

AD-A151 432

PERFORMANCE MONITORING SYSTEM: SUMMARY OF LOCK
STATISTICS FOR JULY-SEPTEMBER 1984(U) CORPS OF
ENGINEERS FORT BELVOIR VA WATER RESOURCES SUPPORT CE.
M V FLEMING ET AL. FEB 85 WRSC-85-SR-1 F/G 13/2

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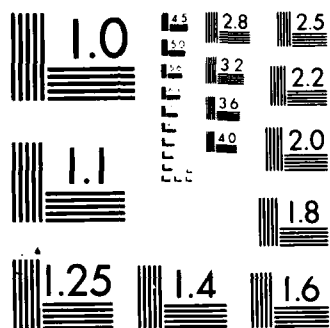
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US Army Corps
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Engineer Institute for
Water Resources

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Performance Monitoring System:

Summary of Lock Statistics for July - September 1984

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February 1985

Summary Report 85-SR-1

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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 operator. This quarterly summary is an overview of the collected statistics.		

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PERFORMANCE MONITORING SYSTEM
SUMMARY OF LOCK STATISTICS
JULY 1984 - SEPTEMBER 1984

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 G. 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 M. Daniel, DAEN-CWP-G.

Requests to update or change the distribution, comments and questions can be directed to Frank Sharp (202-355-2240 or FTS 385-2240) or Marilyn Fleming at the same telephone number. The information is produced and distributed quarterly.

James R. Hanchey
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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 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

ERDC EC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
	NEW ORLEANS	LOWER MISS VALLEY	7/84	8/84	9/84

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ATCHAFALAYA RIVER	11-BERNICK LOCK	0307/0045/11.0
BAYOU FECHÉ	31-KEYSTONE LOCK	0162/0036/12.0
FRESHWATER BAYOU	41-FRESHWATER BAYOU LOCK	0600/0084/15.0
GULF INTRACOASTAL	1-PORT ALLEN LOCK	1198/0084/15.0
	2-BAYOU SORREL LOCK	0800/0056/16.0
	3-INNER HRBP NAVIGATION CANL LK	0646/0075/40.0
	4-ALGIER LOCK	0797/0075/15.0
	5-HARVEY LOCK	0425/0075/14.0
	6-BAYOU BOEUF LOCK	1158/0075/15.0
	7-VERMILLION LOCK	1200/0056/14.0
	8-CALCASIEU LOCK	1205/0075/15.0
	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	1-RED RIVER LOCK & DAM #1	0685/0084/ 9.0

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 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

EDGE	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED	
93	ST. LOUIS	LOWER MISS VALLEY	7/84	8/84 9/84

RIVER	CODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
KASKASKIA RIVER	1-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 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EAO ST	DISTRICT NAME ST. LOUIS	DIVISION NAME LOWER MISS VALLEY	MONTHS REPORTED									
			7/84		8/84		9/84					

RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARBS	BARBS	BARBS	LOCKS	LOCKS	LOCKS	LOCKS	TONNAGE (TONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)												

ARKANSAS RIVER												
ARKANSAS RIVER NAVIGATION LOCK ***												
UPBOUND STATISTICS	197	422	46	665	631	125	756	245	193	6	444	117
DOWNBOUND STATISTICS	182	431	81	694	167	633	740	263	213	8	484	947
TOTALS	379	853	127	1359	798	758	1496	508	406	14	928	1064
MISSISSIPPI RIVER												
LOCK & DAM 24 ***												
UPBOUND STATISTICS	443	349	30	822	3078	2364	5442	719	232	19	961	3481
DOWNBOUND STATISTICS	453	379	24	856	281	5024	5305	735	236	12	983	7072
TOTALS	896	728	54	1678	3359	7388	10747	1454	468	22	1944	10554
LOCK & DAM 25 ***												
UPBOUND STATISTICS	443	630	56	1129	3065	2383	5448	709	321	53	1083	3507
DOWNBOUND STATISTICS	452	652	49	1154	286	5017	5303	709	328	55	1092	7064
TOTALS	896	1282	105	2283	3351	7400	10751	1418	649	108	2175	10591
LOCK & DAM 26 ***												
UPBOUND STATISTICS	691	2	17	710	4662	3580	8242	1219	0	0	1219	5359
DOWNBOUND STATISTICS	654	5	12	671	499	7093	7592	1147	1	1	1149	10041
TOTALS	1345	7	29	1381	5161	10673	15834	2366	1	1	2368	15401
LOCK & DAM 26 AUX 1 ***												
UPBOUND STATISTICS	227	252	89	568	283	300	583	364	120	12	496	530
DOWNBOUND STATISTICS	237	277	127	641	288	386	674	437	144	9	590	567
TOTALS	464	529	216	1209	571	686	1257	801	264	21	1086	1100
LOCK OF ROCKS LOCK & DAM 27 ***												
UPBOUND STATISTICS	909	30	97	1036	5026	4039	9065	932	12	14	956	6205
DOWNBOUND STATISTICS	874	45	78	997	708	7651	8359	860	19	5	887	10945
TOTALS	1743	75	175	1993	5734	11690	17424	1795	31	19	1845	17200

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
 FOR THE PERIOD 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

ERDC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
63	ST. LOUIS	LOWER MISS VALLEY	7/84	8/84	9/84

RIVER LICK NAME	TOWS	VESSL		VESSL TOTAL	BARGS		BARGS TOTAL	LOCKGS COMMER	LOCKGS			TONNAGE (KTONS)
		RECRTN	OTHER		EMPTY	FULL			RECRTN	OTHER	TOTAL (NAV, OPN, ETC)	

MISSISSIPPI RIVER

CHAIN OF ROCKS LA & DM 07 A+1 ***

UPBOUND STATISTICS	316	176	162	654	484	316	800	461	76	17	554	484
DOWNBOUND STATISTICS	356	185	201	742	351	676	1027	534	83	24	641	991
TOTALS	672	361	363	1396	835	992	1827	995	159	41	1195	1475

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

BRCC	DISTRICT NAME			DIVISION NAME			MONTHS REPORTED											
83	ST. LOUIS			LOWER MISS VALLEY			7/84 8/84 9/84											

ALL TIMES EXPRESSED IN MINUTES																		
APPROACH			LOCK PROCESSING TIME									: DELAYED DELAY						
ENTRY			CHAMBER			EXIT			: TOWS			TIME		DELAY				
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	TIME	AVG	MAX		

WASKASKIA RIVER																		
WASKASKIA RIVER NAVIGATION L 1 4 104 1 3 25 4 9 26 1 3 22 : 46 711 1.9 47																		
MISSISSIPPI RIVER																		
LOCK & DAM 24 1 7 83 1 7 35 4 9 42 1 15 60 : 672 17737 8.0 2374																		
LOCK & DAM 25 1 7 96 1 7 38 4 8 31 1 12 48 : 865 144045 160 1465																		
LOCK & DAM 26 1 5 54 1 9 45 4 12 29 1 11 74 : 1340 359447 260.6 2964																		
LOCK & DAM 26 ADX 1 6 95 1 4 46 4 11 31 1 6 65 : 459 24572 53.0 1461																		
RAIL OF ROCKS LOCK & DAM 27 1 10 57 1 7 36 2 11 34 1 7 27 : 1228 66781 51.1 1505																		
RAIL OF ROCKS L & D# 27 AX 1 6 79 1 3 60 5 10 32 1 3 48 : 319 18802 28.0 968																		

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

BRD	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
84	WICSBURG	LOWER MISS VALLEY	7/84	8/84	9/84

BRD	LOCK/LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
84	1-DOONESVILLE LOCK & DAM	0600/0084/23.4
	2-COLUMBIA LOCK & DAM	0600/0084/27.4
	3-LOCK & DAM 3	0268/0055/17.4
	4-LOCK & DAM 4	0268/0055/19.0

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
 FOR THE PERIOD 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

ROD	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED	
4	ROCK ISLAND	NORTH CENTRAL	7/84	8/84 9/84

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ILLINOIS	1-THOMAS J O'BRIEN	1000/0110/12.0
	2-LOCKPORT LOCK	0600/0110/12.0
	3-BRANDON ROAD LOCK & DAM	0600/0110/12.0
	4-DRESDEN ISLAND LOCK & DAM	0600/0110/12.0
	5-MARSHALLS LOCK & DAM	0600/0110/12.0
	6-STAPVED ROCK LOCK & DAM	0600/0110/12.0
	7-PEORIA LOCK & DAM	0600/0110/12.0
	8-LASGRANGE LOCK & DAM	0600/0110/12.0
MISSISSIPPI RIVER	11-LOCK & DAM 11	0600/0110/10.0
	12-LOCK & DAM 12	0600/0110/10.0
	13-LOCK & DAM 13	0600/0110/10.0
	14-LOCK & DAM 14	0600/0110/10.0
	14-LOCK & DAM 14 AUXILIARY 1	0320.0080/10.0
	15-LOCK & DAM 15	0600/0110/10.0
	15-LOCK & DAM 15 AUXILIARY 1	0360/0110/10.0
	16-LOCK & DAM 16	0600/0110/10.0
	17-LOCK & DAM 17	0600/0110/10.0
	18-LOCK & DAM 18	0600/0110/10.0
	19-LOCK & DAM 19	1200/0110/10.0
	19-LOCK & DAM 19 AUXILIARY 1	1350/0110/10.0
	20-LOCK & DAM 20	0600/0110/10.0
	21-LOCK & DAM 21	0600/0110/10.0
	22-LOCK & DAM 22	0600/0110/10.0

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC FS	DISTRICT NAME DETROIT	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED		
			7/84	8/84	9/84

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	0144/0031/ 6.0
	24-KAUKAUNA LOCK 4	0144/0037/ 6.0
	25-KAUKAUNA LOCK 5	0144/0036/ 6.0
	32-LITTLE CHUTE LOCK 2	0147/0035/ 6.0
	33-LITTLE CHUTE COMB LOCKS UPPER	0144/0036/ 6.0
	34-LITTLE CHUTE COMB LOCKS LOWER	0147/0035/ 6.0
	35-CEDARS LOCK & DAM	0144/0035/ 6.0
	41-APPLETON LOCK 1	0145/0034/ 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	0144/0034/ 6.0
THE INLAND ROUTE	11-ALANSON LOCK	0066/0018/ 7.0
ST MARYS RIVER	1-MACARTHUR LOCK	0800/0080/31.0
	2-NEW POE LOCK	1200/0110/32.0
	3-DAVIS LOCK00	1350/0080/31.0
	4-SABIN LOCK00	1350/0080/31.0

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 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F2	CHICAGO	NORTH CENTRAL	7/84	8/84	9/84

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
CHICAGO HARBOR	1-CHICAGO LOCK	0600/0080/22.0

NO DATA RECORDED ON SUMMARY FILE FOR THIS PERIOD

NO DATA RECORDED ON LOCKAGE FILE FOR THIS PERIOD

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
 FOR THE PERIOD 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

ERDC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F1	BUFFALO	NORTH CENTRAL	7/84	8/84	9/84

ALL TIMES EXPRESSED IN MINUTES

APPROACH		LOCK PROCESSING TIME				EXIT		DELAIED	DELAY	DELAY	DELAY	
MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	TOWS	TIME	AVG	MAX
: (TOWS) (TOWS) (ALL VSSLS)												

BLK ROCK CH/TONAWANDA

BLACK ROCK LOCK	1	1	13	1	1	15	2	10	20	1	1	15 :	0	0	,0	48
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TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F1	BUFFALO	NORTH CENTRAL	7/84	8/84	9/84

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
BLK ROCK CH/TONAWANDA	1-BLACK ROCK LOCK	0650/0070/21.7

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROG	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED	
E4	NORFOLK	NORTH ATLANTIC	7/84	8/84 9/84

ALL TIMES EXPRESSED IN MINUTES

APPROACH			LOCK PROCESSING TIME			EXIT			: DELAYED DELAY		DELAY	DELAY		
			ENTRY			CHAMBER			: TOWS		TIME	AVG	MAX	
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	(TOWS)	(TOWS)	(ALL VSSLS)

ATLANT INTRACOASTAL

GREAT BRIDGE GUARD LOCK	1	3	13	1	3	15	2	5	35	1	4	55 :	401	1617	4.0	32
-------------------------	---	---	----	---	---	----	---	---	----	---	---	------	-----	------	-----	----

DISMAL SWAMP

DEEP CREEK LOCK	2	4	6	2	5	8	10	10	25	4	5	50 :	0	0	.0	5
-----------------	---	---	---	---	---	---	----	----	----	---	---	------	---	---	----	---

SOUTH MILLS LOCK	2	4	5	3	3	6	10	10	12	3	4	5 :	0	0	.0	210
------------------	---	---	---	---	---	---	----	----	----	---	---	-----	---	---	----	-----

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC E4	DISTRICT NAME NORFOLK	DIVISION NAME NORTH ATLANTIC						MONTHS REPORTED					
								7/84	8/84			9/84	

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

ATLANT INTRCOASTAL													
GREAT BRIDGE GUARD LOCK	***												
UPBOUND STATISTICS	204	1346	74	1624	90	154	244	267	592	29	888	175	
DOWNBOUND STATISTICS	197	1475	67	1739	143	89	232	253	619	33	905	95	
TOTALS	401	2821	141	3363	233	243	476	520	1211	62	1793	271	
DISMAL SWAMP													
DEEP CREEK LOCK	***												
UPBOUND STATISTICS	0	249	1	250	0	0	0	1	112	1	114	0	
DOWNBOUND STATISTICS	0	165	0	165	0	0	0	1	79	1	81	0	
TOTALS	0	414	1	415	0	0	0	2	191	2	195	0	
SOUTH MILLS LOCK	***												
UPBOUND STATISTICS	0	159	0	159	0	0	0	3	79	0	82	0	
DOWNBOUND STATISTICS	0	227	0	227	0	0	0	1	104	1	106	0	
TOTALS	0	386	0	386	0	0	0	4	183	1	188	0	

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
E4	NORFOLK	NORTH ATLANTIC	7/84	8/84	9/84

RIVER	LCODE-LOCK NAME	LEN/MID/DRAFT (FT/FT/FT)
ATLANT INTRCOASTAL	11-GREAT BRIDGE GUARD LOCK	0600/0075/16.0
DISMAL SWAMP	1-DEEP CREEK LOCK	0300/0052/12.0
	2-SOUTH MILLS LOCK	0300/0052/12.0

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
 FOR THE PERIOD 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

RIVER LOCK NAME	TOWS	VESSEL		VESSEL TOTAL	BARGES		BARGES TOTAL	LOCKGS COMMER	LOCKGS			TONNAGE (KTONS)
		RECRTN	OTHER		EMPTY	FULL			RECRTN	OTHER	TOTAL	
(NAV, DPN, ETC)												

HUDSON RIVER

TRAY LOCK & DAM	***											
UPBOUND STATISTICS	47	1140	10	1287	0	91	91	116	644	20	780	196
DOWNBOUND STATISTICS	86	1388	4	1478	85	1	86	109	721	22	852	0
TOTAL	133	2528	14	2765	85	92	177	225	1365	42	1632	196

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

LRDC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
CT	NEW YORK	NORTH ATLANTIC	7/84	8/84	9/84

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
HUDSON RIVER	1-TROY LOCK & DAM	0493/0044/15.0

