

	<p><b>WATER MANAGEMENT MONTHLY REPORT</b></p> <p><b><u>Information Exchange Bulletin</u></b></p> <p><b>Vol. No. <u>10 – 10</u></b></p> <p><b>Date: 16 November 2010</b></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 OCTOBER 2010**

**HIGHLIGHTS** – The Ohio River at Cairo began the month at a stage of 26.34 feet. Cairo stage was at 17.91 feet at the end of the month. Flood stage at Cairo is 40 feet. As drought conditions continued throughout much of the Ohio Valley, low flow coordination occurred the later half of the month.

**WEATHER** – September’s warm and dry trend continued into October for the Ohio Valley. Precipitation departures in the basin ranged from 0.13 inches below normal at Pittsburgh, PA to 1.75 inches below normal at Louisville, KY.

Temperature departures in the basin ranged from 0.9 degrees above normal at Pittsburgh, PA to 4.6 degrees above normal at Louisville, KY.

One of the strongest low pressure systems ever to affect the Continental U.S. spawned a severe weather outbreak on the 26<sup>th</sup>. Wind gusts were as high as 80 mph with 13 confirmed tornadoes in Ohio, 12 in Indiana, 10 in Kentucky and one in Tennessee. Some rainfall also fell ahead of this system on the 25<sup>th</sup> in the Tennessee and Cumberland Valley. Otherwise, there were no other major weather events during the month.

**TEMPERATURE AND PRECIPITATION – OCTOBER 2010**

STATION	TEMPERATURE		PRECIPITATION	
	OBSERVED DEGREES F	DEPARTURE FROM NORMAL	OBSERVED INCHES	DEPARTURE FROM NORMAL
Pittsburgh, PA	53.4	+0.9	2.12	-0.13
Charleston, WV	57.7	+2.6	2.17	-0.50
Columbus, OH	56.2	+1.5	1.54	-0.77
Cincinnati, OH	57.6	+1.9	1.48	-1.48

Louisville, KY	63.1	+4.6	1.04	-1.75
Indianapolis, IN	58.1	+3.5	1.32	-1.44
Evansville, IN	60.0	+2.7	1.06	-1.72
Nashville, TN	61.4	+1.5	2.49	-0.38

**STREAMFLOW** – The monthly average flows ranged from a low of 64% of normal at Paducah, KY to a high of 102% of normal at Pittsburgh, PA.

Daily flows ranged from a low of 28% of normal at Louisville, KY to a high of 187% of normal at Pittsburgh, PA.

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

**FLOW DATA – OCTOBER 2010**

STATION	AVERAGE MONTHLY FLOW  CUBIC FEET/SECOND	PERCENT LONG-TERM NORMAL		
		MONTHLY	DAILY	
			HIGH	LOW
Pittsburgh, PA	12,000	102	187	62
Huntington, WV	23,000	94	163	33
Cincinnati, OH	21,000	77	129	33
Louisville, KY	23,000	80	163	28
Evansville, IN	22,000	68	103	33
Paducah, KY	53,000	64	104	42

**RESERVOIRS** – October began with 0.4% utilization of the total system flood control storage and ended the month at 3.0%. System-wide augmentation storage availability began the month at 89.6% and was at 89.1% by the end of the month.

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

<b>CHANGE IN STORAGE TRIBUTARY-RESERVOIR SUBSYSTEM</b>	<b>(ACRE-FEET)</b>
Allegheny-Monongahela-Beaver	-25,500
Muskingum-Little Kanawha-Hocking-Kanawha-Guyandotte	-51,900
Twelvepole-Big Sandy-Little Sandy-Scioto	-23,500
Little Miami-Licking-Mill Creek-Great Miami	-32,900
Kentucky-Salt-Green-Wabash	-191,300
Cumberland	-178,200
<b>TOTAL</b>	<b>-503,300</b>

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