

DAILY STAGES FOR 1994

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. LOW WATER REFERENCE PLANE AT THE FOOT OF HARBOUR CHANNEL, 1.7 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, MINUS 6.80 FEET ON AUG. 7 AND 8, 1988.

DAILY EIGHT A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, N.G.V.D. OF 1929

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	----	25.4	31.7	27.1	----	13.8	----	9.7	7.2	----	4.6	10.1
2	----	26.5	32.2	----	36.0	11.6	----	10.0	6.3	----	4.5	11.8
3	11.0	27.4	32.3	----	35.4	----	----	10.6	----	5.8	4.2	----
4	10.8	27.9	32.2	30.2	34.8	----	----	11.0	----	5.8	3.8	----
5	10.8	----	----	30.8	32.4	----	15.8	10.8	----	5.6	----	14.5
6	11.0	----	----	31.5	----	----	15.2	----	6.1	5.8	----	14.4
7	11.1	----	31.1	31.7	----	11.2	14.6	----	6.0	6.0	5.2	13.8
8	----	----	31.7	----	----	11.2	----	----	6.0	----	7.0	13.8
9	----	----	31.1	----	32.2	10.7	----	----	5.8	----	7.3	14.6
10	13.5	----	31.9	----	31.2	10.8	----	----	----	----	8.0	----
11	14.9	----	31.7	32.1	30.2	----	12.8	----	----	4.6	----	----
12	16.3	----	----	32.6	29.2	----	12.4	----	----	3.8	----	17.0
13	17.6	----	----	32.6	----	----	11.2	----	----	3.6	----	18.0
14	18.9	26.8	31.9	32.7	----	----	11.2	----	----	3.6	10.8	18.4
15	----	26.5	32.0	----	----	----	11.0	5.9	----	----	11.2	19.2
16	----	26.7	32.1	----	28.4	----	----	5.5	----	----	10.8	19.4
17	----	27.0	32.2	----	28.4	----	----	4.8	----	3.5	10.0	----
18	20.2	27.5	32.1	35.6	28.3	----	11.9	4.2	----	3.6	9.5	----
19	19.0	----	----	36.4	27.7	----	11.5	5.2	2.4	4.0	----	18.5
20	18.5	----	----	37.3	----	12.8	11.2	----	2.5	4.5	----	17.0
21	17.8	----	32.2	37.9	----	12.8	11.2	----	2.5	4.6	----	15.6
22	----	----	32.0	----	----	12.6	11.0	8.0	2.6	----	----	14.9
23	----	----	31.1	----	21.9	12.4	----	8.8	2.8	----	----	14.3
24	14.0	----	31.5	----	20.2	----	----	9.6	----	----	----	----
25	13.5	----	30.1	----	18.4	----	10.9	10.6	----	----	----	----
26	13.9	----	----	----	17.2	----	10.6	10.8	3.0	----	----	----
27	14.8	----	----	----	----	11.8	9.9	----	2.8	----	----	10.4
28	16.4	31.1	26.7	----	----	12.0	9.9	----	2.6	----	9.5	9.2
29	----	----	25.8	----	----	12.8	9.8	10.6	2.4	----	9.5	8.6
30	----	----	25.9	----	----	14.0	----	9.8	3.2	----	9.3	8.0
31	23.9	----	26.7	----	13.8	----	----	8.2	----	4.0	----	----
MEAN	----	----	----	----	----	----	----	----	----	----	----	----
MAX	----	----	----	----	----	----	----	----	----	----	----	----
MIN	----	----	----	----	----	----	----	----	----	----	----	----

THE MEAN STAGE FOR THE YEAR ----
HIGHEST AND LOWEST STAGES WERE NOT DETERMINED.

DAILY STAGES FOR 1993

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. LOW WATER REFERENCE PLANE AT THE FOOT OF HARBOUR CHANNEL, 1.7 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, MINUS 6.80 FEET ON AUG. 7 AND 8, 1988.

DAILY EIGHT A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, N.G.V.D. OF 1929

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	E 22.3	24.2	21.0	29.9	E 29.9	E 17.4	E 19.1	E 30.6	21.0	24.6	13.8	23.0
2	E 21.5	24.2	21.5	30.3	E 30.0	E 16.8	E 19.3	E 30.9	20.7	E 25.5	13.4	22.0
3	E 20.6	23.6	21.8	E 30.7	E 30.2	E 16.5	E 19.6	E 31.1	20.2	E 26.1	12.8	21.4
4	20.1	22.5	21.5	E 31.1	E 30.3	E 16.1	E 20.0	E 31.3	E 19.7	26.5	12.3	E 21.8
5	20.4	21.9	21.0	31.4	E 30.4	E 16.1	E 20.3	E 31.1	E 19.6	26.7	12.0	E 22.3
6	20.8	E 20.1	E 20.3	31.6	E 30.6	E 16.0	E 21.0	31.4	E 19.6	26.8	E 12.0	22.9
7	22.0	E 18.5	E 20.9	31.8	E 30.8	E 16.1	E 21.8	E 30.9	19.7	26.6	E 12.0	23.5
8	23.8	16.9	22.9	32.0	E 31.1	E 16.6	E 22.8	E 30.4	19.6	26.4	E 11.9	24.0
9	25.1	15.6	24.5	E 32.6	E 31.4	E 17.0	E 23.8	30.2	20.0	E 26.0	E 11.7	24.6
10	26.2	14.4	25.9	E 32.7	E 31.4	E 17.5	E 24.6	30.3	20.2	E 25.2	E 11.4	25.0
11	26.9	13.9	E 27.1	E 32.8	E 31.5	E 18.5	E 25.2	30.4	E 20.0	E 24.2	E 11.7	E 25.3
12	27.1	E 13.4	28.0	E 32.9	E 31.3	E 19.9	E 25.8	30.4	E 20.0	22.7	E 11.8	E 25.4
13	27.1	E 13.3	E 28.8	E 33.0	E 30.9	E 20.8	E 26.1	30.2	19.8	21.2	E 11.2	25.6
14	26.9	E 13.1	E 29.4	E 32.9	E 30.3	E 20.9	E 26.5	E 30.0	19.5	19.5	E 10.9	26.0
15	26.5	E 13.1	29.8	E 33.0	E 29.4	E 20.9	E 26.8	E 29.8	19.4	17.8	11.0	26.0
16	26.0	13.5	30.0	E 32.8	E 28.5	E 21.0	E 27.2	29.6	19.0	E 16.6	11.0	26.0
17	25.6	13.8	30.5	E 32.3	E 27.7	E 21.1	E 27.5	29.3	E 19.0	E 15.9	E 15.2	25.6
18	24.8	14.3	30.5	E 31.9	E 26.9	E 21.1	E 27.7	29.1	E 18.9	15.4	20.0	E 24.8
19	24.6	14.8	30.5	E 31.6	E 26.3	E 21.0	E 27.9	29.0	E 19.1	14.6	22.0	E 23.5
20	24.3	E 15.0	E 30.2	E 31.6	E 25.6	E 20.5	E 28.3	28.9	19.6	14.4	E 24.3	22.0
21	24.4	E 15.2	E 29.6	E 31.6	E 25.2	E 19.6	E 28.6	E 28.6	19.6	14.4	E 25.8	20.6
22	24.2	15.5	28.5	E 31.6	E 25.0	E 18.6	E 29.0	E 28.3	19.8	14.4	27.0	19.4
23	E 23.9	E 16.1	27.4	E 31.7	E 24.9	E 17.8	E 29.5	27.9	20.1	E 14.9	27.5	18.4
24	E 23.9	17.0	26.1	E 31.7	E 24.5	E 17.5	E 29.9	27.2	20.3	E 16.0	27.9	E 17.5
25	23.6	17.9	25.3	E 31.6	E 23.6	E 17.4	E 30.2	26.5	E 20.7	16.5	E 27.7	E 16.8
26	23.4	18.9	25.1	E 31.6	E 22.8	E 17.6	E 30.5	25.9	E 21.3	16.5	E 27.3	E 16.1
27	23.5	E 19.7	E 25.7	E 31.2	E 21.8	E 17.8	E 30.6	25.0	21.9	16.5	E 26.7	E 15.6
28	23.6	E 20.4	E 26.5	E 30.8	E 20.8	E 18.0	E 30.6	E 24.6	22.5	15.8	E 26.0	E 15.1
29	24.1		27.4	E 30.4	E 19.6	E 18.3	E 30.4	E 24.2	23.0	15.3	25.0	E 14.6
30	E 24.4		28.0	E 30.1	E 18.7	E 19.0	E 30.4	23.8	23.8	E 14.6	23.9	E 13.6
31	E 24.4		29.1		E 18.1		E 30.5	21.9		E 14.0		E 12.2

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE.

MEAN	24.05	17.17	26.28	31.71	27.08	18.45	26.17	28.66	20.25	19.72	17.90	21.32
MAX.	27.1	24.2	30.5	33.0	31.5	21.1	30.6	31.4	23.8	26.8	27.9	26.0
MIN.	20.1	13.1	20.3	29.9	18.1	16.0	19.1	21.9	18.9	14.0	10.9	12.2

E- ESTIMATED.

HIGHEST STAGE WAS 33.03 ESTIMATED ON APR. 15.

LOWEST STAGE WAS 10.92 ESTIMATED ON NOV. 14.

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EXTREMES. HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, MINUS 6.80 FEET ON AUG. 7 AND 8, 1988.

DAILY EIGHT A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, N.G.V.D. OF 1929

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	E 15.7	E 12.3	E 15.9	E 21.0	E 23.0	E 6.2	6.5	E 18.7	4.5	E 13.6	E 3.0	25.2
2	15.5	E 11.9	E 16.8	20.4	E 22.5	6.3	E 6.1	E 20.2	5.8	E 12.8	3.0	25.0
3	15.5	11.0	E 17.7	20.4	E 21.5	6.5	E 5.4	E 21.0	7.4	E 11.9	2.5	24.8
4	E 15.5	10.2	E 18.3	E 20.9	20.2	7.0	E 5.1	E 21.2	E 8.3	E 10.8	2.2	24.5
5	E 15.7	9.2	E 18.6	E 21.1	19.0	E 7.7	E 4.9	E 21.0	E 8.3	9.2	2.8	E 23.8
6	16.0	8.0	E 18.4	E 20.8	18.0	E 7.9	5.1	E 20.8	E 7.4	7.8	3.0	E 22.7
7	16.2	7.1	E 17.7	E 20.1	E 16.9	E 8.2	6.5	E 20.5	E 5.9	6.0	E 3.9	21.2
8	17.2	E 6.3	E 16.5	E 19.2	E 16.0	E 8.6	7.7	E 19.8	4.6	5.0	E 5.1	19.5
9	18.0	E 5.8	15.0	E 18.2	E 15.4	9.0	8.6	E 18.8	3.7	4.0	6.7	17.8
10	18.1	5.5	15.0	E 17.0	E 14.9	9.0	E 8.9	E 17.4	3.4	E 3.0	8.0	16.8
11	E 17.9	5.0	E 14.4	E 15.8	14.5	9.5	E 8.5	E 16.3	E 3.9	E 2.6	E 9.6	E 15.7
12	E 17.3	4.5	E 14.6	E 14.6	14.0	E 9.9	E 8.0	E 15.6	E 4.3	E 2.6	10.8	E 14.7
13	E 16.5	4.0	E 16.4	13.5	13.0	E 10.5	7.7	E 15.2	E 4.4	E 2.5	11.4	E 13.8
14	E 15.9	4.0	E 19.1	12.7	12.7	E 10.8	E 7.8	E 14.6	5.0	E 2.3	E 11.9	13.1
15	15.3	E 4.0	E 21.0	12.0	E 12.8	11.0	8.8	E 14.0	6.0	E 2.0	E 13.0	13.0
16	13.5	E 3.8	22.0	11.5	E 12.6	E 10.9	E 9.8	E 13.3	7.0	E 1.9	14.0	13.1
17	13.0	E 3.6	23.0	E 10.7	E 12.0	E 10.2	10.0	12.5	7.6	E 2.0	15.1	13.2
18	E 12.6	5.0	23.2	E 10.2	11.0	E 8.8	E 9.9	11.9	7.7	E 2.8	16.3	13.9
19	E 13.1	6.2	23.4	E 10.0	E 9.7	E 7.1	E 10.5	11.0	E 7.3	3.8	17.0	E 15.7
20	E 13.5	7.0	23.0	10.3	E 8.6	E 5.8	E 12.3	10.0	E 6.8	4.2	17.2	E 17.9
21	13.2	E 8.9	E 22.5	11.0	E 8.0	E 5.2	14.5	9.8	6.4	5.0	E 17.1	20.0
22	13.0	E 10.6	E 22.5	12.5	E 7.6	6.2	17.0	E 9.0	6.9	5.3	E 16.9	21.9
23	12.0	E 11.8	23.0	14.8	E 7.3	8.8	E 17.4	E 8.1	7.1	5.6	16.8	23.2
24	11.0	13.0	23.2	E 17.0	E 7.2	10.9	E 17.2	7.0	7.8	E 6.1	E 16.9	E 24.4
25	E 9.5	14.0	23.7	E 18.5	E 7.3	11.2	E 16.6	6.5	E 9.2	E 6.0	18.8	E 25.0
26	E 8.4	15.0	24.5	E 20.0	7.5	9.1	E 15.9	5.5	E 10.5	5.4	E 21.3	E 25.4
27	E 7.7	15.2	24.5	21.1	7.2	E 8.7	15.7	4.5	E 11.9	E 4.7	E 23.1	E 25.3
28	E 7.6	15.6	E 24.7	22.5	7.0	E 7.9	15.8	4.3	E 13.2	E 3.8	E 24.2	24.6
29	E 8.2	E 15.5	E 24.4	E 22.9	E 7.0	7.2	16.0	E 4.2	E 14.0	3.6	E 24.8	24.0
30	E 9.8		E 23.7	E 23.1	E 6.9	E 6.8	16.5	E 4.0	E 14.1	E 3.7	25.0	23.6
31	E 11.5		E 22.3		E 6.5		17.1	4.0		E 3.5		22.9

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE.

MEAN	13.67	8.76	20.30	16.79	12.50	8.42	10.90	12.94	7.34	5.28	12.71	20.17
MAX.	18.1	15.6	24.7	23.1	23.0	11.2	17.4	21.2	14.1	13.6	25.0	25.4
MIN.	7.6	3.6	14.4	10.0	6.5	5.2	4.9	4.0	3.4	1.9	2.2	13.0

E- ESTIMATED.

HIGHEST STAGE WAS 25.40 ESTIMATED ON DEC 26.

LOWEST STAGE WAS 1.90 ESTIMATED ON OCT 16.

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

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GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. LOW WATER REFERENCE PLANE AT THE FOOT OF HARBOUR CHANNEL, 1.7 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, MINUS 6.80 FEET ON AUG. 7 AND 8, 1988.

DAILY EIGHT A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, N.G.V.D. OF 1929

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	A	19.0	31.1	28.5	24.0	A	13.6	4.5	A	1.5	A	A
2	34.1	A	A	29.0	23.0	A	13.0	4.0	A	1.0	A	9.5
3	34.5	A	A	29.5	23.0	24.6	12.0	A	0.0	0.8	A	10.5
4	35.2	17.2	31.6	30.0	A	23.5	A	A	0.0	0.5	A	12.0
5	A	17.0	31.5	30.4	A	22.5	11.0	4.0	0.0	A	A	16.0
6	A	16.8	30.5	A	22.5	21.0	A	3.0	0.0	A	A	20.0
7	36.5	17.0	29.6	A	22.0	20.5	A	2.5	A	A	A	A
8	36.5	17.5	27.5	31.0	21.4	A	10.0	2.5	A	A	A	A
9	36.5	A	A	30.5	21.4	A	9.5	2.0	A	A	A	26.0
10	36.8	A	A	30.0	22.0	A	9.5	A	A	A	A	27.0
11	36.5	20.5	24.5	27.8	A	A	9.0	A	A	A	A	27.0
12	A	21.5	24.0	26.0	A	A	9.5	2.5	A	A	A	27.0
13	A	22.4	23.5	A	24.0	A	A	3.0	A	A	A	27.2
14	36.0	23.0	23.5	A	24.5	A	A	E 3.5	A	A	A	A
15	36.5	23.4	23.5	24.0	24.5	A	12.0	3.5	A	A	A	A
16	36.0	A	A	24.0	24.0	A	12.0	3.5	0.2	A	A	23.5
17	36.0	A	A	24.0	A	A	11.5	A	0.2	A	A	23.0
18	35.8	A	22.5	25.0	A	A	11.5	A	0.4	A	A	22.8
19	A	25.0	22.5	26.0	A	A	10.5	2.5	0.7	A	A	22.7
20	A	25.0	22.5	A	23.0	A	A	3.0	E 1.1	A	A	22.6
21	A	25.5	23.0	A	23.0	A	A	3.2	A	A	A	A
22	34.0	26.0	23.5	28.0	E 22.5	A	8.0	3.0	A	A	A	A
23	33.0	A	A	28.5	21.5	A	7.5	3.0	1.1	A	A	20.0
24	32.0	A	A	28.5	20.5	A	6.5	A	1.1	A	A	18.0
25	29.5	29.0	25.0	28.5	A	A	5.5	A	1.5	A	7.2	A
26	A	29.8	25.5	28.0	A	A	4.5	2.0	1.5	A	8.5	16.5
27	A	30.5	E 26.0	A	A	A	A	2.0	1.0	A	10.5	15.5
28	26.5	31.0	26.5	A	19.2	A	A	2.0	A	A	A	A
29	24.5		27.5	27.0	19.5	A	4.2	2.1	A	A	A	A
30	22.5		A	25.5	19.5	A	4.0	2.0	2.3	A	A	16.0
31	20.5		A		23.5		4.2	A		A		16.0

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE.

MEAN
MAX.
MIN.

A- NO RECORD.

E- ESTIMATED.

HIGHEST AND LOWEST STAGES WERE NOT DETERMINED.

