

# The Weather Watcher

## Of the Inland Northwest

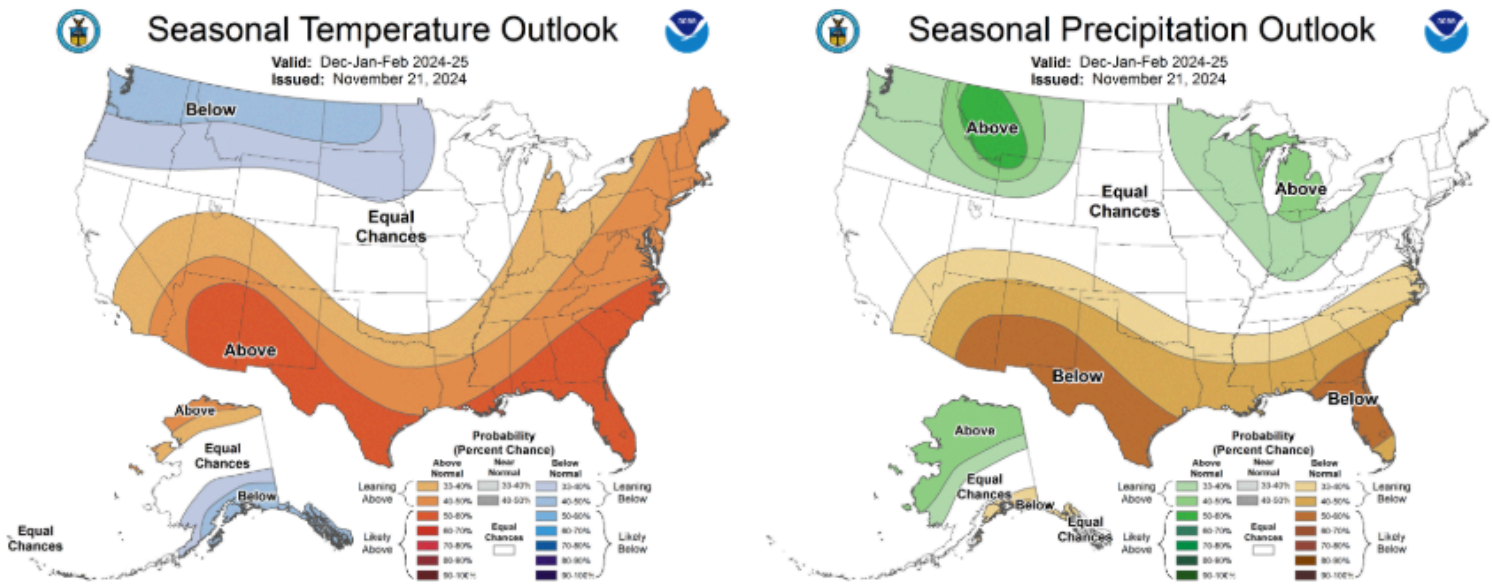
[www.weather.gov/Spokane](http://www.weather.gov/Spokane)



December 2024

### Winter Outlook 2024

The Climate Prediction Center [CPC Seasonal Outlook](#) for December through February forecasts below normal temperatures and above normal precipitation for much of the Pacific NW. While December looks to trend milder than normal, a cooling trend is favored for the later half of the winter season. Seasonal models lean toward increased confidence of above normal precipitation especially for January and February. ☀️



### ENSO Update - La Niña Watch continues...

The latest Climate Prediction Center [CPC Discussion](#) stated that ENSO-neutral continued in November, with near-average sea surface temperatures (SSTs) observed across much of the equatorial Pacific Ocean. Nonetheless, La Niña conditions are likely to emerge by January 2025 (59% chance), with a transition to ENSO-neutral most likely by March-May 2025 (61% chance). The seasonal models continue to predict a weak and a short duration La Niña. Additional forecaster perspectives and analysis are available in an [ENSO blog](#). ☀️

