STREAMFLOW CHARACTERISTICS OF THE MISSOURI RIVER BASIN, WYOMING, THROUGH 1984

By David A. Peterson

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PLATE

CONVERSION FACTORS

For use of readers who prefer metric units, rather than the inch-pound terms used in this report, the following factors may be used:

Multiply inch-pound unit	*By*	*To obtain metric unit*
acre	0.4047	hectare
acre-foot	1,233	cubic meter
cubic foot per second (ft^3/s)	0.02832	cubic meter per second
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer
square mile (mi^2)	2.590	square kilometer

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ABSTRACT

Knowledge of current streamflow characteristics is beneficial in evaluating and planning Wyoming's existing and future uses of surface water. This report presents a summary of streamflow characteristics for the Missouri River basin in Wyoming through 1984, based on data from 204 streamflow-gaging stations. Major drainages are the Upper Yellowstone, Bighorn, Tongue, Powder, Cheyenne, and North Platte Rivers. Streamflow characteristics before and after dam construction or transbasin diversion are presented for six stations.

The streamflow characteristics which are presented include mean monthly and mean annual streamflow; duration of daily mean flow; and magnitude and probability of instantaneous annual peak flow, annual low flow, and annual high flow. Recurrence intervals of 2, 5, 10, 20 or 25, 50, and 100 years are determined for the peak-flow, low-flow, and high-flow characteristics. Annual low-flow and high-flow characteristics are also listed for various numbers of consecutive days. Mean monthly streamflow and duration of daily mean flow are graphed for each station.

INTRODUCTION

Planning the development and use of Wyoming's surface water is aided through a statistical summary of streamflows within the State. Knowledge of streamflow characteristics is beneficial for design and operation of reservoirs and for management of water supplies for recreation; irrigation; and domestic, industrial, and municipal uses. A detailed compilation of the streamflow characteristics of Wyoming's surface-water resources in the Missouri River basin is provided in this report. The compilation is based on data collected at streamflow-gaging stations operated by the U.S. Geological Survey, in cooperation with municipal, State, and other Federal agencies. A report similar to this one has been compiled for 101 streamflow-gaging stations in the Green, Bear, and Snake River basins of Wyoming and adjacent areas (Peterson, 1988).

The purpose of this report is to present a statistical description of streamflow characteristics for gaged sites in the Missouri River basin of Wyoming. Streamflow data analyses are presented for 204 active or discontinued stations with 10 or more complete years of record. Fifteen stations that are located in states adjacent to Wyoming are included because these stations gage water entering or leaving Wyoming. The statistical summaries include maximum, minimum, and mean monthly streamflow; mean annual streamflow; duration of daily mean flow; and magnitudes and probabilities of instantaneous peak flow, annual low flow, and annual high flow, presented in a tabular

format. Mean monthly streamflow and duration of daily mean streamflow are also presented graphically. Streamflow characteristics at six stations are presented for the periods before and after dam construction or transbasin diversion.

STREAMFLOW DATA ANALYSIS

Streamflow data were analyzed through use of three computer programs of the U.S. Geological Survey. Monthly and annual streamflow characteristics were computed using program W4422 by Price and Meeks (1977). Peak-flow characteristics were computed using program J407 by Kirby (1981) and retrieved from the streamflow/basin characteristics file using program E796 by Dempster (1983). Low-flow, high-flow, and flow-duration characteristics were computed using program A969 by Meeks (1977). Output from programs W4422, E796, and A969 was formatted for publication by using a FORTRAN program that was written by G.D. Rogers (U.S. Geological Survey, written commun., 1985).

Daily streamflow data summarized in this report are stored in the computer files of the Geological Survey and can be retrieved upon request. The data are also published in a series of annual reports; for example, see U.S. Geological Survey (1985).

The location and identification number of each streamflow-gaging station is shown on plate 1. An eight-digit station-identification number customarily is assigned to locations at which samples are collected or measurements are made on a repetitive basis. The first two digits indicate the river basin in which the station is located; for example, 06 refers to the Missouri River basin. The remaining six digits are based on position within the river basin, and the numbers increase in the downstream direction.

The data are presented on facing pages for each station. On the page to the left, a description denotes such information as: location of the station and the period of record; tables show streamflow-characteristics data. On the page to the right, one graph shows mean monthly streamflow for the period of record; the other graph shows duration of daily mean streamflow (flow-duration curve).

Station Description

The station description lists information regarding station location, drainage area, period of record, type and history of gage, remarks on regulation or diversion, extremes for the period of record, and cooperation in data collection, if any. The period of record at stations active as of the end of water year 1984 (Sept. 30, 1984) is noted "to current year." Throughout this report, "year" refers to the water year of October 1 to September 30 unless specified otherwise.

Streamflow Tables and Graphs

The period of record for analysis is listed in each table title; the corresponding graphs use the same period of record. The period of record listed in the tables occasionally differs from that listed in the station description because the tables were screened to exclude either large changes in the streamflow regime (such as construction of dams), seasonal data, or incomplete water years. When the length of record is sufficient, data are presented for the periods before and after construction of dams or transbasin diversions.

Monthly and annual streamflow characteristics presented in the tables include maximum, minimum, mean, standard deviation, coefficient of variation, and percent of annual runoff (by month).

Magnitude and probability of instantaneous peak flow are listed at stations where the natural flow is not substantially affected by regulation, diversion, or irrigation. Peak flows with recurrence intervals of 2, 5, 10, 25, 50, and 100 years and weighted skew were computed following methodology described by the U.S. Water Resources Council (1981). The exceedance probabilities corresponding to recurrence intervals of 2, 5, 10, 25, 50, and 100 years are 50, 20, 10, 4, 2, and 1 percent; the probabilities are also listed in the tables. As an example, in any specified year, there is a 1-percent chance of exceedance of a peak flow with a recurrence interval of 100 years.

Magnitudes of annual low flows are given at recurrence intervals of 2, 5, 10, 20, 50, and 100 years for each of the following numbers of consecutive days: 1, 3, 7, 14, 30, 60, 90, 120, and 183. The non-exceedance probabilities corresponding to the above recurrence intervals are also listed.

The low-flow and high-flow frequency curves were generally projected to recurrence intervals of about twice the length of record, but the 100-year recurrence interval flows are reported for stations having 40 or more years of record. Annual low flows are based on the climatic year which begins on April 1. Low-flow characteristics are interpreted as follows: the 7-day low flow will be less than the 7-day 10-year low flow at intervals averaging 10 years in length; or the probability is 10 percent that the 7-day low flow in any 1 year will be less than the 7-day 10-year low flow. Riggs (1972) describes low-flow statistics in more detail.

Magnitude and probability of annual high flows are listed for series of 1, 3, 7, 15, 30, 60, and 90 consecutive days, with recurrence intervals of 2, 5, 10, 25, 50, and 100 years. As an example of interpretation, the annual 7-day high flow will exceed the 7-day 10-year high flow at intervals averaging 10 years in length.

The final table for each station shows the probability distribution of the daily mean flows for all complete years of record. These figures are plotted on the facing page as the flow-duration curve. As a guideline, a steep flow-duration curve indicates highly variable flow, and a gently sloped curve indicates relatively uniform flow. The flow-duration curve of a perennial stream tends to be relatively flat at its lower end, indicating a stable

base flow, whereas an intermittent or ephemeral stream has a steeply sloped curve at the lower end, indicating that base flow goes to zero. The shape of the flow-duration curve may be affected by irrigation or reservoir operations.

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U.S. Geological Survey, 1985, Water resources data, Wyoming, Water year 1984: U.S. Geological Survey Water-Data Report WY-84-1, 470 p. [Reports for other years have similar titles.]

LIST OF STREAMFLOW-GAGING STATIONS

(*, streamflow characteristics shown for periods before and after dam construction or transbasin diversion)

LIST OF STREAMFLOW-GAGING STATIONS--Continued

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STREAMFLOW CHARACTERISTICS

[Altitude and datum, in feet, refer to distance above National Geodetic Vertical Datum of 1929. Abbreviations: ft, foot; ft^3/s, cubic foot per second; mi, mile; mi^2, square mile; %, percent; sec., section; ¼, quarter-section; T., township; R., range; °, degree of latitude or longitude; ', minute of latitude or longitude; ", second of latitude or longitude; ---, value not calculated]

06037500 MADISON RIVER NEAR WEST YELLOWSTONE, MONT.

LOCATION.--Lat 44°39'25", long 111°04'03", in SW¼ sec.36, T.13 S., R.5 E., Gallatin County, Yellowstone National Park, on left bank 0.7 mi downstream from Montana-Wyoming State line, 1.5 mi east of West Yellowstone, 16.4 mi downstream from Gibbon River, and at mile 132.7.

DRAINAGE AREA.--420 mi^2.

PERIOD OF RECORD.--June 1913 to December 1917, July 1918 to October 1921, June 1922 to September 1973, August 1983 to September 1984. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 6,650 ft, from topographic map. Prior to October 20, 1918, non-recording gage, and October 20, 1918, to June 29, 1930, non-recording gage or water-stage recorder at sites 2.5 mi upstream at different datums. Supplementary non-recording gage at site 0.3 mi downstream at different datum used at times during 1927-30.

REMARKS.--No diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,150 ft^3/s, May 24, 1956, gage height, 3.44 ft; maximum gage height, about 10.0 ft, January 8, 1937 (ice jam); minimum discharge, 100 ft^3/s, February 7, 1933, result of freezeup.

Monthly and annual streamflow 1914-17, 1919-21, 1923-73, 1984

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	710	297	428	85	0.20	7.3
November	697	297	418	70	0.17	7.1
December	568	304	409	58	0.14	7.0
January	582	304	398	56	0.14	6.8
February	572	303	394	51	0.13	6.7
March	539	313	398	49	0.12	6.8
April	671	369	480	74	0.15	8.2
May	1210	388	810	174	0.21	13.8
June	1420	341	804	278	0.35	13.7
July	863	282	485	126	0.26	8.3
August	600	273	419	79	0.19	7.2
September	593	282	415	76	0.18	7.1
Annual	664	337	488	78	0.16	100

Magnitude and probability of annual low flow based on period of record 1915-17, 1920-21, 1924-73

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	337	297	278	263	247	237
3	344	305	287	272	256	246
7	353	315	296	281	265	254
14	362	321	301	285	267	256
30	370	328	307	290	272	260
60	379	336	314	296	276	263
90	385	341	319	301	280	267
120	390	346	323	304	284	270
183	399	352	328	309	288	274

Magnitude and probability of instantaneous peak flow based on 59 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1340	1620	1790	1960	2080	2190

Weighted skew = -0.360

Magnitude and probability of annual high flow based on period of record 1914-17, 1919-21, 1923-73, 1984

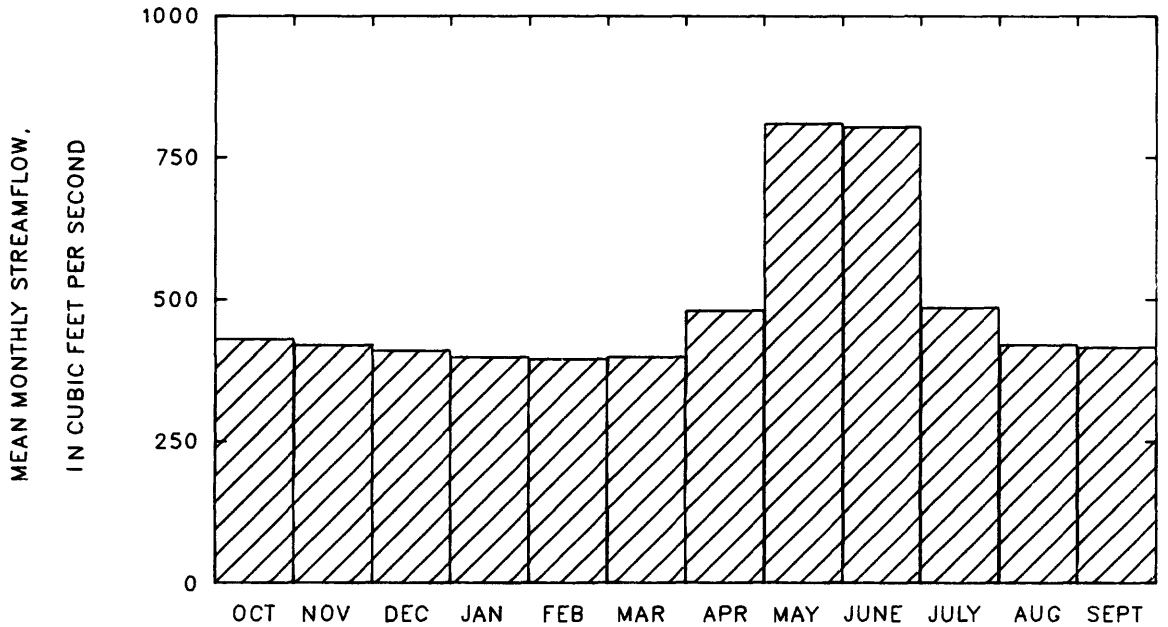
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1250	1540	1710	1910	2040	2160
3	1180	1460	1620	1800	1930	2050
7	1120	1390	1560	1750	1880	2000
15	1040	1300	1460	1640	1760	1870
30	953	1180	1320	1470	1570	1670
60	814	996	1100	1220	1300	1370
90	712	862	949	1050	1120	1180

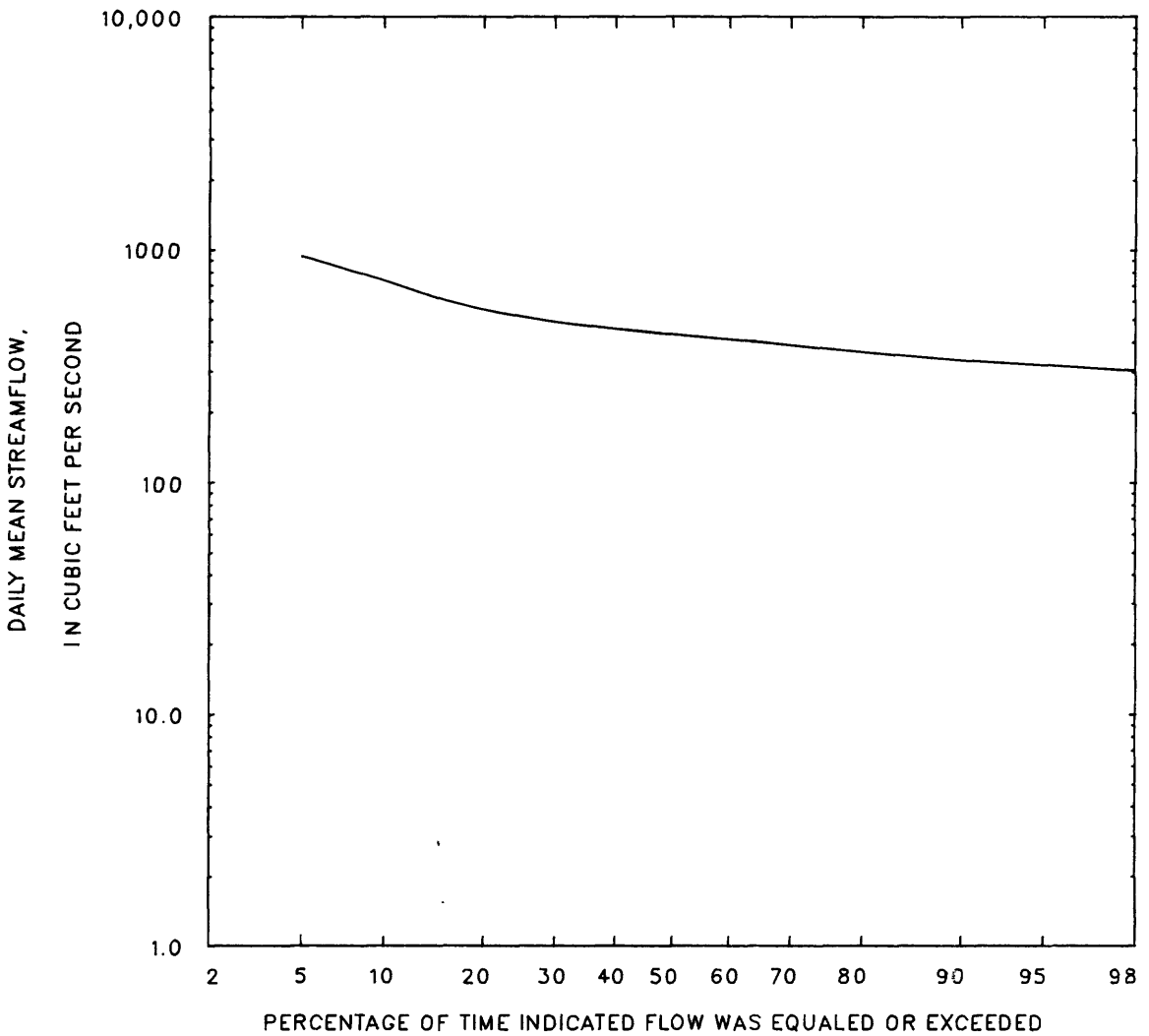
Duration of daily mean flow for period of record 1914-17, 1919-21, 1923-73, 1984

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1350	938	736	612	550	485	452	427	408	386	362	333	316	301	287	278	264

STATION 06037500 PERIOD OF RECORD 1914–17, 1919–21, 1923–73, 198

MADISON RIVER NEAR WEST YELLOWSTONE, MONT.





06186500 YELLOWSTONE RIVER AT YELLOWSTONE LAKE OUTLET, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°34'03", long 110°22'48", Yellowstone National Park, on left bank 450 ft downstream from Fishing Bridge, 0.3 mi downstream from outlet of Yellowstone Lake, and at mile 616.4.

DRAINAGE AREA.--1,006 mi^2.

PERIOD OF RECORD.--December 1922 to September 1982. Prior to October 1926, gage height only. Monthly discharge only for winter periods in water years 1927-30, 1932-33, 1935-38, 1940, 1942-46; published in WSP 1309. Figures of daily discharge for these months published in WSP 646, 666, 686, 701, 731, 746, 786, 806, 826, 856, 896, 956, 976, 1006, 1036, and 1056 have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 7,727.91 ft. Prior to October 2, 1928, non-recording gage at site 450 ft upstream at datum 1.07 ft higher.

REMARKS.--No artificial regulation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,170 ft^3/s, June 28, 1974, gage height, 8.20 ft; minimum daily, 130 ft^3/s, March 1-31, 1935, but may have been less during periods of ice effect; minimum gage height, 1.45 ft, December 17, 1936.

Monthly and annual streamflow 1927-82, 1984

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1260	408	821	209	0.25	5.2
November	984	348	620	161	0.26	3.9
December	775	246	481	129	0.27	3.0
January	639	180	398	127	0.32	2.5
February	628	150	384	124	0.32	2.4
March	717	130	442	130	0.29	2.8
April	801	175	539	128	0.24	3.4
May	2190	605	1090	384	0.35	6.9
June	6640	1710	3540	1030	0.29	22.3
July	7160	1270	4090	1370	0.33	25.7
August	4030	812	2250	726	0.32	14.2
September	1950	538	1230	340	0.28	7.7
Annual	1940	682	1330	300	0.23	100

Magnitude and probability of annual low flow based on period of record 1928-82

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	308	222	184	156	129	113
3	309	223	185	158	130	114
7	314	227	189	160	132	116
14	323	236	197	168	138	121
30	341	249	207	175	143	124
60	362	265	221	187	154	134
90	383	285	240	205	171	150
120	412	316	271	236	201	179
183	516	409	357	318	276	251

Magnitude and probability of instantaneous peak flow based on 60 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
4780	6240	7080	8030	8680	9270

Weighted skew = -0.400

Magnitude and probability of annual high flow based on period of record 1927-82, 1984

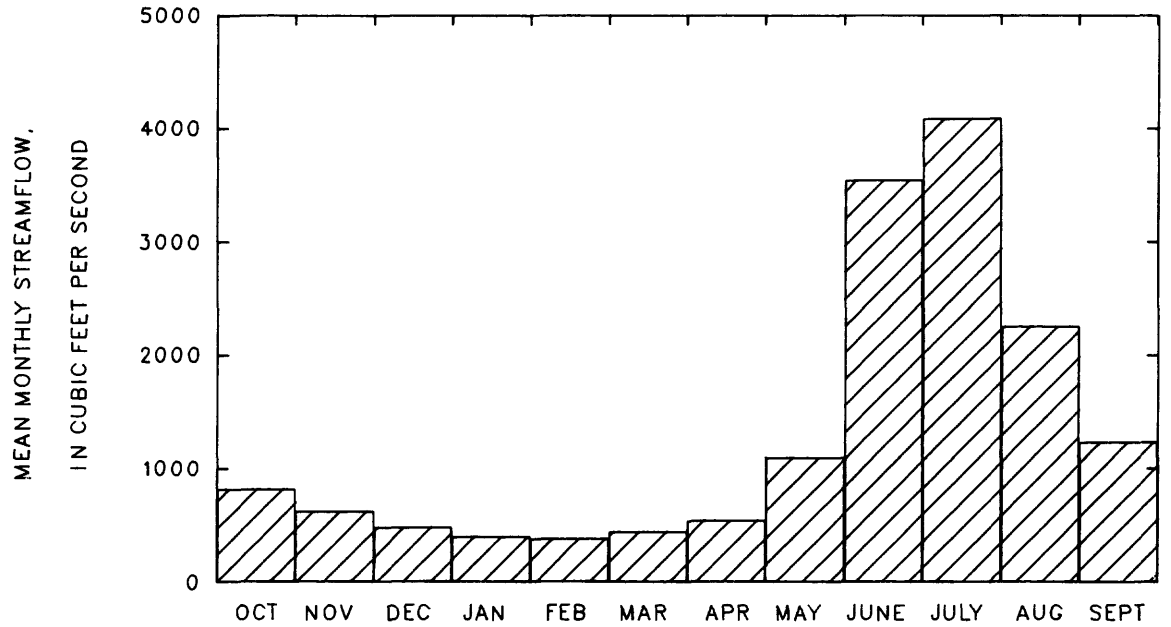
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	4810	6220	7010	7880	8450	8970
3	4800	6210	7000	7870	8440	8950
7	4770	6170	6950	7820	8380	8900
15	4690	6050	6820	7660	8220	8720
30	4480	5740	6440	7200	7690	8120
60	3910	4950	5500	6090	6460	6780
90	3340	4180	4630	5100	5390	5650

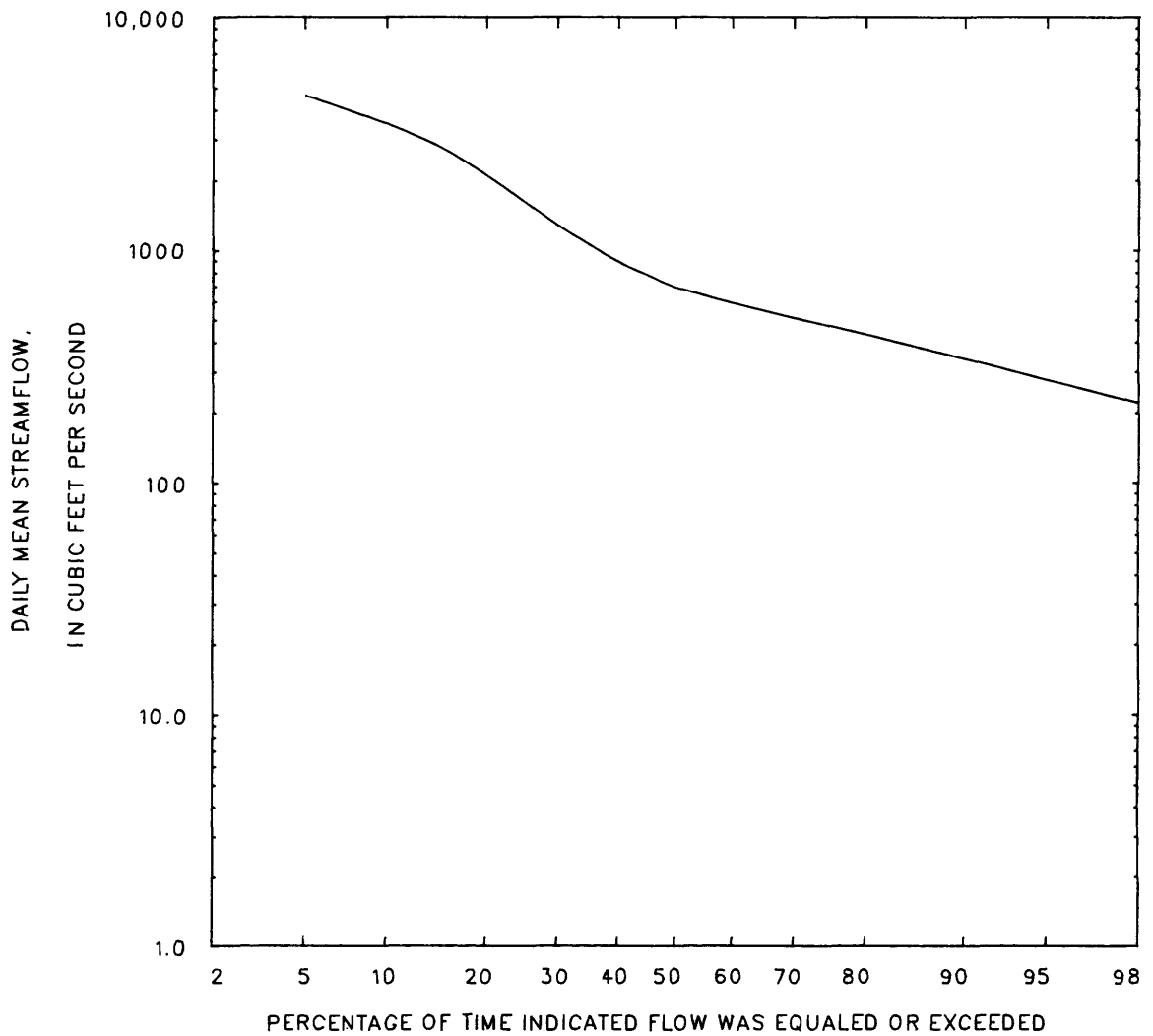
Duration of daily mean flow for period of record 1927-82, 1984

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
6400	4600	3490	2750	2100	1280	881	684	586	508	429	339	275	218	180	161	143

STATION 06186500 PERIOD OF RECORD 1927–82, 1984

YELLOWSTONE RIVER AT YELLOWSTONE LAKE OUTLET, YELLOWSTONE NATIONAL PARK





06187500 TOWER CREEK AT TOWER FALLS, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°54', long 110°23', Yellowstone Park, just upstream from Tower Falls, 0.25 mi upstream from mouth, and 2 mi southeast of Camp Roosevelt.

DRAINAGE AREA.--51 mi^2, approximately.

PERIOD OF RECORD.--September 1922 to September 1943.

GAGE.--Staff gage. Altitude of gage is 6,400 ft, from topographic map. Prior to September 26, 1931, staff gage at site 25 ft downstream at datum 2.22 ft lower. September 26, 1931, to July 11, 1933, staff gage at site 75 ft downstream at different datum. July 12, 1933, to October 13, 1934, staff gage at datum 0.50 ft higher.

REMARKS.--No diversions or regulation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 642 ft^3/s, May 30, 1925, from rating curve extended above 400 ft^3/s; maximum gage height, 6.27 ft, May 28, 1928, site and datum then in use; minimum discharge, 5.6 ft^3/s (discharge measurement), March 17, 1934.

Monthly and annual streamflow 1924-43

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	36	18	25	5.1	0.20	4.5
November	45	16	22	6.0	0.27	3.9
December	25	14	19	3.4	0.18	3.3
January	22	12	17	3.3	0.20	2.9
February	20	10	16	3.3	0.21	2.8
March	22	10	16	3.1	0.19	2.9
April	39	12	26	7.8	0.30	4.6
May	278	46	105	58	0.56	18.6
June	397	46	185	99	0.53	32.6
July	261	25	74	53	0.72	13.1
August	61	21	34	9.6	0.28	6.0
September	40	19	27	5.6	0.20	4.8
Annual	85	26	47	16	0.34	100

Magnitude and probability of annual low flow based on period of record 1925-43

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	15	12	9.6	7.9	---	---
3	15	12	11	9.6	---	---
7	15	12	11	10	---	---
14	15	12	11	10	---	---
30	15	13	11	10	---	---
60	16	13	12	11	---	---
90	17	14	12	11	---	---
120	17	15	13	12	---	---
183	19	16	15	14	---	---

Magnitude and probability of instantaneous peak flow based on 21 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
320	470	565	680	761	839

Weighted skew = -0.370

Magnitude and probability of annual high flow based on period of record 1924-43

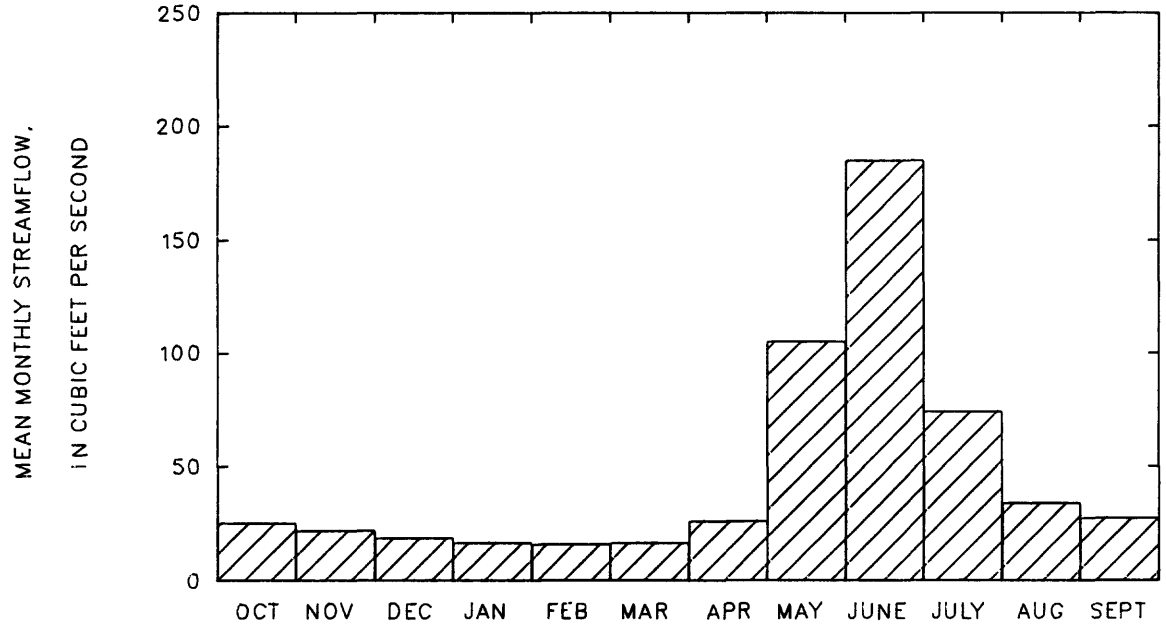
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	324	474	566	672	---	---
3	300	438	524	624	---	---
7	263	394	483	597	---	---
15	231	351	438	555	---	---
30	194	292	362	457	---	---
60	142	209	260	331	---	---
90	110	159	196	248	---	---

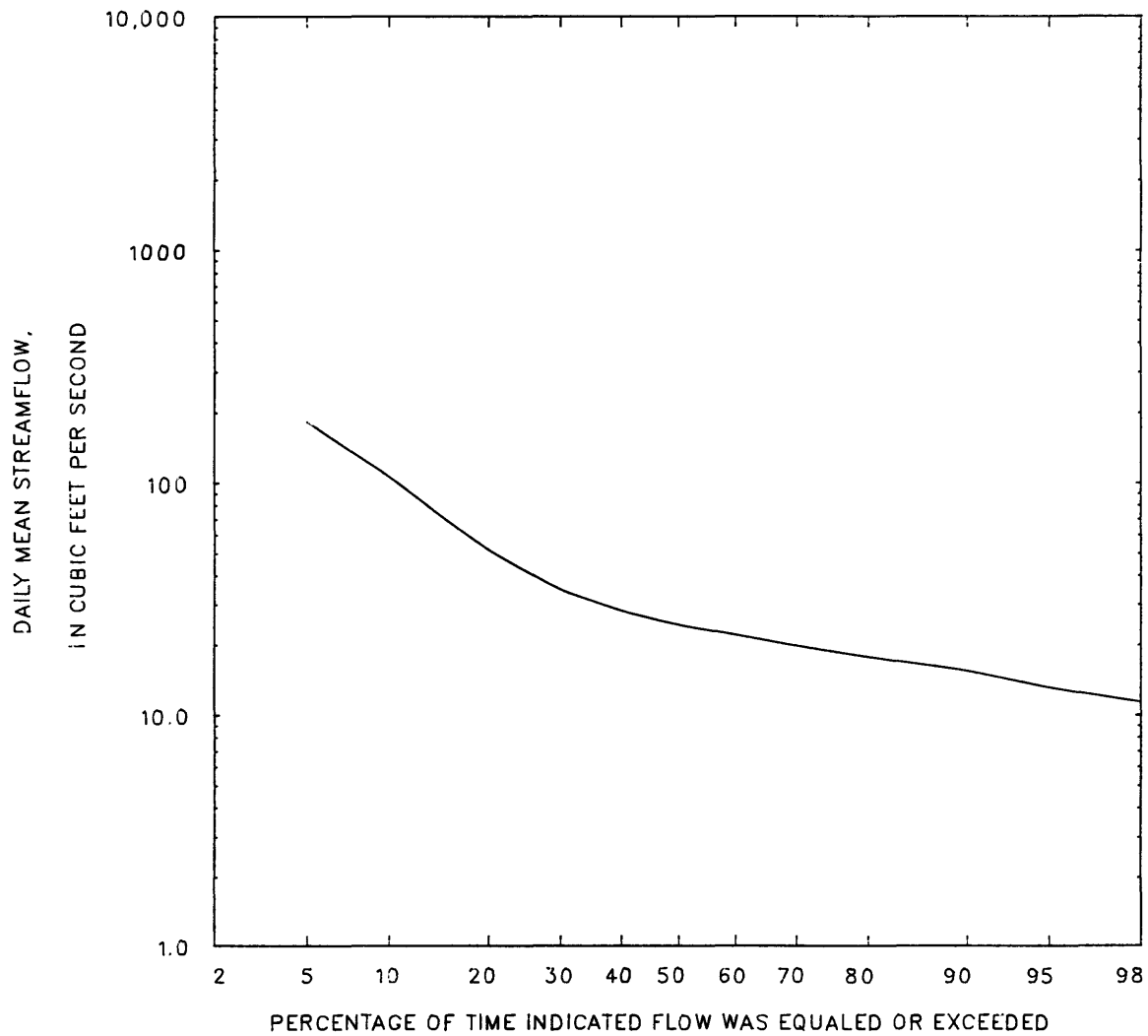
Duration of daily mean flow for period of record 1924-43

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
369	181	106	70	51	34	28	24	22	20	18	15	13	11	11	10	10

STATION 06187500 PERIOD OF RECORD 1924–43

TOWER CREEK AT TOWER FALLS, YELLOWSTONE NATIONAL PARK





06188000 LAMAR RIVER NEAR TOWER FALLS RANGER STATION, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°55'40", long 110°23'35", Yellowstone National Park, on left bank 0.5 mi northeast of Cooke City highway, upstream from mouth, and 1.5 mi northeast of Tower Falls ranger station.

DRAINAGE AREA.--660 mi^2.

PERIOD OF RECORD.--September 1922, April 1923 to September 1969. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 5,910 ft, from topographic map. Prior to September 16, 1925, non-recording gages, and September 16, 1925, to July 29, 1927, water-stage recorder, at same site at datum 1.00 ft higher.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 13,600 ft^3/s, May 25, 1928, gage height, 9.75 ft; minimum, 40 ft^3/s (discharge measurement), March 16, 1945, but may have been less during periods of no gage-height record in winter.

Monthly and annual streamflow 1924-69

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	485	110	217	93	0.43	2.2
November	330	88	157	53	0.34	1.6
December	202	76	118	25	0.21	1.2
January	200	75	105	21	0.20	1.1
February	171	70	100	19	0.18	1.0
March	146	68	104	17	0.17	1.0
April	1110	106	381	268	0.71	3.8
May	6890	969	2600	1090	0.42	26.1
June	7830	1410	4200	1420	0.34	42.2
July	3260	344	1390	737	0.53	13.9
August	886	173	349	142	0.41	3.5
September	518	138	230	85	0.37	2.3
Annual	1290	525	829	191	0.23	100

Magnitude and probability of annual low flow based on period of record 1925-69

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	84	68	60	54	47	43
3	85	72	65	60	54	51
7	87	75	70	65	61	58
14	89	78	72	68	64	62
30	93	81	75	71	66	63
60	95	84	79	76	73	71
90	98	87	83	80	77	75
120	103	91	86	83	79	78
183	129	108	99	93	87	83

Magnitude and probability of instantaneous peak flow based on 47 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
8490	10500	11600	12900	13800	14600

Weighted skew = -0.330

Magnitude and probability of annual high flow based on period of record 1924-69

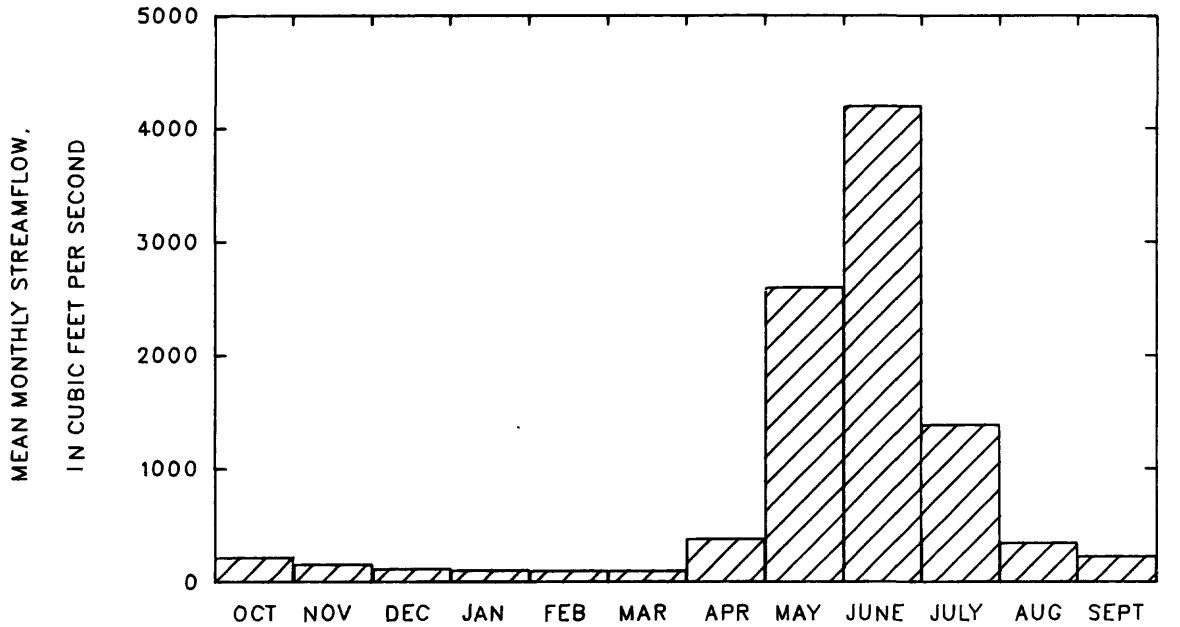
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	7370	9160	10200	11300	12100	12800
3	6900	8640	9680	10900	11700	12500
7	6270	7940	8960	10200	11000	11800
15	5470	7020	7990	9160	10000	10800
30	4660	5890	6660	7580	8240	8880
60	3580	4420	4920	5510	5920	6320
90	2730	3360	3740	4170	4480	4770

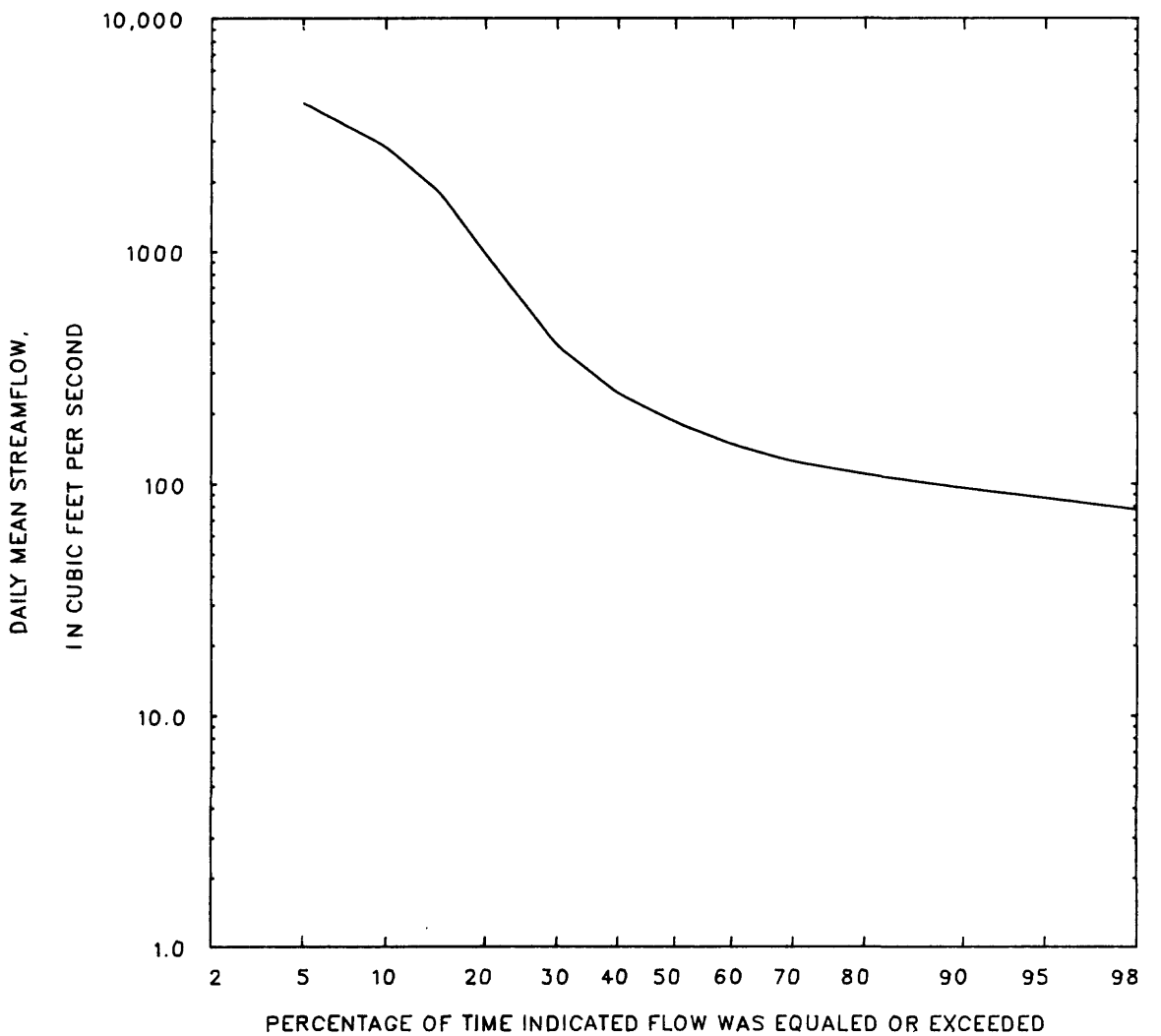
Duration of daily mean flow for period of record 1924-69

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
7400	4290	2820	1770	983	390	241	182	146	124	109	95	86	77	73	67	57

STATION 06188000 PERIOD OF RECORD 1924–69

LAMAR RIVER NEAR TOWER FALLS RANGER STATION, YELLOWSTONE NATIONAL PARK





06190500 GARDNER RIVER AT MAMMOTH, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°59', long 110°41', Yellowstone Park, 0.25 mi downstream from footbridge on Mount Everts trail, 0.50 mi upstream from Boiling River, 0.9 mi northeast of Mammoth, and 3.75 mi upstream from mouth.

DRAINAGE AREA.--198 mi^2.

PERIOD OF RECORD.--September 1922 to October 1938. Published as "near Mammoth Hot Springs" prior to October 1, 1923, and as "at Mammoth Hotel" October 1, 1923, to September 30, 1937.

GAGE.--Water-stage recorder. Altitude of gage is 5,680 ft, from topographic map. Prior to June 10, 1927, staff gage at site 0.25 mi upstream at different datum. June 10 to July 29, 1927, staff gage at described site and datum.

REMARKS.--No diversion or regulation above station. Records not equivalent to those for station near Mammoth, 1.25 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,790 ft^3/s, May 28, 1928, gage height, 3.59 ft; minimum, 31 ft^3/s, April 7, 1928; minimum gage height, 0.51 ft, April 3, 1931.

Monthly and annual streamflow 1924-38

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	132	73	95	21	0.22	4.9
November	153	65	87	23	0.26	4.5
December	103	59	78	14	0.18	4.0
January	98	55	71	11	0.16	3.7
February	90	50	69	13	0.18	3.6
March	90	52	70	12	0.17	3.6
April	180	69	115	41	0.36	5.9
May	977	201	410	195	0.47	21.2
June	1070	161	514	248	0.48	26.6
July	409	89	211	94	0.45	10.9
August	185	71	115	35	0.30	5.9
September	145	70	98	23	0.24	5.1
Annual	246	106	161	41	0.26	100

Magnitude and probability of annual low flow based on period of record 1924-38

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	58	51	48	45	---	---
3	61	54	51	48	---	---
7	63	56	52	50	---	---
14	64	57	53	50	---	---
30	66	58	53	50	---	---
60	67	59	55	52	---	---
90	69	60	56	54	---	---
120	71	62	58	55	---	---
183	76	66	62	59	---	---

Magnitude and probability of instantaneous peak flow based on 16 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1120	1520	1790	2130	2380	2620

Weighted skew = -0.150

Magnitude and probability of annual high flow based on period of record 1924-38

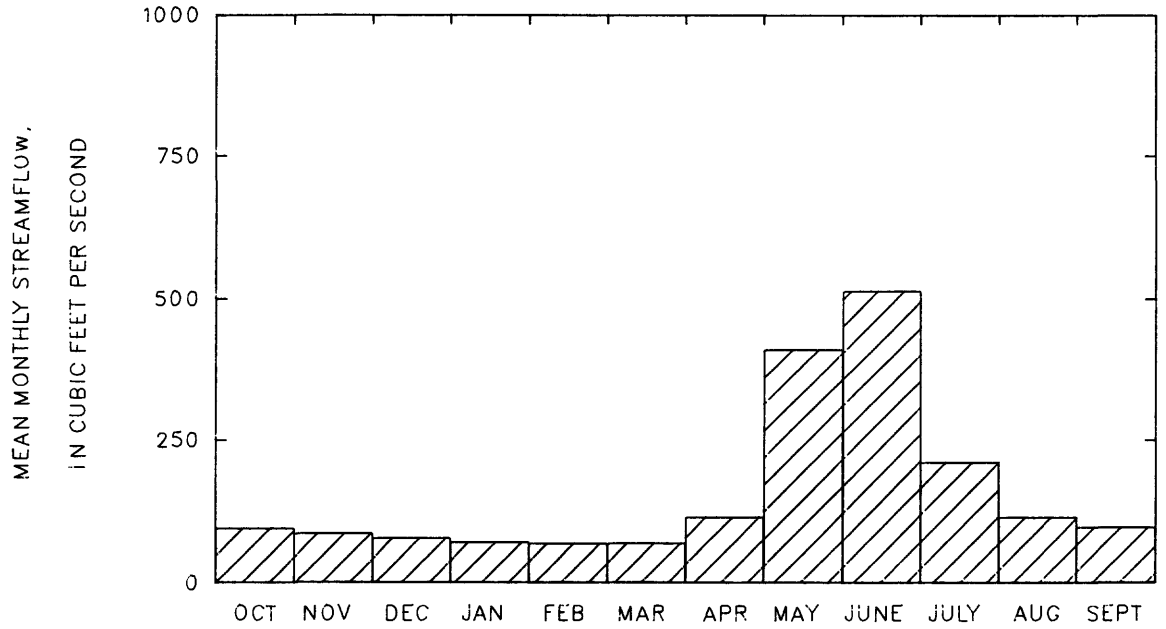
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	827	1200	1460	1820	---	---
3	783	1110	1350	1650	---	---
7	713	1020	1250	1550	---	---
15	646	932	1130	1410	---	---
30	567	803	967	1180	---	---
60	459	627	736	872	---	---
90	368	496	578	681	---	---

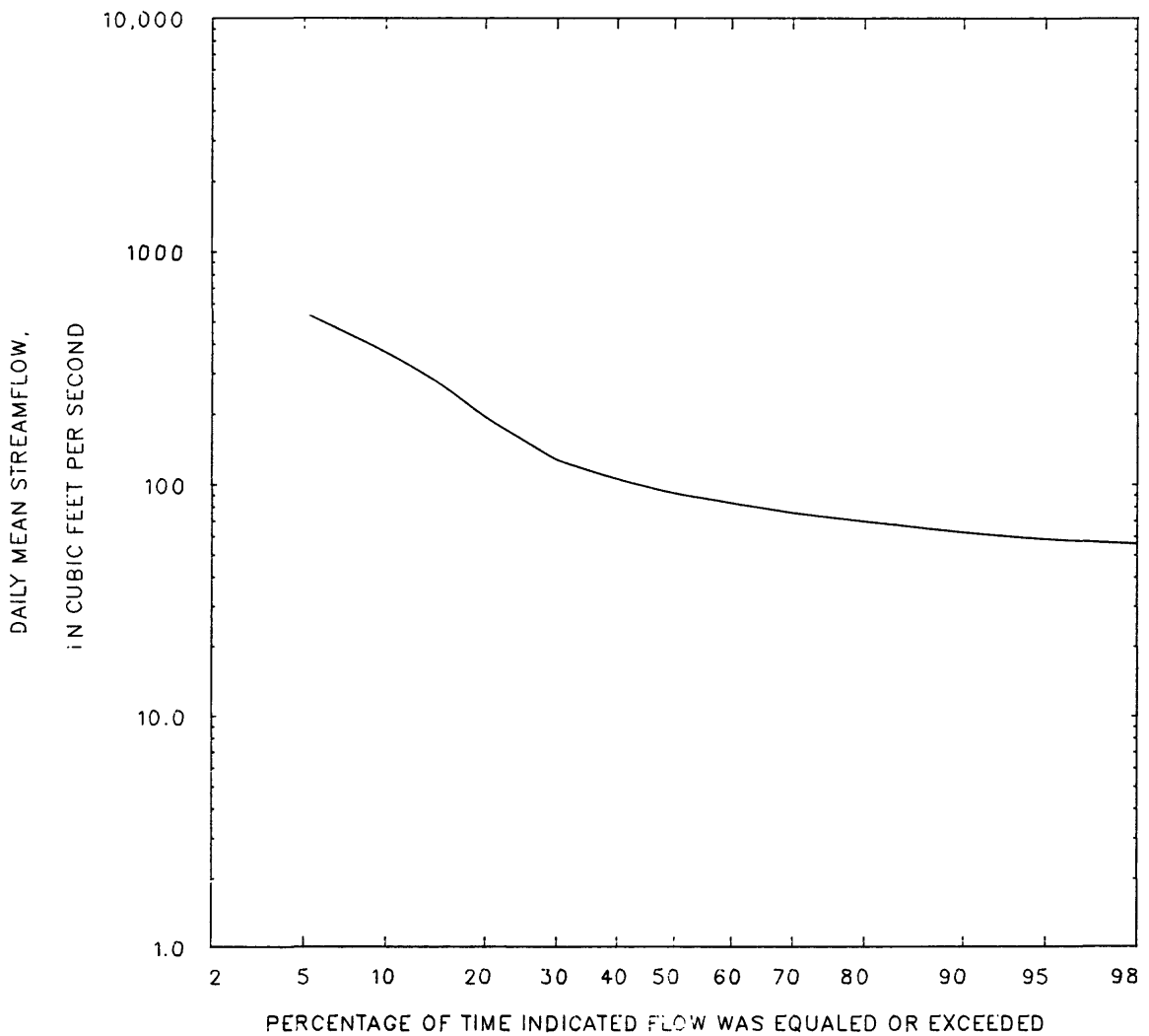
Duration of daily mean flow for period of record 1924-38

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
998	542	368	266	192	126	104	91	82	75	69	62	58	55	53	51	49

STATION 06190500 PERIOD OF RECORD 1924–38

GARDNER RIVER AT MAMMOTH, YELLOWSTONE NATIONAL PARK





06191000 GARDNER RIVER NEAR MAMMOTH, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°59'35", long 110°41'25", Park County, Yellowstone National Park, on left bank at Wyoming-Montana State line, 400 ft upstream from highway bridge, 0.5 mi down-stream from Hot River (formerly Boiling River), 1.5 mi north of Mammoth, and 3 mi upstream from mouth.

DRAINAGE AREA.--202 mi^2.

PERIOD OF RECORD.--October 1938 to September 1972. Prior to October 1959, published as Gardner River near Mammoth.

GAGE.--Water-stage recorder. Altitude of gage is 5,620 ft, from topographic map.

REMARKS.--No regulation or diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,080 ft^3/s, June 4, 1956, gage height, 4.46 ft; maximum gage height, 4.78 ft, June 16, 1962 (backwater from log and debris); minimum discharge, 35 ft^3/s, March 28, 1942, gage height, 1.08 ft.

Monthly and annual streamflow 1939-72

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	175	96	127	18	0.15	4.8
November	136	86	111	13	0.12	4.2
December	119	79	101	9.5	0.09	3.8
January	118	78	95	9.5	0.10	3.6
February	116	75	92	8.1	0.09	3.5
March	108	75	90	7.6	0.08	3.4
April	248	84	128	40	0.32	4.8
May	811	283	489	150	0.31	18.6
June	1350	349	770	272	0.35	29.2
July	662	149	327	132	0.40	12.4
August	236	104	166	35	0.21	6.3
September	190	96	139	22	0.16	5.3
Annual	313	142	220	44	0.20	100

Magnitude and probability of annual low flow based on period of record 1940-72

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	71	64	61	59	56	---
3	78	71	67	64	61	---
7	83	76	72	69	66	---
14	86	79	75	72	69	---
30	88	82	78	76	73	---
60	90	84	80	78	75	---
90	92	85	82	79	75	---
120	95	87	83	80	76	---
183	103	94	89	86	82	---

Magnitude and probability of instantaneous peak flow based on 34 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1120	1510	1760	2060	2270	2480

Weighted skew = -0.210

Magnitude and probability of annual high flow based on period of record 1939-72

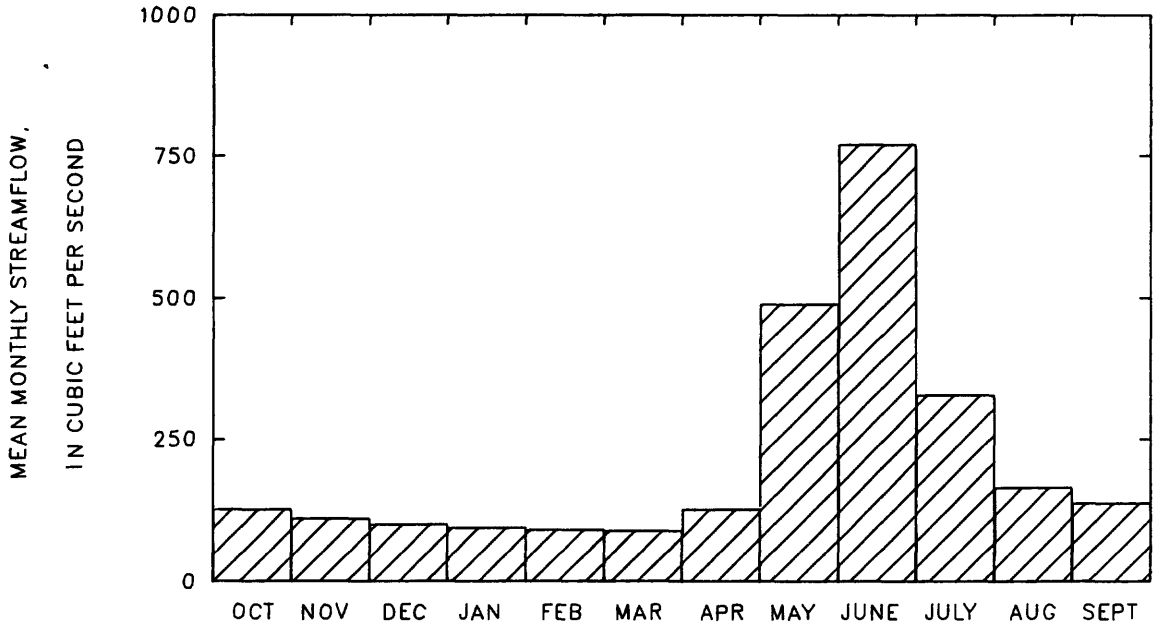
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1120	1420	1600	1820	1970	---
3	1060	1350	1530	1750	1910	---
7	997	1280	1450	1670	1820	---
15	904	1170	1340	1550	1710	---
30	801	1030	1180	1370	1510	---
60	645	826	942	1080	1190	---
90	518	658	745	850	926	---

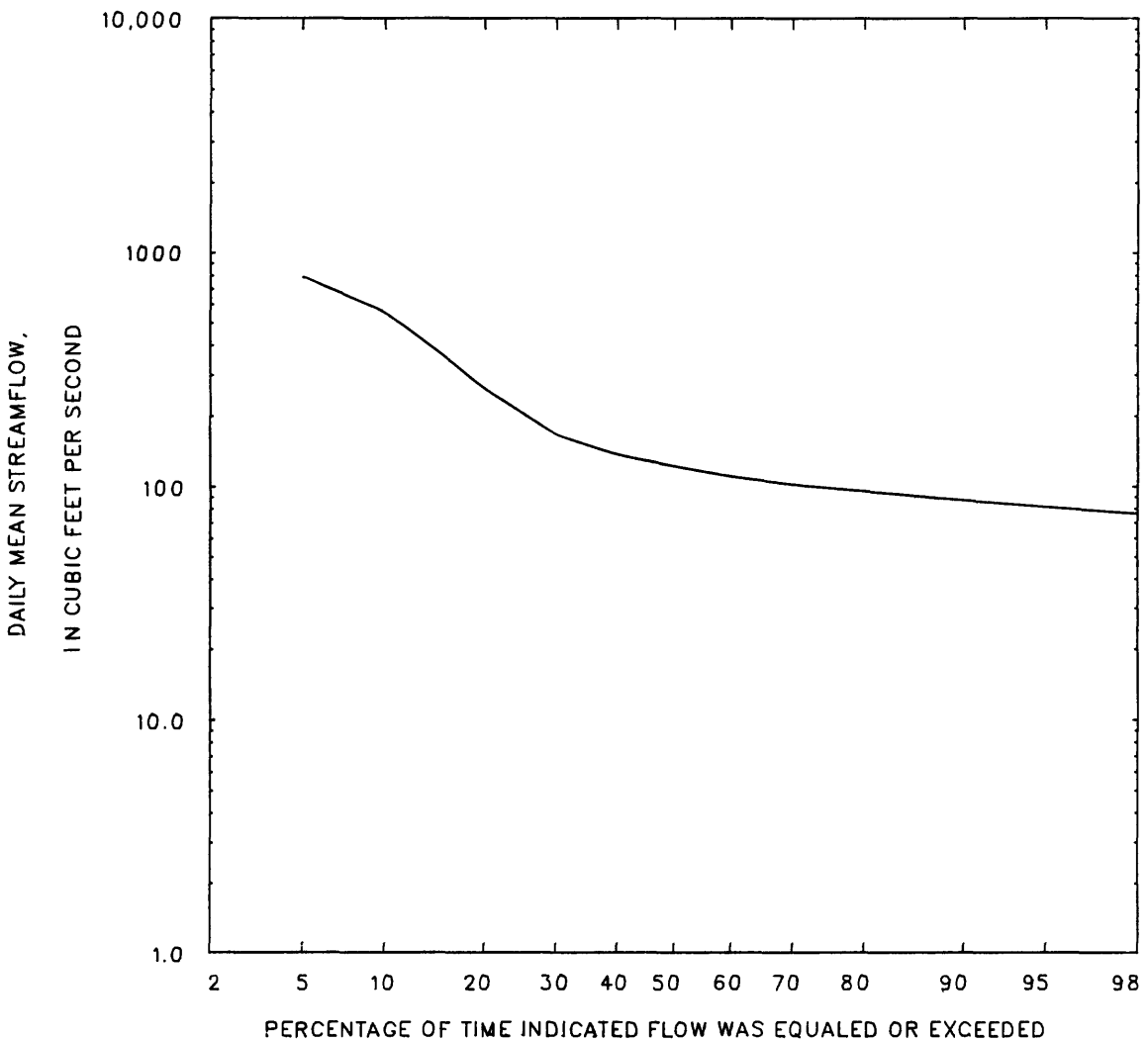
Duration of daily mean flow for period of record 1939-72

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1250	785	551	371	259	165	136	121	109	101	95	87	81	76	74	69	62

STATION 06191000 PERIOD OF RECORD 1939–72

GARDNER RIVER NEAR MAMMOTH, YELLOWSTONE NATIONAL PARK





06191500 YELLOWSTONE RIVER AT CORWIN SPRINGS, MONT.

LOCATION.--Lat 45°06'43", long 110°47'37", in NW¼SE¼NW¼ sec.30, T.8 S., R.8 E., Park County, on left bank 20 ft downstream from highway bridge at Corwin Springs, 1.3 mi upstream from Mol Herron Creek, 7 mi northwest of Gardner, and at mile 549.7.

DRAINAGE AREA.--2,623 mi^2.

PERIOD OF RECORD.--August 1889 to November 1893 (published as "at Horr"), September 1910 to current year. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 5,079.09 ft. August 12, 1889, to November 4, 1893, non-recording gages at site 2 mi upstream at different datums. September 2, 1910, to April 19, 1935, non-recording gages on bridge at present datum.

REMARKS.--Natural storage in Yellowstone Lake. Diversions for irrigation of about 960 acres of which 40 acres are below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,000 ft^3/s, June 14, 15, 1918, gage height, 11.5 ft, from rating curve extended above 18,000 ft^3/s; minimum, 389 ft^3/s, February 23, March 5, 9, 1937, gage height, 0.05 ft.

Monthly and annual streamflow 1890-93, 1911-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	2430	934	1550	391	0.25	4.1
November	2060	710	1210	278	0.23	3.2
December	1420	551	975	195	0.20	2.6
January	1230	448	850	185	0.22	2.3
February	1180	411	835	177	0.21	2.2
March	1230	412	910	182	0.20	2.4
April	2980	576	1450	495	0.34	3.9
May	13600	2580	5750	1920	0.33	15.4
June	21200	4250	11500	3450	0.30	30.8
July	13300	2030	7040	2670	0.38	18.8
August	5690	1320	3280	979	0.30	8.8
September	3210	1020	2010	488	0.24	5.4
Annual	4350	1900	3120	630	0.20	100

Magnitude and probability of annual low flow based on period of record 1891-93, 1912-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	677	538	474	425	375	344
3	696	556	492	444	393	362
7	724	585	519	468	416	383
14	755	614	546	494	438	403
30	788	646	577	522	465	428
60	820	673	600	543	481	443
90	850	702	628	570	507	467
120	891	744	670	611	547	506
183	1050	877	794	729	660	616

Magnitude and probability of instantaneous peak flow based on 77 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
17500	22000	24500	27400	29200	31000

Weighted skew = -0.400

Magnitude and probability of annual high flow based on period of record 1890-93, 1911-84

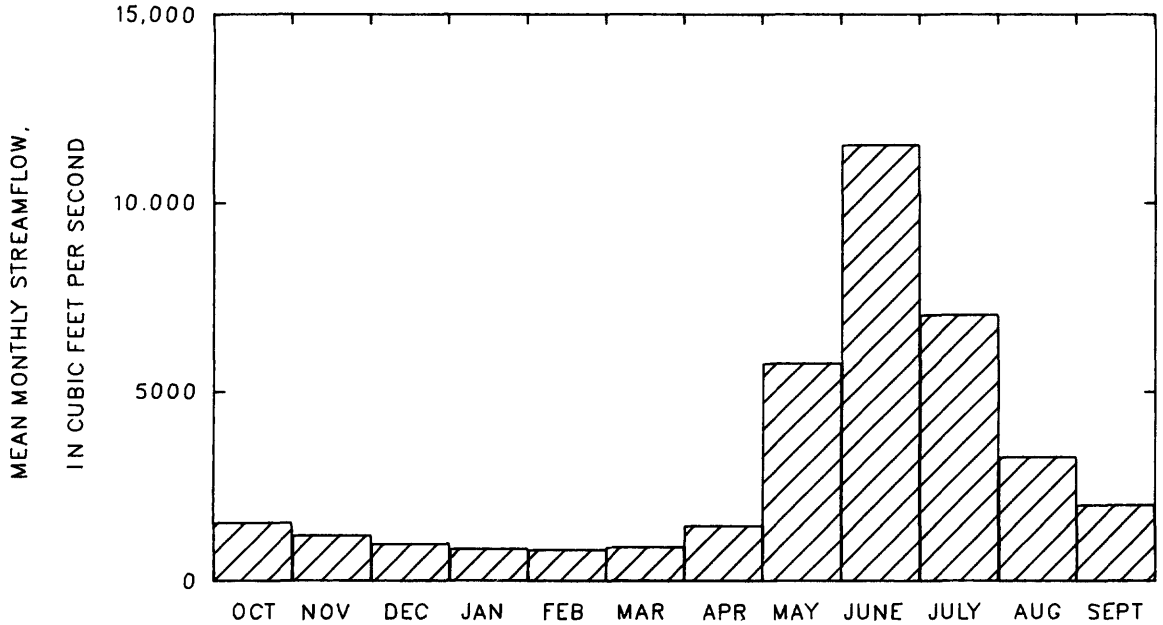
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	16300	20600	23200	26100	28200	30100
3	15400	19700	22300	25400	27600	29700
7	14400	18600	21300	24400	26700	28900
15	13200	17200	19600	22700	24900	27000
30	12000	15300	17300	19700	21400	23000
60	9960	12400	13700	15300	16300	17200
90	8250	10100	11200	12300	13100	13800

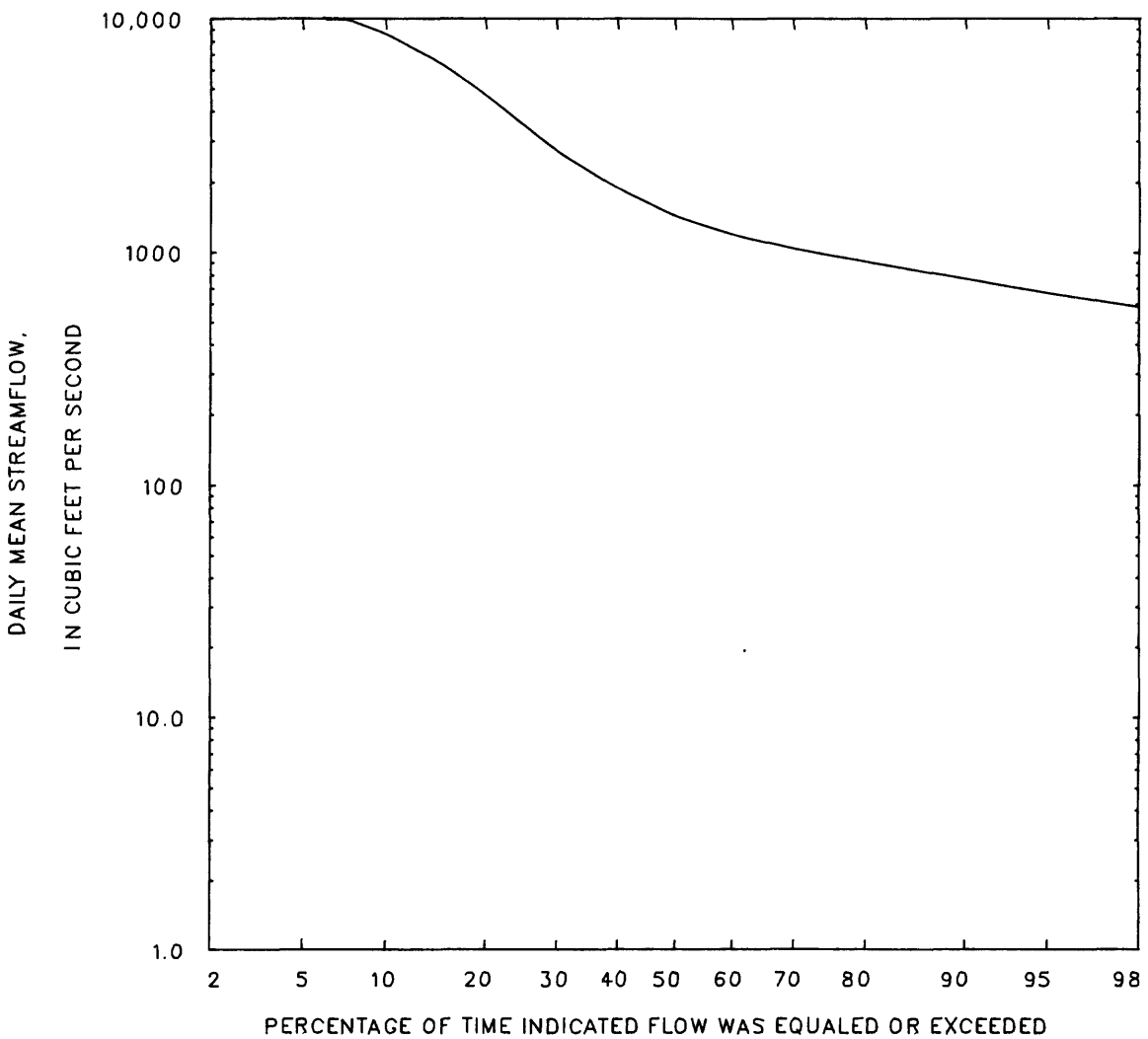
Duration of daily mean flow for period of record 1890-93, 1911-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
17800	11600	8580	6390	4690	2710	1880	1430	1190	1040	906	766	665	577	525	476	408

STATION 06191500 PERIOD OF RECORD 1890–93, 1911–84

YELLOWSTONE RIVER AT CORWIN SPRINGS, MONT.





06206500 SUNLIGHT CREEK NEAR PAINTER, WYO.

LOCATION.--Lat 44°45'00", long 109°30'20", in NE¼ sec.16, T.55 N., R. 105 W., Park County, Shoshone National Forest, on left bank 1.5 mi downstream from Painter Gulch and 4.5 mi west of Painter.

DRAINAGE AREA.--135 mi^2.

PERIOD OF RECORD.--August 1929 to September 1932, July 1945 to September 1971. Monthly discharge only for some periods; published in WSP 1309. Daily discharge for periods December 1950 to April 1951 and December 1951 to March 1952; published in WSP 1916.

GAGE.--Water-stage recorder. Altitude of gage is 6,700 ft, by barometer.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,110 ft^3/s, June 26, 1932, gage height, 4.31 ft, from rating curve extended above 1,200 ft^3/s; minimum, 8.0 ft^3/s, February 20, 1957 (discharge measurement). Maximum stage known, about 5.8 ft in 1918 (discharge, about 4,000 ft^3/s).

Monthly and annual streamflow 1930-32, 1946-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	103	27	52	20	0.39	3.4
November	63	24	35	8.8	0.25	2.3
December	45	17	26	5.6	0.22	1.7
January	37	14	21	4.9	0.23	1.4
February	30	14	20	3.9	0.20	1.3
March	32	15	21	4.0	0.19	1.4
April	100	17	41	21	0.51	2.7
May	463	80	224	93	0.42	14.8
June	929	340	554	163	0.29	36.6
July	559	105	332	118	0.35	22.0
August	220	70	121	42	0.35	8.0
September	117	36	66	23	0.34	4.3
Annual	187	89	126	26	0.21	100

Magnitude and probability of annual low flow based on period of record 1931-32, 1947-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	15	13	11	11	9.8	---
3	16	13	13	12	11	---
7	16	14	13	13	12	---
14	16	14	13	13	12	---
30	17	15	14	14	13	---
60	19	16	16	15	14	---
90	20	17	16	15	15	---
120	21	19	17	17	16	---
183	28	24	22	21	21	---

Magnitude and probability of instantaneous peak flow based on 29 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1160	1480	1710	2030	2290	2570

Weighted skew = 0.838

Magnitude and probability of annual high flow based on period of record 1930-32, 1946-71

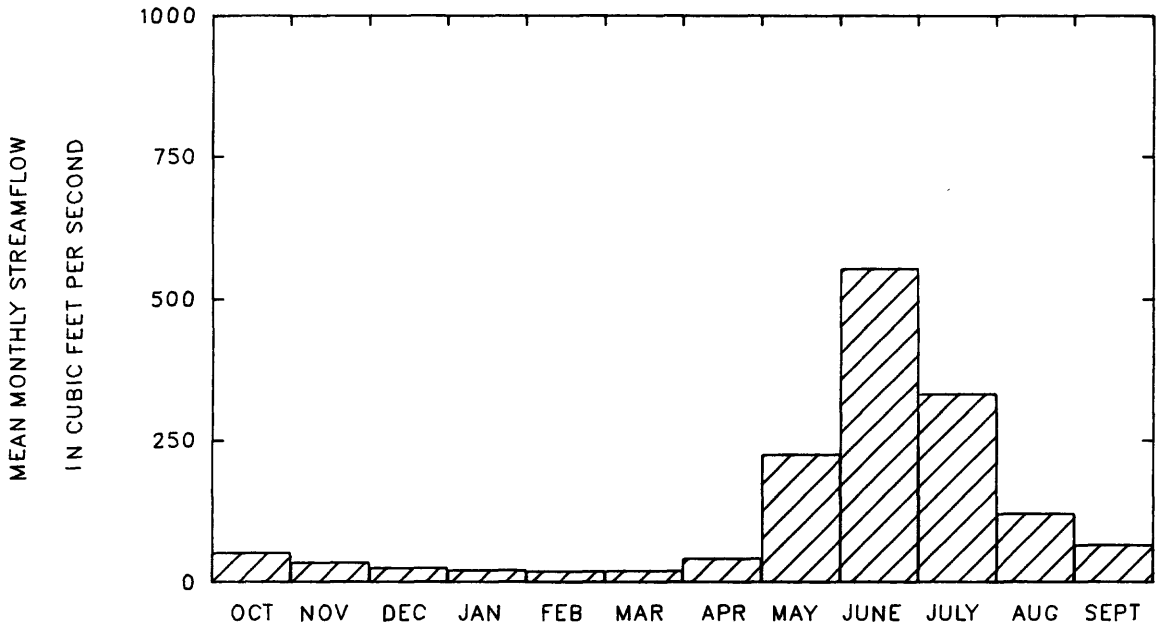
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	962	1160	1270	1390	1460	---
3	871	1080	1200	1350	1450	---
7	787	989	1110	1260	1360	---
15	691	873	983	1110	1200	---
30	588	735	826	936	1020	---
60	460	577	652	747	817	---
90	371	459	515	582	631	---

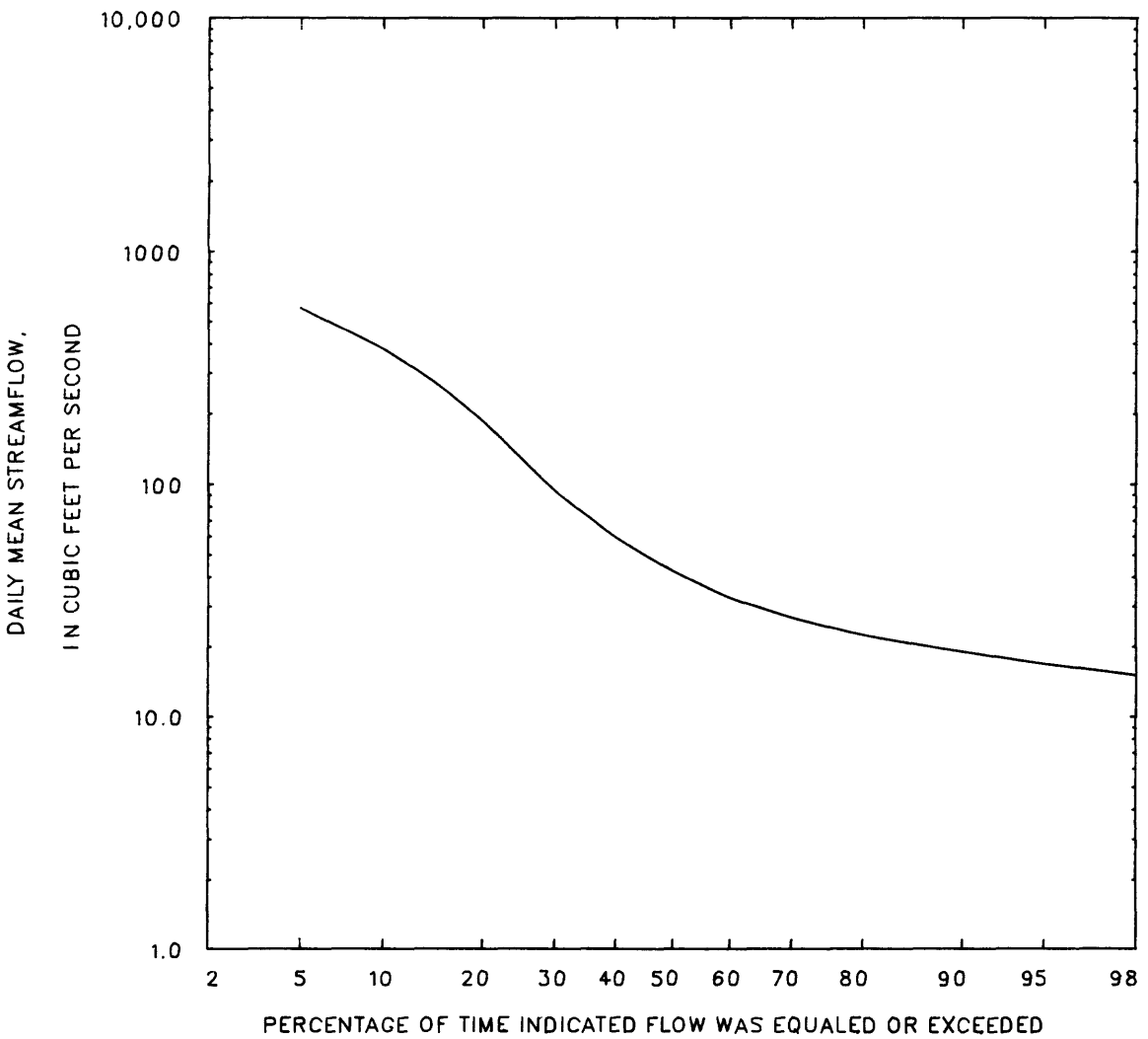
Duration of daily mean flow for period of record 1930-32, 1946-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
928	566	381	265	186	93	58	42	32	26	22	19	17	15	14	14	12

STATION 06206500 PERIOD OF RECORD 1930–32, 1946–71

SUNLIGHT CREEK NEAR PAINTER, WYO.





06207500 CLARKS FORK YELLOWSTONE RIVER NEAR BELFRY, MONT.

LOCATION.--Lat 45°00'37", long 109°03'53", in NW¼SW¼NW¼ sec.32, T.9 S., R.22 E., Carbon County, on left bank 0.2 mi upstream from county road bridge and Big Sand Coulee, 0.8 mi north of Wyoming-Montana State line, 9.5 mi southwest of Belfry, and at mile 71.2.

DRAINAGE AREA.--1,154 mi^2.

PERIOD OF RECORD.--July 1921 to current year. Monthly discharge only for some periods; published in WSP 1309. Published as Clarks Fork at Chance prior to October 1956 and as Clarks Fork Yellowstone River at Chance October 1956 to September 1968.

GAGE.--Water-stage recorder. Datum of gage is 3,986.24 ft, from levels by U.S. Army Corps of Engineers. Prior to November 15, 1934, non-recording gage, and November 15, 1934, to July 26, 1951, water-stage recorder at bridge 0.4 mi downstream at different datum. July 27, 1951, to September 30, 1953, water-stage recorder at present site at datum 0.98 ft higher.

REMARKS.--Diversions for irrigation of about 11,100 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft^3/s, June 9, 1981, gage height, 9.97 ft; minimum 32 ft^3/s, April 26, 1961, result of discharge measurement.

Monthly and annual streamflow 1922-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	725	62	298	150	0.51	2.6
November	648	149	300	90	0.30	2.6
December	379	110	263	55	0.21	2.3
January	345	110	232	47	0.20	2.0
February	329	100	224	45	0.20	2.0
March	364	96	217	43	0.20	1.9
April	1170	111	408	207	0.51	3.6
May	5700	839	2000	856	0.43	17.5
June	6630	2460	4150	1050	0.25	36.4
July	5740	469	2320	1100	0.47	20.3
August	1450	142	651	312	0.48	5.7
September	834	104	345	161	0.47	3.0
Annual	1460	547	952	203	0.21	100

Magnitude and probability of annual low flow based on period of record 1923-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	131	94	75	61	47	39
3	139	99	79	64	49	40
7	152	110	88	71	54	44
14	160	118	96	79	62	51
30	176	132	110	92	74	64
60	199	155	132	113	94	82
90	211	173	154	139	122	112
120	224	189	172	159	144	135
183	250	209	191	177	162	153

Magnitude and probability of instantaneous peak flow based on 62 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
7710	9410	10400	11700	12500	13300

Weighted skew = -0.020

Magnitude and probability of annual high flow based on period of record 1922-84

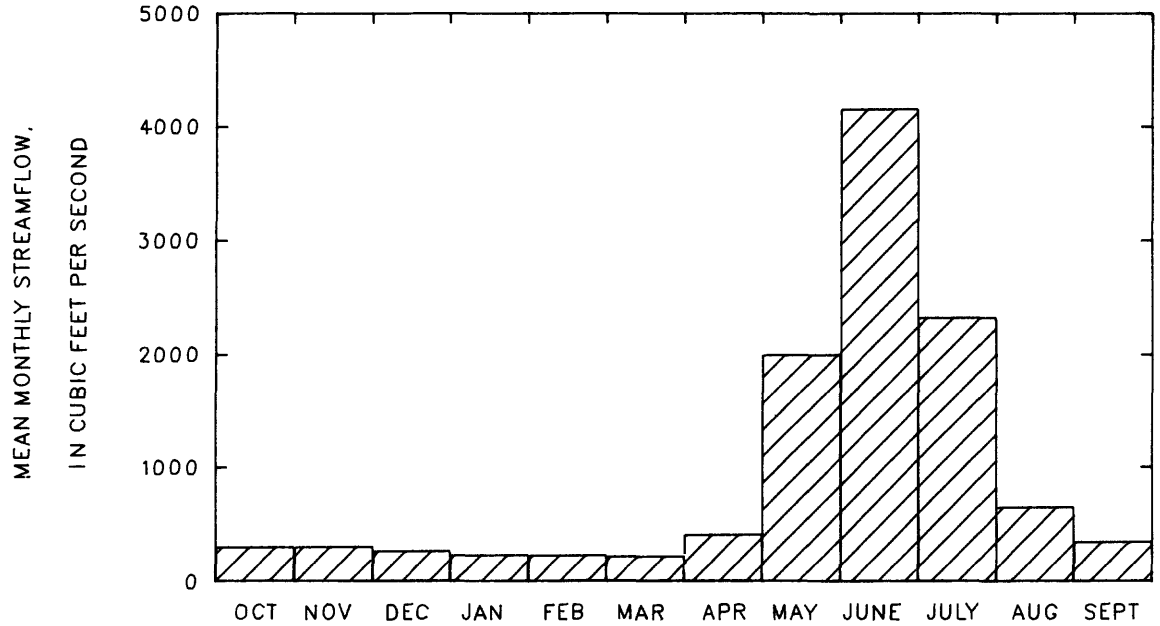
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	7110	8630	9560	10700	11500	12300
3	6670	8070	8920	9940	10700	11400
7	6030	7420	8290	9320	10100	10800
15	5240	6560	7380	8390	9110	9820
30	4530	5560	6170	6900	7410	7900
60	3600	4360	4800	5300	5640	5960
90	2840	3450	3800	4210	4480	4740

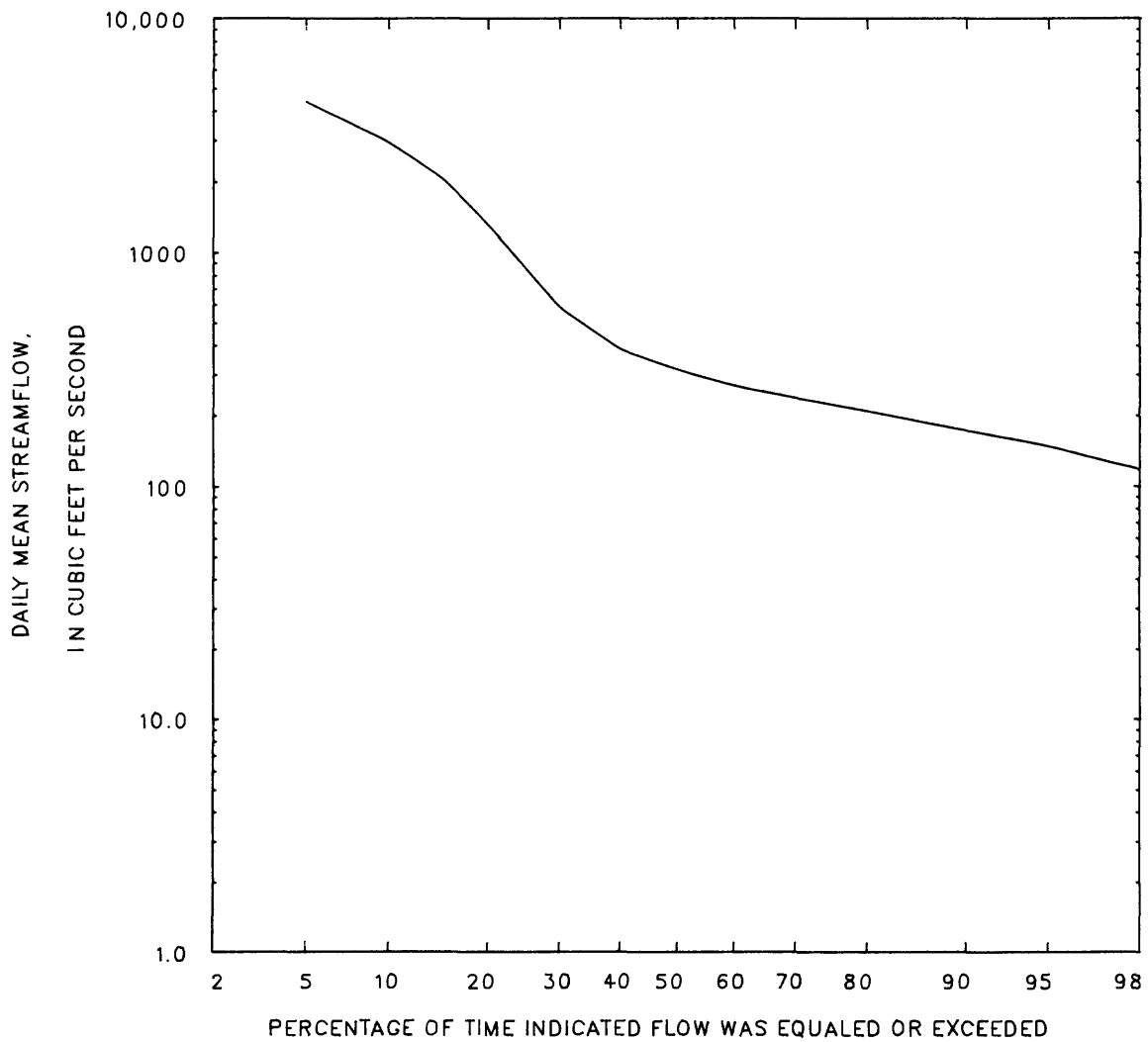
Duration of daily mean flow for period of record 1922-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
7010	4350	2950	2050	1310	582	383	313	267	237	207	172	147	117	100	84	53

STATION 06207500 PERIOD OF RECORD 1922–84

CLARKS FORK YELLOWSTONE RIVER NEAR BELFRY, MONT.





06218500 WIND RIVER NEAR DUBOIS, WYO.

LOCATION.--Lat 43°34'43", long 109°45'33", in NW¼NE¼ sec.25, T.42 N., R.108 W., Fremont County, on left bank 2.5 mi upstream from Warm Springs Creek and 6.7 mi northwest of Dubois.

DRAINAGE AREA.--232 mi^2.

PERIOD OF RECORD.--October 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,188.71 ft, from levels by Bureau of Reclamation.

REMARKS.--Diversions above station for irrigation of about 2,300 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,940 ft^3/s, June 8, 1972, gage-height, 5.48 ft; maximum gage height, 5.66 ft, June 2, 1956; minimum daily discharge, 26 ft^3/s, February 5, 1982.

Monthly and annual streamflow 1946-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	151	57	88	21	0.24	4.1
November	103	40	71	14	0.20	3.3
December	88	41	64	13	0.20	3.0
January	88	38	58	13	0.22	2.7
February	78	39	57	8.9	0.16	2.7
March	105	43	61	10	0.17	2.9
April	192	56	100	30	0.30	4.7
May	628	160	367	126	0.34	17.2
June	1180	238	684	240	0.35	32.0
July	796	66	340	178	0.52	15.9
August	290	57	145	54	0.37	6.8
September	160	52	101	26	0.26	4.7
Annual	280	90	178	42	0.24	100

Magnitude and probability of annual low flow based on period of record 1947-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	41	35	31	29	27	---
3	43	36	33	31	28	---
7	45	39	36	33	30	---
14	48	41	38	35	32	---
30	51	44	41	38	35	---
60	54	47	44	41	39	---
90	56	49	46	43	40	---
120	59	51	47	44	41	---
183	66	57	53	50	47	---

Magnitude and probability of instantaneous peak flow based on 39 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1230	1540	1710	1910	2050	2180

Weighted skew = -0.275

Magnitude and probability of annual high flow based on period of record 1946-84

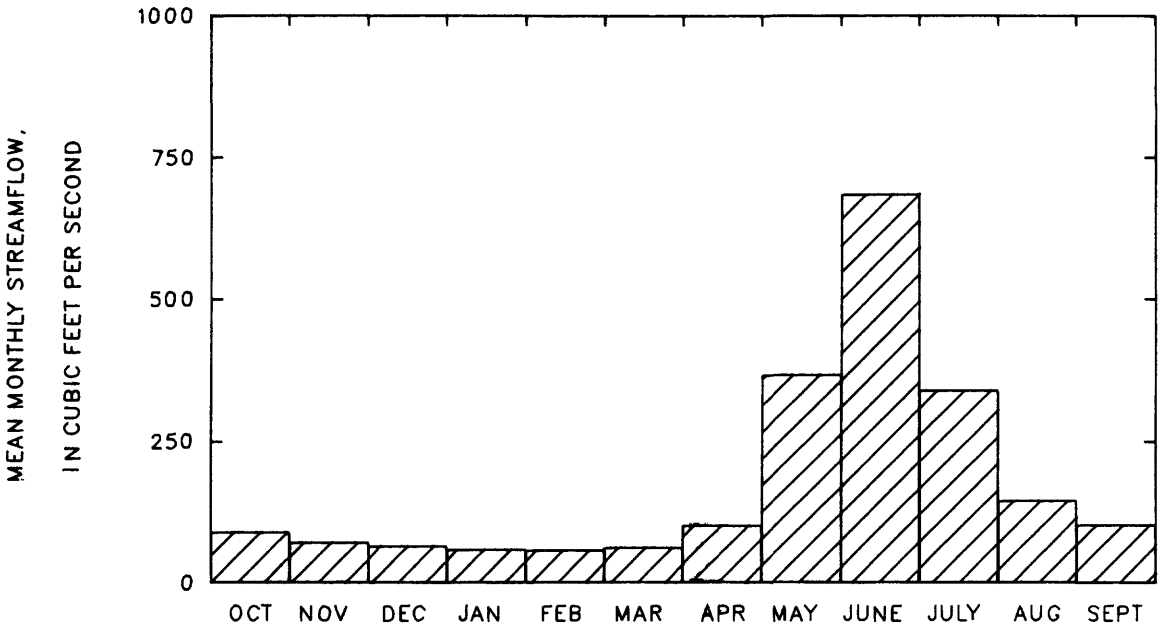
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1110	1410	1580	1780	1910	---
3	1040	1330	1510	1720	1860	---
7	944	1240	1420	1640	1800	---
15	840	1110	1270	1460	1600	---
30	739	957	1080	1200	1280	---
60	586	749	837	931	990	---
90	469	598	668	741	788	---

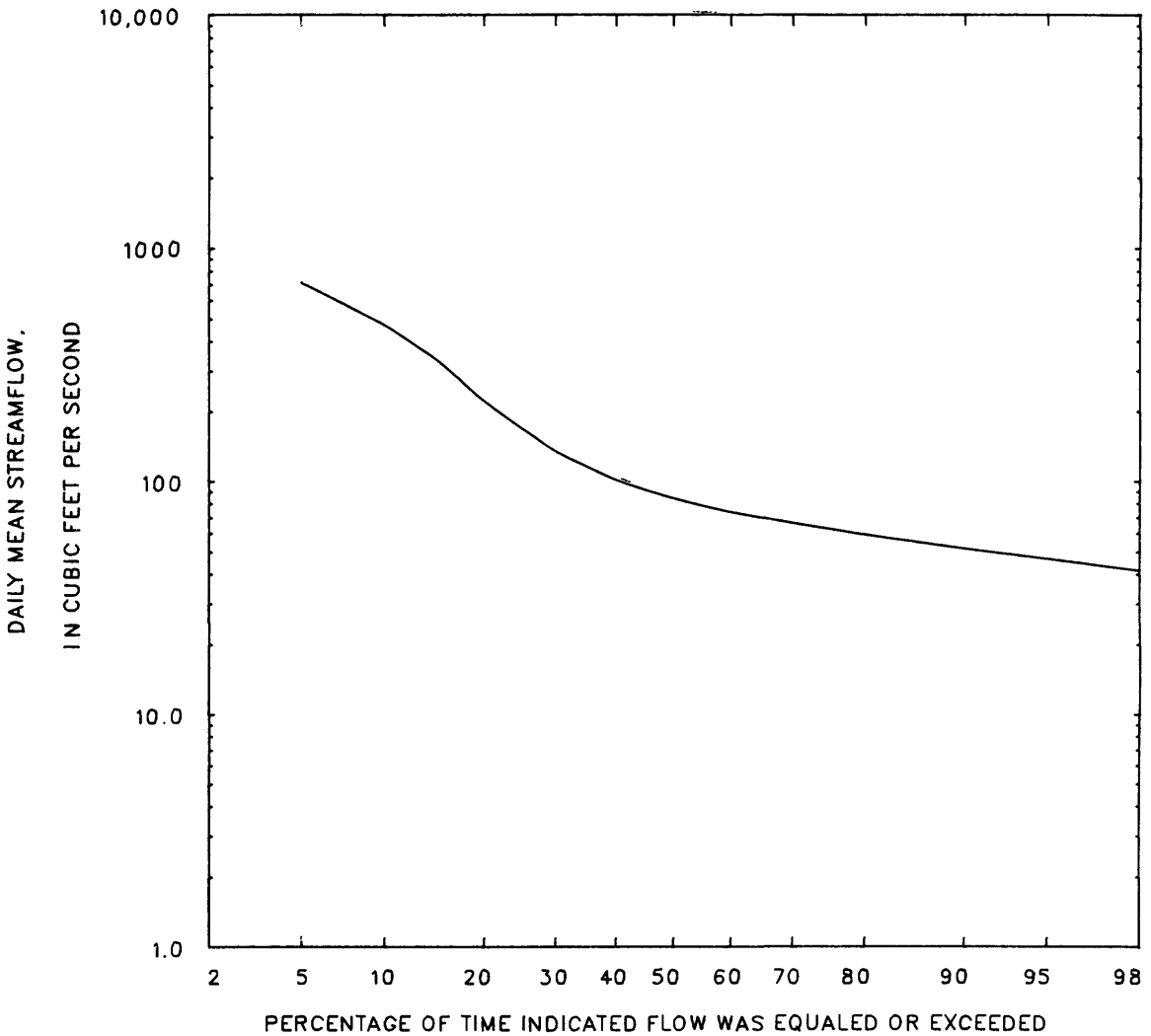
Duration of daily mean flow for period of record 1946-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1150	711	475	330	221	134	100	84	73	66	58	51	46	41	39	36	32

STATION 06218500 PERIOD OF RECORD 1946–84

WIND RIVER NEAR DUBOIS, WYO.





06220500 EAST FORK WIND RIVER NEAR DUBOIS, WYO.

LOCATION.--Lat 43°27'16", long 109°27'57", in SE¼SW¼NW¼ sec.34, T.6 N., R.6 W., Fremont County, Wind River Indian Reservation, on left bank 1.0 mi upstream from mouth and 9.9 mi southeast of Dubois.

DRAINAGE AREA.--427 mi^2.

PERIOD OF RECORD.--April 1950 to September 1957, October 1975 to current year. Prior to October 1953, published as North Fork Wind River near Dubois.

GAGE.--Water-stage recorder. Altitude of gage is 6,440 ft, from topographic map. Prior to September 30, 1957, at site 50 ft upstream at same datum.

REMARKS.--Diversions for irrigation of about 2,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,980 ft^3/s, June 9, 1981, gage height, 7.69 ft, from rating curve extended above 2,600 ft^3/s; maximum gage height, 9.27 ft, June 30, 1957; minimum daily discharge, 18 ft^3/s, January 9, 1977.

Monthly and annual streamflow 1951-57, 1976-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	200	53	98	39	0.40	3.1
November	112	39	62	17	0.27	2.0
December	88	35	54	14	0.27	1.7
January	69	27	49	12	0.25	1.6
February	67	31	49	11	0.22	1.6
March	73	40	54	9.1	0.17	1.7
April	353	64	148	80	0.54	4.7
May	1160	215	570	260	0.46	18.2
June	1760	511	1110	380	0.34	35.7
July	1280	114	608	331	0.55	19.4
August	461	66	204	102	0.50	6.5
September	186	54	115	41	0.36	3.7
Annual	414	126	261	76	0.29	100

Magnitude and probability of annual low flow based on period of record 1952-57, 1977-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	33	27	23	21	---	---
3	35	28	25	22	---	---
7	36	30	26	23	---	---
14	39	32	28	25	---	---
30	42	34	30	27	---	---
60	45	37	33	30	---	---
90	47	39	35	32	---	---
120	49	41	37	33	---	---
183	58	50	45	42	---	---

Magnitude and probability of instantaneous peak flow based on 17 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
3780	5090	5880	6800	7440	8040

Weighted skew = -0.342

Magnitude and probability of annual high flow based on period of record 1951-57, 1976-84

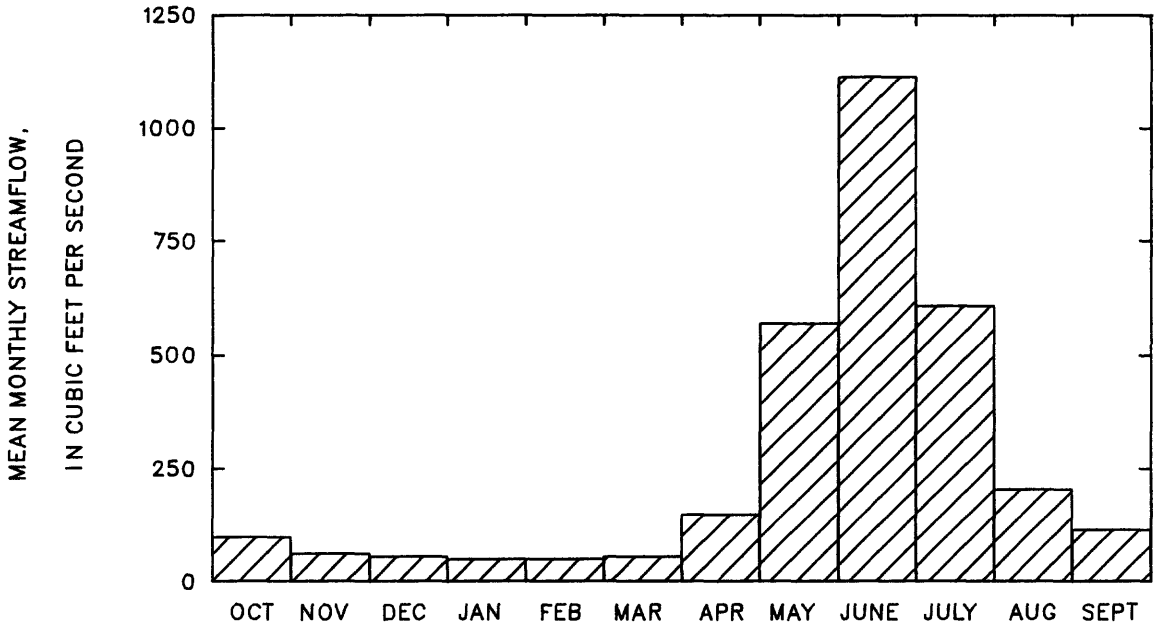
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2450	3210	3610	4020	---	---
3	2160	2850	3210	3600	---	---
7	1820	2440	2810	3240	---	---
15	1520	2050	2360	2730	---	---
30	1220	1650	1900	2180	---	---
60	967	1280	1440	1600	---	---
90	783	1030	1160	1300	---	---

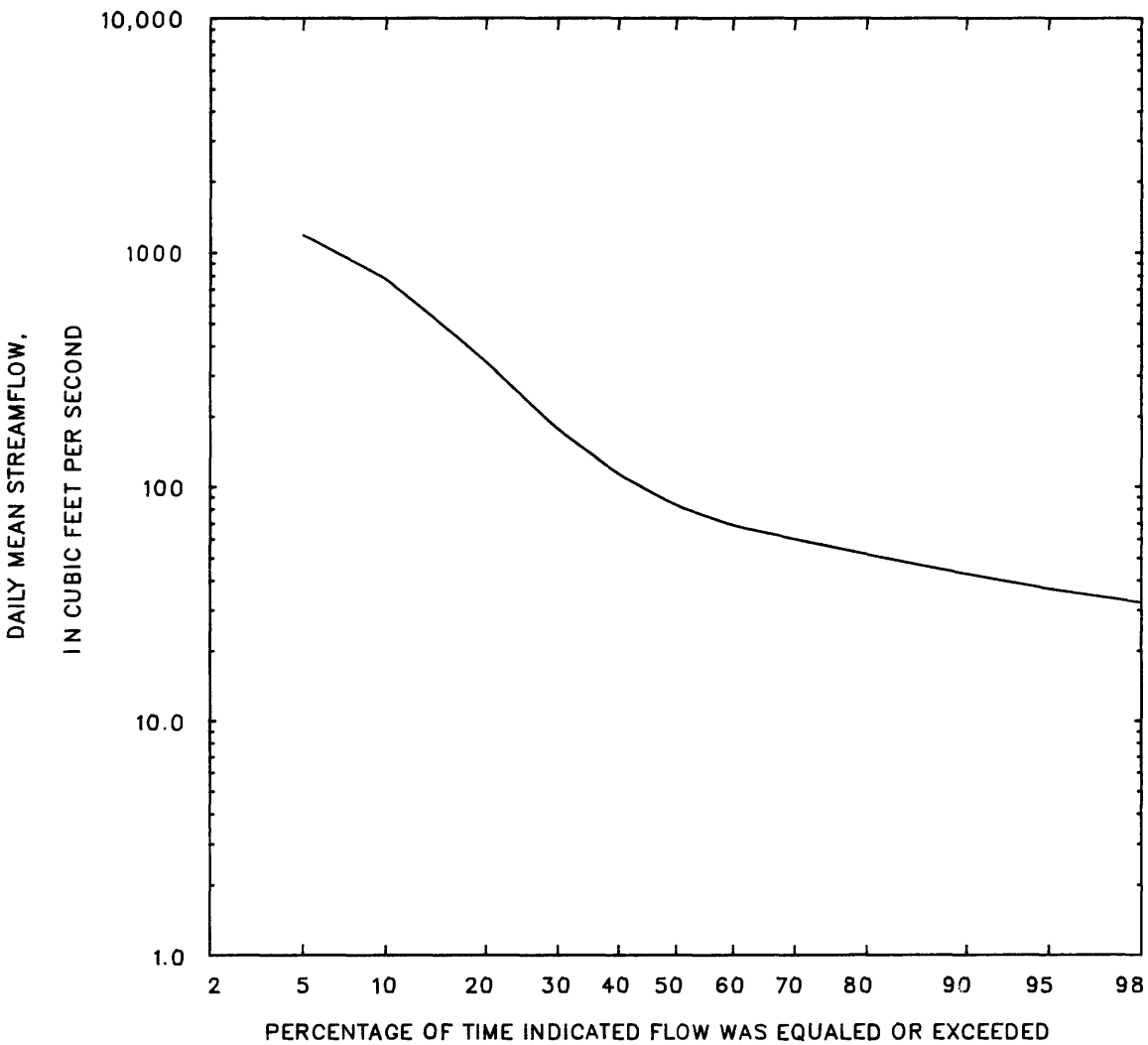
Duration of daily mean flow for period of record 1951-57, 1976-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2210	1180	769	496	341	174	112	82	68	59	51	42	36	32	30	28	21

STATION 06220500 PERIOD OF RECORD 1951–57, 1976–84

EAST FORK WIND RIVER NEAR DUBOIS, WYO.





06221400 DINWOODY CREEK ABOVE LAKES, NEAR BURRIS, WYO.

LOCATION.--Lat 43°20'44", long 109°24'34", in SE¼SE¼ sec. 1, T.4N., R.6 W., Fremont County, Wind River Indian Reservation, on left bank 0.5 mi upstream from Upper Dinwoody Lake, 7.0 mi west of Burris, and 17 mi southeast of Dubois.

DRAINAGE AREA.--88.2 mi^2.

PERIOD OF RECORD.--October 1957 to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 6,500 ft, from topographic map.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,450 ft^3/s, July 25, 1977, gage height, 4.44 ft; minimum daily, 1.0 ft^3/s, January 9, 1977.

Monthly and annual streamflow 1958-78

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	73	25	43	13	0.29	2.5
November	41	9.7	20	6.9	0.34	1.2
December	23	3.8	12	4.6	0.37	0.7
January	19	1.5	8.6	3.8	0.44	0.5
February	13	2.1	7.7	2.8	0.36	0.5
March	14	2.3	8.5	2.5	0.29	0.5
April	60	8.5	17	12	0.67	1.0
May	299	71	157	60	0.38	9.3
June	739	315	467	113	0.24	27.5
July	794	350	498	106	0.21	29.3
August	406	255	325	43	0.13	19.1
September	250	59	133	40	0.30	7.8
Annual	179	112	142	16	0.11	100

Magnitude and probability of annual low flow based on period of record 1959-78

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	4.8	2.9	2.1	1.5	---	---
3	5.0	3.0	2.2	1.6	---	---
7	5.4	3.3	2.5	1.9	---	---
14	5.8	3.7	2.8	2.1	---	---
30	6.6	4.1	3.0	2.3	---	---
60	7.5	4.8	3.6	2.7	---	---
90	8.4	5.6	4.3	3.3	---	---
120	9.6	6.5	5.0	3.9	---	---
183	17	13	12	11	---	---

Magnitude and probability of instantaneous peak flow based on 21 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
945	1120	1240	1370	1470	1570

Weighted skew = 0.240

Magnitude and probability of annual high flow based on period of record 1958-78

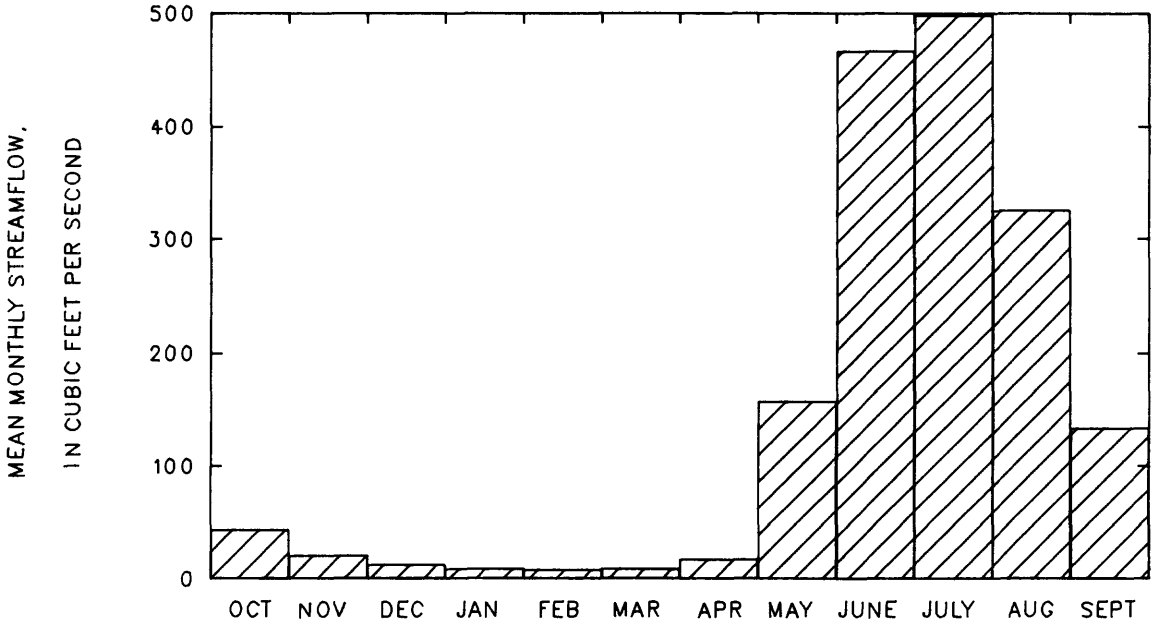
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	849	997	1080	1160	---	---
3	773	896	960	1030	---	---
7	706	832	902	977	---	---
15	629	759	839	935	---	---
30	566	667	725	790	---	---
60	498	571	611	657	---	---
90	441	496	527	562	---	---

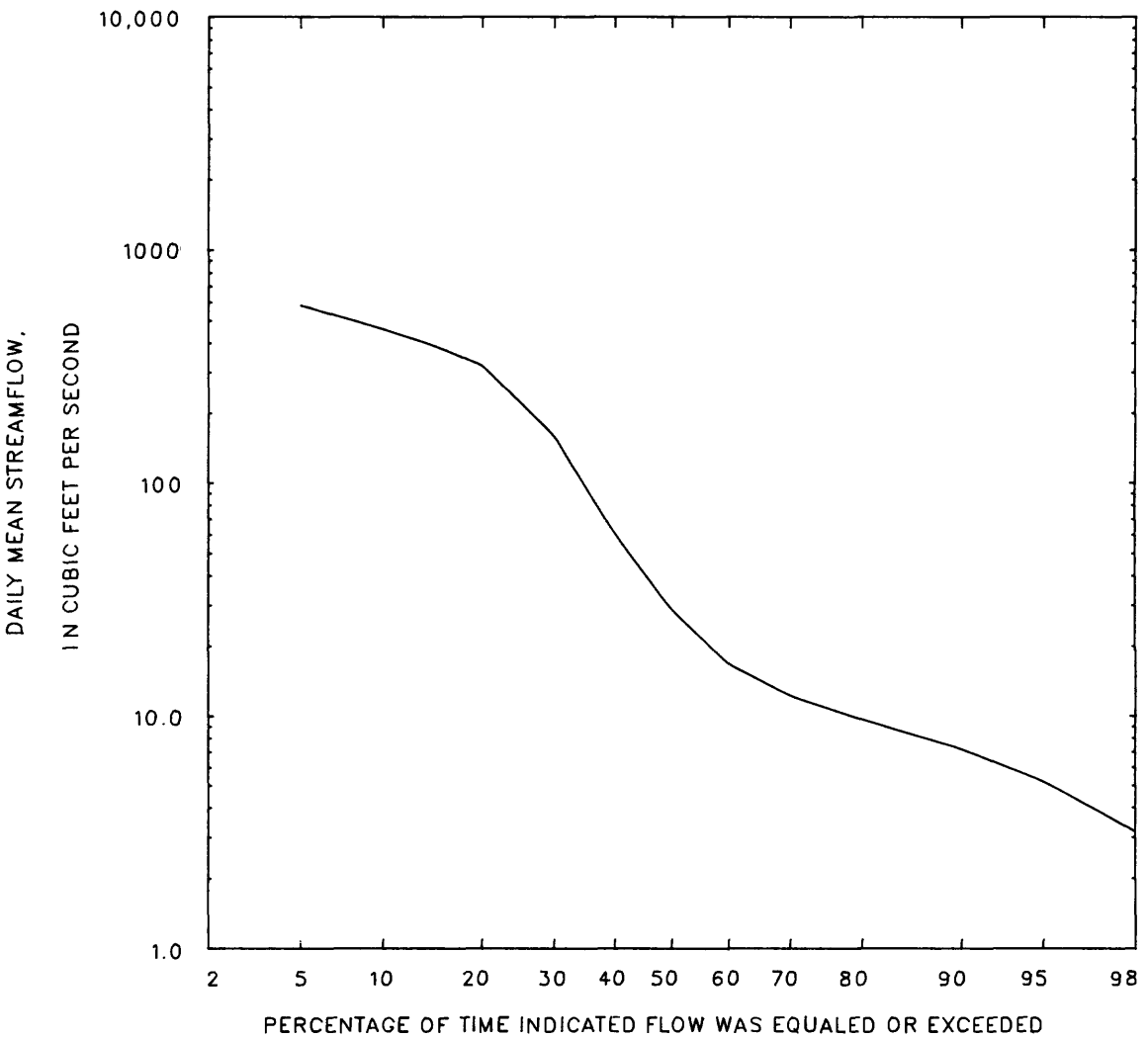
Duration of daily mean flow for period of record 1958-78

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
815	577	458	382	319	159	60	28	17	12	9.6	7.1	5.2	3.2	2.4	1.9	1.4

STATION 06221400 PERIOD OF RECORD 1958–78

DINWOODY CREEK ABOVE LAKES, NEAR BURRIS, WYO.





06221500 DINWOODY CREEK NEAR BURRIS, WYO.

LOCATION.--Lat 43°25'55", long 109°21'01", in NE¼NE¼ sec.9, T.5 N., R.5 W., Fremont County, on left bank 1,000 ft upstream from mouth and 6 mi northwest of Burris.

DRAINAGE AREA.--100 mi^2.

PERIOD OF RECORD.--May to October 1909 (gage height only for May, monthly discharge only June to October) May 1918 to July 1930, April 1950 to September 1958; published as "near Crowheart," 1909 and as "near Lenore," 1918-24.

GAGE.--Water-stage recorder. Datum of gage is 6,196.63 ft. May 17 to October 30, 1909, chain gage at same site and datum.

REMARKS.--Diversions above station for irrigation of about 1,700 acres below station since 1936. Natural regulation by Dinwoody Lake and other small lakes.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,710 ft^3/s, July 25, 1923, gage height, 3.75 ft; no flow May 8-13, 1955.

Monthly and annual streamflow 1919-29, 1951-58

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	118	4.3	51	27	0.53	3.0
November	54	15	27	11	0.39	1.6
December	38	9.1	19	7.2	0.38	1.1
January	23	6.8	15	4.3	0.29	0.9
February	21	7.1	14	4.0	0.28	0.9
March	22	6.3	14	3.9	0.28	0.9
April	36	9.5	18	6.6	0.37	1.1
May	297	11	148	76	0.51	8.9
June	825	187	396	156	0.39	23.8
July	902	202	516	171	0.33	31.0
August	592	111	324	126	0.39	19.5
September	264	14	122	83	0.68	7.3
Annual	190	66	140	37	0.26	100

Magnitude and probability of annual low flow based on period of record 1920-30, 1952-58

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	6.7	1.0	0.28	0.10	---	---
3	8.0	1.1	0.36	0.12	---	---
7	9.3	2.1	0.65	0.19	---	---
14	9.3	3.9	2.1	1.2	---	---
30	11	6.7	4.7	3.4	---	---
60	13	9.7	8.3	7.2	---	---
90	14	10	8.8	7.6	---	---
120	15	11	9.6	8.3	---	---
183	22	15	13	11	---	---

Magnitude and probability of instantaneous peak flow based on 22 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
999	1220	1350	1510	1630	1740

Weighted skew = 0.040

Magnitude and probability of annual high flow based on period of record 1919-29, 1951-58

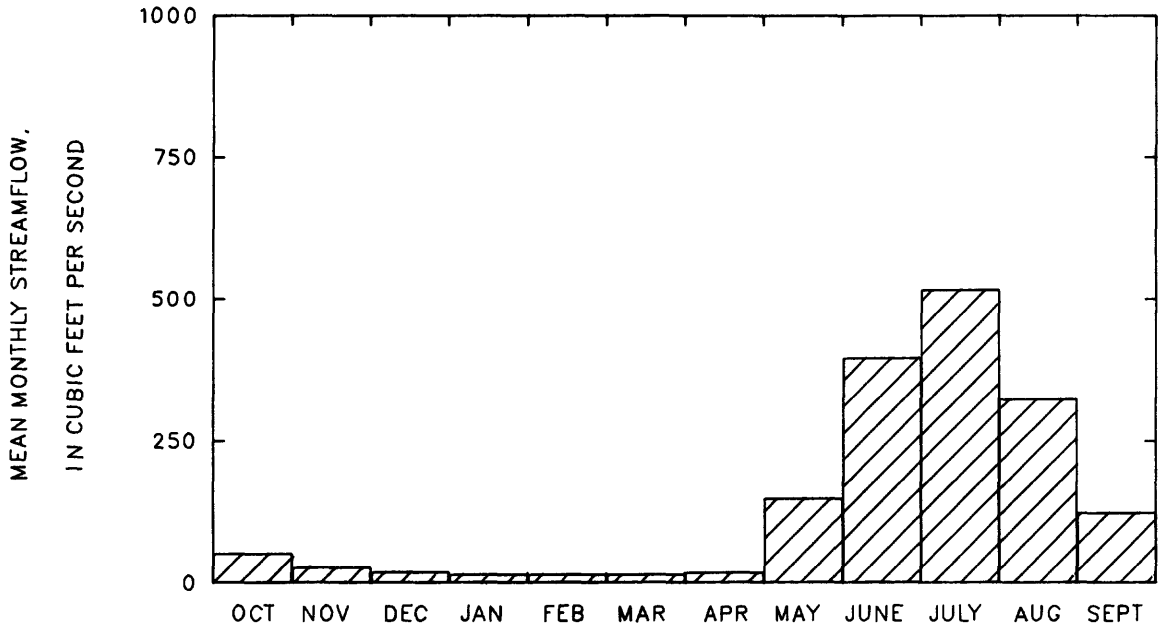
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	912	1140	1290	1500	---	---
3	842	1040	1180	1360	---	---
7	750	921	1040	1200	---	---
15	665	813	906	1020	---	---
30	600	741	813	886	---	---
60	506	615	666	714	---	---
90	438	530	573	614	---	---

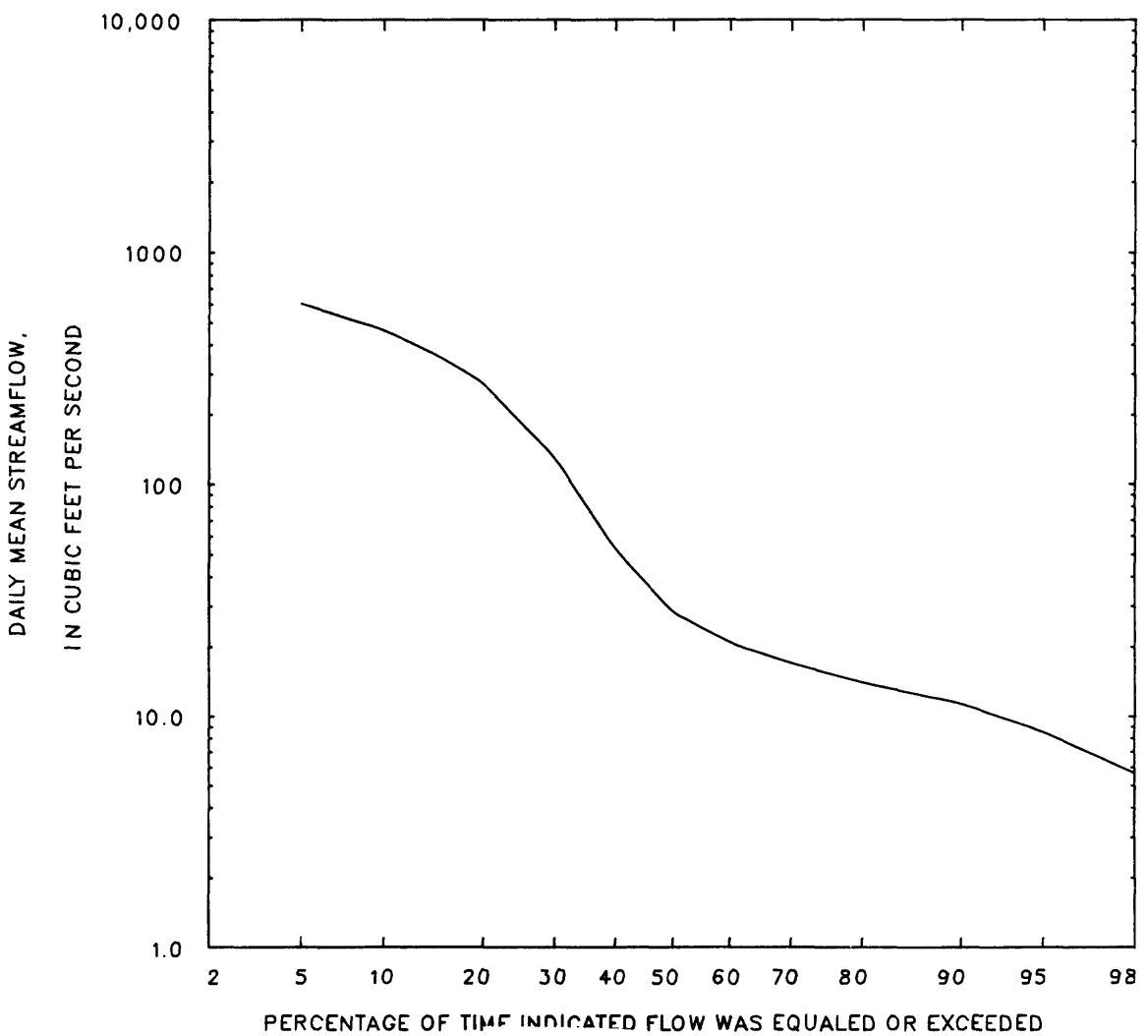
Duration of daily mean flow for period of record 1919-29, 1951-58

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
887	599	464	359	273	130	52	28	21	17	14	11	8.5	5.6	3.7	1.2	0.21

STATION 06221500 PERIOD OF RECORD 1919–29, 1951–58

DINWOODY CREEK NEAR BURRIS, WYO.





06222500 DRY CREEK NEAR BURRIS, WYO.

LOCATION.--Lat 43°20'10", long 109°18'20", in SW¼ sec.12, T. 4 N., R. 5 W., Fremont County, 0.50 mi upstream from Dry Creek ditch and 2.5 mi southwest of Burris.

DRAINAGE AREA.--57 mi^2, approximately.

PERIOD OF RECORD.--June 1921 to September 1940. Published as "at Crowheart," 1909 and "near Lenore," 1921-24.

SUPPLEMENTAL RECORDS AVAILABLE--January to October 1909, gage heights and discharge measurements only at site 1.5 mi downstream.

GAGE.--Water-stage recorder. Altitude of gage is 6,480 ft, from topographic map. May 19, 1921, to November 5, 1934, water-stage recorder at site 50 ft downstream at datum 1.07 ft higher.

REMARKS.--Diversions above station for irrigation of about 100 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,400 ft^3/s, about June 12, 1921, gage height, 3.9 ft, from floodmark, site and datum then in use, from rating curve extended above 580 ft^3/s; no flow March 1 to April 11, 1934.

Monthly and annual streamflow 1922-36, 1938-40

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	50	5.2	19	14	0.72	3.5
November	25	1.8	11	7.5	0.65	2.1
December	15	0.55	6.6	4.4	0.67	1.2
January	10	0.30	4.6	3.1	0.66	0.9
February	7.0	0.20	3.1	2.1	0.68	0.6
March	10	0.00	3.3	2.2	0.69	0.6
April	26	0.88	9.3	6.3	0.68	1.7
May	162	30	86	35	0.40	16.1
June	343	51	187	80	0.43	34.8
July	212	34	116	48	0.42	21.5
August	164	19	60	31	0.52	11.2
September	65	12	31	15	0.50	5.8
Annual	68	20	45	13	0.29	100

Magnitude and probability of annual low flow based on period of record 1923-36, 1939-40

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.7	0.00	0.00	0.00	---	---
3	1.7	0.00	0.00	0.00	---	---
7	1.7	0.00	0.00	0.00	---	---
14	2.1	0.56	0.00	0.00	---	---
30	2.3	1.1	0.00	0.00	---	---
60	3.1	1.3	0.62	0.31	---	---
90	3.5	1.5	0.80	0.43	---	---
120	4.3	1.9	1.0	0.59	---	---
183	7.2	3.7	2.5	1.8	---	---

Magnitude and probability of instantaneous peak flow based on 19 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
418	698	905	1190	1410	1640

Weighted skew = -0.140

Magnitude and probability of annual high flow based on period of record 1922-36, 1938-40

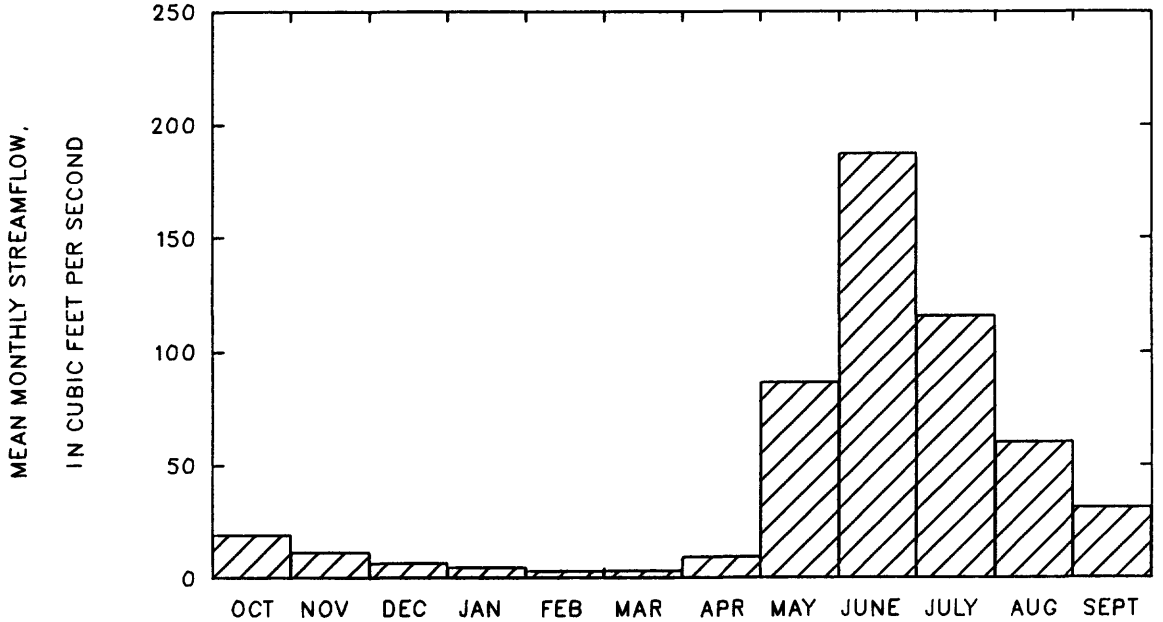
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	347	528	642	779	---	---
3	315	461	546	643	---	---
7	270	388	457	534	---	---
15	227	323	378	441	---	---
30	197	270	311	356	---	---
60	165	216	240	263	---	---
90	140	178	195	209	---	---

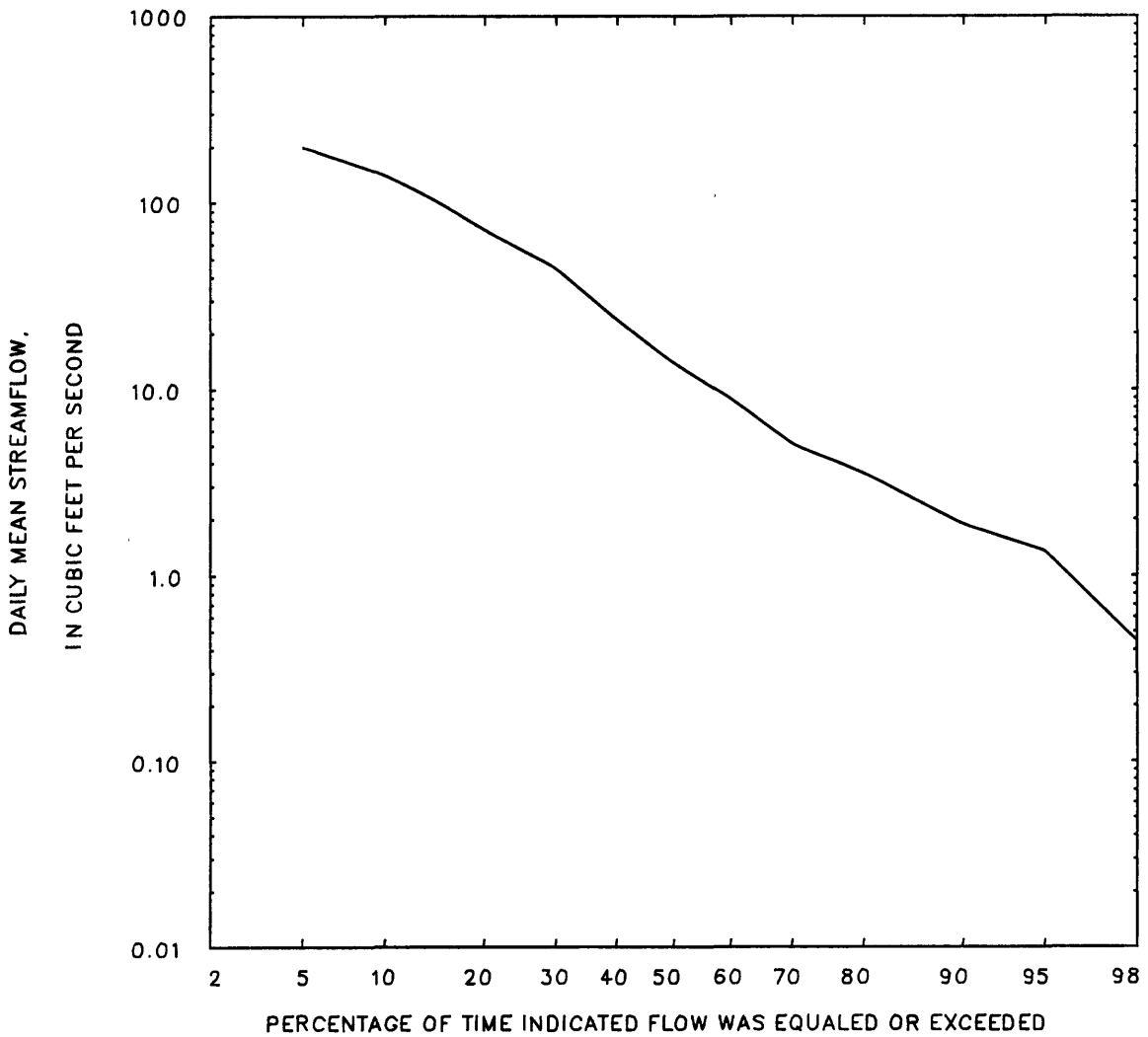
Duration of daily mean flow for period of record 1922-36, 1938-40

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
327	198	139	99	71	44	24	14	8.8	5.0	3.5	1.8	1.3	0.44	0.22	0.08	0.02

STATION 06222500 PERIOD OF RECORD 1922–36, 1938–40

DRY CREEK NEAR BURRIS, WYO.





06222700 CROW CREEK NEAR TIPPERARY, WYO.

LOCATION.--Lat 43°34'37", long 109°15'42", in sec. 20, T.7 N., R.4 W., Fremont County, Wind River Indian Reservation, on right bank just above Crow Creek Canyon, 2.0 mi downstream from Trail Creek, 5.0 mi north of Tipperary, and 19 mi north of Crowheart.

DRAINAGE AREA.--30.2 mi^2.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,600 ft, from topographic map.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 568 ft^3/s, June 16,1965, gage height, 5.20 ft, from rating curve extended above 220 ft^3/s on basis of velocity-area study; maximum gage height, 5.64 ft, January 14, 1975 (backwater from ice); minimum daily discharge, 0.48 ft^3/s, January 9, 1977.

Monthly and annual streamflow 1963-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	19	2.5	6.1	3.4	0.55	2.3
November	10	2.8	4.5	1.5	0.34	1.7
December	6.4	1.6	3.7	1.2	0.34	1.4
January	4.8	0.62	2.9	1.0	0.36	1.1
February	3.9	0.74	2.7	0.75	0.27	1.1
March	6.6	1.2	3.5	1.3	0.38	1.3
April	22	2.8	7.5	4.1	0.55	2.9
May	82	13	53	18	0.33	20.1
June	246	23	113	56	0.49	43.3
July	119	4.4	45	30	0.67	17.3
August	23	3.9	12	5.6	0.46	4.6
September	14	3.0	7.4	2.9	0.40	2.8
Annual	41	5.6	22	7.8	0.36	100

Magnitude and probability of annual low flow based on period of record 1964-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	2.1	1.3	0.94	0.68	---	---
3	2.2	1.4	1.0	0.73	---	---
7	2.3	1.5	1.1	0.83	---	---
14	2.5	1.7	1.2	0.92	---	---
30	2.6	1.8	1.3	1.0	---	---
60	2.8	1.9	1.5	1.1	---	---
90	3.0	2.1	1.7	1.3	---	---
120	3.2	2.3	1.9	1.5	---	---
183	3.7	2.9	2.5	2.3	---	---

Magnitude and probability of instantaneous peak flow based on 22 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
318	420	478	542	585	624

Weighted skew = -0.483

Magnitude and probability of annual high flow based on period of record 1963-84

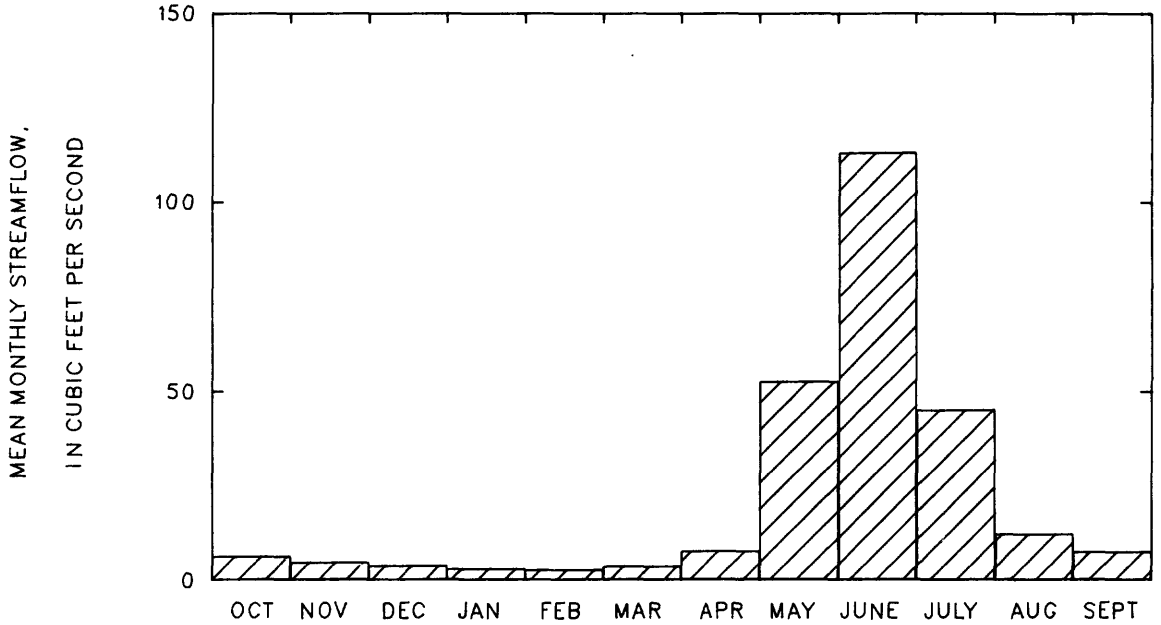
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	226	309	341	366	---	---
3	209	281	308	328	---	---
7	178	247	278	303	---	---
15	145	213	249	285	---	---
30	125	178	203	227	---	---
60	94	131	148	164	---	---
90	72	99	111	122	---	---

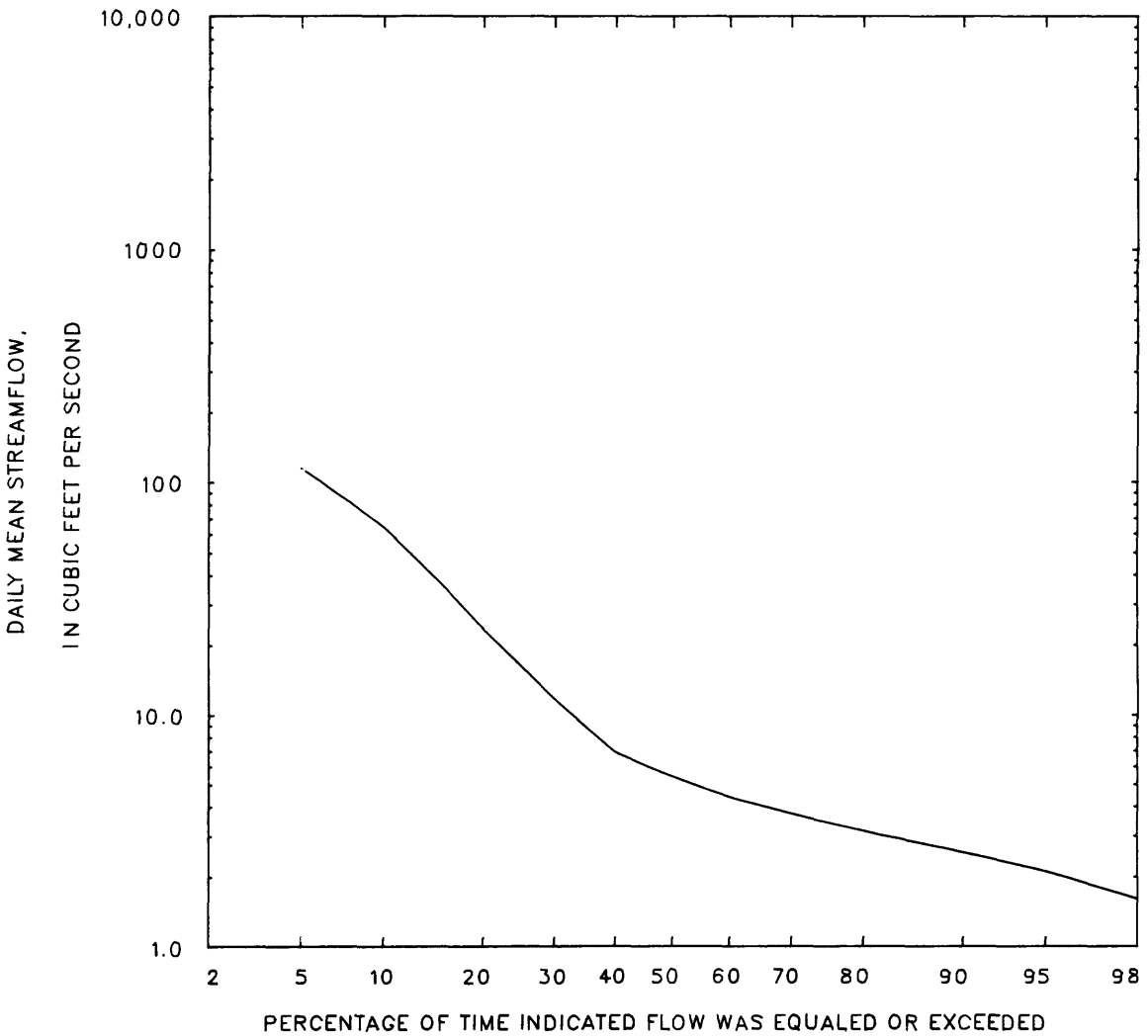
Duration of daily mean flow for period of record 1963-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
221	115	65	38	24	12	6.9	5.4	4.4	3.7	3.1	2.5	2.1	1.6	1.2	0.70	0.51

STATION 06222700 PERIOD OF RECORD 1963–84

CROW CREEK NEAR TIPPERARY, WYO.





06223500 WILLOW CREEK NEAR CROWHEART, WYO.

LOCATION.--43°17'05", long 109°11'00", in NW¼ sec. 36, T. 4 N., R.4 W., Fremont County, 400 ft upstream from Willow Creek Canal diversion dam and 2 mi south of Crowheart.

DRAINAGE AREA.--50 mi^2, approximately.

PERIOD OF RECORD.--June to September 1909, June 1921 to June 1923, May 1925 to September 1940. Published as "at J. K. Ranch Post Office," 1909 and "near Lenore," 1921-23.

GAGE.--Water-stage recorder. Altitude of gage is 6,070 ft, from topographic map. May 17 to October 31, 1909, staff gage at site 1.8 mi downstream at different datum. May 16, 1921, to August 24, 1923, chain gage at site 800 ft upstream at different datum.

REMARKS.--Small diversion above station for irrigation of about 100 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft^3/s, May 31, 1939, gage height, 5.40 ft, by computation of flow over dam; minimum not determined.

Monthly and annual streamflow 1922, 1926-40

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	18	5.4	9.7	3.5	0.37	5.1
November	13	2.5	7.7	2.8	0.37	4.1
December	10	2.0	6.1	2.2	0.35	3.2
January	8.0	2.0	5.1	1.5	0.30	2.7
February	7.0	2.0	4.6	1.5	0.32	2.4
March	8.0	2.5	4.9	1.4	0.28	2.6
April	9.1	4.0	6.6	1.4	0.21	3.5
May	64	6.9	29	18	0.62	15.4
June	132	9.7	71	38	0.54	37.4
July	55	5.7	23	12	0.54	12.2
August	45	3.5	12	9.8	0.80	6.4
September	22	4.7	9.2	4.5	0.49	4.9
Annual	25	4.6	16	5.5	0.35	100

Magnitude and probability of annual low flow based on period of record 1927-40

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	4.1	3.1	2.7	2.3	---	---
3	4.1	3.1	2.7	2.3	---	---
7	4.1	3.2	2.7	2.3	---	---
14	4.1	3.2	2.7	2.3	---	---
30	4.2	3.2	2.7	2.3	---	---
60	4.3	3.2	2.7	2.3	---	---
90	4.6	3.4	2.9	2.4	---	---
120	4.9	3.6	3.0	2.5	---	---
183	5.8	4.4	3.8	3.3	---	---

Magnitude and probability of instantaneous peak flow based on 19 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
214	397	560	822	1060	1350

Weighted skew = 0.319

Magnitude and probability of annual high flow based on period of record 1922, 1926-40

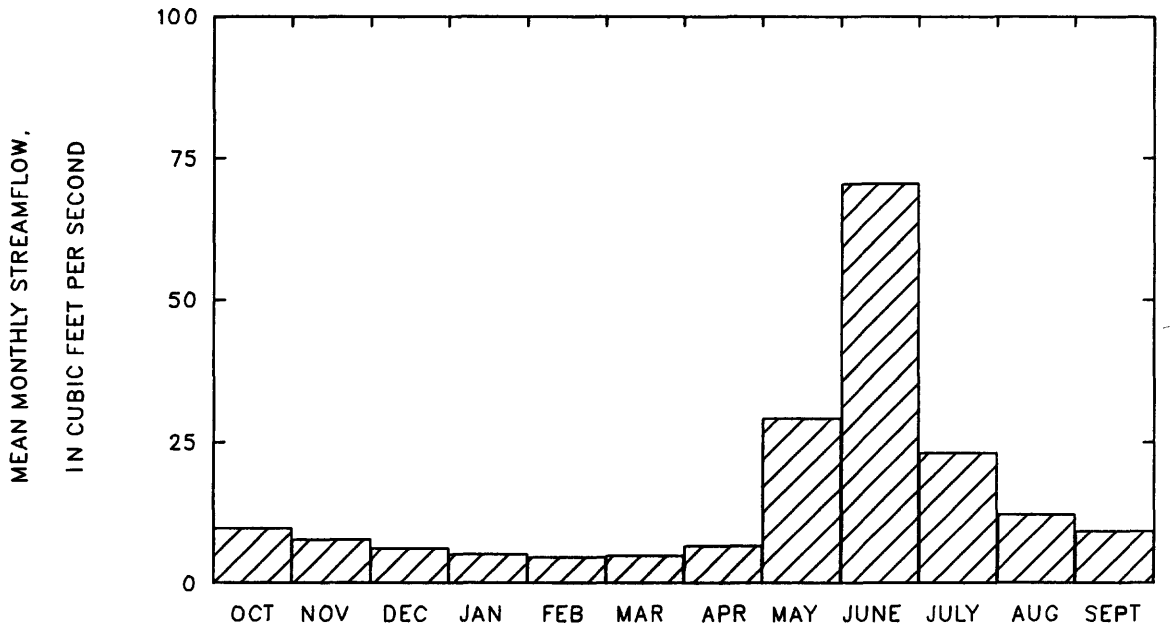
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	141	208	236	257	---	---
3	124	192	224	251	---	---
7	106	165	194	220	---	---
15	91	144	171	196	---	---
30	76	117	137	154	---	---
60	55	83	95	106	---	---
90	42	62	70	78	---	---

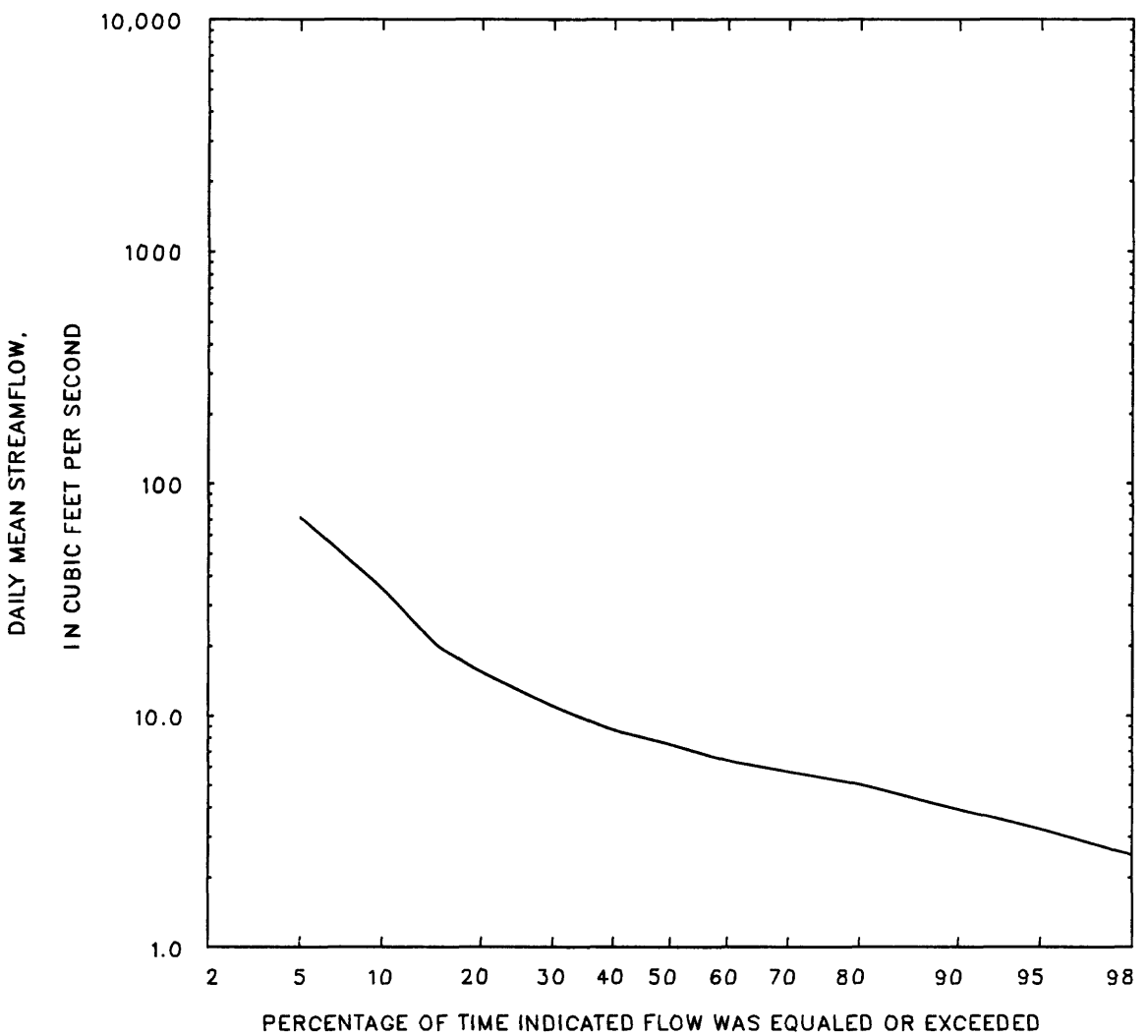
Duration of daily mean flow for period of record 1922, 1926-40

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
141	71	35	20	15	11	8.6	7.4	6.3	5.6	5.0	3.9	3.2	2.5	2.2	2.1	2.0

STATION 06223500 PERIOD OF RECORD 1922, 1926–40

WILLOW CREEK NEAR CROWHEART, WYO.





06224000 BULL LAKE CREEK ABOVE BULL LAKE, WYO.

LOCATION.--Lat 43°10'37", long 109°12'08", in NE¼SW¼ sec.2, T.2 N., R.4 W., Fremont County, Wind River Indian Reservation, on left bank 1.2 mi upstream from high-water line of Bull Lake and 9.0 mi south of Crowheart.

DRAINAGE AREA.--187 mi^2.

PERIOD OF RECORD.--June 1941 to December 1953, October 1966 to current year. Monthly discharge only for some periods; published in WSP 1309. Prior to October 1950, published as "above Bull Lake Reservoir."

GAGE.--Water-stage recorder. Altitude of gage is 5,874 ft, from topographic map.

REMARKS.--No diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,470 ft^3/s, June 9, 1981, gage height, 7.98 ft; minimum, 5.2 ft^3/s, January 28, 1970, gage height, 1.44 ft.

Monthly and annual streamflow 1942-53, 1967-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	222	56	103	42	0.41	2.9
November	109	30	57	21	0.37	1.6
December	62	15	38	12	0.31	1.1
January	43	7.3	30	8.2	0.28	0.8
February	41	6.9	26	7.6	0.29	0.7
March	45	6.7	27	8.3	0.31	0.7
April	199	25	60	37	0.62	1.7
May	777	170	448	159	0.35	12.4
June	1920	684	1180	273	0.23	32.6
July	1580	480	980	277	0.28	27.2
August	655	297	451	117	0.26	12.5
September	533	122	212	80	0.38	5.9
Annual	395	174	302	48	0.16	100

Magnitude and probability of instantaneous peak flow based on 31 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
2270	2840	3190	3600	3890	4160

Weighted skew = -0.066

Magnitude and probability of annual low flow based on period of record 1943-53, 1968-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	19	14	11	8.8	6.6	---
3	20	15	12	9.3	7.0	---
7	21	15	12	9.8	7.3	---
14	22	16	13	11	8.2	---
30	24	18	14	12	8.8	---
60	26	19	15	12	9.1	---
90	29	21	17	13	9.5	---
120	31	23	19	15	11	---
183	45	35	31	28	25	---

Magnitude and probability of annual high flow based on period of record 1942-53, 1967-84

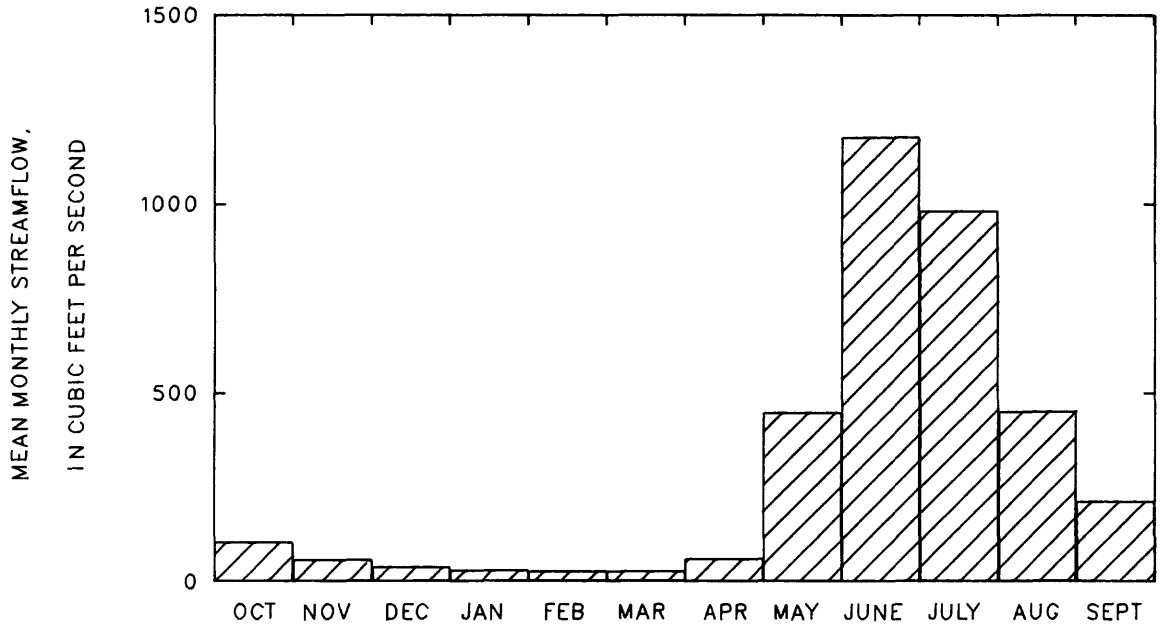
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	2160	2610	2870	3150	3340	---
3	2000	2390	2590	2810	2960	---
7	1790	2130	2320	2530	2670	---
15	1550	1880	2080	2300	2440	---
30	1370	1620	1750	1880	1960	---
60	1140	1320	1400	1480	1520	---
90	950	1090	1150	1210	1240	---

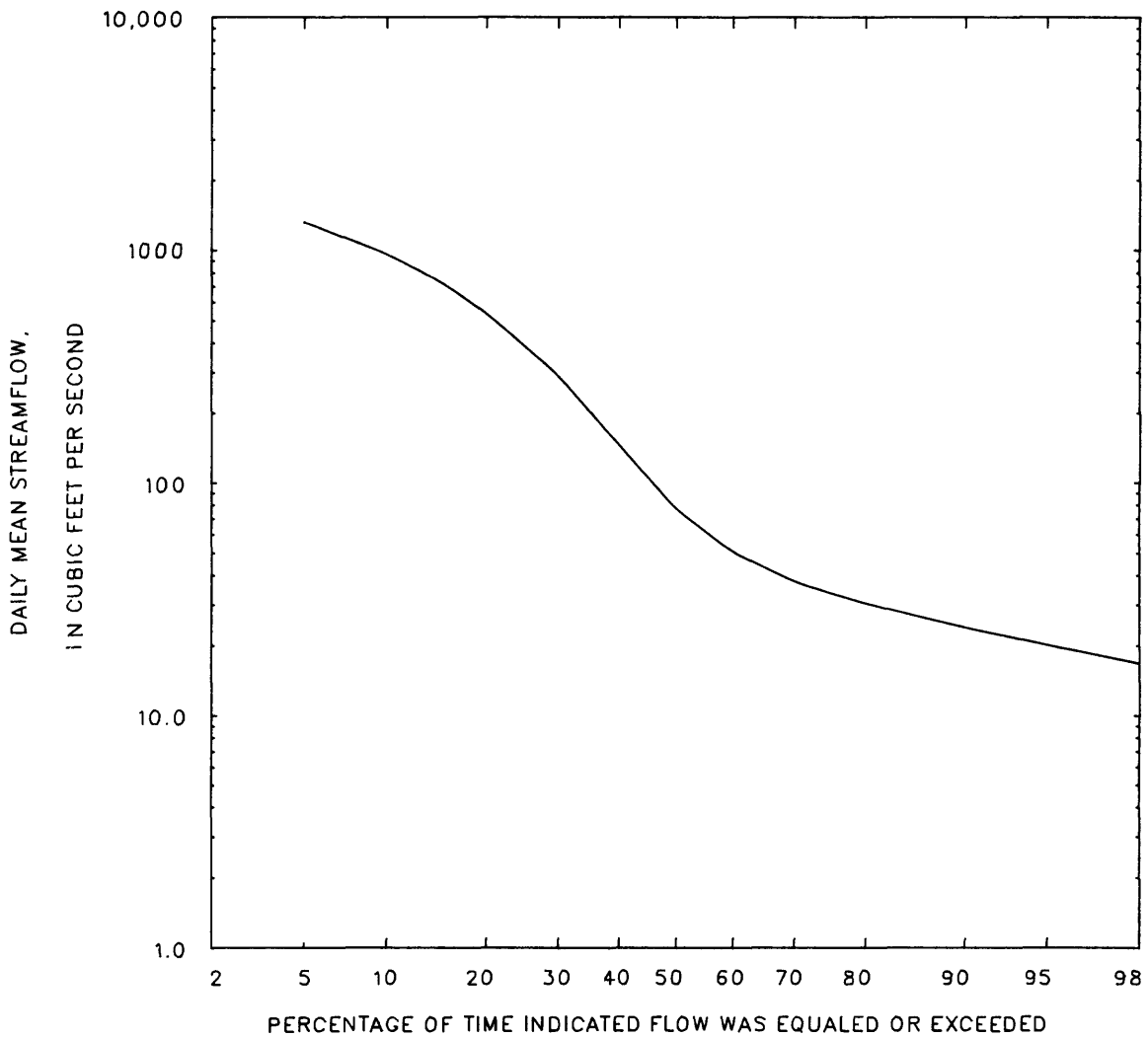
Duration of daily mean flow for period of record 1942-53, 1967-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2000	1310	964	724	537	290	145	76	50	37	30	24	20	17	12	7.0	6.4

STATION 06224000 PERIOD OF RECORD 1942–53, 1967–84

BULL LAKE CREEK ABOVE BULL LAKE, WYO.





06225000 BULL LAKE CREEK NEAR LENORE, WYO.
(before construction of Bull Lake Dam)

LOCATION.--Lat 43°14'33", long 109°01'20", in NE¼NW¼ sec.17, T.3 N., R.2 W., Fremont County, Wind River Indian Reservation, on left bank 700 ft upstream from mouth, 2.8 mi downstream from Bull Lake, and 8.5 mi southeast of Lenore.

DRAINAGE AREA.--213 mi^2, of which 12 mi^2 is probably noncontributing.

PERIOD OF RECORD.--May 1918 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,654 ft, from topographic map. May 18, 1918, to September 30, 1922, at site 10 ft upstream at datum 0.86 ft higher; October 1, 1922, to October 3, 1934, at present site at datum 2.00 ft lower.

REMARKS.--Flow completely regulated by Bull Lake 2.8 mi upstream since April 1938. Diversions about station for irrigation of about 730 acres below.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,200 ft^3/s, August 8, 1951, gage height, 7.09 ft, result of automatic spillway gates releasing on Bull Lake Dam, from rating curve extended above 2,000 ft^3/s on basis of slope-area measurement of peak flow; minimum prior to construction of Bull Lake Dam not determined, probably occurred during period of ice effect in March 1933; no flow February 28 to April 7, 1937 (result of regulation).

Monthly and annual streamflow 1919-23, 1927-38

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	224	30	97	51	0.52	2.8
November	123	23	51	25	0.48	1.5
December	70	15	33	15	0.46	1.0
January	49	11	27	11	0.40	0.8
February	49	12	25	11	0.43	0.7
March	50	0.00	25	14	0.54	0.7
April	109	16	50	27	0.53	1.5
May	831	75	412	176	0.43	11.9
June	1830	99	1110	504	0.45	32.1
July	1650	390	895	320	0.36	25.8
August	914	363	515	153	0.30	14.8
September	392	127	227	82	0.36	6.5
Annual	395	165	291	76	0.26	100

Magnitude and probability of annual low flow based on period of record 1920-23, 1927-38

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	14	0.00	0.00	0.00	---	---
3	14	0.00	0.00	0.00	---	---
7	15	0.00	0.00	0.00	---	---
14	19	3.7	0.00	0.00	---	---
30	20	5.6	0.00	0.00	---	---
60	21	15	12	10	---	---
90	23	16	13	11	---	---
120	25	18	15	13	---	---
183	40	30	26	23	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1919-23, 1927-38

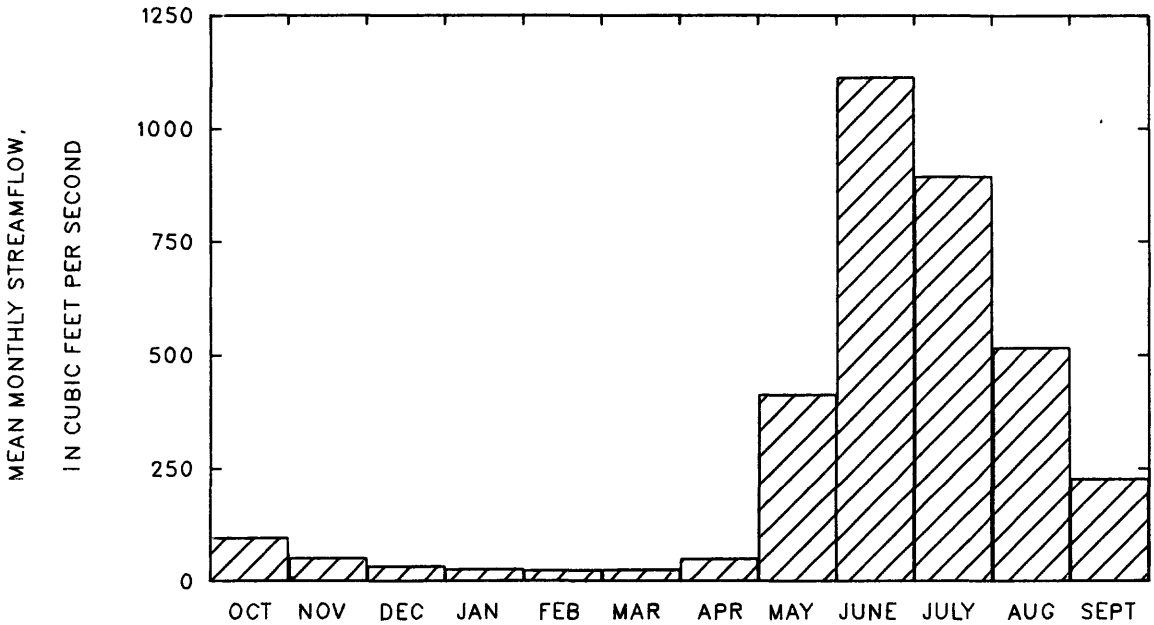
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2000	2780	3210	3680	---	---
3	1890	2600	3010	3450	---	---
7	1680	2290	2650	3050	---	---
15	1430	1970	2290	2650	---	---
30	1250	1690	1950	2230	---	---
60	1040	1360	1530	1710	---	---
90	894	1130	1260	1390	---	---

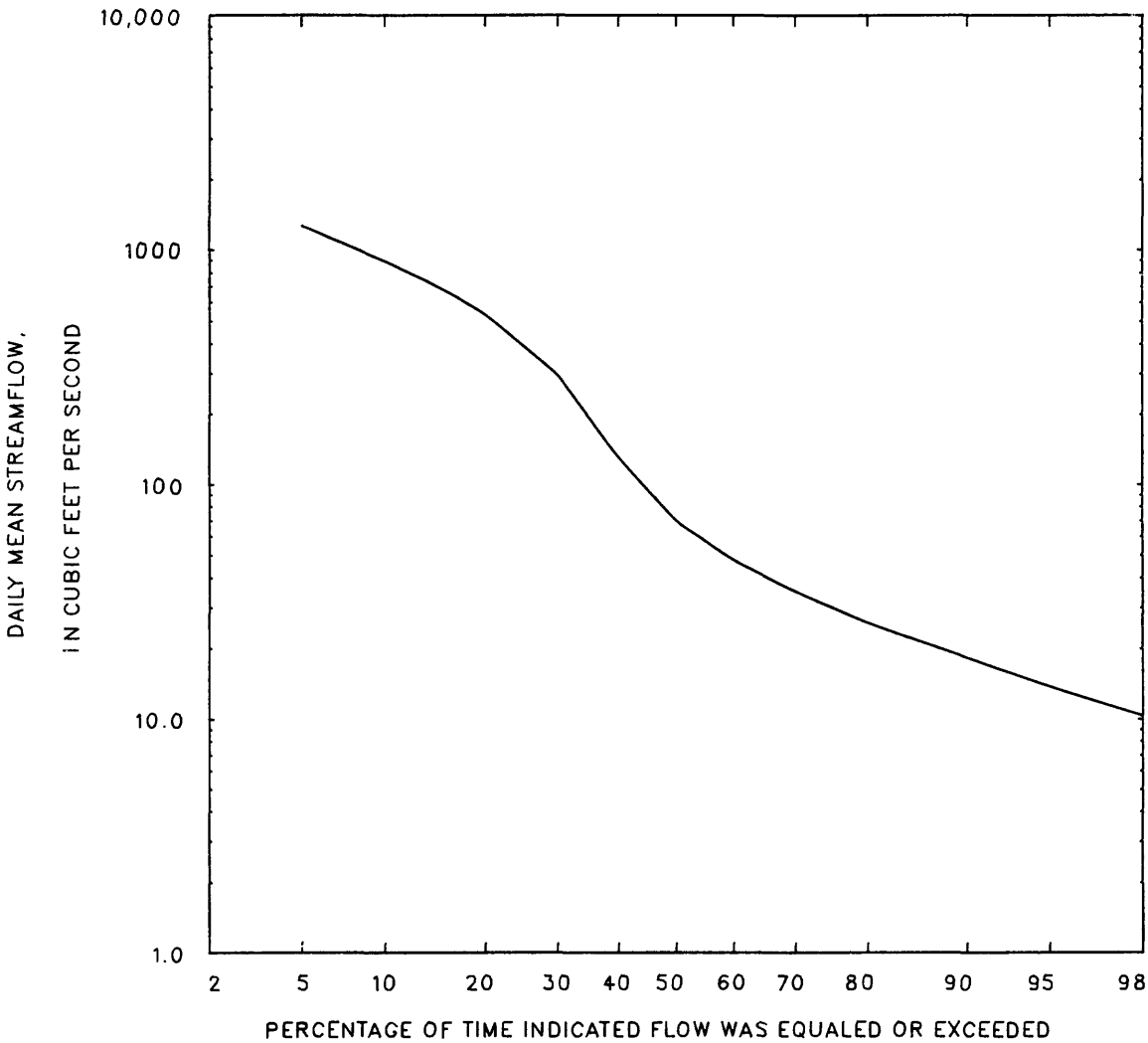
Duration of daily mean flow for period of record 1919-23, 1927-38

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2070	1250	891	684	530	294	129	69	47	35	25	18	14	10	1.3	0.63	0.13

STATION 06225000 PERIOD OF RECORD 1919–23, 1927–38

BULL LAKE CREEK NEAR LENORE, WYO. (BEFORE CONSTRUCTION OF BULL LAKE DAM)





06225000 BULL LAKE CREEK NEAR LENORE, WYO.
(after construction of Bull Lake Dam)

Monthly and annual streamflow 1939-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	782	4.2	159	159	1.0	4.9
November	467	8.3	84	82	0.98	2.6
December	241	14	98	64	0.65	3.0
January	267	14	131	80	0.61	4.0
February	219	15	109	69	0.64	3.3
March	197	7.1	85	57	0.67	2.6
April	601	3.6	122	130	1.1	3.7
May	585	6.0	157	128	0.81	4.8
June	1210	11	355	310	0.87	10.9
July	1440	86	813	281	0.35	24.9
August	1030	193	696	159	0.23	21.3
September	982	113	456	214	0.47	14.0
Annual	427	100	273	68	0.25	100

Magnitude and probability of annual low flow
based on period of record 1940-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	11	3.5	1.8	1.0	0.50	0.31
3	13	4.2	2.1	1.1	0.53	0.31
7	15	5.4	2.9	1.7	0.87	0.55
14	20	8.1	4.8	3.1	1.8	1.2
30	27	13	8.0	5.4	3.3	2.4
60	38	18	12	8.5	5.6	4.2
90	52	25	17	12	7.8	5.8
120	69	34	22	16	10	7.6
183	95	50	34	24	16	12

Magnitude and probability of instantaneous peak flow
based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow
based on period of record 1939-84

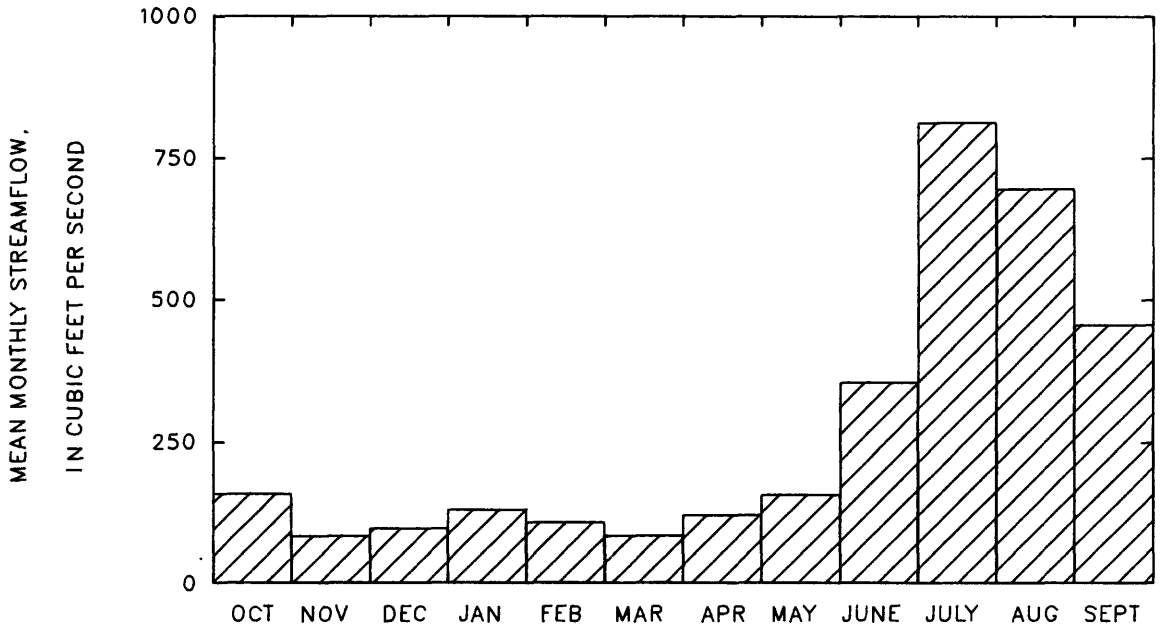
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1400	1920	2240	2610	2870	3110
3	1350	1850	2150	2510	2760	3000
7	1240	1670	1940	2260	2490	2720
15	1110	1430	1630	1870	2030	2180
30	972	1220	1360	1510	1620	1710
60	834	1020	1110	1200	1250	1300
90	710	885	971	1060	1110	1150

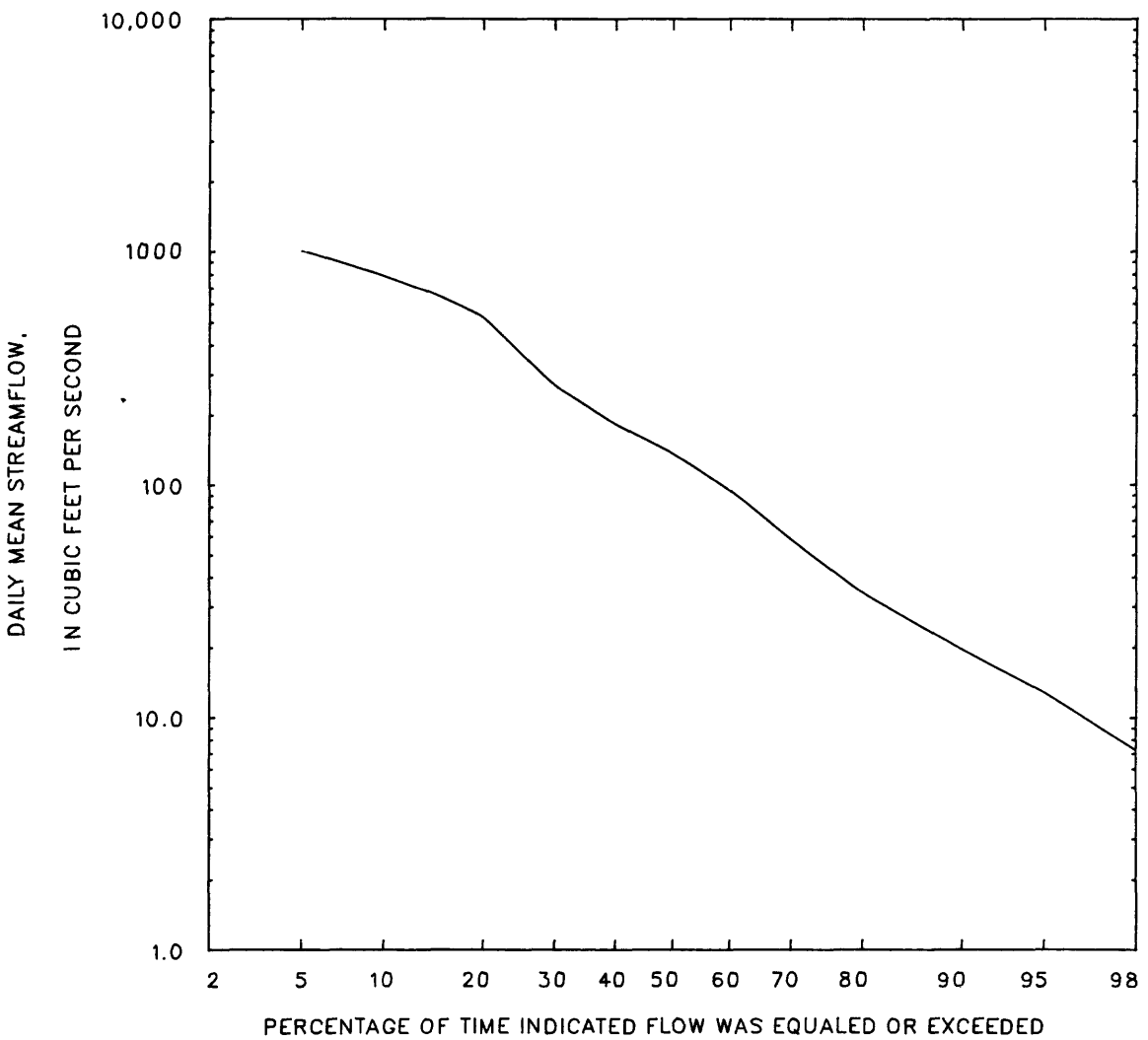
Duration of daily mean flow for period of record 1939-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1470	998	783	642	526	267	181	136	94	58	34	19	13	7.2	5.1	3.7	1.1

STATION 06225000 PERIOD OF RECORD 1939–84

BULL LAKE CREEK NEAR LENORE, WYO. (AFTER CONSTRUCTION OF BULL LAKE DAM)





06225500 WIND RIVER NEAR CROWHEART, WYO.

LOCATION.--Lat 43°14'33", long 109°00'35", in NW¼NW¼ sec.16, T.3 N., R.2 W., Fremont County, Wind River Indian Reservation, on right bank 0.9 mi downstream from Bull Lake Creek and 9.0 mi southeast of Crowheart.

DRAINAGE AREA.--1,891 mi^2.

PERIOD OF RECORD.--October 1945 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,635 ft, from topographic map.

REMARKS.--Some regulation by Bull Lake on Bull Lake Creek. Diversions for irrigation of about 25,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft^3/s, June 16, 1963, gage height, 9.16 ft; maximum gage height, 9.59 ft, June 9, 1981; minimum daily discharge, 130 ft^3/s, February 5, 1982.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1927, reached a discharge of 13,000 ft^3/s, discharge measurment made by Bureau of Reclamation at site 1.0 mi downstream.

Monthly and annual streamflow 1946-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1420	408	706	236	0.33	4.8
November	932	298	496	120	0.24	3.3
December	625	215	413	87	0.21	2.8
January	560	179	399	98	0.24	2.7
February	538	222	384	79	0.21	2.6
March	616	226	384	85	0.22	2.6
April	1280	311	566	206	0.36	3.8
May	2940	729	1790	594	0.33	12.0
June	7260	1580	3860	1320	0.34	26.0
July	5690	1440	3040	1150	0.38	20.5
August	2480	853	1680	345	0.21	11.3
September	1720	736	1130	246	0.22	7.6
Annual	1650	670	1240	242	0.19	100

Magnitude and probability of annual low flow based on period of record 1947-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	267	213	187	167	146	---
3	279	222	195	174	153	---
7	296	237	208	186	162	---
14	316	252	221	196	169	---
30	341	274	240	213	185	---
60	368	296	259	230	199	---
90	381	309	273	245	215	---
120	390	320	285	258	228	---
183	458	382	347	319	290	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1946-84

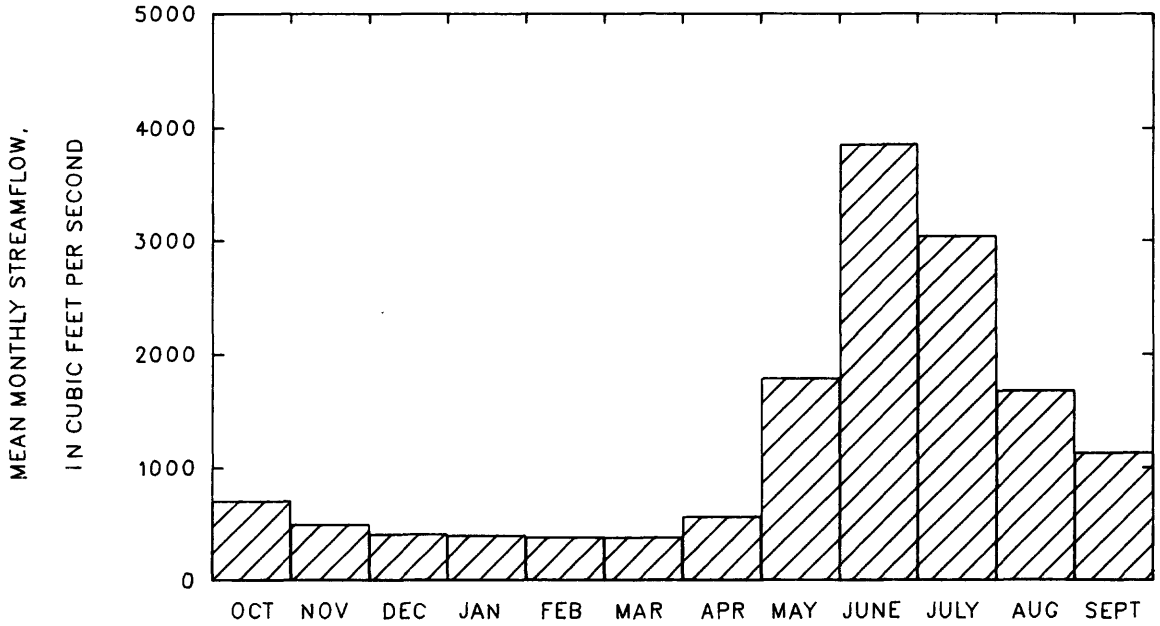
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	6560	8690	9870	11200	12000	---
3	6160	8120	9180	10300	11000	---
7	5590	7510	8600	9800	10600	---
15	4870	6590	7600	8730	9500	---
30	4200	5570	6350	7190	7750	---
60	3520	4570	5170	5830	6270	---
90	3040	3820	4230	4660	4930	---

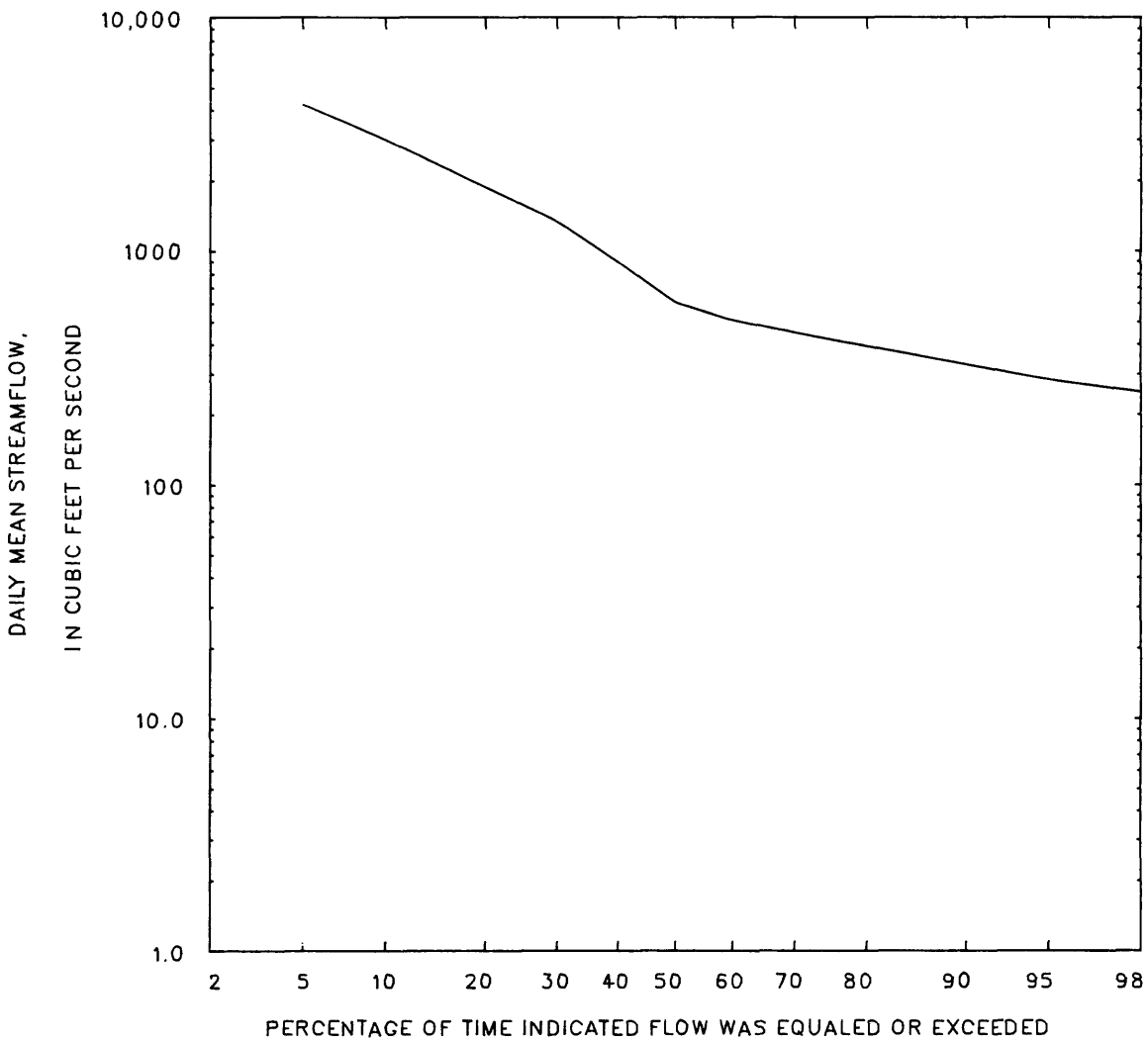
Duration of daily mean flow for period of record 1946-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
6820	4220	2980	2290	1870	1330	895	599	504	447	392	326	281	249	227	206	157

STATION 06225500 PERIOD OF RECORD 1946–84

WIND RIVER NEAR CROWHEART, WYO.





06228000 WIND RIVER AT RIVERTON, WYO.

LOCATION.--Lat 43°00'38", long 108°22'32", in NE¼NW¼NW¼ sec.2, T.1 S., R.4 E., Fremont County, Wind River Indian Reservation, on left bank 265 ft downstream from bridge on State Highway 789, 1.1 mi southeast of post office in Riverton, and 1.5 mi upstream from Little Wind River.

DRAINAGE AREA.--2,309 mi^2.

PERIOD OF RECORD.--May to August 1906, August to December 1907, May to October 1908, May 1911 to current year. Monthly discharge only for some periods; published in WSP 1309. Published as "Big Wind River near Arapahoe Agency," 1906 and as "Big Wind River near Riverton," 1907-08.

GAGE.--Water-stage recorder. Datum of gage is 4,901.56. See WSP 1729 for history of changes prior to October 13, 1930. October 13, 1930, to April 15, 1968, water-stage recorder at site 280 ft upstream at datum 2.00 ft higher. April 16 to November 17, 1968, water-stage recorder at site 880 ft upstream at datum 2.00 ft higher. November 18, 1968, to July 28, 1970, water-stage recorder at site 225 ft upstream at datum 2.00 ft higher. July 29, 1970, to September 30, 1977, water-stage recorder at present site at datum 2.00 ft higher.

REMARKS.--Some regulation by Bull Lake beginning in 1938 and Pilot Butte Reservoir beginning in 1926, combined capacity, 182,000 acre-ft. Diversions above station for irrigation of about 128,000 acres above and below station. The Wyoming canal of the Riverton project is the major diversion. This diversion began in 1926 and part of it can be returned to the river above station through Pilot wasteway. Additional waste water returns to river below station through Fivemile and Muddy Creeks.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft^3/s, June 15, 1935, gage height, 10.15 ft, present datum, from rating curve extended above 7,200 ft^3/s; maximum gage height, 10.80 ft, December 30, 1983 (backwater from ice); minimum daily discharge, 9.8 ft^3/s, May 28, July 16, 1977.

Monthly and annual streamflow 1927-28, 1930-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1500	272	636	272	0.43	6.7
November	895	222	457	125	0.27	4.8
December	559	200	364	83	0.23	3.8
January	539	151	344	101	0.29	3.6
February	531	196	346	88	0.25	3.7
March	535	75	338	107	0.32	3.6
April	1230	84	423	233	0.55	4.5
May	4620	149	1220	779	0.64	12.9
June	6160	155	2660	1520	0.57	28.1
July	4200	56	1620	1160	0.72	17.1
August	3050	44	590	523	0.89	6.2
September	1790	74	458	329	0.72	4.8
Annual	1520	250	789	293	0.37	100

Magnitude and probability of annual low flow based on period of record 1928, 1931-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	81	36	23	15	9.5	6.9
3	95	46	31	22	14	11
7	115	59	40	29	19	14
14	147	78	53	37	24	18
30	207	116	78	54	34	24
60	270	174	129	97	67	51
90	310	212	164	128	94	74
120	329	246	204	172	139	119
183	383	292	250	218	186	167

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1927-28, 1930-84

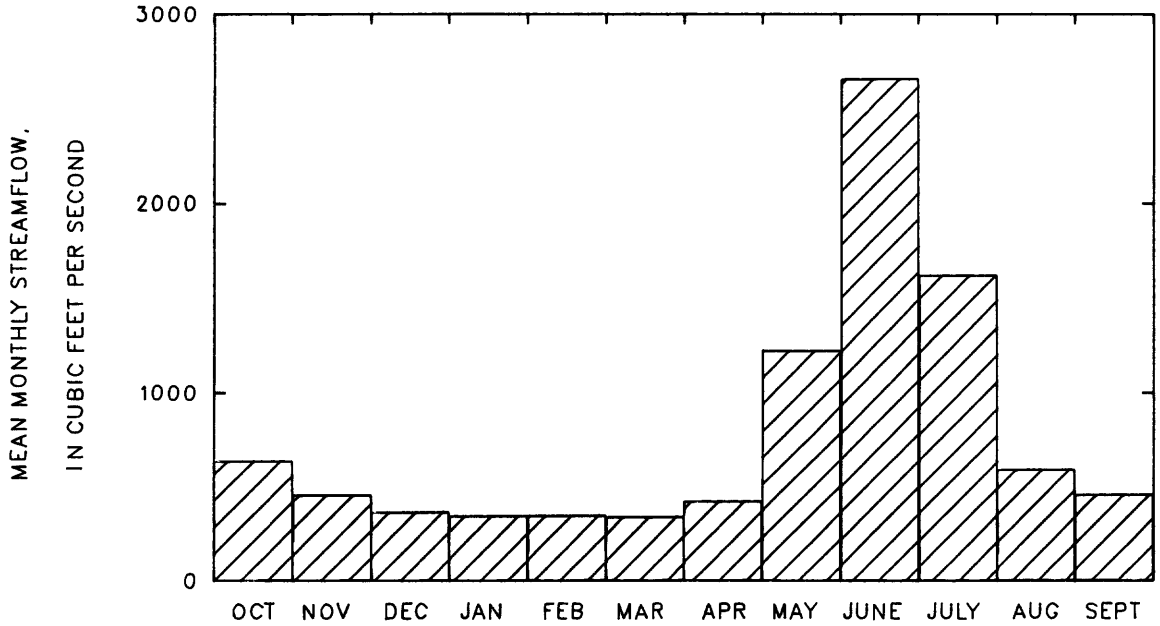
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	5420	7600	8700	9770	10400	10900
3	5050	7180	8230	9220	9770	10200
7	4500	6570	7590	8540	9060	9460
15	3760	5580	6520	7430	7950	8360
30	2950	4540	5450	6430	7050	7590
60	2230	3480	4240	5080	5630	6130
90	1760	2740	3350	4070	4560	5010

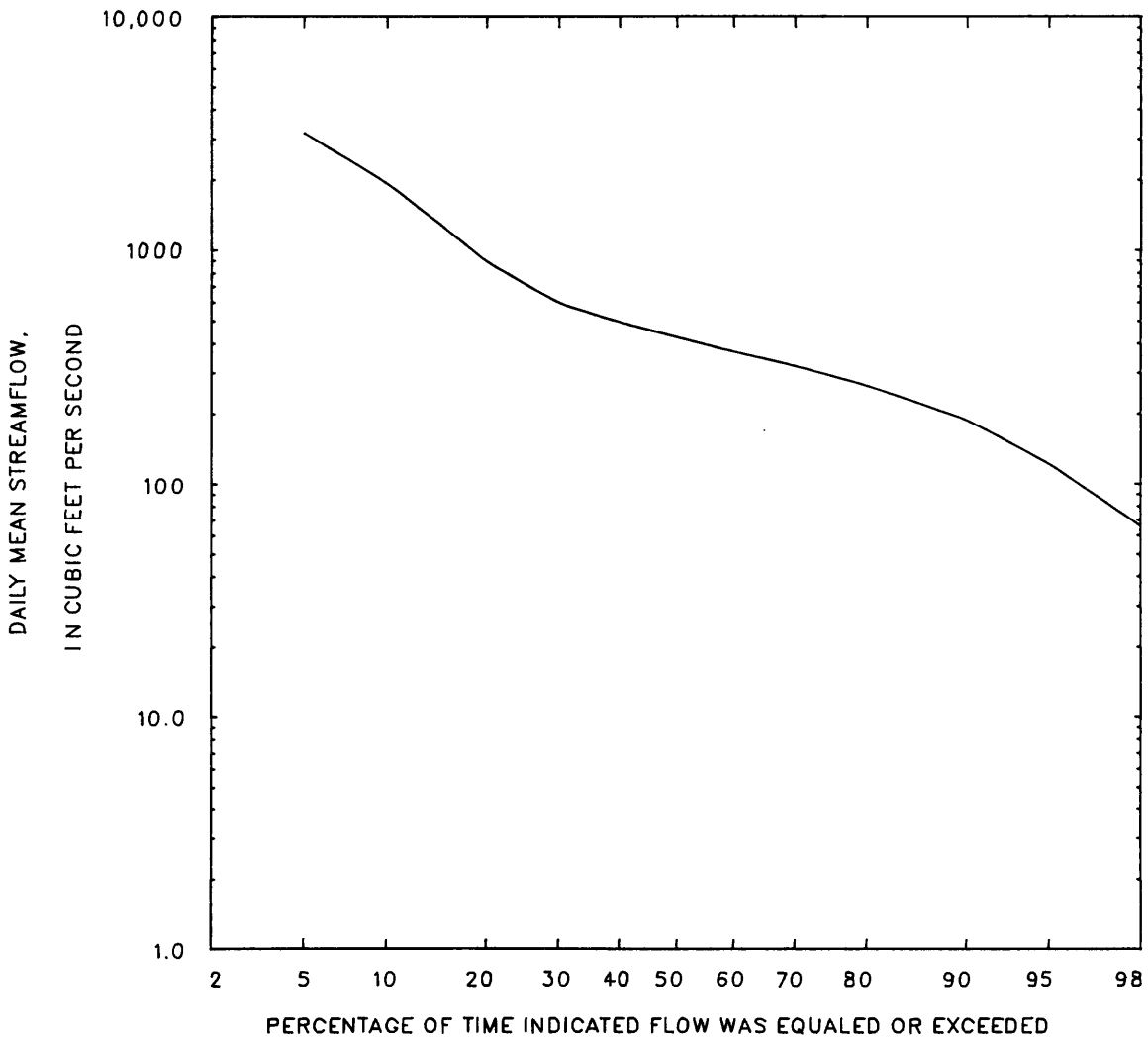
Duration of daily mean flow for period of record 1927-28, 1930-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
5680	3150	1940	1260	886	590	491	422	367	318	263	187	122	65	44	31	16

STATION 06228000 PERIOD OF RECORD 1927–28, 1930–84

WIND RIVER AT RIVERTON, WYO.





06228500 SOUTH FORK LITTLE WIND RIVER NEAR FORT WASHAKIE, WYO.

LOCATION.--Lat 43°00'00", long 108°56'05", in SE¼ sec. 1, T.1 S., R. 2 W., Fremont County, 500 ft upstream from Ray Canal, 2.5 mi west of Fort Washakie, and 3.4 mi upstream from North Fork.

DRAINAGE AREA.--118 mi^2.

PERIOD OF RECORD.--May 1921 to September 1940; published as "Little Wind River," 1923-40.

GAGE.--Water-stage recorder. Altitude of gage is 5,720 ft, from topographic map. Prior to October 1, 1926, at datum 1.30 ft higher.

REMARKS.--Flow regulated by Washakie Reservoir (capacity, 7,800 acre-ft). Natural flow of stream affected by transbasin diversions from North Fork and diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,220 ft^3/s, July 9, 1926, gage height, 8.89 ft, most recent datum, from rating curve extended above 1,100 ft^3/s; minimum observed, 6.9 ft^3/s, April 15, 1940.

Monthly and annual streamflow 1922-40

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	149	21	59	38	0.65	4.0
November	75	15	36	18	0.52	2.4
December	50	12	26	12	0.46	1.7
January	50	10	22	11	0.49	1.5
February	40	8.0	20	9.1	0.45	1.4
March	50	8.0	23	12	0.53	1.5
April	95	8.7	44	25	0.56	3.0
May	414	111	242	84	0.35	16.5
June	880	133	511	226	0.44	34.7
July	607	69	291	131	0.45	19.7
August	270	52	127	56	0.44	8.6
September	156	24	72	37	0.51	4.9
Annual	179	59	123	34	0.27	100

Magnitude and probability of annual low flow based on period of record 1923-40

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	16	12	9.6	8.2	---	---
3	16	12	9.6	8.2	---	---
7	16	12	9.7	8.4	---	---
14	17	12	10	8.7	---	---
30	17	12	10	8.9	---	---
60	17	12	10	9.0	---	---
90	18	13	11	9.6	---	---
120	20	14	12	11	---	---
183	27	19	17	15	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1922-40

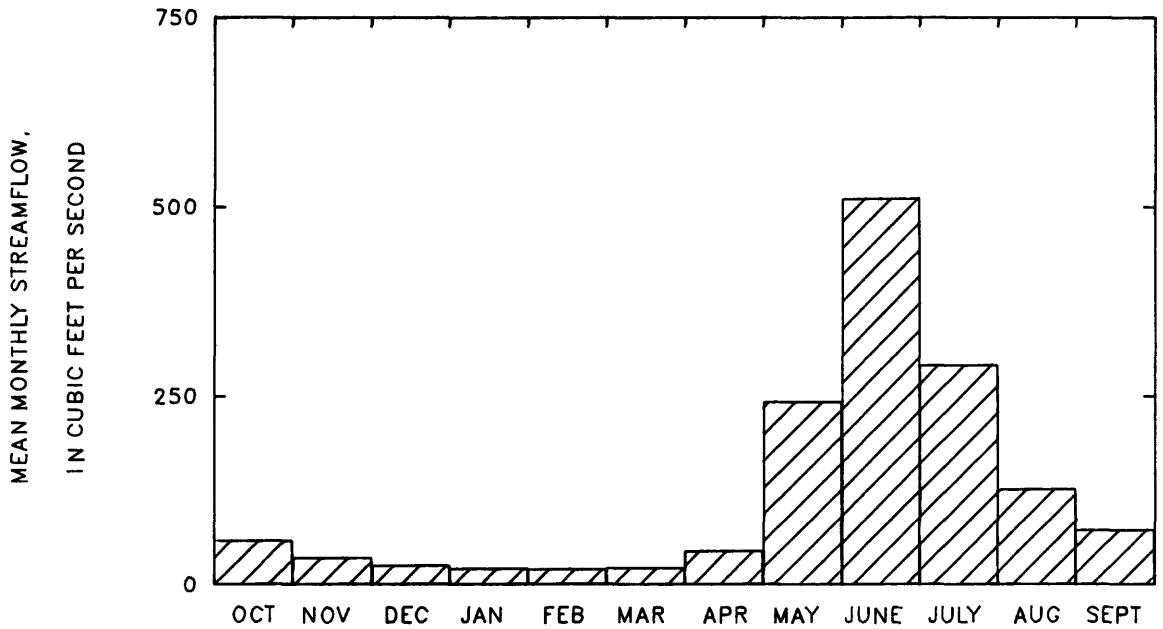
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	989	1500	1830	2240	---	---
3	919	1300	1520	1750	---	---
7	788	1100	1260	1430	---	---
15	649	900	1040	1180	---	---
30	547	761	883	1020	---	---
60	442	584	654	724	---	---
90	362	466	515	563	---	---

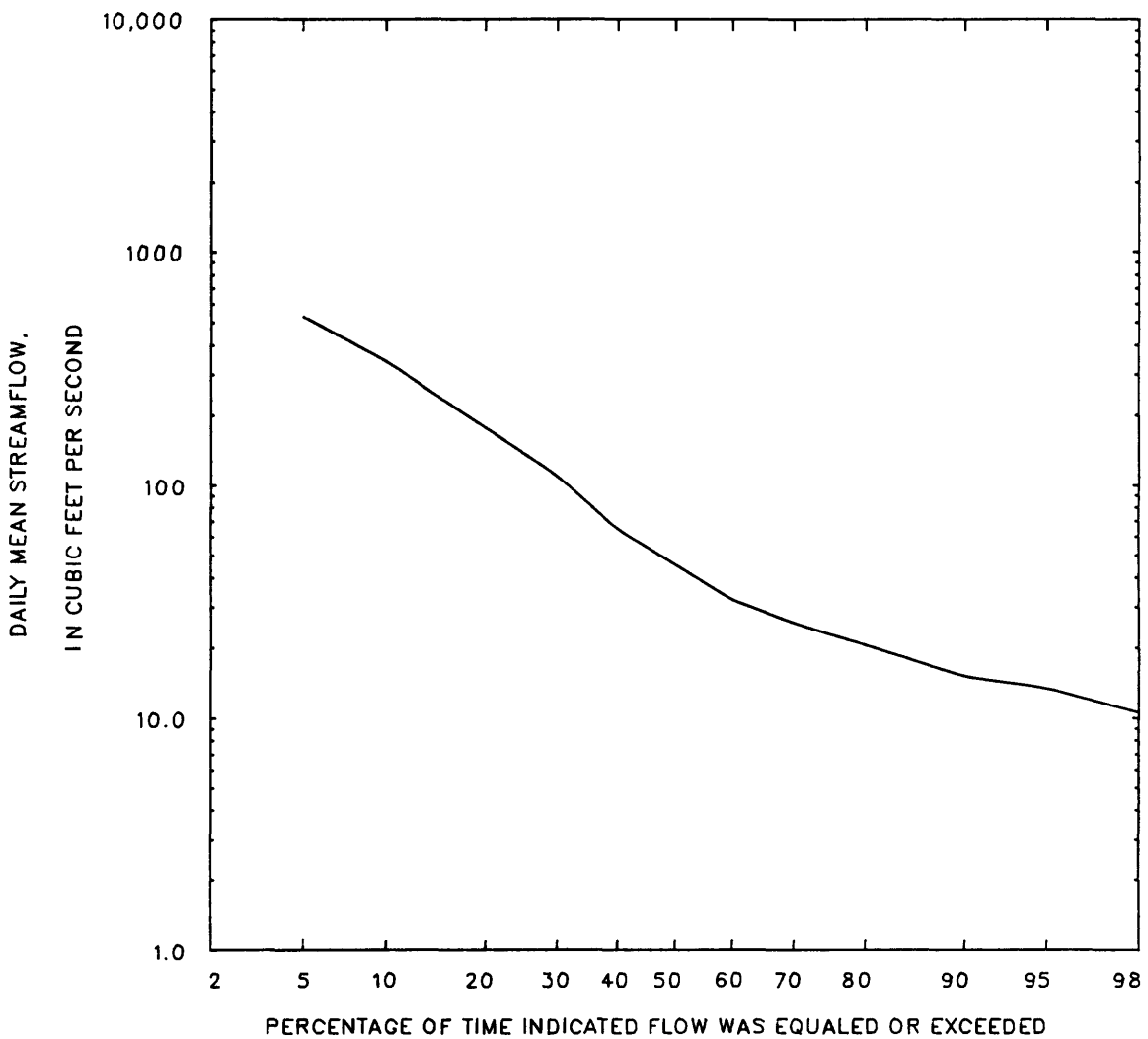
Duration of daily mean flow for period of record 1922-40

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
937	526	341	234	176	109	64	45	32	25	20	15	13	10	8.3	7.7	7.2

STATION 06228500 PERIOD OF RECORD 1922–40

SOUTH FORK LITTLE WIND RIVER NEAR FORT WASHAKIE, WYO.





06229000 NORTH FORK LITTLE WIND RIVER AT FORT WASHAKIE, WYO.

LOCATION.--Lat 43°00'40", long 108°53'10", in SE¼SW¼ sec. 33, T. 1 N., R. 1 W., Fremont County, 0.25 mi upstream from South Fork and 0.50 mi north of Fort Washakie.

DRAINAGE AREA.--127 mi^2.

PERIOD OF RECORD.--May 1921 to September 1940.

GAGE.--Water-stage recorder. Altitude of gage is 5,540 ft, from topographic map.

REMARKS.--Natural flow of stream affected by diversions for irrigation of about 1,000 acres and by transbasin diversions above station to Pevah Creek (tributary to Sage Creek and South Fork Little Wind River).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft^3/s, July 9, 1926, gage height, 4.85 ft, from rating curve extended above 1,100 ft^3/s; minimum not determined.