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC B4	DISTRICT NAME VICKSBURG	DIVISION NAME LOWER MISS VALLEY	MONTHS REPORTED															
			7/84	8/84	9/84													
ALL TIMES EXPRESSED IN MINUTES																		
			LOCK PROCESSING TIME									:	DELTAY	DELTAY	DELTAY	DELTAY		
APPROACH			ENTRY			CHAMBER			EXIT			:	TOWS	TIME	AVG	MAX		
MIN AVG MAX			:	MIN AVG MAX	:	MIN AVG MAX	:	MIN AVG MAX	:	MIN AVG MAX	:		(TOWS)	(TOWS)	(TOWS)	(ALL VSSLS)		
DOUCHITA/BLACK RIV																		
JONESVILLE LOCK & DAM			2	6	17	1	5	47	4	13	34	2	7	40 :	6	21	.4	15
COLUMBIA LOCK & DAM			3	5	14	3	6	62	5	14	27	3	6	30 :	2	25	1.2	15
LOCK & DAM 6			2	4	10	2	4	9	5	6	13	2	6	25 :	8	31	2.8	10
LOCK & DAM 8			1	5	12	1	4	10	5	6	18	4	5	12 :	9	24	2.7	15

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

BRDC	DISTRICT NAME	DIVISION NAME		MONTHS REPORTED									
84	VICKSBURG	LOWER MISS VALLEY		7/84			8/84			9/84			

RIVER-LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKES COMMER	LOCKES RECRTN	LOCKES OTHER	LOCKES TOTAL	TONNAGE (TONS)	

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

LOCK NAME	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED											
			7/84		8/84		9/84							
LOCK NAME			TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGE EMPTY	BARGE FULL	BARGE TOTAL	LODGE COMMER	LODGE RECRTN	LODGE OTHER	LODGE TOTAL	TONNAGE KTONS
(NAV, LPM, ETC)														
ILLINOIS														
FRANKLIN LOCK			***											
UPBOUND STATISTICS			102	4297	46	4475	170	47	217	173	1069	9	1542	57
DOWNBOUND STATISTICS			122	4320	33	4475	66	138	204	160	1248	8	1416	123
TOTALS			254	8617	79	8950	236	185	421	333	2608	17	2958	190
FRANKLIN LOCK			*** ONLY FIRST AND THIRD MONTHS REPORTED											
UPBOUND STATISTICS			21	18	19	49	7	117	124	26	6	1	33	57
DOWNBOUND STATISTICS			43	35	2	86	122	78	200	42	6	0	42	118
TOTALS			64	53	12	129	129	195	324	68	6	1	75	206
FRANKLIN LOCK & DAM			*** ONLY FIRST AND THIRD MONTHS REPORTED											
UPBOUND STATISTICS			24	21	8	53	9	165	174	75	6	0	43	232
DOWNBOUND STATISTICS			37	30	3	70	126	48	174	40	5	1	46	87
TOTALS			61	51	11	123	135	213	348	75	13	1	89	116
GREYSON ISLAND LOCK & DAM			***											
UPBOUND STATISTICS			194	782	30	1006	276	471	747	108	321	4	555	755
DOWNBOUND STATISTICS			184	789	33	1006	278	393	671	216	330	6	552	659
TOTALS			378	1571	63	2012	554	864	1418	444	653	10	1107	1415
FRANKLIN LOCK & DAM			***											
UPBOUND STATISTICS			241	802	25	1068	525	617	1142	182	345	7	534	944
DOWNBOUND STATISTICS			234	802	25	1061	342	722	1064	271	341	7	519	934
TOTALS			475	1604	50	2129	867	1339	2206	353	686	14	1053	1883
STANLEY LOCK & DAM			***											
UPBOUND STATISTICS			260	874	13	1157	699	633	1352	106	328	3	637	1113
DOWNBOUND STATISTICS			252	865	28	1145	345	918	1263	193	364	6	683	1405
TOTALS			512	1739	51	2302	1044	1571	2615	399	712	9	1320	2519
FRANKLIN LOCK & DAM			***											
UPBOUND STATISTICS			323	644	46	1013	1191	1166	2357	427	314	21	754	1866
DOWNBOUND STATISTICS			323	654	44	1021	468	1730	2198	416	336	20	766	2509
TOTALS			646	1298	90	2034	1659	2896	4555	843	650	41	1520	4385

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

RIVER LOCK NAME	DISTRICT NAME		DIVISION NAME		MONTHS REPORTED								
	7/84	8/84	9/84	10/84	11/84	12/84	1/85	2/85	3/85	4/85	5/85	6/85	
MISSISSIPPI RIVER													
LOCK & DAM #1	***												
UPBOUND STATISTICS	367	16	14	633	1478	1270	2748	426	153	31	610	2195	
DOWNBOUND STATISTICS	365	361	12	681	439	2130	2569	375	186	57	618	3071	
TOTALS	611	677	26	1314	1917	3400	5317	801	339	88	1228	5266	
LOCK & DAM #2	***												
UPBOUND STATISTICS	366	1353	59	1689	196	1436	3416	393	717	10	1120	2674	
DOWNBOUND STATISTICS	287	1478	23	1716	118	3212	3330	382	741	15	1138	4576	
TOTALS	573	2761	83	3405	2098	4648	6746	775	1458	25	2258	6651	
LOCK & DAM #3	***												
UPBOUND STATISTICS	304	1171	22	1356	2086	1584	3670	431	634	14	1079	2271	
DOWNBOUND STATISTICS	296	1645	14	1756	113	3401	3514	412	647	20	1079	4793	
TOTALS	600	2766	36	2712	2199	4985	7184	843	1281	34	2158	7064	
LOCK & DAM #4	***												
UPBOUND STATISTICS	393	1176	24	1603	2049	1597	3646	436	588	6	1039	2296	
DOWNBOUND STATISTICS	301	1294	14	1610	136	3405	3541	425	604	17	1046	4802	
TOTALS	695	2570	38	3213	2185	5002	7187	861	1192	23	2076	7098	
LOCK & DAM #14 ALBILAR #1	***												
UPBOUND STATISTICS	210	0	0	259	0	0	0	0	565	0	565	0	
DOWNBOUND STATISTICS	2405	0	0	2455	0	0	0	0	584	0	584	0	
TOTALS	2615	0	0	5014	0	0	0	0	1149	0	1149	0	

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

LOCK NAME	DISTRICT NAME ROCK ISLAND	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED										TONNAGE ATONS
			7/84			8/84			9/84				
LOCK NAME	TOWS	VESSEL RECRTN	VESSEL OTHER	VESSEL TOTAL	BARGES EMPTY	BARGES FULL	BARGES TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER (NAVL, OPN, ETC)	LOCKGS TOTAL	TONNAGE ATONS	
MISSISSIPPI RIVER													
LOCK & DAM 15	***												
UPBOUND STATISTICS	417	31	42	490	2039	1935	4174	116	31	3	49	1196	
DOWNBOUND STATISTICS	420	7	35	462	287	3817	4104	111	7	7	125	5371	
TOTALS	837	38	77	952	2526	5752	9278	227	37	10	174	8157	
LOCK & DAM 15 AUXILIARY 1	***												
UPBOUND STATISTICS	66	2180	34	2285	40	54	94	109	801	5	915	68	
DOWNBOUND STATISTICS	58	2167	58	2283	66	15	81	117	796	5	920	21	
TOTALS	124	4347	92	4568	106	69	175	226	1597	10	1835	89	
LOCK & DAM 16	***												
UPBOUND STATISTICS	450	418	47	915	2408	2134	4542	690	258	10	988	3117	
DOWNBOUND STATISTICS	452	416	42	912	333	4063	4396	671	313	14	999	5695	
TOTALS	902	834	89	1827	2741	6197	8938	1361	571	24	1987	8812	
LOCK & DAM 17	***												
UPBOUND STATISTICS	379	241	23	643	2332	2255	4587	621	216	15	854	3281	
DOWNBOUND STATISTICS	390	241	11	642	252	4196	4448	635	246	27	878	5680	
TOTALS	769	482	34	1285	2584	6451	9035	1256	464	42	1732	8961	
LOCK & DAM 18	***												
UPBOUND STATISTICS	398	458	34	890	2435	2237	4672	624	261	5	940	3260	
DOWNBOUND STATISTICS	397	418	32	847	283	4313	4596	613	355	16	984	6050	
TOTALS	795	876	66	1737	2718	6550	9268	1237	616	21	1924	9310	
LOCK & DAM 19	***												
UPBOUND STATISTICS	383	294	51	728	2639	2233	4871	416	136	5	557	3298	
DOWNBOUND STATISTICS	399	322	41	762	293	4470	4763	416	146	9	571	6263	
TOTALS	782	616	92	1490	2932	6703	9635	832	282	14	1128	9561	
LOCK & DAM 19 AUXILIARY 1	NO DATA RECORDED FOR THIS LOCK												
LOCK & DAM 20	***												
UPBOUND STATISTICS	384	274	62	720	2688	2178	4866	653	191	17	888	3235	
DOWNBOUND STATISTICS	400	308	57	765	269	4540	4809	667	222	18	907	6173	
TOTALS	784	582	119	1485	2957	6718	9675	1320	413	35	1815	9408	

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
 FOR THE PERIOD 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

DISTRICT NAME	DIVISION NAME		MONTHS REPORTED									
ROCK ISLAND	NORTH CENTRAL		7/84	8/84	9/84							
RI RIVER LOCK NAME	TONS	VESSEL RECATN	VESSEL OTHER	VESSEL TOTAL	BARGES EMPTY	BARGES FULL	BARGES TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL	TONNAGE (KTONS) (NAV, OFN, ETC)
MISSISSIPPI RIVER												
LOCK # DAM 01	***											
PEBOUR STATISTICS	400	287	51	760	2810	2272	5082	700	222	20	942	3359
WABOUND STATISTICS	409	285	59	783	302	4710	5012	709	233	26	968	6615
TOTALS	861	592	60	1543	3112	6982	10094	1409	455	46	1910	9975
LOCK # DAM 11	***											
PEBOUR STATISTICS	427	432	31	860	2949	2297	5246	701	215	32	948	3385
WABOUND STATISTICS	438	440	29	907	308	4612	5120	705	245	29	979	6776
TOTALS	865	842	60	1767	3257	7109	10366	1406	460	61	1927	10161

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

LOCK #	DISTRICT NAME			DIVISION NAME			MONTHS REPORTED											
14	LOCK ISLAND			NORTH CENTRAL			7/84 8/84											
ALL TIMES EXPRESSED IN MINUTES																		
APPROACH			LOCK PROCESSING TIME						EXIT					DELAIED	DELAY	DELAY	SECT	
MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	TOWS	TIME	TIME	TIME
MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	(TOWS)	(TOWS)	(TOWS)	SECT
ILLINOIS																		
THOMAS J. O'BRIEN	1	1	19	1	1	16	1	15	74	1	1	15	:	86	977	10.3	41	
LOCKPORT LOCK	1	9	93	1	11	28	15	23	52	1	12	64	:	60	22763	358.7	655	
BRANDON ROAD LOCK & DAM	1	9	40	1	16	399	8	21	67	1	12	66	:	56	119225	1934.9	11165	
BRESDEN ISLAND LOCK & DAM	1	3	34	1	4	416	6	17	134	1	4	59	:	148	7101	19.8	135	
MARSTELLES LOCK & DAM	1	5	78	1	4	53	3	21	79	1	7	340	:	200	15309	32.1	1206	
SHARVED ROCK LOCK & DAM	1	3	41	1	4	42	7	17	75	1	6	75	:	160	11565	22.6	1440	
PEORIA LOCK & DAM	1	5	51	1	7	62	1	9	37	1	9	74	:	626	25120	38.9	286	
LABRANCE LOCK & DAM	1	7	70	1	8	60	1	7	90	1	17	85	:	566	26654	43.6	325	
MISSISSIPPI RIVER																		
LOCK & DAM 11	1	4	65	1	4	30	1	10	70	1	8	47	:	169	34784	68.7	620	
LOCK & DAM 12	1	5	86	1	5	36	1	7	131	1	9	51	:	106	35223	28.7	654	
LOCK & DAM 13	1	3	62	1	5	31	1	8	55	1	9	133	:	291	27005	44.6	1412	
LOCK & DAM 14	1	5	88	1	6	429	1	8	140	1	11	299	:	453	61393	101.4	1494	
LOCK & DAM 14 AUXILIARY 1	1	1	1	1	1	2	1	12	75	1	1	2	:	0	0	1.0	0	
LOCK & DAM 15	1	9	126	1	8	65	2	10	402	1	16	142	:	448	64421	221.0	1644	
LOCK & DAM 15 AUXILIARY 1	1	1	17	1	1	13	1	10	142	1	1	22	:	19	1711	13.9	1440	

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERCD	DISTRICT NAME			DIVISION NAME			MONTHS REPORTED							
F4	ROCK ISLAND			NORTH CENTRAL			7/84 8/84 9/84							

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

MISSISSIPPI RIVER														
LOCK & DAM 1A	1	7	72	1	6	36	1	8	68	1 13 59 :	577	69622	77.2	760
LOCK & DAM 1B	1	9	101	1	7	365	5	9	437	1 13 164 :	484	59013	76.7	1537
LOCK & DAM 1C	1	6	89	1	7	38	1	7	64	1 13 49 :	496	55072	69.3	1486
LOCK & DAM 1D	1	15	106	1	7	40	3	17	57	1 9 67 :	372	28020	35.8	788
LOCK & DAM 1A AUXILIARY 1	NO DATA RECORDED FOR THIS LOCK													
LOCK & DAM 2A	1	6	87	1	7	41	1	6	66	1 14 87 :	438	45736	58.3	771
LOCK & DAM 2B	1	3	138	1	7	73	1	6	83	1 14 89 :	535	61900	71.9	612
LOCK & DAM 2C	1	10	120	1	8	37	1	6	63	1 17 531 :	623	155606	179.9	1631

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
 FOR THE PERIOD 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

4	FACILITY NAME	DIVISION NAME	MONTHS REPORTED
		NORTH CENTRAL	7/84
			8/84
			9/84

FACILITY	CODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
MISSISSIPPI	1-LOCK & DAM 1 MAIN CHBR 1	0400/0056/11.0
	1-LOCK & DAM 1 MAIN CHBR 2	0400/0056/11.0
	2-LOCK & DAM 2	0600/0110/11.0
	2-LOCK & DAM 2 AUXILIARY 1	0500/0110/11.0
	3-LOCK & DAM 3	0600/0110/11.0
	4-LOCK & DAM 4	0600/0110/11.0
	5-LOCK & DAM 5	0600/0110/11.0
	6-LOCK & DAM 6	0600/0110/11.0
	7-LOCK & DAM 7	0600/0110/11.0
	8-LOCK & DAM 8	0600/0110/11.0
	9-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

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC FS	WATER NAME DIVISION	DIVISION NAME NORTH CENTRAL	MONTHS REPORTED									
			7/84		8/84		9/84					
RIVER LOCK NAME												
	TOWS	VESSL RECREA	VESSL OTHER	VESSL TOTAL	BARGE EMPTY	BARGE FULL	BARGE TOTAL	LOCKGS COMMER	LOCKGS RECREA	LOCKGS OTHER	LOCKGS TOTAL (NAV, OPN, ETC)	TONNAGE (TONS)
RIVER LOCK NAME												
LOCK & DAM 1 - RIVER 1												

