YOUR NATIONAL WEATHER SERVICE SPOKANE QUARTERLY REPORT

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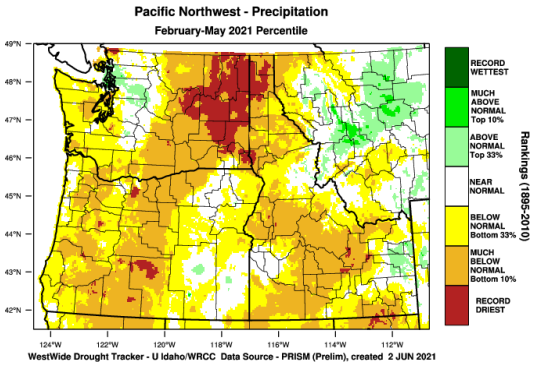
# The Weather Watcher

## of the Inland Northwest

www.weather.gov/Spokane

## Record Dry Spring

Since mid February, the Inland NW has been extremely dry. In fact, record dryness has been reported across parts of northeastern Washington and the far northern Idaho. As seen in the Spring Precipitation chart below.



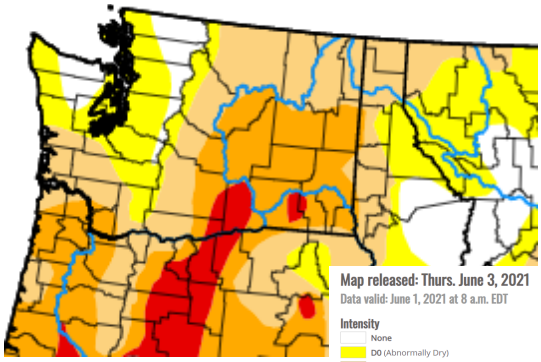

The impacts from this dryness has hit dryland agriculture the hardest - for both winter and spring wheat, hay, barley and grazing land. Look just how dry it was at many locations!

...METEOROLOGICAL SPRING...MARCH THROUGH MAY...DRIEST ON RECORD FOR SEVERAL LOCATIONS...

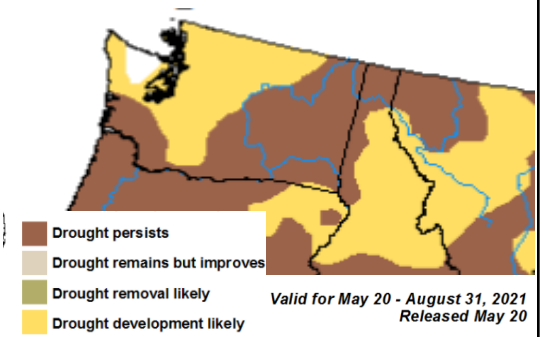
HERE IS A LOOK AT MARCH THROUGH MAY 2021 PRECIPITATION TOTALS ACROSS THE REGION AND HOW EACH ONE RANKS HISTORICALLY IN TERMS OF DRIEST ON RECORD.

| CITY | MARCH - MAY 2021 PRECIP TOTAL (INCHES) | DRIEST RANK | RECORDS BEGAN |
|---|---|---|---|
| LIND, WA | 0.10" | 1ST | 1931 |
| RITZVILLE, WA | 0.19" | 1ST | 1899 |
| MAZAMA, WA | 0.50" | 1ST | 1969 |
| ENTIAT, WA | 0.63" | 1ST | 1990 |
| BOUNDARY DAM, WA | 1.81" | 1ST | 1966 |
| PRIEST RIVER, ID | 2.05" | 1ST | 1898 |
| EPHRATA, WA | 0.32" | 2ND | 1949 |
| ODESSA, WA | 0.35" | 2ND | 1903 |
| DAVENPORT, WA | 0.49" | 2ND | 1910 |
| WILBUR, WA | 0.56" | 2ND | 1900 |
| COULEE DAM, WA | 0.58" | 2ND | 1935 |
| LEWISTON, ID | 0.62" | 2ND | 1882 |
| SPOKANE ARPT, WA | 0.67" | 2ND | 1881 |
| COLVILLE, WA | 0.75" | 2ND | 1900 |
| BONNERS FERRY, ID | 1.67" | 2ND | 1907 |
| CHELAN, WA | 0.48" | 3RD | 1892 |
| PULLMAN, WA | 1.59" | 3RD | 1893 |
| OMAK, WA | 0.62" | 4TH | 1909 |
| WINTHROP, WA | 0.45" | 4TH | 1906 |

