

# REPUBLICAN RIVER BASIN

## MEDICINE CREEK above Harry Strunk Lake, 06841000 - 1997

LOCATION.--SW1/4 Sec. 7-6-26 W., Frontier County, Lat. 40°30'10", Long. 100°19'20", on right bank 3.75 miles southeast of Stockville and 13.5 miles upstream from Medicine Creek Dam.

DRAINAGE AREA.--770 square miles, of which approximately 530 square miles contributes directly to surface runoff.

GAGE.--Continuous stage recorder. Datum of gage is 2,380.94 feet above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--1950 - present

REMARKS.--Published by U. S. Geological Survey up to Oct. 1, 1994.

E indicates estimated daily discharge. Estimated records January 1-February 2, August 10-September 2. Records good, except estimated records are poor.

EXTREMES FOR PERIOD OF RECORD.--Peak discharge 11,600 cubic feet per second June 21, 1967, gage height 20.05 feet; minimum daily discharge 9.1 cubic feet per second August 9, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharge 1,290 cubic feet per second June 26, gage height 14.00 feet; minimum daily discharge 32 cubic feet per second July 26-27.

### DAILY DISCHARGE IN CUBIC FEET PER SECOND FOR 1997

Day	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	52E	60E	61	58	56	55	65	43	40E	39	61	59
2	50E	64E	61	59	57	54	56	43	40E	38	57	59
3	47E	68	61	61	56	56	51	41	39	39	55	57
4	44E	67	61	67	56	62	49	40	39	39	55	57
5	41E	64	60	68	55	64	48	37	39	39	54	57
6	38E	64	60	66	55	59	48	39	39	39	53	57
7	38E	63	60	61	55	54	48	40	38	39	53	55
8	40E	62	60	58	54	51	46	44	38	39	54	55
9	42E	62	61	58	52	50	44	42	37	39	53	53
10	42E	62	63	58	51	47	43	41E	38	41	53	55
11	39E	61	64	58	51	52	42	43E	38	42	53	55
12	36E	60	65	58	50	68	42	52E	37	107	53	57
13	36E	60	65	60	50	62	42	60E	37	128	53	55
14	38E	60	62	64	50	55	41	54E	37	118	53	55
15	40E	60	62	67	50	55	42	47E	39	74	54	55
16	42E	61	60	65	50	51	43	45E	45	61	55	55
17	44E	62	61	63	50	51	40	43E	44	56	52	55
18	46E	66	62	60	49	49	38	42E	40	54	53	55
19	48E	66	63	59	49	47	36	41E	38	52	51	56
20	50E	68	63	58	49	45	36	40E	37	51	51	56
21	50E	67	64	58	48	50	36	40E	37	51	53	56
22	47E	65	64	57	48	55	36	41E	40	51	54	57
23	44E	63	63	57	50	50	35	42E	43	51	55	56
24	41E	62	62	56	52	47	34	41E	45	54	55	57
25	38E	61	61	55	56	48	33	40E	45	63	55	57
26	38E	61	60	55	58	797	32	39E	44	80	56	56
27	41E	60	59	55	63	382	32	38E	43	74	57	58
28	44E	61	59	55	65	232	33	38E	41	69	58	57
29	47E	-----	59	56	62	127	34	38E	40	68	61	57
30	50E	-----	59	55	61	84	38	38E	39	68	60	58
31	54E	-----	59	-----	58	-----	40	39E	-----	66	-----	59
TOTAL	1,347	1,760	1,904	1,785	1,666	2,959	1,283	1,311	1,196	1,829	1,640	1,746
MEAN	43.5	62.9	61.4	59.5	53.7	98.6	41.4	42.3	39.9	59.0	54.7	56.3
MAX	54	68	65	68	65	797	65	60	45	128	61	59
MIN	36	60	59	55	48	45	32	37	37	38	51	53
AC-FT	2,670	3,490	3,780	3,540	3,300	5,870	2,540	2,600	2,370	3,630	3,250	3,460
YEAR 1997	TOTAL	20,426	MEAN	56.0	MAX	797	MIN	32	AC-FT	40,510		

# REPUBLICAN RIVER BASIN

## MEDICINE CREEK below Harry Strunk Lake, 06842500 - 1997

LOCATION.--Center of Sec. 25-5-26 W., Frontier County, Latitude 40° 22' 20", Longitude 100° 13' 20", On left bank 0.5 mile downstream from Medicine Creek Dam and 6.5 miles northwest of Cambridge.