### Winter Calendar

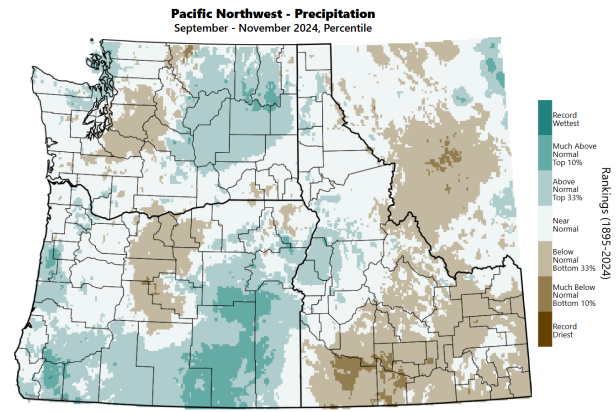
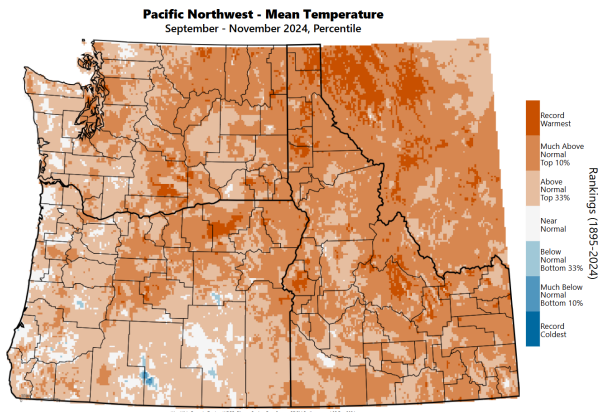
Winter brings mixed precipitation, fog, cloudiness, and cold to the Inland NW, along with shorter daylight hours. The **Winter Solstice** occurs on **December 21, 2024 at 1:19 AM PST** and marks the longest night of the year when the north pole is tilted the maximum distance from the sun. On the plus side, the longer nights may allow opportunities for winter recreation or sky watching on those rare clear cold nights.

**Trivia Question:** What are the names of the winter Full Moons and when do they occur?



# Fall 2024 in Review

It was a mild and wet fall across the Inland NW. A soggy November was the main contributor to the wet conditions. Below are maps showing how fall finished, with many locations finishing in the top 10% for mean temperature from September-November.



The first week of meteorological fall arrived where summer left off, as temperatures reached the 90s across the region to start off **September**, with even a few triple digits in the hottest spots including Lewiston and Omak. The 11th and 12th brought some much needed rain from the Palouse into the Central Panhandle Mountains. Several locations received over an inch of rain including 2.27" at St. Maries, 1.72" in Potlatch, and 1.36" in Lenore. Unfortunately the rain wasn't widespread which was bad news when a pair of strong cold fronts arrived at the end of the month. On the 25th high winds picked up a considerable amount of blowing dust, with severe thunderstorms and a haboob added to the mix as well. Storms produced wind gusts as high as 60-70 MPH across Eastern Washington and North Idaho knocking down several trees from North Spokane through Elk, Newport, Sandpoint, Bonners Ferry, Pullman, and Clarkston. Power was lost to around 40,000 customers. The winds picked up blowing dust in Airway Heights reducing visibility to near zero! A haboob tracking through Colfax, Pullman, Moscow, also picked up substantial blowing dust. In Oroville, a severe thunderstorm delivered wind gusts to around 55 MPH with several downed trees. Another cold front arrived on the 29th producing 40-50 MPH wind gusts. Considerable amounts of blowing dust occurred across the Columbia Basin with this event with Ritzville one of the hardest hit areas with 0 visibility, and cars pulling off the road.

**October** was a much quieter month across the Inland NW. There was one last dust storm on the 4th. This one occurred in a different area typically not as prone to dust storms, along Highway 95 near Genesee. Nearby Shirrod Hill recorded a peak wind gust of 63 MPH. Otherwise periods of light precipitation occurred during the month along with breezy winds with several frontal passages.

