

## DAILY STAGE FOR 1965

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	82.0	83.0	83.0	85.8	97.5	89.5	85.5	83.4	85.1	97.1	84.4	83.9
2	82.9	82.3	84.0	85.7	97.4	88.7	87.5	83.2	85.0	94.0	84.0	84.0
3	84.7	82.3	84.5	85.4	97.3	89.7	90.4	83.4	84.4	91.0	83.9	83.7
4	84.7	82.3	85.7	86.5	97.2	89.9	93.0	83.2	84.6	89.5	84.1	83.6
5	85.4	82.2	87.6	89.6	97.0	91.5	92.2	83.1	84.5	89.5	84.0	83.5
6	85.2	82.0	86.7	93.8	97.0	91.7	91.0	83.3	84.7	89.8	84.1	83.3
7	85.2	82.0	86.8	96.2	97.0	92.7	90.0	83.3	85.8	89.2	83.9	83.3
8	84.6	82.9	86.6	97.7	97.0	93.7	87.4	83.5	87.5	88.7	83.8	83.3
9	84.2	82.8	86.4	98.5	96.8	93.6	86.6	83.4	87.4	88.2	83.7	83.3
10	83.8	83.4	86.1	99.0	96.5	92.5	86.1	83.4	87.4	87.7	83.5	83.5
11	83.0	84.3	86.2	99.3	96.0	91.7	85.6	83.1	87.8	87.3	83.8	83.7
12	83.1	84.9	86.6	99.6	95.8	90.7	85.7	83.4	88.7	86.9	83.7	83.6
13	82.8	84.5	87.5	100.0	95.8	90.9	85.6	83.2	86.8	86.6	83.9	83.5
14	82.3	84.6	87.9	100.0	95.6	90.4	85.5	83.1	86.4	86.1	83.6	83.4
15	82.4	85.1	87.5	100.0	95.2	89.7	86.0	83.0	84.9	85.8	83.8	83.5
16	81.8	84.9	87.2	100.4	94.8	89.3	86.4	82.8	85.2	85.6	83.7	83.7
17	82.2	84.4	87.7	100.1	94.0	89.1	86.1	82.7	89.0	85.0	83.8	84.0
18	82.3	84.1	89.8	99.8	92.5	88.9	85.6	82.7	90.4	87.0	83.7	84.0
19	82.3	83.9	93.0	99.5	91.8	88.5	85.1	83.1	89.4	87.4	84.0	84.2
20	82.2	83.6	95.5	98.8	90.8	87.8	84.7	83.0	87.9	86.5	83.8	84.2
21	82.1	83.4	96.8	98.2	89.7	87.7	84.7	83.2	87.9	85.7	83.8	84.2
22	82.2	83.1	95.5	97.5	89.0	87.9	86.8	83.2	90.3	85.5	83.7	84.2
23	82.5	82.8	90.5	96.9	88.4	87.6	89.7	82.9	95.1	85.3	83.7	84.1
24	84.3	82.9	87.7	96.5	88.0	87.8	90.3	82.7	98.5	85.2	83.7	84.1
25	85.5	82.6	86.0	96.6	87.5	87.1	90.3	82.5	99.7	84.7	83.7	84.4
26	85.8	82.5	85.0	96.0	87.2	87.0	90.4	82.2	100.6	84.5	83.7	85.2
27	85.3	83.2	84.2	95.5	88.6	86.5	88.1	83.7	101.0	84.4	83.8	85.6
28	84.9	83.2	84.1	95.4	88.4	86.1	85.5	83.8	101.1	84.6	83.5	86.2
29	84.3	-----	84.3	96.5	87.6	85.2	84.4	83.4	100.5	84.7	83.7	86.6
30	83.7	-----	84.2	97.3	88.8	85.3	84.0	83.2	99.0	84.7	83.7	86.1
31	83.2	-----	85.1	-----	90.1	-----	83.8	84.5	-----	84.5	-----	85.2

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	83.6	83.3	87.4	96.1	93.1	89.3	87.2	83.2	90.2	87.2	83.8	84.2
MAX	85.8	85.1	96.8	100.4	97.5	93.7	93.0	84.5	101.1	97.1	84.4	86.6
MIN	81.8	82.0	83.0	85.4	87.2	85.2	83.8	82.2	84.4	84.4	83.5	83.3
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 87.4.

HIGHEST STAGE WAS 101.1 ON SEP 28.

LOWEST STAGE WAS 81.8 ON JAN 16.

## DAILY STAGE FOR 1966

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	85.0	82.8	84.9	86.7	87.9	86.4	84.8	83.3	82.9	81.9	82.3	82.8
2	85.0	82.8	84.9	86.6	87.1	86.2	84.7	83.4	83.0	81.8	82.2	82.7
3	85.1	83.0	85.2	86.6	86.7	85.8	84.6	83.1	82.8	82.1	82.5	82.3
4	85.2	82.9	85.5	86.8	86.6	85.3	84.7	83.0	82.8	82.8	82.5	82.2
5	85.4	83.0	85.5	87.0	86.7	85.2	84.2	83.0	82.8	82.0	82.7	82.4
6	85.6	83.0	85.4	87.0	86.9	85.0	84.0	83.0	83.0	82.0	82.5	82.0
7	85.9	82.5	85.2	87.1	87.0	84.7	83.7	83.0	82.9	82.1	82.4	82.7
8	85.7	82.5	84.7	87.1	86.6	84.9	83.8	82.6	82.9	81.9	82.5	83.3
9	84.2	82.4	84.7	86.9	86.1	84.9	83.8	82.6	82.8	82.0	82.1	83.2
10	84.2	84.2	84.9	86.8	85.9	85.6	83.3	82.8	82.5	82.0	82.7	83.4
11	84.3	87.4	84.9	86.5	85.5	86.0	83.1	83.0	82.5	81.8	82.5	83.1
12	83.9	90.4	84.8	86.5	85.9	86.7	83.3	82.7	82.6	81.8	82.5	83.1
13	84.1	90.4	85.2	86.4	86.6	86.5	83.5	82.6	82.5	82.2	82.5	82.7
14	83.9	89.9	85.5	86.9	87.0	88.0	83.7	82.6	82.4	82.5	82.8	82.5
15	84.0	90.2	85.6	86.8	87.6	90.0	83.5	83.0	82.7	83.3	82.7	82.7
16	84.2	89.7	85.8	86.7	88.5	94.0	83.7	82.7	82.0	82.3	82.7	82.8
17	84.0	88.6	86.0	86.7	88.9	93.6	83.8	82.7	82.1	82.7	82.5	82.7
18	83.6	87.8	85.9	86.4	89.4	92.5	83.9	82.7	82.3	82.8	82.5	83.0
19	83.4	86.4	85.6	86.0	92.3	91.7	83.7	83.1	82.5	82.8	82.4	82.7
20	83.8	87.3	85.4	85.8	93.0	89.0	83.7	83.7	82.6	83.0	82.5	82.7
21	83.6	87.0	85.3	89.9	93.0	86.4	83.5	83.4	82.6	82.9	82.5	82.5
22	83.8	86.3	85.1	93.7	92.5	86.1	83.6	83.3	82.4	83.3	82.4	82.8
23	83.4	85.9	85.3	93.5	90.7	85.3	83.3	83.0	82.5	82.9	82.5	82.8
24	83.2	85.5	85.4	94.0	90.0	84.6	83.2	83.0	82.3	82.9	82.5	82.5
25	82.8	85.6	85.5	93.9	88.5	84.2	82.7	83.1	82.3	82.6	82.5	82.2
26	82.9	85.2	85.8	92.8	88.6	84.1	83.0	83.3	82.3	82.7	82.4	82.3
27	82.8	85.3	86.3	91.5	88.9	84.1	82.7	83.2	82.3	82.7	82.8	82.3
28	82.8	85.2	86.5	89.9	88.4	83.6	83.0	83.2	82.1	82.7	82.7	82.6
29	82.6	-----	86.5	89.5	88.5	83.9	83.7	83.0	82.1	82.3	82.6	82.3
30	82.5	-----	86.4	89.0	87.5	83.9	83.5	83.1	81.9	82.2	82.7	82.2
31	82.8	-----	86.6	-----	86.9	-----	83.5	83.0	-----	82.0	-----	82.2

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	84.0	85.8	85.5	88.4	88.2	86.6	83.7	83.0	82.5	82.4	82.5	82.6
MAX	85.9	90.4	86.6	94.0	93.0	94.0	84.8	83.7	83.0	83.3	82.8	83.4
MIN	82.5	82.4	84.7	85.8	85.5	83.6	82.7	82.6	81.9	81.8	82.1	82.0
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 84.6.

HIGHEST STAGE WAS 94.0 ON APR 24, AND JUN 16.

LOWEST STAGE WAS 81.8 ON OCT 2, AND OCT 11 THRU 12.

## DAILY STAGE FOR 1967

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

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MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	82.2	83.2	82.2	85.2	88.2	84.7	100.9	85.5	82.4	83.0	85.6	83.4
2	82.2	83.4	82.3	85.6	87.3	85.5	100.6	85.2	82.7	82.6	89.1	83.5
3	82.0	83.4	82.4	87.0	86.4	86.7	100.5	84.2	82.6	82.5	89.2	84.2
4	81.7	83.3	82.1	90.2	86.0	86.2	99.3	83.7	82.5	82.5	89.2	84.0
5	82.2	83.1	82.2	91.7	85.7	85.4	98.6	83.4	82.5	82.6	90.0	83.7
6	81.6	83.0	82.3	91.5	85.1	84.5	96.3	83.5	82.5	82.6	89.5	83.8
7	82.0	82.8	82.6	90.7	85.4	84.3	94.2	83.5	82.3	82.9	87.2	84.2
8	82.0	82.8	82.8	89.0	87.4	84.0	92.5	83.5	82.3	83.0	85.6	84.0
9	81.6	82.5	82.5	88.5	89.0	85.0	90.7	83.8	82.2	83.6	84.8	83.9
10	82.0	82.7	82.5	87.6	88.5	85.5	88.7	83.6	82.3	83.9	84.5	84.5
11	81.7	82.5	82.6	87.5	86.5	86.0	88.5	83.5	82.2	84.2	84.4	84.5
12	82.2	82.5	82.9	87.9	85.5	87.6	88.8	83.6	82.3	84.4	84.2	84.7
13	82.2	82.8	83.0	88.8	86.0	89.6	88.9	83.3	82.3	83.9	84.0	84.5
14	82.0	82.6	83.1	88.9	85.3	94.8	88.2	83.0	82.4	83.5	84.0	84.6
15	82.0	82.4	83.2	89.0	85.6	94.8	86.7	82.7	82.5	83.2	83.7	84.5
16	81.6	82.8	83.3	92.4	85.5	96.0	85.7	83.0	83.1	83.9	83.8	84.2
17	81.8	83.0	83.2	94.3	86.0	96.5	84.5	82.9	83.2	83.8	83.6	84.1
18	81.7	83.0	83.2	94.7	86.2	97.3	84.1	82.9	83.4	84.1	83.6	84.0
19	81.4	83.0	83.1	94.7	86.2	98.7	83.5	82.9	83.4	84.6	83.5	83.8
20	81.4	83.0	83.3	94.0	85.4	99.1	83.8	82.8	83.1	84.1	83.5	83.9
21	81.8	83.0	83.9	92.7	84.7	99.5	83.7	83.3	83.0	83.7	83.5	84.2
22	81.6	82.9	84.0	92.1	84.5	99.8	83.8	83.0	83.1	83.4	83.5	85.9
23	81.6	82.2	84.0	91.3	84.5	99.8	83.6	82.8	83.1	83.3	83.3	85.6
24	81.6	82.4	83.7	90.8	84.1	99.5	83.7	82.5	83.2	83.0	83.4	84.7
25	81.7	81.9	84.0	90.4	83.9	100.0	84.3	82.7	83.3	83.3	83.2	84.5
26	82.2	82.0	84.1	90.2	83.9	100.9	84.3	82.7	83.3	83.2	83.2	84.2
27	83.2	82.4	84.3	90.1	83.8	100.9	84.1	82.6	83.4	83.0	83.4	84.1
28	82.9	82.4	84.6	90.0	83.9	101.0	84.5	82.7	83.2	83.4	83.3	84.0
29	82.5	-----	85.1	89.5	83.9	101.2	84.9	82.7	83.1	83.5	83.1	83.9
30	82.6	-----	85.3	88.9	83.7	101.5	85.2	82.6	83.1	83.4	83.4	83.6
31	83.3	-----	84.9	-----	83.9	-----	85.0	82.5	-----	83.8	-----	83.8

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	82.0	82.7	83.3	90.2	85.5	93.2	88.8	83.2	82.8	83.4	84.9	84.2
MAX	83.3	83.4	85.3	94.7	89.0	101.5	100.9	85.5	83.4	84.6	90.0	85.9
MIN	81.4	81.9	82.1	85.2	83.7	84.0	83.5	82.5	82.2	82.5	83.1	83.4
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 85.4.

HIGHEST STAGE WAS 101.5 ON JUN 30.

LOWEST STAGE WAS 81.4 ON JAN 19 THRU 20.

## DAILY STAGE FOR 1968

## 0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 & LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83.4	84.5	82.9	83.3	84.7	88.3	85.8	85.1	83.0	83.5	84.5	85.3
2	83.5	86.0	82.9	83.3	84.6	87.8	86.0	84.5	82.7	83.7	84.4	84.3
3	83.4	88.4	82.8	83.4	84.3	87.0	86.5	84.6	83.1	83.7	84.5	84.5
4	83.4	88.6	82.8	83.8	84.2	86.9	86.2	86.3	82.9	83.7	84.4	84.6
5	83.7	87.5	82.6	84.0	84.3	86.5	86.0	88.1	82.7	83.7	84.3	84.4
6	83.3	86.3	82.5	84.3	84.0	86.5	86.2	87.7	82.6	83.7	84.5	84.4
7	83.0	85.9	82.6	84.3	83.9	85.5	86.2	87.5	82.7	83.7	84.7	84.1
8	83.0	85.9	82.6	84.2	84.0	85.0	86.1	86.3	82.8	83.6	84.7	84.0
9	82.9	85.9	82.7	84.1	83.8	84.9	86.1	85.3	83.2	83.7	84.7	83.3
10	82.8	84.4	82.6	83.8	83.5	84.5	86.2	85.0	83.5	83.6	84.5	83.3
11	82.8	84.0	82.7	83.8	83.5	84.1	86.3	84.9	83.5	83.4	84.5	82.8
12	82.5	83.8	82.9	83.7	83.7	83.9	86.3	84.8	83.3	83.4	84.4	82.6
13	82.7	83.7	83.0	83.6	83.7	83.6	86.2	85.0	83.3	83.8	84.3	82.2
14	82.8	83.7	83.1	83.6	83.4	83.9	86.0	86.6	83.3	84.2	84.3	83.2
15	82.5	83.8	83.3	83.7	83.2	84.5	85.8	86.0	83.0	84.4	84.3	83.0
16	82.4	84.0	83.2	83.6	83.2	84.5	85.5	85.1	83.2	84.6	84.3	83.3
17	82.3	84.0	83.4	83.7	83.3	84.1	84.5	84.6	83.2	84.4	85.3	82.9
18	82.3	83.8	83.5	83.8	83.5	84.0	84.5	84.3	83.4	84.2	86.3	82.9
19	82.5	83.6	83.5	84.0	83.9	84.1	84.5	84.3	83.3	84.1	85.3	83.0
20	82.3	83.5	83.3	84.0	83.7	84.0	85.0	84.3	83.5	83.9	84.7	83.0
21	82.4	83.4	83.5	84.3	83.9	84.0	84.8	84.2	83.5	84.7	84.7	83.0
22	82.9	83.3	83.9	84.0	84.0	84.1	84.8	84.3	83.5	84.7	84.5	83.0
23	83.6	83.5	84.0	84.3	84.3	84.0	84.8	84.3	83.6	84.7	84.3	83.1
24	84.0	83.5	84.0	85.2	84.5	84.2	84.2	84.0	83.7	84.7	84.2	83.1
25	84.0	83.5	83.9	85.0	85.9	84.2	84.3	83.7	84.2	84.6	84.0	83.2
26	83.7	83.1	83.7	86.0	91.6	84.5	84.8	83.5	84.2	84.5	83.8	83.5
27	83.5	83.0	83.6	87.3	91.6	86.5	85.1	83.3	84.3	84.4	84.0	83.4
28	83.4	82.9	83.6	86.9	91.2	85.9	86.4	83.1	84.1	84.5	83.8	84.0
29	83.5	82.9	83.6	87.0	90.3	85.2	87.5	83.3	83.8	84.3	84.4	86.3
30	83.9	-----	83.3	85.0	89.1	85.2	86.8	83.1	83.7	84.3	85.6	86.7
31	84.2	-----	83.4	-----	88.5	-----	85.8	83.0	-----	84.3	-----	86.5

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	83.1	84.5	83.2	84.4	85.2	85.0	85.7	84.8	83.4	84.1	84.5	83.8
MAX	84.2	88.6	84.0	87.3	91.6	88.3	87.5	88.1	84.3	84.7	86.3	86.7
MIN	82.3	82.9	82.5	83.3	83.2	83.6	84.2	83.0	82.6	83.4	83.8	82.2
DAYS	31	29	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 366

THE MEAN STAGE FOR THE YEAR WAS 84.3.

HIGHEST STAGE WAS 91.6 ON MAY 26 THRU 27.

LOWEST STAGE WAS 82.2 ON DEC 13.

## DAILY STAGE FOR 1969

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	84.80	90.90	85.80	91.70	101.60	88.30	97.70	88.90	83.90	83.50	84.00	83.40
2	84.30	89.30	87.00	91.50	102.30	89.20	98.70	88.70	83.90	83.50	84.40	83.50
3	84.30	88.60	86.50	91.00	100.80	92.00	100.00	87.60	83.90	83.30	84.50	83.50
4	84.80	87.50	86.00	90.30	99.60	92.50	101.20	87.00	83.60	83.30	84.30	83.30
5	84.70	86.60	85.80	90.40	99.00	90.50	101.90	86.00	83.60	83.20	84.20	83.10
6	84.00	85.60	85.70	92.40	98.00	89.00	102.60	85.30	84.00	83.60	84.30	83.50
7	83.50	85.30	85.70	96.00	97.50	88.40	103.50	85.10	83.90	83.60	84.30	83.60
8	83.50	85.70	85.80	97.00	96.70	88.20	104.00	85.90	84.00	83.40	84.30	83.60
9	82.80	88.70	85.70	97.10	96.20	87.80	104.00	85.70	84.00	83.40	84.30	83.70
10	82.50	90.50	85.60	96.70	95.20	86.60	104.50	85.70	84.10	83.00	84.30	83.60
11	83.30	90.50	84.90	96.10	95.70	86.70	105.60	86.50	84.10	83.80	84.00	83.20
12	83.40	88.60	84.80	95.50	96.00	87.50	106.11	86.70	84.40	86.90	84.00	83.20
13	83.50	87.50	84.70	95.10	95.20	87.90	107.00	86.70	84.00	96.50	84.00	83.10
14	83.50	87.00	84.50	94.70	94.80	87.60	107.00	85.70	83.80	100.00	84.00	83.00
15	83.40	86.40	84.30	94.50	94.10	87.50	107.00	84.80	83.70	101.30	84.00	83.00
16	83.40	85.80	84.00	94.50	93.80	87.70	106.20	84.10	83.70	102.00	83.80	83.10
17	83.60	84.80	84.00	94.50	93.10	89.30	104.60	84.40	84.50	100.40	83.80	83.10
18	84.50	84.50	83.90	95.30	92.50	89.30	102.30	84.60	86.50	98.00	83.80	83.00
19	85.90	84.30	84.30	97.80	92.10	88.00	99.50	84.90	85.40	92.00	83.90	83.00
20	86.30	84.10	84.40	100.20	91.10	87.00	97.50	84.70	84.80	89.00	83.90	83.00
21	85.80	84.30	84.50	101.50	90.00	86.80	97.00	84.60	84.50	88.50	83.90	83.00
22	86.10	84.30	85.20	102.20	90.10	86.90	96.60	84.50	83.80	88.00	83.80	83.00
23	86.50	84.30	86.70	102.00	90.10	89.30	96.70	84.00	83.40	87.50	83.80	83.00
24	87.10	84.50	86.70	101.00	91.60	94.00	96.30	84.00	83.40	86.60	83.80	83.00
25	87.60	84.50	89.70	100.00	93.40	94.90	95.70	83.90	83.40	86.40	83.80	83.00
26	86.40	84.40	93.70	99.00	93.10	94.90	94.20	83.90	83.90	86.00	83.50	82.80
27	85.30	84.50	94.00	98.00	91.60	93.50	93.50	83.70	83.90	85.50	83.90	82.20
28	85.30	84.90	94.00	98.00	90.40	92.00	92.80	83.70	83.90	85.00	83.50	82.10
29	85.00	-----	94.00	98.50	89.80	94.30	91.60	83.70	83.80	85.00	83.70	82.70
30	88.40	-----	93.00	99.70	88.70	96.60	90.00	83.50	83.50	84.60	83.60	82.60
31	91.00	-----	92.30	-----	88.30	-----	89.00	83.90	-----	84.00	-----	82.80

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	84.98	86.35	87.01	96.41	94.27	89.81	99.82	85.24	84.04	88.09	83.98	83.09
MAX	91.00	90.90	94.00	102.20	102.30	96.60	107.00	88.90	86.50	102.00	84.50	83.70
MIN	82.50	84.10	83.90	90.30	88.30	86.60	89.00	83.50	83.40	83.00	83.50	82.10
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 88.61.

