

FIRE WEATHER ANNUAL SUMMARY - 2015
FOR
EASTERN WASHINGTON
AND
NORTHERN IDAHO

By

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Winter 2014-2015 (Dec – Feb)

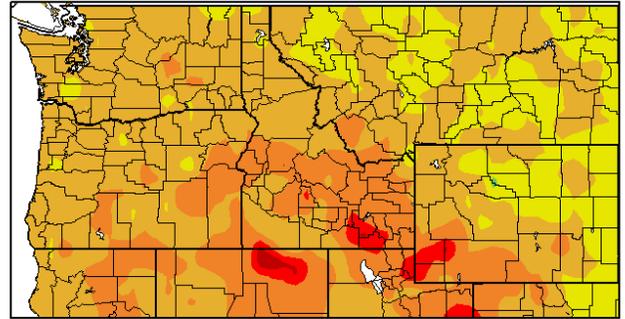
This was the second consecutive winter of ENSO-Neutral conditions which generally gives us little foresight as for what type of winter to expect. Needless to say we didn't anticipate what occurred this winter. Despite the name of the season the weather was a far cry from our typical winters due to very warm temperatures. Some asked if it was the warmest Inland Northwest ever. Although it was a close call, the answer was no.

December actually started off on the cold side in the wake of a cold Canadian air mass that moved into the area just after Thanksgiving. But this was short lived as warm moist air from the south nosed the cold air out and replaced it with record warm temperatures by the second week of the month. Highs in the 50s to middle 60s were common on the 10th with Pullman hitting 56°F and Lewiston soaring to 66°F on the 11th, both records for the day. This started a streak of mild weather that would last until the end of the month. The warm weather was also accompanied by fairly moist conditions. Widespread precipitation was observed on the 20th, with some rather impressive totals. The town of Chelan reported just over three-quarters of an inch of rain. Rain was the predominant precipitation type across most valley locations. The only exception was near the Cascade Crest. Both Twisp and Mazama reported heavy snow amounts with accumulations ranging from 7 to 9 inches. Finally by the 27th, a cold air mass moved into the Inland Northwest to bring the first significant snow of the season to many locations. The Spokane Airport received its first 1" of snow, the latest this has ever occurred (dating back to 1947).

The cold weather stuck around for the first few days of **January**. It turned out this was the coldest portion of the entire winter. Most mornings saw low temperatures in the single digits and teens with highs in the 20s. This cold stretch of winter weather came to an abrupt end by the 4th as a moist front moved over the region. This cold air scrubbing was accompanied by widespread moderate snow with widespread 3 to 6 inch amounts over many valley locations with around a foot of snow in Sandpoint. The harshest of the winter weather was reserved for the upper Wenatchee Valley. Not only did Leavenworth pick up 4 to 6 inches of snow, it was followed by nearly an inch of freezing rain resulting in downed trees and power lines. The next ten days were rather benign albeit somewhat cool. A pair of stronger storms moved through the region in the middle of the month, bringing 2 to 5" of snow to the northern Washington and Idaho valleys as well as the Cascades. The month concluded on a quiet and uneventful note.

February saw the culmination of what little winter we had. A strong atmospheric river brought widespread rain and mild temperatures to the region between the 4th and the 7th. This rain and warmth removed the low elevation snow from most locations as temperatures soared into the mid-50s and lower 60s. Numerous records were set on the 6th, including 64°F at Lacrosse and 66°F at Lewiston. The mild temperatures persisted until the middle of the month. A cooler air mass moved in on the 20th, allowing nighttime temperatures to finally drop below freezing again. Still, daytime temperatures generally warmed into the 40s and 50s.

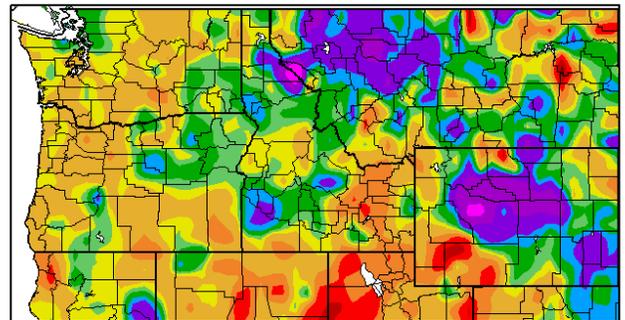
Departure from Normal Temperature (F)
12/1/2014 – 2/28/2015



Generated 3/11/2015 at HPRCC using provisional data.

Regional Climate Centers

Percent of Normal Precipitation (%)
12/1/2014 – 2/28/2015



Generated 3/11/2015 at HPRCC using provisional data.

Regional Climate Centers

Temperatures during the winter were substantially warmer than normal over the entire Pacific Northwest (orange & yellow shading, top image). **Precipitation** amounts were quite variable. Normal to wetter than normal over eastern 1/3 of WA and ID Panhandle and much drier than normal elsewhere (bottom image).

Spring 2015 (MAR – MAY)

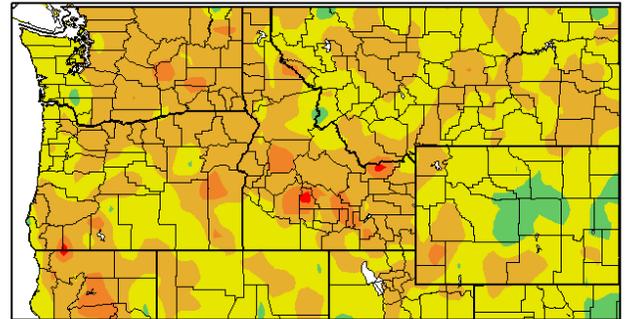
After undergoing a very mild winter, folks were wondering if they would have to “pay for it” in spring. As it turned out, that wouldn’t be the case. The mild weather which characterized the winter persisted throughout spring. Most of the flora responded by budding and blooming much sooner than normal, in some cases up to 6 weeks early. The meager mountain snowpack also disappeared much sooner than normal which resulted in an unusually early green-up.

March started out very quiet note. The first few days of the month saw some light valley snow but nothing truly noteworthy. Temperatures gradually ascended into the 60s and even lower 70s by the 10th. A very wet storm system moved through the area on the 15th. Bonners Ferry received 2.23” of rain while Fairchild AFB recorded 1.64” of rain. This led to some minor rock slides onto roads in Kootenai and Stevens counties. The second half of the month was more showery, with more wet days than dry ones. A strong Pacific front brought widespread rain and wind to the region on the 28th. Many locations across northeast Washington and north Idaho received rainfall amounts between 0.25-0.75”. Wind gusts to 45 mph were also reported at Spokane and Lewiston.

April is characteristically termed a weather transition month. Typically we see the weather transition from a strong cold fronts in March to a more convective or thunderstorm regime in May. April is often caught in the middle, and is typically drier than either March or May. It’s too late for much snow, but too early for much thunder. But this April was uncharacteristically tranquil and dry. Temperatures were close to normal, but precipitation was lacking. Less than half the normal amount fell during the month. There were really only two widespread wet days over the region. A cold front on the 6th delivered cool temperatures and even some valley snow including just over 2 inches in Coeur d’Alene. A stronger front on the 6th brought lowland snow to the area, including 2.1” south of Coeur d’Alene. A stronger front on the 13th and 14th provided up to 6” of snow to the mountains. The latter half of the month was remarkably quiet.

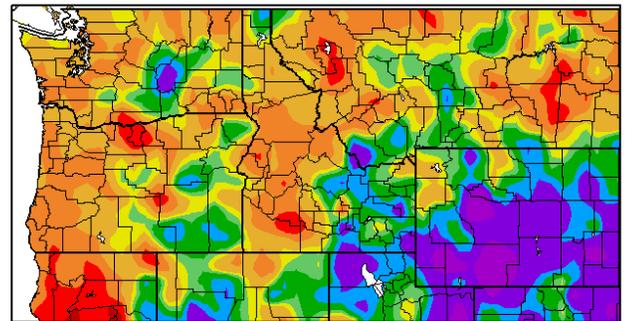
The placid weather conditions continued well into **May**. It wasn’t until the 12th and 13th that considerable rain finally fell over the region. Moscow received 1.35” inches of rain while Clarkston picked up 0.94”. Meanwhile numerous locations in and around Wenatchee saw an inch or more of rain. This event started a warmer and wetter pattern which persisted for the remainder of the month. Showers and thunderstorms were common some of which produced unusually heavy rains. A particularly wet cluster of thunderstorms on the 16th generated a flash flood between Oakesdale and Tekoa.

Departure from Normal Temperature (F)
3/1/2015 – 5/31/2015



Generated 6/11/2015 at HPRCC using provisional data. Regional Climate Centers

Percent of Normal Precipitation (%)
3/1/2015 – 5/31/2015



Generated 6/11/2015 at HPRCC using provisional data. Regional Climate Centers

Temperatures during the spring were generally warmer than normal over the entire Pacific Northwest (orange and yellow shading, top image). **Precipitation** amounts were generally near normal or drier than normal (bottom image).

Summer 2015 (Jun-Aug)

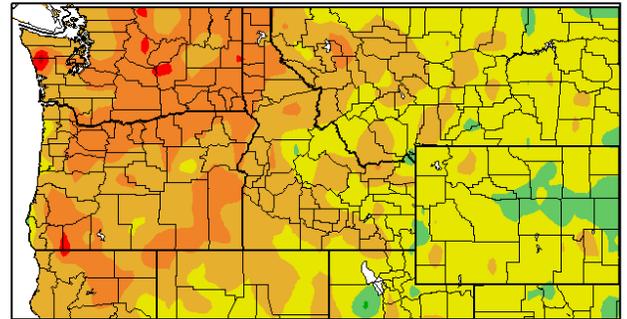
The summer of 2015 will go down as a brutally hot and dry summer. For many locations it was the hottest summer on record and a few locations also saw the least amount of rainfall. The combination of record heat, little if any rainfall, an unusually early green up, followed by early curing of fuels led to an extreme fire season.

