

Oregon Water Conditions Report September 5, 2017



Drier than normal conditions continue to spread across Oregon. Due to continuing higher than normal temperatures and below normal precipitation, the [US Drought Monitor](#) now indicates that almost 78 percent of Oregon is now categorized as “abnormally dry”. This areal coverage has continued to increase and is likely to intensify between now and the end of the water year (September 30).

Most of Oregon was much warmer than normal for the month of August. The above average temperatures for the [past three months](#) have reversed the cooler than normal trend that we started the year with. May-July 2017 is the 5th warmest such period in Oregon in the 123 year record (May-July 2015 is #1)

Over the next [8 to 14 days](#), the NOAA Climate Prediction Center is forecasting above normal temperature probabilities across Oregon. The accompanying precipitation outlook is for below normal precipitation across the western half of the state and normal probability for the remainder.

The NOAA Climate Prediction Center’s most recent [three month outlook](#) continues to indicate a high likelihood of above normal temperatures for Oregon. There is an equal chance of above or below normal precipitation between now and November. The next outlook will be issued on September 21, 2017.

Statewide mountain precipitation for the water year remains well above normal. As of September 5, precipitation for the water year (based upon SNOTEL data) is at 123 percent. However, even with the brief rain showers two weeks ago, precipitation for the [past few months](#) has been well below normal. This lack of precipitation, combined with sustained above average temperatures, continues to contribute to an increase in water demand as well as a reduction in streamflow in some areas of the state.

This [news article](#) about the rapid onset of drought in Montana is an illustration of how rapidly conditions can change with limited/no precipitation and extreme temperatures. While conditions in Oregon have not reached this level, the take home of this is that a “normal” winter/spring does not always equate to adequate water supplies throughout the year.

El Niño Southern Oscillation conditions are projected to remain neutral through fall of 2017. Sea surface temperatures in the equatorial Pacific are slightly warmer than normal, but atmospheric conditions are not reflective of El Niño. Unfortunately these “neutral” conditions do not provide much certainty about the upcoming fall and winter outlooks for the Pacific Northwest. By comparison, the winters of 2013-14 with below normal precip/normal temperatures and

2014-15, with near normal precip/warm temperatures were ENSO neutral years. The situation continues to be monitored and any changes will be made to the status by the Climate Prediction Center.

Statewide streamflows for the month of August were 85 percent of normal for this time of year. Statewide, this is down slightly from 86 percent last month. Regionally streamflow conditions were balanced at 85 percent for both east and west of the Cascades.

As of late last week, streamflows have continued to decline and are now at 74 percent of normal. Of note, flows in the Umatilla, South Coast, Willamette, John Day, and Sandy Basins are all less than 55 percent of normal. Flows in the Umatilla continue to rank the lowest in the state at 40 percent but the South Coast and Willamette are not far behind (or ahead) at less than 50 percent of normal. Short term weather outlooks indicate that this downward trend is likely to continue.

Most of the state’s water supply reservoirs are at normal levels for this time of year.

[Willamette](#) and [Rogue](#) project reservoirs remain on track this summer. [Hills Creek Reservoir](#) in the Willamette Basin is being held to lower than normal levels for maintenance projects. Minimum streamflow targets are projected to be met for the rest of the season. [Central Oregon](#) reservoirs are between 35 and 83 percent of capacity. [Eastern Oregon](#) reservoirs are between 30 and 68 percent of capacity. All are continuing to release stored water for the supply season. While this is good news for entities that have access to storage releases, individuals that rely on live streamflows are experiencing late season shortages in some areas of the state. For the most recent near real-time, site-specific reservoir conditions (teacup diagrams) visit the [USBR](#) or [USACE](#) websites.

There are numerous active wildfires across the state. Fire potential is listed as “extreme” in large areas of the state. The ODF Significant Fire Potential [map](#) of Oregon provides the latest detail. Information and updates on current and developing wildfire conditions can be accessed at the [ODF Wildfire Blog](#). For statewide incident-specific information refer to the [InciWeb](#) incident reporting system.

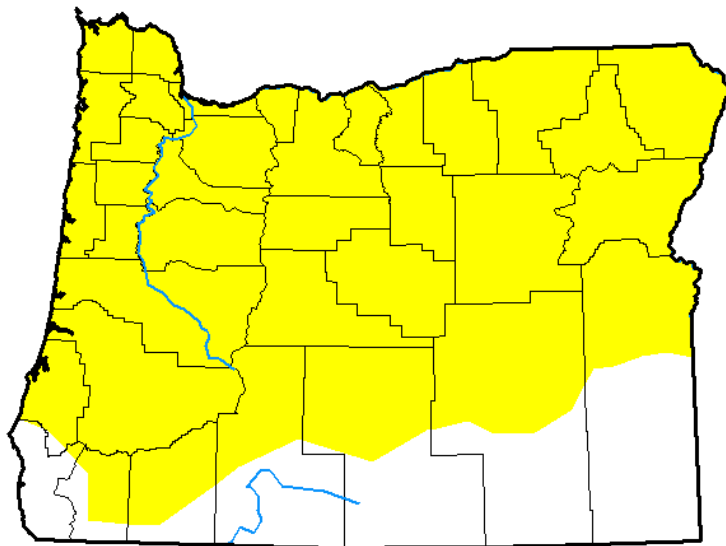
Data & Products:	Page:
U.S. Drought Monitor for Oregon (August 29, 2017)	3
Precipitation (mountain) - Percent of Normal.....	4
Temperature – (1 Month) Departure from Normal	5
Precipitation – (1 Month) Percent of Normal.....	6
Three Month Temperature and Precipitation Outlook.....	7
Soil Moisture - Percentile.....	8
Regional Streamflow Conditions - August	9
Streamflow Example – Central Oregon (Deschutes)	9
Streamflow Example – Eastern Oregon (Powder).....	10
Streamflow Example – Western Oregon (Willamette)	10
ODF Significant Fire Potential Map	11
Photo – Eagle Creek Fire (9/4/2017)	11

