

REPUBLICAN RIVER BASIN

MEDICINE CREEK above Harry Strunk Lake, 06841000 - 2002

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 7.1 cubic feet per second August 8, 2002.

EXTREMES FOR CURRENT YEAR.--Peak discharge estimated 82 cubic feet per second March 10, at approximate gage height 4.9 feet during the recession when ice was going out; maximum gage height 6.03 feet November 30 due to backwater from ice; minimum daily discharge 7.1 cubic feet per second August 8.

DAILY DISCHARGE IN CUBIC FEET PER SECOND WATER YEAR OCT 2001 TO SEP 2002

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	39	44E	33E	45E	49E	52	53	34	19	9.2	12
2	31	39	45	33E	45E	50E	52	49	33	17	7.9	12
3	30	38	45	32E	46E	55E	49	47	32	17	8.0	10
4	31	39	46	33E	47E	60E	48	46	34	17	9.1	11
5	32	39	46	33E	48E	65E	48	46	36	17	8.6	9.8
6	32	39	46	34E	48	65E	48	45	38	17	8.6	8.9
7	34	40	46	35E	47	60E	48	44	35	16	8.1	8.2
8	35	40	46	37E	47	55E	48	44	33	15	7.1	7.4
9	35	40	47	40E	48	50E	49	45	30	16	11	8.2
10	35	40	46	43E	48	50E	49	45	28	14	11	10
11	35	40	45	46E	45	50E	49	45	28	15	11	12
12	36	41	46	47	48	53	48	44	27	15	11	14
13	37	42	46	47	48	54	48	44	26	15	12	18
14	38	42	47	46	47	55	48	43	26	16	13	18
15	44	42	45	48	47	55	48	42	27	15	12	17
16	46	42	45	49	47	54	47	42	28	14	10	17 E
17	52	43	45	45	48	53	46	42	28	14	9.6	16 E
18	49	43	45	47	49	53	45	42	27	12	9.2	15 E
19	46	43	44	49	50	53	43	42	28	12	11	15 E
20	44	43	44	49	50	53	42	41	27	12	11	15 E
21	43	43	44	52	50	53	43	39	25	10	11	16 E
22	43	43	44	48	50	52	44	38	23	9.9	10	16 E
23	43	42E	45	46	51	51	45	37	22	8.7	15	17 E
24	42	41E	43	46	51	51	42	37	21	8.6	20	17 E
25	41	40E	43	45	51	51	34	38	20	8.7	15	18 E
26	40	40E	42E	45	50E	51	34	39	29	9.8	15	18 E
27	40	40E	42E	46	49E	51	41	39	26	11	14	19 E
28	40	41E	41E	47	49E	51	49	39	24	11	14	19 E
29	40	42E	39E	49	-----	52	60	39	22	10	13	20 E
30	40	43E	37E	47E	-----	52	56	38	21	10	13	20 E
31	40	-----	35E	45E	-----	52	-----	36	-----	10	13	-----
TOTAL	1,205	1,229	1,364	1,342	1,349	1,659	1,403	1,310	838	412.7	351.4	434.5
MEAN	38.9	41.0	44.0	43.3	48.2	53.5	46.8	42.3	27.9	13.3	11.3	14.5
MAX	52	43	47	52	51	65	60	53	38	19	20	20
MIN	30	38	35	32	45	49	34	36	20	8.6	7.1	7.4
AC-FT	2,390	2,440	2,710	2,660	2,680	3,290	2,780	2,600	1,660	819	697	862
CAL YEAR 2001	TOTAL	16,367.0	MEAN	44.8	MAX	197	MIN	16	AC-FT	32,460		
WTR YEAR 2002	TOTAL	12,897.6	MEAN	35.3	MAX	65	MIN	7.1	AC-FT	25,580		

E indicates estimated discharge.

REPUBLICAN RIVER BASIN

MEDICINE CREEK below Harry Strunk Lake, 06842500 - 2002

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, 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 260 cubic feet per second July 25, gage height 2.47 feet; minimum daily discharge zero September 2.