Monthly and annual streamflow 1922-40

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	152	17	54	40	0.73	4.0
November	85	15	37	21	0.55	2.7
December	50	13	27	12	0.43	1.9
January	50	10	22	10	0.47	1.6
February	40	10	21	8.5	0.40	1.6
March	50	10	24	10	0.42	1.8
April	75	20	46	17	0.36	3.3
May	473	123	250	97	0.39	18.2
June	1020	115	497	249	0.50	36.2
July	569	47	246	137	0.56	17.9
August	256	14	92	58	0.64	6.7
September	141	22	58	37	0.63	4.2
Annual	207	39	115	39	0.34	100

Magnitude and probability of annual low flow based on period of record 1923-40

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	18	13	11	10	---	---
3	18	13	11	10	---	---
7	18	13	11	10	---	---
14	18	13	12	11	---	---
30	18	13	12	11	---	---
60	18	14	12	11	---	---
90	20	14	13	11	---	---
120	21	16	13	12	---	---
183	27	19	15	13	---	---

Magnitude and probability of instantaneous peak flow based on 20 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1090	1710	2130	2680	3090	3500

Weighted skew = -0.250

Magnitude and probability of annual high flow based on period of record 1922-40

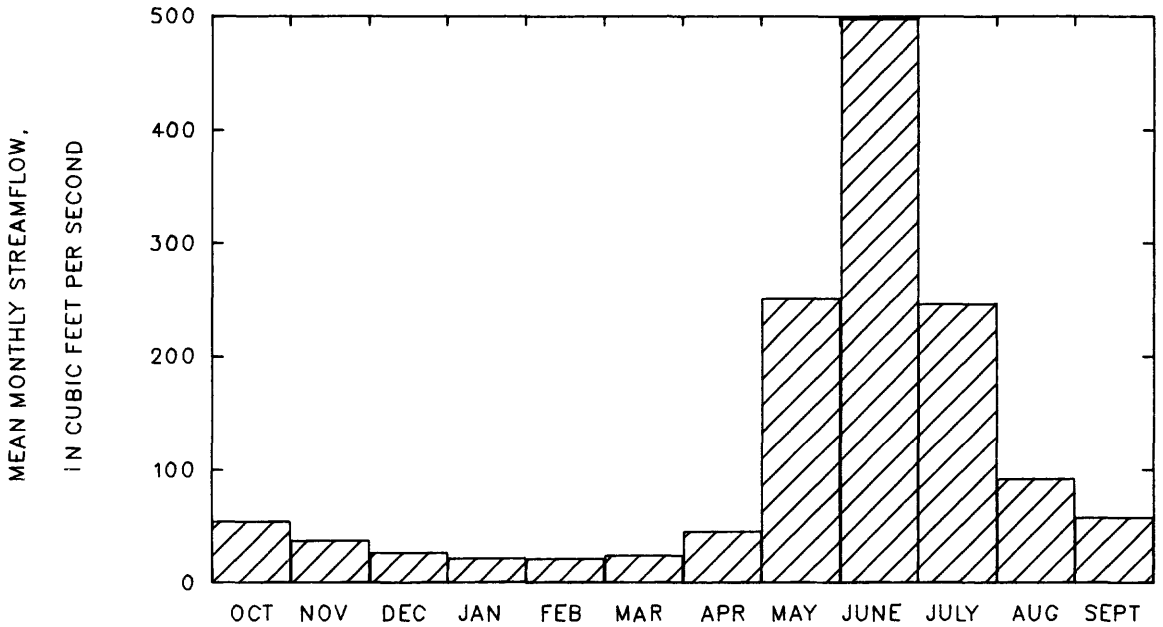
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	965	1440	1740	2100	---	---
3	868	1300	1580	1930	---	---
7	756	1100	1320	1570	---	---
15	638	913	1080	1280	---	---
30	527	739	868	1020	---	---
60	417	573	661	756	---	---
90	336	454	515	577	---	---

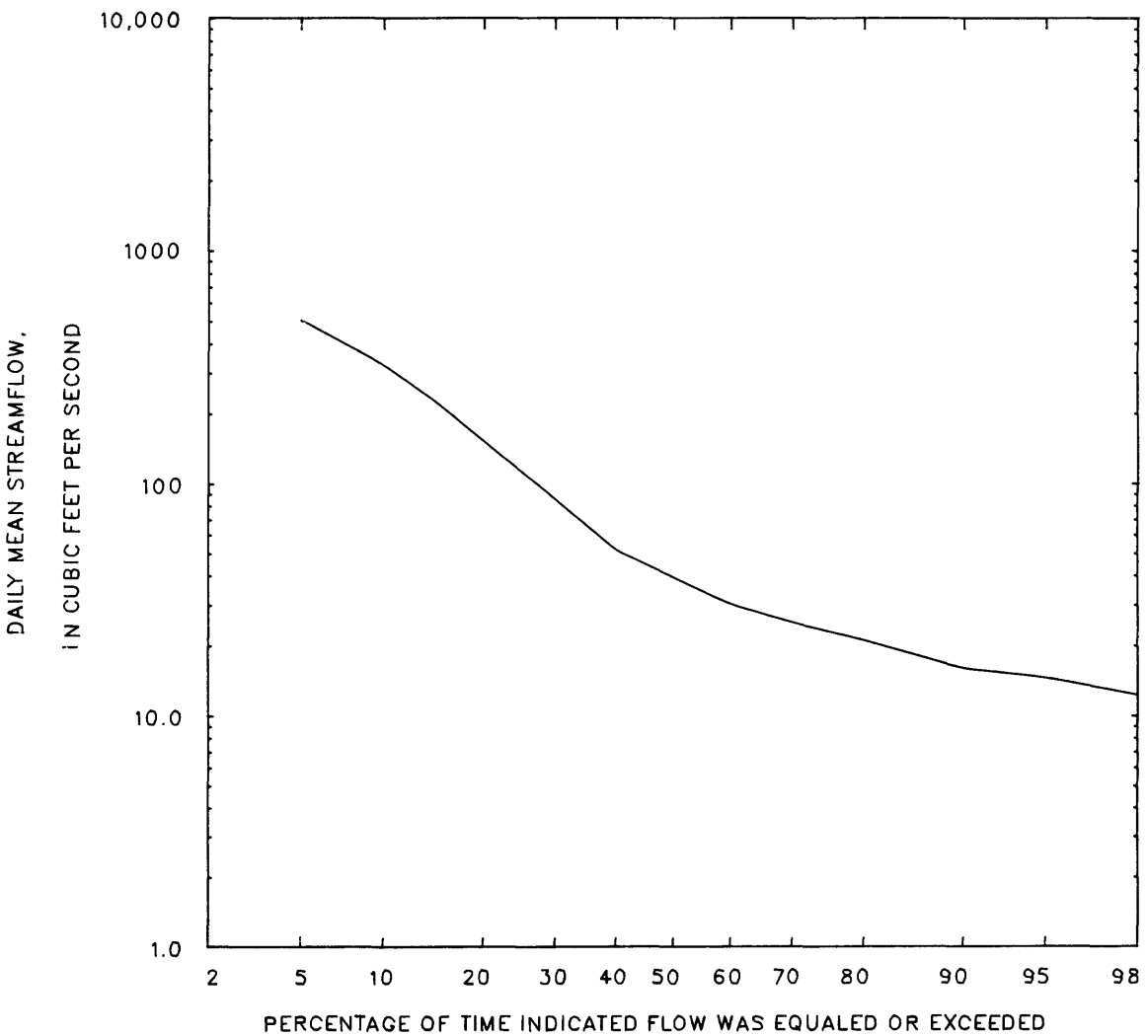
Duration of daily mean flow for period of record 1922-40

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
913	504	325	219	153	86	52	39	30	25	21	16	14	12	11	10	9.1

STATION 06229000 PERIOD OF RECORD 1922–40

NORTH FORK LITTLE WIND RIVER AT FORT WASHAKIE, WYO.





06232000 NORTH POPO AGIE RIVER NEAR MILFORD, WYO.

LOCATION.--Lat 42°51'50", long 108°54'25", in SW¼NE¼ sec. 3, T. 33N., R.101 W., Fremont County, on right bank at Pine Bar Ranch, 2.25 mi downstream from Paradise Creek, 6.25 mi southwest of Milford, and 8.5 mi northwest of Lander.

DRAINAGE AREA.--98.4 mi^2.

PERIOD OF RECORD.--August 1945 to September 1963.

GAGE.--Water-stage recorder. Altitude of gage is 6,190 ft, from topographic map. Prior to October 1, 1946, at datum 2.0 ft higher.

REMARKS.--Two small diversions above station for irrigation of hay meadows.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft^3/s, June 16, 1963, gage height, 9.44 ft, from floodmarks, from rating curve extended above 1,400 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 5.2 ft^3/s, January 5-9, 1960.

Monthly and annual streamflow 1946-63

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	74	22	40	16	0.40	2.7
November	47	15	28	9.5	0.34	1.9
December	31	8.4	19	5.8	0.31	1.3
January	22	7.7	16	4.5	0.29	1.1
February	23	10	15	3.3	0.22	1.0
March	19	9.9	14	2.3	0.16	1.0
April	119	17	39	26	0.67	2.7
May	514	106	274	112	0.41	18.8
June	1020	277	588	207	0.35	40.4
July	599	104	274	148	0.54	18.8
August	174	51	97	38	0.39	6.6
September	99	31	55	21	0.39	3.8
Annual	177	66	122	32	0.26	100

Magnitude and probability of annual low flow based on period of record 1947-63

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	10	7.7	6.5	5.5	---	---
3	11	8.0	6.8	5.8	---	---
7	11	8.5	7.1	6.1	---	---
14	12	9.0	7.6	6.5	---	---
30	12	9.8	8.4	7.3	---	---
60	13	11	9.5	8.5	---	---
90	15	12	11	9.5	---	---
120	16	13	11	9.8	---	---
183	21	17	15	14	---	---

Magnitude and probability of instantaneous peak flow based on 18 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1190	1850	2360	3090	3690	4340

Weighted skew = 0.210

Magnitude and probability of annual high flow based on period of record 1946-63

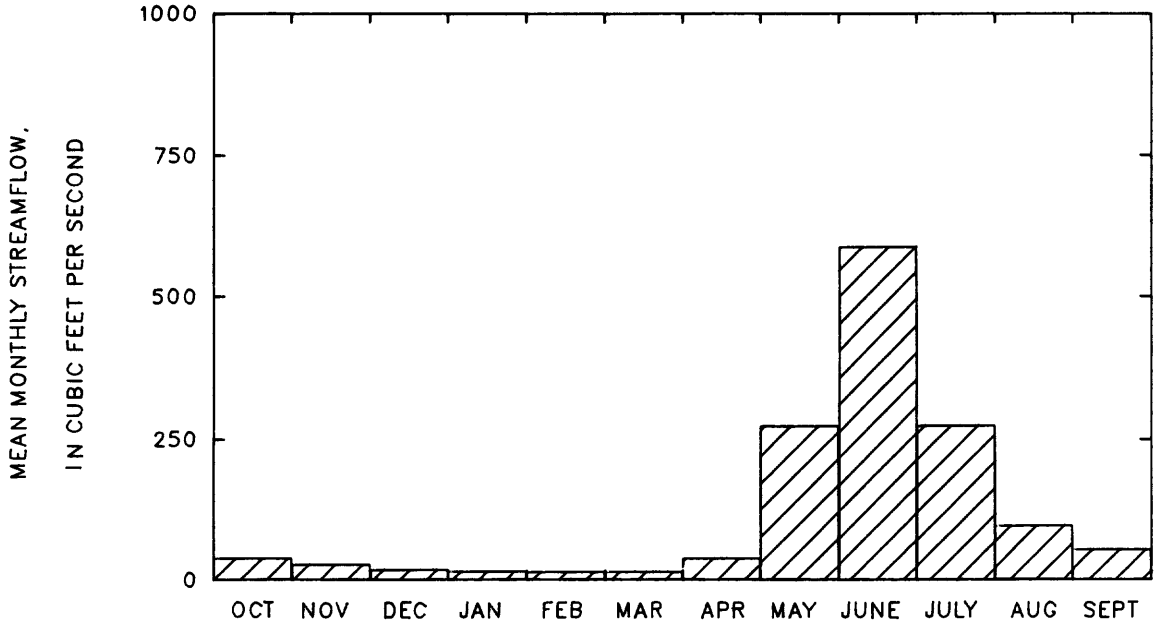
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	992	1530	1970	2630	---	---
3	920	1390	1760	2290	---	---
7	852	1210	1450	1780	---	---
15	756	1000	1150	1320	---	---
30	625	823	942	1080	---	---
60	475	615	698	792	---	---
90	379	488	549	617	---	---

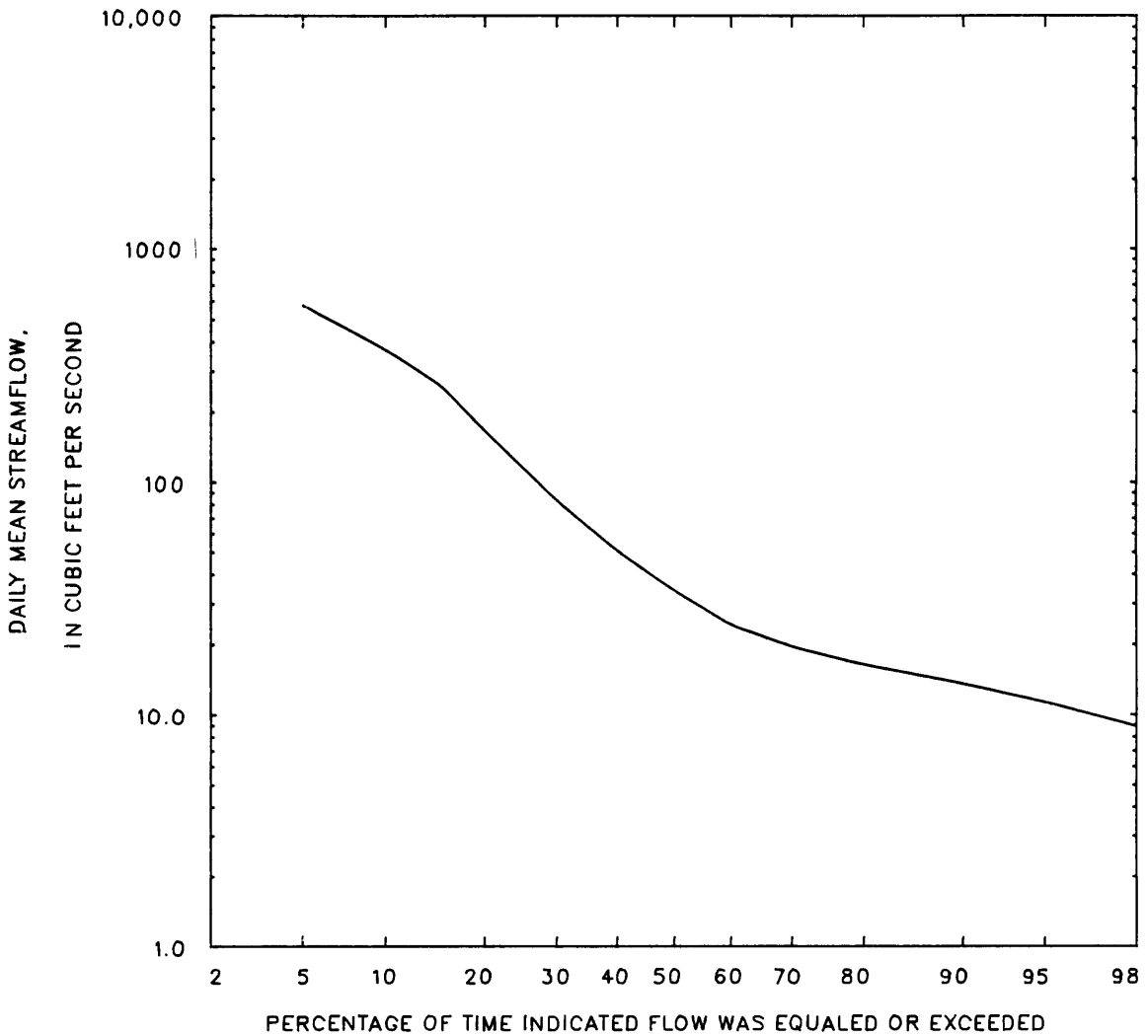
Duration of daily mean flow for period of record 1946-63

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
983	568	368	258	164	83	50	34	24	19	16	13	11	8.8	7.9	6.9	5.6

STATION 06232000 PERIOD OF RECORD 1946–63

NORTH POPO AGIE RIVER NEAR MILFORD, WYO.





06232500 NORTH POPO AGIE RIVER NEAR LANDER, WYO.

LOCATION.--Lat 42°52'59", long 108°47'16", in SE¼SW¼ sec. 17, T.2 S., R.1 E., Fremont County, on left bank 120 ft downstream from bridge on U.S. Highway 287, 4.5 mi northwest of post office in Lander, and 7 mi upstream from mouth.

DRAINAGE AREA.--134 mi^2.

PERIOD OF RECORD.--May 1938 to November 1953. Published as "North Fork Popo Agie River" 1938-43.

GAGE.--Water-stage recorder. Datum of gage is 5,498.08 ft. Prior to September 22, 1938, chain gage 30 ft downstream at same datum.

REMARKS.--Diversions for irrigation of about 3,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft^3/s, June 14, 1953, gage height, 5.54 ft; minimum daily, 5.0 ft^3/s, November 10, 1939.

Monthly and annual streamflow 1939-53

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	82	11	39	22	0.56	3.1
November	59	7.4	34	12	0.36	2.6
December	38	11	27	7.1	0.27	2.1
January	32	8.6	23	5.8	0.25	1.8
February	31	10	21	5.3	0.25	1.7
March	34	11	21	4.9	0.23	1.7
April	111	14	45	25	0.56	3.6
May	394	90	249	91	0.37	19.6
June	748	90	492	210	0.43	38.7
July	448	21	232	144	0.62	18.2
August	128	6.7	55	41	0.74	4.3
September	95	11	34	24	0.72	2.7
Annual	155	30	106	37	0.35	100

Magnitude and probability of annual low flow based on period of record 1940-53

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	11	7.5	5.9	4.9	---	---
3	12	8.0	6.4	5.2	---	---
7	13	8.6	6.9	5.7	---	---
14	14	9.5	7.5	6.1	---	---
30	16	11	8.3	6.7	---	---
60	18	13	11	8.7	---	---
90	22	16	13	11	---	---
120	23	18	14	11	---	---
183	26	19	15	12	---	---

Magnitude and probability of instantaneous peak flow based on 16 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1150	1660	1980	2340	2600	2840

Weighted skew = -0.440

Magnitude and probability of annual high flow based on period of record 1939-53

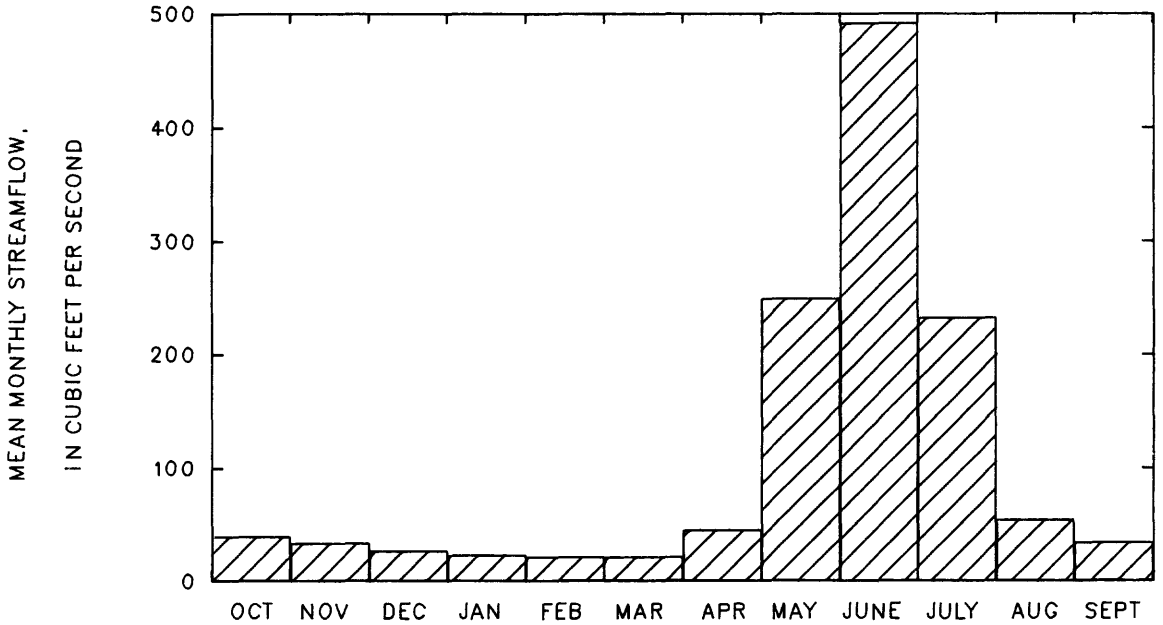
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1030	1400	1580	1760	---	---
3	924	1250	1420	1590	---	---
7	805	1090	1240	1380	---	---
15	677	909	1020	1120	---	---
30	557	752	842	924	---	---
60	423	578	648	710	---	---
90	330	461	522	579	---	---

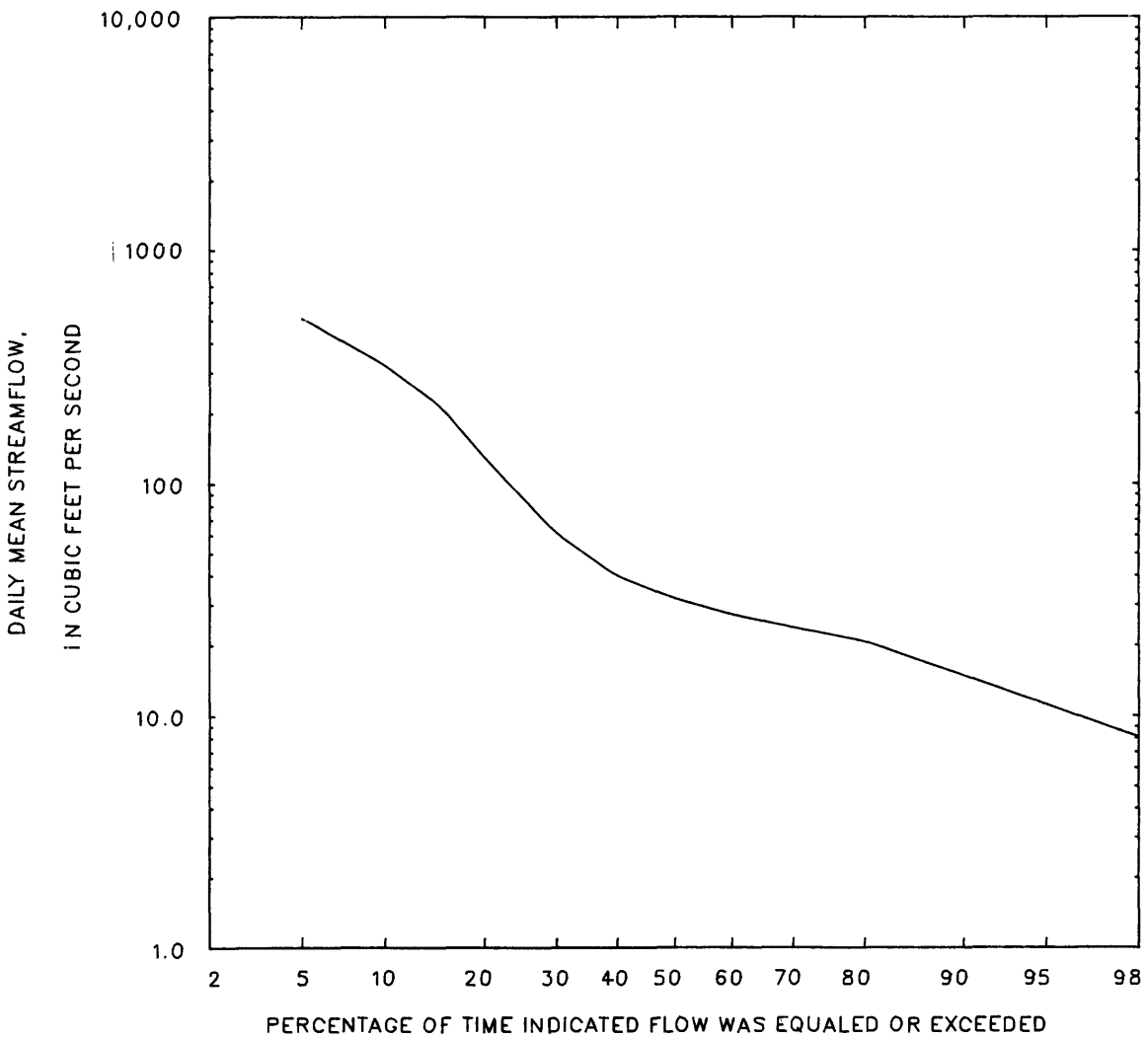
Duration of daily mean flow for period of record 1939-53

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
938	506	321	214	129	61	40	31	27	24	21	15	11	8.0	6.8	6.2	5.3

STATION 06232500 PERIOD OF RECORD 1939–53

NORTH POPO AGIE RIVER NEAR LANDER, WYO.





06232800 LITTLE POPO AGIE RIVER NEAR ATLANTIC CITY, WYO.

LOCATION.--Lat 42°35'32", long 108°55'08", in SW¼NE¼NE¼ sec. 8, T. 30 N., R.101 W., Fremont County, Shoshone National Forest, on left bank 200 ft downstream from Gustave Lake and 11.6 mi northwest of Atlantic City.

DRAINAGE AREA.--5.99 mi².

PERIOD OF RECORD.--October 1957 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 9,780 ft, from topographic map.

REMARKS.--Flow regulated by Christina Lake 0.6 mi upstream, capacity, 3,860 acre-ft. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189 ft³/s, June 14, 1973, gage height, 2.91 ft; maximum gage height 3.45 ft, May 20, 1973 (backwater from snow); minimum daily discharge, 0.02 ft³/s, March 4, 1973.

Monthly and annual streamflow 1958-73

Month	Maximum (ft³/s)	Minimum (ft³/s)	Mean (ft³/s)	Standard deviation (ft³/s)	Coefficient of variation	Percent of annual runoff
October	18	0.80	5.3	4.4	0.84	4.8
November	4.1	0.49	1.8	0.99	0.56	1.6
December	2.5	0.25	1.1	0.67	0.59	1.0
January	2.0	0.14	0.97	0.58	0.60	0.9
February	2.3	0.05	1.0	0.67	0.65	0.9
March	2.4	0.05	1.0	0.65	0.66	0.9
April	2.7	0.18	1.3	0.75	0.58	1.2
May	30	1.4	7.5	9.5	1.3	6.8
June	94	4.9	36	24	0.67	32.6
July	71	2.9	24	19	0.79	21.9
August	25	6.1	15	5.9	0.39	13.8
September	26	2.2	15	7.7	0.52	13.6
Annual	13	4.0	9.2	2.7	0.29	100

Magnitude and probability of annual low flow based on period of record 1959-73

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.52	0.23	0.11	0.06	---	---
3	0.53	0.24	0.13	0.07	---	---
7	0.56	0.25	0.13	0.07	---	---
14	0.59	0.26	0.14	0.08	---	---
30	0.64	0.28	0.15	0.08	---	---
60	0.78	0.34	0.19	0.10	---	---
90	0.81	0.38	0.23	0.14	---	---
120	0.86	0.44	0.28	0.19	---	---
183	1.8	1.1	0.77	0.57	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft³/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1958-73

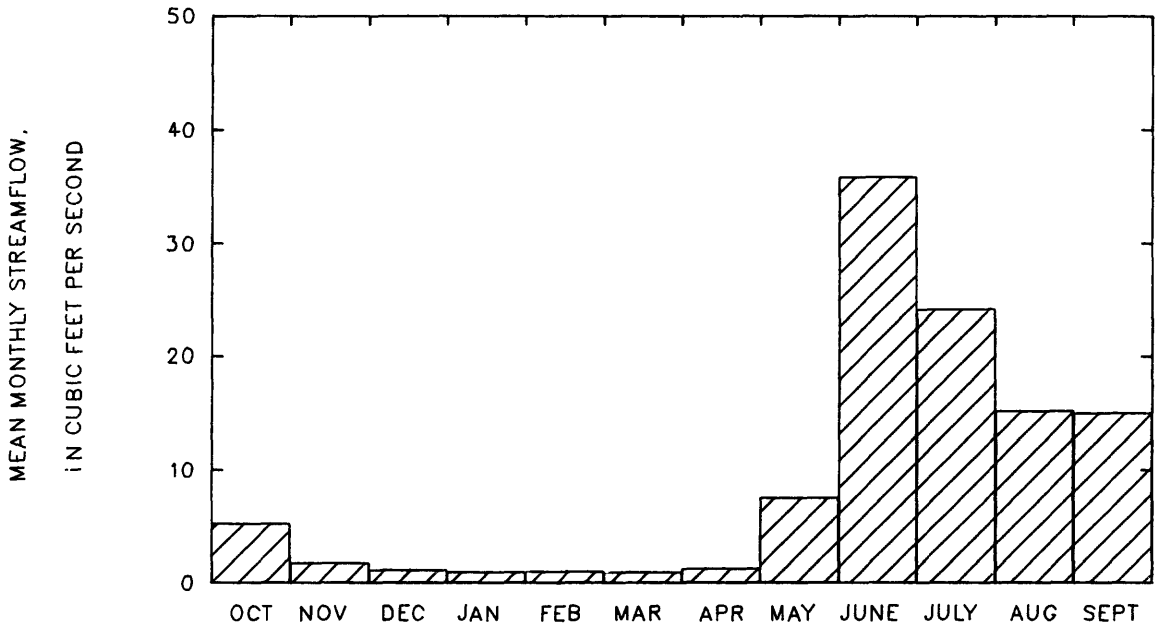
Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	97	152	181	211	---	---
3	90	139	165	193	---	---
7	81	125	149	176	---	---
15	63	98	120	147	---	---
30	48	74	92	114	---	---
60	33	48	57	66	---	---
90	28	37	41	44	---	---

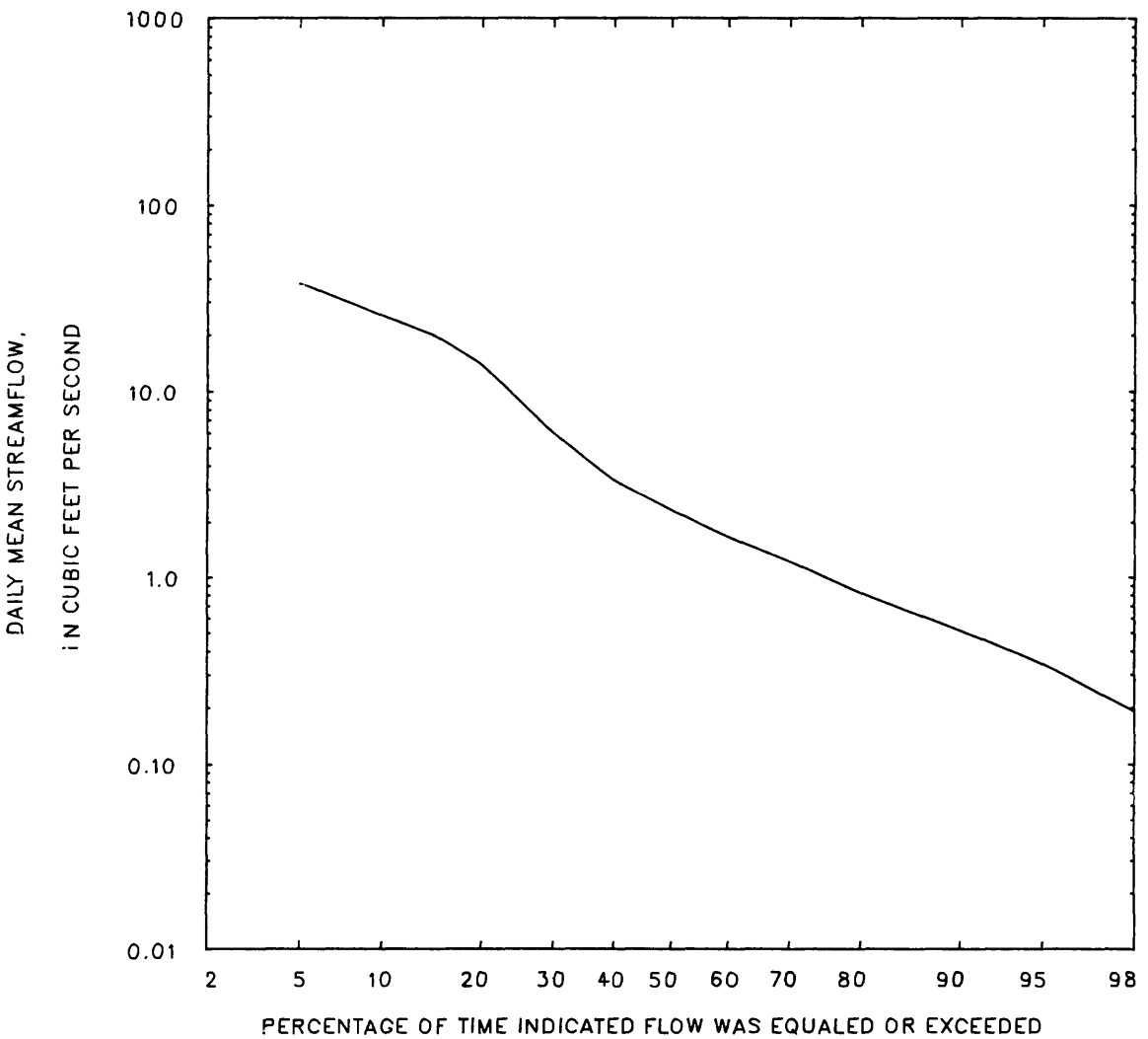
Duration of daily mean flow for period of record 1958-73

Discharge, in ft³/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
106	38	25	20	14	6.0	3.3	2.3	1.6	1.2	0.81	0.51	0.34	0.19	0.09	0.05	0.03

STATION 06232800 PERIOD OF RECORD 1958–73

LITTLE POPO AGIE RIVER NEAR ATLANTIC CITY, WYO.





06233000 LITTLE POPO AGIE RIVER NEAR LANDER, WYO.

LOCATION.--Lat 42°43'00", long 108°38'34", in NE¼SE¼ sec.27, T.32 N., R.99 W., Fremont County, on left bank 700 ft downstream from bridge on State Highway 28, 2.5 mi downstream from Red Canyon Creek, and 9.5 mi southeast of post office in Lander.

DRAINAGE AREA.--125 mi^2.

PERIOD OF RECORD.--March 1946 to current year (no winter records since 1971).

GAGE.--Water-stage recorder. Datum of gage is 5,436.49 ft.

REMARKS.--Diversions for irrigation of about 540 acres above station. Slight regulation by Christina Lake, capacity, about 3,860 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,010 ft^3/s, June 16, 1963, gage height, 6.64 ft; minimum daily, 12 ft^3/s, January 20, 21, February 26 to March 2, 1960, January 10, 11, 18, 19, 1963.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1947-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	49	23	35	8.2	0.23	3.6
November	42	21	30	5.0	0.17	3.1
December	36	18	26	4.4	0.17	2.7
January	33	14	23	4.3	0.18	2.4
February	43	17	24	5.1	0.21	2.5
March	34	19	25	3.5	0.14	2.6
April	77	27	43	13	0.31	4.5
May	334	85	190	66	0.35	19.7
June	720	93	340	166	0.49	35.3
July	332	35	135	89	0.66	14.0
August	99	22	53	18	0.35	5.4
September	63	23	41	12	0.29	4.3
Annual	131	37	80	25	0.31	100

Magnitude and probability of annual low flow based on period of record 1947-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	17	15	14	13	11	---
3	18	15	14	13	11	---
7	19	16	14	13	12	---
14	20	17	16	14	13	---
30	21	18	17	15	14	---
60	22	19	18	17	15	---
90	23	20	19	17	16	---
120	24	21	19	18	16	---
183	27	24	22	21	20	---

Magnitude and probability of instantaneous peak flow based on 38 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
714	1110	1370	1680	1900	2120

Weighted skew = -0.426

Magnitude and probability of annual high flow based on period of record 1947-71

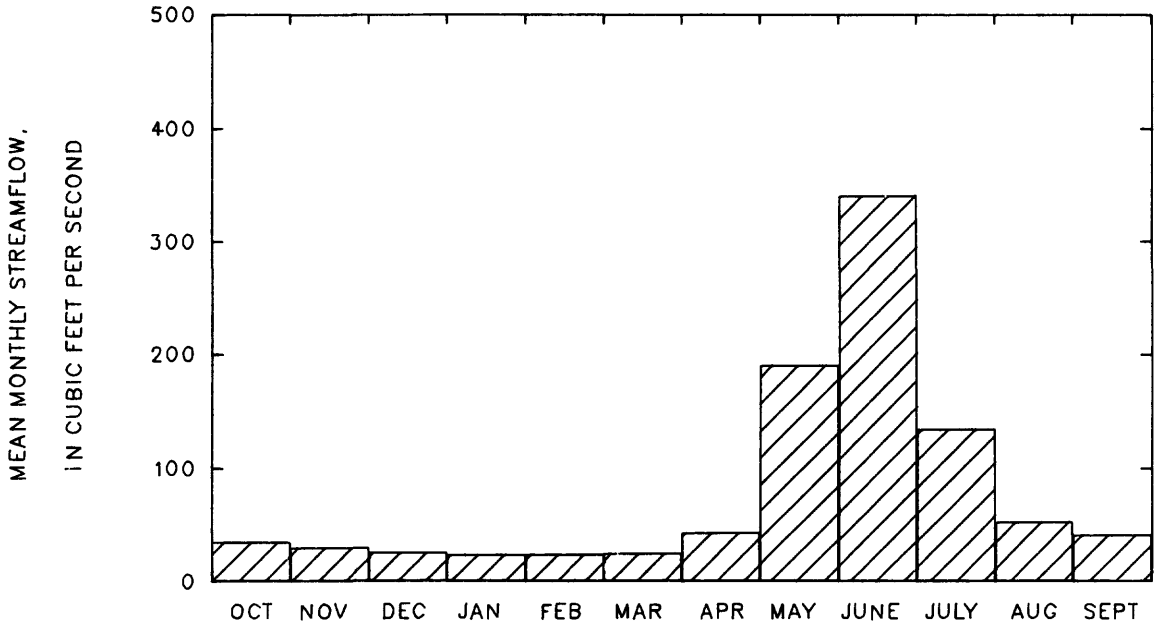
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	587	941	1180	1470	1690	---
3	538	827	1010	1220	1370	---
7	484	716	854	1010	1110	---
15	422	609	718	841	922	---
30	359	512	602	704	772	---
60	275	389	457	533	584	---
90	215	305	358	420	461	---

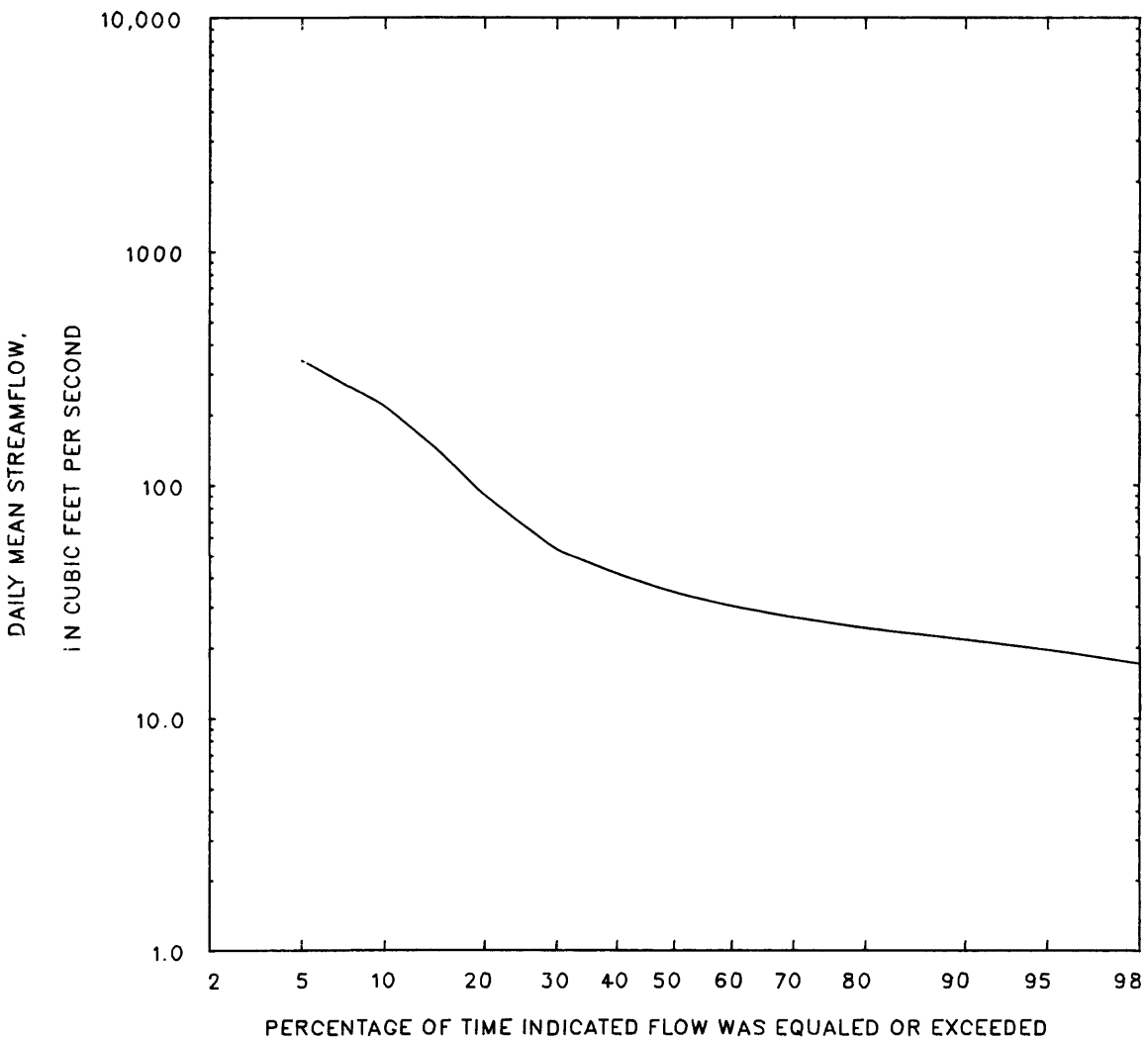
Duration of daily mean flow for period of record 1947-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
611	340	218	138	90	52	41	34	30	27	24	21	19	17	16	14	13

STATION 06233000 PERIOD OF RECORD 1947–71

LITTLE POPO AGIE RIVER NEAR LANDER, WYO.





06233500 LITTLE POPO AGIE RIVER AT HUDSON, WYO.

LOCATION.--Lat 42°54'04", long 108°35'12", in SW¼ sec.21, T.34 N., R.98 W., Fremont County, on left bank at southwest edge of Hudson, 0.50 mi upstream from mouth.

DRAINAGE AREA.--384 mi^2.

PERIOD OF RECORD.--August 1907 to December 1909 and June 1911 to September 1917 (no winter records), May 1938 to November 1953. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Chain gage. Datum of gage is 5,074.28 ft, from Chicago and North Western Railway bench mark. August 26, 1907, to June 23, 1908, and July 24, 1912, to September 30, 1917, staff gages at bridge 150 ft downstream at different datums. June 13, 1908, to December 31, 1909, and June 19, 1911, to July 23, 1912, chain gage at site 450 ft downstream at different datum.

REMARKS.--Diversions for irrigation of about 3,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 1,540 ft^3/s, June 22, 1947, gage height, 7.60 ft; minimum daily, 0.4 ft^3/s, August 16-19, 1940.

Monthly and annual streamflow 1939-53

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	80	18	56	18	0.32	4.9
November	69	16	50	13	0.25	4.4
December	62	18	41	11	0.26	3.6
January	52	14	36	10	0.29	3.2
February	50	21	38	9.5	0.25	3.3
March	87	32	52	13	0.25	4.6
April	137	45	94	26	0.28	8.3
May	425	82	236	93	0.39	20.7
June	668	41	325	176	0.54	28.6
July	310	11	121	90	0.74	10.6
August	92	1.3	43	30	0.70	3.8
September	104	6.0	44	27	0.62	3.9
Annual	147	26	95	34	0.36	100

Magnitude and probability of annual low flow based on period of record 1940-53

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	13	3.5	1.4	0.59	---	---
3	15	4.1	1.7	0.71	---	---
7	17	5.0	2.2	0.96	---	---
14	20	6.6	3.0	1.4	---	---
30	23	9.1	4.6	2.4	---	---
60	30	14	7.6	4.1	---	---
90	35	19	12	7.9	---	---
120	38	25	18	13	---	---
183	43	29	22	17	---	---

Magnitude and probability of instantaneous peak flow based on 25 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
684	935	1110	1340	1520	1710

Weighted skew = 0.240

Magnitude and probability of annual high flow based on period of record 1939-53

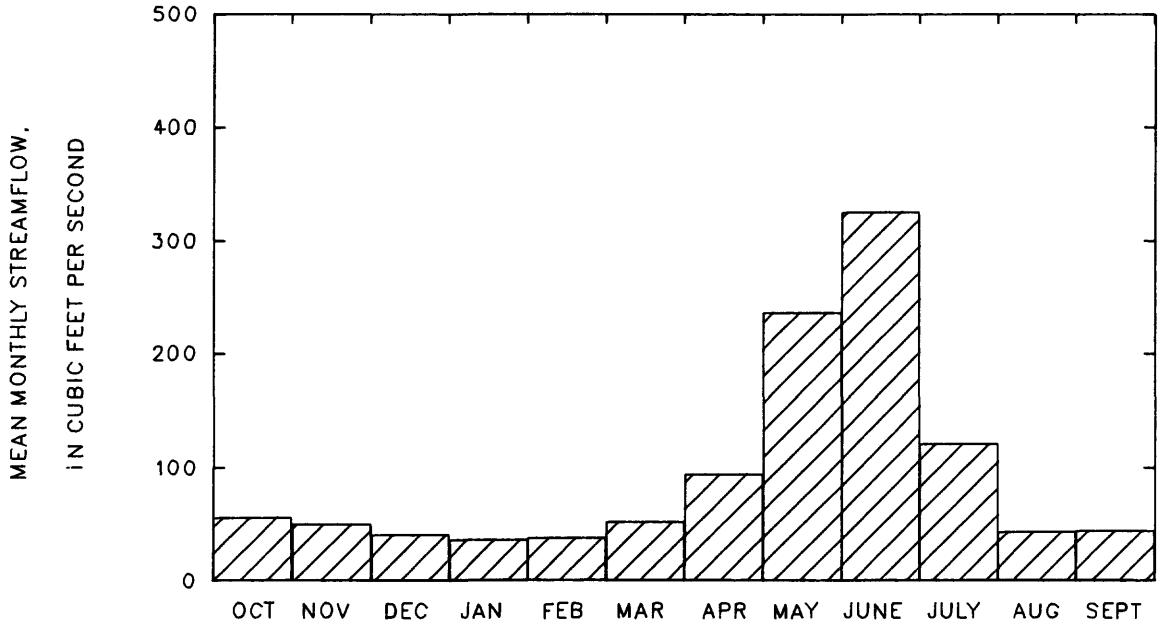
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	581	871	1050	1270	---	---
3	513	782	957	1170	---	---
7	454	701	858	1050	---	---
15	405	613	733	864	---	---
30	351	521	619	725	---	---
60	283	416	487	560	---	---
90	236	338	389	438	---	---

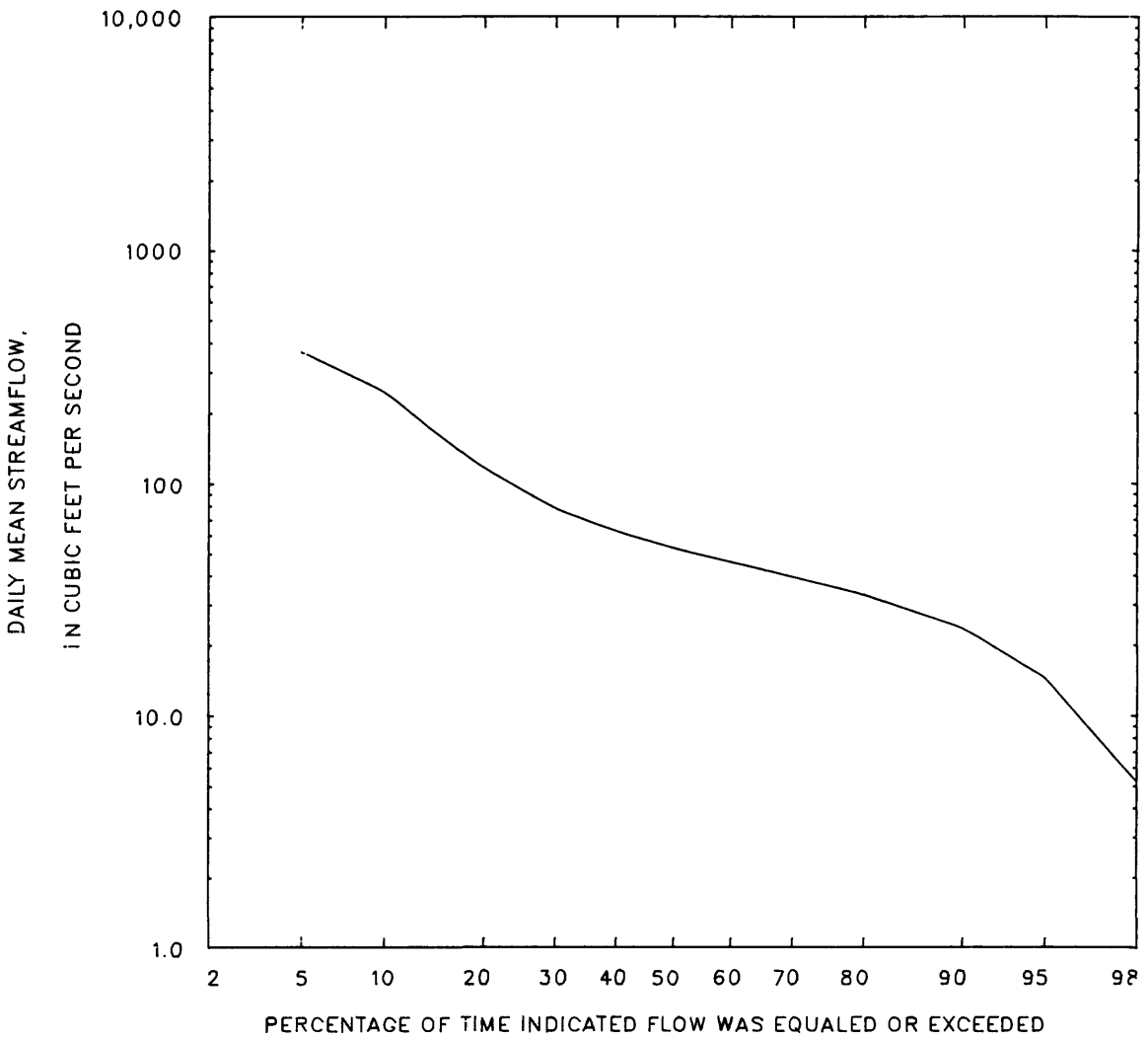
Duration of daily mean flow for period of record 1939-53

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
601	363	247	159	116	78	62	52	46	39	33	24	14	5.2	2.5	1.5	0.57

STATION 06233500 PERIOD OF RECORD 1939–53

LITTLE POPO AGIE RIVER AT HUDSON, WYO.





06235500 LITTLE WIND RIVER NEAR RIVERTON, WYO.

LOCATION.--Lat 42°59'51", long 108°22'29", in NE¼NW¼ sec.11, T.1 S., R.4 E., Fremont County, Wind River Indian Reservation, on right bank 1.8 mi upstream from mouth and 1.9 mi southeast of Riverton.

DRAINAGE AREA.--1,904 mi^2.

PERIOD OF RECORD.--May 1941 to current year. Prior to October 1958, published as Popo Agie River near Riverton.

GAGE.--Water-stage recorder. Datum of gage is 4,901.84 ft. Prior to September 19, 1956, at site 600 ft downstream at same datum.

REMARKS.--Diversions for irrigation of about 62,900 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,700 ft^3/s, June 17, 1963, gage height, 10.85 ft; minimum daily, 41 ft^3/s, August 7, 1960.

Monthly and annual streamflow 1942-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	728	160	330	131	0.40	4.7
November	501	176	280	72	0.26	3.9
December	351	129	213	43	0.20	3.0
January	302	95	185	42	0.22	2.6
February	728	123	214	95	0.44	3.0
March	427	191	262	51	0.19	3.7
April	1040	167	369	163	0.44	5.2
May	2350	242	1160	537	0.46	16.3
June	5110	288	2490	1130	0.46	35.1
July	2830	117	1050	721	0.68	14.9
August	699	58	269	152	0.56	3.8
September	1320	90	268	206	0.77	3.8
Annual	1020	236	591	188	0.32	100

Magnitude and probability of annual low flow based on period of record 1943-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	106	75	62	52	42	36
3	111	78	64	53	42	36
7	117	83	67	56	45	38
14	127	90	73	61	49	42
30	140	101	84	71	58	50
60	162	121	102	88	73	64
90	179	145	130	118	106	99
120	195	166	155	147	138	134
183	218	178	161	150	139	132

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1942-84

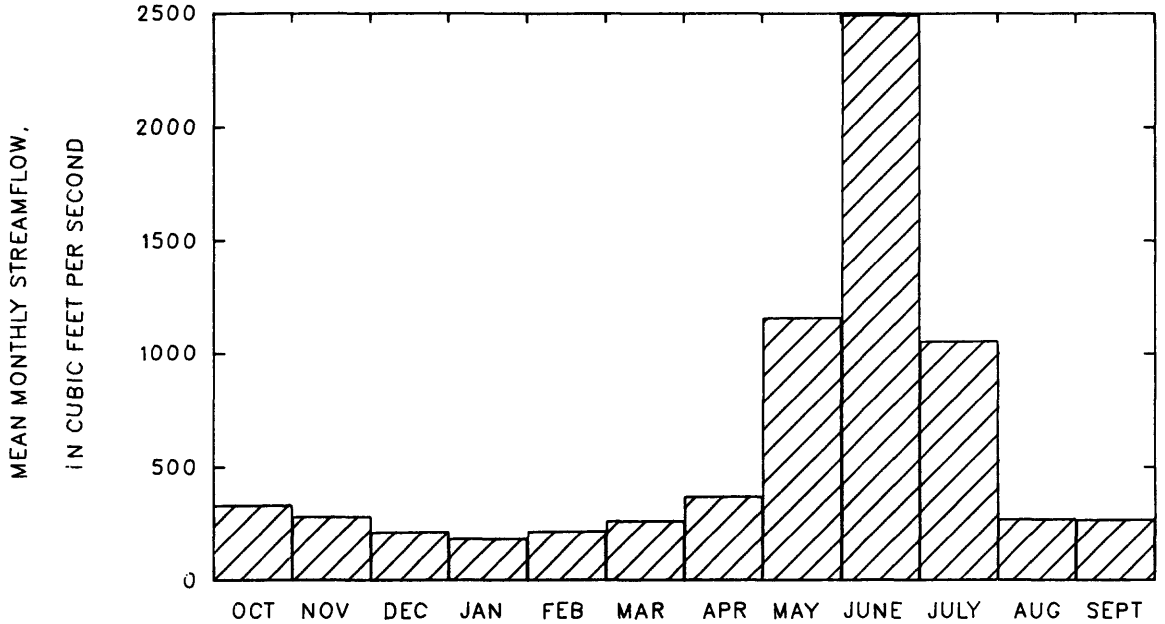
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	4830	6960	8120	9310	10000	10700
3	4450	6240	7140	8000	8490	8880
7	3990	5450	6070	6600	6860	7040
15	3440	4640	5130	5520	5710	5830
30	2790	3840	4300	4690	4890	5040
60	2060	2860	3240	3570	3750	3880
90	1590	2210	2510	2800	2960	3090

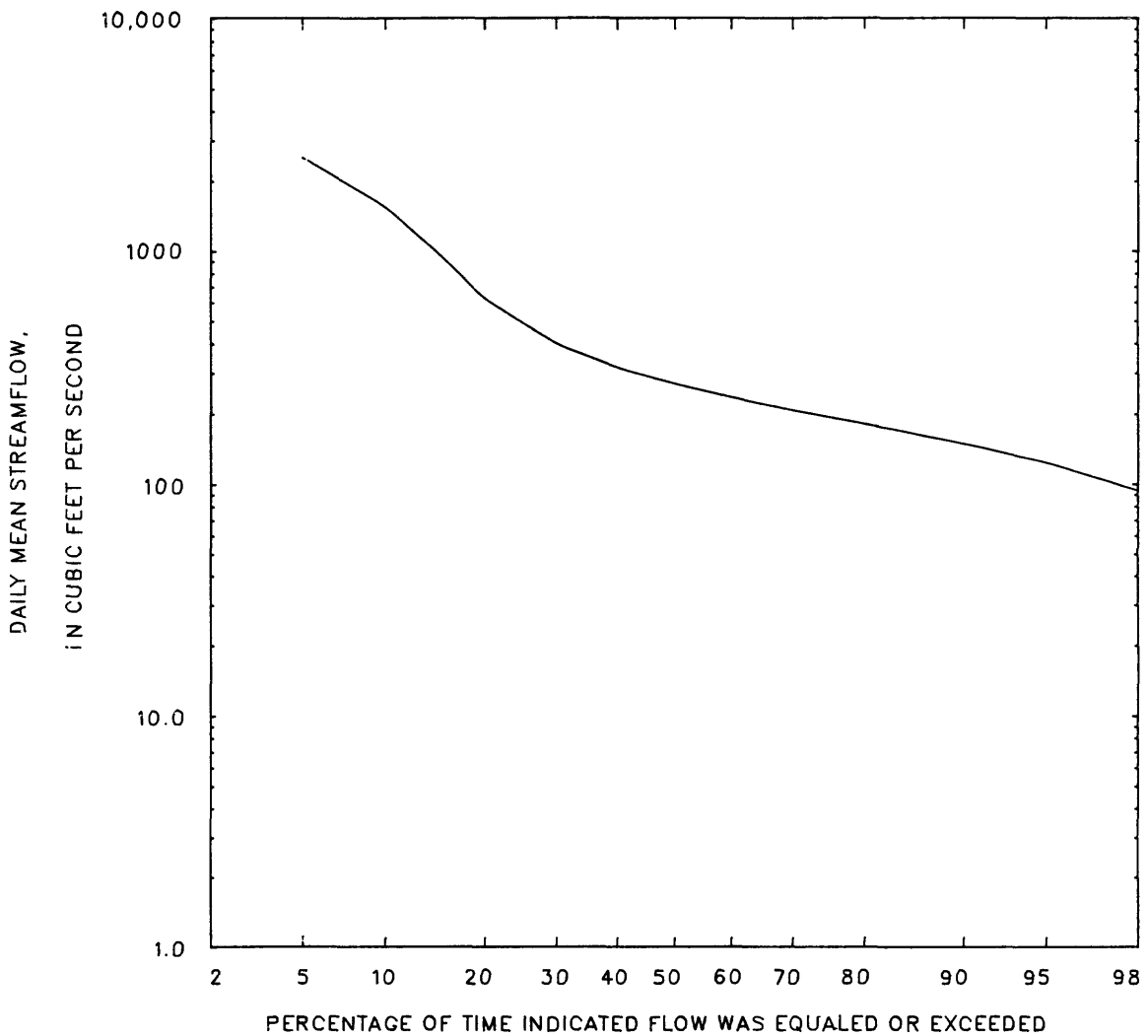
Duration of daily mean flow for period of record 1942-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
4600	2520	1550	954	621	397	313	268	234	206	181	148	124	93	76	62	50

STATION 06235500 PERIOD OF RECORD 1942–84

LITTLE WIND RIVER NEAR RIVERTON, WYO.





06239000 MUSKRAT CREEK NEAR SHOSHONI, WYO.

LOCATION.--Lat 43°08'53", long 108°09'27", in SW¼NE¼SW¼ sec.15, T.2 N., R.6 E., Fremont County, Wind River Indian Reservation, on right bank 2.0 mi upstream from mouth and 7.0 mi southwest of Shoshoni. Prior to October 1, 1972, 60 ft upstream on left bank.

DRAINAGE AREA.--733 mi^2.

PERIOD OF RECORD.--June 1950 to September 1958, October 1959 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 4,770 ft, from topographic map. Prior to October 1, 1971, water-stage recorder at present site and datum. October 1, 1971, to September 30, 1972, at site 60 ft upstream, on right bank, at datum 6.00 ft lower.

REMARKS.--Bureau of Land Management has extensive spreader and detention systems on some of the tributaries above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft^3/s, February 10, 1962, gage height, 6.44 ft, from floodmarks, present site and datum, on basis of slope-area measurement of peak flow; no flow for most of each year.

Monthly and annual streamflow 1951-58, 1960-73

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	0.10	0.00	0.00	0.02	4.7	0.0
November	0.00	0.00	0.00	0.00		0.0
December	1.0	0.00	0.05	0.21	4.7	0.1
January	0.00	0.00	0.00	0.00		0.0
February	245	0.00	15	54	3.7	33.7
March	7.4	0.00	0.39	1.6	4.0	0.9
April	101	0.00	5.1	21	4.2	11.8
May	151	0.00	10	32	3.1	23.8
June	140	0.00	10	30	2.8	24.1
July	24	0.00	1.6	5.3	3.4	3.6
August	4.7	0.00	0.41	1.3	3.2	0.9
September	3.3	0.00	0.45	0.95	2.1	1.0
Annual	22	0.00	3.5	6.1	1.7	100

Magnitude and probability of annual low flow based on period of record 1952-58, 1961-73

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.00	0.00	---	---	---	---
90	0.00	0.00	---	---	---	---
120	0.00	0.00	---	---	---	---
183	0.00	0.00	---	---	---	---

Magnitude and probability of instantaneous peak flow based on 21 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
781	2020	3370	5870	8450	11800

Weighted skew = 0.120

Magnitude and probability of annual high flow based on period of record 1951-58, 1960-73

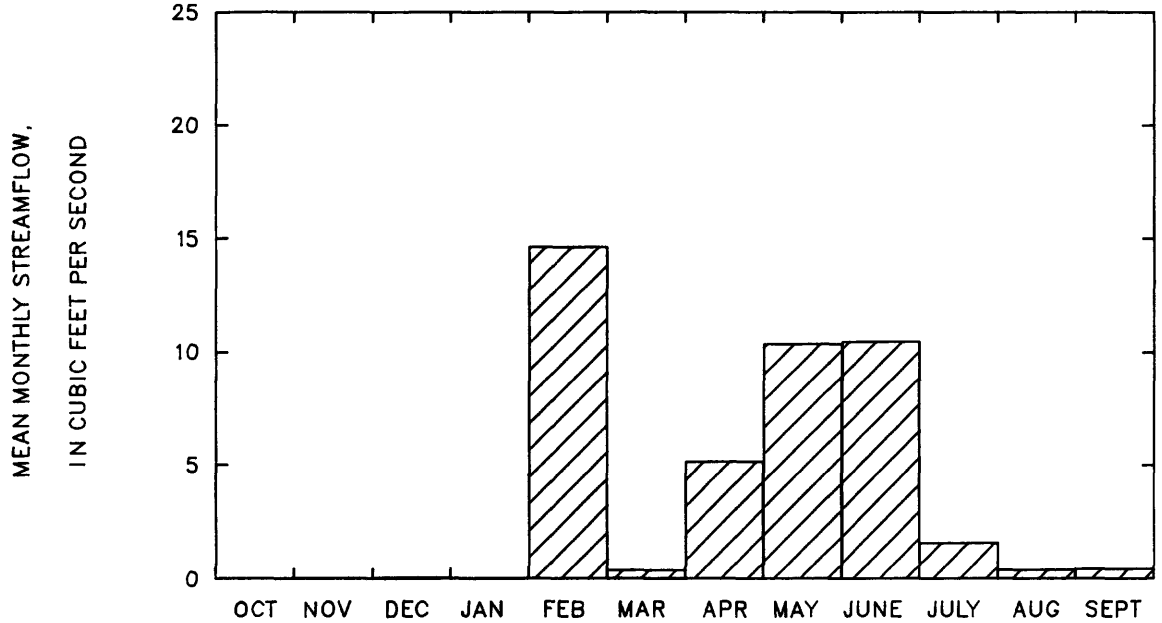
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	163	667	---	---	---	---
3	80	353	---	---	---	---
7	37	174	---	---	---	---
15	18	92	---	---	---	---
30	10	50	---	---	---	---
60	5.8	28	---	---	---	---
90	4.1	19	---	---	---	---

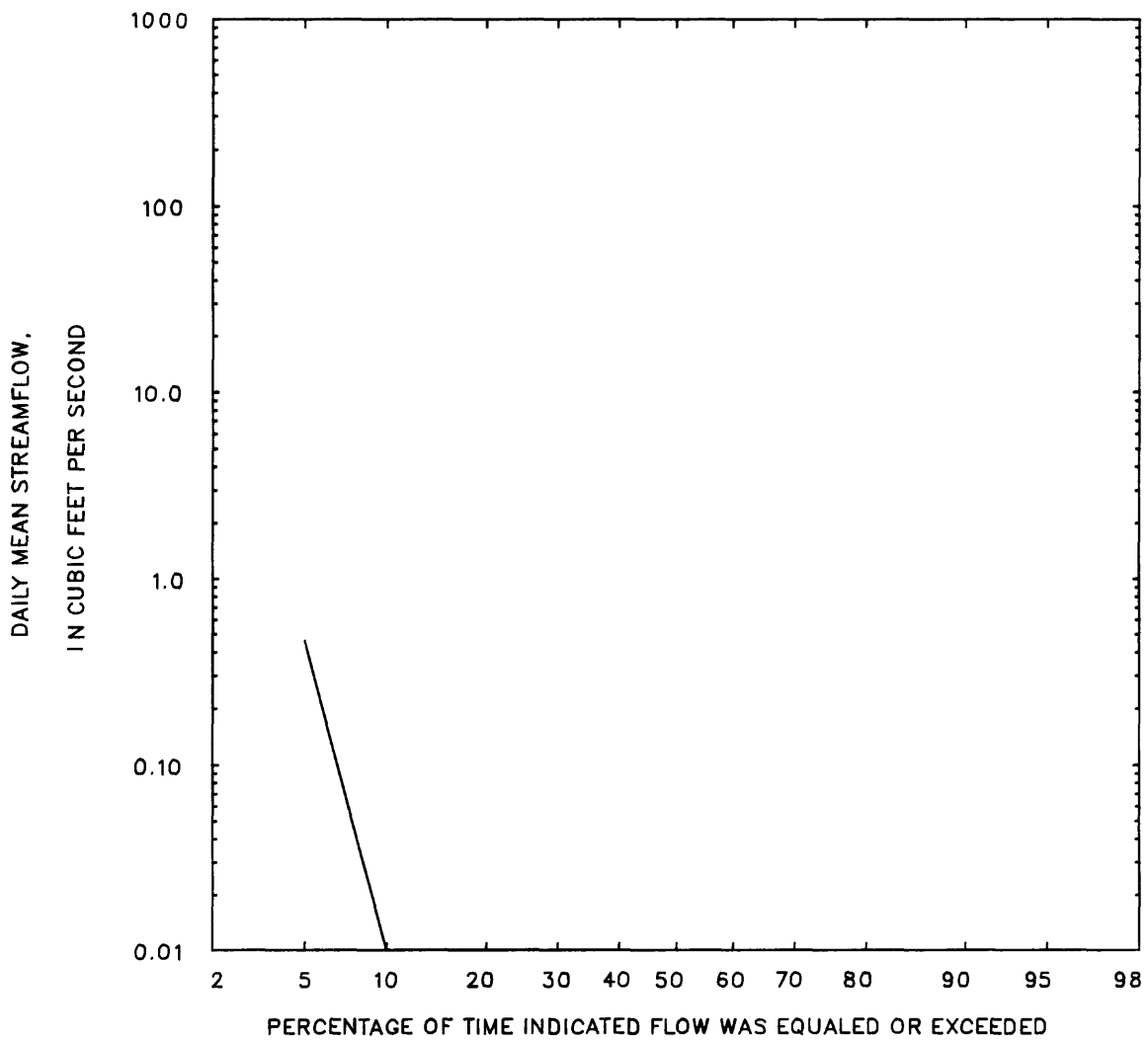
Duration of daily mean flow for period of record 1951-58, 1960-73

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
48	0.46	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

STATION 06239000 PERIOD OF RECORD 1951–58, 1960–73

MUSKRAT CREEK NEAR SHOSHONI, WYO.





06244500 FIVEMILE CREEK ABOVE WYOMING CANAL, NEAR PAVILLION, WYO.

LOCATION.--Lat 43°18'05", long 108°42'08", in SE¼SW¼SE¼ sec. 24, T.4 N., R.1 E., Fremont County, on left bank 1,700 ft upstream from Wyoming Canal siphon and 4.0 mi north of Pavillion.

DRAINAGE AREA.--118 mi^2.

PERIOD OF RECORD.--October 1949 to September 1975.

GAGE.--Water-stage recorder. Altitude of gage is 5,500 ft, from topographic map. August 27, 1948, to March 28, 1950, at site 0.2 mi downstream at different datum. March 29, 1950, to April 23, 1974, at site 300 ft downstream at present datum.

REMARKS.--Flow regulated by Bureau of Indian Affairs reservoir reservoir system approximately 10.5 mi upstream. Diversions for irrigation of about 320 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,750 ft^3/s, September 6, 1951, gage height, 5.60 ft from floodmarks, from rating curve extended above 350 ft^3/s; no flow at times in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1948 reached a stage of about 6.1 ft, discharge, 2,600 ft^3/s, by slope-area measurement of peak flow.

Monthly and annual streamflow 1950-75

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	5.5	0.00	1.9	1.5	0.78	7.1
November	5.5	0.00	2.0	1.7	0.82	7.5
December	3.1	0.00	1.0	0.98	0.95	3.8
January	3.3	0.00	1.1	1.2	1.1	3.9
February	6.9	0.00	2.5	1.9	0.76	9.3
March	8.2	0.27	4.1	2.3	0.56	15.0
April	6.6	0.10	3.6	1.8	0.49	13.2
May	5.8	0.38	2.9	1.5	0.49	10.9
June	26	0.04	3.6	6.0	1.7	13.1
July	12	0.00	1.4	2.5	1.8	5.1
August	5.8	0.00	0.55	1.3	2.3	2.0
September	15	0.00	2.5	3.9	1.6	9.1
Annual	5.1	0.25	2.3	1.4	0.60	100

Magnitude and probability of annual low flow based on period of record 1951-75

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.00	0.00	---	---	---	---
90	0.00	0.00	---	---	---	---
120	0.27	0.00	---	---	---	---
183	0.75	0.10	---	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1950-75

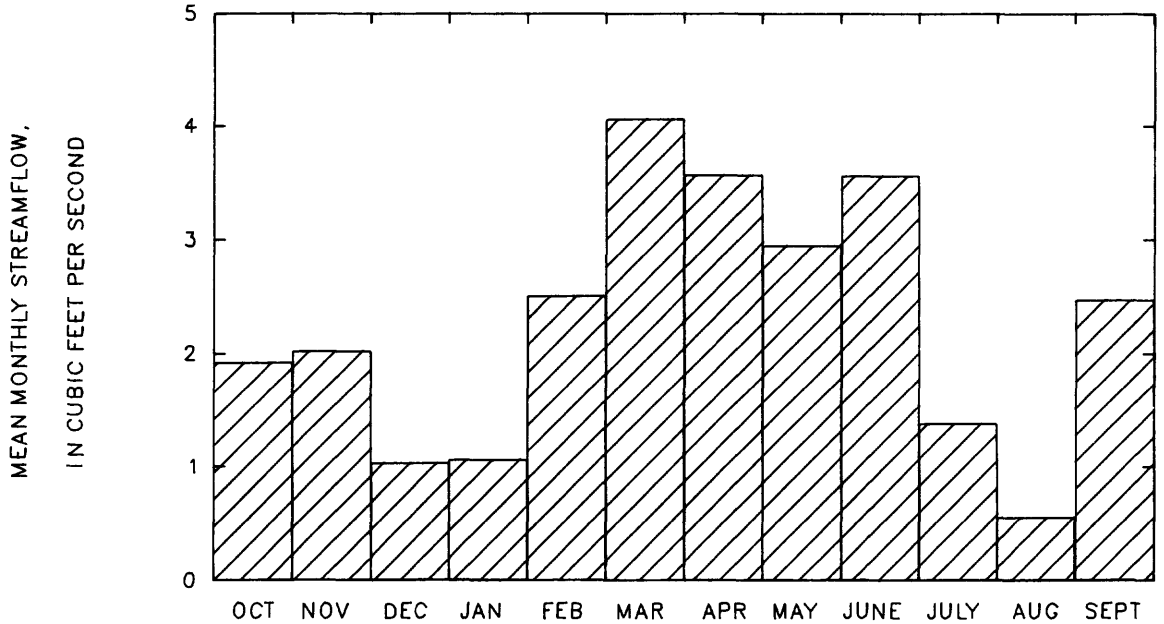
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	27	57	89	---	---	---
3	18	35	51	---	---	---
7	12	23	33	---	---	---
15	8.0	15	21	---	---	---
30	6.3	11	14	---	---	---
60	5.0	8.3	10	---	---	---
90	4.5	7.0	8.4	---	---	---

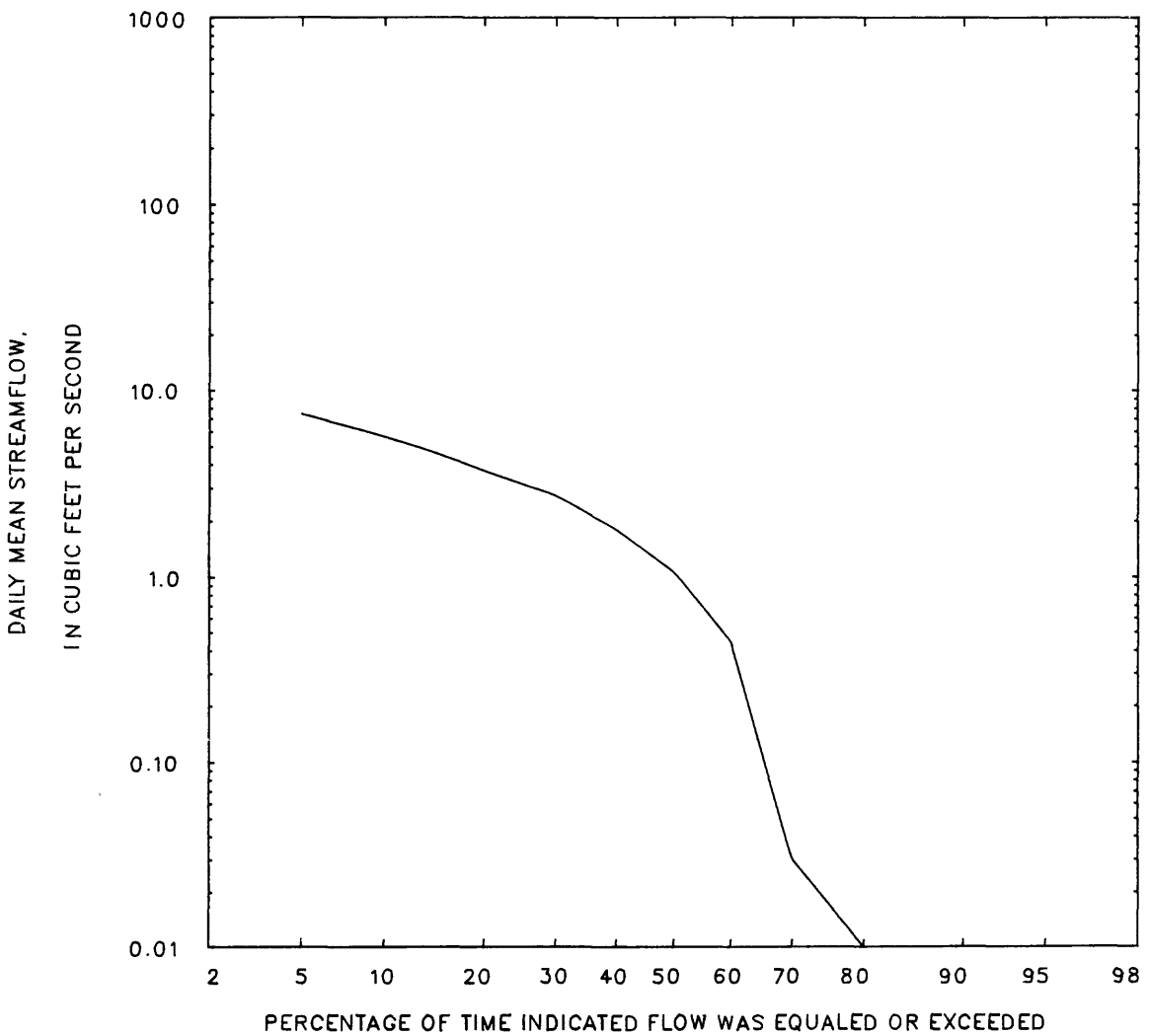
Duration of daily mean flow for period of record 1950-75

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
19	7.4	5.6	4.5	3.7	2.7	1.8	1.0	0.44	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00

STATION 06244500 PERIOD OF RECORD 1950–75

FIVEMILE CREEK ABOVE WYOMING CANAL, NEAR PAVILLION, WYO.





06250000 FIVEMILE CREEK NEAR RIVERTON, WYO.

LOCATION.--Lat 43°12'14", long 108°23'54", in SW¼SW¼ sec. 27, T.3 N., T.4 E., Fremont County, on right bank 12.5 mi north of Riverton and 13 mi upstream from mouth.

DRAINAGE AREA.--356 mi^2, of which 132 mi^2 is probably noncontributing.

PERIOD OF RECORD.--September 1949 to September 1958, October 1959 to September 1965.

GAGE.--Water-stage recorder. Altitude of gage is 5,020 ft, from topographic map. Prior to April 4, 1951, wire-weight gage at site 50 ft downstream at same datum.

REMARKS--Flow regulated by operation of Wyoming Canal spillway. Bureau of Indian Affairs has a reservoir system in the headwaters.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,690 ft^3/s, July 25, 1950, gage height, 11.0 ft, from floodmarks, from rating curve extended above 1,100 ft^3/s on basis of velocity-area study and logarithmic plotting; minimum daily, 2.0 ft^3/s, November 17, 18, 1951.

Monthly and annual streamflow 1950-58, 1960-65

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	119	30	67	26	0.39	7.1
November	59	8.0	40	12	0.30	4.3
December	45	4.8	30	11	0.38	3.2
January	41	3.7	24	9.9	0.41	2.6
February	49	14	28	11	0.38	3.0
March	64	14	31	13	0.41	3.3
April	66	21	40	14	0.35	4.3
May	117	47	81	23	0.28	8.7
June	213	93	134	31	0.23	14.3
July	202	85	164	29	0.18	17.5
August	230	88	164	33	0.20	17.5
September	187	93	135	31	0.23	14.4
Annual	101	57	78	14	0.18	100

Magnitude and probability of annual low flow based on period of record 1951-58, 1961-65

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	12	6.1	3.9	2.6	---	---
3	12	6.4	4.2	2.8	---	---
7	13	7.3	4.8	3.3	---	---
14	15	8.4	5.6	3.8	---	---
30	19	11	7.1	4.8	---	---
60	24	14	9.6	6.5	---	---
90	26	17	13	9.4	---	---
120	28	20	16	14	---	---
183	37	29	25	22	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1950-58, 1960-65

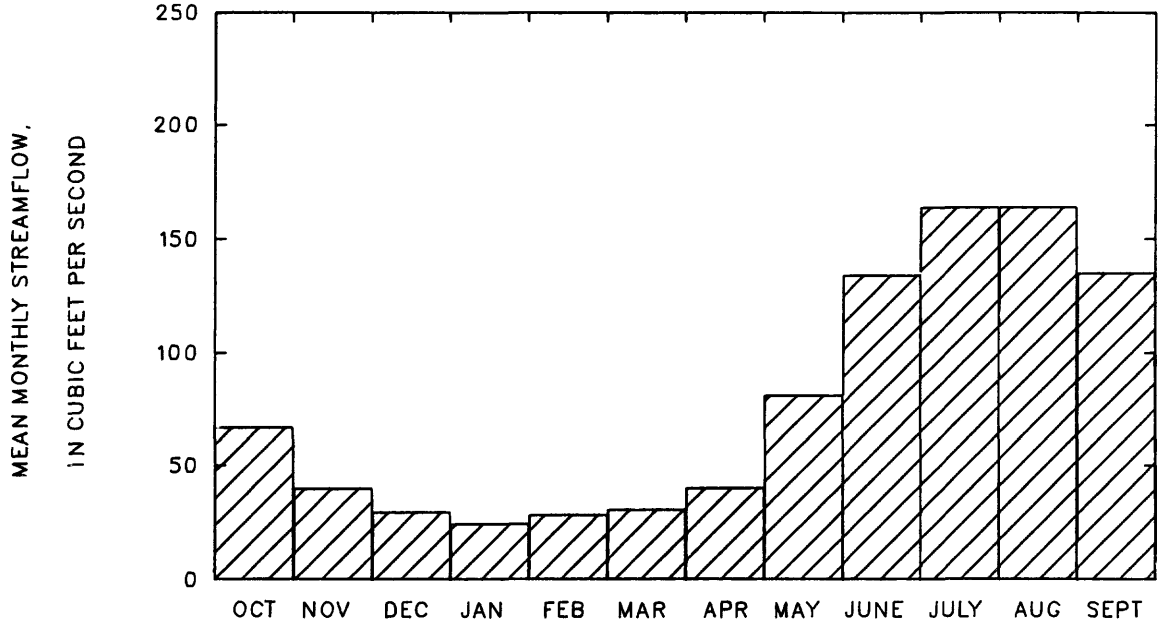
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	276	393	491	642	---	---
3	244	320	374	445	---	---
7	223	276	305	336	---	---
15	204	235	246	255	---	---
30	191	212	217	220	---	---
60	178	197	201	204	---	---
90	168	186	192	195	---	---

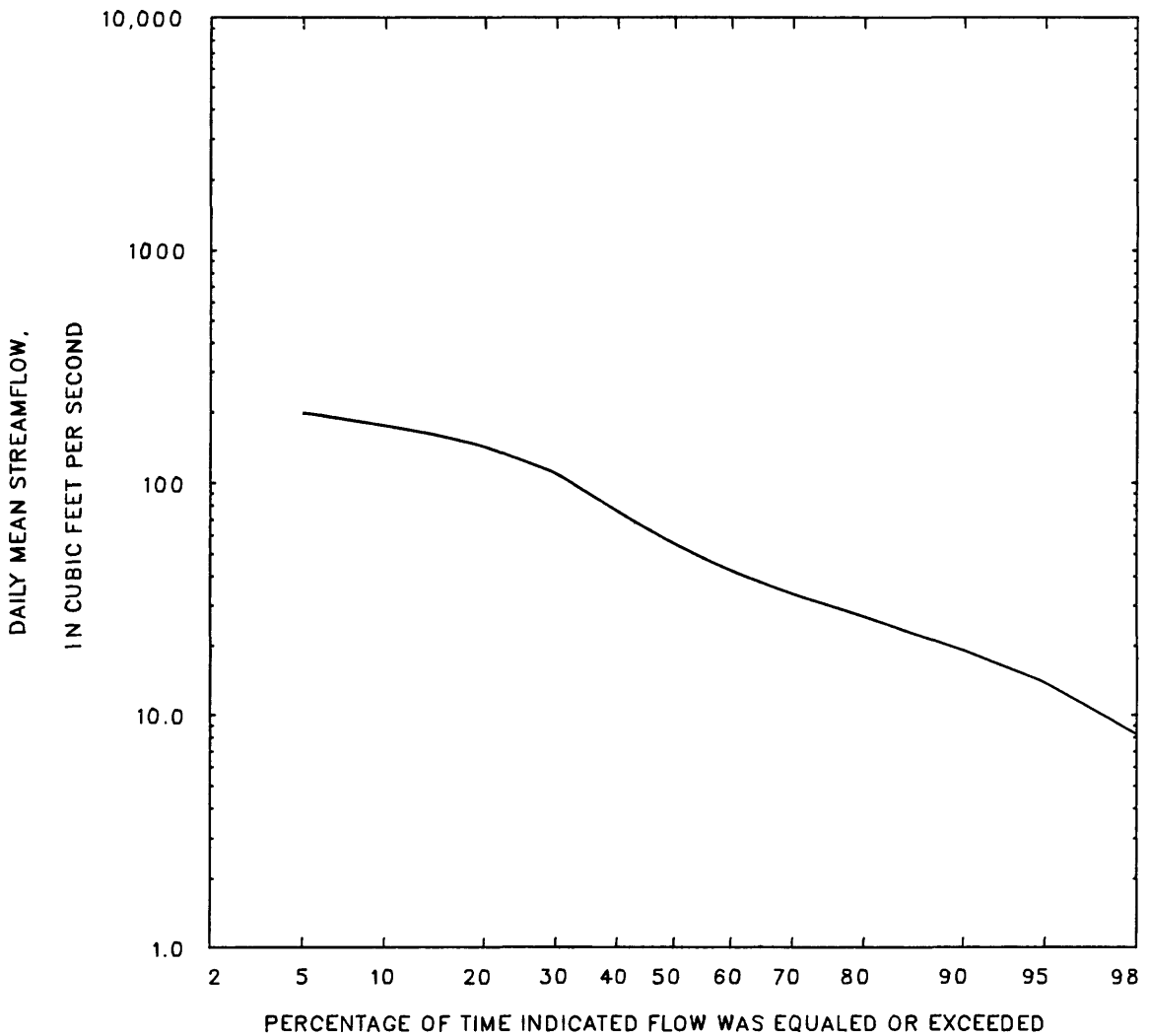
Duration of daily mean flow for period of record 1950-58, 1960-65

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
226	199	175	158	142	109	75	54	42	33	27	19	14	8.2	4.9	4.1	2.9

STATION 06250000 PERIOD OF RECORD 1950–58, 1960–65

FIVEMILE CREEK NEAR RIVERTON, WYO.





06253000 FIVEMILE CREEK NEAR SHOSHONI, WYO.

LOCATION.--Lat 43°13'20", long 108°13'06", in NW¼SW¼ sec.19, T.3 N., R.6 E., Fremont County, on right bank 1.2 mi upstream from normal high-water line of Boysen Reservoir at elevation 4,725 ft and 5.0 mi west of Shoshoni.

DRAINAGE AREA.--418 mi^2, of which 133 mi^2 is probably noncontributing.

PERIOD OF RECORD.--May 1941 to September 1942, August 1948 to September 1983.

GAGE.--Water-stage recorder. Altitude of gage is 4,750 ft, from topographic map. May 10, 1941, to September 30, 1942, non-recording gage at site 1.0 mi downstream at different datum.

REMARKS.--Natural flow of stream affected by regulation of Bureau of Indian Affairs reservoir system in the headwaters, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,390 ft^3/s, June 15, 1962, gage height, 7.85 ft, from rating curve extended above 2,500 ft^3/s; maximum gage height, 9.61 ft, December 27, 1954 (backwater from ice); minimum daily discharge, 1.0 ft^3/s, January 4-6, 1942.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 24, 1923, discharge, 3,390 ft^3/s, estimated by Bureau of Reclamation, exceeded all floods at this location during period of record.

Monthly and annual streamflow 1942, 1949-83

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	214	18	133	46	0.35	7.0
November	120	15	74	21	0.29	3.9
December	90	8.3	56	18	0.32	3.0
January	75	2.6	47	14	0.31	2.5
February	80	6.2	47	13	0.28	2.5
March	87	18	50	12	0.24	2.6
April	129	13	72	27	0.38	3.8
May	265	28	169	51	0.30	9.0
June	442	113	275	70	0.26	14.6
July	524	141	335	84	0.25	17.8
August	525	139	341	88	0.26	18.1
September	451	95	283	75	0.27	15.0
Annual	229	55	157	36	0.23	100

Magnitude and probability of annual low flow based on period of record 1950-83

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	28	21	18	15	13	---
3	29	22	18	16	13	---
7	31	24	20	18	15	---
14	35	28	24	21	18	---
30	41	33	28	25	21	---
60	45	36	32	28	25	---
90	48	39	35	32	28	---
120	51	43	38	35	31	---
183	72	58	51	46	40	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1942, 1949-83

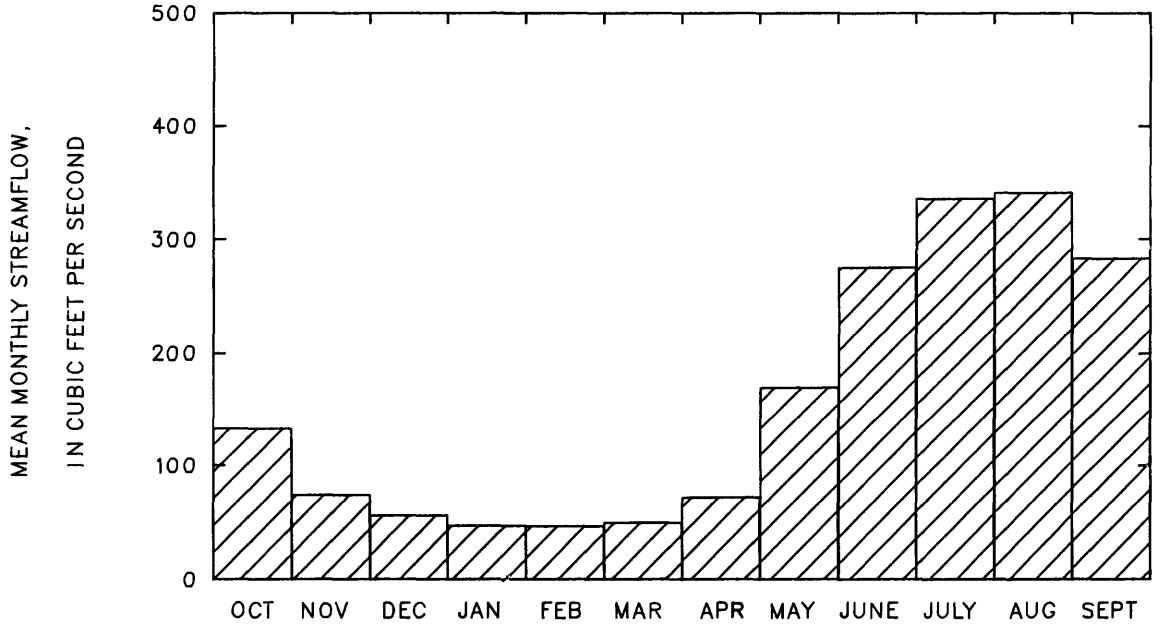
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	496	642	737	855	942	---
3	458	572	633	698	740	---
7	426	520	564	607	632	---
15	398	478	514	545	562	---
30	377	451	482	507	520	---
60	356	425	453	477	489	---
90	339	403	430	452	464	---

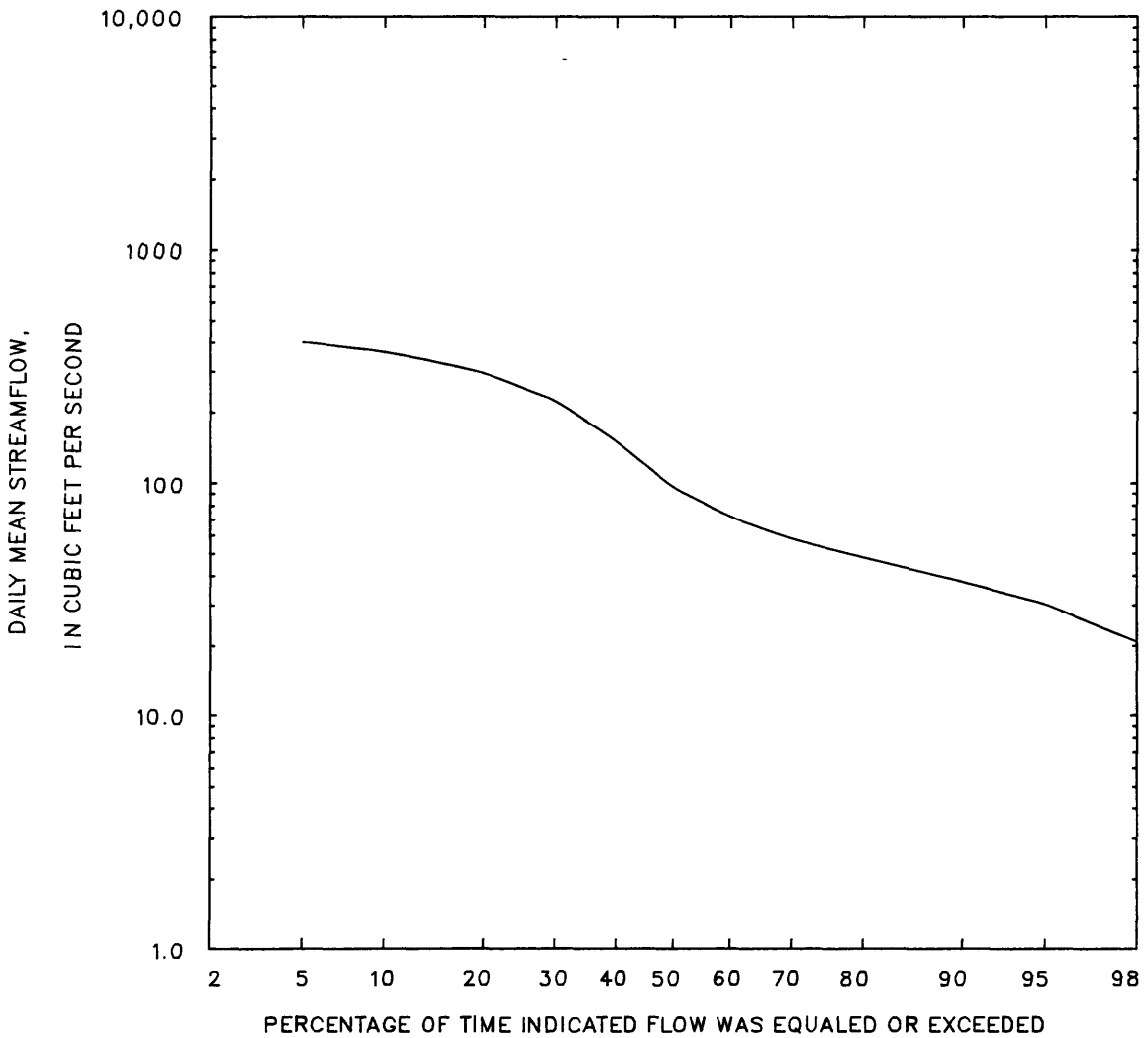
Duration of daily mean flow for period of record 1942, 1949-83

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
505	401	363	326	295	223	150	94	71	57	48	38	30	21	13	7.0	2.2

STATION 06253000 PERIOD OF RECORD 1942, 1949–83

FIVEMILE CREEK NEAR SHOSHONI, WYO.





06256000 BADWATER CREEK AT LYBYER RANCH, NEAR LOST CABIN, WYO.

LOCATION.--Lat 43°21'02", long 107°33'22", in SE¼NE¼ sec.18, T.39 N., R.89 W., Fremont County, on right bank 2,000 ft downstream from Sioux Creek, 1 mile northwest of Lybyer Ranch, and 6 mi northeast of Lost Cabin.

DRAINAGE AREA.--131 mi^2.

PERIOD OF RECORD.--September 1948 to September 1968.

GAGE.--Digital water-stage recorder. Datum of gage is 5,715.42 ft. Prior to August 18, 1966, graphic water-stage recorder at same site and datum.

REMARKS.--Diversions for irrigation of about 350 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,060 ft^3/s, July 16, 1968, from rating curve extended above 170 ft^3/s on basis of step-backwater study; maximum gage height, 8.88 ft, March 30, 1952 (backwater from ice); no flow at times in most years.

Monthly and annual streamflow 1949-68

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	13	0.00	2.0	2.9	1.5	1.9
November	12	0.00	2.6	2.8	1.1	2.5
December	8.0	0.00	1.9	1.9	1.0	1.8
January	6.9	0.00	1.5	1.7	1.2	1.4
February	7.6	0.00	1.6	1.8	1.1	1.5
March	15	0.43	4.6	3.4	0.74	4.4
April	71	4.4	20	15	0.77	19.0
May	133	5.6	37	35	0.94	35.3
June	116	0.30	25	35	1.4	23.6
July	38	0.00	6.2	10	1.7	5.9
August	17	0.00	1.7	4.0	2.4	1.6
September	11	0.00	1.2	2.8	2.3	1.2
Annual	27	1.8	8.7	8.0	0.91	100

Magnitude and probability of annual low flow based on period of record 1950-68

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.00	0.00	---	---	---	---
90	0.00	0.00	---	---	---	---
120	0.00	0.00	---	---	---	---
183	0.00	0.00	---	---	---	---

Magnitude and probability of instantaneous peak flow based on 20 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
161	369	574	928	1270	1690

Weighted skew = 0.100

Magnitude and probability of annual high flow based on period of record 1949-68

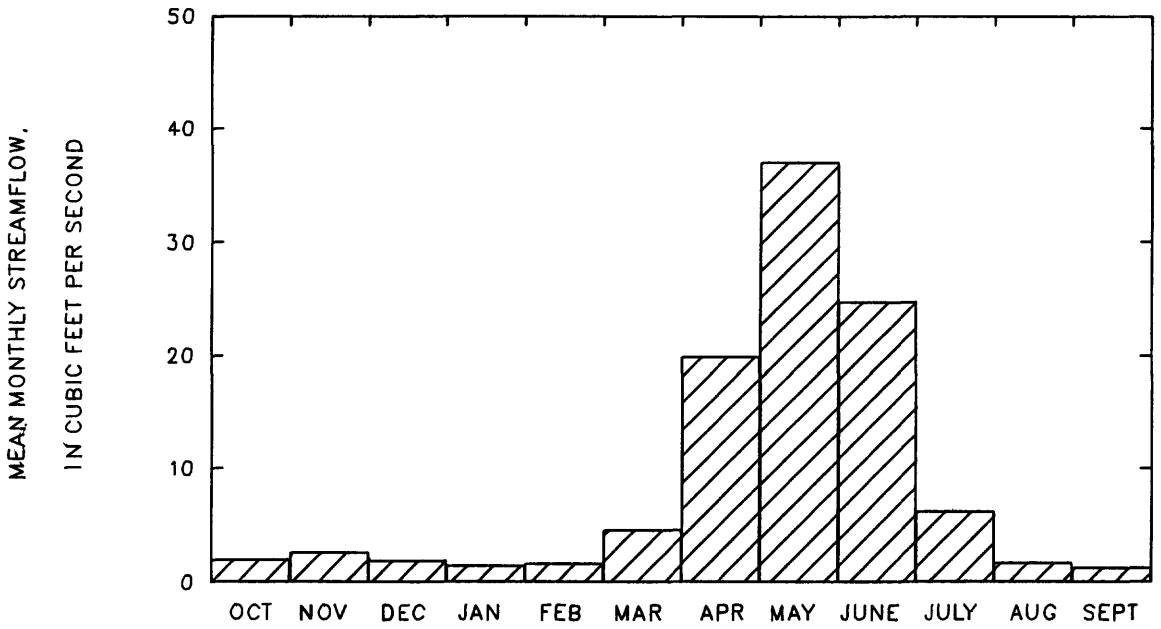
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	70	157	---	---	---	---
3	54	124	---	---	---	---
7	45	105	---	---	---	---
15	38	85	---	---	---	---
30	30	66	---	---	---	---
60	23	51	---	---	---	---
90	19	40	---	---	---	---

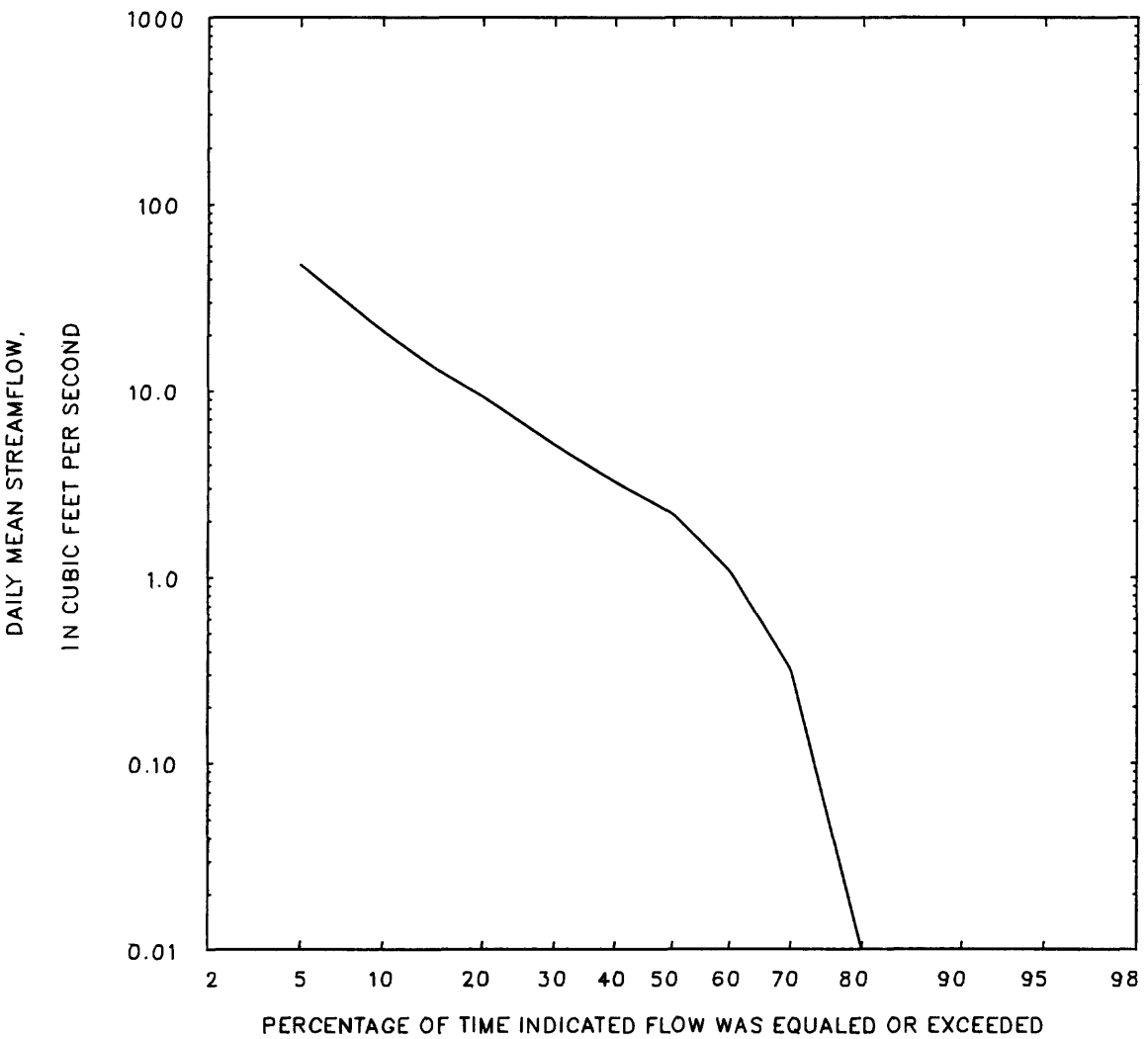
Duration of daily mean flow for period of record 1949-68

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
111	47	21	13	9.2	5.1	3.2	2.2	1.1	0.32	0.01	0.00	0.00	0.00	0.00	0.00	0.00

STATION 06256000 PERIOD OF RECORD 1949–68

BADWATER CREEK AT LYBYER RANCH, NEAR LOST CABIN, WYO.





06256900 DRY CREEK NEAR BONNEVILLE, WYO.

LOCATION.--Lat 43°16'52", long 107°54'45", in NW¼NW¼ sec.8, T.38 N., R.92 W., Fremont County, on left bank 0.4 mi upstream from mouth and 8.0 mi east of Bonneville.

DRAINAGE AREA.--52.6 mi^2.

PERIOD OF RECORD.--October 1965 to September 1981.

GAGE.--Water-stage recorder. Altitude of gage is 5,010 ft, from topographic map.

REMARKS.--Diversions for irrigation of about 200 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,650 ft^3/s, June 17, 1967, gage height, 12.41 ft, from rating curve extended above 160 ft^3/s on basis of slope-area measurement of peak flow; no flow for most of each year.

Monthly and annual streamflow 1966-80

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	0.15	0.00	0.02	0.05	2.2	0.1
November	0.09	0.00	0.01	0.03	2.8	0.0
December	0.02	0.00	0.00	0.01	2.2	0.0
January	0.02	0.00	0.00	0.01	2.8	0.0
February	1.1	0.00	0.08	0.28	3.6	0.2
March	3.1	0.00	0.41	0.93	2.3	1.2
April	21	0.00	5.1	7.0	1.4	15.1
May	79	0.00	19	23	1.2	55.5
June	56	0.00	8.6	15	1.7	25.3
July	1.6	0.00	0.22	0.45	2.0	0.7
August	4.1	0.00	0.56	1.3	2.4	1.6
September	0.73	0.00	0.12	0.22	1.9	0.3
Annual	9.5	0.00	2.8	3.0	1.0	100

Magnitude and probability of annual low flow based on period of record 1967-80

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.00	0.00	---	---	---	---
90	0.00	0.00	---	---	---	---
120	0.00	0.00	---	---	---	---
183	0.00	0.00	---	---	---	---

Magnitude and probability of instantaneous peak flow based on 16 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
193	511	847	1440	2040	2770

Weighted skew = -0.050

Magnitude and probability of annual high flow based on period of record 1966-80

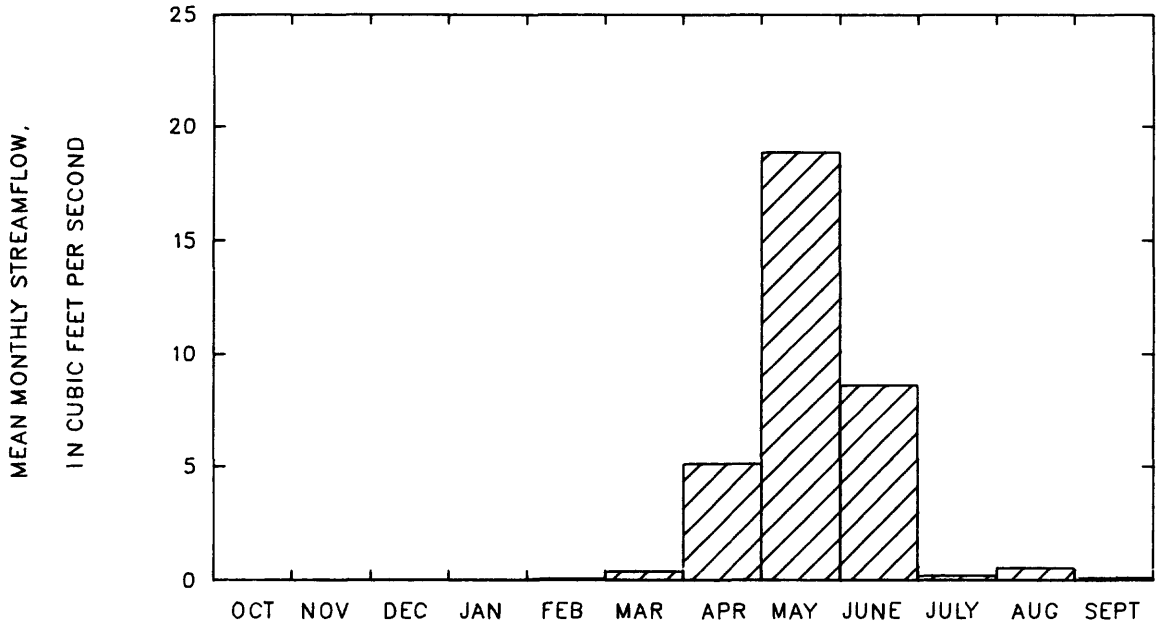
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	71	144	---	---	---	---
3	50	110	---	---	---	---
7	36	92	---	---	---	---
15	25	71	---	---	---	---
30	17	51	---	---	---	---
60	10	34	---	---	---	---
90	7.1	23	---	---	---	---

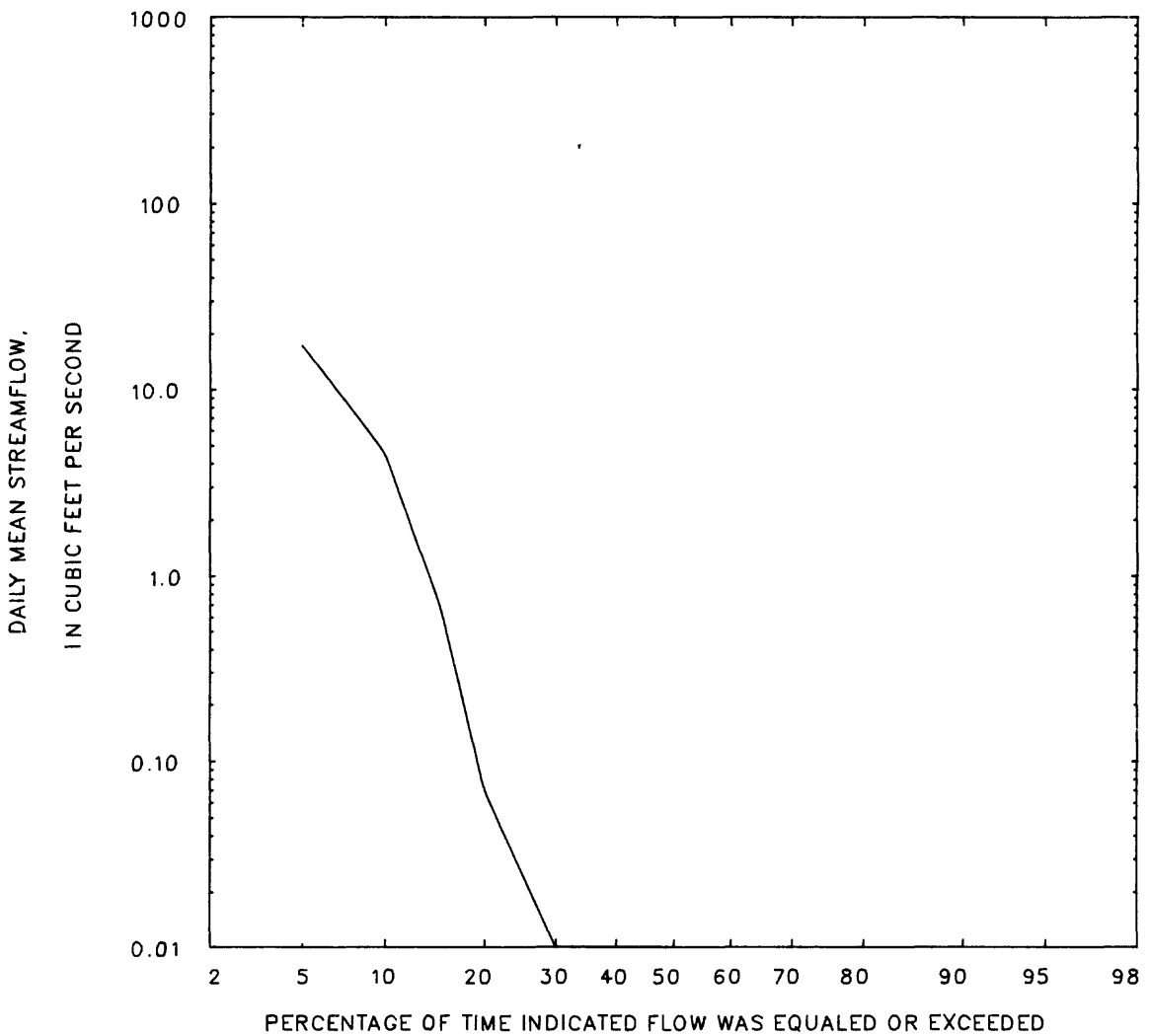
Duration of daily mean flow for period of record 1966-80

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
64	17	4.5	0.69	0.07	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATION 06256900 PERIOD OF RECORD 1966–80

DRY CREEK NEAR BONNEVILLE, WYO.





06257000 BADWATER CREEK AT BONNEVILLE, WYO.

LOCATION.--Lat 43°16'09", long 108°04'46", in NW¼NE¼ sec.14, T.38 N., R.94 W., Fremont County, on right bank 0.4 mi west of Bonneville and 3.0 mi upstream from normal high-water line of Boysen Reservoir at elevation 4,725 ft.

DRAINAGE AREA.--808 mi^2.

PERIOD OF RECORD.--April 1947 to September 1973.

GAGE.--Water-stage recorder. Datum of gage is 4,774.17 ft. Prior to June 27, 1947, non-recording gage at same site and datum.

REMARKS.--Diversions for irrigation of about 3,100 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,490 ft^3/s, June 9, 1968, gage height, 7.64 ft; no flow for many days in each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 24, 1923, reached a discharge of 18,600 ft^3/s, from slope-area measurement of peak flow.

Monthly and annual streamflow 1948-73

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	73	0.00	6.6	17	2.5	2.4
November	34	0.00	3.9	8.2	2.1	1.4
December	8.3	0.00	0.95	2.0	2.2	0.3
January	7.9	0.00	0.93	2.1	2.3	0.3
February	211	0.00	15	44	2.9	5.4
March	289	1.4	37	58	1.6	13.6
April	155	0.00	39	38	0.97	14.4
May	515	0.00	72	107	1.5	26.2
June	450	0.00	65	113	1.7	23.8
July	132	0.00	17	34	1.9	6.4
August	116	0.00	7.4	23	3.1	2.7
September	78	0.00	8.0	19	2.4	2.9
Annual	96	1.4	23	26	1.2	100

Magnitude and probability of annual low flow based on period of record 1949-73

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.00	0.00	---	---	---	---
90	0.00	0.00	---	---	---	---
120	0.00	0.00	---	---	---	---
183	0.00	0.00	---	---	---	---

Magnitude and probability of instantaneous peak flow based on 26 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1570	3760	5910	9540	13000	17100

Weighted skew = -0.050

Magnitude and probability of annual high flow based on period of record 1948-73

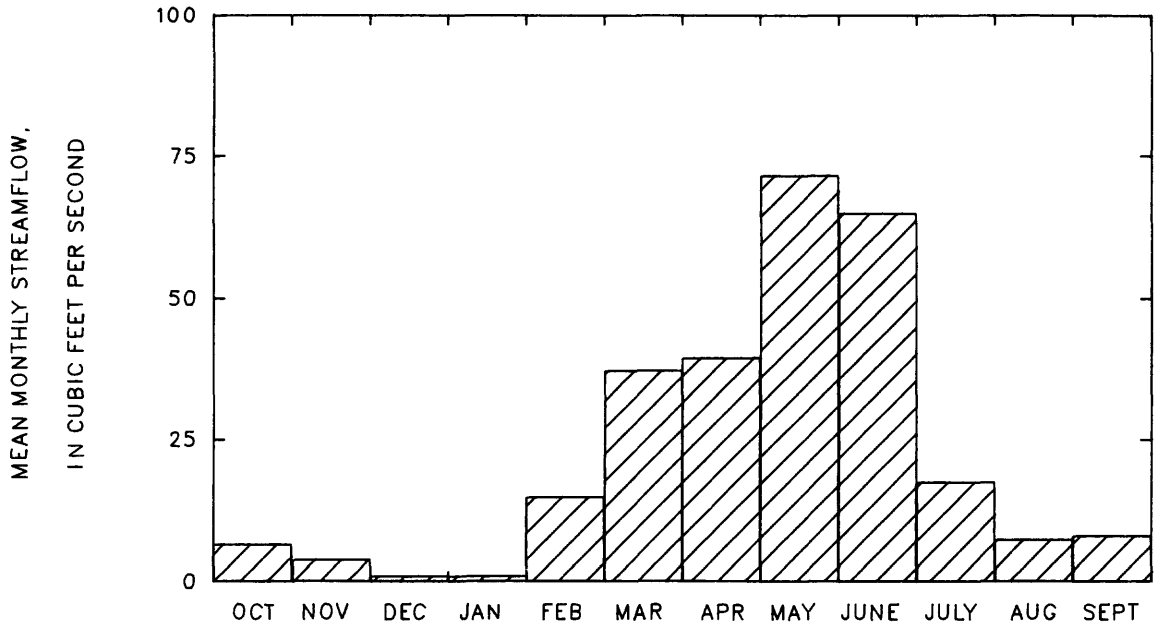
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	307	814	---	---	---	---
3	197	520	---	---	---	---
7	137	357	---	---	---	---
15	100	261	---	---	---	---
30	68	188	---	---	---	---
60	48	133	---	---	---	---
90	39	106	---	---	---	---

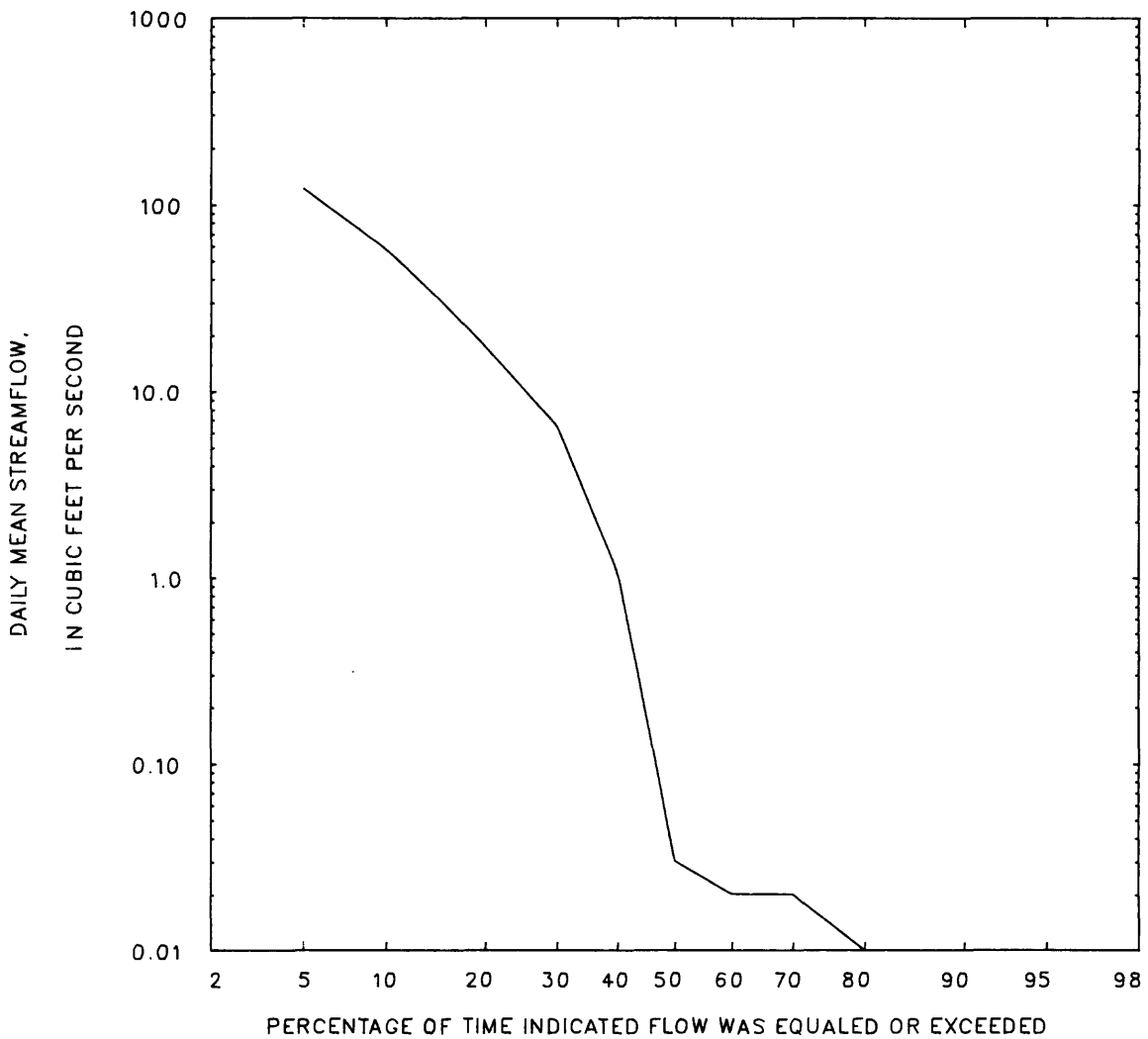
Duration of daily mean flow for period of record 1948-73

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
360	122	58	30	17	6.4	1.1	0.03	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00

STATION 06257000 PERIOD OF RECORD 1948–73

BADWATER CREEK AT BONNEVILLE, WYO.





06257500 MUDDY CREEK NEAR PAVILLION, WYO.

LOCATION.--Lat 43°21'46", in NW¼SE¼ sec.35, T.5 N., R.2 E., Fremont County, on left bank 600 ft upstream from Wyoming Canal siphon, 4.1 mi downstream from Sheep Creek, and 9.2 mi northeast of Pavillion.

DRAINAGE AREA.--267 mi^2.

PERIOD OF RECORD.--March 1949 to December 1953, October 1954 to September 1958, October 1959 to December 1964, July 1965 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 5,350 ft, from topographic map. Prior to October 16, 1956, at site 1.1 mi upstream at different datum.

REMARKS.--Flow regulated by Bureau of Indian Affairs reservoir systems, the nearest of which is approximately 6.5 mi upstream on Sheep Creek and the other approximately 18.6 mi upstream on the main stem. The flow is also affected by several small spreader dike systems and diversions for irrigation of about 1,500 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,300 ft^3/s, June 5, 1949, gage height, 9.70 ft, from floodmark, site and datum then in use, from rating curve extended above 1,100 ft^3/s on basis of slope-area measurement of peak flow; no flow at times most years.

Monthly and annual streamflow 1950-53, 1955-58, 1960-64, 1966-73

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	14	0.40	3.7	3.2	0.87	6.3
November	8.0	0.25	3.3	2.3	0.68	5.7
December	7.7	0.00	1.9	1.8	0.98	3.2
January	4.1	0.00	1.4	1.4	0.98	2.4
February	8.5	0.00	3.4	2.3	0.68	5.9
March	14	3.9	7.9	3.0	0.38	13.6
April	33	2.7	8.8	6.3	0.72	15.1
May	24	0.98	7.7	6.4	0.82	13.4
June	57	0.14	9.7	14	1.5	16.7
July	18	0.00	4.5	5.0	1.1	7.8
August	9.4	0.00	1.9	2.3	1.2	3.2
September	21	0.00	3.8	5.1	1.3	6.6
Annual	9.7	1.5	4.8	2.2	0.45	100

Magnitude and probability of annual low flow based on period of record 1950-53, 1956-58, 1961-64, 1967-73

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.05	0.00	---	---	---	---
90	0.68	0.06	---	---	---	---
120	1.2	0.42	---	---	---	---
183	1.8	0.76	---	---	---	---

Magnitude and probability of instantaneous peak flow based on 23 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
395	985	1550	2480	3330	4310

Weighted skew = -0.220

Magnitude and probability of annual high flow based on period of record 1950-53, 1955-58, 1960-64, 1966-73

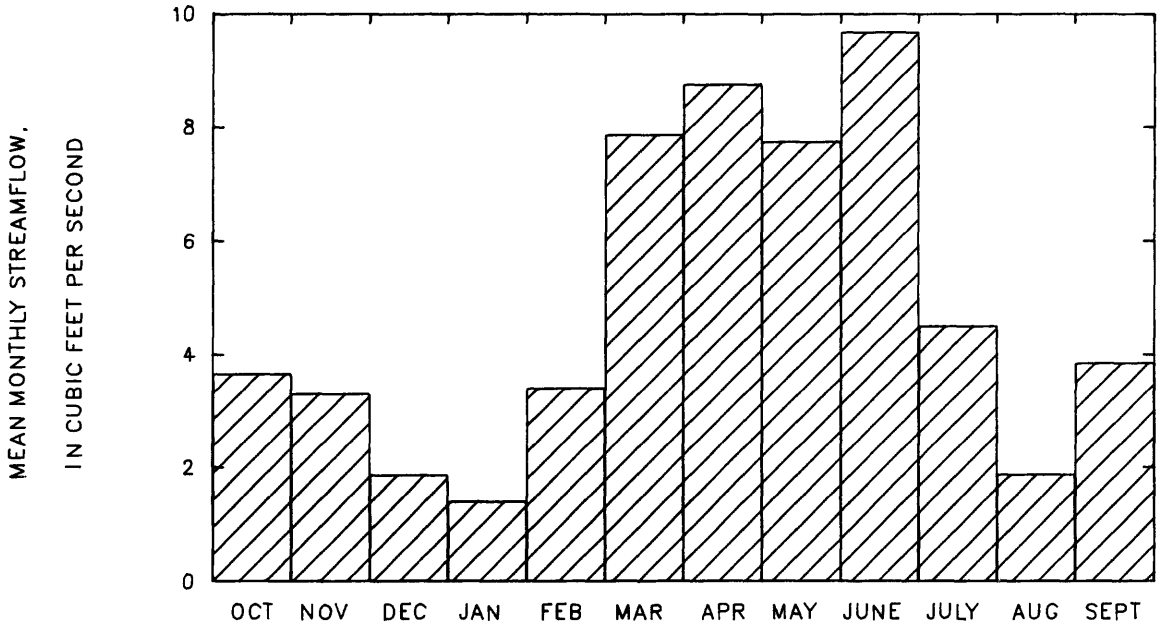
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	87	164	---	---	---	---
3	48	86	---	---	---	---
7	29	51	---	---	---	---
15	19	33	---	---	---	---
30	14	23	---	---	---	---
60	11	17	---	---	---	---
90	9.1	14	---	---	---	---

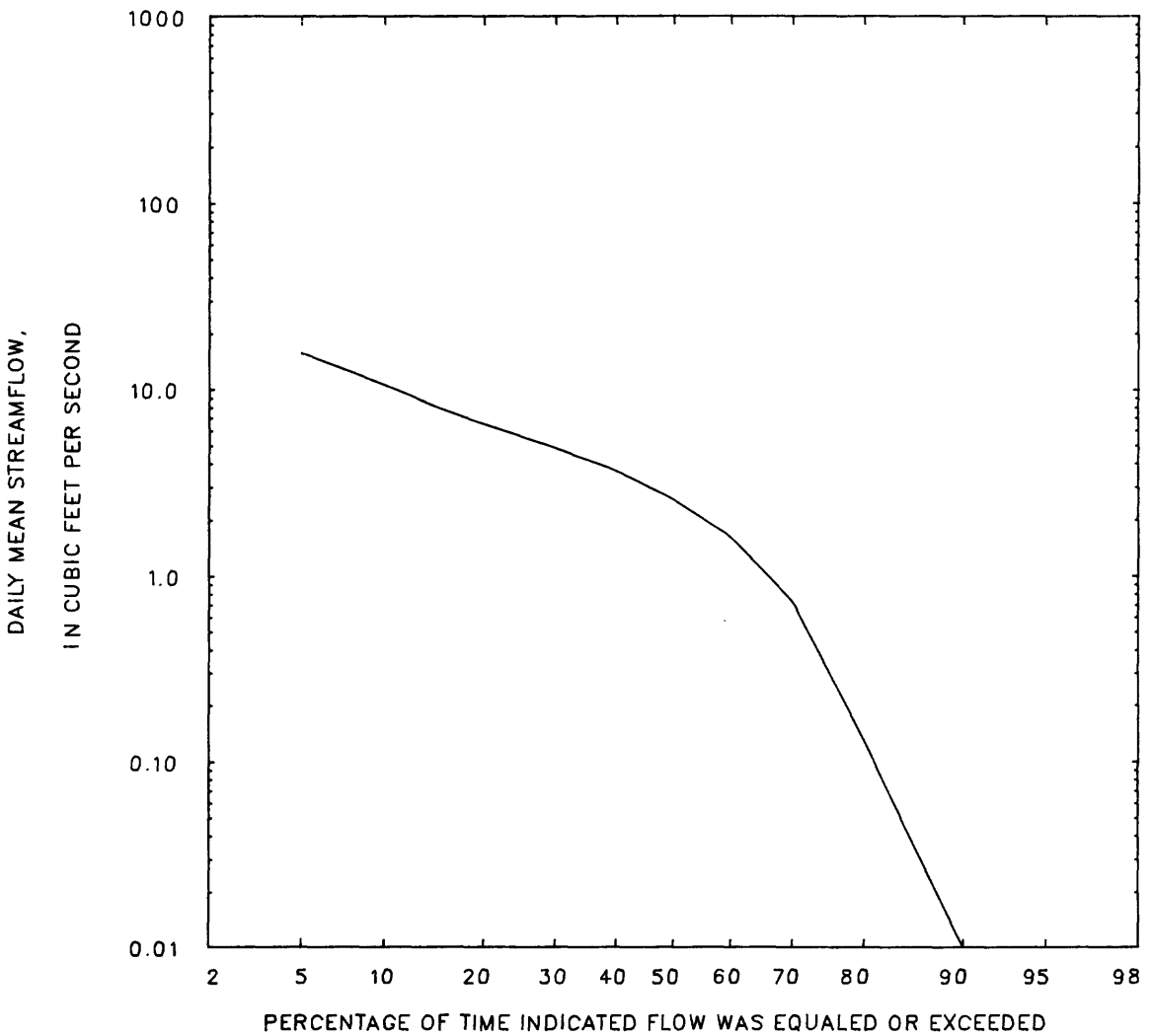
Duration of daily mean flow for period of record 1950-53, 1955-58, 1960-64, 1966-73

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
45	16	11	7.8	6.5	4.8	3.6	2.6	1.6	0.73	0.13	0.01	0.00	0.00	0.00	0.00	0.00

STATION 06257500 PERIOD OF RECORD 1950–53, 1955–58, 1960–64, 196

MUDDY CREEK NEAR PAVILLION, WYO.





06258000 MUDDY CREEK NEAR SHOSHONI, WYO.

LOCATION.--Lat 43°17'10", long 108°16'30", in NE¼NW¼ sec.34, T.4 N., R.5 E., Fremont County, on left bank 2.5 mi upstream from normal high-water line of Boysen Reservoir at elevation 4,725 ft and 9.0 mi northwest of Shoshoni.

DRAINAGE AREA.--332 mi^2.

PERIOD OF RECORD.--March 1949 to September 1968, October 1972 to September 1983.

GAGE.--Water-stage recorder. Altitude of gage is 4,780 ft, from topographic map. Prior to May 13, 1949, water-stage recorder at site 50 ft upstream at different datum.

REMARKS.--Natural flow of stream affected by regulation of Bureau of Indian Affairs reservoir system in the headwaters, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,430 ft^3/s, July 22, 1951, gage height, 7.50 ft; no flow at times in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 24, 1923, reached a discharge of 16,300 ft^3/s, from slope-area measurement of peak flow.

Monthly and annual streamflow 1950-68, 1973-83

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	24	3.6	13	4.8	0.36	5.0
November	16	2.0	9.1	3.6	0.40	3.4
December	11	0.25	5.2	3.3	0.64	1.9
January	11	0.00	3.8	3.1	0.83	1.4
February	13	0.00	6.1	3.7	0.60	2.3
March	26	4.8	15	5.0	0.34	5.4
April	46	5.4	21	10	0.50	7.9
May	130	6.1	34	22	0.66	12.8
June	111	7.3	42	26	0.62	15.8
July	83	12	41	18	0.43	15.5
August	116	14	44	26	0.59	16.6
September	167	11	32	30	0.93	12.0
Annual	59	10	22	9.5	0.43	100

Magnitude and probability of annual low flow based on period of record 1950-68, 1974-83

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	0.00	---	---
3	0.00	0.00	0.00	0.00	---	---
7	0.00	0.00	0.00	0.00	---	---
14	0.00	0.00	0.00	0.00	---	---
30	0.53	0.00	0.00	0.00	---	---
60	2.3	0.19	0.00	0.00	---	---
90	3.7	1.4	0.78	0.45	---	---
120	5.0	2.6	1.7	1.2	---	---
183	8.4	5.2	3.7	2.7	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1950-68, 1973-83

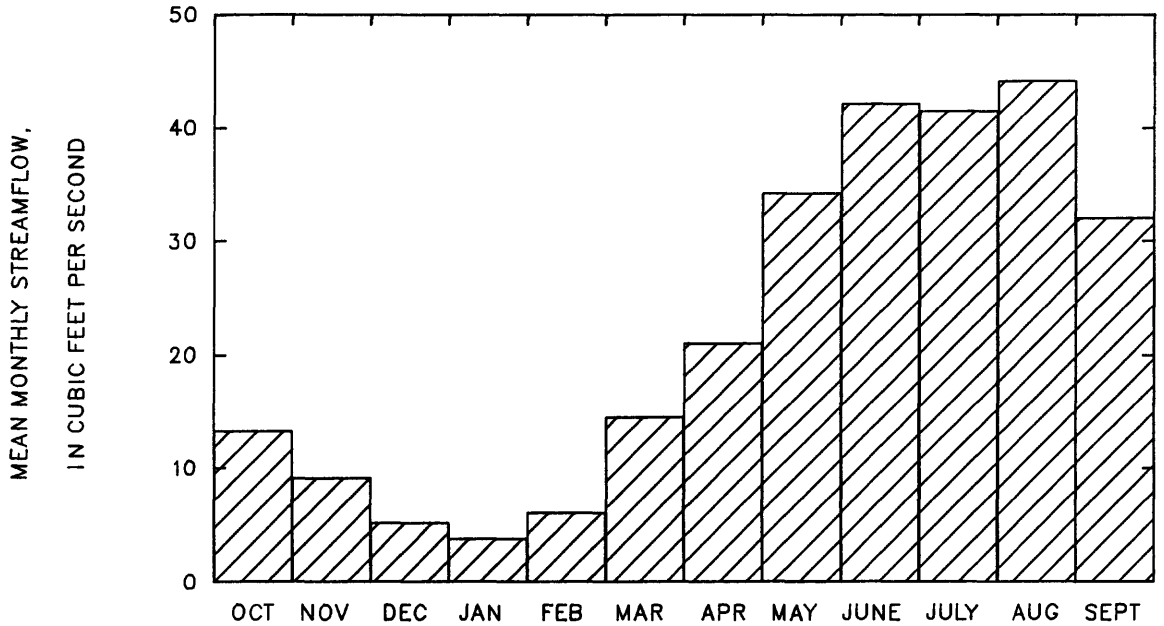
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	148	242	318	433	---	---
3	109	172	225	306	---	---
7	88	134	169	221	---	---
15	68	104	132	173	---	---
30	55	82	104	137	---	---
60	45	65	82	108	---	---
90	41	58	72	93	---	---

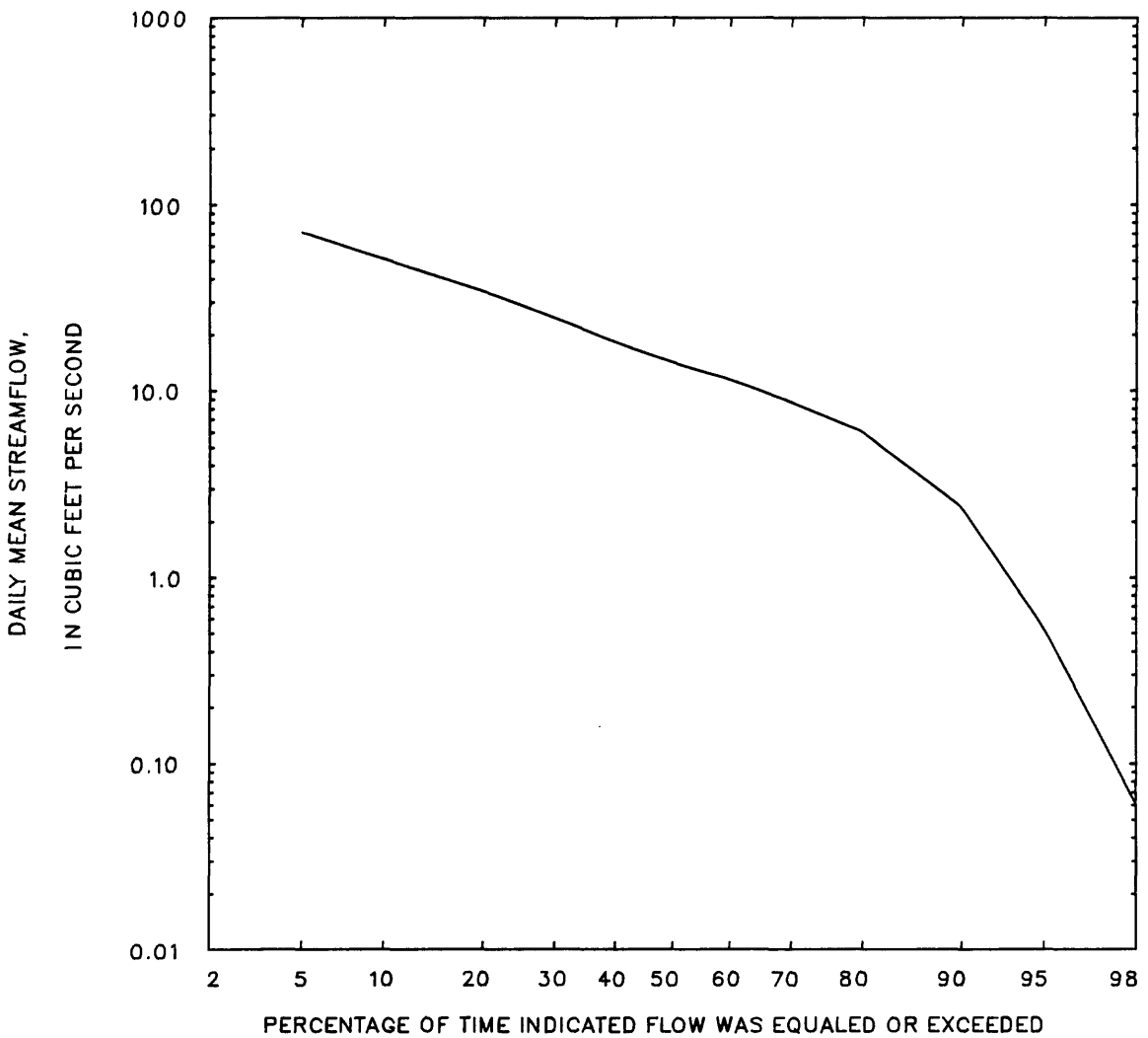
Duration of daily mean flow for period of record 1950-68, 1973-83

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
139	71	51	41	34	24	18	14	11	8.5	5.9	2.4	0.53	0.06	0.03	0.01	0.00

STATION 06258000 PERIOD OF RECORD 1950–68, 1973–83

MUDDY CREEK NEAR SHOSHONI, WYO.





06259000 WIND RIVER BELOW BOYSEN RESERVOIR, WYO.

LOCATION.--Lat 43°25'30", long 108°10'42", in NW¼SW¼ sec.9, T.5 N., R.6 E., Fremont County, on right bank 0.6 mi downstream from Boysen Dam and 13 mi north of Shoshoni.

DRAINAGE AREA.--7,701 mi^2.

PERIOD OF RECORD.--May 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,608.58 ft.

REMARKS.--Flow regulated by Boysen Reservoir since October 1951. Natural flow also affected by Bull Lake, Pilot Butte Reservoir, and several small reservoirs, combined capacity, 190,000 acre-ft, and diversions for irrigation of about 196,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 ft^3/s, July 7, 1967, gage height, 13.35 ft; minimum daily, 4.7 ft^3/s, April 3, 1962.

Monthly and annual streamflow 1952-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	2850	332	1270	558	0.44	7.3
November	2090	306	1270	483	0.38	7.3
December	2010	305	1250	438	0.35	7.2
January	2210	347	1180	452	0.38	6.8
February	2200	210	1150	504	0.44	6.6
March	2030	213	1180	502	0.43	6.8
April	2240	389	1280	493	0.39	7.4
May	2360	777	1410	421	0.30	8.1
June	5220	1020	2030	1130	0.56	11.7
July	8820	1020	2510	1980	0.79	14.4
August	2320	922	1510	443	0.29	8.7
September	2500	792	1330	386	0.29	7.7
Annual	2350	612	1450	396	0.27	100

Magnitude and probability of annual low flow based on period of record 1953-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	523	202	83	32	8.4	---
3	631	268	123	53	17	---
7	671	458	359	288	218	---
14	737	500	390	309	230	---
30	790	557	444	359	275	---
60	895	634	501	400	300	---
90	1030	738	580	458	337	---
120	1120	811	635	496	359	---
183	1220	883	698	553	407	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1952-84

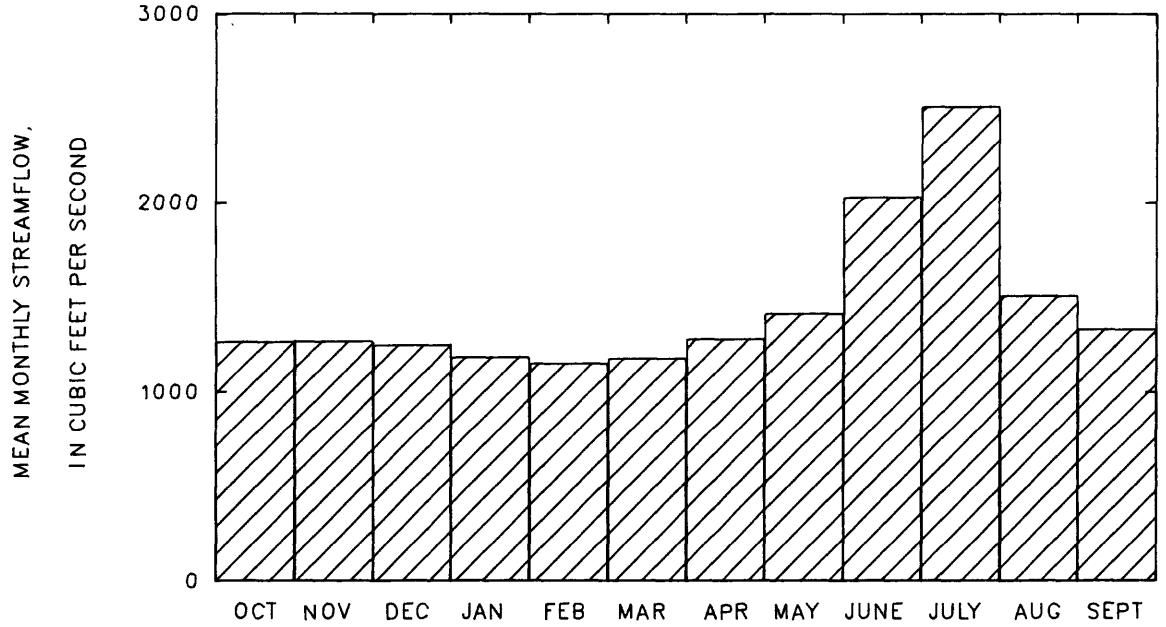
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	3260	5660	7690	10800	13600	---
3	3200	5580	7620	10800	13600	---
7	3020	5320	7360	10600	13600	---
15	2810	4940	6870	10000	13000	---
30	2480	4230	5830	8450	10900	---
60	2170	3330	4290	5770	7090	---
90	2000	2870	3540	4490	5290	---

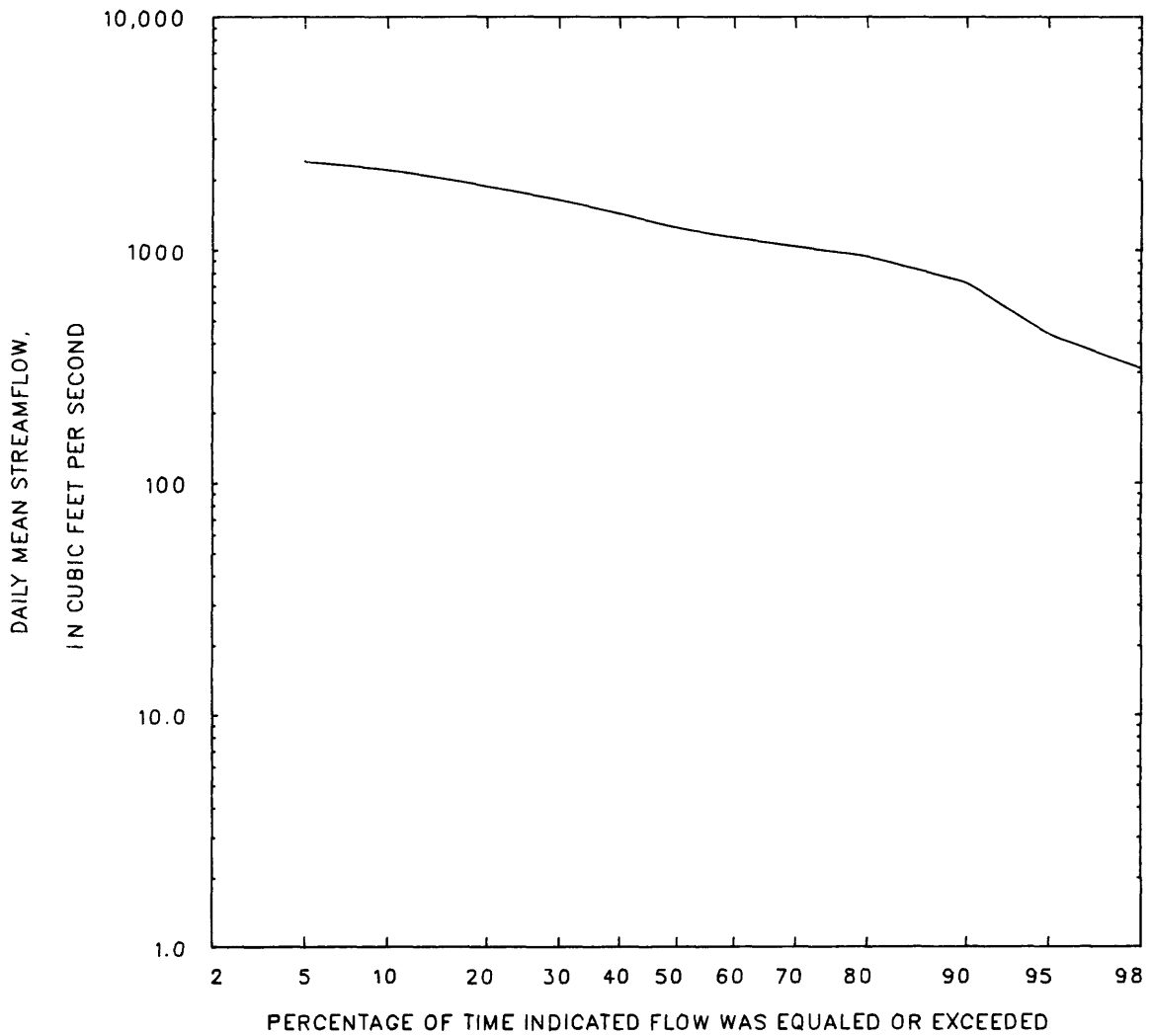
Duration of daily mean flow for period of record 1952-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
6580	2380	2200	2020	1860	1640	1430	1240	1120	1030	938	723	434	308	282	195	115

STATION 06259000 PERIOD OF RECORD 1952–84

WIND RIVER BELOW BOYSEN RESERVOIR, WYO.





06259500 BIGHORN RIVER AT THERMOPOLIS, WYO.

LOCATION.--Lat 43°39', long 108°12', in sec.36, T.43 N., R.95 W., Hot Springs County, on left bank 200 ft downstream from Park Street bridge at Thermopolis and 0.25 mi downstream from Thermopolis Creek.

DRAINAGE AREA.--8,020 mi^2.

PERIOD OF RECORD.--May 1900 to December 1905, July 1910 to December 1953. Published as "near Thermopolis," 1900-1904, 1910.

GAGE.--Water-stage recorder. Datum of gage is 4,305.18 ft. Prior to October 25, 1934, staff or chain gages at several sites within 350 ft of present site at various datums. October 25, 1934, to September 30, 1950, water-stage recorder at site 0.50 mi downstream at datum 4.69 ft lower; prior to October 1, 1936, at datum 3.69 ft lower. October 1, 1950, to April 30, 1952, wire-weight gage at site 0.25 mi upstream at datum 2.89 ft higher.

REMARKS.--Diversions for irrigation of about 141,000 acres above station. Flow completely regulated by Boysen Reservoir beginning October 11, 1951.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,800 ft^3/s, July 24, 1923, gage height, 16.2 ft, from floodmarks, site, and datum then in use, from rating curve extended above 17,000 ft^3/s; minimum daily, 51 ft^3/s, January 7, 1950, caused by temporary storage behind dam due to construction work upstream.

Monthly and annual streamflow 1912, 1915-50

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	2610	409	1090	447	0.41	4.9
November	1670	448	803	225	0.28	3.6
December	815	400	578	117	0.20	2.6
January	856	316	543	135	0.25	2.5
February	1120	364	598	175	0.29	2.7
March	2570	482	930	430	0.46	4.2
April	5890	490	1240	846	0.68	5.6
May	7380	995	3090	1270	0.41	14.0
June	13000	1000	6550	3000	0.46	29.6
July	9650	768	3850	2090	0.54	17.4
August	4960	695	1670	878	0.53	7.5
September	3110	472	1200	550	0.46	5.4
Annual	3210	676	1850	547	0.30	100

Magnitude and probability of annual low flow based on period of record 1916-50

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	414	284	205	145	90	---
3	417	308	271	243	213	---
7	421	344	308	281	252	---
14	452	370	333	304	273	---
30	480	398	361	333	304	---
60	517	428	388	358	327	---
90	546	451	410	379	347	---
120	591	496	454	423	392	---
183	715	578	517	472	426	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1912, 1915-50

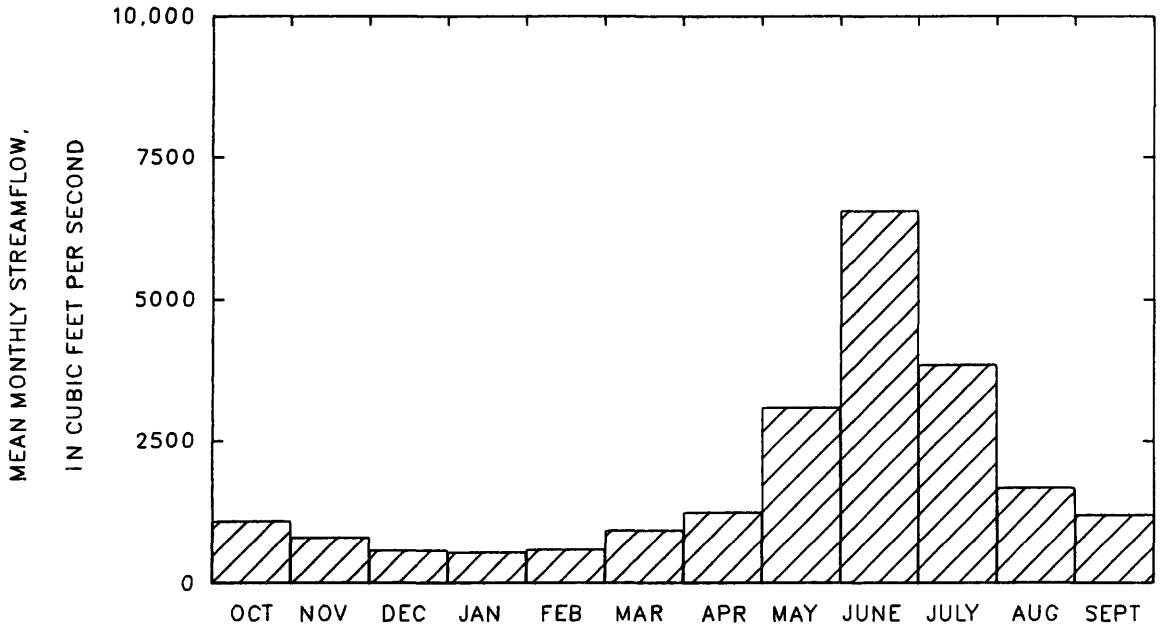
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	11500	16200	19100	22500	24900	---
3	10900	15500	18200	21200	23100	---
7	9540	13800	16300	19000	20700	---
15	8160	11900	14000	16400	18000	---
30	7070	10100	11600	13100	14000	---
60	5690	7830	8820	9710	10200	---
90	4650	6350	7130	7840	8220	---

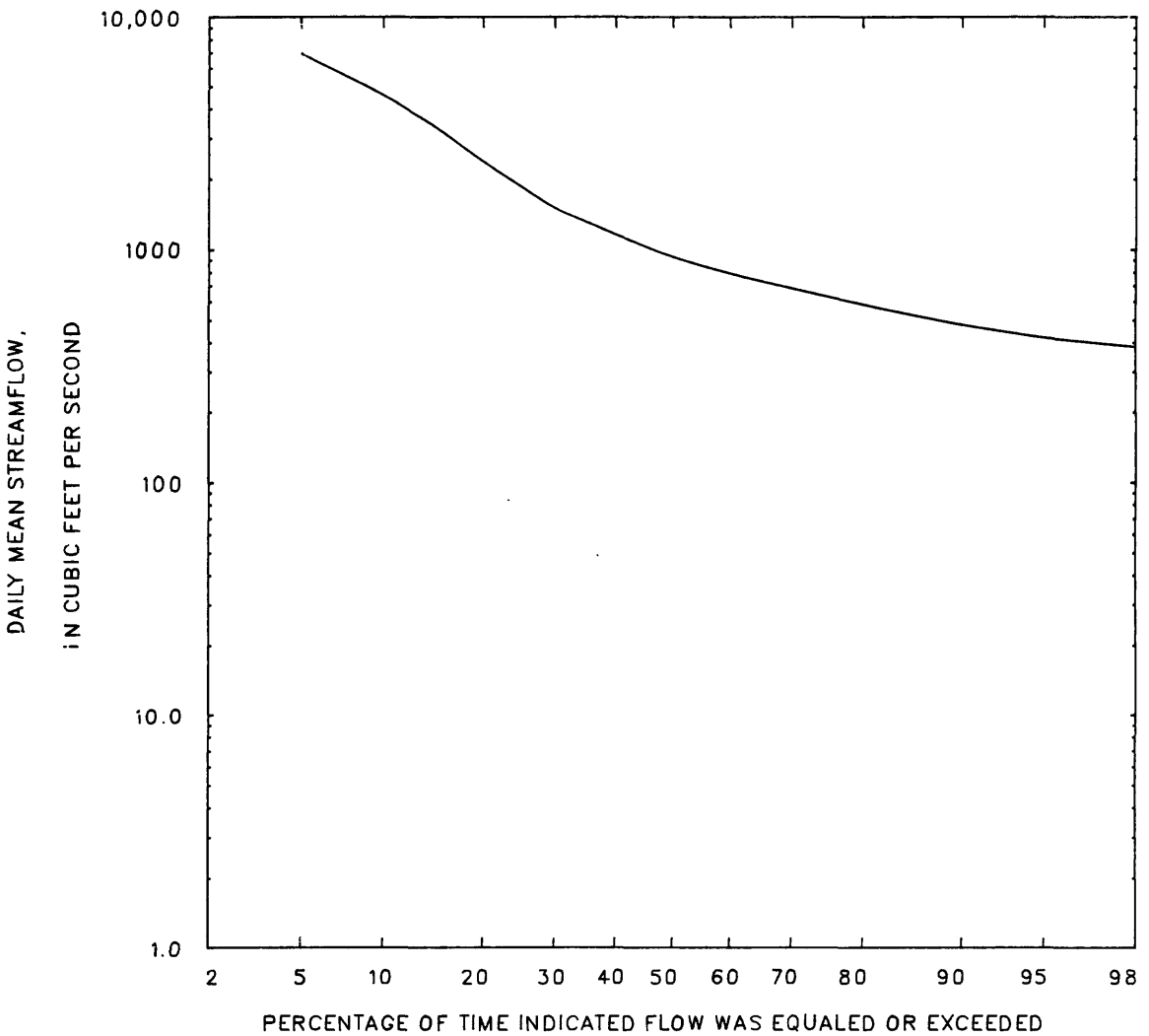
Duration of daily mean flow for period of record 1912, 1915-50

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
12300	6910	4610	3300	2390	1500	1160	924	782	678	577	472	416	380	337	315	262

STATION 06259500 PERIOD OF RECORD 1912, 1915–50

BIGHORN RIVER AT THERMOPOLIS, WYO.





06260000 SOUTH FORK OWL CREEK NEAR ANCHOR, WYO.

LOCATION.--Lat 43°40'01", long 108°51'18", in sec.28, T.43 N., R.100 W., Hot Springs County, on left bank 0.2 mi upstream from normal high-water line of Anchor Reservoir, 1.6 mi upstream from Anchor Dam, 2.6 mi southwest of Anchor, and 33 mi west of Thermopolis.

DRAINAGE AREA.--85.5 mi^2.

PERIOD OF RECORD.--April to May 1932, August 1939 to September 1943 (no winter records except 1941 water year), April 1959 to current year.

GAGE.--Water-stage recorder and concrete flume. Datum of gage is 6,453.11 ft. See WSP 1916 for history of changes prior to August 11, 1965. August 11, 1965, to November 3, 1968, at present site and datum. November 4, 1968, to June 5, 1970, at site 0.7 mi upstream on left bank at datum 51.36 ft higher. June 6, 1970, to September 30, 1972, at site 0.7 mi upstream on right bank at datum 51.22 ft higher. October 1, 1972, to June 5, 1978, at site 0.7 mi upstream on left bank at datum 51.36 ft higher.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,940 ft^3/s, July 25, 1941, gage height, 8.73 ft, site and datum then in use, from rating curve extended above 640 ft^3/s on basis of slope-area measurement of peak flow; no flow January 10-17, 1979.

Monthly and annual streamflow 1960-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	24	6.7	11	3.9	0.35	2.8
November	11	3.5	6.8	1.9	0.27	1.7
December	8.0	1.2	4.8	1.7	0.37	1.2
January	7.2	0.08	3.5	2.1	0.59	0.9
February	6.2	0.19	3.2	1.8	0.57	0.8
March	15	0.32	5.1	3.3	0.64	1.3
April	51	1.6	15	11	0.71	3.7
May	142	25	74	30	0.40	18.3
June	368	45	165	76	0.46	40.7
July	203	17	76	51	0.67	18.8
August	58	9.4	25	12	0.47	6.1
September	36	6.7	16	6.7	0.42	3.9
Annual	62	15	34	12	0.34	100

Magnitude and probability of instantaneous peak flow based on 30 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
483	785	1030	1380	1690	2030

Weighted skew = 0.281

Magnitude and probability of annual low flow based on period of record 1961-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.2	0.31	0.04	0.00	---	---
3	1.4	0.38	0.06	0.00	---	---
7	1.6	0.44	0.08	0.00	---	---
14	2.0	0.56	0.22	0.09	---	---
30	2.8	0.85	0.34	0.13	---	---
60	3.0	1.3	0.72	0.41	---	---
90	3.3	1.7	1.1	0.73	---	---
120	3.9	2.3	1.6	1.1	---	---
183	5.6	4.3	3.7	3.2	---	---

Magnitude and probability of annual high flow based on period of record 1960-84

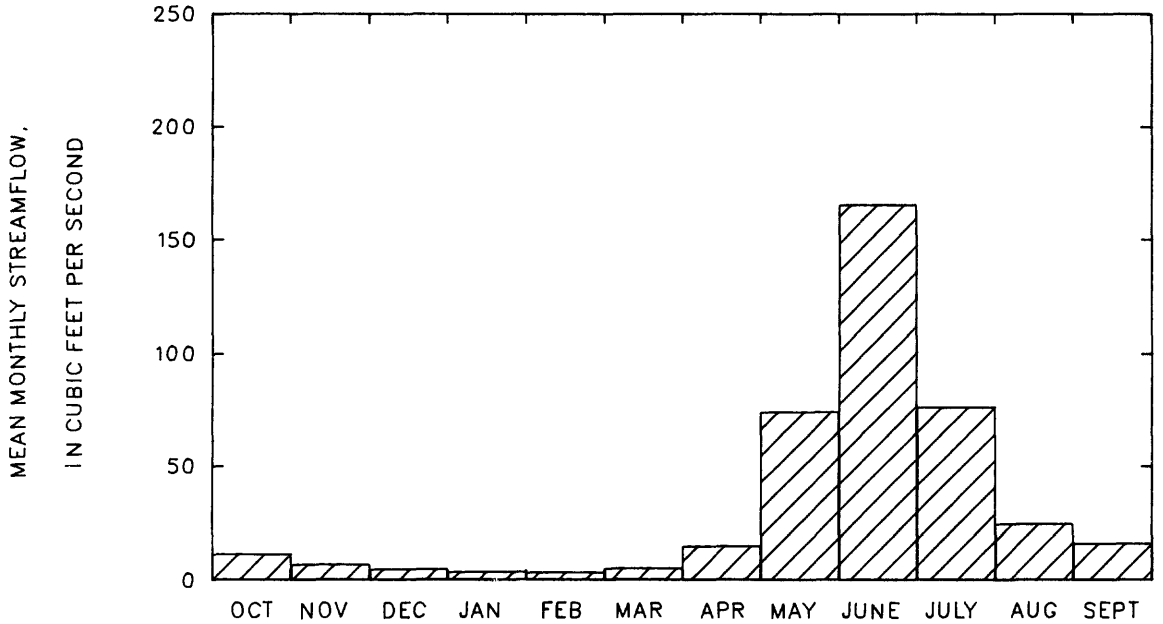
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	323	461	544	639	---	---
3	290	414	487	570	---	---
7	254	363	426	496	---	---
15	214	311	367	429	---	---
30	179	257	300	347	---	---
60	133	188	221	259	---	---
90	104	145	168	194	---	---

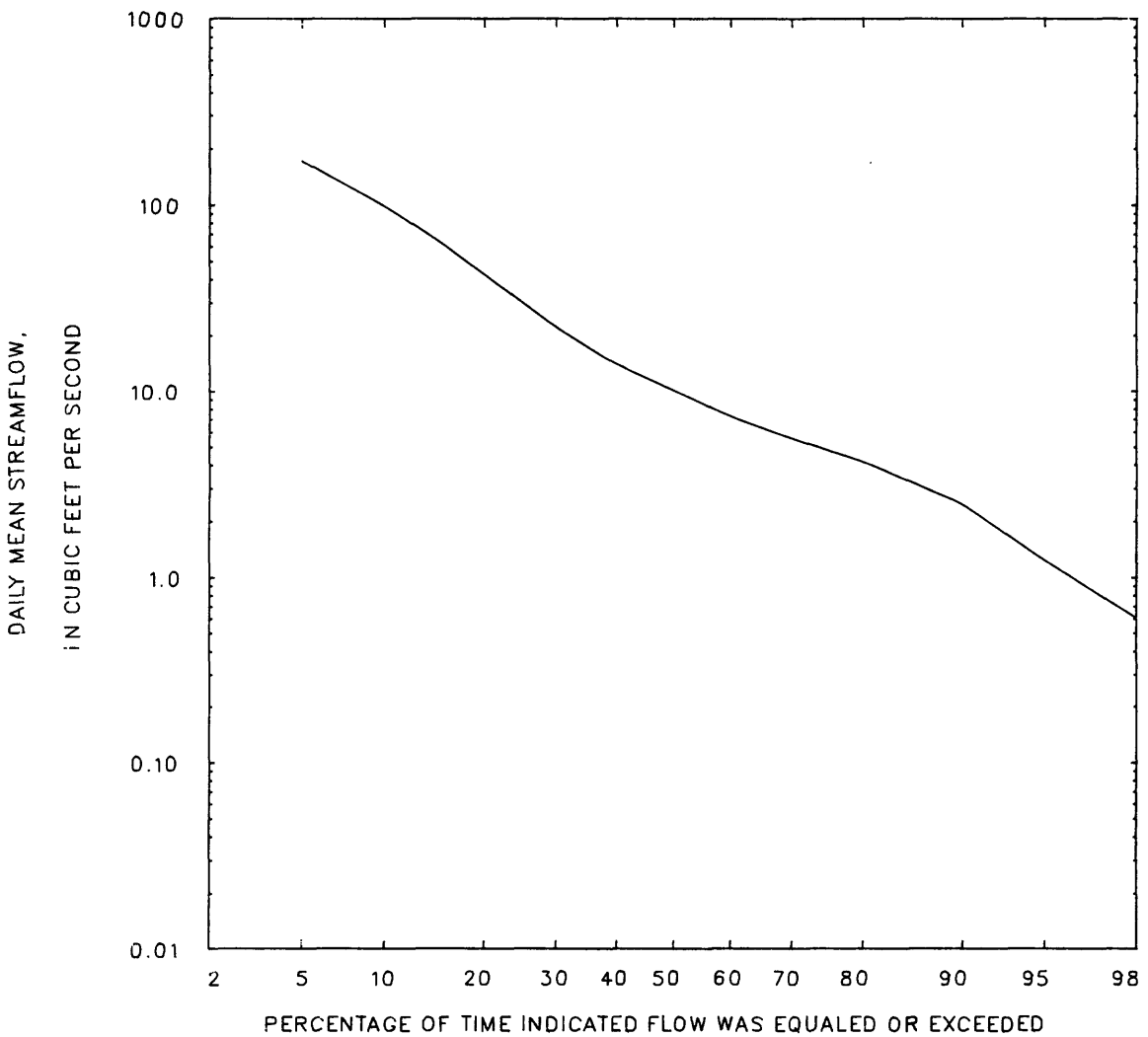
Duration of daily mean flow for period of record 1960-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
323	170	98	63	42	22	14	10	7.2	5.5	4.1	2.4	1.2	0.60	0.27	0.11	0.02

STATION 06260000 PERIOD OF RECORD 1960–84

SOUTH FORK OWL CREEK NEAR ANCHOR, WYO.





06260400 SOUTH FORK OWL CREEK BELOW ANCHOR RESERVOIR, WYO.

LOCATION.--Lat 43°39'57", long 108°47'34, in sec.25, T.43 N., R.100 W., Hot Springs County, on left bank 1.6 mi downstream from Anchor Dam and 30 mi west of Thermopolis.

DRAINAGE AREA.--131 mi^2.

PERIOD OF RECORD.--April 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,120 ft, from topographic map.

REMARKS.--Flow regulated by Anchor Dam. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 373 ft^3/s, May 26, 1967, gage height, 3.64 ft; no flow at times most years.

Monthly and annual streamflow 1960-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	21	2.5	7.4	3.9	0.53	2.8
November	8.9	0.01	2.6	1.8	0.70	1.0
December	3.9	0.00	0.97	1.2	1.2	0.4
January	2.4	0.00	0.39	0.56	1.4	0.1
February	2.7	0.00	0.70	0.72	1.0	0.3
March	8.7	0.00	2.0	2.3	1.2	0.7
April	21	1.0	8.2	6.0	0.72	3.1
May	90	14	48	22	0.46	18.0
June	150	40	97	37	0.38	36.8
July	124	14	62	33	0.53	23.4
August	60	4.2	24	15	0.64	8.9
September	24	4.0	12	5.3	0.43	4.6
Annual	31	12	22	6.0	0.27	100

Magnitude and probability of annual low flow based on period of record 1961-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.00	0.00	---	---	---	---
90	0.16	0.00	---	---	---	---
120	0.40	0.00	---	---	---	---
183	2.0	1.3	---	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1960-84

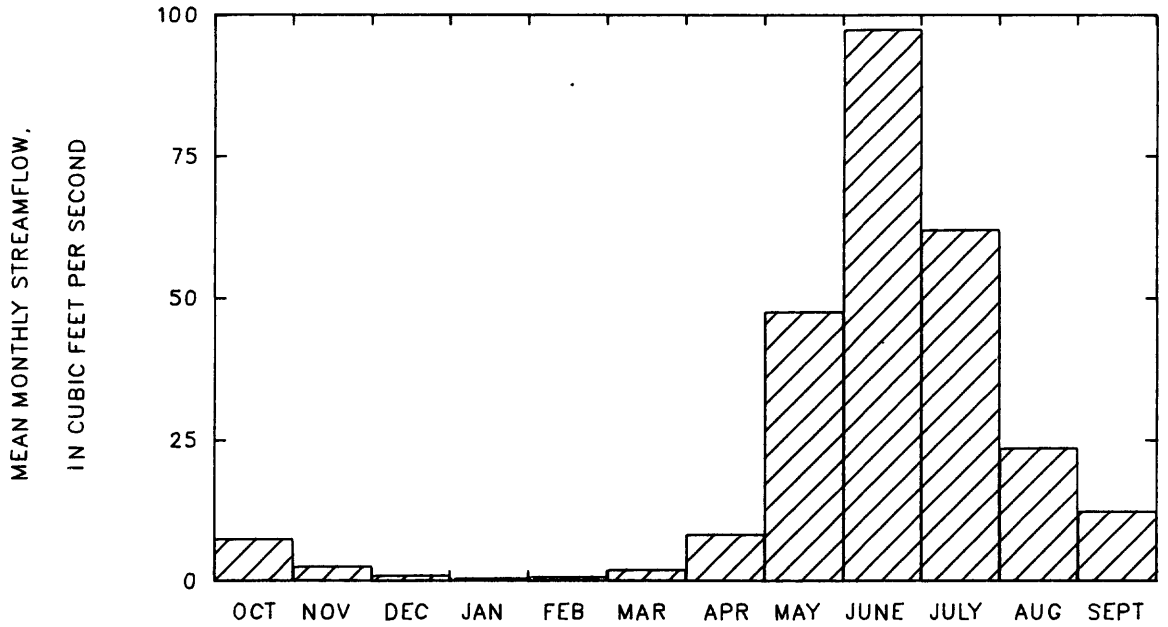
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	176	223	---	---	---	---
3	168	212	---	---	---	---
7	152	194	---	---	---	---
15	134	173	---	---	---	---
30	115	148	---	---	---	---
60	89	115	---	---	---	---
90	71	92	---	---	---	---

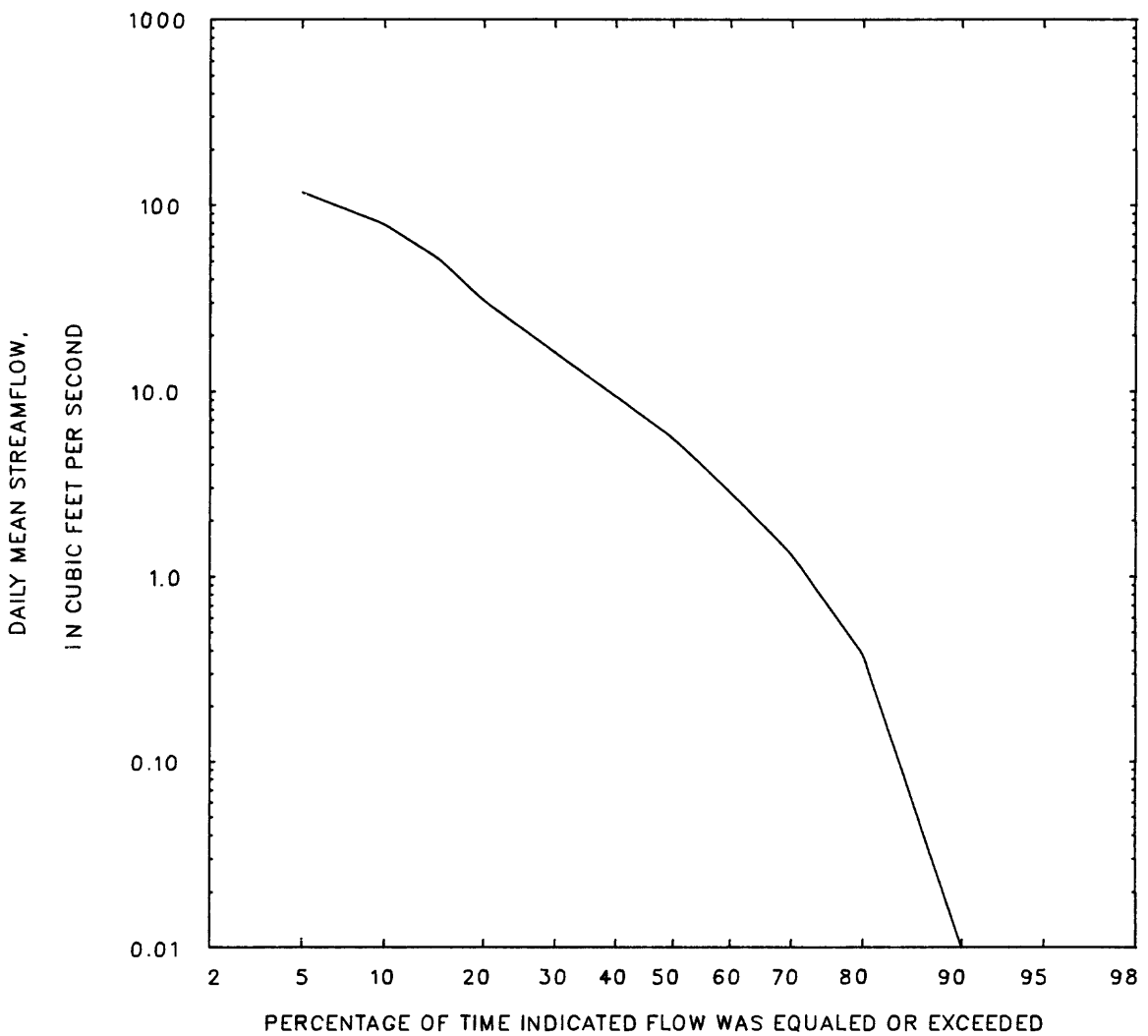
Duration of daily mean flow for period of record 1960-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
185	116	78	51	30	16	9.3	5.5	2.8	1.3	0.38	0.01	0.00	0.00	0.00	0.00	0.00

STATION 06260400 PERIOD OF RECORD 1960–84

SOUTH FORK OWL CREEK BELOW ANCHOR RESERVOIR, WYO.





06260500 SOUTH FORK OWL CREEK ABOVE CURTIS RANCH, NEAR THERMOPOLIS, WYO.

LOCATION.--Lat 43°41', long 108°44', in NW¼ sec.11, T.8 N., R.1 E., Hot Springs County, on right bank 1.7 mi southwest of Curtis Ranch, 5 mi upstream from Red Creek, and 26 mi west of Thermopolis.

DRAINAGE AREA.--144 mi^2.

PERIOD OF RECORD.--October 1943 to September 1959.

GAGE.--Water-stage recorder. Altitude of gage is 5,840 ft, by barometer.

REMARKS.--Two diversions for irrigation of about 400 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,520 ft^3/s, June 24, 1945, gage height, 4.25 ft, from rating curve extended above 350 ft^3/s; no flow at times in winter each year.

Monthly and annual streamflow 1944-59

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	25	0.71	7.2	6.4	0.88	2.3
November	11	0.00	2.3	2.6	1.2	0.7
December	2.7	0.00	0.56	0.85	1.5	0.2
January	0.37	0.00	0.04	0.10	2.3	0.0
February	1.6	0.00	0.16	0.41	2.5	0.1
March	12	0.00	2.1	3.2	1.5	0.7
April	52	0.04	14	15	1.0	4.4
May	150	18	65	37	0.57	20.5
June	249	55	135	55	0.40	42.6
July	122	19	67	33	0.49	21.1
August	41	5.6	16	9.8	0.61	5.0
September	29	0.80	8.0	7.2	0.90	2.5
Annual	40	9.8	27	8.1	0.31	100

Magnitude and probability of annual low flow based on period of record 1945-59

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	---	---	---
3	0.00	0.00	0.00	---	---	---
7	0.00	0.00	0.00	---	---	---
14	0.00	0.00	0.00	---	---	---
30	0.00	0.00	0.00	---	---	---
60	0.00	0.00	0.00	---	---	---
90	0.00	0.00	0.00	---	---	---
120	0.13	0.00	0.00	---	---	---
183	1.7	0.71	0.41	---	---	---

Magnitude and probability of instantaneous peak flow based on 15 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
592	950	1220	1580	1880	2190

Weighted skew = 0.000

Magnitude and probability of annual high flow based on period of record 1944-59

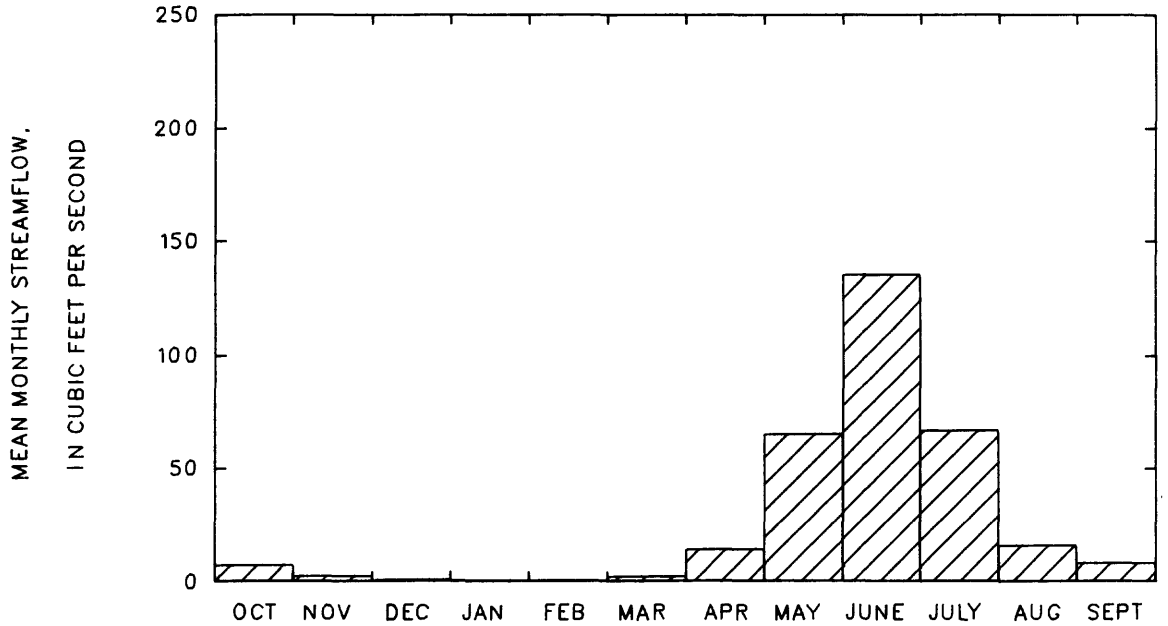
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	287	399	460	---	---	---
3	261	355	403	---	---	---
7	221	302	346	---	---	---
15	185	243	274	---	---	---
30	152	200	224	---	---	---
60	115	150	168	---	---	---
90	92	118	131	---	---	---

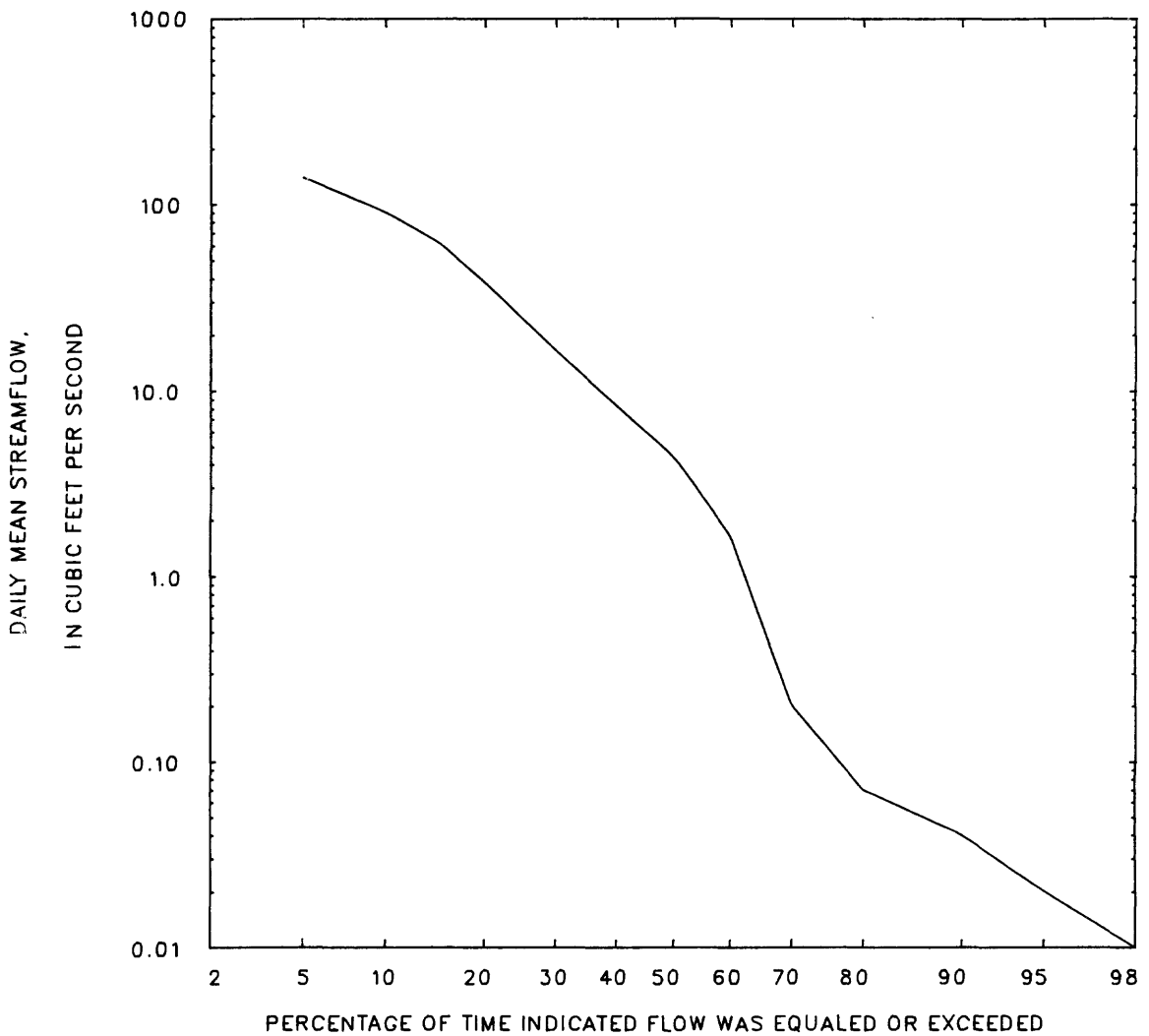
Duration of daily mean flow for period of record 1944-59

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
257	138	90	61	38	16	8.2	4.3	1.6	0.20	0.07	0.04	0.02	0.01	0.00	0.00	0.00

STATION 06260500 PERIOD OF RECORD 1944–59

SOUTH FORK OWL CREEK ABOVE CURTIS RANCH, NEAR THERMOPOLIS, WYO.





06262000 NORTH FORK OWL CREEK NEAR ANCHOR, WYO.

LOCATION.--Lat 43°42', long 108°55', in sec. 12, T.43 N., R.101 W., Hot Springs County, on left bank 0.50 mi upstream from Cup Creek and 4.75 mi west of Anchor.

DRAINAGE AREA.--54.8 mi^2.

PERIOD OF RECORD.--May 1941 to July 1962 (no winter records 1941-44).

GAGE.--Water-stage recorder. Altitude of gage is 6,720 ft, by barometer. Prior to August 29, 1948, water-stage recorder at site 0.5 mi downstream at different datum.

REMARKS.--One small diversion for irrigation of hay meadows above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,200 ft^3/s, July 23, 1955, gage height, 8.0 ft, from floodmark, from rating curve extended above 320 ft^3/s on basis of slope-area measurement of peak flow; no flow at times in most winters.

Monthly and annual streamflow 1945-61

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	17	0.98	5.2	3.8	0.72	3.2
November	5.2	0.64	3.0	1.5	0.49	1.8
December	3.2	0.21	1.6	0.90	0.56	1.0
January	3.3	0.00	0.92	0.97	1.1	0.6
February	6.4	0.00	1.6	1.8	1.1	1.0
March	10	0.13	4.7	3.0	0.63	2.9
April	70	5.2	17	14	0.83	10.6
May	96	15	41	24	0.58	25.0
June	203	9.2	55	45	0.82	33.7
July	61	4.1	21	17	0.80	12.8
August	14	2.0	6.6	3.5	0.52	4.0
September	14	1.3	5.6	3.7	0.66	3.4
Annual	31	4.6	14	7.0	0.51	100

Magnitude and probability of annual low flow based on period of record 1946-61

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	---	---	---
3	0.00	0.00	0.00	---	---	---
7	0.00	0.00	0.00	---	---	---
14	0.00	0.00	0.00	---	---	---
30	0.00	0.00	0.00	---	---	---
60	0.37	0.00	0.00	---	---	---
90	0.83	0.28	0.14	---	---	---
120	1.2	0.53	0.32	---	---	---
183	2.3	1.3	0.94	---	---	---

Magnitude and probability of instantaneous peak flow based on 20 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
336	823	1340	2300	3290	4570

Weighted skew = 0.223

Magnitude and probability of annual high flow based on period of record 1945-61

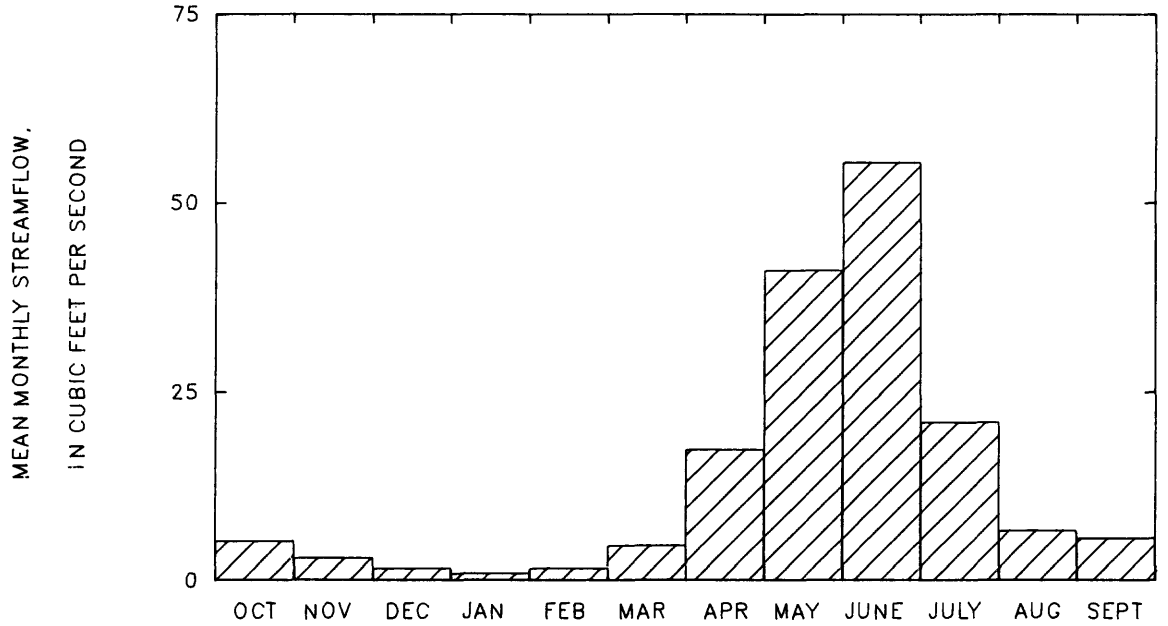
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	117	214	303	---	---	---
3	95	177	253	---	---	---
7	79	152	216	---	---	---
15	66	123	173	---	---	---
30	55	95	127	---	---	---
60	43	71	94	---	---	---
90	36	59	77	---	---	---

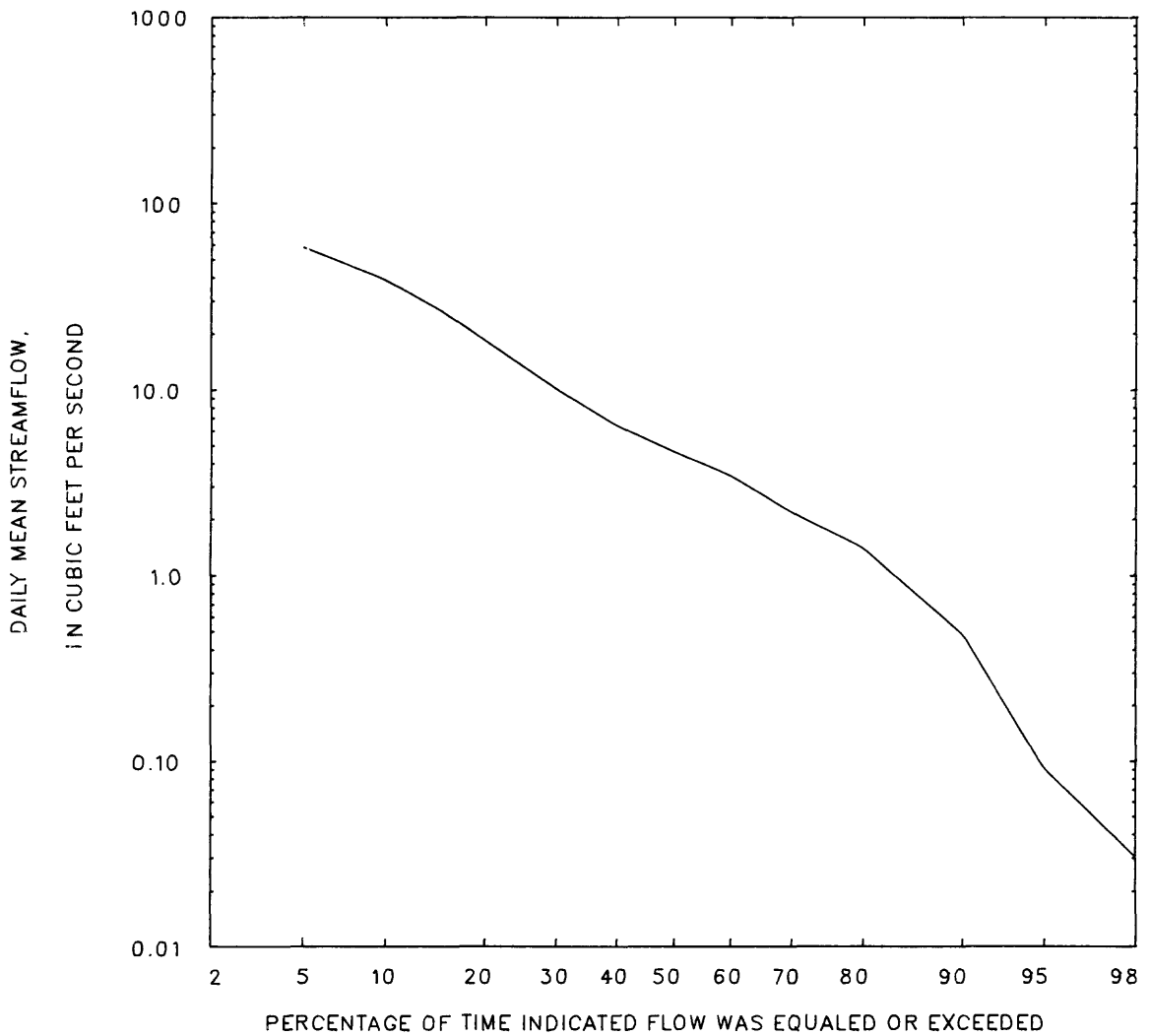
Duration of daily mean flow for period of record 1945-61

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
127	57	39	26	18	10	6.3	4.6	3.4	2.2	1.4	0.48	0.09	0.03	0.02	0.01	0.00

STATION 06262000 PERIOD OF RECORD 1945–61

NORTH FORK OWL CREEK NEAR ANCHOR, WYO.





06262300 NORTH FORK OWL CREEK ABOVE BASIN RANCH, NEAR ANCHOR, WYO.

LOCATION.--Lat 43°41'21", long 108°50'24", in NW¼SW¼SE¼ sec.15, T.43 N., R.100 W., Hot Springs County, on right bank 0.1 mi downstream from Anchor Dam road, 1.1 mi southwest of Anchor, and 32 mi west of Thermopolis.

DRAINAGE AREA.--61 mi^2, approximately.

PERIOD OF RECORD.--April 1962 to September 1975 (discharge measurements only in 1973 and no winter records since 1974). Published as "below Cup Creek, near Anchor," 1962-76.

GAGE.--Water-stage recorder. Altitude of gage is 6,340 ft, from topographic map. Prior to October 1, 1967, at site 0.1 mi upstream at different datum. October 1, 1967, to September 5, 1972, at site 0.5 mi downstream at different datum.

REMARKS.--Several small reservoirs above station used for storage of stock and irrigation water. Diversion above station into Basin Ranch ditch for irrigation of about 820 acres below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,370 ft^3/s, June 15, 1963, computation of peak flow through culvert and over embankment; no flow for many days in 1964-67, 1970-72.

COOPERATION.-- Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1963-72

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	7.7	0.00	2.8	2.4	0.87	1.7
November	3.8	0.04	1.8	1.2	0.65	1.1
December	3.7	0.24	1.7	1.2	0.69	1.0
January	3.2	0.03	1.1	0.94	0.88	0.7
February	4.0	0.00	1.9	1.2	0.59	1.2
March	19	1.8	4.8	5.0	1.0	3.0
April	21	3.5	9.6	5.2	0.55	5.9
May	100	14	44	24	0.55	27.0
June	139	3.5	71	46	0.65	43.4
July	43	0.40	15	12	0.81	9.3
August	19	0.30	5.6	5.6	1.0	3.4
September	8.5	0.00	3.8	3.2	0.84	2.3
Annual	24	4.6	14	5.9	0.43	100

Magnitude and probability of instantaneous peak flow based on 13 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
475	790	1030	1380	1660	1960

Weighted skew = 0.030

Magnitude and probability of annual low flow based on period of record 1963-72

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.06	0.00	---	---	---	---
60	0.33	0.00	---	---	---	---
90	0.75	0.00	---	---	---	---
120	1.2	0.41	---	---	---	---
183	1.6	0.90	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1963-72

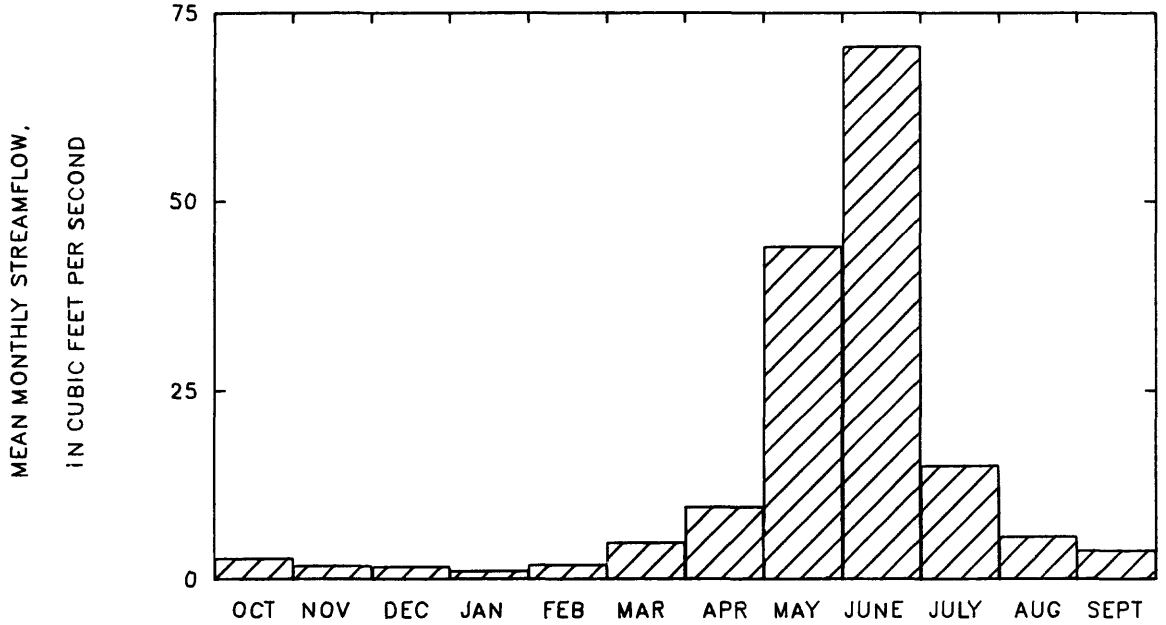
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	184	294	---	---	---	---
3	140	220	---	---	---	---
7	112	180	---	---	---	---
15	91	142	---	---	---	---
30	76	115	---	---	---	---
60	55	85	---	---	---	---
90	41	63	---	---	---	---

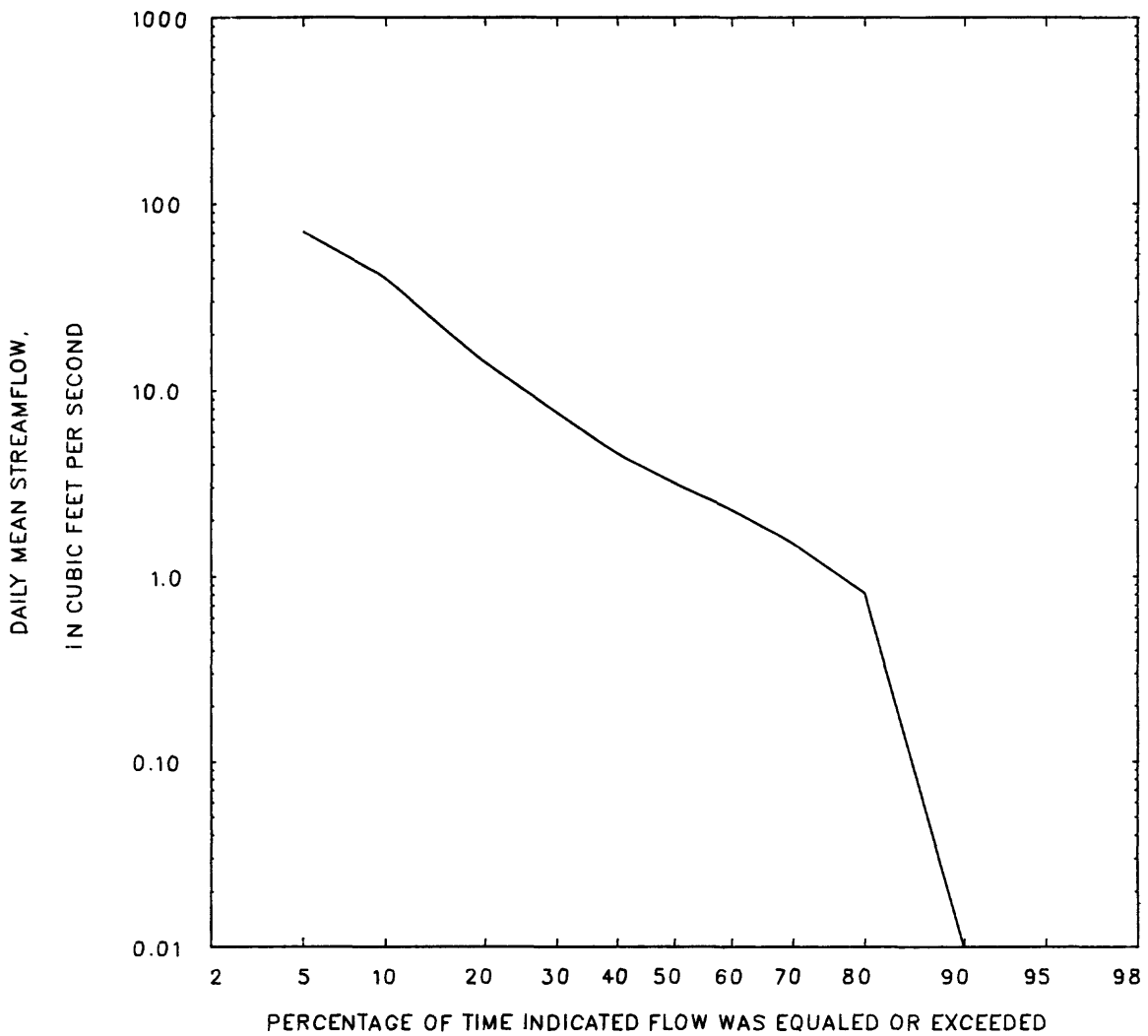
Duration of daily mean flow for period of record 1963-72

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
155	70	40	22	14	7.5	4.5	3.1	2.2	1.5	0.80	0.01	0.00	0.00	0.00	0.00	0.00

STATION 06262300 PERIOD OF RECORD 1963–72

NORTH FORK OWL CREEK ABOVE BASIN RANCH, NEAR ANCHOR, WYO.





06264000 OWL CREEK NEAR THERMOPOLIS, WYO.

LOCATION.--Lat 43°41'09", long 108°18'08", in NW¼NE¼ sec.19, T.43 N., R.95 W., Hot Springs County, on right bank at McCumber Ranch, 1.5 mi downstream from Mud Creek, and 6 mi northwest of Thermopolis.

DRAINAGE AREA.--478 mi^2.

PERIOD OF RECORD.--July 1910 to November 1917, November 1931 to November 1932, May 1938 to September 1969. No winter records prior to 1932. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 4,560 ft, by barometer.

REMARKS.--Some regulation by Anchor Dam since November 1960. Diversions for irrigation of about 14,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,030 ft^3/s, June 15, 1963, gage height, 8.73 ft, from rating curve extended above 1,900 ft^3/s on basis of contracted opening measurement of peak flow; no flow at times during irrigation seasons of 1912, 1916, 1939-40, 1961.

Monthly and annual streamflow 1939-69

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	79	0.49	9.1	15	1.6	2.8
November	67	1.3	12	13	1.1	3.7
December	36	3.0	12	7.6	0.63	3.7
January	27	1.8	12	6.5	0.55	3.6
February	51	3.8	17	10	0.60	5.2
March	65	2.3	23	16	0.69	7.0
April	125	1.7	26	33	1.3	8.0
May	276	1.6	50	77	1.5	15.3
June	454	2.2	109	126	1.2	33.2
July	135	0.13	37	40	1.1	11.2
August	200	0.00	12	35	3.0	3.6
September	106	0.16	9.4	19	2.0	2.9
Annual	81	2.9	27	23	0.82	100

Magnitude and probability of annual low flow based on period of record 1940-69

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.68	0.00	0.00	0.00	0.00	---
3	0.78	0.00	0.00	0.00	0.00	---
7	0.90	0.00	0.00	0.00	0.00	---
14	1.0	0.00	0.00	0.00	0.00	---
30	1.5	0.00	0.00	0.00	0.00	---
60	2.6	0.47	0.09	0.00	0.00	---
90	3.5	0.96	0.44	0.22	0.10	---
120	4.8	1.7	0.93	0.55	0.30	---
183	6.5	3.0	2.0	1.4	0.97	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1939-69

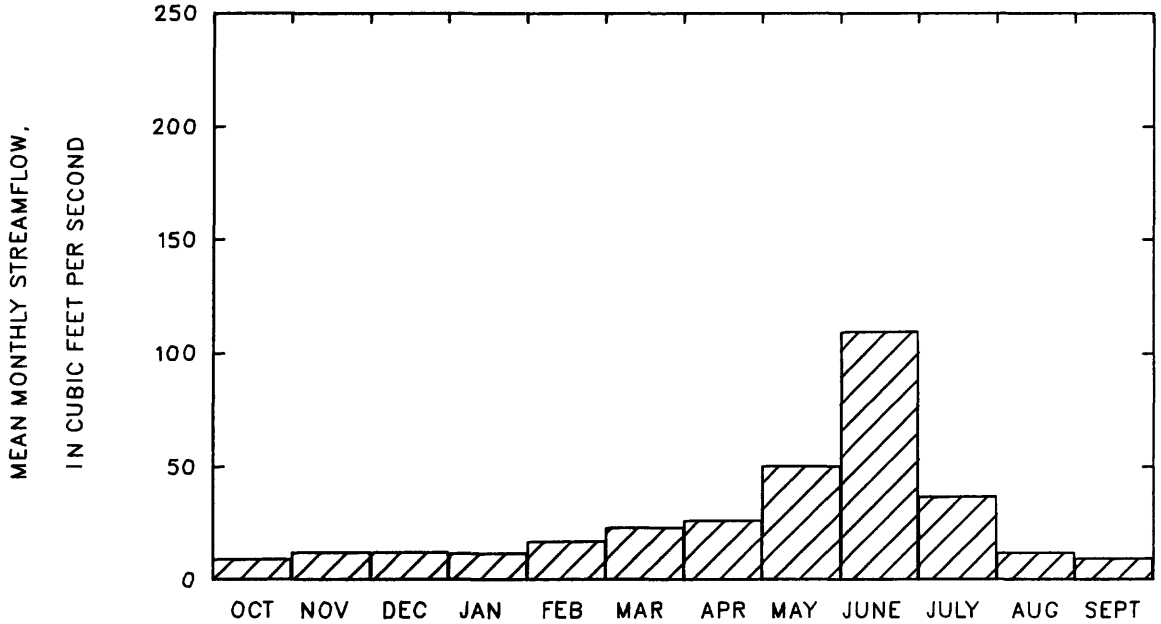
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	233	555	865	1380	1860	---
3	170	419	676	1130	1580	---
7	131	333	542	910	1270	---
15	102	262	427	716	998	---
30	76	198	325	544	755	---
60	55	141	227	373	511	---
90	45	110	172	275	369	---

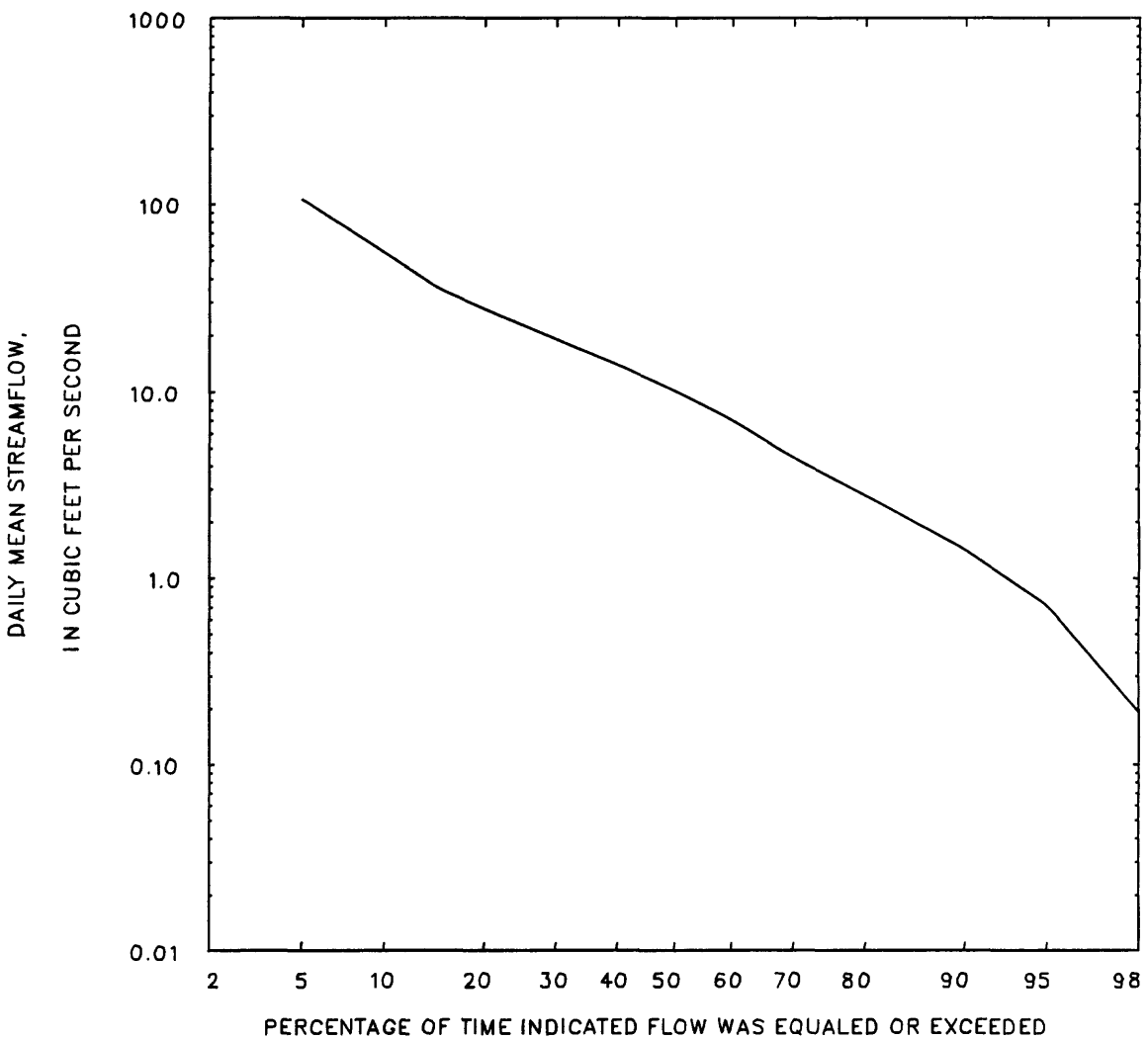
Duration of daily mean flow for period of record 1939-69

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
376	105	55	35	27	19	14	10	7.0	4.4	2.8	1.4	0.71	0.19	0.07	0.03	0.01

STATION 06264000 PERIOD OF RECORD 1939–69

OWL CREEK NEAR THERMOPOLIS, WYO.





