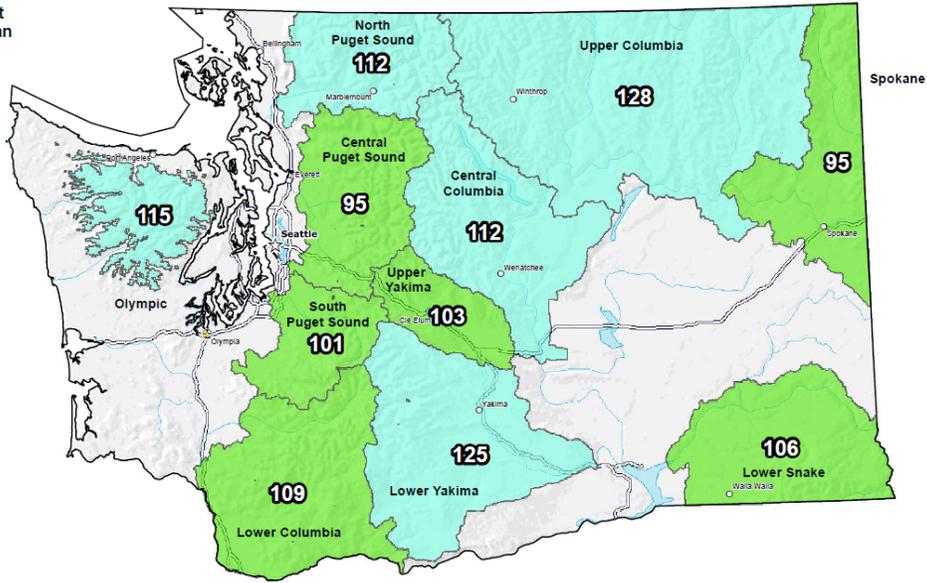
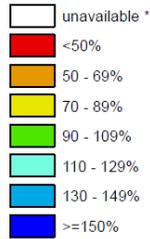


Washington SNOTEL Current Snow Water Equivalent (SWE) % of Normal

Apr 01, 2016  
Current Snow Water Equivalent (SWE) Basin-wide Percent of 1981-2010 Median



Provisional Data  
Subject to Revision



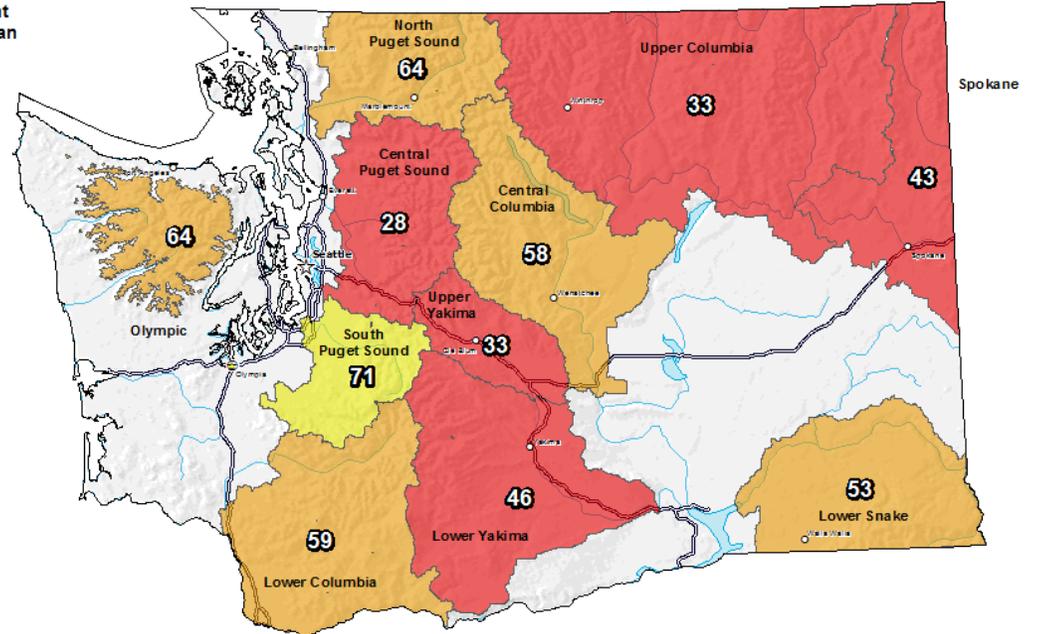
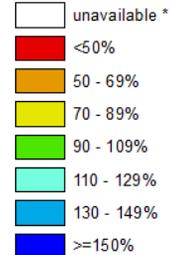
The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

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

← April 1st

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

May 16, 2016  
Current Snow Water Equivalent (SWE) Basin-wide Percent of 1981-2010 Median



Provisional Data  
Subject to Revision

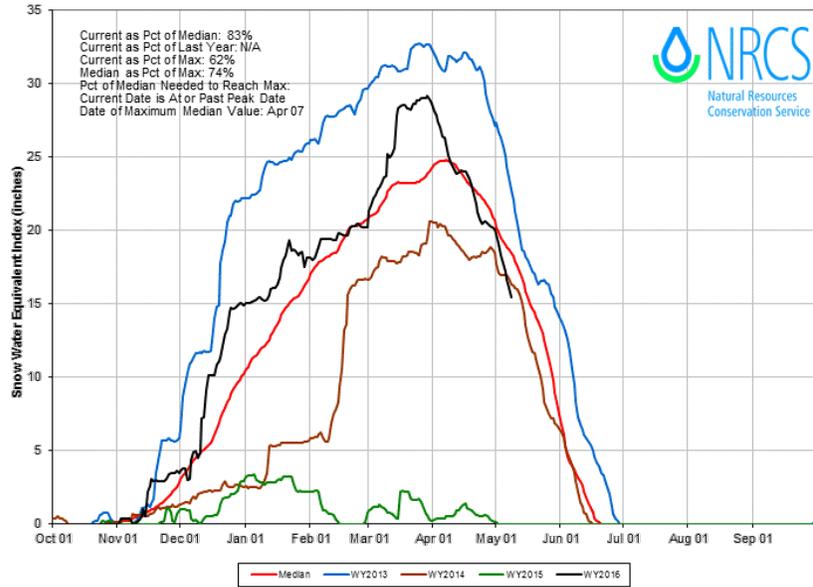


The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

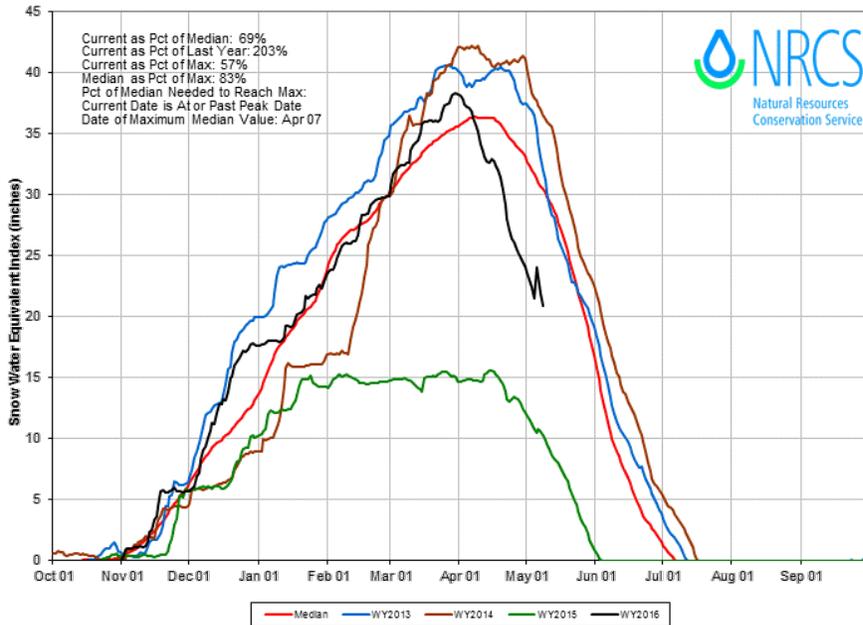
Prepared by:  
USDA/NRCS National Water and Climate Center  
Portland, Oregon  
<http://www.wcc.nrcs.usda.gov>

May 16 →

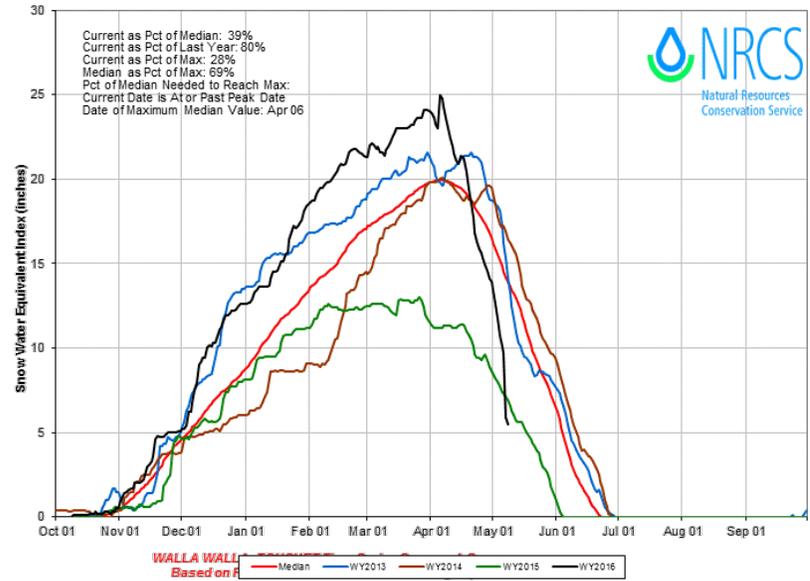
**OLYMPIC Time Series Snowpack Summary**  
Based on Provisional SNOTEL data as of May 08, 2016



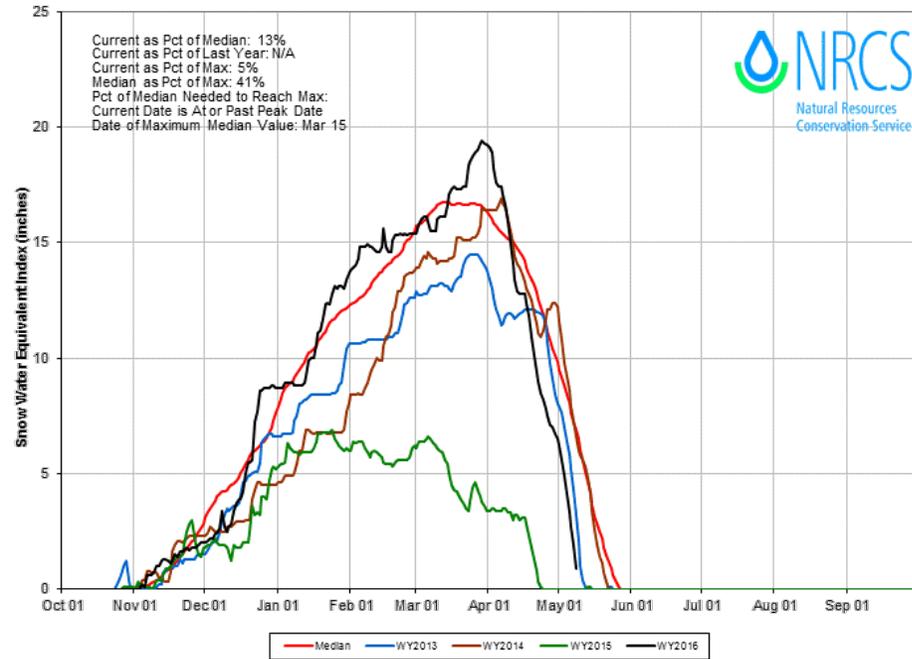
**BAKER, SKAGIT, NOOKSACK Time Series Snowpack Summary**  
Based on Provisional SNOTEL data as of May 08, 2016



