

April/May 2011 River Flooding

Rivers throughout the region reached their peak crest in early May 2011. The New Madrid Floodway was activated by the Army Corps of Engineers on May 2. The detonation of the levee near Birds Point and New Madrid, MO relieved pressure on levees in the Mid-Mississippi and Lower Ohio Valleys. Kentucky Dam and Barkley Dam on the Tennessee and Cumberland Rivers held back record water levels, but are now falling.

Rainfall History: A series of heavy rainfall events from April 22 to May 2 dropped up to 21 inches of rain (at Cape Girardeau and Poplar Bluff) and caused widespread river flooding. Cumulative rainfall totals from April 22 through May 2 are available here.

- **Rainfall Records:**

- **Evansville** - 11.77 inches of rain fell in April of 2011. This was the second wettest April at Evansville. The record was 11.83 in 1996. No records were set at Evansville. Spring 2011 is (so far) the 14th wettest as of May 3, with 21.75 inches. Records go back to 1897 at Evansville and 1937 at Paducah.
- **Paducah** - 15.91 inches of rain fell in April of 2011. A variety of records were set at Paducah, including:
 - **Wettest April** (previous record was 14.54 inches set in 1983)
 - **Wettest month** (previous record was 14.91 in March of 1964)
 - **Wettest spring** (28.24 inches as of May 3 - previous record was 27.04" in 1973). Meteorological spring is March through May. It is worth noting that a couple other monthly rainfall records have been set at Paducah in the past several years, including wettest September (2006) and wettest October (2009).

Record river stages: Preliminary data available on AHPS indicate that record river stages were reached on:

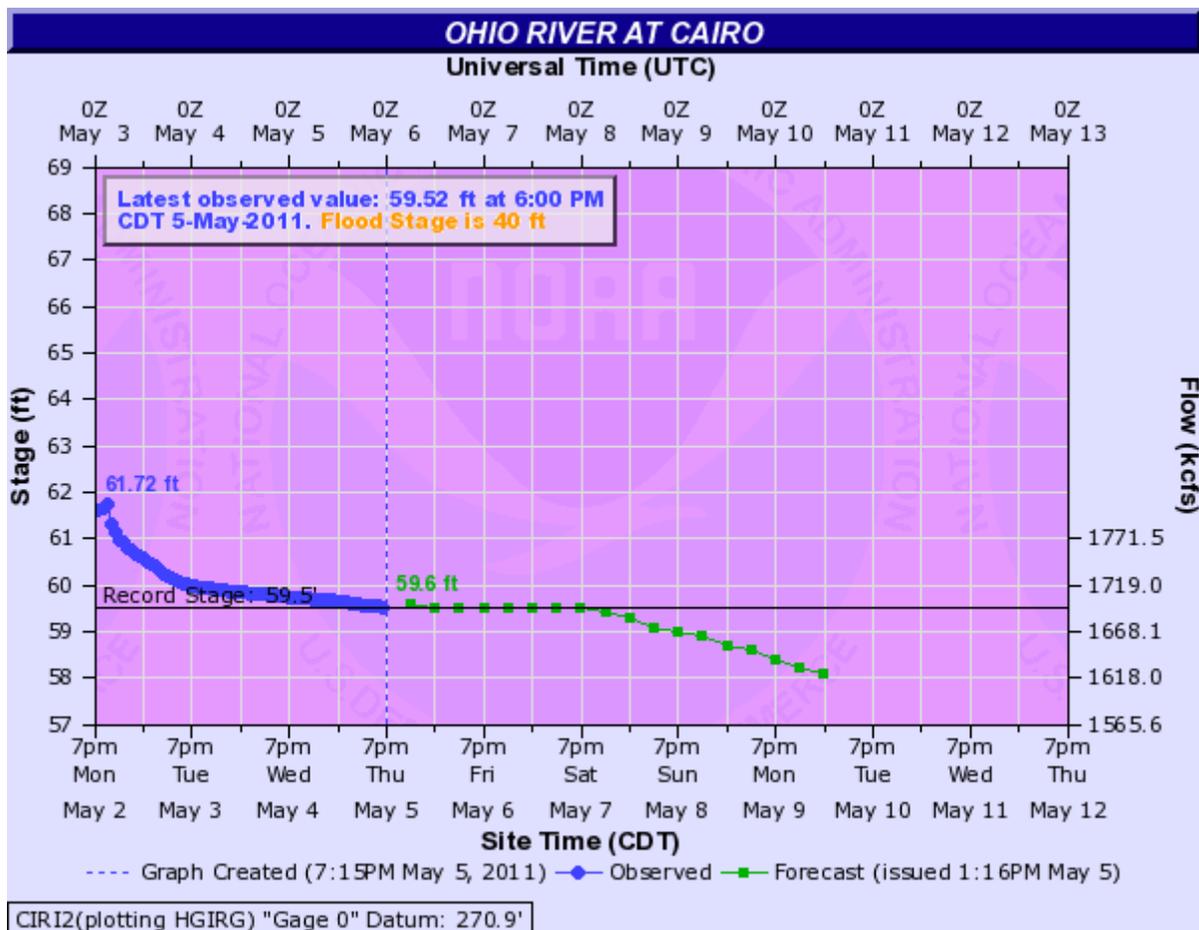
- The Ohio River at Cairo, IL and on the Mississippi River at New Madrid. The old record at both of those locations was set during the 1937 flood.
- Preliminary data show the Wabash River at Mount Carmel broke a record for the third time in six years. Records at Mount Carmel go back to at least 1876.
- Based on preliminary data, record flooding was also observed on the Big Muddy River at Murphysboro, IL and the Big Muddy River at Plumfield, IL.
- Record flooding occurred on the Patoka River at Princeton, IN (based on preliminary data).
- The crest on the Ohio River at Paducah, KY was the second highest on record, but well below the 1937 record crest.

