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The Weather Watcher

Of the Inland Northwest

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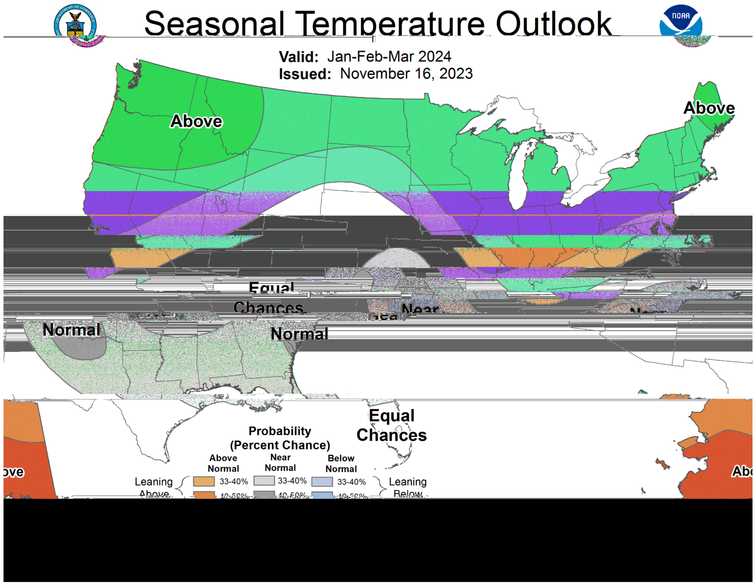
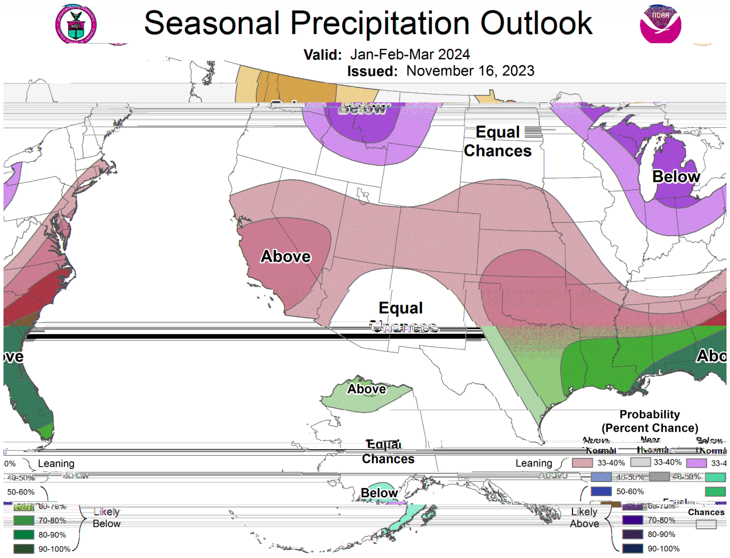
December 2023

Winter Outlook 2023/24 ~ El Niño Continues





El Niño is anticipated to last through the Northern Hemisphere spring (with a 62% chance during April-June 2024). This is due to above normal sea surface temperatures across the equatorial Pacific Ocean. Based on latest forecasts, there is a greater than 55% chance of at least a "strong" El Niño persisting through January-March 2024. There is a 35% chance of this event becoming "historically strong" through January. Stronger El Niño events increase the likelihood of El Niño-related climate anomalies, but do not necessarily equate to strong impacts. In the past, El Niño events typically enhance a strong subtropical jet stream with a southern storm track across the U.S.

The NWS Climate Prediction Center reflects the El Niño Outlook for the Pacific Northwest. Despite the moderate to heavy precipitation in early December, chances of precipitation should average out to near to slightly below normal through the winter season. There is higher confidence of above normal temperatures across the region. The warmer winter temperatures would affect the snowpack, causing below normal seasonal snowfall during El Niño events. NWS Spokane has a local climatology of Inland NW Snowfall Statistics during El Niño events for further details. It may even include your location! Check it out!

