The Weather Watcher

Of the Inland Northwest

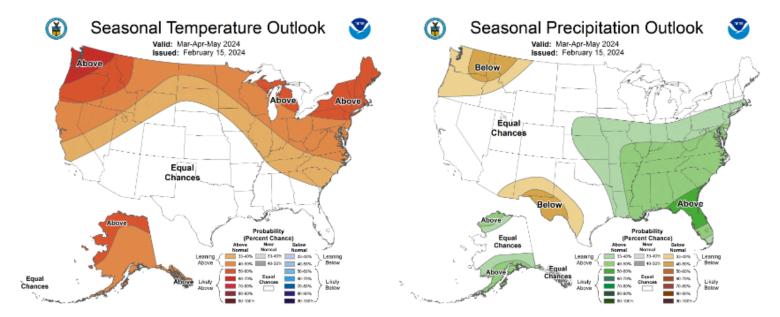
www.weather.gov/Spokane





Spring Outlook 2024

A big story so far this year has been the snowpack and how it's been lacking in many areas across the Inland NW. While some areas saw near record low levels, recent snow has helped boost amounts. The chances for more snow building events look slim through the rest of the spring. The seasonal outlook is leaning toward above normal temperatures and below normal precipitation for March through May 2024.



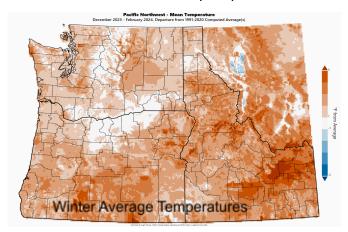
As El Niño Wanes, La Niña Spotted in the Distance

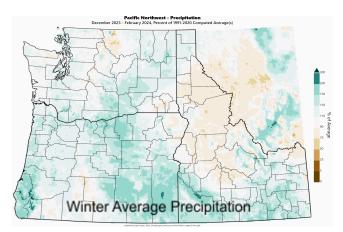
A transition from El Niño to ENSO-neutral is likely by April-June 2024 (79% chance), with increasing odds of La Niña developing in June-August 2024 (55% chance). El Niño conditions peaked in January with above normal sea surface temperatures, since then there has been a slight cooling in the equatorial Pacific Ocean. The most recent long range forecast indicates a transition to ENSO-neutral during spring 2024, with La Niña potentially developing during summer 2024. Even though forecasts made through the spring season tend to be less reliable, there is a historical tendency for La Niña to follow strong El Niño events. There is some uncertainty around the timing of these transitions. Even as the current El Niño weakens, weather impacts could persist through the spring season, leaning toward above normal temperatures and below normal precipitation across the Pacific NW, as seen in the most current Climate Prediction Center CPC Seasonal Outlooks.

Trivia Question: When is the best time to plant my garden this spring?

Winter 2023-24 in Review

The winter as a whole finished **warmer** and **wetter** than normal for the Pacific Northwest. Temperatures were 1-2 degrees above normal when averaged over the entire winter, with precipitation in central and northeast Washington into the north Idaho Panhandle around 110-130% of normal. Parts of the northern Cascades and southern ID Panhandle were below normal for precipitation.





December brought very mild conditions, which was to be expected given the strong El Niño. It was the 6th warmest December on record for Lewiston, and the 7th warmest for the Wenatchee Airport. The month started off on a wintry note on the 2nd and 3rd as heavy snow hit the Cascade crest with 18" in Stehekin and Plain, while NE Washington and the Idaho Panhandle received 5-7". Then a pair of atmospheric rivers took aim at the region bringing

warmer and wet weather from the 5th through the 7th. Moderate to heavy rain over north Idaho combined with rapid snow melt led to rapid river rises with minor flooding on Lightning Creek and the Pack River. CoCoRAHS observers in the area around Sandpoint measured between 3.35-4.50" of rain over the three-day period. The dial turned back to winter on the 9th and 10th with heavy snow returning to similar areas from earlier in the month. Another 13-16" fell in the Stehekin and Plain areas with areas around Deer Park, Newman Lake, Elk, and Spirit Lake also receiving a heavy dose of the white stuff with 7-9".



