

The Weather Watcher

of the Inland Northwest

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Fire Season Outlook

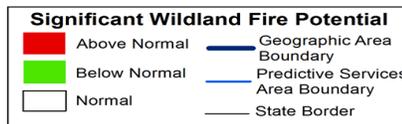
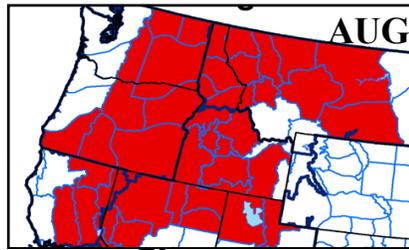
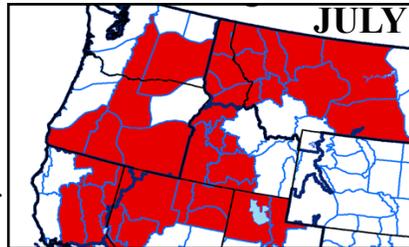


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- For 2018, expect a better chance of above normal temperatures and below normal precipitation
- Finer fuels should quickly cure out in June.
- Most likely anticipate an early start to fire season in the Columbia Basin and southern Washington Cascades, not quite so early for the northern Cascades, and normal start for the Northeast mountains and the Panhandle mountains.
- Anticipate an average to above average number of fire starts for this fire season.
- Estimating an above average number of acres burned for Columbia Basin and Cascades.
- Oregon will be active and may start quite early with above normal acres burned.
- Here's a list of years that had similar pre-season weather conditions as those seen for this year.

Significant Wildland Fire Potential Outlook



Year	Acres Burned	Total Fires
1996	35,375	1157
2002	70,814	1298
2012	238,645	1382
2017	354,582	1014

☀ Bob Tobin

Flood Season Review

This spring saw an active flood season as mountain snow melted. Although a couple rivers had flooding in the winter, many peaked in May as temperatures soared. Not every river saw flooding. Most flooding originated from mountain snow pack in B.C. or Montana. Here's a table of Inland NW rivers that saw flooding. ☀ Katherine Rowden

River	Gauge	Peak stage or flow	When	Highest Since
Paradise Creek	Moscow	9.7 ft	30-Dec	2017
Palouse	Potlatch	15.92	5-Feb	2017
Moyie	Eastport	9.53 ft	8-May	2008
Methow	Pateros	10.65	10-May	1983
St. Joe	St. Maries	33.18	11-May	2017
Kettle	Near Curlew	22.54	11-May	historic
Similkameen	Nighthawk	15.5	11-May	1974
Okanogan	Tonasket	19.71	12-May	1972
Columbia	Priest Rapids Dam	32.36	15-May	2012
Stehekin	Stehekin	24.22	17-May	2017
Lake Pend Oreille	Hope	2064.2 ft	30-May	2011
Pend Oreille	Albeni Falls	119300	30-May	2011

Editor's Notes

We've had a jump start to summer, especially after the warm May across the Inland NW. Seen several rounds of stormy weather, but luckily no severe reports so far. Lightning is a hazard that should not be overlooked. Early this June, there was a report of lightning striking a tree near Bowman Field in Pullman. The tree was damaged, but no one was injured. What a good reminder to respect the power of lightning. When thunder roars, go indoors!

Warmer and dry weather will lead to drier grasses and vegetation. Be mindful of sparks and fire when out hiking and camping this summer.

We are always looking for new ideas, pictures & stories for our publication. Please submit them to nws.spokane@noaa.gov.

This newsletter & past issues are available on the NWS Spokane web page.

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

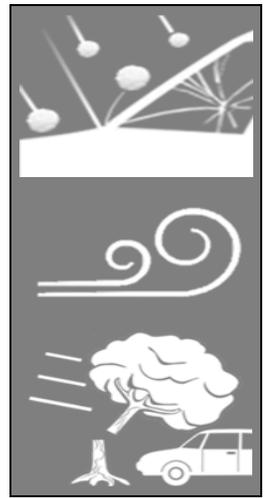
All articles are written by the NWS staff. A big thanks goes to Jeremy Wolf, Bob Tobin, Katherine Rowden, and Mark Turner.