The month of **June** started off quite wet and cool as a cold front brought extremely wet thunderstorms and subsequent flash flooding to portions of the Coeur d'Alene area and a small part of northeast Washington. The cool conditions persisted for a few days until an unusually strong area of high pressure developed, bringing record hot temperatures to the area. By the 8th, temperatures soared into the 90s and lower 100s. The heat was interrupted during the middle of the month but conditions were dry. The heat returned by the end of the month with widespread triple digit heat on the 27th and 28th. A few locations set their warmest ever June temperatures, including Spokane which saw 105°F (the 5th warmest day ever in Spokane) The heat and the parched conditions supported a wild fire in the Wenatchee area that burnt 28 homes on the 29th. When it was all over, the month of June 2015 was by far the hottest June ever! Was this an anomaly or would the heat continue?

The question was quickly answered as above-normal temperatures persisted for the first 10 days of **July**. Showers and thunderstorms brought a short end to the heat on the 11th, bringing much needed moisture to the area. Rain from these storms produced localized flash flooding on the Palouse. Another round of thunderstorms on the 20th brought lightning to the Canadian border area and sparked a few wild fires. Temperatures for the rest of the month were actually quite normal for this time of year. A cool and showery weather pattern came in for the 25th through the 27th. But the heat returned on the 30th with more triple-digit temperatures reported.

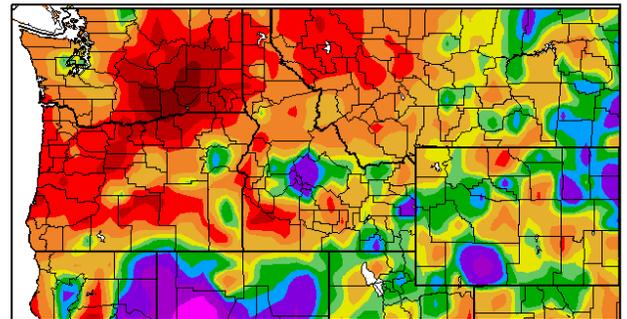
The hot weather continued into **August**. There were a few thunderstorms on the 3rd and 10th, but they weren't widespread and didn't bring much if any rain. More problematic was a strong low pressure system on the 13th and 14th. Initially this low sparked a number of thunderstorms and subsequent wildfires. As the low exited, strong winds developed on the 14th which fanned all the new wildfires. Tens of thousands of acres were burned and reports of blowing dust and ash were common. Following this event, temperatures were near normal for mid-August. But the smoke from the fires reduced visibilities and raised health concerns. A strong cold front on the 20th and 21st brought more wind and fire growth to the Okanogan Valley. A third strong storm moved through the region on the 29th, bringing the strongest winds of all. Blowing dust was again a problem however with a bit more moisture most of the fires remained in check. A secondary front moved in on the 30th delivering more widespread rains and much cooler temperatures. Thus, while the summer of 2015 got off to an early start, it may have also come to an early end.

Departure from Normal Temperature (F)
6/1/2015 - 8/31/2015



Generated 9/11/2015 at HPRCC using provisional data. Regional Climate Centers

Percent of Normal Precipitation (%)
6/1/2015 - 8/31/2015



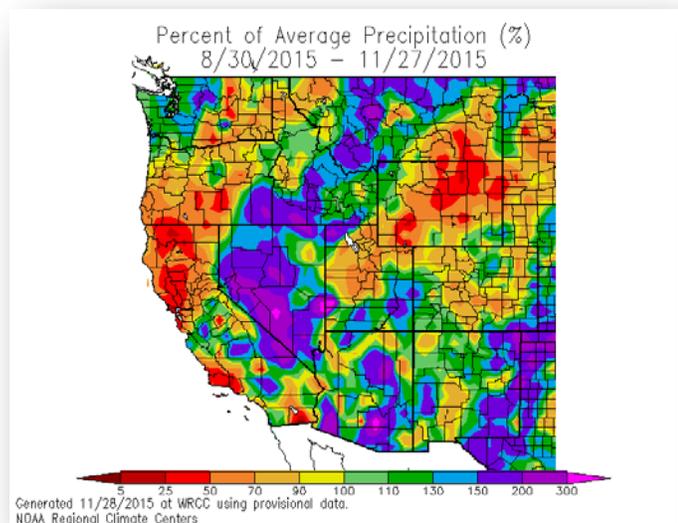
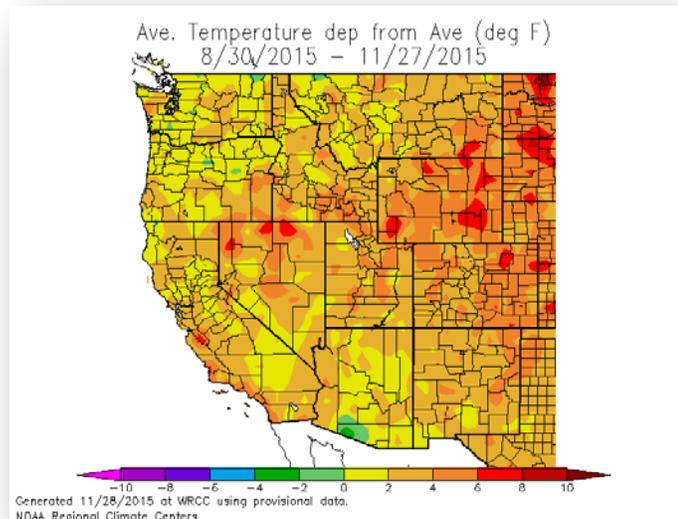
Generated 9/11/2015 at HPRCC using provisional data. Regional Climate Centers

For the summer, **Temperatures** were significantly warmer than normal. (orange and dark orange, top image). **Precipitation** amounts were well below normal (red shading, bottom image).

September continued to give welcome relief to the unrelenting heat from earlier in the summer. Temperatures were generally cooler than normal across the entire region, although most locations continued to see relatively dry weather. Temperatures at the beginning of the month were slightly cooler than normal, however by the 5th and 6th a fairly strong cold front delivered widespread light to moderate rains and more importantly much cooler temperatures. The front also produced some gusty winds near Wenatchee with a gust to 42 mph reported on the 5th. A significant warm-up developed by the 10th and persisted for a few days with highs in the 80s to lower 90s. Then another strong cold front tracked through the region on the 13th which plummeted high temperatures nearly 30° from their peak. The front was not a big rain producer. A slow warming ensued between the 15th and 20th after which another cold front moved through producing a few reports of 40 mph winds. The remainder of the month saw roller coaster temperatures however little if any rain fell. Generally speaking the cooler temperatures and shorter days were sufficient to put a slow end to the area wildfires despite the lack of appreciable rainfall.

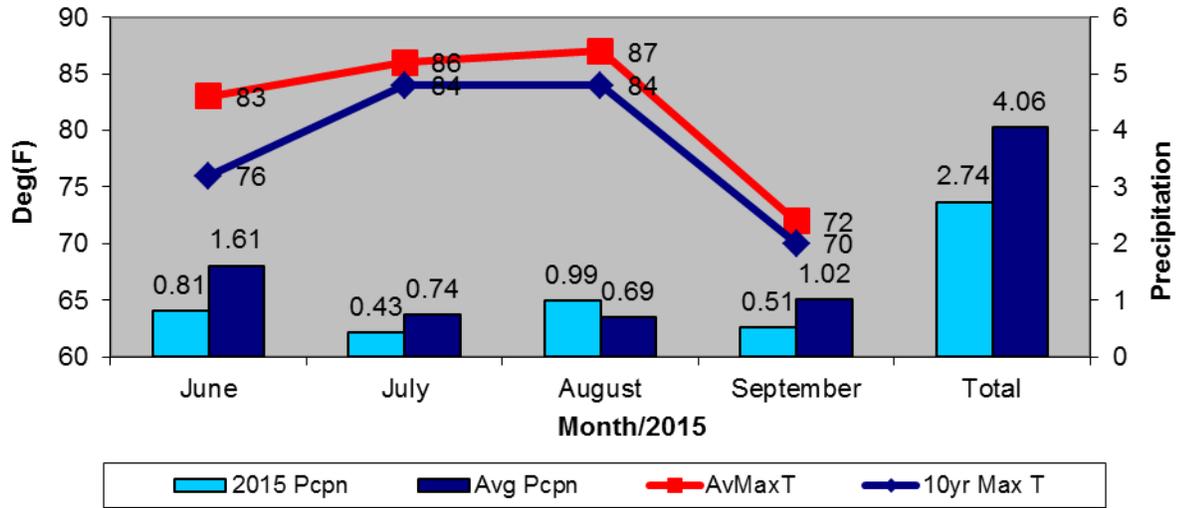
While September was generally characterized by cool conditions, the tables completely flipped in **October**. Every day of the month featured warmer than normal temperatures. The sum of all these warm days resulted in the warmest October on record in Wenatchee and the second warmest in Spokane. Not only was it warm, it was also dry. The first 17 days of the month featured dry and warm weather, with the only noteworthy feature consisting of a cold front on the 10th. This front produced wind gusts around 45 mph in both Spokane and Wenatchee. It also produced some light rain near the Cascades and the northern mountains. The last seven days of the month finally delivered some much needed precipitation to the region. Near the Cascades rainfall amounts ranged from 3 to 7 inches with 1 to 2 inches falling over much of the Idaho Panhandle. The strongest event of the month was a cold front that moved through between the 30th and 31st. Wind gusts of 40-55 mph were reported with some blowing dust over the Columbia Basin.

