YOUR NATIONAL WEATHER SERVICE SPOKANE QUARTERLY REPORT Vol XXVIII Issue 2

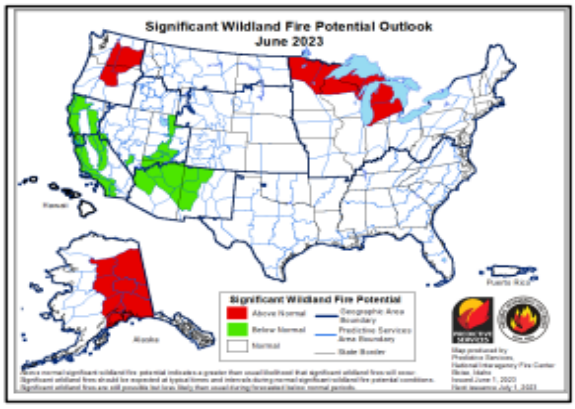
The Weather Watcher

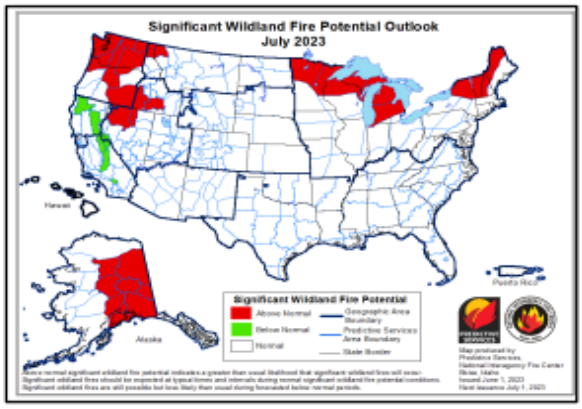
Of the Inland Northwest

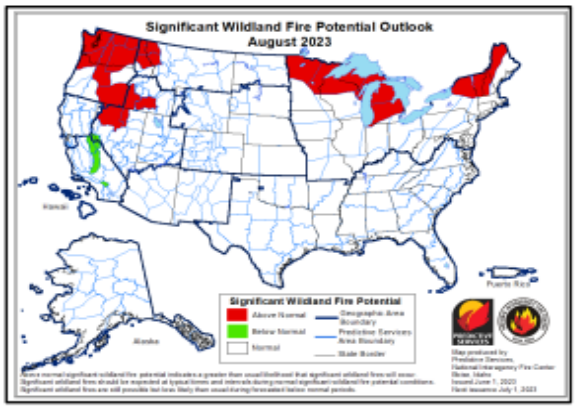
www.weather.gov/Spokane

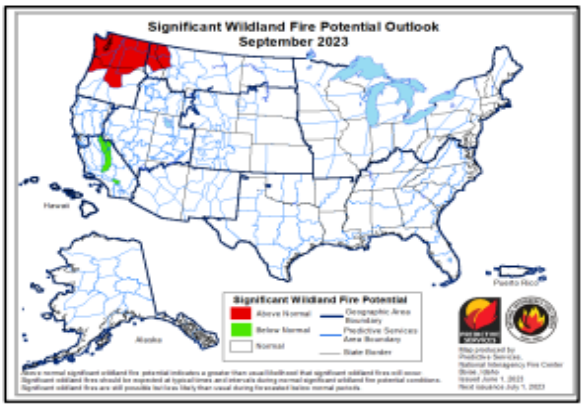
June 2023

Fire Weather Outlook 2023





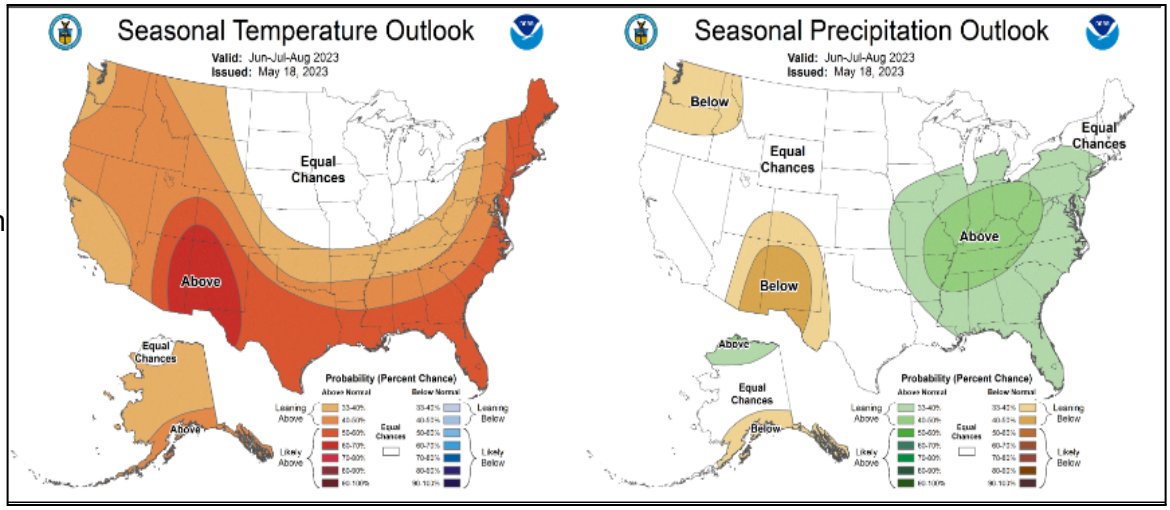




The National Interagency Coordination Center in Boise released its updated Significant Wildland Fire Potential Outlook on June 1st. It highlighted the Inland NW for the next several months with an above normal risk of fire potential. This can be attributed to the above normal temperatures in May that led to the rapid mountain snowmelt. In addition, the latest summer outlook suggests warmer and drier conditions for the summer season. ☀️

Summer Outlook 2023

