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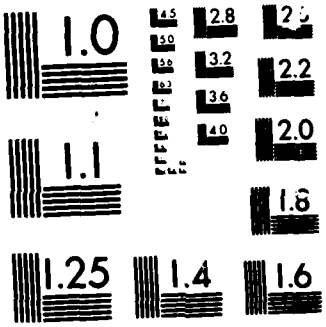

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US Army Corps
of Engineers
Engineer Institute for
Water Resources

AD-A165 928

Performance Monitoring System: Summary of Lock Statistics ~~for~~ July - September 1983

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December 1985

Summary Report 84-SR-2
Revision 1

DEPARTMENT OF THE ARMY
INSTITUTE FOR WATER RESOURCES CORPS OF ENGINEERS
CASEY BUILDING, HUMPHREYS ENGINEER CENTER
FORT BELVOIR, VIRGINIA 22060-5586

REPLY TO
ATTENTION OF

18 March 1986

SUBJECT: Transmittal of Summary Report 84-SR-2 - Revision 1

Defense Technical Information Center
Cameron Station
Alexandria, Virginia 22314

1. Reference AR 70-31.

2. Twelve copies of Summary Report 84-SR-1, 2 Revision 1, Performance Monitoring System: Summary of Lock Statistics for July-Sept. 1983" are hereby submitted.

3. Initial Distribution of this report has been made to appropriate Corps of Engineers agencies. It is recommended that copies of this report be forwarded to the National Technical Information Service.

4. Request the DTIC Form 50 (Incl 2) be completed and returned to WRSC-IWR.

FOR THE COMMANDER AND DIRECTOR:

2 Incl

James R Hanchey
JAMES R. HANCHEY
Director, Institute for
Water Resources

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Although the data are edited, the United States Government does not warrant its suitability for all purposes and does not assume responsibility for results of computations performed with these data. This is an updated version of the PMS Report published in April 1984.

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Performance Monitoring System
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)
Lock Performance Monitoring data are collected at Corps locks by lock operators from observation and information provided by waterway operators. This quarterly summary is an overview of the collected statistics.

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PERFORMANCE MONITORING SYSTEM
SUMMARY OF LOCK STATISTICS
JULY 1983 - SEPTEMBER 1983

U.S. Army Corps of Engineers
Water Resources Support Center
Institute for Water Resources
Ft. Belvoir, Virginia 22060

December 1985

Summary Report 84-SR-2
Revision 1

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 Miss Julie A. Oweis 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. Robert Schmitt, 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 (202-355-3083) or Robert Baldwin (202-653-1007). The information is produced and distributed quarterly.

JAMES R. HANCHEY
Director, WRSC-IWR

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Introduction

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

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.

APPENDIX A

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B2	NEW ORLEANS	LOWER MISS VALLEY	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ATCHAFALAYA RIVER	11-BERWICK LOCK	0307/0045/11.0
BAYOU TECHE	31-KEYSTONE LOCK	0162/0036/12.0
FRESHWATER BAYOU	41-FRESHWATER BAYOU LOCK	0600/0084/15.0
GULF INTRACOASTAL	01-PORT ALLEN LOCK	1198/0084/15.0
	02-BAYOU SORREL LOCK	0800/0056/16.0
	03-INNER HRBR NAVIGATION CANL LK	0646/0075/40.0
	04-ALGIERS LOCK	0797/0075/15.0
	05-HARVEY LOCK	0425/0075/14.0
	06-BAYOU BOEUF LOCK	1158/0075/15.0
	07-VERMILLION LOCK	1200/0056/14.0
	08-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
	77-LELAND BOWMAN LOCK	1200/0110/15.0
OLD RIVER	51-OLD RIVER LOCK	1200/0075/15.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD
NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B3	ST LOUIS	LOWER MISS VALLEY	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
KASKASKIA RIVER	01-KASKASKIA RIVER NAVAGATION 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 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B3	ST LOUIS	LOWER MISS VALLEY	7/83	8/83	9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
KASKASKIA RIVER												
KASKASKIA RIVER NAVAGATION LK	xxx											
UPBOUND STATISTICS	129	657	52	838	476	6	482	182	277	5	464	6
DNBOUND STATISTICS	127	640	62	829	5	483	488	189	315	6	510	722
TOTAL	256	1297	114	1667	481	489	970	371	592	11	974	728
MISSISSIPPI RIVER												
LOCK & DAM 24	xxx											
UPBOUND STATISTICS	626	281	35	942	6374	1943	8317	1099	149	15	1263	2912
DNBOUND STATISTICS	587	308	38	933	207	7272	7479	1025	202	10	1237	10233
TOTAL	1213	589	73	1875	6581	9215	15796	2124	351	25	2500	13145
LOCK & DAM 25	xxx											
UPBOUND STATISTICS	632	558	53	1243	6392	1991	8383	1086	278	22	1386	2988
DNBOUND STATISTICS	582	619	55	1256	189	7253	7442	995	309	17	1321	10194
TOTAL	1214	1177	108	2499	6581	9244	15825	2081	587	39	2707	13182
LOCK & DAM 26	xxx											
UPBOUND STATISTICS	695	5	9	709	7073	2920	9993	1372	1	5	1378	4319
DNBOUND STATISTICS	666	15	13	694	434	8766	9200	1326	0	1	1327	12388
TOTAL	1361	20	22	1403	7507	11686	19193	2698	1	6	2705	16707
LOCK & DAM 26 AUX 1	xxx											
UPBOUND STATISTICS	487	166	49	702	1452	984	2436	959	108	25	1092	1759
DNBOUND STATISTICS	444	210	56	710	461	1782	2243	875	137	28	1040	2638
TOTAL	931	376	105	1412	1913	2766	4679	1834	245	53	2132	4397
CHAIN OF ROCKS LOCK & DAM 27	xxx											
UPBOUND STATISTICS	1106	42	86	1234	8657	3816	12473	1128	14	11	1153	5926
DNBOUND STATISTICS	1046	23	85	1154	733	10720	11453	1073	9	6	1088	15394
TOTAL	2152	65	171	2388	9390	14536	23926	2201	23	17	2241	21321
CHAIN OF ROCKS LK & DM 27 AX1	xxx											
UPBOUND STATISTICS	329	164	123	616	586	288	874	435	68	27	530	418
DNBOUND STATISTICS	351	291	130	772	256	695	951	468	123	25	616	1048
TOTAL	680	455	253	1388	842	983	1825	903	191	52	1146	1466

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B3	ST LOUIS	LOWER MISS VALLEY	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
KASKASKIA RIVER																
KASKASKIA RIVER NAVAGATION L	1	3	44	1	2	29	3	9	29	1	2	20	24	337	1.3	52
MISSISSIPPI RIVER																
LOCK & DAM 24	1	5	81	1	8	59	5	12	41	1	14	46	1162	1423526	1173.5	3818
LOCK & DAM 25	1	6	115	1	8	39	2	8	32	1	14	72	1209	468274	385.7	1721
LOCK & DAM 26	1	2	67	1	10	42	4	13	38	1	10	58	1361	927119	681.2	3953
LOCK & DAM 26 AUX 1	1	5	68	1	6	46	4	13	43	1	10	69	922	370099	397.5	2223
CHAIN OF ROCKS LOCK & DAM 27	1	9	87	1	8	38	3	11	61	1	8	29	1753	129433	60.1	620
CHAIN OF ROCKS LK & DM 27 AX	1	6	39	1	3	30	5	10	70	1	3	56	297	6620	9.7	350

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B4	VICKSBURG	LOWER MISS VALLEY	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
OUCHITA/BLACK RIV	01-JONESVILLE LOCK & DAM	0600/0084/23.4
	02-COLUMBIA LOCK & DAM	0600/0084/27.4
	03-FELSENTHAL LOCK & DAM	0600/0084/11.0
	04-CALION LOCK & DAM	0600/0084/11.0
	06-LOCK & DAM 6	0268/0055/17.4
	08-LOCK & DAM 8	0268/0055/19.0
RED RIVER	41-RED RIVER LOCK & DAM #1	0685/0084/ 9.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B4	VICKSBURG	LOWER MISS VALLEY	7/83	8/83	9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
OUCHITA/BLACK RIV												
JONESVILLE LOCK & DAM	xxx											
UPBOUND STATISTICS	27	7	2	36	35	34	69	31	5	19	55	65
DNBOUND STATISTICS	28	7	5	40	35	35	70	38	6	22	66	53
TOTAL	55	14	7	76	70	69	139	69	11	41	121	118
COLUMBIA LOCK & DAM	xxx											
UPBOUND STATISTICS	12	9	0	21	13	14	27	12	5	1	18	20
DNBOUND STATISTICS	10	10	0	20	12	11	23	11	5	2	18	17
TOTAL	22	19	0	41	25	25	50	23	10	3	36	38
FELSENTHAL LOCK & DAM	xxx	NO DATA RECORDED FOR THIS LOCK										
CALION LOCK & DAM	xxx	NO DATA RECORDED FOR THIS LOCK										
LOCK & DAM 6	xxx											
UPBOUND STATISTICS	7	162	8	177	2	12	14	8	81	5	94	6
DNBOUND STATISTICS	7	157	10	174	14	0	14	9	79	5	93	0
TOTAL	14	319	18	351	16	12	28	17	160	10	187	6
LOCK & DAM 8	xxx											
UPBOUND STATISTICS	8	40	2	50	2	14	16	9	27	2	38	7
DNBOUND STATISTICS	7	46	0	53	15	0	15	8	29	1	38	0
TOTAL	15	86	2	103	17	14	31	17	56	3	76	7
MISSISSIPPI RIVER												
RED RIVER LOCK & DAM #1	xxx	NO DATA RECORDED FOR THIS LOCK										

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B4	VICKSBURG	LOWER MISS VALLEY	7/83	8/83	9/83

ALL TIMES EXPRESSED IN MINUTES

	LOCK PROCESSING TIME (MIN.) APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
OUCHITA/BLACK RIV																
JONESVILLE LOCK & DAM	2	6	17	1	4	33	4	18	49	1	6	32	9	42	0.7	20
COLUMBIA LOCK & DAM	3	6	12	2	5	15	5	17	30	4	7	20	3	29	1.3	15
FELSENTHAL LOCK & DAM	NO DATA RECORDED FOR THIS LOCK															
CALION LOCK & DAM	NO DATA RECORDED FOR THIS LOCK															
LOCK & DAM 6	1	2	14	1	2	19	5	11	39	1	3	18	14	77	5.5	20
LOCK & DAM 8	1	4	20	1	3	20	5	12	28	2	5	21	15	55	3.6	15
MISSISSIPPI RIVER																
RED RIVER LOCK & DAM #1	NO DATA RECORDED FOR THIS LOCK															

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
E3	NEW YORK	NORTH ATLANTIC	7/83	8/83	9/83

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

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
E3	NEW YORK	NORTH ATLANTIC	7/83 8/83 9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
HUDSON RIVER												
TROY LOCK & DAM	xxx											
UPBOUND STATISTICS	99	1166	4	1269	1	102	103	113	629	18	760	227
DNBOUND STATISTICS	97	1314	6	1417	94	3	97	115	676	20	811	0
TOTAL	196	2480	10	2686	95	105	200	228	1305	38	1571	228

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
E3	NEW YORK	NORTH ATLANTIC	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
HUDSON RIVER																
TROY LOCK & DAM	1	7	25	2	5	25	5	10	20	2	5	10	17	189	0.9	55

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
E4	NORFOLK	NORTH ATLANTIC	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ATLANT INTRCOASTAL	11-GREAT BRIDGE GUARD LOCK	0530/0072/12.0
DISMAL SWAMP	01-DEEP CREEK LOCK	0300/0052/ 6.0
	02-SOUTH MILLS LOCK	0300/0052/ 6.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
E4	NORFOLK	NORTH ATLANTIC	7/83 8/83 9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
ATLANT INTRCOASTAL												
GREAT BRIDGE GUARD LOCK	xxx											
UPBOUND STATISTICS	140	1282	77	1499	98	96	194	196	604	26	826	114
DNBOUND STATISTICS	152	1400	63	1615	90	96	186	194	598	29	821	105
TOTAL	292	2682	140	3114	188	192	380	390	1202	55	1647	219
DISMAL SWAMP												
DEEP CREEK LOCK	xxx	ONLY FIRST AND SECOND MONTHS REPORTED										
UPBOUND STATISTICS	0	87	0	87	0	0	0	0	52	0	52	0
DNBOUND STATISTICS	0	123	0	123	0	0	0	0	61	0	61	0
TOTAL	0	210	0	210	0	0	0	0	113	0	113	0
SOUTH MILLS LOCK	xxx											
UPBOUND STATISTICS	0	129	0	129	0	0	0	0	64	1	65	0
DNBOUND STATISTICS	0	83	0	83	0	0	0	1	48	1	50	0
TOTAL	0	212	0	212	0	0	0	1	112	2	115	0

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
E4	NORFOLK	NORTH ATLANTIC	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
ATLANT INTRCOASTAL																
GREAT BRIDGE GUARD LOCK	1	3	22	1	3	25	1	5	43	1	4	27	292	1237	4.2	45
DISMAL SWAMP																
DEEP CREEK LOCK	2	4	10	1	4	5	4	9	15	2	5	15	0	0	0.0	60
SOUTH MILLS LOCK	2	3	12	2	3	7	5	11	20	3	3	15	0	0	0.0	150

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F1	BUFFALO	NORTH CENTRAL	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
BLK ROCK CH/TONAWANDA	01-BLACK ROCK LOCK	0650/0070/21.6

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F1	BUFFALO	NORTH CENTRAL	7/83	8/83	9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
BLK ROCK CH/TONAWANDA												
BLACK ROCK LOCK	xxx											
UPBOUND STATISTICS	6	3896	32	3934	5	1	6	353	764	16	1133	2
DNBOUND STATISTICS	26	3155	2	3183	3	24	27	41	883	17	941	350
TOTAL	32	7051	34	7117	8	25	33	394	1647	33	2074	353

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F1	BUFFALO	NORTH CENTRAL	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
BLK ROCK CH/TONAWANDA																
BLACK ROCK LOCK	1	1	15	1	1	15	1	12	20	1	1	15	14	81	2.5	45

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F2	CHICAGO	NORTH CENTRAL	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
CHICAGO HARBOR	01-CHICAGO LOCK	0600/0080/21.5

