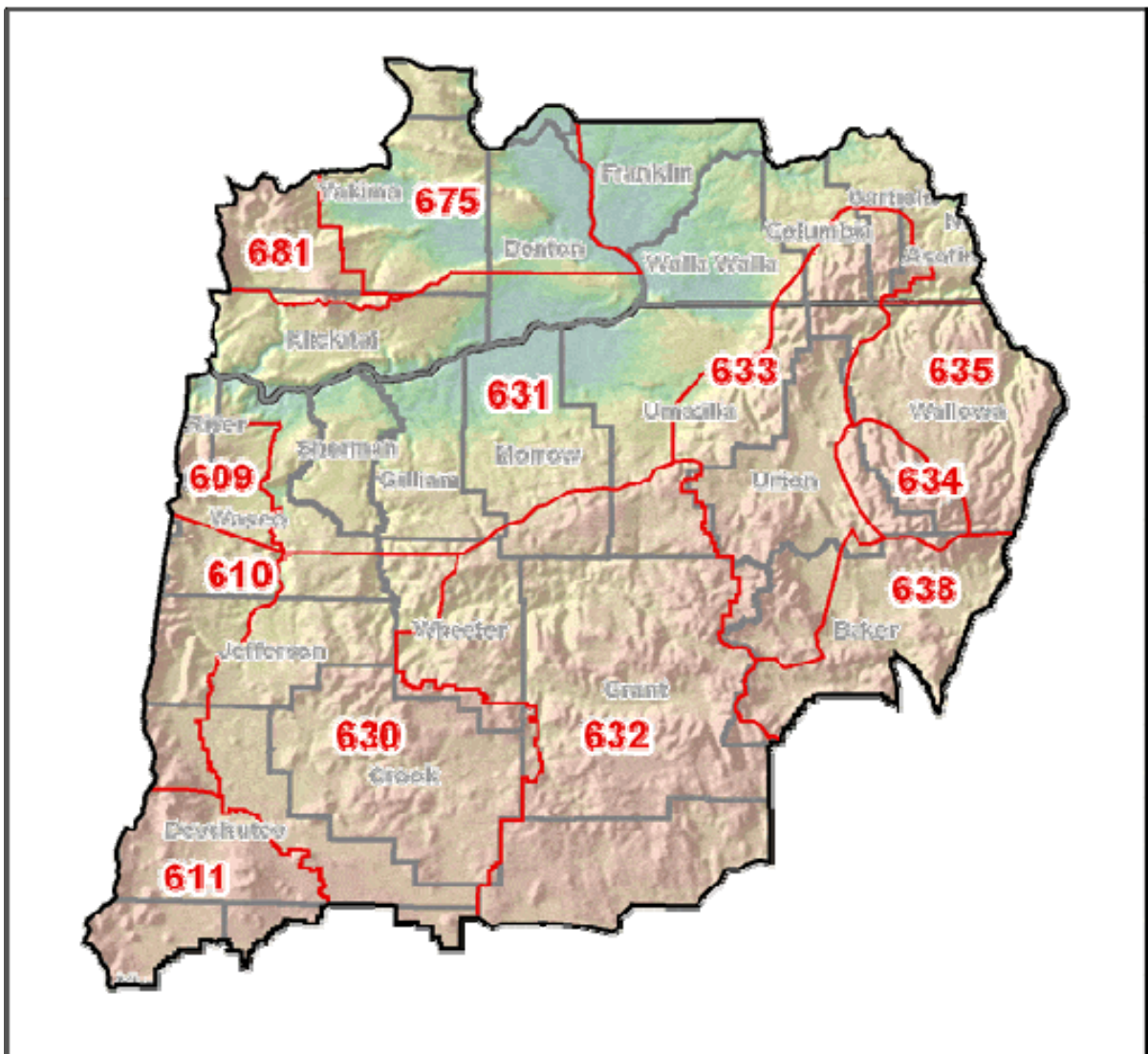


***PENDLETON FIRE WEATHER
ANNUAL SUMMARY 2007***
for
***CENTRAL AND NORTHEAST OREGON,
SOUTHCENTRAL AND SOUTHEAST WASHINGTON***

Prepared by Joe Solomon – Pendleton Fire Weather Program manager

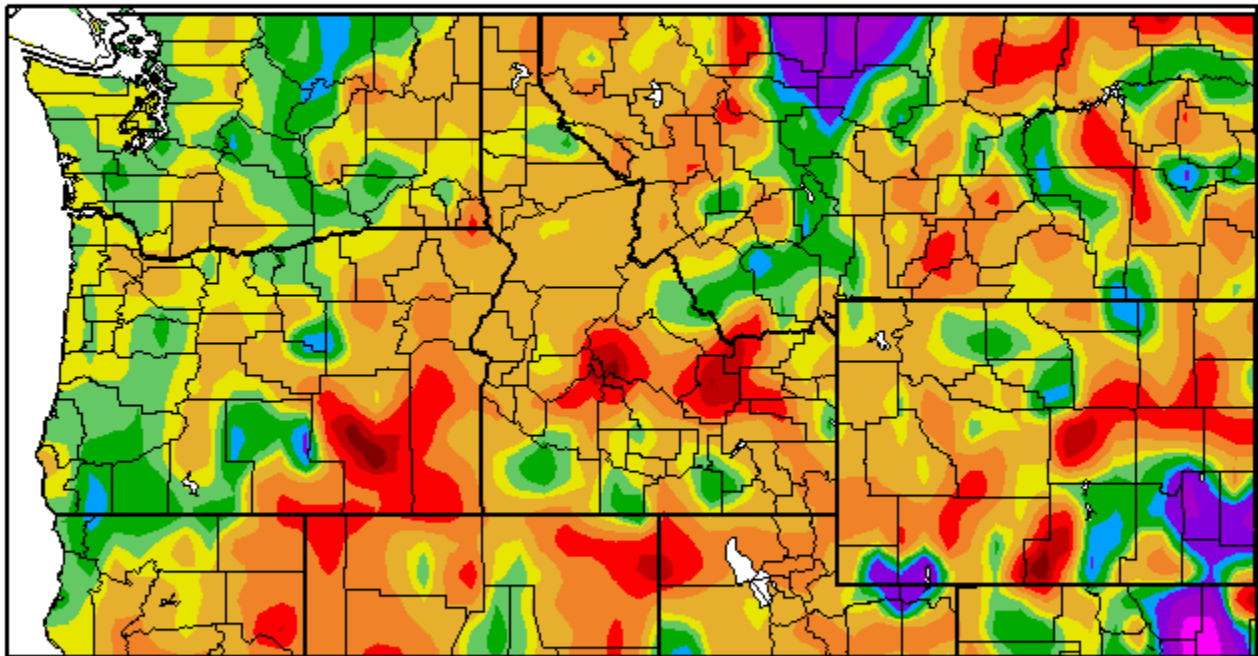


Weather Review

Fall and Winter 2006-2007 (Nov – Feb)

The fall and winter precipitation period started out very wet during November and December with a very active weather pattern producing above normal precipitation. However, by January 1st the eastern Oregon mountain snowpack was slightly below normal except for the Cascade mountains. January turned dry and cold as a ridge of high pressure dominated the weather pattern. The active weather pattern returned in February with near normal precipitation but snowfall was below normal. This resulted in the eastern Oregon snowpack being only 70-90% of normal (see snowpack chart) heading into the spring. Overall the season's precipitation was below normal. Temperatures overall averaged within one to two degrees of normal during the winter.

