

Oregon Water Supply Availability Committee

August 9, 2016

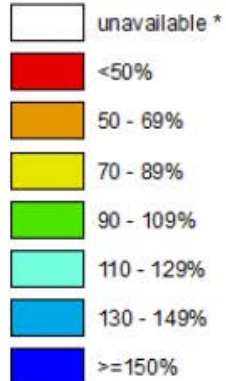


Melissa Webb
Snow Survey Hydrologist
USDA NRCS Snow Survey and Water
Supply Forecasting Program
503-414-3270
<http://www.nrcs.usda.gov/wps/portal/nrcs/main/or/snow/>

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

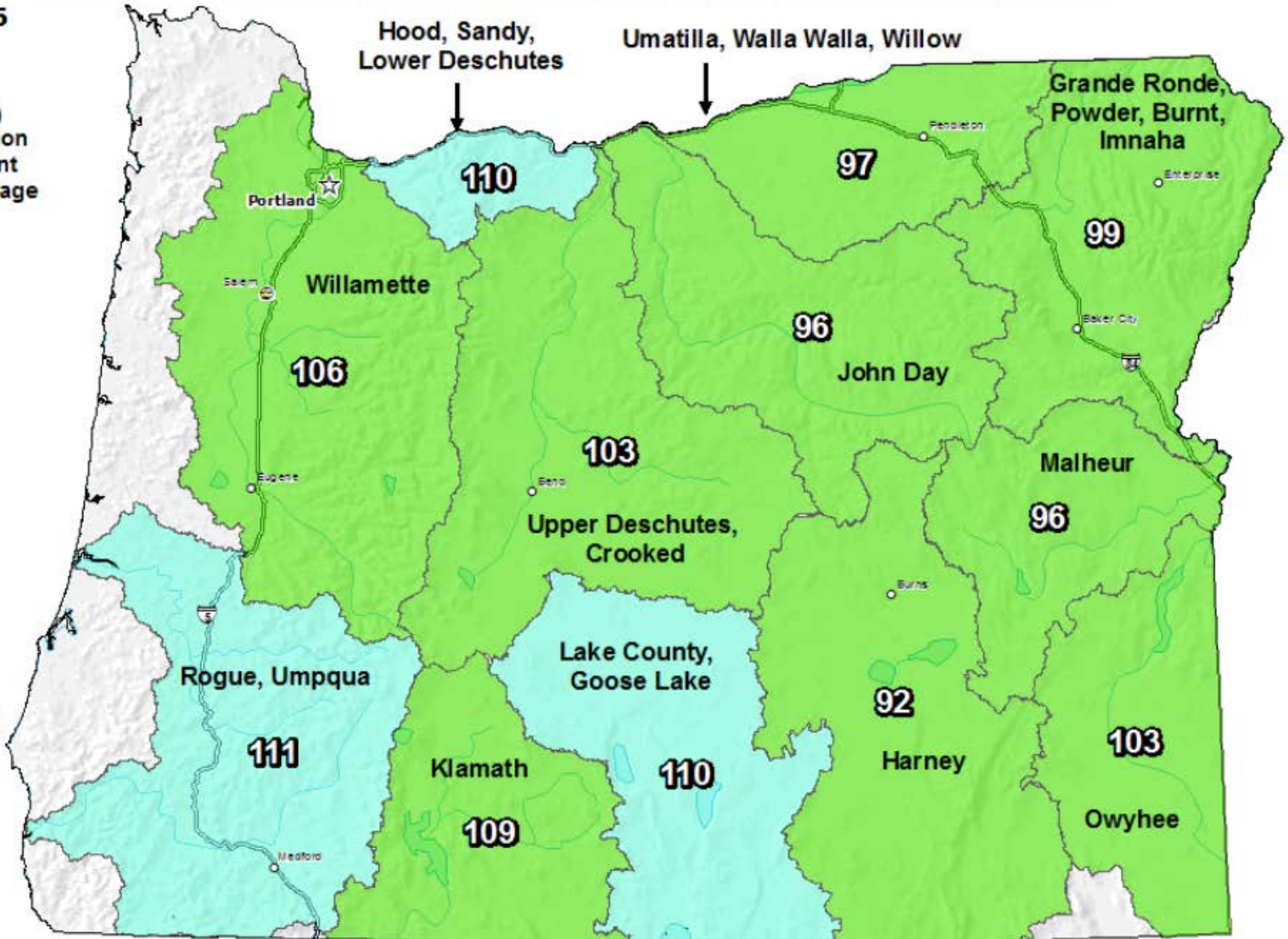
Aug 09, 2016

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

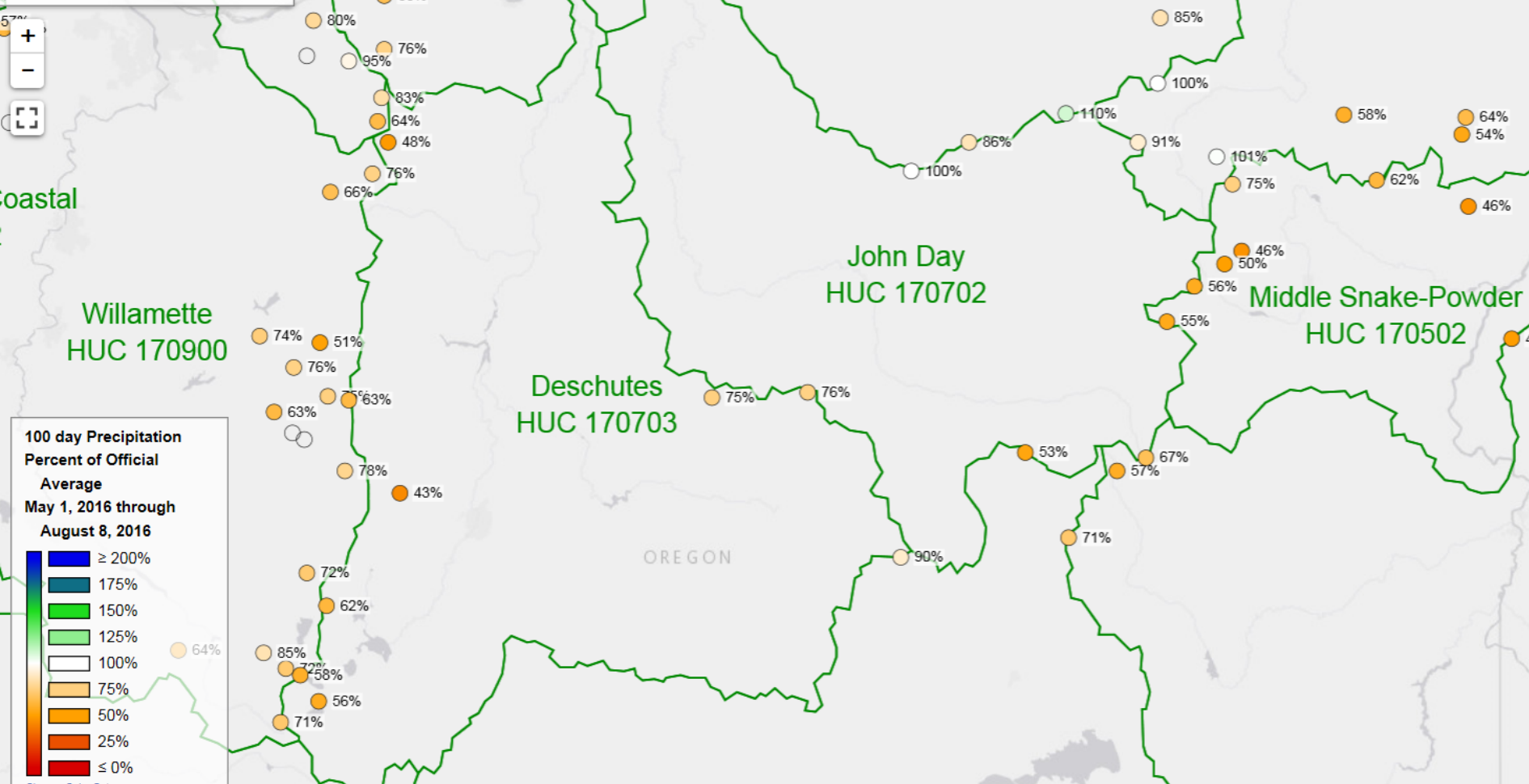


The water year to date precipitation percent of normal represents the accumulated precipitation found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).



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

Selected Stations: 861



Selected Stations: 861

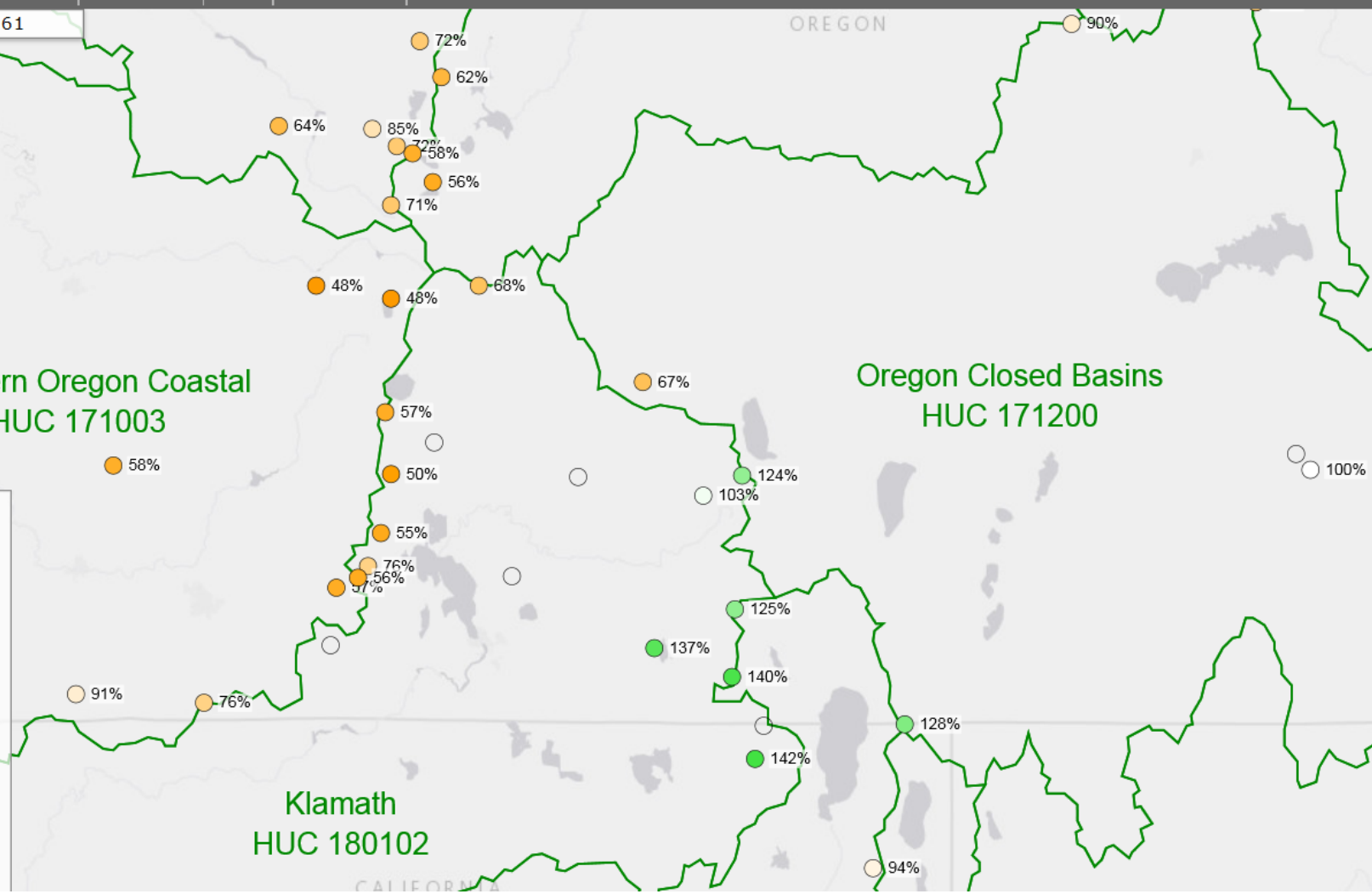
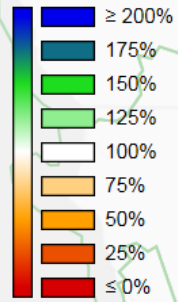


Southern Oregon Coastal
HUC 171003

Oregon Closed Basins
HUC 171200

Klamath
HUC 180102

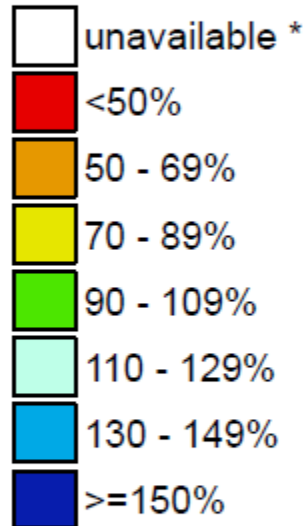
100 day Precipitation
Percent of Official
Average
May 1, 2016 through
August 8, 2016



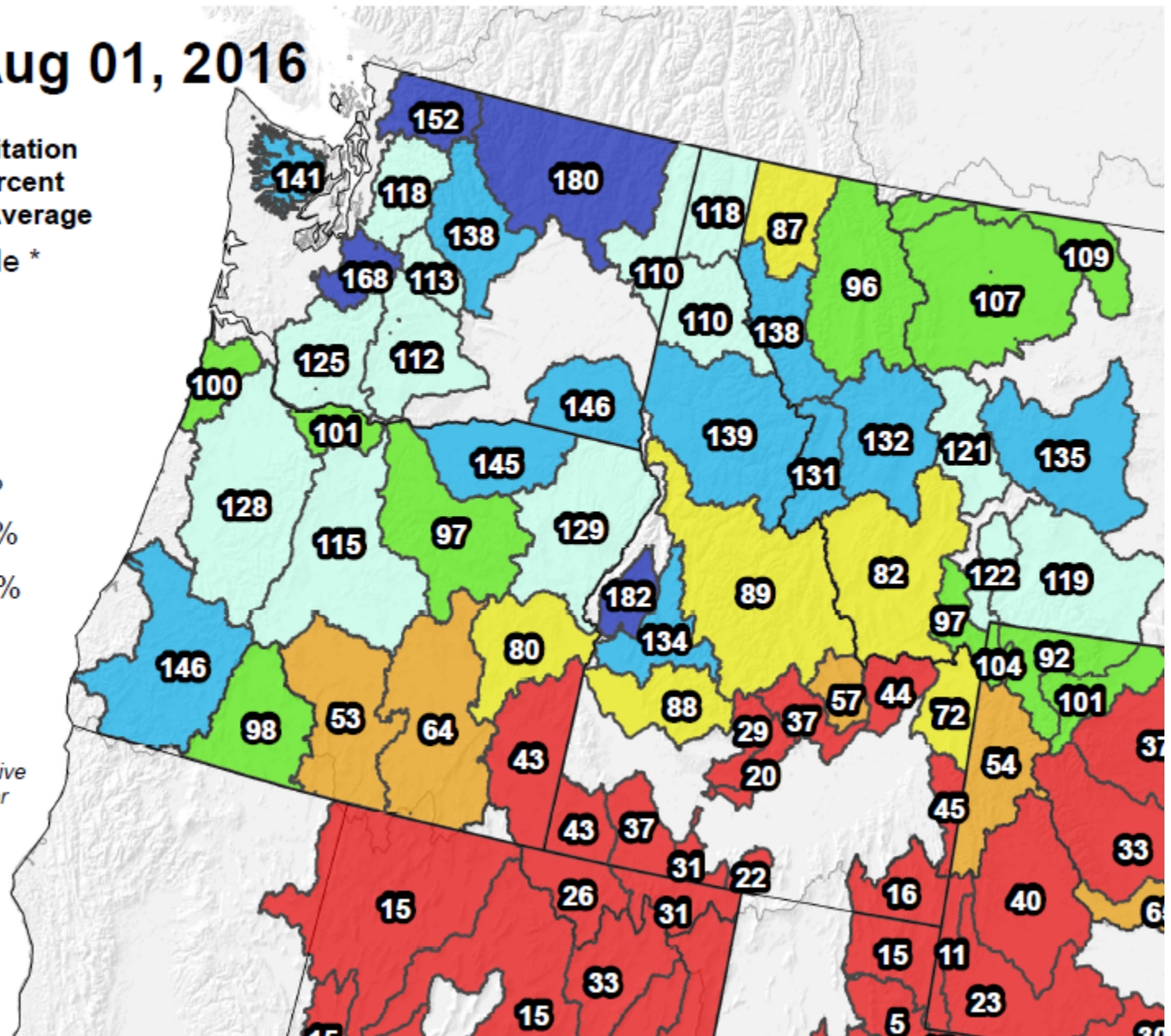
Westwide SNOTEL Current Month to Date Precipitation

Aug 01, 2016

Current Month
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



Thank you!