U.S. Drought Monitor for Oregon (August 29, 2017)

Website: <http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?OR>

U.S. Drought Monitor Oregon

August 29, 2017
(Released Thursday, Aug. 31, 2017)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	22.33	77.67	0.00	0.00	0.00	0.00
Last Week 08-22-2017	41.52	58.48	0.00	0.00	0.00	0.00
3 Months Ago 05-30-2017	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year 01-03-2017	65.31	34.69	5.29	0.00	0.00	0.00
Start of Water Year 09-27-2016	0.00	100.00	50.59	12.30	0.00	0.00
One Year Ago 08-30-2016	0.00	100.00	50.21	12.03	0.00	0.00

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:

Chris Fenimore
NCEI/NESDIS/NOAA

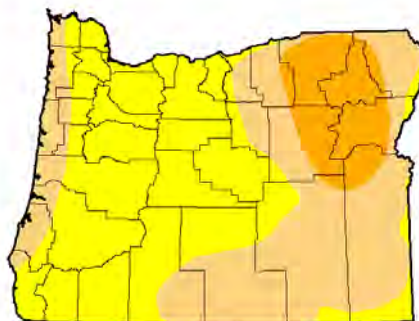


<http://droughtmonitor.unl.edu/>

Compared to this time last year:

U.S. Drought Monitor Oregon

August 30, 2016
(Released Thursday, Sep. 1, 2016)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	50.21	12.03	0.00	0.00
Last Week 08-23-2016	0.00	100.00	50.21	12.03	0.00	0.00
3 Months Ago 06-01-2016	20.20	79.80	74.13	0.00	0.00	0.00
Start of Calendar Year 01-04-2016	14.52	85.48	68.45	85.33	39.55	0.00
Start of Water Year 09-01-2015	0.00	100.00	100.00	100.00	87.29	0.00
One Year Ago 08-30-2015	0.00	100.00	100.00	100.00	87.29	0.00

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.

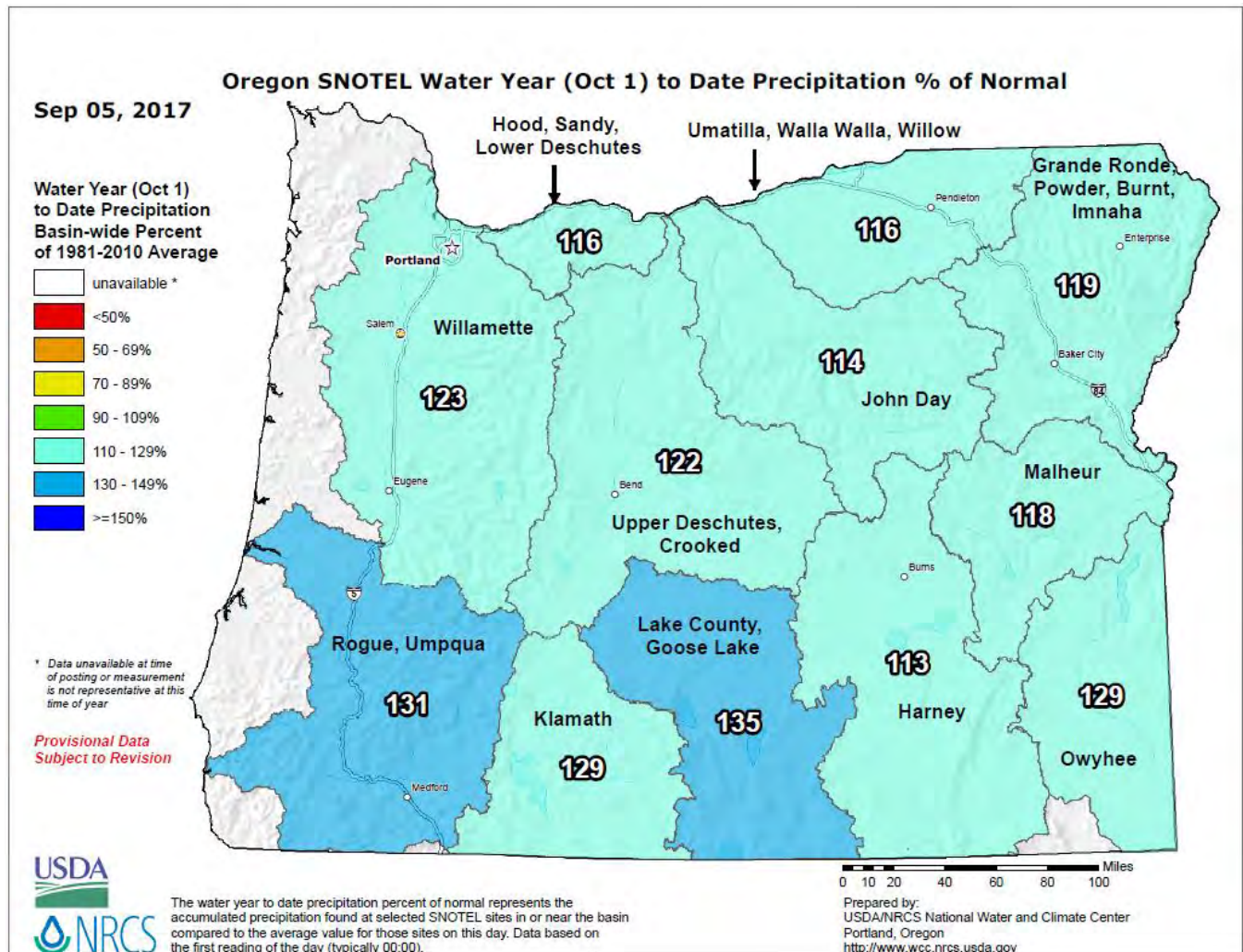
Author:

Chris Fenimore
NCEI/NESDIS/NOAA

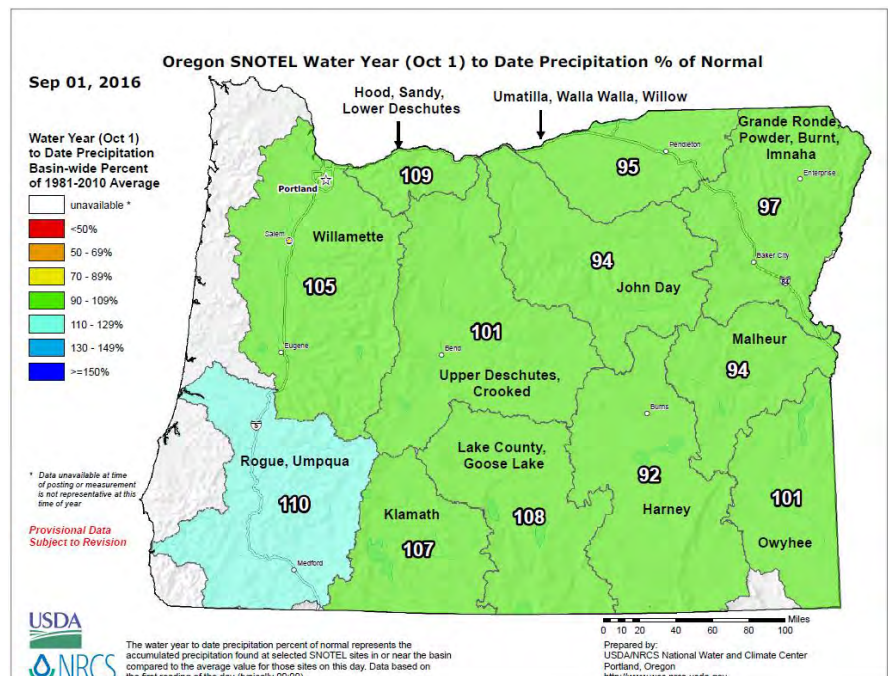


<http://droughtmonitor.unl.edu/>

Precipitation (mountain) - Percent of Normal



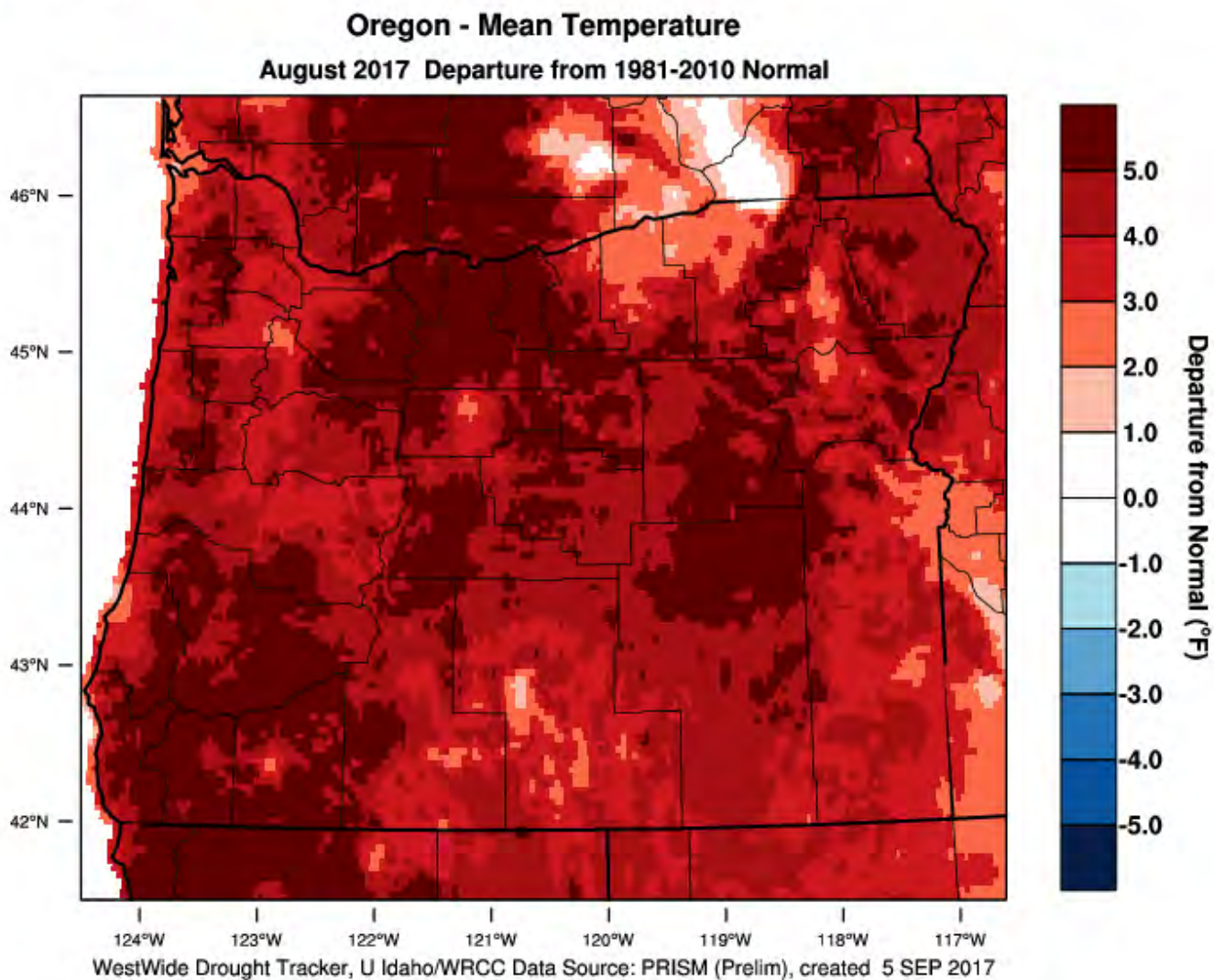
