

AD-A146 451

PERFORMANCE MONITORING SYSTEM: SUMMARY OF LOCK
STATISTICS FOR OCTOBER-DECEMBER 1983(U) ARMY ENGINEER
INST FOR WATER RESOURCES FORT BELVOIR VA

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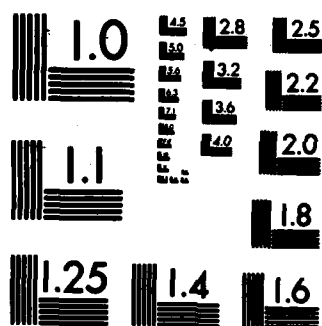
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US Army Corps
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AD-A146 451

Performance Monitoring System: Summary of Lock Statistics for October - December 1983

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August 1984

Summary Report 84-SR-5

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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER 84-SR-5	2. GOVT ACCESSION NO. AI46 431	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Performance Monitoring System Summary of Lock Statistics October - December 1983		5. TYPE OF REPORT & PERIOD COVERED Quarterly Summary Report October - December 1983
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Marilyn V. Fleming & Kevin A. Alexander U.S. Army Corps of Engineers Water Resources Support Center <u>Institute for Water Resources</u>		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS U.S. Army Corps of Engineers Water Resources Support Center, IWR Casey Building, Ft. Belvoir, VA 22060-5586		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS Office, Chief of Engineers, U.S. Army Corps of Engineers, Pulaski Building, 20 Massachusetts Avenue, N.W., Washington, D. C. 20314		12. REPORT DATE August 1984
		13. NUMBER OF PAGES 100
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for Public Release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES Although the data are edited, the United States Government does not warrant its suitability for all purposes and does not assume responsibility for results of computations performed with these data.		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) lock Performance Monitoring System PMS Statistics		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Lock Performance Monitoring data are collected at Corps locks by lock operators from observation and information provided by waterway operators. This quarterly summary is an overview of the collected statistics.		

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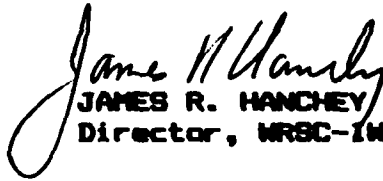
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PREFACE

This report is a product of the Navigation Data Management and Applications Branch of the U. S. Army Engineer Institute for Water Resources (WRSC-IWR). The information is compiled from statistics collected at the Corps locks in support of the lock Performance Monitoring System (PMS).

The study is managed by Mrs. Marilyn V. Fleming under the supervision of Mr. Francis M. Sharp, Chief of the WRSC-IWR Navigation Data Management and Applications Branch, and Dr. Lloyd B. Antle, Chief of the WRSC-IWR Navigation Division. The Office of the Chief of Engineers (OCE) sponsors are Mr. Henry W. Campbell Jr., DAEN-CWO-M, and Mr. Robert E. Daniel, DAEN-CWP-G.

Requests to update or change the distribution, comments and questions can be directed to Frank Sharp (202-335-2240 or FTS 385-2240) or Marilyn Fleming at the same telephone number. The information is produced and distributed quarterly.


JAMES R. HANCHEY
Director, WRSC-IWR

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Introduction

The lock Performance Monitoring System (PMS) is a part of the Inland Navigation Systems Analysis (INSA) program and encompasses the collection, editing, maintenance and analysis of data collected at all Corps-owned and operated locks. The data have been collected since March of 1975 and consist of information describing the traffic through the locks as well as the physical aspects of lockages. The quarterly summary of selected statistics presented in the appendix provides an overview of the traffic and operation at each lock. The quarterly report is presented as a set of three tables for each Corps District. Information reported for each lock and chamber includes:

TABLE 1. A listing providing the name of the lock, the river on which the lock is and its dimensions. In those cases where there is no quarterly information, this table will be the only display for the district.

TABLE 2. A table providing, by direction and total, the number of tows, commercial vessels other than tows, recreational vessels, barges (empty and loaded), commercial lockages, recreational lockages and tonnage.

TABLE 3. A summary of approach, entry, chambering and exit times (maximum, minimum and average) and the number of delays, total delay time, maximum delay time and average delay time.

Although the summary information will be computed and displayed for chambers at which there is data for only one or two months of the quarter, the fact is noted on the report.

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

ERDC B2	DISTRICT NAME NEW ORLEANS	DIVISION NAME LOWER MISS VALLEY	10/83	11/83	12/83
RIVER	LCODE-LOCK NAME	LEN/WTD/DRAFT (FT/FT/FT)			
ATCHAFALAYA RIVER	11-BERNICK LOCK	0300/0045/11.0			
BAYOU TECHÉ	31-KEYSTONE LOCK	0160/0036/12.0			
FRESHWATER BAYOU	41-FRESHWATER BAYOU LOCK	0590/0084/15.0			
GULF INTRACASTAL	01-PORT ALLEN LOCK	1202/0084/15.0			
	02-BAYOU SORREL LOCK	0800/0056/16.0			
	03-INNER HBOR NAVIGATION CANL LK	0626/0074/40.0			
	04-ALGERS LOCK	0760/0075/15.0			
	05-HARVEY LOCK	0426/0075/14.0			
	06-BAYOU BOEUF LOCK	1148/0075/15.0			
	07-VERMILLION LOCK	1195/0056/14.0			
	08-CALCASIEU LOCK	1194/0075/15.0			
	21-SCHOONER BAYOU CONTROL STRUCT	9999/0075/14.0			
	22-CATFISH POINT CONTROL STRUCT	9999/0056/16.0			
	23-CALCASIEU SALT WATER BARRIER	9999/0056/15.0			
OLD RIVER	51-OLD RIVER LOCK	1200/0075/15.0			
RED RIVER	01-RED RIVER LOCK & DAM #1	0685/0084/ 9.0			

NO DATA RECORDED ON SURRYRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LOCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

ERDC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B3	ST. LOUIS	LOWER MISS VALLEY	10/83	11/83	12/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
KASKASKIA RIVER	01-KASKASKIA RIVER NAVIGATION LK	0610/0084/12.0
MISSISSIPPI RIVER	24-LOCK & DAM 24	0610/0110/12.0
	25-LOCK & DAM 25	0610/0110/12.0
	26-LOCK & DAM 26	0610/0110/12.0
	26-LOCK & DAM 26 AUX 1	0380/0110/12.0
	27-CHAIN OF ROCKS LOCK & DAM 27	1210/0110/12.0
	27-CHAIN OF ROCKS LK & DM 27 AX1	0610/0110/12.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC 83	DISTRICT NAME ST. LOUIS	DIVISION NAME LOWER MISS VALLEY		MONTHS REPORTED								
				10/83	11/83	12/83						
RIVER/LOCK NAME	TONS	VESSEL RECRTN	VESSEL OTHER	VESSEL TOTAL	BARGES EMPTY	BARGES FULL	BARGES TOTAL	LOCKGS CONNER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
KASKASKIA RIVER												
KASKASKIA RIVER NAVIGATION LK	xxx											
UPBOUND STATISTICS	156	82	54	292	563	1	564	211	49	3	263	0
DOWNBOUND STATISTICS	150	89	68	307	1	570	571	219	52	1	272	855
TOTALS	306	171	122	599	564	571	1135	430	101	4	535	855
MISSISSIPPI RIVER												
LOCK & DAM 24	xxx											
UPBOUND STATISTICS	438	24	116	578	3462	1661	5123	812	17	8	837	2484
DOWNBOUND STATISTICS	556	50	45	651	280	6434	6714	998	50	10	1058	9035
TOTALS	994	74	161	1229	3742	8095	11837	1810	67	18	1895	11519
LOCK & DAM 25	xxx											
UPBOUND STATISTICS	431	33	143	607	3424	1642	5066	813	19	6	838	2460
DOWNBOUND STATISTICS	571	64	59	694	261	6489	6750	1015	52	10	1077	9117
TOTALS	1002	97	202	1301	3685	8131	11816	1828	71	16	1915	11578
LOCK & DAM 26	xxx											
UPBOUND STATISTICS	570	0	47	617	5044	2825	7869	1139	0	1	1140	4219
DOWNBOUND STATISTICS	677	3	24	704	686	8053	8739	1310	0	3	1313	11348
TOTALS	1247	3	71	1321	5730	10878	16608	2449	0	4	2453	15567
LOCK & DAM 26 AUX 1	xxx											
UPBOUND STATISTICS	456	18	120	594	1486	825	2311	992	13	21	1026	1493
DOWNBOUND STATISTICS	482	116	57	655	490	2201	2691	1032	70	18	1120	3247
TOTALS	938	134	177	1249	1976	3026	5002	2024	83	39	2146	4741
CHAIN OF ROCKS LOCK & DAM 27	xxx											
UPBOUND STATISTICS	979	9	139	1127	6611	3602	10213	1017	2	9	1028	5664
DOWNBOUND STATISTICS	1095	29	113	1237	1085	10312	11397	1118	9	6	1133	14675
TOTALS	2074	38	252	2364	7696	13914	21610	2135	11	15	2161	20339

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC B3	DISTRICT NAME ST. LOUIS	DIVISION NAME LOWER MISS VALLEY	MONTHS REPORTED									
			10/83	11/83	12/83							
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARCS EMPTY	BARCS FULL	BARCS TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)

(NAV, OPN, ETC)

MISSISSIPPI RIVER

CHAIN OF ROCKS LK & DN 27 AX1

UPBOUND STATISTICS	354	20	180	554	689	269	958	491	9	19	519	411
DOWNBOUND STATISTICS	346	137	134	617	241	860	1101	467	61	23	551	1242
TOTALS	700	157	314	1171	930	1129	2059	958	70	42	1070	1653

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC B3	DISTRICT NAME ST. LOUIS			DIVISION NAME LOWER MISS VALLEY							MONTHS REPORTED						
											10/83			11/83		12/83	
APPROACH			LOCK PROCESSING TIME						: DELAYED DELAY			DELAY	DELAY				
			ENTRY			CHAMBER			EXIT			: TONS	TIME	AVG	MAX		
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:		(TONS)	(TONS)	(ALL VSSLS)	
KASKASKIA RIVER																	
KASKASKIA RIVER NAVIGATION L	1	6	55	1	4	23	5	9	30	1	4	21	:	25	536	21.4	60
MISSISSIPPI RIVER																	
LOCK & DAM 24	1	7	390	1	9	194	4	11	105	1	17	125	:	933	534818	573.2	2662
LOCK & DAM 25	1	5	263	1	9	165	4	12	100	1	15	230	:	1000	734894	734.9	10260
LOCK & DAM 26	1	3	805	1	10	150	3	13	119	1	11	454	:	1246	2169053	1740.8	6230
LOCK & DAM 26 AUX 1	1	5	612	1	7	127	2	13	98	1	11	119	:	937	690530	737.0	3664
CHAIN OF ROCKS LOCK & DAM 27	1	9	67	1	8	40	3	11	38	1	8	29	:	1684	140016	83.1	666
CHAIN OF ROCKS LK & DM 27 AX	1	7	51	1	4	40	5	10	33	1	3	35	:	325	11339	34.9	732

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

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EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B4	VICKSBURG	LOWER MISS VALLEY	10/83	11/83	12/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
OUCHITA/BLACK RIV	01-JONESVILLE LOCK & DAM	0655/0084/23.4
	02-COLUMBIA LOCK & DAM	0655/0084/27.4
	06-LOCK & DAM 6	0300/0055/17.4
	08-LOCK & DAM 8	0300/0055/19.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC B4	DISTRICT NAME VICKSBURG	DIVISION NAME LOWER MISS VALLEY	MONTHS REPORTED									
			10/83		11/83		12/83					
RIVER/LOCK NAME												
TONS												
VESSL RECRTN												
VESSL OTHER												
VESSL TOTAL												
BARGS EMPTY												
BARGS FULL												
BARGES TOTAL												
LOCKGS COMMER												
LCKGES RECRTN												
LCKGES OTHER												
LCKGES TOTAL												
TONNAGE (KTONS)												
(NAV, OPN, ETC)												
OUCHITA/BLACK RIV												
JONESVILLE LOCK & DAM												
XXX ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS												
DOWNBOUND STATISTICS												
TOTALS												
COLUMBIA LOCK & DAM												
XXX ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS												
DOWNBOUND STATISTICS												
TOTALS												
LOCK & DAM 6												
XXX ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS												
DOWNBOUND STATISTICS												
TOTALS												
LOCK & DAM 8												
XXX ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS												
DOWNBOUND STATISTICS												
TOTALS												

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

PAGE 8

EROC 04	DISTRICT NAME VICKSBURG			DIVISION NAME LOWER MISS VALLEY			MONTHS REPORTED 10/8311/8312/83																																																				
																	ALL TIMES EXPRESSED IN MINUTES																																										
APPROACH			LOCK PROCESSING TIME									EXIT			: DELAYED		DELAY	DELAY	DELAY																																								
			ENTRY		CHAMBER										: TONS		TIME	AVG	MAX																																								
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:		(TONS)	(TONS)	(ALL VSSLS)																																								
OUCHITA/BLACK RIV																																																											
JONESVILLE LOCK & DAM			1	8	35	1	4	13	5	19	48	1	7	20	:	8	175	21.9	60																																								
COLUMBIA LOCK & DAM			3	5	9	3	5	11	5	16	25	5	6	12	:	0	0	0.0	0																																								
LOCK & DAM 6			2	5	15	1	5	15	5	15	35	1	6	18	:	11	37	3.4	8																																								
LOCK & DAM 8			2	4	15	2	5	10	5	15	35	2	6	15	:	8	42	5.3	15																																								

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
E3	NEW YORK	NORTH ATLANTIC	10/83	11/83	12/83

RIVER	LCODE-LOCK NAME	LEN/MID/DRAFT (FT/FT/FT)
HUDSON RIVER	01-TROY LOCK & DAM	0493/0044/15.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC E3	DISTRICT NAME NEW YORK	DIVISION NAME NORTH ATLANTIC	MONTHS REPORTED									
			10/83		11/83		12/83					
RIVER/LOCK NAME	TOMS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGS	LOCKGS	LCKGES	LCKGES	LCKGES	TONNAGE (KTOMS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	CONMER	RECRTN	OTHER	TOTAL	
		(NAV, OPN, ETC)										
HUDSON RIVER												
TROY LOCK & DAM	xxx											
UPBOUND STATISTICS	77	101	1	179	0	85	85	81	65	6	152	162
DOWNBOUND STATISTICS	82	277	1	360	81	2	83	88	178	7	273	0
TOTALS	159	378	2	539	81	87	168	169	243	13	425	162

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
E4	NORFOLK	NORTH ATLANTIC	10/83	11/83	12/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ATLANT INTRACOASTAL	11-GREAT BRIDGE GUARD LOCK	0600/0072/16.0
DISMAL SWAMP	01-DEEP CREEK LOCK	0300/0052/12.0
	02-SOUTH HILLS LOCK	0300/0052/12.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC E4	DISTRICT NAME NORFOLK	DIVISION NAME NORTH ATLANTIC	MONTHS REPORTED											
			10/83		11/83		12/83							
RIVER/LOCK NAME			TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCKGS CONNER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL (NAV, DPN, ETC)	TONNAGE (KTONS)
ATLANT INTRACOASTAL														
GREAT BRIDGE GUARD LOCK			xxx											
UPBOUND STATISTICS			172	403	74	649	112	123	235	228	211	23	462	133
DOWNBOUND STATISTICS			158	2358	61	2577	98	109	207	220	598	18	836	122
TOTALS			330	2761	135	3226	210	232	442	448	809	41	1298	256
DISMAL SWAMP														
DEEP CREEK LOCK			xxx											
UPBOUND STATISTICS			0	222	0	222	0	0	0	2	110	0	112	0
DOWNBOUND STATISTICS			0	45	0	45	0	0	0	2	23	0	25	0
TOTALS			0	267	0	267	0	0	0	4	133	0	137	0
SOUTH MILLS LOCK			xxx											
UPBOUND STATISTICS			0	14	0	14	0	0	0	0	12	0	12	0
DOWNBOUND STATISTICS			0	260	0	260	0	0	0	2	119	0	121	0
TOTALS			0	274	0	274	0	0	0	2	131	0	133	0

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC E4	DISTRICT NAME NORFOLK			DIVISION NAME NORTH ATLANTIC									MONTHS REPORTED 10/8311/8312/83					
ALL TIMES EXPRESSED IN MINUTES																		
APPROACH			LOCK PROCESSING TIME									: DELAYED		DELAY	DELAY			
			ENTRY			CHAMBER			EXIT			: TONS				TIME	AVG	MAX
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:		(TONS)	(TONS)	(ALL VSSLS)		
ATLANT INTRCOASTAL																		
GREAT BRIDGE GUARD LOCK	1	3	20	1	4	17	1	8	55	1	4	15	:	330	1546	4.7	45	
DISMAL SWAMP																		
DEEP CREEK LOCK	2	4	7	1	4	6	5	9	12	2	5	10	:	0	0	0.0	175	
SOUTH MILLS LOCK	2	4	8	2	4	6	5	9	11	3	5	10	:	0	0	0.0	115	

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F1	BUFFALO	NORTH CENTRAL	10/83	11/83	12/83

RIVER	LCODE-LOCK NAME	LEN/MID/DRAFT (FT/FT/FT)
BLK ROCK CH/TOMAHAWKA	01-BLACK ROCK LOCK	0650/0070/21.7

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC F1	DISTRICT NAME BUFFALO	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED		
			10/83	11/83	12/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL (NAV, OPH, ETC)	TONNAGE (KTONS)
-----------------	------	-----------------	----------------	----------------	----------------	---------------	-----------------	------------------	------------------	-----------------	------------------------------------	--------------------