Ohio River Location	Flood Stage	Unofficial 2011 Crest	2005	1997
Owensboro	40	43.60	Unavailable	49.00
Newburgh L/D	38	46.98	46.81	50.53
Evansville	42	44.20	44.14	47.52
Mount Vernon	35	46.10	47.20	50.00
JT Myers L/D	37	49.51	51.21	53.84
Shawneetown	40	49.66	52.00	54.40
Golconda	33	48.68	50.55	53.58
Smithland L/D	40	46.70	47.2	51.44
Paducah	39	47.81	47.90	51.79
Brookport L/D	37	49.50	49.50	53.60
Grand Chain L/D	42	54.80	54.60	57.80
Cairo	40	53.41	53.20	56.20

Photo of Ohio River flooding in Metropolis, Illinois on April 27. Barges can be seen in the distant background. NWS Photo.

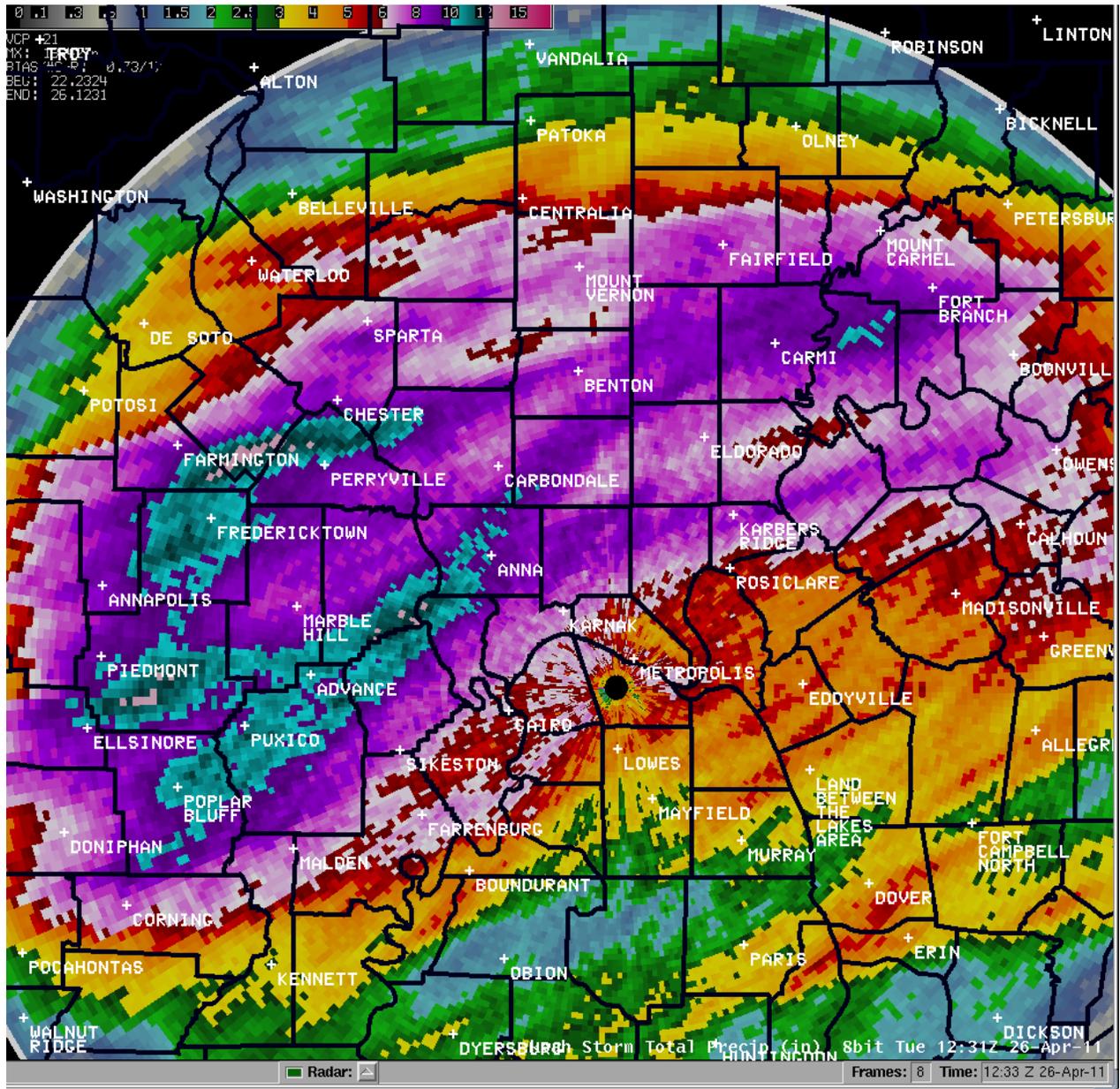


The following hydrograph is **NOT CURRENT**. It is the archived graph showing the effect of the activation of the New Madrid floodway on Cairo, IL.



The table was set for an active spring flood season late last winter. From February 23 through March 14, Evansville received 8.31 inches of rain, and Paducah received 9.43 inches. The rivers were not below flood stage very long before the most recent series of heavy rainfall events began.

Below is the storm-total rainfall graphic from the NWS Paducah radar from the evening of April 22 to the early morning of April 26. The color scale on the top left of the graphic indicates shades of pink and purple represent at least 6 inches, with aqua colors over 10 inches. The lowest rainfall amounts are over western Kentucky in shades of yellow, orange, and red.



Below is a listing of cumulative rainfall totals from airport sites and NWS co-operative observers.