November saw warmer than normal conditions as the first three weeks of the month saw relatively persistent and mild westerly flow. This pattern supported 3 windy days due to the passage of strong cold fronts. The initial front moved through on the 1st with gusts to 45 mph with similar speeds encountered from the 2nd front on the 13th. The final front of the month was the most memorable. This front roared through the area on the 17th and produced some of the strongest wind reports the Inland Northwest has ever seen from a non-thunderstorm event. Wind gusts in excess of 60 mph were reported at Moses Lake and Pullman with a 71 mph gust in Spokane. This resulted in widespread blowing dust and numerous downed trees and power lines over northeast Washington and north Idaho. From a precipitation standpoint, the westerly flow kept light rainfall over much of eastern Washington and north Idaho. Meanwhile heavy precipitation was kept near the Cascades and over the northern mountains. The last week of the month saw cold and dry conditions in the wake of a dry polar front cold front.

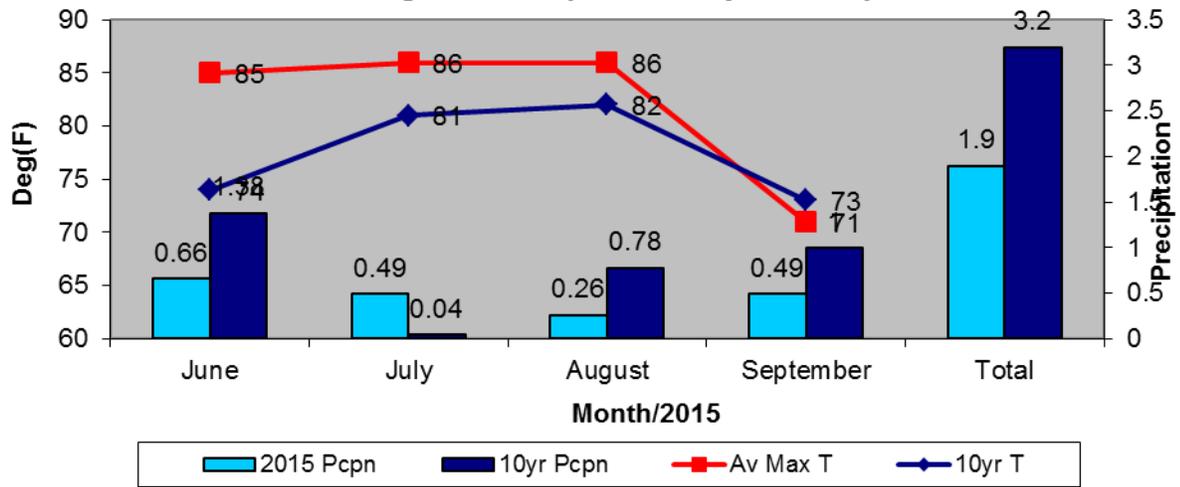


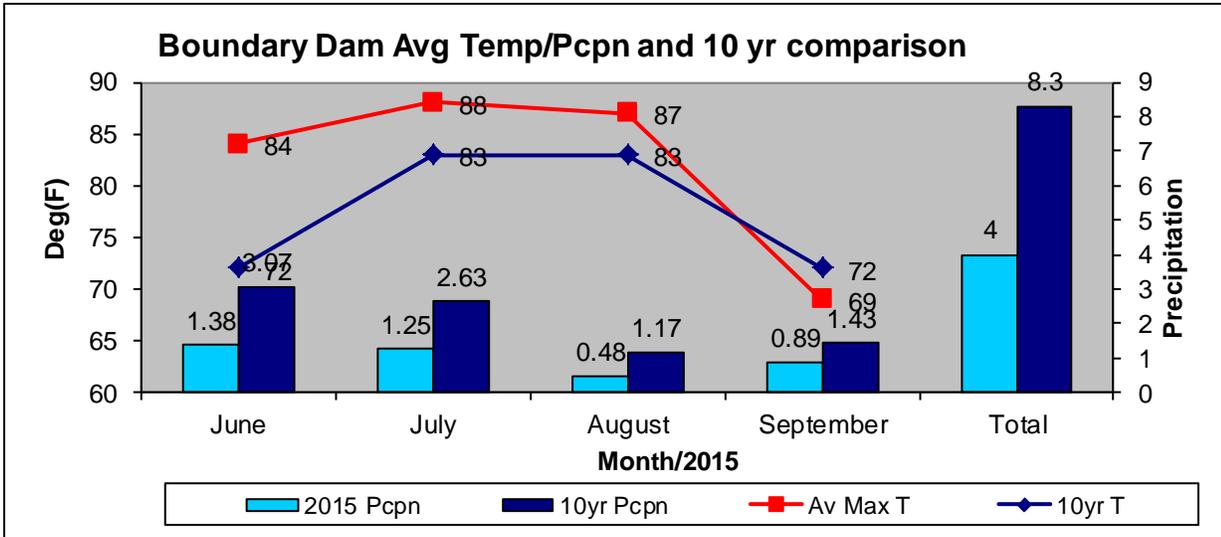
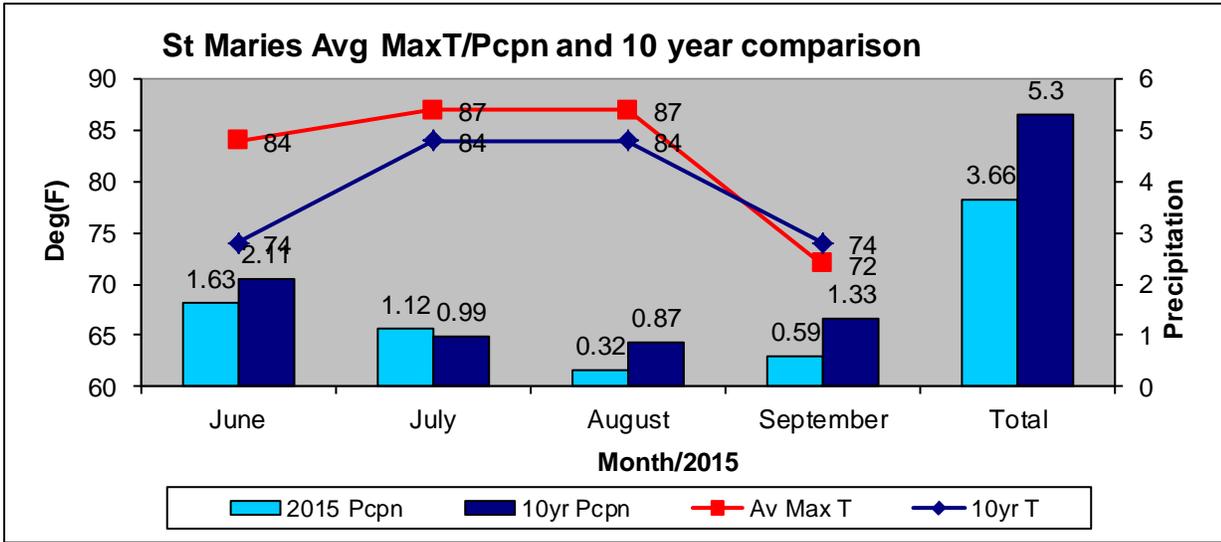
Temperatures were generally warmer than normal for the autumn (yellow and orange shading, top image). **Precipitation** amounts were generally drier than normal except for locations near the Cascade Crest (bottom image oranges and yellows are drier than normal).

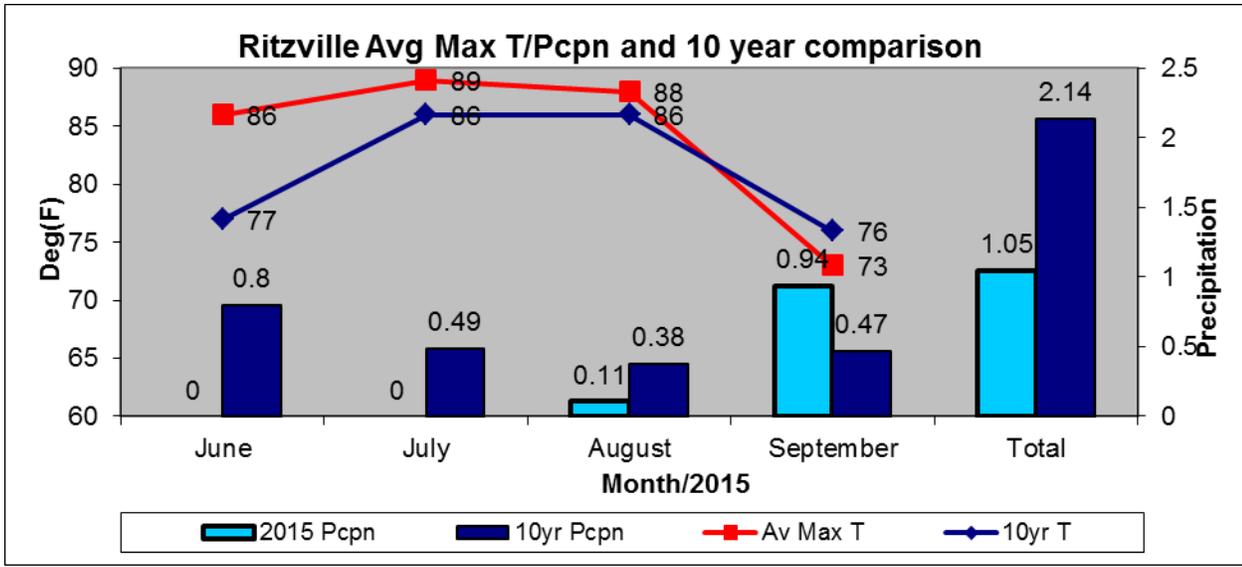
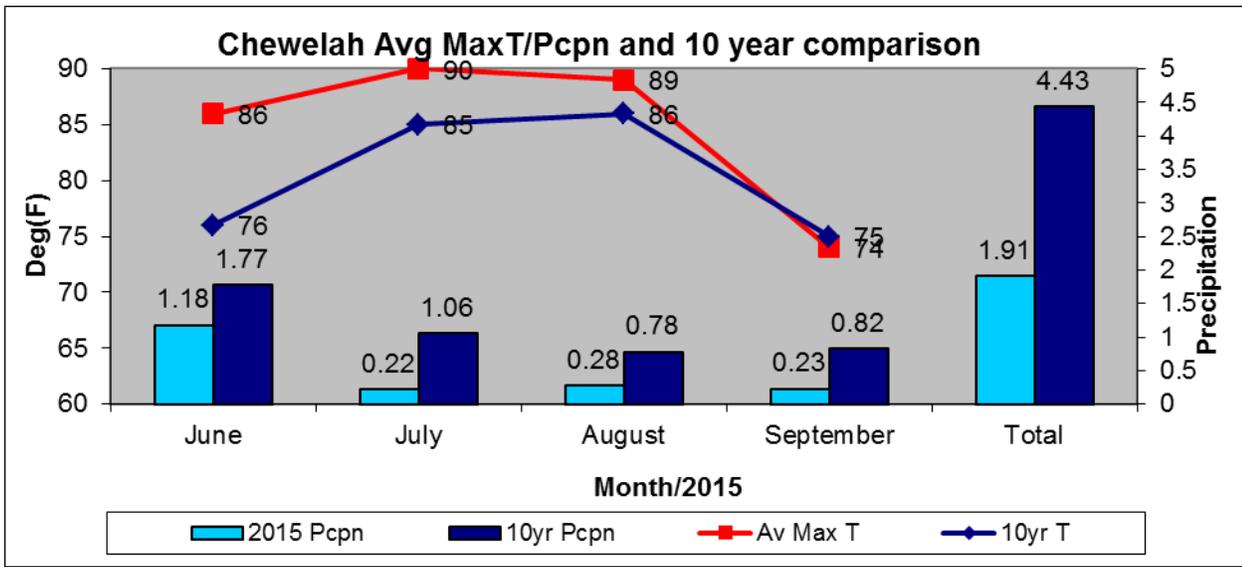
Bonner's Ferry Avg MaxT/Pcpn and 10 year comparison