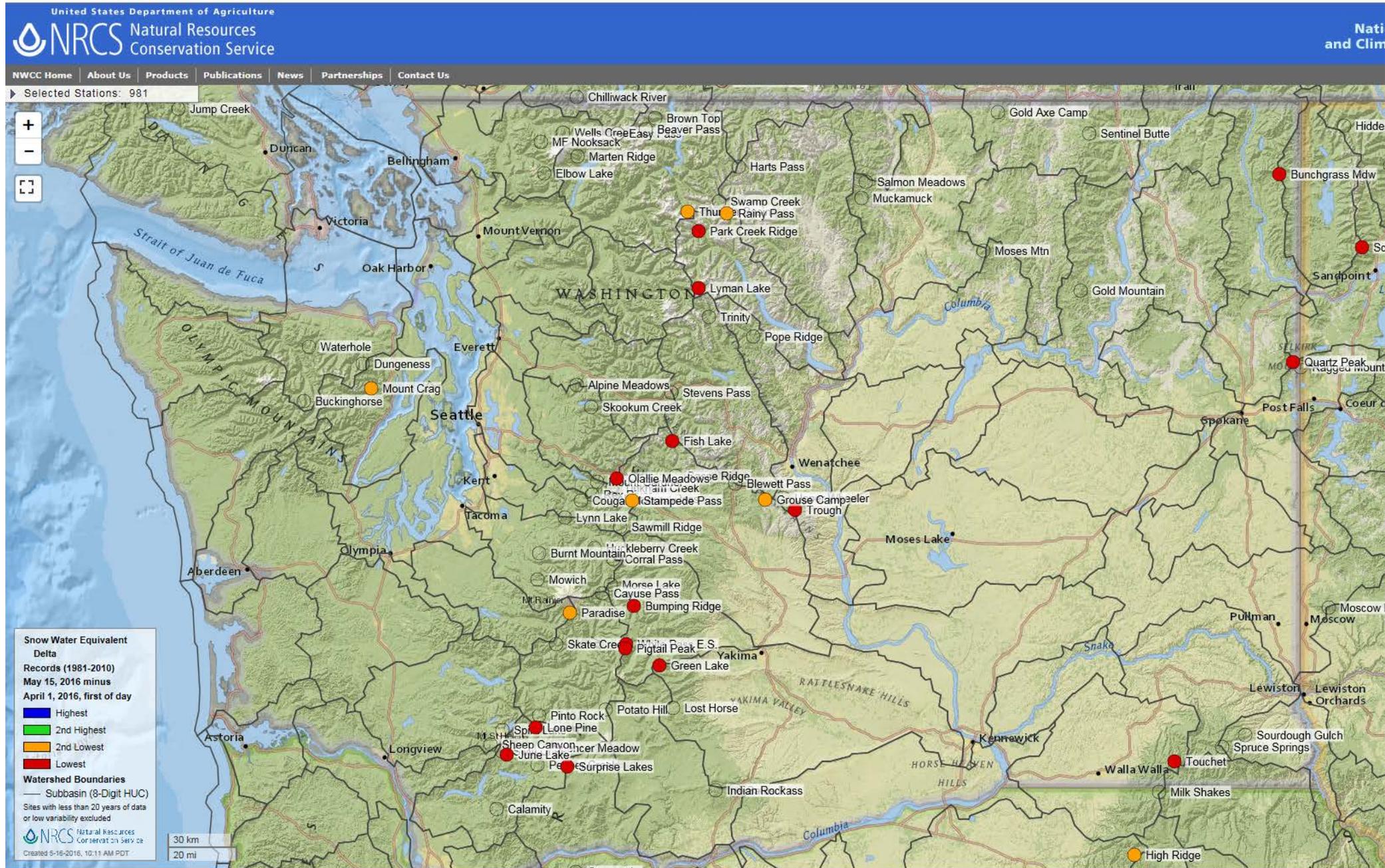
**COLUMBIA ABOVE METHOW Time Series Snowpack Summary**  
Based on Provisional SNOTEL data as of May 08, 2016



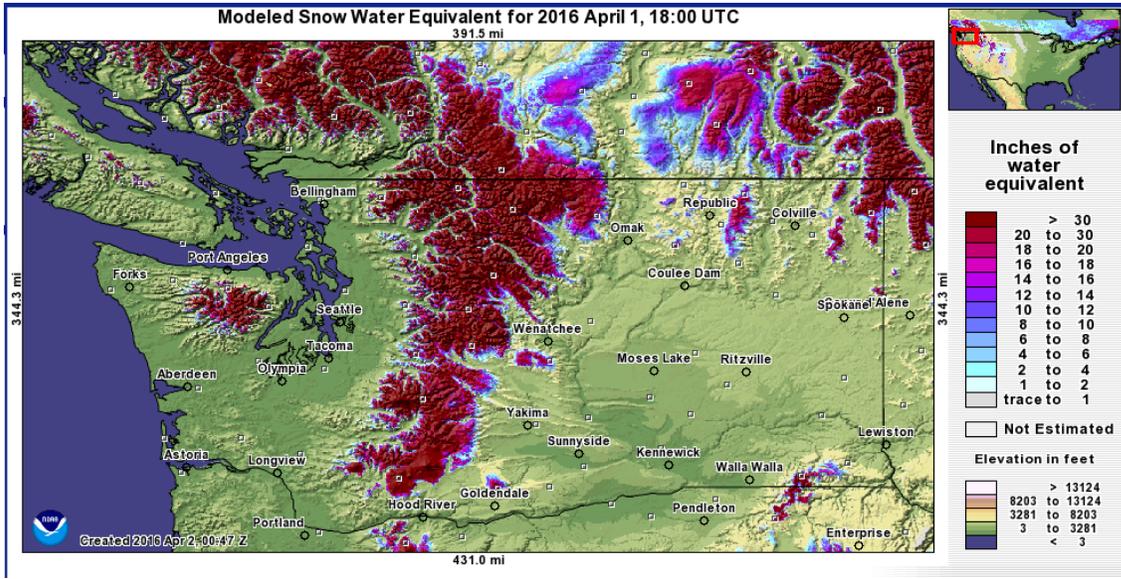
**WALLA WALLA Time Series Snowpack Summary**  
Based on Provisional SNOTEL data as of May 08, 2016



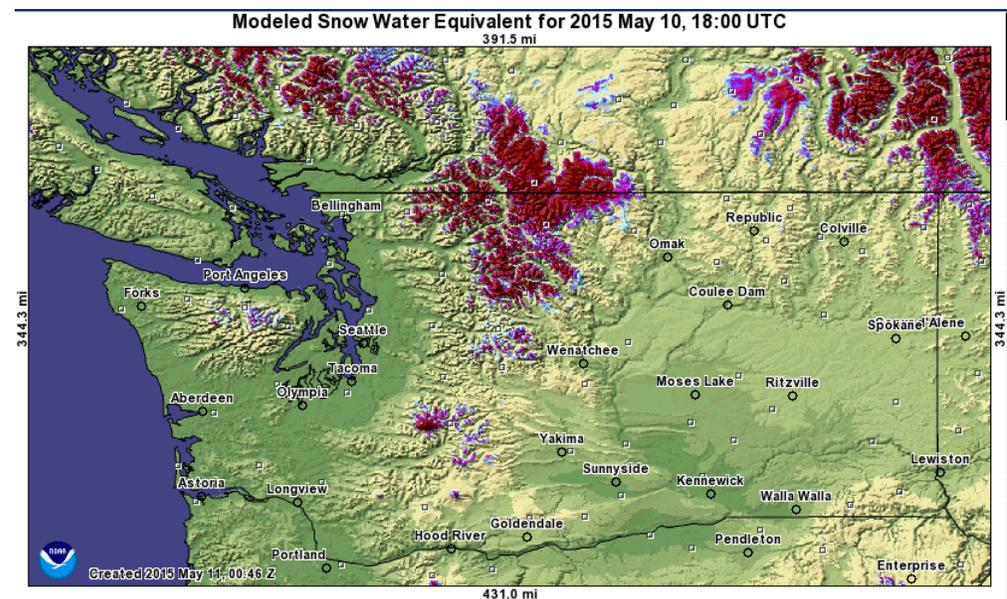
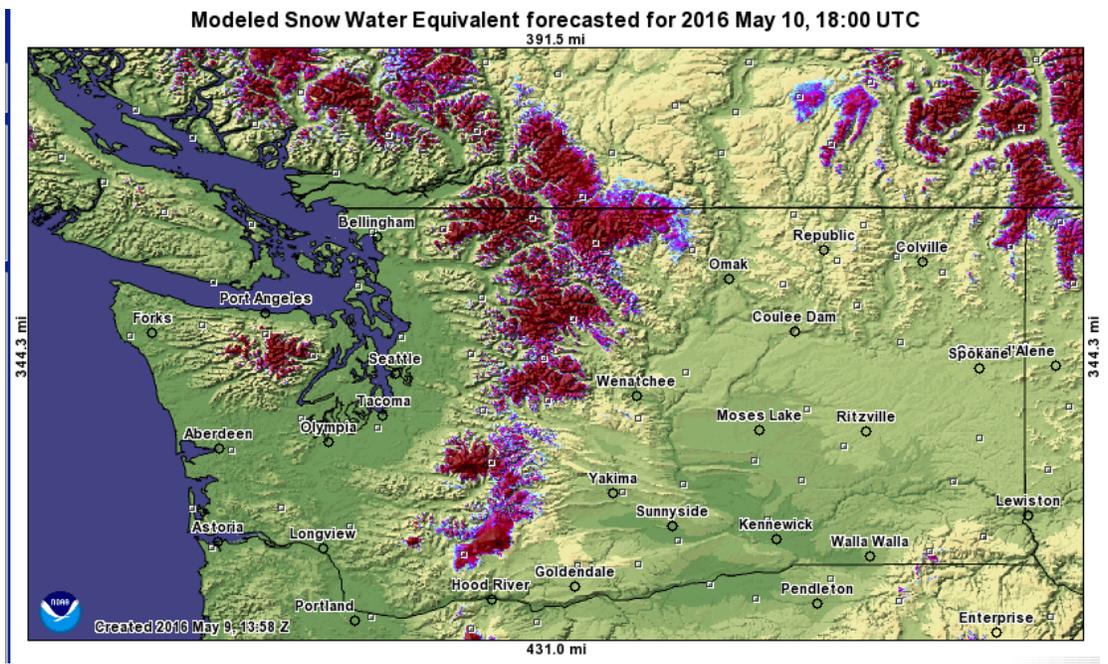
# Changes in SWE (April 1 – May 15)