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DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	19.8	10.3	32.0 E	22.2	10.2	16.5	22.0	6.7	8.6	13.6	E 9.1	10.4
2	20.2	9.1	E 31.7	22.5	10.4	17.1	22.0	6.4	E 8.6	12.8	E 7.5	E 9.7
3	20.1	10.2	31.5	E 22.6	11.5	17.5	20.8	7.0	E 8.1	12.0	E 6.3	E 9.3
4	20.0	10.8	31.2	23.0	12.9	17.4	20.2	7.6	8.0	11.5	E 5.2	E 9.1
5	E 19.0	12.0	31.0	23.6	14.8	17.4	20.6	7.0	8.1	11.5	4.5	8.8
6	18.1	14.2	30.7	24.4	15.8	16.4	21.0	6.3	E 9.0	12.6	E 4.5	8.7
7	17.1	16.0	30.1	25.8	16.8	E 15.3	21.0	5.9	9.3	12.8	E 4.8	8.2
8	E 16.6	E 17.0	29.0	26.8	17.4	14.6	20.5	5.2	8.8	E 13.3	E 5.7	7.6
9	16.2	17.8	E 28.5	E 27.6	17.8	14.6	19.8	4.7	8.1	E 13.6	E 5.7	E 6.8
10	16.2	17.8	28.2	28.1	17.4	14.8	19.2	5.0	E 7.5	E 13.6	E 5.7	E 5.8
11	17.6	17.7	E 27.9	29.2	17.4	15.2	18.2	E 5.2	7.0	13.1	E 5.4	5.2
12	19.2	17.3	27.7	29.4	17.5	15.6	17.4	E 5.7	7.0	E 12.4	5.5	4.8
13	E 19.9	E 16.5	27.6	29.8	17.5	16.4	E 16.5	5.0	E 7.1	E 11.2	5.9	4.8
14	21.0	16.2	27.3	29.8	E 17.8	16.8	15.5	3.7	8.6	E 9.8	6.5	4.8
15	21.6	15.7	27.2	29.8	18.2	17.0	14.6	E 2.0	12.0	E 8.2	7.5	5.1
16	23.6	17.8	E 27.2	E 29.7	18.4	18.2	14.0	0.6	10.9	E 7.1	8.0	E 5.2
17	24.2	19.5	27.2	29.4	18.6	18.6	13.3	0.0	E 12.5	E 7.0	8.3	E 5.0
18	25.0	24.2	27.0	29.4	18.6	19.3	12.8	0.0	14.0	E 6.2	8.3	4.4
19	E 26.0	25.8	26.6	28.8	18.8	20.2	12.7	E -0.2	14.3	E 5.6	9.3	E 4.2
20	26.6	26.4	25.7	26.1	19.0	20.9	11.6	E 0.0	14.4	E 5.5	10.0	4.2
21	26.8	27.4	25.4	22.6	19.0	21.3	10.4	0.0	14.4	E 6.3	E 12.4	3.1
22	26.7	27.6	23.5	21.8	18.8	21.8	8.8	E 0.2	14.8	E 7.5	14.8	E 1.6
23	26.6	28.4	23.0	18.0	18.4	E 22.4	8.0	E 0.5	15.0	E 9.4	E 16.0	E 0.7
24	25.9	28.7	E 22.0	16.0	E 17.8	22.8	7.8	1.0	14.3	E 11.5	16.5	E 0.7
25	24.8	29.8	E 21.9	14.6	17.6	23.0	7.8	2.0	13.3	E 14.1	16.5	E 0.6
26	23.6	30.4	E 22.1	14.2	17.6	23.3	8.0	3.6	E 12.5	E 15.5	E 15.6	0.0
27	20.2	30.9	E 22.2	13.2	17.0	23.4	8.0	4.6	12.0	E 16.3	14.5	-0.1
28	16.7	31.5	E 22.1	12.8	16.8	23.4	8.4	E 5.7	12.0	E 16.3	E 13.2	0.0
29	14.0		E 22.6	11.4	16.3	23.0	E 8.1	E 6.8	12.6	E 15.3	12.3	0.0
30	12.0		E 22.6	10.6	16.0	22.7	8.0	E 8.3	13.6	E 13.3	11.3	E -0.4
31	11.4		E 22.6		16.0		7.4	9.5		E 11.1		E -0.3

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE.

MEAN	20.53	20.24	26.62	23.10	16.71	18.88	14.33	4.06	10.87	11.29	9.22	4.45
MAX.	26.8	31.5	32.0	29.8	19.0	23.4	22.0	9.5	15.0	16.3	16.5	10.4
MIN.	11.4	9.1	21.9	10.6	10.2	14.6	7.4	-0.2	7.0	5.5	4.5	-0.4

E- ESTIMATED.

HIGHEST STAGE WAS 32.00 ON MAR 1.

LOWEST STAGE WAS -0.39 ESTIMATED ON DEC 30.

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. LOW WATER REFERENCE PLANE AT THE FOOT OF HARBOUR CHANNEL, 1.7 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, MINUS 2.71 FEET ON JAN. 21, 1981.

DAILY EIGHT A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, N.G.V.D. OF 1929

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	27.2	17.2	16.4	9.6	8.8	3.5	-6.6	-3.8	-5.1	-0.3	-3.1	17.5
2	27.0	15.0	15.1	12.0	8.2	3.0	-6.6	-4.0	-4.8	0.0	-3.6	16.3
3	26.6	13.9	14.0	15.1	7.8	1.7	-6.4	-4.6	-4.6	1.4	-4.3	14.9
4	25.6	15.0	13.0	17.0	7.2	0.0	-6.5	-5.1	-4.9	0.0	-4.6	13.5
5	24.0	18.2	11.6	17.7	7.0	E -1.0	-6.5	-6.0	-5.0	-0.8	-4.6	11.2
6	22.2	20.5	11.2	17.9	6.7	E -1.8	-6.6	-6.3	-5.2	-1.5	-4.1	10.8
7	E 20.3	21.8	11.4	18.0	6.3	E -1.7	-6.7	-6.8	-5.2	-2.7	-3.6	9.5
8	18.6	22.5	12.8	18.6	6.0	E -1.8	-6.7	-6.8	-5.1	-3.2	-3.1	8.5
9	17.2	22.8	13.4	19.4	5.8	E -1.9	-6.7	-5.5	-5.4	E -3.3	E -2.4	7.1
10	16.2	23.0	17.0	20.0	5.8	E -2.3	-6.7	-4.9	-5.1	E -3.2	-1.5	5.5
11	12.8	23.0	18.6	20.3	6.0	E -2.8	-6.7	-5.0	-4.9	E -3.0	-1.0	3.8
12	10.4	23.0	19.6	20.5	6.5	E -3.2	-6.7	-5.7	-4.4	E -3.0	0.7	2.7
13	8.4	23.0	20.0	20.5	6.8	E -3.4	-6.1	-6.3	-4.4	E -3.3	1.5	E 2.3
14	7.5	22.8	19.4	20.4	6.8	E -3.5	-6.0	-6.3	-5.4	E -4.0	1.6	2.0
15	6.6	22.0	18.4	20.0	6.6	E -3.7	-5.5	-6.3	-6.0	E -4.8	1.8	1.8
16	6.4	20.4	17.0	19.8	6.4	E -3.9	-5.8	-6.1	-6.3	-5.2	2.1	1.5
17	6.2	17.4	16.0	19.5	6.0	E -4.3	-6.2	-5.8	-5.8	-5.8	E 2.3	0.8
18	5.8	16.8	E 15.7	18.9	5.2	E -4.7	-6.3	E -5.5	-5.5	-5.8	2.2	E -0.5
19	5.7	15.8	15.5	17.5	4.8	E -5.0	-6.2	-5.2	-5.4	-5.7	2.9	E -1.6
20	8.2	15.6	15.0	16.2	4.2	E -5.1	-6.2	-5.2	-4.2	-4.8	5.8	E -2.7
21	8.6	E 15.0	14.6	15.2	3.4	-5.1	-5.9	-5.4	-5.0	-4.4	6.9	E -3.4
22	11.0	14.6	13.2	14.5	3.0	-5.1	-6.0	-5.0	-6.4	-4.3	8.7	E -3.7
23	17.0	14.8	12.0	13.9	2.8	-5.1	-4.9	-4.2	-5.1	-4.5	11.1	E -3.8
24	20.5	15.0	11.0	13.5	3.2	-5.2	-2.4	-4.0	-3.1	-4.6	15.4	E -2.8
25	22.4	15.6	10.2	12.8	3.8	-5.2	-0.7	-4.1	-1.8	-4.6	17.2	-1.0
26	23.0	E 16.3	9.1	12.2	3.8	-5.5	0.2	-4.6	-2.0	-4.0	18.3	E 0.9
27	23.1	16.8	8.4	11.6	4.2	-5.8	E -1.2	-4.9	-2.1	-3.1	19.3	3.2
28	23.1	17.0	7.6	10.3	4.4	-6.1	E -3.0	-5.2	E -1.8	-3.0	19.3	4.6
29	22.7	16.8	7.4	9.9	4.2	-6.5	-3.9	-5.1	-1.2	-3.3	19.3	11.4
30	E 21.5		7.6	9.3	E 4.0	-6.5	-3.8	-5.4	-1.0	-3.2	18.4	15.7
31	19.5		8.8		E 3.8		-3.6	-5.5		-3.0		18.3

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE.

MEAN	16.62	18.33	13.57	16.06	5.46	-3.26	-5.25	-5.31	-4.41	-3.26	4.62	5.30
MAX.	27.2	23.0	20.0	20.5	8.8	3.5	0.2	-3.8	-1.0	1.4	19.3	18.3
MIN.	5.7	13.9	7.4	9.3	2.8	-6.5	-6.7	-6.8	-6.4	-5.8	-4.6	-3.8

E- ESTIMATED.

HIGHEST STAGE WAS 27.20 ON JAN. 1.

LOWEST STAGE WAS -6.80 ON AUG. 7 AND 8.

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. LOW WATER REFERENCE PLANE AT THE FOOT OF HARBOUR CHANNEL, 1.7 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, MINUS 2.71 FEET ON JAN. 21, 1981.
DAILY EIGHT A.M. STAGE IN FEET GAGE ZERO, 178.05 FEET, N.G.V.D. OF 1929

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	17.9	12.9	18.8	14.7	19.5	9.6	6.0	3.5	2.6	2.3	A	3.4
2	18.2	12.1	19.7	15.8	18.8	10.4	5.4	3.6	3.8	1.8	A	4.2
3	18.4	11.4	22.1	16.5	18.5	11.0	5.2	3.4	6.6	1.5	A	5.2
4	17.8	11.5	23.8	18.0	18.2	12.3	5.2	4.0	7.6	1.2	A	5.8
5	16.5	11.8	24.7	18.6	17.6	13.0	5.0	4.3	7.4	1.2	A	6.4
6	15.2	12.9	25.5	19.0	16.8	13.6	4.6	4.5	7.5	1.0	A	7.2
7	14.2	13.9	26.3	19.4	15.8	13.4	5.2	4.5	7.0	0.6	A	8.0
8	13.5	14.7	26.6	20.0	14.8	13.8	7.2	4.5	6.2	0.4	A	8.0
9	12.6	14.8	26.7	20.0	14.0	13.0	9.6	4.6	5.4	0.4	A	7.6
10	12.0	14.6	26.6	19.7	13.1	12.8	10.6	4.9	4.6	0.5	A	7.0
11	11.4	14.5	25.7	19.5	13.8	12.0	12.0	4.8	3.5	A	A	6.6
12	10.8	14.4	24.6	19.4	14.0	10.0	13.7	4.1	3.2	A	A	6.0
13	10.0	13.7	23.3	19.2	13.2	9.1	13.2	3.0	3.4	A	A	5.6
14	9.2	13.1	21.5	20.0	12.2	8.2	13.0	2.4	3.8	A	1.0	5.0
15	8.8	12.6	19.6	20.6	11.8	8.1	12.5	2.0	3.5	A	1.5	5.5
16	8.8	12.4	18.0	20.8	10.8	8.4	12.2	1.8	3.0	A	1.3	6.0
17	8.5	11.7	17.2	22.0	9.2	8.4	12.5	1.0	2.3	A	1.8	6.5
18	8.5	11.0	17.0	24.0	8.5	8.6	12.7	0.8	2.6	A	1.2	7.0
19	8.4	11.0	16.4	25.0	8.2	8.0	12.8	0.2	3.0	A	1.0	7.2
20	8.0	10.9	15.4	26.0	7.7	7.2	12.6	1.7	3.0	A	1.5	7.4
21	7.8	10.7	14.5	26.4	7.2	6.8	12.0	2.0	2.6	A	1.2	7.5
22	8.4	10.7	13.9	26.6	6.8	6.9	11.2	3.0	2.4	A	1.2	7.4
23	10.7	10.9	13.6	26.5	6.6	6.4	10.6	4.0	2.6	A	1.4	7.9
24	12.7	10.9	13.6	26.5	6.3	5.6	9.0	4.6	3.0	A	1.2	9.2
25	14.4	11.8	14.4	26.3	6.6	5.0	8.0	4.6	3.8	A	0.7	13.8
26	15.4	13.5	15.9	26.0	8.8	5.2	6.8	4.7	5.0	A	1.0	17.0
27	16.4	14.7	15.4	25.6	9.2	5.4	6.0	4.8	5.5	A	1.2	19.4
28	16.6	16.4	15.1	24.6	10.5	6.4	4.8	4.2	5.3	A	1.4	22.2
29	16.5		14.8	23.0	10.8	6.5	4.2	3.2	4.4	A	1.5	24.5
30	15.6		14.4	21.0	10.2	6.5	3.8	3.2	3.0	A	2.8	26.0
31	14.3		14.2		9.8		3.0	3.0		A		26.6

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE.

MEAN	12.82	12.69	19.32	21.69	11.91	9.05	8.72	3.38	4.25			9.90
MAX.	18.4	16.4	26.7	26.6	19.5	13.8	13.7	4.9	7.6			26.6
MIN.	7.8	10.7	13.6	14.7	6.3	5.0	3.0	0.2	2.3			3.4

A- NO RECORD.

HIGHEST STAGE WAS 27.00 ON DEC. 31.

LOWEST STAGE WAS NOT DETERMINED.

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. LOW WATER REFERENCE PLANE AT THE FOOT OF HARBOUR CHANNEL, 1.7 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, MINUS 2.71 FEET ON JAN. 21, 1981.

DAILY EIGHT A.M. STAGE IN FEET							GAGE ZERO, 178.05 FEET, N. G. V. D. OF 1929						
DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	14.0	13.6	22.3	19.9	15.1	21.3	8.8	10.0	E 4.5	16.0	18.9	E 21.5	
2	E 12.9	E 12.8	22.1	E 18.6	14.7	21.0	8.7	9.4	E 4.4	E 16.6	19.0	23.1	
3	11.9	12.0	21.8	E 17.6	13.4	20.4	8.8	9.0	4.0	E 16.9	19.0	24.2	
4	11.4	11.3	20.8	16.8	12.5	19.7	9.2	8.6	3.7	E 17.1	19.0	24.7	
5	10.9	E 10.7	19.9	16.0	12.1	E 19.4	E 10.0	E 8.0	3.6	E 17.8	18.7	24.9	
6	10.5	14.8	18.8	15.5	12.1	18.8	11.2	7.5	E 3.1	18.7	18.6	25.3	
7	E 10.1	18.0	18.0	14.8	E 12.6	18.1	12.0	7.2	E 3.2	20.0	E 18.3	25.5	
8	9.8	20.2	17.0	E 14.4	13.1	17.5	14.0	7.0	E 4.2	22.0	E 18.8	25.6	
9	9.8	22.0	16.0	14.0	12.9	17.2	15.0	E 6.6	4.9	22.8	E 18.4	25.8	
10	E 9.6	E 22.9	15.0	14.0	12.7	17.6	15.5	E 6.3	5.3	E 23.7	E 18.1	25.8	
11	9.2	23.8	14.0	E 14.8	12.7	18.0	15.4	E 6.1	5.0	E 24.6	E 18.5	25.9	
12	8.6	E 24.8	13.4	15.5	13.0	19.6	14.8	6.2	4.5	25.6	E 19.6	26.0	
13	8.0	E 24.9	13.8	16.0	13.0	20.2	13.8	6.0	3.6	26.2	E 20.6	26.2	
14	E 7.2	E 25.4	14.2	E 15.9	13.0	E 20.5	14.8	6.0	2.8	E 26.3	E 21.5	26.6	
15	6.9	25.4	15.0	E 15.7	13.0	E 19.7	E 16.0	5.9	E 3.1	E 26.3	22.2	26.5	
16	6.7	E 25.2	16.9	15.5	13.3	E 18.9	17.2	E 5.8	3.4	E 25.9	23.0	26.5	
17	E 6.5	24.9	19.0	15.0	14.4	18.2	17.8	5.6	3.0	25.5	23.3	26.2	
18	E 6.1	E 24.6	21.0	14.9	16.9	17.9	19.0	4.9	E 2.8	24.8	23.1	25.8	
19	5.9	24.0	22.4	14.9	18.7	17.4	19.4	4.5	3.4	24.5	E 22.2	25.5	
20	5.9	23.6	23.5	E 14.9	18.9	16.9	19.6	E 4.5	4.3	24.0	E 20.8	25.2	
21	5.8	E 23.0	24.5	15.0	18.7	16.3	19.4	5.3	5.2	E 23.5	E 18.8	23.3	
22	E 5.9	22.6	25.5	14.8	18.0	15.4	E 19.0	E 6.0	6.0	23.0	17.0	22.9	
23	6.4	E 22.3	E 25.8	15.0	18.1	14.6	18.2	6.9	E 6.5	22.4	16.3	21.2	
24	7.0	E 22.4	E 25.8	15.4	18.5	14.0	E 17.3	6.8	6.6	E 21.6	15.5	20.0	
25	8.9	22.8	E 25.9	15.8	19.0	13.2	16.4	6.5	E 7.5	21.3	15.1	18.9	
26	E 10.7	23.0	E 26.0	E 15.9	20.0	12.0	15.2	6.3	9.3	20.3	15.4	18.0	
27	12.0	23.0	26.0	E 15.8	21.0	11.4	13.1	6.0	10.6	20.0	15.8	17.2	
28	13.5	E 22.5	25.5	15.8	21.5	10.5	12.0	5.5	12.3	19.4	16.5	16.8	
29	14.4		E 24.6	16.0	21.6	9.6	11.6	4.6	13.1	19.0	17.2	16.4	
30	14.8		23.0	15.8	21.5	9.0	11.2	4.2	15.3	E 18.9	19.5	16.8	
31	14.3		21.0		21.4		E 10.5	3.8		18.7		17.0	

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE.

MEAN	9.53	20.95	20.59	15.66	16.04	16.80	14.35	6.35	5.63	21.72	18.95	23.07
MAX.	14.8	25.4	26.0	19.9	21.6	21.3	19.6	10.0	15.3	26.3	23.3	26.6
MIN.	5.8	10.7	13.4	14.0	12.1	9.0	8.7	3.8	2.8	16.0	15.1	16.4

E- ESTIMATED.

HIGHEST STAGE WAS 26.60 ON DEC. 14.

