

The Weather Watcher

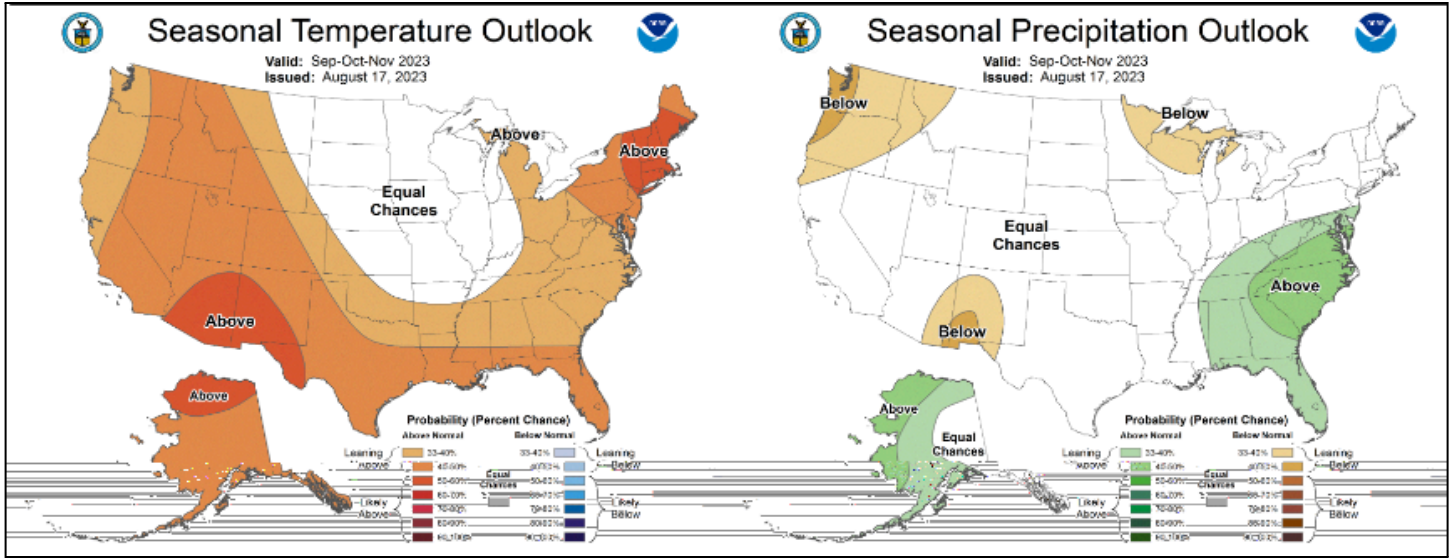
Of the Inland Northwest

www.weather.gov/Spokane



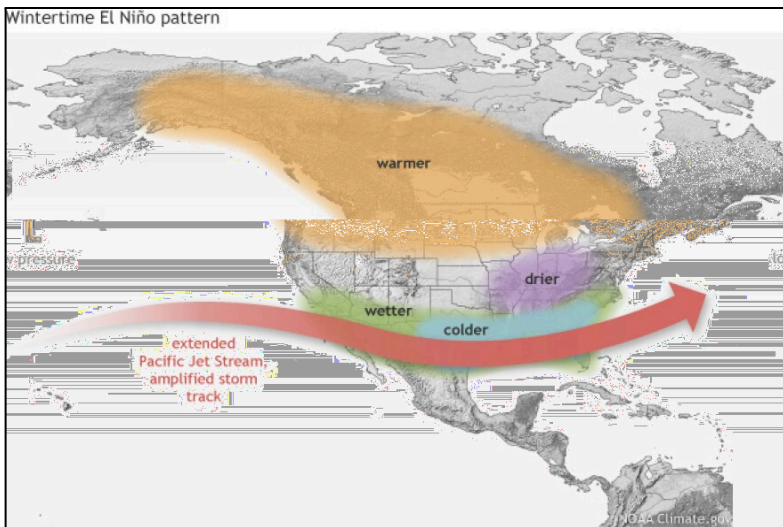
September 2023

Fall Outlook 2023 & El Niño



The [NWS Climate Prediction Center](https://www.weather.gov/ClimatePredictionCenter) shows odds are favored for a 40-50% chance of above normal temperatures and 30-40% chance of below normal precipitation for the autumn months of September through November 2023.