HIGHEST STAGE WAS 107.00 ON JUL 13 THRU 15.

LOWEST STAGE WAS 82.10 ON DEC 28.

## DAILY STAGE FOR 1970

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	82.6	84.0	83.2	84.2	94.4	88.9	86.3	83.5	82.8	94.3	86.9	84.2
2	83.0	84.0	83.5	84.8	99.1	92.0	85.5	83.8	82.5	90.6	86.6	84.0
3	82.6	83.2	83.7	86.5	100.0	95.8	85.3	84.0	82.5	88.2	85.8	84.2
4	82.7	83.2	84.1	87.0	99.0	96.0	85.4	83.8	82.4	86.9	85.7	84.1
5	83.2	83.5	84.2	86.3	97.4	96.6	84.9	83.5	82.2	85.3	85.9	84.4
6	82.8	83.3	84.9	86.5	95.2	98.0	84.5	85.5	82.0	84.7	85.9	84.6
7	82.8	83.1	84.9	86.6	93.0	98.5	84.5	86.7	82.1	84.5	85.8	84.5
8	83.0	83.1	85.0	86.4	91.0	97.5	84.0	87.7	83.3	84.3	85.6	84.5
9	83.3	83.2	85.3	85.9	89.6	96.1	83.7	87.8	83.0	84.3	85.5	84.5
10	82.9	83.2	85.3	85.9	89.1	94.8	83.7	88.4	83.2	84.6	85.4	83.8
11	82.7	83.0	84.8	85.2	89.9	93.5	83.7	88.5	82.8	87.3	86.4	83.6
12	82.5	82.7	84.3	85.0	90.4	92.7	83.7	88.5	83.2	90.6	86.5	84.0
13	82.5	82.8	84.0	85.0	90.6	92.2	83.3	85.9	83.5	90.5	86.3	84.3
14	82.5	82.8	83.9	85.0	90.7	92.8	83.0	83.6	84.0	89.9	86.3	84.8
15	82.0	82.8	83.9	85.4	91.1	96.3	83.0	83.2	84.9	89.9	86.4	84.8
16	82.0	82.9	83.8	85.5	97.6	97.5	83.4	83.3	84.5	87.8	86.3	84.5
17	81.8	82.9	83.4	85.7	100.9	95.5	83.6	83.9	85.4	86.5	85.5	84.3
18	81.8	82.8	83.0	85.5	102.0	94.0	83.4	83.9	86.5	85.8	85.7	84.3
19	82.0	82.9	83.5	86.8	101.5	92.5	83.3	83.9	87.0	84.7	85.5	84.4
20	82.0	82.8	83.7	91.6	100.5	92.5	83.8	84.1	88.0	84.7	85.6	84.2
21	82.5	82.7	83.4	96.5	99.2	91.7	83.3	84.3	88.0	84.5	85.7	84.6
22	82.0	82.8	83.3	97.4	97.2	92.3	83.2	84.3	86.5	84.5	85.8	84.6
23	81.5	82.7	83.7	96.5	94.7	91.6	83.2	84.0	88.1	84.1	86.1	84.3
24	81.4	82.9	83.5	96.7	92.5	91.0	83.3	83.6	92.1	85.0	85.6	83.9
25	82.0	82.7	83.7	97.0	91.4	90.8	83.0	83.8	98.0	85.1	85.3	83.8
26	82.3	82.9	83.8	94.4	90.4	89.4	83.0	83.6	100.0	84.3	84.8	83.6
27	82.6	82.9	84.0	91.8	90.3	88.5	83.1	83.4	100.7	84.6	84.6	83.5
28	82.6	83.1	84.0	91.1	89.9	87.8	83.1	83.4	101.0	85.5	84.8	83.5
29	83.2	-----	83.9	90.0	89.8	87.0	82.9	82.9	100.3	87.9	84.1	83.4
30	83.5	-----	84.0	89.1	89.8	86.7	82.8	82.7	98.8	87.8	84.0	83.4
31	84.0	-----	84.0	-----	89.4	-----	82.9	82.9	-----	87.6	-----	83.4

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	82.5	83.0	84.0	88.7	94.1	93.0	83.7	84.6	87.6	86.7	85.7	84.1
MAX	84.0	84.0	85.3	97.4	102.0	98.5	86.3	88.5	101.0	94.3	86.9	84.8
MIN	81.4	82.7	83.0	84.2	89.1	86.7	82.8	82.7	82.0	84.1	84.0	83.4
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 86.5.

HIGHEST STAGE WAS 102.0 ON MAY 18.

LOWEST STAGE WAS 81.4 ON JAN 24.

## DAILY STAGE FOR 1971

## 0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 & LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83.3	83.1	93.6	88.3	88.4	86.0	84.3	83.8				
2	83.4	83.0	93.9	87.7	88.6	85.9	84.2	83.7				
3	83.4	83.0	94.1	87.7	88.3	86.3	84.0	83.5				
4	83.9	83.0	93.6	87.8	88.2	86.3	83.9	83.6				
5	85.0	83.5	93.0	87.8	87.4	87.0	84.1	83.4				
6	85.5	84.0	92.0	88.2	86.5	87.5	84.0	83.5				
7	85.6	84.0	90.3	88.4	85.9	87.3	84.0	83.6				
8	84.4	83.8	87.9	88.6	86.0	86.9	84.0	83.3				
9	84.1	83.6	86.7	88.5	86.0	86.3	83.9	83.4				
10	83.9	83.5	87.0	88.5	85.5	86.0	84.2	83.3				
11	83.7	83.5	86.8	88.5	85.6	85.7	84.5	83.3				
12	84.0	83.3	86.8	88.5	85.5	86.4	84.6	83.3				
13	83.8	83.2	86.2	88.3	86.3	86.8	85.4	83.2				
14	83.7	83.2	86.5	88.7	86.5	87.4	85.6	83.0				
15	83.3	83.2	87.5	87.9	86.5	87.7	86.0	83.2				
16	83.1	83.3	88.5	87.7	86.5	88.3	86.0	83.4				
17	83.0	83.3	90.0	87.6	86.3	88.3	85.1	83.3				
18	83.0	83.3	91.0	87.3	85.6	87.6	85.4	83.3				
19	82.5	83.7	91.8	87.3	84.8	87.3	85.5	83.3				
20	82.4	84.2	90.5	87.1	84.7	86.3	84.6	83.0				
21	82.9	87.7	89.7	87.1	84.5	85.9	84.6	83.0				
22	83.1	90.7	89.0	87.1	84.8	85.6	84.5	83.6				
23	83.1	92.0	88.7	87.2	85.8	85.0	84.2	83.4				
24	83.0	92.1	88.7	87.5	86.5	85.1	84.2	83.3				
25	83.1	92.1	88.9	87.6	86.5	85.0	84.0	83.2				
26	83.1	92.1	89.0	87.7	85.6	85.1	84.0	83.2				
27	82.8	92.7	89.5	87.9	85.8	84.5	84.0	83.0				
28	82.8	92.8	89.7	88.2	86.0	84.7	83.9	83.1				
29	83.3	-----	89.5	88.2	86.6	84.8	83.7	83.1				
30	83.2	-----	89.0	88.4	86.5	84.7	84.0	83.0				
31	83.1	-----	88.4	-----	86.2	-----	84.0	83.0	-----		-----	

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	83.5	85.7	89.6	87.9	86.3	86.3	84.5	83.3				
MAX	85.6	92.8	94.1	88.7	88.6	88.3	86.0	83.8				
MIN	82.4	83.0	86.2	87.1	84.5	84.5	83.7	83.0				
DAYS	31	28	31	30	31	30	31	31	0	0	0	0

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 243

THE MEAN STAGE FOR THE YEAR WAS 85.9.

HIGHEST STAGE WAS 94.1 ON MAR 3.

LOWEST STAGE WAS 82.4 ON JAN 20.

## DAILY STAGE FOR 1972

## 0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 & LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	84.7	83.0	83.4	85.8	91.8	86.1	84.5	85.5	85.9	86.0	86.6	87.6
2	85.0	83.0	83.9	85.5	92.6	86.3	85.0	85.4	85.9	86.6	87.6	87.2
3	84.8	83.0	84.0	85.7	94.9	85.7	84.7	85.2	85.7	87.2	88.6	86.5
4	84.8	83.0	84.2	85.9	96.0	85.4	84.5	85.2	85.5	87.4	89.0	86.4
5	84.0	83.3	84.1	85.9	96.0	85.5	84.4	85.7	85.5	87.4	89.6	86.0
6	84.0	83.3	84.5	85.9	95.7	85.0	84.2	86.8	85.5	87.4	89.8	85.8
7	83.8	82.9	84.5	85.9	95.3	84.9	84.2	88.3	85.5	87.0	89.5	85.0
8	84.1	82.9	83.8	86.0	94.7	84.5	84.0	88.5	85.7	87.0	88.9	85.0
9	84.0	82.9	83.8	86.0	93.8	84.9	83.9	88.6	85.0	87.0	88.0	85.0
10	83.9	82.9	83.8	86.0	94.6	84.7	84.0	88.6	84.9	87.3	87.8	84.9
11	83.7	82.9	83.8	86.0	95.5	84.6	83.9	88.6	85.3	87.4	88.0	84.8
12	83.7	82.9	83.8	86.2	95.4	84.8	83.9	88.8	85.3	87.4	88.1	83.8
13	83.8	82.9	84.0	86.5	95.0	84.8	83.9	88.7	85.0	87.4	88.4	83.8
14	83.7	82.5	84.7	86.0	94.8	84.8	83.9	88.8	84.8	87.2	91.3	83.5
15	83.2	82.4	85.4	86.0	94.5	85.2	83.7	88.7	85.0	87.2	94.0	83.5
16	83.2	82.9	86.3	87.0	94.3	85.8	84.0	88.3	85.7	86.4	95.7	83.5
17	83.4	83.2	86.9	86.8	93.8	86.8	84.0	88.1	88.0	86.2	97.0	83.5
18	83.5	83.3	86.9	86.8	93.3	87.2	84.2	87.3	88.5	86.2	96.8	83.5
19	82.5	83.3	86.9	86.5	92.7	86.9	84.3	86.1	87.7	85.0	96.0	83.5
20	83.1	83.5	86.7	88.0	91.9	86.5	84.8	85.7	87.0	85.0	93.8	83.8
21	83.5	83.5	86.0	89.6	91.1	86.5	85.0	85.7	86.4	84.8	92.5	84.0
22	83.2	83.6	85.5	91.5	90.1	86.5	85.1	85.3	85.7	84.8	91.8	84.7
23	83.0	83.3	85.5	94.0	88.9	86.1	85.5	84.9	85.3	84.9	91.1	84.9
24	83.0	83.3	85.3	95.2	88.0	85.7	85.0	85.2	84.8	84.5	89.9	85.0
25	83.0	83.2	85.5	95.2	87.6	85.3	85.0	85.0	84.8	84.5	88.4	84.8
26	83.0	83.1	86.0	94.6	87.0	85.2	84.9	84.9	84.4	84.5	88.5	84.7
27	83.0	83.1	86.3	93.5	86.8	85.0	85.0	84.8	84.4	84.5	88.6	84.7
28	82.8	83.4	86.3	92.5	86.8	84.9	85.0	84.7	84.2	86.0	88.2	84.8
29	82.8	83.5	86.0	92.1	86.9	84.7	85.0	85.3	85.0	86.0	87.8	84.8
30	82.8	-----	85.7	91.8	86.5	84.7	85.0	85.7	85.4	86.2	87.6	85.6
31	82.9	-----	85.6	-----	86.3	-----	85.4	86.0	-----	86.5	-----	86.7

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	83.5	83.1	85.1	88.5	92.0	85.5	84.5	86.6	85.6	86.2	90.3	84.9
MAX	85.0	83.6	86.9	95.2	96.0	87.2	85.5	88.8	88.5	87.4	97.0	87.6
MIN	82.5	82.4	83.4	85.5	86.3	84.5	83.7	84.7	84.2	84.5	86.6	83.5
DAYS	31	29	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 366

THE MEAN STAGE FOR THE YEAR WAS 86.3.

HIGHEST STAGE WAS 97.0 ON NOV 17.

LOWEST STAGE WAS 82.4 ON FEB 15.

## DAILY STAGE FOR 1973

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	88.4	91.7	87.4	110.2	113.0	101.7	89.5	86.5	84.0	94.3	87.9	90.2
2	91.7	91.3	87.6	110.5	111.6	101.8	88.8	86.0	84.0	95.4	88.0	89.9
3	91.4	91.4	87.1	110.8	109.8	101.4	88.3	85.5	84.0	96.3	87.5	88.0
4	91.6	94.8	87.4	111.2	108.5	100.0	87.0	85.0	83.6	97.0	87.5	87.7
5	92.3	97.0	88.3	111.3	108.0	99.8	87.0	85.0	83.6	97.8	87.0	89.8
6	92.4	97.6	90.3	111.5	107.7	99.6	88.5	85.0	83.8	98.4	86.5	93.5
7	92.1	96.4	94.8	111.0	107.8	99.6	90.5	84.7	83.9	98.6	86.0	95.7
8	91.5	96.3	99.5	110.5	108.1	99.6	91.5	84.5	83.9	98.0	86.5	96.5
9	90.5	96.3	100.8	109.3	108.5	98.9	89.8	84.2	84.1	96.7	86.5	95.0
10	86.1	95.0	101.5	108.6	108.9	98.6	88.8	84.9	84.3	92.8	86.0	92.5
11	83.5	94.0	102.5	108.0	109.0	97.9	88.0	86.0	84.3	89.7	85.7	89.5
12	84.0	91.5	103.5	107.3	109.1	97.6	87.4	86.2	84.0	88.7	85.5	87.7
13	84.8	89.5	104.4	106.8	109.1	96.9	87.2	86.3	83.7	88.6	85.4	87.2
14	84.8	89.5	105.0	105.6	109.0	96.1	86.7	86.8	83.7	96.0	85.0	86.5
15	84.8	91.2	105.7	105.0	108.5	95.4	86.0	86.5	83.7	96.4	85.2	86.7
16	84.8	92.2	106.2	104.6	107.5	95.0	85.5	87.0	83.7	96.0	85.0	86.0
17	84.8	91.2	106.5	104.8	105.8	95.0	85.5	86.5	83.6	96.0	84.9	85.8
18	86.8	89.1	106.0	105.0	104.5	94.5	85.0	86.0	83.8	96.5	85.0	85.2
19	87.0	87.2	105.8	105.0	103.3	94.0	84.8	84.8	83.8	97.3	84.9	84.9
20	92.5	85.7	105.3	105.5	102.4	95.0	84.4	84.8	83.8	97.0	84.5	84.7
21	94.9	85.8	104.7	106.0	102.0	96.0	84.5	84.6	84.0	96.3	85.0	84.7
22	95.0	86.0	103.8	106.5	101.0	95.2	85.0	84.4	83.9	96.2	85.1	84.1
23	95.5	85.9	103.5	108.0	101.0	94.4	87.0	84.3	83.8	95.5	86.3	84.1
24	95.8	85.5	103.1	109.8	101.2	93.3	91.5	84.0	83.8	93.8	87.7	84.4
25	95.7	85.3	102.4	111.8	101.0	92.7	92.2	84.0	84.0	91.5	88.6	84.8
26	94.4	85.6	103.0	112.9	100.6	92.0	90.8	84.0	84.4	89.9	89.3	87.5
27	93.1	85.8	104.7	114.0	100.1	91.3	88.3	84.3	85.8	89.1	90.0	88.7
28	91.9	86.2	106.4	114.8	99.7	91.0	87.3	84.4	88.8	88.7	90.8	89.3
29	91.8	-----	107.8	114.7	100.0	90.8	87.1	84.4	91.1	88.7	91.6	89.7
30	91.8	-----	109.0	113.8	100.5	90.5	87.0	85.0	93.0	87.9	90.8	89.2
31	92.0	-----	109.7	-----	101.2	-----	86.6	84.5	-----	87.7	-----	88.0

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	90.2	90.5	101.1	109.2	105.4	96.2	87.7	85.2	84.7	94.0	86.9	88.3
MAX	95.8	97.6	109.7	114.8	113.0	101.8	92.2	87.0	93.0	98.6	91.6	96.5
MIN	83.5	85.3	87.1	104.6	99.7	90.5	84.4	84.0	83.6	87.7	84.5	84.1
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 93.3.

HIGHEST STAGE WAS 114.8 ON APR 28.

LOWEST STAGE WAS 83.5 ON JAN 11.

## DAILY STAGE FOR 1974

## 0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 & LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	87.2	98.5	89.5	88.5	90.9	100.0	97.0	84.0	84.5	83.0	83.4	83.5
2	85.8	97.5	89.2	88.5	91.4	101.7	97.0	84.3	84.0	83.0	83.6	83.5
3	85.0	96.1	89.2	88.6	92.4	102.5	96.5	84.3	84.4	83.0	85.0	83.5
4	85.0	95.5	89.2	88.6	93.1	102.0	95.8	84.2	84.7	82.0	86.8	83.5
5	84.6	94.8	89.1	88.0	92.9	101.5	95.5	84.0	84.7	82.0	88.5	83.5
6	84.6	93.0	89.7	88.0	92.5	100.0	94.8	84.0	84.5	82.5	89.7	83.5
7	84.4	91.8	90.7	87.9	92.0	98.3	94.0	83.8	84.4	83.0	88.8	83.5
8	84.3	89.8	91.5	88.0	91.6	98.0	94.1	83.5	84.1	83.0	88.4	84.0
9	84.0	89.6	91.2	88.6	90.6	98.9	93.0	83.5	83.7	83.0	87.8	84.0
10	84.0	89.6	91.4	88.8	89.8	100.0	90.8	83.9	83.5	83.0	87.4	84.4
11	84.0	88.8	91.7	89.6	89.1	100.7	89.8	84.8	83.8	83.2	87.8	84.4
12	84.0	88.2	94.5	90.0	88.8	101.5	88.8	85.5	84.0	83.2	87.8	84.4
13	84.0	87.5	97.0	90.6	88.6	101.9	88.2	86.0	84.0	83.3	87.8	83.9
14	84.0	87.5	97.5	90.8	88.3	101.7	87.7	86.0	84.0	83.3	87.4	83.8
15	84.0	87.5	98.0	91.8	88.8	100.8	87.1	85.5	84.0	83.2	86.8	84.6
16	84.0	86.8	97.7	91.9	90.8	100.0	87.2	85.7	84.0	83.0	86.0	84.0
17	84.0	86.5	97.3	91.0	94.0	99.3	87.0	85.3	84.0	83.0	85.3	84.0
18	84.0	86.2	96.5	91.4	93.8	98.2	86.6	84.8	84.0	83.0	85.0	84.2
19	84.2	86.3	96.0	91.2	94.0	97.1	86.0	84.3	83.5	83.0	84.6	84.2
20	88.3	88.3	95.0	91.0	97.5	96.2	85.7	84.0	83.9	83.0	84.2	83.8
21	91.5	90.6	94.3	90.8	100.0	95.9	84.2	84.0	83.7	82.8	83.9	83.6
22	93.0	91.6	93.8	90.8	101.8	95.5	85.2	84.0	83.8	82.7	83.9	83.6
23	94.8	92.1	92.2	91.0	102.8	95.0	85.2	84.5	83.7	82.2	83.7	83.6
24	96.0	92.7	91.3	91.3	103.7	95.0	84.8	84.7	83.3	82.1	83.7	83.0
25	95.0	92.8	90.8	92.0	103.7	95.0	85.0	84.7	82.8	82.6	83.7	83.5
26	94.6	92.0	89.8	92.8	102.5	95.0	85.0	84.7	82.8	83.0	83.7	83.5
27	94.7	90.8	88.8	92.4	101.3	95.0	84.7	84.5	83.0	83.0	83.7	83.3
28	97.0	90.1	88.5	92.4	100.5	95.5	84.5	86.0	82.6	82.6	83.7	83.4
29	99.0	-----	88.0	91.5	99.0	96.0	85.0	85.6	83.2	82.9	83.5	83.5
30	99.5	-----	87.7	91.2	98.0	96.5	85.0	85.1	82.8	82.9	83.7	83.6
31	99.0	-----	87.9	-----	98.5	-----	84.8	84.7	-----	83.0	-----	83.6

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	88.6	90.8	92.1	90.3	94.9	98.5	88.9	84.6	83.8	82.9	85.6	83.8
MAX	99.5	98.5	98.0	92.8	103.7	102.5	97.0	86.0	84.7	83.3	89.7	84.6
MIN	84.0	86.2	87.7	87.9	88.3	95.0	84.2	83.5	82.6	82.0	83.4	83.0
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 88.7.