Keep in mind, this outlook does not mean winter has been canceled for the Inland NW. Every winter season is unique, each with rounds of snow, rain, wind, fog and ice. It’s best to keep current on the latest weather forecasts especially if you are planning trips in and around the region. Other good tips: Have your vehicle ready for winter weather, practice winter driving conditions, and check the WA & ID road conditions before you go! Safe travels! ☀️

Trivia Question: *When were some Strong El Niño Winters?*

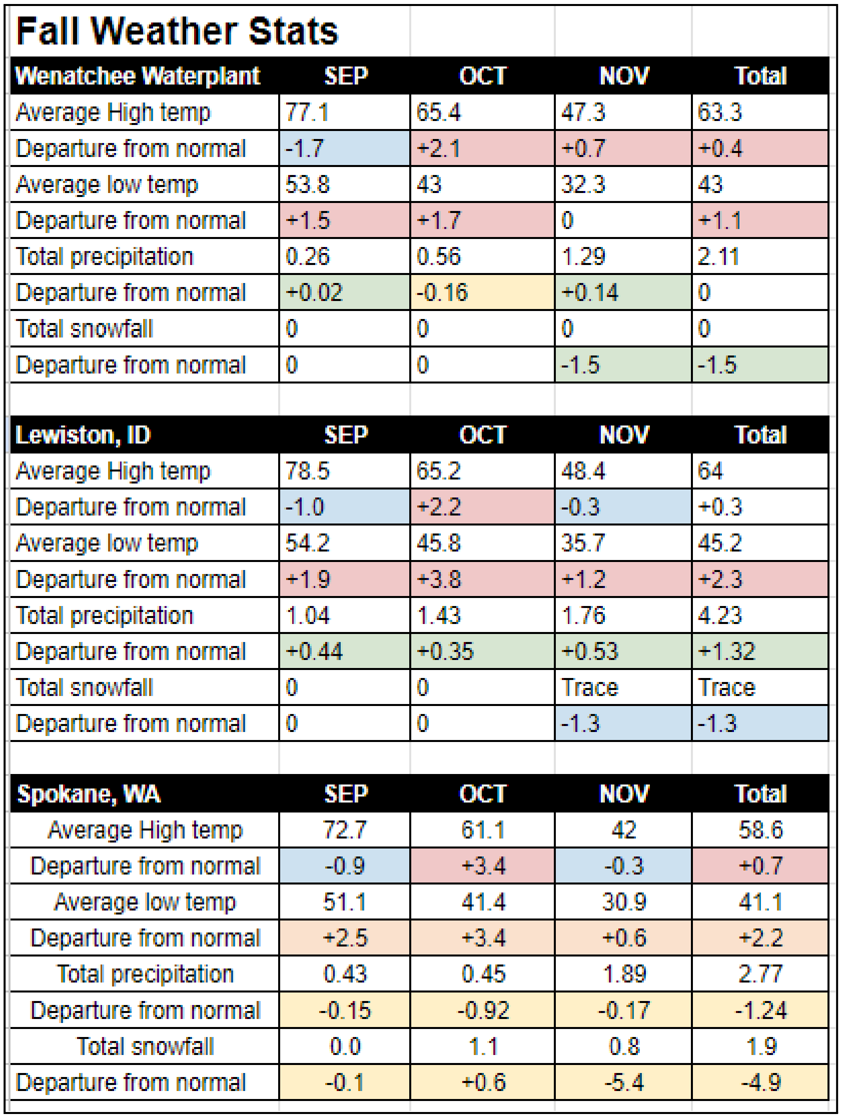
Fall 2023 in Review

Fall of 2023 was a quiet one across the Inland Northwest with just a couple significant weather events.

September was a wet month across northern Washington, especially the Okanogan Valley where Omak recorded its 8th wettest September on record with 1.86”. About half of that fell on the 20th with 0.86”, smashing the previous daily record of just 0.15”. There were a couple thunderstorm events during the month. On the 3rd, thunderstorms over northeast Washington resulted in power outages in the Colville and Addy areas. On the 7th, thunderstorms in the Lewiston area brought wind gusts to near 40 MPH. A rather abrupt change in the weather also hit the LC Valley during the month. The hottest day was on the 16th with a high temperature of 97°F, but just 4-5 days later temperatures dropped into the 50s and 60s with cool and rainy weather.