The basis for much of this seasonal outlook is on [El Niño](https://www.weather.gov/ElNiño) which is anticipated to continue through the winter season across the Northern Hemisphere. El Niño is indicated by above-average sea surface temperatures (SSTs) over the equatorial Pacific Ocean, which then affects the tropical atmospheric pattern. Confidence is growing that there is a 71% chance of a [“strong” El Niño event](https://www.weather.gov/strongElNiño) through this winter season. Keep in mind, a strong El Niño does not necessarily equate to strong El Niño impacts locally, with the odds of related climate anomalies often lower than the chances of El Niño itself. An El Niño Advisory is in effect.



El Niño episodes peak in the winter months. A “typical” El Niño weather pattern across North America is characterized by a strong Pacific jet stream that takes aim across the southern U.S. This brings wetter conditions to the south and less active weather and milder weather across the northern tier states.

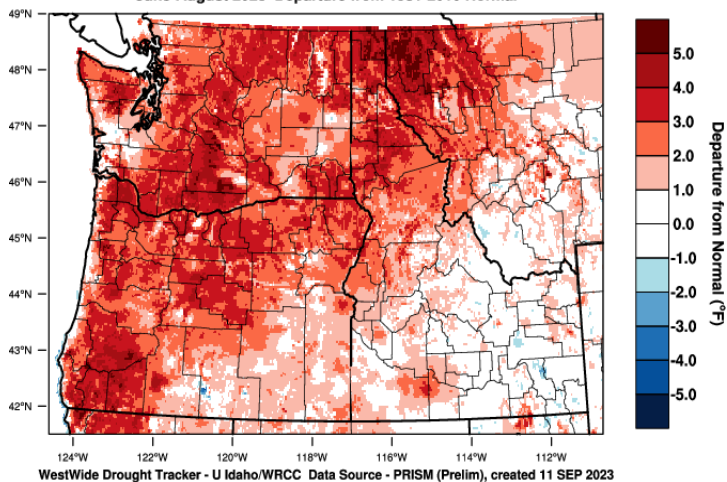
The last El Niño was the winter of 2018-2019 and the last “strong” El Niño episode was 2015-2016. ☀️

Trivia Question: *What month can we expect the biggest change in temperatures?*

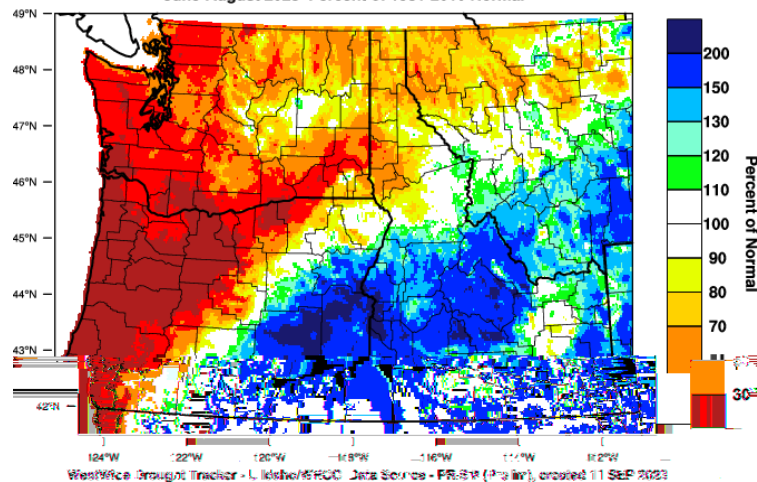
Summer 2023 in Review

The summer as a whole finished warmer and drier than normal over the region. But this didn't mean an absence of weather events, with several rounds of thunderstorms as well as two destructive fires in August.

Pacific Northwest - Mean Temperature
June-August 2023 Departure from 1981-2010 Normal