Percent of Normal Precipitation (%)
12/1/2006 – 2/28/2007



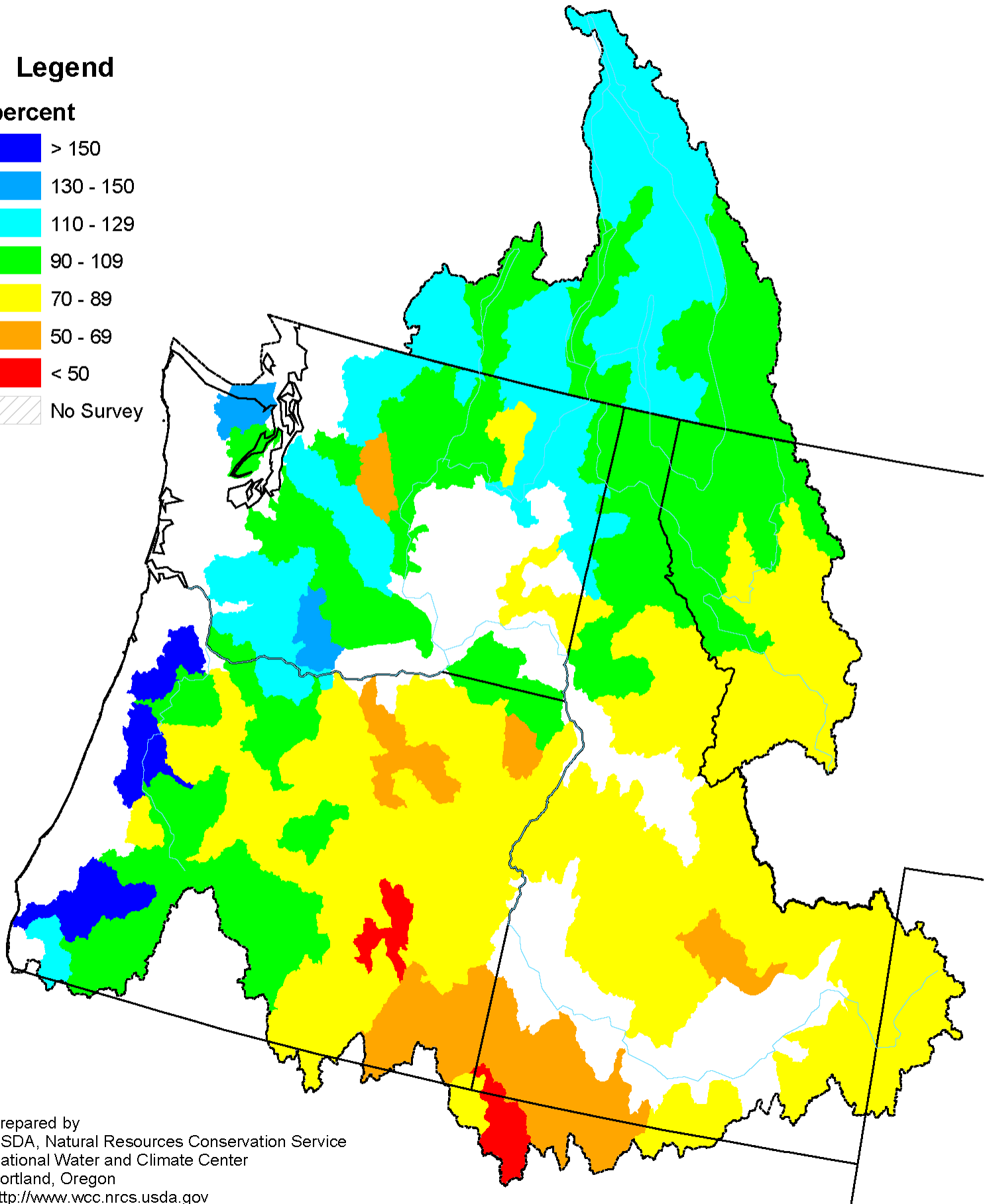
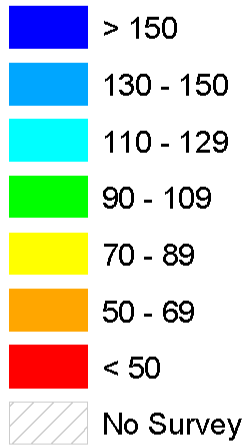
Generated 7/17/2007 at HPRCC using provisional data.

NOAA Regional Climate Centers

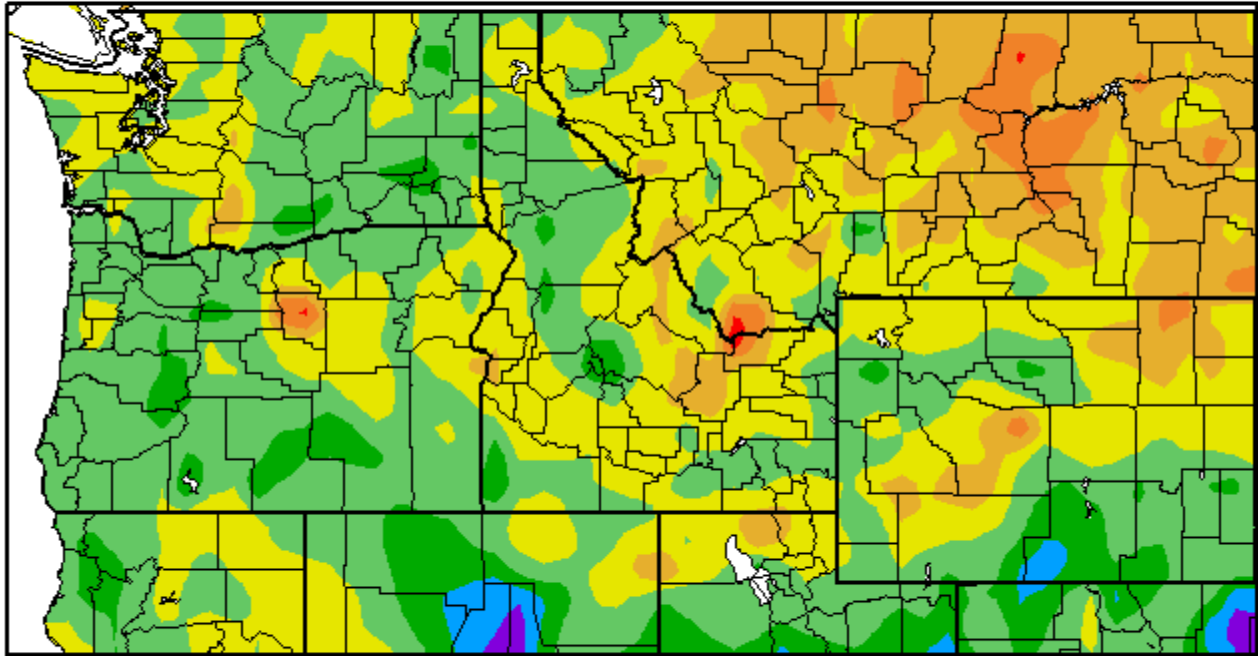
Columbia River Mountain Snowpack as of March 1, 2007

