

Update on Climate & Drought Conditions

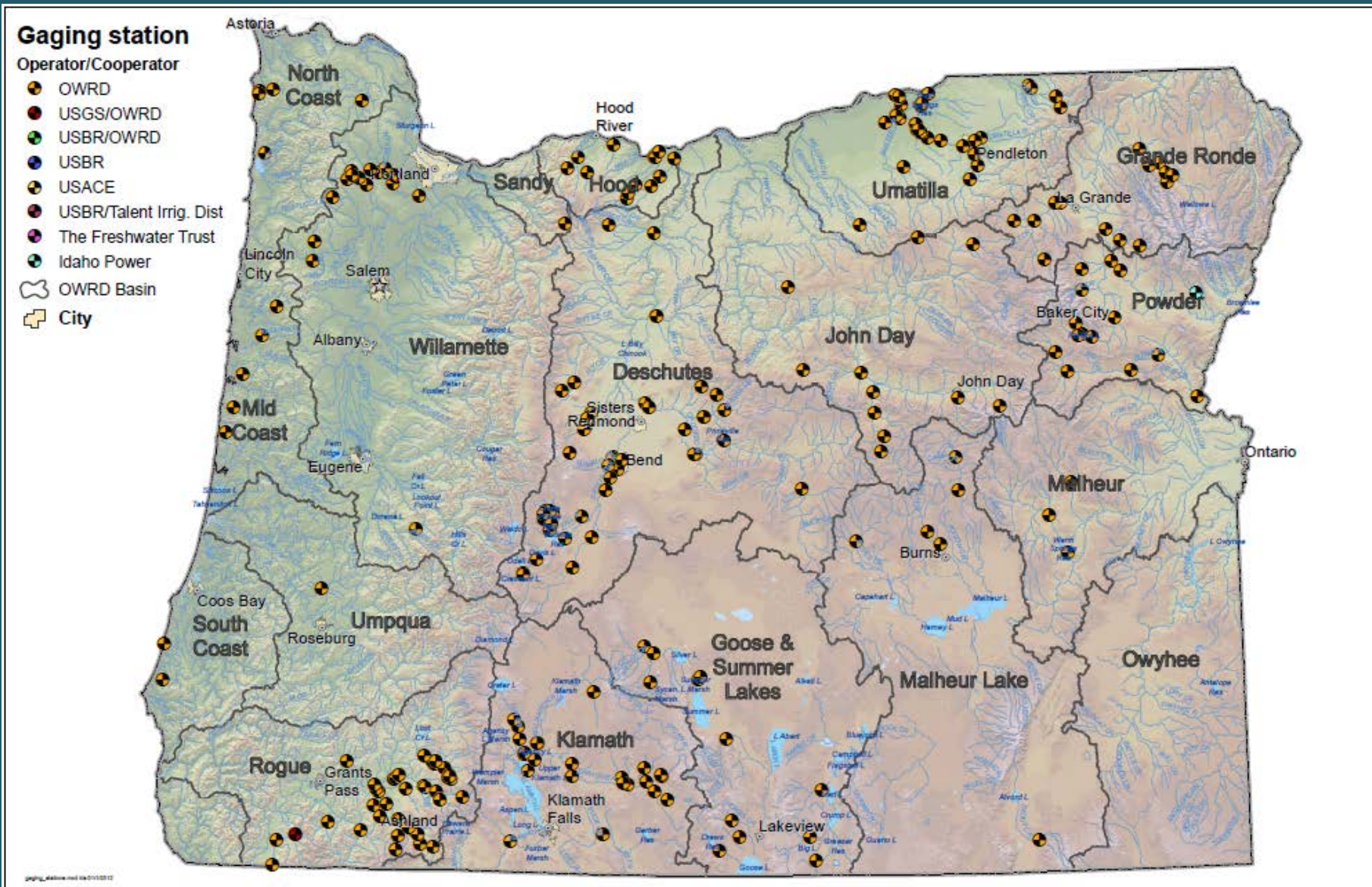
Water Resources Commission Meeting
Special Panel Presentation
June 18, 2015



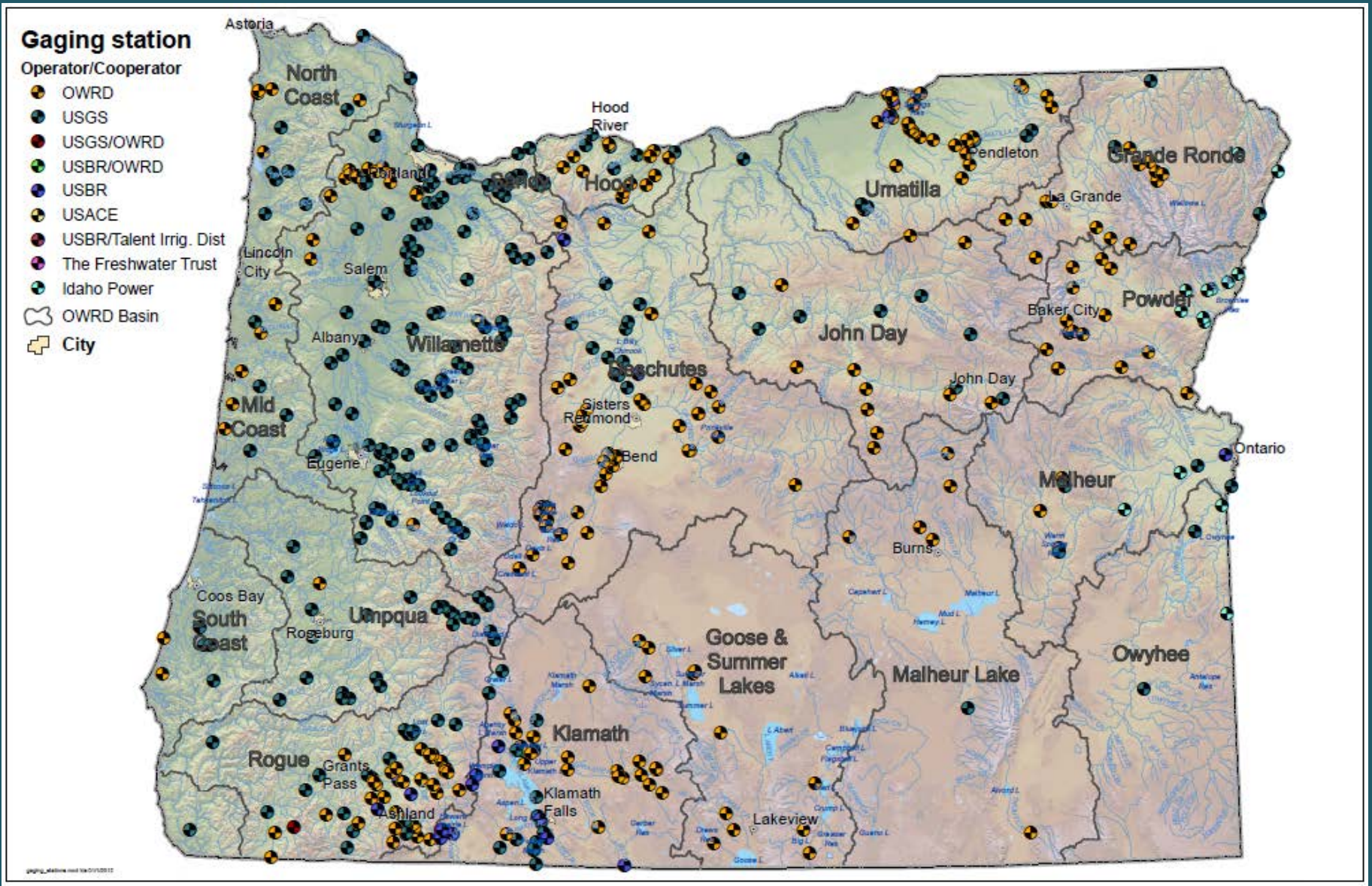
During this Agenda Item

- **Ken Stahr - surface water supply conditions**
Water Resources Department
- **Scott Oviatt - water supply forecasting**
Snow Survey Program, Natural Resources Conservation Service
- **Andy Bryant - conditions and outlooks**
NOAA's National Weather Service
- **David Rupp - climate change**
Oregon Climate Change Research Institute
- **Keith Mills - state drought declarations**
Water Resources Department

