FIRE WEATHER ANNUAL SUMMARY - 2014

FOR

EASTERN WASHINGTON
AND
NORTHERN IDAHO

By

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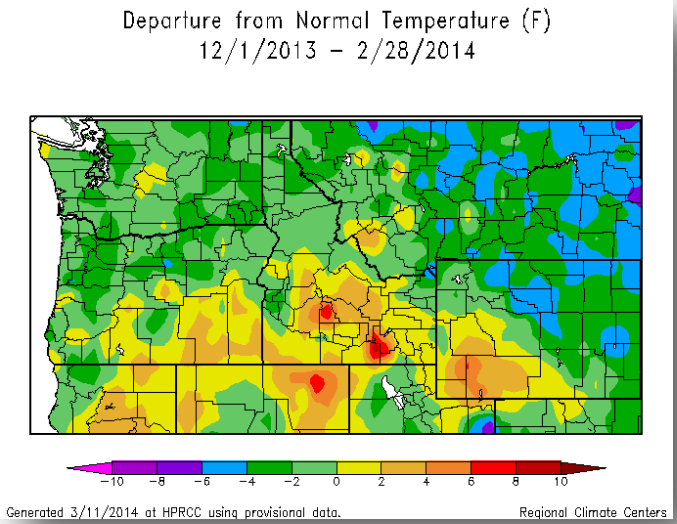
Winter 2013-2014 (Dec – Feb)

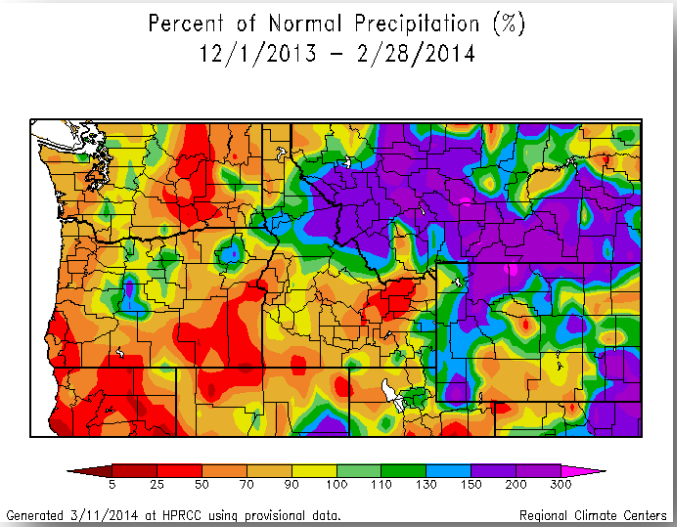
ENSO neutral conditions prevailed for the second consecutive year. Typically ENSO neutral years lead to difficult long-range forecasts, and this was no exception. Over the entire course of the year, temperatures ended up being a little warmer than normal over most locations, while precipitation amounts ended up close to or slightly wetter than normal.

If one word could represent the weather for **December**, it would be dry. The dry weather was a result of a strong ridge of high pressure which formed off the coast by the second day of the month and generally remained fixed there until the end of the year. A few weak disturbances were able to temporarily disrupt the control of the ridge, however from a precipitation standpoint; this was the driest December on record for a few locations and in the top 10 for most. The driest conditions were found over the western Columbia Basin and near the Cascades. Ephrata only received .02" of precipitation for the month, while Omak saw .11". Considering that December is normally the wettest month of the year, these meager precipitation totals were quite staggering. Aside from the lack of significant precipitation, the other highlight of the month revolved around an intrusion of very cold air from northwest Canada. The temperatures experienced were the coldest seen since January 2011. Between the 3th and 8th, sub-zero temperatures became commonplace. Aside from this cold snap, the remainder of the month was generally near or warmer than normal.

January started off where 2013 left off with more dry weather. The month started off quiet for the first week. But then the storm door opened briefly. Light snow fell in many locations on the 7th and 8th, but it didn't last long as temperatures warmed into the 40s and lower 50s. Omak hit 61 degrees on the 13th, while Republic reached 53F. Both were the warmest January days ever for those locations. The warm weather combined with some rain and melting snow resulted in areas of flooding. After the warmth and flooding the region was subjected to more ridging. This episode lasted for a couple weeks and delivered dry weather and widespread fog. The month ended with some more light to moderate snow.

The dry pattern finally changed in **February**. First, a cold arctic air mass invaded with widespread nighttime temperatures below zero with daytime readings only in the teens As the arctic air retreated, snow began to fall. By the 11th, most locations had at least a few inches of snow on the ground. But another surge of warm air brought an additional round of melting snow and flooding. This flooding was exacerbated by deeply frozen ground which prevented the water from soaking into the ground. The exception to the flooding was in the Cascade valleys, where sub-freezing temperatures prevailed and snow was the predominant precipitation type. Many Cascade valleys set records for the snowiest February ever. Overall, February ended up being a colder month than February, a rather rare occurrence. Given the wet and cold conditions, the mountain snowpack surged closer to the seasonal normals.





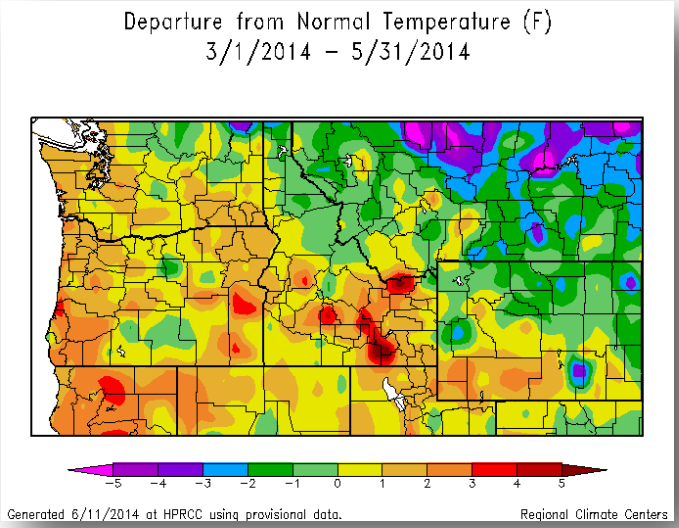
Temperatures during the winter were generally cooler than normal over eastern Washington and north Idaho (green shading, top image). **Precipitation** amounts were generally below normal (orange and red shading, bottom image) except for near normal amounts near the Cascade Crest and southwest of Spokane (green shading)

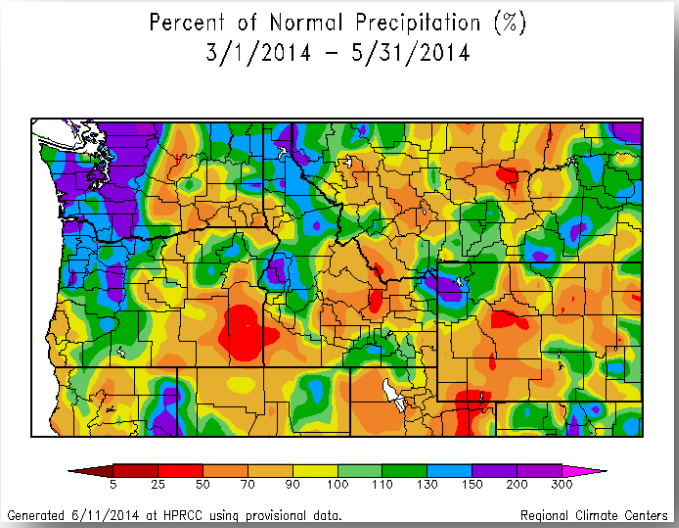
Spring 2014 (MAR – MAY)

As the districts transitioned into **March** and thus into Spring, the wet weather persisted, as did the cool temperatures. Temperatures began the month nearly 20° below normal while a very wet storm system dumped up to 2' of snow near the Cascades with lesser amounts encountered over the Idaho Panhandle. After this cold beginning, the weather pattern changed dramatically. Significantly warmer air invaded the Inland Northwest with temperatures surging into the 50s and 60s, melting the newly fallen snow. With the still frozen ground this resulted in another round of lowland flooding including in the town of Colfax and across other portions of the eastern Columbia Basin and Palouse. The other highlight for the month was an unusually early thunderstorm event which downed trees and power lines in the Spokane area and Palouse. Quieter weather took over for the 2nd half of the month.

The quiet weather pattern continued into **April**. Temperatures on the 8th warmed into the 70s in many locations, with even a few readings in the lower 80s. Wetter weather returned by the middle of the month as a wet cold front moved through. Another wet front moved through the following week. The month ended on a warm and dry note with temperatures surging into the 70s to middle 80s. Overall though the month was uncharacteristically tranquil with no thunderstorms, wind storms, or lowland snow events.

May saw little change to this quiet and benign weather pattern. The month started on a warm note with temperatures 10 to 15 degrees above normal. The mercury in Wenatchee climbed to 85° on the second, which was a record for the date. A wet and windy cold front brought much needed rain to the area on the 9th. Most areas received a quarter to a half inch of rain, with locally heavier amounts reported. Warm weather returned a few days later as many locations saw their first 80° or warmer reading on the 15th. This round of warmth produced some good runoff from the mountain snowpack resulting in some minor flooding, including along the Okanogan River. Temperatures then retreated to near normal readings as a wet cold front delivered widespread light to moderate precipitation. The wetter and cooler weather was short-lived though as another warm spell arrived by the 23rd. This persisted through the end of the month and it became clear that nearly the entire precipitation surplus of February and March was offset by an unusually dry April and May. Some areas in central Washington had received less than 50% of their normal precipitation for the winter and spring.