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD
NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F3	DETROIT	NORTH CENTRAL	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
FOX RIVER	11-DE PERE LOCK & DAM	0146/0036/ 6.0
	12-LITTLE KAUKAUNA LOCK & DAM	0146/0036/ 6.0
	13-RAPIDE CROCHE LOCK & DAM	0146/0036/ 6.0
	21-KAUKAUNA LOCK 1	0144/0035/ 6.0
	22-KAUKAUNA LOCK 2	0144/0035/ 6.0
	23-KAUKAUNA LOCK 3	0144/0031/ 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	61-ALANSON LOCK	0066/0018/ 7.0
ST MARYS RIVER	01-MACARTHUR LOCK	0800/0080/31.0
	02-NEW POE LOCK	1200/0110/32.0
	03-DAVIS LOCK00	1350/0080/23.0
	04-SABIN LOCK00	1350/0080/23.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F3	DETROIT	NORTH CENTRAL	7/83	8/83	9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
FOX RIVER												
DE PERE LOCK & DAM	xxx	NO DATA RECORDED FOR THIS LOCK										
LITTLE KAUKAUNA LOCK & DAM	xxx											
UPBOUND STATISTICS	1	377	3	381	1	0	1	104	424	0	528	0
DNBOUND STATISTICS	0	408	3	411	0	0	0	109	408	0	517	0
TOTAL	1	785	6	792	1	0	1	213	832	0	1045	0
RAPIDE CROCHE LOCK & DAM	xxx											
UPBOUND STATISTICS	0	202	5	207	0	0	0	2	256	4	262	0
DNBOUND STATISTICS	0	215	5	220	0	0	0	1	237	4	242	0
TOTAL	0	417	10	427	0	0	0	3	493	8	504	0
KAUKAUNA LOCK 1	xxx											
UPBOUND STATISTICS	0	191	6	197	0	0	0	2	162	3	167	0
DNBOUND STATISTICS	0	192	6	198	0	0	0	2	176	4	182	0
TOTAL	0	383	12	395	0	0	0	4	338	7	349	0
KAUKAUNA LOCK 2	xxx											
UPBOUND STATISTICS	0	205	5	210	0	0	0	2	154	8	164	0
DNBOUND STATISTICS	0	195	5	200	0	0	0	2	169	8	179	0
TOTAL	0	400	10	410	0	0	0	4	323	16	343	0
KAUKAUNA LOCK 3	xxx											
UPBOUND STATISTICS	0	204	5	209	0	0	0	2	162	9	173	0
DNBOUND STATISTICS	0	186	4	190	0	0	0	2	161	8	171	0
TOTAL	0	390	9	399	0	0	0	4	323	17	344	0
KAUKAUNA LOCK 4	xxx											
UPBOUND STATISTICS	0	203	2	205	0	0	0	2	163	7	172	0
DNBOUND STATISTICS	0	197	2	199	0	0	0	2	164	6	172	0
TOTAL	0	400	4	404	0	0	0	4	327	13	344	0
KAUKAUNA LOCK 5	xxx											
UPBOUND STATISTICS	0	190	3	193	0	0	0	2	170	5	177	0
DNBOUND STATISTICS	0	204	3	207	0	0	0	1	166	5	172	0
TOTAL	0	394	6	400	0	0	0	3	336	10	349	0
LITTLE CHUTE LOCK 2	xxx											
UPBOUND STATISTICS	0	179	4	183	0	0	0	2	159	5	166	0
DNBOUND STATISTICS	0	199	3	202	0	0	0	2	183	5	190	0
TOTAL	0	378	7	385	0	0	0	4	342	10	356	0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
F3	DETROIT	NORTH CENTRAL	7/83 8/83 9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES CONNER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
FOX RIVER												
LITTLE CHUTE COMB LOCKS UPPER	xxx											
UPBOUND STATISTICS	0	188	5	193	0	0	0	2	162	7	171	0
DNBOUND STATISTICS	0	168	3	171	0	0	0	2	172	4	178	0
TOTAL	0	356	8	364	0	0	0	4	334	11	349	0
LITTLE CHUTE COMB LOCKS LOWER	xxx											
UPBOUND STATISTICS	0	187	6	193	0	0	0	2	157	8	167	0
DNBOUND STATISTICS	0	183	3	186	0	0	0	2	176	5	183	0
TOTAL	0	370	9	379	0	0	0	4	333	13	350	0
CEDARS LOCK & DAM	xxx											
UPBOUND STATISTICS	0	181	3	184	0	0	0	2	161	8	171	0
DNBOUND STATISTICS	0	175	3	178	0	0	0	2	182	6	190	0
TOTAL	0	356	6	362	0	0	0	4	343	14	361	0
APPLETON LOCK 1	xxx											
UPBOUND STATISTICS	0	196	4	200	0	0	0	2	159	3	164	0
DNBOUND STATISTICS	0	179	5	184	0	0	0	2	187	3	192	0
TOTAL	0	375	9	384	0	0	0	4	346	6	356	0
APPLETON LOCK 2	xxx											
UPBOUND STATISTICS	0	194	4	198	0	0	0	2	158	3	163	0
DNBOUND STATISTICS	0	202	5	207	0	0	0	2	184	2	188	0
TOTAL	0	396	9	405	0	0	0	4	342	5	351	0
APPLETON LOCK 3	xxx											
UPBOUND STATISTICS	0	187	6	193	0	0	0	2	155	3	160	0
DNBOUND STATISTICS	0	202	4	206	0	0	0	2	184	4	190	0
TOTAL	0	389	10	399	0	0	0	4	339	7	350	0
APPLETON LOCK 4	xxx											
UPBOUND STATISTICS	0	180	9	189	0	0	0	2	168	5	175	0
DNBOUND STATISTICS	0	201	10	211	0	0	0	2	193	4	199	0
TOTAL	0	381	19	400	0	0	0	4	361	9	374	0
MENASHA LOCK & DAM	xxx											
UPBOUND STATISTICS	0	546	3	549	0	0	0	4	483	55	542	0
DNBOUND STATISTICS	0	527	6	533	0	0	0	3	525	43	571	0
TOTAL	0	1073	9	1082	0	0	0	7	1008	98	1113	0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F3	DETROIT	NORTH CENTRAL	7/83	8/83	9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
THE INLAND ROUTE												
ALANSON LOCK	xxx	NO DATA RECORDED FOR THIS LOCK										
ST MARYS RIVER												
MACARTHUR LOCK	xxx	NO DATA RECORDED FOR THIS LOCK										
NEW POE LOCK	xxx	NO DATA RECORDED FOR THIS LOCK										
DAVIS LOCKOO	xxx	NO DATA RECORDED FOR THIS LOCK										
SABIN LOCKOO	xxx	NO DATA RECORDED FOR THIS LOCK										

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F3	DETROIT	NORTH CENTRAL	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
FOX RIVER																
DE PERE LOCK & DAM	1	1	11	1	1	10	1	5	15	1	1	10				
LITTLE KAUKAUNA LOCK & DAM	1	1	10	1	1	10	1	4	15	1	1	10	0	0	0.0	16
RAPIDE CROCHE LOCK & DAM	1	1	4	1	1	8	1	6	15	1	1	8	0	0	0.0	10
KAUKAUNA LOCK 1	1	1	4	1	1	7	1	7	14	1	1	4	0	0	0.0	15
KAUKAUNA LOCK 2	1	1	5	1	1	10	1	5	14	1	1	10	0	0	0.0	42
KAUKAUNA LOCK 3	1	1	5	1	1	10	1	6	15	1	1	10	0	0	0.0	10
KAUKAUNA LOCK 4	1	1	2	1	1	8	1	5	14	1	1	9	0	0	0.0	10
KAUKAUNA LOCK 5	1	1	2	1	1	7	1	5	15	1	1	5	0	0	0.0	10
LITTLE CHUTE LOCK 2	1	1	4	1	1	8	1	7	13	1	1	7	0	0	0.0	19
LITTLE CHUTE COMB LOCKS UPPE	1	1	4	1	1	10	1	6	15	1	1	10	0	0	0.0	26
LITTLE CHUTE COMB LOCKS LOWE	1	1	4	1	1	10	1	6	15	1	1	9	0	0	0.0	21
CEDARS LOCK & DAM	1	1	2	1	1	3	1	4	14	1	1	4	0	0	0.0	15
APPLETON LOCK 1	1	1	2	1	1	7	1	5	11	1	1	6	0	0	0.0	7
APPLETON LOCK 2	1	1	2	1	1	5	1	5	10	1	1	4	0	0	0.0	21
APPLETON LOCK 3	1	1	2	1	1	7	1	5	9	1	1	5	0	0	0.0	31

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F3	DETROIT	NORTH CENTRAL	7/83	8/83	9/83

ALL TIMES EXPRESSED IN MINUTES

	LOCK PROCESSING TIME (MIN.)												DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	APPROACH			ENTRY			CHAMBER			EXIT						
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
FOX RIVER																
APPLETON LOCK 4	1	1	2	1	1	6	1	4	11	1	1	5	0	0	0.0	5
MENASHA LOCK & DAM	1	1	5	1	1	8	1	6	13	1	1	7	0	0	0.0	23
THE INLAND ROUTE																
ALANSON LOCK	NO DATA RECORDED FOR THIS LOCK															
ST MARYS RIVER																
MACARTHUR LOCK	1	8	58	1	5	37	3	12	49	1	4	58				
NEW POE LOCK	1	8	70	1	7	58	2	14	49	1	6	51				
DAVIS LOCK00	1	5	16	1	8	18	11	15	20	2	5	10				
SABIN LOCK00	2	2	4	1	1	1	17	22	25	1	3	4				

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F4	ROCK ISLAND	NORTH CENTRAL	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ILLINOIS	01-THOMAS J O'BRIEN	1000/0110/12.0
	02-LOCKPORT LOCK	0600/0110/12.0
	03-BRANDON ROAD LOCK & DAM	0600/0110/12.0
	04-DRESDEN ISLAND LOCK & DAM	0600/0110/12.0
	05-MARSIELLES LOCK & DAM	0600/0110/12.0
	06-STARVED ROCK LOCK & DAM	0600/0110/12.0
	07-PEORIA LOCK & DAM	0600/0110/12.0
	08-LAGRANGE 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 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F4	ROCK ISLAND	NORTH CENTRAL	7/83	8/83	9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
ILLINOIS												
THOMAS J O'BRIEN	xxx											
UPBOUND STATISTICS	319	4441	70	4830	331	636	967	382	1278	24	1684	939
DNBOUND STATISTICS	317	4487	67	4871	466	520	986	381	1225	22	1628	826
TOTAL	636	8928	137	9701	797	1156	1953	763	2503	46	3312	1765
LOCKPORT LOCK	xxx											
UPBOUND STATISTICS	440	220	38	698	522	1978	2500	516	113	0	629	2955
DNBOUND STATISTICS	459	279	33	771	1515	1041	2556	520	125	1	646	1656
TOTAL	899	499	71	1469	2037	3019	5056	1036	238	1	1275	4611
BRANDON ROAD LOCK & DAM	xxx											
UPBOUND STATISTICS	454	287	54	795	599	1986	2585	537	150	3	690	2982
DNBOUND STATISTICS	444	329	58	831	1449	1107	2556	526	136	3	665	1740
TOTAL	898	616	112	1626	2048	3093	5141	1063	286	6	1355	4722
DRESDEN ISLAND LOCK & DAM	xxx											
UPBOUND STATISTICS	405	704	31	1140	658	2070	2728	490	347	5	842	3123
DNBOUND STATISTICS	400	738	35	1173	1412	1313	2725	488	344	8	840	2102
TOTAL	805	1442	66	2313	2070	3383	5453	978	691	13	1682	5226
MARSIELLES LOCK & DAM	xxx											
UPBOUND STATISTICS	381	624	37	1042	753	1912	2665	488	286	9	783	3038
DNBOUND STATISTICS	392	683	25	1100	1204	1521	2725	497	317	12	826	2406
TOTAL	773	1307	62	2142	1957	3433	5390	985	603	21	1609	5445
STARVED ROCK LOCK & DAM	xxx											
UPBOUND STATISTICS	398	693	34	1125	921	1958	2879	511	305	23	839	3121
DNBOUND STATISTICS	402	761	28	1191	1155	1768	2923	510	319	27	856	2747
TOTAL	800	1454	62	2316	2076	3726	5802	1021	624	50	1695	5869
PEORIA LOCK & DAM	xxx											
UPBOUND STATISTICS	428	483	49	960	1439	2284	3723	529	274	91	894	3626
DNBOUND STATISTICS	444	550	37	1031	1243	258/	3830	540	312	96	948	3889
TOTAL	872	1033	86	1991	2682	4871	7553	1069	586	187	1842	7516
LAGRANGE LOCK & DAM	xxx											
UPBOUND STATISTICS	431	296	22	749	1820	1911	3731	526	148	101	775	3167
DNBOUND STATISTICS	453	351	12	816	753	3058	3811	546	171	101	818	4552
TOTAL	884	647	34	1565	2573	4969	7542	1072	319	202	1593	7719

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
F4	ROCK ISLAND	NORTH CENTRAL	7/83 8/83 9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
MISSISSIPPI RIVER												
LOCK & DAM 11	xxx											
UPBOUND STATISTICS	428	1212	48	1688	3976	1230	5206	636	646	9	1291	1835
DNBOUND STATISTICS	416	1294	48	1758	268	4570	4838	594	659	14	1267	6485
TOTAL	844	2506	96	3446	4244	5800	10044	1230	1305	23	2558	8320
LOCK & DAM 12	xxx											
UPBOUND STATISTICS	461	1025	18	1504	4235	1376	5611	675	597	7	1279	2014
DNBOUND STATISTICS	450	1060	19	1529	265	4946	5211	652	627	15	1294	6981
TOTAL	911	2085	37	3033	4500	6322	10822	1327	1224	22	2573	8996
LOCK & DAM 13	xxx											
UPBOUND STATISTICS	462	1045	19	1526	4253	1382	5635	690	529	5	1224	2032
DNBOUND STATISTICS	449	1079	18	1546	252	4948	5200	665	546	11	1222	6965
TOTAL	911	2124	37	3072	4505	6330	10835	1355	1075	16	2446	8997
LOCK & DAM 14	xxx											
UPBOUND STATISTICS	580	683	31	1294	5191	1648	6839	920	385	6	1311	2425
DNBOUND STATISTICS	573	781	22	1376	291	6023	6314	891	373	9	1273	8177
TOTAL	1153	1464	53	2670	5482	7671	13153	1811	758	15	2584	10602
LOCK & DAM 14 AUXILIARY 1	xxx											
UPBOUND STATISTICS	0	1658	0	1658	0	0	0	0	334	0	334	0
DNBOUND STATISTICS	0	1614	0	1614	0	0	0	0	348	0	348	0
TOTAL	0	3272	0	3272	0	0	0	0	682	0	682	0
LOCK & DAM 15	xxx											
UPBOUND STATISTICS	538	14	22	574	4891	1684	6575	988	17	1	1006	2475
DNBOUND STATISTICS	534	15	20	569	324	5806	6130	973	17	3	993	8148
TOTAL	1072	29	42	1143	5215	7490	12705	1961	34	4	1999	10623
LOCK & DAM 15 AUXILIARY 1	xxx											
UPBOUND STATISTICS	111	1844	70	2025	75	78	153	179	736	2	917	114
DNBOUND STATISTICS	117	1908	62	2087	99	68	167	178	781	4	963	105
TOTAL	228	3752	132	4112	174	146	320	357	1517	6	1880	219
LOCK & DAM 16	xxx											
UPBOUND STATISTICS	627	277	31	935	5239	1924	7163	1047	195	14	1256	2853
DNBOUND STATISTICS	615	338	34	987	415	6235	6650	1006	230	20	1256	8773
TOTAL	1242	615	65	1922	5654	8159	13813	2053	425	34	2512	11627

