

Water Supply Conditions Report

Drought Readiness Council



Ken Stahr
Oregon Water Resources
Department
June 12, 2018

3 Oregon SNOTEL Sites with Remaining measurable SWE – June 12, 2018

GRANDE RONDE, POWDER, BURNT, IMNAHA

Aneroid Lake #2 7400' SWE = 2.6" Normal = 8.7" Percent Normal = 30%

HOOD, SANDY, LOWER DESCHUTES

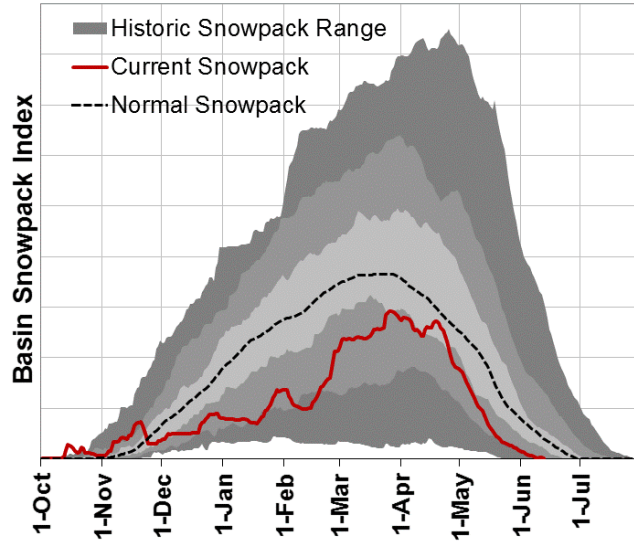
Mt. Hood Test Site 5370' SWE = 0.6" Normal = 34.4" Percent Normal = 2%

WILLAMETTE

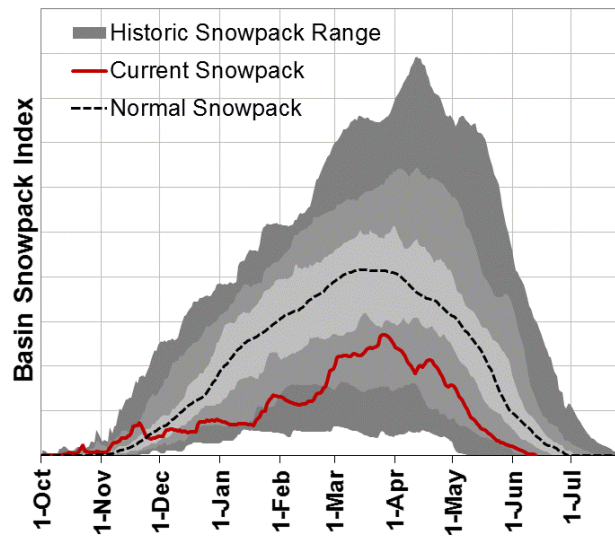
Summit Lake 5610' SWE = 0.3" Normal = 19.9" Percent Normal = 2%

Water Year 2018 – June 12th

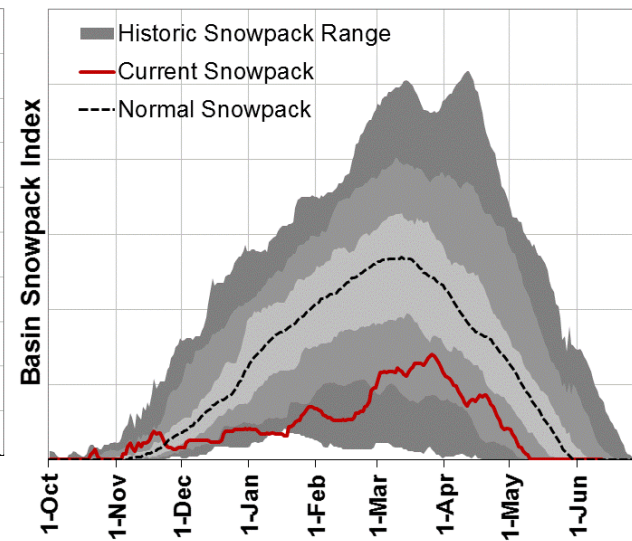
Willamette



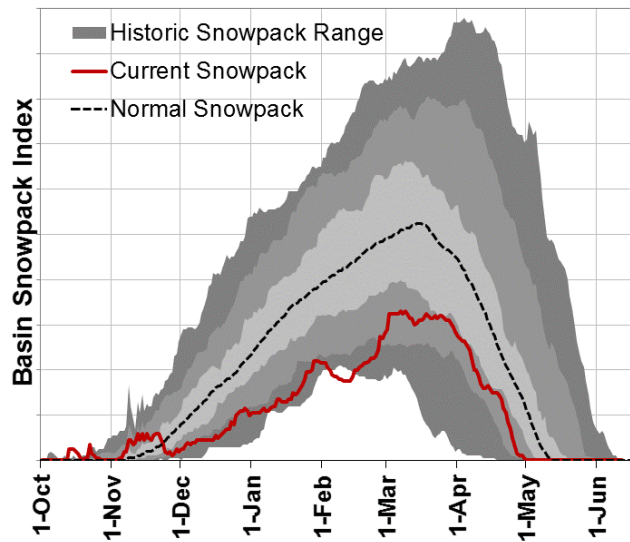
Rogue/Umpqua



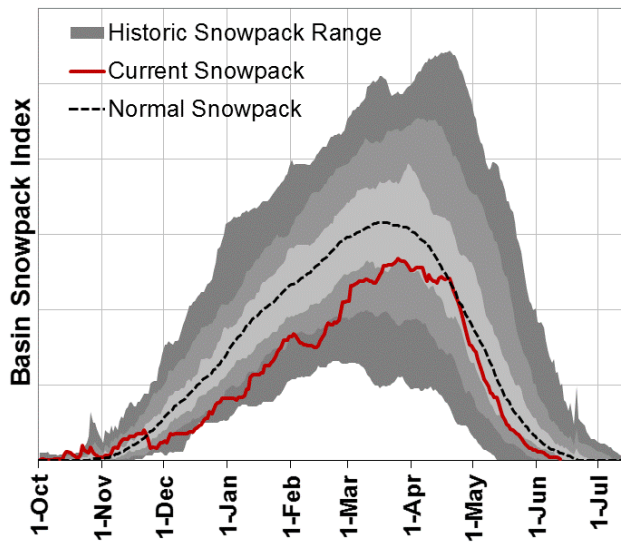
Klamath



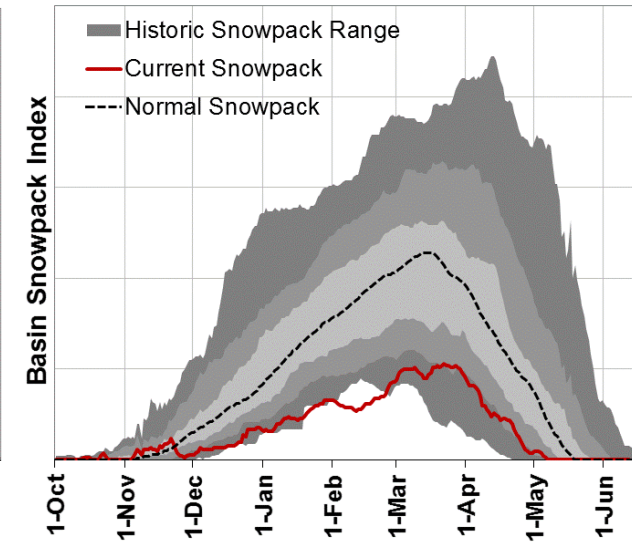
John Day



Grande Ronde/Powder/Burnt



Owyhee/Malheur



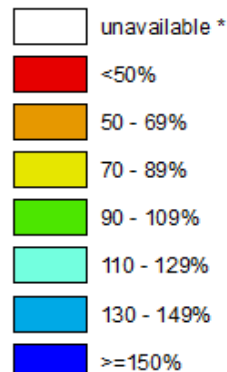
Statewide SNOTEL Precipitation is 89% of normal on June 12, 2018

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

Jun 12, 2018

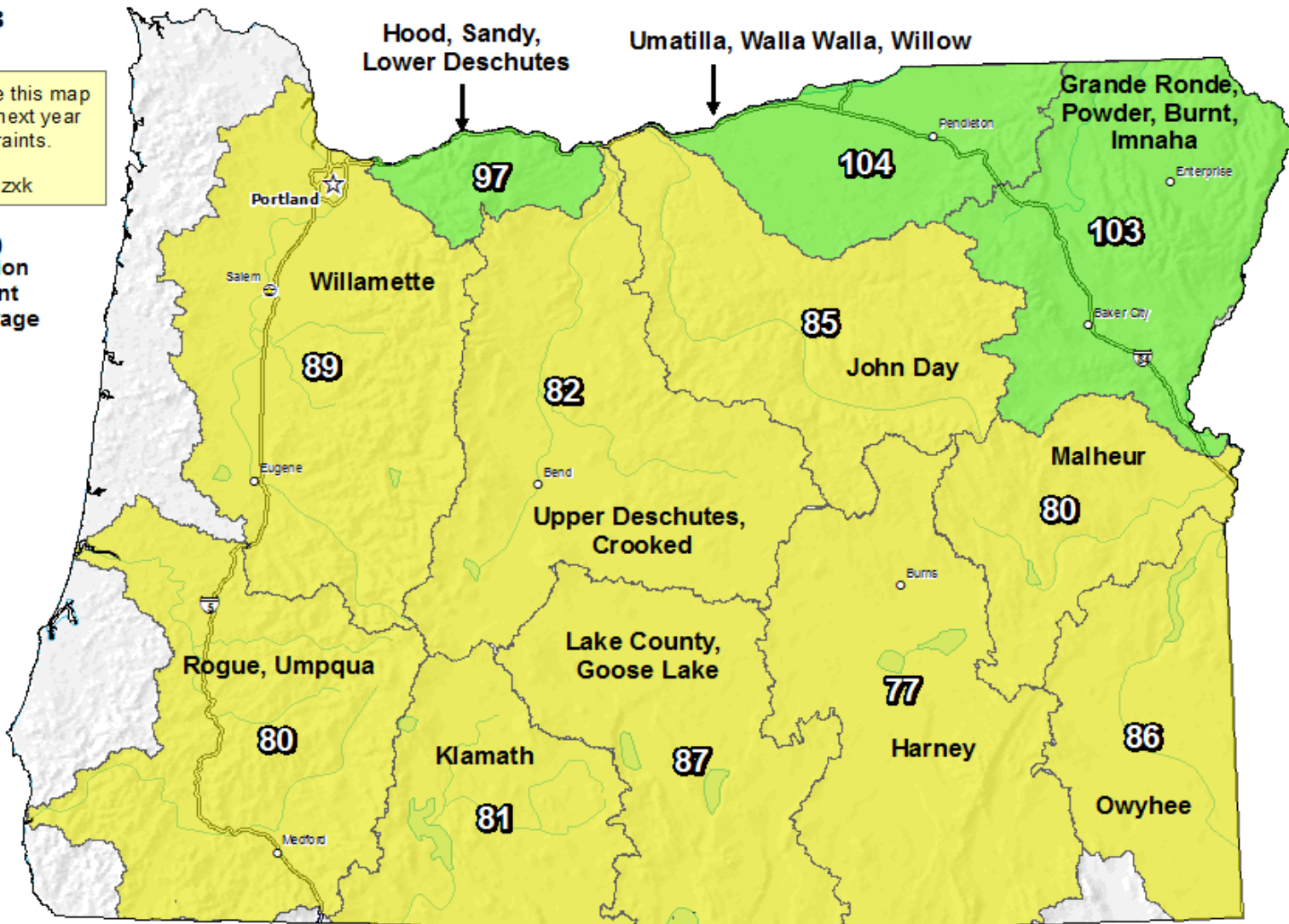
Notice: We anticipate this map will not be available next year due to staffing constraints. Alternate maps: <https://go.usa.gov/xnzxk>

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

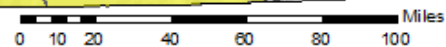


* Data unavailable at time of posting or measurement is not representative at this time of year

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).

