

Month in Review - July 2024

Weather Forecast Office

Pendleton, OR

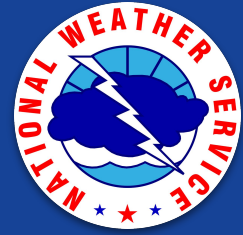
Wednesday, August 14

Photo taken by NWS Pendleton staff
in southern Umatilla County, Oregon



The Month in Review is a retrospective collection of climate statistics for NWS Pendleton's forecast area 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 - July 2024

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

- Average temperatures during July were much above normal (top 10% of all years) for the majority of the forecast area.
- Below-normal precipitation was observed across the forecast area.
- Drought conditions worsened across portions of eastern Oregon and eastern Washington, most notably in the Blue Mountains.
- A combination of human- and lightning-caused wildfires led to periods of smoke and haze.



Local Storm Reports (LSRs) - July 2024

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

- Iowa State University's website provides a nice graphical interface for viewing archived local storm reports. See the following link for July's local storm reports in NWS Pendleton's forecast area: <https://mesonet.agron.iastate.edu/lsr/#PDT/202407010700/202408010700/011011>
- For recent LSRs, <https://www.weather.gov/source/crh/lsrcmap.html?sid=pdt> or <https://mesonet.agron.iastate.edu/lsr/#PDT/YYYYMMDDHHmm/YYYYMMDDHHmm/111111> and change the time to your desired date range.

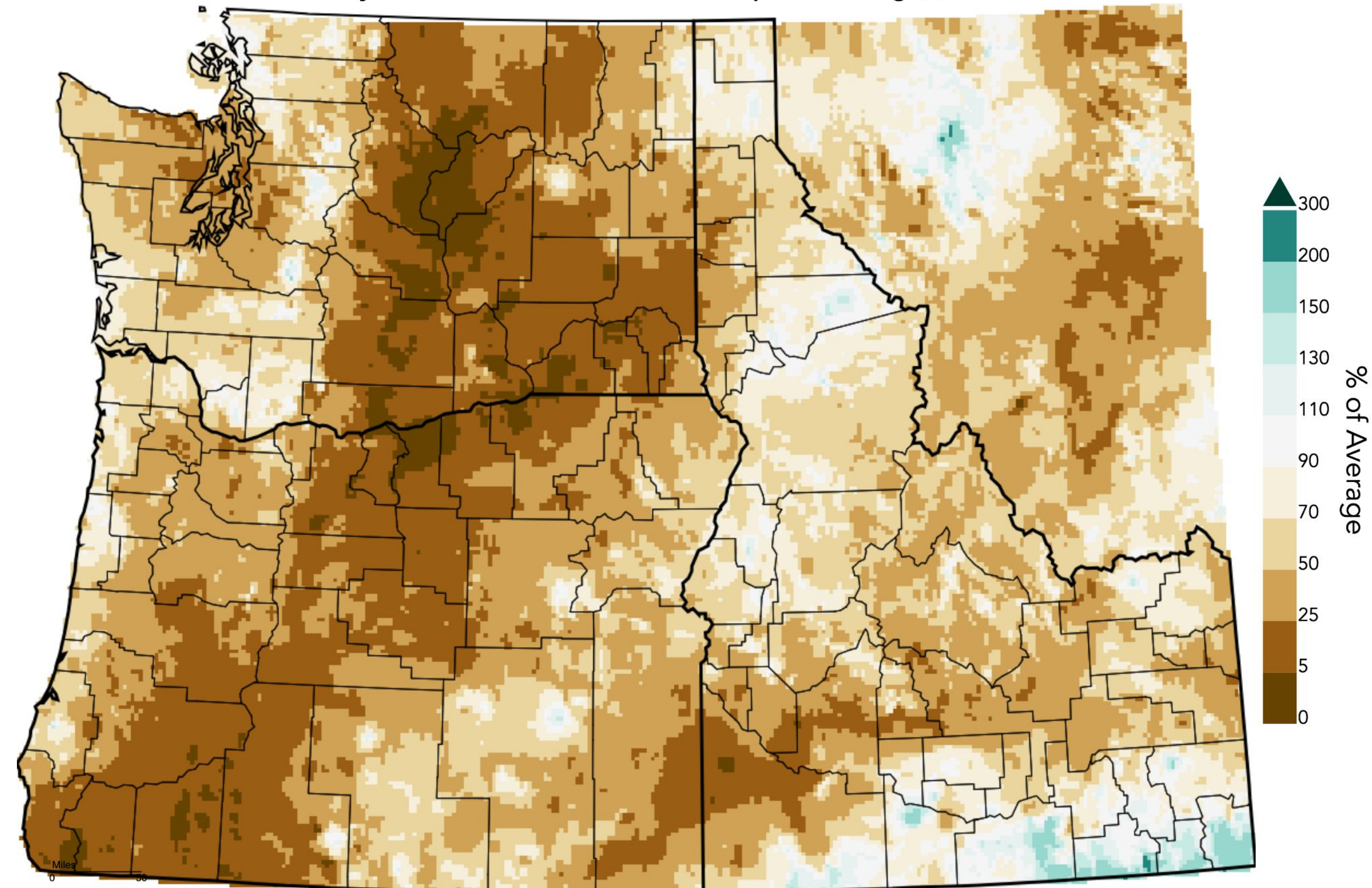


Precipitation Anomaly - July 2024

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

Pacific Northwest - Precipitation
July 2024, Percent of 1991-2020 Computed Average(s)

Below-normal precipitation was observed across the forecast area.

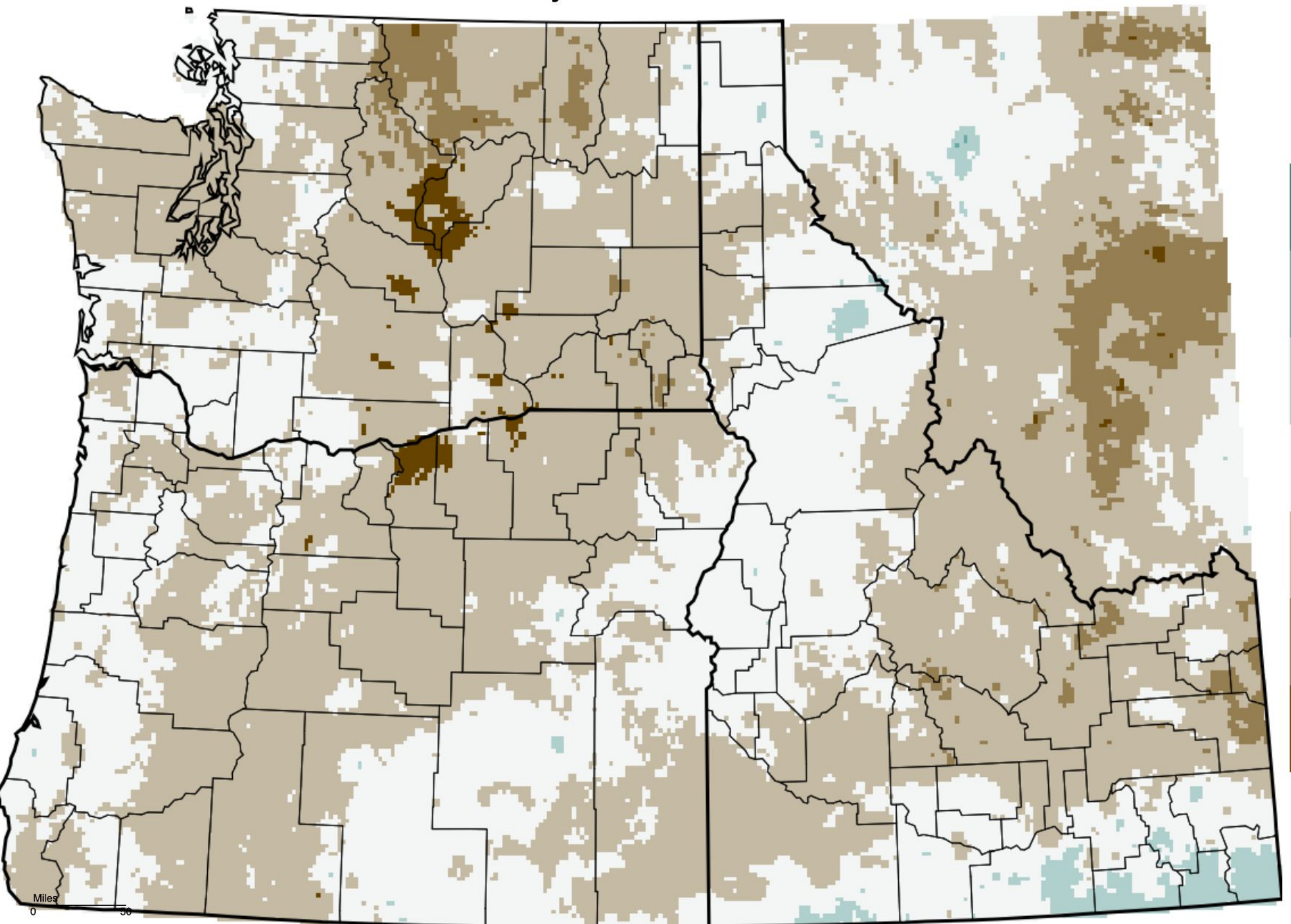




Precipitation Percentiles - July 2024

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

Pacific Northwest - Precipitation
July 2024, Percentile



Rankings (1895-2024)

For historical context, precipitation during July was below normal (bottom 33% of all years) for the majority of the forecast area.