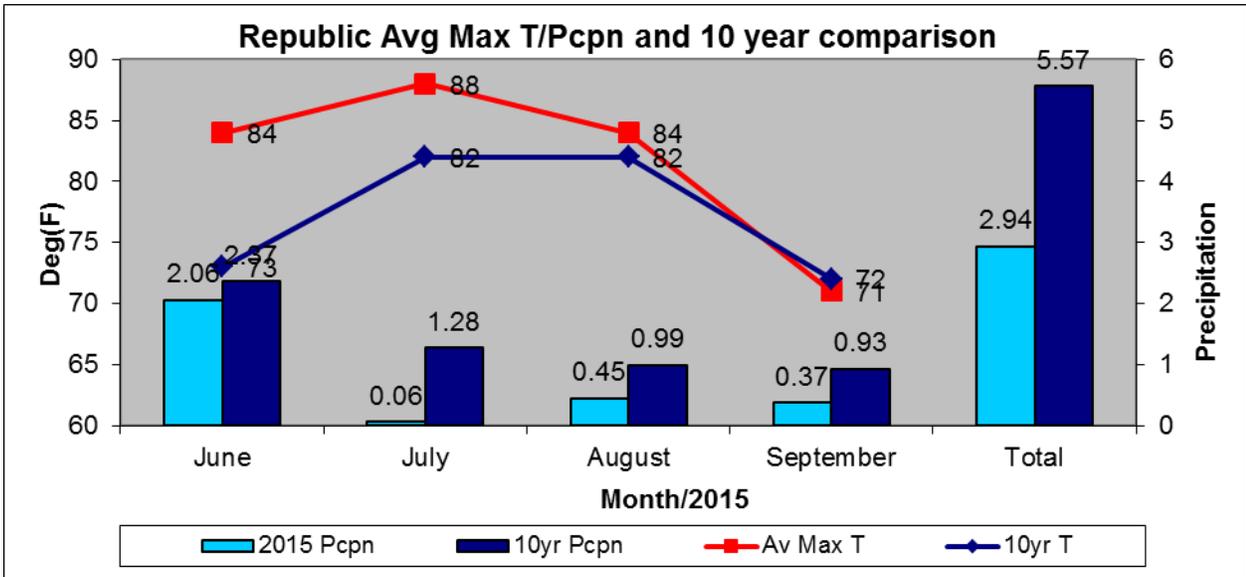
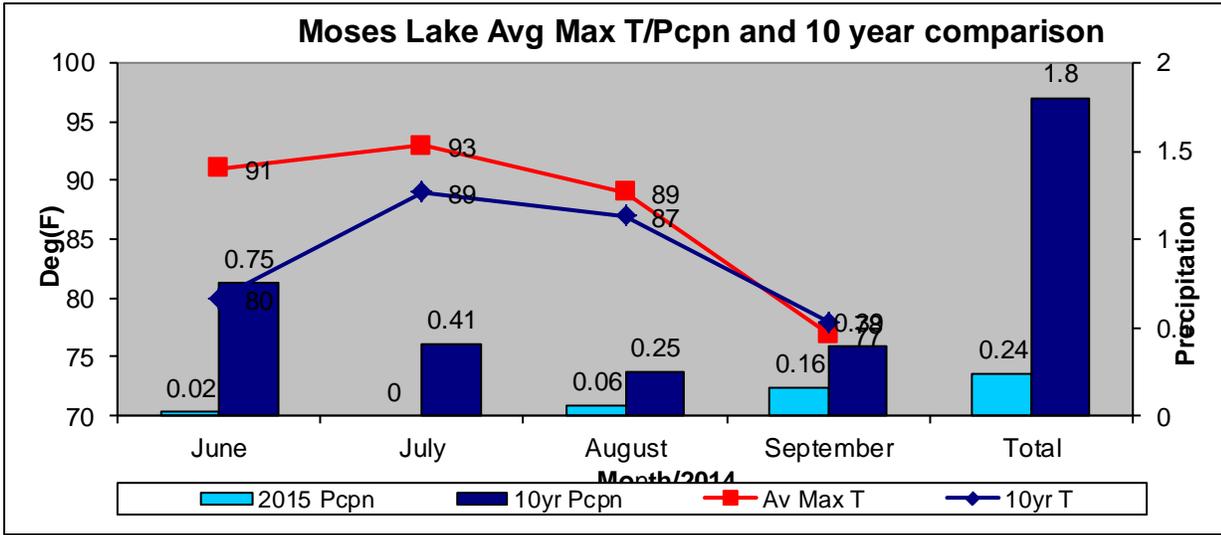


