

# **Month in Review - October 2024**

Weather Forecast Office
Pendleton, OR
Tuesday, November 5



The Month in Review is a retrospective collection of climate statistics for NWS Pendleton's forecast area (central to northeast Oregon and south-central to southeast Washington) with specific emphasis on ASOS-based climate sites, snowpack and drought evolution, and various statistics for the water year to date.

Prepared by NWS Pendleton's Climate Services team.



# **Key Points - October 2024**

- Mean (average) temperatures were predominantly near or above normal (relative to the 1991-2020 climate reference period) across the forecast area during October.
- Near- to below-normal precipitation (relative to the 1991-2020 climate reference period) was observed across our forecast area during October.
- Drought conditions degraded by one category in portions of Wasco, Sherman, Gilliam, Klickitat, Yakima, Benton, Franklin, and Walla Walla counties.



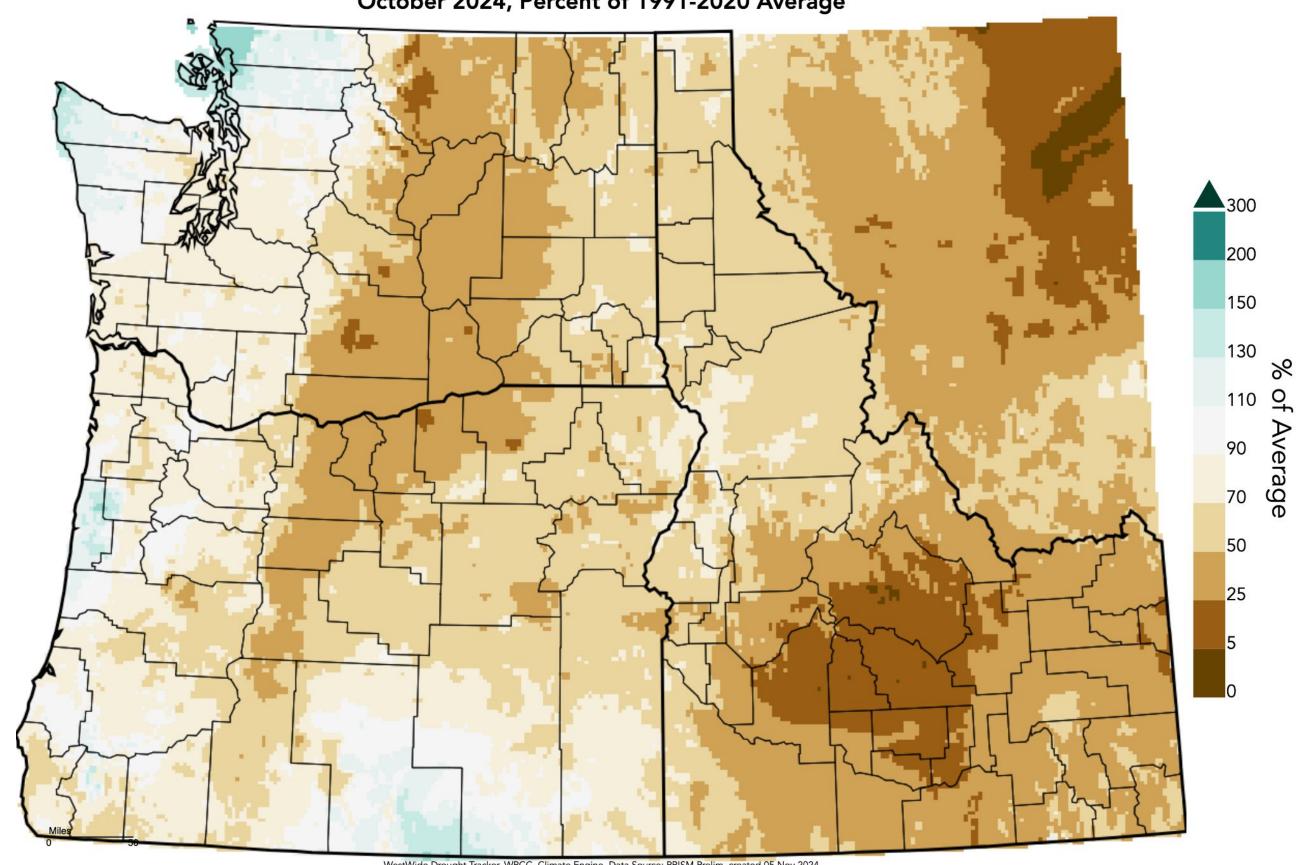
# Local Storm Reports (LSRs) - October 2024

- Iowa State University's website provides a nice graphical interface for viewing archived local storm reports. See the following link for October's local storm reports in NWS Pendleton's forecast area:
  - https://mesonet.agron.iastate.edu/lsr/#PDT/202410010700/202411010700/011011
- For recent LSRs, <a href="https://www.weather.gov/source/crh/lsrmap.html?sid=pdt">https://mesonet.agron.iastate.edu/lsr/#PDT/YYYYMMDDHHmm/YYYYMMDDHHmm/111111</a> and change the time to your desired date range.