WestWide Drought Tracker, WRCC, Climate Engine, Data Source: PRISM Prelim, created 05 Aug 2024

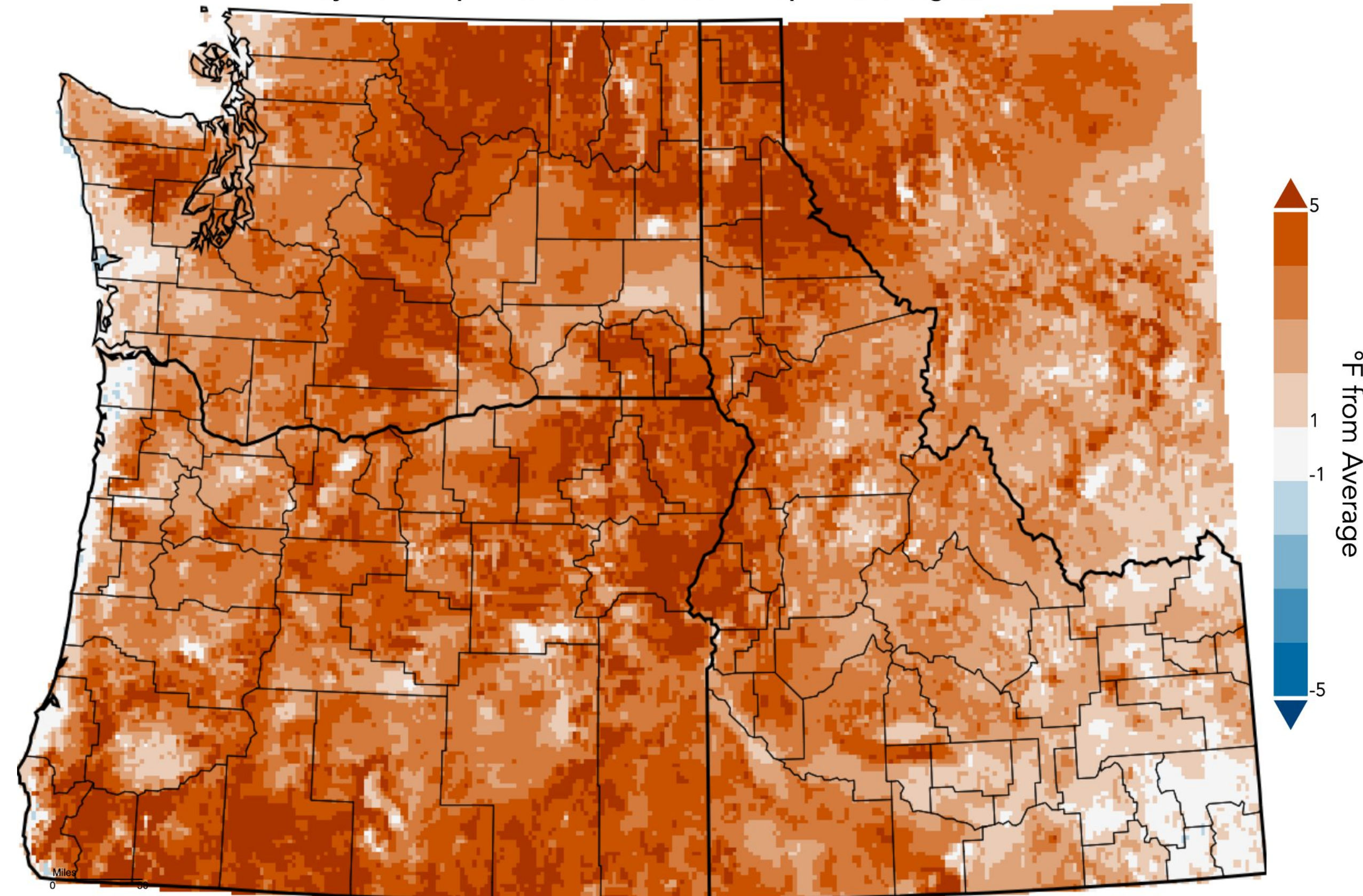


Temperature Anomaly - July 2024

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

Pacific Northwest - Mean Temperature
July 2024, Departure from 1991-2020 Computed Average(s)

Mean (average) temperatures were above normal across the forecast area during July.



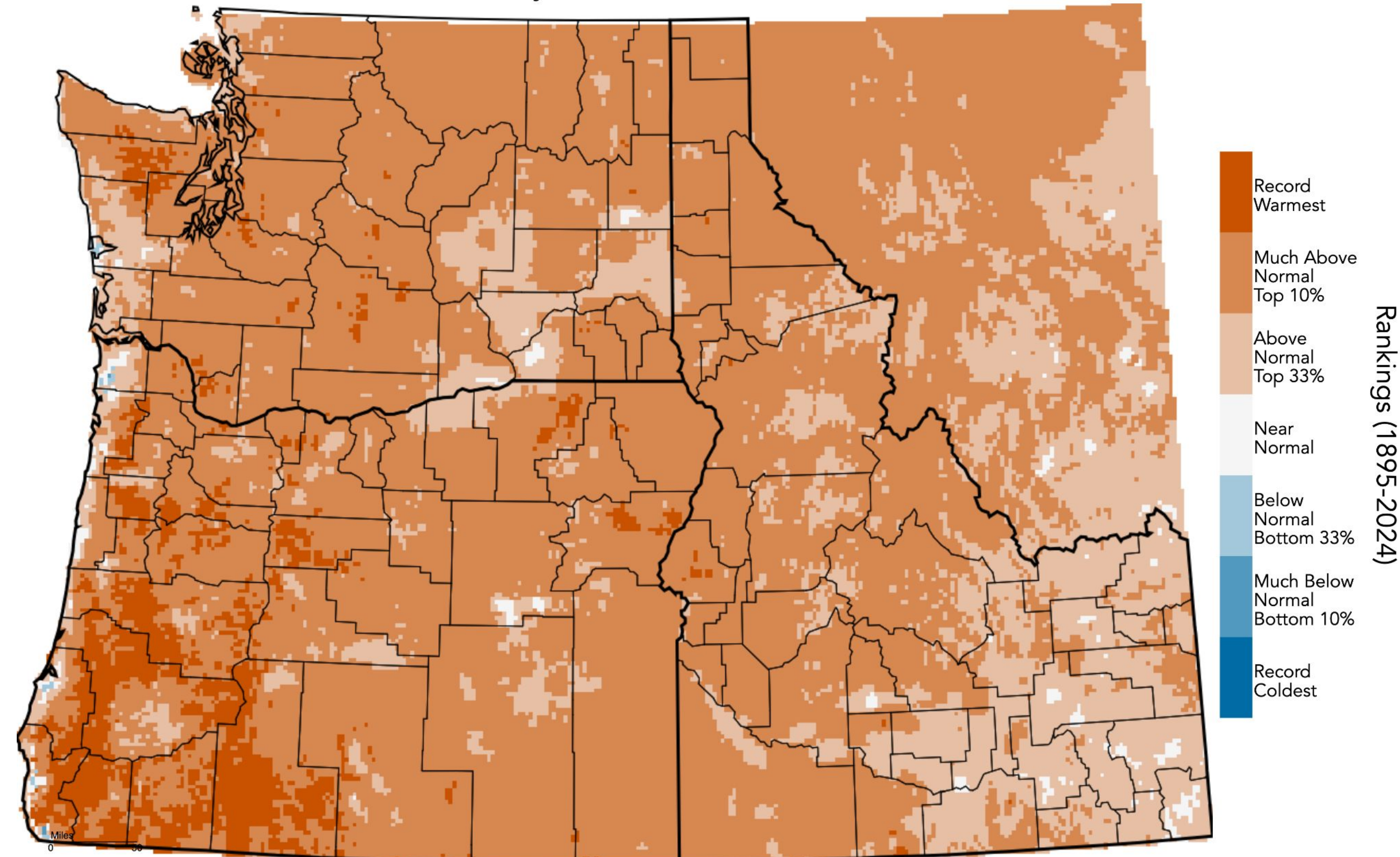


Temperature Percentiles - July 2024

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

Pacific Northwest - Mean Temperature
July 2024, Percentile

For historical context, mean (average) temperatures during July were much above normal (top 10% of all years) for the majority of the forecast area.