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F4	ROCK ISLAND	NORTH CENTRAL	7/83	8/83	9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
MISSISSIPPI RIVER												
LOCK & DAM 17	xxx											
UPBOUND STATISTICS	609	166	15	790	5416	2105	7521	1055	141	23	1219	3108
DNBOUND STATISTICS	593	186	12	791	503	6460	6963	1002	158	30	1190	9053
TOTAL	1202	352	27	1581	5919	8565	14484	2057	299	53	2409	12162
LOCK & DAM 18	xxx											
UPBOUND STATISTICS	613	358	32	1003	5543	2144	7687	1028	296	16	1340	3174
DNBOUND STATISTICS	589	373	34	996	493	6598	7091	975	312	17	1304	9228
TOTAL	1202	731	66	1999	6036	8742	14778	2003	608	33	2644	12402
LOCK & DAM 19	xxx											
UPBOUND STATISTICS	600	271	51	922	5874	1979	7853	631	125	10	766	2933
DNBOUND STATISTICS	578	305	47	930	326	6899	7225	590	146	10	746	9666
TOTAL	1178	576	98	1852	6200	8878	15078	1221	271	20	1512	12600
LOCK & DAM 19 AUXILIARY 1	xxx	NO DATA RECORDED FOR THIS LOCK										
LOCK & DAM 20	xxx											
UPBOUND STATISTICS	605	222	79	906	5966	1988	7954	1101	147	26	1274	2939
DNBOUND STATISTICS	584	276	81	941	314	6980	7294	1033	201	22	1256	9779
TOTAL	1189	498	160	1847	6280	8968	15248	2134	348	48	2530	12718
LOCK & DAM 21	xxx											
UPBOUND STATISTICS	608	287	57	952	6137	1902	8039	1095	182	30	1307	2845
DNBOUND STATISTICS	579	337	53	969	196	7128	7324	1009	236	31	1276	9990
TOTAL	1187	624	110	1921	6333	9030	15363	2104	418	61	2583	12836
LOCK & DAM 22	xxx											
UPBOUND STATISTICS	606	358	35	999	6174	1956	8130	1083	191	20	1294	2918
DNBOUND STATISTICS	572	408	31	1011	167	7156	7323	1004	225	16	1245	10078
TOTAL	1178	766	66	2010	6341	9112	15453	2087	416	36	2539	12997

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F4	ROCK ISLAND	NORTH CENTRAL	7/83	8/83	9/83

ALL TIMES EXPRESSED IN MINUTES

	LOCK PROCESSING TIME (MIN.) APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
ILLINOIS																
THOMAS J O'BRIEN	1	1	21	1	1	22	1	14	71	1	1	15	233	3469	5.4	75
LOCKPORT LOCK	1	8	55	1	9	40	9	26	95	1	10	98	730	61472	68.3	777
BRANDON ROAD LOCK & DAM	1	9	55	1	9	70	2	19	88	1	10	63	672	53308	59.3	1490
DRESDEN ISLAND LOCK & DAM	1	6	393	1	7	436	1	16	197	1	9	89	546	43122	53.5	673
MARSIELLES LOCK & DAM	1	8	183	1	7	275	2	18	85	1	11	78	496	71667	92.7	1440
STARVED ROCK LOCK & DAM	1	6	62	1	7	56	4	16	77	1	11	68	470	58151	72.6	624
PEORIA LOCK & DAM	1	5	46	1	8	38	1	9	71	1	11	63	744	61334	70.3	525
LAGRANGE LOCK & DAM	1	7	90	1	9	35	1	7	35	1	14	68	784	82210	92.9	1640
MISSISSIPPI RIVER																
LOCK & DAM 11	1	5	386	1	5	32	1	10	127	1	10	226	622	83914	99.4	1440
LOCK & DAM 12	1	6	73	1	5	64	1	7	398	1	11	742	656	105203	115.4	1446
LOCK & DAM 13	1	4	340	1	6	35	1	9	103	1	12	55	634	84485	92.7	1530
LOCK & DAM 14	1	5	85	1	7	124	1	8	190	1	14	127	907	251051	217.7	2215
LOCK & DAM 14 AUXILIARY 1	1	1	1	1	1	1	5	17	48	1	1	1	0	0	0.0	0

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F4	ROCK ISLAND	NORTH CENTRAL	7/83	8/83	9/83

ALL TIMES EXPRESSED IN MINUTES

	LOCK PROCESSING TIME (MIN.) APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
MISSISSIPPI RIVER																
LOCK & DAM 15	1	9	395	1	8	388	1	10	68	1	18	93	868	198288	184.9	1720
LOCK & DAM 15 AUXILIARY 1	1	1	61	1	1	21	1	10	81	1	1	425	38	1799	7.8	1440
LOCK & DAM 16	1	7	80	1	8	78	1	8	62	1	15	92	1043	218332	175.7	2132
LOCK & DAM 17	1	10	388	1	8	67	1	9	449	1	14	356	1056	304475	253.3	1707
LOCK & DAM 18	1	7	125	1	8	55	1	7	334	1	15	85	1032	218484	181.7	1579
LOCK & DAM 19	1	16	116	1	8	27	1	17	101	1	9	26	742	60993	51.7	472
LOCK & DAM 19 AUXILIARY 1	NO DATA RECORDED FOR THIS LOCK															
LOCK & DAM 20	1	6	70	1	8	36	1	6	64	1	16	67	915	153001	128.6	1100
LOCK & DAM 21	1	7	90	1	8	35	1	6	68	1	16	85	980	168345	141.8	609
LOCK & DAM 22	1	8	152	1	9	56	1	7	74	1	18	105	1142	966280	820.2	3114

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F5	ST PAUL	NORTH CENTRAL	7/83	8/83	9/83

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

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
F5	ST PAUL	NORTH CENTRAL	7/83 8/83 9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
MISSISSIPPI RIVER												
LOCK & DAM 1 MAIN CHBR 1	xxx											
UPBOUND STATISTICS	296	1631	13	1940	291	251	542	330	702	15	1047	313
DNBOUND STATISTICS	285	1750	29	2064	201	327	528	327	693	14	1034	486
TOTAL	581	3381	42	4004	492	578	1070	657	1395	29	2081	799
LOCK & DAM 1 MAIN CHBR 2	xxx	ONLY FIRST AND SECOND MONTHS REPORTED										
UPBOUND STATISTICS	1	0	0	1	2	0	2	2	0	0	2	0
DNBOUND STATISTICS	0	2	0	2	0	0	0	1	0	1	2	0
TOTAL	1	2	0	3	2	0	2	3	0	1	4	0
LOCK & DAM 2	xxx											
UPBOUND STATISTICS	404	2357	11	2772	3912	530	4442	530	832	17	1379	808
DNBOUND STATISTICS	403	2340	8	2751	84	4057	4141	526	798	18	1342	5727
TOTAL	807	4697	19	5523	3996	4587	8583	1056	1630	35	2721	6536
LOCK & DAM 2 AUXILIARY 1	xxx	NO DATA RECORDED FOR THIS LOCK										
LOCK & DAM 3	xxx											
UPBOUND STATISTICS	346	3504	51	3901	3597	514	4111	478	1103	19	1600	771
DNBOUND STATISTICS	343	3701	51	4095	64	3739	3803	428	1168	20	1616	5287
TOTAL	689	7205	102	7996	3661	4253	7914	906	2271	39	3216	6058
LOCK & DAM 4	xxx											
UPBOUND STATISTICS	356	2527	12	2895	3713	563	4276	463	1025	23	1511	852
DNBOUND STATISTICS	350	2663	19	3032	54	3925	3979	447	1022	29	1498	5554
TOTAL	706	5190	31	5927	3767	4488	8255	910	2047	52	3009	6407
LOCK & DAM 5	xxx											
UPBOUND STATISTICS	361	2054	9	2424	3624	630	4254	472	887	18	1377	950
DNBOUND STATISTICS	352	2060	17	2429	66	3889	3955	456	896	22	1374	5496
TOTAL	713	4114	26	4853	3690	4519	8209	928	1783	40	2751	6446
LOCK & DAM 6	xxx											
UPBOUND STATISTICS	380	2319	12	2711	3956	658	4614	497	969	37	1503	992
DNBOUND STATISTICS	366	2442	19	2827	58	4230	4288	475	1050	40	1565	5976
TOTAL	746	4761	31	5538	4014	4888	8902	972	2019	77	3068	6969
LOCK & DAM 7	xxx											
UPBOUND STATISTICS	382	3313	24	3719	3951	671	4622	512	1115	23	1650	1020
DNBOUND STATISTICS	367	3353	25	3745	58	4227	4285	475	1198	27	1700	5985
TOTAL	749	6666	49	7464	4009	4898	8907	987	2313	50	3350	7005

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
F5	ST PAUL	NORTH CENTRAL	7/83 8/83 9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
MISSISSIPPI RIVER												
LOCK & DAM 8	xxx											
UPBOUND STATISTICS	371	1432	13	1816	3901	747	4648	509	739	26	1274	1126
DNBOUND STATISTICS	362	1482	13	1857	77	4262	4339	495	736	26	1257	6010
TOTAL	733	2914	26	3673	3978	5009	8987	1004	1475	52	2531	7136
LOCK & DAM 9	xxx											
UPBOUND STATISTICS	366	1475	102	1943	3676	1082	4758	505	783	15	1303	1590
DNBOUND STATISTICS	358	1485	106	1949	247	4156	4403	491	772	14	1277	5874
TOTAL	724	2960	208	3892	3923	5238	9161	996	1555	29	2580	7464
LOCK & DAM 10	xxx											
UPBOUND STATISTICS	449	1560	14	2023	4136	1109	5245	607	782	49	1438	1639
DNBOUND STATISTICS	417	1591	33	2041	248	4632	4880	578	852	50	1480	6529
TOTAL	866	3151	47	4064	4384	5741	10125	1185	1634	99	2918	8168
ST ANTHONY FALLS UPPER L & D	xxx											
UPBOUND STATISTICS	223	1178	24	1425	240	111	351	244	419	5	668	144
DNBOUND STATISTICS	217	1292	30	1539	85	257	342	248	425	5	678	367
TOTAL	440	2470	54	2964	325	368	693	492	844	10	1346	511
ST ANTHONY FALLS LOWER L & D	xxx											
UPBOUND STATISTICS	300	1164	8	1472	295	249	544	306	416	9	731	309
DNBOUND STATISTICS	285	1296	20	1601	199	328	527	304	420	11	735	472
TOTAL	585	2460	28	3073	494	577	1071	610	836	20	1466	781
LOCK & DAM 5A	xxx											
UPBOUND STATISTICS	360	2652	39	3051	3624	622	4246	496	1099	13	1608	939
DNBOUND STATISTICS	351	2653	36	3040	69	3866	3935	447	1165	26	1638	5470
TOTAL	711	5305	75	6091	3693	4488	8181	943	2264	39	3246	6409

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F5	ST PAUL	NORTH CENTRAL	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.) APPROACH			ENTRY			CHAMBER			EXIT			ALL TIMES EXPRESSED IN MINUTES DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
MISSISSIPPI RIVER																
LOCK & DAM 1 MAIN CHBR 1	1	2	13	1	4	58	3	11	32	1	3	26	110	2252	3.8	123
LOCK & DAM 1 MAIN CHBR 2	1	2	5	2	8	13	10	14	16	3	4	6	0	0	0.0	0
LOCK & DAM 2	1	4	107	1	6	55	3	9	52	1	8	58	576	63079	78.1	525
LOCK & DAM 2 AUXILIARY 1	NO DATA RECORDED FOR THIS LOCK															
LOCK & DAM 3	1	4	116	1	6	58	1	5	55	1	8	76	461	38121	55.3	423
LOCK & DAM 4	1	4	86	1	5	35	4	5	17	1	8	50	472	31898	45.1	607
LOCK & DAM 5	1	4	64	1	5	66	4	7	26	1	8	56	467	43265	60.6	775
LOCK & DAM 6	1	5	79	1	5	85	2	5	55	1	8	55	518	46492	62.3	515
LOCK & DAM 7	1	4	110	1	5	38	4	6	27	1	7	47	523	44686	59.6	528
LOCK & DAM 8	1	4	78	1	6	56	4	7	27	1	10	54	507	70019	95.5	966
LOCK & DAM 9	1	5	115	1	5	31	4	6	56	1	10	78	325	34556	47.7	510
LOCK & DAM 10	1	5	119	1	5	69	3	6	17	1	9	108	586	78632	90.7	1007
ST ANTHONY FALLS UPPER L & D	1	2	40	1	3	22	6	9	25	1	2	20	26	403	0.9	47
ST ANTHONY FALLS LOWER L & D	1	2	19	1	3	27	4	11	54	1	2	24	105	1832	3.1	120
LOCK & DAM 5A	1	4	71	1	4	27	4	6	24	1	6	52	456	27641	38.8	688

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
G2	PORTLAND	NORTH PACIFIC	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
COLUMBIA RIVER	01-BONNEVILLE LOCK & DAM	0500/0075/15.0
	02-THE DALLES DAM	0675/0086/15.0
	03-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

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
G2	PORTLAND	NORTH PACIFIC	7/83	8/83	9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
COLUMBIA RIVER												
BONNEVILLE LOCK & DAM	xxx											
UPBOUND STATISTICS	234	183	19	436	511	262	773	465	139	30	634	429
DNBOUND STATISTICS	243	220	22	485	73	729	802	500	113	33	646	1586
TOTAL	477	403	41	921	584	991	1575	965	252	63	1280	2015
THE DALLES DAM	xxx											
UPBOUND STATISTICS	201	80	5	286	410	247	657	225	50	7	282	420
DNBOUND STATISTICS	195	76	4	275	70	577	647	219	51	8	278	1384
TOTAL	396	156	9	561	480	824	1304	444	101	15	560	1804
JOHN DAY LOCK & DAM	xxx											
UPBOUND STATISTICS	187	106	11	304	400	243	643	212	44	19	275	416
DNBOUND STATISTICS	181	117	11	309	71	557	628	204	52	22	278	1420
TOTAL	368	223	22	613	471	800	1271	416	96	41	553	1837
WILLAMETTE RIVER												
WILLAMETTE FALLS LOCKS 1 - 4	xxx											
UPBOUND STATISTICS	105	312	23	440	34	119	153	145	212	3	360	31
DNBOUND STATISTICS	103	367	29	499	7	133	140	138	212	3	353	39
TOTAL	208	679	52	939	41	252	293	283	424	6	713	70
WILLAMETTE FALLS GUARD LOCK	xxx											
UPBOUND STATISTICS	110	177	165	452	30	92	122	98	186	382	470	20
DNBOUND STATISTICS	114	228	166	508	14	100	114	106	187	382	463	29
TOTAL	224	405	331	960	44	192	236	204	373	764	933	49

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
G2	PORTLAND	NORTH PACIFIC	7/83	8/83	9/83