Legend

percent



Departure from Normal Temperature (F) 12/1/2006 – 2/28/2007



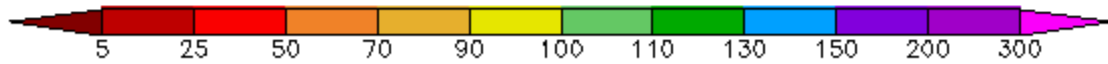
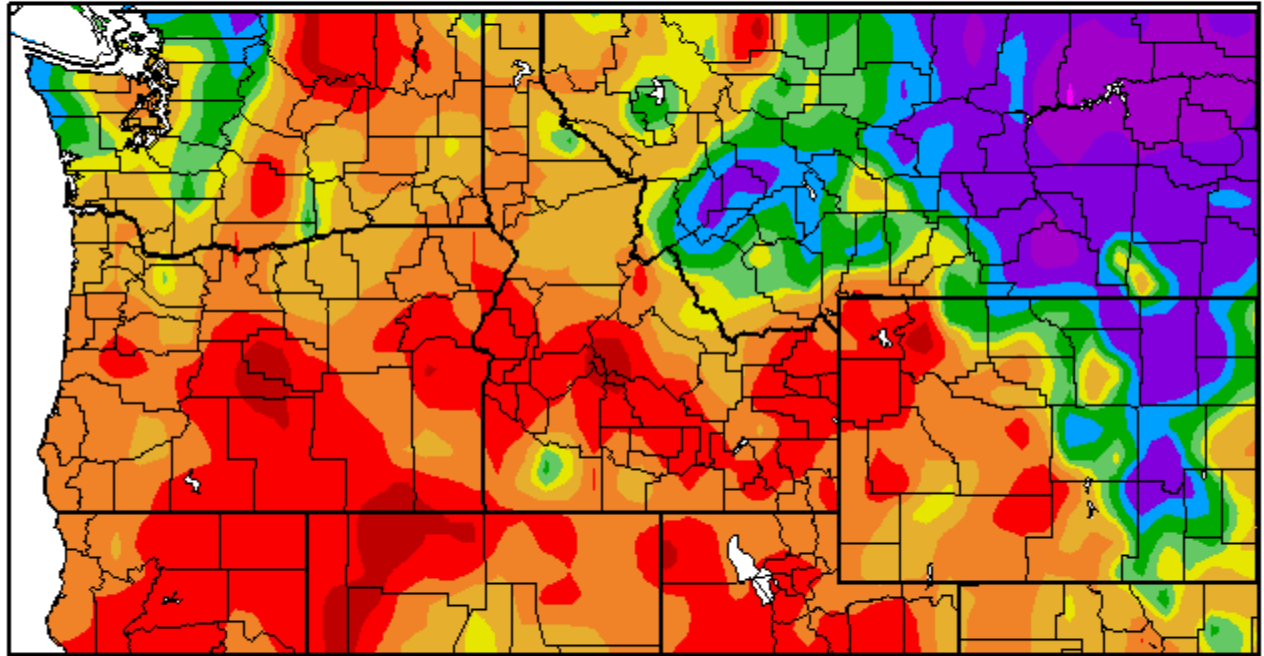
Generated 7/17/2007 at HPRCC using provisional data.

NOAA Regional Climate Centers

Spring 2007 (Mar – May)

The spring season was dry and warm. Precipitation averaged half of normal while average temperatures were 2-3 degrees above normal. Very little snow fell in the early spring resulting in end of season mountain snowpack less than half of normal.

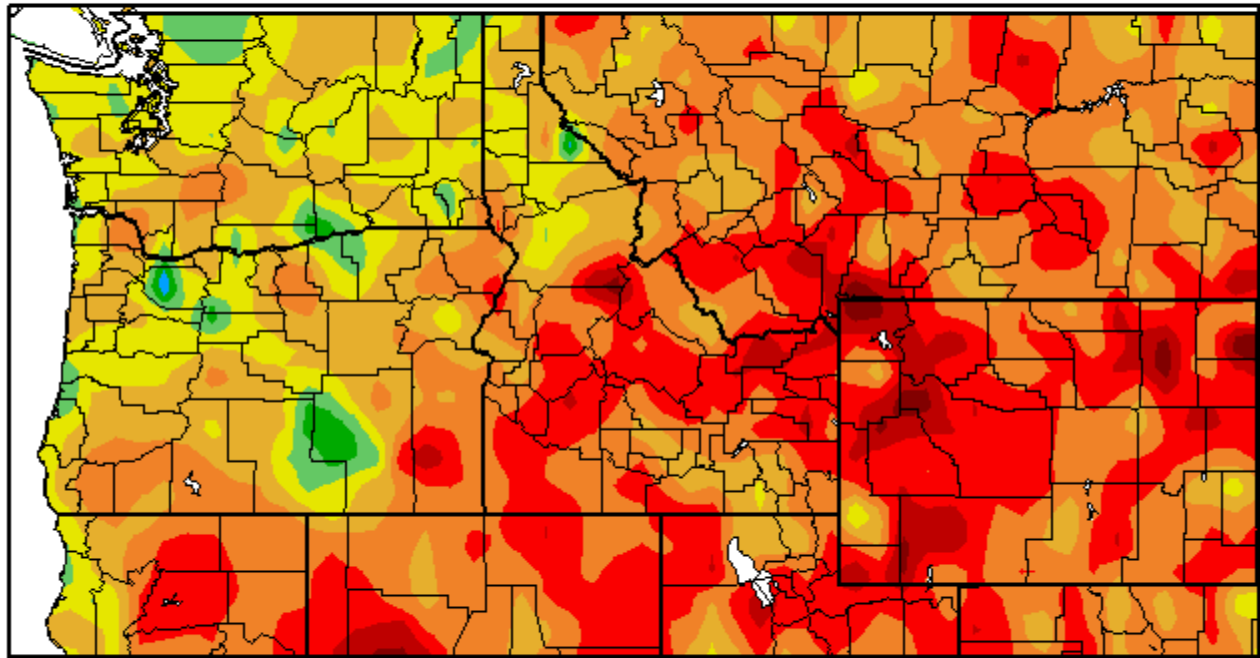
Percent of Normal Precipitation (%)
3/1/2007 - 5/31/2007



Generated 8/3/2007 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Temperature (F) 3/1/2007 – 5/31/2007



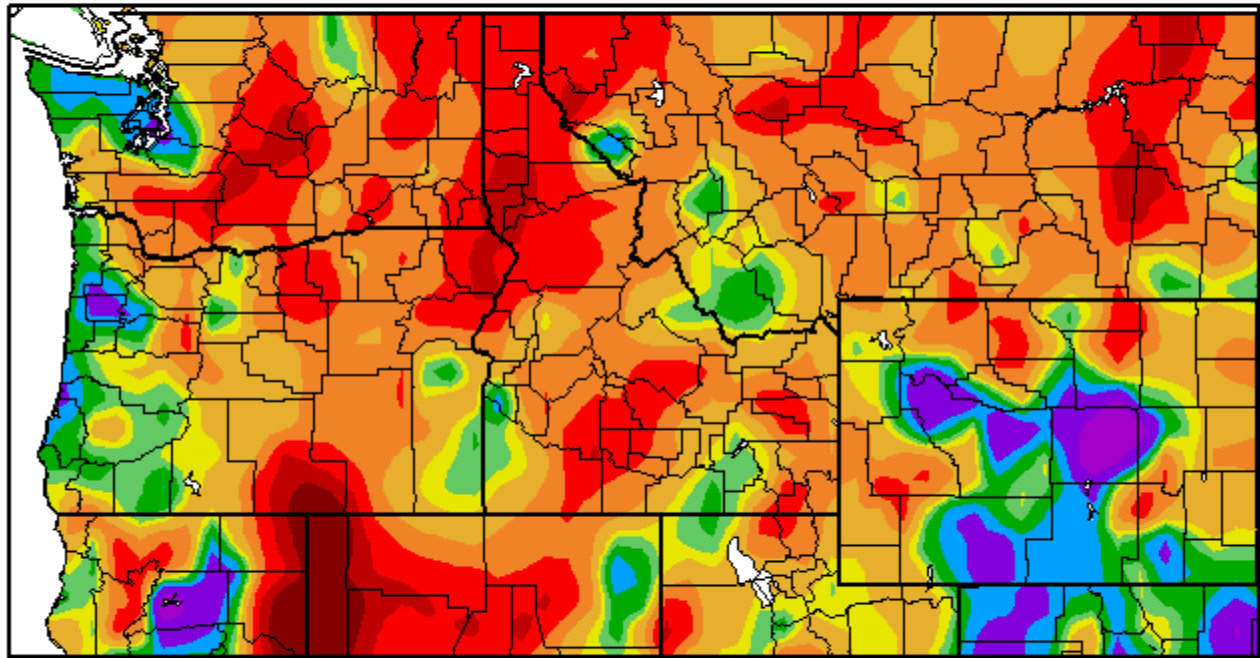
Generated 8/3/2007 at HPRCC using provisional data.

