YOUR NATIONAL WEATHER SERVICE SPOKANE QUARTERLY REPORT

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The Weather Watcher

of the Inland Northwest

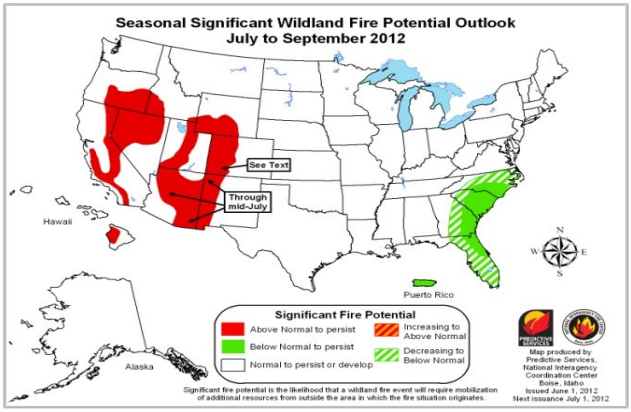
www.weather.gov/Spokane

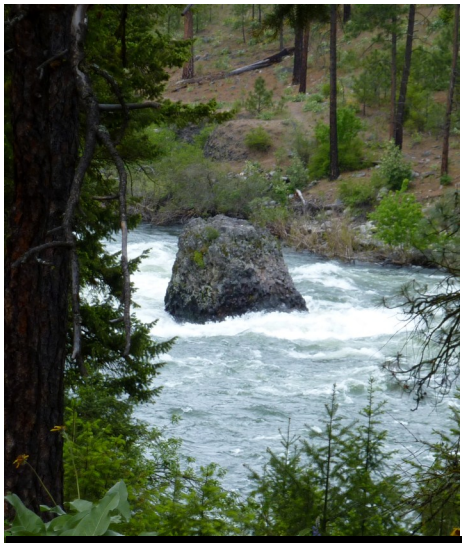
Fire Season Outlook

A drier May has given way to cooler temperatures and above normal precipitation for most locations into June. The exception was along the east slopes of the Cascades and the lower Columbia basin where drier conditions prevailed. The storm track for this spring has spanned from the central Oregon Cascades northeast through northeast Oregon, eastern Washington, and the Idaho Panhandle. At this time, there is no reason to think the weather pattern will deviate from current trends in these areas through the end of June into early July. As such, the fuels for the east slopes of the Cascades and Columbia Basin may come into fire season a week or two earlier than normal. The remainder of the region looks like it will begin fire season at about the normal time, mid-late July for the lower elevations and late July to early August for the higher elevations.

La Nina conditions from last winter have now changed to ENSO neutral and may even shift to a weak El Nino by the end of the summer. The change in ENSO conditions will result in lower than average predictability for July through early September. Our best guess at this time is that temperatures will be near normal, if not slightly above normal and precipitation will be slightly below normal for the summer.

So what can we expect? For most of eastern Washington and north Idaho we can anticipate a normal start to the fire season with about normal number of starts and normal acres. The areas of most concern will be the Cascade Mountains and east across the Columbia Basin. ☼ *Bob Tobin*





High spring flows on the Spokane River, downstream from the Bowl and Pitcher. May 2012

Spring Mountain Snowmelt

The cool spring has helped keep the mountain snow pack from melting off too fast. The lower and middle slopes of the mountains have had a more normal melt off this year. What remains now in early June is the highest elevation snow, above 4000-5000 feet, especially near the crest of the northern Cascades and along the Canadian border of northeast Washington and north Idaho. In these regions, the snow pack at the highest elevations is 170-240% of normal for early June. The continued cool and wet conditions through June will continue the trend of a slower snowmelt and will keep higher than normal flows through early summer on many main-stem rivers that drain from the east slopes of Cascades and southern British Columbia. This includes the Kootenai, Columbia, Okanogan, Methow, Entiat and Wenatchee rivers. ☼ *Katherine Rowden*

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Editor's Notes

The Inland Northwest is not immune to severe weather; it's just not that common. In early June, a severe thunderstorm watch was issued for extreme eastern Washington and all of north Idaho. The main result from the severe storms that evening was large hail—up to 2" in diameter was reported in Weippe, ID. That is considered hen egg size! All thunderstorms poise a danger—lightning! Remember when you see lightning, find a safe shelter immediately. Get out of the water and off the ball field until the threat is over.