06264500 OWL CREEK NEAR LUCERNE, WYO.

LOCATION.--Lat 43°43', long 108°11', in sec.7, T.43 N., R.94 W., Hot Springs County, near center of span on upstream side of bridge on U.S. Highway 20, 1 mile upstream from nouth and 1.5 mi south of Lucerne.

DRAINAGE AREA.--505 mi^2.

PERIOD OF RECORD.--February 1932 to February 1933, May 1938 to September 1940, May 1941, to September 1953.

GAGE.--Chain gage. Datum of gage is 4,305.33 ft. Prior to March 27, 1952, on downstream side of bridge. February 26 to September 30, 1932, at datum 1.48 ft higher, October 1, 1932, to February 28, 1933, at datum 0.98 ft higher, May 11, 1938, to July 12, 1944, at datum 2.00 ft higher, and July 13, 1944, to March 26, 1952, at same datum.

REMARKS.--Diversions above station for irrigation of about 18,000 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 928 ft^3/s, May 4, 1947, from rating curve extended above 520 ft^3/s; maximum gage height, 6.80 ft, May 27, 1942, present datum; no flow at times in 1932, 1938-40.

Monthly and annual streamflow 1939-40, 1942-53

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	78	0.01	8.8	20	2.3	3.2
November	54	0.20	12	14	1.2	4.4
December	28	0.16	13	7.7	0.61	4.6
January	20	0.09	12	5.8	0.48	4.5
February	53	1.2	18	12	0.67	6.6
March	87	1.5	31	23	0.76	11.2
April	128	0.42	37	40	1.1	13.6
May	216	0.28	46	73	1.6	16.8
June	378	0.70	76	111	1.5	27.6
July	73	0.16	16	22	1.3	6.0
August	4.6	0.00	1.9	1.2	0.63	0.7
September	8.0	0.00	2.3	2.4	1.0	0.8
Annual	62	1.0	23	20	0.86	100

Magnitude and probability of annual low flow based on period of record 1940, 1943-53

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.35	0.07	0.00	0.00	---	---
3	0.42	0.10	0.00	0.00	---	---
7	0.53	0.15	0.00	0.00	---	---
14	0.66	0.19	0.00	0.00	---	---
30	0.90	0.23	0.00	0.00	---	---
60	1.4	0.50	0.00	0.00	---	---
90	1.6	0.65	0.00	0.00	---	---
120	2.8	0.79	0.30	0.12	---	---
183	5.0	1.5	0.60	0.22	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1939-40, 1942-53

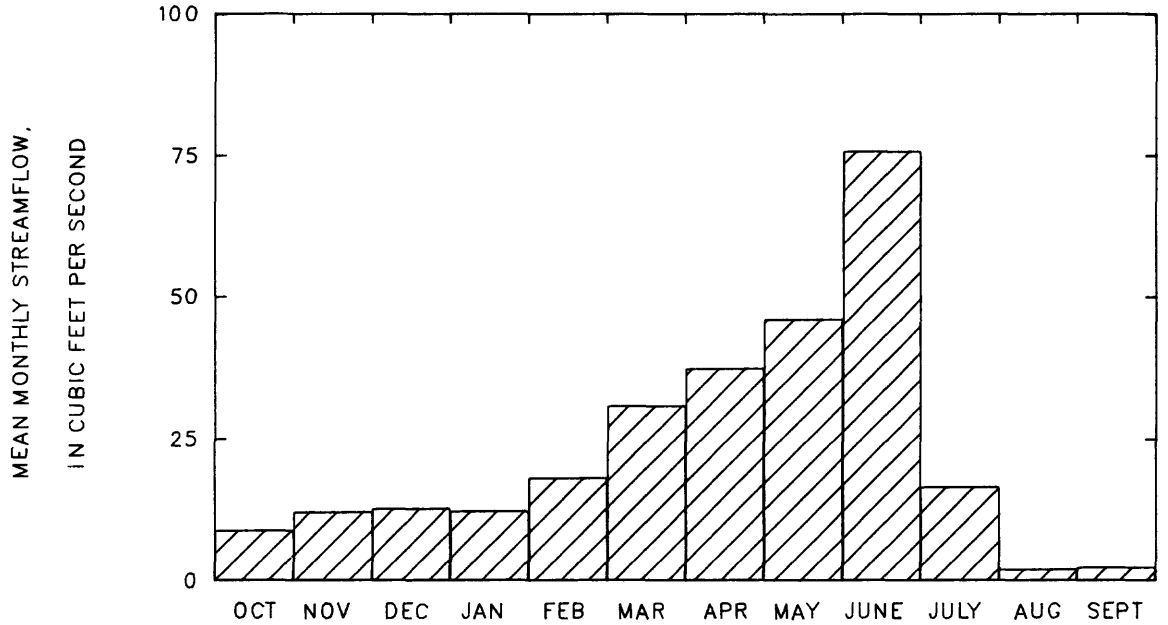
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	207	459	699	---	---	---
3	162	369	575	---	---	---
7	111	287	479	---	---	---
15	82	223	378	---	---	---
30	59	167	288	---	---	---
60	46	125	205	---	---	---
90	39	104	164	---	---	---

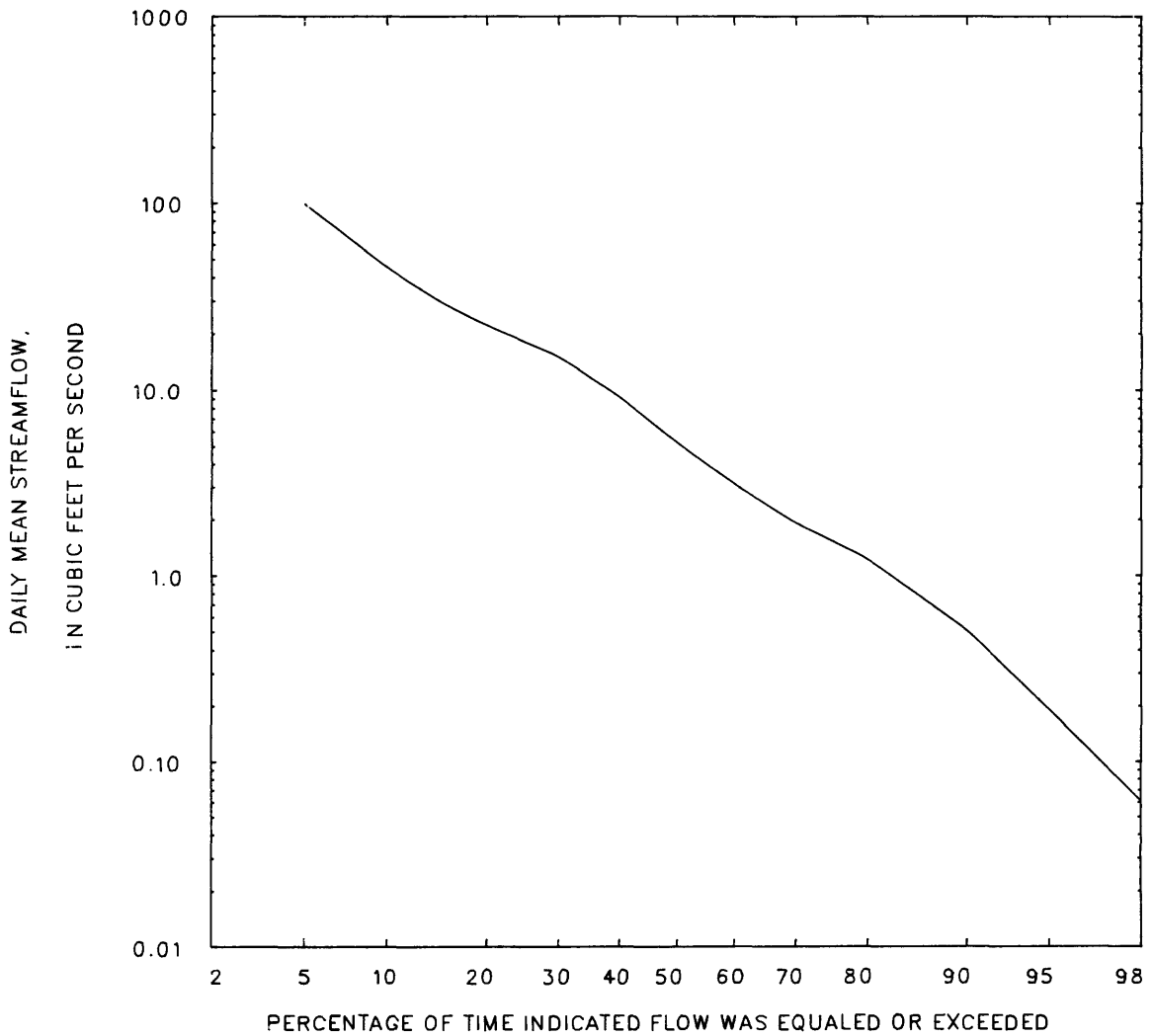
Duration of daily mean flow for period of record 1939-40, 1942-53

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
339	98	45	29	22	15	9.2	5.2	3.1	1.9	1.2	0.51	0.19	0.06	0.03	0.01	0.00

STATION 06264500 PERIOD OF RECORD 1939–40, 1942–53

OWL CREEK NEAR LUCERNE, WYO.





06265800 GOOSEBERRY CREEK AT DICKIE, WYO.

LOCATION.--Lat 44°00'00", long 108°45'25", in NE¼ sec.32, T.47 N., R.99 W., Hot Springs County, at left downstream wingwall of county bridge, 0.6 mi downstream from Middle Creek, and 0.8 mi northwest of Dickie.

DRAINAGE AREA.--95.0 mi^2.

PERIOD OF RECORD.--October 1957 to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 5,750 ft, from topographic map.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,130 ft^3/s, June 15, 1963, gage height, 5.66 ft, from rating curve extended above 250 ft^3/s on basis of slope-area measurement of peak flow; no flow September 8-13, 1959, January 28 to February 8, August 5, 6, 18-25, 1961, January 5-9, August 19, 1970.

Monthly and annual streamflow 1958-78

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	9.8	2.7	5.0	1.8	0.36	3.1
November	8.4	1.9	4.4	1.6	0.36	2.7
December	4.6	0.65	2.6	1.2	0.45	1.6
January	4.1	0.28	1.8	1.1	0.64	1.1
February	17	0.53	2.9	3.6	1.2	1.8
March	19	1.2	5.6	4.1	0.74	3.4
April	66	4.6	17	16	0.92	10.3
May	134	13	47	30	0.65	28.6
June	141	3.8	53	38	0.71	32.3
July	34	0.97	13	9.8	0.75	8.0
August	15	0.43	6.1	4.4	0.72	3.7
September	29	0.96	5.9	5.8	0.97	3.6
Annual	26	3.6	14	6.4	0.46	100

Magnitude and probability of annual low flow based on period of record 1959-78

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	0.00	---	---
3	0.13	0.00	0.00	0.00	---	---
7	0.36	0.00	0.00	0.00	---	---
14	0.64	0.17	0.08	0.04	---	---
30	0.96	0.37	0.22	0.14	---	---
60	1.3	0.67	0.47	0.35	---	---
90	1.8	1.0	0.75	0.57	---	---
120	2.2	1.3	1.0	0.79	---	---
183	3.0	2.1	1.7	1.4	---	---

Magnitude and probability of instantaneous peak flow based on 21 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
247	437	597	838	1050	1290

Weighted skew = 0.190

Magnitude and probability of annual high flow based on period of record 1958-78

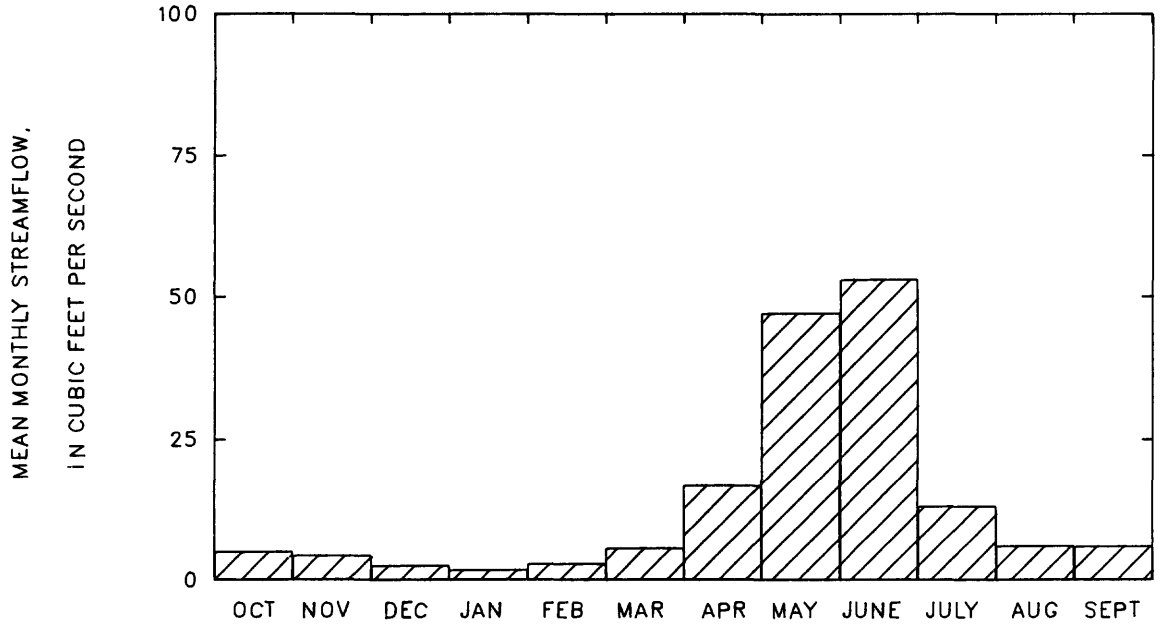
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	133	255	350	482	---	---
3	112	215	296	412	---	---
7	97	174	228	297	---	---
15	80	136	173	218	---	---
30	66	111	139	172	---	---
60	48	80	100	123	---	---
90	38	61	75	90	---	---

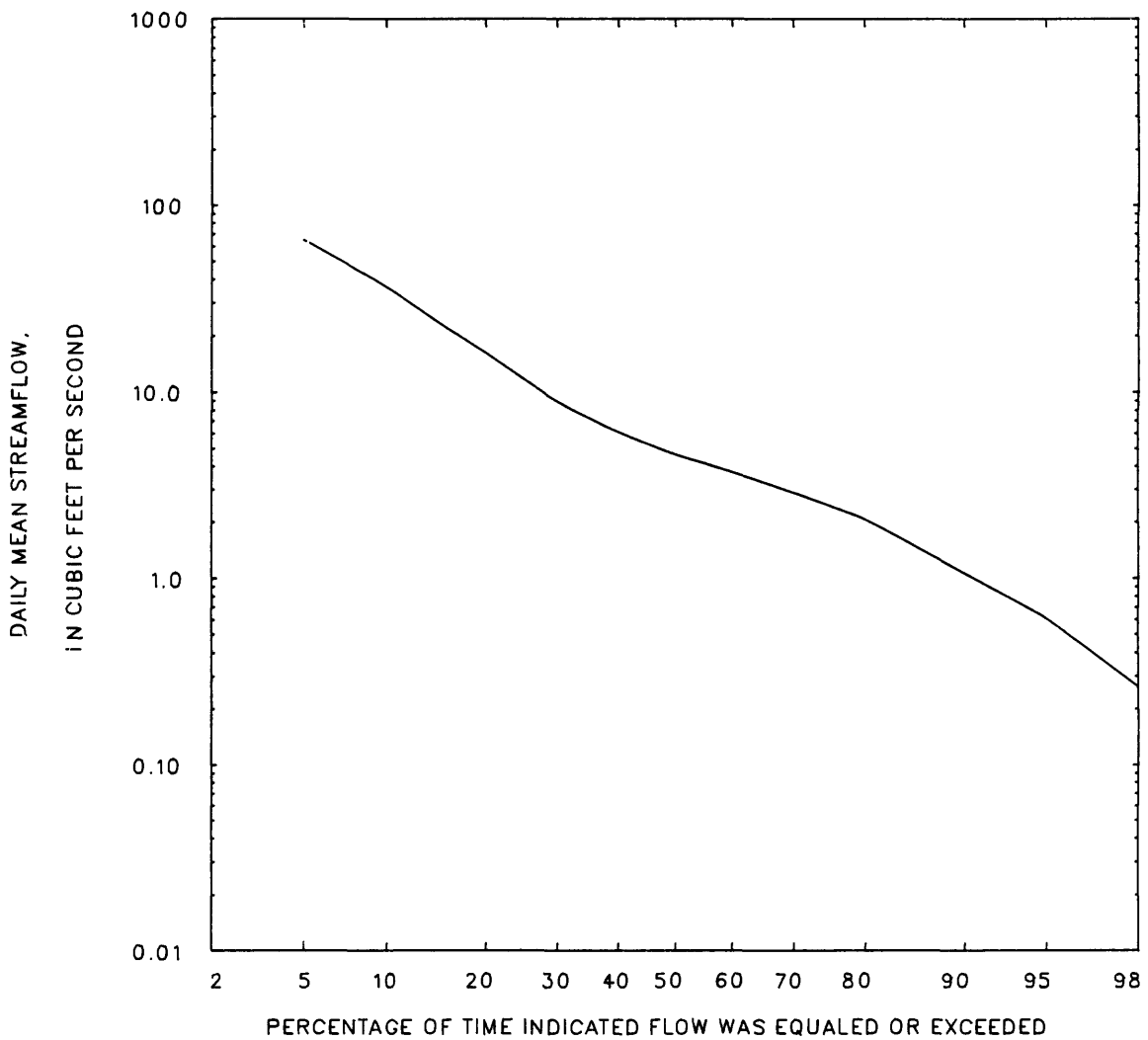
Duration of daily mean flow for period of record 1958-78

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
139	65	36	23	16	8.7	6.0	4.6	3.7	2.8	2.1	1.0	0.61	0.26	0.11	0.02	0.00

STATION 06265800 PERIOD OF RECORD 1958–78

GOOSEBERRY CREEK AT DICKIE, WYO.





06266000 GOOSEBERRY CREEK NEAR GRASS CREEK, WYO.

LOCATION.--Lat 44°00'00", long 108°41'10", in SE¼NW¼ sec.36, T.47 N., R.99 W., Hot Springs County, on right bank 15 ft downstream from bridge, 3 mi downstream from Enos Creek, and 4.5 mi northwest of town of Grass Creek.

DRAINAGE AREA.--142 mi^2.

PERIOD OF RECORD.--July 1945 to September 1957.

GAGE.--Water-stage recorder. Datum of gage is 5,522 ft. Prior to April 23, 1953, at datum 1.35 ft higher.

REMARKS.--Diversions for irrigation of about 800 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 593 ft^3/s, June 22, 1948, gage height, 4.97 ft, present datum, from rating curve extended above 150 ft^3/s; no flow at times in 1950-57.

Monthly and annual streamflow 1946-57

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	14	1.1	6.1	4.3	0.70	3.7
November	12	0.73	5.1	3.5	0.69	3.1
December	8.3	0.25	3.2	2.7	0.84	1.9
January	7.7	0.00	2.1	2.5	1.2	1.3
February	7.2	0.00	2.4	2.1	0.90	1.4
March	17	0.01	7.6	6.0	0.78	4.6
April	57	5.6	21	17	0.80	12.8
May	119	1.6	47	36	0.78	28.3
June	144	4.4	48	46	0.95	29.4
July	50	0.95	13	14	1.1	7.8
August	17	0.12	4.8	5.7	1.2	2.9
September	14	0.06	4.6	4.4	0.96	2.8
Annual	30	2.0	14	9.0	0.66	100

Magnitude and probability of annual low flow based on period of record 1947-57

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.13	0.00	---	---	---	---
60	0.64	0.04	---	---	---	---
90	1.1	0.14	---	---	---	---
120	1.8	0.52	---	---	---	---
183	2.6	1.2	---	---	---	---

Magnitude and probability of instantaneous peak flow based on 12 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
281	431	535	670	774	878

Weighted skew = 0.130

Magnitude and probability of annual high flow based on period of record 1946-57

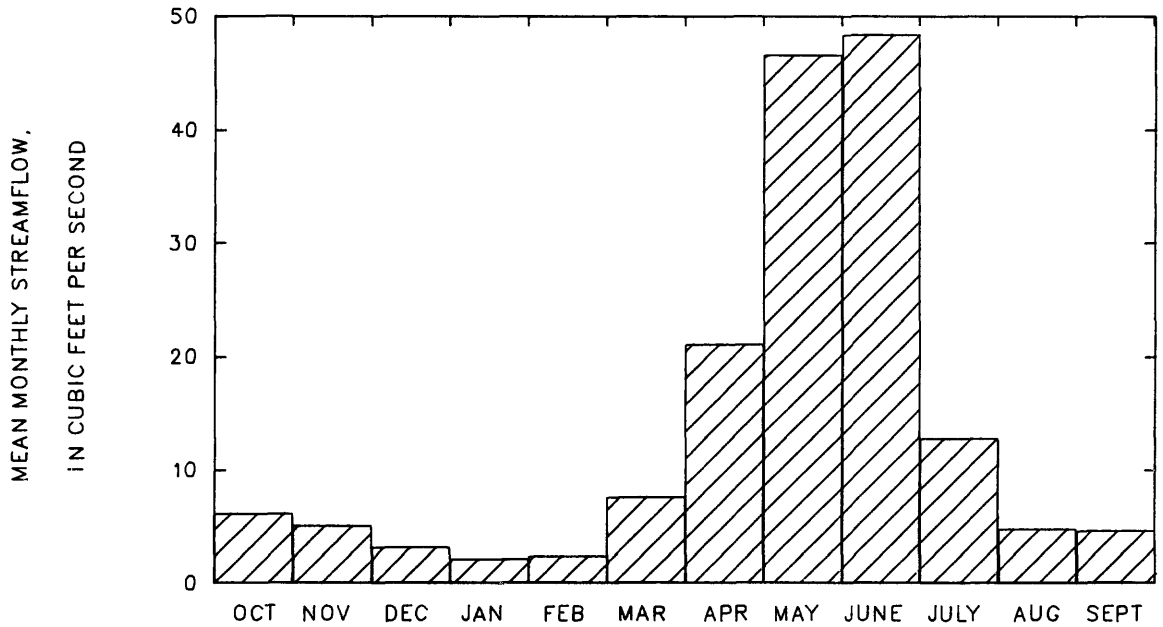
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	132	250	---	---	---	---
3	104	199	---	---	---	---
7	85	166	---	---	---	---
15	67	132	---	---	---	---
30	52	102	---	---	---	---
60	40	80	---	---	---	---
90	32	63	---	---	---	---

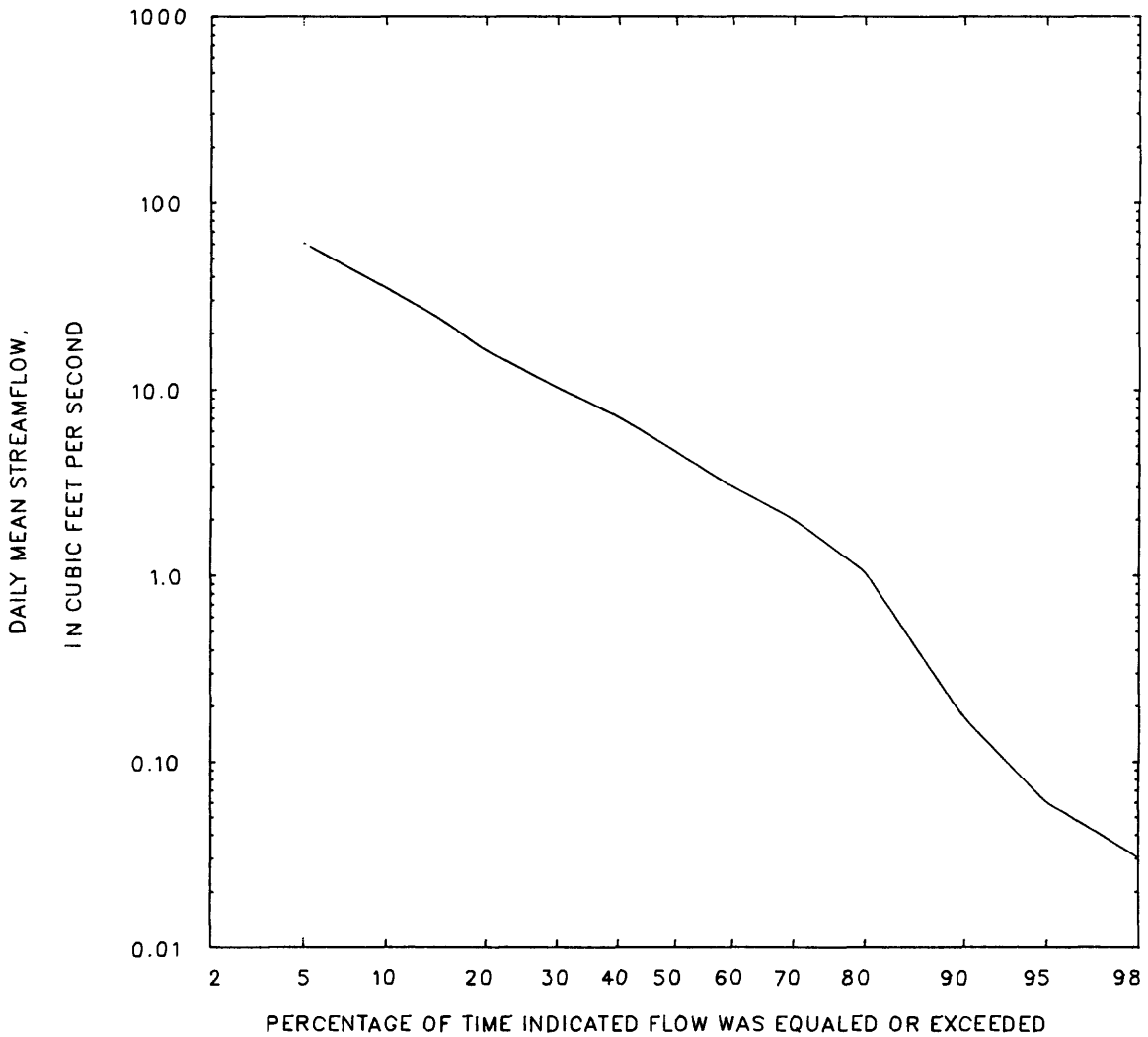
Duration of daily mean flow for period of record 1946-57

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
159	60	35	24	16	10	7.1	4.6	2.9	2.0	1.0	0.17	0.06	0.03	0.01	0.01	0.00

STATION 06266000 PERIOD OF RECORD 1946–57

GOOSEBERRY CREEK NEAR GRASS CREEK, WYO.





06267000 GOOSEBERRY CREEK AT NEIBER, WYO.

LOCATION.--Lat 43°55'22", long 108°03'48", in SE¼ sec. 30, T.46 N., R.93 W., Washakie County, on left bank at Neiber, 0.75 mi upstream from mouth.

DRAINAGE AREA.--361 mi^2.

PERIOD OF RECORD.--May 1941 to September 1944, October 1945 to September 1953. Monthly discharge only for some periods; published in WSP 1309. Published as "at Pulliam."

GAGE.--Water-stage recorder. Datum of gage is 4,140.44 ft. Prior to September 30, 1944, water-stage recorder at two sites within 0.25 mi upstream from present site at different datums. October 1, 1945, to September 4, 1948, water-stage recorder at present site at datum 1.01 ft higher.

REMARKS.--Diversions for irrigation of about 3,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,650 ft^3/s, May 18, 1944, gage height, 7.13 ft, site and datum then in use, from rating curve extended above 170 ft^3/s; no flow at times in each year.

Monthly and annual streamflow 1942-44, 1946-53

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	30	0.00	5.9	8.6	1.5	3.9
November	20	0.08	7.4	7.5	1.0	4.9
December	14	0.05	4.6	5.5	1.2	3.1
January	7.5	0.00	2.2	2.8	1.3	1.4
February	6.9	0.24	2.6	2.3	0.86	1.8
March	47	1.6	21	17	0.79	14.0
April	69	0.70	26	22	0.85	17.1
May	145	0.33	34	52	1.5	22.9
June	113	0.54	36	43	1.2	23.9
July	48	0.00	8.5	16	1.9	5.7
August	3.5	0.00	0.37	1.0	2.8	0.2
September	8.9	0.00	1.6	3.0	1.9	1.1
Annual	31	0.45	13	11	0.86	100

Magnitude and probability of annual low flow based on period of record 1943-44, 1947-53

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.00	0.00	---	---	---	---
90	0.00	0.00	---	---	---	---
120	0.22	0.00	---	---	---	---
183	1.1	0.25	---	---	---	---

Magnitude and probability of instantaneous peak flow based on 12 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
220	628	1090	1980	2920	4140

Weighted skew = 0.046

Magnitude and probability of annual high flow based on period of record 1942-44, 1946-53

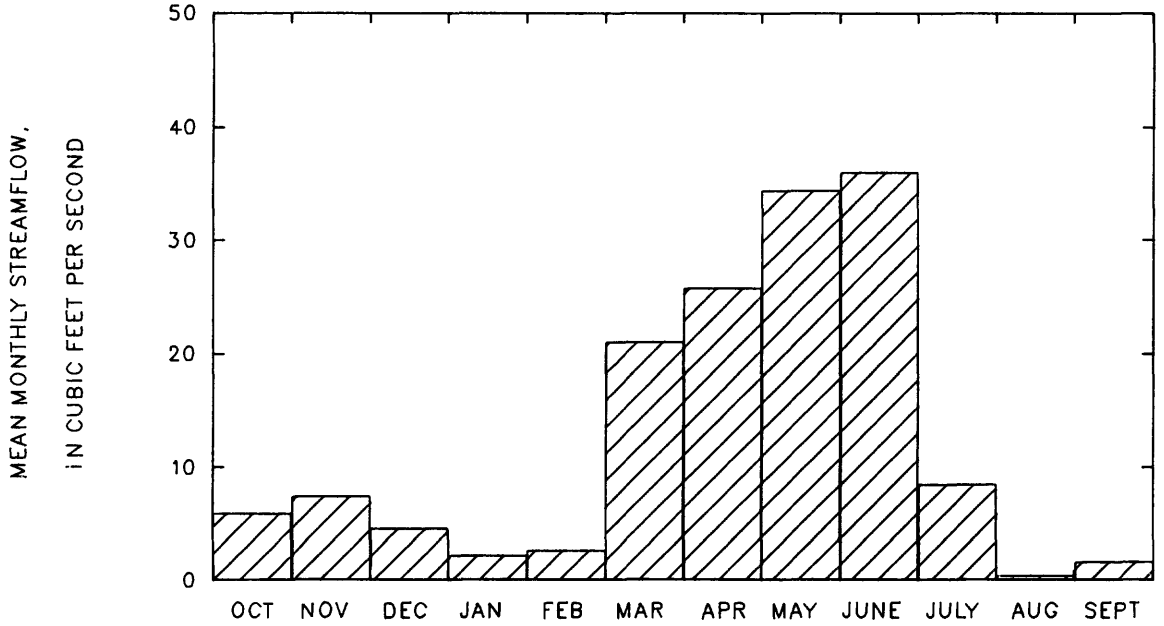
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	136	355	---	---	---	---
3	114	283	---	---	---	---
7	94	238	---	---	---	---
15	70	177	---	---	---	---
30	49	128	---	---	---	---
60	34	86	---	---	---	---
90	25	65	---	---	---	---

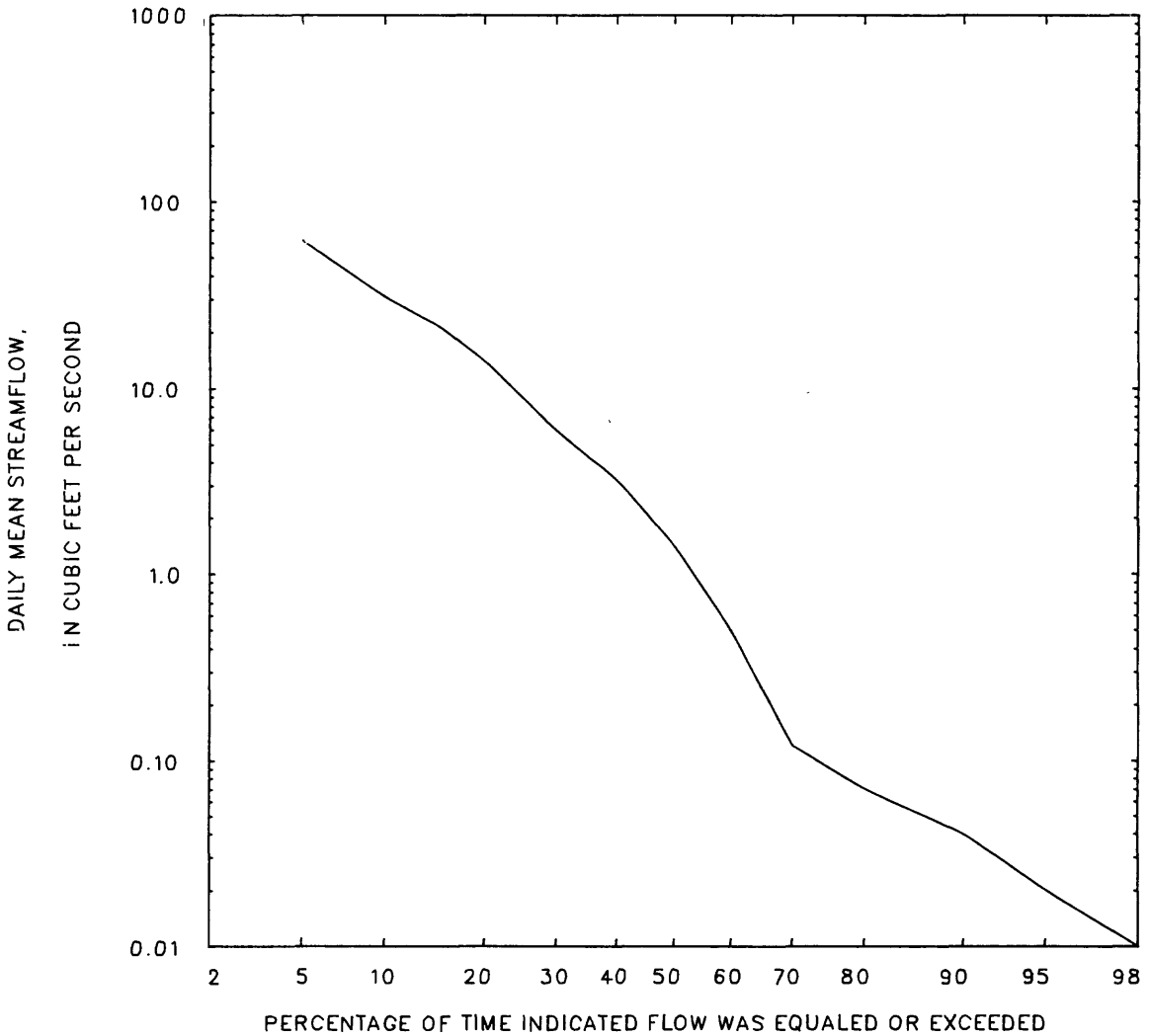
Duration of daily mean flow for period of record 1942-44, 1946-53

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
186	61	31	21	14	5.9	3.2	1.4	0.50	0.12	0.07	0.04	0.02	0.01	0.00	0.00	0.00

STATION 06267000 PERIOD OF RECORD 1942–44, 1946–53

GOOSEBERRY CREEK AT NEIBER, WYO.





06267400 EAST FORK NOWATER CREEK NEAR COLTER, WYO.

LOCATION.--Lat 43°54'55", long 107°55'46", in SE¼NE¼ sec.31, T.46 N., R.92 W., Washakie County, on left bank 50 ft upstream from county road, 1.8 mi upstream from mouth, 5.2 mi southeast of Colter, and 7.0 mi south of Worland.

DRAINAGE AREA.--149 mi^2.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,165 ft, from topographic map.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,040 ft^3/s, May 18, 1978, gage height, 6.65 ft; no flow for most of each year.

Monthly and annual streamflow 1972-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	73	0.00	7.1	20	2.8	11.9
November	3.2	0.00	0.32	0.88	2.8	0.5
December	0.11	0.00	0.01	0.03	3.1	0.0
January	0.88	0.00	0.07	0.24	3.6	0.1
February	92	0.00	11	26	2.3	18.3
March	64	0.84	10	18	1.7	17.2
April	40	0.00	5.9	11	1.8	9.9
May	97	0.00	15	29	2.0	24.8
June	13	0.00	2.8	4.0	1.4	4.7
July	12	0.00	2.2	4.4	2.0	3.7
August	10	0.00	1.7	2.8	1.6	2.9
September	16	0.00	3.5	5.2	1.5	5.9
Annual	14	1.1	5.0	4.4	0.88	100

Magnitude and probability of instantaneous peak flow based on 12 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
599	1183	1710	2560	3340	4250

Weighted skew = 0.169

Magnitude and probability of annual low flow based on period of record 1973-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	---	---	---
3	0.00	0.00	0.00	---	---	---
7	0.00	0.00	0.00	---	---	---
14	0.00	0.00	0.00	---	---	---
30	0.00	0.00	0.00	---	---	---
60	0.00	0.00	0.00	---	---	---
90	0.00	0.00	0.00	---	---	---
120	0.00	0.00	0.00	---	---	---
183	0.25	0.04	0.00	---	---	---

Magnitude and probability of annual high flow based on period of record 1972-84

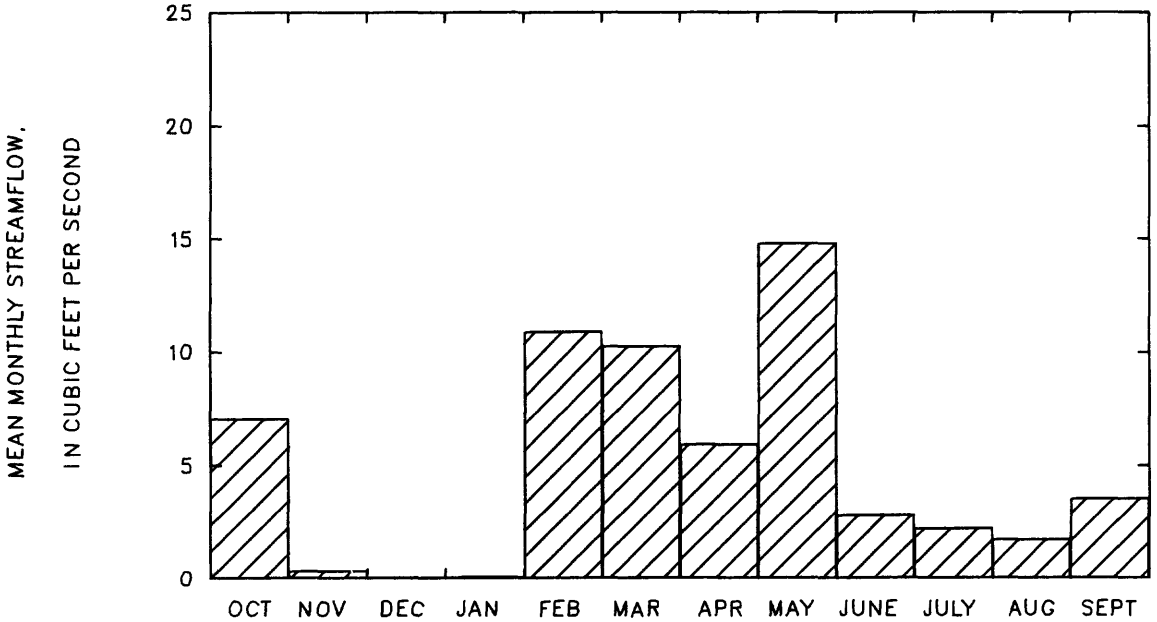
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	189	513	916	---	---	---
3	114	286	489	---	---	---
7	66	153	249	---	---	---
15	40	95	155	---	---	---
30	23	53	87	---	---	---
60	14	30	47	---	---	---
90	9.8	21	33	---	---	---

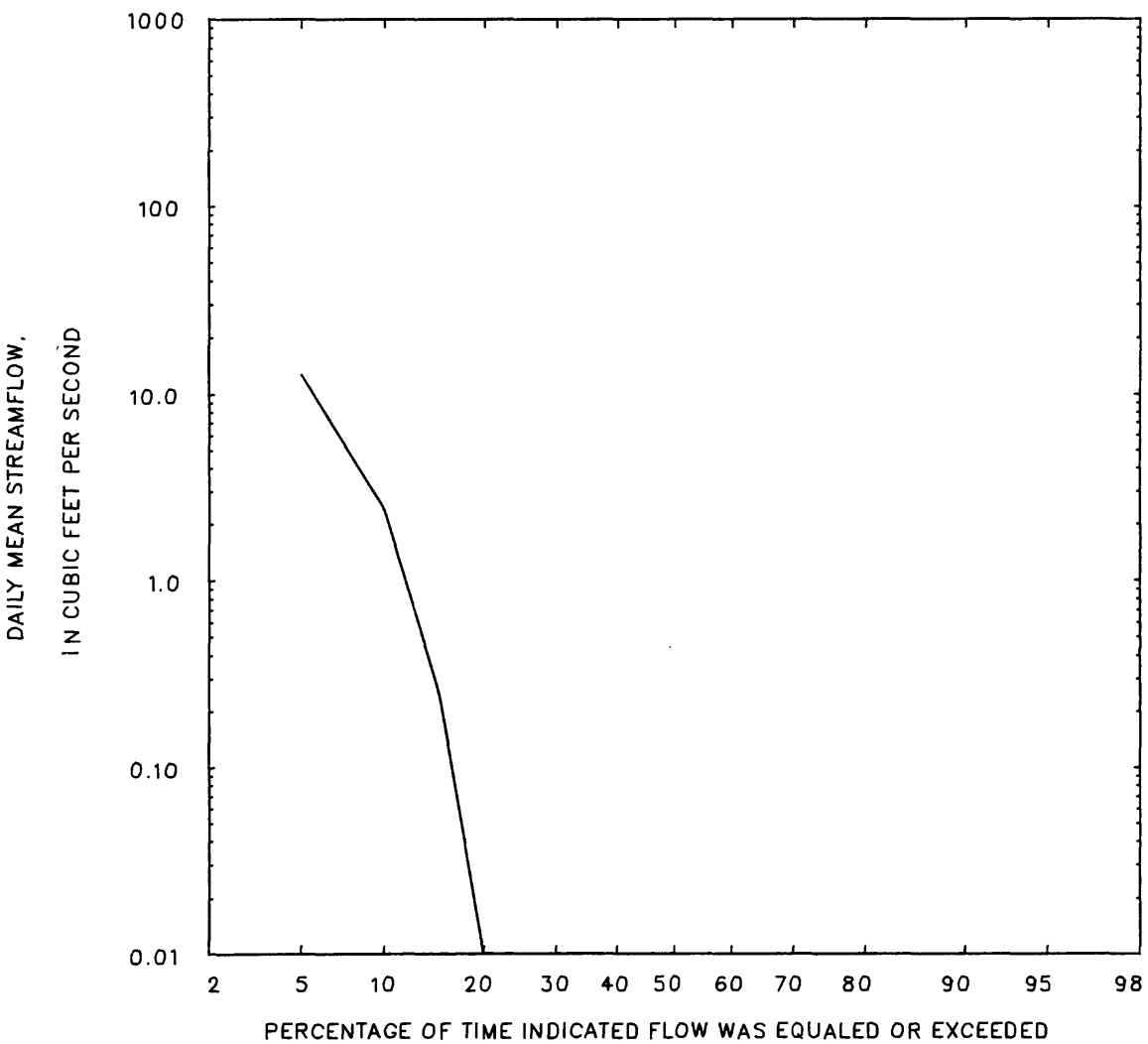
Duration of daily mean flow for period of record 1972-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
108	13	2.4	0.25	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATION 06267400 PERIOD OF RECORD 1972–84

EAST FORK NOWATER CREEK NEAR COLTER, WYO.





06268500 FIFTEENMILE CREEK NEAR WORLAND, WYO.

LOCATION.--Lat 44°01'14", long 108°00'42", in NW¼NW¼NE¼ sec.27, T.47 N., R.93 W., Washakie County, on left bank 300 ft upstream from Bighorn Canal spillway, 2.0 mi upstream from mouth, and 2.8 mi west of Worland.

DRAINAGE AREA.--518 mi^2.

PERIOD OF RECORD.--March 1951 to December 1972, June 1978 to current year. Occasional measurements and annual maximum, January 1973 to May 1978.

GAGE.--Water-stage recorder. Altitude of gage is 4,070 ft, from topographic map. Prior to October 1, 1956, at site 400 ft upstream at datum 7.52 ft higher. October 1, 1956, to September 30, 1969, at present site at datum 2.00 ft higher. January 1, 1973, to May 31, 1978, crest-stage gage at present site and datum.

REMARKS.--Bureau of Land Management has extensive spreader systems on some of the tributaries above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,270 ft^3/s, May 18, 1978, gage height, 10.58 ft, from floodmarks, from rating curve extended above 1,700 ft^3/s; no flow for many days each year.

Monthly and annual streamflow 1952-72, 1979-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	136	0.00	7.8	26	3.4	6.3
November	1.4	0.00	0.13	0.35	2.7	0.1
December	8.8	0.00	0.52	1.9	3.7	0.4
January	0.00	0.00	0.00	0.00		0.0
February	58	0.00	6.0	15	2.4	4.8
March	65	0.00	8.9	14	1.6	7.1
April	48	0.00	8.6	14	1.6	6.9
May	102	0.00	21	25	1.2	16.6
June	269	0.00	32	52	1.6	26.0
July	33	0.00	7.3	8.8	1.2	5.9
August	109	0.00	15	25	1.7	11.7
September	119	0.00	18	30	1.7	14.2
Annual	34	2.7	10	6.8	0.66	100

Magnitude and probability of annual low flow based on period of record 1952-72, 1980-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.00	0.00	---	---	---	---
90	0.00	0.00	---	---	---	---
120	0.00	0.00	---	---	---	---
183	0.38	0.00	---	---	---	---

Magnitude and probability of instantaneous peak flow based on 33 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1120	1900	2490	3300	4020	4760

Weighted skew = -0.023

Magnitude and probability of annual high fl w based on period of record 1952-72, 1979-84

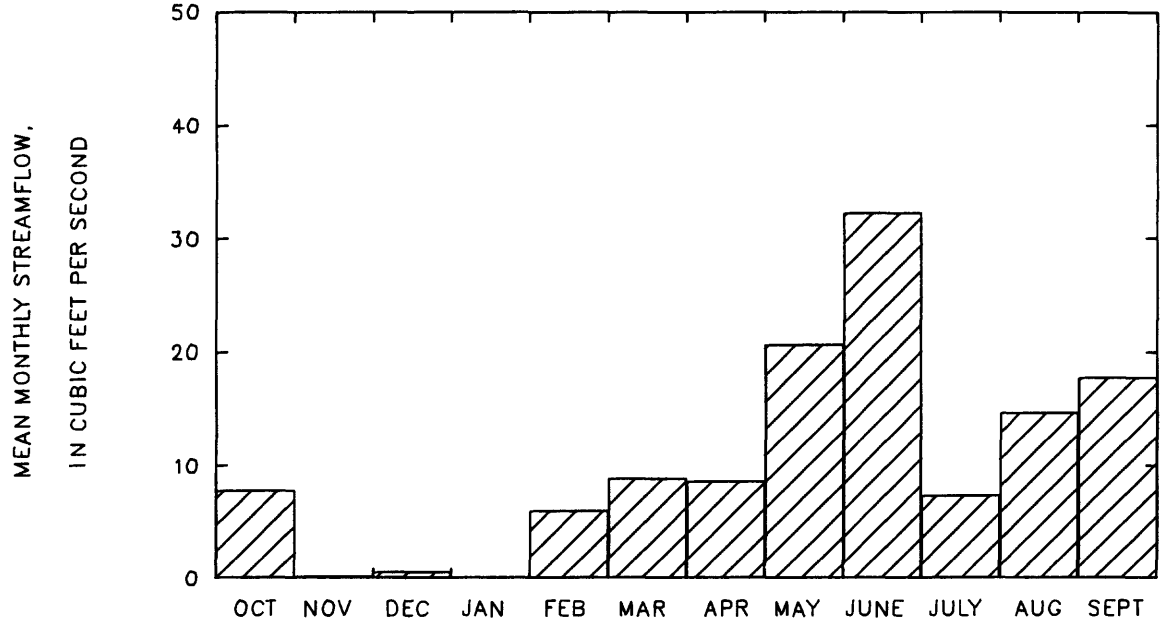
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	490	860	---	---	---	---
3	278	499	---	---	---	---
7	152	273	---	---	---	---
15	93	173	---	---	---	---
30	54	99	---	---	---	---
60	34	61	---	---	---	---
90	27	45	---	---	---	---

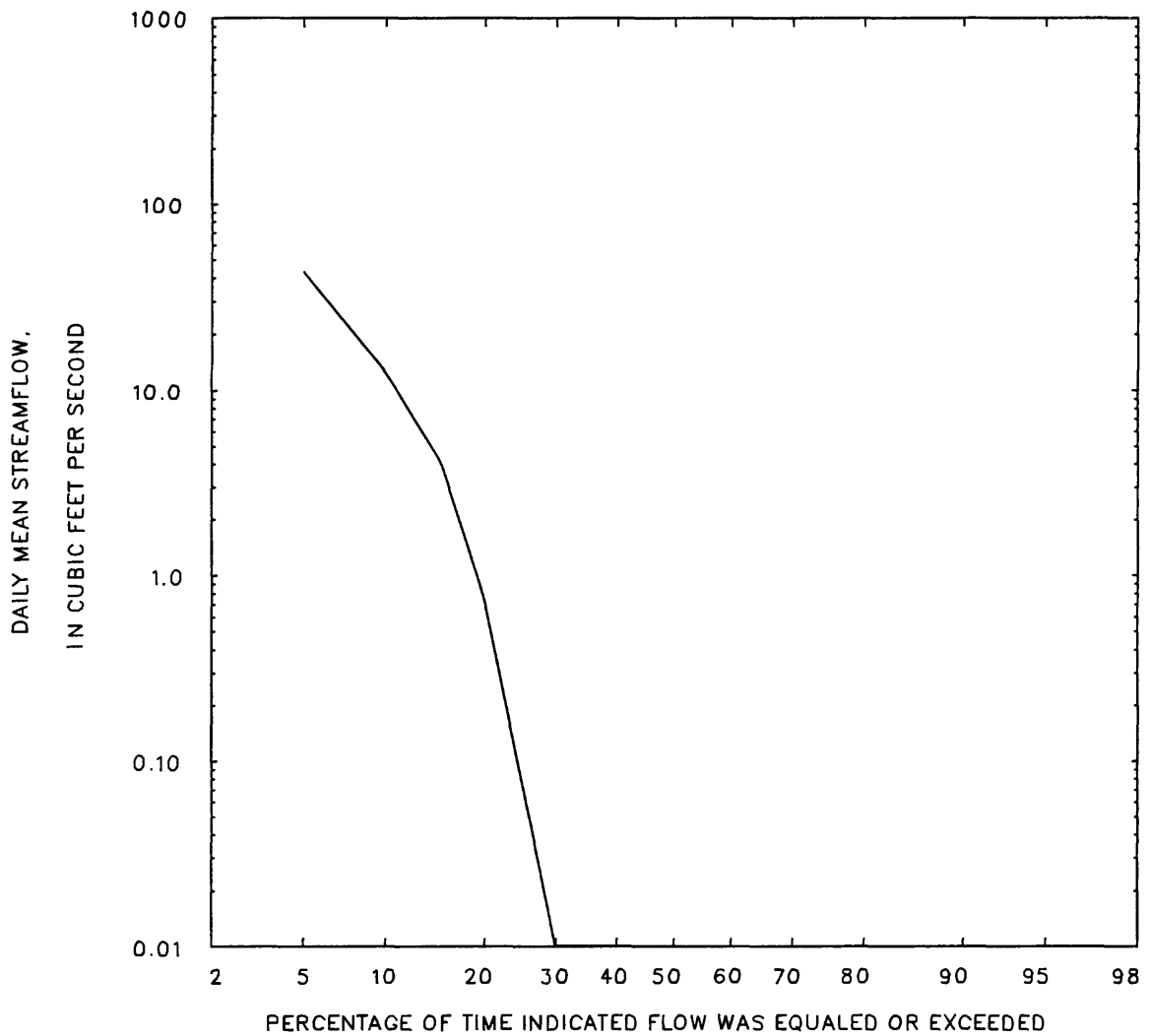
Duration of daily mean flow for period of record 1952-72, 1979-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
237	43	12	4.1	0.74	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATION 06268500 PERIOD OF RECORD 1952–72, 1979–84

FIFTEENMILE CREEK NEAR WORLAND, WYO.





06270000 NOWOOD RIVER NEAR TEN SLEEP, WYO.

LOCATION.--Lat 44°00'48", long 107°25'39", in SW¼NW¼ sec.27, T.47 N., R.88 W., Washakie County, on right bank 1.7 mi southeast of Ten Sleep and 4.3 mi upstream from Ten Sleep Creek.

DRAINAGE AREA.--803 mi^2.

PERIOD OF RECORD.--May 1938 to September 1943, March 1950 to December 1955 (published as Nowood Creek near Tensleep), October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,420 ft, from topographic map. May 6, 1938, to September 30, 1943, non-recording gage at site 200 ft downstream at different datum. March 17, 1950, to December 31, 1955, water-stage recorder at site 100 ft upstream at different datum.

REMARKS.--Diversions for irrigation of about 550 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,380 ft^3/s, May 19, 1978, gage height, 12.94 ft; maximum gage height, 13.0 ft, March 12, 13, 1942 (ice jam), site and datum then in use; minimum daily discharge, 0.70 ft^3/s, August 13, 1940.

Monthly and annual streamflow 1939-43, 1951-55, 1973-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	110	48	76	18	0.23	5.3
November	98	50	75	14	0.19	5.3
December	88	44	65	12	0.18	4.6
January	159	42	65	23	0.36	4.6
February	106	27	73	17	0.23	5.1
March	257	60	124	58	0.46	8.8
April	462	82	172	94	0.55	12.1
May	1450	106	442	354	0.80	31.2
June	670	41	194	174	0.90	13.7
July	126	5.9	44	34	0.78	3.1
August	85	13	37	21	0.58	2.6
September	98	17	51	21	0.41	3.6
Annual	254	59	118	52	0.44	100

Magnitude and probability of instantaneous peak flow based on 24 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1210	2090	2770	3720	4490	5310

Weighted skew = -0.072

Magnitude and probability of annual low flow based on period of record 1940-43, 1951-55, 1974-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	12	4.5	2.4	1.3	---	---
3	13	4.9	2.7	1.5	---	---
7	14	5.4	3.1	1.8	---	---
14	16	6.7	3.8	2.3	---	---
30	21	9.5	5.8	3.6	---	---
60	29	18	13	10	---	---
90	36	24	19	16	---	---
120	45	32	26	22	---	---
183	54	42	37	33	---	---

Magnitude and probability of annual high flow based on period of record 1939-43, 1951-55, 1973-84

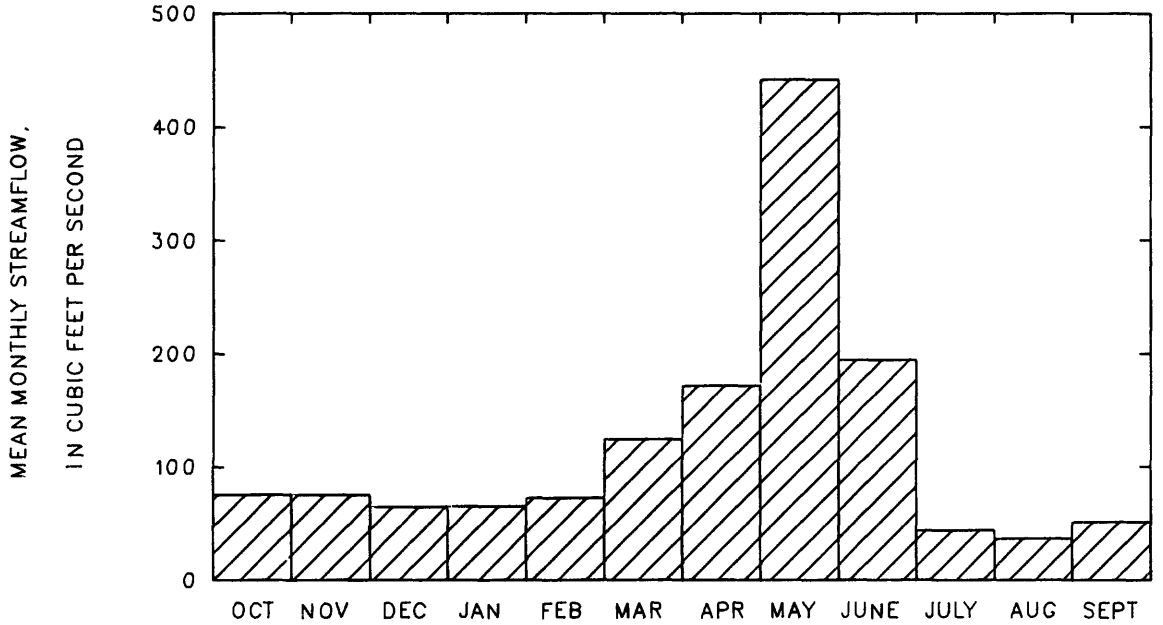
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	785	1540	2190	3190	---	---
3	683	1360	1950	2840	---	---
7	574	1140	1650	2440	---	---
15	474	932	1350	2030	---	---
30	374	717	1030	1540	---	---
60	283	513	714	1030	---	---
90	234	398	534	740	---	---

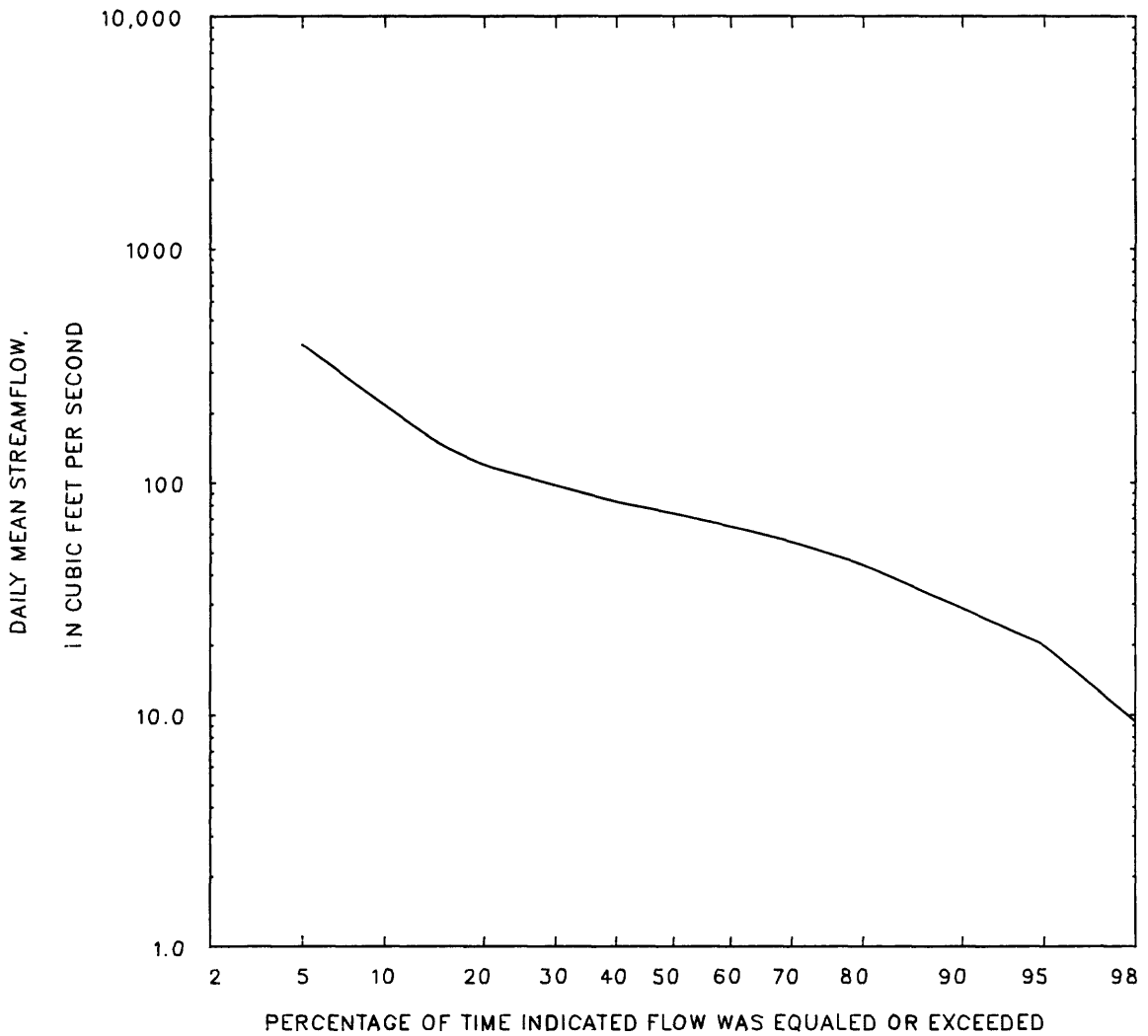
Duration of daily mean flow for period of record 1939-43, 1951-55, 1973-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1050	390	215	146	118	96	82	73	64	55	44	29	20	9.3	4.1	2.5	1.5

STATION 06270000 PERIOD OF RECORD 1939–43, 1951–55, 1973–84

NOWOOD RIVER NEAR TEN SLEEP, WYO.





06271000 TENSLEEP CREEK NEAR TEN SLEEP, WYO.

LOCATION.--Lat 44°03'28", long 107°23'14", in NW¼SW¼NW¼ sec.12, T.47 N., R.88 W., Washakie County, on left bank 0.3 mi downstream from Canyon Creek and 3.2 mi northeast of Ten Sleep.

DRAINAGE AREA.--247 mi^2.

PERIOD OF RECORD.--September 1910 to December 1912, October 1914 to November 1924, October 1943 to October 1971, April to September 1972. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 4,667.59 ft. Prior to October 1, 1916, non-recording gage at datum 1.00 ft higher. October 1, 1916, to May 10, 1918, non-recording gage at same site and datum.

REMARKS.--Diversions for irrigation of about 350 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,890 ft^3/s, June 15, 1924, gage height, 7.05 ft; minimum daily, 26 ft^3/s, September 12, 1966.

Monthly and annual streamflow 1911-12, 1915-24, 1944-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	205	41	71	32	0.45	4.0
November	112	42	58	14	0.25	3.3
December	75	35	49	9.2	0.19	2.8
January	66	35	46	7.2	0.16	2.6
February	63	30	45	6.3	0.14	2.6
March	69	35	46	7.5	0.16	2.7
April	225	35	64	39	0.60	3.6
May	564	161	344	96	0.28	19.7
June	1140	193	630	248	0.39	36.0
July	531	59	238	123	0.51	13.6
August	233	41	86	42	0.49	4.9
September	170	36	74	31	0.42	4.2
Annual	226	85	146	35	0.24	100

Magnitude and probability of annual low flow based on period of record 1912, 1916-24, 1945-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	35	30	28	27	26	---
3	36	32	30	28	27	---
7	37	33	31	30	29	---
14	39	35	33	31	30	---
30	40	36	35	33	32	---
60	43	39	37	36	34	---
90	44	40	38	37	36	---
120	45	41	39	38	37	---
183	49	43	42	41	40	---

Magnitude and probability of instantaneous peak flow based on 41 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1630	2170	2510	2940	3240	3550

Weighted skew = -0.050

Magnitude and probability of annual high flow based on period of record 1911-12, 1915-24, 1944-71

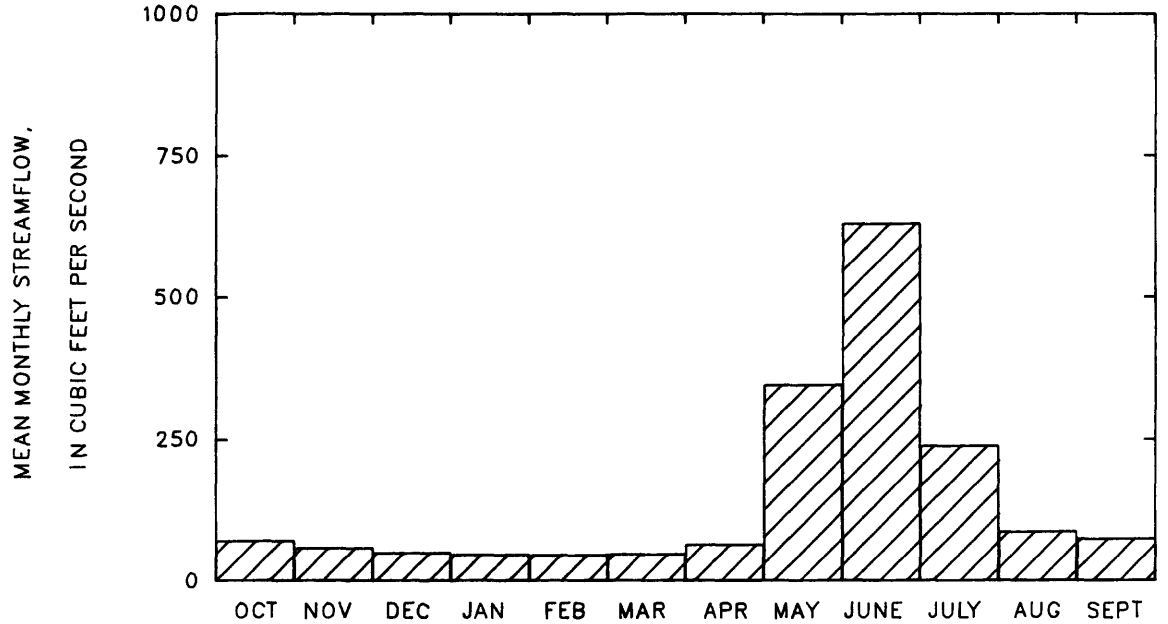
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1330	1700	1920	2160	2330	---
3	1180	1510	1710	1950	2110	---
7	1030	1320	1490	1680	1810	---
15	871	1090	1220	1360	1450	---
30	703	893	1000	1120	1210	---
60	524	658	735	822	881	---
90	408	510	567	630	671	---

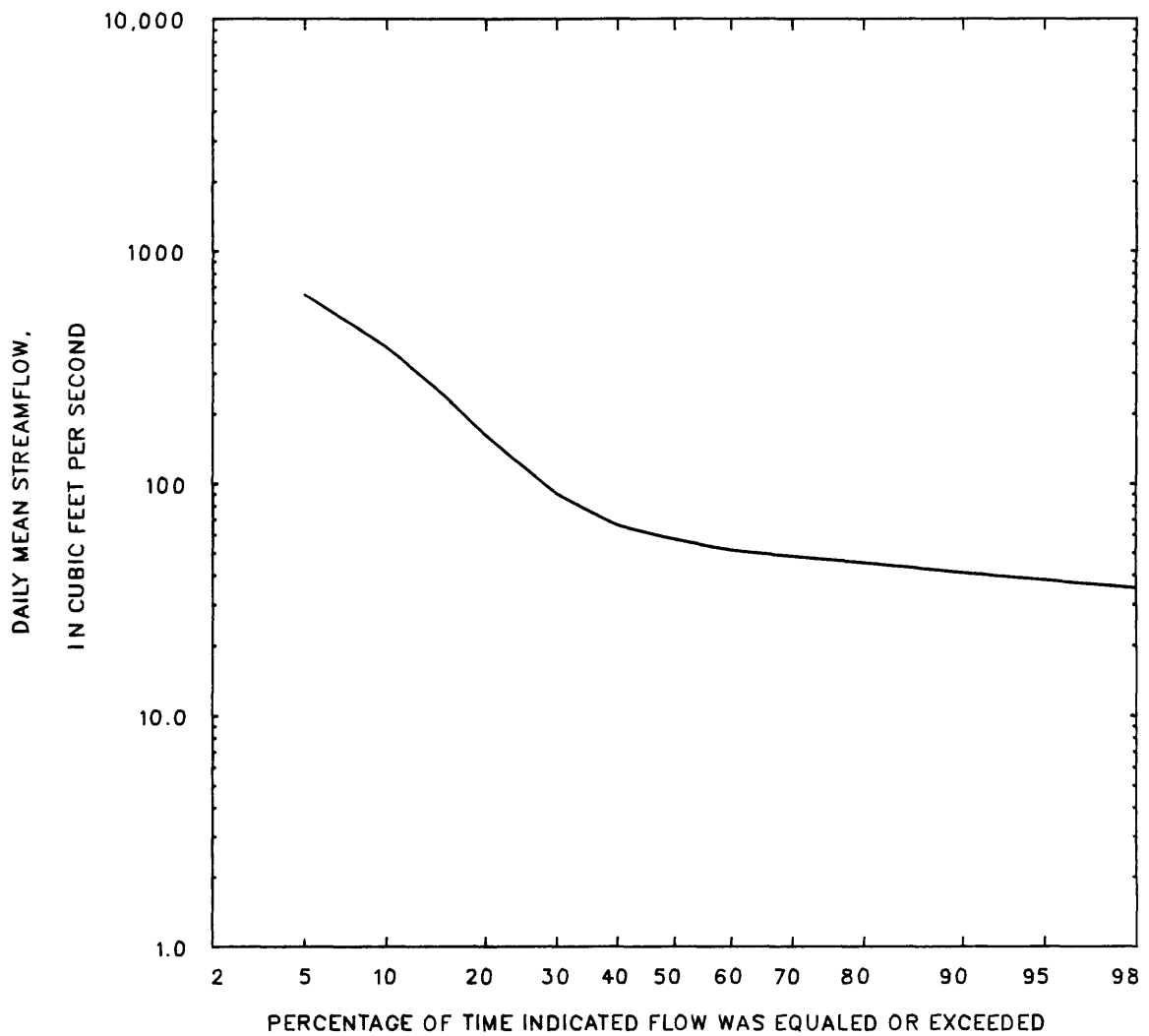
Duration of daily mean flow for period of record 1911-12, 1915-24, 1944-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1140	648	388	245	161	90	65	57	51	48	45	41	38	35	34	32	30

STATION 06271000 PERIOD OF RECORD 1911–12, 1915–24, 1944–71

TENSLEEP CREEK NEAR TEN SLEEP, WYO.





06272500 PAINTROCK CREEK NEAR HYATTVILLE, WYO.

LOCATION.--Lat 44°17', long 107°30", in sec.25, T.50 N., R.89 W., Big Horn County, on downstream side of bridge near left bank, 0.6 mi upstream from Luman Creek and 6 mi northeast of Hyattville.

DRAINAGE AREA.--164 mi^2.

PERIOD OF RECORD.--August 1920 to January 1927, April 1941 to September 1953. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Wire-weight gage. Altitude of gage is 5,070 ft, by barometer. Prior to September 4, 1948, water-stage recorder at several sites within 1,200 ft of present site at various datums. September 4, 1948, to June 14, 1953, water-stage recorder at site 400 ft upstream at different datum.

REMARKS.--Diversions for irrigation of 12 acres above station. Some natural regulation by Lake Solitude and many small lakes in headwaters.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,200 ft^3/s, June 24, 1945, gage height, 9.80 ft, from floodmarks, site and datum then in use, from rating curve extended above 1,100 ft^3/s by logarithmic plotting; minimum, 6.2 ft^3/s, December 10, 1944, from rating curve extended below 15 ft^3/s; minimum daily, 10 ft^3/s, December 10, 1944, January 25, 1950.

Monthly and annual streamflow 1921-26, 1942-53

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	150	24	51	30	0.58	2.9
November	71	18	34	13	0.40	1.9
December	50	18	27	9.8	0.37	1.5
January	45	16	24	8.9	0.37	1.4
February	40	15	22	8.0	0.37	1.2
March	42	14	22	8.4	0.38	1.3
April	152	20	53	38	0.71	3.1
May	655	129	384	153	0.40	22.0
June	1200	416	696	207	0.30	39.9
July	505	109	291	106	0.36	16.6
August	151	38	83	30	0.36	4.8
September	132	32	60	30	0.50	3.4
Annual	234	110	146	29	0.20	100

Magnitude and probability of annual low flow based on period of record 1922-26, 1942-53

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	14	11	10	9.5	---	---
3	16	13	12	12	---	---
7	17	14	13	13	---	---
14	18	15	14	14	---	---
30	18	15	14	14	---	---
60	19	16	15	14	---	---
90	20	16	15	14	---	---
120	21	17	16	16	---	---
183	27	21	19	18	---	---

Magnitude and probability of instantaneous peak flow based on 19 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
2240	3150	3860	4860	5700	6620

Weighted skew = 0.580

Magnitude and probability of annual high flow based on period of record 1921-26, 1942-53

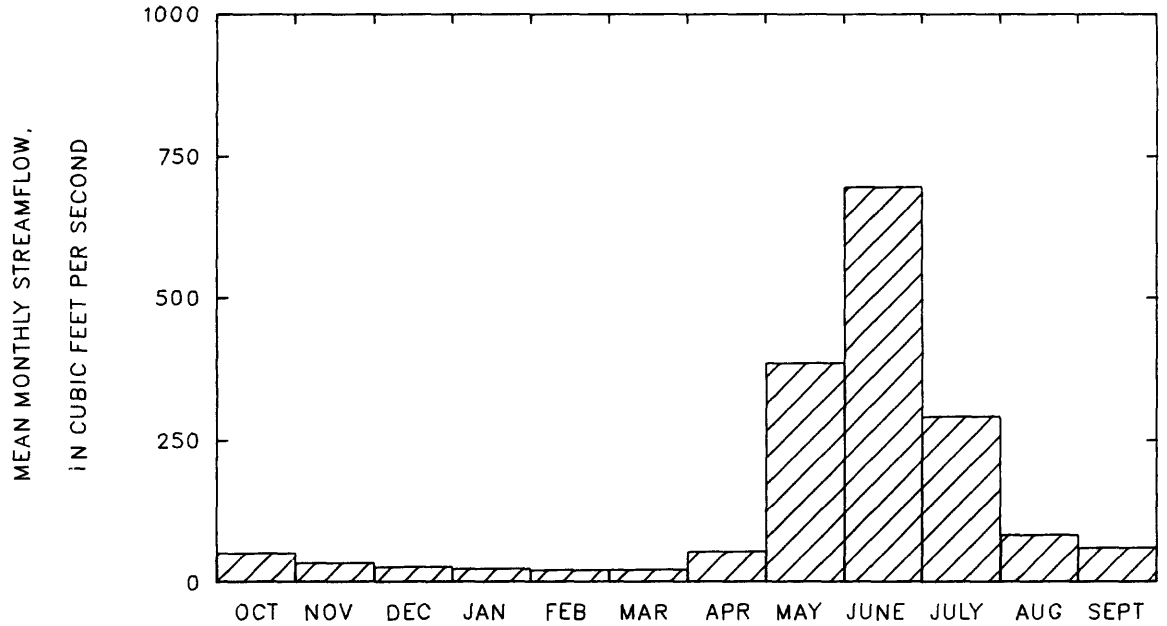
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1640	2190	2610	3220	---	---
3	1440	1840	2100	2430	---	---
7	1180	1520	1750	2050	---	---
15	980	1210	1350	1530	---	---
30	787	949	1050	1160	---	---
60	582	684	749	831	---	---
90	451	528	582	655	---	---

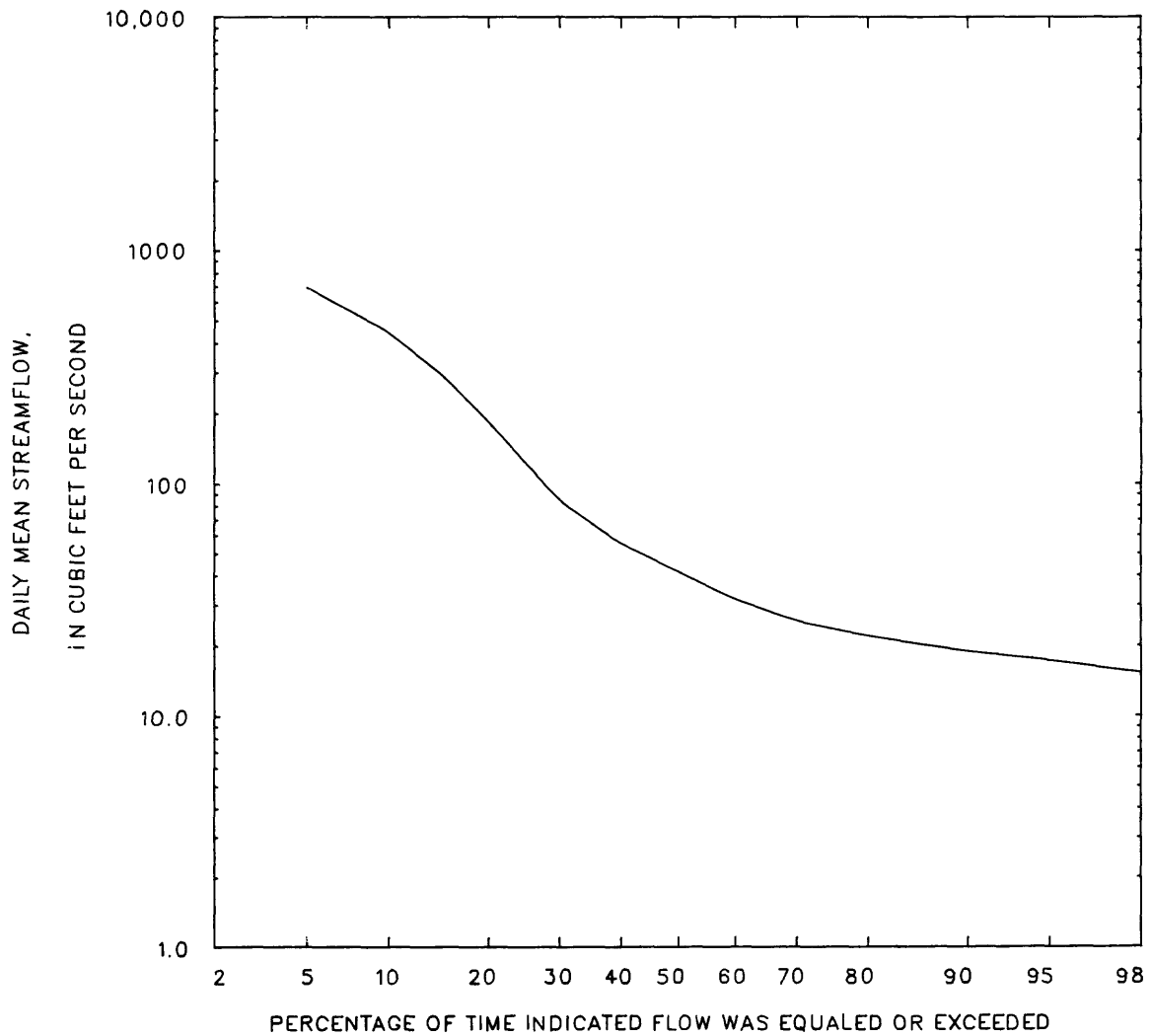
Duration of daily mean flow for period of record 1921-26, 1942-53

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1300	691	444	285	183	84	55	41	31	25	22	19	17	15	14	14	11

STATION 06272500 PERIOD OF RECORD 1921–26, 1942–53

PAINTROCK CREEK NEAR HYATTVILLE, WYO.





06273000 MEDICINE LODGE CREEK NEAR HYATTVILLE, WYO.

LOCATION.--Lat 44°17'37", long 107°32'23", in NE¼SE¼NE¼ sec.21, T.50 N., R.89 W., Big Horn County, on left bank 0.3 mi downstream from Dry Medicine Loge Creek and 4.5 mi north-east of Hyattville.

DRAINAGE AREA.--86.8 mi^2.

PERIOD OF RECORD.--October 1942 to September 1973. Monthly discharge only for some; published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 4,780 ft, from topographic map. Prior to June 24, 1943, non-recording gage at different datum. June 24, 1943, to June 5, 1968, water-stage recorder at datum 2.00 ft higher.

REMARKS.--Diversions for irrigation of about 40 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,160 ft^3/s, June 24,1945, gage height, 6.10 ft, present datum, from floodmark, from rating curve extended above 550 ft^3/s; minimum daily, 4.1 ft^3/s, February 2, 1963.

COOPERATION--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1944-71, 1973

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	22	9.2	15	3.7	0.26	3.5
November	18	8.8	13	2.1	0.17	3.1
December	15	8.5	11	1.5	0.14	2.7
January	13	7.8	10	1.3	0.12	2.5
February	12	7.9	10	1.1	0.11	2.4
March	13	7.6	10	1.2	0.12	2.4
April	37	7.7	13	6.4	0.50	3.1
May	143	24	85	31	0.36	20.6
June	299	55	163	67	0.41	39.7
July	98	16	48	23	0.48	11.7
August	42	11	18	5.7	0.32	4.4
September	40	9.3	16	5.8	0.36	3.9
Annual	47	21	34	6.7	0.20	100

Magnitude and probability of annual low flow based on period of record 1945-72

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	9.0	8.0	7.0	6.1	5.0	---
3	9.0	8.0	7.3	6.6	5.9	---
7	9.1	8.2	7.8	7.4	7.1	---
14	9.1	8.4	8.0	7.7	7.4	---
30	9.3	8.5	8.1	7.8	7.4	---
60	9.8	8.9	8.4	8.1	7.7	---
90	10	9.1	8.6	8.3	7.9	---
120	10	9.3	8.9	8.5	8.2	---
183	11	10	9.5	9.1	8.7	---

Magnitude and probability of instantaneous peak flow based on 30 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
466	640	763	926	1050	1190

Weighted skew = 0.250

Magnitude and probability of annual high flow based on period of record 1944-71, 1973

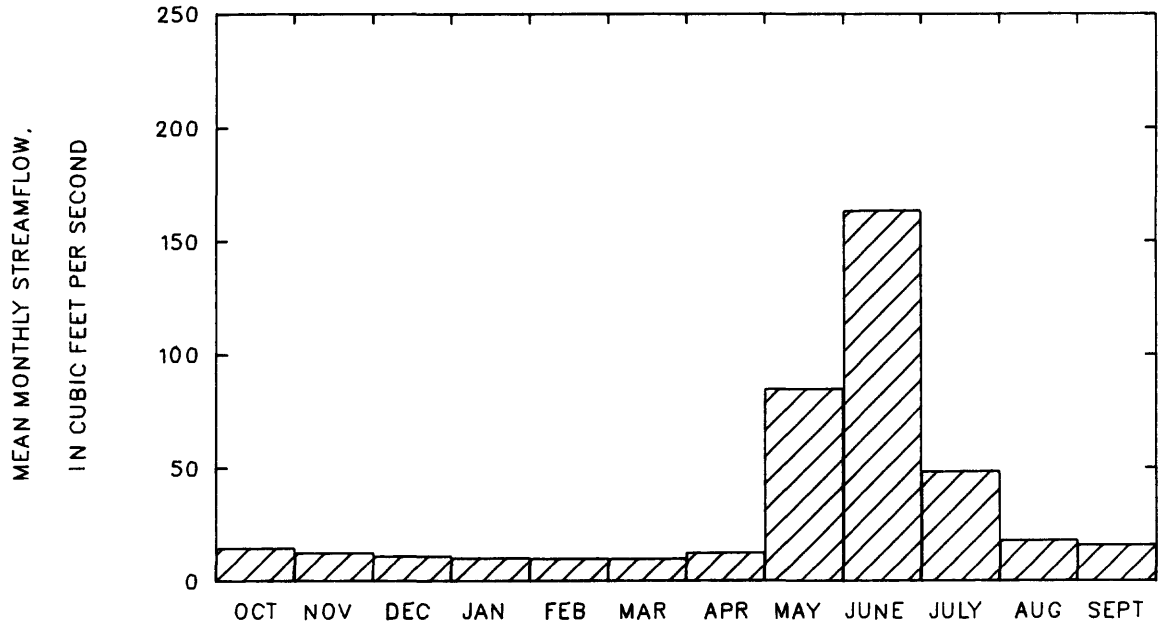
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	338	451	527	624	697	---
3	305	396	453	522	572	---
7	267	341	386	439	477	---
15	224	281	315	355	384	---
30	181	230	260	297	323	---
60	133	164	183	204	218	---
90	100	123	135	147	155	---

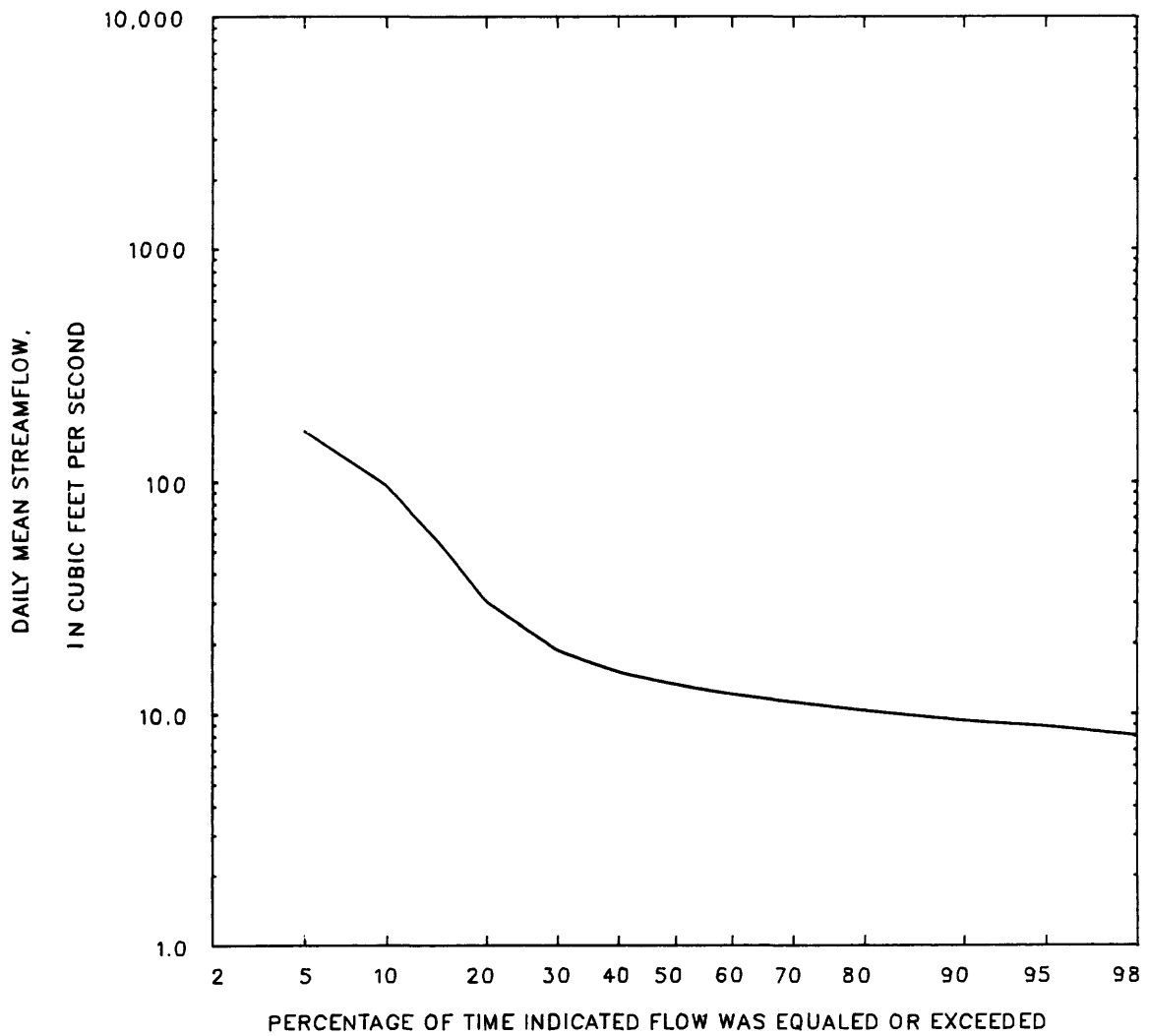
Duration of daily mean flow for period of record 1944-71, 1973

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
293	165	96	53	30	19	15	13	12	11	10	9.3	8.8	8.0	7.7	7.6	6.7

STATION 06273000 PERIOD OF RECORD 1944–71, 1973

MEDICINE LODGE CREEK NEAR HYATTVILLE, WYO.





06274500 GREYBULL RIVER NEAR PITCHFORK, WYO.

LOCATION.--Lat 44°06'31", long 109°09'36", in SE¼ sec.24, T.48 N., R.103 W., Park County, on left bank at downstream side of Z Bar T Ranch bridge, 0.1 mi upstream from Rose Creek, and 4 mi west of Pitchfork.

DRAINAGE AREA.--282 mi^2.

PERIOD OF RECORD.--April 1946 to September 1949, May 1951 to October 1971.

GAGE.--Water-stage recorder. Datum of gage is 6,709.33 ft. Prior to May 9, 1951, at site 300 ft downstream at different datum. May 9, 1951, to June 7, 1952, at site 30 ft upstream at present datum.

REMARKS.--Diversions for irrigation of about 1,850 acres, of which about 650 acres are below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,610 ft^3/s, June 15, 1963, gage height, 7.68 ft, from rating curve extended above 2,500 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 8 ft^3/s, March 17-23, April 12-14, 1953.

Monthly and annual streamflow 1947-49, 1952-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	109	25	59	21	0.35	2.7
November	90	23	44	15	0.34	2.0
December	65	23	33	9.2	0.28	1.5
January	48	18	27	6.1	0.23	1.2
February	44	18	26	5.6	0.22	1.2
March	49	17	28	6.8	0.24	1.3
April	225	22	59	49	0.84	2.7
May	681	83	306	145	0.47	14.1
June	1770	317	869	370	0.43	39.9
July	1230	179	494	245	0.50	22.7
August	278	75	151	61	0.41	6.9
September	147	39	81	33	0.40	3.7
Annual	281	97	182	53	0.29	100

Magnitude and probability of annual low flow based on period of record 1948-49, 1953-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	16	12	10	8.6	---	---
3	17	13	11	9.1	---	---
7	18	14	12	9.9	---	---
14	19	15	13	12	---	---
30	21	19	18	17	---	---
60	23	21	20	19	---	---
90	24	22	21	21	---	---
120	26	24	23	22	---	---
183	33	28	26	25	---	---

Magnitude and probability of instantaneous peak flow based on 25 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
2080	3300	4280	5720	6960	8330

Weighted skew = 0.340

Magnitude and probability of annual high flow based on period of record 1947-49, 1952-71

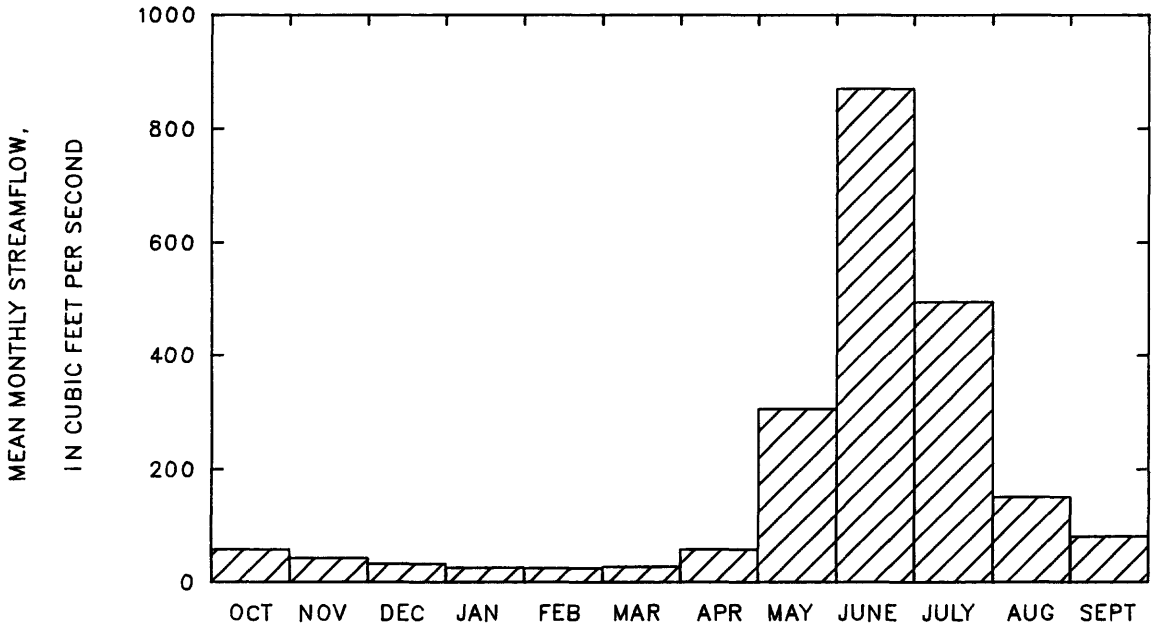
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1570	2310	2840	3560	---	---
3	1470	2090	2480	2970	---	---
7	1330	1830	2120	2450	---	---
15	1140	1570	1830	2120	---	---
30	920	1270	1490	1730	---	---
60	703	964	1120	1290	---	---
90	557	745	853	974	---	---

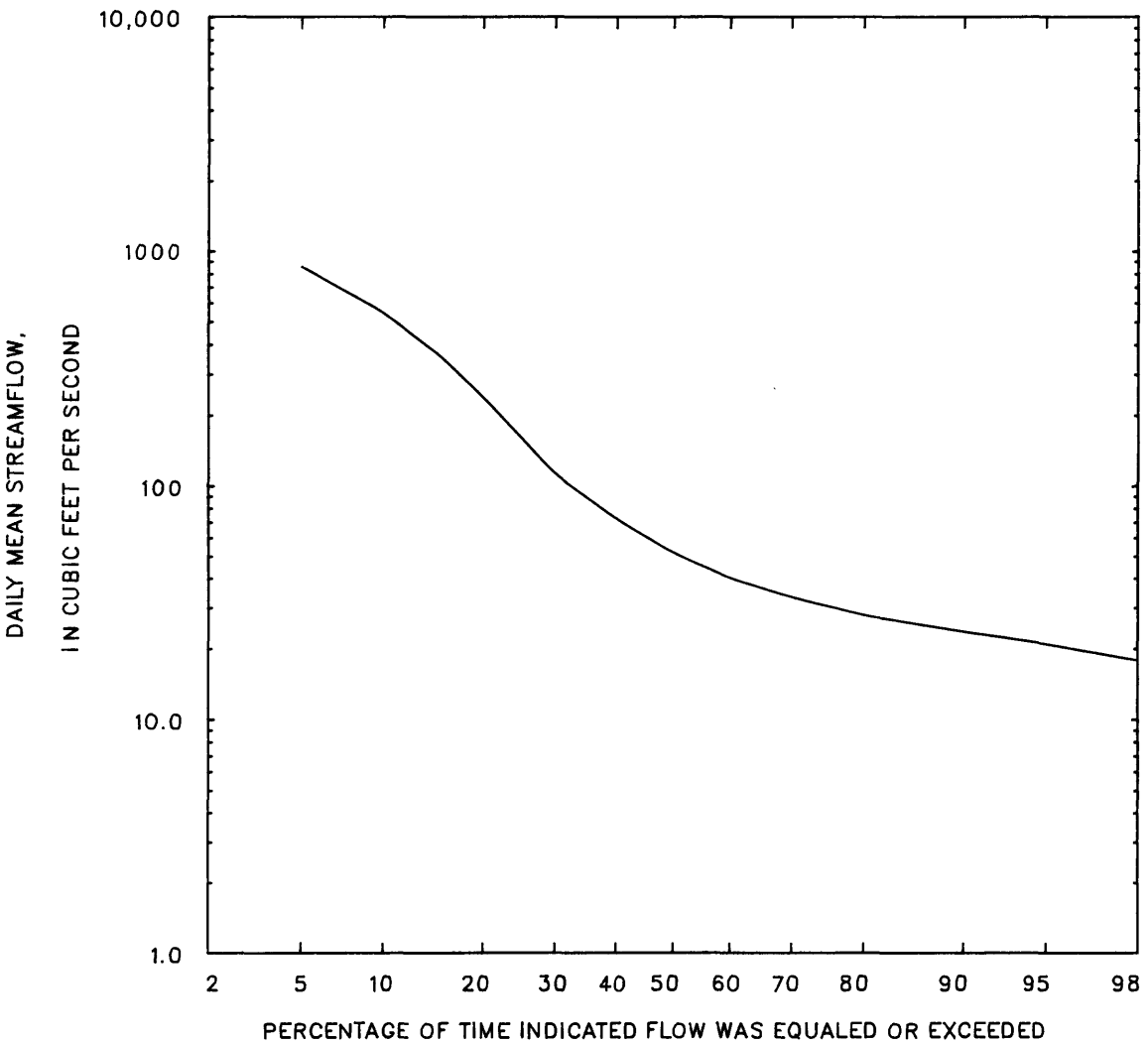
Duration of daily mean flow for period of record 1947-49, 1952-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1620	852	544	361	238	111	72	51	40	33	28	23	21	18	15	14	9.1

STATION 06274500 PERIOD OF RECORD 1947–49, 1952–71

GREYBULL RIVER NEAR PITCHFORK, WYO.





06275000 WOOD RIVER AT SUNSHINE, WYO.

LOCATION.--Lat 44°02'15", long 108°58'24", in NW¼SW¼ sec.15, T.47 N., R.101 W., Park County, on right bank at bridge on county road, 1.0 mi downstream from Ernest May Ranch, 5.2 mi downstream from Dick Creek, and 10 mi southwest of Meeteetse.

DRAINAGE AREA.--194 mi^2, approximately.

PERIOD OF RECORD.--August 1945 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,450 ft, from topographic map. Prior to September 18, 1952, and October 28, 1953, to June 15, 1963, water-stage recorder at site 2.0 mi upstream at different datum. September 18, 1952, to October 27, 1953, non-recording gage at site 2.0 mi upstream at different datum. June 16, 1963, to August 13, 1967, water-stage recorder at site 1.4 mi upstream at different datum. August 14 to October 5, 1967, non-recording gage at present site and datum.

REMARKS.--Diversion above station to Lower Sunshine Reservoir since 1972. Diversion above station for irrigation of about 3,200 acres, of which about 1,000 acres are below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,080 ft^3/s, June 15, 1963, gage height, 7.00 ft, from floodmark, site and datum then in use, from contracted-opening measurement of peak flow; maximum gage height, 7.98 ft, June 9, 1981; minimum daily discharge, 0.40 ft^3/s, March 13, 1978.

Monthly and annual streamflow 1946-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	109	15	57	27	0.47	4.3
November	78	3.4	44	20	0.46	3.3
December	64	1.8	36	15	0.41	2.7
January	56	1.2	31	14	0.45	2.3
February	67	1.3	29	14	0.48	2.2
March	68	1.5	32	15	0.47	2.4
April	226	7.7	63	45	0.72	4.7
May	522	45	220	119	0.54	16.5
June	1030	102	414	216	0.52	31.1
July	647	62	222	135	0.61	16.6
August	229	45	109	40	0.37	8.2
September	251	28	75	38	0.51	5.6
Annual	194	39	111	39	0.35	100

Magnitude and probability of annual low flow based on period of record 1947-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	14	4.9	2.5	1.3	0.57	---
3	14	5.4	2.8	1.6	0.75	---
7	15	5.9	3.2	1.8	0.86	---
14	17	6.6	3.6	2.0	0.99	---
30	21	9.1	5.2	3.0	1.5	---
60	27	12	6.9	3.9	1.8	---
90	30	14	8.1	4.5	2.1	---
120	33	17	9.8	5.6	2.7	---
183	40	24	17	12	7.5	---

Magnitude and probability of instantaneous peak flow based on 39 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1160	1950	2550	3370	4020	4720

Weighted skew = -0.100

Magnitude and probability of annual high flow based on period of record 1946-84

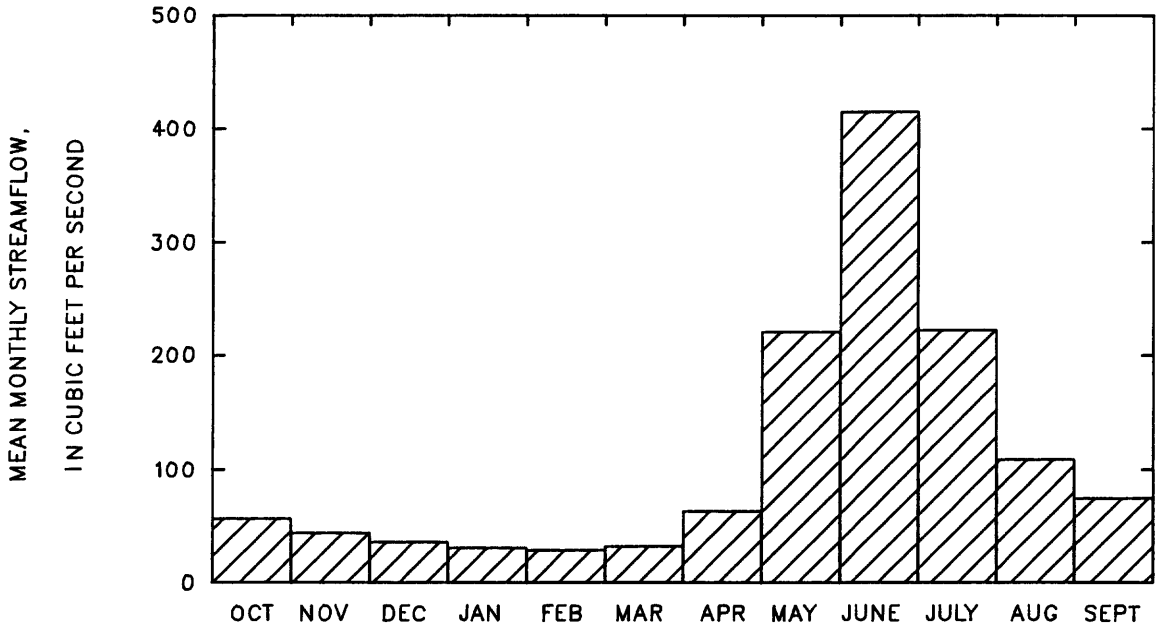
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	809	1250	1510	1770	1940	---
3	737	1150	1380	1620	1770	---
7	635	990	1200	1420	1560	---
15	523	812	984	1180	1300	---
30	435	671	809	961	1060	---
60	340	511	609	716	785	---
90	279	411	486	569	622	---

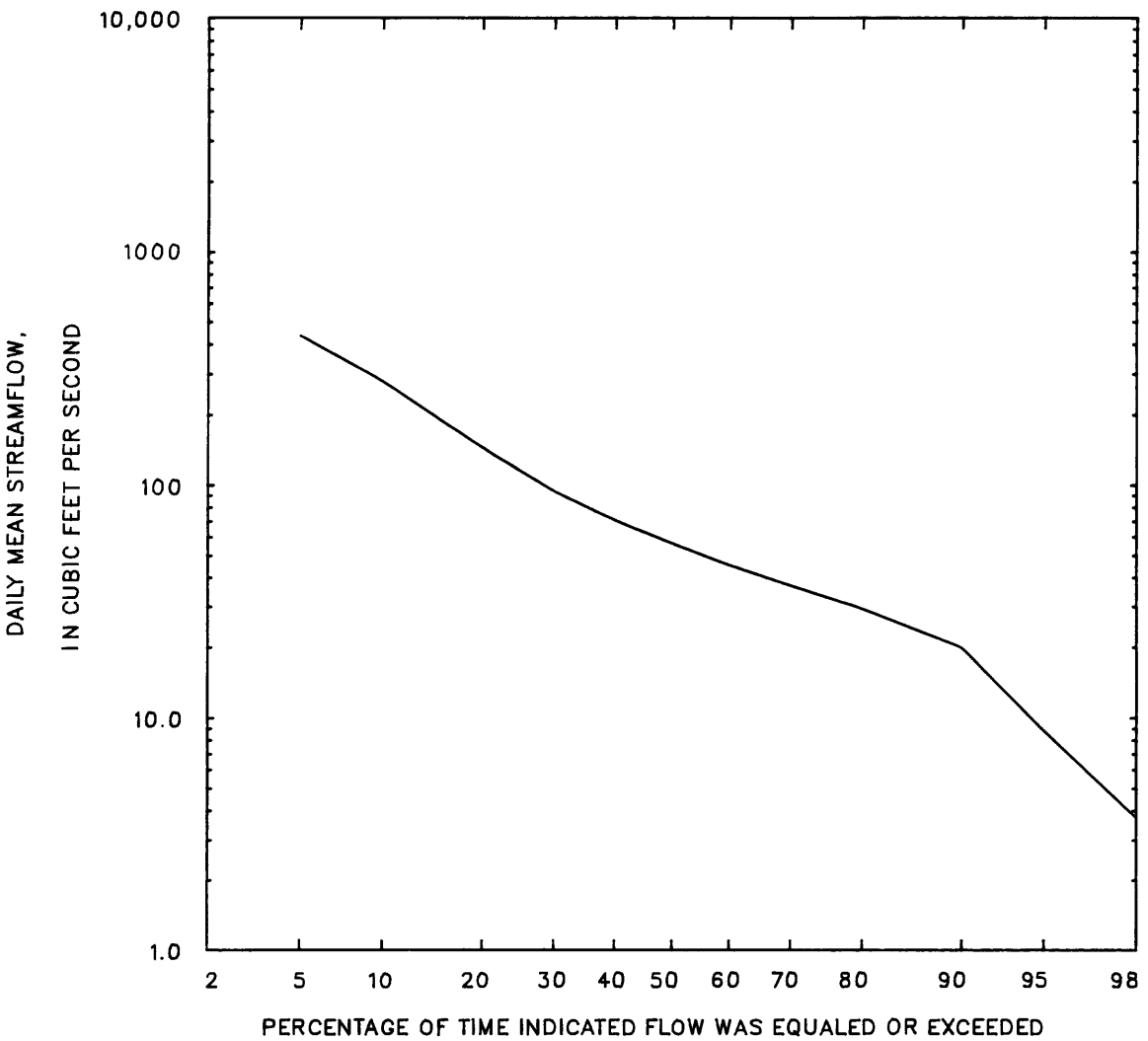
Duration of daily mean flow for period of record 1946-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
847	434	277	192	144	93	70	56	45	36	29	20	8.7	3.7	1.9	1.4	1.1

STATION 06275000 PERIOD OF RECORD 1946–84

WOOD RIVER AT SUNSHINE, WYO.





06275500 WOOD RIVER NEAR MEETEETSE, WYO.

LOCATION.--Lat 44°06'25", long 108°57'25", in SE¼SE¼ sec. 22, T. 48 N., R. 101 W., Park County, 50 ft downstream from bridge, 0.25 mi upstream from mouth, and 5.5 mi southwest of Meeteetse.

DRAINAGE AREA.--218 mi^2.

PERIOD OF RECORD.--October 1910 to October 1912, October 1914 to October 1916, October 1929 to September 1949.

SUPPLEMENTAL RECORDS AVAILABLE.--April to September 1917, gage heights and discharge measurements only.

GAGE.--Water-stage recorder. Altitude of gage is 6,030 ft, from topographic map. September 15, 1910, to October 31, 1912, staff gage, and May 10, 1915, to April 25, 1916, chain gage, at bridge 50 ft upstream at different datums. April 26, 1916, to September 30, 1917, and April 7, 1930, to July 31, 1934, chain gages at site 450 ft upstreams at different datums. August 1, 1934, to August 16, 1936, water-stage recorder at site 800 ft downstream at different datum. August 17, 1936, to August 26, 1945, water-stage recorder at described site at datum 2.00 ft higher.

REMARKS.--Diversions for irrigation of about 6,800 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,150 ft^3/s, June 24, 1945, gage height, 3.05 ft, datum then in use, from rating curve extended above 550 ft^3/s; minimum daily, 9 ft^3/s, January 21, 1940.

Monthly and annual streamflow 1937-49

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	187	36	87	36	0.42	5.3
November	118	40	63	19	0.31	3.9
December	67	27	44	12	0.26	2.7
January	56	16	38	12	0.31	2.3
February	49	20	36	10	0.29	2.2
March	61	33	45	8.7	0.19	2.8
April	151	52	84	30	0.36	5.2
May	461	87	267	129	0.48	16.4
June	774	98	471	219	0.47	29.0
July	468	82	258	114	0.44	15.9
August	425	35	133	99	0.74	8.2
September	255	29	97	57	0.59	6.0
Annual	228	50	136	51	0.37	100

Magnitude and probability of annual low flow based on period of record 1938-49

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	29	19	15	11	---	---
3	30	20	15	12	---	---
7	32	22	17	13	---	---
14	34	24	19	15	---	---
30	36	26	21	17	---	---
60	37	27	22	18	---	---
90	39	29	24	20	---	---
120	41	32	28	24	---	---
183	52	40	35	30	---	---

Magnitude and probability of instantaneous peak flow based on 23 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
950	1420	1730	2130	2430	2730

Weighted skew = -0.180

Magnitude and probability of annual high flow based on period of record 1937-49

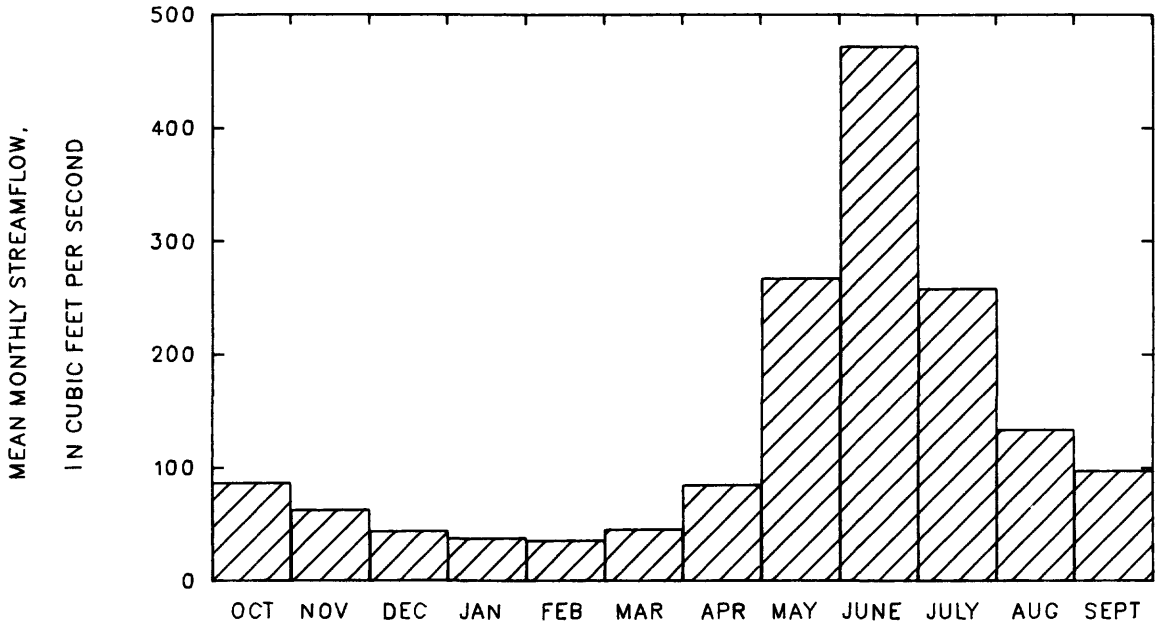
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	848	1220	1410	---	---	---
3	778	1150	1330	---	---	---
7	691	1010	1150	---	---	---
15	602	892	1030	---	---	---
30	499	744	863	---	---	---
60	404	584	669	---	---	---
90	334	478	548	---	---	---

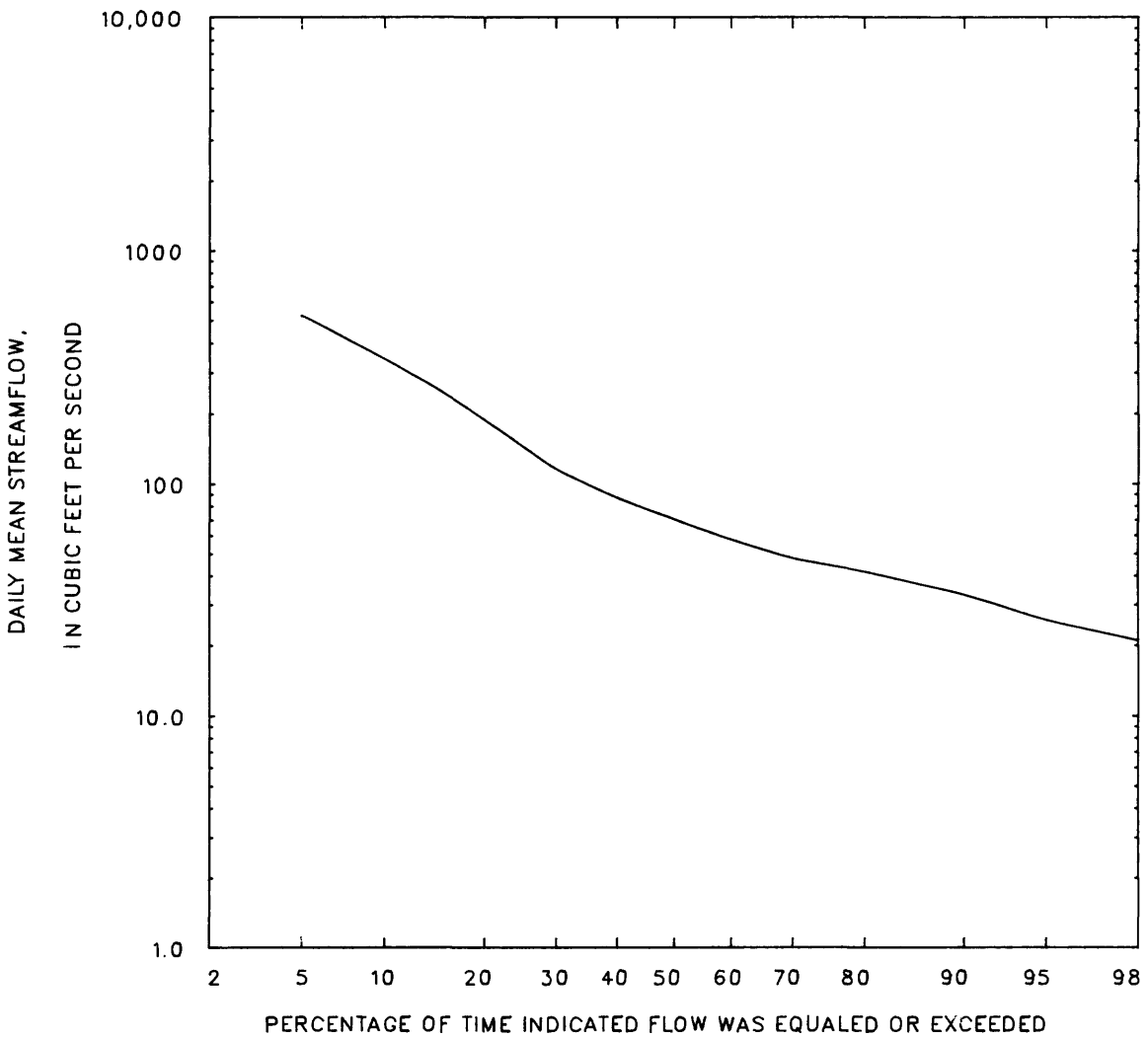
Duration of daily mean flow for period of record 1937-49

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
871	522	342	251	188	114	86	70	57	47	41	33	25	21	18	16	12

STATION 06275500 PERIOD OF RECORD 1937–49

WOOD RIVER NEAR MEETEETSE, WYO.





06276500 GREYBULL RIVER AT MEETEETSE, WYO.

LOCATION.--Lat 44°09'20", long 108°52'35", in sec.4, T.48 N., R.100 W., Park County, on right bank at Meeteetse, 0.3 mi upstream from bridge on State Highway 120, and 3.0 mi upstream from Meeteetse Creek.

DRAINAGE AREA.--681 mi^2.

PERIOD OF RECORD.--June to December 1897, April to October 1903 (gage heights and discharge measurements only), July 1920 to current year (no winter records since 1971). Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 5,739.42 ft. See WSP 1916 for history of changes prior to April 28, 1938. April 28, 1938, to May 24, 1961, at site on left bank at datum 2.00 ft higher. May 25, 1961, to May 9, 1967, at site 100 ft downstream at present datum.

REMARKS.--Some regulation by Sunshine Reservoir beginning May 1940, capacity, 52,990 acre-ft, and Lower Sunshine Reservoir beginning December 1972, capacity, 58,900 acre-ft. Diversions for irrigation of about 10,600 acres above station. Several diversions above station for irrigation below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft^3/s, June 15, 1963, gage height, 9.20 ft, from floodmark, from rating curve extended above 4,600 ft^3/s on basis of velocity-area study; minimum daily, 16 ft^3/s, March 4, 1963.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1931-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	457	73	152	69	0.45	3.8
November	248	53	104	35	0.34	2.6
December	134	45	78	21	0.26	2.0
January	105	27	64	17	0.26	1.6
February	104	34	64	17	0.26	1.6
March	117	35	77	23	0.30	1.9
April	441	44	145	75	0.52	3.6
May	1320	214	557	240	0.43	14.0
June	3190	284	1240	647	0.52	31.2
July	2220	188	798	410	0.51	20.0
August	1700	137	473	266	0.56	11.9
September	662	84	229	98	0.43	5.7
Annual	566	130	333	104	0.31	100

Magnitude and probability of annual low flow based on period of record 1932-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	42	31	26	23	19	---
3	44	33	28	25	21	---
7	47	36	30	26	22	---
14	51	39	33	29	24	---
30	55	43	37	33	29	---
60	59	48	44	40	37	---
90	62	51	46	42	39	---
120	66	55	51	47	43	---
183	83	71	66	63	60	---

Magnitude and probability of instantaneous peak flow based on 64 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
4010	6390	8120	10500	12300	14200

Weighted skew = -0.080

Magnitude and probability of annual high flow based on period of record 1931-71

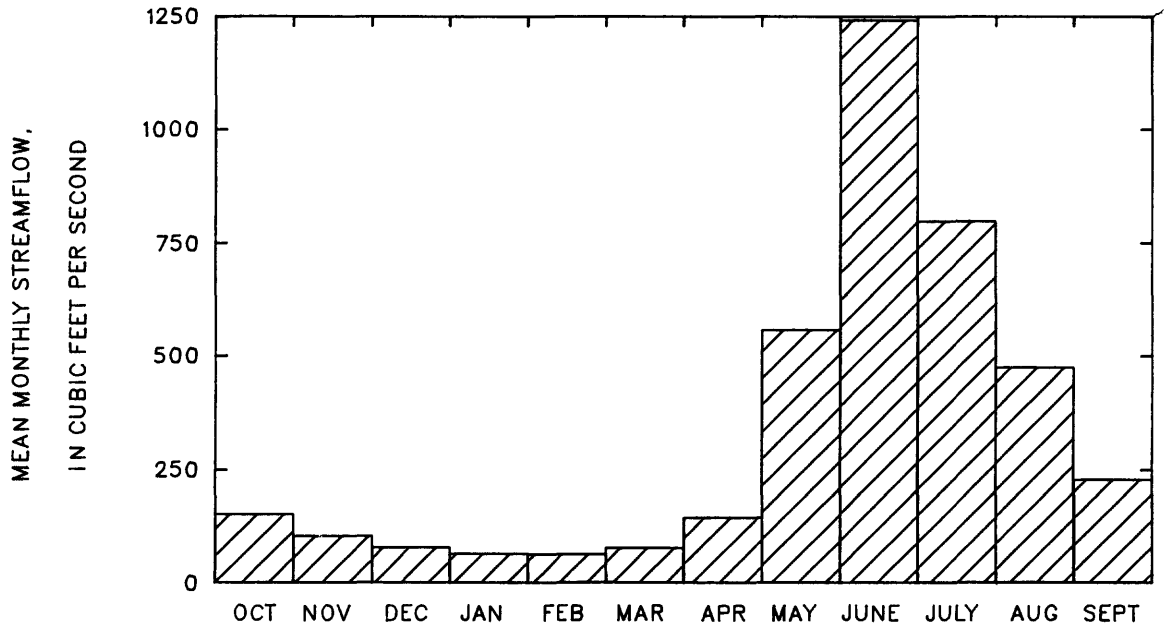
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2240	3790	4950	6550	7830	---
3	2050	3510	4600	6100	7290	---
7	1790	3050	3980	5240	6240	---
15	1510	2440	3100	3940	4570	---
30	1260	1960	2430	3030	3480	---
60	1030	1500	1790	2130	2360	---
90	880	1230	1430	1650	1800	---

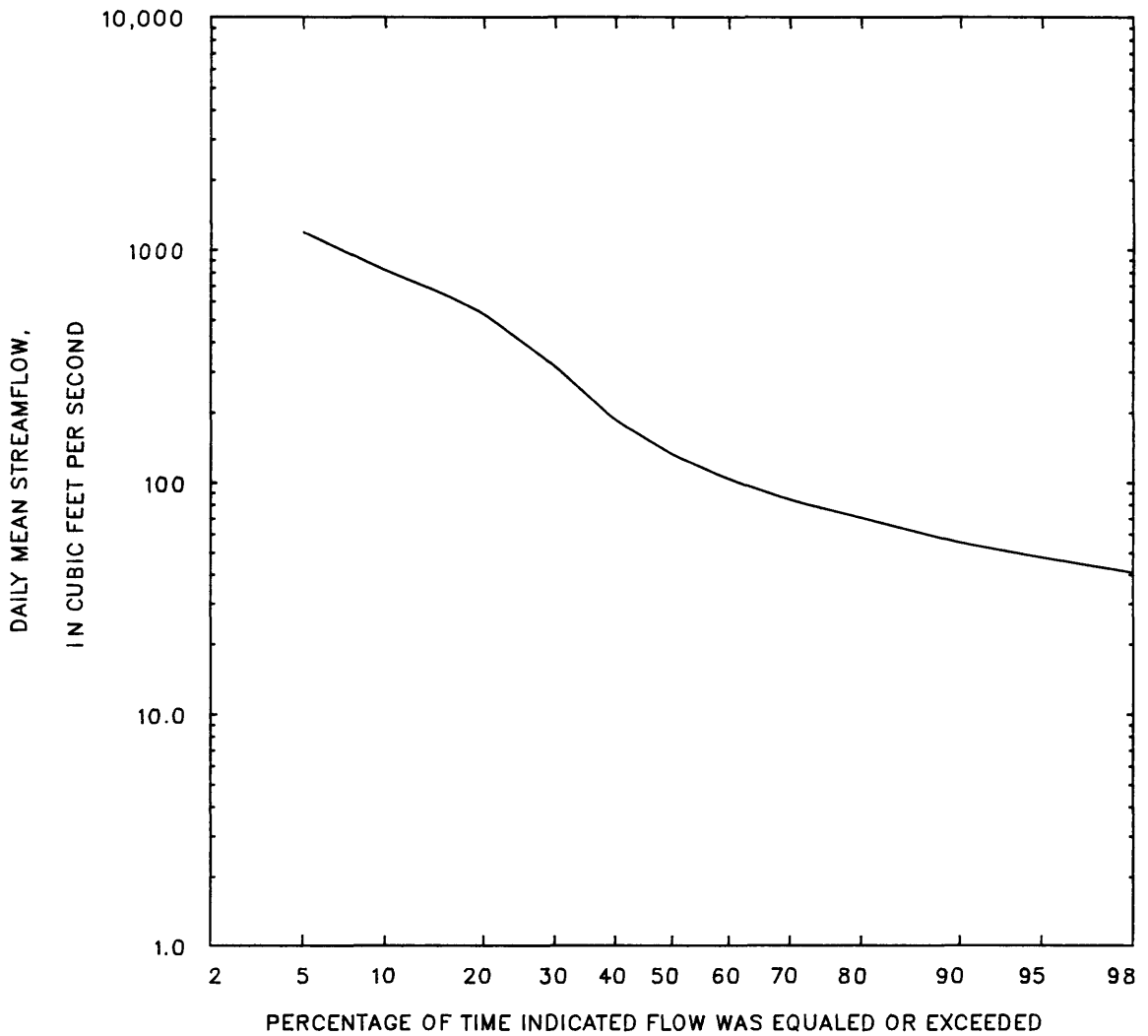
Duration of daily mean flow for period of record 1931-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2480	1180	810	650	526	314	183	131	102	83	70	55	47	41	35	30	22

STATION 06276500 PERIOD OF RECORD 1931–71

GREYBULL RIVER AT MEETEETSE, WYO.





06277500 GREYBULL RIVER NEAR BASIN, WYO.

LOCATION.--Lat 44°24'24", long 108°11'10", in NE¼NW¼SW¼ sec.8, T.51 N., R.94 W., Big Horn County, on right bank at upstream side of bridge on State Highway 0200, 3.0 mi upstream from Dorsey Creek, and 8.0 mi west of Basin.

DRAINAGE AREA.--1,115 mi^2.

PERIOD OF RECORD.--April 1930 to September 1973. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 4,000 ft, from topographic map. Prior to September 30, 1930, non-recording gage at site 250 ft downstream at datum 2.92 ft higher. October 1, 1930, to September 20, 1934, non-recording gage and September 21, 1934, to April 14, 1936, water-stage recorder, at site 250 ft downstream at datum 1.92 ft higher. April 15, 1936, to August 13, 1951, at site 100 ft downstream at present datum. August 14, 1951, to June 17, 1970, at site 300 ft downstream at present datum.

REMARKS.--Slight regulation by Sunshine Reservoir, beginning May 1940, capacity, 53,000 acre-ft and lower Sunshine Reservoir beginning November 1972, capacity, 58,900 acre-ft. Diversions above station for irrigation of about 63,300 acres, of which about 2,600 acres are below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,400 ft^3/s, June 16, 1963, gage height, 8.83 ft, from rating curve extended above 2,200 ft^3/s on basis of contracted-opening measurement of peak flow; no flow at times in 1931-34, 1936, 1939.

Monthly and annual streamflow 1931-73

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	494	1.2	84	93	1.1	3.9
November	296	11	121	52	0.43	5.6
December	148	30	102	26	0.25	4.7
January	135	40	85	21	0.25	3.9
February	243	45	96	32	0.33	4.4
March	250	20	133	46	0.35	6.1
April	576	5.3	159	115	0.72	7.3
May	759	5.8	216	235	1.1	10.0
June	2900	8.2	769	694	0.90	35.4
July	1070	3.1	258	310	1.2	11.9
August	913	2.2	74	142	1.9	3.4
September	681	1.8	72	117	1.6	3.3
Annual	418	42	180	97	0.54	100

Magnitude and probability of annual low flow based on period of record 1932-73

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	6.1	0.00	0.00	0.00	0.00	---
3	7.7	0.97	0.00	0.00	0.00	---
7	9.2	2.2	0.15	0.00	0.00	---
14	15	3.4	0.53	0.00	0.00	---
30	18	5.4	2.4	1.1	0.44	---
60	24	8.7	4.6	2.7	1.3	---
90	34	14	8.1	4.9	2.7	---
120	49	20	11	6.4	3.2	---
183	69	32	19	12	6.1	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1931-73

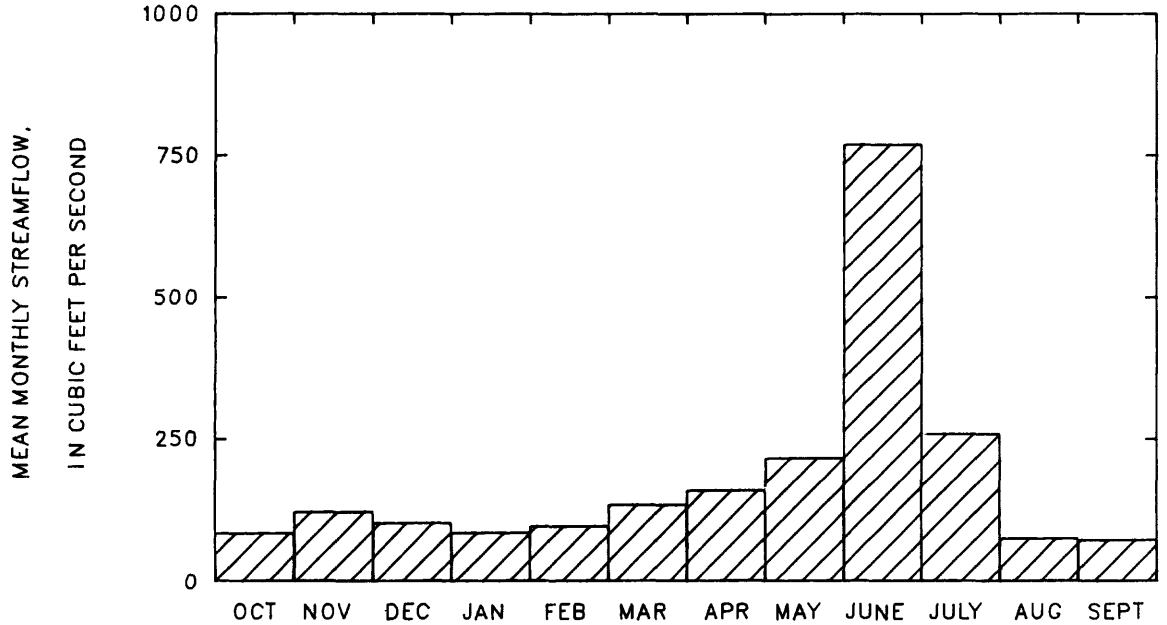
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1800	3580	4980	6930	8480	---
3	1480	3020	4240	5940	7290	---
7	1170	2520	3640	5250	6560	---
15	887	1960	2860	4170	5230	---
30	637	1430	2110	3130	3990	---
60	437	941	1370	2020	2560	---
90	349	699	983	1390	1730	---

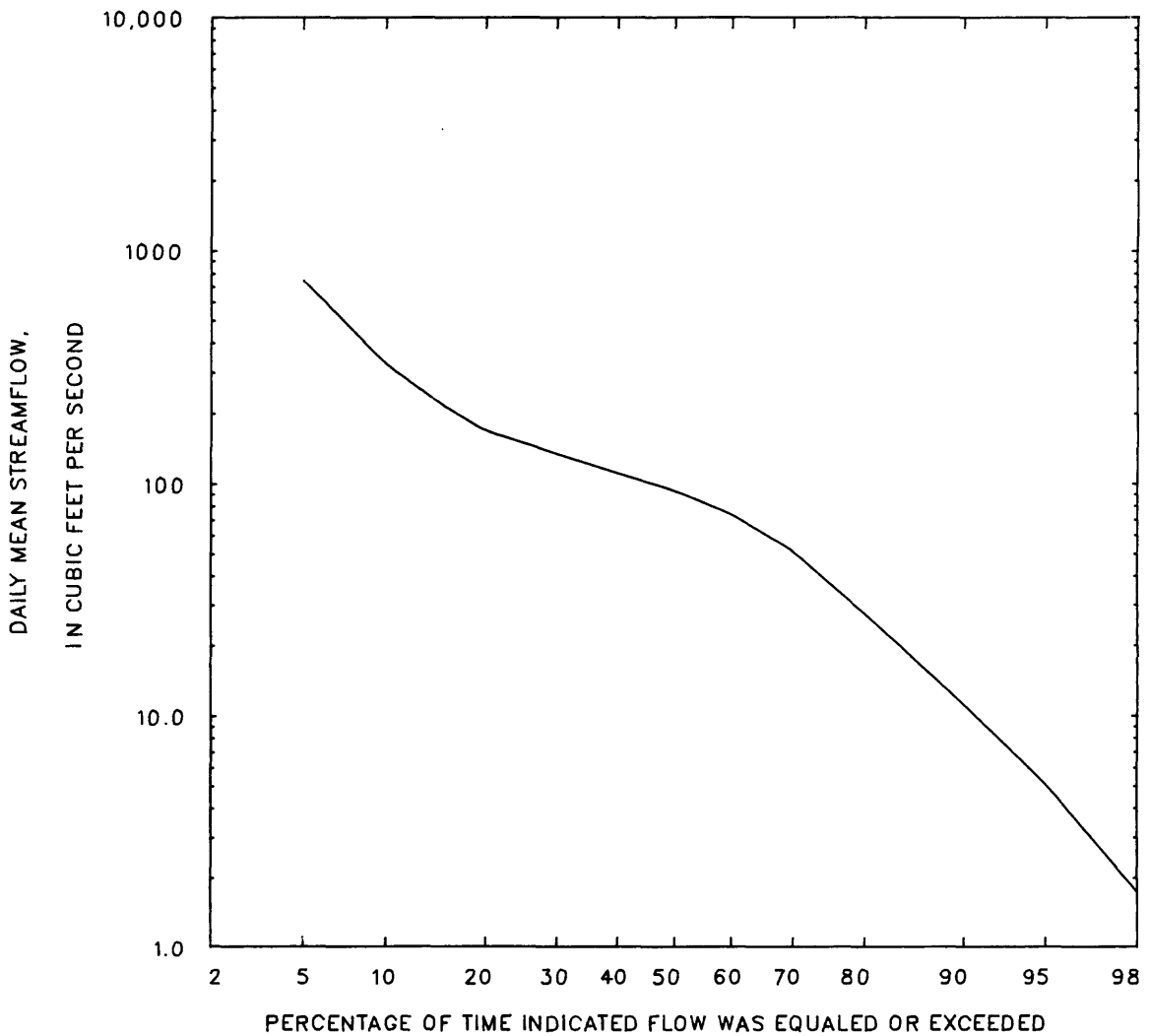
Duration of daily mean flow for period of record 1931-73

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2060	740	325	219	168	134	110	92	73	51	27	11	5.1	1.7	0.73	0.13	0.02

STATION 06277500 PERIOD OF RECORD 1931–73

GREYBULL RIVER NEAR BASIN, WYO.





06278300 SHELL CREEK ABOVE SHELL RESERVOIR, WYO.

LOCATION.--Lat 44°30'29", long 107°24'11", in sec.1, T.52 N., R.88 W., Big Horn County, Bighorn National Forest, on right bank 0.2 mi upstream from Shell Reservoir, 1.1 mi downstream from Buckley Creek, 6.0 mi southeast of Shell Creek ranger station, and 19 mi east of Shell.

DRAINAGE AREA.--23.1 mi^2.

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1969, published as Shell Creek above Shell Creek Reservoir.

GAGE.--Water-stage recorder. Altitude of gage is 9,050 ft, from topographic map.

REMARKS.--No diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,870 ft^3/s, June 15, 1963, gage height, 7.84 ft, from floodmarks, from rating curve extended above 725 ft^3/s on basis of velocity-area study; minimum daily, 0.60 ft^3/s, March 7, 1967.

Monthly and annual streamflow 1957-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	18	3.6	8.7	4.1	0.48	2.0
November	11	2.9	5.7	2.0	0.35	1.3
December	6.4	2.0	3.8	1.2	0.33	0.9
January	4.3	1.5	2.6	0.77	0.30	0.6
February	3.5	1.1	2.1	0.66	0.31	0.5
March	3.7	1.1	2.1	0.72	0.35	0.5
April	18	1.2	4.3	3.8	0.89	1.0
May	289	15	102	63	0.62	23.4
June	353	69	227	73	0.32	52.1
July	188	12	53	37	0.69	12.2
August	46	4.1	14	8.4	0.62	3.1
September	45	4.3	11	8.1	0.77	2.4
Annual	50	19	36	7.4	0.20	100

Magnitude and probability of annual low flow based on period of record 1958-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.2	0.93	0.81	0.74	0.66	---
3	1.3	1.0	0.90	0.83	0.76	---
7	1.4	1.1	1.0	0.93	0.86	---
14	1.5	1.2	1.1	0.98	0.90	---
30	1.7	1.3	1.2	1.1	0.95	---
60	1.9	1.5	1.3	1.2	1.0	---
90	2.1	1.6	1.5	1.3	1.2	---
120	2.5	1.9	1.7	1.6	1.4	---
183	4.0	3.0	2.6	2.3	2.0	---

Magnitude and probability of instantaneous peak flow based on 28 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
783	961	1080	1250	1380	1510

Weighted skew = 0.660

Magnitude and probability of annual high flow based on period of record 1957-84

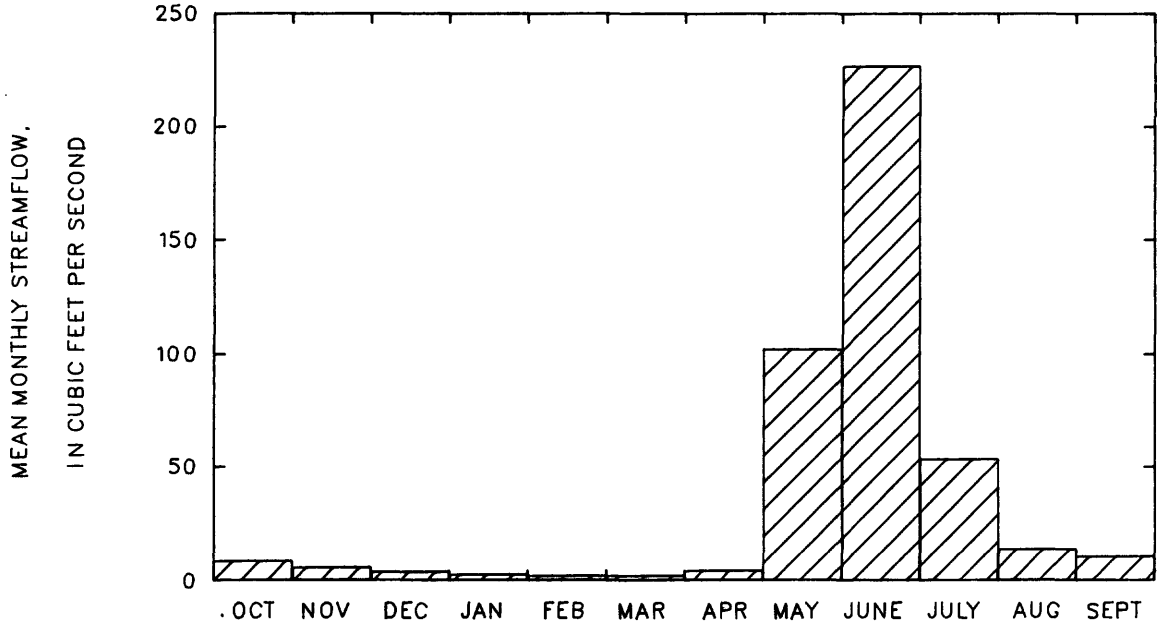
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	551	661	727	805	861	---
3	508	571	593	610	617	---
7	430	493	519	541	552	---
15	359	412	432	448	456	---
30	276	323	343	360	369	---
60	183	216	232	247	256	---
90	131	155	166	176	182	---

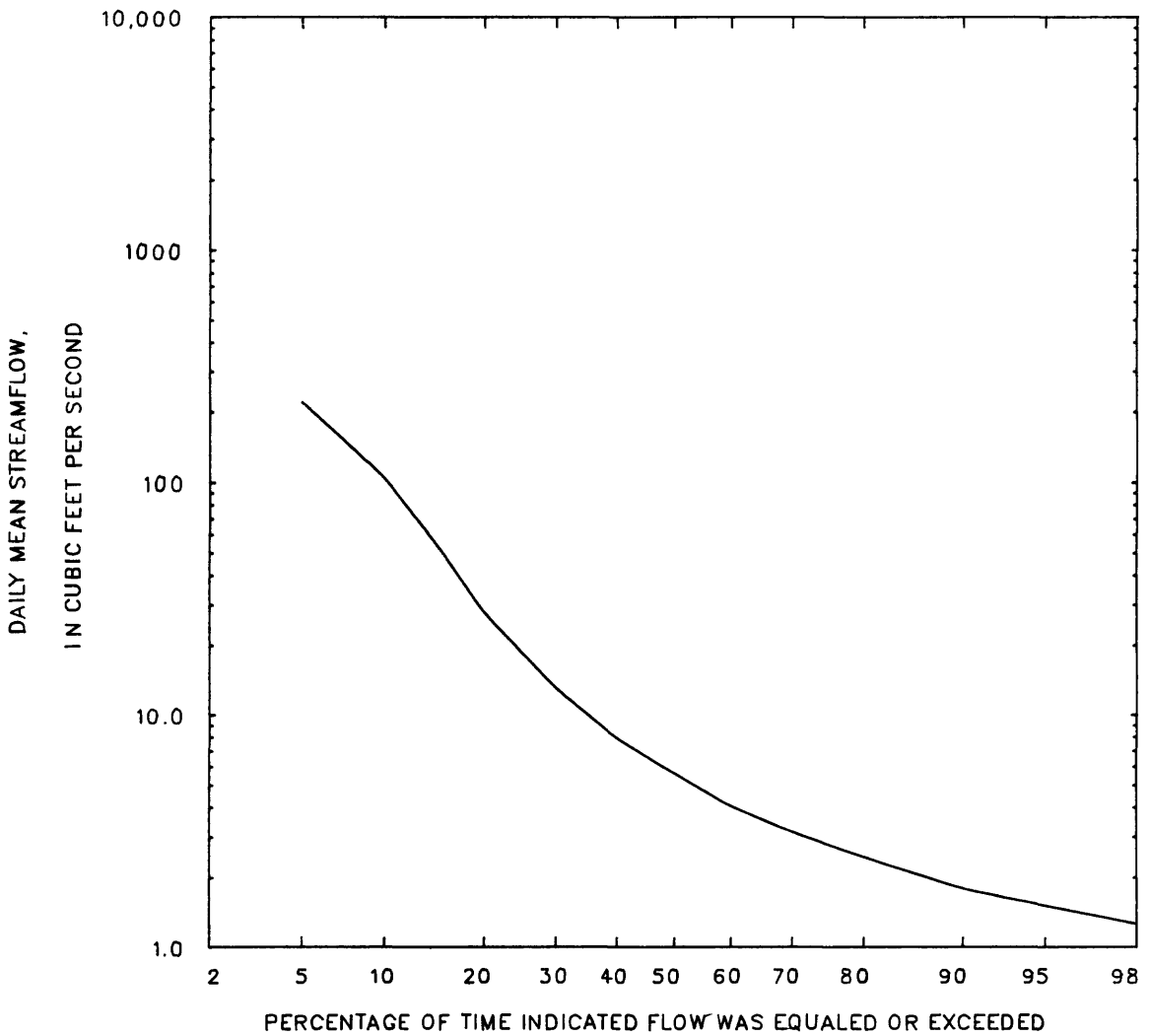
Duration of daily mean flow for period of record 1957-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
460	220	105	52	27	13	7.9	5.6	4.0	3.1	2.4	1.8	1.5	1.3	1.1	1.0	0.89

STATION 06278300 PERIOD OF RECORD 1957–84

SHELL CREEK ABOVE SHELL RESERVOIR, WYO.





06278500 SHELL CREEK NEAR SHELL, WYO.

LOCATION.--Lat 44°33'54", long 107°42'44", in SE¼SW¼ sec.17, T.53 N., R.90 W., Big Horn County, on right bank 0.9 mi upstream from White Creek and 5.0 mi northeast of Shell.

DRAINAGE AREA.--145 mi^2.

PERIOD OF RECORD.--October 1940 to current year (no winter records since 1971). Prior to December 1940, monthly discharge only; published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 4,370.05 ft.

REMARKS.--Some regulation by two small reservoirs, capacity, 3,650 acre-ft. Diversions above station for irrigation of about 80 acres below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,020 ft^3/s, June 24, 1945, gage height, 7.49 ft, from rating curve extended above 1,600 ft^3/s; minimum daily, 18 ft^3/s, March 5, 7, 1950, January 30, 31, 1951.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1941-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	95	9.1	56	18	0.32	4.0
November	76	7.6	46	12	0.26	3.3
December	60	6.4	40	9.2	0.23	2.9
January	49	4.3	36	7.8	0.22	2.6
February	45	3.5	34	7.0	0.21	2.4
March	48	3.0	34	7.0	0.21	2.4
April	138	2.5	50	29	0.57	3.6
May	438	93	269	93	0.34	19.2
June	990	99	514	219	0.43	36.8
July	308	40	163	69	0.42	11.7
August	135	22	89	21	0.24	6.3
September	134	7.3	69	24	0.35	4.9
Annual	160	42	117	26	0.22	100

Magnitude and probability of annual low flow based on period of record 1942-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	28	17	11	6.7	3.3	---
3	32	20	12	7.2	3.4	---
7	---	---	---	---	---	---
14	---	---	---	---	---	---
30	---	---	---	---	---	---
60	---	---	---	---	---	---
90	---	---	---	---	---	---
120	---	---	---	---	---	---
183	---	---	---	---	---	---

Magnitude and probability of instantaneous peak flow based on 44 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1410	1810	2090	2450	2730	3020

Weighted skew = 0.380

Magnitude and probability of annual high flow based on period of record 1941-71

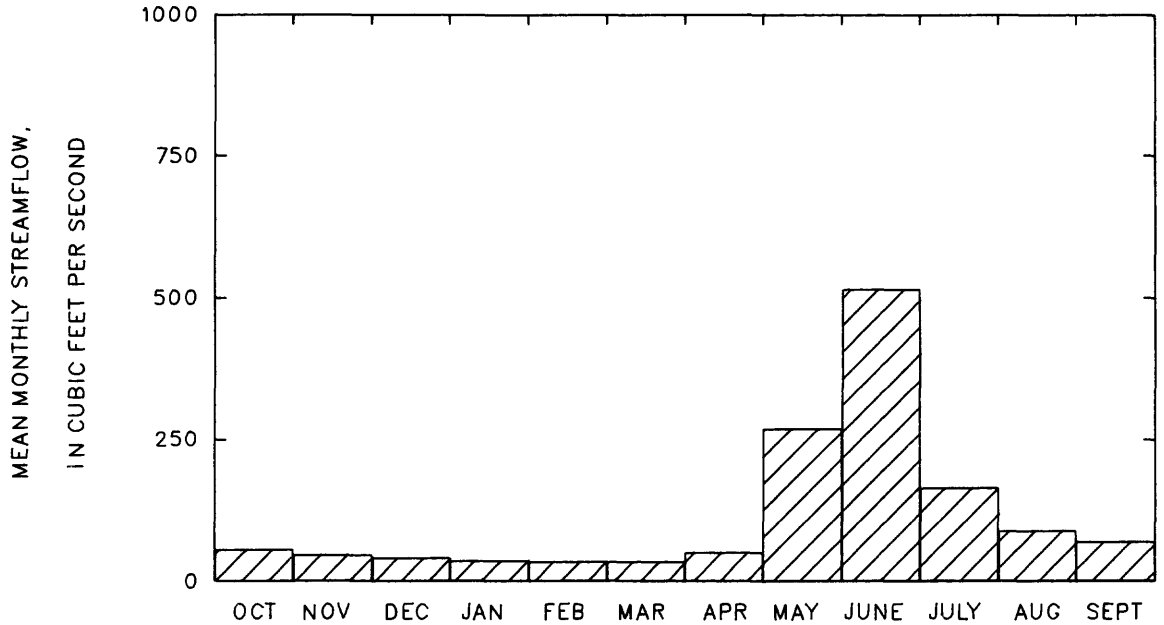
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1060	1350	1540	1750	1900	---
3	958	1210	1350	1500	1600	---
7	847	1060	1180	1310	1400	---
15	717	891	986	1090	1160	---
30	577	728	816	916	984	---
60	422	521	571	622	653	---
90	326	397	431	462	480	---

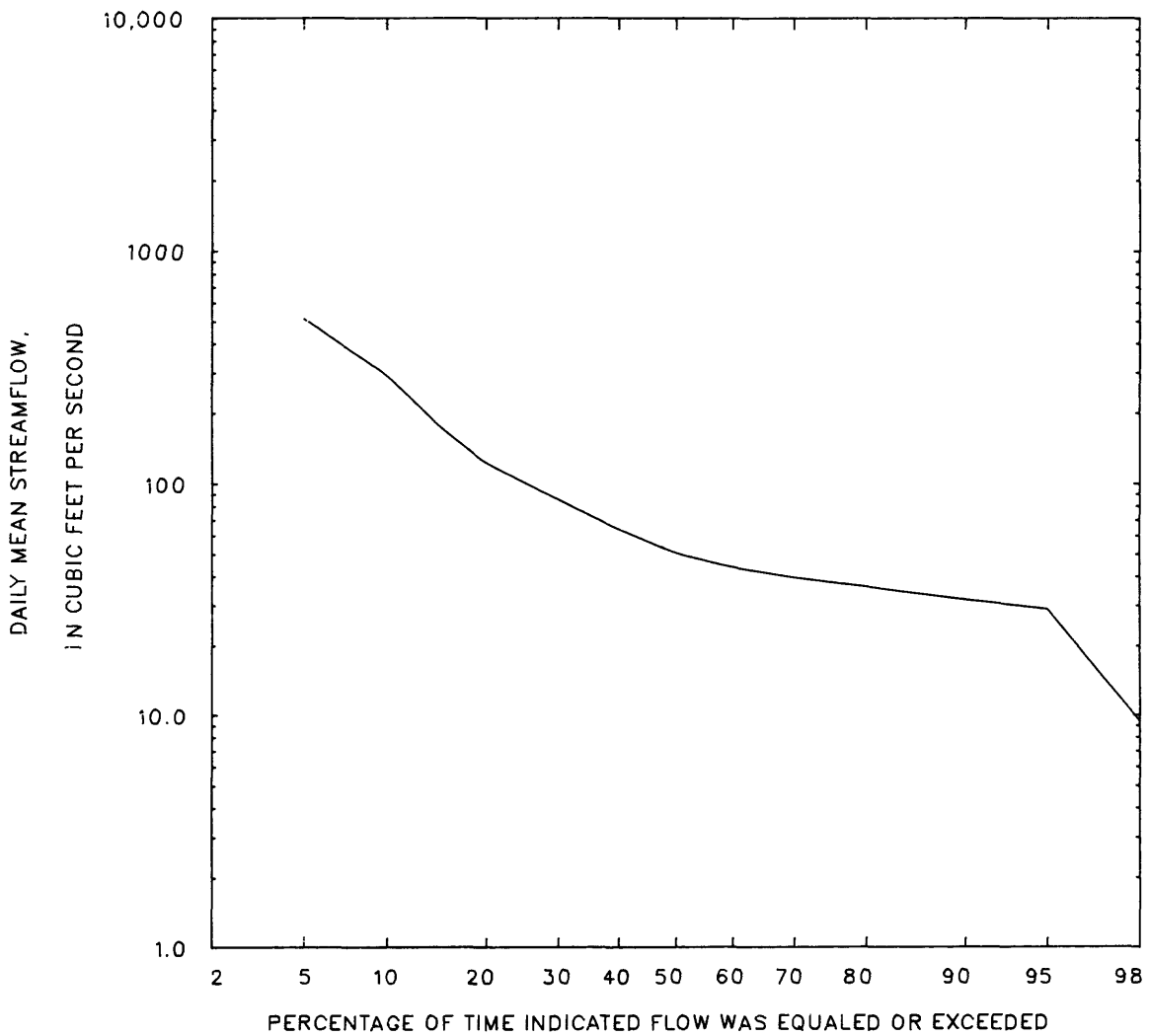
Duration of daily mean flow for period of record 1941-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
943	509	292	170	122	85	64	50	44	39	36	32	29	9.3	4.6	3.1	2.6

STATION 06278500 PERIOD OF RECORD 1941–71

SHELL CREEK NEAR SHELL, WYO.





06279500 BIGHORN RIVER AT KANE, WYO.

LOCATION.--Lat 44°45'31", long 108°10'51", in NW¼NE¼SW¼ sec.9, T.55 N., R.94 W., Big Horn County, on right bank 180 ft upstream from Bighorn Canyon National Recreation Area boundary, 0.5 mi upstream from normal high-water line of Bighorn Lake at elevation 3,660 ft, 1.3 mi upstream from Five Springs Creek, and 5.9 mi south of Kane.

DRAINAGE AREA.--15,765 mi^2. Area at sites used prior to May 17, 1956, 15,846 mi^2.

PERIOD OF RECORD.--August 1928 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,660 ft, from topographic map. August 29, 1928, to April 25, 1932, non-recording gage, and April 25, 1932, to May 16, 1956, water-stage recorder, at site 12.5 mi downstream at different datum.

REMARKS.--Some regulation by Boysen Reservoir since October 1951. Diversions for irrigation of about 376,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,200 ft^3/s, June 16, 1935, gage height, 11.10 ft, site and datum then in use; minimum daily, 179 ft^3/s, July 22, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1923, 14.8 ft, September 30, 1923, site and datum in use April 1932 to May 1956.

Monthly and annual streamflow 1930-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	3990	524	1830	691	0.38	6.7
November	2870	737	1700	548	0.32	6.2
December	2510	627	1450	545	0.37	5.3
January	2870	580	1370	576	0.42	5.0
February	3160	550	1550	624	0.40	5.6
March	3170	874	1840	572	0.31	6.7
April	3450	696	1870	639	0.34	6.8
May	7510	1010	3310	1460	0.44	12.1
June	14700	1030	6180	3280	0.53	22.6
July	11700	501	3310	2540	0.77	12.1
August	6390	305	1480	1030	0.69	5.4
September	3670	386	1520	689	0.45	5.5
Annual	3520	923	2280	607	0.27	100

Magnitude and probability of annual low flow based on period of record 1931-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	576	377	294	236	182	152
3	611	399	310	247	188	155
7	663	428	329	261	197	161
14	722	466	360	286	217	179
30	829	551	434	352	273	229
60	999	681	546	449	357	304
90	1120	799	663	565	469	413
120	1240	914	775	674	573	513
183	1380	1020	861	743	626	556

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1930-84

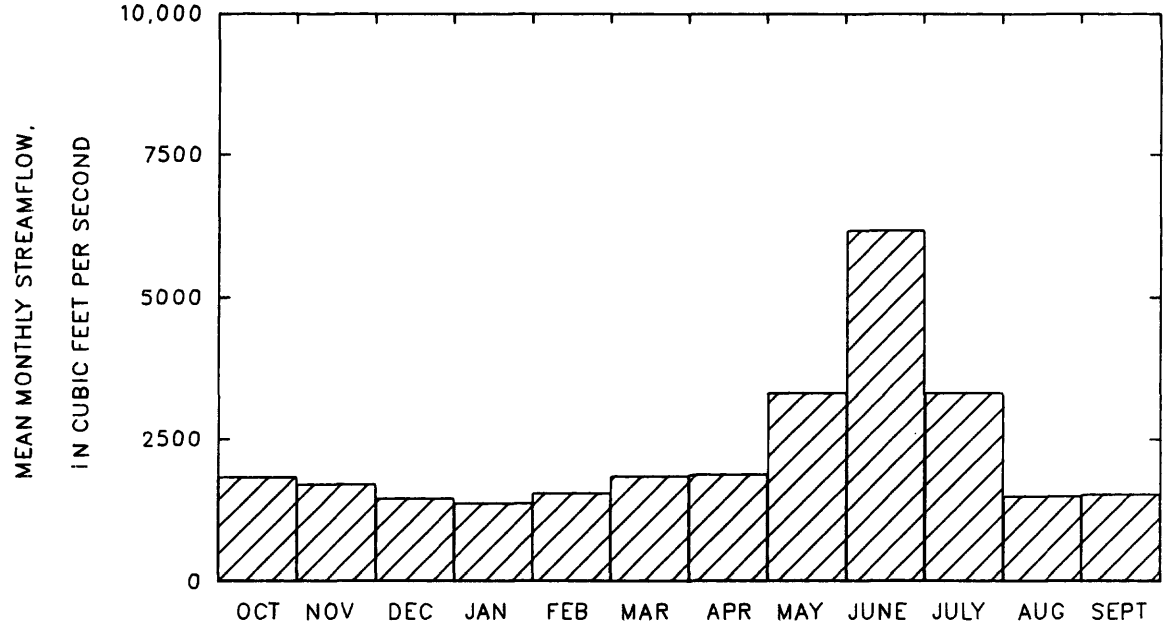
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	10700	15900	19200	23300	26100	28900
3	9480	14200	17400	21400	24300	27300
7	8380	12700	15700	19600	22600	25600
15	7290	11000	13600	17000	19700	22300
30	6230	9500	11800	14800	17000	19300
60	4950	7470	9170	11400	13000	14600
90	4170	6070	7300	8800	9880	10900

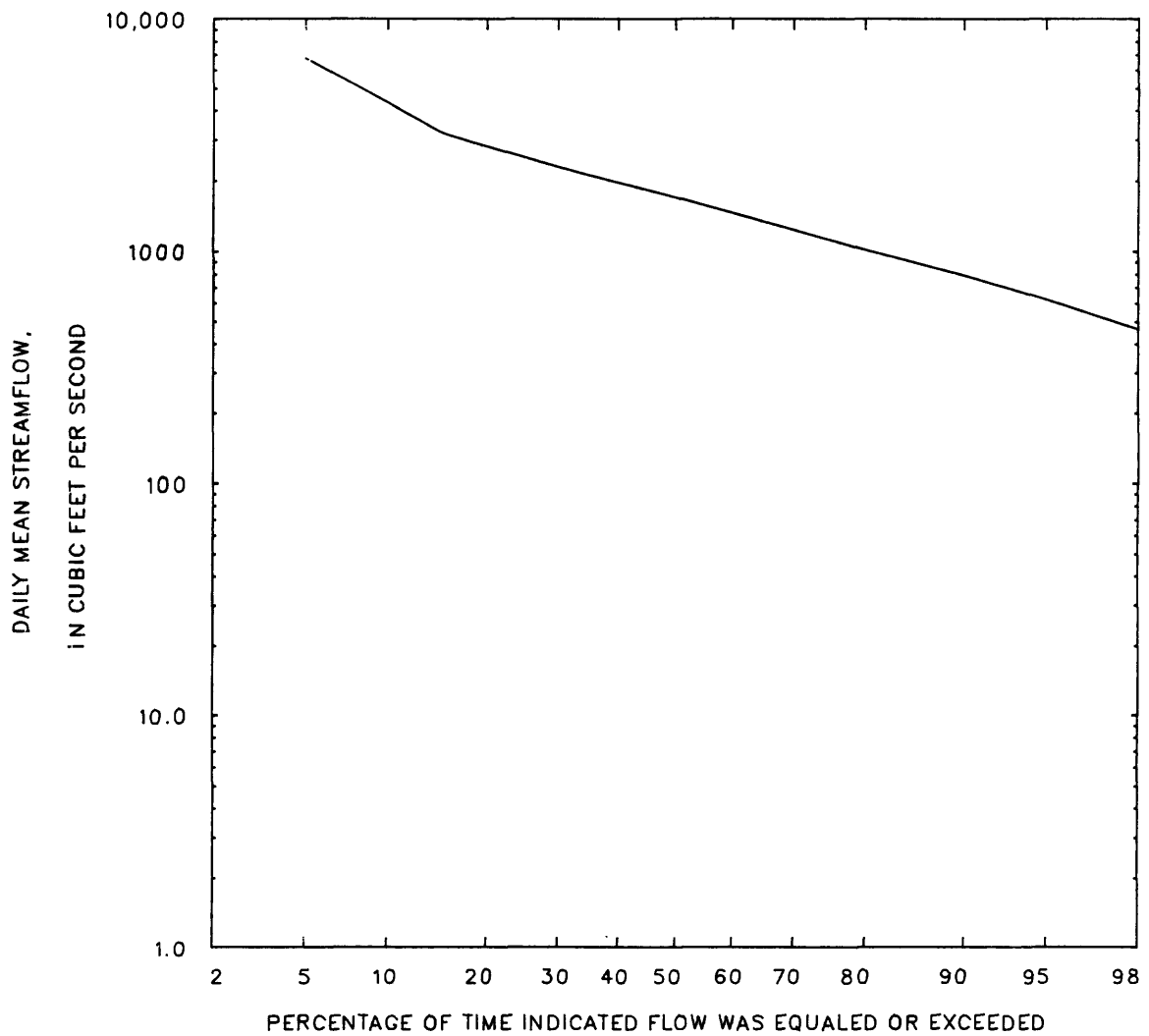
Duration of daily mean flow for period of record 1930-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
12200	6730	4330	3170	2800	2290	1960	1690	1450	1230	1010	783	617	460	354	296	231

STATION 06279500 PERIOD OF RECORD 1930–84

BIGHORN RIVER AT KANE, WYO.





06280000 NORTH FORK SHOSHONE RIVER NEAR WAPITI, WYO.

LOCATION.--Lat 44°28'45", long 109°20'28", in NW¼NE¼SE¼ sec.15, T.52 N., R.104 W., Park County, on left bank 600 ft downstream from Trout Creek, 1.6 mi upstream from normal high-water line of Buffalo Bill Reservoir at elevation 5,369 ft, 4.8 mi east of Wapiti, and 14 mi west of Cody.

DRAINAGE AREA.--775 mi^2.

PERIOD OF RECORD.--January 1921 to September 1926, May 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,400 ft, from topographic map. January 1921 to September 1926, water-stage recorder at site 0.6 mi downstream at different datum.

REMARKS.--Diversion for irrigation of about 2,700 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft^3/s, June 9, 1981, gage height, 12.0 ft, from floodmarks; minimum daily, 94 ft^3/s, January 28, 1980.

Monthly and annual streamflow 1922-26, 1980-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	529	215	339	119	0.35	3.2
November	356	169	235	60	0.26	2.2
December	225	128	176	26	0.15	1.7
January	189	118	156	24	0.15	1.5
February	189	125	154	21	0.14	1.4
March	214	127	170	24	0.14	1.6
April	871	261	496	218	0.44	4.7
May	2790	1420	1950	433	0.22	18.3
June	4650	2650	3570	634	0.18	33.5
July	4460	1190	2330	1100	0.47	21.9
August	1420	414	670	315	0.47	6.3
September	849	234	402	173	0.43	3.8
Annual	1230	708	890	178	0.20	100

Magnitude and probability of annual low flow based on period of record 1922-26, 1981-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	123	106	98	---	---	---
3	127	110	103	---	---	---
7	131	114	107	---	---	---
14	135	120	113	---	---	---
30	143	129	123	---	---	---
60	151	140	136	---	---	---
90	158	148	144	---	---	---
120	166	157	153	---	---	---
183	211	185	173	---	---	---

Magnitude and probability of instantaneous peak flow based on 11 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
7380	10600	13100	16500	19300	22300

Weighted skew = 0.363

Magnitude and probability of annual high flow based on period of record 1922-26, 1980-84

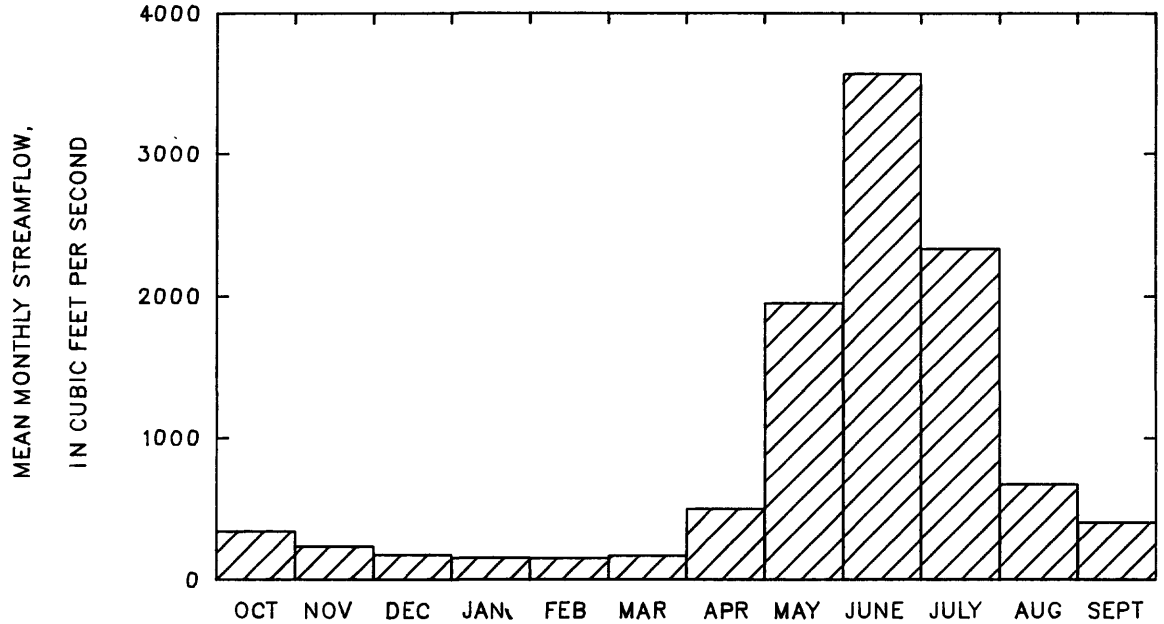
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	5620	8030	10100	---	---	---
3	5400	7150	8440	---	---	---
7	4980	6380	7350	---	---	---
15	4440	5660	6550	---	---	---
30	3930	4850	5490	---	---	---
60	3180	3860	4330	---	---	---
90	2580	3120	3490	---	---	---

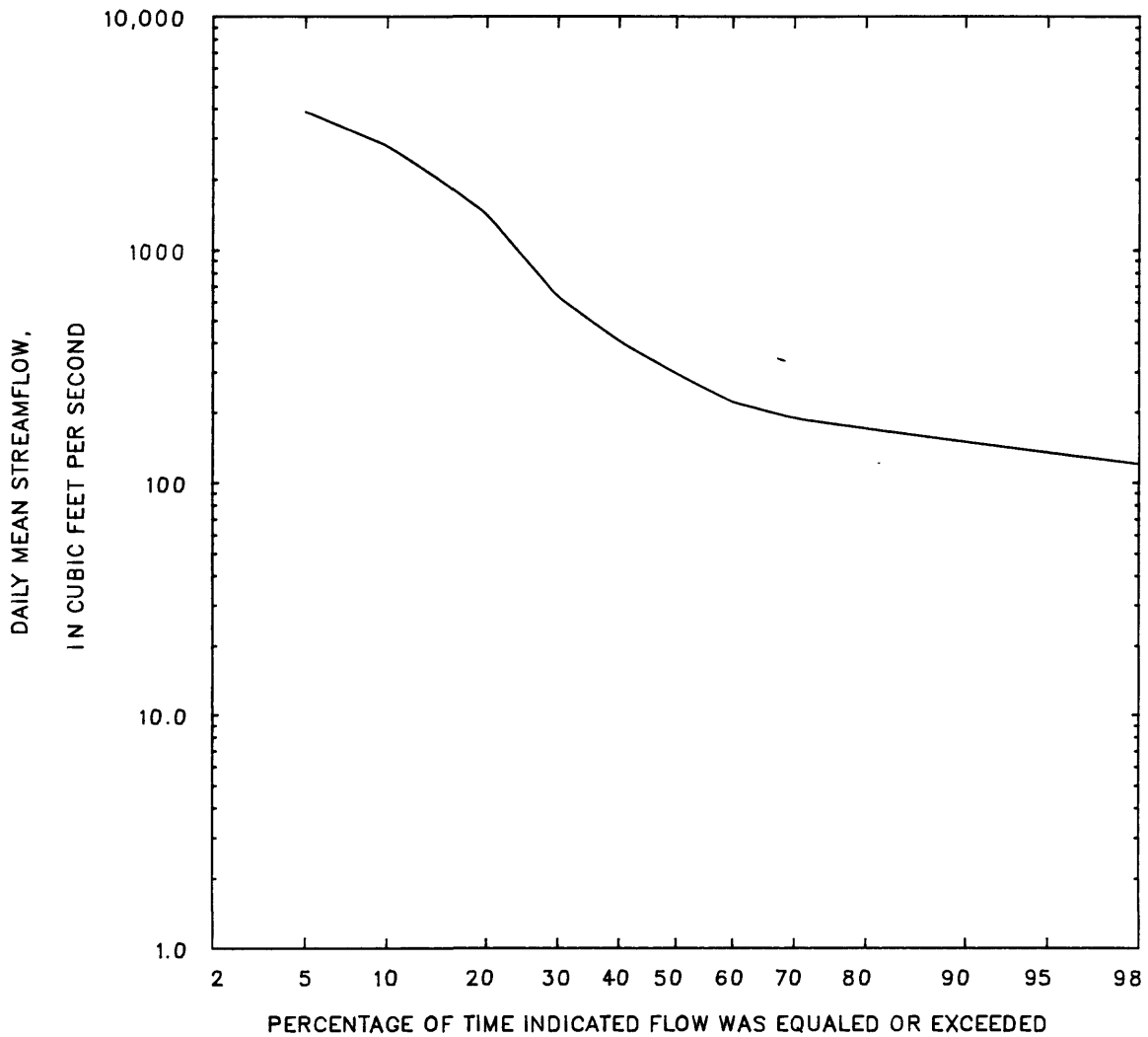
Duration of daily mean flow for period of record 1922-26, 1980-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
5790	3870	2760	1950	1410	627	404	293	219	186	168	148	133	119	112	106	96

STATION 06280000 PERIOD OF RECORD 1922–26, 1980–84

NORTH FORK SHOSHONE RIVER NEAR WAPITI, WYO.





06280300 SOUTH FORK SHOSHONE RIVER NEAR VALLEY, WYO.

LOCATION.--Lat 44°12'30", long 109°33'15", in NE¼ sec.24, T.49 N., R.106 W., Park County, Shoshone National Forest, on left bank 75 ft downstream from U.S. Forest Service bridge, 0.4 mi downstream from Boulder Creek, 3.2 mi northeast of Valley, and 34 mi southwest of Cody.

DRAINAGE AREA.--297 mi^2.

PERIOD OF RECORD.--October 1956 to September 1958, October 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,200 ft, from topographic map. Prior to November 22, 1961, at site 75 ft upstream at same datum.

REMARKS.--Diversions for irrigation of about 450 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft^3/s, June 9, 1981, gage height, 9.24 ft, from floodmarks; minimum daily, 41 ft^3/s, February 27, 28, 1961, March 29, 1975.

Monthly and annual streamflow 1957-58, 1960-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	244	104	159	37	0.23	3.1
November	146	71	107	18	0.17	2.1
December	109	61	84	12	0.14	1.6
January	95	65	76	9.1	0.12	1.5
February	94	59	72	7.6	0.11	1.4
March	109	60	74	12	0.17	1.5
April	341	70	143	63	0.44	2.8
May	1390	252	738	250	0.34	14.4
June	2910	1050	1810	446	0.25	35.4
July	2290	312	1220	555	0.45	23.9
August	834	172	402	163	0.41	7.9
September	341	121	223	65	0.29	4.4
Annual	583	221	427	84	0.20	100

Magnitude and probability of annual low flow based on period of record 1958, 1961-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	52	46	43	41	39	---
3	53	47	44	42	39	---
7	58	51	48	45	43	---
14	61	55	52	50	47	---
30	66	61	58	57	55	---
60	69	64	62	61	59	---
90	72	66	64	62	61	---
120	75	70	67	66	64	---
183	95	85	80	77	74	---

Magnitude and probability of instantaneous peak flow based on 27 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
4030	5180	5990	7080	7940	8830

Weighted skew = 0.522

Magnitude and probability of annual high flow based on period of record 1957-58, 1960-84

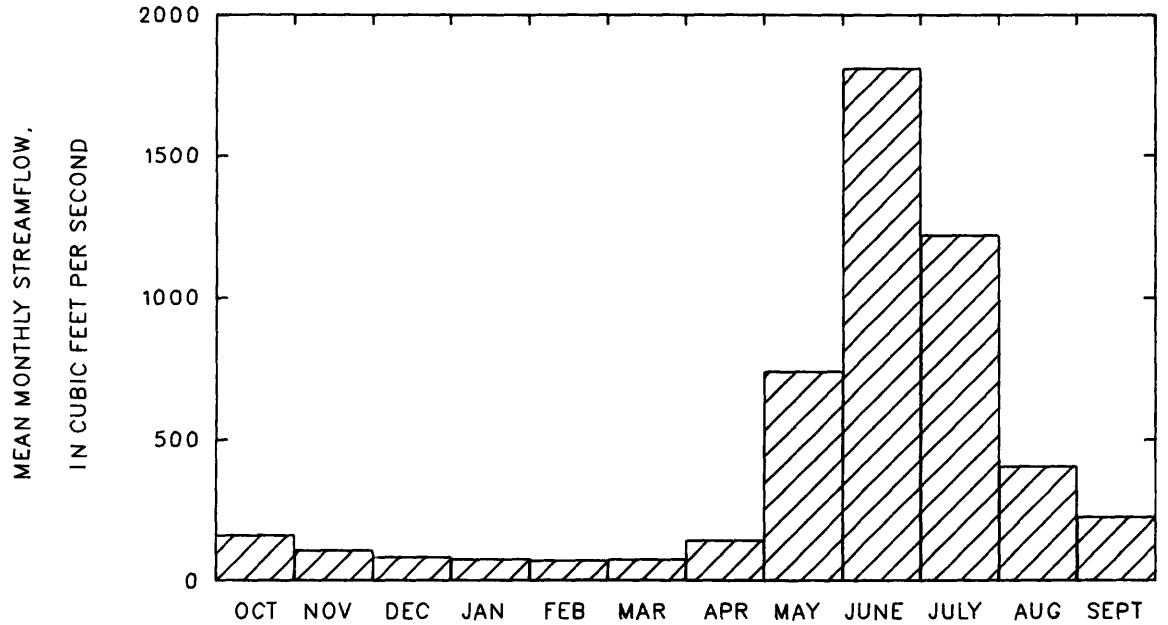
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	3150	3990	4590	5410	6060	---
3	3020	3650	4020	4440	4720	---
7	2740	3340	3680	4070	4340	---
15	2390	2940	3240	3580	3810	---
30	2060	2480	2690	2890	3010	---
60	1670	2000	2150	2270	2340	---
90	1330	1590	1700	1790	1840	---

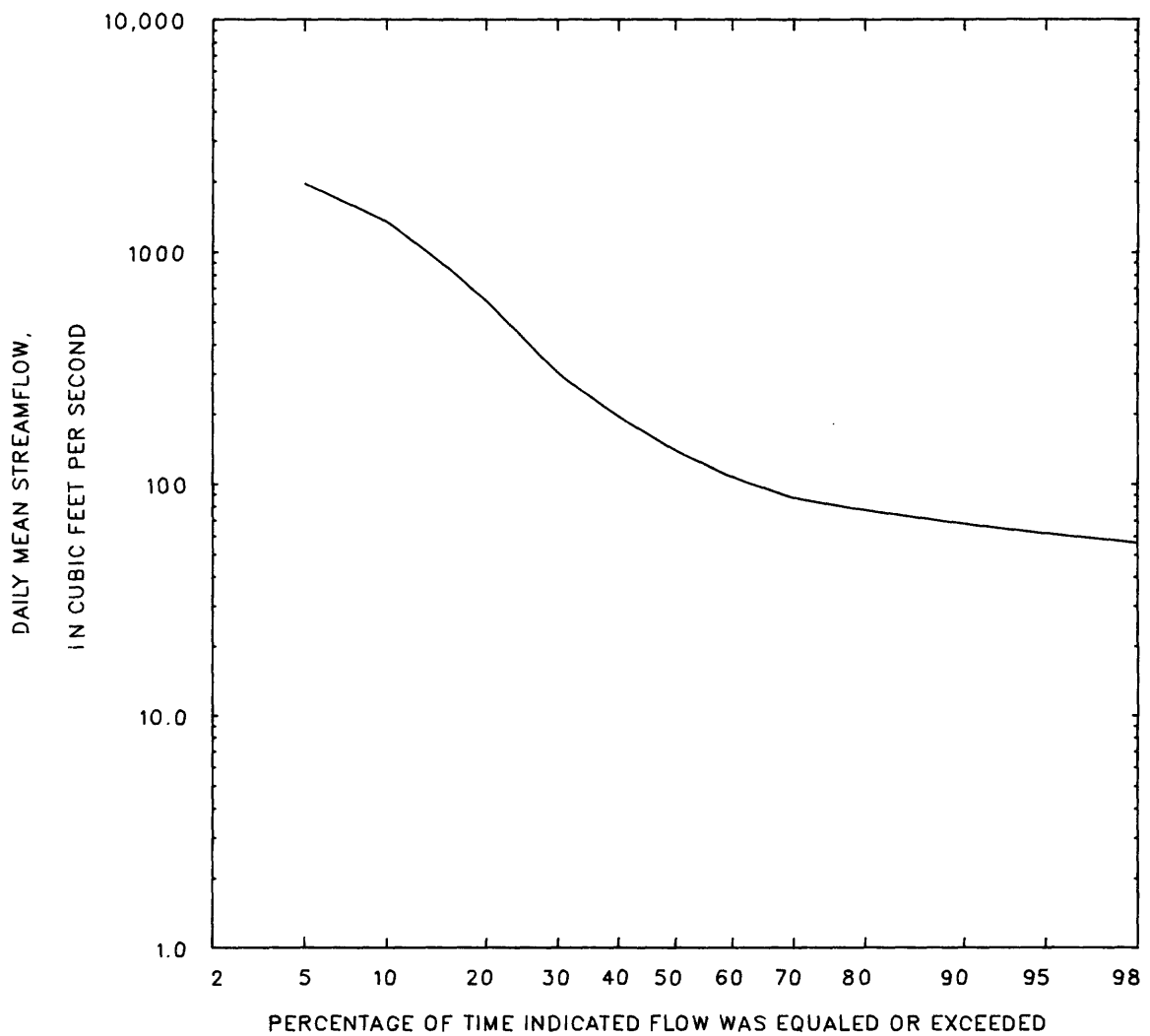
Duration of daily mean flow for period of record 1957-58, 1960-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
3030	1950	1340	892	615	298	193	137	106	86	76	67	61	56	51	49	43

STATION 06280300 PERIOD OF RECORD 1957–58, 1960–84

SOUTH FORK SHOSHONE RIVER NEAR VALLEY, WYO.





06281000 SOUTH FORK SHOSHONE RIVER ABOVE BUFFALO BILL RESERVOIR, WYO.

LOCATION.--Lat 44°25'58", long 109°15'06", in lot 46, sec.33, T.52 N., R.103 W., Park County, on left bank at bridge on county road, 1.0 mi upstream from normal high-water line of Buffalo Bill Reservoir at elevation 5,369 ft, 1.1 mi downstream from Cody Canal diversion, and 11.5 mi southwest of Cody.

DRAINAGE AREA.--585 mi^2.

PERIOD OF RECORD.--May to November 1903, May 1905 to September 1908, January 1921 to September 1926, October 1973 to current year (gage heights only June to September 1908). No winter records 1906, 1908, 1922. Published as "at Marquette," 1903, 1905-08, and as Shoshone River above Shoshone Reservoir 1921-26.

GAGE.--Water-stage recorder. Altitude of gage is 5,410 ft, from topographic map. April 26 to November 30, 1903, and May 1905 to May 30, 1908, non-recording gages at sites within about 6.0 mi downstream at different datums.

REMARKS.--Diversions for irrigation of about 11,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,960 ft^3/s, June 9, 1981, gage height, 9.41 ft; minimum daily discharge, 2.8 ft^3/s, October 24, 1977.

Monthly and annual streamflow 1907, 1923-26, 1974-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	407	18	117	115	0.98	2.3
November	268	71	156	49	0.32	3.0
December	166	55	120	27	0.23	2.4
January	130	63	101	17	0.17	2.0
February	115	78	100	11	0.11	2.0
March	161	77	106	20	0.19	2.1
April	387	94	204	94	0.46	4.0
May	1230	168	738	279	0.38	14.4
June	3140	970	1750	559	0.32	34.3
July	3030	159	1360	865	0.63	26.7
August	1080	17	236	261	1.1	4.6
September	381	6.4	111	120	1.1	2.2
Annual	705	182	426	127	0.30	100

Magnitude and probability of annual low flow based on period of record 1923-26, 1975-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	9.7	5.1	3.8	3.0	---	---
3	10	5.3	3.9	3.1	---	---
7	11	5.9	4.5	3.6	---	---
14	15	7.8	5.6	4.4	---	---
30	20	9.6	6.6	4.9	---	---
60	40	19	13	9.0	---	---
90	65	37	26	19	---	---
120	82	57	45	36	---	---
183	98	74	64	56	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1907, 1923-26, 1974-84

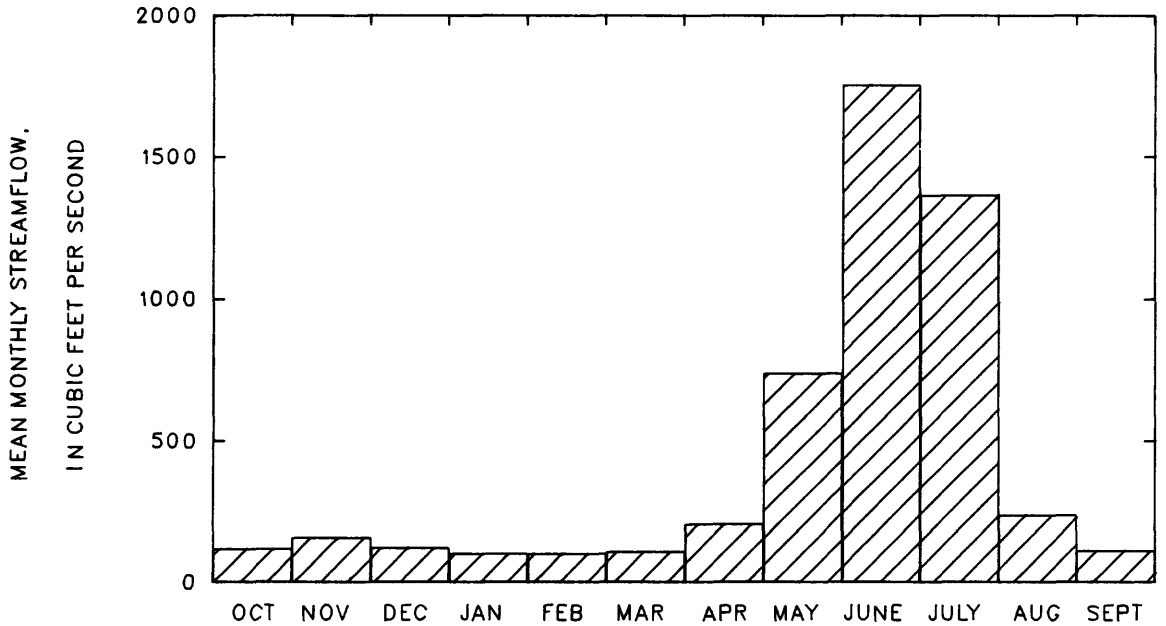
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	3420	4900	6020	7580	---	---
3	3180	4430	5310	6510	---	---
7	2840	3940	4740	5800	---	---
15	2460	3410	4050	4870	---	---
30	2100	2780	3170	3630	---	---
60	1720	2240	2480	2700	---	---
90	1350	1760	1940	2110	---	---

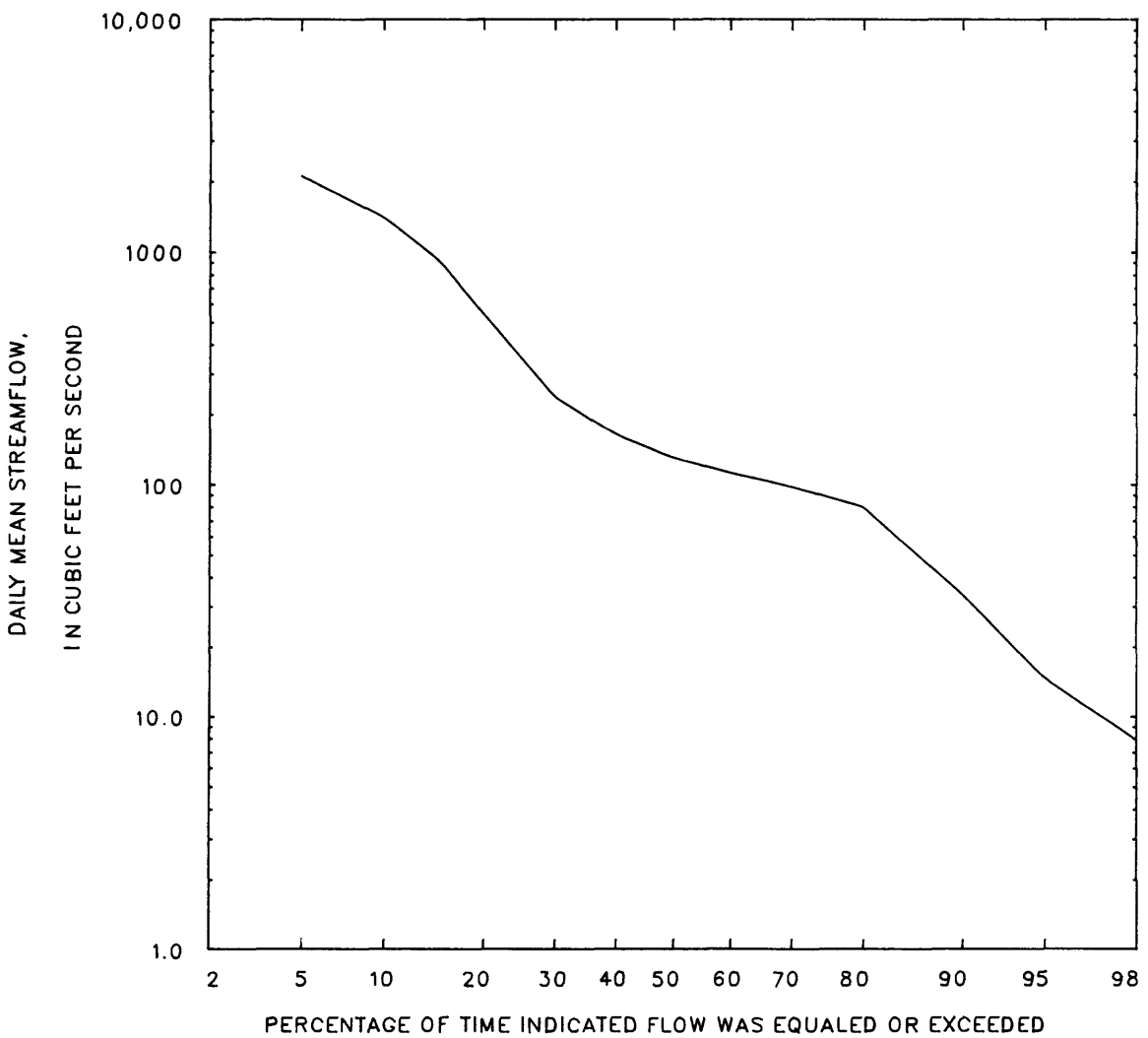
Duration of daily mean flow for period of record 1907, 1923-26, 1974-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
3430	2100	1400	920	541	237	162	129	111	97	80	34	14	7.9	6.3	5.6	3.4

STATION 06281000 PERIOD OF RECORD 1907, 1923–26, 1974–84

SOUTH FORK SHOSHONE RIVER ABOVE BUFFALO BILL RESERVOIR, WYO.





06282000 SHOSHONE RIVER BELOW BUFFALO BILL RESERVOIR, WYO.
(before diversion to Heart Mountain Canal)

LOCATION.--Lat 44°31'00", long 109°05'50", in lot 71, NE¼ sec.3, T.52 N., R.102 W., Park County, on left bank 0.5 mi downstream from Trail Creek, 1.0 mi west of Cody city limits, and 5.5 mi downstream from Buffalo Bill Reservoir.

DRAINAGE AREA.--1,538 mi^2. Area at site prior to October 1, 1949, 1,502 mi^2.

PERIOD OF RECORD.--January 1921 to current year. Prior to October 1944, published as "below Shoshone Reservoir."

GAGE.--Water-stage recorder. Altitude of gage is 4,900 ft, from topographic map. Prior to October 1, 1949, at site 2.5 mi upstream at different datum.

REMARKS.--Flow completely regulated by Buffalo Bill Reservoir. Diversions above station for irrigation of about 56,100 acres, of which about 37,900 acres are below station. Diversion 2.1 mi upstream, to Heart Mountain Canal began in 1943.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,300 ft^3/s, June 9, 1981, gage height, 11.57 ft; minimum daily dishcarge, 14 ft^3/s, November 19, 1933.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood since construction of Buffalo Bill Reservoir in 1909, 18,700 ft^3/s, June 15, 1918, by computation of flow over dam.

Monthly and annual streamflow 1922-42

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1390	112	652	292	0.45	4.3
November	2000	112	542	454	0.84	3.6
December	1650	179	448	325	0.72	3.0
January	742	175	305	122	0.40	2.0
February	409	176	256	61	0.24	1.7
March	477	85	253	77	0.30	1.7
April	1730	224	527	348	0.66	3.5
May	5570	967	1890	1070	0.56	12.6
June	7760	1010	4540	1780	0.39	30.2
July	5430	1390	3080	1210	0.39	20.5
August	2880	834	1540	487	0.32	10.2
September	2260	444	1010	422	0.42	6.7
Annual	1870	741	1260	269	0.21	100

Magnitude and probability of annual low flow
based on period of record 1923-42

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	206	113	68	40	---	---
3	208	142	113	91	---	---
7	211	157	127	104	---	---
14	218	162	131	107	---	---
30	229	170	137	111	---	---
60	242	188	162	142	---	---
90	251	205	187	174	---	---
120	289	220	194	175	---	---
183	381	277	236	208	---	---

Magnitude and probability of instantaneous peak flow
based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow
based on period of record 1922-42

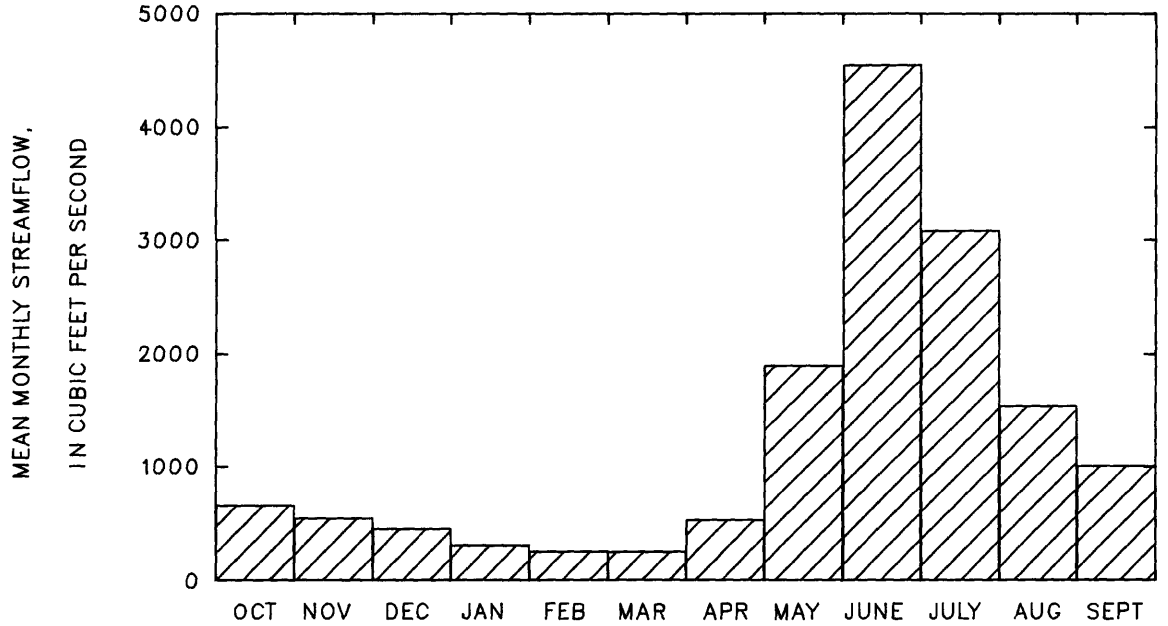
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	7780	11300	13200	15000	---	---
3	7490	10900	12700	14400	---	---
7	6860	9920	11600	13300	---	---
15	6030	8610	10000	11600	---	---
30	5130	7060	8090	9170	---	---
60	4000	5430	6210	7030	---	---
90	3300	4330	4880	5440	---	---

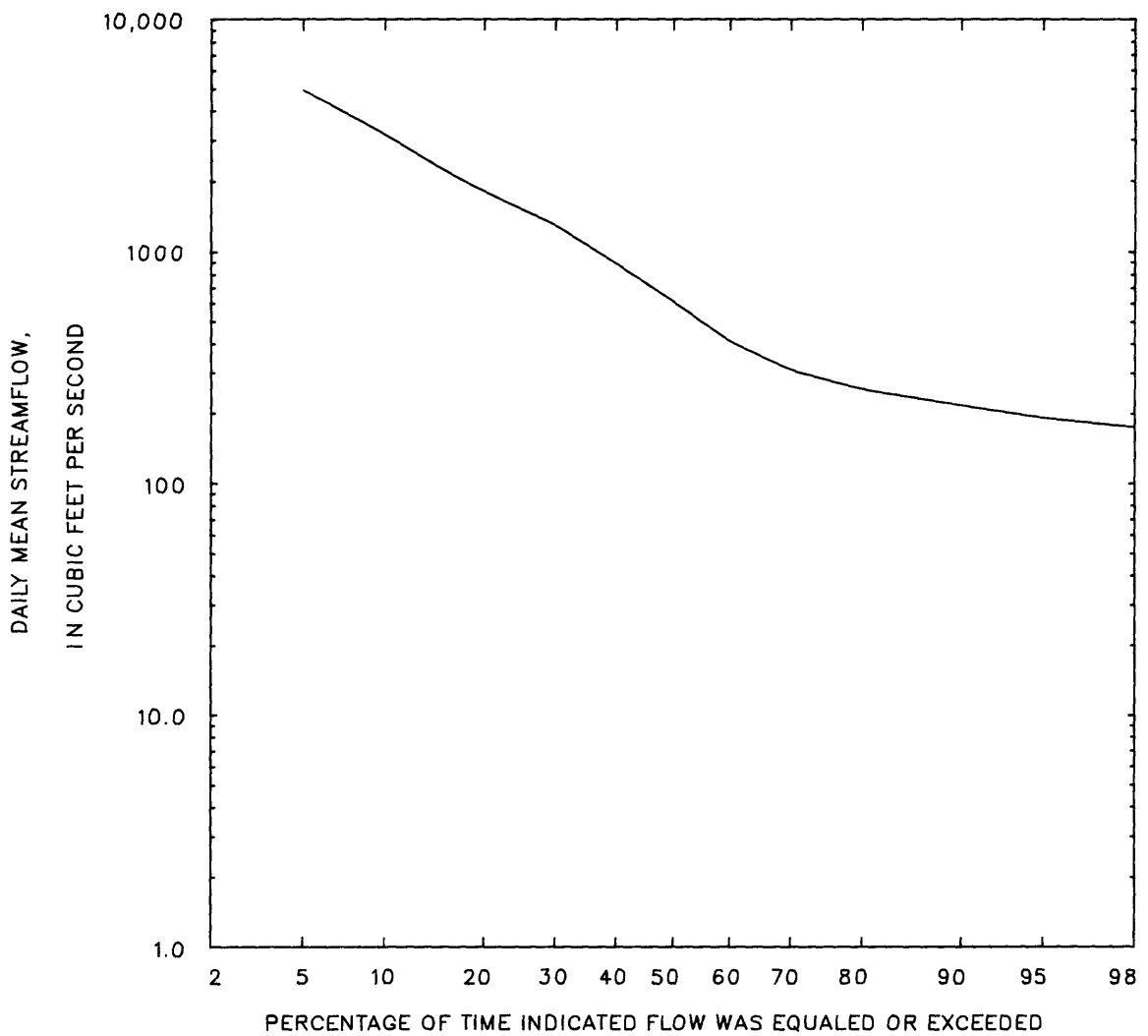
Duration of daily mean flow for period of record 1922-42

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
8600	4890	3160	2260	1790	1300	885	610	407	306	252	215	189	172	109	93	78

STATION 06282000 PERIOD OF RECORD 1922–42

SHOSHONE R. BL. BUFFALO BILL RES., WYO. (BEFORE DIVERSION TO HEART MOUNTAIN CANAL)





06282000 SHOSHONE RIVER BELOW BUFFALO BILL RESERVOIR, WYO.
(after diversion to Heart Mountain Canal)

Monthly and annual streamflow 1943-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1200	293	766	194	0.25	5.7
November	966	155	585	199	0.34	4.3
December	944	199	591	199	0.34	4.4
January	894	172	555	179	0.32	4.1
February	893	65	541	185	0.34	4.0
March	866	73	548	203	0.37	4.0
April	1740	113	776	296	0.38	5.7
May	2960	833	1420	462	0.33	10.5
June	6440	902	2600	1380	0.53	19.2
July	6560	1040	2820	1310	0.46	20.9
August	3400	685	1360	397	0.29	10.1
September	2110	606	965	223	0.23	7.1
Annual	1760	616	1130	242	0.21	100

Magnitude and probability of annual low flow
based on period of record 1944-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	332	204	148	109	74	55
3	358	221	158	115	76	56
7	372	227	162	117	77	57
14	386	236	169	122	81	60
30	438	271	194	140	92	67
60	498	322	233	169	111	81
90	523	353	268	206	146	114
120	542	383	305	246	188	155
183	610	466	392	334	273	237

Magnitude and probability of instantaneous peak flow
based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow
based on period of record 1943-84

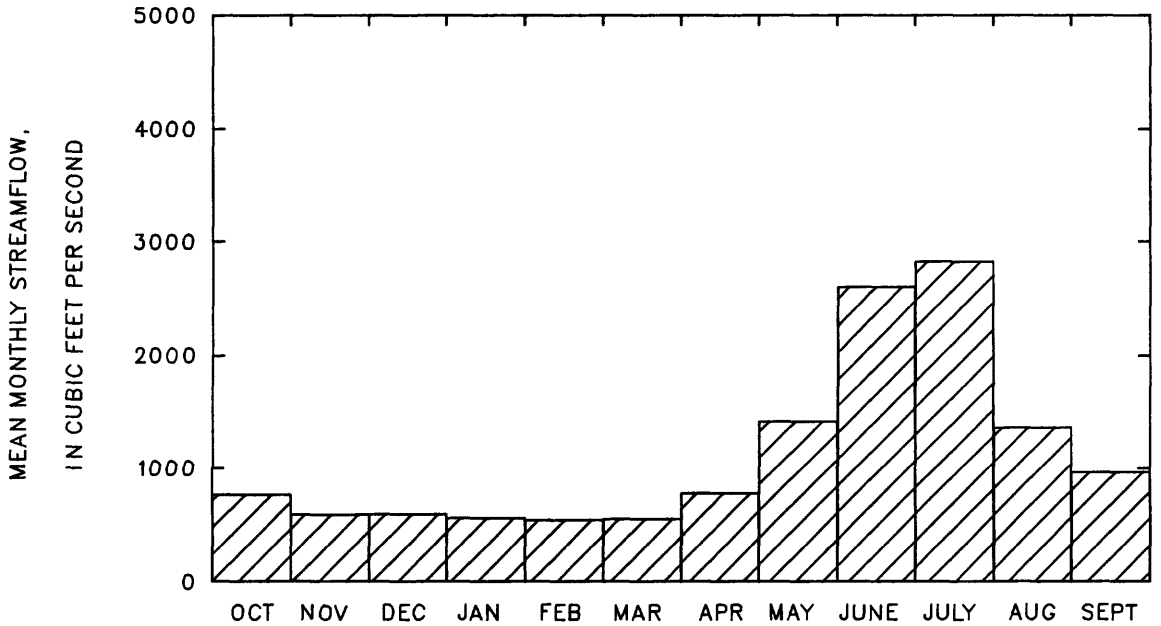
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	5040	8560	11000	13900	16100	18200
3	4850	8190	10500	13300	15400	17300
7	4520	7500	9500	12000	13800	15500
15	4050	6490	8060	9960	11300	12600
30	3400	5230	6410	7840	8850	9820
60	2660	3780	4470	5300	5870	6410
90	2280	3070	3540	4090	4460	4810

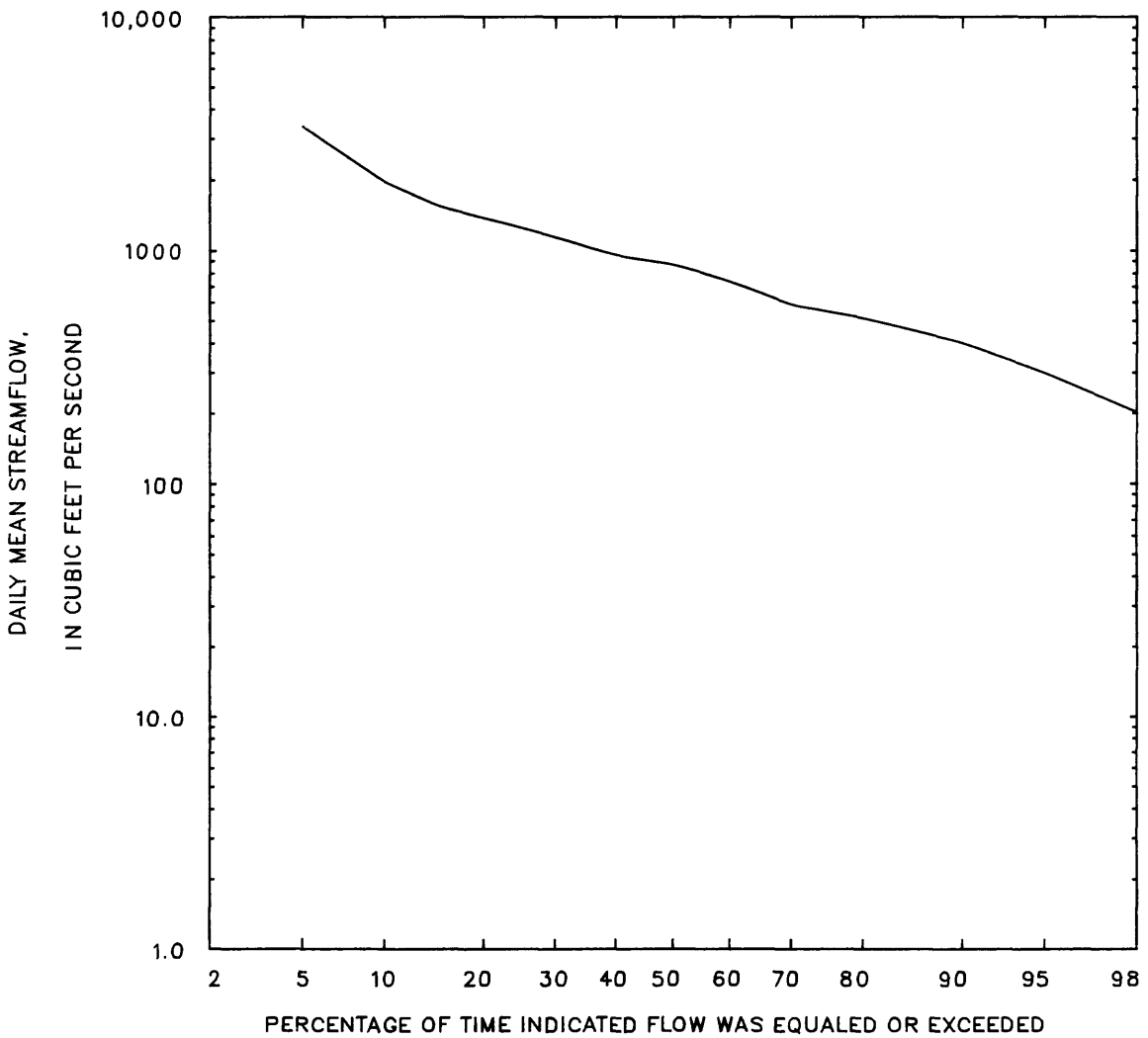
Duration of daily mean flow for period of record 1943-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
6300	3350	1940	1530	1370	1140	947	865	734	580	510	399	297	200	166	77	62

STATION 06282000 PERIOD OF RECORD 1943–84

SHOSHONE R. BL. BUFFALO BILL RES., WYO. (AFTER DIVERSION TO HEART MOUNTAIN CANAL)





06283000 SHOSHONE RIVER AT CORBETT DAM, WYO.

LOCATION.--Lat 44°35', long 108°56', in NW¼ (corrected) sec. 7, T. 53 N., R. 100 W., Park County, at Corbett Dam, 7 mi northeast of Cody.

