

The Weather Watcher

Of the Inland Northwest

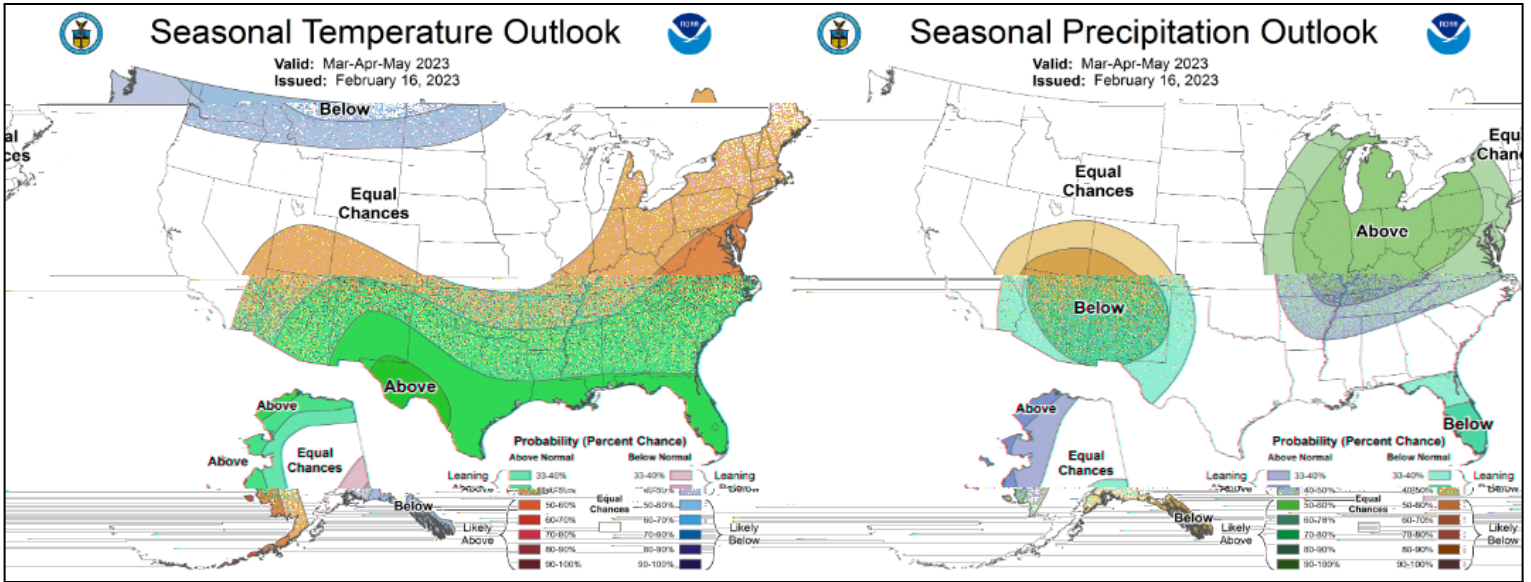
www.weather.gov/Spokane



March 2023

Spring Outlook 2023

The [NWS Climate Prediction Center](https://www.weather.gov/climate) updated the seasonal outlook for this spring and it's leaning toward below normal temperatures with equal chances of above/at/below normal precipitation for March through May. In addition, [La Nina has ended](https://www.weather.gov/climate) and ENSO Neutral conditions are expected through the spring and summer of 2023. ☀️