**Compared to this time
 last year -**



Temperature – (1 Month) Departure from Normal

Website: <http://www.wrcc.dri.edu/wwdt/index.php?folder=mdn1>

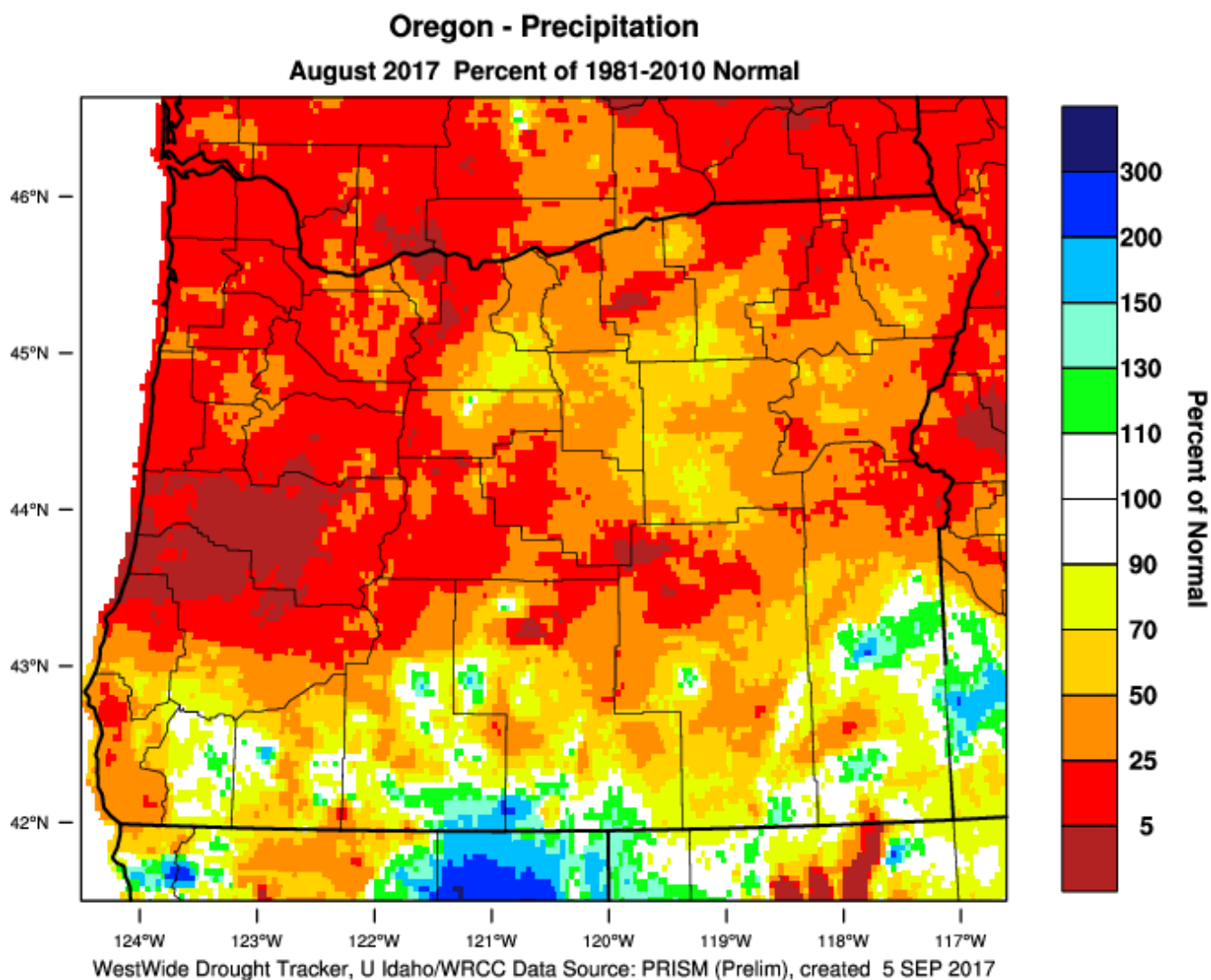
PRISM > Temperature Anomaly 1 Month > Oregon



