

	WATER MANAGEMENT MONTHLY REPORT
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RESERVOIR OPERATION AND SYSTEM STATUS FOR SEPTEMBER 2004

HIGHLIGHTS – The remnants of two hurricanes, Frances and Ivan, caused extensive flooding during the month. Rare flooding set a record for the month of September from Pittsburgh to Maysville. At the same time drought conditions were emerging in the western areas of the basin. Cairo stage began the month at 26.5 feet and ended at 28.6 feet after cresting at 33.6 on the 27th

WEATHER –The weather during September was dominated by heavy rainfall from hurricanes, Frances and Ivan. Temperatures averaged 1-3 degrees above normal for the month. Precipitation was quite varied across the basin. Remains of hurricane Frances dropped up to 15 inches in the highlands of North Carolina and up to 8 inches in an area from eastern Kentucky, through southeastern Ohio into Pennsylvania on September 8th & 9th. This was followed nine days later over the same area by the remains of hurricane Ivan which brought 8-10 inches of rainfall over many of the same areas. At the same time, much of western Kentucky, Indiana and Illinois were receiving little or no rainfall. Louisville, KY set a new record driest September.

TEMPERATURE AND PRECIPITATION – SEPTEMBER 2004

STATION	TEMPERATURE		PRECIPITATION	
	OBSERVED DEGREES F	DEPARTURE FROM NORMAL	OBSERVED INCHES	DEPARTURE FROM NORMAL
Pittsburgh, PA	65.8	+1.8	10.06	+6.85
Charleston, WV	68.4	+2.2	7.69	+4.24
Columbus, OH	68.0	+1.5	2.98	+0.06
Cincinnati, OH	68.5	+1.1	1.53	-1.29
Louisville, KY	71.9	+1.8	0.09	-2.96
Indianapolis, IN	69.1	+2.8	0.75	-2.13
Evansville, IN	69.8	+0.7	0.09	-2.90
Nashville, TN	72.1	+0.8	4.55	+0.96

STREAMFLOW -- Ohio River monthly average flows for September ranged from a low of 373 percent of normal at Paducah, KY to a high of 716 percent of normal at Huntington, WV. Daily flows ranged from a low of 92 percent of normal at Louisville, KY to a high of 2603 percent of normal at Pittsburgh, PA.

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

FLOW DATA – SEPTEMBER 2004

STATION	AVERAGE MONTHLY FLOW	PERCENT LONG-TERM NORMAL		
		MONTHLY	DAILY	
	CUBIC FEET/SECOND			HIGH
Pittsburgh, PA	69,300	686	2603	96
Huntington, WV	164,000	716	1843	149
Cincinnati, OH	183,000	638	1486	101
Louisville, KY	195,000	666	1479	92
Evansville, IN	196,000	550	1148	113
Paducah, KY	323,000	373	625	118

RESERVOIRS -- September began with 1.3% utilization of the total system flood control storage and ended the month at 3.6%. System-wide augmentation storage started at 96.7% at the beginning of the month and was at 96.3% by the end of the month. Significant flood storage utilization in excess of 25 percent occurred at these projects during the month; Woodcock, Union City, East Branch Clarion, Tionesta, Conemaugh, Loyalhanna, Mosquito Ck, Shenango, Atwood, Bolivar, Clendening, Leesville, Beech Fk, Paintsville, Cave Run and Buckhorn. Projects storing over 50 percent of flood control storage were: Mahoning Ck (84), Crooked Ck (63), Berlin (60), Piedmont (66), Senecaville (89), Tappan (51), Wills Ck (62) and Yatesville (56).

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

CHANGE IN STORAGE TRIBUTARY-RESERVOIR SUBSYSTEM	(ACRE-FEET)
Allegheny-Monongahela-Beaver	-56,800
Muskingum-Little Kanawha-Hocking-Kanawha-Guyandotte	+135,500

Twelvepole-Big Sandy-Little Sandy-Scioto	-7,300
Little Miami-Licking-Mill Creek-Great Miami	+65,200
Kentucky-Salt-Green-Wabash	-74,900
Cumberland	+479,500
TOTAL	+541,200

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