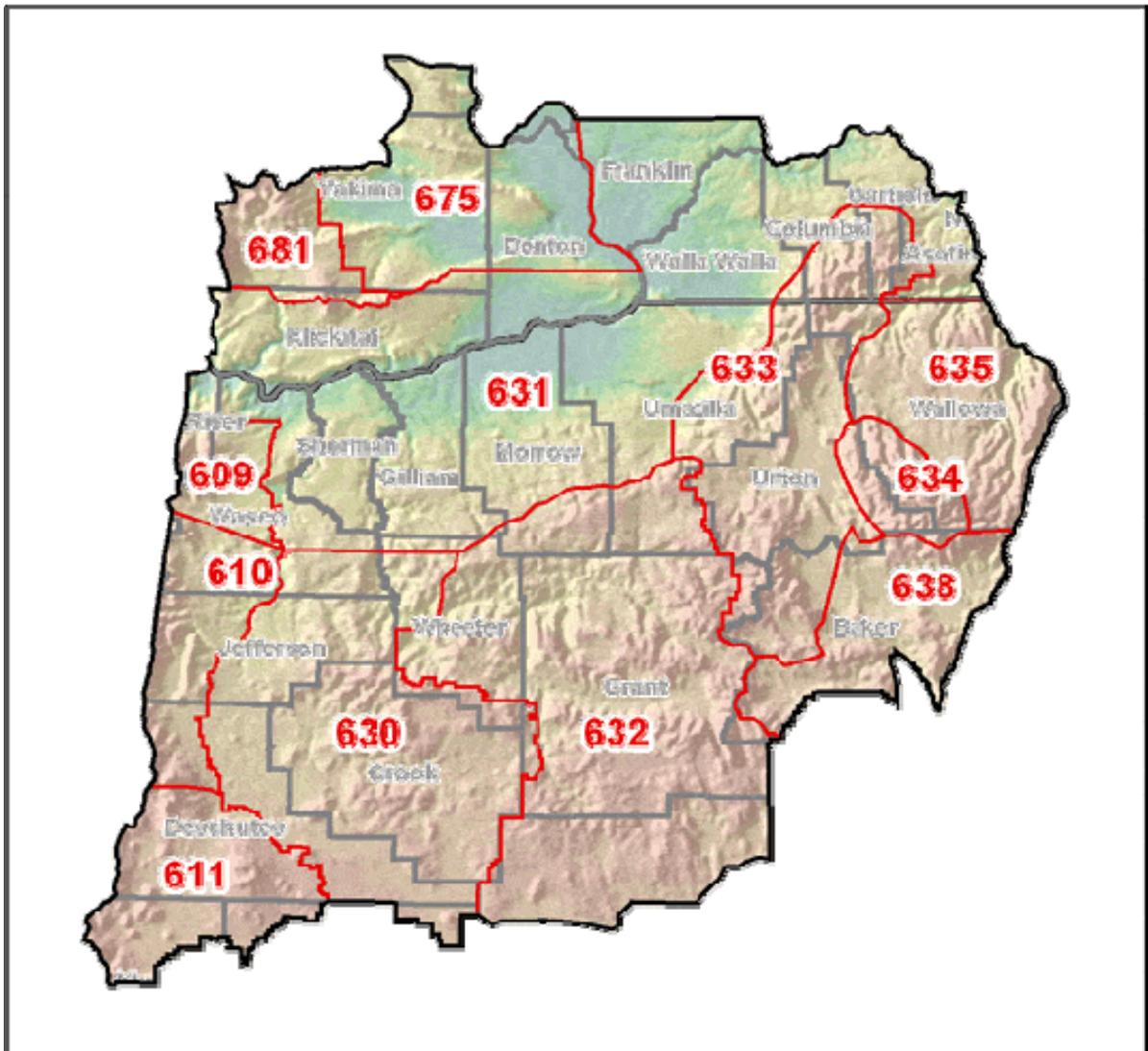


***PENDLETON FIRE WEATHER
ANNUAL SUMMARY 2008***
for
***CENTRAL AND NORTHEAST OREGON,
SOUTHCENTRAL AND SOUTHEAST WASHINGTON***

Prepared by Joe Solomon – Pendleton Fire Weather Program Manager

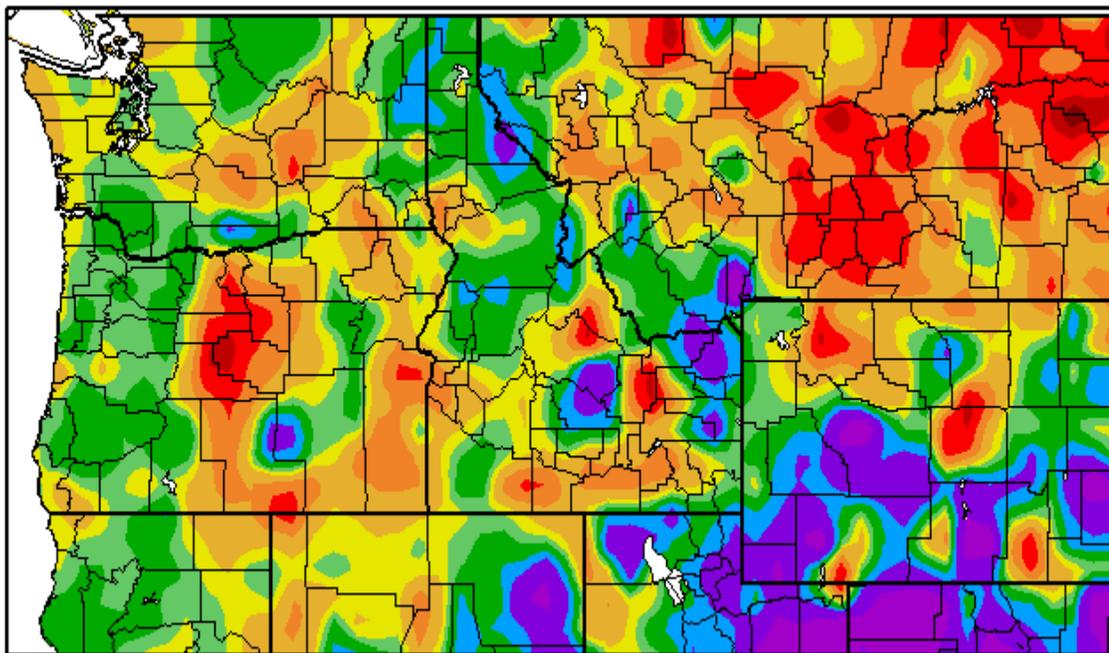


Weather Review

Fall and Winter 2007-2008 (Nov – Feb)