Pacific Northwest - Precipitation
June-August 2023 Percent of 1981-2010 Normal



June brought several active thunderstorm events with large hail, damaging winds, and flash flooding. On the 8th severe thunderstorms hit the North Idaho Panhandle hard with damaging wind gusts in Bayview, Harrison, Rockford Bay, Rathdrum, and near Fernan Lake. Several boats and docks were damaged in the Gozzer Ranch/Arrow Point area on Lake Coeur d'Alene. Quarter sized hail was also reported near Rose Lake. On the 9th, thunderstorms produced flash flooding in Lewiston with several roads flooded with debris on roadways. Several vehicles became stalled or trapped in flooded waters. On the 13th, a strong cold front delivered windy conditions to central Washington with Beverly and Wenatchee reporting peak wind gusts of 61 and 50 MPH, respectively. Also on this date, a thunderstorm produced quarter sized hail in Bayview, Idaho. From the 18th through the 21st, a weather system sat over the Inland NW for multiple days bringing a period of abnormally cool temperatures, with some locations such as Spokane and Pullman not getting out of the 50s on the 20th. On the 27th, thunderstorms produced another round of flash flooding. Seven miles northwest of Lake Wenatchee mud and debris went over several sections of White River Road closing it for hours. On SR 291 north of Spokane, mud and debris went across the highway near Swenson Road. On the 28th, a thunderstorm near Priest Lake dumped 1.16" of rain in one hour.

The active weather continued in **July**, with severe thunderstorms producing more large hail and flash flooding on the 9th and 10th. On the 9th, a debris flow occurred across Bonaparte Lake Road near Wauconda. On the 10th, thunderstorms produced torrential rain, with a very destructive flash flood on Highway 2 between Coulee City and Waterville. Nearly 3 miles of road was washed out, closing the highway until August 15th. There were also reports of penny to quarter sized hail in this area, as well as between Hartline and Almira. Several reports of large hail emerged as these storms tracked into Northeast Washington. This includes dime size near Ford, half-dollar size near Elk, quarter size in Blanchard, nickel in Twin Lakes, and penny size in Athol. Another round of thunderstorms on the 12th brought flooding around the Methow Valley near Winthrop. Mud and debris went across West Chewuch Road with almost a foot of water at the intersection with Highway 20. One rain gauge in the area picked up 2.38"! The second half of July brought a much needed breather from the busy weather.

The quiet weather didn't last long as **August** arrived. More wet thunderstorms made it a noteworthy wet month for some. Coulee Dam and Ephrata recorded their 4th wettest August on record with 1.62" and 0.98" for the month respectively. For the Spokane Airport and Moses Lake, it was the wettest August since 2004. On the 6th and 7th, thunderstorms produced abundant rainfall and heavy rain in central Washington. Almira received 1.06" of rain, with 0.71" in Moses Lake. Storms also tracked from Chewelah into Priest Lake with abundant lightning. The hottest temperatures of the summer arrived from the 14th through the 17th with triple digit heat. Most locations topped out in the upper 90s to near 105 with a few hotter locations including Kamiah reaching 111°F, and Lewiston and Omak reaching 109°F. This heat wave set the stage for two destructive fires in the Spokane area on the 18th as a very dry cold front tracked through the region. The Gray Fire burned through Medical Lake and Silver Lake while the Oregon Fire near Elk collectively burned hundreds of homes and structures, along with two fatalities. Both fires burned near 10,000 acres. Relative humidity was exceptionally low for several hours, dropping to near 6%. This combined with windy conditions with a peak gust at the Spokane Airport of 37 MPH fueled the destruction. A shift in north to northwest winds behind the front then brought in an abundance of smoke from Canada through the 21st. This combined with smoke from local fires brought widespread unhealthy to very unhealthy air, with some locations even reaching hazardous air quality. The smoke and fire situation improved drastically over eastern Washington and north Idaho with much needed rain on the 22nd followed by increasing west winds on the 23rd to clear out the smoke. Widespread rain totals of 0.25-0.50" were observed with locally higher amounts including around an inch in Sandpoint. The summer closed on yet another significant weather event on the 28th and 29th. Thunderstorms produced abundant lightning and even more rain. Northeast Washington and the Idaho Panhandle was especially wet with widespread rain totals of 0.50-1.25", with a few areas getting even more. Kellogg was one of the wettest stations with 1.58", with Deer Park close behind with 1.49". *Jeremy Wolf* ☀️