April 1 2016



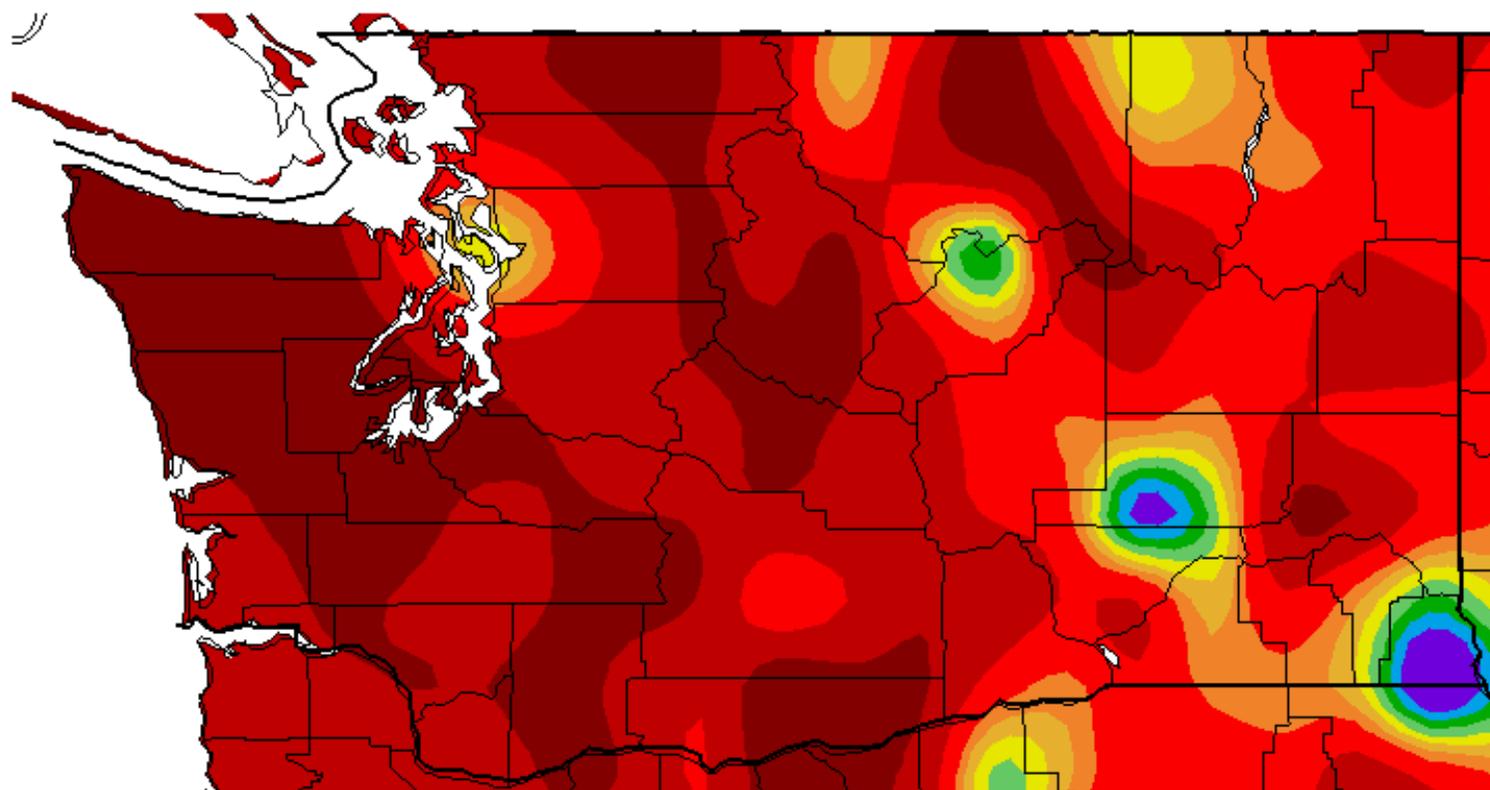
May 10 2016



Last Year: May 10 2015



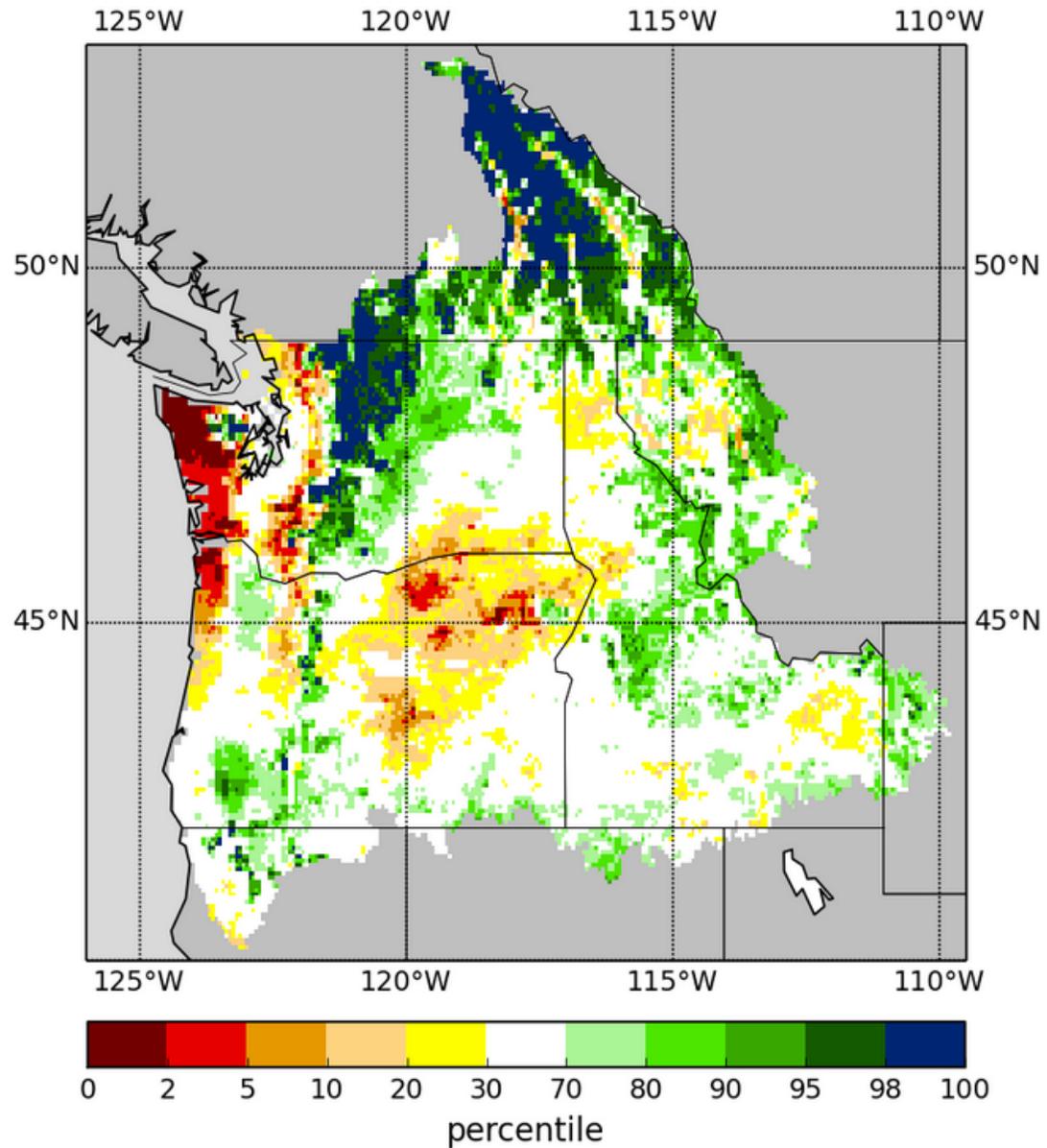
Percent of Average Precipitation (%)  
4/15/2016 – 5/14/2016



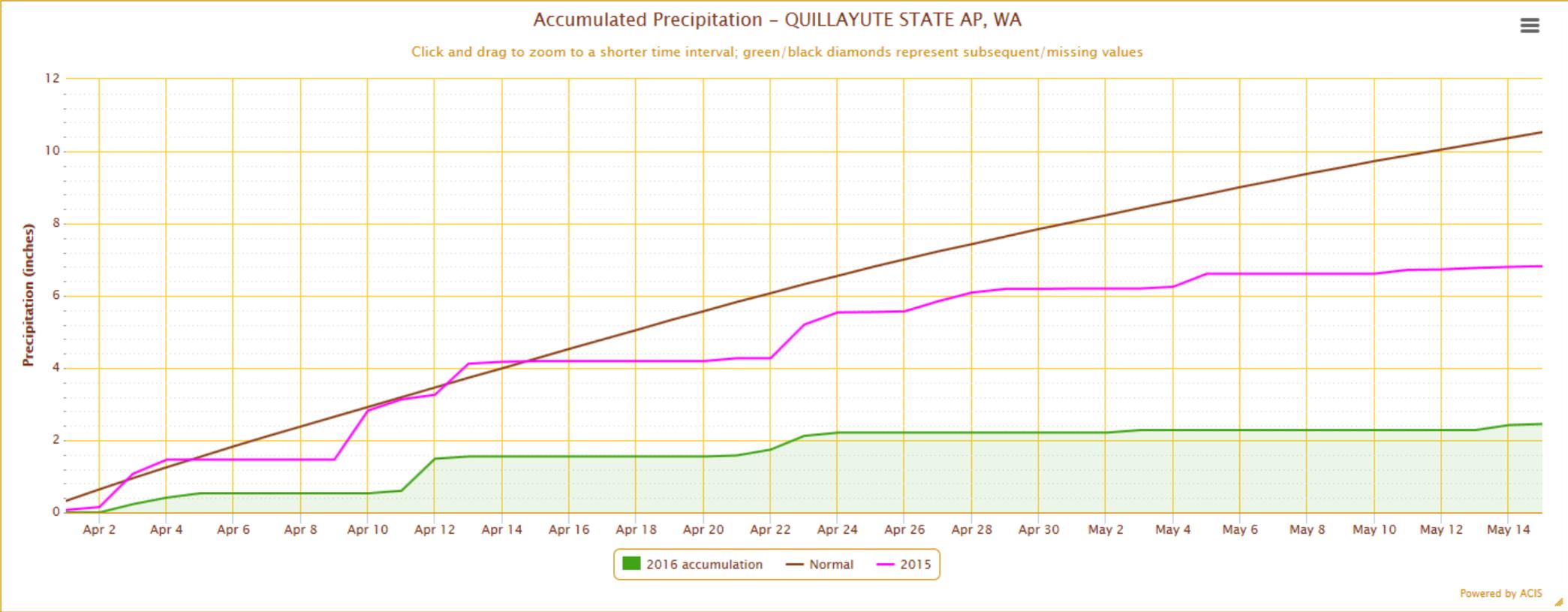
Generated 5/15/2016 at WRCC using provisional data.  
NOAA Regional Climate Centers

# Soil Moisture Percentile

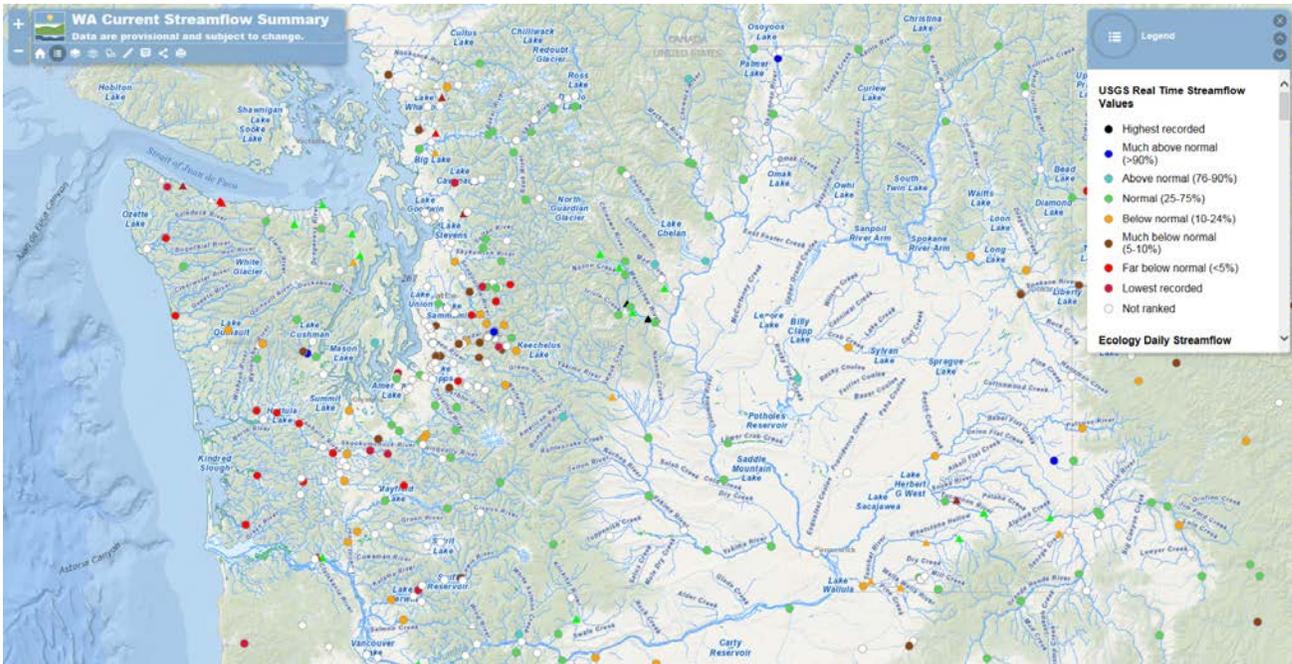
2016--05--14



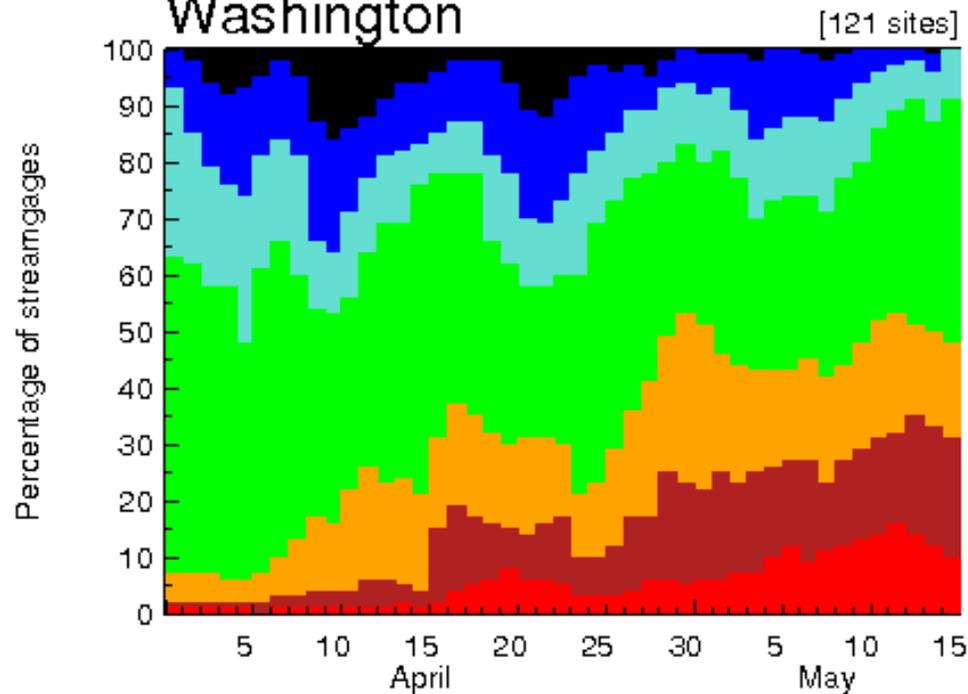
# Recent Precipitation, Near Forks



Click to Plot/Remove Years of Interest		(number of missing days in parentheses)						Resort table by year	
1966: - (45)	2008: 5.97 (4)	1995: 7.11	2009: 8.49	2002: 9.60	1987: 11.14	1986: 12.14	1984: 13.50	1993: 15.76	
2004: 2.18	1989: 6.00	1983: 7.20	1971: 8.66	1968: 9.62	1969: 11.40	1972: 12.17	1974: 14.36	1970: 15.87	
2016: 2.45	1967: 6.55	1999: 7.69	1979: 8.71	2007: 10.60	2003: 11.70	2010: 12.59	1996: 14.64	1988: 16.31	
1998: 4.86	1990: 6.69	1977: 7.78	1980: 8.94	1982: 10.80	2005: 11.73	1997: 12.85	1992: 14.69		
1973: 5.53	2015: 6.82	1985: 7.88	1978: 9.09	1991: 10.96	2000: 11.74	2013: 13.05	1981: 15.35		
1976: 5.77	2006: 7.02	1994: 8.04	1975: 9.30	2012: 11.01	2011: 12.07	2014: 13.06	2001: 15.42		