BLK ROCK CH/TONNANDA

BLACK ROCK LOCK	XXX											
UPBOUND STATISTICS	0	291	18	309	0	0	0	20	113	11	144	0
DOWBOUND STATISTICS	17	393	5	415	0	17	17	22	188	9	219	154
TOTALS	17	684	23	724	0	17	17	42	301	20	363	154

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC F1	DISTRICT NAME BUFFALO			DIVISION NAME NORTH CENTRAL			MONTHS REPORTED 10/83 11/83 12/83									
ALL TIMES EXPRESSED IN MINUTES																
APPROACH			LOCK PROCESSING TIME								:	DELAYED	DELAY	DELAY	DELAY	
			ENTRY			CHAMBER			EXIT		:	TOMS	TIME	AVG	MAX	
MIN AVG MAX			:	MIN AVG MAX	:	MIN AVG MAX	:	MIN AVG MAX	:	MIN AVG MAX	:		(TOMS)	(TOMS)	(ALL VSSLS)	
BLK ROCK CH/TONAWANDA																
BLACK ROCK LOCK	1	1	9	1	1	12	1	12	20	1	1	11	:	3	25	8.3 45

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F3	DETROIT	NORTH CENTRAL	10/83	11/83	12/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
FOX RIVER	11-DE PERE LOCK & DAM	0146/0036/ 6.0
	12-LITTLE KAUKAUNA LOCK & DAM	0146/0036/ 6.0
	13-RAPIDE CROCHE LOCK & DAM	0146/0036/ 6.0
	21-KAUKAUNA LOCK 1	0144/0035/ 6.0
	22-KAUKAUNA LOCK 2	0144/0035/ 6.0
	23-KAUKAUNA LOCK 3	0144/0037/ 6.0
	24-KAUKAUNA LOCK 4	0144/0037/ 6.0
	25-KAUKAUNA LOCK 5	0144/0036/ 6.0
	32-LITTLE CHUTE LOCK 2	0142/0035/ 6.0
	33-LITTLE CHUTE COMB LOCKS UPPER	0144/0037/ 6.0
	34-LITTLE CHUTE COMB LOCKS LOWER	0146/0036/ 6.0
	35-CEDARS LOCK & DAM	0144/0035/ 6.0
	41-APPLETON LOCK 1	0145/0035/ 6.0
	42-APPLETON LOCK 2	0145/0035/ 6.0
	43-APPLETON LOCK 3	0144/0035/ 6.0
	44-APPLETON LOCK 4	0144/0035/ 6.0
	51-MENASHA LOCK & DAM	0144/0035/ 6.0
THE INLAND ROUTE	11-ALANSON LOCK	0066/0018/ 7.0
ST MARYS RIVER	01-MACARTHUR LOCK	0000/0080/31.0
	02-MEN POE LOCK	1200/0110/32.0
	03-DAVIS LOCK00	1350/0080/31.0
	04-SABIN LOCK00	1350/0080/31.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC F3	DISTRICT NAME DETROIT	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED											
			10/83		11/83		12/83							
RIVER/LOCK NAME														
TOWNS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS CONNER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)			
(NAV, OPN, ETC)														
FOX RIVER														
DE PERE LOCK & DAM		NO DATA RECORDED FOR THIS LOCK												
LITTLE KAUKAUMA LOCK & DAM		*** ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS	0	22	0	22	0	0	0	2	33	0	35	0		
DOWNBOUND STATISTICS	0	34	0	34	0	0	0	2	33	0	35	0		
TOTALS	0	56	0	56	0	0	0	4	66	0	70	0		
RAPIDE CROCHE LOCK & DAM		*** ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS	0	7	0	7	0	0	0	0	18	1	19	0		
DOWNBOUND STATISTICS	0	16	0	16	0	0	0	2	23	0	25	0		
TOTALS	0	23	0	23	0	0	0	2	41	1	44	0		
KAUKAUMA LOCK 1		*** ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS	0	9	0	9	0	0	0	2	9	2	13	0		
DOWNBOUND STATISTICS	1	19	1	21	1	0	1	2	13	3	18	0		
TOTALS	1	28	1	30	1	0	1	4	22	5	31	0		
KAUKAUMA LOCK 2		*** ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS	0	5	0	5	0	0	0	0	9	3	12	0		
DOWNBOUND STATISTICS	0	18	3	21	0	0	0	2	12	3	17	0		
TOTALS	0	23	3	26	0	0	0	2	21	6	29	0		
KAUKAUMA LOCK 3		*** ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS	0	8	0	8	0	0	0	2	10	0	12	0		
DOWNBOUND STATISTICS	0	18	0	18	0	0	0	2	13	0	15	0		
TOTALS	0	26	0	26	0	0	0	4	23	0	27	0		
KAUKAUMA LOCK 4		*** ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS	0	7	0	7	0	0	0	2	10	0	12	0		
DOWNBOUND STATISTICS	0	14	0	14	0	0	0	2	12	0	14	0		
TOTALS	0	21	0	21	0	0	0	4	22	0	26	0		

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC F3	DISTRICT NAME DETROIT	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED											
			10/83		11/83		12/83							
RIVER/LOCK NAME														
TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARCS EMPTY	BARCS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)			
(NAV, OPN, ETC)														
FOX RIVER														
KAUKAUNA LOCK 5														
*** ONLY FIRST MONTH REPORTED														
UPBOUND STATISTICS	0	8	0	8	0	0	0	2	10	0	12	0		
DOWNBOUND STATISTICS	0	19	0	19	0	0	0	2	13	0	15	0		
TOTALS	0	27	0	27	0	0	0	4	23	0	27	0		
LITTLE CHUTE LOCK 2														
*** ONLY FIRST MONTH REPORTED														
UPBOUND STATISTICS	0	7	0	7	0	0	0	0	12	4	16	0		
DOWNBOUND STATISTICS	0	14	5	19	0	0	0	1	16	6	23	0		
TOTALS	0	21	5	26	0	0	0	1	28	10	39	0		
LITTLE CHUTE COMB LOCKS UPPER														
*** ONLY FIRST MONTH REPORTED														
UPBOUND STATISTICS	0	5	0	5	0	0	0	2	11	2	15	0		
DOWNBOUND STATISTICS	0	16	4	20	0	0	0	0	15	5	20	0		
TOTALS	0	21	4	25	0	0	0	2	26	7	35	0		
LITTLE CHUTE COMB LOCKS LOWER														
*** ONLY FIRST MONTH REPORTED														
UPBOUND STATISTICS	0	5	1	6	0	0	0	0	12	4	16	0		
DOWNBOUND STATISTICS	0	16	3	19	0	0	0	1	14	4	19	0		
TOTALS	0	21	4	25	0	0	0	1	26	8	35	0		
CEDARS LOCK & DAM														
*** ONLY FIRST MONTH REPORTED														
UPBOUND STATISTICS	0	8	0	8	0	0	0	2	11	0	13	0		
DOWNBOUND STATISTICS	0	16	1	17	0	0	0	2	15	1	18	0		
TOTALS	0	24	1	25	0	0	0	4	26	1	31	0		
APPLETON LOCK 1														
*** ONLY FIRST MONTH REPORTED														
UPBOUND STATISTICS	0	11	0	11	0	0	0	2	10	0	12	0		
DOWNBOUND STATISTICS	0	12	1	13	0	0	0	1	18	1	20	0		
TOTALS	0	23	1	24	0	0	0	3	28	1	32	0		
APPLETON LOCK 2														
*** ONLY FIRST MONTH REPORTED														
UPBOUND STATISTICS	0	12	0	12	0	0	0	2	10	0	12	0		
DOWNBOUND STATISTICS	0	11	1	12	0	0	0	2	18	1	21	0		
TOTALS	0	23	1	24	0	0	0	4	28	1	33	0		

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

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EROC F3	DISTRICT NAME DETROIT			DIVISION NAME NORTH CENTRAL			MONTHS REPORTED 10/83 11/83 12/83										
ALL TIMES EXPRESSED IN MINUTES																	
APPROACH			LOCK ENTRY			PROCESSING TIME CHAMBER			EXIT			: DELAYED DELAY		DELAY	DELAY		
												: TOMS	TIME			AVG	MAX
												(TOMS)		(TOMS)	(ALL VSSLS)		
FOX RIVER																	
DE PERE LOCK & DAM NO DATA RECORDED FOR THIS LOCK																	
LITTLE KAUKAUNA LOCK & DAM	1	1	2	1	1	5	1	4	10	1	1	3	:	0	0	0.0	7
RAPIDE CROCHE LOCK & DAM	1	1	1	1	1	2	3	5	10	1	1	2	:	0	0	0.0	9
KAUKAUNA LOCK 1	1	1	1	1	1	2	3	6	7	1	1	2	:	0	0	0.0	10
KAUKAUNA LOCK 2	1	1	2	1	1	2	2	6	8	1	1	2	:	0	0	0.0	5
KAUKAUNA LOCK 3	1	1	1	1	1	5	3	5	10	1	1	3	:	0	0	0.0	3
KAUKAUNA LOCK 4	1	1	1	1	1	1	2	5	8	1	1	1	:	0	0	0.0	5
KAUKAUNA LOCK 5	1	1	1	1	1	5	1	5	9	1	1	1	:	0	0	0.0	5
LITTLE CHUTE LOCK 2	1	1	1	1	1	2	2	6	10	1	1	2	:	0	0	0.0	5
LITTLE CHUTE COMB LOCKS UPPE	1	1	2	1	1	2	2	5	10	1	1	2	:	0	0	0.0	5
LITTLE CHUTE COMB LOCKS LOWE	1	1	1	1	1	5	1	5	10	1	1	2	:	0	0	0.0	5
CEDARS LOCK & DAM	1	1	1	1	1	1	1	4	10	1	1	1	:	0	0	0.0	10
APPLETON LOCK 1	1	1	1	1	1	5	1	5	7	1	1	1	:	0	0	0.0	2
APPLETON LOCK 2	1	1	1	1	1	2	4	5	7	1	1	1	:	0	0	0.0	2
APPLETON LOCK 3	1	1	1	1	1	1	4	5	7	1	1	1	:	0	0	0.0	5

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC F4	DISTRICT NAME ROCK ISLAND	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED		
			10/83	11/83	12/83
RIVER ILLINOIS	LCODE-LOCK NAME		LEN/HD/DRAFT (FT/FT/FT)		
	01-THOMAS J O'BRIEN		1200/0110/12.0		
	02-LOCKPORT LOCK		1200/0110/12.0		
	03-BRANDON ROAD LOCK & DAM		1200/0110/12.0		
	04-DRESDEN ISLAND LOCK & DAM		1200/0110/12.0		
	05-MARSELLES LOCK & DAM		1200/0110/12.0		
	06-STARVED ROCK LOCK & DAM		1200/0110/12.0		
	07-PEORIA LOCK & DAM		1200/0110/12.0		
MISSISSIPPI RIVER	08-LAGRANGE LOCK & DAM		1200/0110/12.0		
	11-LOCK & DAM 11		1350/0110/10.0		
	12-LOCK & DAM 12		1350/0110/10.0		
	13-LOCK & DAM 13		1350/0110/10.0		
	14-LOCK & DAM 14		1350/0110/10.0		
	14-LOCK & DAM 14 AUXILIARY 1		1350/0110/10.0		
	15-LOCK & DAM 15		1350/0110/10.0		
	15-LOCK & DAM 15 AUXILIARY 1		1350/0110/10.0		
	16-LOCK & DAM 16		1350/0110/10.0		
	17-LOCK & DAM 17		1350/0110/10.0		
	18-LOCK & DAM 18		1350/0110/10.0		
	19-LOCK & DAM 19		1350/0110/10.0		
	19-LOCK & DAM 19 AUXILIARY 1		1350/0110/10.0		
	20-LOCK & DAM 20		1350/0110/10.0		
	21-LOCK & DAM 21		1350/0110/10.0		
	22-LOCK & DAM 22		1350/0110/10.0		

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC F4	DISTRICT NAME ROCK ISLAND	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED									
			10/83			11/83			12/83			
RIVER/LOCK NAME	TONS	VESSEL RECRTN	VESSEL OTHER	VESSEL TOTAL	BARGE EMPTY	BARGE FULL	BARGE TOTAL	LOCKGS CONFER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)												
ILLINOIS												
THOMAS J O'BRIEN	XXX											
UPBOUND STATISTICS	326	340	45	711	297	679	976	367	148	5	520	998
DOWNBOUND STATISTICS	311	1052	60	1423	474	461	935	369	345	6	720	679
TOTALS	637	1392	105	2134	771	1140	1911	736	493	11	1240	1678
LOCKPORT LOCK	XXX											
UPBOUND STATISTICS	487	13	55	555	504	2009	2513	549	7	2	558	2998
DOWNBOUND STATISTICS	512	115	55	682	1511	1092	2603	585	53	0	638	1732
TOTALS	999	128	110	1237	2015	3101	5116	1134	60	2	1196	4730
BRANDON ROAD LOCK & DAM	XXX											
UPBOUND STATISTICS	480	13	58	551	532	2055	2587	549	9	3	581	3078
DOWNBOUND STATISTICS	479	115	53	647	1434	1123	2557	561	62	3	626	1756
TOTALS	959	128	111	1198	1966	3178	5144	1130	71	6	1207	4834
DRESDEN ISLAND LOCK & DAM	XXX											
UPBOUND STATISTICS	436	55	40	531	608	2151	2759	577	26	7	610	3269
DOWNBOUND STATISTICS	430	123	37	590	1395	1298	2693	554	66	7	627	2109
TOTALS	866	178	77	1121	2003	3449	5452	1131	92	14	1237	5378
MARSELLES LOCK & DAM	XXX											
UPBOUND STATISTICS	454	74	27	555	843	2104	2947	616	53	11	680	3341
DOWNBOUND STATISTICS	432	122	39	593	1267	1491	2758	587	83	8	678	2388
TOTALS	886	196	66	1148	2110	3595	5705	1203	136	19	1358	5730
STARVED ROCK LOCK & DAM	XXX											
UPBOUND STATISTICS	477	98	29	604	1182	2133	3315	674	45	21	740	3410
DOWNBOUND STATISTICS	447	135	35	617	1252	1766	3018	624	85	17	726	2769
TOTALS	924	233	64	1221	2434	3899	6333	1298	130	38	1466	6179
PEDRIA LOCK & DAM	XXX											
UPBOUND STATISTICS	501	40	48	589	2126	2459	4585	419	26	318	763	3921
DOWNBOUND STATISTICS	487	105	63	655	1445	2721	4166	402	67	310	779	4011
TOTALS	988	145	111	1244	3571	5180	8751	821	93	628	1542	7932

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC F4	DISTRICT NAME ROCK ISLAND	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED									
			10/83		11/83		12/83					
RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS CONMER	LCKGES RECRTN	LCKGES OTHER (NAV, OPN, ETC)	LCKGES TOTAL	TONNAGE (KTONS)
ILLINOIS												
LAGRANGE LOCK & DAM	XXX											
UPBOUND STATISTICS	492	11	14	517	2603	2091	4694	437	5	261	703	3440
DOWNBOUND STATISTICS	492	93	14	599	1015	3246	4261	422	54	268	744	4781
TOTALS	984	104	28	1116	3618	5337	8955	859	59	529	1447	8222
MISSISSIPPI RIVER												
LOCK & DAM 11	XXX											
UPBOUND STATISTICS	289	98	87	474	1859	1123	2982	517	86	8	611	1668
DOWNBOUND STATISTICS	359	138	40	537	248	3808	4056	608	109	9	726	5369
TOTALS	648	236	127	1011	2107	4931	7038	1125	195	17	1337	7037
LOCK & DAM 12	XXX											
UPBOUND STATISTICS	317	130	71	518	2062	1245	3307	540	100	7	647	1834
DOWNBOUND STATISTICS	400	175	20	595	269	4275	4544	667	147	9	823	6017
TOTALS	717	305	91	1113	2331	5520	7851	1207	247	16	1470	7852
LOCK & DAM 13	XXX											
UPBOUND STATISTICS	315	143	77	535	2059	1242	3301	553	92	6	651	1860
DOWNBOUND STATISTICS	407	200	25	632	315	4269	4584	680	141	14	835	6012
TOTALS	722	343	102	1167	2374	5511	7885	1233	233	20	1486	7872
LOCK & DAM 14	XXX											
UPBOUND STATISTICS	400	87	77	564	2729	1373	4102	682	58	13	753	2032
DOWNBOUND STATISTICS	502	134	18	654	321	5210	5531	846	112	13	971	7121
TOTALS	902	221	95	1218	3050	6583	9633	1528	170	26	1724	9154
LOCK & DAM 14 AUXILIARY 1	NO DATA RECORDED FOR THIS LOCK											
LOCK & DAM 15	XXX											
UPBOUND STATISTICS	374	3	72	449	2545	1408	3953	671	3	8	682	2100
DOWNBOUND STATISTICS	491	10	32	533	339	5085	5424	874	10	6	890	7120
TOTALS	865	13	104	982	2884	6493	9377	1545	13	14	1572	9221