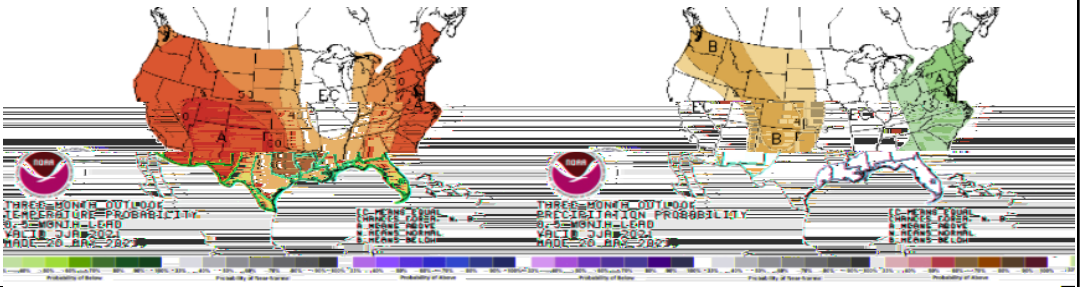
The U.S. Drought Monitor issued on June 3rd shows drought conditions have expanded all across the Inland NW with Moderate to Severe Drought stretching in the Columbia Basin, Palouse and Spokane area. Some pockets of Extreme Drought have developed in parts of south-central Washington and near Walla Walla.




The U.S. Seasonal Drought Outlook does not indicate any improvement with conditions likely to persist through summer months. There may even be an increase of drought levels in the upcoming weeks and months without any significant future precipitation. ☼




## Three month outlook—Favoring Warm & Dry




**Share your precipitation reports! Check out CoCoRaHS at www.cocorahs.org**



### Editor's Notes

*Warm and very dry weather was the theme for the spring and it looks like this trend will roll into Summer 2021. Our main weather hazard so far has been wind and blowing dust. Folks need to be aware of blowing dust and its impacts with sudden reduced visibilities. The DOT has reported several accidents already this year during blowing dust events.*

*If caught in a dust storm while driving, it is wise to slow down and pull over to the side of the road. Wait for conditions to improve. In extreme events, it's good to turn off your engine and lights while parked on the side of the road as not to lead traffic off the roadway.*

*The summer solstice will be June 20th at 8:31 PM PDT—the longest day of the year. After this date, we can look forward to loosing daylight hours and gaining more darkness.*

*We're always looking for new ideas and stories. If you have something to share, please send to nws.spokane@noaa.gov. Past newsletters are available on the NWS Spokane web page.*

*Check out the NWS Spokane—Inland NW Weather blog for more exciting stories*

*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.*

*Stehekin River on June 3, 2021. Courtesy of Bob Nelson, Stehekin COOP Observer*

# Spring Flood Season

Spring flooding chances decreased with the lack of spring precipitation. Yet the abundance of winter mountain snow in the northern Cascades kept a glimmer of hope for flood chances in the surrounding river basins, specifically the Stehekin River.

As early June, mountain snowpack was still near 100% of normal from Washington Pass to Stevens Pass. Typically the Stehekin River, located on the upper end of Lake Chelan experiences bank full conditions each year. This year did not disappoint with the amount of spring runoff especially during the early June heatwave. This caused river levels to rise and pushed the Stehekin to slightly above Flood Stage on June 3-4.

Remember to check the latest river flows and forecasts before you head out to the water.

Although spring flooding is wrapping up, keep in mind—we can still experience flash flooding or debris flows under any intense rain or thunderstorm events, especially in burn scar areas. ☼ *Robin Fox*

# Virtual Training

NWS Spokane had an active round of virtual weather spotter training, spanning 6 weeks. New this year was a chance to take a Basic weather spotting class and/or an Advanced weather spotting class. In all, 94 spotters attended the classes with the overwhelming majority being new recruits. If you didn't get a chance to view the class or want to see it again, recordings and notes of the classes are available on the NWS Spokane Spotter Resources page. We look forward to all of your reports this summer and the months to come! ☼ *Robin Fox*