After a mild December, big changes arrived in **January** as a major blast of arctic air entered the region on the 11th. But there were a couple significant events prior to this. On the 6th heavy snow fell north of Spokane with 6-8" in Clayton, Loon Lake, Diamond Lake, and Newman Lake. On the 9th a deep low pressure system tracking across southern British Columbia delivered high winds to the region, including blizzard conditions in the Cascades leading to the closure of Stevens and Blewett Passes. Stevens Pass recorded 33.5" of snow in a two-day period, while Blewett Pass had 30 trees blown down along Highway 97. Peak gusts include 62 MPH in Athol and Pomeroy, and 56 MPH in Pullman and Quincy. Then on the 11th a strong arctic front initially brought snow squalls to parts of the region with intense bursts of snow causing major impacts. Wenatchee was hit with 8-11" of snow with several accidents. Another snow squall stalled over a small stretch of I-90 between Vantage and George for several hours, closing the road. In Clarkston, 5" fell in 2.5 hours, while Alpowa Summit reported thundersnow. Then the Inland NW went into the deep freeze with some impressive cold stats!

Several locations recorded their coldest high temperatures in decades on the 13th. This includes the Wenatchee Airport's high temperature of -1°F which was the coldest since December 1968, Bonner Ferry -3°F which was the coldest since January 1979, and Lewiston 2°F which was the coldest since 1983. But these were just the air temperatures, the winds made the wind chills about as cold as you will ever see for the Inland NW. Wind chills on the morning of the 13th include -42°F Curlew and Sandpoint, -41°F Deer Park, -40°F Mansfield and Uniontown, and -38°F in Naples and Coeur d'Alene. The exceptional cold lasted for several days, with Wenatchee breaking numerous temperature records from the 12th through the 16th. The region gradually warmed up for the final two weeks of January as milder Pacific air replaced the frigid arctic air. Initially snow resulted, which was heavy on the 17th over NE Washington with 12" in Chewelah, and 11" in Loon Lake and Metaline Falls. Then periods of snow changed to freezing rain with .10-.20" of ice accumulation over NE Washington and North Idaho on the 21st. Exceptionally mild weather closed out the month, with Lewiston reaching a balmy 63°F on the 29th!

February brought mild and guieter weather to the region with just a couple events. On the 15th a colder weather system impacted the region with 1-4" of snow from the Cascade valleys across the Upper Columbia Basin, Spokane/Coeur d'Alene area, and Palouse. On the 25th a strong cold front delivered windy conditions. Peak gusts include 53 MPH at the Spokane Airport and Athol, 52 MPH Pullman Airport, 50 MPH Uniontown, and 47 MPH at the Wenatchee Airport. Finally, heavy snow hit the mountains to close out the month. Stevens Pass over a three-day period ending on the 28th received 3 feet. The Idaho Panhandle received a burst of moderate to heavy snow on the 28th with 4-7" from Bonners Ferry down to the Coeur d'Alene area. Portions of the palouse received 2-4" with patchy drifting snow as well. .Jeremy Wolf 🔆



Winter Weathe	r Stats			
Wenatchee Waterplant	DEC	JAN	FEB	Total
Average High temp	40.3	34.2	47.1	40.5
Departure from normal	+4.1	-1.6	+3.2	+1.9
Average low temp	32.8	23.8	31.8	29.5
Departure from normal	+6.4	-1.8	+4.2	+2.9
Total precipitation	1.48	1.79	0.42	1.23
Departure from normal	-0.11	+0.47	-0.50	-0.14
Total snowfall	4.5	14	1.4	19.9
Departure from normal	-1.5	+8.4	-1.6	+5.3