NOAA Regional Climate Centers

Summer 2007 (Jun – Sep)

June and July started off the summer with above normal temperatures and below normal precipitation across the forecast districts. This resulted in fuels drying out and reaching critical levels around the Fourth of July, which was nearly 2 weeks ahead of normal. Conditions remained critical until mid August when a cool and wet system brought the summer first significant rains across the region. Conditions remained dry through most of September but temperatures ran slightly below normal. Overall, precipitation for the summer was below normal while temperatures were above normal.

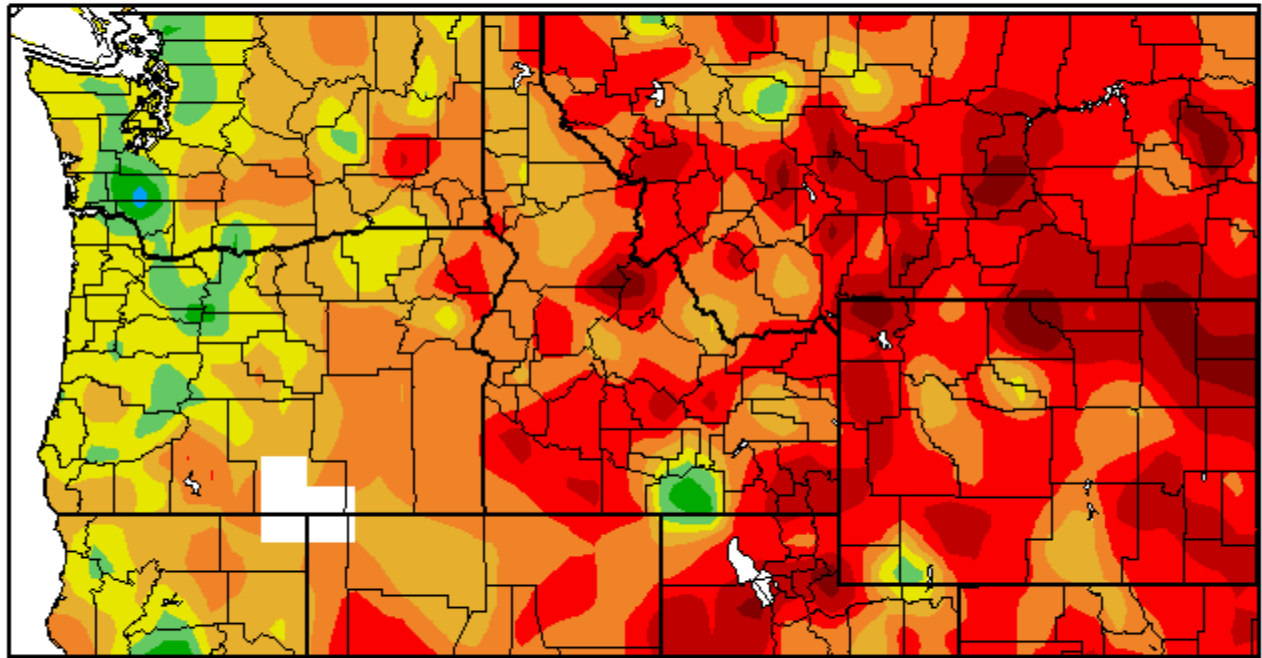
Percent of Normal Precipitation (%)
7/1/2007 - 9/30/2007



Generated 10/5/2007 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Temperature (F)
7/1/2007 - 9/30/2007



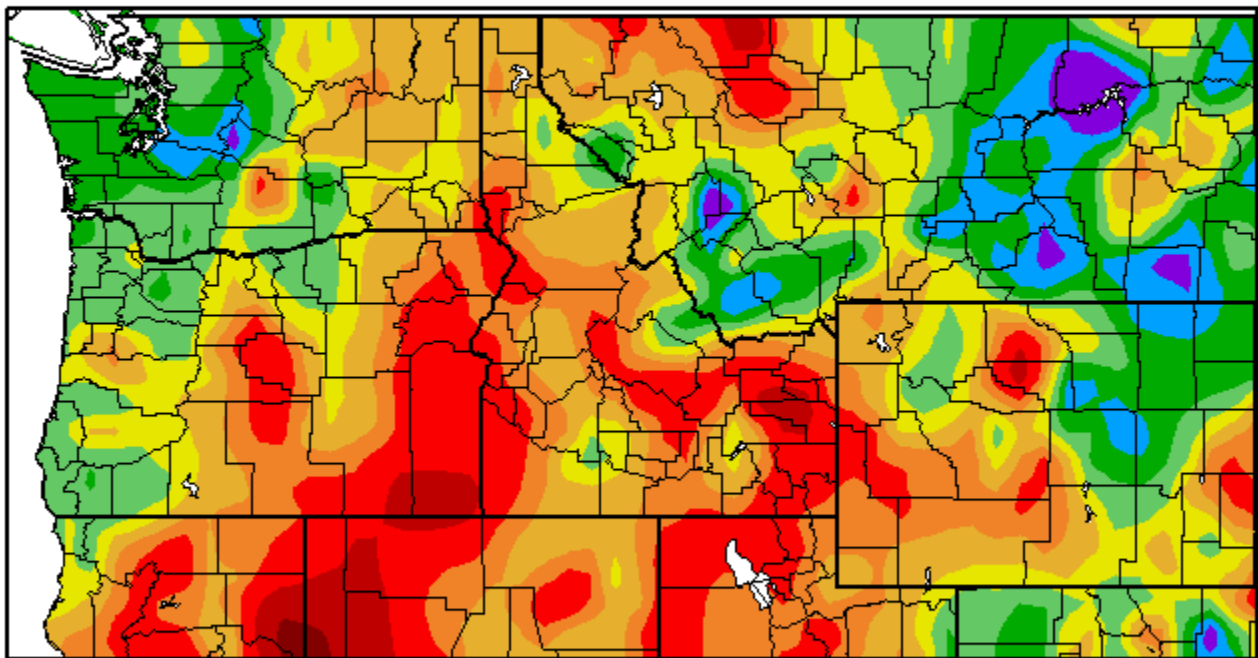
Generated 10/5/2007 at HPRCC using provisional data.

