NWS Wilmington, Ohio
February 2018
Regional Climate Summary

Regional Climate Summary

While the February 2018 weather pattern did feature some record warmth, the main story/impact felt in the region was the repeated rounds of rain which led to some historic and widespread river flooding throughout the Ohio Valley. The impact felt throughout the area was significant and was of the magnitude that had not been experienced in parts of the area in over two decades.

Temperatures

Although the first day of the month was a tad warmer than normal, the weather pattern in the region provided seasonably cold temperatures through most of the first week and a half in the month with several days of high temperatures below the freezing mark.

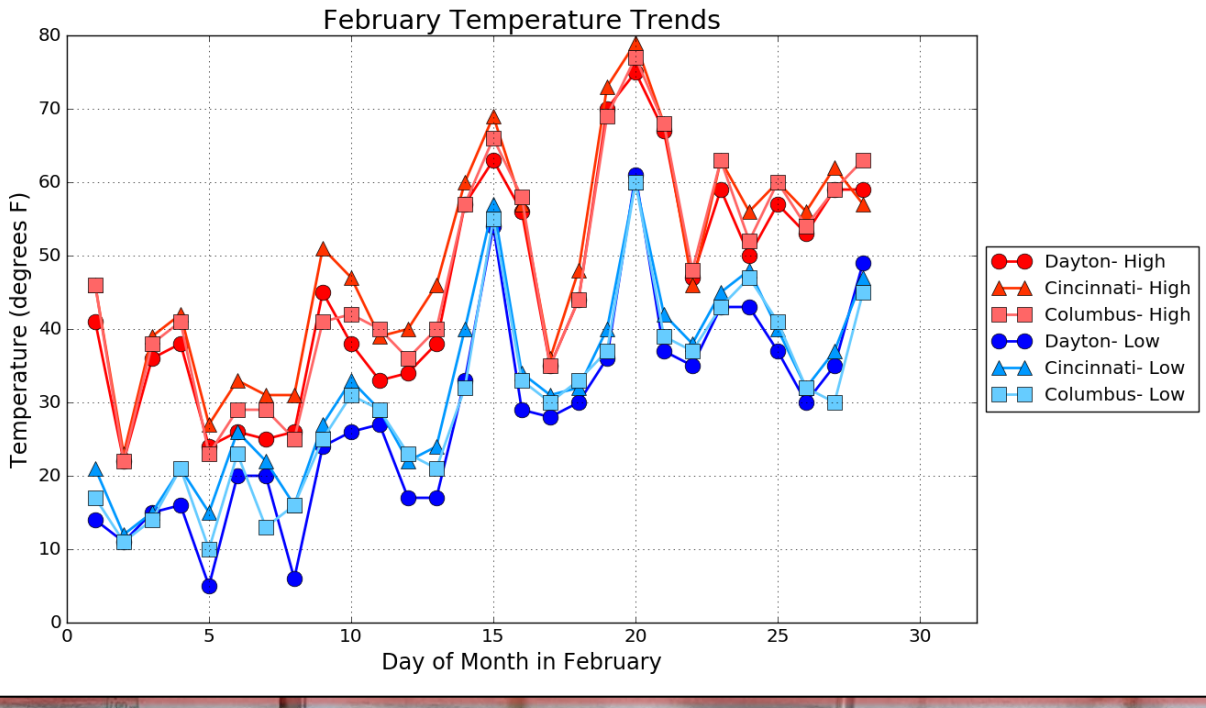
Towards the middle of the month, a drastic change in the weather pattern developed, ushering in an extended period of unusually warm and wet weather for the second half of the month. In fact, high temperatures reached into the 50s and 60s numerous days during this stretch, with even a few days with temperatures in the 70s. In fact, the high of 79°F at Cincinnati on the 20th is the warmest temperature ever recorded at the site in any winter month (Dec/Jan/Feb). Daily record highs were also set at Columbus (77°F) and Dayton (75°F) on the 20th.