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

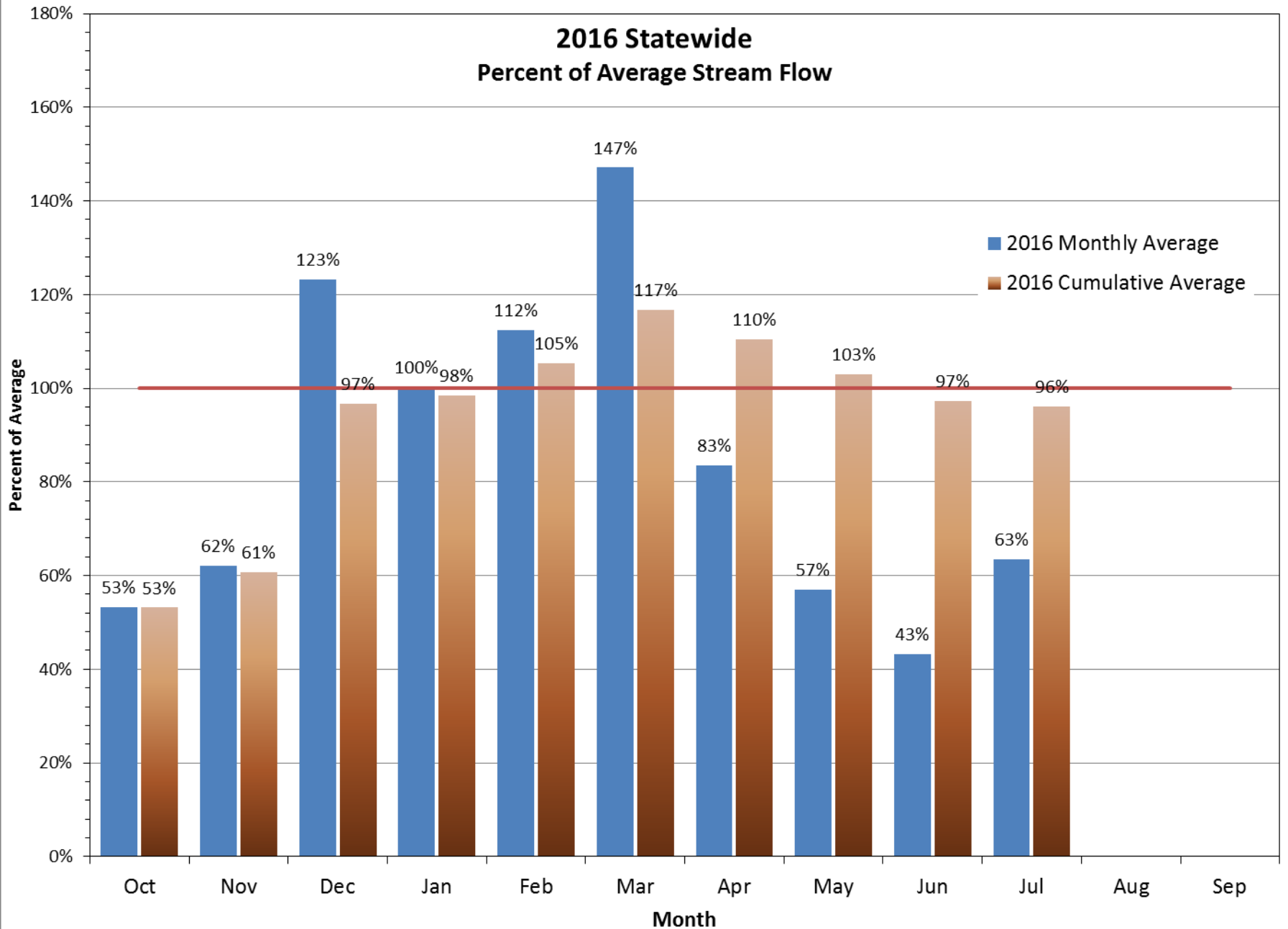
Surface Water Conditions Report

Water Supply Availability Committee

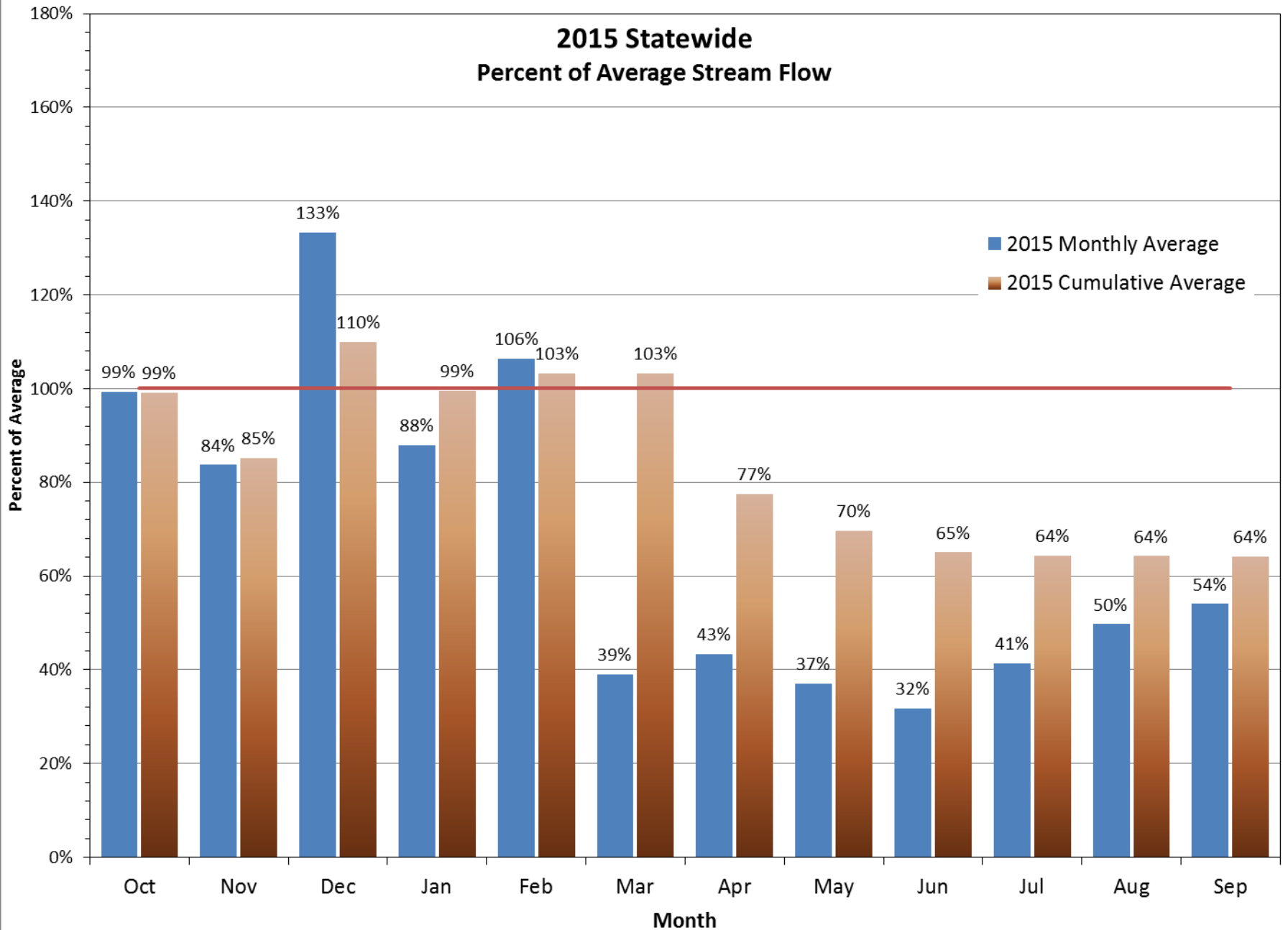


Ken Stahr
Oregon Water Resources
Department
August 9, 2016

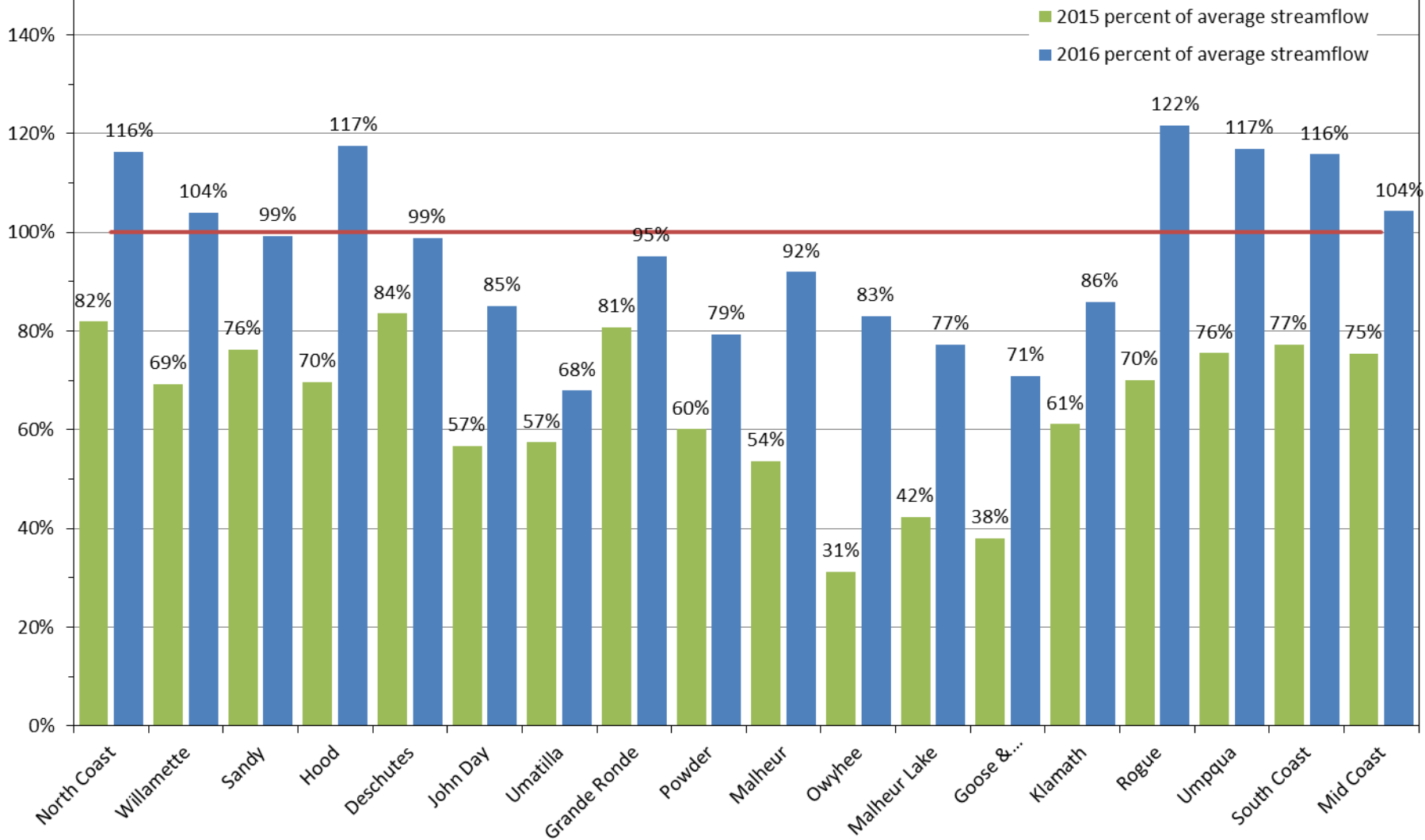
2016 Statewide Percent of Average Stream Flow



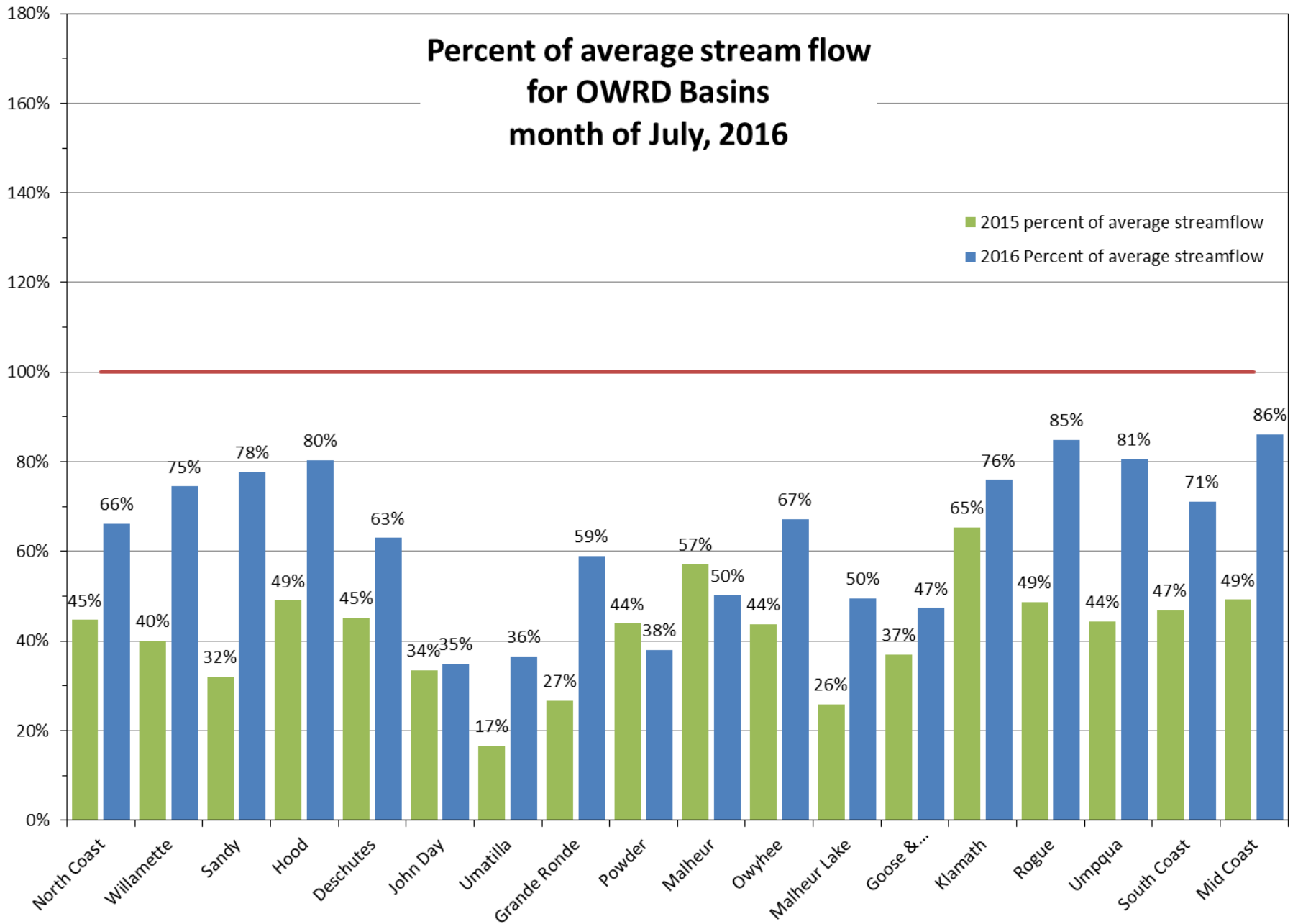
2015 Statewide Percent of Average Stream Flow



Percent of average stream flow for OWRD Basins October 1, 2015 - July 31, 2016








Percent of average stream flow for OWRD Basins month of July, 2016



Percent of Average Streamflow Month of June, 2016

Percent of Average Streamflow

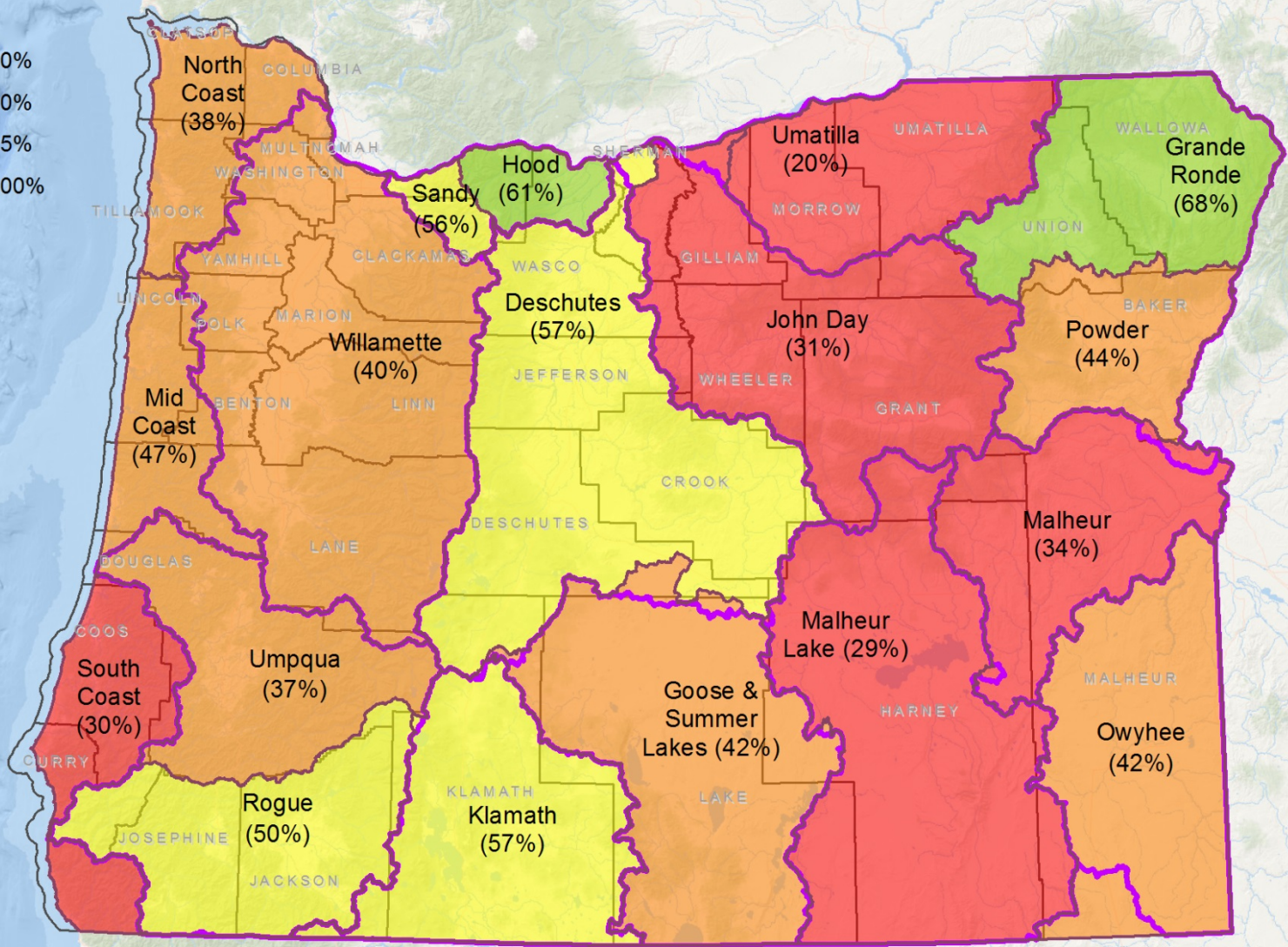
OWRD Basins

-  < 36%
-  36% - 50%
-  51% - 60%
-  61% - 75%
-  76% - 100%

NRCS Basins



Counties



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

Percent of Average Streamflow Month of July, 2016

Percent of Average Streamflow

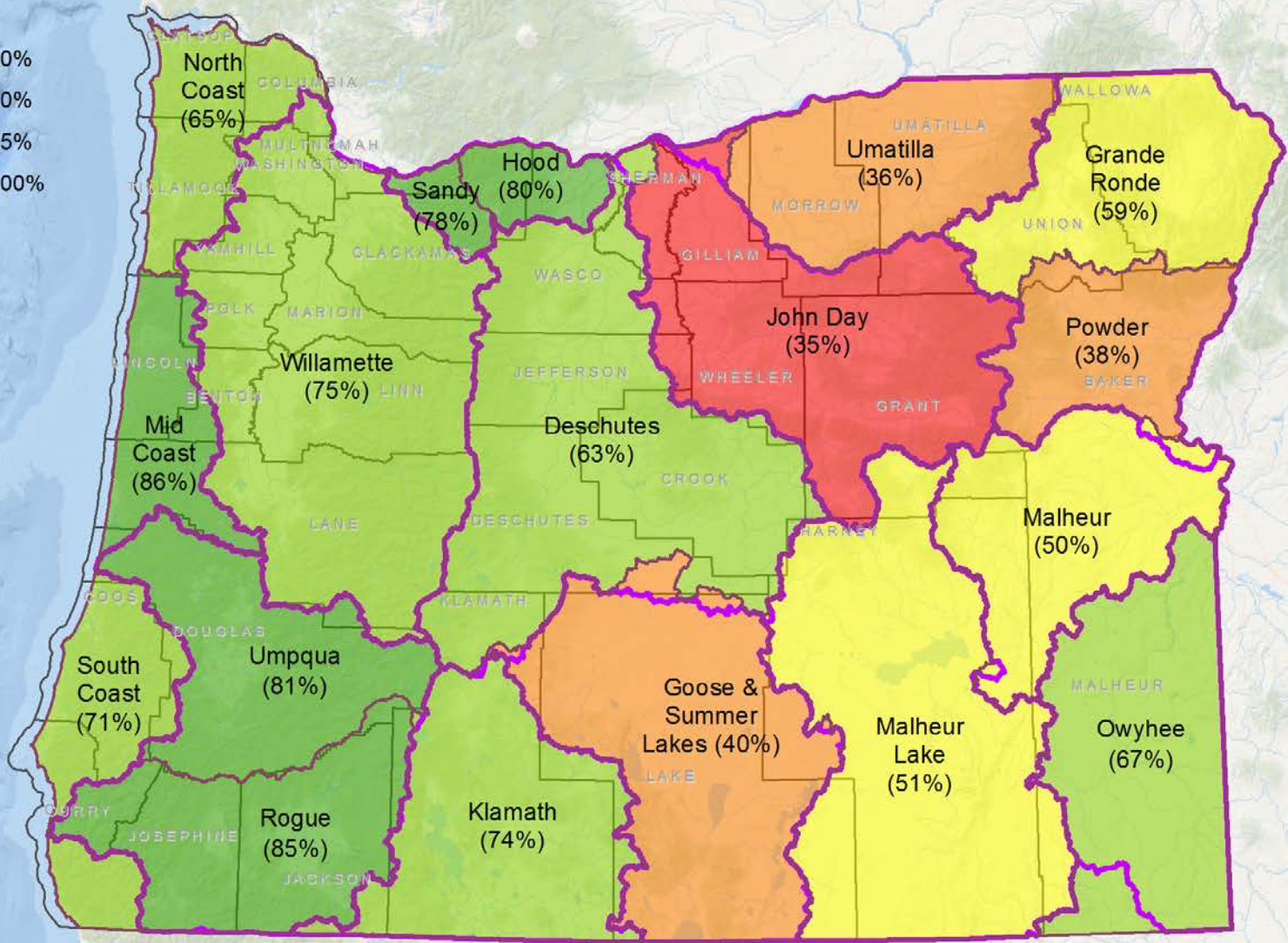
OWRD Basins

- < 36%
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- 61% - 75%
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NRCS Basins



Counties



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.

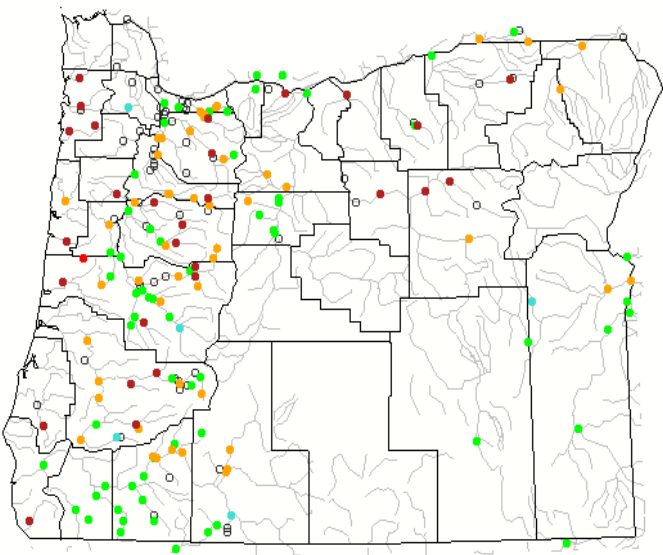
Maps of 28-day average USGS streamflow compared to historical streamflow for the day of the year (Oregon).

Screen Captures for June 2016 and July 2016

Map of monthly streamflow compared to historical streamflow for the month of the year (Oregon)

Oregon or Water-Resources Regions

June 2016



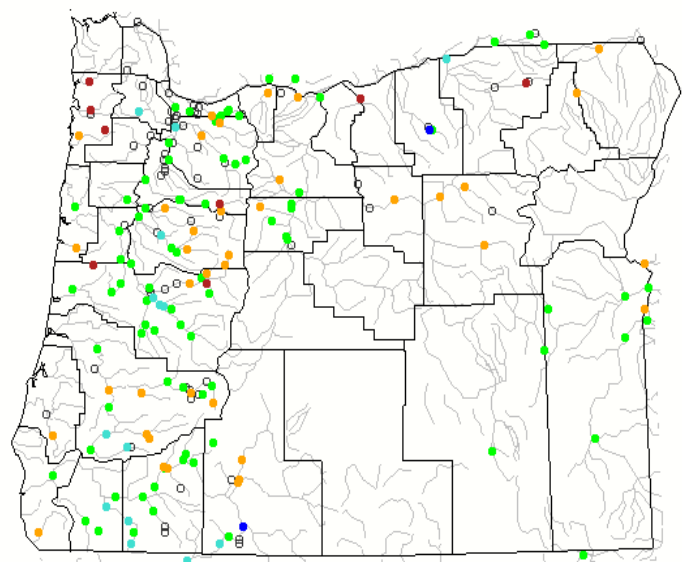
Choose a data retrieval option and select a location on the map
 List of all stations Single station Nearest stations Peak flow

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

Map of monthly streamflow compared to historical streamflow for the month of the year (Oregon)

Oregon or Water-Resources Regions

July 2016



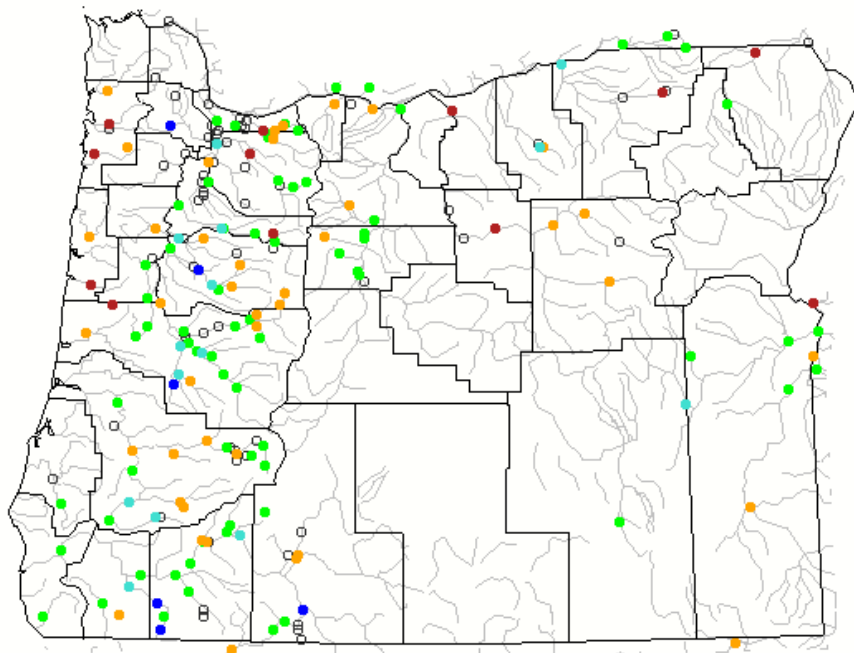
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Explanation - Percentile classes							
●	●	●	●	●	●	●	○
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked

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

Oregon ▼ or Water-Resources Regions ▼ All Days

Sunday, August 07, 2016



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

List of all stations Single station Nearest stations

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

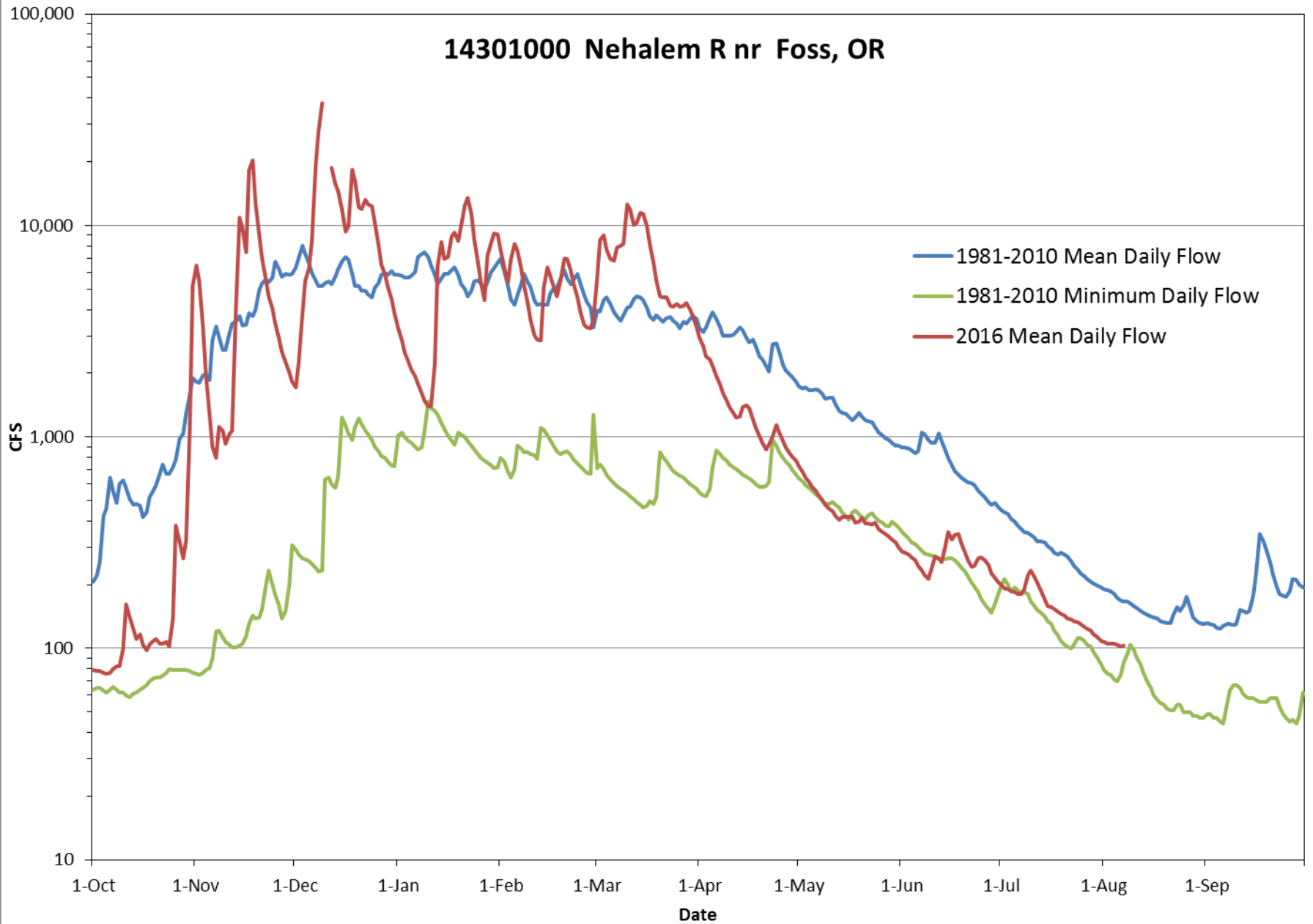
Map of 7-day average USGS streamflow

Compared to historical streamflow for the day of the year (08/07)

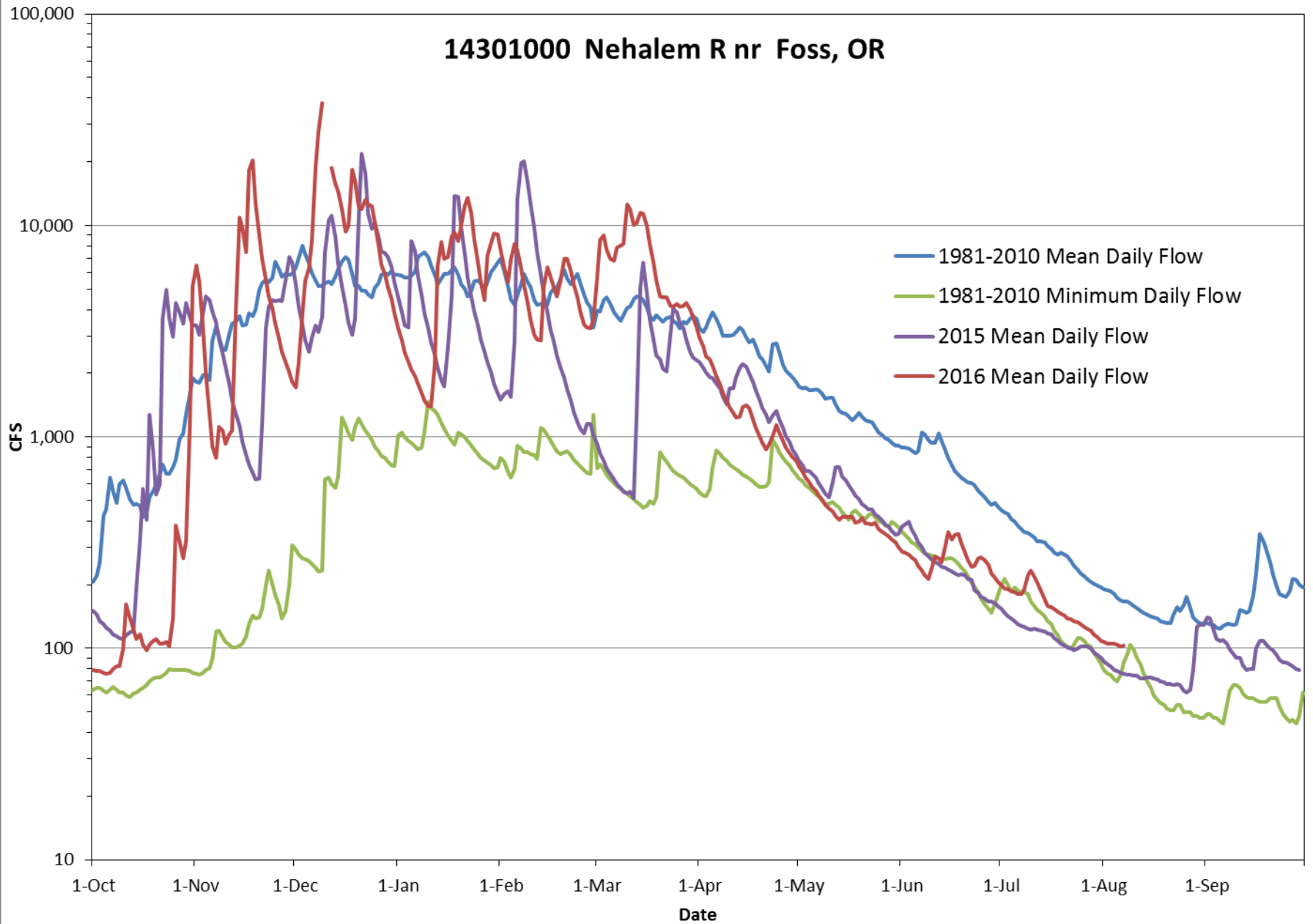
Basin/Areas with Stressed Streamflow Indicators