# **Precipitation Anomaly - October 2024**



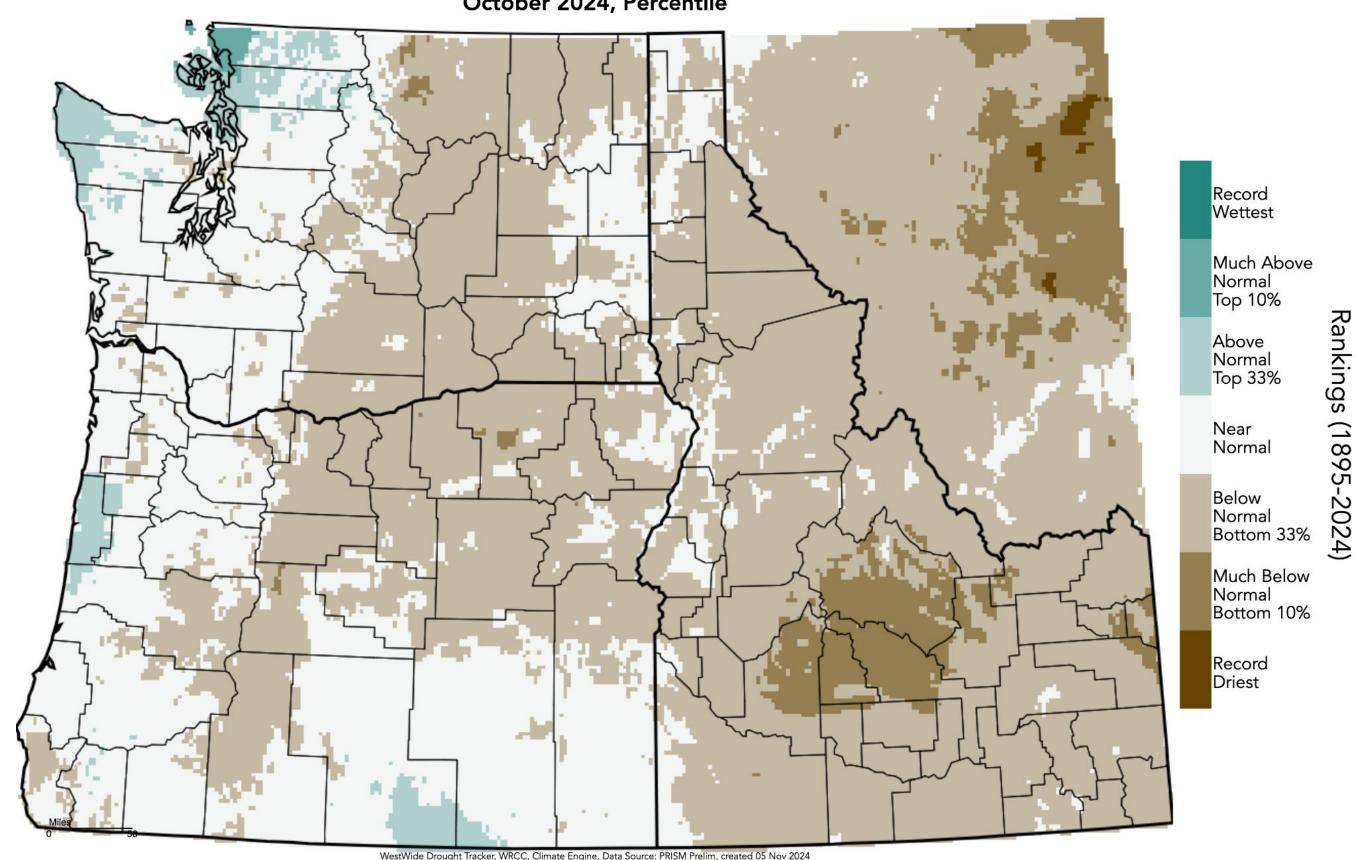


Near- to below-normal precipitation was observed across our forecast area during October.



# **Precipitation Percentiles - October 2024**



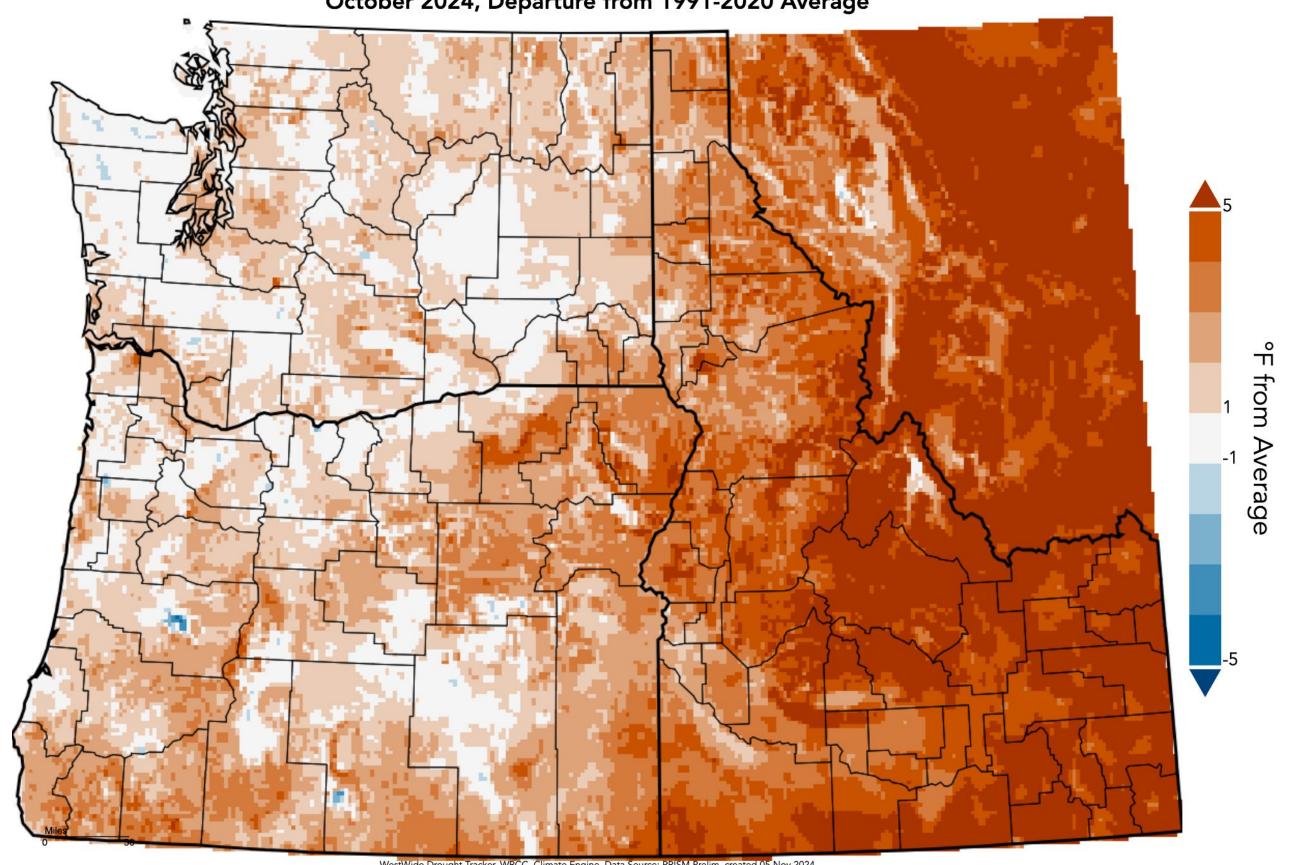


For historical context, mostly below-normal (bottom 33% of all years) precipitation was observed during October. Limited areas recorded near-normal precipitation such as along the Cascade crest and limited portions of central and northeast Oregon and southeast Washington.