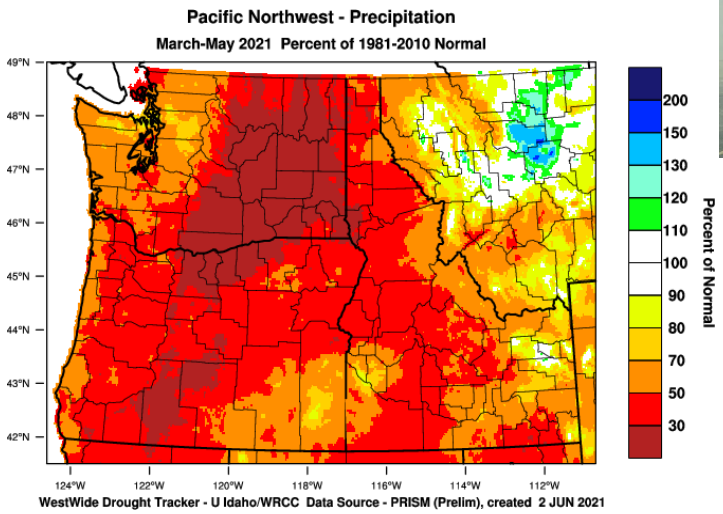

## Spring Weather Statistics

| Wenatchee Water Plant | MAR | APR | MAY | Total |
|---|---|---|---|---|
| Avg High Temp | 56.5 | 67.0 | 73.1 | 60.6 |
| Departure from Norm | +2.2 | +3.1 | -0.1 | +1.7 |
| Avg Low Temp | 33.5 | 40.4 | 48.4 | 37.5 |
| Departure from Norm | +0.1 | 0.0 | -0.9 | -0.3 |
| Total Precip | 0.25 | 0.09 | 0.18 | 0.67 |
| Departure from Norm | -0.48 | -0.49 | -0.57 | -1.54 |
| Total Snowfall | 0.2 | 0.0 | 0.0 | 0.2 |
| Departure from Norm | -0.2 | 0.0 | 0.0 | -0.2 |
| **Lewiston Airport** | **MAR** | **APR** | **MAY** | **Total** |
| Avg High Temp | 56.7 | 67.1 | 74.7 | 66.2 |
| Departure from Norm | +1.6 | +4.8 | +2.7 | +3.0 |
| Avg Low Temp | 34.6 | 39.7 | 47.9 | 40.7 |
| Departure from Norm | -1.1 | -1.0 | -0.2 | -0.8 |
| Total Precip | 0.41 | 0.05 | 0.16 | 0.62 |
| Departure from Norm | -0.89 | -1.39 | -1.53 | -3.81 |
| Total Snowfall | 0.0 | 0.0 | 0.0 | 0.0 |
| Departure from Norm | -0.8 | 0.0 | 0.0 | 0.0 |
| **Spokane Airport** | **MAR** | **APR** | **MAY** | **Total** |
| Avg High Temp | 51.9 | 60.9 | 69.0 | 60.6 |
| Departure from Norm | +3.3 | +4.0 | +1.9 | +3.1 |
| Avg Low Temp | 31.1 | 37.4 | 44.1 | 37.5 |
| Departure from Norm | -0.4 | +0.4 | -0.8 | -0.3 |
| Total Precip | 0.26 | 0.21 | 0.20 | 0.67 |
| Departure from Norm | -1.57 | -1.04 | -1.35 | -3.96 |
| Total snowfall | T | T | 0.0 | T |
| Departure from Norm | -3.9 | -0.7 | -0.1 | -4.7 |

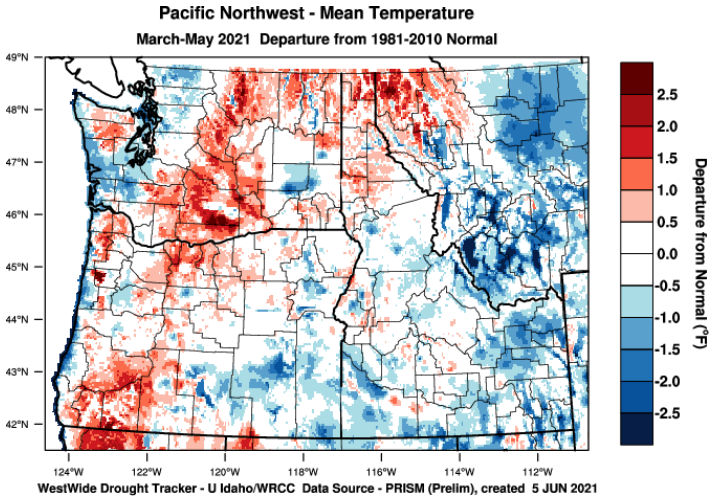
**ANSWER: Normal 90 degree days: Spokane 19, Wenatchee 33, and Lewiston 40—Hot, hot, hot!**

# Spring 2021 in Review

This spring will go down in the record books as one of the driest on record for many! The percent of normal of spring precipitation was less than 30% normal east of the Cascades.