ALL TIMES EXPRESSED IN MINUTES

	LOCK PROCESSING TIME (MIN.)												DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	APPROACH			ENTRY			CHAMBER			EXIT						
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
COLUMBIA RIVER																
BONNEVILLE LOCK & DAM	1	6	70	1	6	55	5	22	86	1	4	33	471	36224	75.9	465
THE DALLES DAM	1	5	28	1	5	30	2	21	78	1	5	15	296	2800	7.0	59
JOHN DAY LOCK & DAM	1	4	33	1	5	40	2	24	81	1	4	20	368	1885	5.1	65
WILLAMETTE RIVER																
WILLAMETTE FALLS LOCKS 1 - 4	1	1	14	1	1	22	1	33	116	1	1	13	175	221	1.0	50
WILLAMETTE FALLS GUARD LOCK	1	1	11	1	1	3	1	1	31	1	1	11	169	173	0.7	4

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
G3	SEATTLE	NORTH PACIFIC	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
LAKE WASHINGTON SHP CA	01-HIRAM M CHITTENDEN LOCKS	0760/0080/30.0
	01-HIRAM M CHITTENDEN LOCKS AUX1	0150/0028/25.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
G3	SEATTLE	NORTH PACIFIC	7/83 8/83 9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
LAKE WASHINGTON SHP CA												
HIRAM M CHITTENDEN LOCKS	xxx											
UPBOUND STATISTICS	334	7081	747	8162	102	302	404	740	111	91	942	438
DNBOUND STATISTICS	313	6495	745	7553	246	338	584	707	124	48	879	180
TOTAL	647	13576	1492	15715	348	640	988	1447	235	139	1821	618
HIRAM M CHITTENDEN LOCKS AUX1	xxx											
UPBOUND STATISTICS	31	8074	654	8759	21	11	32	906	1422	132	2460	0
DNBOUND STATISTICS	23	8450	531	9004	8	15	23	764	1613	168	2545	0
TOTAL	54	16524	1185	17763	29	26	55	1670	3035	300	5005	0

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
G3	SEATTLE	NORTH PACIFIC	7/83	8/83	9/83

ALL TIMES EXPRESSED IN MINUTES

	LOCK PROCESSING TIME (MIN.) APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
LAKE WASHINGTON SHP CA																
HIRAM M CHITTENDEN LOCKS	1	2	15	1	3	42	2	14	68	1	7	86	562	3241	5.0	231
HIRAM M CHITTENDEN LOCKS AUX	1	1	19	1	1	26	1	4	41	1	8	46	4	7	0.1	90

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
G4	WALLA WALLA	NORTH PACIFIC	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
COLUMBIA RIVER	24-MCNARY LOCK & DAM	0675/0086/14.0
SNAKE RIVER	01-ICE HARBOR LOCK & DAM	0670/0086/14.0
	02-LOWER MONUMENTAL LOCK & DAM	0670/0086/14.0
	03-LITTLE GOOSE LOCK & DAM	0670/0086/14.0
	04-LOWER GRANITE LOCK & DAM	0670/0086/14.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
G4	WALLA WALLA	NORTH PACIFIC	7/83	8/83	9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
COLUMBIA RIVER												
MCNARY LOCK & DAM	xxx											
UPBOUND STATISTICS	243	219	8	470	450	355	805	266	118	5	389	577
DNBOUND STATISTICS	237	216	8	461	126	653	779	265	118	4	387	1557
TOTAL	480	435	16	931	576	1008	1584	531	236	9	776	2134
SNAKE RIVER												
ICE HARBOR LOCK & DAM	xxx											
UPBOUND STATISTICS	196	684	56	936	409	67	476	274	275	1	550	35
DNBOUND STATISTICS	221	680	25	926	10	459	469	265	255	4	524	1117
TOTAL	417	1364	81	1862	419	526	945	539	530	5	1074	1153
LOWER MONUMENTAL LOCK & DAM	xxx											
UPBOUND STATISTICS	134	186	8	328	357	65	422	161	108	1	270	35
DNBOUND STATISTICS	136	194	4	334	11	404	415	161	107	2	270	958
TOTAL	270	380	12	662	368	469	837	322	215	3	540	994
LITTLE GOOSE LOCK & DAM	xxx											
UPBOUND STATISTICS	132	215	6	353	336	65	401	156	104	36	296	35
DNBOUND STATISTICS	133	206	2	341	9	385	394	158	108	39	305	899
TOTAL	265	421	8	694	345	450	795	314	212	75	601	934
LOWER GRANITE LOCK & DAM	xxx											
UPBOUND STATISTICS	128	384	9	521	244	55	299	153	223	8	384	30
DNBOUND STATISTICS	129	394	3	526	10	281	291	154	224	7	385	638
TOTAL	257	778	12	1047	254	336	590	307	447	15	769	669

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
G4	WALLA WALLA	NORTH PACIFIC	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
COLUMBIA RIVER																
MCNARY LOCK & DAM	1	4	21	1	5	24	9	16	60	1	6	17	480	2586	5.3	80
SNAKE RIVER																
ICE HARBOR LOCK & DAM	1	3	48	1	4	30	9	26	61	1	3	16	417	3088	7.4	110
LOWER MONUMENTAL LOCK & DAM	1	4	20	1	4	20	9	22	53	1	3	11	270	1460	5.4	88
LITTLE GOOSE LOCK & DAM	1	3	19	1	3	26	5	19	39	1	4	30	265	1267	4.7	46
LOWER GRANITE LOCK & DAM	1	3	27	1	4	20	6	11	36	1	3	15	257	1050	4.0	35

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H1	HUNTINGTON	OHIO RIVER	7/83	8/83	9/83

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

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H1	HUNTINGTON	OHIO RIVER	7/83	8/83	9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
KANAWHA RIVER												
WINFIELD LOCKS & DAM MAIN 1	xxx											
UPBOUND STATISTICS	195	48	5	248	586	552	1138	747	78	3	828	823
DNBOUND STATISTICS	201	36	9	246	329	918	1247	784	60	0	844	1082
TOTAL	396	84	14	494	915	1470	2385	1531	138	3	1672	1906
WINFIELD LOCKS & DAM MAIN 2	xxx											
UPBOUND STATISTICS	241	98	14	353	933	478	1411	771	168	6	945	650
DNBOUND STATISTICS	231	114	17	362	608	686	1294	743	174	12	929	829
TOTAL	472	212	31	715	1541	1164	2705	1514	342	18	1874	1480
MARMET LOCKS & DAM MAIN 1	xxx											
UPBOUND STATISTICS	133	112	10	255	569	70	639	388	158	2	548	92
DNBOUND STATISTICS	195	98	14	307	77	930	1007	607	209	0	816	1146
TOTAL	328	210	24	562	646	1000	1646	995	367	2	1364	1239
MARMET LOCKS & DAM MAIN 2	xxx											
UPBOUND STATISTICS	177	291	33	501	703	93	796	419	336	2	757	96
DNBOUND STATISTICS	122	303	31	456	75	344	419	240	275	3	518	421
TOTAL	299	594	64	957	778	437	1215	659	611	5	1275	517
LONDON LOCKS & DAM MAIN 1	xxx											
UPBOUND STATISTICS	39	18	4	61	106	0	106	74	23	1	98	0
DNBOUND STATISTICS	31	23	6	60	1	76	77	55	23	0	78	88
TOTAL	70	41	10	121	107	76	183	129	46	1	176	88
LONDON LOCKS & DAM MAIN 2	xxx											
UPBOUND STATISTICS	121	65	13	199	319	13	332	215	78	0	293	8
DNBOUND STATISTICS	130	60	11	201	6	339	345	231	71	0	302	407
TOTAL	251	125	24	400	325	352	677	446	149	0	595	415
OHIO RIVER												
BELLEVILLE LOCKS & DAM	xxx											
UPBOUND STATISTICS	343	3	5	351	981	2533	3514	345	2	0	347	3843
DNBOUND STATISTICS	333	3	7	343	1443	2094	3537	333	3	1	337	3199
TOTAL	676	6	12	694	2424	4627	7051	678	5	1	684	7042

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
H1	HUNTINGTON	OHIO RIVER	7/83 8/83 9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
OHIO RIVER												
BELLEVILLE LOCKS & DAM AUX 1	xxx											
UPBOUND STATISTICS	35	290	8	333	52	65	117	45	174	1	220	66
DNBOUND STATISTICS	41	295	10	346	72	54	126	53	183	4	240	35
TOTAL	76	585	18	679	124	119	243	98	357	5	460	101
RACINE LOCKS & DAM	xxx											
UPBOUND STATISTICS	392	4	4	400	1396	2550	3946	397	3	0	400	3865
DNBOUND STATISTICS	383	8	9	400	1476	2503	3979	388	3	0	391	3524
TOTAL	775	12	13	800	2872	5053	7925	785	6	0	791	7390
RACINE LOCKS & DAM AUX 1	xxx											
UPBOUND STATISTICS	44	196	9	249	134	30	164	61	131	1	193	42
DNBOUND STATISTICS	53	206	12	271	70	118	188	67	140	4	211	103
TOTAL	97	402	21	520	204	148	352	128	271	5	404	146
GALLIPOLIS LOCKS & DAM	xxx											
UPBOUND STATISTICS	352	1	3	356	954	2327	3281	581	0	0	581	3580
DNBOUND STATISTICS	349	84	8	441	1415	2044	3459	586	1	1	588	2959
TOTAL	701	85	11	797	2369	4371	6740	1167	1	1	1169	6539
GALLIPOLIS LOCKS & DAM AUX 1	xxx											
UPBOUND STATISTICS	78	112	17	207	249	309	558	161	145	8	314	474
DNBOUND STATISTICS	83	125	24	232	205	283	488	161	134	7	302	390
TOTAL	161	237	41	439	454	592	1046	322	279	15	616	864
GREENUP LOCKS & DAM	xxx											
UPBOUND STATISTICS	163	11	4	178	1090	575	1665	164	5	0	169	905
DNBOUND STATISTICS	154	8	4	166	289	1266	1555	157	3	0	160	1920
TOTAL	317	19	8	344	1379	1841	3220	321	8	0	329	2825
GREENUP LOCKS & DAM AUX 1	xxx											
UPBOUND STATISTICS	348	409	17	774	2357	962	3319	521	263	2	786	1446
DNBOUND STATISTICS	359	375	21	755	528	2993	3521	544	279	2	825	4417
TOTAL	707	784	38	1529	2885	3955	6840	1065	542	4	1611	5863
CAPT ANT MELDAHL LOCKS & DAM	xxx											
UPBOUND STATISTICS	460	17	9	486	2976	1870	4846	467	9	0	476	2941
DNBOUND STATISTICS	456	16	12	484	809	4122	4931	457	13	1	471	6206
TOTAL	916	33	21	970	3785	5992	9777	924	22	1	947	9148

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
H1	HUNTINGTON	OHIO RIVER	7/83 8/83 9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
OHIO RIVER												
CAPT ANT MELDAHL LK&DAM AUX 1	xxx											
UPBOUND STATISTICS	20	1479	7	1506	40	25	65	25	553	1	579	34
DNBOUND STATISTICS	32	1433	6	1471	60	43	103	39	565	1	605	53
TOTAL	52	2912	13	2977	100	68	168	64	1118	2	1184	87
WILLOW ISLAND LOCKS & DAM	xxx											
UPBOUND STATISTICS	342	10	3	355	1129	2229	3358	347	7	0	354	3297
DNBOUND STATISTICS	338	22	5	365	1216	2199	3415	339	10	1	350	3192
TOTAL	680	32	8	720	2345	4428	6773	686	17	1	704	6490
WILLOW ISLAND LOCKS & DAM AUX	xxx											
UPBOUND STATISTICS	69	259	20	348	151	66	217	97	129	3	229	78
DNBOUND STATISTICS	87	238	12	337	88	195	283	108	142	3	253	127
TOTAL	156	497	32	685	239	261	500	205	271	6	482	205

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H1	HUNTINGTON	OHIO RIVER	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
KANAWHA RIVER																
WINFIELD LOCKS & DAM MAIN 1	1	12	310	1	5	68	5	10	29	1	12	295	210	32130	81.1	1010
WINFIELD LOCKS & DAM MAIN 2	1	9	108	1	4	29	5	11	38	1	10	294	287	62833	133.1	1130
MARMET LOCKS & DAM MAIN 1	1	9	54	1	4	24	5	8	25	1	9	44	57	4526	13.7	250
MARMET LOCKS & DAM MAIN 2	1	8	67	1	4	63	5	8	19	1	6	78	55	4680	15.6	300
LONDON LOCKS & DAM MAIN 1	1	8	20	1	4	13	5	10	28	1	6	23	17	3434	49.0	466
LONDON LOCKS & DAM MAIN 2	1	9	63	1	4	16	6	9	25	1	7	40	58	12627	50.3	582
OHIO RIVER																
BELLEVILLE LOCKS & DAM	1	18	57	1	9	30	8	13	28	1	8	22	184	8030	11.8	386
BELLEVILLE LOCKS & DAM AUX 1	1	9	38	1	3	30	7	13	30	1	3	25	4	61	0.8	45
RACINE LOCKS & DAM	1	15	81	2	11	31	9	10	27	2	9	37	235	9665	12.4	1440
RACINE LOCKS & DAM AUX 1	1	8	34	1	5	36	8	10	24	1	5	22	6	90	0.9	31
GALLIPOLIS LOCKS & DAM	1	9	64	1	12	60	5	13	51	2	18	75	442	101135	144.2	2405
GALLIPOLIS LOCKS & DAM AUX 1	1	6	46	1	7	32	5	13	28	1	9	60	88	97825	607.6	2585
GREENUP LOCKS & DAM	1	14	41	2	10	22	8	11	27	1	9	23	89	3256	10.2	153

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H1	HUNTINGTON	OHIO RIVER	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED	DELAY	DELAY	DELAY
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	TOWS	TIME TOWS	AVG TOWS	MAX (ALL VSLS)
OHIO RIVER																
GREENUP LOCKS & DAM AUX 1	1	8	207	2	9	70	5	11	87	1	11	60	534	113649	160.7	1023
CAPT ANT MELDAHL LOCKS & DAM	1	17	59	1	10	43	5	15	34	1	11	30	392	25370	27.6	375
CAPT ANT MELDAHL LK&DAM AUX	1	4	36	1	2	24	5	12	33	1	2	14	2	32	0.6	34
WILLOW ISLAND LOCKS & DAM	1	16	59	1	8	24	7	14	29	1	8	28	170	7117	10.4	170
WILLOW ISLAND LOCKS & DAM AU	1	10	40	1	3	16	6	13	25	1	5	28	14	240	1.5	40

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H2	LOUISVILLE	OHIO RIVER	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
GREEN/BARREN RIVER	21-LOCK & DAM 1	0600/0084/12.0
	22-LOCK & DAM 2	0600/0084/12.0
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
	52-LOCK & DAM 52	1200/0110/12.0
	52-LOCK & DAM 52 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