CoCoRaHS March Madness 2023

March 1–31, 2023

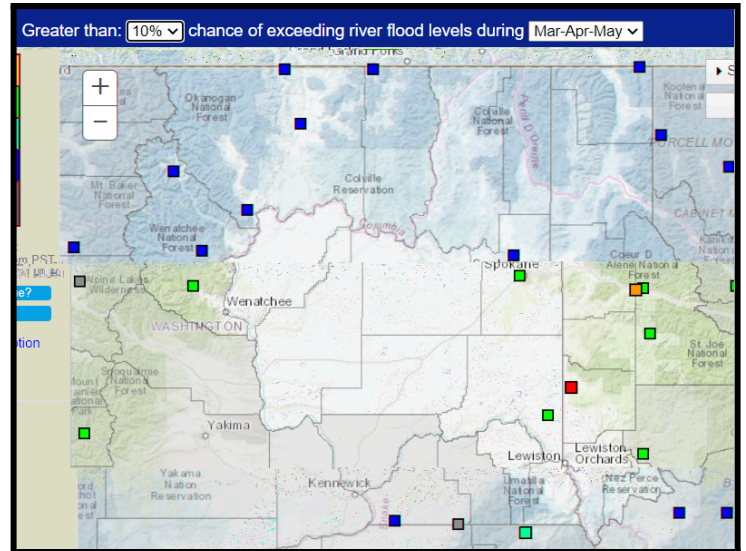
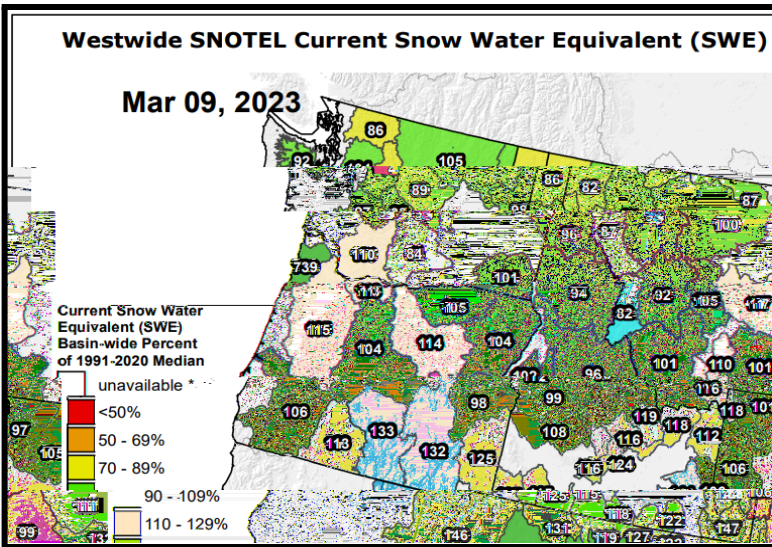
How many new volunteers can you recruit in your state?

It's that time again. Recruiting season for weather observers across the region and country to join the Community Collaborative Rain, Hail and Snow Network or **CoCoRaHS!** There is always a need for a greater number of observations, as the saying goes "the rain (or snow) doesn't fall the same on all." Due to the variability of precipitation, amounts measured can be quite different a block or a mile away! This is so true for the Inland NW with the many micro-climates across our region. Help fill in the gaps by recommending the program to a friend or relative. The more the merrier - and the more observations, the clearer the picture, the better the understanding of where it did AND did not rain. For many observers, this will be their **15th year of collecting precipitation reports across the Inland NW!** Learn more by visiting www.cocorahs.org where you can see the latest precipitation maps on rain and snow along with signing up for the program! ☀️

Trivia Question: ...Where are the wettest & driest locations in the Inland NW?

Spring Flood Outlook 2023

It may seem like our winter has dragged on for quite some time with our early snow dump in November and then more snow in March. Yet most of January into early February was mild and on the dry side. Examining the [mountain snow water equivalent](#) (SWE) is a good indicator of our spring flood season. Currently the mountain snowpack is



running near to slightly below normal with higher than normal spots across north central Washington. The [long range flood outlook](#) for March through May looks fairly normal and shows a 10% chance of reaching flood stage across the Palouse River, the Coeur d'Alene River, and the Grand Ronde River basins. Despite having a solid snowpack at the higher elevations, the snow accumulated after a dry fall season left the soil moisture fairly low underneath. This may delay the runoff and higher flows as the soil moisture gets replenished. In addition, it all comes down to timing! How warm it gets, how heavy the rain falls, and how fast the snow melts. Periods of warm and wet weather can cause rapid rises on many creeks and rivers, especially in late spring. Stay current on the latest NWS [river forecasts](#). ☀️

Drought

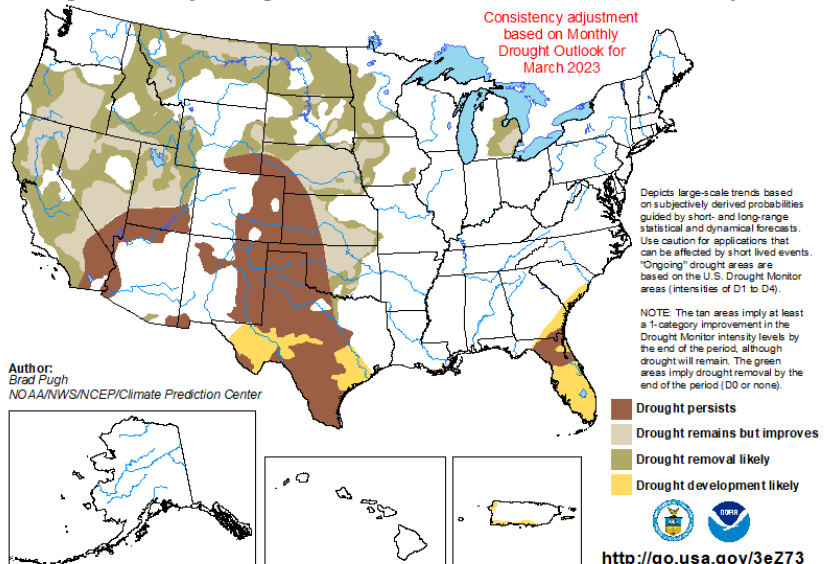
The [Drought Monitor](#) shows only small amounts of moderate drought across parts of the Inland NW with more areas remaining abnormally dry. The [Seasonal Drought Outlook](#) shows that drought removal is likely in the coming spring months.