NOAA Regional Climate Centers

Weather Review Summary Fall 2006 – Summer 2007

Overall the past year saw a large portion of the fire district experience precipitation well below normal. This was especially true from central Oregon, northeast Oregon and into southeast Washington. This below normal precipitation can be attributed to a dry second half of winter and a dry spring. This resulted in end of winter season mountain snowpack that was less than half of normal. The 2 and 3 year percent of normal precipitation continues to show that northeast Oregon and southeast Washington remain below normal on their precipitation. This will continue to be a concern heading into the 2008 fire season.

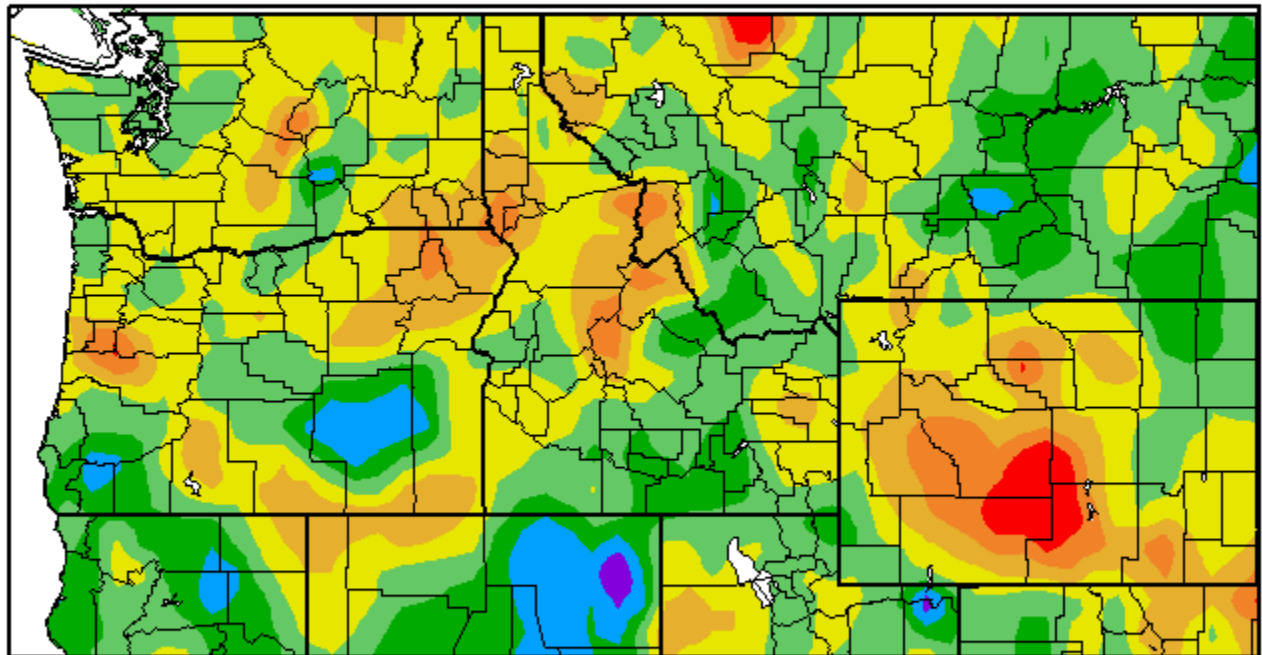
Percent of Normal Precipitation (%) 10/1/2006 – 9/30/2007



Generated 10/5/2007 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
10/9/2004 - 10/8/2007



Generated 10/9/2007 at HPRCC using provisional data.