The Fall and Winter precipitation was normal in November and December. January was slightly below normal then it dried out during the month of February with only 70% of normal precipitation. Despite the drier conditions in February the mountain snowpack across the fire district was above normal at the end of February. Overall the winter precipitation was slightly below normal at 92%. (See map below) The lowlands of central Oregon and the Blue Mountain region were slightly drier than the rest of the district. Temperatures ranged from being near normal in the low elevations to be below normal across central and northeast Oregon. These below normal temperatures in the higher elevations aided in the above normal mountain snowpack heading into Spring.

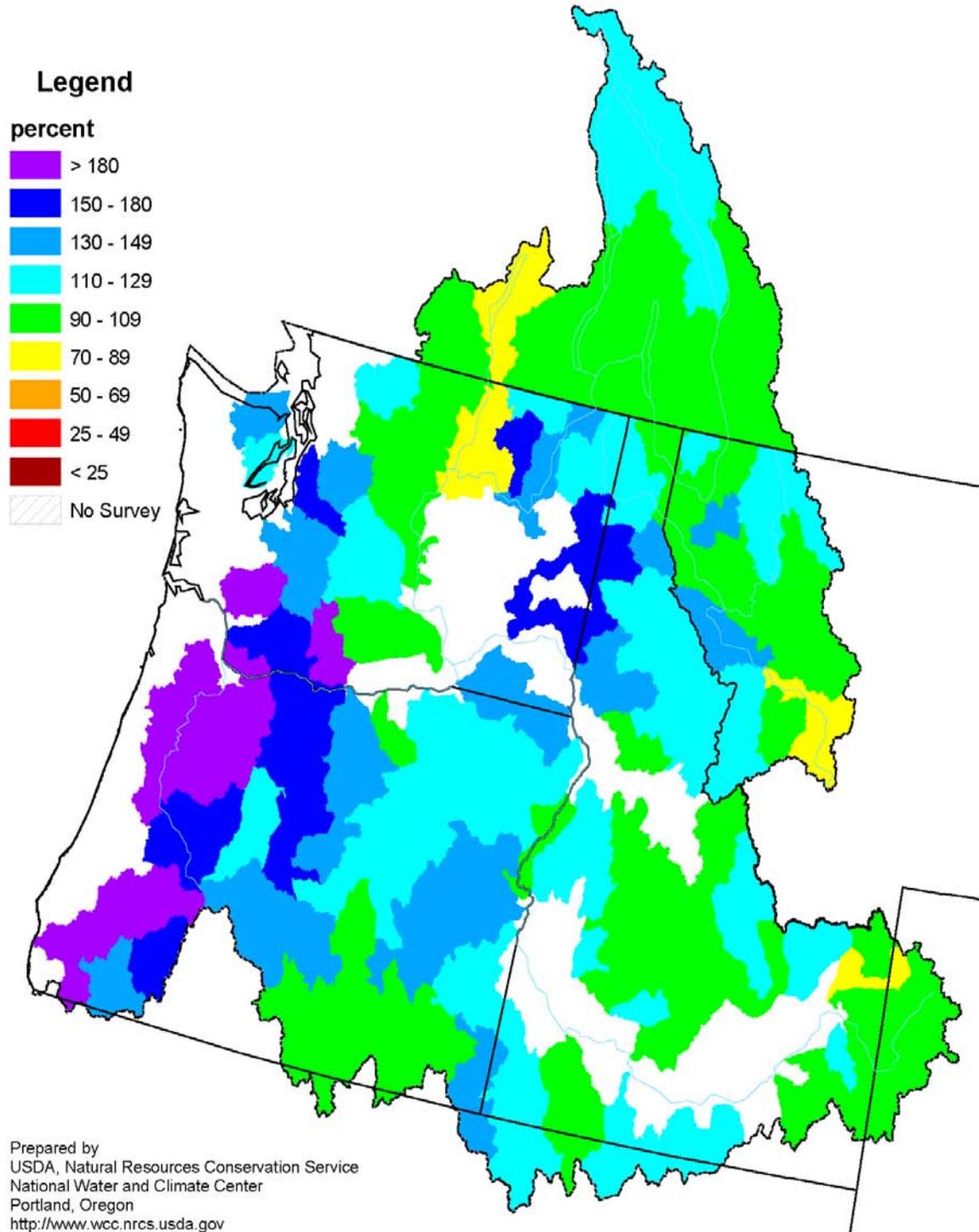
Percent of Normal Precipitation (%)
12/1/2007 – 2/29/2008



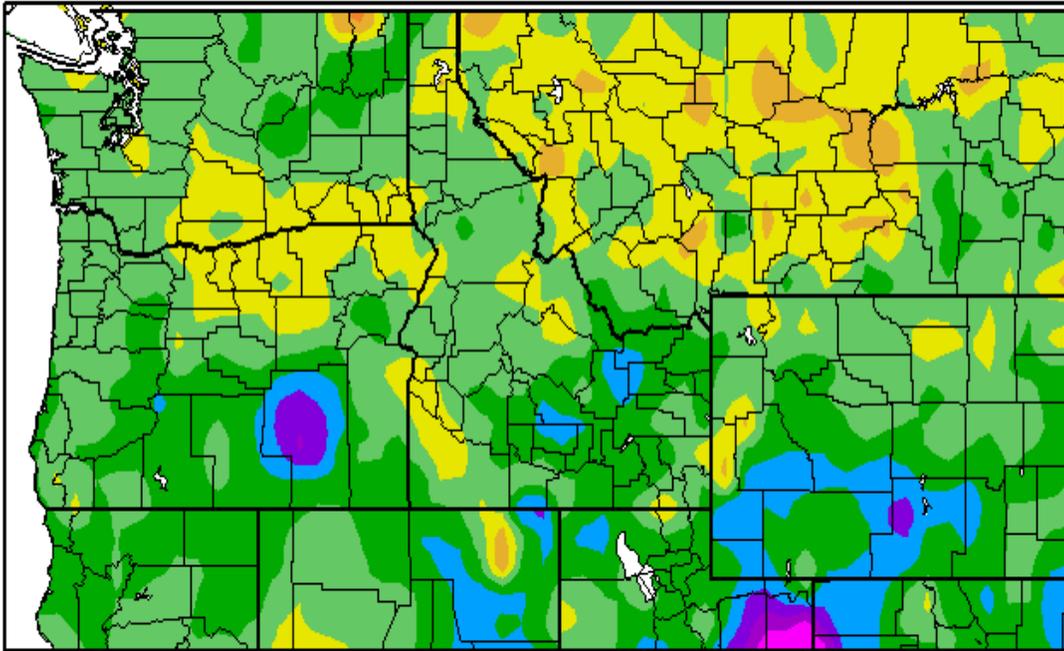
Generated 9/15/2008 at HPRCC using provisional data.