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC F4	DISTRICT NAME ROCK ISLAND	DIVISION NAME NORTH CENTRAL						MONTHS REPORTED					
								10/83	11/83		12/83		
RIVER/LOCK NAME		TONS	VESSL RECRTH	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS CONNER	LCKGES RECRTH	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)													
MISSISSIPPI RIVER													
LOCK & DAM 15 AUXILIARY 1		XXX											
UPBOUND STATISTICS		78	115	61	254	86	41	127	133	62	2	197	61
DOWNBOUND STATISTICS		71	150	38	259	60	40	100	110	88	1	199	55
TOTALS		149	265	99	513	146	81	227	243	150	3	396	117
LOCK & DAM 16		XXX											
UPBOUND STATISTICS		431	26	113	570	2835	1596	4433	760	26	14	800	2375
DOWNBOUND STATISTICS		556	48	37	641	397	5622	6019	959	50	8	1017	7882
TOTALS		987	74	150	1211	3232	7220	10452	1719	76	22	1817	10257
LOCK & DAM 17		XXX											
UPBOUND STATISTICS		432	3	85	520	2905	1775	4680	780	4	14	798	2631
DOWNBOUND STATISTICS		552	34	15	601	495	5872	6367	977	50	10	1037	8229
TOTALS		984	37	100	1121	3400	7647	11047	1757	54	24	1835	10860
LOCK & DAM 18		XXX											
UPBOUND STATISTICS		429	17	104	550	2986	1772	4758	779	21	12	812	2624
DOWNBOUND STATISTICS		557	49	37	643	502	5998	6500	996	56	7	1059	8412
TOTALS		986	66	141	1193	3488	7770	11258	1775	77	19	1871	11036
LOCK & DAM 19		XXX											
UPBOUND STATISTICS		420	15	123	558	3264	1683	4947	475	6	8	489	2511
DOWNBOUND STATISTICS		516	47	62	625	328	5993	6321	538	25	6	569	8423
TOTALS		936	62	185	1183	3592	7676	11268	1013	31	14	1058	10934
LOCK & DAM 19 AUXILIARY 1		NO DATA RECORDED FOR THIS LOCK											
LOCK & DAM 20		XXX											
UPBOUND STATISTICS		437	10	147	594	3346	1680	5026	815	11	23	849	2496
DOWNBOUND STATISTICS		522	47	91	660	328	5978	6306	935	46	17	1018	8370
TOTALS		959	57	238	1254	3674	7658	11332	1770	57	40	1867	10866
LOCK & DAM 21		XXX											
UPBOUND STATISTICS		427	23	125	575	3378	1595	4973	805	22	22	849	2394
DOWNBOUND STATISTICS		537	44	60	641	235	6177	6412	975	53	17	1045	8665
TOTALS		964	67	185	1216	3613	7772	11385	1780	75	39	1894	11059

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC F4	DISTRICT NAME ROCK ISLAND	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED									
			10/83			11/83			12/83			

RIVER/LOCK NAME	TONS	VESSL RECRTH	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTH	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)

MISSISSIPPI RIVER

LOCK & DAM 22												
xxx												
UPBOUND STATISTICS	418	33	115	566	3369	1634	5003	789	21	19	829	2442
DOWNBOUND STATISTICS	10 532	88	51	671	238	6231	6469	965	70	20	1055	8769
TOTALS	950	121	166	1237	3607	7865	11472	1754	91	39	1884	11211

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC F4	DISTRICT NAME ROCK ISLAND	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED												10/83	11/83	12/83								
			ALL TIMES EXPRESSED IN MINUTES																						
			APPROACH			LOCK ENTRY			PROCESSING TIME			CHAMBER						EXIT			: DELAYED DELAY			DELAY AVG MAX	DELAY MAX (ALL VSSLS)
			MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX				: MIN	AVG	MAX	: TONS	TIME (TONS)	AVG (TONS)		
ILLINOIS																									
THOMAS J O'BRIEN	1	3	28	1	2	30	3	13	44	1	2	16	:	104	1464	14.1	131								
LOCKPORT LOCK	1	9	117	1	10	76	1	27	96	1	11	100	:	824	89844	109.0	1503								
BRANDON ROAD LOCK & DAM	1	12	431	1	10	43	4	19	9	1	12	400	:	783	60612	77.4	1445								
DRESDEN ISLAND LOCK & DAM	1	10	421	1	10	58	1	17	437	1	13	113	:	582	64255	110.4	1155								
MARSHIELLES LOCK & DAM	1	11	167	1	9	81	1	19	435	1	16	127	:	649	140810	217.0	1440								
STARVED ROCK LOCK & DAM	1	8	112	1	9	83	6	16	108	1	14	406	:	589	100385	170.4	1440								
PEORIA LOCK & DAM	1	6	423	1	8	57	1	7	43	1	12	154	:	618	75064	121.5	875								
LAGRANGE LOCK & DAM	1	7	90	1	8	45	1	6	421	1	14	136	:	646	88281	136.7	995								
MISSISSIPPI RIVER																									
LOCK & DAM 11	1	8	139	1	8	85	4	10	68	1	15	398	:	439	84431	192.3	2118								
LOCK & DAM 12	1	9	151	1	8	88	1	7	40	1	15	146	:	520	83334	160.3	2148								
LOCK & DAM 13	1	6	149	1	8	407	1	10	105	1	17	134	:	533	118788	222.9	1565								
LOCK & DAM 14	1	7	377	1	9	327	1	9	434	1	17	185	:	732	287226	392.4	2855								
LOCK & DAM 14 AUXILIARY 1	NO DATA RECORDED FOR THIS LOCK																								
LOCK & DAM 15	1	10	105	1	9	97	1	11	302	1	19	183	:	688	181612	264.0	1682								
LOCK & DAM 15 AUXILIARY 1	1	3	23	1	2	19	1	10	32	1	3	41	:	14	479	34.2	193								

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC F4	DISTRICT NAME ROCK ISLAND			DIVISION NAME NORTH CENTRAL			MONTHS REPORTED 10/8311/8312/83									
ALL TIMES EXPRESSED IN MINUTES																
APPROACH			LOCK ENTRY			PROCESSING TIME CHAMBER			EXIT			: DELAYED DELAY		DELAY	DELAY	
												: TONS	TIME			AVG
MIN AVG MAX :			MIN AVG MAX :			MIN AVG MAX :			MIN AVG MAX :					(TONS)	(TONS)	(ALL VSSLS)
MISSISSIPPI RIVER																
LOCK & DAM 16	1	8	309	1	9	50	3	9	79	1	18	111 :	890	582235	654.2	6323
LOCK & DAM 17	1	11	440	1	9	75	2	9	69	1	16	87 :	899	407013	452.7	1785
LOCK & DAM 18	1	8	110	1	10	172	3	8	100	1	18	405 :	892	404788	453.8	5235
LOCK & DAM 19	1	24	794	1	10	392	1	23	639	1	12	439 :	750	274401	365.9	7450
LOCK & DAM 19 AUXILIARY 1	NO DATA RECORDED FOR THIS LOCK															
LOCK & DAM 20	1	7	306	1	9	270	2	7	76	1	17	394 :	768	204136	265.8	9534
LOCK & DAM 21	1	9	108	1	9	158	1	6	50	1	18	751 :	818	176401	215.6	11653
LOCK & DAM 22	1	9	432	1	10	70	1	6	60	1	20	434 :	893	409685	458.8	2220

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

ERDC F5	DISTRICT NAME ST. PAUL	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED		
			10/83	11/83	12/83
RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)			
MISSISSIPPI RIVER	01-LOCK & DAM 1 MAIN CHBR 1	0400/0056/11.0			
	01-LOCK & DAM 1 MAIN CHBR 2	0400/0056/11.0			
	02-LOCK & DAM 2	0600/0110/11.0			
	02-LOCK & DAM 2 AUXILIARY 1	0500/0110/11.0			
	03-LOCK & DAM 3	0600/0110/11.0			
	04-LOCK & DAM 4	0600/0110/11.0			
	05-LOCK & DAM 5	0600/0110/11.0			
	06-LOCK & DAM 6	0600/0110/11.0			
	07-LOCK & DAM 7	0600/0110/11.0			
	08-LOCK & DAM 8	0600/0110/11.0			
	09-LOCK & DAM 9	0600/0110/11.0			
	10-LOCK & DAM 10	0600/0110/11.0			
	51-ST ANTHONY FALLS UPPER L & D	0400/0056/11.0			
52-ST ANTHONY FALLS LOWER L & D	0400/0056/11.0				
55-LOCK & DAM 5A	0600/0110/11.0				

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

PAGE 32

EROC F5	DISTRICT NAME ST. PAUL	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED											
			10/83		11/83		12/83							
RIVER/LOCK NAME			TONS	VESSL RECTN	VESSL OTHER	VESSL TOTAL	BARCS EMPTY	BARCS FULL	BARCS TOTAL	LOCKGS CONNER	LCKGES RECTN	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
MISSISSIPPI RIVER														
LOCK & DAM 1 MAIN CHBR 1			XXX	ONLY FIRST AND SECOND MONTHS REPORTED										
UPBOUND STATISTICS			202	197	29	428	138	233	371	230	114	3	347	302
DOWNBOUND STATISTICS			213	239	13	465	189	208	397	229	119	4	352	302
TOTALS			415	436	42	893	327	441	768	459	233	7	699	604
LOCK & DAM 1 MAIN CHBR 2			NO DATA RECORDED FOR THIS LOCK											
LOCK & DAM 2			XXX											
UPBOUND STATISTICS			267	255	31	553	1632	635	2267	383	136	8	527	943
DOWNBOUND STATISTICS			298	199	7	504	79	2892	2971	466	112	7	585	4066
TOTALS			565	454	38	1057	1711	3527	5238	849	248	15	1112	5010
LOCK & DAM 2 AUXILIARY 1			NO DATA RECORDED FOR THIS LOCK											
LOCK & DAM 3			XXX											
UPBOUND STATISTICS			231	381	59	671	1370	638	2008	366	169	14	549	963
DOWNBOUND STATISTICS			263	376	33	672	81	2677	2758	411	181	14	606	3771
TOTALS			494	757	92	1343	1451	3315	4766	777	350	28	1155	4734
LOCK & DAM 4			XXX											
UPBOUND STATISTICS			222	161	39	422	1429	652	2081	352	123	23	498	963
DOWNBOUND STATISTICS			266	170	7	443	73	2826	2899	414	169	24	607	3983
TOTALS			488	331	46	865	1502	3478	4980	766	292	47	1105	4947
LOCK & DAM 5			XXX											
UPBOUND STATISTICS			219	108	31	358	1413	649	2062	350	83	21	454	966
DOWNBOUND STATISTICS			262	108	2	372	78	2815	2893	422	116	23	561	3976
TOTALS			481	216	33	730	1491	3464	4955	772	199	44	1015	4943
LOCK & DAM 6			XXX											
UPBOUND STATISTICS			231	116	36	383	1693	703	2396	381	95	29	505	1043
DOWNBOUND STATISTICS			279	123	3	405	73	3235	3328	461	138	25	624	4581
TOTALS			510	239	39	788	1766	3958	5724	842	233	54	1129	5624

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC F5	DISTRICT NAME ST. PAUL	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED									
			10/83		11/83		12/83					
RIVER/LOCK NAME	TONS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LOCKGS	LOCKGS	LOCKGS	LOCKGS	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	CONNER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)												
MISSISSIPPI RIVER												
LOCK & DAM 7	XXX											
UPBOUND STATISTICS	229	193	43	465	1684	696	2380	363	129	72	564	1017
DOWNBOUND STATISTICS	280	210	18	508	73	3247	3320	441	155	84	680	4579
TOTALS	509	403	61	973	1757	3943	5700	804	284	156	1244	5597
LOCK & DAM 8	XXX											
UPBOUND STATISTICS	231	94	114	439	1695	797	2492	379	79	71	529	1203
DOWNBOUND STATISTICS	282	100	8	390	87	3366	3453	468	109	74	651	4735
TOTALS	513	194	122	829	1782	4163	5945	847	188	145	1180	5939
LOCK & DAM 9	XXX											
UPBOUND STATISTICS	234	126	40	400	1533	1027	2560	394	107	20	521	1513
DOWNBOUND STATISTICS	291	138	4	433	246	3321	3567	487	142	26	655	4674
TOTALS	525	264	44	833	1779	4348	6127	881	249	46	1176	6188
LOCK & DAM 10	XXX											
UPBOUND STATISTICS	295	148	65	508	1931	1044	2975	478	119	58	655	1530
DOWNBOUND STATISTICS	364	185	21	570	236	3852	4088	581	161	61	803	5425
TOTALS	659	333	86	1078	2167	4896	7063	1059	280	119	1458	6956
ST ANTHONY FALLS UPPER L & D	XXX	ONLY FIRST AND SECOND MONTHS REPORTED										
UPBOUND STATISTICS	143	122	37	302	113	114	227	181	48	0	229	163
DOWNBOUND STATISTICS	162	157	18	337	111	147	258	178	56	0	234	209
TOTALS	305	279	55	639	224	261	485	359	104	0	463	372
ST ANTHONY FALLS LOWER L & D	XXX	ONLY FIRST AND SECOND MONTHS REPORTED										
UPBOUND STATISTICS	198	136	27	361	146	208	354	224	55	1	280	253
DOWNBOUND STATISTICS	211	160	16	387	178	210	388	223	57	0	280	290
TOTALS	409	296	43	748	324	418	742	447	112	1	560	543
LOCK & DAM 5A	XXX											
UPBOUND STATISTICS	220	142	40	402	1411	657	2068	335	115	85	535	972
DOWNBOUND STATISTICS	262	140	10	412	75	2833	2908	397	138	89	624	3998
TOTALS	482	282	50	814	1486	3490	4976	732	253	174	1159	4971

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC F5	DISTRICT NAME ST. PAUL			DIVISION NAME NORTH CENTRAL									MONTHS REPORTED								
													10/83			11/83			12/83		
ALL TIMES EXPRESSED IN MINUTES																					
APPROACH			LOCK ENTRY			PROCESSING TIME CHAMBER			EXIT			: DELAYED TONS			DELAY	DELAY					
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: TONS	TIME	AVG	MAX						
															(TONS)	(TONS)	(ALL VSSLS)				
MISSISSIPPI RIVER																					
LOCK & DAM 1 MAIN CHBR 1	1	3	17	1	5	18	6	11	33	1	5	31	:	64	1457	22.8	58				
LOCK & DAM 1 MAIN CHBR 2	NO DATA RECORDED FOR THIS LOCK																				
LOCK & DAM 2	1	8	94	1	9	119	5	10	55	1	13	110	:	332	36433	109.7	595				
LOCK & DAM 2 AUXILIARY 1	NO DATA RECORDED FOR THIS LOCK																				
LOCK & DAM 3	1	8	119	1	7	73	4	6	40	1	13	70	:	264	23352	88.5	712				
LOCK & DAM 4	1	8	305	1	8	64	4	6	55	1	14	91	:	236	18565	78.7	1048				
LOCK & DAM 5	1	8	216	1	8	180	4	8	56	1	14	125	:	230	21325	92.7	986				
LOCK & DAM 6	1	10	418	1	9	206	4	5	56	1	16	295	:	287	35132	122.4	1060				
LOCK & DAM 7	1	9	315	1	8	125	4	6	40	1	14	172	:	293	26246	89.6	457				
LOCK & DAM 8	1	8	93	1	8	104	4	7	57	1	16	374	:	302	41884	136.0	1055				
LOCK & DAM 9	1	10	160	1	8	102	1	6	36	1	16	148	:	226	22303	98.7	427				
LOCK & DAM 10	1	10	460	1	8	260	4	6	108	1	14	194	:	420	72482	172.6	1090				
ST ANTHONY FALLS UPPER L & D	1	2	14	1	4	35	5	10	56	1	4	66	:	13	323	24.8	60				
ST ANTHONY FALLS LOWER L & D	1	3	55	1	4	31	5	12	43	1	4	58	:	61	1238	20.3	119				
LOCK & DAM 5A	1	7	97	1	7	88	4	6	22	1	12	78	:	254	20326	80.0	350				

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
			10/83	11/83	12/83
G2	PORTLAND	NORTH PACIFIC			
RIVER	LCODE-LOCK NAME		LEN/WID/DRAFT (FT/FT/FT)		
COLUMBIA RIVER	01-BONNEVILLE LOCK & DAM		0500/0074/15.0		
	02-THE DALLES DAM		0650/0084/15.0		
	03-JOHN DAY LOCK & DAM		0650/0084/15.0		
WILLAMETTE RIVER	11-WILLAMETTE FALLS LOCKS 1 - 4		0200/0037/ 6.5		
	15-WILLAMETTE FALLS GUARD LOCK		0200/0037/ 6.5		

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC G2	DISTRICT NAME PORTLAND	DIVISION NAME NORTH PACIFIC	MONTHS REPORTED											
			10/83		11/83		12/83							
RIVER/LOCK NAME			TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS CONNER	LCKGES RECRTN	LCKGES OTHER (NAV, OPN, ETC)	LCKGES TOTAL	TONNAGE (KTONS)
COLUMBIA RIVER														
BONNEVILLE LOCK & DAM			xxx											
UPBOUND STATISTICS			256	18	24	298	616	285	901	564	8	14	586	464
DOWNBOUND STATISTICS			271	13	20	304	64	877	941	615	15	10	640	1971
TOTALS			527	31	44	602	680	1162	1842	1179	23	24	1226	2435
THE DALLES DAM			xxx											
UPBOUND STATISTICS			216	4	10	230	495	278	773	226	3	3	232	459
DOWNBOUND STATISTICS			218	5	2	225	61	722	783	223	4	5	232	1803
TOTALS			434	9	12	455	556	1000	1556	449	7	8	464	2262
JOHN DAY LOCK & DAM			xxx											
UPBOUND STATISTICS			217	6	7	230	494	275	769	222	3	5	230	454
DOWNBOUND STATISTICS			216	6	8	230	58	717	775	222	3	5	230	1773
TOTALS			433	12	15	460	552	992	1544	444	6	10	460	2228
WILLAMETTE RIVER														
WILLAMETTE FALLS LOCKS 1 - 4			xxx											
UPBOUND STATISTICS			99	21	17	137	22	129	151	159	29	1	189	35
DOWNBOUND STATISTICS			94	23	27	144	3	128	131	146	27	1	174	35
TOTALS			193	44	44	281	25	257	282	305	56	2	363	71
WILLAMETTE FALLS GUARD LOCK			xxx											
UPBOUND STATISTICS			108	7	126	241	25	96	121	149	7	97	253	22
DOWNBOUND STATISTICS			103	10	146	259	10	93	103	141	7	99	247	28
TOTALS			211	17	272	500	35	189	224	290	14	196	500	50