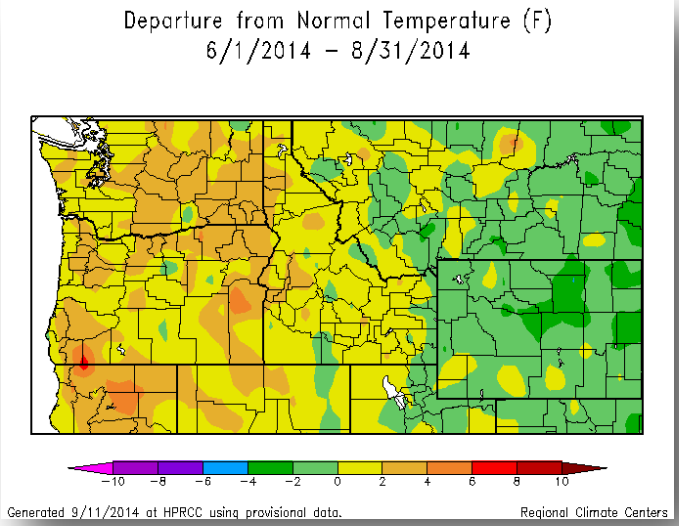




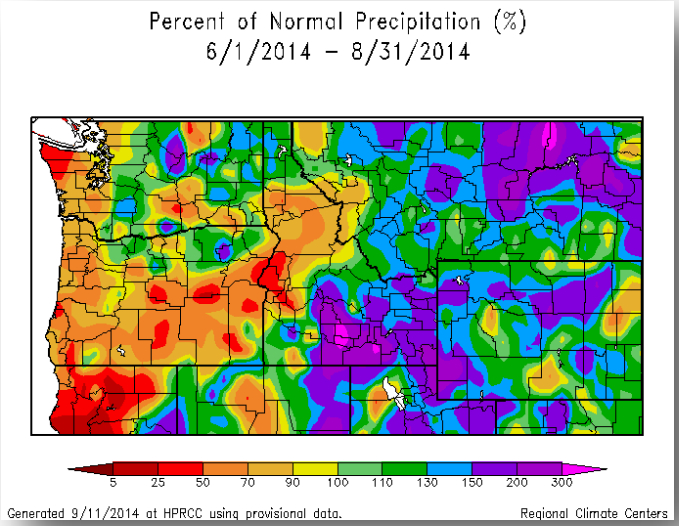
Temperatures during the spring were generally around normal over the entire Pacific Northwest (green and yellow shading, top image). **Precipitation** amounts were generally above average except near the Cascades (bottom image).

Summer 2013 (Jun-Aug)

June was a mostly quiet and pleasant month, weather-wise. Typically Junes in the Inland Northwest feature quite a few bouts of thunderstorms; however the 2014 edition of the month did not fit the bill. The first three days of the month saw minor thunderstorm activity, including a storm that produced golf ball-sized hail near Springdale, WA as well as a storm that caused a 62 mph wind gust at Lewiston. Another compact, but robust, weather system delivered some heavy rain showers to the Cascades. By the middle of the month, temperatures cooled significantly with highs only in the mid-50s to lower 60s. Meanwhile this cool weather was accompanied by a large area of heavy rain. Most of this rain concentrated across northeast Washington and the Idaho Panhandle. Over a three-day period many locations were soaked with rainfall amounts between 1 to 1.5 inches. This was a welcome event given the dry conditions over the previous several months and certainly put a temporary brake on the fire season. Much warmer weather returned to the region during the last week of the month with temperatures climbing into the 80s and lower 90s.



We often say that summer in the Inland Northwest doesn't start until **July** 4th, and this was once again the case. This year it warmed just in time for the holiday weekend. Little did we know, that was the harbinger for the remainder of the month. High pressure over the region was unrelenting. Wenatchee Airport hit 100°F or hotter for 9 straight days from the 8th through the 16th, it's longest streak ever. Spokane reached 90°F or better for 12 straight days, 2 shy of its all-time record. On the 14th, wet thunderstorms moved through the area sparking new wildfires in the Cascades. These wildfires burned without any weather hindrances and on 17th a dry cold front delivered just what the fires need for extreme growth; strong winds and low relative humidity values. This scenario was responsible for the unprecedented growth on the Carlton Complex. The heat continued and on the 23rd there was a large outbreak of severe thunderstorms. Large hail damaged cars near Colville while 70 mph winds brought down numerous trees from Spokane to Sandpoint. These thunderstorms brought a brief cool spell, but the heat returned later in the month with Spokane reaching the century mark for the first time in 5 years.



For the summer, **Temperatures** were warmer than normal. (orange and yellow shading, top image). **Precipitation** amounts were generally wetter than normal over most of the region (blue and purple shading, bottom image).

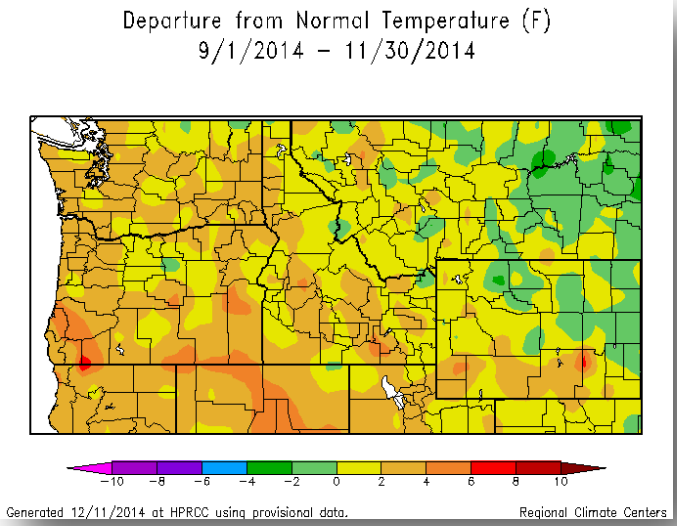
The heat continued into the first part of **August**. Another strong thunderstorm event on the 2nd brought down more trees from Spokane to Sandpoint. A change in the weather pattern occurred on the 12th as thunderstorms brought a widespread dust storm to the Columbia Basin. Wind gusted to 63 mph at Ritzville and 5 injuries resulted from a multi-car accident on I-90 due to blowing dust. Heavy rain from thunderstorms between the 12th and 15th caused flash flooding and debris flows on the burn-scarred areas of the Cascades. Another flash flood event occurred on the evening of the 21st. Heavy rain over the Carlton Complex burn area created a flood that destroyed 10 homes that managed to survive the fire.

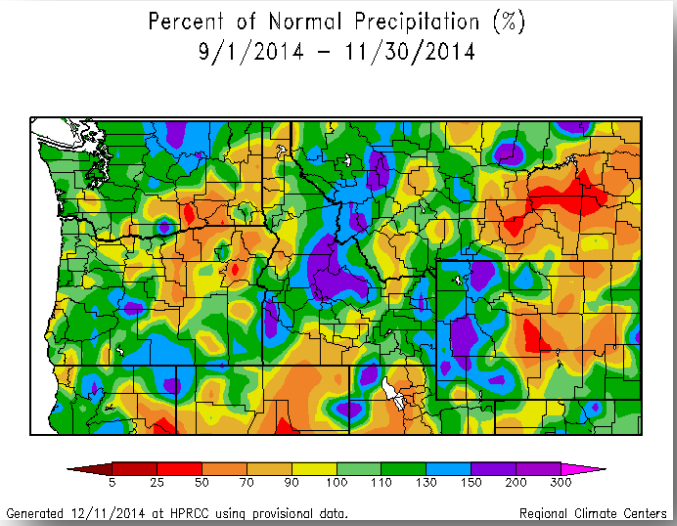
Autumn 2014 (Sep-Nov)

September started off the season on a cool note. Temperatures on the first few days of the month were below normal with light rain showers. Little did we know at that point that the majority of the rainfall for the month would fall in those first few days. Omak received 0.37" of rain on the 2nd, a record for the day. Temperatures remained in the 60s on the 3rd. But the warm weather wasn't over. Four days later, temperatures had warmed back into the mid-80s and lower 90s. The temperature rollercoaster continued for the rest of the month as the Inland Northwest swung between the 60s and the 80s.

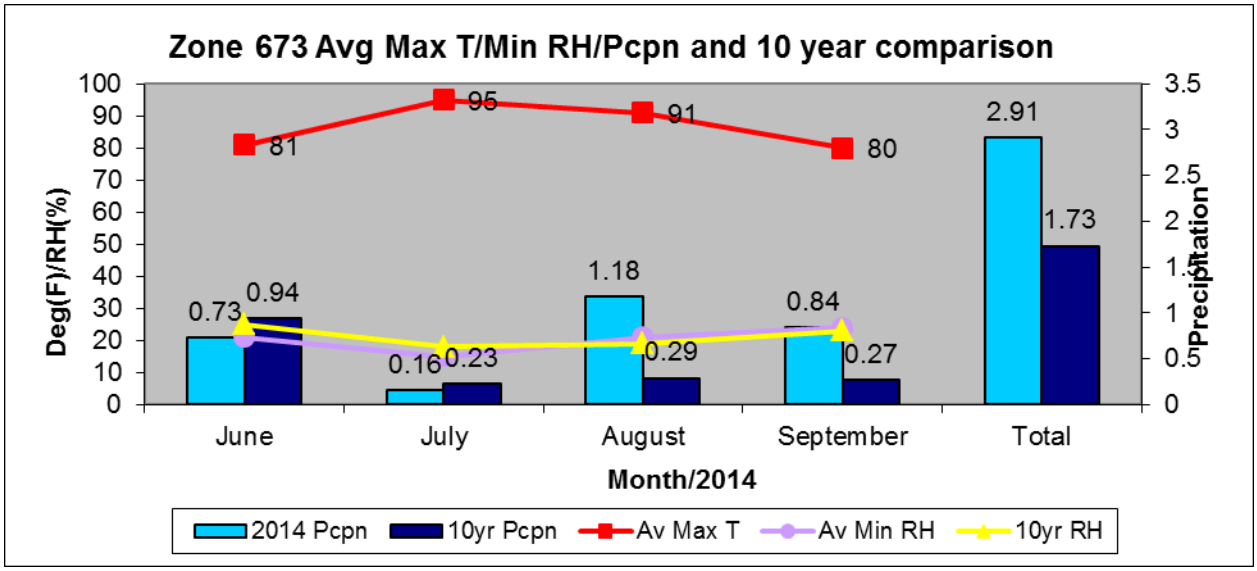
October was one of the warmest ever across the Inland Northwest. Abundant sunshine and warm afternoons described the month as a whole. Nighttime temperatures were also mild so backyard gardeners were harvesting throughout the month. The 4th through the 13th saw very mild temperatures for early October. Highs on the 7th reached 80F in Spokane and 87F in Lewiston, while Wenatchee warmed to 90F on the 6th, setting records for the day. The weather cooled a little on the 11th as a dry cold front moved through the region bringing blowing dust to the Moses Lake area. A wetter front on the 14th and 15th brought welcome rain to the area. But the warm weather wasn't over. La Crosse reached 81F on the 19th while Pullman topped out at 75F, both of which were records for the day. Eventually, the cold fronts became stronger and wetter with a rather wet system bringing heavy rain to parts of the area, including Omak which received 0.86" and Odessa which picked up 0.50" on the 22nd, both daily records. Temperatures cooled to more normal readings for late October as another front brought strong winds on the 26th. For the month, Wenatchee had its 2nd warmest October ever, while Lewiston and Spokane had their 3rd and 5th warmest Octobers respectively.