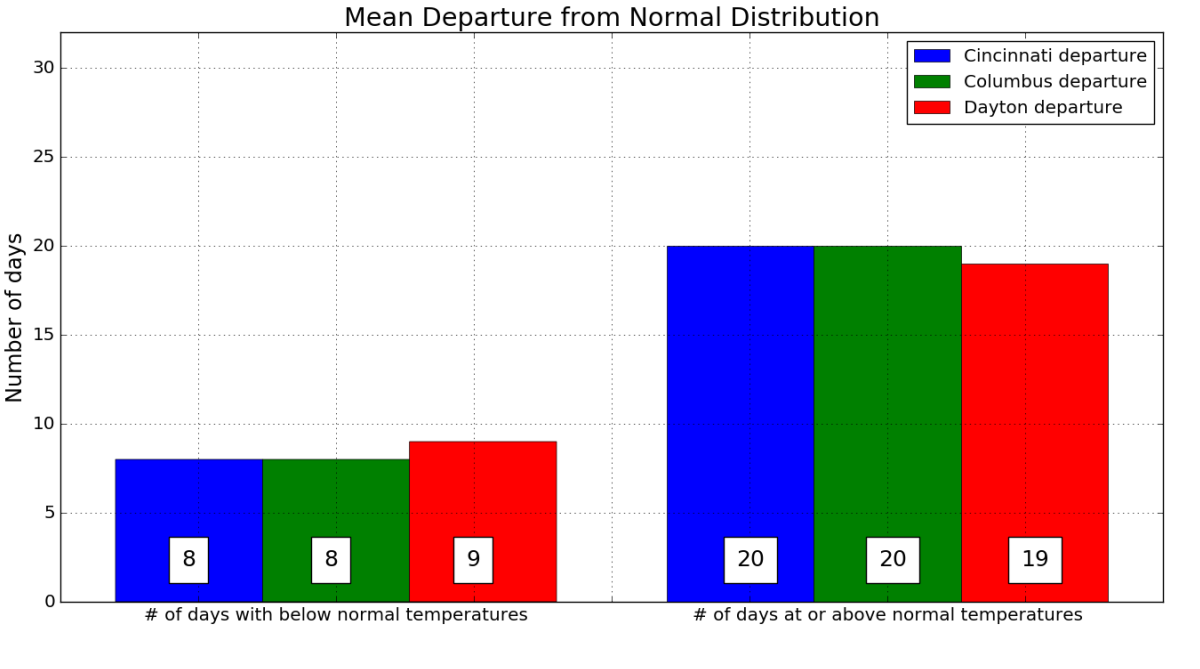
The magnitude and length of the unseasonably warm weather for the month of February was notable. In fact, the 14th through the 28th was one of the warmest two-week stretches on record at Cincinnati, Columbus, and Dayton in the month of February. In fact, the average temperature of 38.8°F at Columbus in the month of February made this month the 8th warmest February on record for the site.

The final "winter" month of the 2017-2018 season certainly didn't end of a very wintry note in the Ohio Valley.

Site	Avg Temp (°F)	Avg High Temp (°F)	Avg Low Temp (°F)	Departure From Normal (°F)	Maximum Temperature (°F)	Minimum Temperature (°F)
Cincinnati (CVG)	40.9°F	49.5°F	32.4°F	+6.4°F	79°F (02/20)	12°F (02/02)
Columbus (CMH)	38.8°F	47.3°F	30.3°F	+6.0°F	77°F (02/20)	10°F (02/05)
Dayton (DAY)	37.1°F	45.6°F	28.5°F	+6.1°F	75°F (02/20)	5°F (02/05)

Temperatures (Continued)





Precipitation

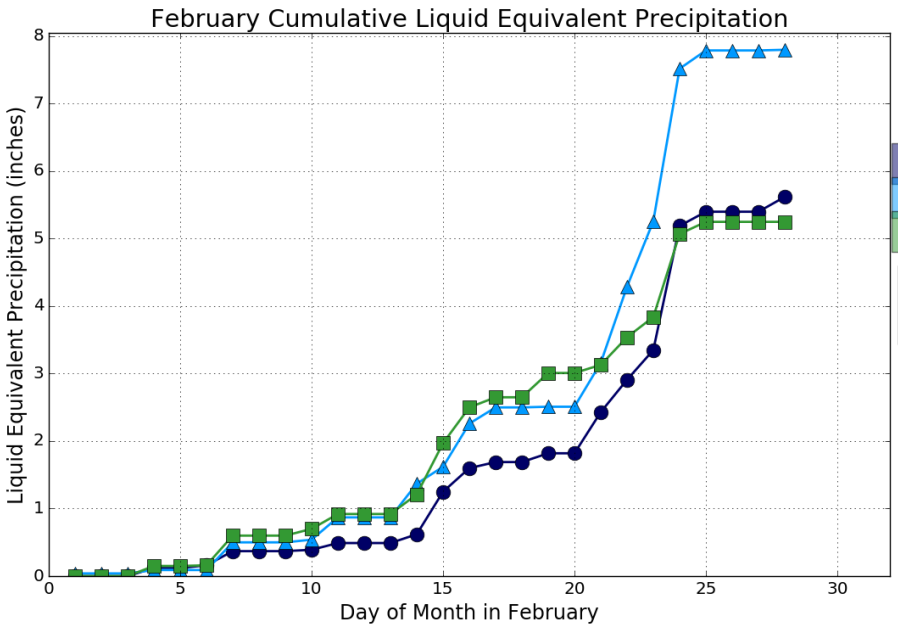
The month of February 2018 started off as many other Februarys do – with some wintry precipitation. The first of these events came during the early morning hours on the 7th as freezing rain, sleet, and snow overspread the area, with 2-4" measured from near the Dayton metro area to the Columbus metro area. Further south, freezing rain and sleet cut down on snow totals significantly. Another lighter event moved through on the 12th, impacting portions of south-central Ohio and northern Kentucky.

