

# The Weather Watcher of the Inland Northwest

www.weather.gov/Spokane



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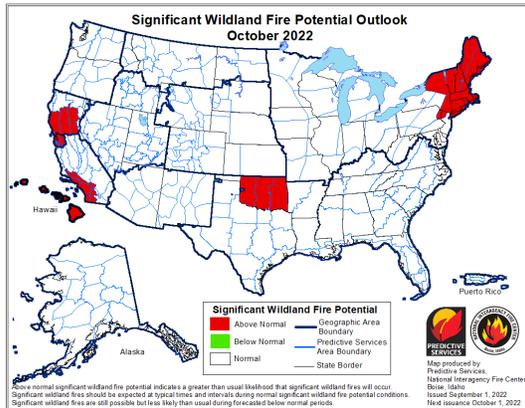
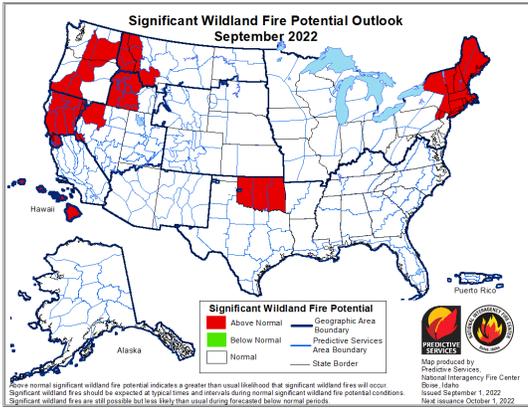
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## Arrival of the Fire and Smoke Season

The wildfire season may have had a slow start this year, but it ramped up quickly by August after the heat, lightning, and dry, breezy winds. So far, there have been at least 14 wildfires across the Inland NW with around 50,000 acres burned across eastern Washington and north Idaho. Initially the grasses and rangeland were the first to see the fires. Now that the timber at the higher elevations have dried out, wildfires have developed there as well. The number of local and regional wildfires have brought waves of smoke and degraded [air quality](#) across the Inland NW. ☀

## Significant Fire Outlook—September and October

Above normal fire potential remains through September as dry conditions prevail with rounds of breezy winds. Wetter and cooler conditions should limit significant fire potential by October.



## Editor's Notes

Days are getting shorter and the summer heat will soon be a thing of the past. It's time to enjoy the changing foliage of fall and cool crisp days. Yet it won't be long before colder weather grips the region with freezing temperatures, ice and snow. It's time to prepare your household and vehicle for the changing seasons. September is National Preparedness month.

The Autumn Equinox arrives on Thursday, September 22nd at 6:30 am PDT. This marks the equal time between day and night. After this date, expect shorter day hours and longer nights. The upcoming full moons include: Harvest Moon on Sept 10, Hunter's Moon on Oct 9, and Beaver Moon on Nov 8.

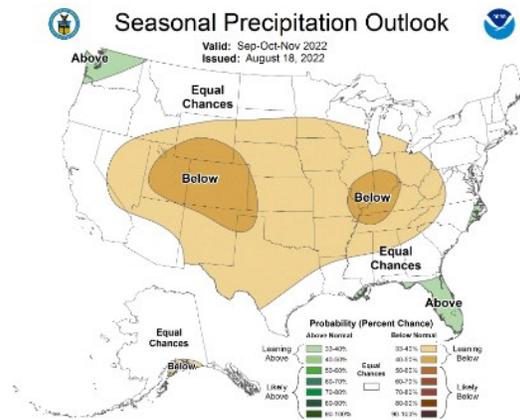
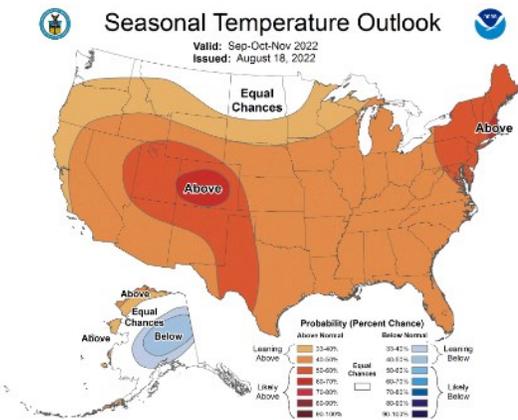
We're always looking for new ideas and stories for our publication. Please send to [nws.spokane@noaa.gov](mailto:nws.spokane@noaa.gov). Newsletters are available on the NWS Spokane web page.