HIGHEST STAGE WAS 103.7 ON MAY 24 THRU 25.

LOWEST STAGE WAS 82.0 ON OCT 4 THRU 5.

## DAILY STAGE FOR 1975

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83.5	88.2	87.2	97.6	95.7	89.9	92.5	84.3	87.7	83.8	83.8	85.0
2	84.2	89.1	87.0	96.5	94.3	90.7	91.5	84.0	87.2	83.8	83.5	85.5
3	84.6	87.5	86.8	95.4	94.3	91.2	90.8	83.8	86.6	84.0	83.1	86.0
4	83.5	86.5	87.0	93.5	94.5	90.3	90.3	83.5	86.0	83.7	83.4	86.4
5	83.9	85.9	86.3	92.9	93.8	89.7	90.0	83.5	85.5	83.9	83.5	85.6
6	84.1	85.6	85.8	92.0	93.5	89.7	90.6	83.5	85.0	83.7	83.8	85.0
7	83.8	85.3	86.0	91.5	93.5	89.2	90.2	83.5	85.0	83.6	83.5	84.5
8	84.4	85.0	86.0	90.3	96.4	88.8	89.8	84.0	84.8	83.6	83.8	84.4
9	84.0	84.8	87.6	89.3	98.0	88.5	89.8	83.9	84.8	83.8	83.3	84.6
10	85.2	84.6	87.1	88.5	98.2	87.8	89.9	83.5	84.3	83.8	84.0	84.3
11	87.3	84.3	86.0	88.3	98.5	87.5	89.6	83.5	84.1	83.8	83.7	84.3
12	87.5	84.5	86.3	88.2	98.3	87.1	89.6	83.4	83.9	83.8	84.0	84.4
13	85.8	84.0	86.5	88.2	98.0	87.5	88.6	83.5	83.9	83.6	84.1	84.0
14	85.1	84.0	86.5	88.2	97.2	88.6	88.4	83.5	85.5	83.5	84.1	84.0
15	84.5	84.0	86.0	88.5	96.3	89.6	88.3	83.9	85.0	83.5	84.2	84.4
16	84.5	84.2	85.8	88.3	95.7	89.2	88.0	84.0	84.7	83.5	84.2	84.7
17	84.1	84.2	85.4	88.5	95.3	88.6	87.7	83.3	84.7	83.8	84.2	84.7
18	84.2	84.5	85.9	88.5	95.0	88.8	87.3	83.0	84.7	83.8	84.3	84.5
19	84.5	85.2	87.0	88.8	94.3	90.0	86.9	83.4	84.7	83.7	83.8	84.0
20	83.9	85.3	88.5	89.2	93.5	90.3	86.7	83.2	86.9	83.5	84.0	83.8
21	83.3	85.2	88.5	89.9	93.1	90.3	86.6	83.6	85.9	83.5	84.0	83.5
22	83.0	85.4	89.6	90.5	92.9	90.4	86.0	83.5	85.1	83.5	84.0	83.9
23	83.0	89.0	90.3	90.5	92.9	90.6	85.5	83.8	84.6	83.8	84.0	83.7
24	83.6	92.0	90.7	92.4	92.3	90.7	85.4	84.3	84.2	83.5	84.0	83.3
25	84.1	91.0	91.1	96.0	92.0	90.7	85.5	84.0	84.1	83.5	83.8	83.3
26	84.5	89.0	91.1	99.0	91.6	91.3	85.5	84.7	84.2	83.7	83.8	83.5
27	84.6	87.8	90.8	100.3	90.7	91.4	85.0	85.0	83.8	83.5	84.2	83.5
28	84.6	87.5	91.7	100.5	90.2	92.4	84.9	85.0	83.6	83.5	83.8	83.5
29	84.0	-----	94.2	99.8	90.0	92.9	84.4	86.3	83.7	83.5	84.0	83.6
30	84.0	-----	96.2	98.0	89.4	92.9	84.2	86.7	83.5	83.5	84.3	83.9
31	85.0	-----	97.5	-----	89.1	-----	84.4	87.7	-----	83.8	-----	83.9

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	84.4	86.2	88.5	92.3	94.1	89.9	87.9	84.1	84.9	83.7	83.9	84.3
MAX	87.5	92.0	97.5	100.5	98.5	92.9	92.5	87.7	87.7	84.0	84.3	86.4
MIN	83.0	84.0	85.4	88.2	89.1	87.1	84.2	83.0	83.5	83.5	83.1	83.3
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 87.0.

HIGHEST STAGE WAS 100.5 ON APR 28.

LOWEST STAGE WAS 83.0 ON JAN 22 THRU 23, AND AUG 18.

## DAILY STAGE FOR 1976

## 0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 & LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83.9	82.8	85.6	87.3	97.8	85.4	83.9	83.5	81.8	82.6	82.6	82.3
2	83.9	82.8	85.2	87.4	97.6	85.7	84.8	83.2	81.6	82.3	82.6	82.4
3	83.8	82.7	85.5	87.6	97.0	85.6	83.9	83.0	81.5	82.3	82.7	82.4
4	83.5	82.9	85.9	87.9	95.8	85.5	83.8	83.2	81.5	82.6	82.7	82.3
5	83.4	83.0	89.8	87.7	94.7	85.2	83.7	82.7	82.5	82.6	82.7	82.3
6	83.4	83.0	93.8	87.6	93.8	85.0	83.7	82.7	82.2	82.8	82.5	82.4
7	83.7	83.0	94.8	87.6	93.0	85.0	83.3	82.9	81.5	82.8	82.7	82.4
8	83.0	83.0	95.0	87.7	92.7	84.4	83.7	82.9	82.2	82.7	82.6	82.4
9	83.0	83.3	93.8	87.7	92.7	84.0	83.6	82.4	82.2	82.8	82.6	82.5
10	83.3	83.3	92.3	87.9	93.0	84.0	83.8	82.4	82.2	82.6	82.5	82.7
11	83.3	83.4	89.7	87.9	90.5	83.9	83.8	82.4	82.4	82.9	82.6	82.4
12	83.1	83.4	88.7	88.0	89.0	83.9	83.0	82.3	82.4	82.8	82.4	82.4
13	82.8	83.2	88.3	88.0	88.8	83.6	83.0	82.3	82.3	82.6	82.6	82.5
14	82.8	83.6	88.3	88.2	88.2	83.6	83.3	82.2	82.3	82.4	82.2	82.5
15	82.5	83.6	88.0	88.5	87.2	83.3	82.9	83.1	82.3	82.5	82.4	82.5
16	83.0	83.7	88.2	88.7	86.8	83.5	83.3	82.9	82.3	82.6	82.4	82.4
17	82.3	84.4	88.4	88.5	87.7	84.1	82.9	82.7	82.3	82.3	82.4	82.4
18	81.8	84.3	89.0	88.0	88.5	84.0	83.3	82.7	82.3	82.5	82.4	82.2
19	82.5	84.4	89.3	88.3	89.9	84.7	82.6	82.5	82.3	82.4	82.4	82.4
20	83.0	84.2	89.4	88.0	89.7	84.4	82.3	82.4	82.3	82.4	82.5	82.3
21	82.6	84.4	89.0	88.0	88.5	83.9	82.8	82.8	82.3	82.4	82.4	81.9
22	82.7	85.6	88.5	90.5	87.6	83.7	82.8	82.6	82.3	82.4	82.5	82.2
23	82.7	85.9	87.7	92.0	87.3	83.7	83.3	82.4	82.4	82.4	82.4	82.2
24	82.8	84.9	86.5	92.8	86.6	83.8	83.2	82.3	82.4	82.8	82.4	82.3
25	82.8	84.7	86.3	93.7	85.8	83.9	83.1	82.3	82.3	82.9	82.4	82.1
26	82.9	84.8	85.9	93.7	85.3	83.7	83.1	81.7	82.4	82.7	82.4	82.1
27	82.8	84.7	86.0	94.4	84.8	83.7	83.2	81.5	82.7	82.7	82.4	82.1
28	82.8	84.7	86.8	96.5	85.4	83.8	83.1	82.5	82.8	82.6	82.9	82.1
29	82.9	85.0	87.5	97.8	85.7	83.6	83.3	82.5	82.8	82.6	82.4	82.1
30	82.9	-----	87.5	98.0	85.8	83.6	83.3	82.5	82.8	82.7	82.4	82.1
31	82.8	-----	87.4	-----	85.3	-----	83.3	82.5	-----	82.6	-----	82.1

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	83.0	83.9	88.6	89.9	89.8	84.2	83.3	82.6	82.3	82.6	82.5	82.3
MAX	83.9	85.9	95.0	98.0	97.8	85.7	84.8	83.5	82.8	82.9	82.9	82.7
MIN	81.8	82.7	85.2	87.3	84.8	83.3	82.3	81.5	81.5	82.3	82.2	81.9
DAYS	31	29	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 366

THE MEAN STAGE FOR THE YEAR WAS 84.6.

HIGHEST STAGE WAS 98.0 ON APR 30.

LOWEST STAGE WAS 81.5 ON AUG 27, AND SEP 3 THRU 4, AND SEP 7.

## DAILY STAGE FOR 1977

## 0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 & LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	82.1	80.5	83.5	87.0	83.3	82.6	84.9	82.8	83.6	85.3	86.5	83.2
2	82.1	80.5	82.5	86.8	83.4	82.6	85.5	82.4	84.6	86.7	88.5	83.2
3	82.1	80.6	82.5	85.7	83.4	82.6	85.6	82.4	83.8	86.3	95.4	82.7
4	82.2	80.4	82.8	84.6	83.4	83.1	86.3	82.2	84.6	86.2	96.8	83.2
5	82.2	80.4	82.7	84.3	83.3	83.3	84.9	82.3	87.5	85.7	96.9	83.5
6	82.2	80.4	82.5	83.9	83.4	83.2	84.3	82.3	87.7	85.7	96.2	83.7
7	82.2	80.7	82.7	84.0	85.9	83.3	84.3	82.3	88.0	85.7	93.7	83.1
8	82.0	80.7	82.8	83.9	87.2	83.3	84.0	83.3	87.5	86.1	91.5	83.1
9	81.8	80.7	82.3	83.9	86.7	83.3	83.7	83.9	86.7	86.7	89.4	83.0
10	81.3	80.8	82.4	84.0	84.7	83.0	83.7	86.7	85.7	88.8	89.9	83.0
11	81.3	81.3	82.3	84.0	84.2	83.4	83.7	85.9	84.7	90.2	89.0	83.0
12	81.2	82.4	83.7	83.9	83.9	83.5	83.7	84.9	84.6	88.2	89.9	82.7
13	81.2	82.9	84.2	83.5	83.7	82.7	83.7	84.2	84.4	87.2	91.0	82.7
14	81.2	83.1	83.7	83.2	83.7	82.7	83.8	84.2	86.2	86.6	90.4	83.4
15	81.2	84.1	83.7	83.2	83.7	82.7	83.9	83.7	89.8	85.9	89.0	83.4
16	81.2	83.4	83.8	83.0	83.4	82.4	83.5	84.2	91.8	85.3	87.5	83.8
17	81.5	82.8	83.8	83.0	83.3	82.3	83.3	83.5	91.8	85.3	86.5	83.7
18	81.3	82.0	83.8	82.5	83.0	82.5	83.1	83.3	91.0	85.3	85.5	84.0
19	81.3	81.7	82.8	82.5	83.3	83.2	83.1	83.8	89.3	84.4	85.4	84.4
20	81.2	83.2	83.6	82.5	83.3	83.6	83.3	83.6	88.7	84.8	85.4	84.4
21	81.2	84.0	83.2	82.9	83.2	83.6	83.3	83.8	88.3	84.7	85.2	84.4
22	81.2	83.0	83.7	83.4	83.0	83.6	83.3	83.5	87.0	84.6	84.4	83.6
23	81.2	82.6	83.0	83.5	82.9	84.0	82.7	83.3	86.5	84.6	84.4	83.6
24	81.2	82.6	83.3	83.5	83.3	84.7	82.3	83.4	85.0	84.4	84.3	84.1
25	81.2	82.8	83.2	83.7	83.4	85.0	82.3	83.2	85.7	84.5	84.0	83.8
26	81.2	82.3	83.2	83.7	83.3	85.5	82.4	83.2	85.4	89.0	84.2	83.5
27	80.7	83.0	82.3	83.5	83.3	85.4	82.6	83.0	85.4	92.0	84.2	83.5
28	80.7	83.8	83.0	83.3	83.4	85.4	82.6	83.0	85.7	91.0	83.8	83.3
29	81.2	-----	88.4	83.3	83.1	85.3	82.6	83.4	85.7	90.5	83.7	83.3
30	81.2	-----	88.7	83.3	83.1	85.2	82.6	83.5	85.0	89.5	83.2	83.4
31	80.5	-----	87.7	-----	82.6	-----	82.6	83.6	-----	87.3	-----	83.8

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	81.4	82.0	83.6	83.8	83.7	83.6	83.6	83.5	86.7	86.7	88.2	83.5
MAX	82.2	84.1	88.7	87.0	87.2	85.5	86.3	86.7	91.8	92.0	96.9	84.4
MIN	80.5	80.4	82.3	82.5	82.6	82.3	82.3	82.2	83.6	84.4	83.2	82.7
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 84.2.

HIGHEST STAGE WAS 96.9 ON NOV 5.

LOWEST STAGE WAS 80.4 ON FEB 4 THRU 6.

## DAILY STAGE FOR 1978

## 0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 & LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83.8	82.3	82.4	100.5	93.3	89.0	88.5	87.9	83.8	85.3	83.3	84.0
2	83.9	82.8	82.4	99.3	93.3	88.5	89.6	87.6	84.0	84.9	83.3	84.1
3	83.4	82.8	82.4	97.4	92.2	88.0	90.0	87.8	84.5	84.5	83.3	84.3
4	83.4	83.0	82.7	95.6	90.7	88.8	90.0	87.8	84.0	84.2	83.3	83.7
5	83.4	83.0	82.7	93.4	89.5	89.5	88.7	88.3	83.9	84.2	83.4	83.6
6	83.5	82.8	82.3	91.8	88.9	89.5	87.9	87.8	83.9	84.0	83.3	83.5
7	83.5	82.8	82.5	92.8	88.6	88.9	87.6	86.7	83.9	83.9	83.3	83.6
8	83.5	82.8	82.5	95.1	90.4	87.8	87.9	85.8	83.9	83.5	83.2	83.5
9	83.0	82.8	82.6	94.7	94.0	87.5	88.9	85.5	83.8	83.9	83.2	83.1
10	82.8	82.8	82.8	93.6	97.0	86.8	90.2	84.8	84.0	83.7	83.2	83.0
11	82.8	83.0	82.9	93.4	99.0	86.3	91.0	84.6	83.6	83.8	83.2	83.0
12	82.8	83.0	83.1	95.4	98.5	85.5	91.4	83.9	83.6	83.6	83.2	83.2
13	82.8	83.0	83.3	98.4	98.0	85.0	91.8	83.9	83.5	83.9	83.2	83.2
14	82.8	82.8	84.4	99.1	99.2	84.8	91.9	83.7	83.5	83.9	83.5	83.2
15	82.8	82.8	87.8	99.7	100.0	84.9	91.6	83.8	83.3	83.9	83.5	83.2
16	82.8	82.4	89.6	99.5	100.4	84.8	91.8	83.9	83.5	83.8	83.6	83.3
17	82.8	82.4	91.0	99.5	100.0	84.3	92.2	83.7	84.2	83.7	83.7	83.2
18	82.4	83.0	91.7	99.3	99.0	84.4	92.5	83.7	84.2	83.6	83.9	83.0
19	82.4	83.0	92.7	98.6	97.5	84.0	91.7	83.3	86.6	83.6	83.8	83.4
20	82.4	82.6	93.3	99.5	95.8	84.1	90.7	83.4	87.4	83.5	84.0	83.5
21	82.4	82.5	94.3	100.5	94.0	85.1	89.7	83.7	89.9	83.5	84.6	83.6
22	81.9	82.5	95.2	101.1	92.8	85.0	88.9	83.6	90.7	83.4	84.6	83.5
23	82.4	82.4	96.2	101.0	91.5	85.0	88.7	83.3	89.6	83.3	83.9	83.0
24	82.4	82.4	97.0	100.7	92.1	86.8	88.9	83.4	89.9	83.3	84.1	83.2
25	82.4	82.1	99.0	100.4	93.6	88.2	89.5	83.3	89.8	83.2	84.0	83.0
26	82.2	81.8	100.7	99.6	92.2	88.3	90.7	83.4	89.2	83.5	84.0	83.3
27	82.2	82.4	101.3	98.7	91.0	88.3	92.2	83.7	88.8	83.2	84.0	83.2
28	83.2	82.4	101.3	96.9	90.5	87.3	91.5	83.7	87.5	83.5	84.5	83.2
29	83.0	-----	101.6	95.6	90.3	87.1	90.0	83.7	86.3	83.3	84.6	83.1
30	82.1	-----	101.8	94.2	90.2	87.5	89.0	83.7	85.2	83.4	84.5	83.0
31	81.8	-----	101.8	-----	90.2	-----	88.3	83.8	-----	83.4	-----	82.8

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	82.8	82.7	90.2	97.5	94.0	86.7	90.1	84.7	85.7	83.8	83.7	83.3
MAX	83.9	83.0	101.8	101.1	100.4	89.5	92.5	88.3	90.7	85.3	84.6	84.3
MIN	81.8	81.8	82.3	91.8	88.6	84.0	87.6	83.3	83.3	83.2	83.2	82.8
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 87.1.

HIGHEST STAGE WAS 101.8 ON MAR 30 THRU 31.

LOWEST STAGE WAS 81.8 ON JAN 31, AND FEB 26.

## DAILY STAGE FOR 1979

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	82.8	83.0	86.3	103.2	99.4	91.5	87.8	86.4	86.9	82.8	84.0	84.3
2	82.0	83.0	86.2	103.1	99.1	90.5	88.3	88.0	88.0	83.1	83.9	84.1
3	83.0	83.0	86.8	103.0	99.0	90.0	88.3	87.4	88.9	83.1	83.8	84.3
4	82.9	83.0	89.0	102.8	98.9	90.0	87.8	85.8	88.6	83.1	84.0	84.3
5	82.9	83.0	92.2	102.7	98.8	90.5	87.4	86.0	88.5	83.1	83.8	84.3
6	82.9	83.0	94.5	102.4	100.7	88.8	87.6	86.1	88.5	83.0	84.4	84.3
7	82.9	83.0	95.6	102.0	101.1	88.2	87.6	85.9	87.6	83.0	84.3	83.2
8	82.9	83.0	95.0	101.5	101.6	88.0	87.6	85.2	86.9	82.9	84.0	83.2
9	82.9	83.0	94.5	101.7	101.7	88.6	87.6	85.0	86.3	83.2	84.0	83.2
10	82.9	83.0	94.9	101.4	100.0	88.2	87.4	84.8	86.4	82.9	83.8	83.1
11	82.9	83.0	95.0	101.7	99.6	88.2	87.2	85.1	86.2	82.9	83.8	83.8
12	82.9	83.0	91.5	105.1	100.0	89.5	87.0	85.0	85.7	82.7	83.8	83.5
13	83.2	83.0	91.9	106.9	100.7	89.3	87.7	84.7	85.0	82.9	84.0	83.5
14	82.9	83.0	91.4	109.0	98.9	88.9	87.2	84.3	85.0	83.0	84.0	83.5
15	82.9	83.0	91.5	108.8	98.7	88.8	87.0	84.6	84.7	82.5	84.0	83.3
16	82.9	83.0	92.8	108.3	98.0	88.1	87.8	84.4	84.2	82.5	83.9	83.2
17	82.9	83.0	94.2	107.3	98.0	87.9	87.8	84.5	84.2	82.7	84.0	83.1
18	82.7	83.0	94.0	105.8	97.8	87.7	86.8	84.0	84.0	83.0	84.0	83.1
19	82.6	83.0	92.7	104.2	96.9	87.3	86.9	84.3	83.5	82.7	84.0	83.0
20	82.5	83.0	94.7	103.0	96.0	87.0	86.8	84.3	83.6	83.0	84.0	83.0
21	82.5	83.0	95.9	102.2	95.2	86.9	86.7	85.2	83.6	83.2	84.0	82.9
22	82.7	83.2	97.9	101.0	94.4	86.8	86.5	86.2	83.2	82.5	84.0	83.2
23	83.0	84.7	99.3	100.8	94.4	87.0	85.5	86.4	83.4	83.2	83.9	82.9
24	83.0	87.2	100.7	100.8	94.4	87.0	85.3	87.2	83.5	83.2	84.1	83.2
25	83.0	88.3	100.6	100.7	94.1	87.2	85.0	87.2	82.9	83.3	84.3	83.5
26	83.0	89.2	102.9	100.7	94.0	87.0	84.8	87.3	83.4	83.3	84.5	83.5
27	83.0	88.5	103.3	100.5	93.5	86.7	85.5	87.3	83.4	83.7	84.0	83.7
28	83.0	86.8	104.0	100.0	93.0	86.7	86.1	87.0	83.4	83.1	84.3	84.0
29	83.0	-----	104.5	99.4	93.0	87.6	86.3	86.9	83.4	83.6	84.1	84.0
30	83.0	-----	104.5	99.2	93.0	87.9	86.1	86.9	83.4	83.8	84.1	83.9
31	83.0	-----	104.0	-----	91.7	-----	85.8	86.9	-----	84.2	-----	83.8

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	82.9	84.0	95.6	103.0	97.3	88.3	86.9	85.8	85.2	83.1	84.0	83.5
MAX	83.2	89.2	104.5	109.0	101.7	91.5	88.3	88.0	88.9	84.2	84.5	84.3
MIN	82.0	83.0	86.2	99.2	91.7	86.7	84.8	84.0	82.9	82.5	83.8	82.9
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 88.3.