# **Temperature Anomaly - October 2024**

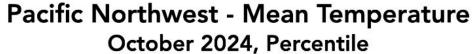


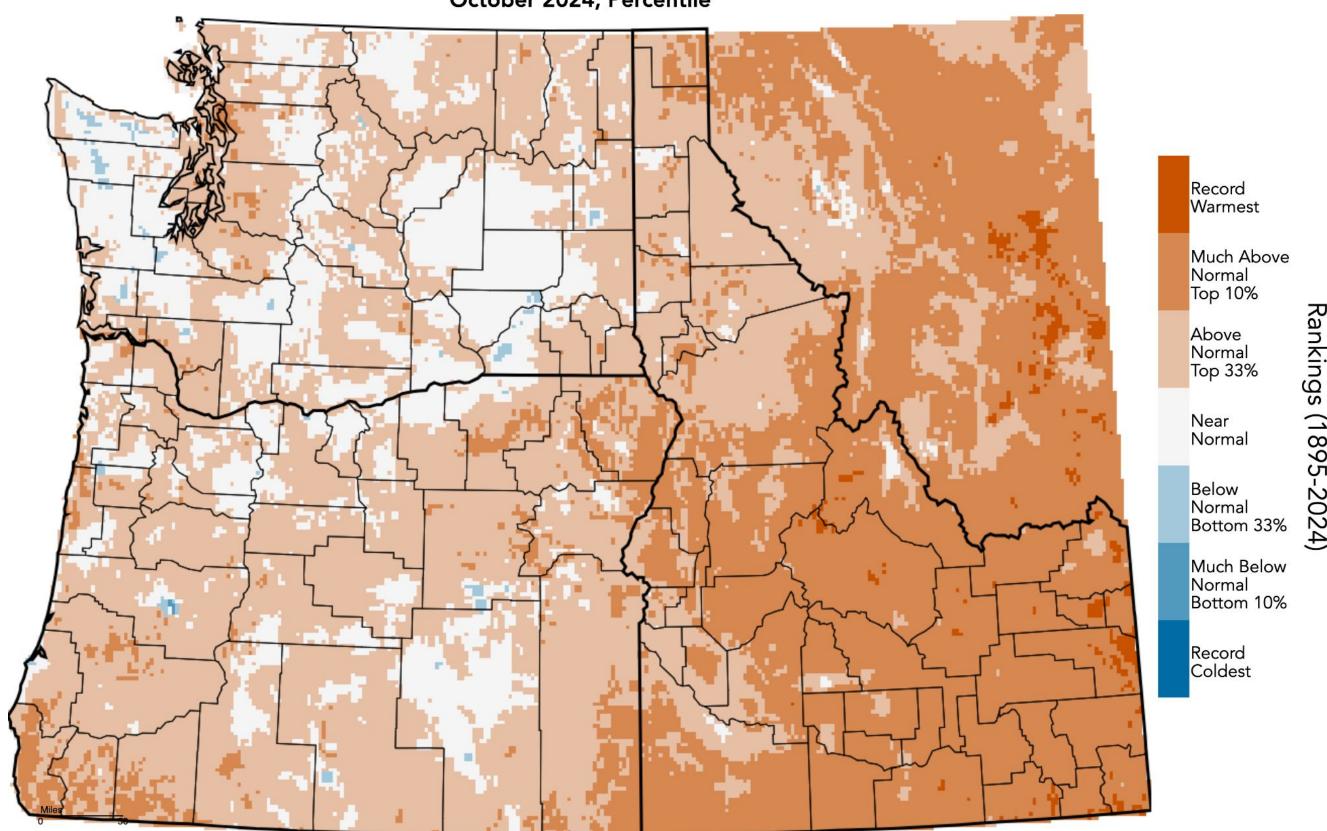


Mean (average) temperatures were predominantly near or above normal (relative to the 1991-2020 climate reference period) across the forecast area during October.



# Temperature Percentiles - October 2024





For historical context, mean (average) temperatures during October were mostly near normal or above normal (top 33% of all years) with a few pockets of much-above-normal temperatures (top 10% of all years) in northeast Oregon.



### October 2024 Climate Statistics - Pendleton ASOS

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	84	-	-
Average Daily Maximum Temperature (F)	67.4	63.5	3.9
Average Daily Minimum Temperature (F)	41.1	39.4	1.7
Coolest Daily Minimum Temperature (F)	30	-	-
Average Temperature (F)	54.3	51.5	2.8
Total Precipitation (inches)	0.53	1.09	-0.56
Total Snow (inches)	0.0	0.1	-0.1

Variable (units)	Value	Day
Daily Record High Temperature (F)		
Daily Record Low Temperature (F)		
Daily Record Precipitation (inches)		



### October 2024 Climate Statistics - Walla Walla ASOS

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	84	-	-
Average Daily Maximum Temperature (F)	65.8	63.4	2.4
Average Daily Minimum Temperature (F)	44.1	43.9	0.2
Coolest Daily Minimum Temperature (F)	34	-	-
Average Temperature (F)	55.0	53.7	-1.9
Total Precipitation (inches)	0.84	1.66	-0.82

Variable (units)	Value	Day
Daily Record High Temperature (F)	84	20th
Daily Record Low Temperature (F)		
Daily Record Precipitation (inches)		



#### **October 2024 Climate Statistics - The Dalles ASOS**

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	83*	-	-
Average Daily Maximum Temperature (F)	67.9*	65.5	2.4*
Average Daily Minimum Temperature (F)	41.3*	42.6	-1.3*
Coolest Daily Minimum Temperature (F)	31*	-	-
Average Temperature (F)	54.6*	54.0	0.6*
Total Precipitation (inches)	0.46*	1.14	-0.68*

<sup>\*</sup>Note: Data were unavailable from 10/26-10/30.

Variable (units)	Value	Day
Daily Record High Temperature (F)		
Daily Record Low Temperature (F)		
Daily Record Precipitation (inches)		



# October 2024 Climate Statistics - Ellensburg ASOS

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	81	-	-
Average Daily Maximum Temperature (F)	64.4	62.3	2.1
Average Daily Minimum Temperature (F)	35.2	36.9	-1.7
Coolest Daily Minimum Temperature (F)	23	-	-
Average Temperature (F)	49.8	49.6	0.2
Total Precipitation (inches)	0.32	0.83	-0.51

Variable (units)	Value	Day
Daily Record High Temperature (F)		
Daily Record Low Temperature (F)	28, 23	3rd, 23rd
Daily Record Precipitation (inches)		



### October 2024 Climate Statistics - Hermiston ASOS

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	85	-	-
Average Daily Maximum Temperature (F)	68.4	66.5	1.9
Average Daily Minimum Temperature (F)	39.1	39.0	0.1
Coolest Daily Minimum Temperature (F)	24	-	-
Average Temperature (F)	53.8	52.7	1.1
Total Precipitation (inches)	0.45	0.80	-0.35

Variable (units)	Value	Day
Daily Record High Temperature (F)		
Daily Record Low Temperature (F)		
Daily Record Precipitation (inches)		



# **October 2024 Climate Statistics - Meacham ASOS**

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	79	_	-
Average Daily Maximum Temperature (F)	60.5	56.7	3.8
Average Daily Minimum Temperature (F)	30.5	29.4	1.1
Coolest Daily Minimum Temperature (F)	20	-	-
Average Temperature (F)	45.5	43.1	2.4
Total Precipitation (inches)	1.72	2.85	-1.13

Variable (units)	Value	Day
Daily Record High Temperature (F)		
Daily Record Low Temperature (F)		
Daily Record Precipitation (inches)		



#### October 2024 Climate Statistics - Pasco ASOS

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	84	-	-
Average Daily Maximum Temperature (F)	68.7	65.8	2.9
Average Daily Minimum Temperature (F)	38.5	38.4	0.1
Coolest Daily Minimum Temperature (F)	26	-	-
Average Temperature (F)	53.6	52.1	1.5
Total Precipitation (inches)	0.38	0.66	-0.28

Variable (units)	Value	Day
Daily Record High Temperature (F)		
Daily Record Low Temperature (F)		
Daily Record Precipitation (inches)		



#### October 2024 Climate Statistics - Redmond ASOS

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	88*	-	-
Average Daily Maximum Temperature (F)	67.7*	64.5	3.2*
Average Daily Minimum Temperature (F)	32.9*	32.7	0.2*
Coolest Daily Minimum Temperature (F)	20*	-	-
Average Temperature (F)	50.3*	48.6	1.7*
Total Precipitation (inches)	0.41	0.68	-0.27

<sup>\*</sup>Note: Data were unavailable on 10/10.

Variable (units)	Value	Day
Daily Record High Temperature (F)		
Daily Record Low Temperature (F)		
Daily Record Precipitation (inches)		