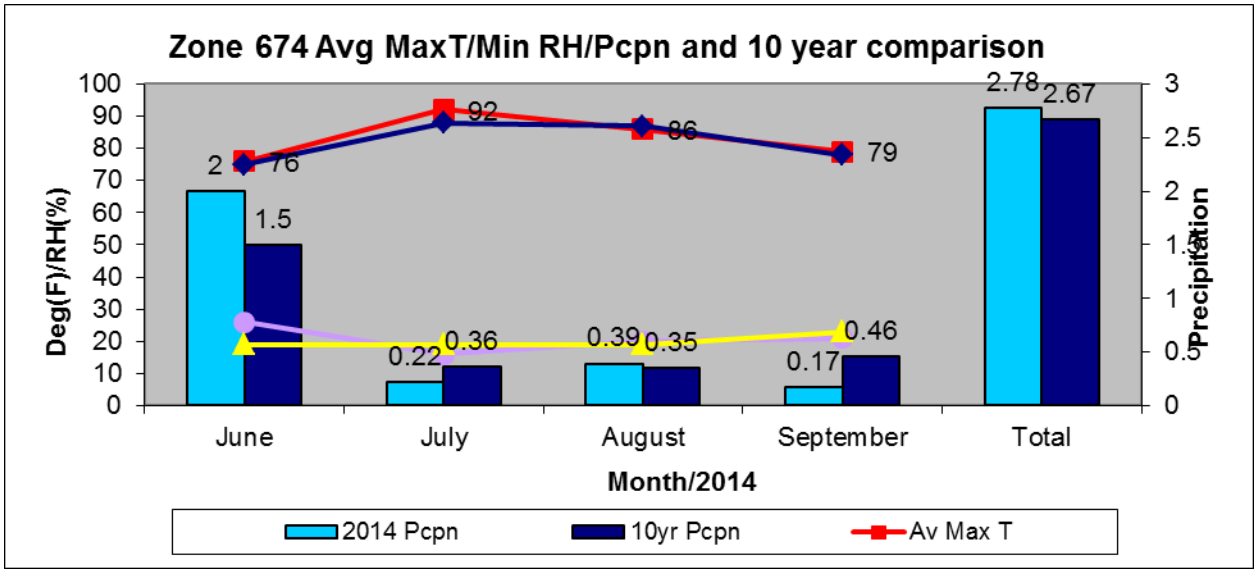
November initially looked like another relatively warm month. Although it was rainy, the temperatures were much above normal, and nighttime lows remained well above freezing. The 32F at the Spokane airport on the 2nd tied for the latest ever first freezing temperature. Lewiston reached 73F on the 6th, a record for the day. But then the remnants of Typhoon Nuri altered the jet stream and drew frigid air southward from Canada. Veterans Day was a rather raw day with a cold northeast wind blowing all day. Priest Lake and Naples dropped to 1F on the morning of the 14th while Odessa reached 2F. These temperatures persisted for over week. As milder Pacific air ushered out the cold air, snow resulted. Many valley locations picked up a light dusting on the 20th. But the temperatures continued to warm, and subsequent snow was confined to the mountains, where one to three feet fell over a few days. The exception was the Cascade valleys, which picked up 4-8" of snow on the 22nd. The Methow Valley received up to 18" of snow on the 24th, guaranteeing a white Thanksgiving. But for the rest of the area, Thanksgiving was very mild, reaching the 50s and lower 60s with a breezy west wind. One more cold front delivered sub-freezing temperatures to the region for the last day of the month.