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC C2	DISTRICT NAME PORTLAND			DIVISION NAME NORTH PACIFIC			MONTHS REPORTED															
							10/83			11/83			12/83									
ALL TIMES EXPRESSED IN MINUTES																						
APPROACH			LOCK PROCESSING TIME									:	DELAYED	DELAY	DELAY	DELAY						
			ENTRY			CHAMBER			EXIT			:	TONS	TIME	AVG	MAX						
MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:		(TOMS)	(TOMS)	(ALL VSSLS)			
COLUMBIA RIVER																						
BONNEVILLE LOCK & DAM			1	7	34	:	1	7	77	:	2	23	129	:	1	5	30	:	514	44349	86.3	440
THE DALLES DAM			1	5	29	:	2	6	30	:	5	22	135	:	2	5	20	:	328	3736	11.4	75
JOHN DAY LOCK & DAM			1	5	25	:	1	6	24	:	10	25	90	:	1	5	26	:	430	2403	5.6	79
WILLAMETTE RIVER																						
WILLAMETTE FALLS LOCKS 1 - 4			1	1	58	:	1	2	29	:	1	37	98	:	1	1	12	:	192	294	1.5	22
WILLAMETTE FALLS GUARD LOCK			1	1	1	:	1	1	13	:	1	1	12	:	1	1	61	:	206	220	1.1	5

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
G3	SEATTLE	NORTH PACIFIC	10/83	11/83	12/83

RIVER	LCODE-LOCK NAME	LEN/MID/DRAFT (FT/FT/FT)
LAKE WASHINGTON SHP CA	01-HIRAN M CHITTENDEN LOCKS	0825/0080/30.0
	01-HIRAN M CHITTENDEN LOCKS AUX1	0150/0026/25.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC G3	DISTRICT NAME SEATTLE	DIVISION NAME NORTH PACIFIC	MONTHS REPORTED									
			10/83			11/83			12/83			
RIVER/LOCK NAME	TONS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LOCKGS	LCKGES	LCKGES	LCKGES	TONNAGE
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	CONNER	RECRTN	OTHER	TOTAL	(KTONS)
(NAV, OPN, ETC)												
LAKE WASHINGTON SHP CA												
HIRAM M CHITTENDEN LOCKS		XXX										
UPBOUND STATISTICS	202	1063	628	1893	51	187	238	488	29	46	563	324
DOWNBOUND STATISTICS	247	715	864	1826	175	276	451	459	34	48	541	114
TOTALS	449	1778	1492	3719	226	463	689	947	63	94	1104	439
HIRAM M CHITTENDEN LOCKS AUX1		XXX										
UPBOUND STATISTICS	50	2443	1020	3513	27	24	51	1163	648	97	1908	0
DOWNBOUND STATISTICS	45	2733	747	3525	28	17	45	965	779	94	1838	0
TOTALS	95	5176	1767	7038	55	41	96	2128	1427	191	3746	0

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

ERDC 63	DISTRICT NAME			DIVISION NAME			MONTHS REPORTED		
	SEATTLE			NORTH PACIFIC			10/83	11/83	12/83

ALL TIMES EXPRESSED IN MINUTES													
APPROACH			LOCK PROCESSING TIME			EXIT			: DELAYED DELAY			DELAY	DELAY
			ENTRY			CHAMBER			: TONS			TIME	AVG
MIN			MIN			MIN			: TONS			(TONS)	(ALL VSSLS)

LAKE WASHINGTON SHIP CA

HIRAM N CHITTENDEN LOCKS	1	3	25	1	4	68	2	15	89	1	5	56 :	422	9879	23.4	485
HIRAM N CHITTENDEN LOCKS AUX	1	1	10	1	2	23	1	4	73	1	5	35 :	15	108	7.2	121

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
CA	WALLA WALLA	NORTH PACIFIC	10/83	11/83	12/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
COLUMBIA RIVER	24-MCNARY LOCK & DAM	0650/0084/14.0
SHAKE RIVER	01-ICE HARBOR LOCK & DAM	0650/0084/14.0
	02-LOWER MONUMENTAL LOCK & DAM	0650/0084/14.0
	03-LITTLE GOOSE LOCK & DAM	0650/0084/14.0
	04-LOWER GRANITE LOCK & DAM	0650/0084/14.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC C4	DISTRICT NAME WALLA WALLA	DIVISION NAME NORTH PACIFIC	MONTHS REPORTED										
			10/83			11/83			12/83				
RIVER/LOCK NAME		TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS CONNER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
COLUMBIA RIVER													
MCNARY LOCK & DAM		xxx											
UPBOUND STATISTICS		203	7	5	215	402	275	677	209	5	2	216	445
DOWNBOUND STATISTICS		203	8	7	218	69	617	686	213	5	1	219	1543
TOTALS		406	15	12	433	471	892	1363	422	10	3	435	1988
SNAKE RIVER													
ICE HARBOR LOCK & DAM		xxx											
UPBOUND STATISTICS		193	21	57	271	435	44	479	242	14	1	257	23
DOWNBOUND STATISTICS		228	20	23	271	6	480	486	246	14	0	260	1236
TOTALS		421	41	80	542	441	524	965	488	28	1	517	1259
LOWER MONUMENTAL LOCK & DAM		xxx											
UPBOUND STATISTICS		135	4	3	142	388	44	432	141	3	3	147	19
DOWNBOUND STATISTICS		138	5	1	144	6	433	439	141	4	4	149	1091
TOTALS		273	9	4	286	394	477	871	282	7	7	296	1111
LITTLE GOOSE LOCK & DAM		xxx											
UPBOUND STATISTICS		134	8	2	144	375	44	419	139	6	4	149	22
DOWNBOUND STATISTICS		138	12	2	152	8	418	426	142	8	5	155	1045
TOTALS		272	20	4	296	383	462	845	281	14	9	304	1068
LOWER GRANITE LOCK & DAM		xxx											
UPBOUND STATISTICS		129	14	4	147	250	40	290	136	14	10	160	18
DOWNBOUND STATISTICS		127	13	9	149	9	282	291	138	10	8	156	644
TOTALS		256	27	13	296	259	322	581	274	24	18	316	662

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC C4	DISTRICT NAME HALLA HALLA	DIVISION NAME NORTH PACIFIC	MONTHS REPORTED																
			10/83				11/83				12/83								
			ALL TIMES EXPRESSED IN MINUTES																
			APPROACH			LOCK ENTRY			PROCESSING TIME CHAMBER			EXIT			: DELAYED TONS		DELAY TIME (TONS)	DELAY AVG (TONS)	DELAY MAX (ALL VSSLS)
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:							
COLUMBIA RIVER																			
MCNARY LOCK & DAM			1	5	24	1	6	25	10	16	40	1	7	18	:	405	2330	5.8	60
SNAKE RIVER																			
ICE HARBOR LOCK & DAM			1	3	15	1	4	18	10	23	51	1	4	15	:	421	2084	5.0	68
LOWER MONUMENTAL LOCK & DAM			1	4	24	1	5	25	12	23	38	1	4	13	:	273	1485	5.4	50
LITTLE GOOSE LOCK & DAM			1	4	21	1	4	19	11	19	50	1	5	23	:	272	1215	4.5	40
LOWER GRANITE LOCK & DAM			1	3	20	2	5	23	9	11	38	2	4	11	:	256	1112	4.3	47

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

PAGE 44

EROC H1	DISTRICT NAME HUNTINGTON	DIVISION NAME OHIO RIVER	MONTHS REPORTED		
			10/83	11/83	12/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
KANAWHA RIVER	01-MINFIELD LOCKS & DAM MAIN 1	0360/0056/12.0
	01-MINFIELD LOCKS & DAM MAIN 2	0360/0056/12.0
	02-MARHET LOCKS & DAM MAIN 1	0360/0056/12.0
	02-MARHET LOCKS & DAM MAIN 2	0360/0056/12.0
	03-LONDON LOCKS & DAM MAIN 1	0360/0056/12.0
	03-LONDON LOCKS & DAM MAIN 2	0360/0056/12.0
OHIO RIVER	21-BELLEVILLE LOCKS & DAM	1200/0110/12.0
	21-BELLEVILLE LOCKS & DAM AUX 1	0600/0110/12.0
	22-RACINE LOCKS & DAM	1200/0110/12.0
	22-RACINE LOCKS & DAM AUX 1	0600/0110/12.0
	23-GALLIPOLIS LOCKS & DAM	0600/0110/12.0
	23-GALLIPOLIS LOCKS & DAM AUX 1	0360/0110/12.0
	24-GREENUP LOCKS & DAM	1200/0110/12.0
	24-GREENUP LOCKS & DAM AUX 1	0600/0110/12.0
	25-CAPT ANT MELDAHL LOCKS & DAM	1200/0110/12.0
	25-CAPT ANT MELDAHL LK&DAM AUX 1	0600/0110/12.0
	72-WILLOW ISLAND LOCKS & DAM	1200/0110/12.0
	72-WILLOW ISLAND LOCKS & DAM AUX	0600/0110/12.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC H1	DISTRICT NAME HUNTINGTON	DIVISION NAME OHIO RIVER	MONTHS REPORTED											
			10/83		11/83		12/83							
RIVER/LOCK NAME														
		TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)	
(NAV, OPN, ETC)														
KANAWHA RIVER														
WINFIELD LOCKS & DAM MAIN 1		xxx												
UPBOUND STATISTICS		239	2	12	253	842	546	1368	914	3	11	928	837	
DOWNBOUND STATISTICS		253	2	6	261	331	1240	1571	966	0	3	969	1377	
TOTALS		492	4	18	514	1173	1786	2959	1880	3	14	1897	2214	
WINFIELD LOCKS & DAM MAIN 2		xxx												
UPBOUND STATISTICS		221	12	13	246	859	413	1272	740	15	12	767	504	
DOWNBOUND STATISTICS		201	11	18	230	465	611	1076	683	22	18	723	706	
TOTALS		422	23	31	476	1324	1024	2348	1423	37	30	1490	1211	
MARNET LOCKS & DAM MAIN 1		xxx												
UPBOUND STATISTICS		33	1	3	37	115	18	133	99	2	0	101	29	
DOWNBOUND STATISTICS		31	1	7	39	7	133	140	115	3	0	118	165	
TOTALS		64	2	10	76	122	151	273	214	5	0	219	195	
MARNET LOCKS & DAM MAIN 2		xxx												
UPBOUND STATISTICS		315	6	27	348	1244	213	1457	974	14	5	993	251	
DOWNBOUND STATISTICS		309	6	37	352	179	1263	1442	978	11	0	989	1461	
TOTALS		624	12	64	700	1423	1476	2899	1952	25	5	1982	1712	
LONDON LOCKS & DAM MAIN 1		xxx												
UPBOUND STATISTICS		30	1	6	37	79	0	79	59	1	1	61	0	
DOWNBOUND STATISTICS		40	0	2	42	0	112	112	66	0	1	67	117	
TOTALS		70	1	8	79	79	112	191	125	1	2	128	117	
LONDON LOCKS & DAM MAIN 2		xxx												
UPBOUND STATISTICS		136	6	12	154	359	6	365	239	9	1	249	5	
DOWNBOUND STATISTICS		133	5	7	145	2	337	339	237	8	1	246	389	
TOTALS		269	11	19	299	361	343	704	476	17	2	495	394	
OHIO RIVER														
BELLEVILLE LOCKS & DAM		xxx												
UPBOUND STATISTICS		406	0	6	412	908	3475	4383	409	0	2	411	5006	
DOWNBOUND STATISTICS		378	2	12	392	1771	2405	4176	382	0	0	382	3567	
TOTALS		784	2	18	804	2679	5880	8559	791	0	2	793	8573	

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

ERDC H1	DISTRICT NAME HUNTINGTON	DIVISION NAME OHIO RIVER						MONTHS REPORTED				
								10/83	11/83		12/83	
RIVER/LOCK NAME	TONS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LOCKGS	LOCKGS	LOCKGS	LOCKGS	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL		TOTAL	CONRR	RECRTN	OTHER	
(NAV, OPN, ETC)												
OHIO RIVER												
BELLEVILLE LOCKS & DAM AUX 1	XXX											
UPBOUND STATISTICS	30	17	6	53	26	59	85	37	12	4	53	62
DOWNBOUND STATISTICS	47	25	12	84	90	51	141	59	17	3	79	45
TOTALS	77	42	18	137	116	110	226	96	29	7	132	107
RACINE LOCKS & DAM	XXX											
UPBOUND STATISTICS	444	1	9	454	1239	3540	4779	446	0	3	449	5122
DOWNBOUND STATISTICS	404	1	10	415	1760	2691	4451	408	0	1	409	3751
TOTALS	848	2	19	869	2999	6231	9230	854	0	4	858	8873
RACINE LOCKS & DAM AUX 1	XXX											
UPBOUND STATISTICS	38	21	8	67	92	36	128	50	14	1	65	62
DOWNBOUND STATISTICS	63	23	9	95	108	107	215	74	17	2	93	100
TOTALS	101	44	17	162	200	143	343	124	31	3	158	162
CALLIPOLIS LOCKS & DAM	XXX											
UPBOUND STATISTICS	451	1	20	472	860	3344	4204	735	0	3	738	5053
DOWNBOUND STATISTICS	420	4	24	448	1703	2255	3958	702	1	1	704	3256
TOTALS	871	5	44	920	2563	5599	8162	1457	1	4	1462	8309
CALLIPOLIS LOCKS & DAM AUX 1	XXX	ONLY FIRST AND SECOND MONTHS REPORTED										
UPBOUND STATISTICS	22	15	8	45	34	45	79	37	16	6	59	74
DOWNBOUND STATISTICS	28	18	16	62	59	36	95	55	21	4	80	44
TOTALS	50	33	24	107	93	81	174	92	37	10	139	119
GREENUP LOCKS & DAM	XXX											
UPBOUND STATISTICS	511	0	6	517	3330	1815	5145	515	0	0	515	2793
DOWNBOUND STATISTICS	484	0	5	489	741	4093	4834	486	0	0	486	6111
TOTALS	995	0	11	1006	4071	5908	9979	1001	0	0	1001	8905
GREENUP LOCKS & DAM AUX 1	XXX											
UPBOUND STATISTICS	70	222	38	330	111	47	158	109	109	0	218	65
DOWNBOUND STATISTICS	82	169	43	294	115	77	192	127	94	1	222	109
TOTALS	152	391	81	624	226	124	350	236	203	1	440	175

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC H1	DISTRICT NAME HUNTINGTON	DIVISION NAME OHIO RIVER		MONTHS REPORTED								
				10/83	11/83	12/83						
RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)												
OHIO RIVER												
CAPT ANT MELDAHL LOCKS & DAM	XXX											
UPBOUND STATISTICS	497	0	9	506	2971	2170	5141	499	0	0	499	3374
DOWNBOUND STATISTICS	473	1	6	480	766	4184	4950	476	0	0	476	6248
TOTALS	970	1	15	986	3737	6354	10091	975	0	0	975	9623
CAPT ANT MELDAHL LK&DAM AUX 1	XXX											
UPBOUND STATISTICS	28	108	6	142	43	31	74	37	69	1	107	52
DOWNBOUND STATISTICS	48	148	9	205	80	53	133	58	96	0	154	63
TOTALS	76	256	15	347	123	84	207	95	165	1	261	116
WILLOW ISLAND LOCKS & DAM	XXX											
UPBOUND STATISTICS	404	1	5	410	1116	3196	4312	406	1	0	407	4449
DOWNBOUND STATISTICS	383	0	1	384	1525	2540	4065	385	0	0	385	3587
TOTALS	787	1	6	794	2641	5736	8377	791	1	0	792	8036
WILLOW ISLAND LOCKS & DAM AUX	XXX											
UPBOUND STATISTICS	57	18	24	99	145	35	180	86	13	2	101	42
DOWNBOUND STATISTICS	81	25	16	122	109	149	258	101	20	1	122	120
TOTALS	138	43	40	221	254	184	438	187	33	3	223	162