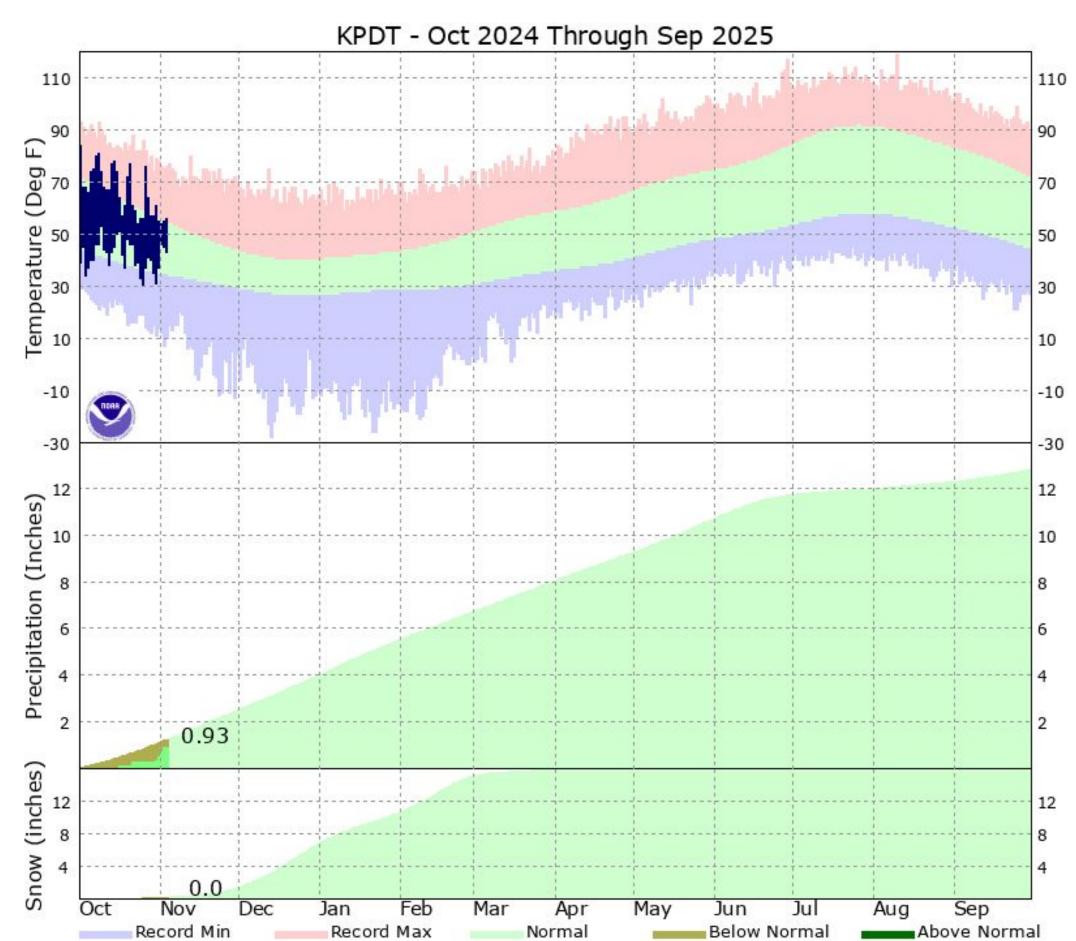
#### October 2024 Climate Statistics - Yakima ASOS

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	80	_	-
Average Daily Maximum Temperature (F)	65.9	64.4	1.5
Average Daily Minimum Temperature (F)	34.0	35.3	-1.3
Coolest Daily Minimum Temperature (F)	24	-	_
Average Temperature (F)	50.0	49.8	0.2
<b>Total Precipitation (inches)</b>	0.27	0.64	-0.37

Variable (units)	Value	Day
Daily Record High Temperature (F)	77	20th
Daily Record Low Temperature (F)		
Daily Record Precipitation (inches)		



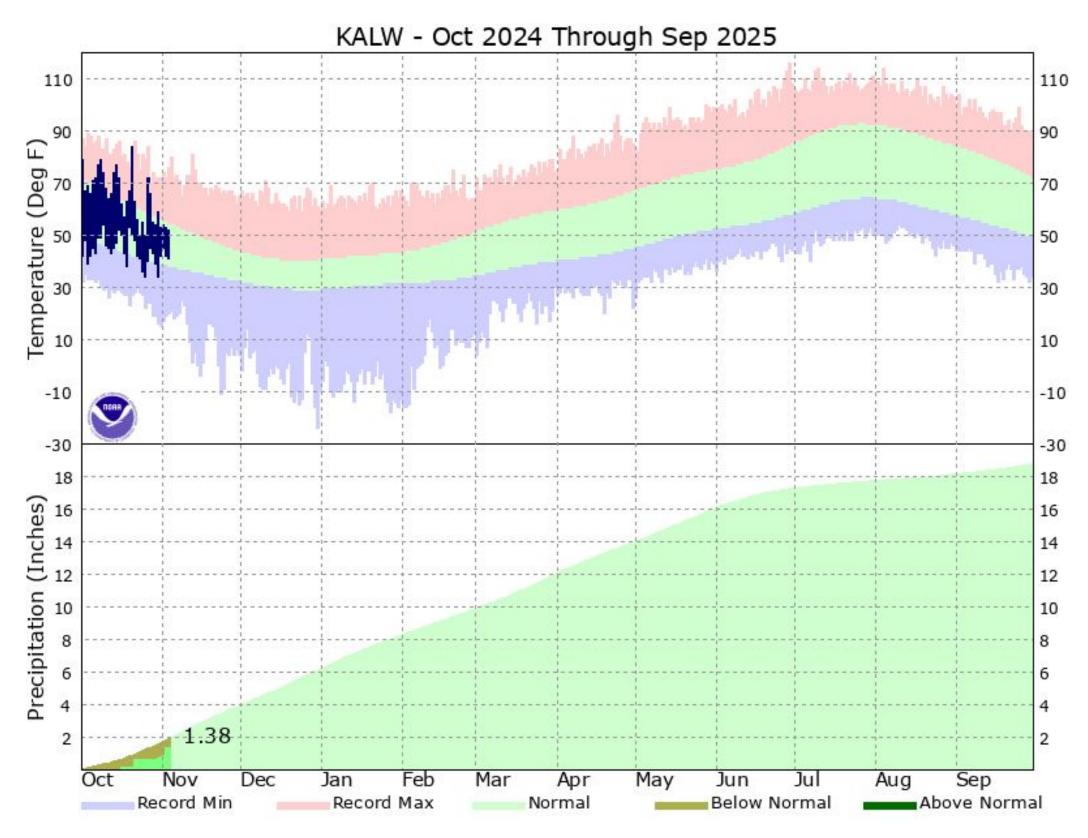
# Water Year Climate Graphs - Pendleton ASOS



During the October 2024 - September 2025 water year, Pendleton has observed slightly below-normal precipitation and below-normal snowfall.



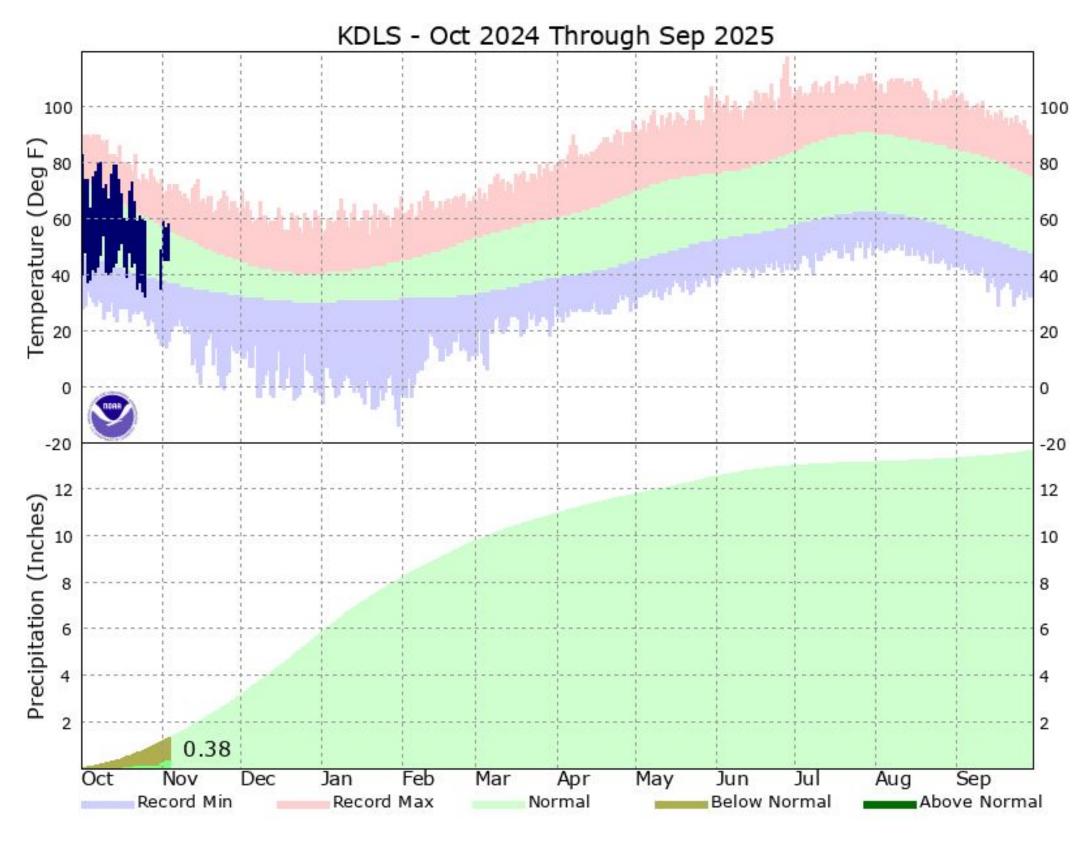
# Water Year Climate Graphs - Walla Walla ASOS



During the October 2024 - September 2025 water year, Walla Walla has received below-normal precipitation.



