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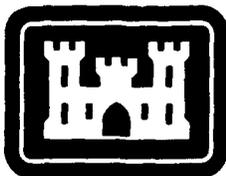
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U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS

STAGES AND DISCHARGES
OF THE
MISSISSIPPI RIVER AND TRIBUTARIES
AND
OTHER WATERSHEDS
IN THE
NEW ORLEANS DISTRICT
FOR 1990



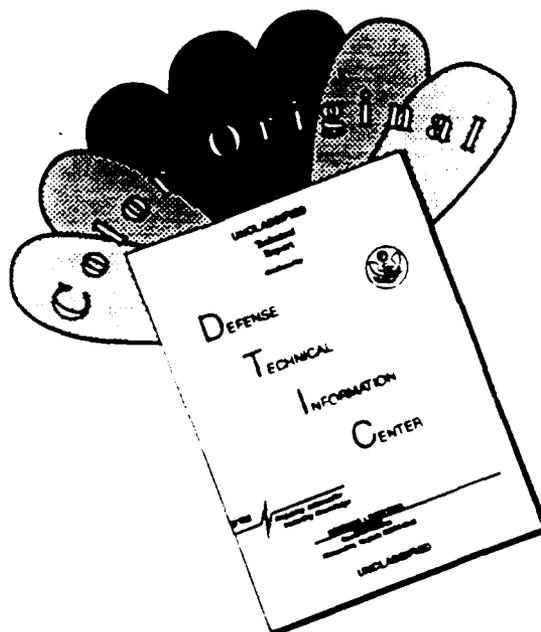
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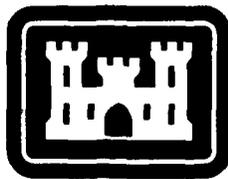
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Compiled at the office of the
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS

STAGES AND DISCHARGES
OF THE
MISSISSIPPI RIVER AND TRIBUTARIES
AND
OTHER WATERSHEDS
IN THE
NEW ORLEANS DISTRICT
FOR 1990



INTRODUCTION

THIS PAMPHLET CONTAINS THE RESULTS OF STAGE AND DISCHARGE OBSERVATIONS MADE ON THE MISSISSIPPI RIVER, ITS OUTLETS AND TRIBUTARIES, AND OTHER STREAMS AND WATERWAYS IN THE US ARMY ENGINEER DISTRICT, NEW ORLEANS, DURING THE 1990 CALENDAR YEAR.

IN ADDITION TO THE RECORDS OF THIS DISTRICT, THERE ARE CONTAINED HEREIN GAGE AND DISCHARGE DATA FURNISHED BY THE US GEOLOGICAL SURVEY, AND GAGE RECORDS FURNISHED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.

GAGES OPERATED BY THE NEW ORLEANS DISTRICT ARE GENERALLY INSPECTED AT LEAST ONCE EACH YEAR. THE DATUM USED IS THAT OF THE 1929 NATIONAL GEODETIC VERTICAL DATUM BY THE NATIONAL GEODETIC SURVEY. GAGES ARE BEING ADJUSTED TO AGREE WITH BENCHMARK CHANGES ALSO FURNISHED BY THE NATIONAL GEODETIC SURVEY. GAGE READINGS ARE CHECKED AGAINST INSPECTION REPORTS AND COMPARATIVE HYDROGRAPHS AND ARE CORRECTED WHERE THE NEED IS INDICATED.

STAGES ARE READINGS OF WATER SURFACE ELEVATIONS EXPRESSED IN FEET ABOVE THE ZERO OR REFERENCE POINT OF THE GAGE. THE REFERENCE POINT IS REFERRED TO EITHER NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD) OR MEAN LOW GULF DATUM. MEAN LOW GULF IS 0.78 FOOT BELOW NGVD. NATIONAL GEODETIC VERTICAL DATUM OF 1929 IS USED IN LIEU OF SEA LEVEL DATUM OF 1929 (MSL).