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Severe Weather Climatology for the Inland NW

Based on a study for the coverage area of the NWS Spokane Doppler weather radar, the primary season for severe weather runs from mid-May through August. Severe weather includes tornadoes, strong winds to 58 mph or damage, and large hail. May is the month with the most reports of tornadoes in the region, while July is the month with the most reports of large hail and strong winds. The best time of the day for severe weather spans from afternoon into the evening hours with a peak near 6 pm. The average number of severe weather reports per year is 23. Severe weather reports vary year by year based on the weather pattern. To the right is an overview of severe weather reports over the last several years. For more details, see <http://www.spc.noaa.gov/climo/online/rda/OTX.html> ☀

Year	# of Severe Reports
2018	n/a
2017	9
2016	21
2015	30
2014	144
2013	77
2012	80
2011	6

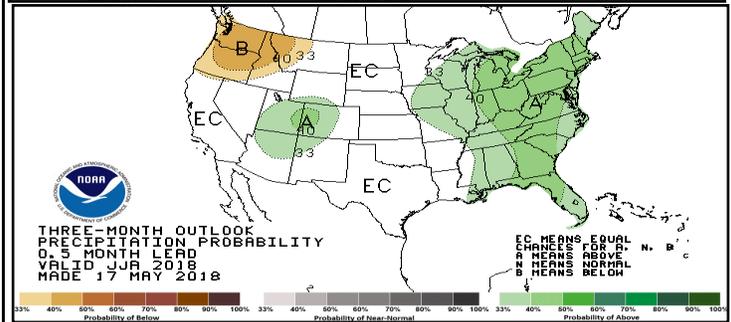
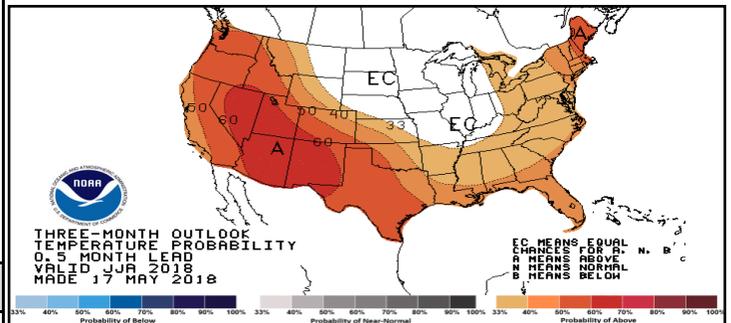


Spring Weather Statistics

Wenatchee Water Plant	Mar	Apr	May	Total
Avg High Temp	53.4	61.8	79.2	64.8
Departure from Norm	-1.7	-2.4	+6.2	+0.7
Avg Low Temp	32.5	40.5	55.3	42.8
Departure from Norm	-1.8	-0.2	+6.5	+1.5
Total Precip	0.53	1.10	0.74	2.37
Departure from Norm	-0.08	+0.57	+0.05	+0.54
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	55.8	62.8	76.6	65.1
Departure from Norm	+0.9	+0.5	+5.7	+2.4
Avg Low Temp	35.1	42.0	53.2	43.4
Departure from Norm	-0.5	+1.7	+6.2	+2.5
Total Precip	1.35	1.82	2.77	5.94
Departure from Norm	+0.20	+0.50	+1.16	+1.86
Total Snowfall	T	T	0.0	T
Departure from Norm	-0.7	0.0	0.0	-0.7
Spokane Airport	Mar	Apr	May	Total
Avg High Temp	48.2	56.1	73.1	59.1
Departure from Norm	-0.7	-1.1	+6.7	+1.6
Avg Low Temp	30.8	37.4	50.8	39.7
Departure from Norm	-0.8	+0.6	+7.0	+2.3
Total Precip	1.30	2.03	1.45	4.78
Departure from Norm	-0.31	+0.75	-0.17	+0.27
Total snowfall	4.9	T	0.0	4.9
Departure from Norm	+1.4	-1.0	-0.1	+0.3