LOWEST STAGE WAS 2.79 ON SEP. 18.

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. LOW WATER REFERENCE PLANE AT THE FOOT OF HARBOUR CHANNEL, 1.7 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, MINUS 2.71 FEET ON JAN. 21, 1981.
DAILY EIGHT A.M. STAGE IN FEET GAGE ZERO, 178.05 FEET, N.G.V.D. OF 1929

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	25.2	9.0	29.4	21.2	17.2	E 14.1	E 11.0	E 3.3	E 10.2	E 4.2	13.6	E 30.4
2	25.6	8.6	30.0	E 23.0	17.5	13.2	10.0	E 3.9	9.7	E 4.3	E 14.0	30.0
3	26.6	E 8.3	31.5	24.8	17.6	12.7	9.8	4.6	9.7	4.4	14.0	30.0
4	27.8	E 8.4	32.2	26.0	17.7	12.4	9.5	5.7	E 9.4	4.6	E 13.7	30.0
5	E 28.8	E 12.7	33.0	27.0	18.6	E 11.9	E 9.1	6.0	8.6	5.2	13.4	30.1
6	E 29.4	E 14.8	33.6	27.8	19.6	E 11.8	9.6	6.6	8.0	5.7	14.4	30.2
7	29.8	E 16.8	34.0	28.4	20.6	E 12.6	9.8	7.0	E 7.3	6.5	14.8	E 30.5
8	29.6	E 17.7	34.4	28.8	21.0	13.3	10.0	7.2	8.1	7.4	15.4	E 30.7
9	29.0	E 17.9	34.6	29.1	21.0	E 14.3	E 9.8	7.1	8.0	7.6	15.4	E 30.8
10	28.4	E 17.8	34.7	29.5	20.6	15.4	E 9.2	6.0	7.5	E 7.6	16.0	E 30.7
11	27.6	E 17.5	34.7	29.6	20.1	E 15.6	8.8	5.4	6.9	E 7.6	17.0	30.6
12	26.8	E 17.2	34.8	29.6	19.0	E 15.8	8.4	5.3	5.4	7.4	17.4	30.6
13	26.0	E 17.2	34.9	29.5	17.6	16.0	8.6	E 5.5	5.0	7.1	E 18.2	30.5
14	25.0	E 17.9	E 34.6	29.0	16.2	16.6	9.0	5.7	4.6	6.6	19.0	30.2
15	24.0	E 18.5	34.2	28.6	15.2	17.3	9.1	5.3	3.6	6.5	19.8	29.7
16	22.0	E 19.2	33.8	27.5	14.5	17.6	9.4	5.0	3.2	7.8	20.6	29.5
17	21.0	E 20.1	33.0	27.0	14.0	E 16.9	E 9.1	4.8	2.6	11.8	20.8	E 29.0
18	19.0	E 20.0	E 32.7	25.6	14.0	16.2	8.3	4.8	2.4	13.5	22.1	28.2
19	18.0	E 19.8	32.4	23.5	E 14.3	15.8	7.8	5.6	2.2	14.8	23.5	27.4
20	16.0	E 19.5	31.8	22.8	E 14.7	14.8	7.2	7.4	1.8	15.9	24.5	26.2
21	15.4	19.0	E 31.2	21.0	15.0	E 14.5	7.0	E 8.7	2.0	E 15.3	26.4	25.2
22	14.8	18.5	31.0	20.6	15.6	15.0	6.4	E 9.7	2.1	14.6	26.9	E 24.9
23	13.6	18.4	29.9	20.0	15.6	15.4	6.3	10.1	2.2	E 14.8	27.3	E 24.7
24	12.8	19.0	29.0	20.0	15.5	E 15.3	E 5.1	10.5	2.6	E 15.5	28.1	E 24.4
25	12.6	20.7	E 28.5	19.1	E 15.5	E 14.6	4.2	10.0	E 2.7	16.0	29.1	E 23.4
26	12.0	23.4	27.5	18.4	E 15.1	E 13.4	4.0	E 9.3	3.0	16.2	30.4	21.8
27	11.2	27.0	25.8	17.3	14.4	E 12.3	4.7	10.0	3.4	16.3	E 31.2	19.8
28	10.9	27.9	24.0	17.0	13.5	12.0	3.4	10.2	3.5	16.0	E 31.3	18.8
29	10.6		22.3	17.2	E 13.7	12.0	3.0	E 10.3	E 3.6	15.0	E 31.1	17.8
30	10.0		21.4	17.0	14.0	11.6	3.0	E 10.6	3.7	14.0	E 30.7	16.0
31	9.4		21.2		14.2		3.0	E 10.7		13.6		15.3

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE.

MEAN	20.60	17.59	30.83	24.19	16.54	14.34	7.52	7.16	5.09	10.43	21.32	26.68
MAX.	29.8	27.9	34.9	29.6	21.0	17.6	11.0	10.7	10.2	16.3	31.3	30.8
MIN.	9.4	8.3	21.2	17.0	13.5	11.6	3.0	3.3	1.8	4.2	13.4	15.3

E- ESTIMATED.

HIGHEST STAGE WAS 34.87 ON MAR. 13.

LOWEST STAGE WAS 1.78 ON SEP. 20.

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. LOW WATER REFERENCE PLANE AT THE FOOT OF HARBOUR CHANNEL, 1.7 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, MINUS 2.71 FEET ON JAN. 21, 1981.
DAILY EIGHT A.M. STAGE IN FEET GAGE ZERO, 178.05 FEET, N.G.V.D. OF 1929

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	16.2	15.0	23.8	31.6	32.9	29.2	21.1	14.0	6.6	5.4	14.3	18.4
2	15.5	15.2	23.4	32.2	33.5	28.5	21.2	13.8	6.5	4.6	14.6	20.0
3	15.8	15.0	23.4	32.8	34.2	27.5	20.9	13.8	6.4	4.1	15.8	21.5
4	16.2	14.4	23.4	33.6	34.7	26.7	20.8	13.5	6.5	3.8	17.9	22.0
5	16.8	13.8	24.7	33.5	34.9	26.3	20.4	12.8	6.9	3.9	20.0	21.5
6	16.3	12.8	25.0	33.8	34.9	25.8	20.6	12.5	7.4	4.0	21.4	21.3
7	15.7	12.3	25.8	33.8	34.9	25.4	21.0	12.0	7.7	4.6	22.3	20.7
8	14.5	12.6	26.7	34.0	35.6	24.5	21.5	11.8	7.1	4.8	22.8	19.8
9	13.6	12.8	27.0	34.4	35.9	23.3	21.8	11.8	6.9	5.0	22.6	18.2
10	13.0	13.0	27.5	34.6	36.2	21.8	21.8	11.7	6.1	5.0	22.3	17.3
11	12.6	13.0	27.6	34.6	36.6	20.3	21.9	11.4	5.6	4.9	21.3	15.8
12	12.2	13.0	27.4	34.7	37.3	18.8	22.3	10.8	4.7	4.8	20.1	15.0
13	12.5	13.2	26.9	34.8	37.9	17.8	22.0	10.7	5.0	4.3	19.2	14.2
14	12.7	12.9	26.4	34.7	38.6	17.6	21.5	10.4	5.2	4.1	18.9	13.6
15	12.7	14.0	25.0	34.6	39.2	18.0	21.2	10.7	5.8	4.0	19.2	13.3
16	12.5	14.6	23.0	34.5	39.6	18.5	20.7	10.8	6.1	4.0	19.4	13.8
17	11.7	17.5	21.0	34.4	40.0	19.1	20.4	11.4	6.2	4.0	19.3	14.6
18	11.4	18.8	20.0	34.2	40.2	19.3	20.0	12.2	5.5	4.4	19.2	15.8
19	11.0	20.9	19.7	33.8	40.2	19.5	19.6	12.5	4.8	4.6	19.0	16.6
20	10.5	22.3	21.0	33.4	40.2	19.7	19.0	12.6	4.8	5.2	18.0	17.8
21	10.0	23.3	22.6	32.6	40.2	19.7	18.2	12.6	5.3	5.4	17.4	18.8
22	9.9	24.8	24.4	32.2	40.0	19.9	17.6	12.1	5.6	7.0	17.9	19.4
23	9.6	25.5	26.2	30.5	39.8	20.2	17.3	11.4	5.6	8.2	18.5	20.2
24	9.7	26.5	27.0	29.4	39.0	20.6	17.0	10.3	5.1	9.6	19.8	22.0
25	9.6	26.6	28.0	28.8	38.6	20.9	16.7	9.6	4.6	13.0	20.6	23.4
26	9.3	26.8	28.7	28.8	37.8	21.0	16.2	8.6	4.3	15.2	20.7	24.0
27	9.4	26.6	29.0	29.5	36.5	21.0	15.1	7.8	5.2	16.0	19.9	25.0
28	9.8	26.0	29.8	30.5	35.4	20.9	14.6	7.4	6.4	15.8	18.7	25.4
29	11.2	25.2	30.2	30.8	34.0	20.9	14.4	7.0	7.0	15.5	17.3	25.4
30	12.8		30.6	32.3	32.4	21.0	14.2	6.8	6.4	14.8	17.1	25.4
31	14.2		31.1		31.0		14.0	6.7		14.4		25.3

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE.

MEAN	12.54	18.22	25.68	32.78	36.64	21.78	19.19	11.01	5.91	7.24	19.17	19.53
MAX.	16.8	26.8	31.1	34.8	40.2	29.2	22.3	14.0	7.7	16.0	22.8	25.4
MIN.	9.3	12.3	19.7	28.8	31.0	17.6	14.0	6.7	4.3	3.8	14.3	13.3

HIGHEST STAGE WAS 40.20 ON MAY 21.
LOWEST STAGE WAS 3.80 ON OCT. 4.

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. LOW WATER REFERENCE PLANE AT THE FOOT OF HARBOUR CHANNEL, 1.7 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, MINUS 2.71 FEET ON JAN. 21, 1981.
DAILY EIGHT A.M. STAGE IN FEET GAGE ZERO, 178.05 FEET, N.G.V.D. OF 1929

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	32.0	15.5	17.5	20.8	33.5	39.9	16.1	11.7	5.0	2.9	12.2	22.2
2	32.7	15.3	17.3	E 20.9	33.1	39.6	15.8	10.3	5.2	3.7	10.5	E 23.5
3	33.2	14.8	17.2	E 21.2	33.0	39.3	15.5	9.9	5.4	3.9	9.2	E 25.3
4	33.7	15.0	E 16.7	E 22.0	33.5	38.9	15.9	9.1	5.4	4.2	8.2	E 26.2
5	33.9	15.2	E 16.2	E 23.1	34.2	38.3	16.6	8.7	5.7	4.3	7.5	E 26.6
6	34.0	16.5	E 16.4	24.0	35.1	37.5	17.4	8.5	5.1	4.3	6.8	E 27.3
7	33.8	17.9	E 16.2	25.0	E 35.8	36.3	17.8	8.3	4.6	3.9	6.6	E 27.8
8	33.2	18.8	16.7	26.4	36.7	34.8	E 18.0	8.4	3.4	3.6	7.0	28.4
9	32.5	19.6	17.6	27.8	38.1	33.2	E 17.9	8.3	3.0	3.2	8.3	28.8
10	30.8	20.1	19.0	28.9	E 38.9	31.6	E 17.6	8.1	3.2	3.0	9.9	29.0
11	28.6	20.3	19.9	30.0	E 39.5	30.0	E 17.4	8.2	4.0	2.7	10.6	29.2
12	26.1	20.3	-20.5	31.4	E 39.9	28.3	E 16.9	8.3	4.5	2.4	10.5	28.8
13	23.4	19.9	20.8	32.4	E 40.2	26.4	16.7	7.9	3.9	1.8	9.9	28.2
14	21.5	19.5	20.8	33.7	E 40.1	24.0	16.5	7.2	3.2	1.7	9.2	27.8
15	19.7	19.0	20.7	34.5	E 40.1	21.9	16.2	6.9	2.6	1.7	9.2	27.4
16	18.5	18.6	20.5	35.1	E 40.1	20.1	15.7	6.9	2.6	1.7	9.6	27.4
17	17.4	18.4	20.0	35.8	E 39.9	18.9	15.0	6.5	3.3	2.5	10.6	27.5
18	16.6	18.3	19.5	36.2	E 39.6	18.0	14.5	6.3	3.2	2.5	11.4	E 27.6
19	15.8	17.9	18.9	36.5	E 39.7	17.3	14.1	6.3	2.1	2.5	11.8	E 27.1
20	15.2	17.4	18.3	36.6	E 39.6	17.0	13.3	6.2	1.4	3.0	12.2	E 26.4
21	14.5	17.1	17.8	36.6	E 39.6	16.6	13.0	6.0	1.2	3.5	11.8	E 25.9
22	13.7	16.9	17.5	36.5	E 39.6	16.9	13.1	5.5	1.4	3.7	12.0	E 24.8
23	13.2	17.6	17.4	36.5	E 39.7	17.2	13.2	5.1	2.0	4.1	12.8	E 23.2
24	12.7	18.0	18.0	36.5	39.7	17.6	12.9	5.0	2.1	5.6	15.4	E 21.4
25	12.7	18.0	19.0	36.4	39.7	18.2	12.5	5.0	2.3	8.4	16.4	E 19.8
26	13.4	17.5	19.9	36.0	39.7	18.3	12.3	4.9	2.8	10.9	17.0	E 18.5
27	14.8	17.4	20.6	35.7	39.9	18.1	12.5	5.1	3.0	12.8	18.8	E 17.7
28	15.8	17.6	20.8	35.4	40.0	17.8	12.9	5.3	2.8	14.0	20.4	E 17.0
29	16.3		20.8	34.6	40.1	17.2	13.7	5.5	2.6	14.5	21.1	E 16.7
30	16.5		21.0	34.0	40.0	16.4	13.9	5.1	2.6	14.5	21.4	E 16.3
31	16.0		21.0		40.0		13.3	5.0		13.7		E 15.3

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE.

MEAN	22.33	17.80	18.85	31.35	38.34	25.52	15.10	7.08	3.32	5.33	11.94	24.48
MAX.	34.0	20.3	21.0	36.6	40.2	39.9	18.0	11.7	5.7	14.5	21.4	29.2
MIN.	12.7	14.8	16.2	20.8	33.0	16.4	12.3	4.9	1.2	1.7	6.6	15.3

E- ESTIMATED.

HIGHEST STAGE WAS 40.23 ON MAY 13.

LOWEST STAGE WAS 1.20 ON SEP. 21.

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. LOW WATER REFERENCE PLANE AT THE FOOT OF HARBOUR CHANNEL, 1.7 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, MINUS 2.71 FEET ON JAN. 21, 1981.
DAILY EIGHT A.M. STAGE IN FEET GAGE ZERO, 178.05 FEET, N.G.V.D. OF 1929

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	14.8	25.8	30.0	32.4	19.4	18.5	13.0	13.5	9.5	6.7	6.0	18.0
2	14.6	26.5	30.0	32.3	18.8	19.4	12.8	13.1	10.6	6.4	5.8	19.0
3	13.9	27.4	29.7	32.2	18.5	20.5	12.8	12.0	11.8	6.0	5.8	19.8
4	13.3	28.1	29.6	31.6	18.2	22.2	13.5	11.7	13.1	5.5	5.9	21.8
5	13.2	28.6	29.3	30.9	17.7	23.7	13.9	11.3	14.2	5.0	6.1	23.2
6	12.4	28.8	28.5	29.9	17.2	24.5	14.5	10.9	17.0	4.2	6.7	25.6
7	14.2	28.7	27.3	28.7	16.6	25.0	15.0	10.2	18.3	4.2	6.9	27.8
8	18.8	28.1	25.7	27.8	16.2	24.5	15.8	10.0	18.4	4.1	8.3	28.9
9	20.1	28.4	24.2	27.3	16.2	23.7	17.0	9.9	16.7	4.1	9.6	30.0
10	21.1	27.9	23.7	26.7	15.9	23.6	18.2	9.8	15.0	4.2	9.5	31.1
11	21.4	27.6	21.7	26.1	15.8	23.5	18.8	9.4	12.8	4.2	9.5	32.0
12	21.7	27.2	21.0	25.2	15.5	23.8	18.7	9.9	11.6	4.3	9.5	32.5
13	21.4	27.3	20.6	24.6	15.2	24.2	18.1	10.6	10.2	4.6	8.8	32.8
14	20.8	27.0	20.0	23.6	15.2	24.5	17.7	11.3	9.1	5.2	7.9	32.9
15	19.6	26.8	20.1	22.8	15.5	24.6	17.5	11.5	8.3	5.8	7.0	32.9
16	17.8	26.3	20.5	E 21.8	15.2	25.2	16.5	11.0	8.3	6.5	7.0	32.6
17	15.6	25.6	21.4	E 21.4	14.7	25.1	15.5	10.2	8.8	7.8	7.0	32.2
18	13.2	24.7	22.7	E 20.9	14.0	24.9	14.8	8.9	9.4	8.4	7.8	31.6
19	11.6	23.8	24.4	E 20.6	13.1	24.7	14.4	8.3	9.8	8.0	9.0	31.1
20	10.0	23.2	25.8	E 20.8	12.6	24.2	14.0	10.4	10.4	7.8	10.8	30.4
21	9.1	23.2	27.2	21.1	12.8	23.8	14.1	12.4	11.1	7.9	11.5	29.8
22	8.5	24.0	28.1	22.1	13.5	23.6	14.1	13.3	11.2	7.6	12.2	29.2
23	8.5	25.4	29.0	22.6	14.1	22.9	14.5	13.0	10.8	7.2	12.3	28.6
24	8.8	26.4	29.7	23.0	14.8	22.0	15.0	11.9	10.3	7.0	13.3	27.9
25	12.0	27.3	30.4	23.3	16.0	20.0	16.0	10.6	9.8	6.8	13.4	27.4
26	17.8	28.2	30.9	23.0	16.7	19.2	16.5	9.4	9.5	6.5	14.2	27.5
27	21.2	28.8	31.4	22.7	16.9	18.2	17.0	9.0	9.1	6.2	14.7	27.8
28	23.0	29.5	31.9	21.6	17.0	17.6	17.3	8.5	8.5	6.0	15.0	28.4
29	24.0		32.4	20.5	17.7	15.5	17.0	8.3	8.1	5.8	16.3	29.4
30	25.0		32.4	19.8	18.2	13.9	16.0	8.5	7.0	5.8	17.0	30.2
31	25.6		32.5		18.3		14.6	8.9		6.0		31.0

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE.