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 learn more! ☀️



U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for March 1 - May 31, 2023
Released February 28, 2023



Winter 2022-23 in Review

Was this a harsh winter? Some may answer yes, while others may think otherwise. We recently published a blog summarizing the winter as a whole, found at the following link:

<https://inlandnorthwestweather.blogspot.com/2023/03/inland-northwest-has-winter-of-2022-23.html>

Now for the details regarding our winter. **December** was a very active month with several significant weather events. On the 1st heavy snow fell southeast of Lewiston on the Camas Prairie with 9" in Craigmont. Then from the 8th through the 10th, heavy snow struck much of North Central and Northeast Washington into the Idaho Panhandle. Leavenworth was especially hit hard with two feet of snow! Wenatchee also received a heavy dose of the white stuff with 8-12". Elsewhere across NE Washington into the Idaho Panhandle there were several reports of 6-12". The main event for the month was a brutally cold arctic outbreak that hit northern Washington and Idaho especially hard. This began with the front stalling near the Canadian border on the 19th and 20th with 14" in Bonners Ferry and 13" at Boundary Dam. The bitter cold was the main story, with some locations recording the coldest readings in decades on the 22nd! Some of the coldest readings include -30°F Porthill and Curlew, -28°F Addy, -27°F Naples, Republic, and Mazama, -26°F Winthrop, -24°F Colville and Northport, -23°F Priest Lake, and -20°F in Bonners Ferry and Pullman. Mazama and Winthrop's readings were the coldest since 1983! Northport recorded the coldest low since 1968! Republic tied for the coldest temperature since 1990. The wind made it feel even colder, especially the Okanogan Valley and Waterville Plateau. Wind chill readings include -38°F Waterville, -36°F Mansfield, and -28°F in Omak. Wind chills near -30°F were also recorded at the Spokane Airport, Coeur d'Alene, and Sandpoint. The bitter cold transitioned to milder and wet weather from the 24th-26th bringing a wintry mix for Christmas including areas of sleet and freezing rain. Ice amounts ranged from 0.1-0.3 inches from Ardenvoir into the Omak, Wenatchee, and Moses Lake areas. Finally, some areas received moderate to heavy rain on the 26th and 27th with over 2 inches north of Spokane. This combined with snow melt led to urban flooding in poor drainage areas and water over roads. On the Palouse, Paradise Creek reached 11 feet, surpassing its flood stage of 9.2 feet. This led to water into some homes.

The weather pattern in **January** brought quieter weather with the exception being periods of wet weather in North Central Washington and an arctic front to close out the month. Several rounds of rain and snow occurred from the 7th through the 16th. In Omak a wet storm on the 12th brought 1.24" of mainly rain, making it the 4th wettest January storm on record dating back to 1909. All the precipitation combined with low elevation snow melt contributed to several debris flows across the region, including two near Entiat on Highway 97A. Then an arctic front on the 28th brought colder weather, but not as cold as what occurred in December. But some of the colder pockets dropped below 0F including Deer Park with -6°F, and Mazama -4°F.