Active OWRD Surface Water Gaging Stations



All Active Surface Water Gaging Stations



Typical Old Style Stream Gages



New Upgraded Real-Time Equipment

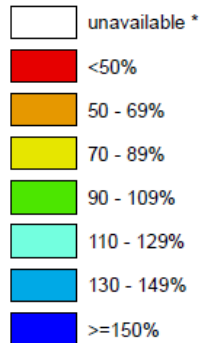


Precipitation

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

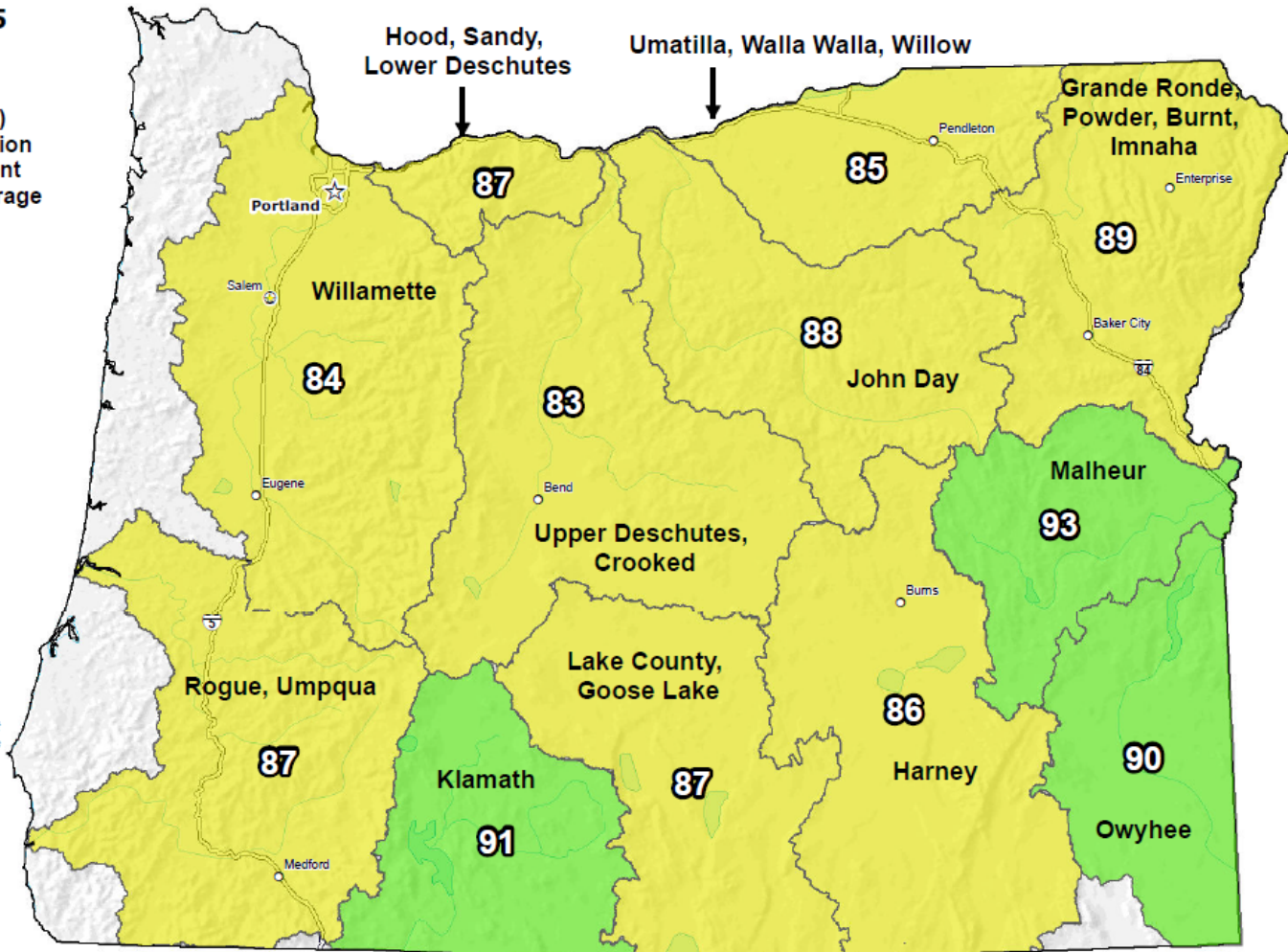
Jun 15, 2015

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).

0 10 20 40 60 80 100 Miles

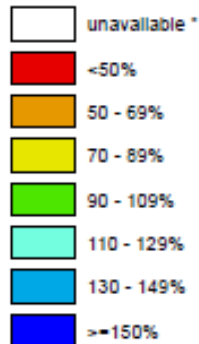
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Snow Water Equivalent