Meanwhile, temperatures were near to above normal in many spots. Some pockets of below normal temperatures were found mainly in the higher elevations.




In **March,** the dry conditions contributed to several blowing dust events. One of the worst dust episodes of the spring came in March when a strong cold front on the 28th delivered high winds. A dust storm closed Interstate 90 between Moses Lake and Ritzville for seven hours. In total 36 collisions were reported with the worst being an eight car pileup near Othello on SR26 with minor injuries. Peak wind gusts include 64 MPH Athol, 62 MPH Silcott Island (west of Clarkston), 59 MPH Thorton, 56 MPH in Spokane, and 53 MPH in Lewiston. The front also brought heavy snow to Stevens Pass with 14" reported. March was the driest on record for a few sites including Odessa (Trace), Davenport (0.03"), and Mazama (0.22").

*March 28, 2021—I-90 near Moses Lake*

**April** brought several more cold fronts (mainly of the dry variety). Gusts of 40-50 MPH were recorded across Central, WA on the 10th, 13th, and 18th. The front on the 10th brought much colder and drier air into the region with some cold readings on the 11th by April standards. Some of the colder readings include 14F Davenport, 15F Deer Park, 16F Ritzville, 19F Potlatch, and 21F in Pullman. On the 18th strong NE winds over portions of NE Washington and the Idaho Panhandle resulted in downed trees and power outages in some areas including Blanchard, Hayden, and Spokane. A dust storm with visibility as low as 1/16th of a mile was reported near the Davenport and Reardan areas. Lewiston tied for the driest April on record with only .05".

**May** brought yet a few more monthly record low precipitation totals including Lind with 0.00", and Odessa with a trace. On the 6th a very strong cold front tracked across the region, with Lewiston dropping 30 degrees for high temperatures between the 6th (92F) and the 7th (62F). Yet another significant blowing dust episode occurred on the 27th as very windy conditions developed. Near zero visibility was reported near Moses Lake and Othello with several wrecks reported including a two-car collision on I-90 eight miles east of Moses Lake. The winds also carried a large swath of dust into NE Washington and the North Idaho Panhandle with power outages in some areas as well. Peak gusts include 55 MPH at Fairchild AFB, 54 MPH in Deer Park and Ritzville, 51 MPH Mattawa and Ephrata, 49 MPH at the Spokane Airport, and 47 MPH Moses Lake. While thunderstorms were not common this spring, a strong one did pass through Post Falls on the 22nd with wind gusts near 50 MPH. ☼ *Jeremy Wolf*

*May 27, 2021—I-90 near Moses Lake*

**SPOTTER REPORTS: (509) 244-0435 or (800) 483-4532**

## 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

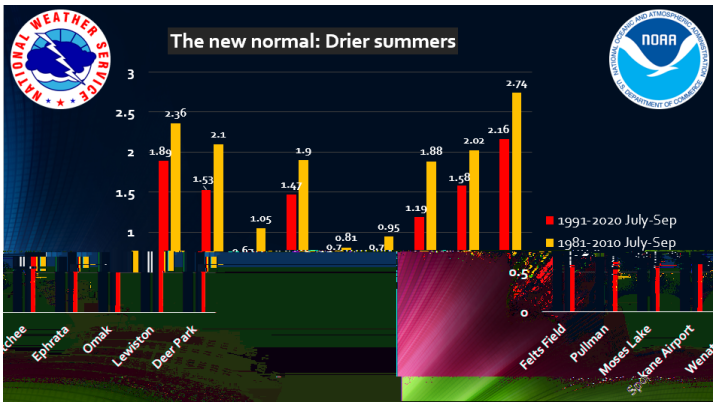
**Heavy Rain:**
Showery: 1/2" + in 1hr
Steady: 1"+ in 12hr/1.5"+ in 24hr