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H2	LOUISVILLE	OHIO RIVER	7/83	8/83	9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
GREEN/BARREN RIVER												
LOCK & DAM 1	xxx											
UPBOUND STATISTICS	329	142	11	482	1079	183	1262	340	142	1	483	272
DNBOUND STATISTICS	326	141	8	475	68	1164	1232	333	141	2	476	1745
TOTAL	655	283	19	957	1147	1347	2494	673	283	3	959	2017
LOCK & DAM 2	xxx											
UPBOUND STATISTICS	260	50	5	315	1005	18	1023	265	50	2	317	25
DNBOUND STATISTICS	266	41	15	322	23	1014	1037	281	41	2	324	1515
TOTAL	526	91	20	637	1028	1032	2060	546	91	4	641	1540
OHIO RIVER												
MARKLAND LOCKS & DAM	xxx											
UPBOUND STATISTICS	412	9	3	424	2166	1987	4153	417	6	0	423	3205
DNBOUND STATISTICS	409	7	6	422	990	3236	4226	416	5	1	422	4921
TOTAL	821	16	9	846	3156	5223	8379	833	11	1	845	8126
MARKLAND LOCKS & DAM AUX 1	xxx											
UPBOUND STATISTICS	67	1080	5	1152	179	196	375	74	473	7	554	311
DNBOUND STATISTICS	84	1174	9	1267	202	300	502	96	538	8	642	453
TOTAL	151	2254	14	2419	381	496	877	170	1011	15	1196	764
MCALPINE LOCKS & DAM	xxx											
UPBOUND STATISTICS	292	141	55	488	947	1598	2545	330	71	5	406	2520
DNBOUND STATISTICS	314	179	44	537	746	2024	2770	351	96	3	450	3093
TOTAL	606	320	99	1025	1693	3622	5315	681	167	8	856	5614
MCALPINE LOCKS & DAM AUX 1	xxx	ONLY FIRST AND SECOND MONTHS REPORTED										
UPBOUND STATISTICS	216	73	13	302	760	1206	1966	352	26	4	382	1922
DNBOUND STATISTICS	231	53	14	298	651	1358	2009	367	26	4	397	2072
TOTAL	447	126	27	600	1411	2564	3975	719	52	8	779	3994
LOCK & DAM 52	xxx											
UPBOUND STATISTICS	623	35	54	712	3025	2978	6003	442	5	176	623	4795
DNBOUND STATISTICS	654	36	59	749	1622	4723	6345	495	11	171	677	6844
TOTAL	1277	71	113	1461	4647	7701	12348	937	16	347	1300	11640

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
H2	LOUISVILLE	OHIO RIVER	7/83 8/83 9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
OHIO RIVER												
LOCK & DAM 52 AUX 1	xxx											
UPBOUND STATISTICS	272	46	57	375	983	952	1935	396	26	3	425	1571
DNBOUND STATISTICS	275	32	40	347	620	1441	2061	396	31	5	432	2117
TOTAL	547	78	97	722	1603	2393	3996	792	57	8	857	3688
CANNELTON LOCK & DAM	xxx											
UPBOUND STATISTICS	496	71	6	573	1817	3086	4903	503	29	1	533	4910
DNBOUND STATISTICS	498	54	8	560	1322	3621	4943	505	23	0	528	5185
TOTAL	994	125	14	1133	3139	6707	9846	1008	52	1	1061	10096
CANNELTON LOCK & DAM AUX	xxx											
UPBOUND STATISTICS	23	320	4	347	49	12	61	28	140	1	169	16
DNBOUND STATISTICS	29	398	8	435	51	39	90	38	173	3	214	53
TOTAL	52	718	12	782	100	51	151	66	313	4	383	70
NEWBURGH LOCK & DAM	xxx											
UPBOUND STATISTICS	576	202	24	802	2621	2765	5386	586	49	0	635	4532
DNBOUND STATISTICS	581	141	29	751	1428	4117	5545	593	48	2	643	5929
TOTAL	1157	343	53	1553	4049	6882	10931	1179	97	2	1278	10462
NEWBURGH LOCK & DAM AUX 1	xxx											
UPBOUND STATISTICS	59	1614	32	1705	67	56	123	77	576	5	658	87
DNBOUND STATISTICS	64	1707	55	1826	97	71	168	95	571	2	668	89
TOTAL	123	3321	87	3531	164	127	291	172	1147	7	1326	176
UNIONTOWN LOCK & DAM	xxx											
UPBOUND STATISTICS	546	40	7	593	3635	2284	5919	553	18	1	572	3802
DNBOUND STATISTICS	557	63	8	628	1044	5104	6148	564	21	1	586	7619
TOTAL	1103	103	15	1221	4679	7388	12067	1117	39	2	1158	11422
UNIONTOWN LOCK & DAM AUX 1	xxx											
UPBOUND STATISTICS	39	1044	23	1106	56	46	102	56	552	4	612	75
DNBOUND STATISTICS	44	1103	31	1178	60	47	107	62	595	6	663	72
TOTAL	83	2147	54	2284	116	93	209	118	1147	10	1275	147
SMITHLAND LOCK & DAM	xxx											
UPBOUND STATISTICS	75	105	6	186	382	156	538	80	57	8	145	279
DNBOUND STATISTICS	599	180	25	804	943	5109	6052	623	109	14	746	7741
TOTAL	674	285	31	990	1325	5265	6590	703	166	22	891	8021

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
H2	LOUISVILLE	OHIO RIVER	7/83 8/83 9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
OHIO RIVER												
SMITHLAND LOCK & DAM AUX 1	***											
UPBOUND STATISTICS	625	125	20	770	4370	2191	6561	646	72	15	733	3663
DNBOUND STATISTICS	105	79	10	194	137	935	1072	114	41	7	162	1423
TOTAL	730	204	30	964	4507	3126	7633	760	113	22	895	5087

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H2	LOUISVILLE	OHIO RIVER	7/83	8/83	9/83

ALL TIMES EXPRESSED IN MINUTES

	LOCK PROCESSING TIME (MIN.) APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
GREEN/BARREN RIVER																
LOCK & DAM 1	1	5	65	1	3	30	5	8	34	1	4	33	115	2747	4.1	149
LOCK & DAM 2	1	5	35	1	3	25	5	11	60	1	5	29	106	2107	4.0	60
OHIO RIVER																
MARKLAND LOCKS & DAM	1	24	94	1	8	30	5	14	33	1	8	30	348	20782	25.3	570
MARKLAND LOCKS & DAM AUX 1	1	6	66	1	4	31	5	12	25	1	5	45	79	25325	167.7	1367
MCALPINE LOCKS & DAM	1	16	105	1	8	30	5	13	75	1	7	109	345	34504	56.9	1934
MCALPINE LOCKS & DAM AUX 1	1	11	110	1	11	71	5	23	50	1	12	76	432	337696	755.4	2528
LOCK & DAM 52	1	9	105	1	10	36	1	16	90	1	12	58	838	341391	267.3	2105
LOCK & DAM 52 AUX 1	1	9	90	1	11	46	5	15	60	1	13	65	435	257971	471.6	4336
CANNELTON LOCK & DAM	1	24	115	1	7	30	5	11	70	1	8	52	434	29866	30.0	1440
CANNELTON LOCK & DAM AUX	1	9	60	1	2	12	5	10	30	1	3	11	6	290	5.5	125
NEWBURGH LOCK & DAM	1	14	80	1	8	27	6	8	26	1	9	35	471	20020	17.3	275
NEWBURGH LOCK & DAM AUX 1	1	4	43	1	2	22	5	8	18	1	2	27	14	192	1.5	40
UNIONTOWN LOCK & DAM	1	18	97	1	7	25	5	10	47	1	7	49	416	18741	16.9	215

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M2	LOUISVILLE	OHIO RIVER	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
OHIO RIVER																
UNIONTOWN LOCK & DAM AUX 1	1	4	60	1	1	25	5	9	58	1	1	25	6	105	1.2	550
SMITHLAND LOCK & DAM	1	14	65	1	8	30	1	11	435	1	8	80	121	4974	7.3	1250
SMITHLAND LOCK & DAM AUX 1	1	12	50	1	9	30	1	10	115	1	7	30	125	9117	12.4	2350

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H3	NASHVILLE	OHIO RIVER	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
CLINCH RIVER	11-MELTON HILL LOCK	0400/0075/11.0
CUMBERLAND RIVER	21-BARKLEY LOCK	0800/0110/11.0
	22-CHEATHAM LOCK	0800/0110/11.0
	23-CORDELL HULL LOCK	0400/0084/11.0
	24-OLD HICKORY LOCK	0400/0084/11.0
TENNESSEE RIVER	01-KENTUCKY LOCK	0600/0110/11.0
	02-PICKWICK LANDING LOCK	1000/0110/11.0
	02-PICKWICK LANDING LOCK AUX	0600/0110/11.0
	03-WILSON LOCK	0600/0110/11.0
	03-WILSON LOCK AUX	0292/0060/11.0
	04-GEN JOS WHEELER LOCK	0600/0110/11.0
	04-GEN JOS WHEELER LK AUX1	0400/0060/11.0
	05-GUNTERSVILLE LOCK	0600/0110/11.0
	05-GUNTERSVILLE LOCK AUX 1	0360/0060/11.0
	06-NICKAJAC LOCK	0600/0119/11.0
	07-CHICKAMAUGA LOCK	0360/0060/11.0
	08-WATTS BAR LOCK	0360/0060/11.0
	09-FORT LOUDON LOCK	0360/0060/11.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
H3	NASHVILLE	OHIO RIVER	7/83 8/83 9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
CLINCH RIVER												
MELTON HILL LOCK	xxx											
UPBOUND STATISTICS	0	54	0	54	0	0	0	1	42	14	57	0
DNBOUND STATISTICS	0	53	0	53	0	0	0	1	42	15	58	0
TOTAL	0	107	0	107	0	0	0	2	84	29	115	0
CUMBERLAND RIVER												
BARKLEY LOCK	xxx											
UPBOUND STATISTICS	53	358	4	415	65	343	408	58	186	11	255	507
DNBOUND STATISTICS	91	409	3	503	791	28	819	105	233	11	349	35
TOTAL	144	767	7	918	856	371	1227	163	419	22	604	543
CHEATHAM LOCK	xxx											
UPBOUND STATISTICS	96	247	0	343	29	523	552	100	160	14	274	799
DNBOUND STATISTICS	96	244	0	340	519	34	553	99	174	11	284	45
TOTAL	192	491	0	683	548	557	1105	199	334	25	558	845
CORDELL HULL LOCK	xxx	NO DATA RECORDED FOR THIS LOCK										
OLD HICKORY LOCK	xxx											
UPBOUND STATISTICS	27	572	12	611	10	47	57	43	319	15	377	68
DNBOUND STATISTICS	27	593	13	633	42	7	49	42	352	14	408	6
TOTAL	54	1165	25	1244	52	54	106	85	671	29	785	75
TENNESSEE RIVER												
KENTUCKY LOCK	xxx											
UPBOUND STATISTICS	453	179	49	681	1019	3237	4256	694	129	4	827	4796
DNBOUND STATISTICS	414	81	59	554	2492	1375	3867	668	89	7	764	1895
TOTAL	867	260	108	1235	3511	4612	8123	1362	218	11	1591	6691
PICKWICK LANDING LOCK	xxx											
UPBOUND STATISTICS	227	247	15	489	182	2144	2326	333	202	17	552	3127
DNBOUND STATISTICS	234	237	12	483	1978	454	2432	342	209	25	576	641
TOTAL	461	484	27	972	2160	2598	4758	675	411	42	1128	3768

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H3	NASHVILLE	OHIO RIVER	7/83	8/83	9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
TENNESSEE RIVER												
PICKWICK LANDING LOCK AUX	xxx	NO DATA RECORDED FOR THIS LOCK										
WILSON LOCK	xxx											
UPBOUND STATISTICS	127	262	64	453	192	921	1113	205	206	8	419	1354
DNBOUND STATISTICS	138	257	62	457	803	429	1232	219	204	12	435	587
TOTAL	265	519	126	910	995	1350	2345	424	410	20	854	1942
WILSON LOCK AUX	xxx	ONLY SECOND MONTH REPORTED										
UPBOUND STATISTICS	6	5	1	12	4	36	40	28	20	0	48	47
DNBOUND STATISTICS	3	7	4	14	34	10	44	33	22	0	55	12
TOTAL	9	12	5	26	38	46	84	61	42	0	103	60
GEN JOS WHEELER LOCK	xxx											
UPBOUND STATISTICS	114	116	6	236	171	889	1060	154	99	4	257	1300
DNBOUND STATISTICS	116	103	10	229	756	360	1116	170	81	5	256	493
TOTAL	230	219	16	465	927	1249	2176	324	180	9	513	1794
GEN JOS WHEELER LK AUX1	xxx											
UPBOUND STATISTICS	9	284	5	298	6	49	55	15	211	1	227	71
DNBOUND STATISTICS	6	275	0	281	50	25	75	8	219	3	230	35
TOTAL	15	559	5	579	56	74	130	23	430	4	457	106
GUNTERSVILLE LOCK	xxx											
UPBOUND STATISTICS	124	543	4	671	265	716	981	157	223	2	382	1033
DNBOUND STATISTICS	126	560	3	689	615	440	1055	159	224	4	387	585
TOTAL	250	1103	7	1360	880	1156	2036	316	447	6	769	1619
GUNTERSVILLE LOCK AUX 1	xxx											
UPBOUND STATISTICS	1	506	2	509	0	1	1	3	264	2	269	0
DNBOUND STATISTICS	0	461	0	461	0	0	0	0	267	4	271	0
TOTAL	1	967	2	970	0	1	1	3	531	6	540	0
NICKAJAC LOCK	xxx											
UPBOUND STATISTICS	150	244	9	403	325	702	1027	180	157	3	340	922
DNBOUND STATISTICS	153	203	10	366	619	465	1084	187	141	4	332	623
TOTAL	303	447	19	769	944	1167	2111	367	298	7	672	1546
CHICKAMAUGA LOCK	xxx											
UPBOUND STATISTICS	66	760	8	834	68	256	324	127	505	40	672	379
DNBOUND STATISTICS	62	751	13	826	189	133	322	121	544	42	707	185
TOTAL	128	1511	21	1660	257	389	646	248	1049	82	1379	564

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
H3	NASHVILLE	OHIO RIVER	7/83 8/83 9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
TENNESSEE RIVER												
WATTS BAR LOCK	xxx											
UPBOUND STATISTICS	47	547	0	594	69	118	187	66	448	6	520	188
DNBOUND STATISTICS	45	546	1	592	52	121	173	62	432	6	500	158
TOTAL	92	1093	1	1186	121	239	360	128	880	12	1020	347
FORT LOUDON LOCK	xxx											
UPBOUND STATISTICS	25	285	3	313	17	49	66	34	221	9	264	90
DNBOUND STATISTICS	26	257	3	286	36	22	58	34	198	9	241	31
TOTAL	51	542	6	599	53	71	124	68	419	18	505	122

