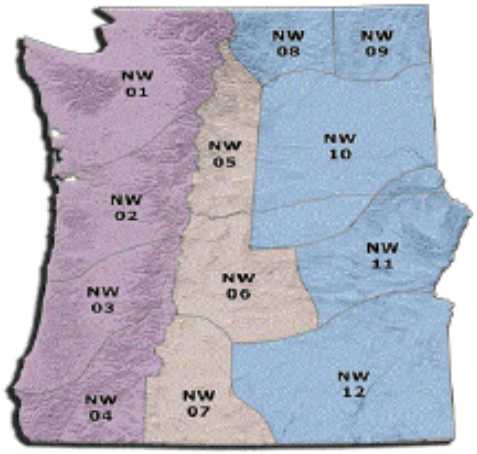
# WSAC Wildfire Update

## July 2020

# Significant Fire Potential, Jul 7



# Pacific NW 7-Day Fire Potential




**Legend**

| Fire Environment (FEN) 4 levels | |
|---|---|
| *Minimal* | - The Overall Fire Environment suggests a very low risk for Large fires (less than 1% chance) |
| *Normal* | - The Overall Fire Environment suggests a normal risk for large fires (1 - 4% chance) |
| *Elevated* | - The Overall Fire Environment suggests a moderately high risk for large fires (5 - 19% chance) |
| *High Risk* | The risk for large fire(s) is very high (≥ 20%)<br>Triggers: 1. ⚡ (Significant Lightning)<br>2. BEN (Critical Burn Environment) |

The assessment of the overall fire environment considers multiple factors including weather, lightning amount and fuel dryness. Large Fire probabilities are derived objectively via statistical methods. **High Risk** levels (≥ 20% probability of a large fire) are almost always due to significant lightning as burning conditions alone rarely result in a large fire probability much above about 10%.

## *Pacific Northwest*
## *7 Day Significant Fire Potential*

PREDICTIVE SERVICES

**Wednesday, 7/8/2020**

| Predictive Service Areas | ytd | Today | Thu | Fri | Sat | Sun | Mon | Tue |
|---|---|---|---|---|---|---|---|---|
| NW01 | | | | | | | | |
| NW02 | | | | | | | | |
| NW03 | | | | | | | | |
| NW04 | | | | | | | | |
| NW06 | | | | | | | | |
| NW08 | | | | | | | | |
| NW07 | | | | | | | | |
| NW08 | | | | | | | | |
| NW09 | | | | | | | | |
| NW10 | | | | | | | | |
| NW11 | | | | | | | | |
| NW12 | | | | | | | | |

**Fire Weather:** A weak ridge of upper level pressure will bring warmer and drier weather today, although western and northeastern Washington might see an isolated shower or two. Temperatures will gradually warm for the next several days, but stay close to seasonal average. Breezy winds and isolated showers and thunderstorms return Thursday as another disturbance crosses the region. Friday and Saturday appear dry and calm before another system approaches Sunday. Check local NWS forecasts for details in your area.

**Fire Potential:** Significant fire potential remains at or below seasonal normal with the main fire threat remaining in light fuels on the lee side of the Cascades and around the Columbia Basin, particularly in breezy periods.

