

	<p>WATER MANAGEMENT MONTHLY REPORT</p> <p><u>Information Exchange Bulletin</u></p> <p>Vol. No. <u>10 – 11</u></p> <p>Date: 3 December 2010</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 NOVEMBER 2010

HIGHLIGHTS – The Ohio River at Cairo began the month at a stage of 17.90 feet. Cairo stage was at 25.78 feet at the end of the month. Flood stage at Cairo is 40 feet.

WEATHER – In November, drier than normal weather was followed by a series of storm systems. This rainfall caused some flooding along the tributaries to the Ohio River and provided some drought relief. Overall, the precipitation in the Ohio Valley was above normal. These storms were on the 24th through the 27th and the 29th through the 30th. Precipitation departures in the basin ranged from 0.96 inches above normal at Nashville, TN to 4.28 inches above normal at Evansville, IN.

The temperatures alternated between warmer and colder than normal throughout November. Monthly temperature departures in the basin ranged from 0.1 degrees below normal at Cincinnati, OH to 2.3 degrees above normal at Louisville, KY.

TEMPERATURE AND PRECIPITATION – NOVEMBER 2010

STATION	TEMPERATURE		PRECIPITATION	
	OBSERVED DEGREES F	DEPARTURE FROM NORMAL	OBSERVED INCHES	DEPARTURE FROM NORMAL
Pittsburgh, PA	42.3	0.0	5.97	+2.95
Charleston, WV	47.2	+1.2	4.81	+1.15
Columbus, OH	43.7	0.0	4.34	+1.15
Cincinnati, OH	44.6	-0.1	6.94	+3.48
Louisville, KY	49.9	+2.3	5.96	+2.15

Indianapolis, IN	44.8	+1.9	4.46	+0.85
Evansville, IN	46.8	+0.9	8.46	+4.28
Nashville, TN	50.9	+1.6	5.41	+0.96

STREAMFLOW – The monthly average flows ranged from a low of 67% of normal at Evansville, IN to a high of 94% of normal at Pittsburgh, PA.

Daily flows ranged from a low of 14% of normal at Louisville, KY to a high of 302% of normal at Pittsburgh, PA.

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

FLOW DATA – NOVEMBER 2010

STATION	AVERAGE MONTHLY FLOW CUBIC FEET/SECOND	PERCENT LONG-TERM NORMAL		
		MONTHLY	DAILY	
			HIGH	LOW
Pittsburgh, PA	21,000	94	302	44
Huntington, WV	39,000	87	222	36
Cincinnati, OH	37,000	69	191	22
Louisville, KY	43,000	72	199	14
Evansville, IN	45,000	67	195	30
Paducah, KY	94,000	68	133	41

RESERVOIRS – November began with 3.0% utilization of the total system flood control storage and ended the month at 3.6%. System-wide augmentation storage availability began the month at 89.1% and was at 90.6% by the end of the month.

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

CHANGE IN STORAGE TRIBUTARY-RESERVOIR SUBSYSTEM	(ACRE-FEET)
Allegheny-Monongahela-Beaver	+18,500
Muskingum-Little Kanawha-Hocking-Kanawha-Guyandotte	-131,300
Twelvepole-Big Sandy-Little Sandy-Scioto	-66,100
Little Miami-Licking-Mill Creek-Great Miami	-43,200
Kentucky-Salt-Green-Wabash	-258,200
Cumberland	+9,100
TOTAL	-471,200

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U.S. Army Corps of Engineers