Summer Outlook

The NWS Climate Prediction Center is calling for a warm and dry summer across the Inland NW with a better chance of above normal temperatures and below normal precipitation for the month of June through August. ☀



Flooding on Lake Pend Oreille at Trestle Creek Park on 5/25/18



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

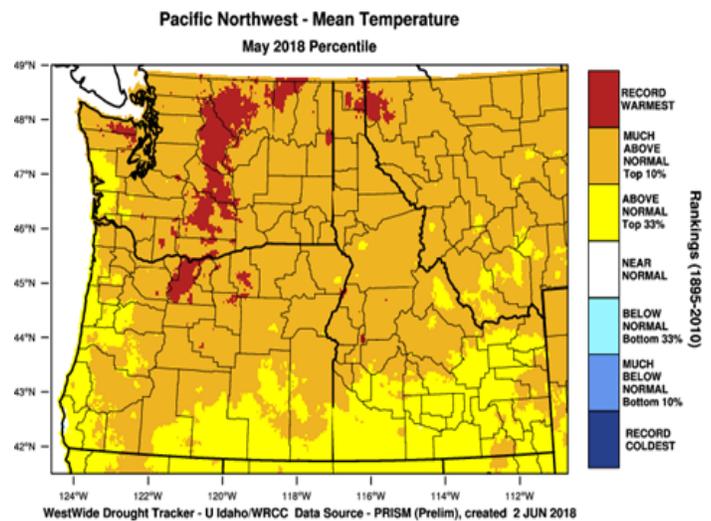
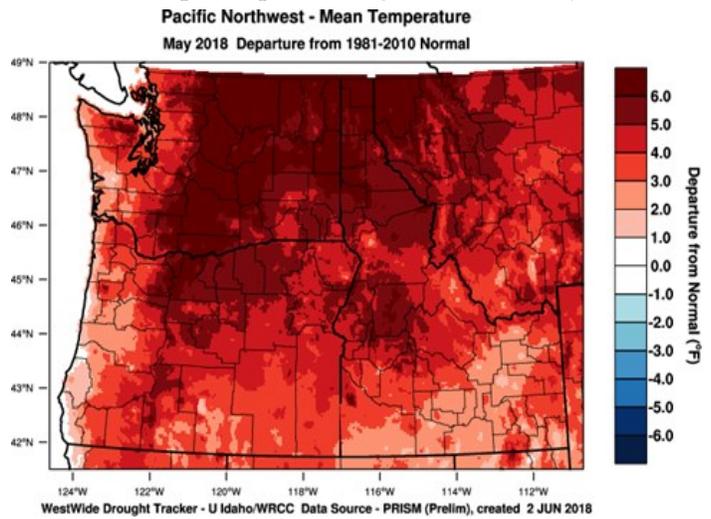
2018 Spring in Review

March brought normal weather to most of the Inland Northwest except around the Okanogan Valley and Highlands, Methow Valley, and Lake Chelan where the month was abnormally wet. The wet weather didn't waste any time as a major snow storm struck the Republic and Conconully areas with 14-20" of snow on the 1st. Higher mountain sites estimated as much as 23". The lower valleys such as Wenatchee and Omak received primarily rain. Another significant round of precipitation arrived on the 22nd with 1.10" of rain in Winthrop. These two wet storms combined with a few weaker storms gave Winthrop the 3rd wettest March on record. A colder storm struck NE Washington into north Idaho on the 24th bringing low elevation snow. The snowiest location was between Elk and Diamond Lake with several reports of 8-10". Spokane Airport came in with almost 3". Also noteworthy of the month was cold nights early in the month. On the 3rd, 4th, and 7th Deer Park dropped to between 10°-12°F while Winthrop got down as low as 9°F.