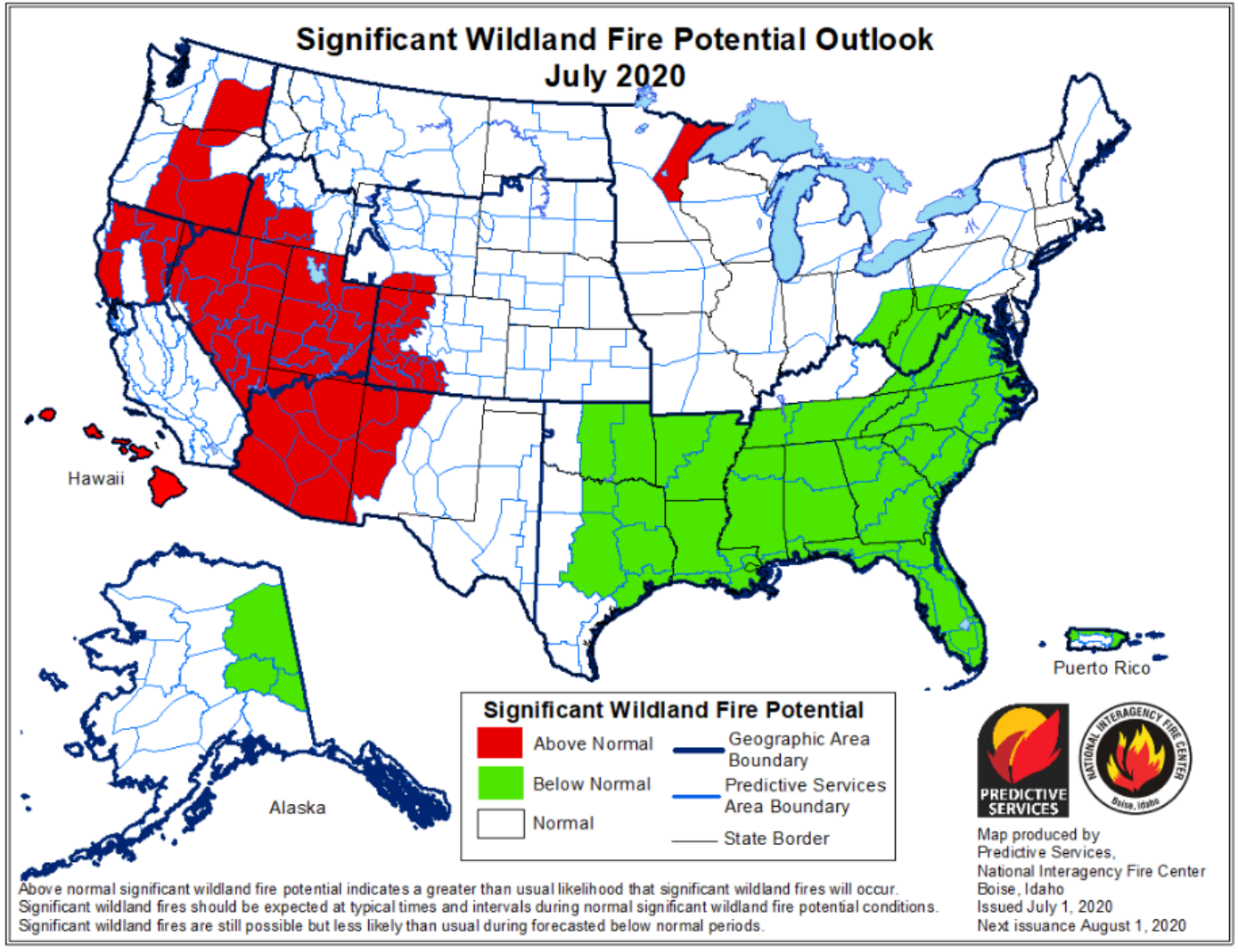
**Preparedness Level:**

Northwest: 2
National: 3

- Eric Wise

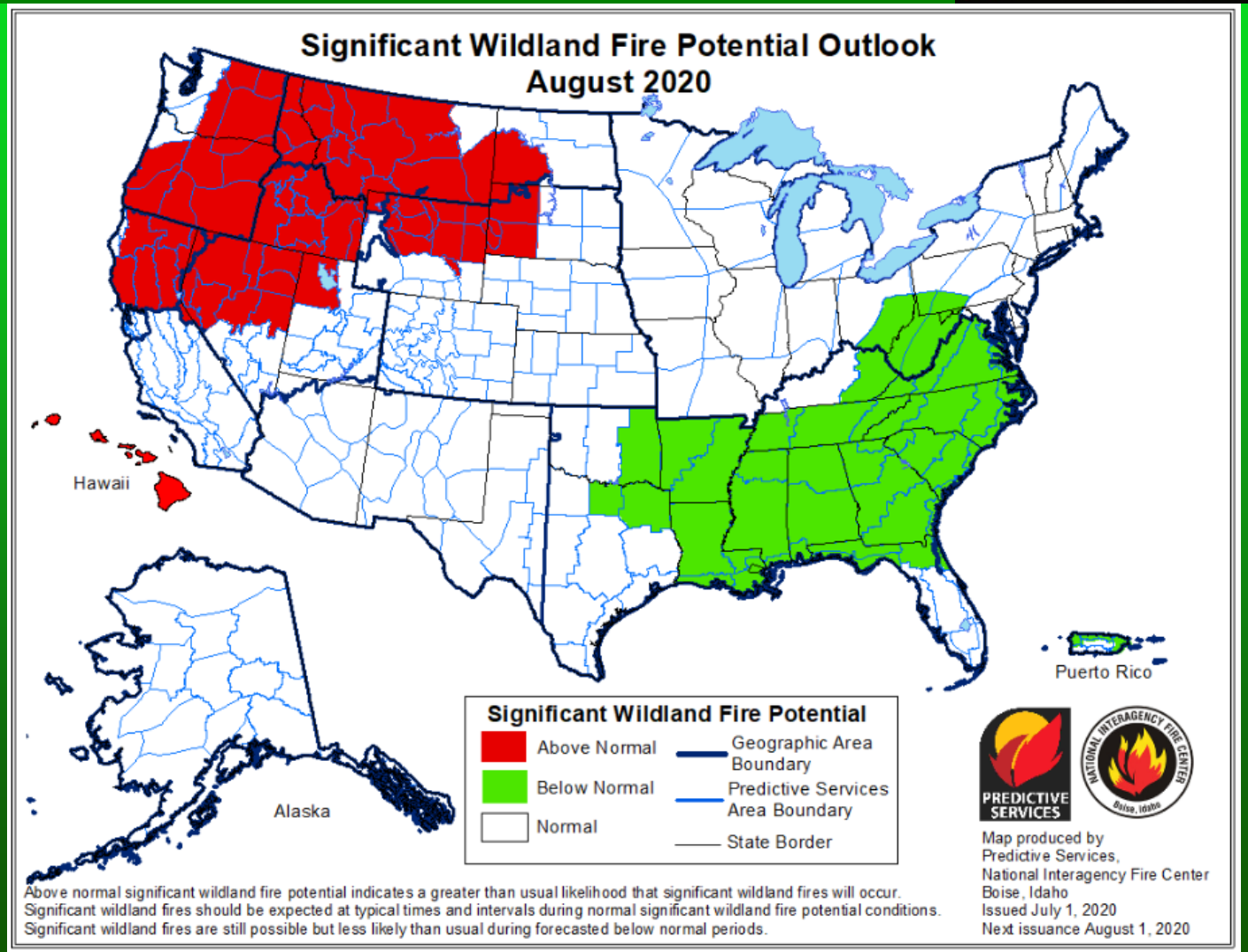
# Significant Fire Potential Outlook

July



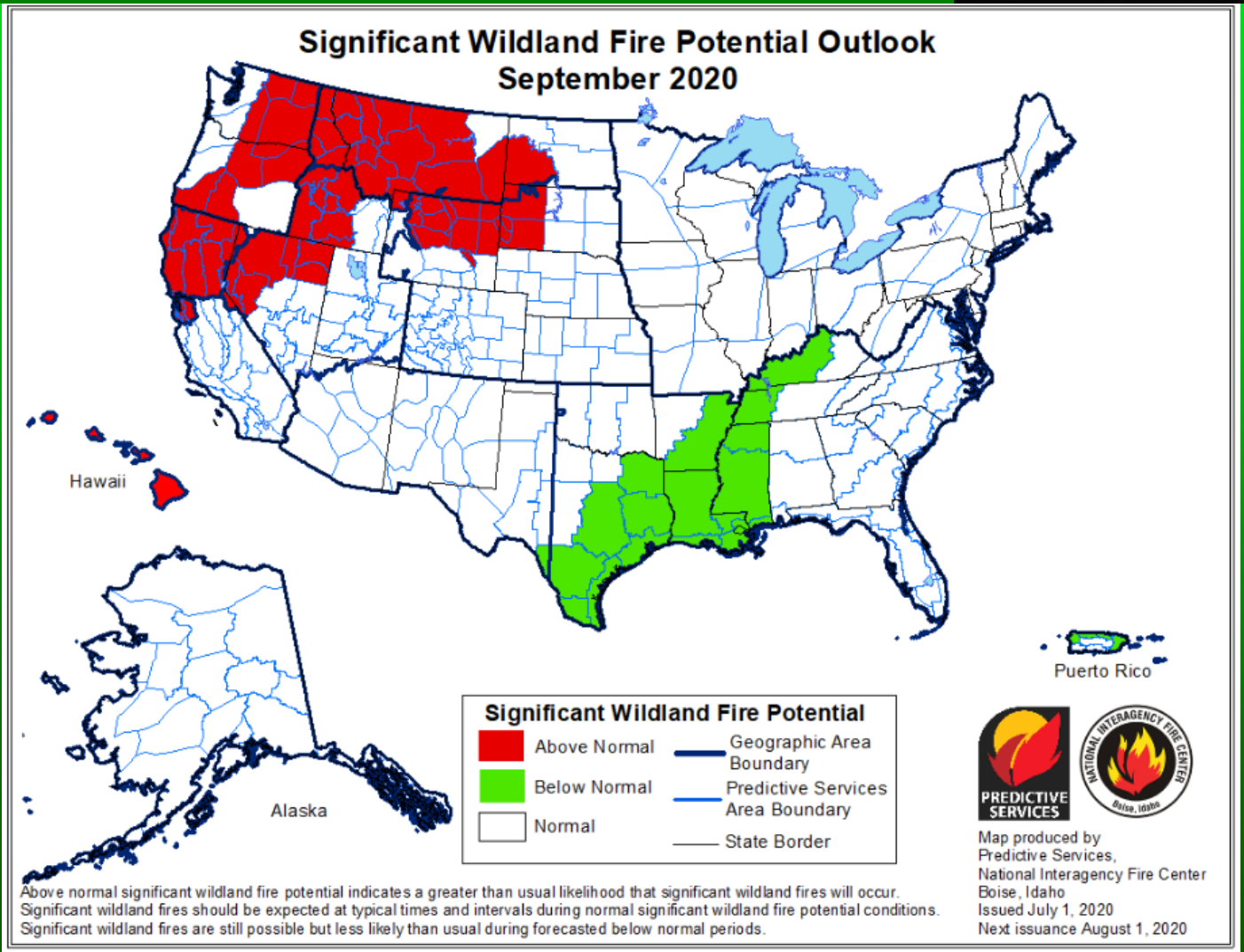
# Significant Fire Potential Outlook

August



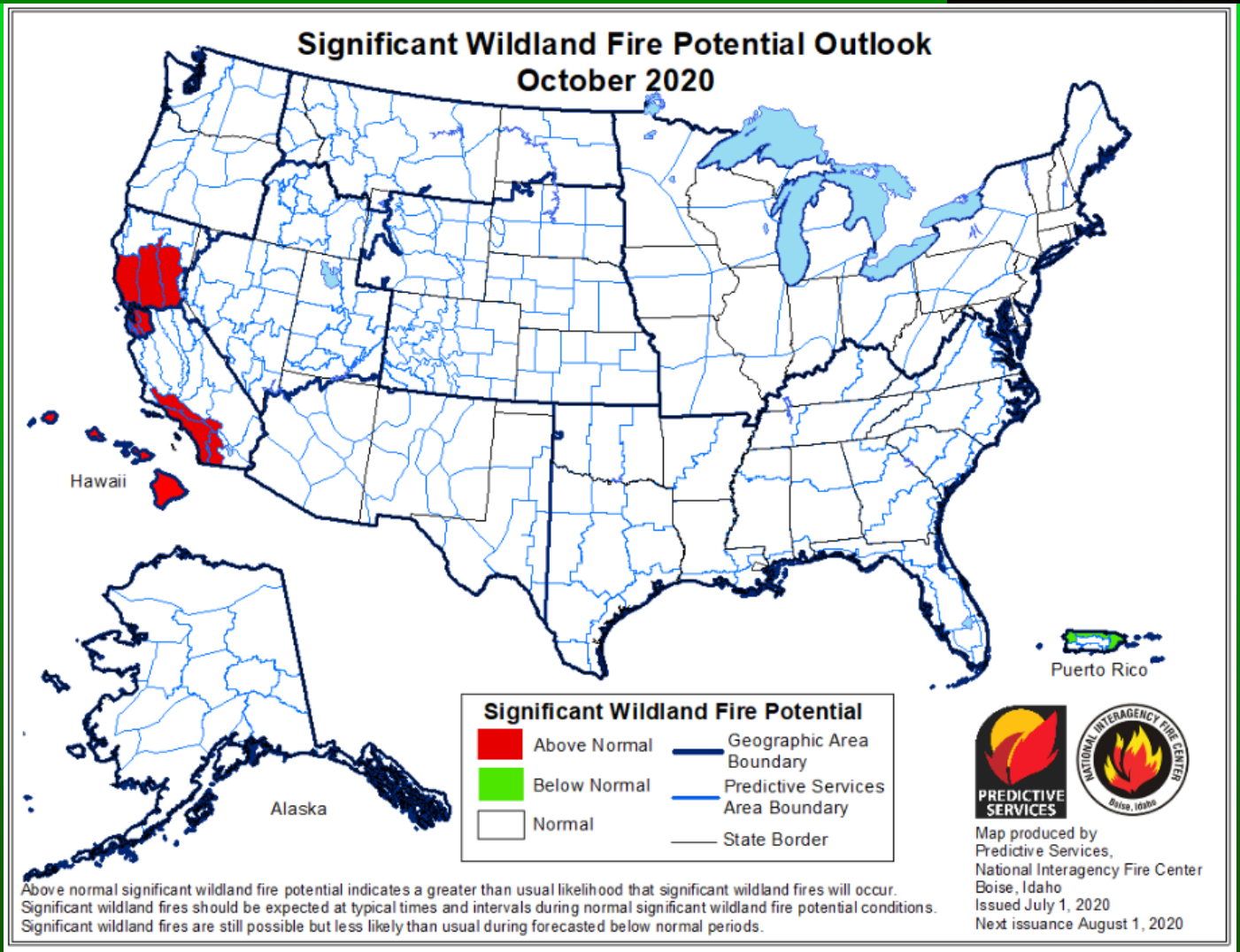
# Significant Fire Potential Outlook

September



# Significant Fire Potential Outlook

October



# WSAC Wildfire Update

Nick.J.Yonker@Oregon.gov

# Cyanotoxin in Drinking Water Response

Kari Salis, PE