Precipitation – (1 Month) Percent of Normal

Website: <http://www.wrcc.dri.edu/wwdt/index.php?folder=pon1>

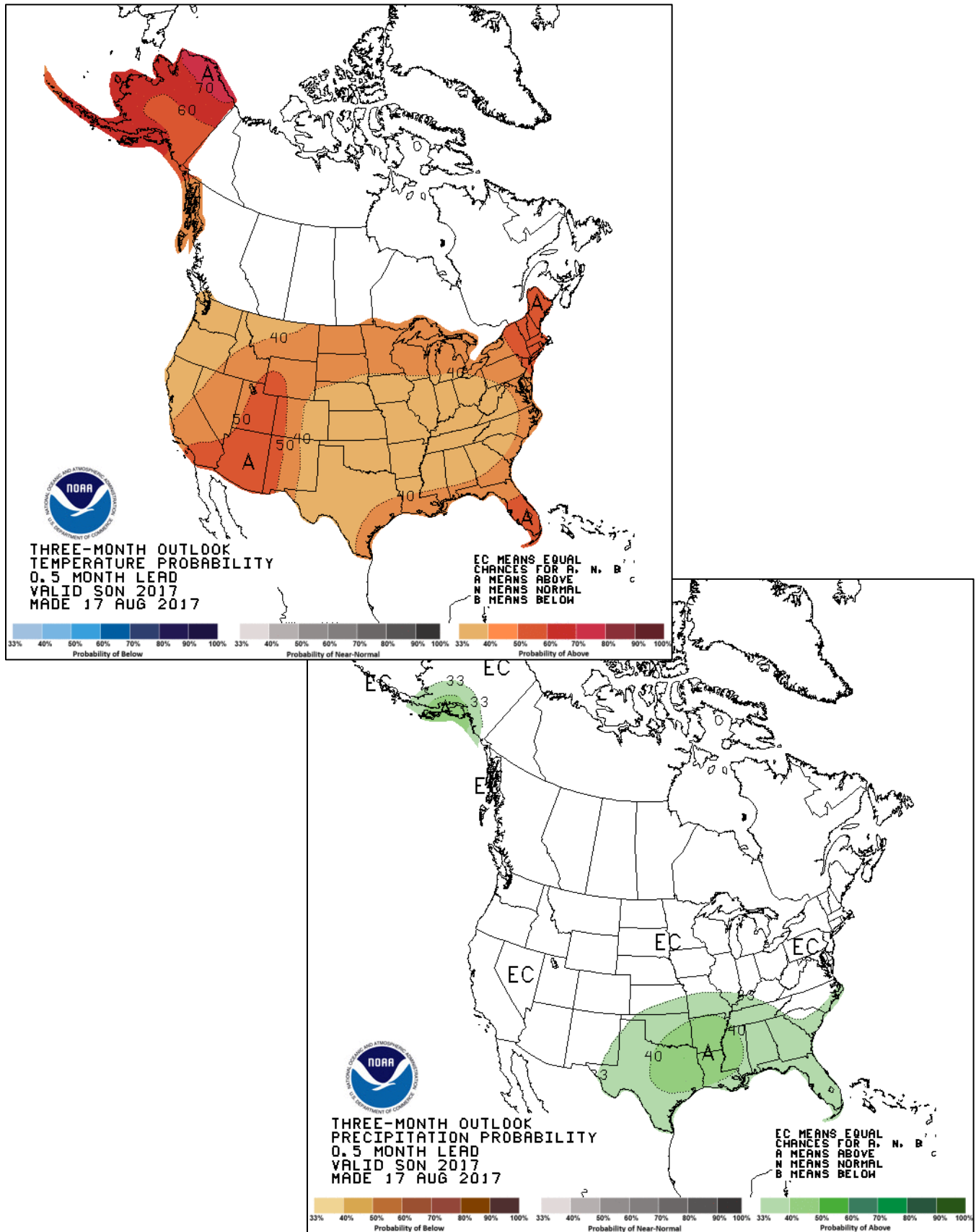
PRISM > Precipitation Anomaly 1 Month > Oregon



Three Month Temperature and Precipitation Outlook

September-October-November – Follow link for the latest information.