The most impactful part of the weather pattern that evolved through the month was the repeated rounds of rain which led to widespread flooding and river flooding throughout most of the entire region. A very wet pattern evolved through the 2nd half of the month, leading to nearly 8" at Cincinnati for the month (the 3rd wettest February on record for the site). Many locations in the local area received between 4-8" of rain for the month, which led to widespread flooding and river flooding. Many river points went into flood and some went to levels that have not been recorded in the past two decades. The Ohio River at Cincinnati crested at 60.5,' the highest crest at that point since 1997. Other smaller tributaries also experienced flooding.

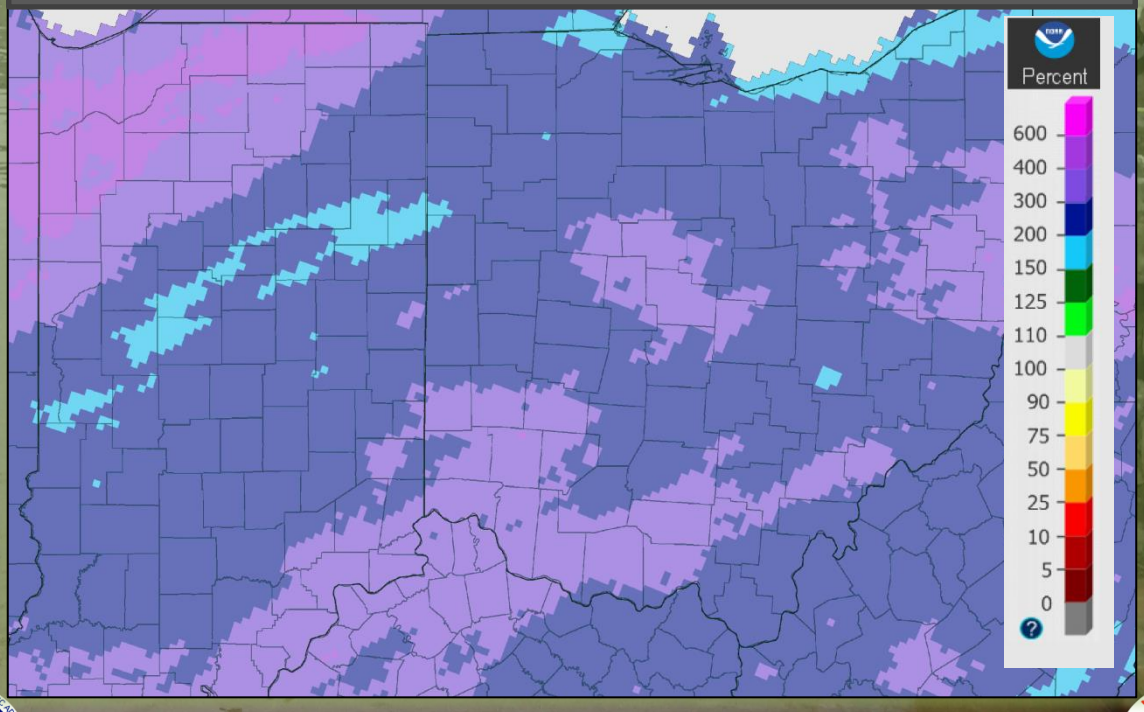
The most impactful event moved through the area on the 24th through the 25th, in which many locations in the local area received 2-3" on top of soils that were already very saturated.

Site	Total Precipitation (in.)	Departure From Normal (in.)	Max Daily Precipitation (in./date)		Total Snowfall (in.)	Max Daily Snowfall (in./date)	
Cincinnati (CVG)	7.80"	+4.99"	2.26"	02/24	1.6"	1.1"	02/17
Columbus (CMH)	5.25"	+3.00"	1.23"	02/24	6.0"	4.4"	02/07
Dayton (DAY)	5.62"	+3.38"	1.84"	02/24	2.6"	1.5"	02/07

Precipitation (Continued)



February Precipitation Departure From Normal Percentage



Precipitation (Continued)

The monthly February precipitation values also reached the top 10 for all three primary first-order climate sites.