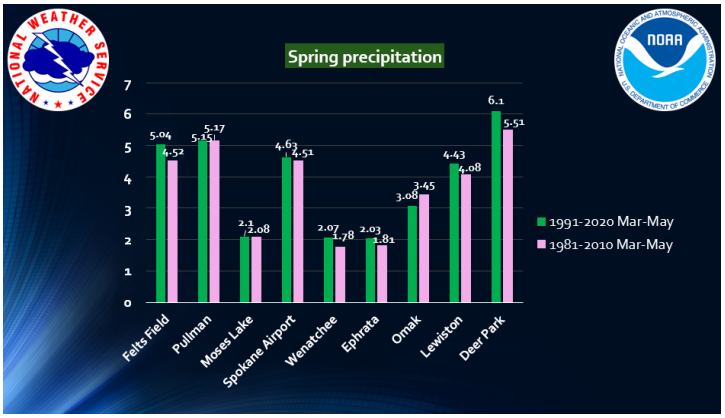
**Travel Problems or Damage:**
due to severe/hazardous weather

**How many 90 degree days does Spokane, Wenatchee and Lewiston see a year?**

# New Climate Normals

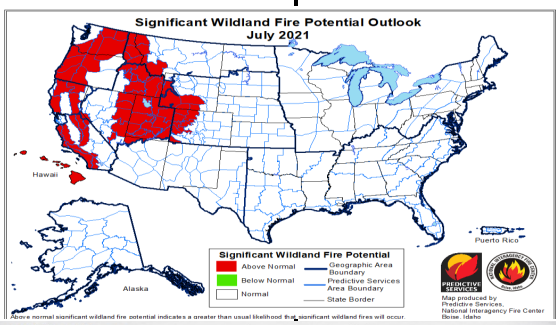
Starting in May, new Climate Normals will be used across the country. The Normals are 30 year averages of key climate observations made at weather stations and corrected for bad or missing values and station changes over time. From the daily weather report to seasonal forecasts, the Normals are the basis for judging how temperature, rainfall, and other climate conditions compare to what's normal for a given location in today's climate. For the past decade, the Normals have been based on weather observations form 1981 to 2010. The new Climate Normals are now based on weather experienced from 1991 to 2020 and gathered from observations at nearly 10,000 weather stations, including COOP (Cooperative Observer Program) and ASOS (Automated Surface Observing System) stations, and for the first time SNOTEL (USDA Snow Telemetry) and CoCoRaHS (Community Collaborative Rain, Hail and Snow Network) stations!



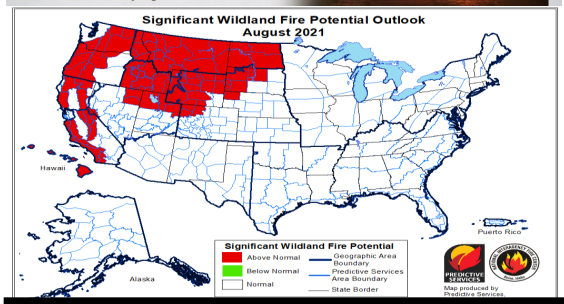




So how does this effect the Inland NW? Temperatures show a small warming trend, especially for the summer season. Precipitation trends toward wetter conditions in the spring season with drier summer seasons. For more information, see the Climate Normals on Climate.gov or the NOAA Climate Normal story. ☼ *Jeremy Wolf*

# Fire Season Outlook








Significant fire potential is expected to increase to above normal this summer, starting in southeast Washington in June and then expand across all of the Inland NW for July and August. The warm and dry spring has helped increase the potential along with the seasonal outlooks favoring more dry and warmer than normal conditions for the summer. High mountain snow is quickly melting off and river flows will gradually decrease. The driest area spans across the Columbia Basin where green up is near completion, albeit sparse in many locations.

Local studies reflect the best predictor for an active ("bad") fire season would be a hot and dry summer. Remember back in 2015? That was an active fire season and a drought year too with a record hot June. What was different in 2015 was the snowpack was meager but spring rains were plentiful. This is the reverse for this 2021. The lack of spring rains have given way to less fine fuels and an earlier curing of the fuels.

Another wild card for the fire season is lightning, a top contributor for fire starts. Many of the fires in 2015 were started by lightning strikes. Although Labor Day 2020 showed that not all wildfires are started by lightning, where we saw near record acreage burned, surpassed only by the wildfires of 2015.

Keep current on the latest fire weather forecasts and highlights on the NWS new fire weather web page. Plan and prepare before you head out on your next outdoor adventure. ☼ *Steven Bodnar and Ron Miller*