NOAA Regional Climate Centers

Red Flag Warning Verification Events

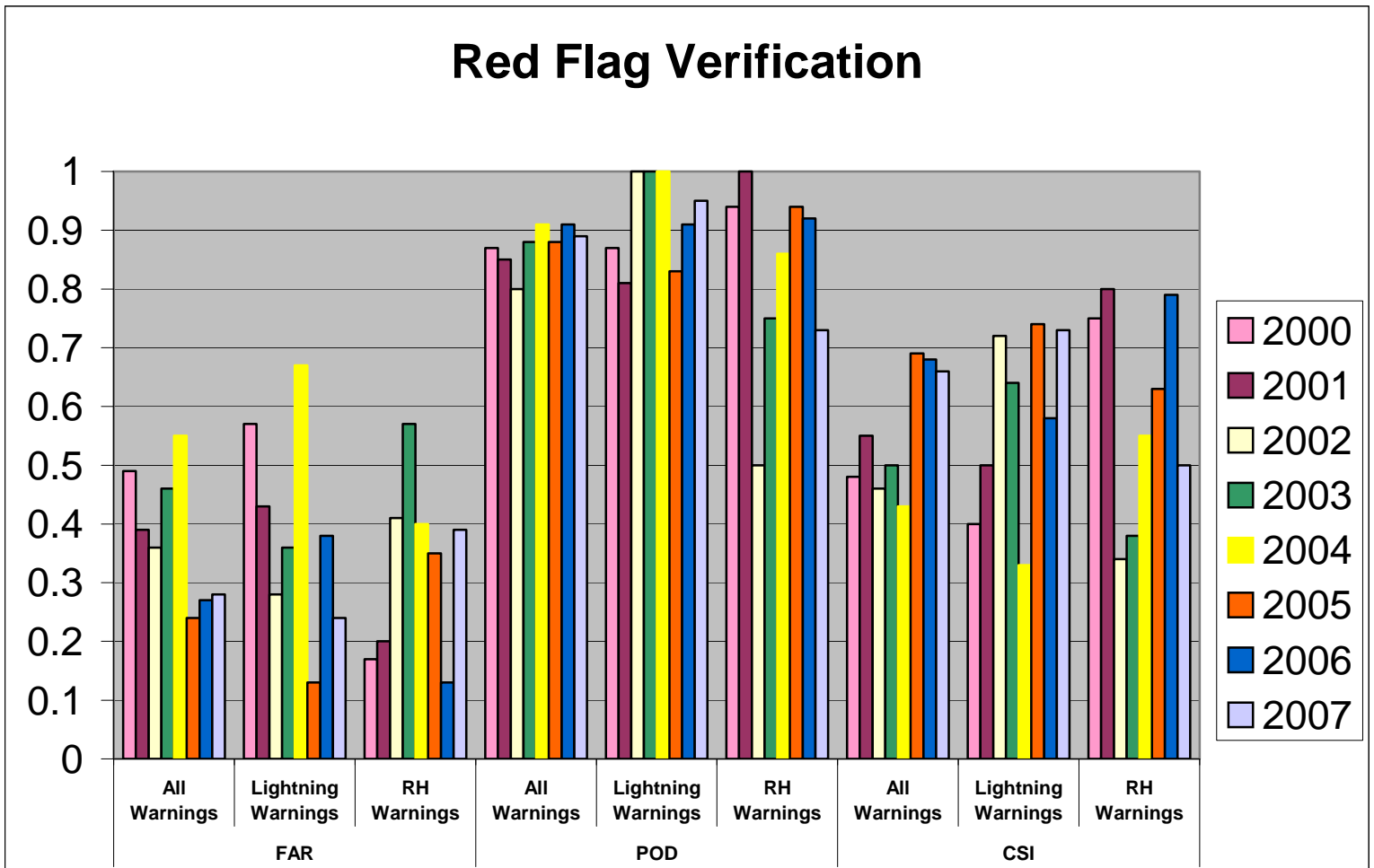
Pendleton Red Flag Warnings 2007

Date	Zones	Reason	Verification	Lead Time
July 5-6	W609,O609,W631 O631,675,610	Wind/Low RH	No – W609,O609 W631,O631,675,610	0 Hrs
July 5-6	611,630,632,W633 O633,634,635,638	Haines/Low RH	Yes - All	21 Hrs
July 7	O631	Wind/ Low RH	Missed	0 Hrs
July 11-13	O609,W609,610 611,630,632 O631,W631,681 O633,W633,634 635,675,638	Lightning	Yes – All	12.7 Hrs
July 11-13	610,611	Lightning	No – 610,611	0 Hrs
July 18	632	Lightning	Missed	0 Hrs
July 23	632	Lightning	Missed	0 Hrs
Aug 2	O631	Wind/Low RH	Missed	0 Hrs
Aug 3	O631,W631,675	Wind/Low RH	Yes –All	2.3 Hrs
Aug 4-6	632,O633,W633 634,635,638	Lightning	Yes- All except 634	9.0 Hrs
Aug 4-6	632,O633,W633 634,635	Lightning	No – All	0 Hrs
Aug 12	638	Wind/Low RH	Missed	0 Hrs
Aug 15-16	632,O633,W633 634,635	Lightning	Yes – 632 No – O633,W633 634,635	0 Hrs
Aug 30-31	610,611,630O,631, W631,632,O633, W633,634635,638	Lightning	Yes - All	31.2 Hrs
Aug 2	O631	Wind/Low RH	Missed	0 Hrs
Sep 3-4	610,632,O633 634,635,638	Lightning	Yes – All	22.7 Hrs
Sep 8-9	638	Wind/Low RH	Missed	0 Hrs
				Avg lead time 16.2 Hrs

Warnings Issued:	All Lightning: 50	Wind/Low RH or Haines6/Low RH: 18 Total = 68
Correct Warnings:	All Lightning: 38	Wind/Low RH or Haines6/Low RH: 11 Total = 49
Incorrect Warnings:	All Lightning: 12	Wind/Low RH or Haines6/Low RH: 7 Total = 19
Missed warnings:	All Lightning: 2	Wind/Low RH or Haines6/Low RH: 4 Total = 6
False Alarm Rate:	All Lightning = .24	Wind/Low RH or Haines6/Low RH = .39 All = .28
Probability of Detection:	All Lightning = .95	Wind/Low RH or Haines6/Low RH = .73 All = .89
Critical Success Index:	All Lightning = .73	Wind/Low RH or Haines6/Low RH = .50 All = .66

Note: For highest accuracy, False Alarm Rate (FAR) should approach 00 and Critical Success Index (CSI) and Probability of Detection (POD) 1.00