UPBOUND STATISTICS	250	1087	20	1967	237	254	491	294	706	10	1910	320
DOWNBOUND STATISTICS	261	1854	6	2122	229	266	495	289	740	11	1040	197
TOTALS	502	3541	26	4089	466	520	986	583	1446	21	2050	517
LOCK & DAM 1 - RIVER 2												
NO DATA RECORDED FOR THIS LOCK												
LOCK & DAM 2												

UPBOUND STATISTICS	345	2112	21	2478	2774	557	3331	443	788	16	1247	793
DOWNBOUND STATISTICS	343	2167	6	2516	46	3268	3316	441	783	20	1244	4626
TOTALS	688	4279	27	4994	2822	3825	6647	884	1571	36	2491	5420
LOCK & DAM 2 - RIVER 1												
NO DATA RECORDED FOR THIS LOCK												
LOCK & DAM 3												

UPBOUND STATISTICS	275	3697	17	3990	2430	560	2990	350	1110	37	1497	806
DOWNBOUND STATISTICS	214	3740	10	4024	40	2946	2986	348	1135	34	1517	4199
TOTALS	550	7437	27	8014	2470	3506	5976	698	2245	71	3014	5006
LOCK & DAM 4												

UPBOUND STATISTICS	276	2424	20	2720	2463	577	3040	355	952	89	1396	832
DOWNBOUND STATISTICS	275	2520	13	2808	42	2995	3037	346	995	82	1423	4178
TOTALS	551	4944	33	5528	2505	3572	6077	701	1947	171	2819	5110
LOCK & DAM 5												

UPBOUND STATISTICS	275	1904	12	2191	2371	625	2996	348	810	158	1316	697
DOWNBOUND STATISTICS	212	1961	6	2241	60	2955	3015	344	825	156	1325	4111
TOTALS	547	3865	18	4432	2431	3580	6011	692	1635	314	2641	5107
LOCK & DAM 6												

UPBOUND STATISTICS	275	21	6	2459	2489	680	3169	360	969	37	1366	497
DOWNBOUND STATISTICS	277	1108	7	2498	66	3113	3179	347	1101	35	1487	4427
TOTALS	552	1129	13	4957	2555	3793	6348	707	2070	72	2853	5425

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

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ERDC FS	STATION NAME ST. PAUL	DIVISION NAME NORTH CENTRAL					MONTHS REPORTED 7/84 8/84 9/84					
RIVER/LOCK NAME												
TOWS	VESSL RECRIN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCKGS COMMER	LOCKGS RECRIN	LOCKGS OTHER	LOCKGS TOTAL (NAV, OPN, ETC)	LOCKGS TOTAL	LOCKGS TOTAL
MISSISSIPPI RIVER												
LOCK & DAM 7	***											
UPBOUND STATISTICS	285	3396	18	3699	2488	682	3170	427	1114	71	1612	581
DOWNBOUND STATISTICS	275	3433	112	3820	52	3112	3164	404	1181	79	1664	4407
TOTALS	560	6829	130	7519	2540	3794	6334	831	2295	150	3276	10217
LOCK & DAM 8	***											
UPBOUND STATISTICS	286	1422	11	1719	2425	803	3228	363	743	33	1139	1171
DOWNBOUND STATISTICS	273	1486	8	1767	70	3149	3219	352	757	37	1146	4478
TOTALS	559	2908	19	3486	2495	3952	6447	715	1500	70	2285	5649
LOCK & DAM 9	***											
UPBOUND STATISTICS	271	1423	5	1699	2043	1186	3229	344	750	72	1166	1419
DOWNBOUND STATISTICS	262	1465	5	1732	97	3065	3162	333	759	77	1169	4362
TOTALS	533	2888	10	3431	2140	4251	6391	677	1509	149	2335	5082
LOCK & DAM 10	***											
UPBOUND STATISTICS	303	1619	20	1942	2224	1239	3463	391	825	22	1238	1771
DOWNBOUND STATISTICS	288	1587	13	1888	100	3243	3343	370	903	27	1300	4593
TOTALS	591	3206	33	3830	2324	4482	6806	761	1728	49	2538	6364
ST ANTHONY FALLS UPPER L & D	***											
UPBOUND STATISTICS	182	816	124	1122	198	98	296	206	405	6	617	140
DOWNBOUND STATISTICS	192	910	22	1124	82	226	308	210	417	8	635	389
TOTALS	374	1726	146	2246	280	324	604	416	822	14	1252	469
ST ANTHONY FALLS LOWER L & D	***											
UPBOUND STATISTICS	261	826	11	1098	239	252	491	273	396	10	679	370
DOWNBOUND STATISTICS	266	948	7	1221	233	269	502	272	406	7	685	397
TOTALS	527	1774	18	2319	472	521	993	545	802	17	1364	767
LOCK & DAM 54	***											
UPBOUND STATISTICS	278	2627	39	2944	2383	628	3011	472	987	149	1610	112
DOWNBOUND STATISTICS	274	2619	42	2935	51	2987	3038	446	1062	140	1650	4164
TOTALS	552	5246	81	5879	2434	3615	6049	920	2051	289	3260	5276

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

LOCK	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED													
85	RED RIVER	NORTH CENTRAL	7/84		8/84		9/84									
ALL TIMES EXPRESSED IN MINUTES																
APPROACH			LOCK PROCESSING TIME			EXIT			DELA	DELA	DELA	DELA				
MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	TOWS	TIME	AVE	MAX				
									(TOWS)			(TOWS)	(TOWS)			
RED RIVER																
LOCK 1 - MAIN CHAMBER	1	2	50	1	4	30	3	11	45	1	3	22	109	2222	4.3	88
LOCK 2 - MAIN CHAMBER	NO DATA RECORDED FOR THIS LOCK															
LOCK 3 - MAIN CHAMBER	1	4	76	1	6	35	4	9	23	1	7	72	447	47533	69.1	720
LOCK 4 - MAIN CHAMBER	NO DATA RECORDED FOR THIS LOCK															
LOCK 5 - CHAMBER	1	4	73	1	5	50	1	6	26	1	7	61	366	36969	57.1	649
LOCK 6 - CHAMBER	1	4	60	1	5	38	2	5	59	1	7	73	342	28241	51.3	603
LOCK 7 - CHAMBER	1	4	90	1	5	63	4	8	38	1	7	170	317	23474	42.9	563
LOCK 8 - CHAMBER	1	4	76	1	4	34	2	5	26	1	7	84	336	28269	50.2	644
LOCK 9 - CHAMBER	1	7	74	1	5	29	4	5	56	1	6	90	359	22201	39.6	611
LOCK 10 - CHAMBER	1	4	70	1	5	30	4	7	55	1	9	57	322	26404	47.2	598
LOCK 11 - CHAMBER	1	4	118	1	5	46	3	6	26	1	9	78	201	27246	51.1	1106
LOCK 12 - CHAMBER	1	4	84	1	5	56	4	6	36	1	8	90	312	25591	43.3	540
LOCK 13 - CHAMBER	1	2	78	1	3	24	4	9	31	1	2	27	31	478	1.1	70
LOCK 14 - CHAMBER	1	2	78	1	4	71	4	11	52	1	2	15	115	2314	4.4	150
LOCK 15 - CHAMBER	1	2	78	1	4	84	1	6	17	1	6	63	335	27965	54.7	889

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC NO.	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
1	RELAND	NORTH PACIFIC	7/84	8/84	9/84

REVER	LOCK-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
COUMPLA RIVER	1-BONNEVILLE LOCK & DAM	0500/0075/15.0
	2-THE DALLES DAM	0675/0086/15.0
	3-JOHN DAY LOCK & DAM	0675/0086/15.0
WILLAMETTE RIVER	11-WILLAMETTE FALLS LOCKS 1 - 4	0210/0040/ 6.5
	15-WILLAMETTE FALLS GUARD LOCK	0210/0040/ 6.5

APL

PERFORMANCE MONITORING SYSTEM (FMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC AL	DISTRICT NAME PORTLAND	DIVISION NAME NORTH PACIFIC	MONTHS REPORTED										TONNAGE (KTONS)
			7/84		8/84		9/84		10/84		11/84		
REVENUE	TYPE	TOWL	VESSEL RECRTN	VESSEL OTHER	VESSEL TOTAL	BARGES EMPTY	BARGES FULL	BARGES TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL	
(NAV, OPN, ETC)													
KELLY RIVER													
BONNEVILLE DAM		***											
UPBOUND STATISTICS		301	162	34	497	736	279	1015	627	55	47	729	519
DOWNBOUND STATISTICS		211	182	11	514	59	1042	1101	693	68	54	815	2294
TOTALS		622	344	45	1011	795	1321	2116	1320	123	101	1544	2813
THE DALY DAM													
UPBOUND STATISTICS		237	86	6	331	567	263	830	258	47	27	332	405
DOWNBOUND STATISTICS		24	97	9	346	57	795	852	260	57	22	339	1987
TOTALS		477	183	17	677	624	1058	1682	518	104	49	671	2392
JOHN DAY DAM													
UPBOUND STATISTICS		237	103	9	349	547	271	818	256	42	32	330	470
DOWNBOUND STATISTICS		237	116	16	365	60	767	827	254	45	32	331	1915
TOTALS		476	219	25	714	607	1038	1645	510	87	64	661	2386
W. WHEAT RIVER													
WILLAMETTE RIVER LOCKS 1-4		***											
UPBOUND STATISTICS		132	279	45	456	14	183	217	211	243	1	459	44
DOWNBOUND STATISTICS		105	113	61	477	4	135	139	115	228	2	405	40
TOTALS		241	387	106	933	18	318	356	386	475	3	864	85
W. WHEAT RIVER LOCKS 5-6													
UPBOUND STATISTICS		97	108	118	319	16	123	149	34	33	396	463	23
DOWNBOUND STATISTICS		72	129	141	342	4	68	72	16	30	363	409	23
TOTALS		165	237	259	661	20	191	221	50	63	759	872	46

SEE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

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PROJECT NAME	DIVISION NAME	MONTHS REPORTED
PORTLAND	NORTH PACIFIC	7/84 8/84 9/84

ALL TIMES EXPRESSED IN MINUTES

APPROACH			LOCK PROCESSING TIME			EXIT			TOWS		DELA	DELA
MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	MAX	TIME	TIME
											(TOWS)	(TOWS)

COLUMBIA RIVER

BONNEVILLE LOCK & DAM	1	7	65	1	6	65	1	23	110	1	4	67	609	60126	96.7	457
THE DALLES DAM	1	5	30	1	5	24	10	22	96	1	5	18	384	3796	8.	
JOHN DAY LOCK & DAM	1	4	20	1	6	24	2	23	85	1	4	12	468	2520	5.4	110

WILLAMETTE RIVER

WILLAMETTE FALLS LOCKS 1 - 4	1	1	61	1	1	8	2	33	117	1	1	24	234	281	1.1	18
WILLAMETTE FALLS GUARD LOCK	1	1	6	1	1	8	1	1	61	1	1	61	161	165	1.0	5

TABLE

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
 FOR THE PERIOD 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

BRDC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
30	TEATTLE	NORTH PACIFIC	7/84	8/84	9/84

RIVER	LEGGE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
LAKE WASHINGTON LRP CA	1-HIRAM M CHITTENDEN LOCKS	0760/0080/30.0
	1-HIRAM M CHITTENDEN LOCKS AUX1	0150/0028/25.0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

DIVISION	FACILITY NAME FACILITY	DIVISION NAME OHIO RIVER	MONTHS REPORTED									TONNAGE TENS	
			7/84	8/84	9/84								

			TOWS	VESSEL RECRN	VESSEL OTHER	VESSEL TOTAL	BARGES EMPTY	BARGES FULL	BARGES TOTAL	LOCKGS COMMER	LOCKGS RECRN	LOCKGS OTHER (NAV, OPN, ETC)	

DIVISION 1			***										
	WATERWAY		75	385	2	433	124	12	136	50	170	3	123
	WATERWAY		47	468	9	524	56	98	154	56	213	2	271
	WATERWAY		84	854	17	957	180	110	290	106	383	5	494
DIVISION 2			***										
	WATERWAY		727	757	54	1538	3006	3709	6715	744	224	5	972
	WATERWAY		899	798	59	1556	1697	4557	6254	720	240	5	965
	WATERWAY		1426	1555	113	3094	4702	8266	12969	1464	464	10	1938
DIVISION 3			*** ONLY FIRST AND THIRD MONTHS REPORTED										
	WATERWAY		8	554	19	621	49	45	94	56	160	1	213
	WATERWAY		31	551	71	633	78	54	132	74	157	2	173
	WATERWAY		39	1115	90	1254	127	99	226	130	317	3	451
DIVISION 4			***										
	WATERWAY		611	44	18	753	4627	7003	7630	699	7	2	708
	WATERWAY		704	21	10	736	1144	6361	7505	706	7	1	714
	WATERWAY		1315	66	28	1489	5771	9364	15135	1405	14	3	1422
DIVISION 5			***										
	WATERWAY		45	877	27	945	98	28	126	63	563	2	618
	WATERWAY		75	941	31	1010	50	51	101	60	602	5	667
	WATERWAY		84	1817	54	1955	148	79	227	123	1165	7	1291
DIVISION 6			***										
	WATERWAY		177	61	15	234	813	401	1214	150	48	2	200
	WATERWAY		696	145	30	873	972	6138	7210	710	73	6	789
	WATERWAY		873	211	47	1107	1785	6639	8424	860	121	8	989
DIVISION 7			***										
	WATERWAY		177	121	10	308	5163	1644	7607	742	60	6	611
	WATERWAY		17	94	16	275	181	1320	1501	177	59	6	1869
	WATERWAY		19	15	26	1157	5744	7964	9708	919	119	14	1810

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

PORT	PORT NAME	DIVISION NAME					MONTHS REPORTED					
R2	VEHICLE	OHIO RIVER					7/84			8/84		

RIVER-LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGS	LOCKS	LOCKS	LOCKS	LOCKS	AVERAGE
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	SECRETN	OTHER	TOTAL	
		(NAV, OFN, ETC)										

SPEED/ERRIN RIVER												
LOCK A DAM 1	***											
UPBOUND STATISTICS	566	314	21	841	1718	219	1937	525	165	3	693	328
DOWNBOUND STATISTICS	589	221	14	844	116	1819	1929	523	159	2	684	324
TOTALS	1015	635	35	1685	1828	2038	3866	1048	324	5	1277	652
LOCK 1 DAM 1	***											
UPBOUND STATISTICS	365	84	15	464	1380	33	1413	378	53	4	435	49
DOWNBOUND STATISTICS	366	76	6	448	25	1389	1414	374	51	3	429	49
TOTALS	731	160	21	912	1405	1422	2827	752	104	7	864	98
LOCK 1 DAM	NO DATA RECORDED FOR THIS LOCK											
OHIO RIVER												
MARKLAND LOCKS & DAM	***											
UPBOUND STATISTICS	523	1025	17	1565	2311	2652	4963	532	331	11	874	100
DOWNBOUND STATISTICS	507	1031	9	1547	932	3739	4671	514	352	17	883	99
TOTALS	1030	2056	26	3112	3243	6391	9634	1046	683	28	1757	99
MARKLAND LOCKS & DAM AUX 1	NO DATA RECORDED FOR THIS LOCK											
MOALPINE LOCKS & DAM	***											
UPBOUND STATISTICS	586	288	109	974	1819	3582	5401	663	114	17	794	104
DOWNBOUND STATISTICS	590	341	84	1015	1396	3719	5115	645	142	19	806	100
TOTALS	1176	629	184	1989	3215	7301	10516	1308	256	36	1600	102
MOALPINE LOCKS & DAM AUX 1	NO DATA RECORDED FOR THIS LOCK											
CANNELTON LOCKS & DAM	***											
UPBOUND STATISTICS	546	38	6	590	2008	3734	5742	551	11	0	562	100
DOWNBOUND STATISTICS	521	33	11	565	1345	4064	5409	524	14	3	541	99
TOTALS	1067	71	17	1155	3353	7798	11151	1075	25	3	1103	99