OHA Drinking Water Services

Oregon Health Authority

PUBLIC HEALTH DIVISION
Drinking Water Services

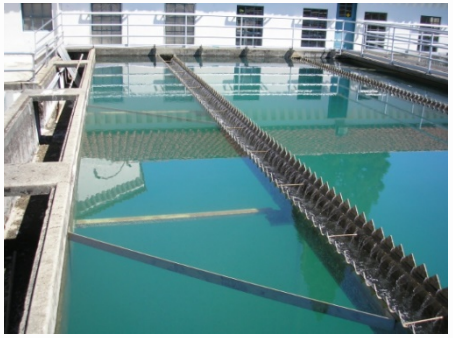
# Cyanotoxins in drinking water: activities

- Regulatory oversight, receive data: **OHA-DWS**
- Public health information: **OHA** (available now)
- Monitoring: **Water systems** (60)
- Sample analysis, qPCR study: **DEQ Lab**
- More studies, technical resources: **EPA**
- Recreational HAB advisories: **OHA-EPH**
- Sampling lakes: **Whoever wants to** (no unified effort)
- Crossing fingers: **Everyone!**

# Response role: Public water system

- Issue a drinking water advisory as required by OHA
  - They determine the best methods to reach all customers
- Pursue treatment options or mitigation measures
- Consider provision of alternate water source
  - Trucked or bottled water
- Provide test results to media / public
- Provide public health information to public (using materials created by OHA-DWS)
- Request emergency assistance from county if needed