October brought mild and dry weather for the first three weeks with several days of above normal temperatures with highs in the 70s with a few low 80s. A very abrupt change occurred as an arctic front brought much colder temperatures and even some snow to some areas on the 24th and 25th. Snow accumulated in the mountains and higher plateaus of the region. This includes 6-10” for Stevens and Washington Passes, 5.5” in Waterville, and 3” in Davenport. The snow led to slick roads with slide offs on Interstate 90 near Four Lakes, and Highway 2 between Airway Heights and Davenport. As the snow came to an end, skies cleared allowing temperatures to plummet on the 28th and 29th. Some of the colder spots include 11°F in Deer Park, 13°F in Wilbur and Davenport, 14°F Mazama, 15°F Sandpoint, and 17°F in Pullman.

Several rounds of rain welcomed the region as **November** arrived. North Idaho was especially wet with the first eight days bringing precipitation totals of 3.98” in Sandpoint and 3.61” in Priest River. Lewiston surpassed its entire monthly precipitation normal in just the first six days with 1.43”. The most impactful storm of the month came through on the 11st delivery windy conditions across the region as well as heavy snow to the North Cascades. Peak wind gusts include 53 MPH in Deer Park, 52 MPH Spokane Airport, 51 MPH Beverly, and 48 MPH in Post Falls and Pullman. Washington Pass received 15-20” of snow accumulation. The remainder of the month brought quieter weather. The 29th brought one of the colder days of the month with freezing fog and highs only in the 20s for much of the Columbia Basin and Spokane area. Icy roads resulted in several crashes involving semi trucks three miles east of Ritzville, closing Interstate 90 for several hours.*Jeremy Wolf*



Fall Weather Stats

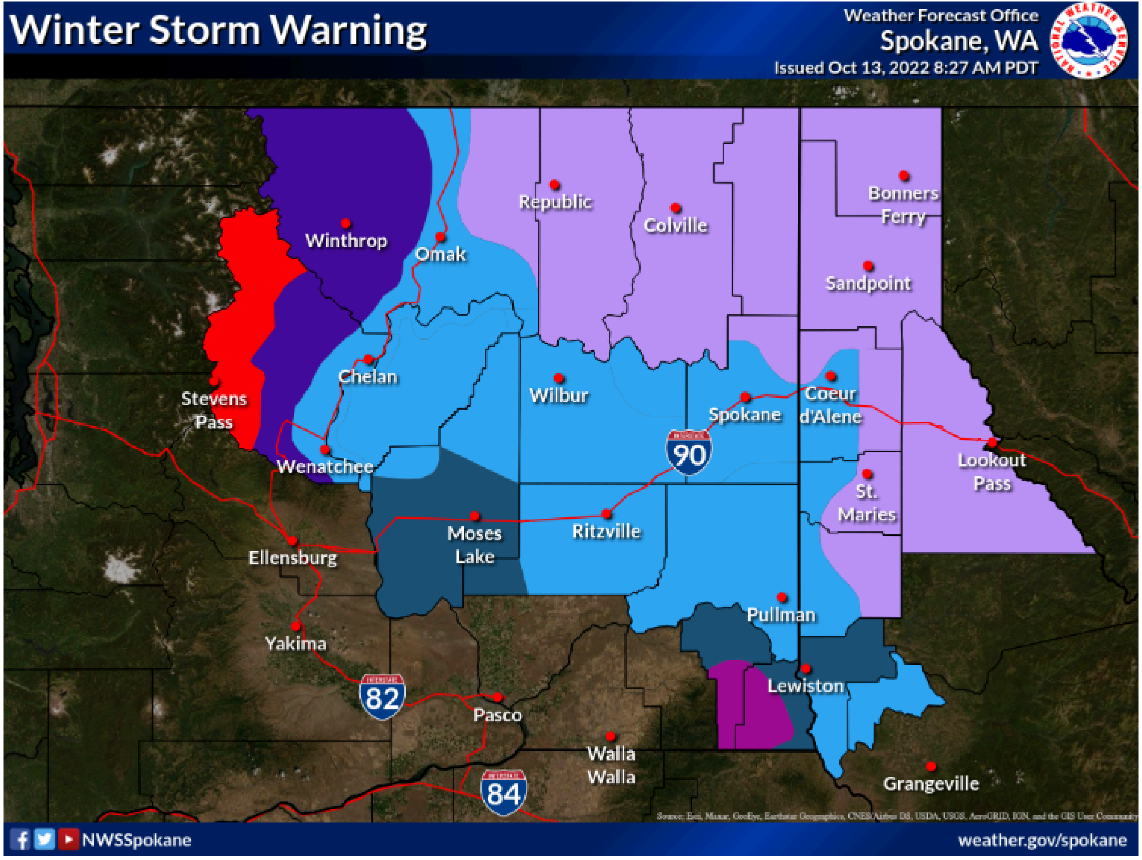
Wenatchee Waterplant	SEP	OCT	NOV	Total
Average High temp	77.1	65.4	47.3	63.3
Departure from normal	-1.7	+2.1	+0.7	+0.4
Average low temp	53.8	43	32.3	43
Departure from normal	+1.5	+1.7	0	+1.1
Total precipitation	0.26	0.56	1.29	2.11
Departure from normal	+0.02	-0.16	+0.14	0
Total snowfall	0	0	0	0
Departure from normal	0	0	-1.5	-1.5