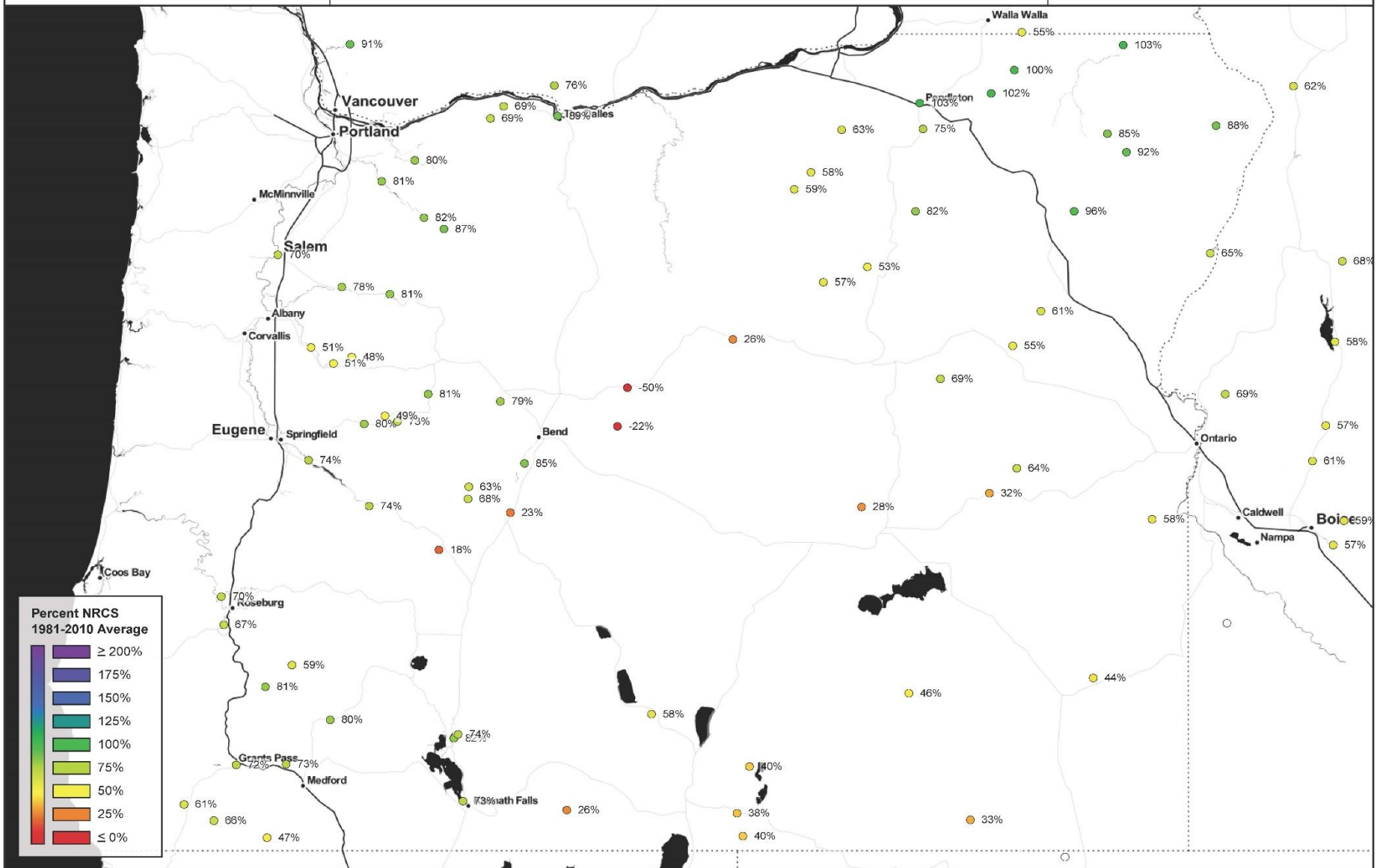


Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Forecast Volume,
50% Exceedance Probability

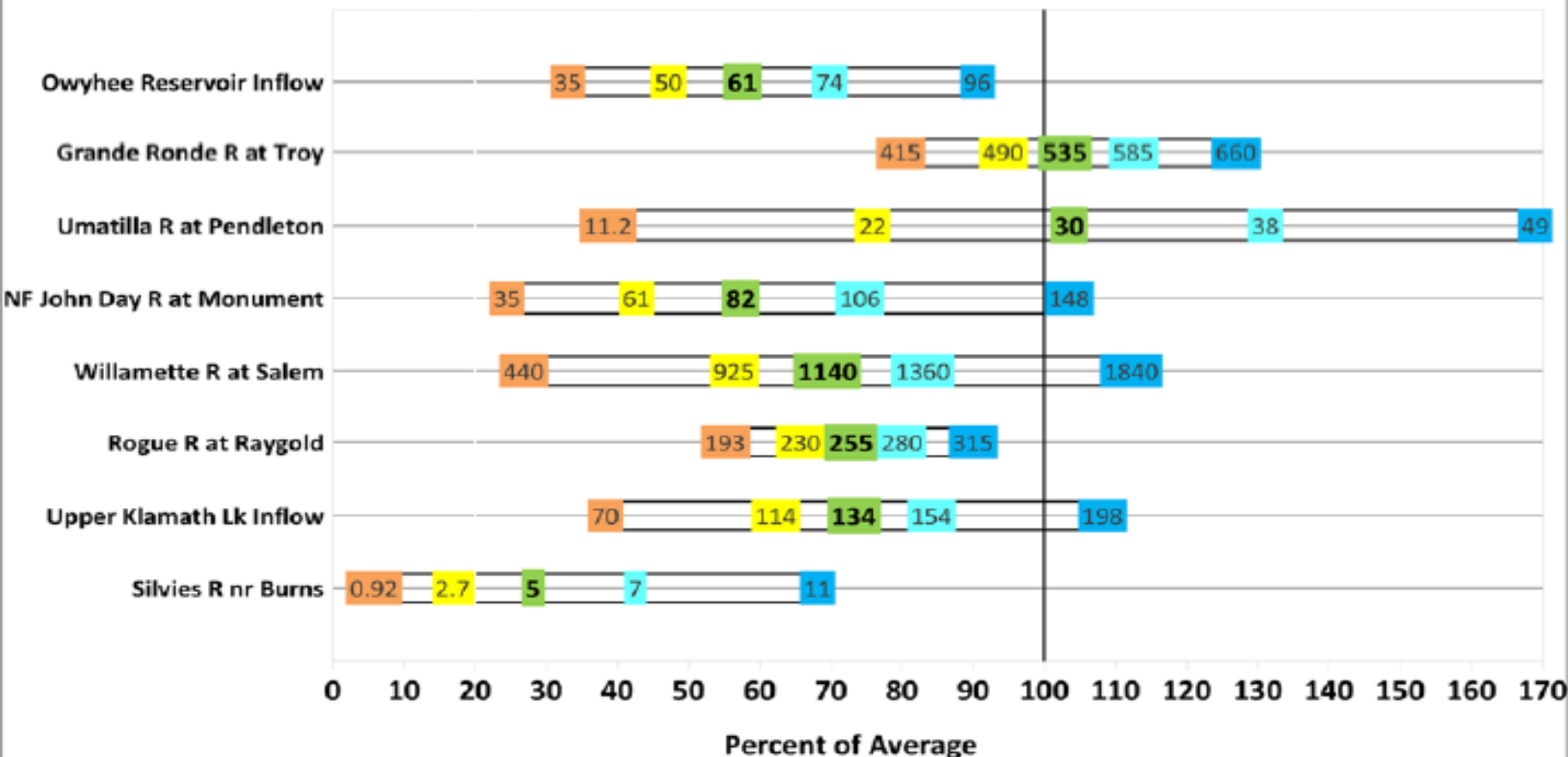
Percent NRCS 1981-2010 Average

June - September, June 1, 2018



Summary of Streamflow Forecasts across Oregon

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



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

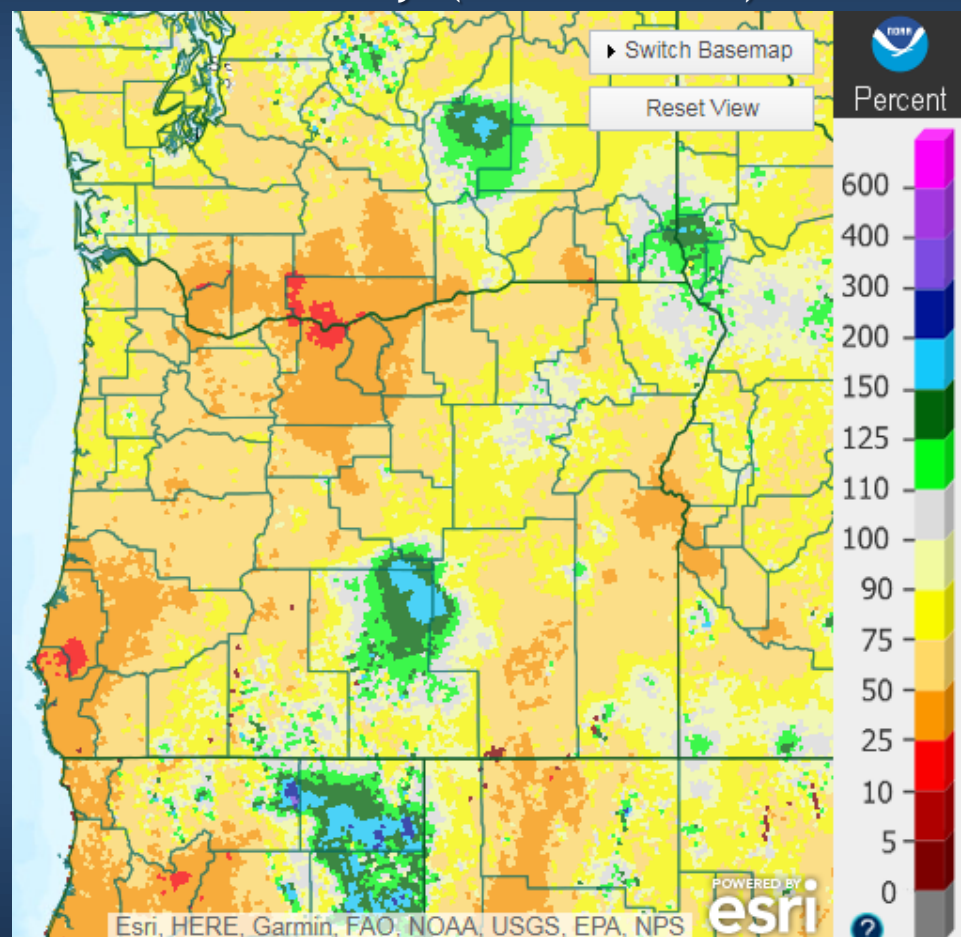
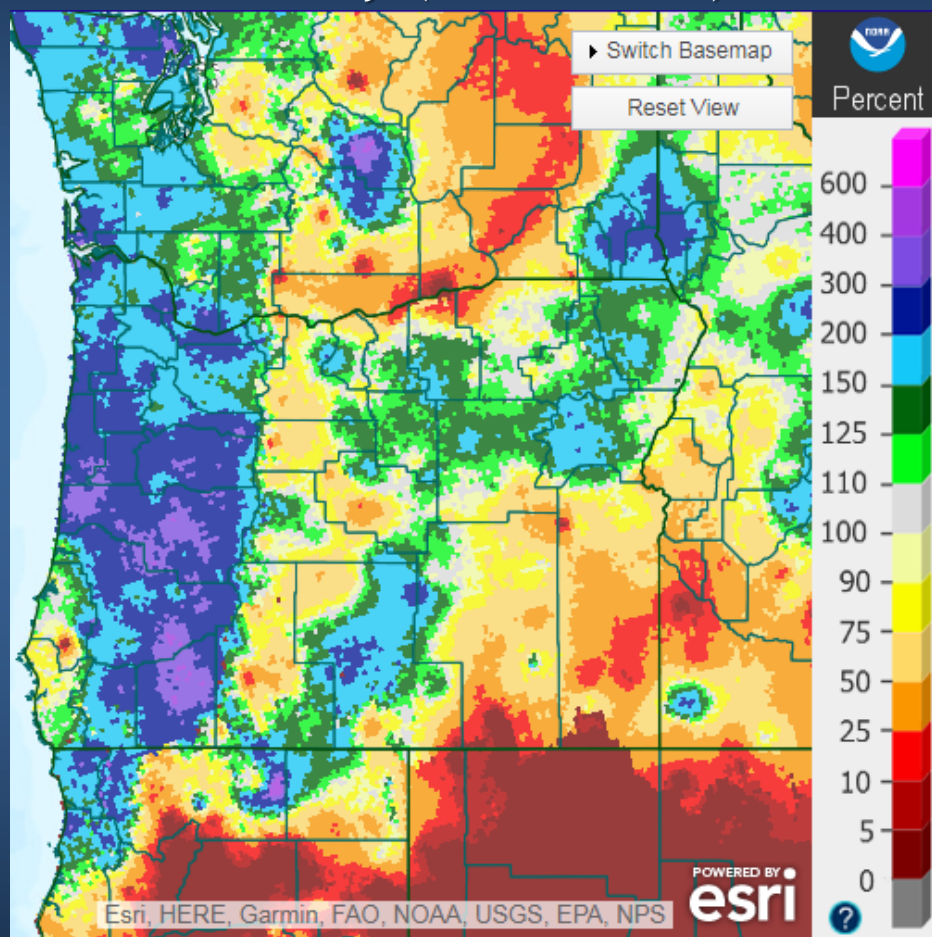
90% Exceedance Forecast (KAF) There is a 90% chance that flows will exceed this volume.	70% Exceedance Forecast (KAF) There is a 70% chance that flows will exceed this volume.	50% Exceedance Forecast (KAF) There is a 50% chance that flows will exceed this volume.	30% Exceedance Forecast (KAF) There is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