DRAINAGE AREA.--1,793 mi^2, approximately.

PERIOD OF RECORD.--May 1908 to September 1925.

GAGE.--Water-stage recorder. Altitude of gage is 4,700 ft (estimated from nearby U. S. C. & G. S. level line). Staff gage prior to 1921.

REMARKS.--Natural flow of stream affected by diversions above station for irrigation, return flow from irrigated areas, and storage in Buffalo Bill Reservoir beginning in 1909.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,700 ft^3/s, June 15, 1918; maximum gage height, 5.15 ft, July 4, 1909, from floodmark; minimum not determined.

COOPERATION--Records furnished by Bureau of Reclamation.

Monthly and annual streamflow 1911, 1913-15, 1917-25

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	2220	393	805	447	0.56	4.6
November	2070	415	824	475	0.58	4.8
December	1870	369	748	473	0.63	4.3
January	1100	345	582	220	0.38	3.4
February	767	297	495	159	0.32	2.9
March	1500	345	571	299	0.52	3.3
April	848	445	634	112	0.18	3.7
May	3760	697	1530	910	0.59	8.9
June	9940	1550	4790	2200	0.46	27.7
July	5830	1250	3720	1400	0.38	21.5
August	3460	783	1540	720	0.47	8.9
September	2290	617	1080	501	0.46	6.2
Annual	1960	845	1450	303	0.21	100

Magnitude and probability of annual low flow based on period of record 1911, 1913-15, 1918-25

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	344	226	174	137	---	---
3	376	261	212	176	---	---
7	394	284	237	203	---	---
14	407	309	269	240	---	---
30	421	330	292	265	---	---
60	447	353	315	288	---	---
90	489	386	342	310	---	---
120	523	398	352	322	---	---
183	592	457	409	377	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1911, 1913-15, 1917-25

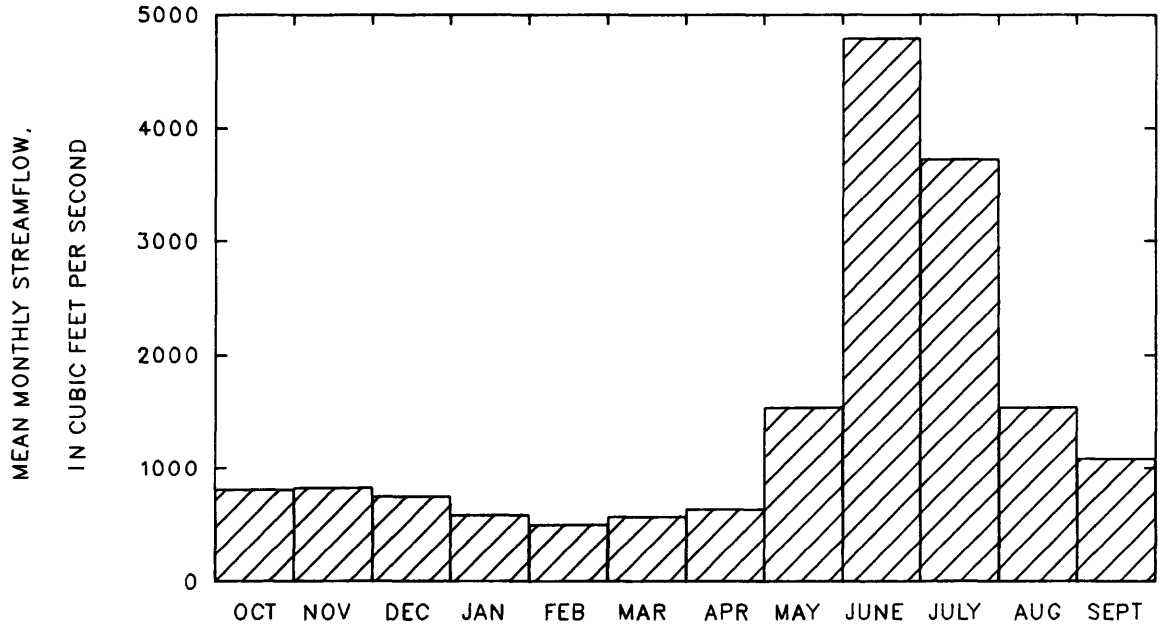
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	8100	11800	13800	---	---	---
3	7900	11500	13400	---	---	---
7	7330	10700	12600	---	---	---
15	6600	9600	11200	---	---	---
30	5970	8080	9020	---	---	---
60	4700	5960	6440	---	---	---
90	3690	4630	5020	---	---	---

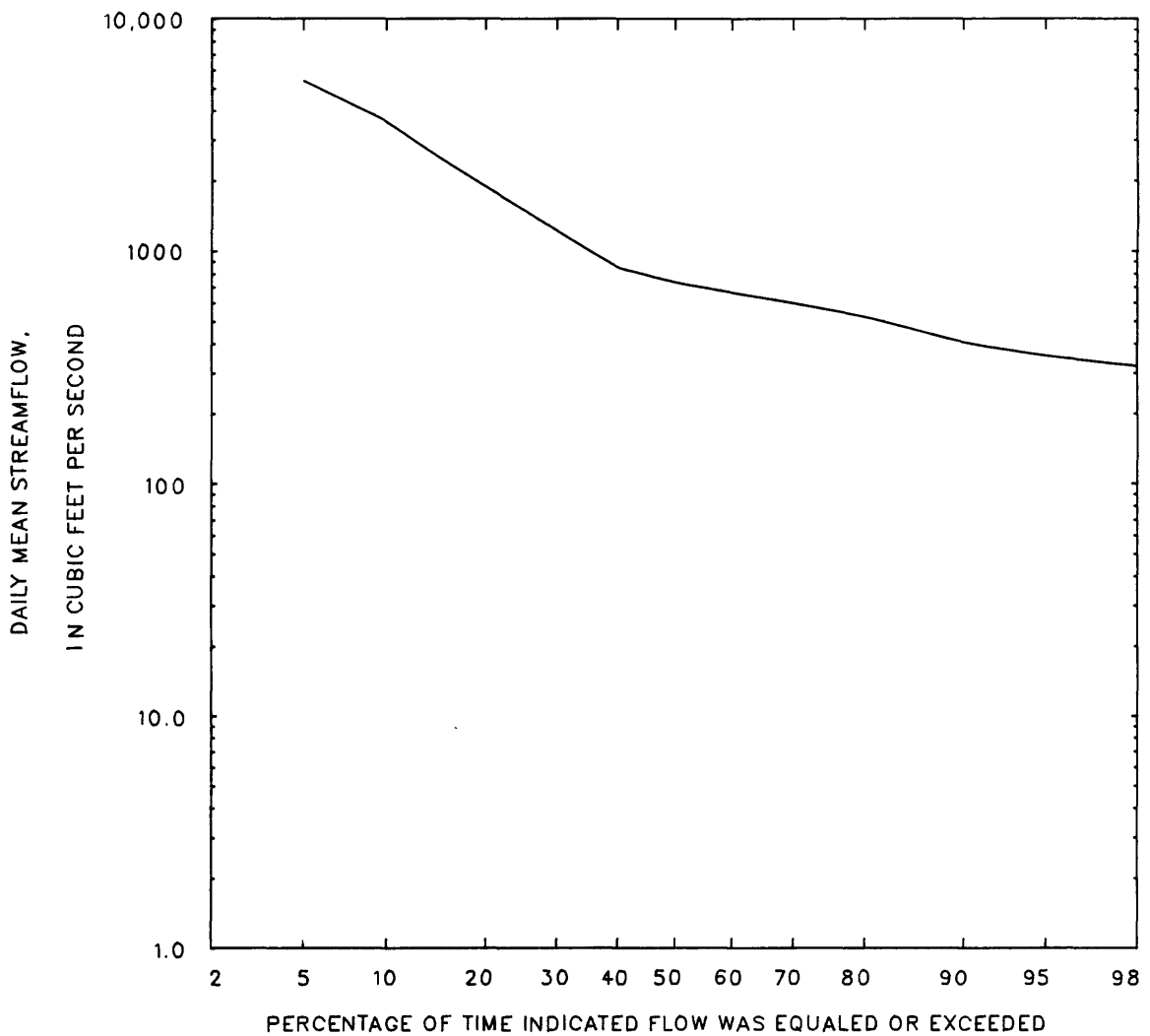
Duration of daily mean flow for period of record 1911, 1913-15, 1917-25

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
9220	5360	3600	2480	1880	1220	846	727	655	595	521	403	354	319	272	245	200

STATION 06283000 PERIOD OF RECORD 1911, 1913–15, 1917–25

SHOSHONE RIVER AT CORBETT DAM, WYO.





06284400 SHOSHONE RIVER NEAR GARLAND, WYO.

LOCATION.--Lat 44°44'20", long 108°35'38", in SE¼SE¼ sec.13, T.55 N., R.98 W., Park County, on right bank 50 ft downstream from bridge on county road, 600 ft downstream from Penrose Dam, 1.3 mi upstream from Bitter Creek, 4.3 mi southeast of Garland, and 8.0 mi east of Powell.

DRAINAGE AREA.--2,036 mi^2.

PERIOD OF RECORD.--May 1958 to September 1979.

GAGE.--Water-stage recorder. Datum of gage is 4,073.67 ft. Prior to November 12, 1965, at site 50 ft upstream at present datum. November 12, 1965, to June 13, 1968, at site 150 ft upstream at datum 3.64 ft higher.

REMARKS.--Flow regulated by Buffalo Bill Reservoir. Diversions above station for irrigation of about 143,000 acres of which about 37,000 acres are below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft^3/s, July 1, 1967, gage height, 8.76 ft, from floodmark, site and datum then in use; minimum daily, 5.0 ft^3/s, May 25, 26, 1959.

Monthly and annual streamflow 1959-79

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	793	206	471	155	0.33	5.8
November	1000	211	629	201	0.32	7.7
December	995	336	700	193	0.28	8.6
January	938	202	623	186	0.30	7.6
February	955	124	624	211	0.34	7.6
March	1050	161	660	237	0.36	8.1
April	1570	110	581	328	0.56	7.1
May	1270	29	342	391	1.1	4.2
June	3950	57	1370	1260	0.92	16.7
July	3940	34	1580	1430	0.91	19.3
August	719	62	302	175	0.58	3.7
September	547	76	305	131	0.43	3.7
Annual	1070	197	682	258	0.38	100

Magnitude and probability of annual low flow based on period of record 1960-79

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	24	9.6	6.3	4.5	---	---
3	32	12	7.8	5.4	---	---
7	47	19	12	8.2	---	---
14	73	32	21	14	---	---
30	130	64	42	28	---	---
60	207	105	68	45	---	---
90	263	128	82	54	---	---
120	305	146	92	60	---	---
183	388	204	135	92	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1959-79

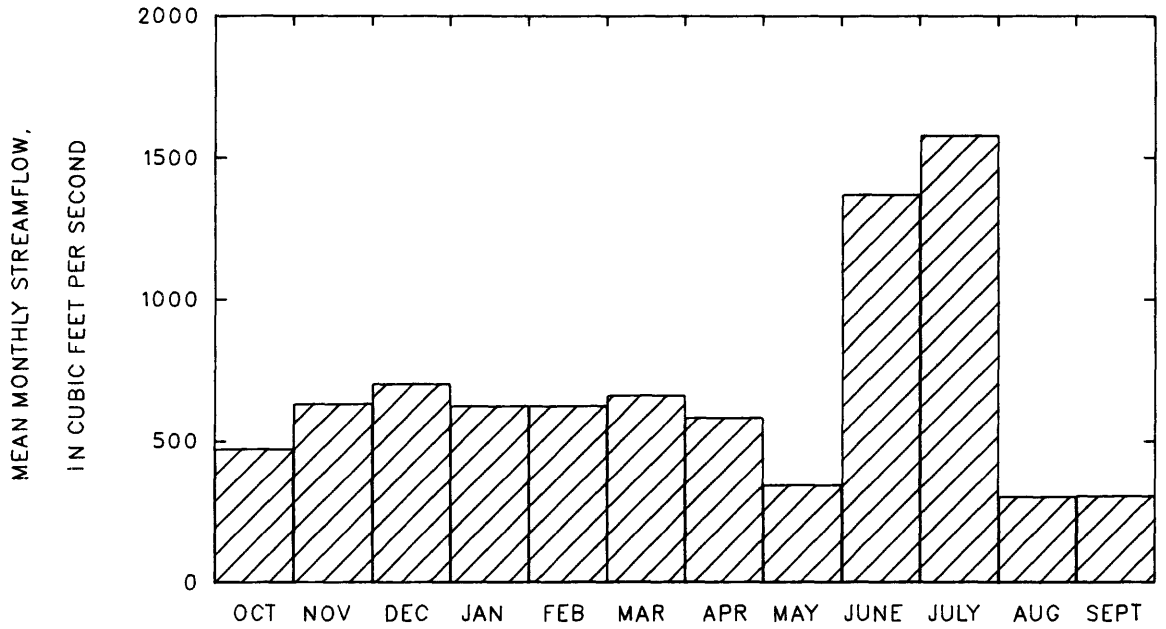
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	3540	7170	10200	14500	---	---
3	3270	6760	9780	14400	---	---
7	3010	6290	9160	13600	---	---
15	2570	5380	7770	11300	---	---
30	2000	4020	5650	8010	---	---
60	1510	2560	3290	4240	---	---
90	1280	1950	2370	2860	---	---

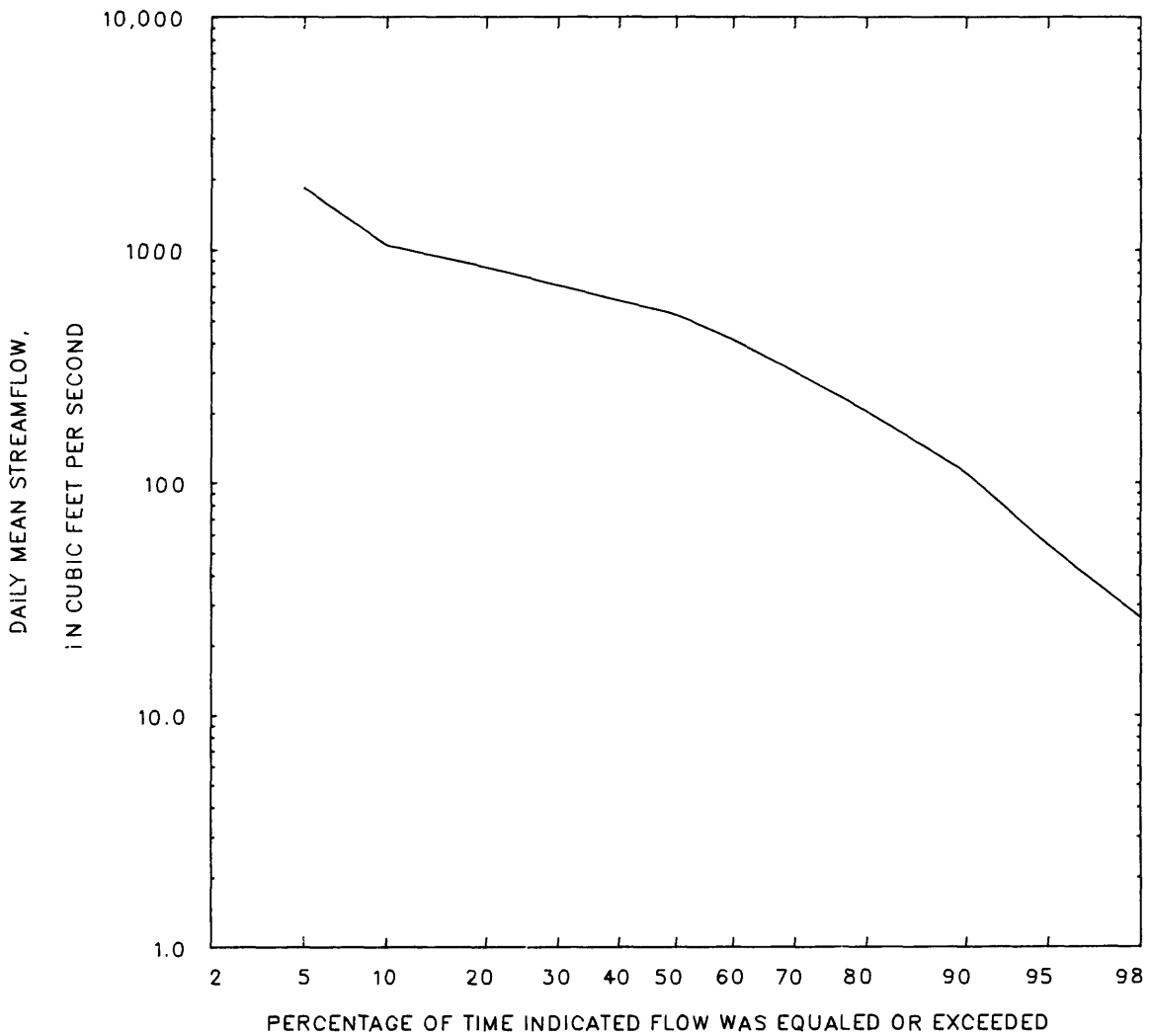
Duration of daily mean flow for period of record 1959-79

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
5540	1830	1040	925	841	704	605	529	412	301	203	110	54	26	17	13	8.3

STATION 06284400 PERIOD OF RECORD 1959–79

SHOSHONE RIVER NEAR GARLAND, WYO.





06284500 BITTER CREEK NEAR GARLAND, WYO.

LOCATION.--Lat 44°45'13", long 108°35'29", in SW¼SW¼SW¼ sec.7, T.55 N., R.97 W., Big Horn County, on left bank 100 ft downstream from bridge on county road, 1.0 mi upstream from mouth, 4.0 mi southeast of Garland, and 5.0 mi southwest of Byron.

DRAINAGE AREA.--80.5 mi^2.

PERIOD OF RECORD.--March 1950 to December 1953, October 1957 to September 1960, October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,080 ft, from topographic map.

REMARKS.--Flow is mainly return flow from Garland Canal system of Shoshone irrigation project.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,230 ft^3/s, July 4, 1975, gage height, 4.74 ft, from rating curve extended above 580 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 0.50 ft^3/s, January 30 to February 3, 1969.

Monthly and annual streamflow 1951-53, 1958-60, 1969-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	281	103	188	48	0.26	11.1
November	59	31	41	6.6	0.16	2.4
December	34	19	26	4.3	0.17	1.5
January	27	3.2	19	5.3	0.28	1.1
February	28	3.6	18	4.3	0.23	1.1
March	41	15	21	5.0	0.24	1.2
April	199	28	76	36	0.47	4.5
May	303	122	222	47	0.21	13.1
June	310	172	248	37	0.15	14.6
July	319	212	263	34	0.13	15.5
August	363	202	301	36	0.12	17.7
September	359	171	272	50	0.18	16.1
Annual	172	108	142	16	0.12	100

Magnitude and probability of annual low flow based on period of record 1951-53, 1959-60, 1970-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	15	11	8.8	6.8	---	---
3	16	12	9.2	7.0	---	---
7	16	13	10	7.8	---	---
14	17	14	11	9.4	---	---
30	18	15	13	11	---	---
60	18	16	15	14	---	---
90	19	17	16	15	---	---
120	21	19	18	17	---	---
183	52	45	41	39	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1951-53, 1958-60, 1969-84

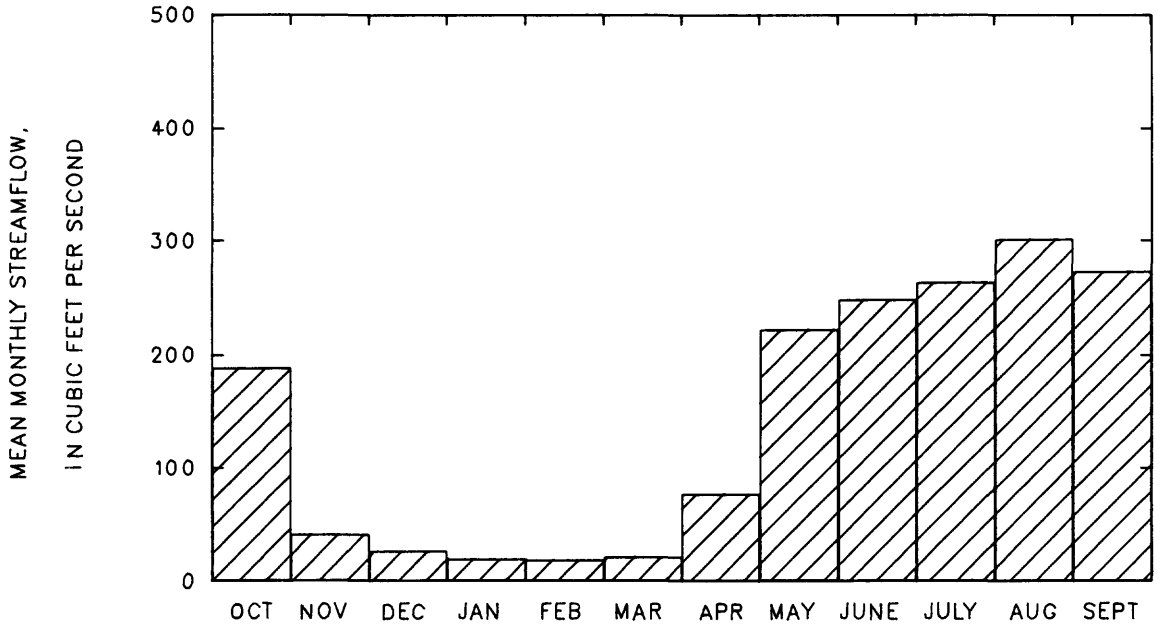
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	407	474	516	568	---	---
3	384	425	445	464	---	---
7	357	394	411	427	---	---
15	338	374	391	407	---	---
30	317	348	363	377	---	---
60	302	329	341	351	---	---
90	288	313	324	333	---	---

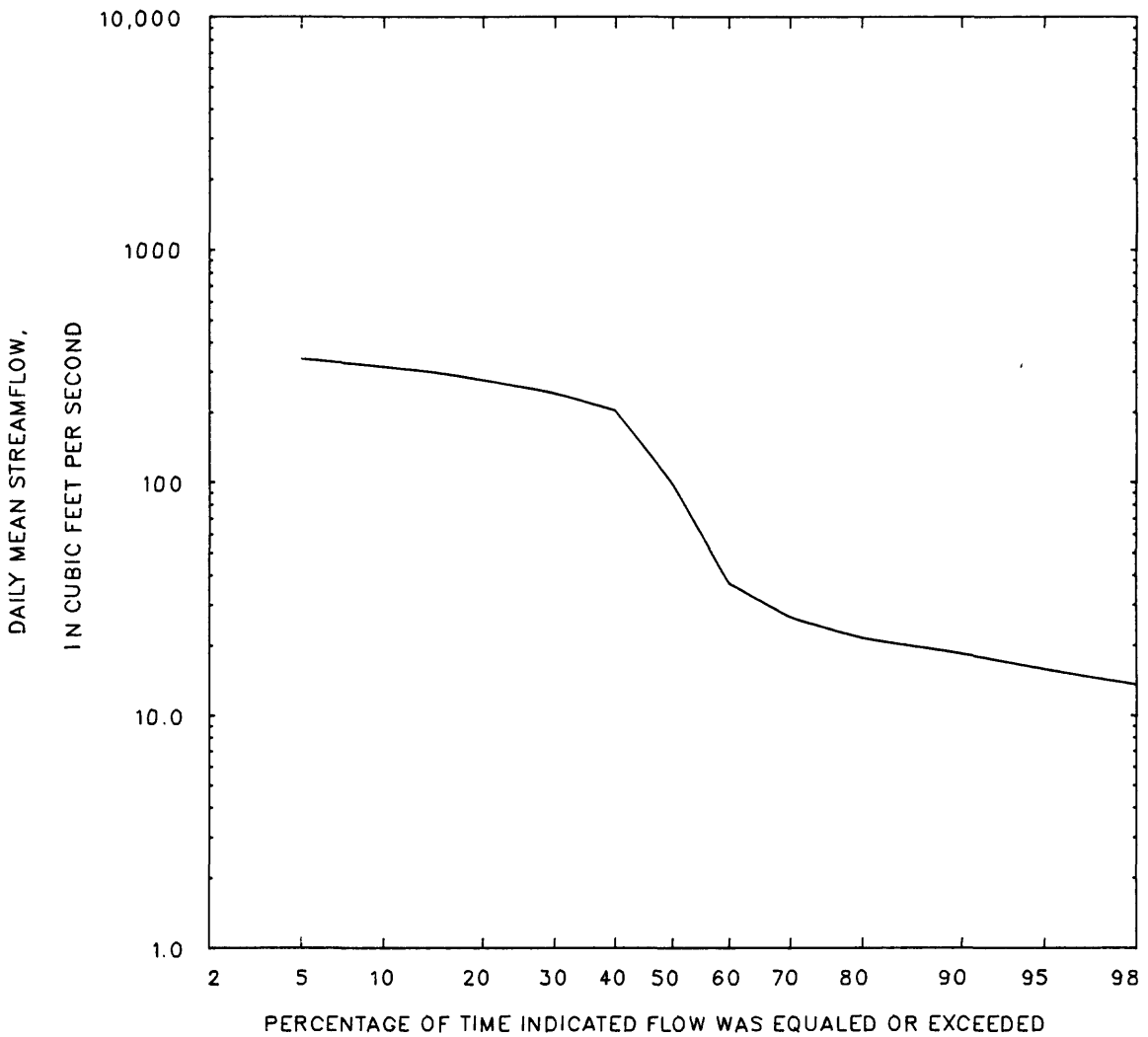
Duration of daily mean flow for period of record 1951-53, 1958-60, 1969-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
402	338	313	294	274	241	202	98	37	26	21	18	16	13	7.8	3.8	1.1

STATION 06284500 PERIOD OF RECORD 1951–53, 1958–60, 1969–84

BITTER CREEK NEAR GARLAND, WYO.





06284800 WHISTLE CREEK NEAR GARLAND, WYO.

LOCATION.--Lat 44°43'21", long 108°34'16", in NW¼NW¼NE¼ sec.30, T.55 N., R.97 W. Big Horn County, on right bank 300 ft upstream from Elk-Lovell Canal, 5.6 mi southeast of Garland, and 6.3 mi southwest of Byron.

DRAINAGE AREA.--101 mi^2.

PERIOD OF RECORD.--May 1958 to May 1960, October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,150 ft, from topographic map. Prior to May 31, 1960, at different datum.

REMARKS.--Part of flow is return flow from areas irrigated by diversions from the Shoshone River.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,780 ft^3/s, July 3, 1975, gage height, 12.44 ft, from floodmarks, on basis of slope-area measurement of peak flow; minimum daily, 0.05 ft^3/s, at site 6.5 mi upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of September 19, 1961, reached a discharge of 4,260 ft^3/s, at site 6.5 mi upstream.

Monthly and annual streamflow 1959, 1969-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	56	15	31	11	0.36	9.9
November	4.7	1.4	2.4	0.76	0.31	0.8
December	2.0	0.55	1.2	0.42	0.35	0.4
January	2.1	0.13	0.68	0.58	0.85	0.2
February	2.0	0.17	0.99	0.51	0.51	0.3
March	13	1.0	3.6	3.3	0.90	1.1
April	29	3.3	16	8.0	0.48	5.2
May	120	29	52	20	0.39	16.3
June	89	27	54	16	0.29	17.0
July	84	29	49	13	0.26	15.5
August	88	23	54	14	0.25	16.8
September	70	18	53	14	0.26	16.5
Annual	34	16	27	5.2	0.19	100

Magnitude and probability of annual low flow based on period of record 1960, 1970-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.21	0.10	0.07	0.05	---	---
3	0.23	0.11	0.07	0.05	---	---
7	0.26	0.13	0.09	0.07	---	---
14	0.33	0.18	0.13	0.10	---	---
30	0.44	0.25	0.19	0.14	---	---
60	0.56	0.35	0.28	0.22	---	---
90	0.82	0.55	0.44	0.36	---	---
120	1.2	0.85	0.70	0.59	---	---
183	6.6	5.2	4.6	4.1	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1959, 1969-84

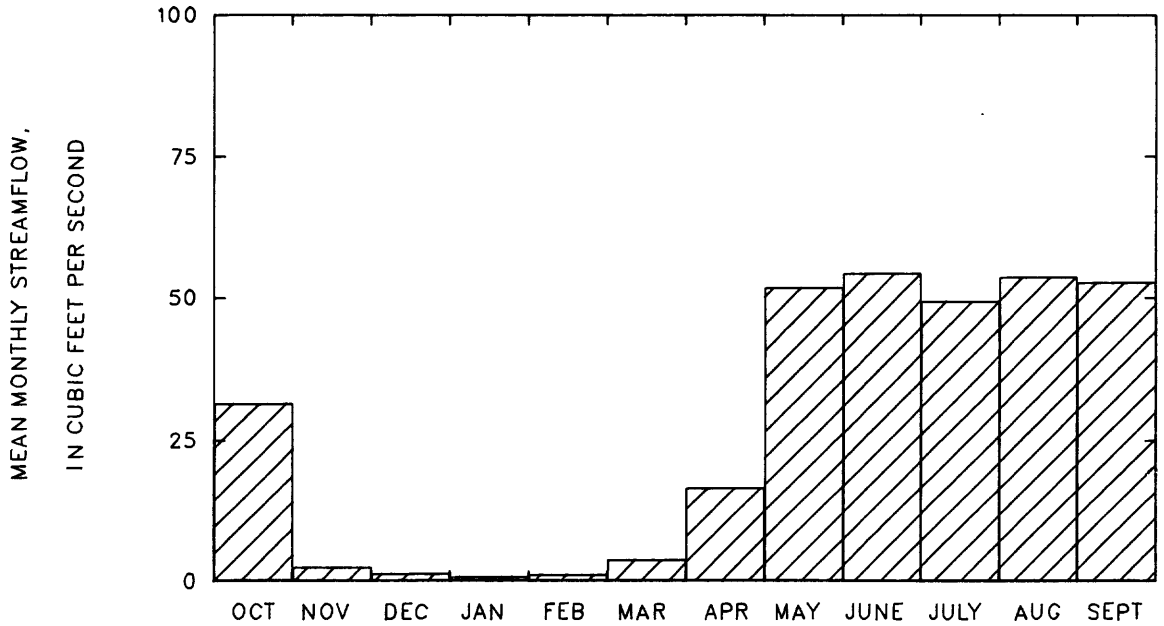
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	259	500	715	1050	---	---
3	148	263	371	557	---	---
7	99	152	200	278	---	---
15	79	108	130	162	---	---
30	66	87	101	119	---	---
60	59	72	79	87	---	---
90	57	67	73	78	---	---

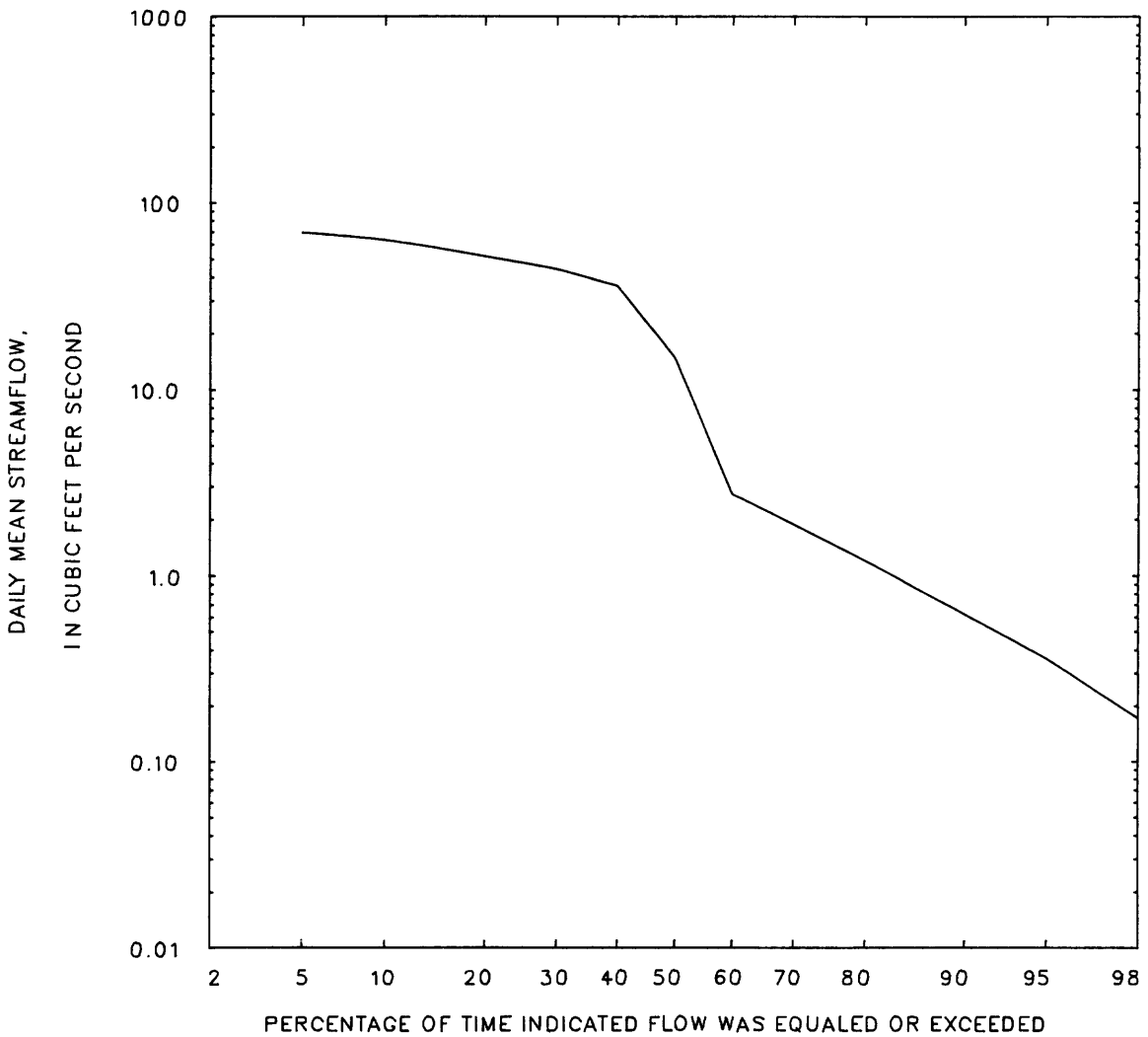
Duration of daily mean flow for period of record 1959, 1969-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
113	69	63	57	51	44	36	15	2.7	1.9	1.2	0.62	0.36	0.17	0.13	0.11	0.08

STATION 06284800 PERIOD OF RECORD 1959, 1969–84

WHISTLE CREEK NEAR GARLAND, WYO.





06285000 SHOSHONE RIVER AT BYRON, WYO.

LOCATION.--Lat 44°47', long 108°31', in sec.35, T.56 N., R.97 W., Big Horn County, on left bank at Byron, 450 ft downstream from highway bridge and 0.75 mi downstream from Coon Creek.

DRAINAGE AREA.--2,345 mi^2.

PERIOD OF RECORD.--January 1929 to September 1966.

GAGE.--Water-stage recorder. Altitude of gage is 3,960 ft, by barometer. Prior to April 23, 1932, chain gage at bridge 450 ft upstream at same datum.

REMARKS.--Diversions above station for irrigation of about 133,000 acres. Flow regulated by Buffalo Bill Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft^3/s, September 19, 1961, gage height, 7.57 ft, from rating curve extended above 9,500 ft^3/s by logarithmic plotting and velocity-area study; maximum gage height, 8.27 ft, February 4, 1963 (backwater from ice); minimum discharge, 29 ft^3/s, February 14, 1932 (discharge measurement).

Monthly and annual streamflow 1930-66

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1020	196	658	227	0.34	6.0
November	1850	153	710	347	0.49	6.4
December	1740	291	676	283	0.42	6.1
January	981	166	588	223	0.38	5.3
February	1080	144	567	244	0.43	5.1
March	1080	114	553	251	0.45	5.0
April	1410	122	545	262	0.48	4.9
May	2140	288	774	450	0.58	7.0
June	6460	371	2510	1650	0.66	22.8
July	5720	344	1890	1300	0.69	17.1
August	2600	313	828	442	0.53	7.5
September	2300	293	718	360	0.50	6.5
Annual	1650	422	918	273	0.30	100

Magnitude and probability of annual low flow based on period of record 1930-66

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	235	136	92	63	39	---
3	252	154	111	82	57	---
7	280	175	129	97	67	---
14	308	197	147	113	80	---
30	354	233	179	141	104	---
60	411	285	230	191	153	---
90	446	319	264	224	185	---
120	479	349	293	253	213	---
183	550	412	350	304	258	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1930-66

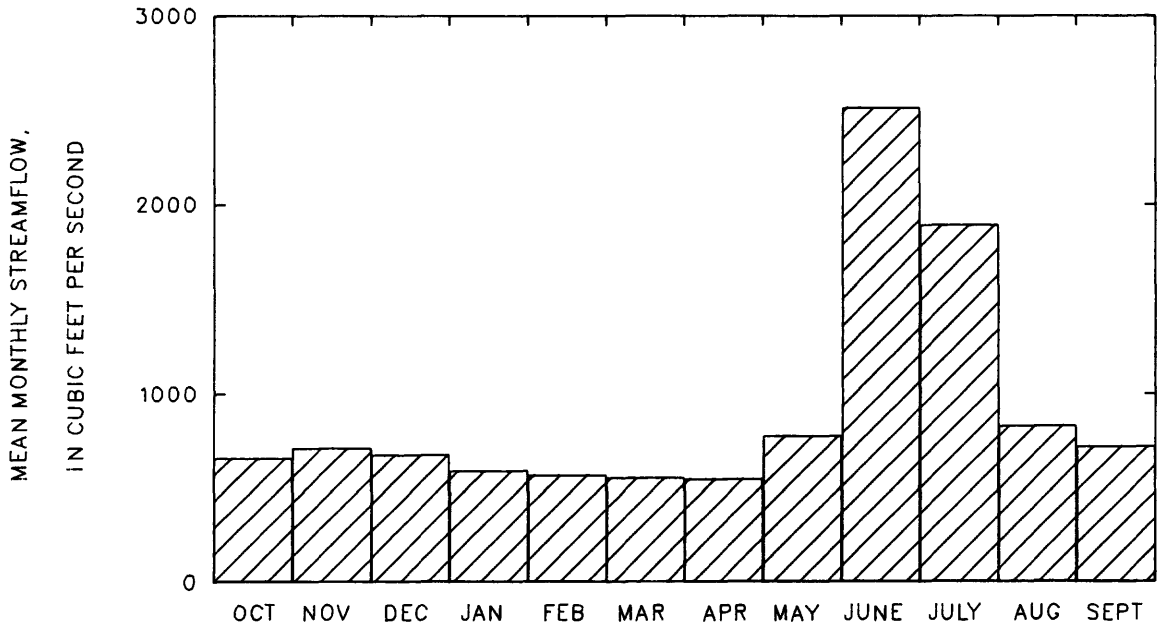
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	5580	8620	10200	11800	12800	---
3	5020	7980	9700	11600	12700	---
7	4500	7220	8860	10700	11900	---
15	3820	6160	7600	9250	10300	---
30	3110	4990	6160	7500	8410	---
60	2250	3410	4120	4950	5500	---
90	1810	2620	3110	3670	4050	---

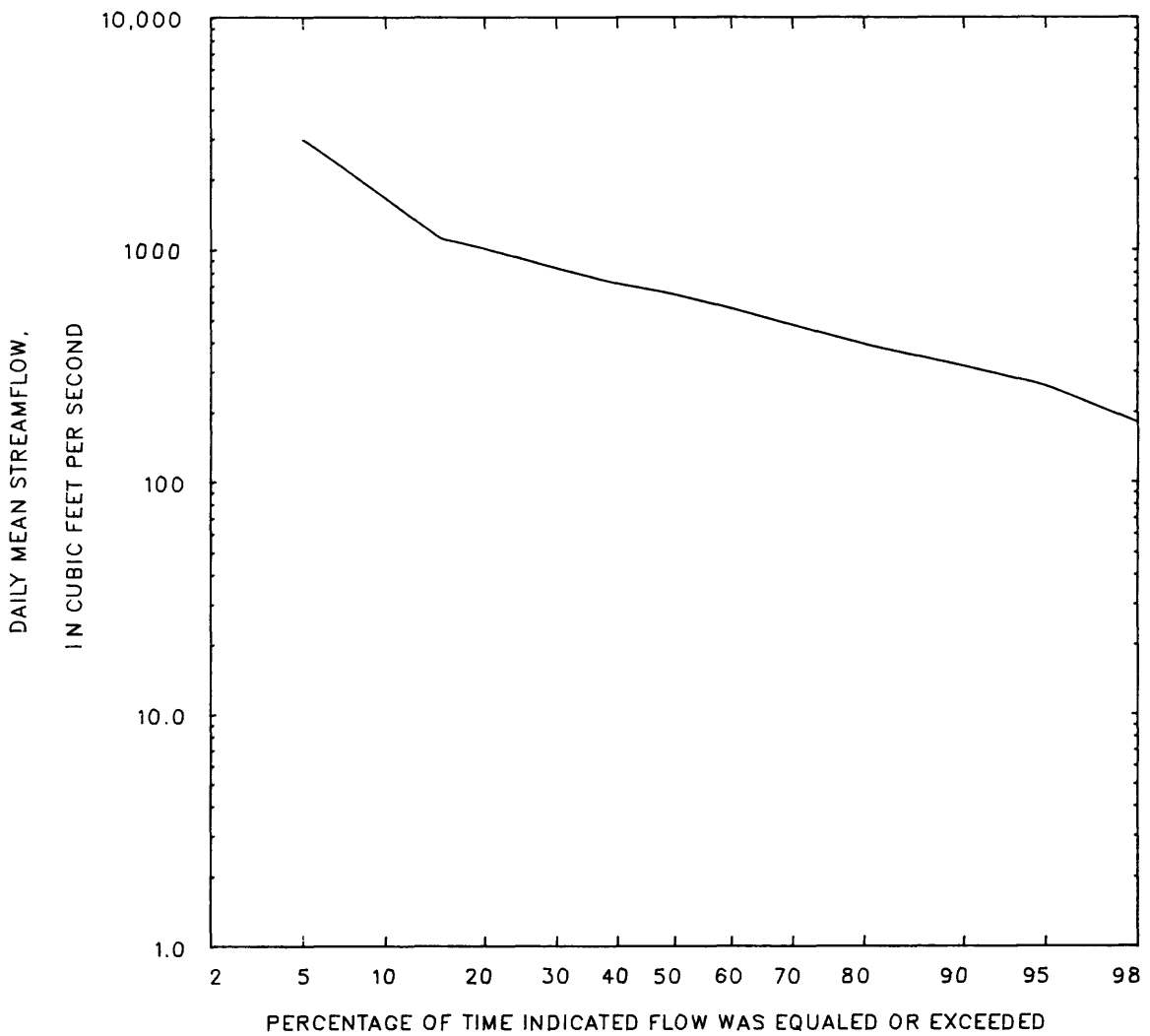
Duration of daily mean flow for period of record 1930-66

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
6190	2960	1650	1110	1000	826	709	640	558	472	390	315	259	180	144	118	68

STATION 06285000 PERIOD OF RECORD 1930–66

SHOSHONE RIVER AT BYRON, WYO.





06285100 SHOSHONE RIVER NEAR LOVELL, WYO.

LOCATION.--Lat 44°50'20", long 108°26'00", in NW¼NW¼ sec.16, T.56 N., R.96 W., Big Horn County, on right bank 30 ft upstream from bridge on U.S. Highway 310 and 1.5 mi west of Lovell.

DRAINAGE AREA.--2,350 mi^2, approximately.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,850 ft, from topographic map. Prior to October 1, 1976, at datum 2.00 ft higher, October 1, 1976, to September 30, 1980, at datum 1.00 ft higher.

REMARKS.--Flow regulated by Buffalo Bill Reservoir. Natural flow of stream affected by storage reservoirs, power development, diversions above station for irrigation of about 143,000 acres, of which about 8,000 acres are below station, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,400 ft^3/s, June 10, 1981, gage height, 9.16 ft present datum; maximum gage height, 10.09 ft, February 3, 1972 (backwater from ice) present datum; minimum daily discharge, 27 ft^3/s, May 31, 1977.

Monthly and annual streamflow 1967-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1250	413	868	215	0.25	7.2
November	1150	462	808	195	0.24	6.7
December	1170	431	772	223	0.29	6.4
January	1070	417	699	190	0.27	5.8
February	1140	373	707	192	0.27	5.8
March	1130	317	751	223	0.30	6.2
April	1880	248	792	405	0.51	6.5
May	1910	193	804	529	0.66	6.6
June	4940	203	2130	1320	0.62	17.6
July	4690	149	2180	1450	0.67	18.0
August	1310	207	798	250	0.31	6.6
September	1310	245	812	266	0.33	6.7
Annual	1310	482	1010	218	0.22	100

Magnitude and probability of annual low flow based on period of record 1968-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	239	118	72	44	---	---
3	279	149	96	62	---	---
7	327	189	127	86	---	---
14	387	245	177	129	---	---
30	479	322	244	186	---	---
60	596	410	314	243	---	---
90	673	470	356	270	---	---
120	713	498	376	283	---	---
183	772	553	425	325	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1967-84

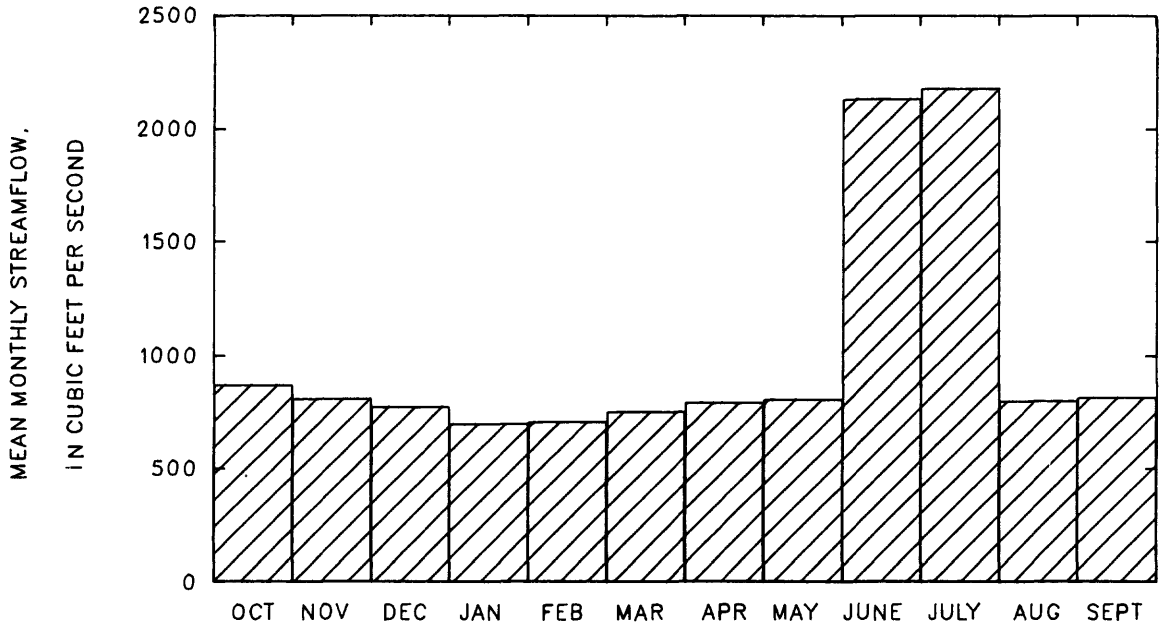
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	5310	8990	11500	14700	---	---
3	4840	8340	10700	13800	---	---
7	4320	7430	9580	12300	---	---
15	3840	6290	7870	9750	---	---
30	2970	4770	5970	7470	---	---
60	2180	3200	3850	4650	---	---
90	1800	2500	2930	3440	---	---

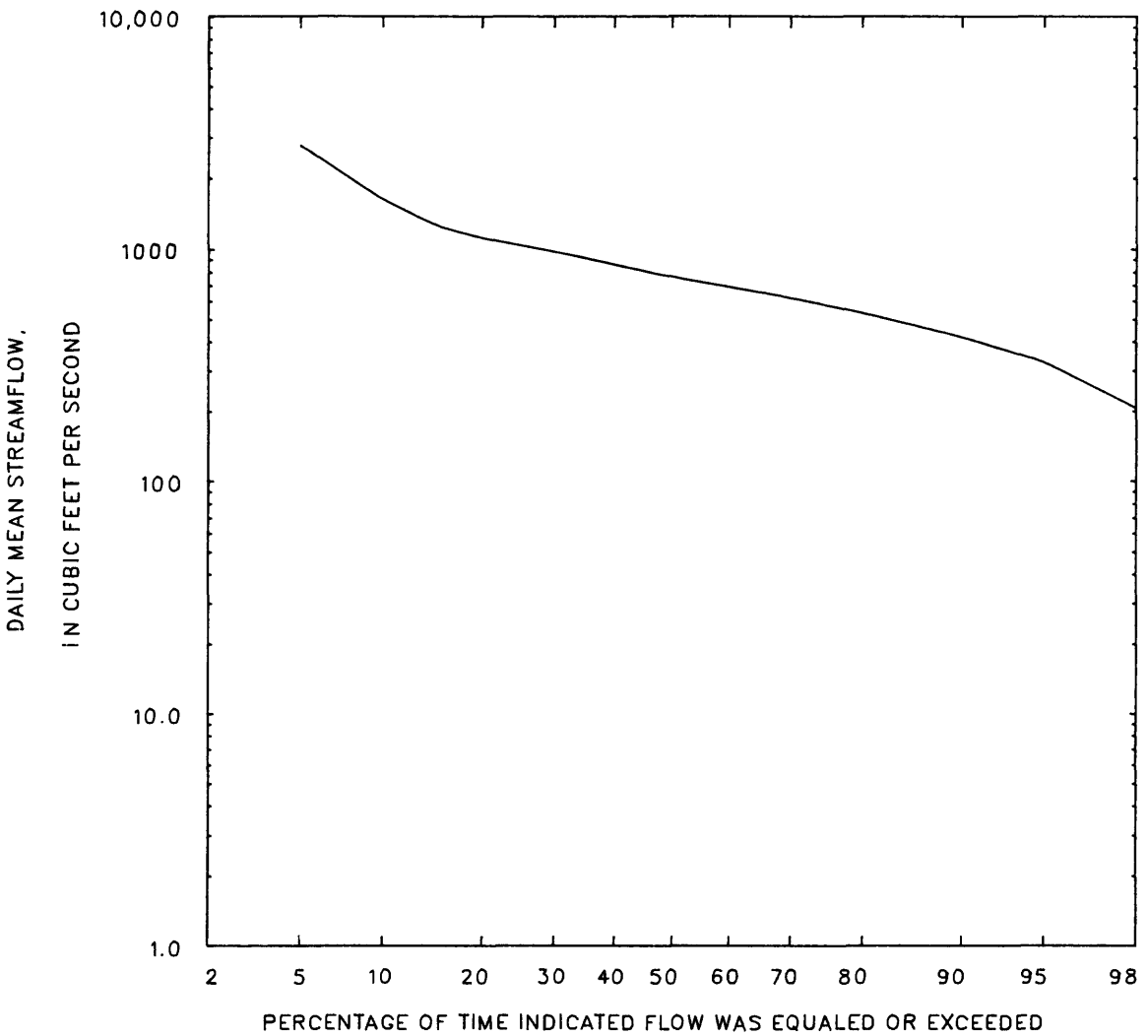
Duration of daily mean flow for period of record 1967-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
5620	2750	1620	1250	1110	972	856	760	687	616	530	418	327	206	145	104	63

STATION 06285100 PERIOD OF RECORD 1967–84

SHOSHONE RIVER NEAR LOVELL, WYO..





06285400 SAGE CREEK AT SIDON CANAL, NEAR DEAVER, WYO.

LOCATION.--Lat 44°53'08", long 108°33'01", in NE¼NE¼NW¼ sec.34, T.57 N., R.97 W., Big Horn County, on left bank 300 ft downstream from Polecat Creek, 800 ft upstream from Sidon Canal crossing, and 2.4 mi east of Deaver.

DRAINAGE AREA.--341 mi^2.

PERIOD OF RECORD.--June 1958 to May 1960, October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,020 ft, from topographic map.

REMARKS.--Flow is mostly return flow from land irrigated by canals diverting water from Shoshone River.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,250 ft^3/s, June 8, 1958, gage height, 9.22 ft, from floodmark, from rating curve extended above 500 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 0.50 ft^3/s, February 2-6, February 21 to March 5, 1960.

Monthly and annual streamflow 1959, 1969-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	143	64	109	21	0.19	13.9
November	51	23	31	6.7	0.22	3.9
December	28	14	19	3.3	0.17	2.4
January	22	9.2	14	3.4	0.24	1.8
February	22	7.4	16	4.8	0.31	2.0
March	60	15	27	11	0.39	3.4
April	76	25	52	12	0.24	6.6
May	166	51	96	29	0.31	12.3
June	168	41	106	29	0.27	13.6
July	111	51	78	18	0.23	10.0
August	138	66	106	21	0.20	13.5
September	171	76	128	22	0.17	16.4
Annual	75	48	65	7.4	0.11	100

Magnitude and probability of annual low flow based on period of record 1970-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	9.1	6.8	5.7	4.9	---	---
3	10	7.5	6.2	5.2	---	---
7	11	8.0	6.6	5.6	---	---
14	12	8.9	7.3	6.1	---	---
30	13	9.9	8.4	7.2	---	---
60	14	11	10	9.0	---	---
90	16	13	12	11	---	---
120	18	15	14	13	---	---
183	37	32	30	28	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1959, 1969-84

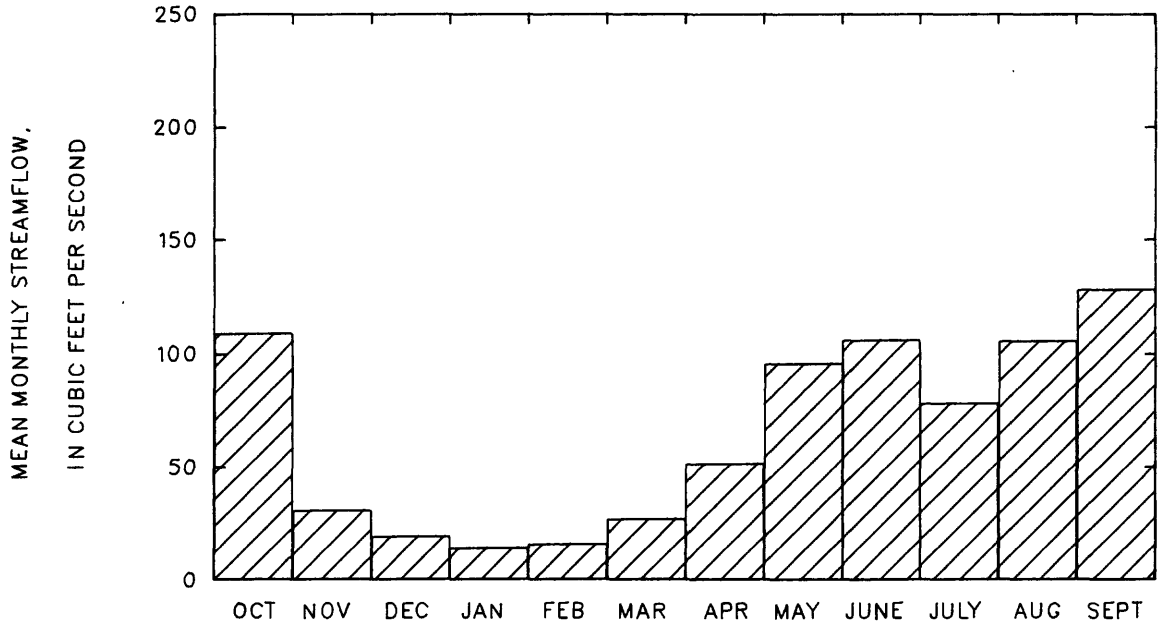
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	207	277	349	477	---	---
3	194	250	304	395	---	---
7	186	221	245	276	---	---
15	171	194	207	220	---	---
30	143	156	163	170	---	---
60	124	136	140	144	---	---
90	111	123	127	130	---	---

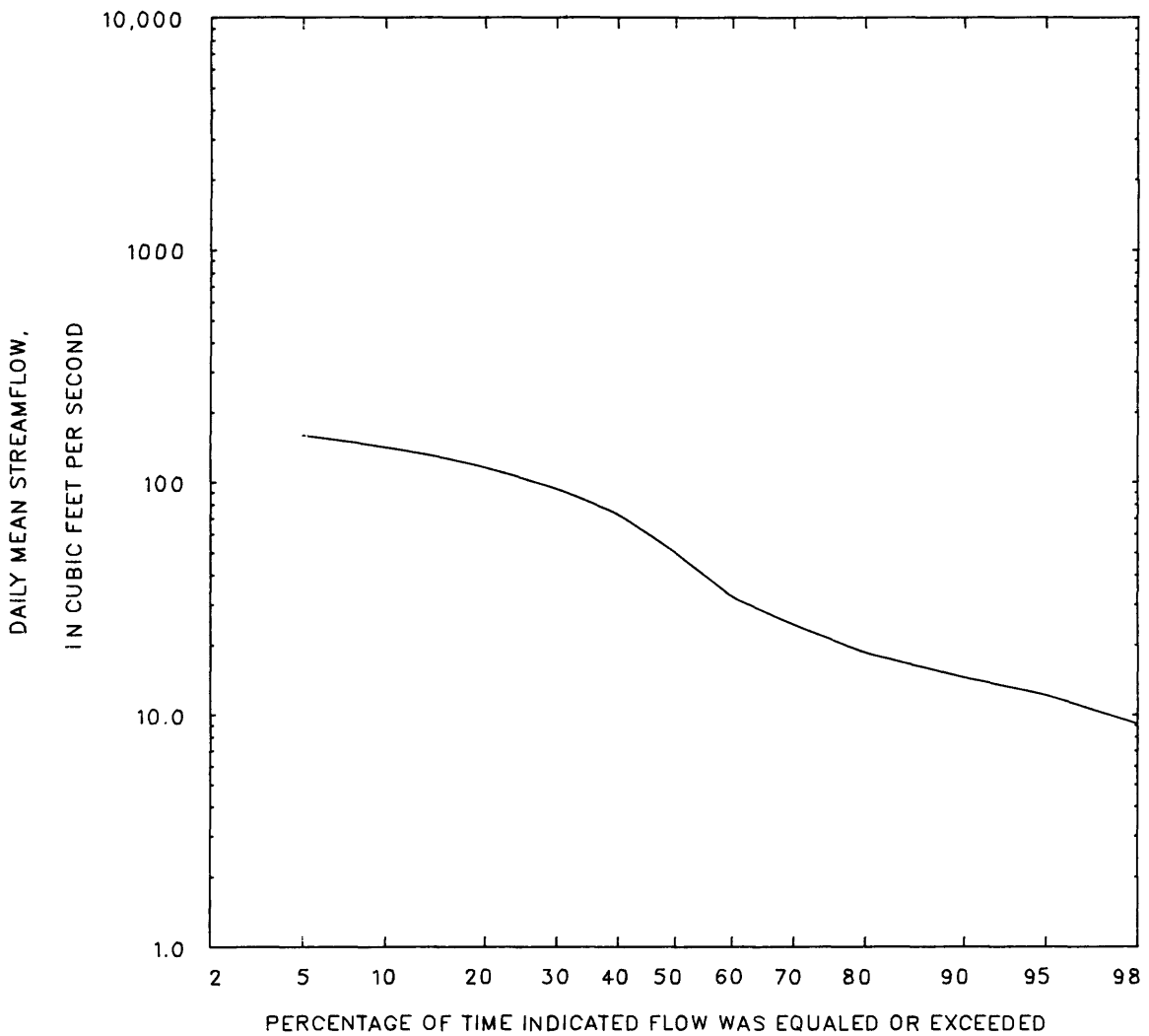
Duration of daily mean flow for period of record 1959, 1969-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
202	158	141	127	115	93	73	50	32	24	18	14	12	9.1	7.6	6.2	4.5

STATION 06285400 PERIOD OF RECORD 1959, 1969–84

SAGE CREEK AT SIDON CANAL, NEAR DEAVER, WYO.





06286200 SHOSHONE RIVER AT KANE, WYO.

LOCATION.--Lat 44°51'45", long 108°12'30", in E½ sec. 6, T.56 N., R.94 W., Big Horn County, on left abutment of county bridge, 1 mi north of Kane, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--2,989 mi².

PERIOD OF RECORD.--October 1957 to September 1968.

GAGE.--Water-stage recorder with pressure-recording bubbler system. Datum of gage is 3,635.25 ft. October 1957 to October 21, 1964, June 22 to November 18, 1965, at present site at datum 0.10 ft higher. October 22, 1964, to June 21, 1965, May 1, to August 13, 1967, water-stage recorder at sites 0.25 mi upstream at different datums. November 19, 1965, to April 30, 1967, at present site and datum.

REMARKS.--Natural flow of stream affected by transbasin diversions, storage resevoirs, power development, diversions for irrigation, and return flow from irrigated areas. Major regulation by Buffalo Bill Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 13,200 ft³/s, September 19, 1961, gage height, 10.34 ft; minimum daily, 120 ft³/s, January 21-23, 1959.

Monthly and annual streamflow 1958-68

Month	Maximum (ft³/s)	Minimum (ft³/s)	Mean (ft³/s)	Standard deviation (ft³/s)	Coefficient of variation	Percent of annual runoff
October	1620	827	1250	186	0.15	9.1
November	1370	493	979	271	0.28	7.2
December	1080	432	809	213	0.26	5.9
January	1050	286	698	223	0.32	5.1
February	1300	198	784	339	0.43	5.7
March	1100	277	818	293	0.36	6.0
April	1220	317	830	314	0.38	6.1
May	1230	423	719	254	0.35	5.3
June	3990	561	2080	1390	0.67	15.3
July	4870	550	2130	1720	0.81	15.6
August	3140	854	1310	671	0.51	9.6
September	2230	777	1250	375	0.30	9.1
Annual	1610	606	1140	352	0.31	100

Magnitude and probability of annual low flow based on period of record 1959-68

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	302	201	158	128	---	---
3	335	215	164	128	---	---
7	363	232	177	139	---	---
14	413	256	191	146	---	---
30	488	307	228	172	---	---
60	549	373	290	230	---	---
90	591	421	338	275	---	---
120	631	471	394	336	---	---
183	806	652	568	499	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft³/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1958-68

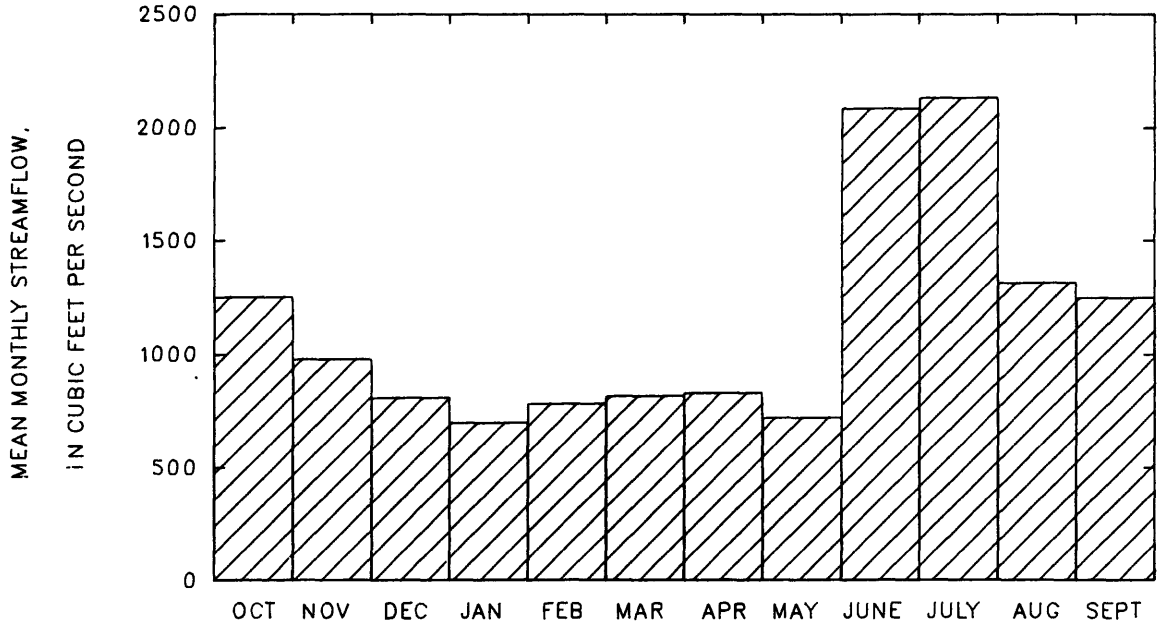
Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	5450	9310	12100	---	---	---
3	4790	8450	11300	---	---	---
7	4160	7520	10300	---	---	---
15	3480	6270	8560	---	---	---
30	2860	5020	6770	---	---	---
60	2140	3430	4390	---	---	---
90	1790	2730	3390	---	---	---

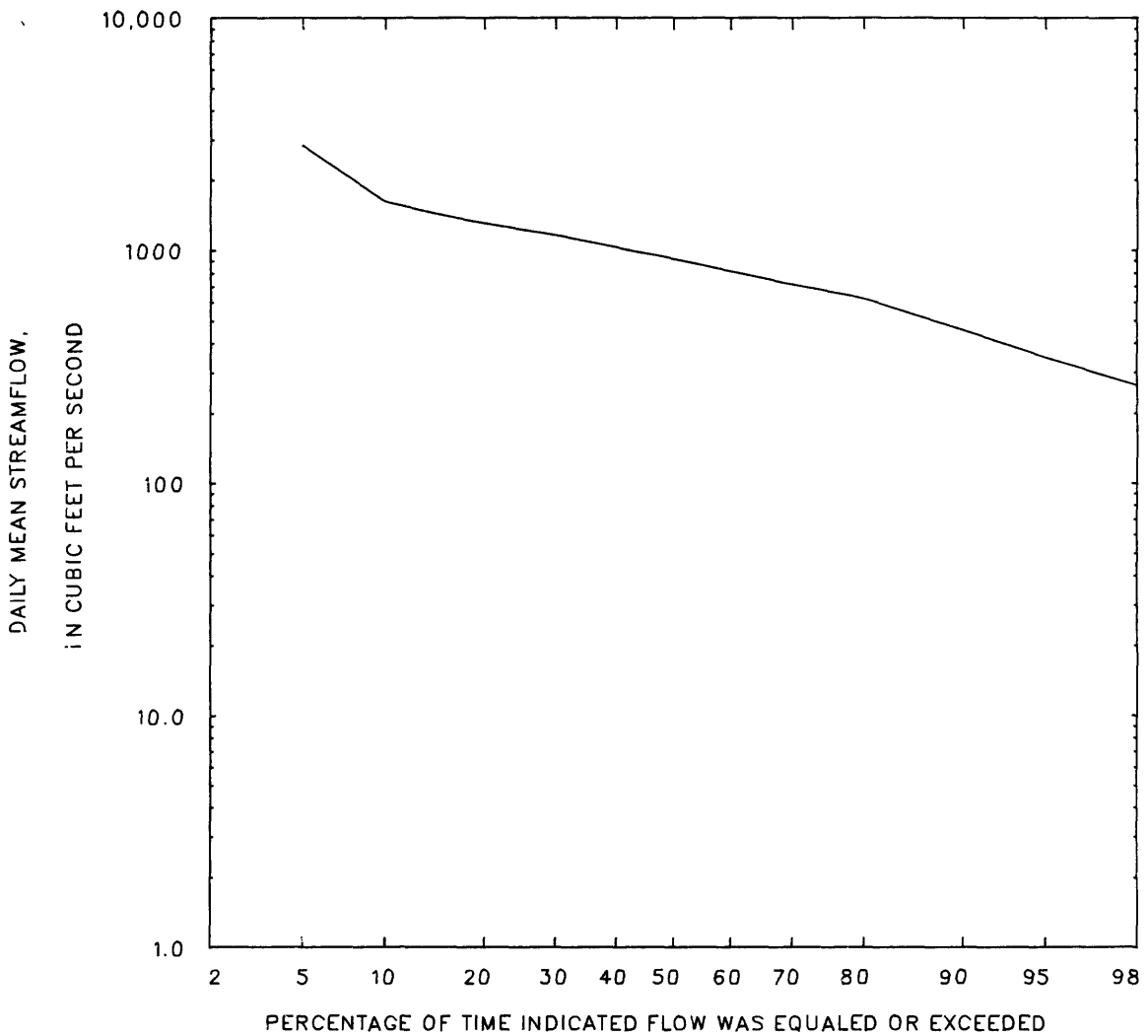
Duration of daily mean flow for period of record 1958-68

Discharge, in ft³/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
6750	2820	1610	1410	1290	1150	1030	913	810	711	619	454	345	262	227	155	132

STATION 06286200 PERIOD OF RECORD 1958–68

SHOSHONE RIVER AT KANE, WYO.





06287000 BIGHORN RIVER NEAR ST. XAVIER, MONT.
(before construction of Bighorn Dam)

LOCATION.--Lat 45°19'00", long 107°55'05", in NW¼NE¼ sec.16, T.6 S., R.31 E., Big Horn County, on right bank 800 ft downstream from Yellowtail afterbay dam, 1,500 ft downstream from Lime Kiln Creek, 14 mi southwest of St. Xavier, and at mile 83.9.

DRAINAGE AREA.--19,667 mi^2. Area at site used prior to April 16, 1963, 19,626 mi^2.

PERIOD OF RECORD.--October 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,158.38 ft, from levels by U.S. Army Corps of Engineers. Prior to April 16, 1963, and June 13, 1964, to March 31, 1965, water-stage recorder at site 1.2 mi upstream at different datum. April 1, 1965, to July 31, 1966, water-stage recorder at site 1,300 ft downstream at present datum.

REMARKS.--Figures of discharge given herein are sum of river flow and flow of Bighorn Canal. Some regulation by 14 reservoirs in Wyoming with combined capacity of 1,400,000 acre-ft and complete regulation by Bighorn Lake since November 3, 1965. Diversions for irrigation of about 375,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,400 ft^3/s, June 16, 1935; minimum 49 ft^3/s, March 29, 1966, result of discharge measurement (dam closure); minimum daily, 112 ft^3/s, April 2, 1967.

Monthly and annual streamflow 1935-64

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	4030	1570	2770	685	0.25	6.7
November	4000	1360	2580	630	0.24	6.2
December	3310	1100	2140	615	0.29	5.2
January	3500	1090	1930	590	0.31	4.6
February	3760	888	2110	717	0.34	5.1
March	4540	1400	2630	764	0.29	6.3
April	4800	1230	2610	850	0.33	6.3
May	8740	1630	4530	1770	0.39	10.9
June	17900	2750	9570	4400	0.46	23.0
July	14000	1140	5740	3590	0.63	13.8
August	4990	1300	2430	991	0.41	5.8
September	3930	1330	2560	711	0.28	6.1
Annual	5060	1710	3470	843	0.24	100

Magnitude and probability of annual low flow
based on period of record 1936-64

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	891	605	482	394	310	---
3	991	741	635	559	484	---
7	1150	928	834	766	698	---
14	1350	1090	974	887	798	---
30	1550	1270	1130	1020	907	---
60	1710	1390	1230	1120	993	---
90	1860	1510	1350	1220	1090	---
120	2030	1660	1480	1340	1200	---
183	2230	1830	1640	1480	1320	---

Magnitude and probability of instantaneous peak flow
based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow
based on period of record 1935-64

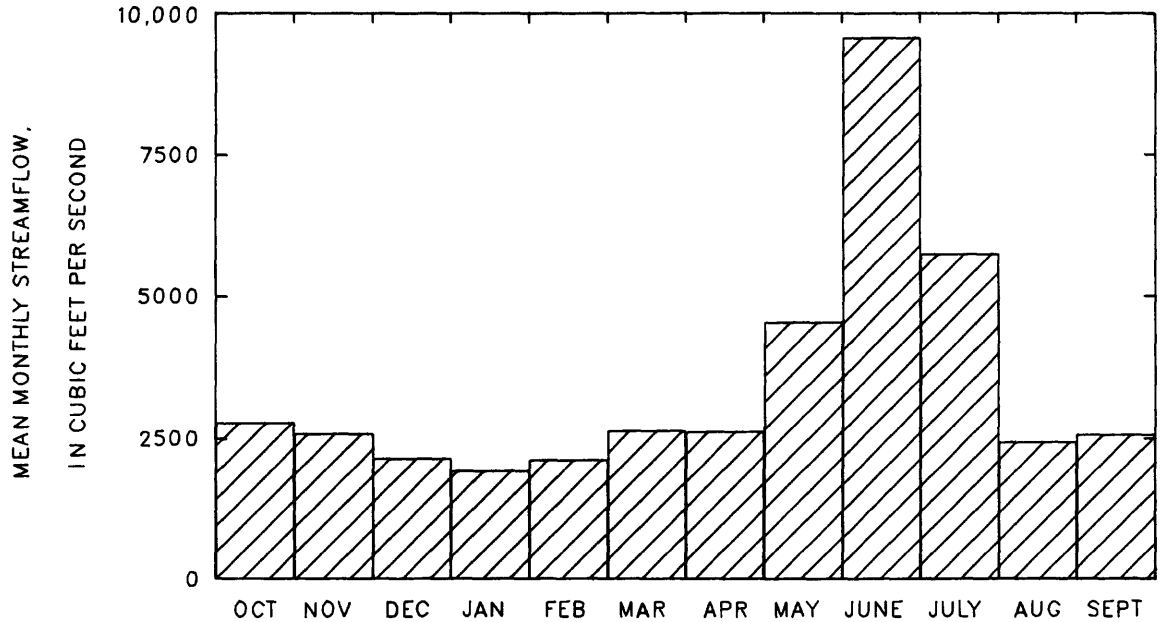
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	14500	21100	25600	31600	36100	---
3	13300	20000	24600	30600	35300	---
7	12200	18600	23100	29000	33500	---
15	10900	16700	20600	25500	29200	---
30	9630	14700	17900	21700	24500	---
60	7730	11500	13900	16600	18500	---
90	6420	9250	11000	13000	14300	---

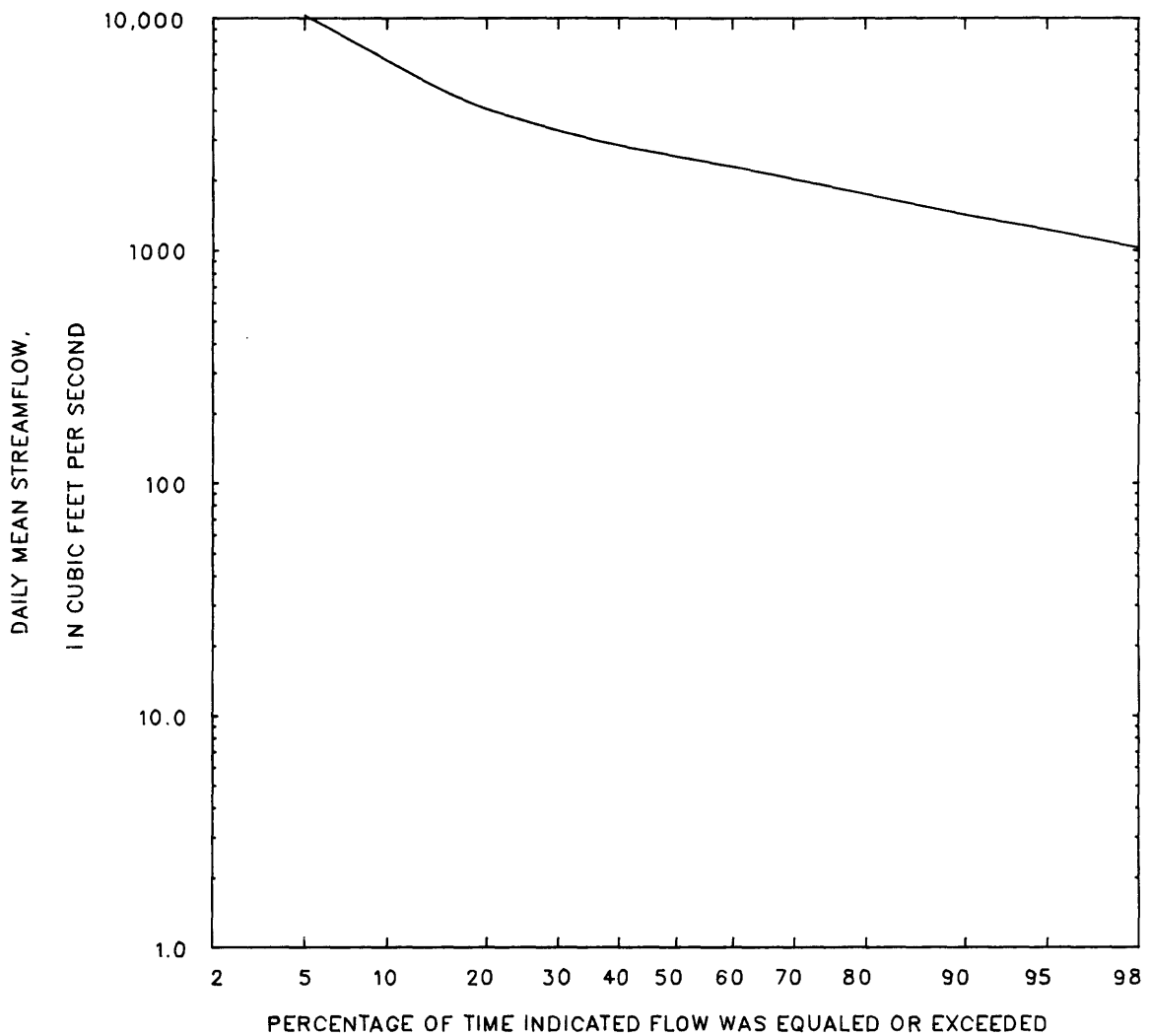
Duration of daily mean flow for period of record 1935-64

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
7900	10300	6580	4850	4030	3260	2810	2520	2270	2010	1730	1410	1220	1020	893	812	574

STATION 06287000 PERIOD OF RECORD 1935–64

BIGHORN RIVER NEAR ST. XAVIER, MONT. (BEFORE CONSTRUCTION OF BIGHORN DAM)





06287000 BIGHORN RIVER NEAR ST. XAVIER, MONT.
(after construction of Bighorn Dam)

Monthly and annual streamflow 1965-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	5140	1220	3320	1010	0.30	7.3
November	5150	857	3480	1320	0.38	7.6
December	5000	1880	3520	794	0.23	7.7
January	5270	1900	3420	758	0.22	7.5
February	4380	1400	3400	684	0.20	7.4
March	4810	327	3400	1120	0.33	7.4
April	6680	678	3310	1510	0.46	7.2
May	6990	900	3480	1580	0.45	7.6
June	11800	1080	5600	2540	0.45	12.3
July	18900	1390	6290	4300	0.68	13.8
August	6490	1260	3430	1270	0.37	7.5
September	4540	1070	3020	850	0.28	6.6
Annual	4950	1570	3810	827	0.22	100

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual low flow based on period of record 1966-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	838	379	231	146	---	---
3	1090	485	291	182	---	---
7	1420	667	409	259	---	---
14	1520	733	457	295	---	---
30	2020	1180	808	558	---	---
60	2300	1540	1180	924	---	---
90	2740	1930	1510	1190	---	---
120	3030	2170	1720	1360	---	---
183	3330	2430	1910	1510	---	---

Magnitude and probability of annual high flow based on period of record 1965-84

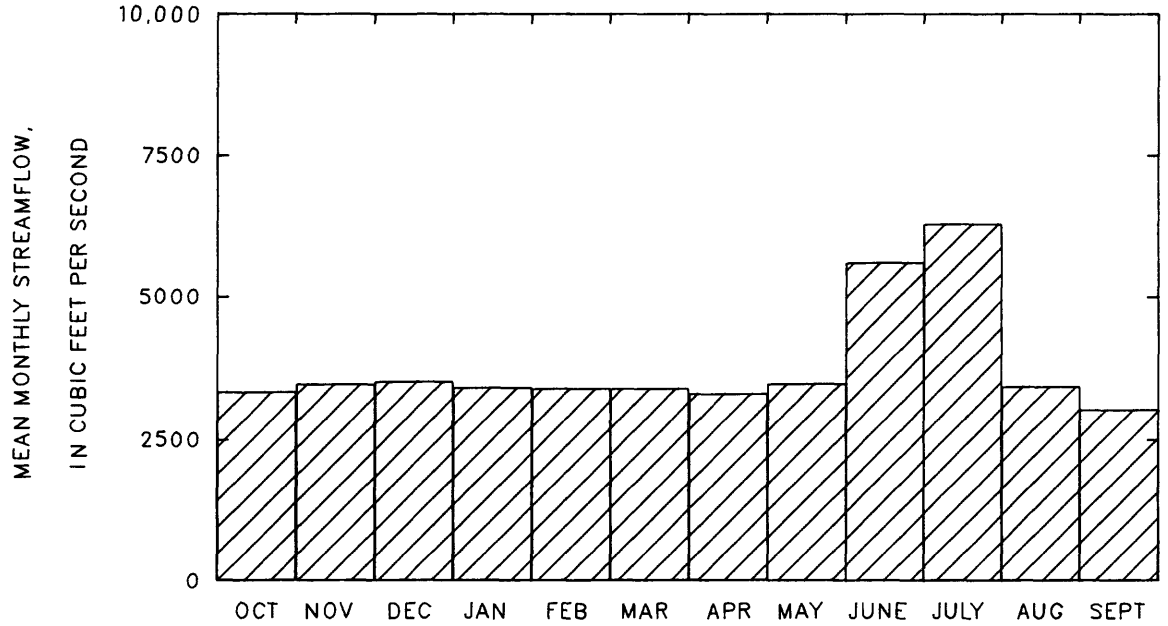
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	8670	13600	17600	23800	---	---
3	8420	13000	16900	22800	---	---
7	8040	12300	15900	21500	---	---
15	7550	11400	14600	19600	---	---
30	6860	10100	12800	17100	---	---
60	5970	8380	10100	12500	---	---
90	5370	7200	8450	10100	---	---

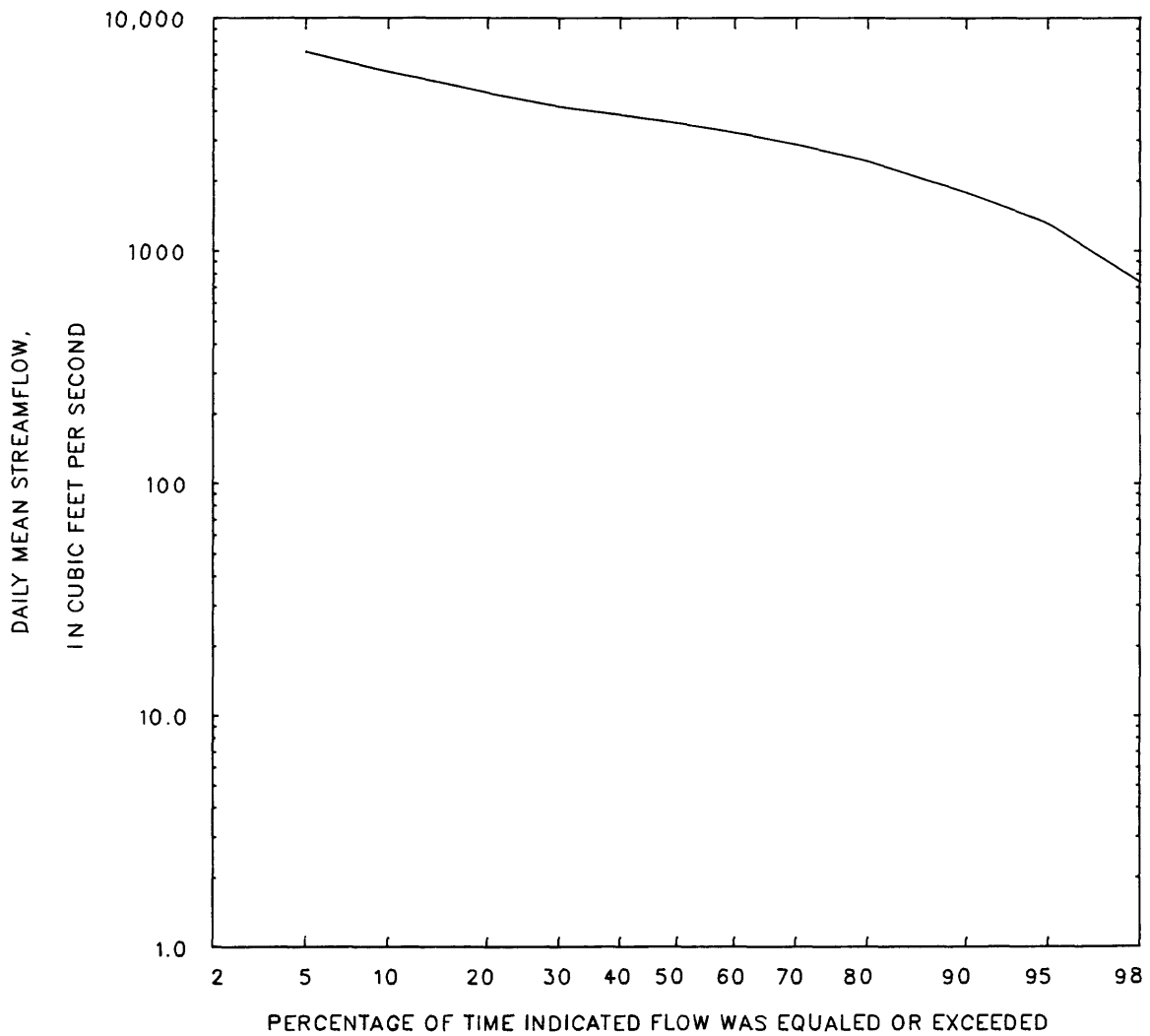
Duration of daily mean flow for period of record 1965-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
12700	7130	5850	5240	4740	4150	3830	3540	3220	2860	2430	1770	1310	731	510	329	171

STATION 06287000 PERIOD OF RECORD 1965–84

BIGHORN RIVER NEAR ST. XAVIER, MONT. (AFTER CONSTRUCTION OF BIGHORN DAM)





06289000 LITTLE BIGHORN RIVER AT STATE LINE, NEAR WYOLA, MONT.

LOCATION.--Lat 45°00'25", long 107°36'52", in SW¼NW¼ sec.36, T.9 S., R.33 E., Bighorn County, on right bank 20 ft downstream from county bridge, 0.5 mi north of Wyoming-Montana State line, 1.0 mi downstream from West Fork, 13 mi southwest of Wyola, and at mile 115.2.

DRAINAGE AREA.--193 mi^2.

PERIOD OF RECORD.--March 1939 to current year. Prior to October 1940, published as Little Horn River at State line, near Wyola.

GAGE.--Water-stage recorder. Altitude of gage is 4,350 ft, from topographic map.

REMARKS.--Diversions for irrigation of 163 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,730 ft^3/s, June 3, 1944, gage height, 4.87 ft, from rating curve extended above 1,400 ft^3/s; maximum gage height, 5.93 ft, June 9, 1944 (log jam); minimum discharge, 21 ft^3/s, December 27, 1954, result of freezeup.

Monthly and annual streamflow 1940-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	120	64	89	16	0.18	4.8
November	104	57	78	13	0.16	4.2
December	91	52	70	10	0.15	3.7
January	85	44	64	9.1	0.14	3.4
February	88	50	63	8.2	0.13	3.4
March	86	49	63	8.3	0.13	3.4
April	172	51	85	26	0.31	4.6
May	533	127	326	99	0.30	17.5
June	1130	211	559	247	0.44	30.1
July	689	101	235	103	0.44	12.6
August	228	70	128	31	0.25	6.9
September	151	68	102	20	0.20	5.5
Annual	253	90	155	37	0.24	100

Magnitude and probability of annual low flow based on period of record 1940-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	41	32	29	26	23	21
3	44	36	32	29	26	24
7	51	42	38	34	30	28
14	55	48	43	40	36	34
30	59	52	49	46	44	42
60	60	54	52	50	47	46
90	62	56	53	51	49	47
120	64	58	54	52	49	48
183	71	63	59	56	53	51

Magnitude and probability of instantaneous peak flow based on 46 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1070	1490	1790	2170	2460	2760

Weighted skew = 0.105

Magnitude and probability of annual high flow based on period of record 1940-84

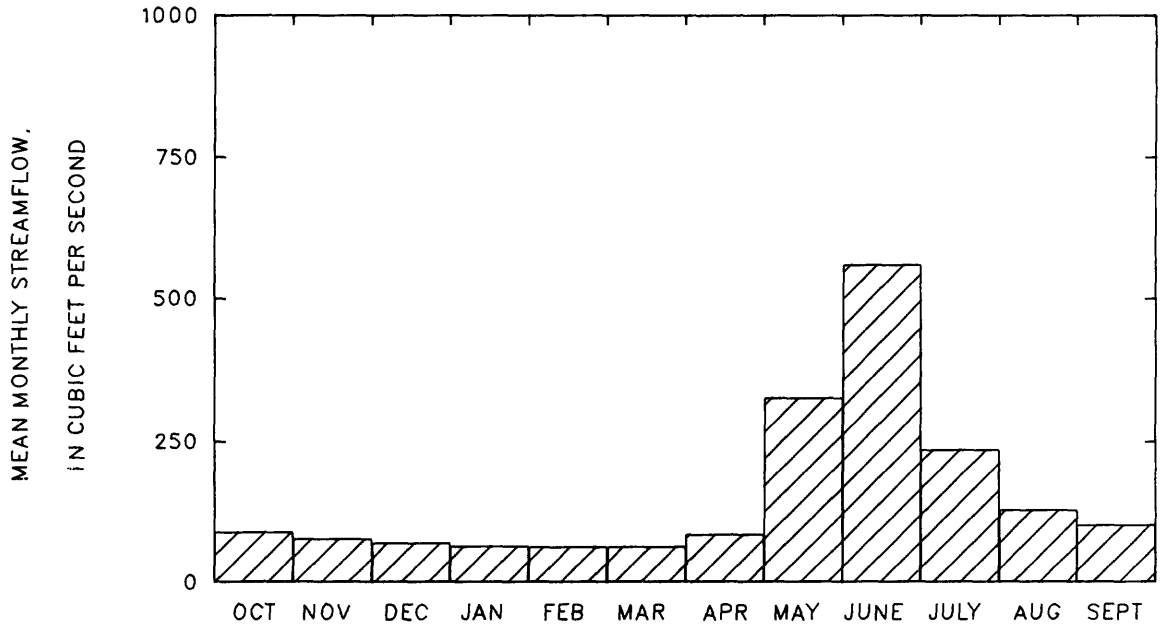
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	867	1220	1460	1790	2040	2300
3	803	1110	1310	1560	1750	1930
7	736	1010	1190	1410	1580	1750
15	652	895	1060	1270	1440	1600
30	574	784	928	1120	1260	1410
60	447	601	706	840	943	1050
90	359	476	552	649	722	795

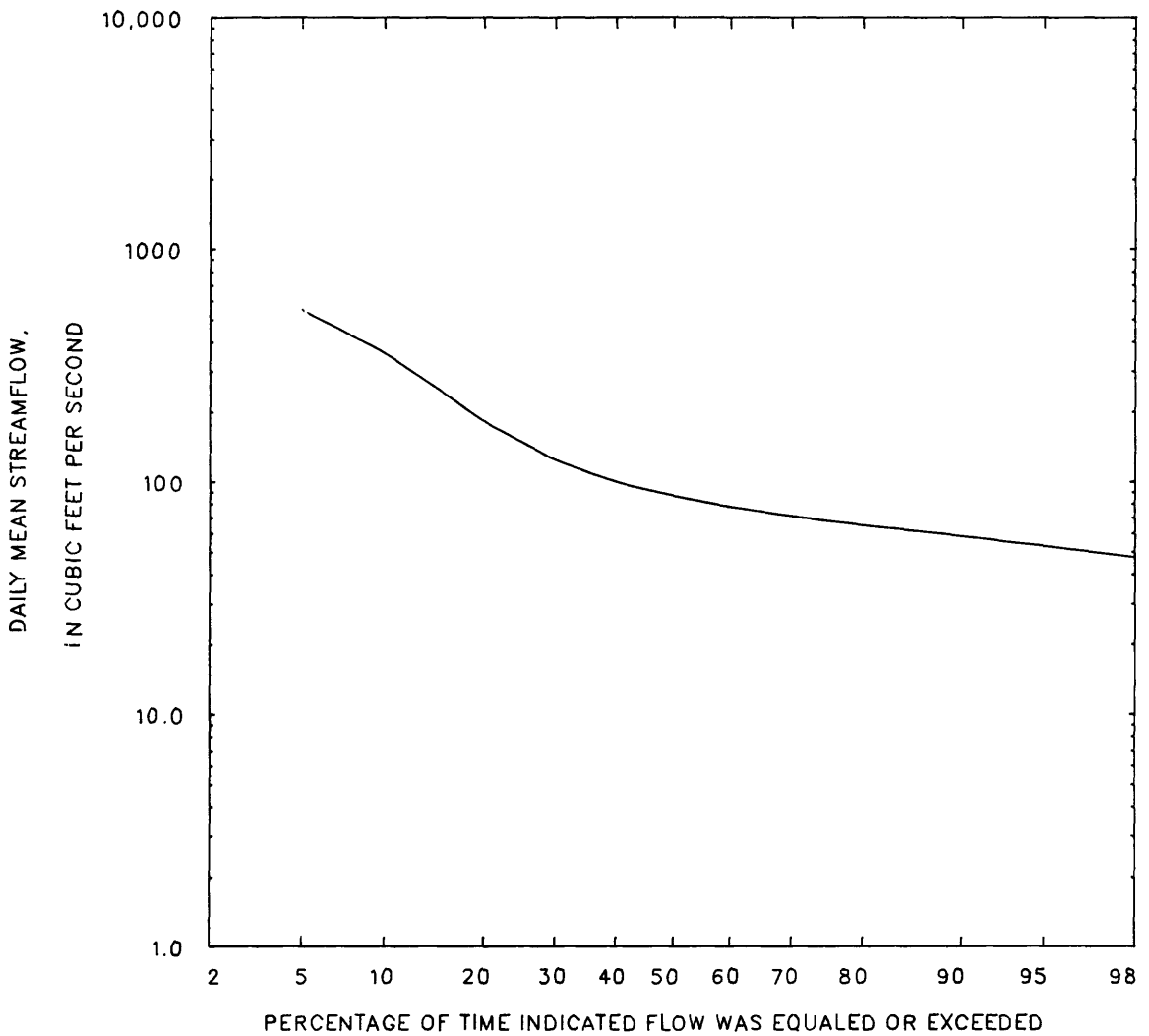
Duration of daily mean flow for period of record 1940-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
974	546	362	248	181	124	99	86	77	70	64	58	53	47	42	38	30

STATION 06289000 PERIOD OF RECORD 1940–84

LITTLE BIGHORN RIVER AT STATE LINE, NEAR WYOLA, MONT.





06290000 PASS CREEK NEAR WYOLA, MONT.

LOCATION.--Lat 45°03', long 107°21', in NE¼ sec.13, T.9 S., R.35 E., Big Horn County, Montana, on right bank 100 ft upstream from highway bridge, 1 mile downstream from Twin Creek, 5 mi south of Wyola, and 6 mi upstream from mouth.

DRAINAGE AREA.--111 mi^2.

PERIOD OF RECORD.--June 1935 to September 1956. Winter records are incomplete prior to 1939.

GAGE.--Water-stage recorder. Altitude of gage is 3,860 ft, from topographic map. Prior to December 21, 1950, wire-weight gage on highway bridge 100 ft downstream at same datum.

REMARKS.--Diversions for irrigation of about 2,500 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,150 ft^3/s, June 4, 1944 gage height, 4.82 ft, from rating curve extended above 500 ft^3/s; maximum gage height 6.22 ft, March 25, 1943 (ice jam); no flow August 3, 9, 10, 1935.

Monthly and annual streamflow 1939-56

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	28	5.7	17	6.9	0.41	3.8
November	28	11	20	5.3	0.27	4.5
December	34	11	18	5.4	0.30	4.1
January	32	7.0	17	6.6	0.38	4.0
February	58	9.9	24	13	0.55	5.5
March	115	18	42	24	0.58	9.6
April	84	21	51	19	0.38	11.7
May	198	37	87	44	0.51	19.9
June	375	31	104	87	0.84	23.8
July	93	6.6	31	24	0.78	7.1
August	39	1.9	12	11	0.87	2.8
September	29	2.2	14	8.1	0.60	3.1
Annual	77	17	36	17	0.46	100

Magnitude and probability of annual low flow based on period of record 1940-56

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	3.9	1.5	0.93	0.61	---	---
3	4.3	1.7	0.99	0.63	---	---
7	4.9	1.9	1.2	0.73	---	---
14	5.8	2.5	1.5	1.0	---	---
30	7.4	3.7	2.5	1.8	---	---
60	9.3	4.9	3.4	2.5	---	---
90	11	6.7	5.0	3.9	---	---
120	13	8.7	6.9	5.6	---	---
183	15	11	9.1	8.0	---	---

Magnitude and probability of instantaneous peak flow based on 22 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
336	697	1090	1770	2440	3240

Weighted skew = 0.566

Magnitude and probability of annual high flow based on period of record 1939-56

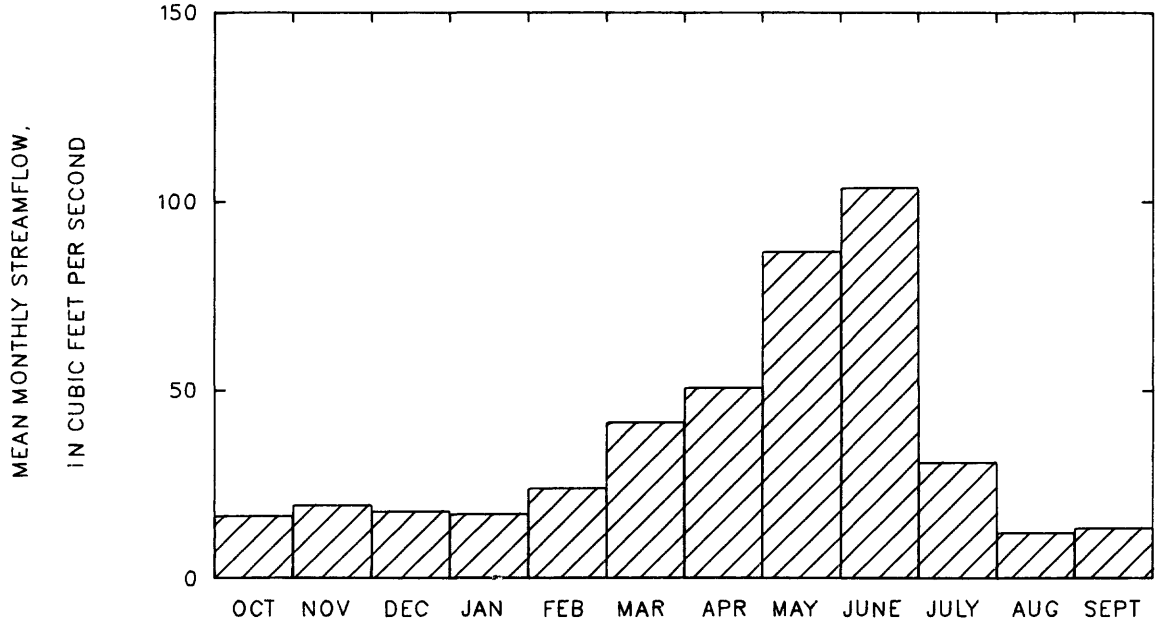
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	228	451	677	1080	---	---
3	178	339	511	841	---	---
7	142	259	385	625	---	---
15	120	206	289	434	---	---
30	101	166	225	326	---	---
60	83	131	172	237	---	---
90	72	109	140	187	---	---

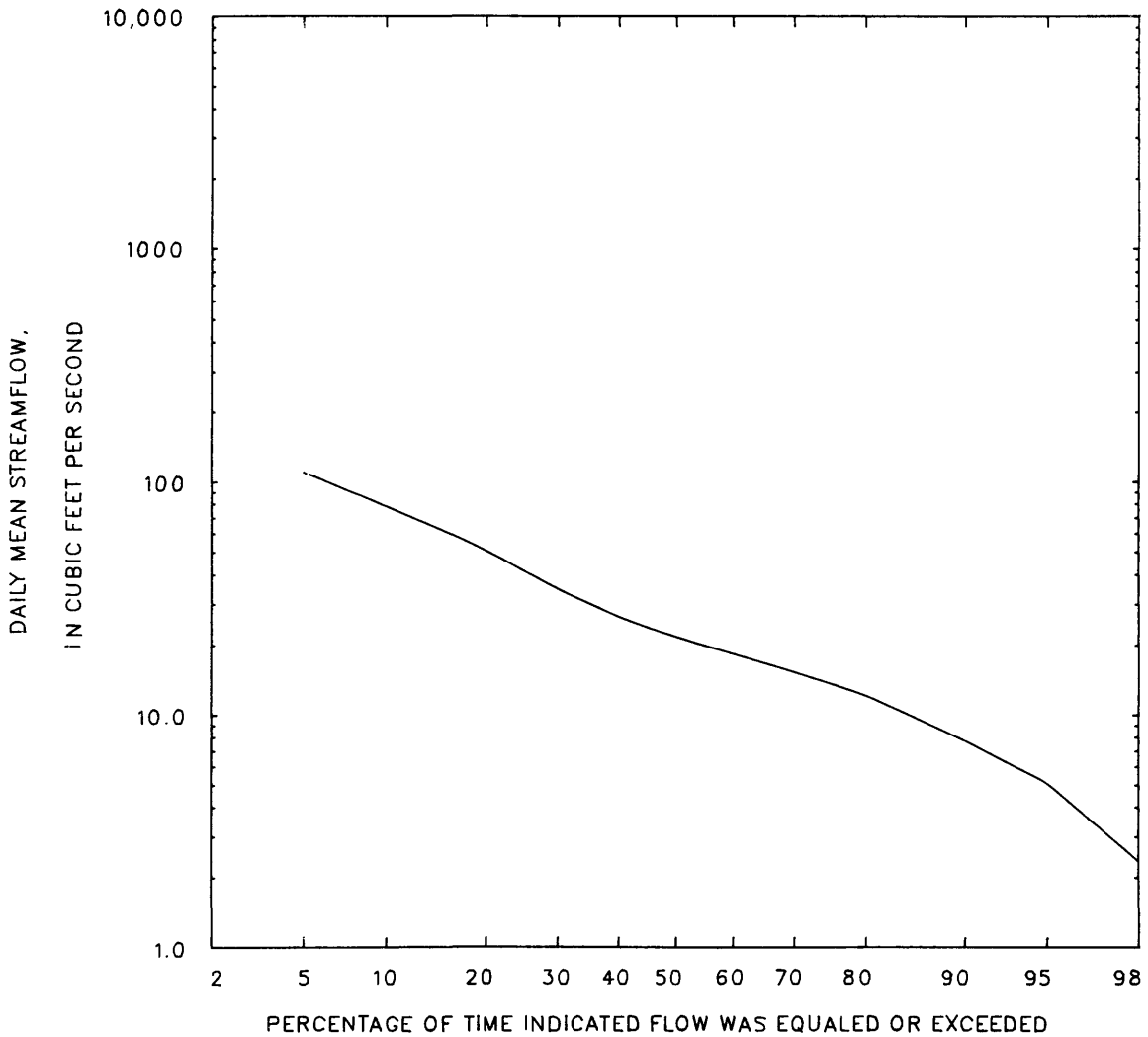
Duration of daily mean flow for period of record 1939-56

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
226	110	78	62	50	35	26	21	18	15	12	7.7	5.1	2.3	1.7	1.0	0.46

STATION 06290000 PERIOD OF RECORD 1939–56

PASS CREEK NEAR WYOLA, MONT.





06297000 SOUTH TONGUE RIVER NEAR DAYTON, WYO.

LOCATION.--Lat 44°47'02", long 107°28'10", in sec.33, T.56 N., R.88 W., Sheridan County, Bighorn National Forest, on left bank 60 ft downstream from Johnson Creek and 12 mi southwest of Dayton.

DRAINAGE AREA.--85.0 mi^2.

PERIOD OF RECORD.--September 1945 to October 1971, April to September 1972. Prior to October 1960, published as South Fork Tongue River near Dayton. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 7,621.78 ft, from Bureau of Reclamation bench mark.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,910 ft^3/s, June 4, 1968, gage height, 6.20 ft; minimum daily, 7.0 ft^3/s, March 25, April 4, 1955, February 7, 1971. Maximum stage known, about 6.36 ft, from floodmarks (date unknown).

Monthly and annual streamflow 1946-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	47	15	26	7.4	0.29	2.7
November	28	15	20	3.8	0.19	2.1
December	25	11	18	3.9	0.22	1.9
January	22	10	15	2.8	0.19	1.5
February	22	7.9	13	3.1	0.24	1.4
March	23	8.1	13	3.3	0.27	1.3
April	110	12	29	28	0.97	3.1
May	378	89	240	75	0.31	25.4
June	699	121	382	161	0.42	40.5
July	191	50	113	40	0.35	12.0
August	75	24	44	13	0.29	4.7
September	69	19	32	11	0.36	3.4
Annual	108	43	79	18	0.23	100

Magnitude and probability of annual low flow based on period of record 1947-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	9.4	7.9	7.2	6.8	6.3	---
3	9.8	8.2	7.5	7.0	6.5	---
7	10	8.6	7.9	7.3	6.8	---
14	11	9.0	8.2	7.6	7.0	---
30	11	9.5	8.7	8.0	7.4	---
60	12	10	9.3	8.9	8.4	---
90	12	11	10	10	9.6	---
120	14	12	12	11	11	---
183	16	15	14	14	13	---

Magnitude and probability of instantaneous peak flow based on 27 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
882	1190	1380	1630	1810	1990

Weighted skew = -0.020

Magnitude and probability of annual high flow based on period of record 1946-71

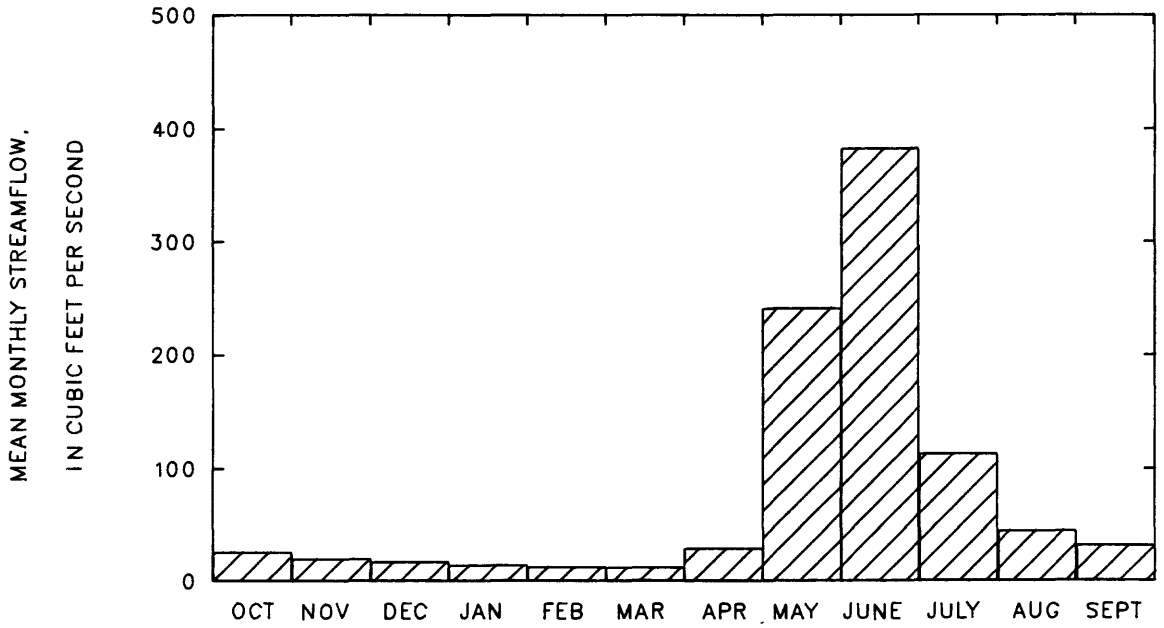
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	696	929	1070	1250	1370	---
3	623	839	969	1120	1230	---
7	569	752	858	978	1060	---
15	511	660	740	824	876	---
30	433	562	632	706	753	---
60	328	414	457	500	526	---
90	253	313	341	367	382	---

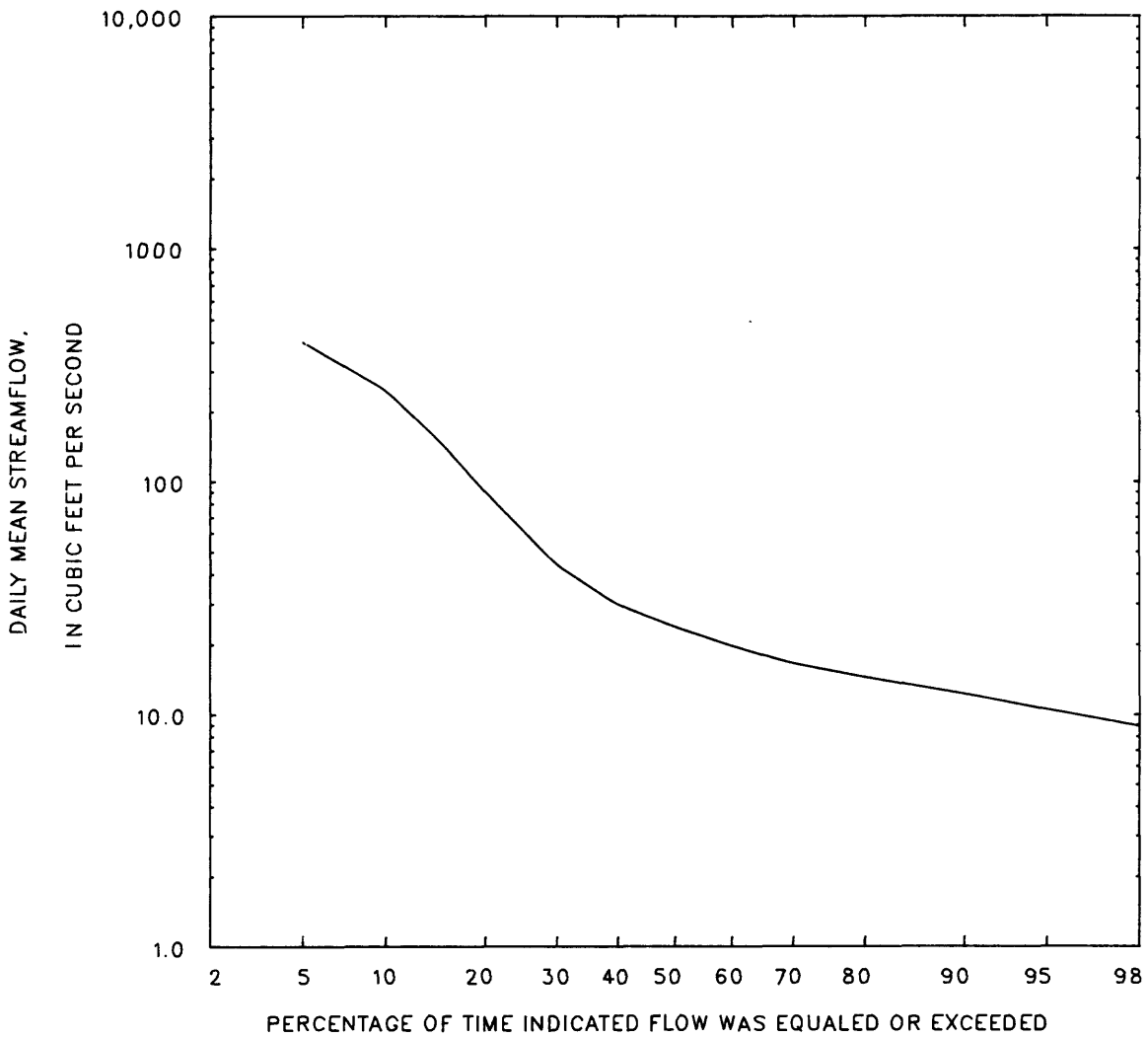
Duration of daily mean flow for period of record 1946-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
662	398	248	146	89	43	29	24	20	16	14	12	10	8.9	8.3	7.7	7.1

STATION 06297000 PERIOD OF RECORD 1946–71

SOUTH TONGUE RIVER NEAR DAYTON, WYO.





06298000 TONGUE RIVER NEAR DAYTON, WYO.

LOCATION.--Lat 44°50'58", long 107°18'14", in NE¼NE¼NE¼ sec.11, T.56 N., R.87 W., Sheridan County, on left bank 0.5 mi upstream from Crystal Draw, 0.6 mi downstream from intake of Highline ditch, and 2.5 mi southwest of Dayton.

DRAINAGE AREA.--204 mi^2.

PERIOD OF RECORD.--October 1918 to September 1929, October 1940 to current year. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 4,060 ft, from topographic map.

REMARKS.--Small diversion above station for Dayton municipal supply. Figures of daily discharge do not include water diverted 0.6 mi above station by Highline ditch for irrigation below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,400 ft^3/s, June 3, 1944, gage height, 6.45 ft; minimum daily, 18 ft^3/s, November 29, 1919.

Monthly and annual streamflow 1920-27, 1929, 1941-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	284	50	83	35	0.42	3.7
November	155	41	69	17	0.25	3.1
December	108	40	62	11	0.18	2.8
January	89	36	57	8.9	0.16	2.5
February	81	34	53	7.7	0.14	2.4
March	72	38	52	7.0	0.13	2.3
April	354	44	106	71	0.67	4.7
May	1050	266	534	167	0.31	23.8
June	1480	224	759	323	0.43	33.9
July	767	84	261	115	0.44	11.7
August	244	53	117	35	0.30	5.2
September	163	43	88	26	0.30	3.9
Annual	316	108	187	47	0.25	100

Magnitude and probability of annual low flow based on period of record 1920-27, 1942-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	36	30	27	24	21	20
3	41	36	33	31	28	27
7	46	41	39	37	35	34
14	48	43	41	39	37	36
30	50	45	43	41	40	39
60	51	47	45	44	43	42
90	53	48	46	45	43	43
120	55	50	48	47	46	45
183	59	54	52	51	51	50

Magnitude and probability of instantaneous peak flow based on 54 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1680	2260	2630	3060	3360	3650

Weighted skew = -0.262

Magnitude and probability of annual high flow based on period of record 1920-27, 1929, 1941-84

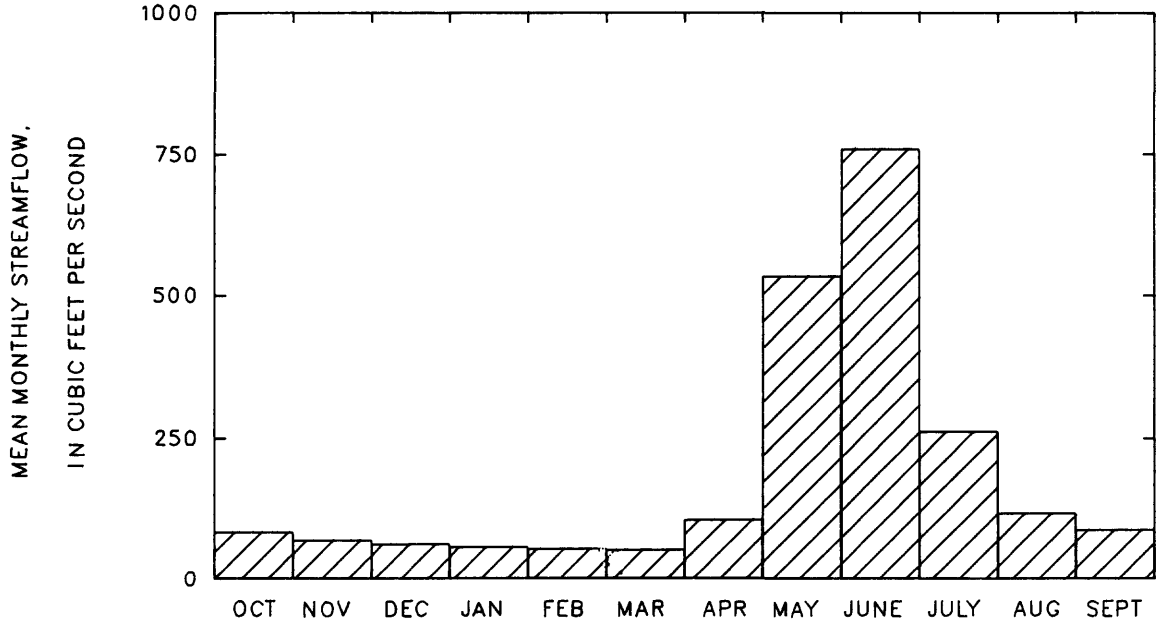
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1370	1800	2060	2350	2550	2730
3	1230	1610	1840	2100	2280	2460
7	1120	1450	1640	1850	2000	2130
15	989	1290	1450	1640	1760	1880
30	864	1130	1290	1470	1600	1720
60	662	861	982	1120	1220	1310
90	519	664	749	845	910	971

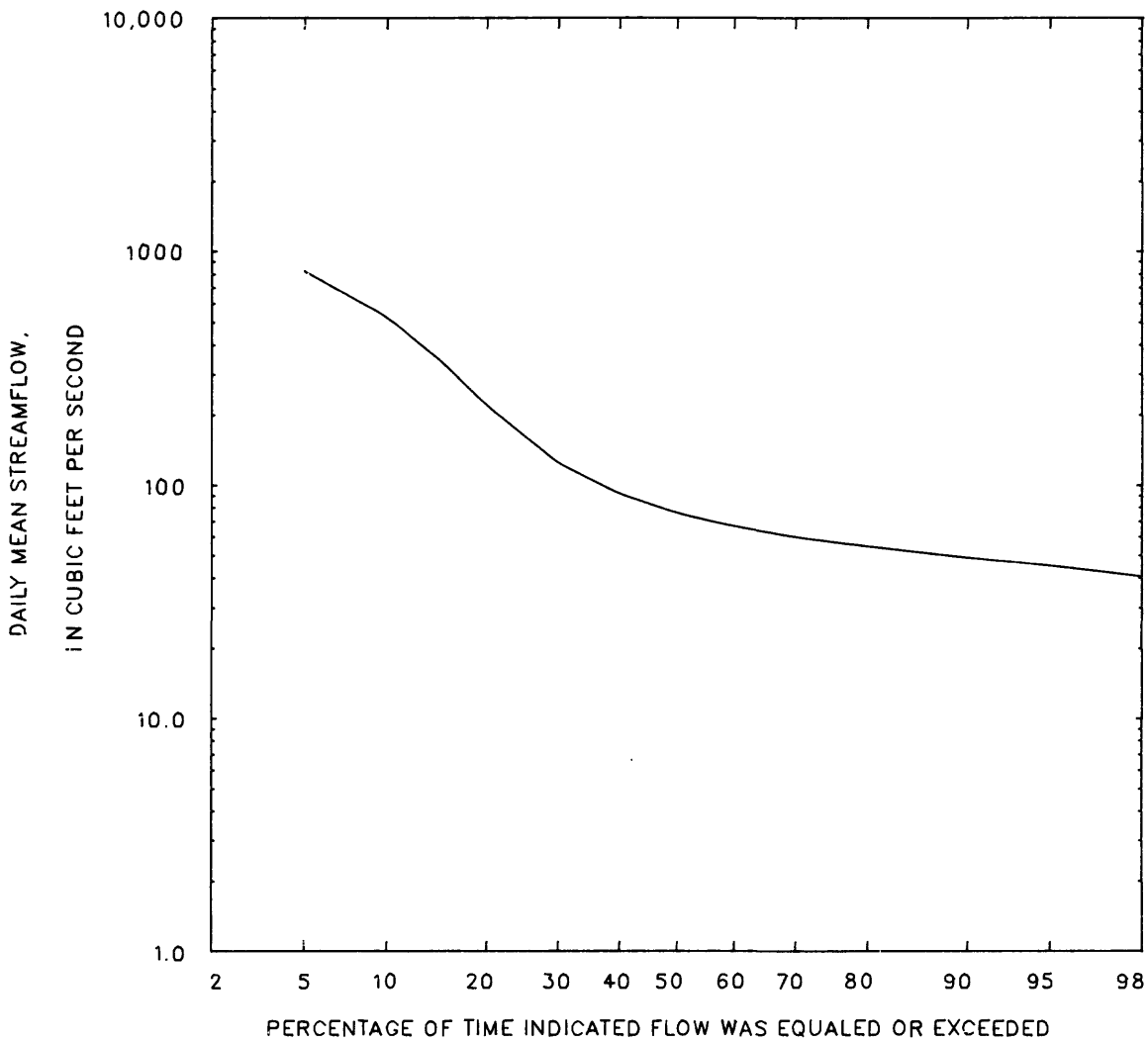
Duration of daily mean flow for period of record 1920-27, 1929, 1941-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1360	818	525	336	217	124	91	75	66	59	54	48	45	40	38	35	30

STATION 06298000 PERIOD OF RECORD 1920–27, 1929, 1941–84

TONGUE RIVER NEAR DAYTON, WYO.





06298500 LITTLE TONGUE RIVER NEAR DAYTON, WYO.

LOCATION.--Lat 44°48'38", long 107°17'02", in SW¼NE¼SE¼ sec.24, T.56 N., R.87 W., Sheridan County, on right bank 0.1 mi downstream from South Fork, 0.2 mi upstream from East Fork, and 4.5 mi south of Dayton.

DRAINAGE AREA.--25.1 mi^2.

PERIOD OF RECORD.--January 1951 to December 1953, March 1955 to September 1974.

GAGE.--Water-stage recorder. Altitude of gage is 4,420 ft, from topographic map.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 850 ft^3/s, June 9, 1964, gage height, 4.60 ft, from rating curve extended above 300 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 0.80 ft^3/s, September 4-7, 1960.

Monthly and annual streamflow 1952-53, 1956-74

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	5.4	1.3	2.7	0.86	0.31	1.8
November	3.3	1.5	2.5	0.54	0.22	1.6
December	3.4	1.4	2.1	0.45	0.22	1.3
January	3.9	1.2	1.9	0.54	0.28	1.2
February	6.0	1.3	2.0	0.96	0.48	1.3
March	5.5	1.5	2.1	0.83	0.40	1.3
April	16	2.3	5.9	4.6	0.79	3.8
May	87	15	51	19	0.38	32.5
June	132	8.9	66	38	0.58	42.1
July	35	2.7	14	8.8	0.61	9.2
August	6.2	1.3	3.5	1.3	0.36	2.3
September	5.1	1.1	2.7	0.99	0.37	1.7
Annual	22	3.7	13	5.0	0.38	100

Magnitude and probability of annual low flow based on period of record 1952-53, 1956-74

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.3	1.0	0.92	0.84	---	---
3	1.4	1.1	0.98	0.88	---	---
7	1.5	1.2	1.0	0.93	---	---
14	1.5	1.3	1.1	1.0	---	---
30	1.6	1.3	1.2	1.1	---	---
60	1.7	1.5	1.4	1.3	---	---
90	1.8	1.5	1.4	1.3	---	---
120	1.8	1.6	1.5	1.4	---	---
183	2.1	1.8	1.6	1.5	---	---

Magnitude and probability of instantaneous peak flow based on 23 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
125	219	301	430	548	686

Weighted skew = 0.398

Magnitude and probability of annual high flow based on period of record 1952-53, 1956-74

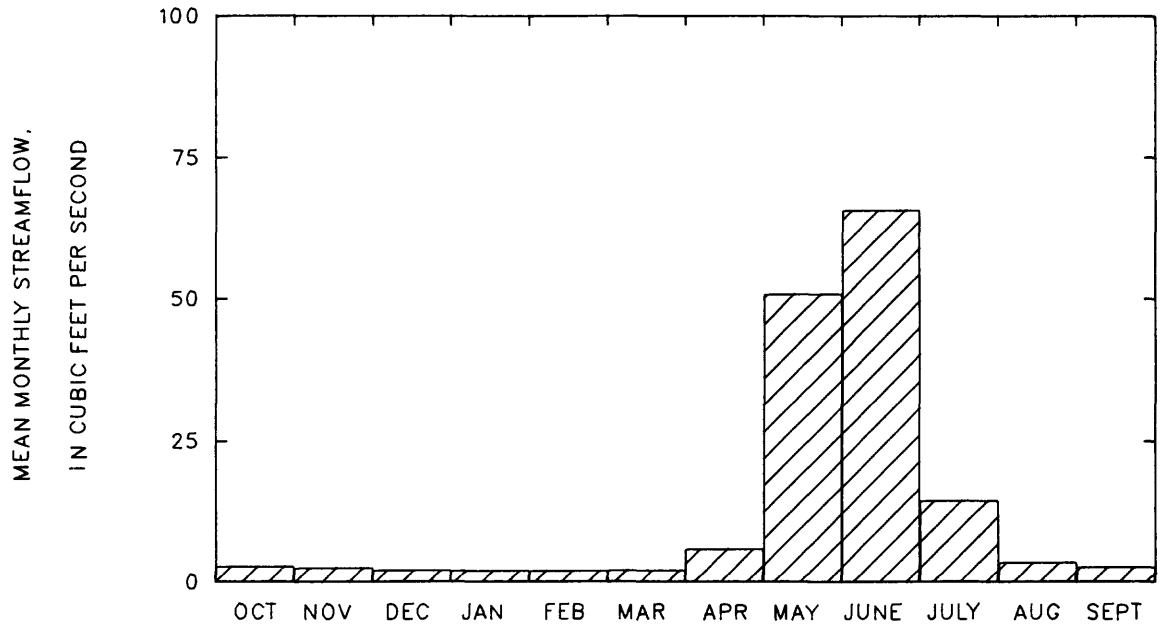
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	115	204	268	353	---	---
3	110	184	232	290	---	---
7	103	162	198	237	---	---
15	93	138	163	188	---	---
30	81	119	138	158	---	---
60	59	86	101	115	---	---
90	44	63	72	81	---	---

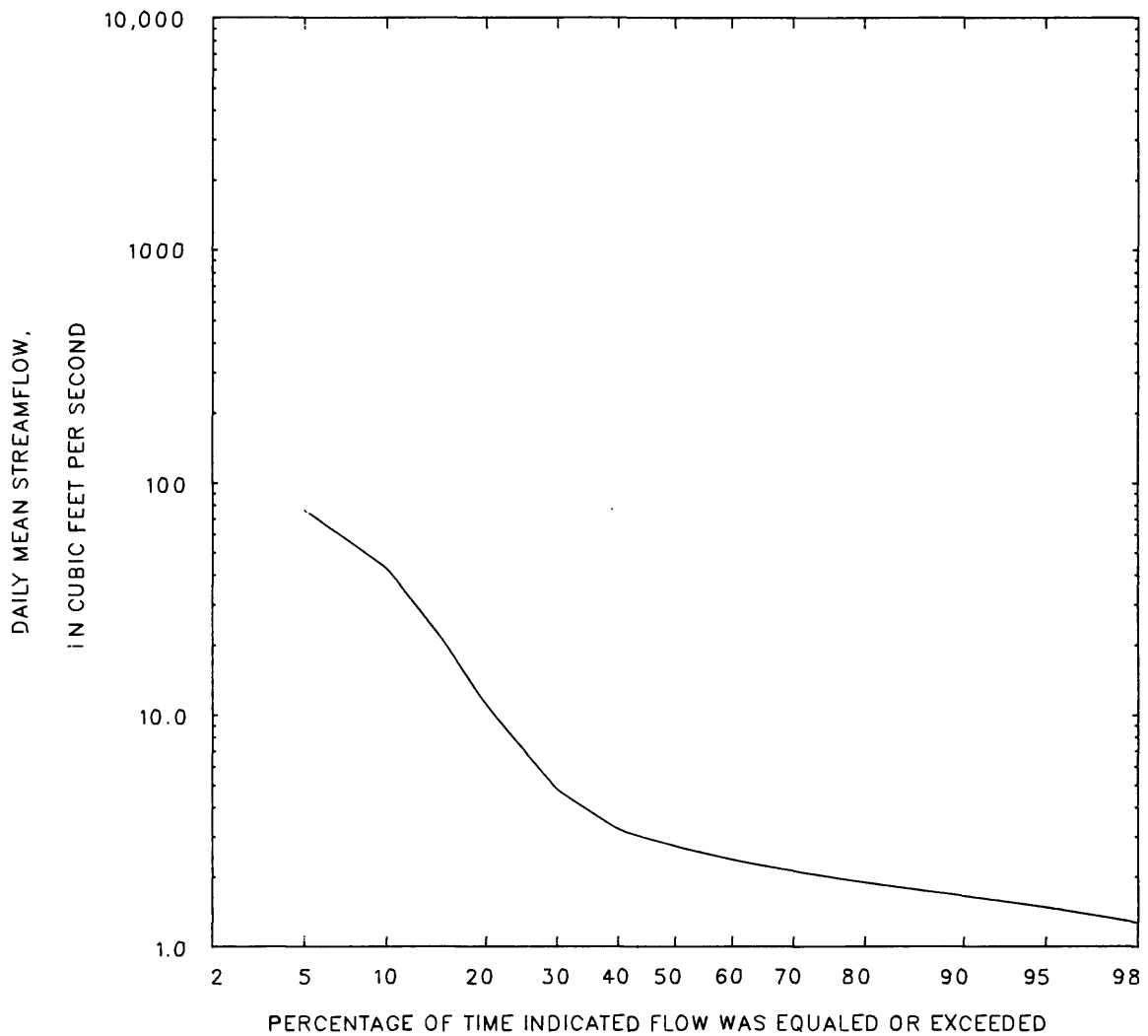
Duration of daily mean flow for period of record 1952-53, 1956-74

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
136	76	43	21	11	4.7	3.2	2.7	2.3	2.1	1.9	1.6	1.5	1.3	1.1	1.1	0.91

STATION 06298500 PERIOD OF RECORD 1952–53, 1956–74

LITTLE TONGUE RIVER NEAR DAYTON, WYO.





06299500 WOLF CREEK AT WOLF, WYO.

LOCATION.--Lat 44°46'21", long 107°14'01", in NE¼SW¼NW¼ sec.4, T.55 N., R.86 W., Sheridan County, on left bank at Wolf and 0.5 mi downstream from Red Canyon Creek.

DRAINAGE AREA.--37.8 mi^2.

PERIOD OF RECORD.--January 1945 to current year (no winter records since 1971). Monthly discharge for January to March 1945; published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 4,525 ft, from topographic map. Prior to May 26, 1945, non-recording gage at same site and datum.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,130 ft^3/s, June 15, 1963, gage height, 4.60 ft, from rating curve extended above 500 ft^3/s; no flow for part of each day January 13, 15, 29, 30, February 26, 1947, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, about 5.0 ft, May 18, 1944.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1946-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	14	6.5	8.7	2.0	0.23	2.5
November	10	5.7	7.0	1.2	0.17	2.0
December	7.5	3.8	5.7	0.87	0.15	1.6
January	6.1	2.8	4.7	0.78	0.16	1.3
February	5.6	3.2	4.5	0.64	0.14	1.3
March	6.2	3.7	4.8	0.67	0.14	1.4
April	33	6.4	14	7.6	0.56	3.9
May	161	36	100	31	0.31	28.4
June	263	50	138	59	0.43	39.3
July	72	18	39	14	0.37	11.1
August	31	6.2	15	5.8	0.38	4.3
September	23	6.8	10	3.6	0.36	2.9
Annual	45	14	29	7.6	0.26	100

Magnitude and probability of annual low flow based on period of record 1947-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	3.4	2.7	2.3	2.1	1.8	---
3	3.7	3.0	2.7	2.4	2.2	---
7	3.9	3.3	2.9	2.7	2.4	---
14	4.0	3.4	3.1	2.8	2.5	---
30	4.2	3.6	3.3	3.0	2.7	---
60	4.5	3.9	3.6	3.3	2.9	---
90	4.7	4.1	3.8	3.5	3.1	---
120	5.0	4.4	4.1	3.8	3.4	---
183	5.8	5.2	5.0	4.8	4.6	---

Magnitude and probability of instantaneous peak flow based on 40 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
304	482	626	841	1030	1240

Weighted skew = 0.422

Magnitude and probability of annual high flow based on period of record 1946-71

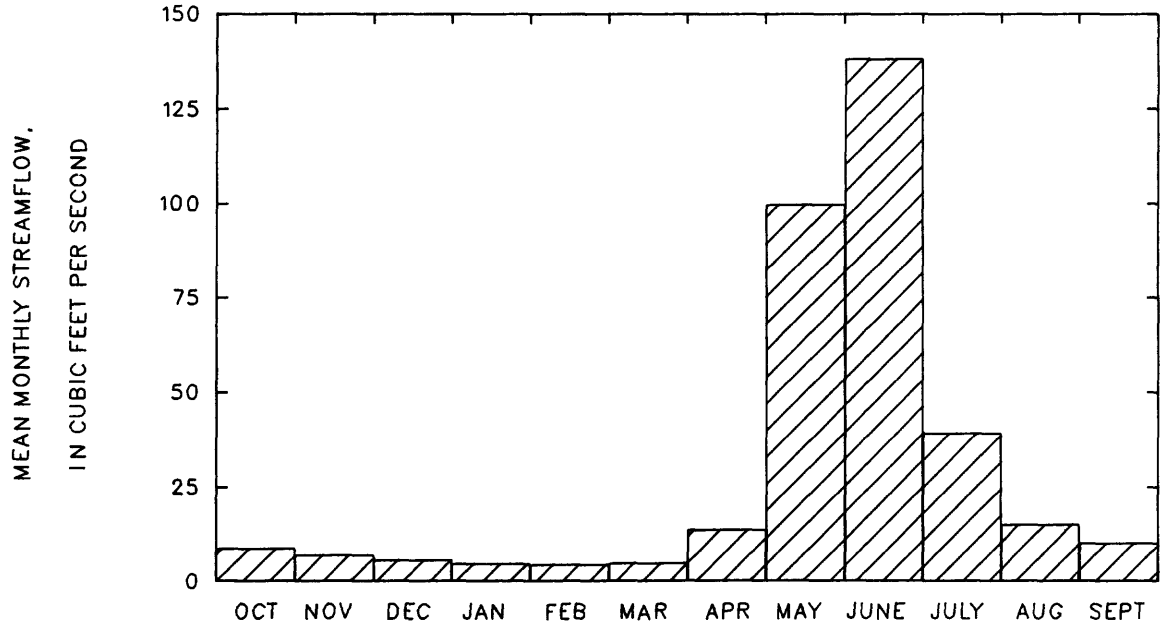
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	244	360	439	543	622	---
3	229	327	388	461	512	---
7	209	287	329	376	405	---
15	185	249	283	318	340	---
30	158	212	242	274	295	---
60	121	158	179	201	215	---
90	94	120	134	147	156	---

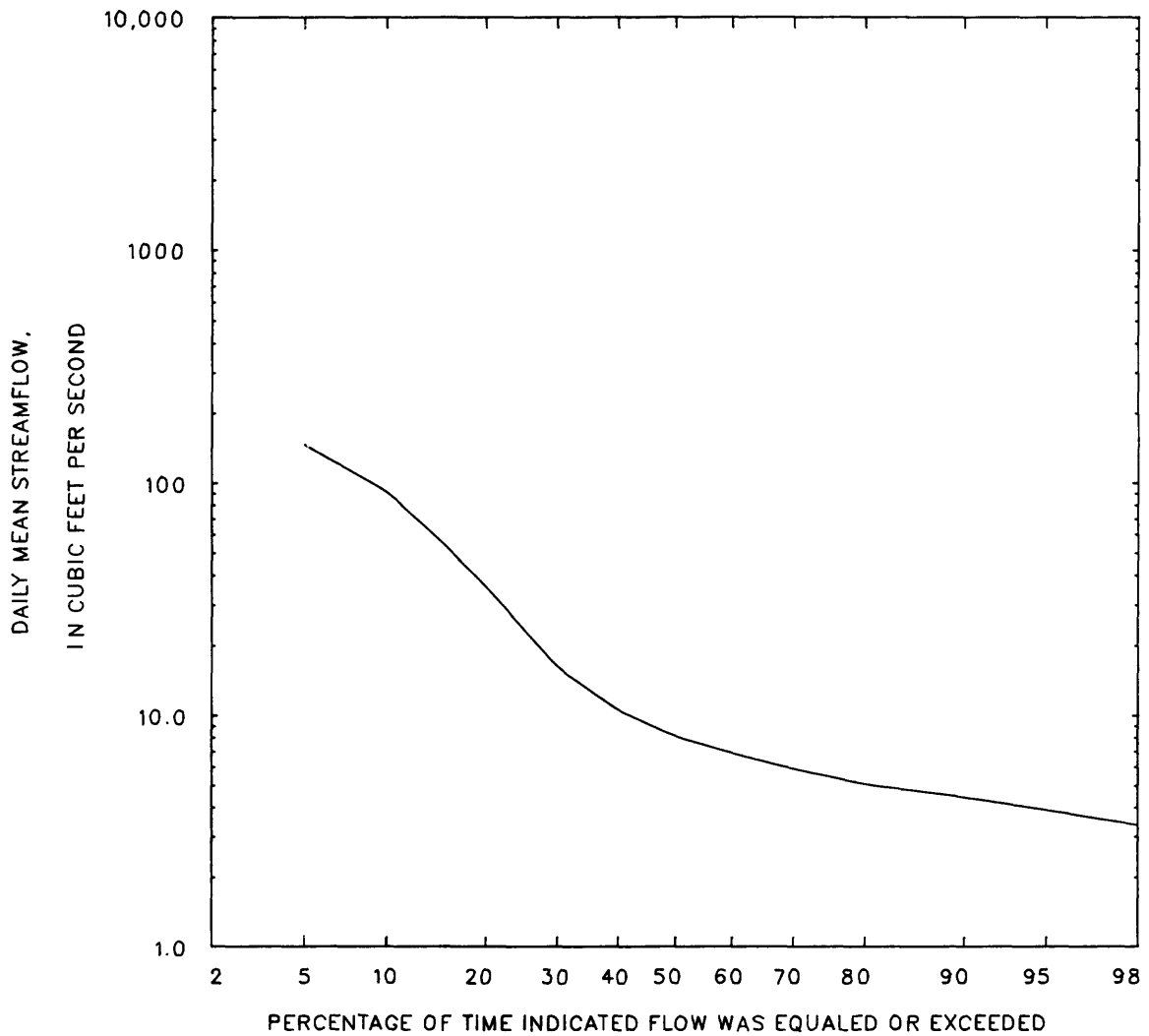
Duration of daily mean flow for period of record 1946-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
257	146	91	55	36	16	10	8.1	6.8	5.8	5.0	4.4	3.9	3.3	3.1	2.9	2.4

STATION 06299500 PERIOD OF RECORD 1946–71

WOLF CREEK AT WOLF, WYO.





06300500 EAST FORK BIG GOOSE CREEK NEAR BIG HORN, WYO.

LOCATION.--Lat 44°32'18", long 107°13'33", in SE¼SE¼NW¼ sec.28, T.53 N., R.86 W., Johnson County, Bighorn National Forest, on right bank 0.7 mi upstream from Park Reservoir and 16 mi southwest of Big Horn.

DRAINAGE AREA.--20.1 mi^2.

PERIOD OF RECORD.--October 1953 to current year (no winter records since 1973). Prior to October 1960, published as East Goose Creek near Big Horn.

GAGE.--Water-stage recorder. Altitude of gage is 8,320 ft, from topographic map. Prior to June 28, 1960, water-stage recorder at site 1.1 mi downstream at different datum. June 28, 1960, to July 14, 1970, water-stage recorder at site 0.9 mi downstream at different datums and July 15 to October 7, 1970, non-recording gage at present site and datum.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,230 ft^3/s, June 15, 1963, gage height, 4.59 ft, site and datum then in use, from rating curve extended above 250 ft^3/s, on basis of slope-area measurement of peak flow; minimum daily, 1.0 ft^3/s, December 11-14, 1963, March 24-25, November 14-15, 1964, March 18, 1971.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1954-73

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	17	4.5	8.6	3.3	0.39	2.2
November	8.4	2.8	5.5	1.5	0.28	1.4
December	5.3	2.2	3.7	0.94	0.26	0.9
January	4.2	1.9	3.0	0.64	0.21	0.8
February	3.3	1.6	2.6	0.54	0.21	0.7
March	3.5	1.2	2.5	0.64	0.25	0.6
April	19	1.8	5.0	3.8	0.77	1.3
May	152	29	84	35	0.41	21.6
June	260	85	188	61	0.32	48.1
July	111	21	57	23	0.40	14.6
August	47	7.4	18	9.9	0.55	4.7
September	37	5.2	12	8.0	0.64	3.2
Annual	42	21	33	5.9	0.18	100

Magnitude and probability of annual low flow based on period of record 1955-73

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.8	1.3	1.1	0.93	---	---
3	2.0	1.4	1.2	1.0	---	---
7	2.0	1.5	1.3	1.1	---	---
14	2.2	1.7	1.4	1.2	---	---
30	2.3	1.8	1.5	1.3	---	---
60	2.5	2.0	1.7	1.5	---	---
90	2.7	2.2	1.9	1.7	---	---
120	2.9	2.3	2.1	1.9	---	---
183	4.2	3.4	3.1	2.8	---	---

Magnitude and probability of instantaneous peak flow based on 30 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
528	716	852	1040	1190	1350

Weighted skew = 0.477

Magnitude and probability of annual high flow based on period of record 1954-73

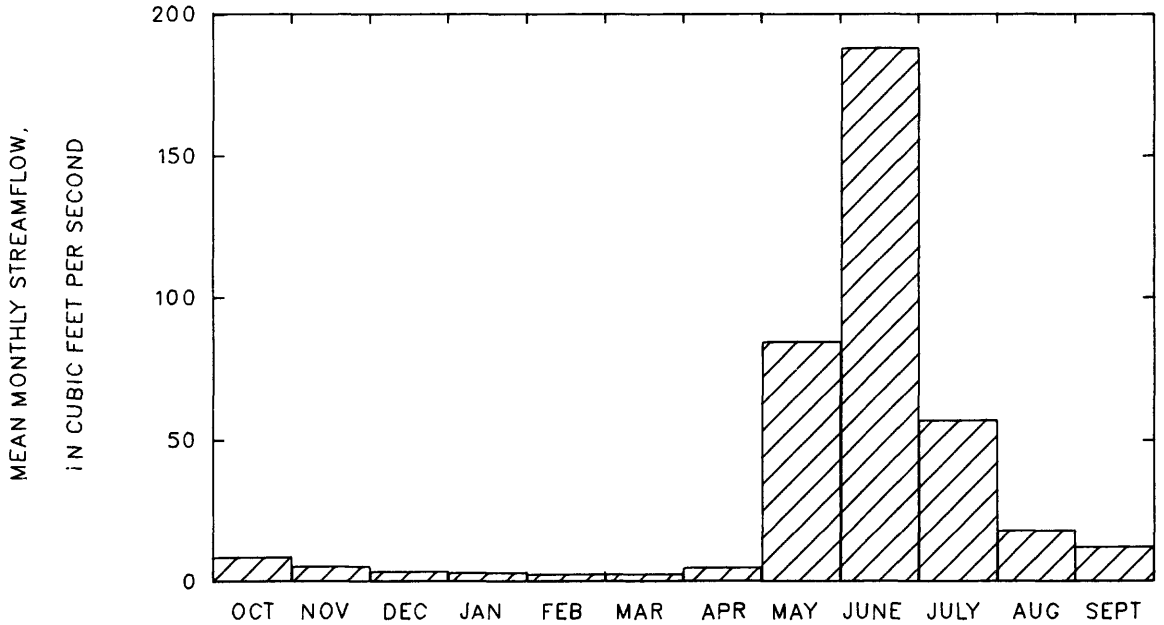
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	382	493	571	674	---	---
3	347	431	484	550	---	---
7	311	371	405	441	---	---
15	266	315	339	364	---	---
30	215	256	275	293	---	---
60	152	178	192	205	---	---
90	113	133	142	151	---	---

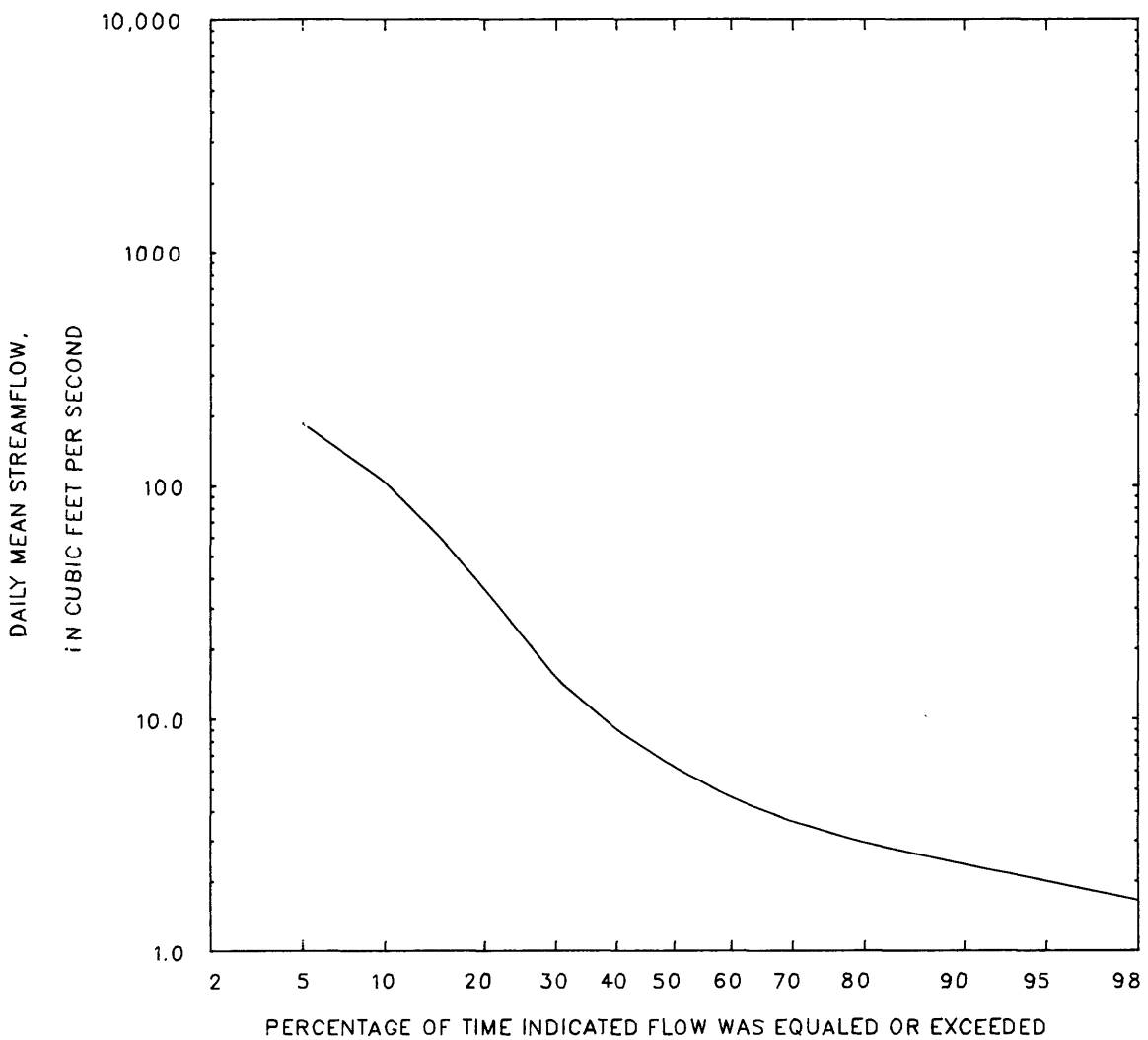
Duration of daily mean flow for period of record 1954-73

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
332	184	104	59	36	15	8.9	6.2	4.6	3.6	2.9	2.3	2.0	1.6	1.4	1.2	1.0

STATION 06300500 PERIOD OF RECORD 1954–73

EAST FORK BIG GOOSE CREEK NEAR BIG HORN, WYO.





06300900 CROSS CREEK ABOVE BIGHORN RESERVOIR, NEAR BIG HORN, WYO.

LOCATION.--Lat 44°31'02", long 107°12'15", in NW¼SW¼SE¼ sec.34, T.53 N., R.86 W., Johnson County, Bighorn National Forest, on left bank 0.4 mi upstream from Bighorn Reservoir and 15.5 mi southwest of Big Horn.

DRAINAGE AREA.--9.29 mi^2.

PERIOD OF RECORD.--October 1960 to September 1971.

GAGE.--Water-stage recorder. Altitude of gage is 8,790 ft, from topographic map.

REMARKS.--Some regulation 1.1 mi upstream by Cross Creek Reservoir (capacity, 796 acre-ft). No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 285 ft^3/s, June 15, 1963, gage height, 6.02 ft; no flow August 3-8, 10, 1966.

Monthly and annual streamflow 1961-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	7.6	1.6	4.1	2.1	0.51	2.6
November	4.1	1.5	2.4	0.87	0.37	1.5
December	3.0	1.0	1.8	0.68	0.39	1.1
January	1.9	0.92	1.4	0.35	0.24	0.9
February	1.6	0.66	1.2	0.29	0.24	0.8
March	1.8	0.77	1.3	0.35	0.26	0.8
April	4.7	0.83	2.0	1.3	0.67	1.2
May	45	4.4	21	12	0.57	13.5
June	103	38	78	23	0.30	49.2
July	42	9.5	25	9.4	0.37	16.1
August	26	4.3	13	6.6	0.51	8.2
September	17	1.7	6.2	3.9	0.64	3.9
Annual	16	8.7	13	2.1	0.16	100

Magnitude and probability of annual low flow based on period of record 1962-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.72	0.00	0.00	---	---	---
3	0.80	0.00	0.00	---	---	---
7	0.86	0.00	0.00	---	---	---
14	1.0	0.77	0.66	---	---	---
30	1.1	0.84	0.71	---	---	---
60	1.2	0.96	0.82	---	---	---
90	1.3	1.0	0.89	---	---	---
120	1.4	1.1	1.0	---	---	---
183	2.0	1.6	1.4	---	---	---

Magnitude and probability of instantaneous peak flow based on 11 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
165	205	230	261	284	307

Weighted skew = 0.190

Magnitude and probability of annual high flow based on period of record 1961-71

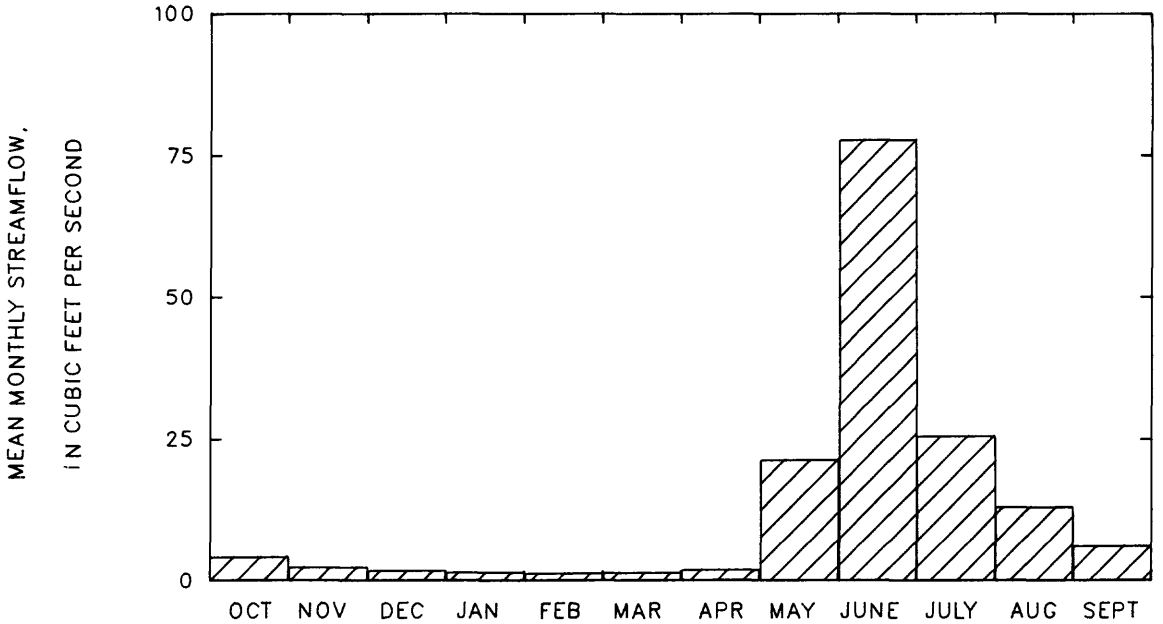
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	147	168	179	---	---	---
3	137	154	161	---	---	---
7	120	138	146	---	---	---
15	105	123	131	---	---	---
30	88	100	105	---	---	---
60	59	67	70	---	---	---
90	46	51	53	---	---	---

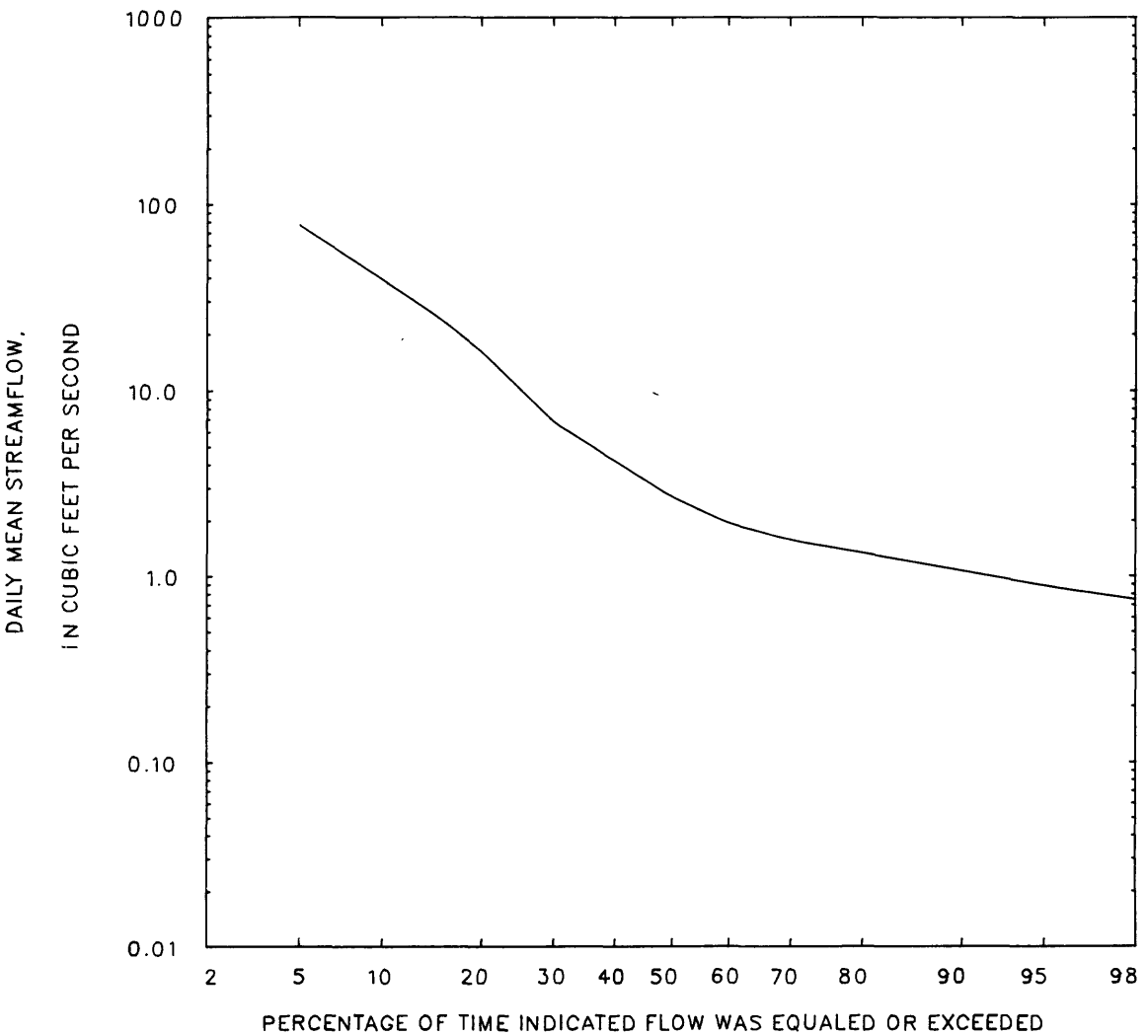
Duration of daily mean flow for period of record 1961-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
130	76	39	25	16	6.7	4.2	2.7	1.9	1.5	1.3	1.1	0.88	0.74	0.64	0.51	0.01

STATION 06300900 PERIOD OF RECORD 1961–71

CROSS CREEK ABOVE BIGHORN RESERVOIR, NEAR BIG HORN, WYO.





06301500 WEST FORK BIG GOOSE CREEK NEAR BIG HORN, WYO.

LOCATION.--Lat 44°36'47", long 107°17'49", in NE¼SE¼NE¼ Sec.35, T.54 N., R.87 W., Sheridan County, Bighorn National Forest, on left bank 0.3 mi downstream from Twin Lakes Branch and 16 mi west of Big Horn.

DRAINAGE AREA.--24.4 mi^2.

PERIOD OF RECORD.--October 1953 to current year (no winter records since 1971). Prior to October 1960, published as West Goose Creek near Big Horn.

GAGE.--Water-stage recorder. Altitude of gage is 8,420 ft, from topographic map.

REMARKS.--Some regulation by Twin Lakes, capacity, 1,200 acre-ft, and Dome Lake, capacity, 1,800 acre-ft. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft^3/s, June 15, 1963, gage height, 5.37 ft, from rating curve extended above 410 ft^3/s on basis of velocity-area study; minimum daily, 0.80 ft^3/s, December 14, 26, 1963, January 15, 16, February 26, 1964.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1954-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	18	2.7	8.6	4.7	0.55	2.1
November	10	1.2	6.2	2.6	0.42	1.5
December	9.6	1.0	4.8	2.2	0.45	1.2
January	6.6	1.0	3.8	1.6	0.41	0.9
February	6.0	1.1	3.1	1.3	0.40	0.8
March	5.4	1.5	3.0	1.2	0.39	0.7
April	16	1.7	5.1	3.3	0.66	1.2
May	139	14	65	37	0.56	15.8
June	305	102	198	67	0.34	48.0
July	111	35	61	22	0.36	14.8
August	57	19	30	10	0.34	7.2
September	49	6.3	24	11	0.46	5.8
Annual	46	22	34	6.4	0.18	100

Magnitude and probability of annual low flow based on period of record 1955-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	2.0	1.4	1.1	0.94	---	---
3	2.0	1.4	1.1	0.96	---	---
7	2.1	1.5	1.3	1.1	---	---
14	2.3	1.6	1.3	1.2	---	---
30	2.5	1.8	1.4	1.2	---	---
60	2.9	2.0	1.6	1.3	---	---
90	3.3	2.2	1.7	1.4	---	---
120	3.7	2.5	1.9	1.5	---	---
183	5.0	3.3	2.6	2.0	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1954-71

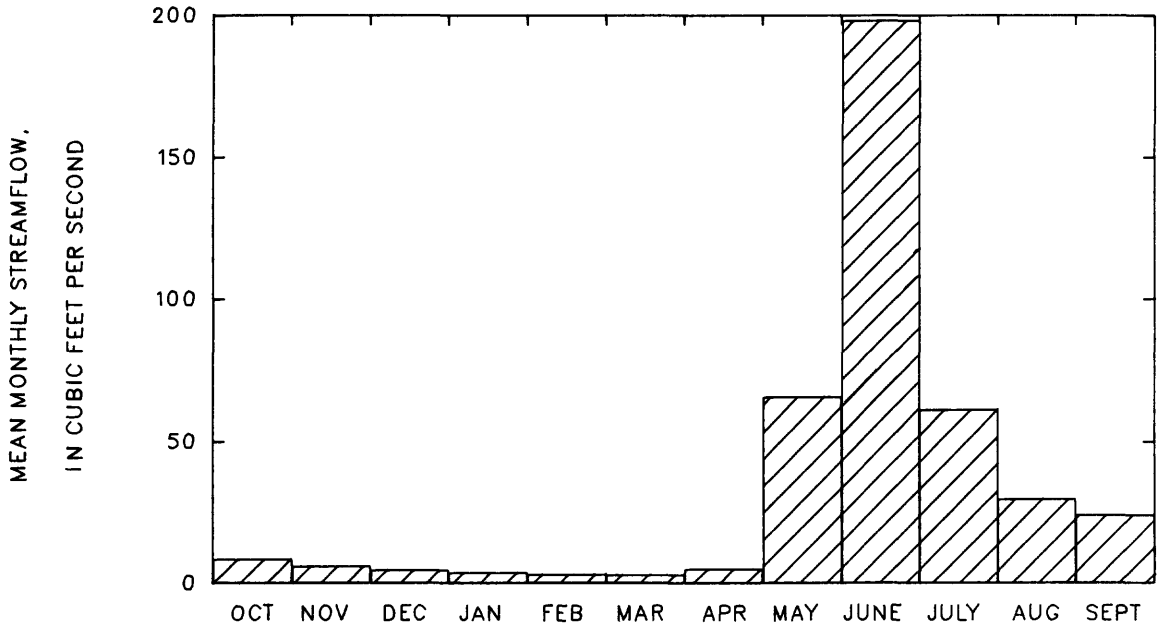
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	425	501	547	599	---	---
3	386	459	500	547	---	---
7	334	397	430	466	---	---
15	281	338	366	393	---	---
30	221	271	295	319	---	---
60	149	179	195	212	---	---
90	112	134	145	158	---	---

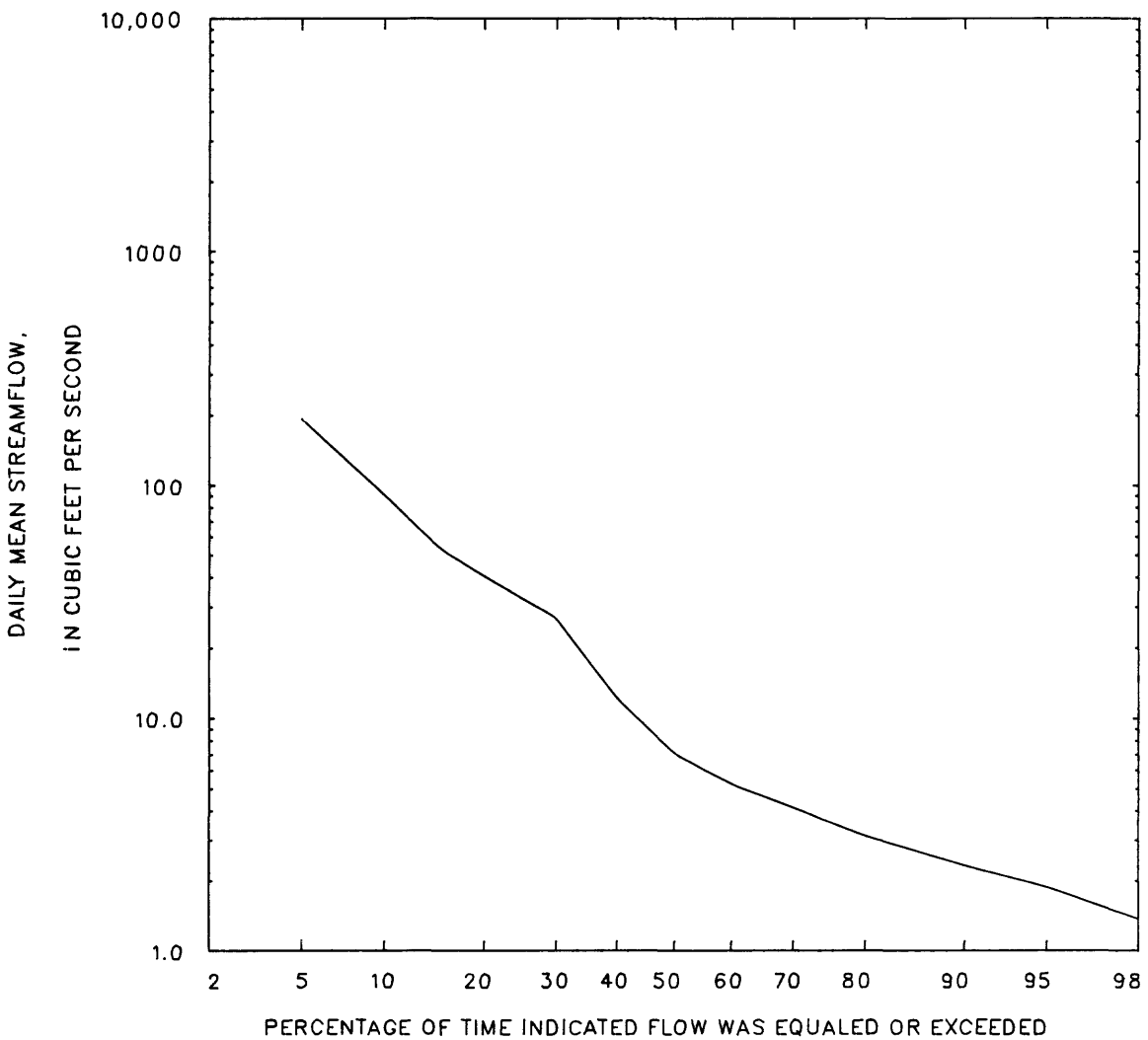
Duration of daily mean flow for period of record 1954-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
361	192	90	53	40	27	12	7.0	5.2	4.1	3.1	2.3	1.9	1.4	1.2	1.0	0.85

STATION 06301500 PERIOD OF RECORD 1954–71

WEST FORK BIG GOOSE CREEK NEAR BIG HORN, WYO.





06302000 BIG GOOSE CREEK NEAR SHERIDAN, WYO.

LOCATION.--Lat 44°42'08", long 107°10'51", in NW¼NE¼ sec.35, T.55 N., R.86 W., Sheridan County, on right bank 0.4 mi upstream from Cave Creek and 14 mi southwest of Sheridan.

DRAINAGE AREA.--120 mi^2.

PERIOD OF RECORD.--September 1929 to current year (no winter records since 1971). Prior to October 1960, published as Goose Creek near Sheridan. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 4,505 ft, from topographic map.

REMARKS.--Natural flow of stream affected by transbasin diversions, storage reservoirs, diversions for irrigation of about 20 acres and to Sheridan Filtration plant, and return flow from irrigated areas. PK ditch diverts water 0.6 mi above station for irrigation of lands downstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,160 ft^3/s, June 15, 1963, gage height, 5.83 ft, from rating curve extended above 1,600 ft^3/s; minimum daily, 1.6 ft^3/s, November 29, 1954.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1931-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	93	9.7	27	19	0.68	2.9
November	48	7.1	19	8.1	0.43	1.9
December	30	5.2	14	5.3	0.38	1.5
January	22	2.7	12	4.4	0.37	1.2
February	18	2.9	10	3.8	0.37	1.1
March	20	2.8	10	3.8	0.36	1.1
April	102	12	33	22	0.67	3.4
May	576	37	235	112	0.47	24.4
June	764	50	446	207	0.46	46.3
July	266	22	93	60	0.64	9.7
August	72	10	33	11	0.33	3.4
September	116	11	31	19	0.62	3.2
Annual	137	27	80	26	0.32	100

Magnitude and probability of annual low flow based on period of record 1931-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	5.4	3.4	2.6	2.0	1.5	1.3
3	6.4	4.2	3.3	2.6	2.0	1.7
7	7.1	4.7	3.7	2.9	2.3	1.9
14	8.0	5.3	4.1	3.2	2.4	1.9
30	9.0	5.9	4.5	3.5	2.6	2.1
60	10	6.6	5.1	3.9	2.9	2.3
90	11	7.2	5.6	4.4	3.3	2.7
120	11	7.9	6.4	5.2	4.1	3.4
183	14	10	8.4	7.2	6.1	5.4

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1931-71

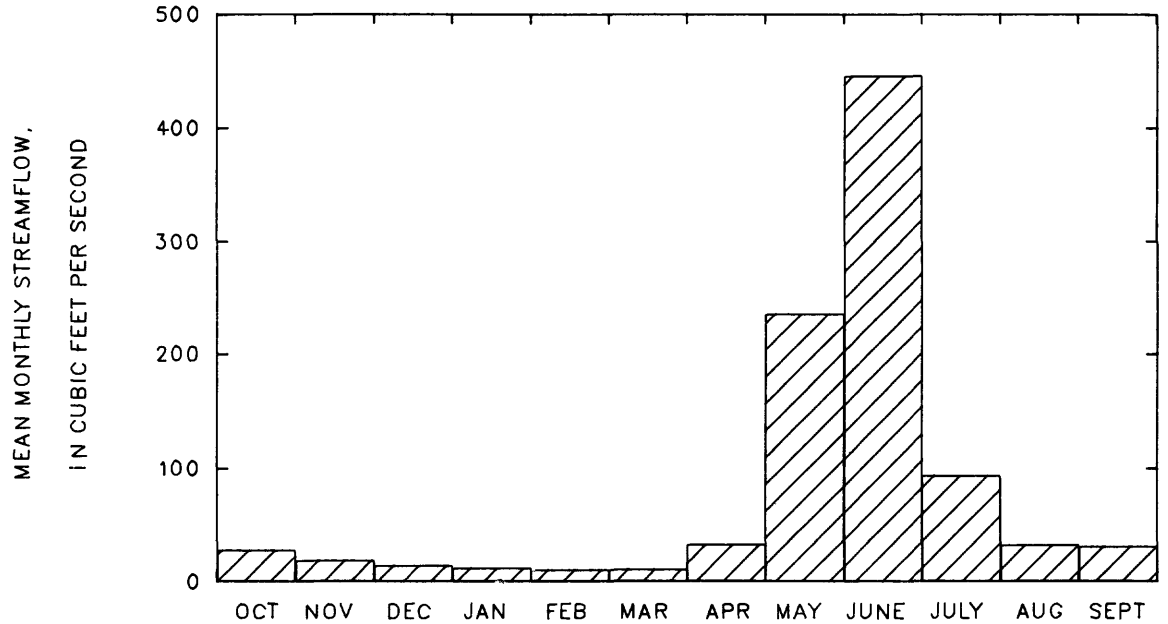
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	973	1340	1540	1760	1900	2020
3	897	1230	1410	1590	1700	1800
7	773	1060	1210	1370	1460	1540
15	654	885	994	1090	1150	1190
30	512	699	787	866	909	941
60	358	487	545	597	625	645
90	266	358	399	435	453	467

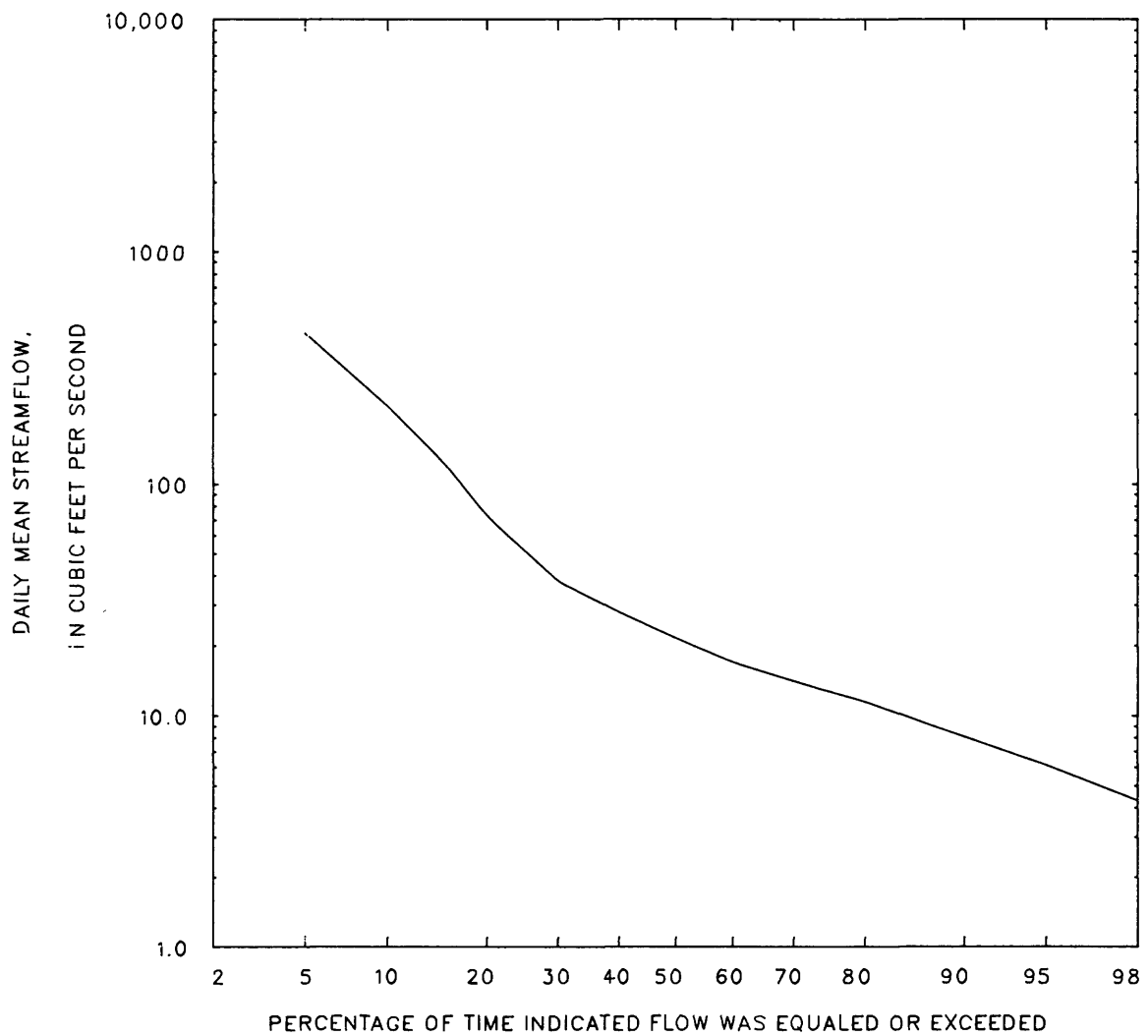
Duration of daily mean flow for period of record 1931-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
880	441	217	125	72	38	28	21	17	14	11	8.1	6.1	4.3	3.2	2.7	2.2

STATION 06302000 PERIOD OF RECORD 1931–71

BIG GOOSE CREEK NEAR SHERIDAN, WYO.





06303500 LITTLE GOOSE CREEK IN CANYON, NEAR BIG HORN, WYO.

LOCATION.--Lat 44°35'46", long 107°02'22", in SE¼SW¼NE¼ sec.1, T.53 N., R.85 W., Sheridan County, on left bank 100 ft upstream from headgate of Lower Peralta ditch and 6.5 mi southwest of Big Horn.

DRAINAGE AREA.--51.6 mi^2.

PERIOD OF RECORD.--April 1941 to current year (no winter records since 1971).

GAGE.--Water-stage recorder. Altitude of gage is 4,860 ft, from topographic map.

REMARKS.--Three small reservoirs above station, combined capacity, 860 acre-ft, two of which store some imported water. Water imported into drainage basin above station from East Goose Creek basin is diverted below station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft^3/s, June 15, 1963, gage height, 6.78 ft, from rating curve extended above 900 ft^3/s; minimum recorded, 2.2 ft^3/s, December 4, 1949, gage height, 0.71 ft.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1942-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	46	13	23	9.6	0.41	3.1
November	27	8.5	13	4.2	0.32	1.7
December	18	6.5	10	2.6	0.25	1.4
January	12	5.0	8.6	1.7	0.20	1.1
February	14	5.4	8.1	1.7	0.21	1.1
March	14	5.8	8.5	2.0	0.23	1.1
April	106	9.5	33	24	0.72	4.4
May	339	80	180	53	0.29	23.7
June	426	106	243	83	0.34	32.1
July	140	79	103	15	0.15	13.6
August	124	44	80	19	0.24	10.5
September	84	20	47	15	0.32	6.2
Annual	84	41	63	11	0.18	100

Magnitude and probability of annual low flow based on period of record 1942-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	6.1	4.9	4.4	3.9	3.4	---
3	6.7	5.5	4.9	4.4	3.8	---
7	6.9	5.9	5.5	5.1	4.8	---
14	7.1	6.1	5.7	5.4	5.0	---
30	7.4	6.4	5.9	5.5	5.1	---
60	7.7	6.6	6.1	5.8	5.4	---
90	8.1	6.9	6.4	6.0	5.6	---
120	8.6	7.3	6.7	6.3	5.9	---
183	12	9.8	9.0	8.5	7.9	---

Magnitude and probability of instantaneous peak flow based on 44 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
538	728	854	1010	1130	1250

Weighted skew = 0.023

Magnitude and probability of annual high flow based on period of record 1942-71

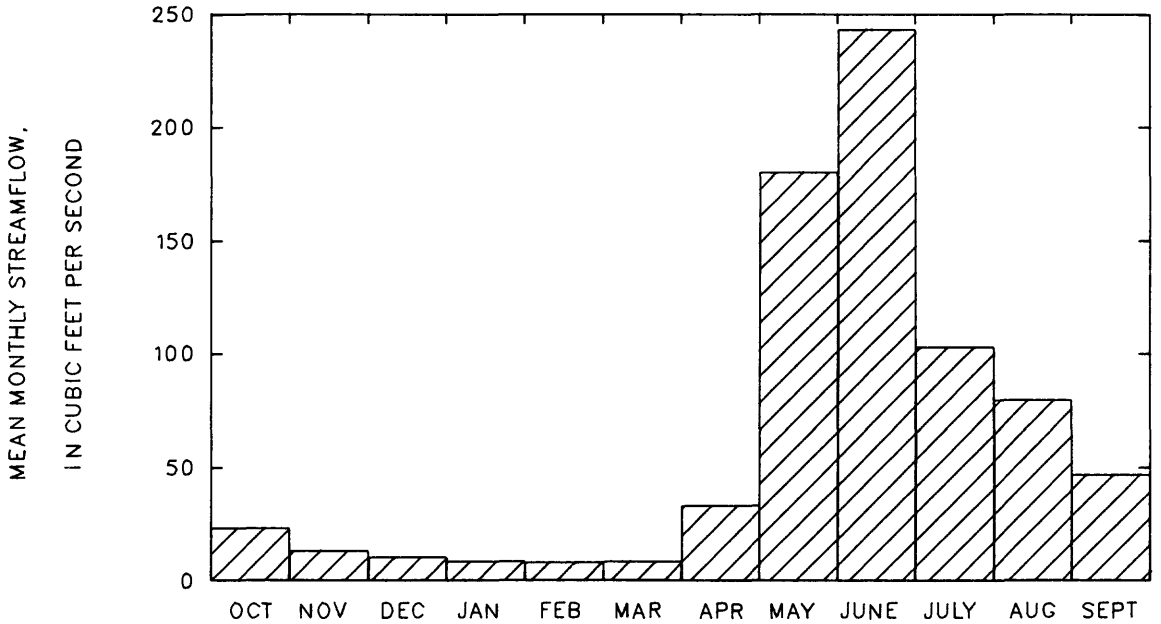
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	421	559	646	749	823	---
3	395	509	574	645	692	---
7	357	453	507	566	604	---
15	313	398	447	502	538	---
30	270	346	391	443	479	---
60	215	269	301	336	360	---
90	178	214	234	256	271	---

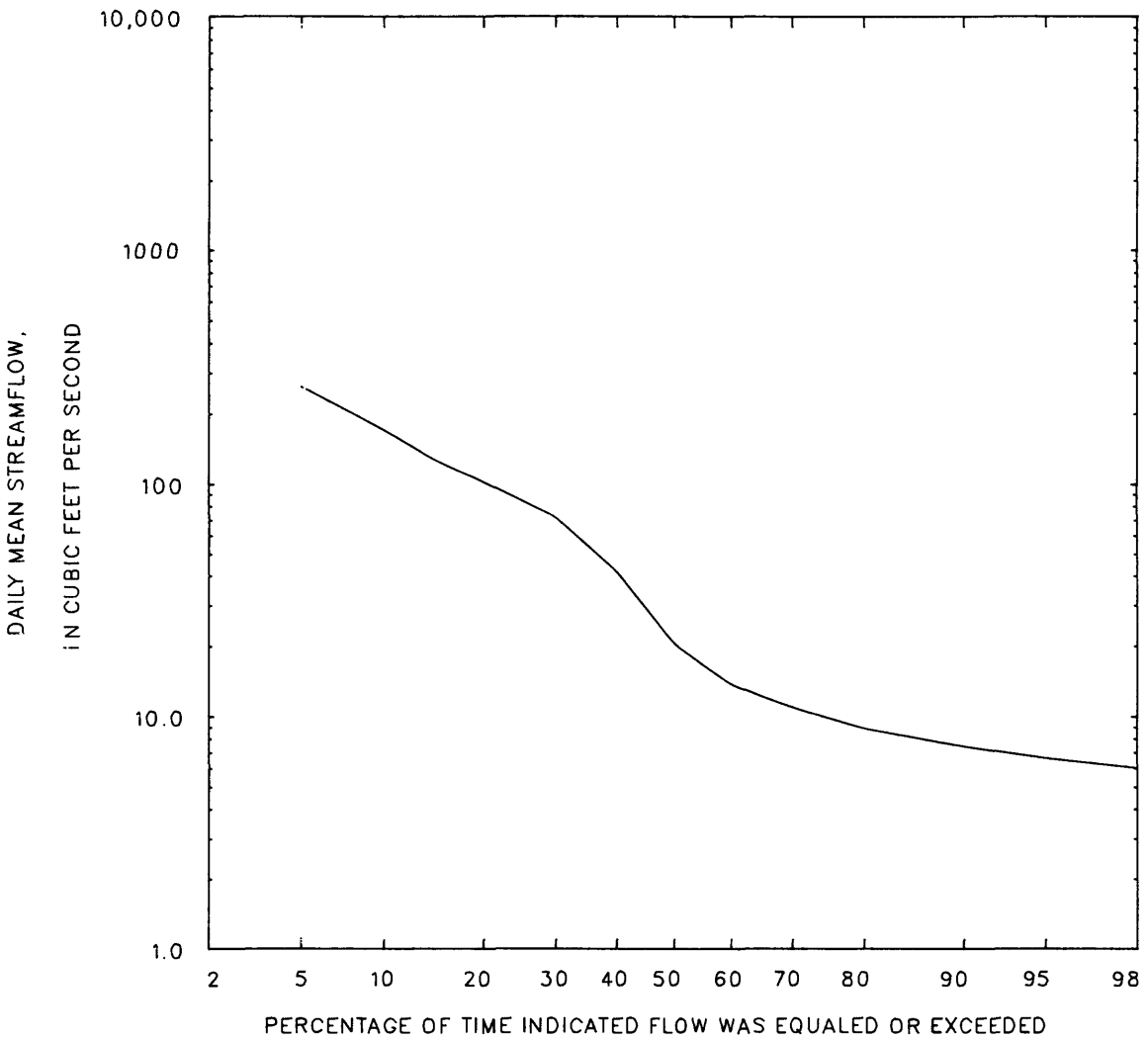
Duration of daily mean flow for period of record 1942-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
427	261	170	123	102	72	42	20	14	11	8.8	7.4	6.6	6.0	5.5	5.2	4.4

STATION 06303500 PERIOD OF RECORD 1942–71

LITTLE GOOSE CREEK IN CANYON, NEAR BIG HORN, WYO.





06305500 GOOSE CREEK BELOW SHERIDAN, WYO.

LOCATION.--Lat 44°49'25", long 106°57'40", in SE¼SW¼ sec.15, T.56 N., R.84 W., Sheridan County, on right bank 700 ft north of Sheridan city limits and 0.2 mi downstream from Soldier Creek.

DRAINAGE AREA.--392 mi^2.

PERIOD OF RECORD.--October 1941 to September 1984. Monthly discharge only for October to December 1941; published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 3,701.36 ft. Prior to August 3, 1951, non-recording gage at site 600 ft upstream at datum 2.18 ft lower.

REMARKS.--Some regulation by many small reservoirs, combined capacity, about 15,000 acre-ft. Natural flow of stream affected by transbasin diversions, storage reservoirs, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,450 ft^3/s, June 16, 1963, gage height, 7.82 ft; maximum gage height, 9.11 ft, February 28, 1972 (backwater from ice); minimum daily discharge, 4.0 ft^3/s, August 11, 1957.

Monthly and annual streamflow 1942-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	195	44	106	38	0.36	4.8
November	138	58	96	18	0.19	4.4
December	114	40	81	15	0.18	3.7
January	123	41	72	15	0.20	3.2
February	222	45	84	36	0.43	3.8
March	201	45	97	29	0.30	4.4
April	320	48	144	59	0.41	6.5
May	1230	28	465	240	0.52	21.1
June	1580	92	754	379	0.50	34.2
July	575	13	166	123	0.74	7.5
August	167	14	56	35	0.63	2.5
September	290	26	88	53	0.61	4.0
Annual	325	59	184	58	0.32	100

Magnitude and probability of annual low flow based on period of record 1943-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	23	13	9.4	7.0	4.9	3.9
3	24	14	10	7.8	5.6	4.4
7	27	16	11	8.7	6.2	4.9
14	30	18	13	9.9	7.1	5.6
30	37	23	18	14	10	8.4
60	48	31	24	19	15	12
90	58	41	32	26	20	17
120	68	51	42	35	28	24
183	76	59	51	45	39	35

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1942-84

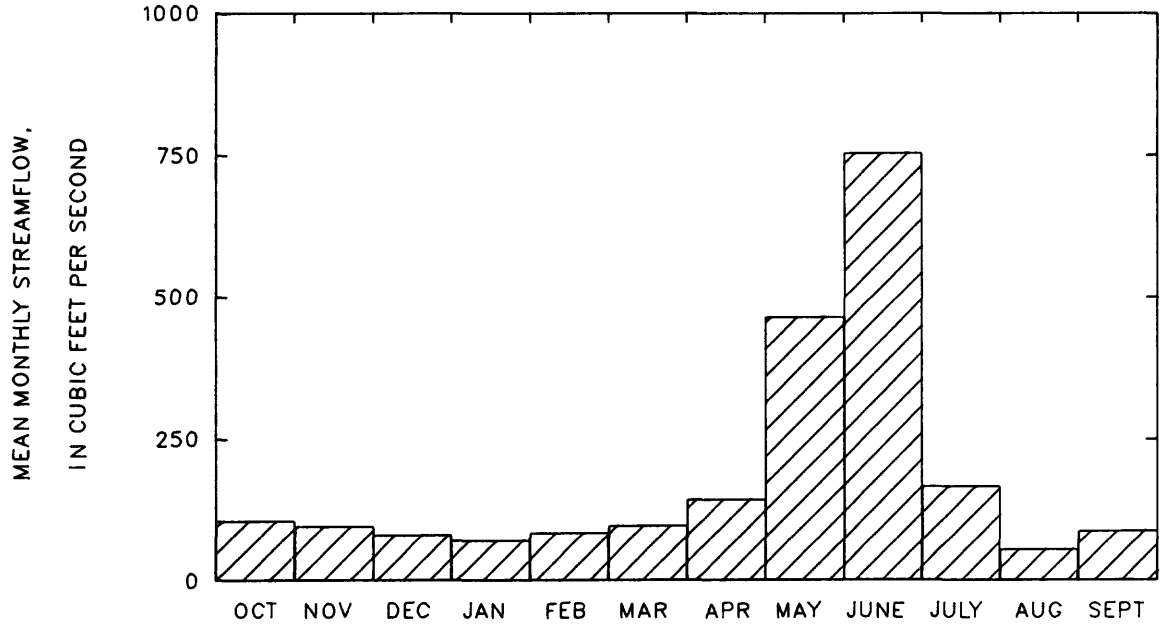
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1480	2310	2880	3600	4140	4670
3	1340	1970	2340	2750	3010	3240
7	1180	1680	1940	2190	2340	2460
15	1000	1420	1620	1800	1900	1980
30	844	1210	1390	1550	1640	1700
60	626	898	1030	1150	1220	1280
90	483	680	774	860	908	944

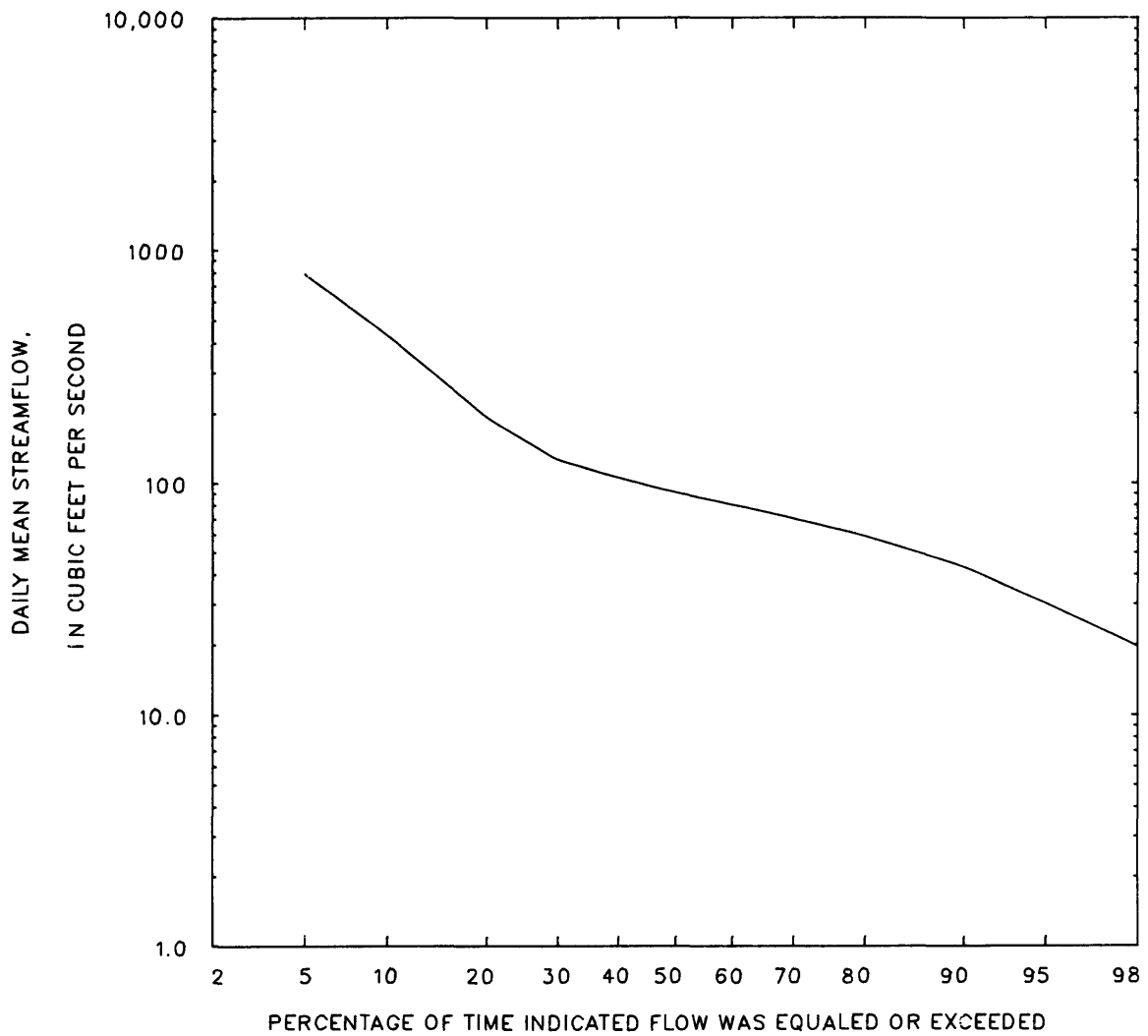
Duration of daily mean flow for period of record 1942-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1460	783	434	278	192	125	104	90	80	70	59	43	30	20	15	12	7.7

STATION 06305500 PERIOD OF RECORD 1942–84

GOOSE CREEK BELOW SHERIDAN, WYO.





06306000 TONGUE RIVER NEAR ACME, WYO.

LOCATION.--Lat 44°56'40", long 106°56'20", in sec.1, T.57 N., R.84 W., Sheridan County, on right bank just upstream from Ash Creek, 400 ft downstream from highway bridge and 3.2 mi northeast of Acme.

DRAINAGE AREA.--894 mi^2.

PERIOD OF RECORD.--October 1938 to September 1957.

GAGE.--Water-stage recorder. Altitude of gage is 3,530 ft, from topographic map.

REMARKS.--Adjudicated diversions above station for irrigation of about 90,000 acres. Some regulation by 12 mountain reservoirs (combined capacity, about 15,000 acre-ft).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,110 ft^3/s, June 4, 1944, gage height, 10.50 ft, from rating curve extended above 5,700 ft^3/s; maximum gage height, 10.68 ft, March 16, 1947 (ice jam); minimum daily discharge, 3.4 ft^3/s, August 24, 1940.

Monthly and annual streamflow 1939-57

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	387	114	200	79	0.40	4.1
November	276	110	189	45	0.24	3.9
December	206	98	157	30	0.19	3.2
January	187	96	141	29	0.21	2.9
February	224	65	154	42	0.27	3.2
March	343	114	204	67	0.33	4.2
April	668	189	341	155	0.46	7.1
May	2520	585	1170	459	0.39	24.3
June	3550	492	1600	771	0.48	33.1
July	877	95	409	278	0.68	8.5
August	273	11	112	72	0.64	2.3
September	335	27	152	89	0.58	3.2
Annual	704	191	403	124	0.31	100

Magnitude and probability of annual low flow based on period of record 1940-57

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	53	21	11	6.0	---	---
3	57	23	13	7.2	---	---
7	61	26	15	8.9	---	---
14	71	33	20	12	---	---
30	84	42	26	16	---	---
60	103	56	37	25	---	---
90	118	78	61	48	---	---
120	134	98	81	68	---	---
183	149	112	96	84	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1939-57

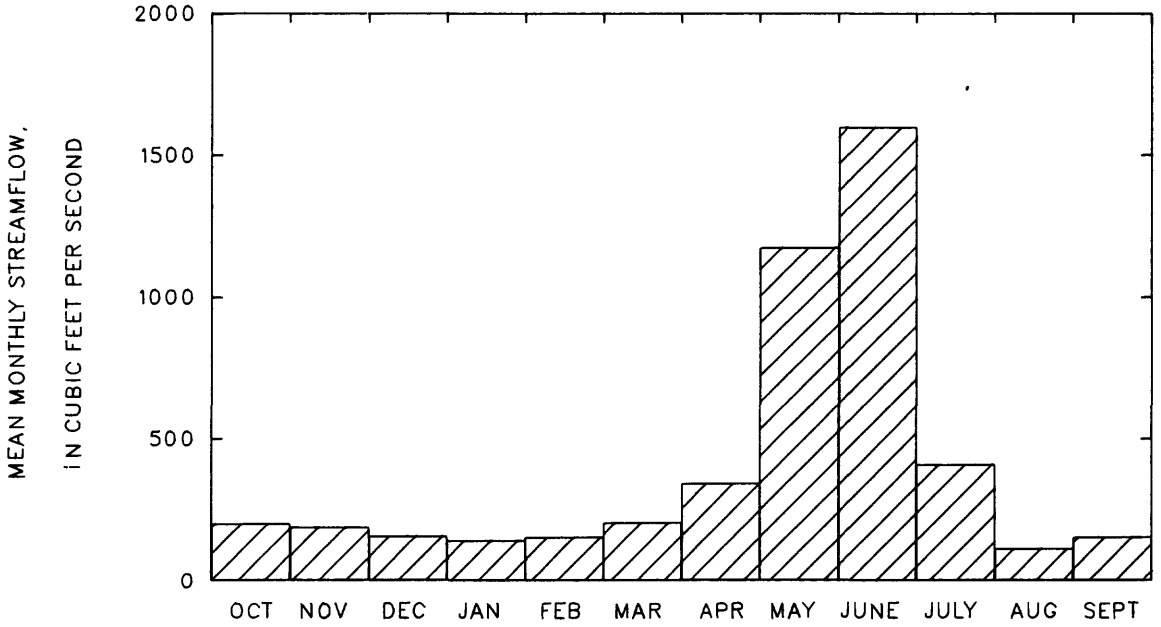
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2850	4140	5070	6310	---	---
3	2660	3710	4380	5180	---	---
7	2370	3280	3850	4520	---	---
15	2070	2820	3280	3820	---	---
30	1730	2440	2900	3470	---	---
60	1350	1860	22C0	2610	---	---
90	1060	1450	1690	1990	---	---

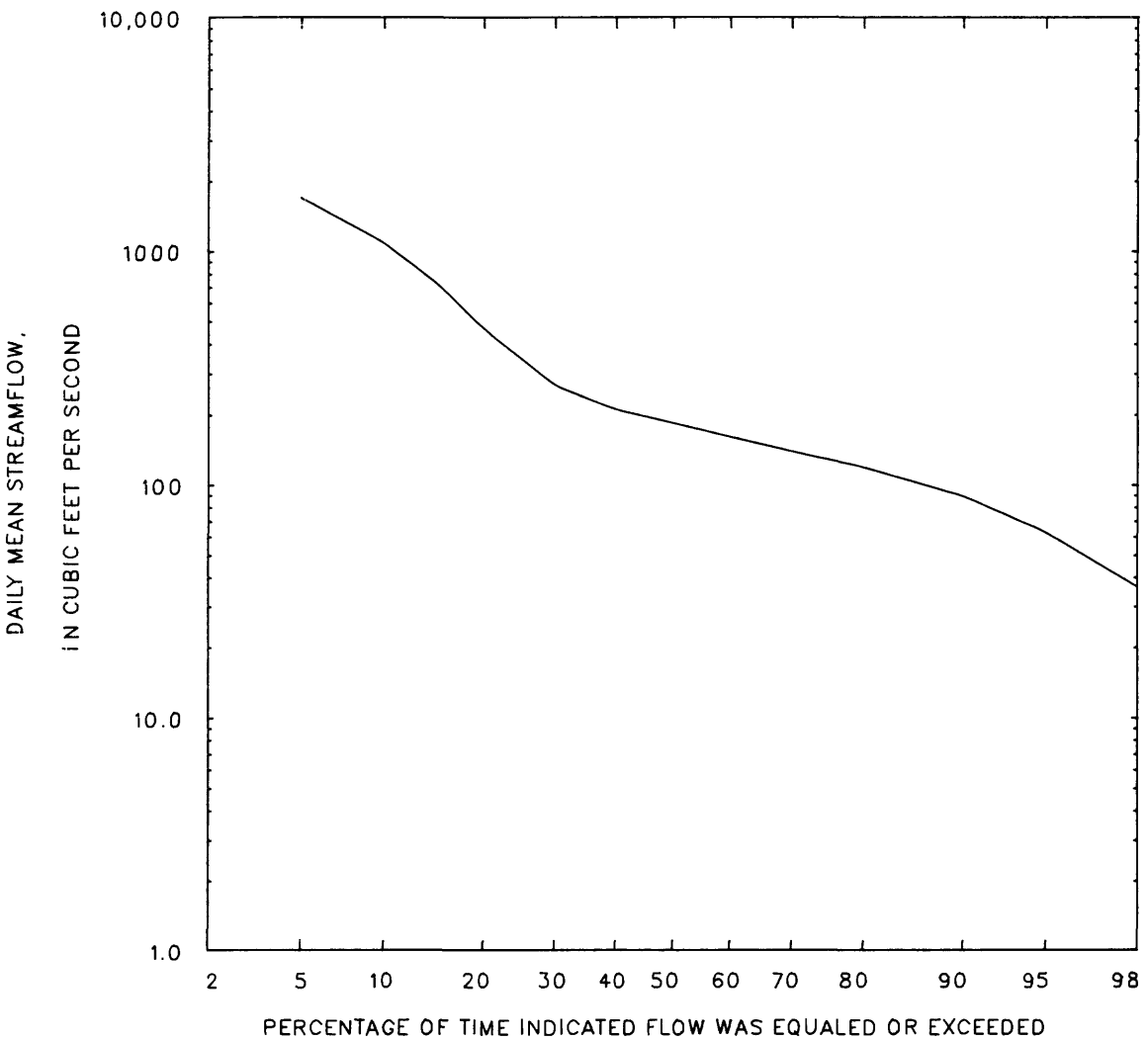
Duration of daily mean flow for period of record 1939-57

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
3080	1690	1090	714	463	266	210	184	160	139	119	89	63	36	24	14	5.0

STATION 06306000 PERIOD OF RECORD 1939–57

TONGUE RIVER NEAR ACME, WYO.





06306300 TONGUE RIVER AT STATE LINE, NEAR DECKER, MONT.

LOCATION.--Lat 45°00'32", long 106°50'08", in NW¼NW¼NE¼ sec.33, T.9 S., R.40 E., Big Horn County, on left bank 1.0 mi north of Wyoming-Montana State line, 1.4 mi southeast of Decker, 1.6 mi upstream from Badger Creek, and at mile 200.9.

DRAINAGE AREA.--1,477 mi^2.

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,429.14 ft, from levels by U.S. Army Corps of Engineers.

REMARKS.--Flow regulated by many small reservoirs in Wyoming, combined capacity, about 15,000 acre-ft. Diversions for irrigation of about 64,300 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft^3/s, May 19, 1978, gage height, 14.25 ft; minimum, 3.0 ft^3/s, August 23, 1961.