DAILY DISCHARGE IN CUBIC FEET PER SECOND WATER YEAR OCT 2001 TO SEP 2002

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	.37	.50	.37	.90	.68	.70	1.5	13	224	218	.01
2	.39	.36	.50	.27	.77	.58	.51	1.5	12	219	188	0
3	.37	.42	.49	.28	.90	.55	.59	1.6	13	216	186	.53
4	.38	.41	.58	.29	.66	.58	.68	1.6	13	205	185	.81
5	.45	.45	.59	.32	.42	.64	.75	1.6	14	168	187	6.2
6	.43	.54	.62	.31	.38	.52	.75	.52	14	156	194	1.3
7	.32	.63	.68	.29	.38	.56	.66	.57	14	157	193	.79
8	.27	.71	.85	.29	.40	.54	.87	.57	13	174	193	.78
9	.33	.96	.73	.29	.36	.42	.92	.62	12	194	174	1.1
10	.36	.78	.66	.36	.40	.44	.93	.59	12	202	171	.91
11	.28	.99	.90	.34	.42	.46	1.1	.26	12	204	172	.84
12	.28	1.3	1.1	.30	.32	.45	.95	.27	13	205	168	1.3
13	.28	1.9	1.1	.28	.30	.44	.25	1.2	13	204	175	1.1
14	.23	1.7	1.1	.25	.31	.70	.29	.76	12	206	187	1.1
15	.62	1.9	1.1	.30	.33	.97	.32	1.0	9.3	208	183	1.1
16	.06	1.8	1.2	.39	.36	1.0	.35	1.7	8.2	212	171	1.0
17	.07	1.8	1.0	.38	.40	.88	.39	2.4	7.6	212	167	1.1
18	.09	1.4	1.1	.39	.48	.68	.42	3.1	48	214	167	.95
19	.09	1.0	1.1	.46	.87	.47	.40	3.2	101	215	161	1.0
20	.10	1.8	1.1	.46	1.0	.51	.67	4.0	140	214	141	1.1
21	.13	1.9	.75	.50	1.3	.50	.82	4.2	104	213	10	.74
22	.14	1.7	.46	.57	1.8	.47	.94	4.4	75	212	.31	.56
23	.14	1.7	.35	.64	1.9	.59	.77	5.0	104	215	.24	1.6
24	.14	.49	.35	.56	1.7	.97	.68	6.8	187	213	.22	1.1
25	.16	.41	.40	.67	1.2	.69	1.2	8.4	238	230	.17	1.8
26	.19	.48	.39	.66	1.0	.73	1.4	9.0	230	217	.11	1.3
27	.21	.38	.40	.96	.75	.61	1.4	10	229	192	.06	1.3
28	.22	.46	.35	1.0	.65	.82	.91	10	231	182	.04	1.2
29	.22	.71	.37	.92	-----	.81	.93	13	232	179	.03	1.4
30	.23	.76	.37	.78	-----	.67	1.2	14	225	200	.02	1.4
31	.31	-----	.37	1.0	-----	.57	-----	13	-----	216	.01	-----
TOTAL	7.94	30.21	21.56	14.88	20.66	19.50	22.75	126.36	2,349.1	6,278	3,592.21	35.42
MEAN	.26	1.01	.70	.48	.74	.63	.76	4.08	78.3	203	116	1.18
MAX	.62	1.9	1.2	1.0	1.9	1.0	1.4	14	238	230	218	6.2
MIN	.06	.36	.35	.25	.30	.42	.25	.26	7.6	156	.01	0
AC-FT	16	60	43	30	41	39	45	251	4,660	12,450	7,130	70
CAL YEAR 2001	TOTAL	15,818.17	MEAN	43.3	MAX	279	MIN	.06	AC-FT	31,380		
WTR YEAR 2002	TOTAL	12,518.59	MEAN	34.3	MAX	238	MIN	0	AC-FT	24,830		