# Response roles: State Agencies



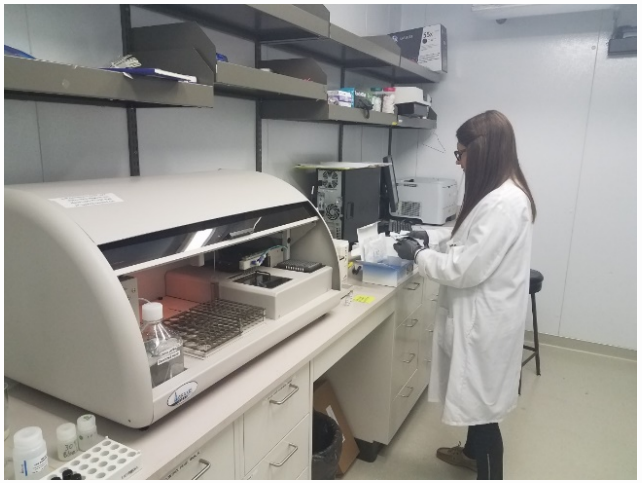
- Oregon Health Authority
  - Drinking Water Services
    - Regulatory agency
    - Receives / interprets analytical results
    - Create FAQs (done)
    - Advise on water treatment or mitigation
    - Determine when advisory can be lifted
  - Environmental Public Health (consult)
  - Health Security and Preparedness
    - Coordinate response, information-sharing as needed
  - Acute and Communicable Disease (consult)