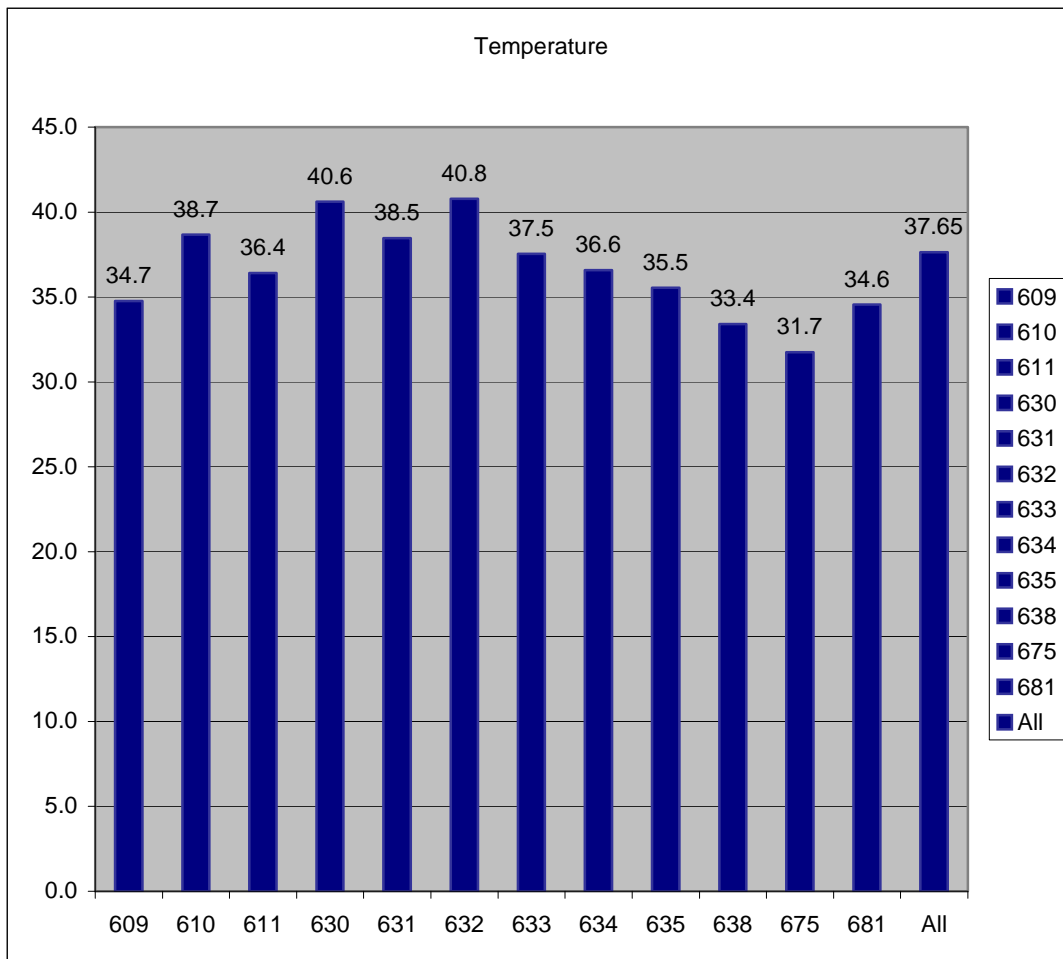
Red Flag Verification



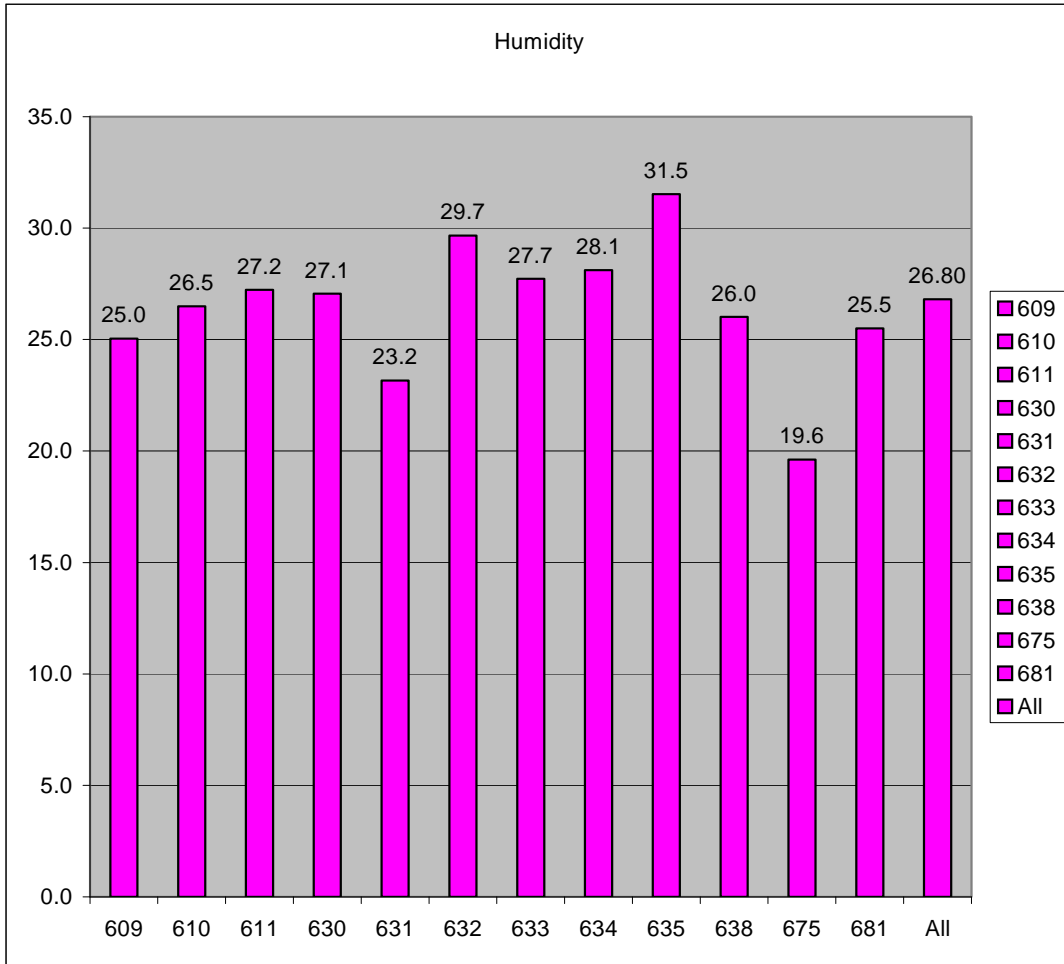
2007 Red Flag Verification (Purple) broken down into individual warning categories compared to the previous years (2000-2006).

2007 NFDRS Verification

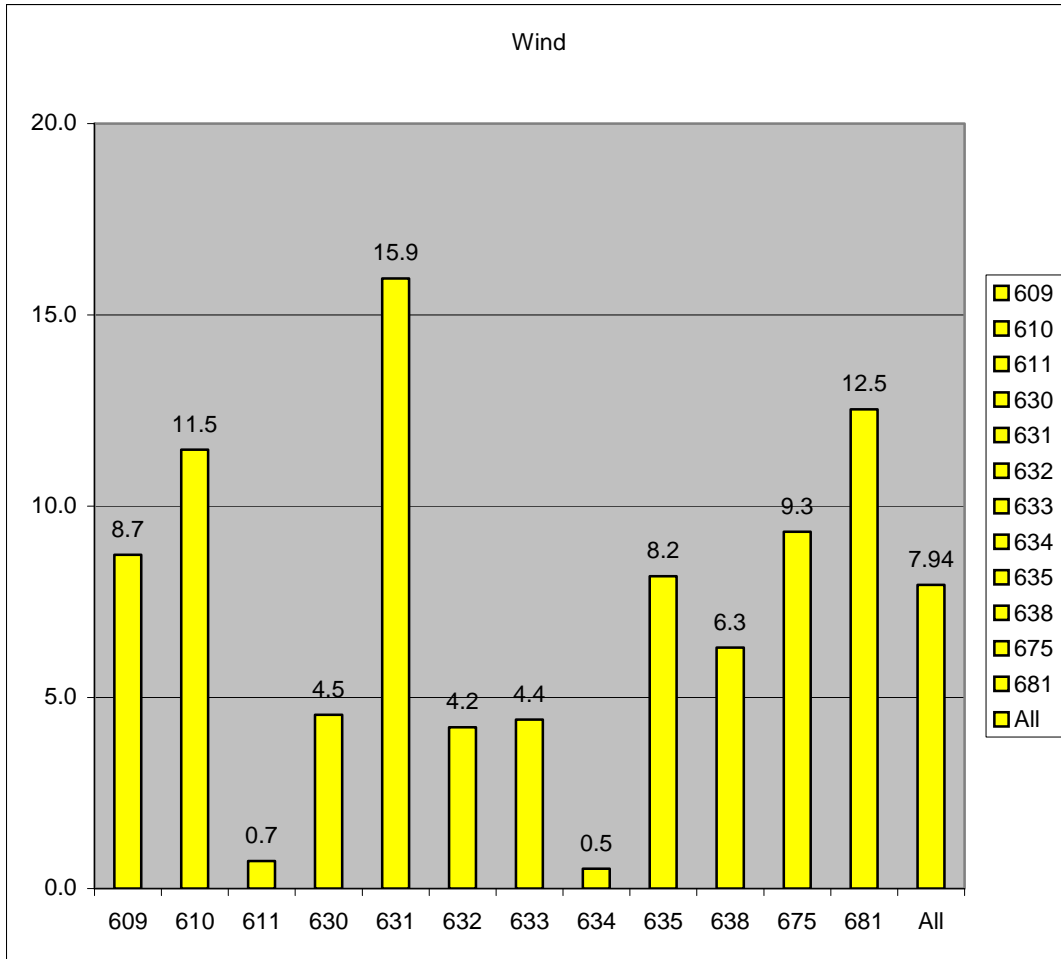
Following charts show forecast percentage improvement over persistence for temperatures, relative humidity and wind speed for each zone followed by the all zones combined in the final column.



Temperature verification (above) for the entire Pendleton forecast fire zones remained steady at 37.7% over persistence compared to 37.5% last year. The office goal is to maintain an improvement of 35% or greater which was accomplished in nearly every zone this year.