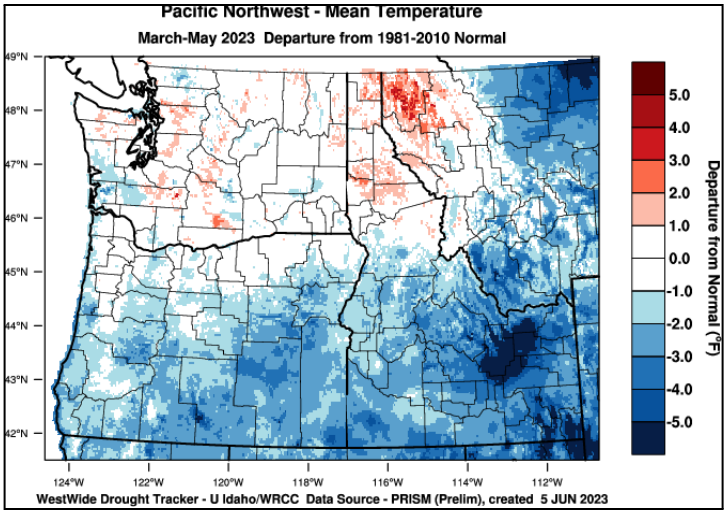
Ready for more heat? The NWS Climate Prediction Center updated the seasonal outlook. It's leaning toward above normal temperatures and below normal precipitation for June, July and August. An El Niño Advisory has been issued. El Niño conditions are present and are expected to gradually strengthen into the Northern Hemisphere winter 2023-24. ☀️

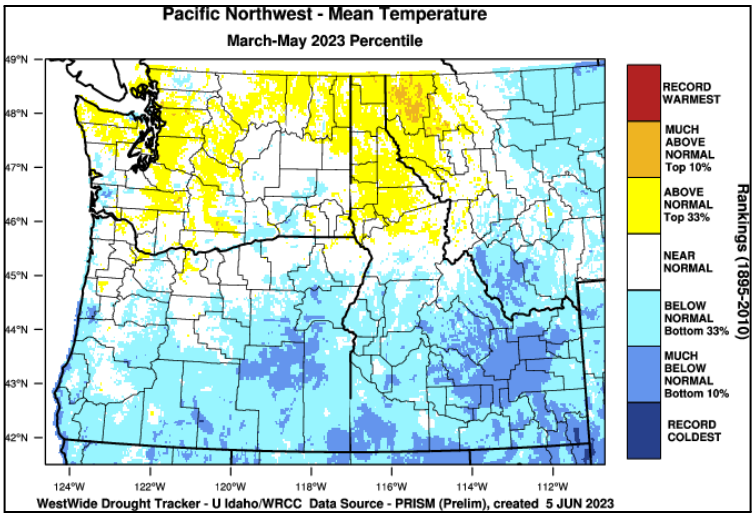


Trivia Question: *What is the highest number of 90 degree days across the Inland NW?*

Spring 2023 in Review

Spring started off on a winter-like note, before a rapid transition to summer-like weather before the start of May. This left some asking if we had much of a spring this year. Yet when you look at the three month period for March through May, temperatures averaged close to normal while precipitation was lacking especially for the higher elevations.