WestWide Drought Tracker, WRCC, Climate Engine, Data Source: PRISM Prelim, created 05 Aug 2024



July 2024 Climate Statistics - Pendleton ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	109	-	-
Average Daily Maximum Temperature (F)	95.1	89.2	5.9
Average Daily Minimum Temperature (F)	60.7	56.7	4.0
Coolest Daily Minimum Temperature (F)	49	-	-
Average Temperature (F)	77.9	73.0	4.9
Total Precipitation (inches)	0.01	0.26	-0.25
Total Snow (inches)	0.0	0.0	0.0

Variable (units)	Value	Day
Daily Record High Temperature (F)	104	7th
Daily Record Low Temperature (F)		
Daily Record Precipitation (inches)		

Additional climate statistics can be found here: <https://www.weather.gov/wrh/climate?wfo=pdt>



July 2024 Climate Statistics - Walla Walla ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	106	-	-
Average Daily Maximum Temperature (F)	93.3	90.1	3.2
Average Daily Minimum Temperature (F)	64.5	62.4	2.1
Coolest Daily Minimum Temperature (F)	52	-	-
Average Temperature (F)	78.9	76.3	2.6
Total Precipitation (inches)	T	0.47	-0.47

Variable (units)	Value	Day
Daily Record High Temperature (F)		
Daily Record Low Temperature (F)	52	26th
Daily Record Precipitation (inches)		

Additional climate statistics can be found here: <https://www.weather.gov/wrh/climate?wfo=ptd>



July 2024 Climate Statistics - The Dalles ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	109	-	-
Average Daily Maximum Temperature (F)	93.2	88.4	4.8
Average Daily Minimum Temperature (F)	63.3	61.0	2.3
Coolest Daily Minimum Temperature (F)	53	-	-
Average Temperature (F)	78.3	74.7	3.6
Total Precipitation (inches)	T	0.16	-0.16

Variable (units)	Value	Day
Daily Record High Temperature (F)	105, 108, 109	5th, 8th, 9th
Daily Record Low Temperature (F)		
Daily Record Precipitation (inches)		



July 2024 Climate Statistics - Ellensburg ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	106	-	-
Average Daily Maximum Temperature (F)	93.2	86.4	6.8
Average Daily Minimum Temperature (F)	60.3	56.8	3.5
Coolest Daily Minimum Temperature (F)	44	-	-
Average Temperature (F)	76.8	71.6	5.2
Total Precipitation (inches)	T	0.23	-0.23

Variable (units)	Value	Day
Daily Record High Temperature (F)	101, 106, 101, 101, 100, 101	7th, 9th, 10th, 13th, 18th, 20th
Daily Record Low Temperature (F)	44	26th
Daily Record Precipitation (inches)		

Additional climate statistics can be found here: <https://www.weather.gov/wrh/climate?wfo=pdt>



July 2024 Climate Statistics - Hermiston ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	110	-	-
Average Daily Maximum Temperature (F)	96.7	92.7	4.0
Average Daily Minimum Temperature (F)	60.4	58.6	1.8
Coolest Daily Minimum Temperature (F)	48	-	-
Average Temperature (F)	78.6	75.6	3.0
Total Precipitation (inches)	T	0.12	-0.12

Variable (units)	Value	Day
Daily Record High Temperature (F)	105, 110, 107	8th, 9th, 10th
Daily Record Low Temperature (F)		
Daily Record Precipitation (inches)		

Additional climate statistics can be found here: <https://www.weather.gov/wrh/climate?wfo=pdt>



July 2024 Climate Statistics - Meacham ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	96	-	-
Average Daily Maximum Temperature (F)	84.5	78.9	5.6
Average Daily Minimum Temperature (F)	43.6	41.5	2.1
Coolest Daily Minimum Temperature (F)	31	-	-
Average Temperature (F)	64.0	60.2	3.8
Total Precipitation (inches)	0.26	0.58	-0.32

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

Additional climate statistics can be found here: <https://www.weather.gov/wrh/climate?wfo=pdt>



July 2024 Climate Statistics - Pasco ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	109	-	-
Average Daily Maximum Temperature (F)	97.6	92.5	5.1
Average Daily Minimum Temperature (F)	58.6	56.9	1.7
Coolest Daily Minimum Temperature (F)	47	-	-
Average Temperature (F)	78.1	74.7	3.4
Total Precipitation (inches)	T	0.15	-0.15

Variable (units)	Value	Day
Daily Record High Temperature (F)	109, 108	9th, 10th
Daily Record Low Temperature (F)	47	26th
Daily Record Precipitation (inches)		



July 2024 Climate Statistics - Redmond ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	107	-	-
Average Daily Maximum Temperature (F)	94.8	87.5	7.3
Average Daily Minimum Temperature (F)	50.7	48.5	2.2
Coolest Daily Minimum Temperature (F)	42	-	-
Average Temperature (F)	72.8	68.0	4.8
Total Precipitation (inches)	0.07	0.40	-0.33

Variable (units)	Value	Day
Daily Record High Temperature (F)	104, 103, 104, 107, 103, 101	6th, 7th, 8th, 9th, 13th, 16th
Daily Record Low Temperature (F)		
Daily Record Precipitation (inches)		

Additional climate statistics can be found here: <https://www.weather.gov/wrh/climate?wfo=pdt>



July 2024 Climate Statistics - Yakima ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	106	-	-
Average Daily Maximum Temperature (F)	94.8	89.9	4.9
Average Daily Minimum Temperature (F)	57.5	55.0	2.5
Coolest Daily Minimum Temperature (F)	48	-	-
Average Temperature (F)	76.2	72.4	3.8
Total Precipitation (inches)	0.05	0.20	-0.15

Variable (units)	Value	Day
Daily Record High Temperature (F)	105	10th
Daily Record Low Temperature (F)		
Daily Record Precipitation (inches)		

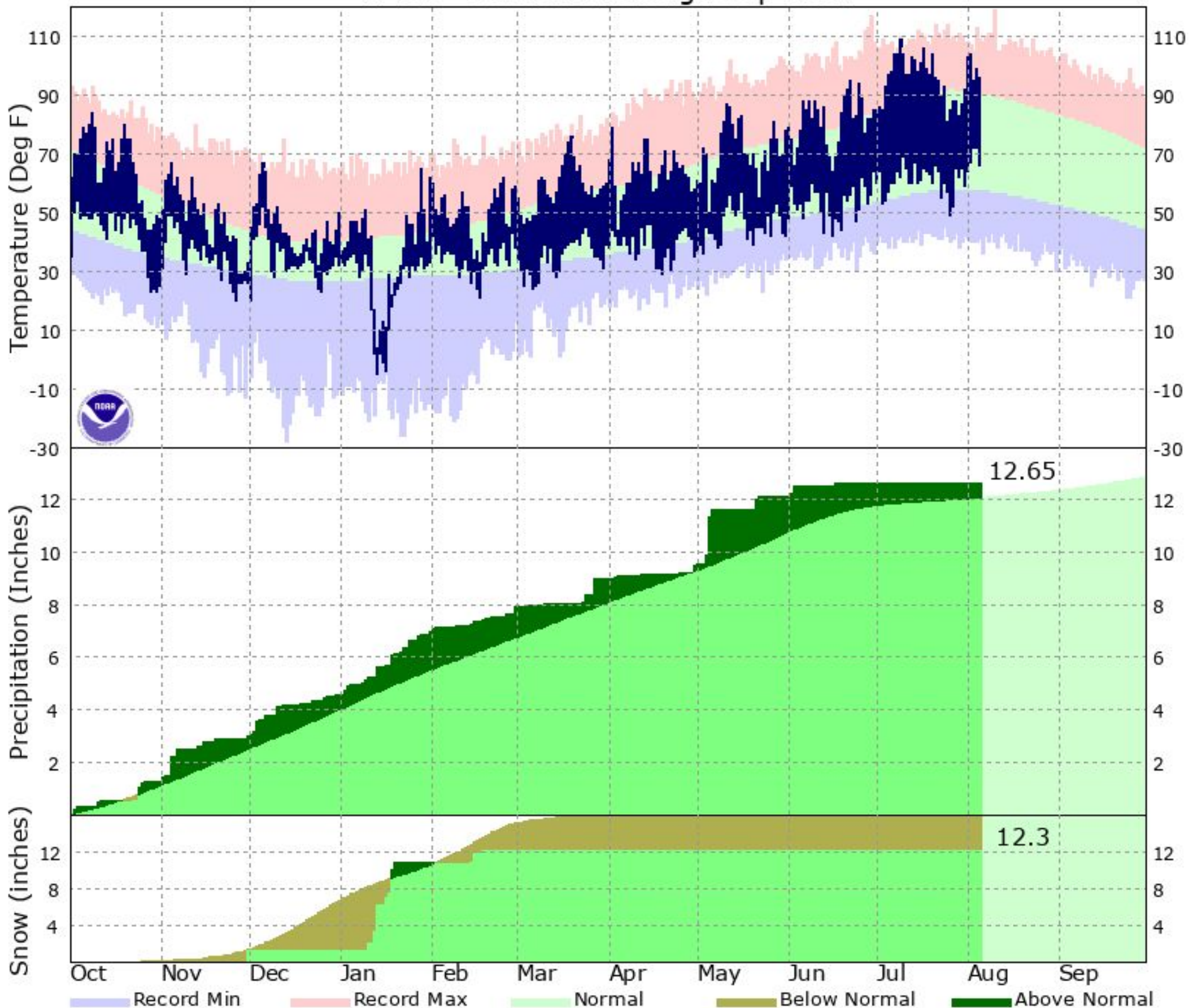
Additional climate statistics can be found here: <https://www.weather.gov/wrh/climate?wfo=pdt>



Water Year Climate Graphs - Pendleton ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

KPDT - Oct 2023 Through Sep 2024



So far this water year, Pendleton has observed slightly above-normal precipitation and below-normal snowfall.