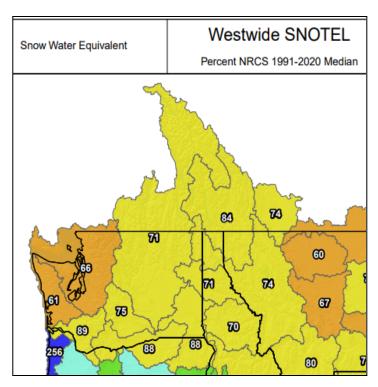
Lewiston, ID	DEC	JAN	FEB	Total
Average High temp	46.6	39.3	48.8	44.9
Departure from normal	+5.8	-2.8	+1.8	+1.6
Average low temp	34.8	27.6	35.7	32.7
Departure from normal	+5.3	-2.7	+4.0	+2.2
Total precipitation	1.22	1.85	1.09	4.16
Departure from normal	+0.09	+0.72	+0.05	+0.86
Total snowfall	0.5	12.3	0.5	13.3
Departure from normal	-4.1	+9.6	-3.3	+2.2

Spokane, WA	DEC	JAN	FEB	Total
Average High temp	38.6	32.7	41.4	37.6
Departure from normal	+4.8	-1.8	+1.9	+1.6
Average low temp	30.5	22.9	30.8	28.1
Departure from normal	+6.2	-1.8	+4.5	+3.1
Total precipitation	3.34	2.08	2.03	7.45
Departure from normal	+1.0	+0.11	+0.59	+1.7
Total snowfall	11.8	9.6	4.9	26.3
Departure from normal	-2.0	-2.7	-2.9	-7.6

Spring Runoff Season

With mountain snowpack being a main driver for spring runoff, the threat for mainstem river flooding looks low for the Inland NW this year. Peak flow forecasts from the NW River Forecast Center and the Long Range Flood Risk being less than 10%. Despite the cool and active weather in early March, the mountain snow water equivalent is running 70% 90% percent of normal according to the snow observations from the National Resources Conservation Services (NRCS). This is no surprise since history has shown that flood chances are typically less after an El Niño winter, especially a strong one like we had this winter. Nonetheless, any big warm ups could increase the snowmelt and runoff leading to rapid rises on small rivers and creeks. This coupled with any moderate to heavy rain events can saturate soils and cause higher flows. If you reside near a stream or flashy river, it's good to monitor the river levels and know when to protect your property if high flows occur.

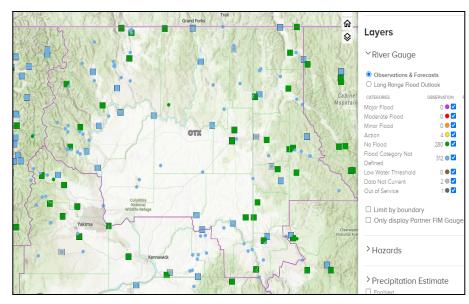




By spring, thunderstorms will be an additional hazard to monitor. Thunderstorms can bring a variety of weather impacts from lightning, heavy rain, hail, gusty winds, and even tornadoes. The storms that are slow moving with heavy downpours can lead to flash flooding especially if they track through urban areas and/or steep terrain especially near burn scars. Know what to do during a flash flood, seek higher ground and stay away from rising water. Don't drive through water covered roadways. Remember, When flooded, Turn around, Don't Drown!

New Hydro page!

A new look will be available to view river observations and forecasts. It's the National Water Prediction Service (NWPS) and it will be turned on after March 27, 2024. This new page will eventually replace the NWS Advanced Hydrologic Prediction Service (AHPS) that has been in use for decades. Besides river observations and forecasts from the River Forecast Centers, it will also have new features including National Water Model forecasts available. Feel free to check it out!



