

	<p>WATER MANAGEMENT MONTHLY REPORT</p> <p><u>Information Exchange Bulletin</u></p> <p>Vol. No. <u>11 – 04</u></p> <p>Date: 13 June 2011</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 APRIL 2011

HIGHLIGHTS – The Ohio River at Cairo began the month at a stage of 44.66 feet. At the end of the month the Cairo stage was at 59.27 feet, 0.23 feet below the 1937 record stage and rising. Flood stage at Cairo is 40 feet. The February-March flood control operation was terminated on the 4th. A new flood control operation began on the 6th. Saturated soil from major flooding in March combined with record or near-record April rainfall and record snowpack on the Upper Mississippi set the stage for a historic lower Ohio and Mississippi River flood by the end of the month.

WEATHER – A consistent southwesterly feed of moisture with slow moving storm systems resulted in a historically wetter than normal April throughout the Ohio Valley. New statewide rainfall records for Pennsylvania, Ohio, West Virginia, Indiana, Kentucky, and Illinois were set. Rainfall fell consistently throughout April starting on April 4th. Other significant rainfall days with widespread totals greater than one inch were from the 11th into the 12th, the 14th through the 17th, the 19th through the 20th, and an entire week from the 22nd through the 29th. Precipitation departures in the basin ranged from 2.12 inches above normal at Pittsburgh, PA to 10.06 inches above normal at Louisville, KY.

Temperature departures in the basin ranged from 3.0 degrees above normal at Columbus, OH to 6.0 degrees above normal at Charleston, WV.

TEMPERATURE AND PRECIPITATION – APRIL 2011

STATION	TEMPERATURE		PRECIPITATION	
	OBSERVED DEGREES F	DEPARTURE FROM NORMAL	OBSERVED INCHES	DEPARTURE FROM NORMAL
Pittsburgh, PA	53.3	+3.4	5.13	+2.12
Charleston, WV	60.3	+6.0	5.99	+2.74

Columbus, OH	55.0	+3.0	7.14	+3.89
Cincinnati, OH	57.1	+3.4	13.52	+9.56
Louisville, KY	61.9	+5.5	13.97*	+10.06
Indianapolis, IN	55.8	+3.8	7.98	+4.37
Evansville, IN	60.2	+4.7	11.77	+7.29
Nashville, TN	62.8	+4.3	7.51	+3.58

***Record Monthly total precipitation for April**

STREAMFLOW – The monthly average flows ranged from a low of 154% of normal at Paducah, KY to a high of 221% of normal at Louisville, KY.

Daily flows ranged from a low of 53% of normal at Pittsburgh, PA to a high of 325% of normal at Evansville, IN.

The following table presents the flow data summary for the Ohio River Index Stations:

FLOW DATA – APRIL 2011

STATION	AVERAGE MONTHLY FLOW CUBIC FEET/SECOND	PERCENT LONG-TERM NORMAL		
		MONTHLY	DAILY	
			HIGH	LOW
Pittsburgh, PA	104,000	179	261	53
Huntington, WV	261,000	191	220	67
Cincinnati, OH	375,000	211	285	67
Louisville, KY	463,000	221	311	70
Evansville, IN	516,000	212	325	78
Paducah, KY	714,000	154	216	75

RESERVOIRS – April began with 7.3% utilization of the total system flood control storage and ended the month at 27.8%. Total system flood control storage peaked on

May 5th at 38.9%. System-wide augmentation storage availability began the month at 98.3% and was at 99.2% by the end of the month.

The following table depicts storage change by tributary reservoir subsystem for April:

CHANGE IN STORAGE TRIBUTARY-RESERVOIR SUBSYSTEM	(ACRE-FEET)
Allegheny-Monongahela-Beaver	+401,400
Muskingum-Little Kanawha-Hocking-Kanawha-Guyandotte	+271,100
Twelvepole-Big Sandy-Little Sandy-Scioto	+245,100
Little Miami-Licking-Mill Creek-Great Miami	+513,600
Kentucky-Salt-Green-Wabash	+1,685,100
Cumberland	+2,321,400
TOTAL	+5,437,700

Prepared by:
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