HIGHEST STAGE WAS 109.0 ON APR 14.

LOWEST STAGE WAS 82.0 ON JAN 2.

## DAILY STAGE FOR 1980

## 0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 & LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83.4	82.6	83.8	88.7	84.6	83.2	84.2	82.9	83.5	85.2	83.2	83.0
2	83.4	82.9	83.9	91.7	84.6	83.9	83.9	82.3	85.2	85.3	83.2	83.0
3	83.4	82.9	83.6	92.9	84.3	86.5	83.8	82.4	85.6	85.2	83.6	83.0
4	83.4	82.5	83.3	90.5	84.2	89.5	84.2	81.8	85.9	85.2	83.6	82.8
5	83.4	82.5	83.3	88.6	84.5	90.9	84.0	81.8	86.0	85.3	83.5	82.8
6	83.4	82.5	83.7	87.6	84.1	92.5	83.8	82.5	86.6	85.3	83.4	82.5
7	83.5	82.5	83.7	88.5	84.0	92.3	83.8	83.0	86.8	85.2	83.3	82.6
8	83.4	82.5	83.4	89.3	84.0	92.0	83.5	82.7	86.0	85.1	83.3	82.6
9	82.8	82.5	83.4	91.4	83.8	90.9	83.2	82.5	85.3	83.7	83.3	84.0
10	82.6	82.5	83.3	90.7	83.7	89.4	83.1	82.4	84.7	83.7	83.1	84.6
11	82.6	82.5	83.3	90.2	83.5	89.0	82.7	81.9	84.4	83.5	83.1	86.0
12	82.6	82.5	83.1	88.9	83.2	88.9	82.8	83.3	84.3	83.5	82.7	85.6
13	83.1	82.5	83.6	89.5	83.2	88.4	82.8	83.7	84.2	83.2	83.2	84.6
14	82.7	82.5	83.6	89.8	83.6	87.8	82.6	83.8	84.5	83.1	83.1	84.6
15	83.0	82.5	83.9	90.1	83.4	87.8	82.6	83.8	84.6	83.0	83.0	83.7
16	82.7	82.5	83.9	90.4	83.5	87.8	82.5	84.0	84.6	83.0	83.0	83.4
17	82.7	82.5	84.5	90.0	83.4	88.5	82.5	84.3	85.4	83.0	83.2	83.3
18	82.9	82.5	84.8	91.2	83.5	89.5	82.4	85.0	85.8	83.0	83.2	83.3
19	83.1	82.8	85.8	91.2	83.6	89.7	82.4	85.7	85.7	83.0	83.2	83.3
20	83.7	82.9	86.1	90.8	83.6	89.2	82.3	86.0	85.1	83.4	83.2	83.2
21	83.9	83.2	86.7	90.0	83.4	88.9	82.3	85.3	84.9	83.4	83.2	83.0
22	84.2	83.0	85.8	89.5	83.5	88.5	82.0	84.7	84.7	83.4	83.2	83.0
23	83.9	83.0	85.6	89.4	83.5	88.0	82.0	84.6	84.8	83.4	83.2	82.8
24	83.3	83.0	85.6	89.1	83.4	86.6	82.4	84.2	84.7	83.4	83.2	82.8
25	83.6	84.1	86.1	88.7	83.5	85.6	82.8	84.0	84.9	83.2	83.1	82.8
26	83.7	84.6	86.2	88.4	83.2	85.1	82.7	84.1	85.0	83.3	83.0	82.8
27	83.7	84.4	86.2	87.2	83.1	85.0	82.7	84.0	84.8	83.1	83.2	82.4
28	82.8	84.9	87.2	86.3	83.1	84.6	81.9	83.4	84.9	83.5	83.6	82.4
29	82.6	84.5	87.2	85.7	83.5	84.3	82.3	83.3	84.9	83.3	83.5	82.5
30	82.6	-----	87.2	85.1	83.4	84.2	82.3	83.0	85.0	83.4	83.5	82.5
31	82.6	-----	88.1	-----	83.5	-----	82.4	83.1	-----	83.2	-----	82.5

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	83.2	83.0	84.8	89.4	83.7	87.9	82.9	83.5	85.1	83.8	83.2	83.3
MAX	84.2	84.9	88.1	92.9	84.6	92.5	84.2	86.0	86.8	85.3	83.6	86.0
MIN	82.6	82.5	83.1	85.1	83.1	83.2	81.9	81.8	83.5	83.0	82.7	82.4
DAYS	31	29	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 366

THE MEAN STAGE FOR THE YEAR WAS 84.5.

HIGHEST STAGE WAS 92.9 ON APR 3.

LOWEST STAGE WAS 81.8 ON AUG 4 THRU 5.

## DAILY STAGE FOR 1981

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	82.5	82.5	85.8	82.6	84.8	85.4	93.0	100.5	87.0	83.8	84.4	83.5
2	82.2	82.3	84.6	82.6	84.8	85.5	93.8	98.8	86.4	83.6	83.8	83.3
3	82.2	82.3	84.6	82.5	84.8	85.5	93.7	96.1	86.4	83.6	83.8	83.9
4	82.3	82.2	84.6	82.8	84.7	85.5	93.8	94.6	87.2	83.6	84.9	84.8
5	82.2	82.2	84.7	83.0	85.0	85.5	94.0	91.4	87.4	83.6	91.1	85.5
6	82.2	82.2	84.6	83.3	84.8	85.7	96.2	90.8	87.4	83.6	91.0	85.4
7	82.2	82.2	84.8	83.3	84.8	85.7	97.6	91.1	87.3	83.4	89.6	84.6
8	82.2	82.2	84.0	83.2	84.8	85.0	98.1	90.8	86.6	83.4	87.0	84.2
9	82.2	82.2	83.7	83.9	84.8	84.5	97.8	90.8	85.8	83.6	85.6	84.1
10	82.2	82.2	83.4	83.9	85.0	84.3	96.0	90.3	85.6	83.6	85.9	83.7
11	82.2	82.2	83.4	83.9	86.5	84.1	94.0	89.8	85.4	83.9	84.5	83.5
12	82.2	82.2	83.1	83.9	87.7	84.1	91.0	88.2	85.4	83.9	84.5	83.7
13	82.2	82.2	83.1	84.7	87.1	84.1	89.6	87.8	85.4	83.6	84.5	83.5
14	82.2	82.2	83.0	86.6	86.6	84.1	88.7	86.4	84.4	83.6	84.3	83.6
15	82.2	82.2	82.8	87.5	86.7	86.2	87.7	86.7	84.6	83.7	84.2	83.4
16	82.2	82.2	82.8	87.5	86.7	87.0	87.5	88.2	84.2	84.2	84.0	83.4
17	82.2	82.2	82.7	89.3	89.2	87.9	88.4	87.6	84.2	84.4	83.7	83.5
18	82.2	82.2	82.7	89.9	91.2	88.8	88.7	87.6	83.6	85.0	83.7	83.2
19	82.2	82.5	82.7	89.3	97.0	90.3	88.2	87.4	83.6	85.2	83.8	82.6
20	81.6	82.5	82.6	88.2	100.0	90.3	91.7	86.9	83.6	84.6	83.8	82.9
21	81.8	83.2	82.7	87.1	101.0	90.6	94.6	86.6	82.8	84.6	83.8	83.4
22	81.8	83.2	82.7	86.3	100.4	93.4	94.3	86.0	82.6	84.4	83.4	83.2
23	81.6	83.4	82.6	86.4	97.7	97.4	92.8	85.9	82.4	84.4	83.5	83.2
24	82.7	83.7	82.3	86.6	92.7	96.7	94.8	85.2	82.4	84.5	83.5	82.9
25	81.7	84.6	82.2	86.6	90.4	95.3	97.8	84.6	82.4	84.3	83.5	82.6
26	81.7	85.0	82.1	86.2	89.0	94.1	97.1	83.9	82.4	84.3	83.5	82.9
27	82.5	85.5	82.1	85.3	88.6	96.9	97.0	84.4	82.4	84.3	83.6	82.9
28	82.5	85.8	82.1	85.0	88.2	97.2	99.3	84.4	83.6	84.3	83.6	83.0
29	82.5	-----	82.2	85.0	88.0	96.6	101.0	84.4	84.1	84.4	83.3	83.0
30	82.5	-----	82.8	84.6	86.7	94.8	101.2	84.4	84.2	84.2	83.5	83.0
31	82.5	-----	82.7	-----	86.3	-----	101.3	84.6	-----	84.4	-----	83.0

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	82.2	82.8	83.2	85.4	88.9	89.1	94.2	88.6	84.7	84.1	84.8	83.5
MAX	82.7	85.8	85.8	89.9	101.0	97.4	101.3	100.5	87.4	85.2	91.1	85.5
MIN	81.6	82.2	82.1	82.5	84.7	84.1	87.5	83.9	82.4	83.4	83.3	82.6
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 86.0.

HIGHEST STAGE WAS 101.3 ON JUL 31.

LOWEST STAGE WAS 81.6 ON JAN 20, AND JAN 23.

## DAILY STAGE FOR 1982

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83.0	87.5	93.5	94.5	92.4	99.5	89.3	87.5	87.0	83.5	86.0	89.4
2	83.1	87.5	91.5	94.2	92.3	100.5	88.9	86.5	90.8	83.5	86.0	89.0
3	83.2	86.2	90.5	95.0	92.2	101.3	89.1	85.5	92.8	83.7	87.0	94.5
4	83.3	84.4	90.3	94.8	92.2	101.8	92.0	85.5	93.0	84.0	87.5	103.0
5	83.2	86.6	90.0	92.8	92.0	102.1	96.0	85.0	91.0	83.5	87.3	106.5
6	83.2	86.6	89.4	93.5	92.0	103.0	97.0	85.0	89.3	83.8	87.0	107.0
7	83.1	86.6	88.9	92.5	92.0	101.6	96.5	85.1	87.2	84.1	86.8	108.4
8	83.1	83.5	87.6	92.7	91.6	100.8	94.7	85.1	86.0	84.1	86.0	108.8
9	83.1	83.0	86.5	92.8	91.2	100.0	94.5	86.6	84.8	84.3	85.4	108.2
10	83.1	82.8	86.0	93.2	92.3	101.0	95.0	87.0	84.5	84.3	85.4	106.5
11	83.0	82.5	85.5	92.3	92.5	102.2	95.0	86.0	84.5	84.3	85.0	104.0
12	83.0	83.0	85.5	91.4	91.5	102.8	93.0	85.5	84.5	85.5	85.3	103.2
13	83.0	83.3	87.5	91.3	90.5	102.6	90.8	84.5	84.2	86.4	85.4	101.5
14	83.0	82.9	88.2	90.8	90.0	102.0	90.3	85.1	84.2	85.8	85.4	100.5
15	83.0	83.0	89.5	91.3	89.9	101.2	90.7	85.1	84.2	86.0	88.8	98.6
16	83.0	82.5	91.5	91.5	90.0	100.0	90.7	91.7	85.0	86.0	89.0	96.8
17	83.1	83.0	94.5	92.0	92.0	98.2	90.5	92.7	86.0	85.5	89.0	94.5
18	83.0	86.0	96.7	92.7	93.0	96.8	90.5	91.0	86.2	85.3	88.9	92.5
19	82.6	88.3	97.3	93.8	93.8	96.5	92.3	89.5	86.2	85.2	88.8	90.5
20	81.6	91.5	97.4	95.5	94.6	96.8	93.7	88.7	86.5	85.8	89.0	91.5
21	82.0	91.0	97.5	96.8	94.6	96.7	94.7	85.5	86.6	85.0	89.0	91.0
22	82.0	95.5	97.7	96.8	94.8	96.0	95.4	85.5	86.0	85.3	88.8	90.6
23	81.4	96.4	98.8	96.2	94.8	94.4	96.1	81.7	86.0	85.3	88.5	90.4
24	82.4	97.2	100.0	96.0	95.5	91.5	96.2	84.3	85.4	85.6	88.4	91.2
25	83.0	97.5	99.8	95.3	96.5	89.8	96.2	84.0	84.8	85.2	87.8	91.6
26	82.6	96.7	99.4	94.7	96.5	90.0	94.7	84.3	84.6	85.4	88.0	92.1
27	82.9	97.3	98.5	94.4	95.5	89.9	92.5	84.8	84.5	85.0	87.6	97.6
28	82.2	97.3	97.5	93.5	95.0	89.0	90.4	84.7	84.2	85.0	89.0	97.6
29	82.6	-----	96.7	93.2	97.0	88.8	90.0	87.8	84.0	85.4	88.9	96.7
30	88.0	-----	95.7	92.7	98.1	89.8	88.5	87.4	83.7	85.4	89.8	96.0
31	90.0	-----	95.5	-----	98.3	-----	88.3	86.3	-----	85.4	-----	96.8

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	83.2	88.2	93.1	93.6	93.4	97.6	92.7	86.3	86.3	84.9	87.5	97.6
MAX	90.0	97.5	100.0	96.8	98.3	103.0	97.0	92.7	93.0	86.4	89.8	108.8
MIN	81.4	82.5	85.5	90.8	89.9	88.8	88.3	81.7	83.7	83.5	85.0	89.0
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 90.4.

HIGHEST STAGE WAS 108.8 ON DEC 8.

LOWEST STAGE WAS 81.4 ON JAN 23.

## DAILY STAGE FOR 1983

## 0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 & LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	96.2	84.7	90.5	98.6	103.0	97.5	90.7	85.8	84.0	85.0	84.0	92.5
2	95.5	84.7	90.0	98.9	105.6	97.0	90.5	85.6	83.9	84.9	84.0	92.3
3	94.3	85.6	90.4	99.0	108.3	96.8	91.8	85.5	83.7	84.0	84.4	92.4
4	93.0	85.8	89.6	103.0	110.2	97.1	91.8	85.5	83.5	84.0	85.9	92.6
5	91.8	86.0	89.6	105.0	110.2	97.1	92.0	85.4	83.5	84.1	89.0	92.0
6	90.8	85.7	89.8	106.0	108.4	96.0	92.1	85.5	83.8	83.8	89.9	92.0
7	90.6	84.4	90.3	106.6	106.0	95.7	92.4	85.6	83.8	83.4	87.5	91.0
8	90.0	84.0	90.8	108.2	104.5	95.0	92.7	84.5	83.6	83.4	86.0	89.7
9	89.5	84.0	92.3	109.0	102.8	93.7	92.5	84.5	83.6	83.2	86.0	88.0
10	89.0	84.5	92.5	110.0	101.5	93.6	92.4	85.4	83.6	83.0	85.0	85.0
11	88.4	84.5	92.0	107.8	100.4	91.0	92.0	84.5	83.5	83.4	85.1	86.3
12	87.2	84.4	92.0	107.2	99.6	90.5	91.8	84.4	83.5	83.4	85.5	88.0
13	87.2	84.7	92.1	106.4	98.7	90.5	91.8	84.3	83.5	83.1	85.6	90.8
14	87.4	84.8	92.0	106.2	99.3	90.2	91.7	84.0	83.5	83.7	85.6	89.6
15	87.4	84.6	91.5	105.6	99.0	90.5	91.5	84.0	83.0	83.1	85.3	89.5
16	87.3	85.4	91.8	104.0	99.8	89.9	91.5	83.9	83.3	83.1	85.0	88.0
17	85.8	87.4	91.8	103.8	100.0	89.9	91.2	83.9	83.4	83.7	84.5	88.0
18	84.8	87.8	92.0	103.5	99.7	90.8	90.7	83.5	83.1	83.8	85.0	86.3
19	84.5	89.4	92.3	103.0	98.5	90.6	89.8	83.8	83.5	83.9	85.0	85.0
20	84.2	89.3	92.3	102.5	98.0	92.0	89.5	84.0	83.3	84.3	85.0	84.5
21	84.2	89.4	92.8	102.0	98.0	92.7	89.0	84.0	83.3	84.9	85.5	84.3
22	84.2	88.6	92.8	101.5	98.0	93.0	89.5	84.0	83.8	85.1	84.8	84.3
23	83.8	88.8	93.4	101.4	99.7	93.0	89.3	84.2	83.8	85.3	85.8	84.0
24	84.5	90.7	92.6	101.4	100.0	92.8	89.0	84.2	83.3	85.5	88.0	84.0
25	84.5	91.0	92.6	100.0	100.0	92.8	88.7	83.8	83.1	85.5	91.5	84.1
26	84.5	91.2	93.0	100.0	99.5	92.8	88.7	83.8	84.5	85.4	90.2	84.1
27	84.7	91.2	92.8	99.8	98.5	91.0	88.4	83.8	84.5	85.4	91.0	83.8
28	84.9	90.8	95.0	100.0	97.5	88.8	87.5	83.9	84.8	85.4	91.5	83.6
29	85.0	-----	97.6	101.0	97.3	88.8	87.0	83.8	84.8	85.2	92.5	83.5
30	85.0	-----	98.6	101.3	97.3	89.0	87.0	84.0	85.0	84.8	93.1	83.8
31	84.7	-----	98.6	-----	97.7	-----	87.0	84.0	-----	84.5	-----	83.8

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	87.6	86.9	92.4	103.4	101.2	92.7	90.4	84.4	83.7	84.2	86.9	87.3
MAX	96.2	91.2	98.6	110.0	110.2	97.5	92.7	85.8	85.0	85.5	93.1	92.6
MIN	83.8	84.0	89.6	98.6	97.3	88.8	87.0	83.5	83.0	83.0	84.0	83.5
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 90.1.

HIGHEST STAGE WAS 110.2 ON MAY 4 THRU 5.

LOWEST STAGE WAS 83.0 ON SEP 15, AND OCT 10.

## DAILY STAGE FOR 1984

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83.8	83.8	92.7	99.3	100.0	98.5	101.4	87.5	83.4	83.0	87.0	85.4
2	83.8	84.2	93.0	97.5	100.5	98.5	100.8	87.1	83.4	83.0	87.0	85.2
3	83.7	85.0	93.0	96.8	101.0	98.3	100.5	86.5	83.9	83.0	91.8	84.8
4	83.7	85.0	93.2	98.4	101.5	96.8	100.5	86.5	83.6	83.5	91.6	84.5
5	83.7	85.0	95.5	99.4	101.8	96.4	100.5	86.5	83.5	84.0	97.7	84.5
6	83.7	84.4	97.0	100.5	101.8	95.7	101.0	86.1	83.5	84.0	96.3	85.0
7	83.7	84.4	95.8	101.4	102.5	95.0	100.0	85.8	83.0	84.0	92.7	84.5
8	83.8	84.4	94.9	100.7	102.5	93.8	101.2	85.0	83.5	83.8	91.0	83.6
9	83.8	84.4	93.8	100.6	102.0	93.5	100.8	85.4	83.5	84.0	89.0	83.5
10	84.0	84.4	93.9	100.9	101.5	93.5	100.5	86.0	83.5	84.1	87.8	83.2
11	84.4	84.5	93.9	101.0	101.0	97.8	99.7	85.5	84.0	84.3	87.8	83.2
12	84.5	84.5	88.7	101.8	101.0	99.0	98.0	85.5	84.4	83.9	87.8	83.2
13	84.5	84.8	87.9	101.8	101.0	100.8	98.0	85.4	83.8	83.9	87.5	83.3
14	85.0	85.8	87.0	101.5	100.2	101.7	97.0	85.5	83.5	84.0	87.4	83.8
15	85.0	86.8	86.0	101.7	100.5	101.7	95.0	85.0	83.8	83.7	87.4	84.6
16	85.0	88.5	87.9	101.0	100.5	101.7	94.4	85.4	83.8	84.0	86.8	85.0
17	84.5	88.6	90.2	100.6	100.5	101.7	94.2	85.0	83.9	84.0	86.0	85.6
18	84.5	88.8	93.3	100.0	99.8	100.8	93.8	85.0	84.0	84.3	86.0	85.5
19	84.4	88.7	93.8	99.8	98.8	100.8	93.8	85.1	83.8	85.0	86.0	85.7
20	84.2	88.7	96.5	99.2	97.5	100.5	93.6	84.5	83.7	85.3	85.9	85.6
21	84.0	92.0	99.0	99.4	97.5	100.2	92.8	84.4	83.5	85.3	85.8	85.7
22	84.4	92.0	98.8	99.4	97.7	100.0	92.0	84.3	83.4	89.0	85.9	87.2
23	84.4	92.0	97.8	104.2	98.8	100.3	92.0	84.2	83.6	87.2	85.2	87.0
24	83.8	91.9	96.0	105.0	99.8	100.6	91.8	84.0	83.5	86.3	85.0	86.9
25	83.6	91.7	96.8	104.8	99.0	100.9	90.9	83.9	83.0	85.5	84.7	87.0
26	83.6	91.8	97.8	104.2	100.1	101.5	90.5	83.5	83.0	85.9	84.1	85.9
27	83.6	92.0	98.1	103.5	100.2	101.8	90.0	83.4	83.4	85.8	84.7	84.4
28	83.8	92.2	98.9	102.5	100.2	101.8	90.1	83.4	83.8	85.8	86.7	84.2
29	83.9	92.5	99.8	101.0	98.8	101.8	90.1	83.4	83.7	85.2	86.5	84.5
30	83.8	-----	99.8	100.5	99.0	101.5	89.4	83.4	83.8	86.4	85.9	87.4
31	84.0	-----	99.2	-----	99.2	-----	88.4	83.6	-----	86.6	-----	91.5

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	84.1	87.7	94.5	100.9	100.2	99.2	95.6	85.0	83.6	84.8	87.8	85.2
MAX	85.0	92.5	99.8	105.0	102.5	101.8	101.4	87.5	84.4	89.0	97.7	91.5
MIN	83.6	83.8	86.0	96.8	97.5	93.5	88.4	83.4	83.0	83.0	84.1	83.2
DAYS	31	29	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 366

THE MEAN STAGE FOR THE YEAR WAS 90.7.

