

	<p><b>WATER MANAGEMENT MONTHLY REPORT</b></p> <p><b><u>Information Exchange Bulletin</u></b></p> <p><b>Vol. No. <u>09 – 03</u></b></p> <p><b>Date: 2 April 2009</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 MARCH 2009**

**HIGHLIGHTS** – The Ohio River at Cairo began the month at a stage of 27.91 feet. The Cairo stage rose to a high of 36.99 feet by the end of the month. Flood stage at Cairo is 40 feet.

**WEATHER** – The weather was drier than normal in the basin, except in the Upper Wabash and Maumee River basins as well as part of the Kanawha, Guyandotte, and Big Sandy basins. Precipitation departures ranged from 0.97 inches below normal at Evansville, IN to 3.05 inches below normal at Louisville, KY. There was a light winter weather event in southern WV/KY/TN on March 1<sup>st</sup>. No very heavy rainfall events occurred this March, although there were significant rainfalls on the 14<sup>th</sup> through the 15<sup>th</sup> and on 25<sup>th</sup> through the 27<sup>th</sup>. Rainfall from the 8<sup>th</sup> through the 11<sup>th</sup> missed most of the watershed to the north, but did cause flooding in the upper Wabash and neighboring Lake Erie and Michigan drainage areas.

The basin temperatures averaged above normal. Temperature departures in the basin ranged from 1.9 degrees above normal at Nashville, TN to 5.5 degrees above normal at Indianapolis, IN.

**TEMPERATURE AND PRECIPITATION – MARCH 2009**

STATION	TEMPERATURE		PRECIPITATION	
	OBSERVED DEGREES F	DEPARTURE FROM NORMAL	OBSERVED INCHES	DEPARTURE FROM NORMAL
Pittsburgh, PA	42.3	+2.5	1.69	-1.48
Charleston, WV	47.9	+2.6	2.90	-1.00

Columbus, OH	46.0	+4.0	1.15	-1.74
Cincinnati, OH	47.5	+3.6	1.61	-2.29
Louisville, KY	50.4	+3.5	1.36	-3.05
Indianapolis, IN	47.2	+5.5	2.28	-1.16
Evansville, IN	49.4	+3.6	3.32	-0.97
Nashville, TN	52.0	+1.9	2.92	-1.95

**STREAMFLOW** – The monthly average flows ranged from a low of 49% of normal at Evansville, IN to a high of 62% of normal at Pittsburgh, PA. Daily flows ranged from a low of 25% of normal at Pittsburgh, PA to a high of 146% of normal also at Pittsburgh, PA. The following table presents the flow data summary for the Ohio River Index Stations:

**FLOW DATA – MARCH 2009**

STATION	AVERAGE MONTHLY FLOW  CUBIC FEET/SECOND	PERCENT LONG-TERM NORMAL		
		MONTHLY	DAILY	
			HIGH	LOW
Pittsburgh, PA	43,000	62	146	25
Huntington, WV	93,000	56	81	30
Cincinnati, OH	113,000	53	76	28
Louisville, KY	130,000	52	81	26
Evansville, IN	146,000	49	65	26
Paducah, KY	290,000	56	68	38

**RESERVOIRS** – March began with 3.3% utilization of the total system flood control storage and ended the month at 5.2%. System-wide augmentation storage availability began the month at 97.9% and was at 96.8% by the end of the month.

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

<b>CHANGE IN STORAGE TRIBUTARY-RESERVOIR SUBSYSTEM</b>	<b>(ACRE-FEET)</b>
Allegheny-Monongahela-Beaver	+312,700
Muskingum-Little Kanawha-Hocking-Kanawha-Guyandotte	+20,000
Twelvepole-Big Sandy-Little Sandy-Scioto	+9,000
Little Miami-Licking-Mill Creek-Great Miami	+35,100
Kentucky-Salt-Green-Wabash	+123,800
Cumberland	+509,100
<b>TOTAL</b>	<b>+1,009,700</b>

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