The main purpose of this publication is to keep our readers informed about NWS services and programs, and recognize those who help us with our mission, including weather spotters, observers, media, emergency managers, and government agencies.

All articles are written by the NWS staff. A special thanks goes to Jeremy Wolf for his contributions.

## Fall Seasonal Outlook ~ La Niña Advisory

The NWS Climate Prediction Center's three month outlook for September thru November 2022 leans toward above normal precipitation for the northwest half of Washington while equal chances of at, below or near normal precipitation span across southeast Washington and the Idaho Panhandle. Temperatures trend warmer than normal for southeast Washington and the southern Idaho Panhandle with more seasonal temperatures anticipated to the north. The La Niña Advisory remains in effect. La Niña is favored to continue through winter 2022-23, with a 91% chance in September-November, decreasing to a 54% chance in January-March 2023. ☀



Want to report precipitation? Check out CoCoRaHS at [www.cocorahs.org](http://www.cocorahs.org)

# Summer 2022 in Review

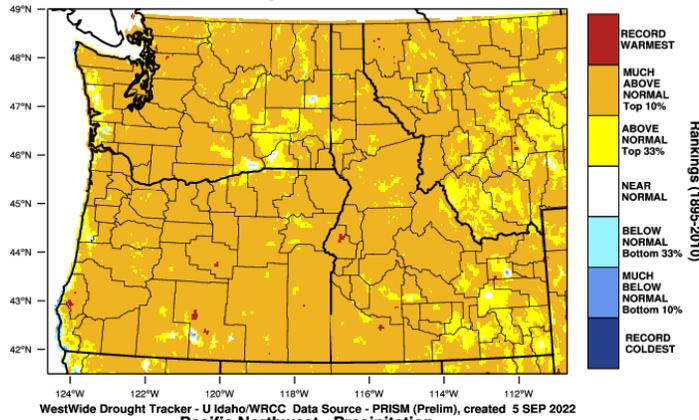
It was an active summer across the Inland NW with several rounds of thunderstorms and hot temperatures. Spokane tied a record for number of 100 degree days with 6! See how [this summer compared to normal](#) in the charts below. For June, July and August, much above normal temperatures were widespread. As for precipitation, the Inland NW favored above normal values in many locations which helped alleviate drought concerns.

for the end of the month, with temperatures warming into the 80s and 90s.

Similar to June, **July** started off on an active note with severe thunderstorms on the 3rd and 4th. In central Washington, flash flooding was the main story. In Curlew, heavy rain led to mudslides on Boulder Creek Road. In Chelan, water and debris went over several roads. In Conconully, at least 25 residences were inundated with water. Flash flooding also occurred in several locations surrounding Winthrop and Mazama with reports of rock, mud, and debris on roads. In Kettle Falls, an estimated 2" of rain resulted in at least 6" of sand, mud, and debris on SR25 north of Rice, WA. But flooding was the only weather on this day. In Colville, 50 MPH wind gusts led to downed trees and power outages. Meanwhile in Oakesdale quarter-sized hail was reported. On the 6th, hail 1.25" in diameter went through Nez Perce. A major heat wave hit the region to close out the month. While not as hot as 2021, temperatures were noteworthy given the length of the heat wave. Wenatchee reached triple digits for seven consecutive days, which tied for the 2nd longest streak of 100°+ on record. Priest Rapids Dam (south of Moses Lake) was one of the hottest locations reaching 111°F.