TABLE

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
 FOR THE PERIOD 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

ESDC	STATION NAME	DIVISION NAME	MONTHS REPORTED		
RL	COLUMBIA	OHIO RIVER	7/84	8/84	9/84

RIVER	LOCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
GREEN RIVER	21-LOCK & DAM 1	0600/0084/12.0
	22-LOCK & DAM 2	0600/0084/12.0
	23-LOCK & DAM 3	0138/0036/12.0
OHIO RIVER	41-MARKLAND LOCKS & DAM	1200/0110/12.0
	41-MARKLAND 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
	75-CANNELTON LOCK & DAM	1200/0110/12.0
	75-CANNELTON LOCK & DAM AUX	0600/0110/12.0
	76-NEWBURGH LOCK & DAM	1200/0110/12.0
	76-NEWBURGH 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-SMITHLAND LOCK & DAM	1200/0110/12.0
	78-SMITHLAND LOCK & DAM AUX 1	1200/0110/12.0
	52-LOCK & DAM 52	1200/0110/12.0
	52-LOCK & DAM 52 AUX 1	0600/0110/12.0

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC DISTRICT NAME DIVISION NAME MONTHS REPORTED
H1 HUNTINGTON OHIO RIVER 7/84 8/84

ALL TIMES EXPRESSED IN MINUTES

APPROACH			LOCK PROCESSING TIME			EXIT			DELA			DELA		
			ENTRY			CHAMBER			TOWS			TIME		
MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	(TOWS)	(TOWS)	(TOWS)

OHIO RIVER

CAPT ANT MELDAH LANDAM AUX	1	4	38	1	2	26	6	12	28	1	2	25	3	80	1.2	50
WILLOW ISLAND LOCKS & DAM	1	15	48	1	8	28	5	13	50	2	9	30	325	14113	15.1	136
WILLOW ISLAND LOCKS & DAM AU	1	10	49	1	3	27	5	13	27	1	5	15	17	414	1.2	54

TABLE

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EAOO NO	DISTRICT NAME HUNTINGTON	DIVISION NAME OHIO RIVER	MONTHS REPORTED															7/84	8/84	9/84		
			ALL TIMES EXPRESSED IN MINUTES																			
			APPROACH			LOCK ENTRY			PROCESSING TIME CHAMBER			EXIT			: DELAYED TOWS		DELAY TIME				DELAY AVG	DELAY MAX
			MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS	(TOWS)				(TOWS)	(ALL VESSELS)
MAJOR RIVER																						
WINFIELD LOCKS & DAM MAIN 1	1	9	98	1	5	45	5	10	32	4	13	490	:	413	101138	165.2	1310					
WINFIELD LOCKS & DAM MAIN 2	1	8	105	1	4	19	5	9	42	3	11	103	:	422	97404	164.6	940					
MARMET LOCKS & DAM MAIN 1	1	9	53	1	4	40	5	8	28	1	9	50	:	188	92688	207.8	2180					
MARMET LOCKS & DAM MAIN 2	1	3	71	1	4	28	5	8	20	1	8	53	:	90	10633	29.2	640					
LONDON LOCKS & DAM MAIN 1	1	7	57	1	4	19	5	9	24	2	8	65	:	80	9901	45.0	486					
LONDON LOCKS & DAM MAIN 2	1	7	38	1	4	21	5	9	25	2	7	38	:	56	11156	50.3	801					
MID RIVER																						
BELLEVILLE LOCKS & DAM	1	17	50	1	9	30	8	12	25	3	9	33	:	296	14138	18.5	786					
BELLEVILLE LOCKS & DAM AUX 1	1	9	73	1	6	40	8	12	53	1	8	65	:	174	50102	174.0	1440					
RACINE LOCKS & DAM	1	13	75	2	11	36	9	10	27	2	9	29	:	370	17110	8.6	232					
RACINE LOCKS & DAM AUX 1	1	6	72	2	5	22	8	10	17	1	6	20	:	13	363	0.0	60					
GALLIPOLI LOCKS & DAM	1	9	101	1	12	46	5	12	57	2	18	72	:	827	202859	207.3	1090					
GALLIPOLI LOCKS & DAM AUX 1	1	6	43	1	6	45	5	12	37	1	7	58	:	18	3082	26.8	889					
GREENE LOCKS & DAM	1	14	52	2	9	30	5	11	22	2	9	29	:	520	23140	19.2	240					
GREENE LOCKS & DAM AUX 1	1	6	30	1	4	19	5	10	20	1	4	15	:	10	255	0.0	60					
CARTERS LOCKS & DAM	1	17	58	1	10	42	5	14	30	2	11	27	:	473	28273	16.0	190					

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC H1	DISTRICT NAME HUNTINGTON	DIVISION NAME OHIO RIVER						MONTHS REPORTED 7/84 8/84 9/84					

RIVER LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL	TUNNAGE (NAV, OPN, ETC)	

OHIO RIVER													
CAPT ANT MELDRAH LOCKS & DAM	***												
UPBOUND STATISTICS	542	19	11	572	3479	2326	5805	553	11	0	564	3689	
DOWNBOUND STATISTICS	518	20	6	544	951	4636	5587	523	13	0	536	7026	
TOTALS	1060	39	17	1116	4430	6962	11392	1076	24	0	1100	10718	
CAPT ANT MELDRAH LOCKS & DAM AUX 1	***												
UPBOUND STATISTICS	31	1224	2	1257	31	53	84	38	470	1	509	78	
DOWNBOUND STATISTICS	37	1184	7	1228	59	43	102	47	479	3	529	50	
TOTALS	68	2408	9	2485	90	96	186	85	949	4	1038	128	
WILLOW ISLAND LOCKS & DAM	***												
UPBOUND STATISTICS	458	7	7	472	877	4096	4973	460	5	0	465	5710	
DOWNBOUND STATISTICS	440	14	4	458	2325	2531	4856	443	9	0	452	3664	
TOTALS	898	21	11	930	3202	6627	9829	903	14	0	917	9374	
WILLOW ISLAND LOCKS & DAM AUX	***												
UPBOUND STATISTICS	84	329	20	433	138	143	281	116	161	1	278	151	
DOWNBOUND STATISTICS	105	340	18	463	194	167	361	137	160	2	299	143	
TOTALS	189	669	38	896	332	310	642	253	321	3	577	294	

TABLE

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

RIVER	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED										TONNAGE (LTONS)
			7/84			8/84			9/84				
			TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER (NAV, OPN, ETC)	LOCKGS TOTAL
HUNTINGTON													
BELLERUE LOCKS & DAM AUX 1 ***													
	UPBOUND STATISTICS		134	135	4	273	215	952	1167	173	162	24	359
	DOWNBOUND STATISTICS		104	145	16	265	671	566	1237	205	165	23	387
	TOTALS		238	280	20	538	886	1518	2404	378	327	47	746
RACINE LOCKS & DAM ***													
	UPBOUND STATISTICS		535	7	7	549	1255	4610	5865	540	2	0	641
	DOWNBOUND STATISTICS		495	6	11	512	2642	2948	5590	500	2	2	504
	TOTALS		1030	13	18	1061	3897	7558	11455	1040	4	2	1145
RACINE LOCKS & DAM AUX 1 ***													
	UPBOUND STATISTICS		56	161	6	217	99	70	169	57	101	7	161
	DOWNBOUND STATISTICS		76	165	11	246	128	121	249	87	107	3	19
	TOTALS		132	326	17	463	227	191	418	144	208	6	180
GALLIUP LOCKS & DAM ***													
	UPBOUND STATISTICS		512	7	9	524	890	4418	5308	878	1	0	879
	DOWNBOUND STATISTICS		486	99	104	689	2630	2469	5099	837	0	1	838
	TOTALS		998	106	113	1213	3520	6887	10407	1715	1	1	1717
GALLIUP LOCKS & DAM AUX 1 ***													
	UPBOUND STATISTICS		55	131	27	213	64	116	180	90	102	3	195
	DOWNBOUND STATISTICS		60	131	42	233	134	76	210	120	101	3	224
	TOTALS		115	262	69	446	198	192	390	210	203	6	419
GREENE LOCKS & DAM ***													
	UPBOUND STATISTICS		612	30	23	665	4092	1945	6037	624	8	2	624
	DOWNBOUND STATISTICS		593	17	21	631	860	5070	5930	606	4	0	606
	TOTALS		1205	47	44	1296	4952	7015	11967	1230	12	2	1230
JEEB LOCKS & DAM AUX 1 ***													
	UPBOUND STATISTICS		60	484	53	597	56	69	125	112	264	2	376
	DOWNBOUND STATISTICS		53	479	74	611	68	38	106	128	237	3	366
	TOTALS		113	963	127	1208	124	107	231	240	501	5	742

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EAOE #1	DISTRICT NAME HUNTINGTON		DIVISION NAME OHIO RIVER				MONTHS REPORTED						
			7/84			8/84							
RIVER LOCK NAME	TOWNS		VESSEL	VESSEL	VESSEL	BARGES	BARGES	BARGES	LOCKGS	LOCKGS	LOCKGS	LOCKGS	WATER MILES
			RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)													
CANAWHA RIVER													
WINFIELD LOCKS & DAM MAIN 1	***												
UPBOUND STATISTICS	270	63	20	353	1049	617	1666	1052	70	11	1133	154	
DOWNBOUND STATISTICS	276	41	10	327	330	1462	1792	1057	56	11	1124	1644	
TOTALS	546	104	30	680	1379	2079	3458	2109	126	22	2257	1594	
WINFIELD LOCKS & DAM MAIN 2	***												
UPBOUND STATISTICS	296	68	22	386	1382	430	1812	1051	101	13	1165	576	
DOWNBOUND STATISTICS	295	90	20	405	514	1197	1711	1053	111	6	1170	1391	
TOTALS	591	158	42	791	1896	1627	3523	2104	212	19	2335	1970	
MARRET LOCKS & DAM MAIN 1	***												
UPBOUND STATISTICS	202	87	15	304	955	100	1055	663	154	0	817	115	
DOWNBOUND STATISTICS	244	106	15	365	72	1172	1244	829	168	3	1000	1452	
TOTALS	446	193	30	669	1027	1272	2299	1492	322	3	1817	1569	
MARRET LOCKS & DAM MAIN 2	***												
UPBOUND STATISTICS	194	193	23	410	760	75	835	501	225	0	726	99	
DOWNBOUND STATISTICS	150	173	21	344	74	621	695	367	224	2	593	712	
TOTALS	344	366	44	754	834	696	1530	868	449	2	1319	811	
LONDON LOCKS & DAM MAIN 1	***												
UPBOUND STATISTICS	111	17	12	140	346	5	351	247	31	9	287	6	
DOWNBOUND STATISTICS	109	22	9	140	5	373	378	262	46	11	319	447	
TOTALS	220	39	21	280	351	378	729	509	77	20	606	453	
LONDON LOCKS & DAM MAIN 2	***												
UPBOUND STATISTICS	109	46	8	163	397	1	398	265	53	6	324	1	
DOWNBOUND STATISTICS	113	21	10	144	1	389	390	270	42	2	314	411	
TOTALS	222	67	18	307	398	390	788	535	95	8	638	412	
OHIO RIVER													
BELLEVILLE LOCKS & DAM	***												
UPBOUND STATISTICS	401	2	3	406	677	3728	4405	403	0	1	404	5415	
DOWNBOUND STATISTICS	364	1	5	370	2148	2089	4237	365	0	0	365	3113	
TOTALS	765	3	8	776	2825	5817	8642	768	0	1	769	8528	

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROT	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H1	ATLINGTON	OHIO RIVER	7/84	8/84	9/84

RIVER	LOCK-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
KANAWHA RIVER	1-WINFIELD LOCKS & DAM MAIN 1	0360/0056/12.0
	1-WINFIELD LOCKS & DAM MAIN 2	0360/0056/12.0
	2-MARMET LOCKS & DAM MAIN 1	0360/0056/12.0
	2-MARMET LOCKS & DAM MAIN 2	0360/0056/12.0
	3-LONDON LOCKS & DAM MAIN 1	0360/0056/12.0
OHIO RIVER	3-LONDON LOCKS & DAM MAIN 2	0360/0056/12.0
	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-SALLIPOLIS LOCKS & DAM	0600/0110/12.0
	23-SALLIPOLIS 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 LOCKS & 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 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC 64	DISTRICT NAME WALLA WALLA	DIVISION NAME NORTH PACIFIC	MONTHS REPORTED												7/84	8/84	9/84				
			ALL TIMES EXPRESSED IN MINUTES																		
			APPROACH			LOCK ENTRY			PROCESSING CHAMBER			EXIT						: DELAYED TOWS		DELAY TIME AVE	DELAY MAX
			MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX				:	(TOWS)	(TOWS)	(SECS)
COLUMBIA RIVER																					
MCNARY LOCK & DAM			1	4	25	1	5	25	5	16	44	2	5	22	:	441	3301	65			
SNAKE RIVER																					
ICE HARBOR LOCK & DAM			1	3	15	1	5	34	10	21	46	1	3	17	:	393	2784	140			
LOWER MONUMENTAL LOCK & DAM			1	3	25	2	5	30	9	24	44	1	4	24	:	252	1857	95			
LITTLE GOOSE LOCK & DAM			2	3	18	1	3	26	9	15	34	1	4	18	:	250	1191	75			
LOWER GRANITE LOCK & DAM			1	3	28	2	4	15	6	11	21	1	3	14	:	225	1491	70			

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC ID	DISTRICT NAME WALLA WALLA	DIVISION NAME NORTH PACIFIC	MONTHS REPORTED											
			7/84			8/84				9/84				
RIVER/LOCK NAME			TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL (NAV, OPN, ETC)	TONNAGE (TONS)
COLUMBIA RIVER														
MONARCH LOCK & DAM			***											
UPBOUND STATISTICS			222	161	5	388	467	274	741	246	82	3	331	416
DOWNBOUND STATISTICS			219	151	7	387	83	669	752	248	89	5	342	1650
TOTALS			441	322	12	775	550	943	1493	494	171	8	673	2066
MADE RIVER														
ICE HARVEY LOCK & DAM			***											
UPBOUND STATISTICS			196	636	23	855	396	58	454	234	263	1	498	37
DOWNBOUND STATISTICS			197	651	21	869	5	460	465	236	259	3	498	1121
TOTALS			393	1287	44	1724	401	518	919	470	522	4	996	1158
LOWER MONUMENTAL LOCK & DAM			***											
UPBOUND STATISTICS			127	163	2	292	331	57	388	143	80	2	225	38
DOWNBOUND STATISTICS			125	173	3	301	4	387	391	143	87	3	233	900
TOTALS			252	336	5	593	335	444	779	286	167	5	458	939
LITTLE LOOSE LOCK & DAM			***											
UPBOUND STATISTICS			125	148	1	274	317	56	373	141	75	5	221	36
DOWNBOUND STATISTICS			125	168	2	295	6	369	375	143	85	6	274	835
TOTALS			250	316	3	569	323	425	748	284	160	11	495	871
LOWER GRANITE LOCK & DAM			***											
UPBOUND STATISTICS			114	249	1	364	229	53	282	129	162	4	295	34
DOWNBOUND STATISTICS			112	264	2	378	12	271	283	130	175	3	308	575
TOTALS			226	513	3	742	241	324	565	259	337	7	603	609