MEAN	16.54	26.80	26.84	24.91	16.05	22.23	15.63	10.57	11.29	5.99	9.82	28.49
MAX.	25.6	29.5	32.5	32.4	19.4	25.2	18.8	13.5	18.4	8.4	17.0	32.9
MIN.	8.5	23.2	20.0	19.8	12.6	13.9	12.8	8.3	7.0	4.1	5.8	18.0

E- ESTIMATED.

HIGHEST STAGE WAS 32.90 ON DEC 14.

LOWEST STAGE WAS 4.10 ON OCT 9.

DAILY STAGES FOR 1981

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. LOW WATER REFERENCE PLANE AT THE FOOT OF HARBOUR CHANNEL, 1.7 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, MINUS 1.2 FEET ON FEB. 7, 1977.

DAILY EIGHT A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, N.G.V.D. OF 1929

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	E -0.6	-0.2	18.8	4.0	19.2	24.1	20.6	18.8	5.8	2.3	7.0	4.8
2	E -0.9	0.6	19.7	4.5	18.1	23.1	20.5	19.7	5.8	2.8	8.2	5.4
3	E -1.0	2.0	20.3	5.9	16.9	22.6	20.0	20.6	6.5	3.0	9.2	6.1
4	E -0.9	2.7	20.9	7.5	15.8	22.4	19.3	21.3	7.5	3.5	9.7	7.6
5	E -0.8	4.1	20.9	8.9	14.5	22.4	18.8	20.7	9.0	3.6	9.7	9.4
6	E -0.3	6.0	20.6	9.6	14.2	23.3	18.4	19.7	10.4	3.5	9.5	10.6
7	E -0.2	8.5	20.6	9.0	13.8	23.8	18.1	18.5	11.8	3.0	8.8	10.9
8	E -0.4	10.9	20.2	8.3	14.2	24.3	18.3	17.2	12.7	2.8	8.5	11.2
9	E -0.7	12.5	19.6	8.8	14.6	24.9	18.9	16.0	13.5	3.2	9.8	11.6
10	E -1.4	13.0	18.8	10.4	14.8	25.5	19.6	15.0	13.3	3.6	11.4	11.9
11	-1.7	12.5	18.0	11.8	14.5	26.0	20.2	14.8	13.1	3.7	11.4	11.2
12	-1.9	11.2	17.8	12.3	13.6	26.3	20.4	14.5	12.4	3.6	10.7	10.0
13	-2.0	9.6	16.6	12.5	13.1	25.8	20.7	14.0	11.2	3.5	9.8	8.8
14	-1.9	8.8	16.0	12.0	13.1	25.5	19.5	14.0	10.1	3.5	8.8	8.1
15	-1.9	8.1	15.3	11.6	13.4	25.2	18.2	13.6	9.3	3.8	8.0	7.2
16	-2.1	8.0	13.9	10.9	13.9	25.1	16.8	12.6	8.5	3.8	7.5	6.9
17	-2.0	8.0	12.0	11.4	14.9	25.2	15.6	11.7	8.0	3.8	7.2	6.4
18	-2.2	8.1	10.5	12.5	15.5	25.3	14.4	11.2	7.5	4.5	6.0	6.5
19	-2.4	8.8	9.1	14.7	16.0	25.2	13.6	10.7	6.9	4.5	5.2	6.0
20	-2.7	9.2	7.5	16.7	16.9	25.1	13.3	10.4	6.4	4.5	4.5	5.6
21	E -2.7	9.2	6.5	18.3	19.2	25.1	13.3	10.0	6.4	4.7	4.0	5.5
22	E -2.6	9.5	6.0	19.0	22.1	E 24.8	13.5	9.8	6.0	5.5	3.3	5.6
23	E -2.5	11.0	5.9	19.6	24.4	24.5	13.7	9.8	5.7	6.2	3.1	5.4
24	E -2.4	13.5	5.7	19.8	E 26.0	24.0	14.7	9.8	4.8	6.3	3.1	E 4.9
25	E -2.3	15.8	5.2	20.5	E 26.8	23.7	15.9	9.0	4.2	6.4	3.2	5.3
26	E -2.3	16.0	5.0	20.9	27.6	22.9	16.6	8.1	3.7	6.7	3.7	6.7
27	E -2.3	17.5	4.4	20.6	27.5	22.3	17.1	7.7	3.4	6.7	4.3	9.0
28	E -2.2	18.0	E 3.9	20.5	27.2	21.7	17.4	7.4	2.7	6.3	4.6	11.0
29	E -1.6		E 3.8	20.4	26.6	21.1	17.7	7.1	2.1	6.3	5.0	12.4
30	E -1.1		3.5	20.4	25.9	20.3	17.8	6.8	1.7	6.4	4.5	13.6
31	-0.6		3.5		25.3		18.2	6.1		6.6		14.2

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE.

MEAN	-1.62	9.39	12.59	13.44	18.69	24.04	17.45	13.11	7.67	4.47	6.99	8.38
MAX.	-0.2	18.0	20.9	20.9	27.6	26.3	20.7	21.3	13.5	6.7	11.4	14.2
MIN.	-2.7	-0.2	3.5	4.0	13.1	20.3	13.3	6.1	1.7	2.3	3.1	4.8

E- ESTIMATED.

HIGHEST STAGE WAS 27.60 ON MAY 26.

LOWEST STAGE WAS -2.71 ON JAN. 21.

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. LOW WATER REFERENCE PLANE AT THE FOOT OF HARBOUR CHANNEL, 1.7 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, MINUS 1.2 FEET ON FEB. 7, 1977.

DAILY EIGHT A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, N.G.V.D. OF 1929

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	20.7	16.3	16.6	33.0	19.8	15.8	10.8	6.5	12.0	6.4	4.6	6.5
2	21.4	15.4	17.6	33.3	17.9	13.6	11.3	5.5	10.0	6.0	4.7	7.2
3	21.5	13.9	17.2	33.3	16.6	13.0	12.0	5.8	8.3	6.3	4.4	7.5
4	21.5	13.2	16.8	33.4	15.7	11.4	12.2	6.5	6.6	6.9	4.3	7.6
5	21.2	12.1	15.7	33.7	15.5	10.8	12.2	6.8	5.9	6.9	4.4	7.5
6	20.5	11.6	14.5	33.7	15.3	10.6	12.2	7.0	6.0	6.6	4.3	6.6
7	19.5	10.8	13.4	33.7	15.3	11.9	12.4	6.2	7.1	6.2	4.0	5.2
8	18.0	9.8	12.5	33.8	15.5	14.8	13.0	5.5	7.7	5.7	4.1	4.6
9	16.5	8.9	12.5	33.6	15.0	17.1	12.7	5.5	8.1	5.4	4.2	4.4
10	15.5	7.5	13.4	32.8	14.5	18.5	11.9	6.2	9.2	5.5	3.7	4.7
11	15.0	6.5	15.6	32.1	13.5	19.3	11.0	6.9	10.0	5.4	3.2	4.8
12	14.6	5.9	18.0	31.7	12.3	19.6	10.0	7.4	10.2	5.0	3.0	4.7
13	14.2	7.4	19.8	31.0	11.2	19.2	9.4	7.6	9.9	5.0	2.1	4.7
14	14.0	7.5	21.0	31.0	9.8	18.6	9.3	7.7	8.5	3.5	2.0	6.1
15	14.4	7.6	21.8	30.4	8.5	18.2	10.0	7.0	7.6	2.3	2.0	8.2
16	15.2	7.3	22.1	29.8	8.8	17.8	10.9	6.8	6.8	1.4	1.7	10.2
17	16.4	6.8	23.2	29.2	7.9	17.4	11.6	7.2	6.5	1.3	1.5	11.2
18	17.3	8.0	23.3	29.2	8.6	17.0	12.2	8.6	6.4	1.1	2.2	10.2
19	17.8	9.0	23.5	29.2	8.8	15.7	12.0	10.4	6.2	-0.2	2.4	10.1
20	18.0	9.7	24.2	29.4	9.8	16.0	11.5	11.9	6.7	-0.4	2.6	7.7
21	17.9	10.8	25.4	29.5	12.5	15.6	11.5	12.7	7.1	0.8	3.0	6.2
22	17.7	11.3	26.0	29.5	14.3	15.4	9.6	12.7	7.3	0.7	3.7	5.2
23	17.7	12.2	26.9	29.4	17.0	15.1	7.4	13.0	7.3	2.8	4.6	4.0
24	17.8	12.8	27.9	29.2	17.4	15.6	6.1	13.3	7.0	2.8	5.2	3.4
25	18.0	12.8	28.8	28.8	17.1	15.1	4.4	14.0	7.0	1.7	5.8	3.2
26	18.3	13.0	29.4	28.4	16.9	14.3	4.1	14.8	7.4	1.4	4.5	2.5
27	18.6	12.6	30.3	27.6	16.8	13.7	4.8	15.2	7.5	1.4	4.0	0.8
28	18.5	13.4	31.0	26.4	16.9	13.3	6.4	15.4	7.2	2.0	4.3	-0.4
29	18.1	15.4	31.8	24.5	17.1	12.6	7.4	15.2	7.2	1.5	4.8	-1.1
30	17.6		32.2	22.5	17.0	11.9	8.0	14.8	6.9	1.7	5.8	-1.1
31	17.2		32.7		16.4		7.8	14.1		3.9		E -1.1

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE.

MEAN	17.76	10.67	22.10	30.44	14.18	15.30	9.87	9.62	7.72	3.45	3.70	5.20
MAX.	21.5	16.3	32.7	33.8	19.8	19.6	13.0	15.4	12.0	6.9	5.8	11.2
MIN.	14.0	5.9	12.5	22.5	7.9	10.6	4.1	5.5	5.9	-0.4	1.5	-1.1

E- ESTIMATED.

HIGHEST STAGE WAS 33.80 ON APR. 8.

LOWEST STAGE WAS -1.15 ON DEC. 31.

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. LOW WATER REFERENCE PLANE AT THE FOOT OF HARBOUR CHANNEL, 1.7 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, MINUS 1.2 FEET ON FEB. 7, 1977.

MEAN. NOT COMPUTED FOR PERIOD OF RECORD.

DAILY EIGHT A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, N.G.V.D. OF 1929

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	19.1	26.5	28.0	32.7	36.4	20.8	16.7	19.6	19.0	21.3	9.9	24.8
2	19.0	26.6	29.1	33.5	35.3	21.1	16.0	20.5	19.8	20.8	10.1	25.5
3	18.5	26.2	30.0	33.9	34.1	21.0	15.0	20.9	19.8	20.2	9.9	26.0
4	19.6	25.6	31.5	34.5	33.3	22.6	13.7	21.1	20.1	19.5	9.7	26.4
5	20.1	24.1	32.2	34.9	32.0	23.0	13.3	21.2	19.6	19.4	10.9	27.0
6	21.9	22.1	32.7	35.3	31.1	22.5	13.0	21.0	19.7	19.2	12.5	26.2
7	23.0	20.0	33.5	35.7	29.7	22.0	13.5	20.6	19.2	18.9	13.9	26.0
8	22.9	17.7	34.4	36.2	30.4	21.4	13.4	19.8	18.2	18.6	14.8	25.3
9	24.0	15.8	35.5	36.7	30.4	20.4	13.5	19.0	17.3	18.6	15.8	23.9
10	24.6	14.2	36.7	37.2	30.4	19.8	13.8	18.2	16.0	17.4	16.8	22.1
11	25.0	13.0	37.9	37.4	30.5	19.4	14.1	17.7	15.6	16.8	17.0	20.0
12	25.4	12.0	38.3	37.9	30.7	19.2	14.5	17.0	15.0	16.2	17.0	18.3
13	25.5	11.3	38.7	38.0	30.7	19.3	14.1	16.7	14.2	15.8	16.6	17.9
14	25.6	10.7	38.9	38.0	30.3	19.5	14.1	16.4	14.2	15.1	17.4	17.0
15	25.3	10.2	38.9	38.0	29.9	19.5	14.5	16.1	13.7	14.8	17.6	16.5
16	25.0	9.8	38.8	38.4	29.1	19.3	14.6	16.1	13.3	14.6	18.0	16.4
17	24.3	9.5	38.3	38.6	28.0	18.6	14.7	16.4	14.0	14.7	18.0	17.1
18	23.4	9.3	38.3	39.1	26.9	18.4	15.0	16.4	15.2	15.2	18.2	18.3
19	22.2	9.9	38.0	39.6	25.9	17.3	15.3	16.2	18.5	15.5	17.8	19.0
20	21.3	10.3	37.9	39.9	25.1	16.2	15.1	15.5	20.0	15.7	17.3	19.8
21	20.5	11.6	37.7	40.4	24.5	15.3	15.0	14.3	20.8	15.4	16.5	19.8
22	19.9	13.0	37.4	40.4	24.0	14.6	15.0	12.0	20.7	15.0	16.8	19.4
23	19.9	15.0	37.4	40.5	23.6	14.1	15.0	10.8	19.9	14.1	16.9	18.5
24	21.5	16.6	36.7	40.6	22.7	14.1	14.8	11.3	19.1	13.1	16.3	17.7
25	22.3	18.9	36.0	40.2	21.6	14.7	14.3	12.5	19.0	12.4	16.0	16.6
26	23.3	21.6	35.5	39.8	20.8	15.2	14.1	14.4	19.7	11.3	15.8	15.7
27	24.3	23.0	34.9	39.1	20.2	15.9	14.2	15.8	20.6	10.7	17.3	15.7
28	25.0	26.5	34.3	38.8	19.0	16.4	15.0	16.6	21.3	10.2	20.1	17.0
29	25.6		33.8	38.0	20.2	16.8	15.1	17.8	21.5	9.9	21.7	18.6
30	26.2		33.1	37.3	20.5	16.9	16.0	18.4	21.7	9.4	23.9	20.1
31	26.5		33.1		20.3		17.2	18.6		9.0		20.7

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE.

MEAN	22.93	16.82	35.40	37.69	27.34	18.51	14.63	17.06	18.22	15.45	16.02	20.43
MAX.	26.5	26.6	38.9	40.6	36.4	23.0	17.2	21.2	21.3	23.9	27.0	
MIN.	18.5	9.3	28.0	32.7	19.0	14.1	13.0	10.8	13.3	9.0	9.7	15.7

HIGHEST STAGE WAS 40.60 ON APR. 24.
LOWEST STAGE WAS 9.00 ON OCT. 31.

DAILY STAGES FOR 1978

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE,

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. LOW WATER REFERENCE PLANE AT THE FOOT OF HARBOUR CHANNEL, 2.6 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, MINUS 1.2 FEET ON FEB. 7, 1977.

DAILY SEVEN A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, M.S.L. (1929-58 ADJ.)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	19.9	21.2	7.0	35.3	23.0	23.6	12.9	13.5	7.1	10.4	5.9	12.0
2	19.0	22.2	7.2	35.3	22.7	23.0	11.7	13.2	7.8	10.3	5.9	13.6
3	18.6	23.4	8.4	35.4	22.4	22.0	12.6	13.1	8.6	9.9	6.0	14.2
4	17.8	23.9	8.8	35.4	22.7	20.7	13.6	13.4	9.0	8.6	5.4	15.0
5	17.0	24.3	9.2	35.3	22.8	18.6	14.3	14.2	9.9	7.4	4.3	15.7
6	16.1	24.8	9.2	35.1	23.0	17.9	14.7	14.1	10.4	6.5	3.5	16.1
7	15.1	24.8	9.4	34.8	23.4	16.8	14.9	14.1	11.4	6.1	3.3	18.8
8	15.3	23.1	9.8	33.0	23.2	16.0	14.9	13.8	11.3	5.7	2.5	19.4
9	15.4	21.7	10.4	33.3	22.3	15.6	14.9	13.0	10.1	5.2	1.9	23.4
10	15.0	19.7	11.3	32.4	22.0	15.6	15.0	13.6	8.7	4.9	1.6	23.6
11	14.6	17.4	13.0	31.0	22.6	15.0	15.1	12.5	7.7	4.7	2.0	24.4
12	15.5	15.0	14.0	29.5	24.0	14.8	15.6	12.3	6.9	4.5	2.0	25.5
13	17.0	13.4	14.9	27.8	25.5	14.7	15.7	12.3	6.5	4.3	2.2	26.1
14	18.6	12.9	17.0	26.2	26.5	14.8	15.4	12.5	5.3	3.6	2.0	27.4
15	19.6	11.3	18.7	25.0	27.5	14.8	15.6	12.3	6.7	3.6	1.8	27.7
16	20.5	11.0	20.8	24.5	28.2	14.8	15.5	11.9	6.2	3.4	1.7	27.9
17	21.2	10.7	23.0	24.4	28.6	14.4	15.1	11.4	6.3	3.1	2.3	28.2
18	21.0	10.7	25.2	24.3	28.9	13.5	15.1	11.4	6.8	5.7	2.4	28.4
19	20.5	10.6	26.9	24.4	29.2	13.0	15.4	11.3	6.0	6.3	2.7	28.4
20	19.2	10.5	28.2	24.3	29.5	11.1	15.8	11.2	5.8	6.9	4.8	28.5
21	18.4	10.1	29.2	24.0	29.5	10.6	16.3	10.6	5.4	7.1	6.8	28.5
22	16.7	10.0	30.1	23.6	29.5	10.4	16.6	9.3	6.5	6.9	8.5	28.4
23	15.4	9.8	31.0	23.1	29.2	10.6	16.1	8.9	8.3	6.4	9.9	28.2
24	14.9	9.5	31.8	22.9	29.0	10.7	15.2	8.3	9.4	5.7	10.8	27.6
25	15.3	9.5	32.3	22.8	28.4	11.1	13.9	7.9	10.9	5.0	11.0	26.4
26	15.4	8.0	32.9	23.0	27.8	11.5	13.0	7.4	11.5	4.3	10.3	25.4
27	15.5	7.7	33.3	23.2	27.0	11.8	12.5	6.5	11.4	3.8	9.2	25.1
28	15.8	7.5	33.9	23.3	26.3	12.2	12.3	6.0	11.2	3.1	9.2	22.6
29	16.1		34.3	23.3	25.8	12.5	12.3	5.7	10.9	2.3	10.2	21.4
30	18.0		34.8	23.2	25.0	12.8	13.2	6.0	10.5	2.1	11.5	20.5
31	19.8		35.1		24.4		13.6	6.8		3.5		19.4

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE

MEAN	17.35	15.16	20.99	27.96	25.79	14.82	14.47	10.91	8.47	5.52	5.38	23.14
MAX.	21.2	24.8	35.1	35.4	29.5	23.6	16.6	14.2	11.5	10.4	11.5	28.5
MIN.	14.6	7.5	7.0	22.8	22.0	10.4	11.7	5.7	5.3	2.1	1.6	12.0

HIGHEST STAGE WAS 35.4 ON APRIL 3 AND 4.
LOWEST STAGE WAS 1.4 ON NOV. 10.