HIGHEST STAGE WAS 105.0 ON APR 24.

LOWEST STAGE WAS 83.0 ON SEP 7, AND SEP 25 THRU 26, AND OCT 1 THRU 3.

## DAILY STAGE FOR 1985

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	97.5	83.0	105.3	97.8	90.5	86.7	85.9	85.3	84.0	84.5	87.0	96.6
2	99.0	83.0	105.4	97.0	91.4	86.5	85.7	85.3	83.9	85.0	89.0	96.0
3	98.8	83.0	105.6	97.0	93.8	88.0	85.5	85.2	83.9	88.2	89.0	97.0
4	93.5	83.4	101.0	96.8	94.4	87.4	85.5	85.2	83.8	88.2	88.4	95.0
5	87.9	83.4	101.3	97.1	94.4	88.5	85.7	83.8	83.6	86.8	87.3	91.8
6	85.5	83.4	102.8	96.8	91.0	90.4	85.4	83.4	83.5	86.0	87.3	91.0
7	86.0	83.3	104.3	97.0	90.4	90.7	85.3	83.4	83.4	86.7	86.9	90.8
8	86.4	83.3	105.3	96.3	90.0	92.0	85.2	83.4	83.4	86.3	86.7	90.8
9	86.6	83.3	104.3	96.0	89.8	92.7	85.0	83.3	83.4	86.2	86.5	90.3
10	87.2	83.3	103.5	95.5	89.6	89.5	85.0	83.4	83.4	85.9	87.0	90.8
11	86.9	83.3	103.4	95.0	89.4	89.6	84.9	83.6	83.2	86.7	86.8	92.9
12	86.5	83.0	102.0	95.0	88.8	91.0	84.2	83.7	83.2	89.5	87.3	94.0
13	85.8	82.8	101.2	94.5	88.5	89.6	84.2	83.7	83.6	89.5	87.2	96.0
14	86.6	82.8	101.1	94.7	88.5	88.2	84.2	83.6	83.7	93.0	88.9	96.1
15	86.6	82.8	101.0	95.0	89.9	87.1	83.9	84.7	83.7	94.5	91.7	96.0
16	85.0	82.8	99.9	94.0	91.3	87.4	83.9	86.3	83.6	94.0	96.0	90.0
17	85.2	83.1	98.8	93.5	91.5	87.0	83.8	86.3	83.6	93.3	97.4	89.7
18	84.9	83.1	98.0	93.0	89.6	90.0	83.7	85.0	83.6	92.0	98.8	88.7
19	85.0	83.0	97.4	92.5	89.2	92.8	83.5	84.0	84.2	92.0	101.0	87.9
20	85.0	83.0	96.8	92.0	91.5	92.3	83.3	84.3	84.1	91.0	102.4	87.7
21	84.3	83.4	96.2	91.3	89.3	90.2	83.1	84.4	84.3	91.7	103.4	87.4
22	84.2	85.4	96.0	90.6	88.2	88.5	83.0	84.5	84.4	92.0	103.8	87.0
23	84.2	95.7	95.3	90.0	87.7	87.7	82.9	85.0	83.9	92.0	103.2	86.6
24	84.0	101.0	95.1	89.9	87.3	86.9	82.9	84.3	84.0	91.6	101.8	86.9
25	83.8	100.5	94.7	89.8	86.8	87.0	83.5	84.3	84.4	90.8	98.5	85.8
26	83.8	105.0	93.7	89.7	86.6	87.5	84.0	84.8	85.4	89.6	97.0	86.0
27	84.1	105.7	93.2	89.5	86.5	87.8	84.0	83.9	85.5	90.8	95.0	86.3
28	83.4	105.8	93.0	90.2	86.0	87.3	84.0	83.9	85.4	89.9	96.5	86.2
29	83.3	-----	92.8	91.2	85.8	87.0	83.2	84.9	85.2	88.9	96.0	86.1
30	83.3	-----	93.5	91.1	85.8	87.2	83.4	84.8	84.7	88.5	95.0	85.9
31	83.0	-----	96.7	-----	86.7	-----	83.5	84.8	-----	88.0	-----	85.6

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	86.7	87.3	99.3	93.7	89.4	88.8	84.2	84.4	84.0	89.5	93.4	90.3
MAX	99.0	105.8	105.6	97.8	94.4	92.8	85.9	86.3	85.5	94.5	103.8	97.0
MIN	83.0	82.8	92.8	89.5	85.8	86.5	82.9	83.3	83.2	84.5	86.5	85.6
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 89.3.

HIGHEST STAGE WAS 105.8 ON FEB 28.

LOWEST STAGE WAS 82.8 ON FEB 13 THRU 16.

## DAILY STAGE FOR 1986

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	85.4	83.9	85.0	90.4	84.3	96.4	87.0	87.0	84.1	97.6	101.4	89.2
2	85.0	85.0	86.0	90.4	84.7	96.4	88.2	86.5	84.1	100.8	100.5	90.0
3	84.8	85.2	85.8	89.9	87.4	96.0	88.7	86.6	83.9	102.4	99.8	91.7
4	84.6	87.6	86.5	89.9	87.2	95.4	89.0	86.3	84.0	106.0	98.4	92.3
5	85.2	89.5	86.0	89.9	88.7	94.6	89.9	85.8	83.9	107.4	97.5	92.7
6	84.6	89.3	86.0	90.6	87.0	93.7	91.0	85.8	84.0	108.5	96.5	91.8
7	83.7	89.8	85.9	92.4	87.5	93.5	90.2	85.7		109.3	94.8	89.5
8	83.5	89.1	85.7	93.2	87.5	93.0	89.3	85.7		110.5	93.8	89.5
9	83.4	89.2	85.6	92.7	88.5	93.3	89.2	86.6		110.5	92.8	91.9
10	83.4	88.7	85.9	92.4	91.5	93.6	92.9	86.0		110.3	92.0	92.7
11	83.5	87.5	86.4	92.8	89.6	92.6	93.5	85.7		109.9	91.8	93.0
12	83.8	86.6	86.7	93.2	90.0	91.5	93.8	85.3		109.3	91.7	92.6
13	84.2	85.9	87.9	93.0	90.2	91.0	94.7	85.4		108.2	91.3	90.5
14	83.4	85.0	88.5	92.5	91.6	90.1	95.4	85.0	83.8	106.8	90.7	87.8
15	83.2	85.0	89.1	92.4	92.0	90.0	97.4	85.3	85.4	105.7	90.4	86.6
16	83.2	84.9	89.3	92.0	92.1	90.2	97.8	85.1	85.3	105.3	89.9	86.0
17	83.4	84.9	89.9	91.6	93.0	90.0	98.3	86.9	84.6	105.1	89.8	85.5
18	83.4	84.7	89.8	92.0	93.0	89.4	97.5	88.0	85.0	104.8	88.6	85.6
19	84.2	85.0	89.3	92.4	96.6	89.0	96.0	86.8	85.6	104.0	88.6	86.0
20	84.3	84.9	89.3	92.0	98.5	88.9	94.0	86.8	85.3	103.4	89.0	87.5
21	84.7	85.3	89.7	91.8	100.0	88.7	92.6	86.6	87.9	102.4	89.5	87.6
22	84.6	85.6	91.8	89.9	101.3	88.5	90.5	86.2	90.0	101.8	89.0	87.8
23	84.6	85.1	92.3	89.9	102.0	88.0	89.0	85.7	91.6	101.2	88.7	87.4
24	85.2	85.0	91.6	88.9	101.2	87.0	88.5	85.0	92.3	100.8	88.3	87.1
25	84.6	84.2	91.8	88.9	101.2	87.0	88.3	84.7	93.6	100.0	88.2	87.4
26	85.1	84.6	91.4	88.7	100.4	87.3	88.9	84.5	95.9	99.7	87.8	86.8
27	84.6	84.7	91.1	88.6	99.0	87.8	87.6	84.4	97.8	100.3	89.8	85.6
28	84.5	85.4	91.2	88.3	98.5	87.5	87.7	85.2	97.7	100.8	90.4	85.5
29	84.5	-----	91.1	86.4	97.6	87.5	87.6	84.8	96.3	100.4	90.0	85.0
30	83.9	-----	91.1	85.4	97.0	87.0	87.4	84.2	96.5	101.8	89.5	85.0
31	83.8	-----	91.0	-----	96.6	-----	87.2	84.4	-----	101.8	-----	84.7

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	84.2	86.1	88.7	90.7	93.4	90.8	91.3	85.7	88.6	104.4	92.0	88.5
MAX	85.4	89.8	92.3	93.2	102.0	96.4	98.3	88.0	97.8	110.5	101.4	93.0
MIN	83.2	83.9	85.0	85.4	84.3	87.0	87.0	84.2	83.8	97.6	87.8	84.7
DAYS	31	28	31	30	31	30	31	31	23	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 358

THE MEAN STAGE FOR THE YEAR WAS 90.4.

HIGHEST STAGE WAS 110.5 ON OCT 8 THRU 9.

LOWEST STAGE WAS 83.2 ON JAN 15 THRU 16.

## DAILY STAGE FOR 1987

## 0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 & LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	84.9	83.8	84.4	92.8	86.8	91.6	83.7	83.9	88.4	83.8	82.5	85.1
2	84.6	84.7	84.2	92.8	87.2	91.2	83.7	83.6	87.6	83.5	82.8	85.2
3	84.7	84.8	85.7	91.4	86.7	90.9	84.0	83.8	86.8	83.0	82.8	85.4
4	84.6	84.8	89.3	91.5	86.6	90.1	83.7	83.8	85.7	83.0	82.9	84.3
5	84.4	84.7	89.4	91.0	86.0	89.1	83.6	83.8	85.6	82.9	82.9	84.3
6	84.0	84.5	87.5	89.9	87.4	88.5	83.5	83.7	84.8	82.6	83.5	84.3
7	84.0	84.7	86.7	89.8	88.4	87.3	83.8	83.4	83.3	82.4	83.7	84.5
8	84.0	84.8	86.5	90.2	89.0	86.4	84.3	83.6	84.0	82.2	83.6	84.7
9	83.9	84.7	85.7	89.7	88.8	86.0	83.5	83.5	84.1	82.2	83.1	84.8
10	84.3	84.7	85.6	88.9	87.8	85.5	83.9	83.2	83.6	82.7	83.0	84.9
11	83.2	84.6	85.1	88.7	86.6	86.0	83.5	83.2	83.6	82.8	83.4	84.9
12	83.9	84.7	85.6	88.2	85.4	85.5	85.5	83.1	83.8	83.0	82.9	84.4
13	83.8	84.6	85.2	87.4	85.2	85.2	86.5	83.0	83.5	83.0	83.0	83.8
14	83.7	84.6	85.4	90.6	85.1	84.6	87.1	83.6	83.5	82.9	83.0	83.8
15	83.9	84.0	85.5	93.7	85.1	84.0	87.8	83.9	83.0	82.8	83.0	83.9
16	84.1	84.0	85.8	96.6	85.0	84.2	87.5	84.0	83.2	82.6	83.0	83.9
17	84.3	83.9	85.6	95.4	84.7	84.2	87.2	84.0	83.0	82.5	83.0	83.9
18	84.5	83.9	85.7	94.5	84.2	84.0	87.0	85.0	83.3	82.4	82.9	83.9
19	84.6	83.8	86.0	93.7	84.4	83.9	86.5	85.6	83.5	82.3	82.8	84.1
20	84.2	84.4	86.9	93.7	84.5	82.8	85.1	85.5	83.3	83.0	82.8	84.9
21	83.7	84.7	90.6	93.6	85.0	83.4	83.9	85.0	84.9	82.9	83.0	87.9
22	83.2	84.6	91.7	92.3	84.9	83.3	83.9	83.9	84.5	83.2	83.1	90.1
23	83.3	84.5	91.3	91.6	87.4	83.3	83.6	83.9	84.0	83.0	83.5	90.7
24	83.3	84.3	89.7	91.2	86.9	84.3	83.8	84.3	83.9	82.5	83.2	90.1
25	83.3	84.3	89.0	90.0	86.5	84.1	83.8	84.0	83.6	82.5	83.9	89.7
26	83.5	84.3	89.0	89.8	86.0	84.0	83.7	83.7	83.5	82.9	84.2	89.8
27	83.3	84.3	89.3	89.9	85.0	84.2	83.6	83.7	84.0	82.8	84.5	88.4
28	83.6	84.4	91.3	89.3	84.7	83.5	83.7	83.4	83.4	82.8	84.8	92.9
29	83.9	-----	91.8	88.2	85.9	83.7	83.6	83.6	83.6	82.7	84.9	93.4
30	83.7	-----	93.0	87.3	87.5	83.4	83.2	90.1	83.7	82.5	84.9	92.7
31	83.7	-----	93.4	-----	90.2	-----	83.7	89.7	-----	82.5	-----	89.7

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	83.9	84.4	87.8	91.1	86.3	85.6	84.6	84.3	84.2	82.8	83.4	86.6
MAX	84.9	84.8	93.4	96.6	90.2	91.6	87.8	90.1	88.4	83.8	84.9	93.4
MIN	83.2	83.8	84.2	87.3	84.2	82.8	83.2	83.0	83.0	82.2	82.5	83.8
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 85.4.

HIGHEST STAGE WAS 96.6 ON APR 16.

LOWEST STAGE WAS 82.2 ON OCT 8 THRU 9.

## DAILY STAGE FOR 1988

## 0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 & LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	87.9	85.2	86.6	90.3	84.8	81.7	80.1	79.9	82.2	82.5	82.3	83.4
2	86.3	87.0	84.8	90.0	84.7	81.6	80.1	80.1	82.1	82.5	82.2	83.4
3	84.8	86.5	84.9	89.6	84.6	81.9	80.1	80.3	82.1	82.5	82.2	83.2
4	84.8	85.0	85.8	89.9	84.5	81.8	80.1	80.1	82.1	82.5	82.3	82.8
5	84.5	86.0	85.9	90.9	84.5	81.8	80.0	80.3	82.0	82.7	82.4	82.7
6	84.3	84.6	86.0	91.4	84.7	81.6	79.9	80.1	82.3	82.9	82.3	82.6
7	84.2	84.3	86.8	92.2	84.4	81.6	79.9	80.1	82.1	82.7	82.2	82.6
8	84.2	84.2	87.3	91.6	84.1	81.2	80.0	80.0	81.9	82.4	82.5	82.5
9	84.2	84.1	87.5	90.7	84.0	81.3	79.9	79.9	82.0	82.2	82.3	82.5
10	83.8	84.1	85.8	89.3	83.4	81.1	79.9	80.0	81.9	81.7	82.4	82.4
11	83.9	83.9	85.7	88.8	83.4	81.0	79.9	79.9	81.8	81.9	82.5	82.3
12	83.9	83.9	85.9	88.6	83.4	81.7	79.9	82.4	81.7	81.4	82.5	82.2
13	83.4	83.9	86.0	88.4	83.8	81.6	80.0	82.5	81.7	81.5	82.8	82.1
14	83.4	84.0	85.9	88.1	83.9	81.6	79.9	82.4	81.6	81.8	82.8	81.9
15	83.7	84.0	85.8	87.7	83.9	81.5	80.3	82.2	81.5	82.0	82.7	81.7
16	83.3	84.0	86.0	86.8	83.8	81.5	80.2	82.1	81.5	81.9	82.8	81.5
17	83.3	84.0	86.3	86.5	83.8	81.5	80.4	82.2	82.1	82.1	82.7	81.5
18	83.3	83.8	86.4	86.5	83.6	81.4	80.2	82.2	82.1	82.0	82.6	81.9
19	83.4	84.0	84.8	86.6	83.6	81.4	80.4	82.4	81.9	82.0	82.9	81.9
20	83.5	84.8	84.8	87.6	83.5	81.4	80.4	82.5	82.8	82.1	83.0	81.7
21	85.1	85.1	84.6	87.0	83.6	81.0	80.2	82.2	82.3	82.5	83.2	81.6
22	85.0	85.3	84.4	86.5	83.7	80.6	80.0	82.0	82.4	82.3	83.3	81.6
23	85.6	85.7	84.0	86.0	83.6	80.4	80.0	82.3	83.1	82.5	83.3	82.5
24	85.6	85.9	83.7	85.8	83.5	80.4	80.5	82.2	83.2	82.4	83.3	82.7
25	85.7	86.5	84.0	85.5	83.4	80.4	80.2	82.2	83.0	82.1	83.7	82.5
26	85.4	86.6	83.3	85.2	83.5	80.3	80.4	82.2	82.4	82.3	83.0	82.5
27	84.9	85.2	82.8	85.5	83.0	80.2	80.6	82.2	82.5	82.1	83.1	82.6
28	84.8	84.9	84.0	85.3	82.9	80.0	80.1	82.6	82.5	82.4	83.0	82.7
29	84.6	84.8	84.3	84.9	82.5	80.0	80.0	82.4	82.3	82.4	83.0	82.8
30	84.6	-----	87.4	84.8	81.8	80.5	80.3	82.5	82.4	82.4	83.2	83.5
31	84.6	-----	91.0	-----	81.8	-----	79.9	82.3	-----	82.3	-----	83.1

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	84.5	84.9	85.6	87.9	83.7	81.1	80.1	81.5	82.2	82.2	82.7	82.4
MAX	87.9	87.0	91.0	92.2	84.8	81.9	80.6	82.6	83.2	82.9	83.7	83.5
MIN	83.3	83.8	82.8	84.8	81.8	80.0	79.9	79.9	81.5	81.4	82.2	81.5
DAYS	31	29	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 366

THE MEAN STAGE FOR THE YEAR WAS 83.2.

HIGHEST STAGE WAS 92.2 ON APR 7.

LOWEST STAGE WAS 79.9 ON JUL 6 THRU 7, AND JUL 9 THRU 12, AND JUL 14, AND JUL 31 THRU AUG 1, AND AUG 9, AND AUG 11.