Recent Precipitation Percent of Average

Past 7 Days (as of June 11th)

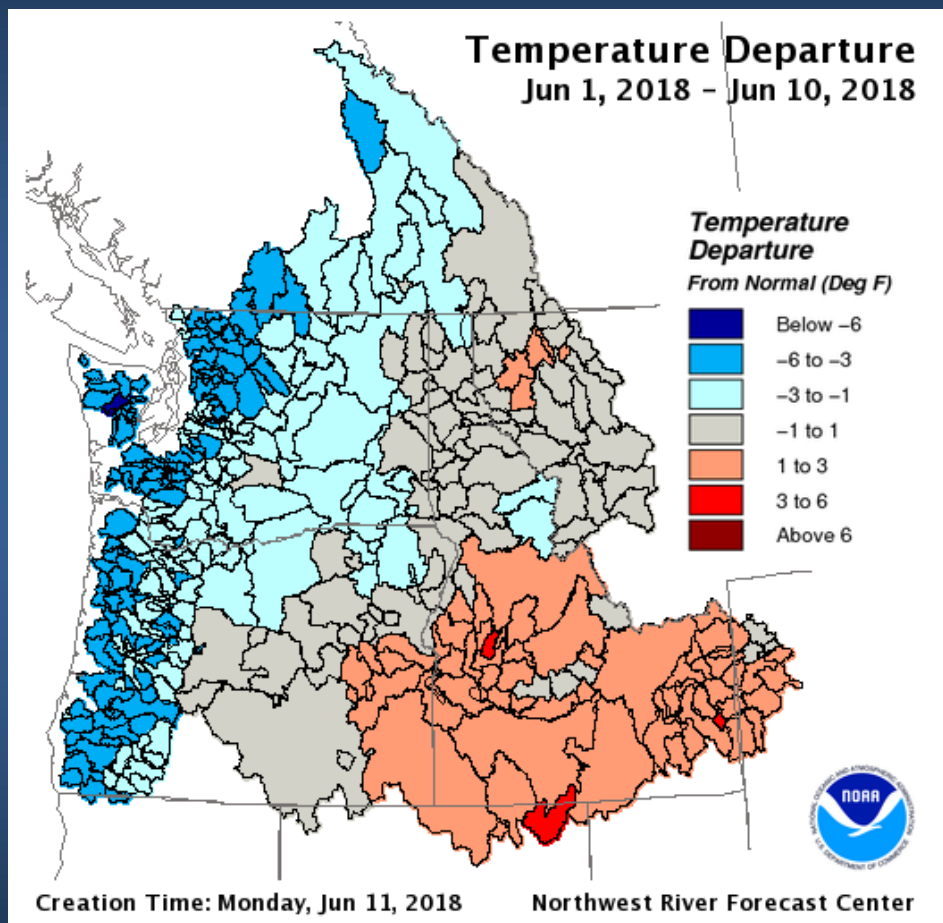
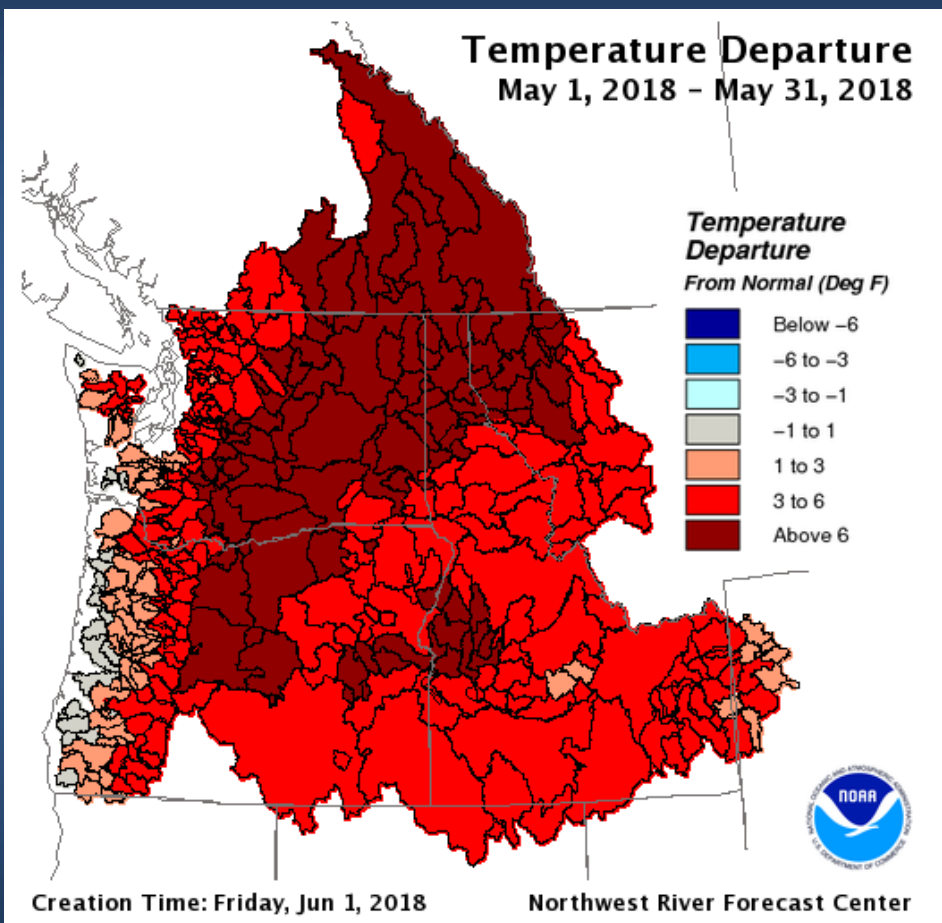
Past 60 Days (as of June 11th)





Recent Temperatures

Columbia Basin Conditions



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

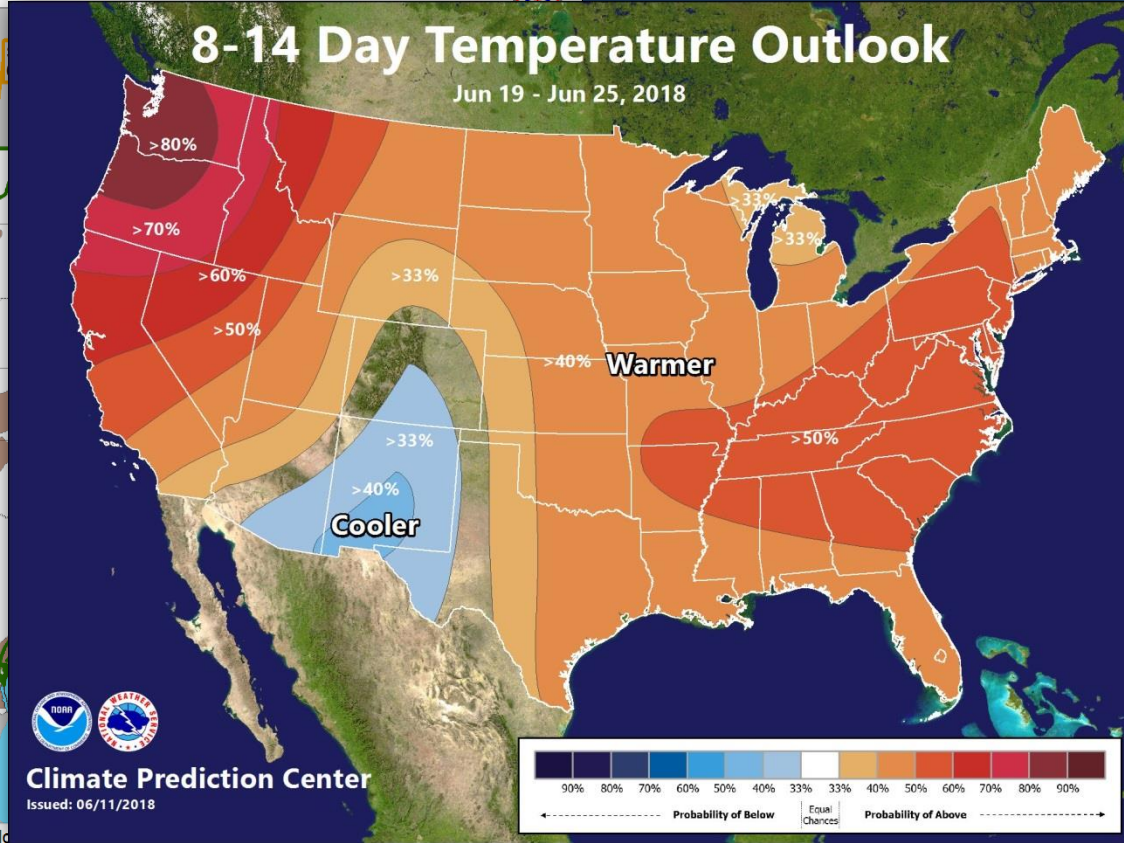
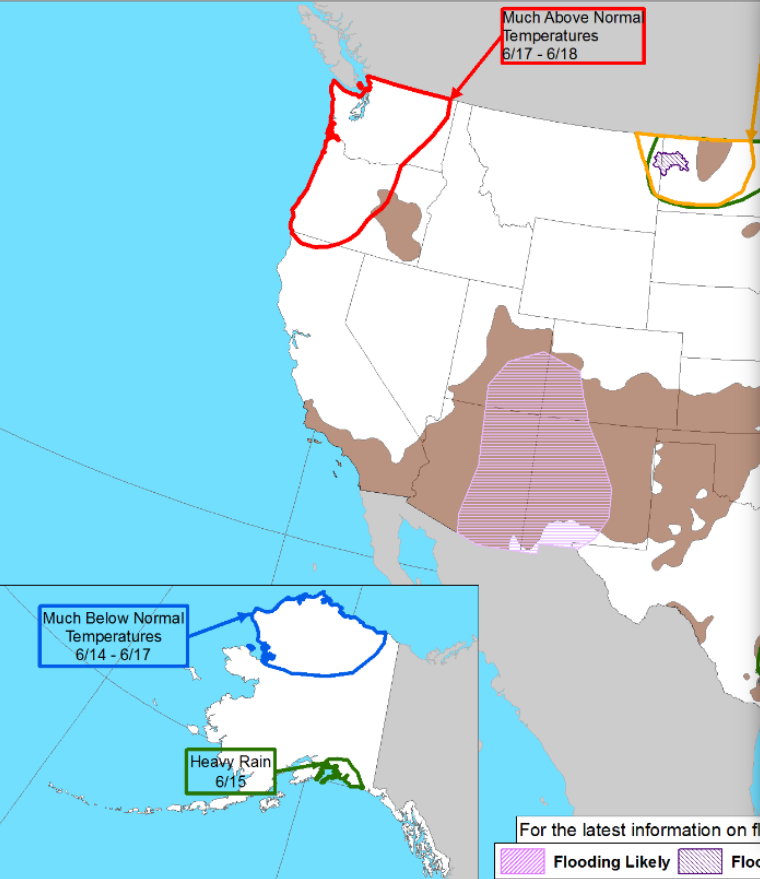