DISCHARGE IS THE QUANTITY OF WATER FLOWING PAST A CROSS SECTION OF THE STREAM IN A UNIT OF TIME. IT IS EXPRESSED IN DAY SECOND FEET.

DISCHARGE DATA CONSIST OF A BRIEF DESCRIPTION OF THE GAGING STATION, RESULTS OF DISCHARGE OBSERVATIONS, AND WHERE DETERMINED, COMPUTED DAILY FLOWS.

ANNUAL HIGHEST AND LOWEST STAGES ARE REPORTED FOR MOST OF THE DAILY GAGE STATIONS. IN DETERMINING THESE EXTREME RECORDS, ALL AVAILABLE GAGE DATA, INCLUDING CONTINUOUS RECORDER CHARTS, TWICE-DAILY GAGE READINGS, AND GAGE RECORDS TAKEN FROM DISCHARGE NOTES, INSPECTION REPORTS, ETC., ARE USED. THE TIME OF OCCURRENCE USUALLY IS REPORTED FOR THE ANNUAL HIGHEST STAGE BUT NOT FOR THE ANNUAL LOWEST STAGE.

THE TIME OF OBSERVATION REFERS TO CENTRAL STANDARD TIME.

THE ENCLOSED STREAM GAGING MAP SHOWS THE GAGING SYSTEMS OPERATED BY THE DISTRICT DURING THE REPORTING PERIOD. THE MAP CONTAINS AN INDEX FOR FINDING GAGE AND DISCHARGE RECORDS WITHIN THE PAMPHLET BY THE SYSTEM ARRANGEMENT.