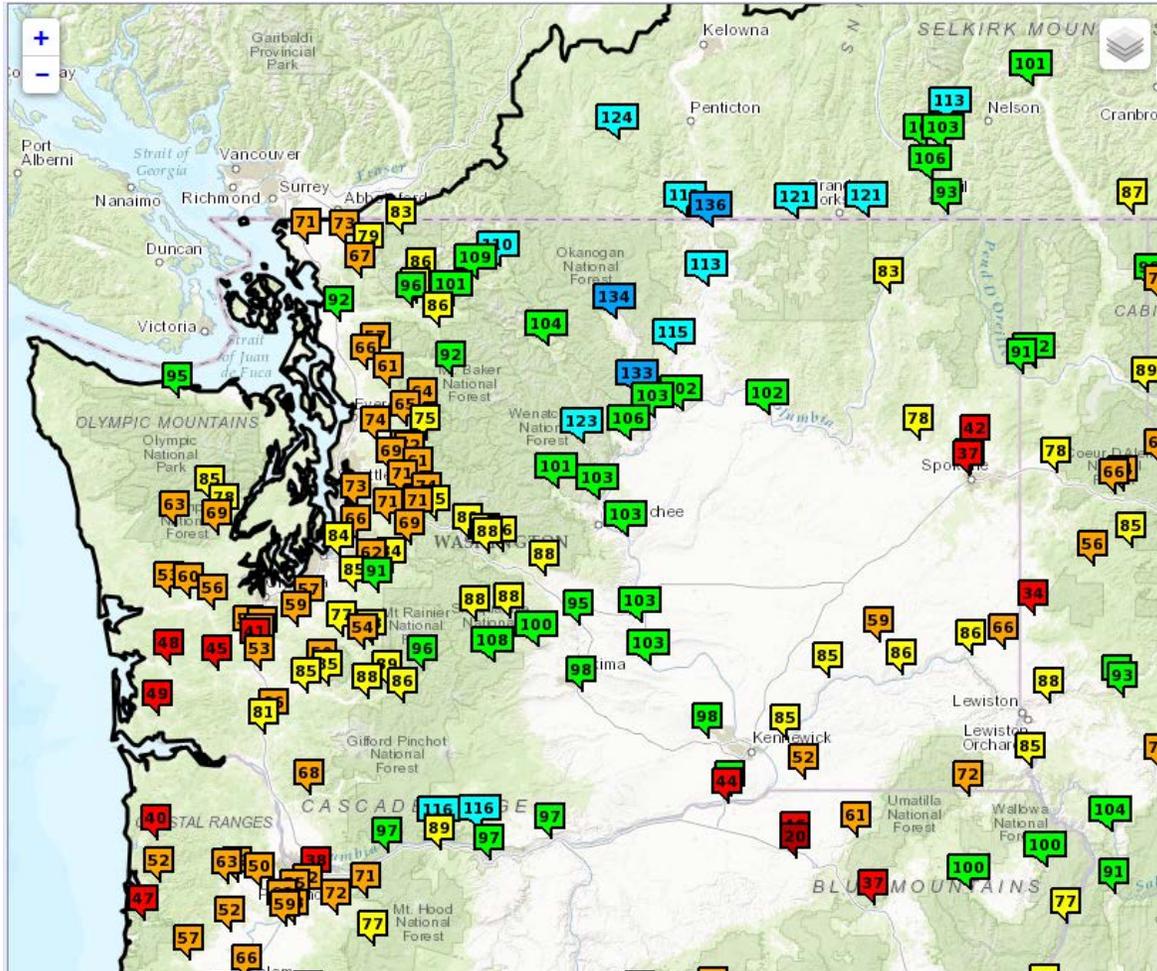
## Last 45 Days Washington



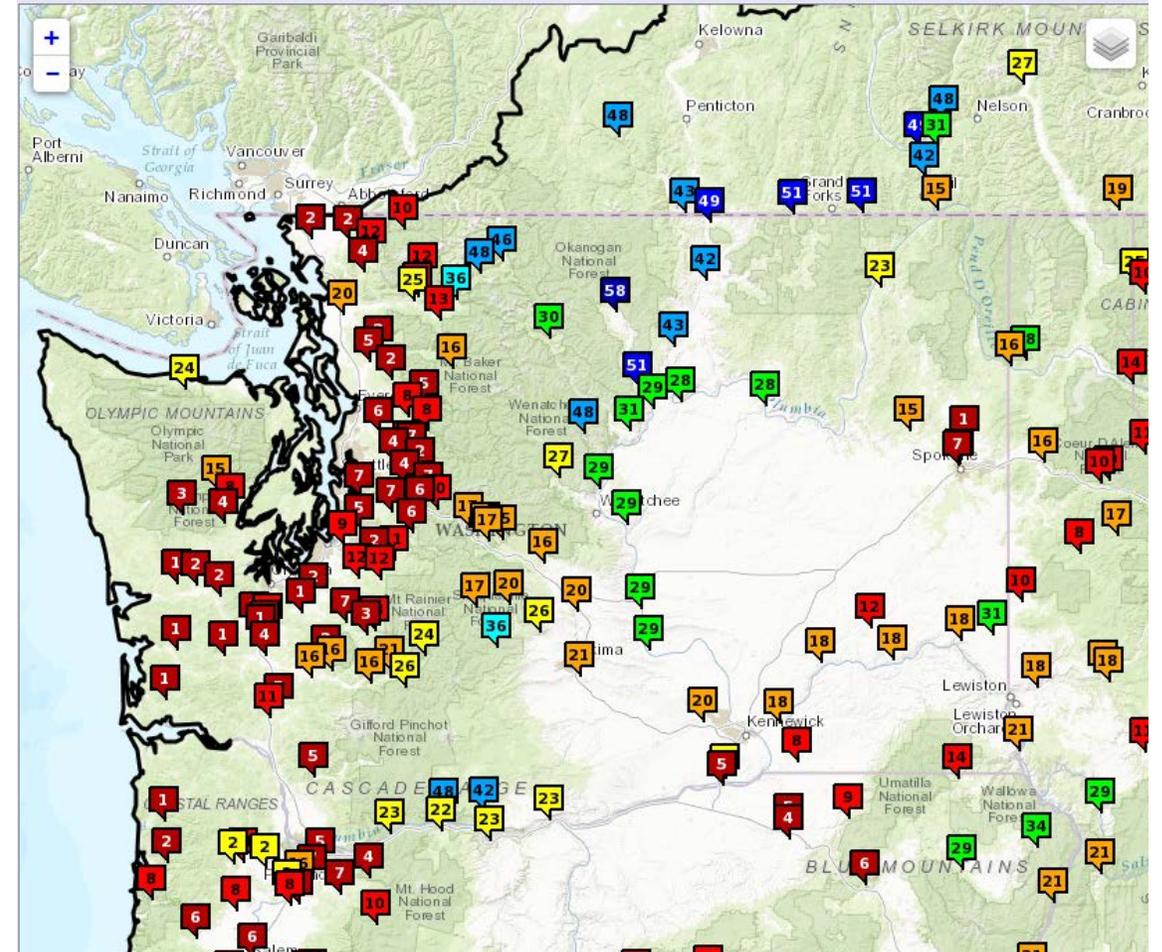
### Explanation - Percentile classes

	<10	10-24	25-75	76-90	>90	
Low	Much below normal	Below normal	Normal	Above normal	Much above normal	High

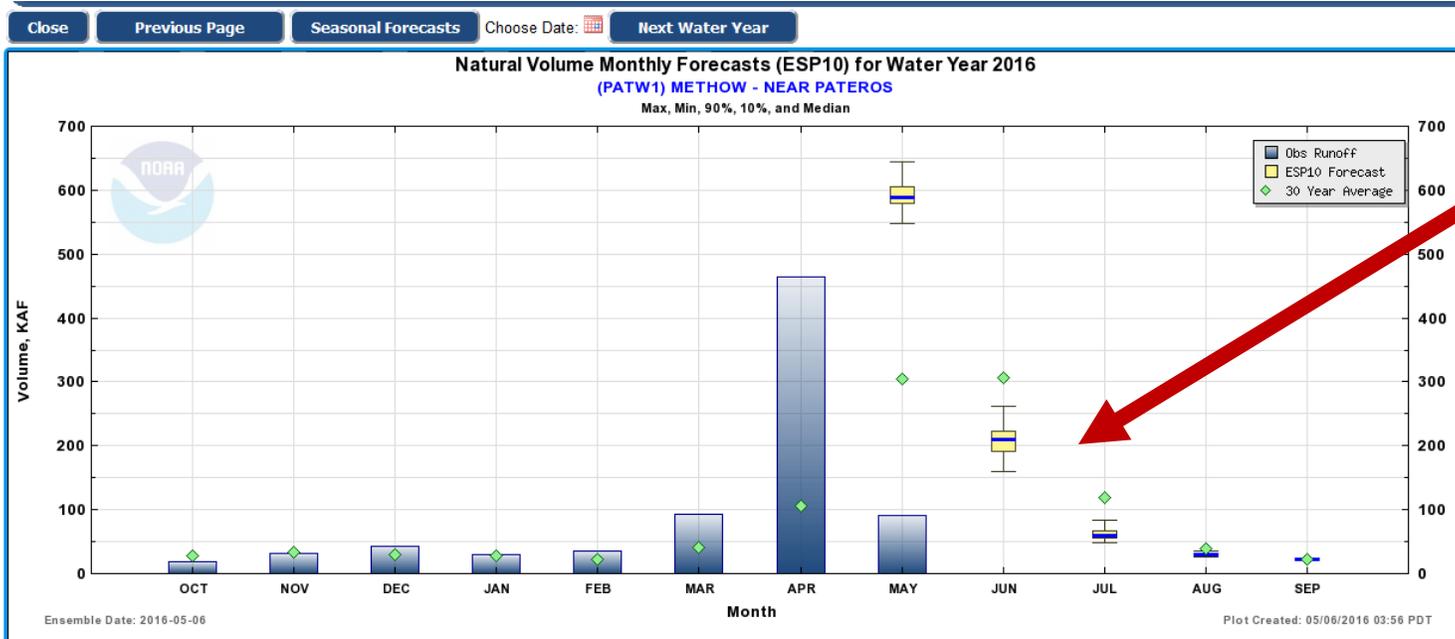
Forecasted Apr – Sept Runoff, expressed as Percent of Normal



Forecasted Apr – Sept Runoff, expressed as Driest Ranking for period of record (up to 68 years)



# Big Runoff, followed by below average late season flows



Transition from Above Average to Below Average Status

Methow April Runoff: >400% Average

METHOW - NEAR PATEROS Forecasts For Water Year 2016							METHOW - NEAR PATEROS Forecasts For Water Year 2016							METHOW - NEAR PATEROS Forecasts For Water Year 2016						
ESP Natural Forecast							ESP Natural Forecast							ESP Natural Forecast						
10 days QPF: Ensemble: 2016-05-06 Issued: 2016-05-06							5 days QPF: Ensemble: 2016-05-06 Issued: 2016-05-06							0 days QPF: Ensemble: 2016-05-06 Issued: 2016-05-06						
Forecast Period	Forecasts Are in KAF				Obs Runoff (2016-05-06)	30 Year Average (1981-2010)	Forecast Period	Forecasts Are in KAF				Obs Runoff (2016-05-06)	30 Year Average (1981-2010)	Forecast Period	Forecasts Are in KAF				Obs Runoff (2016-05-06)	30 Year Average (1981-2010)
	90 %	50 %	% Average	10 %				90 %	50 %	% Average	10 %				90 %	50 %	% Average	10 %		
OCT					19	27	OCT					19	27	OCT					19	27
NOV					32	34	NOV					32	34	NOV					32	34
DEC					42	29	DEC					42	29	DEC					42	29
JAN					30	27	JAN					30	27	JAN					30	27
FEB					36	23	FEB					36	23	FEB					36	23
MAR					92	40	MAR					92	40	MAR					92	40
APR					465	105	APR					465	105	APR					465	105
MAY	548	589	194	644	91*	304	MAY	496	563	186	623	91*	304	MAY	433	514	169	599	91*	304
JUN	159	210	69	261		306	JUN	178	229	75	282		306	JUN	206	261	85	331		306
JUL	49	60	50	84		118	JUL	55	66	56	93		118	JUL	60	76	64	111		118
AUG	26	29	73	35		39	AUG	27	30	76	36		39	AUG	28	31	79	39		39
SEP	22	23	99	25		23	SEP	22	23	100	25		23	SEP	22	23	101	25		23