DAILY STAGES FOR 1977

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION, LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE, VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION, LOW WATER REFERENCE PLANE AT THE FOOT OF HARBOUR CHANNEL, 2.6 FEET ON GAGE.

RECORDS AVAILABLE, STAGE, JULY 30, 1961, TO DATE;

EXTREMES, HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975, LOWEST, MINUS 0.60 FOOT ON SEPT. 21, 1976.

DAILY SEVEN A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, M.S.L. (1929-58 ADJ.)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2.8	1.7	10.2	21.1	13.5	3.6	10.5	4.7	7.2	13.0	16.9	19.8
2	3.3	1.4	14.1	21.9	13.6	2.9	11.7	4.6	6.4	12.8	16.8	20.3
3	3.2	1.0	16.8	22.4	13.6	2.8	12.5	4.2	5.4	12.6	16.1	21.1
4	2.3	0.0	19.3	22.5	13.4	2.3	12.4	3.0	4.8	12.9	15.3	21.6
5	2.3	-0.7	20.0	22.1	13.1	1.8	12.0	2.4	5.2	13.0	14.6	22.3
6	2.0	-0.9	20.8	21.5	13.4	1.7	11.0	2.5	5.1	14.4	14.5	23.9
7	2.2	-1.2	21.8	21.4	13.5	1.5	10.8	1.0	5.1	14.6	16.8	25.4
8	2.3	-0.9	22.8	22.3	13.4	1.5	10.7	0.6	5.6	16.4	18.1	25.9
9	2.5	-0.1	23.5	23.5	13.2	1.7	10.5	0.4	6.8	16.6	19.3	26.6
10	1.7	-0.5	24.0	24.7	13.1	1.7	10.1	-0.1	8.1	16.6	19.5	26.9
11	2.2	-0.8	24.4	25.8	14.4	1.8	8.3	-1.0	9.5	16.7	19.4	27.0
12	3.4	-0.9	24.7	26.5	15.6	1.8	7.8	0.6	10.0	16.7	19.2	27.0
13	3.3	-0.4	24.8	26.9	16.7	1.8	7.1	1.9	10.0	17.2	19.4	27.0
14	3.3	-0.1	24.3	27.0	17.0	1.8	6.9	5.6	9.5	17.8	19.3	27.0
15	3.3	-0.1	24.6	27.3	16.8	1.9	7.1	8.0	8.9	18.1	19.5	26.7
16	3.1	1.1	25.1	27.0	16.1	2.8	7.2	8.9	8.1	18.2	20.2	26.4
17	3.4	1.9	25.3	26.7	14.7	3.7	6.8	10.5	7.6	18.0	20.5	25.7
18	4.0	5.0	25.3	26.1	13.0	4.0	6.5	11.2	7.7	17.6	20.1	25.1
19	4.3	7.0	25.2	25.0	11.6	3.3	6.7	12.3	9.7	16.6	19.4	24.4
20	4.5	8.6	24.7	23.4	10.3	1.7	7.0	13.1	12.8	15.6	18.7	23.9
21	5.0	9.2	24.6	22.0	9.0	0.6	6.8	14.0	14.8	14.3	18.1	23.5
22	4.5	9.2	24.3	17.9	8.0	0.8	6.5	14.0	15.0	13.1	18.0	23.4
23	4.6	8.4	23.1	15.3	7.3	1.3	4.2	13.5	15.2	12.5	18.0	23.5
24	4.5	7.5	22.0	13.2	7.0	2.0	3.7	12.3	14.8	12.1	18.3	23.7
25	4.3	7.0	21.0	11.4	6.0	2.3	3.5	11.3	15.2	11.3	18.9	23.6
26	4.1	6.9	20.1	11.2	5.5	2.1	4.6	9.9	14.4	11.3	19.6	23.3
27	4.1	7.5	19.5	11.8	4.5	3.3	5.2	8.5	14.2	11.3	19.8	23.0
28	3.8	7.8	18.7	12.5	4.2	4.2	4.1	7.3	14.0	11.1	19.9	22.6
29	3.7		18.3	13.1	4.6	7.1	4.8	7.6	13.4	11.5	19.8	22.0
30	3.2		18.6	13.2	4.8	8.9	5.1	7.8	13.1	13.4	19.7	21.3
31	2.4		20.0		4.4		5.1	7.4		14.8		20.5

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE

MEAN	3.33	3.02	21.66	20.88	11.13	2.61	7.64	8.70	9.91	14.57	18.45	24.00
MAX.	5.0	9.2	25.3	27.3	17.0	8.9	12.5	14.0	15.2	18.2	20.5	27.0
MIN.	1.7	-1.2	10.2	11.2	4.2	0.6	3.5	-1.0	4.8	11.1	14.5	19.8

HIGHEST STAGE WAS 27.30 AT 800 A.M., APR. 15.

LOWEST STAGE WAS MINUS 1.20 AT 800 A.M., FEB. 7.

DAILY STAGES FOR 1976

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION: LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE, VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION, AVERAGE LOW WATER PLANE AT THE FOOT OF HARBOR CHANNEL, 3.5 FEET ON GAGE.

RECORDS AVAILABLE, STAGE, JULY 30, 1961, TO DATE;

EXTREMES: HIGHEST, 41.9 FEET ON APR. 7 AND 8, 1975. LOWEST, 0.4 FOOT ESTIMATED FOR JAN. 3, 1964.

DAILY SEVEN A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, M.S.L. (1929-58 ADJ.)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	18.5	19.2	28.4	23.5	17.1	9.8	12.3	8.8	2.6	1.0	8.2	2.0
2	19.5	20.2	28.4	23.7	E 17.9	10.6	12.0	7.8	2.9	1.8	8.8	2.3
3	20.8	20.5	28.3	24.0	E 18.7	11.6	11.9	6.9	2.1	3.9	9.6	3.4
4	21.3	21.1	28.1	24.2	E 19.0	12.9	11.7	6.6	2.1	3.9	10.2	3.5
5	22.0	21.2	27.9	24.5	E 19.3	14.1	11.6	6.8	3.0	3.3	10.4	4.0
6	22.9	21.1	27.2	24.4	E 19.0	15.1	12.8	7.2	2.3	3.0	10.4	3.9
7	23.8	20.6	26.2	24.4	E 18.4	15.7	13.8	7.4	1.2	3.3	10.4	3.8
8	24.4	19.8	25.5	24.1	E 17.5	16.0	14.2	7.0	0.5	3.5	10.4	3.0
9	25.0	18.7	25.4	23.6	16.9	15.7	13.8	5.9	0.4	3.2	10.0	2.7
10	25.4	17.3	25.4	23.0	16.2	15.2	13.1	4.4	0.1	2.2	9.4	2.5
11	25.6	16.1	25.3	22.2	15.6	14.4	12.4	4.0	-0.1	1.7	8.4	2.9
12	25.7	15.1	25.3	21.5	15.1	12.9	11.6	3.9	0.0	1.3	7.1	3.3
13	25.5	14.4	25.2	20.2	14.9	11.5	11.0	4.3	0.0	1.8	5.8	4.5
14	25.1	14.0	24.5	19.0	14.4	10.0	10.5	3.9	0.0	2.9	4.8	6.4
15	24.1	13.9	23.8	18.0	13.6	9.0	10.3	3.8	0.0	4.3	4.4	8.5
16	22.5	13.7	22.8	17.1	12.9	8.0	9.7	3.7	0.5	6.6	3.9	9.5
17	21.0	13.5	22.7	16.3	12.9	7.0	9.1	3.5	0.1	8.8	3.5	9.6
18	19.5	13.7	22.2	15.4	13.3	7.0	9.0	2.8	0.0	10.7	3.4	9.2
19	18.6	15.6	22.3	14.9	13.6	7.5	10.0	3.4	0.0	12.0	2.9	8.6
20	18.5	17.9	21.7	14.2	13.8	7.6	10.0	4.0	0.0	11.8	2.7	7.7
21	18.8	20.5	21.5	13.8	14.5	7.9	9.5	4.8	-0.6	10.4	2.6	7.0
22	19.0	23.1	21.5	13.4	15.4	8.1	8.4	4.9	-0.3	8.1	2.3	6.6
23	18.6	24.5	20.9	13.0	16.0	8.6	7.6	4.2	-0.3	5.9	2.0	4.9
24	17.8	25.5	20.8	12.8	16.2	9.6	7.1	3.9	0.0	4.5	2.1	4.4
25	16.9	26.4	20.7	13.1	15.4	10.5	6.2	3.2	-0.2	4.0	1.7	4.8
26	16.0	27.3	21.2	13.9	14.1	10.9	5.5	2.8	-0.2	4.0	1.1	4.9
27	15.1	27.9	21.6	14.9	13.0	11.4	6.1	1.5	-0.5	4.1	1.5	4.2
28	14.5	28.4	21.9	15.7	12.0	12.0	6.9	1.2	-0.2	4.7	1.7	3.7
29	15.3	28.4	22.4	16.2	11.4	12.3	7.2	1.5	-0.2	6.2	1.8	3.3
30	16.7		23.3	16.6	10.3	12.2	7.8	1.9	-0.2	7.4	2.3	3.0
31	18.2		23.5		9.6		8.4	2.1		7.8		2.9

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE

MEAN	20.53	19.98	24.05	18.71	15.09	11.16	10.04	4.44	0.50	5.09	5.45	4.86
MAX.	25.7	28.4	28.4	24.5	E 19.3	16.0	14.2	8.8	3.0	12.0	10.4	9.6
MIN.	14.5	13.5	20.7	12.8	9.6	7.0	5.5	1.2	-0.6	1.0	1.1	2.0

E- ESTIMATED

HIGHEST STAGE WAS 28.4 FROM FEB. 28 TO MAR. 2,

LOWEST STAGE WAS MINUS 0.6 ON SEP. 21.

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. AVERAGE LOW WATER PLANE AT THE FOOT OF HARBOR CHANNEL, 3.5 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE;

EXTREMES. HIGHEST, 41.5 FEET ON MAY 8, 1973. LOWEST, 0.4 FOOT ESTIMATED FOR JAN. 3, 1964.

DAILY SEVEN A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, M.S.L. (1929-58 ADJ.)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	19.7	23.0	30.1	39.6	29.4	20.3	17.4	10.7	8.7	15.2	15.0	12.5
2	20.4	23.1	30.8	39.9	30.3	20.2	17.5	10.1	9.3	16.8	13.8	12.9
3	21.5	23.7	31.2	40.6	31.2	19.7	18.0	9.2	10.3	316.5	12.9	13.4
4	23.4	24.9	31.5	41.0	31.8	19.2	18.3	8.7	10.8	15.4	12.1	14.1
5	22.9	26.4	31.5	41.4	32.2	18.9	18.0	9.0	11.2	14.0	11.2	15.5
6	23.5	27.2	31.5	41.8	32.4	19.3	17.1	9.4	12.1	12.1	10.5	17.6
7	24.1	27.8	31.6	41.9	32.5	19.4	16.4	9.3	12.9	10.5	10.5	18.4
8	24.1	28.0	31.6	41.9	32.6	19.4	16.3	8.7	13.1	9.8	10.3	19.0
9	24.3	28.0	31.5	41.7	32.8	19.3	16.6	8.5	13.2	9.4	9.7	18.9
10	24.0	28.5	31.2	41.5	32.8	19.0	17.0	8.7	11.4	8.9	9.7	18.0
11	24.2	28.7	31.0	41.3	32.7	18.6	17.1	9.0	10.4	8.5	10.0	17.0
12	24.1	28.9	30.9	40.6	32.7	18.4	16.4	9.3	10.4	9.0	10.3	16.4
13	24.0	28.9	31.6	39.9	32.6	18.5	15.8	9.0	10.0	9.5	10.5	16.0
14	25.0	28.8	31.5	39.1	32.3	18.6	15.7	8.3	9.7	9.7	10.8	15.6
15	26.1	28.7	31.2	38.0	32.1	18.5	15.5	7.5	9.5	10.0	11.0	15.2
16	27.0	28.5	31.3	36.6	31.8	18.4	14.8	7.0	9.8	10.4	11.1	15.0
17	27.6	28.3	31.7	34.9	31.0	18.1	14.2	6.9	9.9	10.6	11.6	14.5
18	28.0	27.8	32.7	32.4	30.0	17.9	13.0	7.0	10.4	10.5	12.8	14.4
19	28.1	27.0	33.7	29.5	28.7	18.0	13.0	7.6	11.0	10.2	14.5	14.9
20	28.0	26.3	34.6	26.5	27.4	18.2	12.8	8.6	11.0	10.8	16.2	16.2
21	27.4	25.6	35.3	24.3	26.4	18.7	12.6	9.1	10.4	12.9	17.0	17.5
22	26.7	25.1	36.0	22.9	25.6	18.8	12.5	9.8	10.1	16.0	16.9	18.5
23	25.8	25.1	36.6	22.1	25.2	19.0	12.8	10.1	10.2	18.5	16.1	18.7
24	25.1	25.3	37.3	21.7	24.8	18.9	12.8	9.9	10.6	19.6	14.9	18.5
25	24.6	25.6	37.6	21.6	24.2	18.7	12.9	8.7	11.4	20.2	14.0	18.2
26	24.1	27.4	37.8	21.8	23.7	18.3	13.4	7.7	12.4	20.3	13.0	17.9
27	23.9	28.5	37.9	23.3	23.1	18.0	13.0	7.0	13.1	19.9	12.6	17.1
28	23.9	29.2	38.5	25.3	22.1	17.6	12.7	6.4	13.5	19.4	12.3	16.4
29	23.9		38.9	26.9	21.2	17.0	12.3	6.2	13.9	18.6	12.1	15.8
30	23.6		38.9	28.4	20.8	17.0	12.1	6.9	15.0	17.4	11.8	16.0
31	23.4		39.1		20.5		11.3	7.9		16.3		16.9

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE

MEAN	24.58	26.93	33.75	33.60	28.60	18.65	14.81	8.45	11.18	23.44	12.50	16.34
MAX.	28.1	29.2	39.1	41.9	32.8	20.3	18.3	10.7	15.0	316.5	17.0	19.0
MIN.	19.7	23.0	30.1	21.6	20.5	17.0	11.3	6.2	8.7	8.5	9.7	12.5

HIGHEST STAGE WAS 41.90 FROM 800 A.M., APR. 7 TO 800 A.M., APR. 8.
LOWEST STAGE WAS 6.20 FROM 400 P.M., AUG. 28 TO 800 A.M., AUG. 29.

DAILY STAGES FOR 1974

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE, VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION, AVERAGE LOW WATER PLANE AT THE FOOT OF HARBOR CHANNEL, 3.5 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 41.5 FEET ON MAY 8, 1973. LOWEST, 0.4 FOOT ESTIMATED FOR JAN, 3, 1964.

DAILY SEVEN A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, M.S.L. (1929-58 ADJ.)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	27.0	37.4	28.4	29.3	22.6	29.6	24.4	9.0	10.3	8.4	5.5	15.8
2	28.0	37.4	28.4	28.6	21.8	29.3	24.6	9.0	12.2	8.0	5.4	15.5
3	28.6	37.8	28.1	27.4	21.5	29.0	25.0	9.2	13.3	9.3	5.2	15.2
4	28.9	37.8	27.3	26.3	21.0	28.9	25.2	9.1	13.8	9.5	5.1	14.8
5	29.0	37.8	26.6	25.4	20.6	29.4	24.9	9.0	14.3	9.6	5.9	14.6
6	29.0	37.9	25.8	25.2	20.3	29.8	24.6	8.9	15.5	9.6	6.0	14.9
7	29.1	38.0	24.8	25.5	20.2	30.7	24.1	8.5	16.6	9.6	6.9	15.5
8	29.4	37.9	23.9	26.1	20.5	31.5	23.5	8.2	16.9	8.5	9.0	16.5
9	29.8	37.8	23.5	26.7	20.7	31.9	21.8	8.2	17.2	7.9	11.9	17.3
10	30.2	37.5	23.6	27.3	20.8	32.2	22.0	8.1	17.6	7.7	14.6	17.8
11	31.3	37.2	24.3	27.8	20.8	32.3	21.3	8.1	17.7	7.0	15.8	17.7
12	31.5	36.7	25.3	28.5	20.6	32.5	20.6	8.5	17.5	6.2	15.8	17.7
13	31.8	36.0	26.0	29.0	20.3	32.8	19.6	8.9	16.7	6.0	15.0	18.0
14	32.1	35.2	26.7	29.4	19.9	32.8	18.7	9.8	15.8	6.0	14.4	18.4
15	32.4	34.3	27.2	29.7	19.8	32.8	17.7	11.1	14.9	5.8	14.1	18.8
16	32.5	33.2	27.8	29.9	19.7	32.8	17.0	12.0	14.6	5.4	14.8	19.0
17	32.9	31.1	28.2	30.1	19.9	32.4	15.9	13.2	14.9	5.4	15.1	19.3
18	33.4	29.1	28.6	30.2	20.6	31.8	14.6	13.5	15.1	5.8	15.1	19.4
19	33.9	27.4	29.3	30.3	21.8	31.2	13.5	12.6	15.3	6.5	15.2	19.2
20	34.5	26.1	29.9	30.0	23.3	30.3	13.4	11.4	15.1	7.3	15.4	19.1
21	34.8	25.3	30.4	29.5	24.6	29.0	13.1	10.8	14.6	7.9	15.2	18.7
22	35.0	25.5	30.8	29.6	25.5	27.5	12.9	10.5	13.7	8.1	15.0	18.5
23	35.4	25.6	31.0	29.0	26.0	26.0	12.6	10.2	12.0	8.2	15.0	18.4
24	35.5	26.5	31.1	28.0	26.5	24.6	12.2	9.5	11.2	8.2	14.8	18.4
25	36.1	27.1	31.0	27.3	27.1	23.6	11.5	9.0	9.9	8.0	14.7	18.5
26	36.3	27.7	30.9	26.3	27.7	23.0	11.1	8.6	9.3	7.2	14.6	18.1
27	36.5	28.0	30.6	25.4	28.2	22.8	10.6	8.5	9.2	6.6	14.7	17.9
28	36.9	28.5	30.5	24.5	28.5	23.0	10.0	8.4	9.8	6.0	15.1	17.8
29	36.9		30.3	23.8	28.7	23.3	9.6	8.2	10.0	5.9	15.7	17.8
30	36.9		30.1	23.2	28.7	23.9	9.4	8.3	9.4	5.7	15.9	18.4
31	36.9		29.8		28.8		9.2	8.8		5.8		18.8

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE

MEAN	32.65	32.77	28.06	27.63	23.12	29.01	17.24	9.57	13.80	7.32	12.55	17.60
MAX.	36.9	38.0	31.1	30.3	28.8	32.8	25.2	13.5	17.7	9.6	15.9	19.4
MIN.	27.0	25.3	23.5	23.2	19.7	22.8	9.2	8.1	9.2	5.4	5.1	14.6

HIGHEST STAGE WAS 38.0 ON FEB. 6 AND 7.