Cincinnati

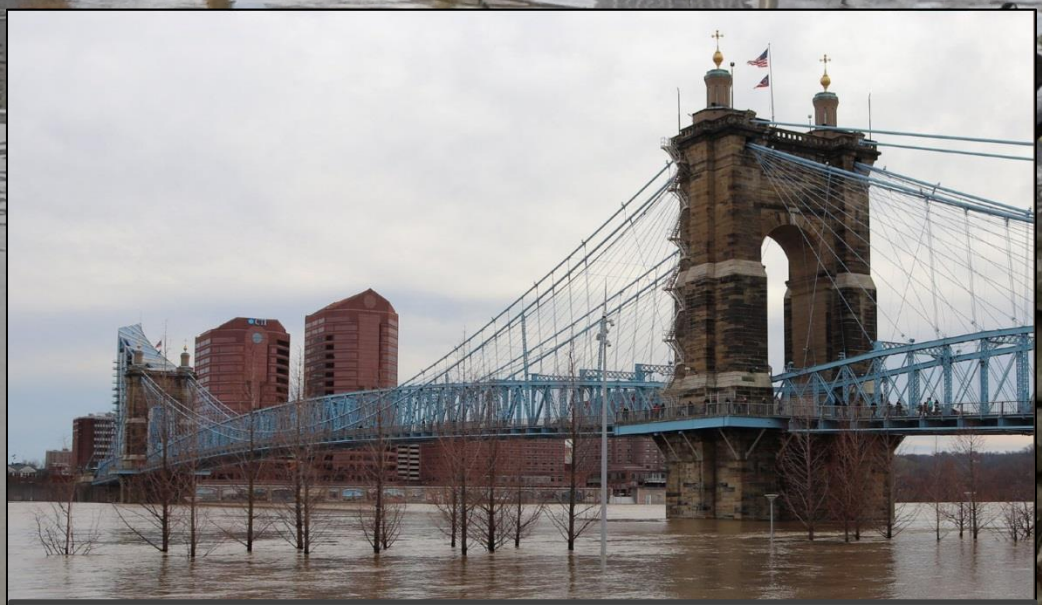
Top 10 Wettest	
Rank	Value/Yr
1	8.87| 1884
2	8.22| 1883
3	7.80| 2018
4	7.29| 1887
5	7.04| 1882
6	6.72| 1955
7	5.92| 1956
8	5.91| 1874
9	5.89| 1971
10	5.82| 1990

Dayton

Top 10 Wettest	
Rank	Value/Yr
1	6.77| 1909
2	6.44| 1908
3	5.77| 1990
4	5.62| 2018
5	4.79| 1903
6	4.66| 1910
7	4.57| 1951
8	4.57| 1950
9	4.55| 2011
10	4.38| 1939

Columbus

Top 10 Wettest	
Rank	Value/Yr
1	7.65| 1893
2	6.48| 1887
3	6.18| 1883
4	6.12| 1890
5	5.94| 1882
6	5.42| 1891
7	5.25| 2018
8	5.15| 1990
9	5.05| 1910
10	4.97| 1909



Ohio River Cincinnati @ 60' (February 25th, 2018)
Courtesy of Andrew Hatzos

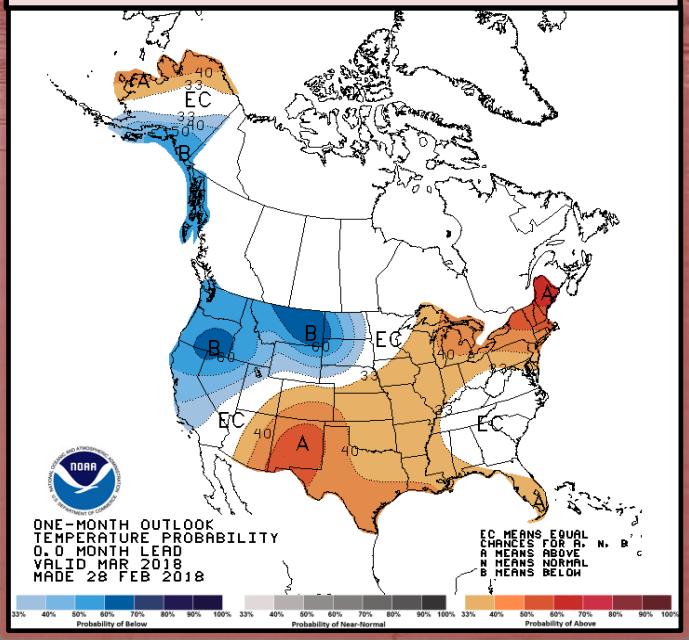
March Outlook

The latest outlook from the Climate Prediction Center (CPC) indicates favorable probabilities for above normal temperatures and precipitation throughout most of the Ohio Valley during the month of March.