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

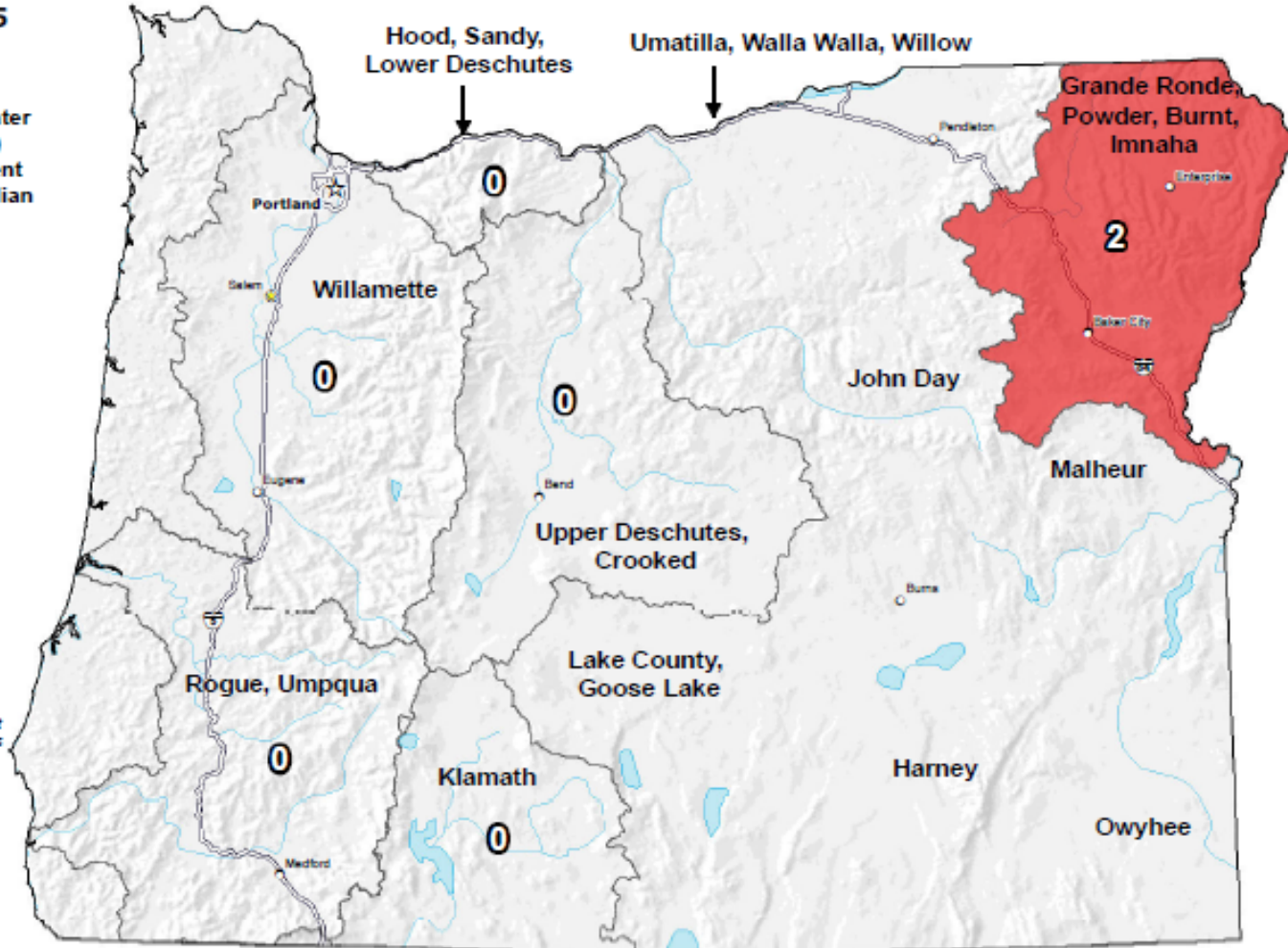
Jun 15, 2015

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



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

Provisional Data
Subject to Revision

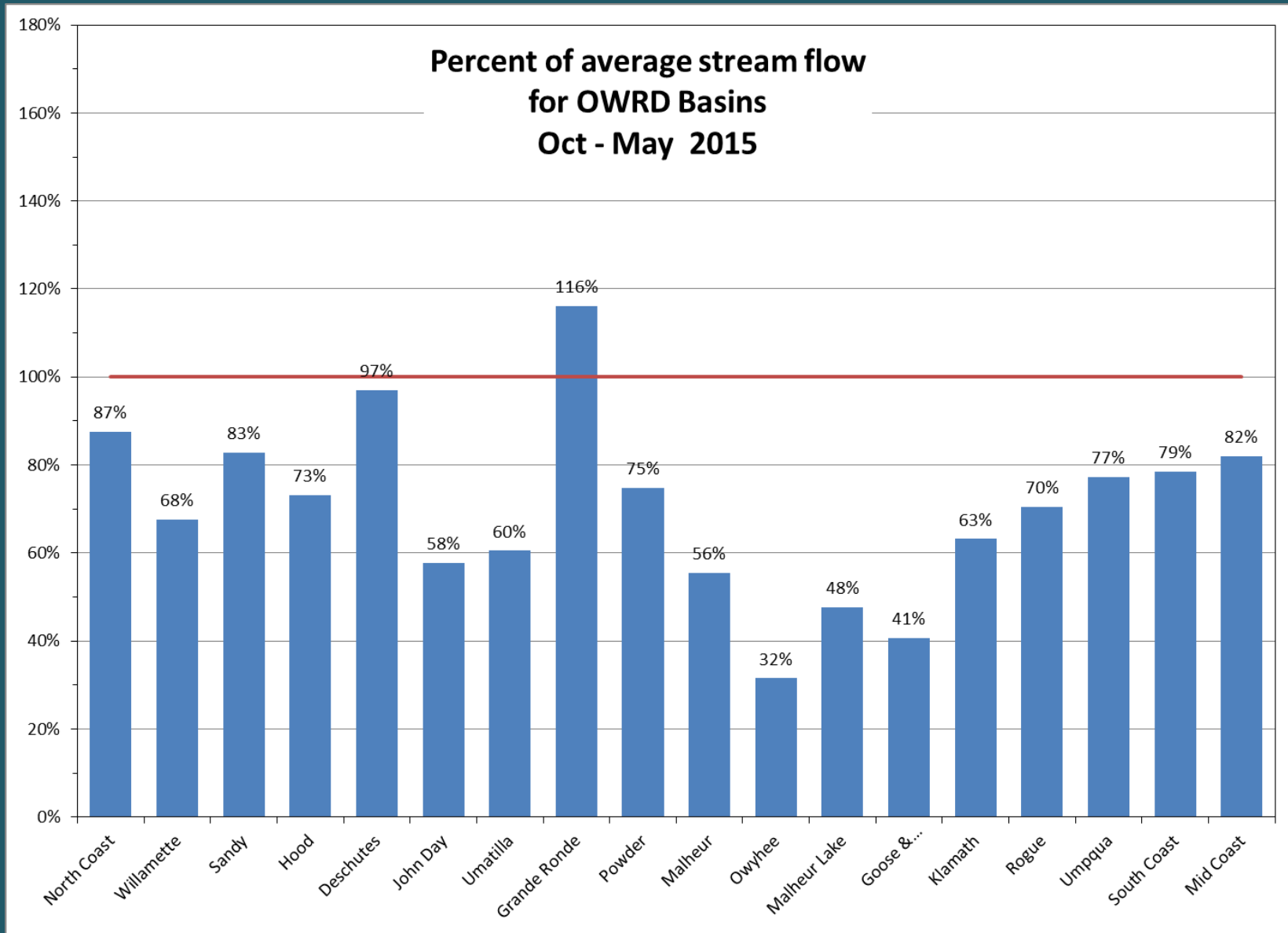


The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

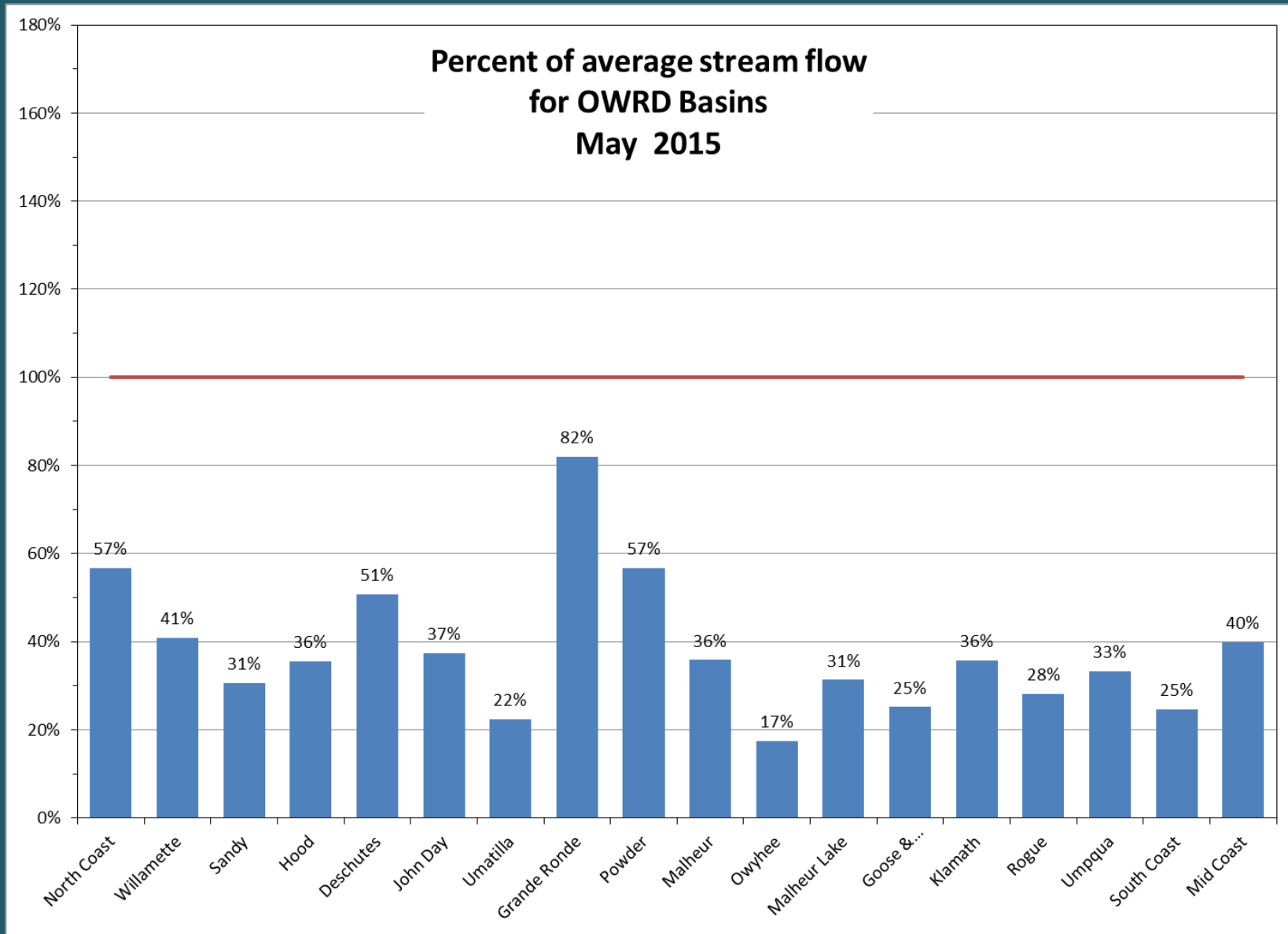
0 10 20 40 60 80 100 Miles

Prepared by:
USDA/NRCS National Water and Climate Center
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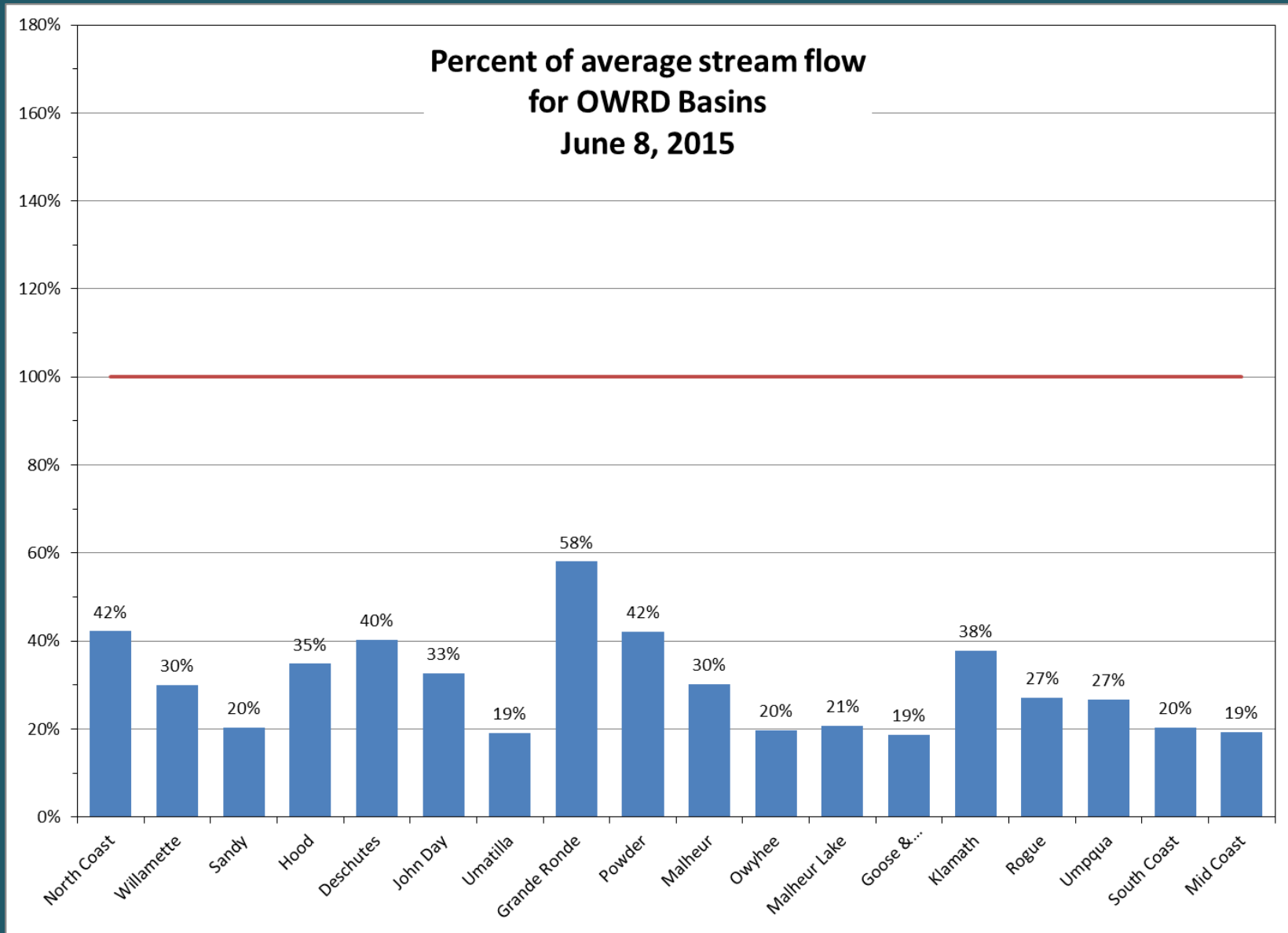
Streamflow Conditions – Water Year



