

	<p>WATER MANAGEMENT MONTHLY REPORT</p> <p><u>Information Exchange Bulletin</u></p> <p>Vol. No. <u>09 – 07</u></p> <p>Date: 7 August 2009</p> <p>Prepared by: U.S. Army Engineer Division, Great Lakes and Ohio River, 550 Main St. #10032, Cincinnati, OH 45202-3222</p>
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RESERVOIR OPERATION AND SYSTEM STATUS FOR JULY 2009

HIGHLIGHTS – The Ohio River at Cairo began the month at a stage of 29.32 feet. The Cairo stage fell to a low of 18.44 feet on the 25th of the month then rose to 23.39 feet by month's end. Flood stage at Cairo is 40 feet.

WEATHER – The weather was generally wetter and much cooler than normal in the Ohio Valley during July. Cincinnati recorded the coldest July average temperature since record keeping began. Evansville, Columbus, Indianapolis, and Louisville had one of their top three coldest July average temperatures recorded. Temperature departures in the basin ranged from -2.6 degrees below normal at Charleston, WV to -6.2 degrees above normal at Cincinnati, OH.

Precipitation departures ranged from 0.16 inches above normal at Pittsburgh, PA to 2.71 inches above normal at Evansville, IN. Significant rainfall events occurred from the 4th through the 6th, the 11th through the 13th, the 15th through the 17th, the 21st through the 23rd, the 25th through the end of the month. Showers and thunderstorms were frequent as cold fronts penetrated to the south much farther than normal during July.

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TEMPERATURE AND PRECIPITATION – JULY 2009

STATION	TEMPERATURE		PRECIPITATION	
	OBSERVED DEGREES F	DEPARTURE FROM NORMAL	OBSERVED INCHES	DEPARTURE FROM NORMAL
Pittsburgh, PA	69.4	-3.2	4.12	+0.16
Charleston, WV	71.3	-2.6	5.32	+0.46
Columbus, OH	71.0	-4.1	4.90	+0.28

Cincinnati, OH	70.1	-6.2	5.35	+1.60
Louisville, KY	73.4	-5.0	6.02	+1.72
Indianapolis, IN	70.9	-4.5	4.60	+0.18
Evansville, IN	73.4	-5.2	6.46	+2.71
Nashville, TN	75.7	-3.4	6.03	+2.26

STREAMFLOW – The monthly average flows ranged from a low of 84% of normal at Evansville, IN to a high of 99% of normal at Pittsburgh, PA. Daily flows ranged from a low of 13% of normal at Louisville, KY to a high of 335% of normal also at Louisville, KY. The following table presents the flow data summary for the Ohio River Index Stations:

FLOW DATA – JULY 2009

STATION	AVERAGE MONTHLY FLOW CUBIC FEET/SECOND	PERCENT LONG-TERM NORMAL		
		MONTHLY	DAILY	
			HIGH	LOW
Pittsburgh, PA	14,000	99	176	61
Huntington, WV	33,000	91	202	50
Cincinnati, OH	43,000	96	273	47
Louisville, KY	46,000	87	335	13
Evansville, IN	52,000	84	237	29
Paducah, KY	128,000	91	156	64

RESERVOIRS – July began with 1.8% utilization of the total system flood control storage and ended the month at 1.6%. System-wide augmentation storage availability began the month at 99.3% and was at 98.5% by the end of the month. The following table depicts storage change by tributary reservoir subsystem for July:

CHANGE IN STORAGE TRIBUTARY-RESERVOIR SUBSYSTEM	(ACRE-FEET)
Allegheny-Monongahela-Beaver	-46,600
Muskingum-Little Kanawha-Hocking-Kanawha-Guyandotte	-4,900
Twelvepole-Big Sandy-Little Sandy-Scioto	+6,800
Little Miami-Licking-Mill Creek-Great Miami	+7,000
Kentucky-Salt-Green-Wabash	+100
Cumberland	-56,600
TOTAL	-94,200

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