The weather often turns much wetter into **November** and this year was no different. Although this time it was much wetter than normal, especially in Central Washington. For Omak and Ephrata, it was the 2nd wettest November on record with 3.91" and 2.71" of precipitation respectively. For Spokane it was the wettest November since 2006 with 4.24". The 19th through the 23rd was an exceptionally wet period as a very strong weather system off the coast sent in several rounds of precipitation. On the 19th and 20th, heavy snow fell in the Methow Valley with 16" in Mazama, and 12" in Winthrop. Heavy snow impacted other communities as well including 15" in Conconully, 14" Winton, and 11" in Waterville. Near the Canadian border 11" fell in Naples, 8.5" Priest Lake, and 6" in Metaline Falls. The next day, Spokane recorded its wettest day of 2024 (so far) with 0.90" of rain. From the 21st through the 23rd, several

stations on the palouse and east of Lewiston picked up to 1-2" of rain including 1.66" in Moscow and 1.53" in Lenore. All the precipitation saturated some area slopes causing landslides. Numerous large rocks slide onto Highway 971 on the south shore of Lake Chelan closing the road. Six miles south of Julietta, a large boulder came down onto Highway 12, damaging a vehicle. A landslide near Kamiah went onto SR 64 closing the road. All the precipitation made ski resorts happy with several regional resorts reporting 2 to 3 feet of snow on the ground by month's end.

Jeremy Wolf ☀️

## Drought Relief

The November rains were beneficial for many and brought welcome relief to the long term drought across the Inland NW. This long term drought has extends back to the fall of 2022 for many locations. As of December 3rd, the U.S. [Drought Monitor](#) showed less than 20% of the region at Moderate Drought (D1) and 45% at Abnormally Dry (D0); that means more than 36% of the region being drought free. According to the U.S. [Monthly and Seasonal Drought Outlooks](#), further drought improvements are favored through the upcoming winter season. ☀️

## Mountain Snow

The mountain snow season was off to a quick start in late October through mid November with the rounds of precipitation and temperatures cold enough to turn the higher elevations white. In fact, near to above normal mountain snow water equivalent (SWE) was observed by November 20th at most of the Snotel sites across the Pacific NW. Then the storm track shifted and a dry spell set in with below normal precipitation for early December according to the



View of the Methow Valley  
Sun Mtn Lodge - December 2024

[NRCS](#)

[daily SWE reports](#). As of the second week of December, the mountain snowpack still looks solid with above normal values across the Okanogan Highlands into the ID Panhandle. Deficits of snow were observed along the Cascade crest in Okanogan and Chelan counties. Hopes are high that the storm track shifts back to the region and brings more rounds of winter precipitation. Mountain snow is vital for our region since the runoff from the melting of snow brings the water to the lakes and rivers during the drier seasons, such as late spring and through summer. Rapid changes in the snow pack or the timing of the snow building impacts how much water is available for agriculture, wildlife, fish and residents around the region. ☀️

### Fall Weather Stats

Wenatchee Waterplant	SEP	OCT	NOV	Season
Average High temp	84.8	67.4	47.2	66.5
Departure from normal	+6	+4.1	+0.6	+3.6
Average low temp	56	41.5	33.2	43.6
Departure from normal	+3.7	+0.2	+0.9	+1.6
Total precipitation	0.00	0.10	2.88	2.98
Departure from normal	-0.24	-0.62	+1.73	+0.87
Total snowfall	0	0	1	1
Departure from normal	0	0	-0.5	-0.5

Lewiston, ID	SEP	OCT	NOV	Season
Average High temp	83	67.3	49.3	66.5
Departure from normal	+3.5	+4.3	+0.6	+2.8
Average low temp	57	44.3	37.2	46.2
Departure from normal	+4.7	+2.3	+2.7	+3.2
Total precipitation	0.82	0.89	1.45	3.16
Departure from normal	+0.22	-0.19	+0.22	-0.19
Total snowfall	0	0	0	0
Departure from normal	0	0	-1.3	-1.3

Spokane, WA	SEP	OCT	NOV	Season
Average High temp	79.5	61.5	43.1	61.4
Departure from normal	+5.9	+3.8	+0.8	+3.5
Average low temp	53.9	40.3	33.3	42.5
Departure from normal	+5.3	+2.3	+3	+3.5
Total precipitation	0.04	0.90	4.24	5.18
Departure from normal	-0.54	-0.47	+2.18	+1.17
Total snowfall	0.0	0.0	2.6	2.6
Departure from normal	-0.1	-0.5	-3.6	-4.2

# Staff Updates

We are happy to celebrate the promotion of a sixth Lead Meteorologist to NWS Spokane this fall and that's **Valerie Thaler**! Valerie has been at the Spokane office since the summer of 2020 as a Meteorologist. Prior to that, she worked at NWS Portland and completed her Masters degree at Portland State University. She has demonstrated increased knowledge of weather hazards of the Inland NW.