Highway 2 Washout in Douglas County
July 2023

Summer Weather Stats				
Wenatchee Waterplant	JUN	JUL	AUG	Total
Average High temp	83.5	92	89.5	88.3
Departure from normal	+3.9	+3.0	+1.3	+2.7
Average low temp	58.9	64.5	61.2	61.5
Departure from normal	+3.1	+2.4	+0.1	+1.9
Total precipitation	0.07	0.00	0.92	0.99
Departure from normal	-0.53	-0.22	+0.78	+0.03
Total snowfall	0	0	0	0
Departure from normal	0	0	0	0
Lewiston, ID	JUN	JUL	AUG	Total
Average High temp	84.3	95.4	90.6	90.1
Departure from normal	+5.3	+4.6	+0.5	+3.5
Average low temp	58.3	63	63.7	61.7
Departure from normal	+4.3	+2.1	+3.4	+3.3
Total precipitation	1.01	0.08	0.83	1.92
Departure from normal	-0.24	-0.39	+0.32	-0.31
Total snowfall	0	0	0	0
Departure from normal	0	0	0	0
Spokane, WA	JUN	JUL	AUG	Total
Average High temp	78.6	88.3	84.6	83.8
Departure from normal	+4.9	+3.9	+0.8	+3.2
Average low temp	54.3	60.5	60.1	58.3
Departure from normal	+3.5	+2.9	+3.4	+3.3
Total precipitation	0.86	0.12	0.98	1.96
Departure from normal	-0.31	-0.30	+0.51	-0.1
Total snowfall	0.0	0.0	0.0	0.0
Departure from normal	0.0	0.0	0.0	0.0

Staff Updates

July 31, 2023 marked an end to an era at NWS Spokane, when Meteorologist In Charge Ron Miller retired from federal service. He has been a pillar in Spokane, hired in May 1995 as the Science and Operations Officer for the new weather forecast office. Having a wealth of weather knowledge, Ron trained and quizzed all the weather forecasters that passed through the doors at the NWS Spokane Forecast Office since its inception. In August 2018, Ron was promoted to Meteorologist in Charge and supervised the entire weather office. Ron's background before Spokane was unique, working in Boulder, Colorado for the NWS COMET program which promoted a better understanding of mesoscale meteorology for weather forecasters and maximized the benefits of new weather technologies. He also worked in the NOAA Forecast Systems Laboratory. Prior to that he worked for the Navy in Monterey, California. Originating from California, it didn't take Ron long to adjust to the climate and weather of the Inland NW. He especially enjoyed the colder and snowier times of the year. After 28 years at NWS Spokane, we wish Ron the best of luck in the next chapter of his life - wherever it will take him! ☀️



Remember your Autumn Spotter Checklist
First Snow of the Season!!!
Reduced Visibility: < 1 mile due to dust, smoke, fog...
Strong Winds: 30mph+ or wind damage
Hail: pea size or larger
Tornado or Funnel Cloud
Heavy Rain: Showery: 1/2" + in 1hr Steady: 1" + in 12hr/1.5" + in 24hr
Snow: 2" + valleys & 4" + mountains
Any Mixed Precipitation
Any Flooding
Travel Problems or Damage: due to severe/hazardous weather

Weather Spotter & Observer Corner

It has been a busy season with thunderstorms, flash flooding, hail, smoke, and winds. A big thank you for all the weather spotter reports who tirelessly sent in their reports after each big storm. We really appreciate the photos and pictures of storm damage.

As the seasons change, the threat for hazardous weather will shift to snow, ice, fog and wind. If you want a refresher on the spotter training, feel free to visit recordings and notes of past weather spotter training on the [Spotter Resources Website](#). Expect a schedule for live cold season spotter training in October to early November.

Remember, the easiest ways to relay reports is to dial **509-244-0435** or simply to [Submit a Report Online](#). In addition, NWS Spokane is active on social media, so if you post a picture or report there - we may see and share it too! ☀️

September is Preparedness Month

Answer: October! Climatologically average temperatures drop by 18-20 degrees from Oct 1 to Oct 31

Complete 1 activity a month to prepare you and your family for disasters!

 Make a Communications Plan	 Create an Action Plan	 Store Water	 Build Grab & Go Kits	 Secure Important Documents	 Be 2 Weeks Ready
 Learn Fire Safety	 Learn Utility Safety	 Store Under the Bed Supplies	 Practice Drop, Cover, and Hold On	 Prepare to Shelter in Place	 Conduct a Home Hazard Hunt

Drought

The [Drought Monitor](#) has expanded drought across much of the Inland NW. Only a small area of central Washington has escaped drought conditions so far. Areas of D0 to D2 span from the Cascades to north Idaho. The rainfall in August was beneficial to ward off any additional degradation in drought. The [Seasonal Drought Outlook](#) shows that drought conditions will likely persist and expand across the Inland NW over the autumn months.