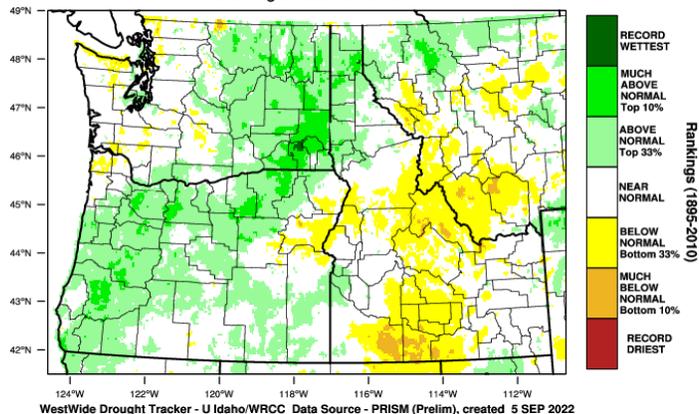
**August** brought more of the same with heat and thunderstorms. It was the hottest August on record for several cities in the Inland NW. Spokane reached 90°F or warmer 19 times which tied a record for the most number of 90 degree days in a month. On the 9th, thunderstorms produced outflow winds in the Columbia Basin into the Lewiston area and Palouse with several reports of blowing dust. Severe thunderstorms on the 11th were very damaging across parts of the region. Thunderstorms knocked down several trees and power lines in Kamiah and on the Camas Prairie. But the biggest storm developed on the Palouse from Albion to Oakesdale producing ping pong size hail. The storm strengthened as it tracked up into the Spokane area with golf ball size hail and 60 MPH wind gusts in Liberty Lake. But that wasn't it, it got even stronger as it reached Newman Lake and Hauser with baseball size hail reported. The hail damaged cars in the area. More severe weather arrived on the 24th and 25th as a low pressure system brought localized areas of abundant lightning, heavy rain, hail, and gusty winds. Hunters down through Wellpinit and Rear-dan saw frequent lightning on the evening of the 24th with over an inch of rain in some areas. Hot temperatures returned to close out the month with Spokane reaching 100°F, and Lewiston 106°F both tying a record high temperature for the 31st. The heat ended with yet more thunderstorms on the evening of the 31st. These storms didn't have much rain and ignited several wildfires across northeast Washington into the Idaho Panhandle. The thunderstorms also produced gusty winds. Wind gusts of around 35 MPH in the Spokane and Coeur d'Alene area picked up blowing dust. From Priest River to Sandpoint, estimated gusts up to 50 MPH led to some downed trees and power lines. ☀️ *Jeremy Wolf*

Pacific Northwest - Mean Temperature  
June-August 2022 Percentile



WestWide Drought Tracker - U Idaho/WRC Data Source - PRISM (Prelim), created 5 SEP 2022

Pacific Northwest - Precipitation  
June-August 2022 Percentile



WestWide Drought Tracker - U Idaho/WRC Data Source - PRISM (Prelim), created 5 SEP 2022

The first half of **June** was very active with severe thunderstorms and flooding. On the 3rd, quarter-sized hail in Athol damaged some crops in the area. On the 5th, heavy rain from thunderstorms flooded roads in Wenatchee, Spokane, and Clarkston. In Spokane numerous roads were flooded near the I-90 corridor while in Lewiston heavy rain led to urban flooding with water entering a few structures. Number One Canyon in Wenatchee closed for several hours due to a mudslide. Also on the 5th, Uniontown recorded hail to 1.25" in diameter. Then from the 9th through the 13th, an unusually wet period arrived for eastern Washington into the Idaho Panhandle with several locations receiving 1-3" of rain. Major flooding occurred on the Palouse River at Potlatch as it reached its third highest stage on record, and its highest level since 1996. Flooding also occurred on US 95 near Lapwai, with one foot of water over Mission Creek Road near Culatesac. This wet spell ended on a cool note with Pullman only reaching 48°F for a high temperature on the 13th. Much quieter weather arrived

Large hail in Liberty Lake on August 11, 2022 courtesy of Lynda Marchi. Thanks for using coins to measure!



