YOUR NATIONAL WEATHER SERVICE SPOKANE QUARTERLY REPORT

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The Weather Watcher

of the Inland Northwest

www.weather.gov/Spokane

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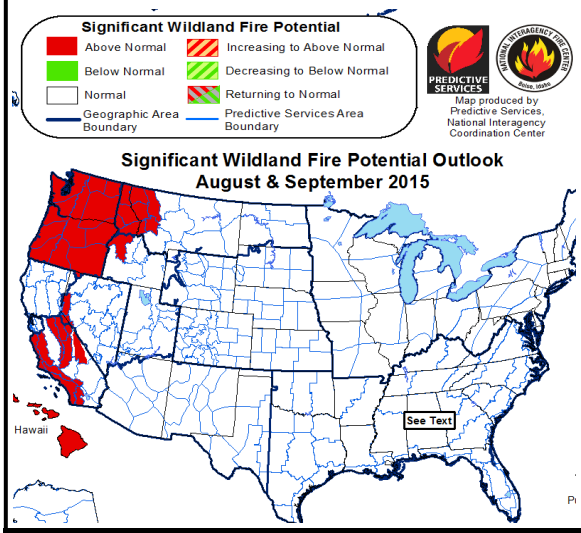
Fire Season

The warm and dry weather has heightened the potential of wildfires across the Inland Northwest. Above normal potential for significant fire activity is anticipated for much of the Inland Northwest this summer, spanning from June through September. Temperatures have been running above normal through the spring. A few thunderstorms during mid to late May helped bring substantial precipitation to much of central Washington, but drier and warmer weather is forecast for the upcoming weeks. The mountain snowpack is essentially gone, and the fire season has kicked into gear about 3-5 weeks ahead of schedule.

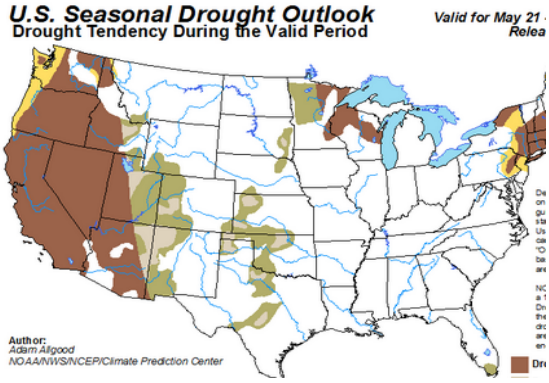
Fuel levels are drier then they should be for this time of the year, especially in the 100hr to 1000hr fuels which include most of the forested areas. The finer grassy fuels have greened up and will continue to cure over the coming weeks.

The climate outlooks suggest that June through September will be warmer than normal with near to slightly below normal precipitation. Any thunderstorms in July and August will likely lead to ample lightning which will prove to be the deciding factor for the intensity of this fire season. For more information on the fire season outlook, see the http://gacc.nifc.gov/nwcc/predict/outlook.aspx

☼ *Jon Fox*



Drought



Early runoff of our minimal winter snowpack means continually declining summer water supply prospects. The long range outlook calls for continued above normal temperatures and normal to slightly below normal precipitation. Here are some important water facts:

- The record low snowpack across the Inland Northwest was completely gone by late April.
- There was near-normal precipitation this winter, but we have been drier than average since April & haven't received any significant spring rain events to boost summer water supply forecasts.
- We are seeing well-below average stream flows for this time of the year & summer water supply forecasts are between a low of 31% (NF Coeur d'Alene River) to a high of 76% (Columbia-Grand Coulee).
- The Washington State Governor has declared a statewide drought emergency.
- Impacts we may see this summer include: low summer flows which impact fisheries & recreation; lower levels in wells, irrigation and stock ponds; potential impacts to recreational lakes/reservoirs.

For more on the Washington drought, please see http://www.ecy.wa.gov/drought/ ☼

Katherine Rowden

Editor's Notes

The summer solstice falls on Sunday, June 21st at 9:39 AM. This marks the longest day of the year and the shortest night for the Inland Northwest.

As we move into summer, we can expect much warmer temperatures. It's important to remember to hydrate and play it safe while in the heat. Rest and cool down in the shade. Maybe reorganize activities to the cooler part of the day. Dress for summer!

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.

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 goes to Ron Miller, Jon Fox, Katherine Rowden, and Mark Turner for their help.