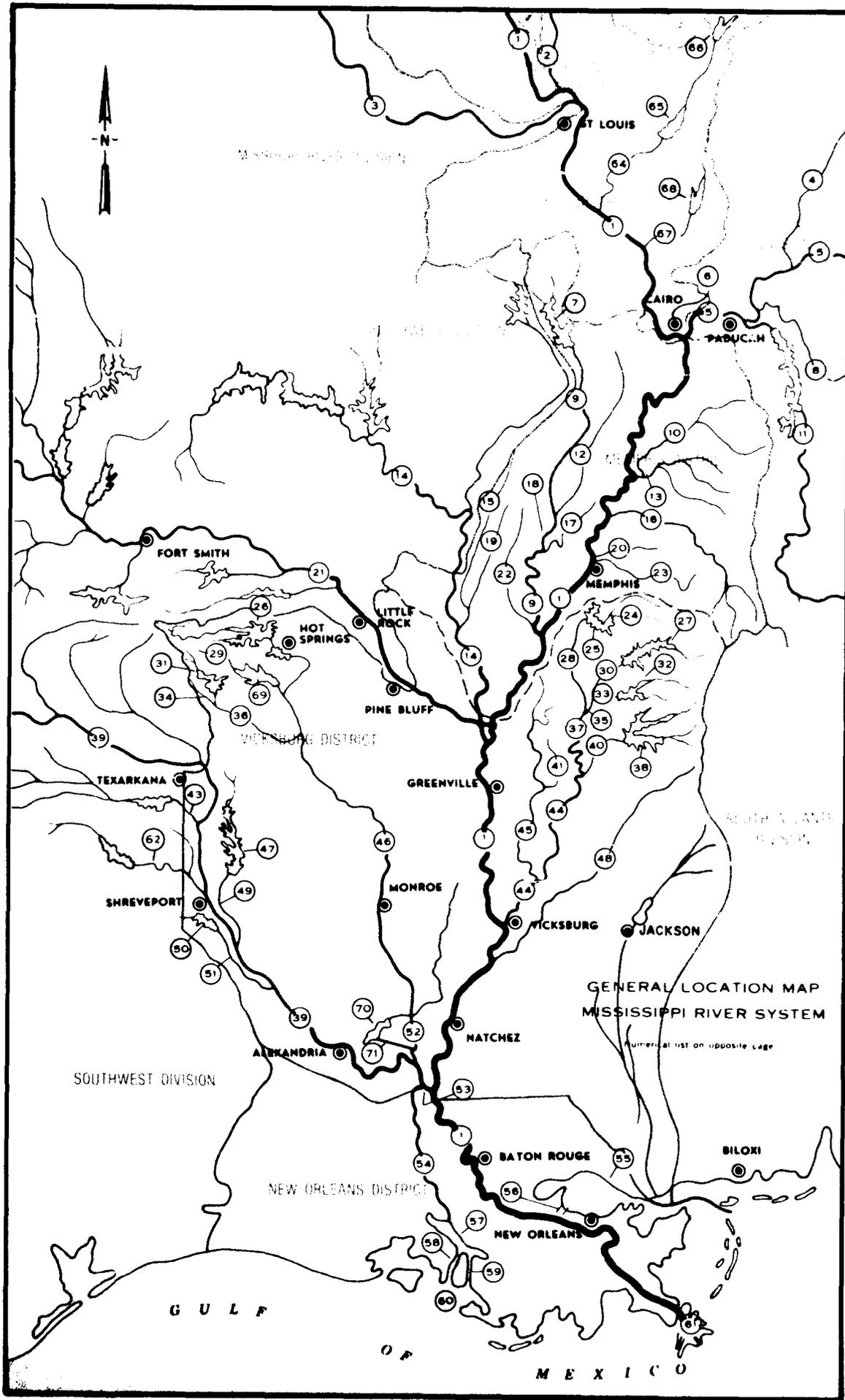
RICHARD V. GORSKI
COLONEL, CORPS OF ENGINEERS
DISTRICT ENGINEER

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**GENERAL LOCATION MAP
MISSISSIPPI RIVER SYSTEM**

Numbered list on opposite page

SOUTHWEST DIVISION

NEW ORLEANS DISTRICT

GULF

OF

MEXICO

1. Mississippi River
2. Illinois River
3. Missouri River
4. Wabash River
5. Ohio River
6. Cache River
7. Wappapello Reservoir
8. Cumberland River
9. St. Francis River
10. Obion River
11. Tennessee River
12. Little River (Floodway)
13. Forked Deer River
14. White River
15. Cache River
16. Hatchie River
17. Tyrnza River
18. St. Francis Bay-Steep Gut Floodway
19. Bayou De View
20. Loosahatchie River
21. Arkansas River
22. L'Anguille River
23. Wolf River
24. Pigeon Roost Creek
25. Arkabutla Reservoir
26. Lake Ouachita
27. Sardis Reservoir
28. Coldwater River
29. Caddo River
30. Little Tallahatchie River
31. Lake Greeson
32. Enid Reservoir
33. Yocona River
34. Muddy Fork Creek
35. Panola-Quitman Floodway
36. Little Missouri River
37. Tallahatchie River
38. Grenada Reservoir
39. Red River
40. Yalobusha River
41. Quiver River
43. Sulphur River
44. Yazoo River
45. Big Sunflower River
46. Ouachita River
47. Bayou Bodcau Reservoir
48. Big Black River
49. Bayou Bodcau-Loggy Bayou
50. Wallace Lake
51. Cypress Bayou-Bayou Pierre
52. Black River
53. Old River
54. Atchafalaya River
55. Lake Pontchartrain
56. Bonnet Carre Floodway
57. Grand Lake-Six Mile Lake
58. Wax Lake Outlet
59. Lower Atchafalaya River
60. Eugene Island
61. Head of Passes
62. Twelve Mile Bayou
64. Kaskaskia River
65. Carlyle Lake
66. Lake Shelbyville
67. Big Muddy River
68. Rend Lake Reservoir
69. DeGray Lake
70. Catahoula Lake
71. Diversion Canal