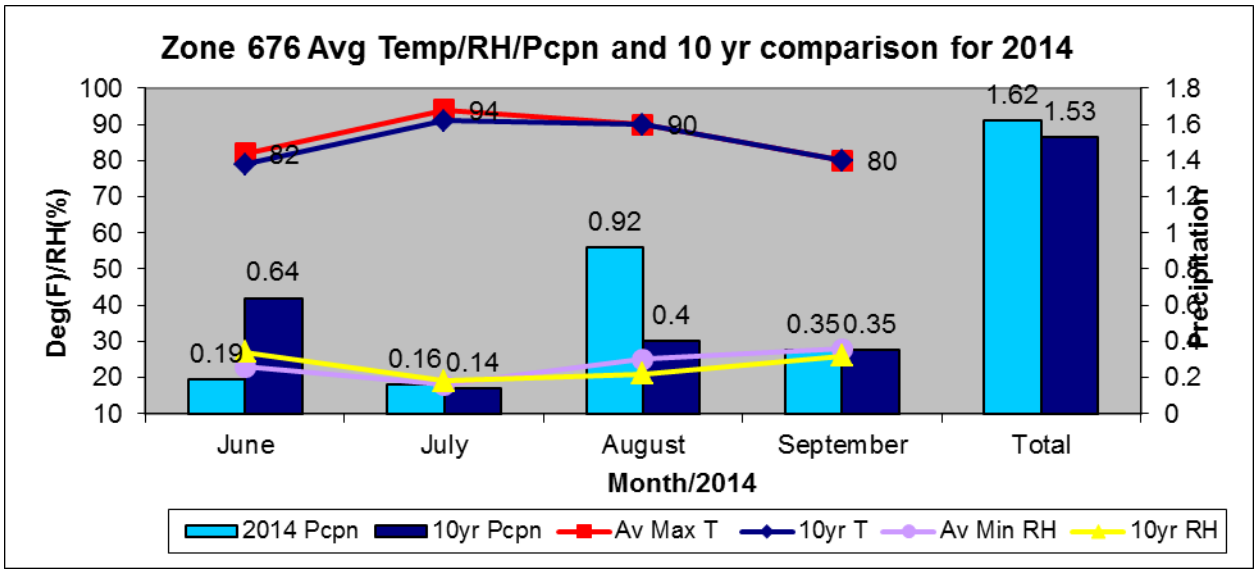


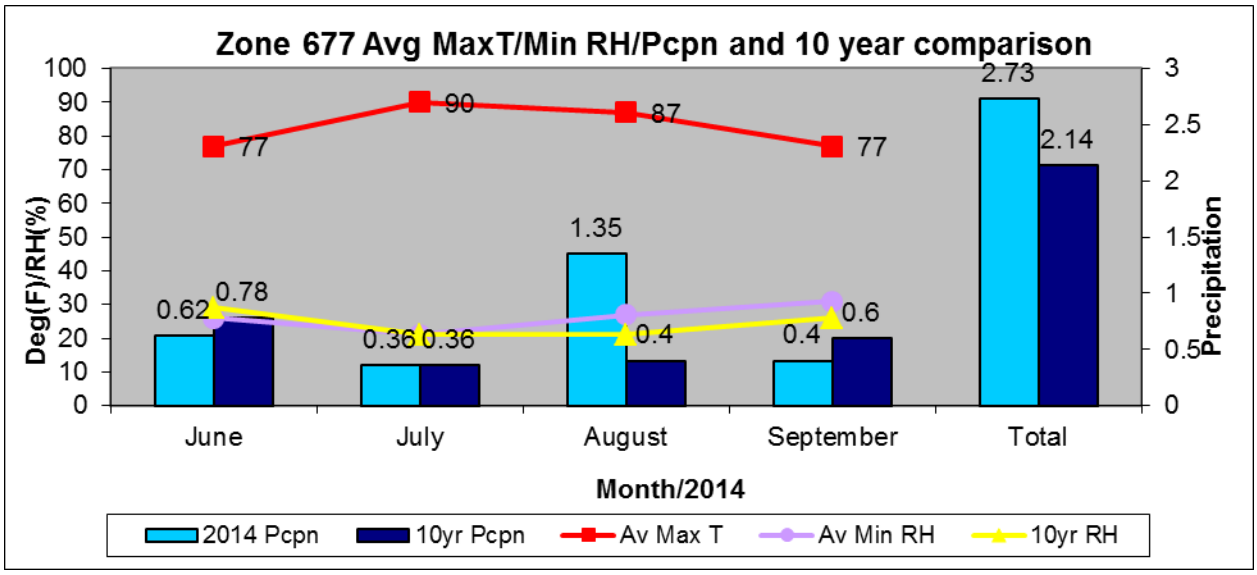


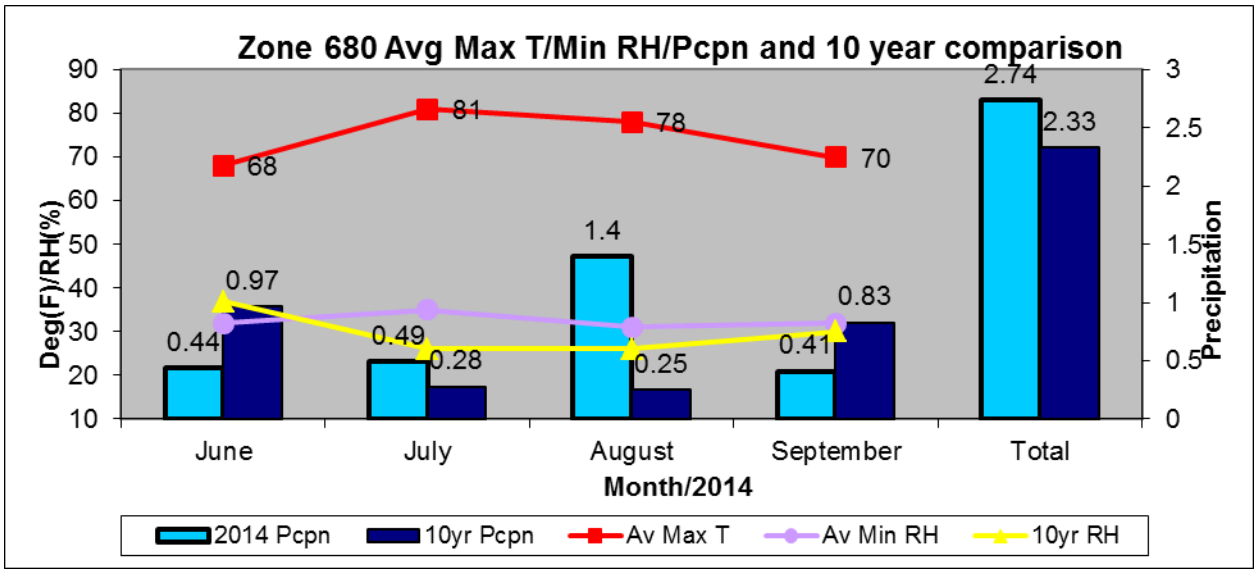
Temperatures were generally warmer than normal for the autumn (yellow and orange shading, top image). **Precipitation** amounts were varied with below normal amounts over the eastern quarter of Washington and a small portion of north Idaho, while wetter than normal conditions prevailed elsewhere.

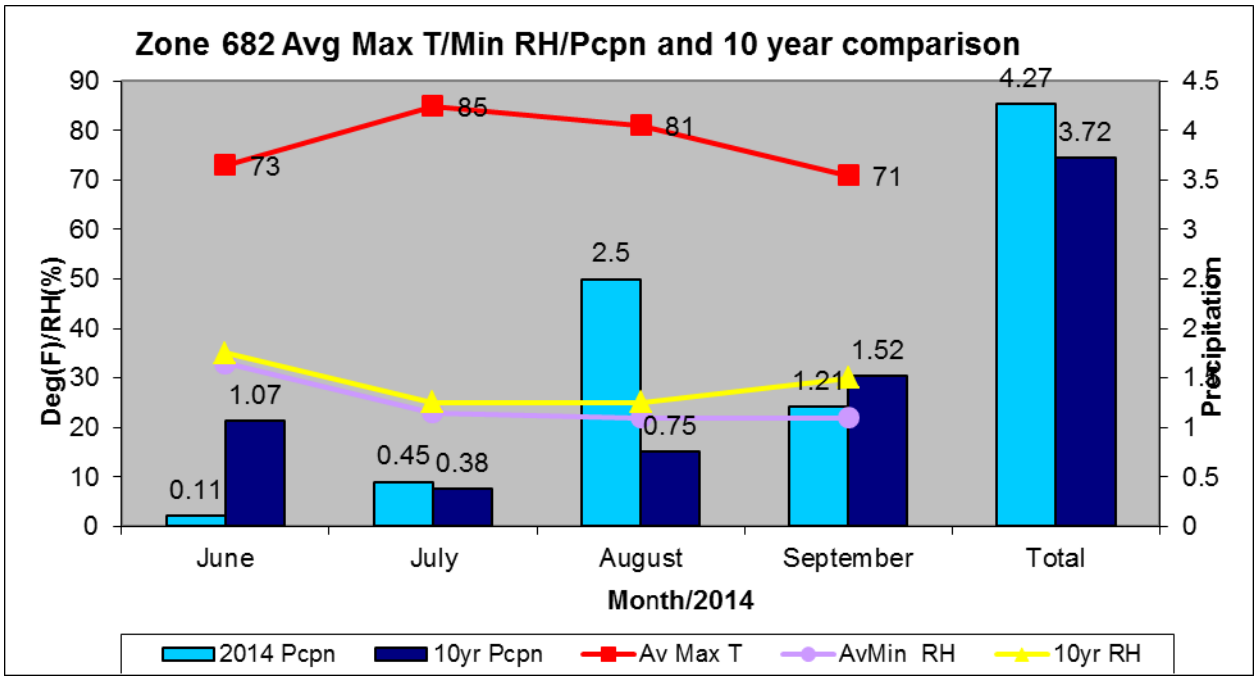

Zone 673 Avg Max T/Min RH/Pcpn and 10 year comparison
Deg(F)/RH(%)
Precipitation
100
90
80
70
60
50
40
30
20
10
0
3.5
3
2.5
2
1.5
1
0.5
0
81
95
91
80
0.73
0.94
0.16
0.23
1.18
0.29
0.84
0.27
2.91
1.73
June
July
August
September
Total
Month/2014
2014 Pcpn
10yr Pcpn
Av Max T
Av Min RH
10yr RH

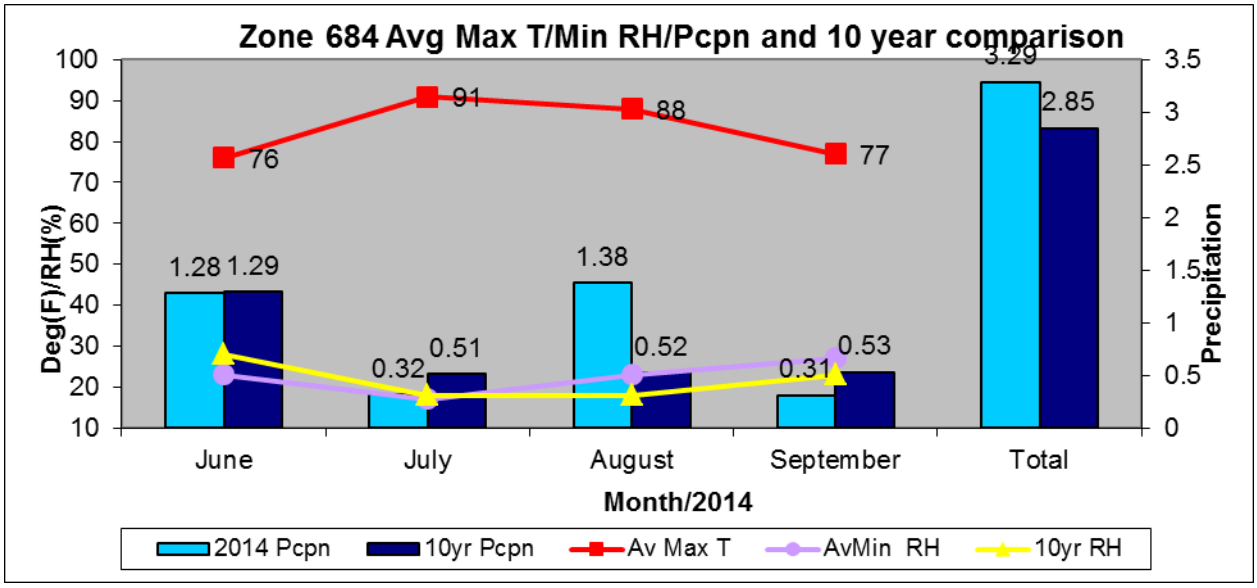

Zone 674 Avg MaxT/Min RH/Pcpn and 10 year comparison
Deg(F)/RH(%)
Precipitation
100
90
80
70
60
50
40
30
20
10
0
3
2.5
2
1.5
1
0.5
0
76
92
86
79
1.5
0.22
0.36
0.39
0.35
0.17
0.46
2.78
2.67
June
July
August
September
Total
Month/2014
2014 Pcpn
10yr Pcpn
Av Max T

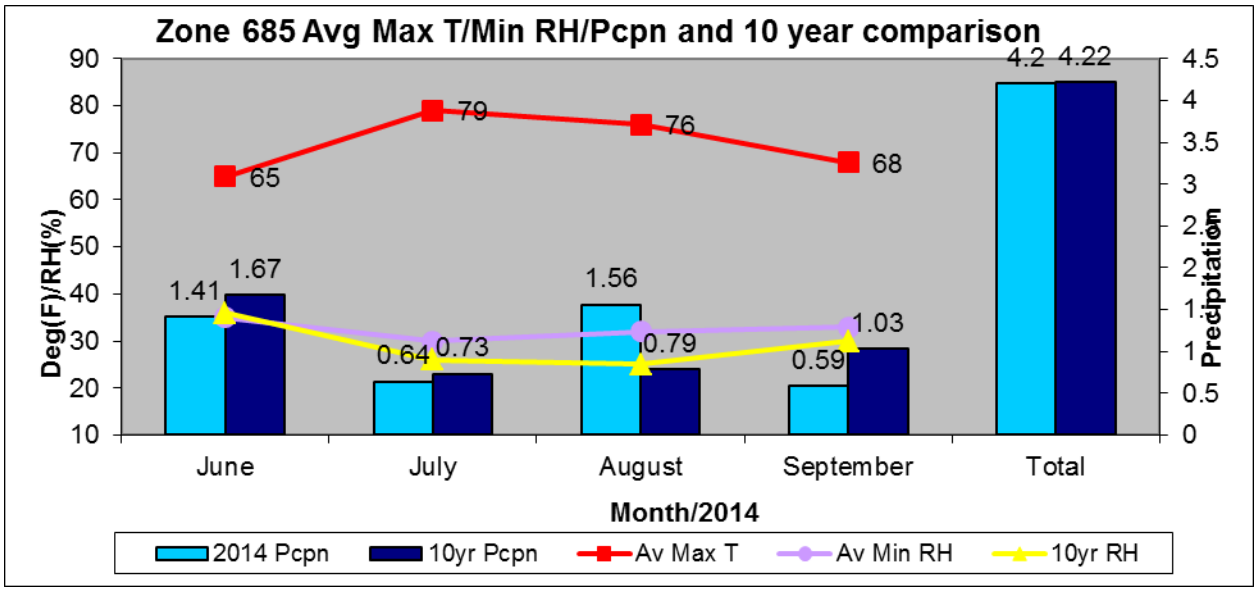

Zone 676 Avg Temp/RH/Pcpn and 10 yr comparison for 2014
Deg(F)/RH(%)
Precipitation
Month/2014
June
July
August
September
Total
82
94
90
80
0.64
0.19
0.16
0.14
0.92
0.4
0.35
0.35
1.62
1.53
2014 Pcpn
10yr Pcpn
Av Max T
10yr T
Av Min RH
10yr RH