Mid/Late-June Outlook

Forecast Temperatures



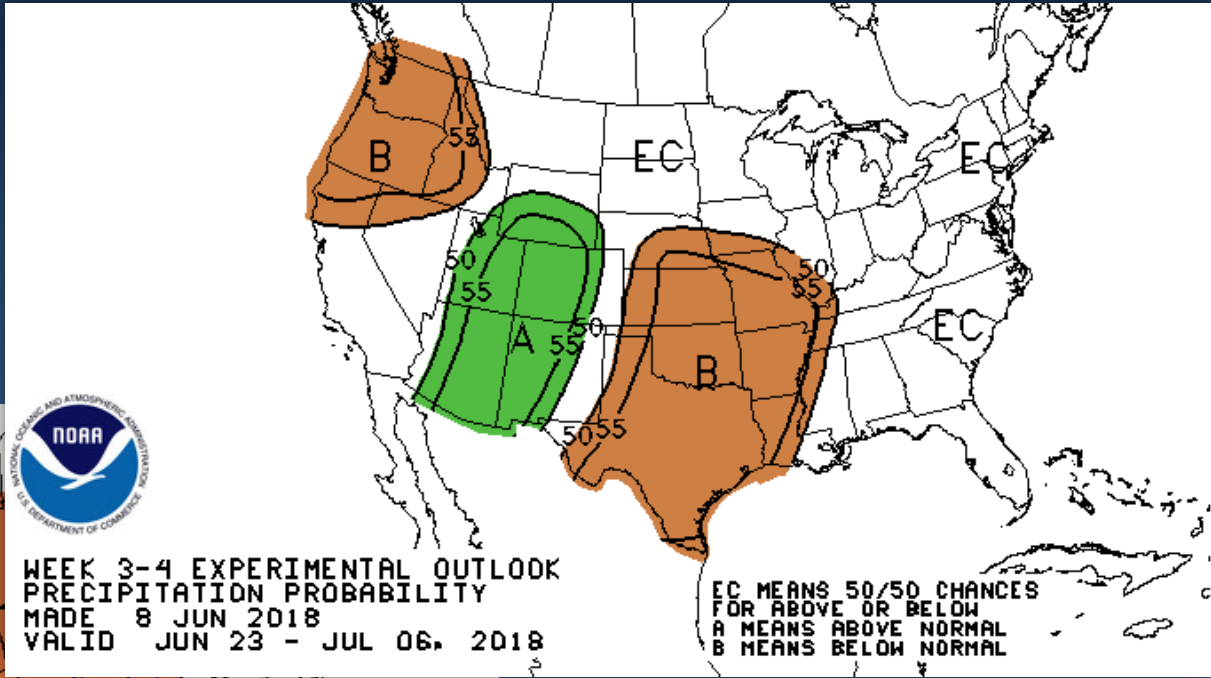
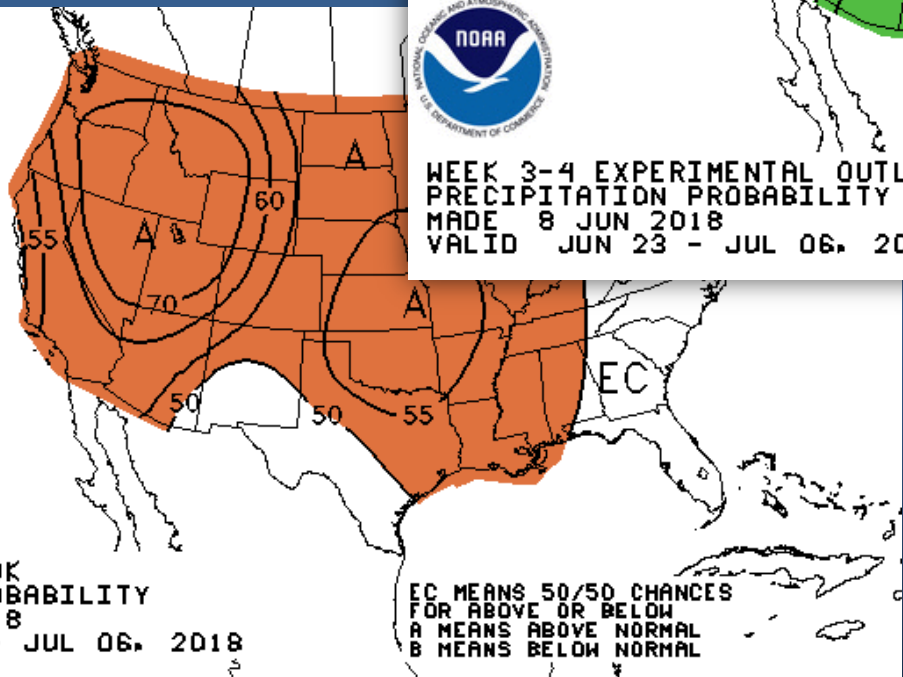
Day 3-7 U.S. Hazards Outlook
Valid: 06/14/2018-06/18/2018





Late-June / Early-July Outlook

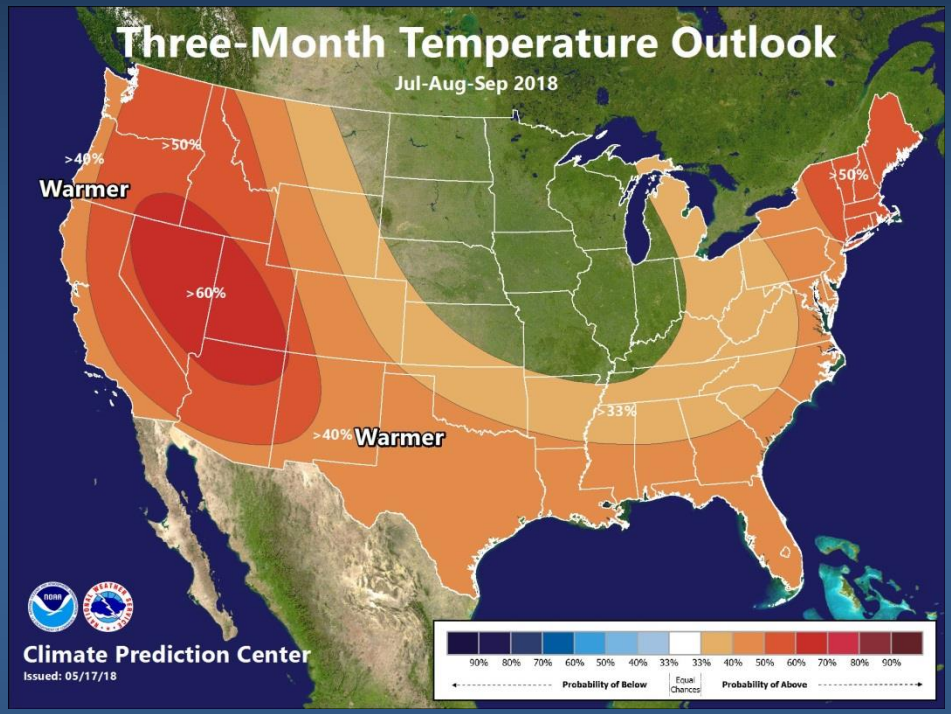
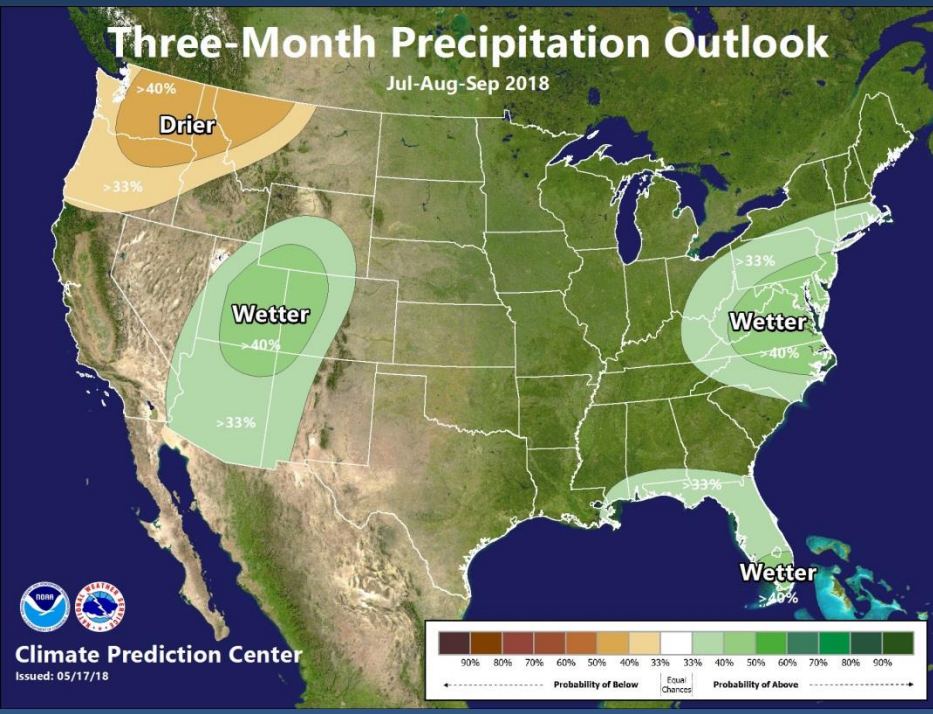
Temperatures