NOAA Regional Climate Centers

Columbia River Mountain Snowpack as of March 1, 2008



Departure from Normal Temperature (F) 12/1/2007 - 2/29/2008



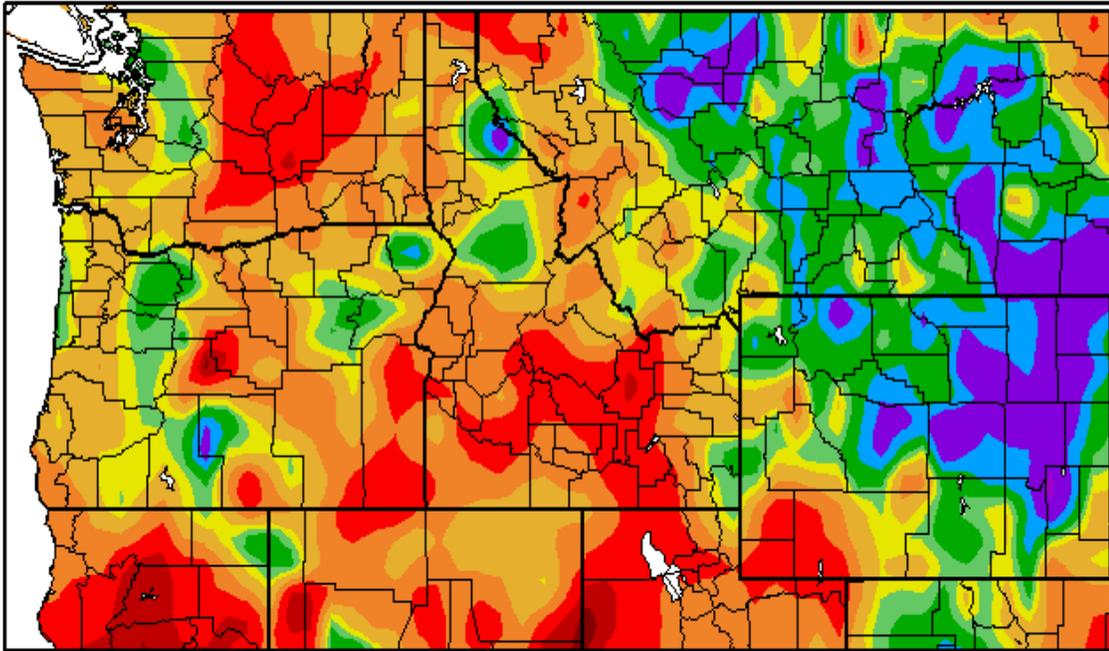
Generated 9/15/2008 at HPRCC using provisional data.

NOAA Regional Climate Centers

Spring 2008 (Mar – May)

The Spring season was dry and cool before turning wet in mid to late May. Monthly precipitation average across the forecast district was only 60 to 70% of normal in March and April but then rose to 105% in May. Portions of northeast Oregon and the Oregon Cascades seemed to have benefited the most from the wet month of May where average precipitation was 125 to 150% of normal for the month. Average temperatures for spring were below normal. This added to the mountain snowpack resulting in a well above normal snowpack heading into early summer despite March and April being dry.

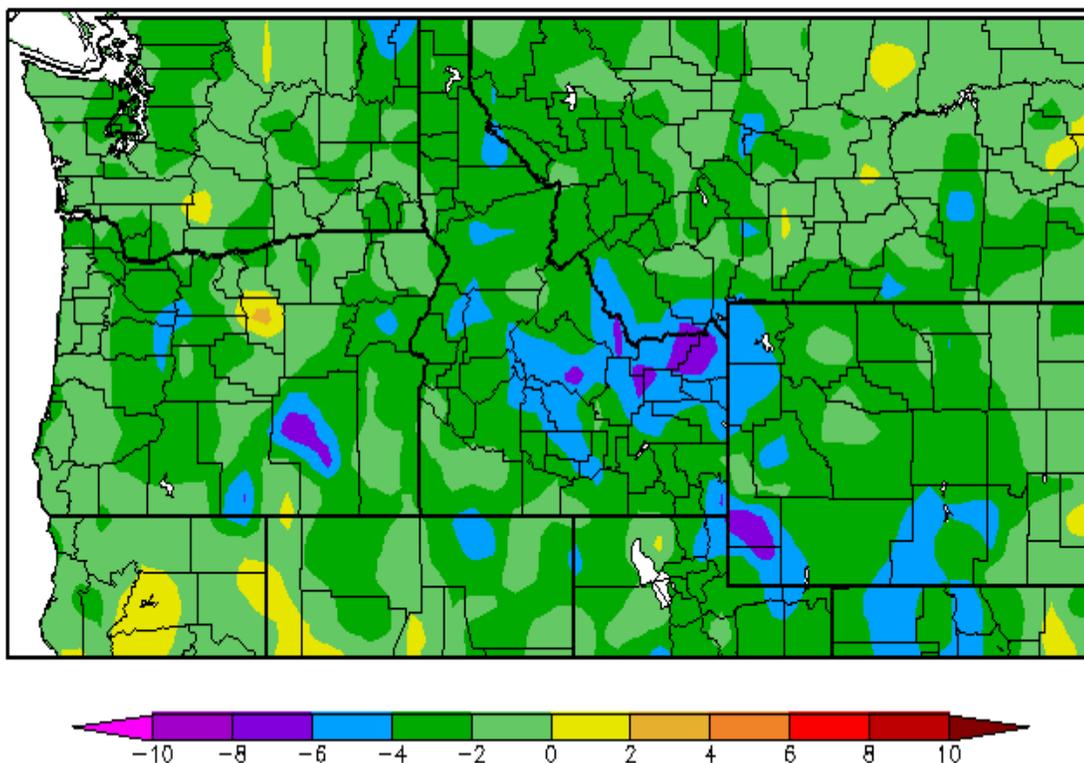
Percent of Normal Precipitation (%)
3/1/2008 - 5/31/2008