Coeur D'A'ene Avg Max T/Pcpn and 10 year comparison

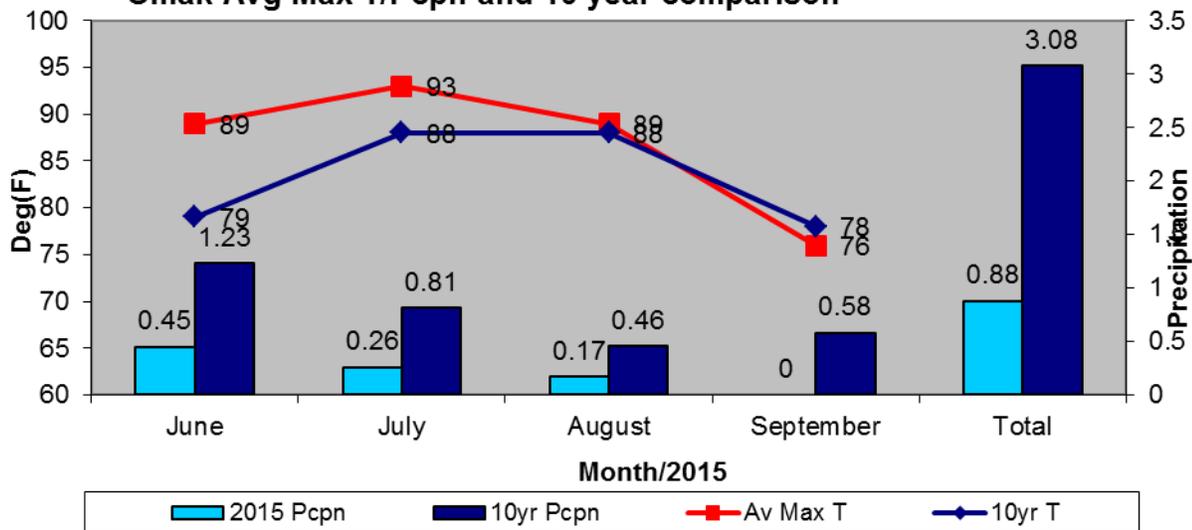




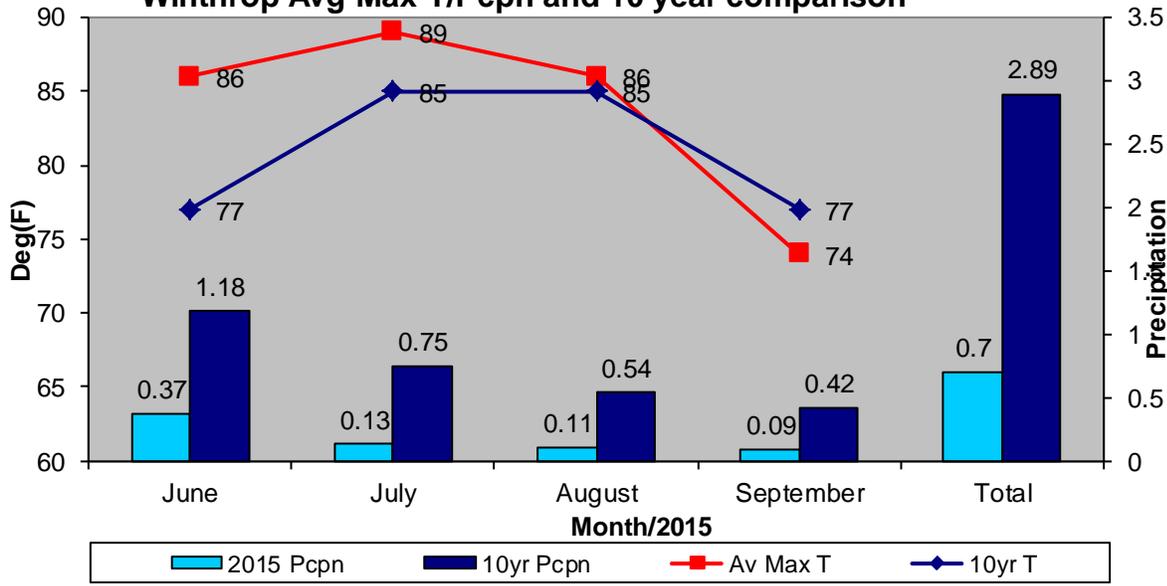


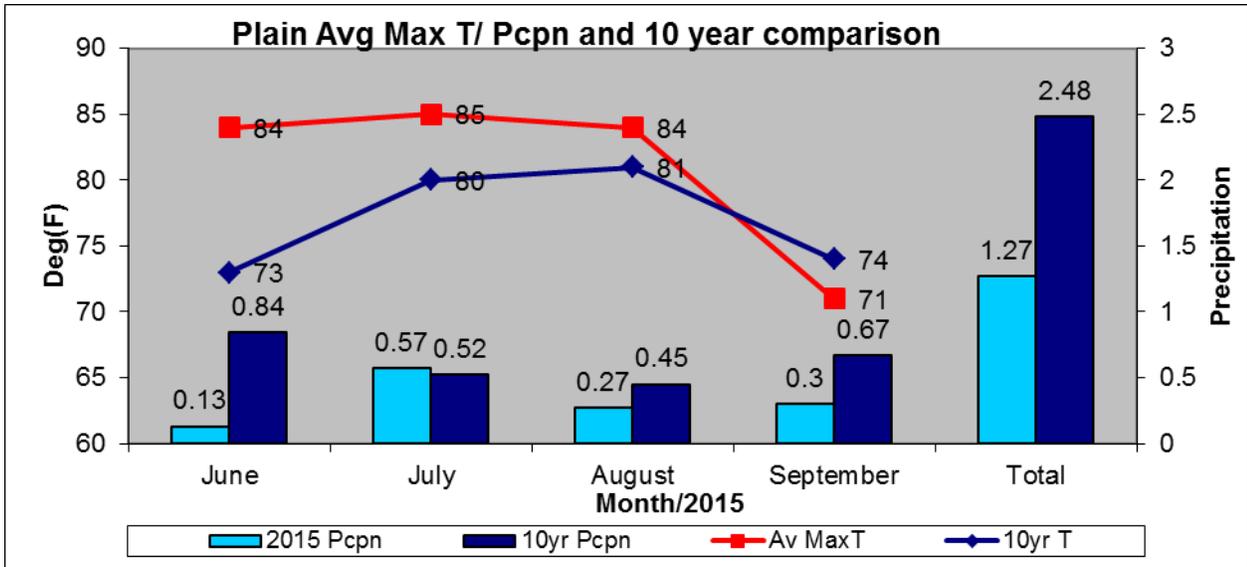
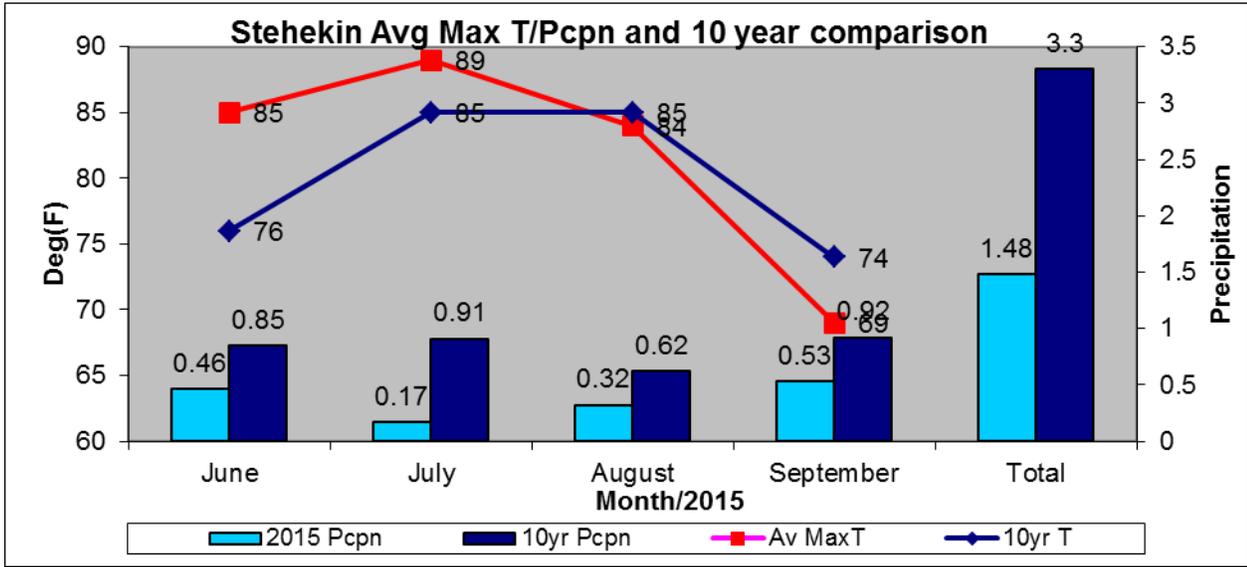


Omak Avg Max T/Pcpn and 10 year comparison



Winthrop Avg Max T/Pcpn and 10 year comparison





SPOKANE 2015 RED FLAG WARNINGS/WATCHES PROBLEMS

Date	Zones	Reason	Verification	Lead Time (hours)
Jun 8	676	Wind/Low RH	Yes, Preceded by watch	24
Jun 9-10	677	Wind/Low RH	Missed warning 6/9 Yes 6/10 Not Preceded by a watch	0 24
Jun 11	673, 674	Wind/Low RH	Yes 673 Missed Warning Not Preceded by a watch	24 0
Jun 12	674, 684	Wind/Low RH	Yes All Not Preceded by watch	30
Jun 15	676	Wind/Low RH	Watch cancelled	0
Jun 18	676,677	Wind/Low RH	No RH too high	0
Jun 19	677	Wind/Low RH	Yes Not Preceded by watch	14
Jun 28	673,676,677,680,682,684,685, 687	Lightning	Yes 673, 676,677,680,682,685 No 684,687 Preceded by a watch	24
Jun 29	686	Lightning	Yes preceded by a Watch	12
Jun 30	101, 676	Lightning 101 Wind/low RH 676	Missed Warning Yes	0 8 Good Warning
Jul 3	676, 677	Wind/Low RH	Yes, Preceded by a Watch	24
Jul 4	673, 676, 677, 684, 686	Wind/low RH	685 cancelled Yes 673, 677, 684 No 687 Missed Warning 676 preceded by watches	24
Jul 7	682, 685, 686, 687, 101	Lightning	685 cancelled Yes 686,687,101 682 Missed Warning Preceded by Watch	12
Jul 10	673, 674, 84,685,686,687,101	Lightning	684 cancelled 673 Missed Warning Yes 674,685,686,687,101	8
Jul 15	677	Wind/ Low RH	Yes, Preceded by watch	12
Jul 17	673,684	Wind/Low RH	Yes Preceded by Watch	24

Jul 20	673, 674,676,677	Wind/Low RH	Yes to all Preceded by watch	24
Jul 31	673,676, 677	Wind/Low RH/Stability	Watch Cancelled	24
Aug 3	673,674,676,677	Wind/Low RH	Yes to all Preceded by Watch	12
Aug 10	676,680,674,686,687,101	Lightning	Yes to 676,680,674,101,686 687 Missed event Preceded by Watch for 676,680,674,101 only	10
Aug 12	All Fire Zones	Lightning Winds/RH for 673,674,676,677	Yes to all No Zone 680 No Watch	24
Aug 14	All Fire Zones	Lightning Winds/RH	Yes to all No zone 680	24 Not enough lightning for zone 680
Aug 19- 22	All Fire Zones	Winds/RH/ Stability/Thermal Trough	Yes to all	24
Aug 23	677,680,682,684,685,686,687,101	Hot/Unstable	Yes to all Watch for 101 cancelled	24
Aug 24	674,101	Lightning	Warning cancelled No to both	24
Aug 27	673,674,677,684,686,687	Wind/Low RH	Yes 673, 674,677,684 No 686,687 Not enough Wind No Watch in place	24
Aug 29	673,674,677,684,686,687,101	Wind/Low RH	Yes 674,677,684,686,687 No 673,101	32
Sept 12- 13	676	Wind/Low RH	Yes Watch in place	24
Sept 13	673,674,677	Wind/Low RH	Yes to all Watch in Place	24
Total Warnings: 105 Correct Warnings: 91		Dry Lightning: 35 Incorrect Warnings: 14	Wind/low RH/Haines/Instability: 70 Missed Warnings: 7	

Probability of Detection:	Dry Lightning 0.88	Wind/low RH/Haines 0.95	All 0.93
False Alarm Rate:	Dry Lightning 0.17	Wind/low RH/Haines 0.11	All 0.13
Critical Success Index:	Dry Lightning 0.74	Wind/low RH/Haines 0.85	All 0.81

ALL WARNINGS

All RFW by Month	JUN	JUL	AUG	SEP	OCT	Season
Warnings	18	21	62	4	0	105
Warned Events	13	19	55	4	0	91
Unverified Warnings	5	2	7	0	0	14
Missed Events	3	3	1	0	0	7
Total Events	16	22	56	4	0	98
POD	0.81	0.86	0.98	1.00	0.00	0.93
FAR	0.28	0.10	0.11	0.00	0.00	0.13
CSI	0.62	0.79	0.87	1.00	0.00	0.81

