

	<p>WATER MANAGEMENT MONTHLY REPORT</p> <p><u>Information Exchange Bulletin</u></p> <p>Vol. No. <u>10 – 05</u></p> <p>Date: 7 June 2010</p> <p>Prepared by: U.S. Army Engineer Division, Great Lakes and Ohio River, 550 Main St. #10032, Cincinnati, OH 45202-3222</p>
---	--

RESERVOIR OPERATION AND SYSTEM STATUS FOR MAY 2010

HIGHLIGHTS – The Ohio River at Cairo, IL began the month at a stage of 35.22 feet. A record rainfall event in Nashville affecting the Cumberland, Tennessee and Lower Ohio Valley from 1-2 May resulted in the initiation of a flood reduction operation on 1 May. This operation led to a Cairo crest of 49.43 feet on the 6th. The Cairo stage was at 34.77 feet at the end of the month. Flood stage at Cairo is 40 feet. The flood reduction operation was terminated on 1 June.

WEATHER – A heavy rainfall event in the southern Ohio Valley from the 1st through the 3rd resulted in May being much wetter than normal for Kentucky and most of Tennessee. May also continued April’s tendency to be much warmer than normal for the entire Ohio River basin. Precipitation departures in the basin ranged from 1.95 inches below normal at Evansville, IN to 11.36 inches above normal at Nashville, TN, where a record two-day rainfall of 13.67 inches was set for May 1 and 2 and a monthly rainfall record was set for May. Outside of the May 1-2 rainfall event, significant rainfall also occurred on the 12th through the 13th and on the 16th through the 18th.

Temperature departures in the basin ranged from +2.4 degrees above normal at Cincinnati, OH to +5.1 degrees above normal at Charleston, WV.

TEMPERATURE AND PRECIPITATION – MAY 2010

STATION	TEMPERATURE		PRECIPITATION	
	OBSERVED DEGREES F	DEPARTURE FROM NORMAL	OBSERVED INCHES	DEPARTURE FROM NORMAL
Pittsburgh, PA	63.6	+3.6	5.19	+1.39
Charleston, WV	67.5	+5.1	8.01	+3.71
Columbus, OH	65.6	+3.0	3.89	+0.01

Cincinnati, OH	66.1	+2.4	5.66	+1.07
Louisville, KY	70.5	+4.7	8.16	+3.28
Indianapolis, IN	66.0	+3.4	4.43	+0.07
Evansville, IN	68.4	+2.8	3.06	-1.95
Nashville, TN	70.2	+3.1	16.43*	+11.36

* Nashville, TN received record rainfall during May.

STREAMFLOW – The monthly average flows ranged from a low of 104% of normal at Pittsburgh, PA to a high of 164% of normal at Paducah, KY.

Daily flows ranged from a low of 41% of normal at Pittsburgh, PA to a high of 330% of normal at Louisville, KY. The following table presents the flow data summary for the Ohio River Index Stations:

FLOW DATA – MAY 2010

STATION	AVERAGE MONTHLY FLOW CUBIC FEET/SECOND	PERCENT LONG-TERM NORMAL		
		MONTHLY	DAILY	
			HIGH	LOW
Pittsburgh, PA	40,000	104	172	41
Huntington, WV	103,000	112	252	52
Cincinnati, OH	153,000	125	314	50
Louisville, KY	207,000	147	330	52
Evansville, IN	276,000	163	323	56
Paducah, KY	530,000	164	273	84

RESERVOIRS – May began with 1.8% utilization of the total system flood control storage and ended the month at 3.5%. System-wide augmentation storage availability began the month at 91.0% and was at 98.7% by the end of the month.

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

CHANGE IN STORAGE TRIBUTARY-RESERVOIR SUBSYSTEM	(ACRE-FEET)
Allegheny-Monongahela-Beaver	-48,800
Muskingum-Little Kanawha-Hocking-Kanawha-Guyandotte	+28,900
Twelvepole-Big Sandy-Little Sandy-Scioto	+7,000
Little Miami-Licking-Mill Creek-Great Miami	+20,100
Kentucky-Salt-Green-Wabash	+582,100
Cumberland	+183,500
TOTAL	+772,800

Prepared by:

Water Management Division

Great Lakes and Ohio River Division

U.S. Army Corps of Engineers