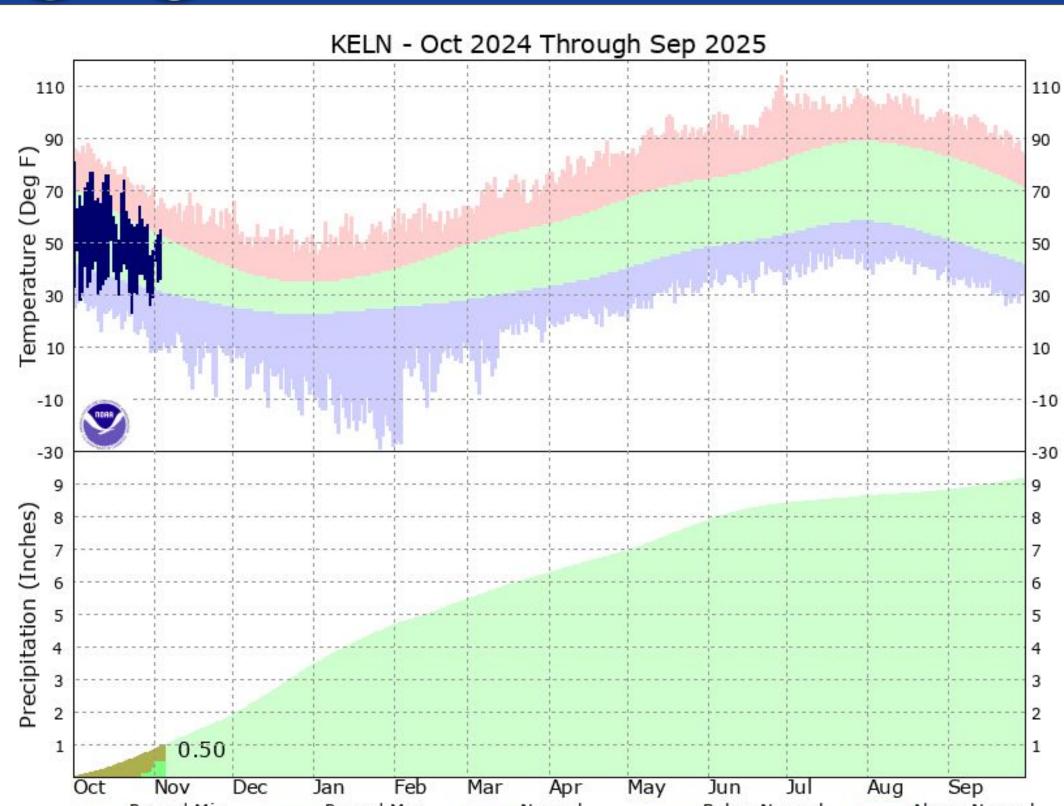
# **Water Year Climate Graphs - The Dalles ASOS**



During the October 2024 - September 2025 water year, The Dalles has recorded below-normal precipitation.



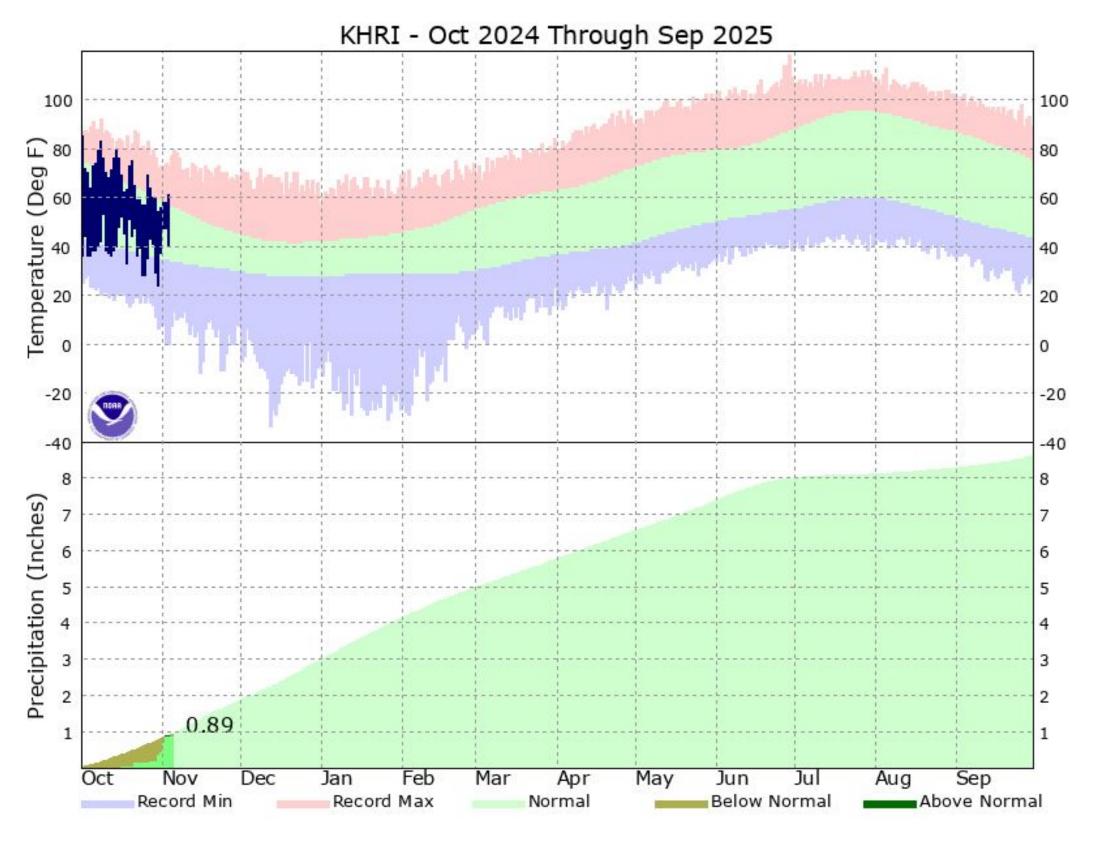
# Water Year Climate Graphs - Ellensburg ASOS



During the October 2024 - September 2025 water year, Ellensburg has observed below-normal precipitation.