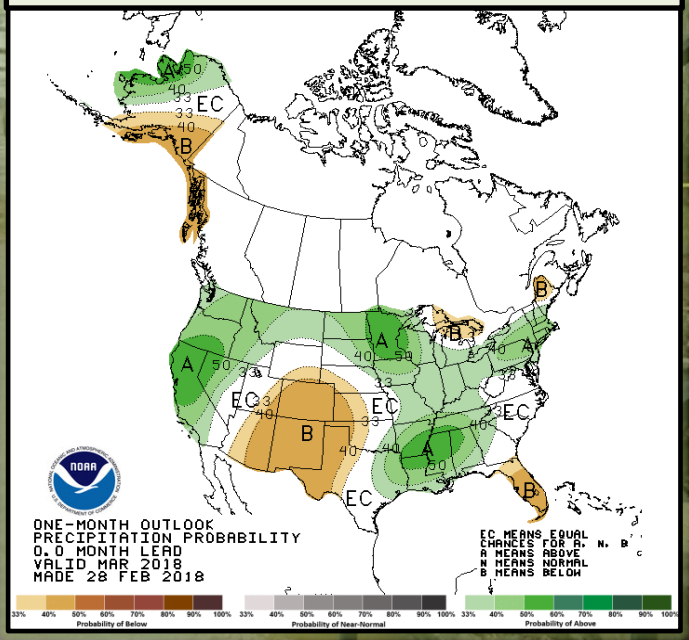
Site	Normal Avg Temp (°F)	Normal High (°F)	Normal Low (°F)
Cincinnati (CVG)	43.6°F	53.2°F	34.0°F
Columbus (CMH)	41.9°F	51.1°F	32.7°F
Dayton (DAY)	40.4°F	49.6°F	31.2°F

Site	Normal Precipitation (in.)	Normal Snowfall (in.)
Cincinnati (CVG)	**3.96”**	**3.0”**
Columbus (CMH)	**3.02”**	**4.2”**
Dayton (DAY)	**3.34”**	**3.4”**

Upcoming Temperature Outlook



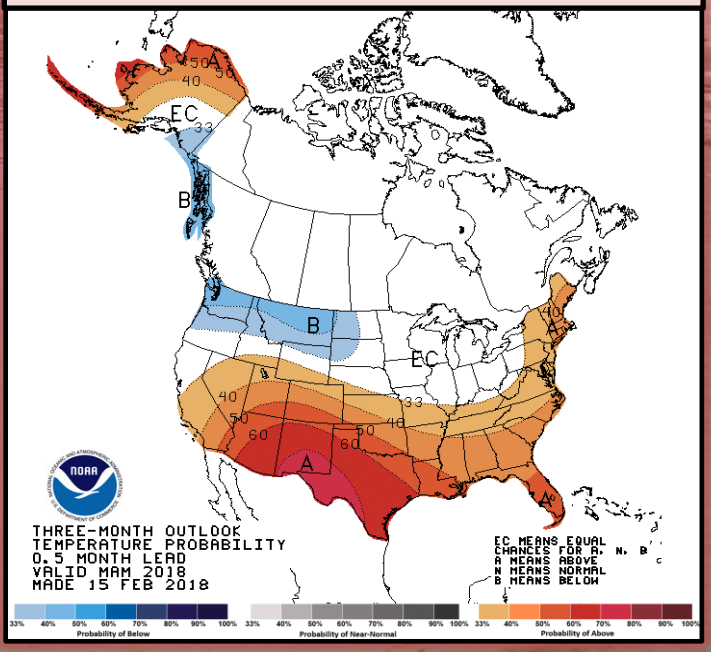
Upcoming Precipitation Outlook



March-May Outlook

A La Niña Advisory remains in effect, however a transition to ENSO-neutral is most likely during the Northern Hemisphere spring. There is an increased likelihood of above normal precipitation over the entire region. There is also an equal chance of below and above normal temperatures across the area.

Three-Month (MAM) Temp. Outlook



Three-Month (MAM) Precip. Outlook