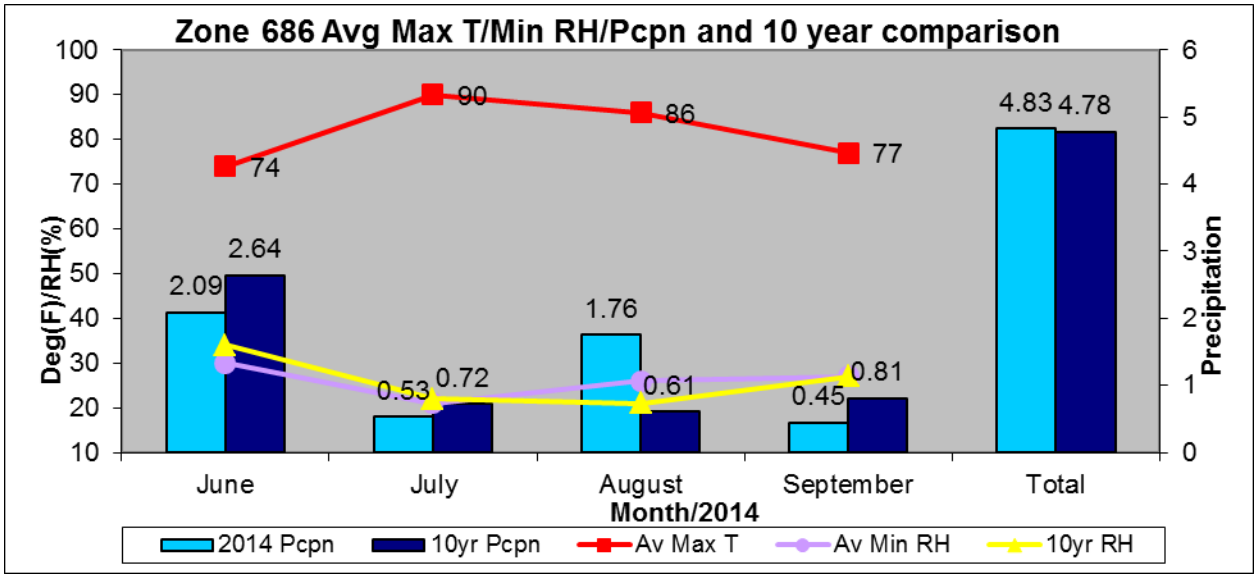

Zone 677 Avg MaxT/Min RH/Pcpn and 10 year comparison
Deg(F)/RH(%)
Precipitation
Month/2014
June
July
August
September
Total
77
90
87
77
0.62
0.78
0.36
0.36
1.35
0.4
0.4
0.6
2.73
2.14
2014 Pcpn
10yr Pcpn
Av Max T
Av Min RH
10yr RH

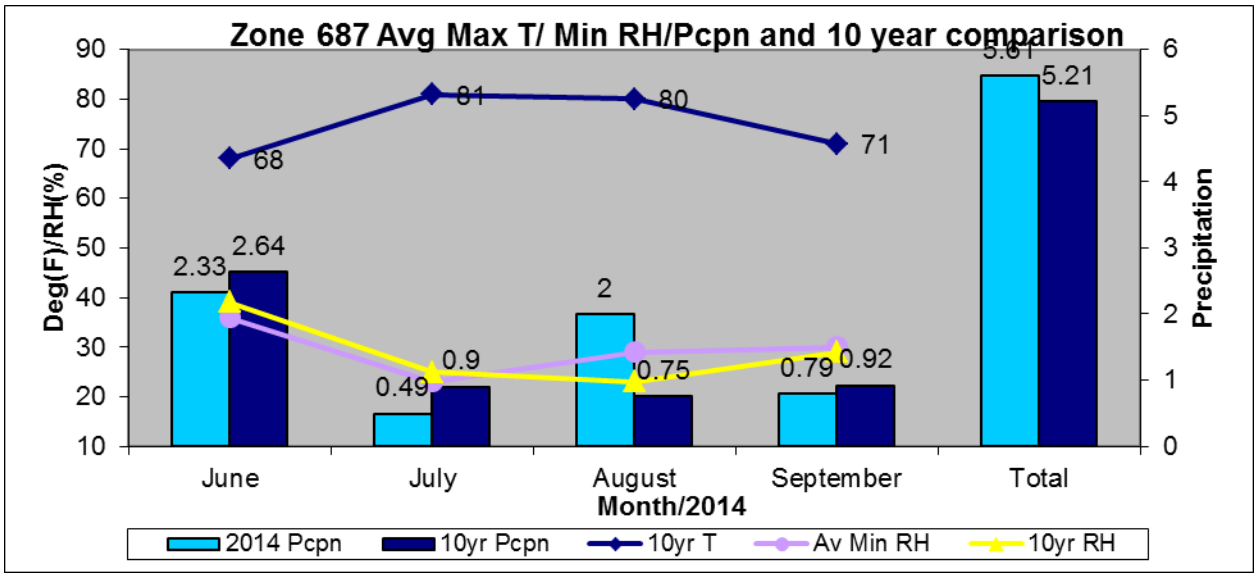

Zone 680 Avg Max T/Min RH/Pcpn and 10 year comparison
Deg(F)/RH(%)
Precipitation
Month/2014
June
July
August
September
Total
68
81
78
70
0.44
0.97
0.49
0.28
1.4
0.25
0.41
0.83
2.74
2.33
2014 Pcpn
10yr Pcpn
Av Max T
Av Min RH
10yr RH

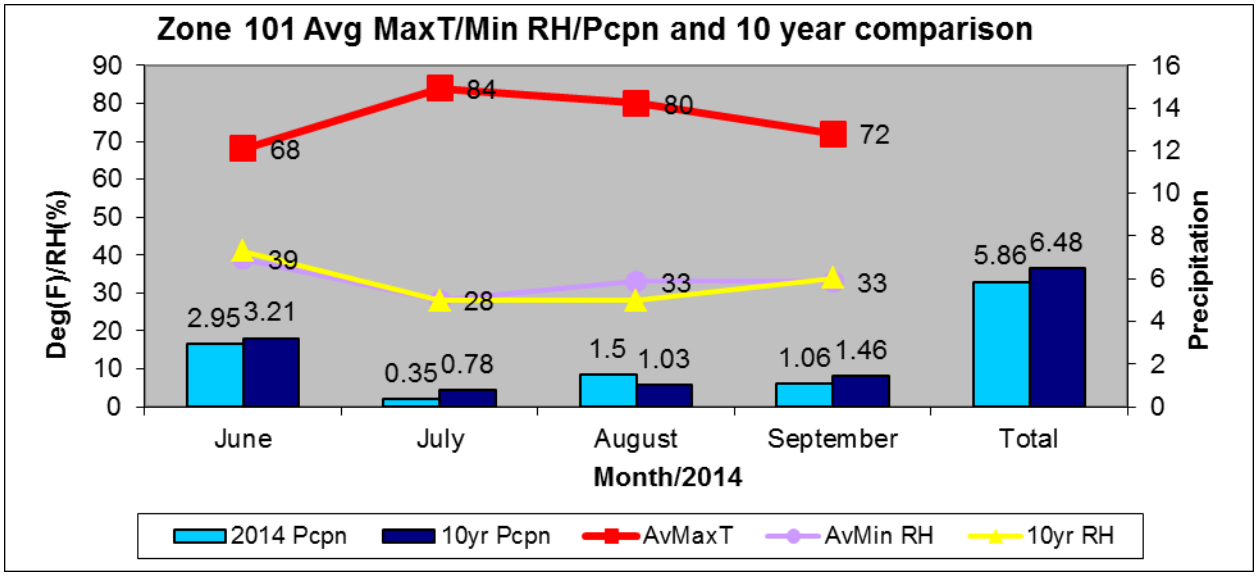

Zone 682 Avg Max T/Min RH/Pcpn and 10 year comparison
Deg(F)/RH(%)
Precipitation
Month/2014
June
July
August
September
Total
73
85
81
71
0.11
1.07
0.45
0.38
2.5
0.75
1.21
1.52
4.27
3.72
2014 Pcpn
10yr Pcpn
Av Max T
AvMin RH
10yr RH


Zone 684 Avg Max T/Min RH/Pcpn and 10 year comparison
Deg(F)/RH(%)
Precipitation
Month/2014
June
July
August
September
Total
76
91
88
77
1.28
1.29
0.32
0.51
1.38
0.52
0.31
0.53
3.29
2.85
2014 Pcpn
10yr Pcpn
Av Max T
AvMin RH
10yr RH


Zone 685 Avg Max T/Min RH/Pcpn and 10 year comparison
Deg(F)/RH(%)
Precipitation
Month/2014
June
July
August
September
Total
65
79
76
68
1.41
1.67
0.64
0.73
1.56
0.79
0.59
1.03
4.2
4.22
2014 Pcpn
10yr Pcpn
Av Max T
Av Min RH
10yr RH


Zone 686 Avg Max T/Min RH/Pcpn and 10 year comparison
Deg(F)/RH(%)
Precipitation
100
90
80
70
60
50
40
30
20
10
6
5
4
3
2
1
0
74
90
86
77
2.09
2.64
0.53
0.72
1.76
0.61
0.45
0.81
4.83
4.78
June
July
August
September
Total
Month/2014
2014 Pcpn
10yr Pcpn
Av Max T
Av Min RH
10yr RH