### Summer Weather Statistics

Wenatchee Water Plant	Jun	Jul	Aug	Total
Avg High Temp	77.8	91.2	94.2	87.7
Departure from Norm	-1.8	+3.6	+6.0	+2.6
Avg Low Temp	54.3	64.1	64.7	61.0
Departure from Norm	-1.5	+2.3	+3.6	+1.5
Total Precip	0.93	0.09	0.00	1.02
Departure from Norm	-0.33	-0.13	-0.18	-0.64
Total Snowfall	0.0	0.0	0.0	0.0
Departure from Norm	0.0	0.0	0.0	0.0
Lewiston Airport	Jun	Jul	Aug	Total
Avg High Temp	78.0	93.4	95.6	89.0
Departure from Norm	-1.0	+2.6	+5.5	+2.4
Avg Low Temp	55.1	63.0	64.6	60.9
Departure from Norm	+1.1	+2.1	+4.3	+2.5
Total Precip	3.18	0.17	0.16	3.51
Departure from Norm	+1.93	-0.30	-0.35	+1.28
Total Snowfall	0.0	0.0	0.0	0.0
Departure from Norm	0.0	0.0	0.0	0.0
Spokane Airport	Jun	Jul	Aug	Total
Avg High Temp	71.7	87.6	90.1	83.1
Departure from Norm	-2.0	+3.2	+6.3	+2.5
Avg Low Temp	52.0	60.5	62.0	58.2
Departure from Norm	+1.2	+2.9	+5.3	+3.1
Total Precip	2.46	0.34	Trace	2.80
Departure from Norm	+1.29	-0.08	-0.47	+0.74
Total snowfall	0.0	0.0	0.0	0.0
Departure from Norm	0.0	0.0	0.0	0.0

## Average First Freeze and Snow Dates

It's right around the corner, the first freeze of the season. This is important for those who want to lengthen their growing season and protect their garden. Then there is the first snowfall of the season which can lead to road delays and traffic issues. These dates vary across the Inland NW with the earlier dates across the northern valleys and the later dates in Wenatchee Valley, lower Columbia Basin, and LC Valley.

Here is a table of the average first freeze and first snowfall dates based the climate records for each location. Interested in other locations, check out the [NOWData](#) on the NWS web page. ☀

City	1st Freeze	1st Snow
Republic	Sept 7	Nov 8
Holden Village	Sept 8	Oct 28
Winchester	Sept 11	Oct 26
Sandpoint	Sept 16	Nov 13
Colville	Sept 19	Nov 16
Winthrop	Sept 19	Nov 9
Metaline Falls	Sept 20	Nov 16
Wallace	Sept 21	Nov 12
Bonnors Ferry	Sept 22	Nov 13
Odessa	Sept 23	Dec 2
Moscow	Sept 24	Nov 16
Leavenworth	Sept 27	Nov 15
Omak	Sept 28	Nov 27
Coeur d'Alene	Oct 1	Nov 21
Pullman	Oct 1	Nov 17
Ritzville	Oct 2	Nov 25
Stehekin	Oct 5	Nov 16
Spokane	Oct 7	Nov 13
Lewiston	Oct 21	Dec 3
Wenatchee	Oct 21	Dec 2