- Central and North Coast
- Grande Ronde
- Umatilla
- Upper John Day

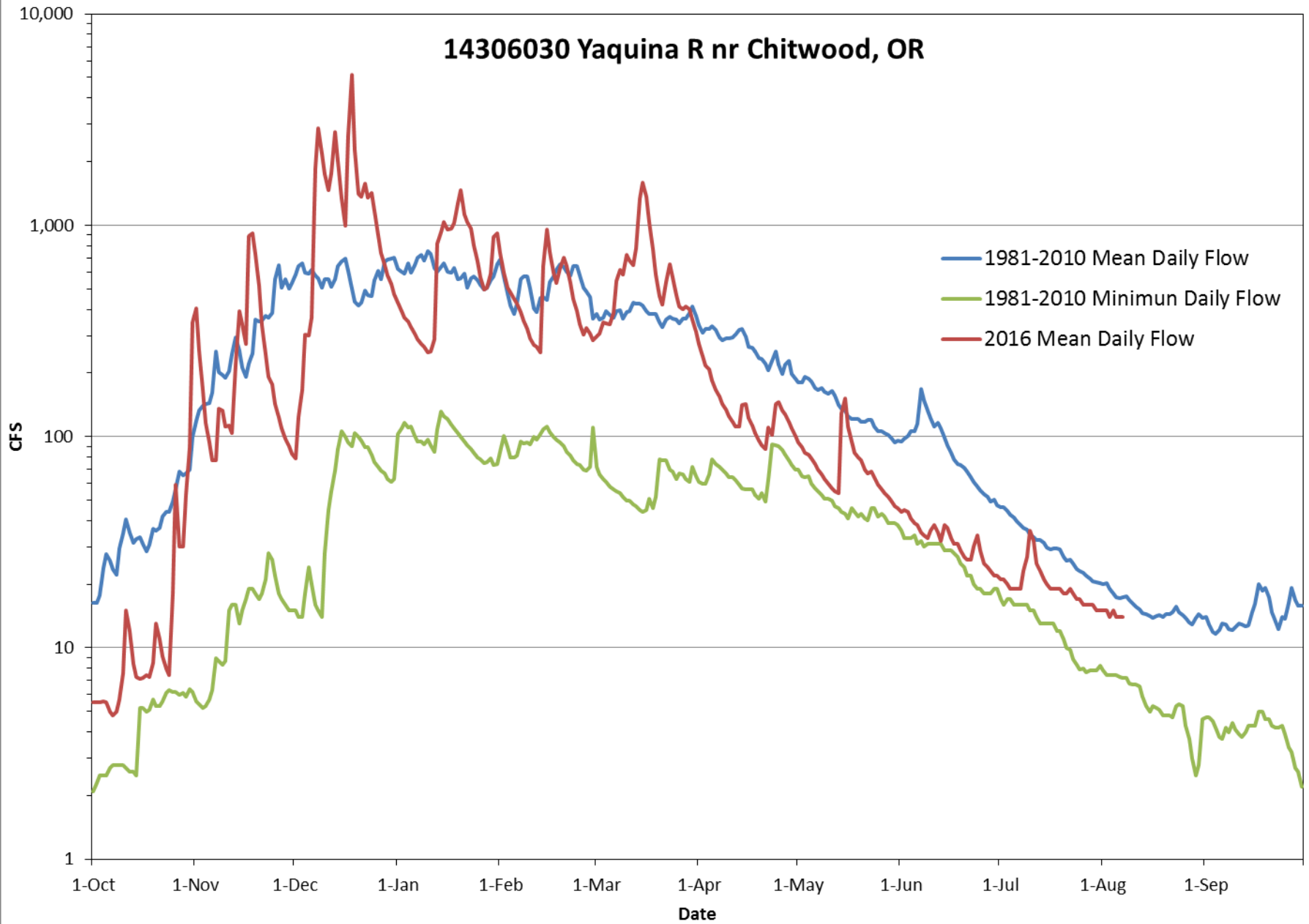
14301000 Nehalem R nr Foss, OR



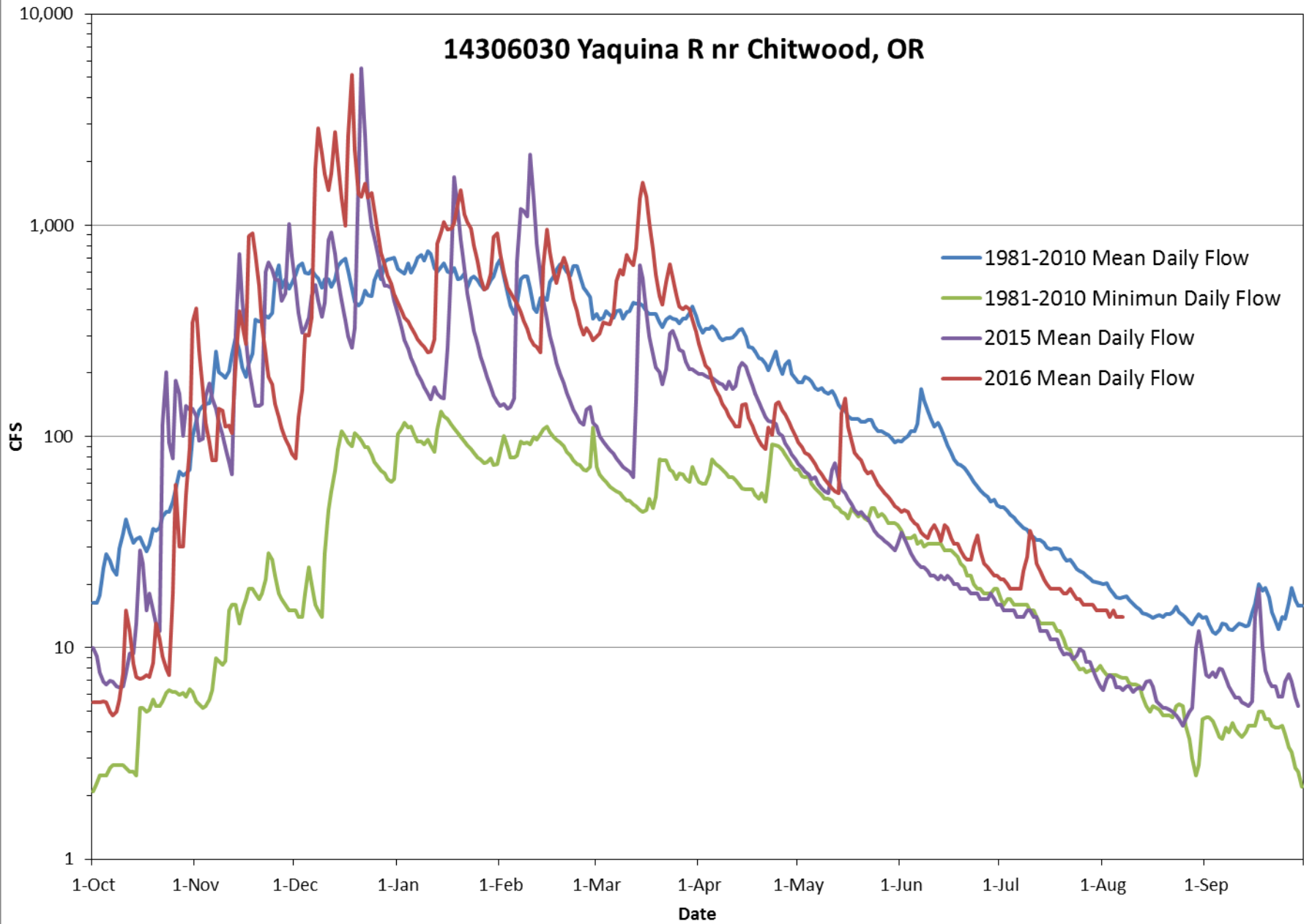
14301000 Nehalem R nr Foss, OR



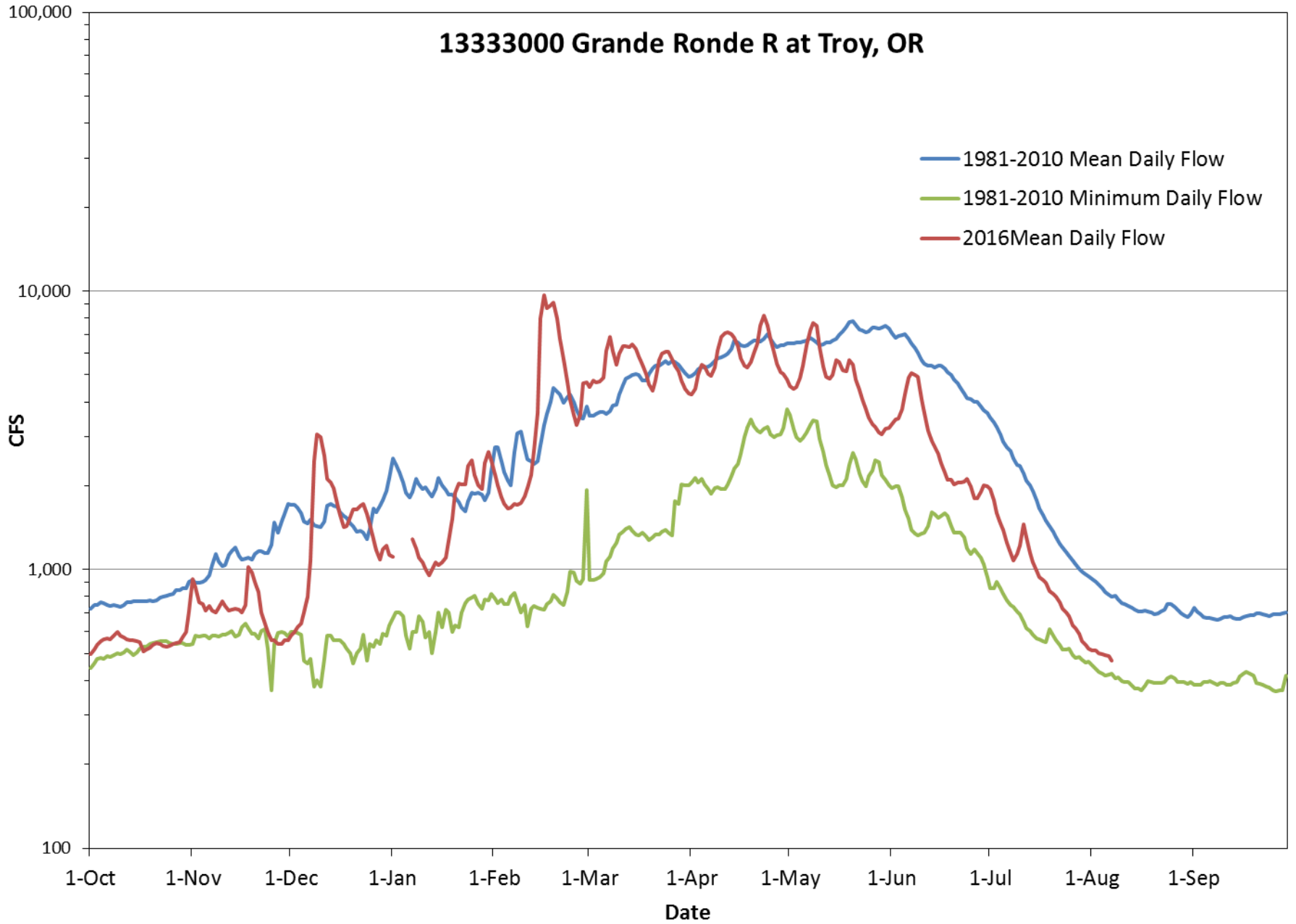
14306030 Yaquina R nr Chitwood, OR



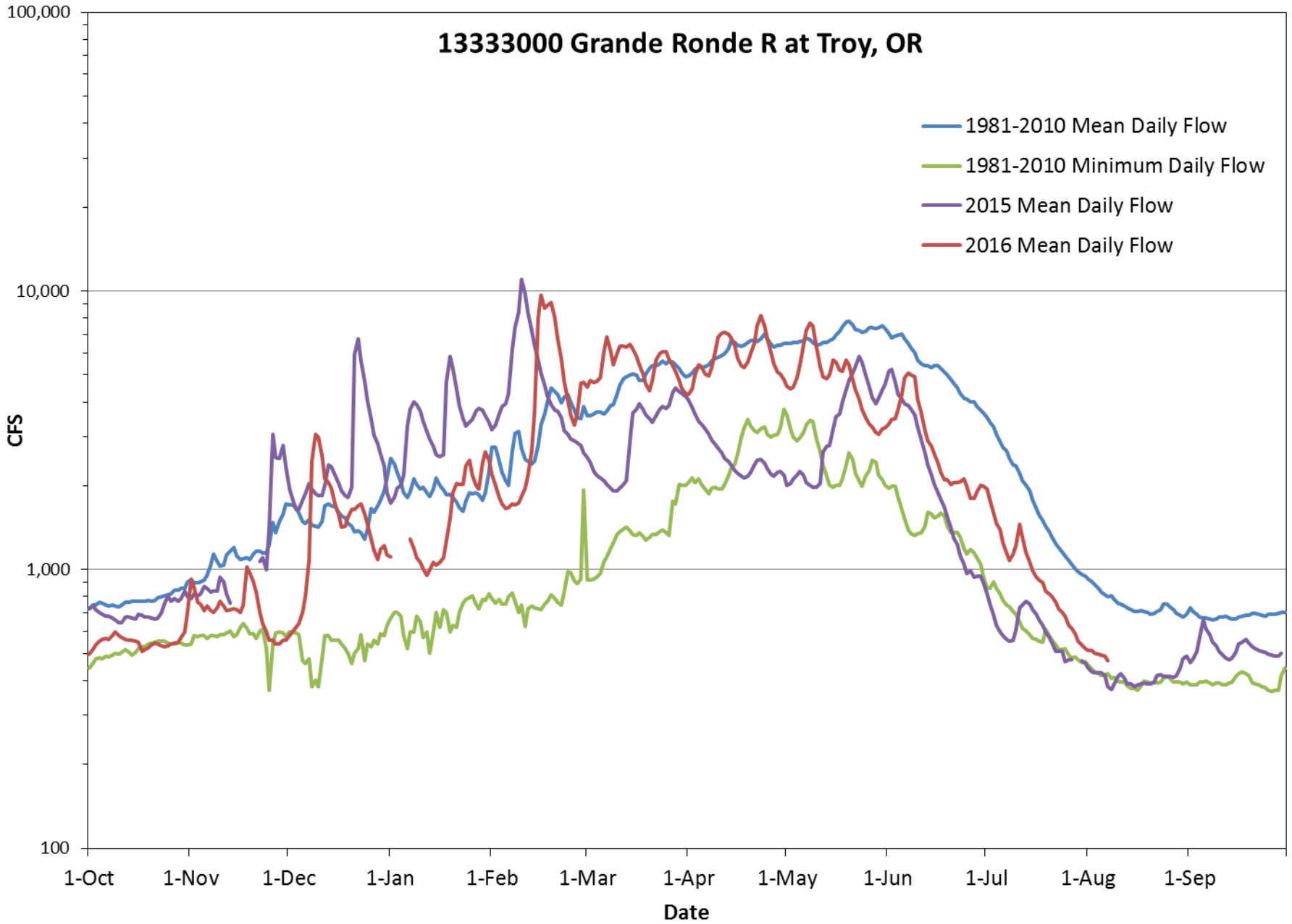
14306030 Yaquina R nr Chitwood, OR



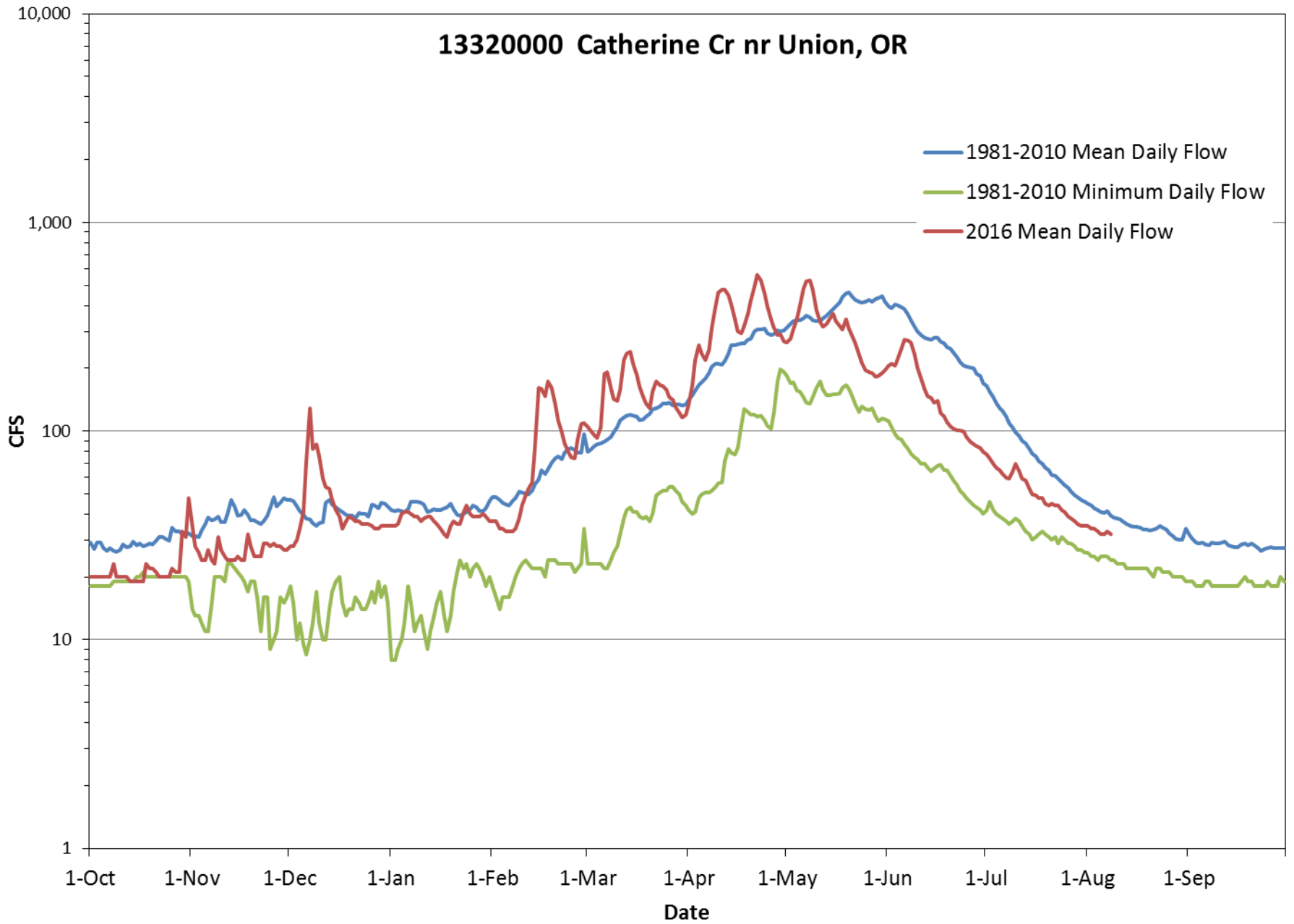
13333000 Grande Ronde R at Troy, OR



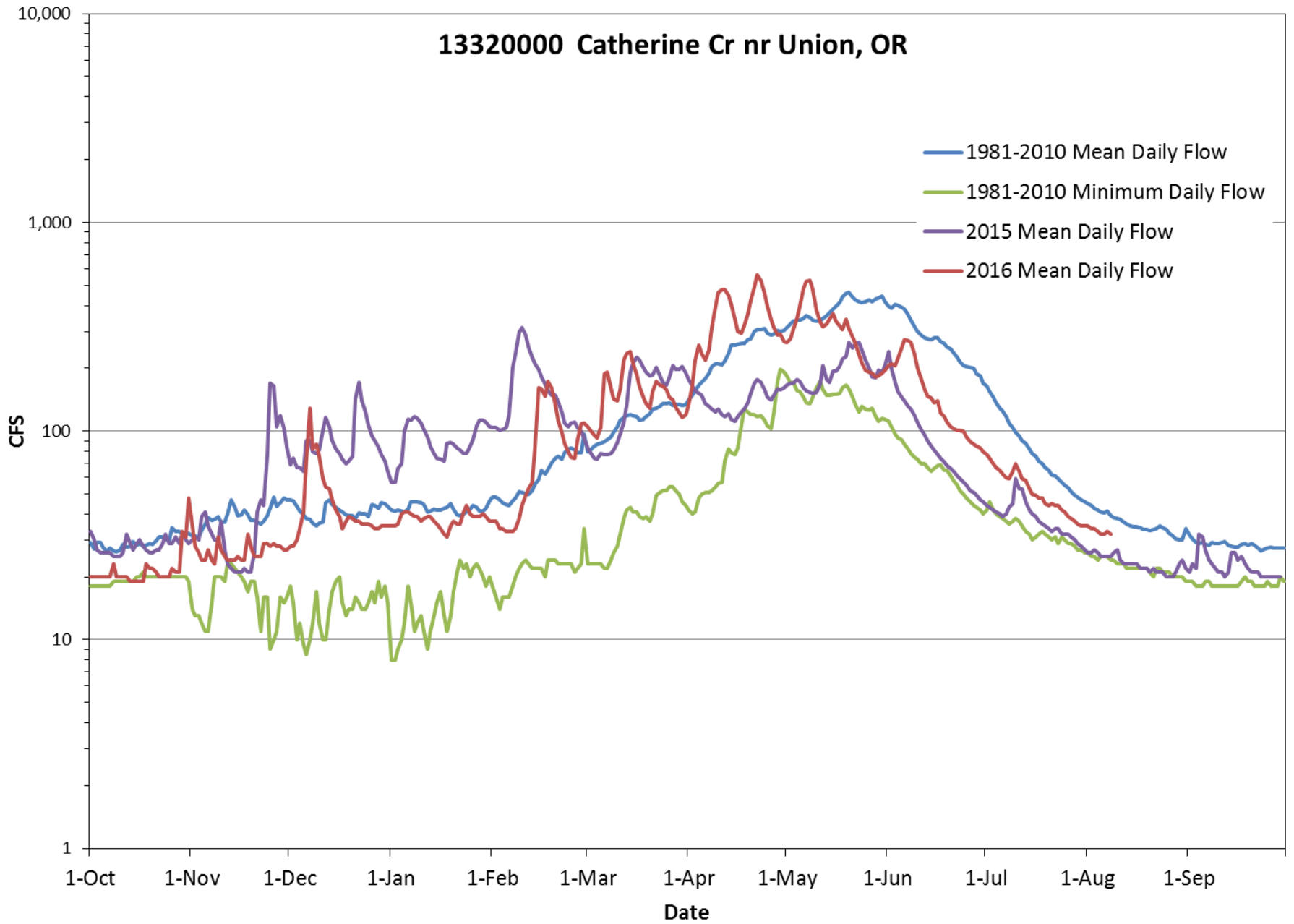
13333000 Grande Ronde R at Troy, OR



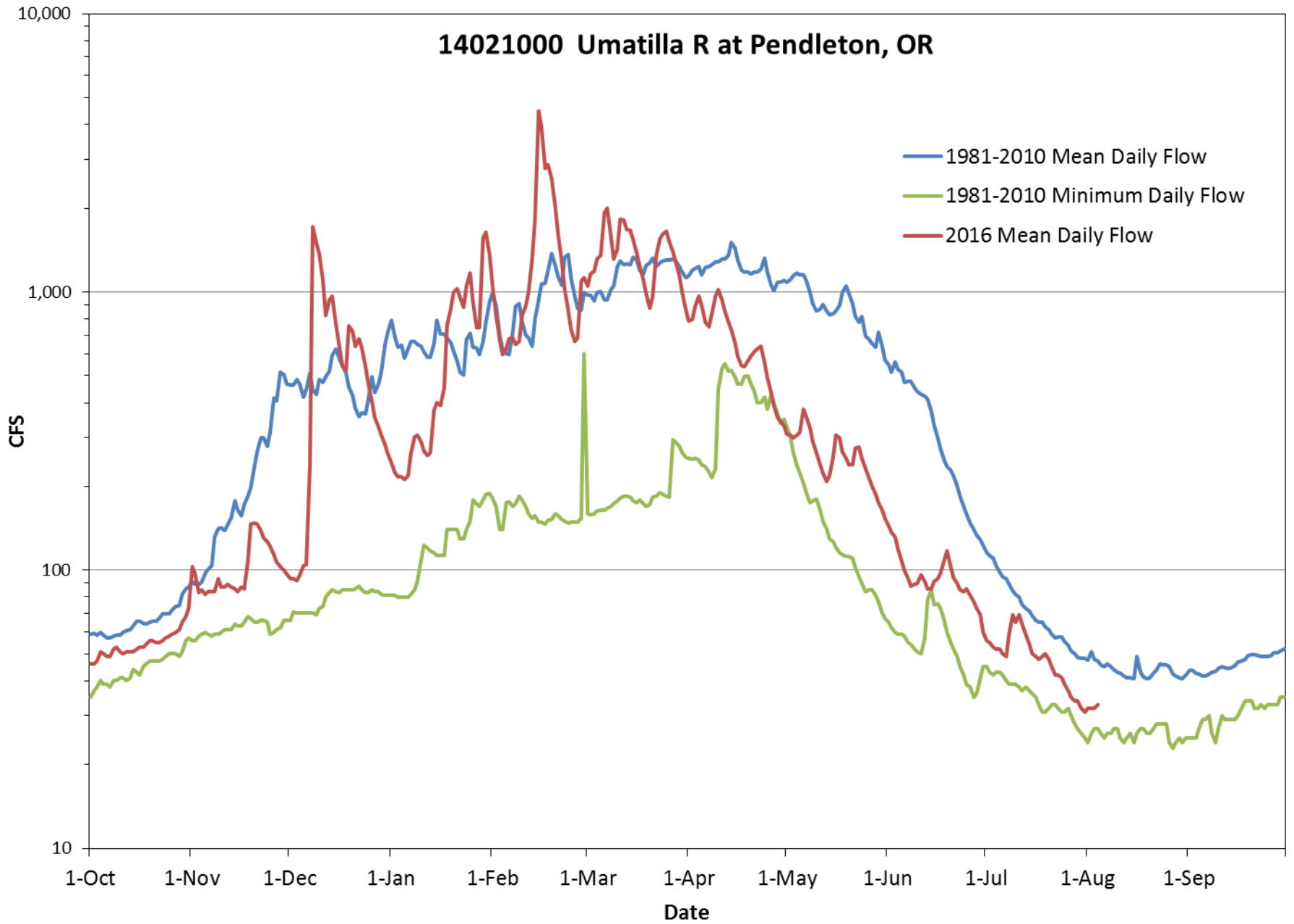
13320000 Catherine Cr nr Union, OR



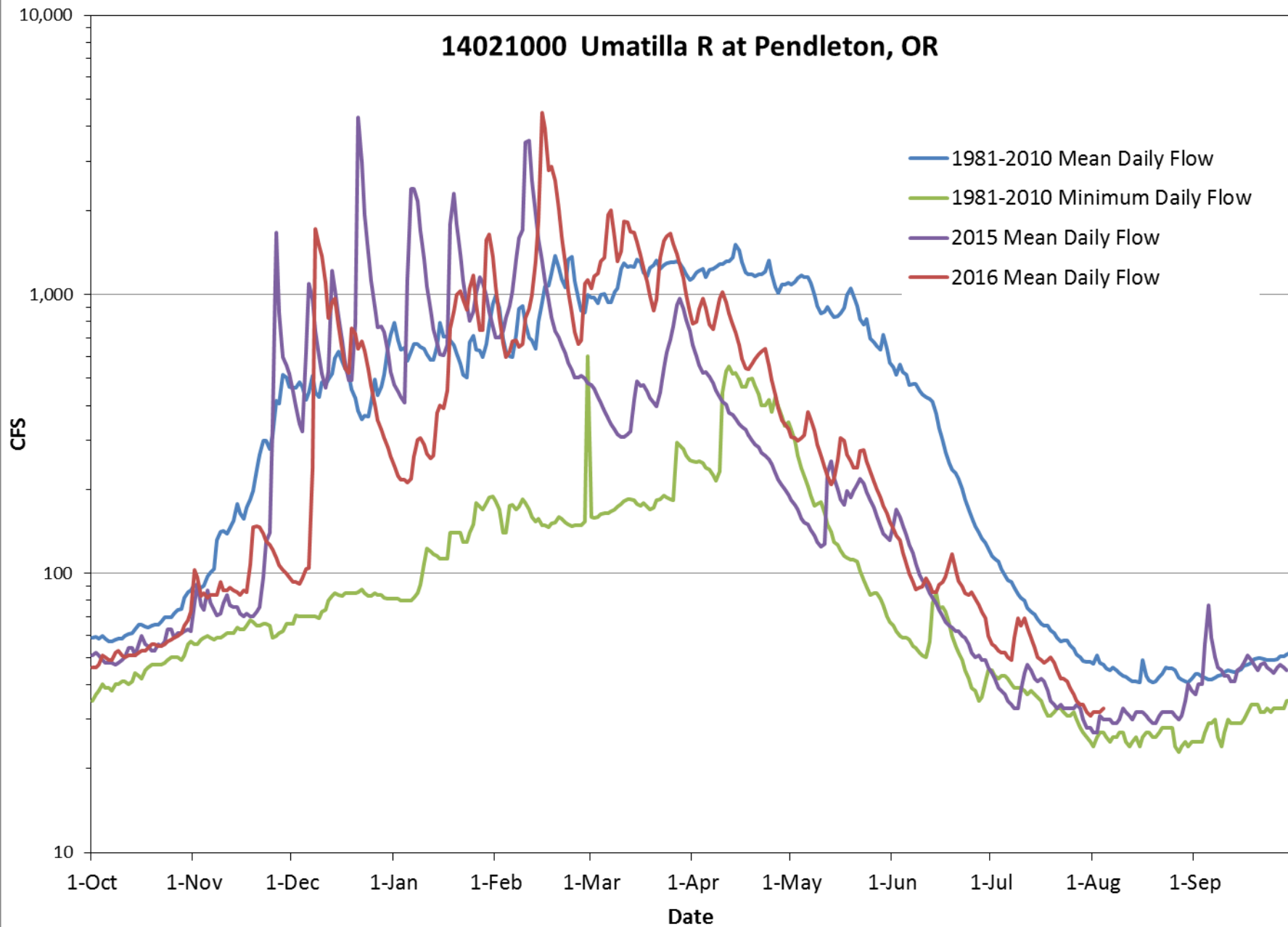
13320000 Catherine Cr nr Union, OR



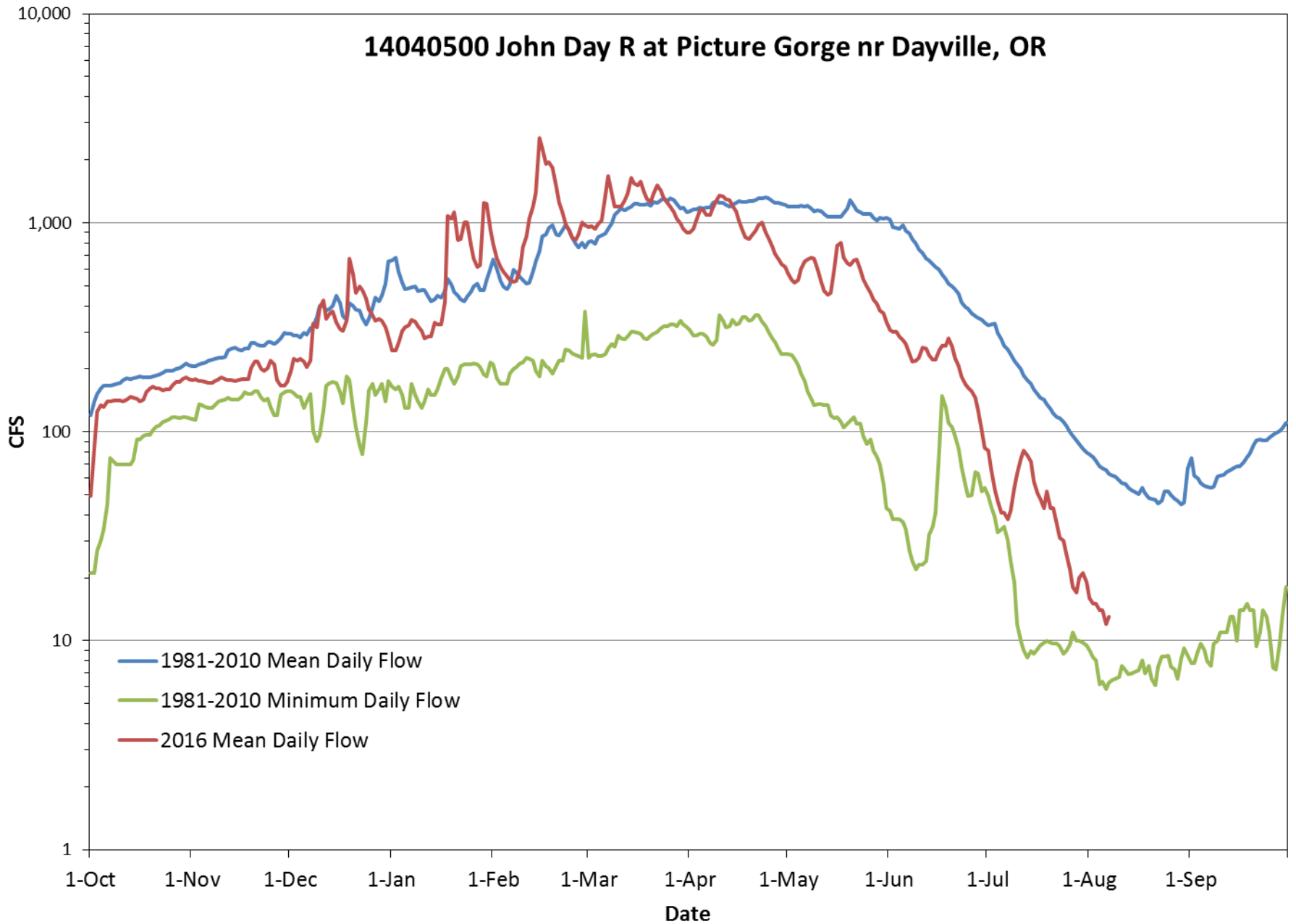
14021000 Umatilla R at Pendleton, OR



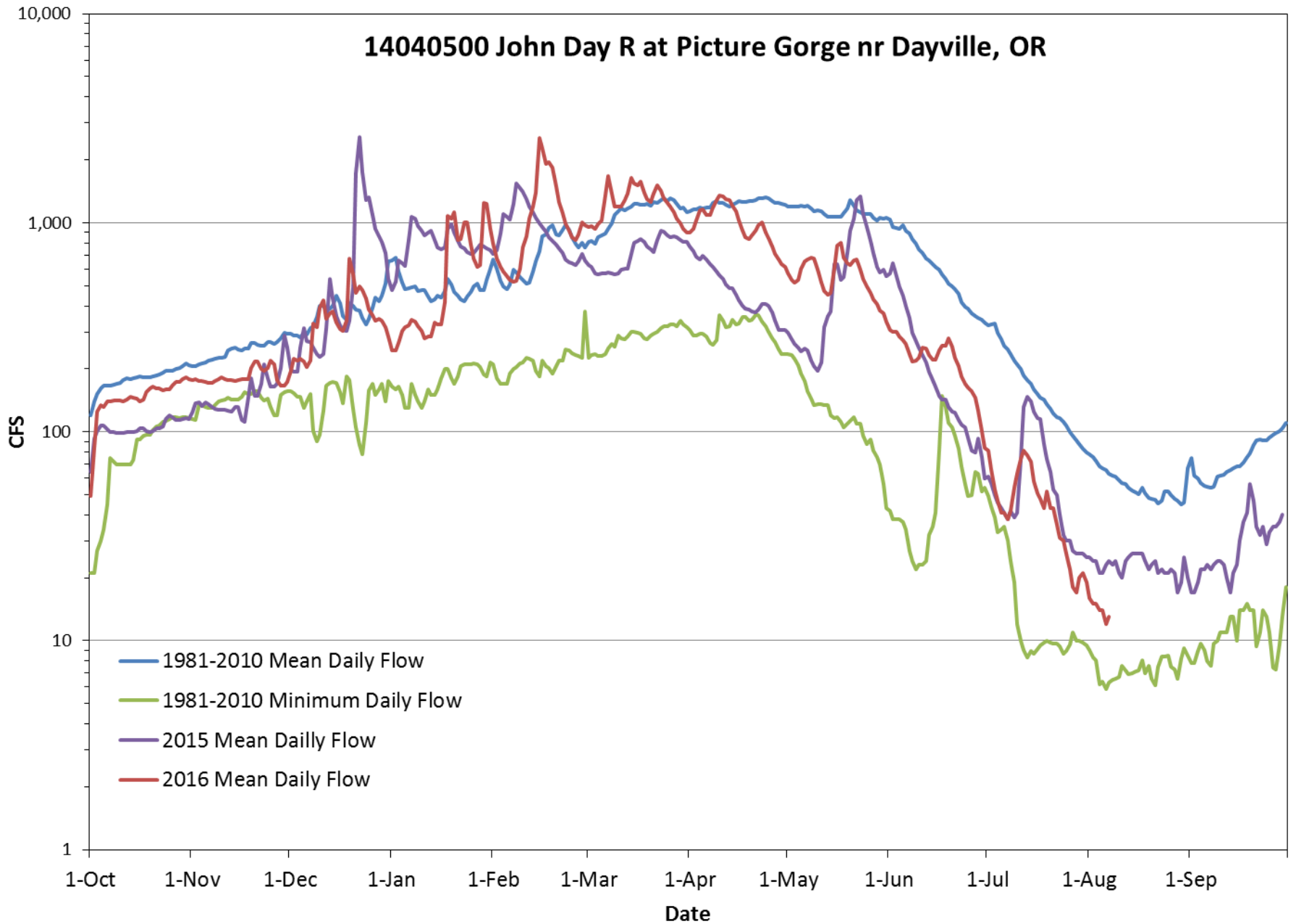
14021000 Umatilla R at Pendleton, OR



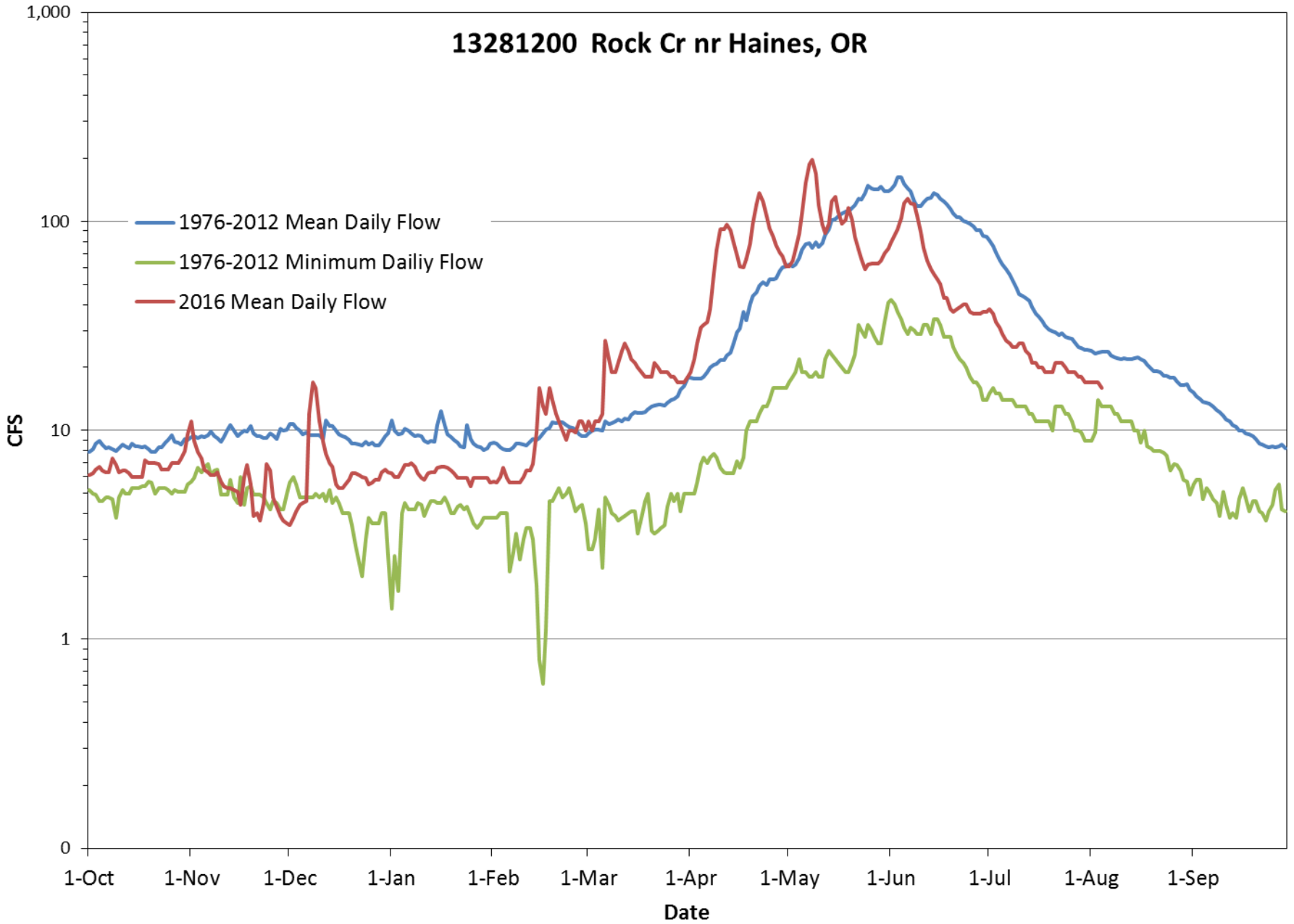
14040500 John Day R at Picture Gorge nr Dayville, OR