Zone 687 Avg Max T/ Min RH/Pcpn and 10 year comparison
Deg(F)/RH(%)
Precipitation
90
80
70
60
50
40
30
20
10
6
5
4
3
2
1
0
68
81
80
71
2.33
2.64
0.49
0.9
2
0.75
0.79
0.92
5.21
June
July
August
September
Total
Month/2014
2014 Pcpn
10yr Pcpn
10yr T
Av Min RH
10yr RH


Zone 101 Avg MaxT/Min RH/Pcpn and 10 year comparison
Deg(F)/RH(%)
Precipitation
Month/2014
June
July
August
September
Total
68
84
80
72
39
28
33
33
2.95
3.21
0.35
0.78
1.5
1.03
1.06
1.46
5.86
6.48
2014 Pcpn
10yr Pcpn
AvMaxT
AvMin RH
10yr RH

SPOKANE 2014 RED FLAG WARNINGS/WATCHES PROBLEMS

Date	Zones	Reason	Verification	Lead Time (hours)
Jun 9-10	673, 677	Wind/Low RH	Yes 673, 677 Preceded by watch	24
Jul 3	677	Wind/Low RH/Haines	Yes Not Preceded by a watch	4
Jul 4	676	Wind/Low RH/Haines	No Not Preceded by a watch	0
Jul 9-10	673, 676, 677	Wind/Low RH/Haines	Yes All Preceded by watch 676,677 Not Preceded by watch 673	20
Jul 13	673,676,677,680,682,685	Lightning	Yes 676,677,680,682 No 685 Missed Warning 673	15
Jul 14	673,68w	Lightning	Missed Warnings	0
Jul 16	676, 677,680,682,684,685	Wind/Low RH/Haines	Yes to all 676 Preceded by watch The rest not	7
Jul 17	673,674,686,687	Wind/Low RH/Haines	Yes 673, 674 Preceded by a watch No 686,687 Not preceded by a watch	24
Jul 19	677, 686, 687	Wind/Low RH/Haines	Yes 677 No 686, 687	10
Aug 1	673, 676,677,680,682,684,685	Lightning	Yes 684, 685 Preceded by Watches cancelled 673,676, 680, 682	36
Aug 2	673, 677,682,684,685,686,687	Lightning	Yes to all Not preceded by a Watch	9
Aug 5	673, 676, 677, 6821	Wind/Low RH/Haines	Yes 676, 677 No 672, 682 Not enough wind Preceded by watches	24
Aug 6	677	Wind/Low RH/Haines	Yes Not Preceded by Watch	8
Aug 8	676, 677	Wind/Low RH/Haines	Yes	14
Aug 11	All zones	Lightning	Yes to 673, 674, 676, 677, 680, 682,686,101 No to 684, 685, 687 Preceded by watch	36
Aug 13	684,685	Lightning	Missed Warnings Lightning after cancellation	0

Sep 8	673, 674,676,676	Wind/Low RH/Haines	Yes to 673, 674,677 No to 676 Preceded by watch	12
Sep 10	673, 684	Wind/Low RH/Haines	Yes 684 Missed warning 673	6

Total Warnings: 57 Dry Lightning: 26 Wind/low RH/Haines/Instability: 31
Correct Warnings: 42 Incorrect Warnings: 15 Missed Warnings: 6
Warnings Preceded with a Watch: 37

Probability of Detection:	**Dry Lightning 0.79**	**Wind/low RH/Haines 0.96**	**All 0.88**
False Alarm Rate:	**Dry Lightning 0.27**	**Wind/low RH/Haines 0 .26**	**All 0.26**
Critical Success Index:	**Dry Lightning 0.61**	**Wind/low RH/Haines 0.72**	**All 0.67**

ALL WARNINGS

All RFW by Month	*JUN*	*JUL*	*AUG*	*SEP*	*OCT*	*Season*
Warnings	2	22	28	5	0	57
Warned Events	2	16	20	4	0	42
Unverified Warnings	0	6	8	1	0	15
Missed Events	0	3	2	1	0	6
Total Events	2	19	22	5	0	48
POD	1.00	0.84	0.91	0.80	0.00	0.88
FAR	0.00	0.27	0.26	0.20	0.00	0.26
CSI	1.00	0.64	0.69	0.67	0.00	0.67

WARNINGS FOR DRY LIGHTNING

RFW for Dry Lightning	673	674	676	677	680	682	684	685	686	687	101	All Zones
Warnings	2	1	2	3	2	3	3	4	2	3	1	26
Warned Events	2	1	2	3	2	3	3	3	2	1	1	19
Unverified Warnings	0	0	0	0	0	0	2	3	0	2	0	7
Missed Events	2	0	0	0	0	1	1	1	0	0	0	5
Total Events	4	1	2	3	2	4	2	2	2	1	1	24
Lead Time (hours)	18	18	15	18	18	12	18	18	5	15	0	13
POD	1.00	1.00	1.00	1.00	1.00	0.67	1.00	1.00	0.67	1.00	0.50	0.79
FAR	0.25	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.33	0.50	0.50	0.27
CSI	0.75	1.00	0.67	1.00	1.00	0.67	0.00	1.00	0.50	0.50	0.33	0.61

WARNINGS FOR LOW RH COMBINED WITH WIND OR HAINES OR INSTABILITY

RFW for Wind/RH	673	674	676	677	680	682	684	685	686	687	101	All Zones
Warnings	5	2	6	9	0	2	2	1	2	2	0	31
Warned Events	4	2	4	9	0	1	2	1	0	0	0	23
Unverified Warnings	1	0	2	0	0	1	0	0	2	2	0	8
Missed Events	1	0	0	0	0	0	1	0	0	0	0	1
Total Events	5	2	4	9	0	1	2	1	0	0	0	24
Lead Time (hours)	16	18	20	14	0	7	7	7	0	0	0	13
POD	0.80	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.96
FAR	0.20	0.00	0.33	0.00	0.00	0.50	0.00	0.00	1.00	1.00	0.00	0.26
CSI	0.67	1.00	0.67	1.00	0.00	0.50	1.00	1.00	0.00	0.00	0.00	0.72

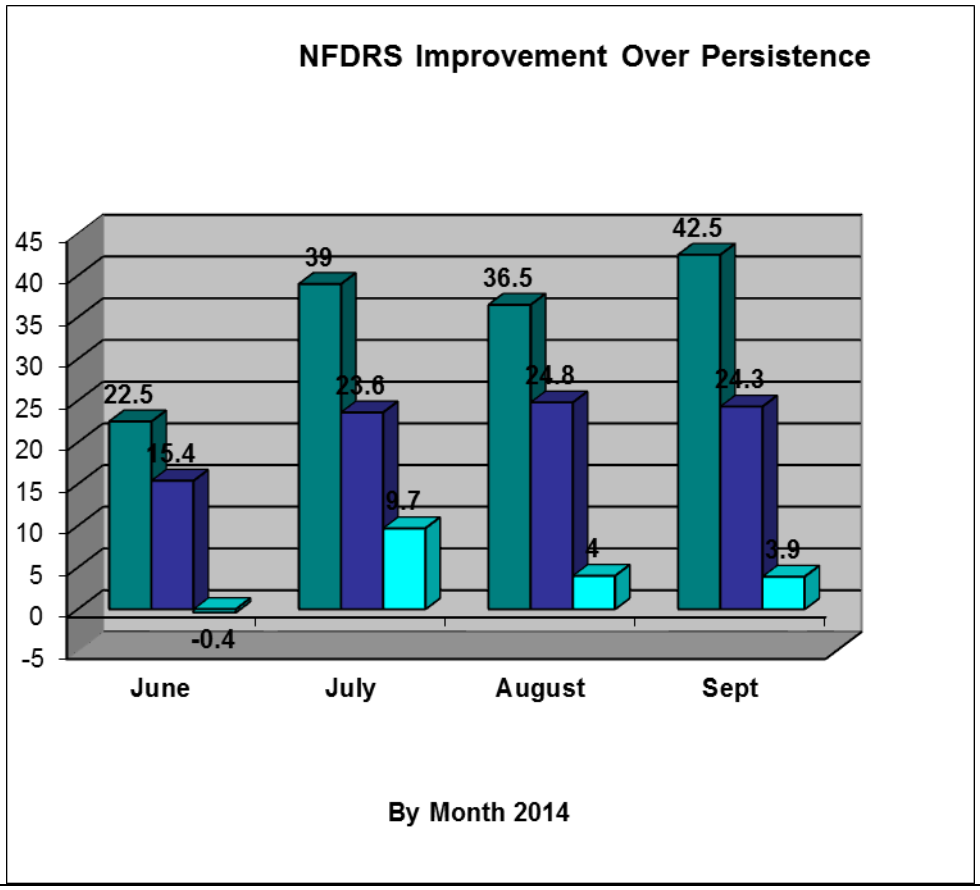
ALL WARNINGS BY ZONE

All Red Flag Warnings	673	674	676	677	680	682	684	685	686	687	101	All Zones
Warnings	7	3	8	12	2	5	5	5	4	5	1	57
Verified Warnings	6	3	6	12	2	4	3	2	2	1	1	42
Unverified Warnings	1	0	2	0	0	1	2	3	2	4	0	15
Missed Events	3	0	0	0	0	1	1	1	0	0	0	6
Total Events	13	2	6	12	2	5	4	3	2	1	1	48
Lead Time (hours)	13	2	22	16	26	13	6	5	20	4	36	14
POD	0.67	1.00	1.00	1.00	1.00	0.80	0.75	0.67	1.00	1.00	0.00	0.88
FAR	0.14	0.00	0.25	0.00	0.00	0.20	0.40	0.60	0.50	0.80	1.00	0.26
CSI	0.60	1.00	0.75	1.00	1.00	0.67	0.50	0.33	0.50	0.20	1.00	0.67

