# **Top 5 Weather Events of 2021:**

The staff of the National Weather Service in Jackson has once again ranked what we deemed were the top 5 weather events of this past year, 2021. Here are the events, ranked from 1 to 5, with 1 being the most significant:

# 1. <u>February 26 – March 1, 2021: Major Flooding across eastern</u> Kentucky:



Old Highway 80 between London and Manchester Courtesy of Chris Meadows

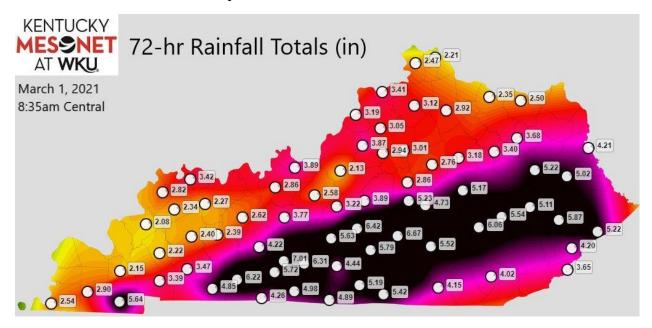
Several rounds of heavy rain moved across eastern Kentucky from late Friday, February 26<sup>th</sup> through early Monday, March 1<sup>st</sup>. The combination of all the heavy rainfall led to significant flooding across a good portion of central and east Kentucky. For some areas, this was the most significant flooding in the last 50 to 60 years, or more.

The first round of heavy rain came through late on Friday. This rainfall targeted areas along the Hal Rogers Parkway, including Laurel, Clay, Perry, and Knott Counties. Flash flooding led to some closed roads for a short time in these areas.

The second round of rainfall came through late Saturday night as a warm front lifted northward across east Kentucky. The heavy rain stalled out over portions of Powell and Menifee Counties, leading to flash flooding in the early morning hours of Sunday.

Finally, the third round of heavy rain came from late Sunday afternoon through Sunday night. Given that much of the area had already received significant amounts of rain earlier, this last round caused widespread flash flooding across much of east Kentucky. This ultimately led to larger creek and river flooding. River levels on the Kentucky River were some of the highest readings ever recorded, namely at Booneville and Ravenna. Clay City, Heidelberg, Jackson,

Paintsville, and Salyersville also saw significant river flooding of which hadn't been seen in 40 to 50 years.



In addition, the periods of heavy rain and flooding led to numerous water rescues and

mud/rock slides. Many areas were cut off or blocked due to the flooding. Power outages were also noted and reached as high as 12,000 during the peak of the flash flooding Sunday night.

For more information on this event: <a href="https://www.weather.gov/jkl/022821\_Flood">https://www.weather.gov/jkl/022821\_Flood</a>

#### 2. February 15<sup>th</sup> – 16<sup>th</sup>, 2021 Significant Ice Storm:

An area of low pressure tracked across east Kentucky from Monday, February 15<sup>th</sup> into Tuesday, February 16<sup>th</sup>. Widespread precipitation spread across east Kentucky during the afternoon hours on the 15<sup>th</sup>, with locally heavy precipitation during the evening hours. With temperatures below freezing across most of east Kentucky,

and warmer air just off the ground, freezing rain was the predominant precipitation type, resulting in significant ice accumulations.

Power outages during the peak of this event reached 150,000 across east Kentucky with numerous trees snapping off from the weight of the ice. Many roads became impassable due to downed trees and electrical lines.



Magoffin County Courtesy of Gary



Whitley County Courtesy of Robbie

For more

information:

https://www.weather.gov/jkl/021521\_Ice

#### 3. August 30, 2021 Flash Flooding in Pike County:

Hurricane Ida made landfall in Louisiana at 11:55 a.m. CDT on August 29<sup>th</sup>. From there it continued to slowly move inland and northward. By late morning on August 30<sup>th</sup>, it had reached southwest Mississippi. A large amount of moisture was pulled from the Gulf northward with this system and made its way to Kentucky. This was exacerbated by a frontal boundary that was stalled north of the Ohio River, keeping Kentucky in the warm and moist sector of the storm system.

Showers and thunderstorms developed across portions of the Coalfields by midmorning. The most persistent and intense storms occurred over Pike County between 9 a.m. and 11 a.m. and had very little forward motion. Rainfall rates under the heaviest activity approached 3 inches per hour at the peak of the event. This led to flash flooding which blocked multiple roadways, and water entering one of the fire stations at Blackberry. High water rescues were performed along Stone Coal Road as the flood waters rose. Fortunately, no fatalities were reported.