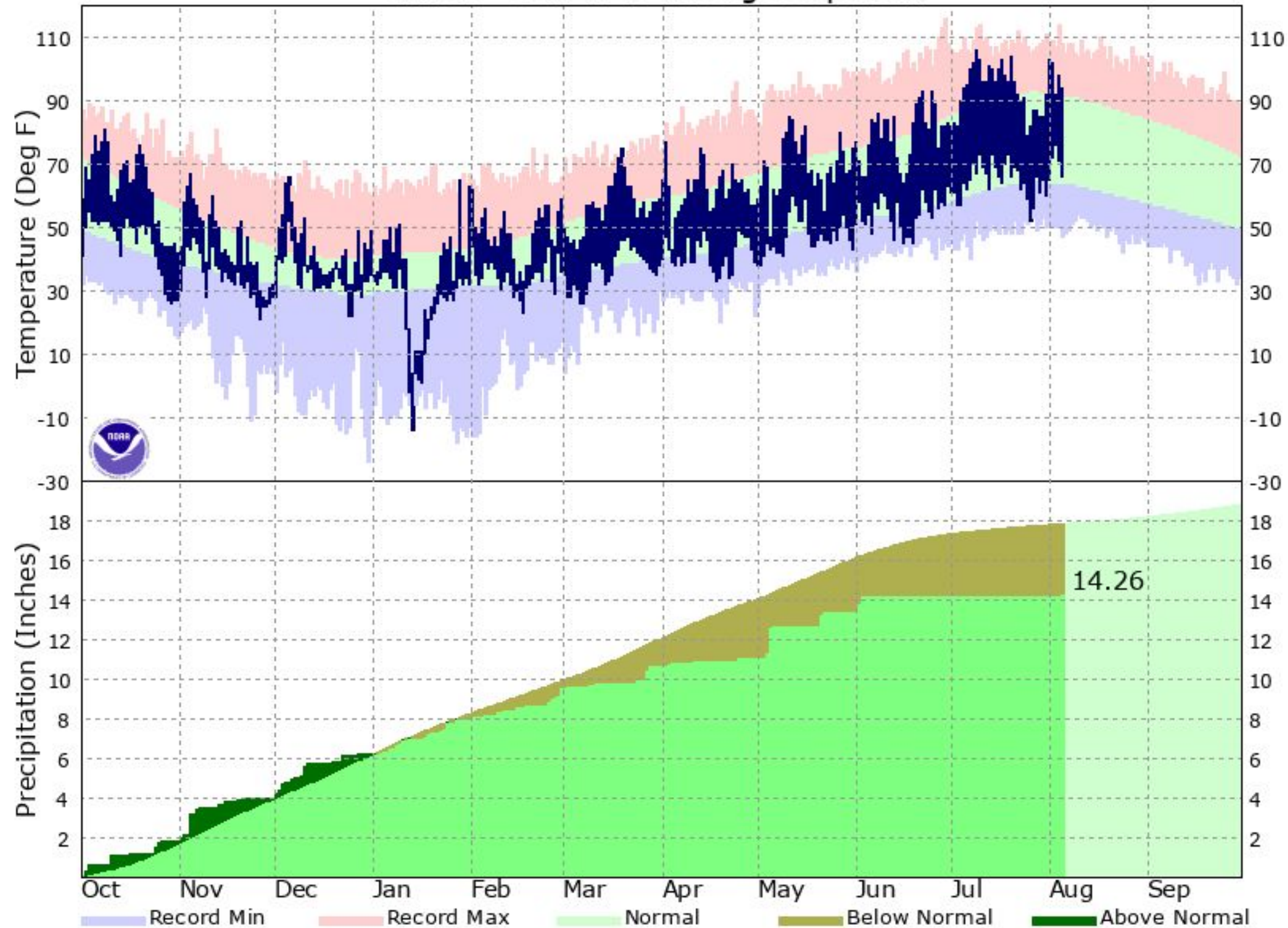
The latest graphs are located here:
<https://www.weather.gov/pdt/CliPlot>



Water Year Climate Graphs - Walla Walla ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

KALW - Oct 2023 Through Sep 2024



So far this water year, Walla Walla has received below-normal precipitation.

The latest graphs are located here:

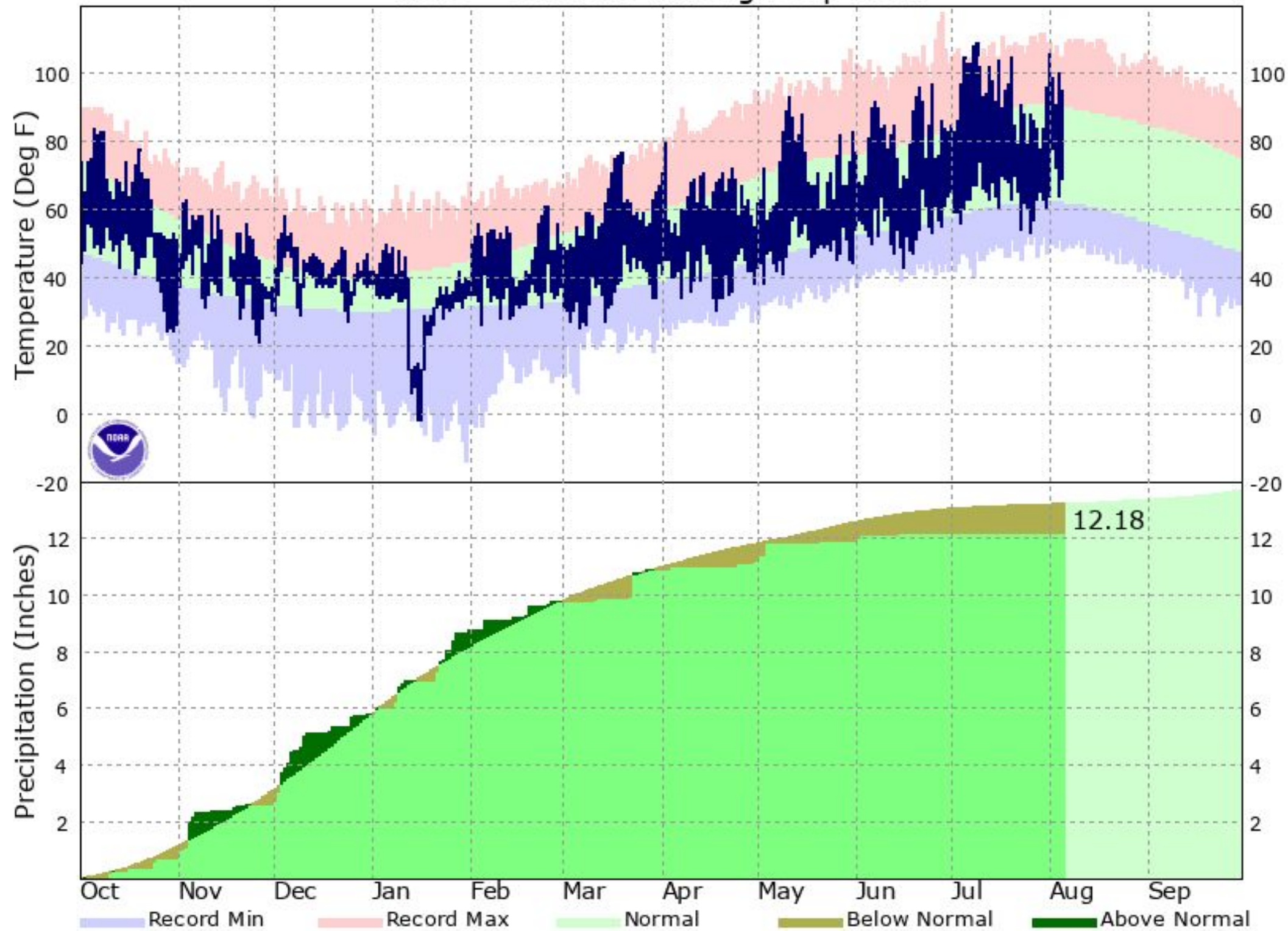
<https://www.weather.gov/pdt/CliPlot>



Water Year Climate Graphs - The Dalles ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

KDLS - Oct 2023 Through Sep 2024



So far this water year, The Dalles has recorded slightly below-normal precipitation.

