

## REPUBLICAN RIVER BASIN

**MEDICINE CREEK above Harry Strunk Lake, 06841000**

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 discharges above 125 cubic feet per second are fair and estimated records are poor.

EXTREMES FOR PERIOD OF RECORD.--Peak discharge 16,900 cubic feet per second May 30, 2007, gage height 20.84 feet; minimum daily discharge 7.1 cubic feet per second August 8, 2002.

EXTREMES FOR CURRENT YEAR.--Peak discharge 597 cubic feet per second July 16, gage height 10.37 feet; minimum daily discharge 31 cubic feet per second September 1 & 2.

## DISCHARGE ( CFS ), WATER YEAR 2009

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	37	50	50	57e	54	54	54	64	50	43	39	31
2	37	50	50	53e	54	53	54	59	51	42	38	31
3	37	51	50	59e	54	52	54	56	57	42	37	32
4	37	51	49e	61e	54	53	55	57	53	42	40	32
5	38	51	49e	56e	54	55	58	60	50	41	38	33
6	40	51	48	56e	54	56	59	60	49	40	38	33
7	41	51	49	60e	55	57	60	57	48	39	37	33
8	42	52	50	62e	55	57	58	55	48	38	36	32
9	42	52	51e	58e	57	56	58	53	48	38	35	35
10	41	52	51e	52	59	55e	58	52	48	38	34	38
11	41	53	50	51	64	53e	57	51	51	39	35	39
12	43	53	49	50	61	51e	58	52	59	39	37	39
13	66	54	50e	51	60	51	57	52	58	37	35	41
14	83	54	51e	50e	58	51	57	51	57	37	34	39
15	75	53	50e	51e	55	52	56	50	54	36	39	37
16	72	52	50e	52e	54	53	56	49	52	214	74	36
17	61	51	50e	52e	55	55	58	48	51	60	62	36
18	51	50	52e	51	55	55	73	48	49	44	42	36
19	48	50	50e	51	56	55	83	47	52	42	38	35
20	46	50	49e	52	55	55	79	47	47	40	36	36
21	46	50	47e	53	55	56	70	46	49	39	34	36
22	53	50	49e	53	54	56	62	46	47	39	33	37
23	60	50	52e	53e	54	56	57	59	47	38	33	42
24	73	50	53e	52e	53	56	55	63	45	54	32	46
25	73	50	54e	52e	54	55	53	57	44	40	34	53
26	67	49	58e	51e	56	55	52	62	47	37	33	50
27	60	49	62e	52e	57e	54	52	61	51	36	34	50
28	55	49	57e	53e	55e	54	52	67	52	38	33	46
29	52	49	57e	53e	---	54	53	65	50	39	32	44
30	52	50	62e	53e	---	54	58	59	48	40	32	42
31	51	---	62e	54e	---	54	---	53	---	40	32	---
TOTAL	1620	1527	1611	1664	1561	1683	1766	1706	1512	1431	1166	1150
MEAN	52.3	50.9	52.0	53.6	55.7	54.3	58.8	55.1	50.5	46.2	37.6	38.4
MAX	83	54	62	62	64	57	83	67	59	214	74	53
MIN	37	49	47	50	53	51	52	46	44	36	32	31
AC-FT	3213	3029	3195	3300	3096	3338	3503	3384	2999	2838	2313	2281
CAL YEAR 2008	TOTAL		32801	MEAN	89.6	MAX	6420	MIN	34.0	AC-FT	65060	
WTR YEAR 2009	TOTAL		18397	MEAN	50.4	MAX	214.0	MIN	31.0	AC-FT	36490	

e indicates estimated discharge.

## REPUBLICAN RIVER BASIN

**MEDICINE CREEK below Harry Strunk Lake, 06842500**

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 are good, records between 4 and 10 cubic feet per second are fair, records below 4 cubic  
feet per second.

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 247 cubic feet per second August 24, gage height 3.13 feet;  
minimum daily discharge 0.03 cubic feet per second October 4.

## DISCHARGE ( CFS ), WATER YEAR 2009

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.36	70	59	50	47	52	53	3.6	42	149	67	150
2	0.49	71	55	50	47	52	52	4.9	43	146	91	139
3	0.45	71	52	51	47	52	53	8.5	43	127	158	112
4	0.03	71	52	51	47	52	54	11	42	125	190	14
5	0.15	71	50	52	47	52	53	14	41	121	174	1.2
6	0.40	71	50	51	46	52	52	16	41	127	150	0.89
7	0.42	71	50	51	46	52	52	18	41	139	139	0.74
8	0.29	71	50	50	46	52	52	20	51	154	139	0.68
9	0.39	71	51	50	46	52	52	20	73	161	160	0.63
10	0.65	70	51	50	45	52	52	21	54	156	208	0.80
11	0.90	70	51	50	45	52	52	22	43	162	206	0.86
12	1.0	70	51	50	45	52	52	24	46	152	224	1.1
13	1.0	70	51	51	46	52	52	26	46	132	205	1.3
14	5.2	63	51	51	46	52	53	26	48	127	165	1.4
15	31	59	52	51	46	52	53	27	48	124	149	1.4
16	35	59	52	51	45	52	52	26	50	83	139	1.5
17	42	60	52	50	51	52	52	27	49	37	126	1.7
18	50	60	50	50	54	52	52	28	50	25	118	1.6
19	50	60	48	50	54	53	52	64	54	25	103	1.3
20	51	60	48	50	53	53	52	113	54	25	100	1.3
21	51	60	47	50	53	53	28	94	53	24	117	1.4
22	53	60	48	49	53	53	1.7	74	49	52	127	1.6
23	52	59	48	50	52	53	1.3	50	58	63	160	1.4
24	52	59	48	50	52	53	1.2	55	89	46	231	0.66
25	52	59	48	50	52	53	1.1	57	113	55	242	0.34
26	53	59	49	50	52	53	1.1	47	117	75	179	0.24
27	58	59	49	50	52	52	1.2	37	116	128	116	0.41
28	70	59	49	49	52	52	1.2	38	126	134	72	0.43
29	70	58	49	48	---	53	1.2	38	144	111	71	0.14
30	70	59	50	48	---	53	2.3	40	143	99	83	0.11
31	70	---	50	48	---	53	---	40	---	67	125	---
TOTAL	921.73	1930	1561	1552	1367	1623	1087.3	1090	1967	3151	4534	440.13
MEAN	29.8	64.3	50.3	50.1	48.8	52.2	36.3	35.2	65.6	101.6	146.3	14.7
MAX	70	71	59	52	54	53	54	113	144	162	242	150
MIN	0.03	58	47	48	45	52	1.1	3.6	41	24	67	0.11
AC-FT	1828	3828	3096	3078	2711	3219	2157	2162	3901	6250	8993	873
CAL YEAR 2008	TOTAL		32849	MEAN	89.8	MAX	1060	MIN	0.030	AC-FT	65150	
WTR YEAR 2009	TOTAL		21224	MEAN	58.1	MAX	242.0	MIN	0.030	AC-FT	42100	