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Cold air funnel? May 26 around 5 pm.
Courtesy of Jeff Goldman—Spotted from downtown Spokane

Spring Weather Statistics

Wenatchee Water Plant	Mar	April	May	Total
Avg High Temp	60.6	64.0	77.6	67.4
Departure from Norm	+4.8	+0.6	+6.5	+4.0
Avg Low Temp	37.8	40.1	53.6	43.8
Departure from Norm	+4.2	+3.2	+5.2	4.2
Total Precip	0.76	0.21	1.21	2.18
Departure from Norm	+0.15	-0.32	+0.53	+0.36
Total Snowfall	0.0	0.0	0.0	0.0
Departure from Norm	-0.4	0.0	0.0	-0.4
Lewiston Airport	**Mar**	**April**	**May**	**Total**
Avg High Temp	59.8	64.2	76.7	66.9
Departure from Norm	+4.9	+1.9	+5.8	+4.2
Avg Low Temp	38.2	38.1	50.3	42.2
Departure from Norm	+2.6	-2.2	+3.3	+3.7
Total Precip	1.18	0.29	1.11	2.58
Departure from Norm	+0.03	-1.03	-0.50	-1.5
Total Snowfall	0.0	0.0	0.0	0.0
Departure from Norm	0.0	0.0	0.0	0.0
Spokane Airport	**Mar**	**April**	**May**	**Total**
Avg High Temp	55.5	58.7	72.5	62.2
Departure from Norm	+6.6	+1.5	+6.1	+4.7
Avg Low Temp	35.5	36.3	48.9	40.2
Departure from Norm	+3.9	-0.5	+5.1	+8.5
Total Precip	2.43	0.53	0.85	3.81
Departure from Norm	+0.82	-0.75	-0.77	-0.70
Total snowfall	0.9	1.0	0.0	1.9
Departure from Norm	-2.6	0.0	-0.1	-2.7

Spring 2015 in Review

After 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 winter weather carried over throughout spring. Most plants budded and bloomed earlier than normal. The meager snow pack in the mountains melted early as well.

March started out very quiet. As is usual, the first few days of the month saw some light lowland snow. Temperatures gradually warmed to readings in 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 light rain on more days than not. A strong Pacific front brought widespread rain and wind to the region on the 28th. St. Maries and Kellogg both picked up 0.85" of rain while Elk and Chattaroy received a half inch. Spokane Airport and Lewiston both gusted to 45 mph.

April is often a transition month. Spring is a long season in the Inland Northwest. The first half of spring (late February and March) is marked with strong Pacific cold fronts, bringing wind, rain, and occasional snow showers. The second half of spring (May and June) is warmer and often wetter, with more heavy rain showers and thunderstorms. 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 extra-quiet and dry. Temperatures were close to normal, but precipitation was lacking. Less than half the normal amount fell during the month. One cold front on the 6th brought lowland snow to the area, including 2.1" south of Coeur d'Alene. A somewhat stronger front on the 13th provided up to 6" of snow to the mountains. The cold air behind this storm dropped morning low temperatures on the 15th into the 20s in many locations. The latter half of the month was remarkably quiet.

This stretch of quiet weather continued well into **May**, ending on the 12th and 13th as a low from the south finally brought some rain to the area. Moscow received 1.35" inches of rain while Clarkston picked up 0.94". Many locations in the Wenatchee area received 1" to nearly 2" of rain. This event started a warmer and wetter pattern for the remainder of the month. A moist and unstable atmosphere brought several days of heavy showers and thunderstorms. One of these caused a Flash Flood between Oaksdale and Tekoa on the 16th. The last week of May stayed very active and we saw repeated heavy rain showers each day. ☼ *Ron Miller*

Tornado Sightings in May

Tornados do occur in the Inland Northwest. They are typically small in scale—a zero or one on the Enhanced Fujita scale. This means they can be on the ground for less than 5 minutes, have a diameter of up to 100 yards and a track of less than 1/4 of a mile. Wind speeds can range 85-115 mph. The 30-year average annual number of tornados in Washington is 3, while it's 5 in Idaho. The best time of the year for tornado development across the region is May and June. ☼ *Robin Fox*

Tornado Damage? On May 23 around 3:30pm.
Courtesy of Anthony Norris & Ryan Overton.
At apartments on Spokane's South Hill.