The first half of **March** delivered cool and showery conditions, especially from the 4th through the 10th, where snow fell in the lower elevations. Most of the snow accumulations were on the lighter side except under heavier bands. On the 5th snow amounts of 6” were reported in and around the Methow Valley. On the 6th, Ephrata and Moses Lake came in with reports as high as 4-5”. Meanwhile, a localized area of heavy snow fell in Rockford (SE of Spokane) with 6”. On the 9th Springdale and Loon Lake joined the crowd with 6”. On the 10th a stronger storm brought snow through the day with the highest amounts from the Spokane/Coeur d’Alene areas up into Sandpoint. Amounts reached as high as 5-7” with the highest amounts in Idaho. The Palouse received a couple rounds of lighter snow on the 9th and 10th ranging from 1-3”. A storm on the 13th brought warmer weather with rain, with Clayton and Athol coming in with nearly an inch.

After a break during the second half of March, more winter weather struck the region in **April**. On the 3rd, snow greeted Palouse residents in the morning with 2-3” in Pullman. This was followed by isolated thunderstorms in the afternoon with several reports of snow and graupel. A few produced heavy and quick accumulations of graupel contributing to accidents. Numerous crashes on 4th of July Pass brought an extended closure to I-90. Meanwhile, a localized band of heavy snow south of Spokane brought 8” near Marshall, 6” in Cheney, and 4” in Plummer. A day later a snow squall hit I-90 between Mullan and Lookout Pass with multiple crashes. Attention then shifted to heavy rain from the 7th through the 10th in north central Washington, with the highest amounts on the 10th. Ephrata received .93”, which was the wettest April day on record for the entire month dating back to 1949. Grand Coulee Dam recorded 1.25” over a two day period, which was also a record for the month of April. Even higher amounts occurred in the Okanogan Highlands and NE Washington Mountains with nearly 2”. This rain combined with snow melt led to localized flooding and debris flows. In Hunters, water came up to buildings and on roads. In Stevens county there were several reports of road washouts, as well as SR21 south of Republic. Finally, the first 20 days of April brought several rounds of freezing overnight temperatures to the region. The 5th was one of the coldest mornings including 18°F in Lind, Wilbur, and Republic.

The switch to summer quickly arrived at the end of April and continued into **May** with two pronounced heat waves from Apr 29-May 4th, and again from May 13th-21st. High temperatures in the 80s were common with some locations even reaching the low to mid 90s. This was enough to give Spokane its warmest May on record, where the average temperature of 63.5 degrees surpassed the previous record of 62.7 degrees in 1958. The Wenatchee Waterplant and Omak Airport also set records for the warmest May with an average temperature of 67.7 and 66.4 degrees respectively. The other story of the month were thunderstorms. Spokane recorded 10 days of thunderstorms during the month. Many of the storms were severe over Northeast Washington on the 20th and 21st producing large hail. Addy reported the largest hail stone with golf ball size. Half-dollar sized hail was reported in Chewelah. Several reports of quarter sized hail came in as well including near Ione, Malo and Rice. Thunderstorms also produced heavy rain leading to damage to several roads, especially forest service roads. One storm near Mazama produced 1.07" of rain in 35 minutes on the 18th. *Jeremy Wolf* ☀️

Spring 2023 Highlights & Stats

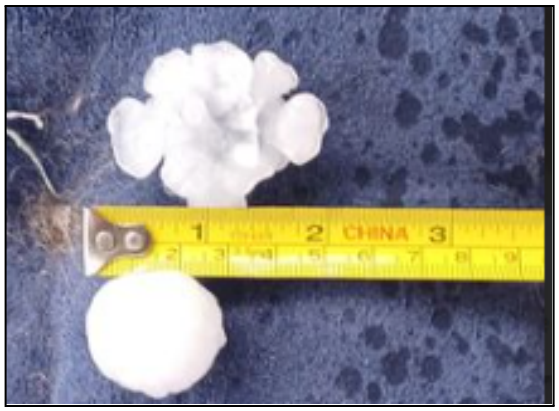
Spring Weather Stats

Wenatchee Waterplant	MAR	APR	MAY	Total
Average High temp	50.5	60.7	80.9	64
Departure from normal	-3.8	-3.2	+7.7	+0.2
Average low temp	31.6	39.3	54.5	41.8
Departure from normal	-1.8	-1.1	+5.2	+0.8
Total precipitation	0.48	0.08	Trace	0.56
Departure from normal	-0.25	-0.5	-0.75	-1.5
Total snowfall	0.4	0	0	0.4
Departure from normal	0	0	0	0