Water rescue in progress along Stone Coal Rd. Courtesv of Dillon Gaudett

For more information:

https://www.weather.gov/jkl/2021-08-30-Pike\_County-Flash\_Flooding

#### 4. August 19, 2021, Flash Flooding at Bethany in Wolfe County:

A weak shortwave moving into a very moist atmosphere during the overnight hours was sufficient to trigger showers and thunderstorms throughout the following day across eastern Kentucky. Portions of the region had already been hit by heavy rains in the days leading up to this event, saturating soils and priming those areas which later experienced flooding. Ultimately the heaviest rainfall occurred over southern Wolfe County between 8 a.m. and 10 a.m. and was followed by significant flash flooding. Additional showers passed through the area around midday, likely exacerbating the situation. In particular, Holly Creek in Bethany and Hunting Fork along U.S. Highway 15 experienced some of the worst flooding. A number of houses were inundated. Flooding was also observed in other portions of the county such as along Stillwater Creek between Malaga and the Mountain Parkway.



Flooding at Bethany School Courtesy of Johnny Ray Feltner



Inundated Road along Hunting Fork Courtesy of Michael Parsons

For more information:

https://www.weather.gov/jkl/2021-08-19-Wolfe\_County-Flash\_Flood

## 5. February 7<sup>th</sup>, 2021, Snow Storm:



**Top of Pine Mountain Courtesy of Tammie** 

A weather disturbance aloft interacted with a cold front over southeast Kentucky to bring widespread snow to the area during the early morning hours of February 7<sup>th</sup>. A band of very heavy snowfall developed from Whitley and Bell counties through Harlan and Letcher counties. Within this band of snowfall, amounts ranged from 4 to 9 inches. The snow was very wet and heavy in nature, which led to several

downed branches and trees. This in turn, knocked out power for several thousand customers during the morning hours. Travel was also very difficult as snowfall rates exceeded 2 inches per hour at times, making it nearly impossible to keep the roads cleared off. Travel across the higher ridgetops above 2,000 feet was especially treacherous as temperatures in these areas were much colder, resulting in higher accumulations.

SNOWFALL REPORTS FOR 02/07/2021			
Location	Amount	Reported By	
1 N Rock House	9.8 in.	Public	
Pansy	8.5 in.	Public	
1 NNE Gatun	8.3 in.	Public	
1 NE Loyall	6.5 in.	Public	
Frakes	6.5 in.	Public	
Mayking	6.5 in.	Public	
1 WSW Wallins Creek	6.0 in.	Public	
Strunk	4.5 in.	Public	
Carcassonne	4.0 in.	Public	
Pineville	3.5 in.	Law Enforcement	
1 SSW Ermine	3.5 in.	CO-OP Observer	
2 ESE Slemp	3.0 in.	Public	
1 ESE Skyline	2.7 in.	CO-OP Observer	
Beverly	2.5 in.	Public	
Whitley City	2.5 in.	Trained Spotter	
1 SW Deering	1.1 in.	CoCoRaHS	
Thornton	1.0 in.	Trained Spotter	
Clover Bottom 1WSW	1.0 in.	CO-OP Observer	
SNOWFALL REPORTS FOR 02/07/2021 (Continued)			

Location	Amount	Reported By
Cressy	0.7 in.	CO-OP Observer
Stanton 2W	0.6 in.	CO-OP Observer
Campton 9.3 SE	0.6 in.	CoCoRaHS
Viper 0.5 N	0.5 in.	CoCoRaHS
Jackson 5.5WNW	0.5 in.	CoCoRaHS
Salyersville	0.5 in.	CO-OP Observer

For more information: <a href="https://www.weather.gov/jkl/020721\_Snow">https://www.weather.gov/jkl/020721\_Snow</a>

### **Honorable Mentions (In no particular order):**

- 1. February 17<sup>th</sup> 18<sup>th</sup>, 2021 Snowfall
- 2. February 28th, 2021 Wayne County Tornado
- 3. June 11<sup>th</sup>, 2021 Flash Flooding in Lee County
- 4. July 30<sup>th</sup>, 2021 Flash Flooding in Frenchburg