Funnel Cloud or Landspout? May 6 @ 4:30 pm.
Courtesy of Wenatchee World
North of Wenatchee on Waterville Plateau.

Tornado? Memorial Day @ 7:30 pm .
Courtesy of Glenn Miles Kootenai #97
Spotted near Wilbur.

Answer:
Spokane: 108° on 8/4/1961
&
Lewiston: 117° on 7/27/1939
&
Wenatchee: 110° on 7/18/1941

Coop Awards

WSU - Lind Dryland Research Station
L-R: John Livingston—MIC, Bruce Sauer—Farm Manager, Brian Fode—COOP Observer

On June 11, WFO Spokane recognized the Washington State University Dryland Research Station in Lind for 100 years of making daily weather observations in cooperation with the National Weather Service. The weather station was initially set up in May 24, 1897 within the town of Lind.

The first observer was Dan Krehbiel. The thermometer shelter at that time was located "4 feet above ground on NW corner of house", and the time of observation was listed as "nearest sunset".

The weather observational responsibility and equipment moved to the "Adams Branch Experiment Station" 100 years ago, and the site became an official Weather Bureau site in February of 1916.

Since that relocation, the weather station at WSU Dryland Research Station – Lind has recorded the following extreme weather events:

Max temp: 113° on 8/4/1961
Min temp: -26° on 1/26/1957
Greatest 24 hr precipitation: 1.61" on 5/19/1948
Greatest 24 hr snowfall: 12" on 1/14/1987
Greatest snow depth: 22" on 2/5/1950

☼ *Mark Turner*

Staff News

There have been some big changes in the staff at NWS Spokane. Two new meteorologist Interns have been hired and have started in the office. Andrew Kalin is arriving from Lincoln, Nebraska and Bryce Williams will be coming from Huntsville, Alabama.

We also have a summer volunteer, Krista Carrothers. She has been hard at work, helping us with some important projects. Krista was raised in Spokane and just finished her first year at University of North Dakota in the Meteorology program.

Lastly, we are saying good bye to our Administrative Assistant, Rose Tibbitts. She took a transfer to the NWS office in Phoenix, Arizona. She had worked at the Spokane NWS office for a total of 12 years.

Good luck to Andrew, Bryce, Krista and Rose! ☼ *Robin Fox*

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

Remember your Summer Spotter Checklist

Tornado or **Funnel Cloud**

Hail: pea size or larger

Strong Winds:
30mph+ or damage

Reduced Visibility:
under a mile due to rain, dust...

Heavy Rain:
Showery: 1/2" + in 1 hr
Steady Rain: 1"+ in 12 hrs
or 1.5"+ in 24 hrs

Any Flooding

Travel Problems or
Any Damage: due to severe or hazardous weather.

Mt. St. Helens—35 years later

Long time residents of the Inland Northwest will find it difficult to forget May 18, 1980. It's the day Mt. Saint Helens erupted, which is known as "the deadliest & most economically destructive volcanic event in the history of the United States," according to a NOAA report.

Here are some number facts from the event based on reports from the USGS and US Forest Service:

- 57 people died—mostly by asphyxiation from hot ash
- 10,000 earthquakes were recorded in the 2 months preceding the eruption.
- 5.1 magnitude earthquake was recorded right before the eruption.
- The mountain lost 1314 feet after the eruption.
- 158 miles of highway were destroyed
- 200 homes were lost
- 520 million tons of ash blew eastward across 7 states.
- 8:32 am was the time of the eruption.
- For 3 days—the ash cloud covered the entire U.S.
- 7000 big game animals were lost due to the eruption.

For more statistics on Mt. St. Helens, see *http://volcanoes.usgs.gov/volcanoes/st_helens/st_helens_geo_hist_99.html* ☼ *Robin Fox*

Lightning Safety

Lightning strikes the United States about 25 million times a year. Although most lightning occurs in the summer, people can be struck at any time of the year. An average of 49 people die from lightning strikes each year with many hundreds severely injured. Here are some safety tips on when you hear thunder—go Indoors!

- Stay off corded phones, computers and other electrical equipment.
- Avoid plumbing, sinks, baths and faucets.
- Stay away from windows and doors; stay off porches.
- Do not lie on concrete floors or against concrete walls.
- Stay indoors at least 30 min after you hear the last sound of thunder!

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
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Trivia: What are some of the all-time record high temperatures across the Inland Northwest?