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H3	NASHVILLE	OHIO RIVER	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
CLINCH RIVER																
MELTON HILL LOCK	1	7	22	1	2	5	10	15	28	1	1	3	0	0	0.0	24
CUMBERLAND RIVER																
BARKLEY LOCK	1	9	55	1	6	68	2	16	44	1	5	63	30	1033	7.1	115
CHEATHAM LOCK	1	6	27	1	7	46	6	16	31	1	6	67	28	722	3.7	219
CORDELL HULL LOCK	NO DATA RECORDED FOR THIS LOCK															
OLD HICKORY LOCK	1	3	44	1	3	44	6	16	31	1	3	23	20	380	7.0	78
TENNESSEE RIVER																
KENTUCKY LOCK	1	8	75	1	12	55	12	20	453	1	16	82	738	192918	222.5	1055
PICKWICK LANDING LOCK	1	7	62	1	11	92	6	17	44	1	16	227	237	26869	58.2	702
PICKWICK LANDING LOCK AUX	NO DATA RECORDED FOR THIS LOCK															
WILSON LOCK	1	9	95	1	11	95	6	22	50	1	11	68	119	16330	61.6	1741
WILSON LOCK AUX	1	13	164	2	7	15	28	45	114	2	10	60	6	2106	234.0	770
GEN JOS WHEELER LOCK	1	12	148	1	11	41	8	14	29	2	15	88	54	6085	26.4	1095
GEN JOS WHEELER LK AUX	1	7	99	1	4	23	6	13	26	1	5	98	11	6708	447.2	1393
GUNTERSVILLE LOCK	1	6	65	1	7	39	6	14	44	1	10	104	64	4145	16.5	290

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H3	NASHVILLE	OHIO RIVER	7/83	8/83	9/83

ALL TIMES EXPRESSED IN MINUTES

		LOCK PROCESSING TIME (MIN.) APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
		MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
TENNESSEE RIVER																	
GUNTERSVILLE LOCK	AUX	1	2	14	1	2	13	6	12	25	1	2	32	0	0	0.0	600
NICKAJAC LOCK		1	8	215	1	9	44	7	14	30	1	10	56	76	4386	14.4	188
CHICKAMAUGA LOCK		1	3	113	1	4	30	6	12	72	1	5	114	54	8946	69.8	668
WATTS BAR LOCK		1	6	52	1	4	27	6	15	32	1	4	50	30	2192	23.8	567
FORT LOUDON LOCK		1	9	66	1	4	27	6	23	58	1	4	58	17	787	15.4	260

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H4	PITTSBURGH	OHIO RIVER	7/83	8/83	9/83

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

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
H4	PITTSBURGH	OHIO RIVER	7/83 8/83 9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
ALLEGHENY RIVER												
LOCK & DAM 2	xxx											
UPBOUND STATISTICS	266	2474	28	2768	533	270	803	474	999	11	1484	314
DNBOUND STATISTICS	267	2486	30	2783	299	510	809	476	968	17	1461	251
TOTAL	533	4960	58	5551	832	780	1612	950	1967	28	2945	566
LOCK & DAM 3	xxx											
UPBOUND STATISTICS	262	1494	31	1787	534	290	824	527	599	11	1137	341
DNBOUND STATISTICS	267	1499	17	1783	323	505	828	506	572	9	1087	240
TOTAL	529	2993	48	3570	857	795	1652	1033	1171	20	2224	581
LOCK & DAM 4	xxx											
UPBOUND STATISTICS	184	1559	14	1757	636	60	696	490	481	6	977	85
DNBOUND STATISTICS	186	1548	12	1746	65	631	696	457	424	6	887	283
TOTAL	370	3107	26	3503	701	691	1392	947	905	12	1864	368
LOCK & DAM 5	xxx											
UPBOUND STATISTICS	144	1020	0	1164	609	6	615	354	352	5	711	2
DNBOUND STATISTICS	144	1009	0	1153	9	608	617	357	349	5	711	257
TOTAL	288	2029	0	2317	618	614	1232	711	701	10	1422	260
LOCK & DAM 6	xxx											
UPBOUND STATISTICS	145	483	2	630	616	6	622	303	165	2	470	2
DNBOUND STATISTICS	143	468	1	612	6	609	615	300	162	4	466	257
TOTAL	288	951	3	1242	622	615	1237	603	327	6	936	260
LOCK & DAM 7	xxx											
UPBOUND STATISTICS	35	402	7	444	65	7	72	44	237	9	290	2
DNBOUND STATISTICS	37	411	5	453	9	65	74	41	274	9	324	28
TOTAL	72	813	12	897	74	72	146	85	511	18	614	31
LOCK & DAM 8	xxx											
UPBOUND STATISTICS	0	392	0	392	0	0	0	123	103	1	227	0
DNBOUND STATISTICS	0	414	0	414	0	0	0	144	124	1	269	0
TOTAL	0	806	0	806	0	0	0	267	227	2	496	0
LOCK & DAM 9	xxx											
UPBOUND STATISTICS	0	323	0	323	0	0	0	0	191	0	191	0
DNBOUND STATISTICS	0	328	0	328	0	0	0	0	200	0	200	0
TOTAL	0	651	0	651	0	0	0	0	391	0	391	0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H4	PITTSBURGH	OHIO RIVER	7/83	8/83	9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
MONONGAHELA RIVER												
LOCK & DAM 2	xxx											
UPBOUND STATISTICS	419	41	3	463	1850	712	2562	462	0	1	463	887
DNBOUND STATISTICS	438	40	8	486	432	2144	2576	491	0	0	491	2237
TOTAL	857	81	11	949	2282	2856	5138	953	0	1	954	3124
LOCK & DAM 2 AUX 1	xxx											
UPBOUND STATISTICS	155	571	61	787	101	153	254	336	246	8	590	99
DNBOUND STATISTICS	124	591	62	777	159	43	202	339	228	8	575	45
TOTAL	279	1162	123	1564	260	196	456	675	474	16	1165	145
LOCK & DAM 3	xxx											
UPBOUND STATISTICS	714	3	5	722	3216	433	3649	712	3	2	717	519
DNBOUND STATISTICS	747	2	3	752	305	3401	3706	749	0	0	749	3365
TOTAL	1461	5	8	1474	3521	3834	7355	1461	3	2	1466	3884
LOCK & DAM 3 AUXILIARY 1	xxx											
UPBOUND STATISTICS	137	542	120	799	175	55	230	412	139	7	558	56
DNBOUND STATISTICS	100	536	140	776	70	84	154	390	156	5	551	84
TOTAL	237	1078	260	1575	245	139	384	802	295	12	1109	141
LOCK & DAM 4	xxx											
UPBOUND STATISTICS	560	4	9	573	2847	343	3190	599	0	1	600	360
DNBOUND STATISTICS	585	1	6	592	235	2958	3193	609	0	1	610	2878
TOTAL	1145	5	15	1165	3082	3301	6383	1208	0	2	1210	3239
LOCK & DAM 4 AUXILIARY 1	xxx											
UPBOUND STATISTICS	40	461	57	558	52	19	71	232	178	11	421	14
DNBOUND STATISTICS	26	491	58	575	32	14	46	237	180	7	424	15
TOTAL	66	952	115	1133	84	33	117	469	358	18	845	29
MAXWELL LOCK & DAM	xxx											
UPBOUND STATISTICS	433	417	9	859	2285	172	2457	560	101	5	666	199
DNBOUND STATISTICS	104	399	3	506	29	573	602	211	138	5	354	560
TOTAL	537	816	12	1365	2314	745	3059	771	239	10	1020	759
MAXWELL LOCK & DAM AUX 1	xxx											
UPBOUND STATISTICS	100	442	6	548	465	85	550	225	112	1	338	91
DNBOUND STATISTICS	429	467	6	902	128	2264	2392	570	90	1	661	2206
TOTAL	529	909	12	1450	593	2349	2942	795	202	2	999	2298

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H4	PITTSBURGH	OHIO RIVER	7/83	8/83	9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
MONONGAHELA RIVER												
LOCK & DAM 7	xxx											
UPBOUND STATISTICS	483	116	19	618	2026	214	2240	925	32	8	965	242
DNBOUND STATISTICS	485	122	19	626	172	2057	2229	949	32	6	987	1950
TOTAL	968	238	38	1244	2198	2271	4469	1874	64	14	1952	2193
LOCK & DAM 8	xxx											
UPBOUND STATISTICS	422	76	20	518	1741	231	1972	789	30	12	831	259
DNBOUND STATISTICS	420	78	22	520	178	1777	1955	811	27	11	849	1688
TOTAL	842	154	42	1038	1919	2008	3927	1600	57	23	1680	1947
MORGANTOWN LOCK & DAM	xxx											
UPBOUND STATISTICS	48	148	7	203	228	16	244	120	64	4	188	14
DNBOUND STATISTICS	49	161	4	214	13	220	233	120	63	4	187	210
TOTAL	97	309	11	417	241	236	477	240	127	8	375	225
HILDEBRAND LOCK & DAM	xxx											
UPBOUND STATISTICS	22	139	9	170	38	10	48	97	47	5	149	9
DNBOUND STATISTICS	21	145	8	174	10	38	48	105	44	6	155	41
TOTAL	43	284	17	344	48	48	96	202	91	11	304	50
OPEKISKA LOCK & DAM	xxx											
UPBOUND STATISTICS	14	298	11	323	6	10	16	67	165	27	259	9
DNBOUND STATISTICS	13	305	12	330	10	5	15	61	181	30	272	5
TOTAL	27	603	23	653	16	15	31	128	346	57	531	14
OHIO RIVER												
EMSWORTH LOCK & DAM	xxx											
UPBOUND STATISTICS	390	222	57	669	946	1205	2151	546	1	3	550	1407
DNBOUND STATISTICS	393	205	61	659	871	1276	2147	545	2	1	548	1403
TOTAL	783	427	118	1328	1817	2481	4298	1091	3	4	1098	2810
EMSWORTH LOCK & DAM AUX 1	xxx											
UPBOUND STATISTICS	149	338	46	533	312	335	647	305	249	15	569	366
DNBOUND STATISTICS	151	329	43	523	276	399	675	324	269	13	606	415
TOTAL	300	667	89	1056	588	734	1322	629	518	28	1175	782

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H4	PITTSBURGH	OHIO RIVER	7/83	8/83	9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
OHIO RIVER												
DASHIELDS LOCK & DAM	xxx											
UPBOUND STATISTICS	419	5	12	436	1205	1479	2684	477	0	1	478	1694
DNBOUND STATISTICS	432	7	11	450	1121	1639	2760	489	0	1	490	1780
TOTAL	851	12	23	886	2326	3118	5444	966	0	2	968	3475
DASHIELDS LOCK & DAM AUX 1	xxx											
UPBOUND STATISTICS	87	476	81	644	57	61	118	305	181	8	494	66
DNBOUND STATISTICS	76	470	83	629	79	29	108	326	182	8	516	32
TOTAL	163	946	164	1273	136	90	226	631	363	16	1010	98
MONTGOMERY LOCK & DAM	xxx											
UPBOUND STATISTICS	401	18	12	431	1116	1609	2725	512	2	2	516	2016
DNBOUND STATISTICS	407	15	12	434	1238	1648	2886	505	5	0	510	1890
TOTAL	808	33	24	865	2354	3257	5611	1017	7	2	1026	3906
MONTGOMERY LOCK & DAM AUX 1	xxx											
UPBOUND STATISTICS	67	656	83	806	53	37	90	252	269	4	525	37
DNBOUND STATISTICS	55	658	96	809	52	14	66	258	287	8	553	17
TOTAL	122	1314	179	1615	105	51	156	510	556	12	1078	54
NEW CUMBERLAND LOCK & DAM	xxx											
UPBOUND STATISTICS	287	9	2	298	347	2077	2424	291	0	1	292	2997
DNBOUND STATISTICS	269	10	5	284	1351	1064	2415	276	1	0	277	1304
TOTAL	556	19	7	582	1698	3141	4839	567	1	1	569	4302
NEW CUMBERLAND LK & DAM AUX 1	xxx											
UPBOUND STATISTICS	113	401	32	546	185	160	345	255	139	6	400	215
DNBOUND STATISTICS	140	412	19	571	250	171	421	285	139	7	431	166
TOTAL	253	813	51	1117	435	331	766	540	278	13	831	382
PIKE ISLAND LOCK & DAM	xxx											
UPBOUND STATISTICS	328	17	8	353	368	2612	2980	340	7	1	348	3838
DNBOUND STATISTICS	309	24	5	338	1650	1229	2879	320	7	0	327	1661
TOTAL	637	41	13	691	2018	3841	5859	660	14	1	675	5499
PIKE ISLAND LOCK & DAM AUX 1	xxx											
UPBOUND STATISTICS	105	369	38	512	136	160	296	263	114	5	382	197
DNBOUND STATISTICS	145	383	20	548	253	164	417	289	127	6	422	154
TOTAL	250	752	58	1060	389	324	713	552	241	11	804	351

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PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H4	PITTSBURGH	OHIO RIVER	7/83	8/83	9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
OHIO RIVER												
HANNIBAL LOCKS & DAM	xxx	ONLY FIRST AND SECOND MONTHS REPORTED										
UPBOUND STATISTICS	179	3	2	184	643	1171	1814	181	2	0	183	1750
DNBOUND STATISTICS	178	13	0	191	686	1177	1863	187	1	1	189	1485
TOTAL	357	16	2	375	1329	2348	3677	368	3	1	372	3235
HANNIBAL LOCKS & DAM AUX 1	xxx											
UPBOUND STATISTICS	193	173	12	378	738	1065	1803	278	130	41	449	1589
DNBOUND STATISTICS	198	187	7	392	552	1274	1826	312	130	26	468	1571
TOTAL	391	360	19	770	1290	2339	3629	590	260	67	917	3160

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H4	PITTSBURGH	OHIO RIVER	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
ALLEGHENY RIVER																
LOCK & DAM 2	1	4	33	1	4	20	5	7	37	1	5	36	194	4474	8.3	122
LOCK & DAM 3	1	5	45	1	4	29	5	7	17	1	4	37	153	3919	7.4	608
LOCK & DAM 4	1	5	30	1	4	21	5	7	20	1	5	35	118	2243	6.0	480
LOCK & DAM 5	1	3	15	1	2	10	5	8	20	1	3	13	57	443	1.5	47
LOCK & DAM 6	1	4	10	2	4	10	8	8	10	2	4	10	62	695	2.4	33
LOCK & DAM 7	3	4	13	2	3	5	6	7	10	1	3	10	7	73	1.0	22
LOCK & DAM 8	1	4	14	2	3	5	5	7	8	2	3	5	0	0	0.0	20
LOCK & DAM 9	1	2	5	1	1	10	9	10	14	1	1	10	0	0	0.0	19
MONONGAHELA RIVER																
LOCK & DAM 2	1	12	53	1	6	38	5	11	48	1	8	60	228	7513	8.7	315
LOCK & DAM 2 AUX 1	1	7	53	1	2	17	5	6	16	1	2	10	40	562	2.0	60
LOCK & DAM 3	1	10	38	2	5	20	6	9	20	2	6	35	631	21353	14.6	195
LOCK & DAM 3 AUXILIARY 1	1	6	33	1	2	11	5	8	18	1	2	23	53	850	3.5	67
LOCK & DAM 4	1	11	52	1	6	20	5	10	27	2	8	33	385	13583	11.8	150