We are always looking for new ideas, pictures and stories for our publication. If you have any to share, please contact us at (509) 244-0110 or email nws.spokane@ noaa.gov.

This newsletter and past issues are available online on our NWS Spokane web page. If you would like a paper copy, please contact us and we will put you on the mailing list.

The main purpose of this publication is to keep our readers informed about NWS services and programs, and recognize those who help us with our mission, including weather spotters, observers, media, emergency managers, and government agencies.

All articles are written by the NWS staff. A special thanks to Bob Tobin, Katherine Rowden, Ron Miller and Laurie Nisbet for their help.

Spring 2012 in Review

After last year's cold and wet La Nina spring, folks in the Inland Northwest were probably wondering what this spring would bring. Since La Nina didn't make much of a showing this past winter, there was hope that the spring would also turn out to be more "normal", if there is such a thing.

March can be summarized in one word: WET! While the first 10 days of the month had below normal precipitation, the last 3 weeks were anything but dry. Each day brought seemingly more rain, and by the end of the month, many locations had shattered their records for wettest March ever! Some of the more notable records were:

Location	March 2012 Precipitation	Old Record	Year of Old Record
Spokane	4.56	3.81	1995
Grand Coulee	4.13	2.64	1983
Newport	6.16	5.54	1945
Republic	4.90	3.48	1948
Rosalia	4.98	4.28	1989
Bonners Ferry	6.04	3.99	1950
Cabinet Gorge	7.40	6.40	1997
Coeur d'Alene	6.14	5.37	1916
Priest River	6.57	5.99	1945
Sandpoint	7.88	6.70	1997

Before the rain arrived, temperatures warmed into the 60s and lower 70s on the 9th, setting a few daily warm maximum temperature records. By the 12th, records for cold maximum temperatures were being set. Plain, Washington only reached 34° with 7.2" of snowfall, while nearby Leavenworth received over 10". On the 15th an extremely wet weather system moved into the area setting precipitation records. Grand Coulee picked up 1.50", which was the 3rd wettest day in history for that location, dating back to 1934. The 1.18" of rain that fell at Spokane was the wettest March day ever. Meanwhile, Wenatchee reached a high of only 38° degrees, which was the coldest daytime temperature for that day.

On the 21st and 22nd, a cold storm brought snow to several locations. The Spokane airport picked up 4.3" over the 2 days, meanwhile Newport, WA had 6.1", Sandpoint 4.1", Pullman received 4.5", and Mullan, ID had 5.0" of snow. A spotter northeast of Moscow had 13" of snow! The last week of March continued the wet theme of the month. On the 27th , the Wenatchee Airport received 0.62" of rain, which was the 3rd wettest March day ever, with records back to 1959.

All this precipitation did bring some flooding. The heavy rain on the 15th resulted in widespread flood problems for northeast Washington and the northern Panhandle with numerous road washouts and some basement flooding. Heavy rain in the Moscow area on the 26th caused Paradise Creek to flood some parts of town. A few days later more rain brought the Palouse River above flood stage. Heavy rain on the 30th brought more flood problems with additional road washouts, mainly in north Idaho. As the month ended, memories of a dry December were long gone, as most of the region now showed near or above normal precipitation for the season. Mountain snow pack, which had been running low through the winter, was now above normal.