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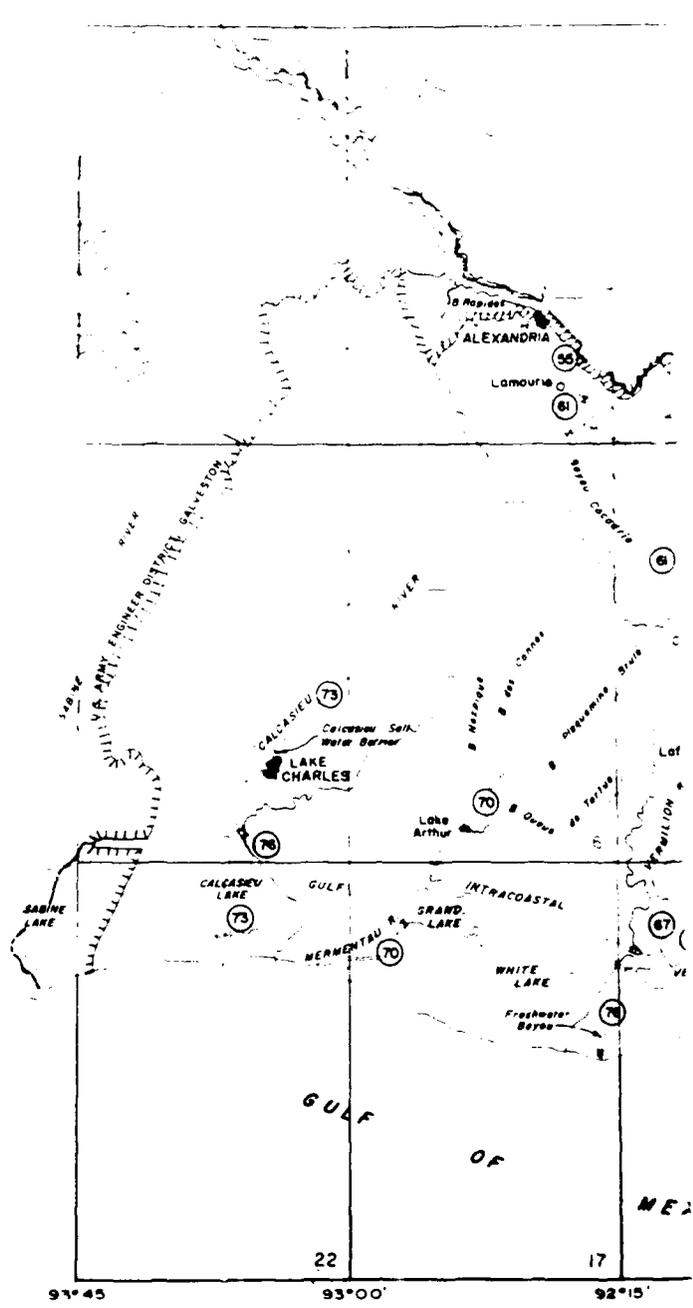
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40	Upper Pointe Coupee Drainage Area	64	(*)
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46	West Atchafalaya Floodway	69	(*)
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52	East of East Atchafalaya Basin Protection Levee	94	(*)
55	Bayou des Glaises and Vicinity	117	(*)
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61	Bayou Rapides, Boeuf, Cocodrie, and Vicinity	137	(*)
64	Bayou Teche and Vicinity	148	273
67	Vermilion River and Tributaries	159	273
70	Mermentau River and Tributaries	166	(*)
73	Calcasieu River and Tributaries	176	(*)
76	Intracoastal Waterway and Vicinity, New Orleans, La., to Calcasieu River	187	(*)
79	Delcambre Canal, Bayou Carlin, and Vicinity	218	(*)
82	Bayou LaFourche and Vicinity	219	(*)
85	Lake Pontchartrain and Vicinity	227	(*)
88	Gulf of Mexico	254	(*)

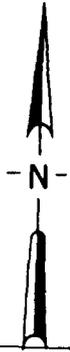
* Discharge not included in this publication



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U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS

STREAM GAGING INDEX MAP



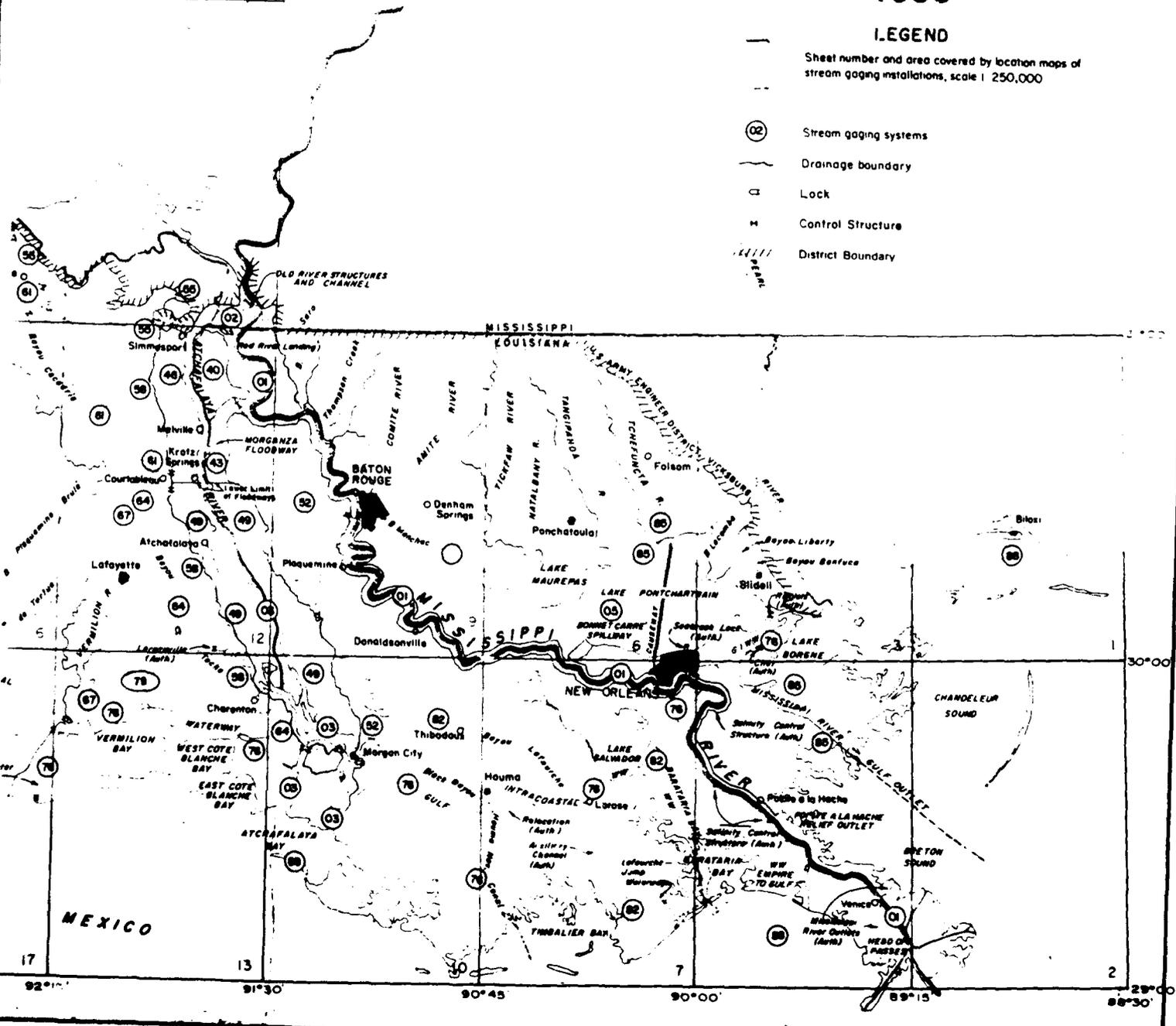
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1990

LEGEND

- Sheet number and area covered by location maps of stream gaging installations, scale 1:250,000
- Stream gaging systems
- Drainage boundary
- Lock
- Control Structure
- District Boundary



MEXICO

PART I
STAGES AND DAILY DISCHARGES
OF THE
MISSISSIPPI RIVER AND TRIBUTARIES
AND
OTHER WATERSHEDS

DAILY STAGE FOR 1990

MISSISSIPPI RIVER AT TARBERT LANDING, MISS.