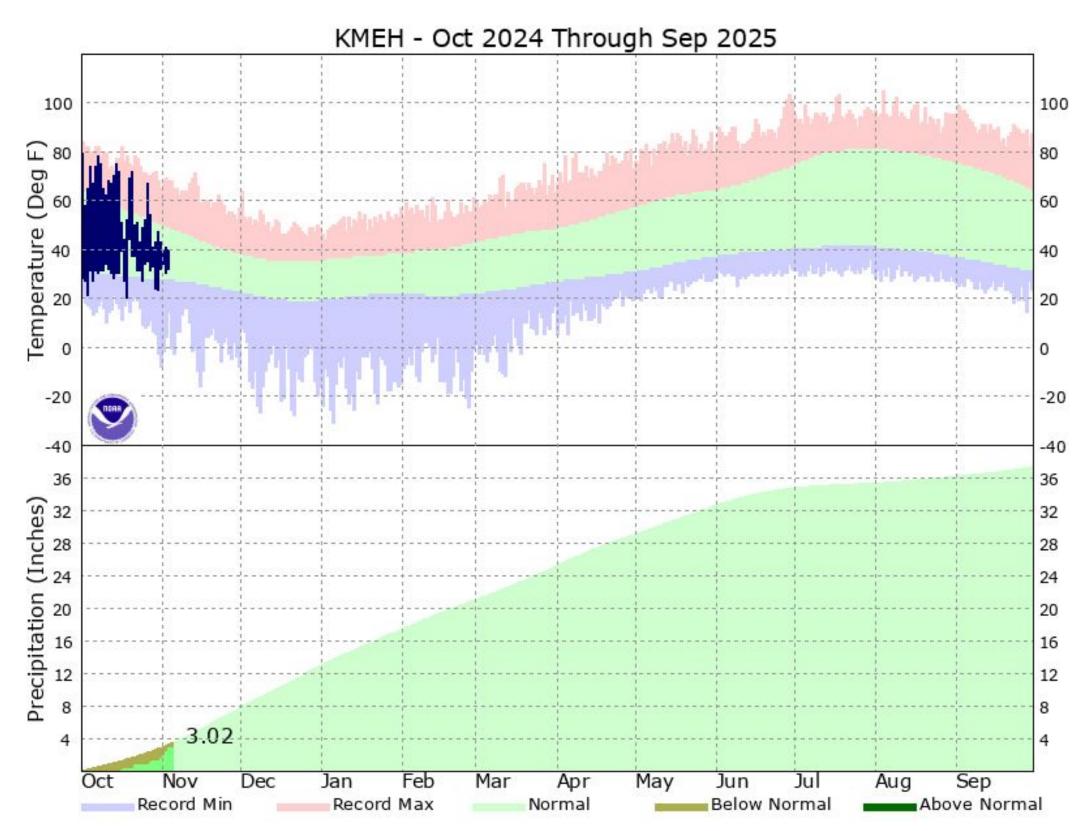
# Water Year Climate Graphs - Hermiston ASOS



During the October 2024 - September 2025 water year, Hermiston has recorded near-normal precipitation.



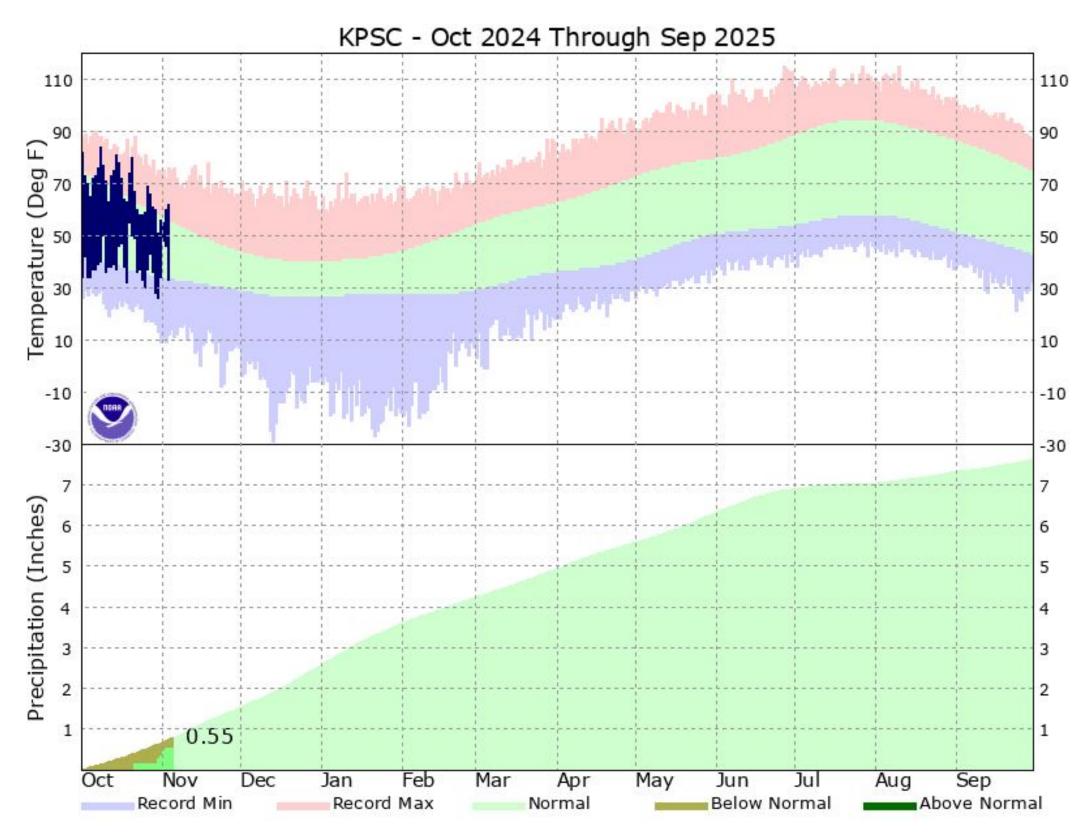
# Water Year Climate Graphs - Meacham ASOS



During the October 2024 - September 2025 water year, Meacham has received slightly below-normal precipitation.



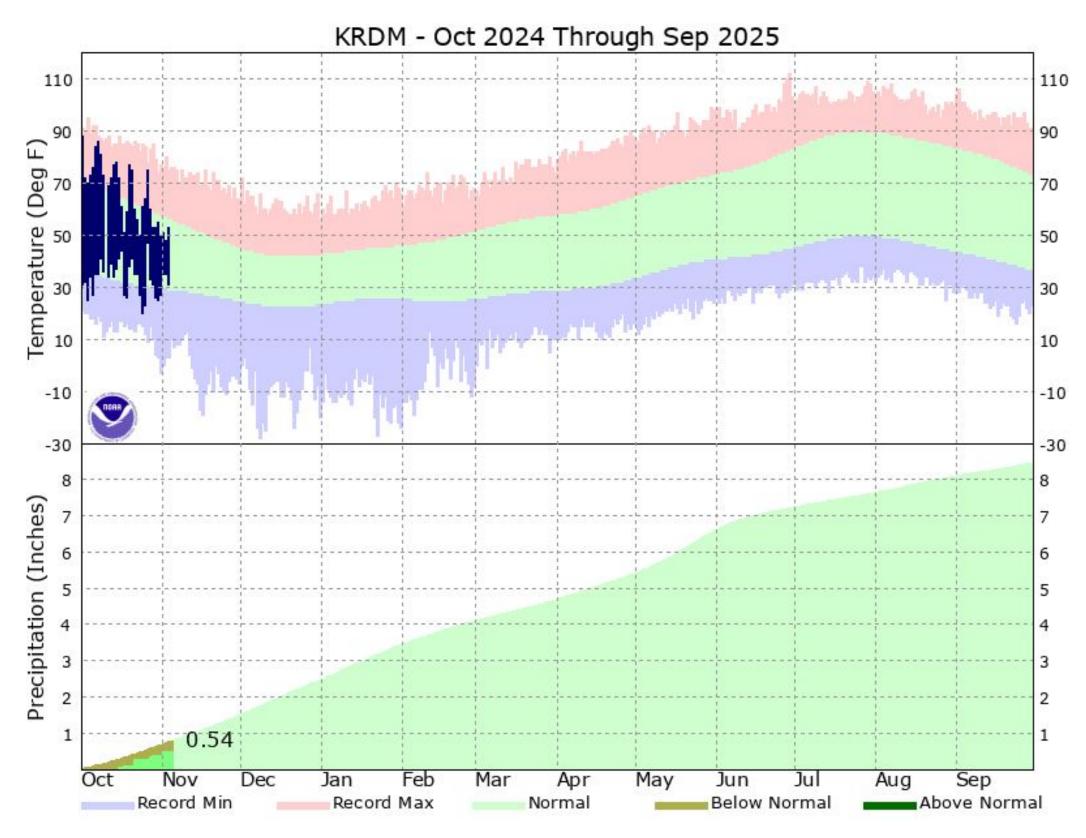
# Water Year Climate Graphs - Pasco ASOS



During the October 2024 - September 2025 water year, Pasco has observed slightly below-normal precipitation.