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC H1	DISTRICT NAME HUNTINGTON	DIVISION NAME OHIO RIVER	MONTHS REPORTED												10/83	11/83	12/83			
			ALL TIMES EXPRESSED IN MINUTES																	
			APPROACH			LOCK ENTRY			PROCESSING TIME			CHAMBER						EXIT		
MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	TONS	(TOMS)	(TOMS)	(ALL VSSLS)	
KANAWHA RIVER																				
WINFIELD LOCKS & DAM MAIN 1		1	1	11	95	1	4	39	5	10	30	1	12	66	:	258	33957	131.6	752	
WINFIELD LOCKS & DAM MAIN 2		1	1	11	140	1	4	35	5	10	41	1	11	108	:	179	22427	125.3	500	
HARMET LOCKS & DAM MAIN 1		1	1	9	37	1	4	14	5	8	21	2	9	37	:	24	2565	106.9	270	
HARMET LOCKS & DAM MAIN 2		1	1	9	62	1	4	23	5	8	30	2	10	50	:	356	72535	203.8	930	
LONDON LOCKS & DAM MAIN 1		1	1	8	24	1	5	13	7	10	20	2	7	24	:	11	2058	187.1	486	
LONDON LOCKS & DAM MAIN 2		1	1	9	47	1	5	20	6	9	29	2	7	28	:	51	12162	238.5	541	
OHIO RIVER																				
BELLEVILLE LOCKS & DAM		1	1	18	57	1	9	30	6	12	32	1	8	32	:	252	9830	39.0	227	
BELLEVILLE LOCKS & DAM AUX 1		1	1	15	36	1	4	18	9	12	22	1	4	11	:	0	0	0.0	6	
RACINE LOCKS & DAM		1	1	17	622	1	11	45	8	11	45	2	9	38	:	302	19365	64.1	975	
RACINE LOCKS & DAM AUX 1		2	2	12	40	2	6	16	7	10	22	2	6	13	:	3	45	15.0	25	
GALLIPOLIS LOCKS & DAM		1	1	10	107	2	12	95	5	11	25	2	18	90	:	602	117262	194.8	1330	
GALLIPOLIS LOCKS & DAM AUX 1		1	1	6	30	2	7	31	5	12	21	2	9	48	:	10	2465	246.5	740	
GREENUP LOCKS & DAM		1	1	16	60	2	10	28	7	11	23	2	9	26	:	358	17295	48.3	558	
GREENUP LOCKS & DAM AUX 1		1	1	8	38	1	4	22	6	10	15	1	5	18	:	7	96	13.7	25	
CAPT AMT MELDAHL LOCKS & DAM		1	1	19	58	1	10	30	7	13	27	2	11	30	:	414	24623	59.5	270	

EROC
H1

DISTRICT NAME
HUNTINGTON

DIVISION NAME
OHIO RIVER

MONTHS REPORTED		
10/83	11/83	12/83

ALL TIMES EXPRESSED IN MINUTES																		
APPROACH			LOCK PROCESSING TIME									: DELAYED DELAY		DELAY	DELAY			
			ENTRY			CHAMBER			EXIT			: TONS		TIME	AVG	MAX		
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:		(TONS)	(TONS)	(ALL VSSLS)		
OHIO RIVER																		
CAPT ANT MELDAHL LK&DAM AUX			1	9	40	1	3	26	6	13	34	1	5	20 :	2	1480	740.0	1440
WILLOW ISLAND LOCKS & DAM			1	16	60	2	8	31	6	13	42	1	9	35 :	239	10572	44.2	231
WILLOW ISLAND LOCKS & DAM AU			1	12	45	1	3	15	8	13	25	1	6	15 :	7	244	34.9	51

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

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EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H2	LOUISVILLE	OHIO RIVER	10/83	11/83	12/83

RIVER	LCODE-LOCK NAME	LEN/MID/DRAFT (FT/FT/FT)
GREEN/BARREN RIVER	21-LOCK & DAM 1	0600/0004/12.0
	22-LOCK & DAM 2	0600/0004/12.0
	23-LOCK & DAM 3	0138/0036/12.0
OHIO RIVER	41-HARKLAND LOCKS & DAM	1200/0110/12.0
	41-HARKLAND LOCKS & DAM AUX 1	0600/0110/12.0
	42-MCALPINE LOCKS & DAM	1200/0110/12.0
	42-MCALPINE LOCKS & DAM AUX 1	0600/0110/12.0
	50-LOCK & DAM 50	0600/0110/12.0
	51-LOCK & DAM 51	0600/0110/12.0
	52-LOCK & DAM 52	1200/0110/12.0
	52-LOCK & DAM 52 AUX 1	0600/0110/12.0
	53-LOCK & DAM 53	0600/0110/12.0
	75-CANNELTON LOCK & DAM	1200/0110/12.0
	75-CANNELTON LOCK & DAM AUX	0600/0110/12.0
	76-HEMBURGH LOCK & DAM	1200/0110/12.0
	76-HEMBURGH LOCK & DAM AUX 1	0600/0110/12.0
	77-UNIONTOWN LOCK & DAM	1200/0110/12.0
	77-UNIONTOWN LOCK & DAM AUX 1	0600/0110/12.0
	78-SKITHLAND LOCK & DAM	1200/0110/12.0
	78-SKITHLAND LOCK & DAM AUX 1	1200/0110/12.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC H2	DISTRICT NAME LOUISVILLE	DIVISION NAME OHIO RIVER	MONTHS REPORTED									
			10/83			11/83			12/83			
RIVER/LOCK NAME	TOMS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGS	LOCKGS	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	CONNER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)												
GREEN/BARREN RIVER												
LOCK & DAM 1	XXX											
UPBOUND STATISTICS	485	16	10	511	1622	174	1796	434	8	61	503	256
DOWNBOUND STATISTICS	474	17	15	506	115	1657	1772	438	9	53	500	2485
TOTALS	959	33	25	1017	1737	1831	3568	872	17	114	1003	2741
LOCK & DAM 2	XXX											
UPBOUND STATISTICS	372	15	3	390	1401	14	1415	375	11	0	386	18
DOWNBOUND STATISTICS	368	13	12	393	16	1401	1417	381	10	0	391	2080
TOTALS	740	28	15	783	1417	1415	2832	756	21	0	777	2098
LOCK & DAM 3	NO DATA RECORDED FOR THIS LOCK											
OHIO RIVER												
MARKLAND LOCKS & DAM	XXX											
UPBOUND STATISTICS	504	0	4	508	2420	2675	5095	507	0	0	507	4228
DOWNBOUND STATISTICS	477	4	3	484	1071	3734	4805	481	2	0	483	5667
TOTALS	981	4	7	992	3491	6409	9900	988	2	0	990	9895
MARKLAND LOCKS & DAM AUX 1	XXX											
UPBOUND STATISTICS	32	216	10	258	41	32	73	43	96	3	142	57
DOWNBOUND STATISTICS	42	244	21	307	80	23	103	59	123	2	184	34
TOTALS	74	460	31	565	121	55	176	102	219	5	326	91
MCALPINE LOCKS & DAM	XXX											
UPBOUND STATISTICS	556	32	75	663	1850	3295	5145	609	12	2	623	5184
DOWNBOUND STATISTICS	575	64	57	696	1464	3482	4946	613	33	2	648	5259
TOTALS	1131	96	132	1359	3314	6777	10091	1222	45	4	1271	10443
MCALPINE LOCKS & DAM AUX 1	NO DATA RECORDED FOR THIS LOCK											

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC H2	DISTRICT NAME LOUISVILLE	DIVISION NAME OHIO RIVER						MONTHS REPORTED				
								10/83	11/83		12/83	
RIVER/LOCK NAME	TONS	VESSEL	VESSEL	VESSEL	BARGES	BARGES	BARGES	LOCKS	LOCKS	LOCKS	LOCKS	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	CONNER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)												
OHIO RIVER												
LOCK & DAM 50	NO DATA RECORDED FOR THIS LOCK											
LOCK & DAM 51	NO DATA RECORDED FOR THIS LOCK											
LOCK & DAM 52	XXX											
UPBOUND STATISTICS	891	2	79	972	4923	4472	9395	289	0	643	932	6895
DOWNBOUND STATISTICS	895	8	88	991	2397	6582	8979	320	2	643	965	9417
TOTALS	1786	10	167	1963	7320	11054	18374	609	2	1286	1897	16313
LOCK & DAM 52 AUX 1	XXX	ONLY FIRST AND SECOND MONTHS REPORTED										
UPBOUND STATISTICS	200	9	47	256	365	547	912	239	6	2	247	923
DOWNBOUND STATISTICS	173	20	39	232	218	573	791	207	14	2	223	877
TOTALS	373	29	86	488	583	1120	1703	446	20	4	470	1800
LOCK & DAM 53	NO DATA RECORDED FOR THIS LOCK											
CANNELTON LOCK & DAM	XXX											
UPBOUND STATISTICS	535	7	6	548	1855	3480	5335	540	2	0	542	5443
DOWNBOUND STATISTICS	509	2	6	517	1423	3716	5139	515	0	0	515	5401
TOTALS	1044	9	12	1065	3278	7196	10474	1055	2	0	1057	10844
CANNELTON LOCK & DAM AUX	XXX											
UPBOUND STATISTICS	31	25	11	67	113	15	128	43	12	3	58	21
DOWNBOUND STATISTICS	51	60	10	121	56	107	163	59	32	2	93	137
TOTALS	82	85	21	188	169	122	291	102	44	5	151	158
NEMBURGH LOCK & DAM	XXX											
UPBOUND STATISTICS	635	8	20	663	2656	3575	6231	640	2	2	644	5642
DOWNBOUND STATISTICS	617	20	29	666	1816	4145	5961	622	4	0	626	5965
TOTALS	1252	28	49	1329	4472	7720	12192	1262	6	2	1270	11608
NEMBURGH LOCK & DAM AUX 1	XXX											
UPBOUND STATISTICS	71	166	53	290	65	133	198	108	79	1	188	213
DOWNBOUND STATISTICS	89	191	33	313	172	50	222	110	90	2	202	71
TOTALS	160	357	86	603	237	183	420	218	169	3	390	285

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC H2	DISTRICT NAME LOUISVILLE	DIVISION NAME OHIO RIVER	MONTHS REPORTED									
			10/83			11/83			12/83			
RIVER/LOCK NAME	TONS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LOCKGS	LCKGES	LCKGES	LCKGES	TONNAGE
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	(KTONS)
(NAV, OPN, ETC)												
OHIO RIVER												
UNIONTOWN LOCK & DAM	xxx											
UPBOUND STATISTICS	688	26	31	745	4375	3076	7451	690	3	1	694	4939
DOWNBOUND STATISTICS	654	10	14	678	1374	5686	7060	660	2	2	664	8458
TOTALS	1342	36	45	1423	5749	8762	14511	1350	5	3	1358	13397
UNIONTOWN LOCK & DAM AUX 1	xxx											
UPBOUND STATISTICS	40	173	17	230	93	25	118	54	135	2	191	40
DOWNBOUND STATISTICS	34	193	45	272	63	24	87	64	152	1	217	33
TOTALS	74	366	62	502	156	49	205	118	287	3	408	73
SMITHLAND LOCK & DAM	xxx											
UPBOUND STATISTICS	135	9	18	162	671	380	1051	147	6	8	161	612
DOWNBOUND STATISTICS	680	59	43	782	1063	5913	6976	705	31	13	749	8887
TOTALS	815	68	61	944	1734	6293	8027	852	37	21	910	9500
SMITHLAND LOCK & DAM AUX 1	xxx											
UPBOUND STATISTICS	705	55	33	793	4766	2723	7489	720	18	10	748	4383
DOWNBOUND STATISTICS	133	23	15	171	325	934	1259	145	17	7	169	1424
TOTALS	838	78	48	964	5091	3657	8748	865	35	17	917	5808

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

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EROC H2	DISTRICT NAME LOUISVILLE			DIVISION NAME OHIO RIVER			MONTHS REPORTED											
							10/83					11/83					12/83	
							ALL TIMES EXPRESSED IN MINUTES											
APPROACH			LOCK ENTRY			PROCESSING TIME CHAMBER			EXIT			:	DELAYED TONS	DELAY TIME	DELAY AVG	DELAY MAX		
MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	(TONS)	(TONS)	(ALL VSSLS)
GREEN/BARREN RIVER																		
LOCK & DAM 1	1	5	65	1	3	10	1	7	69	1	4	50	:	123	2576	20.9	106	
LOCK & DAM 2	1	4	22	1	3	15	5	11	77	1	4	27	:	108	3407	31.5	1240	
LOCK & DAM 3	NO DATA RECORDED FOR THIS LOCK																	
OHIO RIVER																		
MARKLAND LOCKS & DAM	1	23	102	1	8	50	3	13	44	2	9	70	:	450	27222	60.5	661	
MARKLAND LOCKS & DAM AUX 1	1	10	81	1	3	24	5	12	22	1	5	15	:	5	115	23.0	75	
MCALPINE LOCKS & DAM	1	18	115	1	9	37	5	12	45	1	8	66	:	602	34339	57.0	743	
MCALPINE LOCKS & DAM AUX 1	NO DATA RECORDED FOR THIS LOCK																	
LOCK & DAM 50	NO DATA RECORDED FOR THIS LOCK																	
LOCK & DAM 51	NO DATA RECORDED FOR THIS LOCK																	
LOCK & DAM 52	1	5	95	1	6	32	1	7	80	1	8	75	:	584	431596	739.0	6680	
LOCK & DAM 52 AUX 1	1	12	88	1	11	50	5	15	55	1	12	100	:	250	209423	837.7	5910	
LOCK & DAM 53	NO DATA RECORDED FOR THIS LOCK																	
CANNELTON LOCK & DAM	1	26	110	2	7	30	5	11	50	1	8	40	:	491	31593	64.3	425	
CANNELTON LOCK & DAM AUX	1	20	85	1	4	20	5	10	21	1	4	25	:	6	456	76.0	160	
MEMBURGH LOCK & DAM	1	16	79	1	8	30	5	7	56	1	10	76	:	522	21132	40.5	230	

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC H2	DISTRICT NAME LOUISVILLE	DIVISION NAME OHIO RIVER	MONTHS REPORTED												10/83	11/83	12/83					
			ALL TIMES EXPRESSED IN MINUTES																			
			APPROACH			LOCK ENTRY			PROCESSING TIME CHAMBER			EXIT			:	DELAYED TONS	DELAY TIME (TONS)	DELAY AVG (TONS)	DELAY MAX (ALL VSSLS)			
			MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:				
OHIO RIVER																						
MEMBURGH LOCK & DAM AUX 1			1	9	44	:	1	3	25	:	5	7	12	:	1	5	20	:	6	69	11.5	25
UNIONTOWN LOCK & DAM			1	19	103	:	1	7	30	:	5	9	70	:	1	7	65	:	608	29429	48.4	279
UNIONTOWN LOCK & DAM AUX 1			1	6	52	:	1	2	15	:	5	9	23	:	1	2	25	:	1	89	89.0	89
SMITHLAND LOCK & DAM			1	17	115	:	1	9	25	:	5	10	65	:	1	8	85	:	133	38765	291.5	2445
SMITHLAND LOCK & DAM AUX 1			1	14	225	:	1	9	30	:	1	11	800	:	1	8	70	:	131	30287	231.2	2495

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC K3	DISTRICT NAME NASHVILLE	DIVISION NAME OHIO RIVER	MONTHS REPORTED		
			10/83	11/83	12/83
RIVER	LCODE-LOCK NAME		LEN/WID/DRAFT (FT/FT/FT)		
CLINCH RIVER	11-MELTON HILL LOCK		0400/0075/11.0		
CUMBERLAND RIVER	21-BARKLEY LOCK		0800/0110/11.0		
	22-CHEATHAM LOCK		0800/0110/11.0		
	23-CORDELL HULL LOCK		0400/0084/11.0		
	24-OLD HICKORY LOCK		0400/0084/11.0		
TENNESSEE RIVER	01-KENTUCKY LOCK		0600/0110/11.0		
	02-PICKWICK LANDING LOCK		1000/0110/11.0		
	02-PICKWICK LANDING LOCK AUX		0600/0110/11.0		
	03-WILSON LOCK		0600/0110/11.0		
	03-WILSON LOCK AUX		0292/0060/11.0		
	04-GEN JOS WHEELER LOCK		0600/0110/11.0		
	04-GEN JOS WHEELER LK	AUX1	0400/0060/11.0		
	05-GUNTERSVILLE LOCK		0600/0110/11.0		
	05-GUNTERSVILLE LOCK	AUX 1	0360/0060/11.0		
	06-HICKAJAC LOCK		0600/0110/11.0		
	07-CHICKAMAUGA LOCK		0360/0060/11.0		
	08-HATTS BAR LOCK		0360/0060/11.0		
	09-FORT LOUDON LOCK		0360/0060/11.0		

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC H3	DISTRICT NAME NASHVILLE				DIVISION NAME OHIO RIVER				MONTHS REPORTED				
									10/83	11/83	12/83		
RIVER/LOCK NAME													
TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS CONNER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL	TONNAGE (KTONS)		
(NAV, OPN, ETC)													
CLINCH RIVER													
MELTON HILL LOCK	XXX												
UPBOUND STATISTICS	1	1	1	3	1	0	1	3	0	3	6	0	
DOWNBOUND STATISTICS	1	2	1	4	0	1	1	3	1	3	7	0	
TOTALS	2	3	2	7	1	1	2	6	1	6	13	0	
CUMBERLAND RIVER													
BARKLEY LOCK	XXX												
UPBOUND STATISTICS	44	31	4	79	10	299	309	52	20	5	77	431	
DOWNBOUND STATISTICS	90	34	5	129	715	20	735	121	28	5	154	29	
TOTALS	134	65	9	208	725	319	1044	173	48	10	231	461	
CHEATHAM LOCK	XXX												
UPBOUND STATISTICS	103	48	0	151	21	556	577	113	40	5	158	864	
DOWNBOUND STATISTICS	100	38	6	144	546	32	578	116	31	5	152	43	
TOTALS	203	86	6	295	567	588	1155	229	71	10	310	908	
CORDELL HULL LOCK	NO DATA RECORDED FOR THIS LOCK												
OLD HICKORY LOCK	XXX												
UPBOUND STATISTICS	42	112	13	167	9	92	101	64	75	6	145	147	
DOWNBOUND STATISTICS	32	112	21	165	88	2	90	64	78	9	151	38	
TOTALS	74	224	34	332	97	94	191	128	153	15	296	185	
TENNESSEE RIVER													
KENTUCKY LOCK	XXX												
UPBOUND STATISTICS	449	24	52	525	989	3290	4279	753	26	9	788	4861	
DOWNBOUND STATISTICS	391	14	53	458	2448	1342	3790	653	17	7	677	1812	
TOTALS	840	38	105	983	3437	4632	8069	1406	43	16	1465	6673	