The wet and cold weather continued into the first few days of **April.** An inch of snow fell on the 4th at the Spokane Airport. High temperatures on that day included 37° at Sandpoint, 38° at St Maries, and 37° at Bayview (which tied the coldest high temperature for April set on the 24th in 1967). Just as folks were starting to dread a repeat of March in April, the weather pattern finally changed. High pressure built into the area, temperatures warmed, and the rain decreased considerably. There were still showers every few days, but nothing abnormally wet. The first truly warm spell of 2012 hit in late April, with many locations reaching the 70s and 80s for 4 straight days. The 82° and 87° at Wenatchee Airport on the 22nd and 23rd respectively, were record highs for those dates. Priest Rapids Dam in Washington reached 91° on the 23rd, which was the earliest that they have ever reached 90° or better. Records there date back to 1956.

On average, **May** tends to be wetter than April and sometimes March. But in 2012, this wasn't the case. Overall the month was drier than normal. But that didn't equate to warmth, as the month was actually a little cooler than normal as well. Much of the rain fell in the first few days with daytime temperatures stuck in the 50s. The high of 52° at Wenatchee on the 3rd was the coldest high temperature ever for that date. Although daytime temperatures gradually warmed, the air mass was so dry that nighttime temperatures would plummet after sunset. Lind, WA dropped to 26° on the morning of the 11th, a record for the day. The town of Nez Perce in Idaho hit 22°, which was the coldest reading so late in the spring, with records back to 1901.

By mid May there was another warm spell with temperatures soaring into the 80s and lower 90s. Several locations set record high temperatures on the 14th and 15th, including Wenatchee Airport with a record high 91° on the 15th. About the only really damaging weather event came from an unusually deep low pressure system over Oregon. It brought strong northeast winds to the area on the 25th. This caused numerous power outages and fanned the flames of a wild fire near Soap Lake, WA. ☼ *Ron Miller*

Staff News

There will be many new faces and names seen at NWS Spokane this summer.

Ryan Fliehman has agreed to take the Met Intern slot vacated by Colby Neuman who was promoted to Forecaster in Portland, OR. Ryan was a student meteorologist at WFO Tuscon and finished his Masters in Hydro-Meteorology at the University of Arizona. He started in early June.

Steven Van Horn was offered and accepted the Forecaster slot vacated by Mike Fries who was promoted to Lead Forecaster in Pittsburgh, PA. Steven has been a Met Intern in Spokane since February 2009 and has been active in the Public Service Unit.

Ty Judd will fill the Met Intern slot vacated by Steven. Ty is a Met Intern at the WFO in Norman OK and requested a reassignment to WFO Spokane. His spouse will be starting her new job at the Kootenai Medical Center later this summer. Ty starts in early July.

Lastly, John Cambareri will be working at NWS Spokane office as a meteorologist volunteer this summer. He will be doing mostly project work, but will likely spend time with the forecasters and in the Public Service Unit. John lives in Spokane with his parents and he just graduated with honors from Embry Riddle University in Prescott, AZ with a BS in Applied Meteorology. He has been accepted to the meteorology graduate program at Texas A&M and will start there in the fall.

Congratulations to our new employees and their recent accomplishments! ☼ *Robin Fox*

Funnel cloud near Ephrata, June 7, 2012

Summer Outlook

The NWS Climate Prediction Center has updated their forecast for the summer months of late June through early September 2012 across the Inland Northwest. It shows that there is a greater chance of below normal precipitation and near to above normal temperatures. ☼

Answer: 7 June 1936, an F3 tornado killed two people north of Ruebens on the Camas Prairie. A house and a barn were leveled.