LOWEST STAGE WAS 5.1 ON NOV. 3 AND 4.

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. AVERAGE LOW WATER PLANE AT THE FOOT OF HARBOR CHANNEL, 3.5 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 37.7 FEET ON MAR. 19, 20, AND 21, 1962. LOWEST, 0.4 FOOT ESTIMATED FOR JAN. 3, 1964.

DAILY SEVEN A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, M.S.L. (1929-58 ADJ.)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	31.3	27.3	A	40.6	39.5	30.2	21.8	20.8	10.5	9.6	13.8	26.5
2	31.0	27.2	A	40.6	40.0	30.5	21.3	20.2	10.1	12.0	14.0	27.8
3	30.7	26.8	A	40.7	40.3	30.8	21.4	19.3	10.0	14.2	14.7	28.8
4	30.8	26.6	16.9	40.9	40.5	31.0	21.4	18.7	10.0	16.3	15.6	29.6
5	30.8	26.5	17.2	41.0	40.9	31.2	21.3	18.0	9.2	18.1	16.5	30.1
6	30.8	26.4	17.2	41.0	41.0	31.4	19.8	16.9	8.3	19.2	16.6	30.8
7	30.8	26.5	17.7	41.0	41.3	31.5	20.1	15.9	8.5	19.7	16.5	31.2
8	30.8	27.2	17.9	40.9	41.4	31.6	19.5	14.7	8.8	20.0	16.3	31.4
9	30.6	27.7	18.6	40.8	41.4	31.6	19.4	14.0	8.6	20.1	16.0	31.7
10	30.4	28.2	20.1	40.6	41.3	31.6	19.5	13.4	8.4	20.2	15.5	32.0
11	30.2	28.8	22.7	40.2	41.2	31.4	20.1	12.7	8.3	20.2	14.8	32.0
12	29.8	29.2	24.7	40.0	41.1	31.2	20.0	12.0	7.7	20.0	14.0	31.8
13	29.2	29.3	26.4	39.8	41.0	31.2	19.2	11.5	7.9	19.5	13.6	31.3
14	28.2	29.9	28.0	39.5	40.7	31.1	18.2	12.1	8.6	18.5	13.4	30.4
15	26.6	30.1	29.1	39.2	40.3	30.8	17.4	12.6	9.1	17.4	13.0	28.6
16	24.8	29.8	30.4	39.0	39.8	30.5	17.0	13.6	8.5	15.9	12.9	26.5
17	23.0	29.3	31.4	38.7	39.3	29.7	16.8	14.8	8.3	15.7	12.4	24.1
18	21.1	29.0	32.1	38.4	38.9	28.7	16.3	15.6	8.3	16.8	11.8	21.6
19	18.6	28.8	33.0	38.2	38.4	27.1	15.7	15.5	7.8	18.0	11.7	20.0
20	18.3	28.8	33.7	38.7	38.0	26.6	15.2	15.3	7.5	18.1	11.7	19.3
21	17.9	28.6	34.7	38.5	37.5	25.9	14.6	15.3	7.7	18.0	12.2	18.6
22	19.0	28.3	35.7	38.4	36.8	25.4	13.9	14.9	7.6	18.2	12.4	18.2
23	20.1	27.5	36.8	38.7	36.1	25.1	13.6	14.2	6.9	18.4	12.5	17.8
24	21.8	21.1	37.9	38.8	35.2	25.0	13.5	13.7	7.0	18.5	12.4	17.5
25	24.3	A	38.6	38.7	34.3	25.2	14.0	13.2	7.2	18.4	13.3	17.4
26	25.5	A	39.3	38.7	32.8	25.2	15.4	12.8	7.2	18.0	14.6	17.4
27	26.5	A	39.7	38.9	31.7	25.3	18.2	12.6	7.1	17.8	18.3	18.5
28	27.2	A	39.9	39.0	30.6	24.8	20.1	12.4	7.1	17.1	21.1	20.3
29	27.5		40.1	39.2	30.0	23.9	21.3	11.3	7.5	16.1	22.8	21.9
30	27.6		40.3	39.4	29.8	22.9	21.5	11.4	8.0	15.1	24.7	24.0
31	27.5		40.4		29.9		21.2	10.9		14.2		25.7

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE

MEAN	26.53		39.59	37.76	28.60	18.34	14.52	8.25	17.39	14.96	25.24
MAX.	31.3		41.0	41.4	31.6	21.8	20.8	10.5	20.2	24.7	32.0
MIN.	17.9		38.2	29.8	22.9	13.5	10.9	6.9	9.6	11.7	17.4

A- NO RECORD

HIGHEST STAGE WAS 41.5 AT 400 P.M., MAY 8.

LOWEST STAGE WAS 6.8 AT 400 P.M., SEP. 23.

DAILY STAGES FOR 1977

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. AVERAGE LOW WATER PLANE AT THE FOOT OF HARBOR CHANNEL, 3.5 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 37.7 FEET ON MAR. 19, 20, AND 21, 1962. LOWEST, 0.4 FOOT ESTIMATED FOR JAN. 3, 1964.

DAILY SEVEN A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, M.S.L. (1929-58 ADJ.)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	14.7	19.4	20.2	23.4	33.5	16.4	15.4	13.5	9.7	11.6	13.7	24.9
2	14.5	19.5	21.4	22.8	33.8	15.3	16.8	13.9	9.5	11.9	14.5	24.4
3	13.9	19.6	22.3	22.2	33.9	14.1	18.0	13.9	9.5	12.4	15.0	23.9
4	13.8	19.6	23.4	21.6	33.8	13.6	18.8	14.2	9.6	13.3	15.8	23.7
5	14.9	19.5	24.5	21.2	33.7	13.4	19.2	14.6	9.3	13.8	17.3	23.5
6	18.0	19.3	25.4	20.5	33.6	13.3	19.5	14.7	9.1	14.3	18.6	23.7
7	19.0	19.6	26.4	19.9	33.3	13.0	19.5	15.0	8.8	14.9	20.5	23.2
8	20.3	18.5	27.1	19.2	33.1	12.4	19.1	14.9	8.5	15.4	21.5	21.9
9	20.9	18.0	27.7	18.6	33.1	12.0	18.5	14.8	8.4	15.6	22.1	23.3
10	21.6	17.6	28.0	18.2	32.7	11.6	17.6	14.7	8.4	15.7	22.6	23.3
11	22.0	17.2	28.1	18.0	32.1	11.2	16.6	15.1	8.4	15.3	22.8	23.6
12	22.7	16.7	28.1	18.2	31.3	10.5	15.5	15.9	8.4	14.8	22.4	24.8
13	23.1	16.3	28.0	18.8	30.5	10.2	14.8	15.7	8.2	14.7	22.4	26.2
14	23.5	15.5	27.8	19.7	30.0	10.1	14.5	14.8	8.0	14.7	22.5	27.3
15	23.9	14.5	27.7	20.6	29.3	9.7	14.7	14.2	8.1	14.6	22.6	28.3
16	23.9	13.6	27.5	21.7	28.8	9.3	14.0	14.0	8.4	13.8	23.1	29.0
17	23.8	13.2	27.3	23.0	28.3	9.2	14.0	13.5	8.5	13.1	23.8	29.6
18	23.7	13.3	27.0	24.7	27.5	9.9	14.0	13.5	8.9	12.6	24.7	30.3
19	23.1	13.4	26.8	26.0	27.0	10.5	13.7	13.5	9.3	12.5	25.7	30.8
20	23.0	15.4	26.3	27.0	26.5	11.4	13.4	13.2	10.2	12.1	26.3	31.3
21	22.5	17.1	26.0	27.7	26.0	12.5	13.8	13.0	11.5	12.0	26.2	31.7
22	21.8	18.5	25.6	28.3	25.2	13.8	13.9	12.9	12.6	12.2	26.4	32.0
23	20.8	18.9	25.2	28.8	24.5	14.5	13.8	13.1	13.3	12.3	26.4	32.1
24	19.7	19.0	24.6	29.5	23.6	14.5	13.4	12.9	13.4	12.5	26.4	32.2
25	18.7	18.8	24.4	30.2	22.6	14.4	13.4	12.9	13.1	13.0	26.3	32.4
26	17.8	18.7	24.1	31.0	21.6	14.2	13.2	13.0	12.3	13.0	26.3	32.5
27	17.6	18.7	23.4	31.7	20.6	14.0	13.1	13.2	11.8	12.5	26.1	32.4
28	17.9	18.9	23.1	32.3	19.6	13.8	12.3	13.0	11.3	12.5	25.9	32.3
29	18.3	19.3	23.0	33.0	18.7	14.0	11.8	11.1	11.0	12.5	25.6	32.1
30	18.7		23.3	33.2	17.8	14.4	11.9	10.3	11.8	12.8	25.3	31.8
31	19.1		23.4		17.1		12.6	9.9		13.4		31.6

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE

MEAN	19.90	17.49	25.38	24.36	27.83	12.56	15.18	13.63	9.97	13.40	22.62	28.06
MAX.	23.9	19.6	28.1	33.2	33.9	16.4	19.5	15.9	13.4	15.7	26.4	32.5
MIN.	13.8	13.2	20.2	18.0	17.1	9.2	11.8	9.9	8.0	11.6	13.7	21.9

HIGHEST STAGE WAS 33.90 ON MAY 3.
LOWEST STAGE WAS 7.90 AT 400 P.M., SEP. 14.

DAILY STAGES FOR 1971

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. AVERAGE LOW WATER PLANE AT THE FOOT OF HARBOR CHANNEL, 3.5 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 37.7 FEET ON MAR. 19, 20, AND 21, 1962. LOWEST, 0.4 FOOT ESTIMATED FOR JAN. 3, 1964.

DAILY SEVEN A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, M.S.L. (1929-58 ADJ.)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	22.1	14.4	32.0	21.3	14.3	15.8	11.4	9.5	9.0	6.5	8.0	7.1
2	22.2	14.7	32.5	21.1	14.3	15.2	11.4	9.5	8.1	6.8	7.6	7.2
3	21.9	14.9	33.0	20.8	14.5	14.6	11.4	10.1	7.0	7.0	7.0	7.7
4	21.7	14.7	33.3	20.2	14.6	14.6	11.1	10.6	6.0	7.3	6.1	8.2
5	20.1	13.9	33.5	19.7	14.6	14.7	10.5	10.9	5.2	7.2	5.7	8.8
6	18.6	13.2	33.6	19.4	14.7	14.7	9.9	11.2	5.4	6.6	5.8	9.9
7	17.4	12.4	33.9	19.2	14.8	14.8	9.6	11.7	5.3	6.0	6.3	11.1
8	16.9	12.4	34.0	19.2	14.7	15.0	8.7	11.7	4.9	5.5	6.9	11.8
9	16.9	13.2	33.9	19.1	14.8	14.8	8.0	11.9	4.5	5.2	7.7	12.1
10	17.6	15.0	33.9	19.0	15.2	14.3	7.6	12.3	4.9	5.5	8.7	13.2
11	18.5	17.8	33.6	18.7	15.6	14.4	7.1	11.9	6.0	5.6	9.3	13.8
12	19.0	20.0	33.4	18.6	16.0	14.8	6.8	13.3	6.3	5.2	9.4	15.0
13	19.4	21.8	32.7	18.0	17.6	14.8	7.2	13.2	5.9	4.7	9.1	17.0
14	19.6	22.7	32.0	17.5	19.4	14.3	8.0	12.7	5.5	4.6	8.8	18.7
15	19.7	23.4	31.1	17.1	20.8	13.5	9.1	11.4	5.5	4.4	8.5	20.0
16	20.0	23.4	30.0	16.8	22.3	13.0	10.2	9.7	5.5	4.0	8.0	20.5
17	20.1	23.1	29.0	16.7	23.6	13.2	11.0	8.7	5.8	4.1	7.6	20.9
18	19.5	23.0	28.2	16.5	24.5	14.0	12.0	8.0	6.1	4.5	7.4	21.0
19	18.6	23.0	27.5	16.2	25.0	15.0	12.8	7.7	7.0	4.5	7.6	21.2
20	18.1	23.0	27.1	15.7	25.1	15.8	12.8	6.8	8.8	4.1	7.5	21.5
21	17.7	22.6	26.8	15.1	25.1	16.3	12.3	6.4	10.1	4.0	7.1	21.9
22	17.6	23.5	26.7	14.6	24.8	16.5	12.2	5.5	10.6	3.7	7.1	22.0
23	17.5	23.6	26.1	14.4	24.1	16.3	12.2	5.4	10.5	3.2	7.0	21.7
24	17.2	25.0	25.4	14.0	23.1	15.8	12.1	5.8	10.3	3.2	6.8	20.9
25	16.9	27.0	24.6	13.3	22.0	14.9	12.4	6.6	10.1	3.7	6.8	20.0
26	16.2	28.8	24.0	12.8	20.7	13.7	12.8	8.0	9.5	4.2	7.0	19.2
27	15.7	30.4	23.0	12.8	19.7	13.0	13.1	8.4	9.0	4.4	7.2	18.3
28	15.4	31.1	22.2	13.0	19.0	12.2	12.1	8.1	8.3	4.5	7.5	17.6
29	15.2		21.9	13.6	18.2	12.0	10.8	7.9	7.0	5.5	7.8	17.1
30	14.9		21.7	14.0	17.2	11.6	10.0	8.0	6.4	6.8	7.5	16.5
31	14.5		21.5		16.5		9.7	8.9		7.6		16.0

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE

MEAN	18.27	20.42	29.09	16.94	18.92	14.44	10.52	9.40	7.14	5.15	7.48	16.05
MAX.	22.2	31.1	34.0	21.3	25.1	16.5	13.1	13.3	10.6	7.6	9.4	22.0
MIN.	14.5	12.4	21.5	12.8	14.3	11.6	6.8	5.4	4.5	3.2	5.7	7.1

HIGHEST STAGE WAS 34.0 FROM 400 P.M. MARCH 7 TO 400 P.M. MARCH 8
 LOWEST STAGE WAS 3.1 AT 400 P.M. OCT. 23

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. AVERAGE LOW WATER PLANE AT THE FOOT OF HARBOR CHANNEL, 3.5 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 37.7 FEET ON MAR. 19, 20, AND 21, 1962. LOWEST, 0.4 FOOT ESTIMATED FOR JAN. 3, 1964.

DAILY SEVEN A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, M.S.L. (1929-58 ADJ.)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	13.2	3.3	20.6	20.2	30.1	18.0	16.8	7.2	6.7	26.3	11.2	15.5
2	13.8	19.4	18.6	20.4	30.7	17.7	15.7	7.0	5.8	20.8	12.2	14.4
3	17.7	12.4	17.1	20.2	30.9	17.7	14.7	7.1	5.1	21.0	13.5	13.0
4	19.9	14.3	16.8	20.5	31.2	17.6	14.0	7.3	5.0	20.5	14.5	11.8
5	21.8	16.4	15.0	21.5	31.6	17.9	13.1	7.6	5.1	19.2	14.7	10.8
6	23.0	18.0	15.9	23.3	32.3	17.9	12.6	8.4	5.1	17.5	14.7	9.4
7	24.2	18.8	16.7	25.1	33.0	19.1	12.1	9.2	5.2	15.5	15.2	10.2
8	25.0	19.5	17.5	26.5	33.2	20.3	11.6	9.9	6.0	14.0	16.0	10.3
9	25.3	20.2	18.4	27.5	33.9	21.1	11.4	10.1	6.6	12.8	16.6	10.4
10	27.6	20.7	19.5	28.1	34.3	21.8	10.7	10.6	6.1	11.7	16.8	10.7
11 E	23.7	20.8	20.4	26.6	34.3	22.2	9.9	11.6	5.5	10.0	16.8	11.0
12 E	21.7	20.9	21.2	26.6	34.1	22.3	9.7	12.6	5.2	9.6	16.8	11.0
13 E	19.7	20.8	21.7	23.7	33.7	21.8	9.6	13.6	5.2	9.5	16.8	10.9
14 E	17.7	20.7	22.0	28.7	33.0	21.1	9.3	14.2	5.0	9.6	17.1	10.9
15 E	15.7	20.7	21.9	28.5	32.1	20.1	9.0	14.5	4.5	10.5	17.3	10.8
16 E	13.7	21.1	21.5	28.2	E 31.0	19.9	9.2	14.5	4.3	13.7	17.3	10.8
17 E	11.7	21.2	20.9	27.9	29.3	19.6	9.5	13.7	5.2	16.4	16.9	11.1
18	10.4	21.6	20.1	26.7	E 27.9	20.1	9.3	12.3	6.5	17.3	16.3	12.2
19	9.0	22.1	19.2	25.1	26.6	20.9	9.0	11.7	7.6	17.2	15.6	13.5
20	9.9	22.5	18.8	23.8	26.5	21.5	8.2	8.6	8.5	16.5	15.5	14.4
21	9.9	22.4	18.5	22.1	26.7	21.6	8.1	7.7	9.5	15.4	15.4	15.0
22	9.9	22.4	18.6	21.3	27.0	21.3	8.3	7.8	10.9	14.5	15.5	15.3
23	9.8	22.1	18.7	21.8	27.2	20.8	8.7	7.9	12.4	13.3	15.8	16.1
24	9.3	21.9	18.9	23.1	27.1	20.6	9.0	8.1	13.9	12.3	16.0	17.2
25	8.9	22.0	18.8	24.7	26.8	20.5	8.5	8.7	14.4	12.0	16.1	17.9
26	8.7	21.9	18.8	26.8	26.0	20.4	8.5	9.0	14.1	11.8	16.5	19.6
27	8.6	21.5	18.8	27.8	24.7	20.3	8.5	9.2	14.5	11.3	17.1	20.6
28	8.2	20.6	19.1	28.7	23.2	19.8	7.8	9.1	16.5	11.1	17.2	21.4
29	5.4		19.7	29.3	21.5	18.9	6.8	8.4	18.4	11.3	16.9	21.8
30	7.4		20.0	29.7	19.9	17.9	6.5	8.1	19.6	11.2	16.3	21.9
31	7.1		20.1		18.7		7.0	7.6		11.0		22.0

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE

MEAN	14.76	19.50	19.17	25.44	28.93	20.01	10.09	9.78	8.61	14.15	15.82	14.25
MAX.	27.6	22.5	22.0	29.7	34.3	22.3	16.0	14.5	19.6	21.0	17.3	22.0
MIN.	7.1	8.3	18.8	20.2	18.7	17.6	6.5	7.0	4.3	9.5	11.2	9.4

E- ESTIMATED

HIGHEST STAGE WAS 34.3 FROM 700 A.M., MAY 10 TO 700 A.M., MAY 11
LOWEST STAGE WAS 4.3 AT 700 A.M., SEP. 16

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. AVERAGE LOW WATER PLANE AT THE FOOT OF HARBOR CHANNEL, 3.5 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 37.7 FEET ON MAR. 19, 20, AND 21, 1962. LOWEST, 0.4 FOOT ESTIMATED FOR JAN. 3, 1964.