February brought more quiet weather through the 19th, before conditions became much more active. A strong cold front late on the 20th into the early morning hours of the 21st brought high winds to portions of North Central Washington, Southeast Washington, and the Lewiston area. Some of the higher gusts include 68 MPH Shirrod Hill (north of Lewiston), 62 MPH Ephrata, and 61 MPH at the Pullman Airport. The region got little rest from this event before a strong arctic front soon followed. This one was again not as cold as late December but brought a burst of snow to much of the area including snow squalls over NE Washington into the Idaho Panhandle. Snow rates reached as high as 2"/hour, with a total of 8" in Tum Tum. Following the arctic front another round of cold followed, with Priest Lake dropping to -14°F on the 24th. Meteorological winter wasn't going to leave without one last hurrah, with heavy snow falling across most of NE Washington and the ID Panhandle including the Spokane area with numerous reports of 4-8" on the 28th. *Jeremy Wolf* ☀️

Answer:...Holden Village in the Northern Cascades is considered the wettest & snowiest spot of our climate records with 42.98" of precipitation on average and 273.7" of snow! Priest Rapids Dam in the lower Columbia Basin is the driest spot with 7.48" of precipitation a year!

Winter 2022-23 Highlights and Stats



Views from Moscow, ID with flooding along Paradise Creek in late December.



Heavy snow north of Wilbur on SR 21 in late December.

Winter Weather Stats

Wenatchee Waterplant	DEC	JAN	FEB	Total
Average High temp	27.8	37.8	43.3	36.3
Departure from normal	-8.4	+2	-0.6	-2.2
Average low temp	17.9	27.4	26.1	23.8
Departure from normal	-8.5	+1.8	-1.5	-2.7
Total precipitation	2.02	1.45	0.72	4.19
Departure from normal	+0.43	+0.13	-0.20	+0.36
Total snowfall	21.6	3.6	3.9	29.1
Departure from normal	+15.6	-2	+0.9	+14.5

Lewiston, ID	DEC	JAN	FEB	Total
Average High temp	37.7	42.7	47.5	42.6
Departure from normal	-3.1	+0.6	+0.5	-0.7
Average low temp	26.3	29.4	30.5	28.7
Departure from normal	-3.2	-0.9	-1.2	-1.8
Total precipitation	1.19	0.36	0.37	1.92
Departure from normal	+0.06	-0.77	-0.67	-1.38
Total snowfall	5	Trace	1.5	6.5
Departure from normal	+0.9	-2.7	-2.3	-4.1

Spokane, WA	DEC	JAN	FEB	Total
Average High temp	28.3	35.4	39.1	34.3
Departure from normal	-5.5	+0.9	-0.4	-1.7
Average low temp	18.7	27	24.3	23.3
Departure from normal	-5.6	+2.3	-2	-1.8
Total precipitation	3.59	1.52	0.70	5.81
Departure from normal	+1.25	-0.45	-0.74	+0.06
Total snowfall	16.9	6.1	8.6	31.6
Departure from normal	+3.1	-6.2	+0.8	-0.8

Stay Prepared!

Spring weather transitions from bursts of wet snow to thunderstorms. Thunderstorms can bring a variety of weather from heavy downpours, hail, damaging winds, and even tornados. One hazard that all thunderstorms produce is lightning! Lightning is potentially deadly. Remember lightning safety - **When Thunder Roars, Go Indoors!** ☀️

WHEN THUNDER ROARS GO INDOORS

Lightning Fatalities For Outdoor Sports

40% SOCCER	27% GOLF
17% RUNNING	10% BASEBALL
3% FOOTBALL	3% OTHER

weather.gov/lightning

step 1 Leave the field immediately

step 2 Seek shelter in an enclosed building or car

Hard-topped Vehicle Windows UP!

Wait 30 minutes after the last rumble of thunder to return outside

STORM PLANNING TIMELINE

A few days out

If the forecast calls for severe weather in a few days, start preparing now.

Make sure that you have emergency supplies

Know your safe places

Have a family communication plan

The day before

The day before, forecast accuracy continues to improve.

Adjust plans

Make sure your phone can receive WEAs

Ensure your shelter is clean and accessible

The day of

Remain vigilant and aware of any active Watches. A Warning may be issued at a moment's notice!

Remind your family of the communication plan

Know how to evacuate and/or get to safety from wherever you are

When a Warning is issued, you may only have seconds to take action!

weather.gov

NWS OTX

Meteorologist In Charge
Ron Miller

Warning Coordination
Meteorologist
Andy Brown

Science Operations Officer
Chad Shafer

Administrative Assistant
Jodi Fitts

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
Derek Haupt

Facilities Tech
Joshua Miller

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

Weather Spotter Corner

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!

Spring weather spotter training will be available this year. A schedule will be posted for dates in April and May where we'll concentrate on thunderstorm hazards for the warm season. Check the News Headlines on the [NWS Spokane website](#) for details and to register.

We appreciate the hard work and dedication it takes to send in your reports. Check out your [Storm Reports](#) online from the last storm! Keep up your terrific work! ☀️