DRAINAGE AREA.--880 square miles, of which 640 square miles contributes directly to surface runoff. This drainage controlled by Medicine Creek Dam 1/2 mile upstream.

GAGE.--Continuous stage recorder. Datum of gage is 2295.26 feet National Geodetic Vertical Datum of 1929 (U.S.B.R. benchmark).

PERIOD OF RECORD.--1949 - present (Monthly discharge only for some periods, published in WSP 1730).

REMARKS.--Published by U. S. Geological Survey up to Oct. 1, 1994.

Records above 10 cubic feet per second good, records from 5 to 10 cubic feet per second fair, records below 5 cubic feet per second poor.

EXTREMES FOR PERIOD OF RECORD.--Peak discharge 1,300 cubic feet per second March 23, 1960, gage height 5.97 ft.  
No flow September 11, 1990.

EXTREMES FOR CURRENT YEAR.--Peak discharge 359 cubic feet per second August 26, gage height 2.84 feet; minimum daily discharge 0.16 cubic feet per second September 19.

### DAILY DISCHARGE IN CUBIC FEET PER SECOND FOR 1997

Day	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	59	59	60	35	1.4	52	157	171	142	.36	.30	.41
2	59	59	60	35	2.5	53	229	159	127	.34	.31	.49
3	59	59	60	35	1.4	69	263	178	141	.30	.32	.50
4	59	59	60	35	1.6	78	256	148	126	.37	.38	.49
5	59	59	60	36	1.8	78	253	197	13	.35	.32	.49
6	59	59	60	36	2.1	76	255	225	1.1	.38	.38	.49
7	58	59	60	35	3.5	74	234	150	.76	.34	.38	.49
8	57	59	60	35	4.3	72	223	105	1.1	.40	.36	.49
9	57	59	60	36	3.2	72	223	103	1.3	.39	.38	.66
10	57	59	60	36	2.4	77	211	117	1.2	.49	.32	.66
11	57	59	48	36	6.4	72	203	91	.66	.41	.40	.66
12	58	59	35	35	8.4	66	203	36	.63	1.1	.64	.66
13	59	59	36	35	9.0	61	233	26	.42	.36	.78	.66
14	59	59	36	15	9.9	60	320	27	.35	.45	.65	.66
15	59	59	35	.97	11	59	343	27	.25	.38	.66	.66
16	59	59	35	.97	12	59	339	45	.17	.48	.52	.66
17	59	59	34	.97	13	59	318	63	.17	.30	.49	.66
18	59	59	35	.98	15	71	269	154	.17	.23	.49	.66
19	59	59	36	1.3	17	78	250	209	.16	.24	.44	.66
20	59	59	36	.99	17	78	250	195	.25	.25	.49	.66
21	60	59	36	.99	17	78	260	214	.37	.42	.49	.66
22	61	60	36	1.1	18	78	270	196	.40	.35	.49	.66
23	60	60	36	1.3	21	58	253	183	.46	.36	.49	.66
24	60	60	36	1.4	21	59	233	209	.40	1.1	.49	.66
25	60	60	35	1.3	22	106	234	310	.32	.55	.42	.66
26	60	60	35	1.4	24	138	239	348	.30	.30	.49	.71
27	60	60	36	1.7	40	152	244	345	.25	.30	.47	.84
28	60	60	36	1.8	52	161	246	299	.27	.30	.59	.66
29	60	-----	36	1.7	52	157	238	233	.40	.24	.71	.66
30	60	-----	36	1.3	51	154	237	201	.35	.24	.46	.61
31	60	-----	36	-----	52	-----	221	203	-----	.27	-----	.49
TOTAL	1,831	1,659	1,360	495.17	512.9	2,505	7,707	5,167	561.21	12.35	14.11	19.04
MEAN	59.1	59.3	43.9	16.5	16.5	83.5	249	167	18.7	.40	.47	.61
MAX	61	60	60	36	52	161	343	348	142	1.1	.78	.84
MIN	57	59	34	.97	1.4	52	157	26	.16	.23	.30	.41
AC-FT	3,630	3,290	2,700	982	1,020	4,970	15,290	10,250	1,110	24	28	38
YEAR 1997	TOTAL	21,843.78	MEAN	59.8	MAX	348	MIN	.16	AC-FT	43,330		