

REPUBLICAN RIVER BASIN

MEDICINE CREEK above Harry Strunk Lake, 06841000 - 2000

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. Records are 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 274 cubic feet per second August 15, gage height 7.03 feet; minimum daily discharge 16 cubic feet per second August 12 & 13.

DAILY DISCHARGE IN CUBIC FEET PER SECOND WATER YEAR OCT 1999 TO SEP 2000

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	45	48	50	49E	54	52	55	41	26	27	20
2	38	44	49	49	50E	53	53	59	40	26	26	20
3	38	45	48	49	50E	55	53	55	39	40	23	20
4	38	45	49	49	52E	60	52	53	39	151	22	19
5	39	45	48	48E	52E	60	52	50	38	99	21	19
6	40	45	47	48	52	57	52	52	37	64	21	19
7	40	45	47	48	52	57	51	52	36	41	20	19
8	41	46	46	48E	53	61	50	53	35	35	20	19
9	41	46	46	47E	53	63	50	54	33	31	19	19
10	42	46	45E	46	52E	59	50	54	32	29	18	19
11	43	47	45E	45	52E	56	50	53	31	29	18	19
12	43	46	45E	46	50E	55	50	49	30	27	16	19
13	42	46	44E	46	50E	54	51	46	30	25	16	18
14	42	46	44E	47	49E	55	50	44	28	24	30	18
15	42	46	44E	47	50E	55	49	44	28	24	216	18
16	42	47	44E	48	52E	54	49	44	26	24	211	18
17	42	47	45E	49	54E	52	50	45	27	24	117	18
18	42	46	45E	49	54E	52	51	45	29	26	85	18
19	43	47	44E	49E	52E	52	50	45	30	25	64	19
20	43	46	43E	49E	52E	53	50	45	30	25	43	23
21	44	46	43E	49E	52E	53	49	44	27	26	34	23
22	44	47	44E	49E	54E	53	50	44	24	39	30	26
23	44	47	44E	49E	58	55	48	42	25	30	28	26
24	44	48	44E	49E	58	55	48	40	26	28	26	28
25	44	49	45E	49E	60	55	50	39	26	26	25	28
26	44	49	47	48E	59	55	53	44	27	25	23	31
27	45	48	48	48E	59	54	51	42	26	47	21	30
28	44	49	48	48E	57	53	50	42	25	39	20	29
29	45	49	49	48E	56	51	48	42	26	34	20	28
30	44	48	50	48E	-----	51	52	41	28	32	20	28
31	45	-----	50	48E	-----	52	-----	41	-----	29	19	-----
TOTAL	1,305	1,396	1,428	1,490	1,543	1,704	1,514	1,458	919	1,150	1,299	658
MEAN	42.1	46.5	46.1	48.1	53.2	55.0	50.5	47.0	30.6	37.1	41.9	21.9
MAX	45	49	50	50	60	63	53	59	41	151	216	31
MIN	37	44	43	45	49	51	48	39	24	24	16	18
AC-FT	2,590	2,770	2,830	2,960	3,060	3,380	3,000	2,890	1,820	2,280	2,580	1,310

CAL YEAR 1999	TOTAL	18,658	MEAN	51.1	MAX	268	MIN	22	AC-FT	37,010
WTR YEAR 2000	TOTAL	15,864	MEAN	43.3	MAX	216	MIN	16	AC-FT	31,470

E indicates estimated discharge.

REPUBLICAN RIVER BASIN

MEDICINE CREEK below Harry Strunk Lake, 06842500 - 2000

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 5 cubic feet per second are good, estimated records are fair, records below 5 cubic feet per second are 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 estimated at 300 cubic feet per second August 1, gage height 2.65 feet based on release from Harry Strunk Lake, rating curve and shift; minimum daily discharge 0.17 cubic feet per second September 5.

DAILY DISCHARGE IN CUBIC FEET PER SECOND WATER YEAR OCT 1999 TO SEP 2000

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.25	.49	.66	48	46	48	2.0	64	78	300 E	.48
2	.19	.27	.49	.66	48	46	48	2.0	71	76	280 E	.50
3	.19	.44	.42	.55	47	46	48	1.6	76	77	240 E	.32
4	.19	.65	.41	.49	46	46	48	1.5	76	80	195 E	.25
5	.19	.69	.32	.53	46	47	48	2.0	97	85	185 E	.17
6	.22	.97	.47	.66	46	48	48	2.4	110	103	185 E	1.2
7	.25	.84	.64	.66	46	48	48	3.1	101	126	225 E	1.3
8	.23	.93	.86	.66	45	48	48	28	108	128	240 E	1.2
9	.19	.66	.97	.97	45	48	49	61	126	163	230 E	1.1
10	.24	.81	.97	18	46	48	49	46	126	260	228	1.2
11	.21	.97	.97	30	46	49	29	46	123	278	200	1.1
12	.23	1.0	1.1	29	46	49	1.6	46	121	266	198	1.0
13	.24	1.3	1.3	40	46	49	1.5	48	126	256	206	1.2
14	.27	1.3	1.3	47	46	49	2.3	48	152	227	230	1.0
15	.26	1.3	1.3	48	46	49	2.7	48	178	220	246	1.0
16	.26	1.4	1.3	48	46	49	2.9	48	191	222	255	.92
17	.30	1.6	1.3	48	48	49	2.5	48	201	215	258	.87
18	.31	1.0	1.2	48	48	49	2.1	48	209	181	240	1.4
19	.33	.58	.99	48	48	49	2.0	48	200	170	217	.82
20	.24	.88	1.0	48	48	49	2.0	49	130	184	210	.70
21	.30	1.0	.57	48	48	48	1.7	49	98	122	208	.33
22	.30	.84	.49	49	48	48	1.6	49	101	75	214	.56
23	.26	.73	.49	48	49	48	1.5	20	98	65	203	.54
24	.24	.49	.49	47	49	48	1.8	24	89	65	187	.83
25	.24	.49	.49	47	49	48	2.1	59	84	57	14	.53
26	.25	.49	.49	47	49	48	2.0	66	92	44	1.7	.52
27	.26	.45	.52	46	47	48	2.4	60	122	74	1.3	.67
28	.28	.46	.65	46	46	48	2.7	61	109	102	1.0	.55
29	.30	.49	.49	48	46	49	2.7	62	117	100	.71	.40
30	.27	.49	.49	48	-----	49	3.0	62	80	140E	1.2	.36
31	.29	-----	.49	48	-----	48	-----	62	-----	270E	.94	-----
TOTAL	7.72	23.77	23.46	979.84	1,362	1,491	552.1	1,200.6	3,576	4,509	5,400.85	23.02
MEAN	.25	.79	.76	31.6	47.0	48.1	18.4	38.7	119	145	174	.77
MAX	.33	1.6	1.3	49	49	49	49	66	209	278	300	1.4
MIN	.19	.25	.32	.49	45	46	1.5	1.5	64	44	.71	.17
AC-FT	15	47	47	1,940	2,700	2,960	1,100	2,380	7,090	8,940	10,710	46
CAL YEAR 1999 TOTAL	10,700.61		MEAN	29.3	MAX	301	MIN	.18	AC-FT	21,220		
WTR YEAR 2000 TOTAL	19,149.36		MEAN	52.3	MAX	300	MIN	.17	AC-FT	37,980		

E indicates estimated daily discharge.