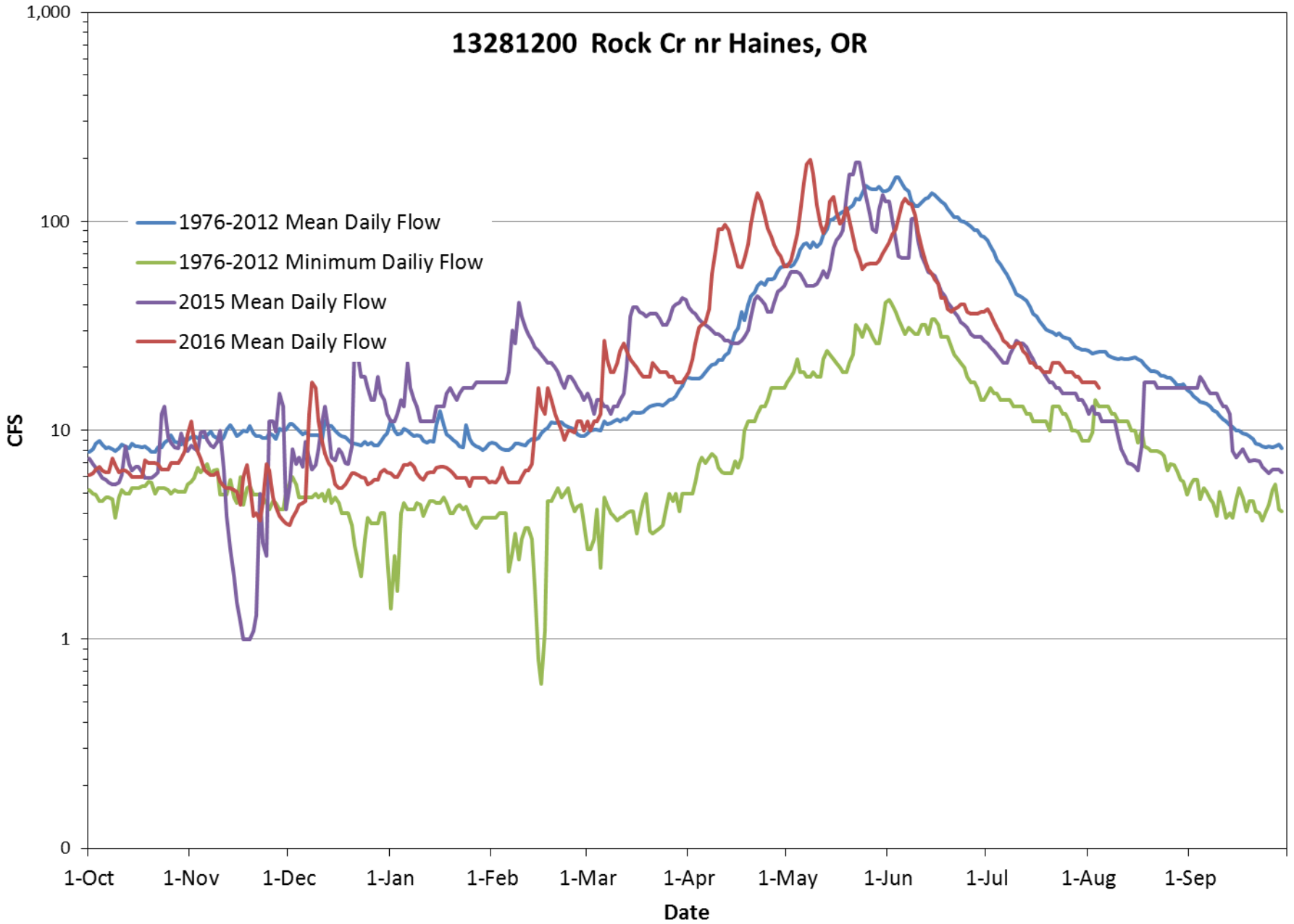
14040500 John Day R at Picture Gorge nr Dayville, OR



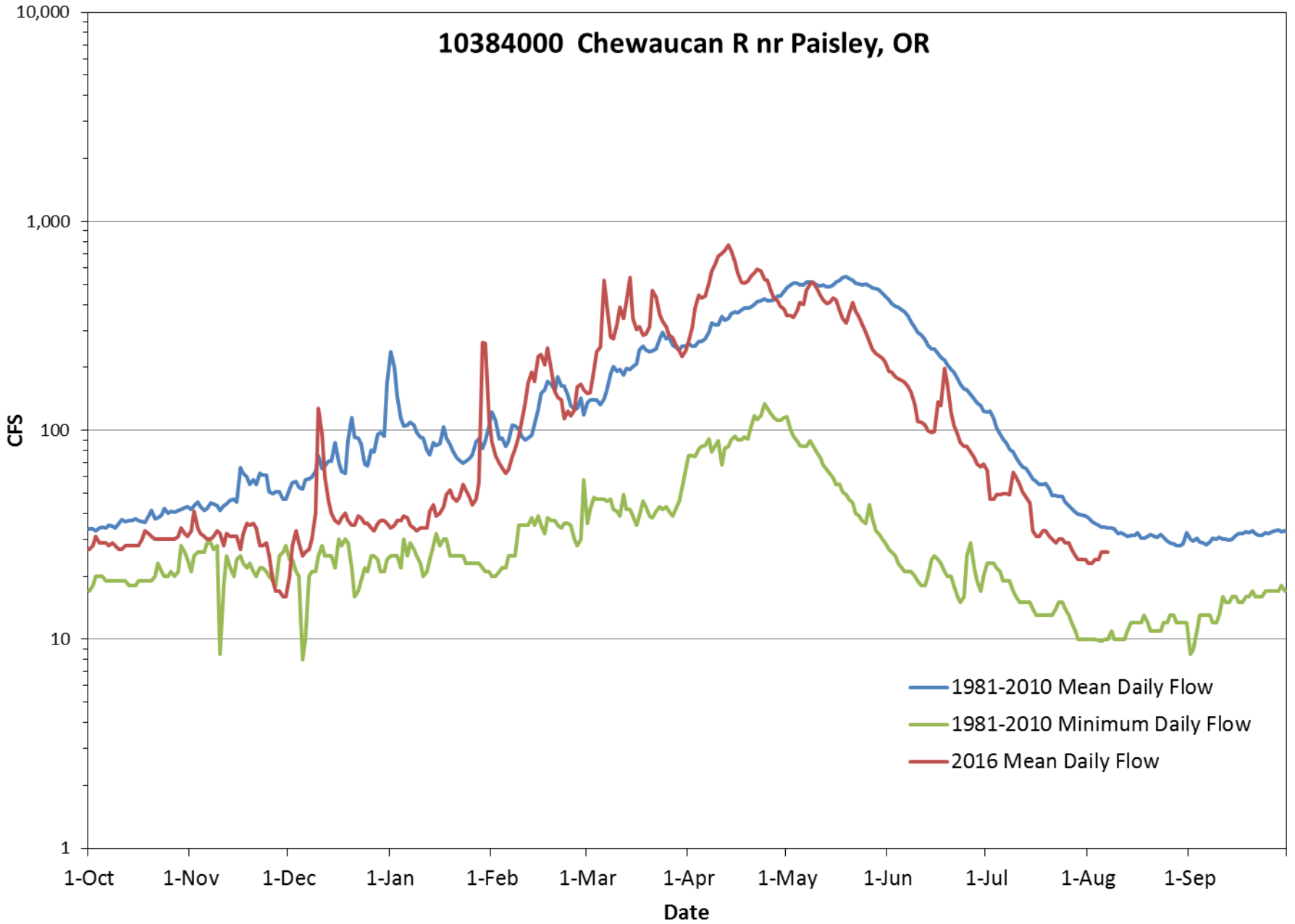
13281200 Rock Cr nr Haines, OR



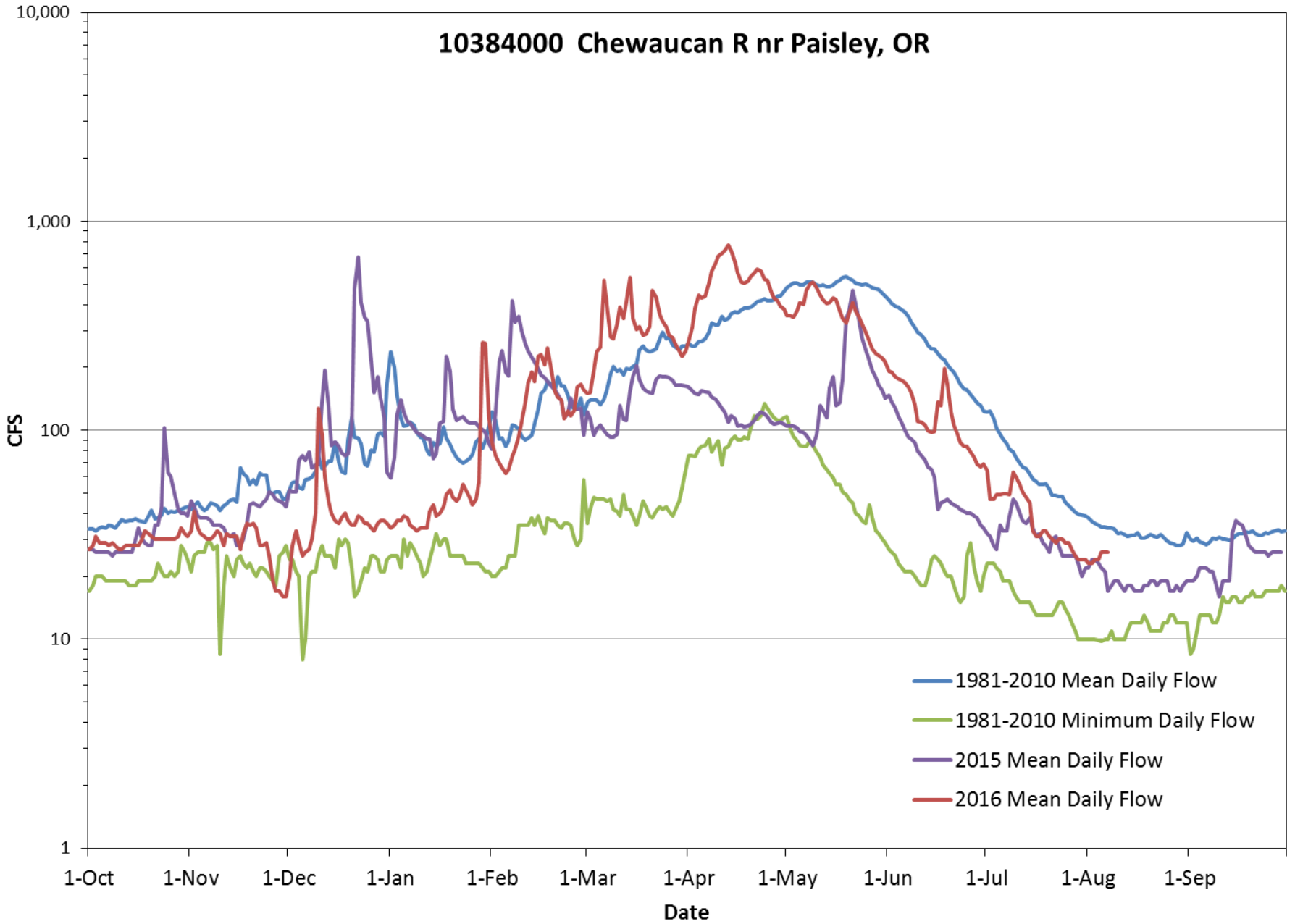
13281200 Rock Cr nr Haines, OR



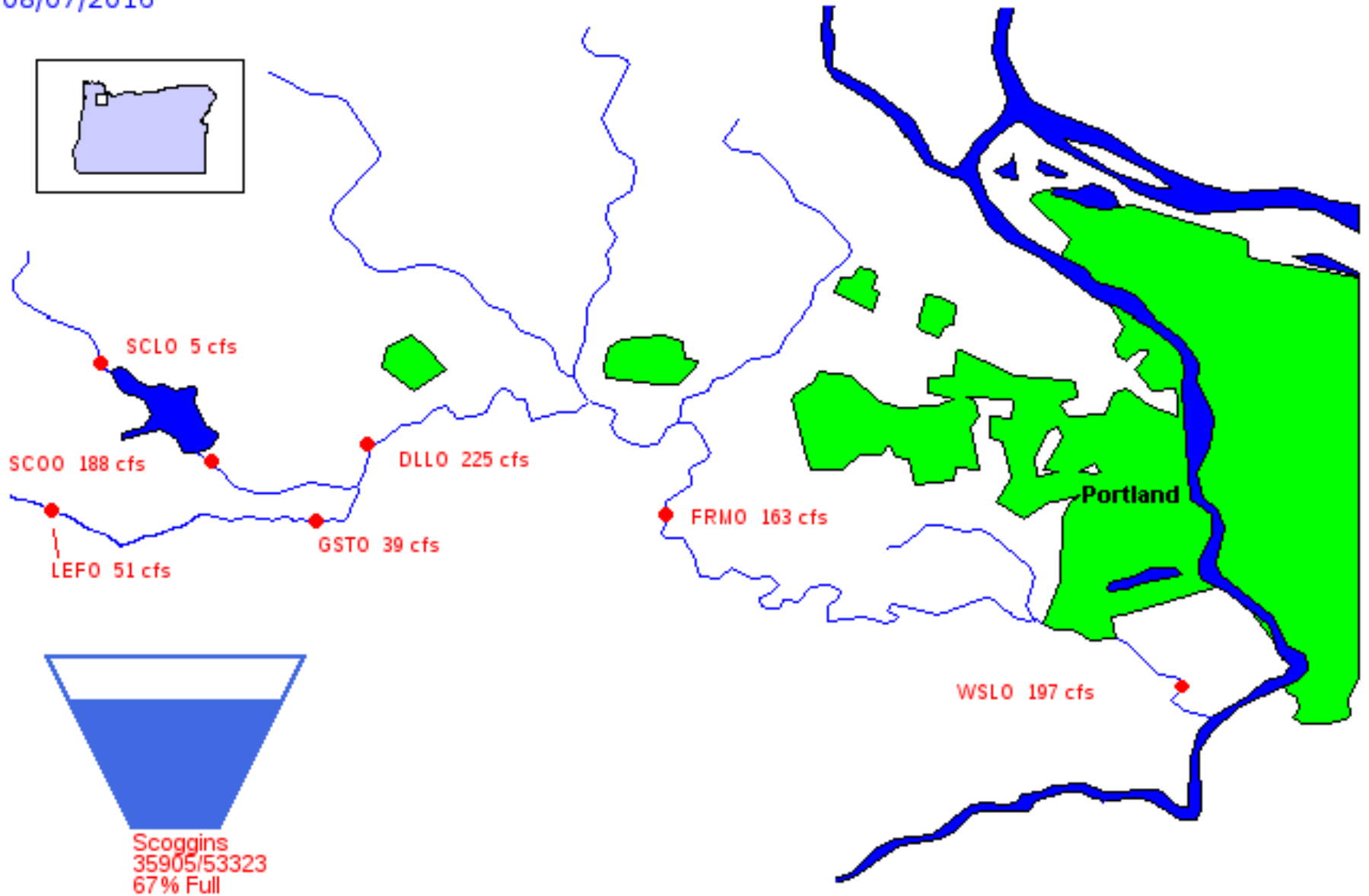
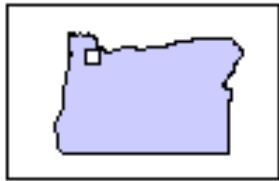
1038400 Chewaucan R nr Paisley, OR



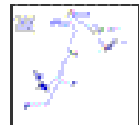
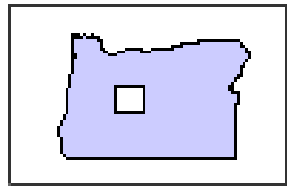
10384000 Chewaucan R nr Paisley, OR



08/07/2016



08/07/2016



Deschutes ESA

CULO 529 cfs

CR00 1259 cfs

Haystack
3947/5600
70% Full

Ochoco
28765/44247
65% Full

CRS0 87 cfs

Prineville

MLC0 0 cfs

CAPO 123 cfs

OCRO 1 cfs

OCHO 14 cfs

CRCO 156 cfs

CRPO 2 cfs

DEBO 129 cfs

PRVO 304 cfs

Bend

Crane Prairie
38467/55300
70% Full

CRAO 303 cfs

BENO 1995 cfs

Prineville
101781/148640
68% Full

Wickiup
60345/200000
30% Full

LAPO 99 cfs

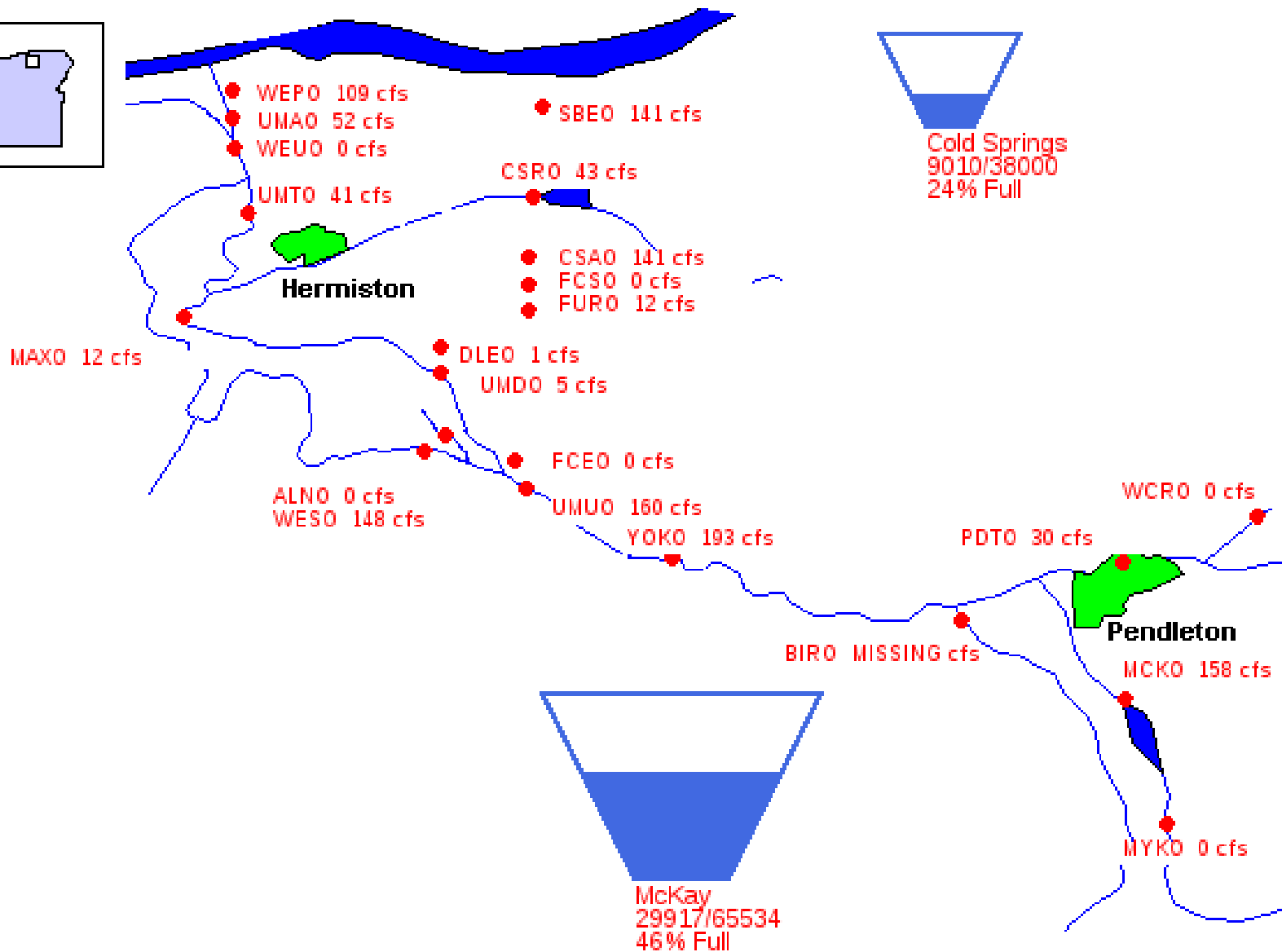
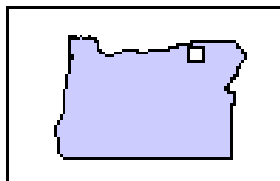
WICO 1642 cfs