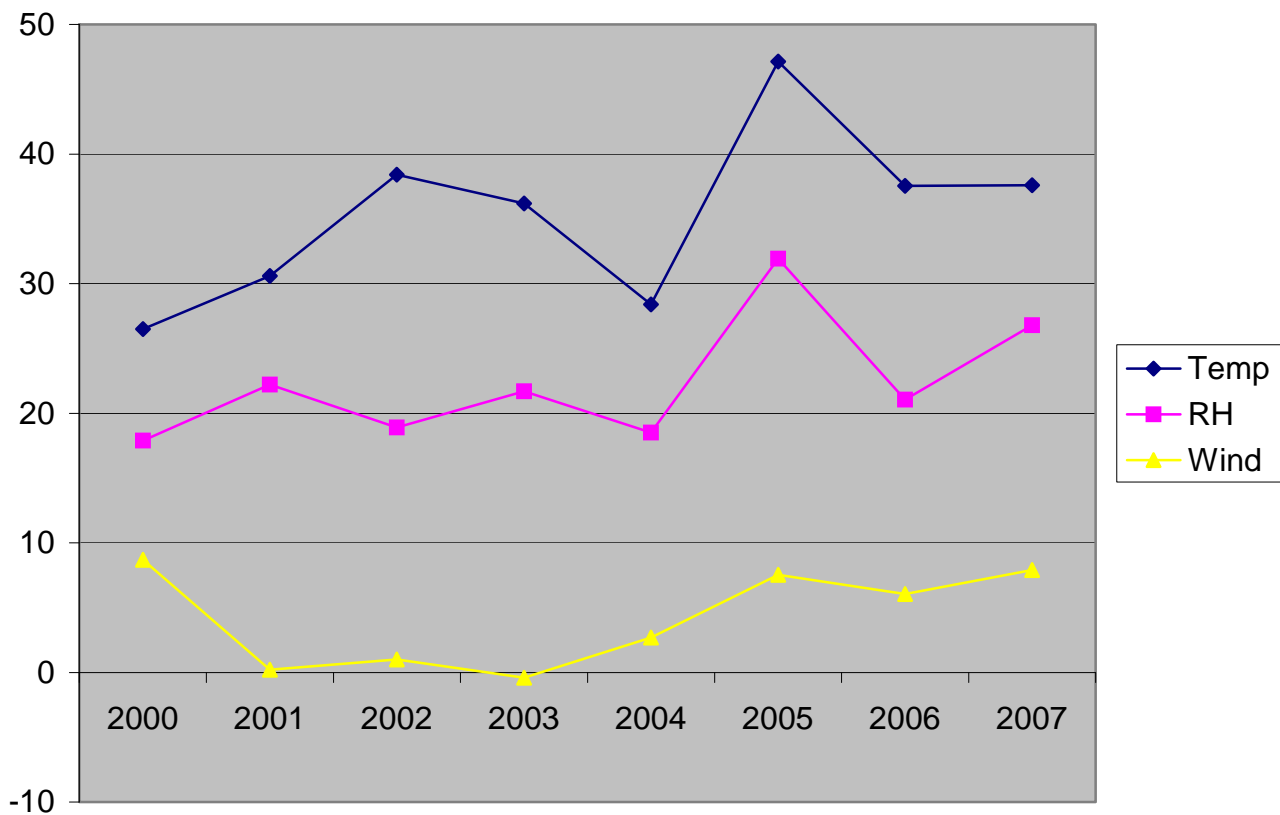


Humidity verification (above) rose to 26.8% this year compared to the previous years 21.0%. The office goal is to maintain an improvement of 25% or greater which was only accomplished in all but two zones this year.



Wind verification (above) rose to 7.9% compared to last years 6.1%. Our office goal is 10% improvement over persistence. Overall yearly NFDRS verification data and trends for the Pendleton office are shown below for the years 2000 – 2007.

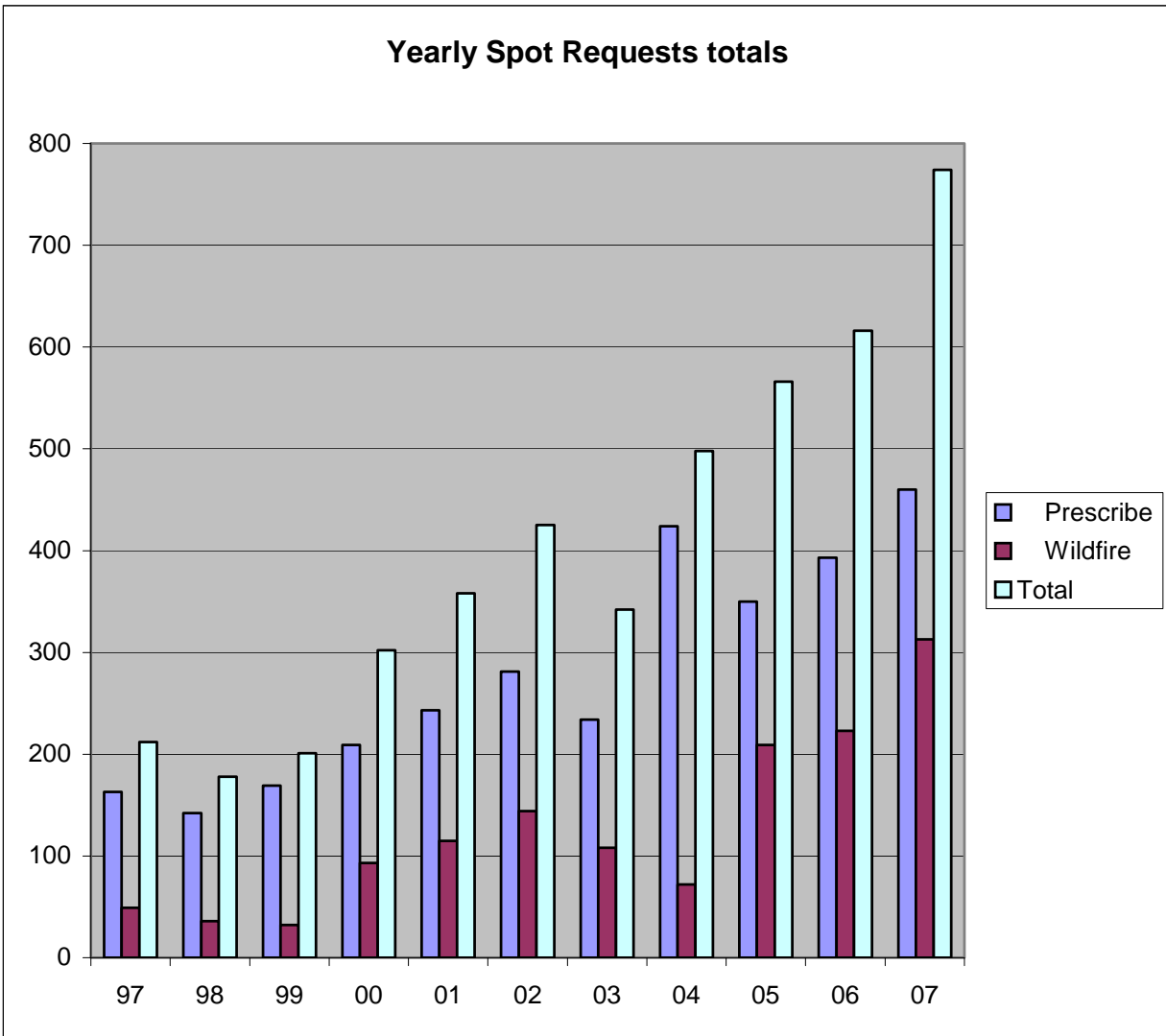
2000 - 2006



2007 Forecast Issued

Month	Routine Forecast		Spot Forecast		Red Flag Events		On Site	Zone Trend	Air Transport & Stability Forecast
	FW Fcsts	LM Fcsts	Wildfire & Hazmat	Prescribed	FWX Watch	Red Flag Warning	AMRS Fcsts	NFDRS Fcsts	
Jan	0	0	0	3	0	0	0	0	31
Feb	0	0	0	10	0	0	0	0	28
Mar	0	0	0	34	0	0	0	0	31
Apr	0	42	0	53	0	0	0	0	30
May	18	28	12	124	0	0	0	10	31
Jun	60	0	15	28	0	0	0	29	30
Jul	62	0	151	1	24	31	12	31	31
Aug	62	0	104	0	24	30	30	30	31
Sep	58	0	30	35	6	7	21	29	30
Oct	0	40	2	118	0	0	0	12	31
Nov	0	0	0	53	0	0	0	0	30
Dec	0	0	0	1	0	0	0	0	31
Total	260	110	314	460	54	68	63	141	365

2007 Spot Forecast Totals



Total number of spot forecasts issued by the Pendleton weather office this year set yet another record with a total of 774. There were 460 prescribed burn spot forecasts (an increase of 67 over the previous year) and 313 wildfire spot requests (an increase of 91). There was 1 hazmat spot forecasts this year. The 313 wildfire spot request set a new yearly record which was previously 223 in 2006. The 460 prescribed burn spot forecasts also broke the record of 424 set back in 2004. The chart above shows the increasing trend that the Pendleton office has undergone over the past 10 years in the number of spot forecast issued.