## NWS Spokane

**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  
Dan Butler  
Rachael Fewkes

**Electronic Systems Analyst**  
Mike Henry

**Electronic Technicians**  
Paul Kozsan  
Derek Haupt

**Facilities Technician**  
Joshua Miller

## Remember your Autumn Spotter Checklist

**First Snow of the Season!!!**

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

**Strong Winds:**  
30mph+ or damage

**Hail:** pea size or larger

**Tornado or Funnel Cloud**

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

**Snow:**  
2"+ valleys & 4"+ mountains

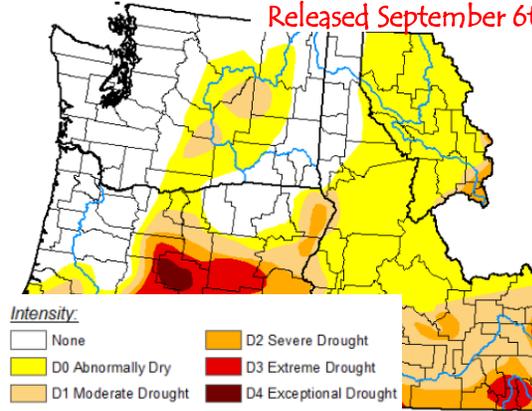
**Any Mixed Precipitation**

**Any Flooding**

**Travel Problems or Damage:**  
due to severe/hazardous weather

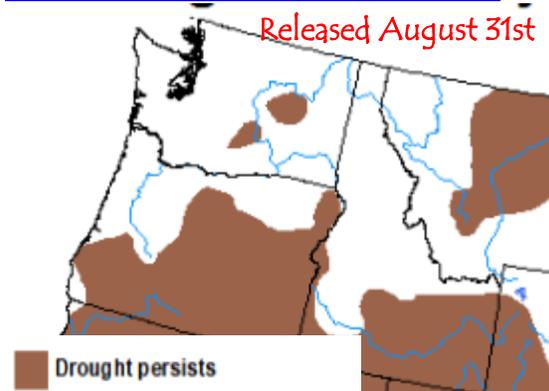
## U.S. Drought Monitor

Released September 6th



## Seasonal Drought Outlook

Released August 31st



## Little Change to Drought

There has been little change to [U.S. Drought Monitor](#) across the Inland NW this summer. Abnormally dry areas remain across parts of eastern Washington with pockets of Moderate Drought. This is due to the long term drought impacts to ground water in part of the region.

The Monthly and [Seasonal Drought Outlook](#) shows these pockets of moderate drought to persist through the autumn season. ☀

## Spotter & Observer Training

The cold season weather spotter and observer [training schedule](#) will be rolling out in the coming weeks and posted on the NWS web page. This training is where we focus on snow, ice and all kinds of winter precipitation. Interested in viewing online training? We have wealth of opportunities on our [Weather Spotter Resources](#) page. The [CoCoRaHS](#) web page has training slide shows available. ☀

## The Weather Watcher

Of the Inland Northwest



National Weather Service  
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Spokane, WA 99224  
(509)-244-0110

**Question:**  
**What is the difference between a frost and freeze?**

## September is National Preparedness Month

National Preparedness Month is an observance each September to raise awareness about the importance of preparing for disasters and emergencies that could happen at any time and any season. The 2022 Theme is [a Lasting Legacy](#). The life you've built is worth protecting. Prepare for disasters to create a lasting legacy for you and your family. Learn more on disasters and emergencies at [Ready.gov](#) ☀

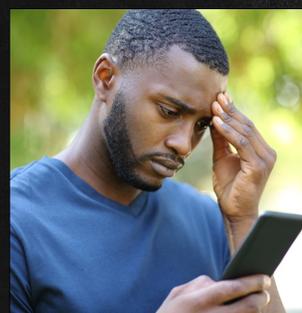
## Extreme Weather Preparedness Emergency Items



- Survival needs:** first aid kit, medicine, food & water (including for pets)
- Other supplies:** chargers & batteries, radio, hygiene products, cash
- Important documents:** proof of ownership, insurance / medical, personal identification
- Go bag** in case of evacuation

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## Extreme Weather Preparedness Communicating After Storms



- If possible, communicate via texting, email, and social media
- Reduce network congestion by limiting phone calls, online videos, and streaming
- Conserve phone battery by reducing screen brightness and limiting app use
- Check on neighbors and those most vulnerable

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