Monthly and annual streamflow 1961-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	403	116	264	74	0.28	4.4
November	324	150	235	46	0.19	3.9
December	271	134	195	41	0.21	3.2
January	330	108	193	55	0.29	3.2
February	672	156	256	112	0.44	4.3
March	855	129	336	177	0.53	5.6
April	676	124	382	141	0.37	6.4
May	3280	481	1270	599	0.47	21.1
June	3570	342	1940	939	0.48	32.3
July	1670	88	528	342	0.65	8.8
August	475	17	184	99	0.54	3.1
September	615	74	232	121	0.52	3.9
Annual	862	187	501	155	0.31	100

Magnitude and probability of annual low flow based on period of record 1962-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	96	53	32	18	---	---
3	101	56	34	20	---	---
7	109	60	37	22	---	---
14	121	68	42	25	---	---
30	137	81	53	34	---	---
60	163	100	69	48	---	---
90	177	125	99	80	---	---
120	193	151	130	113	---	---
183	207	166	147	132	---	---

Magnitude and probability of instantaneous peak flow based on 29 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
3840	5510	6670	8270	9710	11400

Weighted skew = -0.039

Magnitude and probability of annual high flow based on period of record 1961-84

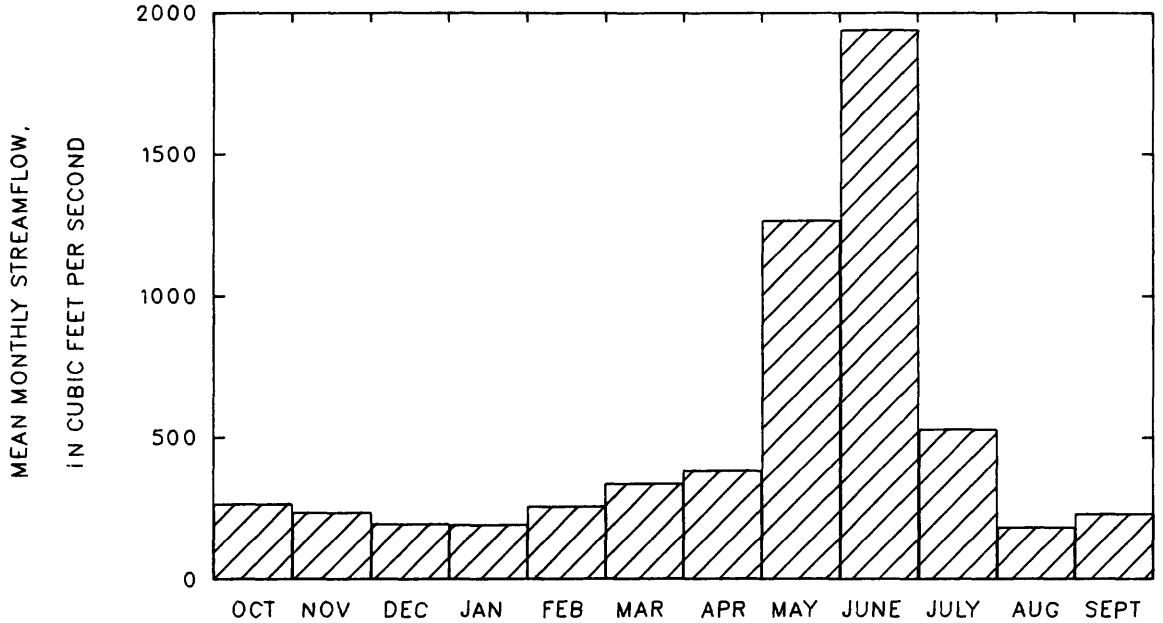
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	3190	5130	6820	9520	---	---
3	2960	4490	5670	7350	---	---
7	2650	3850	4670	5750	---	---
15	2330	3350	4020	4850	---	---
30	2060	2950	3530	4230	---	---
60	1580	2270	2700	3190	---	---
90	1240	1740	2030	2360	---	---

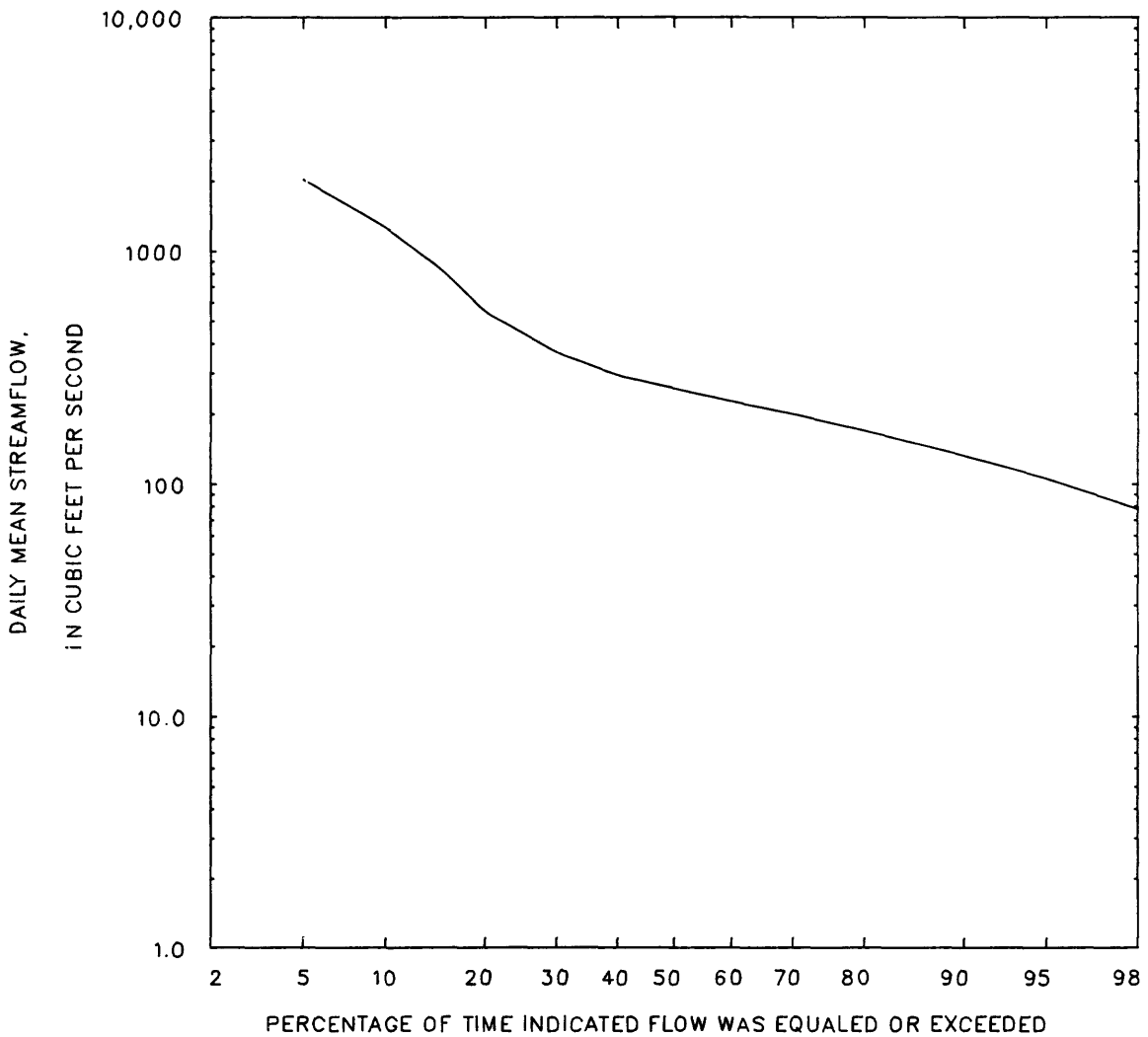
Duration of daily mean flow for period of record 1961-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
3690	2020	1260	828	544	363	289	255	224	198	169	132	105	77	52	24	9.4

STATION 06306300 PERIOD OF RECORD 1961–84

TONGUE RIVER AT STATE LINE, NEAR DECKER, MONT.





06309200 MIDDLE FORK POWDER RIVER NEAR BARNUM, WYO.

LOCATION.--Lat 43°34'40", long 107°08'16", in SE¼SW¼NE¼ sec.26, T.42 N., R.86 W., Washakie County, on left bank 1,100 ft downstream from Rock Creek and 13 mi southwest of Barnum.

DRAINAGE AREA.--45.2 mi^2.

PERIOD OF RECORD.--September 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,220 ft, from topographic map. Prior to October 1, 1970, at site 900 ft upstream at different datum. Since September 15, 1983, supplementary water-stage recorder at site 150 ft downstream at datum 6.78 ft lower.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,110 ft^3/s, June 15, 1963, gage height, 12.6 ft, from floodmark, site and datum then in use, on basis of slope-area measurement of peak flow; minimum daily discharge, 1.0 ft^3/s, December 15, 16, 1964, January 24-27, 1966.

Monthly and annual streamflow 1962-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	15	2.4	6.9	2.4	0.35	1.8
November	13	2.0	6.0	2.2	0.36	1.6
December	9.9	2.8	5.5	1.7	0.32	1.4
January	7.8	2.5	5.0	1.1	0.22	1.3
February	10	3.8	5.4	1.4	0.26	1.4
March	14	4.1	6.3	2.4	0.38	1.6
April	94	8.0	28	24	0.87	7.3
May	268	84	170	59	0.34	44.3
June	299	27	114	82	0.72	29.7
July	40	7.3	20	10	0.50	5.3
August	18	4.3	9.0	3.0	0.33	2.3
September	17	4.2	7.5	2.8	0.37	1.9
Annual	49	16	32	10	0.32	100

Magnitude and probability of annual low flow based on period of record 1963-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	3.3	2.1	1.6	1.2	---	---
3	3.5	2.3	1.8	1.3	---	---
7	3.8	2.6	2.0	1.6	---	---
14	4.0	2.9	2.3	1.9	---	---
30	4.5	3.4	2.9	2.5	---	---
60	4.8	3.7	3.1	2.7	---	---
90	5.0	4.0	3.5	3.1	---	---
120	5.2	4.3	3.9	3.6	---	---
183	5.6	4.8	4.4	4.1	---	---

Magnitude and probability of instantaneous peak flow based on 23 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
668	1200	1690	2500	3280	4220

Weighted skew = 0.546

Magnitude and probability of annual high flow based on period of record 1962-84

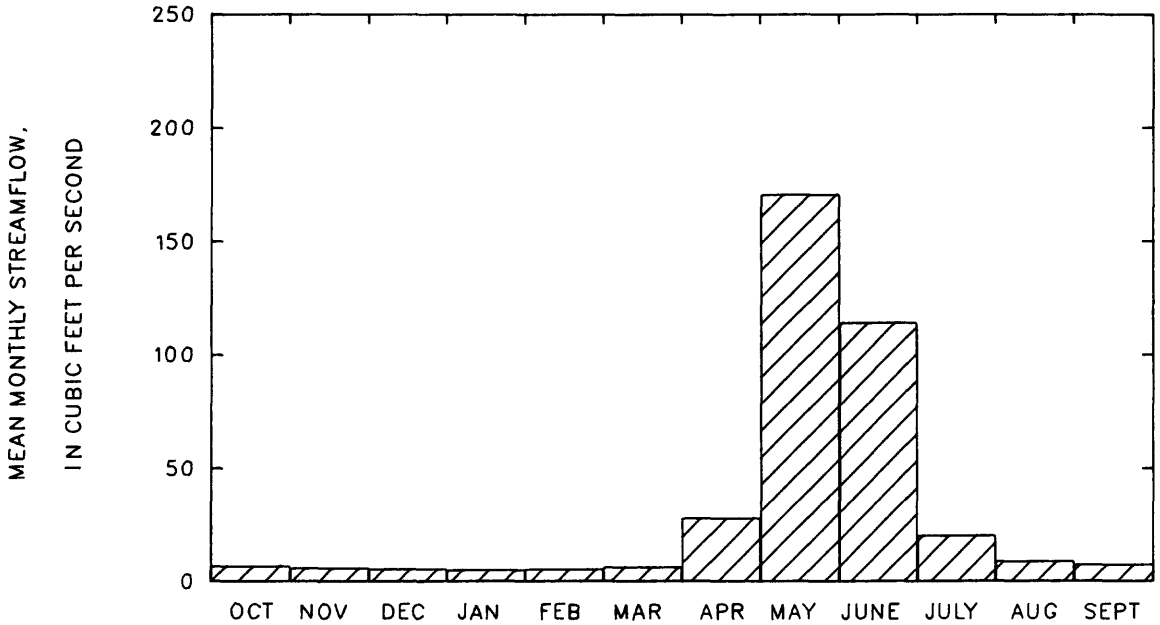
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	448	617	701	782	---	---
3	390	551	639	731	---	---
7	330	480	568	668	---	---
15	275	396	468	549	---	---
30	213	310	371	442	---	---
60	144	201	236	278	---	---
90	104	143	166	192	---	---

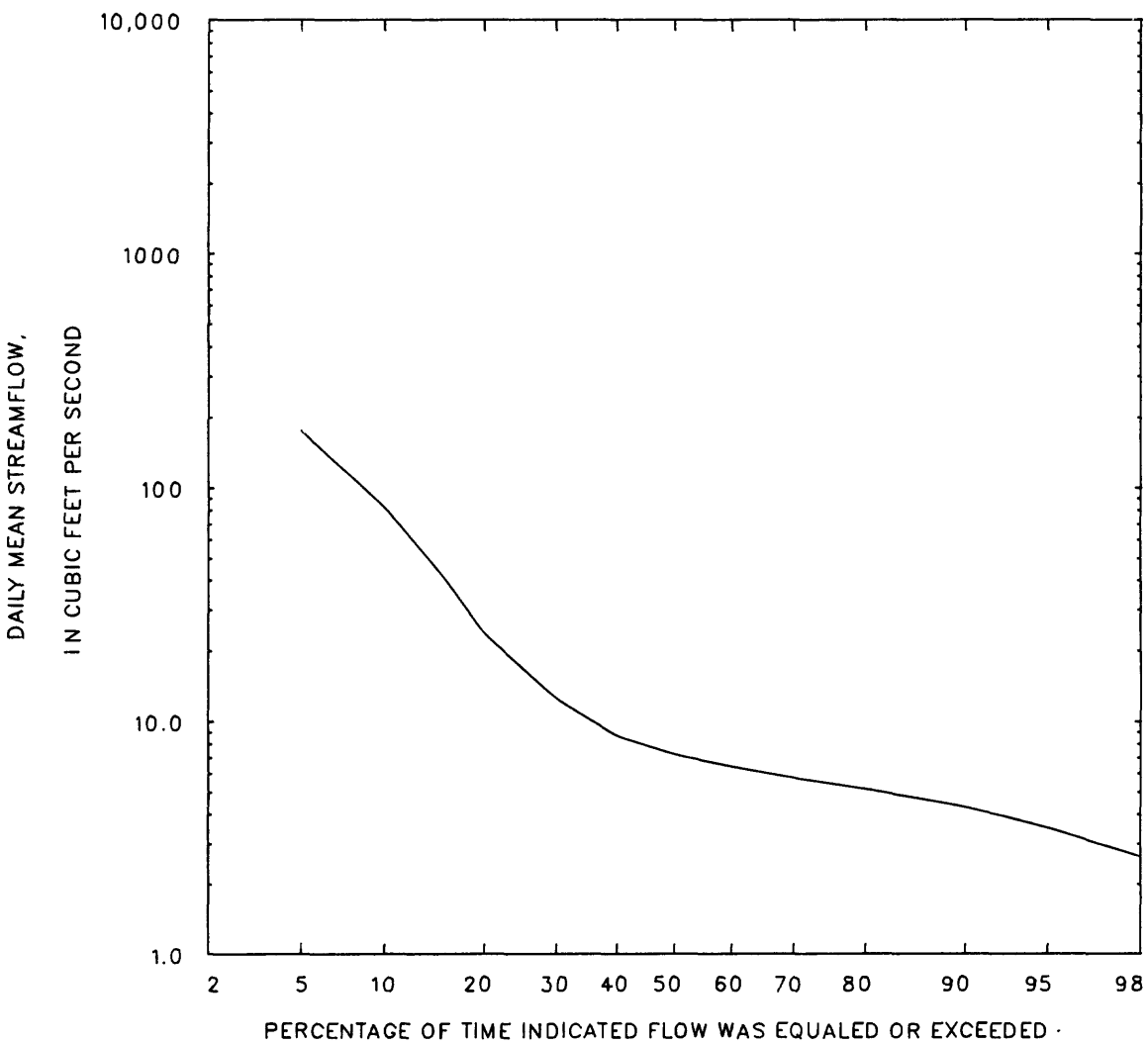
Duration of daily mean flow for period of record 1962-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
422	175	83	43	24	12	8.6	7.1	6.4	5.7	5.1	4.3	3.5	2.6	2.3	2.0	1.6

STATION 06309200 PERIOD OF RECORD 1962–84

MIDDLE FORK POWDER RIVER NEAR BARNUM, WYO.





06309500 MIDDLE FORK POWDER RIVER ABOVE KAYCEE, WYO.

LOCATION.--Lat 43°38'51", long 106°48'29", in SW¼SW¼ sec.34, T.43 N., R.83 W., Johnson County, on right bank 680 ft upstream from bridge on county road, 3.5 mi upstream from Red Fork Powder River, 4 mi downstream from Beaver Creek, and 10 mi southwest of Kaycee.

DRAINAGE AREA.--450 mi^2, approximately.

PERIOD OF RECORD.--April 1949 to September 1970, April to September 1984.

GAGE.--Water-stage recorder. Datum of gage is 4,874.76 ft.

REMARKS.--Diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,750 ft^3/s, June 8, 1968, gage height, 8.74 ft; minimum daily, 12 ft^3/s, August 28, 29, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage for undetermined period, about 11.7 ft, date unknown.

Monthly and annual streamflow 1950-70

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	54	29	42	7.2	0.17	4.9
November	52	34	45	4.9	0.11	5.2
December	53	35	42	4.8	0.12	4.9
January	53	33	40	4.7	0.12	4.6
February	76	34	45	9.4	0.21	5.3
March	54	40	46	3.8	0.08	5.3
April	176	43	78	35	0.45	9.0
May	452	97	236	85	0.36	27.5
June	421	42	163	128	0.79	18.9
July	125	20	55	28	0.51	6.4
August	58	20	33	10	0.31	3.8
September	60	19	36	11	0.30	4.2
Annual	112	47	72	20	0.28	100

Magnitude and probability of annual low flow based on period of record 1950-70

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	22	18	16	14	---	---
3	24	19	17	15	---	---
7	25	20	18	16	---	---
14	26	21	19	17	---	---
30	28	22	20	18	---	---
60	30	25	23	21	---	---
90	34	27	24	22	---	---
120	36	30	27	24	---	---
183	38	33	31	29	---	---

Magnitude and probability of instantaneous peak flow based on 22 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
702	1050	1300	1640	1910	2190

Weighted skew = 0.080

Magnitude and probability of annual high flow based on period of record 1950-70

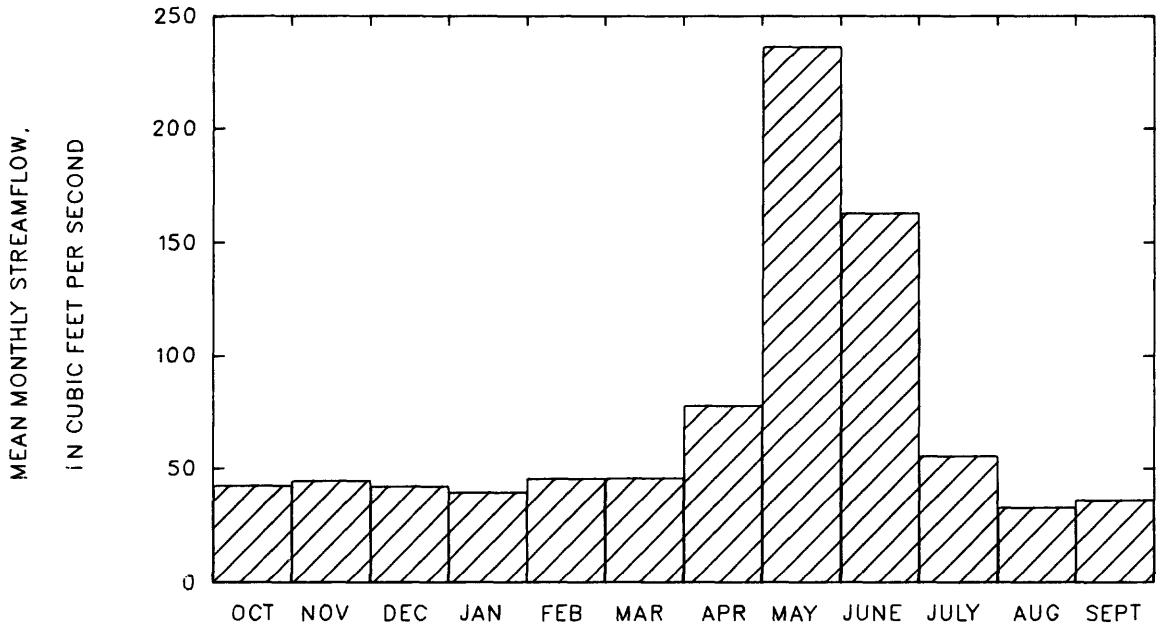
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	490	735	895	1090	---	---
3	441	658	801	978	---	---
7	379	575	712	892	---	---
15	319	485	603	762	---	---
30	259	388	485	620	---	---
60	190	280	347	440	---	---
90	150	214	261	325	---	---

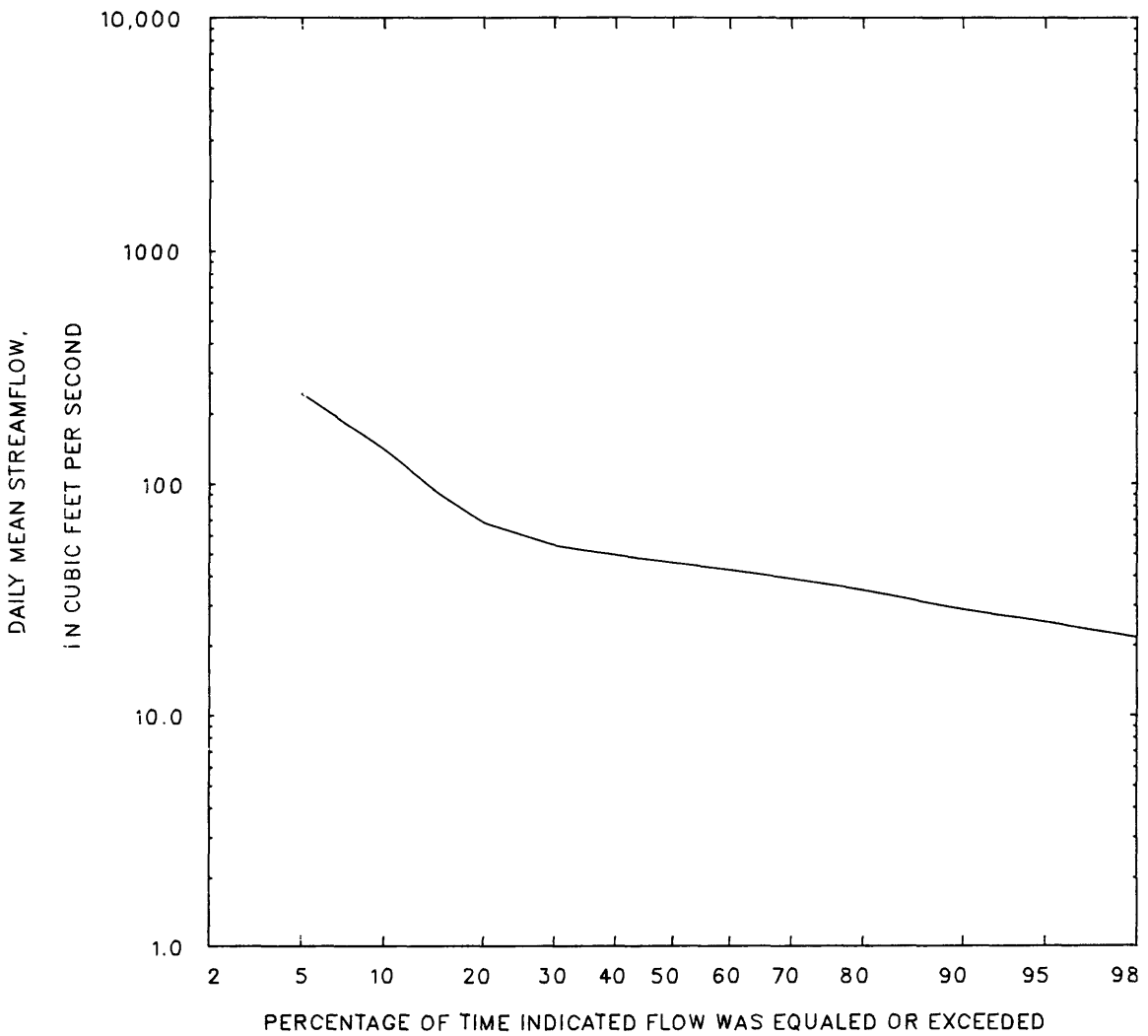
Duration of daily mean flow for period of record 1950-70

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
511	241	141	90	68	54	49	46	42	39	35	28	25	21	19	18	16

STATION 06309500 PERIOD OF RECORD 1950–70

MIDDLE FORK POWDER RIVER ABOVE KAYCEE, WYO.





06311000 NORTH FORK POWDER RIVER NEAR HAZELTON, WYO.

LOCATION.--Lat 44°01'43", long 107°04'55", in NW¼SE¼NW¼ sec.21, T.47 N., R.85 W., Johnson County, on right bank 0.5 mi downstream from Twin Creek, 0.7 mi upstream from Dullknife Reservoir, 7.2 mi southwest of Hazelton, and 19 mi northwest of Mayoworth.

DRAINAGE AREA.--24.5 mi^2.

PERIOD OF RECORD.--September 1946 to current year. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 8,180 ft, from topographic map. Prior to October 1, 1966, at site 0.8 mi downstream at different datum.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 886 ft^3/s, June 15, 1953, gage height, 4.34 ft, site and datum then in use, from rating curve extended above 110 ft^3/s on basis of slope-area measurement of peak flow; maximum gage height, 6.21 ft, May 14, 1984 (backwater from ice); minimum daily discharge, 0.60 ft^3/s, October 30, 1960, April 9, 12, 15-17, 1961, but may have been less during winter months of water years 1947-48.

Monthly and annual streamflow 1947-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	10	2.0	4.2	1.4	0.35	2.3
November	10	1.7	3.4	1.5	0.42	1.9
December	7.0	1.4	2.8	1.0	0.38	1.6
January	4.5	0.80	2.3	0.75	0.33	1.3
February	4.0	1.0	2.1	0.64	0.30	1.2
March	5.0	1.2	2.2	0.75	0.33	1.3
April	34	1.1	7.4	8.3	1.1	4.2
May	119	23	58	21	0.36	32.7
June	178	13	67	41	0.61	37.3
July	47	4.9	17	8.3	0.48	9.7
August	12	2.8	7.0	2.3	0.32	3.9
September	9.7	2.5	4.9	1.7	0.34	2.7
Annual	27	6.9	15	4.8	0.32	100

Magnitude and probability of annual low flow based on period of record 1948-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent: 2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.3	0.96	0.80	0.69	0.57	---
3	1.4	1.0	0.89	0.77	0.65	---
7	1.5	1.1	0.95	0.82	0.69	---
14	1.6	1.2	1.0	0.89	0.75	---
30	1.7	1.3	1.1	0.99	0.86	---
60	1.9	1.5	1.4	1.3	1.1	---
90	2.1	1.7	1.5	1.4	1.3	---
120	2.2	1.8	1.6	1.5	1.4	---
183	2.6	2.2	2.1	1.9	1.9	---

Magnitude and probability of instantaneous peak flow based on 38 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent: 2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
293	422	514	639	738	842

Weighted skew = 0.199

Magnitude and probability of annual high flow based on period of record 1947-84

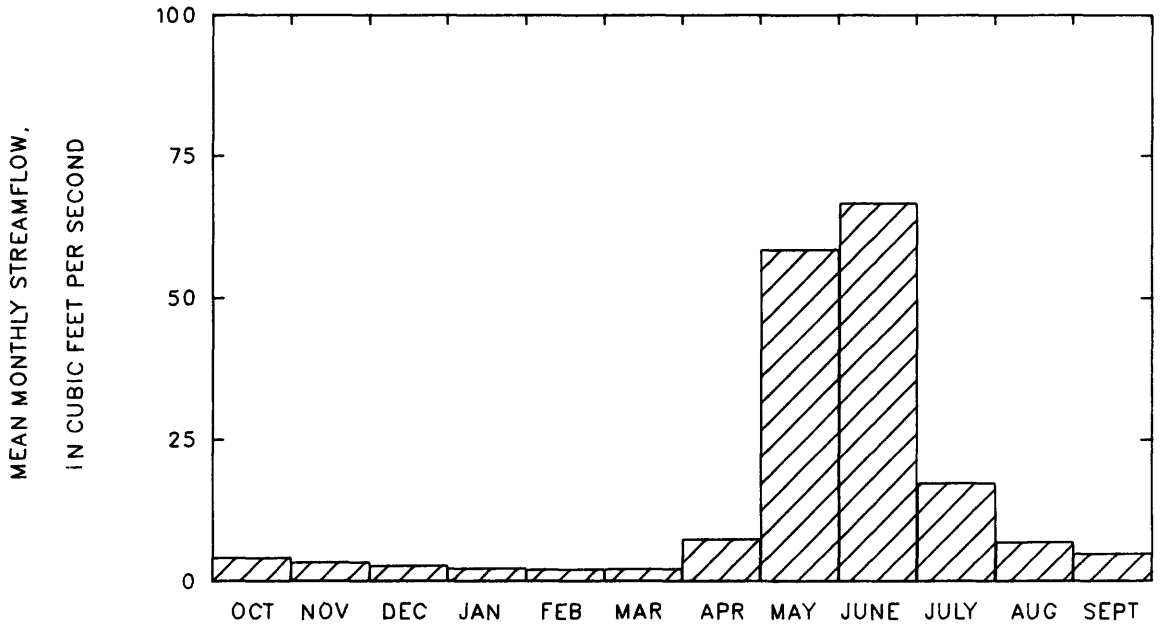
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent: 2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	168	235	281	341	386	---
3	146	204	242	292	329	---
7	122	173	207	251	284	---
15	103	147	178	218	249	---
30	86	122	146	176	198	---
60	63	87	102	120	133	---
90	47	64	74	87	96	---

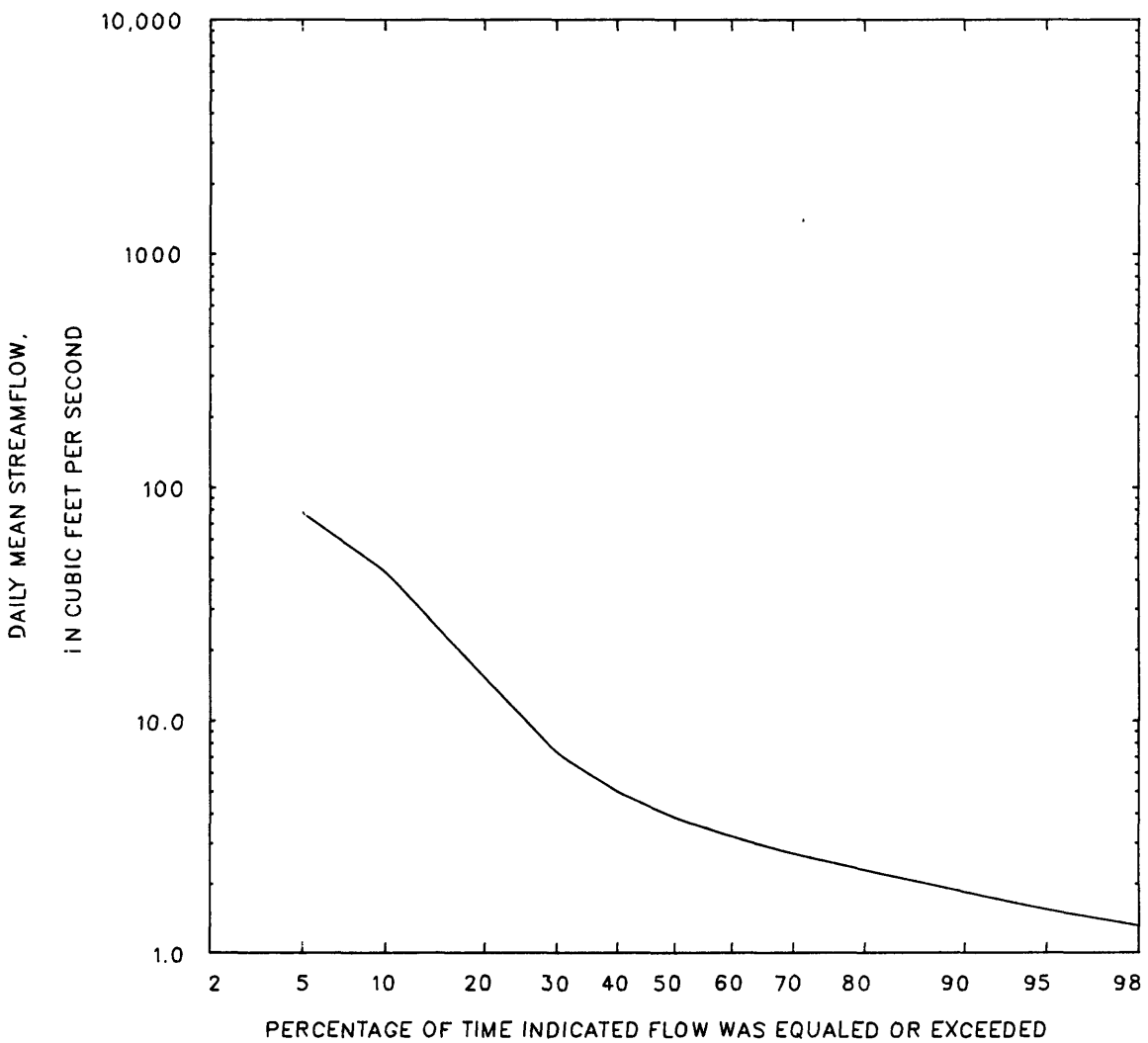
Duration of daily mean flow for period of record 1947-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time: 1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
159	77	43	24	15	7.2	4.9	3.8	3.2	2.7	2.3	1.8	1.5	1.3	1.0	0.91	0.74

STATION 06311000 PERIOD OF RECORD 1947–84

NORTH FORK POWDER RIVER NEAR HAZELTON, WYO.





06311060 NORTH FORK POWDER RIVER BELOW BULL CREEK, NEAR HAZELTON, WYO.

LOCATION.--Lat 44°00'29", long 107°01'08", in NE¼SE¼SW¼ sec.25, T.47 N., R.85 W., Johnson County, on right bank 60 ft downstream from Bull Creek, 2.1 mi downstream from Dullknife Reservoir, and 6.8 mi southwest of Hazelton.

DRAINAGE AREA.--32.3 mi^2.

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,840 ft, from topographic map.

REMARKS.--Flow regulated by Dullknife Reservoir 2.1 mi upstream, capacity, 4,350 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 458 ft^3/s, May 27, 1983, gage height, 4.48 ft, from floodmarks; minimum daily, 0.50 ft^3/s, January 24-30, 1977.

Monthly and annual streamflow 1975-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	10	1.0	4.7	3.4	0.73	2.0
November	7.9	1.0	3.4	2.1	0.61	1.5
December	6.6	0.87	3.2	1.9	0.59	1.4
January	5.4	0.69	2.4	1.5	0.60	1.1
February	4.7	0.73	2.4	1.3	0.53	1.1
March	5.5	0.86	2.6	1.4	0.54	1.1
April	10	1.8	5.1	2.5	0.50	2.2
May	93	6.8	51	29	0.57	22.2
June	151	25	82	44	0.54	35.5
July	59	18	33	11	0.33	14.3
August	33	10	24	7.4	0.31	10.3
September	32	10	17	6.5	0.38	7.4
Annual	27	13	19	5.3	0.27	100

Magnitude and probability of annual low flow based on period of record 1976-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.3	0.75	0.57	---	---	---
3	1.3	0.78	0.58	---	---	---
7	1.4	0.81	0.60	---	---	---
14	1.5	0.87	0.65	---	---	---
30	1.6	0.94	0.70	---	---	---
60	2.1	1.2	0.83	---	---	---
90	2.2	1.2	0.87	---	---	---
120	2.5	1.5	1.1	---	---	---
183	3.1	1.8	1.3	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1975-84

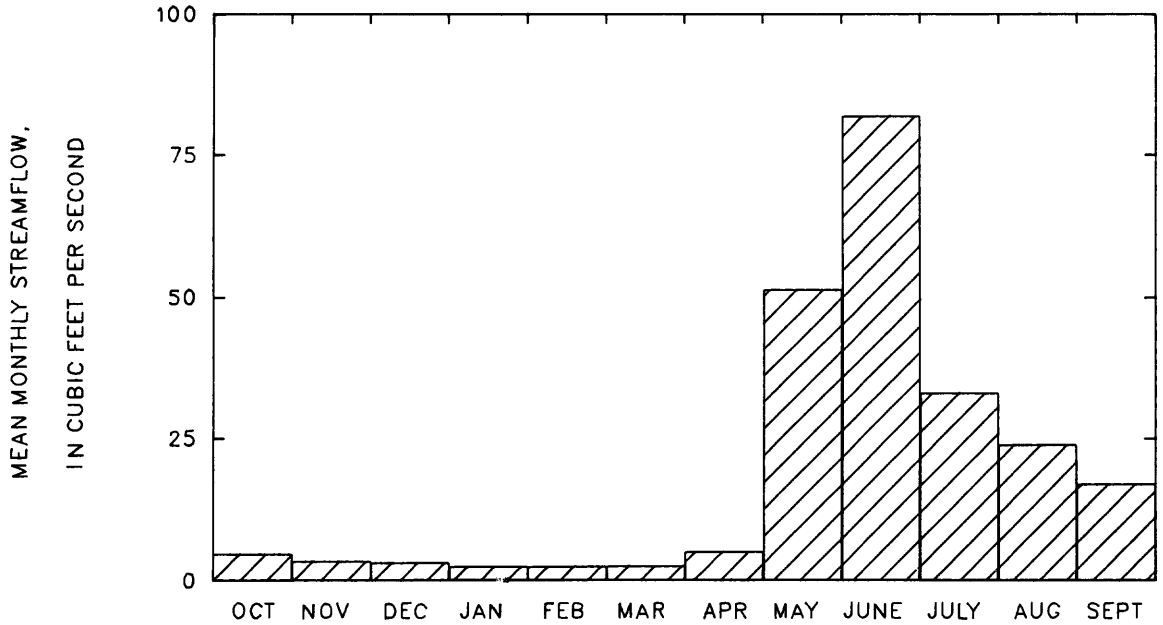
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	175	256	308	---	---	---
3	155	222	265	---	---	---
7	135	199	244	---	---	---
15	117	169	204	---	---	---
30	98	147	180	---	---	---
60	68	98	119	---	---	---
90	56	77	90	---	---	---

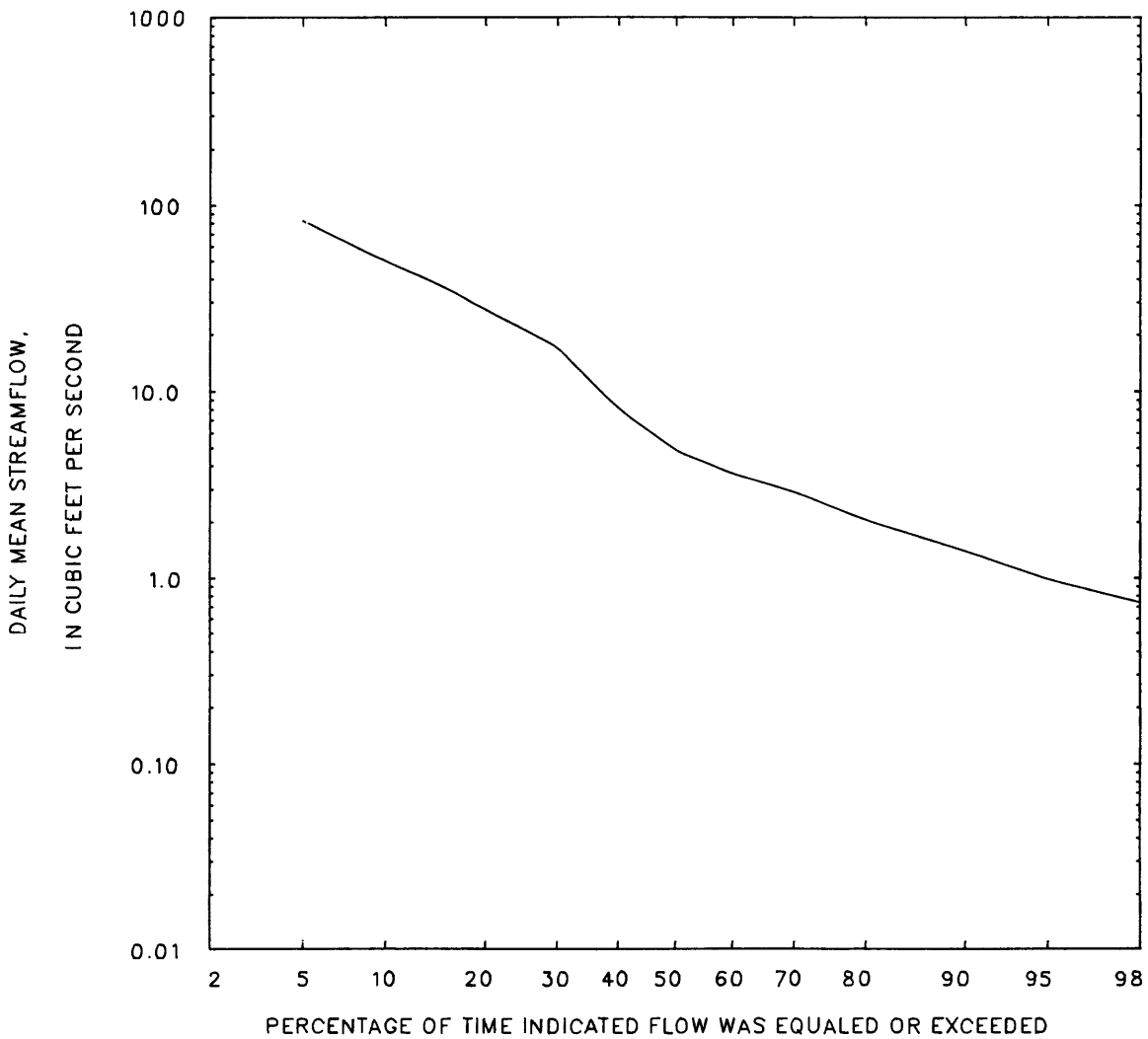
Duration of daily mean flow for period of record 1975-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
196	82	50	37	27	17	8.0	4.8	3.6	2.9	2.0	1.4	0.97	0.73	0.66	0.62	0.53

STATION 06311060 PERIOD OF RECORD 1975–84

NORTH FORK POWDER RIVER BELOW BULL CREEK, NEAR HAZELTON, WYO.





06311400 NORTH FORK POWDER RIVER BELOW PASS CREEK, NEAR MAYOWORTH, WYO.

LOCATION.--Lat 43°54'41", long 106°53'20", in NW¼NE¼SE¼ sec.36, T.46 N., R.84 W., Johnson County, on left bank 0.8 mi downstream from Pass Creek, 1.2 mi upstream from Hat Ranch, 7.2 mi northwest of Mayoworth, and 13 mi downstream from Dullknife Reservoir.

DRAINAGE AREA.--100 mi^2.

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,700 ft, from topographic map. Prior to September 15, 1983, at site 60 ft downstream at same datum.

REMARKS.--Some regulation for irrigation by Dullknife Reservoir 13 mi upstream, capacity, 4,350 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,590 ft^3/s, August 1, 1984, gage height, 8.89 ft, from floodmarks, from rating curve extended above 400 ft^3/s on basis of slope-area measurement of peak flow; minimum daily discharge, 13 ft^3/s, February 5, 1975.

Monthly and annual streamflow 1974-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	32	18	23	3.6	0.16	5.1
November	22	17	20	1.4	0.07	4.4
December	23	18	20	1.7	0.08	4.4
January	20	18	19	0.93	0.05	4.2
February	21	17	19	1.3	0.07	4.2
March	21	16	18	1.5	0.08	4.1
April	48	17	27	11	0.42	6.0
May	176	26	81	43	0.53	18.2
June	187	43	102	54	0.53	23.0
July	81	31	49	13	0.26	11.1
August	50	29	38	8.7	0.23	8.6
September	43	20	29	6.5	0.22	6.6
Annual	52	28	37	7.8	0.21	100

Magnitude and probability of annual low flow based on period of record 1975-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	16	14	14	13	---	---
3	16	15	15	14	---	---
7	16	15	15	15	---	---
14	17	16	15	15	---	---
30	17	16	16	16	---	---
60	18	17	17	16	---	---
90	18	17	17	17	---	---
120	18	18	17	17	---	---
183	20	18	18	18	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1974-84

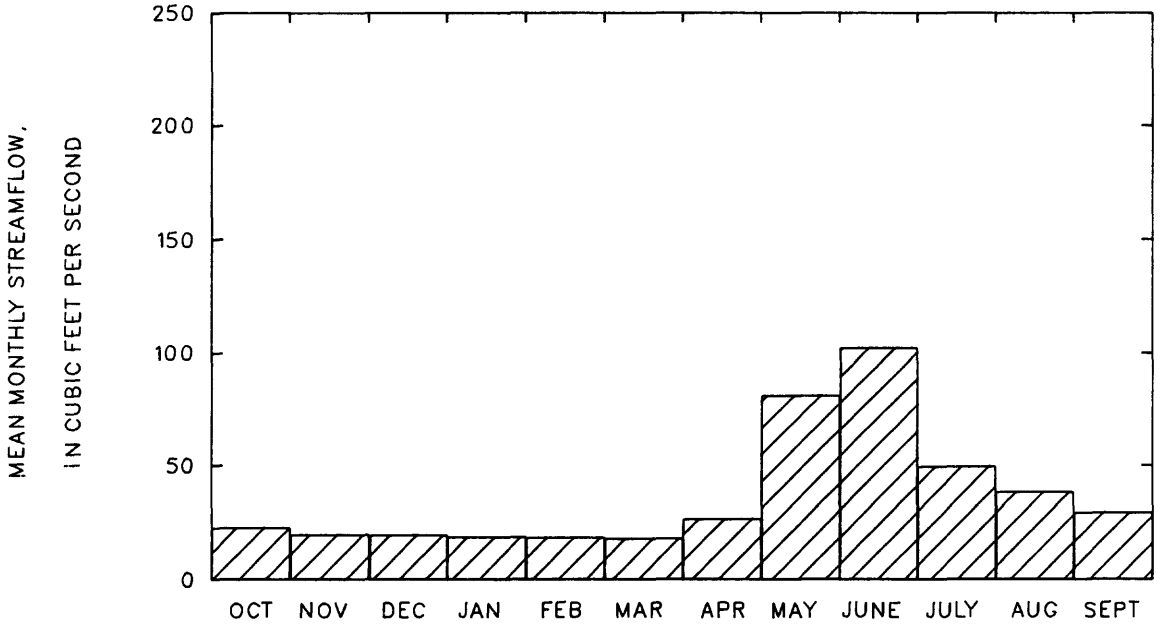
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	216	296	340	---	---	---
3	192	268	314	---	---	---
7	162	239	293	---	---	---
15	137	206	255	---	---	---
30	119	181	227	---	---	---
60	90	132	161	---	---	---
90	75	104	125	---	---	---

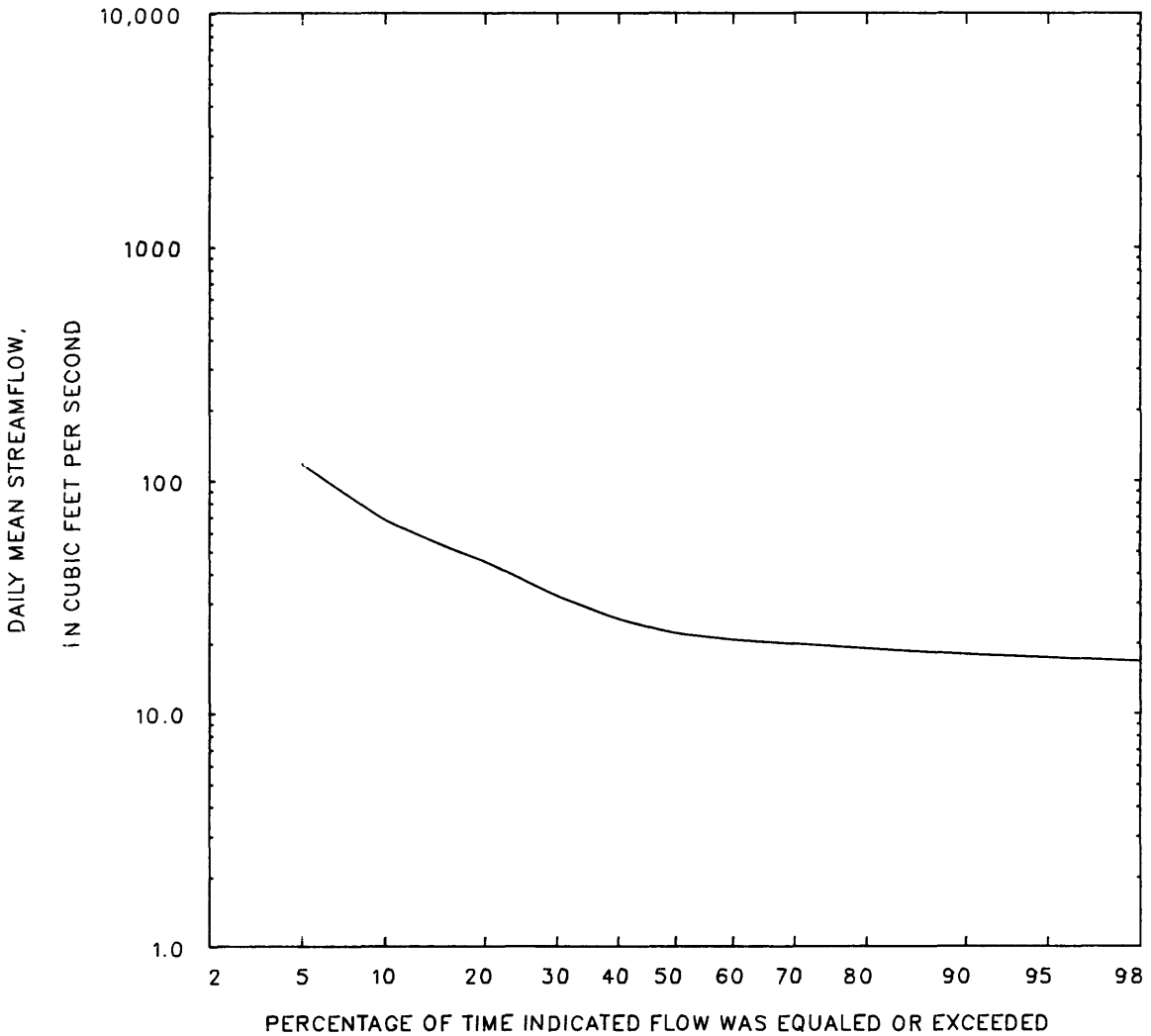
Duration of daily mean flow for period of record 1974-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
238	117	67	53	45	32	25	22	21	20	19	18	17	17	16	16	14

STATION 06311400 PERIOD OF RECORD 1974–84

NORTH FORK POWDER RIVER BELOW PASS CREEK, NEAR MAYOWORTH, WYO.





06311500 NORTH FORK POWDER RIVER NEAR MAYOWORTH, WYO.

LOCATION.--Lat 43°53'50", long 106°52'40", in NE¼SW¼ sec.6, T.45 N., R.83 W., Johnson County, on right bank 2.0 mi downstream from Pass Creek, 6.0 mi northwest of Mayoworth, and 14 mi downstream from Dullknife Reservoir.

DRAINAGE AREA.--106 mi^2.

PERIOD OF RECORD.--October 1940 to September 1973. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 5,590 ft, from topographic map. Prior to May 12, 1948, at site 300 ft downstream at datum 4.43 ft lower.

REMARKS.--Some regulation for irrigation by Dullknife Reservoir 14 mi upstream, capacity, 4,350 acre-ft, since spring of 1967. Diversions above station for irrigation of about 180 acres, of which about 160 acres are below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,270 ft^3/s, August 11, 1941, gage height, 7.64 ft, site and datum then in use, from rating curve extended above 190 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 5.6 ft^3/s, November 5, 1954.

COOPERATION--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1941-73

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	26	11	19	4.1	0.21	4.9
November	25	9.4	19	3.4	0.18	4.8
December	22	12	18	2.3	0.13	4.6
January	23	14	18	2.3	0.13	4.5
February	23	12	17	2.2	0.13	4.4
March	24	13	18	2.2	0.12	4.5
April	89	15	31	21	0.66	7.9
May	230	34	90	38	0.43	23.0
June	247	24	87	55	0.63	22.3
July	65	14	33	11	0.34	8.4
August	44	11	22	7.9	0.35	5.7
September	35	12	20	5.5	0.28	5.0
Annual	47	18	33	7.7	0.24	100

Magnitude and probability of annual low flow based on period of record 1942-73

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	13	9.9	8.5	7.5	6.4	---
3	14	11	9.3	8.2	6.9	---
7	14	11	9.8	8.5	7.2	---
14	15	12	10	8.9	7.6	---
30	15	13	11	10	8.8	---
60	16	14	13	12	11	---
90	17	15	13	12	11	---
120	17	15	14	13	12	---
183	18	15	14	13	12	---

Magnitude and probability of instantaneous peak flow based on 33 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
424	678	863	1110	1310	1520

Weighted skew = -0.058

Magnitude and probability of annual high flow based on period of record 1941-73

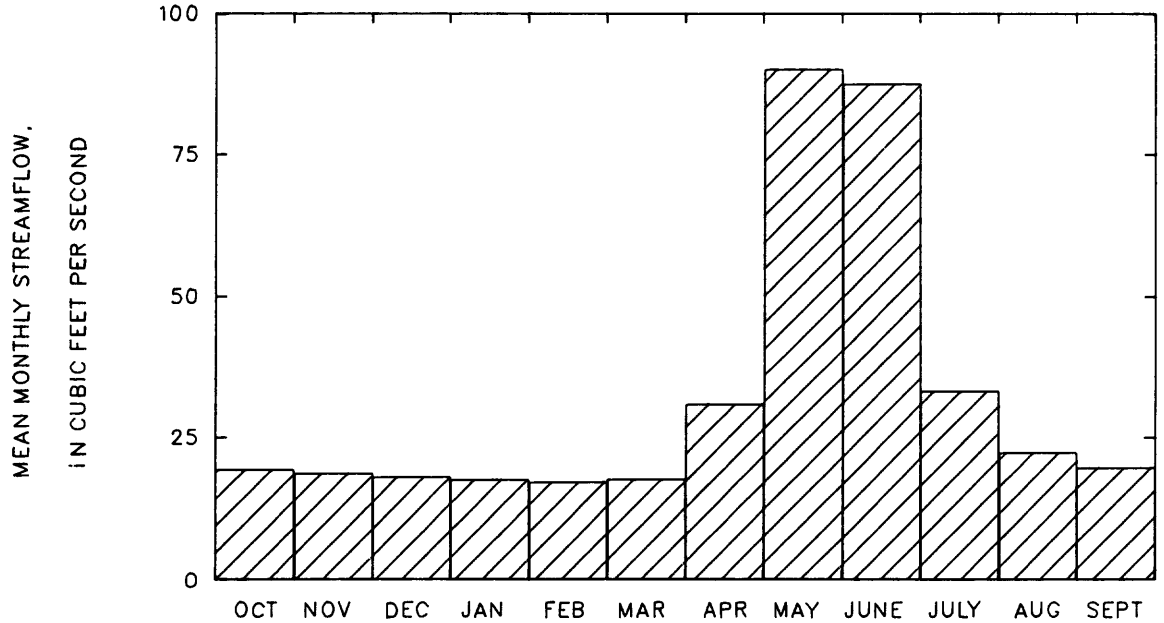
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	233	373	486	654	798	---
3	200	313	404	539	655	---
7	169	261	331	430	510	---
15	142	212	261	325	375	---
30	117	168	201	241	270	---
60	90	125	146	171	188	---
90	71	97	112	131	143	---

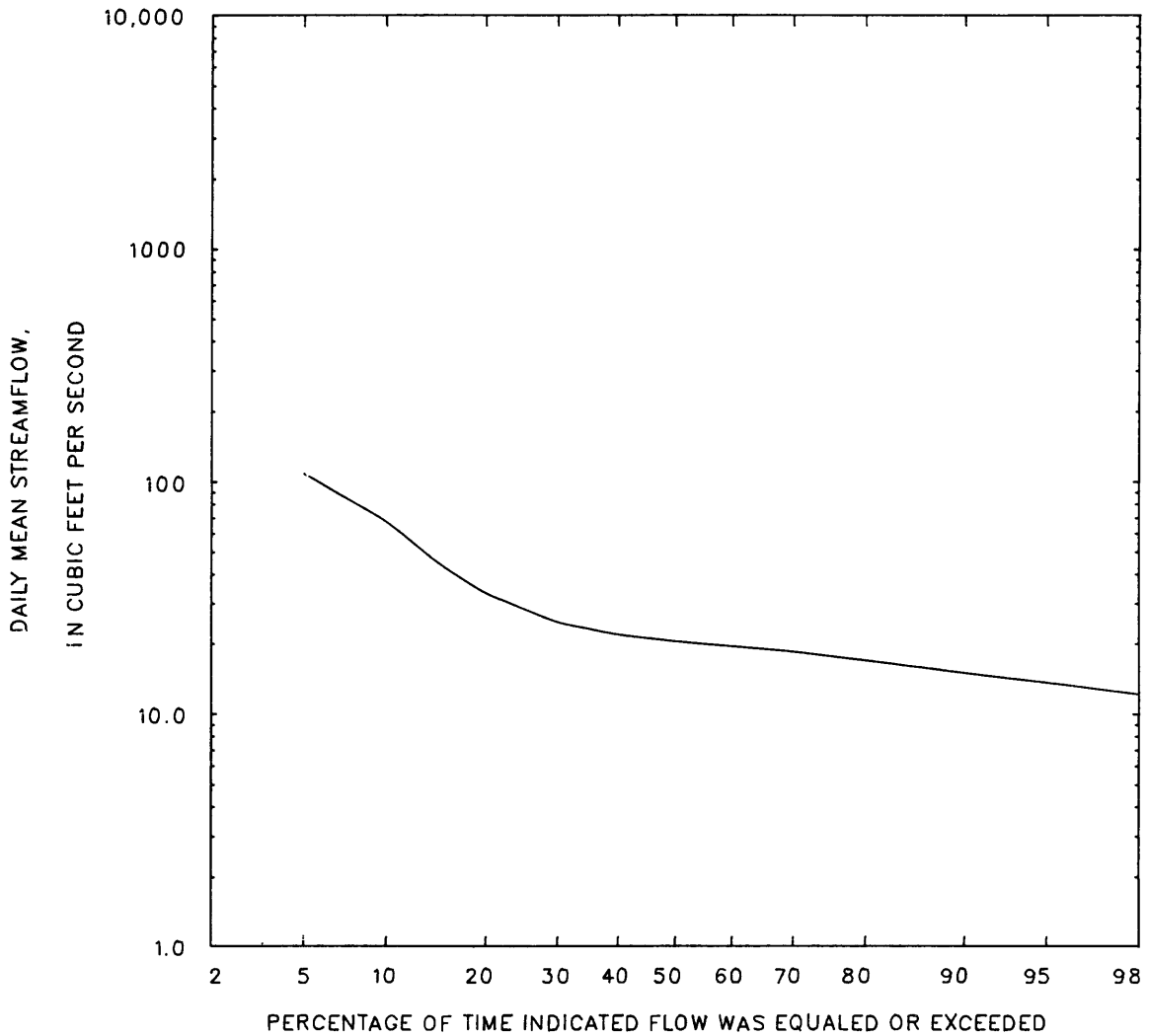
Duration of daily mean flow for period of record 1941-73

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
213	108	68	43	33	25	22	20	19	18	17	15	14	12	11	9.8	7.9

STATION 06311500 PERIOD OF RECORD 1941–73

NORTH FORK POWDER RIVER NEAR MAYOWORTH, WYO.





06312500 POWDER RIVER NEAR KAYCEE, WYO.

LOCATION.--Lat 43°41'35", long 106°31'48", in NE¼NW¼SW¼ sec.13, T.43 N., R.81 W., Johnson County, on left bank at D Ranch, 600 ft downstream from headgate of Sussex Irrigation Canal, 2 mi downstream from confluence of North and Middle Forks, and 6 mi east of Kaycee.

DRAINAGE AREA.--980 mi^2, approximately.

PERIOD OF RECORD.--October to December 1933, March to August 1934, November 1934, May 1935, April 1938 to June 1940, October 1940 to September 1971, October 1978 to September 1980. Monthly discharge only for some periods; published in WSP 1309. Prior to October 1960, published as Middle Fork Powder River near Kaycee.

GAGE.--Water-stage recorder. Datum of gage is 4,533.76 ft. Prior to November 16, 1940, non-recording gage at site 50 ft upstream at same datum.

REMARKS.--Diversions above station for irrigation of about 14,900 acres, of which about 4,600 acres are below station. Diversion to Sussex Irrigation Canal 600 ft upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,230 ft^3/s, August 11, 1941, gage height, 12.57 ft, from rating curve extended above 1,900 ft^3/s on basis of slope-area measurements at gage heights 8.98, 11.17, and 12.57 ft; no flow July 14-16, August 1-11, 14, 1938, August 8, 1953.

EXTREMES FOR OUTSIDE PERIOD OF RECORDS--Flood of September 30, 1923, reached a stage of about 18.0 ft (discharge not determined) and flood of June 3, 1936, reached a stage of 14.3 ft (discharge not determined).

Monthly and annual streamflow 1939, 1941-71, 1979-80

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	126	5.5	69	36	0.51	4.5
November	126	65	96	15	0.15	6.3
December	108	53	89	13	0.14	5.9
January	125	59	84	16	0.19	5.5
February	192	55	101	27	0.26	6.6
March	188	82	120	26	0.22	7.9
April	463	36	180	104	0.58	11.8
May	1000	53	418	224	0.54	27.4
June	874	4.6	262	233	0.89	17.2
July	261	0.35	53	63	1.2	3.5
August	295	0.10	20	50	2.6	1.3
September	120	0.10	32	31	0.97	2.1
Annual	217	58	127	45	0.35	100

Magnitude and probability of annual low flow based on period of record 1940, 1942-71, 1980

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.70	0.17	0.06	0.00	0.00	---
3	0.86	0.25	0.13	0.08	0.04	---
7	1.0	0.29	0.15	0.09	0.05	---
14	1.3	0.34	0.17	0.10	0.05	---
30	2.4	0.56	0.25	0.13	0.06	---
60	6.2	1.3	0.50	0.22	0.08	---
90	13	3.4	1.5	0.73	0.31	---
120	27	8.5	4.0	1.9	0.77	---
183	50	31	22	17	12	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1939, 1941-71, 1979-80

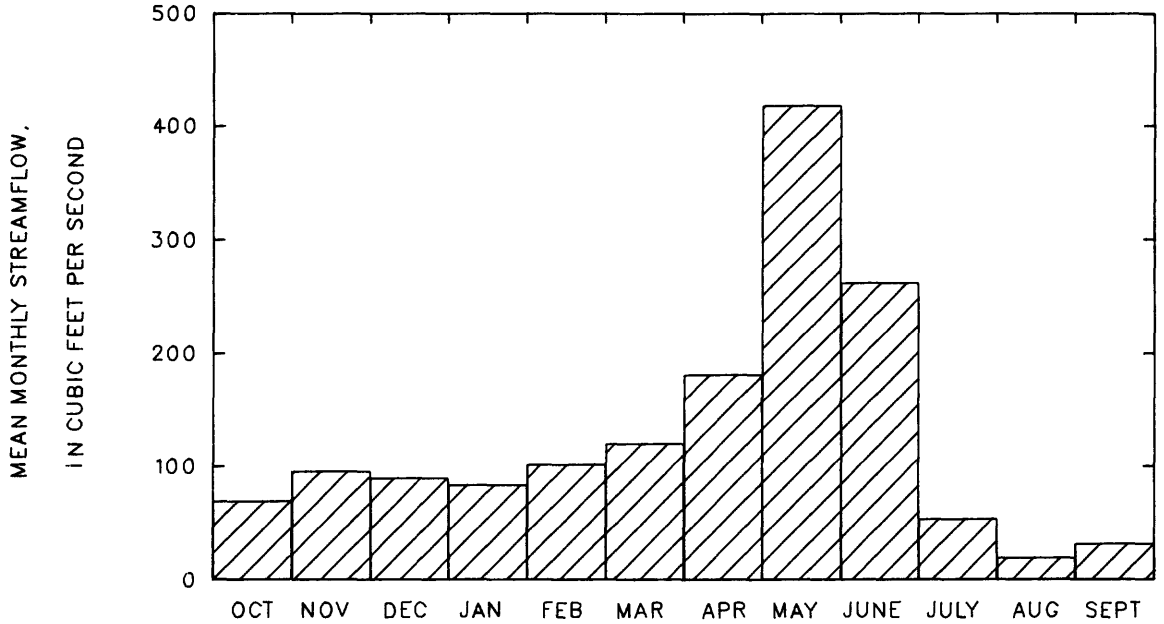
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	934	1600	2150	2990	3730	---
3	799	1310	1690	2220	2630	---
7	671	1090	1380	1760	2050	---
15	553	886	1130	1440	1690	---
30	447	709	899	1160	1360	---
60	348	537	665	830	952	---
90	280	414	503	616	700	---

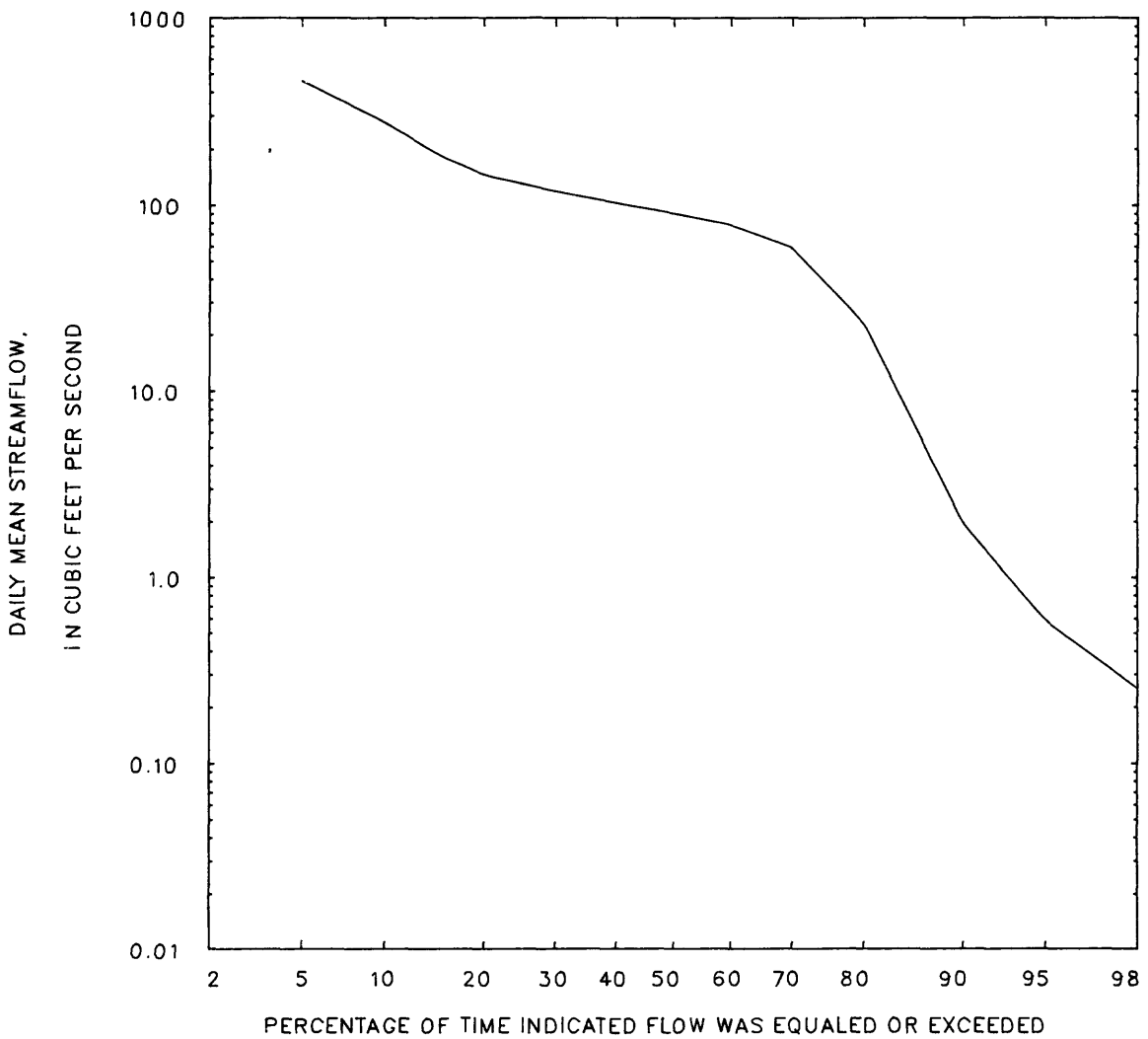
Duration of daily mean flow for period of record 1939, 1941-71, 1979-80

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
956	455	277	182	144	118	102	90	78	59	23	1.9	0.58	0.25	0.13	0.11	0.10

STATION 06312500 PERIOD OF RECORD 1939, 1941–71, 1979–80

POWDER RIVER NEAR KAYCEE, WYO.





06313000 SOUTH FORK POWDER RIVER NEAR KAYCEE, WYO.

LOCATION.--Lat 43°37'03", long 106°34'39", in NW¼SE¼SE¼ sec.9, T.42 N., R.81 W., Johnson County, on right bank 1,000 ft upstream from bridge on old U.S. Highway 87, 0.8 mi upstream from bridge on Interstate 25, 1.7 mi upstream from Murphy Creek, 6.6 mi southeast of Kaycee, and 7 mi upstream from mouth.

DRAINAGE AREA.--1,150 mi^2, approximately.

PERIOD OF RECORD.--July to October 1911, April 1938 to June 1940, May 1950 to September 1969, October 1978 to September 1980, April 1983 to September 1984. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 4,590 ft, from topographic map. May 11 to November 18, 1911, non-recording gage at site 2.1 mi downstream at different datum. April 9, 1938, to June 30, 1940, non-recording gage at site 400 ft downstream at datum 0.14 ft higher. May 1, 1950, to December 3, 1956, water-stage recorder at site 400 ft downstream at datum 2.04 ft higher. December 4, 1956, to September 30, 1962, at site 700 ft downstream at datum 0.91 ft higher. October 1, 1962, to September 30, 1969, at site 700 ft downstream at datum 0.35 ft lower. October 1, 1978, to September 30, 1980, at site 1.1 mi upstream at different datum.

REMARKS.--Adjudications for 16 small reservoirs, combined capacity, 1,300 acre-ft for storage of water above station for stock and irrigation use. Diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,500 ft^3/s, May 22, 1962, gage height, 13.17 ft, site and datum then in use, from rating curve extended above 14,000 ft^3/s on basis of slope-area measurement of peak flow; no flow in 1911, 1939, 1969, 1979, 1983, and 1984 water years.

Monthly and annual streamflow 1939, 1951-69, 1979-80, 1984

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	164	1.2	20	33	1.7	4.5
November	30	1.7	13	6.3	0.50	2.9
December	31	1.3	12	8.1	0.66	2.8
January	23	0.03	10	5.6	0.54	2.4
February	163	5.0	27	32	1.2	6.1
March	212	21	74	56	0.76	16.8
April	172	15	55	42	0.78	12.5
May	659	12	93	141	1.5	21.3
June	524	8.9	74	112	1.5	16.9
July	89	0.89	29	28	0.96	6.7
August	29	0.00	10	7.5	0.74	2.3
September	147	0.00	21	32	1.5	4.9
Annual	109	11	37	20	0.55	100

Magnitude and probability of annual low flow based on period of record 1940, 1952-69, 1980

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	2.3	0.77	0.33	0.14	---	---
3	2.6	0.92	0.40	0.18	---	---
7	3.1	1.1	0.51	0.23	---	---
14	3.7	1.3	0.59	0.26	---	---
30	4.5	1.7	0.75	0.33	---	---
60	6.3	3.5	2.3	1.5	---	---
90	8.5	4.7	3.1	2.1	---	---
120	9.6	5.5	3.8	2.7	---	---
183	12	7.3	5.7	4.6	---	---

Magnitude and probability of instantaneous peak flow based on 25 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
2810	7980	14000	26100	39300	57100

Weighted skew = 0.181

Magnitude and probability of annual high flow based on period of record 1939, 1951-69, 1979-80, 1984

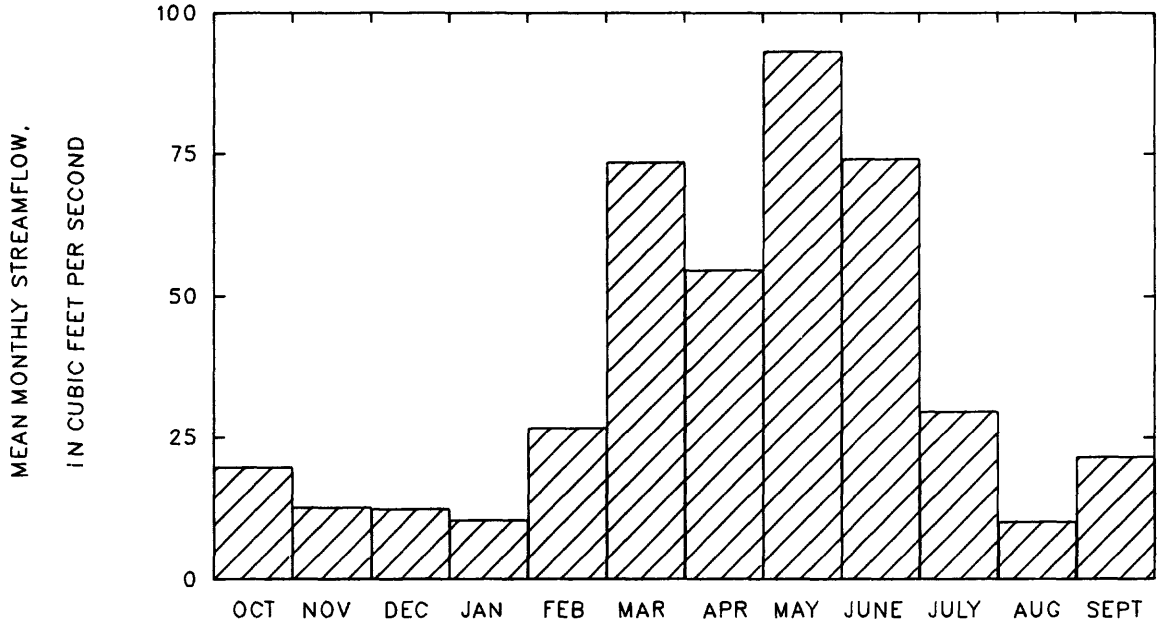
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	935	2470	4210	7590	---	---
3	525	1220	2010	3590	---	---
7	304	649	1030	1780	---	---
15	188	380	585	974	---	---
30	126	241	357	565	---	---
60	87	159	228	349	---	---
90	72	128	178	259	---	---

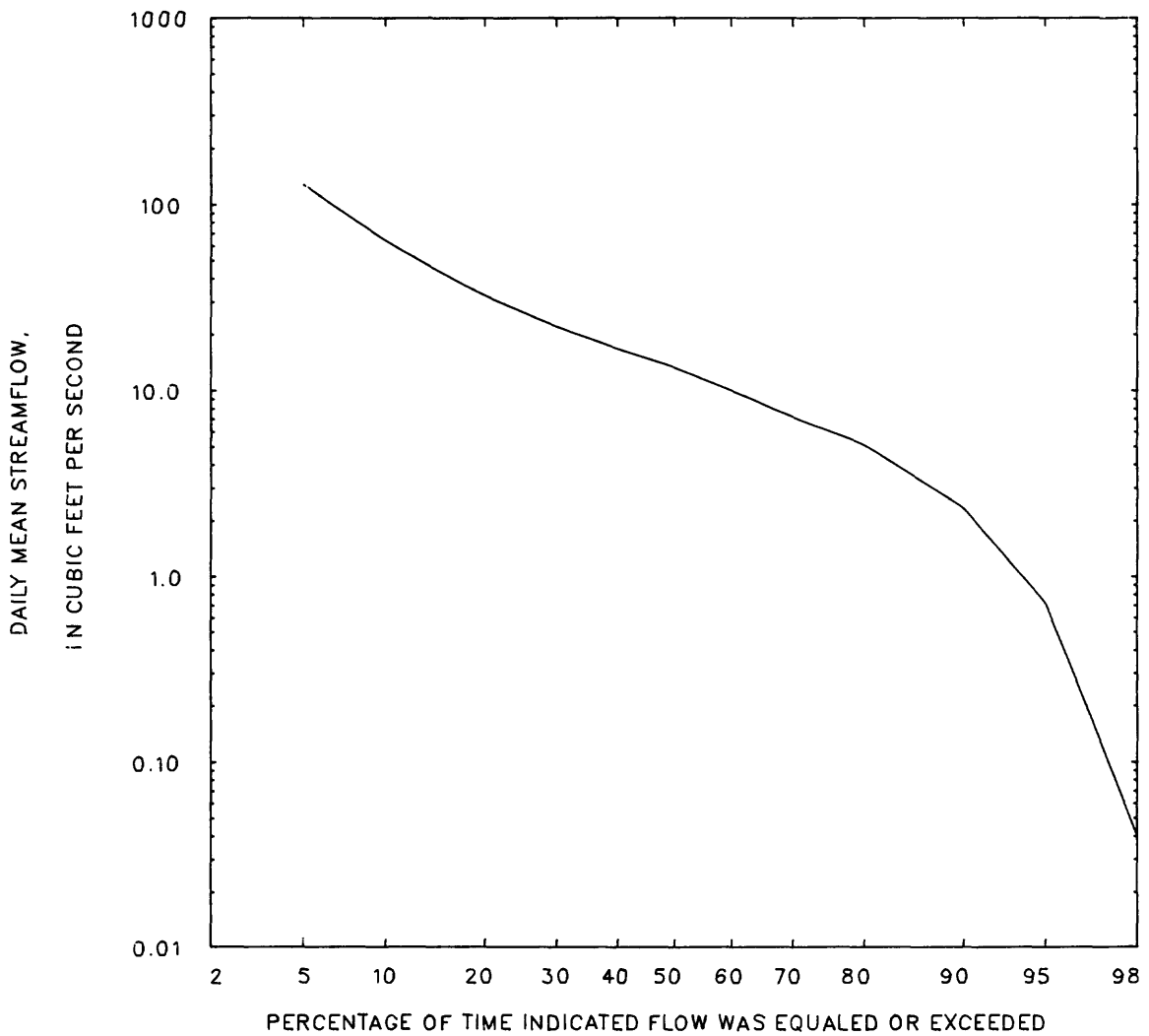
Duration of daily mean flow for period of record 1939, 1951-69, 1979-80, 1984

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
388	127	63	43	32	22	17	13	9.9	7.1	5.1	2.3	0.72	0.04	0.01	0.00	0.00

STATION 06313000 PERIOD OF RECORD 1939, 1951–69, 1979–80, 1984

SOUTH FORK POWDER RIVER NEAR KAYCEE, WYO.





06313500 POWDER RIVER AT SUSSEX, WYO.

LOCATION.--Lat 43°41'44", long 106°18'24", in SW¼SW¼NW¼ sec.13, T.43 N., R.79 W., Johnson County, on left bank, 0.5 mi upstream from bridge on State Highway 192, 0.6 mi west of Sussex, and 2.7 mi downstream from Salt Creek. Prior to April 8, 1983, at site 0.5 mi downstream.

DRAINAGE AREA.--3,090 mi^2, approxmately.

PERIOD OF RECORD.--April 1938 to June 1940, February 1950 to September 1957, October 1977 to September 1984.

GAGE.--Water-stage recorder. Altitude of gage is 4,370 ft, from topographic map. Prior to June 30, 1940, non-recording gage about 500 ft downstream from State Highway 192 at datum 4,363.23 ft. February 8, 1950, to September 30, 1957, water-stage recorder about 600 ft downstream from State Highway 192 at datum 4,362.16 ft. October 1977 to April 8, 1983, water-stage recorder 10 ft downstream from State Highway 192 at datum 4,362.95 ft.

REMARKS.--Numerous small reservoirs and diversions for irrigation of about 17,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,500 ft^3/s, May 23, 1952, elevation, 4,374.76 ft, from floodmarks, site then in use, from rating curve extended above 1,500 ft^3/s, on basis of slope-area measurement of peak flow; minimum daily, 1.5 ft^3/s, August 25, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of September 30, 1923, reached and elevation of 4,375.75 ft at site about 600 ft downstream from State Highway 192, from information by local resident.

Monthly and annual streamflow 1951-54, 1956-57, 1978-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	232	24	107	62	0.58	4.4
November	185	78	125	28	0.22	5.1
December	158	88	116	23	0.20	4.7
January	177	85	117	28	0.24	4.8
February	335	109	183	69	0.38	7.4
March	663	159	291	169	0.58	11.9
April	432	136	248	102	0.41	10.1
May	2550	187	653	655	1.0	26.6
June	1140	22	334	315	0.94	13.6
July	374	29	127	115	0.90	5.2
August	125	16	73	43	0.59	3.0
September	448	5.5	83	122	1.5	3.4
Annual	486	115	205	104	0.51	100

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual low flow based on period of record 1951-54, 1956-57, 1979-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	12	6.3	4.6	3.6	---	---
3	12	6.8	5.0	4.0	---	---
7	15	7.8	5.6	4.3	---	---
14	17	8.7	6.1	4.6	---	---
30	22	11	7.3	5.4	---	---
60	34	17	11	8.3	---	---
90	46	27	20	17	---	---
120	64	42	34	29	---	---
183	82	59	51	45	---	---

Magnitude and probability of annual high flow based on period of record 1951-54, 1956-57, 1978-84

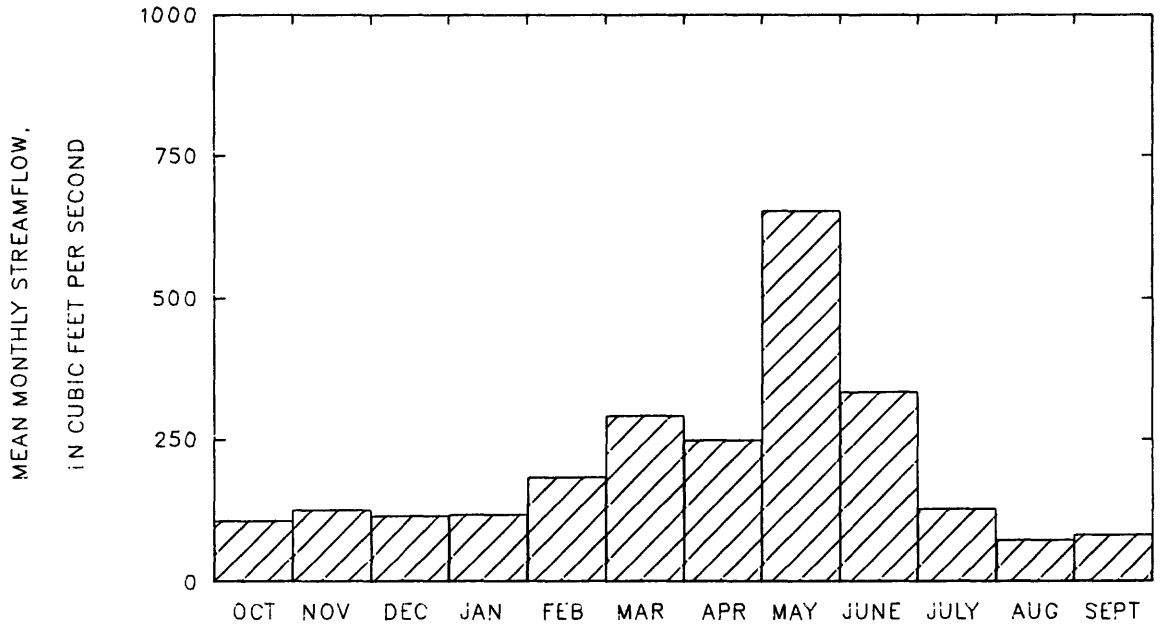
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1940	4220	7160	---	---	---
3	1270	2680	4500	---	---	---
7	957	1910	2950	---	---	---
15	694	1330	2000	---	---	---
30	525	974	1450	---	---	---
60	410	726	1040	---	---	---
90	361	610	844	---	---	---

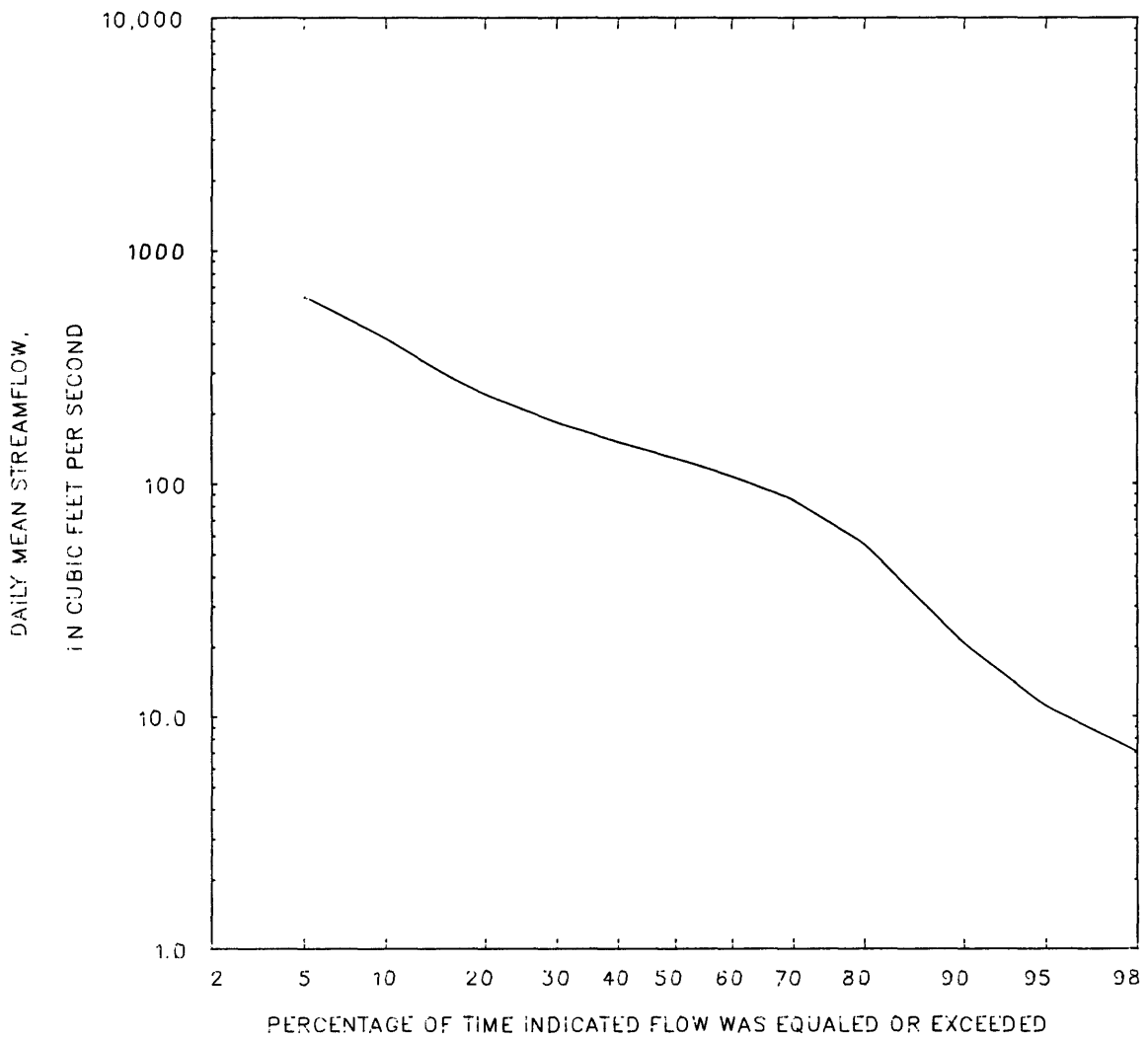
Duration of daily mean flow for period of record 1951-54, 1956-57, 1978-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1730	628	417	297	238	181	149	127	106	84	55	21	11	6.9	5.6	4.9	3.4

STATION 06313500 PERIOD OF RECORD 1951–54, 1956–57, 1978–84

POWDER RIVER AT SUSSEX, WYO.





06313700 DEAD HORSE CREEK NEAR BUFFALO, WYO.

LOCATION.--Lat 44°12'54", long 106°06'41", in NW¼SE¼SW¼ sec.15, T.49 N., R.77 W., Johnson County, on right bank 250 ft downstream from bridge on dirt road, 0.8 mi upstream from Interstate Highway 90, 5.3 mi upstream from mouth, and 31 mi east of Buffalo.

DRAINAGE AREA.--151 mi^2.

PERIOD OF RECORD.--Annual maximum, water years 1958-71. October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,970 ft, from topographic map. October 1, 1958, to September 30, 1971, crest-stage gage at site 250 ft upstream at present datum. November 24, 1971, to July 15, 1976, water-stage recorder at site 0.3 mi upstream at different datum. July 16, 1976, to July 18, 1984, at site 250 ft upstream at present datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,890 ft^3/s, June 16, 1979, gage height, 11.73 ft, from floodmarks, from rating curve extended above 1,150 ft^3/s on basis of contracted-opening and flow-over-road measurement of peak flow; no flow for many days each year.

Monthly and annual streamflow 1972-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1.1	0.00	0.13	0.31	2.4	0.4
November	0.25	0.00	0.04	0.07	1.8	0.1
December	0.12	0.00	0.02	0.03	1.9	0.1
January	1.8	0.00	0.15	0.50	3.3	0.5
February	58	0.00	5.5	16	2.9	17.0
March	44	0.00	3.8	12	3.2	11.7
April	2.1	0.01	0.22	0.57	2.6	0.7
May	71	0.03	7.1	19	2.7	22.0
June	32	0.03	7.4	9.7	1.3	22.8
July	29	0.00	5.6	8.9	1.6	17.1
August	10	0.00	2.0	2.7	1.4	6.1
September	5.1	0.00	0.56	1.4	2.5	1.7
Annual	11	0.19	2.7	2.9	1.1	100

Magnitude and probability of annual low flow based on period of record 1973-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.00	0.00	---	---	---	---
90	0.00	0.00	---	---	---	---
120	0.00	0.00	---	---	---	---
183	0.00	0.00	---	---	---	---

Magnitude and probability of instantaneous peak flow based on 26 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1040	1790	2330	3050	3600	4160

Weighted skew = -0.314

Magnitude and probability of annual high flow based on period of record 1972-84

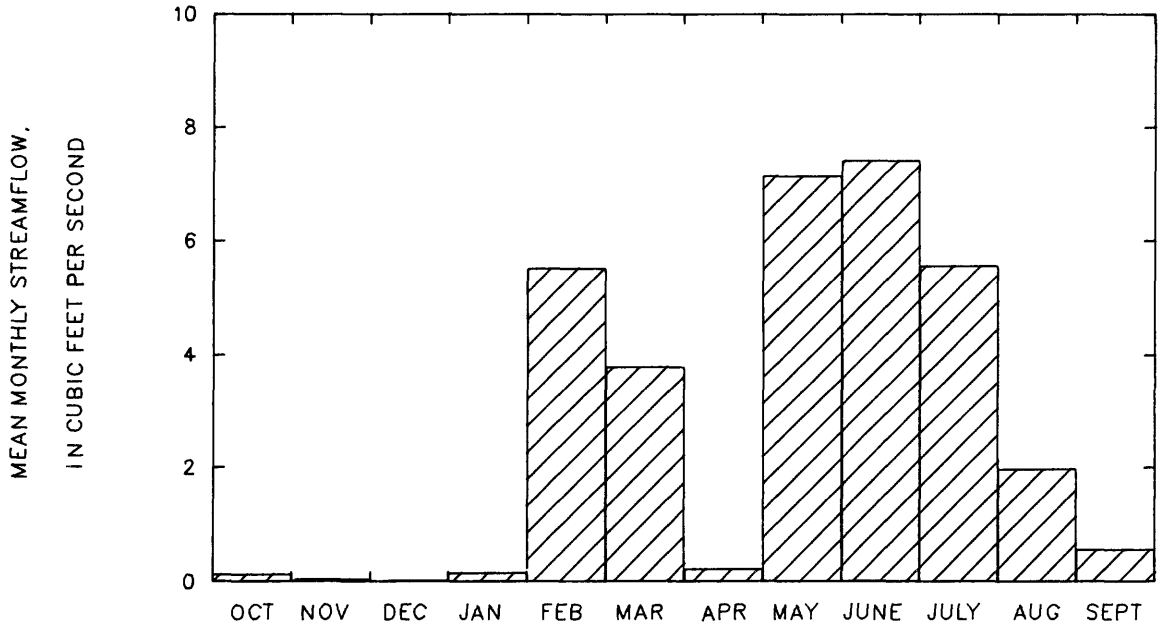
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	180	459	---	---	---	---
3	92	240	---	---	---	---
7	41	111	---	---	---	---
15	21	59	---	---	---	---
30	12	33	---	---	---	---
60	7.4	20	---	---	---	---
90	5.6	15	---	---	---	---

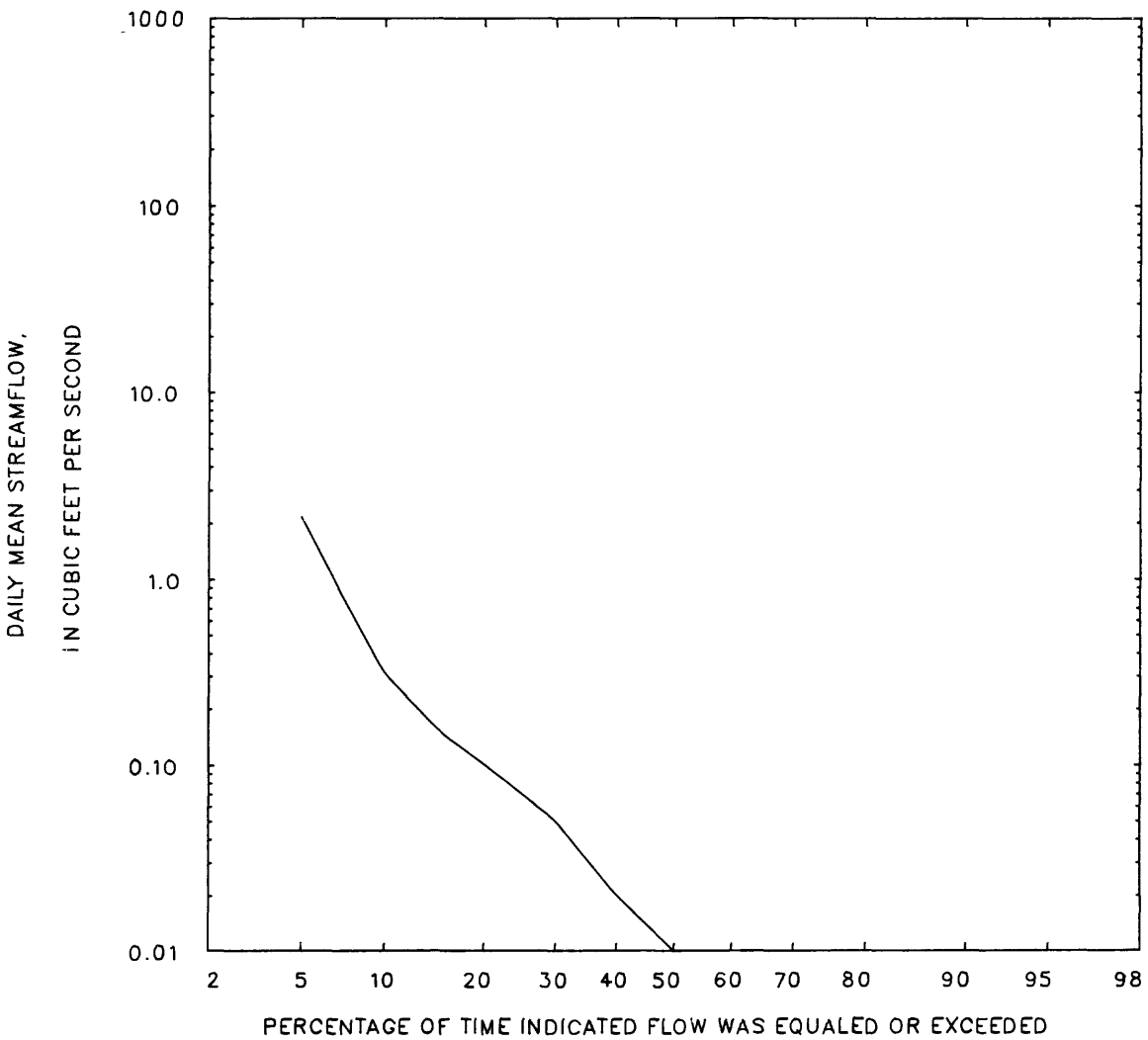
Duration of daily mean flow for period of record 1972-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
78	2.2	0.31	0.15	0.10	0.05	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATION 06313700 PERIOD OF RECORD 1972–84

DEAD HORSE CREEK NEAR BUFFALO, WYO.





06313950 NORTH FORK CRAZY WOMAN CREEK BELOW POLE CREEK, NEAR BUFFALO, WYO.

LOCATION.--Lat 44°11'11", long 106°51'12", in NW¼NE¼SW¼ sec.28, T.49 N., R.83 W., Johnson County, Bighorn National Forest, on right bank 8 ft upstream from bridge, 0.7 mi upstream from forest boundary, 3.4 mi downstream from Pole Creek, and 13 mi southwest of Buffalo.

DRAINAGE AREA.--43.4 mi^2.

PERIOD OF RECORD.--October 1973 to September 1984.

GAGE.--Water-stage recorder. Altitude of gage is 6,280 ft, from topographic map.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 724 ft^3/s, May 16, 1984, gage height, 5.06 ft; minimum daily, 1.2 ft^3/s, January 16, 1977.

Monthly and annual streamflow 1974-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	33	6.7	12	7.3	0.63	3.8
November	20	5.9	8.5	4.0	0.47	2.8
December	15	3.7	6.6	2.9	0.44	2.2
January	9.9	1.8	4.7	2.0	0.41	1.5
February	7.0	2.3	4.1	1.2	0.30	1.3
March	8.2	2.6	4.6	1.4	0.31	1.5
April	32	8.1	17	8.4	0.48	5.7
May	160	47	82	39	0.48	26.8
June	163	27	102	44	0.43	33.4
July	88	11	37	21	0.57	12.1
August	23	7.9	16	5.1	0.31	5.4
September	24	5.9	11	4.8	0.44	3.6
Annual	37	14	26	7.1	0.28	100

Magnitude and probability of annual low flow based on period of record 1975-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	3.2	2.3	1.8	1.4	---	---
3	3.3	2.3	1.8	1.5	---	---
7	3.4	2.4	1.9	1.5	---	---
14	3.6	2.5	2.0	1.6	---	---
30	3.7	2.7	2.2	1.9	---	---
60	3.9	2.9	2.5	2.2	---	---
90	4.1	3.1	2.7	2.4	---	---
120	4.5	3.5	3.2	3.0	---	---
183	5.4	4.9	4.8	4.7	---	---

Magnitude and probability of instantaneous peak flow based on 6 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
304	517	687	935	1140	1370

Weighted skew = 0.109

Magnitude and probability of annual high flow based on period of record 1974-84

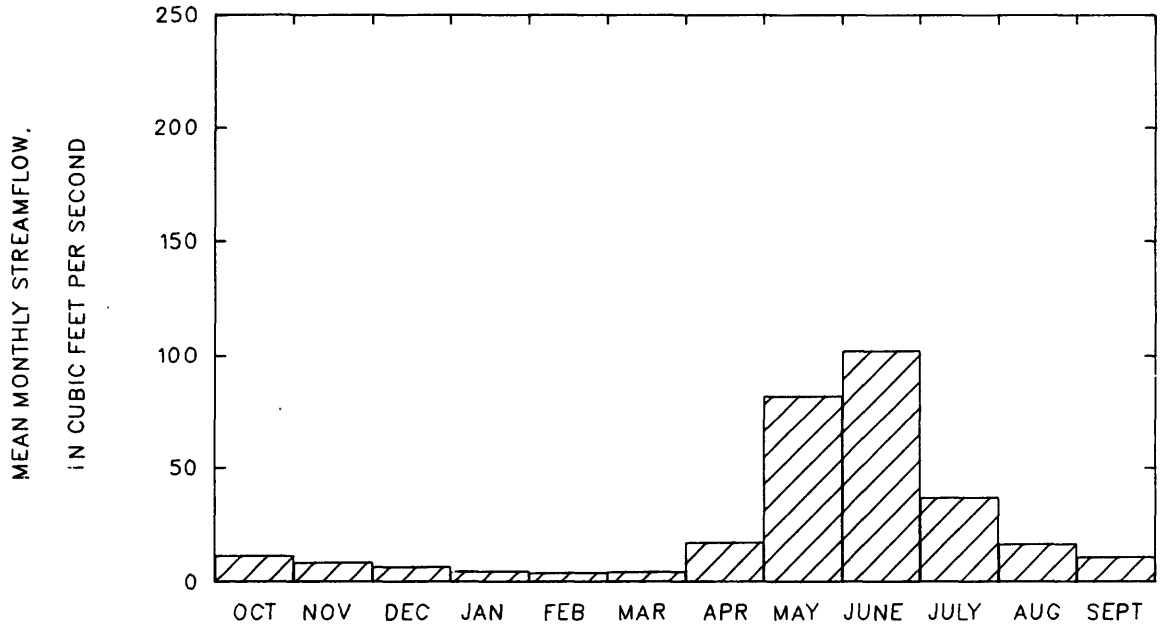
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	229	325	392	---	---	---
3	180	262	324	---	---	---
7	157	231	284	---	---	---
15	145	203	240	---	---	---
30	125	175	205	---	---	---
60	94	130	152	---	---	---
90	74	99	114	---	---	---

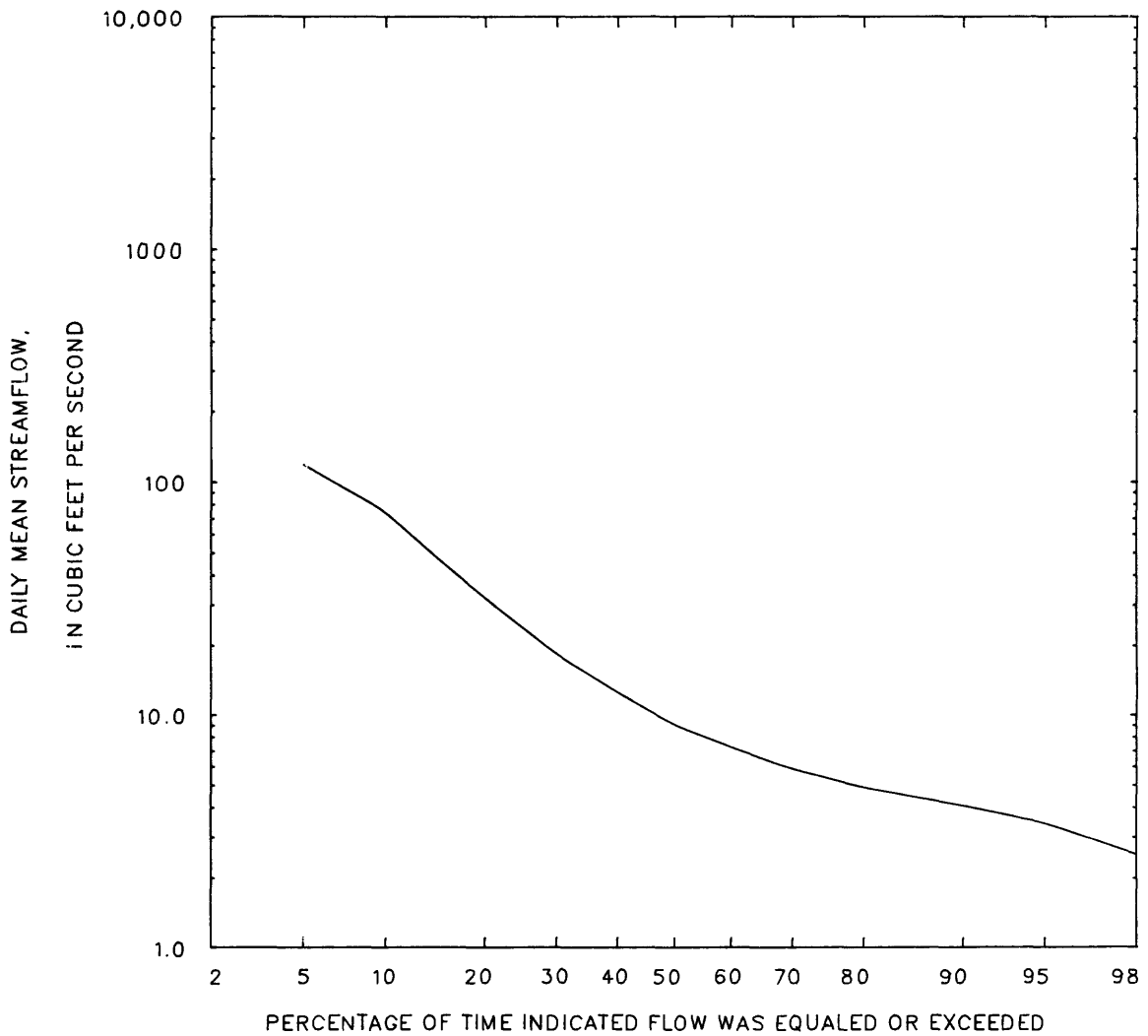
Duration of daily mean flow for period of record 1974-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
214	118	74	46	32	18	12	9.0	7.2	5.8	4.8	4.1	3.4	2.5	2.2	1.9	1.4

STATION 06313950 PERIOD OF RECORD 1974–84

NORTH FORK CRAZY WOMAN CREEK BELOW POLE CREEK, NEAR BUFFALO, WYO.





06314000 NORTH FORK CRAZY WOMAN CREEK NEAR BUFFALO, WYO.

LOCATION.--Lat 44°11'16", long 106°49'48", in SW¼SW¼NE¼ sec.27, T.49 N., R.83 W., Johnson County, on left bank, 70 ft upstream from bridge on county road, 2.1 mi upstream from Spring Draw, and 13 mi southwest of Buffalo.

DRAINAGE AREA.--44.9 mi^2.

PERIOD OF RECORD.--April 1942 to September 1949, October 1973 to September 1984. Prior to October 1944, monthly discharge only; published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 5,900 ft, from topographic map. April 1, 1942, to September 23, 1943, non-recording gage nearby at different datum. September 24, 1943, to September 30, 1949, water-stage recorder at datum 1.33 ft lower.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 742 ft^3/s, May 16, 1984, gage height, 3.97 ft; maximum gage height, 4.23 ft, June 6, 1949, present datum; minimum daily discharge, 1.7 ft^3/s, January 17, 18, 1977.

Monthly and annual streamflow 1944, 1946-49, 1974-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	34	6.7	11	6.4	0.58	3.7
November	20	5.6	8.1	3.3	0.41	2.7
December	14	4.3	6.4	2.2	0.34	2.1
January	9.3	2.4	4.8	1.5	0.31	1.6
February	6.8	2.6	4.2	1.0	0.24	1.4
March	7.7	3.0	4.4	1.1	0.25	1.5
April	34	5.4	17	7.9	0.46	5.8
May	172	39	78	39	0.50	26.2
June	166	29	100	42	0.42	33.8
July	92	12	37	19	0.50	12.5
August	23	7.6	15	5.0	0.33	5.1
September	23	5.6	11	3.9	0.36	3.6
Annual	39	14	25	6.9	0.28	100

Magnitude and probability of annual low flow based on period of record 1947-49, 1975-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	3.6	2.8	2.3	2.0	---	---
3	3.7	2.8	2.3	2.0	---	---
7	3.8	2.9	2.4	2.1	---	---
14	3.9	2.9	2.5	2.2	---	---
30	3.9	3.1	2.8	2.5	---	---
60	4.1	3.3	3.0	2.7	---	---
90	4.2	3.4	3.2	2.9	---	---
120	4.6	3.9	3.6	3.5	---	---
183	5.6	5.0	4.8	4.8	---	---

Magnitude and probability of instantaneous peak flow based on 17 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
312	491	624	806	950	1100

Weighted skew = 0.015

Magnitude and probability of annual high flow based on period of record 1944, 1946-49, 1974-84

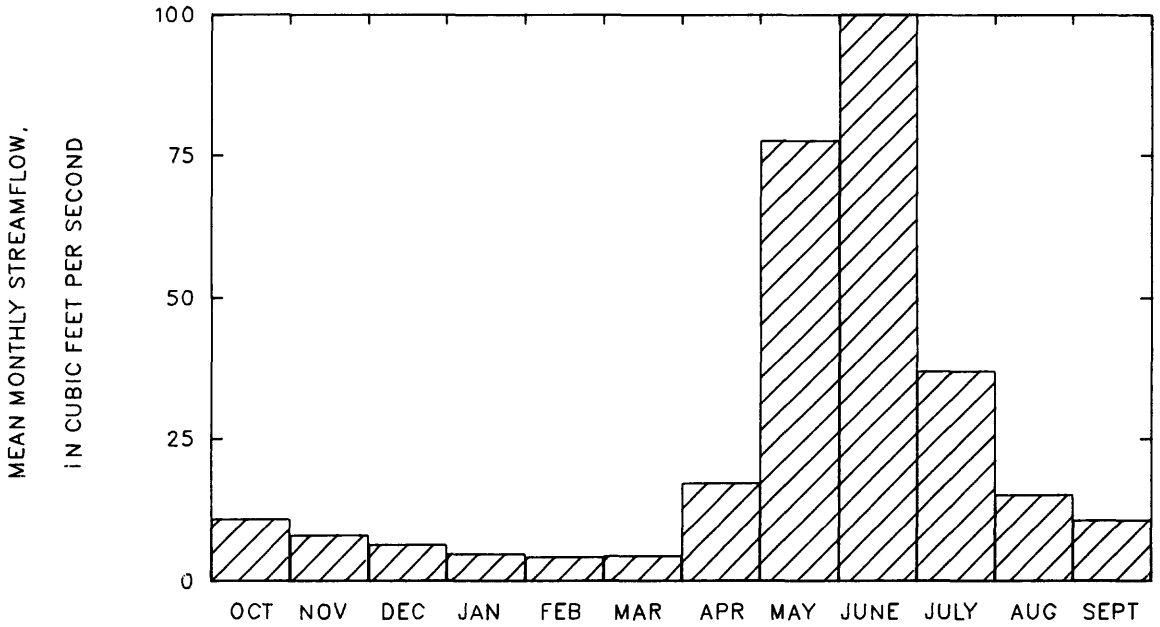
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	201	299	376	487	---	---
3	160	236	298	391	---	---
7	139	207	259	336	---	---
15	126	182	223	279	---	---
30	110	158	193	241	---	---
60	87	121	146	180	---	---
90	69	94	111	133	---	---

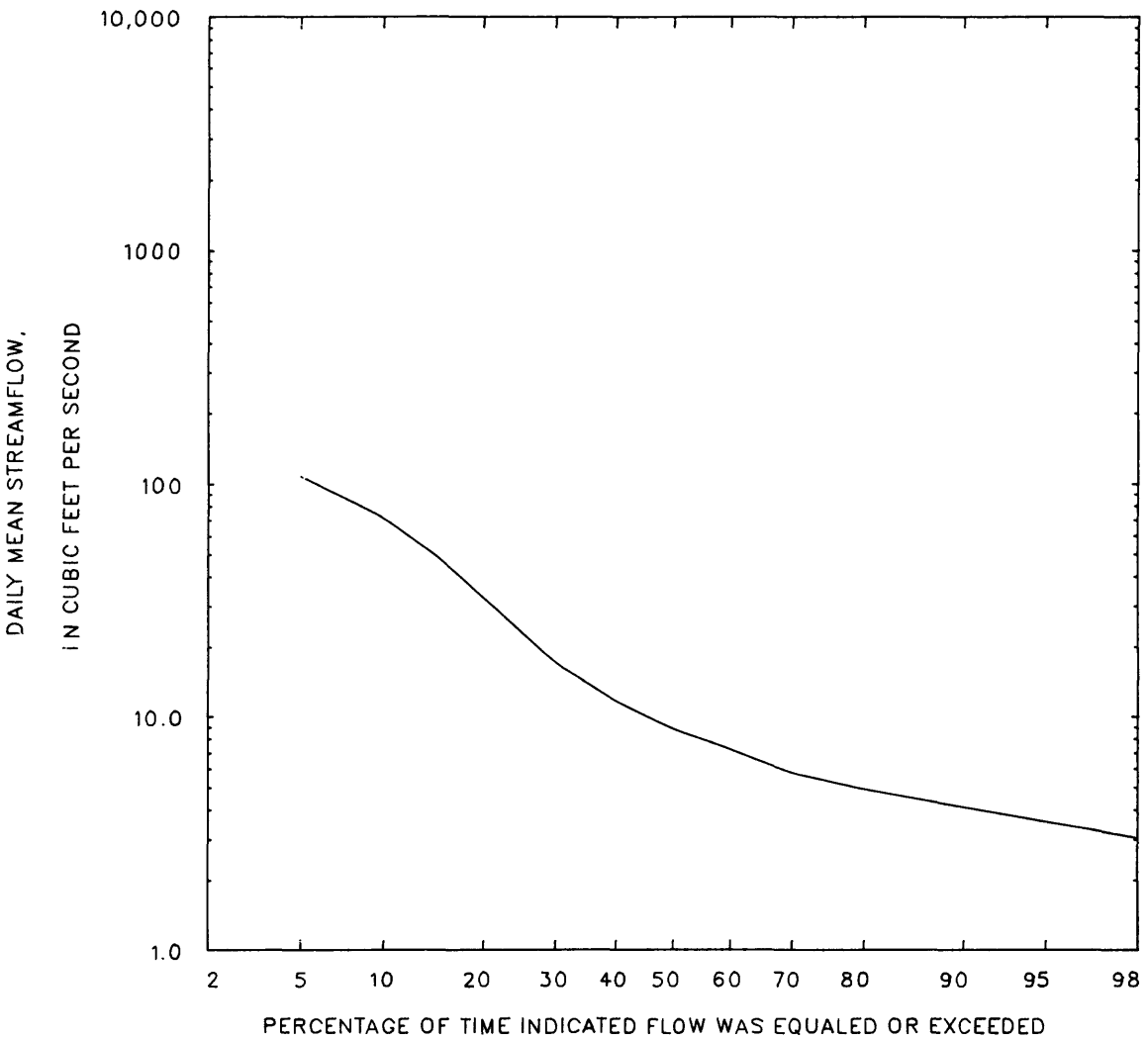
Duration of daily mean flow for period of record 1944, 1946-49, 1974-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
203	107	72	48	33	17	12	8.8	7.2	5.7	4.9	4.1	3.6	3.0	2.7	2.4	2.0

STATION 06314000 PERIOD OF RECORD 1944, 1946–49, 1974–84

NORTH FORK CRAZY WOMAN CREEK NEAR BUFFALO, WYO.





06314500 NORTH FORK CRAZY WOMAN CREEK BELOW SPRING DRAW, NEAR BUFFALO, WYO.

LOCATION.--Lat 44°11'38", long 106°46'47", in NW¼NW¼NW¼ sec.30, T.49 N., R.82 W., Johnson County, on right bank 1.1 mi downstream from Spring Draw and 11 mi southwest of Buffalo.

DRAINAGE AREA.--51.7 mi^2.

PERIOD OF RECORD.--October 1949 to October 1971, March to September 1972.

GAGE.--Water-stage recorder. Altitude of gage is 5,360 ft, from topographic map.

REMARKS.--Diversions for irrigation of about 50 acres above station. Several diversions above station for irrigation of land below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,290 ft^3/s, June 9, 1968, gage height, 6.03 ft; minimum daily, 1.0 ft^3/s, November 27, 1952, December 28, 1966, January 6-9, 1967.

Monthly and annual streamflow 1949-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	14	4.6	7.4	2.5	0.33	3.3
November	11	3.2	6.0	1.9	0.31	2.7
December	8.5	2.0	4.4	1.4	0.32	2.0
January	5.9	1.7	3.5	1.2	0.34	1.6
February	5.5	1.7	3.3	0.94	0.28	1.5
March	7.0	1.8	4.0	1.2	0.31	1.8
April	33	5.0	13	7.9	0.61	5.8
May	126	18	49	23	0.46	22.0
June	195	22	85	55	0.65	37.8
July	73	8.4	29	15	0.52	12.9
August	27	4.5	11	5.3	0.47	4.9
September	19	3.6	8.4	3.6	0.43	3.7
Annual	33	7.6	19	7.6	0.40	100

Magnitude and probability of annual low flow based on period of record 1950-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.9	1.3	1.1	0.98	---	---
3	2.1	1.5	1.2	1.0	---	---
7	2.3	1.6	1.3	1.2	---	---
14	2.4	1.7	1.5	1.3	---	---
30	2.8	2.0	1.7	1.5	---	---
60	3.1	2.3	2.0	1.8	---	---
90	3.3	2.5	2.2	1.9	---	---
120	3.5	2.8	2.4	2.2	---	---
183	4.5	3.6	3.3	3.1	---	---

Magnitude and probability of instantaneous peak flow based on 24 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
266	587	905	1450	1990	2650

Weighted skew = 0.199

Magnitude and probability of annual high flow based on period of record 1949-71

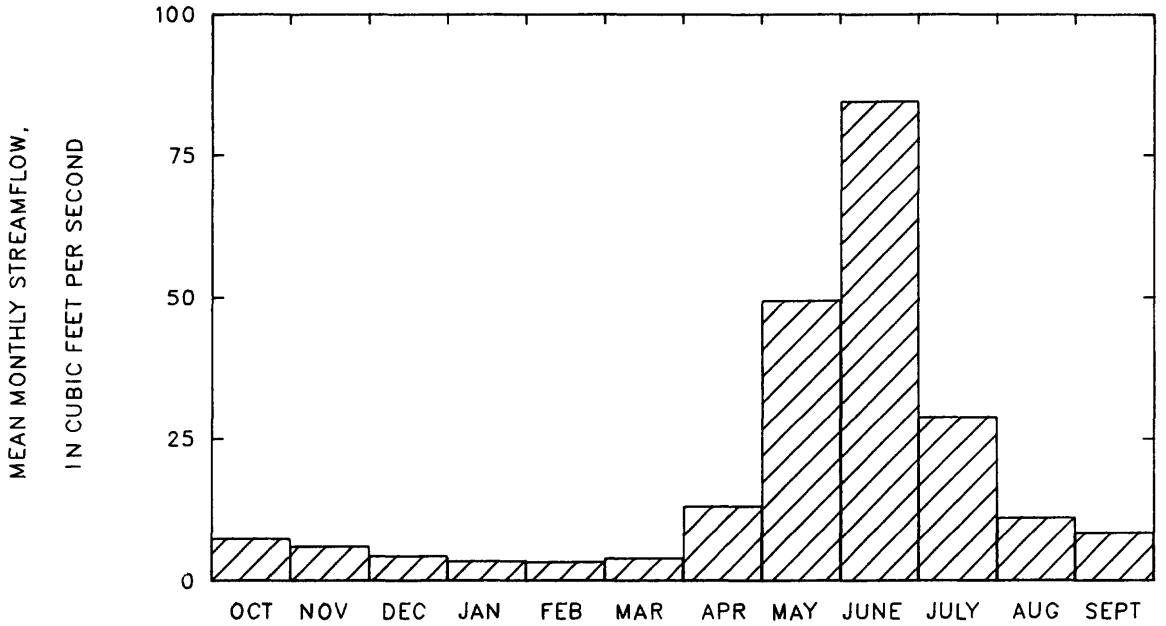
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	152	298	436	669	---	---
3	126	237	340	510	---	---
7	108	197	274	397	---	---
15	94	165	222	308	---	---
30	80	134	175	231	---	---
60	62	98	124	158	---	---
90	51	77	95	118	---	---

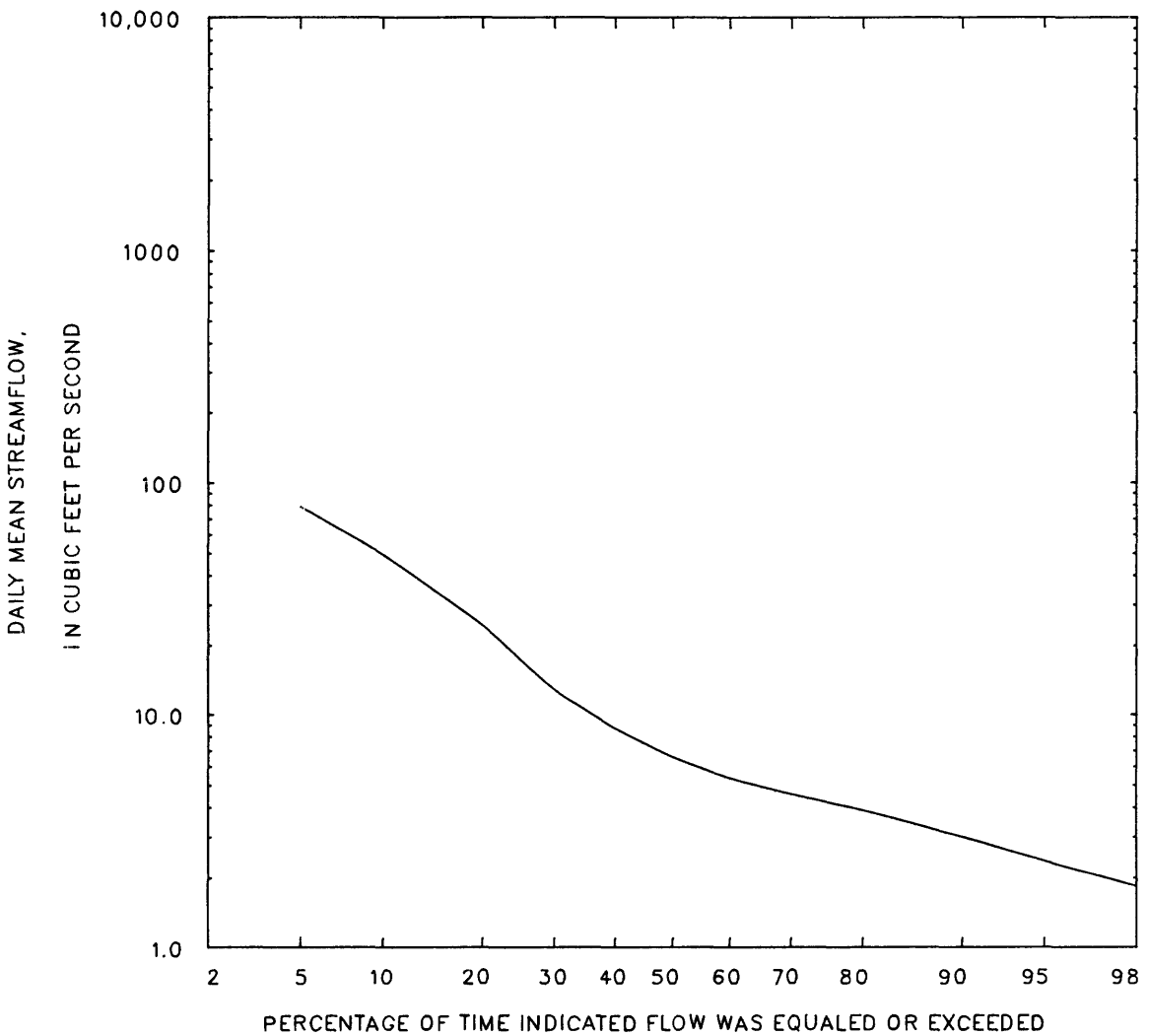
Duration of daily mean flow for period of record 1949-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
161	78	49	33	24	13	8.6	6.5	5.3	4.5	3.9	3.0	2.3	1.8	1.6	1.5	1.2

STATION 06314500 PERIOD OF RECORD 1949–71

NORTH FORK CRAZY WOMAN CREEK BELOW SPRING DRAW, NEAR BUFFALO, WYO.





06315000 NORTH FORK CRAZY WOMAN CREEK NEAR GREUB, WYO.

LOCATION.--Lat 44°04'50", long 106°39'40", in SW¼ sec.36, T.48 N., R.82 W., Johnson County, on left bank 1 mi upstream from Middle Fork, 5 mi northeast of Greub, and 18 mi south of Buffalo.

DRAINAGE AREA.--174 mi^2.

PERIOD OF RECORD.-March 1950 to September 1968.

GAGE.--Digital water-stage recorder. Altitude of gage is 4,650 ft, from topographic map. Prior to September 13, 1950, staff gage and September 13, 1950, to May 19, 1966, graphic water-stage recorder, at same site and datum.

REMARKS.--Diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,640 ft^3/s, June 8, 1968; no flow September 3-5, 10, 14-17, 1955, July 18-24, 1956, September 3-13, 1960.

Monthly and annual streamflow 1951-68

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	20	2.5	7.2	4.6	0.63	3.5
November	14	4.0	8.2	3.1	0.37	4.0
December	12	2.6	7.9	2.3	0.29	3.8
January	11	4.2	7.0	2.1	0.30	3.4
February	14	3.6	8.8	2.7	0.30	4.2
March	18	4.5	11	4.0	0.37	5.3
April	40	2.2	13	8.8	0.69	6.2
May	67	3.9	25	18	0.71	12.2
June	308	3.4	83	95	1.1	40.0
July	86	2.8	22	22	1.0	10.4
August	26	1.8	7.4	6.7	0.91	3.6
September	24	0.83	7.5	6.8	0.90	3.6
Annual	41	3.6	17	12	0.68	100

Magnitude and probability of annual low flow based on period of record 1951-68

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.77	0.00	0.00	0.00	---	---
3	0.87	0.00	0.00	0.00	---	---
7	1.3	0.00	0.00	0.00	---	---
14	1.9	0.65	0.31	0.15	---	---
30	2.6	1.5	1.1	0.79	---	---
60	4.1	2.6	2.0	1.7	---	---
90	4.7	3.1	2.6	2.2	---	---
120	5.2	3.5	2.9	2.4	---	---
183	6.3	4.4	3.7	3.1	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1951-68

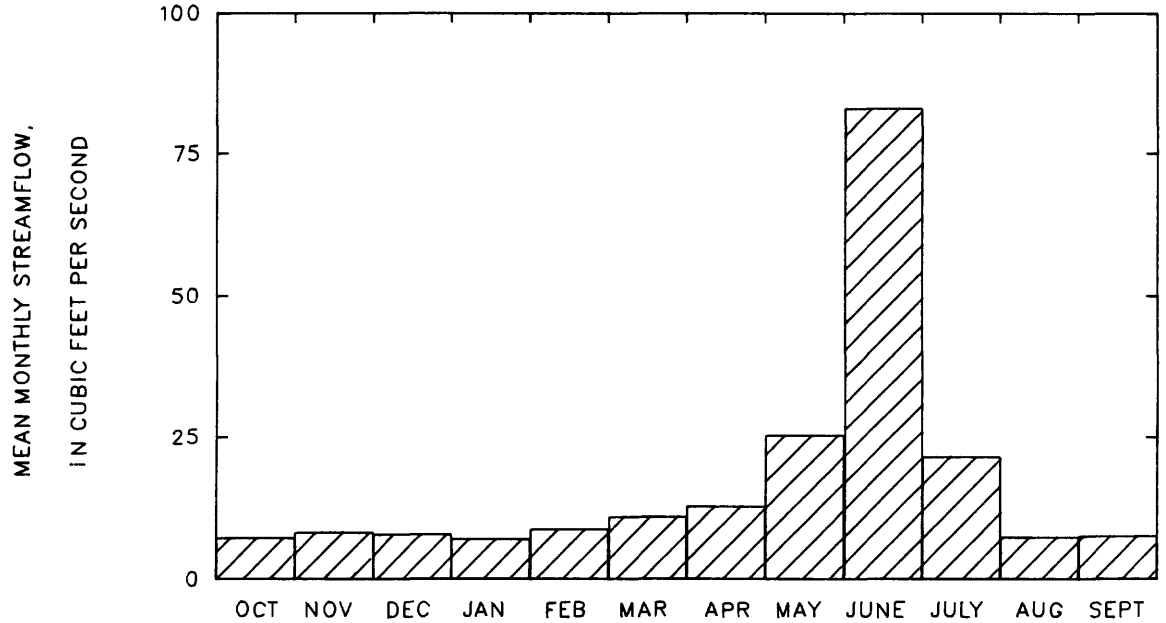
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	160	370	581	951	---	---
3	123	284	439	696	---	---
7	97	226	350	557	---	---
15	79	184	283	444	---	---
30	58	139	218	350	---	---
60	39	92	143	228	---	---
90	31	69	104	161	---	---

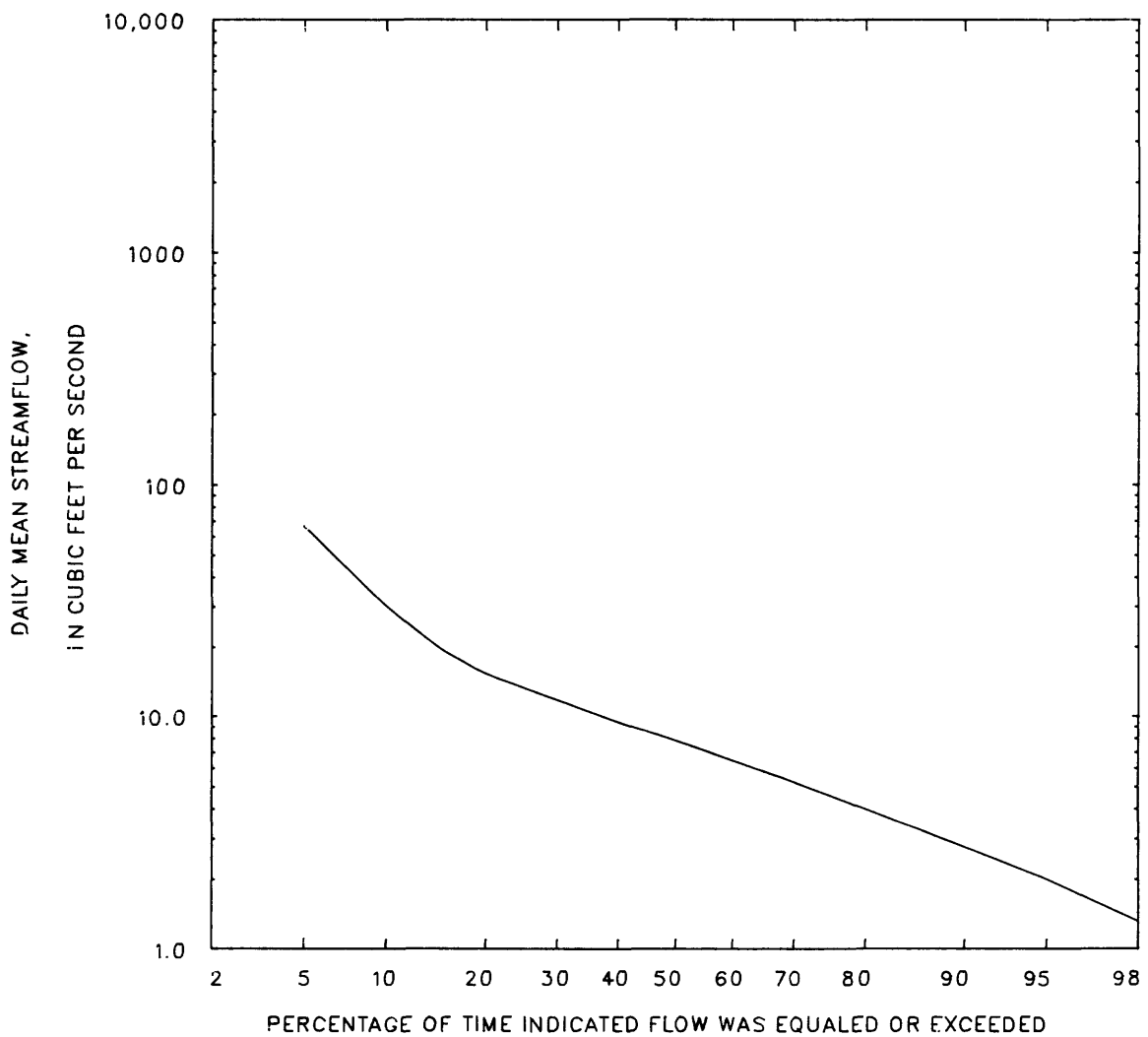
Duration of daily mean flow for period of record 1951-68

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
226	66	30	19	15	12	9.4	7.8	6.4	5.2	4.0	2.8	2.0	1.3	0.87	0.19	0.02

STATION 06315000 PERIOD OF RECORD 1951–68

NORTH FORK CRAZY WOMAN CREEK NEAR GREUB, WYO.





06315500 MIDDLE FORK CRAZY WOMAN CREEK NEAR GREUB, WYO.

LOCATION.--Lat 44°03'29", long 106°48'07", in W½ sec.11, T.47 N., R.83 W., Johnson County, on left bank 0.3 mi downstream from Poison Creek, 2.4 mi west of Greub, and 21 mi southwest of Buffalo.

DRAINAGE AREA.--82.7 mi^2.

PERIOD OF RECORD.--April 1942 to October 1971, March to September 1972. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 5,190 ft, from topographic map. Prior to September 23, 1943, non-recording gage at site 430 ft downstream at about the same datum. Water-stage recorder September 23, 1943, to June 6, 1952, at site 30 ft downstream at datum 0.67 ft lower.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,590 ft^3/s, May 2, 1947, gage height, 5.64 ft, site and datum then in use, from rating curve extended above 110 ft^3/s on basis of slope-area measurement of peak flow at 5.40 ft (flood of June 9, 1968); minimum daily, 1.7 ft^3/s, August 31, 1966.

Monthly and annual streamflow 1943-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	15	5.4	9.7	2.5	0.26	3.6
November	12	5.2	8.5	1.9	0.22	3.2
December	11	4.4	7.2	1.5	0.21	2.7
January	11	3.8	6.5	1.8	0.27	2.4
February	9.9	4.3	6.5	1.4	0.22	2.4
March	20	4.9	8.0	3.0	0.38	3.0
April	70	9.9	25	15	0.57	9.5
May	134	18	62	31	0.51	23.0
June	246	17	87	62	0.71	32.4
July	73	7.0	27	15	0.56	10.0
August	23	3.1	11	4.9	0.45	4.1
September	19	3.9	9.5	3.6	0.38	3.6
Annual	44	10	22	9.2	0.41	100

Magnitude and probability of annual low flow based on period of record 1943-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	4.7	3.2	2.5	2.0	1.6	---
3	4.8	3.3	2.6	2.1	1.6	---
7	5.0	3.5	2.8	2.4	1.9	---
14	5.3	3.8	3.2	2.7	2.2	---
30	5.6	4.3	3.7	3.3	2.9	---
60	5.9	4.8	4.3	3.9	3.5	---
90	6.2	5.1	4.7	4.3	3.9	---
120	6.6	5.5	5.0	4.6	4.3	---
183	7.3	6.1	5.6	5.1	4.7	---

Magnitude and probability of instantaneous peak flow based on 31 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
292	617	954	1570	2210	3050

Weighted skew = 0.540

Magnitude and probability of annual high flow based on period of record 1943-71

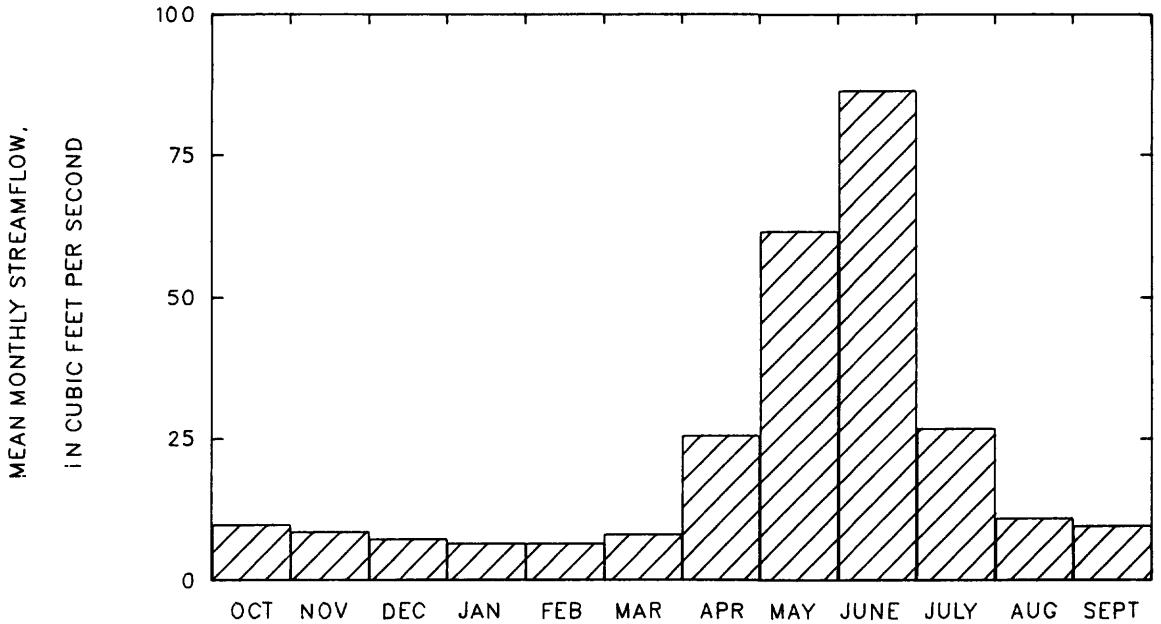
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	179	336	470	677	859	---
3	142	255	350	494	620	---
7	113	203	279	395	496	---
15	98	170	229	314	386	---
30	83	141	185	248	299	---
60	67	108	138	179	212	---
90	55	86	108	137	159	---

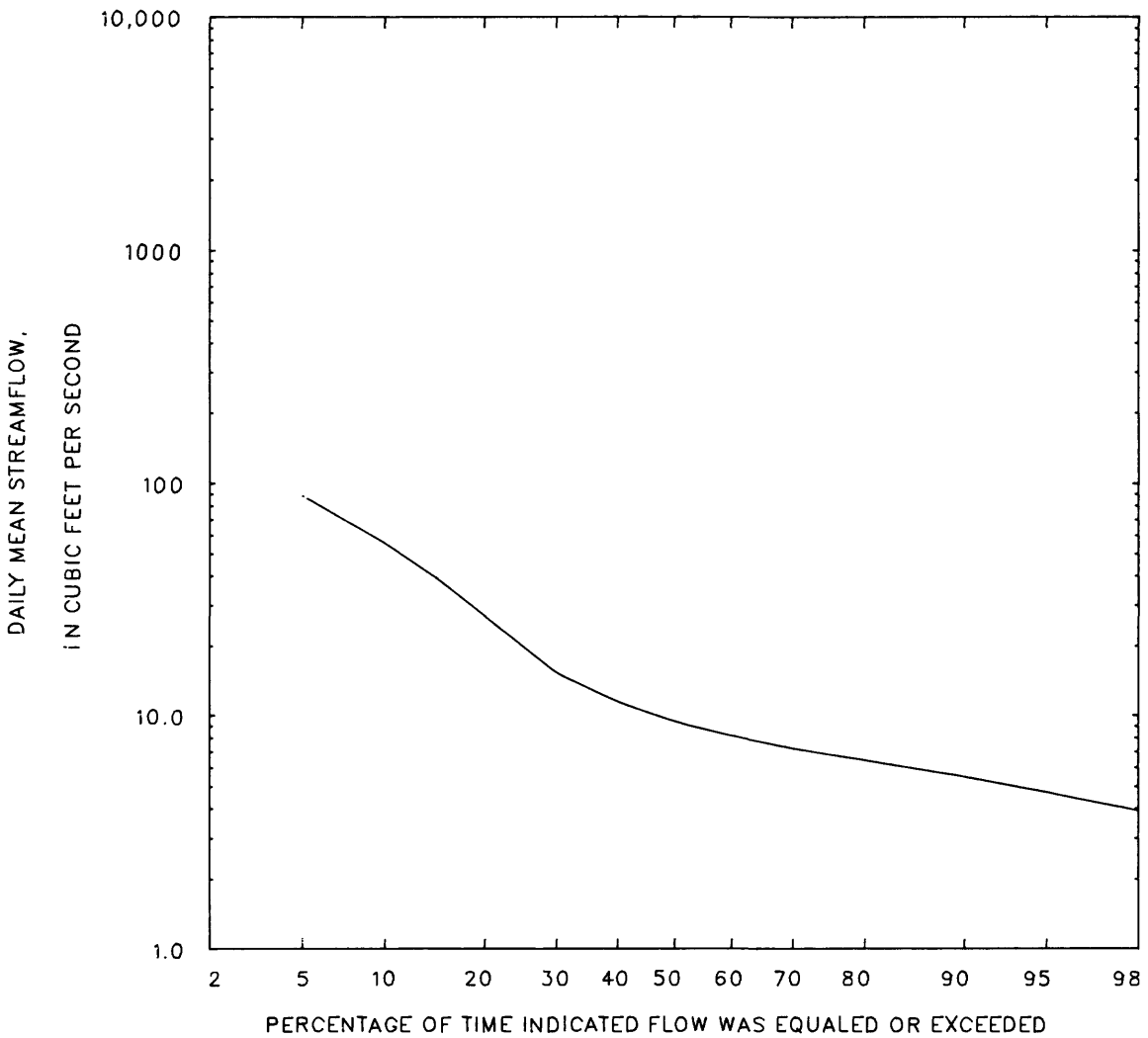
Duration of daily mean flow for period of record 1943-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
186	88	55	38	27	15	11	9.3	8.1	7.1	6.4	5.4	4.7	3.9	3.5	2.9	2.1

STATION 06315500 PERIOD OF RECORD 1943–71

MIDDLE FORK CRAZY WOMAN CREEK NEAR GREUB, WYO.





06316400 CRAZY WOMAN CREEK AT UPPER STATION, NEAR ARVADA, WYO.

LOCATION.--Lat 44°29'28", long 106°10'38", in NE¼SW¼SW¼ sec.7, T.52 N., R.77 W., Johnson County, on left bank 1.1 mi upstream from Jewell Draw, 5.0 mi upstream from mouth, and 11 mi south of Arvada.

DRAINAGE AREA.--945 mi^2, approximately.

PERIOD OF RECORD.--April 1963 to September 1970, October 1977 to September 1981.

GAGE.--Water-stage recorder. Altitude of gage is 3,765 ft, from topographic map.

REMARKS.--Diversions about 12,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft^3/s, June 15, 1965, gage height, 16.02 ft, from rating curve extended above 1,300 ft^3/s on basis of slope-area measurement of peak flow; no flow September 4-8, 1964 for many days in 1966, and September 20-30, 1981.

Monthly and annual streamflow 1964-70, 1978-81

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	40	0.68	18	12	0.68	3.0
November	42	6.4	20	11	0.55	3.4
December	40	8.8	18	9.8	0.55	2.9
January	26	4.1	14	6.5	0.46	2.3
February	41	7.6	19	9.8	0.51	3.2
March	101	12	48	24	0.50	8.0
April	72	7.3	35	23	0.64	5.9
May	629	12	121	178	1.5	20.1
June	590	3.3	217	214	0.99	36.0
July	183	0.13	57	56	0.98	9.5
August	69	0.00	19	21	1.1	3.2
September	55	0.12	15	16	1.1	2.4
Annual	119	15	50	35	0.71	100

Magnitude and probability of annual low flow based on period of record 1964-70, 1979-81

Period (consecutive days)	Discharge, ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	---	---	---
3	0.72	0.00	0.00	---	---	---
7	1.5	0.00	0.00	---	---	---
14	2.0	0.00	0.00	---	---	---
30	3.0	0.09	0.00	---	---	---
60	6.6	0.87	0.22	---	---	---
90	9.7	3.4	1.8	---	---	---
120	13	6.9	4.9	---	---	---
183	14	8.1	5.9	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1964-70, 1978-81

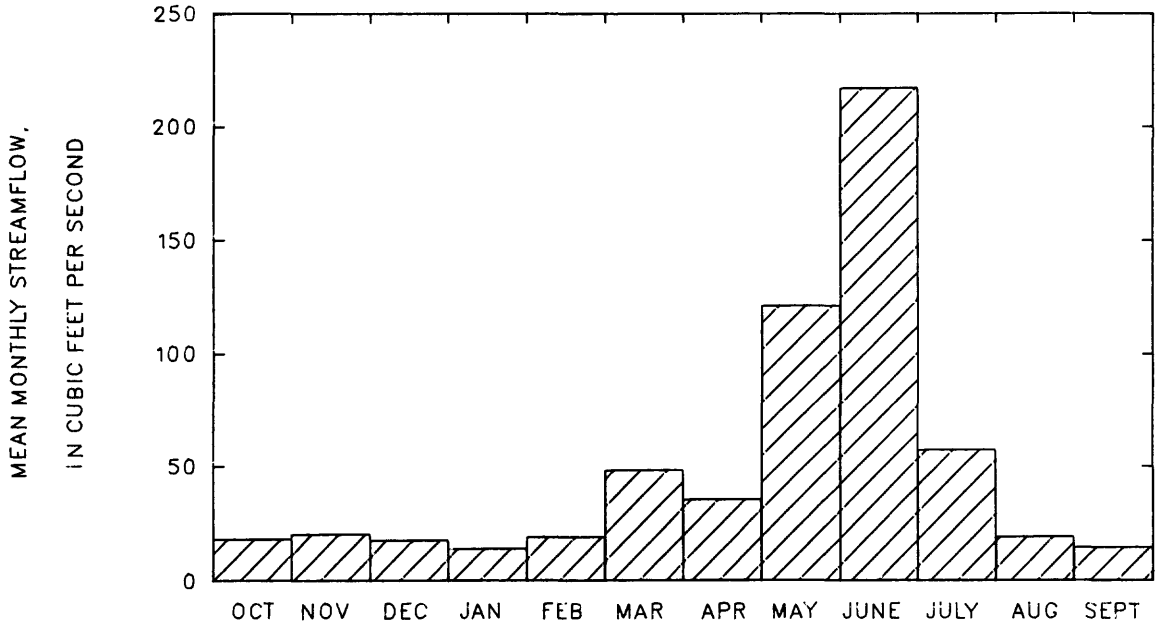
Period (consecutive days)	Discharge, ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	561	1260	1920	---	---	---
3	383	905	1440	---	---	---
7	275	679	1120	---	---	---
15	216	522	857	---	---	---
30	175	410	655	---	---	---
60	124	279	435	---	---	---
90	94	204	312	---	---	---

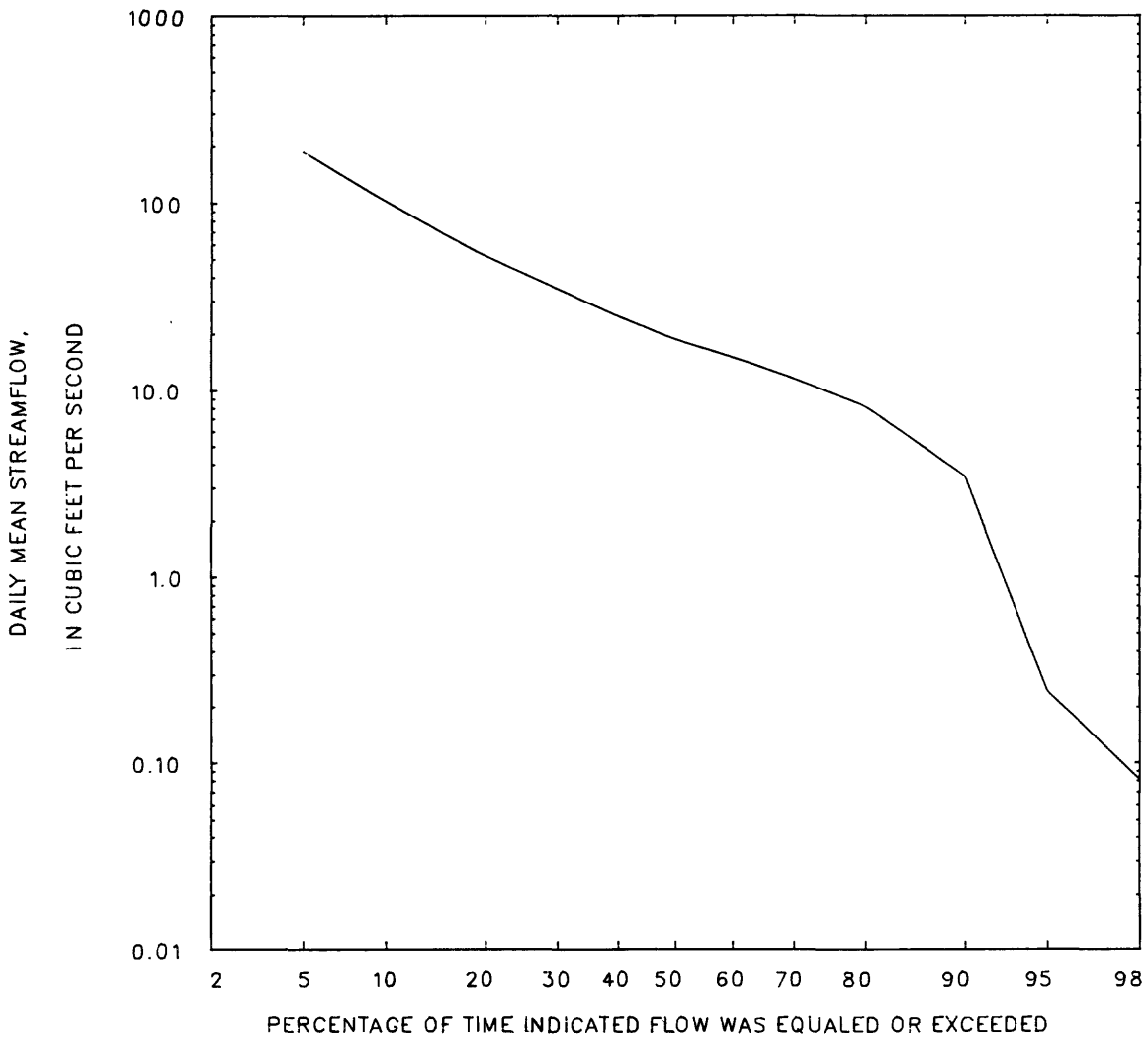
Duration of daily mean flow for period of record 1964-70, 1978-81

Discharge, ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
615	186	101	69	51	35	25	18	15	11	8.1	3.4	0.24	0.08	0.01	0.01	0.00

STATION 06316400 PERIOD OF RECORD 1964–70, 1978–81

CRAZY WOMAN CREEK AT UPPER STATION, NEAR ARVADA, WYO.





06316500 CRAZY WOMAN CREEK NEAR ARVADA, WYO.

LOCATION.--Lat 44°29', long 106°09', in NW¼ sec.16, T.52 N., R.77 W., Johnson County, on left bank 200 ft upstream from county highway bridge, 1 mi upstream from mouth, and 11.5 mi south of Arvada.

DRAINAGE AREA.--956 mi^2.

PERIOD OF RECORD.--October 1939 to December 1943, January 1950 to September 1964.

GAGE.--Water-stage recorder. Datum of gage is 3,737.07 ft. October 1, 1939, to December 31, 1943, chain gage at site 0.5 mi upstream at different datum.

REMARKS.--Diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,900 ft^3/s, July 14, 1962, gage height, 12.79 ft, from rating curve extended above 1,700 ft^3/s, no flow at times in 1939-40, 1942, 1950-62.

Monthly and annual streamflow 1940-43, 1951-64

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	68	0.00	12	19	1.6	2.4
November	48	0.08	13	12	0.93	2.7
December	34	0.52	13	8.6	0.68	2.6
January	28	0.19	8.8	6.6	0.76	1.8
February	29	2.2	15	8.8	0.59	3.1
March	208	18	56	50	0.90	11.7
April	174	6.3	56	48	0.85	11.7
May	349	3.4	78	87	1.1	16.3
June	522	1.8	150	164	1.1	31.3
July	246	0.01	49	65	1.3	10.2
August	167	0.14	19	39	2.1	3.9
September	77	0.00	11	20	1.9	2.2
Annual	96	3.7	40	29	0.73	100

Magnitude and probability of annual low flow based on period of record 1941-43, 1952-64

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.00	0.00	---	---	---	---
90	0.94	0.04	---	---	---	---
120	3.6	0.85	---	---	---	---
183	6.5	2.5	---	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1940-43, 1951-64

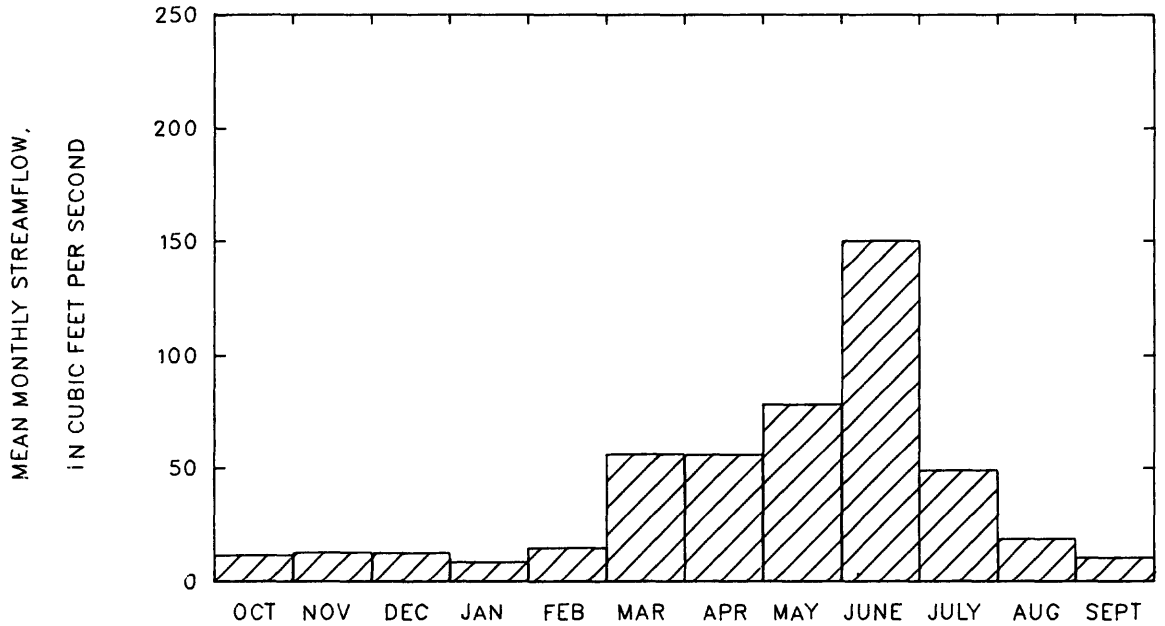
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	623	1110	---	---	---	---
3	467	867	---	---	---	---
7	309	583	---	---	---	---
15	214	418	---	---	---	---
30	151	310	---	---	---	---
60	107	215	---	---	---	---
90	88	172	---	---	---	---

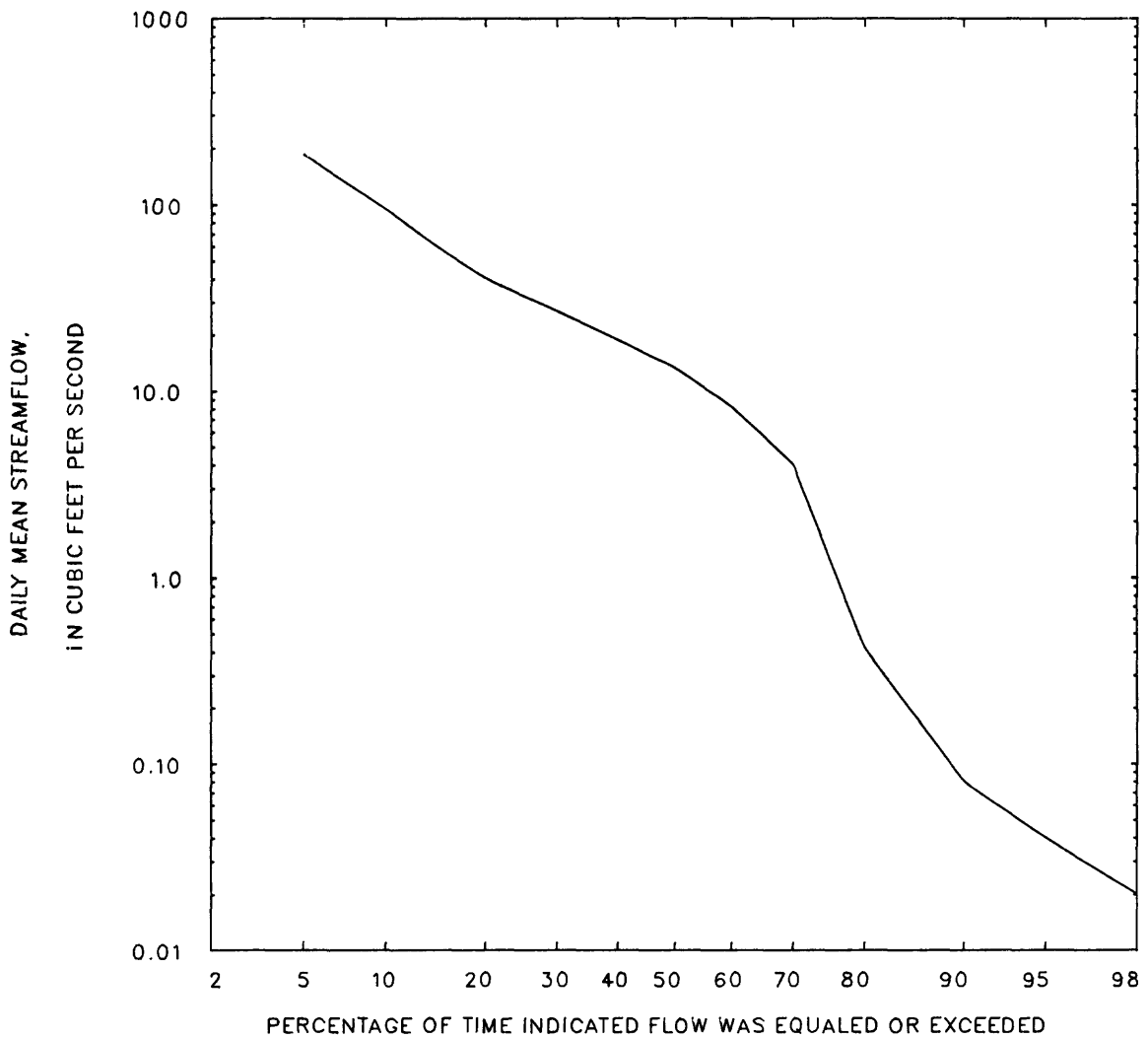
Duration of daily mean flow for period of record 1940-43, 1951-64

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
477	184	94	57	40	27	19	13	8.2	4.0	0.42	0.08	0.04	0.02	0.01	0.00	0.00

STATION 06316500 PERIOD OF RECORD 1940–43, 1951–64

CRAZY WOMAN CREEK NEAR ARVADA, WYO.





06317000 POWDER RIVER AT ARVADA, WYO.

LOCATION.--Lat 44°39'00", long 106°07'37", in SW¼SE¼ sec.16, T.54 N., R.77 W., Sheridan County, on left bank 0.1 mi downstream from bridge on county road, 0.2 mi southeast of Arvada, and 0.2 mi upstream from Wild Horse Creek.

DRAINAGE AREA.--6,050 mi^2, approximately.

PERIOD OF RECORD.--May 1919 to current year (no winter records in water years 1919-30, 1934). Records for February 16-23, 1930, published in WSP 701, are unreliable and should not be used.

GAGE.--Water-stage recorder. Altitude of gage is 3,620 ft, from topographic map. Prior to October 24, 1938, non-recording gage at bridge 0.1 mi upstream at datum 3,621.87 ft. October 24, 1938, to April 27, 1983, at site 0.7 mi upstream at different datum.

REMARKS.--Numerous small reservoirs and diversions for irrigation of about 29,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 100,000 ft^3/s, September 29, 1923, gage height, 23.7 ft, from floodmarks, site and datum then in use, from rating curve extended above 20,000 ft^3/s; no flow at times most years.

Monthly and annual streamflow 1935-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	415	0.00	116	91	0.78	3.5
November	303	11	119	54	0.45	3.6
December	290	23	95	47	0.49	2.9
January	242	26	85	42	0.49	2.6
February	567	42	162	102	0.63	4.8
March	953	144	407	221	0.54	12.2
April	1110	99	364	191	0.52	10.9
May	4030	51	734	629	0.86	22.0
June	3320	31	801	679	0.85	24.0
July	1700	16	291	299	1.0	8.7
August	861	0.04	93	132	1.4	2.8
September	451	0.00	72	98	1.4	2.2
Annual	735	70	278	127	0.45	100

Magnitude and probability of annual low flow based on period of record 1936-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	0.00	---	---
3	0.00	0.00	0.00	0.00	---	---
7	0.00	0.00	0.00	0.00	---	---
14	0.00	0.00	0.00	0.00	---	---
30	0.70	0.00	0.00	0.00	---	---
60	19	2.3	0.80	0.02	---	---
90	42	18	11	7.3	---	---
120	64	33	22	16	---	---
183	78	47	36	28	---	---

Magnitude and probability of instantaneous peak flow based on 66 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
6890	14000	20900	32800	44500	59100

Weighted skew = 0.402

Magnitude and probability of annual high flow based on period of record 1935-84

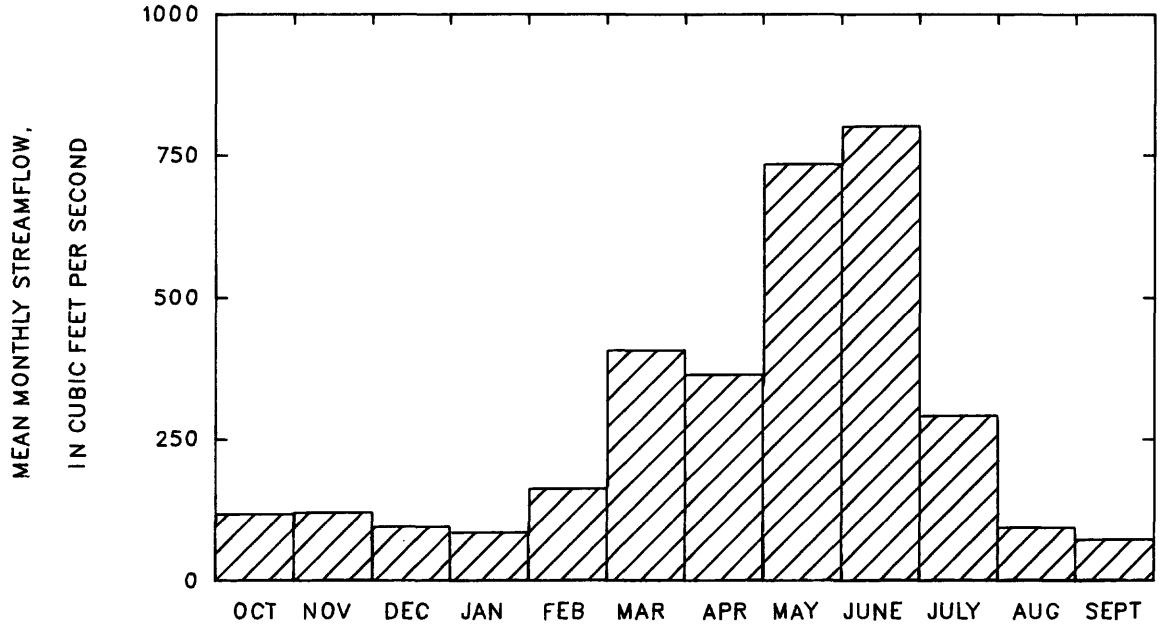
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	3530	6910	10200	15800	---	---
3	2520	4710	6730	10000	---	---
7	1760	3110	4280	6140	---	---
15	1260	2170	2940	4110	---	---
30	947	1630	2190	3060	---	---
60	717	1180	1550	2090	---	---
90	609	952	1210	1570	---	---

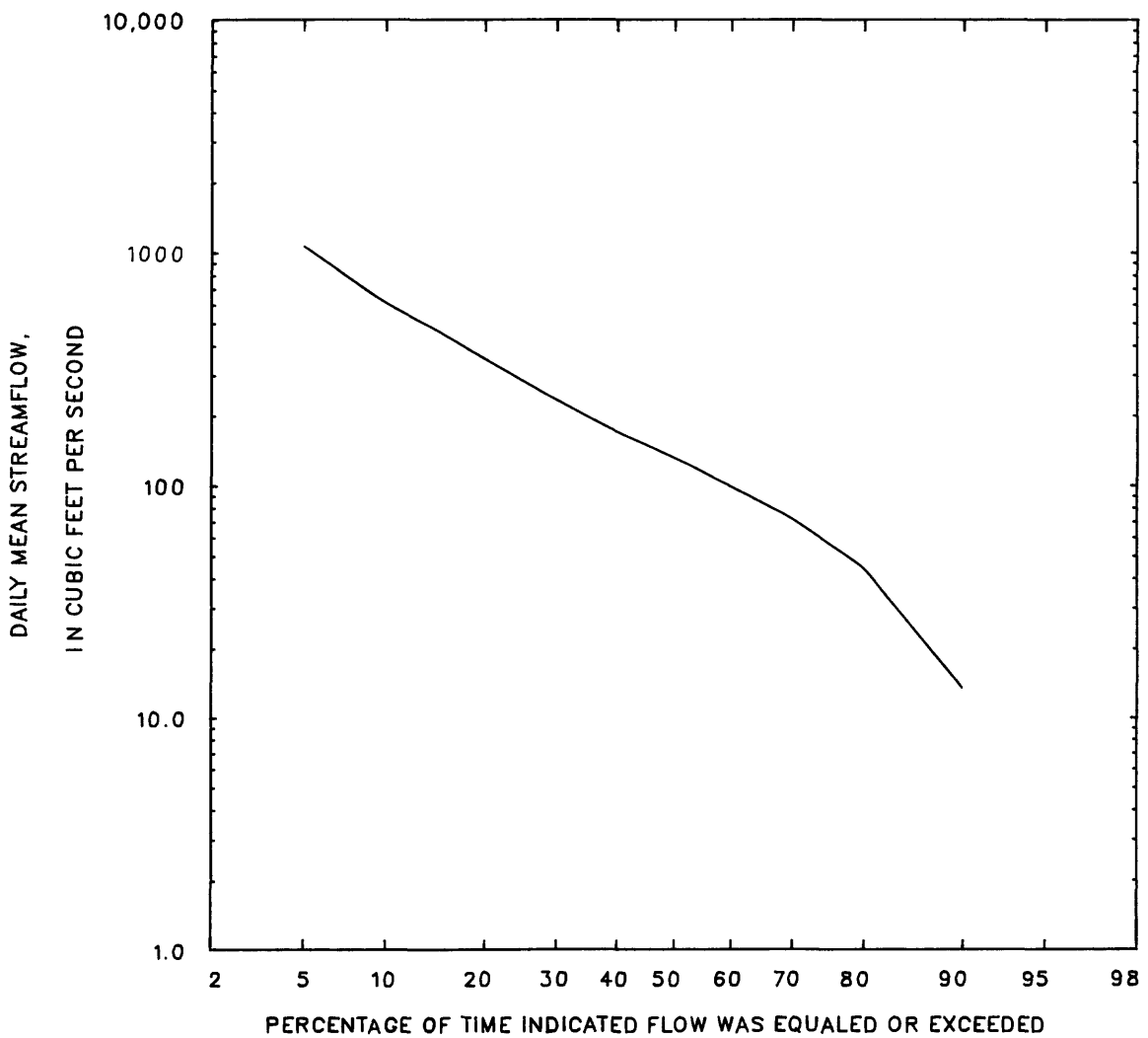
Duration of daily mean flow for period of record 1935-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2550	1060	605	453	350	233	168	131	98	72	44	13	0.01	0.00	0.00	0.00	0.00

STATION 06317000 PERIOD OF RECORD 1935–84

POWDER RIVER AT ARVADA, WYO.





06317500 NORTH FORK CLEAR CREEK NEAR BUFFALO, WYO.

LOCATION.--Lat 44°19'12", long 106°54'35", in SW¼NE¼ sec.12, T.50 N., R.84 W., Johnson County, on left bank 1 mi upstream from confluence with South Fork Clear Creek, 1.75 mi east of Hunter ranger station, and 10.5 mi west of Buffalo.

DRAINAGE AREA.--29.0 mi^2.

PERIOD OF RECORD.--October 1949 to September 1968.

GAGE.--Digital water-stage recorder. Altitude of gage is 6,950 ft, from topographic map. November 25, 1949, graphic water-stage recorder at same site and datum.

REMARKS.--Two diversions for irrigation above station into French Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 675 ft^3/s, June 15, 1963, gage height, 3.95 ft, from rating curve extended above 200 ft^3/s on basis of velocity-area study; maximum gage height, 4.91 ft, April 7, 1952 (backwater from ice); minimum daily discharge, 1.0 ft^3/s, February 2, 1957, February 14, 15, 1958.

Monthly and annual streamflow 1950-68

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	13	4.3	7.3	2.0	0.28	4.4
November	12	4.6	6.8	1.8	0.26	4.1
December	7.9	4.4	5.6	1.1	0.20	3.4
January	6.9	2.5	4.6	1.2	0.26	2.8
February	5.4	2.6	4.3	0.86	0.20	2.6
March	13	2.5	5.4	2.1	0.38	3.3
April	23	5.1	10	4.7	0.47	6.1
May	54	11	27	10	0.38	16.2
June	129	17	51	29	0.57	30.8
July	66	8.4	23	13	0.56	14.1
August	22	5.6	12	4.9	0.41	7.3
September	14	4.4	8.4	2.7	0.33	5.0
Annual	23	9.5	14	3.6	0.26	100

Magnitude and probability of annual low flow based on period of record 1951-68

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	2.6	1.7	1.3	1.0	---	---
3	2.9	1.9	1.5	1.1	---	---
7	3.2	2.2	1.7	1.3	---	---
14	3.4	2.5	2.0	1.7	---	---
30	3.6	2.8	2.4	2.1	---	---
60	4.1	3.3	2.9	2.7	---	---
90	4.4	3.8	3.4	3.2	---	---
120	4.8	4.1	3.8	3.6	---	---
183	5.5	4.9	4.6	4.5	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1950-68

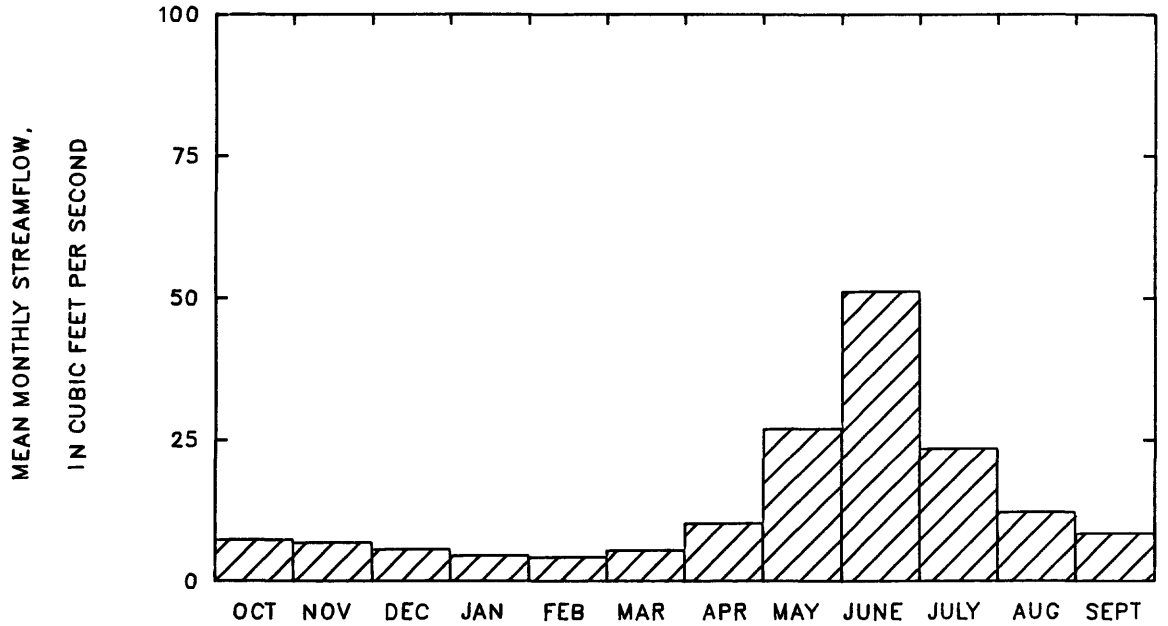
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	133	189	224	265	---	---
3	112	155	181	211	---	---
7	93	129	149	172	---	---
15	74	104	120	137	---	---
30	56	81	98	117	---	---
60	40	57	68	83	---	---
90	33	45	53	63	---	---

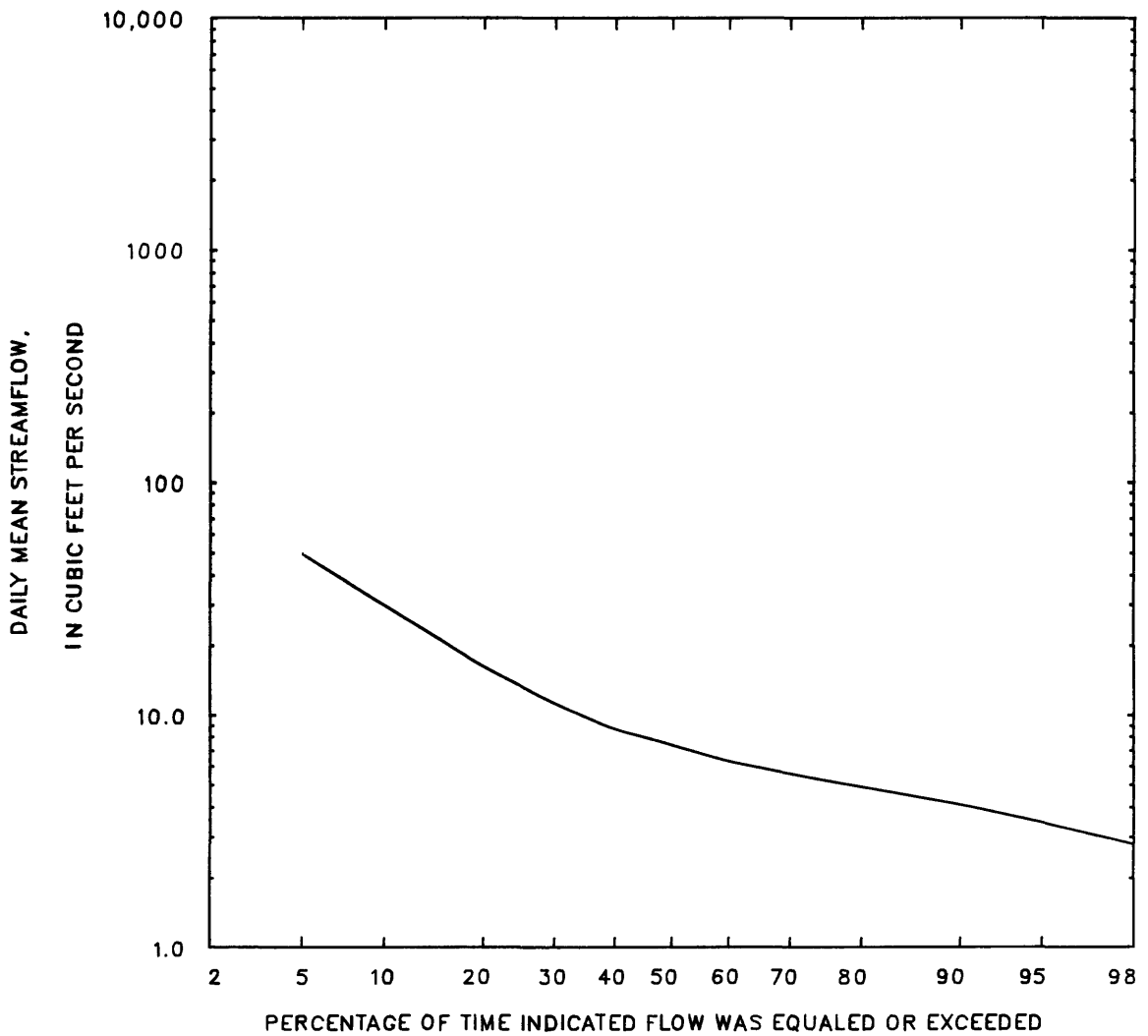
Duration of daily mean flow for period of record 1950-68

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
110	49	30	21	16	11	8.6	7.3	6.2	5.5	4.8	4.1	3.4	2.8	2.3	2.0	1.3

STATION 06317500 PERIOD OF RECORD 1950–68

NORTH FORK CLEAR CREEK NEAR BUFFALO, WYO.





06318500 CLEAR CREEK NEAR BUFFALO, WYO.

LOCATION.--Lat 44°19'58", long 106°46'36", in SE¼SW¼NW¼ sec.6, T.50 N., R.82 W., Johnson County, on left bank 500 ft upstream from abandoned Pacific Power & Light Company powerplant, 2.0 mi downstream from Mosier Gulch, and 4.0 mi west of Buffalo.

DRAINAGE AREA.--120 mi^2.

PERIOD OF RECORD.--April to September 1894, May to September 1896, May 1897 to December 1899, June 1917 to October 1927, April 1938 to current year. Published as "at Buffalo," 1897-98. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 5,184.83 ft. See WSP 1916 for history of changes prior to 1961.

REMARKS.--Diversions above station for irrigation of about 330 acres, of which about 320 acres are below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,420 ft^3/s, June 15, 1963, gage height, 6.19 ft, from rating curve extended above 900 ft^3/s on basis of velocity-area study; no flow February 14-16, 1939, November 12, 13, 1940.

Monthly and annual streamflow 1918-27, 1939-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	258	1.2	28	35	1.2	3.8
November	93	1.0	17	14	0.81	2.3
December	52	0.35	11	8.8	0.79	1.5
January	40	0.26	7.9	6.9	0.88	1.1
February	30	0.55	6.9	5.7	0.83	0.9
March	27	0.99	8.9	6.3	0.70	1.2
April	88	5.8	33	21	0.65	4.5
May	367	62	170	78	0.46	22.8
June	565	61	263	124	0.47	35.3
July	326	27	118	67	0.57	15.8
August	148	3.7	48	30	0.63	6.4
September	107	0.47	33	21	0.64	4.4
Annual	148	18	62	25	0.41	100

Magnitude and probability of annual low flow based on period of record 1919-27, 1940-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	2.6	0.54	0.21	0.35	0.00	0.00
3	2.8	0.79	0.37	0.19	0.08	0.05
7	3.2	0.97	0.48	0.25	0.12	0.07
14	3.5	1.1	0.58	0.32	0.16	0.09
30	4.2	1.4	0.75	0.42	0.21	0.13
60	4.9	1.8	0.94	0.54	0.27	0.17
90	5.6	2.1	1.2	0.70	0.37	0.24
120	6.6	2.7	1.6	1.0	0.56	0.38
183	11	4.9	3.0	1.9	1.1	0.75

Magnitude and probability of instantaneous peak flow based on 63 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
686	1050	1320	1700	2020	2350

Weighted skew = 0.184

Magnitude and probability of annual high flow based on period of record 1918-27, 1939-84

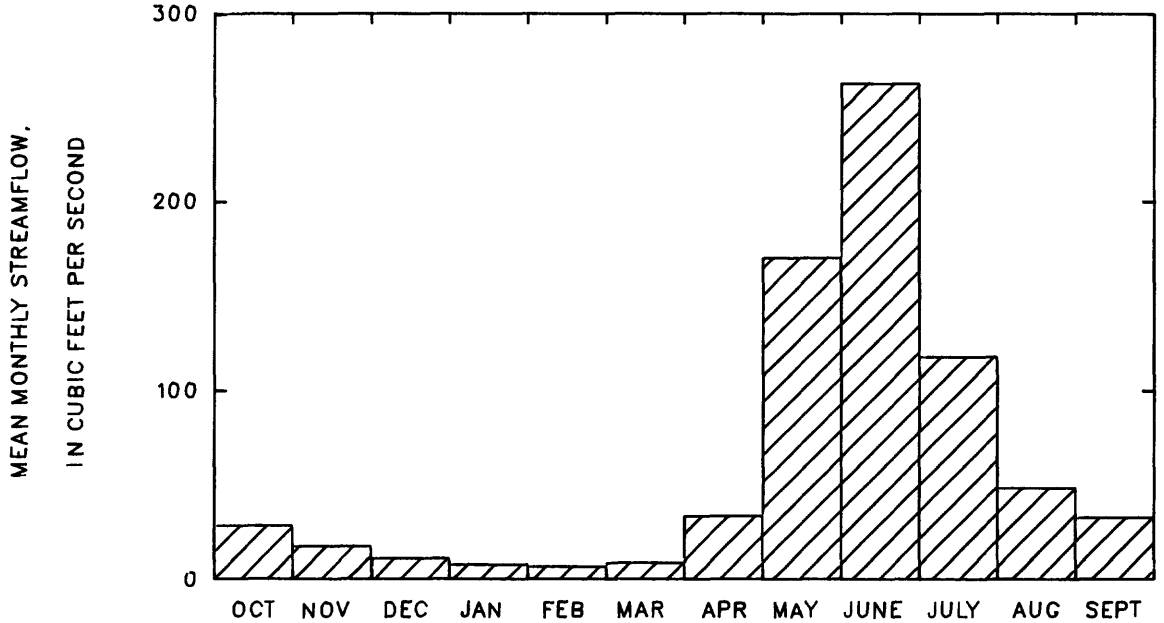
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	551	790	943	1130	1260	1390
3	479	660	765	885	965	1040
7	409	561	649	745	809	866
15	347	478	553	638	695	746
30	293	411	481	560	613	662
60	223	315	372	441	490	537
90	177	249	295	350	390	429

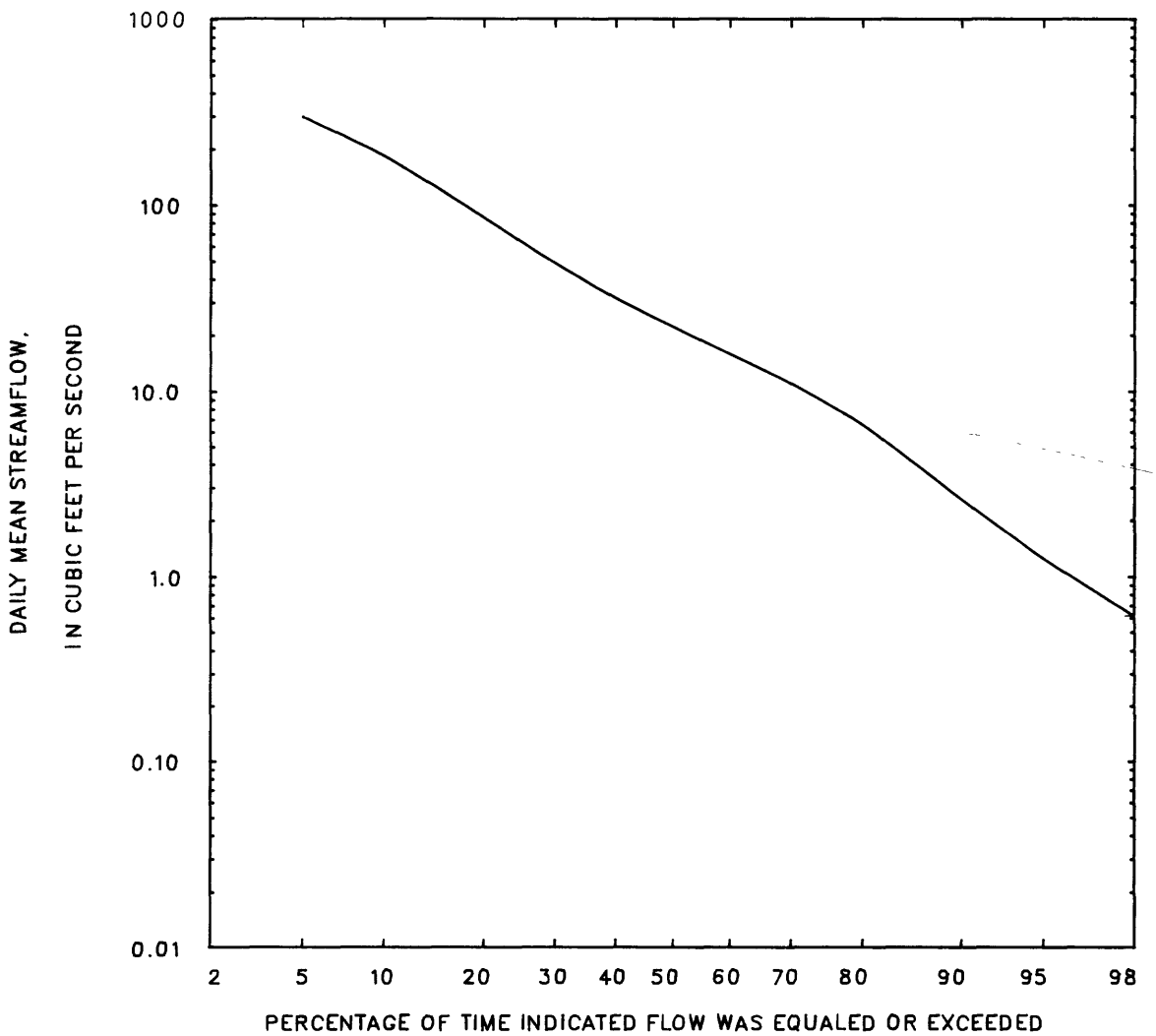
Duration of daily mean flow for period of record 1918-27, 1939-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
522	296	183	120	85	48	31	22	16	11	6.6	2.6	1.2	0.61	0.34	0.26	0.19

STATION 06318500 PERIOD OF RECORD 1918–27, 1939–84

CLEAR CREEK NEAR BUFFALO, WYO.





06320000 ROCK CREEK NEAR BUFFALO, WYO.

LOCATION.--Lat 44°27'22", long 106°52'42", in NW¼NW¼NW¼ sec.29, T.52 N., R.83 W., Johnson County, on left bank 300 ft downstream from confluence of North and South Forks and 11.5 mi northwest of Buffalo.

DRAINAGE AREA.--60.0 mi^2.

PERIOD OF RECORD.--April to August 1941, April to December 1942, May 1943 to November 1944, April 1945 to current year (no winter records since 1971). Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 5,280 ft, from topographic map. Prior to January 8, 1944, non-recording gages 600 ft upstream on North and South Forks at different datums. January 8, 1944, to September 30, 1952, water-stage recorder at present site at datum 0.72 ft lower.

REMARKS.--Water is imported into drainage basin above station from South Piney Creek. Diversions for irrigation of about 250 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,860 ft^3/s, June 15, 1963, gage height, 7.98 ft, from rating curve extended above 450 ft^3/s, on basis of slope-area measurement of peak flow; minimum daily, 0.50 ft^3/s, September 19, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1941, about 8.05 ft, probably during 1944.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1946-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	20	3.4	9.0	3.7	0.40	2.2
November	13	2.7	7.1	2.2	0.31	1.7
December	8.8	3.1	5.6	1.5	0.27	1.3
January	6.4	1.9	4.6	1.3	0.28	1.1
February	6.6	2.3	4.4	1.1	0.26	1.1
March	7.1	2.2	4.8	1.2	0.25	1.2
April	37	4.6	14	9.4	0.68	3.4
May	189	27	91	36	0.39	21.9
June	309	38	150	71	0.48	36.0
July	100	28	67	21	0.31	16.2
August	69	4.2	42	16	0.38	10.1
September	43	1.6	16	12	0.73	3.8
Annual	55	16	35	10	0.29	100

Magnitude and probability of annual low flow based on period of record 1946-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	2.5	1.4	1.0	0.74	0.51	---
3	2.8	1.7	1.2	0.86	0.58	---
7	3.1	1.9	1.3	0.97	0.64	---
14	3.6	2.2	1.6	1.2	0.76	---
30	3.7	2.7	2.2	1.8	1.4	---
60	4.1	3.1	2.7	2.3	2.0	---
90	4.4	3.4	2.9	2.6	2.2	---
120	4.7	3.7	3.3	2.9	2.6	---
183	5.7	4.5	3.9	3.4	3.0	---

Magnitude and probability of instantaneous peak flow based on 44 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
508	932	1290	1830	2290	2820

Weighted skew = 0.084

Magnitude and probability of annual high flow based on period of record 1946-71

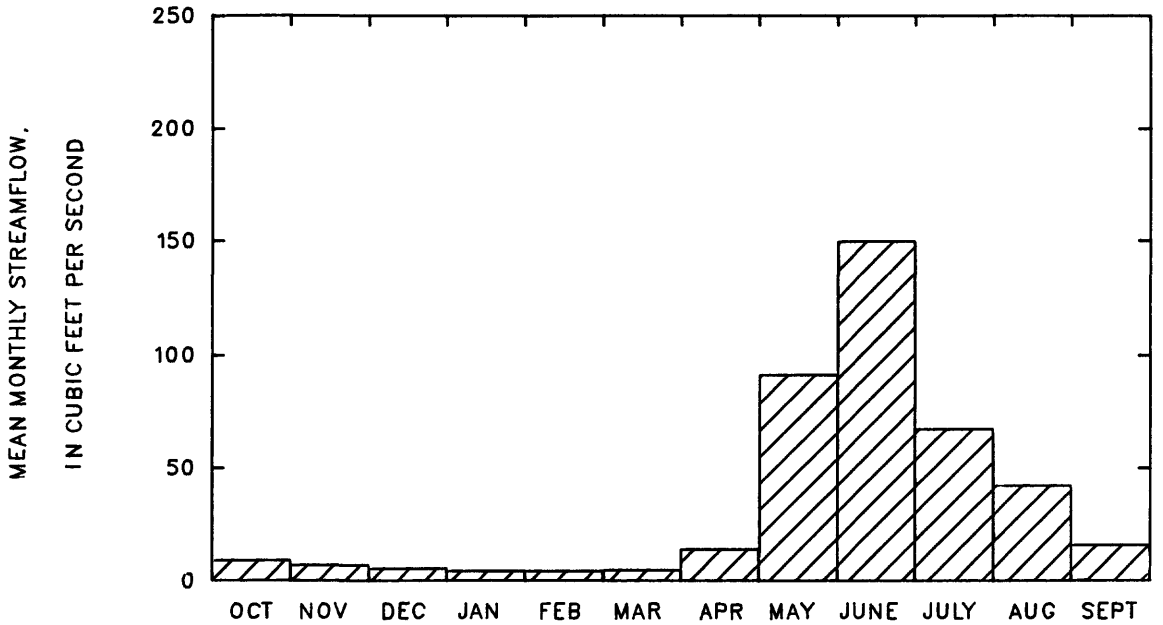
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	314	533	705	951	1150	---
3	256	402	510	658	776	---
7	221	326	398	490	560	---
15	190	269	321	383	429	---
30	164	227	264	306	334	---
60	128	170	194	219	235	---
90	105	135	152	169	179	---

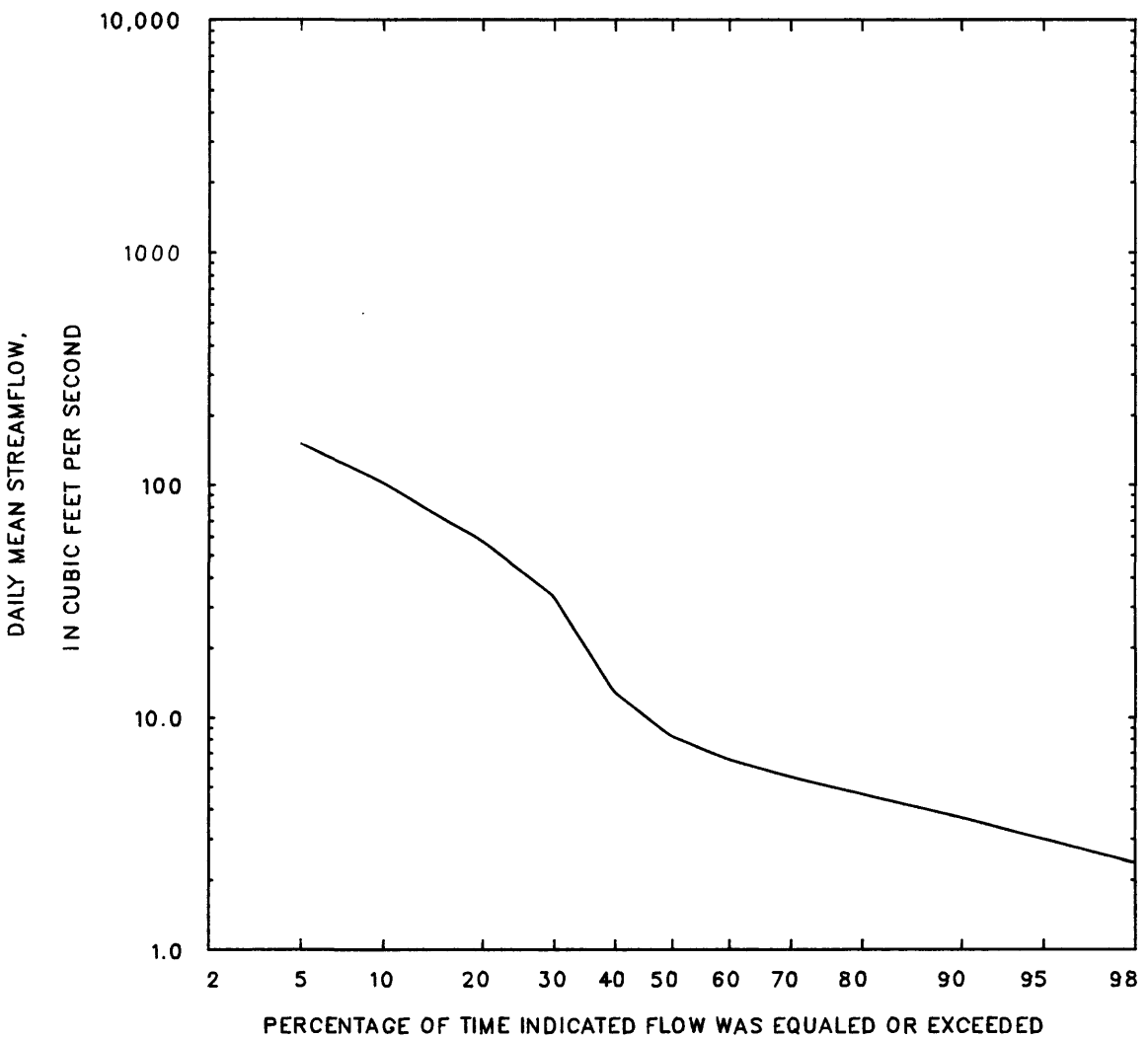
Duration of daily mean flow for period of record 1946-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
268	149	102	73	57	33	13	8.2	6.4	5.4	4.6	3.6	2.9	2.3	1.9	1.4	0.60

STATION 06320000 PERIOD OF RECORD 1946–71

ROCK CREEK NEAR BUFFALO, WYO.





06320500 SOUTH PINEY CREEK AT WILLOW PARK, WYO.

LOCATION.--Lat 44°27'59", long 107°02'03", in NW¼ sec.24, T.52 N., R.85 W., Johnson County, Bighorn National Forest, on left bank about 300 ft downstream from Willow Park Dam, 1.4 mi upstream from Kearny Creek, and 10 mi southwest of Story.

DRAINAGE AREA.--33.6 mi^2.

PERIOD OF RECORD.--September 1945 to September 1957 (no winter records prior to 1948), October 1959 to current year (no winter records since 1971).

GAGE.--Water-stage recorder. Altitude of gage is 8,540 ft, from topographic map. Prior to October 1, 1957, at site about 600 ft upstream at different datum. October 1, 1959, to September 30, 1965, at present site at datum 1.00 ft higher.

REMARKS.--Some regulation by Cloud Peak Reservoir, capacity, 3,385 acre-ft, and Willow Park Reservoir, capacity, 4,457 acre-ft. Storage began in Willow Park Reservoir in April 1959. Cloud Peak Reservoir enlarged December 1958. Water released from storage in Cloud Peak Reservoir is diverted just below station into Rock Creek basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,620 ft^3/s, June 15, 1963, gage height, 5.68 ft, present datum, from rating curve extended above 360 ft^3/s, on basis of slope-area measurement of peak flow; minimum daily, 0.30 ft^3/s, November 19-21, 1966, but may have been less on individual days of no gage-height record; minimum daily determined prior to construction of Willow Park Reservoir, 4.5 ft^3/s, March 1 to April 5, 1955, but may have been less during years of no winter records.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1948-57, 1960-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	27	6.5	15	5.3	0.35	3.0
November	17	0.52	9.8	4.1	0.42	1.9
December	14	1.9	8.2	3.3	0.40	1.6
January	12	1.3	6.9	2.8	0.40	1.4
February	12	1.3	6.2	2.8	0.45	1.2
March	11	1.6	6.3	2.6	0.41	1.2
April	27	1.3	10	6.9	0.69	2.0
May	153	2.8	48	41	0.87	9.4
June	321	66	163	62	0.38	32.1
July	169	74	112	25	0.22	22.1
August	123	31	83	24	0.29	16.3
September	71	17	39	16	0.40	7.7
Annual	56	28	42	7.2	0.17	100

Magnitude and probability of annual low flow based on period of record 1949-57, 1961-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	4.1	1.8	0.99	0.57	---	---
3	4.1	1.8	0.99	0.57	---	---
7	4.1	1.8	1.0	0.59	---	---
14	4.3	1.9	1.1	0.62	---	---
30	4.6	2.1	1.2	0.70	---	---
60	5.3	3.1	2.2	1.5	---	---
90	6.1	3.7	2.7	2.0	---	---
120	6.6	4.2	3.1	2.3	---	---
183	8.5	6.1	5.1	4.2	---	---

Magnitude and probability of instantaneous peak flow based on 33 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
411	642	818	1070	1280	1500

Weighted skew = 0.207

Magnitude and probability of annual high flow based on period of record 1948-57, 1960-71

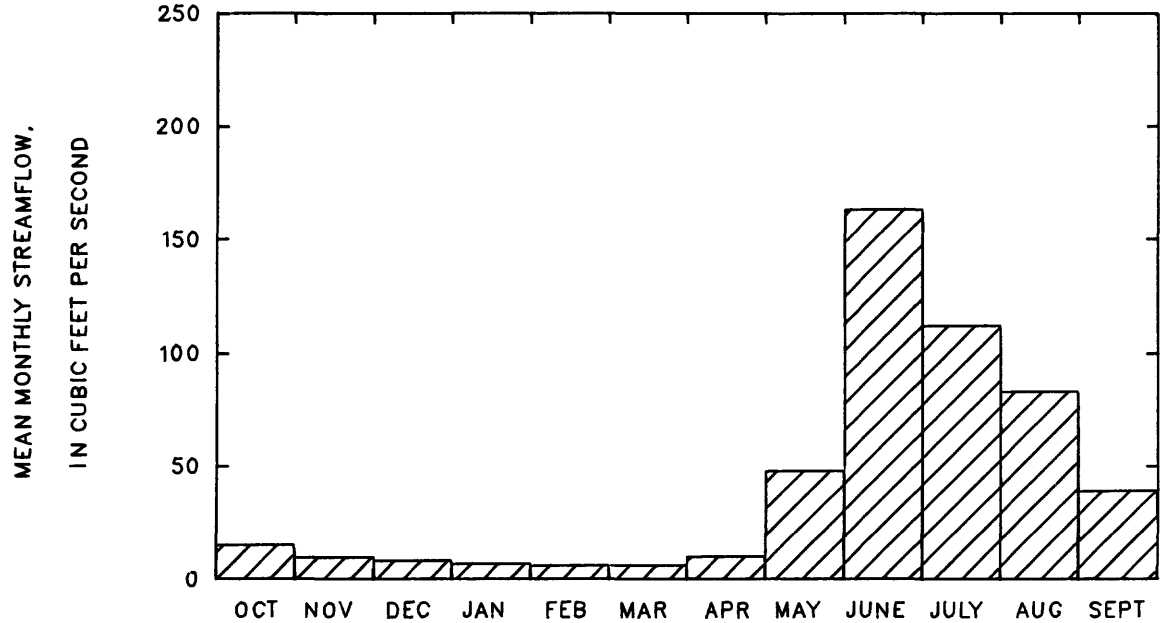
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	356	530	663	849	---	---
3	304	433	527	654	---	---
7	263	357	416	485	---	---
15	225	302	346	394	---	---
30	184	237	268	302	---	---
60	147	179	196	213	---	---
90	127	151	165	179	---	---

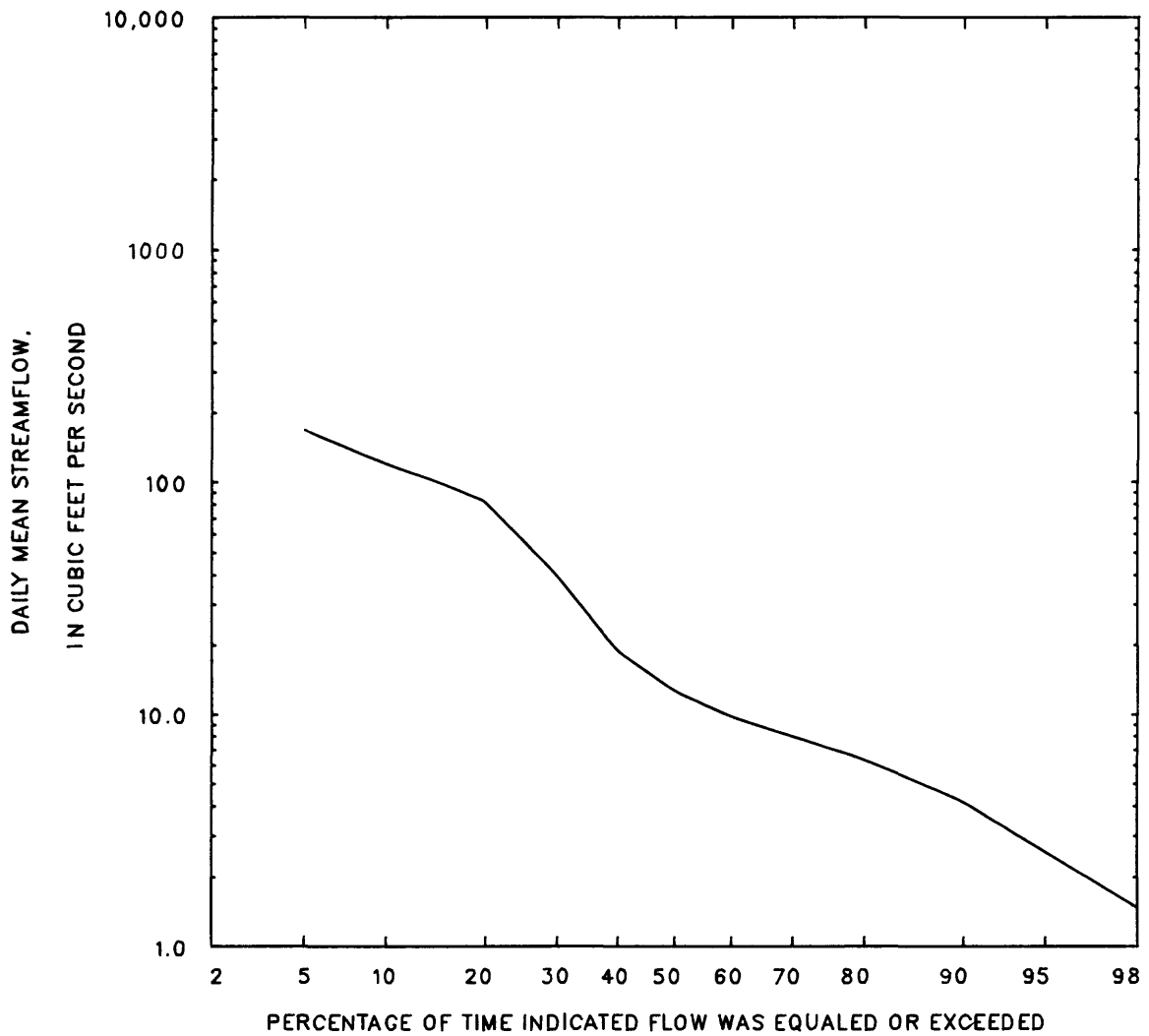
Duration of daily mean flow for period of record 1948-57, 1960-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
291	167	119	98	82	40	19	13	9.7	7.9	6.3	4.1	2.5	1.5	1.0	0.56	0.39

STATION 06320500 PERIOD OF RECORD 1948–57, 1960–71

SOUTH PINEY CREEK AT WILLOW PARK, WYO.





06321000 SOUTH PINEY CREEK NEAR STORY, WYO.

LOCATION.--Lat 44°33'26", long 106°56'11", in NW¼NE¼NE¼ sec.23, T.53 N., R.84 W., Johnson County, Bighorn National Forest, on left bank 2.3 mi southwest of Story and 3.3 mi upstream from confluence with North Piney Creek.

DRAINAGE AREA.--69.4 mi^2.

PERIOD OF RECORD.--June 1951 to September 1974 (no winter records in water years 1972-74), November 1974 to September 1980.

GAGE.--Water-stage recorder. Altitude of gage is 5,590 ft, from topographic map. Prior to October 1, 1951, non-recording gage at site 300 ft upstream at different datum. October 1, 1951, to July 9, 1970, at site 200 ft downstream at datum 10.08 ft lower.

REMARKS.--Some regulation by Cloud Peak Reservoir, capacity, 3,385 acre-ft, Willow Park Reservoir, capacity, 4,457 acre-ft, and Kearny Lake, capacity, 1,860 acre-ft. Diversion above station into Rock Creek basin for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,090 ft^3/s, June 15, 1963, gage height, 4.37 ft, site and datum then in use, from rating curve extended above 1,050 ft^3/s; maximum gage height, 6.55 ft, March 30, 1977 (backwater from snow and ice); minimum daily discharge, 0.40 ft^3/s, November 14, 1964.