Crescent Lake
57994/86900
67% Full

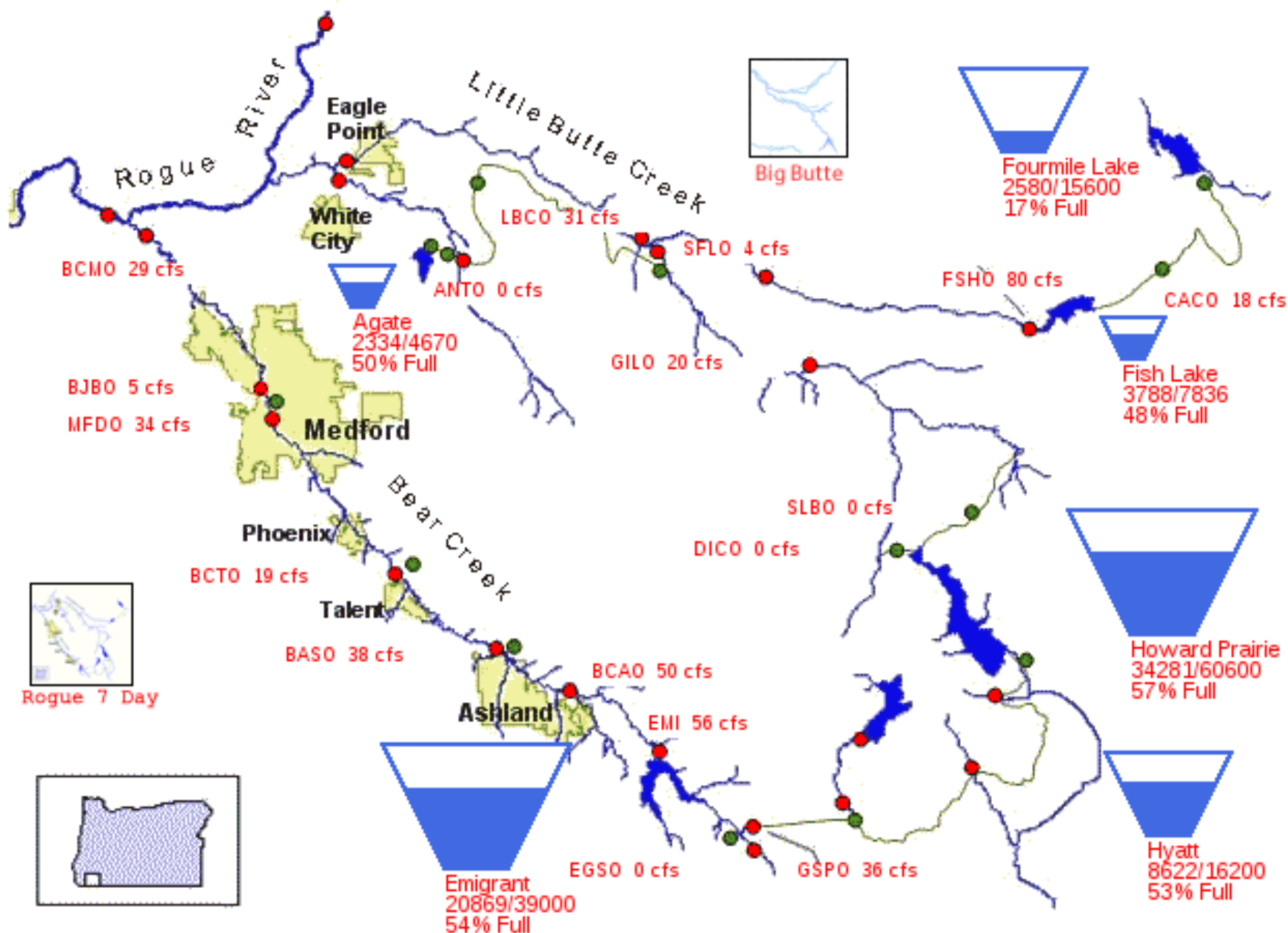
CREO 108 cfs



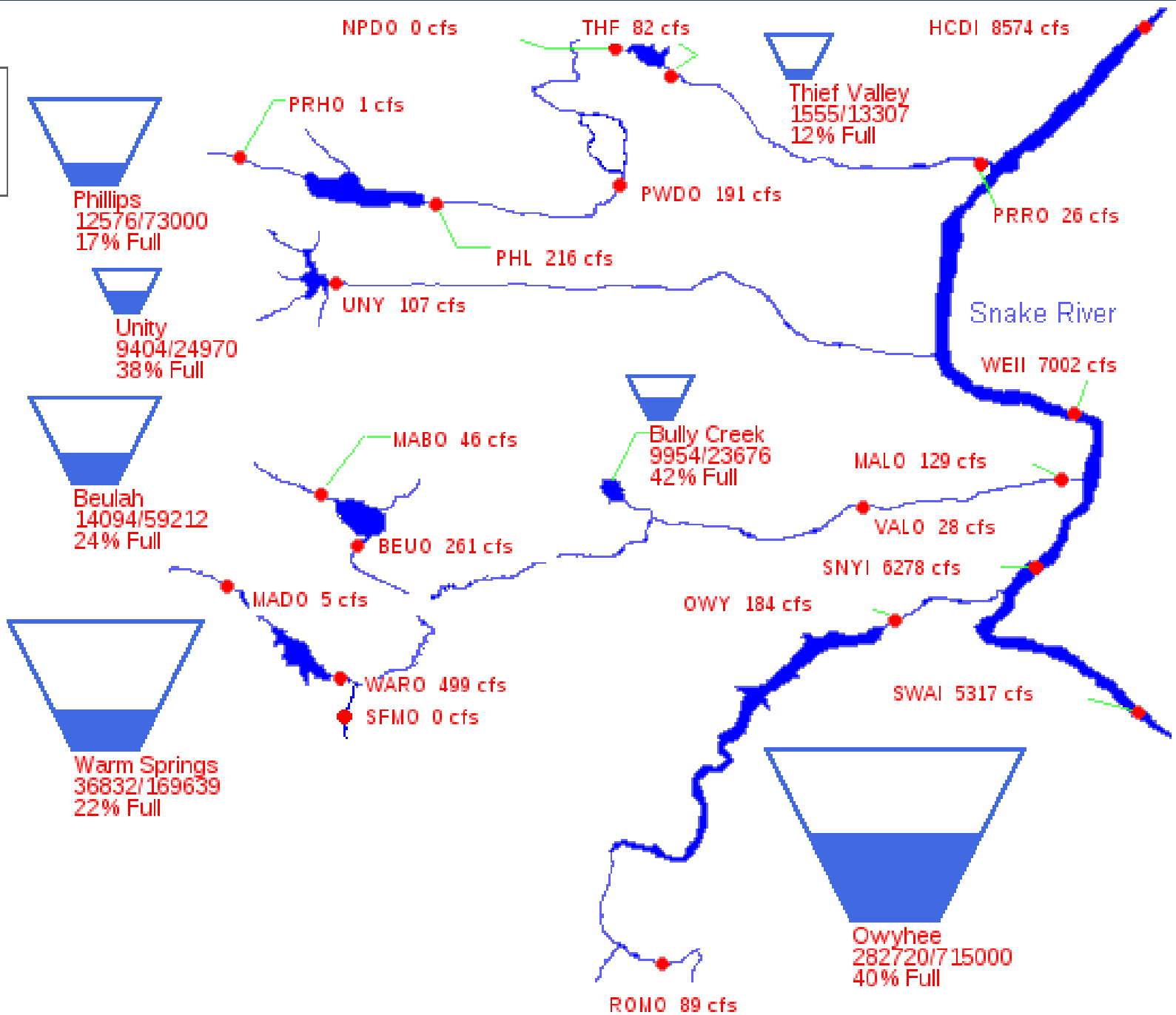
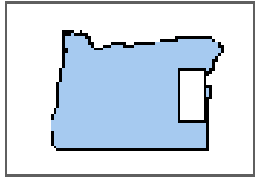
08/07/2016



08/07/2016



08/07/2016



Thank You

U.S. Drought Monitor

Oregon

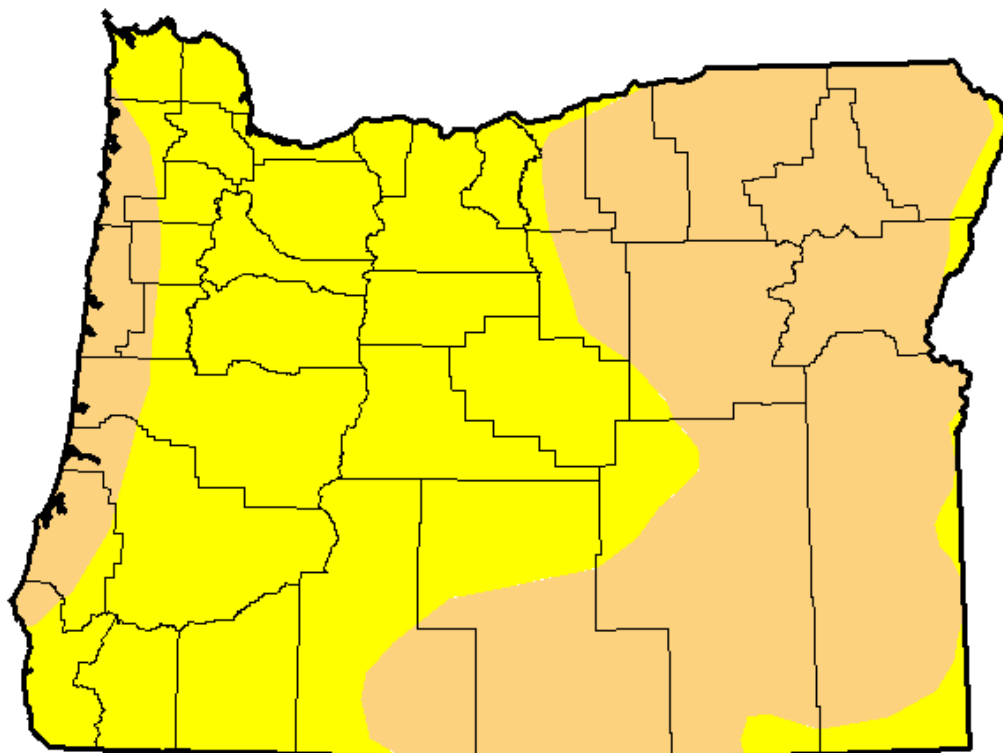
August 2, 2016

(Released Thursday, Aug. 4, 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	49.75	0.00	0.00	0.00
Last Week <i>7/26/2016</i>	0.00	100.00	49.75	0.00	0.00	0.00
3 Months Ago <i>5/3/2016</i>	34.27	65.73	26.12	1.00	0.00	0.00
Start of Calendar Year <i>1/2/2015</i>	14.52	85.48	80.45	65.33	39.55	0.00
Start of Water Year <i>8/29/2015</i>	0.00	100.00	100.00	100.00	67.29	0.00
One Year Ago <i>8/4/2015</i>	0.00	100.00	100.00	100.00	48.31	0.00



Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

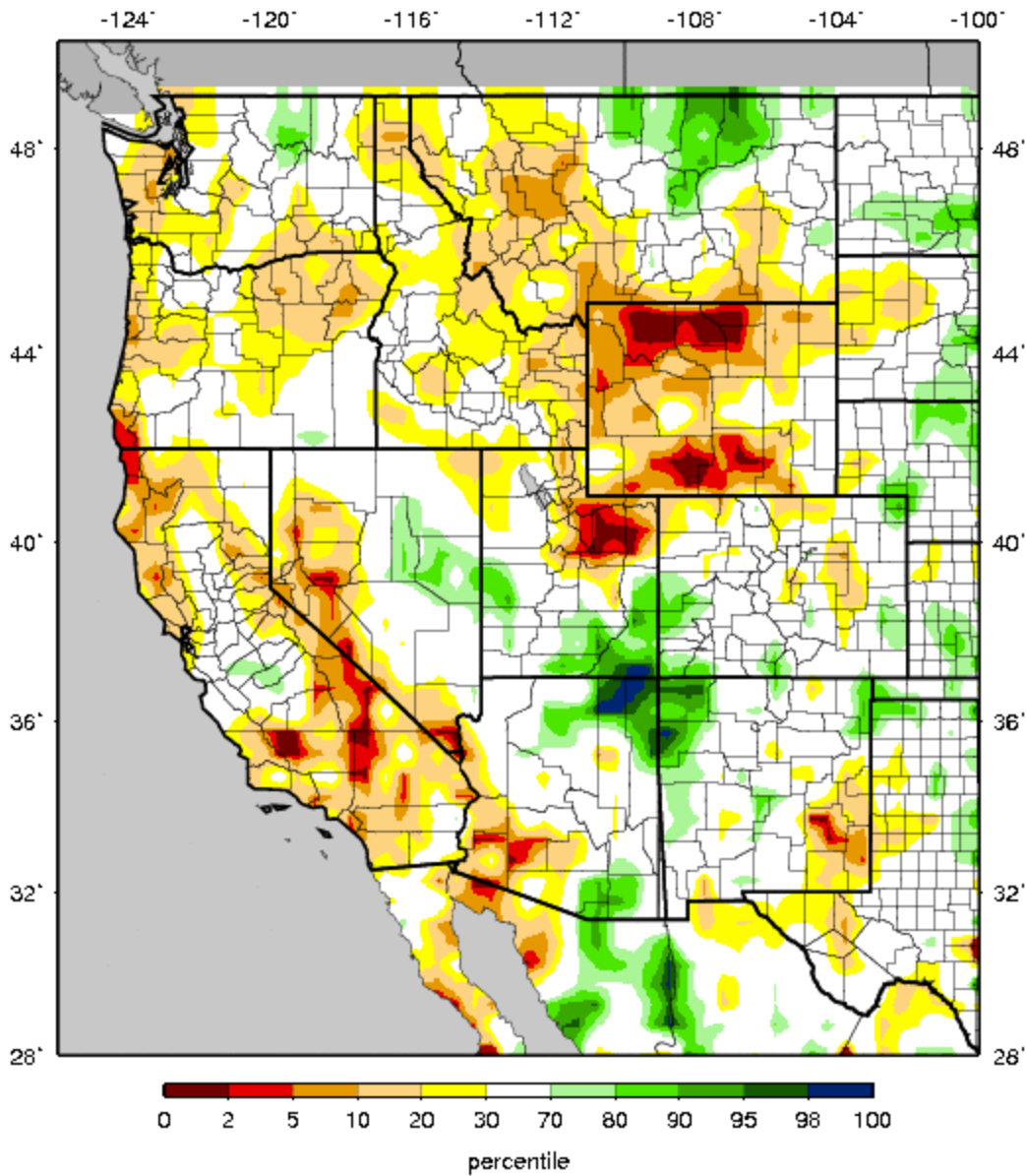
Author:

Richard Tinker

CPC/NOAA/NWS/NCEP



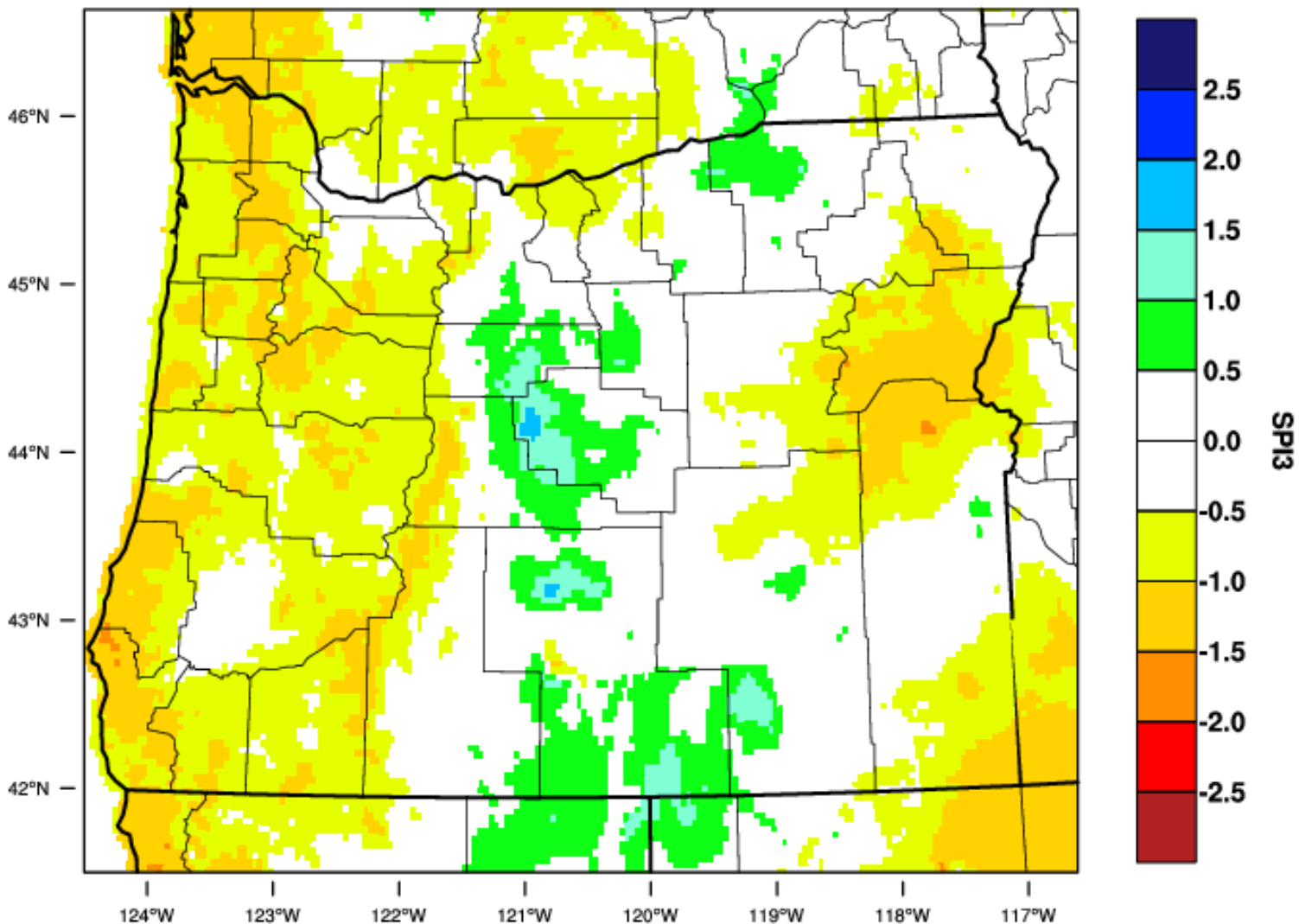
VIC Soil Moisture Percentiles (wrt/ 1916-2004)
Western United States - 20160807



**Current Product:
PRISM > SPI 3 Month > Oregon**

Oregon - 3 month SPI

July 2016



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 7 AUG 2016

Streamflow Forecasts for June - September, 2016 as of June 1, 2016

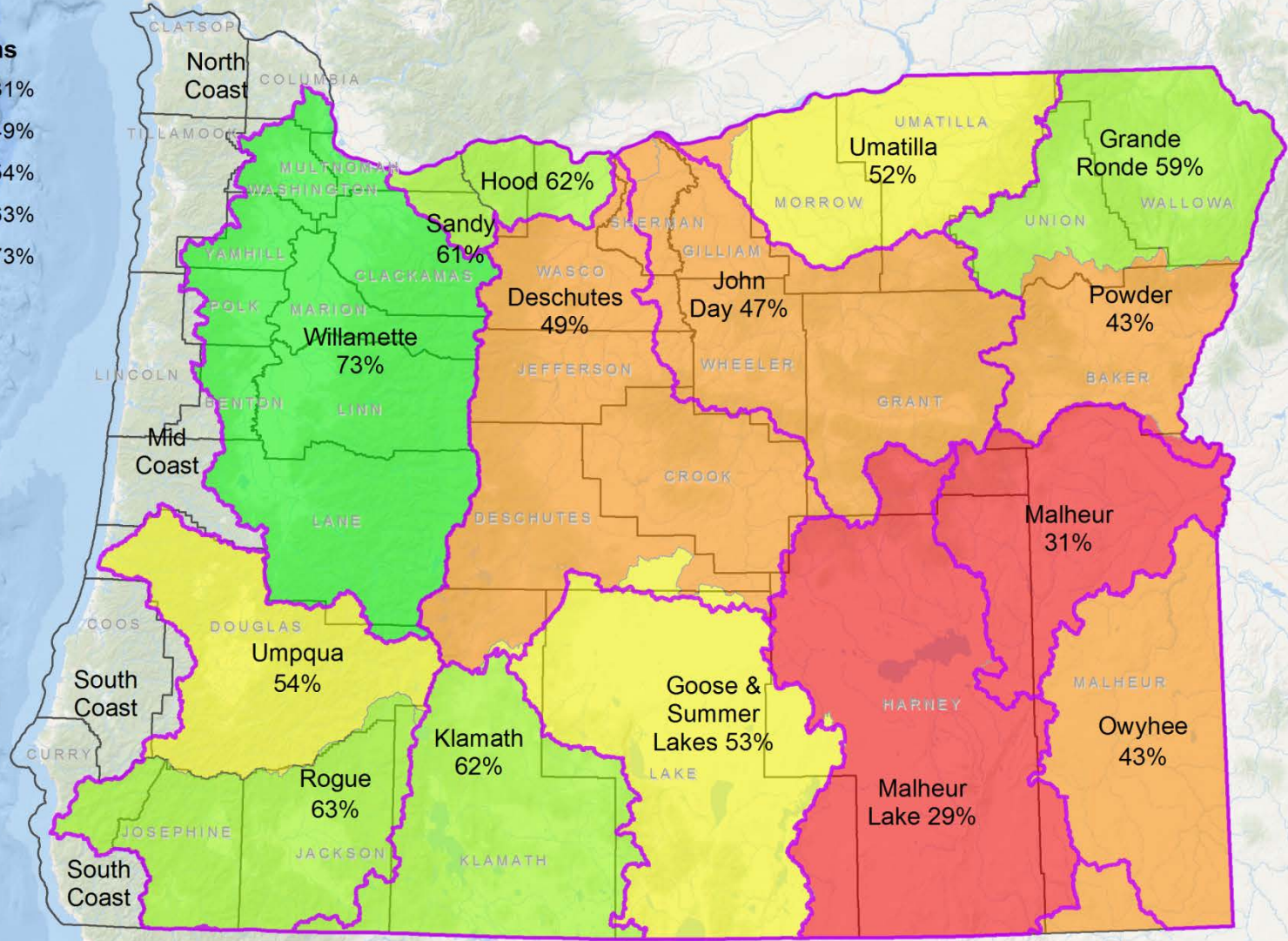
NRCS Basins



OWRD Basins



Counties



Published by the USDA Natural Resources Conservation Service
 Data current as of: 7 June 2016 10:00
 Percent values are based on 70% probability