Generated 9/16/2008 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Temperature (F) 3/1/2008 – 5/31/2008



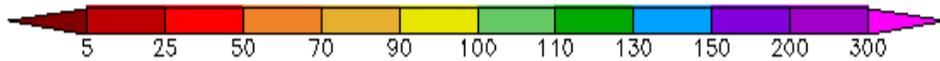
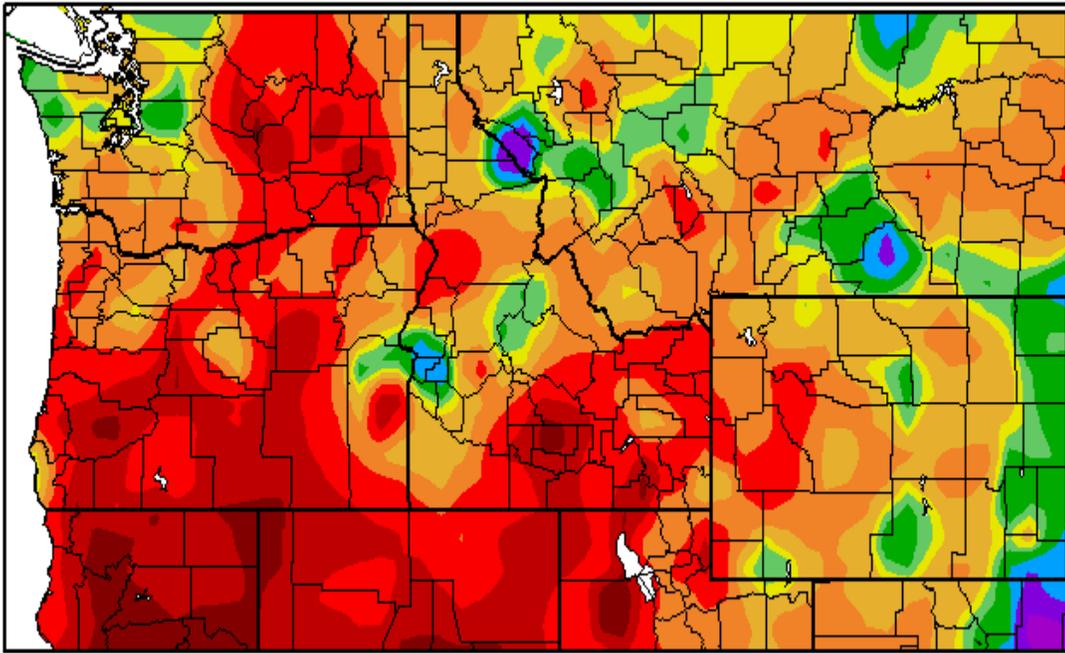
Generated 9/16/2008 at HPRCC using provisional data.

NOAA Regional Climate Centers

Summer 2008 (Jun – Sep)

The wet and cool conditions of May continued through the first two weeks of June especially across northeast Oregon. During this time an unusually late snow storm brought significant snow to the mountains on June 10th. Conditions turned dry through the rest of June but temperatures remained below normal. The dry yet slightly cooler than normal conditions continued through July and mid August. The area then experienced a significant wet period during the third week of August that resulted in the monthly precipitation averages being above normal. Dry and warm conditions returned for late August and September with the area experiencing a couple of late season Haines 6 type days in mid and late September. Overall, precipitation for the summer was near two-thirds of normal while temperatures were near normal.

Percent of Normal Precipitation (%)
7/1/2008 - 9/30/2008



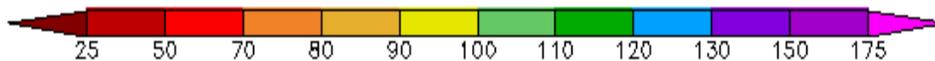
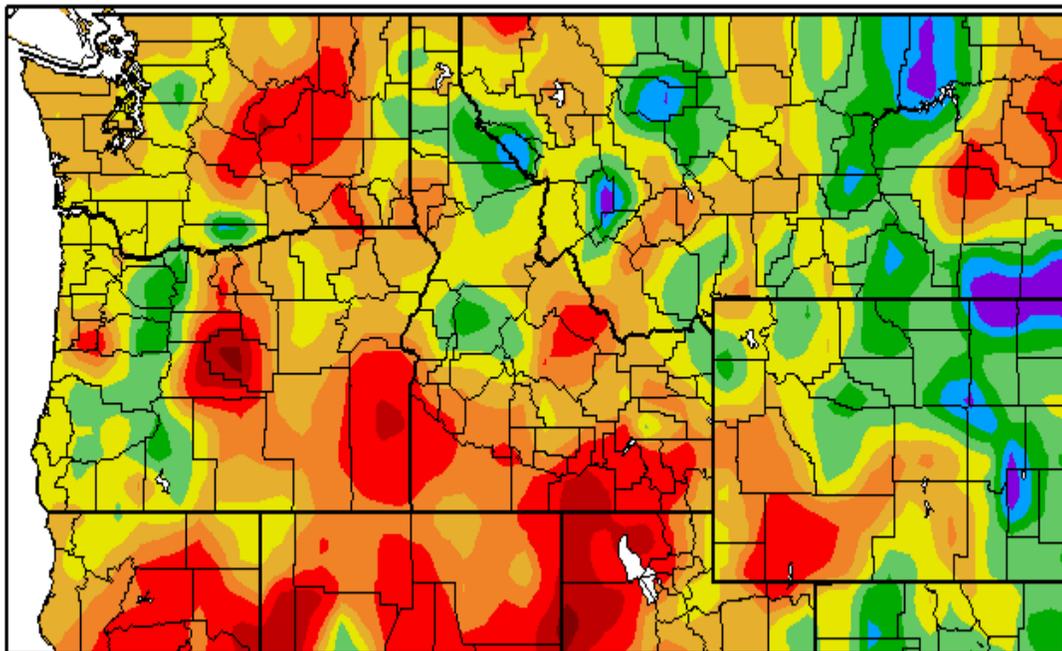
Generated 10/5/2008 at HPRCC using provisional data.