Monthly and annual streamflow 1952-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	49	14	29	8.2	0.28	3.2
November	46	14	22	6.6	0.30	2.4
December	25	9.2	18	3.6	0.21	1.9
January	26	8.1	15	4.3	0.29	1.7
February	26	7.0	14	4.7	0.33	1.6
March	24	8.5	15	4.1	0.28	1.7
April	65	15	25	13	0.50	2.8
May	207	69	114	42	0.37	12.6
June	581	119	308	124	0.40	34.1
July	320	81	164	61	0.37	18.2
August	184	74	118	29	0.24	13.1
September	125	24	62	27	0.44	6.9
Annual	103	52	75	16	0.21	100

Magnitude and probability of annual low flow based on period of record 1953-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	9.5	4.3	2.3	1.2	---	---
3	9.8	6.1	4.5	3.4	---	---
7	11	7.1	5.6	4.4	---	---
14	11	8.0	6.6	5.6	---	---
30	12	9.2	7.9	7.0	---	---
60	13	10	9.2	8.4	---	---
90	14	11	10	9.2	---	---
120	15	12	11	10	---	---
183	18	15	14	13	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1952-71

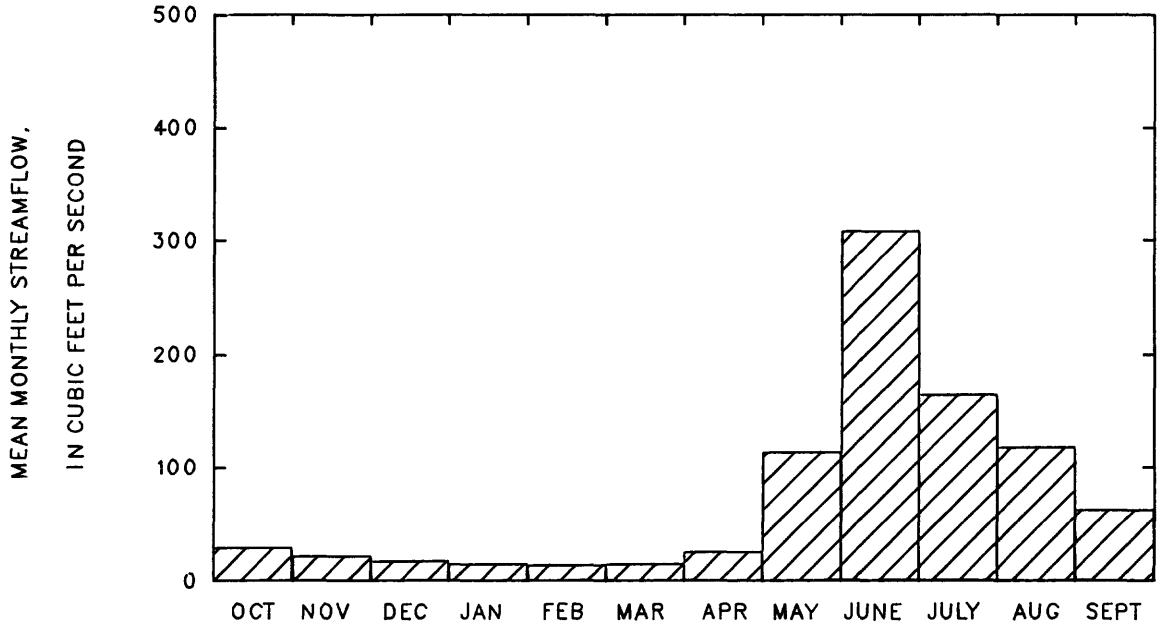
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	621	930	1140	1410	---	---
3	551	812	992	1230	---	---
7	484	694	831	1000	---	---
15	405	557	653	770	---	---
30	322	437	509	596	---	---
60	239	309	354	409	---	---
90	204	256	288	327	---	---

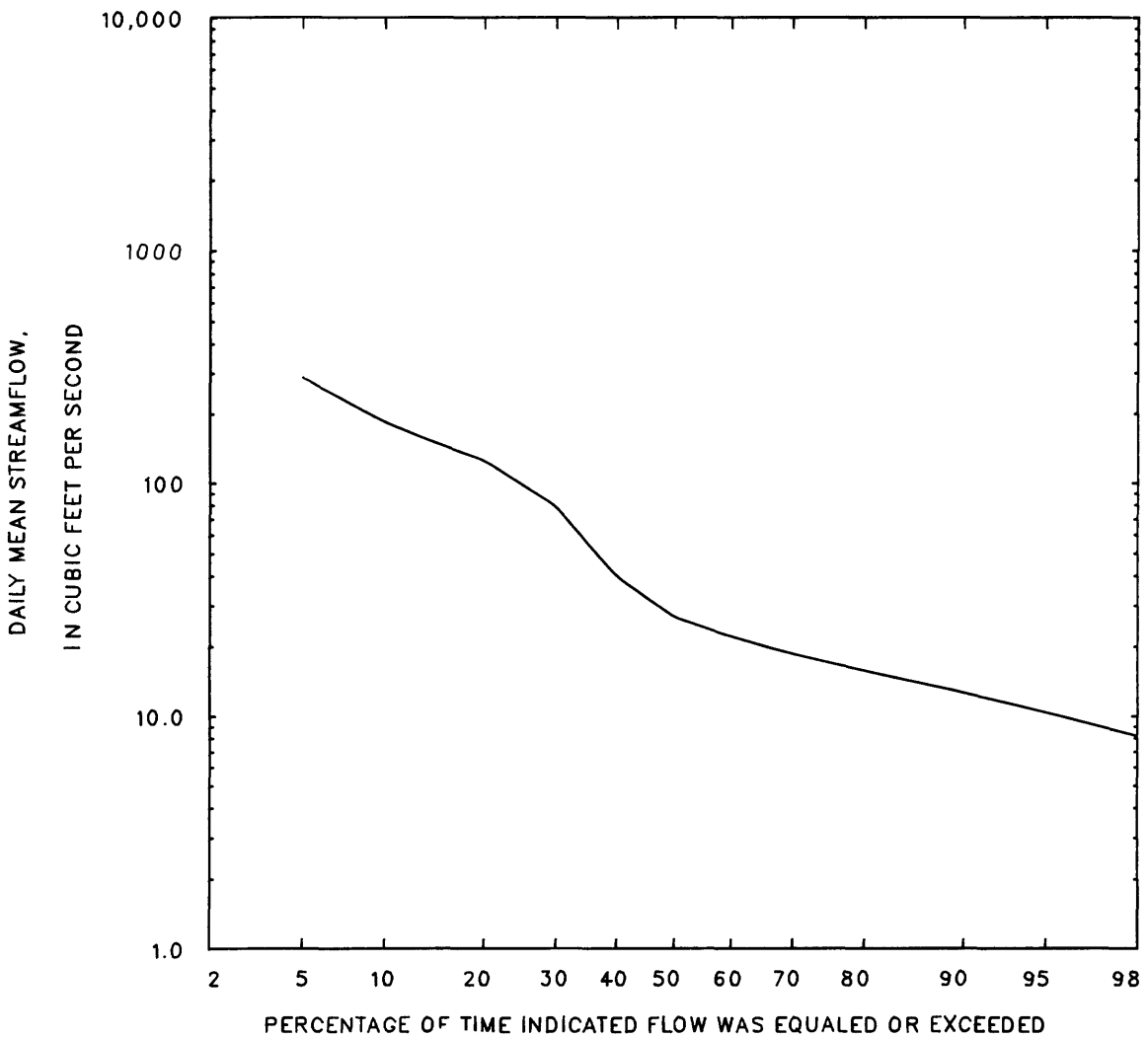
Duration of daily mean flow for period of record 1952-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
572	285	183	146	125	79	40	26	22	18	16	13	10	8.1	7.0	6.1	2.9

STATION 06321000 PERIOD OF RECORD 1952–71

SOUTH PINEY CREEK NEAR STORY, WYO.





06321500 NORTH PINEY CREEK NEAR STORY, WYO.

LOCATION.--Lat 44°34'50", long 106°55'55", in NW¼SW¼ sec.12, T.53 N., R.84 W., Sheridan County, on left bank 2.1 mi west of Story and 3.2 mi upstream from confluence with South Piney Creek.

DRAINAGE AREA.--36.8 mi^2.

PERIOD OF RECORD.--June 1951 to September 1982.

GAGE.--Water-stage recorder. Altitude of gage is 5,290 ft, from topographic map. Prior to September 14, 1951, non-recording gage at present site and datum.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,820 ft^3/s, June 15, 1963, gage height, 5.04 ft, from rating curve extended above 1,000 ft^3/s; minimum daily discharge, 2.1 ft^3/s, January 11, 1981.

Monthly and annual streamflow 1952-82

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	32	5.6	11	4.9	0.46	2.4
November	24	5.6	9.2	3.4	0.37	2.0
December	16	4.8	7.4	2.1	0.29	1.6
January	12	4.4	6.3	1.5	0.23	1.4
February	16	3.9	6.2	2.0	0.33	1.3
March	23	4.7	7.2	3.4	0.47	1.6
April	76	9.2	27	17	0.64	5.9
May	251	85	162	42	0.26	35.4
June	325	51	160	84	0.53	34.8
July	92	15	36	17	0.48	7.8
August	37	6.7	15	6.1	0.41	3.3
September	43	6.1	12	7.1	0.60	2.6
Annual	63	21	38	9.7	0.25	100

Magnitude and probability of annual low flow based on period of record 1953-82

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	4.5	3.5	3.0	2.6	2.3	---
3	4.8	3.9	3.5	3.2	2.9	---
7	5.0	4.2	3.8	3.5	3.2	---
14	5.1	4.4	4.0	3.8	3.5	---
30	5.4	4.7	4.3	4.0	3.8	---
60	5.7	4.9	4.5	4.2	3.9	---
90	5.9	5.1	4.8	4.5	4.3	---
120	6.1	5.3	5.1	4.9	4.8	---
183	7.0	6.1	5.9	5.7	5.6	---

Magnitude and probability of instantaneous peak flow based on 31 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
468	748	977	1320	1620	1950

Weighted skew = 0.402

Magnitude and probability of annual high flow based on period of record 1952-82

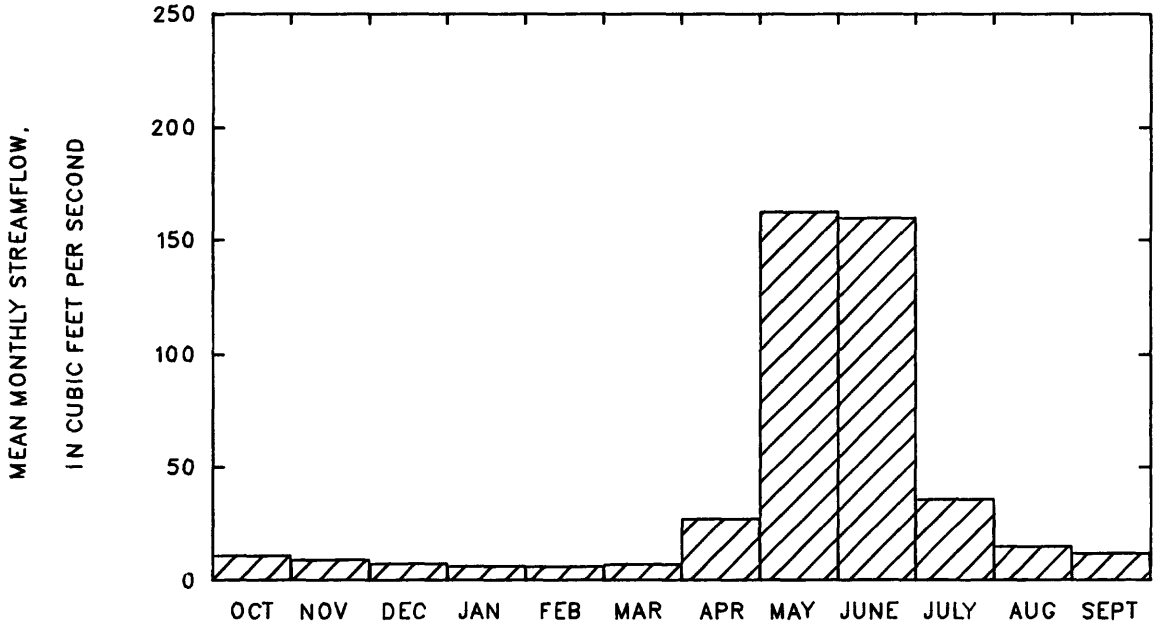
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	373	538	654	807	926	---
3	341	456	525	604	658	---
7	306	391	437	485	515	---
15	267	341	381	424	450	---
30	223	288	326	370	400	---
60	162	209	236	267	289	---
90	121	154	174	197	213	---

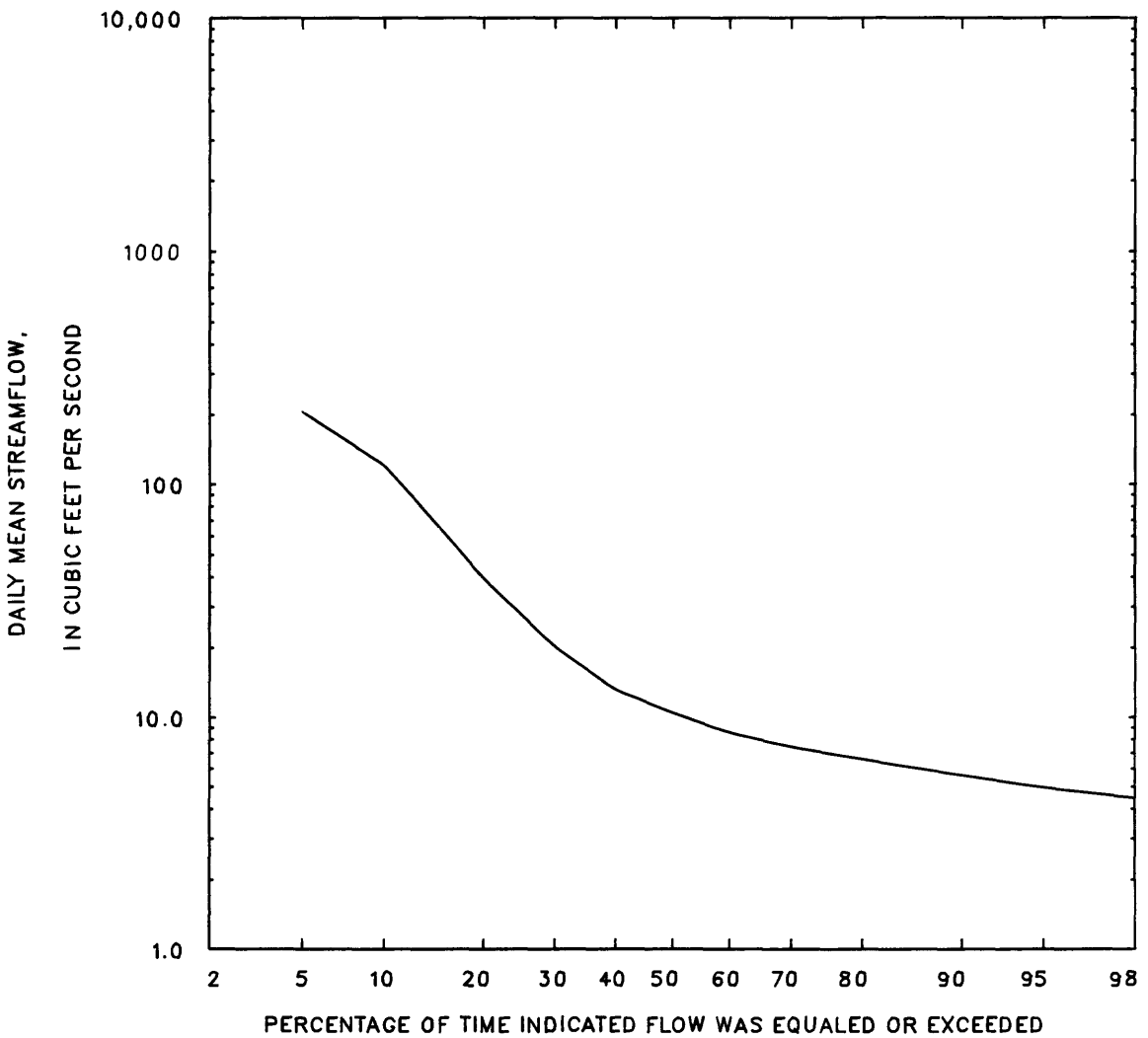
Duration of daily mean flow for period of record 1952-82

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
362	204	120	65	39	20	13	10	8.4	7.3	6.5	5.5	4.9	4.4	4.0	3.7	3.1

STATION 06321500 PERIOD OF RECORD 1952–82

NORTH PINEY CREEK NEAR STORY, WYO.





06323000 PINEY CREEK AT KEARNY, WYO.

LOCATION.--Lat 44°32'08", long 106°49'18", in NE¼NE¼SW¼ sec.26, T.53 N., R.83 W., Johnson County, on right bank at Kearny, 300 ft northeast of Historical Monument and 2.0 mi upstream from Little Piney Creek.

DRAINAGE AREA.--118 mi^2.

PERIOD OF RECORD.--September 1902 to June 1906, June to August 1910, May 1911 to July 1917, May 1919 to September 1923 (no winter records), October 1940 to current year. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 4,655.11 ft. September 6, 1902, to June 30, 1906, non-recording gage at site 50 ft upstream at different datum. May 14, 1911, to July 31, 1917, and May 1, 1919, to September 30, 1923, non-recording gage at site 50 ft upstream at present datum.

REMARKS.--Some regulation by Cloud Peak Reservoir, capacity, 3,385 acre-ft, Willow Park Reservoir, capacity, 4,457 acre-ft, and Kearny Lake, capacity, 1,860 acre-ft. Diversion above station from South Piney Creek into Rock Creek basin for irrigation. Diversions above station for irrigation of about 240 acres, of which about 90 acres are below station. Record includes flow in bypass channel (Spring Creek), 300 ft left of main channel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,410 ft^3/s, June 15, 1963, gage height, 6.05 ft, from rating curve extended above 1,800 ft^3/s; minimum daily, 1.9 ft^3/s, October 3, 1981.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1941-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	70	8.8	28	14	0.51	2.6
November	68	13	34	12	0.34	3.2
December	54	13	31	8.4	0.27	2.9
January	43	12	27	7.9	0.30	2.5
February	54	11	26	8.1	0.31	2.5
March	73	17	30	9.6	0.32	2.9
April	204	16	68	38	0.56	6.5
May	683	57	269	120	0.44	25.5
June	910	47	394	221	0.56	37.3
July	413	16	100	81	0.81	9.4
August	130	8.0	25	23	0.89	2.4
September	86	3.5	23	18	0.78	2.2
Annual	168	32	88	30	0.34	100

Magnitude and probability of annual low flow based on period of record 1942-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	6.6	4.2	3.2	2.6	2.0	1.6
3	7.1	4.7	3.7	3.0	2.3	2.0
7	8.1	5.5	4.4	3.7	3.0	2.6
14	9.4	6.4	5.1	4.3	3.5	3.0
30	11	7.7	6.3	5.3	4.4	3.9
60	15	10	8.4	7.1	5.8	5.0
90	18	13	11	9.3	7.8	6.9
120	21	17	15	13	12	11
183	25	20	18	16	14	14

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1941-84

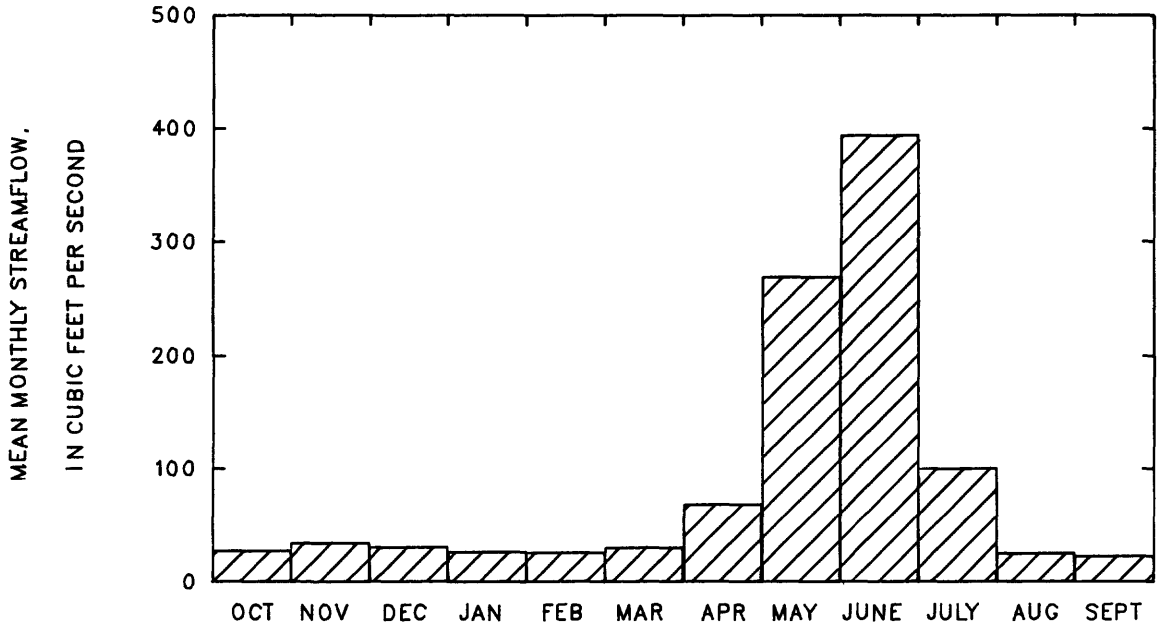
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	928	1310	1490	1650	1740	1800
3	804	1130	1280	1420	1500	1550
7	681	948	1070	1190	1250	1290
15	576	801	907	1010	1060	1100
30	463	661	767	876	942	997
60	342	487	563	640	686	725
90	259	364	419	477	512	541

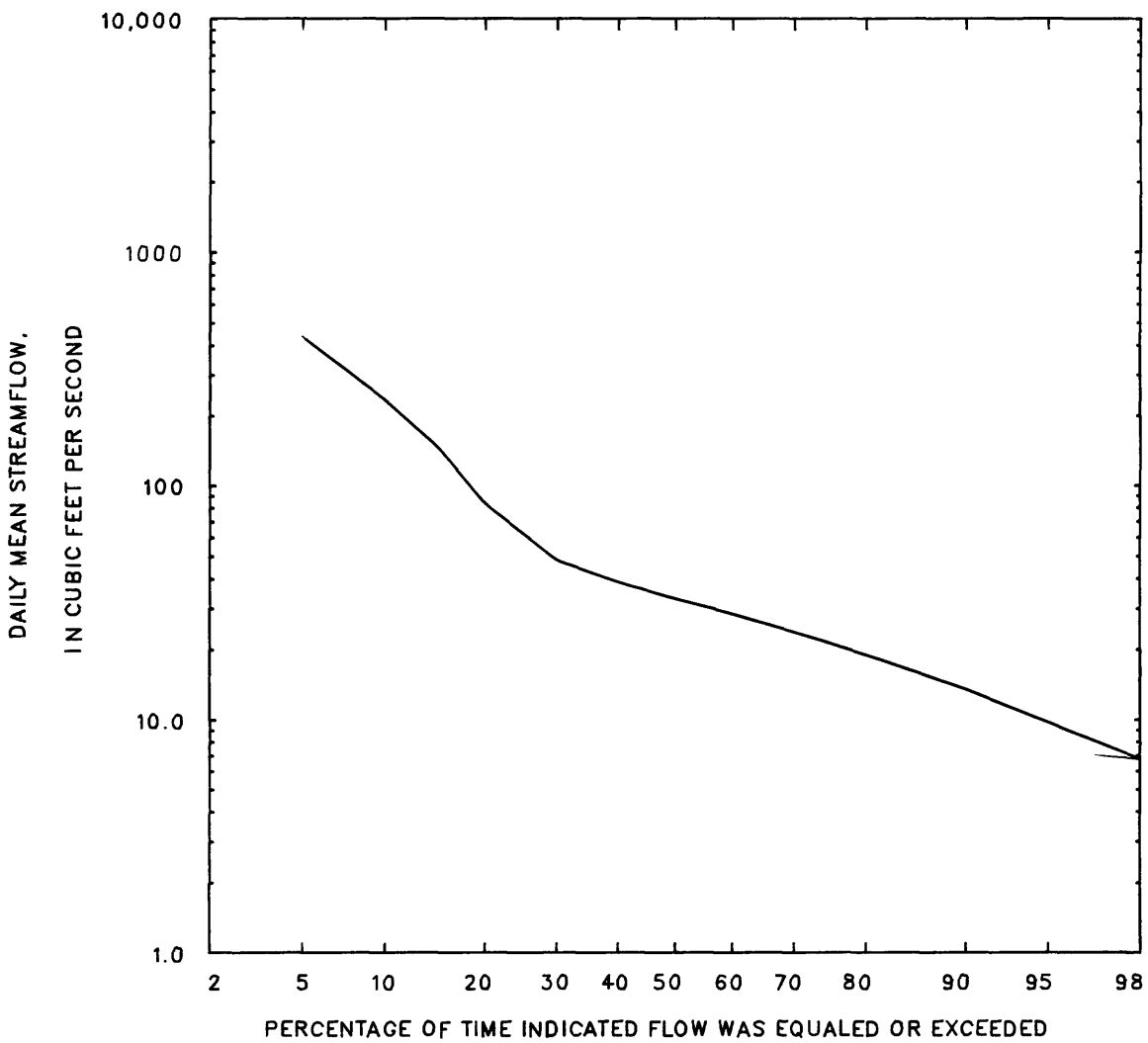
Duration of daily mean flow for period of record 1941-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
844	434	235	143	83	48	38	33	28	24	19	13	9.7	6.7	5.4	4.5	2.9

STATION 06323000 PERIOD OF RECORD 1941–84

PINEY CREEK AT KEARNY, WYO.





06323500 PINEY CREEK AT UCROSS, WYO.

LOCATION.--Lat 44°33'45", long 106°32'25", in SW¼NW¼SE¼ sec.18, T.53 N., R.80 W., Sheridan County, on left bank at Ucross, 140 ft, upstream from bridge on U.S. Highways 14 and 16, and 1.0 mi upstream from mouth.

DRAINAGE AREA.--267 mi^2.

PERIOD OF RECORD.--May 1917 to September 1923 (no winter record), January 1950 to September 1982.

GAGE.--Water-stage recorder. Datum of gage is 4,066.83 ft. May 1917 to September 29, 1923, non-recording gage and September 30, 1923, to May 5, 1976, water-stage recorder, at site 140 ft upstream at present datum.

REMARKS.--Some regulation by Cloud Peak Reservoir, capacity, 3,385 acre-ft, Willow Peak Reservoir, capacity, 4,457 acre-ft, Kearny Lake, capacity, 1,860 acre-ft, and Lake De Smet, capacity, 135,500 acre-ft. Diversions above station from South Piney Creek into Rock Creek basin for irrgation. Diversions for irrigation of about 9,800 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,570 ft^3/s, June 16, 1963, gage height, 7.33 ft; minimum daily, 0.60 ft^3/s, October 12-26, 1955, September 28, October 1, 2, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1, 1929, reached a stage of 10.9 ft present datum, from information by local resident. Stage may have been affected by backwater from bridge.

Monthly and annual streamflow 1951-82

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	181	2.7	39	36	0.93	3.7
November	211	13	43	40	0.95	4.1
December	227	9.8	36	37	1.0	3.4
January	224	5.3	32	37	1.2	3.0
February	69	9.5	30	15	0.51	2.9
March	169	16	46	31	0.67	4.4
April	204	11	68	47	0.69	6.5
May	518	25	202	129	0.64	19.2
June	867	36	330	266	0.81	31.4
July	366	41	110	84	0.76	10.5
August	216	23	64	43	0.68	6.1
September	189	6.4	50	43	0.87	4.8
Annual	162	25	88	39	0.45	100

Magnitude and probability of annual low flow based on period of record 1951-82

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	4.5	1.8	1.0	0.66	0.39	---
3	5.9	2.4	1.4	0.91	0.53	---
7	11	4.7	2.6	1.5	0.74	---
14	15	6.6	3.6	1.9	0.85	---
30	17	8.3	5.1	3.2	1.7	---
60	19	12	9.2	7.4	5.8	---
90	22	14	12	9.5	7.6	---
120	24	16	13	11	9.5	---
183	28	19	16	15	13	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1951-82

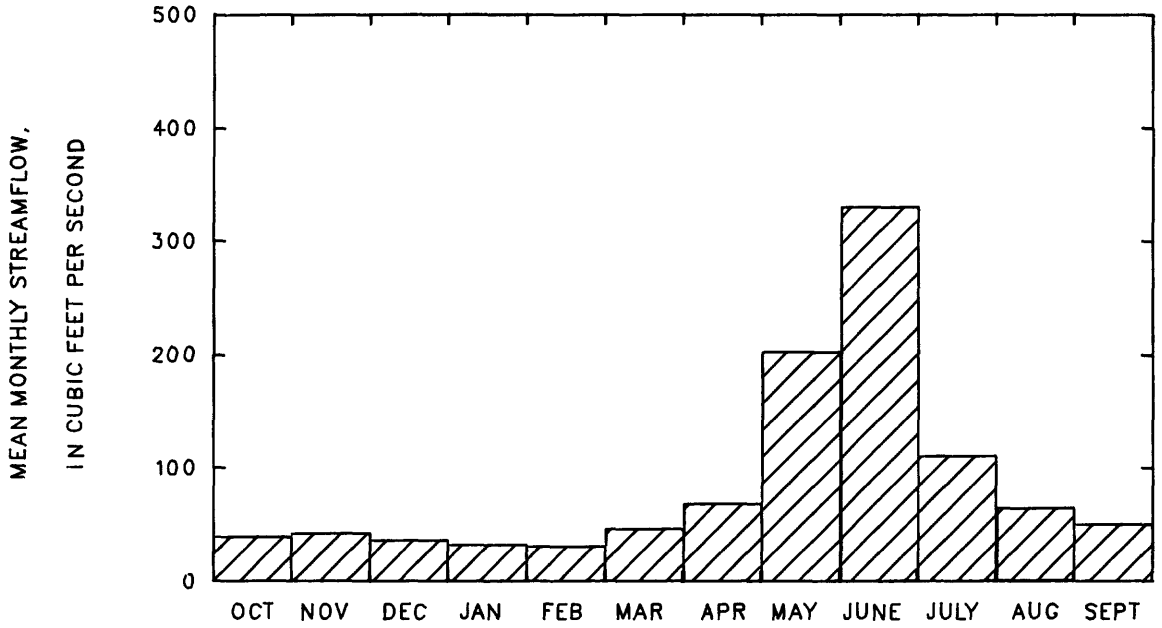
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	719	1280	1650	2100	2410	---
3	623	1080	1370	1710	1940	---
7	507	892	1150	1450	1660	---
15	422	759	983	1250	1440	---
30	342	635	840	1100	1280	---
60	247	446	585	761	888	---
90	200	339	430	540	618	---

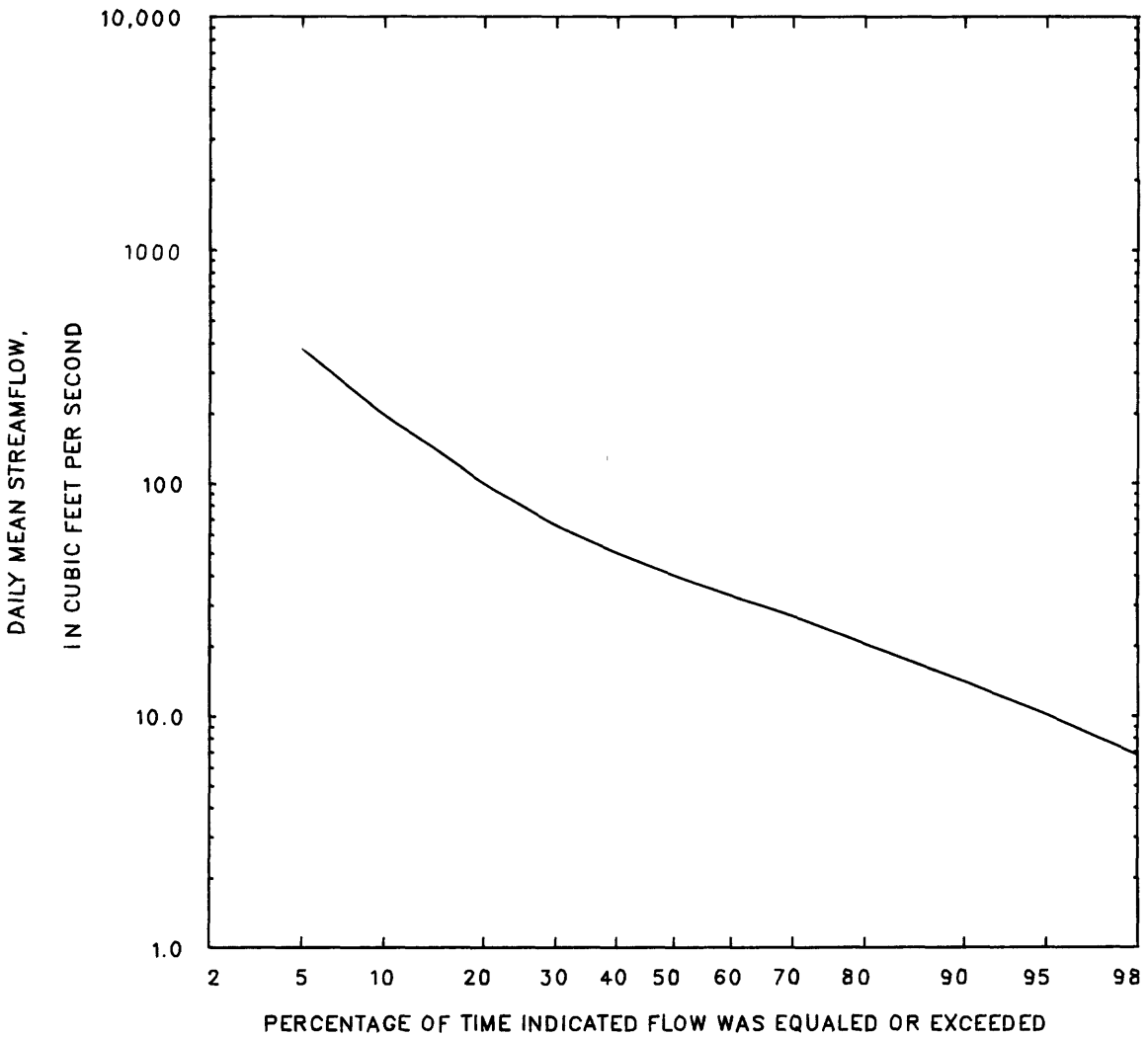
Duration of daily mean flow for period of record 1951-82

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
819	375	195	135	98	65	49	39	32	27	20	14	10	6.7	3.4	2.0	0.68

STATION 06323500 PERIOD OF RECORD 1951–82

PINEY CREEK AT UCROSS, WYO.





06324000 CLEAR CREEK NEAR ARVADA, WYO.

LOCATION.--Lat 44°52'18", long 106°04'56", in SE¼ sec.36, T.57 N., R.77 W., Sheridan County on right bank 600 ft downstream from Cabin Creek, 1.8 mi upstream from mouth, and 16 mi north of Arvada.

DRAINAGE AREA.--1,110 mi^2, approximately.

PERIOD OF RECORD.--August 1915 to April 1919 and April 1928 to May 1929 (no winter records), September 1939 to September 1982.

GAGE.--Water-stage recorder. Datum of gage is 3,506.51 ft. July 21, 1915, to April 30, 1919, non-recording gage at same site at different datum. April 15, 1928, to May 26, 1929, non-recording gage at site 0.2 mi upstream at different datum. September 13, 1939, to January 14, 1951, non-recording gage at present site and datum.

REMARKS.--Some regulation by Cloud Peak Reservoir, capacity, 3,385 acre-ft, Willow Park Reservoir capacity, 4,457 acre-ft, Kearny Lake, capacity, 1,860 acre-ft and Lake De Smet, capacity, 135,000 acre-ft. Diversions for irrigation of about 35,000 acres above station. Diversion to Kendrick Canal about 4.5 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,600 ft^3/s, August 5, 1954, gage height, 10.45 ft, from rating curve extended above 2,500 ft^3/s on basis of slope-area measurement at gage height 10.17 ft; no flow July 22, 1954, May 8-29, September 6-9, 1960, July 5, August 26-28, August 31 to September 6, 1961, August 7-10, 1969, May 25-28, 1982.

Monthly and annual streamflow 1940-82

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	246	18	94	53	0.57	4.4
November	286	46	106	45	0.42	5.0
December	296	35	88	40	0.45	4.1
January	292	23	72	40	0.56	3.4
February	232	29	84	40	0.47	3.9
March	450	37	161	97	0.60	7.5
April	436	20	171	95	0.55	8.0
May	1430	1.8	397	314	0.79	18.5
June	2230	9.2	659	533	0.81	30.7
July	789	4.8	175	167	0.95	8.2
August	256	0.98	62	63	1.0	2.9
September	260	2.0	77	64	0.83	3.6
Annual	408	48	179	81	0.45	100

Magnitude and probability of annual low flow based on period of record 1941-82

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	2.8	0.10	0.00	0.00	0.00	---
3	4.1	0.50	0.00	0.00	0.00	---
7	7.0	1.3	0.05	0.00	0.00	---
14	12	3.0	0.80	0.00	0.00	---
30	21	7.2	3.6	1.9	0.84	---
60	33	13	6.9	3.8	1.8	---
90	43	19	11	6.7	3.4	---
120	57	29	18	12	6.7	---
183	72	45	33	24	17	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1940-82

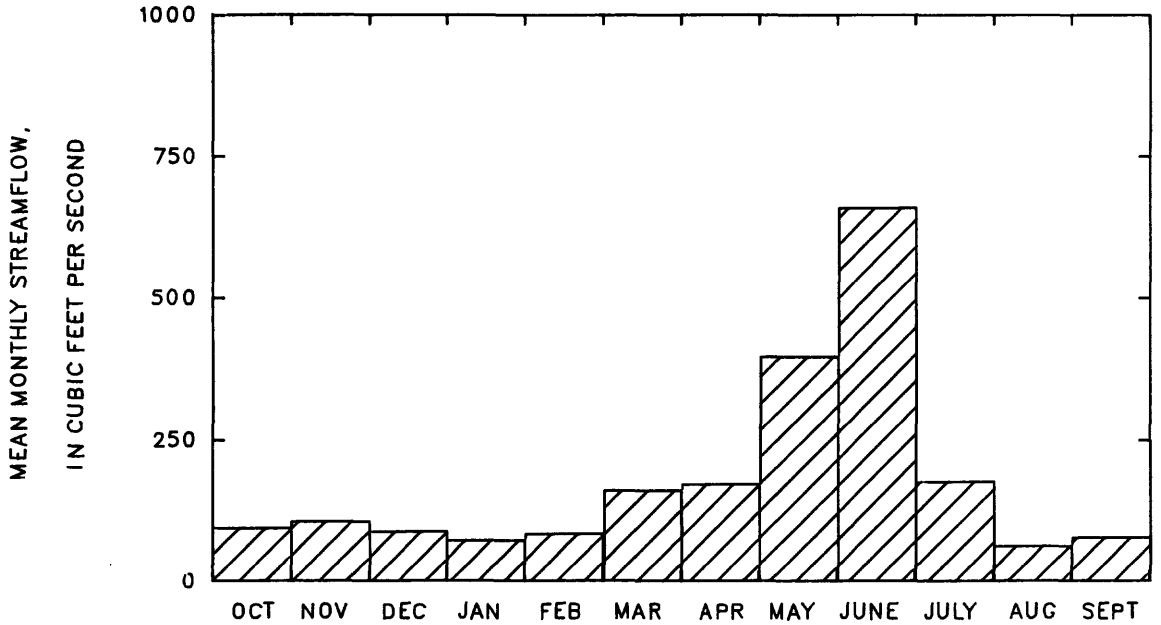
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1750	2940	3720	4670	5340	---
3	1400	2260	2800	3410	3820	---
7	1090	1800	2250	2770	3130	---
15	870	1480	1890	2370	2700	---
30	681	1230	1610	2090	2440	---
60	491	875	1140	1470	1710	---
90	396	669	850	1070	1230	---

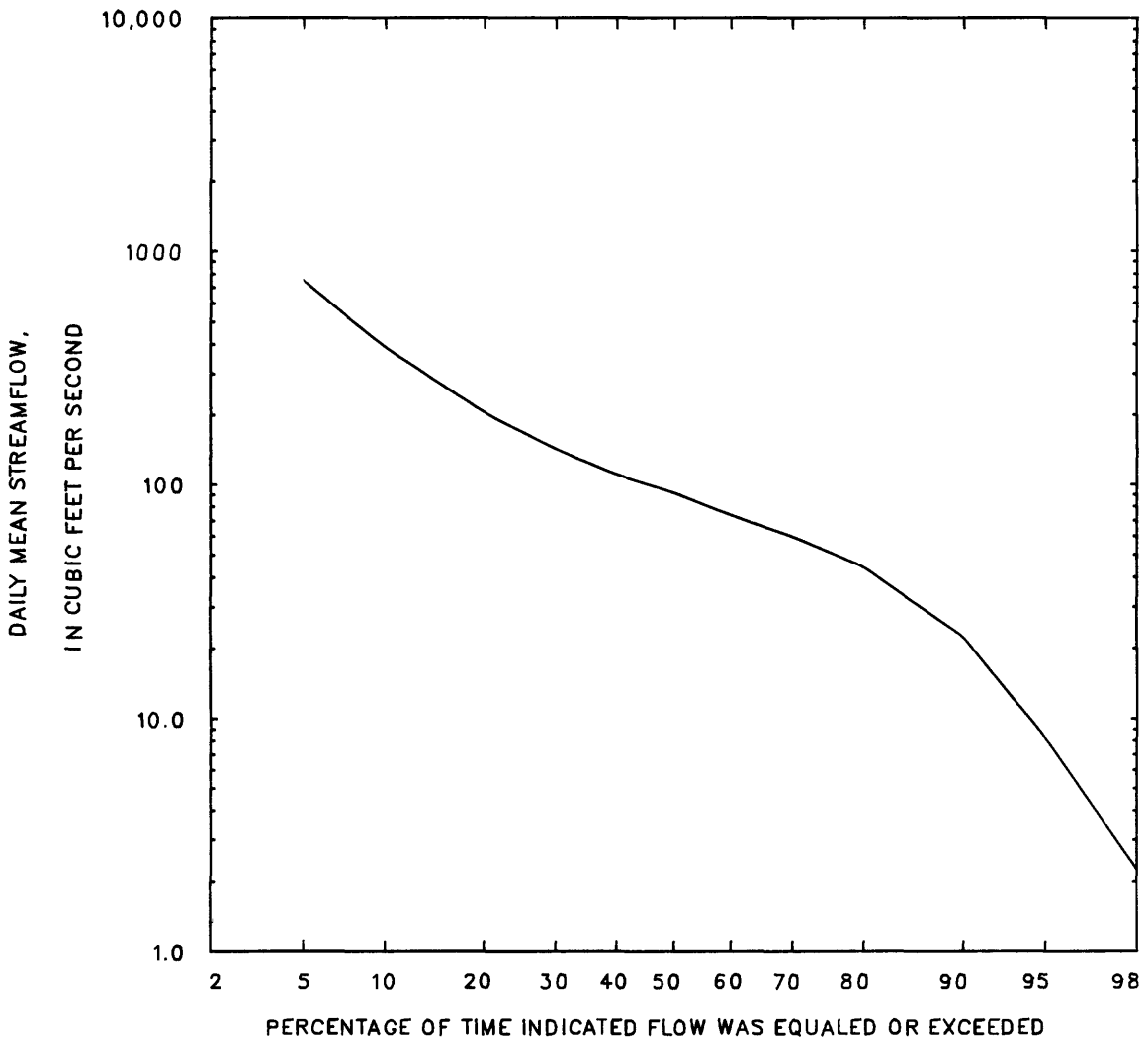
Duration of daily mean flow for period of record 1940-82

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1660	736	384	268	201	140	109	90	72	59	44	22	8.3	2.2	0.97	0.57	0.02

STATION 06324000 PERIOD OF RECORD 1940–82

CLEAR CREEK NEAR ARVADA, WYO.





06324500 POWDER RIVER AT MOORHEAD, MONT.

LOCATION.--Lat 45°04'04", long 105°52'10", in NW¼SE¼NW¼ sec.8, T.9 S., R.48 E., Powder River County, on left bank 500 ft downstream from discontinued post office at Moorhead, 6.2 mi upstream from Buffalo Creek, and at mile 184.8.

DRAINAGE AREA.--8,088 mi².

PERIOD OF RECORD.--May 1929 to September 1972, October 1974 to current year. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 3,334.6 ft, from levels by U.S. Army Corps of Engineers. Prior to August 28, 1931, non-recording gage at site 0.3 mi upstream at different datum. August 28, 1931, to March 21, 1956, water-stage recorder at site 1.2 mi upstream at different datum. March 22 to July 24, 1956, non-recording gage at site 0.3 mi downstream at different datum. July 25 to September 12, 1956, non-recording gage at present site and datum.

REMARKS.--Some regulation by three reservoirs in Wyoming with combined usable capacity of 36,800 acre-ft. Diversions for irrigation of about 66,300 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,000 ft³/s, May 20, 1978, gage height, 15.24 ft; maximum gage height, 17.7 ft, March 21, 1956, site and datum then in use (ice jam); no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of September 30, 1923, reached a stage of 19 ft, site and datum used 1931-56, from information by local residents.

Monthly and annual streamflow 1930-72, 1975-84

Month	Maximum (ft³/s)	Minimum (ft³/s)	Mean (ft³/s)	Standard deviation (ft³/s)	Coefficient of variation	Percent of annual runoff
October	700	16	201	135	0.67	3.6
November	491	80	211	84	0.40	3.8
December	326	56	159	60	0.37	2.9
January	445	27	147	67	0.46	2.7
February	1200	21	280	219	0.78	5.0
March	2290	210	650	426	0.65	11.7
April	1310	117	524	257	0.49	9.4
May	5550	83	1100	911	0.82	19.9
June	4130	40	1460	1060	0.72	26.3
July	2500	34	501	463	0.92	9.0
August	1220	0.60	173	200	1.2	3.1
September	686	1.3	140	149	1.1	2.5
Annual	1090	109	463	195	0.42	100

Magnitude and probability of annual low flow based on period of record 1931-72, 1976-84

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	8.9	0.00	0.00	0.00	0.00	0.00
3	11	0.00	0.00	0.00	0.00	0.00
7	16	1.6	0.00	0.00	0.00	0.00
14	19	4.0	0.00	0.00	0.00	0.00
30	36	11	5.1	2.4	0.97	0.50
60	60	26	16	10	6.1	4.2
90	92	47	31	22	14	10
120	120	70	50	37	25	19
183	137	93	75	63	52	46

Magnitude and probability of instantaneous peak flow based on 55 years of record

Discharge, in ft³/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
6860	11600	15200	20100	23900	27900

Weighted skew = -0.160

Magnitude and probability of annual high flow based on period of record 1930-72, 1975-84

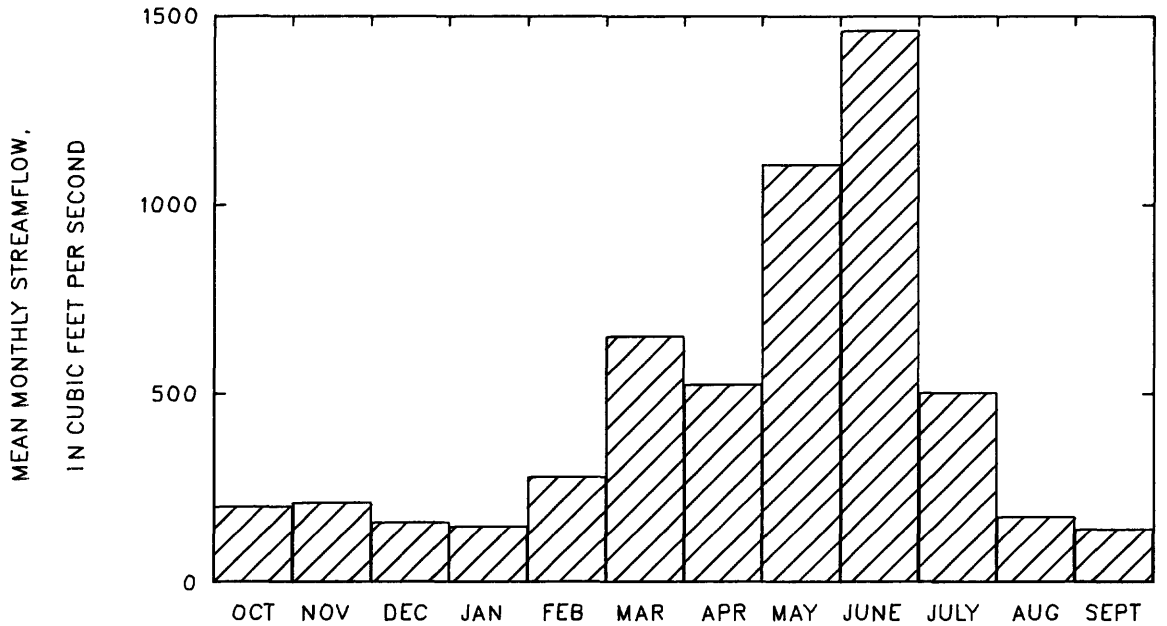
Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	4770	8530	11600	16100	20000	24200
3	3750	6520	8750	12000	14700	17700
7	2820	4750	6220	8290	9970	11800
15	2150	3560	4570	5890	6910	7950
30	1670	2770	3530	4500	5230	5960
60	1260	2060	2610	3310	3830	4350
90	1040	1630	2020	2520	2880	3240

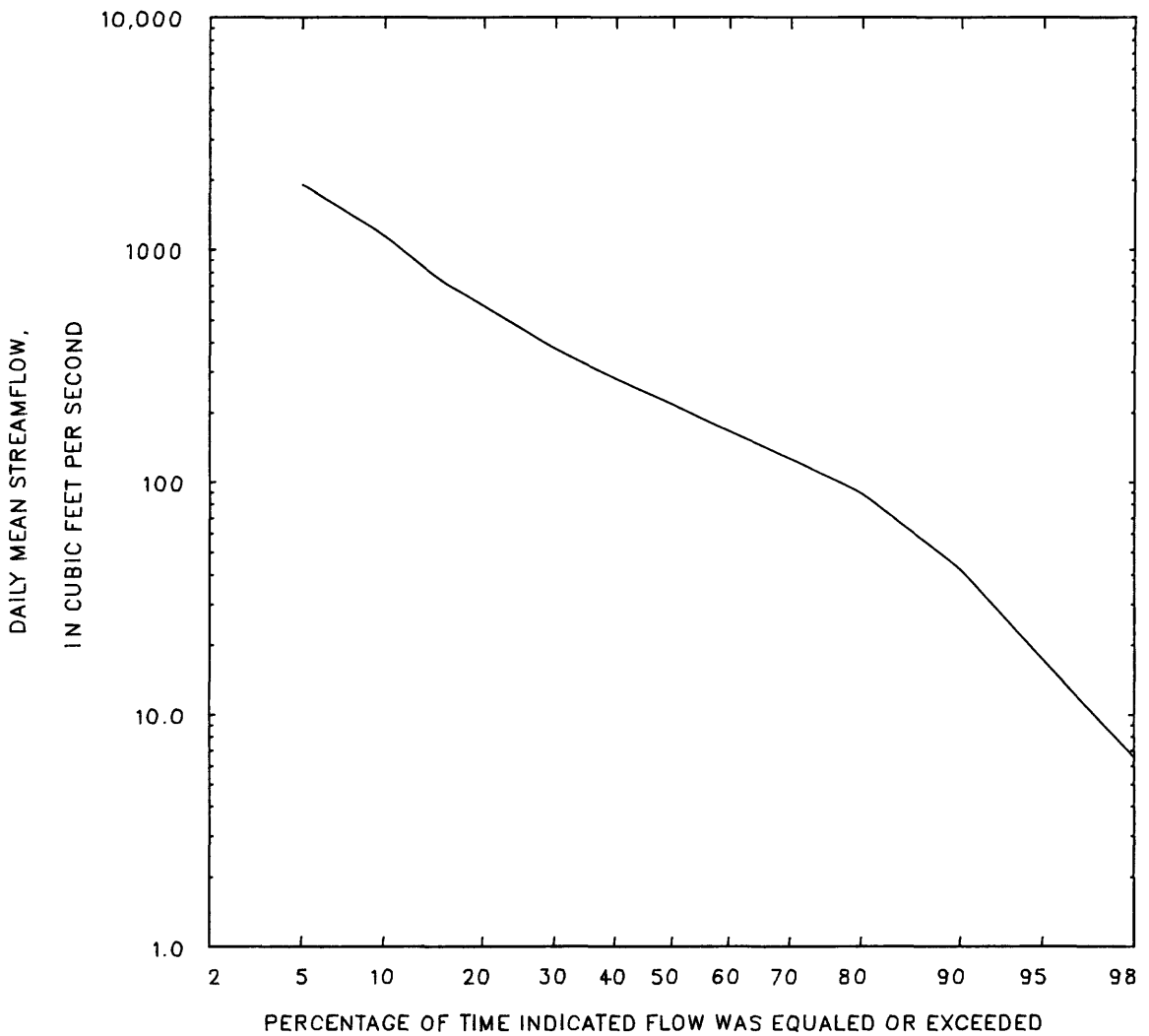
Duration of daily mean flow for period of record 1930-72, 1975-84

Discharge, in ft³/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
4120	1900	1150	738	573	373	279	216	166	126	89	42	17	6.5	2.9	0.14	0.02

STATION 06324500 PERIOD OF RECORD 1930–72, 1975–84

POWDER RIVER AT MOORHEAD, MONT.





06324970 LITTLE POWDER RIVER ABOVE DRY CREEK, NEAR WESTON, WYO.

LOCATION.--Lat 44°55'37", long 105°21'10", in NW¼SW¼SW¼ sec.13, T.57 N., R.71 W., Campbell County, on left bank 3.1 mi upstream from Dry Creek, 5.0 mi south of the Wyoming-Montana State line, and 20 mi north of Weston.

DRAINAGE AREA.--1,235 mi^2.

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,410 ft, from topographic map.

REMARKS.--Diversion above station for irrigation of about 80 acres below station. Flow occasionally affected by contributions from mine dewatering.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,300 ft^3/s, May 19, 1978, gage height, 11.62 ft; maximum gage height, 11.63 ft, March 20, 1978 (backwater from ice); no flow at times some years.

Monthly and annual streamflow 1973-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	26	0.01	6.1	10	1.7	2.1
November	3.2	0.02	1.1	1.2	1.0	0.4
December	3.5	0.21	1.8	1.3	0.70	0.6
January	89	0.25	12	26	2.2	4.0
February	97	1.2	18	27	1.5	6.2
March	613	1.3	69	173	2.5	24.1
April	59	0.75	23	21	0.90	8.0
May	703	2.6	90	199	2.2	31.6
June	188	2.9	41	55	1.3	14.5
July	69	0.04	14	20	1.4	5.0
August	28	0.01	7.3	8.2	1.1	2.6
September	19	0.01	2.7	5.5	2.1	0.9
Annual	127	5.6	24	34	1.4	100

Magnitude and probability of annual low flow based on period of record 1974-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.01	0.00	---	---	---	---
60	0.10	0.02	---	---	---	---
90	0.22	0.04	---	---	---	---
120	0.49	0.11	---	---	---	---
183	1.2	0.33	---	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1973-84

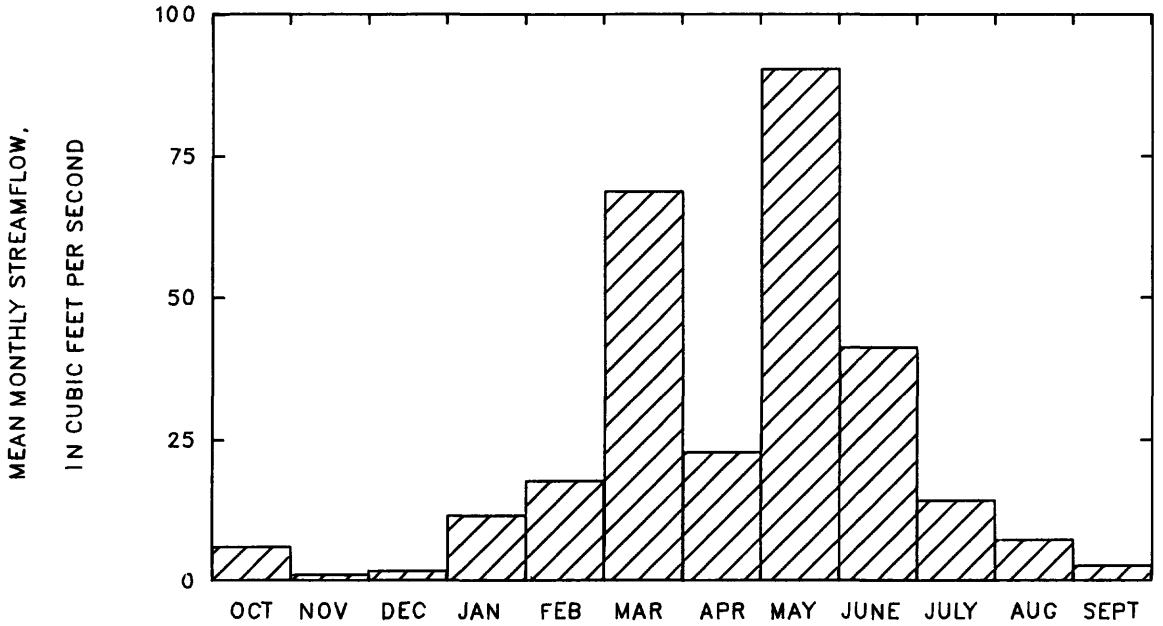
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	341	900	---	---	---	---
3	265	692	---	---	---	---
7	186	438	---	---	---	---
15	123	271	---	---	---	---
30	77	167	---	---	---	---
60	50	113	---	---	---	---
90	39	93	---	---	---	---

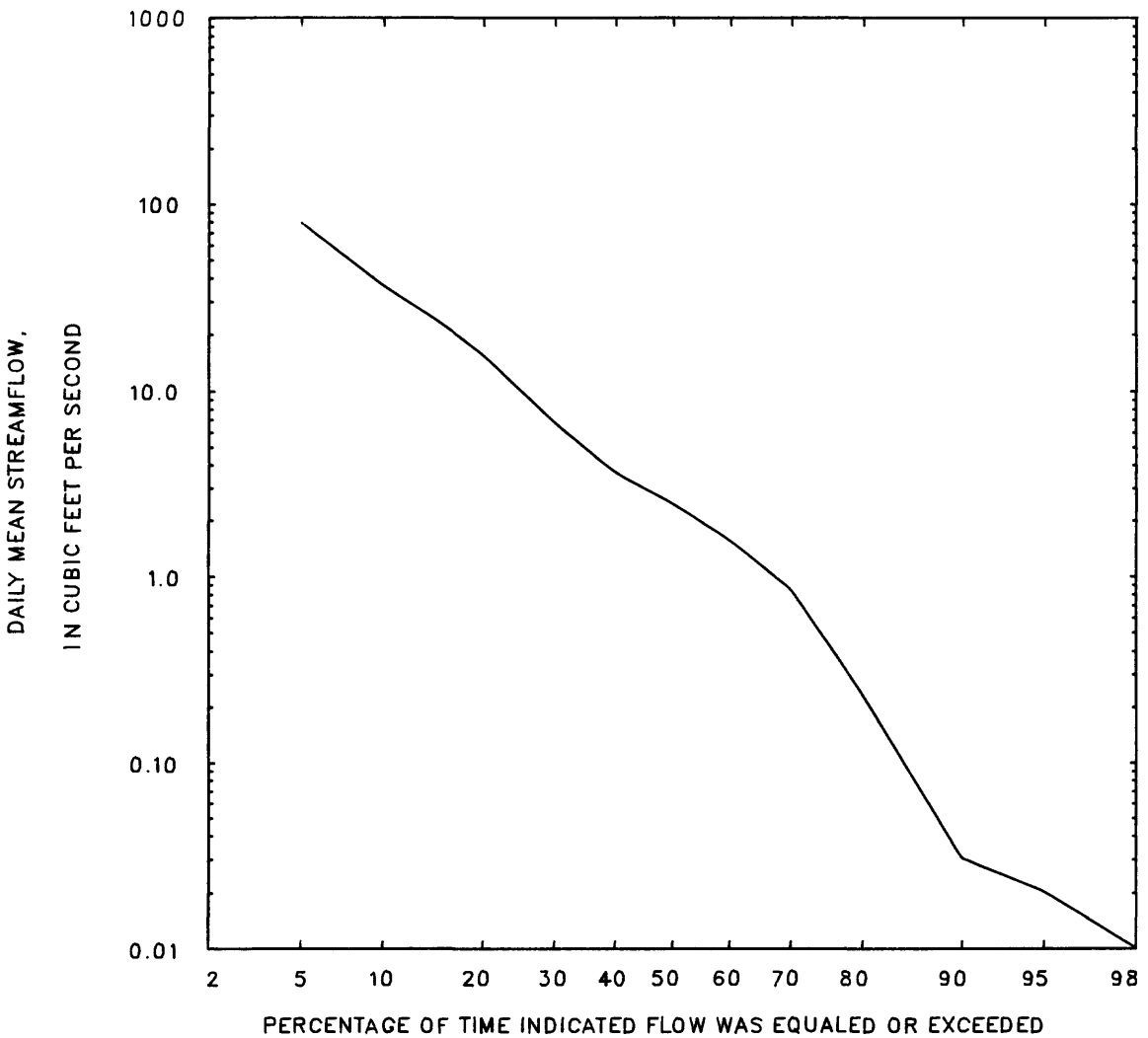
Duration of daily mean flow for period of record 1973-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
365	78	36	23	15	6.7	3.6	2.4	1.5	0.84	0.23	0.03	0.02	0.01	0.00	0.00	0.00

STATION 06324970 PERIOD OF RECORD 1973–84

LITTLE POWDER RIVER ABOVE DRY CREEK, NEAR WESTON, WYO.





06376300 BLACK THUNDER CREEK NEAR HAMPSHIRE, WYO.

LOCATION.--Lat 43°34'54", long 104°43'11", in SW¼SW¼SW¼ sec.30, T.42 N., R.65 W., Weston County, on right bank 20 ft downstream from bridge on county road, 1.3 mi west of Hampshire, and 4.0 mi upstream from mouth.

DRAINAGE AREA.--535 mi^2, approximately.

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,060 ft, from map prepared by Army Map Service, Corps of Engineers.

REMARKS.--There are many small stock ponds above station. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,050 ft^3/s, May 18, 1978, gage height, 14.13 ft, from floodmark, from rating curve extended above 630 ft^3/s on basis of slope-area measurement of peak flow; no flow for many days each year.

Monthly and annual streamflow 1973-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	12	0.00	2.4	3.6	1.5	2.7
November	3.1	0.00	0.33	0.91	2.7	0.4
December	0.02	0.00	0.00	0.01	2.3	0.0
January	5.8	0.00	1.1	2.1	2.0	1.2
February	16	0.00	3.1	5.8	1.9	3.4
March	94	0.00	12	27	2.3	12.9
April	18	0.00	3.8	6.3	1.6	4.2
May	265	0.00	33	74	2.2	36.6
June	53	0.00	13	15	1.2	14.0
July	54	0.00	10	16	1.5	11.6
August	18	0.00	7.8	7.5	0.97	8.6
September	33	0.00	4.0	9.6	2.4	4.4
Annual	37	1.2	7.6	9.6	1.3	100

Magnitude and probability of annual low flow based on period of record 1974-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.00	0.00	---	---	---	---
90	0.00	0.00	---	---	---	---
120	0.00	0.00	---	---	---	---
183	0.04	0.00	---	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1973-84

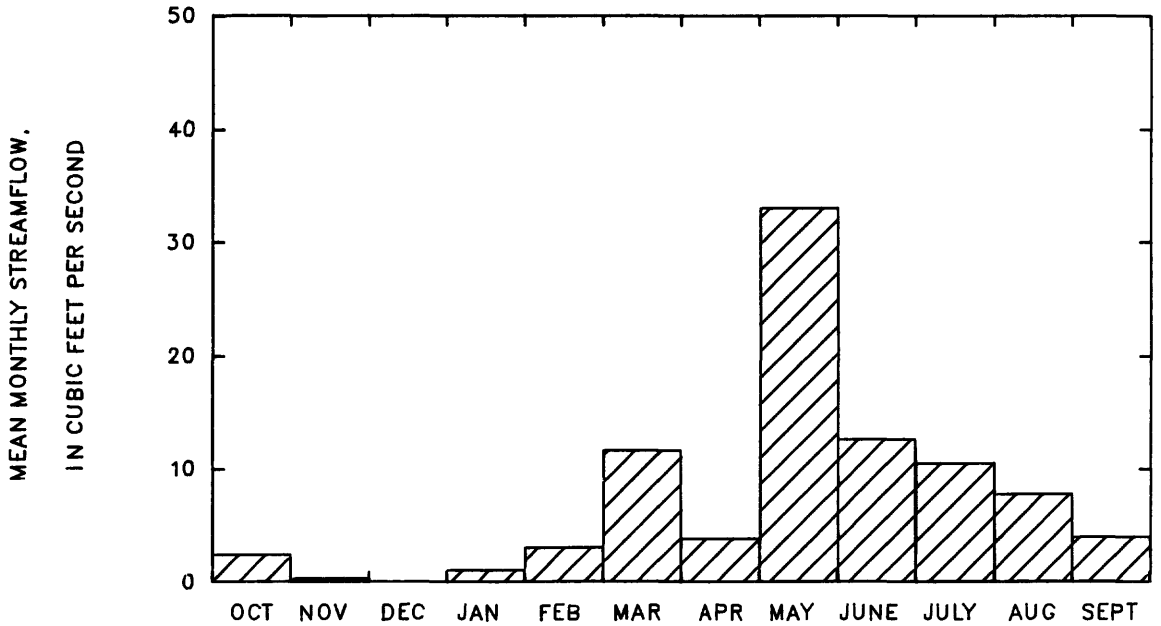
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	317	662	---	---	---	---
3	149	325	---	---	---	---
7	74	160	---	---	---	---
15	43	96	---	---	---	---
30	27	60	---	---	---	---
60	17	37	---	---	---	---
90	14	30	---	---	---	---

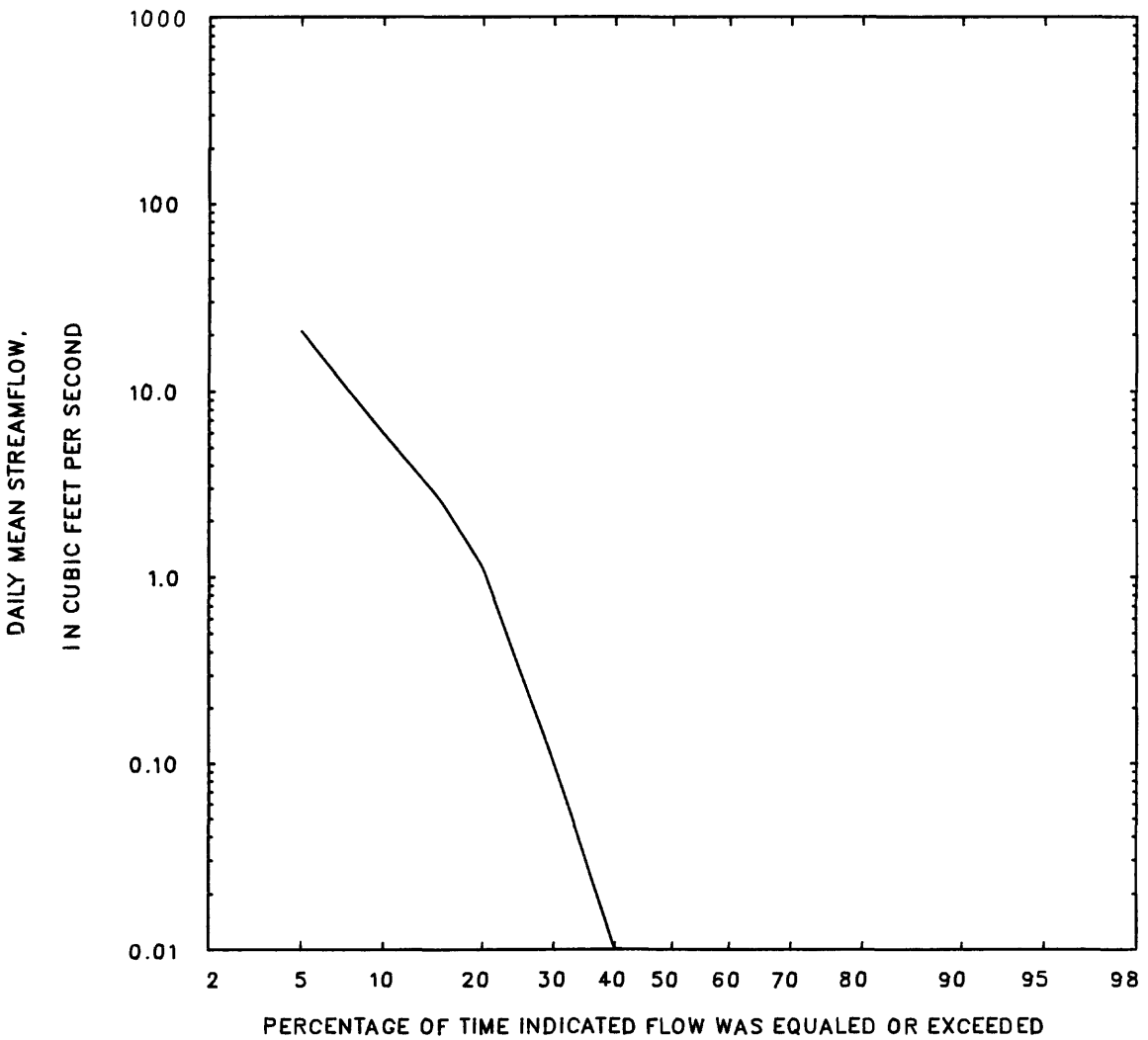
Duration of daily mean flow for period of record 1973-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
182	21	5.9	2.6	1.1	0.10	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATION 06376300 PERIOD OF RECORD 1973–84

BLACK THUNDER CREEK NEAR HAMPSHIRE, WYO.





06386000 LANCE CREEK NEAR RIVERVIEW, WYO.

LOCATION.--Lat 43°21'20", long 104°16'13", in NW¼SE¼, sec.14, T.39 N., R.62 W., Niobrara County, on right bank 0.4 mi north of former Spencer post office, 1.0 mi upstream from mouth, 5.7 mi southwest of Riverview, and 35 mi south of Newcastle.

DRAINAGE AREA.--2,070 mi^2, approximately.

PERIOD OF RECORD.--April 1948 to September 1954, August 1956 to September 1983. Prior to October 1976, published as "at Spencer."

GAGE.--Water-stage recorder. Altitude of gage is 3,750 ft, from map prepared by Army Map Service, Corps of Engineers. April to August 14, 1948, non-recording gage, August 23, 1948 to April 22, 1981, recording gage at site 1.0 mi upstream at different datum.

REMARKS.--There are many small reservoirs above station used for storage of stock and irrigation water, total capacity, about 12,800 acre-ft. Diversions for irrigation of about 3,500 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,410 ft^3/s, May 24, 1971, gage height, 9.67 ft, site and datum then in use; no flow for several days most years.

Monthly and annual streamflow 1949-54, 1957-83

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	19	0.00	1.8	3.7	2.1	0.6
November	7.8	0.00	0.96	1.8	1.9	0.3
December	5.1	0.00	0.78	1.3	1.7	0.3
January	61	0.00	2.6	11	4.1	0.9
February	140	0.00	10	26	2.6	3.3
March	148	0.00	14	28	2.0	4.6
April	78	0.00	12	20	1.7	3.8
May	574	0.02	71	150	2.1	23.1
June	333	0.00	78	88	1.1	25.5
July	310	0.00	68	80	1.2	22.3
August	182	0.00	34	42	1.2	11.2
September	150	0.00	13	33	2.5	4.3
Annual	87	2.5	26	21	0.83	100

Magnitude and probability of annual low flow based on period of record 1950-54, 1958-83

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.00	0.00	---	---	---	---
90	0.00	0.00	---	---	---	---
120	0.00	0.00	---	---	---	---
183	0.08	0.00	---	---	---	---

Magnitude and probability of instantaneous peak flow based on 34 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1770	3400	4760	6800	8540	10500

Weighted skew = -0.057

Magnitude and probability of annual high flow based on period of record 1949-54, 1957-83

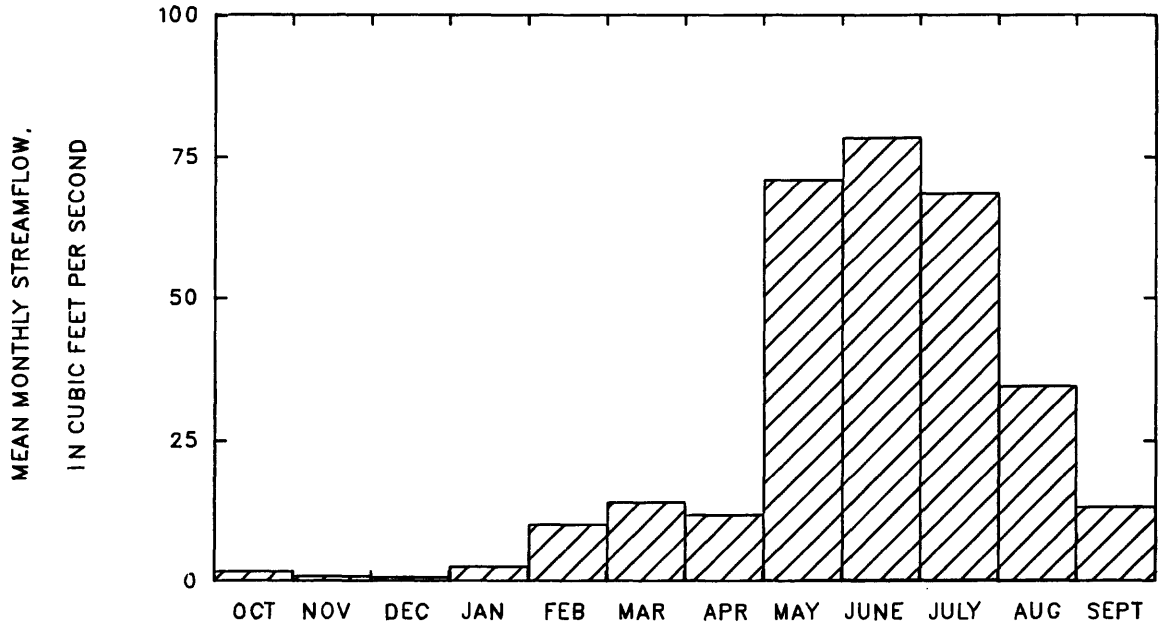
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	960	2140	---	---	---	---
3	601	1340	---	---	---	---
7	342	756	---	---	---	---
15	202	451	---	---	---	---
30	124	281	---	---	---	---
60	79	179	---	---	---	---
90	60	136	---	---	---	---

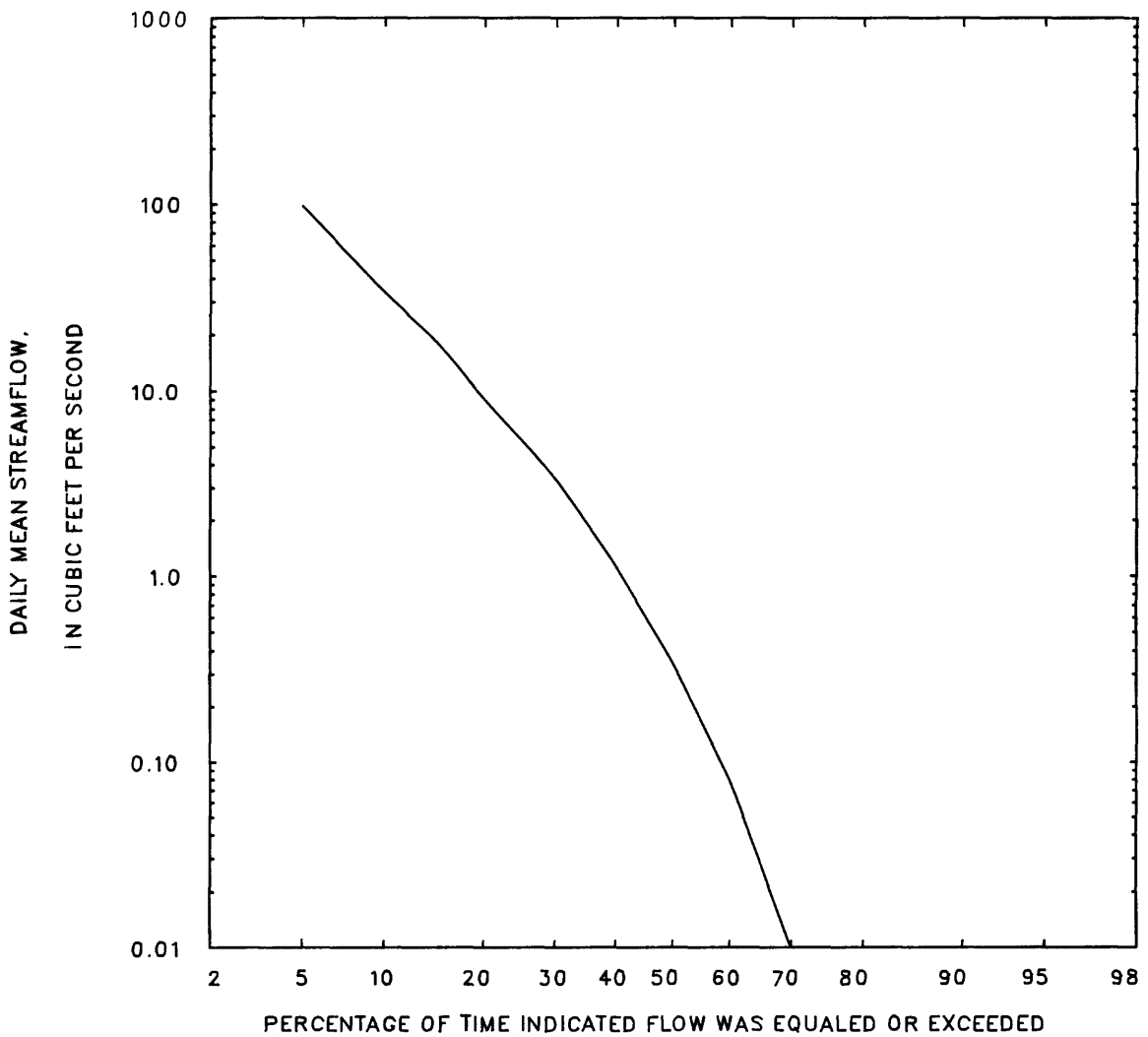
Duration of daily mean flow for period of record 1949-54, 1957-83

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
500	97	33	18	9.0	3.3	1.1	0.34	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATION 06386000 PERIOD OF RECORD 1949–54, 1957–83

LANCE CREEK NEAR RIVERVIEW, WYO.





06386500 CHEYENNE RIVER NEAR SPENCER, WYO.

LOCATION.--Lat 43°25', long 104°08', in N½ sec.25, T.40 N., R.61 W., Niobrara County, at right abutment on downstream side of old highway bridge, 1.8 mi downstream from Robbers Roost Creek, 7.5 mi northeast of Spencer, and 30 mi south of Newcastle.

DRAINAGE AREA.--5,270 mi^2 approximately.

PERIOD OF RECORD.--October 1948 to September 1974. Published as South Fork Cheyenne River near Spencer October 1949 to September 1951.

GAGE.--Water-stage recorder. Altitude of gage is 3,600 ft, from topographic map. Prior to October 18, 1955, water-stage recorder at site 400 ft upstream, October 18, 1955, to August 1, 1961, at site 2,500 ft upstream, and August 1, 1961, to Aug 22, 1962, at site 2,200 ft upstream; all at different datums.

REMARKS.--There are many small reservoirs above station used for storage of stock and irrigation water, total capacity about 33,900 acre-ft. Diversions above station for irrigation of about 6,860 ares, of which about 140 acres are below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft^3/s, May 27, 1962, gage height, 8.74 ft, site and datum then in use; no flow for many days each year.

Monthly and annual streamflow 1949-74

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	28	0.00	2.5	7.2	2.9	0.4
November	20	0.00	0.98	3.9	4.0	0.1
December	5.9	0.00	0.38	1.2	3.2	0.1
January	85	0.00	3.5	17	4.8	0.5
February	120	0.00	16	33	2.0	2.3
March	80	0.00	17	25	1.5	2.4
April	502	0.00	34	99	2.9	4.9
May	1660	0.00	188	400	2.1	27.0
June	1260	0.00	231	285	1.2	33.2
July	680	1.2	122	177	1.5	17.5
August	409	0.00	52	86	1.7	7.5
September	292	0.00	29	76	2.6	4.2
Annual	280	5.9	58	61	1.0	100

Magnitude and probability of annual low flow based on period of record 1950-74

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.00	0.00	---	---	---	---
90	0.00	0.00	---	---	---	---
120	0.00	0.00	---	---	---	---
183	0.00	0.00	---	---	---	---

Magnitude and probability of instantaneous peak flow based on 26 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
3180	6670	10100	16100	22000	29400

Weighted skew = 0.348

Magnitude and probability of annual high flow based on period of record 1949-74

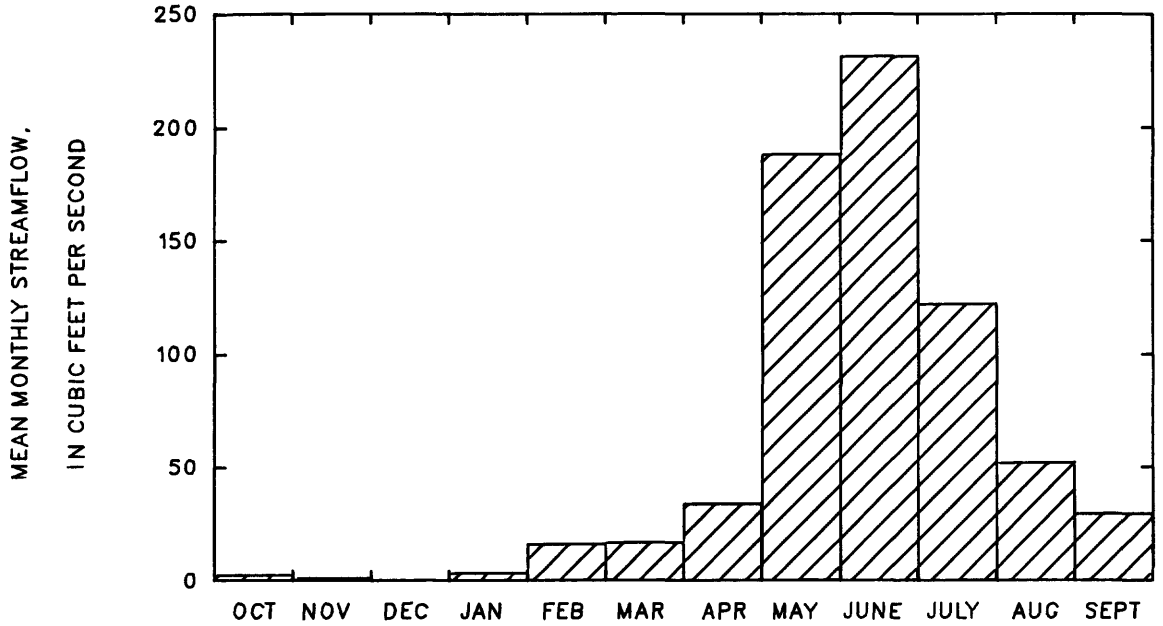
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1850	4130	---	---	---	---
3	1260	2870	---	---	---	---
7	724	1640	---	---	---	---
15	416	1000	---	---	---	---
30	261	623	---	---	---	---
60	165	394	---	---	---	---
90	124	293	---	---	---	---

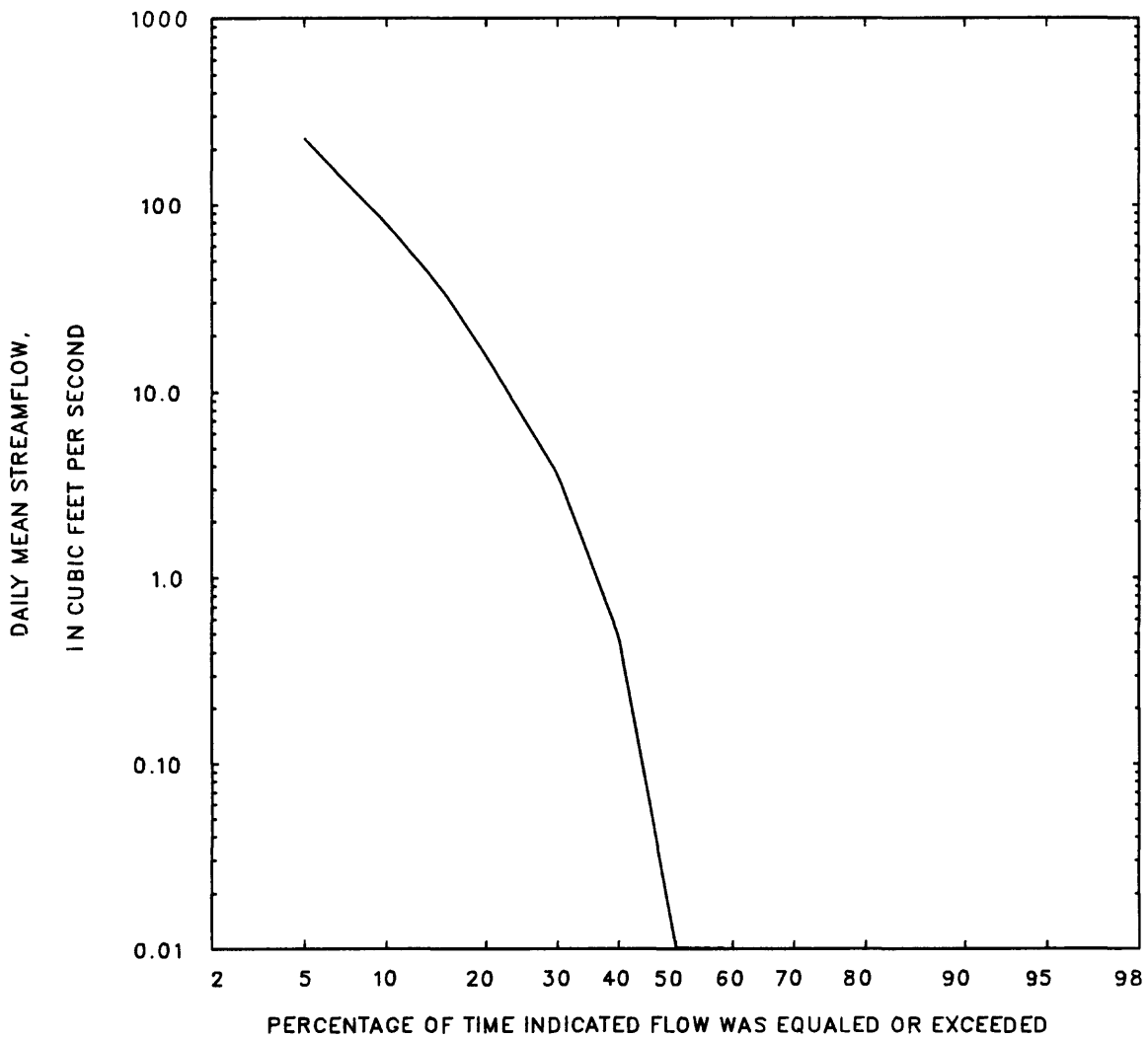
Duration of daily mean flow for period of record 1949-74

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1150	224	78	35	16	3.6	0.48	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATION 06386500 PERIOD OF RECORD 1949–74

CHEYENNE RIVER NEAR SPENCER, WYO.





06394000 BEAVER CREEK NEAR NEWCASTLE, WYO.

LOCATION.--Lat 43°32'07", long 104°07'02", in NW¼ sec.18, T.41 N., R.60 W., Weston County, at highway bridge, 2.2 mi downstream from Sheep Creek, and 23 mi south of Newcastle.

DRAINAGE AREA.--1,320 mi^2, approximately.

PERIOD OF RECORD.--February to September 1943, October 1944 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,660 ft, from topographic map. Prior to November 1, 1945, non-recording gage at present site and datum.

REMARKS.--There are many small reservoirs above station used for storage of stock and irrigation water, total capacity, about 11,000 acre-ft. Diversions for irrigation of about 4,900 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,900 ft^3/s, June 16, 1962, gage height, 19.98 ft; no flow at times in several years.

Monthly and annual streamflow 1945-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	68	0.00	10	13	1.3	2.7
November	29	0.19	10	6.3	0.62	2.7
December	21	0.38	9.5	5.5	0.58	2.5
January	45	0.34	9.9	9.0	0.90	2.7
February	195	0.88	31	40	1.3	8.2
March	257	3.7	78	64	0.82	20.8
April	249	0.39	34	46	1.3	9.1
May	399	0.07	51	86	1.7	13.5
June	561	0.17	76	106	1.4	20.3
July	320	0.17	38	61	1.6	10.2
August	107	0.01	19	23	1.2	5.1
September	58	0.00	8.3	13	1.6	2.2
Annual	130	5.1	31	21	0.68	100

Magnitude and probability of annual low flow based on period of record 1946-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	0.00	0.00	---
3	0.00	0.00	0.00	0.00	0.00	---
7	0.00	0.00	0.00	0.00	0.00	---
14	0.04	0.00	0.00	0.00	0.00	---
30	0.37	0.00	0.00	0.00	0.00	---
60	1.8	0.25	0.00	0.00	0.00	---
90	3.6	1.0	0.42	0.02	0.00	---
120	5.8	2.0	0.87	0.39	0.13	---
183	8.2	3.2	1.6	0.82	0.33	---

Magnitude and probability of instantaneous peak flow based on 41 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1020	1930	2860	4520	6230	8450

Weighted skew = 0.765

Magnitude and probability of annual high flow based on period of record 1945-84

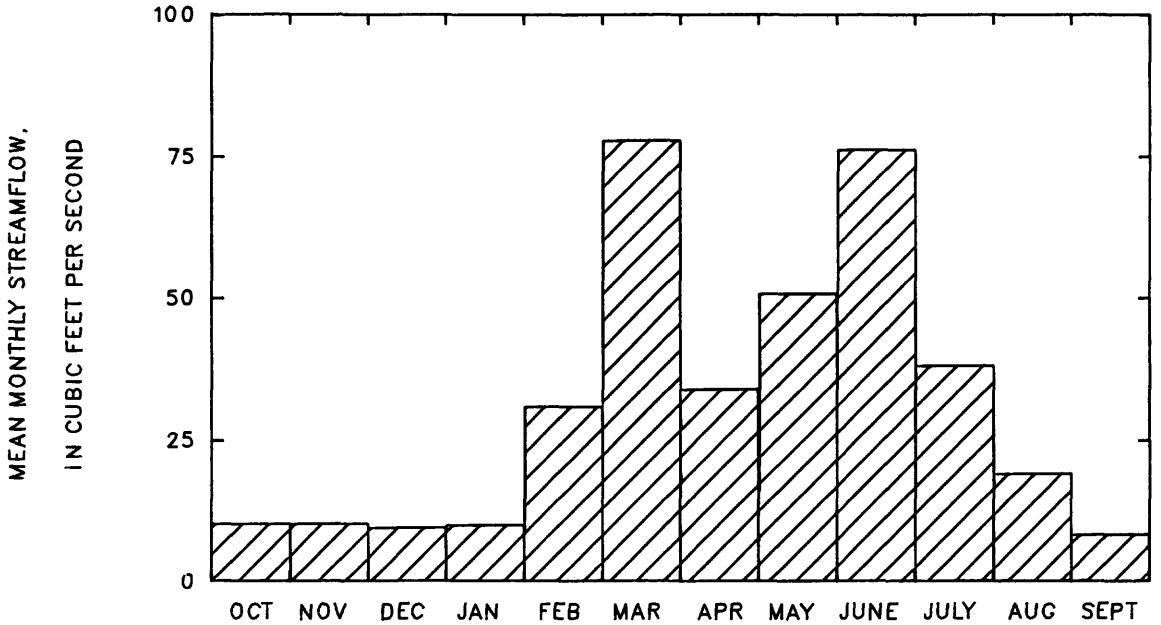
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	714	1330	1980	3170	4430	---
3	496	933	1340	2000	2640	---
7	312	569	784	1110	1390	---
15	192	349	478	671	837	---
30	128	237	332	478	609	---
60	82	153	214	311	397	---
90	64	118	163	233	295	---

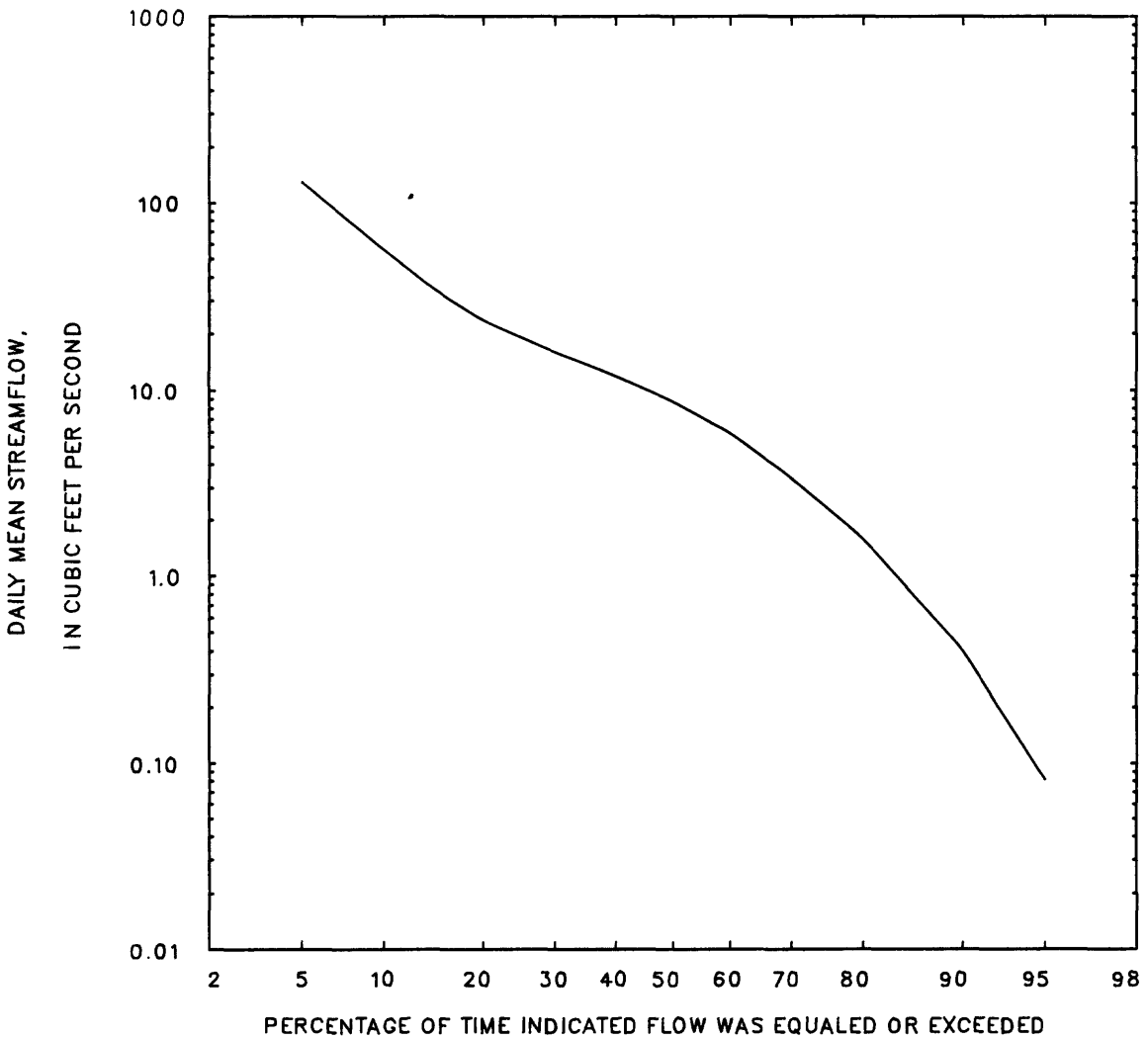
Duration of daily mean flow for period of record 1945-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
474	128	55	32	23	16	12	8.6	5.8	3.3	1.6	0.40	0.08	0.00	0.00	0.00	0.00

STATION 06394000 PERIOD OF RECORD 1945–84

BEAVER CREEK NEAR NEWCASTLE, WYO.





06395000 CHEYENNE RIVER AT EDGEMONT, S.D.

LOCATION.--Lat 43°18'20", long 103°49'14", in SW¼SE¼SE¼ sec.36, T.8 S., R.2 E., Fall River County, on right bank at downstream side of bridge on U.S. Highway 18, at Edgemont, 300 ft downstream from Burlington Northern Railroad bridge, and 600 ft upstream from Cottonwood Creek.

DRAINAGE AREA.--7,143 mi^2.

PERIOD OF RECORD.--June 1903 to November 1906 (no winter records), April 1928 to February 1933, October 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,414.56 ft. Prior to December 1, 1906, non-recording gage 20 ft upstream at datum 0.7 ft lower. April 11, 1928, to February 28, 1933, October 4, 1946, to October 23, 1947, and January 11, 1961, to April 24, 1963, non-recording gage, and October 24, 1947, to January 10, 1961, and April 25, 1963, to September 30, 1972, water-stage recorder all at present site at datum 2.00 ft higher.

REMARKS.--Many small reservoirs above station used for stock and irrigation water, total capacity, about 45,000 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft^3/s, May 20, 1978, gage height, 13.65 ft, present datum; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 12, 1920, reached a stage of 13.0 ft, and May 1, 1922, 14.0 ft, present datum, from floodmarks at railroad bridge.

Monthly and annual streamflow 1947-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	86	0.00	13	19	1.5	1.2
November	51	0.02	11	11	0.94	1.1
December	32	0.00	7.2	7.1	0.99	0.7
January	34	0.00	6.0	9.4	1.6	0.6
February	156	0.00	35	42	1.2	3.4
March	321	3.4	108	88	0.81	10.4
April	559	0.22	65	102	1.6	6.3
May	2190	0.27	244	515	2.1	23.5
June	2080	1.8	284	378	1.3	27.3
July	806	1.0	154	205	1.3	14.8
August	388	0.00	83	98	1.2	8.0
September	275	0.00	27	62	2.3	2.6
Annual	434	13	87	81	0.94	100

Magnitude and probability of annual low flow based on period of record 1948-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	0.00	---	---
3	0.00	0.00	0.00	0.00	---	---
7	0.00	0.00	0.00	0.00	---	---
14	0.00	0.00	0.00	0.00	---	---
30	0.13	0.00	0.00	0.00	---	---
60	0.90	0.02	0.00	0.00	---	---
90	2.9	0.11	0.00	0.00	---	---
120	4.4	0.45	0.00	0.00	---	---
183	7.3	1.6	0.55	0.19	---	---

Magnitude and probability of instantaneous peak flow based on 45 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
3130	6630	9880	15200	20100	25900

Weighted skew = 0.071

Magnitude and probability of annual high flow based on period of record 1947-84

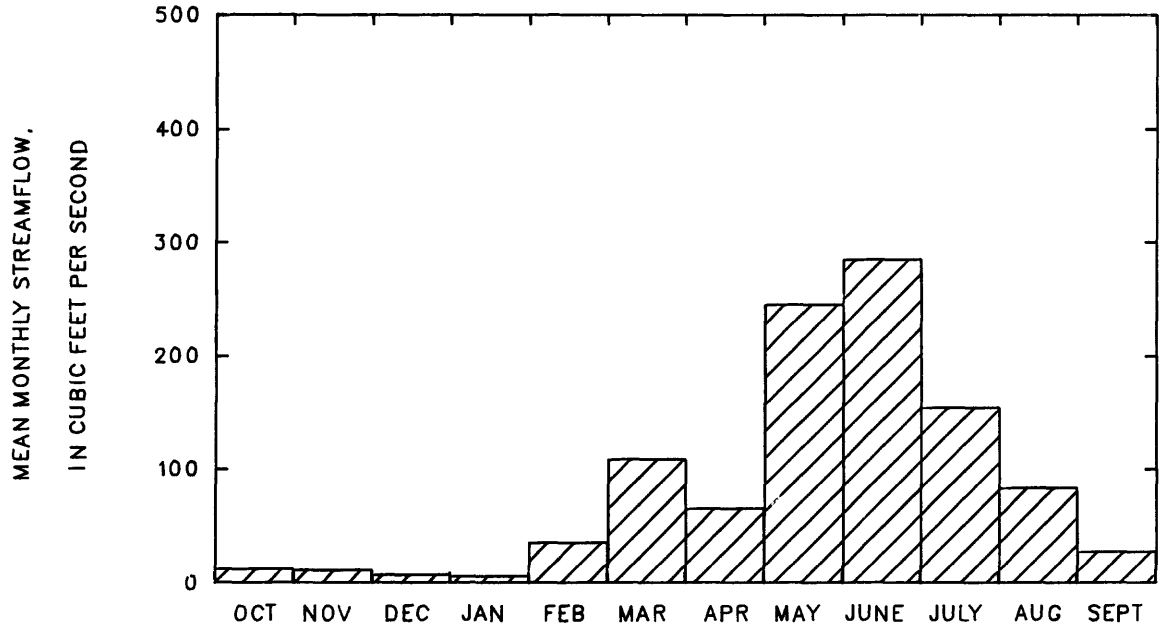
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1890	4340	6990	---	---	---
3	1290	2990	4860	---	---	---
7	781	1750	2820	---	---	---
15	504	1140	1840	---	---	---
30	328	733	1180	---	---	---
60	216	473	747	---	---	---
90	168	359	560	---	---	---

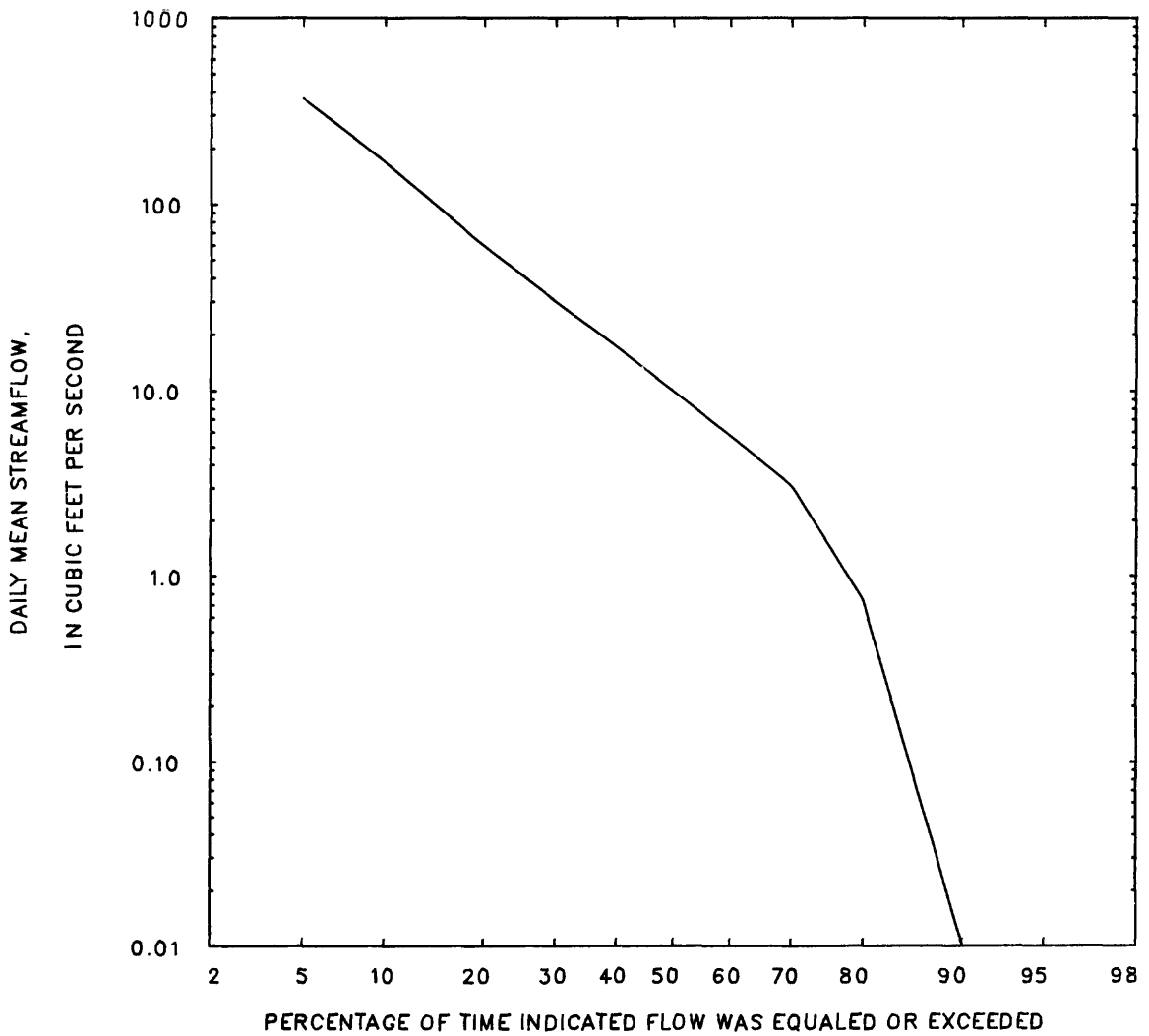
Duration of daily mean flow for period of record 1947-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1340	366	168	94	59	30	17	9.9	5.7	3.1	0.74	0.01	0.00	0.00	0.00	0.00	0.00

STATION 06395000 PERIOD OF RECORD 1947–84

CHEYENNE RIVER AT EDGEMONT, S.D.





06426500 BELLE FOURCHE RIVER BELOW MOORCROFT, WYO.

LOCATION.--Lat 44°17'45", long 104°58'35", in SE¼SW¼ sec.24, T.50 N., R.68 W., Crook County, on left bank 100 ft upstream from Trail Creek, 1.9 mi downstream from Donkey Creek, and 2.6 mi northwest of Moorcroft.

DRAINAGE AREA.--1,670 mi^2, approximately. At site in use prior to January 16, 1951, 1,730 mi^2, approximately.

PERIOD OF RECORD.--May 1943 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 4,118.4 ft, from Bureau of Reclamation bench mark. Prior to March 28, 1947, non-recording gage. March 28, 1947, to January 16, 1951, water-stage recorder, at site 12 mi downstream at different datum.

REMARKS.--Numerous small stockwater and soil conservation reservoirs above station. Diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,420 ft^3/s, May 27, 1962, gage height, 14.33 ft; no flow at times in each year. Flood of April 7, 1924, reached a stage of 12.6 ft at site of former gaging station 4.2 mi upstream at different datum (discharge, 12,500 ft^3/s).

EXTREMES OUTSIDE PERIOD OF RECORDS--Flood in June 1908 reached a stage about 2.5 ft higher than that of April 7, 1924.

Monthly and annual streamflow 1944-70, 1976-83

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	24	0.00	1.6	4.6	2.9	0.6
November	4.4	0.00	0.61	1.1	1.8	0.2
December	22	0.00	1.3	3.9	2.9	0.5
January	28	0.00	1.8	5.1	2.9	0.6
February	260	0.00	17	46	2.7	6.1
March	374	0.10	55	80	1.4	20.2
April	190	0.00	23	38	1.7	8.3
May	1060	0.05	68	191	2.8	24.9
June	509	0.10	70	110	1.6	25.6
July	73	0.00	20	24	1.2	7.3
August	50	0.00	10	12	1.2	3.8
September	64	0.00	5.0	13	2.6	1.8
Annual	136	1.1	23	27	1.2	100

Magnitude and probability of annual low flow based on period of record 1945-70, 1977-83

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.00	0.00	---	---	---	---
90	0.00	0.00	---	---	---	---
120	0.00	0.00	---	---	---	---
183	0.10	0.00	---	---	---	---

Magnitude and probability of instantaneous peak flow based on 35 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
793	1700	2660	4420	6270	8700

Weighted skew = 0.541

Magnitude and probability of annual high flow based on period of record 1944-70, 1976-83

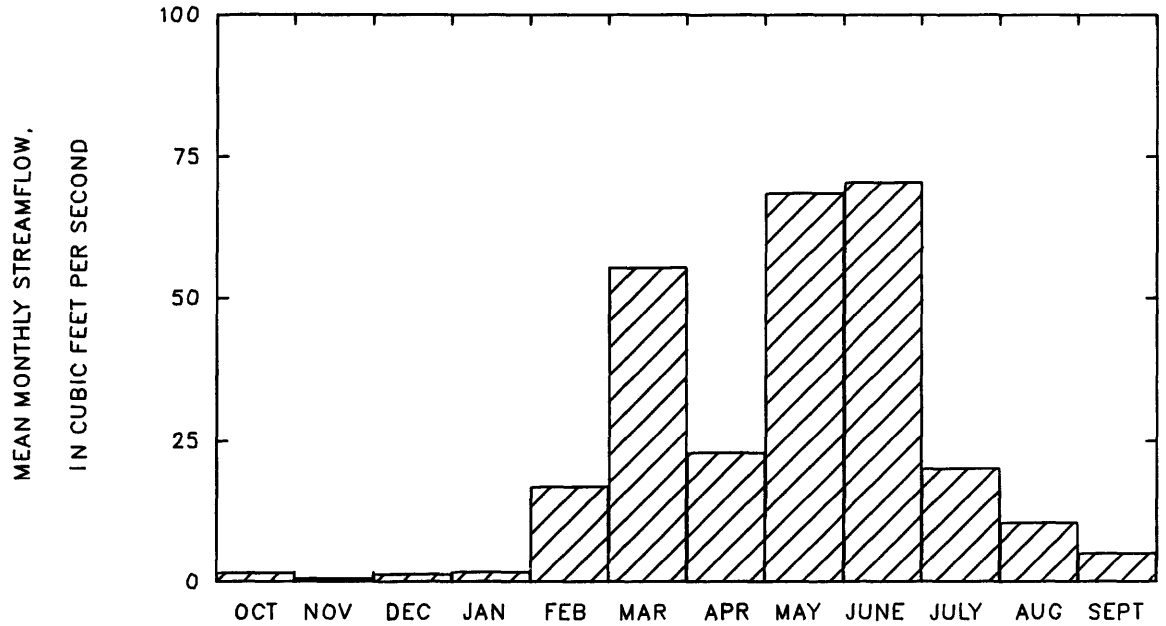
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	696	1490	---	---	---	---
3	443	997	---	---	---	---
7	266	589	---	---	---	---
15	160	360	---	---	---	---
30	96	220	---	---	---	---
60	59	131	---	---	---	---
90	43	98	---	---	---	---

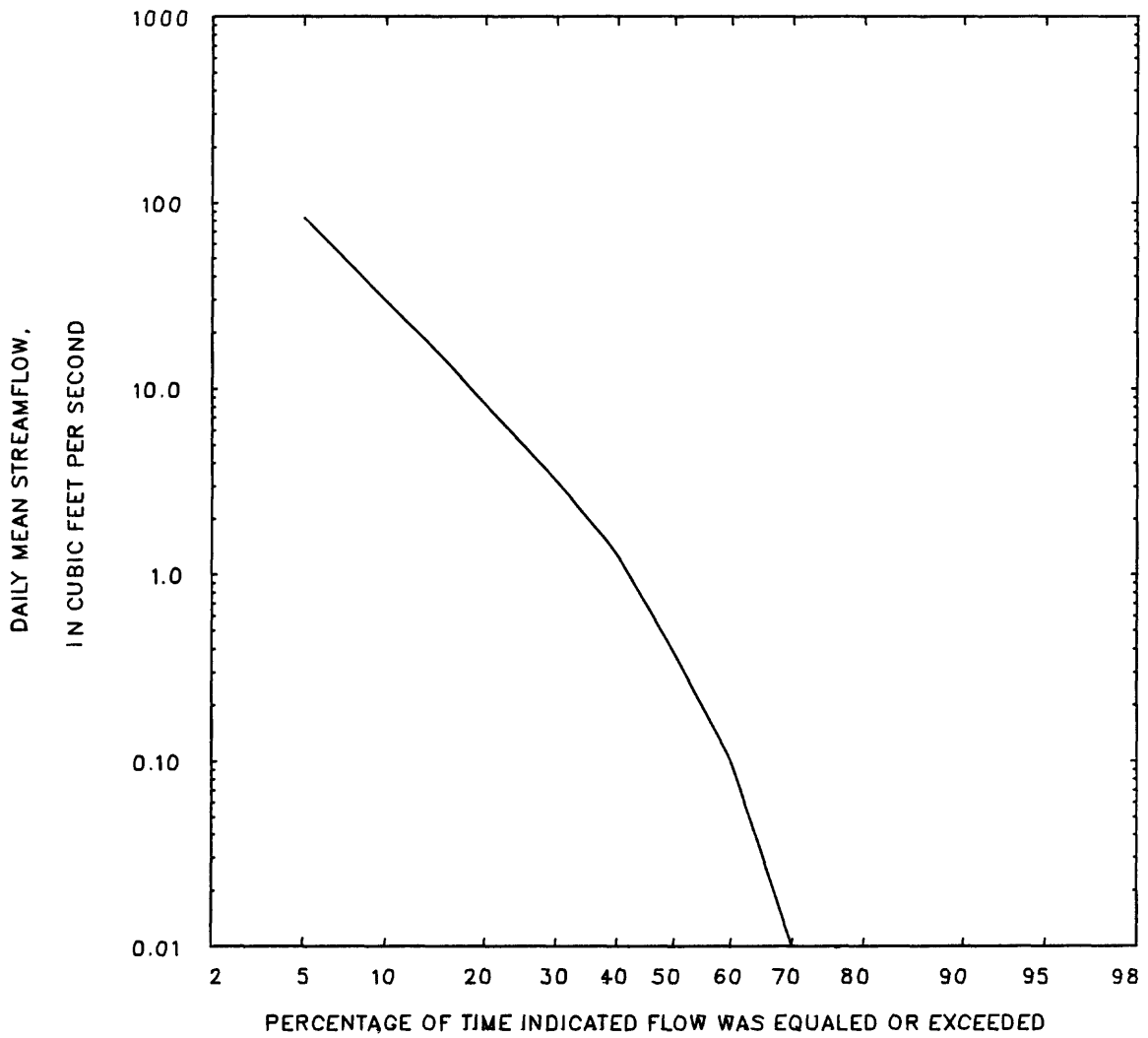
Duration of daily mean flow for period of record 1944-70, 1976-83

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
455	82	29	15	8.2	3.2	1.3	0.38	0.10	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00

STATION 06426500 PERIOD OF RECORD 1944–70, 1976–83

BELLE FOURCHE RIVER BELOW MOORCROFT, WYO.





06427500 BELLE FOURCHE RIVER BELOW KEYHOLE RESERVOIR, WYO.

LOCATION.--Lat 44°23'18", long 104°46'12", in SE¼NE¼SW¼ sec.22, T.51 N., R.66 W., Crook County, on right bank 0.9 mi downstream from Keyhole Dam, 1.7 mi downstream from Mule Creek, 2.9 mi upstream from Spring Creek, and 12 mi northeast of Moorcroft.

DRAINAGE AREA.--2,000 mi^2, approximately.

PERIOD OF RECORD.--April 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,020 ft, from topographic map. Prior to August 30, 1979, at site 0.7 mi upstream at different datum.

REMARKS.--Flow completely regulated by Keyhole Reservoir, 0.9 mi upstream, usable contents, 191,600 acre-ft, since February 1952. Diversions for irrigation of about 820 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,410 ft^3/s, May 23, 1978, gage height, 10.65 ft at present datum; maximum gage height, 6.30 ft, September 5, 1951, site and datum then in use; minimum daily discharge since appreciable storage in Keyhole Reservoir, 0.30 ft^3/s, February 6-20, 1960; no flow at times in 1951-52.

Monthly and annual streamflow 1953-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	21	0.50	2.6	3.8	1.5	0.9
November	8.7	0.40	1.7	1.4	0.85	0.6
December	5.6	0.40	1.6	0.96	0.61	0.6
January	3.7	0.40	1.5	0.74	0.49	0.5
February	120	0.35	5.3	21	4.0	1.9
March	423	0.50	23	77	3.3	8.3
April	154	0.53	19	37	2.0	6.7
May	459	0.71	41	95	2.3	14.8
June	317	0.54	38	68	1.8	13.4
July	195	0.62	62	48	0.77	22.3
August	307	0.70	67	61	0.91	24.1
September	126	0.45	17	27	1.6	5.9
Annual	81	1.8	23	19	0.82	100

Magnitude and probability of annual low flow based on period of record 1954-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent: 2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.2	0.68	0.49	0.37	0.26	---
3	1.2	0.68	0.50	0.37	0.26	---
7	1.2	0.68	0.50	0.37	0.26	---
14	1.2	0.69	0.50	0.37	0.26	---
30	1.2	0.72	0.53	0.40	0.29	---
60	1.3	0.81	0.59	0.45	0.32	---
90	1.4	0.84	0.61	0.46	0.32	---
120	1.4	0.85	0.62	0.47	0.34	---
183	1.6	0.93	0.71	0.57	0.45	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent: 2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1953-84

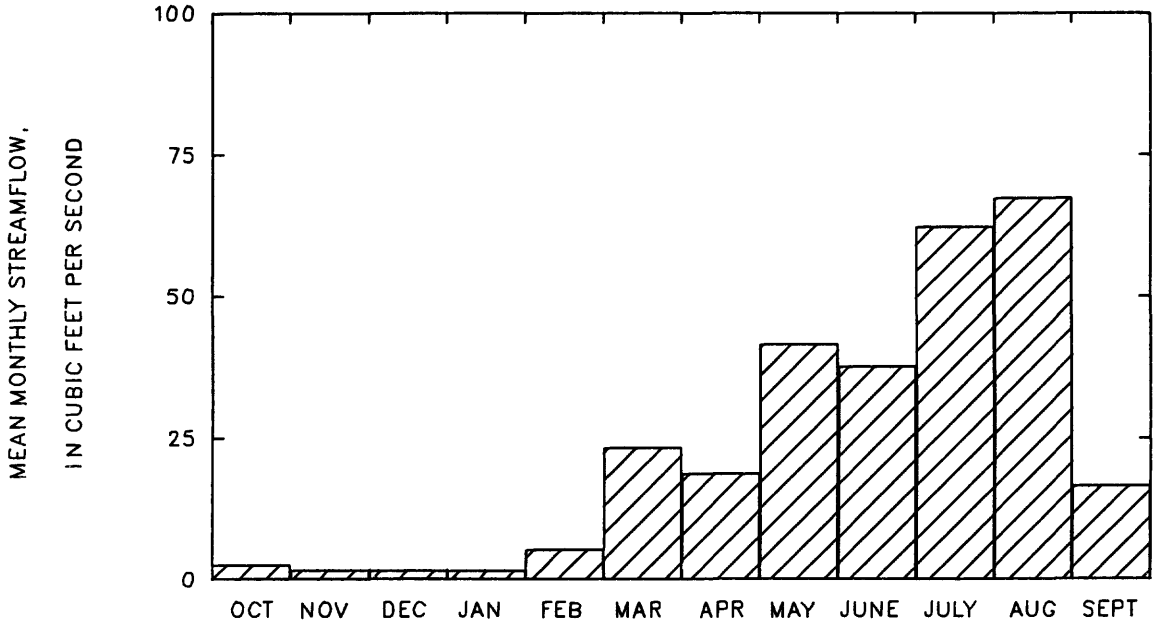
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent: 2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	174	353	501	719	901	---
3	186	357	463	580	653	---
7	180	330	408	481	519	---
15	161	290	357	419	451	---
30	136	223	258	283	293	---
60	98	159	184	202	209	---
90	69	120	146	170	182	---

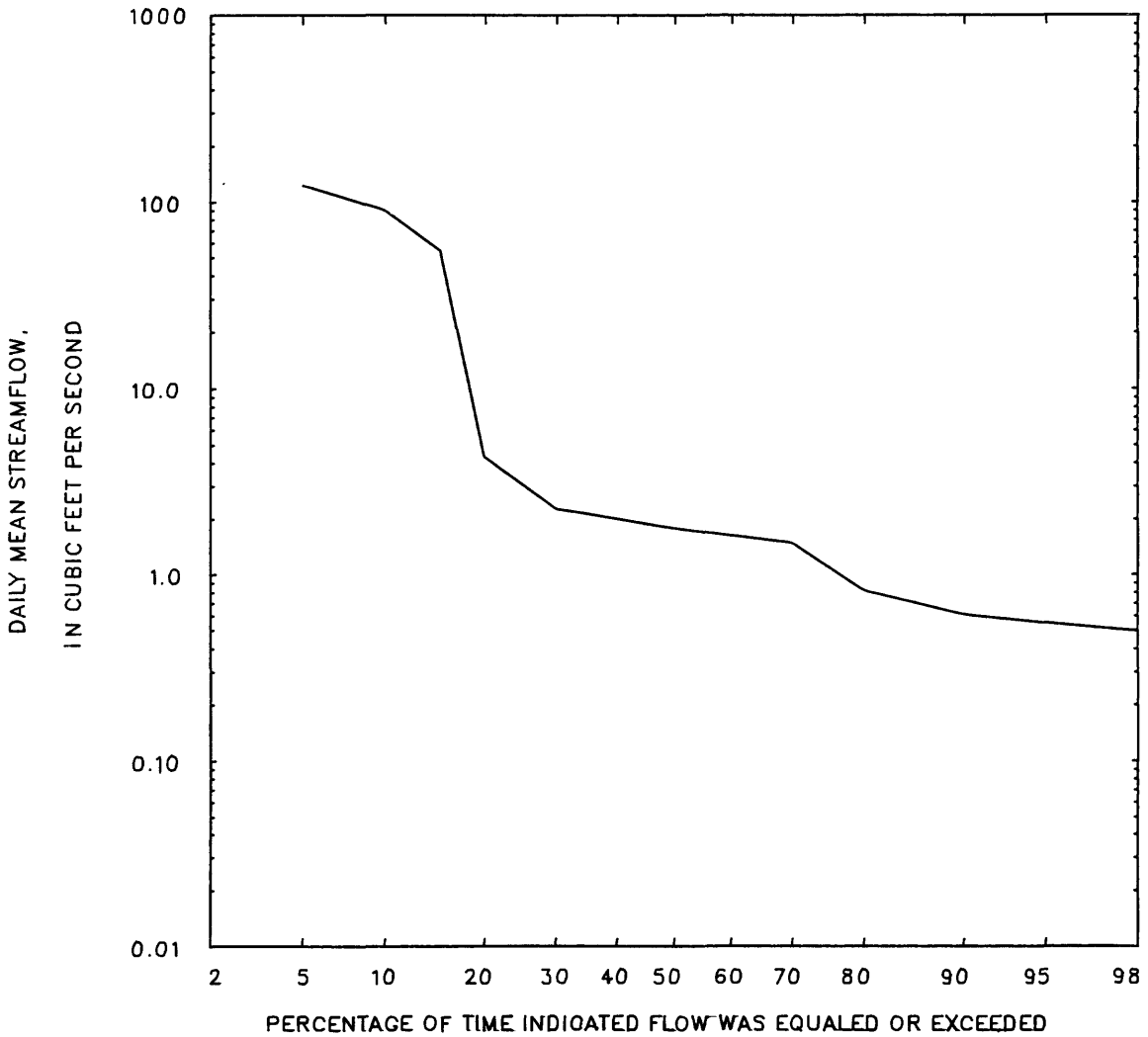
Duration of daily mean flow for period of record 1953-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time: 1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
316	122	89	54	4.3	2.2	2.0	1.8	1.6	1.5	0.81	0.60	0.54	0.49	0.44	0.41	0.37

STATION 06427500 PERIOD OF RECORD 1953–84

BELLE FOURCHE RIVER BELOW KEYHOLE RESERVOIR, WYO.





06428000 BELLE FOURCHE RIVER AT HULETT, WYO.

LOCATION.--Lat 44°41'00", long 104°34'40", in sec.12, T.54 N., R.65 W., Crook County, near right bank on downstream side of pier of bridge at Hulett, 2 mi downstream from Blacktail Creek.

DRAINAGE AREA.--2,800 mi^2, approximately.

PERIOD OF RECORD.--April 1929 to November 1932, April 1938 to December 1951. Monthly discharge only for some periods; published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 3,742.05 ft. Prior to January 11, 1950, wire-weight or chain gage at same site and datum.

REMARKS.--Diversions for irrigation of about 13,500 acres adjudicated for diversion above station. Flow regulated by Keyhole Reservoir since February 1952. Numerous small stockwater and soil conservation reservoirs in drainage basin above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 6,320 ft^3/s, March 26, 1943; maximum gage height, 8.9 ft, May 31, 1929; no flow at times in 1931-32, 1938-89.

EXTREMES OUTSIDE PERIOD OF RECORD--Maximum stage known since 1882, 18.7 ft, April 8, 1924, present site and datum, from floodmark, from information by local resident.

Monthly and annual streamflow 1930-32, 1939-51

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	100	0.26	17	27	1.6	2.0
November	34	0.58	7.6	8.5	1.1	0.9
December	20	0.00	6.3	5.8	0.92	0.8
January	15	0.00	5.4	4.1	0.75	0.7
February	240	0.00	44	77	1.7	5.3
March	605	2.5	211	195	0.93	25.6
April	798	12	176	206	1.2	21.3
May	334	11	91	98	1.1	11.0
June	423	9.5	162	128	0.79	19.6
July	124	2.4	50	42	0.82	6.1
August	46	0.95	18	17	0.92	2.2
September	207	0.08	37	66	1.8	4.5
Annual	134	17	69	32	0.46	100

Magnitude and probability of annual low flow based on period of record 1931-32, 1939-51

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	0.00	---	---
3	0.00	0.00	0.00	0.00	---	---
7	0.14	0.00	0.00	0.00	---	---
14	0.80	0.00	0.00	0.00	---	---
30	1.3	0.00	0.00	0.00	---	---
60	2.1	0.26	0.00	0.00	---	---
90	2.7	0.90	0.46	0.25	---	---
120	3.3	1.2	0.67	0.40	---	---
183	5.1	2.0	1.3	0.87	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1930-32, 1939-51

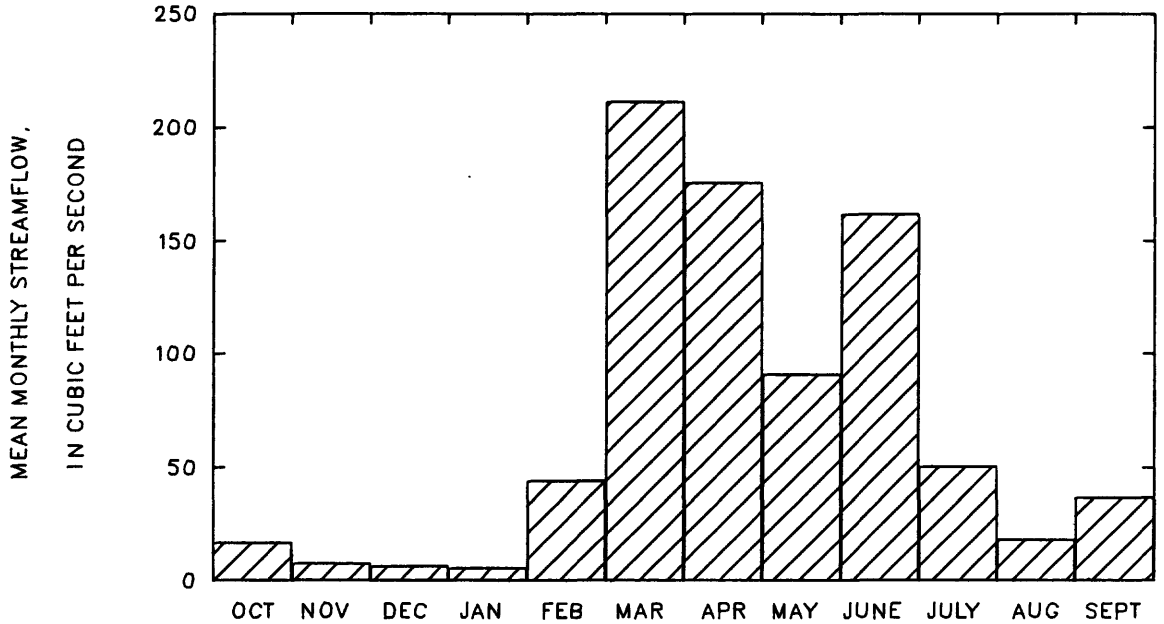
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1790	3070	4070	---	---	---
3	1410	2370	3100	---	---	---
7	956	1550	1940	---	---	---
15	612	979	1190	---	---	---
30	395	623	737	---	---	---
60	259	401	474	---	---	---
90	192	302	363	---	---	---

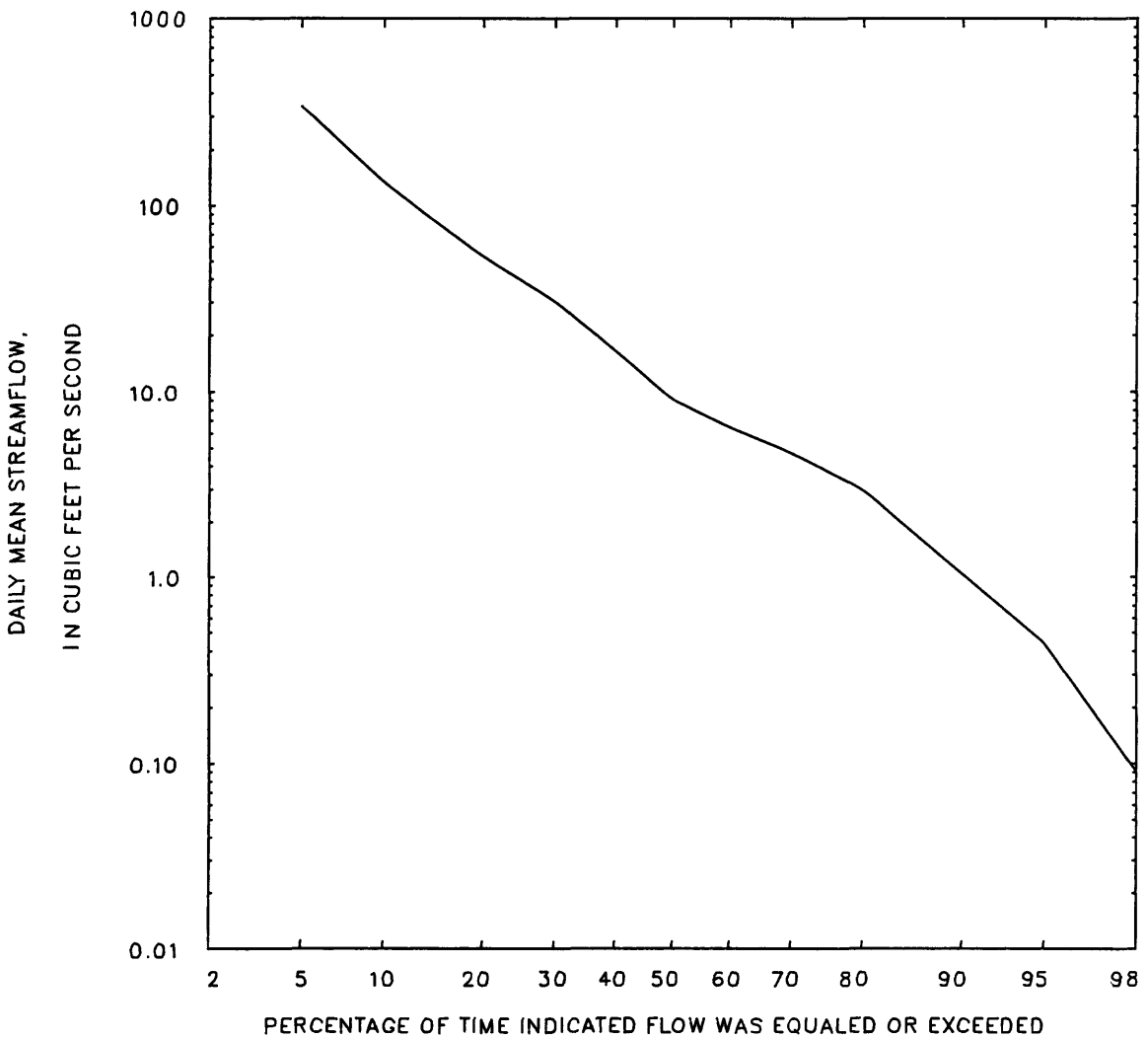
Duration of daily mean flow for period of record 1930-32, 1939-51

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1040	338	133	79	52	30	16	9.0	6.4	4.7	3.0	1.0	0.44	0.09	0.04	0.02	0.00

STATION 06428000 PERIOD OF RECORD 1930–32, 1939–51

BELLE FOURCHE RIVER AT HULETT, WYO.





06428500 BELLE FOURCHE RIVER AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44°44'59", long 104°02'49", in NE¼NW¼NW¼ sec.18, T.9 N., R.1 E., Butte County, on left bank 0.3 mi downstream from State line, 3.7 mi downstream from Oak Creek, and 11 mi northwest of Belle Fourche, So. Dak.

DRAINAGE AREA.--3,280 mi^2, approximately.

PERIOD OF RECORD.--December 1946 to current year. Records for water year 1947 incomplete, yearly estimate published in WSP 1729.

GAGE.--Water-stage recorder. Datum of gage is 3,095.7 ft.

REMARKS.--Diversions above station for irrigation of about 5,400 acres. Flow regulated by Keyhole Reservoir, 143 mi upstream, since February 1952.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,400 ft^3/s, June 18, 1962, gage height, 15.59 ft; no flow at times most years.

Monthly and annual streamflow 1953-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	118	0.00	25	28	1.2	2.3
November	66	0.00	20	15	0.74	1.8
December	41	0.00	15	10	0.68	1.4
January	59	0.00	14	15	1.0	1.3
February	117	0.20	29	33	1.1	2.8
March	931	16	147	169	1.2	13.8
April	823	18	166	149	0.90	15.5
May	1100	3.1	233	228	0.98	21.8
June	812	12	211	198	0.94	19.8
July	303	2.9	94	56	0.60	8.8
August	271	0.10	81	62	0.77	7.6
September	109	0.00	33	26	0.79	3.1
Annual	229	7.7	89	49	0.55	100

Magnitude and probability of annual low flow based on period of record 1954-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.55	0.00	0.00	0.00	---	---
3	0.84	0.00	0.00	0.00	---	---
7	1.2	0.00	0.00	0.00	---	---
14	2.0	0.00	0.00	0.00	---	---
30	3.8	0.00	0.00	0.00	---	---
60	5.9	0.00	0.00	0.00	---	---
90	12	1.2	0.00	0.00	---	---
120	13	2.9	0.00	0.00	---	---
183	20	5.1	1.8	0.60	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
--	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1953-84

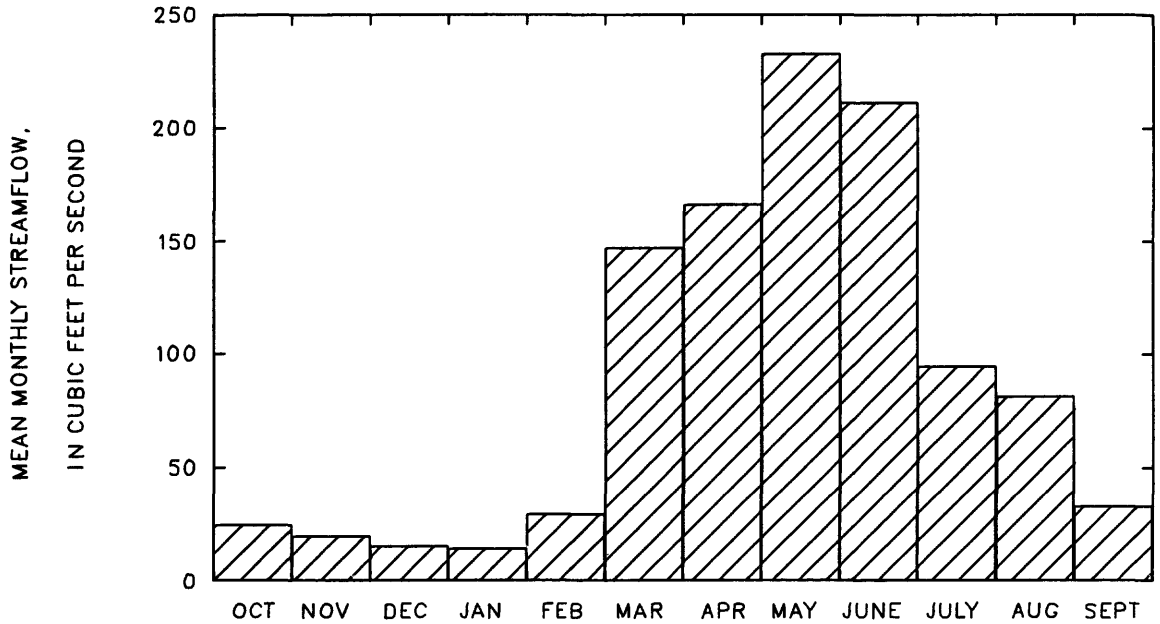
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1020	1850	2430	3160	---	---
3	835	1530	2030	2680	---	---
7	625	1140	1530	2040	---	---
15	455	832	1120	1520	---	---
30	327	593	798	1080	---	---
60	251	430	550	696	---	---
90	209	353	445	551	---	---

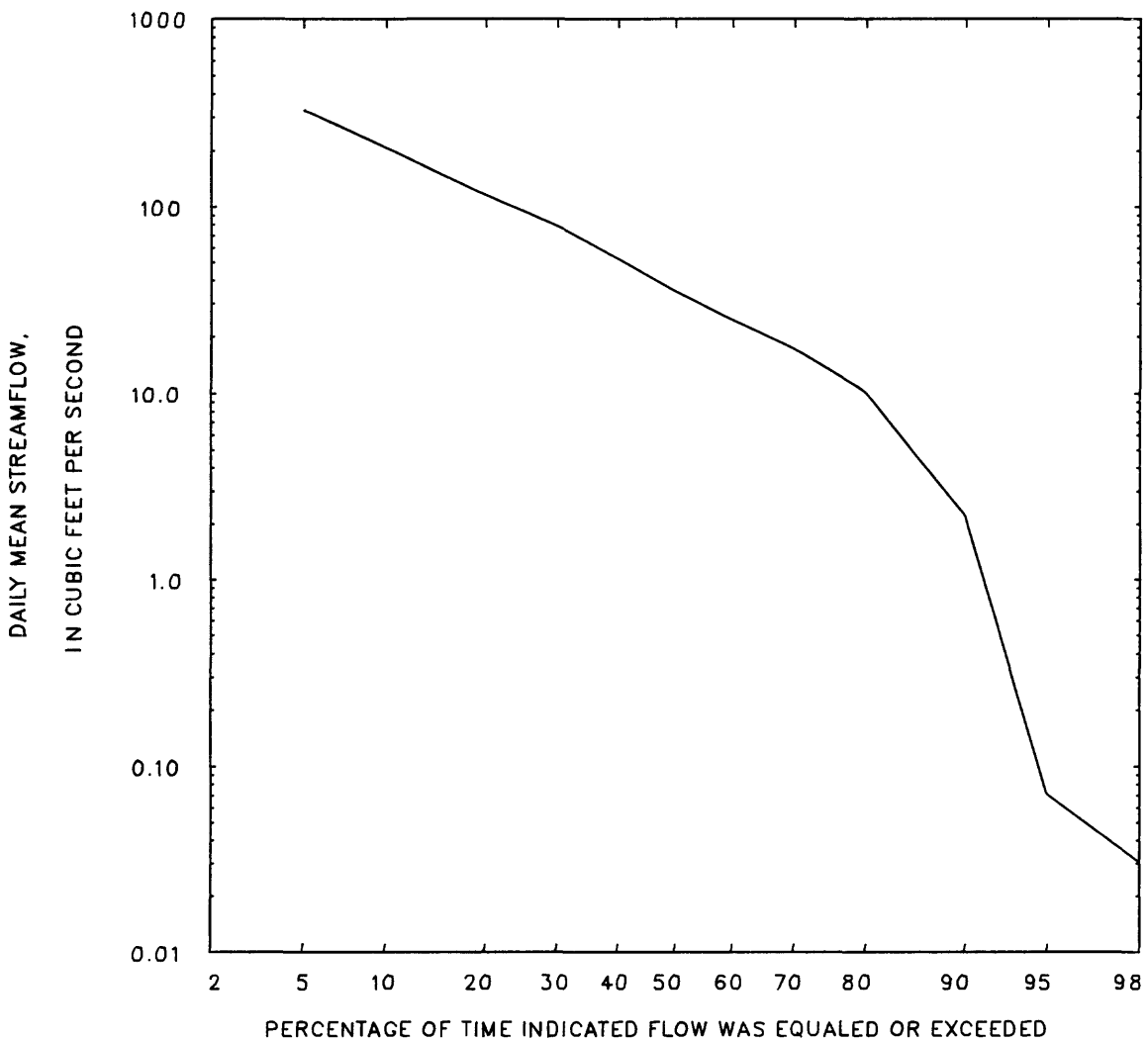
Duration of daily mean flow for period of record 1953-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
993	327	206	148	114	79	52	35	24	17	10	2.2	0.07	0.03	0.01	0.01	0.00

STATION 06428500 PERIOD OF RECORD 1953–84

BELLE FOURCHE RIVER AT WYOMING–SOUTH DAKOTA STATE LINE





06430500 REDWATER CREEK AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44°34'26", long 104°02'54", in NW¼NW¼ sec.18, T.7 N., R.1 E., Butte County, So. Dak., on left bank 800 ft downstream from State line, 5.7 mi upstream from Crow Creek, and 12 mi southwest of Belle Fourche, So. Dak.

DRAINAGE AREA.--471 mi^2.

PERIOD OF RECORD.--April 1929 to September 1931 and February 1936 to July 1937 (published as "near Beulah, Wyo."), June 1954 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,410 ft, from topographic map. April 25, 1929, to September 30, 1931, and February 28, 1936, to July 31, 1937, non-recording gage at site 2 mi upstream at different datum.

REMARKS.--Large diversions for irrigation above station. Total flow passing State line may be obtained by adding flow of Murray ditch.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,440 ft^3/s, August 22, 1973, gage height, 12.19 ft, from rating curve extended above 1,000 ft^3/s on basis of slope-area measurement at gage height 11.95 ft; no flow August 13-15, 1929.

Monthly and annual streamflow 1930-31, 1955-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	67	15	31	11	0.35	7.2
November	70	21	35	10	0.28	8.1
December	60	25	35	8.3	0.24	8.0
January	58	22	34	8.1	0.24	7.8
February	63	24	35	9.4	0.27	8.1
March	59	22	36	9.2	0.26	8.3
April	65	19	40	12	0.31	9.1
May	132	11	58	33	0.57	13.4
June	128	6.3	52	30	0.57	12.1
July	55	8.0	25	12	0.46	5.8
August	59	7.8	24	11	0.47	5.5
September	51	14	27	10	0.38	6.3
Annual	59	18	36	10	0.28	100

Magnitude and probability of annual low flow based on period of record 1931, 1937, 1956-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	7.3	3.8	2.7	2.0	1.5	---
3	7.9	4.4	3.3	2.6	2.1	---
7	9.3	5.4	4.1	3.3	2.6	---
14	11	7.0	5.4	4.4	3.6	---
30	17	11	8.8	7.2	5.7	---
60	20	14	11	9.0	7.3	---
90	22	15	13	10	8.3	---
120	24	17	14	12	9.2	---
183	27	20	17	15	13	---

Magnitude and probability of instantaneous peak flow based on 35 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
289	789	1350	2430	3570	5060

Weighted skew = 0.123

Magnitude and probability of annual high flow based on period of record 1930-31, 1955-84

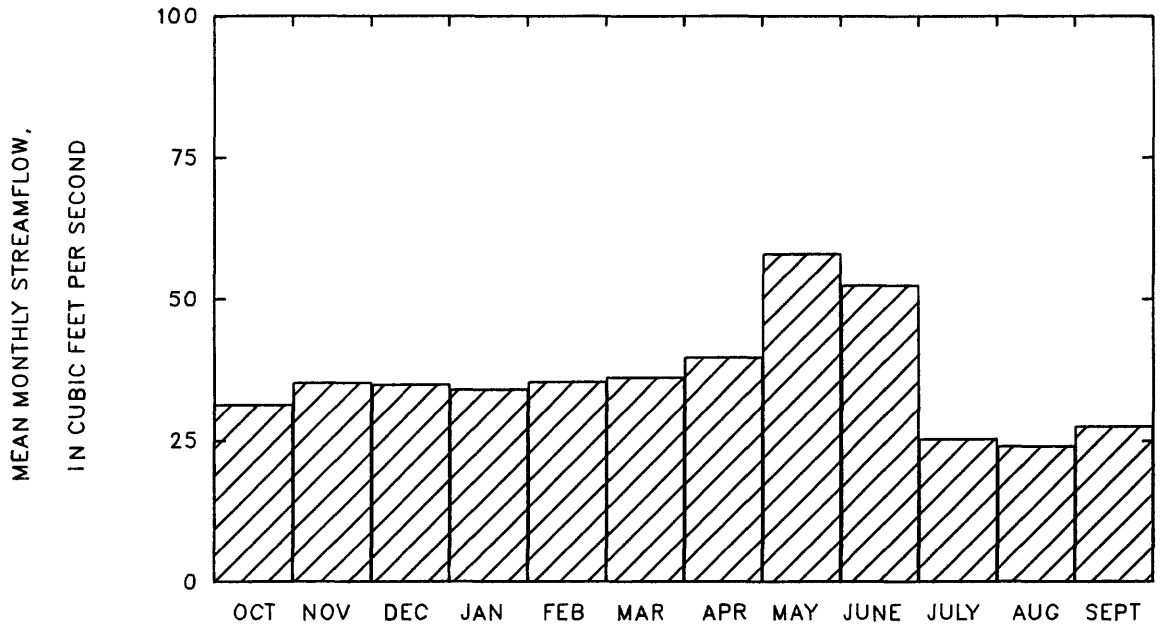
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	142	337	534	877	1210	---
3	114	239	354	542	716	---
7	91	172	243	354	453	---
15	75	129	172	236	290	---
30	64	101	128	165	194	---
60	56	80	95	115	129	---
90	51	68	79	92	101	---

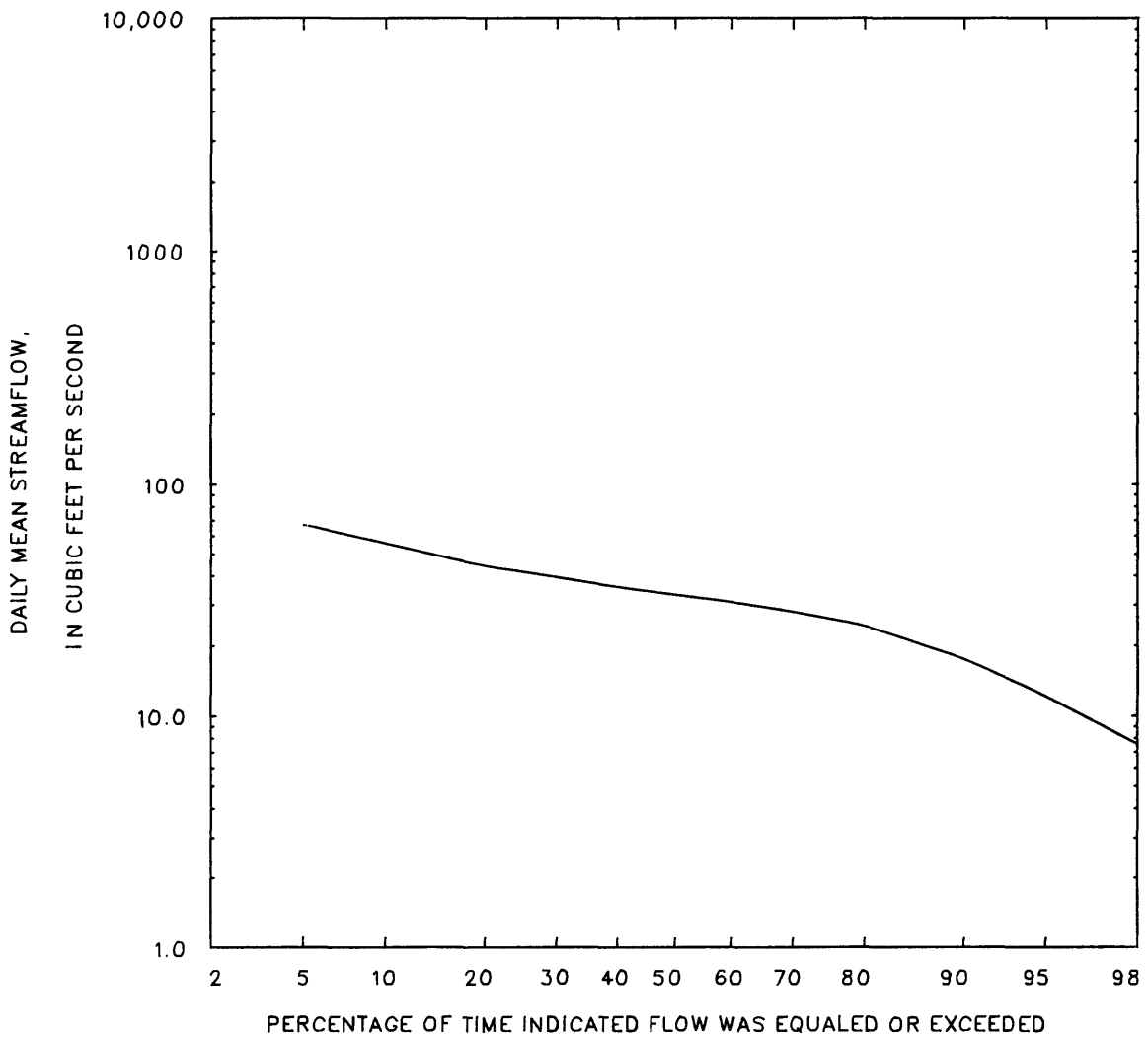
Duration of daily mean flow for period of record 1930-31, 1955-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
130	67	55	48	44	39	35	33	31	28	24	18	12	7.5	5.5	4.6	2.8

STATION 06430500 PERIOD OF RECORD 1930–31, 1955–84

REDWATER CREEK AT WYOMING–SOUTH DAKOTA STATE LINE





06454000 NIOBRARA RIVER AT WYOMING-NEBRASKA STATE LINE

LOCATION.--Lat 42°39'33", long 104°03'54", in SE¼SW¼ sec.15, T.31 N., R.60 W., Niobrara County, Wyo., on left bank 0.2 mi downstream from Van Tassel Creek, 0.3 mi upstream from Wyoming-Nebraska State line, and 3 mi east of Van Tassel, Wyo.

DRAINAGE AREA.--450 mi^2, approximately.

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,687.70 ft.

REMARKS.--Diversions for irrigation of about 4,700 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,120 ft^3/s, August 16, 1977, gage height, 8.28 ft in gage well, from rating curve extended above 800 ft^3/s on basis of computation of peak flow from slope-area measurement; minimum daily, 0.54 ft^3/s, August 9, 10, 12, 1975.

Monthly and annual streamflow 1956-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	4.1	1.7	2.8	0.71	0.25	6.0
November	4.9	2.0	3.1	0.77	0.25	6.6
December	4.7	1.6	3.1	0.75	0.24	6.7
January	13	2.0	3.4	1.9	0.56	7.4
February	18	2.3	4.9	4.0	0.81	10.5
March	19	2.2	5.8	3.6	0.63	12.4
April	16	2.7	5.8	2.8	0.48	12.5
May	10	2.8	4.8	1.7	0.35	10.4
June	13	1.5	4.0	2.1	0.53	8.7
July	22	1.2	3.6	4.0	1.1	7.8
August	16	0.94	2.8	2.6	0.93	6.0
September	3.7	1.0	2.3	0.69	0.30	5.0
Annual	5.8	2.1	3.8	1.0	0.27	100

Magnitude and probability of annual low flow based on period of record 1957-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.5	0.99	0.79	0.65	0.52	---
3	1.5	1.0	0.85	0.70	0.56	---
7	1.6	1.1	0.90	0.75	0.60	---
14	1.8	1.3	1.0	0.87	0.70	---
30	1.9	1.4	1.2	0.99	0.82	---
60	2.1	1.5	1.3	1.1	0.93	---
90	2.2	1.7	1.5	1.3	1.1	---
120	2.3	1.9	1.6	1.5	1.3	---
183	2.6	2.1	1.9	1.7	1.5	---

Magnitude and probability of instantaneous peak flow based on 29 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
66	251	533	1240	2180	3680

Weighted skew = 0.355

Magnitude and probability of annual high flow based on period of record 1956-84

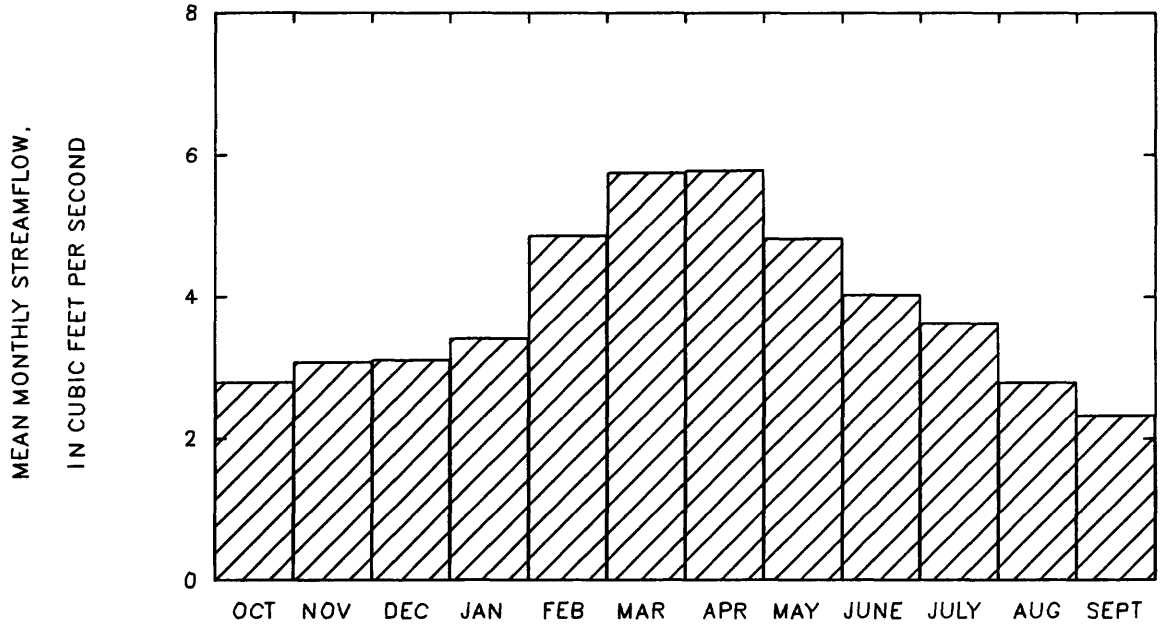
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	26	80	156	336	572	---
3	17	47	86	174	282	---
7	13	28	44	76	110	---
15	9.9	19	27	40	53	---
30	8.0	13	16	22	26	---
60	6.6	9.8	12	15	18	---
90	5.9	8.5	10	13	15	---

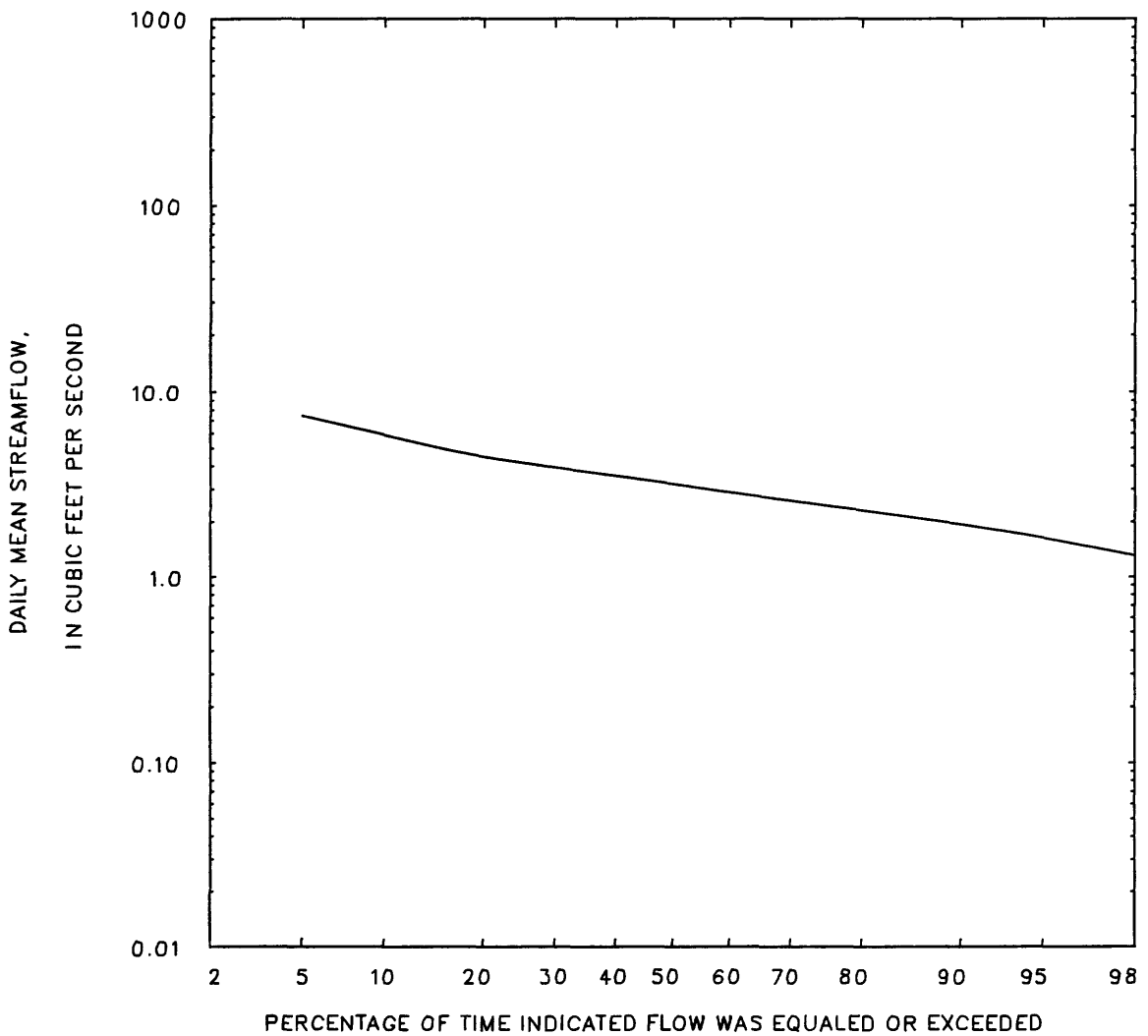
Duration of daily mean flow for period of record 1956-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
13	7.4	5.8	4.9	4.4	3.9	3.5	3.2	2.8	2.6	2.3	1.9	1.6	1.3	1.1	0.88	0.69

STATION 06454000 PERIOD OF RECORD 1956–84

NIOBRARA RIVER AT WYOMING–NEBRASKA STATE LINE





06620000 NORTH PLATTE RIVER NEAR NORTHGATE, COLO.

LOCATION.--Lat 40°56'15", long 106°20'16", in NE¼SW¼SE¼ sec.11, T.11 N., R.80 W., Jackson County, on right bank 1,000 ft downstream from bridge on State Highway 125, 0.7 mi upstream from Camp Creek, 4.2 mi northwest of Northgate, and 4.4 mi south of Colorado-Wyoming State line. Prior to September 20, 1984, at site 650 ft upstream.

DRAINAGE AREA.--1,431 mi^2.

PERIOD OF RECORD.--May to November 1904 (published as "near Pinkhampton"), May 1915 to current year. Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 7,810.39 ft. See WSP 1730 for history of changes prior to April 8, 1918. April 8, 1918, to August 21, 1961, water-stage recorder at site 0.7 mi downstream at datum 3.36 ft lower. August 22, 1961, to September 18, 1984, at site 650 ft upstream at same datum.

REMARKS.--Diversions for irrigation of about 130,000 acres of hay meadows above station. Transbasin diversions above station to Cache la Poudre River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,720 ft^3/s, June 11, 1923, gage height, 6.24 ft, site and datum then in use; maximum gage height recorded, 9.65 ft, April 25, 1980, (ice jam); minimum daily discharge, 19 ft^3/s, July 17-19, 1934.

Monthly and annual streamflow 1916-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	538	32	163	91	0.56	3.1
November	366	54	149	62	0.42	2.8
December	200	34	99	36	0.36	1.9
January	177	28	80	27	0.34	1.5
February	150	36	84	24	0.29	1.6
March	476	48	158	81	0.51	3.0
April	2440	131	761	433	0.57	14.4
May	3650	212	1170	683	0.59	22.1
June	3300	89	1530	779	0.51	29.0
July	2370	27	659	490	0.74	12.5
August	763	39	278	151	0.54	5.3
September	502	24	151	96	0.63	2.9
Annual	878	117	440	182	0.41	100

Magnitude and probability of annual low flow based on period of record 1917-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	58	39	32	27	22	19
3	59	40	33	27	22	19
7	61	43	35	29	24	21
14	64	45	37	31	26	22
30	69	50	41	35	29	25
60	76	56	46	40	33	29
90	82	61	52	45	37	33
120	91	68	58	50	42	37
183	107	80	68	60	52	47

Magnitude and probability of instantaneous peak flow based on 71 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
3010	4450	5370	6500	7300	8080

Weighted skew = -0.336

Magnitude and probability of annual high flow based on period of record 1916-84

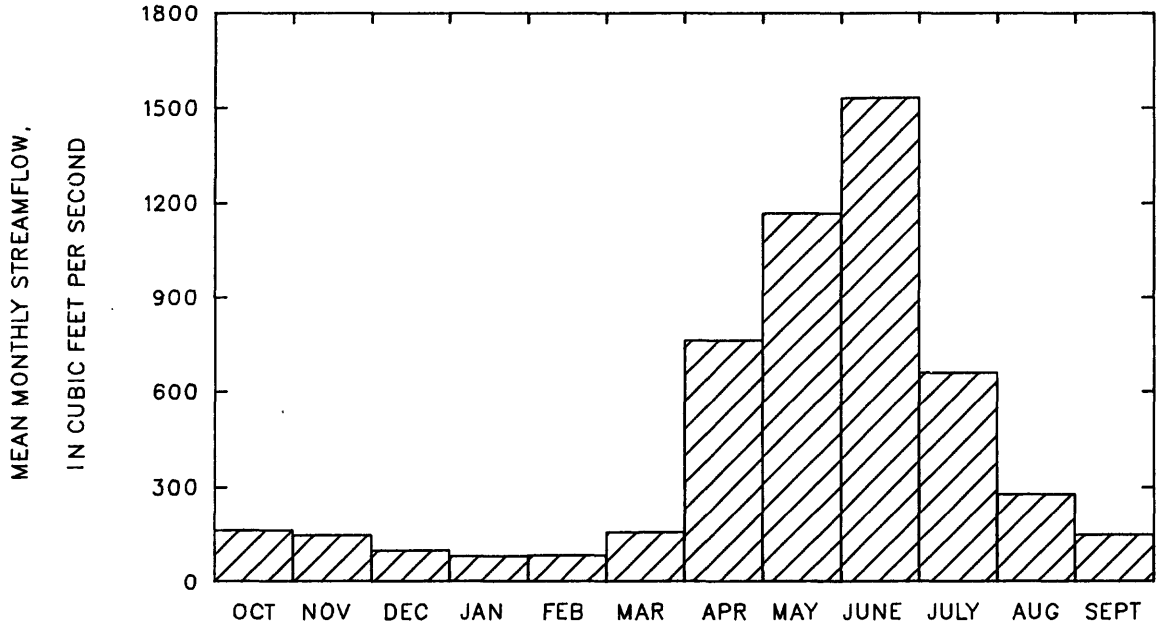
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2800	4120	4910	5810	6420	6980
3	2610	3880	4660	5550	6160	6730
7	2310	3460	4150	4910	5420	5880
15	2000	3020	3610	4250	4650	5010
30	1660	2530	3030	3590	3960	4280
60	1350	2070	2480	2950	3250	3520
90	1180	1770	2100	2470	2710	2920

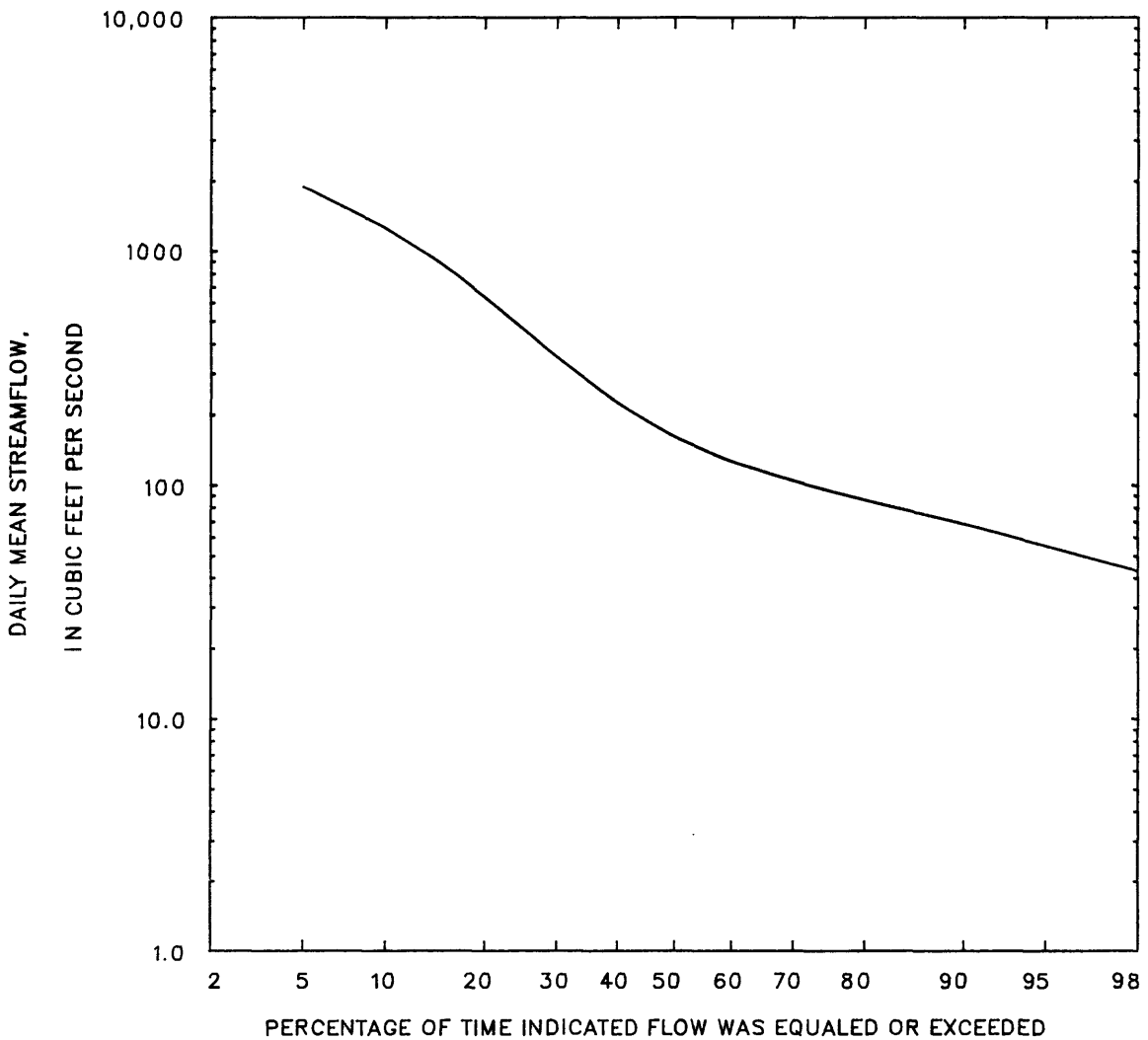
Duration of daily mean flow for period of record 1916-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
3250	1880	1250	884	631	352	223	159	125	103	85	68	55	42	36	30	23

STATION 06620000 PERIOD OF RECORD 1916–84

NORTH PLATTE RIVER NEAR NORTHGATE, COLO.





06620400 DOUGLAS CREEK ABOVE KEYSTONE, WYO.

LOCATION.--Lat 41°11'01", long 106°16'10", in S½NE¼ sec.16, T.14 N., R.79 W., Albany County, on right bank 0.3 mi upstream from Horse Creek, 1.25 mi northwest of Keystone, 1.5 mi upstream from Keystone Creek, and 8 mi west of Albany.

DRAINAGE AREA.--22.1 mi^2.

PERIOD OF RECORD.--May 1955 to September 1965.

GAGE.--Water-stage recorder. Altitude of gage is 9,280 ft, from topographic map.

REMARKS.--No regulation and practically no diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 865 ft^3/s, June 7, 1957, gage height, 4.77 ft; maximum gage height, 5.22 ft, May 5, 1965 (backwater from ice); minimum daily discharge, 1.3 ft^3/s, March 1-31, 1958, but may have been less during periods of ice effect.

Monthly and annual streamflow 1956-65

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	17	2.9	6.1	4.7	0.77	1.5
November	12	2.6	4.5	2.9	0.64	1.1
December	7.1	2.0	3.5	1.5	0.42	0.9
January	5.4	1.7	3.1	1.2	0.40	0.8
February	5.4	1.7	2.9	1.3	0.45	0.7
March	5.9	1.3	2.9	1.4	0.48	0.7
April	39	2.2	12	12	0.99	3.0
May	277	42	154	68	0.44	39.0
June	369	75	174	88	0.51	44.0
July	67	10	21	17	0.81	5.3
August	11	4.3	6.3	1.8	0.28	1.6
September	13	3.1	5.1	2.9	0.57	1.3
Annual	42	24	33	6.5	0.20	100

Magnitude and probability of annual low flow based on period of record 1957-65

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.8	1.4	1.3	---	---	---
3	1.9	1.5	1.3	---	---	---
7	2.1	1.6	1.4	---	---	---
14	2.1	1.6	1.4	---	---	---
30	2.2	1.6	1.4	---	---	---
60	2.3	1.7	1.5	---	---	---
90	2.5	1.9	1.7	---	---	---
120	2.6	2.0	1.8	---	---	---
183	3.2	2.4	2.2	---	---	---

Magnitude and probability of instantaneous peak flow based on 10 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
555	703	796	909	990	1070

Weighted skew = 0.030

Magnitude and probability of annual high flow based on period of record 1956-65

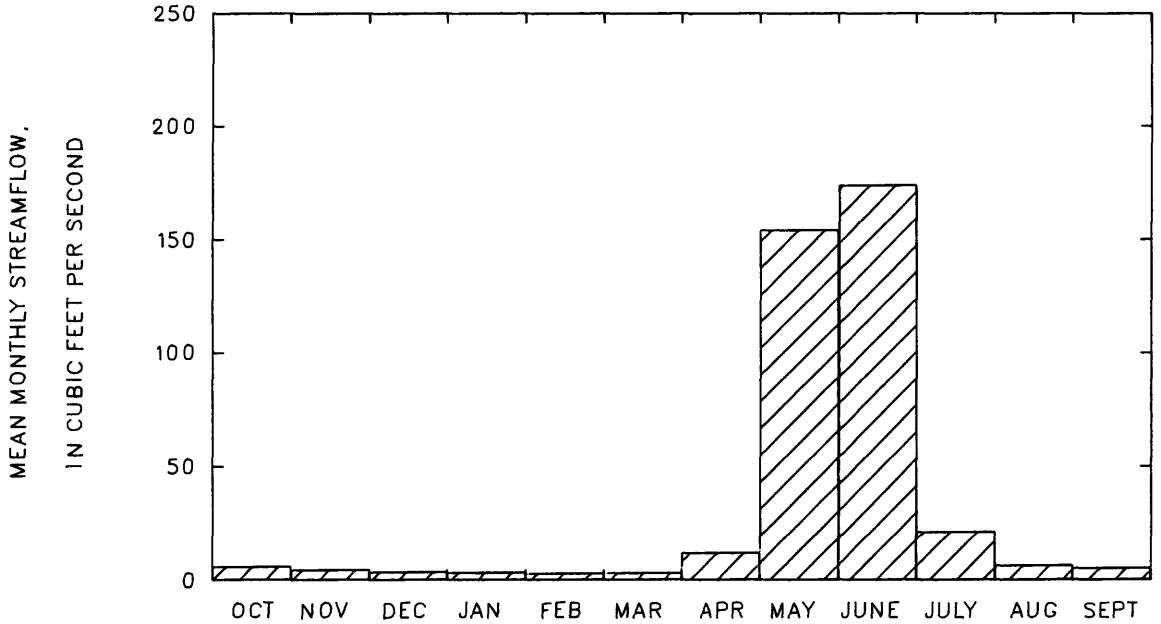
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	407	512	587	---	---	---
3	381	483	554	---	---	---
7	349	449	517	---	---	---
15	306	386	443	---	---	---
30	253	310	349	---	---	---
60	166	198	218	---	---	---
90	117	141	155	---	---	---

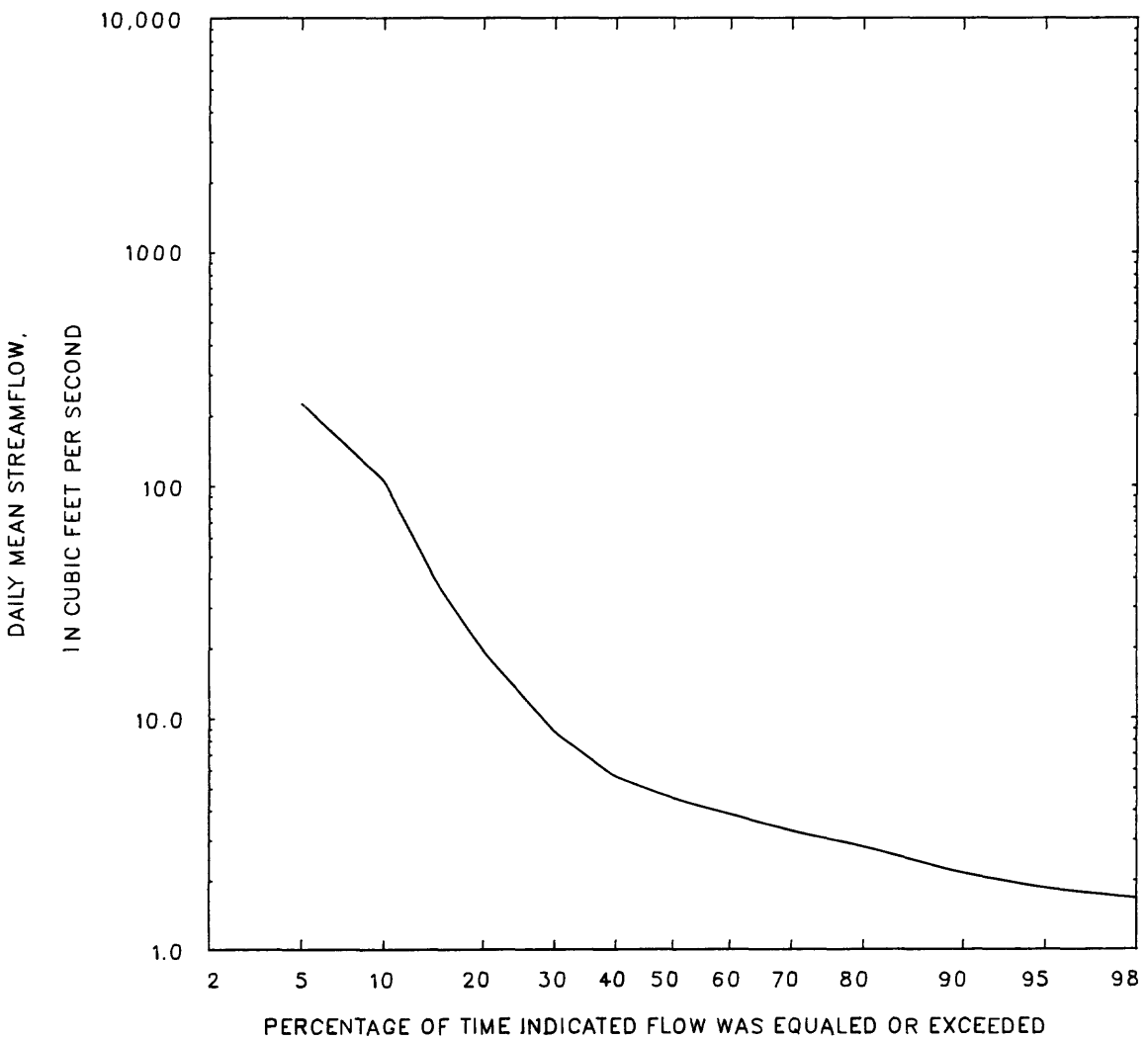
Duration of daily mean flow for period of record 1956-65

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
393	224	105	37	19	8.7	5.6	4.5	3.8	3.3	2.8	2.1	1.8	1.7	1.6	1.4	1.3

STATION 06620400 PERIOD OF RECORD 1956–65

DOUGLAS CREEK ABOVE KEYSTONE, WYO.





06621000 DOUGLAS CREEK NEAR FOXPARK, WYO.

LOCATION.--Lat 41°04'52", long 106°18'25", in NE¼SE¼ sec.19, T.13 N., R.79 W., Albany County, Medicine Bow National Forest, on left bank 0.8 mi downstream from Pelton Creek and 8 mi west of Foxpark.

DRAINAGE AREA.--120 mi^2. Area at mouth, 153 mi^2.

PERIOD OF RECORD.--July 1946 to October 1971, May to September 1972.

GAGE.--Water-stage recorder. Altitude of gage is 8,200 ft, from topographic map.

REMARKS.--Flow regulated by Rob Roy Reservoir (capacity, 8,900 acre-ft). Transbasin diversions above station to Lake Owen for municipal use by cities of Cheyenne and Laramie began November 1963.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,630 ft^3/s, June 1957, gage height, 4.66 ft; minimum daily, 2.3 ft^3/s, August 26, 27, September 6, 7, 1967.

Monthly and annual streamflow 1947-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	43	5.0	17	11	0.62	1.8
November	33	5.4	13	6.7	0.51	1.4
December	23	4.0	10	4.1	0.39	1.1
January	17	2.9	8.9	3.3	0.37	0.9
February	13	2.9	8.3	2.7	0.33	0.9
March	26	3.1	11	4.7	0.43	1.2
April	172	9.5	57	39	0.69	6.0
May	648	180	416	143	0.35	44.2
June	757	56	329	197	0.60	34.9
July	124	12	44	28	0.63	4.7
August	26	4.2	14	5.8	0.42	1.5
September	47	5.0	13	10	0.75	1.4
Annual	140	33	79	26	0.33	100

Magnitude and probability of annual low flow based on period of record 1948-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	4.7	3.3	2.7	2.2	---	---
3	4.9	3.4	2.8	2.3	---	---
7	5.2	3.6	3.0	2.5	---	---
14	5.6	3.9	3.2	2.7	---	---
30	6.6	4.6	3.8	3.2	---	---
60	7.7	5.3	4.3	3.5	---	---
90	8.5	5.9	4.7	3.8	---	---
120	9.0	6.3	5.1	4.2	---	---
183	10	7.1	5.8	5.0	---	---

Magnitude and probability of instantaneous peak flow based on 26 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
956	1280	1470	1690	1840	1980

Weighted skew = -0.420

Magnitude and probability of annual high flow based on period of record 1947-71

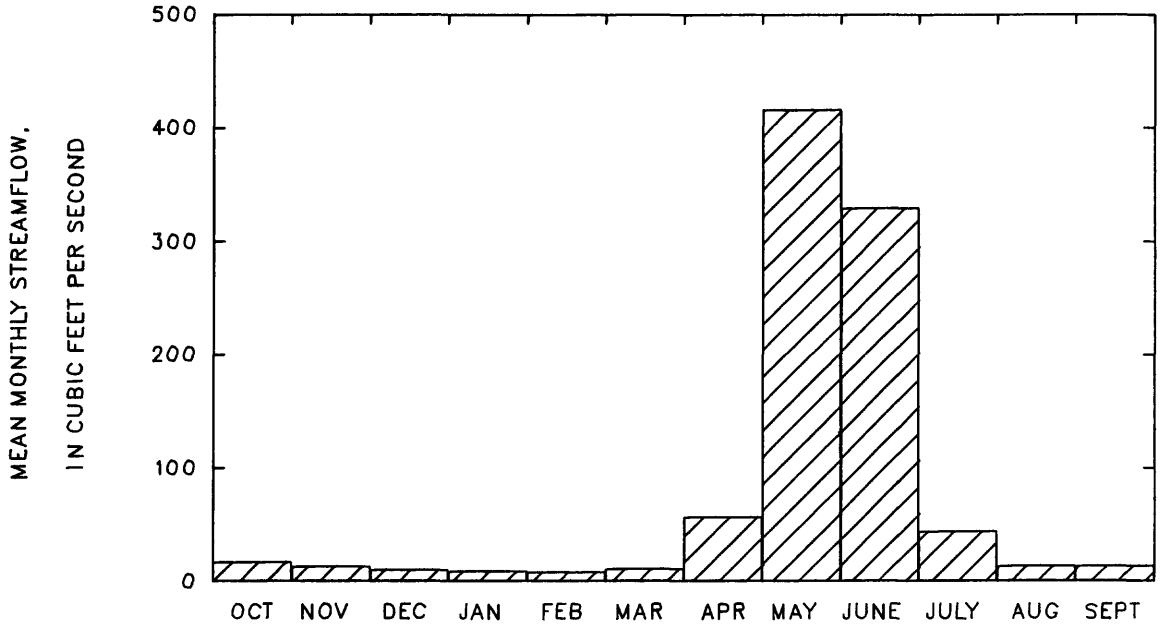
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	816	1090	1230	1360	---	---
3	782	1050	1170	1300	---	---
7	723	979	1110	1230	---	---
15	653	876	987	1100	---	---
30	555	733	819	901	---	---
60	373	507	581	661	---	---
90	270	365	418	476	---	---

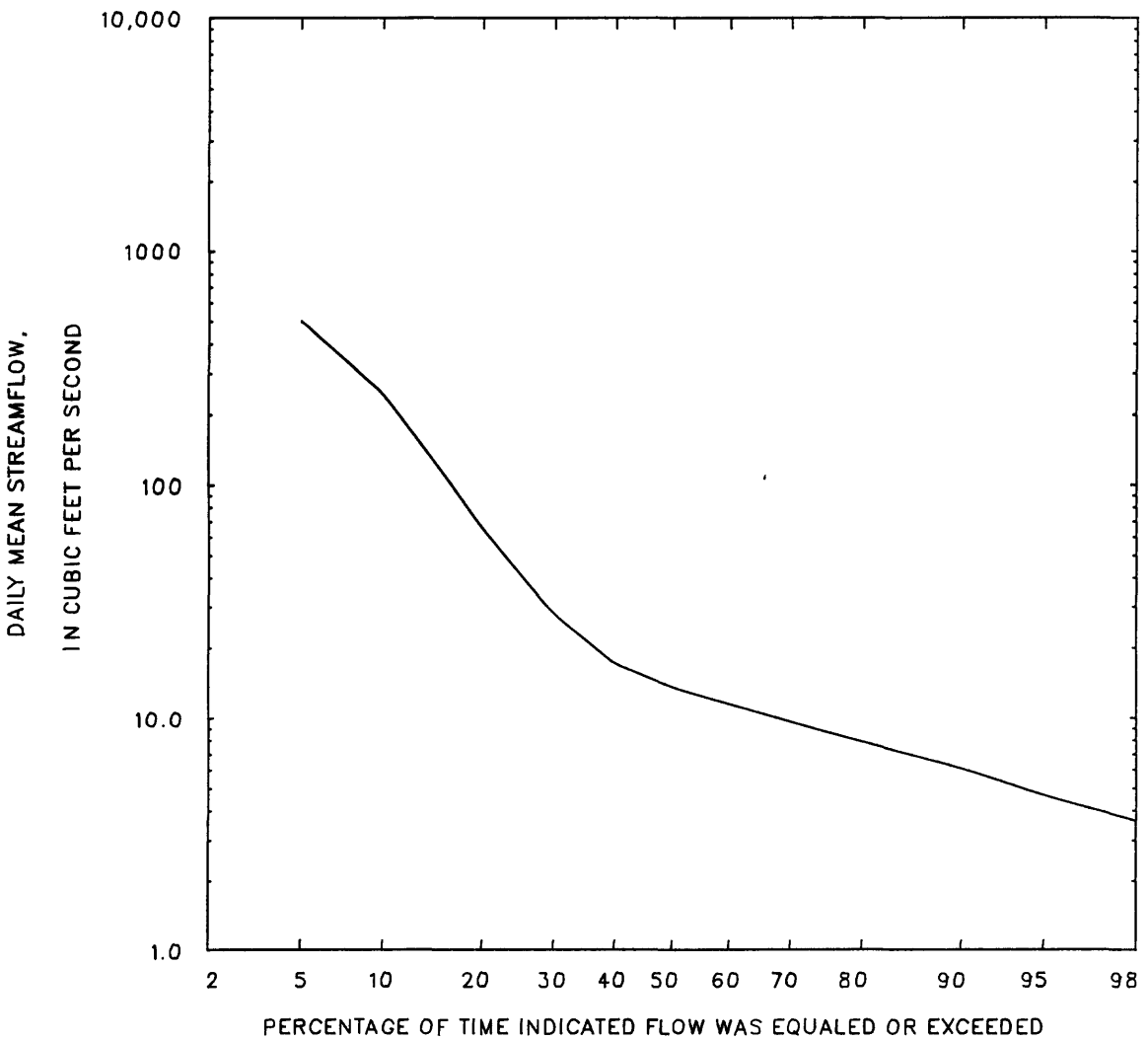
Duration of daily mean flow for period of record 1947-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
880	498	245	120	65	28	17	13	11	9.6	7.9	6.0	4.6	3.6	3.2	2.9	2.5

STATION 06621000 PERIOD OF RECORD 1947–71

DOUGLAS CREEK NEAR FOXPARK, WYO.





06622500 FRENCH CREEK NEAR FRENCH, WYO.

LOCATION.--Lat 41°12'30", long 106°31'00", in SE¼ sec. 5, T. 14 N., R. 81 W., Carbon County, 1.75 mi east of French, 2 mi upstream from mouth, and 14.5 mi east of Encampment.

DRAINAGE AREA.--60 mi^2, approximately.

PERIOD OF RECORD.--May to September 1909, May to October 1910, May to July 1911, October 1912 to September 1924.

GAGE.--Staff gage at described site after June 1, 1920. Altitude of gage is 7,500 ft, from topographic map. April 21, 1909, to November 15, 1910, gage at same ranch but type and datum not known. April 30, 1911, to April 9, 1918, staff gage 1 mi upstream at different datum. April 10, 1918, to June 1, 1920, staff gage 480 ft downstream at different datum.

REMARKS.--Diversions above station for irrigation of 660 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft^3/s, June 10-13, 1921, gage height, 3.0 ft; minimum daily discharge, 6 ft^3/s, April 1, 1915, but may have been less during periods of no gage-height record.

COOPERATION--Records for 1909-10 and 1913-14 furnished by State engineer of Wyoming.

Monthly and annual streamflow 1912-24

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	37	9.2	24	8.7	0.36	2.3
November	38	8.3	21	9.1	0.44	2.0
December	20	8.3	13	4.3	0.33	1.2
January	15	7.1	11	2.3	0.22	1.0
February	15	8.3	10	2.3	0.23	1.0
March	31	7.0	15	6.9	0.47	1.4
April	48	16	31	12	0.38	2.9
May	337	96	199	67	0.33	18.8
June	905	235	513	198	0.39	48.3
July	366	58	152	98	0.65	14.3
August	95	30	47	19	0.40	4.4
September	43	9.8	26	8.3	0.31	2.5
Annual	132	60	88	24	0.27	100

Magnitude and probability of annual low flow based on period of record 1913-24

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	8.1	7.0	6.6	6.3	---	---
3	8.3	7.3	7.1	6.9	---	---
7	8.3	7.4	7.2	7.1	---	---
14	8.4	7.6	7.3	7.2	---	---
30	9.0	7.6	7.4	7.3	---	---
60	9.5	8.4	8.0	7.7	---	---
90	9.7	8.5	8.2	8.0	---	---
120	11	9.5	8.8	8.3	---	---
183	15	12	10	9.1	---	---

Magnitude and probability of instantaneous peak flow based on 14 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
989	1360	1580	1830	2010	2170

Weighted skew = -0.420

Magnitude and probability of annual high flow based on period of record 1912-24

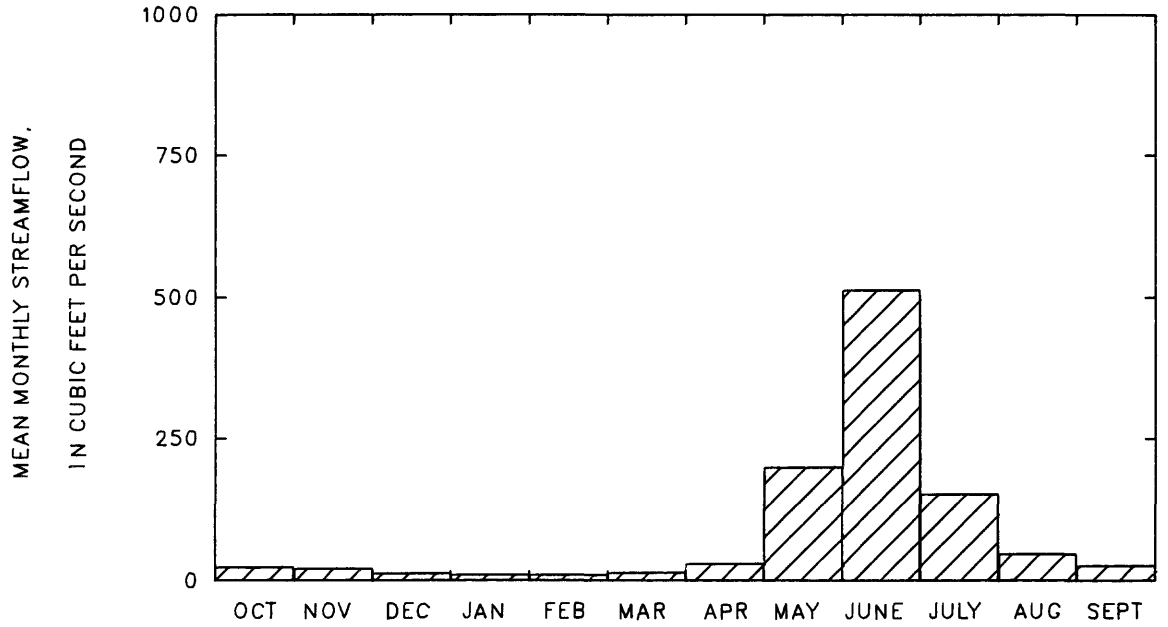
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	899	1220	1390	---	---	---
3	856	1170	1350	---	---	---
7	777	1070	1230	---	---	---
15	656	907	1060	---	---	---
30	528	716	835	---	---	---
60	374	494	571	---	---	---
90	280	366	422	---	---	---

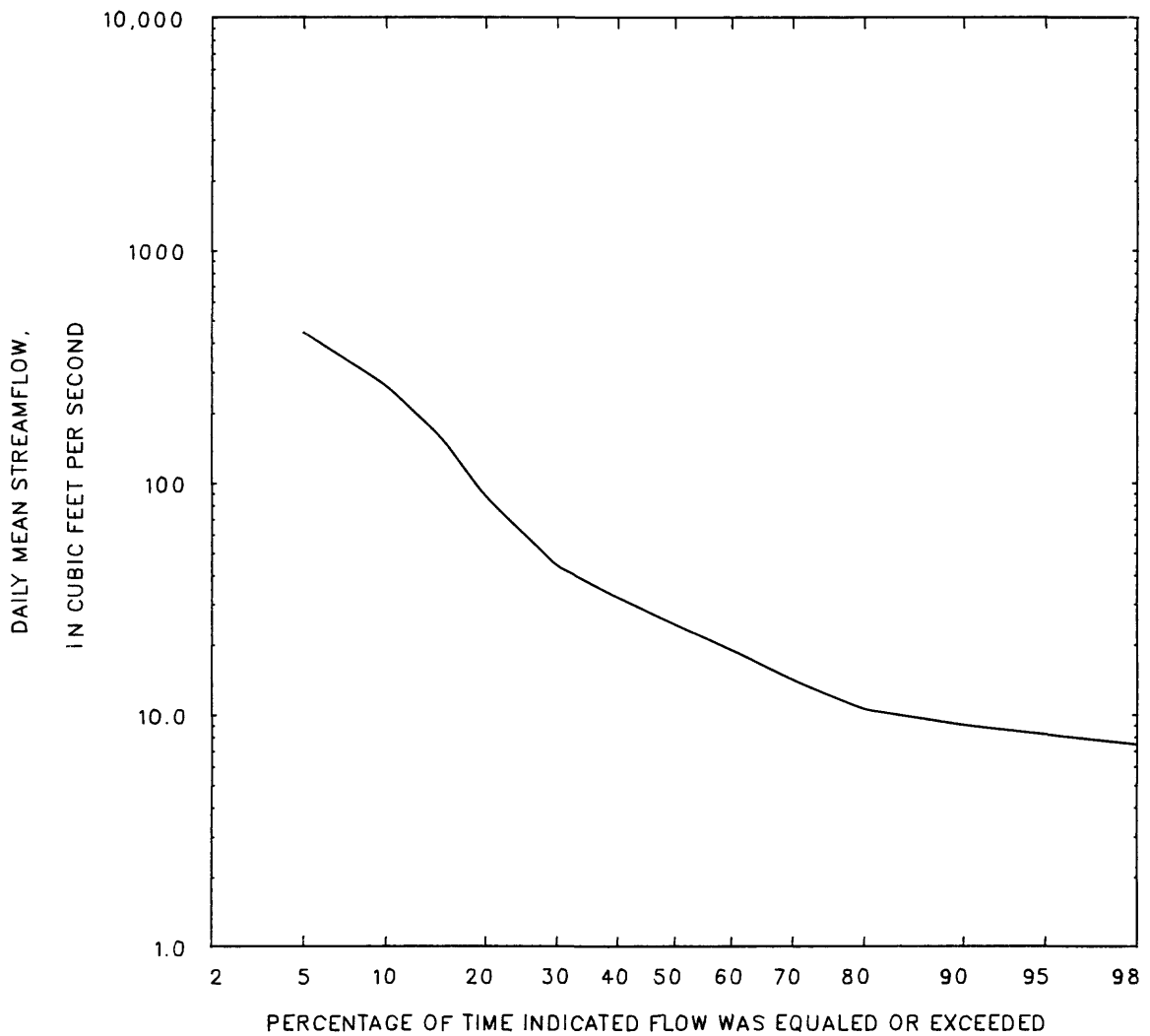
Duration of daily mean flow for period of record 1912-24

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
925	441	263	157	87	44	32	24	19	14	10	9.0	8.2	7.4	7.1	6.7	6.1

STATION 06622500 PERIOD OF RECORD 1912–24

FRENCH CREEK NEAR FRENCH, WYO.





06622700 NORTH BRUSH CREEK NEAR SARATOGA, WYO.

LOCATION.--Lat 41°22'10", long 106°31'22", in NE¼SE¼NW¼ sec.8, T.16 N., R.81 W., Carbon County, Medicine Bow National Forest, on left bank 10 ft downstream from logging road bridge, 0.7 mi downstream from Lincoln Creek, 1.6 mi upstream from South Brush Creek, and 16 mi southeast of Saratoga.

DRAINAGE AREA.--37.4 mi^2.

PERIOD OF RECORD.--May 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,020 ft, from topographic map. Prior to June 17, 1971, at site 110 ft downstream at different datum. June 17 to September 21, 1971, at site 10 ft downstream at present datum.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,360 ft^3/s, June 25, 1983, gage height, 4.23 ft; minimum daily, 4.7 ft^3/s, October 27-29, 1976.

Monthly and annual streamflow 1961-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	39	8.5	15	7.2	0.48	2.4
November	21	8.4	12	3.4	0.28	1.9
December	15	7.8	10	1.9	0.19	1.6
January	13	6.1	9.1	1.6	0.17	1.5
February	12	6.6	9.2	1.5	0.17	1.5
March	20	6.8	11	2.6	0.24	1.7
April	73	13	23	13	0.56	3.6
May	262	60	159	51	0.32	25.4
June	534	102	283	119	0.42	45.3
July	224	14	66	51	0.76	10.6
August	30	9.5	15	4.7	0.32	2.4
September	27	8.0	14	4.9	0.36	2.2
Annual	82	30	52	14	0.26	100

Magnitude and probability of annual low flow based on period of record 1962-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	6.7	5.7	5.3	4.9	---	---
3	6.9	5.9	5.4	5.1	---	---
7	7.3	6.3	5.8	5.4	---	---
14	7.8	6.7	6.2	5.8	---	---
30	8.4	7.4	6.9	6.5	---	---
60	8.8	7.7	7.3	6.9	---	---
90	9.2	8.0	7.5	7.1	---	---
120	9.4	8.3	7.8	7.5	---	---
183	10	9.0	8.5	8.3	---	---

Magnitude and probability of instantaneous peak flow based on 25 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
600	802	938	1110	1250	1380

Weighted skew = 0.186

Magnitude and probability of annual high flow based on period of record 1961-84

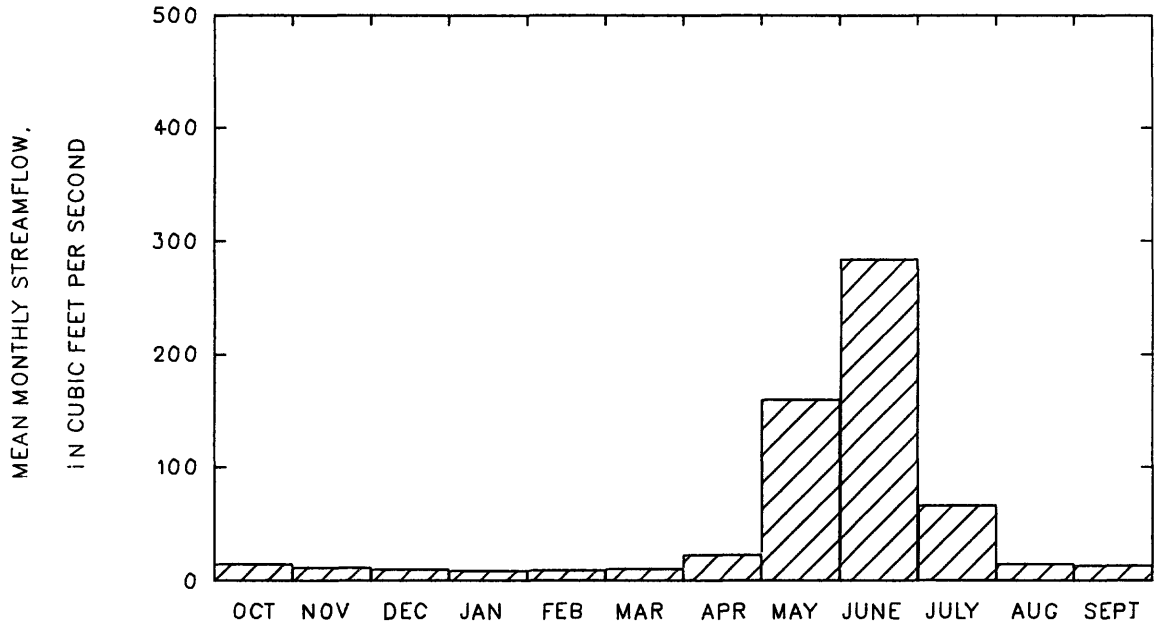
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	477	624	719	838	---	---
3	447	579	665	771	---	---
7	408	534	617	721	---	---
15	368	471	536	615	---	---
30	318	408	464	529	---	---
60	230	296	336	383	---	---
90	167	215	245	280	---	---

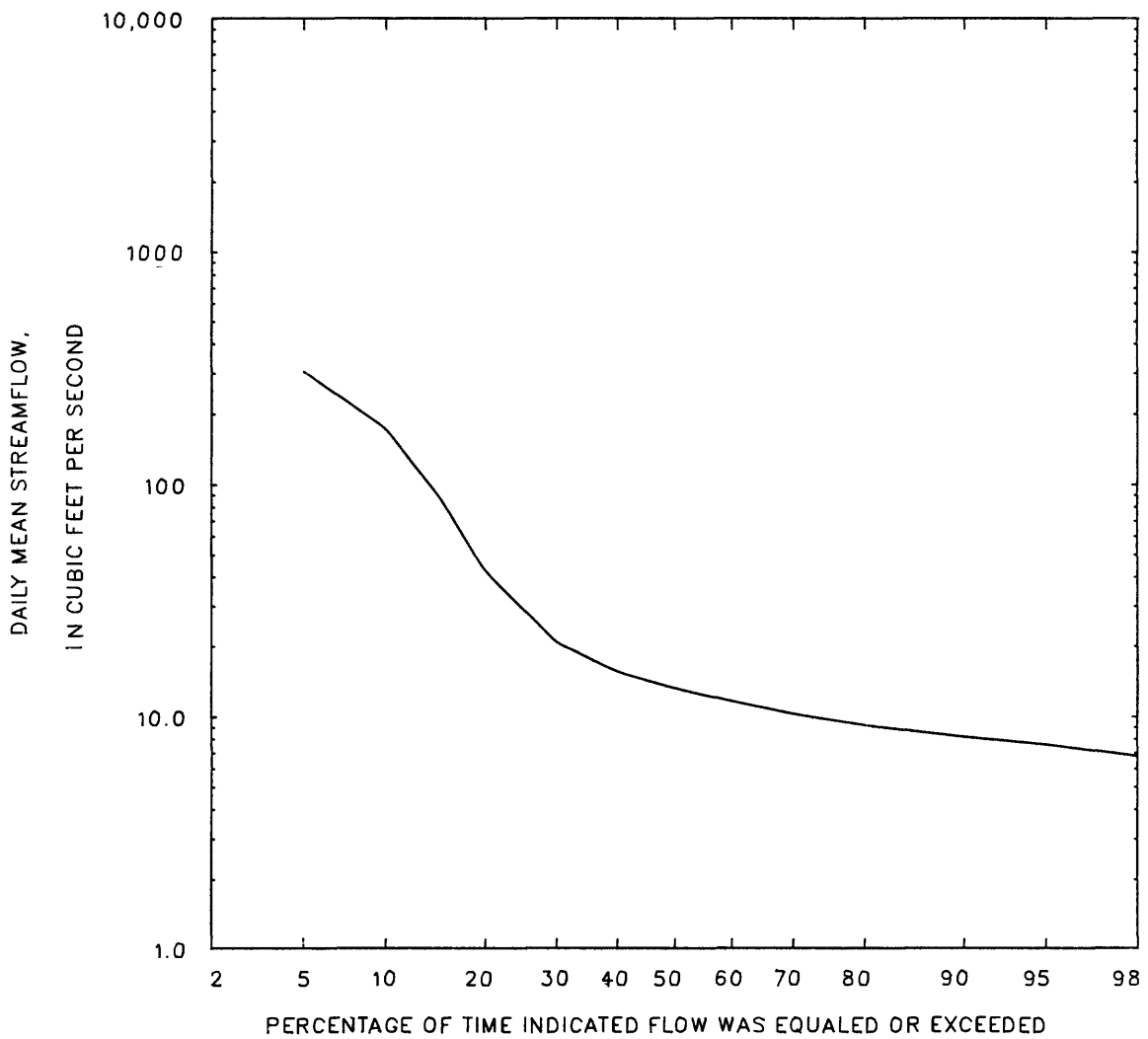
Duration of daily mean flow for period of record 1961-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
488	302	173	87	42	21	15	13	12	10	9.1	8.1	7.5	6.7	6.3	5.8	5.3

STATION 06622700 PERIOD OF RECORD 1961–84

NORTH BRUSH CREEK NEAR SARATOGA, WYO.





06622900 SOUTH BRUSH CREEK NEAR SARATOGA, WYO.

LOCATION.--Lat 41°20'38", long 106°31'33", in NE¼NW¼ sec.20, T.16 N., R.81 W., Carbon County, Medicine Bow National Forest, on left bank 300 ft upstream from culvert on State Highway 130, 1.6 mi upstream from North Brush Creek, and 17 mi southeast of Saratoga.

DRAINAGE AREA.--22.8 mi^2.

PERIOD OF RECORD.--May 1960 to September 1974, May 1976 to September 1977, May 1979 to current year (no winter records since 1972).

GAGE.--Water-stage recorder. Altitude of gage is 8,100 ft, from topographic map.

REMARKS.--Transbasin diversion 0.3 mi above station for irrigation in North Brush Creek basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 559 ft^3/s, June 10, 1965, gage height, 4.09 ft; minimum daily, 0.80 ft^3/s, August 15-20, 28, 29, 1963.