Precipitation



Outlook for July-August-September 2018

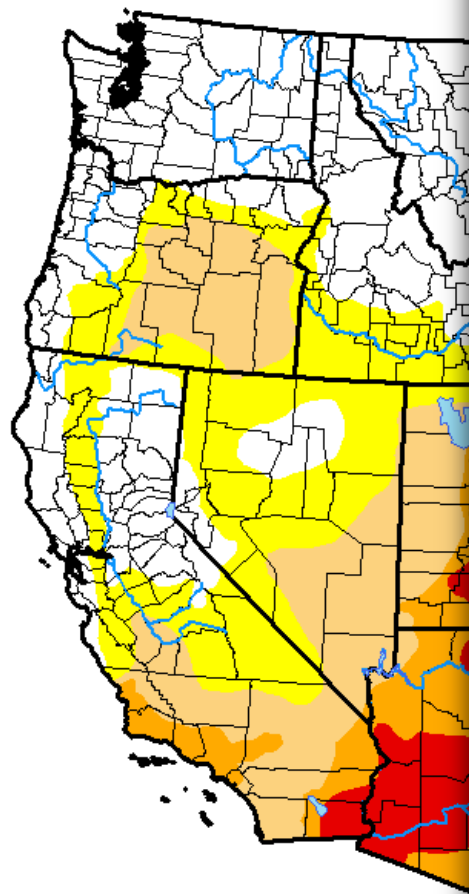




Drought Monitor

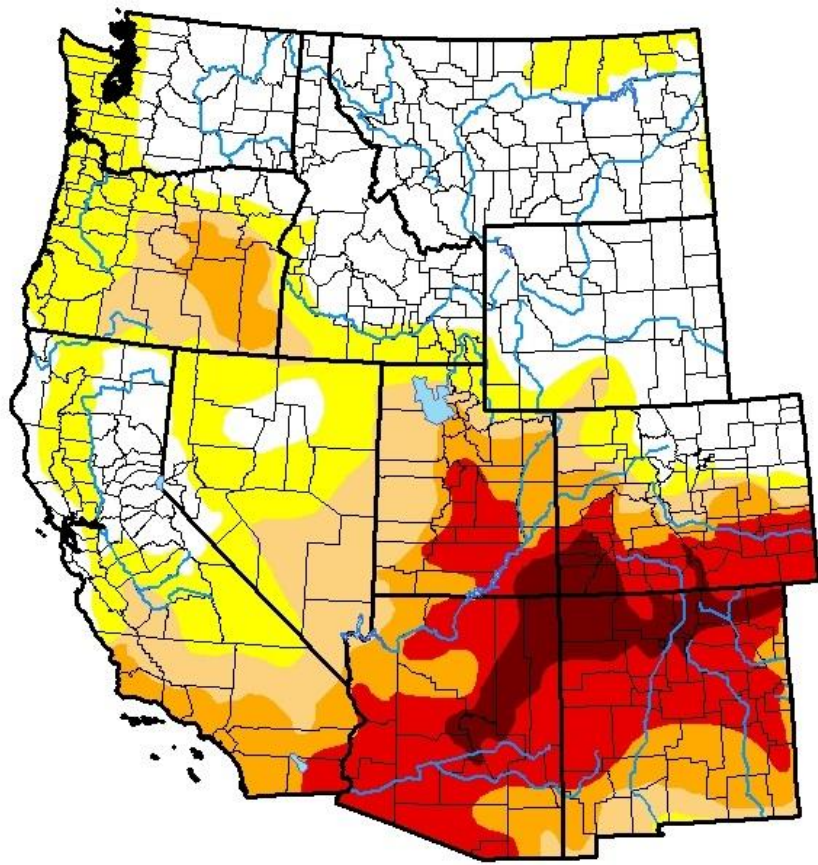
U.S. Drought Monitor West

May 8, 2018
(Released Thursday, May 10, 2018)
Valid 8 a.m. EDT



U.S. Drought Monitor West

June 5, 2018
(Released Thursday, Jun. 7, 2018)
Valid 8 a.m. EDT



Intensity:

-  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. See accompanying text summary for forecast statements.

Author:

Anthony Artusa
NOAA/NWS/NCEP/CPC



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

Percent of Average Streamflow Month of May, 2018

Percent of Average Streamflow

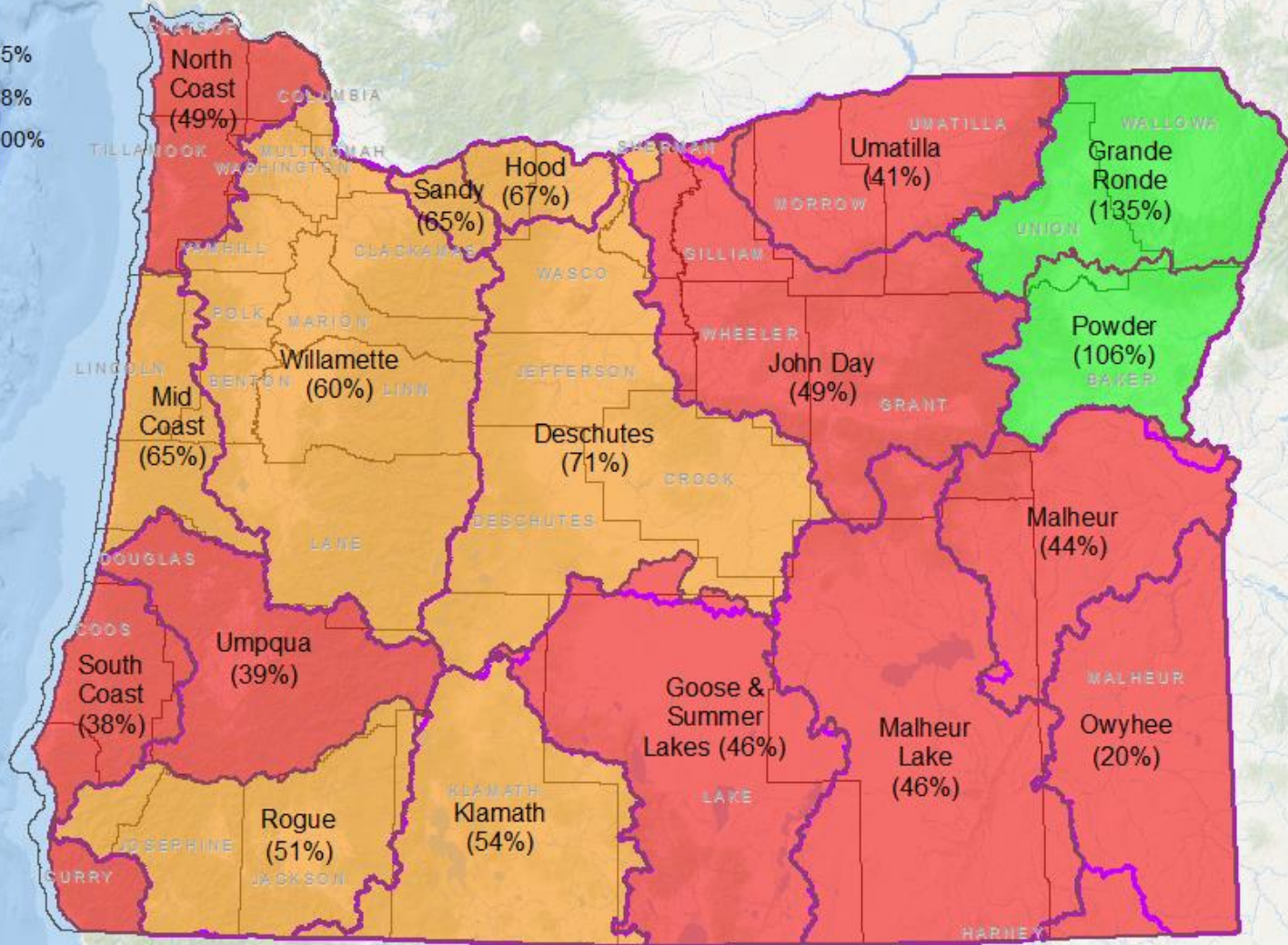
WRD Basin

- < 50%
- 50% - 75%
- 76% - 88%
- 89% - 100%
- > 100%

NRCS Basin

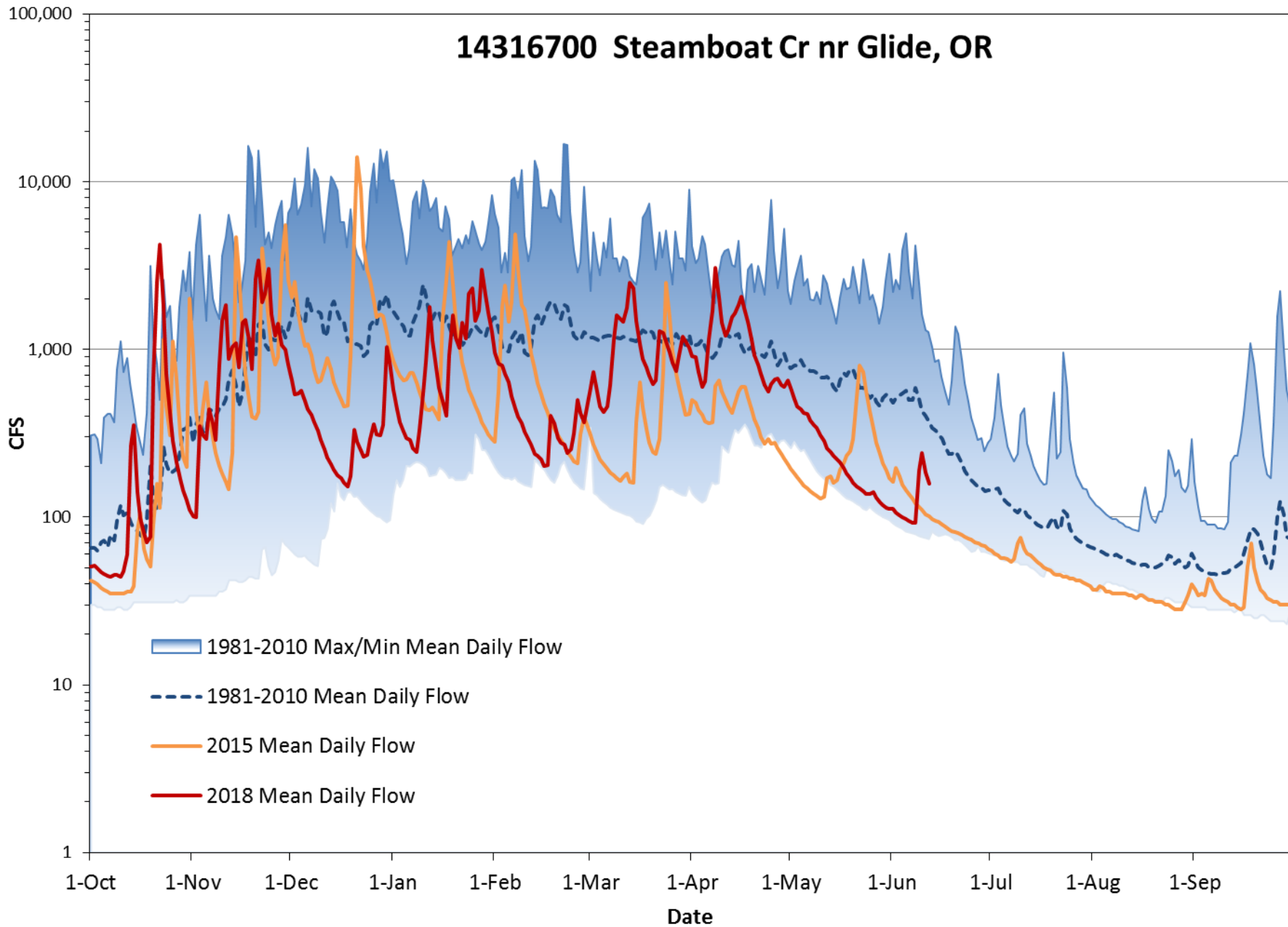


County

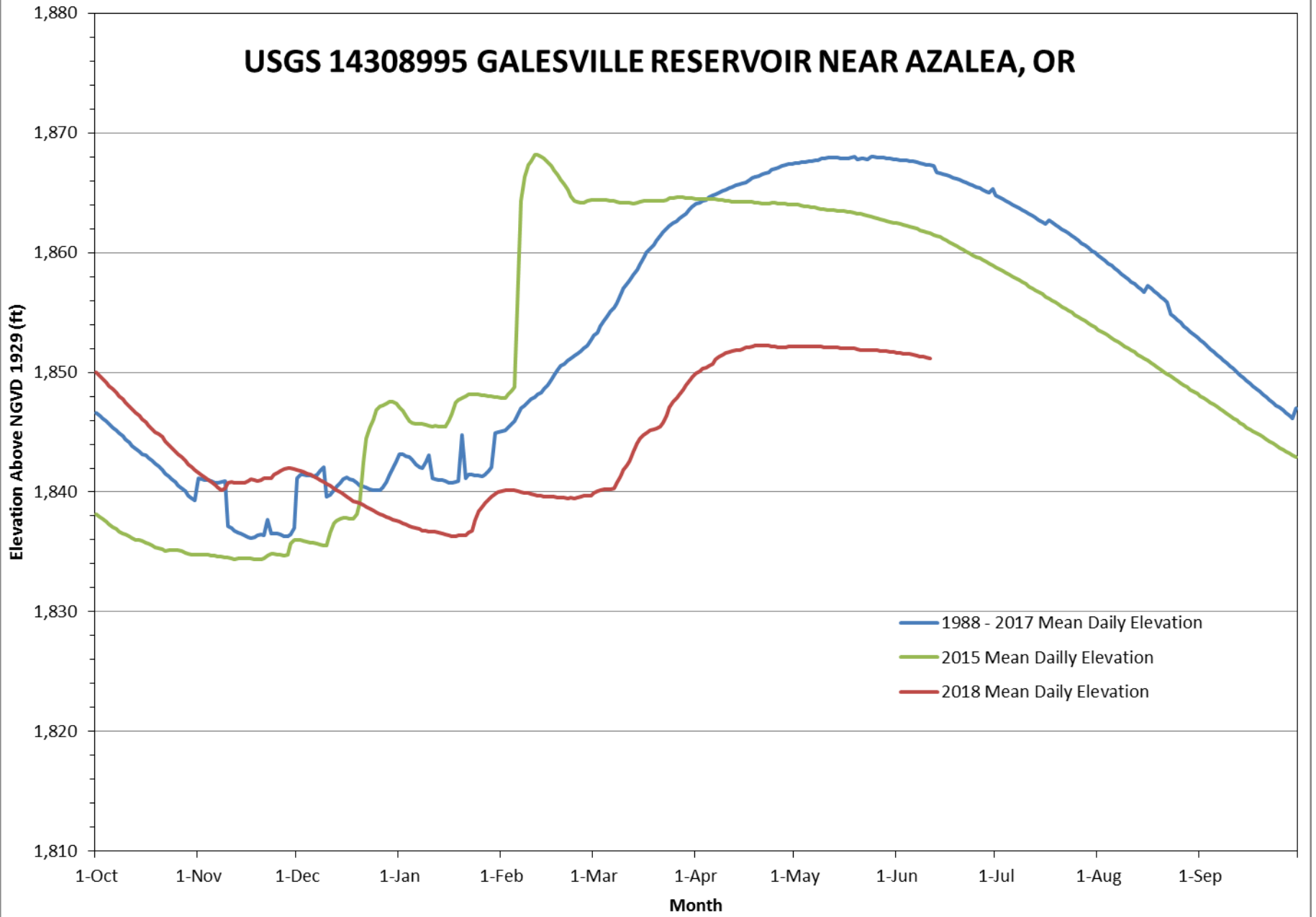


Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.

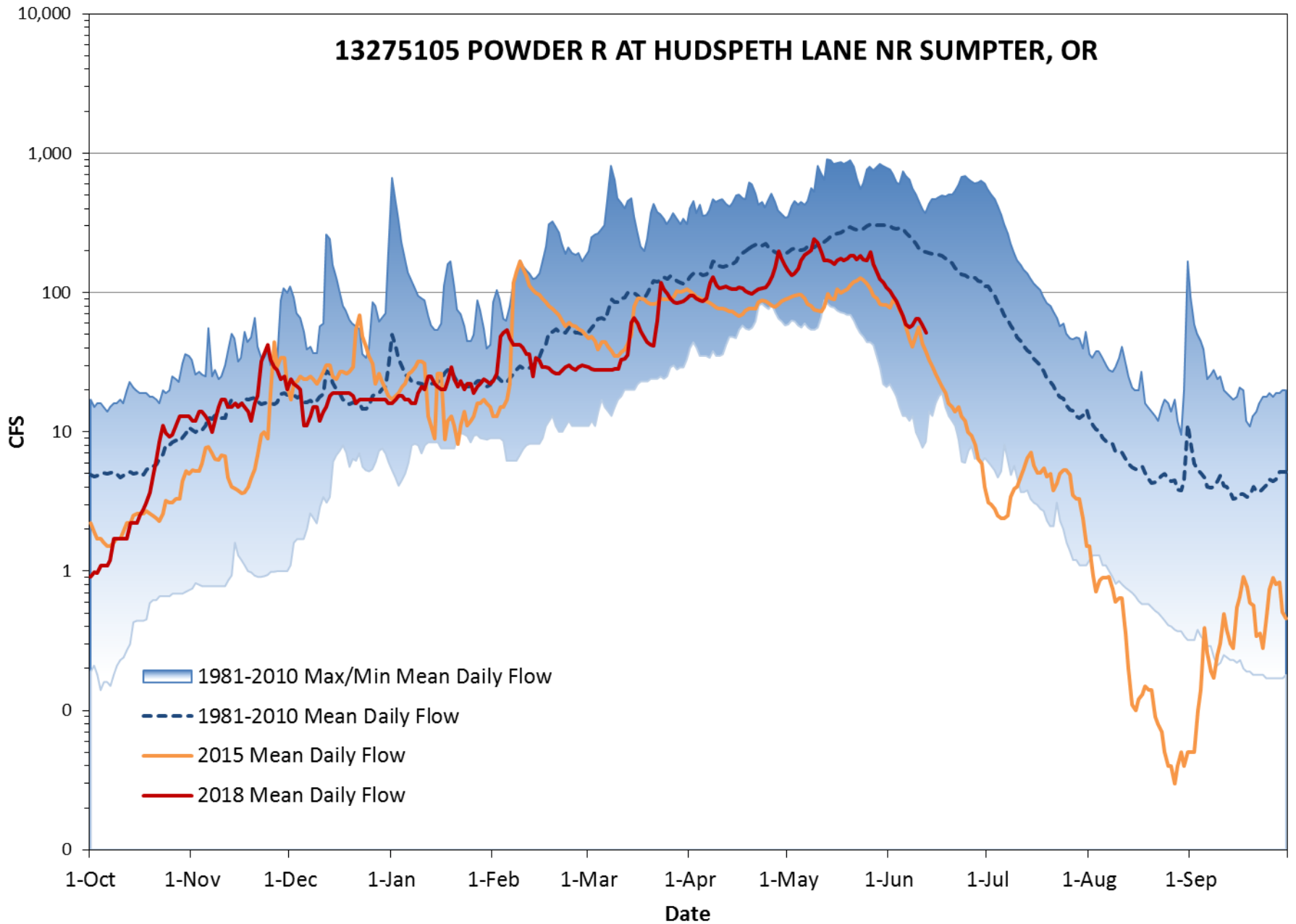
14316700 Steamboat Cr nr Glide, OR



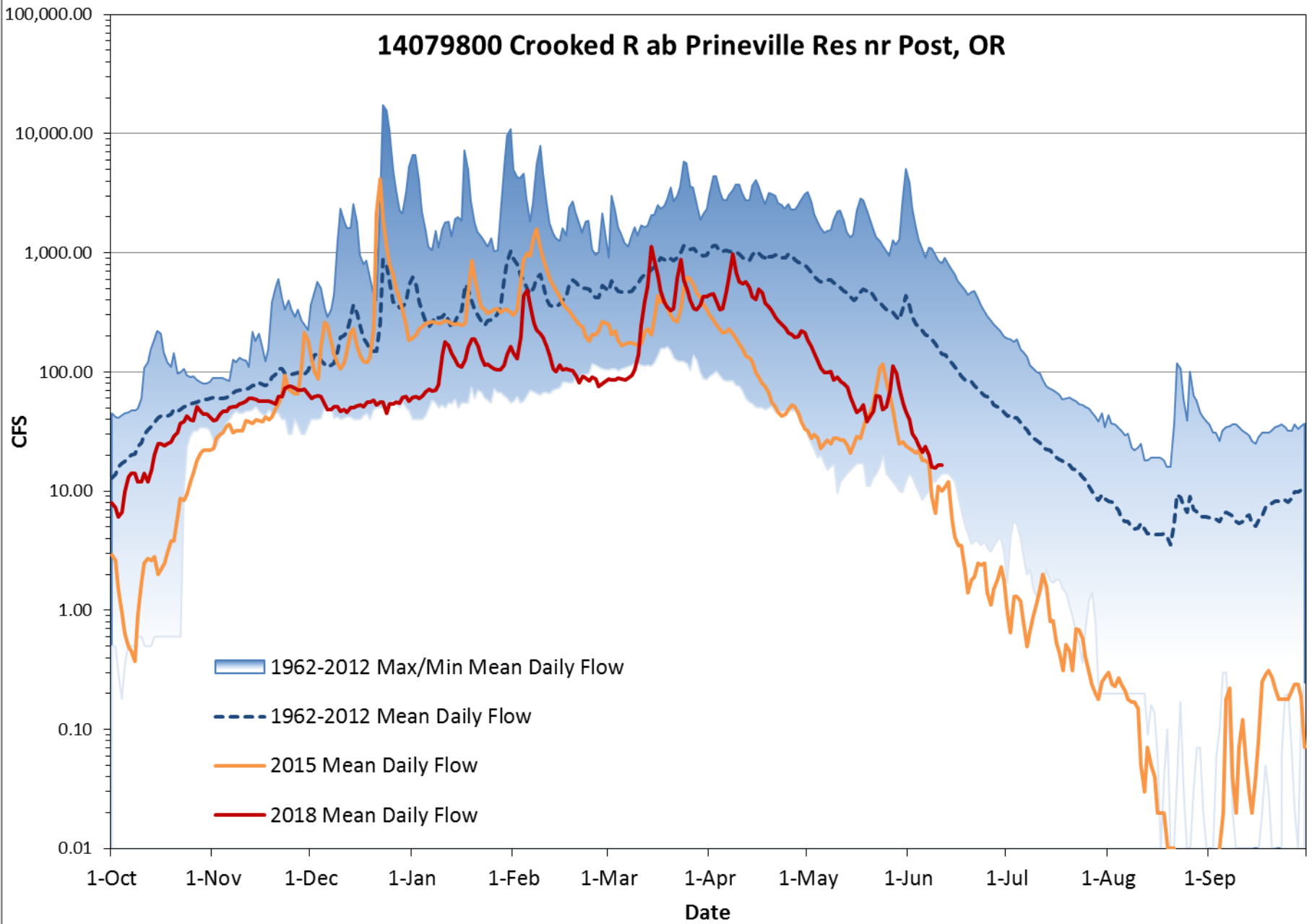
USGS 14308995 GALESVILLE RESERVOIR NEAR AZALEA, OR