NOAA Regional Climate Centers

Weather Review Summary Fall 2007 – Summer 2008

Overall the past year saw a large portion of the fire district experiencing precipitation averages below normal (80 to 90% of normal). However, there were critical periods of time when above normal precipitation did occur that had a significant impact on the 2008 fire season. The early wet winter established a healthy mountain snowpack that ran above normal well into early summer aiding in a delayed green up. Then a three to four week wet and cool period occurred from mid May through mid June that delayed fuel curing through the district. The result was an unusually low number of SPOT request during the spring prescribe burn season. It also delayed the onset of fire season by two to four weeks or until early August. Fire season was then slowed by the wet period that occurred during the third week of August. The occurrence of these weather conditions led to a delayed and shortened fire season during 2008.

Percent of Normal Precipitation (%) 10/1/2007 – 9/30/2008

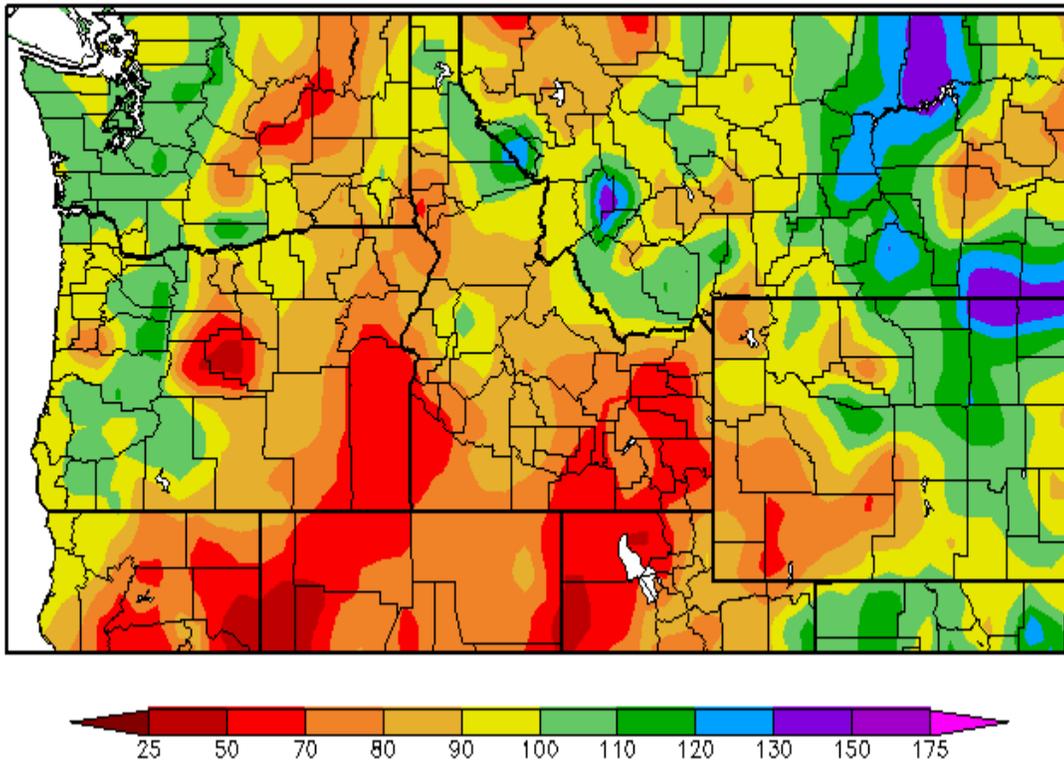


Generated 10/5/2008 at HPRCC using provisional data.

NOAA Regional Climate Centers

The two and three year precipitation averages continue to show that central and northeast Oregon are running below normal for their precipitation amounts. Depending on weather occurrences this winter and spring these regions could be an area of interest in the 2009 fire season.

Percent of Normal Precipitation (%) 10/6/2006 - 10/5/2008



Generated 10/6/2008 at HPRCC using provisional data.