Streamflow Conditions - May



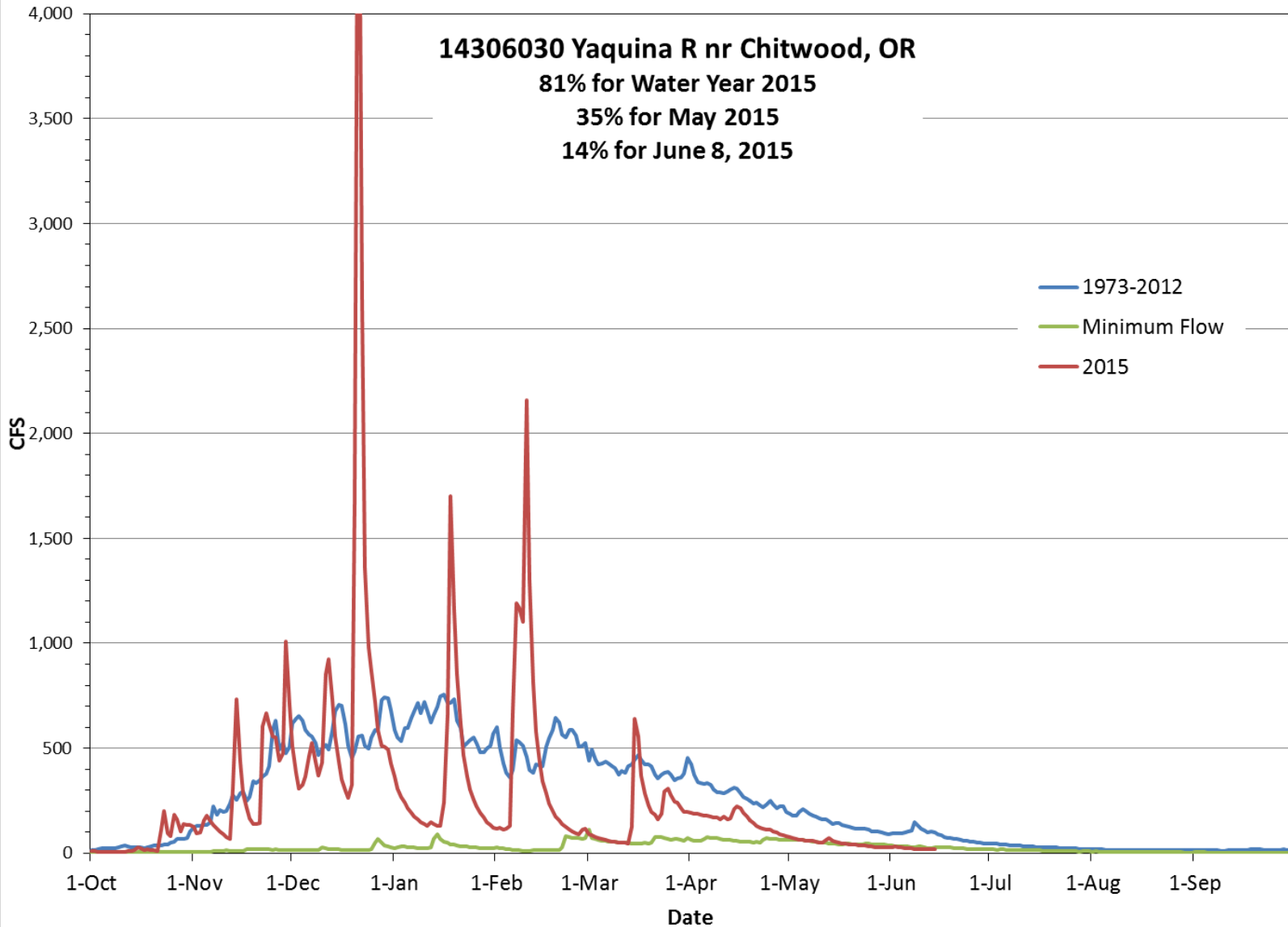
Streamflow Conditions - Current



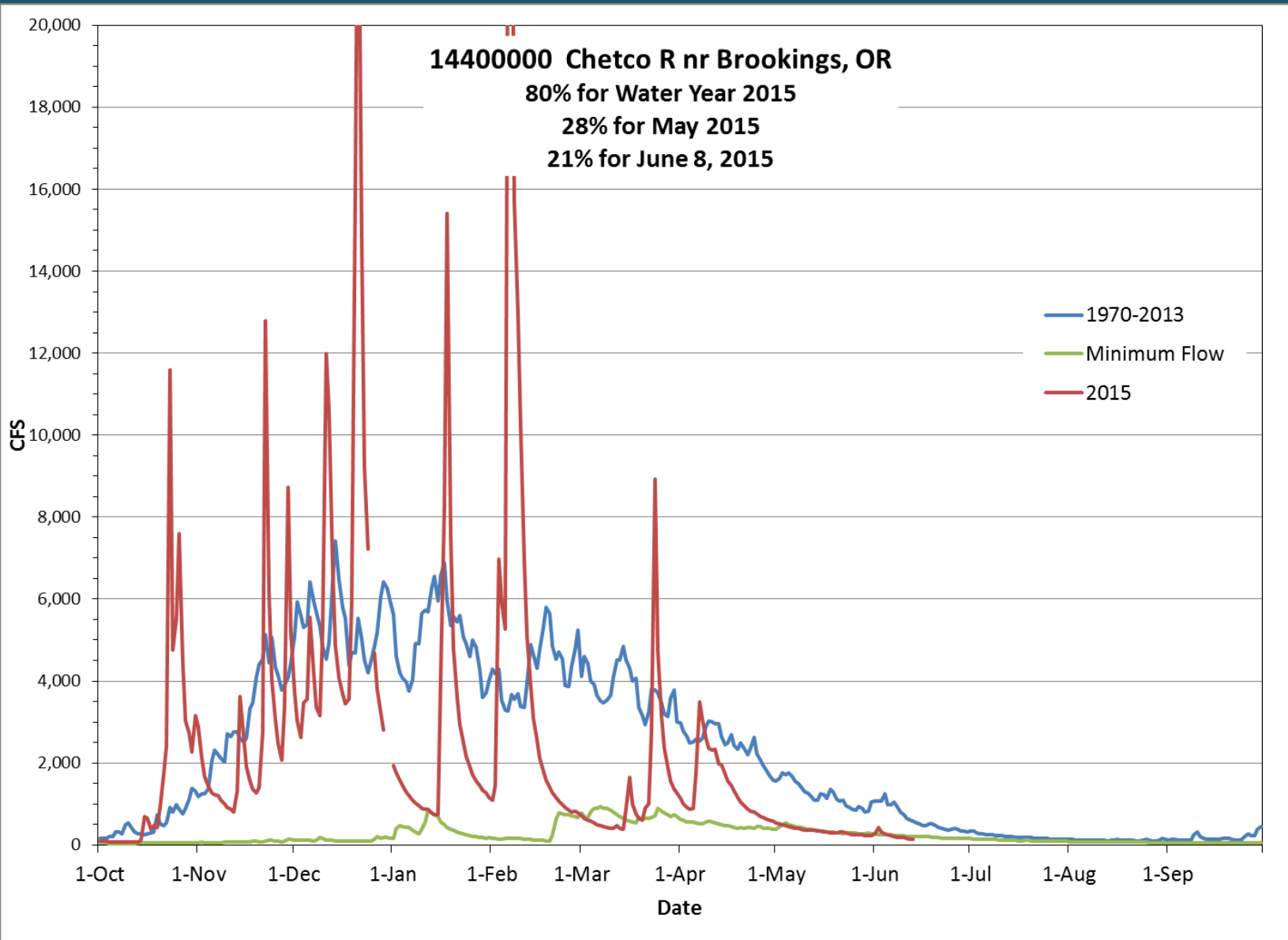
Streamflow Conditions

Basin	Water Year % of average thru May	% of average for May	% of average for 6/8/2015	# of data points
North Coast	87%	57%	42%	3
Willamette	68%	41%	30%	6
Sandy	83%	31%	20%	3
Hood	73%	36%	35%	3
Deschutes	97%	51%	40%	9
John Day	58%	37%	33%	8
Umatilla	60%	22%	19%	6
Grande Ronde	116%	82%	58%	4
Powder	75%	57%	42%	4
Malheur	56%	36%	30%	2
Owyhee	32%	17%	20%	1
Malheur Lake	48%	31%	21%	3
Goose & Summer Lakes	41%	25%	19%	5
Klamath	63%	36%	38%	5
Rogue	70%	28%	27%	7
Umpqua	77%	33%	27%	4
South Coast	79%	25%	20%	2
Mid Coast	82%	40%	19%	3
State	70%	38%	30%	78