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
64	WATER WALLA	NORTH PACIFIC	7/84 8/84

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
COLUMBIA RIVER	24-MCNARY LOCK & DAM	0675/0086/14.0
SNAKE RIVER	1-ICE HARBOR LOCK & DAM	0675/0086/14.0
	2-LOWER MONUMENTAL LOCK & DAM	0675/0086/14.0
	3-LITTLE GOOSE LOCK & DAM	0675/0086/14.0
	4-LOWER GRANITE LOCK & DAM	0675/0086/14.0

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC 62	DISTRICT NAME SEATTLE	DIVISION NAME NORTH PACIFIC				MONTHS REPORTED 7/84 8/84						
RIVER/LOCK NAME												
TOWS	VESSEL RECRTN	VESSEL OTHER	VESSEL TOTAL	BARGES EMPTY	BARGES FULL	BARGES TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL (NAV, OPN, ETC)	VALUE TONS	
LAKE WASHINGTON SHP CA												
HIRAM M CHITTENDEN LOCKS		***										
UPBOUND STATISTICS	324	6295	583	7202	100	275	375	698	96	62	857	471
DOWNBOUND STATISTICS	311	5442	682	6435	246	314	560	622	116	51	789	225
TOTALS	635	11737	1265	13637	346	589	935	1320	212	114	1646	597
HIRAM M CHITTENDEN LOCKS AUX1		***										
UPBOUND STATISTICS	32	8599	508	9139	19	13	32	1043	1518	98	2659	0
DOWNBOUND STATISTICS	33	8814	442	9289	15	18	33	818	1725	114	2657	0
TOTALS	65	17413	950	18428	34	31	65	1861	3243	212	5316	0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERD#	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED									MANAGE (TONS)	
			7/84			8/84			9/84				

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCK65 COMMER	LOCK65 RECRTN	LOCK65 OTHER	LOCK65 TOTAL (NAV, GPN, ETC)		

OHIO RIVER													
LOCK & DAM 52	***												
UPBOUND STATISTICS	706	8	74	788	4000	3741	7741	387	2	343	732	5865	
DOWNBOUND STATISTICS	756	6	65	827	1849	6081	7930	436	4	362	802	9858	
TOTALS	1462	14	139	1615	5849	9822	15671	823	6	705	1534	14723	
LOCK & DAM 52 AUX 1	***												
UPBOUND STATISTICS	348	25	72	445	1095	1032	2127	476	20	3	499	1701	
DOWNBOUND STATISTICS	335	37	67	439	602	1487	2089	466	27	4	497	1197	
TOTALS	683	62	139	884	1697	2519	4216	942	47	7	996	2898	

TABLE

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EBOC #	DISTRICT NAME LOUISVILLE	DIVISION NAME OHIO RIVER	MONTHS REPORTED																
			7/84				8/84				9/84								
			ALL TIMES EXPRESSED IN MINUTES																
			APPROACH			LOCK ENTRY			PROCESSING TIME CHAMBER			EXIT			: DELAYED TOWS		DELAY TIME		DELAY AVG
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	TOWS		(TOWS)	(TOWS)	(ALL VSSLS)		
GREENBARREN RIVER																			
LOCK & DAM	1	5	25	1	3	20	5	7	25	1	4	36	:	205	4249	4.2	80		
LOCK & DAM	1	4	60	1	3	15	5	13	43	1	4	27	:	131	3022	4.1	80		
LOCK & DAM	NO DATA RECORDED FOR THIS LOCK																		
OHIO RIVER																			
MARSHALL LOCK & DAM	1	13	60	1	6	30	5	13	42	1	6	29	:	609	37416	36.5	460		
MARSHALL LOCK & DAM AUX 1	NO DATA RECORDED FOR THIS LOCK																		
MARSHALL LOCK & DAM	1	16	60	1	8	48	5	12	40	1	6	32	:	649	38714	32.5	302		
MARSHALL LOCK & DAM AUX 1	NO DATA RECORDED FOR THIS LOCK																		
CANNELTON LOCK & DAM	1	24	60	1	7	30	5	11	20	1	8	35	:	489	35893	33.6	820		
CANNELTON LOCK & DAM AUX 1	1	9	55	1	2	20	5	10	18	1	3	20	:	7	178	2.1	85		
NEWBURGH LOCK & DAM	1	10	60	1	7	29	6	8	24	1	8	25	:	756	30713	21.5	181		
NEWBURGH LOCK & DAM AUX 1	1	5	30	1	3	15	6	8	18	1	3	17	:	11	127	1.4	34		
OHIO TOWN LOCK & DAM	1	18	60	1	8	30	5	10	30	1	8	55	:	719	40527	29.1	315		
OHIO TOWN LOCK & DAM AUX 1	1	3	46	1	1	20	5	9	22	1	1	15	:	9	178	2.1	45		
SMITHLAND LOCK & DAM	1	15	60	1	8	30	5	10	33	1	8	35	:	148	4184	5.0	220		
SMITHLAND LOCK & DAM AUX 1	1	12	60	1	8	25	5	10	20	1	7	30	:	128	2549	2.9	65		

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
 FOR THE PERIOD 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

LOCK NO	LOCK NAME	DIVISION NAME	MONTHS REPORTED										9	1					
			7/84 8/84																

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

OHIO RIVER																			
LOCK & DAM 32			1	7	60	1	9	30	1	11	57	1	10	58	:	752	366549	250.7	1080
LOCK & DAM 51 AD-1			1	9	110	1	10	73	5	12	50	1	11	82	:	500	332779	486.6	2480

TABLE

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H3	NASHVILLE	OHIO RIVER	7/84	8/84	9/84

RIVER	LOCK-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
	27-FORDELL HULL LOCK	0400/0084/11.0
	24-OLD HIGHWAY LOCK	0400/0084/11.0
TENNESSEE RIVER	1-KENTUCKY LOCK	0600/0110/11.0
	2-PICKWICK LANDING LOCK	1000/0110/11.0
	2-PICKWICK LANDING LOCK AUX	0600/0110/11.0
	3-WILSON LOCK	0600/0110/11.0
	3-WILSON LOCK AUX	0292/0060/11.0
	4-GEN JOS WHEELER LOCK	0600/0110/11.0
	4-GEN JOS WHEELER LK AUX1	0400/0060/11.0
	5-GUNTERSVILLE LOCK	0600/0110/11.0
	5-GUNTERSVILLE LOCK AUX 1	0360/0060/11.0
	6-NICKAJAC LOCK	0600/0119/11.0
	7-CHICKAMAUGA LOCK	0360/0060/11.0
	8-WATTS BAR LOCK	0360/0060/11.0
	9-FORT LOUDON LOCK	0360/0060/11.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC HQ	DISTRICT NAME NASHVILLE	DIVISION NAME OHIO RIVER						MONTHS REPORTED 7/84 8/84 9/84				
RIVER/LOCK NAME												
TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL	TONNAGE (NAV, DPN, ETC)	TONNAGE (TOWNS)
CLINCH RIVER												
MELTON HILL LOCK	***											
UPBOUND STATISTICS	0	44	0	44	0	0	1	33	7	41	0	0
DOWNBOUND STATISTICS	0	45	0	45	0	0	2	35	6	43	0	0
TOTALS	0	89	0	89	0	0	3	68	13	84	0	0
CUMBERLAND RIVER												
BARKLEY LOCK	***											
UPBOUND STATISTICS	57	288	2	347	28	342	370	60	155	9	224	509
DOWNBOUND STATISTICS	112	320	1	433	925	53	978	129	200	8	337	76
TOTALS	169	608	3	780	953	395	1348	189	355	17	561	586
CHEATHAM LOCK	***											
UPBOUND STATISTICS	105	220	3	328	20	554	574	109	148	27	284	861
DOWNBOUND STATISTICS	107	198	2	307	549	53	602	112	127	18	257	76
TOTALS	212	418	5	635	569	607	1176	221	275	45	541	937
CORDELL HULL LOCK	***											
UPBOUND STATISTICS	2	27	0	29	4	0	4	2	24	3	29	1
DOWNBOUND STATISTICS	3	33	0	36	0	6	6	5	24	1	30	9
TOTALS	5	60	0	65	4	6	10	7	48	4	59	10
OLD HICKORY LOCK	***											
UPBOUND STATISTICS	25	485	12	522	2	38	40	38	321	6	365	67
DOWNBOUND STATISTICS	26	490	8	524	45	4	49	35	326	8	369	2
TOTALS	51	975	20	1046	47	42	89	73	647	14	734	69
TENNESSEE RIVER												
KENTUCKY LOCK	***											
UPBOUND STATISTICS	472	120	41	633	799	3764	4563	744	112	10	866	5633
DOWNBOUND STATISTICS	405	65	47	517	2861	1073	3934	651	67	7	725	1520
TOTALS	877	185	88	1150	3660	4837	8497	1395	179	17	1591	7153

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

FPC MT	DISTRICT NAME NASHVILLE	DIVISION NAME OHIO RIVER	MONTHS REPORTED									
			7/84			8/84			9/84			

RIVER LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGS	LOCKGS	LOCKGS	LOCKGS	LOCKGS	TONNAGE (TONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL (NAV, DPN, ETC)	

TENNESSEE RIVER												
FITCHES LANDING LOCK	***											
UPBOUND STATISTICS	208	85	9	302	129	2089	2218	269	67	5	341	3078
DOWNBOUND STATISTICS	208	75	8	311	1905	373	2278	274	75	3	351	548
TOTALS	416	160	17	613	2034	2462	4496	543	142	8	693	3626
FITCHES LANDING LOCK HUI	***											
UPBOUND STATISTICS	47	61	5	133	42	425	467	64	62	16	142	617
DOWNBOUND STATISTICS	41	88	3	132	366	36	402	54	64	18	136	56
TOTALS	88	169	8	265	408	461	869	118	126	34	278	673
WILSON LOCK	***											
UPBOUND STATISTICS	147	283	63	493	204	1652	1256	224	212	8	444	1555
DOWNBOUND STATISTICS	152	298	51	501	904	383	1287	224	233	9	466	527
TOTALS	299	581	114	994	1108	1435	2543	448	445	17	910	2082
WILSON LOCK HUI	NO DATA RECORDED FOR THIS LOCK											
GEN JES WHEELER LOCK	***											
UPBOUND STATISTICS	132	142	3	277	187	1005	1192	182	125	5	312	1475
DOWNBOUND STATISTICS	124	149	5	278	857	335	1192	172	138	4	314	472
TOTALS	256	291	8	555	1044	1340	2384	354	263	9	626	1948
GEN JES WHEELER LK	ADU 1	***										
UPBOUND STATISTICS	0	227	0	227	0	0	0	0	146	0	146	0
DOWNBOUND STATISTICS	0	216	0	216	0	0	0	2	149	0	151	0
TOTALS	0	443	0	443	0	0	0	2	295	0	297	0
GUNTERVILLE LOCK	***											
UPBOUND STATISTICS	115	604	5	724	243	674	917	156	163	4	323	982
DOWNBOUND STATISTICS	114	639	8	761	574	368	942	156	190	4	350	490
TOTALS	229	1243	13	1485	817	1042	1859	312	353	8	673	1472
GUNTERVILLE LOCK	ADU 1	***										
UPBOUND STATISTICS	22	416	0	441	34	98	132	40	350	9	399	149
DOWNBOUND STATISTICS	19	410	0	431	92	48	140	32	345	7	384	58
TOTALS	41	826	0	872	126	146	272	72	695	16	783	208

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC #3	DISTRICT NAME NASHVILLE	DIVISION NAME OHIO RIVER				MONTHS REPORTED 7/84 8/84						

LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL	TONNAGE (KTONS)

TENNESSEE RIVER												
NICKAJACK LOCK	***											
UPBOUND STATISTICS	165	185	9	359	381	795	1176	205	132	4	341	1084
DOWNBOUND STATISTICS	161	212	14	387	678	461	1139	199	148	4	351	625
TOTALS	326	397	23	746	1059	1256	2315	404	280	8	692	1710
CHICKAMAUGA LOCK	***											
UPBOUND STATISTICS	74	384	4	462	51	291	342	141	451	30	622	422
DOWNBOUND STATISTICS	62	411	15	488	206	110	316	130	450	28	608	156
TOTALS	136	795	19	950	257	401	658	271	901	58	1230	578
WATTS BAR LOCK	***											
UPBOUND STATISTICS	52	560	2	614	66	120	186	73	463	9	545	205
DOWNBOUND STATISTICS	54	545	2	601	69	119	188	76	448	9	533	162
TOTALS	106	1105	4	1215	135	239	374	149	911	18	1078	367
FORT LOUDON LOCK	***											
UPBOUND STATISTICS	37	240	3	280	31	63	94	54	209	13	276	127
DOWNBOUND STATISTICS	36	230	2	268	51	42	93	51	202	13	266	61
TOTALS	73	470	5	548	82	105	187	105	411	26	542	189

TABLE

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERO #3	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED												7/84	8/84	9/84		
			ALL TIMES EXPRESSED IN MINUTES																
			LOCK PROCESSING TIME									: DELAYED DELAY			DELA	DELAY			
			APPROACH			ENTRY			CHAMBER			EXIT			: TOWS	TIME	AVG	MAX	
			MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	(TOWS)	(TOWS)	(ALL VSSLS)	
OHIO RIVER																			
MELTON FILL LOCK			1	5	22	1	1	4	8	14	25	1	2	6	:	0	0	.0	723
CUMBERLAND RIVER																			
BARKLEY LOCK			1	10	92	1	6	28	6	15	134	1	6	30	:	32	1347	3.0	110
CHEATHAM LOCK			1	6	40	1	7	45	6	15	48	1	5	37	:	31	769	3.6	135
COFFEE RIVER LOCK			2	7	40	1	4	10	13	20	32	1	4	20	:	0	0	.0	0
OLD HENDER LOCK			1	3	20	1	3	33	6	15	76	1	3	123	:	7	126	2.5	540
TENNESSEE RIVER																			
KENTUCKY LOCK			1	8	406	1	13	73	6	19	77	1	17	77	:	731	178365	203.4	959
PICKAWILLAN LANDING LOCK			1	11	103	2	14	50	10	22	119	1	18	82	:	212	26523	63.8	571
PICKAWILLAN LANDING LOCK AUX			1	9	159	2	9	48	7	16	29	1	12	47	:	45	5597	53.6	369
WILSON LOCK			1	8	70	2	10	46	6	21	39	1	10	50	:	119	8448	26.3	270
WILSON LOCK AUX			NO DATA RECORDED FOR THIS LOCK																
GEN. DAN MANHART LOCK			1	11	121	2	11	39	6	14	35	1	14	63	:	75	4354	17.0	191
GEN. DAN MANHART LOCK AUX	AUX		1	7	53	1	4	33	6	13	22	1	4	15	:	0	0	.0	132
GUNTERBELL LOCK			1	7	65	1	8	62	6	14	28	1	10	47	:	73	10939	47.8	1820
GUNTERBELL LOCK AUX	AUX		1	4	138	1	3	72	6	12	27	1	5	219	:	28	20263	454.2	1911
NICKA LOCK			1	9	87	2	10	47	6	14	26	1	11	75	:	91	6141	18.8	282