A new Meteorologist has been selected and it is **Antoinette Serrato** and will be arriving to start the new calendar year. Antoinette is arriving from NWS Hanford where she has been a Meteorologist since 2022. She has experience in hydrology and outreach. Prior to joining the National Weather Service, Antoinette was a graduate student at University of Nevada, Reno where she received her Masters degree in May 2022.

Lastly, we're announcing the departure of two long time forecasters from NWS Spokane. Both **Rocco Pelatti** and **Jon Fox** will be retiring from federal service on January 25, 2025. Jon has been a Lead Meteorologist since the summer of 1997 and has been an active Incident Meteorologist for over a decade. Rocco arrived at NWS Spokane in late 1997 and also served as an Incident Meteorologist with his interests spanning into hazmat events. Their combined years of service and weather experience are close to 70 years. They will be deeply missed. Both have been job sharing for their last year at NWS Spokane. Rocco is looking forward to skiing more. Jon is anticipating more time on the golf courses by spring. **Congratulations to Valerie, Antoinette, Rocco and Jon!** ☀️

## Community Service

A team at NWS Spokane took part in an afternoon sort session at Second Harvest in Spokane in November. Second Harvest brings community resources together to feed people in need through empowerment, education and partnerships. The volunteer activity was focused on sorting through the large returned donation food boxes. The staff also collected boxes of canned and packaged food for donation. ☀️



### NWS OTX

**Meteorologist in Charge**  
Andy Brown

**Warning Coordination Meteorologist**  
Charlotte Dewey

**Science Operations Officer**  
Kelly Butler

**Administrative Assistant**  
Jodi Miller

**Information Technology Officer**  
Todd Carter

**Service Hydrologist**  
Robin Fox

**Observation Program Leader**  
Ken Daniel

**Lead Meteorologists**  
Greg Koch  
Steve Bodnar  
Jeremy Wolf  
Laurie Nisbet  
Steven VanHorn  
Valerie Thaler

**Meteorologists**  
Jon Fox  
Rocco Pelatti  
Miranda Coté  
Joey Clevenger  
Krista Carrothers  
Dan Butler  
Rachael Fewkes  
Antoinette Serrato

**Electronic Systems Analyst**  
Mike Henry

**Electronic Tech**  
Christopher Huckins  
Kyle Dauk

**Facilities Tech**  
Joshua Miller



**Trivia Answer:** The December full moon occurs on 15th and is called the Cold Moon. In January, the full moon occurs on the 13th and is called the Wolf Moon and in February, it's on the 12th and called the Snow Moon





# Weather Spotter & Observer Corner

We offered three sessions of weather spotter and observer training in October with the focus on winter weather. There were 94 observers and spotters that took the live virtual classes.

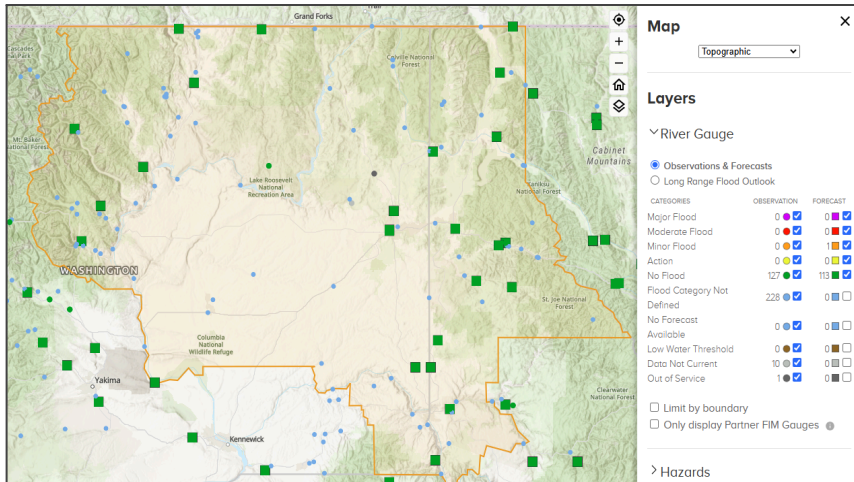
Notes and videos from the winter season training are available on our [NWS Spotter Resources](#)

website. We appreciate all of your reports! This time of year, the typical reports include snow and ice. Keep up the good work! If you are interested to see where your storm reports go, check out this [Local Storm Report page](#).