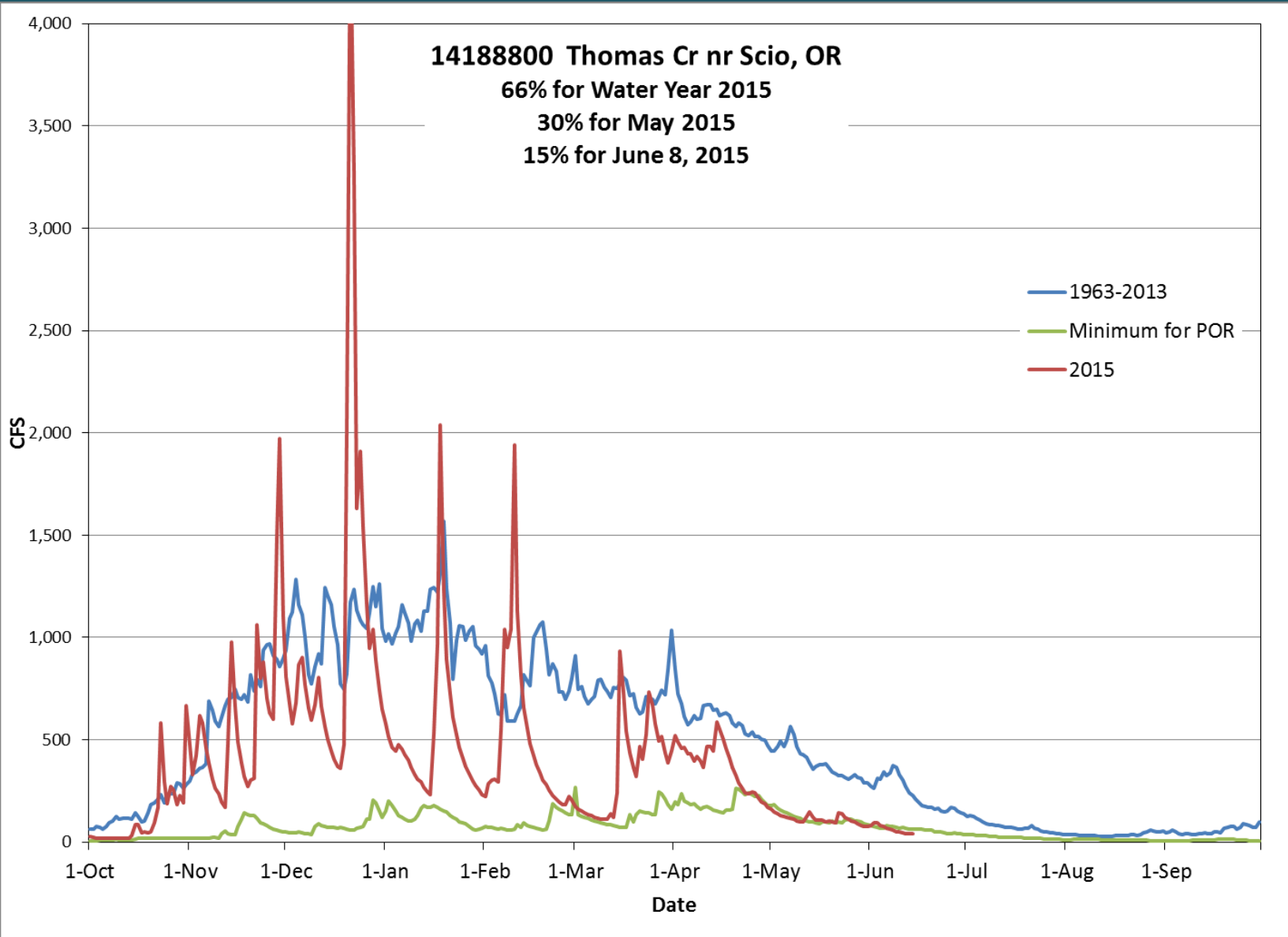
Yaquina River in Lincoln County



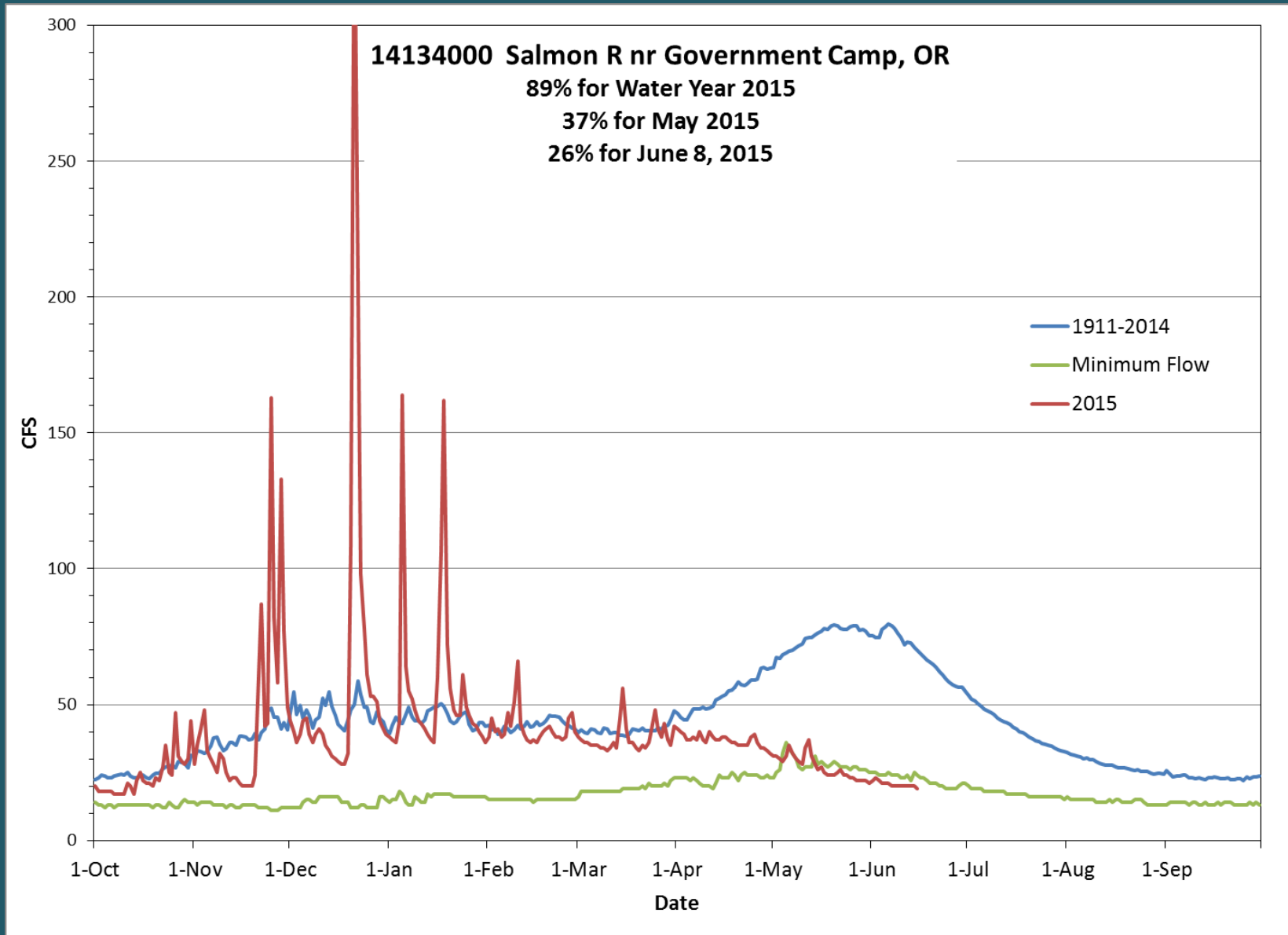
Chetco River in Curry County



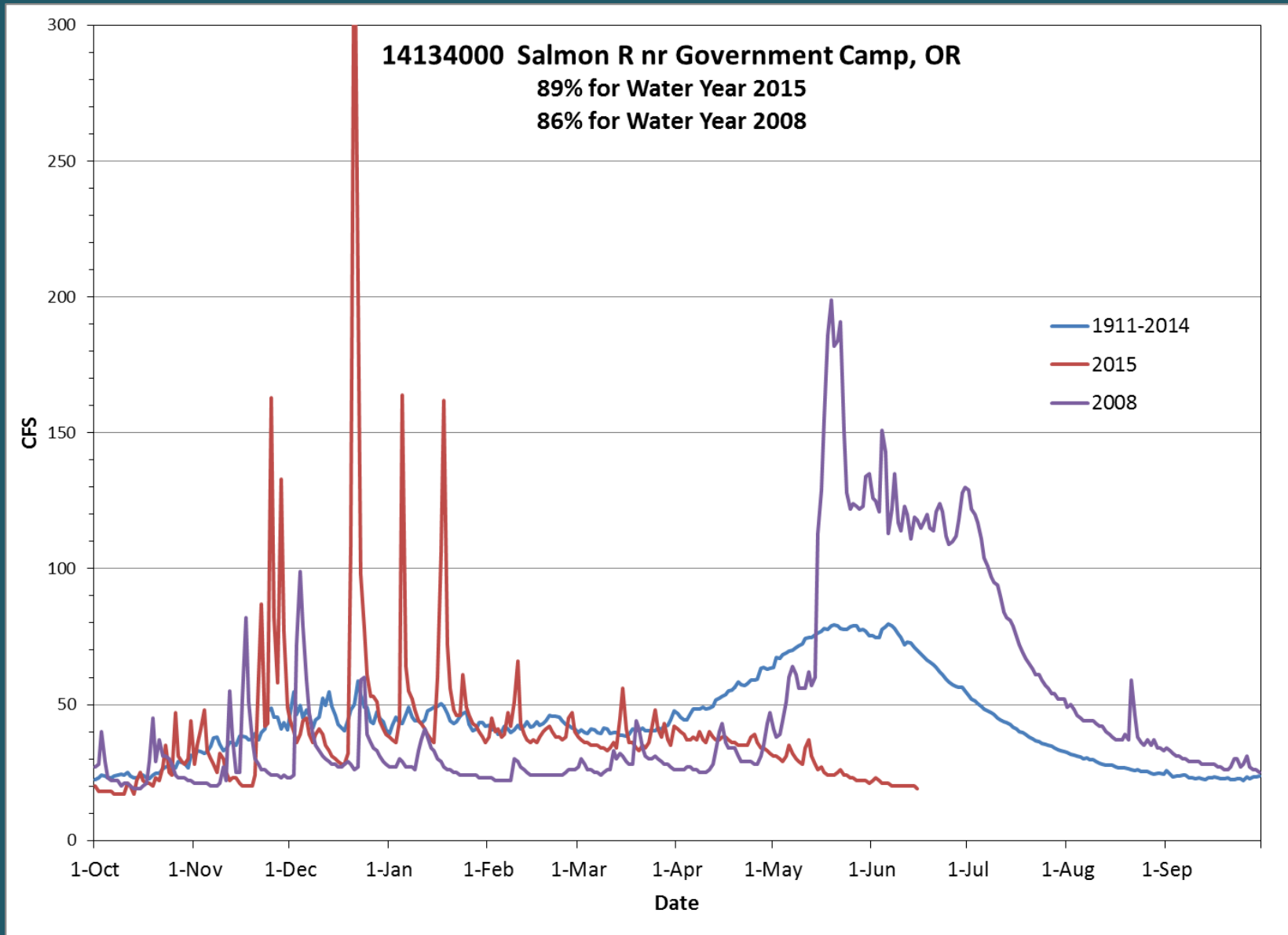
Thomas Creek in Linn County



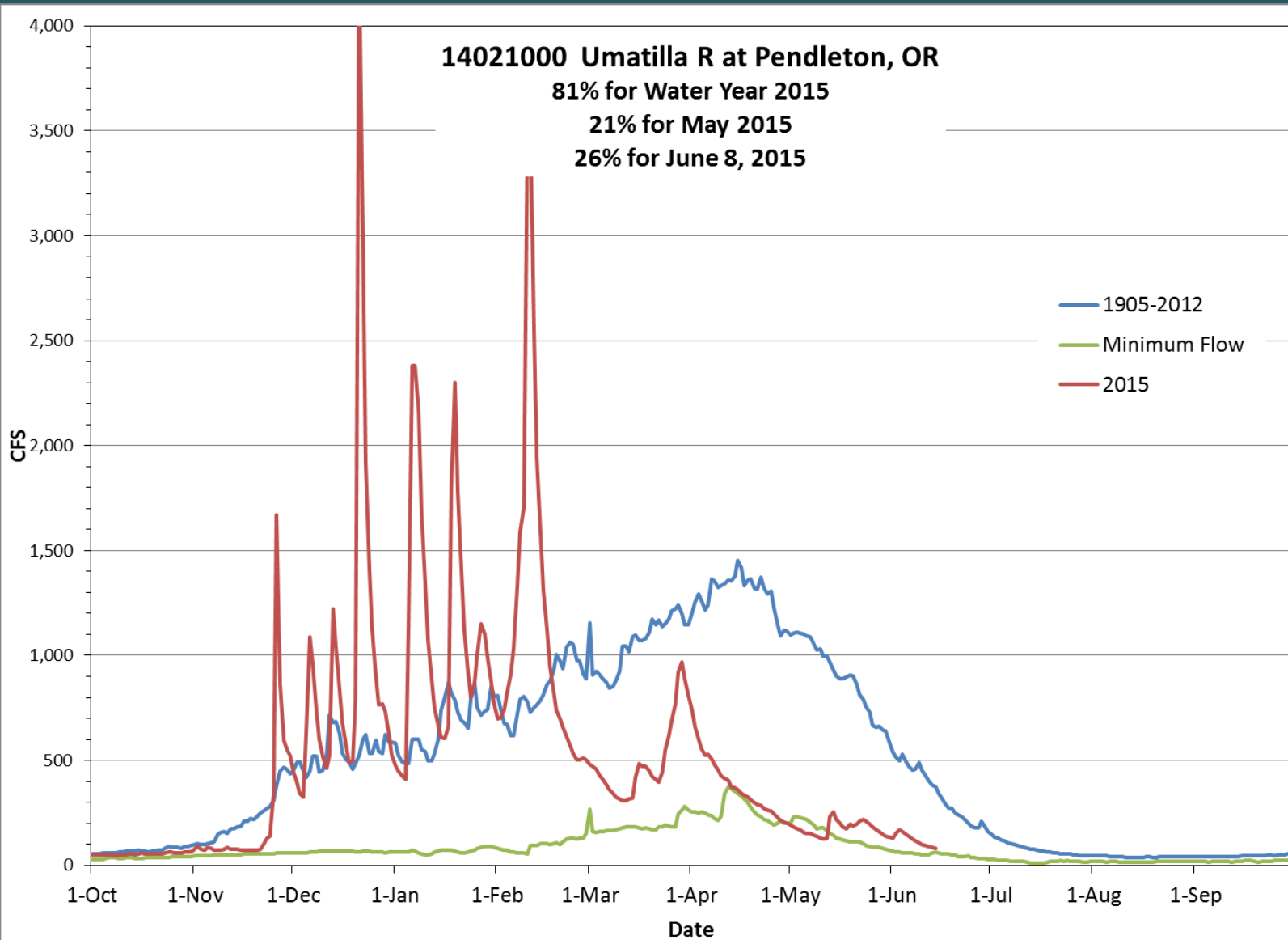
Salmon River in Clackamas County