Lewiston, ID	MAR	APR	MAY	Total
Average High temp	52.1	62.6	79.6	64.8
Departure from normal	-3.0	+0.3	+7.6	+1.6
Average low temp	33.9	39.9	53.6	42.5
Departure from normal	-1.8	-0.8	+5.5	+1
Total precipitation	0.97	1.03	0.71	2.71
Departure from normal	-0.33	-0.41	-0.98	-1.72
Total snowfall	1.2	Trace	0	1.2
Departure from normal	+0.4	0	0	+0.4

Spokane, WA	MAR	APR	MAY	Total
Average High temp	46	56.5	74.7	59.1
Departure from normal	-2.6	-0.4	+7.6	+1.5
Average low temp	29.2	36.3	52.3	39.3
Departure from normal	-2.3	-0.7	+7.4	+1.5
Total precipitation	1.11	1.00	1.35	3.46
Departure from normal	-0.72	-0.25	-0.20	-1.17
Total snowfall	9.1	3.1	0.0	12.2
Departure from normal	+5.2	+2.4	-0.1	+7.5

Flash flooding in Chelan county - May 2023



Large hail in Stevens County - May 2023

River flooding in Ferry County - May 2023

Lightning Safety

Lightning Safety Awareness Week is June 18-24, 2023. This is to call to attention the risks of thunderstorms and the variety of weather hazards each can bring from heavy downpours, hail, damaging winds, and even tornadoes. Lightning is an under-rated killer. Remember, **When Thunder Roars, Go Indoors!** ☀️

Staff Updates

Electronics Technician Derek Haupt took his career path in a new direction and departed the NWS Spokane office this spring. We wish Derek the best of luck. A new hire will be arriving in early July to help fill the Electronics section. He is Christopher Huckins who will be transferring from the US Air Force. Another new face will be with the office this summer. Jared Sinowitz is a Pathways Student who is finishing his Meteorology Degree at Kansas University this fall. Welcome to Spokane Jared and Christopher. ☀️

Weather Spotter & Observer Corner

Spring weather spotter training was in full force in April and May. Most of the sessions were virtual with one in-person class in Republic WA. Two types of sessions were available, one on Basic Weather Spotting and the other on Advanced Weather Spotting. We were able to train 108 weather spotters and gained 35 new recruits.

If you missed a class and would like a refresher, recordings and notes of each session are available on the Spotter Resources Website.

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! A big thank you to the weather spotters that provided reports with our recent thunderstorm events. Pictures are invaluable! Check out your Storm Reports online from the last storm! Keep up your terrific work!

Did you know that CoCoRaHS observers can include pictures in their reports? It's a new feature. What a great idea to share images!

Remember, the impacts for the summer season are more likely convectively driven with thunderstorms, including heavy rain, flash flooding, hail, strong winds, and even tornadoes. Strong winds may lead to blowing dust especially after a dry spell. ☀️