NFDRS VERIFICATION BY MONTH

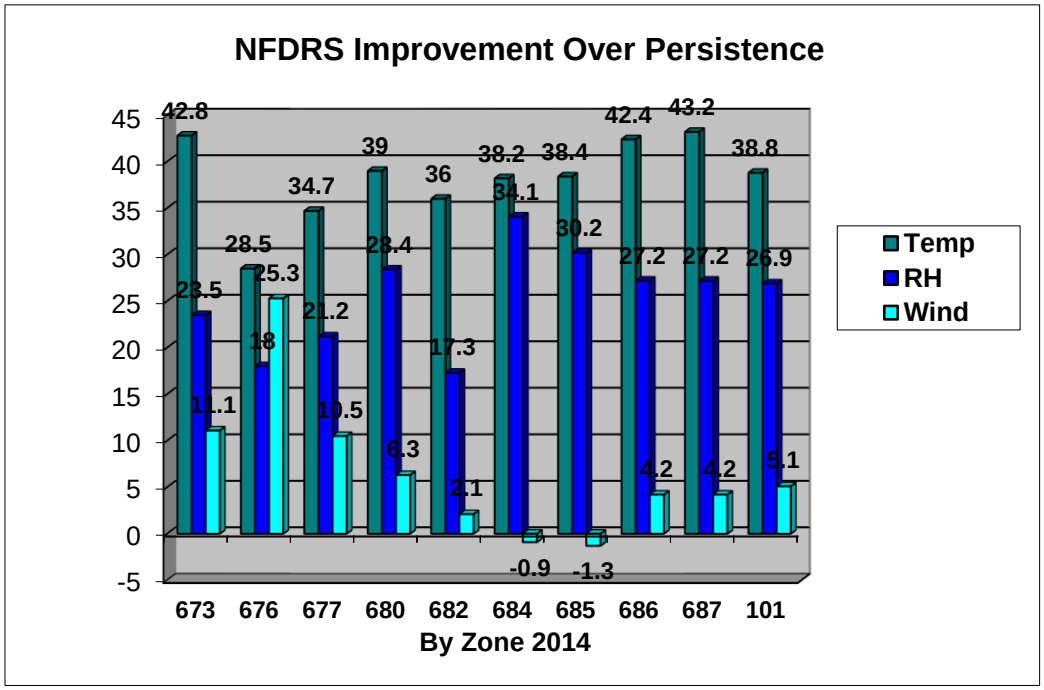
NFDRS forecast verification was accomplished by comparing the average forecast values derived from the 2 PM zone trend forecasts, with the 2 PM NFDRS Fire Weather Zone observation averages for the following day.

Temperature and Relative Humidity show very good improvement over persistence. Wind forecasts for 2014 show good improvement over persistence. Some things to note with wind forecasts: wind observations from the RAWS sites in the mountain zones show little day to day changes on the 1300 observations unless there is a significant wind event. **Be aware that we were having problems with getting NFDRS data in to our system through a large portion of June and these numbers are most likely skewed**



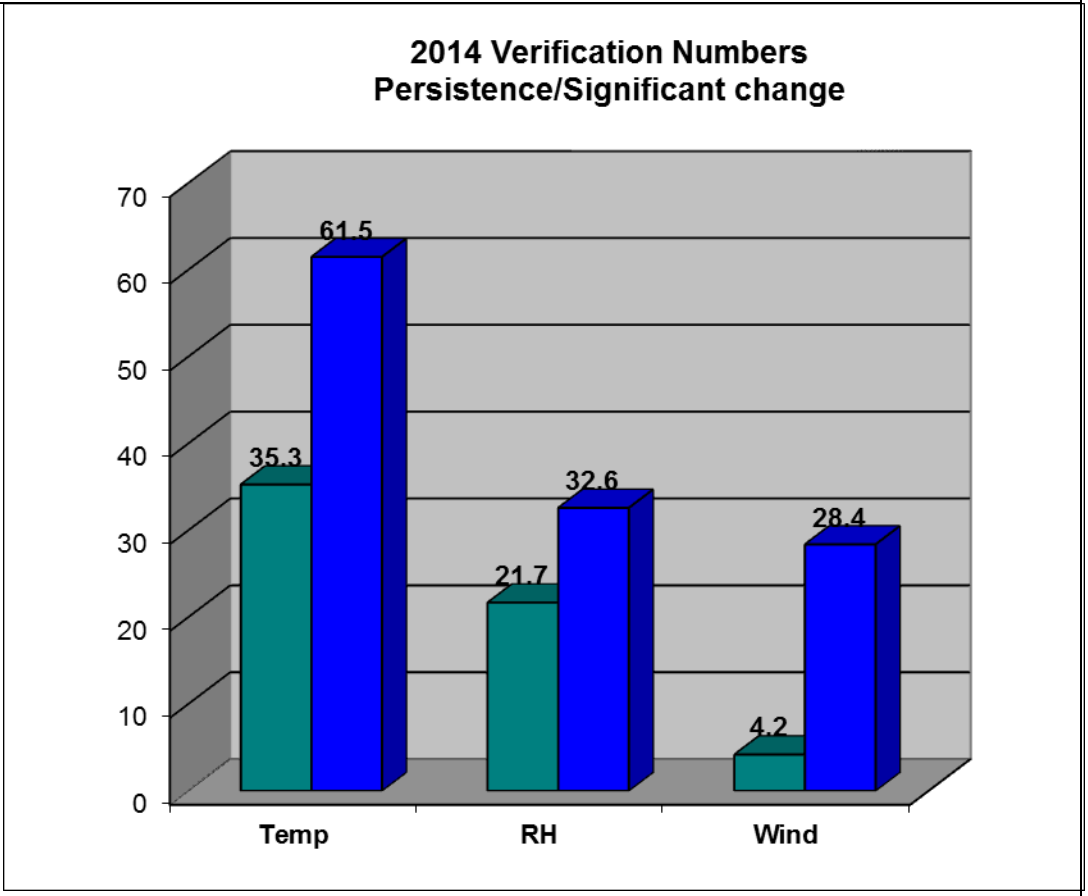
NFDRS VERIFICATION VS. PERSISTENCE

For all zones both temperatures and relative humidity forecasts show good improvement over persistence. Winds show improvement. Note winds in complex terrain are the hardest to show any improvement over persistence.



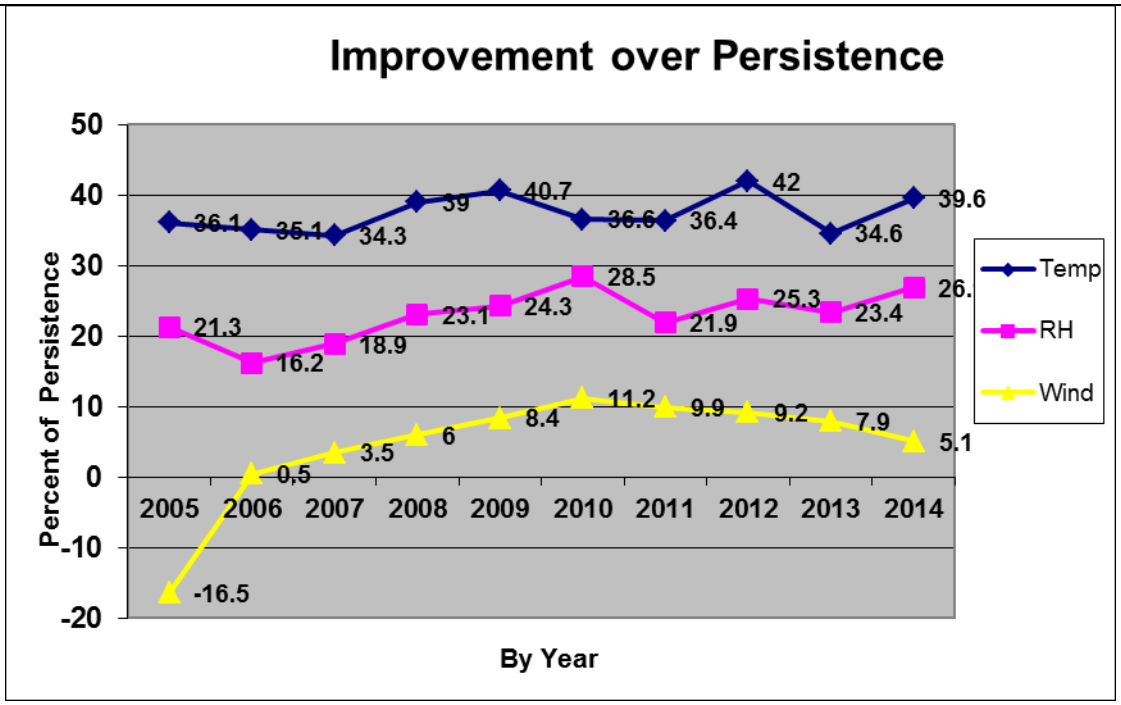
NFDRS VERIFICATION VS. PERSISTENCE AND IN BIG CHANGE EVENTS

This graphic shows the improvement over persistence from day to day compared to improvement when there are big changes. A big change equals a temperature change 10 degrees, relative humidity 5% and winds by 5 mph.



IMPROVEMENTS VS. PERSISTENCE OVER YEARS

While forecast improvement over persistence fluctuated from year to year note that the trend is generally upward for all parameters from 2006 through 2010, but has plateaued through 2014. This appears to show that these numbers are near the best we can do for forecasting improvement over persistence.



2014 Fire Season Fire Activity Summary

The total number of fires in 2014 was above average and the number of acres burned set a record dating back to 1970. Below is a list of all fires of large fires by agency.

