

# Central Indiana

## March 2021

### Climate Summary

*20<sup>th</sup> Warmest on record at Indianapolis*

*64<sup>th</sup> Wettest on record at Indianapolis*

*Tied for 6<sup>th</sup> Least Snowiest on record at Indianapolis*

## Temperatures

The extended period of chilly temperatures that dominated central Indiana for much of February transitioned rather quickly as the calendar turned to March. Near normal high temperatures in the mid and upper 40s were common throughout the first week of the month. An early taste of spring came on the 3<sup>rd</sup> with many locations warming into the lower 60s for the first time this year. An unprecedented stretch of dry, tranquil weather lasted through the first 10 days of March with southerly winds pumped temperatures to their warmest levels since early November for multiple days beginning on the 8<sup>th</sup>. Highs soared into the upper 60s and lower 70s across the area with low temperatures much closer to the average highs.

Even after rain on the 11<sup>th</sup>, temperatures remained into the 60s before slipping backwards to near normal levels through the middle part of March. A briefly wetter stretch of days accompanied the cooler temperatures from the 15<sup>th</sup> through the 18<sup>th</sup> with daytime temperatures varying from the mid 40s to near 60. Beginning on the 19<sup>th</sup>, the remainder of the month would see extended periods of warmer than normal temperatures with briefly cooler surges of air in the wake of cold frontal passages. High temperatures would return to the lower and mid 70s on a few additional days, the 24<sup>th</sup>, the 27<sup>th</sup> and 30<sup>th</sup>. The passage of cold fronts late on the 27<sup>th</sup> and again on the 30<sup>th</sup> would bring 20°+ temperature drops on the following days, along with temperatures near to slightly below freezing at night.

March would end up roughly 5 to 8 degrees above normal at all of the main climate sites across central Indiana with no substantial stretch of colder than normal temperatures.

Site	March 2021 Avg Temp	March 2021 Difference from Normal	Highest Temperature	Lowest Temperature
Indianapolis	46.9	<b>+4.7</b>	74 on 27 and 30	21 on 2
Lafayette	48.6	<b>+7.8</b>	77 on 27	23 on 2 and 7
Muncie	47.2	<b>+7.6</b>	74 on 24 and 27	22 on 5 and 7
Terre Haute	47.5	<b>+4.7</b>	75 on 27	21 on 2
Bloomington	47.6	<b>+4.7</b>	77 on 27	23 on 2 and 6
Shelbyville	48.2	<b>+6.4</b>	75 on 24 and 27	24 on 5
Indy – Eagle Crk.	46.9	<b>+4.5</b>	74 on 27 and 30	21 on 2

At Indianapolis, there were 20 days with above normal average temperatures, 10 days with below normal average temperatures and 1 day with average normal temperatures.

March 2021 was the 20<sup>th</sup> warmest March in the Indianapolis area since weather records began in 1871.

## Precipitation

March was generally near normal for the IND HSA with pockets of above normal precipitation across the Wabash and White River basins with lower than normal across the East Fork White River basin. Rainfall amounted to generally 3 to 5 inches of rain with amounts closer to 2 inches across eastern and southeastern portions of central Indiana. Flooding occurred several times over the month with rivers generally near normal for the month. With these conditions across most of the HSA, by the end of the month, abnormally dry and moderate drought conditions were confined to the northern third of the state and out of central Indiana.

Dry weather was in place for much of the early portions of the month with the first major rain event occurring on the 11<sup>th</sup>. This dry stretch allowed for the flooding that began at the very end of February and the first of March to come to an end. The generally 1 to 2 inches of rain that fell on the 11<sup>th</sup> caused the river falls to come to an end, but was not enough for renewed flooding even with the high levels that were ongoing across the southern Wabash and White rivers where flooding had just ended.

Another wet period occurred from the 15<sup>th</sup> to the 18<sup>th</sup> with several days of precipitation across the area. With cold temperatures in place at the surface, precipitation on the 15<sup>th</sup> fell largely as freezing rain for much of the area, with a little sleet and snow mixed in. This light icing (generally around 0.1 to 0.2 of accretion) combined with wind gusts of 35 to around 50 mph produced several power outages across the area. Later that night, temperatures warmed enough for melting, and subsequent precipitation arrived as rain

in the morning. After a lull, rain picked back up late on the 17<sup>th</sup> and through the 18<sup>th</sup> as a low level jet brought ample moisture up into the area. This multi-day event hit the western and northern portions of the state harder than the east and led to a renewed period of flooding for much of the Wabash basin along with the lower White basin and many smaller streams. Rain was heaviest on the 18<sup>th</sup> with smaller streams climbing well into flood stage and resulted in numerous areal flood warnings and advisories across central Indiana.