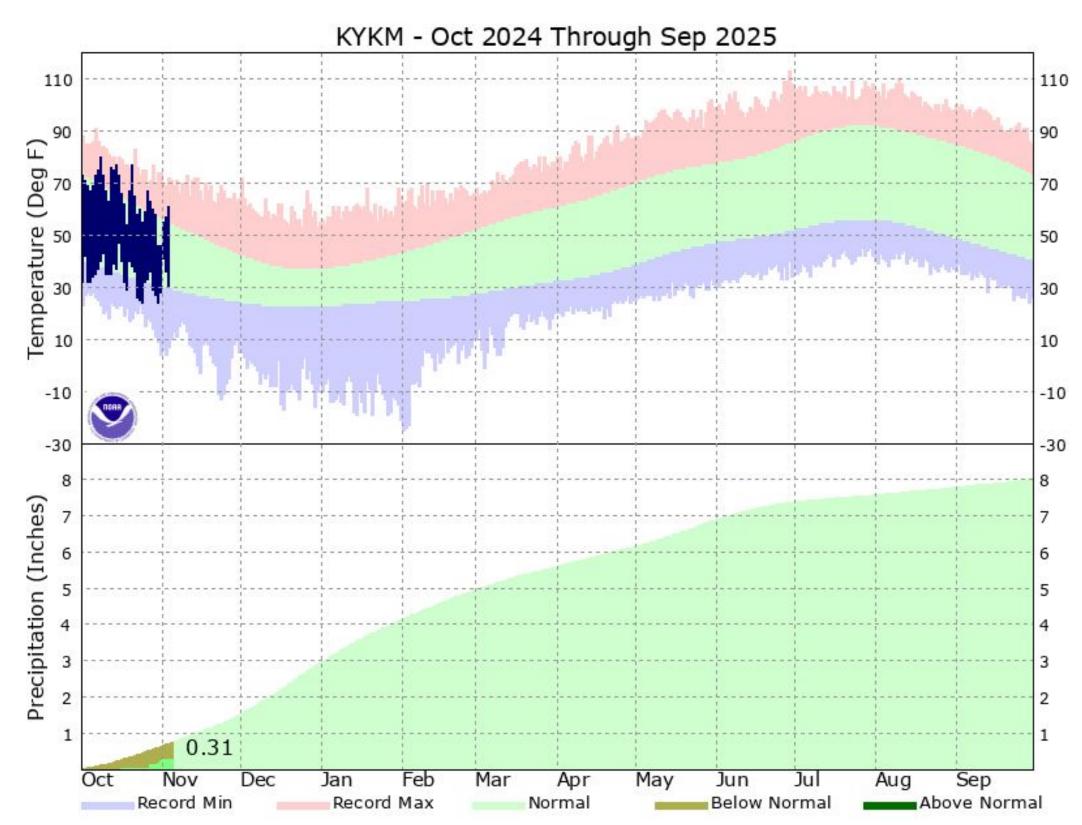
# Water Year Climate Graphs - Redmond ASOS



During the October 2024 - September 2025 water year, Redmond has recorded slightly below-normal precipitation.

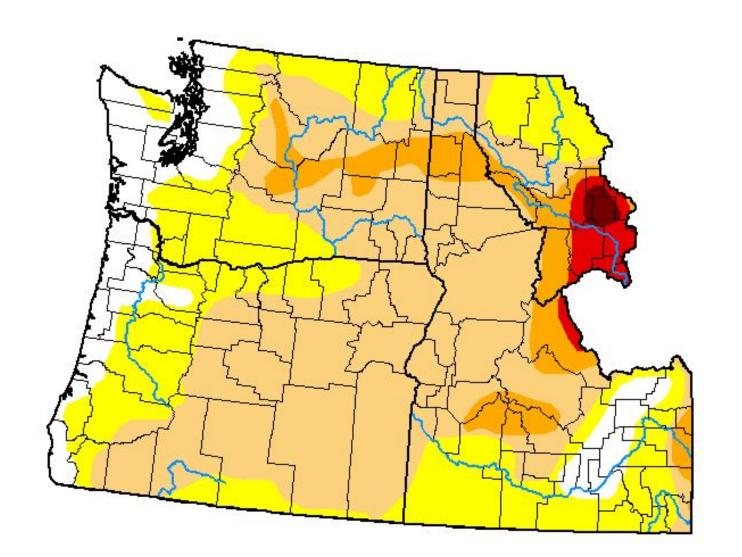


# Water Year Climate Graphs - Yakima ASOS



During the October 2024 - September 2025 water year, Yakima has recorded below-normal precipitation.

# U.S. Drought Monitor Pacific Northwest DEWS



#### October 29, 2024

(Released Thursday, Oct. 31, 2024)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	11.49	88.51	58.59	11.03	2.53	0.49
Last Week 10-22-2024	9.66	90.34	60.14	11.51	2.53	0.49
3 Month's Ago 07-30-2024	11.98	88.02	46.97	10.03	2.87	0.49
Start of Calendar Year 01-02-2024	44.06	55.94	26.37	4.48	0.00	0.00
Start of Water Year 10-01-2024	13.07	86.93	56.26	11.40	2.27	0.49
One Year Ago 10-31-2023	40.46	59.54	45.65	23.62	3.65	0.00

interisity.	
None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought

The Drought Monitor focuses on broad-scale conditions.

Local conditions may vary. For more information on the

Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

#### Author:

Brian Fuchs National Drought Mitigation Center

D1 Moderate Drought









D4 Exceptional Drought

droughtmonitor.unl.edu

<u>D4 (Exceptional Drought)</u>: None.

<u>D3 (Extreme Drought)</u>: None.

<u>D2 (Severe Drought)</u>: Part of eastern Kittitas County.