Fire	Acres Burned	Start Date	Agency
Lawson Flats	533	4/8/2014	COA
Malaga	1,277	5/28/2014	WFS
Foster Creek	375	6/3/2014	SES
Belvedere	700	6/4/2014	COA
Brody Canyon	801	6/12/2014	COA
Cottonwood 2	8,942	6/17/2014	SES
I-82 Manastash	1,996	7/3/2014	SES
Silver Creek II	330	7/4/2014	COA
Rock Hill	2,209	7/6/2014	WFS
Mills Canyon	22,571	7/8/2014	SES
Highland 2	476	7/9/2014	WFS
Lake Spokane	1,016	7/9/2014	NES
25 Mile Creek	218	7/10/2014	SES
Palisades Flats	1,045	7/10/2014	SPD
Middle Mountain	275	7/13/2014	OWF
Carlton Complex	256,108	7/14/2014	DNR
Coyote Flats	1,893	7/14/2014	SPD
Chiwaukum Complex	14,201	7/15/2014	OWF
Duncan	12,695	7/16/2014	OWF
R Road	4,300	7/16/2014	SPD
Saddle Mountain	21,000	7/18/2014	MISC
Watermelon Hill	11,000	7/19/2014	SPD
Bugg Road	775	7/21/2014	NES
Road C Fire	1,000	7/28/2014	WFS
Hansel Creek	1,073	8/2/2014	SES
Devils Elbow Complex	26,629	8/3/2014	COA
Little Bridge Creek	4,928	8/3/2014	OWF
Upper Falls	8,120	8/4/2014	OWF
South Cle Elum Ridge	894	8/7/2014	OWF
Auvil Canyon	604	8/21/2014	DNR
Toroda Mountain	150	8/29/2014	PRI

Fire Data of Customer Agencies – 2014

Agency	Lightning Caused Fires	Acres Burned	Human Caused Fires	Acres Burned	Total Fires	Total Acres Burned
SE DNR	32	1,432	93	38,413	125	39,845
NE DNR	153	147,071	290	10,300	443	157,371
Colville BIA	64	28,034	60	2,178	124	30,212
Okanogan-Wenatchee NF	85	119,748	47	12,113	132	131,861
Colville NF	34	19	9	2	43	21
Idaho Panhandle USFS/IDL	169	580	78	218	247	798
FWS	4	1	0	0	4	1
BLM	10	345	19	6,034	29	6,379
Spokane BIA	1	2	28	709	29	711
Total	552	297,232	624	69,967	1,176	367,199

Fire Data by Year: 1970-2014

YEAR	TOTAL FIRES	LIGHTNING CAUSED FIRES	T
1970	1,303	488	
1971	606	127	
1972	747	253	
1973	1,079	123	
1974*	1,103	238	
1975	953	337	
1976	740	117	
1977	983	591	
1978	790	339	
1979	1,263	446	
1980	613	243	
1981	930	482	
1982	910	368	
1983	595	176	
1984	879	406	
1985	1,112	355	
1986	865	295	
1987	1,057	348	
1988	689	84	
1989	1,088	399	
1990	1,203	583	
1991	1,080	430	
1992	959	368	
1993**	655	186	
1994	1,433	648	
1995	792	211	
1996	739	205	
1997	467	247	
1998	969	439	
1999	951	283	
2000***	827	435	
2001	953	507	
2002	1,157	465	
2003	1,027	416	
2004	1,314	819	
2005	807	217	
2006	1,298	542	
2007	940	284	
2008	1,078	471	
2009	1,382	872	
2010	758	302	
2011	552	107	
2012	1,019	487	
2013	687	396	
2014	1,176	552	

*Colville NF not included before1974

**Spokane IA not included before 1993

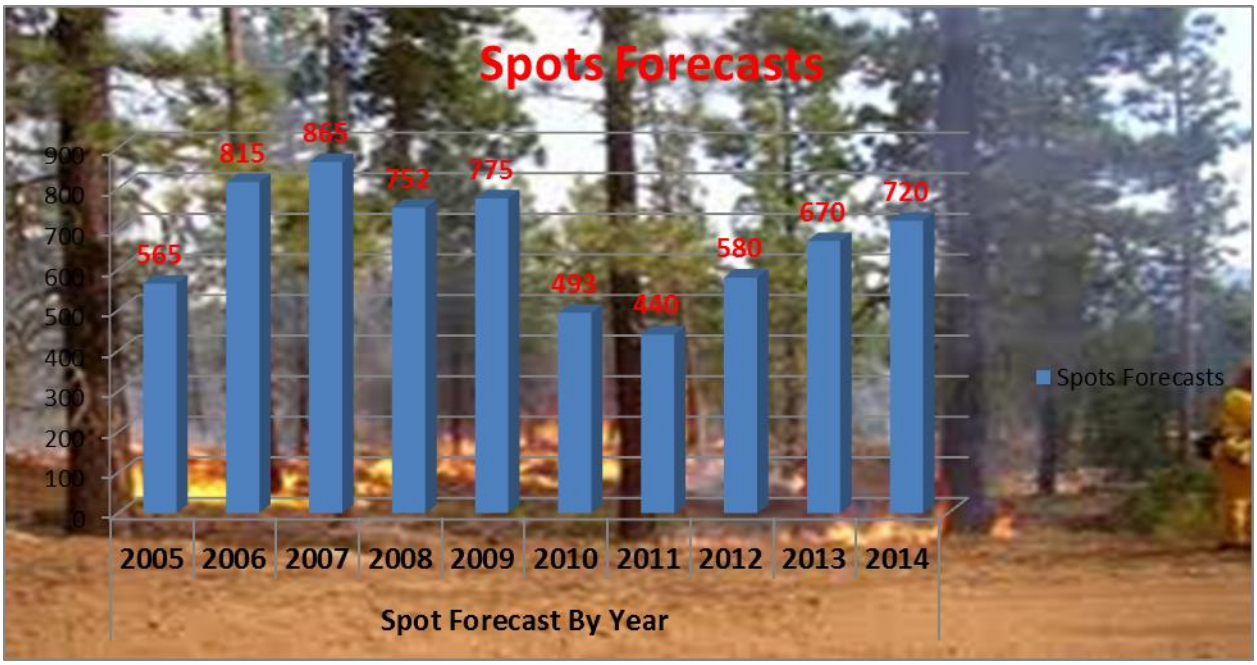
***Added Northern Idaho District in 2000

OPERATIONAL SUMMARY OF THE 2014 FIRE SEASON

Fire weather forecast support began April 6th with one forecast per day. Full service fire weather forecast support began April 28th and continued until October 20th. With the introduction of numerous gridded forecasts available via our web site the winter land management forecasts were not needed through the winter. NFDRS trend forecasts began June 6th. We had data download issues through May and into early June which may have skewed our NFDRS forecasts. And we also noticed that there were several RAWs sites with bad data through June.

This season, the WFO Spokane Fire Weather Program issued a total of 720 spot forecasts for management planned activities, wildfires, and wildfire use fires, search and rescue and hazmat. This spot forecast total is 50 more than in 2013 and is well above the ten year average.

The Internet spot forecast request system continues to offer land management agencies rapid response for spot forecast requests with an average turnaround time of 29 minutes. WFO Spokane again hosted a daily internet briefing through the peak fire season. This is an excellent opportunity for the weather forecasters to share their thoughts with the land managers and receive feedback of forecasts and fuel conditions.



IMET & Dates Dispatched	Incident Name and Location	Incident Team/FBAN
Todd Carter 7/10-11/2014 **Bob Tobin** 7/11-15/2014	Mills Canyon Fire Entiat WA	Rabe Type 2 Team Lewis Type 1
Bob Tobin 7/15-25/2014 **Megan Thimmesch (T)** 7/17-31/2014 **Jonathon Pelton** 7/24-8/06/2014 **John Quagliariello** 8/05-17/2014 **Ken Simosko (T)** 8/04-18/2014 **Kelly Hooper** 8/15-28/2014 **Angie Enyedi** 8/15-28/14	Chiwakum Complex/ Mills Canyon/Duncan/Kelly/Hansel	Ed Lewis PNW 3 Type 1 Team Mike Dueit Type 1 Red Team Chris Shulte PNW 2 Type 1 Team
Jeremy Wolf 7/16-30/2014 **Stephen Bieda (T)** 7/20-30/2014 **Bob Hoenisch east zone** 7/20-28/2014 **Mark Struthwolf South Zone** 7/21-8/1/2014 **Todd Barron** 7/29-8/13/2014	Carlton Fire Carlton Complex	Rabe Wa Type 2 team Allbee WA Type 2 Team Blume Type 1 Team Lund Type 1 Team Oplinger CA Type 1 Team
Bob Tobin 8/06-21/2014 **Zach Finch (T)** 8/14-19/2014 **Christian Cassell** 8/20-24/2014	Little Bridge Creek Upper Falls Carlton Complex	Leitch WA Type 2 Team Beth Lund Type 1 Team
Jon Fox 8/4-18/2013	July Complex Near Etna, CA	Oplinger CA Type 1 Team
Patrick Gilchrist 8/11-23/2014	Snag Canyon Fire South Cle Elum Fire	Johnson WA Type 2 Team Turman N Rockies Type 1
Julia Rutherford 8/10-25/2014	Devil's Elbow Fire	Nickey WA Type 2 Team

Training	Dates and Location	Instructor
Burner's meeting	1/29/2014 Coeur D'Alene ID	Livingston
COV Spring Meeting	3/18/2014 Colville WA	Livingston
S-290	3/22/2014 Tonasket WA	Canceled
S-290	4/1-2/2014 Entiat WA	Canceled
IMET Training	4/14-19/2013 Spokane WA	Carter/Fox/Tobin/Wolf
Region 6 Team meetings	4/14-15/2014 Yakima WA	Tobin/Fox
Idaho State Fire	5/1/2014 Moscow ID	Livingston
S-290	5/6-7/2014 Mead WA	Tobin
Boundary County LEPC	5/7/2014 Bonner's ferry ID	Wolf
RT-130	5/15/2014 Spokane WA	Carter/Fox/Tobin/Wolf
S-190	5/28/2014 Airway Heights WA	Fox
S-290	6/09-10/2014 Coeur D'Alene ID	Tobin
Seasonal Outlook	6/12/2014 Tonasket WA	Wolf
Spring Command Meeting	6/12/2014 Spokane WA	Tobin
S-290	10/20-21/2014 Cle Elum WA	Tobin