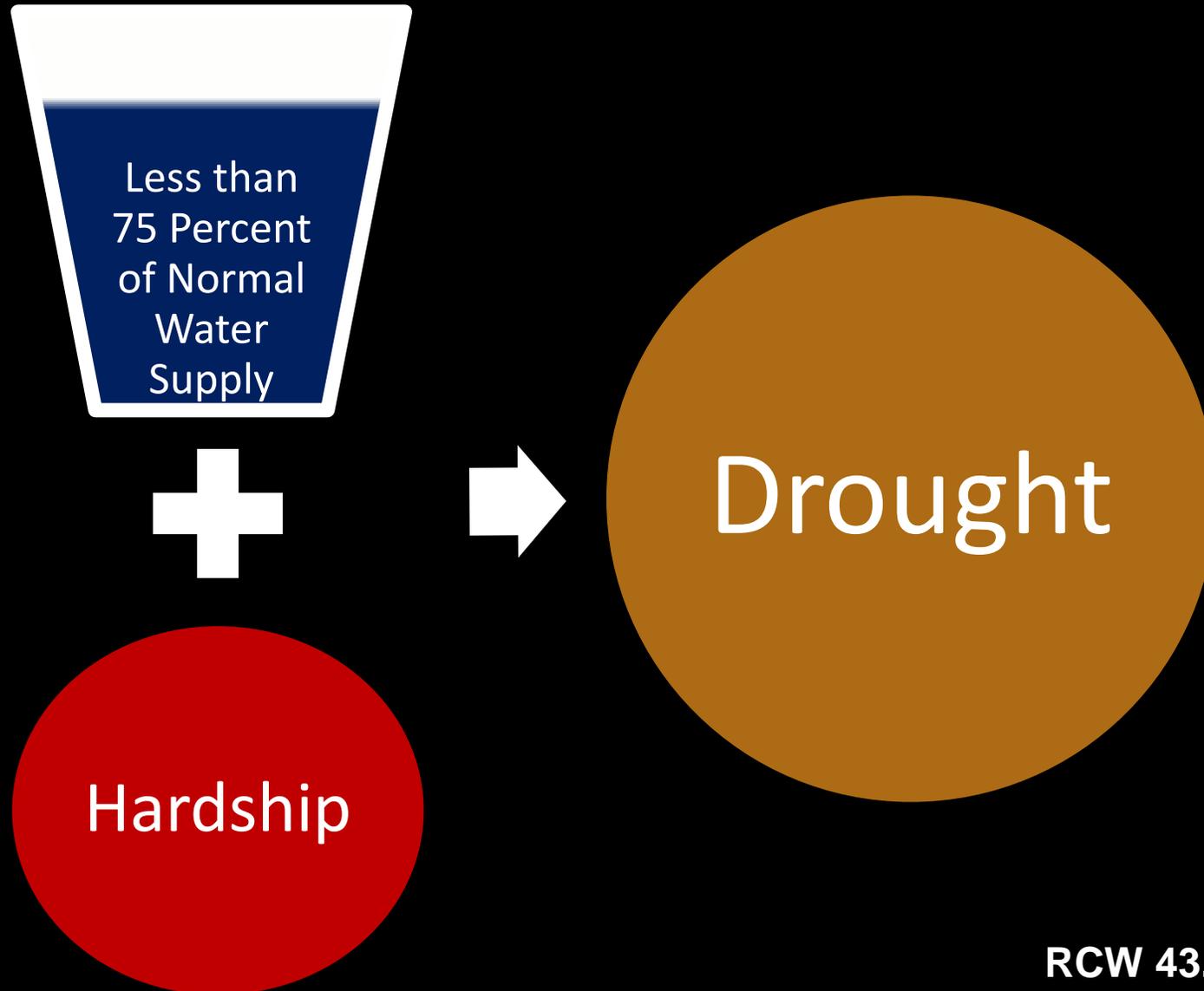
Move the mouse over the desired "Forecast Table" to update graph.  
 \* Partial Monthly Total

Move the mouse over the desired "Forecast Table" to update graph.  
 \* Partial Monthly Total

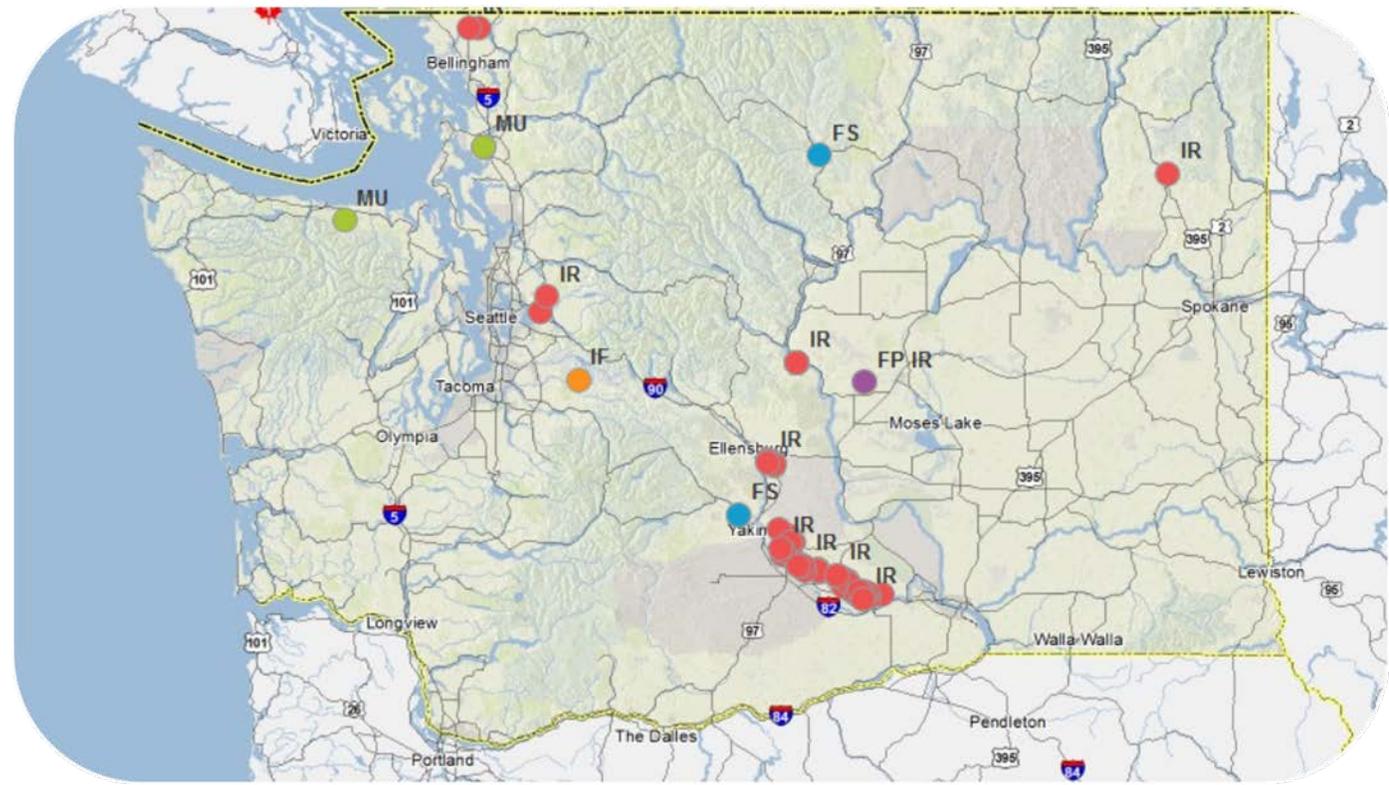
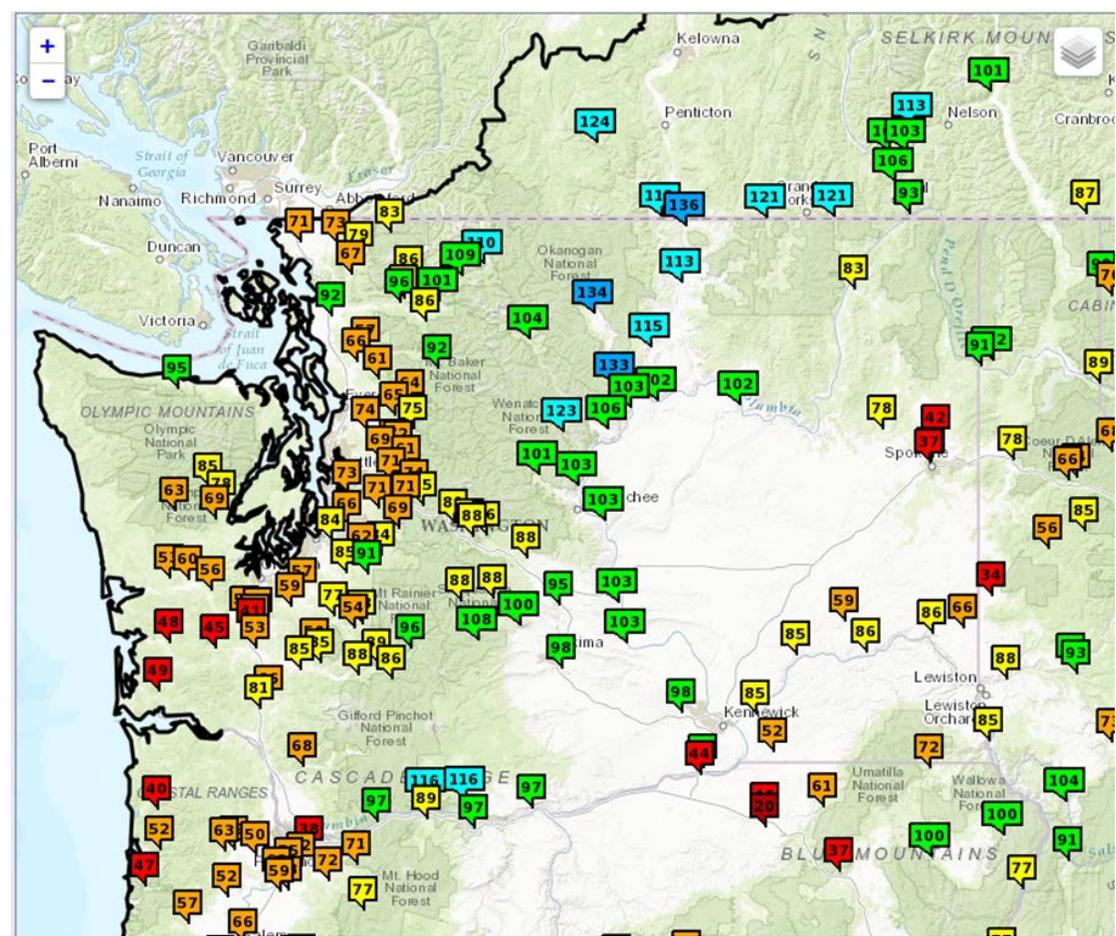
Move the mouse over the desired "Forecast Table" to update graph.  
 \* Partial Monthly Total