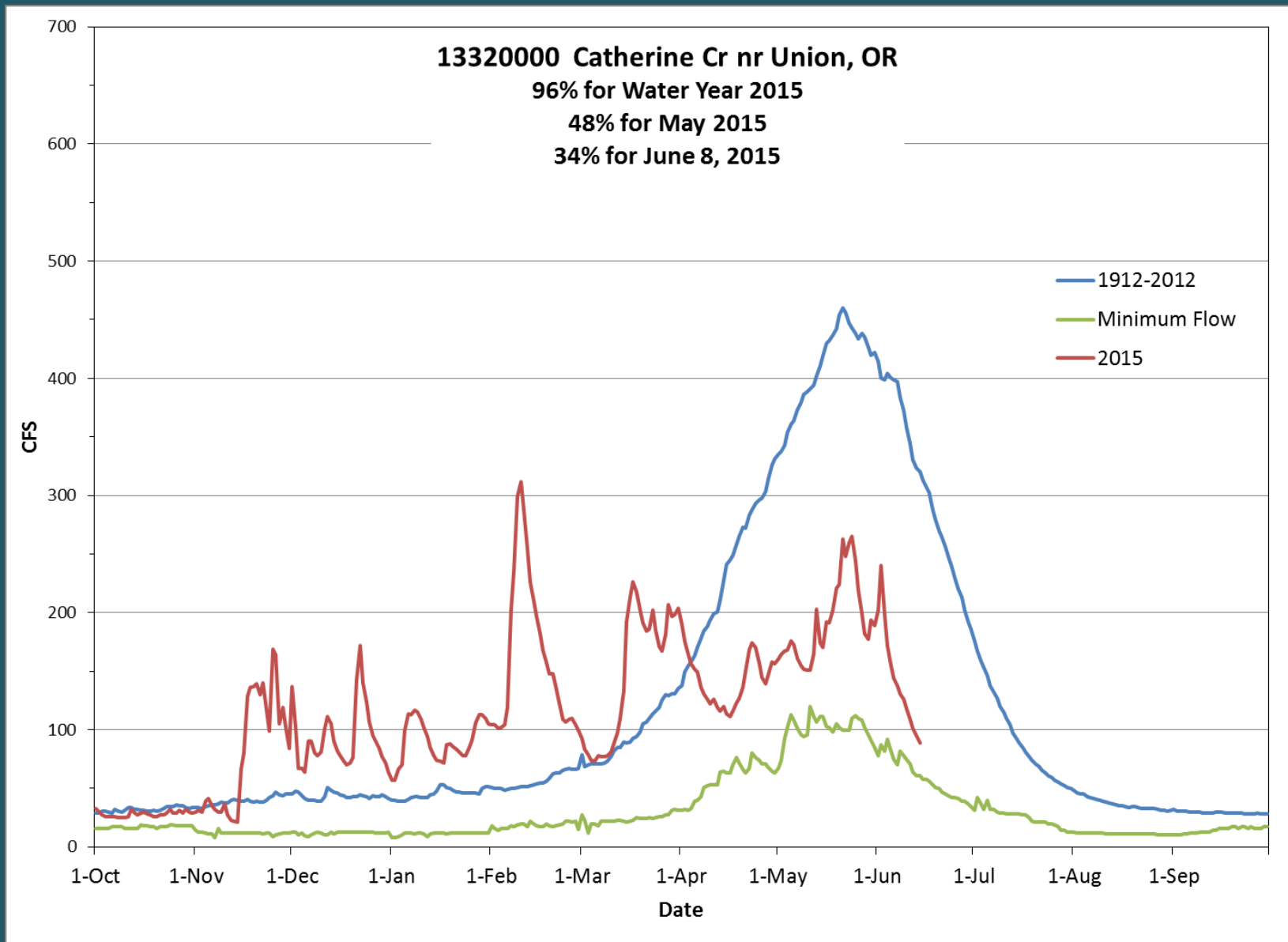
Salmon River in Clackamas County



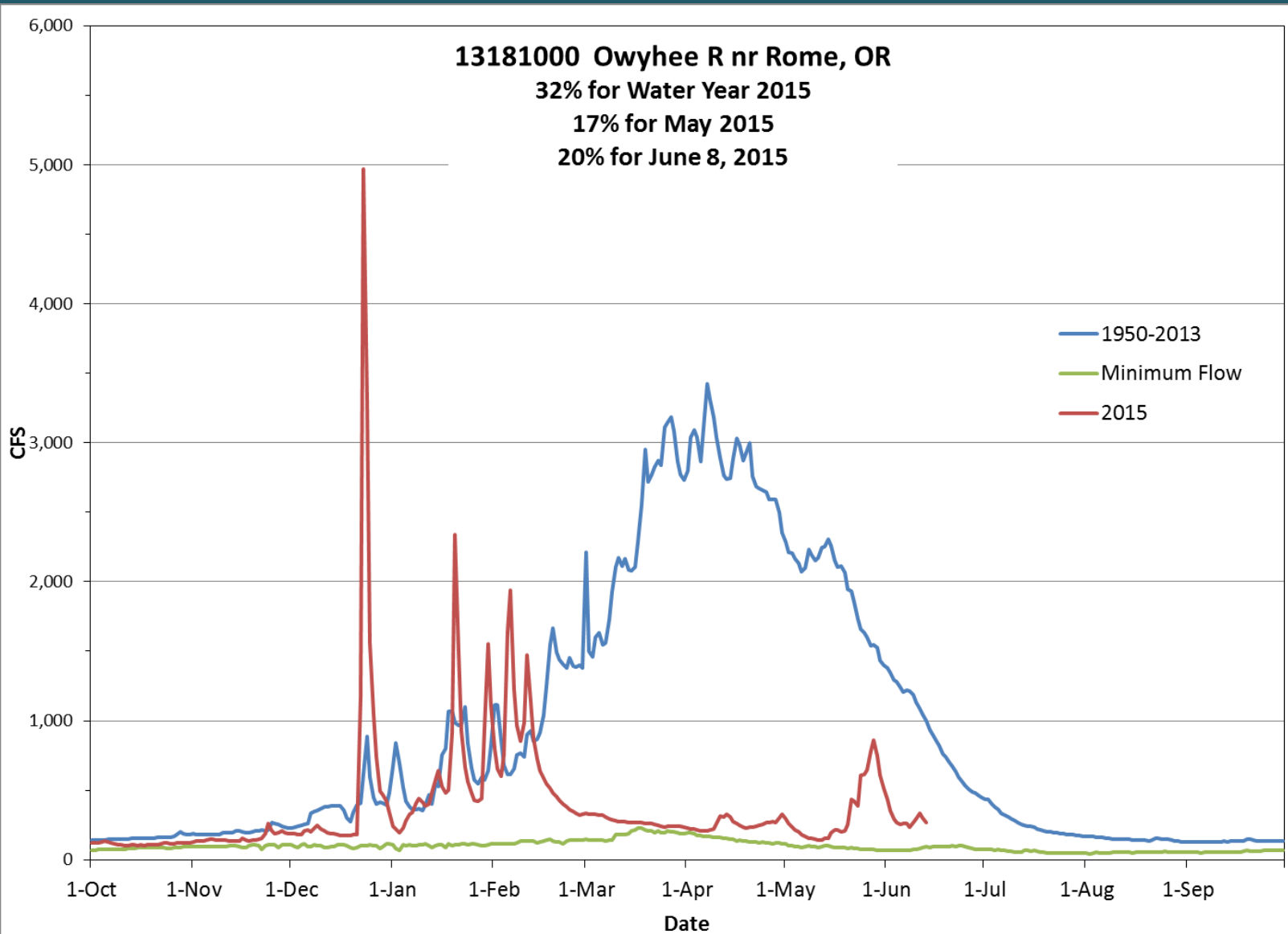
Umatilla River in Umatilla County



Catherine Creek in Union County



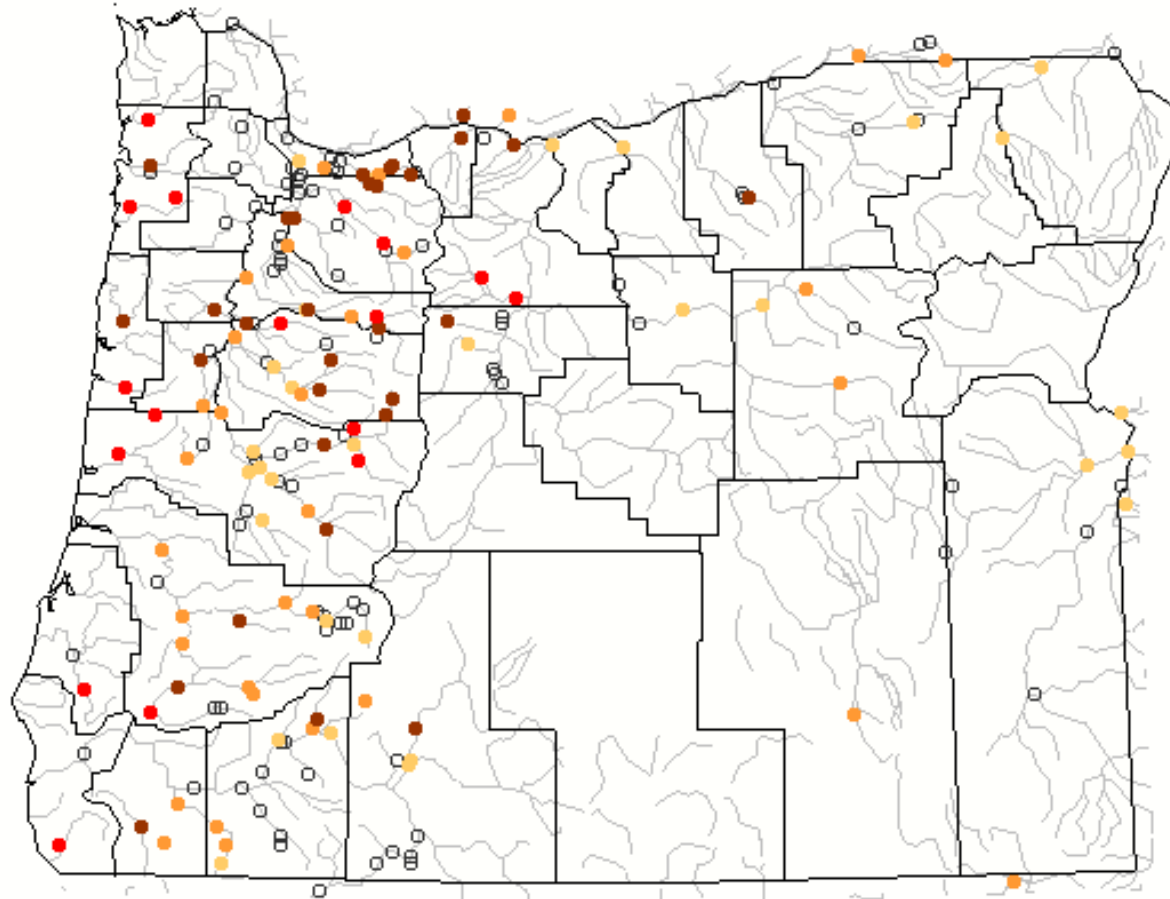
Owyhee River in Malheur County



Streamflow Compared to Historical Data