## DAILY STAGE FOR 1989

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83.3	82.6	82.3	84.3	83.6	83.7	83.2	82.8	84.0	82.6	82.4	81.7
2	83.1	82.9	82.2	84.5	83.4	84.1	83.3	82.7	85.3	82.6	82.8	81.7
3	82.9	83.4	82.1	85.3	83.4	84.4	82.9	82.5	84.2	82.6	83.0	81.7
4	82.6	83.3	82.5	86.9	83.4	84.4	82.9	82.5	83.9	82.6	83.0	81.5
5	82.6	83.0	82.6	88.7	83.4	84.8	83.0	82.5	83.9	82.0	82.8	81.5
6	83.1	82.2	82.5	88.9	83.5	84.8	82.8	82.5	83.6	82.2	83.0	81.4
7	83.4	82.1	82.5	87.7	83.3	84.9	82.6	83.4	83.3	82.2	82.5	81.4
8	83.2	82.3	82.6	87.0	83.2	84.8	82.5	83.1	83.2	82.5	82.6	81.3
9	82.9	82.7	83.0	87.0	83.4	85.2	82.5	83.2	84.1	82.3	82.3	81.3
10	82.6	82.7	82.8	87.0	83.5	84.5	82.5	82.8	85.6	82.5	82.3	81.2
11	82.3	82.5	83.0	86.2	83.4	84.7	82.4	82.5	87.5	82.2	82.3	81.0
12	82.3	82.3	83.4	85.5	83.4	84.8	82.3	82.4	91.0	82.5	82.3	80.6
13	82.5	82.3	84.7	85.4	83.3	84.4	82.4	82.3	91.9	82.3	82.2	80.2
14	82.6	82.4	84.7	84.8	83.3	84.0	82.4	82.3	91.6	82.5	82.2	80.3
15	82.8	82.3	83.9	84.5	83.3	84.6	83.0	82.0	89.2	83.4	82.1	80.3
16	82.8	82.3	84.2	84.3	83.2	83.5	82.4	82.0	87.3	82.5	82.5	80.3
17	82.6	82.3	85.4	84.3	83.3	83.5	82.0	82.0	86.0	82.3	81.8	80.3
18	82.5	82.6	85.8	84.3	83.1	83.1	82.4	82.2	86.1	82.7	82.2	80.3
19	82.3	82.8	84.5	84.1	83.4	83.9	82.0	82.3	86.1	82.9	82.0	80.2
20	82.8	82.7	84.7	84.1	83.2	83.9	81.7	82.3	83.8	82.6	82.0	80.2
21	82.6	82.6	85.8	84.0	83.0	83.8	82.7	82.5	84.1	82.6	82.0	80.2
22	82.4	82.5	85.4	84.0	82.9	83.4	83.0	82.4	84.0	82.6	81.9	80.2
23	82.4	82.5	85.0	83.7	82.9	83.3	82.8	82.4	83.7	82.4	81.9	80.2
24	82.1	82.4	84.5	83.7	83.2	83.1	82.9	82.9	83.5	81.5	81.8	80.2
25	82.1	82.6	83.8	83.7	83.1	82.9	82.8	83.2	83.6	82.2	81.2	80.2
26	82.2	82.6	83.5	83.7	83.5	82.7	82.8	83.4	83.3	82.3	82.0	80.2
27	82.5	82.6	83.4	83.4	83.5	82.7	82.8	83.4	83.1	82.4	81.9	80.2
28	82.5	82.5	83.3	83.6	83.5	82.8	82.5	83.3	83.0	82.2	81.8	80.2
29	82.6	-----	83.3	83.9	83.8	82.6	82.5	83.3	82.7	82.2	81.8	80.2
30	82.6	-----	83.9	83.7	84.1	82.7	82.6	84.0	82.6	82.5	81.7	80.2
31	82.6	-----	84.7	-----	83.8	-----	82.8	83.6	-----	82.5	-----	80.2

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	82.6	82.6	83.7	85.1	83.4	83.9	82.6	82.7	85.2	82.4	82.2	80.7
MAX	83.4	83.4	85.8	88.9	84.1	85.2	83.3	84.0	91.9	83.4	83.0	81.7
MIN	82.1	82.1	82.1	83.4	82.9	82.6	81.7	82.0	82.6	81.5	81.2	80.2
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 83.1.

HIGHEST STAGE WAS 91.9 ON SEP 13.

LOWEST STAGE WAS 80.2 ON DEC 13, AND DEC 19 THRU 31.

## DAILY STAGE FOR 1990

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	80.2	82.4		86.5	86.3	98.9	99.6	89.9	88.4	83.1	83.1	83.3
2	80.2	82.7		86.7	86.7	97.0	98.8	89.8	88.4	82.5	83.3	83.4
3	82.3	82.4		85.9	86.1	95.1	98.0	88.7	84.2	81.5	83.2	83.8
4	82.5	82.6	83.1	85.4	85.9	92.7	97.5	88.6	87.7	82.8	83.2	84.0
5	82.1	82.6	83.4	85.7	88.4	91.0	97.2	88.5	86.9	82.8	83.3	83.8
6	82.1	82.7	83.4	85.4	91.7	90.3	96.9	89.4	86.6	82.5	83.0	83.8
7	82.2	82.6	83.4	85.4	92.4	91.0	96.6	89.7	86.2	82.5	83.0	83.8
8	82.2	82.7	83.4	85.0	92.2	95.3	96.2	89.2	85.7	82.6	83.0	83.8
9	82.3	82.7	83.7	84.6	90.8	97.8	95.3	87.9	84.7	83.1	83.2	83.7
10	82.2	82.9	84.0	84.9	89.1	98.5	94.5	88.1	82.9	83.4	83.0	83.5
11	82.2	83.0	83.9	84.3	87.5	98.4	93.4	87.1	83.1	83.2	82.9	83.4
12	82.2	82.8	84.7	84.3	87.2	98.0	92.5	86.1	83.2	83.2	83.0	83.3
13	82.1	82.9	86.7	84.5	89.4	96.3	90.9	85.4	83.2	83.5	82.9	83.4
14	82.2	82.9	87.9	85.0	92.4	93.7	90.9	85.4	83.3	83.3	83.0	83.4
15	82.0	83.0	89.4	85.9	91.5	92.6	89.9	85.0	83.4	83.3	82.9	83.4
16	81.8	83.2	95.5	85.8	94.8	93.5	89.2	84.5	83.3	83.4	82.9	83.5
17	81.9	83.2	97.5	85.2	101.1	94.8	88.2	84.5	83.2	83.3	82.8	83.5
18	82.3	83.3	98.0	84.7	104.2	96.3	87.5	84.7	83.2	83.5	82.8	83.7
19	82.5	83.3	97.5	84.5	106.0	97.5	87.2	85.0	83.4	83.0	82.7	83.3
20	82.3	83.1	97.5	84.4	104.1	98.4	86.8	85.7	83.4	83.2	82.7	83.3
21	82.2	83.2	95.5	84.2	102.8	99.5	86.2	84.6	83.2	83.4	82.7	83.6
22	82.3	82.9	94.4	84.2	100.5	100.6	87.3	86.5	83.2	83.2	82.6	83.9
23	82.3	83.7	93.0	83.9	97.6	101.4	89.2	86.8	83.3	83.2	82.6	83.6
24	82.4	83.7	91.6	83.8	95.6	102.0	90.2	87.7	83.3	82.9	82.6	83.8
25	82.4		91.3	83.8	94.7	102.3	90.4	87.5	83.3	83.2	82.5	82.9
26	82.4		90.7	83.8	95.8	102.2	89.1	87.3	83.2	83.6	82.2	82.8
27	82.6		90.5	83.7	97.0	101.9	87.3	87.3	82.1	83.3	82.2	82.8
28	82.5		90.3	84.0	99.5	101.5	86.2	87.2	83.1	83.4	83.2	81.2
29	82.6	-----	90.0	83.9	101.3	101.0	85.5	87.4	83.1	83.6	83.4	81.2
30	82.5	-----	89.9	84.2	101.6	100.4	86.6	87.9	83.1	83.6	83.2	82.0
31	82.5	-----	87.7	-----	101.7	-----	89.6	88.4	-----	83.4	-----	83.0

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	82.1	82.9	89.6	84.8	94.7	97.3	91.4	87.2	84.2	83.1	82.9	83.3
MAX	82.6	83.7	98.0	86.7	106.0	102.3	99.6	89.9	88.4	83.6	83.4	84.0
MIN	80.2	82.4	83.1	83.7	85.9	90.3	85.5	84.5	82.1	81.5	82.2	81.2
DAYS	31	24	28	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 358

THE MEAN STAGE FOR THE YEAR WAS 87.0.

HIGHEST STAGE WAS 106.0 ON MAY 19.

LOWEST STAGE WAS 80.2 ON JAN 1 THRU 2.

## DAILY STAGE FOR 1991

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83.00	83.10	83.80	91.00	93.70	96.40	87.50	83.70	82.70	83.10	83.40	85.20
2	83.00	83.20	83.90	90.70	95.20	96.40	87.20	83.60	82.70	83.00	83.50	86.80
3	83.50	83.20	83.80	90.50	95.80	95.80	87.30	83.50	82.50	83.20	83.70	87.10
4	84.00	83.30	84.60	90.80	95.50	96.40	86.90	83.20	82.60	83.50	83.70	87.00
5	84.00	83.40	87.20	90.70	95.40	96.00	86.40	83.20	82.50	83.70	83.70	86.20
6	84.00	83.90	87.00	90.50	95.70	95.10	85.90	83.40	82.30	84.20	84.40	86.10
7	83.00	84.40	86.80	90.50	98.40	94.60	85.40	83.60	82.10	83.50	84.60	84.30
8	83.00	86.40	84.70	90.60	99.00	94.40	85.50	83.60	82.20	83.60	84.20	84.30
9	83.00	86.50	84.20	90.40	98.60	93.70	84.90	83.70	82.20	83.60	84.10	84.10
10	83.30	83.60	84.50	90.10	98.20	93.40	85.40	83.50	82.30	83.40	84.00	84.30
11	83.50	84.00	84.10	89.70	97.60	94.20	87.40	83.50	82.60	83.20	84.00	84.60
12	83.40	84.00	83.90	89.40	96.60	93.70	88.30	83.60	82.70	83.20	83.70	84.70
13	83.40	84.00	84.00	89.30	95.10	93.20	88.50	83.70	82.10	82.90	83.80	85.00
14	83.70	83.80	84.60	89.30	93.80	93.00	86.60	83.70	83.00	82.60	83.90	85.60
15	83.60	84.00	85.10	89.20	94.50	93.00	87.30	83.80	82.90	82.50	83.90	86.10
16	83.80	84.20	84.70	92.20	95.30	93.00	86.80	83.70	83.00	82.50	83.80	85.80
17	83.90	83.60	84.50	94.20	95.60	93.10	85.90	83.70	83.20	82.50	83.50	85.80
18	84.50	84.00	85.80	93.90	95.50	92.90	85.90	83.50	83.40	82.50	83.40	86.40
19	84.80	84.00	86.50	94.40	95.20	93.80	85.40	83.60	83.60	82.00	83.50	86.10
20	84.90	84.00	86.30	95.30	94.50	95.00	85.20	83.40	83.50	82.50	84.30	85.80
21	84.90	83.80	87.00	96.40	93.90	94.30	84.50	83.30	83.50	82.50	84.30	85.90
22	83.30	84.00	87.90	97.00	93.50	93.10	84.80	83.30	83.50	82.50	84.40	86.90
23	83.90	84.20	88.80	97.00	93.20	92.20	84.30	83.10	83.50	82.30	85.00	86.20
24	84.40	84.00	88.70	97.30	93.00	92.00	84.00	83.10	83.60	82.40	85.10	86.20
25	84.00	83.80	88.00	96.60	93.00	91.50	84.30	83.10	83.50	82.30	84.60	86.20
26	83.80	83.80	88.10	96.60	93.60	90.20	84.20	83.00	83.40	82.60	85.00	86.40
27	83.70	83.90	88.30	94.70	95.80	90.10	84.20	83.00	83.20	82.90	86.00	86.80
28	83.60	83.90	88.50	94.00	96.80	89.30	84.10	82.70	83.40	83.00	85.30	87.50
29	83.30	-----	88.80	93.50	96.50	88.40	84.20	82.60	83.30	83.20	85.00	87.30
30	83.00	-----	89.60	93.30	96.30	87.80	84.00	82.60	83.10	83.00	85.00	86.43
31	83.00	-----	90.50	-----	96.30	-----	83.90	82.70	-----	83.10	-----	85.30

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	83.68	84.00	86.26	92.64	95.52	93.20	85.68	83.35	82.94	82.94	84.23	85.88
MAX	84.90	86.50	90.50	97.30	99.00	96.40	88.50	83.80	83.60	84.20	86.00	87.50
MIN	83.00	83.10	83.80	89.20	93.00	87.80	83.90	82.60	82.10	82.00	83.40	84.10
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 86.70.

HIGHEST STAGE WAS 99.00 ON MAY 8.

LOWEST STAGE WAS 82.00 ON OCT 19.

## DAILY STAGE FOR 1992

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	85.5	83.6	85.4	89.4	93.8	83.8	83.2	93.2	82.7	84.5	82.9	95.0
2	84.5	83.5	84.9	88.9	93.3	83.8	83.2	93.4	82.7	84.4	83.1	93.8
3	84.1	83.5	84.2	88.9	92.9	83.6	83.5	94.5	82.7	83.5	83.3	93.2
4	84.1	83.4	84.2	88.3	92.7	83.7	84.2	94.0	82.8	83.3	83.4	92.2
5	83.9	83.2	84.2	88.3	92.1	83.3	83.6	91.2	82.3	83.4	83.6	91.8
6	83.8	83.2	84.1	87.1	91.6	83.3	83.2	89.7	83.0	83.1	84.2	90.0
7	83.9	83.3	84.4	86.4	91.0	83.3	83.5	88.8	83.5	83.1	84.4	89.3
8	84.0	83.2	84.8	86.0	90.5	83.3	83.8	88.0	83.7	82.8	84.7	88.3
9	84.1	83.5	85.6	86.4	89.9	83.5	84.4	88.0	83.6	83.0	84.7	86.8
10	84.0	83.5	86.3	86.5	88.9	83.2	84.8	87.5	84.8	82.0	84.6	86.2
11	84.0	83.5	86.7	86.2	88.7	83.2	84.8	88.6	84.5	82.9	84.8	86.1
12	84.1	83.3	87.6	86.0	87.2	83.2	84.9	87.5	87.0	83.0	85.1	86.4
13	84.1	83.3	87.9	85.4	86.2	83.3	84.8	86.4	87.0	82.9	86.6	86.3
14	84.3	83.0	87.8	85.7	85.5	83.3	85.1	85.5	86.5	83.5	89.4	86.4
15	84.1	83.2	87.9	85.9	85.0	83.0	85.5	85.3	85.7	84.1	89.4	86.8
16	84.0	84.0	87.8	86.4	84.8	83.0	88.1	84.6	84.0	84.2	88.0	95.6
17	83.5	84.4	87.6	86.3	84.2	82.8	94.1	84.5	84.1	84.5	86.2	100.4
18	83.3	84.0	87.7	86.2	84.0	83.6	93.5	84.4	85.3	84.3	85.6	101.8
19	82.8	84.8	88.4	86.0	83.9	83.5	91.6	84.3	85.3	84.1	85.5	102.0
20	82.8	84.7	89.1	91.3	84.0	83.5	91.3	84.1	86.6	84.0	85.7	101.2
21	82.8	85.8	89.8	91.6	83.9	83.3	90.3	83.9	87.8	84.0	87.1	101.1
22	82.8	87.3	92.0	92.8	84.0	83.8	90.2	83.8	88.1	83.9	95.5	99.0
23	83.2	87.7	93.2	95.6	84.2	83.7	89.3	83.7	88.5	83.7	100.9	97.1
24	83.1	86.9	92.1	97.5	84.3	83.8	89.0	83.3	88.6	83.5	99.8	94.0
25	83.0	85.9	90.7	97.0	84.5	83.8	88.8	83.1	87.5	83.4	101.0	90.6
26	83.3	85.5	90.0	96.5	84.6	83.9	88.0	83.2	86.8	83.3	100.6	88.5
27	83.6	85.7	89.5	96.2	84.5	83.8	89.7	82.9	86.6	83.3	99.6	87.0
28	83.8	85.5	89.5	95.5	84.4	83.8	92.5	83.2	86.3	83.4	98.4	86.9
29	83.6	85.5	88.1	95.0	84.3	83.8	95.5	83.5	85.8	83.1	97.4	87.0
30	83.6	-----	88.6	94.3	84.0	83.1	95.0	83.1	85.0	83.1	96.4	87.2
31	83.6	-----	89.5	-----	83.8	-----	94.1	83.0	-----	83.0	-----	87.0

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	83.7	84.4	87.7	89.8	87.0	83.5	87.9	86.5	85.3	83.5	89.4	91.8
MAX	85.5	87.7	93.2	97.5	93.8	83.9	95.5	94.5	88.6	84.5	101.0	102.0
MIN	82.8	83.0	84.1	85.4	83.8	82.8	83.2	82.9	82.3	82.0	82.9	86.1
DAYS	31	29	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 366

THE MEAN STAGE FOR THE YEAR WAS 86.7.

HIGHEST STAGE WAS 102.0 ON DEC 19.

LOWEST STAGE WAS 82.0 ON OCT 10.

## DAILY STAGE FOR 1993

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	88.0	87.8	84.1	95.9	104.3	96.4	102.9	121.4	101.2	110.0	89.5	87.5
2	87.2	87.3	84.0	97.2	104.2	96.3	103.5	121.1	100.1	110.6	89.0	87.2
3	86.5	87.2	84.4	99.0	104.0	95.8	105.5	120.6	102.0	108.8	89.0	87.2
4	89.3	87.5	84.0	99.3	103.4	95.4	107.2	120.2	101.9	107.6	88.6	88.8
5	93.9	87.6	95.5	101.0	103.4	95.3	108.2	119.7	102.2	106.2	88.4	88.3
6	95.3	87.4	98.3	101.0	104.6	95.4	109.0	118.9	102.3	103.9	88.2	88.5
7	95.5	87.1	98.9	103.0	105.5	96.8	109.8	117.6	102.2	101.4	87.6	88.0
8	94.5	86.7	99.3	101.3	105.3	99.6	111.7	116.2	102.0	99.4	87.4	87.4
9	93.0	86.5	99.8	100.9	105.4	100.5	112.7	115.0	101.8	98.8	87.3	87.2
10	91.0	86.6	100.0	100.4	106.0	100.7	113.6	113.5	101.5	97.8	87.1	86.9
11	89.9	86.6	99.6	101.1	106.3	100.4	114.0	111.8	101.2	96.1	87.1	86.5
12	88.2	86.8	98.7	101.1	106.4	100.3	114.3	111.1	101.0	94.4	87.1	86.5
13	87.9	86.9	98.3	102.0	106.7	100.2	114.0	111.1	100.9	94.0	87.0	86.5
14	87.1	87.2	97.7	102.2	106.9	99.8	114.2	111.1	100.6	93.1	87.8	86.3
15	87.7	88.0	96.8	104.2	107.0	99.6	114.0	110.8	102.4	92.3	92.2	86.3
16	88.0	87.8	95.7	106.5	106.8	99.0	115.9	110.0	103.9	91.9	92.8	86.8
17	88.0	86.7	94.0	107.4	106.5	98.9	117.0	109.3	104.6	91.8	93.0	87.7
18	87.7	87.5	92.5	107.6	105.8	98.9	118.0	108.5	104.3	91.5	95.9	87.4
19	87.4	85.1	91.6	107.4	104.9	98.9	118.4	107.8	104.2	92.1	97.2	87.3
20	86.5	85.2	90.9	107.1	104.5	98.8	118.5	106.7	102.3	92.4	95.8	87.0
21	87.2	84.8	90.3	106.8	103.6	98.8	118.6	105.8	102.7	92.5	92.4	86.2
22	88.5	84.8	89.8	106.4	102.7	98.7	118.5	104.9	102.9	92.4	90.5	85.9
23	87.7	84.7	90.3	106.0	101.8	98.7	118.2	104.3	103.9	92.1	89.2	85.9
24	88.7	84.3	92.1	105.7	101.0	99.3	118.0	104.0	105.5	91.4	89.2	85.6
25	90.4	84.2	94.0	106.0	100.1	99.4	117.8	104.0	107.4	90.9	88.6	85.8
26	90.8	84.2	94.8	106.2	99.4	100.8	117.7	103.9	108.6	90.8	88.7	84.9
27	89.8	84.2	95.3	106.0	98.8	102.0	117.6	103.4	109.2	90.6	88.4	84.2
28	89.0	84.1	95.6	105.4	98.4	101.7	117.4	103.0	109.5	90.5	88.5	84.0
29	88.6	-----	95.5	105.2	97.8	102.4	117.5	102.7	109.6	90.6	88.2	83.6
30	88.1	-----	95.2	104.8	97.0	102.9	118.6	102.2	109.9	90.2	88.1	83.5
31	87.9	-----	95.3	-----	96.6	-----	120.0	101.7	-----	90.0	-----	83.5

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	89.3	86.2	93.9	103.5	103.4	99.1	114.3	110.4	103.7	96.0	89.7	86.4
MAX	95.5	88.0	100.0	107.6	107.0	102.9	120.0	121.4	109.9	110.6	97.2	88.8
MIN	86.5	84.1	84.0	95.9	96.6	95.3	102.9	101.7	100.1	90.0	87.0	83.5
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 98.1.

HIGHEST STAGE WAS 121.4 ON AUG 1.

LOWEST STAGE WAS 83.5 ON DEC 30 THRU 31.