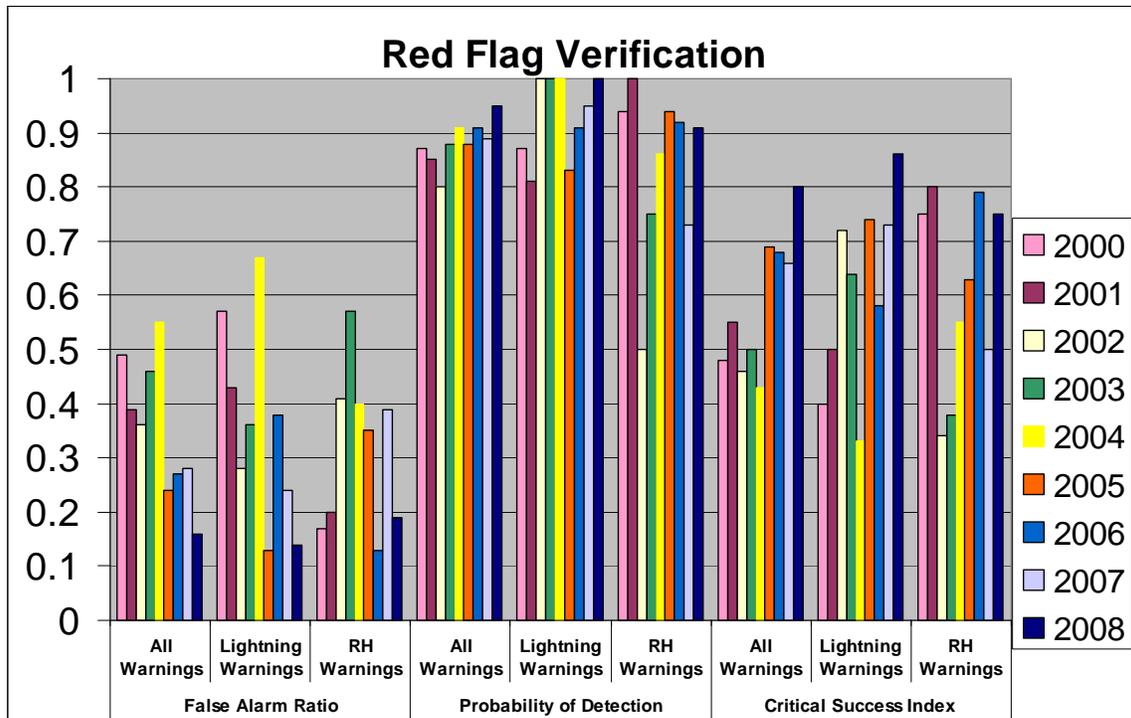
NOAA Regional Climate Centers

				Avg lead time 19.9 Hrs
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Warnings Issued: All Lightning: 49 Wind/Low RH or Haines6/Low RH: 48 Total = 97
Correct Warnings: All Lightning: 42 Wind/Low RH or Haines6/Low RH: 39 Total = 81
Incorrect Warnings: All Lightning: 7 Wind/Low RH or Haines6/Low RH: 9 Total = 16
Missed warnings: All Lightning: 0 Wind/Low RH or Haines6/Low RH: 0 Total = 4

False Alarm Rate: All Lightning = .14 Wind/Low RH or Haines6/Low RH = .19 All = .16
Probability of Detection: All Lightning = 1.00 Wind/Low RH or Haines6/Low RH = .91 All = .95
Critical Success Index: All Lightning = .86 Wind/Low RH or Haines6/Low RH = .75 All = .80

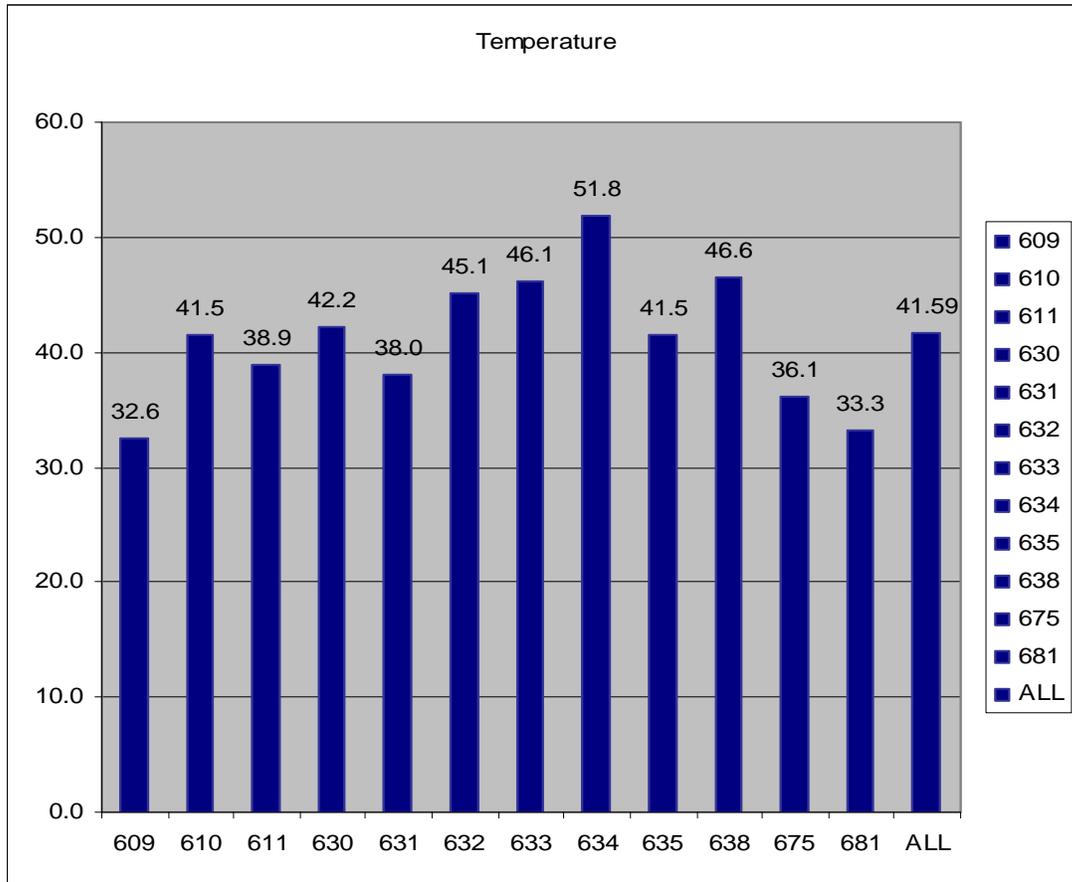
Note: For highest accuracy, False Alarm Rate (FAR) should approach 00 and Critical Success Index (CSI) and Probability of Detection (POD) 1.00