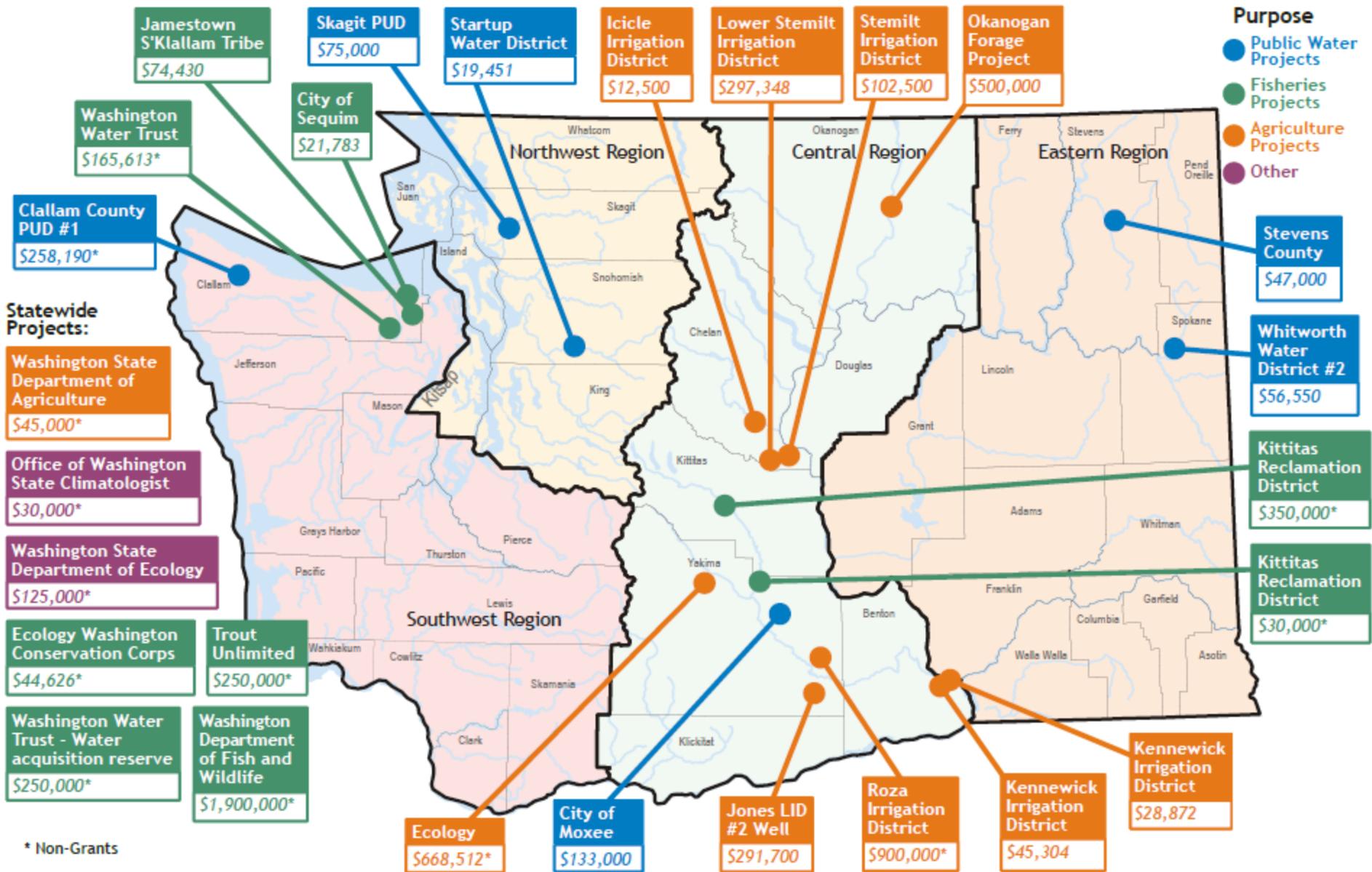


# Washington State's Drought Trigger

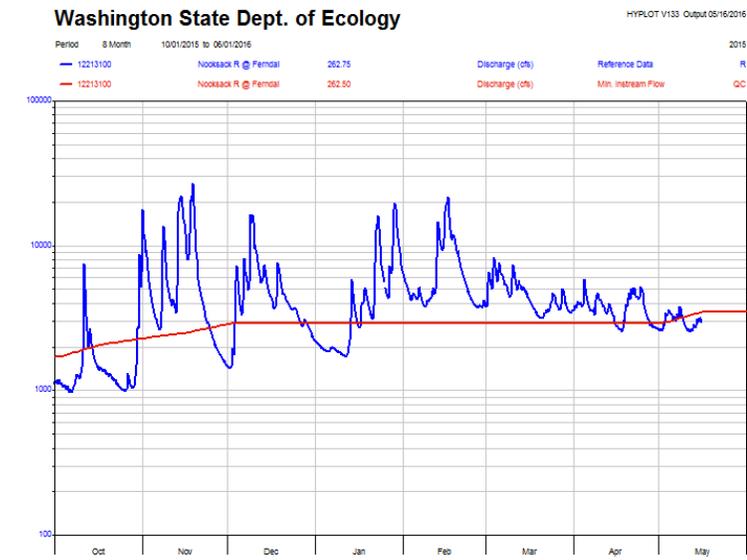


RCW 43.83B.400

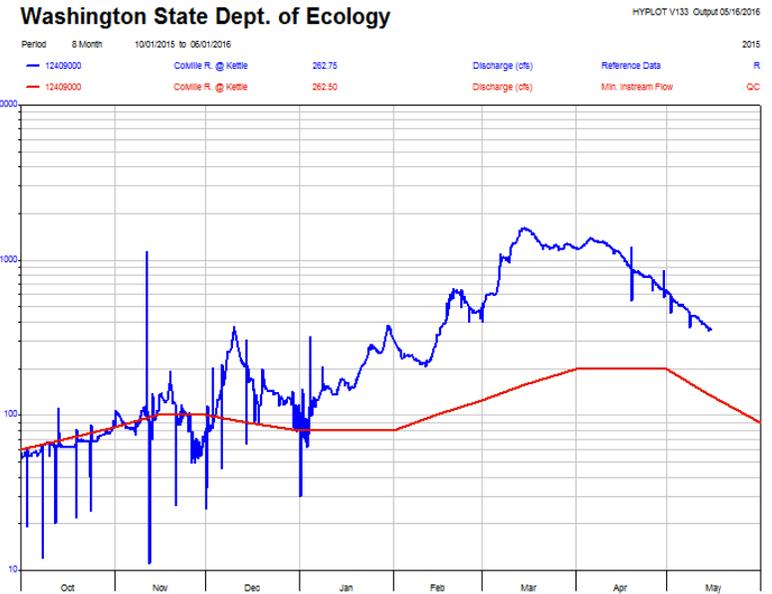




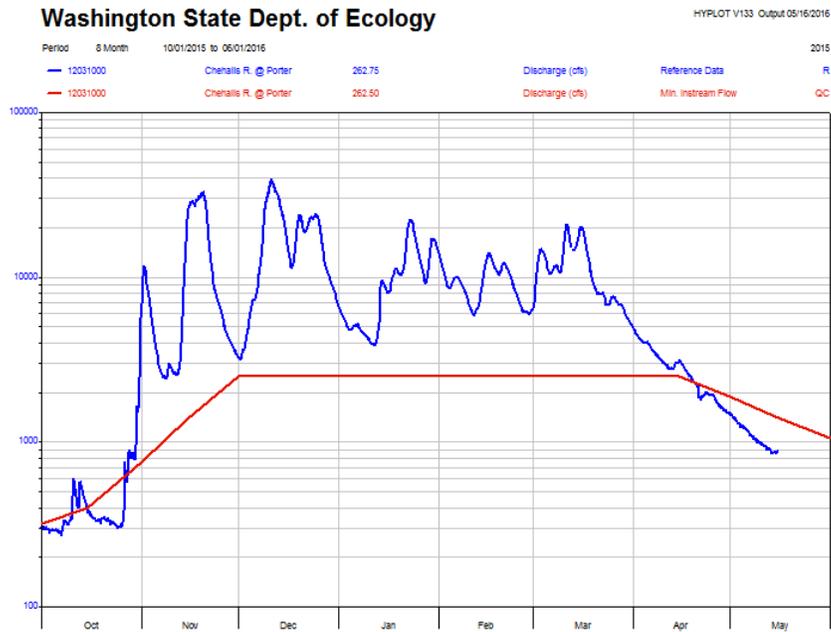
# Nooksack nr Ferndale



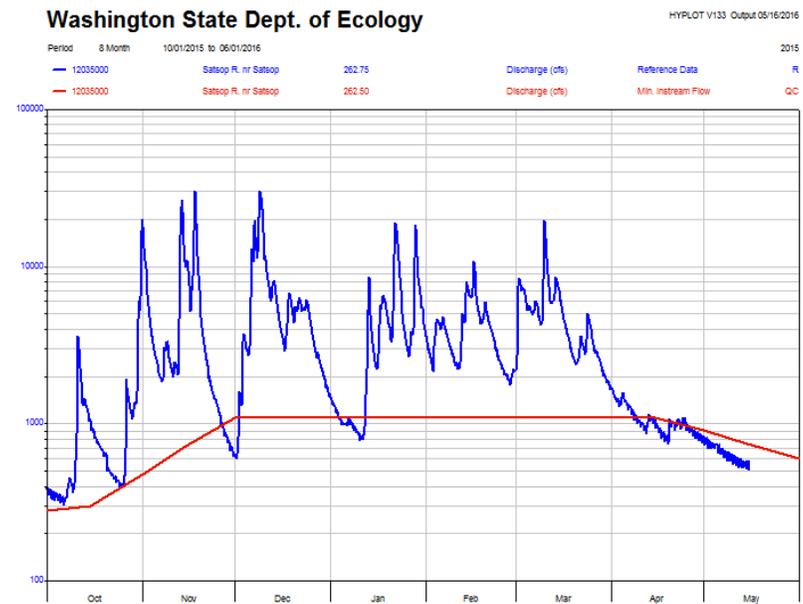
# Colville River nr Kettle Falls



# Chehalis River nr Porter



# Satsop nr Satsop



- June 2: Water Supply Availability Committee (WSAC)
- June 9: Executive Water Emergency Committee (EWEC)

Surplus Slides Follow

# River Stations Where Volume of Runoff Was Below 75 Percent of Normal

Oct – Sept (full water year)

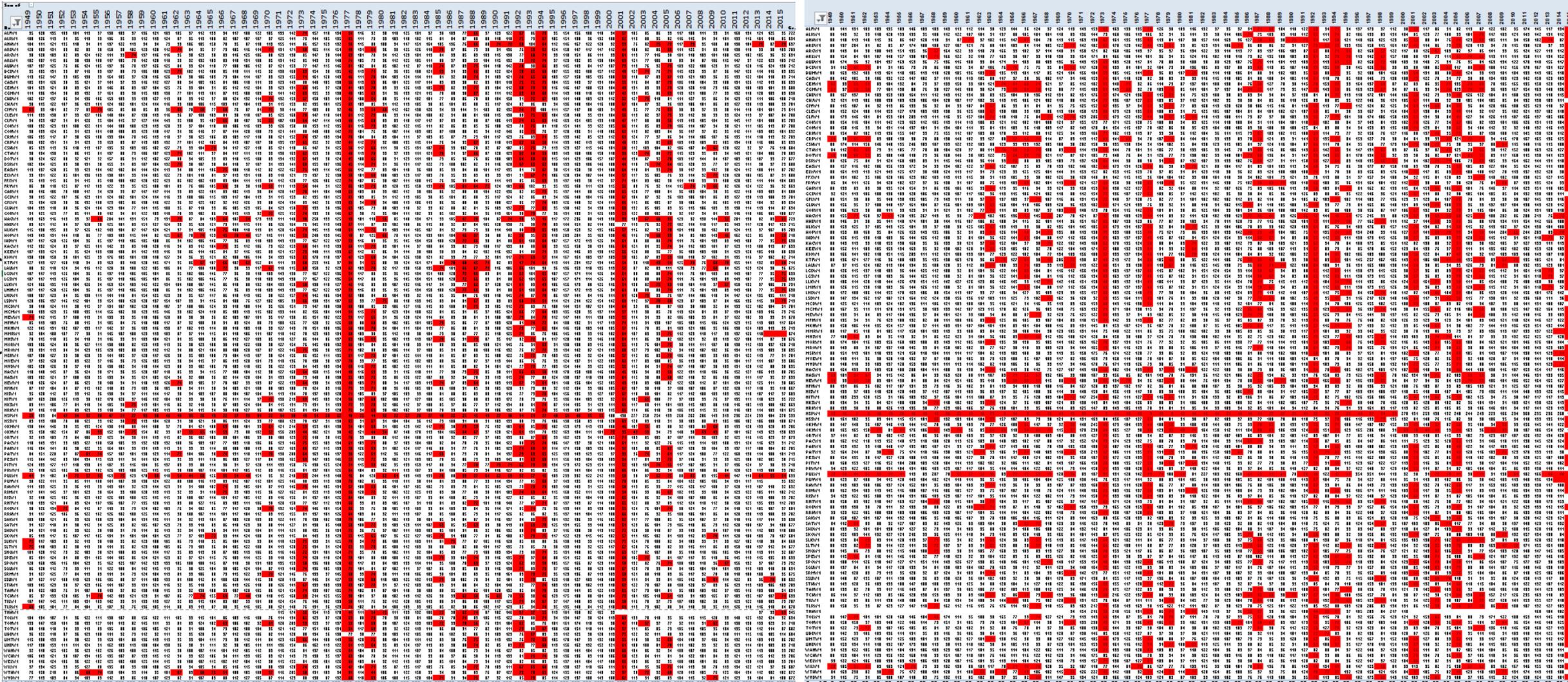
Apr -- Sept (spring/summer)