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EMC #3	DISTRICT NAME NASHVILLE	DIVISION NAME OHIO RIVER	MONTHS REPORTED										
			10/83		11/83		12/83						
RIVER/LOCK NAME		TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)													
TENNESSEE RIVER													
PICKWICK LANDING LOCK		XXX											
UPBOUND STATISTICS		242	37	18	297	220	2385	2605	410	43	34	487	3429
DOWNBOUND STATISTICS		229	26	18	273	1887	522	2409	388	34	36	458	736
TOTALS		471	63	36	570	2107	2907	5014	798	77	70	945	4166
PICKWICK LANDING LOCK AUX		NO DATA RECORDED FOR THIS LOCK											
WILSON LOCK		XXX											
UPBOUND STATISTICS		125	87	56	268	239	1071	1310	236	54	18	308	1508
DOWNBOUND STATISTICS		136	82	46	264	716	483	1199	232	57	13	302	644
TOTALS		261	169	102	532	955	1554	2509	468	111	31	610	2173
WILSON LOCK AUX		NO DATA RECORDED FOR THIS LOCK											
GEN JOS WHEELER LOCK		XXX											
UPBOUND STATISTICS		123	65	4	192	219	1050	1269	191	58	8	257	1471
DOWNBOUND STATISTICS		118	42	6	166	745	450	1151	179	53	7	239	622
TOTALS		241	107	10	358	964	1500	2420	370	111	15	496	2094
GEN JOS WHEELER LK		AUX1	XXX										
UPBOUND STATISTICS		0	28	0	28	0	0	0	0	21	0	21	0
DOWNBOUND STATISTICS		0	48	0	48	0	0	0	0	28	0	28	0
TOTALS		0	76	0	76	0	0	0	0	49	0	49	0
GINTERSVILLE LOCK		XXX											
UPBOUND STATISTICS		135	126	1	262	342	809	1151	189	83	5	277	1153
DOWNBOUND STATISTICS		135	133	4	272	574	520	1094	181	94	2	277	678
TOTALS		270	259	5	534	916	1329	2245	370	177	7	554	1831
GINTERSVILLE LOCK		AUX 1	XXX										
UPBOUND STATISTICS		0	67	0	67	0	0	0	1	52	0	53	0
DOWNBOUND STATISTICS		0	60	0	60	0	0	0	0	45	0	45	0
TOTALS		0	127	0	127	0	0	0	1	97	0	98	0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC H3	DISTRICT NAME NASHVILLE	DIVISION NAME OHIO RIVER	MONTHS REPORTED											
			10/83			11/83			12/83					
RIVER/LOCK NAME			TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCKGS CONNER	LCKGES RECRTN	LCKGES OTHER (NAV, OPN, ETC)	LCKGES TOTAL	TONNAGE (KTONS)
TENNESSEE RIVER														
NICKAJAC LOCK			XXX											
UPBOUND STATISTICS			143	91	10	244	375	653	1028	192	47	3	242	882
DOWNBOUND STATISTICS			144	107	13	264	532	499	1031	197	56	1	254	678
TOTALS			287	198	23	508	907	1152	2059	389	103	4	496	1561
CHICKAMAUGA LOCK			XXX											
UPBOUND STATISTICS			52	447	3	502	53	231	284	117	234	118	469	317
DOWNBOUND STATISTICS			51	463	7	521	179	107	286	117	250	112	479	149
TOTALS			103	910	10	1023	232	338	570	234	484	230	948	466
WATTS BAR LOCK			XXX											
UPBOUND STATISTICS			42	57	0	99	72	86	158	101	100	10	211	135
DOWNBOUND STATISTICS			42	64	1	107	48	114	162	99	105	12	216	148
TOTALS			84	121	1	206	120	200	320	200	205	22	427	284
FORT LOUDON LOCK			XXX											
UPBOUND STATISTICS			30	45	3	78	15	53	68	54	55	11	120	91
DOWNBOUND STATISTICS			28	52	5	85	37	31	68	51	63	11	125	44
TOTALS			58	97	8	163	52	84	136	105	118	22	245	136

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC H3	DISTRICT NAME NASHVILLE	DIVISION NAME OHIO RIVER	MONTHS REPORTED																
			10/83					11/83					12/83						
			ALL TIMES EXPRESSED IN MINUTES																
			APPROACH			LOCK ENTRY			PROCESSING TIME CHAMBER			EXIT			: DELAYED DELAY		DELAY	DELAY	
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: TONS	TIME (TONS)	AVG (TONS)	MAX (ALL VSSLS)	
CLINCH RIVER																			
MELTON HILL LOCK			2	8	19	2	2	5	11	15	21	1	2	3	:	1	55	55.0	60
CUMBERLAND RIVER																			
BARKLEY LOCK			1	14	52	1	9	25	7	16	39	1	9	36	:	9	793	88.1	480
CHEATHAM LOCK			1	9	40	2	10	88	6	19	62	1	8	52	:	20	679	34.0	166
CORDELL HULL LOCK			NO DATA RECORDED FOR THIS LOCK																
OLD HICKORY LOCK			1	3	30	1	6	40	10	18	53	1	6	62	:	6	186	31.0	195
TENNESSEE RIVER																			
KENTUCKY LOCK			1	9	91	1	14	66	11	18	55	1	18	121	:	660	188518	285.6	1188
PICKWICK LANDING LOCK			1	9	128	2	13	75	9	17	173	1	20	406	:	252	41103	163.1	1005
PICKWICK LANDING LOCK AUX			NO DATA RECORDED FOR THIS LOCK																
WILSON LOCK			1	10	93	2	14	55	6	23	62	2	15	73	:	103	11891	115.4	487
WILSON LOCK AUX			NO DATA RECORDED FOR THIS LOCK																
GEN JOS WHEELER LOCK			1	14	86	3	14	48	6	14	27	1	18	92	:	64	5676	88.7	262
GEN JOS WHEELER LK	AUX		1	9	28	1	3	8	10	13	17	2	4	10	:	0	0	0.0	173
GUNTERSVILLE LOCK			1	10	98	1	10	192	6	15	30	1	15	199	:	68	5575	82.0	283
GUNTERSVILLE LOCK	AUX		1	3	14	1	2	19	6	13	23	1	2	5	:	0	0	0.0	18
NICKAJAC LOCK			1	10	99	1	11	52	6	14	26	1	13	69	:	81	6230	76.9	285

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC H3	DISTRICT NAME NASHVILLE			DIVISION NAME OHIO RIVER			MONTHS REPORTED														
							10/83					11/83					12/83				
							ALL TIMES EXPRESSED IN MINUTES														
APPROACH			LOCK ENTRY			PROCESSING TIME CHAMBER			EXIT			: DELAYED DELAY		DELAY	DELAY						
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: TONS	TIME	AVG	MAX						
															(TONS)	(TONS)	(ALL VSSLS)				
TENNESSEE RIVER																					
CHICKAWAUGA LOCK	1	4	75	1	5	37	8	13	35	1	6	78	:	35	8834	252.4	998				
WATTS BAR LOCK	1	8	75	1	5	20	11	16	23	1	9	58	:	15	1981	132.1	381				
FORT LOUDON LOCK	1	10	70	1	4	16	7	21	27	:	9	75	:	10	338	33.8	187				

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC HA	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER	MONTHS REPORTED		
			10/83	11/83	12/83
RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)			
ALLEGHENY RIVER	42-LOCK & DAM 2	0360/0056/13.0			
	43-LOCK & DAM 3	0360/0056/13.0			
	44-LOCK & DAM 4	0360/0056/13.0			
	45-LOCK & DAM 5	0360/0056/13.0			
	46-LOCK & DAM 6	0360/0056/13.0			
	47-LOCK & DAM 7	0360/0056/13.0			
	48-LOCK & DAM 8	0360/0056/13.0			
	49-LOCK & DAM 9	0360/0056/13.0			
MONONGAHELA RIVER	22-LOCK & DAM 2	0720/0110/13.0			
	22-LOCK & DAM 2 AUX 1	0360/0056/13.0			
	23-LOCK & DAM 3	0720/0056/13.0			
	23-LOCK & DAM 3 AUXILIARY 1	0360/0056/13.0			
	24-LOCK & DAM 4	0720/0056/13.0			
	24-LOCK & DAM 4 AUXILIARY 1	0360/0056/13.0			
	25-MAXWELL LOCK & DAM	0720/0084/13.0			
	25-MAXWELL LOCK & DAM AUX 1	0720/0084/13.0			
	27-LOCK & DAM 7	0360/0056/13.0			
	28-LOCK & DAM 8	0360/0056/13.0			
	29-MORGANTOWN LOCK & DAM	0600/0084/13.0			
	30-HILDEBRAND LOCK & DAM	0600/0084/13.0			
OHIO RIVER	31-OPEKISKA LOCK & DAM	0600/0084/13.0			
	01-ENSWORTH LOCK & DAM	0600/0110/13.0			
	01-ENSWORTH LOCK & DAM AUX 1	0360/0056/13.0			
	02-DASHIELDS LOCK & DAM	0600/0110/13.0			
	02-DASHIELDS LOCK & DAM AUX 1	0360/0056/13.0			
	03-MONTGOMERY LOCK & DAM	0600/0110/13.0			
	03-MONTGOMERY LOCK & DAM AUX 1	0360/0056/13.0			
	04-NEW CUMBERLAND LOCK & DAM	1200/0110/13.0			
	04-NEW CUMBERLAND LK & DAM AUX 1	0600/0110/13.0			
	05-PIKE ISLAND LOCK & DAM	1200/0110/13.0			
	05-PIKE ISLAND LOCK & DAM AUX 1	0600/0110/13.0			
	71-HANNIBAL LOCKS & DAM	1200/0110/13.0			
	71-HANNIBAL LOCKS & DAM AUX 1	0600/0110/13.0			

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC #4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER		MONTHS REPORTED								
				10/83			11/83			12/83		
RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)												
ALLEGHENY RIVER												
LOCK & DAM 2	XXX											
UPBOUND STATISTICS	228	221	20	469	385	286	671	347	144	2	493	313
DOWNBOUND STATISTICS	219	214	26	459	284	347	631	332	153	3	488	201
TOTALS	447	435	46	928	669	633	1302	679	297	5	981	515
LOCK & DAM 3	XXX											
UPBOUND STATISTICS	229	86	22	337	383	299	682	350	79	2	431	327
DOWNBOUND STATISTICS	226	90	24	340	305	349	654	338	84	2	424	199
TOTALS	455	176	46	677	688	648	1336	688	163	4	855	527
LOCK & DAM 4	XXX											
UPBOUND STATISTICS	188	80	24	292	621	68	689	259	66	2	327	89
DOWNBOUND STATISTICS	192	92	15	299	78	613	691	254	68	2	324	311
TOTALS	380	172	39	591	699	681	1380	513	134	4	651	401
LOCK & DAM 5	XXX											
UPBOUND STATISTICS	132	54	7	193	557	2	559	153	46	2	201	0
DOWNBOUND STATISTICS	136	64	2	202	20	551	571	157	51	2	210	233
TOTALS	268	118	9	395	577	553	1130	310	97	4	411	234
LOCK & DAM 6	XXX											
UPBOUND STATISTICS	131	41	10	182	550	3	553	155	32	2	189	0
DOWNBOUND STATISTICS	141	35	1	177	27	551	578	162	26	2	190	233
TOTALS	272	76	11	359	577	554	1131	317	58	4	379	233
LOCK & DAM 7	XXX											
UPBOUND STATISTICS	17	39	2	58	10	20	30	21	27	0	48	8
DOWNBOUND STATISTICS	14	35	3	52	20	8	28	19	21	0	40	3
TOTALS	31	74	5	110	30	28	58	40	48	0	88	11
LOCK & DAM 8	XXX ONLY FIRST AND SECOND MONTHS REPORTED											
UPBOUND STATISTICS	0	25	0	25	0	0	0	3	12	0	15	0
DOWNBOUND STATISTICS	0	27	0	27	0	0	0	2	16	1	19	0
TOTALS	0	52	0	52	0	0	0	5	28	1	34	0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC WA	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER	MONTHS REPORTED										
			10/83			11/83			12/83				
RIVER/LOCK NAME		TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS CONNER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)													
ALLEGHENY RIVER													
LOCK & DAM 9		XXX	ONLY FIRST MONTH REPORTED										
UPBOUND STATISTICS		0	12	0	12	0	0	0	0	9	0	9	0
DOWNBOUND STATISTICS		0	13	0	13	0	0	0	2	10	0	12	0
TOTALS		0	25	0	25	0	0	0	2	19	0	21	0
MONONGAHELA RIVER													
LOCK & DAM 2		XXX											
UPBOUND STATISTICS		444	0	3	447	1809	902	2711	472	0	1	473	1133
DOWNBOUND STATISTICS		446	0	1	447	466	2287	2753	472	0	0	472	2366
TOTALS		890	0	4	894	2275	3189	5464	944	0	1	945	3500
LOCK & DAM 2 AUX 1		XXX											
UPBOUND STATISTICS		145	43	62	250	108	107	215	212	32	3	247	80
DOWNBOUND STATISTICS		128	36	72	236	139	53	192	201	30	3	234	62
TOTALS		273	79	134	486	247	160	407	413	62	6	481	143
LOCK & DAM 3		XXX											
UPBOUND STATISTICS		819	0	8	827	3665	530	4195	820	0	0	820	614
DOWNBOUND STATISTICS		844	0	3	847	355	3861	4216	844	0	0	844	3832
TOTALS		1663	0	11	1674	4020	4391	8411	1664	0	0	1664	4446
LOCK & DAM 3 AUXILIARY 1		XXX											
UPBOUND STATISTICS		123	23	125	271	151	46	197	244	19	5	268	43
DOWNBOUND STATISTICS		105	22	117	244	46	101	147	219	18	4	241	103
TOTALS		228	45	242	515	197	147	344	463	37	9	509	147
LOCK & DAM 4		XXX											
UPBOUND STATISTICS		669	0	5	674	3290	435	3725	700	0	1	701	440
DOWNBOUND STATISTICS		716	0	1	717	263	3533	3796	734	0	0	734	3485
TOTALS		1385	0	6	1391	3553	3968	7521	1434	0	1	1435	3925

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC #4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER	MONTHS REPORTED										
			10/83			11/83			12/83				
RIVER/LOCK NAME		TOMS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS CONNER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
MONONGAMELA RIVER													
LOCK & DAM 4 AUXILIARY 1		***											
UPBOUND STATISTICS		62	32	54	148	99	16	115	117	25	4	146	14
DOWNBOUND STATISTICS		27	31	42	100	26	18	44	68	27	3	98	18
TOTALS		89	63	96	248	125	34	159	185	52	7	244	33
MAXWELL LOCK & DAM		***											
UPBOUND STATISTICS		548	46	6	600	2691	320	3011	554	29	4	587	340
DOWNBOUND STATISTICS		138	25	15	178	43	679	722	153	14	4	171	658
TOTALS		686	71	21	778	2734	999	3733	707	43	8	758	998
MAXWELL LOCK & DAM AUX 1		***											
UPBOUND STATISTICS		122	10	2	134	607	52	659	124	10	0	134	51
DOWNBOUND STATISTICS		507	24	7	538	163	2689	2852	513	16	0	529	2622
TOTALS		629	34	9	672	770	2741	3511	637	26	0	663	2674
LOCK & DAM 7		***											
UPBOUND STATISTICS		525	9	25	559	2225	312	2537	976	10	8	994	341
DOWNBOUND STATISTICS		517	11	29	557	226	2319	2545	988	16	7	1011	2186
TOTALS		1042	20	54	1116	2451	2631	5082	1964	26	15	2005	2527
LOCK & DAM 8		***											
UPBOUND STATISTICS		457	5	13	475	1923	308	2231	844	5	7	856	341
DOWNBOUND STATISTICS		454	8	20	482	217	2035	2252	858	10	7	875	1929
TOTALS		911	13	33	957	2140	2343	4483	1702	15	14	1731	2271
MORGANTOWN LOCK & DAM		***											
UPBOUND STATISTICS		46	15	7	68	197	10	207	53	14	4	71	9
DOWNBOUND STATISTICS		46	16	7	69	14	192	206	54	14	3	71	188
TOTALS		92	31	14	137	211	202	413	107	28	7	142	197
HILDEBRAND LOCK & DAM		***											
UPBOUND STATISTICS		23	13	9	45	53	10	63	31	13	3	47	9
DOWNBOUND STATISTICS		23	16	8	47	12	51	63	32	15	2	49	54
TOTALS		46	29	17	92	65	61	126	63	28	5	96	63