Drought

The <u>Drought Monitor</u> continues to highlight drought over Inland NW, especially for northeast Washington into the Idaho Panhandle with areas of Moderate Drought (D1) and Severe Drought (D2). The lack of mountain snowpack and long term dryness are the main drivers for the drought conditions. The U.S <u>Seasonal Drought Outlook</u> suggests drought may persist across parts of the region through the spring. A <u>Drought Information Statement</u> 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 <u>Condition Monitoring Observer Reports (CMOR)</u>. Scan the QR code to the left to learn more on sharing your drought conditions. Likewise CoCoRaHS can share drought reports as well!! **

Weather Spotter & Observer Corner

March is the annual **CoCoRaHS** Recruitment month across the country. The Community Collaborative Rain Hail and Snow Network is for weather enthusiasts who enjoy reporting precipitation. If that includes you, consider joining the <u>CoCoRaHS</u> Network! All you need is a rain gauge and a computer (or device) to send your observations.





Spring is also the time for **Weather Spotter** Training. New material is being updated for this year. We plan to offer training dates mostly in April. We plan to offer both Basic and Advanced weather spotter training. Check the <u>spotter training schedule</u> after mid March for the updated schedule; this will be where you can register for a course. In the meantime, check out the <u>Spotter Resources</u> for additional information.

Remember, the easiest ways to relay reports is to dial **509-244-0435** or simply to <u>Submit a Report Online</u>. 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!

A big thank you for those that have called or sent in a spotter report over the last several months. We appreciate your reports and enjoy your pictures or images. Please keep in mind that when the weather is busy, we are busy too and we may not have time to chat too long. If you are interested to see where your storm or snow reports go, check out this <u>Local Storm Report page</u>.

<u>Trivia Answer</u>: Knowing the average last spring freeze dates can help you plant your garden, which can range from April 15th in the lower Basin to May 15th in the northern valleys. Check out this <u>Climate Page on last spring freezes</u>.

NWS OTX

Meteorologist In Charge Andy Brown

Warning Coordination Meteorologist

Science Operations Officer

Administrative Assistant Jodi Miller

Information Technology Officer Todd Carter

> Service Hydrologist Robin Fox

Observation Program Leader Ken Daniels

Lead Forecasters

Greg Koch Steve Bodnar Jeremy Wolf Charlotte Dewey

Meteorologists

Jon Fox
Rocco Pelatti
Laurie Nisbet
Miranda Coté
Steven Van Horn
Joey Clevenger
Valerie Thaler
Krista Carrotler
Dan Butler
Rachael Fewkes

Electronic Systems Analyst Mike Henry

> Electronic Tech Christopher Huckins Kyle Dauk

> > Facilities Tech Joshua Miller

Staff Updates

There have been a few changes in the NWS Spokane staff over the past few months. Science Operations Officer **Chad Shafer** was selected for the same position at the NWS Kansas City. He departed in January and was excited to be closer to family. Also in January, Forecasters **Jon Fox** and **Rocco Pelatti** began a job sharing position for this calendar year. That leaves some holes to fill in our roster. Expect to see new names and faces joining the NWS Spokane Team in the coming months.



National Weather Service 2601 N Rambo Road Spokane, WA 99224

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

Term Talk

Many may get confused with the terminology that the National Weather Service uses in weather products. Here is a handy table of what a few terms mean when used to communicate severe or hazardous weather risks. These terms can be used in both long-fused events such as: winter storms. hiah floods winds. and short-fused events such as: thunderstorms. severe flash tornadoes. and Check out the flooding. types of Weather Products issued by NWS Spokane.

Remember your Spring Spotter Checklist

Tornado or Funnel Cloud

Hail: pea size or larger

Strong Winds:

30mph+ or damage

Any Flooding

Reduced Visibility:

under a mile due to fog, snow...

Heavy Rain:

Showery: 1/2" + in 1hr

Steady: 1"+ in 12hr/1.5"+ in 24hr

Snow:

2"+ valleys & 4"+ mountains

Any Mixed Precipitation

Travel Problems or Damage:

due to severe/hazardous weather

Warning Watch **Advisory** Weather hazard Risk of weather Weather hazard hazard in the is occurring, is occurring, imminent or likely near future imminent or likely Poses a threat to Could pose a Could cause significant life/property threat to life/property inconvenience **Use Caution** Take Protective Have a Plan of Action Action