Website: http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1



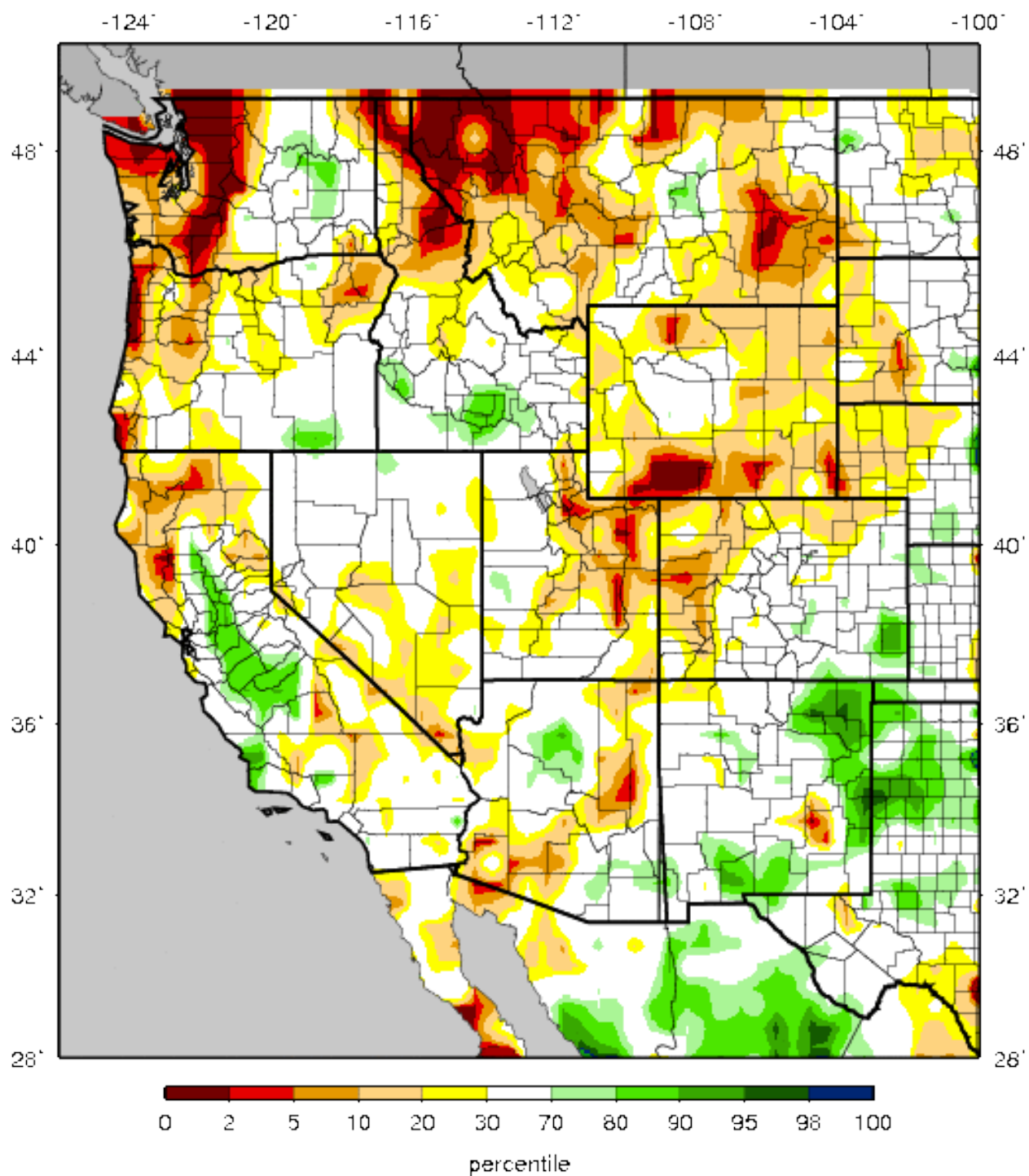
Soil Moisture - Percentile

Website:

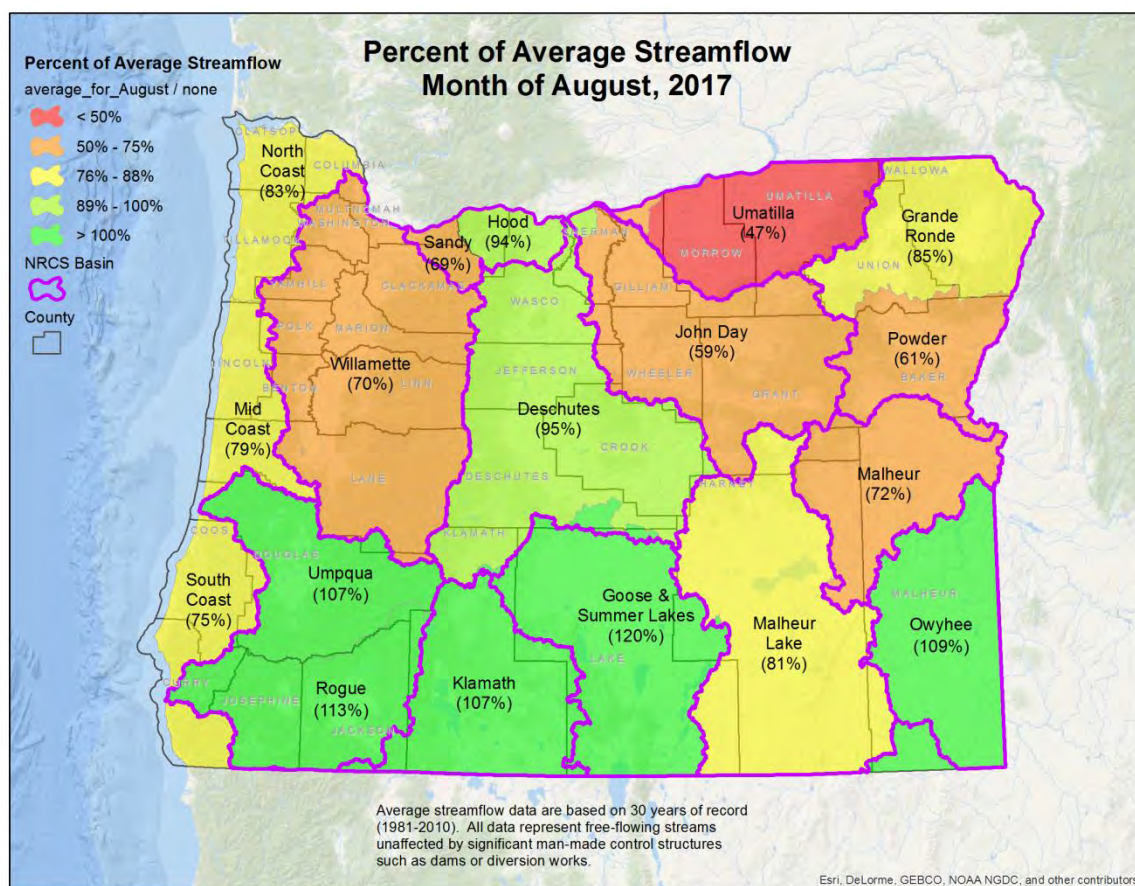
http://www.hydro.washington.edu/forecast/monitor/curr/conus.mexico/west.vic.sm_qnt.gif

VIC Soil Moisture Percentiles (wrt/ 1916-2004)