LOCATION. LAT. 31-00-30 LONG. 91-37-25. MILE 306.3 (1962 SURVEY), ABOUT 2-1/2 MILES UPSTREAM FROM LOWER OLD RIVER. (STA. 0110011.)

GAGE. STAFF TYPE IN SEVERAL SECTIONS.

GENERAL INFORMATION. DRAINAGE AREA, (REVISED) 1,124,900 SQUARE MILES (CONTRIBUTING).

RECORDS AVAILABLE. STAGE, INTERMITTENTLY, 1932 TO DATE. DISCHARGE, 1911 TO 1913, 1928, 1929, AND 1932 TO DATE. COMPUTED DAILY, SINCE 1936.

EXTREMES. FOR STAGES, SEE RED RIVER LANDING. MAXIMUM, 1,977,000 CFS OBSERVED ON FEB. 19, 1937 (RED RIVER LANDING STAGE, 58.09 NGVD). MINIMUM, 85,000 CFS COMPUTED FOR NOV. 4, 1939 (RED RIVER LANDING STAGE, 4.69 NGVD). DISCHARGE NOT DETERMINED FOR RECORD HIGH AND LOW STAGES.

STAGE IN FEET

GAGE ZERO IS AT NGVD (1965 ADJ.)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2				51.25			46.65			21.00		
3			53.15		45.70					21.00		21.80
4						54.80			25.55			
5			53.55								25.20	22.20
6								29.70	25.45			
7					46.00							
8		46.20									24.55	
9	23.25			48.90			42.40			19.85		
10									24.85			25.95
11			51.50	48.20		55.60				19.05		
12						55.60			24.25		21.35	28.15
13			51.15		49.70			26.90				
14			50.80							21.75	21.00	
15												
16				45.50			35.25					
17					50.90					23.70	23.60	30.80
18	32.35			44.65		54.80						
19			49.70						23.05		20.95	29.15
20		51.40				54.30		25.65				
21			49.65		50.60						21.60	
22	35.05	51.75						24.95		25.00		
23				44.45			31.75					
24					50.60				21.55	25.95		
25						51.70	32.30					
26		52.70	50.30	45.20					21.45		21.65	
27								23.60				41.90
28		52.90									20.80	
29		-----	50.90		52.90					25.65		
30		-----		45.50			31.90					
31		-----		-----	53.50	-----			-----	25.25	-----	46.40

DAILY STAGE FOR 1990

MISSISSIPPI RIVER AT WEST POINTE A LA HACHE, LA.

LOCATION. LAT. 29-34-16, LONG. 89-47-49. ON RIGHT BANK AT PLAQUEMINES PARISH WATER INTAKE, AT MILE 48.7 (1962 SURVEY). (STA. 0140004.)

GAGE. AUTOMATIC RECORDER AND STAFF.

GENERAL INFORMATION. DRAINAGE AREA (REVISED) 1,125,940 SQUARE MILES (CONTRIBUTING). BANKFULL STAGE, 3.0 FEET. LOW WATER REFERENCE PLANE, 0.06 FOOT ON GAGE. PRIOR TO 1974 GAGE ZERO WAS MINUS 0.06 FOOT, NGVD.

RECORDS AVAILABLE. STAGE, FEB. 24, 1926 TO DATE. DISCHARGE, 1927, 1929, AND 1943.