WARNINGS FOR DRY LIGHTNING

RFW for Dry Lightning	673	674	676	677	680	682	684	685	686	687	101	All Zones
Warnings	2	4	3	2	3	2	2	3	5	4	5	35
Warned Events	2	3	3	2	2	2	1	3	5	2	4	29
Unverified Warnings	0	1	0	0	1	0	1	0	0	2	1	6
Missed Events	1	0	0	0	0	1	0	0	0	1	1	4
Total Events	3	3	3	2	2	3	1	3	5	3	5	33
Lead Time (hours)	16	13	19	24	17	16	24	19	12	11	12	14
POD	0.67	1.00	1.00	1.00	1.00	0.67	1.00	1.00	1.00	0.67	0.80	0.88
FAR	0.00	0.25	0.00	0.00	0.33	0.00	0.50	0.00	0.00	0.50	0.20	0.17
CSI	0.67	0.75	1.00	1.00	0.67	0.67	0.50	1.00	1.00	0.40	0.67	0.85

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	10	8	9	13	2	2	8	3	6	6	3	70
Warned Events	9	8	8	12	2	2	7	3	5	4	2	62
Unverified Warnings	1	0	1	1	0	0	1	0	1	2	1	8
Missed Events	0	1	1	1	0	0	0	0	0	0	0	3
Total Events	9	9	9	13	2	2	7	3	5	4	0	24
Lead Time (hours)	16	18	20	14	0	7	7	7	0	0	2	65
POD	1.00	0.890	0.89	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95
FAR	0.10	0.00	0.11	0.08	0.00	0.00	0.13	0.00	0.17	0.33	0.33	0.11
CSI	0.90	0.89	0.80	0.86	1.00	1.00	0.88	1.00	0.83	0.67	0.67	0.85

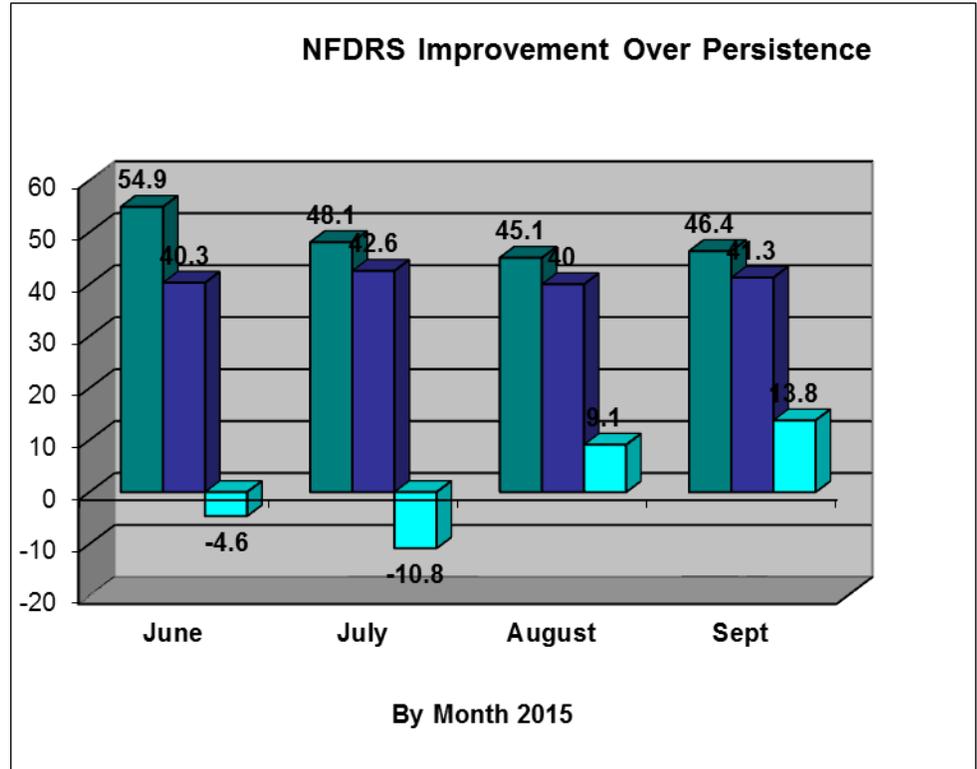
ALL WARNINGS BY ZONE

All Red Flag Warnings	673	674	676	677	680	682	684	685	686	687	101	All Zones
Warnings	12	12	12	15	5	4	10	6	11	10	8	105
Verified Warnings	11	11	11	14	4	4	8	6	10	6	6	91
Unverified Warnings	1	1	1	1	1	0	2	0	1	4	2	15
Missed Events	1	1	1	1	0	1	0	0	0	1	1	6
Total Events	12	12	12	15	4	5	8	6	10	7	7	98
Lead Time (hours)	22	1	18	19	21	19	27	20	16	18	14	17
POD	0.92	0.92	0.92	0.93	1.00	0.80	1.00	1.00	1.00	0.86	0.86	0.93
FAR	0.08	0.08	0.08	0.07	0.20	0.00	0.20	0.00	0.09	0.40	0.25	0.13
CSI	0.85	0.85	0.85	0.99	0.80	0.80	0.80	1.00	0.910	0.550	0.67	0.81

NFDRS VERIFICATION BY MONTH

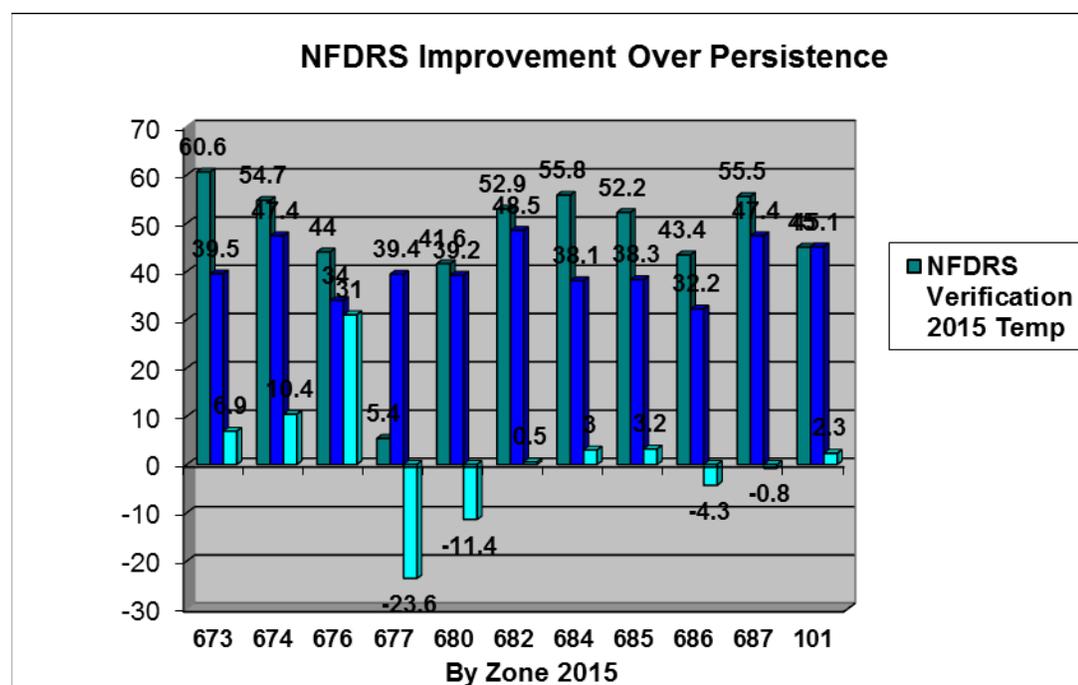
NFDRS forecast verification was accomplished by comparing the average forecast values derived from the 2 PM zone trend forecasts, with the 2 PM NFDRS Fire Weather Zone observation averages for the following day.

Temperature and Relative Humidity show very good improvement over persistence. Wind forecasts for 2015 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 made significant changes in how the NFDRS forecast is generated, from zone trend forecast to individual site forecasts. In addition we were having problems with getting NFDRS data in to our system through a large portion of May and June and these numbers are most likely skewed



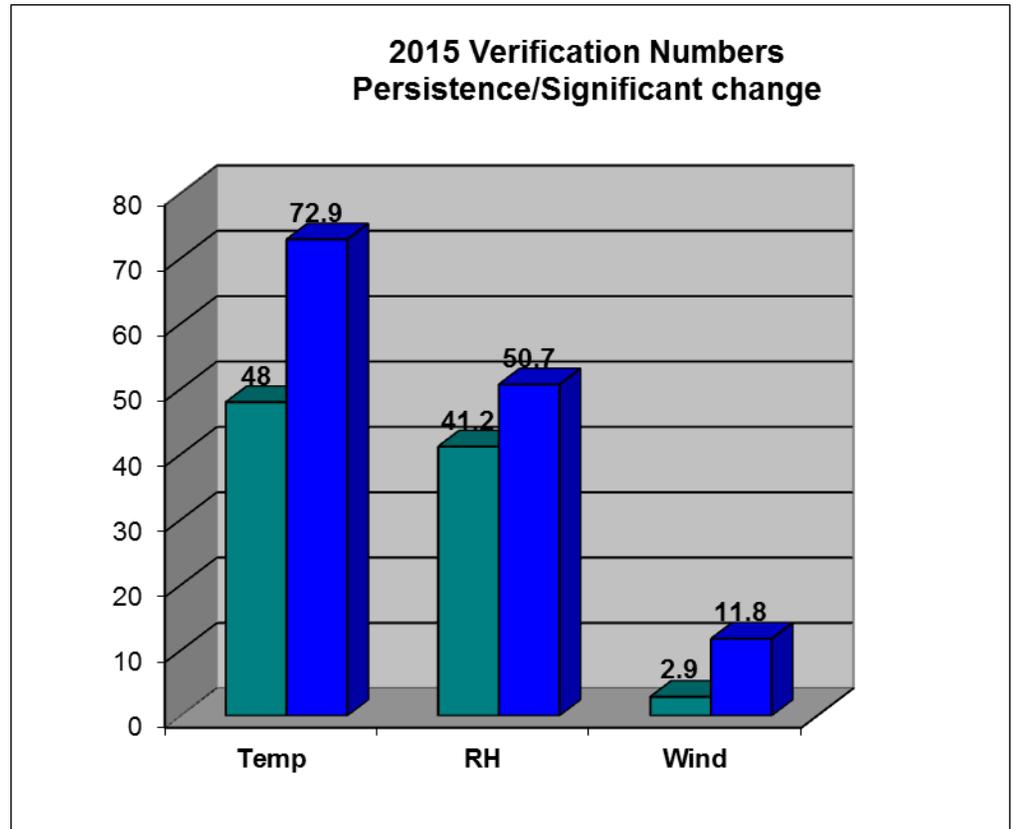
NFDRS VERIFICATION VS. PERSISTENCE

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. After converting to site forecasts we found some major data issues for zone 677 and zone 686. The wind forecasts improved by a large margin for August/September for most of the mountain zones.