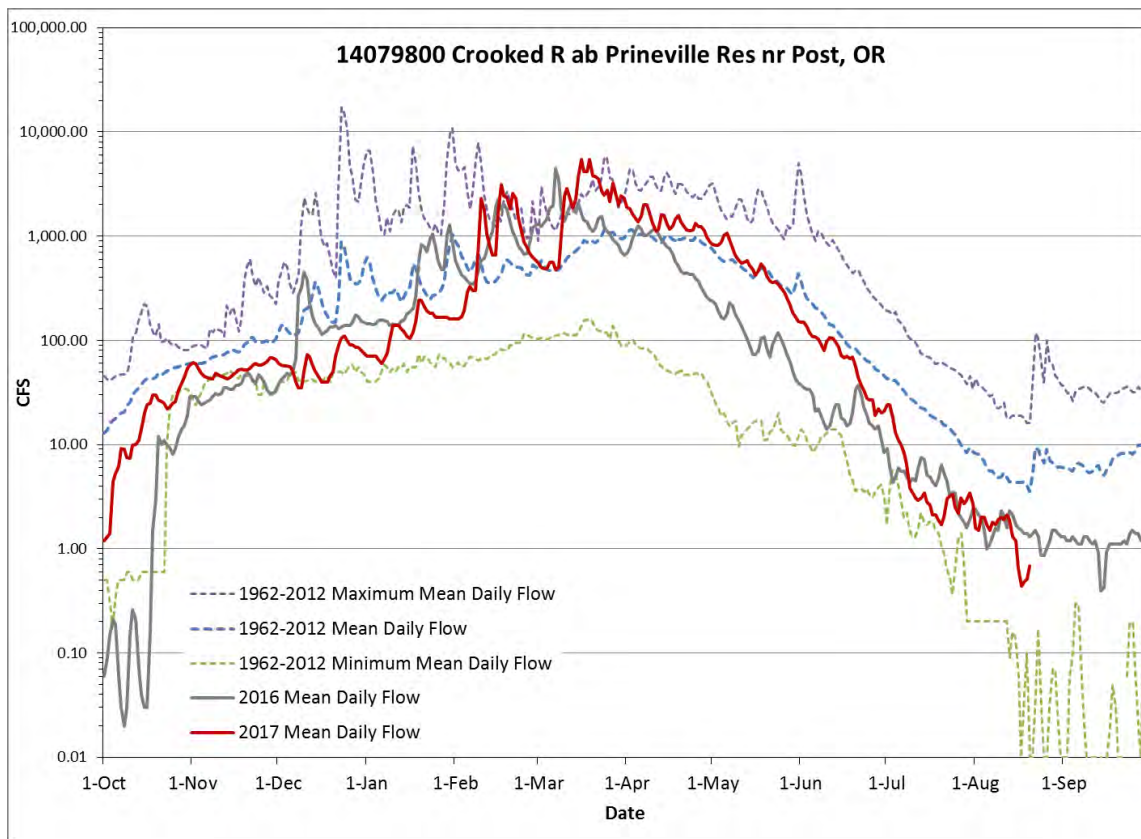
Western United States - 20170904



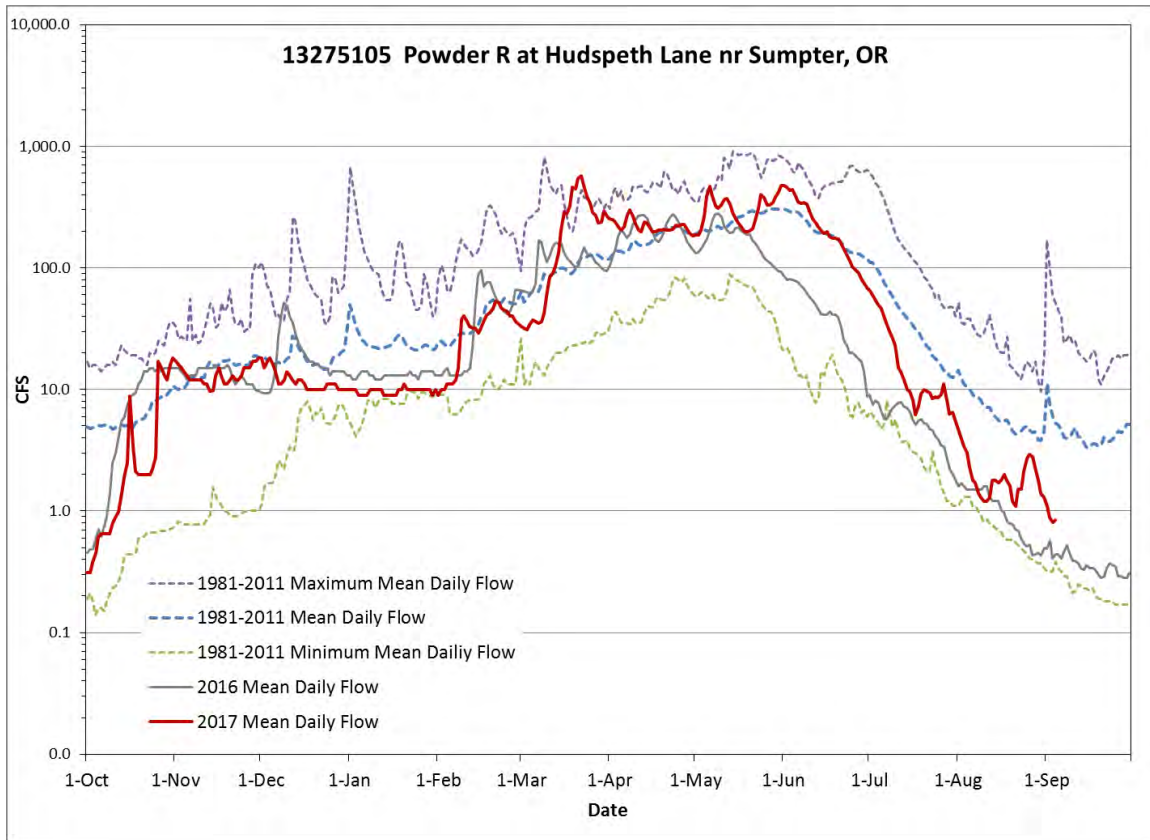
Regional Streamflow Conditions - August



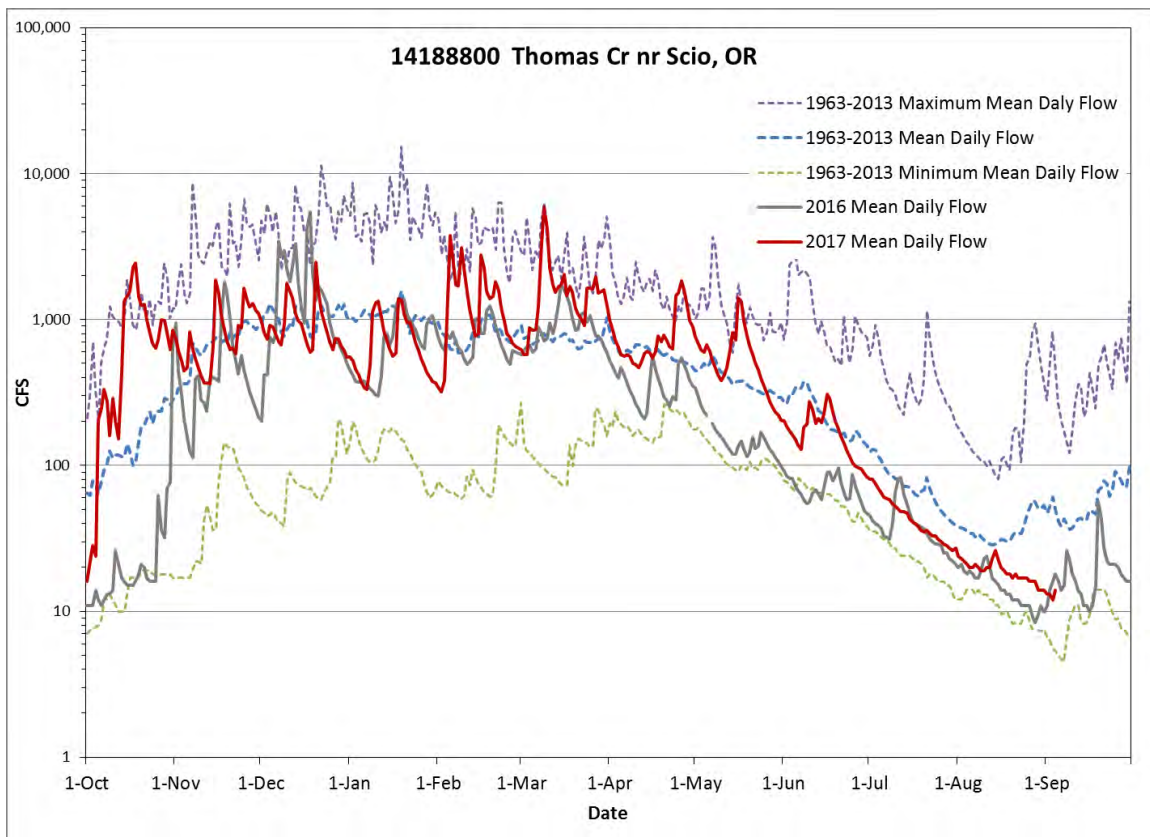
Streamflow Example – Central Oregon (Deschutes)