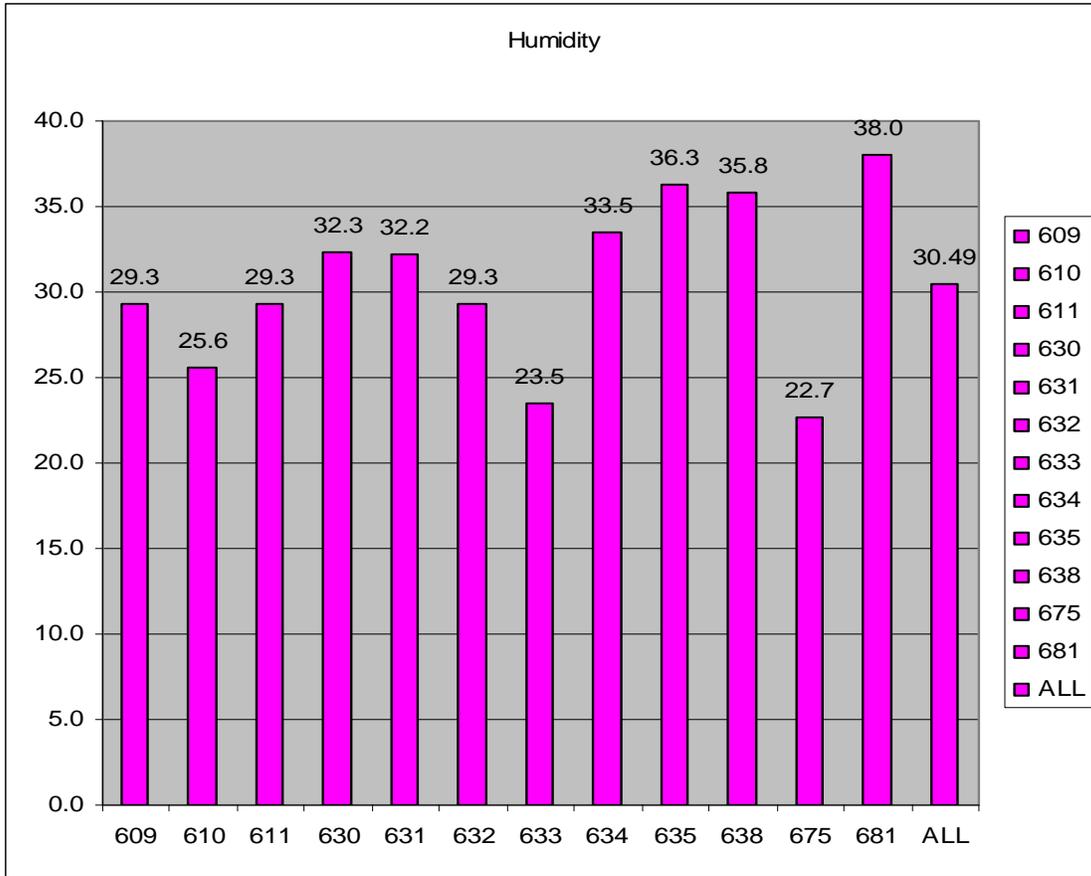
2008 Red Flag Verification (Dark Blue) broken down into individual warning categories compared to the previous years (2000-2007).

2008 NFDRS Verification

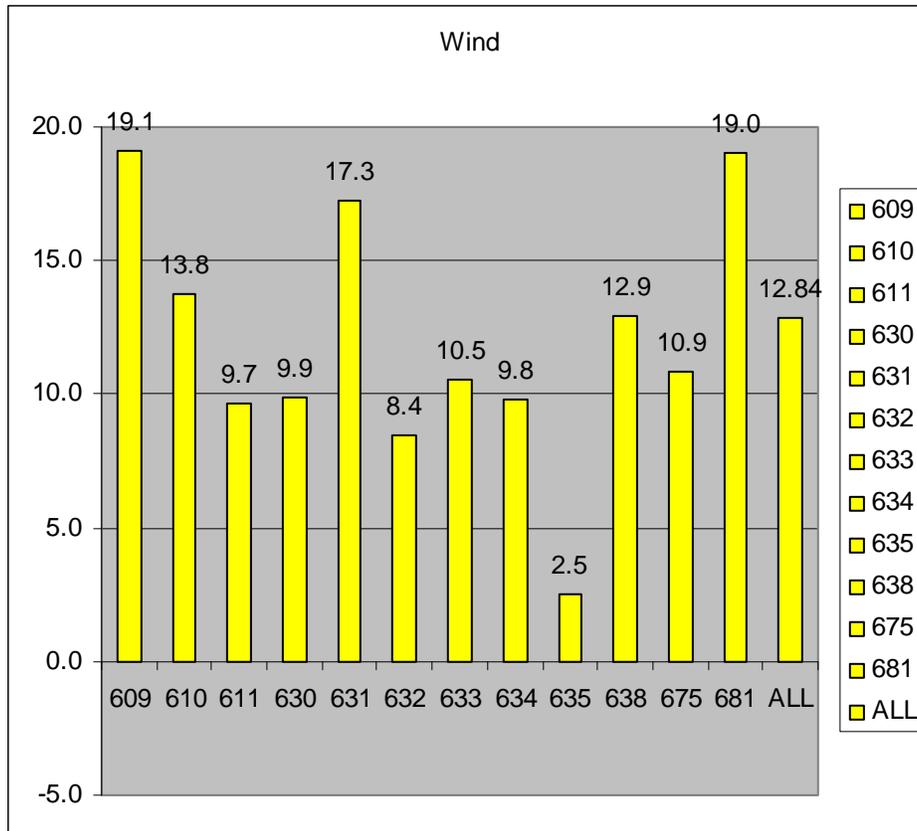
Following charts show forecast percentage improvement over persistence for temperatures, relative humidity and wind speed for each zone followed by the all zones combined in the final column.



Temperature verification (above) for the entire Pendleton forecast fire zones improved to 41.6% over persistence compared to 37.7% last year. The office goal is to maintain an improvement of 35% or greater which was accomplished in nearly every zone this year.