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

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ERDC W4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER	MONTHS REPORTED										
			10/83		11/83		12/83						
RIVER/LOCK NAME		TONS	VESSL RECTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCKCS CONNR	LCKGES RECTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)													
MONONGAHELA RIVER													
OPEKISKA LOCK & DAM		xxx											
UPBOUND STATISTICS		14	28	11	53	9	10	19	27	22	2	51	9
DOWNBOUND STATISTICS		15	28	10	53	13	8	21	27	23	2	52	7
TOTALS		29	56	21	106	22	18	40	54	45	4	103	16
OHIO RIVER													
ENSNORTH LOCK & DAM		xxx											
UPBOUND STATISTICS		560	19	62	641	1320	1790	3110	651	7	2	660	2029
DOWNBOUND STATISTICS		566	20	67	653	1248	1937	3185	652	12	4	668	2087
TOTALS		1126	39	129	1294	2568	3727	6295	1303	19	6	1328	4116
ENSNORTH LOCK & DAM AUX 1		xxx											
UPBOUND STATISTICS		66	5	32	103	66	52	118	108	5	7	120	50
DOWNBOUND STATISTICS		47	11	48	106	50	43	93	105	7	6	118	46
TOTALS		113	16	80	209	116	95	211	213	12	13	238	97
DASHIELDS LOCK & DAM		xxx											
UPBOUND STATISTICS		492	0	19	511	1361	1840	3201	560	0	4	564	2087
DOWNBOUND STATISTICS		500	0	20	520	1233	2071	3304	562	0	3	565	2244
TOTALS		992	0	39	1031	2594	3911	6505	1122	0	7	1129	4331
DASHIELDS LOCK & DAM AUX 1		xxx											
UPBOUND STATISTICS		105	22	77	204	73	88	161	185	16	6	207	92
DOWNBOUND STATISTICS		94	35	88	217	101	27	128	187	24	7	218	28
TOTALS		199	57	165	421	174	115	289	372	40	13	425	120
MONTGOMERY LOCK & DAM		xxx											
UPBOUND STATISTICS		431	2	28	461	1033	1877	2910	545	0	4	549	2281
DOWNBOUND STATISTICS		432	1	31	464	1316	1660	2976	536	1	2	539	1906
TOTALS		863	3	59	925	2349	3537	5886	1081	1	6	1088	4187

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

ERIC #4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER					MONTHS REPORTED						
							10/83	11/83	12/83				
RIVER/LOCK NAME		TONS	VESSL RECTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS CONNR	LCKGES RECTN	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
OHIO RIVER													
MONTGOMERY LOCK & DAM AUX 1		xxx											
UPBOUND STATISTICS		111	53	52	216	200	257	457	285	48	9	342	291
DOWNBOUND STATISTICS		102	44	51	197	178	194	372	244	45	8	297	213
TOTALS		213	97	103	413	378	451	829	529	93	17	639	505
NEW CUMBERLAND LOCK & DAM		xxx											
UPBOUND STATISTICS		349	0	7	356	465	2757	3222	351	0	1	352	3905
DOWNBOUND STATISTICS		315	2	4	321	1684	1238	2922	316	2	0	318	1503
TOTALS		664	2	11	677	2149	3995	6144	667	2	1	670	5409
NEW CUMBERLAND LK & DAM AUX 1		xxx											
UPBOUND STATISTICS		147	33	42	222	323	170	493	191	20	3	214	247
DOWNBOUND STATISTICS		181	39	34	254	328	228	556	216	27	2	245	228
TOTALS		328	72	76	476	651	398	1049	407	47	5	459	475
PIKE ISLAND LOCK & DAM		xxx											
UPBOUND STATISTICS		379	1	5	385	334	3500	3834	380	0	0	380	5022
DOWNBOUND STATISTICS		335	0	7	342	2096	1319	3415	336	0	0	336	1750
TOTALS		714	1	12	727	2430	4819	7249	716	0	0	716	6773
PIKE ISLAND LOCK & DAM AUX 1		xxx											
UPBOUND STATISTICS		94	38	39	171	151	107	258	136	29	3	168	145
DOWNBOUND STATISTICS		150	26	20	196	252	207	459	174	20	2	196	201
TOTALS		244	64	59	367	403	314	717	310	49	5	364	346
HANNIBAL LOCKS & DAM		xxx											
UPBOUND STATISTICS		344	3	5	352	934	2968	3902	347	0	3	350	4172
DOWNBOUND STATISTICS		323	0	2	325	1440	2247	3687	326	0	2	328	3056
TOTALS		667	3	7	677	2374	5215	7589	673	0	5	678	7229
HANNIBAL LOCKS & DAM AUX 1		xxx											
UPBOUND STATISTICS		68	7	9	84	196	220	416	91	7	21	119	321
DOWNBOUND STATISTICS		94	17	12	123	176	320	496	121	15	26	162	358
TOTALS		162	24	21	207	372	540	912	212	22	47	281	680

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC #4	DISTRICT NAME PITTSBURGH			DIVISION NAME OHIO RIVER							MONTHS REPORTED							
											10/83			11/83		12/83		
ALL TIMES EXPRESSED IN MINUTES																		
APPROACH			LOCK ENTRY			PROCESSING TIME			CHAMBER			EXIT			: DELAYED DELAY		DELAY	DELAY
MIN AVG MAX			: MIN AVG MAX			: MIN AVG MAX			: MIN AVG MAX			: MIN AVG MAX			: TONS TIME		AVG	MAX
															(TONS)		(TONS)	(ALL VSSLS)
ALLEGHENY RIVER																		
LOCK & DAM 2	1	5	70	1	4	28	6	7	20	1	6	45	:	77	2779	36.1	255	
LOCK & DAM 3	1	7	71	1	4	40	5	7	18	1	6	30	:	82	3218	39.2	410	
LOCK & DAM 4	1	6	25	1	4	64	6	8	28	1	6	37	:	39	980	25.1	105	
LOCK & DAM 5	1	2	10	1	2	30	5	8	50	1	3	12	:	9	149	16.6	53	
LOCK & DAM 6	3	4	30	3	4	5	6	8	18	3	5	11	:	9	135	15.0	23	
LOCK & DAM 7	1	3	7	1	2	26	7	7	10	1	4	6	:	3	33	11.0	16	
LOCK & DAM 8	1	4	7	2	2	13	8	8	8	2	2	5	:	0	0	0.0	21	
LOCK & DAM 9	1	4	5	1	1	1	10	10	10	1	1	2	:	0	0	0.0	10	
MONONGAHELA RIVER																		
LOCK & DAM 2	1	11	43	1	5	33	7	11	39	1	7	55	:	262	8835	33.7	255	
LOCK & DAM 2 AUX 1	1	8	29	1	2	13	5	6	15	1	2	15	:	18	256	14.2	60	
LOCK & DAM 3	1	10	57	1	5	23	6	10	32	3	6	39	:	818	29597	36.2	184	
LOCK & DAM 3 AUXILIARY 1	1	8	26	1	2	12	5	8	26	1	3	15	:	24	304	12.7	25	
LOCK & DAM 4	1	10	47	1	6	23	6	10	36	1	7	37	:	543	21041	38.7	294	
LOCK & DAM 4 AUXILIARY 1	1	9	39	1	2	16	5	9	23	1	4	24	:	6	69	11.5	33	
MAXWELL LOCK & DAM	1	9	36	1	6	30	7	11	35	2	8	29	:	71	1039	14.6	47	

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC H4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER	MONTHS REPORTED																
			10/83																
			11/83																
			12/83																
ALL TIMES EXPRESSED IN MINUTES																			
APPROACH			LOCK ENTRY			PROCESSING TIME			CHAMBER			EXIT			: DELAYED TONS		DELAY TIME	DELAY AVG	DELAY MAX
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	(TONS)	(TONS)	(ALL VSSLS)	
MONONGAMELA RIVER																			
MAXWELL LOCK & DAM AUX 1			1	11	38	2	7	18	9	12	44	2	9	23	:	50	736	14.7	57
LOCK & DAM 7			1	6	53	1	4	29	5	6	27	1	9	62	:	478	23331	48.8	269
LOCK & DAM 8			1	5	42	1	4	21	5	6	32	2	9	44	:	320	12536	39.2	159
MORGANTOWN LOCK & DAM			2	5	10	2	4	10	5	11	30	2	5	10	:	0	0	0.0	11
HILDEBRAND LOCK & DAM			2	4	20	1	3	12	7	11	29	1	4	13	:	0	0	0.0	45
OPEKISKA LOCK & DAM			2	5	17	2	3	6	10	10	18	2	3	6	:	0	0	0.0	0
OHIO RIVER																			
ENSNORTH LOCK & DAM			1	12	58	2	7	66	6	15	46	2	8	70	:	576	41131	71.4	1169
ENSNORTH LOCK & DAM AUX 1			1	10	40	1	4	15	6	9	20	2	4	24	:	14	776	55.4	178
DASHIELDS LOCK & DAM			1	15	70	1	8	56	6	11	40	1	10	96	:	442	30802	69.7	533
DASHIELDS LOCK & DAM AUX 1			1	11	46	1	3	15	5	6	15	1	3	19	:	22	264	12.0	39
MONTGOMERY LOCK & DAM			1	10	75	1	9	51	7	14	58	1	13	82	:	479	46971	98.1	1210
MONTGOMERY LOCK & DAM AUX 1			1	6	58	1	5	53	6	9	28	1	5	25	:	118	127047	1076.7	2447
NEW CUMBERLAND LOCK & DAM			1	20	59	1	6	33	5	15	49	2	13	53	:	161	6096	37.9	175
NEW CUMBERLAND LK & DAM AUX			1	14	50	1	2	10	7	12	25	1	9	51	:	24	586	24.4	75
PIKE ISLAND LOCK & DAM			1	16	59	1	9	30	5	14	58	2	10	32	:	189	7386	39.1	151
PIKE ISLAND LOCK & DAM AUX 1			1	10	34	1	4	15	5	13	45	1	8	22	:	15	348	23.2	43

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

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EROC HA	DISTRICT NAME PITTSBURGH			DIVISION NAME OHIO RIVER			MONTHS REPORTED 10/8311/8312/83													
ALL TIMES EXPRESSED IN MINUTES																				
APPROACH			LOCK PROCESSING TIME						: DELAYED DELAY			DELAY		DELAY						
			ENTRY			CHAMBER			EXIT			: TONS		TIME		AVG		MAX		
MIN			AVG			MAX			MIN			AVG			MAX			: (ALL VSSLS)		
			MIN			AVG			MAX			MIN			AVG			MAX		
			MIN			AVG			MAX			MIN			AVG			MAX		
			MIN			AVG			MAX			MIN			AVG			MAX		
			MIN			AVG			MAX			MIN			AVG			MAX		
			MIN			AVG			MAX			MIN			AVG			MAX		
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			MIN			AVG			MAX			MIN			AVG			MAX		
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			MIN			AVG			MAX			MIN			AVG			MAX		
			MIN			AVG			MAX			MIN			AVG			MAX		
			MIN																	

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC K3	DISTRICT NAME JACKSONVILLE	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED		
			10/83	11/83	12/83
RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)			
CROSS FLA BRG CNL	11-HENRY HOLLAND BUCKMAN LOCK	0600/0084/15.0			
	12-EUREKA LOCK	0600/0084/15.0			
	13-INGLIS LOCK	0600/0084/15.0			
CANAUVERAL HARBOR	21-CANAUVERAL LOCK	0600/0090/15.0			
ONEECHOBEE WATERWAY	01-ST LUCIE LOCK & DAM	0275/0050/14.0			
	02-MOORE HAVEN LOCK	0275/0050/11.0			
	03-ORTONA LOCK & DAM	0275/0050/12.0			
	04-W P FRANKLIN LCK & CTRL STRCT	0450/0056/14.0			
	05-PORT MAYACA LOCK	0450/0056/14.0			
OKLAHAMA RIVER	31-NOSS BLUFF LOCK & DAM	0156/0030/XXXX			

NO DATA RECORDED ON SURRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC KS	DISTRICT NAME MOBILE	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED		
			10/83	11/83	12/83
RIVER	LCODE-LOCK NAME		LEN/MID/DRAFT (FT/FT/FT)		
ALABAMA-COOSA RIVERS	11-CLAIBORNE LOCK & DAM		0600/0084/12.0		
	12-MILLERS FERRY LOCK & DAM		0600/0084/12.0		
	13-JONES BLUFF LOCK & DAM		0600/0084/12.0		
APLCH/CHTCH/FLNT RI	21-JIM WOODRUFF LOCK & DAM		0450/0082/12.0		
	22-GEORGE W ANDREWS LOCK & DAM		0450/0082/12.0		
	23-WALTER F GEORGE LOCK & DAM		0450/0082/12.0		
BLKMAR/TOMBIGBEE RI	01-COFFEEVILLE LOCK		0600/0110/12.0		
	02-DEMOPOLIS LOCK & DAM		0600/0110/12.0		
	03-WARRIOR LOCK & DAM		0600/0110/12.0		
	04-WILLIAM BACON OLIVER LK & DM		0600/0095/12.0		
	05-HOLT LOCK & DAM		0600/0110/12.0		
	06-JOHN HOLLIS BANKHEAD LK & DM		0600/0110/12.0		
PEARL RIVER	31-LOCK 1		0310/0065/ 9.0		
	32-LOCK 2		0310/0065/ 9.0		
	33-LOCK 3		0310/0065/ 9.0		
TENN TOMBIGBEE WATERWAY	41-GAINESVILLE LOCK & DAM		0600/0110/12.0		
	42-ALICEVILLE LOCK & DAM		0600/0110/12.0		
	43-COLUMBUS LOCK & DAM		0600/0110/12.0		
	44-ABERDEEN LOCK & DAM		0600/0110/12.0		

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC K5	DISTRICT NAME MOBILE	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED										TONNAGE (KTONS)
			10/83		11/83		12/83						
RIVER/LOCK NAME		TONS	VESSL RECRTH	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKCS COMMER	LCKGES RECRTH	LCKGES OTHER	LCKGES TOTAL	
(NAV, OPN, ETC)													
ALABAMA-COOSA RIVERS													
CLAZBORNE LOCK & DAM		xxx											
UPBOUND STATISTICS		89	47	3	139	306	13	319	87	47	8	142	15
DOWNBOUND STATISTICS		90	50	1	141	13	304	317	86	50	9	145	364
TOTALS		179	97	4	280	319	317	636	173	97	17	287	379
MILLERS FERRY LOCK & DAM		xxx											
UPBOUND STATISTICS		48	5	1	54	143	16	159	50	5	0	55	18
DOWNBOUND STATISTICS		48	5	1	54	17	145	162	48	4	2	54	162
TOTALS		96	10	2	108	160	161	321	98	9	2	109	180
JONES BLUFF LOCK & DAM		xxx											
UPBOUND STATISTICS		8	23	0	31	5	11	16	10	9	2	21	14
DOWNBOUND STATISTICS		7	23	1	31	9	4	13	9	8	6	23	4
TOTALS		15	46	1	62	14	15	29	19	17	8	44	18
APLCH/CHTCH/FLNT RI													
JIM WOODRUFF LOCK & DAM		xxx											
UPBOUND STATISTICS		85	20	8	113	169	52	221	99	12	9	120	108
DOWNBOUND STATISTICS		85	20	10	115	55	168	223	103	16	12	131	97
TOTALS		170	40	18	228	224	220	444	202	28	21	251	206
GEORGE H ANDREWS LOCK & DAM		xxx											
UPBOUND STATISTICS		29	35	5	69	26	26	52	32	31	4	67	41
DOWNBOUND STATISTICS		31	31	4	66	26	23	49	35	30	3	68	20
TOTALS		60	66	9	135	52	49	101	67	61	7	135	62
WALTER F GEORGE LOCK & DAM		xxx											
UPBOUND STATISTICS		13	20	1	34	16	11	27	15	16	6	37	19
DOWNBOUND STATISTICS		13	17	4	34	13	13	26	17	15	6	38	8
TOTALS		26	37	5	68	29	24	53	32	31	12	75	27

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

ERIC KS	DISTRICT NAME MOBILE	DIVISION NAME SOUTH ATLANTIC						MONTHS REPORTED					
								10/83	11/83		12/83		
RIVER/LOCK NAME		TONS	VESSL RECTRN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCKGS CONNER	LOCKGS RECTRN	LOCKGS OTHER (NAV, OPN, ETC)	LOCKGS TOTAL	TONNAGE (KTONS)
BLKMAR/TOMBIGBEE RI													
COFFEEVILLE LOCK		XXX											
UPBOUND STATISTICS		446	12	11	469	1753	166	1919	448	1	18	467	277
DOWNBOUND STATISTICS		432	11	16	459	96	1781	1877	436	6	24	466	2718
TOTALS		878	23	27	928	1849	1947	3796	884	7	42	933	2995
DENOPOLIS LOCK & DAM		XXX											
UPBOUND STATISTICS		430	5	12	447	1721	155	1876	432	3	11	446	254
DOWNBOUND STATISTICS		424	7	11	442	98	1766	1864	430	2	10	442	2651
TOTALS		854	12	23	889	1819	1921	3740	862	5	21	888	2906
WARRIOR LOCK & DAM		XXX											
UPBOUND STATISTICS		428	6	8	442	1730	136	1866	436	1	5	442	246
DOWNBOUND STATISTICS		427	4	5	436	85	1756	1841	429	2	3	434	2898
TOTALS		855	10	13	878	1815	1892	3707	865	3	8	876	3144
WILLIAM BACON OLIVER LK & DM		XXX											
UPBOUND STATISTICS		410	9	54	473	1705	101	1806	593	5	22	620	144
DOWNBOUND STATISTICS		413	15	43	471	47	1732	1779	622	8	10	640	2646
TOTALS		823	24	97	944	1752	1833	3585	1215	13	32	1260	2791
MOLT LOCK & DAM		XXX											
UPBOUND STATISTICS		383	6	28	417	1675	100	1775	394	5	6	405	140
DOWNBOUND STATISTICS		374	7	23	404	40	1706	1746	387	5	3	395	2584
TOTALS		757	13	51	821	1715	1806	3521	781	10	9	800	2724
JOHN HOLLIS BANKHEAD LK & DM		XXX											
UPBOUND STATISTICS		286	11	7	304	1169	96	1265	292	8	3	303	135
DOWNBOUND STATISTICS		286	12	8	306	72	1193	1265	294	8	2	304	1830
TOTALS		572	23	15	610	1241	1289	2530	586	16	5	607	1965