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

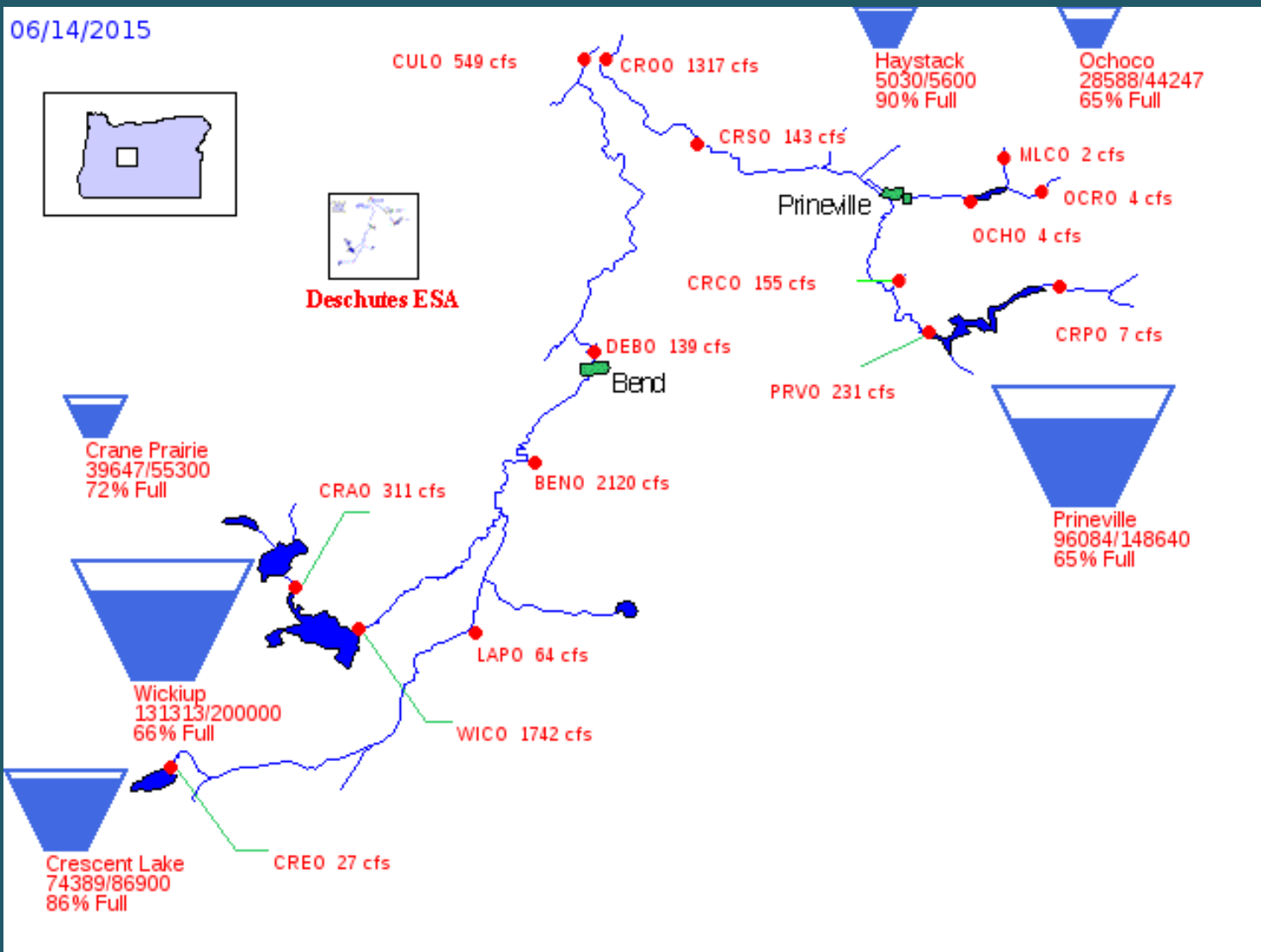


Explanation - Percentile classes

New low	≤ 5	6-9	10-24	Not ranked
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	

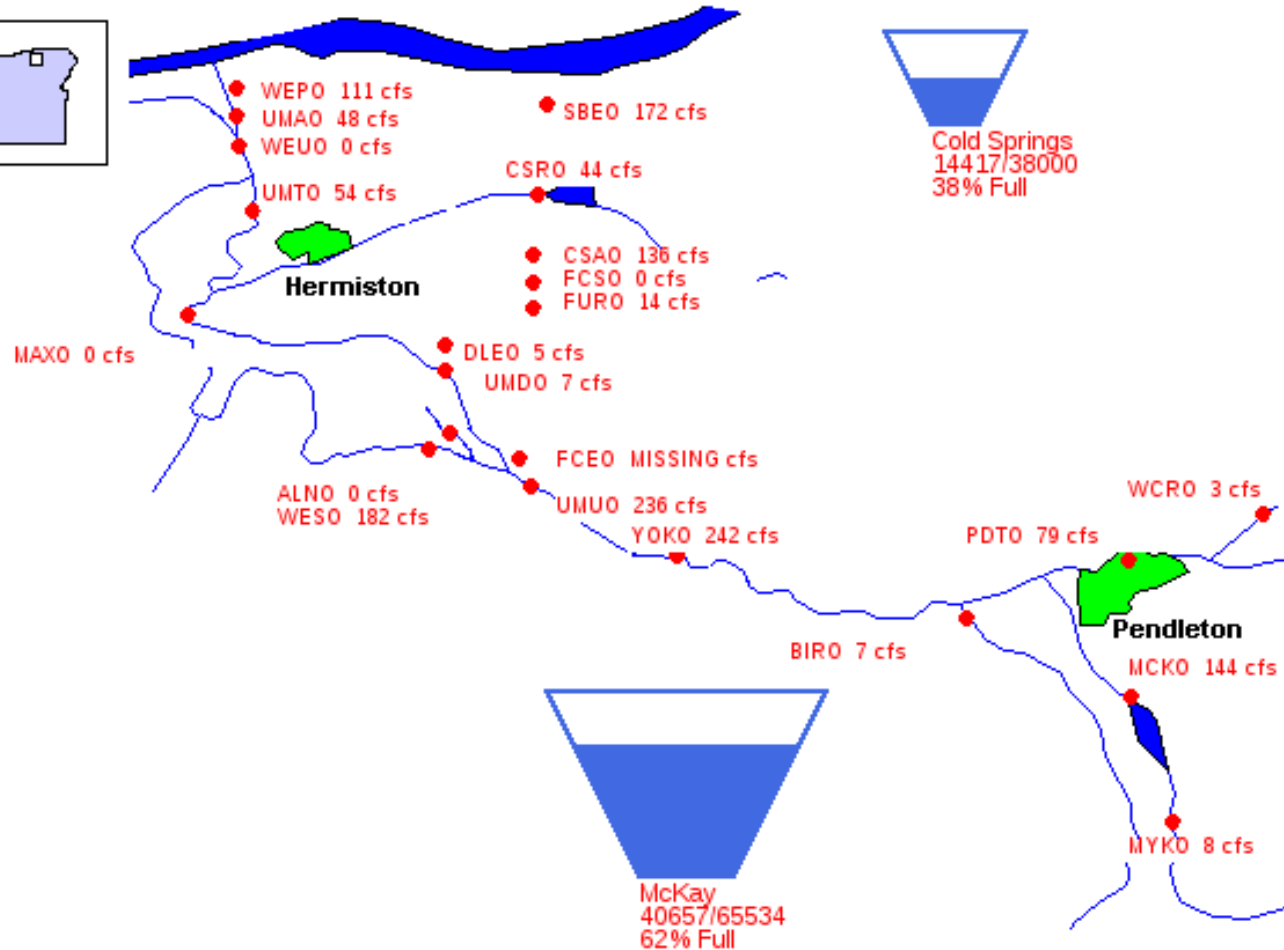
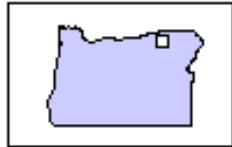
Reservoir Storage – Deschutes