Lewiston, ID	SEP	OCT	NOV	Total
Average High temp	78.5	65.2	48.4	64
Departure from normal	-1.0	+2.2	-0.3	+0.3
Average low temp	54.2	45.8	35.7	45.2
Departure from normal	+1.9	+3.8	+1.2	+2.3
Total precipitation	1.04	1.43	1.76	4.23
Departure from normal	+0.44	+0.35	+0.53	+1.32
Total snowfall	0	0	Trace	Trace
Departure from normal	0	0	-1.3	-1.3

Spokane, WA	SEP	OCT	NOV	Total
Average High temp	72.7	61.1	42	58.6
Departure from normal	-0.9	+3.4	-0.3	+0.7
Average low temp	51.1	41.4	30.9	41.1
Departure from normal	+2.5	+3.4	+0.6	+2.2
Total precipitation	0.43	0.45	1.89	2.77
Departure from normal	-0.15	-0.92	-0.17	-1.24
Total snowfall	0.0	1.1	0.8	1.9
Departure from normal	-0.1	+0.6	-5.4	-4.9

Winter Season Hazards

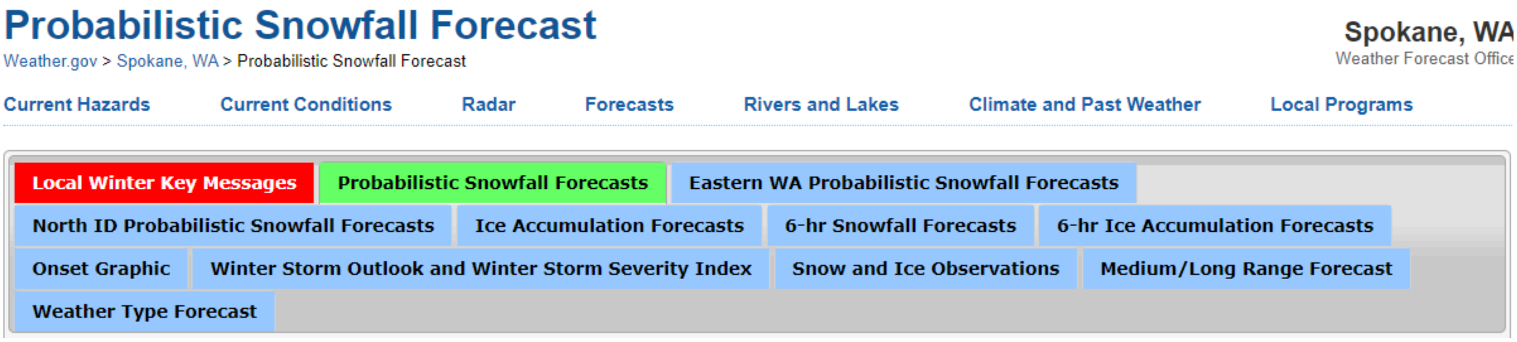
Winters across the Inland NW have multiple hazards with variable precipitation at different elevations. We understand - SNOW is a big hazard! To the right is guidance that NWS Spokane uses to issue Winter Storm Warnings for Heavy Snow. While there is quite a range of values, this has been simplified from past years. This snow guidance is used for the Storm Total amounts for each event. This and other Watch/Warning/Advisory information is available on our NWS Spokane website. This may be a handy guide at times of changing weather and NWS winter weather products.