PUBLIC INFORMATION STATEMENT
NATIONAL WEATHER SERVICE PADUCAH KY
349 PM CDT TUE MAY 3 2011

BELOW ARE RAINFALL TOTALS ACROSS THE REGION BEGINNING APRIL 22
THROUGH THIS MORNING, MAY 03.

...PRECIPITATION...

AIRPORTS

CAPE GIRARDEAU	20.82	CARBONDALE, IL	14.32	EVANSVILLE, IN	12.20
PADUCAH, KY	17.05	POPLAR BLUFF, MO	21.65	OWENSBORO	11.28

KENTUCKY AUTOMATED GAGES...

BARKLEY DAM	12.95	BENTON	13.93	CALHOUN/LOCK 2	10.98
CADIZ	13.02	CANTON	11.70	COBB	13.04
GREENVILLE	13.88	HOPKINSVILLE	9.65	LBL RAWLS	12.59
PADUCAH (RVR)	13.98	PRINCETON	10.70		

KENTUCK MESSONT SITES...

HICKMAN	14.12
MAYFIELD	13.24
MADISONVILLE	12.57

INDIANA AUTOMATIC GAGES...

EVANSVILLE	11.41
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ILLINOIS AUTOMATIC GAGES...

BEAN RIDGE	20.80	BIG MUDDY SUB	10.79	BONNIE	10.76
CAIRO (RIVER)	13.27	CARMI (MAIN ST)	15.42	CASEY FORK	10.96
CISNE	10.80	CRAB ORCHARD	16.75	DIXON SPRINGS	18.33
GRAND TOWER	10.78	MURPHYSBORO	15.78	PLUMFIELD	12.93
REND LAKE	12.33	WALTONVILLE	10.81	WEST SALEM	11.90

MISSOURI AUTOMATED GAGES...

BIRDS POINT	14.85	CAPE GIRARDEAU	15.15	CLEARWATER DAM	17.70
COMMERCE	17.34	DONIPHAN RAWLS	17.37	DONIPHAN (RVR)	13.50
FISK	20.24	GREENVILLE	19.43	MENFRO	14.28
PATTERSON	17.50	PRICE LANDING	12.40	POPLAR BLUFF	21.64
WAPPAPELLO DAM	17.60				

BROWNWOOD, MO (KFVS12 OBSERVER) 26.30

THIS DATA WAS FURNISHED BY THE COOPERATION OF THE NATIONAL
WEATHER SERVICE...THE CORPS OF ENGINEERS...AND THE U.S.
GEOLOGICAL SURVEY. THIS DATA MAY CONTAIN ERRORS AND SHOULD
BE USED WITH CAUTION.