TABLE 3

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FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H4	PITTSBURGH	OHIO RIVER	7/83	8/83	9/83

ALL TIMES EXPRESSED IN MINUTES

	LOCK PROCESSING TIME (MIN.) APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
MONONGAHELA RIVER																
LOCK & DAM 4 AUXILIARY 1	1	9	63	1	3	20	5	9	18	1	4	58	10	101	1.5	87
MAXWELL LOCK & DAM	1	8	28	1	6	21	5	10	33	1	7	23	58	733	1.3	50
MAXWELL LOCK & DAM AUX 1	1	11	40	1	7	23	7	11	40	2	8	26	58	1009	1.9	52
LOCK & DAM 7	1	5	47	1	5	31	5	6	26	1	9	54	384	15585	16.1	186
LOCK & DAM 8	1	5	57	1	4	23	5	6	40	1	10	60	323	15390	18.2	612
MORGANTOWN LOCK & DAM	1	5	10	4	5	15	5	10	20	5	5	10	4	10	0.1	10
HILDEBRAND LOCK & DAM	2	6	20	1	3	10	10	15	35	1	4	13	0	0	0.0	18
OPEKISKA LOCK & DAM	2	4	17	1	2	12	5	10	20	1	3	12	1	15	0.5	27
OHIO RIVER																
EMSWORTH LOCK & DAM	1	12	65	2	7	31	8	13	43	2	10	57	420	30124	38.4	645
EMSWORTH LOCK & DAM AUX 1	1	7	38	1	3	15	6	8	18	1	3	14	207	27955	93.1	662
DASHIELDS LOCK & DAM	1	13	55	2	9	70	5	11	32	1	12	58	311	15293	17.9	276
DASHIELDS LOCK & DAM AUX 1	1	7	72	1	3	65	5	6	22	1	4	40	19	282	1.7	72
MONTGOMERY LOCK & DAM	1	10	59	1	10	40	5	13	60	1	13	60	330	21731	26.8	375

TABLE 3

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INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H4	PITTSBURGH	OHIO RIVER	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TONS	DELAY TIME TONS	DELAY AVG TONS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
OHIO RIVER																
MONTGOMERY LOCK & DAM AUX 1	1	4	54	1	3	21	5	9	20	1	4	17	20	264	2.1	35
NEW CUMBERLAND LOCK & DAM	2	20	60	1	7	32	5	14	42	2	12	51	134	5137	9.2	330
NEW CUMBERLAND LK & DAM AUX	1	12	98	1	3	27	5	12	47	1	9	46	41	716	2.8	374
PIKE ISLAND LOCK & DAM	1	14	59	1	11	33	5	15	41	1	10	27	145	5682	8.9	108
PIKE ISLAND LOCK & DAM AUX 1	1	9	59	1	4	24	6	14	28	1	7	21	38	673	2.6	67
HANNIBAL LOCKS & DAM	1	16	57	1	10	47	6	15	36	4	11	45	96	3553	9.9	124
HANNIBAL LOCKS & DAM AUX 1	1	12	40	1	5	12	10	14	26	1	8	23	241	36179	92.5	1277

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K3	JACKSONVILLE	SOUTH ATLANTIC	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
CROSS FLA BRG CNL	11-HENRY HOLLAND BUCKMAN LOCK	0600/0084/15.0
	12-EUREKA LOCK	0600/0084/15.0
	13-INGLIS LOCK	0600/0084/15.0
CANAVERAL HARBOR	21-CANAVERAL LOCK	0600/0090/15.0
OKEECHOBEE WATRWAY	01-ST LUCIE LOCK & DAM	0250/0050/14.0
	02-MOORE HAVEN LOCK	0250/0050/11.0
	03-ORTONA LOCK & DAM	0250/0050/12.0
	04-W P FRANKLIN LCK & CTRL STRCT	0400/0056/14.0
	05-PORT MAYACA LOCK	0400/0056/14.0
OKLAWAHA RIVER	31-MOSS BLUFF LOCK & DAM	0156/0030/55.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD
NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K5	MOBILE	SOUTH ATLANTIC	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ALABAMA-COOSA RIVERS	11-CLAIBORNE LOCK & DAM	0600/0084/12.0
	12-MILLERS FERRY LOCK & DAM	0600/0084/12.0
	13-JONES BLUFF LOCK & DAM	0600/0084/12.0
APLCH/CHTCH/FLNT RI	21-JIM WOODRUFF LOCK & DAM	0450/0082/12.0
	22-GEORGE W ANDREWS LOCK & DAM	0450/0082/12.0
	23-WALTER F GEORGE LOCK & DAM	0450/0082/12.0
BLKWAR/TOMBIGBEE RI	01-COFFEEVILLE LOCK	0600/0110/12.0
	02-DEMOPOLIS LOCK & DAM	0600/0110/12.0
	03-WARRIOR LOCK & DAM	0600/0110/12.0
	04-WILLIAM BACON OLIVER LK & DM	0460/0095/12.0
	05-HOLT LOCK & DAM	0600/0110/12.0
	06-JOHN HOLLIS BANKHEAD LK & DM	0600/0110/12.0
PEARL RIVER	31-LOCK 1	0310/0065/ 9.0
	32-LOCK 2	0310/0065/ 9.0
	33-LOCK 3	0310/0065/ 9.0
TENN TOMBIGBEE WATERWAY	41-GAINESVILLE LOCK & DAM	0600/0110/12.0
	42-ALICEVILLE LOCK & DAM	0600/0110/12.0
	43-COLUMBUS LOCK & DAM	0600/0110/12.0
	44-ABERDEEN LOCK & DAM	0600/0110/12.0
	45-LOCK A	0600/0110/12.0
	46-LOCK B	0600/0110/12.0
	47-LOCK C	0600/0110/12.0
	48-LOCK D	0600/0110/12.0
	49-LOCK E	0600/0110/12.0
	50-BAY SPRINGS	0600/0110/12.0

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K5	MOBILE	SOUTH ATLANTIC	7/83	8/83	9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
ALABAMA-COOSA RIVERS												
CLAIBORNE LOCK & DAM	xxx											
UPBOUND STATISTICS	75	434	8	517	258	9	267	84	437	3	524	12
DNBOUND STATISTICS	81	433	9	523	5	266	271	93	437	3	533	360
TOTAL	156	867	17	1040	263	275	538	177	874	6	1057	372
MILLERS FERRY LOCK & DAM	xxx											
UPBOUND STATISTICS	44	17	2	63	134	8	142	47	15	2	64	5
DNBOUND STATISTICS	45	29	5	79	3	135	138	51	19	3	73	143
TOTAL	89	46	7	142	137	143	280	98	34	5	137	148
JONES BLUFF LOCK & DAM	xxx											
UPBOUND STATISTICS	4	48	1	53	0	7	7	5	36	6	47	4
DNBOUND STATISTICS	4	46	4	54	2	4	6	9	33	7	49	1
TOTAL	8	94	5	107	2	11	13	14	69	13	96	6
APLCH/CHTCH/FLNT RI												
JIM WOODRUFF LOCK & DAM	xxx											
UPBOUND STATISTICS	79	120	5	204	144	53	197	84	72	15	171	84
DNBOUND STATISTICS	76	196	4	276	49	143	192	80	109	12	201	81
TOTAL	155	316	9	480	193	196	389	164	181	27	372	166
GEORGE W ANDREWS LOCK & DAM	xxx											
UPBOUND STATISTICS	42	124	6	172	73	31	104	46	91	6	143	39
DNBOUND STATISTICS	46	160	2	208	33	84	117	49	113	2	164	48
TOTAL	88	284	8	380	106	115	221	95	204	8	307	87
WALTER F GEORGE LOCK & DAM	xxx											
UPBOUND STATISTICS	8	123	2	133	1	9	10	9	70	5	84	12
DNBOUND STATISTICS	7	168	3	178	9	0	9	10	92	1	103	0
TOTAL	15	291	5	311	10	9	19	19	162	6	187	12
BLKWAR/TOMBIGBEE RI												
COFFEEVILLE LOCK	xxx											
UPBOUND STATISTICS	398	78	14	490	1592	146	1738	403	41	19	463	252
DNBOUND STATISTICS	388	66	13	467	89	1564	1653	396	44	26	466	2370
TOTAL	786	144	27	957	1681	1710	3391	799	85	45	929	2622

TABLE 2

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FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K5	MOBILE	SOUTH ATLANTIC	7/83	8/83	9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
BLKWAR/TOMBIGBEE RI												
DEMOPOLIS LOCK & DAM	xxx											
UPBOUND STATISTICS	381	41	23	445	1514	209	1723	390	29	9	428	270
DNBOUND STATISTICS	368	43	20	431	92	1551	1643	384	29	11	424	2312
TOTAL	749	84	43	876	1606	1760	3366	774	58	20	852	2583
WARRIOR LOCK & DAM	xxx											
UPBOUND STATISTICS	365	5	9	379	1552	122	1674	372	4	3	379	223
DNBOUND STATISTICS	363	6	4	373	72	1549	1621	366	5	9	380	2413
TOTAL	728	11	13	752	1624	1671	3295	738	9	12	759	2637
WILLIAM BACON OLIVER LK & DM	xxx											
UPBOUND STATISTICS	337	47	43	427	1515	97	1612	538	27	15	580	140
DNBOUND STATISTICS	338	31	48	417	54	1551	1605	573	16	19	608	2368
TOTAL	675	78	91	844	1569	1648	3217	1111	43	34	1188	2508
HOLT LOCK & DAM	xxx											
UPBOUND STATISTICS	319	61	8	388	1518	80	1598	328	15	2	345	117
DNBOUND STATISTICS	317	99	8	424	47	1525	1572	325	14	3	342	2325
TOTAL	636	160	16	812	1565	1605	3170	653	29	5	687	2443
JOHN HOLLIS BANKHEAD LK & DM	xxx											
UPBOUND STATISTICS	258	56	0	314	1081	86	1167	258	37	1	296	130
DNBOUND STATISTICS	249	44	5	298	59	1032	1091	254	29	1	284	1579
TOTAL	507	100	5	612	1140	1118	2258	512	66	2	580	1709
PEARL RIVER												
LOCK 1	xxx	NO DATA RECORDED FOR THIS LOCK										
LOCK 2	xxx	NO DATA RECORDED FOR THIS LOCK										
LOCK 3	xxx	NO DATA RECORDED FOR THIS LOCK										
TENN TOMBIGBEE WATERWAY												
GAINESVILLE LOCK & DAM	xxx											
UPBOUND STATISTICS	13	71	5	89	19	15	34	19	56	12	87	13
DNBOUND STATISTICS	12	72	4	88	6	18	24	19	56	13	88	54
TOTAL	25	143	9	177	25	33	58	38	112	25	175	67

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K5	MOBILE	SOUTH ATLANTIC	7/83	8/83	9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
TENN TOMBIGBEE WATERWAY												
ALICEVILLE LOCK & DAM	xxx											
UPBOUND STATISTICS	5	298	5	308	7	1	8	11	223	15	249	1
DNBOUND STATISTICS	5	303	6	314	7	6	13	12	220	15	247	10
TOTAL	10	601	11	622	14	7	21	23	443	30	496	11
COLUMBUS LOCK & DAM	xxx											
UPBOUND STATISTICS	6	310	5	321	5	1	6	16	236	14	266	0
DNBOUND STATISTICS	7	317	4	328	6	8	14	15	234	15	264	7
TOTAL	13	627	9	649	11	9	20	31	470	29	530	8
ABERDEEN LOCK & DAM	xxx	NO DATA RECORDED FOR THIS LOCK										
LOCK A	xxx	NO DATA RECORDED FOR THIS LOCK										
LOCK B	xxx	NO DATA RECORDED FOR THIS LOCK										
LOCK C	xxx	NO DATA RECORDED FOR THIS LOCK										
LOCK D	xxx	NO DATA RECORDED FOR THIS LOCK										
LOCK E	xxx	NO DATA RECORDED FOR THIS LOCK										
BAY SPRINGS	xxx	NO DATA RECORDED FOR THIS LOCK										

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K5	MOBILE	SOUTH ATLANTIC	7/83	8/83	9/83

ALL TIMES EXPRESSED IN MINUTES

	LOCK PROCESSING TIME (MIN.) APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
ALABAMA-COOSA RIVERS																
CLAIBORNE LOCK & DAM	1	3	25	1	2	20	1	10	40	1	3	25	1	1440	9.2	1440
MILLERS FERRY LOCK & DAM	1	9	45	1	5	14	6	15	26	1	5	13	1	95	1.0	95
JONES BLUFF LOCK & DAM	1	2	7	1	2	7	10	15	28	1	3	8	0	0	0.0	0
APLCH/CHTCH/FLNT RI																
JIM WOODRUFF LOCK & DAM	2	3	16	2	3	35	8	11	22	1	4	29	2	55	[illegible].3	40
GEORGE W ANDREWS LOCK & DAM	1	2	4	1	2	12	5	14	42	1	2	15	1	3	0.0	3
WALTER F GEORGE LOCK & DAM	1	2	15	1	3	13	10	15	45	1	3	24	0	0	0.0	60
BLKWAR/TOMBIGBEE RI																
COFFEEVILLE LOCK	1	9	35	1	4	29	6	14	25	1	9	39	266	11200	14.2	220
DEMOPOLIS LOCK & DAM	1	12	44	1	4	20	5	14	25	1	11	70	271	10138	13.5	230
WARRIOR LOCK & DAM	1	12	47	1	4	21	5	15	36	1	9	44	243	18765	25.7	4254
WILLIAM BACON OLIVER LK & DM	1	13	76	1	6	32	1	13	47	1	14	85	396	35069	51.9	897
HOLT LOCK & DAM	1	11	39	1	6	35	5	18	51	1	9	31	186	7804	12.2	256

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K5	MOBILE	SOUTH ATLANTIC	7/83	8/83	9/83

ALL TIMES EXPRESSED IN MINUTES

	LOCK PROCESSING TIME (MIN.) APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
BLKWAR/TOMBIGBEE RI																
JOHN HOLLIS BANKHEAD LK & DM	1	11	39	1	7	20	5	13	35	1	7	20	132	8600	16.9	400
PEARL RIVER																
LOCK 1	NO DATA RECORDED FOR THIS LOCK															
LOCK 2	NO DATA RECORDED FOR THIS LOCK															
LOCK 3	NO DATA RECORDED FOR THIS LOCK															
TENN TOMBIGBEE WATERWAY																
GAINESVILLE LOCK & DAM	1	5	37	1	3	36	5	11	23	1	3	23	2	23	0.9	20
ALICEVILLE LOCK & DAM	1	1	33	1	1	20	5	13	42	1	1	17	2	14	1.4	35
COLUMBUS LOCK & DAM	1	2	36	1	1	15	1	13	27	1	1	9	2	35	2.6	35
APPLETON LOCK 4	999	0	0	999	0	0	999	0	0	999	0	0				
LOCK A	NO DATA RECORDED FOR THIS LOCK															
LOCK B	NO DATA RECORDED FOR THIS LOCK															
LOCK C	NO DATA RECORDED FOR THIS LOCK															
LOCK D	NO DATA RECORDED FOR THIS LOCK															
LOCK E	NO DATA RECORDED FOR THIS LOCK															
BAY SPRINGS	NO DATA RECORDED FOR THIS LOCK															