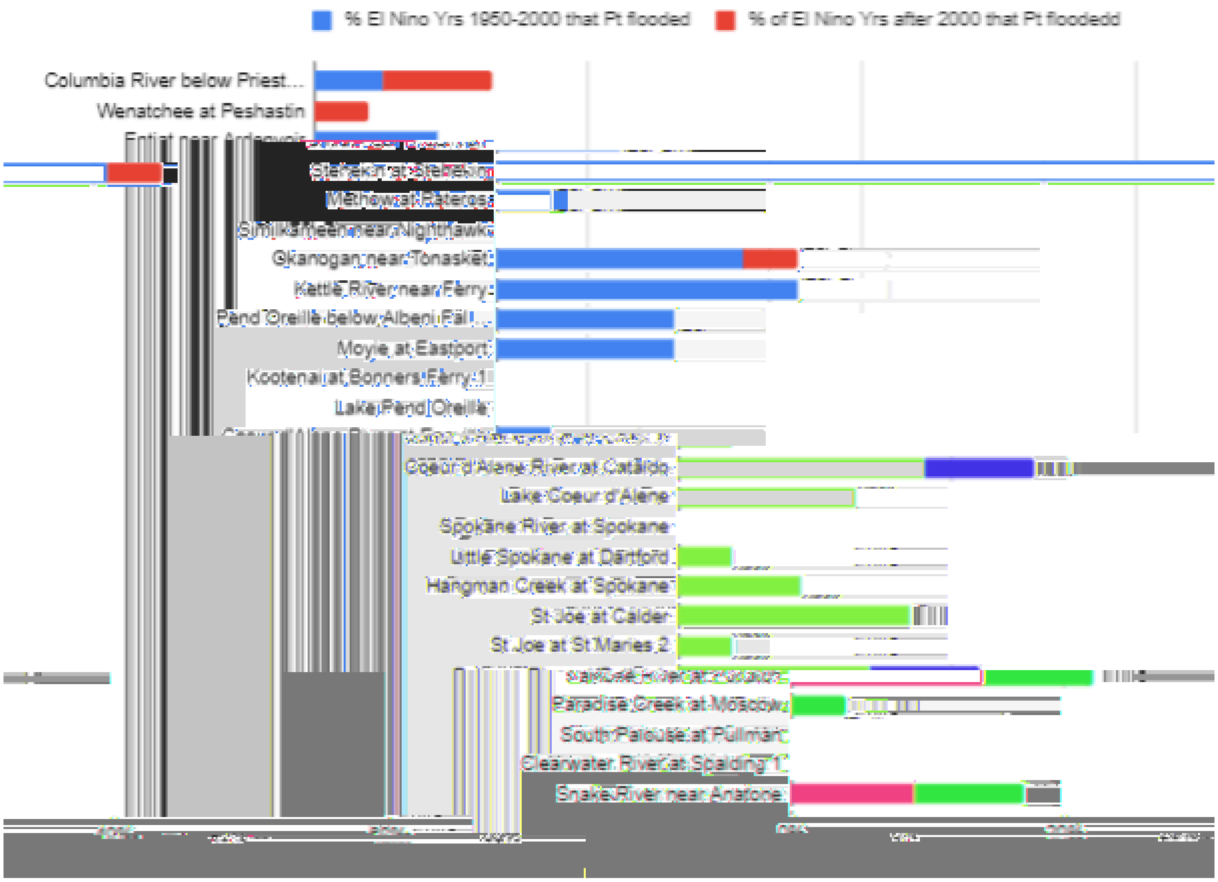
Criteria:

🟦 4 inches of snow or sleet during an event
🟦 6 inches of snow or sleet during an event
🟪 6 inches of snow or sleet below 3000 feet or...
8 inches of snow or sleet above 3000 feet during an event
🟪 8 inches of snow or sleet during an event
🟪 10 inches of snow or sleet during an event
🟥 12 inches of snow or sleet during an event

In addition, NWS Spokane has a Winter Weather page that will highlight local winter key messages, expected amounts, and probabilities of snowfall and ice across the region. There are also links to the Winter Storm Severity Index (WSSI) and the Medium/Long Range Forecasts. This is to help provide you with best winter weather forecast information so you can make decisions that impact your work and your families. ☀

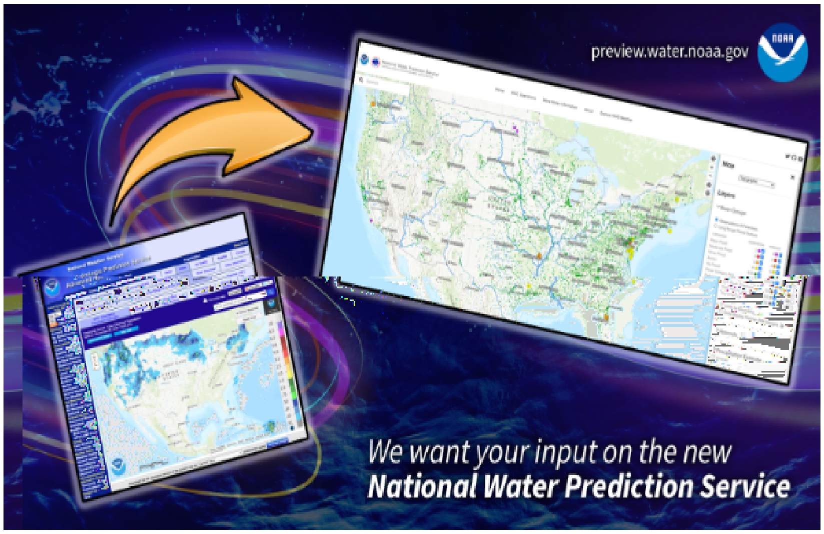


Flooding Outlook & Hydro Updates



The unseasonably mild and wet weather in early December ate away at our young snowpack, but it helps increase stream flows and replenish our thirsty soils. While several mainstem rivers saw a bump in flow, rapid rises were observed on a few smaller rivers, like the White River in Chelan county, and the Pack River & Lightning Creek in Bonner County. Despite the high flows, flood reports were minor across the Inland NW. An interesting note, the top flow ever reported on for Pack River & Lightning Creek occurred 8 years ago in December 2015.

Flooding during El Niño events have occurred in the past, although not as often as other years. The chart above shows the percent of El Niño years that each river forecast point has experienced flooding. The red tips show the flooding that has occurred since 2000. A few spots are sensitive to flooding any year, especially the Stehekin, the Coeur d'Alene at Cataldo, Paradise Creek, and the Palouse at Potlatch.