EXTREMES. HIGHEST, 15.25 FEET (NEAR CREST OF HURRICANE) ON SEP. 9, 1965. LOWEST, MINUS 1.06 FEET ON JAN. 24 AND 25, 1940. EXTREME STAGES HAVE BEEN ADJUSTED TO NGVD. MAXIMUM, 1,360,000 CFS OBSERVED ABOVE RELIEF OUTLET ON APR. 29, 1927 (STAGE, 9.64 NGVD). ON THE SAME DAY, 1,058,000 CFS WAS OBSERVED BELOW THE OUTLET. THE RELIEF OUTLET, ON THE EAST BANK, EXTENDED FROM ABOUT MILE 33 TO MILE 44. FLOW WAS AFFECTED BY A CREVASSE WHICH OCCURRED ON APR. 23 AT JUNIOR, LA. (MILE 54), AND BY AN ARTIFICIAL CREVASSE MADE ON APR. 29 AT CAERNARVON, LA. (MILE 81.6).

DAILY EIGHT A.M. STAGE IN FEET

GAGE ZERO IS AT NGVD (1984 ADJ.)

Table with columns for DAY (1-31) and months JAN-DEC, showing stage readings in feet. Includes 'F' for not at stated time and dashed lines for missing data.

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

Summary table with rows for MEAN, MAX, MIN, DAYS and columns for months JAN-DEC.

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 353
F=NOT AT STATED TIME
THE MEAN STAGE FOR THE YEAR WAS 4.34.
HIGHEST STAGE WAS 7.97 AT 1:45 P.M. ON JUN 8.
LOWEST STAGE WAS 0.19 ON JAN 8.

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DAILY STAGE FOR 1990

LOWER ATCHAFALAYA RIVER AT BERWICK LOCK (LA.) (EAST)

LOCATION. LAT. 29-43-03, LONG. 91-13-28. ABOUT 75 FEET EAST OF LOCK, 1.8 MILES NORTHWEST OF MORGAN CITY, LA. (STA. 0376510.)

GAGE. STAFF TYPE.

RECORDS AVAILABLE. INTERMITTENTLY, 1955 TO DATE.

DAY	STAGE IN FEET											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2	1.35											
3										2.30		
4				5.90	5.15		5.75					
5		3.83				6.80			2.25			2.30
6											2.70	
7			6.49					3.00				
8					5.20							
9	1.65			5.85								
10												
11						7.00			2.70			1.60
12												
13								2.75			1.50	
14		5.00										
15					5.80							
16	2.10									2.00		
17				5.30								
18							4.15					
19						7.00			2.40			
20												2.70
21											2.45	
22		6.20			6.05			2.60				
23												
24												
25	3.23						3.40		2.08			
26											2.29	
27			5.73			6.25						3.95
28								2.40				
29												
30	3.75	-----								2.05		
31		-----		-----		-----	2.80		-----		-----	

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DAILY STAGE FOR 1990

BAYOU LATENACHE BELOW POINTE COUPEE DRAINAGE STRUCTURE (LA.)

LOCATION. LAT. 30-43-38, LONG. 91-43-54. ABOUT 300 FEET BELOW DRAINAGE STRUCTURE (FWS).
(STA. 4350512B.)

GAGE. STAFF TYPE.

RECORDS AVAILABLE. INTERMITTENTLY, 1968 TO DATE.

DAY	STAGE IN FEET											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2	21.65			16.46						12.80		
3							13.60					
4						18.20			14.15			17.63
5			20.60									
6		21.92									12.77	
7					13.87			13.45				
8												
9	22.40			15.96						13.13		
10							13.50					
11									13.40			14.15
12			18.40			15.58						
13		21.80									12.87	
14					14.02			14.00				
15												
16	19.19			15.30						12.80		
17							13.37					13.25
18						14.53			13.28			
19			18.32									
20		22.43									12.82	13.30
21								14.25				
22					13.58							
23	21.53			14.20						12.90		
24							13.28					
25									13.20			
26			16.05			14.00					12.80	13.77
27		19.78										
28								14.45				
29		-----			19.37							
30	26.25	-----		13.90			-----		-----	12.81	-----	

DAILY STAGE FOR 1990

WABPL (FWS) AT BAYOU ROUGE (LA.)