Streamflow Example – Eastern Oregon (Powder)



Streamflow Example – Western Oregon (Willamette)



ODF Significant Fire Potential Map

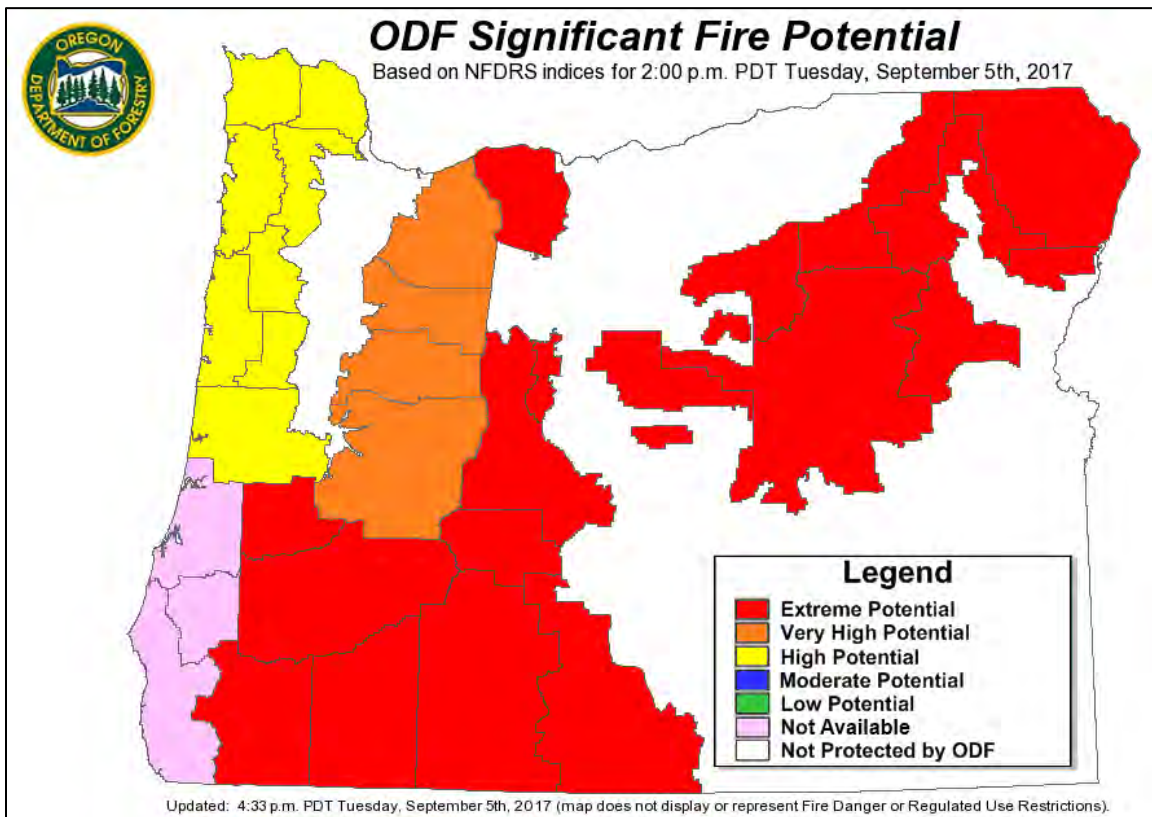


Photo – Eagle Creek Fire (9/4/2017)