Strong storms moved across central Indiana on the 25<sup>th</sup> with large hail and isolated strong winds noted with the storms. The convective nature of the rainfall led to widely varying rain totals, but for most of the area amounts were less than a half inch. One big exception was across northwest parts of the area, where 1.5 to 2 inches was seen in and around the Lafayette area. In the wake of these storms, strong low pressure moved through the state late the night of the 25<sup>th</sup> into early on the 26<sup>th</sup> bringing strong to severe non-thunderstorm wind gusts, with gusts of 45 to 60 mph common across most of central Indiana. This was the third wind headline event for the month of March, with a wind advisory or high wind warning in place across at least parts of central Indiana on March 10<sup>th</sup>, 18<sup>th</sup>, and the 25<sup>th</sup>.

Another round of storms passed through on the evening of the 27<sup>th</sup> with heavy rain continuing through the overnight hours. This more widespread rain caused more significant rises on area rivers and streams and resulted in a flood advisory in portions of Montgomery and Boone counties where an isolated area of 1.5 to over 2 inches of rain fell.

At the end of the month, flooding was ongoing across the middle sections of the Wabash River as a result of a combination of rains from the 25<sup>th</sup> and late 27<sup>th</sup>-early 28<sup>th</sup>. Areas further downstream had a larger capacity to hold the water from recent rains without leading to flooding.

Site	March 2021 Precipitation	March 2021 Difference from Normal	Wettest Day	Longest Dry Stretch
Indianapolis	3.87	<b>+0.31</b>	1.23 on 18	10 days 1-10
Lafayette	4.01	<b>+1.34</b>	1.55 on 18	10 days 1-10
Muncie	2.89	<b>-0.06</b>	1.17 on 18	10 days 1-10
Terre Haute	4.64	<b>+1.27</b>	1.79 on 18	10 days 1-10
Bloomington	4.09	<b>+0.21</b>	1.72 on 11	10 days 1-10
Shelbyville	3.69	<b>+0.26</b>	1.11 on 18	10 days 1-10
Indy–Eagle Crk.	4.43	<b>+1.13</b>	1.73 on 18	10 days 1-10

March 2021 was the 64<sup>th</sup> wettest in the Indianapolis area since weather records began in 1871.

## Severe Weather

Most of March was quiet but a few small severe weather events occurred during the final week of the month. An intensifying low pressure system tracked across the region on the evening of the 25<sup>th</sup>, with hail producing thunderstorms lifting into southern portions of central Indiana from the southwest. Multiple occurrences of quarter size hail were reported from Greene County to near Paragon in Morgan County.

Just two evenings later, strong thunderstorms tracked into the Wabash Valley from the west ahead of a cold front. A severe thunderstorm developed east of Crawfordsville and would track E/NE into Hamilton and Madison Counties, producing quarter size hail in multiple locations, and knocked trees and power lines down near North Salem in Hendricks County. The storm also knocked a large tree over in Carmel that cause a fatality.

For information on severe weather in other areas during March, visit the Storm Prediction Center “Severe Weather Event Summaries” website at <http://www.spc.noaa.gov/climo/online/>.

## Miscellaneous

The maximum wind gust at the Indianapolis International Airport was 57 mph from the southwest early on the morning of the 26<sup>th</sup> in the wake of a strong low pressure system. Fog or haze was reported at Indianapolis on 11 days during the month, with dense fog occurring on 2 days. Thunder occurred on 5 days in March at Indianapolis with ice pellets being reported on the 15<sup>th</sup> and 18<sup>th</sup>, and freezing drizzle occurring on the 15<sup>th</sup>.

## April 2021 Outlook

The official outlook for April 2021 from the Climate Prediction Center indicates a greater chance of above normal temperatures across central Indiana. At Indianapolis, the average temperature for the month is 53.0 degrees. The outlook calls for equal chances for near, above or below normal precipitation. The average precipitation for April at Indianapolis is 3.81”, with 0.2” of snowfall.

***Data prepared by the Indianapolis Forecast Office.***