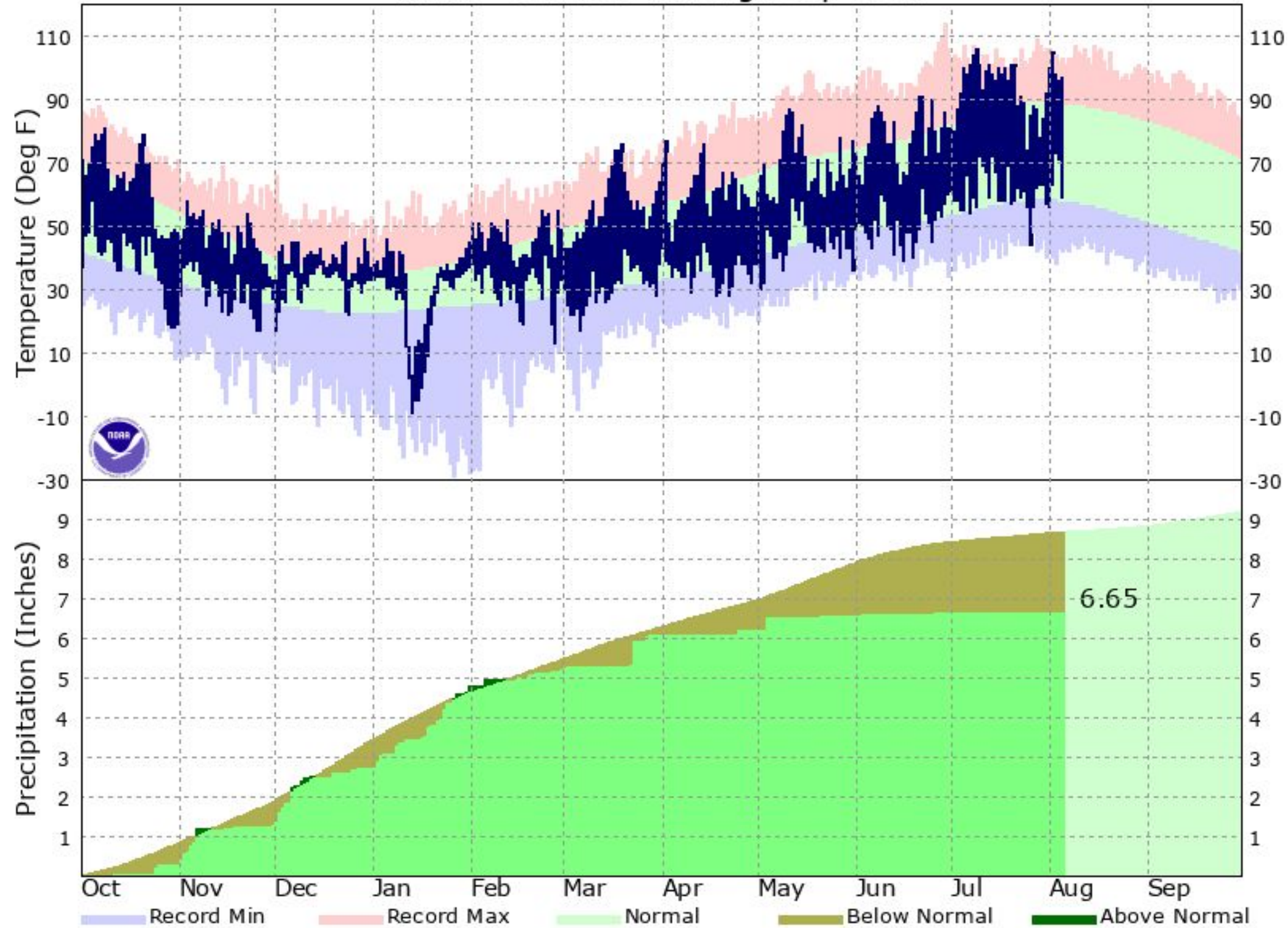
The latest graphs are located here:
<https://www.weather.gov/pdt/CliPlot>



Water Year Climate Graphs - Ellensburg ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

KELN - Oct 2023 Through Sep 2024



So far this water year, Ellensburg has observed below-normal precipitation.

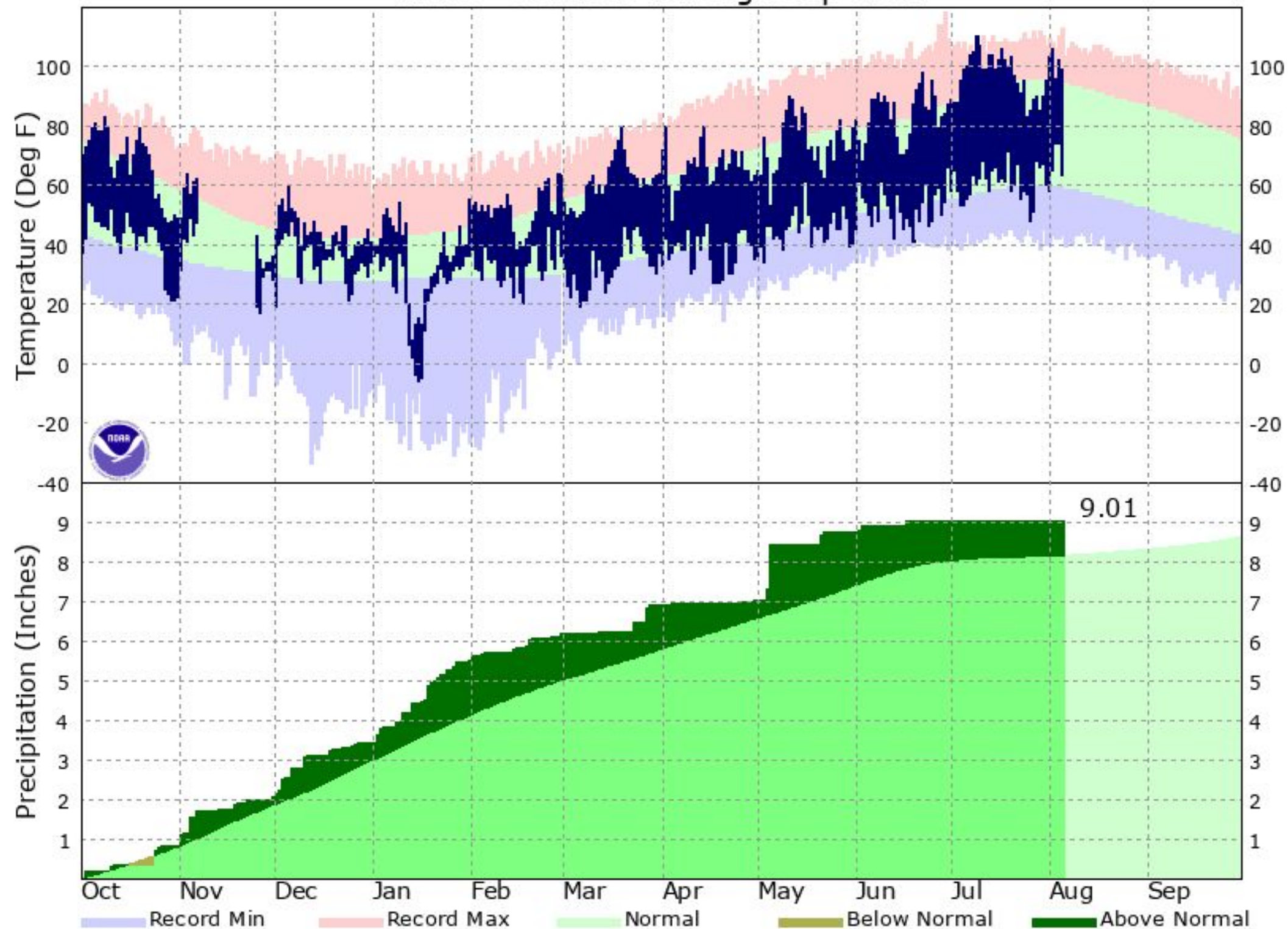
The latest graphs are located here:
<https://www.weather.gov/pdt/CliPlot>



Water Year Climate Graphs - Hermiston ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

KHRI - Oct 2023 Through Sep 2024



So far this water year, Hermiston has recorded above-normal precipitation.

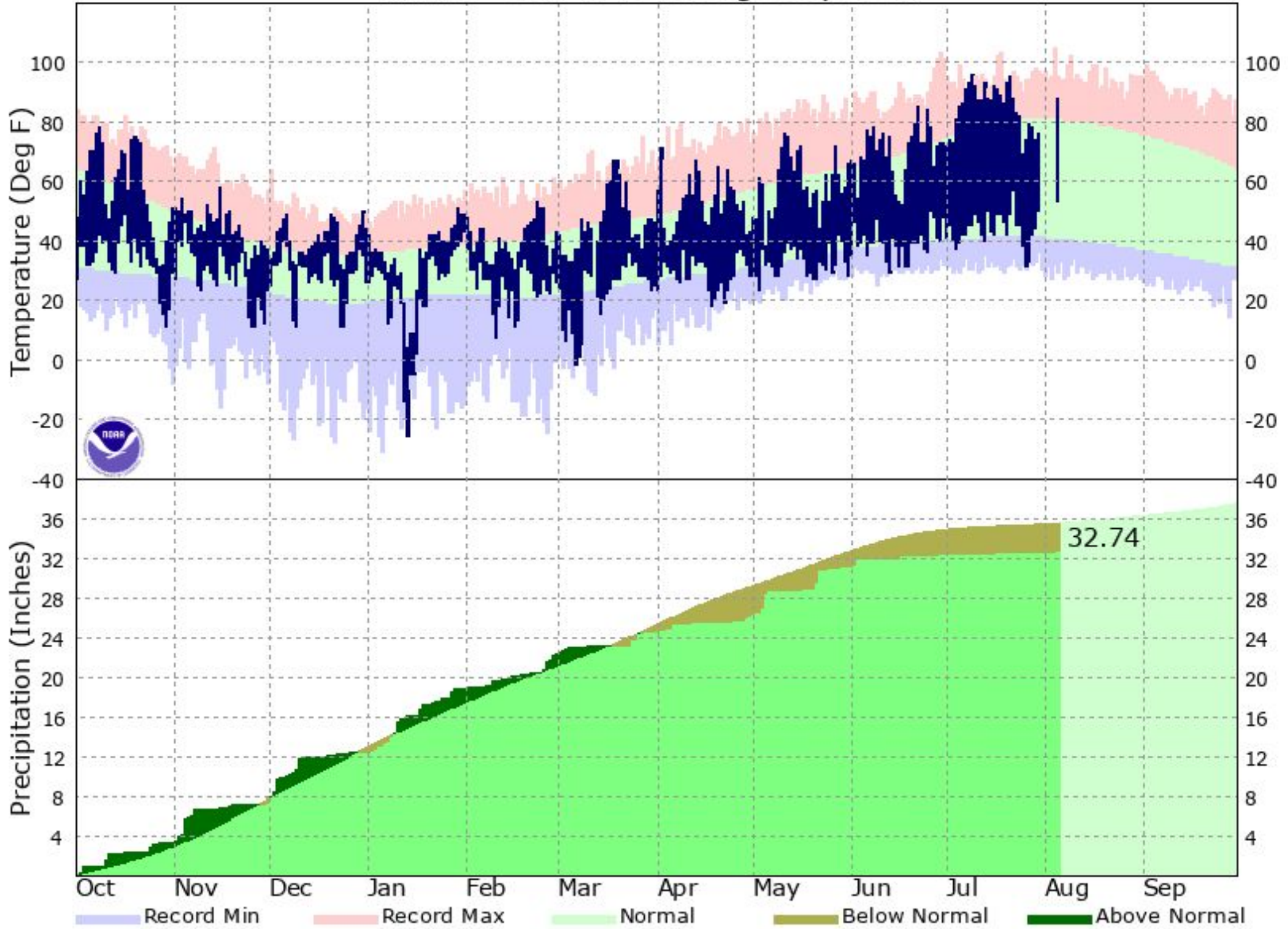
The latest graphs are located here:

<https://www.weather.gov/pdt/CliPlot>



Water Year Climate Graphs - Meacham ASOS

KMEH - Oct 2023 Through Sep 2024



So far this water year, Meacham has received slightly below-normal precipitation.

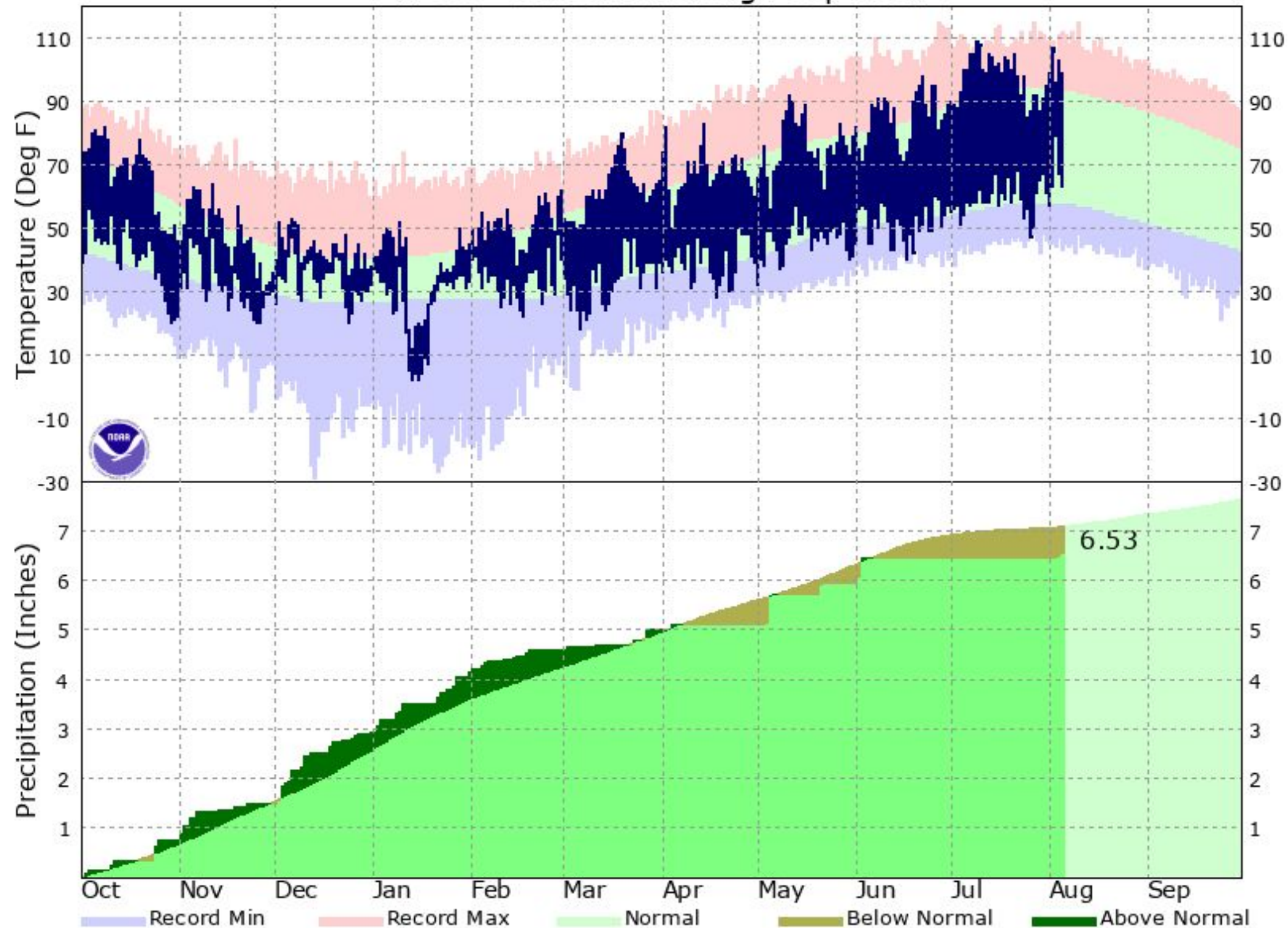
The latest graphs are located here:
<https://www.weather.gov/pdt/CliPlot>



Water Year Climate Graphs - Pasco ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

KPSC - Oct 2023 Through Sep 2024



So far this water year, Pasco has observed slightly below-normal precipitation.

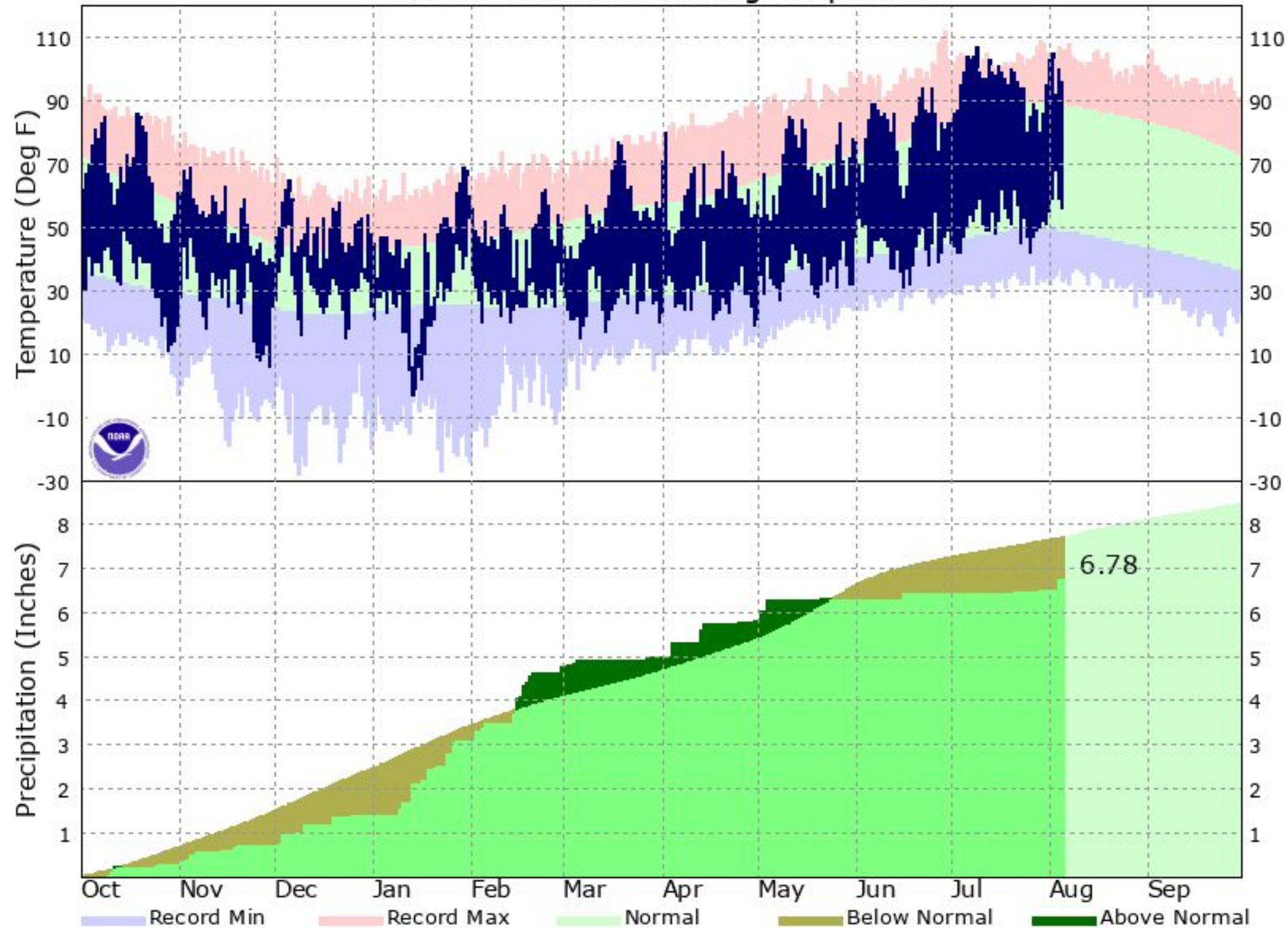
The latest graphs are located here:
<https://www.weather.gov/pdt/CliPlot>



Water Year Climate Graphs - Redmond ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

KRDM - Oct 2023 Through Sep 2024



So far this water year, Redmond has recorded below-normal precipitation.