Percent of Average Streamflow August 8, 2016

Percent of Average Streamflow

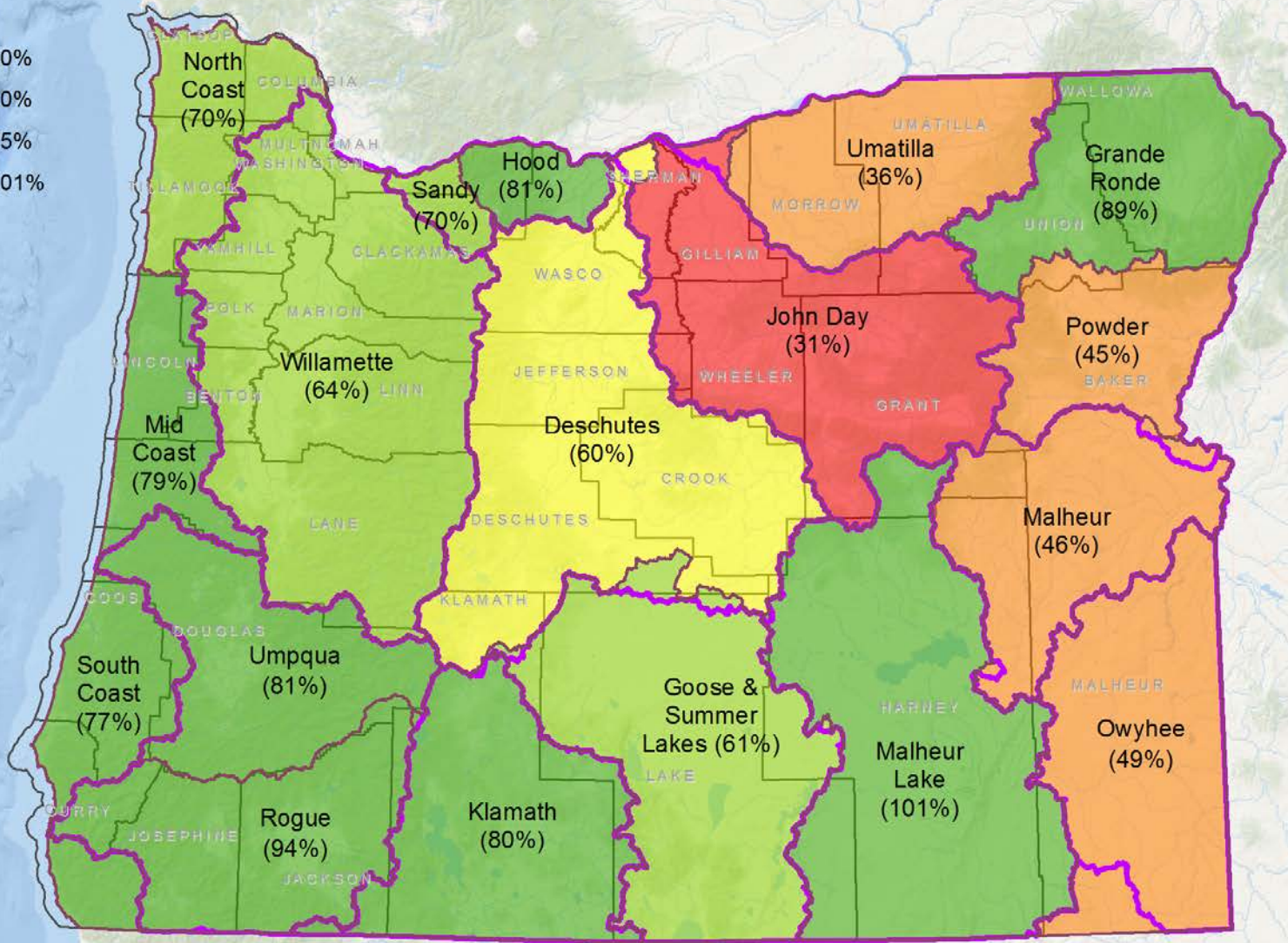
OWRD Basin

- < 36%
- 36% - 50%
- 51% - 60%
- 61% - 75%
- 76% - 101%

NRCS Basins



Counties



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Water Supply Availability Committee August 2016

http://or.water.usgs.gov/data_dir/war_dir/war1604.html

http://or.water.usgs.gov/sw_studies/index.html

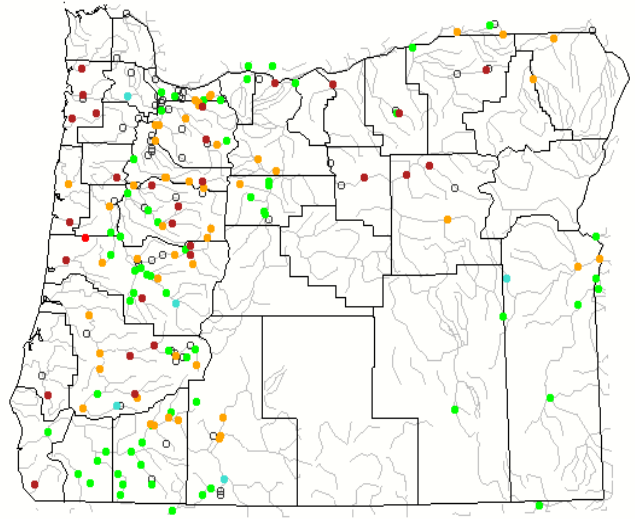
Data are provisional and subject to revision until they have been thoroughly reviewed and received final approval.

Maps of 28-day average USGS streamflow compared to historical streamflow for the day of the year (Oregon). Screen Captures for June 2016 and July 2016

Map of monthly streamflow compared to historical streamflow for the month of the year (Oregon)

Oregon ▼ or Water-Resources Regions ▼

June 2016



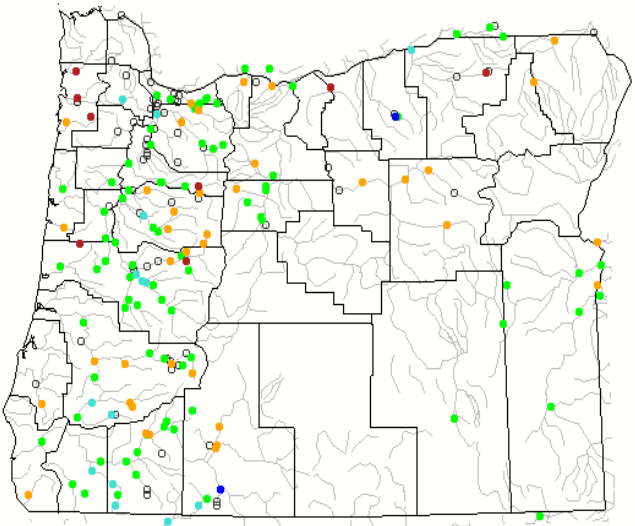
Choose a data retrieval option and select a location on the map
 List of all stations Single station Nearest stations Peak flow

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

Map of monthly streamflow compared to historical streamflow for the month of the year (Oregon)

Oregon ▼ or Water-Resources Regions ▼

July 2016



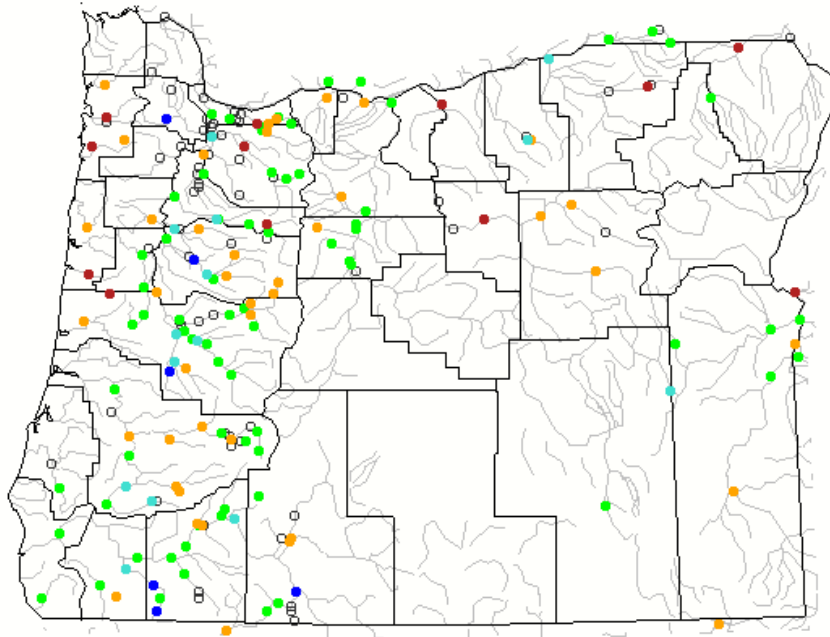
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Map of 7-day average streamflow compared to historical streamflow for the day of the year (Oregon)

Oregon or Water-Resources Regions All Days

Sunday, August 07, 2016



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

List of all stations Single station Nearest stations

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

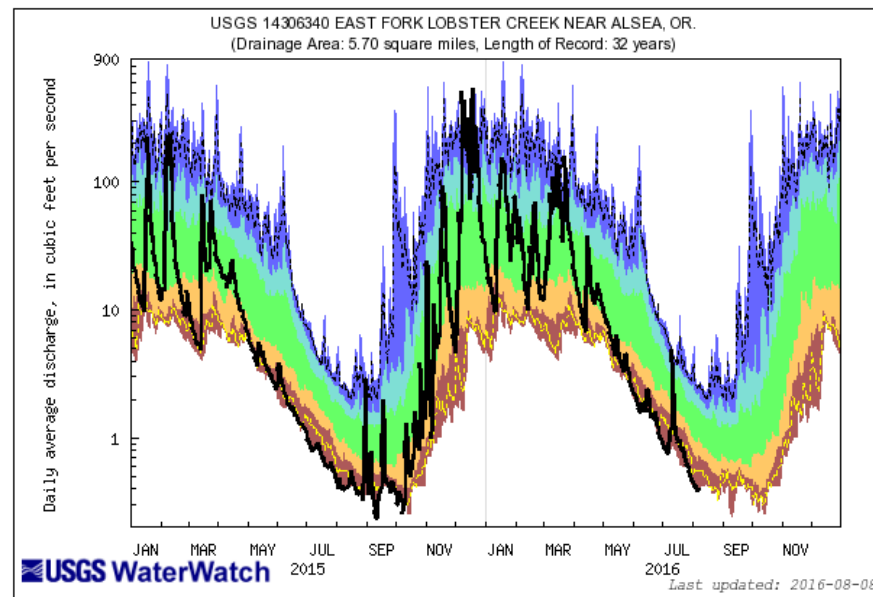
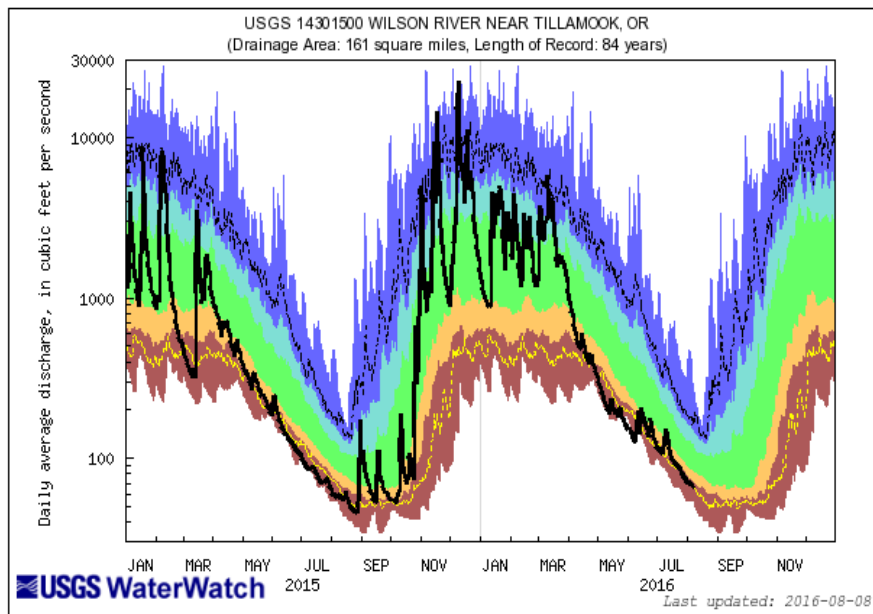
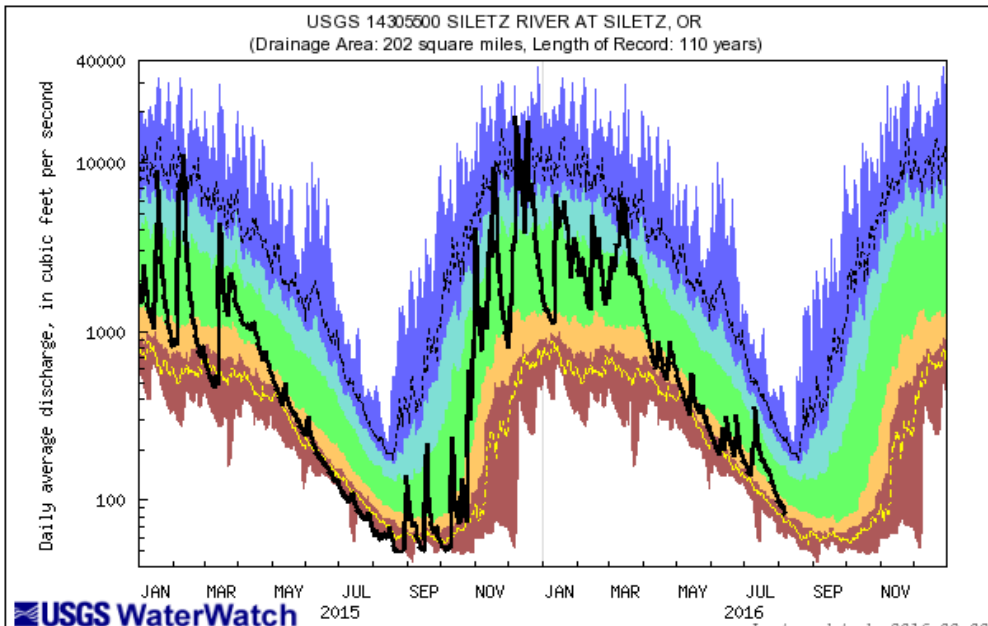
Map of 7-day average USGS streamflow compared to historical streamflow for the day of the year (08/07)

Basins/Areas with Stressed Streamflow Indicators

- Central and Upper Coast
- Grande Ronde.
- Umatilla
- Upper John Day
- *Lake and Deschutes Counties not part of USGS network



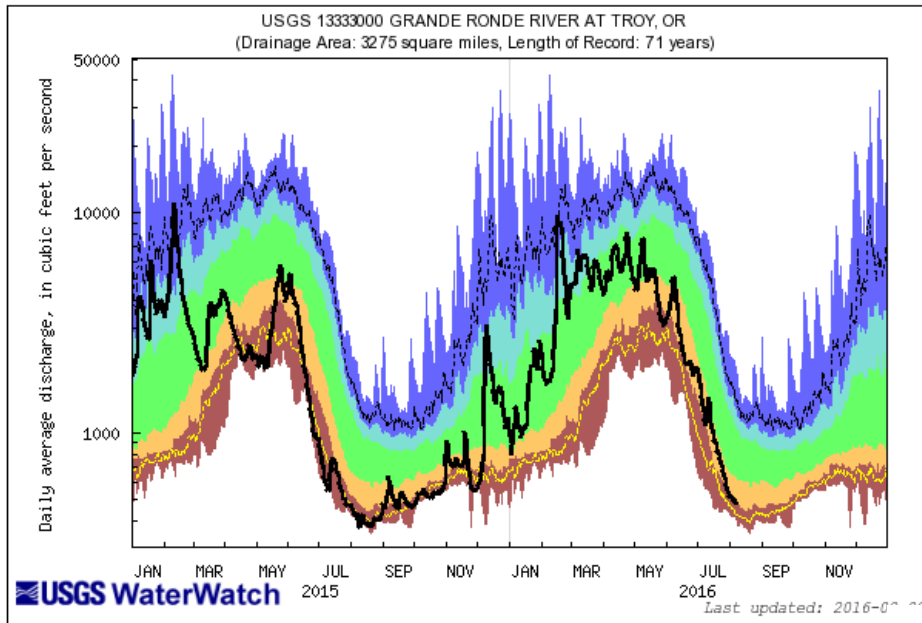
North Coast



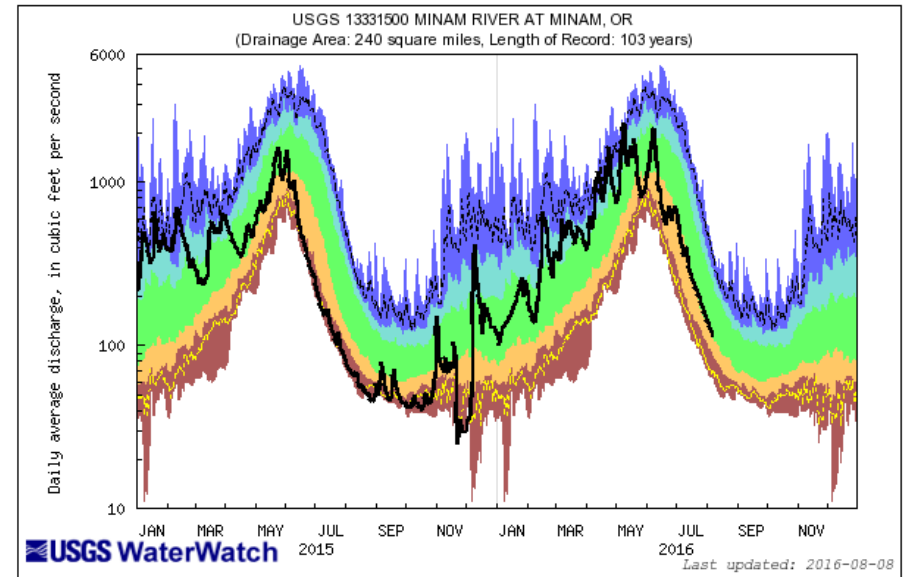
Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile -highest
Below				Above		Flow

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

Grande Ronde



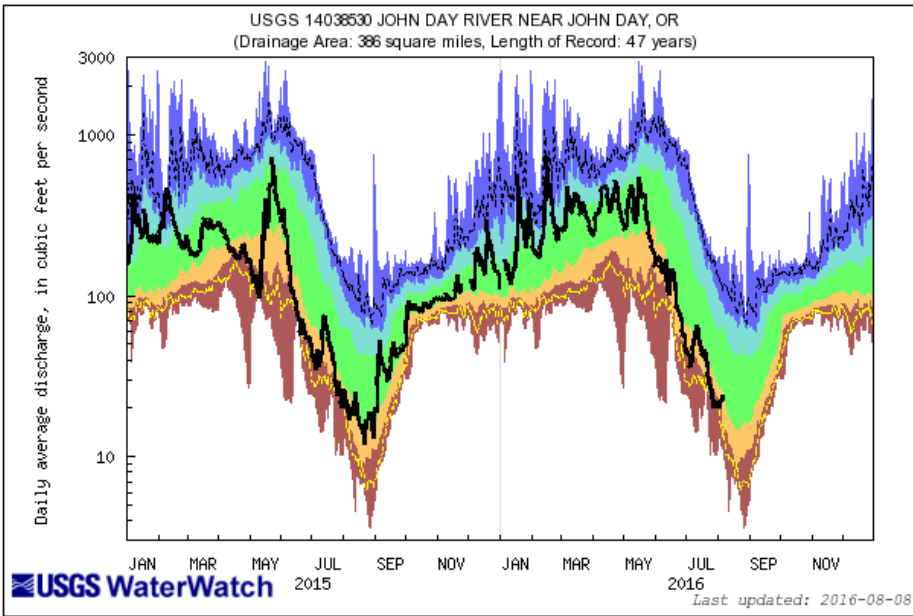
Explanation - Percentile classes							
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest	Flow
Much below Normal	Below normal	Normal	Above normal	Much above normal			



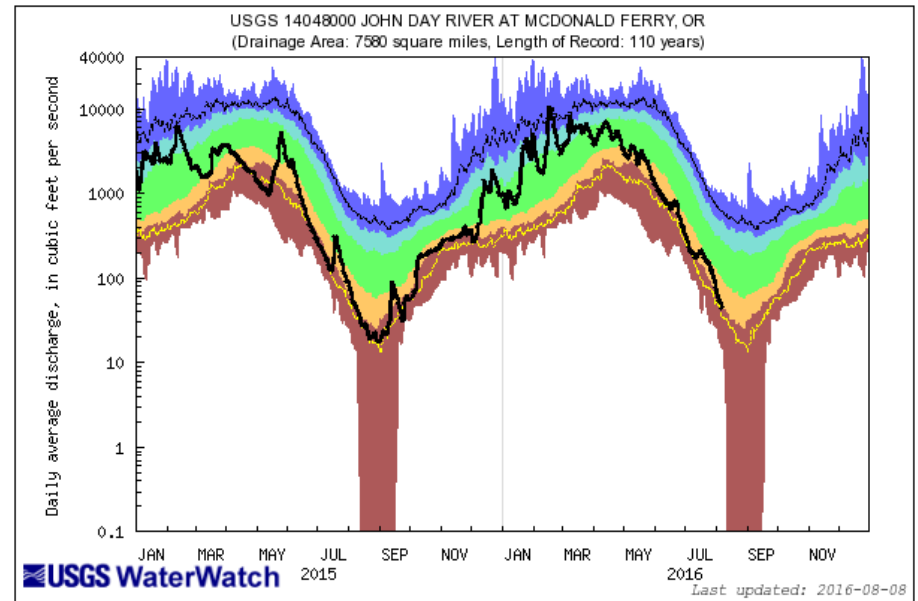
Explanation - Percentile classes							
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest	Flow
Much below Normal	Below normal	Normal	Above normal	Much above normal			



John Day

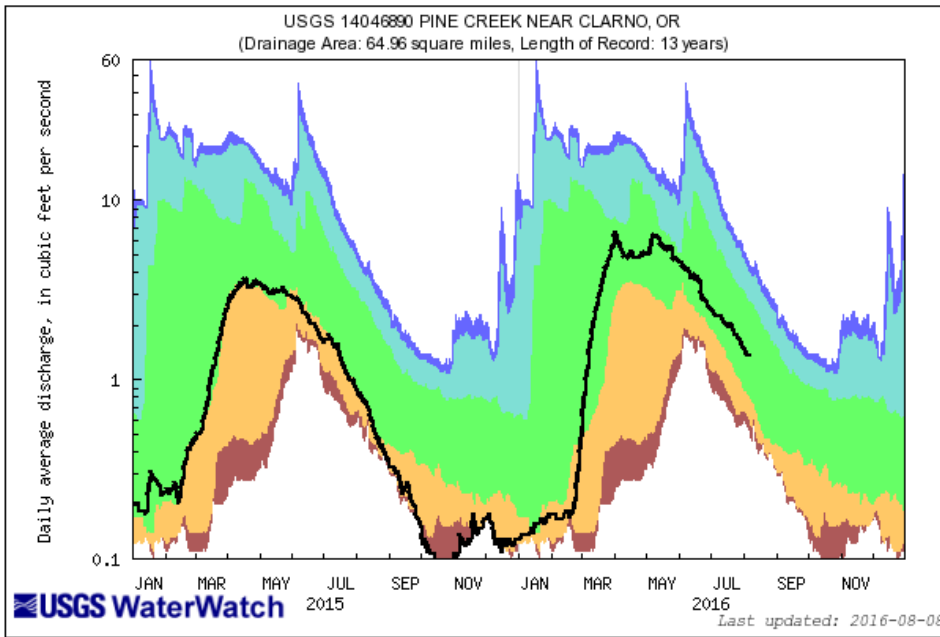


Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95 90th percentile-highest	Flow
Much below Normal	Below normal	Normal	Above normal	Much above normal		