DAILY SEVEN A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, M.S.L. (1929-58 ADJ.)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	15.9	25.9	16.2	22.0	30.8	19.1	20.9	18.6	8.3	6.7	10.7	12.0
2	18.2	27.4	15.8	22.2	30.2	17.9	21.2	18.2	7.5	7.0	9.9	11.0
3	19.5	28.6	15.7	22.1	29.4	16.4	21.6	17.9	7.0	6.8	9.5	10.3
4	19.8	29.5	15.8	21.6	28.6	15.1	22.0	16.8	6.6	6.3	9.1	10.0
5	19.5	30.2	16.0	21.4	27.8	14.3	22.3	16.2	6.6	6.2	8.7	9.7
6	19.2	30.7	16.5	21.0	27.2	14.2	22.5	15.2	6.8	6.4	8.9	9.2
7	18.9	31.3	16.2	20.6	26.5	14.6	22.4	14.1	7.3	6.5	9.6	8.8
8	18.5	31.5	15.9	20.2	25.7	14.8	22.3	13.4	7.6	6.2	9.9	8.7
9	17.9	32.0	15.8	20.3	24.6	14.6	22.4	12.8	7.8	6.1	10.1	8.7
10	17.9	32.1	15.4	21.7	23.1	14.0	22.6	11.8	8.2	6.0	9.9	8.9
11	15.8	32.2	15.3	22.9	21.9	13.4	23.2	11.2	8.5	5.7	9.5	9.7
12	14.4	32.4	15.0	24.2	21.0	13.0	23.6	11.0	8.6	6.0	9.1	10.4
13	12.7	32.7	14.5	25.6	20.5	12.5	24.1	11.1	8.6	6.0	8.5	10.9
14	10.6	32.9	14.4	26.8	20.2	12.2	24.5	11.1	8.2	5.8	8.4	10.5
15	8.9	33.1	14.4	27.5	20.3	12.5	25.1	11.4	8.5	6.4	7.9	10.1
16	8.0	33.0	13.8	27.9	20.2	13.2	25.7	12.1	8.5	9.5	7.6	10.2
17	7.6	33.1	13.2	28.1	20.6	13.8	26.2	12.9	7.9	14.1	8.0	10.2
18	7.4	32.8	12.8	28.5	20.9	14.2	26.6	13.2	6.8	17.3	8.4	10.0
19	7.2	32.0	12.2	28.6	21.1	14.1	26.8	12.7	6.3	18.9	8.8	10.6
20	8.4	30.9	11.3	28.7	21.3	14.0	26.8	10.9	6.3	20.0	8.3	11.2
21	10.8	29.3	10.6	29.0	21.4	14.5	26.7	10.4	6.3	20.4	8.5	12.1
22	13.9	27.0	10.3	29.4	21.6	14.5	26.2	11.1	7.5	20.0	9.1	12.4
23	17.2	24.8	10.6	29.8	21.8	14.3	25.3	11.4	8.3	18.6	10.9	12.3
24	19.4	22.1	11.3	30.2	21.7	13.5	24.2	11.5	8.9	16.9	12.0	11.4
25	20.7	20.0	11.5	30.5	21.6	13.6	23.2	12.0	9.1	15.3	12.8	10.8
26	21.8	18.4	12.2	30.8	21.3	15.3	22.6	12.1	9.3	14.5	13.0	10.5
27	22.7	17.6	14.3	31.0	21.1	17.4	22.3	12.6	8.8	13.7	13.3	10.0
28	23.4	16.8	16.3	31.1	21.0	18.8	22.1	13.1	7.9	13.0	13.1	8.4
29	23.8		18.4	31.2	21.0	19.9	21.6	13.2	6.8	12.3	12.8	7.8
30	24.1		20.2	31.1	20.7	20.6	20.8	11.8	6.3	11.7	12.5	8.0
31	24.8		21.4		20.1		20.1	9.7		11.1		8.6

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE

MEAN	16.41	28.57	14.61	26.19	23.06	15.00	23.47	12.94	7.70	11.01	9.95	10.10
MAX.	24.8	33.1	21.4	31.2	30.8	20.6	26.8	18.6	9.3	20.4	13.3	12.4
MIN.	7.2	16.8	10.3	20.2	20.1	12.2	20.1	9.7	6.3	5.7	7.6	7.8

HIGHEST STAGE WAS 33.2 AT 400 P.M., FEB. 16.
LOWEST STAGE WAS 5.7, OCT. 11.

DAILY STAGES FOR 1968

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. AVERAGE LOW WATER PLANE AT THE FOOT OF HARBOR CHANNEL, 3.5 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 37.7 FEET ON MAR. 19, 20, AND 21, 1962. LOWEST, 0.4 FOOT ESTIMATED FOR JAN. 3, 1964.

DAILY SEVEN A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, M.S.L. (1929-58 ADJ.)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	26.8	18.0	8.8	27.4	16.9	26.7	13.4	12.3	6.6	6.7	7.7	13.2
2	26.1	19.0	8.3	27.1	16.9	27.6	13.7	13.0	5.8	6.7	7.5	14.0
3	25.1	19.4	7.6	27.0	16.4	28.3	13.5	13.3	5.2	6.6	7.5	14.6
4	23.9	20.3	7.5	27.2	15.6	28.8	13.3	13.2	5.1	6.4	7.8	15.7
5	22.5	21.6	7.4	27.4	14.6	29.2	13.0	13.0	4.8	6.0	7.9	16.5
6	21.2	23.7	7.0	27.3	13.7	29.4	13.3	12.9	4.6	6.2	8.2	16.6
7	20.2	24.9	6.4	27.8	13.3	29.5	13.3	12.5	4.7	6.1	8.4	15.9
8	19.8	26.0	6.2	28.3	13.4	29.7	13.1	12.8	4.6	5.9	8.2	15.6
9	19.5	26.6	5.9	28.7	13.5	29.8	13.0	13.7	4.2	6.1	8.2	15.1
10	19.7	26.9	5.5	28.9	13.0	29.9	13.0	14.5	4.0	6.4	8.2	14.7
11	19.5	27.0	5.1	29.0	12.6	29.8	13.0	14.6	4.0	6.4	8.4	14.3
12	19.3	27.0	5.4	29.0	12.5	29.6	13.0	14.5	3.7	6.1	8.8	14.1
13	19.3	26.8	5.5	29.0	12.8	29.2	12.8	14.0	3.8	6.0	9.0	14.0
14	21.2	26.3	6.1	28.7	13.6	28.6	12.8	13.5	4.1	6.1	9.2	13.9
15	19.1	25.7	7.8	28.3	14.0	27.2	12.8	13.6	4.5	5.9	9.5	13.4
16	19.0	24.7	10.1	27.6	14.5	25.0	12.8	13.8	5.0	5.4	9.4	12.7
17	18.9	23.6	12.4	26.6	15.6	21.8	12.8	14.2	5.1	5.3	9.0	11.8
18	18.9	22.3	14.7	25.3	16.5	18.8	12.4	15.0	5.2	6.2	8.8	10.1
19	18.9	20.8	16.9	24.0	17.4	16.5	12.3	15.3	5.2	7.0	8.5	8.8
20	18.8	19.2	19.0	22.5	17.8	15.5	12.2	15.0	4.9	7.9	8.5	8.0
21	18.4	17.5	20.9	21.1	18.2	14.7	11.7	14.2	4.8	8.2	9.7	7.4
22	17.5	15.8	21.8	20.1	18.6	14.0	11.5	13.7	4.9	8.0	11.7	6.9
23	16.6	14.3	23.3	19.5	18.5	13.2	11.3	13.4	5.0	8.2	12.5	6.7
24	15.5	13.3	24.2	18.7	18.3	12.7	10.8	12.5	5.0	8.3	12.8	6.5
25	14.5	12.4	24.7	17.9	18.0	12.6	10.6	11.4	4.8	8.5	12.6	7.1
26	14.0	11.1	25.2	17.4	18.0	12.3	10.7	10.9	4.8	9.0	12.1	8.7
27	14.3	10.2	25.8	17.0	18.0	11.9	10.9	10.6	5.0	9.5	12.0	10.3
28	15.0	9.5	26.3	16.7	18.7	12.0	10.9	10.2	5.2	9.3	12.5	11.6
29	15.8	9.0	26.8	16.3	20.8	12.3	10.9	9.2	6.0	8.8	12.8	11.8
30	16.7		27.1	16.5	23.4	12.7	11.5	8.5	6.5	8.1	12.8	12.6
31	17.5		27.3		25.4		12.0	7.5		7.7		14.1

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE

MEAN	19.14	20.09	14.41	24.27	16.46	21.97	12.33	12.79	4.90	7.06	9.67	12.14
MAX.	26.8	27.0	27.3	29.0	25.4	29.9	13.7	15.3	6.6	9.5	12.8	16.6
MIN.	14.0	9.0	5.1	16.3	12.5	11.9	10.6	7.5	3.7	5.3	7.5	6.5

HIGHEST STAGE WAS 29.9, JUNE 10.

LOWEST STAGE WAS 3.7, SEP. 12.

DAILY STAGES FOR 1967

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. AVERAGE LOW WATER PLANE AT THE FOOT OF HARBOR CHANNEL, 3.5 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 37.7 FEET ON MAR. 19, 20, AND 21, 1962. LOWEST, 0.4 FOOT ESTIMATED FOR JAN. 3, 1964.

DAILY SEVEN A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, M.S.L. (1929-58 ADJ.)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	14.5	10.5	14.4	27.6	21.5	26.8	21.6	12.9	7.8	5.9	8.4	10.4
2	15.2	11.6	14.8	26.8	22.3	24.4	21.7	14.0	7.5	6.3	8.5	11.0
3	15.6	12.2	15.1	25.6	22.4	21.3	22.0	15.0	7.4	6.6	8.6	12.3
4	15.7	13.0	15.1	24.3	22.3	18.6	22.0	15.4	7.2	6.8	9.2	13.0
5	15.8	14.4	14.5	22.8	22.6	17.0	22.2	15.6	7.3	7.1	11.0	14.6
6	15.7	15.5	13.9	21.8	22.7	16.2	22.5	15.6	7.3	7.4	13.8	16.8
7	15.4	16.0	13.8	21.5	23.0	16.2	22.7	15.5	7.2	7.4	15.7	19.0
8	14.8	16.1	13.2	21.9	22.7	16.4	22.9	15.0	7.4	7.0	16.5	20.4
9	14.0	16.0	14.1	22.3	22.5	16.4	22.8	14.1	6.5	6.4	16.8	21.0
10	13.1	16.1	17.1	22.2	22.3	16.2	22.8	13.4	5.6	6.3	16.8	21.4
11	11.9	16.4	20.0	21.0	22.2	15.8	22.1	13.1	5.5	6.1	16.0	21.3
12	11.1	16.4	23.0	20.8	22.7	15.4	21.4	12.7	6.2	6.1	14.9	21.0
13	10.2	16.2	24.9	19.9	23.6	14.9	21.3	12.8	6.6	6.7	13.7	20.8
14	9.1	15.8	26.1	19.4	24.6	14.4	21.4	12.9	6.3	7.2	12.7	21.0
15	8.7	15.1	27.0	19.1	25.0	14.1	21.6	12.4	5.4	7.8	12.3	21.6
16	9.0	14.2	27.5	19.0	26.6	14.5	21.7	11.6	5.2	8.2	12.0	21.5
17	9.0	13.2	28.0	19.0	27.8	15.1	21.5	11.1	5.3	8.9	11.5	21.8
18	8.5	12.0	28.0	19.0	29.0	16.1	21.2	10.3	5.4	8.2	11.1	22.4
19	8.0	11.0	28.2	19.1	29.6	17.2	20.5	9.3	5.4	7.7	10.7	22.5
20	7.9	10.4	28.5	19.5	30.5	18.3	19.3	8.5	5.5	7.8	10.3	22.7
21	7.9	9.9	28.8	20.4	30.8	19.0	18.0	7.9	6.0	8.3	10.0	23.0
22	7.6	10.1	29.0	20.7	31.1	19.5	15.8	7.4	6.5	8.8	9.4	23.5
23	7.2	11.0	29.2	20.9	31.2	19.9	14.0	7.1	6.8	9.0	8.9	23.6
24	7.0	11.4	29.2	20.9	31.3	20.3	12.7	7.3	6.8	9.2	8.6	24.5
25	6.4	12.4	29.4	20.5	31.3	20.5	12.1	7.8	6.7	9.3	8.8	25.4
26	6.0	13.3	29.4	20.3	31.2	20.8	12.0	8.2	6.5	9.0	9.1	26.5
27	6.2	14.0	29.6	20.1	31.0	20.9	11.7	8.0	6.0	8.9	9.6	27.1
28	6.5	14.2	29.4	19.8	30.9	21.0	11.2	7.6	5.9	8.6	10.2	27.0
29	6.7		29.1	20.2	30.2	21.2	11.6	7.6	5.8	8.6	9.9	27.5
30	7.6		28.8	20.6	29.7	21.4	12.0	8.1	6.0	8.6	9.9	27.5
31	8.8		28.3		28.6		12.1	8.2		8.5		27.5

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE

MEAN	10.35	13.50	23.45	21.22	26.54	18.32	18.65	11.16	6.36	7.69	11.49	21.27
MAX.	15.8	16.4	29.6	27.6	31.3	26.8	22.9	15.6	7.8	9.3	16.8	27.5
MIN.	6.0	9.9	13.2	19.0	21.5	14.1	11.2	7.1	5.2	5.9	8.4	10.4

HIGHEST STAGE WAS 31.33 AT 700 A.M., MAY 25.

LOWEST STAGE WAS 5.2 FROM 400 P.M., SEPT. 15 TO 400 P.M., SEPT. 16.

MISSISSIPPI RIVER (ENSLEY ENGINEER YARD) NEAR MEMPHIS, TENN.

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD, MILE 2.9 MEMPHIS HARBOR CHANNEL OR MCKELLAR LAKE.

GAGE. VERTICAL STAFF, ON MOORING DOLPHINS.

GENERAL INFORMATION. AVERAGE LOW WATER PLANE AT THE FOOT OF HARBOR CHANNEL, 3.5 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961, TO DATE.

EXTREMES. HIGHEST, 37.7 FEET ON MAR. 19, 20, AND 21, 1962. LOWEST, 0.4 FOOT ESTIMATED FOR JAN. 3, 1964.

DAILY SEVEN A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, M.S.L. (1929-58 ADJ.)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	10.2	5.5	27.6	13.1	24.4	18.3	7.1	4.7	5.2	4.6	4.6	6.6
2	11.4	5.0	26.2	13.1	24.8	16.9	6.6	5.3	5.2	4.9	4.1	6.9
3	12.5	5.1	24.3	13.1	25.3	15.9	7.5	6.1	4.9	5.6	4.0	7.4
4	14.3	5.1	22.1	13.0	26.0	15.0	7.7	6.1	5.1	6.1	3.9	8.2
5	16.3	4.9	19.7	12.9	26.6	13.7	7.3	6.0	5.1	6.3	4.0	9.3
6	17.9	5.6	17.8	12.5	27.5	12.9	7.6	6.1	4.8	6.3	4.8	10.2
7	19.1	5.6	16.8	12.3	28.1	12.1	8.0	6.2	4.2	6.3	5.3	10.4
8	20.4	5.8	17.1	12.3	28.6	11.0	8.1	6.1	4.0	6.6	6.0	10.5
9	21.3	5.0	17.8	12.6	28.9	11.0	8.0	6.2	4.3	6.9	6.5	10.8
10	21.6	5.2	18.3	12.9	29.1	10.6	7.5	5.4	4.8	7.1	7.0	10.8
11	22.3	6.5	18.0	13.0	29.2	10.4	7.1	4.9	4.9	6.0	7.7	10.8
12	22.0	7.9	18.8	13.0	29.3	10.5	6.8	4.8	4.7	4.5	8.2	11.9
13	21.4	11.9	18.6	13.0	29.4	10.4	6.5	5.2	4.2	4.2	8.8	13.8
14	20.8	16.4	18.3	13.0	29.1	10.6	6.7	5.7	3.7	4.6	9.4	16.8
15	19.8	21.8	17.8	13.7	28.7	10.7	6.6	6.0	3.4	4.5	9.7	19.7
16	18.5	24.6	17.0	14.8	28.2	11.3	6.6	5.6	3.5	4.6	10.2	21.4
17	17.7	26.4	16.6	15.4	27.2	11.9	7.0	6.0	3.6	4.7	11.0	22.4
18	16.5	27.7	16.3	16.1	26.2	12.5	7.4	7.1	3.6	4.7	12.1	22.7
19	15.3	28.5	16.0	16.8	25.4	13.6	8.0	7.6	4.3	4.4	12.4	22.8
20	13.6	29.0	15.8	17.5	25.1	15.0	8.1	7.5	4.7	4.5	12.2	22.9
21	11.5	29.3	15.6	18.5	25.2	15.8	7.9	7.2	4.3	4.7	11.9	23.0
22	10.0	29.7	15.4	19.0	25.5	15.6	7.7	7.2	4.0	5.1	11.2	23.0
23	9.2	29.6	15.1	19.0	26.0	14.9	7.3	6.9	4.8	5.2	9.9	22.7
24	8.3	29.6	14.5	19.4	26.2	13.9	6.8	7.1	5.2	5.8	8.2	22.0
25	8.0	29.8	14.0	20.0	26.4	12.9	6.3	7.5	5.0	6.5	7.2	21.2
26	7.5	29.6	13.5	21.2	26.1	11.8	6.0	7.5	5.4	7.1	7.0	20.0
27	7.3	29.1	12.9	22.0	25.6	10.6	5.7	7.2	5.5	6.9	6.8	18.3
28	7.3	28.7	12.2	22.8	24.5	9.6	5.7	6.8	5.1	6.1	6.9	17.8
29	7.1		12.2	23.1	23.0	8.4	5.0	6.0	4.5	5.6	6.7	16.3
30	6.8		12.5	23.9	21.7	7.6	4.6	5.6	4.8	5.2	6.3	14.7
31	6.3		13.0		19.9		4.4	5.3		4.9		14.2

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE

MEAN	14.26	17.45	17.14	16.09	26.35	12.50	6.88	6.21	4.55	5.49	7.79	15.78
MAX.	22.3	29.8	27.6	23.9	29.4	18.3	8.1	7.6	5.5	7.1	12.4	23.0
MIN.	6.3	4.9	12.2	12.3	19.9	7.6	4.4	4.7	3.4	4.2	3.9	6.6

HIGHEST STAGE WAS 29.8 AT 700 A.M., FEB. 25.
LOWEST STAGE WAS 3.4, SEPT. 15.