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
RI	NASHVILLE	OHIO RIVER	7/84	8/84	9/84

ALL TIMES EXPRESSED IN MINUTES															
APPROACH			LOCK PROCESSING TIME			EXIT			TOWS			DELAYED	DELAY	DELAY	DELAY
MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	(TOWS)	TIME	AVG	MAX
													(TOWS)	(TOWS)	(ALL VSSLS)

TENNESSEE RIVER

CHICKAMAUGA LOCK	1	3	109	1	4	36	9	12	34	1	5	81	53	12472	91.7	995
WATTS BAR LOCK	1	4	70	1	3	29	10	15	75	1	4	84	40	2793	26.3	378
FORT LOUDON LOCK	1	10	116	1	3	22	9	21	49	1	5	76	21	1714	23.5	290

TABLE 1
 PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
 FOR THE PERIOD 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

ERDC #4	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
	PITTSBURGH	OHIO RIVER	7/84	8/84	9/84

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
	22-LOCK & DAM 2	0720/0110/13.0
MONONGAHELY RIVER	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
OHIO RIVER	30-HILDEBRAND LOCK & DAM	0600/0084/13.0
	31-OPEKISKA LOCK & DAM	0600/0084/13.0
	1-EMSWORTH LOCK & DAM	0600/0110/13.0
	1-EMSWORTH LOCK & DAM AUX 1	0360/0056/13.0
	2-DASHIELDS LOCK & DAM	0600/0110/13.0
	2-DASHIELDS LOCK & DAM AUX 1	0360/0056/13.0
	3-MONTGOMERY LOCK & DAM	0600/0110/13.0
	3-MONTGOMERY LOCK & DAM AUX 1	0360/0056/13.0
	4-NEW CUMBERLAND LOCK & DAM	1200/0110/13.0
	4-NEW CUMBERLAND LK & DAM AUX 1	0600/0110/13.0
	5-PIKE ISLAND LOCK & DAM	1200/0110/13.0
	5-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 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

ERDC #4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER		MONTHS REPORTED								
				7/84	8/84	9/84						
RIVER/LOCK NAME	TOWNS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGES EMPTY	BARGES FULL	BARGES TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL	TONNAGE (NAV, OPN, ETC)
ALLEGHENY RIVER												
LOCK & DAM 2	***											
UPBOUND STATISTICS	253	2165	24	2442	504	300	804	312	925	5	1242	351
DOWNBOUND STATISTICS	245	2221	32	2498	297	501	798	314	957	5	1276	359
TOTALS	498	4386	56	4940	801	801	1602	626	1882	10	2518	710
LOCK & DAM 3	***											
UPBOUND STATISTICS	258	1083	23	1364	509	309	818	320	591	3	914	360
DOWNBOUND STATISTICS	250	1106	25	1381	313	503	816	319	566	3	888	257
TOTALS	508	2189	48	2745	822	812	1634	639	1157	6	1802	617
LOCK & DAM 4	***											
UPBOUND STATISTICS	223	1139	22	1384	778	83	861	273	545	4	822	111
DOWNBOUND STATISTICS	218	1228	28	1474	72	792	864	274	524	4	802	389
TOTALS	441	2367	50	2858	850	875	1725	547	1069	8	1624	500
LOCK & DAM 5	***											
UPBOUND STATISTICS	164	735	1	900	745	5	750	177	451	3	631	1
DOWNBOUND STATISTICS	161	752	1	914	10	734	744	178	443	3	624	313
TOTALS	325	1487	2	1814	755	739	1494	355	894	6	1255	314
LOCK & DAM 6	***											
UPBOUND STATISTICS	158	432	2	592	670	4	674	173	315	3	491	0
DOWNBOUND STATISTICS	158	475	1	634	5	671	676	174	317	3	494	285
TOTALS	316	907	3	1226	675	675	1350	347	632	6	985	285
LOCK & DAM 7	***											
UPBOUND STATISTICS	41	392	4	437	96	0	96	46	226	1	273	0
DOWNBOUND STATISTICS	43	452	99	594	0	94	94	46	212	1	259	40
TOTALS	84	844	103	1031	96	94	190	92	438	2	532	40
LOCK & DAM 8	***											
UPBOUND STATISTICS	123	376	9	508	123	0	123	132	193	1	326	0
DOWNBOUND STATISTICS	123	423	9	555	2	121	123	133	202	2	337	239
TOTALS	246	799	18	1063	125	121	246	265	395	3	663	239

TABLE 1
 PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
 FOR THE PERIOD 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

EPOC HA	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER	MONTHS REPORTED											
			7/84			8/84			9/84					
REPORTING NAME	TOWS	VESSEL	VESSEL	VESSEL	BARGS	BARGS	BARGES	LOCKGS	LOCKGS	LOCKGS	LOCKGS	TONNAGE (KTONS)		
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL (NAV, OPN, ETC)			
ALLEGHENY RIVER														
LOCK # 4 - DAM # 1		***												
UPBOUND STATISTICS	0	301	0	301	0	0	0	3	153	0	156	0		
DOWNBOUND STATISTICS	0	275	0	275	0	0	0	4	157	0	161	0		
TOTALS	0	576	0	576	0	0	0	7	310	0	317	0		
MONONGAHELA RIVER														
LOCK # 4 - DAM # 1		***												
UPBOUND STATISTICS	556	0	2	558	2096	1453	3759	614	0	2	616	1823		
DOWNBOUND STATISTICS	577	2	0	582	960	2850	3810	640	0	3	643	3017		
TOTALS	1133	2	5	1140	3266	4303	7569	1254	0	5	1259	4840		
LOCK # 4 - DAM # 2		***												
UPBOUND STATISTICS	132	509	63	754	114	163	277	249	295	8	552	112		
DOWNBOUND STATISTICS	148	514	69	731	175	61	236	217	308	8	533	65		
TOTALS	280	1023	132	1485	289	224	513	466	603	16	1085	178		
LOCK # 4 - DAM # 3		***												
UPBOUND STATISTICS	947	1	6	954	4173	551	4724	947	1	2	950	657		
DOWNBOUND STATISTICS	988	0	4	992	309	4539	4848	988	0	2	990	4577		
TOTALS	1935	1	10	1946	4482	5090	9572	1935	1	4	1940	5235		
LOCK # 4 - DAM # 4		***												
UPBOUND STATISTICS	150	432	178	760	141	88	229	324	235	4	563	97		
DOWNBOUND STATISTICS	110	452	171	736	80	91	171	279	250	5	534	94		
TOTALS	260	884	349	1496	221	179	400	603	485	9	1097	192		
LOCK # 4 - DAM # 5		***												
UPBOUND STATISTICS	791	29	6	826	3911	462	4373	835	11	2	848	476		
DOWNBOUND STATISTICS	507	76	0	583	170	4223	4393	833	15	3	851	4199		
TOTALS	1298	105	9	1662	4081	4685	8766	1668	26	5	1699	895		

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC H4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER	MONTHS REPORTED									
			7/84					8/84				

RIVER/LOCK NAME	TOWNS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LOCKS	LOCKS	LOCKS	LOCKS	TONNAGE (TONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)												

MONONGAHELA RIVER												
LOCK & DAM 4 AUXILIARY 1	***											
UPBOUND STATISTICS	84	385	51	520	226	35	261	149	278	5	432	35
DOWNBOUND STATISTICS	64	377	56	497	50	153	203	130	262	5	397	156
TOTALS	148	762	107	1017	276	188	464	279	540	10	829	191
MAXWELL LOCK & DAM	***											
UPBOUND STATISTICS	685	449	9	1143	3742	307	4049	692	214	3	909	356
DOWNBOUND STATISTICS	537	440	9	986	93	3100	3193	547	212	4	763	3670
TOTALS	1222	889	18	2129	3835	3407	7242	1239	426	7	1672	3409
MAXWELL LOCK & DAM AUX 1	***											
UPBOUND STATISTICS	54	122	3	179	257	43	300	57	83	2	142	51
DOWNBOUND STATISTICS	203	159	3	365	39	1135	1174	207	97	0	304	1126
TOTALS	257	281	6	544	296	1178	1474	264	180	2	446	1177
LOCK & DAM 7	***											
UPBOUND STATISTICS	677	78	19	774	2883	287	3170	1223	100	5	1328	329
DOWNBOUND STATISTICS	666	79	34	779	100	3087	3187	1239	103	5	1347	2973
TOTALS	1343	157	53	1553	2983	3374	6357	2462	203	10	2675	3303
LOCK & DAM 8	***											
UPBOUND STATISTICS	589	67	30	686	2467	279	2746	1062	87	6	1155	125
DOWNBOUND STATISTICS	598	69	35	702	146	2677	2823	1103	83	6	1192	1375
TOTALS	1187	136	65	1388	2613	2956	5569	2165	170	12	2347	2601
MORGANTOWN LOCK & DAM	***											
UPBOUND STATISTICS	91	131	9	231	358	2	360	100	99	4	203	1
DOWNBOUND STATISTICS	91	131	9	231	4	347	351	101	101	4	206	340
TOTALS	182	262	18	462	362	349	711	201	200	8	409	342
HILLSBRAND LOCK & DAM	***											
UPBOUND STATISTICS	35	109	4	148	118	0	118	39	91	0	130	0
DOWNBOUND STATISTICS	33	106	6	145	7	111	118	38	93	1	132	116
TOTALS	68	215	10	293	125	111	236	77	184	1	262	116

TABLE

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

E-001 -4	PROJECT NAME Location	DIVISION NAME OHIO RIVER	MONTHS REPORTED										TONNAGE (TONS)
			7-84		8-84		9-84		TOTAL		TOTAL		
			TOWS	VESSEL RECRTN	VESSEL OTHER	VESSEL TOTAL	BARGE EMPTY	BARGE FULL	BARGE TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER (NAV, GEN, ETC)	LOCKGS TOTAL
OHIO RIVER													
OPENING - DAM			***										
UPDOWN - STATISTICS			21	311	0	232	39	0	39	23	167	1	191
DOWNB - STATISTICS			15	229	2	250	2	34	36	22	181	1	204
TOTAL			40	440	2	482	41	34	75	45	348	2	395
OHIO RIVER													
EMSWORTH - DAM			***										
UPDOWN - STATISTICS			671	17	15	700	1686	2636	4322	784	4	2	790
DOWNB - STATISTICS			945	5	6	658	1860	2379	4239	753	4	4	761
TOTAL			1215	42	18	1378	3546	5015	8561	1537	8	6	1551
OHIO RIVER													
EMSWORTH - DAM			***										
UPDOWN - STATISTICS			121	121	94	942	91	106	197	282	355	25	662
DOWNB - STATISTICS			147	154	114	1015	172	53	225	316	429	25	770
TOTAL			268	275	208	1957	263	159	422	598	784	50	1432
OHIO RIVER													
EMSWORTH - DAM			***										
UPDOWN - STATISTICS			121	121	94	942	91	106	197	282	355	25	662
DOWNB - STATISTICS			147	154	114	1015	172	53	225	316	429	25	770
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OHIO RIVER													
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OHIO RIVER													
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EMSWORTH - DAM			***										
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OHIO RIVER													
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OHIO RIVER													
EMSWORTH - DAM			***										
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OHIO RIVER													
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OHIO RIVER													
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OHIO RIVER													
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TOTAL			268	275	208	1957	263	159	422	598	784	50	1432
OHIO RIVER													
EMSWORTH - DAM			***										
UPDOWN - STATISTICS			121	121	94								

QUARTERLY REPORT
 FROM JANUARY 1984 THROUGH JUNE 1984
 FOR WATER RESOURCES

RIVER	NAME	TIME	VESSEL			BARGES			MONTHS REPORTED					TONNAGE (KTONS)
			RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL		
									7/84	8/84	9/84			
RIVER	NAME	TIME	VESSEL RECRTN	VESSEL OTHER	VESSEL TOTAL	BARGES EMPTY	BARGES FULL	BARGES TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL	TONNAGE (KTONS)	
(NAV, OPN, ETC)														

ONE YEAR RIVER

LOCK & DAM	***														
UPBOUND STATISTICS	11	14	0	26	1	11	12	21	6	3	39	11			
DOWNBOUND STATISTICS	12	25	0	37	12	0	12	19	9	4	32	0			
TOTAL	24	39	0	63	13	11	24	40	15	7	62	11			

LOCK & DAM	*** ONLY SECOND AND THIRD MONTHS REPORTED														
UPBOUND STATISTICS	12	0	0	12	1	11	12	24	0	1	25	12			
DOWNBOUND STATISTICS	12	2	0	14	12	0	12	23	1	1	25	0			
TOTAL	24	2	0	26	13	11	24	47	1	2	50	12			

WILLIAM & BAY & DAM	*** ONLY SECOND AND THIRD MONTHS REPORTED														
UPBOUND STATISTICS	11	0	0	11	0	11	11	11	0	0	11	10			
DOWNBOUND STATISTICS	11	8	0	19	11	0	11	12	2	0	14	0			
TOTAL	22	8	0	30	11	11	22	23	2	0	25	10			

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
47	WILMINGTON	SOUTH ATLANTIC	7/84	8/84	9/84

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
CAPE FEAR RIVER	1-LOCK & DAM 1	0200/0040/10.0
	2-LOCK & DAM 2	0200/0040/10.0
	3-WILLIAM O HUSKE LOCK & DAM	0300/0040/10.0

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

SRCC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
#6	SAVANNAH	SOUTH ATLANTIC	7/84	8/84	9/84

RIVER	LCODE=LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
SAVANNAH RIVER	1-NEW SAVANNAH BLUFF LOCK & DAM	0360/0056/12.0

NO DATA RECORDED ON SUMMARY FILE FOR THIS PERIOD

NO DATA RECORDED ON LOGAGE FILE FOR THIS PERIOD

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED			
K5	MOBILE	SOUTH ATLANTIC	7/84	8/84	9/84	

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

TENN TOMBIGBEE WATERWAY

GAINESVILLE LOCK & DAM	1	7	30	1	4	16	5	13	35	1	6	22	:	0	0	1.0	15
ALICEVILLE LOCK & DAM	1	1	20	1	1	13	5	13	33	1	1	23	:	4	39	2.0	27
COLUMBUS LOCK & DAM	1	3	32	1	1	20	5	13	50	1	1	10	:	1	1	1.1	30
ABERDEEN LOCK & DAM	1	2	58	1	1	17	5	15	37	1	1	14	:	0	0	1.0	55

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K5	MOBILE	SOUTH ATLANTIC	7/84	8/84	9/84