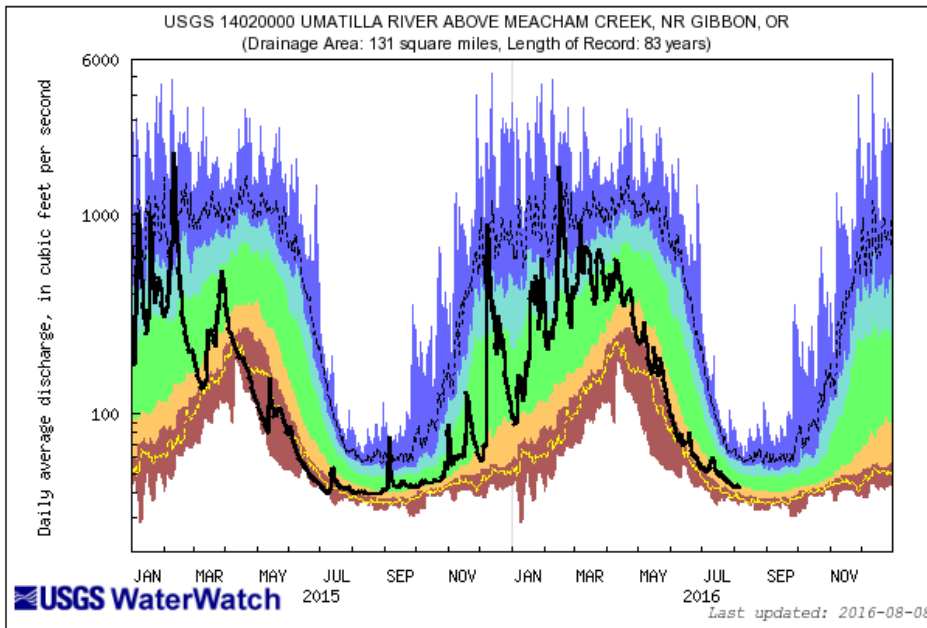
Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95 90th percentile-highest	Flow
Much below Normal	Below normal	Normal	Above normal	Much above normal		

John Day



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

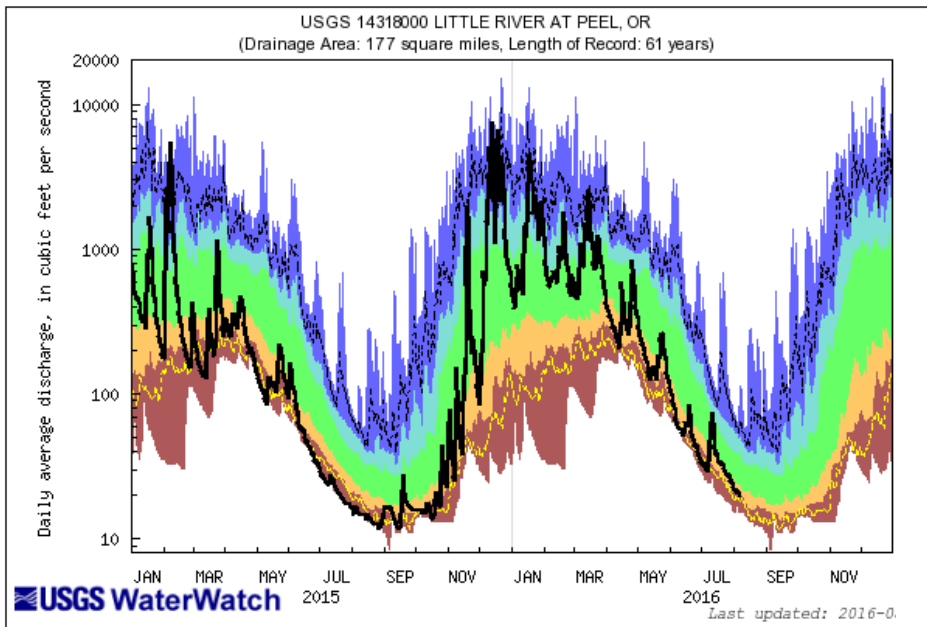
Umatilla



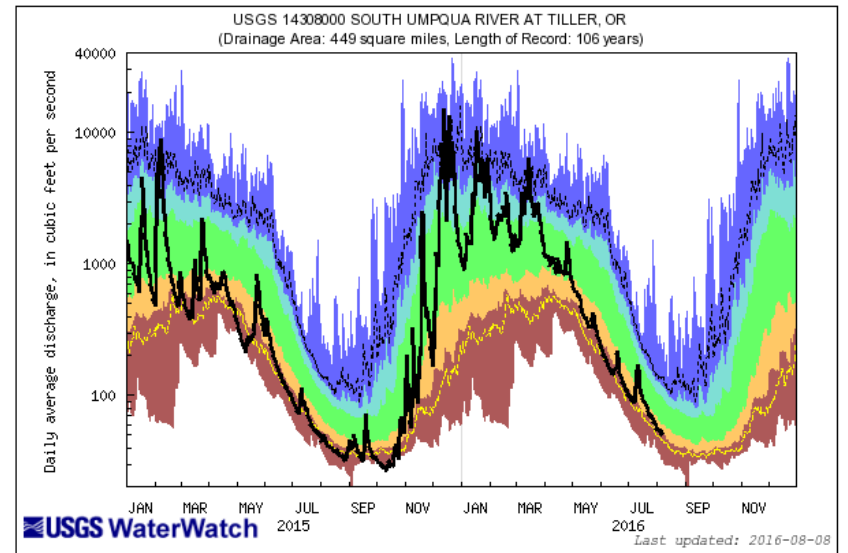
Explanation - Percentile classes

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

Umpqua

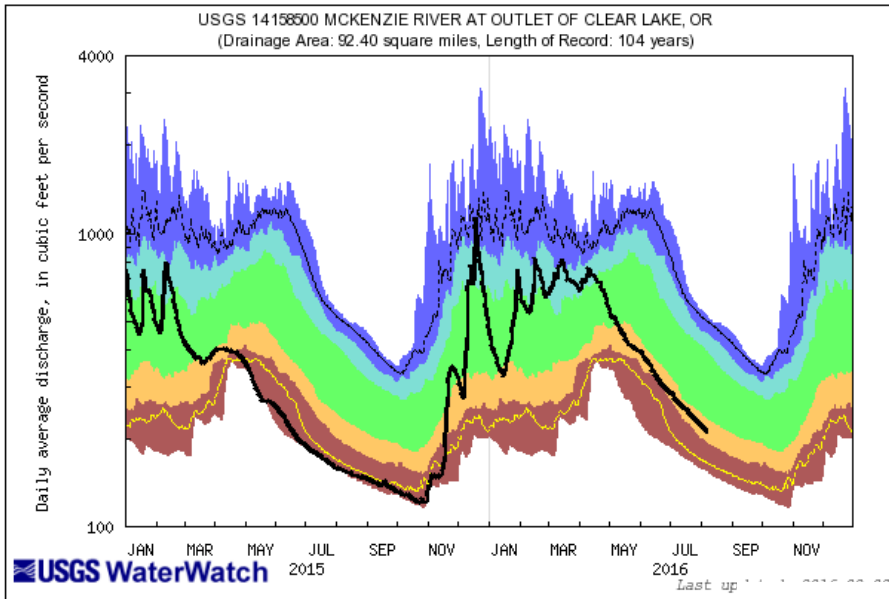


Explanation - Percentile classes						Flow	
lowest-10th percentile	5	10-24	25-75	76-90	95		90th percentile-highest
Much below Normal		Below normal	Normal	Above normal		Much above normal	

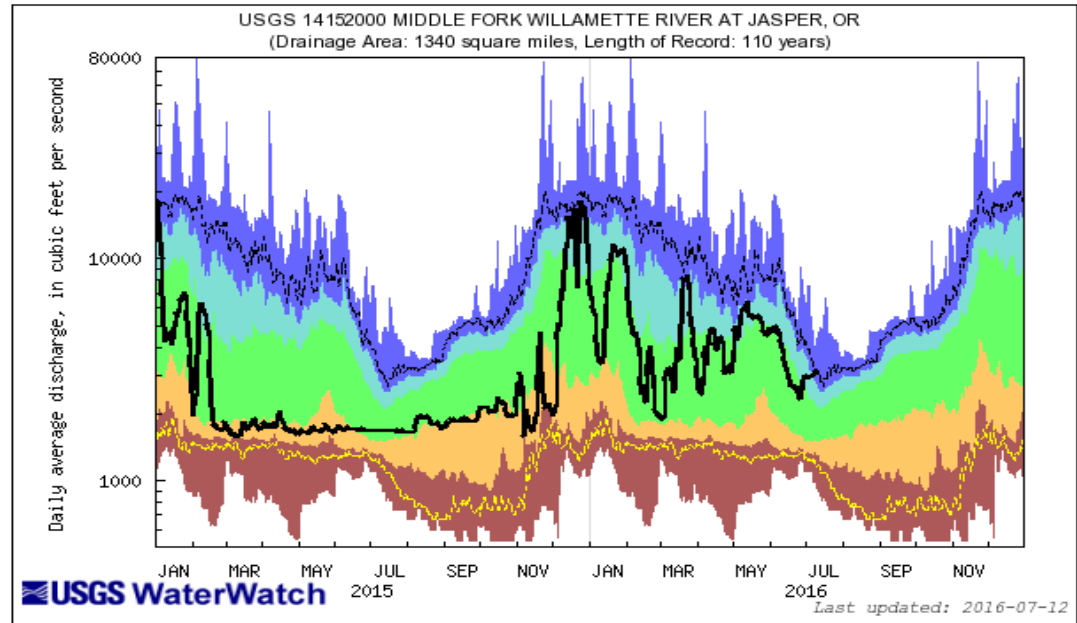


Explanation - Percentile classes						Flow	
lowest-10th percentile	5	10-24	25-75	76-90	95		90th percentile-highest
Much below Normal		Below normal	Normal	Above normal		Much above normal	

Upper Willamette

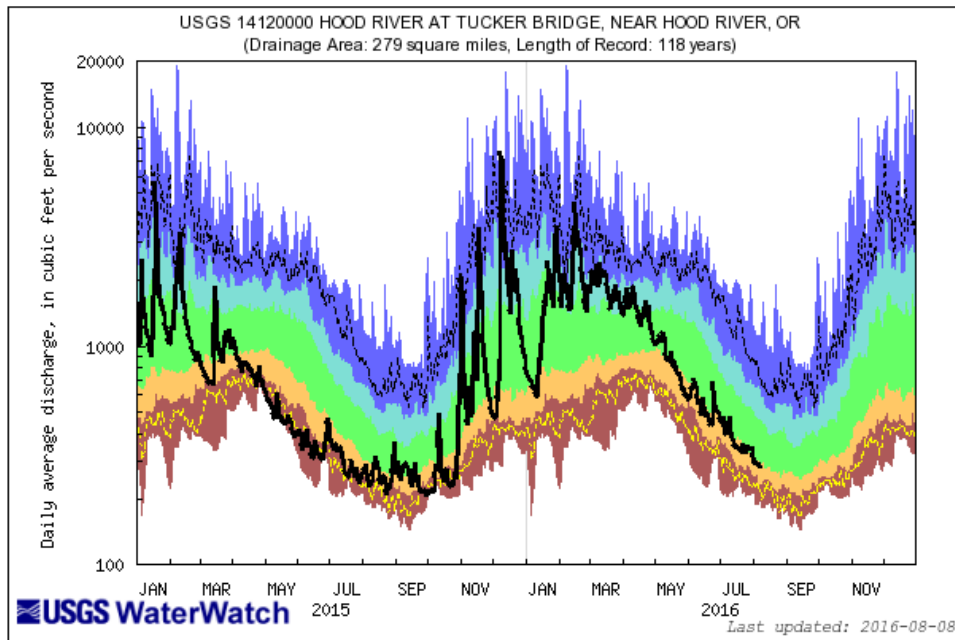


Explanation - Percentile classes						Flow
lowest-10th percentile	5	10-24	25-75	76-90	95	
Much below Normal	Below normal	Normal	Above normal	Much above normal		

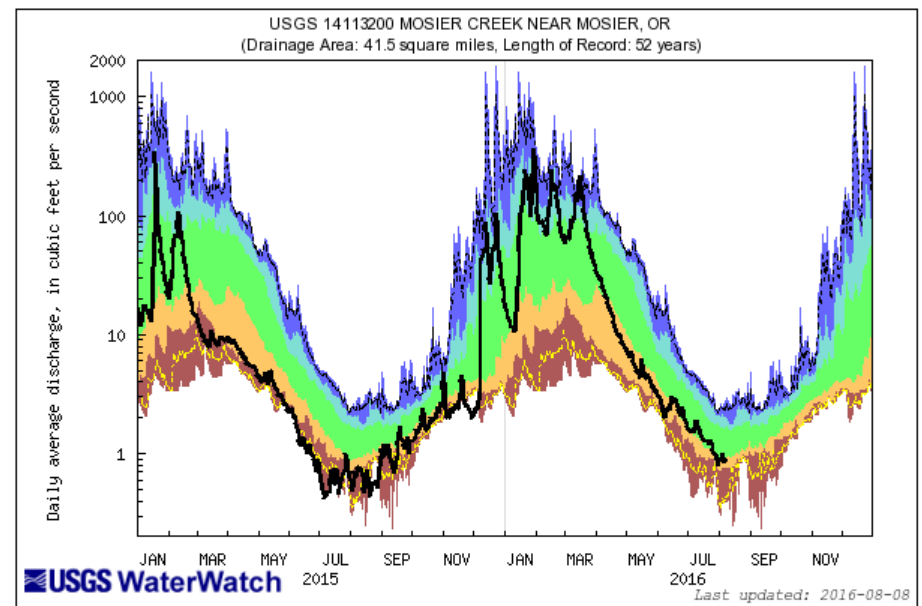


Explanation - Percentile classes						Flow
lowest-10th percentile	5	10-24	25-75	76-90	95	
Much below Normal	Below normal	Normal	Above normal	Much above normal		

Hood River Area



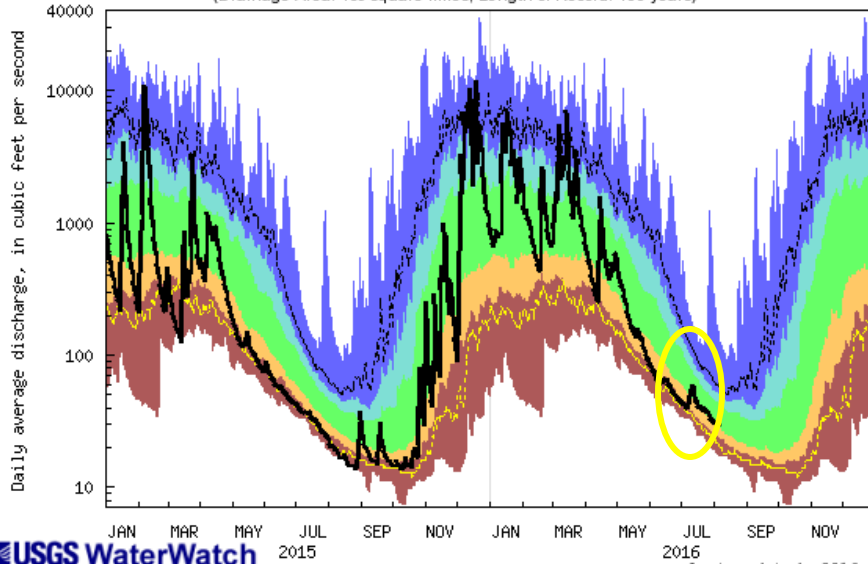
Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile - highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Flow



Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile - highest
						Flow

South Coast

USGS 14325000 SOUTH FORK COQUILLE RIVER AT POWERS, OR
(Drainage Area: 169 square miles, Length of Record: 100 years)



USGS WaterWatch

Last updated: 2016-08-08

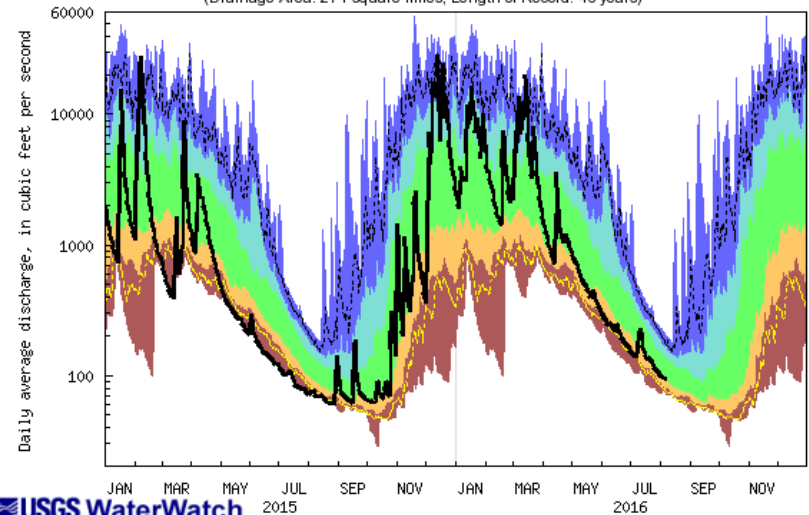
Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile - highest
		Below		Above		Flow

<http://waterwatch.usgs.gov/>

http://waterwatch.usgs.gov/index.php?id=wwchart_sitedur



USGS 14400000 CHETCO RIVER NEAR BROOKINGS, OR
(Drainage Area: 271 square miles, Length of Record: 46 years)



USGS WaterWatch

Last updated: 2016-08-08

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

Thank You

Provisional Data Statement

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

Real-time data relayed by satellite or other telemetry are automatically screened to not display improbable values until they can be verified.

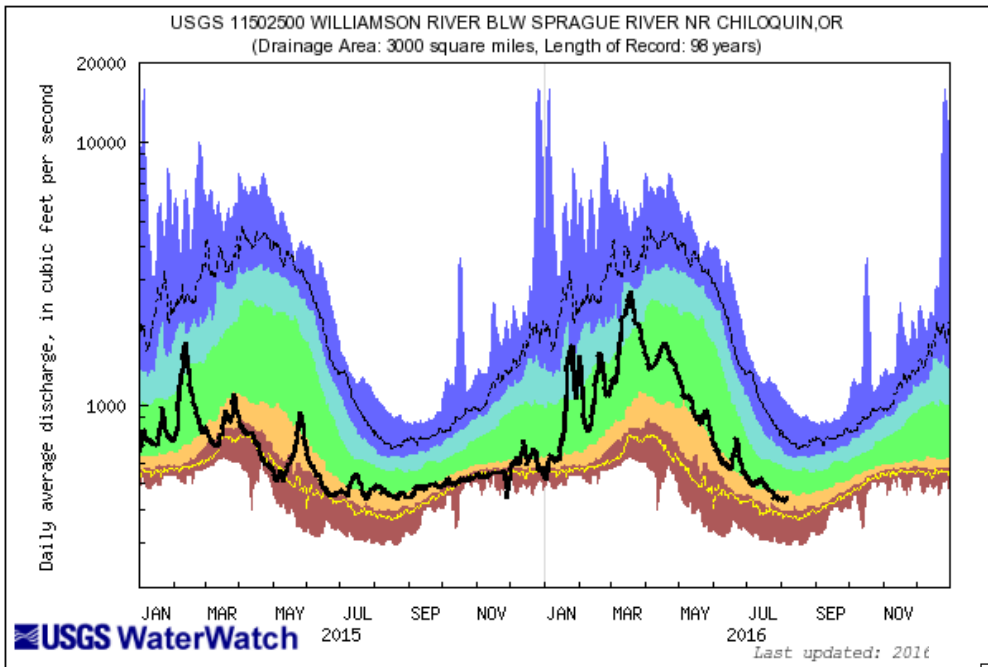
Provisional data may be inaccurate due to instrument malfunctions or physical changes at the measurement site. Subsequent review based on field inspections and measurements may result in significant revisions to the data.

Data users are cautioned to consider carefully the provisional nature of the information before using it for decisions that concern personal or public safety or the conduct of business that involves substantial monetary or operational consequences.

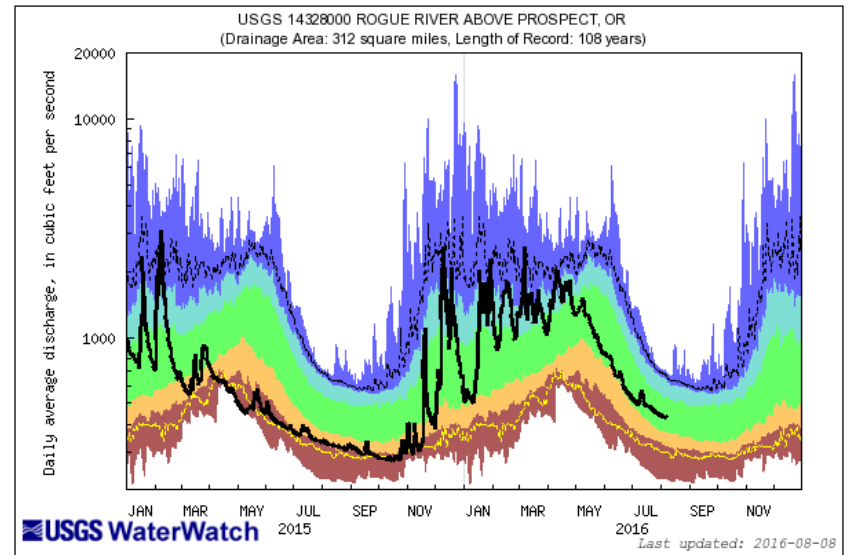
Information concerning the accuracy and appropriate uses of these data or concerning other hydrologic data may be obtained from the USGS



Klamath and Rogue



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



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

MONTHLY AVERAGES (Mean cfs) AS A PERCENT OF THE 30-YEAR AVERAGE, FOR CURRENT YEAR

Station	June-16	July-16	July-15	NRCS SWSI BASIN
Donner Und Blitzen near French Glen	59	56	38	
Deep Creek above Adel (by: OWRD)	50	35	24	Lake County
Chewaucan River near Paisley (by: OWRD)	49	59	47	Lake County
Williamson River near Chiloquin	66	89	89	
Owyhee River near Rome	41	65	45	
NF Malheur River near Beulah (by: OWRD)	46	76	76	
Grand Ronde River at Troy	55	54	33	
Umatilla River near Gibbon	40	85	69	
John Day, Service Creek	29	29	28	Upper John Day
Little Deschutes River near La Pine (by: OWRD)	54	36	78	Upper Deschutes
Hood River near Hood River	68	77	61	
Willamette River at Salem	68	91	75	
Wilson near Tillamook	39	65	44	
Umpqua River near Elkton	52	86	65	
Rogue River near Agness	93	89	72	
SF Coquille River at Powers	30	69	64	
Chetco River near Brookings	30	68	37	

Full Water Availability Report linked below

http://or.water.usgs.gov/data_dir/war_dir/war1604.html