# Response roles: State Agencies

- Oregon Department of Agriculture (ODA)
  - Regulate grocery stores
  - Regulate food processors
  - Regulate some restaurants (brewpubs)
  - Veterinary health of livestock

# Response roles: State Agencies

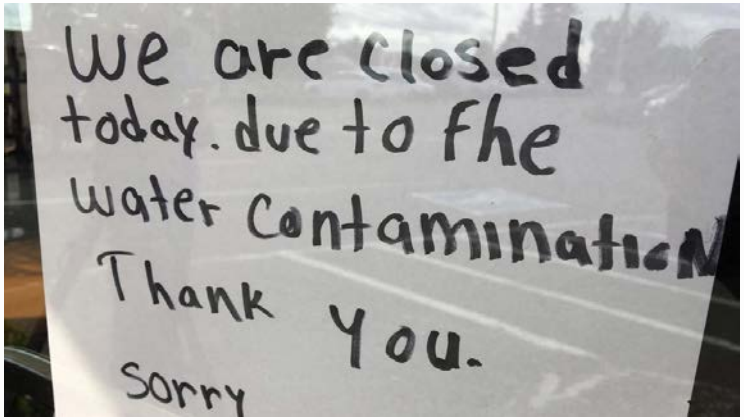
- Department of Environmental Quality (DEQ)
  - Lab: analysis of samples
  - Source protection team: determined which sources would qualify for monitoring. Limited role in response.



# Response roles: State Agencies

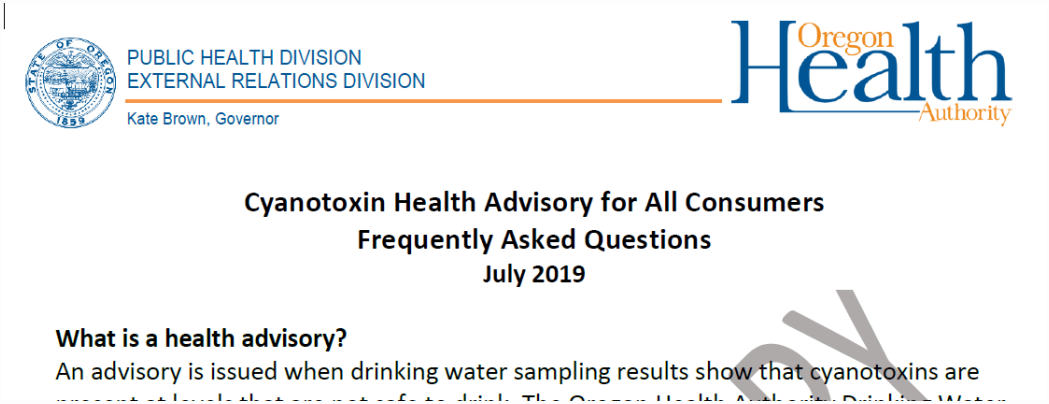
- Oregon Emergency Management (OEM)
  - Facilitate communications
  - Coordinate response if requested

# Response roles: County




- Local public health authority
  - Regulate restaurants, lodging,
  - Syndromic surveillance
  - Provision of health information
- Emergency management
  - Coordinate resources as requested
  - Information sharing
  - Elevate to state OEM as necessary

# Resources



PUBLIC HEALTH DIVISION
EXTERNAL RELATIONS DIVISION
Kate Brown, Governor

Oregon Health Authority

**Cyanotoxin Health Advisory for All Consumers**
**Frequently Asked Questions**
**July 2019**

**What is a health advisory?**
An advisory is issued when drinking water sampling results show that cyanotoxins are

- Lots of info on cyanotoxins in drinking water: www.healthoregon.org/dwcyanotoxins
- Data for any public water system: https://yourwater.oregon.gov/ (cyanotoxins)
- Kari Salis, PE, karyl.l.salis@dhsoha.state.or.us