1949 ←

→ 2015

1949 ←

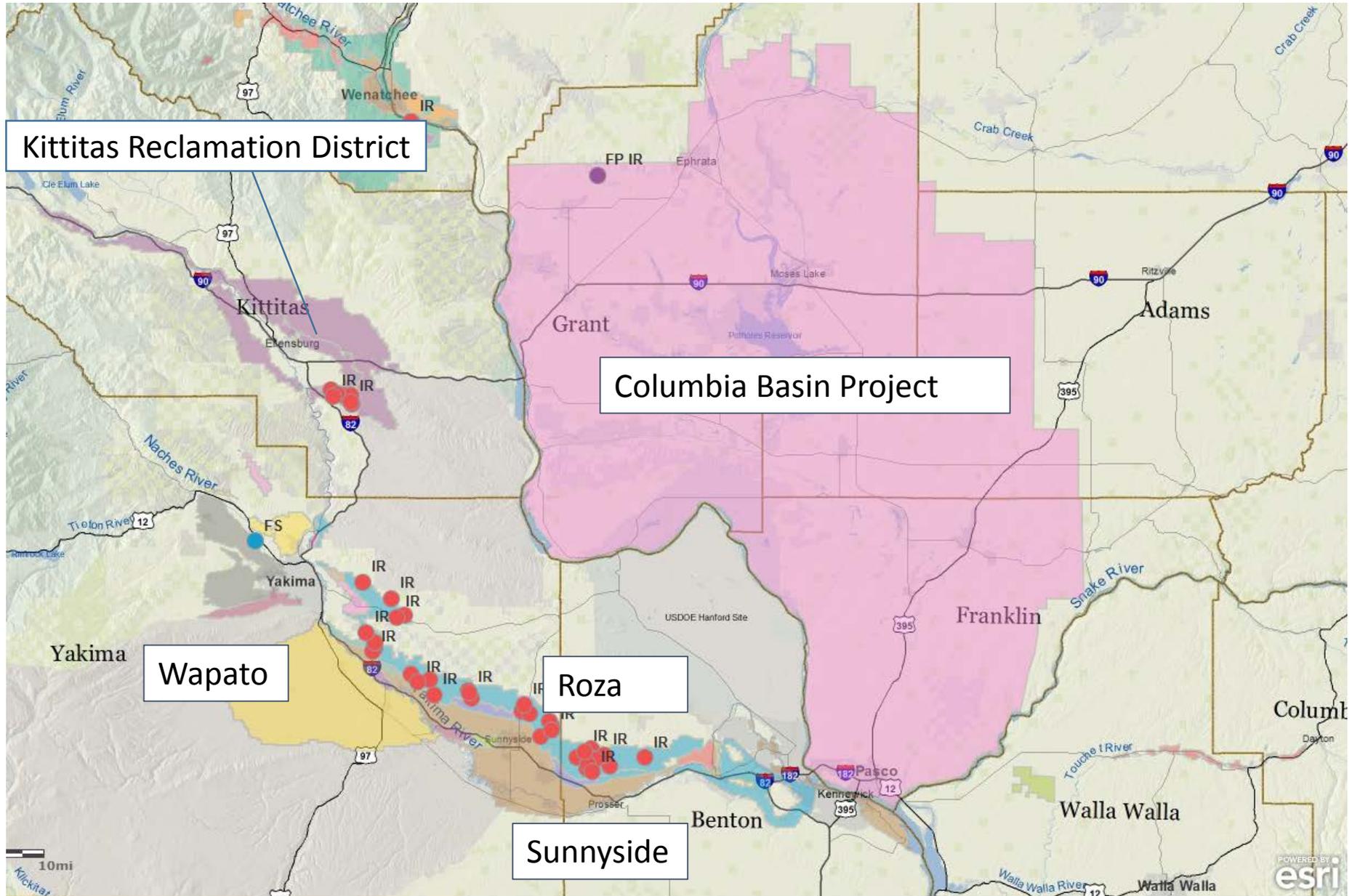
→ 2015



River Stations (n=119)

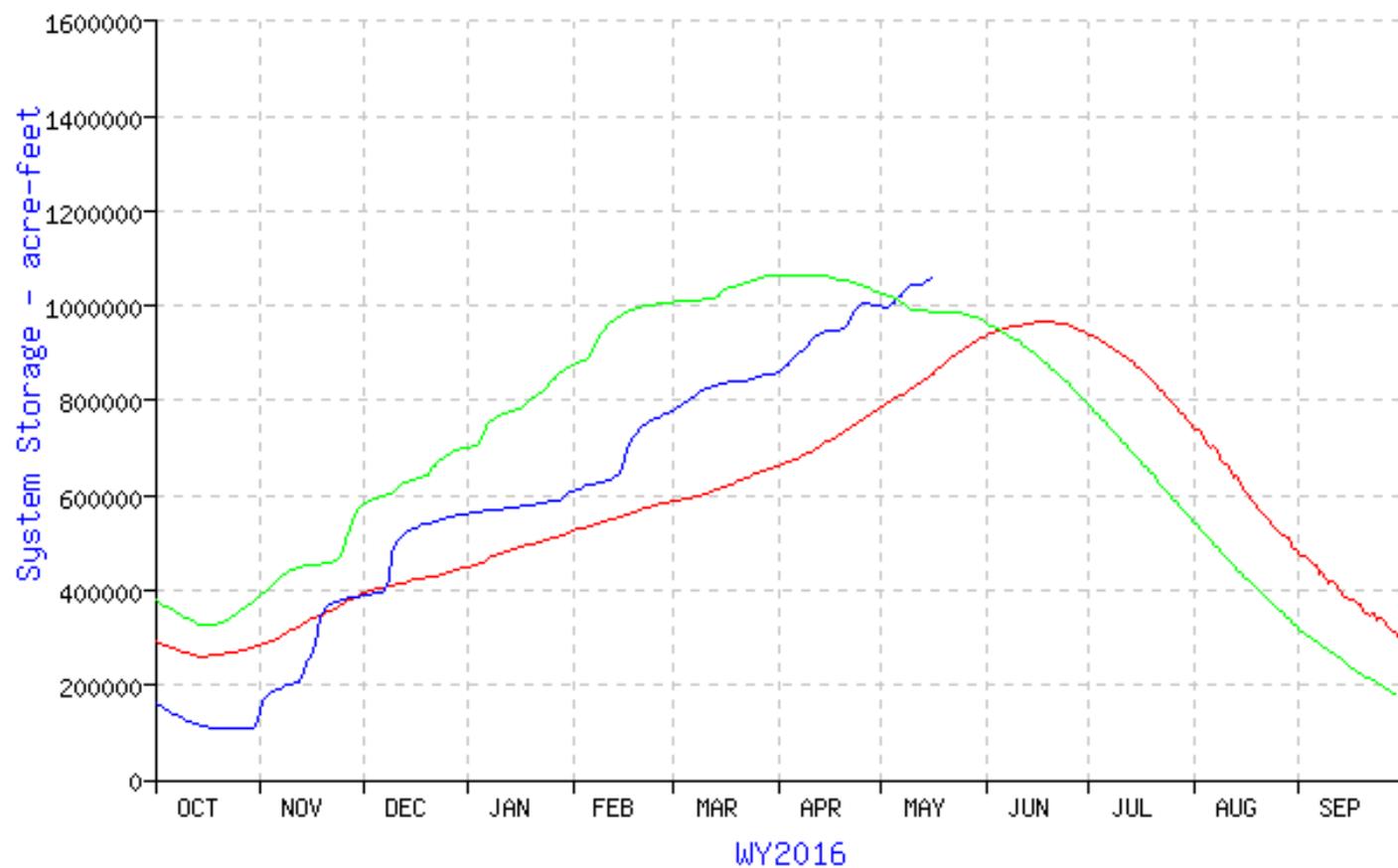
73 77 92 94 01 05 15 73 77 92 94 01 05 15

# Drought Permit Authorizations Central Washington



### Yakima River 5 Reservoirs

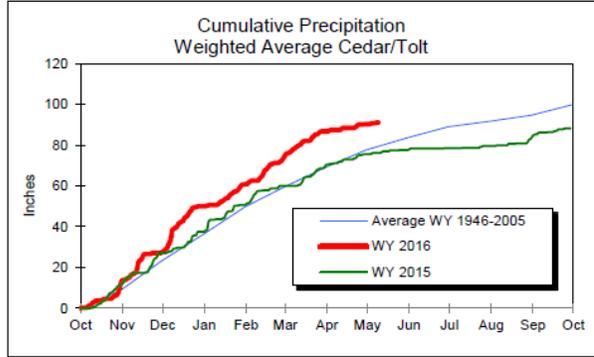
- Current Year
- Previous Year
- Average



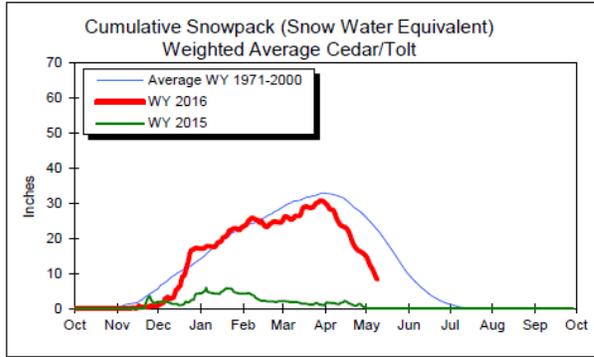
05/16/2016 05:44

PROVISIONAL DATA - SUBJECT TO CHANGE!  
Accessibility

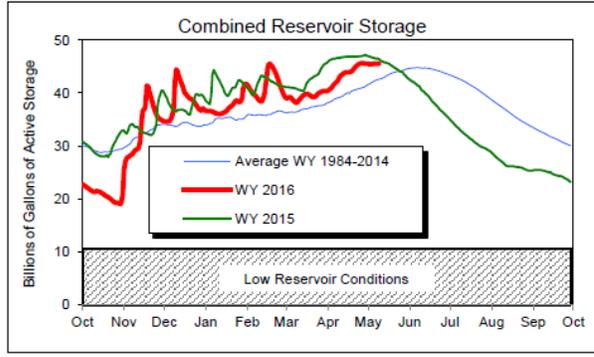
## Seattle Public Utilities Water System Synopsis as of May 9, 2016



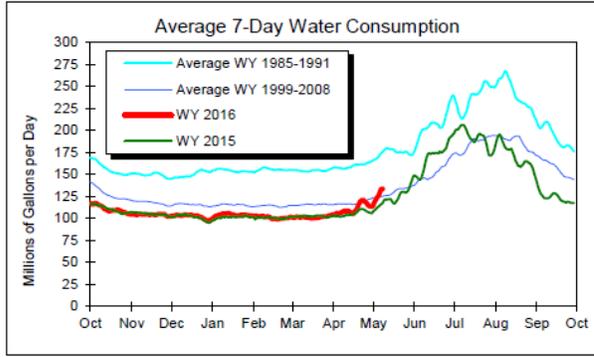
Precipitation was recorded in the Cedar River and South Fork Tolt River Watersheds over the past week.



The average snow accumulation across the sites that we monitor is estimated to be about 8.2 inches snow water equivalent which is below the long term average for this time of the year.



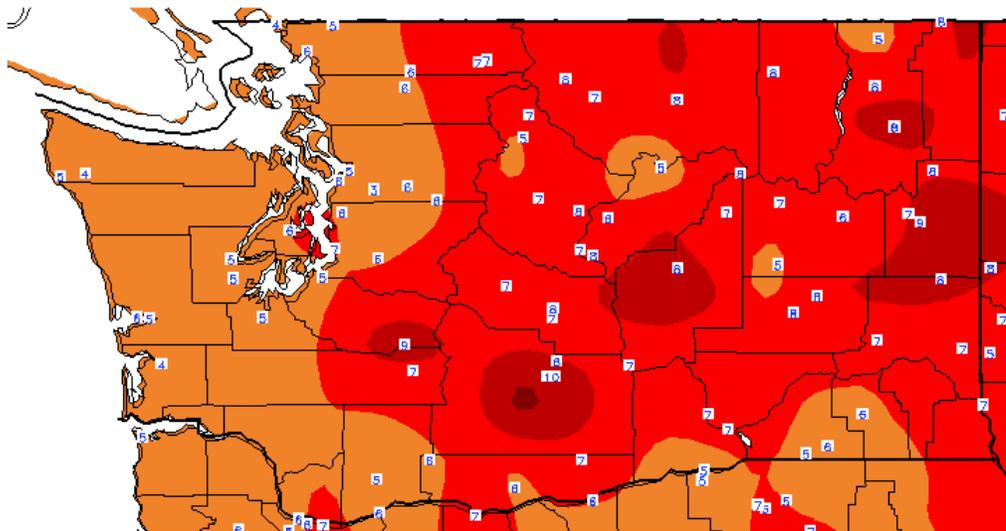
The combined reservoir storage of Chester Morse Lake, Masonry Pool, Lake Youngs and South Fork Tolt Reservoir is above the long term average for this time of the year.



Water use over the past week averaged about 133 million gallons per day (mgd), which is more than the 125 mgd used during the same period over the years 1999-2008.

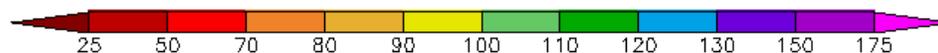
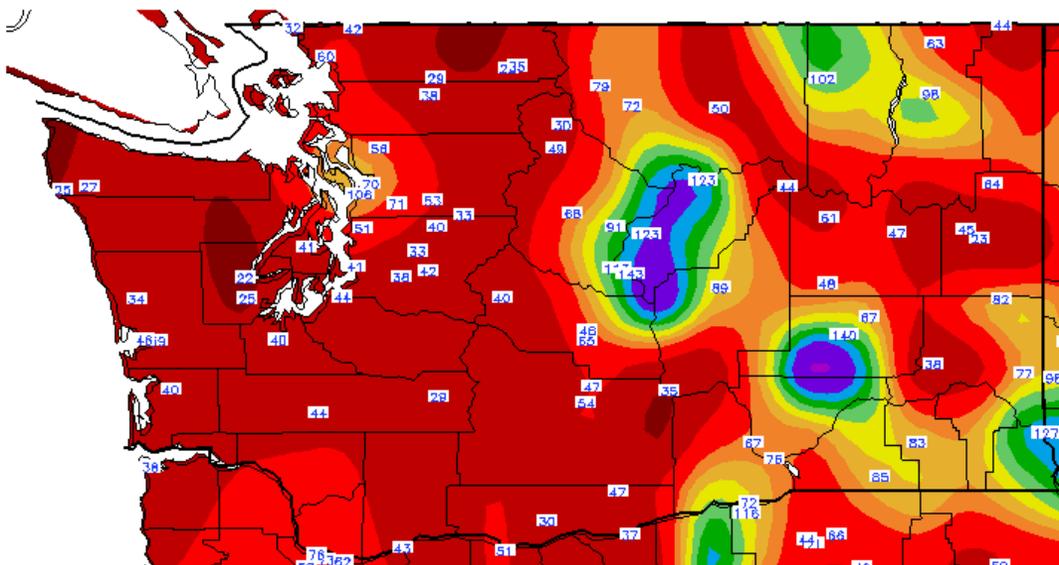
All data is provisional and subject to revision.