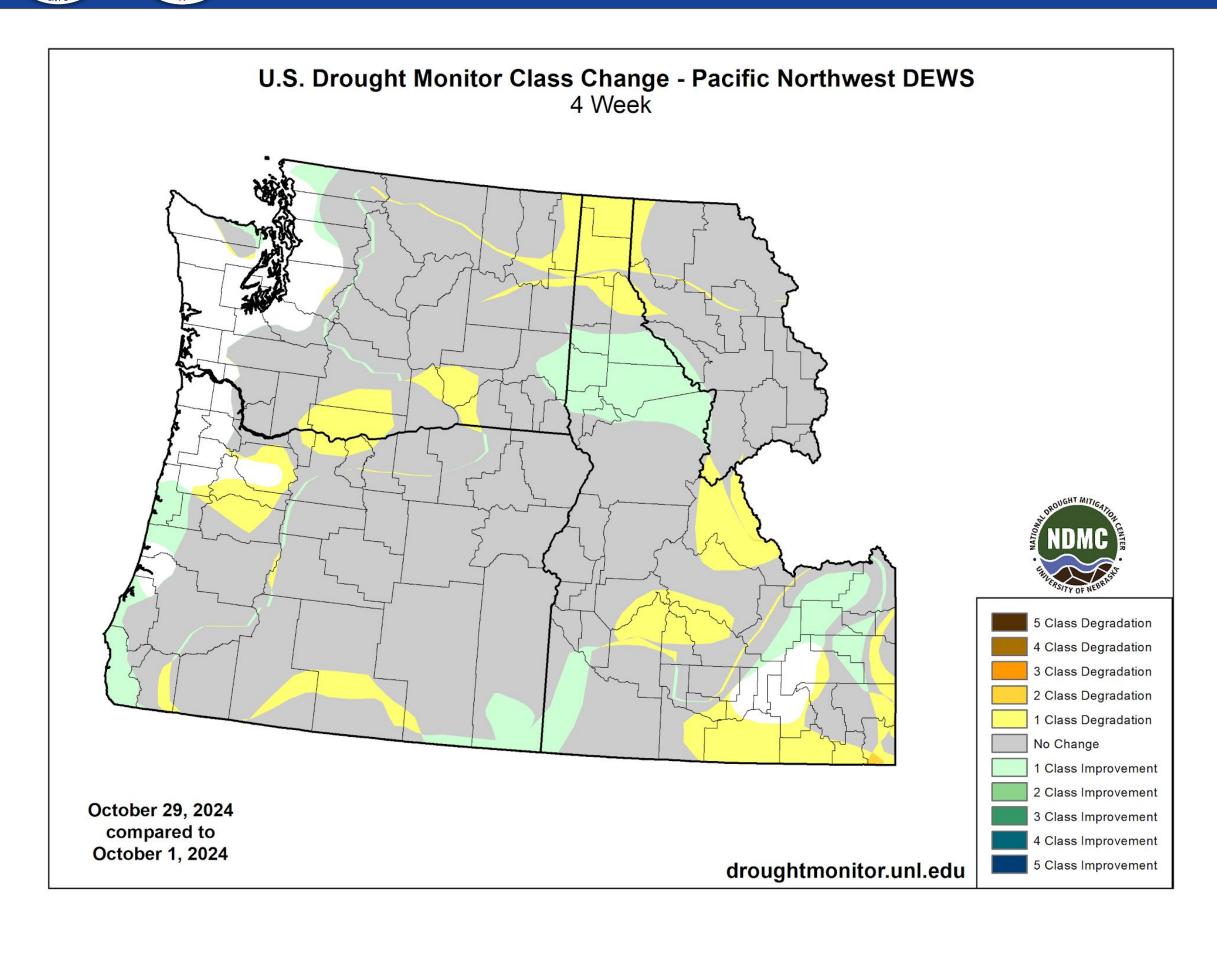
<u>D1 (Moderate Drought)</u>: Portions of Kittitas, Yakima, Benton, Franklin, Columbia, Wallowa, Union, Umatilla, Morrow, Gilliam, Sherman, Wasco, Jefferson, Crook, Wheeler, Grant, and Deschutes counties.

<u>D0 (Abnormally Dry)</u>: Portions of all counties are at least D0.

For the latest conditions, please see droughtmonitor.unl.edu



### **Drought Evolution: 4-Week Change during October**



<u>Improved</u>: None.

<u>Degraded</u>: Portions of Wasco, Sherman, Gilliam, Klickitat, Yakima, Benton, Franklin, and Walla Walla counties.

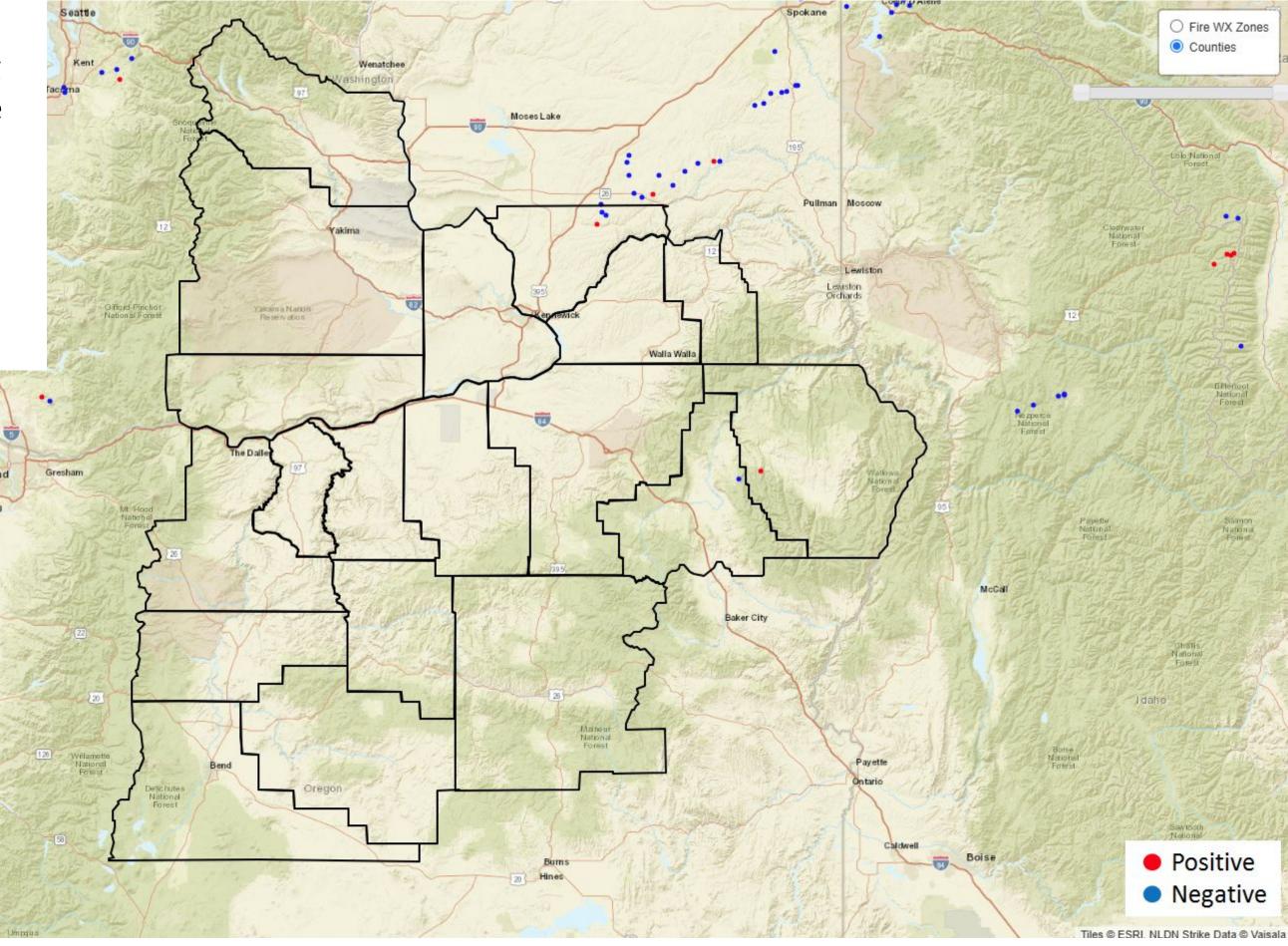
No change: Portions of all counties.



The image shows positive (red) and negative (blue) cloud-to-ground lightning strikes during October. The table lists the number of strikes for each county.

Data provided by Vaisala.

County	Strikes
Franklin WA	3
Union OR	1
Wallowa OR	1



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