COOPERATION--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1961-72

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	34	3.6	12	9.1	0.77	3.1
November	26	5.4	9.0	5.7	0.64	2.4
December	17	4.0	7.1	3.5	0.49	1.9
January	9.6	2.4	5.8	1.9	0.33	1.5
February	9.5	3.7	6.0	1.8	0.30	1.6
March	11	4.6	6.6	1.9	0.29	1.7
April	54	7.5	15	13	0.87	3.9
May	119	53	86	19	0.23	22.5
June	295	65	172	80	0.46	44.9
July	81	16	44	24	0.55	11.4
August	20	2.7	11	4.5	0.43	2.8
September	25	2.7	9.2	5.7	0.62	2.4
Annual	46	19	32	9.1	0.29	100

Magnitude and probability of annual low flow based on period of record 1962-72

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	2.9	1.7	1.2	0.92	---	---
3	3.1	1.8	1.3	0.92	---	---
7	3.4	1.9	1.3	0.95	---	---
14	3.7	2.1	1.5	1.1	---	---
30	4.6	3.1	2.5	2.0	---	---
60	5.2	3.8	3.3	2.8	---	---
90	5.5	4.3	3.7	3.3	---	---
120	5.8	4.6	4.2	3.9	---	---
183	6.6	5.0	4.4	4.1	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1961-72

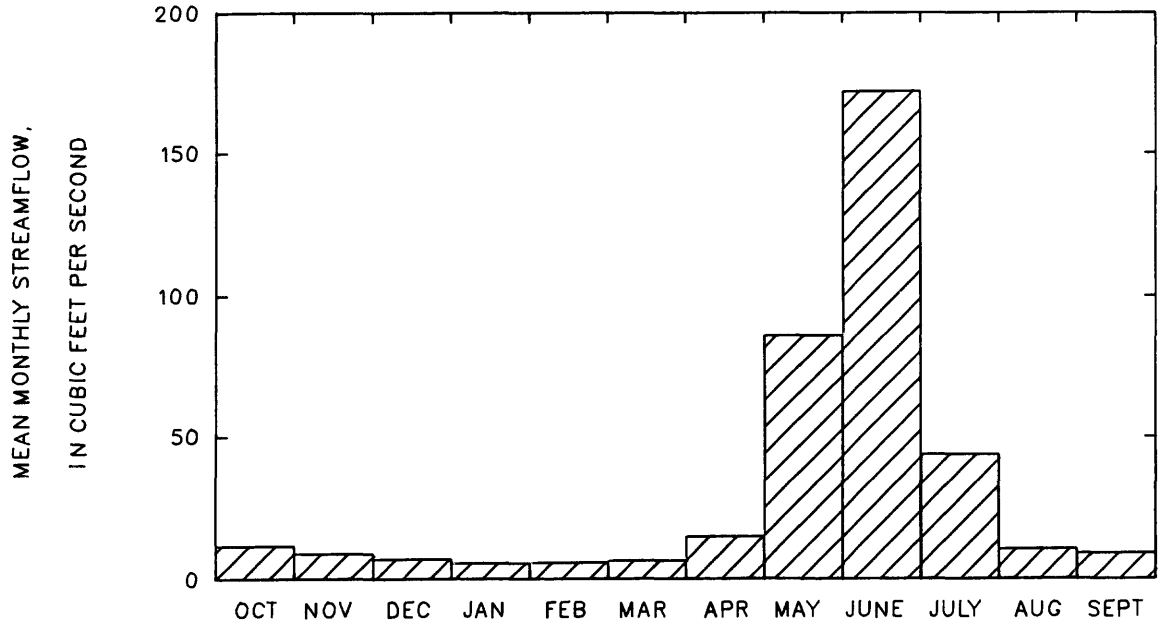
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	289	379	433	---	---	---
3	271	350	397	---	---	---
7	255	331	375	---	---	---
15	221	291	332	---	---	---
30	184	244	279	---	---	---
60	134	179	205	---	---	---
90	100	133	153	---	---	---

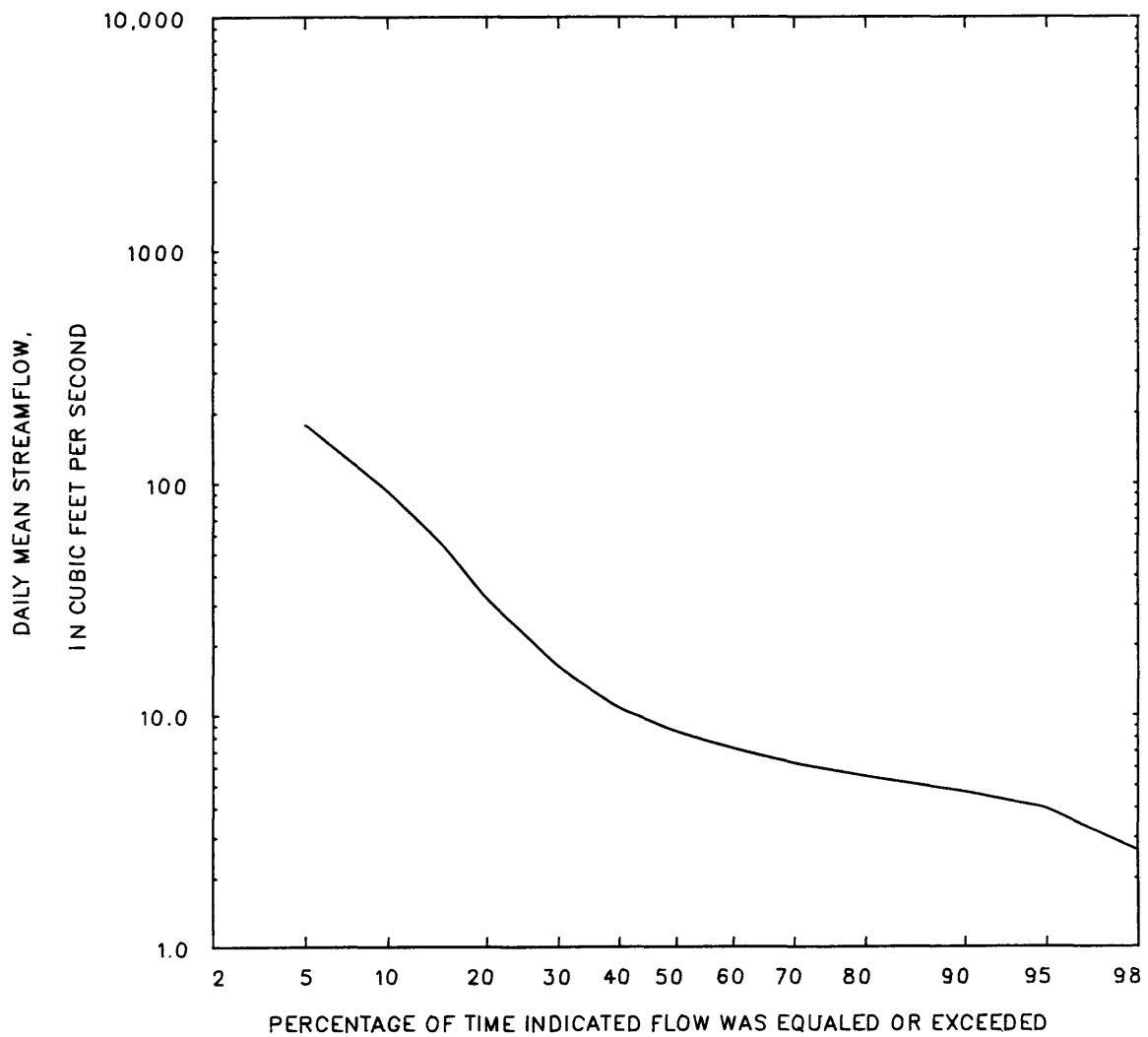
Duration of daily mean flow for period of record 1961-72

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
307	177	92	54	32	16	11	8.4	7.1	6.2	5.4	4.7	3.9	2.6	2.0	1.6	0.88

STATION 06622900 PERIOD OF RECORD 1961–72

SOUTH BRUSH CREEK NEAR SARATOGA, WYO.





06623800 ENCAMPMENT RIVER ABOVE HOG PARK CREEK, NEAR ENCAMPMENT, WYO.

LOCATION.--Lat 41°01'25", long 106°49'27", in NE¼SW¼ sec.10, T.12 N., R.84 W., Carbon County, Medicine Bow National Forest, on left bank 0.6 mi upstream from Hog Park Creek and 13 mi south of Encampment.

DRAINAGE AREA.--72.7 mi^2.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,270 ft, from topographic map.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft^3/s, about June 13, 1965, gage height not determined, from slope-area measurement of peak flow; minimum daily, 9.5 ft^3/s, December 31, 1968.

Monthly and annual streamflow 1965-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	61	20	31	10	0.33	2.2
November	35	16	24	6.2	0.26	1.7
December	32	12	22	5.2	0.23	1.6
January	29	11	19	4.6	0.24	1.4
February	28	11	18	4.4	0.24	1.3
March	25	11	19	4.1	0.22	1.3
April	60	19	34	12	0.34	2.4
May	468	135	256	91	0.36	18.1
June	914	229	653	218	0.33	46.3
July	475	48	249	137	0.55	17.6
August	75	25	51	16	0.32	3.6
September	63	19	34	12	0.35	2.4
Annual	159	51	117	31	0.26	100

Magnitude and probability of annual low flow based on period of record 1966-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	14	11	10	9.1	---	---
3	14	12	11	10	---	---
7	15	13	11	10	---	---
14	16	13	11	10	---	---
30	17	14	12	11	---	---
60	17	14	13	12	---	---
90	18	15	13	12	---	---
120	19	16	14	13	---	---
183	22	18	17	15	---	---

Magnitude and probability of instantaneous peak flow based on 20 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1040	1310	1470	1660	1780	1900

Weighted skew = -0.250

Magnitude and probability of annual high flow based on period of record 1965-84

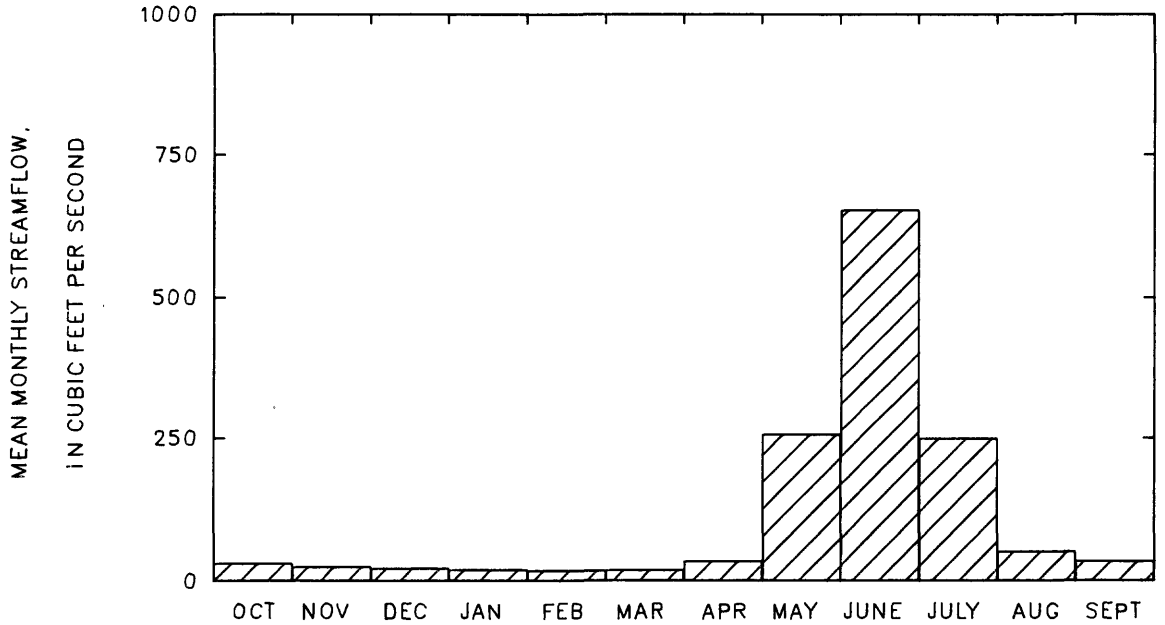
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	904	1130	1250	1380	---	---
3	884	1100	1200	1310	---	---
7	851	1060	1160	1270	---	---
15	776	984	1090	1190	---	---
30	700	896	984	1060	---	---
60	537	682	745	800	---	---
90	400	503	548	586	---	---

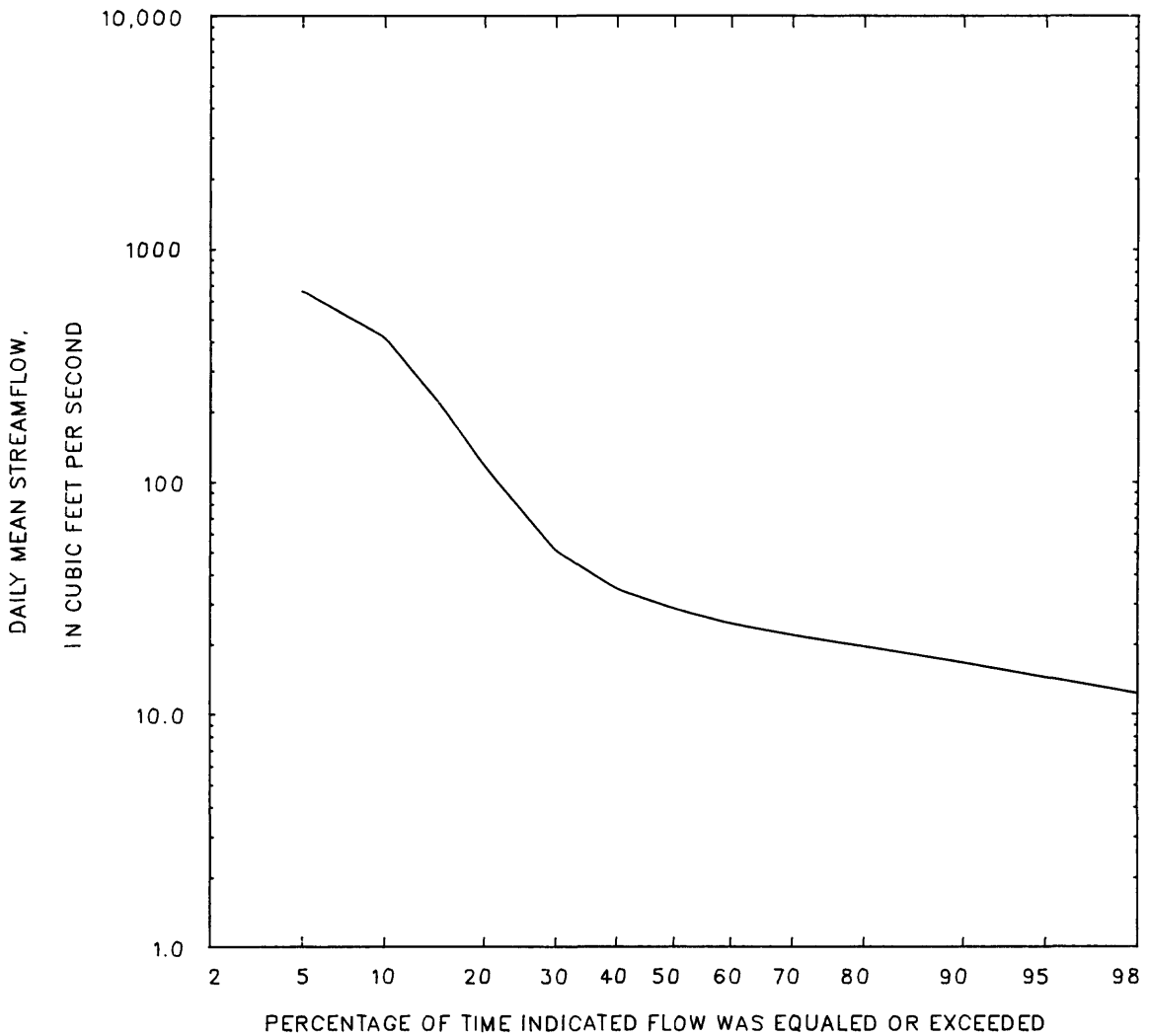
Duration of daily mean flow for period of record 1965-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
994	659	417	216	117	51	35	28	24	22	19	17	14	12	11	11	9.8

STATION 06623800 PERIOD OF RECORD 1965–84

ENCAMPMENT RIVER ABOVE HOG PARK CREEK, NEAR ENCAMPMENT, WYO.





06624500 ENCAMPMENT RIVER AT ENCAMPMENT, WYO.

LOCATION.--Lat 41°12'50", long 106°46'40", in sec. 6, T. 14 N., R.83 W., Carbon County, at Encampment, 1 mi downstream from North Fork.

DRAINAGE AREA.--219 mi^2.

PERIOD OF RECORD.--June to September 1900, August 1909, May to August 1910, May 1911 to September 1924, October 1928 to May 1932. Published as Grand Encampment Creek at Peryam's Ranch, 1900.

GAGE.--Chain gage at described site after June 6, 1912. Datum of gage is 7,141.53 ft. May 16 to September 30, 1900, staff gage at site about 1 mi downstream at different datum. April 19, 1909, to August 31, 1910, gage near same site, but type and datum not known. May 2, 1911, to June 2, 1912, chain gage at site 170 ft downstream at same datum.

REMARKS.--Diversions above station for irrigation of about 8,000 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,680 ft^3/s, May 29, 1900 gage height, 3.20 ft, site and datum then in use; minimum daily discharge, 3 ft^3/s, July 24, 1919.

COOPERATION-- Records for 1909-10 1913-14 furnished by State engineer of Wyoming; those for 1909-10 not previously published by Geological Survey.

Monthly and annual streamflow 1912, 1914-24, 1929-31

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	182	22	75	44	0.58	2.1
November	90	26	54	17	0.32	1.5
December	60	25	43	10	0.24	1.2
January	54	25	39	8.7	0.22	1.1
February	54	25	37	7.5	0.21	1.0
March	75	30	46	11	0.24	1.3
April	921	66	240	203	0.85	6.7
May	1690	508	1070	372	0.35	30.1
June	2620	472	1550	683	0.44	43.4
July	1010	31	294	256	0.87	8.2
August	129	18	62	38	0.62	1.7
September	138	15	59	37	0.63	1.7
Annual	494	123	298	98	0.33	100

Magnitude and probability of instantaneous peak flow based on 19 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
2870	3650	4150	4760	5200	5640

Weighted skew = 0.060

Magnitude and probability of annual low flow based on period of record 1914-24, 1930-32

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	19	8.8	5.4	3.4	---	---
3	23	12	8.0	5.3	---	---
7	25	15	11	8.1	---	---
14	28	20	16	13	---	---
30	30	24	20	18	---	---
60	34	27	24	21	---	---
90	36	29	26	24	---	---
120	38	32	28	26	---	---
183	45	35	30	26	---	---

Magnitude and probability of annual high flow based on period of record 1912, 1914-24, 1929-31

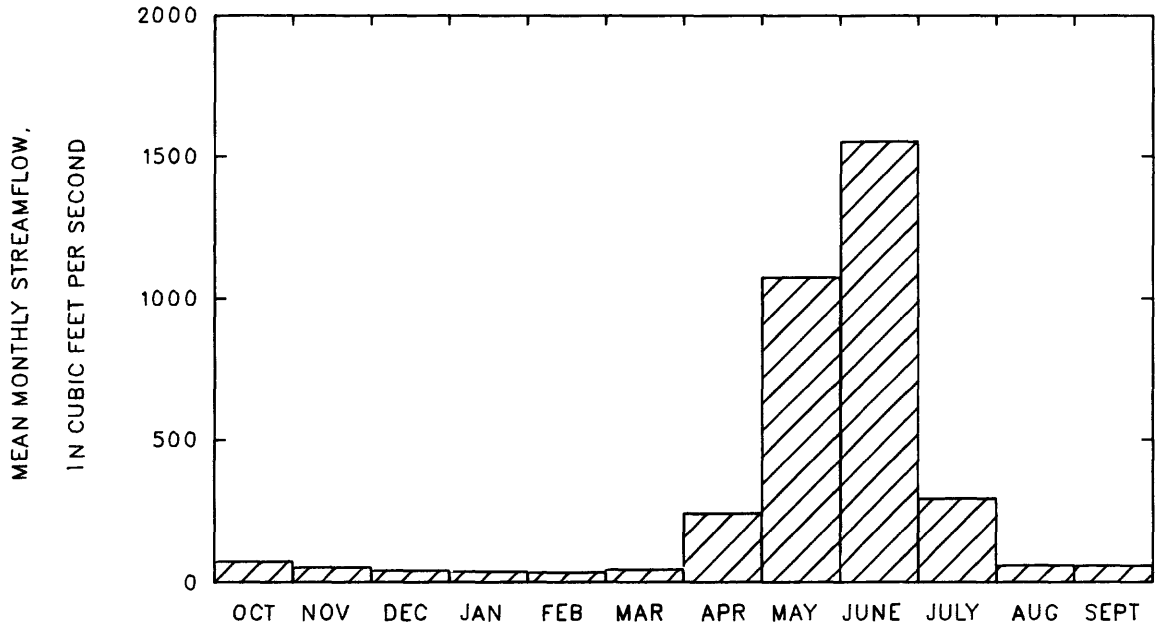
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2590	3600	4190	4840	---	---
3	2420	3370	3920	4550	---	---
7	2270	3130	3610	4110	---	---
15	2090	2900	3340	3810	---	---
30	1800	2460	2820	3190	---	---
60	1370	1800	2000	2200	---	---
90	1030	1350	1510	1660	---	---

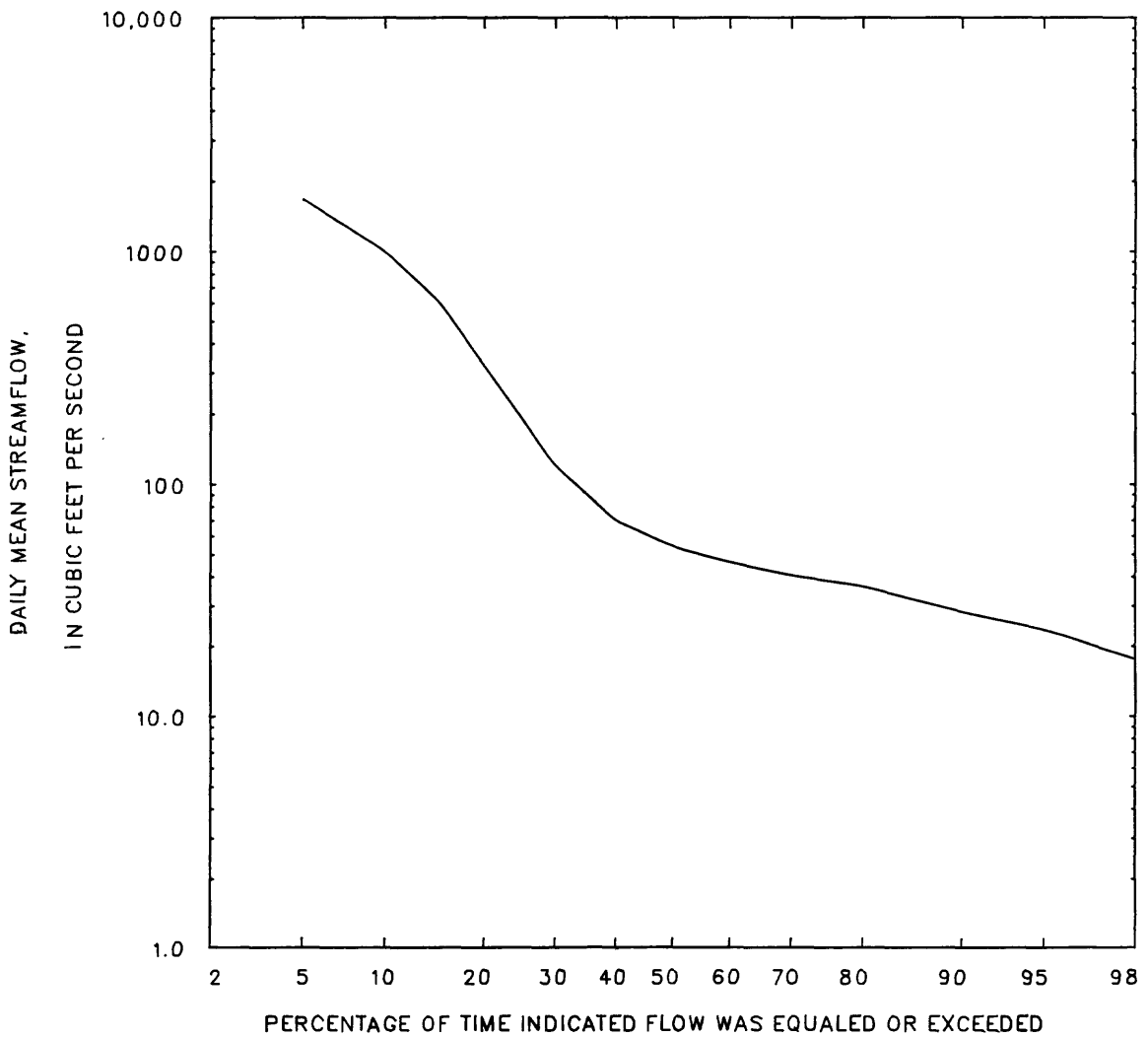
Duration of daily mean flow for period of record 1912, 1914-24, 1929-31

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2890	1670	1000	603	323	120	69	53	46	40	36	28	23	17	15	14	6.5

STATION 06624500 PERIOD OF RECORD 1912, 1914–24, 1929–31

ENCAMPMENT RIVER AT ENCAMPMENT, WYO.





06625000 ENCAMPMENT RIVER AT MOUTH, NEAR ENCAMPMENT, WYO.
(before transbasin diversion)

LOCATION.--Lat 41°18'12", long 106°42'53", in NE¼NW¼ sec.3, T.15 N., R.83 W., Carbon County, on left bank 0.5 mi upstream from mouth and 8.0 mi northeast of Encampment.

DRAINAGE AREA.--265 mi^2.

PERIOD OF RECORD.--April 1940 to current year. Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 6,970 ft, from topographic map. Prior to June 28, 1961, water-stage recorder at site 660 ft upstream at datum 2.00 ft higher.

REMARKS.--Five small reservoirs above station for irrigation, total capacity, about 400 acre-ft. Slight regulation by Hog Park Creek Reservoir, capacity, about 2,970 acre-ft. Diversions for irrigation of about 8,800 acres above station. Transbasin diversion above station into Hog Park Creek (tributary to Encampment River) from North Fork Little Snake River for municipal, industrial, and irrigation uses began September 1964.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,510 ft^3/s, June 1, 1943, gage height, 10.25 ft, present datum; maximum gage height, 10.33 ft, June 4, 1952, present datum; minimum daily discharge, 5.2 ft^3/s, August 15, 16, 1940.

Monthly and annual streamflow 1941-64

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	136	37	68	28	0.41	2.5
November	108	43	68	13	0.19	2.5
December	85	49	59	9.0	0.15	2.2
January	75	34	53	10	0.19	1.9
February	115	36	55	15	0.28	2.0
March	90	45	60	11	0.18	2.2
April	352	71	154	88	0.57	5.7
May	1260	411	813	244	0.30	29.8
June	1940	316	1100	430	0.39	40.4
July	871	38	206	194	0.95	7.5
August	175	22	47	32	0.67	1.7
September	111	14	44	21	0.49	1.6
Annual	337	129	227	61	0.27	100

Magnitude and probability of annual low flow
based on period of record 1942-64

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	23	16	13	11	---	---
3	24	17	14	11	---	---
7	25	18	15	13	---	---
14	27	20	16	14	---	---
30	31	23	19	16	---	---
60	35	27	24	21	---	---
90	42	34	29	26	---	---
120	47	38	35	32	---	---
183	52	44	41	39	---	---

Magnitude and probability of instantaneous peak flow
based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow
based on period of record 1941-64

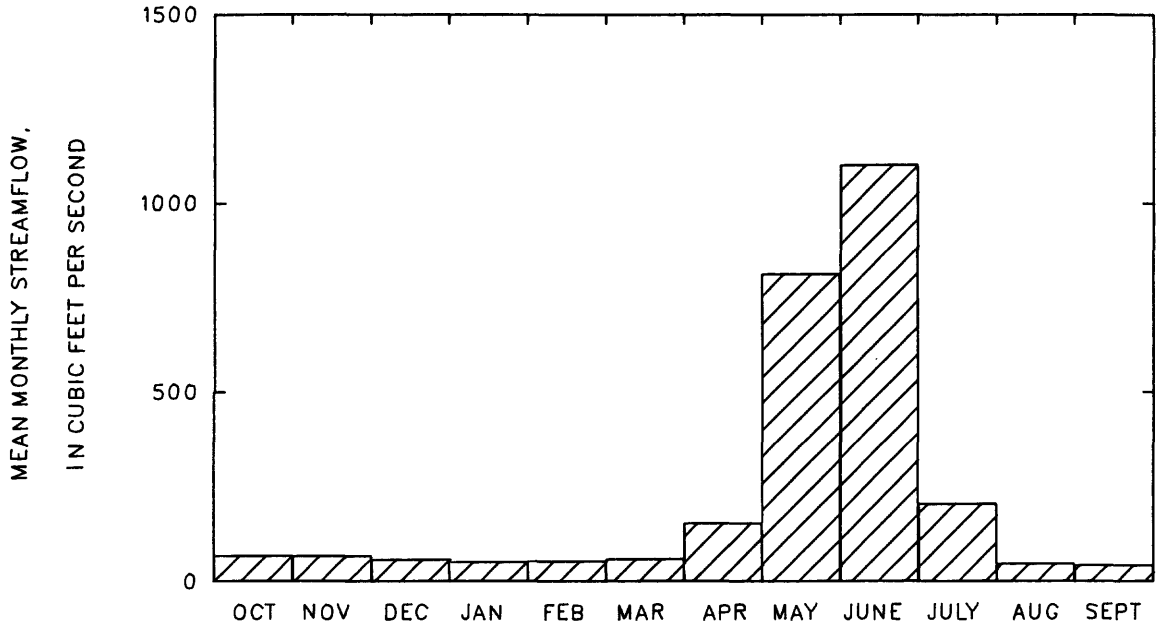
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1910	2530	2910	3370	---	---
3	1810	2360	2690	3070	---	---
7	1660	2180	2480	2840	---	---
15	1500	1930	2190	2480	---	---
30	1300	1660	1860	2080	---	---
60	970	1240	1390	1560	---	---
90	719	930	1060	1200	---	---

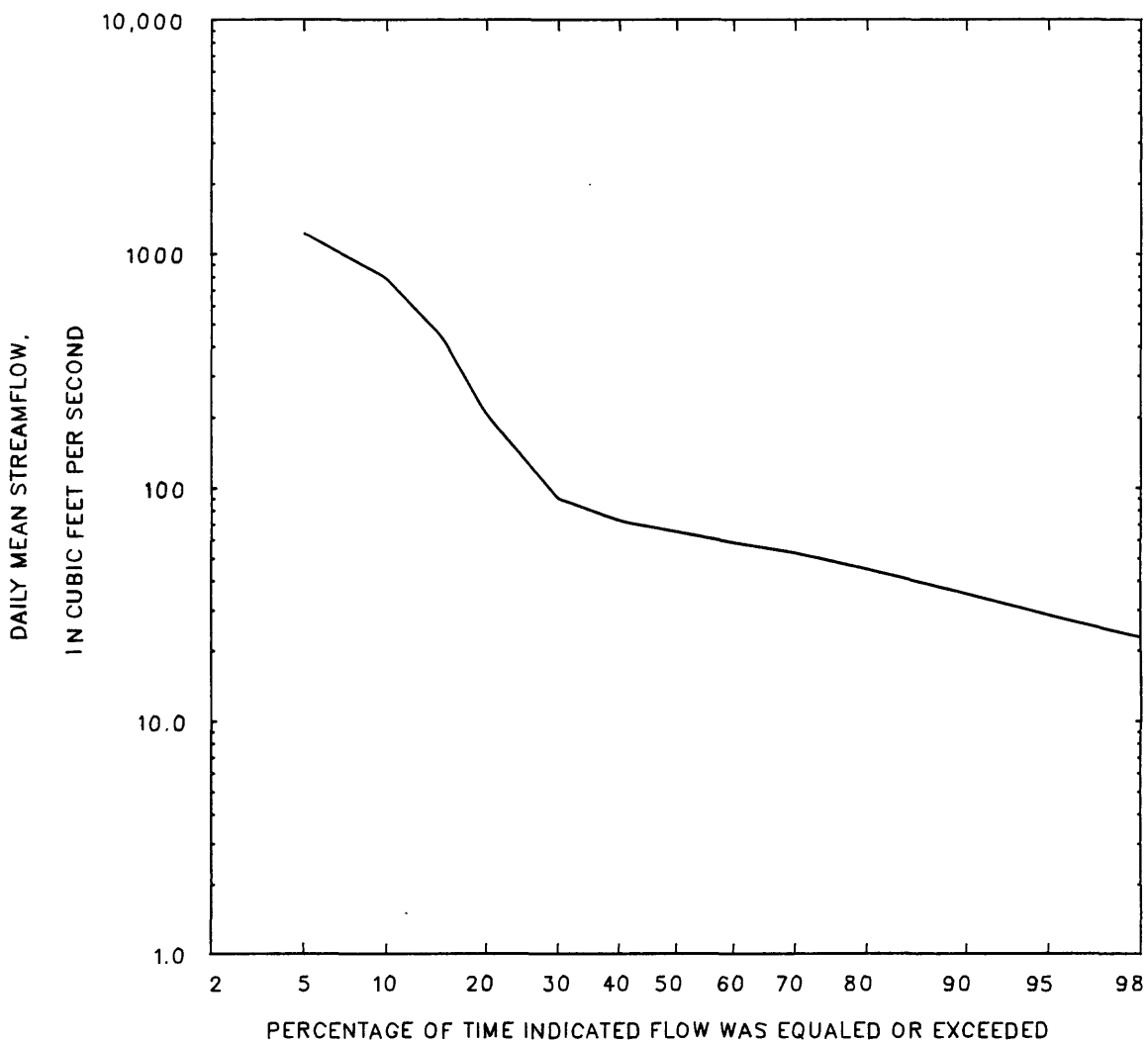
Duration of daily mean flow for period of record 1941-64

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1990	1220	779	437	205	89	72	64	58	52	45	35	28	23	20	16	9.7

STATION 06625000 PERIOD OF RECORD 1941–64

ENCAMPMENT RIVER AT MOUTH, NEAR ENCAMPMENT, WYO. (BEFORE TRANSBASIN DIVERSION)





06625000 ENCAMPMENT RIVER AT MOUTH, NEAR ENCAMPMENT, WYO.
(after transbasin diversion)

Monthly and annual streamflow 1965-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	165	29	78	34	0.44	2.4
November	147	43	79	24	0.30	2.4
December	91	52	71	11	0.16	2.2
January	79	40	62	10	0.16	1.9
February	88	40	60	11	0.19	1.8
March	84	46	65	9.9	0.15	2.0
April	177	77	122	30	0.24	3.8
May	1200	340	716	238	0.33	22.1
June	2030	320	1420	527	0.37	43.8
July	902	55	420	262	0.62	13.0
August	178	38	85	37	0.44	2.6
September	141	29	63	28	0.45	1.9
Annual	370	102	270	74	0.28	100

Magnitude and probability of annual low flow
based on period of record 1966-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	37	26	21	16	---	---
3	38	27	22	18	---	---
7	40	28	23	19	---	---
14	42	31	26	22	---	---
30	46	36	31	27	---	---
60	51	41	37	34	---	---
90	56	47	43	40	---	---
120	60	52	48	45	---	---
183	64	54	51	48	---	---

Magnitude and probability of instantaneous peak flow
based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow
based on period of record 1965-84

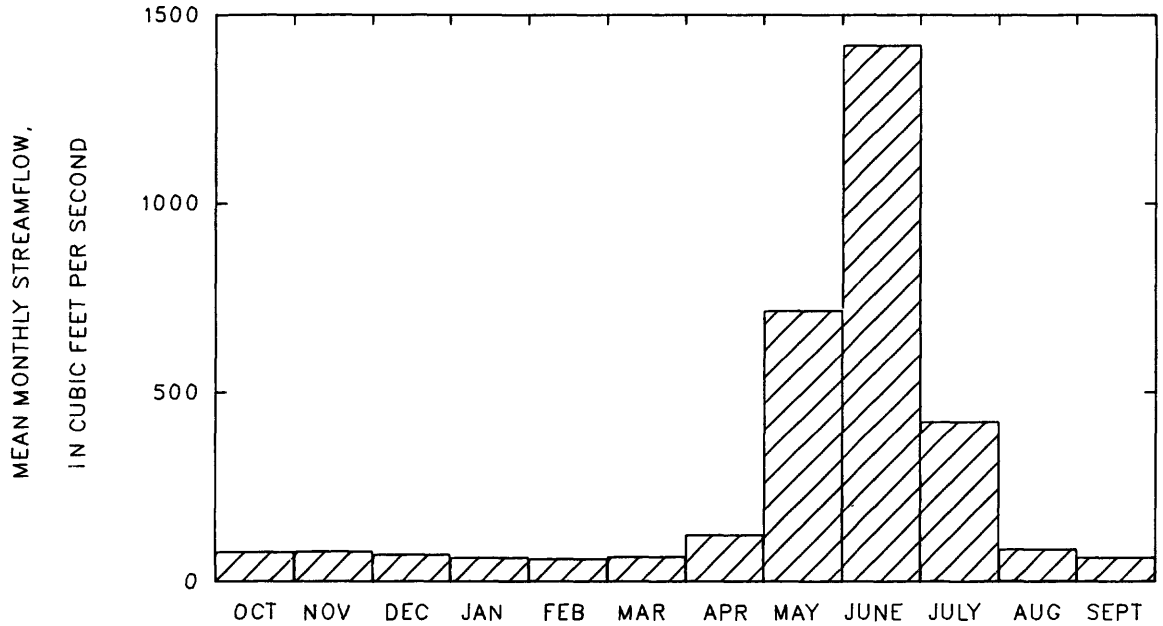
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2190	2730	2940	3110	---	---
3	2070	2570	2770	2930	---	---
7	1950	2440	2640	2800	---	---
15	1790	2230	2400	2530	---	---
30	1590	1990	2120	2210	---	---
60	1210	1540	1660	1760	---	---
90	899	1140	1230	1300	---	---

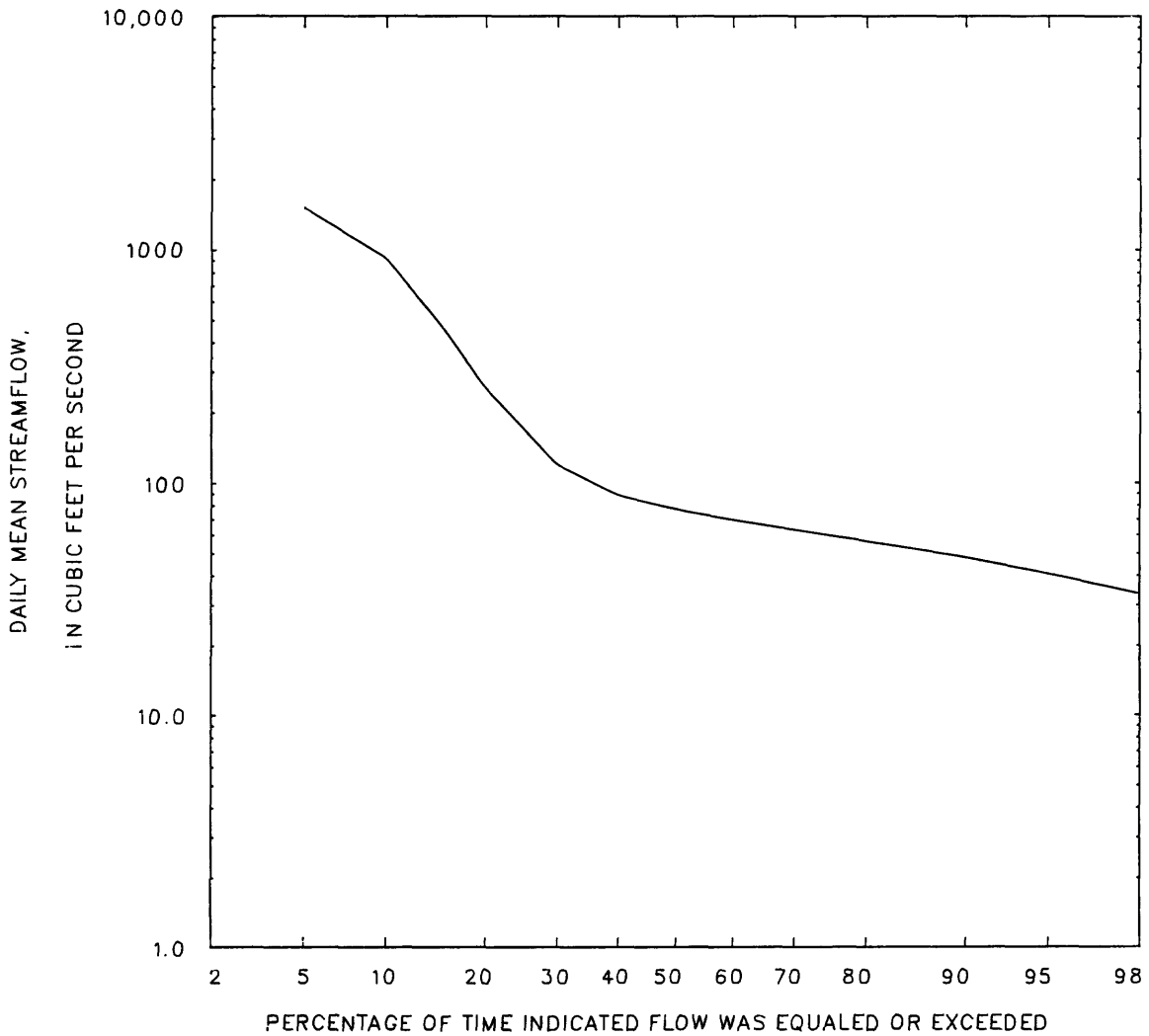
Duration of daily mean flow for period of record 1965-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2240	1500	916	474	253	119	88	77	69	62	56	48	40	33	29	26	16

STATION 06625000 PERIOD OF RECORD 1965–84

ENCAMPMENT RIVER AT MOUTH, NEAR ENCAMPMENT, WYO. (AFTER TRANSBASIN DIVERSION)





06627000 NORTH PLATTE RIVER AT SARATOGA, WYO.

LOCATION.--Lat 41°27'18", long 106°48'16", in SE¼SE¼ sec.11, T.17 N., R.84 W., Carbon County, on left bank 1,000 ft upstream from bridge on State Highway 130 in Saratoga and 1 mi downstream from Spring Creek.

DRAINAGE AREA.--2,840 mi^2.

PERIOD OF RECORD.--June 1903 to October 1906, April to December 1909, October 1910 to September 1970. Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 6,772.69 ft. Prior to April 25, 1911, non-recording gage at site 250 ft downstream at different datum. April 25, 1911, to November 1, 1930, non-recording gage at bridge 35 ft upstream at present datum.

REMARKS.--Diversions above station for irrigation of about 290,000 acres, part of which is above station and part below. Transbasin diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,000 ft^3/s, June 8, 1909, gage height, 11.06 ft, present datum, from floodmarks; minimum daily, 38 ft^3/s, July 18-20, 1934.

Monthly and annual streamflow 1904-06, 1911-14, 1916-70

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1020	129	403	191	0.47	2.9
November	708	157	365	114	0.31	2.7
December	537	179	296	77	0.26	2.2
January	455	151	261	58	0.22	1.9
February	608	140	283	69	0.25	2.1
March	1000	183	436	160	0.37	3.2
April	4110	493	1470	692	0.47	10.7
May	7540	1150	3490	1440	0.41	25.4
June	10500	280	4700	2200	0.47	34.2
July	4950	59	1280	951	0.75	9.3
August	1060	83	462	229	0.50	3.4
September	863	67	309	169	0.55	2.2
Annual	2210	330	1150	393	0.34	100

Magnitude and probability of annual low flow based on period of record 1905-06, 1912-14, 1917-70

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	165	112	90	74	58	49
3	170	116	92	76	59	50
7	178	123	98	80	63	53
14	186	131	106	87	69	59
30	203	146	120	101	81	70
60	228	172	145	125	105	93
90	256	194	163	138	113	98
120	277	214	182	156	129	113
183	294	227	198	177	156	143

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1904-06, 1911-14, 1916-70

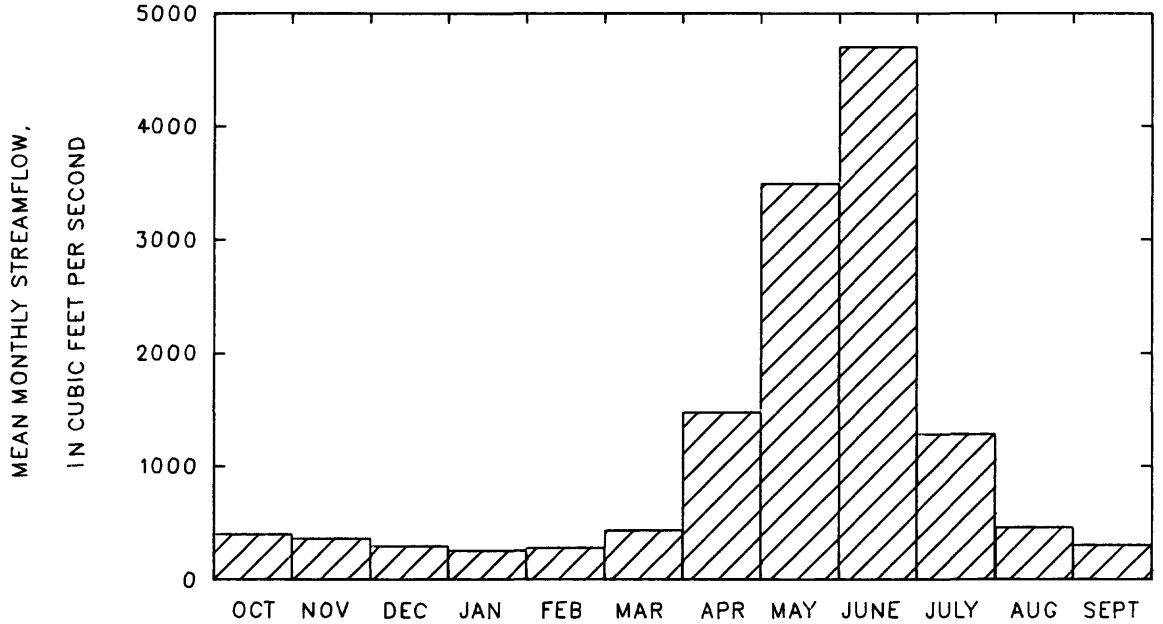
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	7530	10400	11900	13500	14500	15400
3	7170	9990	11500	13200	14200	15100
7	6630	9400	11000	12700	13900	14900
15	6020	8550	9990	11600	12600	13500
30	5250	7360	8530	9790	10600	11300
60	4100	5710	6620	7620	8260	8830
90	3300	4560	5260	6020	6510	6940

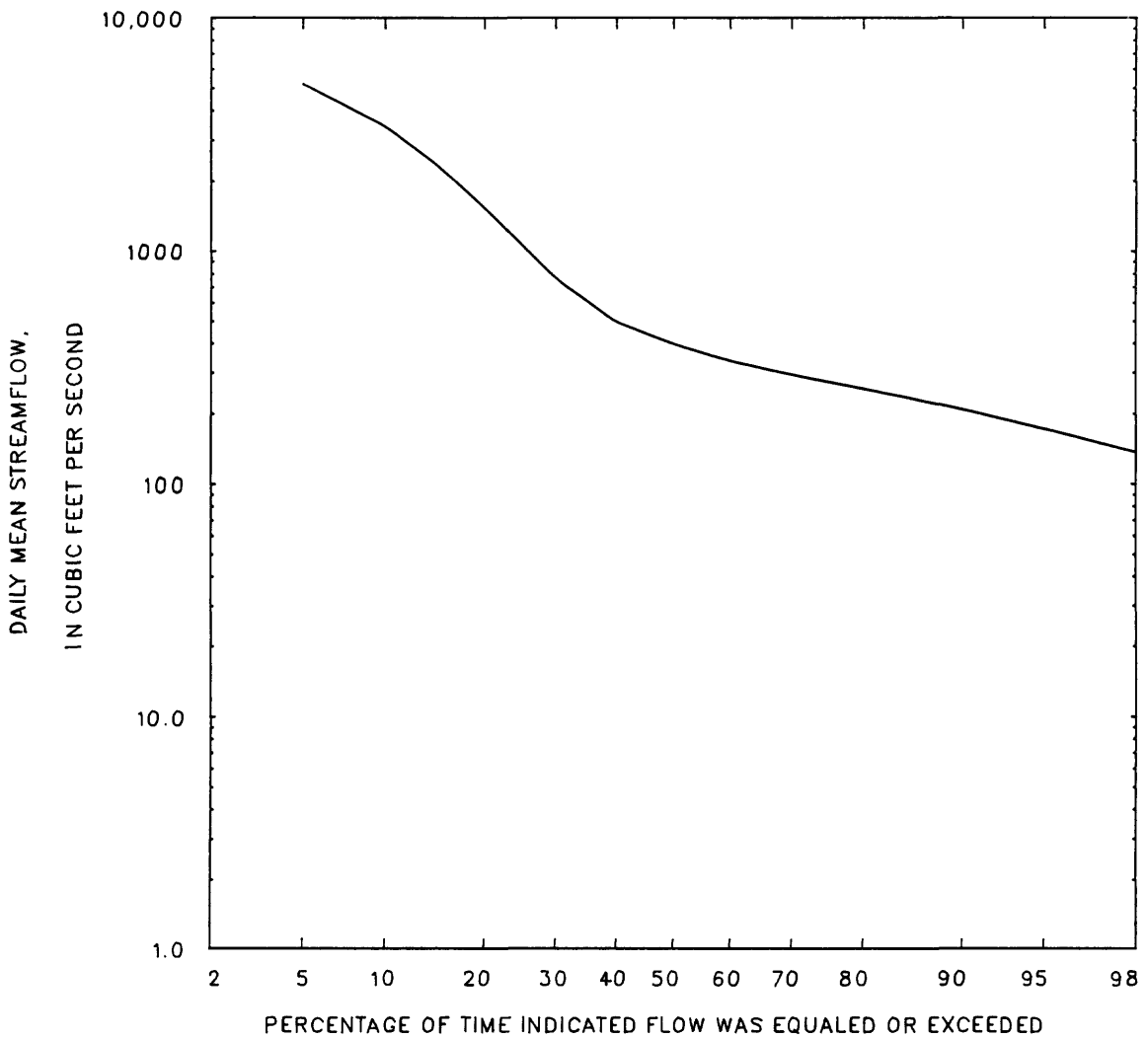
Duration of daily mean flow for period of record 1904-06, 1911-14, 1916-70

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
8780	5150	3430	2280	1530	758	491	394	333	290	253	207	171	136	112	95	51

STATION 06627000 PERIOD OF RECORD 1904–06, 1911–14, 1916–70

NORTH PLATTE RIVER AT SARATOGA, WYO.





06627500 JACK CREEK AT MATHESON RANCH, NEAR SARATOGA, WYO.

LOCATION.--Lat 41°24', long 107°00', in sec.31, T. 17 N., R.85 W., Carbon County, about 1 mi upstream from Willow Creek and about 12 mi west of Saratoga.

DRAINAGE AREA.--40.9 mi^2.

PERIOD OF RECORD.--August 1913 to September 1917, October 1918 to September 1924.

GAGE.--Staff gage. Altitude of gage is 7,200 ft, from topographic map. Prior to August 15, 1915, staff gage at site 200 ft upstream at different datum. August 15, 1915, to June 12, 1917, staff gage at site 1,000 ft upstream at different datum.

REMARKS.--Diversions above station for irrigation of about 7,000 acres above and below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 334 ft^3/s, May 22-24, 1920, gage height, 4.90 ft; no flow August 18-23, 1919.

Monthly and annual streamflow 1914-17, 1919-24

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	11	3.3	7.5	2.0	0.26	2.7
November	7.3	3.8	5.8	1.5	0.26	2.1
December	4.0	2.7	3.3	0.46	0.14	1.2
January	3.5	2.7	3.1	0.20	0.07	1.1
February	3.1	2.7	2.9	0.17	0.06	1.0
March	8.8	3.0	4.3	1.8	0.42	1.5
April	35	9.6	20	8.1	0.40	7.2
May	135	50	85	27	0.32	30.7
June	202	45	108	51	0.48	38.8
July	85	6.3	26	22	0.88	9.2
August	14	2.1	7.4	3.6	0.49	2.7
September	7.7	2.3	5.0	1.8	0.36	1.8
Annual	38	14	23	7.6	0.33	100

Magnitude and probability of annual low flow based on period of record 1915-17, 1920-24

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	2.4	0.00	0.00	---	---	---
3	2.7	0.00	0.00	---	---	---
7	2.8	1.1	0.50	---	---	---
14	3.0	1.8	1.2	---	---	---
30	3.0	2.4	2.1	---	---	---
60	3.0	2.7	2.5	---	---	---
90	3.1	2.9	2.8	---	---	---
120	3.3	3.1	3.0	---	---	---
183	4.4	3.9	3.7	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1914-17, 1919-24

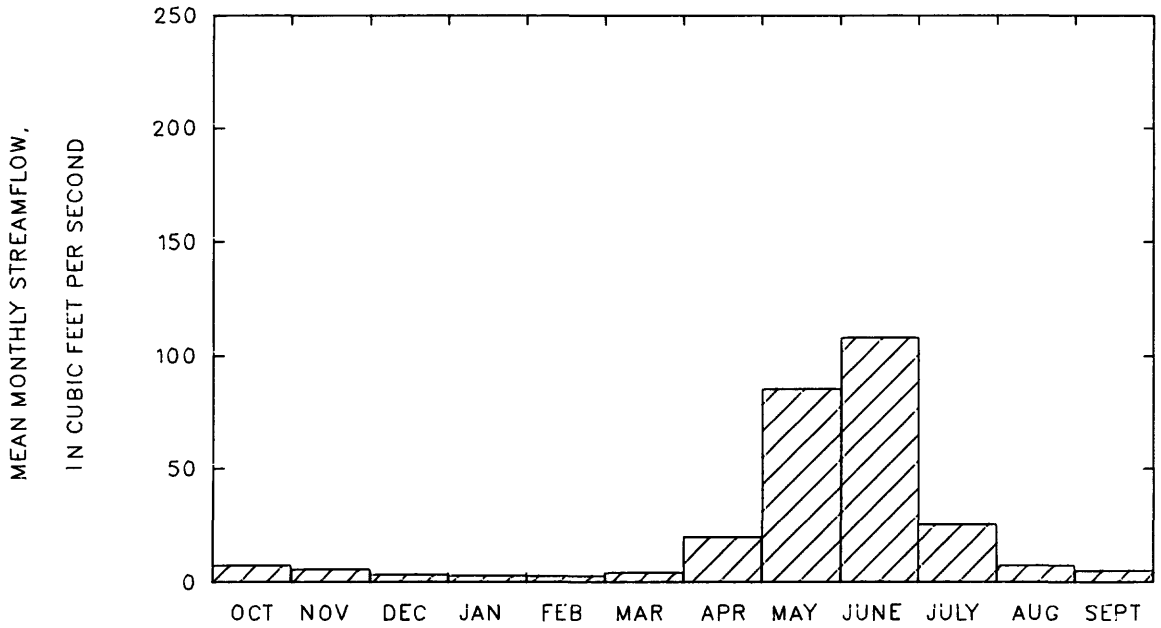
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	186	255	298	---	---	---
3	164	237	289	---	---	---
7	151	223	273	---	---	---
15	140	205	248	---	---	---
30	125	183	221	---	---	---
60	93	132	159	---	---	---
90	71	98	116	---	---	---

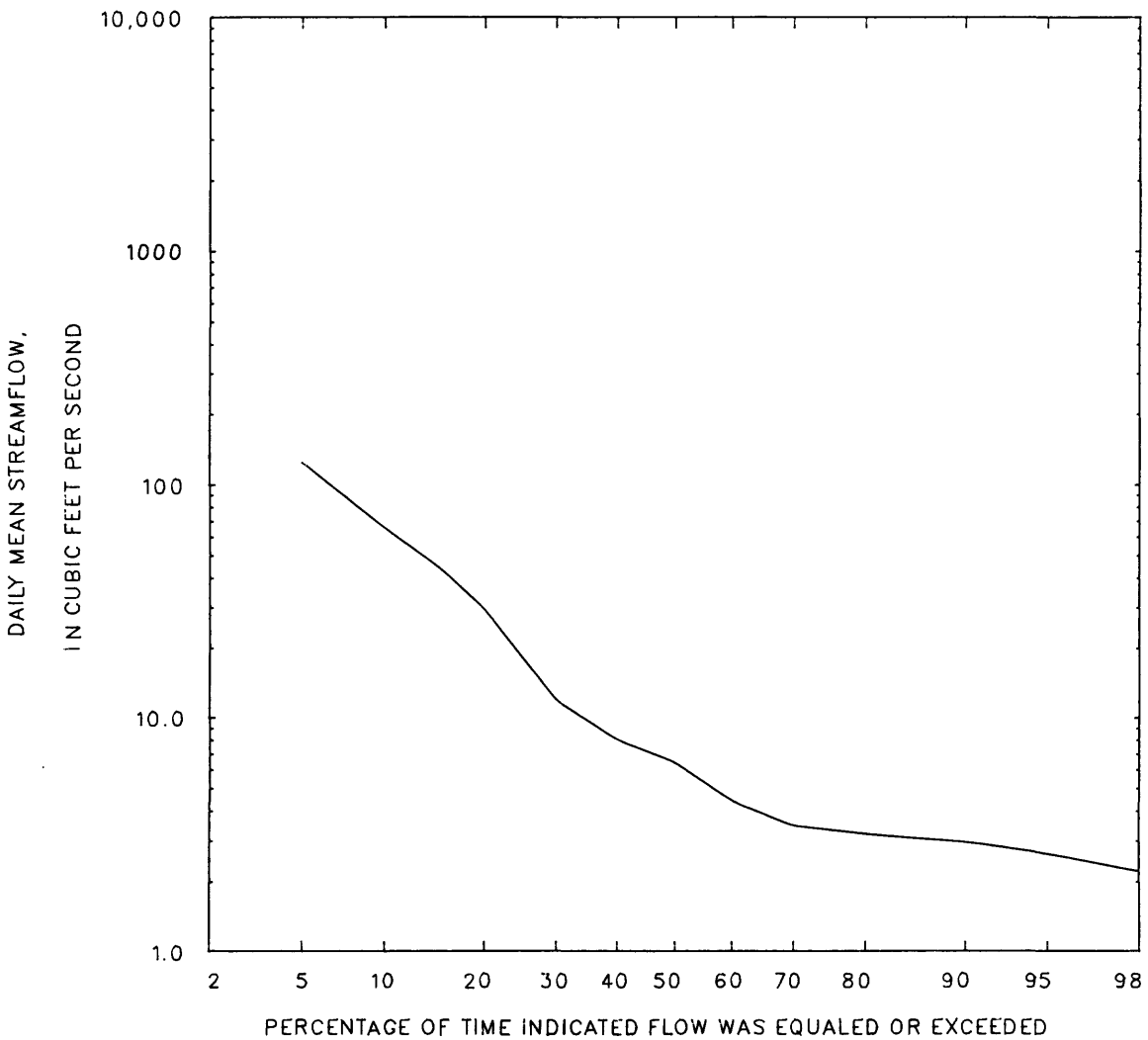
Duration of daily mean flow for period of record 1914-17, 1919-24

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
223	123	65	44	30	12	7.9	6.4	4.4	3.4	3.2	2.9	2.6	2.2	1.6	1.4	0.63

STATION 06627500 PERIOD OF RECORD 1914–17, 1919--24

JACK CREEK AT MATHESON RANCH, NEAR SARATOGA, WYO.





06628900 PASS CREEK NEAR ELK MOUNTAIN, WYO.

LOCATION.--Lat 41°35'10", long 106°36'37", in SW¼SW¼ sec.27, T.19 N., R.82 W., Carbon County, on right bank 235 ft downstream from Lone Tree Creek, 1,000 ft upstream from Brush Creek, 12 mi southwest of Elk Mountain, and 14 mi northeast of Saratoga.

DRAINAGE AREA.--91.5 mi^2. Area at mouth, 279 mi^2.

PERIOD OF RECORD.--April 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,230 ft, from topographic map. Prior to October 6, 1966, 15 ft downstream at present datum.

REMARKS.--Diversions for irrigation of about 6,300 acres above station. Diversion to Kerr ditch 7.5 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,660 ft^3/s, May 12, 1984, gage height, 9.12 ft, from floodmarks, from rating curve extended above 1,600 ft^3/s on basis of slope-area measurement of peak flow; minimum daily discharge, 1.5 ft^3/s, September 11, 12, 1959.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1938, 9.12 ft, May 12, 1984, from floodmarks, from information by local resident.

Monthly and annual streamflow 1958-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	21	5.0	12	4.8	0.39	2.3
November	25	5.2	12	4.2	0.36	2.3
December	18	6.9	10	2.9	0.28	2.0
January	15	5.4	9.5	2.6	0.27	1.8
February	24	4.4	10	3.7	0.37	1.9
March	45	7.3	17	9.9	0.58	3.3
April	151	15	59	31	0.52	11.3
May	540	63	192	113	0.59	36.9
June	360	38	140	79	0.56	27.0
July	86	9.5	33	18	0.53	6.4
August	32	4.3	14	7.7	0.55	2.7
September	24	3.4	11	5.6	0.53	2.0
Annual	86	20	43	18	0.41	100

Magnitude and probability of annual low flow based on period of record 1958-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	4.6	3.0	2.4	2.0	1.6	---
3	4.8	3.2	2.5	2.1	1.6	---
7	5.3	3.5	2.8	2.3	1.8	---
14	5.9	3.9	3.2	2.6	2.1	---
30	6.7	4.7	3.8	3.3	2.8	---
60	7.7	5.5	4.6	4.0	3.4	---
90	8.3	6.3	5.4	4.8	4.1	---
120	8.8	6.8	5.9	5.4	4.8	---
183	9.6	7.4	6.6	5.9	5.3	---

Magnitude and probability of instantaneous peak flow based on 28 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
525	924	1270	1810	2290	1860

Weighted skew = 0.342

Magnitude and probability of annual high flow based on period of record 1958-84

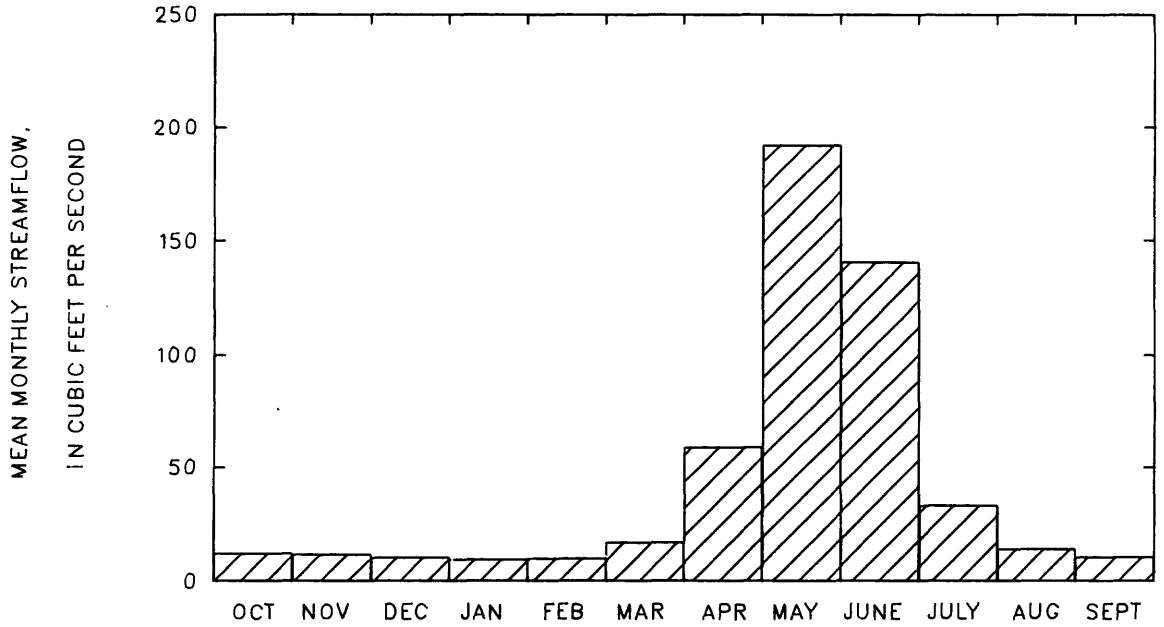
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	321	536	722	1020	1290	---
3	286	472	627	863	1070	---
7	257	417	543	727	882	---
15	220	359	472	641	787	---
30	193	309	399	530	640	---
60	154	237	297	378	442	---
90	122	182	224	279	322	---

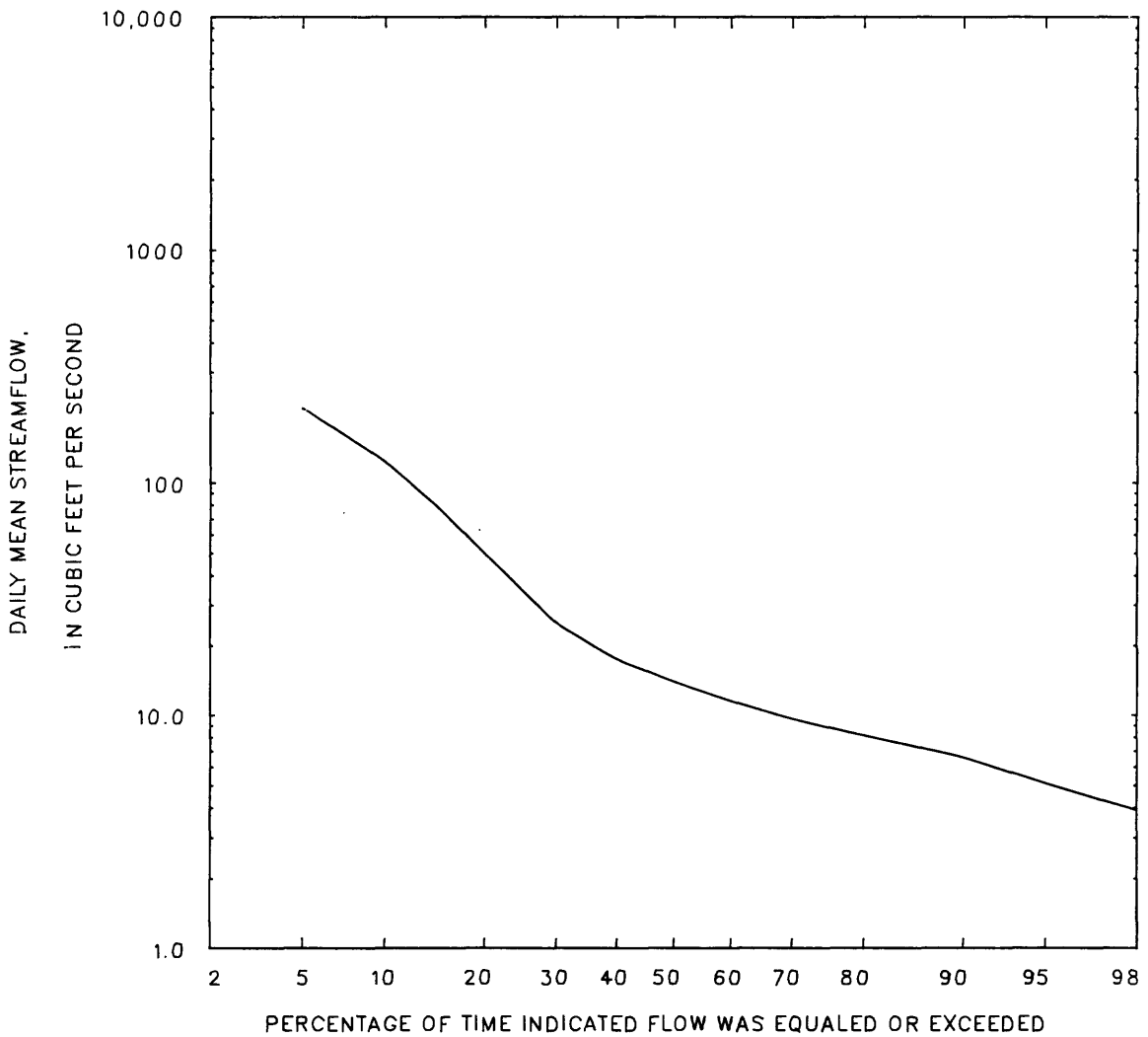
Duration of daily mean flow for period of record 1958-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
407	207	124	77	50	25	17	14	11	9.5	8.1	6.6	5.1	3.9	3.4	3.0	2.2

STATION 06628900 PERIOD OF RECORD 1958–84

PASS CREEK NEAR ELK MOUNTAIN, WYO.





06630000 NORTH PLATTE RIVER ABOVE SEMINOE RESERVOIR, NEAR SINCLAIR, WYO.

LOCATION.--Lat 41°52'20", long 107°03'25", in SW¼SW¼ sec.13, T.22 N., R.86 W., Carbon County, on left bank 6.5 mi northeast of Sinclair and 14 mi upstream from high-water line of Seminoe Reservoir at elevation 6,357 ft.

DRAINAGE AREA.--4,175 mi^2, of which 114 mi^2 is probably noncontributing.

PERIOD OF RECORD.--July 1939 to current year. Prior to October 1943, published as "near Parco."

GAGE.--Water-stage recorder. Datum of gage is 6,400.75 ft.

REMARKS.--Diversions for irrigation of about 215,000 acres above station. Transbasin diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft^3/s, May 26, 1984, gage height, 10.84 ft; minimum daily, 70 ft^3/s, September 17, 1944.

Monthly and annual streamflow 1940-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1040	157	397	193	0.49	2.9
November	745	240	406	120	0.30	2.9
December	499	226	337	72	0.21	2.4
January	449	181	303	71	0.23	2.2
February	643	193	324	77	0.24	2.3
March	884	205	483	159	0.33	3.5
April	4390	508	1410	692	0.49	10.2
May	8570	1210	3230	1540	0.48	23.4
June	10000	830	4590	2060	0.45	33.2
July	5260	272	1500	1180	0.78	10.9
August	1480	135	520	310	0.60	3.8
September	821	93	308	170	0.55	2.2
Annual	2170	467	1150	416	0.36	100

Magnitude and probability of annual low flow based on period of record 1941-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	165	115	94	80	66	58
3	171	119	98	83	69	61
7	179	125	102	87	72	63
14	191	135	112	95	79	70
30	214	153	127	108	89	78
60	247	186	159	139	119	108
90	278	220	194	175	156	145
120	302	243	216	197	177	165
183	319	257	231	213	196	185

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1940-84

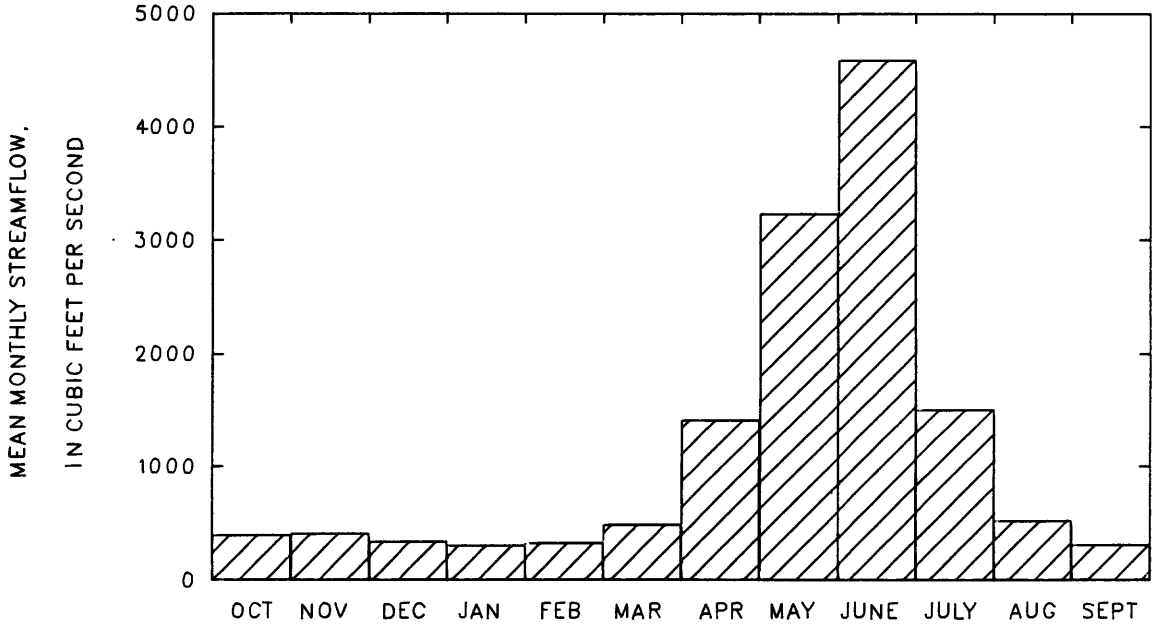
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	7060	9830	11400	13300	14500	15600
3	6740	9420	11000	12800	14000	15100
7	6190	8770	10300	12100	13300	14500
15	5610	7960	9350	10900	12000	13000
30	4930	6970	8170	9520	10400	11200
60	3880	5550	6550	7720	8510	9250
90	3140	4470	5280	6220	6870	7470

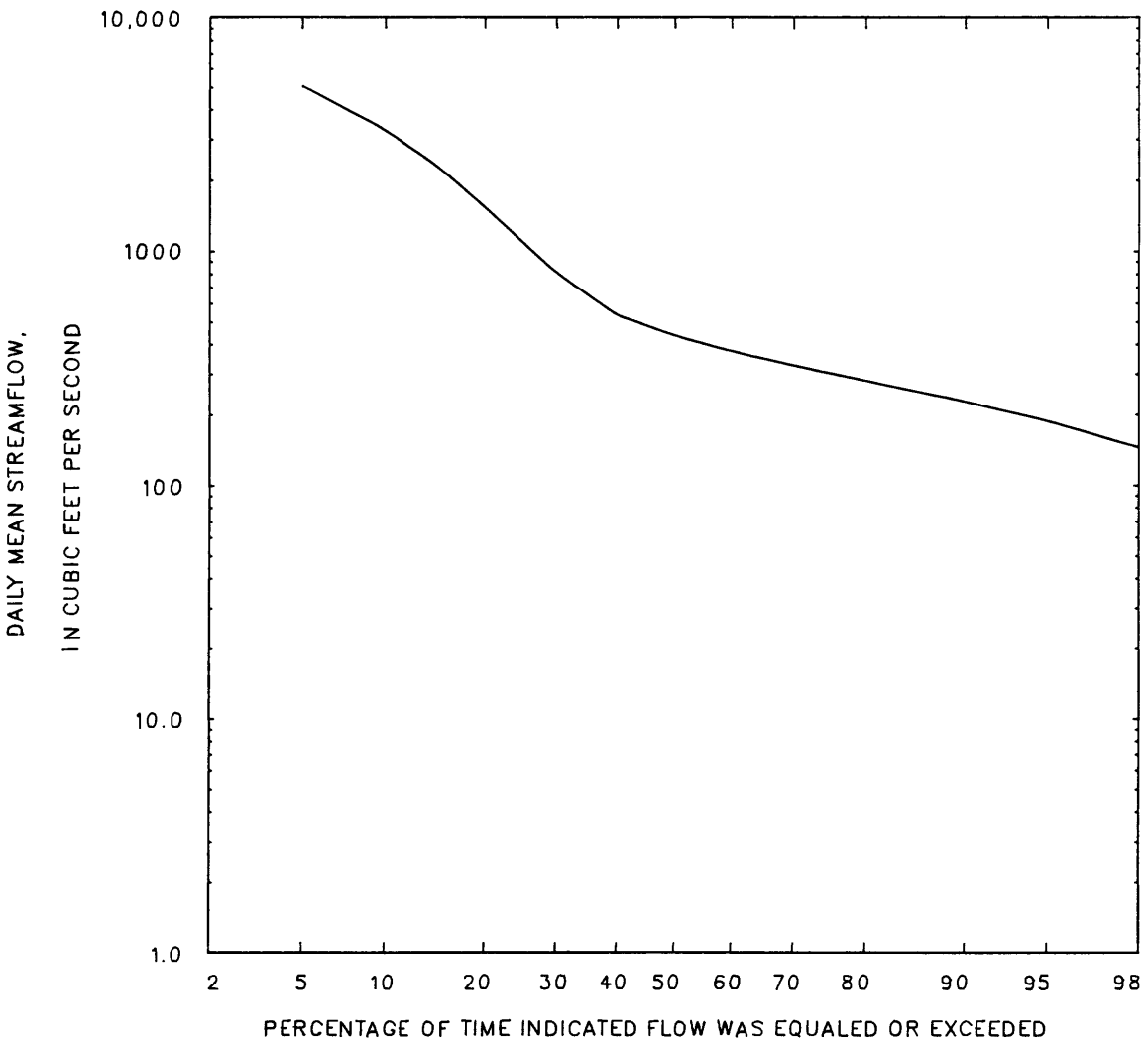
Duration of daily mean flow for period of record 1940-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
8250	5030	3280	2250	1540	804	532	431	372	324	278	227	187	143	119	104	85

STATION 06630000 PERIOD OF RECORD 1940–84

NORTH PLATTE RIVER ABOVE SEMINOE RESERVOIR, NEAR SINCLAIR, WYO.





06631500 MEDICINE BOW RIVER ABOVE ROCK CREEK, NEAR MEDICINE BOW, WYO.

LOCATION.--Lat 41°52'55", long 106°09'05", in NE¼ sec.15, T.22 N., R.78 W., Carbon County, on right bank 50 ft upstream from bridge on U.S. Highways 30 and 287, 1.75 mi downstream from Foote Creek, 2.5 mi upstream from Rock Creek, and 2.5 mi southeast of Medicine Bow.

DRAINAGE AREA.--436 mi^2, of which 35 mi^2 is probably noncontributing.

PERIOD OF RECORD.--October 1951 to September 1963.

GAGE.--Water-stage recorder. Datum of gage is 6,564.70 ft.

REMARKS.--Diversions for irrigation of about 37,000 acres above station. Five small reservoirs above station for irrigation (combined capacity, about 200 acre-ft).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,340 ft^3/s, June 15, 1957, gage height, 7.10 ft; no flow at times in each year.

Monthly and annual streamflow 1952-60, 1962-63

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	33	0.00	8.8	11	1.3	1.4
November	30	1.3	11	8.1	0.72	1.7
December	28	3.2	13	6.8	0.54	1.9
January	25	3.2	13	6.0	0.46	2.0
February	43	4.1	20	10	0.52	3.1
March	55	9.5	32	13	0.42	4.9
April	224	35	92	62	0.68	14.1
May	382	9.9	165	140	0.85	25.5
June	584	9.9	238	165	0.69	36.7
July	308	0.97	44	91	2.1	6.8
August	48	0.00	10	13	1.3	1.6
September	11	0.00	1.4	3.3	2.4	0.2
Annual	109	13	54	33	0.62	100

Magnitude and probability of annual low flow based on period of record 1953-60, 1962-63

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.14	0.00	---	---	---	---
90	2.0	0.10	---	---	---	---
120	5.2	1.3	---	---	---	---
183	7.4	3.3	---	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1952-60, 1962-63

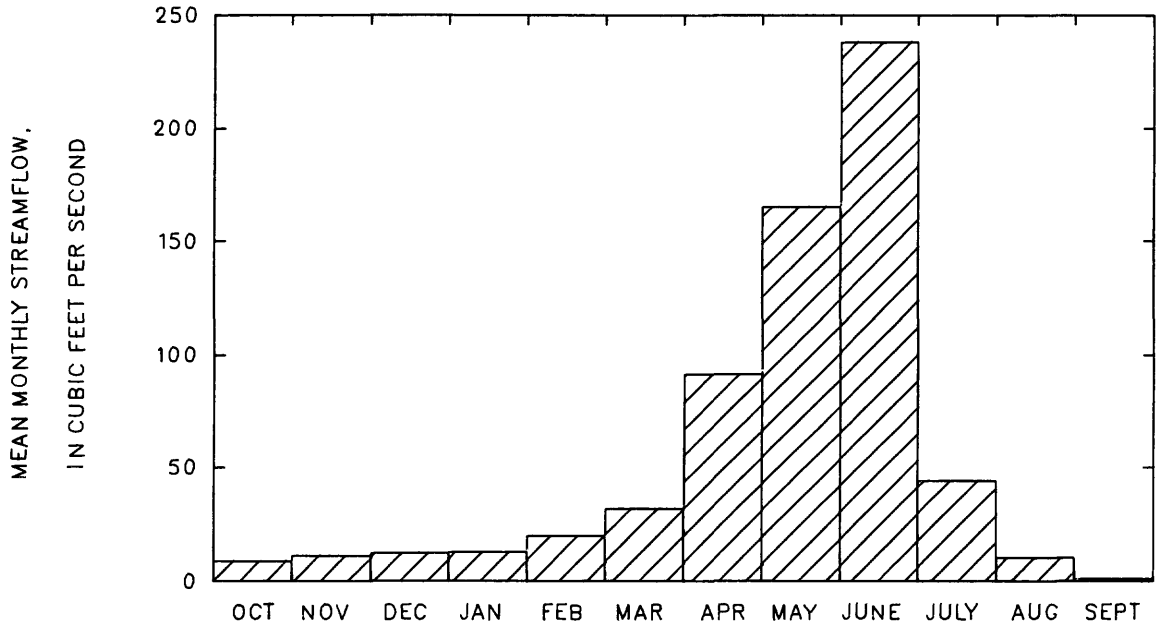
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	568	863	---	---	---	---
3	516	791	---	---	---	---
7	452	745	---	---	---	---
15	374	627	---	---	---	---
30	274	490	---	---	---	---
60	181	340	---	---	---	---
90	150	273	---	---	---	---

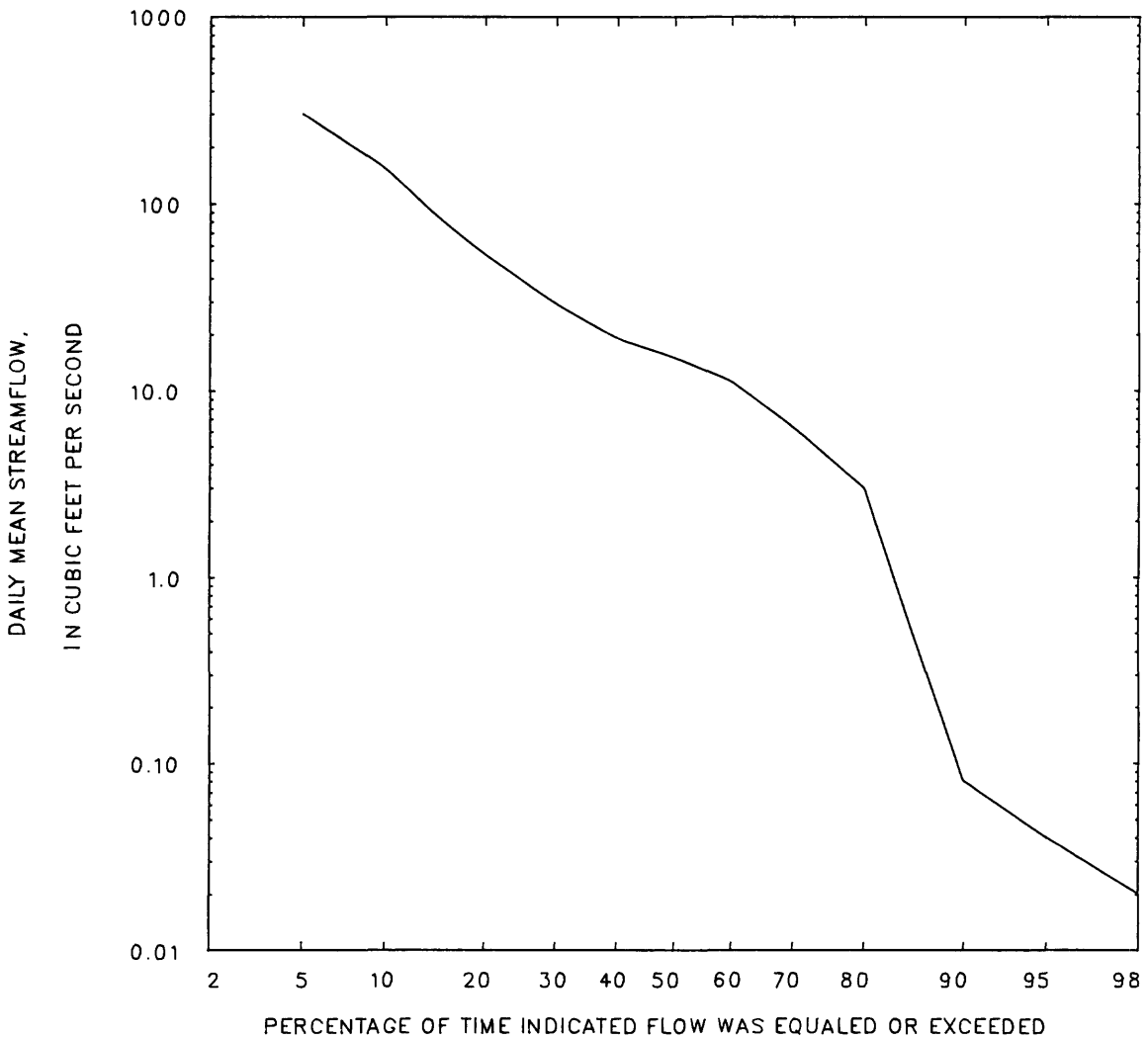
Duration of daily mean flow for period of record 1952-60, 1962-63

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
644	299	154	82	53	29	19	15	11	6.3	3.0	0.08	0.04	0.02	0.01	0.00	0.00

STATION 06631500 PERIOD OF RECORD 1952–60, 1962–63

MEDICINE BOW RIVER ABOVE ROCK CREEK, NEAR MEDICINE BOW, WYO.





06632400 ROCK CREEK ABOVE KING CANYON CANAL, NEAR ARLINGTON, WYO.

LOCATION.--Lat 41°35'07", long 106°13'20", in SE¼SW¼ sec.25, T.19 N., R.79 W., Carbon County, on left bank 200 ft upstream from point of diversion to King Canyon Canal, 0.4 mi downstream from Overland Creek, 1.0 mi southwest of Arlington, and 6.9 mi southwest of McFadden.

DRAINAGE AREA.--62.9 mi^2.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,790 ft, from topographic map.

REMARKS.--Minor regulation by Sand Lake, capacity, 1,100 acre-ft on Deep Creek, 12 mi upstream. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,590 ft^3/s, June 19, 1971, gage height, 5.83 ft; maximum gage height, 5.92 ft, June 24, 1983; minimum daily discharge, 5.5 ft^3/s, December 21, 1967.

Monthly and annual streamflow 1966-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	40	12	18	7.7	0.43	1.6
November	23	8.9	14	3.8	0.27	1.3
December	19	6.8	12	3.2	0.27	1.1
January	15	7.7	11	2.3	0.20	1.0
February	17	7.0	12	3.0	0.26	1.1
March	16	7.1	11	2.1	0.19	1.0
April	44	12	19	8.2	0.42	1.8
May	409	59	202	86	0.42	18.4
June	1020	216	576	222	0.39	52.4
July	420	31	164	114	0.70	14.9
August	67	16	35	16	0.46	3.2
September	40	10	25	9.2	0.37	2.2
Annual	142	51	91	26	0.28	100

Magnitude and probability of annual low flow based on period of record 1967-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	7.2	6.1	5.7	5.4	---	---
3	7.6	6.6	6.1	5.8	---	---
7	8.1	6.9	6.5	6.2	---	---
14	8.6	7.4	6.9	6.4	---	---
30	9.3	7.9	7.3	6.8	---	---
60	10	8.4	7.7	7.2	---	---
90	10	8.8	8.2	7.6	---	---
120	11	9.3	8.6	8.0	---	---
183	12	11	9.8	9.3	---	---

Magnitude and probability of instantaneous peak flow based on 19 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1440	2010	2370	2810	3120	3425

Weighted skew = -0.238

Magnitude and probability of annual high flow based on period of record 1966-84

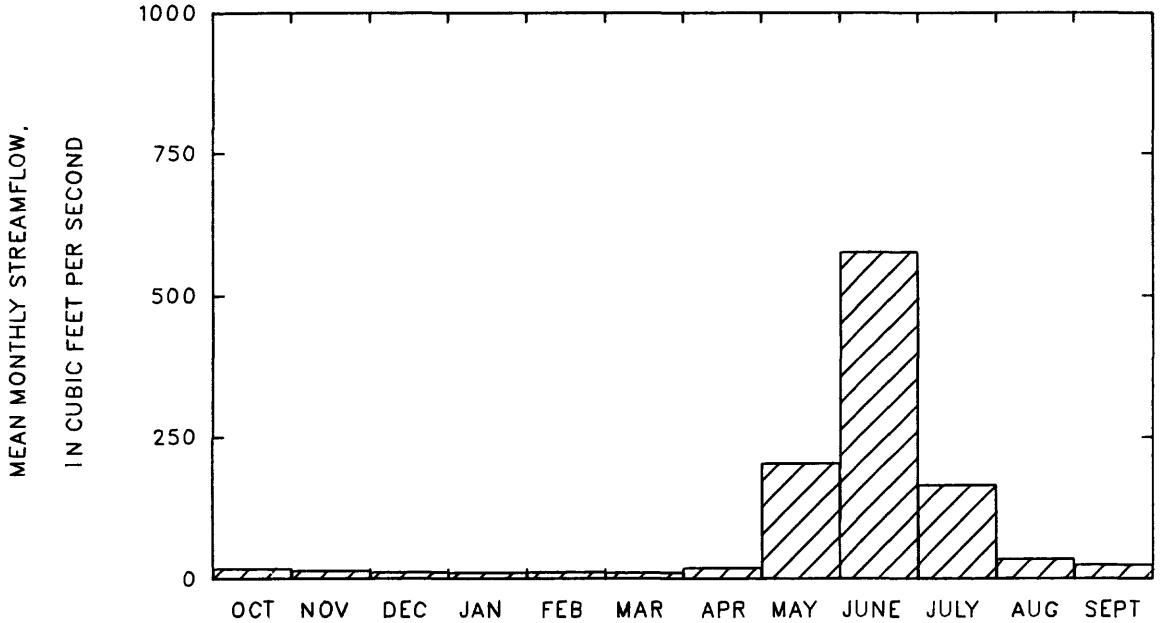
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	977	1290	1490	1720	---	---
3	917	1190	1360	1560	---	---
7	831	1100	1280	1480	---	---
15	712	948	1100	1300	---	---
30	610	802	913	1040	---	---
60	430	559	633	717	---	---
90	311	402	455	516	---	---

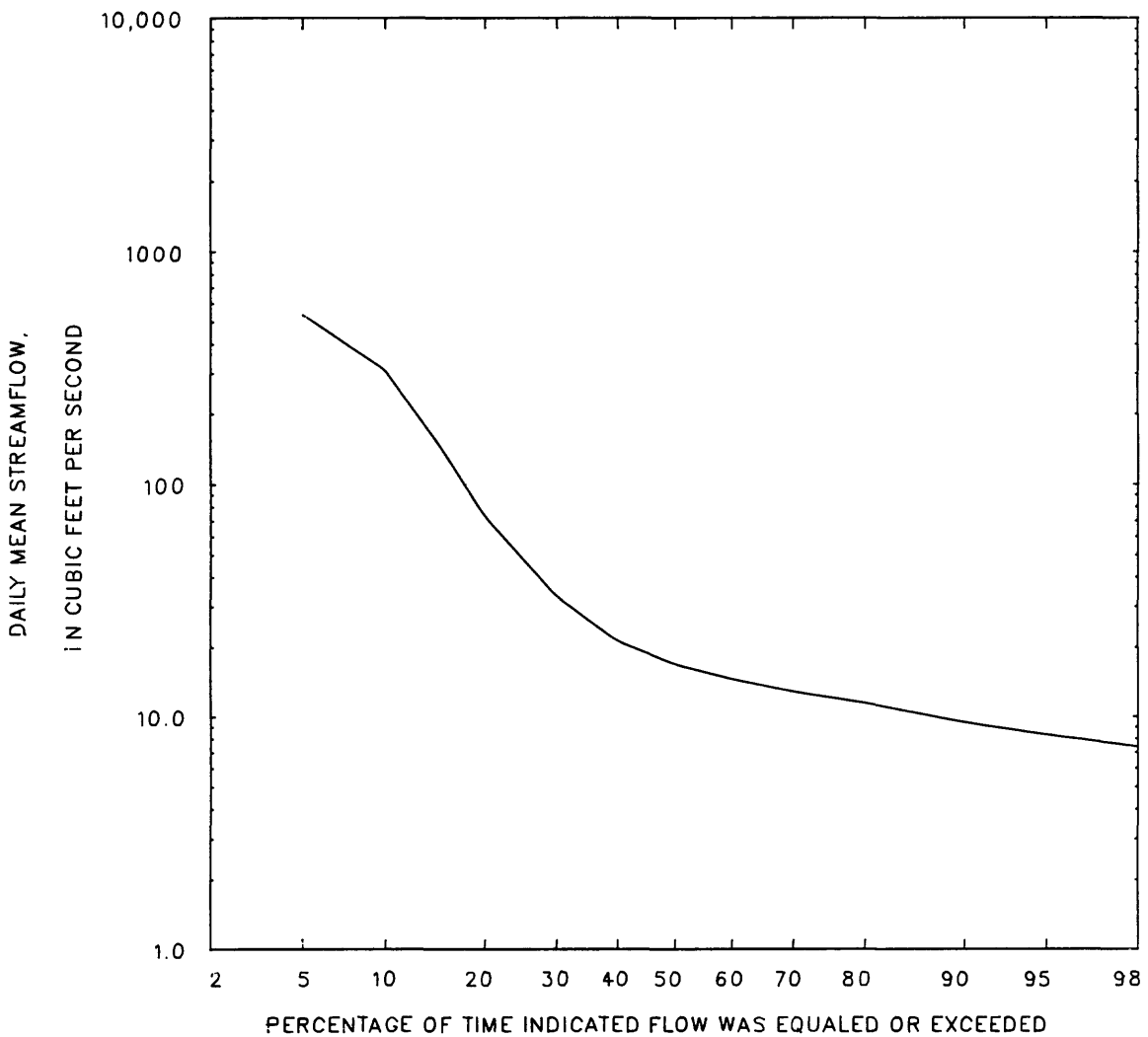
Duration of daily mean flow for period of record 1966-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
991	531	307	144	73	33	21	17	14	13	11	9.4	8.3	7.3	6.8	6.6	5.8

STATION 06632400 PERIOD OF RECORD 1966–84

ROCK CREEK ABOVE KING CANYON CANAL, NEAR ARLINGTON, WYO.





06632500 ROCK CREEK AT ARLINGTON, WYO.

LOCATION.--Lat 41°35'12", long 106°13'16", in NW¼SE¼ sec.25, T.19 N., R.79 W., Carbon County, on left bank 10 ft downstream from county road bridge, 0.50 mi downstream from Overland Creek, 0.8 mi southwest of Arlington, and 6.8 mi southwest of McFadden.

DRAINAGE AREA.--64.5 mi^2.

PERIOD OF RECORD.--October 1910 to September 1918, September 1939 to September 1965, Monthly discharge only for some periods; published in WSP 1310. Published as "near Arlington," 1911-13, 1916-18.

GAGE.--Water-stage recorder. Altitude of gage is 7,780 ft, from topographic map. Prior to July 12, 1912, staff gage and July 12, 1912, to January 11, 1916, water-stage recorder, at site 1 mile downstream at different datum. January 12, 1916, to September 30, 1918, water-stage recorder at site 40 ft upstream at present datum.

REMARKS.--Diversions above station for irrigation of about 4,900 acres above and below station. King Canyon Canal diverts water from right bank 300 ft above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,720 ft^3/s, June 19, 1953, gage height, 4.96 ft, from rating curve extended above 1,400 ft^3/s; minimum daily, 1 ft^3/s, January 5, 6, 1915.

Monthly and annual streamflow 1912-18, 1940-65

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	44	7.3	16	8.7	0.54	1.9
November	33	4.6	13	6.3	0.50	1.5
December	32	3.6	11	5.8	0.51	1.3
January	26	5.0	10	4.6	0.45	1.2
February	25	5.6	11	4.5	0.42	1.2
March	33	6.6	12	6.0	0.51	1.4
April	72	12	25	15	0.60	2.9
May	344	41	201	74	0.37	23.5
June	866	165	417	166	0.40	48.8
July	380	31	99	76	0.77	11.5
August	88	10	25	13	0.54	2.9
September	44	8.5	16	7.5	0.46	1.9
Annual	141	42	71	21	0.29	100

Magnitude and probability of annual low flow based on period of record 1912-18, 1941-65

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	6.1	3.9	2.9	2.2	1.6	---
3	6.8	4.5	3.4	2.7	2.0	---
7	7.2	5.0	4.0	3.3	2.6	---
14	7.7	5.4	4.5	3.8	3.2	---
30	8.2	5.8	4.8	4.1	3.4	---
60	8.5	6.5	5.8	5.4	5.0	---
90	8.9	7.0	6.4	6.0	5.6	---
120	9.5	7.4	6.6	6.2	5.7	---
183	11	8.3	7.5	7.0	6.6	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1912-18, 1940-65

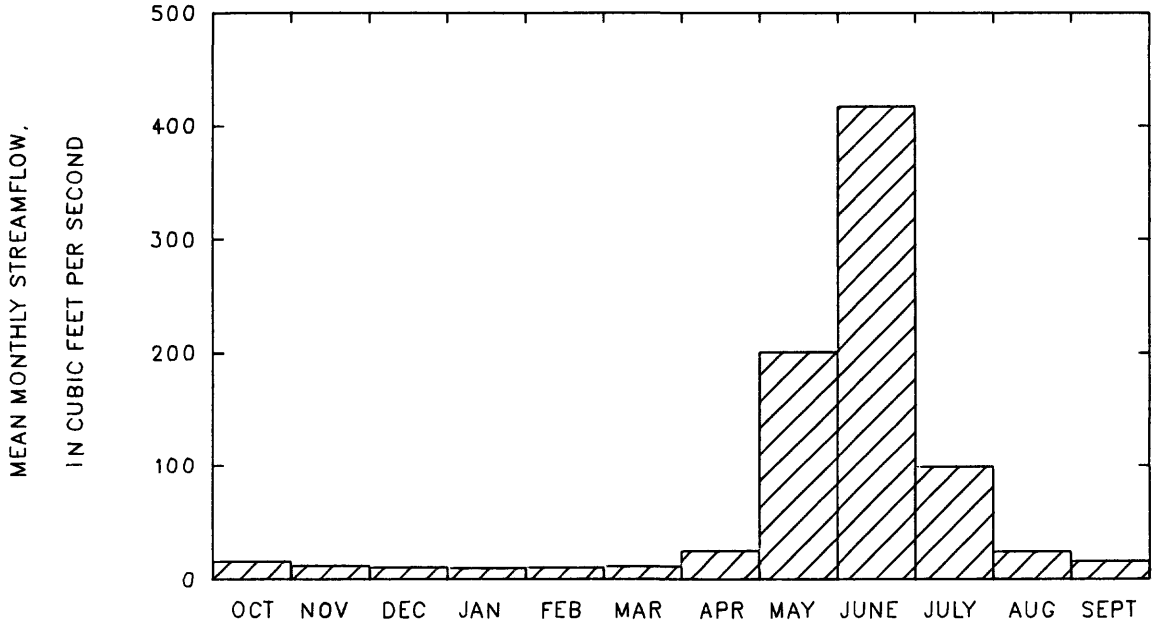
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	757	989	1140	1320	1450	---
3	703	921	1060	1240	1370	---
7	635	839	975	1150	1280	---
15	547	726	844	994	1110	---
30	451	589	682	802	893	---
60	314	403	462	540	599	---
90	231	296	340	395	437	---

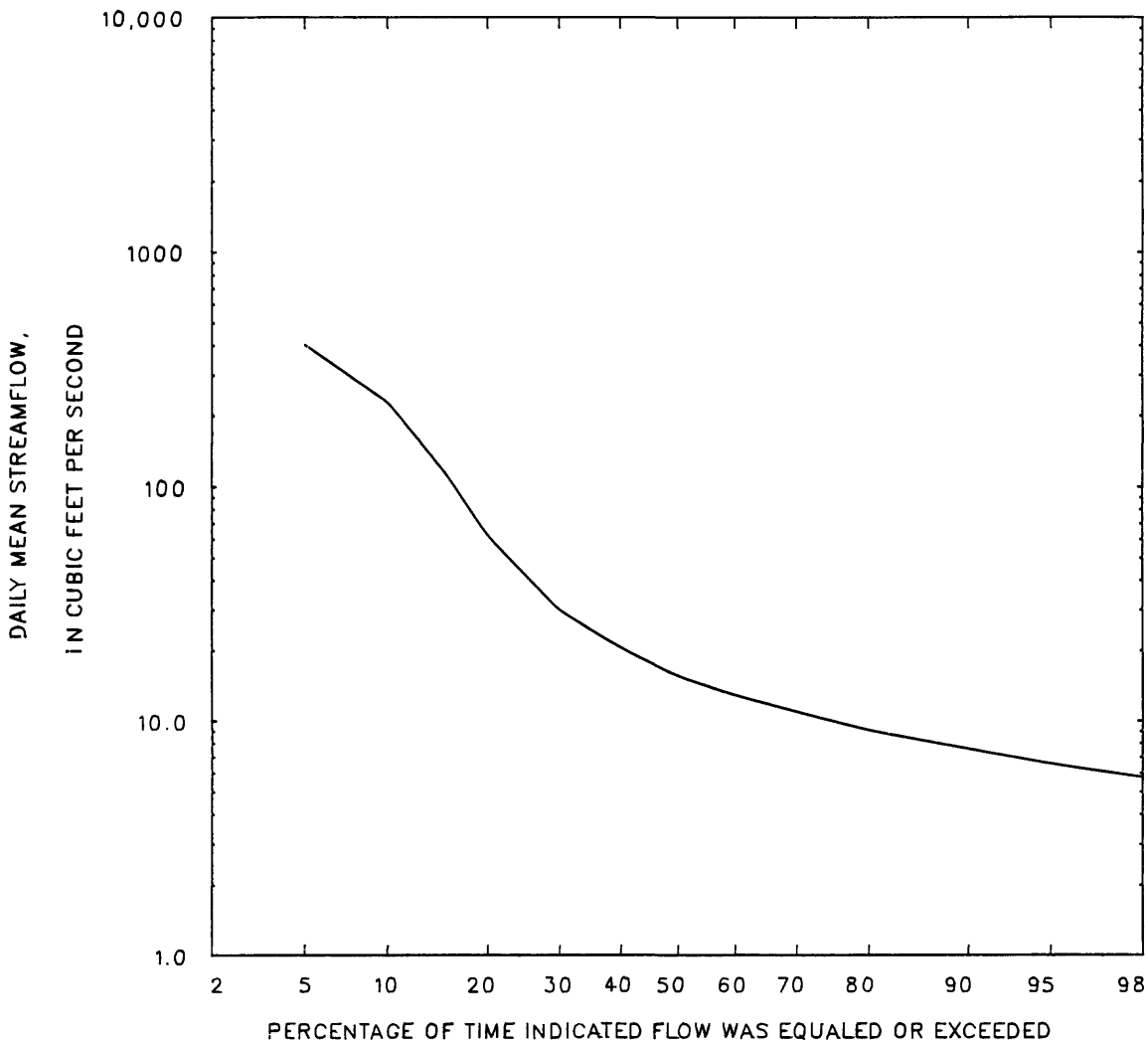
Duration of daily mean flow for period of record 1912-18, 1940-65

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
775	400	227	118	62	30	20	15	13	11	9.0	7.5	6.5	5.7	4.8	4.1	2.3

STATION 06632500 PERIOD OF RECORD 1912–18, 1940–65

ROCK CREEK AT ARLINGTON, WYO.





06633500 ROCK CREEK BELOW ROCK RIVER, WYO.

LOCATION.--Lat 41°46'35", long 105°55'48", in NE¼SW¼ sec.22, T.21 N., R.76 W., Albany County, on left bank 0.6 mi upstream from Johnston ditch and 3.4 mi northeast of town of Rock River.

DRAINAGE AREA.--218 mi^2.

PERIOD OF RECORD.--September 1940 to November 1941, March to September 1942, May 1951 to September 1968.

GAGE.--Digital water-stage recorder. Altitude of gage is 6,740 ft, from topographic map. Prior to July 12, 1966, graphic water-stage recorder at present site and datum.

REMARKS.--Diversions above station for irrigation of about 32,000 acres above and below station. Several small reservoirs above station for irrigation (combined capacity, about 3,300 acre-ft).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,490 ft^3/s, June 17, 1965, gage height 7.63 ft; no flow at times in 1942, 1954-56, 1958-60, 1963, 1967.

Monthly and annual streamflow 1941, 1952-68

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	30	0.72	8.0	7.1	0.88	2.3
November	22	1.5	9.6	5.7	0.59	2.7
December	28	1.3	8.9	6.8	0.76	2.5
January	17	0.58	7.8	4.9	0.63	2.2
February	39	0.18	12	9.5	0.80	3.4
March	35	2.0	18	9.3	0.53	5.0
April	77	10	32	21	0.65	9.1
May	98	9.0	47	25	0.52	13.5
June	351	30	159	97	0.61	45.3
July	181	1.4	36	42	1.2	10.2
August	22	0.06	8.2	6.4	0.78	2.3
September	21	0.03	5.0	5.2	1.0	1.4
Annual	54	9.7	29	14	0.47	100

Magnitude and probability of annual low flow based on period of record 1953-68

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	---	---	---
3	0.00	0.00	0.00	---	---	---
7	0.00	0.00	0.00	---	---	---
14	0.10	0.00	0.00	---	---	---
30	1.2	0.00	0.00	---	---	---
60	3.6	0.93	0.36	---	---	---
90	5.1	1.7	0.78	---	---	---
120	5.9	2.6	1.5	---	---	---
183	6.8	3.4	2.2	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1941, 1952-68

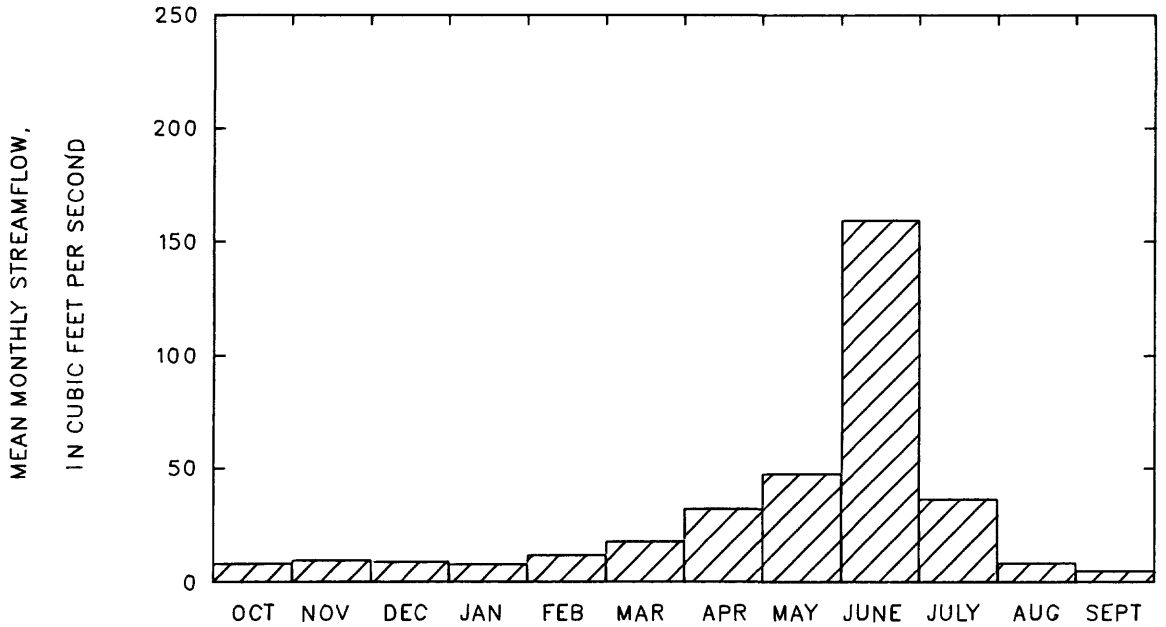
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	332	572	762	---	---	---
3	279	489	658	---	---	---
7	231	420	577	---	---	---
15	197	342	452	---	---	---
30	151	248	315	---	---	---
60	100	161	202	---	---	---
90	77	123	154	---	---	---

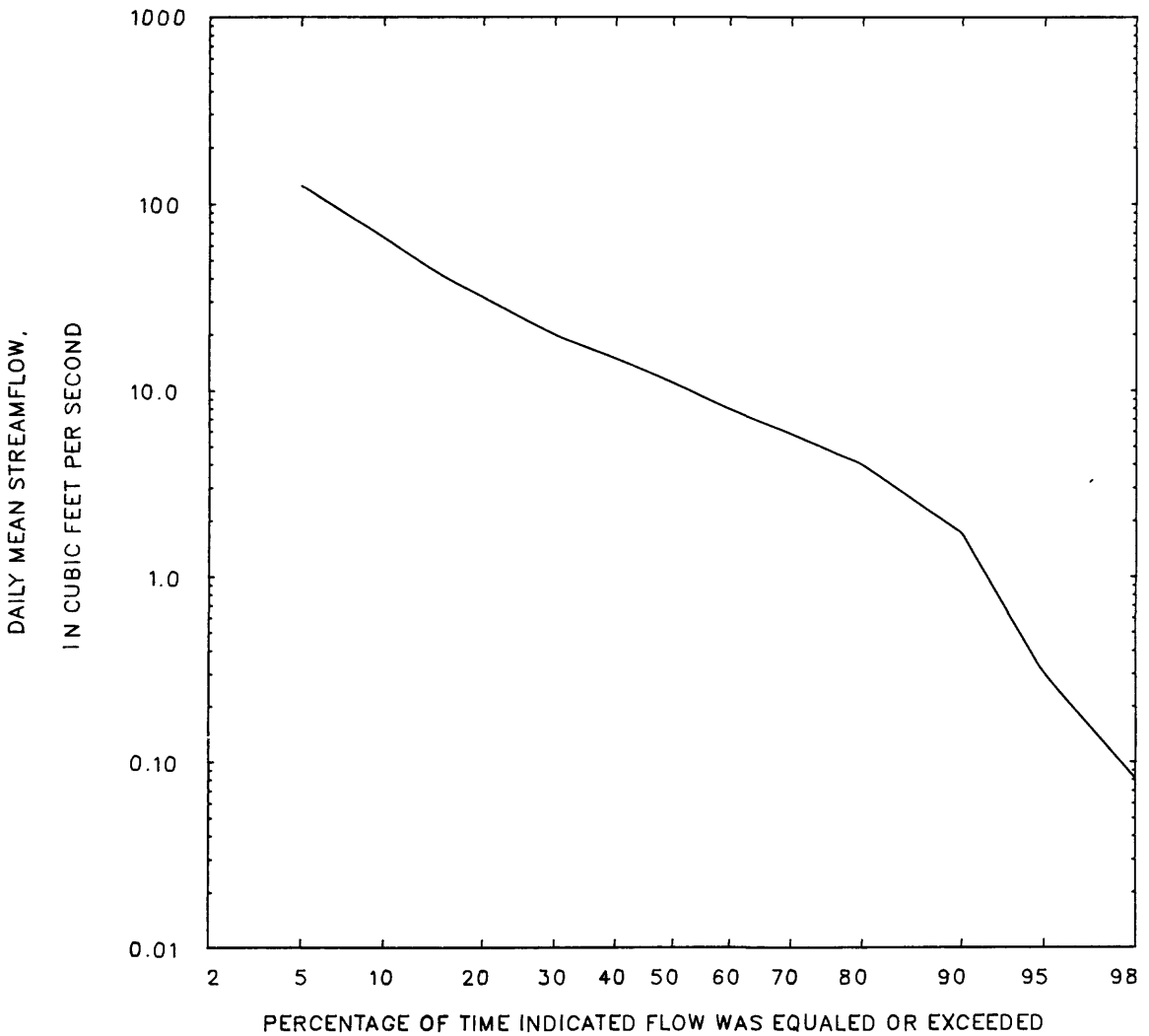
Duration of daily mean flow for period of record 1941, 1952-68

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
354	124	66	42	31	20	15	11	7.8	5.8	3.9	1.7	0.30	0.08	0.04	0.02	0.00

STATION 06633500 PERIOD OF RECORD 1941, 1952–68

ROCK CREEK BELOW ROCK RIVER, WYO.





06634600 LITTLE MEDICINE BOW RIVER NEAR MEDICINE BOW, WYO.

LOCATION.--Lat 41°57'12", long 106°09'38", in NW¼SW¼NE¼ sec.22, T.23 N., R.78 W., Carbon County, on right bank 1.6 mi upstream from State Highway 487, 3.2 mi downstream from Muddy Creek, and 4.3 mi northeast of Medicine Bow.

DRAINAGE AREA.--963 mi^2, of which 54 mi^2 is probably noncontributing.

PERIOD OF RECORD.--October 1973 to September 1984. Station replaced by 06634620 "at Boles Spring."

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft, from topographic map.

REMARKS.--Diversions for irrigation of about 5,200 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,500 ft^3/s, May 17, 1978, from slope-area measurement of peak flow, gage height, 14.10 ft, from floodmark in gage well; no flow at times most years.

Monthly and annual streamflow 1974-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	18	3.2	9.5	4.4	0.46	1.2
November	22	1.9	9.1	5.6	0.61	1.2
December	9.4	0.42	3.9	3.3	0.85	0.5
January	3.5	0.00	1.3	1.4	1.0	0.2
February	6.6	0.00	3.1	2.1	0.67	0.4
March	113	9.7	38	35	0.93	4.8
April	630	16	227	168	0.74	29.1
May	724	56	322	216	0.67	41.3
June	444	19	102	120	1.2	13.0
July	75	2.8	30	27	0.89	3.9
August	108	4.6	26	31	1.2	3.3
September	37	0.97	8.7	9.9	1.1	1.1
Annual	151	13	65	38	0.58	100

Magnitude and probability of annual low flow based on period of record 1975-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	---	---	---
3	0.00	0.00	0.00	---	---	---
7	0.00	0.00	0.00	---	---	---
14	0.00	0.00	0.00	---	---	---
30	0.00	0.00	0.00	---	---	---
60	0.50	0.01	0.00	---	---	---
90	1.4	0.52	0.28	---	---	---
120	3.0	1.9	1.4	---	---	---
183	4.7	3.3	2.8	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1974-84

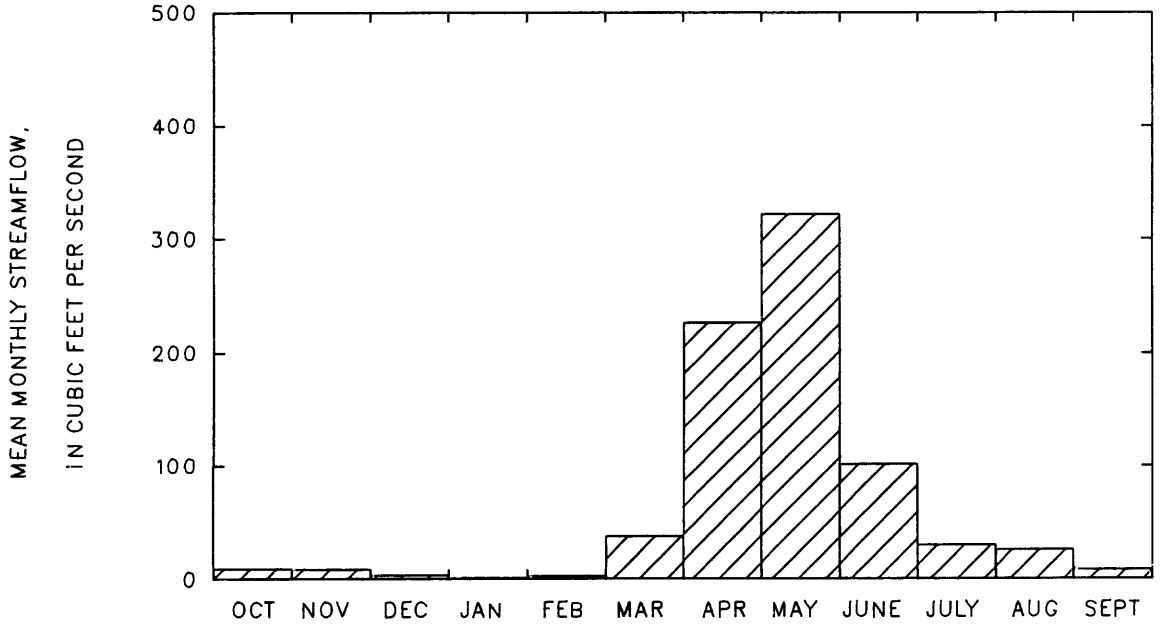
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1020	2120	3210	---	---	---
3	798	1560	2270	---	---	---
7	579	1110	1600	---	---	---
15	452	820	1100	---	---	---
30	361	617	775	---	---	---
60	271	471	588	---	---	---
90	209	348	424	---	---	---

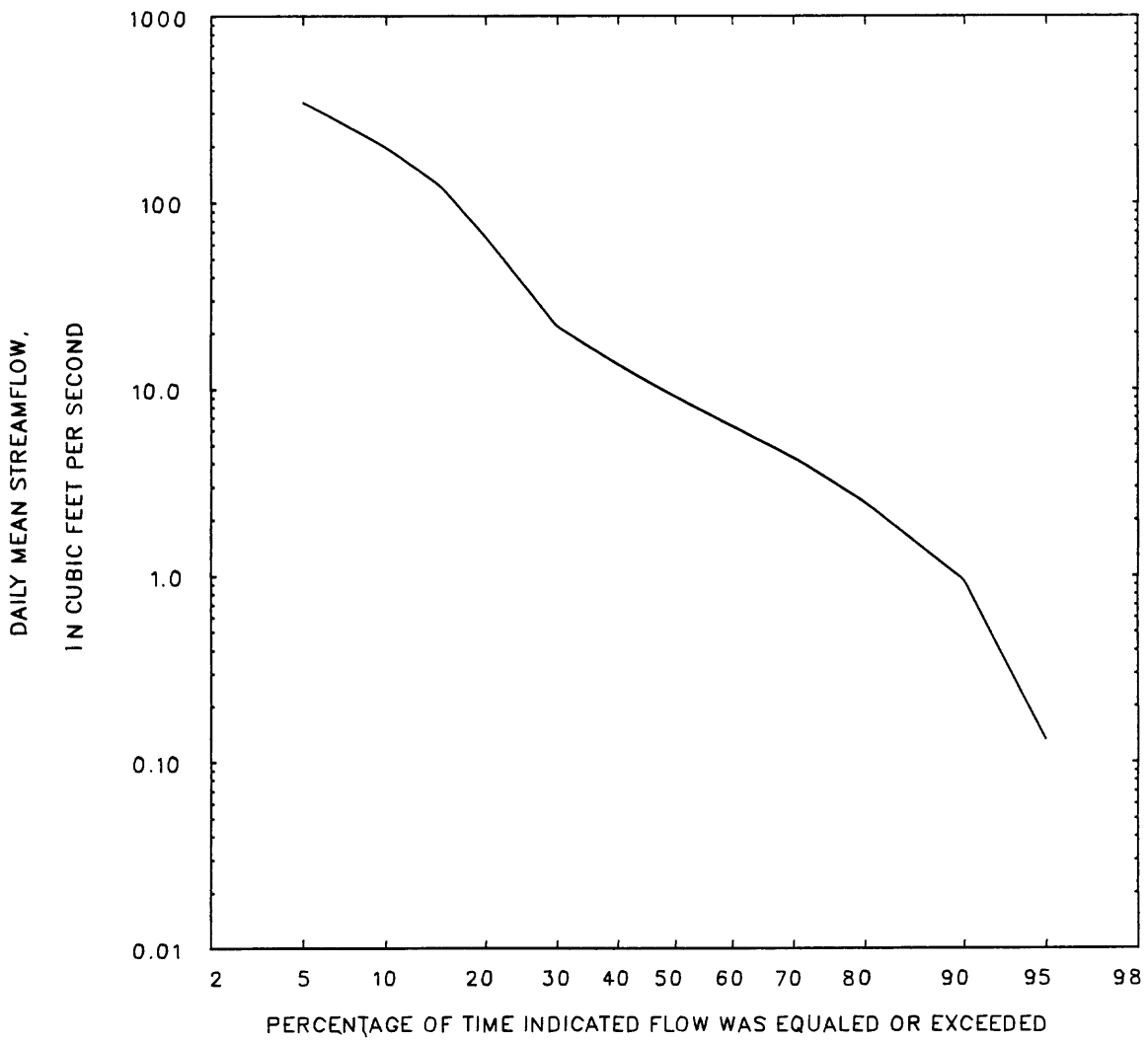
Duration of daily mean flow for period of record 1974-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
805	341	197	121	66	22	13	9.0	6.2	4.2	2.4	0.94	0.13	0.00	0.00	0.00	0.00

STATION 06634600 PERIOD OF RECORD 1974–84

LITTLE MEDICINE BOW RIVER NEAR MEDICINE BOW, WYO.





06635000 MEDICINE BOW RIVER ABOVE SEMINOE RESERVOIR, NEAR HANNA, WYO.

LOCATION.--Lat 42°00'35", long 106°30'45", in SE¼NW¼ sec.34, T.24 N., R.81 W., Carbon County, on left bank 25 ft upstream from county highway bridge, 2.0 mi upstream from Troublesome Creek, 9.0 mi upstream from high-water line of Seminoe Reservoir at elevation 6,357 ft, and 10 mi north of Hanna.

DRAINAGE AREA.--2,338 mi^2, of which 396 mi^2 is probably noncontributing.

PERIOD OF RECORD.--July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,415.40 ft.

REMARKS.--Many small reservoirs above station, total capacity, about 6,000 acre-ft, for irrigation. Diversions for irrigation of about 43,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,010 ft^3/s, May 12, 1973, gage height, 6.74 ft; minimum daily, 1.1 ft^3/s, September 7-14, 1959, August 7, 1963.

Monthly and annual streamflow 1940-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	132	9.6	43	29	0.66	1.9
November	114	16	50	22	0.44	2.2
December	73	8.7	38	17	0.46	1.7
January	54	7.8	31	12	0.40	1.3
February	397	10	47	56	1.2	2.1
March	616	20	135	97	0.72	5.9
April	950	77	353	220	0.62	15.5
May	3060	82	598	508	0.85	26.2
June	2080	59	692	415	0.60	30.4
July	1030	19	197	213	1.1	8.7
August	246	5.7	63	59	0.93	2.8
September	236	3.8	32	41	1.3	1.4
Annual	531	44	190	104	0.55	100

Magnitude and probability of annual low flow based on period of record 1941-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	8.8	4.0	2.6	1.8	1.2	0.78
3	9.0	4.1	2.7	1.9	1.2	0.87
7	10	4.5	2.9	2.0	1.3	0.92
14	11	5.4	3.6	2.6	1.8	1.4
30	13	7.0	5.0	3.8	2.7	2.2
60	18	10	7.7	6.0	4.5	3.8
90	25	15	12	9.6	7.6	6.4
120	29	19	15	13	10	8.8
183	33	22	18	15	13	11

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1940-84

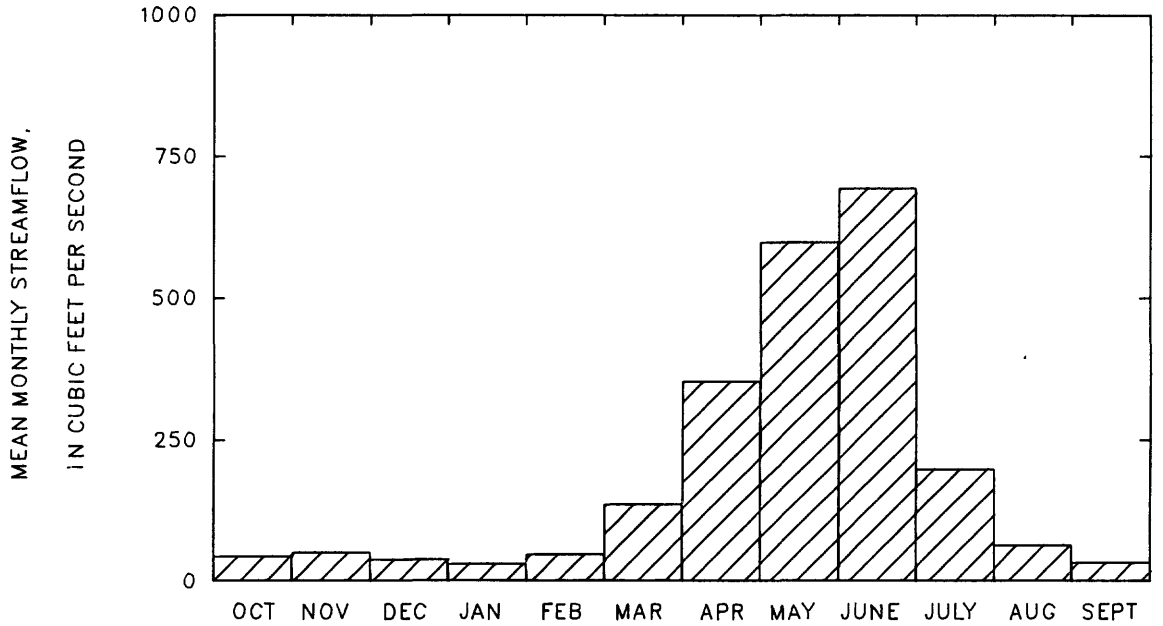
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1390	2340	3090	4170	5070	6070
3	1250	2080	2700	3560	4240	4960
7	1090	1790	2280	2910	3390	3880
15	927	1490	1860	2330	2670	3000
30	760	1240	1570	1990	2300	2610
60	602	995	1270	1610	1870	2130
90	510	827	1050	1320	1530	1740

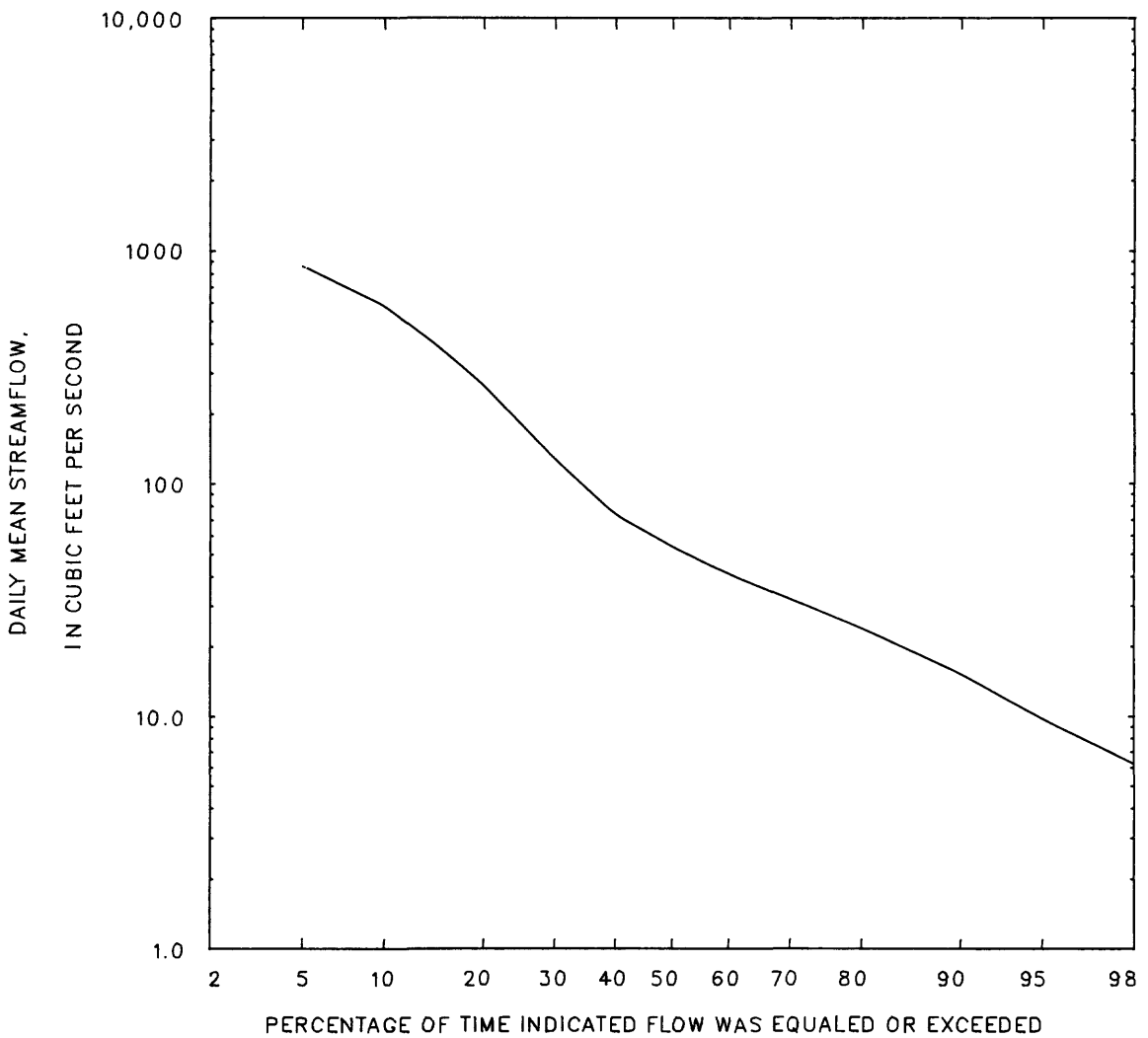
Duration of daily mean flow for period of record 1940-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1730	855	577	384	265	126	73	53	40	32	24	15	9.7	6.1	4.4	2.9	1.8

STATION 06635000 PERIOD OF RECORD 1940–84

MEDICINE BOW RIVER ABOVE SEMINOE RESERVOIR, NEAR HANNA, WYO.





06636000 NORTH PLATTE RIVER ABOVE PATHFINDER RESERVOIR, WYO.

LOCATION.--Lat 42°10'42", long 106°52'33", in SW¼ sec.34, T.26 N., R.84 W., Carbon County, on right bank 1,800 ft downstream from Kortes Dam, 1.2 mi upstream from Lost Creek, and 6 mi southwest of Leo.

DRAINAGE AREA.--7,240 mi^2 of which 588 mi^2 in southern Wyoming is probably noncontributing.

PERIOD OF RECORD.--October 1913 to September 1939, October 1950 to September 1959. Monthly discharge only for some periods; published in WSP 1310. Prior to October 1920, published as "above Pathfinder."

GAGE.--Water-stage recorder. Datum of gage is 5,929.51 ft, from levels by Bureau of Reclamation. Prior to April 11, 1951, at site 1.25 mi downstream at different datum.

REMARKS.--Flow regulated by Seminoe Reservoir since December 18, 1938, and Kortes Reservoir (capacity, 4,740 acre-ft) since 1950. Diversions for irrigation of about 256,000 acres above station. Transbasin diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,000 ft^3/s, June 26, 1917, gage height, 6.2 ft, site and datum then in use; minimum daily, 8 ft^3/s at times in 1957-59.

COOPERATION--Records furnished by Bureau of Reclamation.

Monthly and annual streamflow 1914-38

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1260	144	540	249	0.46	2.7
November	872	177	482	160	0.33	2.4
December	706	216	381	114	0.30	1.9
January	598	227	336	85	0.25	1.7
February	567	200	369	91	0.25	1.9
March	1600	421	770	313	0.41	3.9
April	5110	623	2400	1090	0.45	12.1
May	9190	1270	5000	2120	0.42	25.2
June	14100	390	6760	3310	0.49	34.0
July	6800	115	1720	1350	0.78	8.7
August	1240	86	652	309	0.47	3.3
September	960	40	448	266	0.59	2.3
Annual	3170	431	1660	593	0.36	100

Magnitude and probability of annual low flow based on period of record 1915-38

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	254	138	88	56	---	---
3	264	145	92	58	---	---
7	274	152	97	62	---	---
14	282	161	105	68	---	---
30	293	177	120	82	---	---
60	320	210	156	116	---	---
90	353	242	183	139	---	---
120	378	264	206	162	---	---
183	408	291	236	194	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1914-38

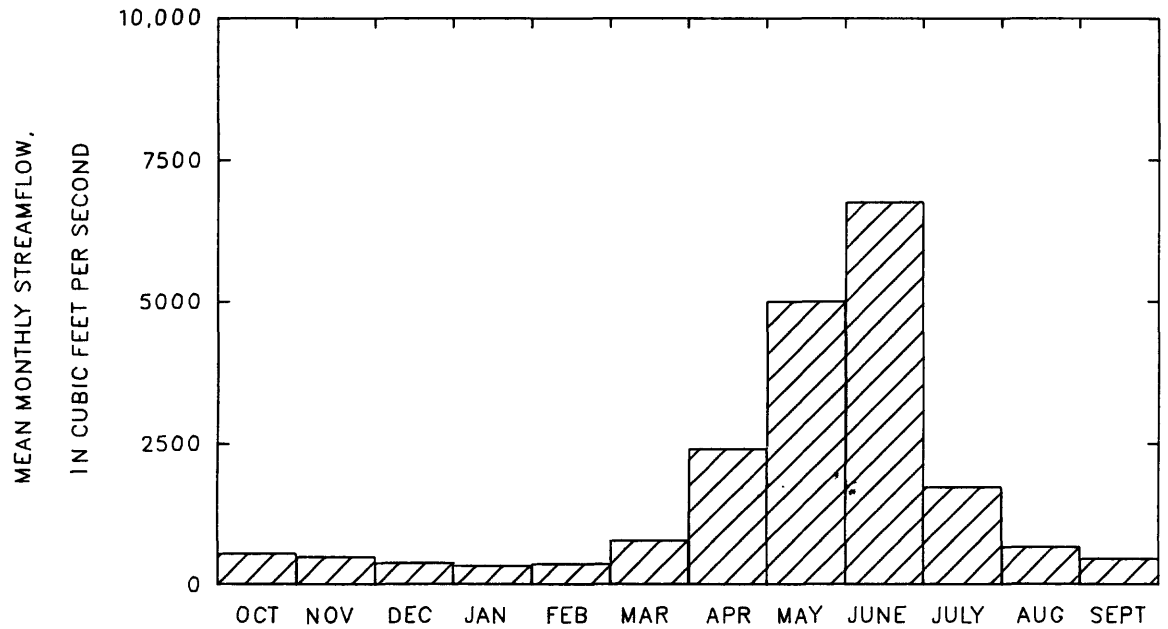
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	10200	13800	15400	16800	---	---
3	9840	13600	15300	16800	---	---
7	9370	13100	14900	16600	---	---
15	8560	12200	13900	15600	---	---
30	7560	10600	12100	13400	---	---
60	6080	8440	9530	10500	---	---
90	4940	6710	7490	8170	---	---

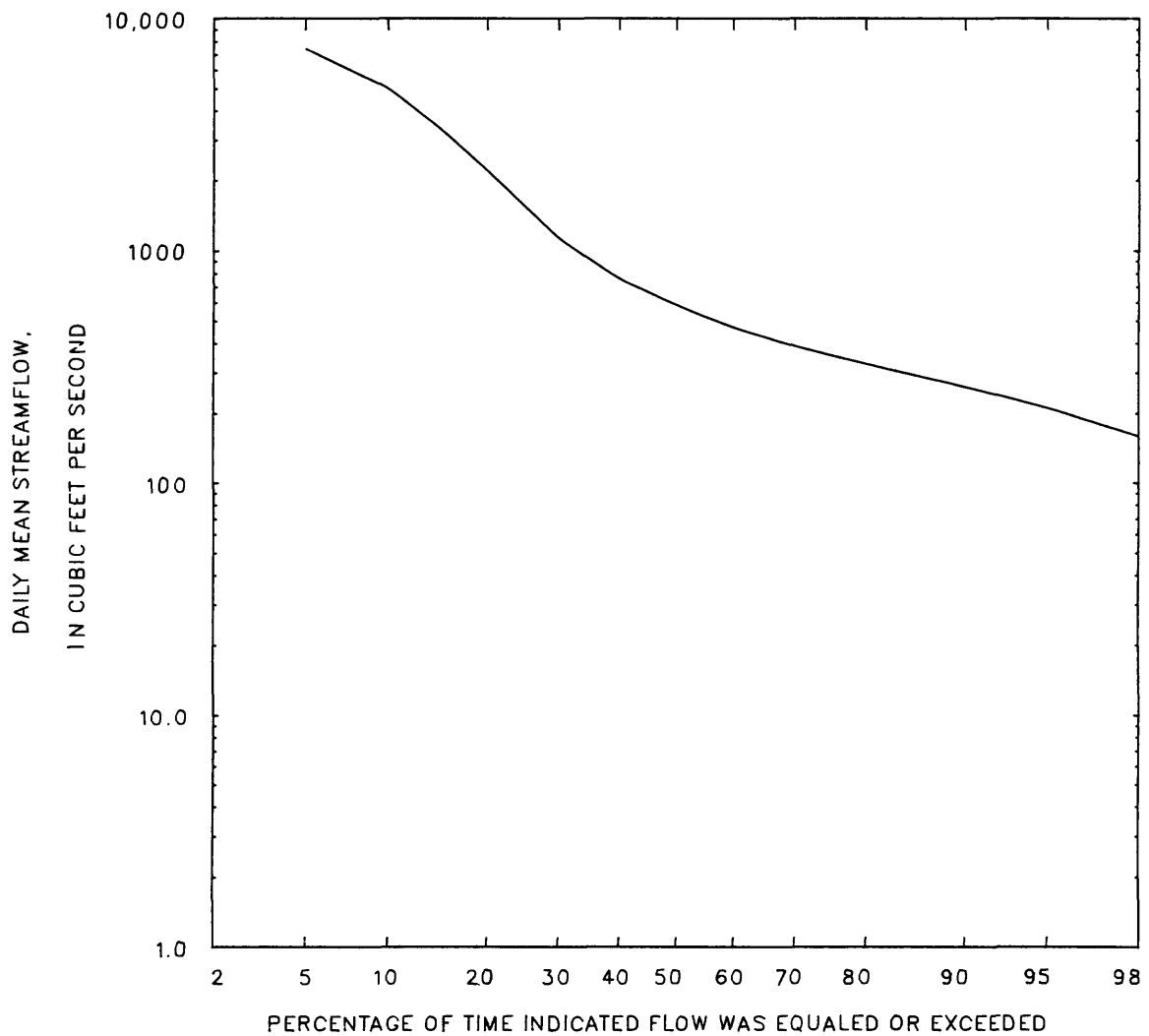
Duration of daily mean flow for period of record 1914-38

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
12800	7370	5030	3300	2210	1130	756	581	465	389	325	259	210	158	99	57	26

STATION 06636000 PERIOD OF RECORD 1914–38

NORTH PLATTE RIVER ABOVE PATHFINDER RESERVOIR, WYO.





06636500 SAGE CREEK ABOVE PATHFINDER RESERVOIR, WYO.

LOCATION.--Lat 42°14'50", long 106°53'00", in sec. 4, T. 26 N., T. 84 W., Carbon County, about 0.75 mi upstream from Pathfinder Reservoir and 16 mi southwest of Alcova.

DRAINAGE AREA.--182 mi^2.

PERIOD OF RECORD.--March 1915 to September 1925.

GAGE.--Staff gage. Altitude of gage is 5,870 ft, from topographic map. Prior to May 10, 1924, at different datum.

REMARKS.--Diversions above station for irrigation of about 3,100 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1.180 ft^3/s, April 7, 1924, gage height, 6.73 ft datum then in use, from rating curve extended above 200 ft^3/s; no flow August 22, 25, 27, 30, 1919, and July 6-8 1921.

Monthly and annual streamflow 1916-25

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	25	2.0	7.5	7.3	0.98	3.3
November	18	3.0	8.8	4.2	0.48	3.9
December	12	3.0	6.9	2.7	0.39	3.1
January	10	3.0	5.1	1.9	0.37	2.3
February	10	3.0	6.1	2.3	0.39	2.7
March	48	9.0	24	12	0.52	10.7
April	219	18	64	61	0.95	28.6
May	149	6.0	76	50	0.67	33.8
June	75	0.36	21	22	1.0	9.3
July	5.8	0.25	2.2	2.3	1.0	1.0
August	4.1	0.17	1.3	1.2	0.91	0.6
September	4.8	0.42	1.6	1.3	0.84	0.7
Annual	32	6.1	19	8.1	0.44	100

Magnitude and probability of annual low flow based on period of record 1916-25

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.20	0.00	0.00	---	---	---
3	0.29	0.00	0.00	---	---	---
7	0.40	0.18	0.11	---	---	---
14	0.50	0.25	0.15	---	---	---
30	0.67	0.37	0.24	---	---	---
60	0.95	0.51	0.35	---	---	---
90	1.3	0.62	0.40	---	---	---
120	2.0	0.86	0.53	---	---	---
183	4.0	2.4	1.8	---	---	---

Magnitude and probability of instantaneous peak flow based on 11 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
244	541	832	1330	1820	2410

Weighted skew = 0.166

Magnitude and probability of annual high flow based on period of record 1916-25

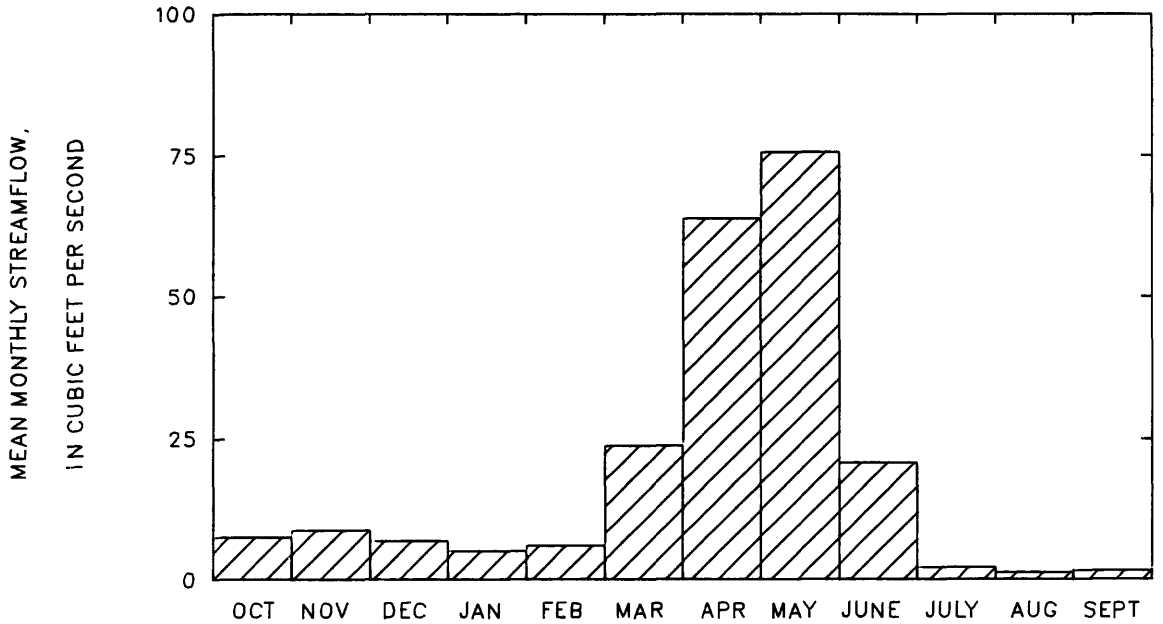
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	173	416	681	---	---	---
3	150	345	546	---	---	---
7	125	268	405	---	---	---
15	100	199	286	---	---	---
30	86	152	200	---	---	---
60	67	113	143	---	---	---
90	56	88	107	---	---	---

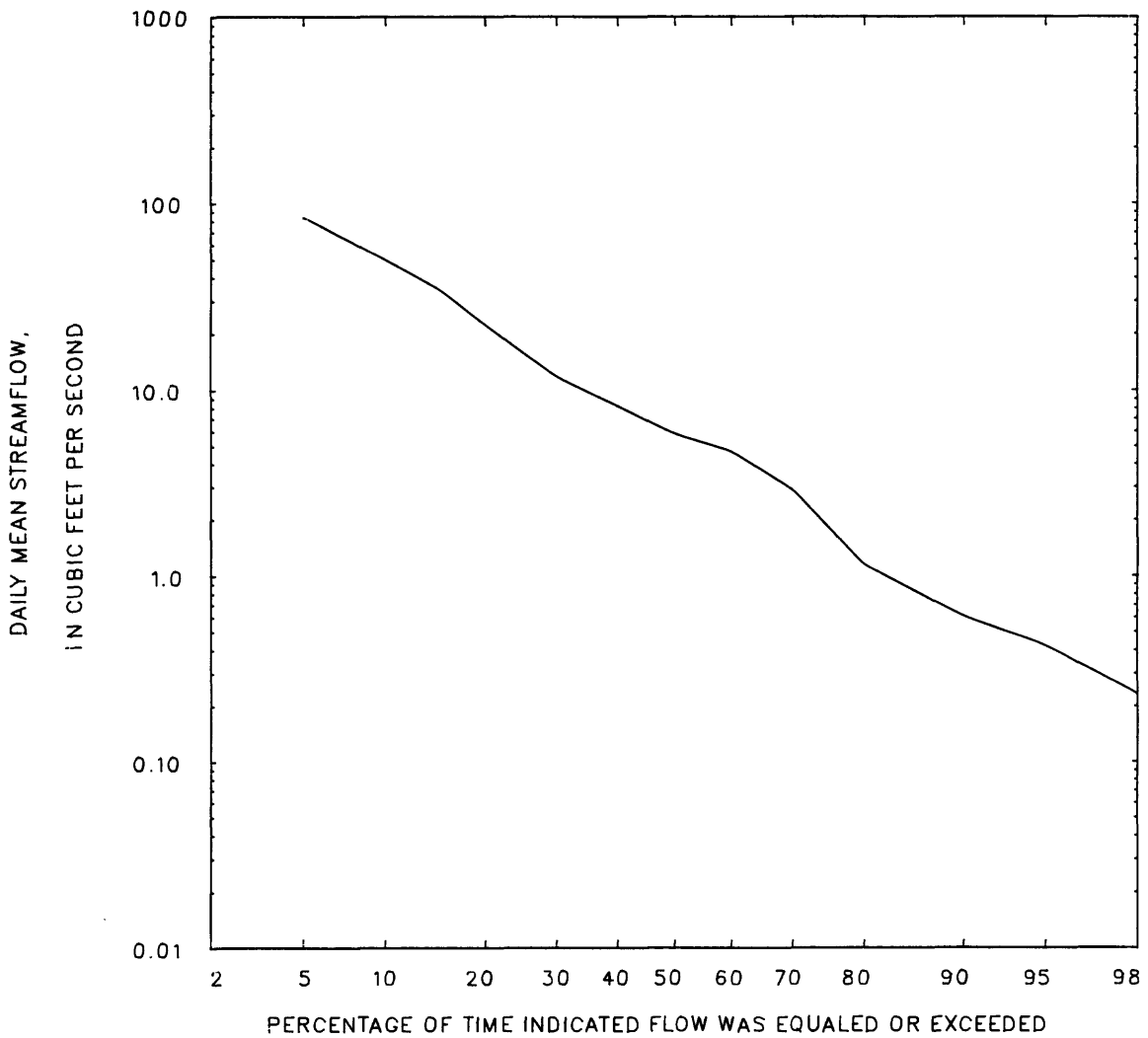
Duration of daily mean flow for period of record 1916-25

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
186	83	49	34	22	12	8.1	5.7	4.6	2.9	1.1	0.60	0.42	0.23	0.17	0.11	0.05

STATION 06636500 PERIOD OF RECORD 1916–25

SAGE CREEK ABOVE PATHFINDER RESERVOIR, WYO.





06637550 SWEETWATER RIVER NEAR SOUTH PASS CITY, WYO.

LOCATION.--Lat 42°22'30", long 108°52'56", in NW¼NW¼ sec.28, T.28 N., R.101 W., Fremont County, on left bank 100 ft downstream from small tributary, 0.8 mi downstream from Fog Gulch, 1.2 mi downstream from State Highway 28, and 7.6 mi southwest of South Pass City.

DRAINAGE AREA.--177 mi^2.

PERIOD OF RECORD.--October 1958 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 7,420 ft, from topographic map.

REMARKS.--Diversions for irrigation of about 950 acres above station. Transbasin diversion from Little Sandy Creek to land along Lander Creek (tributary to Sweetwater River above station).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,150 ft^3/s, June 10, 1965, gage height, 7.53 ft; minimum daily, 1.5 ft^3/s, January 3, 1960.

Monthly and annual streamflow 1959-73

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	37	11	21	9.6	0.45	2.7
November	30	9.0	17	6.7	0.40	2.2
December	24	3.5	12	5.6	0.45	1.6
January	19	2.0	10	5.0	0.49	1.3
February	23	4.1	11	5.4	0.49	1.4
March	26	3.6	15	5.7	0.38	1.9
April	175	19	64	43	0.67	8.2
May	463	77	209	107	0.51	26.6
June	550	74	277	151	0.54	35.4
July	217	21	92	57	0.62	11.7
August	66	8.6	30	16	0.54	3.9
September	66	8.7	24	15	0.64	3.0
Annual	110	24	65	27	0.41	100

Magnitude and probability of annual low flow based on period of record 1960-73

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	5.9	3.4	2.5	1.9	---	---
3	6.1	3.6	2.6	2.0	---	---
7	6.6	3.8	2.8	2.1	---	---
14	7.0	4.1	3.0	2.3	---	---
30	7.7	4.5	3.3	2.5	---	---
60	8.7	5.2	3.8	2.9	---	---
90	9.8	6.2	4.7	3.7	---	---
120	11	7.3	5.8	4.7	---	---
183	13	9.6	8.2	7.3	---	---

Magnitude and probability of instantaneous peak flow based on 23 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
648	972	1180	1440	1630	1810

Weighted skew = -0.337

Magnitude and probability of annual high flow based on period of record 1959-73

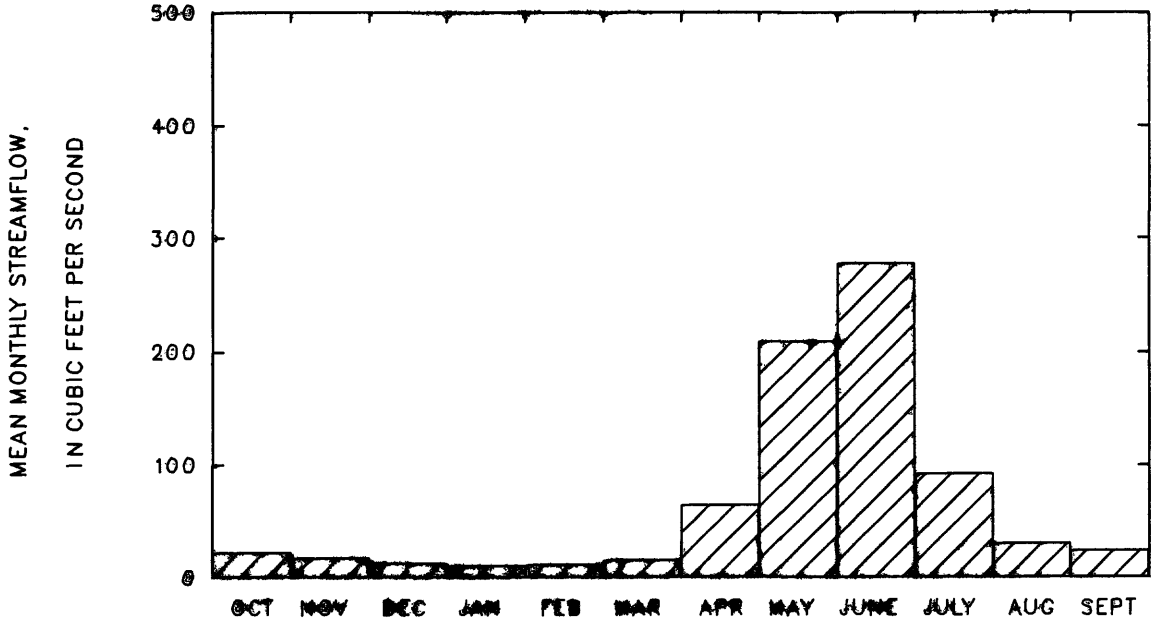
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	459	713	880	1090	---	---
3	408	638	794	992	---	---
7	368	577	714	884	---	---
15	322	502	619	763	---	---
30	291	451	554	676	---	---
60	233	362	442	535	---	---
90	189	286	347	418	---	---

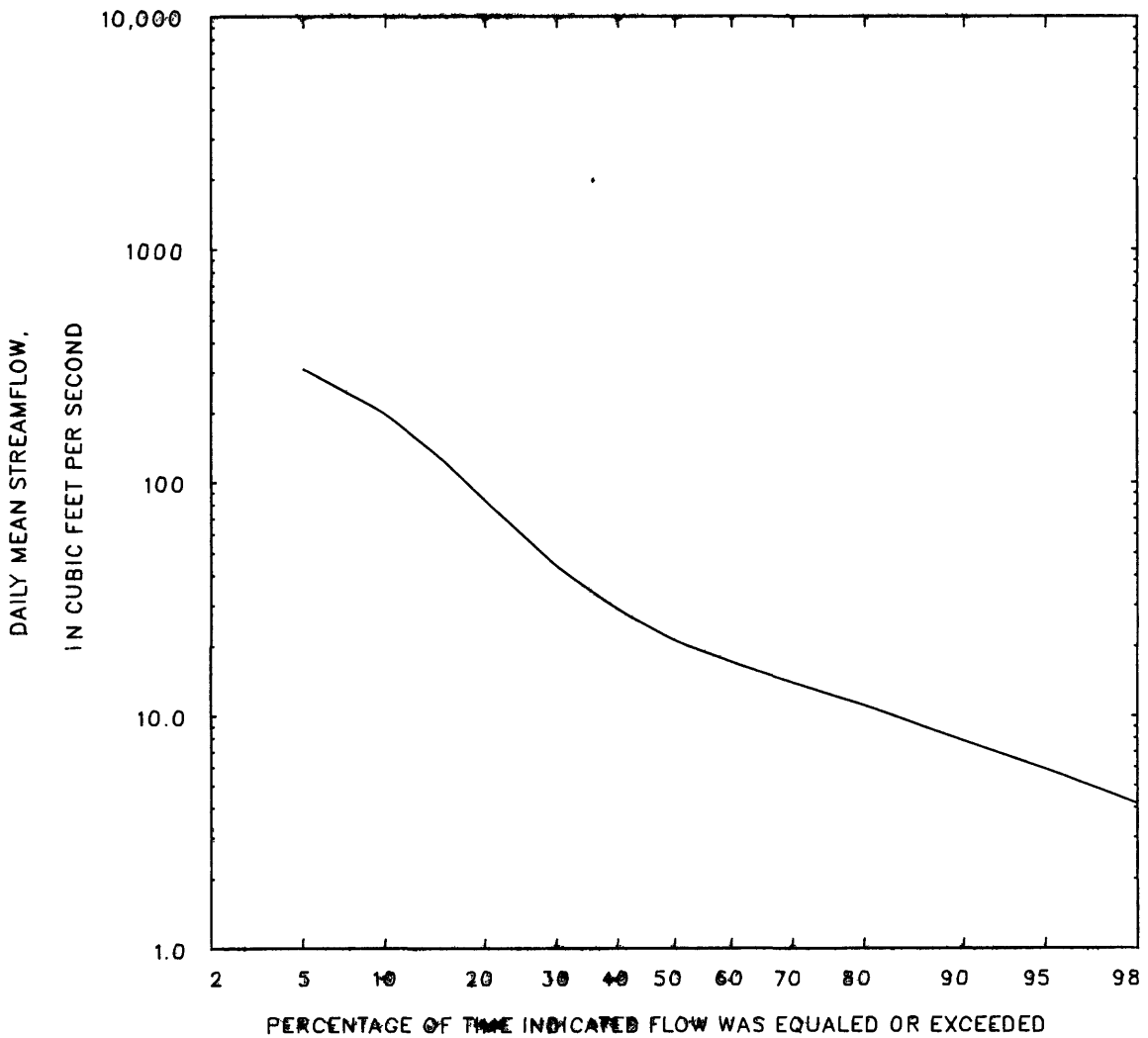
Duration of daily mean flow for period of record 1959-73

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
545	306	197	127	83	43	28	21	17	14	11	7.7	5.8	4.1	2.9	2.3	1.7

STATION 06637550 PERIOD OF RECORD 1959–73

SWEETWATER RIVER NEAR SOUTH PASS CITY, WYO.





06637750 ROCK CREEK ABOVE ROCK CREEK RESERVOIR, WYO.

LOCATION.--Lat 42°32'59", long 108°46'26", in NW¼NW¼ sec.27, T.30 N., R.100 W., Fremont County, Shoshone National Forest, on left bank 200 ft upstream from high-water line of Rock Creek Reservoir, 2.7 mi downstream from Little Rock Creek, and 4.3 mi northwest of Atlantic City.

DRAINAGE AREA.--9.2 mi^2, approximately.

PERIOD OF RECORD.--May 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,330 ft, from topographic map.

REMARKS.--No diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 214 ft^3/s, June 9, 1965, gage height, 7.26 ft; maximum gage height, 8.54 ft, April 22, 1965 (backwater from ice); minimum daily discharge, 0.5 ft^3/s, January 12-14, 1963.

Monthly and annual streamflow 1963-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	3.8	1.0	2.3	0.79	0.35	2.2
November	3.1	0.94	1.8	0.51	0.28	1.7
December	2.6	0.79	1.6	0.43	0.27	1.5
January	2.3	0.62	1.4	0.45	0.32	1.4
February	1.9	0.60	1.3	0.38	0.29	1.2
March	2.3	0.65	1.3	0.42	0.32	1.3
April	7.1	1.2	3.2	1.7	0.52	3.1
May	62	11	33	11	0.34	31.5
June	96	3.8	44	24	0.55	42.3
July	20	2.4	8.7	4.4	0.50	8.3
August	5.1	1.4	3.2	1.0	0.31	3.1
September	5.7	1.0	2.5	1.0	0.40	2.4
Annual	14	2.6	8.8	2.8	0.32	100

Magnitude and probability of annual low flow based on period of record 1964-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.0	0.79	0.70	0.62	---	---
3	1.1	0.83	0.73	0.65	---	---
7	1.1	0.87	0.76	0.68	---	---
14	1.2	0.90	0.79	0.71	---	---
30	1.2	0.94	0.81	0.72	---	---
60	1.3	0.99	0.86	0.77	---	---
90	1.3	1.0	0.92	0.83	---	---
120	1.4	1.1	0.99	0.90	---	---
183	1.6	1.3	1.2	1.1	---	---

Magnitude and probability of instantaneous peak flow based on 23 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
113	151	175	203	224	244

Weighted skew = -0.163

Magnitude and probability of annual high flow based on period of record 1963-84

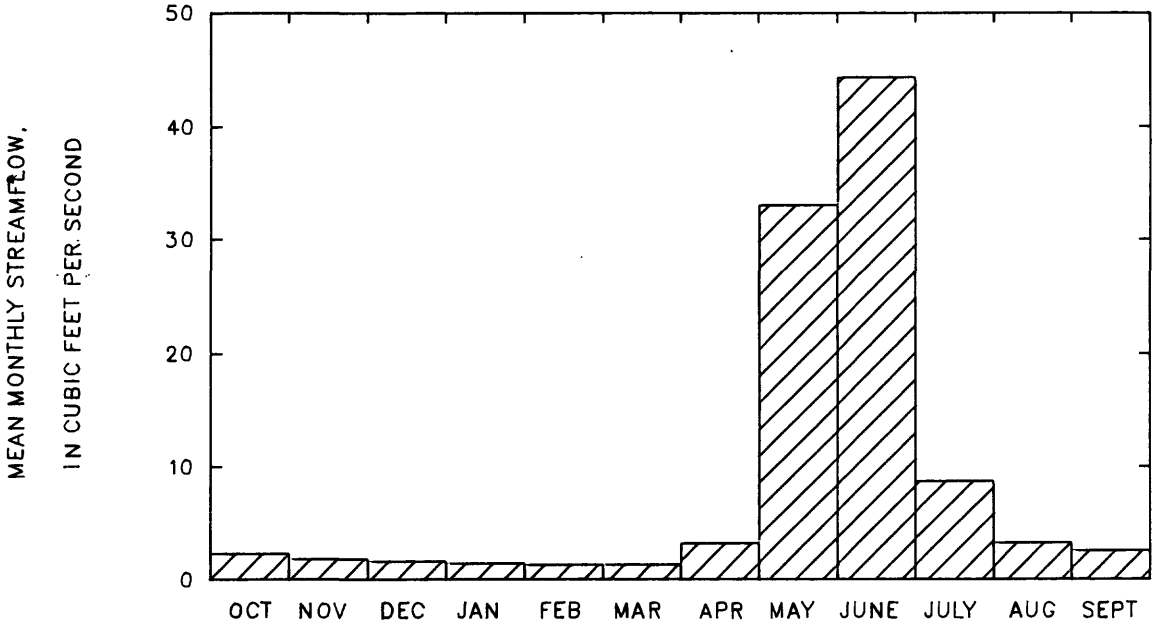
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	90	122	137	151	---	---
3	85	114	124	133	---	---
7	77	102	111	118	---	---
15	69	90	98	104	---	---
30	59	78	85	91	---	---
60	42	54	59	63	---	---
90	30	39	42	45	---	---

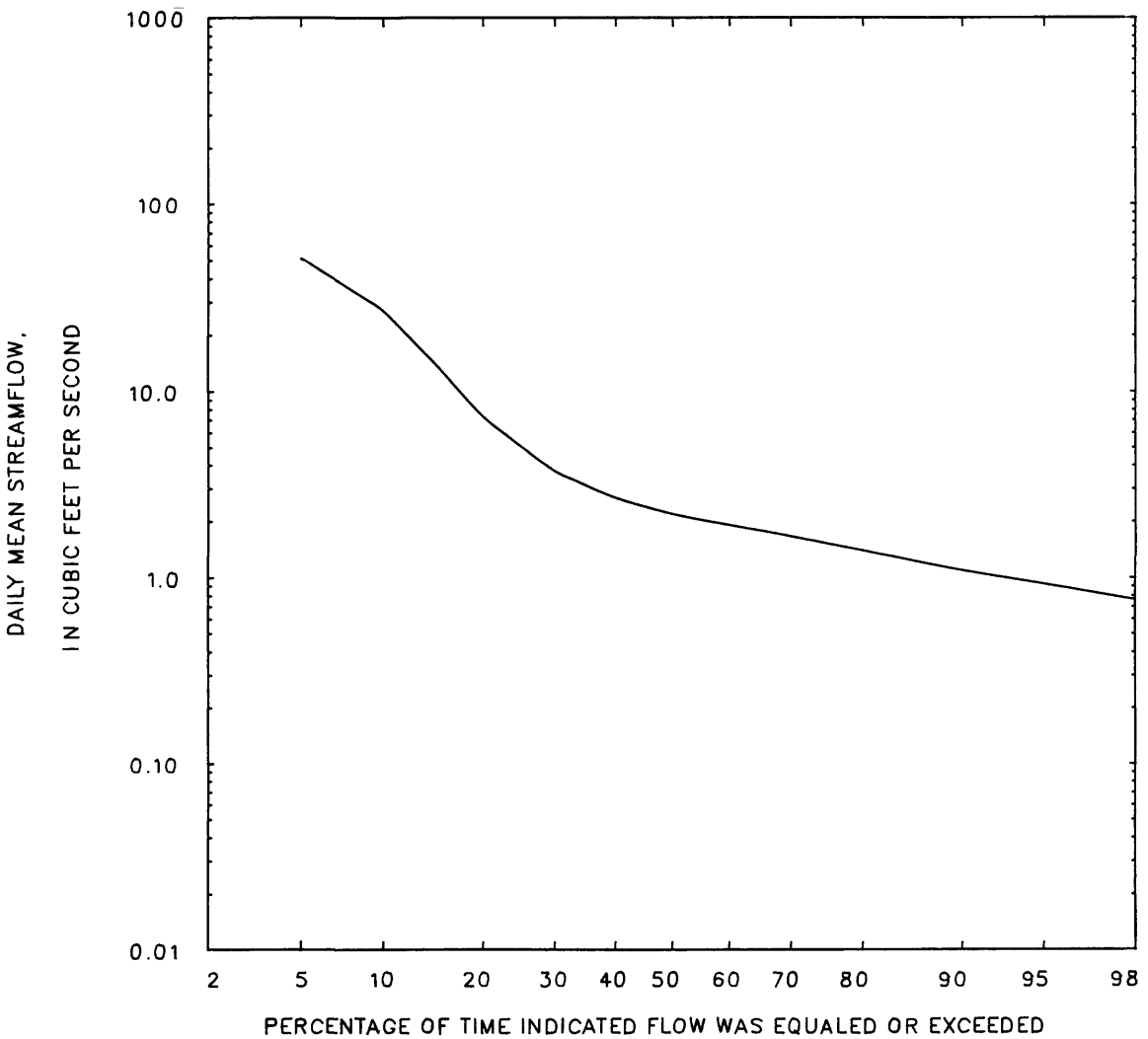
Duration of daily mean flow for period of record 1963-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
91	51	27	13	7.2	3.6	2.6	2.1	1.9	1.6	1.4	1.1	0.91	0.75	0.68	0.64	0.60

STATION 06637750 PERIOD OF RECORD 1963–84

ROCK CREEK ABOVE ROCK CREEK RESERVOIR, WYO.





06637900 SLATE CREEK NEAR ATLANTIC CITY, WYO.

LOCATION.--Lat 42°30'57", long 108°44'52", in SE¼NW¼ sec.2, T.29 N., R.100 W., Fremont County, on left bank 600 ft upstream from mouth and 1.6 mi northwest of Atlantic City.

DRAINAGE AREA.--5.92 mi^2.

PERIOD OF RECORD.--March 1957 to June 1973.

GAGE.--Water-stage recorder. Altitude of gage is 7,880 ft, from topographic map. Prior to October 1, 1963, at datum 1.00 ft higher.

REMARKS.--Flow affected by diversion from Rock Creek into Slate Creek basin above station during some periods since 1963. No diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 296 ft^3/s, June 10, 1965, gage height, 4.02 ft, from rating curve extended above 130 ft^3/s; minimum daily, 0.1 ft^3/s for many days during 1959-61.

Monthly and annual streamflow 1958-72

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	2.0	0.55	1.3	0.42	0.32	1.9
November	1.5	0.67	1.2	0.27	0.23	1.6
December	1.6	0.41	0.91	0.33	0.37	1.3
January	1.4	0.29	0.82	0.29	0.35	1.1
February	1.2	0.50	0.83	0.22	0.26	1.1
March	2.4	0.65	1.1	0.55	0.49	1.6
April	7.8	1.0	2.7	1.7	0.61	3.8
May	39	3.2	16	12	0.72	22.6
June	112	0.93	39	36	0.92	53.6
July	16	0.36	5.5	5.0	0.90	7.7
August	3.7	0.11	1.5	1.1	0.76	2.1
September	2.7	0.16	1.1	0.66	0.58	1.6
Annual	15	0.94	6.0	4.2	0.71	100

Magnitude and probability of annual low flow based on period of record 1958-73

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.46	0.23	0.15	0.10	---	---
3	0.49	0.25	0.16	0.11	---	---
7	0.52	0.26	0.17	0.11	---	---
14	0.55	0.28	0.19	0.12	---	---
30	0.60	0.32	0.21	0.14	---	---
60	0.71	0.41	0.28	0.19	---	---
90	0.78	0.50	0.36	0.26	---	---
120	0.87	0.61	0.48	0.38	---	---
183	0.98	0.72	0.59	0.50	---	---

Magnitude and probability of instantaneous peak flow based on 17 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
76	181	272	403	510	621

Weighted skew = -0.516

Magnitude and probability of annual high flow based on period of record 1958-72

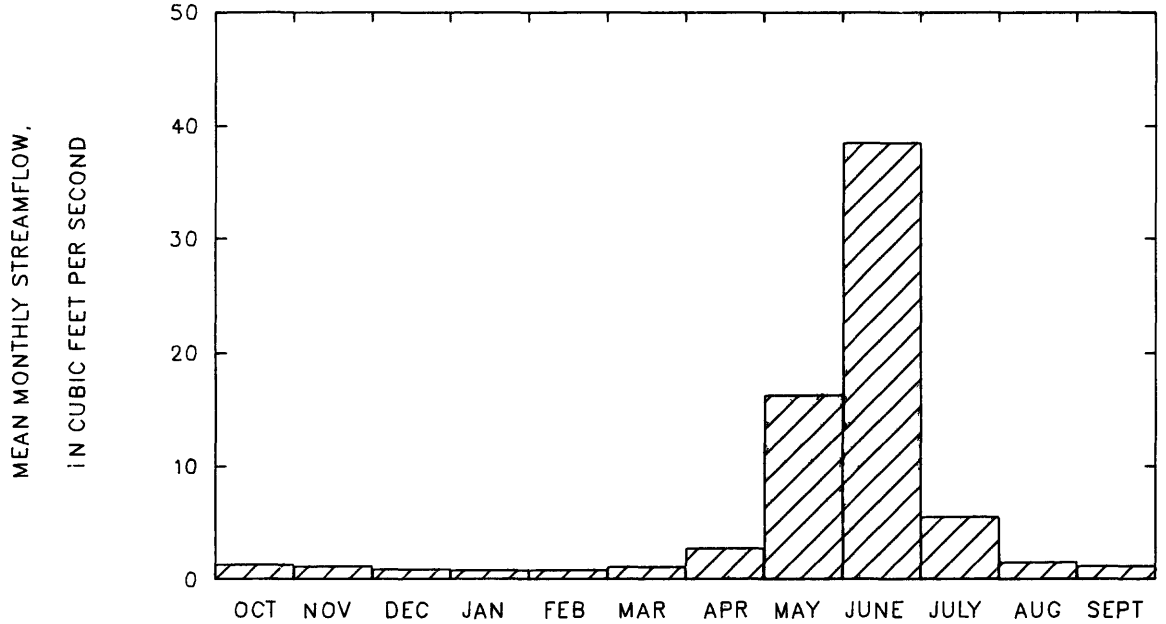
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	59	150	222	315	---	---
3	50	127	188	269	---	---
7	45	114	171	247	---	---
15	38	98	149	220	---	---
30	30	77	118	177	---	---
60	20	48	72	105	---	---
90	15	34	50	72	---	---

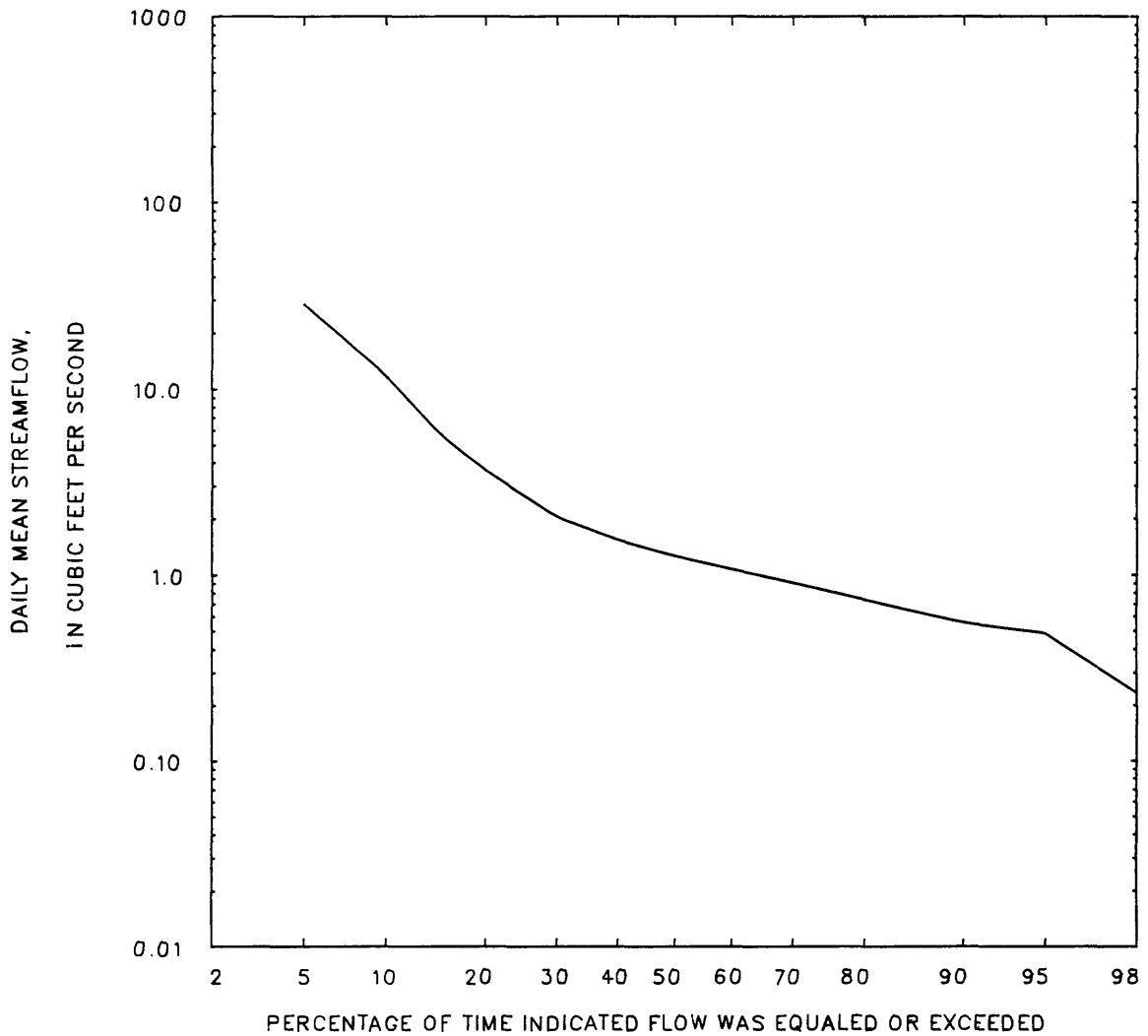
Duration of daily mean flow for period of record 1958-72

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
102	28	12	5.6	3.6	2.0	1.5	1.3	1.1	0.90	0.73	0.55	0.48	0.23	0.13	0.11	0.10

STATION 06637900 PERIOD OF RECORD 1958–72

SLATE CREEK NEAR ATLANTIC CITY, WYO.





06637910 ROCK CREEK AT ATLANTIC CITY, WYO.

LOCATION.--Lat 42°30'47", long 108°44'46", in NW¼SE¼ sec.2, T.29 N., R.100 W., Fremont County, on left bank 500 ft downstream from Slate Creek and 1.4 mi northwest of Atlantic City.

DRAINAGE AREA.--21.3 mi^2.

PERIOD OF RECORD.--June 1957 to September 1976.

GAGE.--Water-stage recorder. Altitude of gage is 7,850 ft, from topographic map. Prior to October 4, 1957, at site 35 ft upstream at different datum.

REMARKS.--Flow regulated by Rock Creek Reservoir 3.0 mi upstream since October 1961, capacity, 2,800 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 340 ft^3/s, June 10, 1965, gage height, 3.85 ft; maximum gage height, 4.30 ft, September 28, 1971 (backwater from beaver dam); minimum daily discharge, 0.62 ft^3/s, August 31, 1966.

Monthly and annual streamflow 1962-76

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	7.4	3.6	5.4	1.3	0.23	3.4
November	7.8	1.9	5.4	1.5	0.28	3.4
December	8.2	1.3	5.3	1.9	0.35	3.4
January	7.3	1.2	5.6	1.7	0.31	3.6
February	9.5	1.2	6.1	2.2	0.36	3.9
March	14	1.9	7.6	3.2	0.42	4.8
April	17	5.6	11	3.1	0.27	7.3
May	54	8.6	28	13	0.46	18.0
June	133	16	58	32	0.55	36.9
July	21	4.3	12	4.8	0.40	7.7
August	9.5	3.0	6.1	1.8	0.29	3.9
September	11	2.6	5.6	2.6	0.46	3.6
Annual	22	7.4	13	3.9	0.30	100

Magnitude and probability of annual low flow based on period of record 1963-76

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.6	1.0	0.83	0.69	---	---
3	1.9	1.3	1.0	0.88	---	---
7	2.3	1.6	1.3	1.1	---	---
14	2.7	1.9	1.5	1.3	---	---
30	3.4	2.4	1.9	1.6	---	---
60	4.2	3.0	2.5	2.1	---	---
90	4.6	3.6	3.2	2.9	---	---
120	4.7	3.9	3.5	3.2	---	---
183	5.2	4.5	4.1	3.9	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1962-76

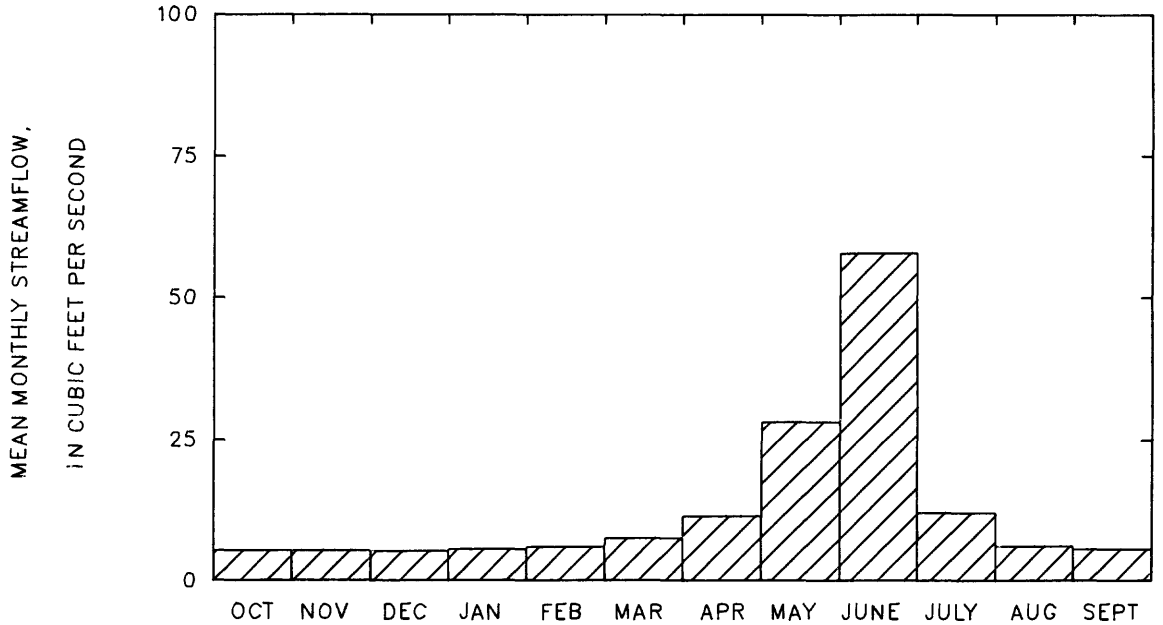
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	103	172	227	306	---	---
3	90	146	189	250	---	---
7	84	130	161	202	---	---
15	72	111	138	173	---	---
30	59	90	111	135	---	---
60	42	61	72	84	---	---
90	32	45	53	62	---	---

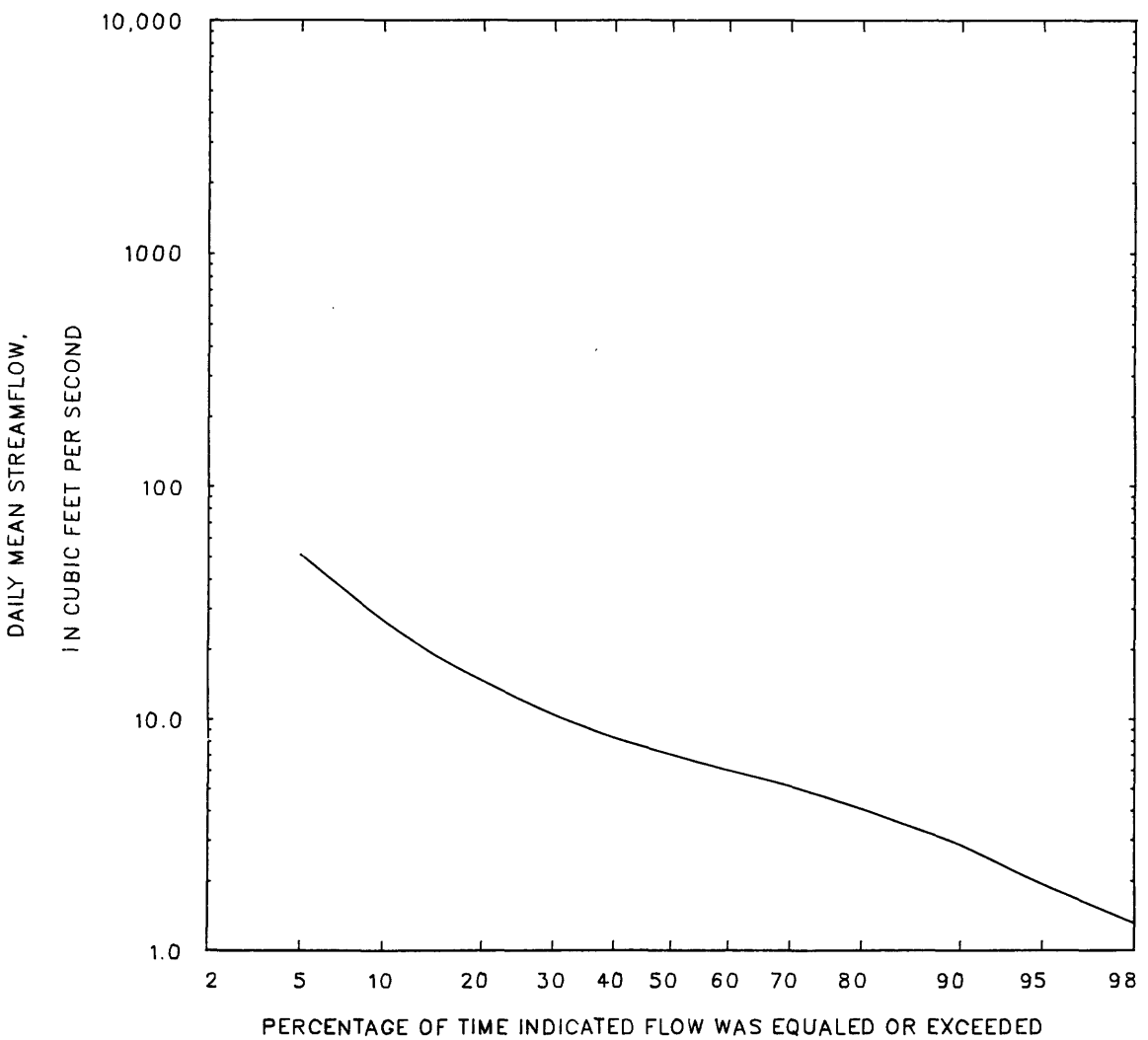
Duration of daily mean flow for period of record 1962-76

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
119	51	27	18	15	10	8.2	7.0	5.9	5.1	4.1	2.8	1.9	1.3	1.2	1.1	0.81

STATION 06637910 PERIOD OF RECORD 1962–76

ROCK CREEK AT ATLANTIC CITY, WYO.





06638090 SWEETWATER RIVER NEAR SWEETWATER STATION, WYO.

LOCATION.--Lat 42°30'17", long 108°14'59", in SW¼SE¼NE¼ sec.12, T.29 N., R.96 W., Fremont County, on left bank 1.4 mi downstream from Alkali Creek and 4.4 mi southwest of Sweetwater Station.

DRAINAGE AREA.--849 mi².

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,590 ft, from topographic map.

REMARKS.--Transbasin diversion by Continental Divide ditch diverts water from Little Sandy Creek to land along Lander Creek (tributary to Sweetwater River). A transbasin diversion diverts water from Sweetwater River into Pacific Creek (tributary to Big Sandy River in Green River basin).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,750 ft³/s, April 24, 1980, gage height, 12.40 ft, from floodmark; minimum daily, 5.6 ft³/s, January 9, 1977.

Monthly and annual streamflow 1974-84

Month	Maximum (ft³/s)	Minimum (ft³/s)	Mean (ft³/s)	Standard deviation (ft³/s)	Coefficient of variation	Percent of annual runoff
October	66	19	41	16	0.39	2.3
November	56	14	35	14	0.40	2.0
December	42	12	25	9.5	0.38	1.4
January	40	7.4	21	9.5	0.45	1.2
February	45	14	28	9.9	0.35	1.6
March	84	25	50	18	0.36	2.8
April	612	104	280	198	0.71	15.8
May	1160	81	578	278	0.48	32.6
June	926	46	484	236	0.49	27.3
July	319	13	155	98	0.63	8.8
August	74	13	48	21	0.44	2.7
September	59	12	29	13	0.44	1.6
Annual	241	46	148	59	0.40	100

Magnitude and probability of annual low flow based on period of record 1975-84

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	13	8.0	6.3	5.1	---	---
3	13	8.6	6.7	5.4	---	---
7	14	9.4	7.4	6.0	---	---
14	16	10	8.2	6.7	---	---
30	17	11	8.9	7.2	---	---
60	19	13	11	9.3	---	---
90	21	14	12	10	---	---
120	23	16	14	12	---	---
183	27	19	15	13	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft³/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1974-84

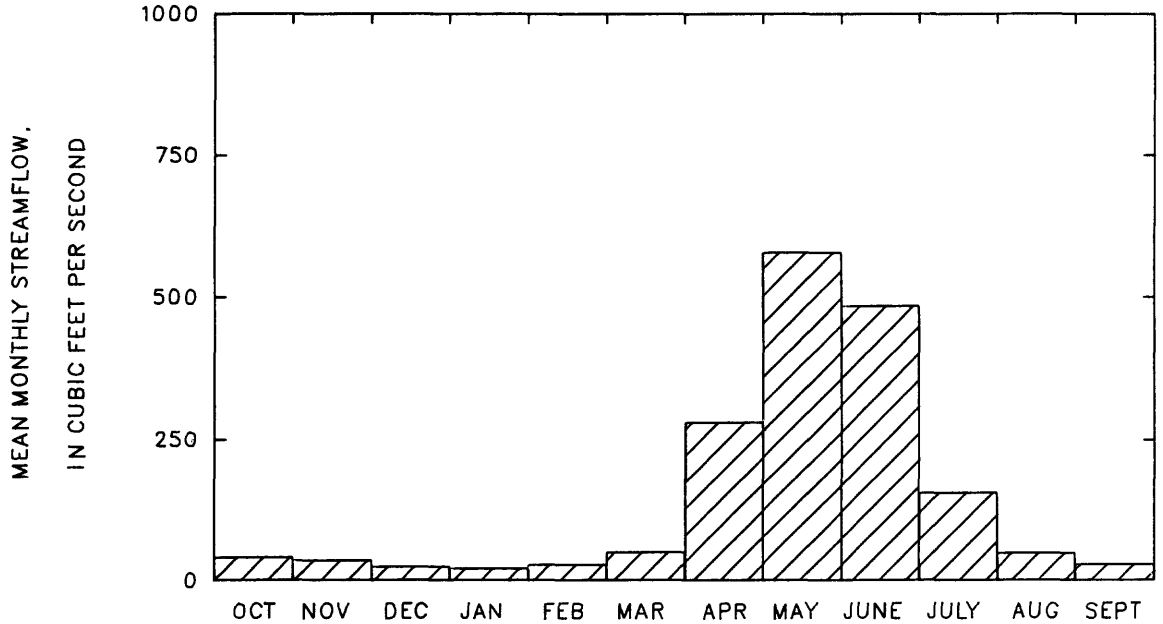
Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1150	2000	2750	---	---	---
3	1050	1730	2310	---	---	---
7	886	1350	1710	---	---	---
15	768	1130	1380	---	---	---
30	695	1000	1180	---	---	---
60	587	845	976	---	---	---
90	469	673	775	---	---	---

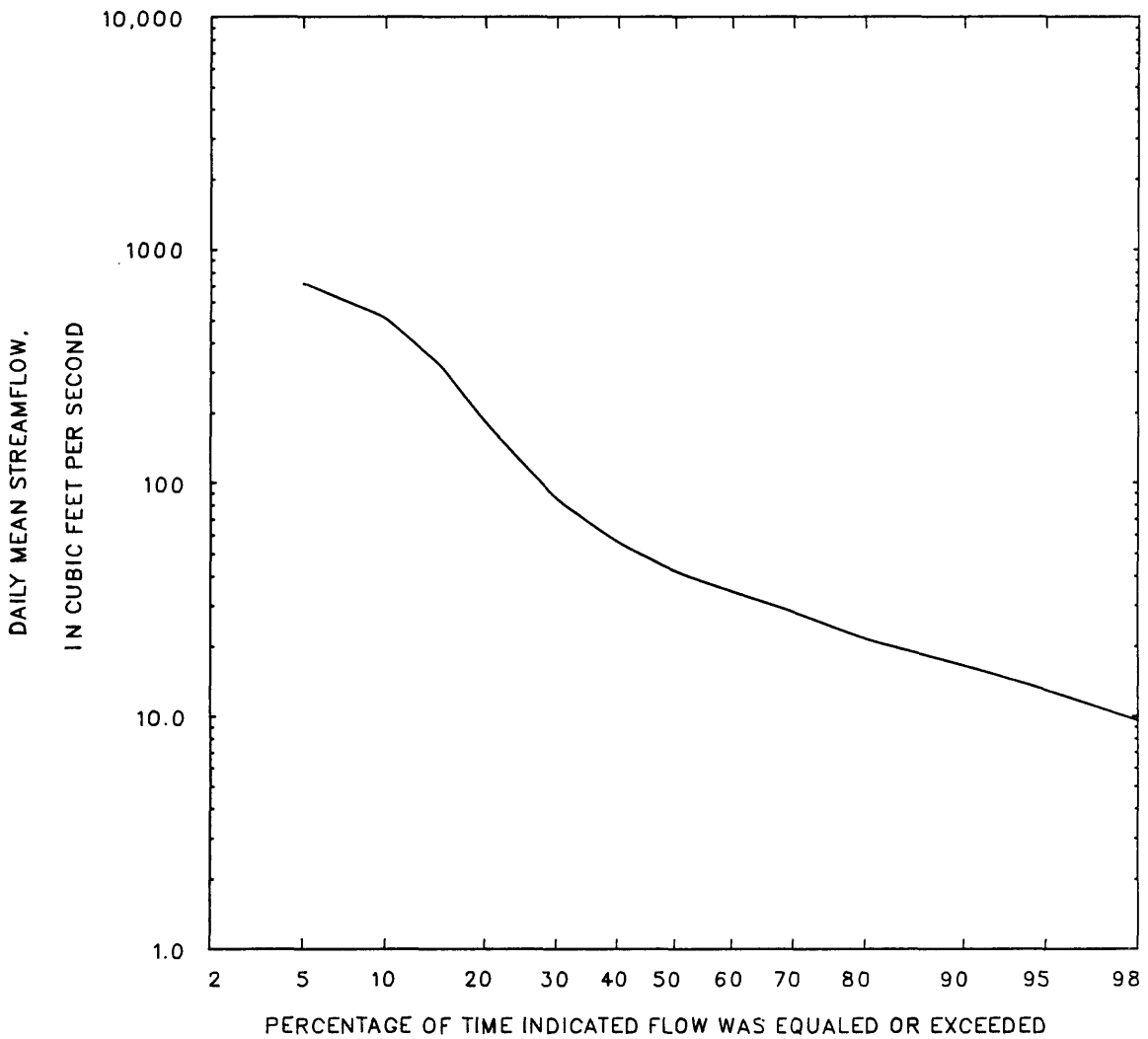
Duration of daily mean flow for period of record 1974-84

Discharge, in ft³/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1150	713	509	318	181	84	55	42	34	28	21	16	13	9.5	8.2	7.3	6.1

STATION 06638090 PERIOD OF RECORD 1974–84

SWEETWATER RIVER NEAR SWEETWATER STATION, WYO.





06639000 SWEETWATER RIVER NEAR ALCOVA, WYO.

LOCATION.--Lat 42°27'28", long 107°11'45", in SW¼NE¼ sec.25, T.29 N., R.87 W., Natrona County, on left bank at Dumbell Ranch, 1.0 mi downstream from Schounmaker ditch diversion dam, 13 mi upstream from high-water line of Pathfinder Reservoir at elevation 5,850 ft, and 25 mi southwest of Alcova.

DRAINAGE AREA.--2,327 mi^2.

PERIOD OF RECORD.--August 1913 to September 1924, October 1938 to current year (no winter records during 1974, 1975, 1977-81, and since 1983). Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 5,920 ft, from topographic map. August 28, 1913, to September 30, 1924, non-recording gages at site 0.4 mi upstream at different datums.

REMARKS.--Several small reservoirs above station, combined capacity, about 5,000 acre-ft, for irrigation. Diversions for irrigation of about 24,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 4,290 ft^3/s, April 13, 1924, maximum gage height, 9.90 ft, April 27, 1983; minimum daily, 0.5 ft^3/s, July 30 to August 12, 1940.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1914-24, 1939-73

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	87	16	46	20	0.44	3.0
November	83	20	50	15	0.30	3.3
December	59	20	38	8.7	0.23	2.5
January	55	11	31	9.4	0.30	2.1
February	69	12	36	10	0.29	2.4
March	210	33	79	35	0.45	5.2
April	1870	74	257	270	1.0	17.0
May	1170	21	415	284	0.68	27.5
June	1120	17	392	266	0.68	26.0
July	362	5.0	102	85	0.83	6.8
August	96	0.92	35	24	0.69	2.3
September	115	1.9	27	25	0.92	1.8
Annual	312	26	126	63	0.50	100

Magnitude and probability of annual low flow based on period of record 1915-24, 1940-73

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	8.7	3.2	1.8	1.1	0.58	0.38
3	9.3	3.3	1.8	1.1	0.59	0.38
7	9.6	3.5	1.9	1.1	0.59	0.38
14	10	3.8	2.1	1.2	0.62	0.39
30	13	5.1	2.9	1.8	0.95	0.61
60	20	9.4	5.6	3.4	1.9	1.2
90	26	14	9.2	6.2	3.8	2.7
120	31	19	13	9.5	6.3	4.6
183	34	24	19	15	12	10

Magnitude and probability of instantaneous peak flow based on 50 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
740	1260	1650	2180	2600	3030

Weighted skew = -0.198

Magnitude and probability of annual high flow based on period of record 1914-24, 1939-73

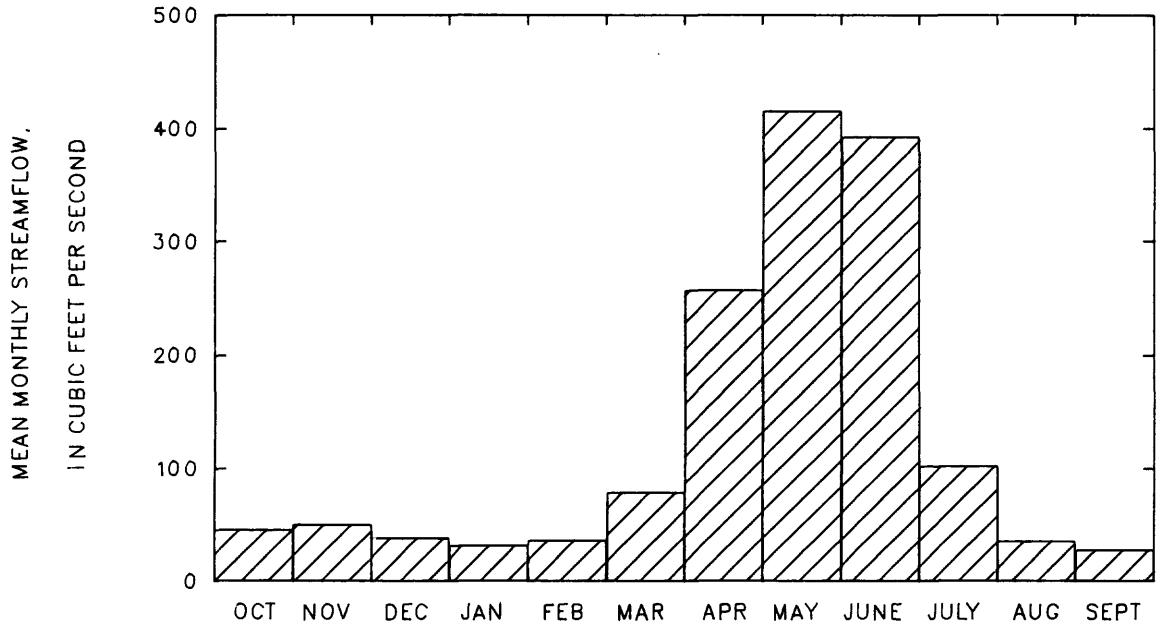
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	700	1200	1560	2040	2400	2770
3	668	1150	1490	1950	2290	2640
7	619	1060	1380	1780	2080	2390
15	548	942	1220	1580	1850	2120
30	471	815	1060	1380	1610	1850
60	391	667	854	1080	1250	1410
90	324	542	684	854	971	1080

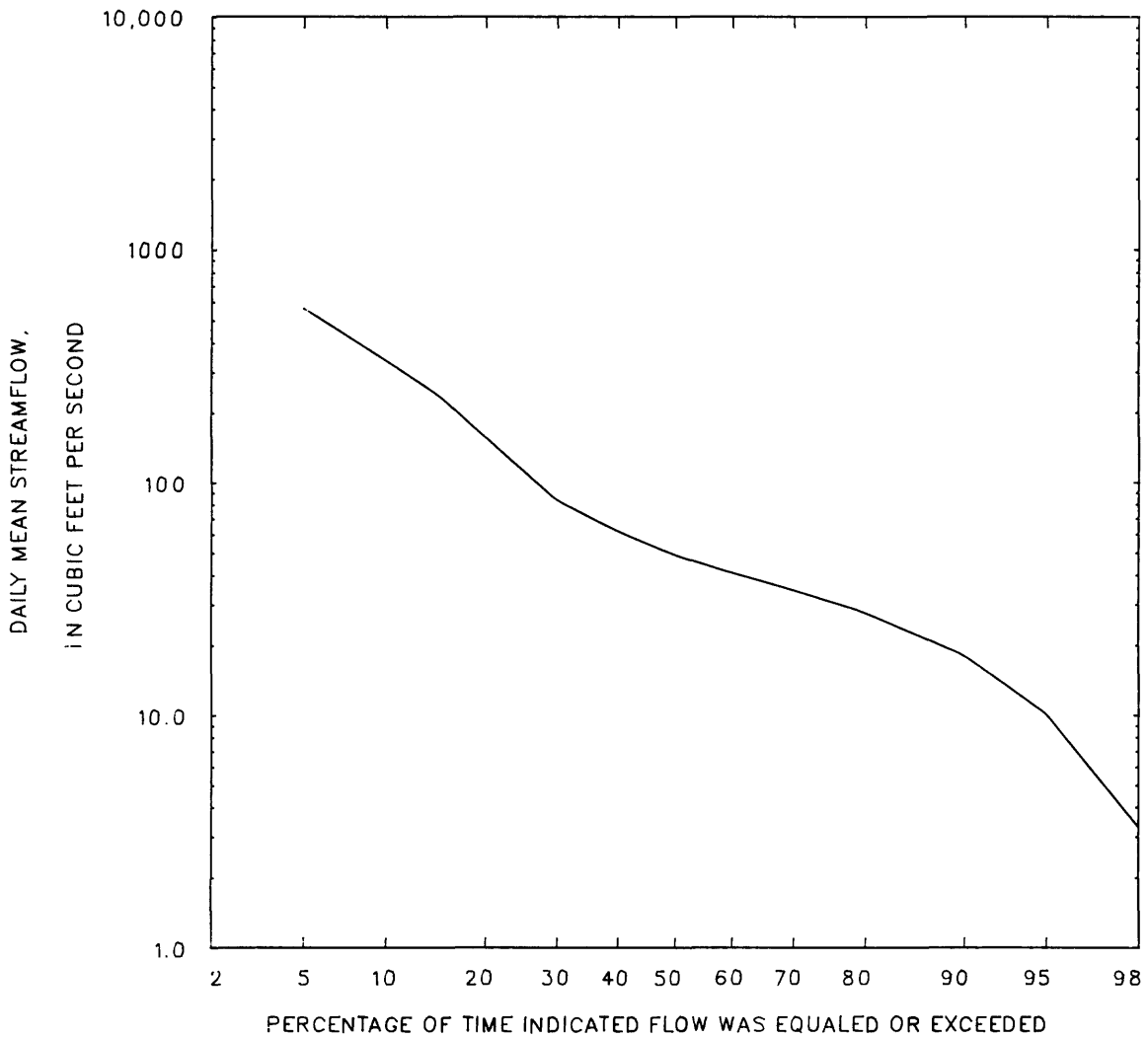
Duration of daily mean flow for period of record 1914-24, 1939-73

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1080	558	336	232	156	83	61	48	41	34	27	18	10	3.3	2.2	1.7	0.72

STATION 06639000 PERIOD OF RECORD 1914–24, 1939–73

SWEETWATER RIVER NEAR ALCOVA, WYO.





06641000 NORTH PLATTE RIVER BELOW PATHFINDER RESERVOIR, WYO.

LOCATION.--Lat 42°27'54", long 106°50'47", in SW¼ sec.24, T.29 N., R.84 W., Natrona County, on left bank 2,300 ft downstream from Pathfinder Dam and 9 mi southwest of Alcova.

DRAINAGE AREA.--10,711 mi^2 of which 700 mi^2 is probably noncontributing.

PERIOD OF RECORD.--May 1904 to December 1960. Monthly discharge only for some periods; published in WSP 1310. Prior to October 1920, published as "at Pathfinder." Supplemental records for January 1909 to September 1913, published as daily inflow to Pathfinder Reservoir in WSP 266, 286, 306, 326, and 356, have been found to be in error on basin of comparison with records at nearby stations and should not be used.

GAGE.--Water-stage recorder. Altitude of gage is 5,670 ft, from topographic map. Prior to 1932, staff or chain gages at same site and datum.

REMARKS.--Flow completely regulated by Seminoe and Pathfinder Reservoirs. Natural flow of stream affected by transbasin diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 18,900 ft^3/s, June 25-27, 1917; minimum not determined.