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

ERO KS	DISTRICT NAME MOBILE			DIVISION NAME SOUTH ATLANTIC			MONTHS REPORTED 10/83 11/83 12/83										
ALL TIMES EXPRESSED IN MINUTES																	
APPROACH			LOCK PROCESSING TIME			EXIT			: DELAYED DELAY		: TONS		: TONS				
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: TONS	TIME	AVG	MAX		
b																	
ALABAMA-COOSA RIVERS																	
CLAIBORNE LOCK & DAM	1	5	50	1	4	20	1	10	60	2	5	29	:	0	0	0.0	75040
MILLERS FERRY LOCK & DAM	3	10	23	2	5	14	10	15	23	2	5	15	:	0	0	0.0	0
JONES BLUFF LOCK & DAM	1	4	10	1	3	12	7	14	25	1	4	10	:	0	0	0.0	0
APLCH/CHTCH/FLNT RI																	
JIM WOODRUFF LOCK & DAM	2	5	35	2	5	40	8	11	17	2	5	36	:	2	35	17.5	25
GEORGE W ANDREWS LOCK & DAM	2	2	6	2	2	12	6	14	31	1	2	9	:	0	0	0.0	0
WALTER F GEORGE LOCK & DAM	1	3	17	1	4	40	5	15	23	1	3	10	:	0	0	0.0	17
BLKWAR/TOMBIGBEE RI																	
COFFEEVILLE LOCK	1	9	36	1	4	27	5	13	25	1	9	40	:	310	11119	35.9	153
DEMOPOLIS LOCK & DAM	1	12	32	1	4	16	1	13	50	3	11	34	:	282	8796	31.2	129
WARRIOR LOCK & DAM	1	12	41	1	4	18	5	17	29	1	9	403	:	289	10956	37.9	160
WILLIAM BACON OLIVER LK & DM	1	12	58	1	6	24	1	14	55	1	13	91	:	509	45970	90.3	1062
HOLT LOCK & DAM	1	10	39	1	6	37	5	19	57	1	8	28	:	238	11053	46.4	472
JOHN HOLLIS BANKHEAD LK & DM	1	13	540	1	8	212	5	13	43	1	8	22	:	128	5259	41.1	170
PEARL RIVER																	
LOCK 1	NO DATA RECORDED FOR THIS LOCK																
LOCK 2	NO DATA RECORDED FOR THIS LOCK																
LOCK 3	NO DATA RECORDED FOR THIS LOCK																

EROC
K5

DISTRICT NAME
MOBILE

DIVISION NAME
SOUTH ATLANTIC

10/83

MONTHS REPORTED
11/83

12/83

												ALL TIMES EXPRESSED IN MINUTES						
			LOCK PROCESSING TIME									:	DELAYED DELAY	DELAY	DELAY			
APPROACH			ENTRY		CHAMBER				EXIT		:	TOMS	TIME	AVG	MAX			
MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	(TOMS)	(TOMS)	(ALL VSSLS)

TENN TOMBIGBEE WATERWAY

[illegible]

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K6	SAVANNAH	SOUTH ATLANTIC	10/83	11/83	12/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
SAVANNAH RIVER	01-NEW SAVANNAH BLUFF LOCK & DAM	0360/0056/12.0

NO DATA RECORDED ON SUMMARY FILE FOR THIS PERIOD

NO DATA RECORDED ON LOCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K7	WILMINGTON	SOUTH ATLANTIC	10/83	11/83	12/83

RIVER	LCODE-LOCK NAME	LEN/MID/DRAFT (FT/FT/FT)
CAPE FEAR RIVER	01-LOCK & DAM 1	0200/0040/10.0
	02-LOCK & DAM 2	0200/0040/10.0
	03-WILLIAM O MUSKE LOCK & DAM	0300/0040/10.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

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EROC K7	DISTRICT NAME WILMINGTON	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED									
			10/83		11/83		12/83					
RIVER/LOCK NAME												
TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS CONMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS) (NAV, OPN, ETC)	
CAPE FEAR RIVER												
LOCK & DAM 1												
xxx												
UPBOUND STATISTICS	16	4	0	20	0	16	16	29	1	7	37	16
DOWNBOUND STATISTICS	16	4	0	20	16	0	16	29	1	7	37	0
TOTALS	32	8	0	40	16	16	32	58	2	14	74	16
LOCK & DAM 2												
xxx												
UPBOUND STATISTICS	15	4	0	19	0	15	15	28	1	5	34	14
DOWNBOUND STATISTICS	16	16	0	32	16	0	16	29	3	5	37	0
TOTALS	31	20	0	51	16	15	31	57	4	10	71	14
WILLIAM O HUSKE LOCK & DAM												
xxx												
UPBOUND STATISTICS	16	0	0	16	0	16	16	17	0	0	17	15
DOWNBOUND STATISTICS	16	14	0	30	16	0	16	17	0	1	18	0
TOTALS	32	14	0	46	16	16	32	34	0	1	35	15

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

ERDC K7	DISTRICT NAME WILMINGTON	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED																	
			10/83						11/83						12/83					
			ALL TIMES EXPRESSED IN MINUTES																	
			APPROACH			LOCK ENTRY			PROCESSING TIME CHAMBER			EXIT			: DELAYED			DELAY	DELAY	
MIN AVG MAX			MIN AVG MAX			MIN AVG MAX			MIN AVG MAX			: TOMS			TIME	AVG	MAX			
															(TOMS)	(TOMS)	(ALL VSSLS)			
CAPE FEAR RIVER																				
LOCK & DAM 1		5	5	5	5	5	5	5	14	15	5	5	15	:	1	5	5.0	5		
LOCK & DAM 2		5	5	10	5	5	10	5	9	15	5	12	437	:	30	149	5.0	5		
WILLIAM O HUSKE LOCK & DAM		4	4	5	5	5	5	30	30	30	5	5	5	:	0	0	0.0	0		

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC L2	DISTRICT NAME SACRAMENTO	DIVISION NAME SOUTH PACIFIC	MONTHS REPORTED		
			10/83	11/83	12/83
RIVER	LCODE-LOCK NAME		LEN/WID/DRAFT (FT/FT/FT)		
SCRWNT0 DMSHP CHNL	01-BARGE CANAL LOCK		0640/0086/23.0		

NO DATA RECORDED ON SUMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M3	GALVESTON	SOUTHWESTERN	10/83	11/83	12/83

RIVER	LCODE-LOCK NAME	LEN/MID/DRAFT (FT/FT/FT)
GULF INTRACOASTAL	11-COLORADO RIVER EAST LOCK	1200/0075/15.0
	12-COLORADO RIVER WEST LOCK	1200/0075/15.0
	13-BRAZOS EAST GATE	9999/0075/15.0
	14-BRAZOS WEST GATE	9999/0075/15.0

NO DATA RECORDED ON SUMMARY FILE FOR THIS PERIOD

NO DATA RECORDED ON LOCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M4	LITTLE ROCK	SOUTHWESTERN	10/83	11/83	12/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ARKANSAS RIVER	01-NORRELL LOCK & DAM	0600/0110/12.0
	02-LOCK & DAM 2	0600/0110/12.0
	03-LOCK & DAM 3	0600/0110/12.0
	04-LOCK & DAM 4	0600/0110/12.0
	05-LOCK & DAM 5	0600/0110/12.0
	06-DAVID D TERRY LOCK & DAM	0600/0110/12.0
	07-MURRAY LOCK & DAM	0600/0110/12.0
	08-TOAD SUCK FERRY LOCK & DAM	0600/0110/12.0
	09-LOCK & DAM 9	0600/0110/12.0
	10-DARDANELLE LOCK & DAM	0600/0110/12.0
	11-OZARK LOCK & DAM	0600/0110/12.0
	13-LOCK & DAM 13	0600/0110/12.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC M4	DISTRICT NAME LITTLE ROCK	DIVISION NAME SOUTHWESTERN	MONTHS REPORTED									
			10/83		11/83		12/83					
RIVER/LOCK NAME	TOMS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)												
ARKANSAS RIVER												
MORRELL LOCK & DAM	XXX											
UPBOUND STATISTICS	162	14	60	236	397	371	768	181	11	45	237	491
DOWNBOUND STATISTICS	171	10	55	236	130	660	790	172	8	44	224	843
TOTALS	333	24	115	472	527	1031	1558	353	19	89	461	1335
LOCK & DAM 2	XXX											
UPBOUND STATISTICS	161	14	45	220	402	371	773	200	12	13	225	495
DOWNBOUND STATISTICS	167	13	38	218	119	659	778	198	11	10	219	830
TOTALS	328	27	83	438	521	1030	1551	398	23	23	444	1325
LOCK & DAM 3	XXX											
UPBOUND STATISTICS	135	26	8	169	406	394	800	155	22	11	188	558
DOWNBOUND STATISTICS	132	27	9	168	109	660	769	149	21	12	182	800
TOTALS	267	53	17	337	515	1054	1569	304	43	23	370	1358
LOCK & DAM 4	XXX											
UPBOUND STATISTICS	130	10	13	153	399	379	778	152	10	16	178	488
DOWNBOUND STATISTICS	132	10	10	152	117	659	776	147	9	16	172	815
TOTALS	262	20	23	305	516	1038	1554	299	19	32	350	1304
LOCK & DAM 5	XXX											
UPBOUND STATISTICS	120	85	11	216	324	331	655	137	77	13	227	416
DOWNBOUND STATISTICS	119	86	7	212	98	552	650	129	71	11	211	756
TOTALS	239	171	18	428	422	883	1305	266	148	24	438	1172
DAVID D TERRY LOCK & DAM	XXX											
UPBOUND STATISTICS	121	169	18	308	329	318	647	136	150	9	295	411
DOWNBOUND STATISTICS	124	172	8	304	105	554	659	133	146	8	287	744
TOTALS	245	341	26	612	434	872	1306	269	296	17	582	1156
MURRAY LOCK & DAM	XXX											
UPBOUND STATISTICS	92	112	43	247	279	271	550	139	91	13	243	348
DOWNBOUND STATISTICS	91	113	39	243	72	483	555	134	88	15	237	656
TOTALS	183	225	82	490	351	754	1105	273	179	28	480	1004

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC #4	DISTRICT NAME LITTLE ROCK	DIVISION NAME SOUTHWESTERN	MONTHS REPORTED									
			10/83			11/83			12/83			
RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCKGS CONNER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)												
ARKANSAS RIVER												
TOAD SUCK FERRY LOCK & DAM	XXX											
UPBOUND STATISTICS	95	30	4	129	281	277	558	106	27	14	147	355
DOWNBOUND STATISTICS	89	29	2	120	73	469	542	94	21	11	126	640
TOTALS	184	59	6	249	354	746	1100	200	48	25	273	995
LOCK & DAM 9	XXX											
UPBOUND STATISTICS	89	37	6	132	274	269	543	98	30	10	138	349
DOWNBOUND STATISTICS	88	38	2	128	72	466	538	93	29	9	131	639
TOTALS	177	75	8	260	346	735	1081	191	59	19	269	988
DARDANELLE LOCK & DAM	XXX											
UPBOUND STATISTICS	95	36	5	136	279	261	540	106	29	17	152	349
DOWNBOUND STATISTICS	93	35	5	133	68	461	529	101	26	14	141	634
TOTALS	188	71	10	269	347	722	1069	207	55	31	293	984
OZARK LOCK & DAM	XXX											
UPBOUND STATISTICS	89	28	5	122	281	251	532	99	26	7	132	339
DOWNBOUND STATISTICS	87	33	1	121	64	456	520	91	29	6	126	649
TOTALS	176	61	6	243	345	707	1052	190	55	13	258	988
LOCK & DAM 13	XXX											
UPBOUND STATISTICS	90	38	4	132	279	249	528	99	33	6	138	321
DOWNBOUND STATISTICS	87	43	2	132	67	447	514	91	34	6	131	610
TOTALS	177	81	6	264	346	696	1042	190	67	12	269	931

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC #4	DISTRICT NAME LITTLE ROCK			DIVISION NAME SOUTHWESTERN									MONTHS REPORTED								
													10/83			11/83			12/83		
APPROACH			LOCK PROCESSING TIME						EXIT			: DELAYED DELAY		DELAY AVG (TOMS)	DELAY MAX (ALL VSSLS)						
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: TONS	TIME (TOMS)								
ARKANSAS RIVER																					
NORRELL LOCK & DAM	1	8	40	1	7	70	1	11	55	1	7	65	:	46	1281	27.8	102				
LOCK & DAM 2	1	10	40	1	9	45	5	13	50	1	9	95	:	60	89725	1495.4	87840				
LOCK & DAM 3	1	11	110	1	9	42	6	13	31	1	10	50	:	33	1327	40.2	140				
LOCK & DAM 4	1	12	55	1	9	55	5	11	48	2	11	82	:	23	684	29.7	75				
LOCK & DAM 5	1	10	32	1	8	49	4	11	32	1	11	45	:	52	1013	19.5	160				
DAVID O TERRY LOCK & DAM	1	9	65	1	7	125	6	10	25	1	8	62	:	24	950	39.6	142				
MURRAY LOCK & DAM	1	5	30	1	6	41	8	10	23	1	7	51	:	24	766	31.9	145				
TOAD SUCK FERRY LOCK & DAM	1	8	38	1	9	35	5	10	35	1	10	70	:	77	1014	13.2	120				
LOCK & DAM 9	1	11	50	1	9	38	8	13	44	1	10	55	:	66	649	9.8	97				
DARDANELLE LOCK & DAM	1	15	109	1	8	37	5	13	40	1	9	45	:	159	986	6.2	70				
OZARK LOCK & DAM	1	11	40	2	11	55	10	12	25	2	12	40	:	136	1390	10.2	80				
LOCK & DAM 13	1	8	43	1	10	44	10	13	53	1	12	44	:	22	490	22.3	46				

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

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EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
MS	TULSA	SOUTHWESTERN	10/83	11/83	12/83

RIVER	LCODE-LOCK NAME	LEN/MID/DRAFT (FT/FT/FT)
ARKANSAS RIVER	21-W D MAYO LOCK & DAM	0600/0110/14.0
	22-ROBERT S KERR LOCK & DAM & RES	0600/0110/14.0
	23-WEBBERS FALLS LOCK & DAM	0600/0110/14.0
	24-CHOUTEAU LOCK & DAM	0670/0110/14.0
	25-NENT GRAHAM LOCK & DAM	0670/0110/14.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC H5	DISTRICT NAME TULSA	DIVISION NAME SOUTHWESTERN	MONTHS REPORTED											
			10/83			11/83			12/83					
RIVER/LOCK NAME			TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)														
ARKANSAS RIVER														
H D MAYO LOCK & DAM			xxx											
UPBOUND STATISTICS			90	69	5	164	263	226	489	97	29	6	132	286
DOWNBOUND STATISTICS			85	74	3	162	62	393	455	91	28	6	125	550
TOTALS			175	143	8	326	325	619	944	188	57	12	257	836
ROBERT S KERR LOCK & DAM & RES			xxx											
UPBOUND STATISTICS			87	49	6	142	260	220	480	95	35	3	133	280
DOWNBOUND STATISTICS			85	60	3	148	61	394	455	90	43	3	136	551
TOTALS			172	109	9	290	321	614	935	185	78	6	269	832
WEBBERS FALLS LOCK & DAM			xxx											
UPBOUND STATISTICS			86	21	4	111	226	216	442	91	14	23	128	282
DOWNBOUND STATISTICS			83	28	5	116	69	348	417	89	17	20	126	493
TOTALS			169	49	9	227	295	564	859	180	31	43	254	775
CHOUTEAU LOCK & DAM			xxx											
UPBOUND STATISTICS			88	7	6	101	208	175	383	95	7	5	107	227
DOWNBOUND STATISTICS			85	9	3	97	58	297	355	90	8	3	101	394
TOTALS			173	16	9	198	266	472	738	185	15	8	208	623
NENT GRAHAM LOCK & DAM			xxx											
UPBOUND STATISTICS			87	8	4	99	198	172	370	92	7	4	103	215
DOWNBOUND STATISTICS			88	10	1	99	65	289	354	89	9	2	100	389
TOTALS			175	18	5	198	263	461	724	181	16	6	203	604

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 10/83 THROUGH 12/83
INSTITUTE FOR WATER RESOURCES

EROC MS	DISTRICT NAME TULSA			DIVISION NAME SOUTHWESTERN							MONTHS REPORTED								
											10/83			11/83			12/83		
ALL TIMES EXPRESSED IN MINUTES																			
APPROACH			LOCK PROCESSING TIME							: DELAYED DELAY			DELAY AVG	DELAY MAX					
			ENTRY		CHAMBER					EXIT		: TONS			TIME				
MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	:		(TONS)	(TONS)	(ALL VSSLS)			
ARKANSAS RIVER																			
W D MAYO LOCK & DAM			1	10	43	1	9	39	5	11	50	1	10	70	:	9	357	39.7	100
ROBERT S KERR LOCK & DAM &RE			2	8	36	1	10	37	10	15	27	1	11	47	:	6	215	35.8	78
WEBBERS FALLS LOCK & DAM			1	14	70	2	8	45	10	19	50	3	10	104	:	52	854	16.4	73
CHOUTEAU LOCK & DAM			1	10	28	1	8	35	5	15	36	1	9	44	:	108	953	8.8	576
NEWT GRAHAM LOCK & DAM			1	11	35	1	9	43	6	14	38	1	13	52	:	29	434	15.0	53