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

ALABAMA-COOSA RIVERS																	
CLATSONE LOCK & DAM	1	4	25	1	2	13	1	10	19	1	3	13	:	0	0	0	17
MILLERS FERRY LOCK & DAM	1	11	27	1	6	32	5	16	48	1	6	27	:	10	346	2.1	96
JONES BLUFF LOCK & DAM	1	2	10	1	2	6	12	16	26	1	3	7	:	0	0	0	0
KELCH-CHICK-FLINT RI																	
JIM WOODRUFF LOCK & DAM	1	4	17	1	4	22	5	11	59	1	5	32	:	22	574	2.4	103
GEORGE W. ANDREWS LOCK & DAM	2	2	15	2	2	17	5	14	33	1	2	11	:	2	3	.1	2
WALTER F. GEORGE LOCK & DAM	1	2	20	1	3	24	5	14	25	1	3	9	:	1	40	1.9	40
ELWARTON-BIGBEE RI																	
COFFEENVILLE LOCK	1	11	38	1	4	30	8	14	34	1	10	42	:	508	23402	20.6	265
DEMOPOLIS LOCK & DAM	1	12	35	1	4	19	5	13	50	2	11	34	:	467	18806	17.2	196
WARRIOR LOCK & DAM	1	13	38	1	4	21	5	15	46	1	9	39	:	443	45837	42.8	9446
WILLIAM AND R. OLIVER LK & DM	1	12	75	1	6	22	5	13	41	1	12	68	:	744	86906	56.4	8580
HOLLY LOCK & DAM	1	11	58	1	7	92	5	19	45	1	9	48	:	399	18030	18.4	288
JOHN HALL'S BANKHEAD LK & DM	1	11	56	1	6	24	5	14	48	1	7	25	:	256	11641	14.3	175
FAUL 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																

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC KS	DISTRICT NAME MOBILE	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED											
			7/84		8/84		9/84							

RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGS	LOCKGS	LOCKGS	LOCKGS	LOCKGS	TONNAGE		
		RECTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECTN	OTHER	TOTAL	(TONS)		
(NAV, DPN, ETC)														

PEARL RIVER														
LOCK 2	NO DATA RECORDED FOR THIS LOCK													
LOCK 3	NO DATA RECORDED FOR THIS LOCK													
TENN TOMBIGBEE WATERWAY														
GAINESVILLE LOCK & DAM	***													
UPBOUND STATISTICS	20	24	3	47	47	23	70	23	15	9	47	19		
DOWNBOUND STATISTICS	19	29	2	50	7	51	58	23	21	7	51	55		
TOTALS	39	53	5	97	54	74	128	46	36	16	98	75		
ALICEVILLE LOCK & DAM	***													
UPBOUND STATISTICS	10	212	4	226	6	18	24	22	162	22	206	20		
DOWNBOUND STATISTICS	10	212	2	224	7	9	16	20	172	19	211	12		
TOTALS	20	424	6	450	13	27	40	42	334	41	417	32		
COLUMBUS LOCK & DAM	***													
UPBOUND STATISTICS	8	360	7	375	5	14	19	17	249	10	276	18		
DOWNBOUND STATISTICS	8	367	4	379	7	5	12	15	249	8	272	6		
TOTALS	16	727	11	754	12	19	31	32	498	18	548	25		
ABERDEEN LOCK & DAM	***	ONLY FIRST AND SECOND MONTHS REPORTED												
UPBOUND STATISTICS	1	79	0	80	2	0	2	3	51	11	65	2		
DOWNBOUND STATISTICS	1	75	1	77	3	0	3	2	59	10	71	0		
TOTALS	2	154	1	157	5	0	5	5	110	21	136	2		

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC LS	DISTRICT NAME MOBILE	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED											
			7/84			8/84				7/84				
RIVER LOCK NAME			TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGES EMPTY	BARGES FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
SOUTHWEST/TOBIBGEE RI														
COFFEEVILLE LOCK			***											
UPBOUND STATISTICS			573	56	13	642	2421	356	2777	578	26	14	618	542
DOWNBOUND STATISTICS			565	59	15	639	148	2603	2751	569	30	12	611	3887
TOTALS			1138	115	28	1281	2569	2959	5528	1147	56	26	1229	4430
DEMOPOLIS LOCK & DAM			***											
UPBOUND STATISTICS			545	27	6	588	2337	352	2689	547	19	7	573	520
DOWNBOUND STATISTICS			547	29	10	596	148	2594	2742	549	21	9	579	3906
TOTALS			1092	56	16	1184	2485	2946	5431	1096	40	16	1152	4427
WARRIOR LOCK & DAM			***											
UPBOUND STATISTICS			532	6	7	545	2334	323	2657	535	5	1	541	497
DOWNBOUND STATISTICS			539	6	8	551	144	2558	2702	543	5	0	548	3898
TOTALS			1071	12	15	1096	2478	2881	5359	1078	10	1	1089	4396
WILLYTOWN LOCK & DAM			***											
UPBOUND STATISTICS			506	15	72	593	2344	297	2641	846	14	8	868	405
DOWNBOUND STATISTICS			500	13	69	582	94	2504	2598	877	8	10	895	3799
TOTALS			1006	28	141	1175	2438	2801	5239	1723	22	18	1763	4205
HELT LOCK & DAM			***											
UPBOUND STATISTICS			500	16	10	526	2359	284	2643	509	12	8	529	399
DOWNBOUND STATISTICS			480	16	16	512	71	2490	2561	490	9	10	509	3775
TOTALS			980	32	26	1038	2430	2774	5204	999	21	18	1038	4175
JOHN RIVER LOCK & DAM			***											
UPBOUND STATISTICS			413	100	12	525	1726	267	1993	418	52	16	486	361
DOWNBOUND STATISTICS			403	99	15	517	119	1864	1983	414	54	16	484	2838
TOTALS			816	199	27	1042	1845	2131	3976	832	106	32	970	3200

PENSACOLA RIVER

LOCK 1

NO DATA RECORDED FOR THIS LOCK

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC #5	DISTRICT NAME MOBILE	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED									
			7/84		8/84		9/84					
			RIVER/LOCK NAME									
TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL (NAV, OPN, ETC)	TONNAGE (*TONS)	
ALABAMA-COOSA RIVERS												
CLATBORNE LOCK & DAM	***											
UPBOUND STATISTICS	78	428	7	513	274	13	287	83	428	4	515	15
DOWNBOUND STATISTICS	83	440	7	530	14	284	298	90	440	4	534	376
TOTALS	161	868	14	1043	288	297	585	173	868	8	1049	392
MILLERS FERRY LOCK & DAM	***											
UPBOUND STATISTICS	81	36	6	123	289	9	298	86	23	0	109	18
DOWNBOUND STATISTICS	86	51	1	138	16	293	309	87	24	3	114	363
TOTALS	167	87	7	261	305	302	607	173	47	3	223	382
JONES BLUFF LOCK & DAM	***											
UPBOUND STATISTICS	7	24	1	32	1	11	12	9	21	0	30	15
DOWNBOUND STATISTICS	7	31	1	39	8	3	11	10	27	0	37	0
TOTALS	14	55	2	71	9	14	23	19	48	0	67	16
APLCH/CHTCH/FLNT RI												
JIM WOODRUFF LOCK & DAM	***											
UPBOUND STATISTICS	117	61	15	193	226	63	289	134	37	16	187	121
DOWNBOUND STATISTICS	123	106	7	236	61	236	297	134	51	16	201	162
TOTALS	240	167	22	429	287	299	586	268	88	32	388	283
GEORGE W ANDREWS LOCK & DAM	***											
UPBOUND STATISTICS	26	103	3	132	12	27	39	28	80	2	110	50
DOWNBOUND STATISTICS	23	149	1	173	25	7	32	27	99	3	129	9
TOTALS	49	252	4	305	37	34	71	55	179	5	239	59
WALTER F GEORGE LOCK & DAM	***											
UPBOUND STATISTICS	11	93	1	105	5	12	17	16	56	0	72	20
DOWNBOUND STATISTICS	10	130	1	141	13	1	14	14	79	2	95	1
TOTALS	21	223	2	246	18	13	31	30	135	2	167	21

TABLE

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC #5	DISTRICT NAME MOBILE	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED		
			7/84	8/84	9/84
RIVER	LOCK-LOCK NAME		LEN/WID/DRAFT (FT/FT/FT)		
ALABAMA RIVERS	11-CLAIRBORNE LOCK & DAM		0600/0084/12.0		
	12-MILLERS FERRY LOCK & DAM		0600/0084/12.0		
	13-JONES BLUFF LOCK & DAM		0600/0084/12.0		
WALCH LAKE/FOUNTAIN R.	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		
BURMAN TOMBERGEE R.	1-COFFEEVILLE LOCK		0600/0110/12.0		
	2-DEMOPOLIS LOCK & DAM		0600/0110/12.0		
	3-WARRIOR LOCK & DAM		0600/0110/12.0		
	4-WILLIAM BACON OLIVER LK & DM		0460/0095/12.0		
	5-HOLT LOCK & DAM		0600/0110/12.0		
	6-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 TOMBERGEE 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 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

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ERDC K3	DISTRICT NAME JACKSONVILLE	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED		
			7/84	8/84	9/84

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
CANAVERAL HARBOR	21-CANAVERAL LOCK	0600/0090/15.0
	1-ST LUCIE LOCK & DAM	0250/0050/14.0
OKEECHOBEE WATERWAY	2-MOORE HAVEN LOCK	0250/0050/11.0
	3-ORTONA LOCK & DAM	0250/0050/12.0
	4-W P FRANKLIN LCK & CTRL STRCT	0400/0056/14.0
	5-PORT MAYACA LOCK	0400/0056/14.0
OKLAHAWA RIVER	31-BOSS BLUFF LOCK & DAM	0156/0030/****

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 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H4	PITTSBURGH	OHIO RIVER	7/84	8/84	9/84

ALL TIMES EXPRESSED IN MINUTES

APPROACH		LOCK PROCESSING TIME		EXIT		TOWS		DELAY	DELAY
MIN	AVG	MIN	AVG	MIN	AVG	MIN	AVG	AVG	MAX
								(TOWS)	(ALL VSSLS)

OHIO RIVER

HANNIBAL LOCK & DAM	1	15	55	1	11	29	8	15	30	2	11	26	293	13097	15.4	154
HANNIBAL LOCK & DAM ADV 1	1	10	45	1	4	20	8	15	40	1	7	28	9	152	1.3	38

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC #4	DISTRICT NAME PITTSBURGH			DIVISION NAME OHIO RIVER									MONTHS REPORTED								
													7/84			8/84			9/84		
ALL TIMES EXPRESSED IN MINUTES																					
APPROACH			LOCK PROCESSING TIME						EXIT		: DELAYED DELAY		DELAY		DELAY						
			ENTRY		CHAMBER												TOWS		TIME		AVG
MIN AVG MAX			: MIN AVG MAX		: MIN AVG MAX		: MIN AVG MAX		: MIN AVG MAX		: TOWS		(TOWS)		(TOWS)		(ALL VSSLS)				
MONONGAHELA RIVER																					
MAXWELL LOCK & DAM AUX 1	1	9	37	1	6	31	7	11	43	1	7	26	:	44	695	2.7	53				
LOCK & DAM 7	1	5	45	1	4	21	5	5	45	1	9	48	:	783	43528	32.4	720				
LOCK & DAM B	1	5	40	1	4	20	5	6	26	1	9	47	:	561	25171	21.1	213				
MORGANTOWN LOCK & DAM	3	5	10	2	5	10	5	10	35	3	5	15	:	0	0	0	19				
HILDEBRAND LOCK & DAM	1	4	35	1	3	12	7	11	30	1	3	15	:	0	0	0	10				
OPERISKA LOCK & DAM	1	5	19	1	2	7	6	10	15	1	3	15	:	2	27	0.7	22				
OHIO RIVER																					
EMSWORTH LOCK & DAM	1	12	55	1	7	34	5	14	32	2	9	60	:	695	47535	36.1	340				
EMSWORTH LOCK & DAM AUX 1	1	6	58	1	2	22	5	8	27	1	3	18	:	48	1075	4.0	63				
DASHIELDS LOCK & DAM	1	13	83	2	8	35	5	11	33	1	12	69	:	667	55572	44.3	664				
DASHIELDS LOCK & DAM AUX 1	1	7	46	1	2	19	5	6	36	1	2	21	:	36	615	2.6	41				
MONTGOMERY LOCK & DAM	1	11	70	1	10	43	5	13	44	1	13	58	:	683	65055	54.9	560				
MONTGOMERY LOCK & DAM AUX 1	1	4	39	1	3	19	5	9	40	1	3	22	:	33	495	2.8	70				
NEW CUMBERLAND LOCK & DAM	1	21	57	1	7	28	5	14	35	2	12	36	:	179	8717	17.7	353				
NEW CUMBERLAND LOCK & DAM AUX	1	10	86	1	4	36	5	13	45	1	9	62	:	200	48763	99.7	969				
PIKE ISLAND LOCK & DAM	1	15	56	1	10	42	7	14	43	2	10	29	:	276	11532	13.3	207				
PIKE ISLAND LOCK & DAM AUX 1	1	8	43	1	3	23	5	12	51	1	6	17	:	37	676	2.7	52				

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC #4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER	MONTHS REPORTED									
			7/84					8/84				
RIVER/LOCK NAME												
TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER (NAV, GEN, ETC)	LOCKGS TOTAL	TENNAGE (TOWNS)	
OHIO RIVER												
MONTGOMERY LOCK & DAM AUX 1												

UPBOUND STATISTICS	98	630	88	816	92	41	133	196	339	7	542	42
DOWNBOUND STATISTICS	82	641	94	817	77	32	109	184	350	5	539	75
TOTALS	180	1271	182	1633	169	73	242	380	689	12	1081	117
NEW CUMBERLAND LOCK & DAM												

UPBOUND STATISTICS	342	7	7	356	435	2923	3358	343	0	0	343	4071
DOWNBOUND STATISTICS	296	5	5	306	1994	1101	3095	296	2	0	298	1114
TOTALS	638	12	12	662	2429	4024	6453	639	2	0	641	5185
NEW CUMBERLAND LOCK & DAM AUX 1												

UPBOUND STATISTICS	212	396	32	640	357	735	1092	266	254	4	524	1060
DOWNBOUND STATISTICS	277	394	19	690	784	533	1317	320	249	5	574	612
TOTALS	489	790	51	1330	1141	1268	2409	586	503	9	1098	1672
PIKE ISLAND LOCK & DAM												

UPBOUND STATISTICS	453	3	9	465	350	4436	4786	452	0	0	452	6344
DOWNBOUND STATISTICS	416	2	3	421	2927	1575	4502	415	0	0	415	2313
TOTALS	869	5	12	886	3277	6011	9288	867	0	0	867	8656
PIKE ISLAND LOCK & DAM AUX 1												

UPBOUND STATISTICS	103	316	40	459	158	143	301	152	217	5	374	119
DOWNBOUND STATISTICS	148	335	31	514	317	149	466	189	208	3	400	149
TOTALS	251	651	71	973	475	292	767	341	425	8	774	268
HANNIBAL LOCK & DAM												

UPBOUND STATISTICS	439	4	5	448	1024	4034	5058	441	2	2	445	5633
DOWNBOUND STATISTICS	409	6	85	500	2202	2689	4891	411	4	2	417	2686
TOTALS	848	10	90	948	3226	6723	9949	852	6	4	862	8319
HANNIBAL LOCK & DAM AUX 1												

UPBOUND STATISTICS	44	212	3	259	69	72	141	53	126	9	188	91
DOWNBOUND STATISTICS	70	207	11	288	125	125	250	85	136	10	231	123
TOTALS	114	419	14	547	194	197	391	138	262	19	419	214