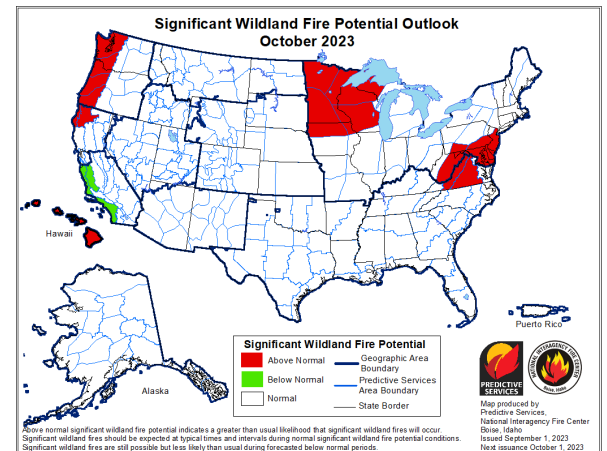
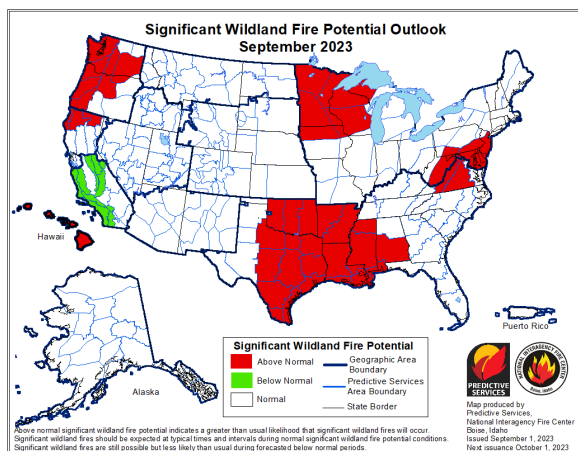
Remember, there are ways that you can help report any drought-related impacts in your area. It's called [Condition Monitoring Observer Reports \(CMOR\)](#).

Scan the QR code to the left to learn more on sharing your drought conditions. Likewise CoCoRaHS can share drought reports as well!! ☀️

2023 Fire Season Review

Fire season may have had a slow start across the Inland NW, yet it really picked up steam by late July into August. The Eagle Bluff fire near Oroville to Lake Osoyoos was the first major wildfire in the area, quickly spreading along Loomis-Oroville Rd to Lake Osoyoos and threatening many homes and structures. The next big fire weather day was August 18th with critical fire weather conditions with very dry, windy conditions. With the dry fuels in place, any spark could roar into wildfires, and it did in Spokane county, first on Grey Road near Medical Lake and then on Oregon Road near Elk. These fires spread rapidly through fields, timber, and neighborhoods. Wildfires developed over north Idaho as well, including Park Ridge near Hayden. More fires were found in the east slopes of the Cascades stretching from Blue Lake near Rainy Pass on Highway 20 to the Airplane fire in western Chelan county.

The August rain and seasonal temperatures in early September helped slow down the fire season, yet the [National Interagency Fire Center](#) leans toward active wildfire potential through September in eastern Washington. It may linger even longer across western Washington where drier conditions exist. ☀️



It's not too early to prepare for these hazards...



dense fog

Fog can be hazardous to drivers, mariners, and aviators and contributes to thousands of travel accidents every year. Visibility often changes quickly in fog.

safety tips

- Slow down
- Use your low-beam headlights
- Leave plenty of distance between you and other vehicles

“Sneaky” Winter Hazards

The winter season brings many weather events that can “sneak” up on you. These are weather hazards that cause big impacts and make travel difficult without making big news.

weather.gov

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first snow

The first snow of the year can often cause major problems on the road as people adjust to the poor driving conditions.

safety tips

- Slow down
- Don't use cruise control
- Leave plenty of distance between you and other vehicles

“Sneaky” Winter Hazards

The winter season brings many weather events that can “sneak” up on you. These are weather hazards that cause big impacts and make travel difficult without making big news.

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Enjoy the autumn season! Fire season and mild temperatures may still be here, but the weather pattern can change quickly to a wetter and colder fall. Be alert to the overnight temperatures. The first frost may be just around the corner! It won't be long until we need to worry about fog and the first snow of the season. Best to prepare now - when the weather is quiet and dry. ☀️