NFDRS VERIFICATION VS. PERSISTENCE AND IN BIG CHANGE EVENTS

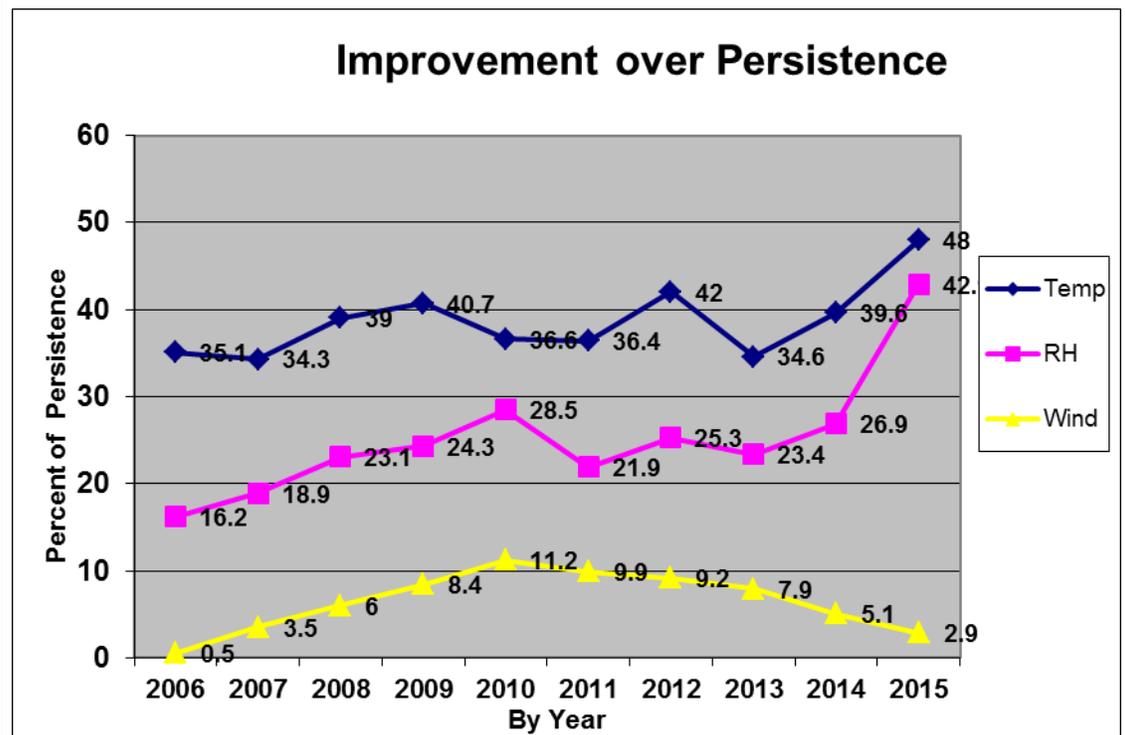
This graphic shows the improvement over persistence from day to day compared to improvement when there are big changes. A big change equals a temperature change 10 degrees, relative humidity 5% and winds by 5 mph.



IMPROVEMENTS VS. PERSISTENCE OVER YEARS

While forecast improvement over persistence fluctuated from year to year note that the trend is upward since 2011 for Temperature and Relative Humidity and up by quite a bit from 2013 through 2015.

Improvement over persistence has been in a steady decline since 2011, but still better than persistence for all years. We feel we have a plan to fix how we forecast the winds.



2015 Fire Season Fire Activity Summary

The total number of fires in 2015 was above average and the number of acres burned of 913,430 shattered the record dating back to 1970. Below is a list of all fires of large fires by agency.

Fire	Acres Burned	Start Date	Agency
Thunder Creek	103	5/30	NCP
Egypt Loop 2	210	6/15	NES
Fish Lake	146	6/17	NES
Sleepy Hollow	2,950	6/28	WFS
Road 6	2,424	6/29	SES
Wolverine	65,587	6/29	OWF
Monument	2,100	6/30	WFS
Twenty-One Mile Grade	2,250	7/1	COA
Newby Lake	5,065	7/2	OWF
Upper Goose Lake	840	7/2	MCR
231	970	7/3	NES
Granite	203	7/3	IPNF
Williams	332	7/3	NES
Willow Springs	485	7/5	SPD
Beezley Hill	1,796	7/5	SPD
Cape Horn	1,326	7/5	IPNF
Little Spokane	168	7/7	NES
Douglas County Complex	22,337	7/10	SPD
Blankenship	212	7/13	OWF
Outlaw Draw	2,300	7/15	SPD
I-90	900	7/20	WFS
North Boulder 2	233	7/20	COF
Parker Ridge	6,675	7/29	IPNF
Long Lake	432	7/31	NES
I-90 Sprague	1,500	8/1	NES
Seven Springs	542	8/10	SPD
Rutter Canyon	155	8/11	NES
Marble Creek	2,827	8/11	IPNF

Kettle Complex	76,512	8/11	COF
Tatie Peak	122	8/12	OWF
North Grizzly	3,889	8/12	IPNF
Lower Flat	7,014	8/12	IPNF
North Star	218,138	8/13	COA
9 Mile	4,704	8/13	NES
Tunk Block	165,947	8/14	NES
Okanogan Complex	133,707	8/14	NES
Chelan Complex	88,985	8/14	SES
Carpenter Road	63,972	8/14	SPA
Gold Hill	557	8/14	NES
First Creek	7,490	8/14	OWF
Marble Valley	3,079	8/14	NES
Chicadee	5,393	8/14	IPNF
Basin Creek	423	8/14	IPNF
Ruby Point	301	8/14	IPNF
Whitetail	1,328	8/14	IPNF
South Bobtail	6,342	8/14	IPNF
Scotchman Peak	2,057	8/14	IPNF
Crater	399	8/15	IPNF
Salt Pork	188	8/15	IPNF
Kanisku Complex	26,068	8/18	COF
Twisp River	11,222	8/19	NES
Pretty	273	8/20	IPNF
Monument	618	8/21	IPNF
White Rock Creek	882	8/22	IPNF
Grassy Mountain	835	8/22	IPNF
Breezy	1,196	8/25	BLM
Birthday	158	8/27	IPNF
Meeks Table	1,183	9/12	OWF

Fire Data of Customer Agencies – 2015

Agency	Lightning Caused Fires	Acres Burned	Human Caused Fires	Acres Burned	Total Fires	Total Acres Burned
SE DNR	37	49,115	107	12,326	144	61,441
NE DNR	131	12,442	379	240,137	510	252,579
Colville BIA	21	97	53	221,118	74	221,215
Okanogan- Wenatchee NF	76	168,629	50	6,150	126	174,779
Colville NF	88	93,249	16	78	104	93,327
Idaho Panhandle USFS/IDL	186	43,107	135	2,035	321	45,142
FWS	2	8	1	0	3	9
BLM	20	27,722	30	15,301	50	43,023
Spokane BIA	3	1,274	37	20,642	40	21,916
Total	564	395,643	808	517,787	1,372	913,430

Fire Data by Year: 1970-2015

YEAR	TOTAL FIRES	LIGHTNING CAUSED FIRES	TOTAL ACRES BURNED
1970	1,303	488	215,037
1971	606	127	3,902
1972	747	253	2,111
1973	1,079	123	11,223
1974*	1,103	238	9,466
1975	953	337	4,807
1976	740	117	32,272
1977	983	591	16,342
1978	790	339	2,361
1979	1,263	446	17,090
1980	613	243	3,465
1981	930	482	16,894
1982	910	368	5,776
1983	595	176	2,453
1984	879	406	5,757
1985	1,112	355	71,488
1986	865	295	9,727
1987	1,057	348	18,214
1988	689	84	89,140
1989	1,088	399	14,259
1990	1,203	583	15,324
1991	1,080	430	47,928
1992	959	368	33,819
1993**	655	186	3,295
1994	1,433	648	260,245
1995	792	211	4,002
1996	739	205	35,375
1997	467	247	5,283
1998	969	439	50,943
1999	951	283	13,128
2000***	827	435	259,024
2001	953	507	182,468
2002	1,157	465	70,814
2003	1,027	416	147,130
2004	1,314	819	86,705
2005	807	217	34,023
2006	1,298	542	321,561
2007	940	284	88,598
2008	1,078	471	77,769
2009	1,382	872	29,862
2010	758	302	25,553
2011	552	107	13,137
2012	1,019	487	238,645
2013	687	396	103,496
2014	1,176	552	367,199
2015	1,372	564	913,430