On December 6-7, 2024, the local Spokane ARES/RACES amateur radio operators gathered at NWS Spokane to take part in the Skywarn Recognition Day. It celebrates the contributions that Skywarn volunteers make to the NWS mission, the protection of life and property. Amateur radio operators comprise a large percentage of the weather spotter volunteers across the country. The Amateur radio operators also provide vital communication between the NWS and emergency management if normal communications become inoperative. ☀️

## Hydrology and Peak Flow Outlook

The late fall precipitation helped boost streamflows back to normal across the Inland NW which were running at very low levels since this summer. The outlook for above normal precipitation and a weak La Niña event does favor higher stream flows for this winter and spring. It's early in the season, yet the [Long Range Flood Outlook](#) does lean toward a slight elevated threat of flooding on the Palouse and Coeur d'Alene river basins by late winter. This will depend largely on the timing and duration of any upcoming winter storms, precipitation, and how the mountain snow pack builds.



snow pack builds.

One way to keep tabs on river conditions is through the NWS [National Water Prediction Service \(NWPS\)](#) which came online last spring and linked through the Rivers and Lakes tab on the NWS webpage. NWPS is dynamically driven with several GIS layers including weather hazards, precipitation estimates, snow depth and snow water equivalent estimates, along with National

Water Model forecasts. In addition, experimental NWS Flood Inundation Mapping (FIM) will be available across the Pacific NW during high flow events. The NWS staff will be using these new services during the upcoming spring runoff season. If you have any questions or comments about NWPS, please contact [nwps.webmaster@noaa.gov](mailto:nwps.webmaster@noaa.gov). Lastly, be aware of the difference between Flood Watch vs. Flood Warning during high flows. ☀️

### FLOOD WATCH

A Flood Watch is issued when **flooding is possible**.

Stay tuned to trusted news sources and be ready to seek higher ground.

Be Prepared.

### FLOOD WARNING

A Flood Warning is issued when **flooding is happening or about to happen**.

Move to higher ground immediately! Never drive or walk through floodwaters.

Take Action!

# Stay Safe on the roads this Winter!

## FOG SAFETY

### Disabled Vehicle in Dense Fog



1. Pull well onto the shoulder
2. Turn off all lights except "flashers"
3. If possible leave your vehicle and move away from the road





## PROTECT YOURSELF FROM SNOW SQUALLS

 **If a Snow Squall Warning is issued, delay travel.**  
If you're already driving, safely exit the road at the next opportunity.

**If you cannot exit the road in time:**





-  **Slow down,** but avoid slamming the brakes
-  **Turn on your lights** (low-beam headlights & hazards, if allowed)
-  **Pull over safely to the side of the road,** and when safe, quickly exit your vehicle and move as far away from the road as possible




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Remember your Winter Spotter Checklist	
<b>Snow:</b>	2'+ valleys & 4'+ mountains
<b>Strong Winds:</b>	30mph+ or damage
<b>Reduced Visibility:</b>	under a mile due to fog, snow...
<b>Hail:</b>	pea size or larger
<b>Heavy Rain:</b>	Showery: 1/2" + in 1hr Steady: 1" + in 12hr/1.5" + in 24hr
<b>Any Mixed Precipitation</b>	
<b>Any Flooding</b>	
<b>Travel Problems or Damage:</b>	due to severe/hazardous weather

## DRIVING DURING STRONG WINDS

-  Maintain a safe distance from high-profile vehicles
-  Look out for fallen/falling trees, powerlines, or debris
-  Keep a firm grip on the wheel with both hands
-  Use caution on bridges and overpasses

weather.gov 

*Wishing you peace and happiness in this festive season & the coming new year!*  
From NWS Spokane