Ave. Temperature dep from Ave (deg F)  
4/8/2016 – 5/7/2016

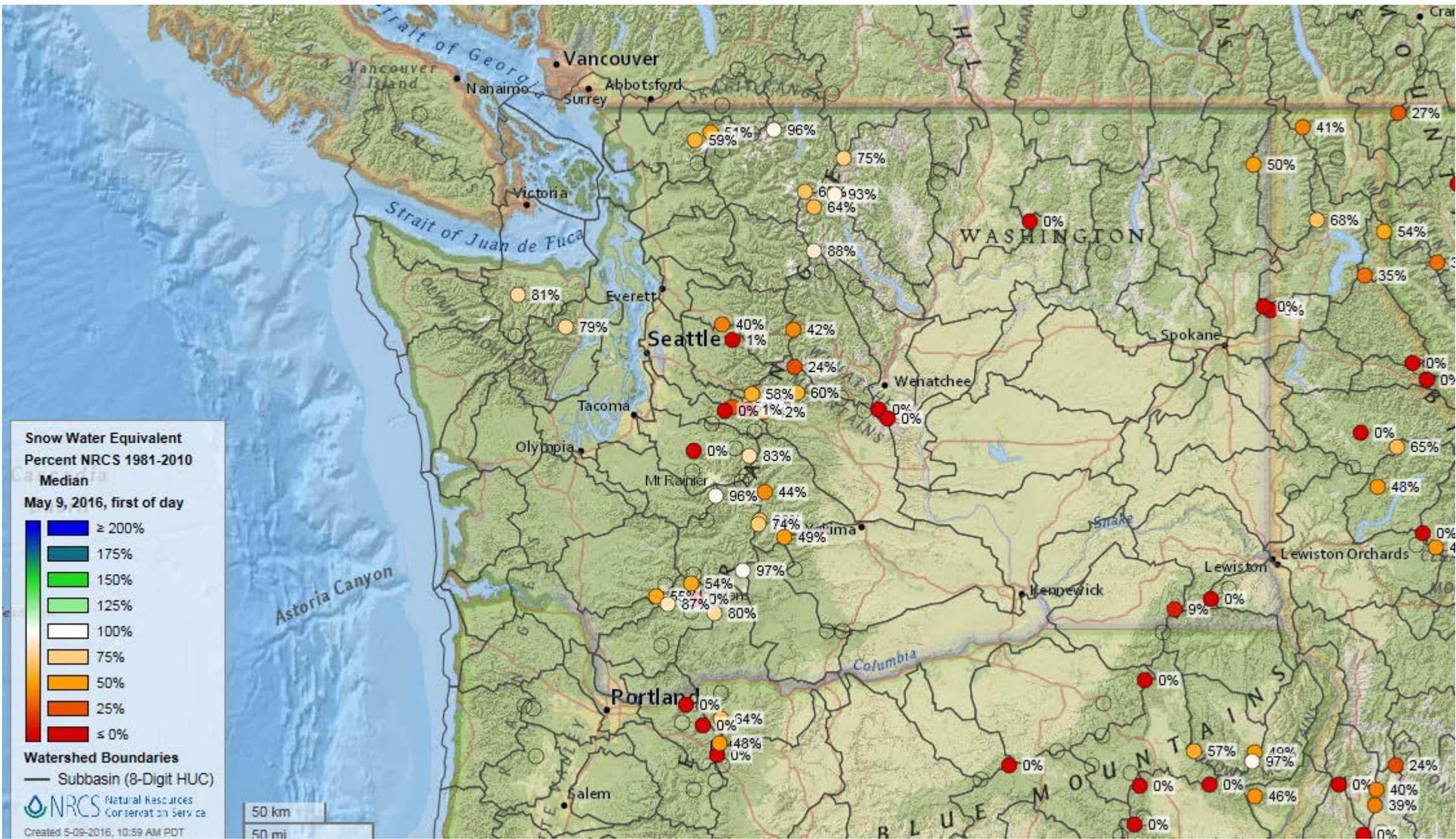


Generated 5/08/2016 at WRCC using provisional data.  
NOAA Regional Climate Centers

Percent of Average Precipitation (%)  
4/8/2016 – 5/7/2016



Generated 5/08/2016 at WRCC using provisional data.  
NOAA Regional Climate Centers



**Snow Water Equivalent  
Percent NRCS 1981-2010  
Median**

**May 9, 2016, first of day**

- ≥ 200%
- 175%
- 150%
- 125%
- 100%
- 75%
- 50%
- 25%
- ≤ 0%

**Watershed Boundaries**

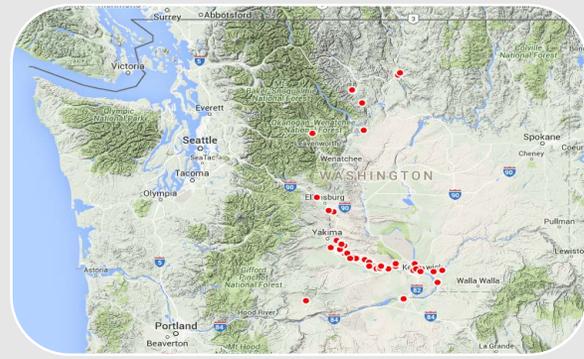
- Subbasin (8-Digit HUC)

**NRCS** Natural Resources Conservation Service

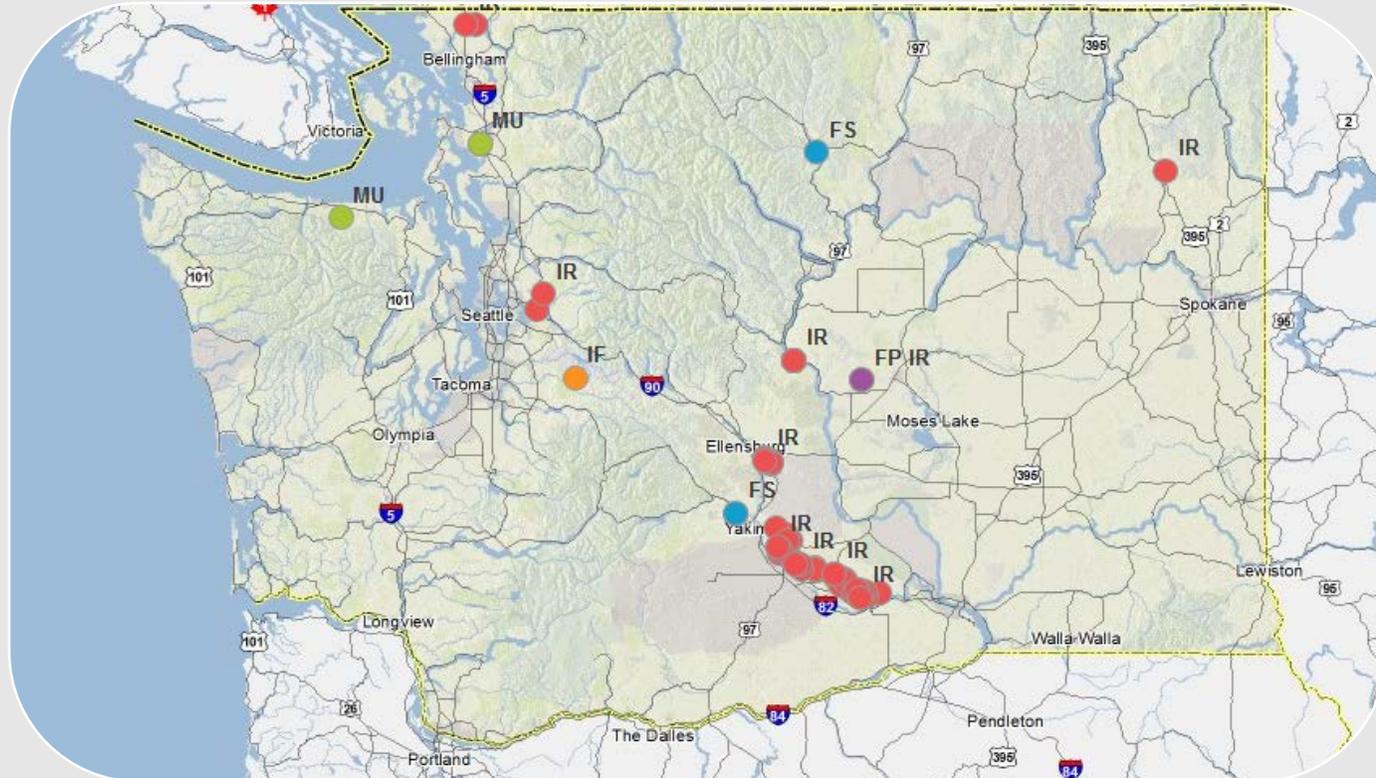
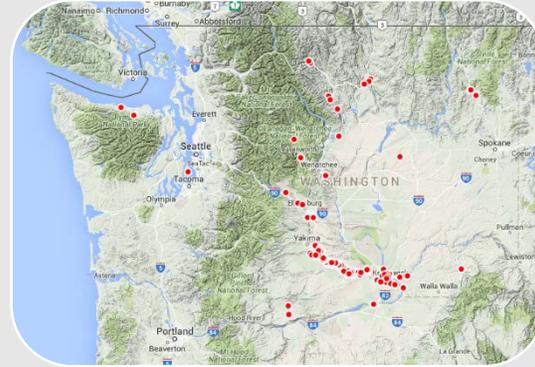
Created 5-09-2016, 10:59 AM PDT

50 km  
50 mi

2001

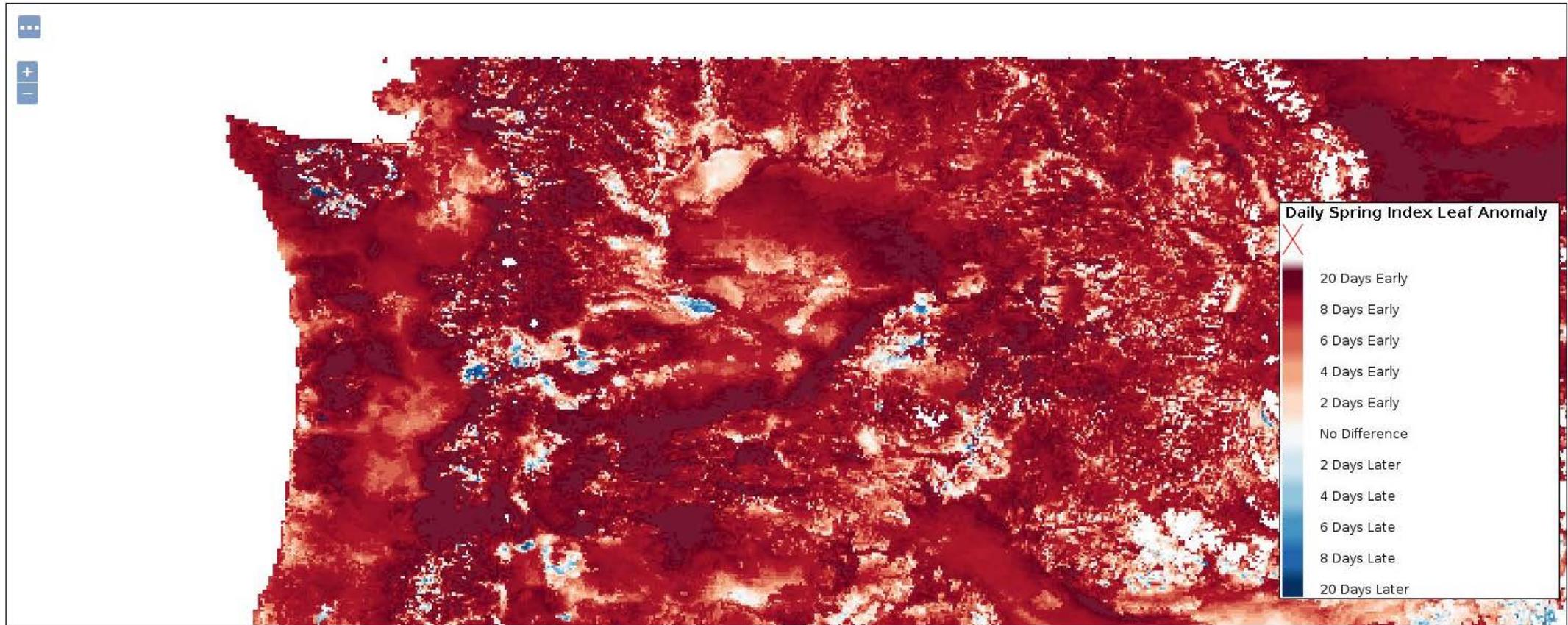


2005



2015

# Leaf Anomalies, May 16 2016



Scale = 1 : 4M

*Click on the map to get feature info*

Source: National Phenology Network