13275105 POWDER R AT HUDSPETH LANE NR SUMPTER, OR



14079800 Crooked R ab Prineville Res nr Post, OR



Reservoir Storage Summary for the end of May, 2018

Percent of Average Storage

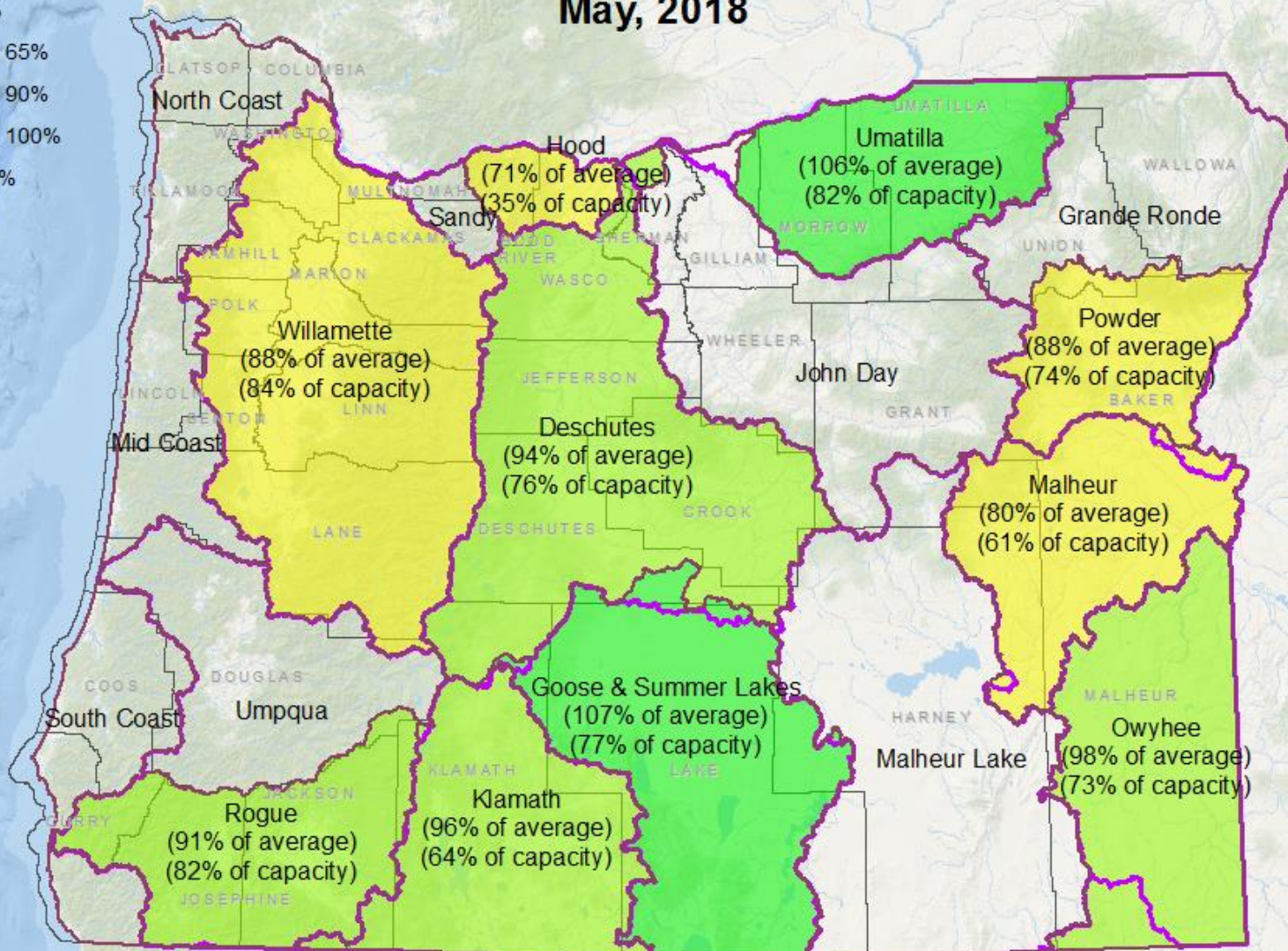
WRD Basin

- < 50%
- 50% - 65%
- 66% - 90%
- 91% - 100%
- > 100%

NRCS Basin

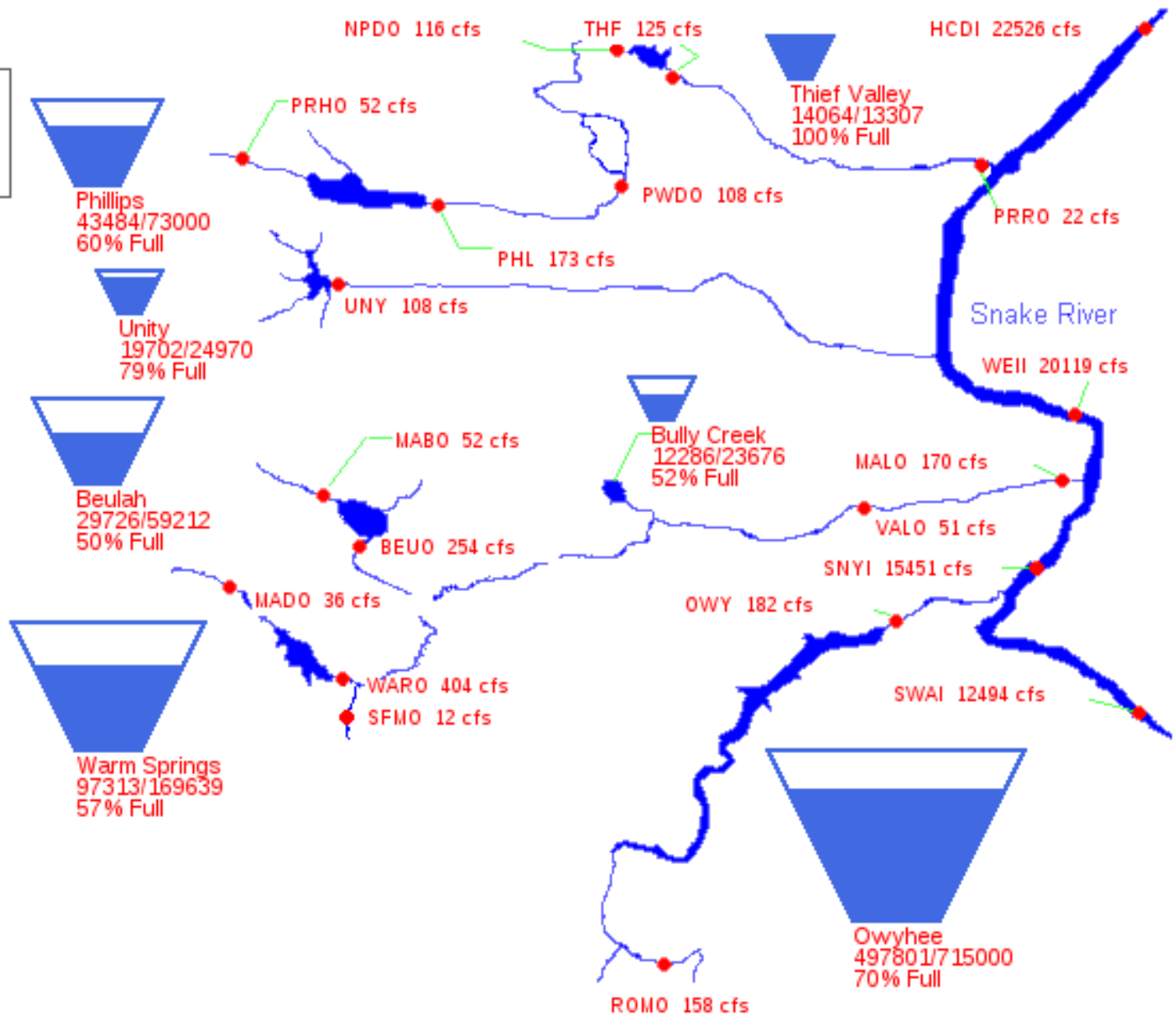


County



NRCS Basinwide Summary: June 1, 2018
(averages based on 1981-2010 reference period)

06/12/2018



OREGON



WATER RESOURCES
DEPARTMENT

Thank you.



Oregon Water Resources Department
Co-Chair, Oregon Drought Readiness Council
725 Summer Street NE, Suite A
Salem, OR 97301

Oregon Office of Emergency Management
Co-Chair, Oregon Drought Readiness Council
P.O. Box 14370
Salem, OR 97309

May 24, 2018

Jason Miner, Natural Resources Policy Manager, and
Heidi Moawad, Public Safety and Military Policy Advisor
Office of Governor Kate Brown
900 Court St., NE
Salem Oregon 97301

Dear Policy Advisors,

The Oregon Drought Readiness Council is a standing body comprised of federal and state natural resource, public health, and emergency response agencies. During a drought, the Council reviews local requests for assistance and makes recommendations to the Governor. The Council meets regularly to discuss current water conditions and likely upcoming conditions for the growing season.

The Drought Readiness Council has received a request from the Lake County Commission requesting a Governor's drought declaration. The county's attached resolution (2018-02) describes the water conditions the county has observed during the past several months, along with current water conditions, and projected economic impacts for the summer growing season.

The Drought Readiness Council has received input from Oregon's Water Supply Availability Committee on basin water conditions and has also conferred with the Council members on this matter. The Council recommends that the Governor declare drought in Lake County for the 2018 calendar year, expiring December 31, 2018.

Should you require any additional information, please do not hesitate to contact us at:
brenda.o.bateman@oregon.gov (503-986-0879) or Sonya.Andron@state.or.us (503-378-4025).

Sincerely,

Brenda O. Bateman, Ph.D.
Co-Chair, Oregon Drought Readiness Council
Administrator, Technical Services Division
Oregon Water Resources Department

Sonya L. Andron, MPH
Co-Chair, Oregon Drought Readiness Council
Operations and Preparedness Manager
Oregon Office of Emergency Management

RECEIVED
MAR 27 2018
GOVERNMENT OFFICE

BEFORE THE BOARD OF COMMISSIONERS FOR LAKE COUNTY, OREGON

In the matter of:)
Declaration of Local Disaster and Request to)
Declare a State Drought Emergency) **Resolution 2018-02**
for Lake County, Oregon)

WHEREAS, on this 21st day of March 2018, the Lake County Board of Commissioners finds that the Lake County agricultural and livestock industries, and related economy are suffering widespread and severe economic damage, potential injuries and loss of property resulting from extreme weather conditions within the county; and

WHEREAS, annual water supplies available for irrigators and ranchers within Lake County are a function of both available water storage in the Chewaucan River, Deep Creek, Thomas Creek, Drews Creek, Honey Creek, Silver Creek and Twentymile Creek and in various reservoirs (including Thompson, Cottonwood and Drews), and the estimated seasonal inflow from winter snow pack. February precipitation was 48% of average. Precipitation since the beginning of the water year (October – March 1) has been 70% of average. As of March 1, 2018, storage at major reservoirs in the basin ranges from 51% of average at Cottonwood Reservoir to 114% of average at Drews Reservoir. Water supplies are in serious jeopardy; and

WHEREAS, YOUR County has approximately 45,000 acres of irrigated ground from stored water. 45,000 acres will be out of water between April 1 and May 1 and about 147,000 acres in other outlying areas will be out of water between April 1 and May 1 and about 84,000 acres of land irrigated from well may also be affected; and

WHEREAS, many long-time Lake County farmers and ranchers have commented that they have not seen water conditions this severe since 2015; and

WHEREAS, the extended weather forecast for Lake County projects increased chances of below-normal temperatures in the north and northwestern half of Oregon with equal chances of above or below-normal temperatures for the rest of the state. The precipitation outlook for the same period indicates equal chances of above or below-normal precipitation for most of the state. and

WHEREAS, the above conditions result in loss of economic stability, pasture shortages, decrease in feed production, shortened growing season, and decreased water supplies for Lake County agricultural and livestock producers. In addition, this multi-year cumulative drought has resulted in decreased fuel moisture and early onset fire danger; and

WHEREAS, the Lake County Board of Commissioners determines that extraordinary measures must be taken to alleviate suffering of people and livestock and to protect or mitigate economic loss, and to be responsive to the threat of wildfires.

NOW, THEREFORE, BE IT PROCLAIMED by the Lake County Board of Commissioners that:

- 1 A local disaster is declared within Lake County.
- 2 The Lake County Drought Emergency Management Plan has been implemented.
- 3 Pursuant to ORS 401.015 (2), we find that appropriate response is beyond the capability of Lake County. We are declaring a state of emergency for the purpose of assessment, evaluation and acquiring the ability to provide appropriate available resources.
- 4 **Request:** The Honorable Kate Brown, Governor of Oregon, declare a Drought Emergency for all of Lake County under the provisions of ORS 401.055 due to severe and continuing drought conditions beginning at this time and continuing for an unknown period of time; **and** direct the Oregon Department of Water Resources to make available in Lake County: Temporary Transfers of Water Rights, and Emergency Water Use Permits, and Use of Existing Right Option/Agreement; **and** other federal and state drought assistance and programs as needed.
- 5 This proclamation shall take effect immediately from and after its issuance.