*Colville NF not included before 1974

**Spokane IA not included before 1993

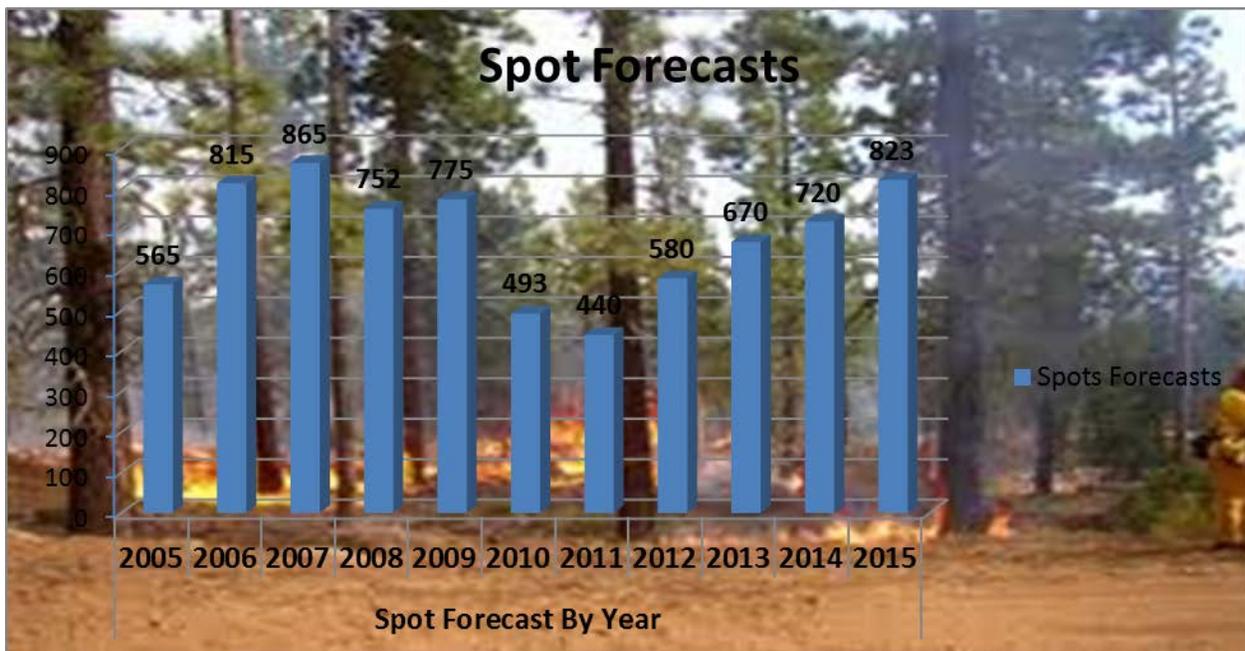
***Added Northern Idaho District in 2000

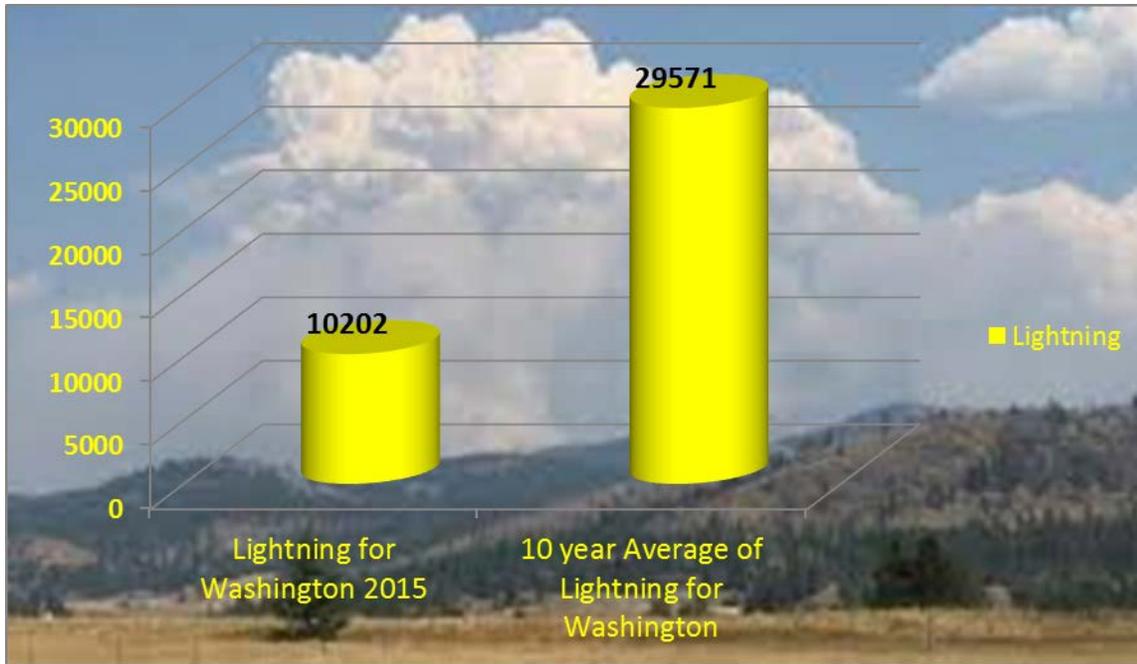
OPERATIONAL SUMMARY OF THE 2015 FIRE SEASON

Fire weather forecast support began March 23rd with one forecast per day. Full service fire weather forecast support began April 27th and continued until October 31st. 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 April 27th, which is 6 weeks ahead of normal and that was chiefly to how dry it was in the spring of 2015. 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 July. NWS Spokane also changed from doing a zone trend NFDRS forecast to an individual RAWs site NFDRS forecast.

This season, the WFO Spokane Fire Weather Program issued a total of 823 spot forecasts for management planned activities, wildfires, and wildfire use fires, search and rescue and hazmat. This spot forecast total is 103 more than in 2014 and is about a 100 spots above the ten year average.

The Internet spot forecast request system continues to offer land management agencies rapid turn around times for spot forecast requests with an average time of 33 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
Wolf 7/3-9/2015	21 Mile Grade Fire	WAIMT-5
Carter 7/4-12/2015	231 Fire	WAIMT-1 Ciraulo Type 2
Haner 7/6-21/2015	Newby Lake Fire	WAIMT-2 Rabe Type 2 PNW 3 Lewis Type 1
Carter 7/13-17/2015	Cape Horn Fire	NRIMT-2 Fry Type 2
Tobin 7/24-8/1/2015	North Boulder 2 Fire	WAIMT-2 Rabe Type 2
Julia Ruthford 8/3-22/2015 Andy Gorelow(T) 8/4-22/2015 Christian Cassell 8/22-9/7/2015	Wolverine-Chelan Complex (Reach,Cagle,Antoine,Black Canyon, McFarland, First Creek,	PNW2 Schulte Type 1 SW1 Templin Type1 WAIMT-2 Rabe Type 2

Dan Borsum 9/6-19/2015	Blankenship, Goode)	
Fox 8/4-16/2015	Baldy Fire	WAIMT-4 Gales Type 2
Wolf 8/12-8/30/2015 Mark Struthwolf 8/30-9/9/2015 Shad Keene (T) 8/30-9/9/2015 Jon Bonk 9/8-17/205	Cougar Creek Fire	WAIMT-5 Leitch Type 2 SoCal-3 Type 2 NVIMT-3 Wyatt Type 2
Tobin 8/15-9/2/2015 Shawn Jacobs (T) 8/19-30/2015 Dan Byrd 9/1-15/2015 Rick Davis 9/14-27/2015	Stickpin - Kettle Complex	WAIMT-1 Ciraulo Type 2 PNW2 Schulte Type 1 WAIMT-1 Ciraulo Type 2 ORIMT-1 Sheldon Type 2
Darren Clabo 8/16-8/31-2015 Shawn Jacobs 8/30-9/5/2015 Makoto Moore 9/4-16/2015	Carpenter Rd Fire	RMIM Blue Type 2 ORIMT-3 Type 2
Kelly Hooper 8/16-9/6/2015 Todd Carter 8/20-9/10/2015 Mike Proud (T) 8/31-9/7/2015 Bob Tobin 9/7-19/2015 Jon Fox 9/9-20/2015	Five Mile Fire - Cascade Complex - Okanogan Complex-Okanogan Complex Chelan Branch	WIMT-2 Rabe Type 2 NRIMT-1 // Type 1 CIIMT-5 Minton Type 1 WAIMT-3 Allbee Type 2
Ken Simosko 8/17-30/2015 Chuck Redman 8/29-9/8/2015 Gorelow (T) 9/1-15/2015 Bob Nester 9/12-23/2015	North Star – Tunk Mtn Merged with the Okanogan Complex	SWIMT-5 Type 2 PNW3 Lewis Type 1
Van Spreybock 8/19-28/2015 Joe Harris 8/28-9/15/2015	Kanisksu Complex	Alaska Black Team Kurth Type 2
Carpenter 8/21	Clark Fork Complex	ORIMT -2 Fillis Type 2
No IMET Requested	Grizzly Complex	NRIMT-2 Fry Type 2
Clapp 8/24-9/1/2015	Graves Mtn-Colville complex	
Jim Dudley 9/2-14/2015	Avery Complex	GBIMT-3 Rosenthal Type 2

Training	Dates and Location	Instructor
S-390	2/9-13 Mead WA	Tobin
CDA Burn Boss	3/12 CDA ID	Carter
Region 6 meeting	3/19-20	Wolf
IMET Training	3/23-27 Spokane WA	Wolf/Tobin
OWF Smoke Meeting	3/16 Wenatchee WA	Carter
IMET CEE	4/6-11 Boise ID	Carter/Fox
Burn Boss Colville	4/14 Colville WA	Tobin
Idaho Fire Chief	4/30 Lewiston ID	Fox
DNR Refresher	5/6 Ellensburg WA	Tobin
DNR Refresher	5/13 Spokane WA	Wolf
Moscow Fire Assessment	5/20 Moscow ID	Wolf
Idaho Seasonal Outlook	5/21 Post Falls ID	Carter
Chelan County Seasonal Outlook	5/18 Plain WA	Tobin
OWF Seasonal Outlook	6/2 Wenatchee WA	Tobin
CWICC	6/2 Wenatchee WA	Tobin
Idaho Seasonal Outlook	6/3 Bonner's Ferry ID	Carter
Idaho Seasonal Outlook	6/11 Sandpoint ID	Tobin/Fox
S-290	6/8-9 CDA ID	Fox
S-290 E WA Fire Academy	6/19-20 Ellensburg WA	Tobin/Bieda