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC K7	DISTRICT NAME WILMINGTON	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED															
			7/84				8/84				9/84							
ALL TIMES EXPRESSED IN MINUTES																		
APPROACH			LOCK PROCESSING TIME						EXIT		DELA		DELA		DELA			
			ENTRY			CHAMBER					TOWS		TIME		MAX			
MIN AVG MAX			MIN AVG MAX			MIN AVG MAX			MIN AVG MAX				(TOWS)		(TOWS)			
CAPE FEAR RIVER																		
LOCK & DAM 1			5	5	10	5	5	15	5	11	15	5	5	10	1	5	12	5
LOCK & DAM 2			5	5	10	5	5	5	5	11	30	5	5	10	22	110	4.6	5
WILLIAM D HUSKE LOCK & DAM			5	5	10	5	5	5	20	29	30	5	5	5	0	0	1.0	0

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
L2	SACRAMENTO	SOUTH PACIFIC	7/84	8/84	9/84

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
SACRAMENTO OVERPASS CHNL	1-BARGE CANAL LOCK	0640/0086/23.0

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 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M3	GALVESTON	SOUTHWESTERN	7/84	8/84	9/84

RIVER	LCODE-LOCK NAME	LEN/WID/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

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC N3	DISTRICT NAME GALVESTON	DIVISION NAME SOUTHWESTERN	MONTHS REPORTED											
			7/84			8/84			9/84					
RIVER/LOCK NAME			TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
GULF INTRACOASTAL														
COLORADO RIVER EAST LOCK			***											
UPBOUND STATISTICS			805	978	160	1943	415	1264	1679	190	0	745	935	2625
DOWNBOUND STATISTICS			890	1097	79	2066	1227	550	1777	110	0	840	950	992
TOTALS			1695	2075	239	4009	1642	1814	3456	300	0	1585	1885	3617
COLORADO RIVER WEST LOCK			***											
UPBOUND STATISTICS			744	1316	162	2222	382	1230	1612	15	0	854	869	2578
DOWNBOUND STATISTICS			825	1627	77	2529	1192	514	1706	11	0	877	888	929
TOTALS			1569	2943	239	4751	1574	1744	3318	26	0	1731	1757	3507
BRAZOS EAST GATE			***											
UPBOUND STATISTICS			933	337	288	1558	463	1359	1822	2	0	1184	1186	2593
DOWNBOUND STATISTICS			1005	305	274	1584	1288	595	1883	4	0	1176	1180	1018
TOTALS			1938	642	562	3142	1751	1954	3705	6	0	2360	2366	3611
BRAZOS WEST GATE			***											
UPBOUND STATISTICS			899	470	281	1650	450	1342	1792	2	0	1026	1028	2568
DOWNBOUND STATISTICS			985	515	300	1800	1300	579	1879	2	0	1054	1056	982
TOTALS			1884	985	581	3450	1750	1921	3671	4	0	2080	2084	3551

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
 FOR THE PERIOD 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

EROC M3	DISTRICT NAME GALVESTON			DIVISION NAME SOUTHWESTERN			MONTHS REPORTED														
							7/84					8/84					9/84				
							ALL TIMES EXPRESSED IN MINUTES														
APPROACH			LOCK ENTRY			PROCESSING TIME CHAMBER			EXIT			:	DELAYED	DELAY	DELAY	DELAY					
												:	TOWS	TIME	AVG	MAX					
MIN AVG MAX			:	MIN AVG MAX	:	MIN AVG MAX	:	MIN AVG MAX	:	MIN AVG MAX	:		(TOWS)	(TOWS)	(TOWS)	(TOWS)					
GULF INTRACOASTAL																					
COLORADO RIVER EAST LOCK																					
	1	2	17		1	1	18		1	2	43		1	1	10	:	1694	2888	1.7	14	
COLORADO RIVER WEST LOCK																					
	1	1	19		1	1	18		1	1	14		1	1	61	:	1568	2968	1.9	10	
BRAZOS EAST GATE																					
	1	1	118		1	1	12		1	1	16		1	1	51	:	1930	3246	1.7	541	
BRAZOS WEST GATE																					
	1	1	22		1	1	7		1	1	2		1	1	61	:	1879	3102	1.6	391	

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
 FOR THE PERIOD 7/84 THROUGH 9/84
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M4	LITTLE ROCK	SOUTHWESTERN	7/84	8/84	9/84

RIVER	LOCK-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ARKANSAS RIVER	1-NORRELL LOCK & DAM	0600/0110/12.0
	2-LOCK & DAM 2	0600/0110/12.0
	3-LOCK & DAM 3	0600/0110/12.0
	4-LOCK & DAM 4	0600/0110/12.0
	5-LOCK & DAM 5	0600/0110/12.0
	6-DAVID D TERRY LOCK & DAM	0600/0110/12.0
	7-MURRAY LOCK & DAM	0600/0110/12.0
	8-TOAD SUCK FERRY LOCK & DAM	0600/0110/12.0
	9-LOCK & DAM 4	0600/0110/12.0
	10-GARDANELLE LOCK & DAM	0600/0110/12.0
	11-DZARK 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 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC No	DISTRICT NAME LITTLE ROCK	DIVISION NAME SOUTHWESTERN	MONTHS REPORTED									
			7/84			8/84			9/84			
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGS	LOCKGS	LOCKGS	LOCKGS	LOCKGS	TONNAGE (TONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)												
ARKANSAS RIVER												
NORRELL LOCK & DAM	***											
UPBOUND STATISTICS	171	84	10	265	578	462	1040	183	57	15	255	602
DOWNBOUND STATISTICS	164	102	7	273	130	837	967	172	64	21	257	1102
TOTALS	335	186	17	538	708	1299	2007	355	121	36	512	1704
LOCK & DAM 2	***											
UPBOUND STATISTICS	169	82	13	264	573	435	1008	180	56	15	251	595
DOWNBOUND STATISTICS	166	101	11	278	127	864	991	174	65	20	259	1163
TOTALS	335	183	24	542	700	1299	1999	354	121	35	510	1759
LOCK & DAM 3	***											
UPBOUND STATISTICS	177	203	13	393	569	431	1000	186	132	40	358	594
DOWNBOUND STATISTICS	171	227	7	405	132	856	988	176	136	42	354	1120
TOTALS	348	430	20	798	701	1287	1988	362	268	82	712	1715
LOCK & DAM 4	***											
UPBOUND STATISTICS	176	275	8	459	542	439	981	183	153	28	364	510
DOWNBOUND STATISTICS	177	295	8	480	135	849	984	183	163	28	374	1137
TOTALS	353	570	16	939	677	1288	1965	366	316	56	738	1747
LOCK & DAM 5	***											
UPBOUND STATISTICS	163	575	24	762	433	398	831	172	377	20	569	524
DOWNBOUND STATISTICS	163	591	5	759	118	715	833	168	379	19	566	1039
TOTALS	326	1166	29	1521	551	1113	1664	340	756	39	1135	1563
DAVID D. TERRY LOCK & DAM	***											
UPBOUND STATISTICS	168	918	16	1102	444	393	837	178	528	13	719	520
DOWNBOUND STATISTICS	168	944	7	1119	128	719	847	173	551	21	745	1075
TOTALS	336	1862	23	2221	572	1112	1684	351	1079	34	1464	1600
MURRAY LOCK & DAM	***											
UPBOUND STATISTICS	126	766	31	923	404	342	746	157	471	7	635	445
DOWNBOUND STATISTICS	122	777	37	936	92	656	748	157	460	7	624	968
TOTALS	248	1543	68	1859	496	998	1494	314	931	14	1259	1405

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

ERDC #4	DISTRICT NAME LITTLE ROCK	DIVISION NAME SOUTHWESTERN	MONTHS REPORTED									
			7/84			8/84				9/84		
RIVER LOCK NAME												
TOWS	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)												
MISSISSIPPI RIVER												
TOTALS												
UPBOUND STATISTICS	130	93	1	224	406	362	768	133	68	15	216	464
DOWNBOUND STATISTICS	122	141	4	267	91	641	732	126	102	17	245	943
TOTALS	252	234	5	491	497	1003	1500	259	170	32	461	1407
LOCK & DAM #												
UPBOUND STATISTICS	124	90	1	215	396	337	733	127	70	16	213	440
DOWNBOUND STATISTICS	122	131	3	256	93	651	744	123	84	15	222	973
TOTALS	246	221	4	471	489	988	1477	250	154	31	435	1414
DARDANELLE LOCK & DAM												
UPBOUND STATISTICS	128	139	1	268	401	330	731	131	107	26	264	426
DOWNBOUND STATISTICS	124	187	5	316	80	651	731	129	138	27	294	1003
TOTALS	252	326	6	584	481	981	1462	260	245	53	558	1429
OZARK LOCK & DAM												
UPBOUND STATISTICS	123	117	2	242	389	329	718	127	71	10	206	426
DOWNBOUND STATISTICS	122	151	4	277	80	651	731	127	90	10	227	960
TOTALS	245	268	6	519	469	980	1449	254	161	20	433	1386
LOCK & DAM #												
UPBOUND STATISTICS	170	192	3	365	396	436	832	175	125	11	311	476
DOWNBOUND STATISTICS	165	227	3	395	174	653	827	170	141	14	325	959
TOTALS	335	419	6	760	570	1089	1659	345	266	25	636	1435

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC M4	DISTRICT NAME LITTLE ROCK			DIVISION NAME SOUTHWESTERN			MONTHS REPORTED														
							7/84					8/84					9/84				
										ALL TIMES EXPRESSED IN MINUTES											
APPROACH			LOCK ENTRY			PROCESSING TIME CHAMBER			EXIT			: DELAYED TOWS		DELAY TIME	DELAY AVG	DELAY MAX					
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:		(TOWS)	(TOWS)	(ALL VSSLS)					
ARKANSAS RIVER																					
NORRELL LOCK & DAM			1	8	40	1	9	81	5	10	27	1	9	50	:	34	981	2.9	89		
LOCK & DAM 2			1	8	37	1	9	77	5	12	86	1	10	45	:	78	3391	10.1	185		
LOCK & DAM 3			1	8	40	1	7	40	5	10	75	1	8	43	:	44	1520	4.4	150		
LOCK & DAM 4			1	7	44	1	5	28	5	11	58	1	7	45	:	38	1086	3.1	130		
LOCK & DAM 5			1	6	50	1	4	34	5	10	28	1	6	73	:	110	1920	5.9	156		
DAVID D TERRY LOCK & DAM			1	5	40	1	4	33	5	10	32	1	5	54	:	104	2766	8.2	160		
MURRAY LOCK & DAM			1	3	50	1	3	37	8	10	30	1	4	42	:	56	1212	4.9	157		
TODD BUCK FERRY LOCK & DAM			1	9	48	1	7	36	5	10	40	1	8	47	:	71	1185	4.7	110		
LOCK & DAM 9			1	12	54	1	7	38	5	12	47	1	8	32	:	44	603	2.5	123		
DARDANELLE LOCK & DAM			1	8	51	1	6	45	5	13	51	1	6	35	:	220	2088	8.3	90		
OZARK LOCK & DAM			1	10	105	1	9	40	5	12	35	1	9	30	:	193	2049	8.4	120		
LOCK & DAM 17			1	7	30	1	6	27	5	12	28	1	8	42	:	80	1622	4.8	98		

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
MS	ULSA	SOUTHWESTERN	7/84	8/84	9/84

RIVER	LCODE-LOCK NAME	LEN/WID/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	0600/0110/14.0
	25-NEWT GRAHAM LOCK & DAM	0600/0110/14.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EROC MS	DISTRICT NAME TULSA	DIVISION NAME SOUTHWESTERN	MONTHS REPORTED									
			7/84			8/84			9/84			

RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGS	LOCKGS	LOCKGS	LOCKGS	LOCKGS	TONNAGE (TONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)												

ARKANSAS RIVER												
W D MAYO LOCK & DAM	***											
UPBOUND STATISTICS	124	283	1	408	380	306	686	127	106	8	241	359
DOWNBOUND STATISTICS	119	343	4	466	62	598	660	123	128	9	260	928
TOTALS	243	626	5	874	442	904	1346	250	234	17	501	1328
ROBERT S KERR LOCK & DAM & RES	***											
UPBOUND STATISTICS	124	268	0	392	387	299	686	124	167	13	304	393
DOWNBOUND STATISTICS	120	308	2	430	62	604	666	124	197	12	333	924
TOTALS	244	576	2	822	449	903	1352	248	364	25	637	1317
WEBBERS FALLS LOCK & DAM	***											
UPBOUND STATISTICS	107	86	3	196	256	303	559	111	57	12	180	495
DOWNBOUND STATISTICS	101	103	5	209	77	446	523	109	64	13	186	740
TOTALS	208	189	8	405	333	749	1082	220	121	25	366	1145
CHOUTEAU LOCK & DAM	***											
UPBOUND STATISTICS	105	54	4	163	261	218	479	110	40	8	158	285
DOWNBOUND STATISTICS	103	64	7	174	72	411	483	113	43	8	164	630
TOTALS	208	118	11	337	333	629	962	223	83	16	322	916
NEW GRAHAM LOCK & DAM	***											
UPBOUND STATISTICS	101	53	4	158	236	218	454	104	44	7	155	291
DOWNBOUND STATISTICS	103	63	6	172	78	396	474	111	47	7	165	614
TOTALS	204	116	10	330	314	614	928	215	91	14	320	896

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/84 THROUGH 9/84
INSTITUTE FOR WATER RESOURCES

EPOC MS	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED																			
			7/84				8/84				9/84											
ALL TIMES EXPRESSED IN MINUTES																						
APPROACH			LOCK PROCESSING TIME									: DELAYED		DELAY	DELAY							
			ENTRY			CHAMBER			EXIT			: TOWS	TIME	AVG	MAX							
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	:	(TOWS)	(TOWS)	(ALL VSSLS)							
KANSAS RIVER																						
W.D. MAX	LOCK & DAM		1	9	45		1	7	37		5	11	25		1	8	44	:	18	329	1.4	73
ROBER	NEAR LOCK & DAM BRE		1	5	31		1	6	37		9	14	26		1	7	45	:	32	1003	4.1	141
WEBBER	LOCK & DAM		1	12	65		1	8	30		5	18	46		1	8	32	:	112	2076	10.0	130
CHOUTEAU	LOCK & DAM		1	6	36		1	7	32		6	15	28		1	9	34	:	72	505	2.4	57
NEWT. GRAHAM	LOCK & DAM		1	9	36		1	7	40		5	13	23		1	11	40	:	34	720	3.5	120

Appendix B

Glossary

Draft This is not a physical lock dimension. It is compared with new data before they are added to the central library to ensure that vessel drafts are not recorded improperly.

Tows Only tows with barges are included with this figure. Tows without barges, (light boats) and other commercial vessels are counted as "other vessels."

Other vessels All vessels other than tows with barges and recreational vessels.

Commercial lockages The number of lockages for which the prime mover is a tow, a light boat or another commercial vessel.

Recreational lockages The number of lockages during which there are only recreational vessels using the lock.

Other lockages The number of lockages during which the prime mover is a government vessel, a government contracted vessel (such as a dredge) or an unidentified type of vessel. Also included in this category are navigable and open pass lockages.

Total lockages A lockage includes all lock activity necessary to process a tow and is counted only once when more than one vessel uses the lock. Thus, both cuts of a double cut lockage (e.g. only part of the tow will fit in the lock and it is necessary to process the tow in two pieces) count as a single lockage together and the count increases by only one when two tows are processed during a single lockage.

Processing time Only the times needed to process tows with barges are included in these statistics.

Delayed vessels Number of tows experiencing delay between arrival time and the time the lock is ready to process them.

Average delay Average time of delay for all tows.

Maximum delay Maximum delay time for vessels. This figure may reflect a single, extraordinary circumstance and should be evaluated accordingly.

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