Bradley J. Winters, Lake County Board of Commissioners Chair

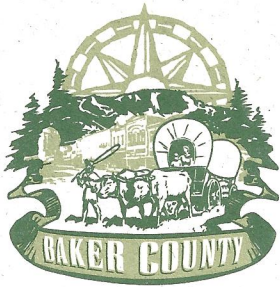


Ken Kestner, Lake County Board of Commissioners Vice-Chair

Absent

Dan Shoun, Lake County Commissioner





Bill Harvey

Commission Chair
bharvey@bakercounty.org

June 6, 2018

Mark Bennett

Commissioner
mbennett@bakercounty.org

Dr. Brenda Bateman
Technical Services Division Administrator
Oregon Water Resources Department
Co-Chair, OR Drought Readiness Council
725 Summer Street NE, Suite A
Salem, OR 97301
Via Email: brenda.o.bateman@oregon.gov

Ms. Sonya Andron
Operations and Preparedness Manager
Oregon Office of Emergency Management
Co-Chair, OR Drought Readiness Council
P.O. Box 14370
Salem, OR 97301
Via Email: Sonya.Andron@state.or.us

Bruce A. Nichols

Commissioner
bnichols@bakercounty.org

RE: Baker County Drought

Dr. Bateman and Ms. Andron:

Baker County, by and through its County Elected Officials, requests that the Governor of Oregon issue an executive order for all of Baker County under the provisions of ORS 536 as a direct result of severe and continuing/projected drought conditions.

There is the potential for the Baker County agricultural and livestock, natural resources, recreational, tourism, and related economies to experience widespread and severe damage resulting from extreme weather conditions within the county.

2/2018 – In northern Baker County a landowner was able to drive fence posts into the ground. Normally this is not done until mid to late March because of the frost in the ground.

2/7/2018 – Field burning is occurring in central west Baker County. This is months earlier than normal.

2/12/2018 – Baker County Road Dept. dug a 10' hole with no moisture and the soil was like cement powder dry dirt.

2/12/2018 – Blowing Dust is observed in the Hereford area

3/2018 – First week of March the spring runoff is already done when usually it keeps flowing until the first of April (northern 1/3 of Baker County).

4/15/2018 – Spring livestock turnout sites have no water (Southern 1/3rd of Baker County)

4/16/2018 – People are already irrigating which normally doesn't happen until the first of May, last year it was the middle of May before irrigation started (in northern 1/3 of Baker County)

4/18/2018 – Sutton Creek area (central Baker County), several springs have not come back yet.

4/27/2018 – Green grass is carrying fire and the sagebrush torches; very dry.

4/25/2018 – Range grasses have slowed growing and are heading out, we have about half the growth compared to normal. Pasture growth has slowed as well. (Northern Baker County)

4/25/2018 – Grass production is half of last years. Soil moisture in dug holes is virtually nothing after 1 foot in depth (central Baker County)

4/25/2018 – Dug a 6-foot test hole and only had 3 inches of moisture. 2 springs are dry and storage ponds are dry as well. Field grass measurements 30% of normal with 27 monitoring points. Idaho Fescue is currently measured at 3 inches when it averages 7 inches at this time (southern Baker County)

5/8/2018 – Water hauling for livestock is occurring in southern Baker County

5/10/2018 – NOAA visited from Boise and observed the southern slopes have cured out in the southern half of Baker County.

The county has already formally declared a drought, and has attached a copy of the adopted resolution for your files. Producers have taken the following actions to anticipate or mitigate effects of the drought:

- Fed livestock longer to allow range land grasses to grow. Livestock turnout was delayed by 2 plus weeks.
- Hauled water for livestock.
- Summer fallowed ground because of the lack of water.

If these trends keep going the way they are, producers will have less pasture for the fall and will be forced to supplement the cattle with hay to keep them going. This is because they will not be able to get the regrowth after haying. They may not be able to get the same number of cuttings as well which means they will have to look for additional hay for their livestock.

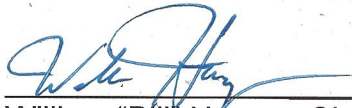
Baker County Drought Committee made up of local producers throughout the county as well as representatives from the irrigation districts, USDA, NRCS, OWRD, and NOAA met on April 25, 2018 and discussed the current conditions and recommend the county move forward with collecting observations, impacts, and declare a drought emergency exists in Baker County.

The Baker County Board of Commissioners have determined that additional action by and support from the state is needed. This may include assistance from the Oregon Water Resources Department and other Oregon executive branch agencies, operating within their statutory authorities.

Baker County Board of Commissioners therefore requests an executive order from the Governor, declaring drought in Baker County.

We extend in advance our appreciation for your consideration on this matter.

Sincerely,



William "Bill" Harvey, Chair
Baker County Board of Commissioners



Mark Bennett, Commissioner
Baker County Board of Commissioners



Bruce Nichols, Commissioner
Baker County Board of Commissioners

COUNTY OF BAKER
BOARD of COMMISSIONERS

DECLARATION OF LOCAL DISASTER

WHEREAS, the County of Baker on this 6th day of June, 2018 has determined that the Baker County agricultural industry, and related economy is suffering widespread and severe economic damage, from extreme cyclical weather conditions and continuing drought within the county.

and

Baker County's precipitation is 2 inches below normal for the water year beginning October 1. For the month of May, Baker County's wettest month and a long term average of 1.46" only received .92 of an inch.

and

Phillips Reservoir, the largest water reservoir in the county, only filled to 67 percent of capacity. Unity Reservoir went on stored water two weeks ahead of schedule. The streamflow forecasts in the May 1, 2018 Oregon Basin Outlook Report for the Burnt, Powder, and Pine drainages are likely to be well below normal.

and

The extended weather forecast for Baker County projects "higher than normal temperatures, and below average precipitation".

and

These disaster conditions have resulted in loss of economic stability, pasture shortages, shortened growing season, and decreased water supplies for Baker County agricultural producers.

WHEREAS, the Baker County Board of Commissioners, has determined that extraordinary measures must be taken to alleviate the suffering of people and livestock and to protect or mitigate economic loss, and to be responsive to the threat of wildfires;

NOW, THEREFORE, BE IT DECLARED by the Baker County Board of Commissioners:

Section 1. That a local disaster is declared within Baker County.

Section 2. That by this declaration, the Baker County Emergency Operations Plan, Drought Annex plan has been implemented and initiated a

limited activation of the Emergency Operations Center.

- Section 3. Baker County has examined its fiscal resources and found them inadequate to provide relief.
- Section 4. That a drought declaration under Oregon Revised Statutes 536 be used to allow the Water Resources Department to use a number of water-related tools that include temporary drought permits to use groundwater.
- Section 5. That this proclamation shall take effect immediately from and after its issuance.
- Section 6. The Board of Commissioners, request that the Honorable Kate Brown, Governor, of the State of Oregon declare: "that a severe, continuing drought" exists in Baker County.

-and-

Request the Honorable, Sonny Perdue, Secretary, of the United States Department of Agriculture, to expedite assistance to local agricultural industries/producers who have suffered extensive and ongoing loss from the drought and associated wildfires.

DONE AND DATED this 6th day of June, 2018

Baker County Board of Commissioners



William "Bill" Harvey, Chairman



Mark E. Bennett, Commissioner



Bruce A. Nichols, Commissioner



DOUGLAS COUNTY BOARD OF COMMISSIONERS

CHRIS BOICE

TIM FREEMAN

1036 SE Douglas Ave., Room 217 → Roseburg, Oregon 97470

Dr. Brenda Bateman
Technical Services Division Administrator
Oregon Water Resources Department
Co-Chair, Oregon Drought Readiness Council
725 Summer Street NE, Suite A Salem, OR 97301
Via Email: brenda.o.bateman@oregon.gov

Ms. Sonya Andron
Operations and Preparedness Manager
Oregon Office of Emergency Management
Co-Chair, Oregon Drought Readiness Council
P.O. Box 14370 Salem, OR 97301
Via Email: Sonya.Andron@state.or.us

RE: Douglas County Drought

Date: June 6, 2018

Dr. Bateman and Ms. Andron:

Douglas County, by and through its County Elected Officials, requests that the Governor of Oregon issue an executive order for all of Douglas County under the provisions of ORS 536 as a direct result of severe and continuing/projected drought conditions.

There is the potential for the Douglas County agricultural and livestock, natural resources, recreational, tourism, and related economies to experience widespread and severe damage resulting from extreme weather conditions within the county. The annual water supplies available for irrigators and ranchers within Douglas County are from winter snow pack which is significantly lower than normal in the Umpqua basin. Current predictions by NOAA are that seasonal drought within our region will persist or intensify and could dramatically increase wildland fire danger due to higher than normal temperatures and below average precipitation.

Additionally, a large share of the county's economy is dependent upon the agriculture sector which is adversely affected by low rainfall. Our initial assessment of impacts indicates imminent and significant damages and losses to the agricultural economy of Douglas County.

Douglas County has already formally declared a drought, and has attached a copy of the that order for your files.

The Douglas County Board of Commissioners has determined that additional action by and support from the state is needed. This may include assistance from the Oregon Water Resources Department and other Oregon executive branch agencies, operating within their statutory authorities.

Douglas County Board of Commissioners therefore requests an executive order from the Governor, declaring drought in Douglas County.

Douglas County Board of Commissioners

Chris Boice, Chair

Tim Freeman

06/06/2018

JUN 06 2018

BEFORE THE BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY
PATRICIA K. HITT, COUNTY CLERK

AN ORDER IN THE MATTER OF)
DECLARING A LOCAL DISASTER) ORDER
AND REQUEST TO DECLARE A)
STATE OF EMERGENCY)
FOR DOUGLAS COUNTY, OREGON)

WHEREAS, the Douglas County Board of Commissioners finds that the Douglas County agricultural, livestock and forest products industries, and related businesses are experiencing economic hardship and potential serious injury and losses resulting from extreme weather conditions within the county; and

WHEREAS, the Natural Resources Conservation Service reports that as of May 18, 2018 the snowpack in the Umpqua basin is 26% of normal and also as of May 18, 2018 OWRD predicted "stream flows will be much lower than normal". Stream flows on many tributaries to the Umpqua, North Umpqua and the Umpqua Rivers have fallen below minimum levels this year. Due to minimal snowpack and low stream flows, basin water managers expect to regulate surface water right users much earlier and to older priority dates than normal. This lack of surface water resources will negatively impact consumptive water users including irrigators, industrial and domestic users resulting in economic losses and hardship. Groundwater resources will also be affected by a lack of sufficient recharge resulting in reduced spring and well water supplies for household uses. As of May 25, 2018, the U.S. Drought Monitor shows most of Douglas County in a condition of abnormally dry.

WHEREAS, the extended weather forecast for Douglas County projects higher than normal temperatures, and below average precipitation; and

WHEREAS, the above conditions will result in the loss of economic stability, decreased feed and pasture production, shortened growing season and decreased water supplies for Douglas County agricultural, livestock and vineyard producers. In addition this multi-year cumulative drought has resulted in decreased fuel moisture and early onset fire danger; and


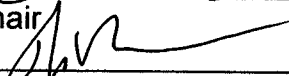
WHEREAS, the Douglas County Board of Commissioners determines that extraordinary measures must be taken to alleviate the suffering of citizens and livestock and to protect or mitigate economic loss, and to be responsive to the threat of wildfires.

///
///
///
///
///
///
///


THE BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY ORDER AS FOLLOWS:

1. A local disaster is declared within Douglas County.
2. Pursuant to ORS 401.165, the board finds that the appropriate response is beyond the capability of Douglas County and we are therefore declaring a state of emergency for the purpose of assessment, evaluation and acquiring the ability to provide appropriate available resources.
3. The Honorable Kate Brown, Governor of Oregon is requested to declare a Drought Emergency for all of Douglas County under the provision of ORS 401.165 due to severe and continuing drought conditions beginning at this time and continuing for an unknown period of time; and direct the Oregon Department of Water Resources to make available in Douglas County: Temporary Transfers of Water Rights and Emergency Water Use Permits, and Use of Existing Right Option/Agreement; and make available other federal and state drought assistance and programs as may be available and needed.


**BOARD OF COUNTY COMMISSIONERS
OF DOUGLAS COUNTY**

By 
Chair
By 
Commissioner

APPROVED AS TO CONTENT

By 
Department Head
Date 6/1/2018

APPROVED AS TO FORM

By 
County Counsel
Date 6-1-18