

## Narrative Summary – August 2017

August 2017 was warmer than normal, averaging 79.4°F, 3.6° above normal (75.8°F). The hottest August (1967) averaged 81.5°F, while the coolest (1964) averaged 69.8°F. There were 24 days in August with maximum temperatures  $\geq 90^\circ\text{F}$  compared to an August normal of 18 days. The record is 27 days (1967 and 1986). There have been 70 days this year with maximum temperatures  $\geq 90^\circ\text{F}$  compared to a normal (through August) of 50 days. This is the second most number of days through August with maximum temperatures  $\geq 90^\circ\text{F}$ . The record is 72 days (1958). There were 10 days in August with maximum temperatures  $\geq 100^\circ\text{F}$  compared to an August normal of 5 days. The record is 15 days (1967). There have been 22 days this year with maximum temperatures  $\geq 100^\circ\text{F}$  compared to a normal (through August) of 13 days. The record is 28 days (2015). The following temperature record was established during August 2017:

<u>Date</u>	<u>Category</u>	<u>New Record</u>	<u>Old Record</u>	<u>Year</u>
29	High Maximum	103	102	1967

Precipitation for August 2017 totaled 0.06 inches, 33% of normal (0.18 inch). The wettest August (1977) received 1.36 inches, while the driest (1955 and 1988) received no precipitation. Total precipitation for 2017 (through August) is 5.64 inches, 135% of normal (4.19 inches).

The average wind speed for August 2017 was 7.3 miles per hour (mph), which was 0.7 mph below normal (8.0 mph). The windiest August (1996) averaged 9.5 mph, while the August with the lightest winds (1956) averaged 6.0 mph. The peak gust for August 2017 was from the northwest at 43 mph on August 18. The record wind gust for August was 66 mph in 1961.

The summer season of 2017 (June, July and August) was warmer than normal, averaging 77.0°F, 2.8° above normal (74.2°F). This makes 2017 tied for the sixth warmest summer on record. The coolest summer (1980) averaged 70.2°F. The warmest summer (2015) averaged 79.4°F. The summer's highest maximum temperature was 107°F on July 7. The highest maximum temperature ever recorded at the Hanford Meteorology Station was 113°F (recorded on August 4, 1961, July 13, 2002;, and July 23, 2006). Summer season precipitation totaled 0.29 inches, 40% of normal (0.92 inch). The wettest summer (1950) received 2.99 inches, while the driest (1973) received only 0.03 inch.

August 2017 could best be described as hot and smoky. Numerous wild fires in the Pacific Northwest caused several smoky days, with ten of those days having visibilities reduced to 6 miles or less, which is a record for any month. The previous such record was 8 days in September of 2012. The lowest visibility was 3/4 of a mile on August 4. The summer of 2017 had a notable hot streak from July 25 to August 12. During this 19 day period the maximum temperature ranged from 98°F to 105°F. From July 30 to Aug 11 we had 11 out of 13 days  $\geq 100^\circ\text{F}$ . If it wasn't for the smoke we could have easily had 14 straight days  $\geq 100^\circ\text{F}$  during this heat wave.

August 2017 will also be remembered for the Great American Solar Eclipse on the morning of August 21. The solar eclipse at HMS peaked at 96% totality at 0923 PST. It was noted that during the eclipse, the temperature at HMS dropped around 5°F.

The monthly climatological data summaries, as well as other information, are available on the Internet. Address: <http://www.hanford.gov/page.cfm/hms>

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**Note:** The data in this summary pertain specifically to the Hanford Meteorology Station (HMS), which is located approximately 25 miles northwest of Richland, WA. No attempt should be made to infer meteorological conditions at other locations from these data.