Kettle River near Kettle Falls, May 2012

Spring Weather Statistics

Wenatchee Water Plant	Mar	Apr	May	Total
Avg High Temp	51.8	64.0	71.5	62.4
Departure from Norm	-3.3	-0.2	-1.4	-1.6
Avg Low Temp	32.5	40.4	48.2	40.4
Departure from Norm	-1.8	-0.3	-0.6	-0.9
Total Precip	1.17	0.96	0.39	3.52
Departure from Norm	+0.56	+0.43	-0.30	+0.69
Total Snowfall	0.0	0.0	0.0	0.0
Departure from Norm	-0.4	0.0	0.0	-0.4
Lewiston Airport	**Mar**	**Apr**	**May**	**Total**
Avg High Temp	53.2	63.8	69.4	62.1
Departure from Norm	-1.7	+1.5	-1.5	-0.6
Avg Low Temp	35.2	42.3	45.9	41.1
Departure from Norm	-0.4	+2.0	-1.0	+0.2
Total Precip	3.59	1.68	0.72	5.99
Departure from Norm	+2.44	+0.36	-0.89	+1.91
Total Snowfall	T	T	0.0	T
Departure from Norm	-0.7	0	0	-0.7
Spokane Airport	**Mar**	**Apr**	**May**	**Total**
Avg High Temp	46.4	58.2	65.2	56.6
Departure from Norm	-2.5	+1.0	-1.2	-0.9
Avg Low Temp	30.9	38.3	42.5	37.2
Departure from Norm	-0.7	+1.5	-1.3	-0.2
Total Precip	4.56	1.39	0.69	6.64
Departure from Norm	+2.95	+0.11	-0.93	+2.13
Total snowfall	5.5	1.1	0.0	6.6
Departure from Norm	+2.0	+0.1	-0.1	+2.0

Want to report precipitation? Check out CoCoRaHS at *http://www.cocorahs.org*

Remember your Summer Spotter Checklist

Tornado or **Funnel Cloud**
Strong Winds: 30 mph+ or damage
Hail: pea size or larger
Heavy Rain: Showery: 1/2" + in 1 hr Steady Rain: 1"+ in 12 hrs or 1.5"+ in 24 hrs
Any Flooding
Reduced Visibility: under a mile due to rain, dust...
Travel Problems or **Any Damage:** due to severe or hazardous weather.

The official NWS Spokane Twitter page will be online soon. Follow us **@nwsspokane**.

Lightning Safety

NO PLACE outside is safe when thunderstorms are in the area:

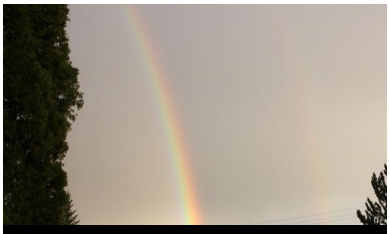
- If you hear thunder, lightning is close enough to strike you.
- When you hear thunder, immediately move to safe shelter.
- Safe shelter is a substantial building or inside an enclosed, metal-topped vehicle.
- Stay inside at least 30 min. after you hear the last thunder.

Indoor safety tips:

- Stay off corded phones, computers and other electrical equipment that put you in direct contact with electricity.
- Avoid plumbing, including sinks, baths, and faucets.
- Stay away from windows and doors, and stay off porches.

If caught outside, last resort safety tips:

- Immediately get off elevated areas such as hills, mountain ridges or peaks
- NEVER lie flat on the ground
- NEVER use a tree for shelter
- NEVER use a cliff or rocky overhang for shelter
- Immediately get out and away from bodies of water



Double rainbow over Pullman, April 2012

Ham Radio Station at NWS Spokane

The NWS Spokane now has its very own amateur radio station in the office. The call sign is WX7OTX! We plan to get the station up and running this summer and learn how to use it during active weather events. Currently we have at least nine staff members with active amateur radio license. ☼ *Laurie Nisbet*

Watch : Conditions are favorable for severe or hazardous weather around the watch area. **CAUTION—Watch the Sky!**

Warning : Severe or hazardous weather is likely or is occurring in the warned area. **DANGER—ACT NOW!**

The Weather Watcher
Of the Inland Northwest

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Trivia: What was Idaho's deadliest tornado?