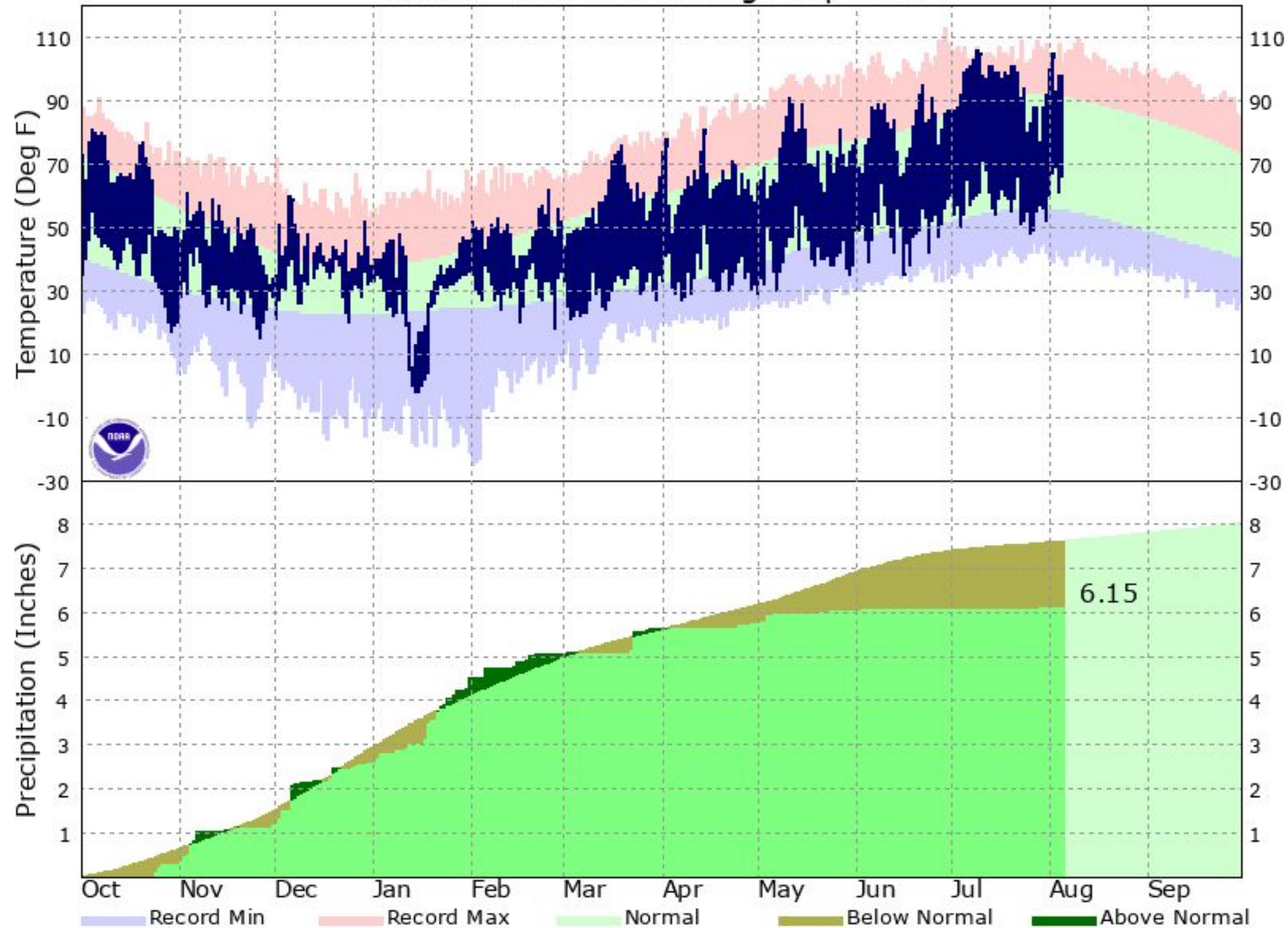
The latest graphs are located here:
<https://www.weather.gov/pdt/CliPlot>



Water Year Climate Graphs - Yakima ASOS

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

KYKM - Oct 2023 Through Sep 2024

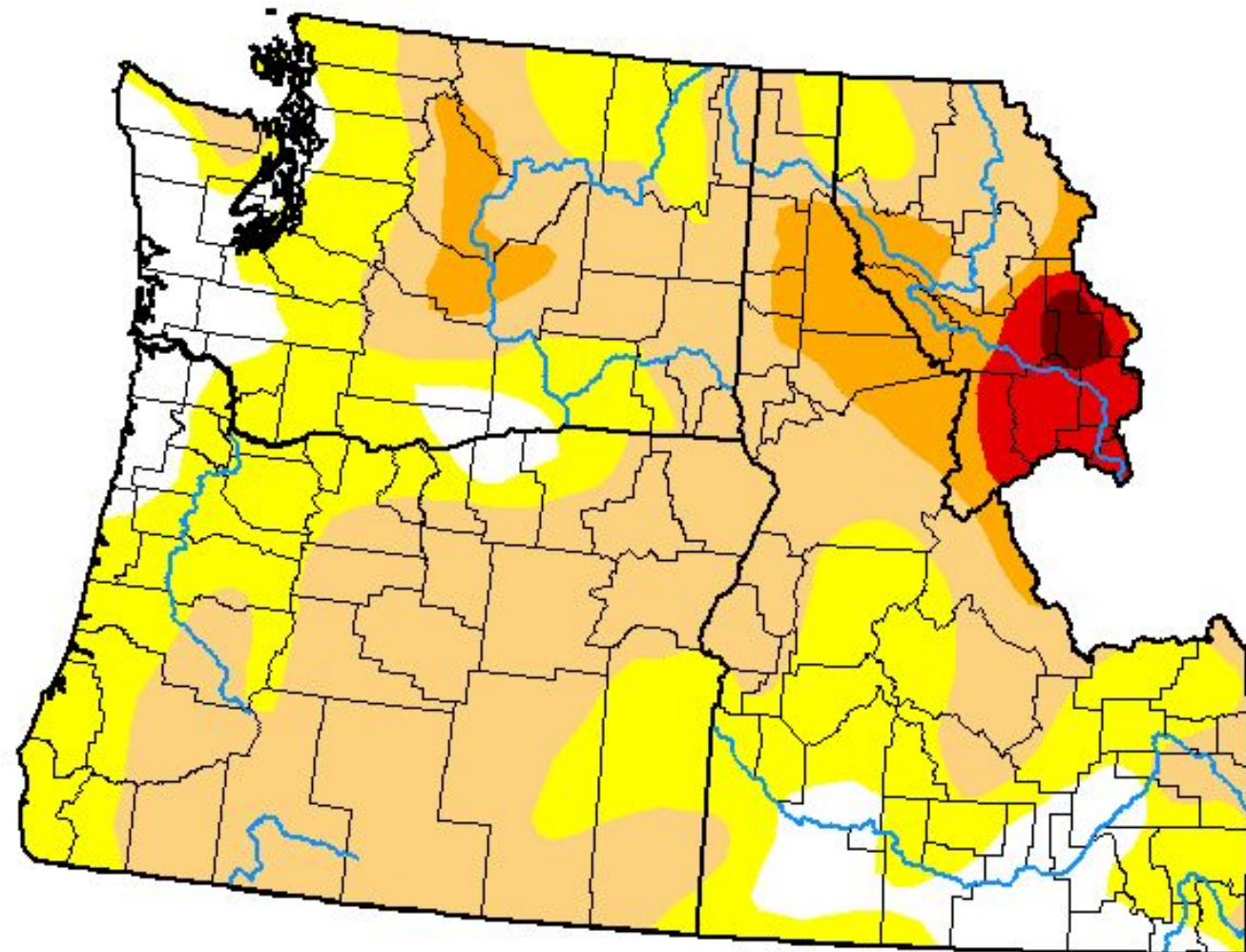


So far this water year, Yakima has recorded below-normal precipitation.

The latest graphs are located here:

<https://www.weather.gov/pdt/CliPlot>

U.S. Drought Monitor Pacific Northwest DEWS



August 6, 2024
(Released Thursday, Aug. 8, 2024)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	10.64	89.36	55.02	10.03	2.88	0.49
Last Week 07-30-2024	11.98	88.02	46.97	10.03	2.87	0.49
3 Months Ago 05-07-2024	51.98	48.02	20.07	7.41	0.57	0.00
Start of Calendar Year 01-02-2024	44.06	55.94	26.37	4.48	0.00	0.00
Start of Water Year 09-26-2023	34.73	65.27	50.11	28.69	7.48	0.00
One Year Ago 08-08-2023	30.18	69.82	45.97	18.49	0.00	0.00

Intensity:



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:

David Simeral
Western Regional Climate Center



droughtmonitor.unl.edu

D4 (Exceptional Drought): None.

D3 (Extreme Drought): None.

D2 (Severe Drought): Portions of Kittitas and Yakima counties.

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

D0 (Abnormally Dry): Portions of all counties are at least D0.