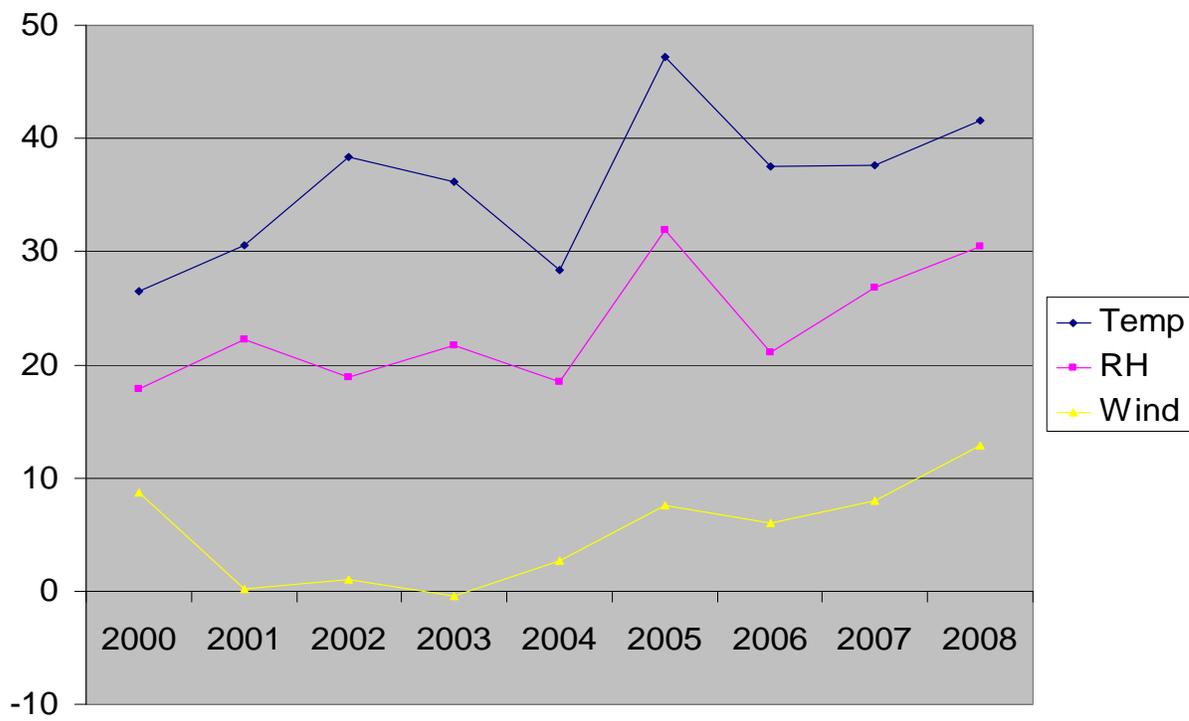


Humidity verification (above) rose to 30.5% this year compared to the previous years 26.8%. The office goal is to maintain an improvement of 25% or greater which was only accomplished in all but two zones this year.



Wind verification (above) rose to 12.8% compared to last years 7.9%. 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 – 2008 showing a gradual improvement over persistence.

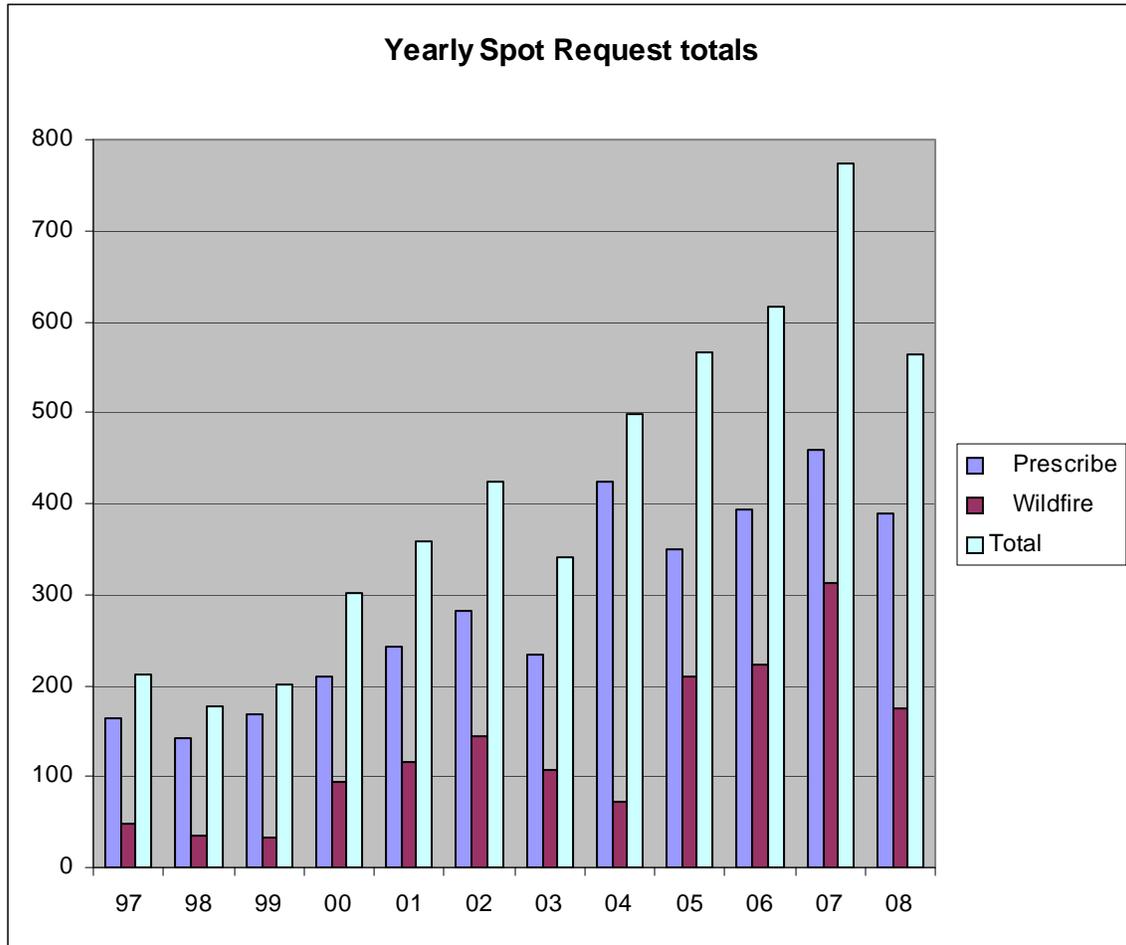
2000 - 2008



2008 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	0	0	0	0	0	31
Feb	0	0	0	3	0	0	0	0	28
Mar	0	0	0	13	0	0	0	0	31
Apr	0	44	0	16	0	0	0	0	30
May	0	44	5	78	0	0	0	0	31
Jun	60	0	8	13	8	8	5	28	30
Jul	62	0	31	2	18	26	25	31	31
Aug	62	0	105	0	24	44	16	31	31
Sep	56	2	21	27	16	19	25	30	30
Oct	10	43	5	215	0	0	4	19	31
Nov	0	10	0	10	0	0	0	0	30
Dec	0	0	0	4	0	0	0	0	31
Total	250	149	175	390	66	97	75	139	365

2008 Spot Forecast Totals



Total number of spot forecasts issued by the Pendleton weather office this year declined for the first time in 5 years to 565. There were 389 prescribed burn spot forecasts (a decrease of 71 over the previous year) and 174 wildfire spot requests (a decrease of 139). There were 2 hazmat spot forecasts this year. The chart above shows the 12 year trend of SPOT forecasts issued by the Pendleton office.