

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 757 cubic feet per second June 14, gage height 11.32 feet; minimum daily discharge 36 cubic feet per second September 13.

DISCHARGE (CFS), WATER YEAR 2010

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	41	70	54	53e	54	97	58	55	48	52	39	40
2	41	76	54	46e	54	80	57	54	49	51	38	40
3	40	71	55e	46e	55	87	56	53	50	50	38	38
4	40	66	56e	45e	56	92	56	53	50	52	38	38
5	41	63	58e	45e	57	86	56	53	48	64	38	38
6	42	59	54e	46e	57	196	57	53	47	76	283	39
7	43	57	51e	45e	57	278	64	54	47	80	124	38
8	45	55	48e	42e	57	136	74	53	52	83	83	38
9	44	54	48e	46e	57e	194	80	53	53	80	67	38
10	46	53	45e	50e	54e	307	75	54	52	75	58	38
11	45	51	45e	57e	56e	174	69	54	51	74	49	38
12	45	52	42e	69e	58	113	62	56	58	64	44	37
13	47	53	44e	73e	64	95	59	56	297	172	41	36
14	48	53	42e	78e	65e	83	62	55	687	81	40	37
15	50	52	42e	78e	62e	77	63	55	399	64	40	38
16	49	53	46e	73e	63	73	63	56	200	60	42	38
17	48	53	61e	83e	60	70	61	59	117	54	79	38
18	47	53	66e	75e	55	68	60	61	89	52	78	38
19	47	52	69e	64e	53	66	59	64	77	50	66	39
20	47	52	71e	58e	54	64	58	67	71	49	59	39
21	49	52	75e	63e	55	64	59	71	96	48	53	39
22	60	53	69e	59	55	63	59	68	217	47	46	39
23	65	53	57e	60	56	62	62	64	136	47	43	40
24	71	53	47e	60	56	61	64	60	92	47	41	47
25	69	54	46e	60	54	61	64	56	74	45	40	50
26	63	54	47e	59	63	60	61	53	66	44	40	58
27	59	54	44e	57	85	60	58	52	62	43	39	64
28	56	55	46e	55	105	59	57	51	58	42	39	49
29	56	54	51e	56	---	59	57	50	56	41	38	43
30	60	54	47e	54	---	59	56	49	54	41	38	41
31	64	---	51e	54	---	60	---	48	---	41	39	---
TOTAL	1568	1684	1631	1809	1677	3104	1846	1740	3453	1869	1800	1233
MEAN	50.6	56.2	52.6	58.4	59.9	100.2	61.6	56.1	115.1	60.2	58.2	41.1
MAX	71	76	75	83	105	307	80	71	687	172	283	64
MIN	40	51	42	42	53	59	56	48	47	41	38	36
AC-FT	3110	3340	3235	3588	3326	6157	3661	3451	6849	3707	3570	2446
CAL YEAR 2009	TOTAL		18522	MEAN	50.7	MAX	214.0	MIN	31.0	AC-FT	36740	
WTR YEAR 2010	TOTAL		23414	MEAN	64.1	MAX	687.0	MIN	36.0	AC-FT	46440	

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 and estimated records 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 228 cubic feet per second March 8, gage height 3.07 feet;
minimum daily discharge 0.01 cubic feet per second October 1, 3, April 26 - 29.

DISCHARGE (CFS), WATER YEAR 2010

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.01	5.6	45	49	52	60	60	0.21	53	79	218	164
2	0.06	4.6	30	50	52	73	60	0.14	55	76	215	137
3	0.01	1.5	1.4	50	52	75	61	13	54	74	194	100
4	0.05	1.1	29	50	53	115	62	47	53	73	118	87
5	0.36	0.99	50	50	52	137	62	47	54	75	44	87
6	0.58	0.99	50	50	52	139	63	47	56	74	55	87
7	0.17	1.1	50	50	52	188	49	47	44	74	106	47
8	0.20	1.2	50	50	52	225	5.0	47	34	73	106	1.6
9	0.40	1.4	50	50	52	225	0.75	47	34	72	106	1.0
10	0.74	1.3	50	50	53	225	0.27	47	35	71	121	0.79
11	1.1	1.1	50	50	53	225	0.11	47	35	72	183	0.66
12	1.3	0.97	50	50	53	225	0.09	47	34	72	220	0.60
13	1.6	1.0	50	50	53	225	0.05	47	36	72	176	0.60
14	1.8	1.2	50	50	53	224	0.21	48	49	91	155	0.62
15	1.8	1.4	50	50	53	224	0.11	49	68	127	161	0.54
16	1.8	1.7	50	50	53	224	0.13	49	81	111	178	0.45
17	1.9	1.7	50	50	53	147	0.44	49	85	121	141	0.41
18	1.9	1.2	49	50	53	100	0.42	49	85	135	111	0.40
19	2.0	1.0	49	50	53	95	0.22	49	90	162	106	0.44
20	1.9	1.4	49	50	53	93	0.07	49	87	203	94	0.47
21	1.3	1.8	49	51	53	92	0.02	49	93	204	94	0.40
22	1.7	4.0	49	52	53	77	0.03	49	96	177	94	0.37
23	1.1	7.5	49	52	54	56	0.13	49	100	147	103	0.38
24	0.80	4.9	49	52	54	56	0.09	49	98	145	132	0.34
25	1.0	1.5	50	52	53	57	0.02	49	98	146	154	0.32
26	1.3	1.5	49	52	52	58	0.01	50	96	174	147	0.30
27	0.93	1.7	49	52	52	58	0.01	50	93	203	115	0.31
28	0.76	1.8	49	52	52	58	0.01	51	89	208	121	0.36
29	1.3	1.9	49	52	---	59	0.01	52	86	219	140	0.47
30	3.7	24	49	52	---	60	0.06	52	83	218	171	0.74
31	5.1	---	49	53	---	60	---	52	---	218	171	---
TOTAL	38.67	83.05	1442.4	1571	1475	3935	425.26	1377.35	2054	3966	4250	721.57
MEAN	1.3	2.8	46.6	50.9	52.7	126.9	14.2	44.3	68.5	127.9	137.1	24.1
MAX	5.1	24	50	53	54	225	63	52	100	219	220	164
MIN	0.01	0.97	1.4	49	52	56	0.01	0.14	34	71	44	0.30
AC-FT	77	165	2861	3116	2926	7805	843	2732	4074	7866	8430	1431
CAL YEAR 2009	TOTAL		18376	MEAN	50.3	MAX	242.0	MIN	0.010	AC-FT	36450	
WTR YEAR 2010	TOTAL		21339	MEAN	58.5	MAX	225.0	MIN	0.010	AC-FT	42330	