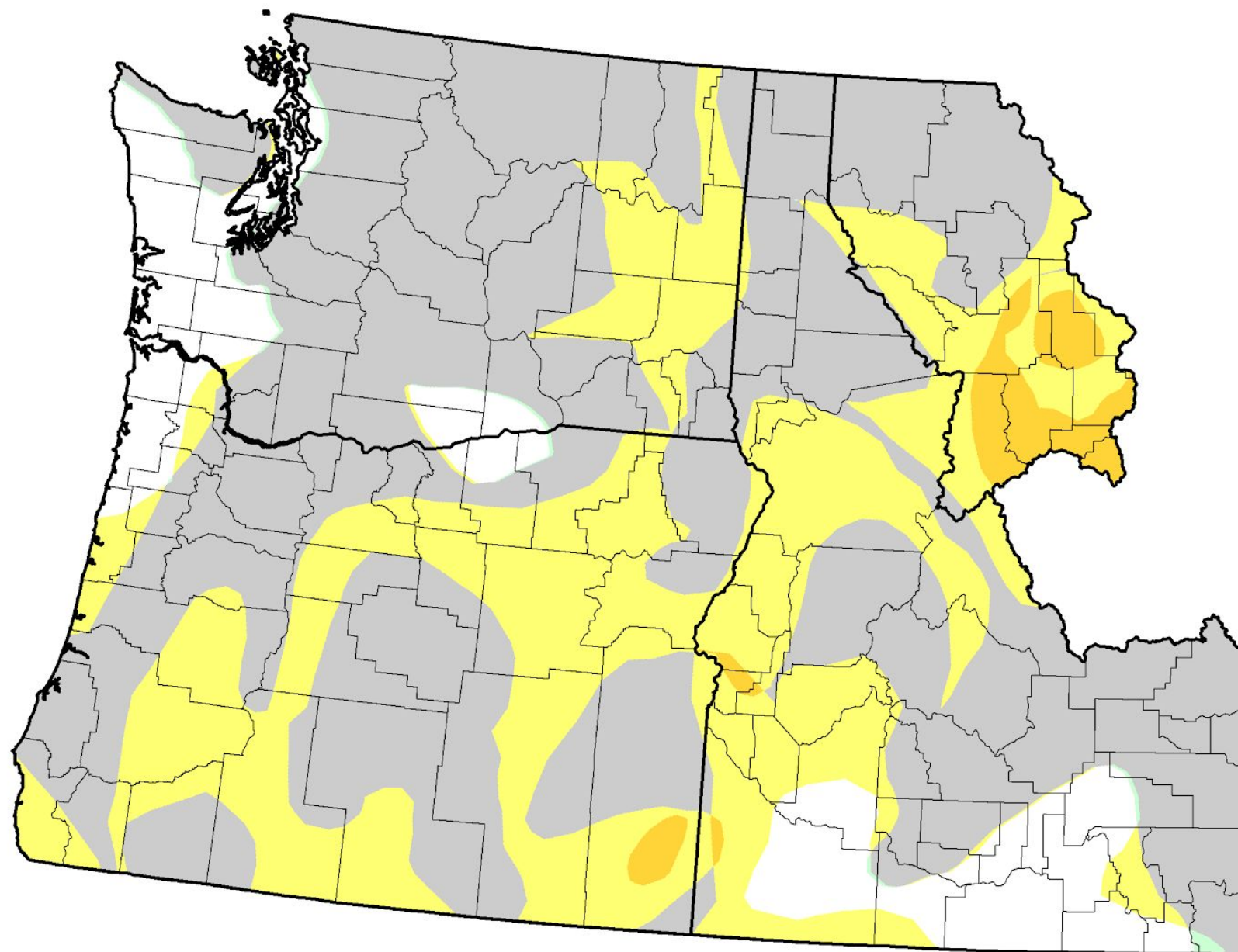
For the latest conditions, please see droughtmonitor.unl.edu



Drought Status: 4-Week Change

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

U.S. Drought Monitor Class Change - Pacific Northwest DEWS
4 Week



August 6, 2024
compared to
July 9, 2024

droughtmonitor.unl.edu



- 5 Class Degradation
- 4 Class Degradation
- 3 Class Degradation
- 2 Class Degradation
- 1 Class Degradation
- No Change
- 1 Class Improvement
- 2 Class Improvement
- 3 Class Improvement
- 4 Class Improvement
- 5 Class Improvement

Improved: None.

Degraded: Portions of Columbia, Wallowa, Union, Umatilla, Morrow, Gilliam, Sherman, Wasco, Wheeler, Jefferson, Grant, and Deschutes counties.

No change: Portions of all counties.



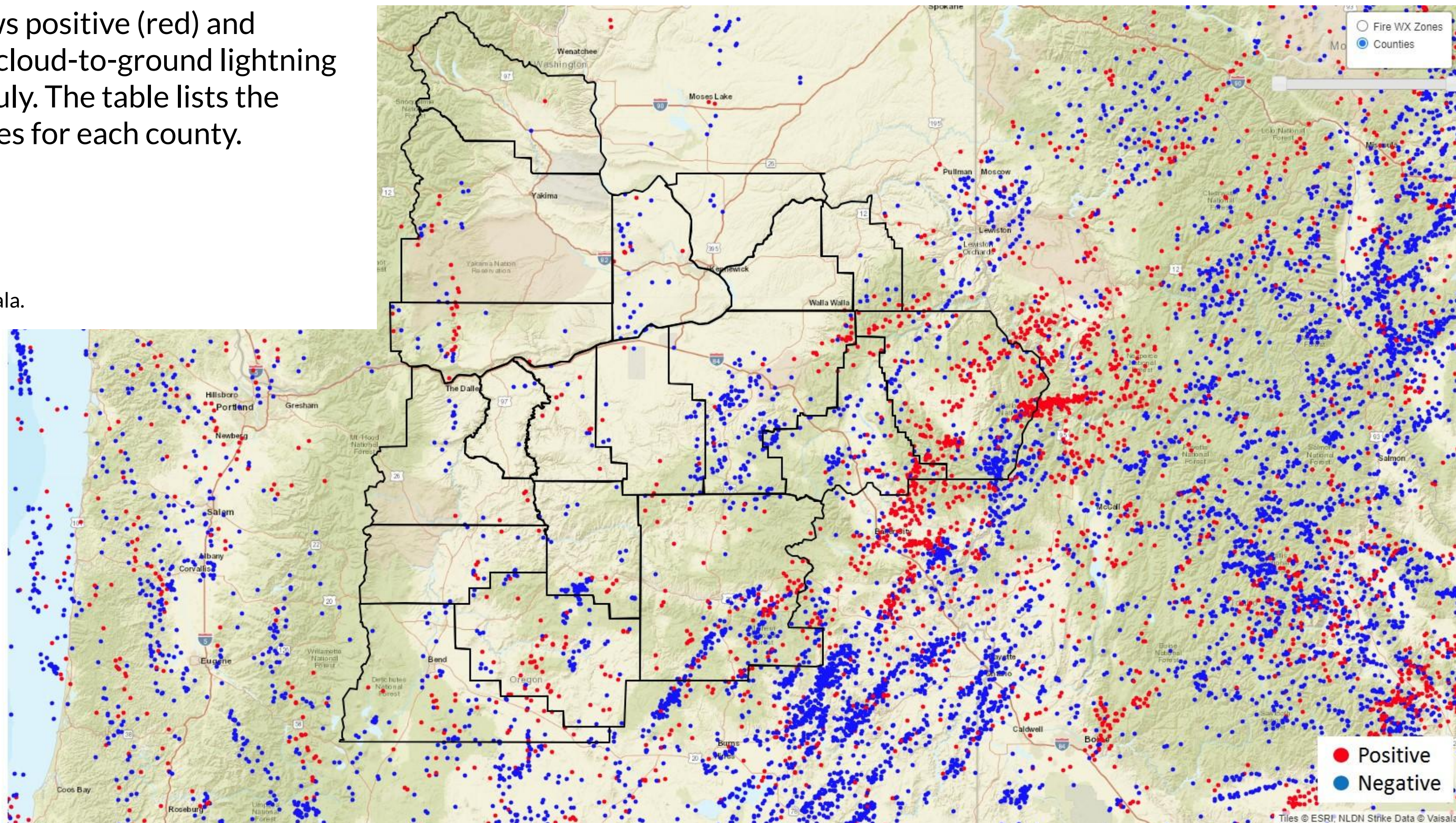
Lightning - July

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

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

Data provided by Vaisala.

County	Strikes
Wallowa OR	377
Deschutes OR	87
Crook OR	108
Jefferson OR	20
Wasco OR	19
Morrow OR	33
Sherman OR	5
Klickitat WA	30
Yakima WA	26
Umatilla OR	149
Grant OR	249
Gilliam OR	14
Union OR	138
Benton WA	30
Columbia WA	12
Franklin WA	4
Wheeler OR	55
Kittitas WA	2
Walla Walla WA	1





Summary

Weather Forecast Office
Pendleton, OR
Wednesday, August 14

- Average temperatures during July were much above normal (top 10% of all years) for the majority of the forecast area.
- Below-normal precipitation was observed across the forecast area.
- Drought conditions worsened across portions of eastern Oregon and eastern Washington, most notably in the Blue Mountains.
- A combination of human- and lightning-caused wildfires led to periods of smoke and haze.



nws.pendleton@noaa.gov



(541) 276-7832



weather.gov/pendleton