The wet weather continued into the first half of **April** with several rounds of rain and mountain snow. Two significant storms impacted the region during the month. Another 0.75" of rain fell in Winthrop on the 7th while a variety of weather struck eastern Washington and north Idaho with the passage of a strong cold front. Lewiston reported a 61 mph gust late in the morning with 56 mph in Uniontown. Snow fell in the afternoon in Metaline Falls, Bonners Ferry, and Sandpoint with around an inch of accumulation north of Sandpoint. Evening thunderstorms developed near Ritzville before tracking east into the Spokane area and northern Palouse. A strong thunderstorm brought dime to nickel size hail in north Spokane. The next wet storm arrived on the 16th with another inch of rain over portions of north central Washington. Saturated ground led to several debris flows. One was on the Chesaw Road west of Molson, while the largest reported was on Paradise Hill Road north of Brewster where the road became impassable. Strong high pressure brought a much needed spell of warmer and drier beginning on the 19th and peaking on the 27th where temperatures warmed into the 80s with Lewiston reaching 90°F. A strong cold front brought a strong temperature drop on the 28th with only 59°F in Lewiston.

May brought abnormally warm weather with Wenatchee, Winthrop, Mazama, and Bonners Ferry reporting the warmest May on record. Lewiston came in 5th warmest and Spokane 6th warmest. Wenatchee reached the 80s on 14 days compared to an average of 7.

Here are a couple maps showing how warm May was!



The warm temperatures combined with an above average snow pack was bad news for rivers in the North Cascades and northern valleys. The Kettle River reached record levels, with major flooding on the Okanogan River. The Pend Oreille River saw moderate flooding while many other rivers including Methow, Stehekin, Moyie, and Lake Pend Oreille experienced minor flooding. Osoyoos Lake near Oroville also sent water onto many properties. Besides the warm weather and flooding, there were many reports of thunderstorms. Ephrata got their entire month's worth of rain in just four hours when 0.72 inches fell from a thunderstorm on the 17th; this caused significant urban flooding to several area businesses. The next morning, heavy rain fell in Lewiston with the airport recording an inch within 5 hours. This heavy rain resulted in flooding of low lying areas and road washouts in Nez Perce. Another thunderstorm near Garfield, WA on the 20th caused a flash flood resulting in a car being swept off of Highway 27. ☀️ Jeremy Wolf

ANSWER: The 2008-2017 average for WA is 24,982 and for ID is 77,077 according to the Natl Lightning Detection Network.

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 dust, smoke...

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

Any Flooding

Travel Problems or Damage:
due to severe/hazardous weather

Staff News

It's exciting to introduce the new staff members to NWS Spokane! Jennifer Simmons arrived in mid May and is the newest Meteorologist Intern. She received her bachelor's degree in meteorology from Arizona State and a master's degree from University of South Carolina. She's eager to learn more on the Inland NW's weather.

Tim Enright will arrive in late June, and he will be the new Electronics System Analyst. He will be arriving from Milwaukee, WI where he was stationed for the last 5 years. Prior to that, he was with the USAF for 12 years.

NWS Spokane welcomes back Heather Bricca who will be a summer volunteer again this year. Coming from Hayden, ID, she finished her first year of meteorology at Valparasio University in Indiana. She plans to work on weather projects and begin some NWS training while she's home for the summer. Good luck to all! ☀

Coop Corner

Mr. Greg Galbreath of Ritzville, WA received a 20 year Length of Service Award on May 29th. The Galbreath family have farmed the Ritzville region for several generations. This region of the state is dominated by dry land farming where precipitation and temperature records are critical in determining when and what to plant. The family met this need by collecting and reporting weather observations for over 47 years, with Greg's mother and father both preceding him as official observers. The data from the Galbreath's Historic Climate Network weather station has been featured prominently in the weekly *Adams County Journal* for a generation and is one of the most popular features in this publication. The Galbreath Family has deep roots in the community, and has been instrumental in collecting and disseminating weather reports since Ritzville's incorporation in 1890. A relative of the Galbreaths', Mr. Daniel Buchanan, collected and published the first known weather records in Ritzville from 1891 to 1900. ☀ *Mark Turner*

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 is the average number of cloud to ground lightning flashes in WA & ID?