DAILY STAGES FOR 1965

MISSISSIPPI RIVER NEAR MEMPHIS, TENN. (ENSLEY ENGINEER YARD)

LOCATION. LAT. 35-04-27, LONG. 90-07-56. AT ENSLEY ENGINEER YARD AT MILE 2.9 MEMPHIS HARBOR CHANNEL (ALSO REFERRED TO AS MC KELLAR LAKE).

GAGE. STAFF TYPE IN SEVERAL SECTIONS. GAGE IS READ AND MAINTAINED BY MEMPHIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION. AVERAGE LOW WATER PLATE AT MOUTH OF HARBOR CHANNEL (RIVER MILE 725.6), 3.5 FEET ON GAGE.

RECORDS AVAILABLE. STAGE, JULY 30, 1961 TO DATE.

EXTREMES. HIGHEST, 37.7 FEET ON MAR. 19, 20, AND 21, 1962. LOWEST, 0.4 FOOT ESTIMATED FOR JAN. 3, 1964.

DAILY EIGHT A.M. STAGE IN FEET

GAGE ZERO, 178.05 FEET, M.S.L. (1929-58 ADJ.)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	13.4	16.6	16.9	27.4	28.5	14.4	11.8	13.7	6.5	20.9	9.8	8.2
2	13.9	17.1	16.5	28.6	27.7	15.2	11.0	12.1	6.8	21.2	9.6	8.3
3	14.8	17.5	16.8	29.8	27.5	15.0	10.7	10.4	6.9	21.1	9.2	8.5
4	15.0	17.5	17.8	30.8	27.5	14.9	10.5	8.6	7.5	20.7	9.2	9.0
5	15.0	17.4	19.0	31.5	27.7	15.1	10.9	7.7	9.5	19.8	9.2	9.2
6	15.3	16.7	20.3	32.2	27.9	15.1	12.8	6.8	11.0	18.5	8.8	8.8
7	16.2	15.8	21.5	32.7	27.9	15.1	14.8	6.3	12.0	17.1	8.2	8.6
8	17.9	14.8	22.8	33.2	27.6	15.5	16.1	6.3	12.1	15.9	8.0	8.3
9	18.6	13.6	24.0	33.5	27.0	16.2	16.4	6.6	11.0	15.0	7.8	7.1
10	20.8	12.5	24.7	33.9	26.1	17.3	16.4	6.9	10.0	14.6	7.7	7.0
11	20.9	11.6	25.0	34.2	24.9	18.2	A	7.2	10.9	14.8	7.8	6.9
12	21.2	13.9	25.4	34.5	23.6	18.6	A	6.9	11.8	14.8	7.4	7.0
13	21.5	16.5	25.4	34.6	22.6	18.7	A	6.8	12.3	14.5	7.2	6.8
14	21.7	20.0	25.1	34.6	21.9	18.4	A	6.6	13.6	14.0	6.9	6.5
15	21.9	23.3	24.9	34.4	21.4	17.8	A	6.2	14.9	13.5	6.8	6.5
16	21.9	25.5	24.8	34.5	21.0	17.1	A	6.2	15.2	12.9	7.3	6.6
17	21.8	26.9	24.6	34.4	20.6	16.2	A	6.2	15.0	12.3	7.2	6.7
18	21.6	27.9	24.4	34.2	20.2	15.7	A	6.1	14.4	11.7	7.1	6.5
19	21.3	28.4	23.8	34.0	19.8	15.2	A	6.0	13.7	11.2	7.2	6.7
20	21.1	28.6	23.1	34.1	19.3	A	A	5.6	13.1	11.0	7.2	6.9
21	20.4	28.1	22.8	34.1	18.6	A	A	5.2	13.7	11.0	7.6	7.6
22	19.4	27.5	22.7	33.8	18.1	A	A	5.0	14.7	11.3	8.1	7.9
23	18.0	26.5	23.4	33.8	17.7	A	A	5.2	15.0	11.5	8.3	8.0
24	17.6	25.3	24.0	33.7	17.0	A	A	5.3	14.8	11.6	8.2	8.1
25	15.7	23.9		33.4	16.6	A	10.2	5.3	14.4	11.4	8.2	7.9
26	13.0	21.9	25.5	33.0	15.9	A	11.2	5.3	15.3	11.2	8.8	7.6
27	12.8	19.8	24.6	32.7	16.2	13.2	12.7	5.6	17.0	11.1	8.9	7.3
28	12.4	18.0	24.1	31.8	15.2	13.0	14.2	5.4	18.5	11.1	8.7	7.7
29	13.5		24.3	30.7	14.8	12.8	15.2	5.0	19.7	11.2	8.2	7.6
30	14.9		25.4	29.6	14.5	12.3	15.5	4.8	20.4	11.0	8.0	7.3
31	15.9				14.8		15.0	5.6		10.6		8.4

THE FOLLOWING REFER ONLY TO READINGS APPEARING IN THE TABLE ABOVE

MEAN	17.72	20.47		32.79	21.62		6.67	13.06	14.15	8.09	7.60
MAX.	21.9	28.6		34.6	28.5		13.7	20.4	21.2	9.8	9.2
MIN.	12.4	11.6		27.4	14.5		4.8	6.5	10.6	6.8	6.5

A- NO RECORD

HIGHEST STAGE WAS 34.6, APR. 13 AND 14.

LOWEST STAGE WAS 4.8 AT 400 P.M., AUG. 29 AND AT 800 A.M., AUG. 30.

RIVER STAGES

Miss. River Gauge at Ensley for the calendar year 1962

Zero Elevation _____ feet above _____

Bank full stage _____ feet on gauge.

U.S.C. 14, 11-7-61

DAY	JAN.	FEB.	MAR.	APR.	MAY	JUN	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	DAY
1	23.0	29.0	28.4	37.4	27.1	14.7	13.3	13.5	6.3	7.7	7.8	12.3	1
2	21.2	29.4	30.1	37.4	25.7	15.1	13.0	12.8	6.8	7.8	7.9	12.8	2
3	19.4	30.0	31.5	37.4	24.7	15.3	12.7	12.0	7.2	8.4	7.4	12.9	3
4	18.0	30.3	32.5	37.5	24.2	15.8	12.2	11.6	7.3	8.5	7.3	12.4	4
5	16.9	30.6	33.6	37.5	23.7	16.9	11.8	11.3	7.4	8.6	7.5	10.5	5
6	16.0	30.8	34.6	37.6	23.5	18.3	11.5	10.9	7.6	9.2	7.8	8.4	6
7	15.3	30.6	35.4	37.5	23.1	18.8	11.2	10.7	8.2	10.1	7.9	7.5	7
8	14.7	30.5	35.9	37.4	22.6	18.7	11.6	10.3	8.7	10.7	8.2	7.4	8
9	14.8	30.3	36.5	37.4	22.0	18.3	12.8	9.8	8.9	10.9	8.7	7.4	9
10	*17.3	30.0	36.7	37.2	21.2	17.8	13.9	9.5	9.0	10.8	8.2	7.8	10
11	18.1	29.8	36.9	37.0	20.4	18.0	14.2	9.8	9.1	10.3	7.2	8.2	11
12	19.1	29.0	37.0	36.8	19.9	18.4	13.9	9.8	*9.3	10.1	6.8	8.5	12
13	19.7	28.0	37.0	36.6	19.2	18.4	13.3	9.6	*9.5	9.8	6.7	8.3	13
14	19.9	27.1	37.1	36.4	18.5	18.3	12.9	9.3	*9.2	9.2	7.3	8.0	14
15	19.9	26.1	37.2	36.2	18.1	18.6	12.6	8.9	9.6	8.8	7.7	7.7	15
16	19.9	25.2	37.4	36.0	18.1	18.9	12.4	8.4	10.1	9.0	10.7		16
17	20.1	24.3	37.4	36.0	18.4	19.2	12.2	8.2	*10.9	9.3	11.5		17
18	20.9	23.4	37.5	36.0	18.4	19.3	12.1	7.5	10.8	9.3	12.5		18
19	21.2	22.8	37.7	36.1	18.0	19.4	12.3	7.2	10.1	9.2	13.4		19
20	20.7	22.4	37.7	36.1	17.6	19.2	12.8	7.0	9.7	9.2	14.0	4.3	20
21	20.4	22.2	37.7	36.0	17.0	18.6	13.9	7.0	9.7	10.0	14.1	4.6	21
22	19.8	22.1	37.6	35.8	16.1	17.7	14.8	6.8	9.9	10.3	13.1	5.3	22
23	19.9	22.0	37.2	35.7	15.2	16.4	14.5	6.5	9.7	9.8	13.3	5.9	23
24	19.8	22.2	36.9	35.4	15.0	15.6	13.5	6.4	9.1	9.0	12.8	6.3	24
25	20.7	21.9	36.6	35.0	14.6	15.1	13.3	6.2	8.5	8.7	12.2	6.9	25
26	22.0	22.7	36.7	34.5	14.2	14.5	13.0	6.1	7.9	8.7	12.3	7.7	26
27	23.8	24.6	36.6	33.7	13.9	14.2	12.7	6.0	7.6	8.9	12.1	8.7	27
28	25.2	26.6	36.7	32.5	13.6	13.9	12.8	6.2	7.6	8.7	12.0	9.7	28
29	26.4		36.8	30.7	13.4	13.8	13.5	6.3	7.5	8.3	12.1	10.6	29
30	27.4		36.9	28.7	13.9	13.5	13.8	6.6	7.6	8.1	12.0	11.9	30
31	28.3		37.3		14.3		13.8	6.4		7.6		13.1	31
Sum													
Mean													
High													
Low													

Remarks: * 4 P.M. Reading

RIVER STAGES

Miss River Gauge at Ensley for the calendar year 1961

Zero Elevation.....feet above.....

Bank full stage.....feet on gauge.

4, R.C. 14, 11-7-41.

DAY	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	DAY
1								17.3		16.0	7.9	17.6	1
2								16.8		15.6	7.8	17.1	2
3								16.0		14.8	8.0	16.8	3
4								15.1		13.7	8.3	16.5	4
5								14.4		13.0	9.0	16.2	5
6								14.5		12.2	11.2	15.7	6
7								14.3		12.3	13.8	15.0	7
8								14.3		12.8	15.8	13.6	8
9								14.6		13.2	17.3	12.4	9
10								15.1	8.3	13.0	18.0	12.5	10
11								15.3	8.8	12.4	18.3	12.4	11
12								15.1	9.4	11.8	18.3	13.5	12
13								15.0	9.3	11.4	17.5	15.1	13
14								14.8	9.2	10.6	16.3	16.8	14
15								14.4	8.6	9.6	15.3	18.0	15
16								14.0	8.3	9.0	14.5	18.9	16
17								13.9		8.9	13.6	20.0	17
18								13.9	9.0	9.0	13.3	20.4	18
19								13.8	12.7	10.6	13.1	20.7	19
20									15.8	12.1	13.4	21.4	20
21									17.9	12.3	14.2	22.4	21
22									19.0	12.0	16.0	23.3	22
23									19.0	11.3	18.5	24.2	23
24									18.0	10.6	19.6	24.8	24
25									16.8	10.0	20.3	25.2	25
26									15.6	9.7	20.5	25.6	26
27									14.4	9.5	20.4	26.3	27
28									14.2	9.4	20.0	26.5	28
29									14.3	9.5	19.2	26.5	29
30							17.6		15.5	9.3	18.4	25.9	30
31							17.6			8.5		24.3	31
Sum													
Mean													
High													
Low													

Remarks:.....

RIVER STAGES

.....Miss..... River Gauge at.....Ensley..... for the calendar year 1962

Zero Elevation..... feet above.....

Bank full stage..... feet on gauge.

M.R.C. 14, 11-7-61.

DAY	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	DAY
1	23.0	29.0	28.4	37.4	27.1	14.7	13.3	13.5	6.3	7.7	7.8	12.3	1
2	21.2	29.4	30.1	37.4	25.7	15.1	13.0	12.8	6.8	7.8	7.9	12.8	2
3	19.4	30.0	31.5	37.4	24.7	15.3	12.7	12.0	7.2	8.4	7.4	12.9	3
4	18.0	30.3	32.5	37.5	24.2	15.8	12.2	11.6	7.3	8.5	7.3	12.4	4
5	16.9	30.6	33.6	37.5	23.7	16.9	11.8	11.3	7.4	8.6	7.5	10.5	5
6	16.0	30.8	34.6	37.6	23.5	18.3	11.5	10.9	7.6	9.2	7.8	8.4	6
7	15.3	30.6	35.4	37.5	23.1	18.8	11.2	10.7	8.2	10.1	7.9	7.5	7
8	14.7	30.5	35.9	37.4	22.6	18.7	11.6	10.3	8.7	10.7	8.2	7.4	8
9	14.8	30.3	36.5	37.4	22.0	18.3	12.8	9.8	8.9	10.9	8.7	7.4	9
10	*17.3	30.0	36.7	37.2	21.2	17.8	13.9	9.5	9.0	10.8	8.2	7.8	10
11	18.1	29.8	36.9	37.0	20.4	18.0	14.2	9.8	9.1	10.3	7.2	8.2	11
12	19.1	29.0	37.0	36.8	19.9	18.4	13.9	9.8	*9.3	10.1	6.8	8.5	12
13	19.7	28.0	37.0	36.6	19.2	18.4	13.3	9.6	*9.5	9.8	6.7	8.3	13
14	19.9	27.1	37.1	36.4	18.5	18.3	12.9	9.3	9.2	9.2	7.3	8.0	14
15	19.9	26.1	37.2	36.2	18.1	18.6	12.6	8.9	9.6	8.8	7.7	7.7	15
16	19.9	25.2	37.4	36.0	18.1	18.9	12.4	8.4	10.1	9.0	10.7		16
17	20.1	24.3	37.4	36.0	18.4	19.2	12.2	8.2	*10.9	9.3	11.5		17
18	20.9	23.4	37.5	36.0	18.4	19.3	12.1	7.5	10.8	9.3	12.5		18
19	21.2	22.8	37.7	36.1	18.0	19.4	12.3	7.2	10.1	9.2	13.4		19
20	20.7	22.4	37.7	36.1	17.6	19.2	12.8	7.0	9.7	9.2	14.0	4.3	20
21	20.4	22.2	37.7	36.0	17.0	18.6	13.9	7.0	9.7	10.0	14.1	4.6	21
22	19.8	22.1	37.6	35.8	16.1	17.7	14.8	6.8	9.9	10.3	13.1	5.3	22
23	19.9	22.0	37.2	35.7	15.2	16.4	14.5	6.5	9.7	9.8	13.3	5.9	23
24	19.8	22.2	36.9	35.4	15.0	15.6	13.5	6.4	9.1	9.0	12.8	6.3	24
25	20.7	21.9	36.6	35.0	14.6	15.1	13.3	6.2	8.5	8.7	12.2	6.9	25
26	22.0	22.7	36.7	34.5	14.2	14.5	13.0	6.1	7.9	8.7	12.3	7.7	26
27	23.8	24.6	36.6	33.7	13.9	14.2	12.7	6.0	7.6	8.9	12.1	8.7	27
28	25.2	26.6	36.7	32.5	13.6	13.9	12.8	6.2	7.6	8.7	12.0	9.7	28
29	26.4		36.8	30.7	13.4	13.8	13.5	6.3	7.5	8.3	12.1	10.6	29
30	27.4		36.9	28.7	13.9	13.5	13.8	6.6	7.6	8.1	12.0	11.9	30
31	28.3		37.3		14.3		13.8	6.4		7.6		13.1	31
Sum													
Mean													
High													
Low													

Remarks: * 4 P.M. Reading

RIVER STAGES

Miss River Gauge at Ensley for the calendar year 1961

Zero Elevation _____ feet above _____

Bank full stage _____ feet on gauge.

M.R.C. 14, 11-7-41.

DAY	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	DAY
1								17.3		16.0	7.9	17.6	1
2								16.8		15.6	7.8	17.1	2
3								16.0		14.8	8.0	16.8	3
4								15.1		13.7	8.3	16.5	4
5								14.4		13.0	9.0	16.2	5
6								14.5		12.2	11.2	15.7	6
7								14.3		12.3	13.8	15.0	7
8								14.3		12.8	15.8	13.6	8
9								14.6		13.2	17.3	12.4	9
10								15.1	8.3	13.0	18.0	12.5	10
11								15.3	8.8	12.4	18.3	12.4	11
12								15.1	9.4	11.8	18.3	13.5	12
13								15.0	9.3	11.4	17.5	15.1	13
14								14.8	9.2	10.6	16.3	16.8	14
15								14.4	8.6	9.6	15.3	18.0	15
16								14.0	8.3	9.0	14.5	18.9	16
17								13.9		8.9	13.6	20.0	17
18								13.9	9.0	9.0	13.3	20.4	18
19								13.8	12.7	10.6	13.1	20.7	19
20									15.8	12.1	13.4	21.4	20
21									17.9	12.3	14.2	22.4	21
22									19.0	12.0	16.0	23.3	22
23									19.0	11.3	18.5	24.2	23
24									18.0	10.6	19.6	24.8	24
25									16.8	10.0	20.3	25.2	25
26									15.6	9.7	20.5	25.6	26
27									14.4	9.5	20.4	26.3	27
28									14.2	9.4	20.0	26.5	28
29									14.3	9.5	19.2	26.5	29
30							17.6		15.5	9.3	18.4	25.9	30
31							17.6			8.5		24.3	31
Sum													
Mean													
High													
Low													

Remarks: _____