06/14/2015



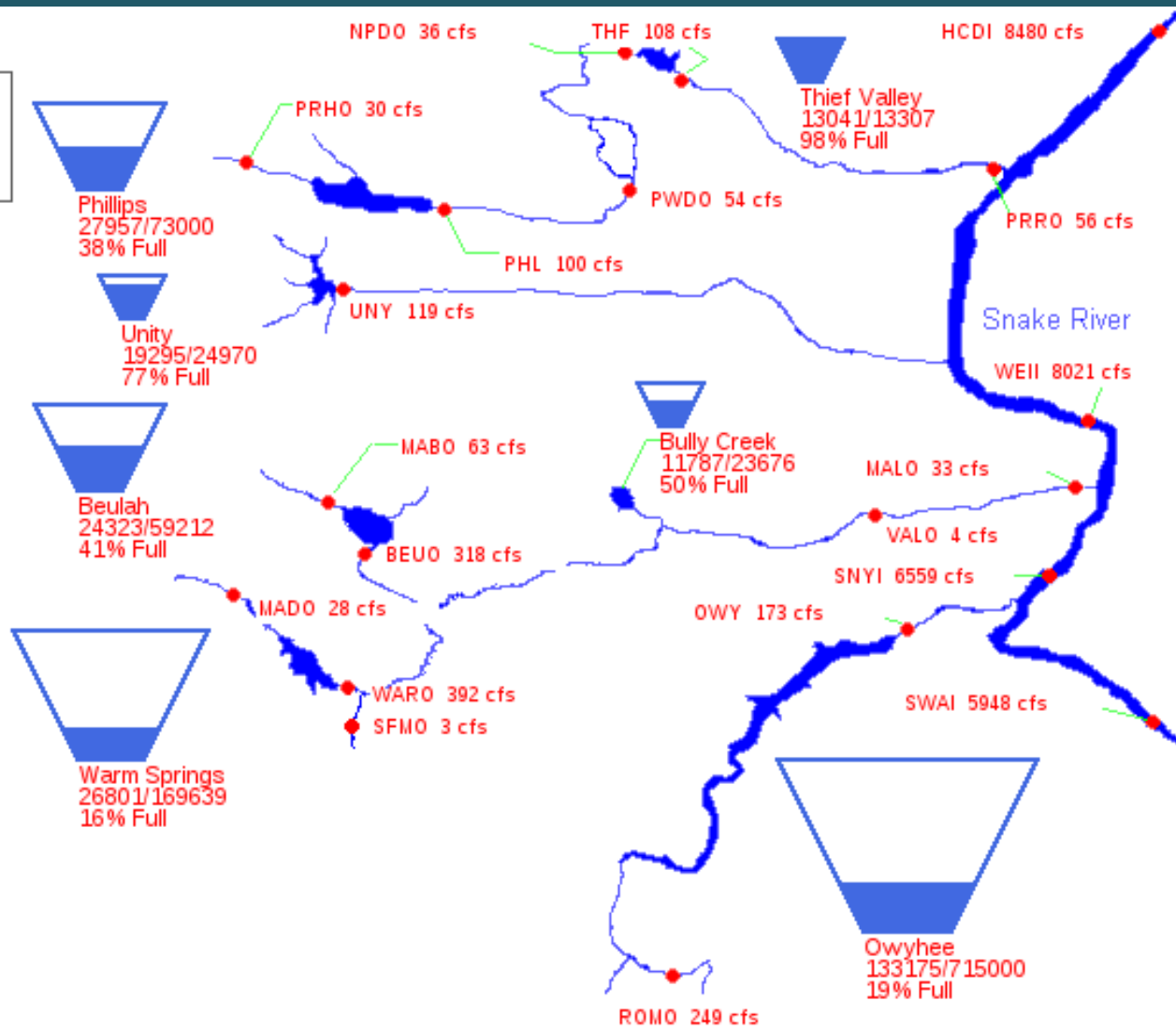
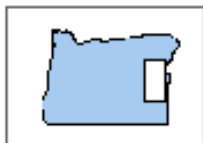
Reservoir Storage – Umatilla

06/14/2015



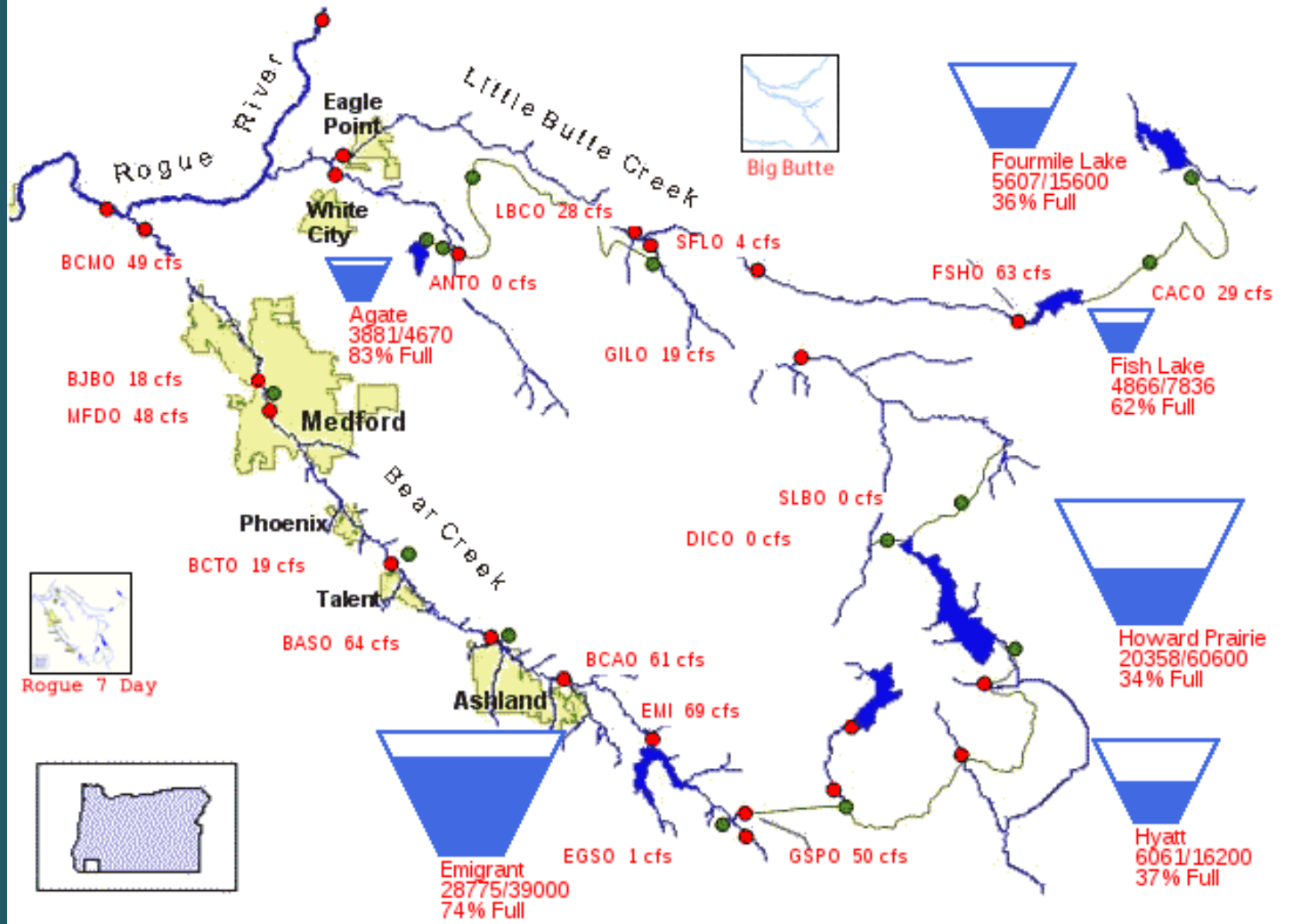
Reservoir Storage – Eastern Oregon

06/14/2015

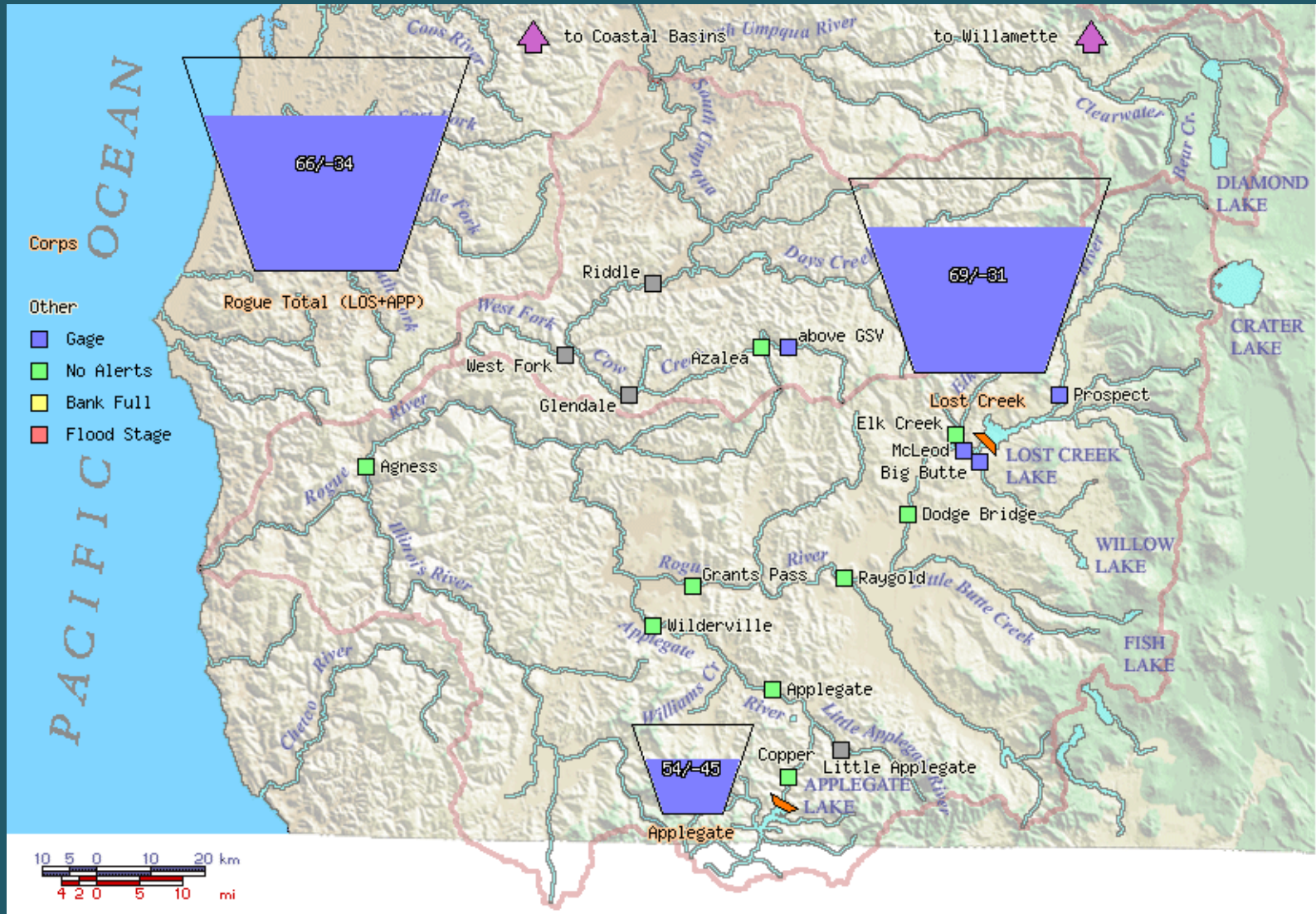


Reservoir Storage – Rogue

06/14/2015



Reservoir Storage – Rogue



Reservoir Storage – Willamette