## DAILY STAGE FOR 1994

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83.7	83.8	90.6	86.8	99.2	86.5	88.7	84.3	83.3	84.5	83.8	85.1
2	83.7	83.8	89.6	86.4	100.7	85.9	88.3	84.4	83.2	84.5	83.8	84.9
3	83.7	83.9	88.6	86.5	101.7	86.7	88.2	84.2	83.2	84.4	83.9	84.8
4	83.6	84.0	88.4	86.3	100.2	86.9	87.6	84.1	83.2	84.4	84.2	84.9
5	83.6	83.9	88.5	86.1	100.3	86.0	86.5	84.0	83.3	83.8	84.1	84.8
6	83.9	83.9	89.3	86.1	98.4	86.8	86.0	84.0	83.4	83.8	84.6	84.7
7	83.6	84.0	91.0	86.7	96.0	86.6	86.8	83.7	83.2	83.8	84.7	84.5
8	83.4	83.6	92.4	86.4	96.0	87.0	86.9	83.2	83.1	83.5	85.0	84.3
9	84.0	83.3	93.6	86.1	96.5	86.7	86.5	83.5	83.0	83.8	85.2	85.7
10	83.8	83.3	94.7	86.2	97.4	87.2	86.6	83.4	83.0	83.7	86.2	85.3
11	83.7	83.3	94.9	89.5	97.5	87.8	86.8	83.3	82.9	83.5	86.3	85.6
12	83.6	83.4	94.2	100.0	97.3	87.9	85.9	83.3	82.9	83.7	86.5	84.6
13	83.5	83.7	93.4	103.5	96.5	87.3	86.4	83.3	82.8	83.6	86.0	84.0
14	83.6	83.2	92.4	106.9	95.6	86.9	86.3	83.3	82.7	83.6	85.9	84.1
15	83.6	83.2	91.7	107.0	95.1	87.3	86.2	83.8	82.5	83.4	84.3	83.9
16	83.5	83.1	91.6	106.1	95.0	86.8	86.6	83.8	82.4	83.5	83.9	83.3
17	83.5	83.1	91.6	104.1	94.3	87.3	86.5	84.1	82.4	83.5	84.1	83.5
18	83.4	83.2	91.3	100.8	93.9	87.3	86.1	84.0	82.4	83.4 E	84.0	83.6
19	83.6	83.4	90.6	97.3	93.5	87.0	86.0	84.0	82.2	83.4	83.9	83.8
20	83.5	83.4	89.5	93.7	92.8	86.8	86.0	83.8	82.2	83.3	83.7	83.6
21	83.4	84.9	88.3	91.9	91.5	87.0	86.2	83.9	82.3	83.4	84.2	83.3
22	83.4	87.7	87.5	91.2	90.5	86.7	85.9	84.0	83.0	83.5	86.3	84.0
23	83.4	90.9	87.0	91.3	89.8	86.9	86.3	83.9	83.5	83.6	87.0	84.0
24	83.4	95.1	87.1	92.0	89.3	87.9	85.4	83.8	83.9	83.6	86.7	84.0
25	83.4	95.3	87.0	91.9	88.6	88.0	85.4	83.6	84.1	83.6	85.8	84.0
26	83.4	94.1	87.1	91.9	88.2	88.3	85.4	83.5	84.2	83.6	85.0	84.0
27	83.7	93.0	87.1	91.3	88.2	88.9	85.2	83.4	84.2	83.6	85.1	84.0
28	83.7	91.4	86.8	91.4	87.9	90.5	85.0	83.4	84.2	83.7	85.4	83.9
29	84.2	-----	86.9	95.2	87.5	90.5	84.6	83.3	84.2	83.6	84.7	83.0
30	84.2	-----	86.9	97.6	87.0	89.4	84.2	83.4	84.3	83.7	84.8	83.6
31	84.3	-----	86.6	-----	86.7	-----	84.3	83.3	-----	83.8	-----	83.5

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	83.6	85.8	89.9	93.3	94.0	87.4	86.2	83.7	83.2	83.7	85.0	84.2
MAX	84.3	95.3	94.9	107.0	101.7	90.5	88.7	84.4	84.3	84.5	87.0	85.7
MIN	83.4	83.1	86.6	86.1	86.7	85.9	84.2	83.2	82.2	83.3	83.7	83.0
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

E=ESTIMATED

THE MEAN STAGE FOR THE YEAR WAS 86.7.

HIGHEST STAGE WAS 107.0 ON APR 15.

LOWEST STAGE WAS 82.2 ON SEP 19 THRU 20.

## DAILY STAGE FOR 1995

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83.4	85.7	84.1	87.4	96.6	111.2	96.5	86.9	85.2	83.3	84.6	84.1
2	83.4	85.7	84.3	88.6	97.8	111.0	96.1	87.3	84.9	83.3	85.0	83.8
3	83.3	85.9	84.4	88.1	98.9	110.6	95.5	87.7	84.6	83.8	85.3	83.5
4	82.8	87.4	84.1	88.5	98.7	110.1	94.6	88.2	84.4	83.7	85.5	83.5
5	82.6	88.5	84.0	88.7	98.4	109.4	94.2	89.8	84.8	83.7	85.9	83.9
6	83.0	86.3	83.8	87.6	98.2	108.8	93.7	90.5	84.8	83.5	86.2	84.0
7	82.7	85.9	84.0	87.3	97.9	108.0	95.7	92.3	84.8	83.7	86.8	84.0
8	82.8	84.7	85.1	87.2	97.2	107.2	97.2	92.9	85.2	83.6	86.3	83.9
9	82.6	84.3	84.5	86.9	97.8	106.6	97.7	90.0	85.7	83.4	85.6	84.1
10	82.8	84.5	84.5	86.6	100.0	106.1	97.5	87.7	85.4	83.9	85.7	83.6
11	82.8	84.6	84.7	87.5	101.4	105.7	96.4	87.8	85.2	84.3	86.6	83.5
12	82.8	84.1	84.3	88.8	102.3	105.5	95.9	88.2	84.7	84.4	86.1	83.2
13	82.9	83.7	83.8	91.1	103.3	105.1	94.8	87.8	84.7	84.4	86.2	83.0
14	84.3	83.4	84.1	93.3	103.6	104.7	93.3	87.1	84.3	84.7	86.6	83.0
15	87.1	83.3	84.1	94.4	103.6	104.2	91.8	86.2	83.9	84.5	86.6	82.9
16	87.5	83.3	84.4	94.1	103.8	103.6	90.8	85.8	84.0	84.5	86.8	82.8
17	86.2	83.3	84.9	93.2	104.9	102.8	90.1	86.5	83.9	84.9	86.7	83.0
18	86.1	83.4	85.4	92.8	107.3	101.9	89.5	88.5	83.6	85.3	86.0	83.1
19	85.5	83.5	86.7	94.5	109.8	100.9	89.0	88.4	83.4	85.3	85.5	83.2
20	86.0	83.4	87.0	94.9	111.5	100.8	88.9	88.1	83.5	85.7	85.3	82.9
21	84.3	83.2	86.5	95.7	112.0	98.6	88.2	87.6	83.8	84.9	85.0	82.9
22	84.6	83.3	86.0	95.7	113.0	97.7	88.6	87.2	83.5	85.1	84.7	82.9
23	84.7	83.5	86.2	95.5	112.2	97.0	88.9	87.2	83.6	84.8	85.0	83.3
24	84.4	83.5	86.2	94.5	111.3	96.5	88.7	87.1	83.6	83.5	84.6	83.5
25	84.3	83.3	86.4	94.0	110.7	95.8	88.5	86.6	83.5	84.1	84.5	83.3
26	84.4	83.6	86.5	93.8	110.5	95.3	88.8	87.8	83.4	83.9	84.5	83.3
27	84.4	83.5	86.6	93.8	110.8	95.3	88.4	86.6	83.8	84.1	84.3	83.4
28	84.7	83.8	86.6	93.6	111.2	95.8	88.1	86.6	84.0	84.3	84.4	83.2
29	86.0	-----	86.8	93.8	111.4	96.6	87.6	86.5	83.7	84.3	84.1	83.0
30	86.5	-----	87.0	94.3	111.5	96.3	87.4	87.2	83.4	84.3	84.5	83.0
31	86.1	-----	87.5	-----	111.4	-----	87.2	86.8	-----	84.5	-----	83.2

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	84.4	84.4	85.3	91.5	105.1	103.0	91.9	87.9	84.2	84.2	85.5	83.4
MAX	87.5	88.5	87.5	95.7	113.0	111.2	97.7	92.9	85.7	85.7	86.8	84.1
MIN	82.6	83.2	83.8	86.6	96.6	95.3	87.2	85.8	83.4	83.3	84.1	82.8
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 89.3.

HIGHEST STAGE WAS 113.0 ON MAY 22.

LOWEST STAGE WAS 82.6 ON JAN 5, AND JAN 9.

## DAILY STAGE FOR 1996

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	82.9	83.0	84.8	85.2	99.6	105.8	96.8	87.4	84.2	84.8	84.7	86.7
2	83.1	83.0	84.4	85.9	96.9	106.5	95.9	87.9	84.4	84.6	85.1	86.7
3	82.9	83.0	83.9	86.0	95.5	106.3	94.8	87.3	83.9	84.2	85.2	87.9
4	82.7	83.6	83.7	86.3	93.5	105.8	94.0	86.7	83.6	84.4	85.5	88.5
5	82.7	83.8	83.8	86.4	93.5	105.3	93.0	86.5	83.3	84.0	84.7	88.2
6	82.6	83.8	84.4	86.0	92.9	105.1	92.7	86.2	84.5	83.7	84.5	87.5
7	82.6	84.0	84.6	85.5	96.0	104.9	92.6	85.9	83.3	83.3	85.7	87.4
8	82.3	83.8	84.5	85.8	98.3	104.3	92.0	86.0	83.3	83.2	86.5	86.7
9	82.3	83.4	83.6	85.7	100.3	104.0	91.7	85.5	83.5	83.2	87.5	85.8
10	83.6	83.3	83.8	85.4	101.7	103.7	91.4	86.1	83.2	83.4	87.1	86.2
11	83.8	83.5	83.6	85.3	102.4	103.3	90.4	87.3	83.5	83.1	86.8	85.6
12	83.6	83.4	83.6	85.0	102.5	102.5	90.4	87.2	83.7	83.4	86.6	85.2
13	83.4	83.8	83.3	84.9	102.8	101.5	89.6	87.3	83.6	83.3	86.5	85.1
14	83.7	84.0	84.2	84.8	103.5	101.5	88.3	86.6	83.7	83.1	85.5	84.6
15	83.7	84.3	84.0	85.5	104.4	99.4	87.4	85.8	83.5	82.9	84.6	84.8
16	82.7	84.9	83.7	85.2	104.5	98.3	86.7	85.1	83.2	83.0	84.6	85.0
17	82.8	84.3	83.5	85.8	104.1	97.5	86.4	84.7	83.0	83.1	84.5	84.8
18	82.6	84.1	83.5	85.5	103.0	96.4	86.5	85.6	82.9	83.9	84.4	84.5
19	83.3	83.9	84.1	85.3	101.8	95.5	86.3	84.7	82.9	83.3	84.6	84.5
20	83.0	83.6	84.2	85.6	100.1	95.8	86.4	85.5	82.9	83.3	86.5	83.7
21	83.1	83.4	84.1	85.6	98.8	96.3	87.0	85.4	83.3	83.4	89.3	83.6
22	83.3	83.5	84.3	86.1	97.3	96.0	88.2	85.3	83.2	83.5	89.0	83.6
23	83.8	83.7	84.2	87.2	95.9	95.5	91.6	84.5	83.5	83.7	88.5	83.5
24	84.1	83.7	84.4	88.2	95.1	94.9	94.7	85.3	83.3	83.3	88.0	83.4
25	83.4	83.7	84.4	88.7	94.6	94.4	95.0	85.3	83.2	83.8	87.7	83.0
26	83.7	83.8	84.4	89.1	94.9	94.5	93.9	85.5	83.4	84.8	88.4	83.0
27	83.8	84.1	84.3	89.1	96.9	95.5	90.9	85.1	83.6	85.3	87.7	83.0
28	83.8	84.5	84.3	88.9	99.7	97.0	89.5	84.5	84.0	85.2	88.2	83.0
29	83.0	84.7	84.7	94.6	101.9	97.5	88.3	84.2	84.2	84.7	88.1	83.0
30	82.9	-----	85.2	99.3	103.5	97.1	87.4	84.6	85.1	84.7	88.3	83.2
31	83.0	-----	85.2	-----	104.7	-----	87.1	84.5	-----	84.6	-----	83.5

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	83.2	83.8	84.2	86.9	99.4	100.1	90.5	85.8	83.6	83.8	86.5	85.0
MAX	84.1	84.9	85.2	99.3	104.7	106.5	96.8	87.9	85.1	85.3	89.3	88.5
MIN	82.3	83.0	83.3	84.8	92.9	94.4	86.3	84.2	82.9	82.9	84.4	83.0
DAYS	31	29	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 366

THE MEAN STAGE FOR THE YEAR WAS 87.7.

HIGHEST STAGE WAS 106.5 ON JUN 2.

LOWEST STAGE WAS 82.3 ON JAN 8 THRU 9.

## DAILY STAGE FOR 1997

## 0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 & LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83.7	83.9	103.1	90.5	98.3	94.3	89.6	85.5	84.6	83.8	84.7	84.3
2	83.5	83.8	102.9	90.3	97.8	92.8	89.2	85.0	84.7	83.8	84.7	84.3
3	83.4	83.9	102.0	90.4	97.3	91.3	89.3	85.0	84.7	83.7	84.5	85.0
4	83.5	84.0	100.8	90.3	97.5	90.8	89.0	85.9	85.5	83.6	84.4	85.5
5	83.5	84.2	99.3	88.8	97.4	90.4	89.1	85.8	84.8	83.6	84.4	85.3
6	83.4	84.7	98.0	90.3	97.3	89.5	89.0	85.9	84.5	83.7	84.8	84.9
7	83.4	85.2	96.8	90.6	96.8	89.0	88.2	85.9	84.5	83.7	84.5	85.0
8	83.1	85.0	95.6	90.6	96.1	88.4	87.3	85.6	84.7	83.7	84.3	85.0
9	83.6	85.2	94.2	91.4	95.3	88.6	87.0	85.4	84.7	83.7	84.3	85.0
10	83.6	84.9	93.8	92.7	94.7	87.9	86.8	85.0	84.5	83.5	84.2	84.7
11	83.1	84.4	93.8	92.7	94.7	88.0	87.2	84.8	83.8	83.5	84.1	84.4
12	83.4	84.2	93.5	92.5	95.3	87.7	86.8	84.8	84.2	83.5	84.2	84.3
13	83.2	84.1	93.4	95.0	95.1	87.5	86.9	85.0	84.0	83.5	84.1	84.3
14	83.2	84.2	94.3	98.6	94.4	87.9	86.8	85.0	84.0	83.7	84.1	84.3
15	83.2	84.2	95.3	100.1	93.5	89.4	86.8	85.3	83.7	83.4	84.0	84.1
16	83.2	84.1	95.3	100.0	92.6	88.8	86.8	84.4	83.7	83.3	84.0	84.1
17	83.2	84.0	95.5	101.1	91.7	87.5	86.7	84.5	83.7	83.2	84.0	84.0
18	83.4	83.7	94.0	101.3	91.2	88.5	86.9	85.3	84.0	83.3	84.0	83.9
19	83.8	83.6	93.6	101.6	90.5	90.0	86.8	85.4	83.9	84.4	84.0	83.8
20	83.7	83.7	92.8	101.8	90.0	90.7	86.7	85.1	83.9	84.4	83.8	83.8
21	83.5	84.3	92.0	101.8	90.0	89.7	86.3	86.0	84.2	84.5	84.0	83.8
22	83.5	90.8	92.0	101.7	89.9	88.9	86.3	85.2	84.3	84.5	84.0	83.9
23	83.5	98.0	91.6	101.3	89.8	88.7	87.3	85.1	84.1	84.4	83.8	83.9
24	83.5	100.0	91.2	101.2	89.8	89.3	87.6	84.9	84.1	84.8	83.8	83.8
25	83.7	100.5	90.9	101.0	88.8	88.8	87.0	84.8	84.1	84.4	83.7	84.1
26	83.7	100.8	91.0	101.8	89.0	88.9	86.3	84.8	84.3	84.2	83.7	84.3
27	83.6	102.1	90.9	100.5	87.6	89.4	85.9	84.9	84.2	84.2	83.7	84.4
28	83.7	103.0	91.0	99.9	91.6	89.5	86.2	84.6	84.4	84.2	83.6	84.5
29	84.4	-----	90.9	99.2	93.3	89.6	86.3	84.9	84.3	84.2	83.8	84.6
30	84.5	-----	90.6	98.5	94.5	89.6	86.6	84.9	83.7	84.5	84.4	84.3
31	84.0	-----	90.6	-----	95.2	-----	86.0	85.3	-----	84.6	-----	84.0

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	83.5	88.0	94.5	96.6	93.5	89.4	87.2	85.2	84.3	83.9	84.1	84.4
MAX	84.5	103.0	103.1	101.8	98.3	94.3	89.6	86.0	85.5	84.8	84.8	85.5
MIN	83.1	83.6	90.6	88.8	87.6	87.5	85.9	84.4	83.7	83.2	83.6	83.8
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 87.9.

HIGHEST STAGE WAS 103.1 ON MAR 1.

LOWEST STAGE WAS 83.1 ON JAN 8, AND JAN 11.

## DAILY STAGE FOR 1998

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83.80	84.30	90.90	94.70	98.40	88.10 E	96.50	91.30 E	85.30	84.10	86.10	85.40
2	83.60	84.00	89.47	98.20	99.20	88.10	97.50	90.60 E	85.00	83.90	86.20	85.40
3	83.80	84.00	88.90	100.80	99.10	89.00	98.60	90.30 E	83.90	84.00	88.60	86.40
4	84.00	83.80	88.50	102.30	98.40	88.50	98.70	88.20 E	83.10	84.40	93.60	86.70
5	84.40	84.30	88.40	103.00	97.30	88.50	97.60 E	87.50 E	83.50	84.10	96.90	86.10
6	85.40	85.10	88.30	103.20	95.50	90.50	97.50	87.30	83.50	85.60	97.00	85.90
7	86.30	84.90	88.00	103.00	94.20	89.70	98.20	87.50	83.50	95.40	95.50	85.40
8	88.70	84.60	87.60	103.10	93.30	88.50	98.60	87.30	83.40	97.60	94.30	87.60
9	92.50	84.30	89.10	101.30	92.90	87.90	98.50	87.40	83.30	97.00	91.80	89.00
10	91.20	84.20	93.80	100.50	92.30	89.90	99.20	87.60	83.30	95.80	91.10	89.30
11	88.50	84.10	96.10	100.40	92.20	90.60	99.20	87.20	83.20	93.80	93.00	87.60
12	86.70	84.50	96.20	101.30	91.80	91.70 E	99.10	87.10	83.10	91.50	94.50	86.90
13	85.40	89.40	94.80	102.20	91.50	91.80 E	98.70	87.00	83.10	88.40	95.80	86.20
14	84.30	89.60	92.90	102.00	91.10	91.70 E	98.30	86.30	82.90	86.70	94.20	85.90
15	84.50	88.60	92.40	102.00	91.30	94.00 E	97.60	86.30	83.20	85.50	93.00	85.30
16	84.00	86.70	89.90	103.00	90.90	94.50	96.10	86.30	83.30	85.30	91.20	84.90
17	84.10	86.30	89.00	104.30	90.20	95.30	94.80	85.50	88.40	85.50	90.10	85.00
18	84.10	86.60	91.90	104.20	89.40	97.10	93.30	85.60	88.60	85.80	89.50	84.50
19	84.00	87.90	94.40	103.40	88.50	97.60	92.30	85.00 E	86.40	89.00	89.20	84.80
20	83.90	87.80	97.50	102.60	88.40	97.70	89.20	85.50	85.10	93.30	88.50	84.60
21	83.90	87.70	100.20	101.70	88.80	97.80	90.10	85.00	84.50	95.80	88.10	84.60
22	84.00	87.80	100.70	100.60	88.50	99.30	89.00	84.70	84.10	95.30	87.50	84.40
23	84.00 E	87.60	100.00	99.80	90.20	100.80	88.10	84.20	84.00	93.80	87.30	84.10
24	84.10	87.40	98.80	99.80	90.50	101.30	87.80	83.80	83.80	91.40	86.70	84.30
25	84.20	86.80	97.30	98.10	90.70	100.80	87.70	83.90	84.10	89.30	86.70	84.60
26	84.20	86.90	96.00	97.60	90.40 E	100.70	87.50	84.00	84.10	88.10	86.70	83.70
27	83.90	87.90	94.70	96.70	91.60	99.60	87.20	84.10	84.10	86.50	86.40	83.30
28	83.70	91.20	94.00	96.00	91.70 E	98.50	89.70	84.10	84.30	86.50	86.50	83.40
29	84.00	-----	93.80	95.90	90.80	96.90 E	92.10	84.40	84.10	86.00	86.30	83.20
30	83.90	-----	93.80	97.30	89.90 E	96.40	91.80	84.30	83.80	86.30	86.00	83.10
31	84.10	-----	94.10	-----	89.20	----- E	92.50	84.80	-----	86.30	-----	83.00

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	85.07	86.37	93.27	100.63	92.20	94.09	94.29	86.26	84.20	89.10	90.28	85.31
MAX	92.50	91.20	100.70	104.30	99.20	101.30	99.20	91.30	88.60	97.60	97.00	89.30
MIN	83.60	83.80	87.60	94.70	88.40	87.90	87.20	83.80	82.90	83.90	86.00	83.00
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

E=ESTIMATED

THE MEAN STAGE FOR THE YEAR WAS 90.10.