LOCATION. LAT. 30-45-23, LONG. 91-54-35. IN BAYOU ROUGE, 2.8 MILES NORTH OF PALMETTO, LA.
(STA. 4615012A.)

GAGE. STAFF TYPE.

RECORDS AVAILABLE. DAILY, JUNE 8, 1937 TO 1979, JUNE 14, 1982 TO FEB. 9, 1987. INTERMITTENTLY
JAN. 11, 1988 TO DATE.

EXTREMES. HIGHEST, 29.89 FEET ON MAR. 14, 1988. LOWEST, 12.3 FEET FROM OCT. 14 TO 16, 1950.

DAY	GAGE ZERO IS AT NGVD (1983 ADJ.)											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2	23.05			18.00			16.60			16.50		
3						19.33						12.10
4		26.19							16.68		16.49	
5								17.05				
6					17.50							
7	26.27											
8				17.63			16.68			16.56		
9									16.62			17.18
10						17.05						
11		25.10										
12												
13			18.27		18.36			17.00			16.58	
14										16.50		
15												
16	20.19			17.61			16.84					
17						16.85			16.61			17.08
18			19.45									
19		24.02						16.87				
20												
21					17.99						15.53	
22	26.40									16.58		
23				17.62			17.42					
24						16.77			16.58			
25												
26		22.80									16.58	17.06
27								16.68				
28	27.35	-----			17.57					16.48		
29		-----										
30		-----		17.65								
31		-----					17.20		-----		-----	15.55

DAILY GATE-OPENINGS FOR 1990
BAYOU COURTABLEAU DRAINAGE STRUCTURE

PHYSICAL DATA. DRAINAGE STRUCTURE CONSISTS OF FIVE GATES, EACH TEN FEET WIDE. ALL GATES ARE OPEN THE SAME AMOUNT UNLESS OTHERWISE NOTED.

DAILY SEVEN A.M. GATE OPENINGS IN FEET

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	10	15	15	0	0	0	0	0	0	0	0	0
2	10	15	15	0	0	0	0	0	0	0	0	0
3	10	15	15	0	0	0	0	0	0	0	0	0
4	10	15	15	0	0	0	0	0	0	0	0	0
5	5	15	15	0	0	0	0	0	0	0	0	0
6	15	15	15	0	0	0	0	0	0	0	0	0
7	15	15	15	0	0	0	0	0	0	0	0	0
8	15	15	15	0	0	0	0	0	0	0	0	0
9		15	15	0	0	0	0	0	0	0	0	0
10		15	15	0	0	0	0	0	0	0	0	0
11		15	15	0	15	0	0	0	0	0	0	3
12		15	15	0	0	0	0	0	0	0	0	0
13		15	15	0	0	0	0	0	0	0	0	0
14	15	15	0	0	0	0	0	0	0	0	0	0
15	15	15	0	0	0	0	0	0	0	0	0	0
16	0	15	0	0	0	0	0	0	0	0	0	0
17	0	15	0	0	0	0	0	0	0	0	0	0
18	0	15	0	0	0	0	0	0	0	0	0	0
19	0	15	0	0	0	0	0	0	0	0	0	0
20	15	15	3	0	0	0	0	0	0	0	0	0
21	15	15	3	0	0	0	0	0	0	0	0	0
22	15	15	3	0	0	0	0	0	0	0	0	0
23	15	15	0	0	0	0	0	0	0	0	0	0
24	15	15	0	0	0	0	0	0	0	0	0	0
25	15	15	0	0	0	0	0	0	0	0	0	12
26	15	15	0	0	0		0	0	0	0	0	12
27	15	15	0	0	0		0	0	0	0	0	12
28	15	15	0	0	0		0	0	0	0	0	12
29	15	-----	0	0	0		0	0	0	0	0	1
30	15	-----	0	0	0		0	0	0	0	0	1
31	15	-----	0	-----	0	-----	0	0	-----	0	-----	1