For those who reside near rivers or are interested in river flows/forecasts, the NWS has this information available. Currently it's found at NWS Advanced Hydrologic Prediction Service (AHPS) and this site has been in use for decades. A new modernized NWS hydrology webpage is coming in Spring 2024, and is being tested now. It's called the National Water Prediction Service (NWPS) and is available for feedback. Besides river observations and forecasts from the River Forecast Centers, it also has National Water Model forecasts available. See the NWPS User's Guide for more details. Feel free to check it out! ☀️

Staff Updates

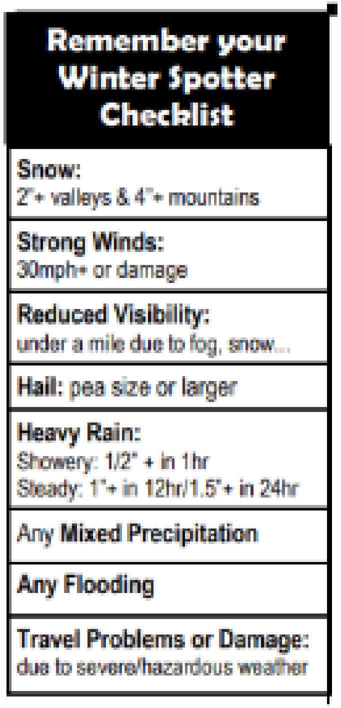
We have exciting news to share! Our new Meteorologist in Charge (MIC) has been selected and it is **Andy Brown**! Even though he has been Acting MIC since Ron Miller's retirement this summer, he will officially take over the role on December 18th. Andy has served as the Warning Coordination Meteorologist at NWS Spokane since 2012 and has been the familiar face to most of our partners and folks across the region. A BIG congratulations to Andy!

In addition, a new Electronics Technician was selected. **Kyle Dauk** will join the team and arrive on January 15th. He's moving from NWS Louisville and has prior experience at Vandenberg AFB and Edwards AFB. We wish Kyle safe travels and welcome him to the Inland NW! ☀

Drought

The Drought Monitor has shown improvements across the Inland NW. Severe Drought (D2) lingers in the ID Panhandle but small improvements are likely if recent precipitation trends continue. The U.S Seasonal Drought Outlook suggests drought may persist across parts of the region through February. A Drought Information Statement is available and shows what factors are included in the drought determination. It also has a new exciting look!

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!! ☀



Remember your Winter Spotter Checklist

Snow: 2"+ valleys & 4"+ mountains

Strong Winds: 30mph+ or damage

Reduced Visibility: under a mile due to fog, snow...

Hail: pea size or larger

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

Any **Mixed Precipitation**

Any Flooding

Travel Problems or Damage: due to severe/hazardous weather

Weather Spotter & Observer Corner

The fall weather spotter and observer training has wrapped up. We had close to 50 attendees over our virtual sessions. Thank you to those that joined. We have the recordings and notes from the classes available on the Spotter Resources if you need a review.

A BIG shout out to the Spokane ARES/RACES group that braved the snow and took part in the Skywarn Recognition Day on December 1-2! It was fortunate they had exciting weather and snow reports to gather for the exercise at NWS Spokane.

Being winter, snow and ice are important to report. 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! ☀

Trivia Answer: The last Strong El Niño events were 2015-16, 2009-10, 1997-98, 1991-92, and 1982-93.

Wishing you a Safe & Happy Holiday Season and....

Looking forward to 2024!

From your friends at NWS Spokane

Thank you for your Reports and

NWS OTX

Meteorologist In Charge
Andy Brown

Warning Coordination Meteorologist
-

Science Operations Officer
Chad Shafer

Administrative Assistant
Jodi Miller

Information Technology Officer
Todd Carter

Service Hydrologist
Robin Fox

Observation Program Leader
Ken Daniels

Lead Forecasters
Jon Fox
Greg Koch
Steve Bodnar
Jeremy Wolf
Charlotte Dewey

Meteorologists
Rocco Pelatti
Laurie Nisbet
Miranda Coté
Steven Van Horn
Joey Clevenger
Valerie Thaler
Krista Carrothers
Dan Butler
Rachael Fewkes

Electronic Systems Analyst
Mike Henry

Electronic Tech
Christopher Huckins
Kyle Dauk

Facilities Tech
Joshua Miller

National Weather Service
2601 N Rambo Road
Spokane, WA 99224

509-244-0435
nws.spokane@noaa.gov