HIGHEST STAGE WAS 104.30 ON APR 17.

LOWEST STAGE WAS 82.90 ON SEP 14.

## DAILY STAGE FOR 1999

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	82.9	90.1	85.2	84.8	103.0	99.7	95.5	89.8	84.7	84.6	82.9	83.3
2	82.9	89.1	84.9	84.6	103.3	99.4	97.3	89.9	84.5	84.2	83.4	82.9
3	82.7	88.6	85.3	84.6	103.0	99.2	98.4	90.0	84.4	83.9	83.2	83.3
4 E	83.2	91.5	85.4	85.2	101.9	99.5	98.1	89.4	84.2	83.9	83.2	83.3
5 E	83.1	89.8	85.7	84.9	101.2	100.0	96.8	88.8	84.2	83.4	83.0	83.5
6 E	83.7	89.5	85.8	85.1	102.2	99.5	95.2	88.5	83.9	83.4	83.1	83.5
7 E	83.5	91.1	86.0	85.5	103.1	99.2	94.3	87.5	83.6	83.4	83.1	83.4
8 E	83.1	94.2	85.2	85.7	103.5	98.9	93.5	89.8	83.6	83.7	83.0	83.5
9 E	82.6	95.0	86.0	86.8	103.5	98.3	92.8	87.7	83.8	83.5	82.9	83.5
10 E	82.7	93.1	88.5	89.2	102.1	97.6	92.2	87.5	83.0	83.4	82.9	83.4
11 E	82.7	91.9	90.0	90.7	100.0	97.3	92.2	86.7	83.4	83.3	82.9	83.5
12 E	81.9	93.9	89.6	89.7	98.1	97.0	92.0	87.3	83.0	83.5	82.9	83.5
13 E	82.4	93.4	88.6	89.4	97.1	96.8	91.3	87.9	83.4	83.3	82.8	83.6
14 E	82.1	90.5	88.4	89.8	96.0	96.5	90.7	87.5	83.4	83.2	83.0	83.4
15 E	82.3	90.3	87.7	90.0	95.9	96.5	90.8	86.3	83.4	83.4	82.9	83.4
16 E	83.2	89.6	86.5	91.3	96.8	96.8	90.0	86.1	83.7	83.2	83.0	83.2
17 E	83.1	88.6	86.4	95.7	97.3	97.1	89.9	85.5	83.5	83.5	83.0	83.1
18 E	83.4	88.6	86.6	95.7	97.9	97.1	89.3	85.4	83.3	83.4	83.0	83.2
19	83.9	88.4	86.4	100.7	99.0	96.6	89.7	84.9	83.3	83.4	83.0	83.0
20	83.9	88.6	86.7	101.4	100.1	96.1	88.8	84.7	83.5	83.0	82.9	83.0
21	84.0	88.0	87.3	101.6	100.9	95.8	88.4	84.3	83.5	83.1	83.0	82.5
22	84.1	87.5	86.5	101.1	101.0	95.5	88.5	84.4	83.6	83.1	82.7	82.3
23	87.0	86.2	86.0	101.1	100.7	95.3	88.1	84.4	83.5	83.0	82.8	82.3
24	90.1	86.7	86.5	99.4	100.4	95.0	87.7	84.5	83.5	82.9	83.0	82.2
25	90.1	86.1	87.0	99.3	100.7	94.6	87.8	84.7	83.6	83.0	83.4	82.3
26	89.1	85.7	87.7	100.4	100.9	94.5	88.0	84.6	83.4	83.0	83.2	82.5
27	88.6	85.6	86.3	101.0	100.9	94.4	88.4	84.4	83.5	83.2	83.2	82.0
28	87.8	85.5	86.3	101.7	100.7	93.8	88.5	84.5	83.3	83.1	83.3	82.5
29	88.0	-----	86.0	102.0	100.0	93.1	89.1	84.5	84.5	83.1	83.5	82.5
30	88.0	-----	85.4	102.2	100.2	93.3	89.3	84.9	83.9	82.9	83.3	82.0
31	88.0	-----	85.1	-----	99.9	-----	89.4	84.5	-----	82.9	-----	82.2

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	84.6	89.5	86.6	93.4	100.4	96.8	91.4	86.5	83.7	83.4	83.0	83.0
MAX	90.1	95.0	90.0	102.2	103.5	100.0	98.4	90.0	84.7	84.6	83.5	83.6
MIN	81.9	85.5	84.9	84.6	95.9	93.1	87.7	84.3	83.0	82.9	82.7	82.0
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

E=ESTIMATED

THE MEAN STAGE FOR THE YEAR WAS 88.5.

HIGHEST STAGE WAS 103.5 ON MAY 8 THRU 9.

LOWEST STAGE WAS 81.9 ON JAN 12.

DAILY STAGE FOR 2000

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 & LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	82.3	82.7	85.0	83.8	84.5	84.7	95.8	83.9	82.9 E	84.1 E	83.8 E	84.3
2	82.5	82.7	84.5	83.7	84.2	84.8	94.6	83.6	82.9 E	84.0 E	83.3 E	84.9
3	82.0	82.7	84.5	83.8	82.2	85.9	93.6	83.6	82.9 E	83.7 E	83.3 E	84.5
4	82.9	82.7	85.4	83.8	84.0	86.0	92.8	83.7	83.0 E	83.6 E	83.3 E	84.4
5	82.9	82.8	85.0	83.8	83.8	86.0	91.9	83.7	82.8 E	84.6 E	83.5 E	84.3
6	82.8	82.8	85.0	83.3	83.4	86.6	91.1	83.7 E	82.3 E	84.5 E	84.1 E	84.1
7	82.7	82.8	84.5	83.4	83.7	86.8	90.4	83.6 E	83.0 E	84.1 E	84.9 E	83.8
8	82.8	82.8	84.4	83.5	85.7	86.7	90.7	83.8 E	82.3 E	84.5 E	84.5 E	83.4
9	82.9	82.4	84.2	83.5	83.5	86.9	90.6	84.0 E	82.7 E	84.1 E	84.8 E	82.8
10	83.0	82.4	84.0	83.3	83.4	86.9	90.2	84.2 E	83.1 E	83.8 E	84.3 E	82.8
11	83.0	82.4	84.1	83.2	83.4	87.7	88.3	84.2 E	83.6 E	83.6 E	85.0 E	82.7
12	83.1	82.0	84.1	83.0	83.4	87.7	87.7	83.7 E	83.5 E	83.7 E	85.0 E	83.2
13	83.0	82.5	84.2	83.0	83.7	87.8	88.0 E	83.5 E	83.3 E	83.5 E	86.1 E	82.8
14	82.9	82.5	83.7	83.4	83.2	87.6	88.1	83.3 E	83.7 E	83.7 E	84.9 E	82.0
15	82.9	82.5	83.8	83.0	83.5	87.6	88.1	82.7 E	83.5 E	83.9 E	83.6 E	82.2
16	82.5	82.5	83.6	82.9	83.3	87.6	88.0	82.9 E	83.8 E	84.1 E	84.2 E	82.5
17	82.5	82.5	83.6	83.0	83.5	89.1	88.2	83.2 E	83.6 E	84.5 E	84.3 E	82.7
18	82.5	83.7	83.5	83.0	83.4	89.9	88.0	83.4 E	83.8 E	84.3 E	84.3 E	82.9
19	82.4	83.7	83.7	82.8	83.5	90.4	88.9	83.2 E	83.7 E	84.2 E	84.2 E	82.9
20	82.8	83.7	83.7	83.4	83.5	90.4	89.0	84.5 E	83.5 E	83.6 E	85.1 E	82.5
21	82.8	83.5	83.8	83.3	83.5	91.2	89.1	84.3 E	83.4 E	83.3 E	85.0 E	83.2
22	82.8	83.5	83.7	83.7	84.0	91.2	88.7	83.8 E	83.4 E	83.2 E	85.2 E	82.8
23	82.7	82.9	83.9	84.7	84.5	92.3	88.1	83.5 E	83.4 E	83.3 E	84.6 E	82.9
24	82.0	82.8	83.9	85.3	84.5	94.0	88.1	83.7 E	82.8 E	84.0 E	84.6 E	82.5
25	83.1	82.7	83.7	84.4	84.6	95.4	86.5	83.9 E	82.8 E	84.0 E	84.3 E	82.5
26	83.1	83.1	83.7	84.7	84.7	94.5	85.3	83.4 E	84.5 E	83.7 E	84.4 E	82.7
27	82.0	83.8	83.8	84.2	89.2	94.5	84.6	83.4 E	84.6 E	83.4 E	84.4 E	82.8
28	82.0	84.7	83.4	84.3	87.4	96.3	84.0	83.3 E	84.1 E	83.5 E	84.1 E	82.6
29	82.0	85.0	83.4	84.3	87.8	97.0	84.3	83.1 E	84.2 E	83.5 E	84.3 E	82.8
30	82.5	-----	83.5	84.3	86.5	96.8	83.7	82.9 E	84.1 E	83.9 E	84.3 E	82.6
31	82.5	-----	83.5	-----	85.9	-----	83.7	82.0	----- E	84.0	----- E	83.2

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	82.6	83.0	84.0	83.7	84.4	89.7	88.7	83.5	83.4	83.9	84.4	83.1
MAX	83.1	85.0	85.4	85.3	89.2	97.0	95.8	84.5	84.6	84.6	86.1	84.9
MIN	82.0	82.0	83.4	82.8	82.2	84.7	83.7	82.0	82.3	83.2	83.3	82.0
DAYS	31	29	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 366

E=ESTIMATED

THE MEAN STAGE FOR THE YEAR WAS 84.5.

HIGHEST STAGE WAS 97.0 ON JUN 29.

LOWEST STAGE WAS 82.0 ON JAN 3, AND JAN 24, AND JAN 27 THRU 29, AND FEB 12, AND AUG 31, AND DEC 14.

## DAILY STAGE FOR 2001

## 0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 & LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1 E	83.4	86.4	99.0	89.1	97.1	93.1	94.1	85.5	84.0	83.7	83.6	83.8
2 E	83.8	85.9	97.5	89.1	97.4	93.6	93.4	86.2	83.6	83.3	83.5	83.9
3 E	83.8	84.6	95.0	88.0	97.4	95.6	92.9	85.6	83.6	83.1	83.6	84.0
4 E	84.2	84.8	92.7	88.0	97.3	97.5	93.7	84.7	82.8	83.7	83.6	83.9
5 E	84.0	84.8	90.2	89.5	97.0	99.8	92.5	84.6	83.0	83.3	83.6	83.9
6 E	83.7	84.0	89.7	90.8	97.0	101.8	92.3	84.8	82.9	83.1	83.8	83.7
7 E	83.7	83.8	89.3	91.2	97.3	103.2	92.7	84.8	82.9	82.9	83.6	83.6
8 E	83.6	85.6	88.8	90.8	97.8	105.0	92.5	84.6	82.9	83.2	83.4	83.4
9 E	83.7	83.8	88.0	90.9	98.0	105.9	91.4	84.6	83.2	83.3	83.3 E	83.0
10 E	83.5	83.8	87.1	90.6	99.9	105.9	90.5	84.6	82.8	83.3	83.6 E	83.1
11 E	83.4	89.3	86.7	91.3	99.8	105.6	89.5	84.7	82.8	83.3	83.6 E	83.4
12 E	83.7	92.3	86.4	93.3	99.3	102.7	88.5	84.7	82.8	83.7	83.6 E	83.5
13 E	83.2	91.6	86.0	94.7	99.1	104.5	88.5	83.6	82.8	83.6	83.1 E	83.8
14 E	83.7	90.0	85.4	95.0	99.6	101.0	87.0	83.6	83.3	83.6	83.0 E	84.1
15 E	83.9	90.0	86.0	94.7	100.3	99.5	86.9	83.6	83.8	83.7	83.1 E	84.0
16 E	84.5	87.7	86.0	95.0	100.4	98.1	86.9	83.6	83.5	83.7	83.9	83.9
17 E	85.2	87.2	88.1	95.4	100.6	97.4	86.0	82.3	83.4	83.7	83.1	83.9
18 E	84.8	86.6	97.0	95.6	100.9	98.0	86.0	82.8	83.4	84.0	82.9	85.1
19 E	84.9	86.6	97.5	95.6	101.4	98.8	85.7	82.7	83.1	84.0	82.9	85.1
20 E	85.0	86.6	97.5	95.8	101.4	98.3	85.5	82.8	82.8	84.0	82.9	84.3
21 E	85.1	86.6	96.5	95.8	102.0	98.3	86.0	82.9	83.7	84.2	83.0	84.2
22 E	84.8	86.6	95.0	96.1	102.0	96.2	85.2	83.0	84.8	83.8	83.0	84.1
23 E	84.8	84.5	94.1	96.1	100.8	97.6	84.9	82.8	85.1	83.5	82.7 E	84.2
24 E	84.5	85.0	93.3	96.4	100.1	98.9	85.5	84.1	83.7	84.3	83.0 E	84.0
25 E	84.1	91.6	93.0	96.9	99.2	99.3	85.2	84.1	84.1	84.9	83.5 E	83.9
26 E	83.9	95.1	92.8	97.1	100.6	98.7	84.8	83.6	83.8	84.5	83.5 E	83.5
27 E	83.7	97.1	93.0	97.1	100.1	98.2	85.1	83.2	83.6	84.0	83.3 E	83.7
28 E	83.8	99.0	92.7	96.9	96.2	97.0	85.5	83.2	83.6	84.1	83.4 E	83.3
29 E	83.5	-----	92.7	96.9	94.3	95.7	86.4	83.3	83.7	84.0	83.4 E	82.8
30	84.4	-----	90.6	97.1	93.2	94.8	85.9	83.6	83.7	83.8	83.6	82.5
31	86.3	-----	89.7	-----	93.2	-----	85.5	83.0	-----	83.8	-----	83.8

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	84.1	87.9	91.5	93.7	98.7	99.3	88.3	83.9	83.4	83.7	83.3	83.8
MAX	86.3	99.0	99.0	97.1	102.0	105.9	94.1	86.2	85.1	84.9	83.9	85.1
MIN	83.2	83.8	85.4	88.0	93.2	93.1	84.8	82.3	82.8	82.9	82.7	82.5
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

E=ESTIMATED

THE MEAN STAGE FOR THE YEAR WAS 88.5.

HIGHEST STAGE WAS 105.9 ON JUN 9 THRU 10.

LOWEST STAGE WAS 82.3 ON AUG 17.

## DAILY STAGE FOR 2002

0190A MISSISSIPPI RIVER AT CHAIN OF ROCKS, MO.

LOCATION: LAT. 38-45, LONG. 90-10, ON RIGHT BANK AT MILE 190.4 ABOVE THE MOUTH OF THE OHIO RIVER.

GAGE: STAFF GAGE ATTACHED TO CHAIN OF ROCKS WATER WORKS INTAKE BUILDING. OWNED, OPERATED AND MAINTAINED BY ST. LOUIS DISTRICT, CORPS OF ENGINEERS.

GENERAL INFORMATION: FLOOD STAGE, 101 FEET. DRAINAGE AREA, 696,936 SQUARE MILES.

NOTE#1: THE 4,000 SQUARE MILES IN GREAT DIVIDE BASIN ARE NO LONGER INCLUDED IN DRAINAGE AREA.

NOTE#2: THE CHAIN OF ROCKS LOW-WATER DAM WAS PUT IN OPERATION ON FEB. 20, 1964\*.

RECORDS AVAILABLE: STAGE, APR. 1892 TO DATE, IN FILES OF CORPS OF ENGINEERS.

MEAN STAGES: 1965 TO PRESENT\*, 88.05 FEET.

EXTREME STAGES: PERIOD OF RECORD HIGHEST, 121.4 FEET ON AUG. 01, 1993 &amp; LOWEST, 72.8 FEET ON JAN. 12, 1909. 1965 TO PRESENT LOWEST, 79.9 FEET ON VARIOUS DAYS IN JULY 1988.

ZERO GAGE DATUM: 313.91 FEET NGVD. NOTE: SUBTRACT DATUM FROM ELEVATION TO OBTAIN STAGE, SEE P. III.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	82.8	83.5	84.3	84.3	96.7	93.0	87.3	83.7	85.5	83.0	83.8	82.7
2	82.8	89.5	84.3	84.3	96.5	91.6	86.2	83.7	85.3	82.8	83.6	82.9
3	82.8	89.5	84.3	84.0	95.6	91.4	86.7	83.4	83.9	83.3	83.6	82.7
4	82.6	85.7	84.3	84.0	95.0	91.4	86.0	83.1	84.0	82.8	83.5	82.6
5	82.6	84.0	83.9	84.7	93.3	90.4	86.1	82.8	84.0	82.8	83.5	82.6
6	82.7	84.5	83.3	84.7	94.0	90.2	85.8	82.7	83.7	83.3	83.6	81.6
7	82.7	84.3	83.3	84.6	96.0	91.2	85.6	82.7	83.5	83.4	83.6	81.7
8	82.6	83.8	83.9	84.9	106.6	92.1	85.4	83.1	83.5	83.4	83.5	81.7
9	82.9	83.8	84.0	84.7	103.9	92.6	85.3	83.0	83.5	83.3	83.5	81.7
10	83.0	83.9	84.1	85.6	104.9	93.2	85.1	83.5	83.5	83.3	83.3	81.9
11	83.0	83.9	84.6	85.6	104.9	93.6	84.8	83.3	83.5	83.8	83.1	81.9
12	83.1	83.7	84.9	86.8	104.9	94.9	84.7	83.2	83.5	84.1	83.0	81.9
13	83.0	83.7	84.6	86.9	105.3	96.5	84.7	83.5	83.1	84.1	83.0	81.7
14	83.1	83.7	84.5	85.9	105.3	94.7	84.7	83.7	83.1	84.1	83.1	82.5
15	83.0	87.0	84.5	86.2	107.7	99.3	84.4	83.7	83.1	84.2	83.8	82.6
16	82.8	87.0	84.7	86.2	108.2	98.4	84.0	83.6	83.1	84.2	82.7	82.5
17	82.8	83.6	85.0	85.7	108.8	97.8	84.0	83.6	83.1	84.5	82.7	82.6
18	82.8	83.7	84.7	85.7	108.8	97.8	83.7	83.6	83.1	84.2	82.7	82.5
19	82.8	83.7	84.8	86.2	107.3	95.7	84.3	83.6	83.0	84.6	82.7	82.5
20	82.9	83.5	84.8	86.4	105.7	94.2	84.3	83.5	83.8	84.5	82.7	83.0
21	82.9	83.4	84.5	86.4	103.4	92.3	84.3	94.2	83.8	84.5	82.4	83.0
22	82.5	83.8	84.9	89.9	102.0	90.0	84.4	86.2	83.8	84.3	82.4	82.7
23	82.4	84.2	84.9	90.9	103.4	89.9	83.8	83.6	83.5	84.2	82.0	82.7
24	82.8	84.5	84.9	90.6	98.4	89.0	84.5	84.8	83.5	84.1	83.0	82.6
25	82.7	84.7	84.9	90.6	97.6	89.0	84.1	86.2	83.5	83.7	82.4	82.7
26	82.7	84.7	84.6	91.6	97.1	88.4	84.1	86.1	83.5	83.7	82.8	82.2
27	82.7	84.7	84.6	89.8	98.7	87.9	83.8	85.8	82.9	83.4	82.8	81.7
28	82.6	84.7	84.6	92.0	97.7	87.5	83.8	85.3	82.6	83.1	82.9	81.6
29	88.2	-----	84.6	92.0	98.0	87.3	83.8	84.8	82.8	83.2	82.9	81.7
30	88.2	-----	84.5	96.1	96.8	87.3	84.0	84.8	82.9	83.1	82.5	81.9
31	88.2	-----	84.5	-----	95.1	-----	84.0	84.6	-----	83.5	-----	81.9

THE FOLLOWING REFER ONLY TO READINGS IN THE TABLE ABOVE

MEAN	83.3	84.7	84.5	87.2	101.2	92.3	84.8	84.3	83.5	83.7	83.0	82.3
MAX	88.2	89.5	85.0	96.1	108.8	99.3	87.3	94.2	85.5	84.6	83.8	83.0
MIN	82.4	83.4	83.3	84.0	93.3	87.3	83.7	82.7	82.6	82.8	82.0	81.6
DAYS	31	28	31	30	31	30	31	31	30	31	30	31

THE TOTAL NUMBER OF DAYS FOR THE YEAR WAS 365

THE MEAN STAGE FOR THE YEAR WAS 86.2.

HIGHEST STAGE WAS 108.8 ON MAY 17 THRU 18.

LOWEST STAGE WAS 81.6 ON DEC 6, AND DEC 28.