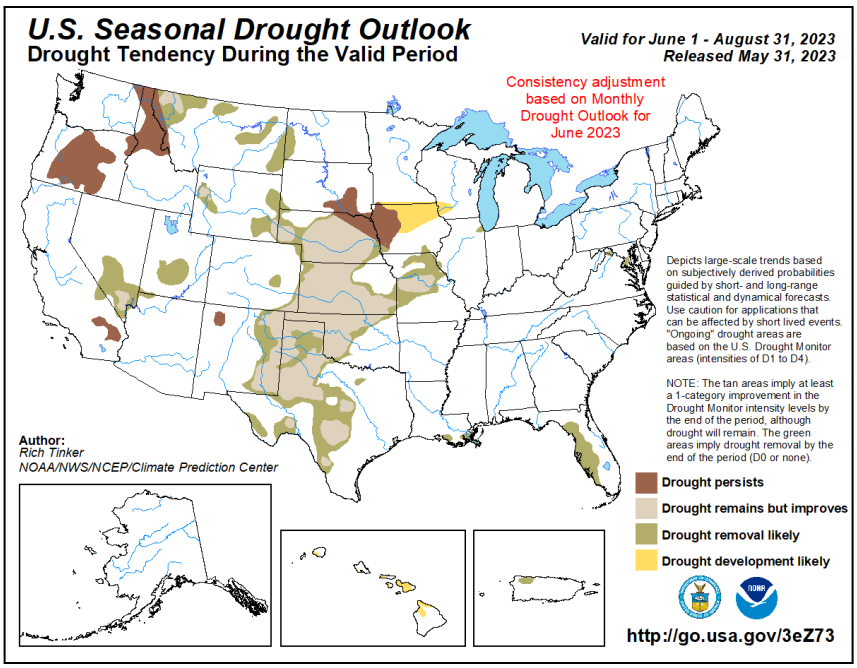
Remember your Summer Spotter Checklist
Tornado or Funnel Cloud
Hail: pea size or larger
Strong Winds: 30mph+ or damage
Any Flooding
Reduced Visibility: under a mile— dust, smoke.fog
Heavy Rain: Showery: 1/2" + in 1hr Steady: 1"+ in 12hr/1.5"+ in 24hr
Travel Problems or Damage: due to severe/hazardous weather

Answer:	Spokane 42 (2021)	Sandpoint 35 (2003)	Omak 81 (1922)
Max # Days	Wenatchee 47 (1990)	Lewiston 80(1938)	Ephrata 65 (1967)

Drought

The Drought Monitor shows only small amounts of moderate drought across parts of northeast Washington and the Idaho Panhandle with more areas remaining abnormally dry. The Seasonal Drought Outlook shows that drought may likely persist for the coming summer 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! ☀️



2023 Flood Season Review

The mountain snowpack was looking promising in April after several weeks of cool temperatures and light precipitation. Low elevation snow melted with a round of moderate precipitation by mid April, and this led to areal flooding across the small streams of Ferry and Stevens county. By May, the heat was turned up and this attacked the mountain snowpack with rapid snowmelt especially at the mid to upper elevations. Runoff was high. Mainstem river flooding was focused over north-central Washington where the Methow and Stehekin Rivers experienced minor flooding and the Kettle River saw moderate flooding that has not occurred in the last 6 years. The St. Joe River at St. Maries saw minor flooding as well. Several rivers were running at bankfull conditions through the month of May.

In addition to the river flooding, thunderstorms brought flash flooding to several locations from central Washington, to parts of north Idaho. Debris flows were reported downstream of many burn scars where mud, boulders, and logs were flushed down the slopes. These reports were from both freshly burned areas from last year and those still recovering after several years.

Bankfull conditions in Stevens county - April 2023

Stream flows settled back down by early June with some areas below normal for this time of the year. Water supply forecasts remain below normal across the northern Idaho Panhandle and much of northeast Washington, including the Columbia River. Thanks to an abundance of snow in southern Idaho, the lower Snake River continues near seasonal flows and will experience near normal water supply for the summer months. ☀️

Summer Heat & Safety

The Inland NW has already experienced abnormally warm temperatures this spring with May temperatures reaching 90 degrees in many areas. This is just the start of the summer season. It's good to start now and develop good habits on adjusting to extreme summer heat and heat waves.

Everyone should take these important steps to prevent heat-related illnesses, injuries, and death during hot weather:

- Stay in an air-conditioned indoor location as much as you can.
- Don't rely on a fan as your primary cooling device especially during extreme heat.
- Cover windows with drapes or shades.
- Drink plenty of fluids even if you don't feel thirsty.
- Schedule outdoor activities carefully.
- Wear loose, lightweight, light-colored clothing and sunscreen.
- Pace yourself.
- Take cool showers or baths to cool down.
- Check on a friend or neighbor and have someone do the same for you.
- Never leave children or pets in cars.
- Check the local news for health and safety updates.

The National Weather Service will alert the public on Excessive Heat by issuing Watches and Warnings. It's important to know and understand the difference. ☀️

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
Jared Sinowitz - Student

Electronic Systems Analyst
Mike Henry

Electronic Tech
Christopher Huckins

Facilities Tech
Joshua Miller

National Weather Service
2601 N Rambo Road
Spokane, WA 99224

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