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K6	SAVANNAH	SOUTH ATLANTIC	7/83	8/83	9/83

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

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
K6	SAVANNAH	SOUTH ATLANTIC	7/83 8/83 9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
SAVANNAH RIVER												
NEW SAVANNAH BLUFF LOCK & DAM	xxx											
UPBOUND STATISTICS	0	4	0	4	0	0	0	0	2	0	2	0
DNBOUND STATISTICS	0	5	0	5	0	0	0	0	5	0	5	0
TOTAL	0	9	0	9	0	0	0	0	7	0	7	0

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K6	SAVANNAH	SOUTH ATLANTIC	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
SAVANNAH RIVER																
NEW SAVANNAH BLUFF LOCK & DA	5	6	10	3	4	5	10	11	13	5	6	8	0	0	0.0	0

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K7	WILMINGTON	SOUTH ATLANTIC	7/83	8/83	9/83

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

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K7	WILMINGTON	SOUTH ATLANTIC	7/83	8/83	9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
CAPE FEAR RIVER												
LOCK & DAM 1	xxx											
UPBOUND STATISTICS	2	26	0	28	0	2	2	3	6	0	9	1
DNBOUND STATISTICS	2	58	0	60	2	0	2	3	14	1	18	0
TOTAL	4	84	0	88	2	2	4	6	20	1	27	1
LOCK & DAM 2	xxx											
UPBOUND STATISTICS	2	24	13	39	0	2	2	19	12	1	32	1
DNBOUND STATISTICS	2	66	13	81	2	0	2	18	15	2	35	0
TOTAL	4	90	26	120	2	2	4	37	27	3	67	1
WILLIAM O HUSKE LOCK & DAM	xxx											
UPBOUND STATISTICS	2	23	0	25	0	2	2	2	11	0	13	1
DNBOUND STATISTICS	2	34	0	36	2	0	2	2	14	0	16	0
TOTAL	4	57	0	61	2	2	4	4	25	0	29	1

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K7	WILMINGTON	SOUTH ATLANTIC	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
CAPE FEAR RIVER																
LOCK & DAM 1	5	5	5	5	5	15	5	14	15	5	5	5	0	0	0.0	5
LOCK & DAM 2	5	5	5	5	5	5	5	8	20	5	7	10	4	20	5.0	5
WILLIAM O HUSKE LOCK & DAM	4	4	5	5	5	5	30	30	30	5	5	5	0	0	0.0	0

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
L2	SACRAMENTO	SOUTH PACIFIC	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
SCRMNTO DWSHP CHNL	01-BARGE CANAL LOCK	0640/0086/23.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD
NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M3	GALVESTON	SOUTHWESTERN	7/83	8/83	9/83

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 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M3	GALVESTON	SOUTHWESTERN	7/83	8/83	9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
GULF INTRACOASTAL												
COLORADO RIVER EAST LOCK	xxx											
UPBOUND STATISTICS	944	1389	108	2441	606	1334	1940	213	0	740	953	3085
DNBOUND STATISTICS	1000	1288	59	2347	1142	668	1810	123	0	877	1000	1397
TOTAL	1944	2677	167	4788	1748	2002	3750	336	0	1617	1953	4482
COLORADO RIVER WEST LOCK	xxx											
UPBOUND STATISTICS	875	1569	98	2542	568	1302	1870	87	3	805	895	3051
DNBOUND STATISTICS	940	1780	60	2780	1109	643	1752	107	1	838	946	1357
TOTAL	1815	3349	158	5322	1677	1945	3622	194	4	1643	1841	4408
BRAZOS EAST GATE	xxx											
UPBOUND STATISTICS	1099	693	464	2256	534	1440	1974	4	0	1407	1411	2993
DNBOUND STATISTICS	1162	524	430	2116	1197	732	1929	1	1	1438	1440	1355
TOTAL	2261	1217	894	4372	1731	2172	3903	5	1	2845	2851	4348
BRAZOS WEST GATE	xxx											
UPBOUND STATISTICS	1052	710	531	2293	531	1408	1939	2	0	1229	1227	2896
DNBOUND STATISTICS	1143	862	345	2350	1213	721	1934	6	2	1269	1265	1316
TOTAL	2195	1572	876	4643	1744	2129	3873	8	2	2498	2492	4213

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M3	GALVESTON	SOUTHWESTERN	7/83	8/83	9/83

ALL TIMES EXPRESSED IN MINUTES

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
GULF INTRACOASTAL																
COLORADO RIVER EAST LOCK	1	2	23	1	1	61	1	3	57	1	1	15	1941	4025	2.0	22
COLORADO RIVER WEST LOCK	1	2	23	1	1	15	1	2	53	1	1	24	1814	3041	1.6	38
BRAZOS EAST GATE	1	0	20	1	0	21	1	0	5	1	1	103	2229	30111	13.3	582
BRAZOS WEST GATE	1	1	28	1	0	14	1	0	3	1	1	61	2183	30205	13.7	577

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M4	LITTLE ROCK	SOUTHWESTERN	7/83	8/83	9/83

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

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
M4	LITTLE ROCK	SOUTHWESTERN	7/83 8/83 9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
ARKANSAS RIVER												
NORRELL LOCK & DAM	xxx											
UPBOUND STATISTICS	188	53	42	283	553	356	909	221	41	21	283	478
DNBOUND STATISTICS	198	59	40	297	153	871	1024	228	45	24	297	1094
TOTAL	386	112	82	580	706	1227	1933	449	86	45	580	1572
LOCK & DAM 2	xxx											
UPBOUND STATISTICS	184	59	36	279	553	348	901	211	43	23	277	487
DNBOUND STATISTICS	195	63	34	292	154	862	1016	223	48	23	294	1089
TOTAL	379	122	70	571	707	1210	1917	434	91	46	571	1577
LOCK & DAM 3	xxx											
UPBOUND STATISTICS	156	140	6	302	542	352	894	161	118	41	320	487
DNBOUND STATISTICS	163	144	6	313	142	848	990	168	115	42	325	1070
TOTAL	319	284	12	615	684	1200	1884	329	233	83	645	1558
LOCK & DAM 4	xxx											
UPBOUND STATISTICS	160	79	7	246	539	347	886	167	69	25	261	478
DNBOUND STATISTICS	169	80	11	260	138	840	978	174	68	23	265	1059
TOTAL	329	159	18	506	677	1187	1864	341	137	48	526	1538
LOCK & DAM 5	xxx											
UPBOUND STATISTICS	140	497	7	644	441	318	759	143	374	17	534	421
DNBOUND STATISTICS	142	497	14	653	118	686	804	152	386	19	557	936
TOTAL	282	994	21	1297	559	1004	1563	295	760	36	1091	1357
DAVID D TERRY LOCK & DAM	xxx											
UPBOUND STATISTICS	140	831	7	978	441	314	755	143	551	17	711	418
DNBOUND STATISTICS	141	855	11	1007	125	674	799	149	567	20	736	915
TOTAL	281	1686	18	1985	566	988	1554	292	1118	37	1447	1334
MURRAY LOCK & DAM	xxx											
UPBOUND STATISTICS	119	669	20	808	397	273	670	138	445	13	596	373
DNBOUND STATISTICS	124	662	20	806	100	613	713	137	450	19	606	853
TOTAL	243	1331	40	1614	497	886	1383	275	895	32	1202	1226
TOAD SUCK FERRY LOCK & DAM	xxx											
UPBOUND STATISTICS	123	106	0	229	405	292	697	124	79	16	219	399
DNBOUND STATISTICS	118	99	2	219	95	593	688	120	73	17	210	810
TOTAL	241	205	2	448	500	885	1385	244	152	33	429	1210

TABLE 2

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M4	LITTLE ROCK	SOUTHWESTERN	7/83	8/83	9/83

RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
ARKANSAS RIVER												
LOCK & DAM 9	xxx											
UPBOUND STATISTICS	113	81	2	196	395	264	659	114	67	12	193	364
DNBOUND STATISTICS	117	84	1	202	88	603	691	119	68	13	200	823
TOTAL	230	165	3	398	483	867	1350	233	135	25	393	1187
DARDANELLE LOCK & DAM	xxx											
UPBOUND STATISTICS	120	136	6	262	402	267	669	127	106	17	250	367
DNBOUND STATISTICS	123	133	6	262	90	615	705	132	103	18	253	845
TOTAL	243	269	12	524	492	882	1374	259	209	35	503	1212
OZARK LOCK & DAM	xxx											
UPBOUND STATISTICS	114	104	2	220	398	256	654	116	72	7	195	343
DNBOUND STATISTICS	118	98	0	216	82	605	687	120	65	7	192	846
TOTAL	232	202	2	436	480	861	1341	236	137	14	387	1190
LOCK & DAM 13	xxx											
UPBOUND STATISTICS	121	206	6	333	395	272	667	124	128	16	268	357
DNBOUND STATISTICS	125	212	6	343	96	606	702	128	137	17	282	920
TOTAL	246	418	12	676	491	878	1369	252	265	33	550	1278

AD-A165 928 PERFORMANCE MONITORING SYSTEM: SUMMARY OF LOCK STATISTICS REVISION 1(U) CORPS OF ENGINEERS FORT BELVOIR VA WATER RESOURCES SUPPORT CENTER 2/2

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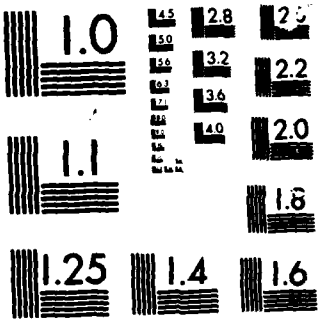

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE 3

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M4	LITTLE ROCK	SOUTHWESTERN	7/83	8/83	9/83

ALL TIMES EXPRESSED IN MINUTES

	LOCK PROCESSING TIME (MIN.)												DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	APPROACH			ENTRY			CHAMBER			EXIT						
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
ARKANSAS RIVER																
NORRELL LOCK & DAM	1	8	31	1	8	55	5	11	24	1	8	35	46	1097	2.8	100
LOCK & DAM 2	1	9	140	1	8	37	5	12	31	1	9	93	64	2010	5.3	95
LOCK & DAM 3	1	9	860	1	6	41	5	12	37	1	8	47	39	1964	6.1	688
LOCK & DAM 4	1	10	45	1	7	33	5	10	40	1	10	50	33	923	2.8	80
LOCK & DAM 5	1	6	39	1	4	43	5	10	50	1	6	49	84	1223	4.3	73
DAVID D TERRY LOCK & DAM	1	6	65	1	4	40	5	9	20	1	5	46	64	1453	5.1	190
MURRAY LOCK & DAM	1	3	45	1	3	35	7	10	35	1	4	35	41	1033	4.2	1094
TOAD SUCK FERRY LOCK & DAM	1	8	50	1	7	40	5	10	55	1	8	45	106	1452	6.0	540
LOCK & DAM 9	1	11	42	1	8	35	3	14	453	1	9	55	67	873	3.7	85
DARDANELLE LOCK & DAM	1	10	69	1	7	35	1	14	393	1	7	53	204	1714	7.0	135
OZARK LOCK & DAM	1	10	40	1	9	30	5	13	45	1	10	35	200	2339	10.0	11525
LOCK & DAM 13	1	6	29	1	7	35	6	12	43	1	8	45	50	1027	4.1	108

TABLE 1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT
FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M5	TULSA	SOUTHWESTERN	7/83	8/83	9/83

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 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
M5	TULSA	SOUTHWESTERN	7/83 8/83 9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LCKGES COMMER	LCKGES RECRTN (NAV, OPN, ETC)	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
ARKANSAS RIVER												
W D MAYO LOCK & DAM	xxx											
UPBOUND STATISTICS	116	384	10	510	396	222	618	122	149	9	280	304
DNBOUND STATISTICS	119	387	8	514	78	565	643	124	146	9	279	820
TOTAL	235	771	18	1024	474	787	1261	246	295	18	559	1124
ROBERT S KERR LOCK & DAM &RES	xxx											
UPBOUND STATISTICS	114	248	6	368	392	227	619	120	162	9	291	309
DNBOUND STATISTICS	120	265	3	388	78	566	644	122	152	8	282	809
TOTAL	234	513	9	756	470	793	1263	242	314	17	573	1119
WEBBERS FALLS LOCK & DAM	xxx											
UPBOUND STATISTICS	109	99	9	217	268	217	485	114	65	16	195	298
DNBOUND STATISTICS	112	112	5	229	93	391	484	116	68	17	201	575
TOTAL	221	211	14	446	361	608	969	230	133	33	396	874
CHOUTEAU LOCK & DAM	xxx											
UPBOUND STATISTICS	97	36	12	145	201	167	368	108	29	6	143	216
DNBOUND STATISTICS	97	38	13	148	63	310	373	108	33	7	148	449
TOTAL	194	74	25	293	264	477	741	216	62	13	291	665
NEWT GRAHAM LOCK & DAM	xxx											
UPBOUND STATISTICS	94	35	10	139	196	167	363	103	33	5	141	215
DNBOUND STATISTICS	93	39	11	143	66	296	362	104	36	6	146	423
TOTAL	187	74	21	282	262	463	725	207	69	11	287	638

TABLE 3

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FOR THE PERIOD 7/83 THROUGH 9/83
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M5	TULSA	SOUTHWESTERN	7/83	8/83	9/83

	LOCK PROCESSING TIME (MIN.)												ALL TIMES EXPRESSED IN MINUTES			
	APPROACH			ENTRY			CHAMBER			EXIT			DELAYED TOWS	DELAY TIME TOWS	DELAY AVG TOWS	DELAY MAX (ALL VSLS)
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX				
ARKANSAS RIVER																
W D MAYO LOCK & DAM	1	8	35	1	6	35	5	10	26	1	7	38	21	432	1.8	100
ROBERT S KERR LOCK & DAM &RE	1	6	28	1	7	33	5	14	27	2	8	41	22	661	2.8	74
WEBBERS FALLS LOCK & DAM	1	13	60	1	7	32	7	19	55	1	8	45	69	1164	5.2	123
CHOUTEAU LOCK & DAM	1	8	32	1	6	23	8	15	40	1	8	33	123	252	1.2	40
NEWT GRAHAM LOCK & DAM	1	9	38	1	7	24	5	14	27	2	11	42	20	310	1.6	54

Appendix B

Glossary

Draft: This is not a physical lock dimension. It is compared with new data before it is added to the central library to ensure that vessel drafts are not recoreded 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 a 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 processa 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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