Monthly and annual streamflow 1914-60

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1880	0.30	327	465	1.4	1.8
November	1220	0.30	85	203	2.4	0.5
December	832	0.30	85	159	1.9	0.5
January	845	0.40	95	169	1.8	0.5
February	1140	0.40	99	212	2.1	0.5
March	1670	0.40	125	282	2.2	0.7
April	3580	0.60	638	813	1.3	3.5
May	5850	1.8	1990	1400	0.71	11.0
June	13500	158	4070	2800	0.69	22.5
July	9040	1800	4690	1260	0.27	25.9
August	5790	1280	3970	1050	0.26	21.9
September	4700	83	1940	1250	0.64	10.7
Annual	2750	673	1520	483	0.32	100

Magnitude and probability of annual low flow based on period of record 1915-60

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	4.0	0.90	0.48	0.28	0.16	0.11
3	4.5	1.0	0.51	0.30	0.17	0.12
7	5.0	1.1	0.56	0.32	0.18	0.13
14	5.6	1.3	0.61	0.34	0.19	0.14
30	8.0	1.5	0.68	0.38	0.21	0.15
60	10	1.8	0.78	0.41	0.23	0.17
90	13	2.3	0.91	0.46	0.25	0.19
120	17	2.9	1.1	0.51	0.28	0.21
183	49	6.5	1.7	0.62	0.33	0.25

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1914-60

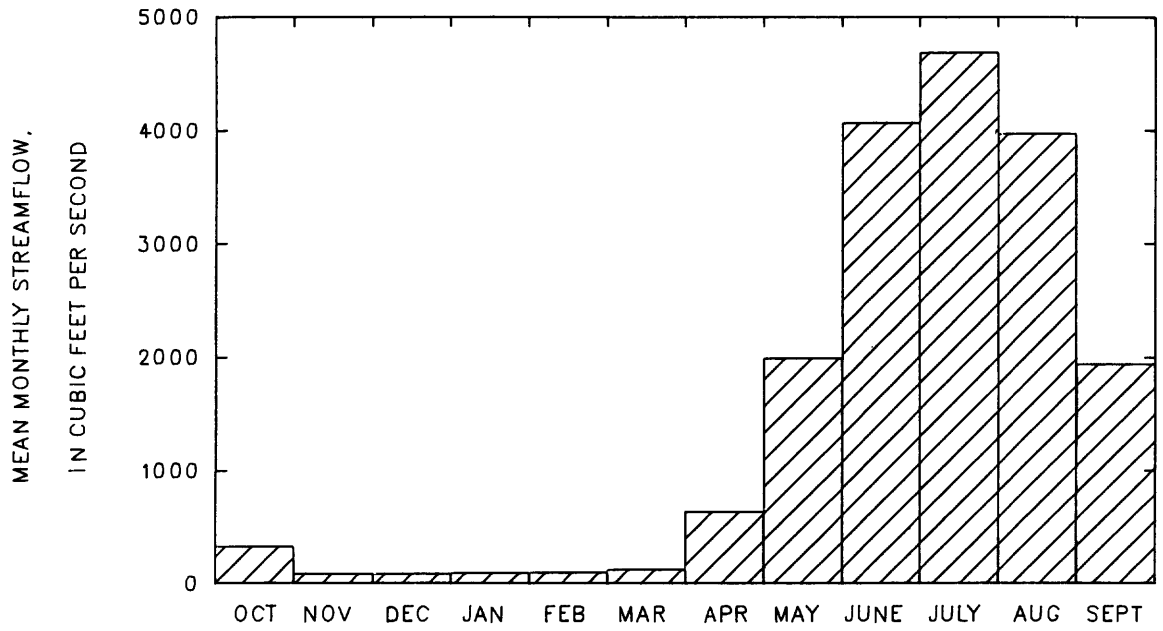
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	6170	8700	10600	13200	15400	17700
3	6090	8590	10500	13100	15300	17700
7	5890	8320	10200	12900	15100	17600
15	5560	7770	9470	11900	14000	16300
30	5200	7060	8390	10200	11600	13100
60	4870	6290	7090	7990	8580	9120
90	4350	5600	6320	7130	7670	8170

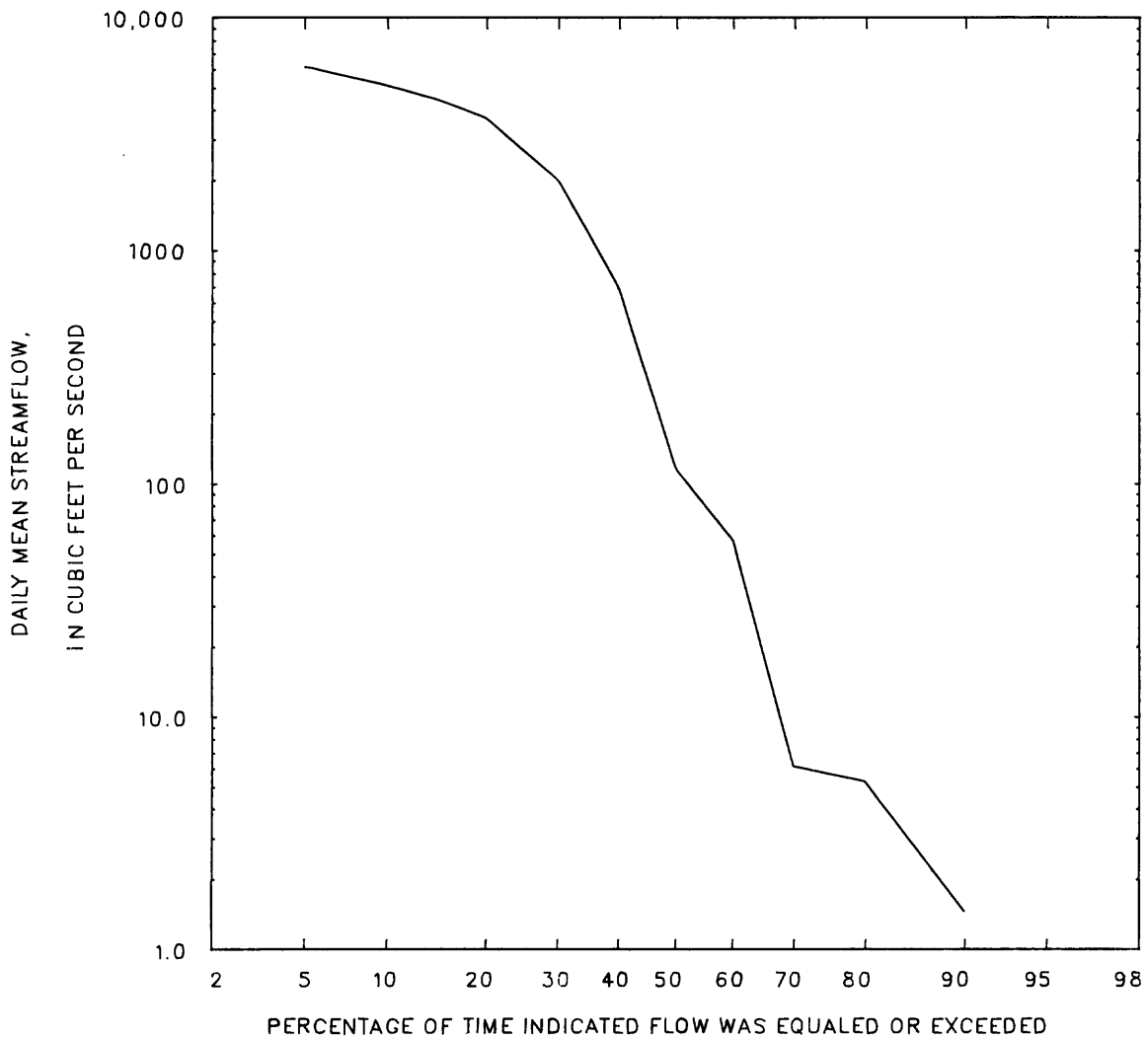
Duration of daily mean flow for period of record 1914-60

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
8110	6130	5090	4360	3690	2000	697	115	57	6.1	5.2	1.5	0.53	0.40	0.35	0.33	0.31

STATION 06641000 PERIOD OF RECORD 1914–60

NORTH PLATTE RIVER BELOW PATHFINDER RESERVOIR, WYO.





06642000 NORTH PLATTE RIVER AT ALCOVA, WYO.

LOCATION.--Lat 42°34'27", long 106°41'31", in NW¼NE¼NW¼ sec.17, T.30 N., R.82 W., Natrona County, on left bank 0.5 mi downstream from Hogback Draw, 0.8 mi downstream from Gray Reef Dam, 1.9 mi northeast of Alcova, and 3.8 mi downstream from Alcova Dam.

DRAINAGE AREA.--10,812 mi^2, of which 700 mi^2 is noncontributing.

PERIOD OF RECORD.--February 1904 to December 1905, October 1934 to current year. Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 5,299.40 ft. February 19, 1904, to December 31, 1905, non-recording gage at site 3.7 mi upstream at different datum. June 1, 1935, to April 27, 1961, water-stage recorder at site 3.5 mi upstream at different datum.

REMARKS.--Flow completely regulated by Seminoe, Pathfinder, and Alcova Reservoirs. Natural flow of stream affected by transbasin diversions, storage reservoirs, power development diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 13,400 ft^3/s, June 6, 10, 11, 1905, gage height, 11.5 ft, site and datum then in use; minimum not determined.

Monthly and annual streamflow 1938-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1480	3.0	625	561	0.90	4.1
November	1380	3.0	534	493	0.92	3.5
December	1160	3.0	480	437	0.91	3.1
January	955	3.0	455	410	0.90	3.0
February	1040	3.0	456	417	0.91	3.0
March	2570	3.0	529	592	1.1	3.4
April	3480	3.0	840	896	1.1	5.5
May	4120	4.4	1490	1080	0.73	9.7
June	7900	19	2230	1580	0.71	14.5
July	7750	564	3130	1530	0.49	20.4
August	5060	553	3020	1280	0.42	19.7
September	3390	180	1560	694	0.44	10.2
Annual	2580	711	1290	374	0.29	100

Magnitude and probability of annual low flow based on period of record 1939-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	57	7.7	2.6	1.0	0.33	0.13
3	59	7.8	2.6	1.0	0.33	0.13
7	62	8.0	2.6	1.0	0.33	0.13
14	68	8.3	2.6	1.0	0.33	0.14
30	75	8.5	2.6	1.1	0.33	0.14
60	90	10	3.0	1.1	0.33	0.14
90	99	11	3.3	1.1	0.33	0.14
120	108	12	3.6	1.2	0.35	0.15
183	144	17	5.2	1.8	0.52	0.22

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1938-84

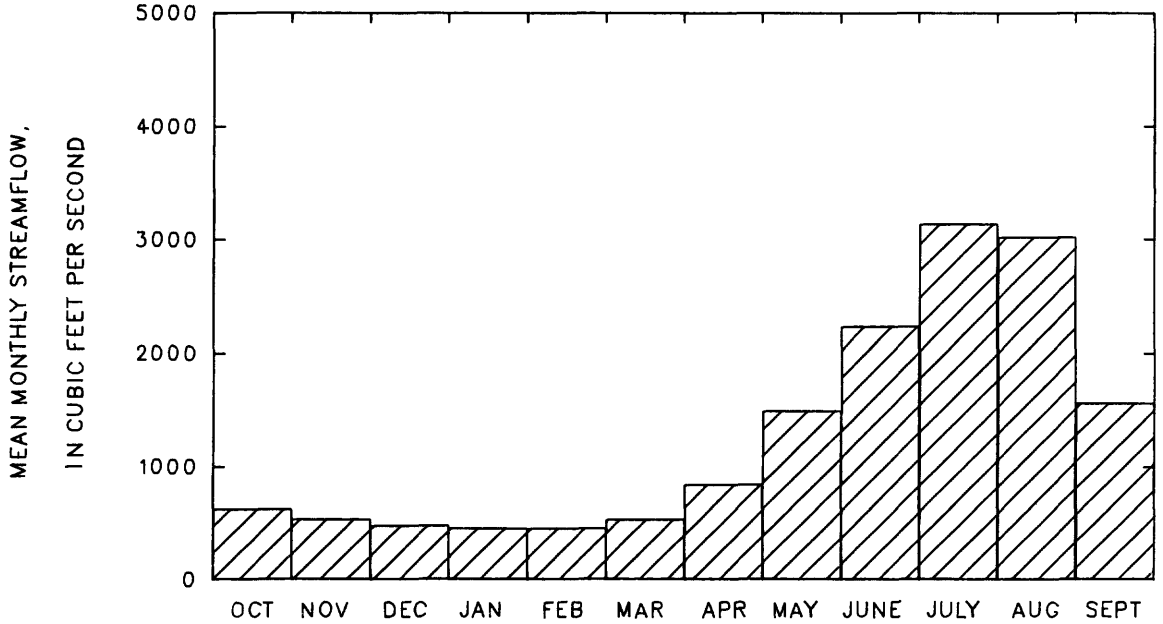
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	4160	5880	6920	8130	8960	9730
3	4100	5820	6860	8070	8900	9680
7	4010	5690	6710	7890	8710	9470
15	3830	5420	6410	7570	8370	9140
30	3550	5050	5990	7120	7910	8670
60	3190	4570	5430	6460	7180	7860
90	2910	4120	4870	5750	6350	6930

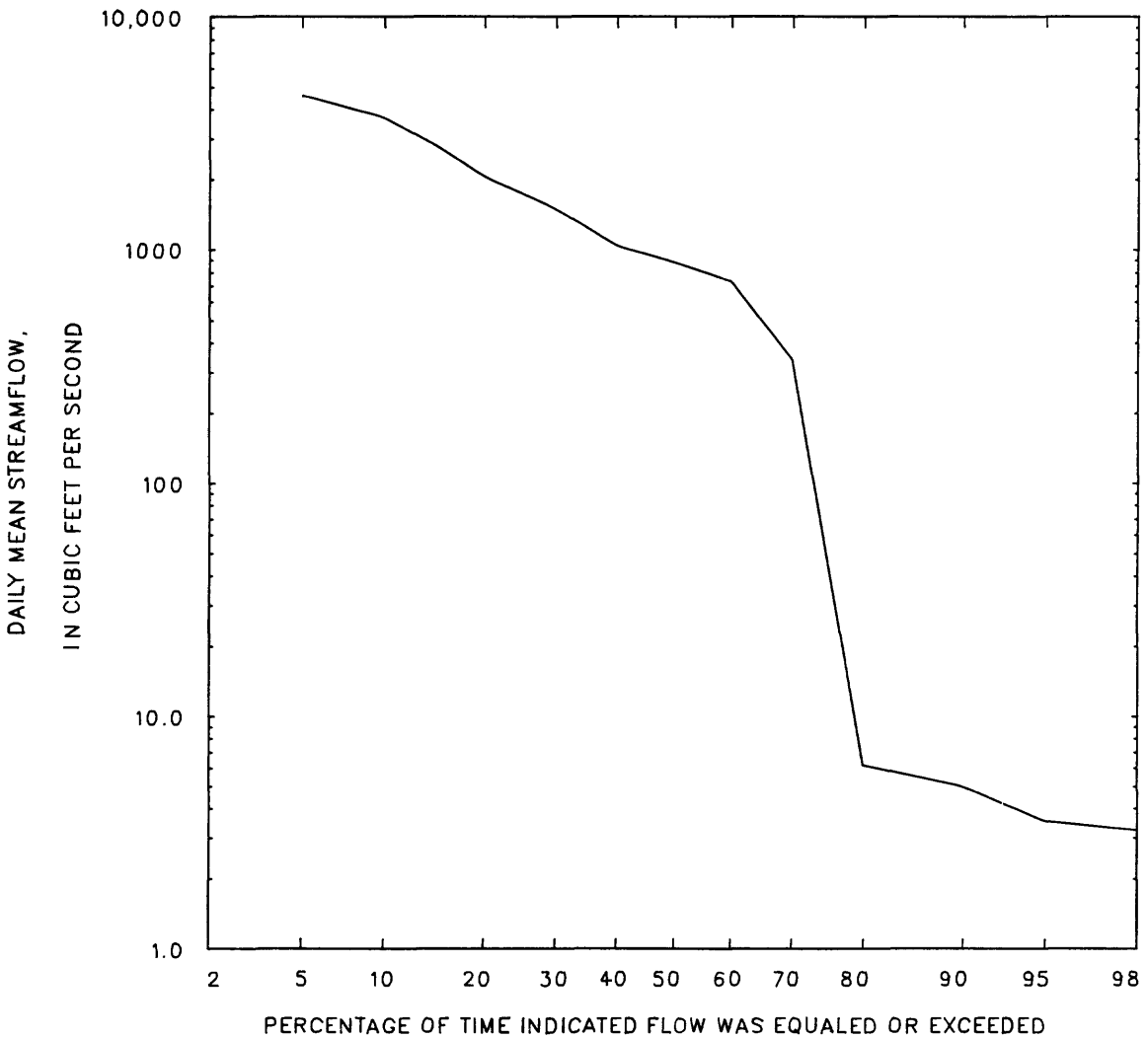
Duration of daily mean flow for period of record 1938-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
6030	4570	3660	2720	2040	1480	1030	878	726	338	6.1	4.9	3.5	3.2	3.1	3.1	3.0

STATION 06642000 PERIOD OF RECORD 1938–84

NORTH PLATTE RIVER AT ALCOVA, WYO.





06643000 BATES CREEK NEAR ALCOVA, WYO.

LOCATION.--Lat 42°40'34", long 106°36'09", in SE¼SE¼ sec.1, T.31 N., R.82 W., Natrona County, on right bank 2.8 mi upstream from mouth and 10.5 mi northeast of Alcova.

DRAINAGE AREA.--393 mi^2.

PERIOD OF RECORD.--April 1916 to September 1924, (irrigation seasons only), June 1935 to September 1954, October 1956 to September 1961. Published as "near Casper," 1916-24.

GAGE.--Water-stage recorder. Altitude of gage is 5,290 ft, from topographic map. April 10, 1916, to September 30, 1924, staff gages at site 1,200 ft upstream at different datums. June 1, 1935, to September 30, 1954, water-stage recorder at site 1,200 ft upstream at datum 3.91 ft higher.

REMARKS.--Diversions for irrigation of about 8,800 acres above station. Natural flow of stream affected by storage for irrigation in Bates Creek Reservoir (capacity, about 3,100 acre-ft), and several smaller reservoirs (total capacity, about 1,400 acre-ft) above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,000 ft^3/s, estimated, September 27, 30, 1923; no flow at times in many years.

Monthly and annual streamflow 1936-54, 1957-61

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	16	0.00	6.1	4.9	0.81	4.0
November	20	1.5	9.3	5.7	0.61	6.2
December	25	2.0	11	5.6	0.51	7.2
January	22	1.5	9.2	5.1	0.55	6.1
February	31	3.0	11	5.9	0.55	7.2
March	75	1.1	21	18	0.87	13.7
April	149	0.10	38	39	1.0	25.1
May	190	0.17	33	51	1.5	21.7
June	31	0.00	3.8	7.1	1.8	2.6
July	28	0.02	3.7	7.1	1.9	2.5
August	22	0.00	2.1	4.6	2.2	1.4
September	18	0.00	3.5	4.1	1.2	2.3
Annual	30	3.1	13	8.4	0.67	100

Magnitude and probability of annual low flow based on period of record 1937-54, 1958-61

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	---	---	---
3	0.00	0.00	0.00	---	---	---
7	0.00	0.00	0.00	---	---	---
14	0.00	0.00	0.00	---	---	---
30	0.02	0.00	0.00	---	---	---
60	0.22	0.07	0.02	---	---	---
90	0.55	0.18	0.11	---	---	---
120	0.98	0.29	0.15	---	---	---
183	2.7	1.0	0.60	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1936-54, 1957-61

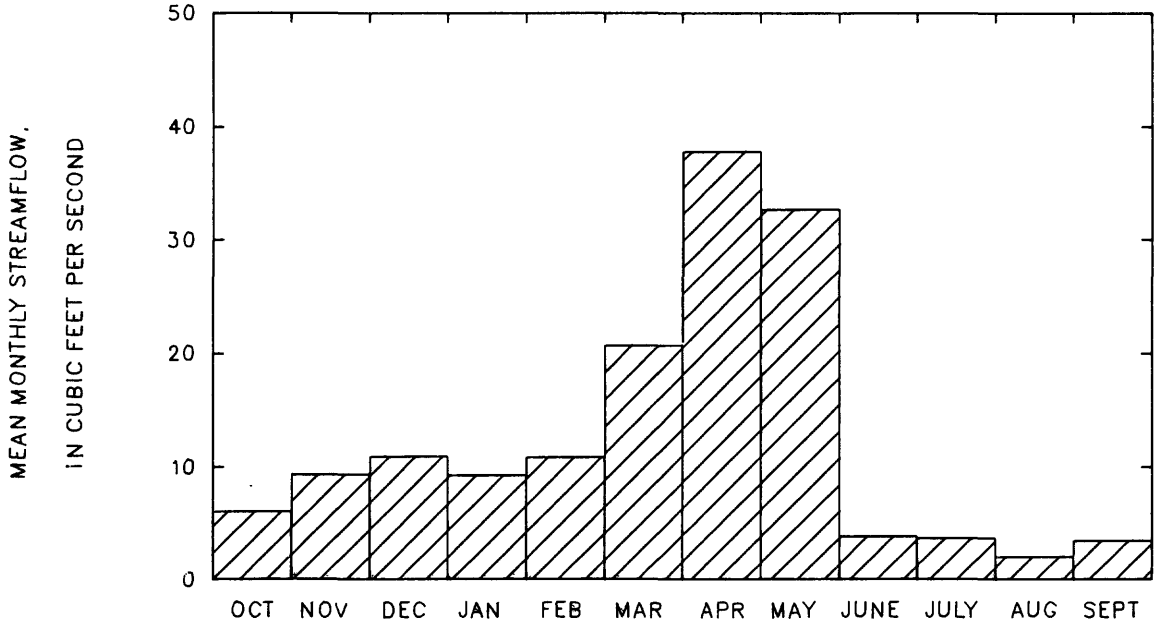
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	223	411	543	---	---	---
3	161	294	388	---	---	---
7	104	199	277	---	---	---
15	66	137	205	---	---	---
30	41	90	140	---	---	---
60	30	63	97	---	---	---
90	24	49	71	---	---	---

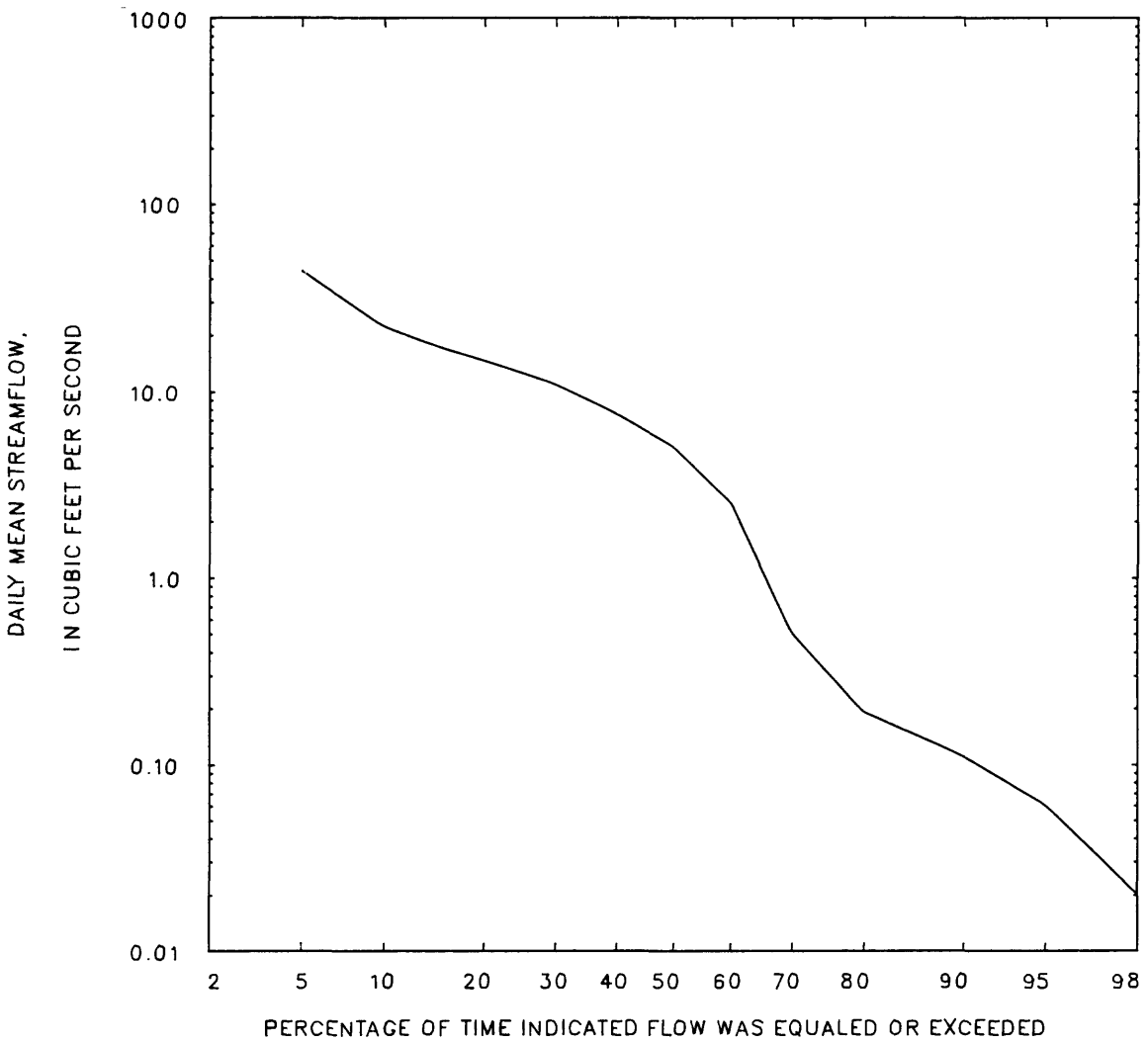
Duration of daily mean flow for period of record 1936-54, 1957-61

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
177	44	22	17	15	11	7.5	5.0	2.5	0.50	0.19	0.11	0.06	0.02	0.01	0.01	0.00

STATION 06643000 PERIOD OF RECORD 1936–54, 1957–61

BATES CREEK NEAR ALCOVA, WYO.





06643500 NORTH PLATTE RIVER NEAR GOOSE EGG, WYO.

LOCATION.--Lat 42°45'10", long 106°31'12", in SW¼NW¼SW¼ sec.11, T.32 N., R.81 W., Natrona County, on right bank 1.6 mi southwest of Goose Egg, 2.5 mi upstream from Poison Spider Creek, and 12 mi southwest of Casper.

DRAINAGE AREA.--11,439 mi^2, of which 700 mi^2 is noncontributing.

PERIOD OF RECORD.--April 1917 to September 1919 (irrigation seasons only), May to September 1924, May to September 1947, May 1950 to September 1960, April 1983 to September 1984. Monthly discharge only for some periods; published in WSP 1310. Published as "near Casper," 1917-19, 1924.

GAGE.--Water-stage recorder. Altitude of gage is 5,180 ft, from topographic map. April 1917 to September 1919, staff gage at site 1.0 mi upstream at different datum. May to September 1924, and May to September 1947, staff gages at site 1.8 mi downstream at different datum. May 1950 to September 1960, water-stage recorder at site 2.7 mi upstream at different datum.

REMARKS.--Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 19,200 ft^3/s, June 24-28, 1917; maximum gage height, 11.80 ft, May 28, 1953, site and datum then in use; minimum daily discharge, 8.7 ft^3/s, June 14, 1955.

Monthly and annual streamflow 1951-60, 1984

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1190	33	344	476	1.4	2.1
November	1210	27	280	440	1.6	1.7
December	971	24	234	360	1.5	1.4
January	881	17	224	338	1.5	1.4
February	901	22	216	332	1.5	1.3
March	2600	24	374	770	2.1	2.3
April	3550	22	1040	1260	1.2	6.4
May	4120	29	1820	1400	0.77	11.2
June	7760	18	2840	2260	0.79	17.5
July	5150	1550	3820	1180	0.31	23.5
August	5130	1880	3490	1100	0.32	21.5
September	3610	418	1560	885	0.57	9.6
Annual	2570	717	1360	522	0.38	100

Magnitude and probability of annual low flow based on period of record 1952-60

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	16	9.8	7.6	---	---	---
3	21	9.8	7.6	---	---	---
7	24	10	7.6	---	---	---
14	26	11	8.5	---	---	---
30	31	13	10	---	---	---
60	35	16	13	---	---	---
90	41	19	15	---	---	---
120	43	20	15	---	---	---
183	57	25	19	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1951-60, 1984

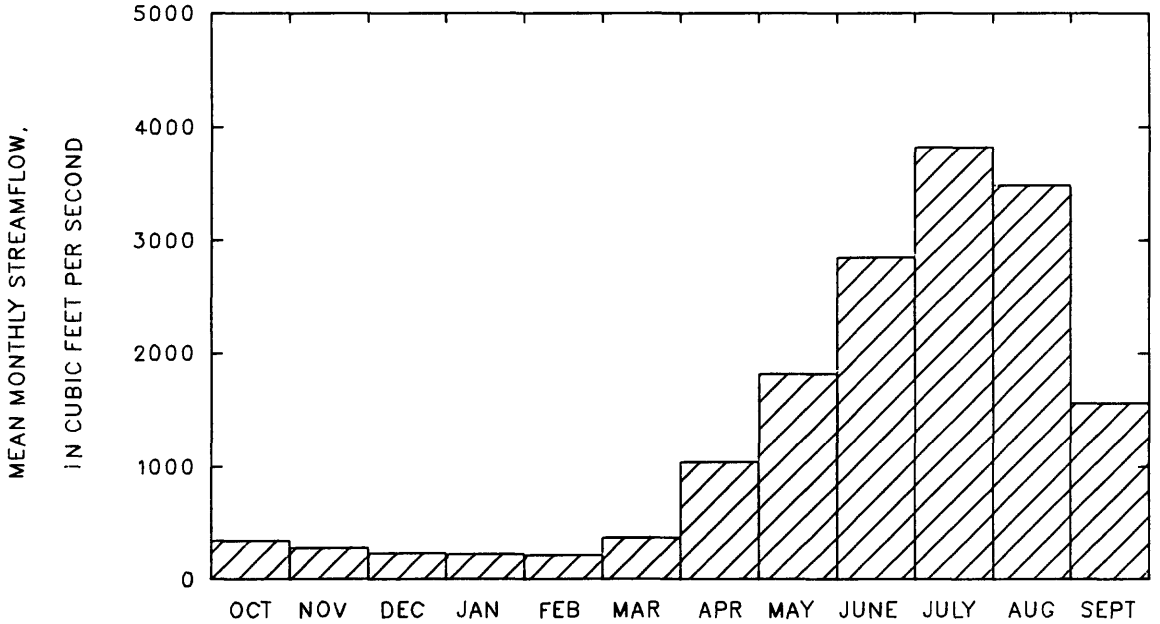
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	5440	7320	8290	---	---	---
3	5390	7290	8240	---	---	---
7	5290	7200	8150	---	---	---
15	4960	6780	7710	---	---	---
30	4560	6050	6780	---	---	---
60	4170	5380	5910	---	---	---
90	3680	4800	5350	---	---	---

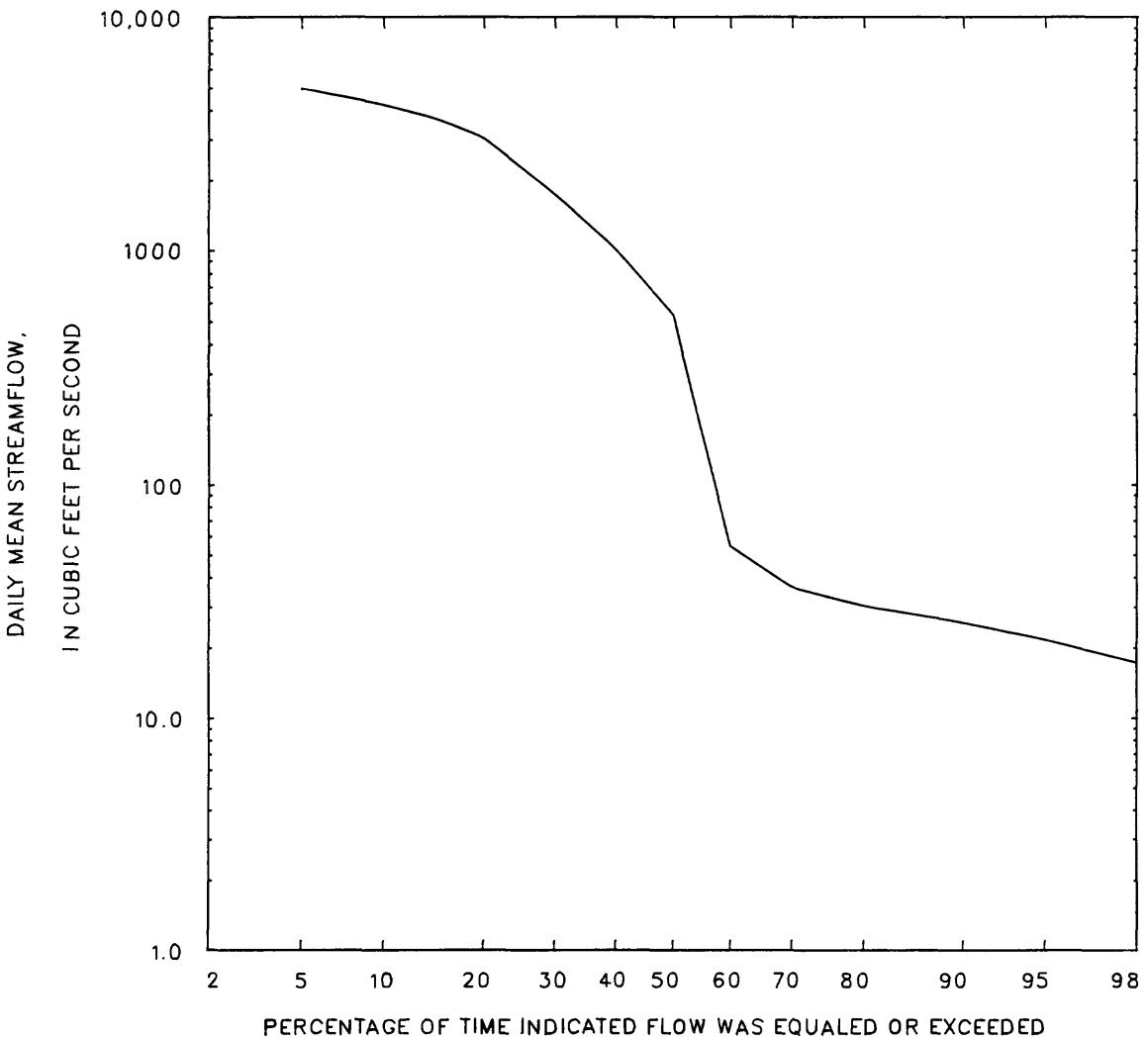
Duration of daily mean flow for period of record 1951-60, 1984

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
6890	4950	4220	3630	3040	1730	1010	529	54	36	30	25	21	17	14	13	9.5

STATION 06643500 PERIOD OF RECORD 1951–60, 1984

NORTH PLATTE RIVER NEAR GOOSE EGG, WYO.





06644500 CASPER CREEK AT CASPER, WYO.

LOCATION.--Lat 42°50'52", long 106°21'52", in NW¼NE¼ sec.7, T.33 N., R.79 W., Natrona County, on left bank 700 ft upstream from bridge on U.S. Highways 20 and 26, 0.4 mile upstream from mouth, and 2 mi west of city hall in Casper.

DRAINAGE AREA.--668 mi^2, of which 98 mi^2 is probably noncontributing.

PERIOD OF RECORD.--May 1946 to September 1956.

GAGE.--Water-stage recorder and Parshall flume with concrete overflow section. Altitude of gage is 5,110 ft, from topographic map.

REMARKS.--Diversions for irrigation of about 3,500 acres above station. Twenty small reservoirs (total capacity, about 15,000 acre-ft) above station. Return flow from water imported from North Platte River for Kendrick Irrigation project enters above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 531 ft^3/s, June 25, 1948 gage height, 3.51 ft, from rating curve extended above 9 ft^3/s on basis of slope-area measurements of peak flow; no flow at times.

Monthly and annual streamflow 1947-56

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1.5	0.08	0.91	0.56	0.61	3.4
November	1.8	0.08	0.84	0.56	0.66	3.2
December	1.6	0.05	0.71	0.51	0.71	2.7
January	1.6	0.09	0.66	0.57	0.85	2.5
February	2.2	0.05	0.86	0.74	0.87	3.2
March	47	0.15	6.2	14	2.3	23.3
April	8.7	0.15	2.4	2.8	1.2	9.2
May	19	0.20	4.2	5.6	1.4	15.7
June	21	0.29	5.3	7.3	1.4	20.0
July	4.6	0.05	1.6	1.6	1.0	6.0
August	4.0	0.21	1.5	1.2	0.83	5.5
September	3.3	0.14	1.4	1.0	0.72	5.3
Annual	6.9	0.18	2.2	1.9	0.84	100

Magnitude and probability of annual low flow based on period of record 1948-56

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.09	0.00	0.00	---	---	---
3	0.11	0.00	0.00	---	---	---
7	0.13	0.00	0.00	---	---	---
14	0.18	0.00	0.00	---	---	---
30	0.37	0.14	0.07	---	---	---
60	0.43	0.21	0.14	---	---	---
90	0.49	0.27	0.20	---	---	---
120	0.57	0.33	0.24	---	---	---
183	0.71	0.39	0.27	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1947-56

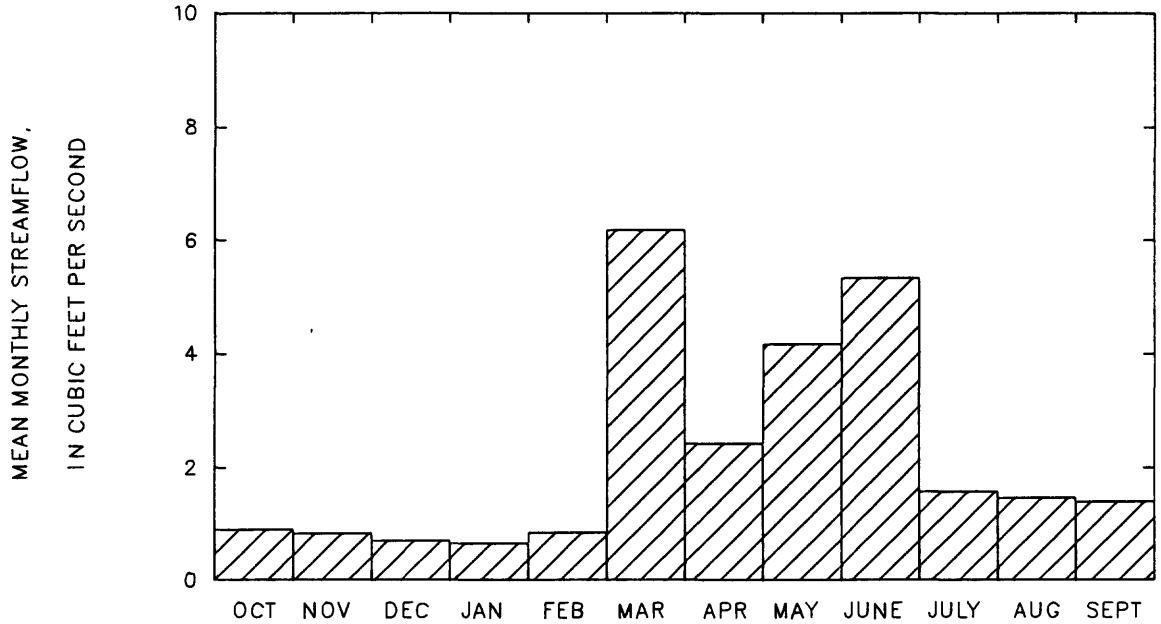
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	22	78	169	---	---	---
3	15	55	121	---	---	---
7	10	35	76	---	---	---
15	7.3	23	47	---	---	---
30	5.9	18	32	---	---	---
60	4.5	11	18	---	---	---
90	3.9	8.8	13	---	---	---

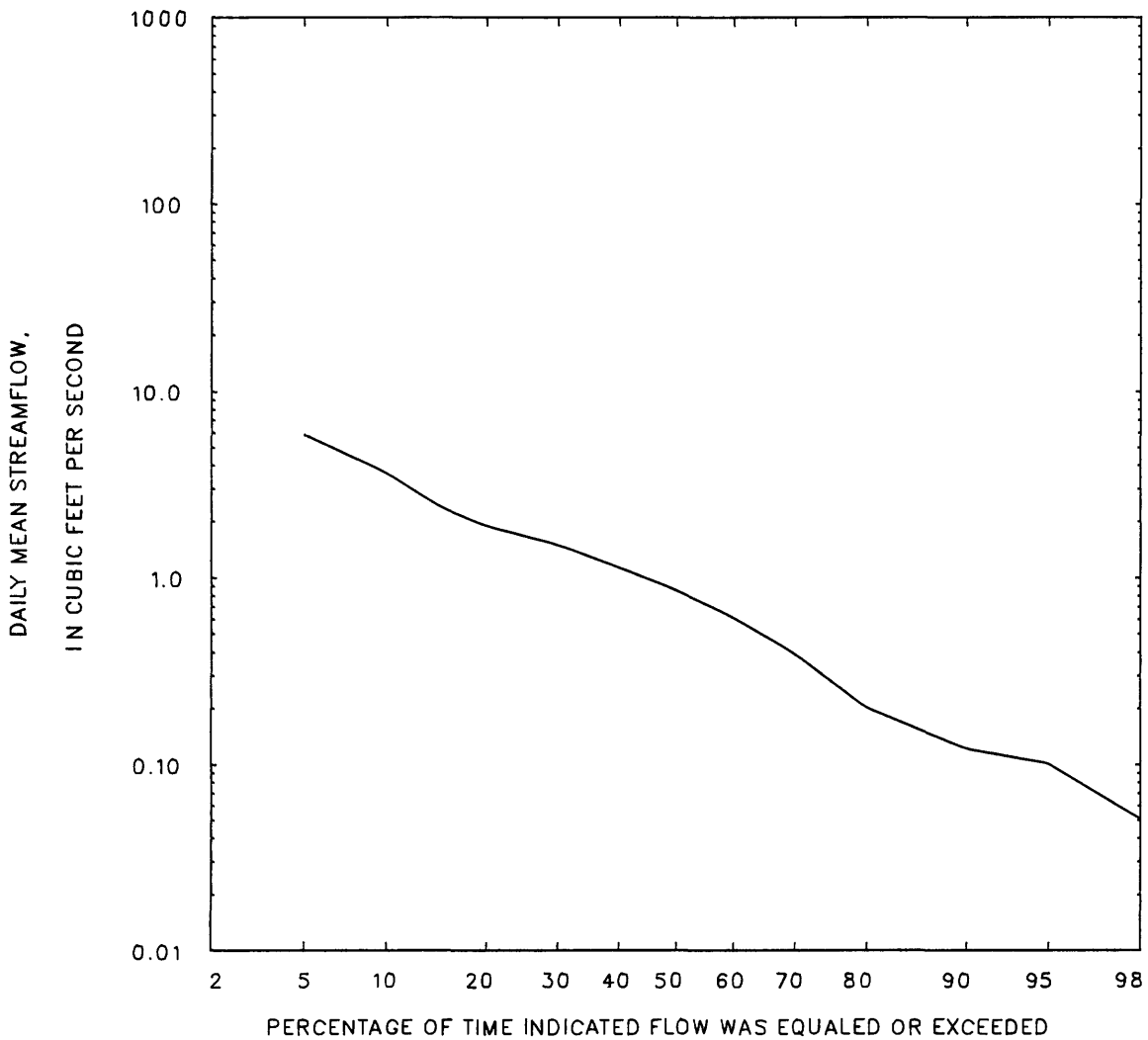
Duration of daily mean flow for period of record 1947-56

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
22	5.8	3.6	2.3	1.9	1.5	1.1	0.85	0.61	0.39	0.20	0.12	0.10	0.05	0.03	0.01	0.00

STATION 06644500 PERIOD OF RECORD 1947–56

CASPER CREEK AT CASPER, WYO.





06645000 NORTH PLATTE RIVER BELOW CASPER, WYO.

LOCATION.--Lat 42°51'45", long 106°13'00", in NW¼NW¼ sec.4, T.33 N., R.78 W., Natrona County, on right bank 0.3 mile upstream from Claude Creek, 0.5 mi north of U.S. Highways 20 and 87, 5.5 mi east of City Hall in Casper, and 9.5 mi downstream from Casper Creek.

DRAINAGE AREA.--12,573 mi^2, of which 840 mi^2 is probably noncontributing.

PERIOD OF RECORD.--May 1929 to September 1959. Prior to October 1932, published as "at Casper."

GAGE.--Water-stage recorder. Altitude of gage is 5,070 ft, from topographic map. Prior to October 1, 1932, staff or chain gages at sites 9 mi upstream at different datums.

REMARKS.--Natural flow of stream affected by transbasin diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,800 ft^3/s, May 30, 1929, gage height, 8.00 ft, site and datum then in use, from rating curve extended above 6,400 ft^3/s; minimum daily, 26 ft^3/s, December 9, 1956.

Monthly and annual streamflow 1938-59

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1060	72	192	221	1.2	1.3
November	594	63	108	110	1.0	0.7
December	570	47	93	108	1.2	0.6
January	498	42	86	93	1.1	0.6
February	528	53	88	99	1.1	0.6
March	648	55	112	124	1.1	0.7
April	3060	56	407	736	1.8	2.7
May	4240	60	1440	1150	0.80	9.5
June	5470	45	2410	1310	0.54	15.8
July	5390	1540	4160	959	0.23	27.3
August	5220	1830	4210	873	0.21	27.7
September	3740	229	1920	881	0.46	12.6
Annual	1920	748	1280	274	0.21	100

Magnitude and probability of annual low flow based on period of record 1939-59

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	42	35	32	30	---	---
3	42	37	37	36	---	---
7	---	---	---	---	---	---
14	---	---	---	---	---	---
30	---	---	---	---	---	---
60	---	---	---	---	---	---
90	---	---	---	---	---	---
120	---	---	---	---	---	---
183	76	68	67	67	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1938-59

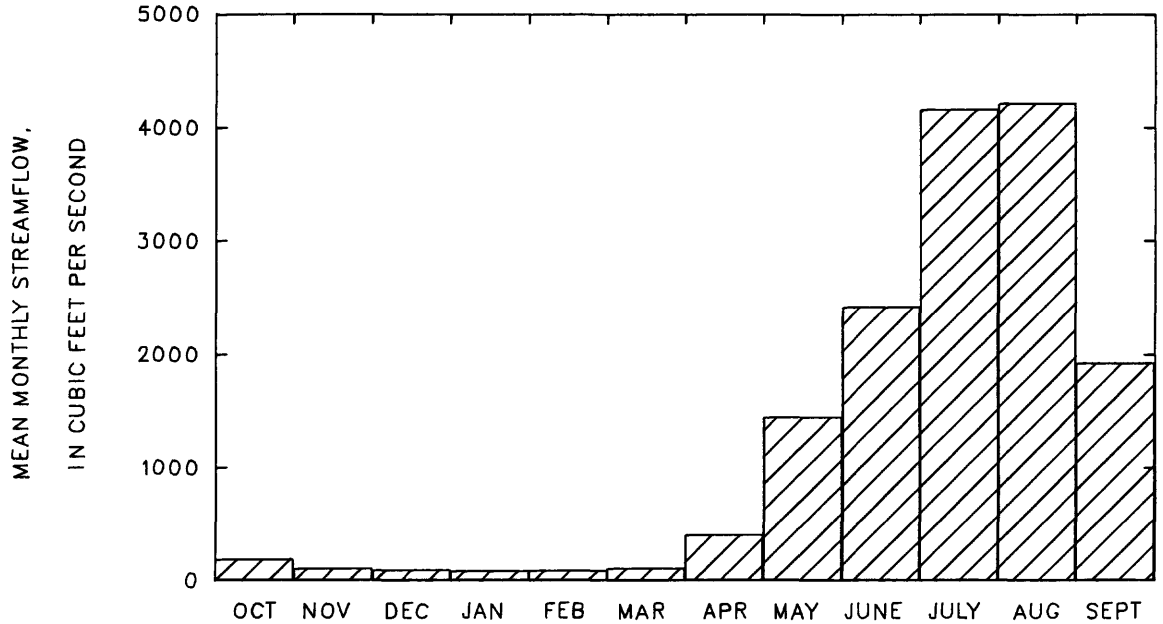
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	5910	6400	6490	6530	---	---
3	5730	6200	6290	6330	---	---
7	5560	6020	6110	6140	---	---
15	5280	5720	5810	5840	---	---
30	4980	5330	5380	5400	---	---
60	4660	5040	5100	5120	---	---
90	4160	4630	4740	4800	---	---

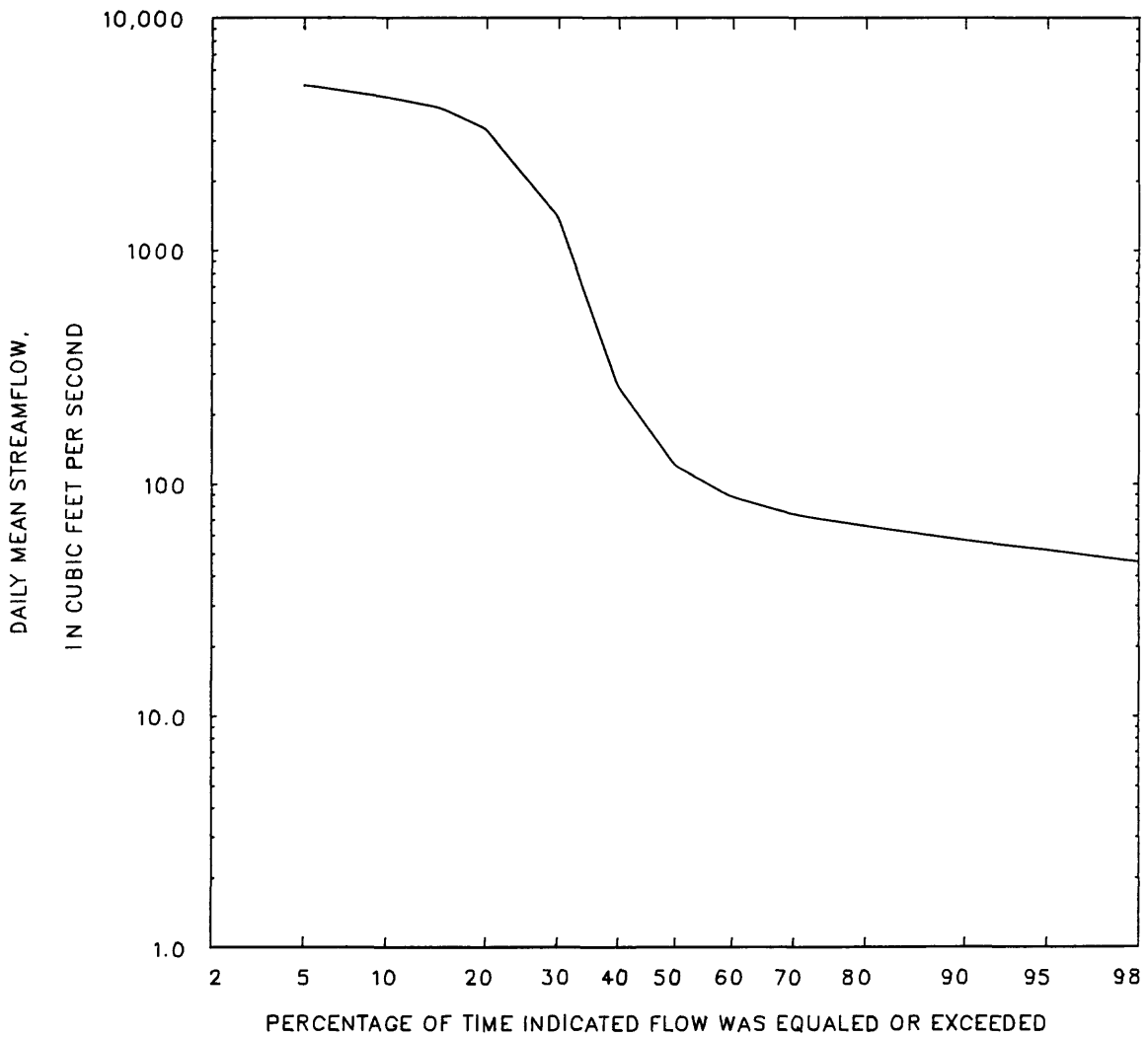
Duration of daily mean flow for period of record 1938-59

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
5720	5140	4580	4110	3340	1400	263	120	87	73	65	56	51	45	42	37	31

STATION 06645000 PERIOD OF RECORD 1938–59

NORTH PLATTE RIVER BELOW CASPER, WYO.





06646500 DEER CREEK AT GLENROCK, WYO.

LOCATION.--Lat 42°51'42", long 105°52'02", in SW¼NW¼ sec.4, T.33 N., R.75 W., Converse County, on left bank 40 ft downstream from bridge on U.S. Highways 20 and 87 in Glenrock and 0.6 mi upstream from mouth.

DRAINAGE AREA.--212 mi^2.

PERIOD OF RECORD.--April 1916 to September 1924, May 1928 to September 1933, March 1935 to February 1961. Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 4,980 ft, from topographic map. Prior to June 1, 1935, staff gages at site 400 ft downstream at various datums. Datum lowered 2.00 ft June 15, 1916, and 1.00 ft May 26, 1928.

REMARKS.--Diversions for irrigation of about 6,500 acres above and 100 acres below station. One small reservoir above station (capacity, about 60 acre-ft) for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 2,840 ft^3/s, April 15, 1924 gage height, 6.5 ft, site and datum then in use, from rating curve extended above 1,200 ft^3/s; no flow at times in many years.

Monthly and annual streamflow 1917-24, 1929-33, 1936-60

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	29	0.00	8.4	8.3	0.99	1.2
November	40	0.00	14	8.6	0.63	2.0
December	28	1.0	13	6.9	0.52	2.0
January	25	1.0	13	6.1	0.47	1.9
February	25	1.0	14	6.4	0.46	2.0
March	100	5.0	29	23	0.79	4.2
April	512	10	180	100	0.56	26.4
May	849	5.2	326	226	0.69	47.9
June	278	0.43	70	68	0.97	10.3
July	84	0.00	8.2	16	2.0	1.2
August	28	0.00	1.8	4.5	2.5	0.3
September	51	0.00	3.9	8.5	2.2	0.6
Annual	113	7.9	57	28	0.49	100

Magnitude and probability of annual low flow based on period of record 1917-24, 1930-33, 1936-60

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	0.00	---	---
3	0.00	0.00	0.00	0.00	---	---
7	0.00	0.00	0.00	0.00	---	---
14	0.01	0.00	0.00	0.00	---	---
30	0.17	0.00	0.00	0.00	---	---
60	0.41	0.06	0.00	0.00	---	---
90	0.78	0.16	0.05	0.00	---	---
120	1.8	0.40	0.13	0.01	---	---
183	5.8	2.2	1.1	0.61	---	---

Magnitude and probability of instantaneous peak flow based on 32 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
790	1330	1760	2390	2910	3480

Weighted skew = 0.097

Magnitude and probability of annual high flow based on period of record 1917-24, 1929-33, 1936-60

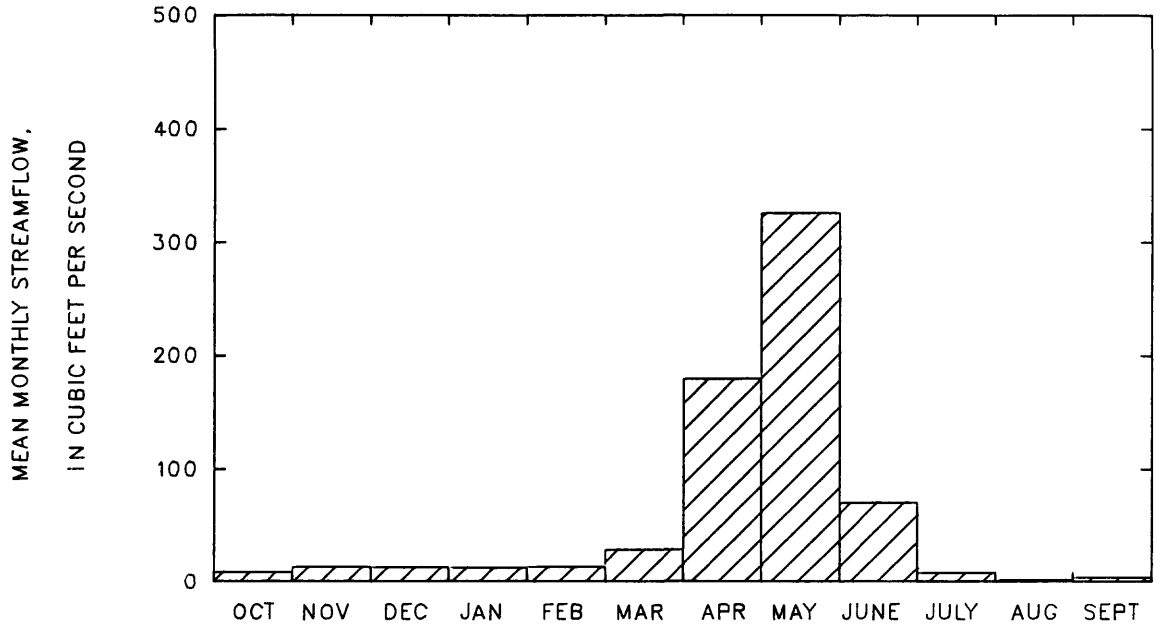
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	696	1150	1500	2000	---	---
3	608	973	1240	1600	---	---
7	523	844	1070	1370	---	---
15	447	708	874	1070	---	---
30	369	570	681	797	---	---
60	259	399	473	547	---	---
90	189	289	341	392	---	---

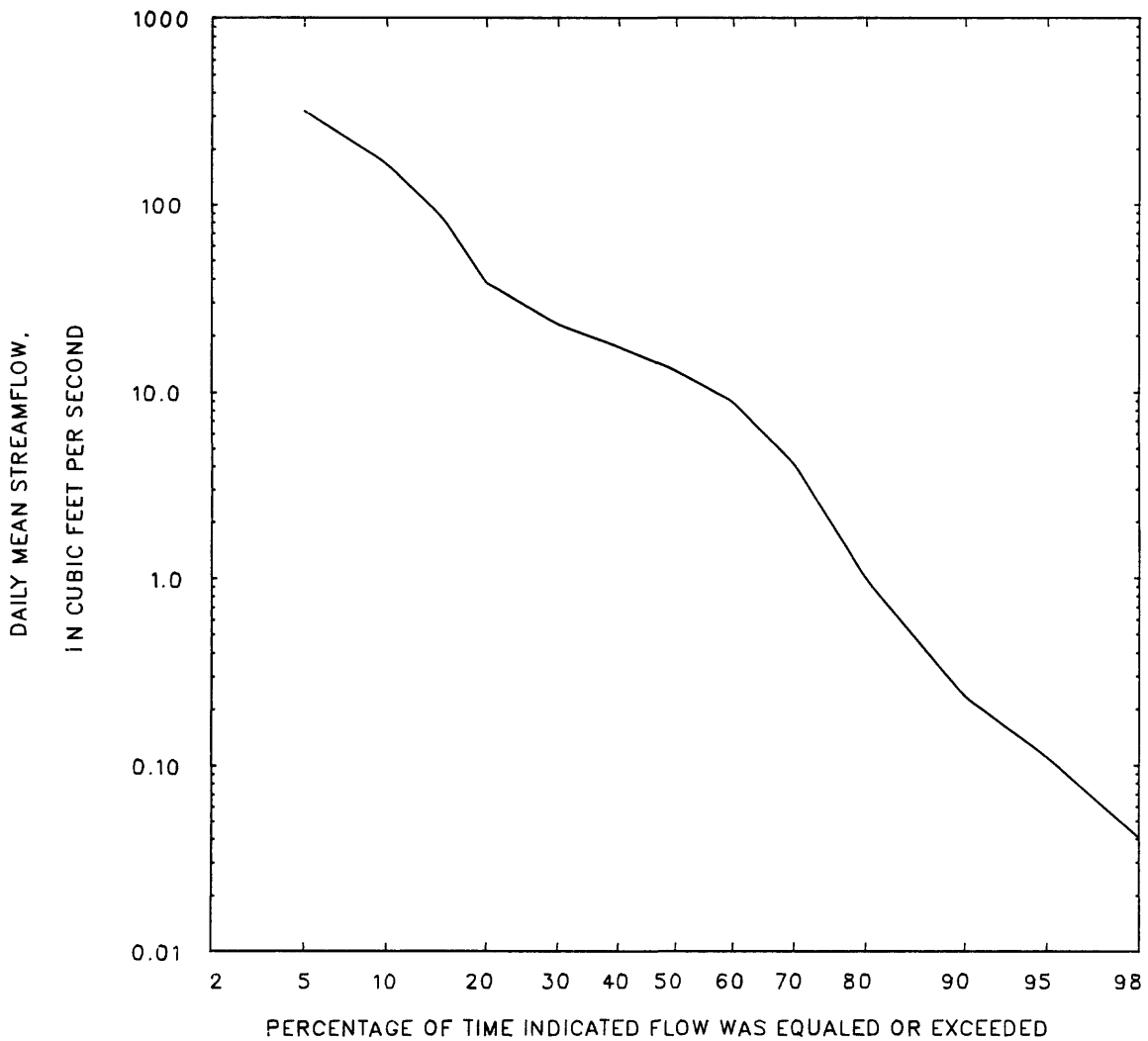
Duration of daily mean flow for period of record 1917-24, 1929-33, 1936-60

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
775	317	166	85	38	23	17	13	8.7	4.1	0.97	0.23	0.11	0.04	0.02	0.01	0.00

STATION 06646500 PERIOD OF RECORD 1917–24, 1929–33, 1936–60

DEER CREEK AT GLENROCK, WYO.





06646600 DEER CREEK BELOW MILLAR WASTEWAY, AT GLENROCK, WYO.

LOCATION.--Lat 42°51'50", long 105°51'56", in SW¼NW¼NW¼ sec.4, T.33 N., R.75 W., Converse County, on right bank in Glenrock, 800 ft downstream from bridge on U.S. Highways 20 and 87, and 0.5 mi upstream from mouth.

DRAINAGE AREA.--213 mi^2.

PERIOD OF RECORD.--February 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,980 ft, from topographic map.

REMARKS.--One small reservoir above station, capacity, about 60 acre-ft, for irrigation. Diversions above station for irrigation of about 3,700 acres, of which about 400 acres are below station. Water is diverted at times to Millar ditch 0.3 mi upstream and bypasses station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,200 ft^3/s, June 12, 1970, gage height, 9.45 ft; no flow at times in 1961-63, 1965, 1977, 1978, 1980.

Monthly and annual streamflow 1962-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	34	2.3	14	8.7	0.61	1.6
November	36	3.0	20	8.3	0.43	2.2
December	37	9.3	20	6.7	0.34	2.3
January	35	13	20	5.1	0.25	2.3
February	36	14	22	6.0	0.27	2.5
March	120	14	37	26	0.70	4.3
April	362	6.5	148	103	0.70	17.0
May	1380	56	448	342	0.76	51.6
June	529	4.3	122	134	1.1	14.0
July	61	0.39	10	14	1.4	1.1
August	15	0.00	2.5	3.6	1.5	0.3
September	30	0.03	5.7	6.8	1.2	0.7
Annual	165	14	73	41	0.56	100

Magnitude and probability of annual low flow based on period of record 1962-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.01	0.00	0.00	0.00	---	---
3	0.01	0.00	0.00	0.00	---	---
7	0.04	0.00	0.00	0.00	---	---
14	0.13	0.00	0.00	0.00	---	---
30	0.47	0.00	0.00	0.00	---	---
60	1.0	0.18	0.02	0.00	---	---
90	2.3	0.74	0.38	0.21	---	---
120	4.3	1.9	1.2	0.83	---	---
183	9.0	5.8	4.6	3.8	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1962-84

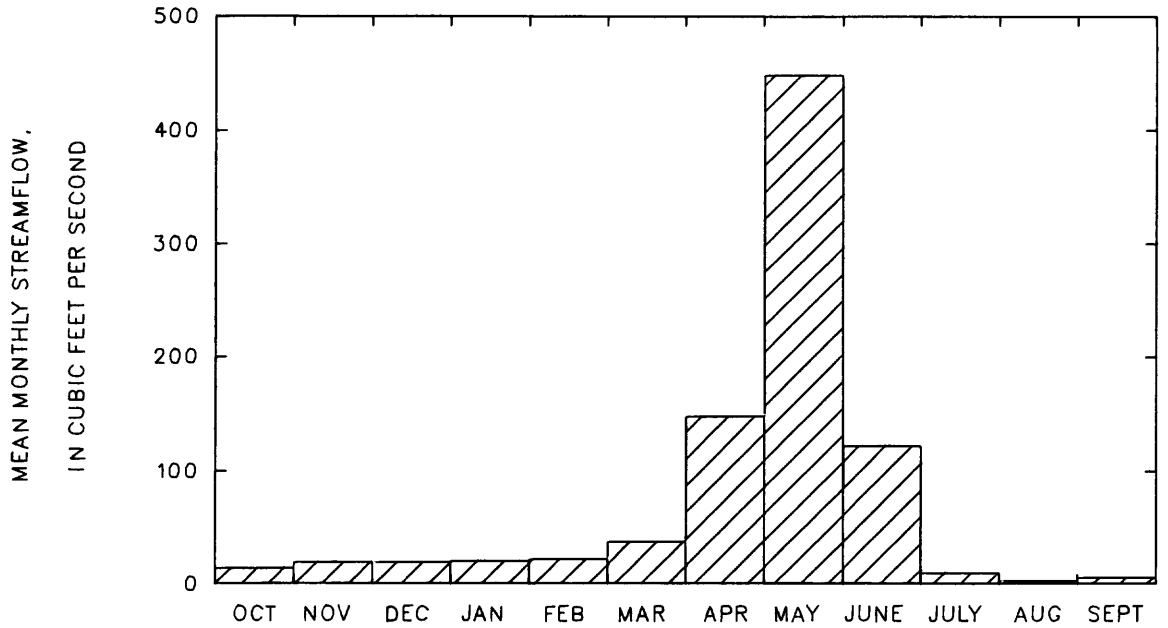
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	961	1980	2920	4480	---	---
3	830	1660	2380	3490	---	---
7	685	1320	1830	2600	---	---
15	555	1030	1390	1870	---	---
30	426	767	1000	1300	---	---
60	294	518	665	839	---	---
90	220	373	467	574	---	---

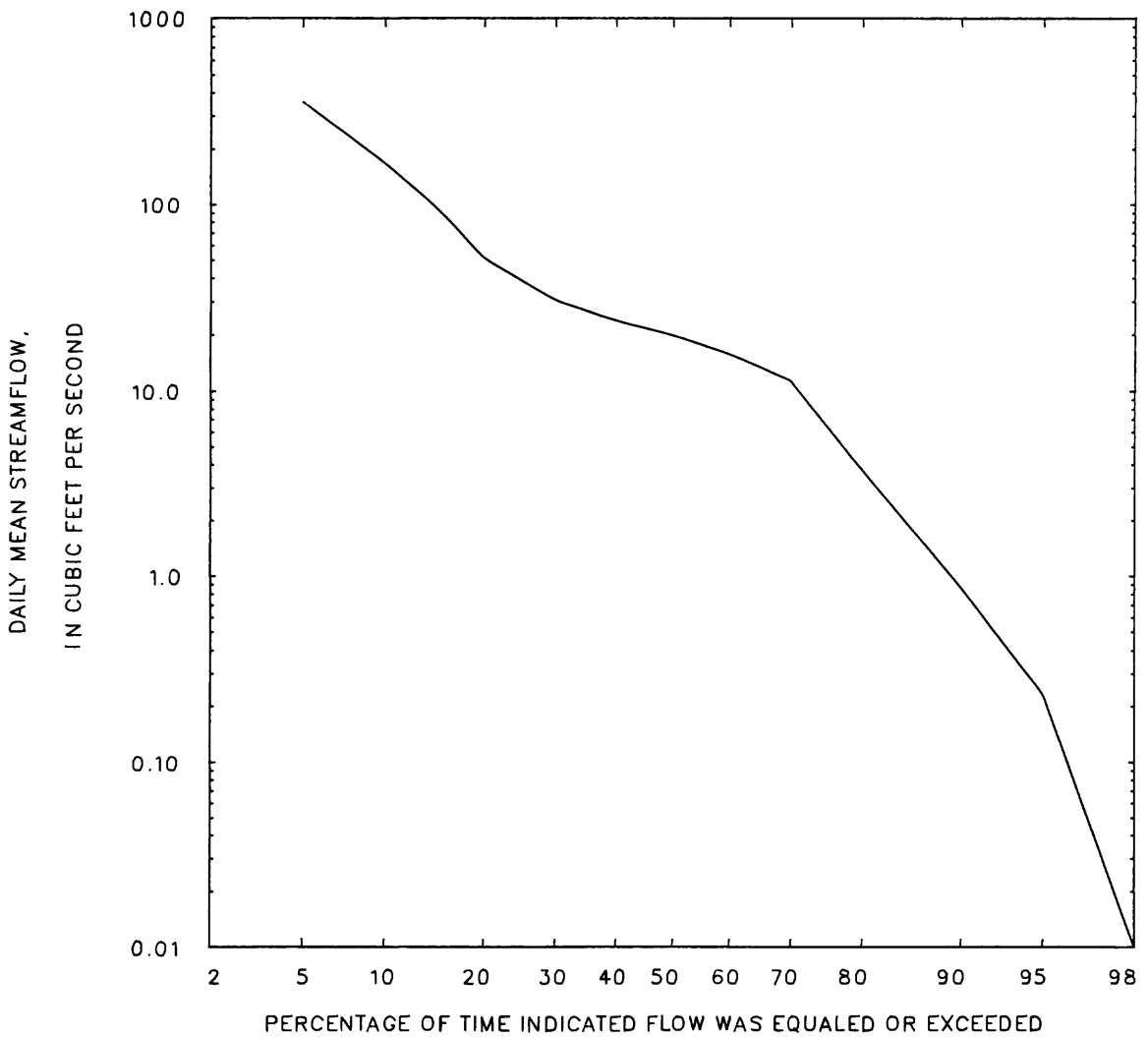
Duration of daily mean flow for period of record 1962-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1070	355	167	92	51	30	24	20	16	11	3.7	0.86	0.23	0.01	0.00	0.00	0.00

STATION 06646600 PERIOD OF RECORD 1962–84

DEER CREEK BELOW MILLAR WASTEWAY, AT GLENROCK, WYO.





06646800 NORTH PLATTE RIVER NEAR GLENROCK, WYO.

LOCATION.--Lat 42°50'10", long 105°45'30", in NW¼NE¼ sec.17, T.33 N., R.74 W., Converse County, on left bank 0.8 mi downstream from Sand Creek, 1.0 mi downstream from Dave Johnston powerplant, and 5.8 mi east of Glenrock city limits.

DRAINAGE AREA.--13,538 mi^2, of which 1,173 mi^2 is probably noncontributing.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Waterstage recorder. Altitude of gage is 4,920 ft, from topographic map. Prior to October 1, 1965, at datum 1.00 ft higher.

REMARKS.--Flow regulated by Seminoe, Pathfinder, and Alcova Reservoirs. Slight regulation 1.0 mi upstream by storage pond for Dave Johnston powerplant, capacity, 755 acre-ft. Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft^3/s, May 14, 1965, gage height, 7.10 ft, present datum; minimum daily, 176 ft^3/s, December 11, 1961.

Monthly and annual streamflow 1961-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1620	540	1220	249	0.20	6.5
November	1500	712	1070	186	0.17	5.7
December	1190	664	906	121	0.13	4.8
January	1070	702	908	97	0.11	4.8
February	1340	751	1010	135	0.13	5.4
March	2720	563	1170	494	0.42	6.3
April	4090	686	1600	832	0.52	8.5
May	6500	1010	2340	1340	0.57	12.5
June	8030	777	2400	1910	0.80	12.8
July	8070	696	2350	1530	0.65	12.6
August	4030	586	2160	790	0.37	11.6
September	2480	566	1590	553	0.35	8.5
Annual	2790	878	1560	487	0.31	100

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual low flow based on period of record 1962-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	406	311	263	226	---	---
3	456	373	332	299	---	---
7	541	448	399	359	---	---
14	660	571	523	483	---	---
30	795	694	635	584	---	---
60	872	771	711	661	---	---
90	913	814	756	705	---	---
120	942	846	793	747	---	---
183	1030	927	875	832	---	---

Magnitude and probability of annual high flow based on period of record 1961-84

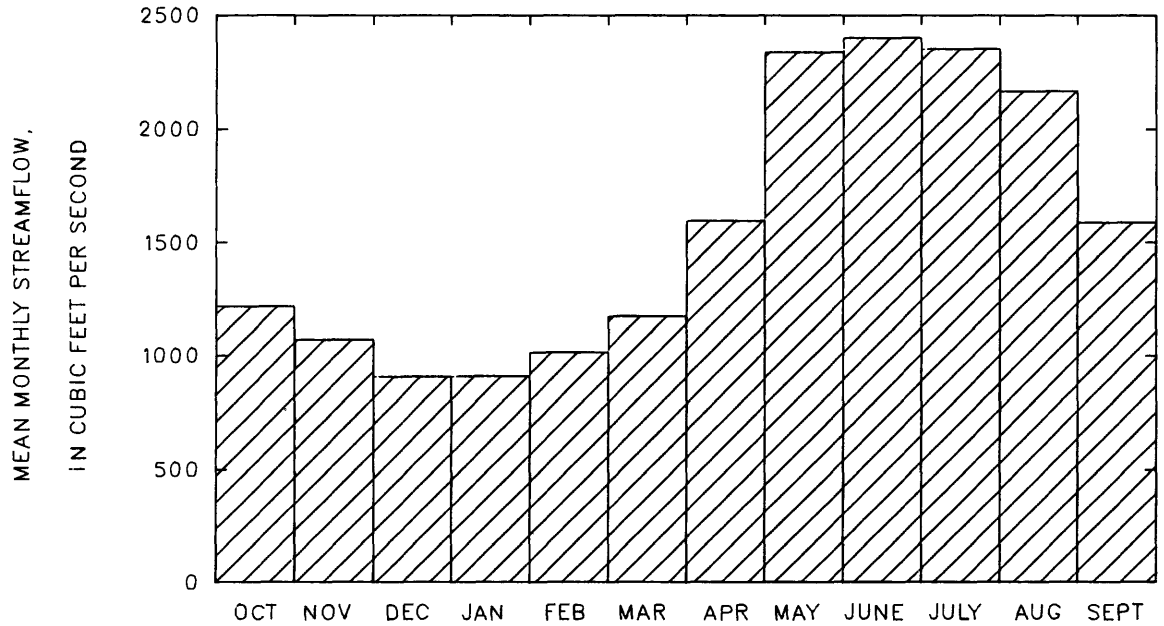
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	3870	5860	7510	10000	---	---
3	3640	5440	6930	9200	---	---
7	3300	4950	6360	8590	---	---
15	3080	4670	6040	8220	---	---
30	2790	4270	5620	7840	---	---
60	2440	3660	4780	6600	---	---
90	2250	3350	4320	5850	---	---

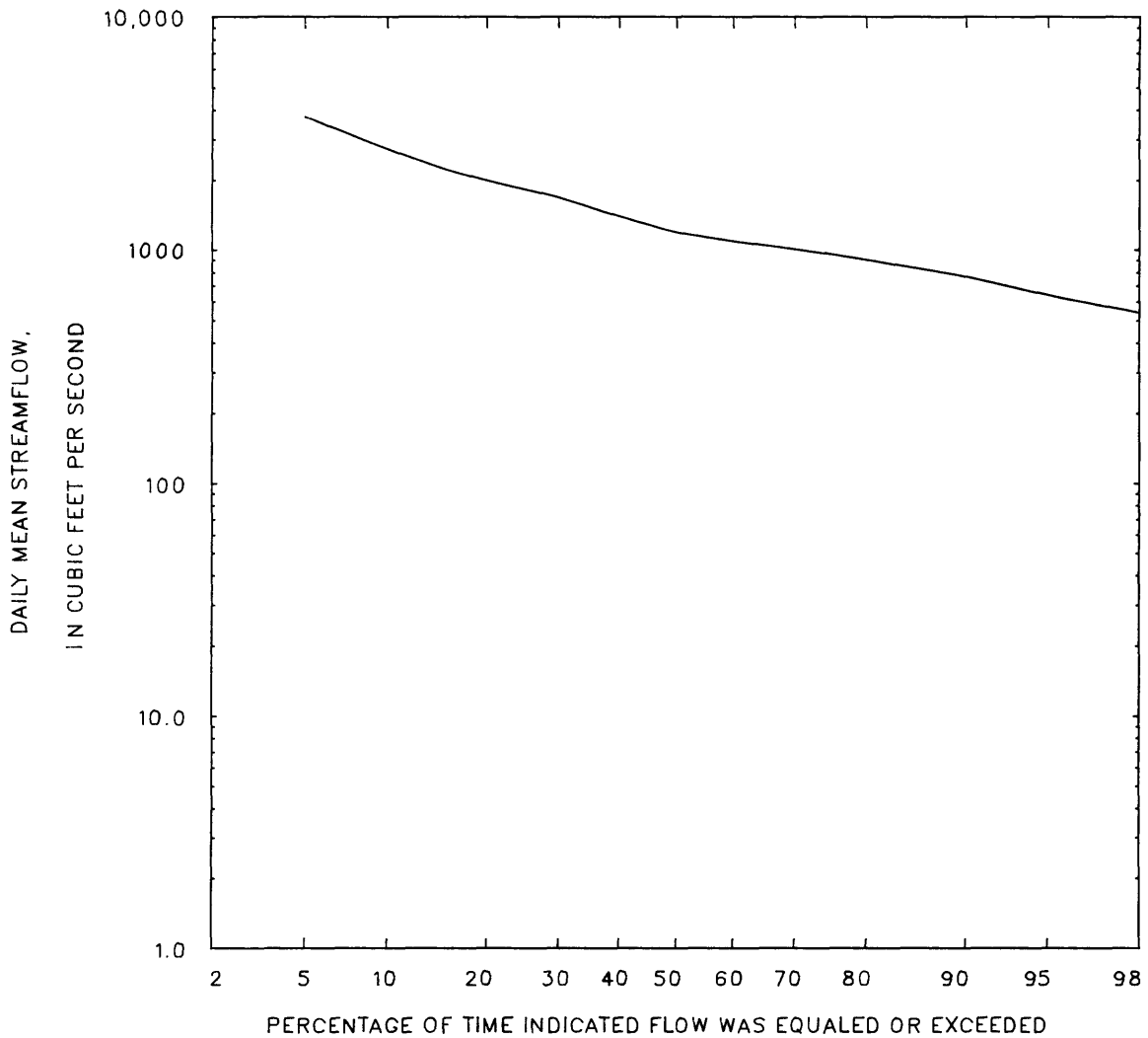
Duration of daily mean flow for period of record 1961-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
7260	3740	2710	2230	1990	1680	1390	1180	1080	999	899	763	633	534	472	420	301

STATION 06646800 PERIOD OF RECORD 1961–84

NORTH PLATTE RIVER NEAR GLENROCK, WYO.





06647500 BOX ELDER CREEK AT BOXELDER, WYO.

LOCATION.--Lat 42°36'44", long 105°51'29", in NE¼NE¼SW¼ sec.32, T.31 N., R.75 W., Converse County, on left bank at Hiser Ranch (old Boxelder Post Office), 0.8 mi downstream from Snowshoe Creek, and 17 mi south of Glenrock.

DRAINAGE AREA.--63.0 mi^2.

PERIOD OF RECORD.--April 1946 to September 1951, October 1961 to September 1967, October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,710 ft, from topographic map. Prior to June 7, 1946, non-recording gage, and June 8, 1946, to July 21, 1976, water-stage recorder at site 400 ft downstream at different datum.

REMARKS.--Diversions above station for irrigation of about 60 acres, of which about 40 acres are below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,530 ft^3/s, May 14, 1965, gage height, 8.58 ft, site and datum then in use; no flow at times.

Monthly and annual streamflow 1947-51, 1962-67, 1972-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	13	0.24	2.4	2.7	1.1	0.5
November	18	0.60	3.2	3.3	1.0	0.7
December	9.9	0.46	2.6	1.8	0.70	0.6
January	7.5	0.66	2.4	1.3	0.57	0.5
February	9.3	0.09	2.8	1.8	0.66	0.6
March	31	1.5	7.5	6.3	0.84	1.6
April	220	9.3	73	45	0.61	15.8
May	562	124	269	124	0.46	58.3
June	331	8.4	85	69	0.81	18.5
July	49	1.0	11	12	1.1	2.3
August	4.9	0.08	1.8	1.5	0.85	0.4
September	4.1	0.06	0.91	1.2	1.3	0.2
Annual	86	15	39	16	0.42	100

Magnitude and probability of annual low flow based on period of record 1948-51, 1963-67, 1973-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	0.00	---	---
3	0.00	0.00	0.00	0.00	---	---
7	0.01	0.00	0.00	0.00	---	---
14	0.12	0.04	0.01	0.00	---	---
30	0.23	0.08	0.05	0.03	---	---
60	0.45	0.18	0.11	0.07	---	---
90	0.82	0.37	0.24	0.16	---	---
120	1.1	0.59	0.44	0.34	---	---
183	1.5	0.88	0.71	0.59	---	---

Magnitude and probability of instantaneous peak flow based on 25 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
598	1110	1590	2400	3170	4120

Weighted skew = 0.512

Magnitude and probability of annual high flow based on period of record 1947-51, 1962-67, 1972-84

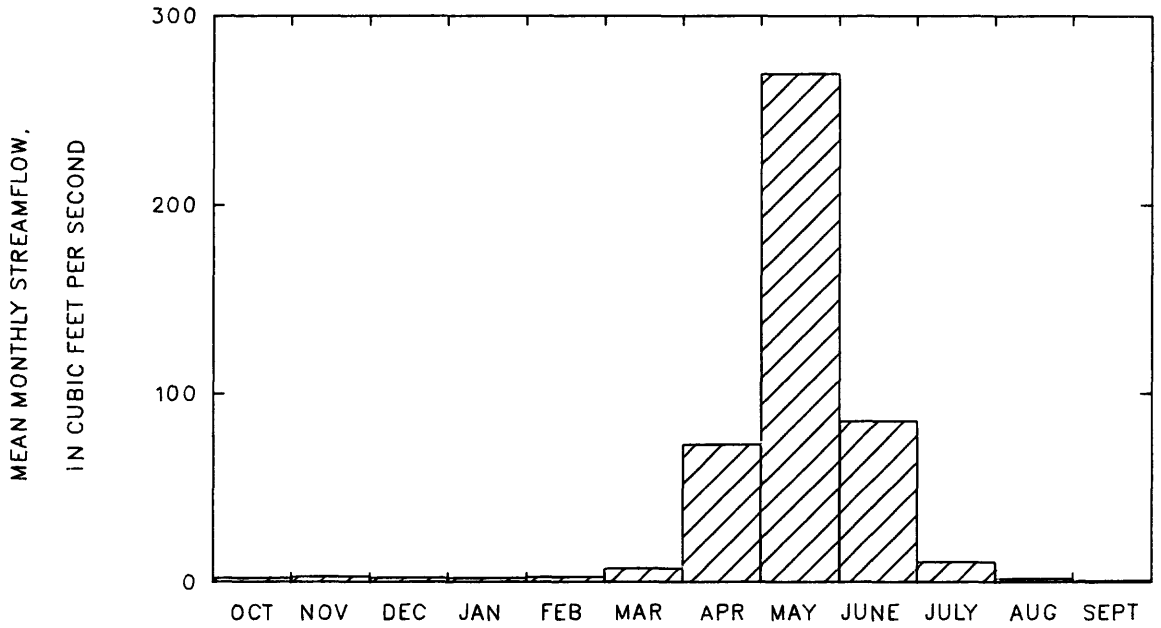
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	494	859	1210	1810	---	---
3	455	756	1030	1470	---	---
7	400	636	834	1140	---	---
15	340	517	656	857	---	---
30	269	392	479	597	---	---
60	184	263	319	393	---	---
90	135	191	228	276	---	---

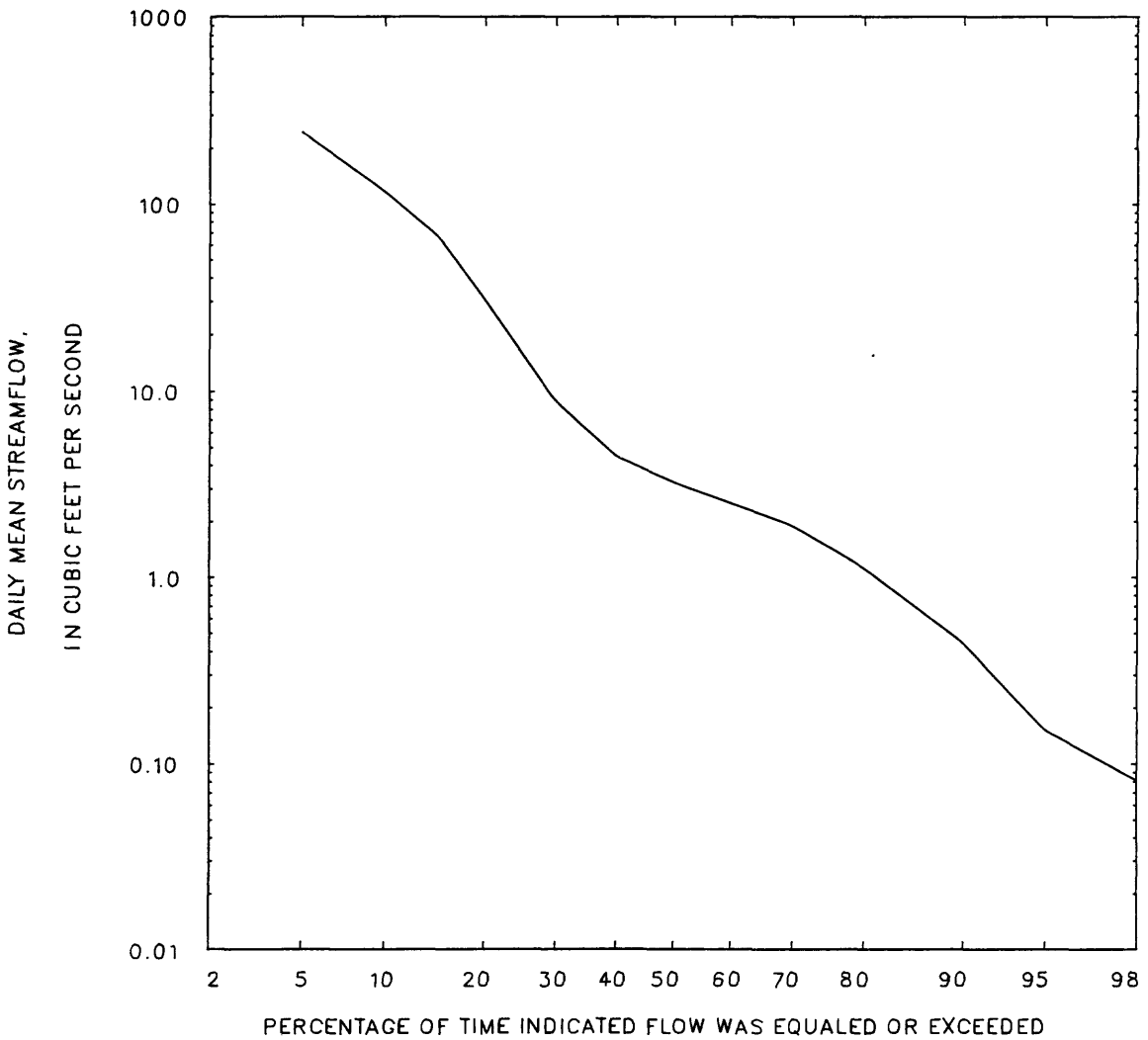
Duration of daily mean flow for period of record 1947-51, 1962-67, 1972-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
499	242	117	65	31	8.8	4.4	3.2	2.4	1.9	1.1	0.44	0.15	0.08	0.04	0.01	0.00

STATION 06647500 PERIOD OF RECORD 1947–51, 1962–67, 1972–84

BOX ELDER CREEK AT BOXELDER, WYO.





06647890 LITTLE BOX ELDER CREEK NEAR CAREYHURST, WYO.

LOCATION.--Lat 42°45'04", long 105°44'25", in SE¼SW¼SE¼ sec.8, T.32 N., R.74 W., Converse County, on right bank 4.6 mi southwest of Barber Ranch and 7.6 mi southwest of Careyhurst.

DRAINAGE AREA.--7.18 mi^2.

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder and bedrock control. Altitude of gage is 5,670 ft, from topographic map. Prior to September 25, 1980, at site 170 ft downstream at different datum.

REMARKS.--No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 193 ft^3/s, July 25, 1981, gage height, about 2.11 ft, from rating curve extended above 62 ft^3/s on basis of weir flow computation of peak flow but may have been exceeded when the log jam that produced the maximum gage height on July 25, 1981, broke, releasing an unknown discharge; maximum gage height, 3.70 ft, July 25, 1981 (backwater from log jam), from floodmarks; minimum daily discharge, 0.32 ft^3/s, November 21, 1979.

Monthly and annual streamflow 1975-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1.1	0.46	0.69	0.20	0.29	3.4
November	1.1	0.42	0.65	0.21	0.32	3.2
December	0.90	0.45	0.66	0.13	0.20	3.3
January	0.97	0.42	0.71	0.19	0.27	3.5
February	1.0	0.46	0.77	0.22	0.29	3.8
March	3.1	0.55	1.3	0.74	0.57	6.5
April	10	0.76	4.4	3.1	0.70	22.0
May	18	1.9	6.5	5.6	0.87	32.3
June	4.9	0.83	1.9	1.3	0.68	9.6
July	2.2	0.65	1.0	0.50	0.48	5.2
August	1.5	0.43	0.75	0.31	0.42	3.7
September	1.1	0.38	0.67	0.24	0.36	3.4
Annual	3.5	0.70	1.7	0.97	0.58	100

Magnitude and probability of annual low flow based on period of record 1976-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.39	0.35	0.33	---	---	---
3	0.41	0.37	0.36	---	---	---
7	0.44	0.39	0.37	---	---	---
14	0.45	0.40	0.38	---	---	---
30	0.49	0.43	0.41	---	---	---
60	0.53	0.45	0.42	---	---	---
90	0.56	0.47	0.44	---	---	---
120	0.58	0.48	0.45	---	---	---
183	0.61	0.50	0.46	---	---	---

Magnitude and probability of instantaneous peak flow based on 10 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
36	79	122	196	268	356

Weighted skew = 0.151

Magnitude and probability of annual high flow based on period of record 1975-84

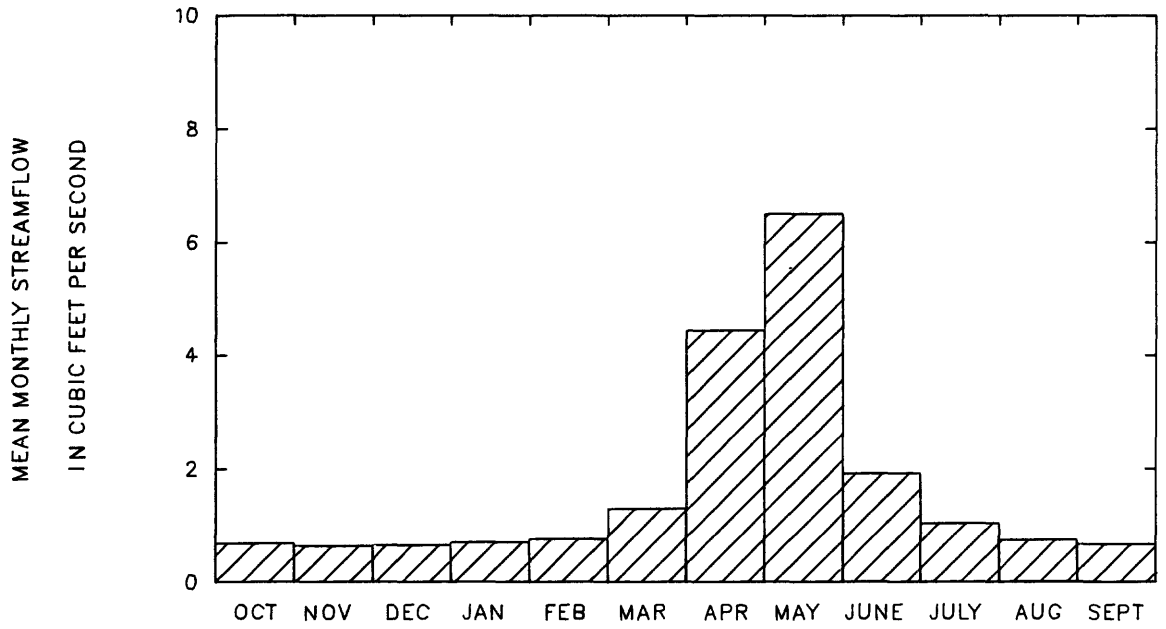
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	14	26	36	---	---	---
3	12	22	32	---	---	---
7	9.5	18	26	---	---	---
15	7.9	15	21	---	---	---
30	6.2	12	17	---	---	---
60	4.4	8.3	12	---	---	---
90	3.5	6.4	8.8	---	---	---

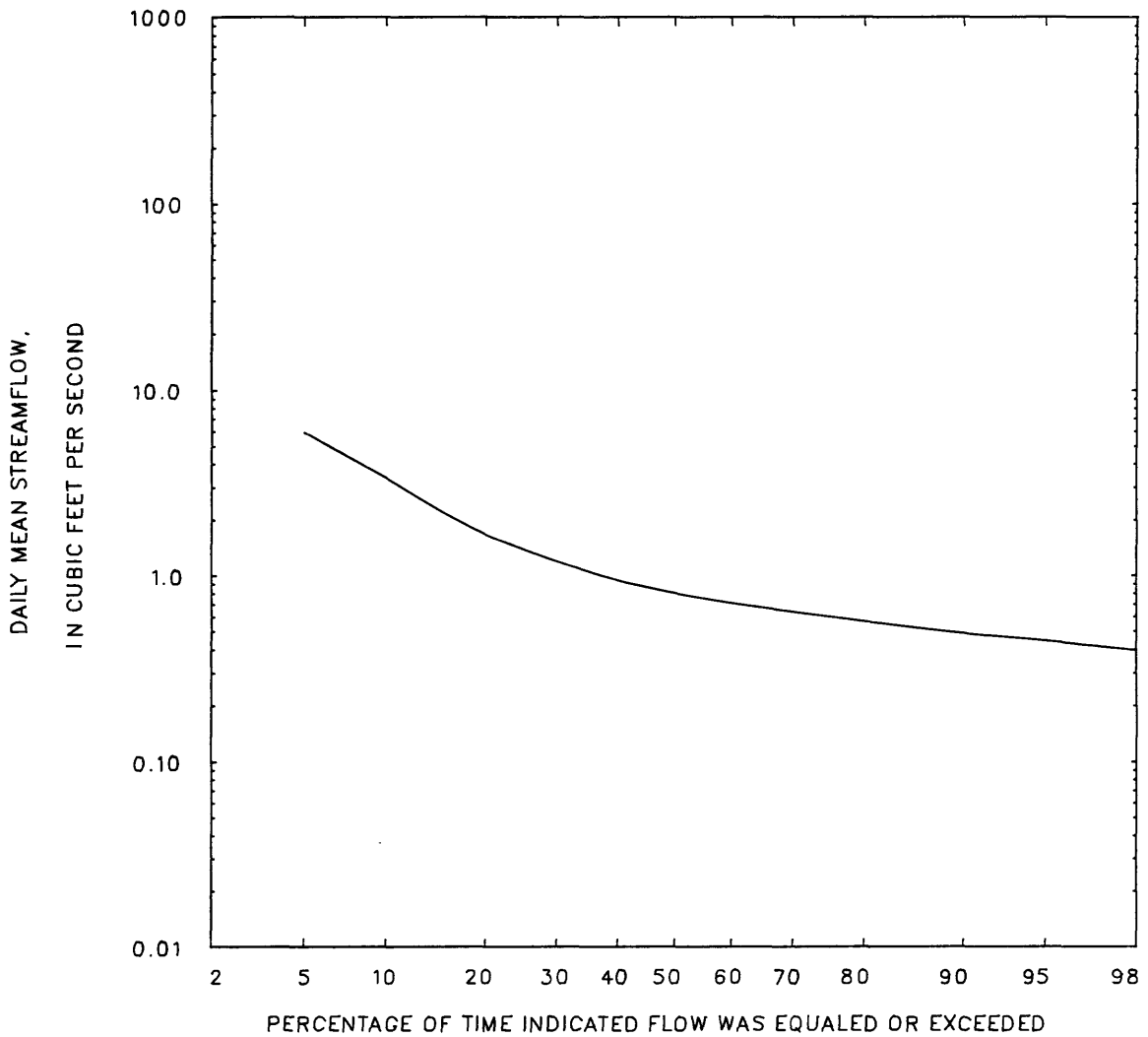
Duration of daily mean flow for period of record 1975-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
18	5.9	3.4	2.2	1.7	1.2	0.93	0.79	0.70	0.63	0.56	0.48	0.44	0.39	0.37	0.35	0.33

STATION 06647890 PERIOD OF RECORD 1975–84

LITTLE BOX ELDER CREEK NEAR CAREYHURST, WYO.





06647900 LITTLE BOX ELDER CREEK AT LITTLE BOX ELDER CAVE, NEAR CAREYHURST, WYO.

LOCATION.--Lat 42°45'38", long 105°43'33", in NE¼SE¼NW¼ sec.9, T.32 N., R.74 W., Converse County, on left bank 0.3 mi southwest of Little Box Elder Cave, 3.6 mi southwest of Barber Ranch, and 6.6 mi southwest of Careyhurst.

DRAINAGE AREA.--8.47 mi^2.

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,480 ft, from topograhic map.

REMARKS.--One small detention reservoir above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50 ft^3/s, May 12, 1984, gage height, 2.02 ft; maximum gage height, 2.07 ft, May 18, 1978; no flow for many days each year.

Monthly and annual streamflow 1975-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	0.21	0.00	0.02	0.07	3.2	0.3
November	0.12	0.00	0.01	0.04	3.2	0.2
December	0.00	0.00	0.00	0.00		0.0
January	0.00	0.00	0.00	0.00		0.0
February	0.29	0.00	0.03	0.09	3.2	0.4
March	0.83	0.00	0.13	0.29	2.2	1.8
April	6.2	0.00	1.8	2.0	1.1	25.1
May	13	0.11	4.1	4.9	1.2	57.1
June	3.7	0.00	0.74	1.3	1.7	10.2
July	1.0	0.00	0.21	0.39	1.9	2.8
August	0.56	0.00	0.10	0.21	2.1	1.3
September	0.30	0.00	0.05	0.11	2.1	0.7
Annual	2.1	0.03	0.61	0.74	1.2	100

Magnitude and probability of annual low flow based on period of record 1976-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	---	---	---	---	---	---
3	---	---	---	---	---	---
7	---	---	---	---	---	---
14	---	---	---	---	---	---
30	---	---	---	---	---	---
60	---	---	---	---	---	---
90	---	---	---	---	---	---
120	---	---	---	---	---	---
183	---	---	---	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1975-84

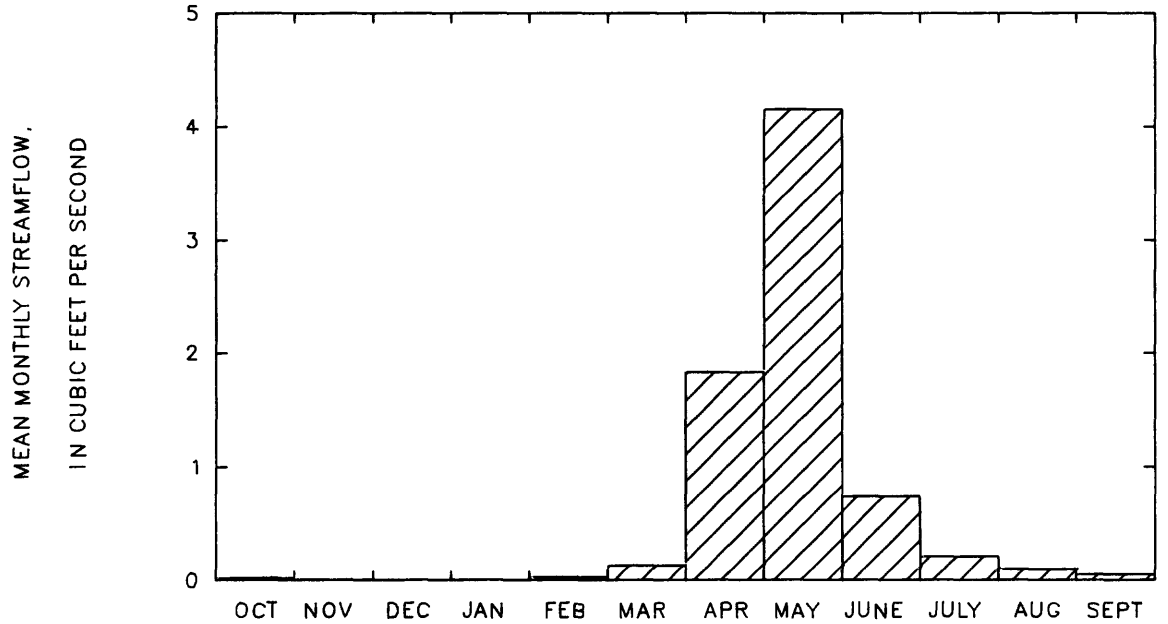
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	---	---	---	---	---	---
3	---	---	---	---	---	---
7	---	---	---	---	---	---
15	3.8	11	19	---	---	---
30	2.7	8.8	15	---	---	---
60	1.6	5.6	10	---	---	---
90	1.1	3.8	6.9	---	---	---

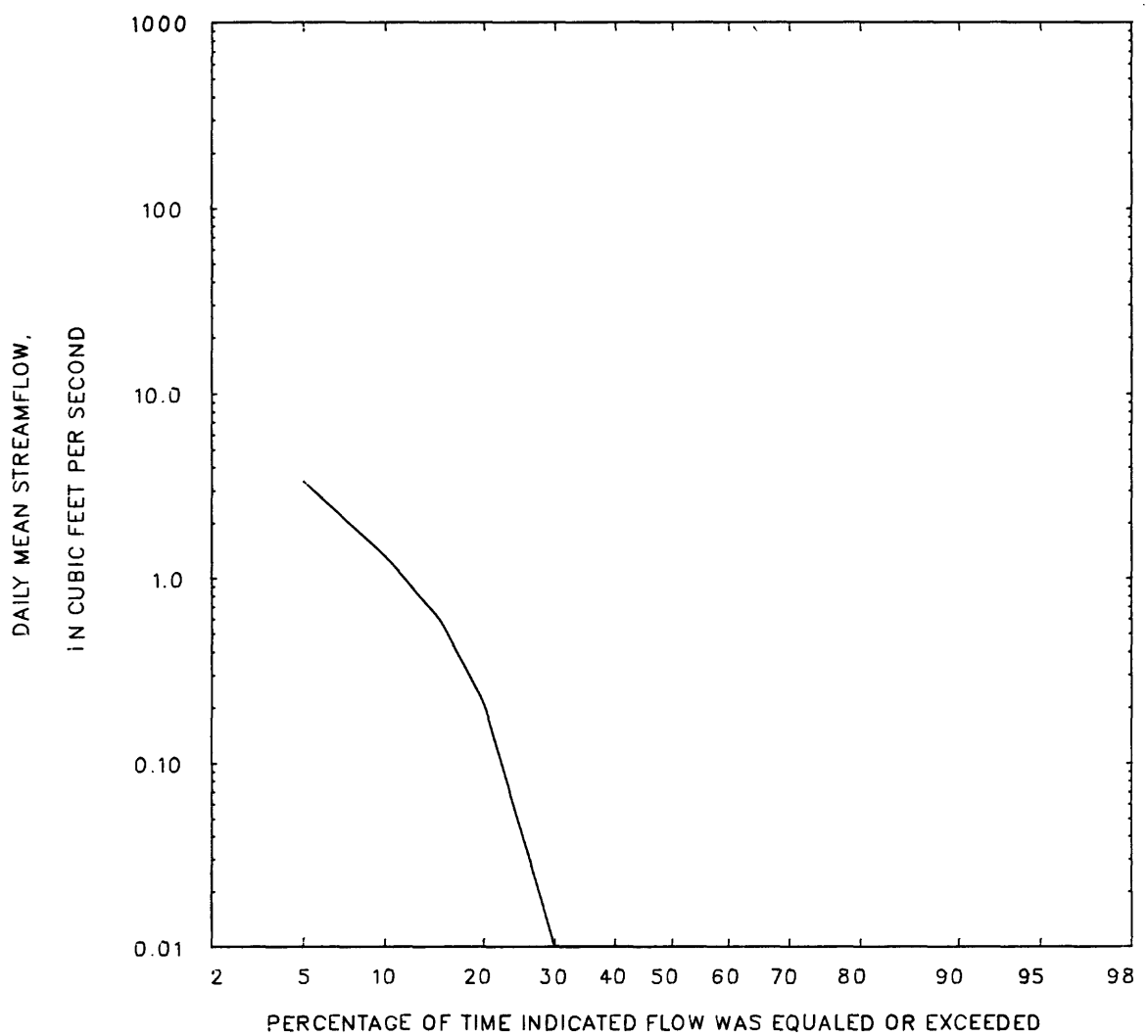
Duration of daily mean flow for period of record 1975-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
13	3.3	1.3	0.59	0.21	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

STATION 06647900 PERIOD OF RECORD 1975–84

LITTLE BOX ELDER CREEK AT LITTLE BOX ELDER CAVE, NEAR CAREYHURST, WYO.





06648000 BOX ELDER CREEK NEAR CAREYHURST, WYO.

LOCATION.--Lat 42°50'08", long 105°40'24", in NE¼NE¼ sec.13, T.33 N., R.74 W., Converse County, on right bank 0.9 mi south of Careyhurst and 2.2 mi upstream from mouth.

DRAINAGE AREA.--202 mi^2.

PERIOD OF RECORD.--May to December 1911, October 1915 to September 1924, May 1928 to October 1932, April to September 1933, April 1935 to September 1969. Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 4,930 ft, from topographic map. May 18 to October 30, 1911, April 9, 1916, to September 30, 1924, non-recording gage within 0.5 mi of present site at different datum. May 26 to October 4, 1938, non-recording gage at site 30 ft upstream at present datum.

REMARKS.--Diversions for irrigation of about 10,200 acres above station. Water rights for municipal supply of Douglas adjudicated for diversion above station. Several small reservoirs above station (combined capacity, about 276 acre-ft) for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,250 ft^3/s, May 14, 1965, gage height, 11.85 ft, from floodmark; no flow at times in many summers.

Monthly and annual streamflow 1916-24, 1929-32, 1936-69

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	65	0.00	6.2	9.7	1.6	1.2
November	70	0.96	9.0	10	1.2	1.7
December	50	1.0	8.7	7.3	0.84	1.6
January	50	2.0	8.4	7.1	0.85	1.6
February	40	1.3	9.0	6.9	0.76	1.7
March	65	0.60	17	15	0.89	3.1
April	357	7.2	110	71	0.65	20.5
May	759	4.9	277	192	0.69	51.7
June	365	0.44	77	81	1.1	14.3
July	87	0.34	8.6	17	2.0	1.6
August	8.8	0.00	1.8	2.0	1.1	0.3
September	63	0.00	4.0	10	2.6	0.7
Annual	100	4.0	45	25	0.56	100

Magnitude and probability of annual low flow based on period of record 1917-24, 1930-32, 1936-69

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.26	0.00	0.00	0.00	0.00	---
3	0.34	0.09	0.00	0.00	0.00	---
7	0.40	0.12	0.00	0.00	0.00	---
14	0.50	0.17	0.09	0.01	0.00	---
30	0.58	0.27	0.18	0.02	0.00	---
60	0.88	0.44	0.29	0.03	0.00	---
90	1.4	0.66	0.44	0.03	0.00	---
120	2.1	0.96	0.65	0.47	0.32	---
183	3.5	1.8	1.3	0.95	0.68	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1916-24, 1929-32, 1936-69

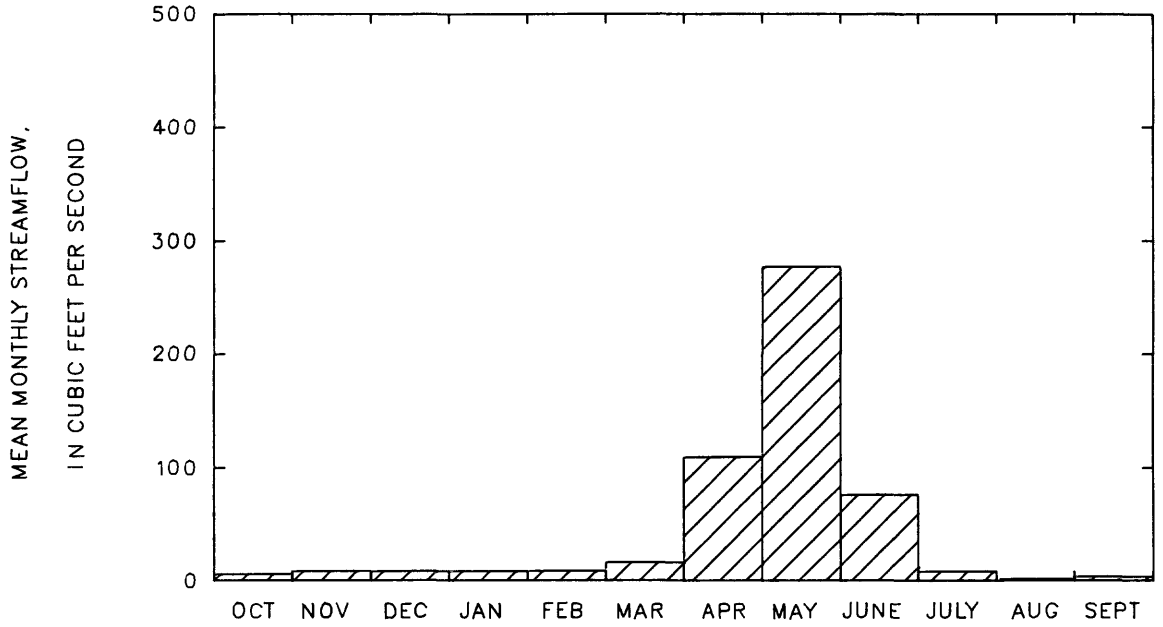
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	539	992	1310	1700	1980	---
3	507	870	1080	1290	1420	---
7	459	733	854	953	999	---
15	390	606	694	760	788	---
30	311	476	540	587	606	---
60	217	330	376	410	425	---
90	154	241	281	315	332	---

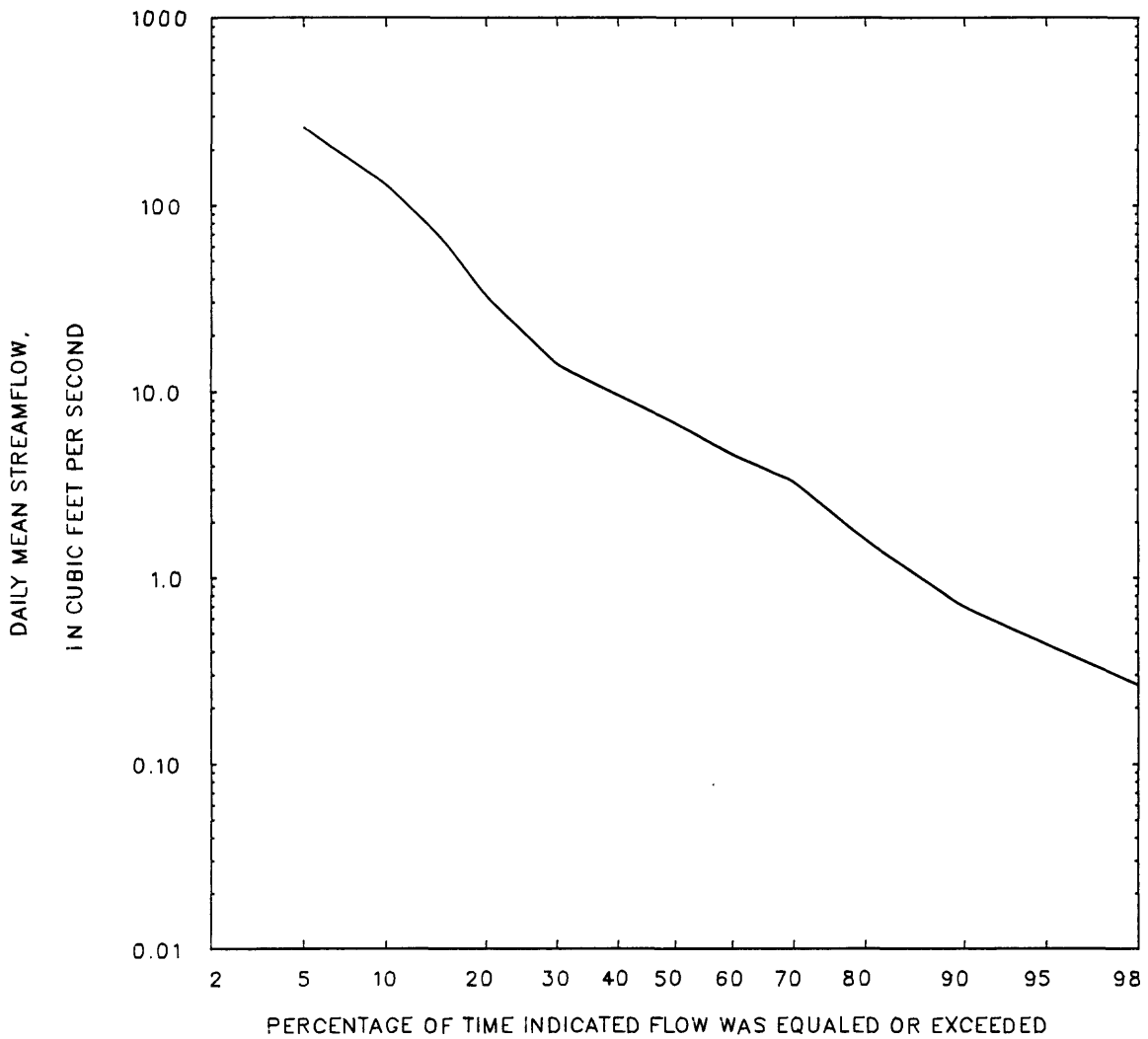
Duration of daily mean flow for period of record 1916-24, 1929-32, 1936-69

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
628	259	130	67	32	14	9.4	6.7	4.5	3.2	1.6	0.68	0.43	0.26	0.12	0.06	0.01

STATION 06648000 PERIOD OF RECORD 1916–24, 1929–32, 1936–69

BOX ELDER CREEK NEAR CAREYHURST, WYO.





06649000 LA PRELE CREEK NEAR DOUGLAS, WYO.

LOCATION.--Lat 42°40'52", long 105°37'48", in SW¼NE¼SW¼ sec.5, T.31 N., R.73 W., Converse County, on right bank 0.8 mi upstream from La Prele Reservoir and 13.5 mi southwest of Douglas.

DRAINAGE AREA.--135 mi^2.

PERIOD OF RECORD.--August 1919 to current year (no winter records since 1971).

GAGE.--Water-stage recorder. Altitude of gage is about 5,600 ft, from nearby line of levels.

REMARKS.--Several small reservoirs above station, combined capacity, about 140 acre-ft, for irrigation. Diversions for irrigation of about 4,600 acres above station. Water is imported from La Bonte Creek and Wagon Hound Creek basins into Little La Prele Creek, upstream from the station, for irrigation below La Prele Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,300 ft^3/s, June 12, 1970, gage height, 13.01 ft, from rating curve extended above 2,700 ft^3/s, on basis of slope-area measurement of peak flow; no flow at times in 1936, 1939-40, 1943.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1920-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	82	0.59	8.2	12	1.4	1.7
November	37	1.7	8.5	6.6	0.78	1.8
December	32	2.5	7.8	5.0	0.64	1.6
January	24	2.6	7.3	3.8	0.52	1.5
February	19	2.1	7.9	3.7	0.47	1.6
March	54	4.1	16	10	0.65	3.3
April	294	6.8	98	60	0.61	20.3
May	662	14	233	149	0.64	48.2
June	455	3.4	75	76	1.0	15.5
July	67	0.98	13	15	1.1	2.6
August	17	0.24	4.5	3.8	0.85	0.9
September	18	0.23	4.3	3.8	0.88	0.9
Annual	99	5.3	40	21	0.52	100

Magnitude and probability of annual low flow based on period of record 1921-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.2	0.07	0.00	0.00	0.00	0.00
3	1.3	0.08	0.00	0.00	0.00	0.00
7	1.7	0.13	0.00	0.00	0.00	0.00
14	1.9	0.51	0.18	0.01	0.00	0.00
30	2.4	0.78	0.37	0.18	0.07	0.04
60	2.9	1.2	0.71	0.44	0.25	0.16
90	3.5	1.7	1.1	0.73	0.47	0.34
120	4.2	2.2	1.5	1.1	0.73	0.57
183	5.1	3.0	2.3	1.9	1.5	1.3

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1920-71

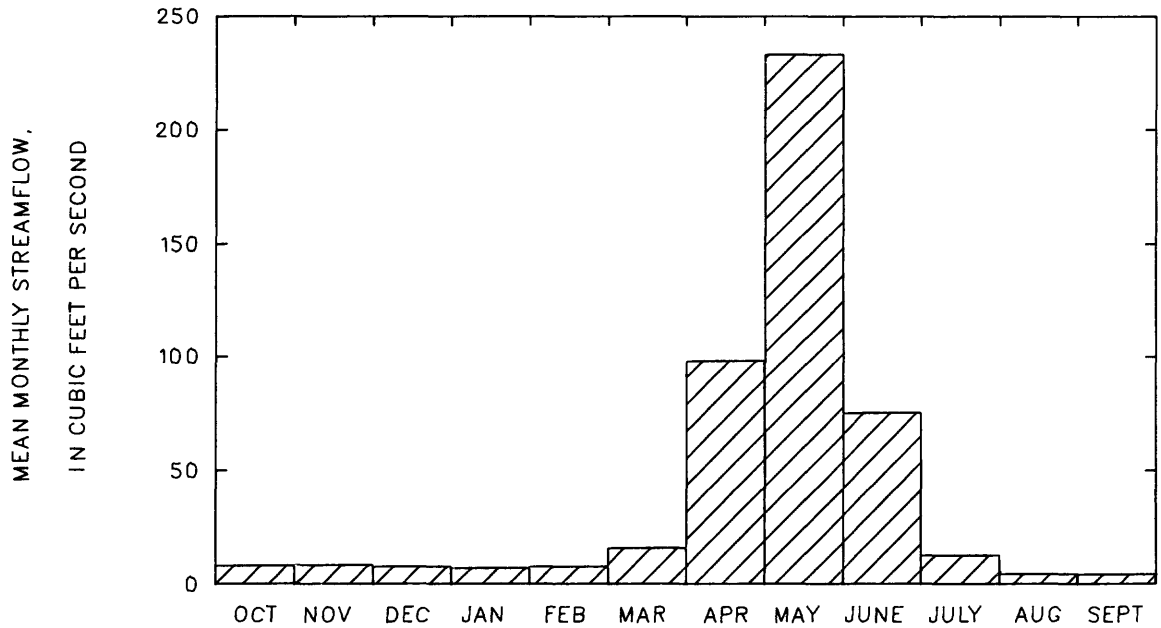
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	427	883	1310	2030	2710	3540
3	396	737	999	1360	1650	1950
7	353	619	799	1020	1170	1320
15	301	494	604	721	792	853
30	246	396	474	550	592	625
60	178	286	342	396	426	449
90	130	208	251	295	320	341

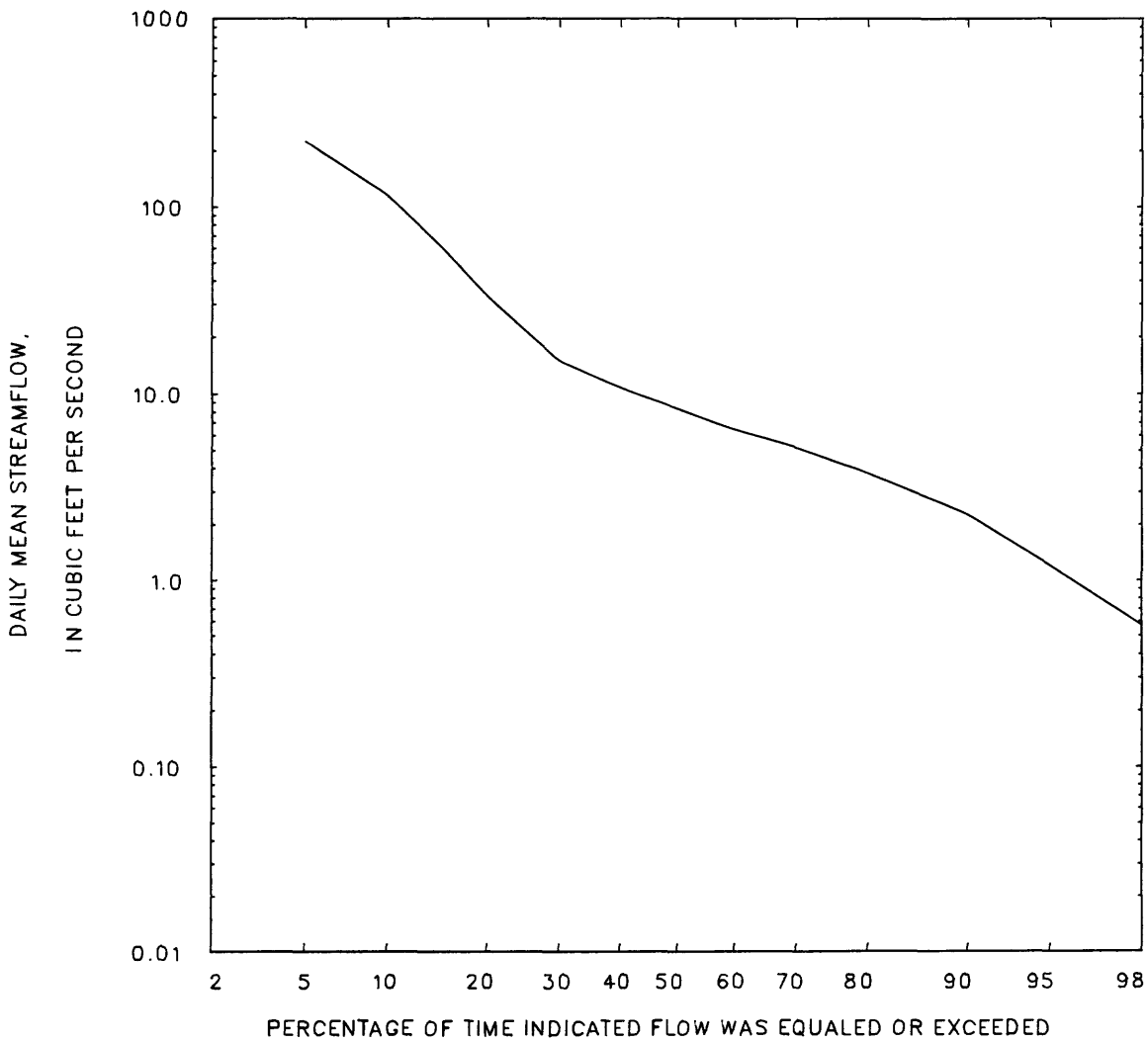
Duration of daily mean flow for period of record 1920-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
506	223	114	59	32	15	11	8.2	6.3	5.1	3.7	2.2	1.2	0.56	0.34	0.12	0.02

STATION 06649000 PERIOD OF RECORD 1920–71

LA PRELE CREEK NEAR DOUGLAS, WYO.





06649500 LA PRELE CREEK NEAR ORPHA, WYO.

LOCATION.--Lat 42°50'12", long 105°29'25", in SE¼NW¼NW¼ sec.15, T.33 N., R.72 W., Converse County, on left bank 20 ft downstream from county road, 1.5 mi upstream from mouth, and 1.4 mi southeast of Orpha.

DRAINAGE AREA.--177 mi^2.

PERIOD OF RECORD.--April to August 1916, April to September 1918, April to September 1923, April to September 1924, May 1928 to September 1933, April 1935 to current year. Monthly discharge only for some periods; published in WSP 1310. Prior to May 1928, published as "near Fetterman."

GAGE.--Water-stage recorder. Altitude of gage is 4,800 ft, from topographic map. Prior to May 26, 1928, non-recording gages at site about 0.2 mi downstream at different datum. May 26, 1928, to September 30, 1933, non-recording gage at present site at datum 0.5 ft higher. April 1 to June 2, 1935, non-recording gage at present site and datum.

REMARKS.--Flow regulated by La Prele Reservoir 18.5 mi upstream (capacity, 20,000 acre-ft); also several small reservoirs above station (combined capacity, about 140 acre-ft) for irrigation, Diversions above station for irrigation of about 21,000 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,000 ft^3/s, June 12, 1970, gage height, 10.15 ft, from rating curve extended above 2,000 ft^3/s on basis of contracted-opening measurement; no flow at times in many years.

Monthly and annual streamflow 1929-32, 1936-70

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	72	0.02	12	14	1.2	7.9
November	24	0.18	10	6.9	0.66	7.1
December	21	1.5	10	5.2	0.52	6.8
January	21	1.2	9.2	4.4	0.47	6.3
February	18	1.7	9.3	4.5	0.49	6.3
March	41	1.4	9.6	6.9	0.72	6.5
April	25	0.25	9.1	6.4	0.70	6.2
May	306	0.11	32	69	2.2	21.5
June	384	0.03	28	67	2.4	18.8
July	57	0.00	6.7	11	1.7	4.6
August	42	0.00	5.0	8.5	1.7	3.4
September	42	0.00	6.5	9.1	1.4	4.4
Annual	54	1.0	12	12	0.99	100

Magnitude and probability of annual low flow based on period of record 1930-32, 1936-70

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	0.00	---	---
3	0.00	0.00	0.00	0.00	---	---
7	0.00	0.00	0.00	0.00	---	---
14	0.00	0.00	0.00	0.00	---	---
30	0.12	0.00	0.00	0.00	---	---
60	0.57	0.00	0.00	0.00	---	---
90	0.96	0.00	0.00	0.00	---	---
120	1.6	0.21	0.04	0.01	---	---
183	2.7	0.55	0.22	0.10	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1929-32, 1936-70

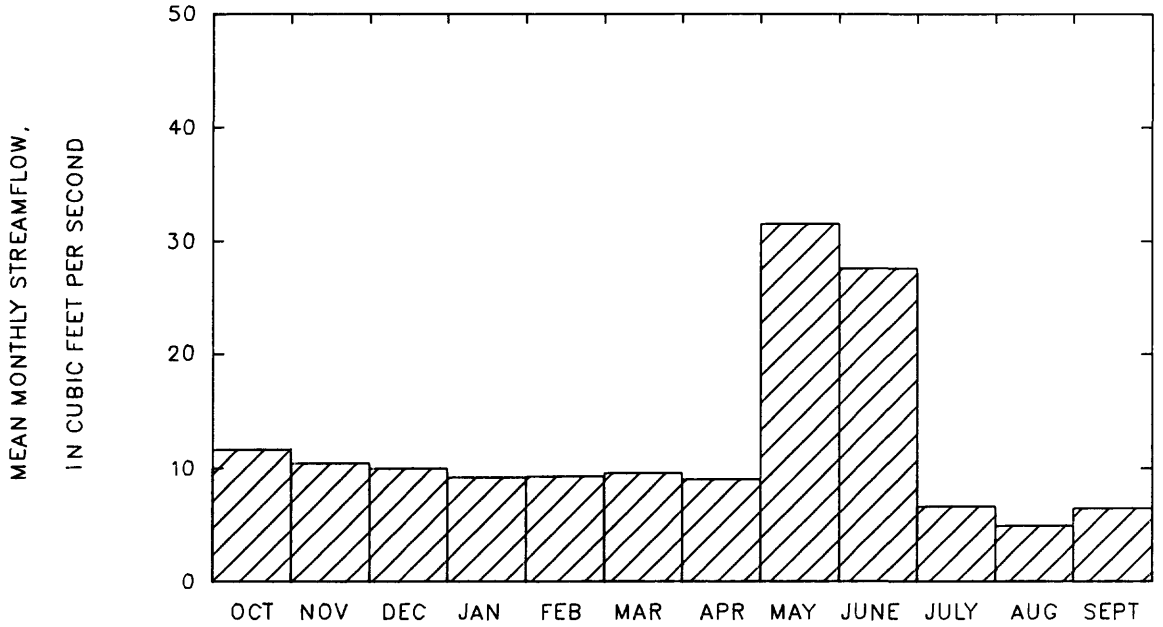
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	45	163	357	905	---	---
3	39	141	312	806	---	---
7	33	114	244	606	---	---
15	27	85	173	399	---	---
30	22	64	123	267	---	---
60	18	46	81	160	---	---
90	16	37	62	113	---	---

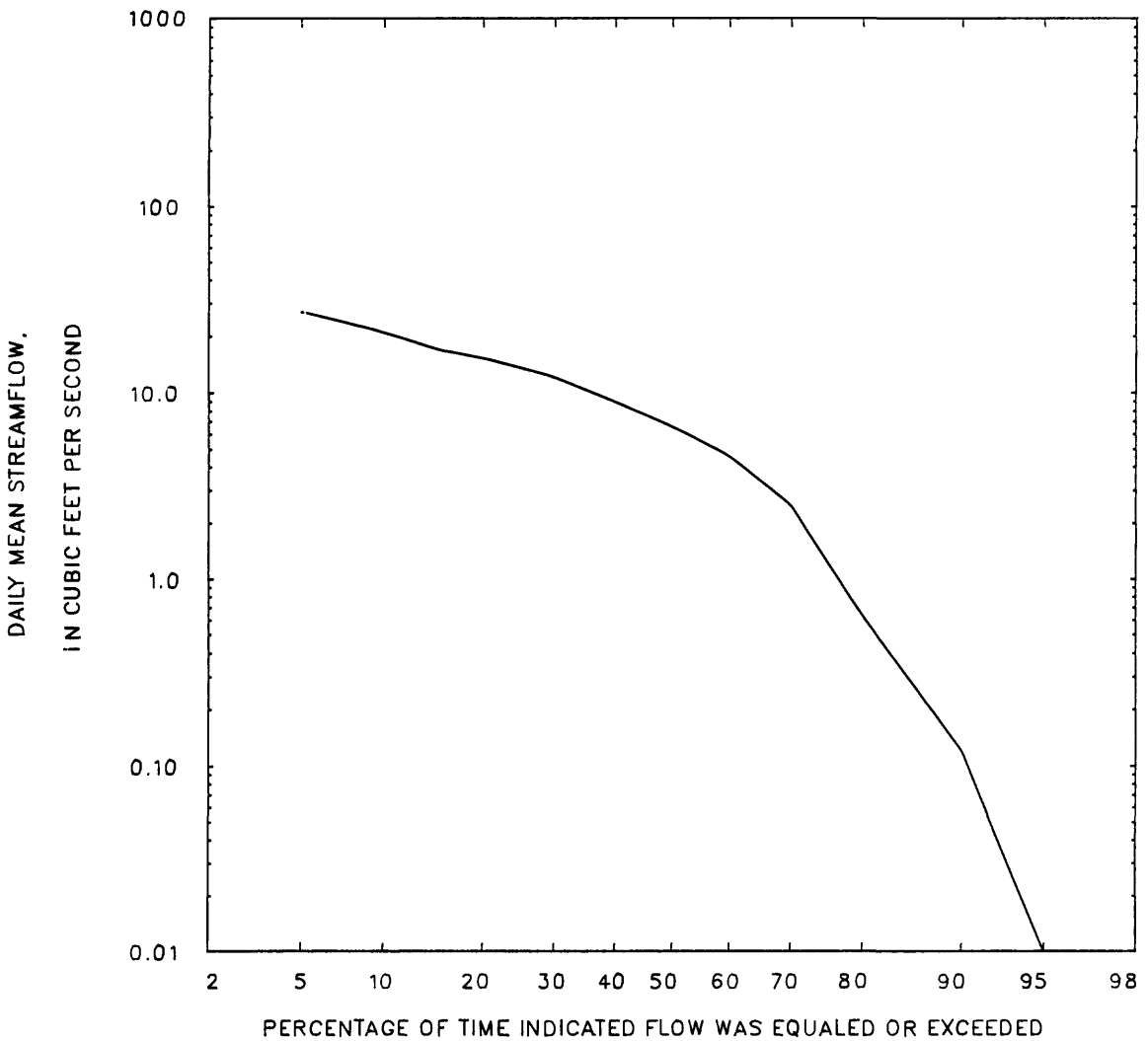
Duration of daily mean flow for period of record 1929-32, 1936-70

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
155	27	21	17	15	12	8.8	6.5	4.5	2.5	0.63	0.12	0.01	0.00	0.00	0.00	0.00

STATION 06649500 PERIOD OF RECORD 1929–32, 1936–70

LA PRELE CREEK NEAR ORPHA, WYO.





06650000 NORTH PLATTE RIVER NEAR DOUGLAS, WYO.

LOCATION.--Lat 42°41'00", long 105°23'26", in NW¼SE¼ sec.5, T.31 N., R.71 W., Converse County, on right bank 2 mi downstream from Bedtick Creek, 3.25 mi upstream from Wagonhound Creek, and 4 mi south of Douglas.

DRAINAGE AREA.--14,378 mi^2, of which 1,189 mi^2 is probably noncontributing.

PERIOD OF RECORD.--May 1891 to September 1894, April 1919 to September 1923 (irrigation seasons only), April 1929 to September 1939, April 1946 to September 1959. Published as "at Douglas," 1891-94, 1929-39.

GAGE.--Water-stage recorder. Datum of gage is 4,743.56 ft. Prior to April 28, 1932, staff or chain gages at sites 4 to 7 mi upstream at various datums. April 28, 1932, to September 30, 1939, water-stage recorder at site 6 mi upstream at different datum.

REMARKS.--Natural flow of stream affected by transbasin diversions, storage reservoirs, power developments, groundwater withdrawals and diversions for irrigation of about 385,000 acres above station, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,700 ft^3/s, July 13, 1937, gage height, 8.44 ft, site and datum then in use; minimum daily, 45 ft^3/s, January 8, 1937.

Monthly and annual streamflow 1930-39, 1947-59

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1570	130	425	367	0.86	2.5
November	621	112	215	108	0.50	1.3
December	579	90	167	94	0.57	1.0
January	544	80	152	92	0.60	0.9
February	586	97	173	96	0.55	1.0
March	697	107	220	122	0.56	1.3
April	3200	87	677	692	1.0	4.0
May	4670	305	1960	1090	0.56	11.5
June	5620	287	2930	1570	0.53	17.2
July	5890	1400	4210	1150	0.27	24.7
August	5120	1420	3990	947	0.24	23.4
September	3670	188	1920	996	0.52	11.3
Annual	1970	751	1430	339	0.24	100

Magnitude and probability of annual low flow based on period of record 1930-39, 1947-59

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	86	65	57	51	---	---
3	91	69	60	54	---	---
7	97	75	68	63	---	---
14	99	83	79	78	---	---
30	105	92	91	90	---	---
60	117	107	106	106	---	---
90	128	118	117	117	---	---
120	136	125	124	124	---	---
183	190	148	135	128	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1930-39, 1947-59

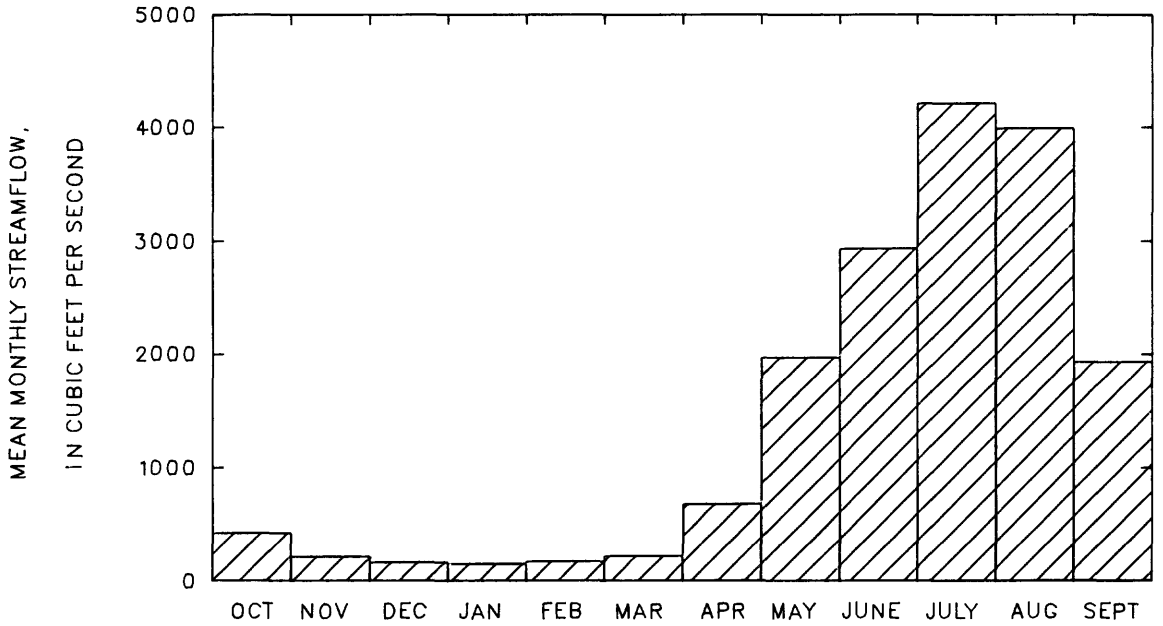
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	5850	7340	8410	9840	---	---
3	5920	6870	7300	7690	---	---
7	5770	6430	6640	6790	---	---
15	5450	6030	6200	6300	---	---
30	5030	5590	5740	5830	---	---
60	4670	5330	5510	5610	---	---
90	4170	4870	5110	5280	---	---

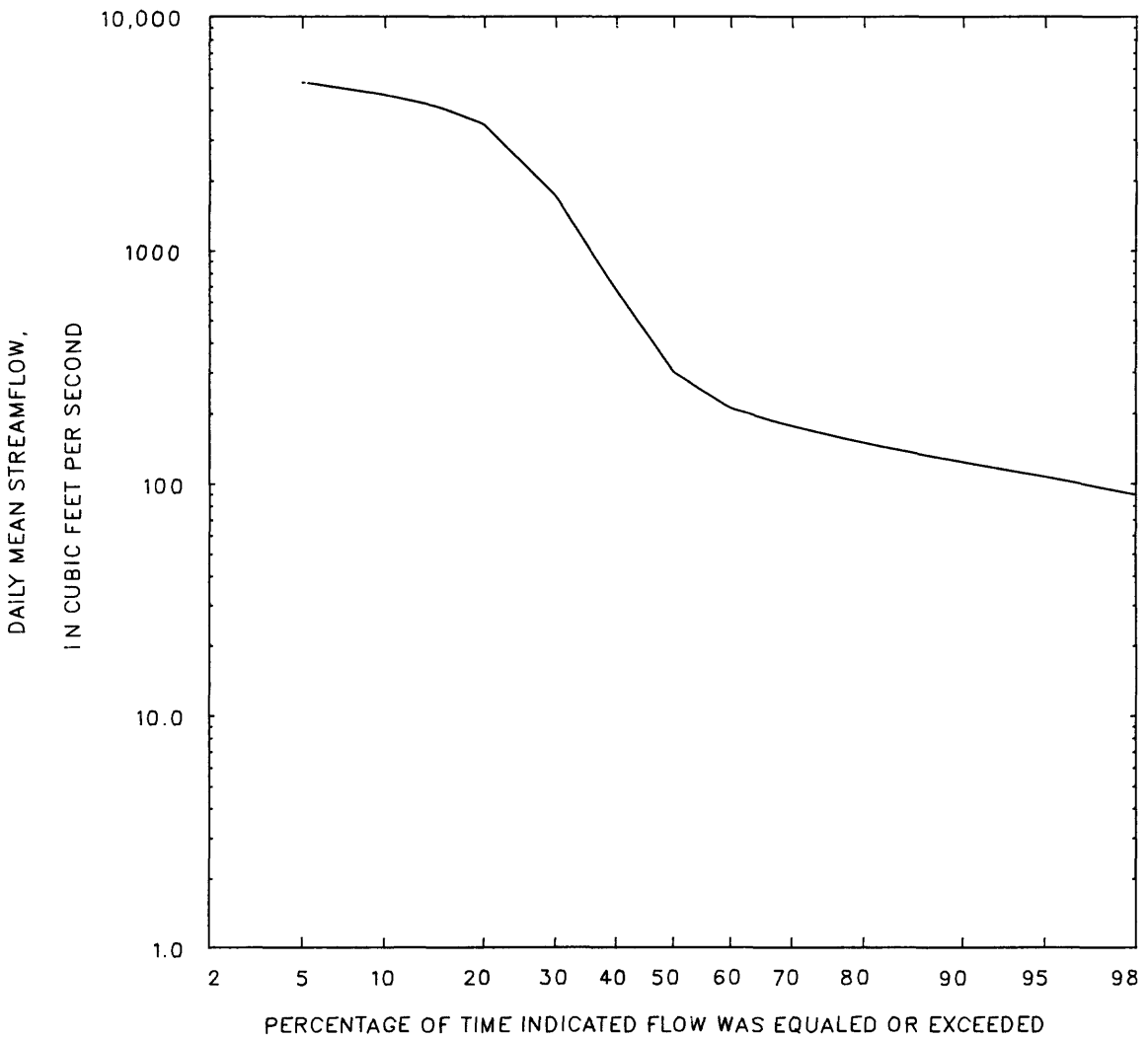
Duration of daily mean flow for period of record 1930-39, 1947-59

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
6300	5250	4630	4090	3460	1710	670	299	207	174	148	122	106	89	79	72	57

STATION 06650000 PERIOD OF RECORD 1930–39, 1947–59

NORTH PLATTE RIVER NEAR DOUGLAS, WYO.





06650500 WAGONHOUND CREEK NEAR LA BONTE, WYO.

LOCATION.--Lat 42°39'35", long 105°22'10", in SW¼NE¼ sec.16, T.31 N., R.71 W., Converse County, on left bank 0.6 mi upstream from mouth, 3.5 mi northeast of La Bonte, and 6 mi south of Douglas.

DRAINAGE AREA.--112 mi^2.

PERIOD OF RECORD.--April 1916 to September 1924, May 1929 to June 1932, April 1937 to September 1969. Seasonal records only 1929-32, 1937-39. Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 4,741 ft, from topographic map. Prior to October 18, 1939, non-recording gages at several sites within 0.5 mile of present site at various datums.

REMARKS.--Diversions for irrigation of about 3,900 acres above station. Diversions above station for supplemental irrigation supply to about 8,800 acres along La Prele Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,500 ft^3/s, May 14, 1965, gage height, 11.83 ft; no flow at times in many years.

Monthly and annual streamflow 1940-69

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	2.5	0.00	0.65	0.77	1.2	0.8
November	5.4	0.00	1.2	1.4	1.2	1.4
December	5.0	0.00	1.2	1.3	1.1	1.4
January	4.5	0.00	1.1	1.2	1.0	1.3
February	15	0.00	1.7	2.8	1.7	2.0
March	19	0.00	3.8	4.7	1.2	4.4
April	74	0.00	19	20	1.0	22.1
May	182	0.14	30	41	1.4	35.2
June	137	0.04	22	31	1.4	25.2
July	26	0.00	3.3	5.8	1.7	3.8
August	29	0.00	1.7	5.3	3.0	2.0
September	1.8	0.00	0.38	0.40	1.0	0.4
Annual	23	0.10	7.2	6.0	0.83	100

Magnitude and probability of annual low flow based on period of record 1941-69

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	0.00	---	---
3	0.00	0.00	0.00	0.00	---	---
7	0.00	0.00	0.00	0.00	---	---
14	0.01	0.00	0.00	0.00	---	---
30	0.04	0.00	0.00	0.00	---	---
60	0.12	0.00	0.00	0.00	---	---
90	0.21	0.00	0.00	0.00	---	---
120	0.31	0.00	0.00	0.00	---	---
183	0.43	0.07	0.00	0.00	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1940-69

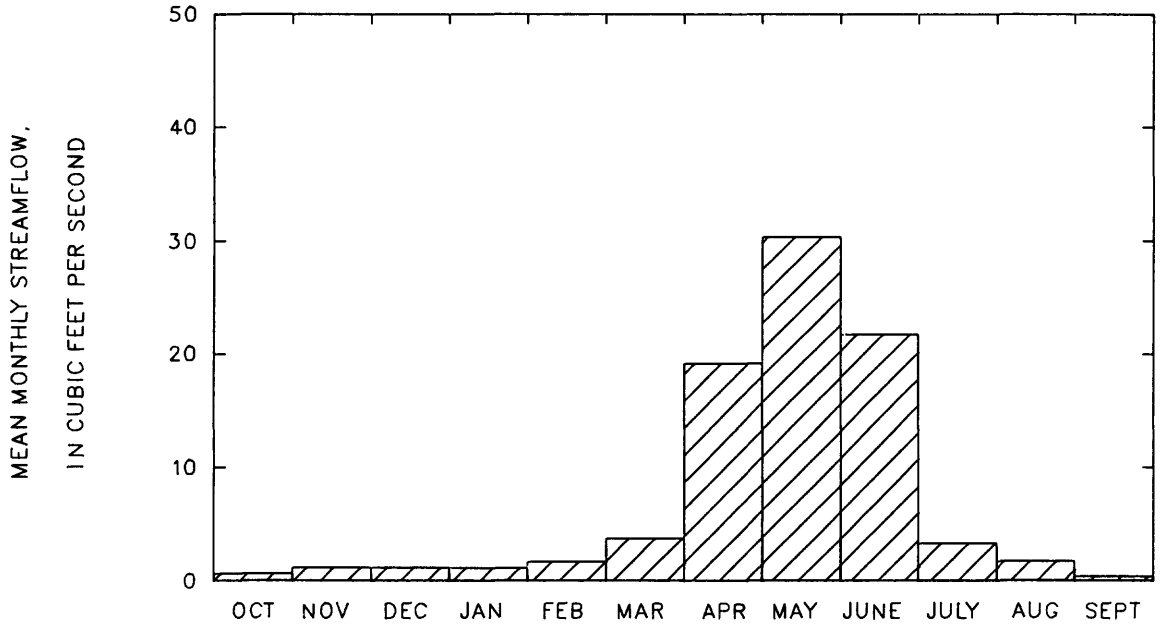
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	127	330	490	696	---	---
3	99	254	362	486	---	---
7	76	182	244	302	---	---
15	54	131	177	222	---	---
30	36	90	125	161	---	---
60	24	59	82	106	---	---
90	19	45	61	77	---	---

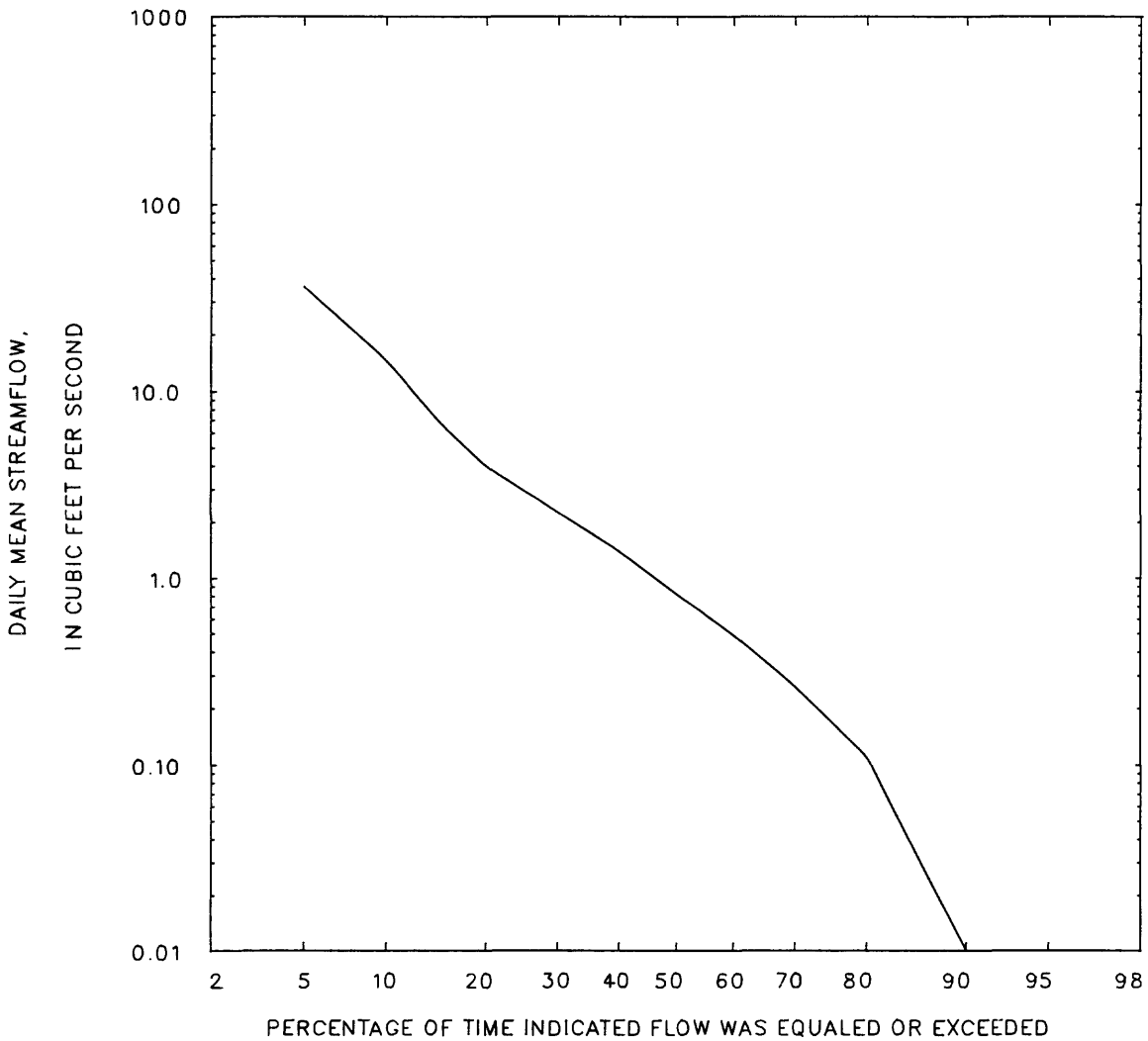
Duration of daily mean flow for period of record 1940-69

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
117	36	15	6.5	3.9	2.2	1.4	0.81	0.49	0.26	0.11	0.01	0.00	0.00	0.00	0.00	0.00

STATION 06650500 PERIOD OF RECORD 1940–69

WAGONHOUND CREEK NEAR LA BONTE, WYO.





06651500 LA BONTE CREEK NEAR LA BONTE, WYO.

LOCATION.--Lat 42°38'59", long 105°21'36", in SE¼SW¼ sec.15, T.31 N., R.71 W., Converse County, on left bank 1.1 mi upstream from mouth, 3 mi northeast of La Bonte, and 7.3 mi south of Douglas.

DRAINAGE AREA.--287 mi^2.

PERIOD OF RECORD.--April 1916 to September 1924, May 1928 to November 1932, April to September 1933, April 1935 to September 1969. Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 4,755 ft, from topographic map. Prior to May 4, 1935, non-recording gages near same site at different datums and May 4 to June 3, 1935, non-recording gage at site 1,000 ft downstream at different datum.

REMARKS.--Diversions for irrigation of about 8,300 acres above station. Diversion above station for supplemental irrigation supply to about 9,300 acres along La Prele Creek. One small reservoir above station (capacity, about 100 acre-ft) for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,770 ft^3/s, May 14, 1965, gage height, 10.60 ft, from rating curve extended above 3,100 ft^3/s on basis of slope-acre measurement of peak flow; no flow at times in many years.

Monthly and annual streamflow 1917-24, 1929-32, 1936-69

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	30	0.00	6.2	6.5	1.0	1.0
November	20	0.40	6.9	5.2	0.76	1.1
December	20	0.28	6.4	4.3	0.68	1.0
January	19	0.47	5.8	3.4	0.60	0.9
February	32	0.49	7.2	5.6	0.78	1.1
March	80	0.41	21	19	0.87	3.4
April	342	6.5	155	88	0.57	24.3
May	1070	7.9	296	250	0.84	46.7
June	425	1.2	98	108	1.1	15.4
July	117	0.29	20	28	1.4	3.1
August	59	0.00	7.7	10	1.3	1.2
September	59	0.00	5.1	8.9	1.7	0.8
Annual	130	4.3	53	32	0.59	100

Magnitude and probability of annual low flow based on period of record 1918-24, 1930-32, 1936-69

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.25	0.00	0.00	0.00	0.00	---
3	0.33	0.00	0.00	0.00	0.00	---
7	0.42	0.00	0.00	0.00	0.00	---
14	0.68	0.00	0.00	0.00	0.00	---
30	1.6	0.00	0.00	0.00	0.00	---
60	2.4	0.34	0.00	0.00	0.00	---
90	3.3	0.86	0.33	0.13	0.04	---
120	3.8	1.2	0.57	0.27	0.11	---
183	4.7	1.8	0.97	0.54	0.25	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1917-24, 1929-32, 1936-69

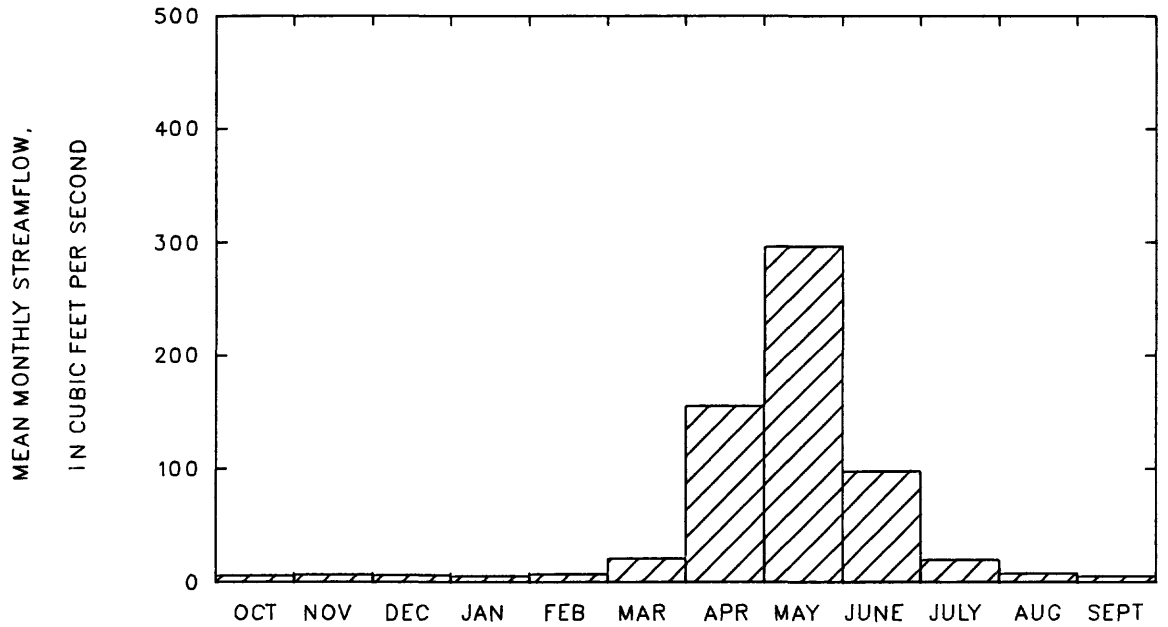
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	660	1230	1610	2030	2320	---
3	591	1100	1400	1720	1920	---
7	510	921	1140	1350	1470	---
15	422	747	909	1050	1120	---
30	326	576	697	803	855	---
60	232	409	496	573	612	---
90	173	302	367	426	456	---

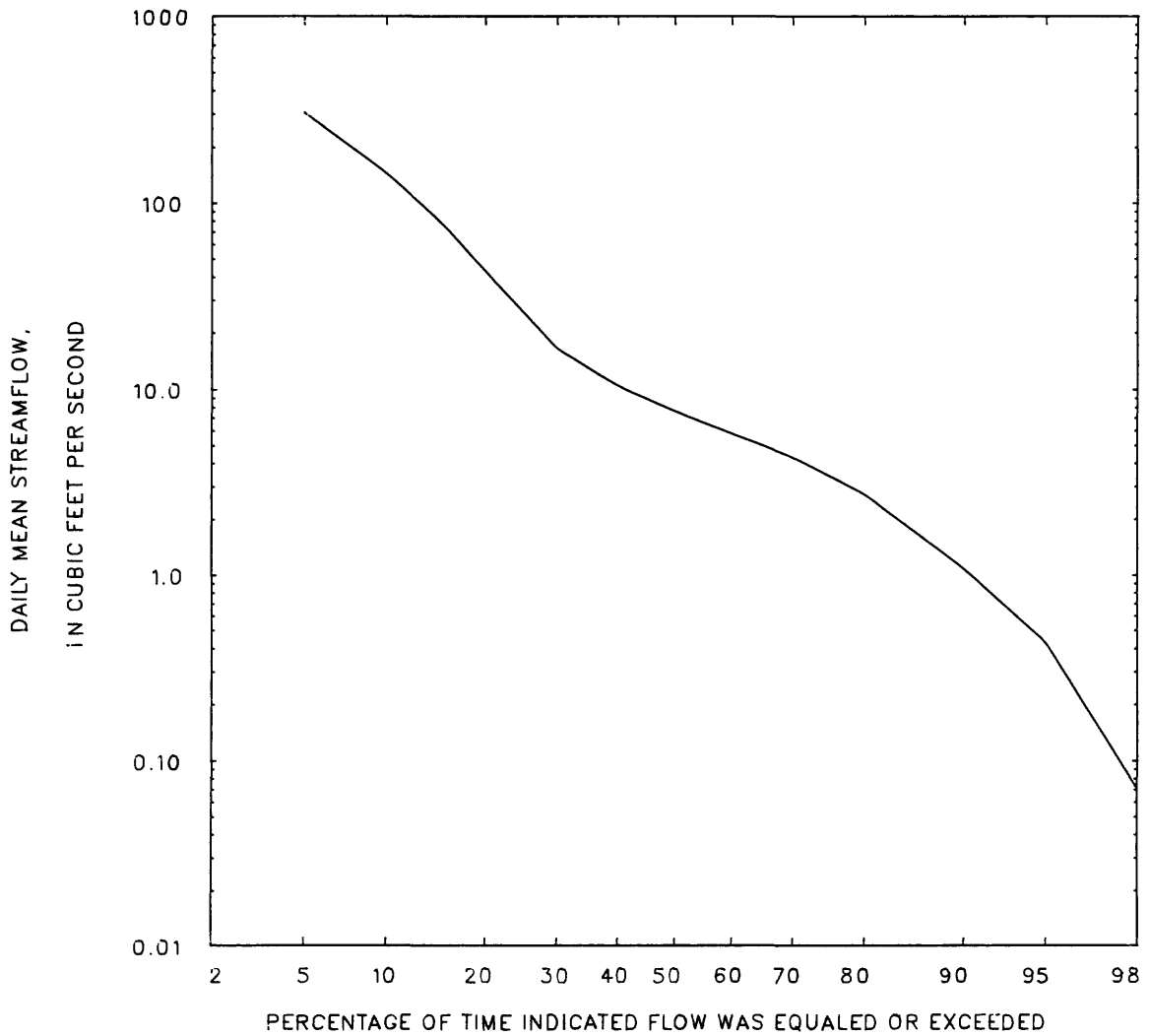
Duration of daily mean flow for period of record 1917-24, 1929-32, 1936-69

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
704	305	145	78	43	16	10	7.5	5.7	4.3	2.7	1.1	0.43	0.07	0.04	0.02	0.00

STATION 06651500 PERIOD OF RECORD 1917–24, 1929–32, 1936–69

LA BONTE CREEK NEAR LA BONTE, WYO.





06652000 NORTH PLATTE RIVER AT ORIN, WYO.

LOCATION.--Lat 42°39'02", long 105°09'46", in SE¼SW¼SW¼ sec.17, T.31 N., R.69 W., Converse County, on right bank 630 ft downstream from bridge on U.S. Highway 87, 0.2 mi upstream from Shawnee Creek, and 1.5 mi east of Orin.

DRAINAGE AREA.--14,888 mi^2, of which 1,193 mi^2 is probably noncontributing.

PERIOD OF RECORD.--January 1895, April to November 1895, April to October 1896, January 1897 to December 1898, April to November 1899, April to September 1917, April to September 1918, May to September 1924, April 1958 to current year. Monthly discharge only for some periods; published in WSP 1310. Published as "at Orin Junction," 1895, 1897-99 and as "at McKinley," 1917-18.

GAGE.--Water-stage recorder. Altitude of gage is 4,660 ft, from topographic map. January 1, 1895, to November 30, 1899, and May 1 to September 30, 1924, non-recording gage at railroad bridge just upstream from U.S. Highway 87 at different datum. April 1, 1917, to September 30, 1918, non-recording gage at site 2.2 mi downstream at different datum.

REMARKS.--Major regulation began after completion of Pathfinder Reservoir in April 1909. Natural flow of stream affected by storage reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,800 ft^3/s, May 15, 1965, gage height, 10.00 ft; maximum gage height, 10.45 ft, June 12, 1970; minimum daily discharge, 170 ft^3/s, September 11-14, 1899.

Monthly and annual streamflow 1959-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1670	571	1280	252	0.20	6.3
November	1530	639	1140	209	0.18	5.6
December	1220	566	973	152	0.16	4.8
January	1150	628	959	127	0.13	4.7
February	1470	595	1080	189	0.18	5.3
March	2910	618	1230	533	0.43	6.1
April	4580	670	1920	901	0.47	9.4
May	9270	1330	3170	2000	0.63	15.6
June	8360	964	2620	1890	0.72	12.9
July	7800	982	2250	1450	0.64	11.1
August	4090	611	2090	770	0.37	10.3
September	2500	636	1600	547	0.34	7.9
Annual	3110	935	1700	552	0.33	100

Magnitude and probability of annual low flow based on period of record 1960-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	410	319	280	251	223	---
3	468	375	333	302	270	---
7	569	468	419	382	342	---
14	707	604	553	512	468	---
30	834	710	643	589	529	---
60	926	804	735	677	611	---
90	963	846	782	728	668	---
120	1010	889	822	764	699	---
183	1100	967	892	828	755	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1959-84

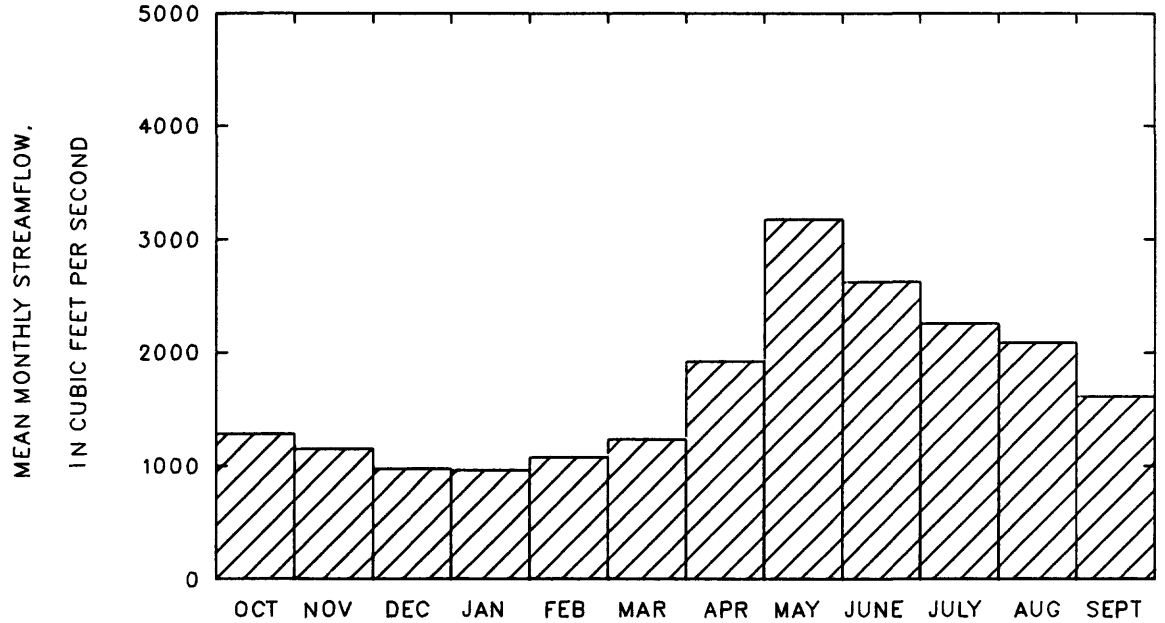
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	4930	8470	11800	17600	23200	---
3	4590	7570	10200	14400	18200	---
7	4190	6610	8590	11600	14100	---
15	3680	5650	7260	9690	11800	---
30	3200	4900	6340	8590	10600	---
60	2650	4060	5350	7480	9500	---
90	2380	3620	4760	6650	8450	---

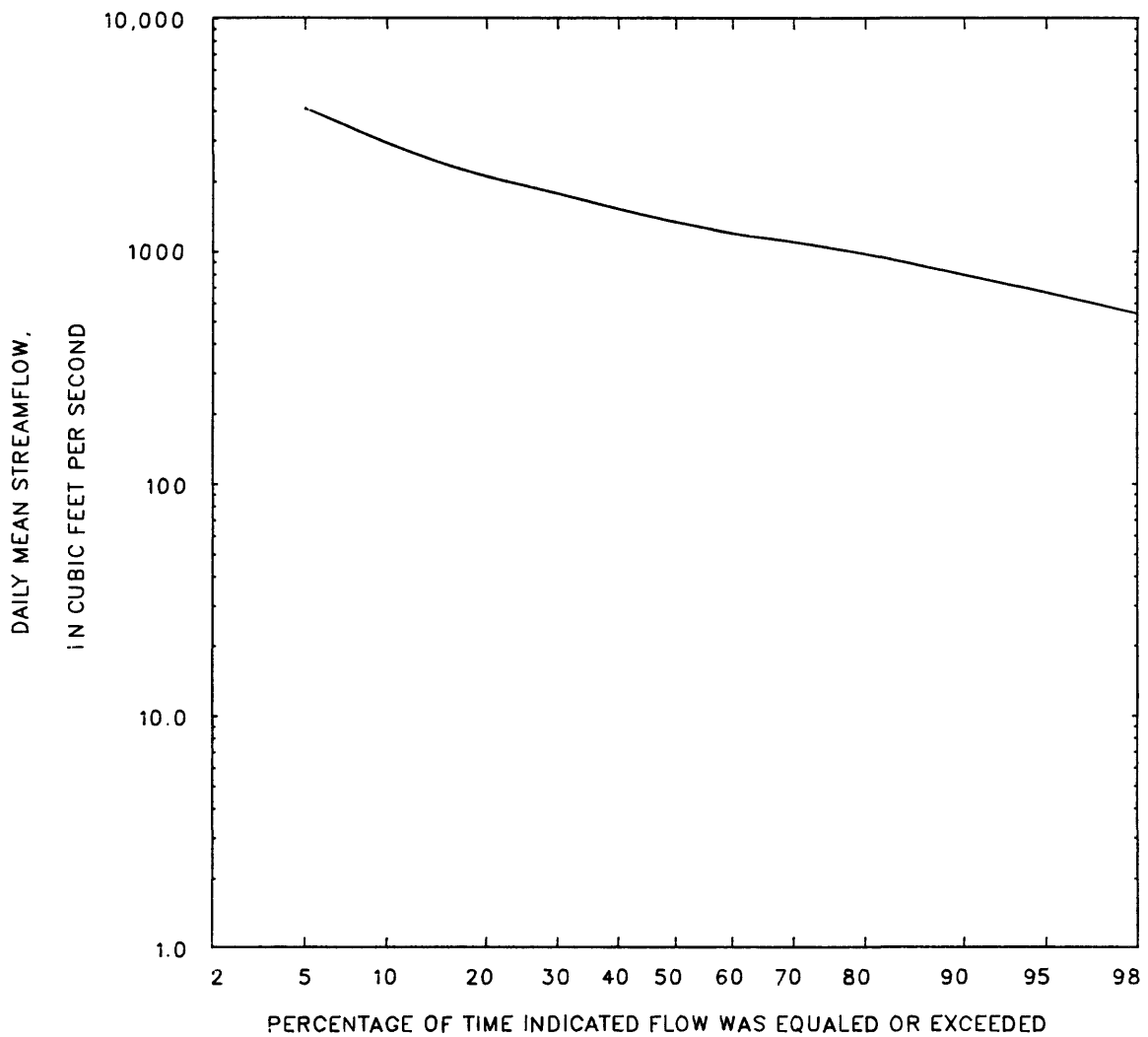
Duration of daily mean flow for period of record 1959-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
7930	4090	2910	2360	2080	1750	1500	1320	1180	1090	965	786	662	536	478	428	294

STATION 06652000 PERIOD OF RECORD 1959–84

NORTH PLATTE RIVER AT ORIN, WYO.





06652800 NORTH PLATTE RIVER BELOW GLENDO RESERVOIR, WYO.

LOCATION.--Lat 42°27'25", long 104°56'50", in SW¼SW¼NW¼ sec.30, T.29 N., R.67 W., Platte County, on right bank opposite Sand Draw, 1.3 mi upstream from Horseshoe Creek, 3.1 mi downstream from Glendo Dam, and 5.2 mi southeast of Glendo.

DRAINAGE AREA.--15,548 mi^2, of which 1,215 mi^2 is probably noncontributing.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,488.94 ft, from levels by Bureau of Reclamation.

REMARKS.--Flow completely regulated by Glendo Reservoir since October 17, 1957. Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,300 ft^3/s, June 29, 1984, gage height, 11.16 ft; minimum daily, 0.41 ft^3/s, October 17, 1977.

Monthly and annual streamflow 1958-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	361	2.6	44	89	2.0	0.2
November	51	1.3	7.1	10	1.5	0.0
December	324	1.5	16	62	4.0	0.1
January	173	1.6	14	35	2.5	0.1
February	1050	2.0	124	264	2.1	0.6
March	3840	1.9	555	959	1.7	2.8
April	3870	203	1190	838	0.70	6.0
May	4690	130	2320	1120	0.48	11.7
June	8920	66	2880	2250	0.78	14.5
July	8680	3100	4820	1090	0.23	24.3
August	8920	3870	5080	1030	0.20	25.6
September	6030	906	2770	878	0.32	14.0
Annual	3130	920	1660	537	0.32	100

Magnitude and probability of annual low flow based on period of record 1959-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.5	0.89	0.71	0.59	0.49	---
3	1.6	1.0	0.82	0.70	0.60	---
7	1.8	1.3	1.1	0.97	0.87	---
14	2.3	1.5	1.3	1.1	0.97	---
30	2.5	1.7	1.4	1.2	1.0	---
60	2.8	1.8	1.5	1.3	1.2	---
90	3.0	1.9	1.6	1.4	1.3	---
120	3.3	1.9	1.6	1.5	1.4	---
183	51	14	7.0	3.8	1.9	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1958-84

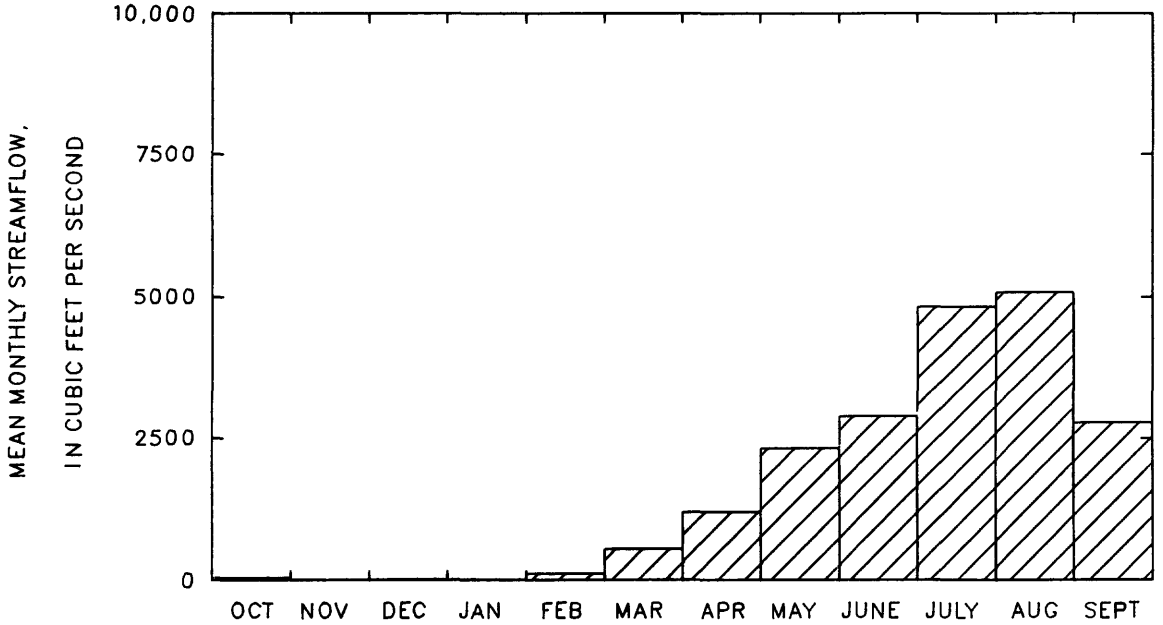
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	6810	7830	8590	9620	10400	---
3	6770	7780	8530	9550	10400	---
7	6420	7470	8290	9440	10400	---
15	5760	6840	7720	9030	10100	---
30	5300	6350	7220	8510	9620	---
60	4820	5750	6560	7800	8890	---
90	4320	5300	6120	7330	8380	---

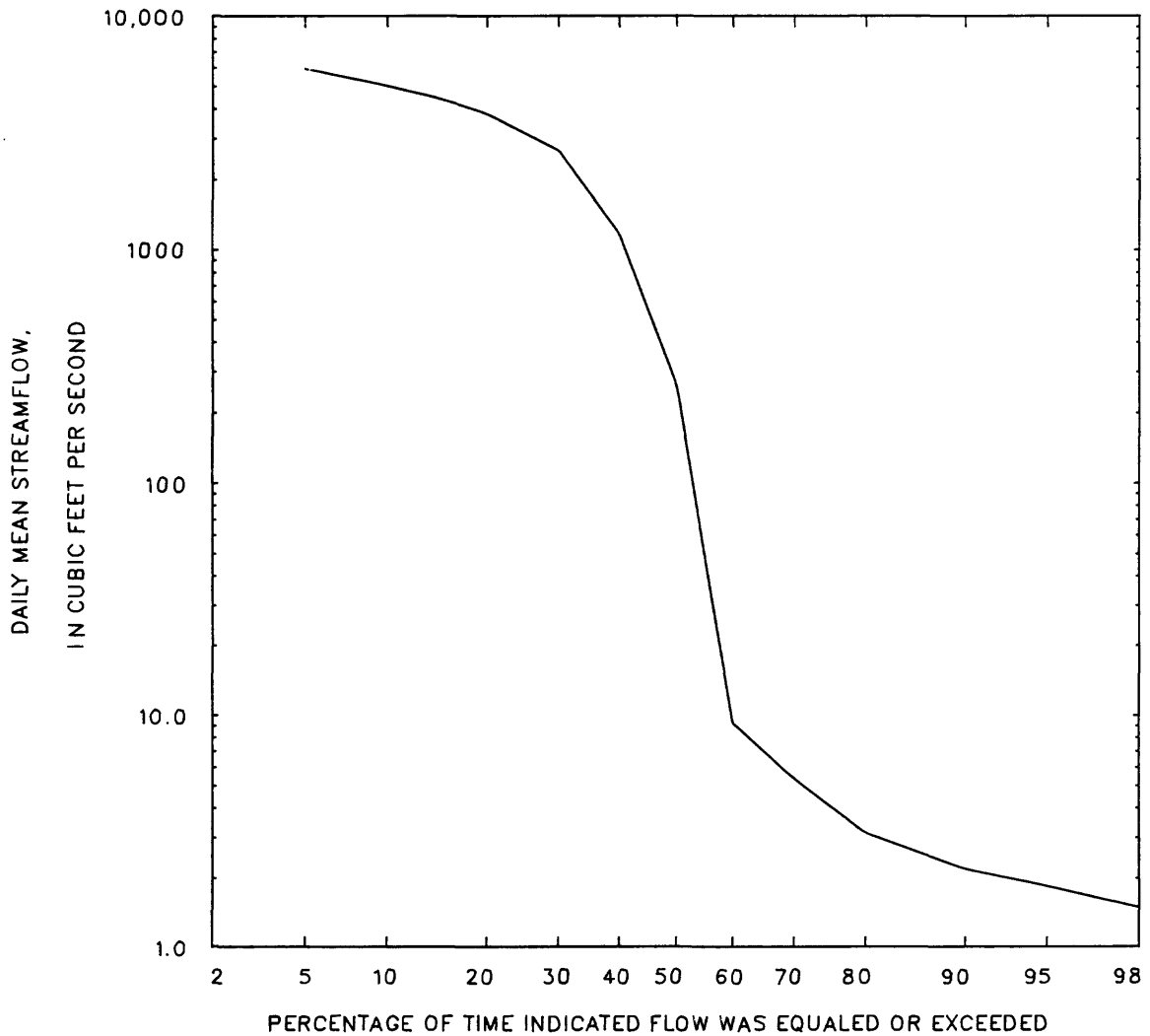
Duration of daily mean flow for period of record 1958-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
8580	5920	4990	4370	3800	2650	1170	261	9.2	5.3	3.1	2.2	1.8	1.5	1.3	1.1	0.88

STATION 06652800 PERIOD OF RECORD 1958–84

NORTH PLATTE RIVER BELOW GLENDO RESERVOIR, WYO.





06653500 HORSESHOE CREEK NEAR GLENDO, WYO.

LOCATION.--Lat 42°27'09", long 104°58'11", SE¼ sec.26, T.29 N., R.68 W., Platte County, on left bank 0.6 mi upstream from mouth and 4.4 mi southeast of Glendo.

DRAINAGE AREA.--211 mi^2. Drainage area at mouth, 212 mi^2.

PERIOD OF RECORD.--April 1916 to September 1918, April 1921 to September 1924, May 1928 to November 1932, April to September 1933, April 1935 to September 1970. Monthly discharge only for some periods; published in WSP 1310. Records for April to September 1919, published in WSP 469 and 506, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Altitude of gage is 4,500 ft, from topographic map. Prior to June 9, 1935, non-recording gages at sites about 2 mi upstream at different datums.

REMARKS.--Diversion for irrigation of about 7,600 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,900 ft^3/s, May 30, 1935, gage height, 8.80 ft, from floodmarks, present site and datum, from rating curve extended above 750 ft^3/s on basis of slope-area measurement of peak flow; no flow at times in 1918, 1935, 1939-40.

Monthly and annual streamflow 1922-24, 1929-32, 1936-70

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	30	1.0	6.0	5.3	0.89	1.8
November	21	1.0	6.7	4.3	0.64	2.0
December	17	1.7	6.3	3.7	0.58	1.9
January	16	1.5	5.6	3.6	0.65	1.7
February	15	1.5	6.0	3.5	0.59	1.8
March	25	1.7	9.0	6.7	0.75	2.7
April	186	1.8	56	51	0.90	17.1
May	439	1.6	124	113	0.91	37.7
June	405	1.1	80	103	1.3	24.2
July	104	1.1	19	24	1.3	5.6
August	23	0.50	5.7	4.0	0.71	1.7
September	17	0.73	5.1	3.6	0.70	1.6
Annual	77	2.1	28	20	0.71	100

Magnitude and probability of annual low flow based on period of record 1922-24, 1930-32, 1936-70

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.5	0.46	0.00	0.00	0.00	---
3	1.6	0.48	0.00	0.00	0.00	---
7	2.2	0.62	0.01	0.00	0.00	---
14	2.4	0.96	0.44	0.01	0.00	---
30	2.7	1.4	0.78	0.02	0.00	---
60	3.4	1.8	1.3	0.92	0.63	---
90	3.7	2.1	1.5	1.2	0.84	---
120	4.1	2.4	1.8	1.4	1.0	---
183	4.7	2.8	2.1	1.7	1.3	---

Magnitude and probability of instantaneous peak flow based on 42 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
352	1060	1970	3940	6250	9590

Weighted skew = 0.328

Magnitude and probability of annual high flow based on period of record 1922-24, 1929-32, 1936-70

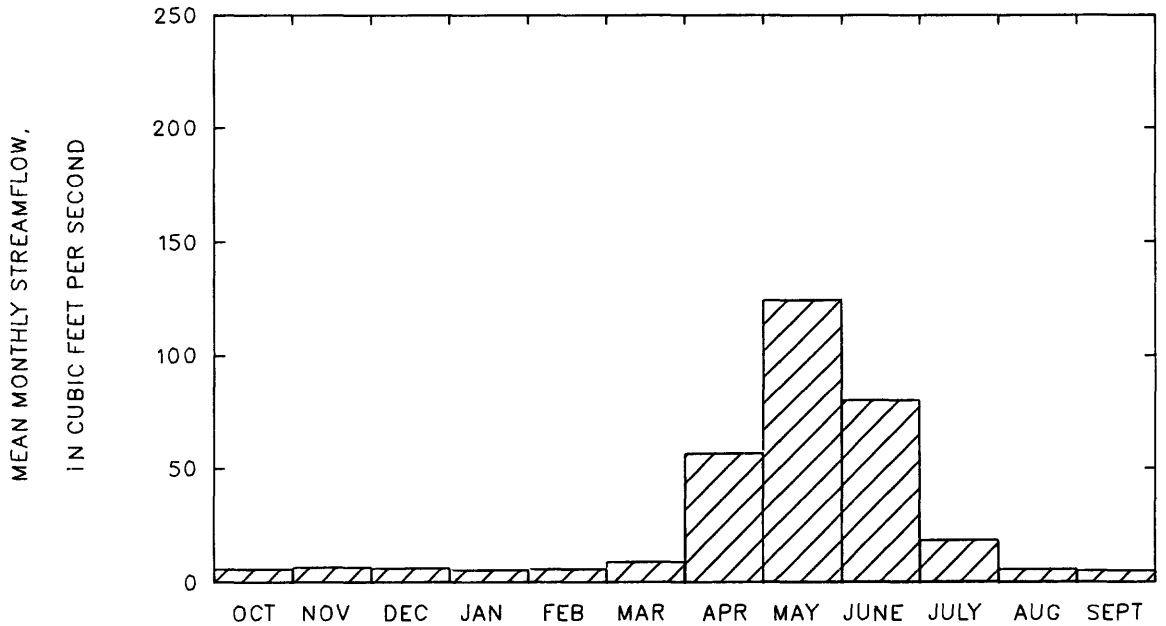
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	248	635	995	1560	2050	---
3	223	533	777	1100	1340	---
7	196	447	622	828	963	---
15	163	365	497	642	731	---
30	127	287	391	505	575	---
60	88	207	293	397	467	---
90	68	154	215	290	342	---

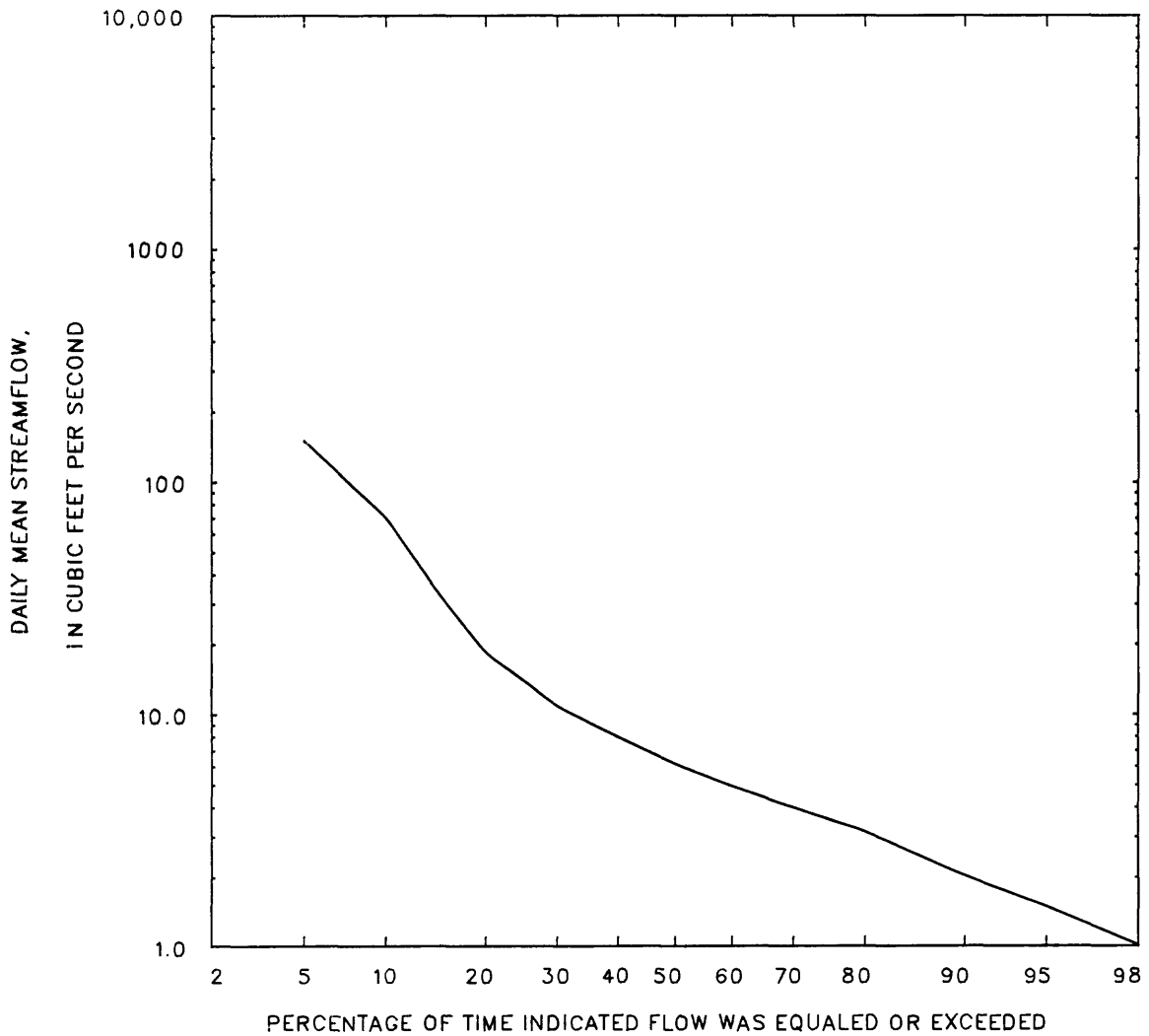
Duration of daily mean flow for period of record 1922-24, 1929-32, 1936-70

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
351	150	71	32	18	11	7.9	6.1	4.9	4.0	3.2	2.0	1.5	1.0	0.77	0.51	0.14

STATION 06653500 PERIOD OF RECORD 1922–24, 1929–32, 1936–70

HORSESHOE CREEK NEAR GLENDO, WYO.





06654000 NORTH PLATTE RIVER NEAR CASSA, WYO.

LOCATION.--Lat 42°23'53", long 104°55'53", in SE¼ sec.18, T.28 N., R.67 W., Platte County, on right bank 0.50 mi downstream from Dear Creek, 1.5 mi southeast of Cassa, 5.5 mi downstream from Horseshoe Creek, and about 8 mi upstream from high-water line of Guernsey Reservoir.

DRAINAGE AREA.--15,836 mi^2, of which 1,214 mi^2 is probably noncontributing.

PERIOD OF RECORD.--April 1946 to December 1957.

GAGE.--Water-stage recorder. Datum of gage is 4,457.82 ft.

REMARKS.--Cottonwood and Little Cottonwood Creeks are the only tributaries with appreciable discharge between this station and Guernsey dam. Natural flow of stream affected by transbasin diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,780 ft^3/s, September 7, 1946, gage height, 6.12 ft; minimum daily, 63 ft^3/s, November 15, 1955.

Monthly and annual streamflow 1947-57

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	761	152	313	166	0.53	1.8
November	295	129	213	53	0.25	1.2
December	267	138	187	45	0.24	1.1
January	211	116	161	31	0.20	0.9
February	278	122	200	45	0.22	1.2
March	610	149	284	135	0.47	1.7
April	1420	158	662	362	0.55	3.9
May	3880	480	1900	890	0.47	11.1
June	5950	377	2500	1490	0.60	14.7
July	5200	2300	4040	838	0.21	23.7
August	4960	3340	4280	572	0.13	25.1
September	3780	696	2310	905	0.39	13.5
Annual	2130	854	1430	350	0.24	100

Magnitude and probability of annual low flow based on period of record 1947-57

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	106	80	68	60	---	---
3	114	90	79	72	---	---
7	126	105	96	89	---	---
14	136	115	106	100	---	---
30	145	124	114	108	---	---
60	160	138	128	121	---	---
90	172	146	134	125	---	---
120	180	151	137	127	---	---
183	220	175	156	141	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1947-57

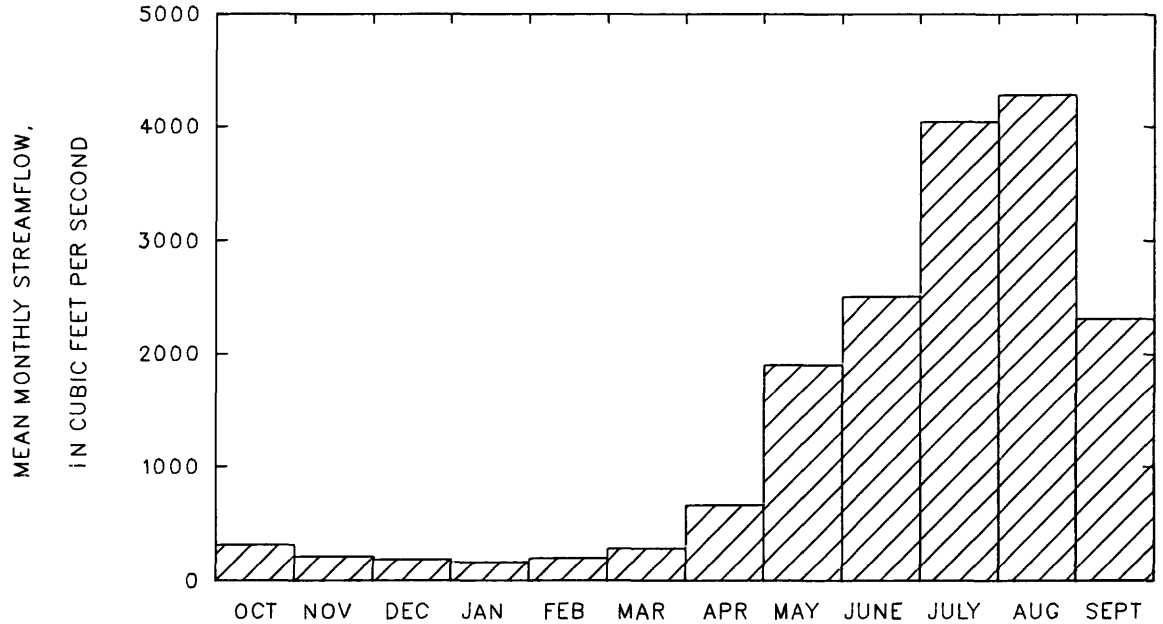
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	5830	6690	7330	---	---	---
3	5430	6180	6790	---	---	---
7	5190	5950	6570	---	---	---
15	4910	5670	6270	---	---	---
30	4710	5340	5710	---	---	---
60	4450	4910	5120	---	---	---
90	3960	4520	4780	---	---	---

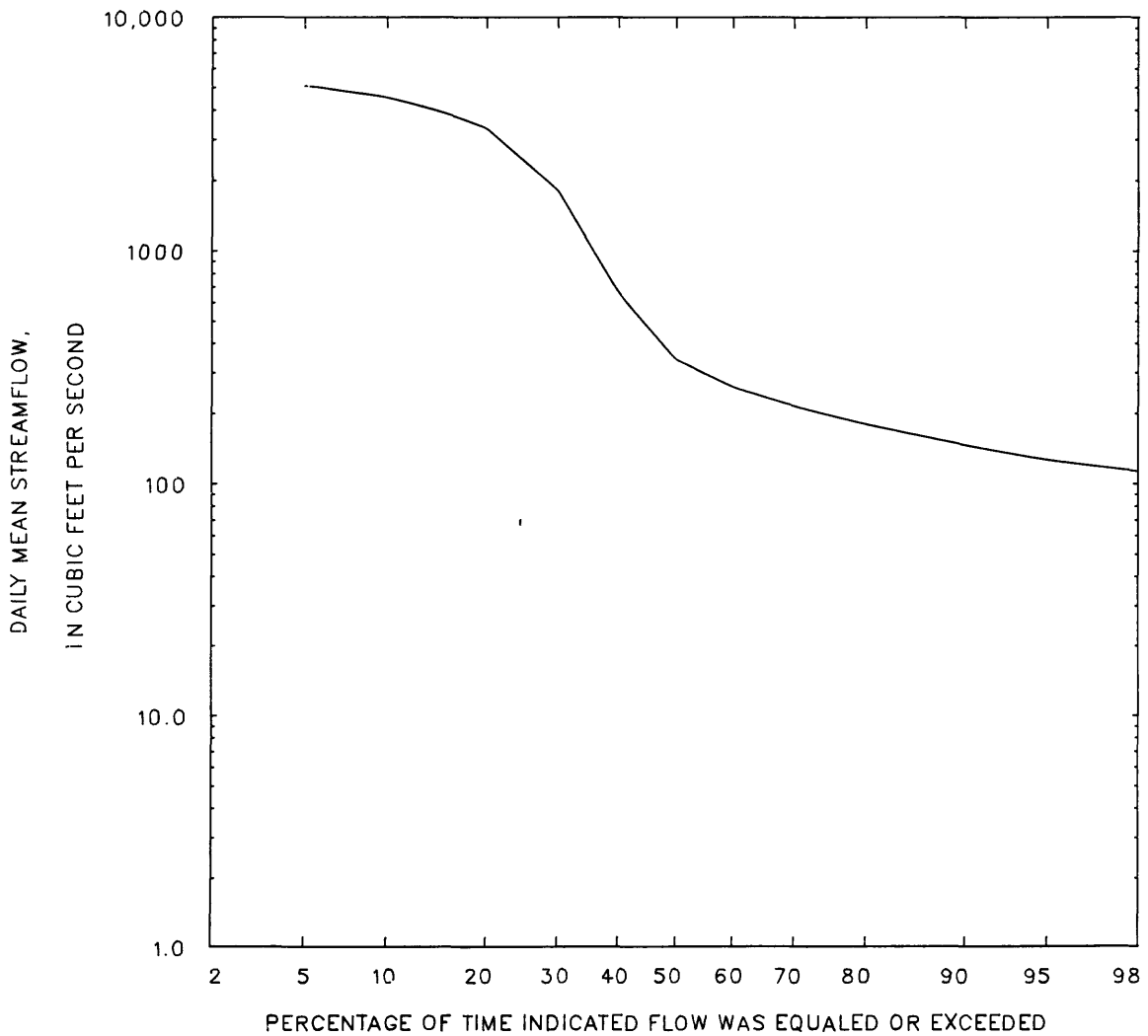
Duration of daily mean flow for period of record 1947-57

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
6050	5050	4510	3900	3320	1810	655	339	257	212	178	145	125	112	99	87	69

STATION 06654000 PERIOD OF RECORD 1947–57

NORTH PLATTE RIVER NEAR CASSA, WYO.





06655000 COTTONWOOD CREEK AT WENDOVER, WYO.

LOCATION.--Lat 42°19'33", long 104°52'33", in SE¼NW¼SE¼ sec.10, T.27 N., R.67 W., Platte County, 0.1 mi southwest of Wendover and 0.2 mi upstream from mouth.

DRAINAGE AREA.--196 mi².

PERIOD OF RECORD.--April 1916 to September 1924, May 1929 to September 1933, April 1935 to September 1942, April 1946 to September 1955, October 1973 to September 1974. No winter records prior to 1936 except for water years 1930-32. Monthly discharge only for some periods; published in WSP 1310. Published as "near Wendover," 1916-24.

GAGE.--Water-stage recorder. Altitude of gage is 4,450 ft, from topographic map. April 19, 1916, to September 30, 1924, May 1, 1929, to September 30, 1933, and April 1 to May 23, 1935, non-recording gages within 0.8 mi upstream; May 24, 1935, to September 30, 1942, water-stage recorder at site 50 ft upstream; all at different datums. April 6, 1946, to September 30, 1955, water-stage recorder at site 200 ft downstream at present datum.

REMARKS.--Diversion for irrigation of about 1,500 acres above station. Two small reservoirs above station, combined capacity, about 20 acre-ft, for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,140 ft³/s, September 23, 1940, gage height, 12.13 ft site and datum then in use, from floodmark, from rating curve extended above 140 ft³/s, on basis of slope-area measurements at gage heights 7.57 ft and 12.13 ft. No flow July 12, 15, 1932.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known, about 5,800 ft³/s, August 15, 1927, gage height, 10.6 ft from floodmark, site and datum of 1929, by slope-area measurement.

Monthly and annual streamflow 1936-42, 1947-55, 1974

Month	Maximum (ft³/s)	Minimum (ft³/s)	Mean (ft³/s)	Standard deviation (ft³/s)	Coefficient of variation	Percent of annual runoff
October	9.5	1.8	3.2	1.7	0.53	5.7
November	9.0	1.5	3.2	1.6	0.51	5.6
December	7.5	1.7	3.0	1.4	0.47	5.3
January	7.3	1.5	3.0	1.4	0.47	5.3
February	7.1	1.8	3.2	1.4	0.45	5.5
March	9.5	2.2	3.8	2.0	0.52	6.7
April	16	2.0	4.5	3.2	0.70	7.9
May	72	2.0	9.1	16	1.8	16.0
June	53	1.6	12	13	1.1	20.3
July	15	1.6	5.4	3.8	0.71	9.5
August	7.9	1.5	3.6	1.4	0.40	6.3
September	12	1.8	3.4	2.3	0.66	6.0
Annual	11	2.4	4.8	2.1	0.45	100

Magnitude and probability of annual low flow based on period of record 1937-42, 1948-55

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.8	1.1	0.82	0.62	---	---
3	1.8	1.2	0.86	0.65	---	---
7	1.9	1.2	0.92	0.72	---	---
14	1.9	1.3	1.1	0.89	---	---
30	2.0	1.5	1.3	1.2	---	---
60	2.3	1.9	1.7	1.5	---	---
90	2.4	2.0	1.8	1.6	---	---
120	2.5	2.1	1.9	1.7	---	---
183	2.6	2.2	2.0	1.9	---	---

Magnitude and probability of instantaneous peak flow based on 24 years of record

Discharge, in ft³/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
282	924	1760	3560	5670	8680

Weighted skew = 0.182

Magnitude and probability of annual high flow based on period of record 1936-42, 1947-55, 1974

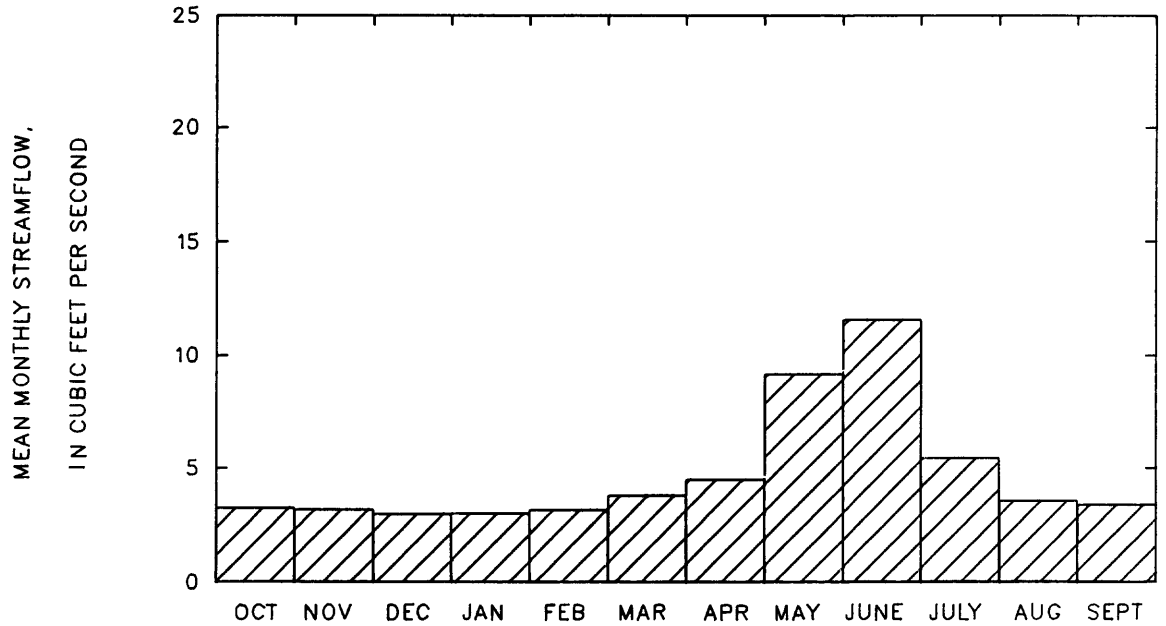
Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	48	112	167	248	---	---
3	31	70	103	151	---	---
7	22	51	76	115	---	---
15	16	36	56	92	---	---
30	11	24	38	63	---	---
60	8.3	16	25	39	---	---
90	7.3	13	19	29	---	---

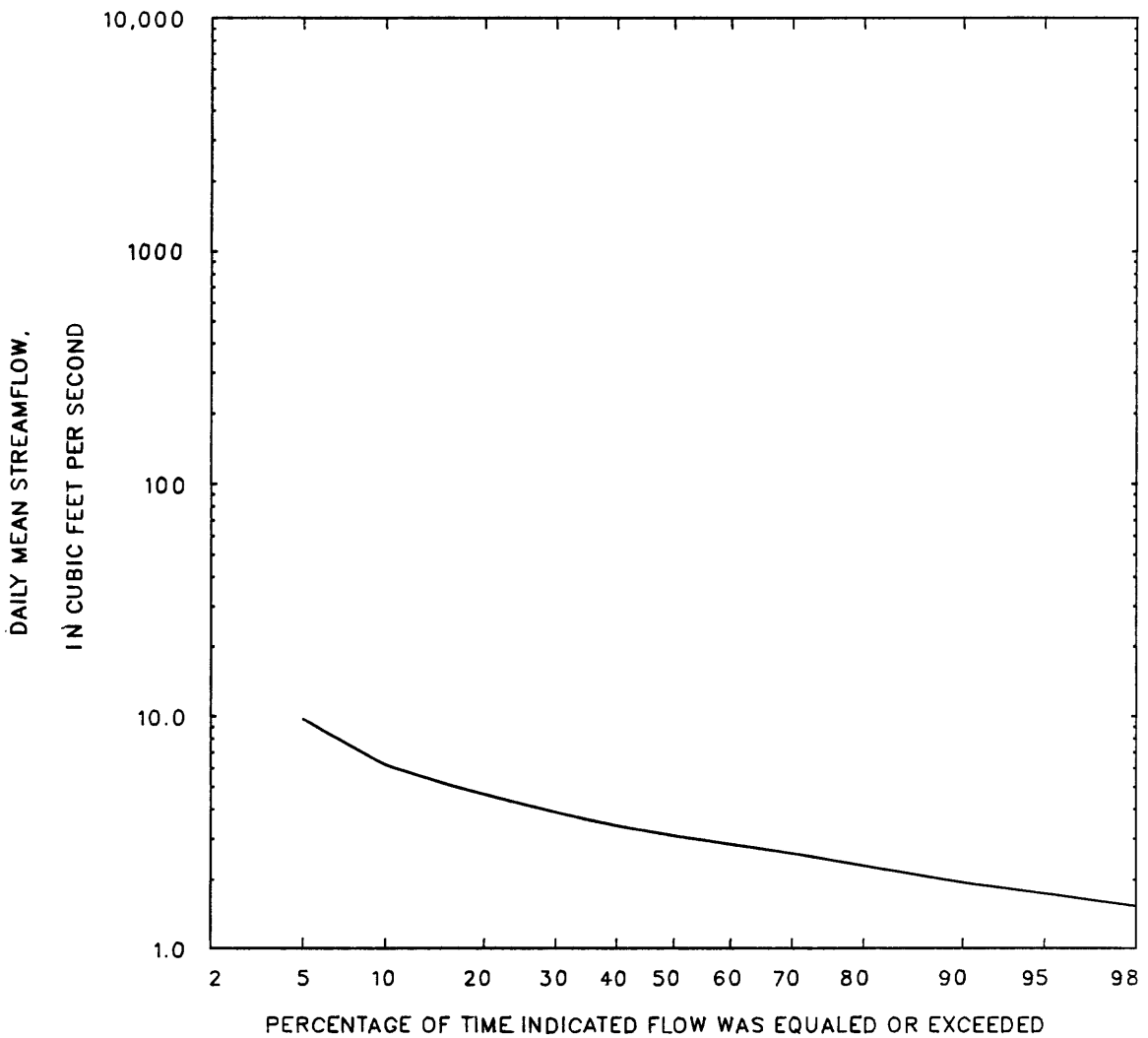
Duration of daily mean flow for period of record 1936-42, 1947-55, 1974

Discharge, in ft³/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
47	9.6	6.2	5.2	4.6	3.8	3.4	3.1	2.8	2.6	2.3	1.9	1.7	1.5	1.3	1.1	0.71

STATION 06655000 PERIOD OF RECORD 1936–42, 1947–55, 1974

COTTONWOOD CREEK AT WENDOVER, WYO.





06656000 NORTH PLATTE RIVER BELOW GUERNSEY RESERVOIR, WYO.
(before construction of Guernsey Dam)

LOCATION.--Lat 42°16'50", long 104°45'15", in SE¼SE¼ sec.27, T.27 N., R.66 W., Platte County, on right bank 1.0 mi northwest of Guernsey and 1.1 mi downstream from Guernsey Dam.

DRAINAGE AREA.--16,237 mi², of which 1,216 mi² is probably noncontributing.

PERIOD OF RECORD.--June 1900 to current year (no winter records prior to 1903). Monthly discharge only for some periods; published in WSP 1310. Published as "near Guernsey," 1900-1901, 1904; as "at Guernsey," 1902-3, 1905-8, March to October 1912; as "at Whalen," 1909; as North Platte River and Interstate Canal at Whalen 1910-11, 1913-16; and as "above Whalen," 1917-27.

GAGE.--Water-stage recorder. Altitude of gage is 4,340 ft, from topographic map. Prior to November 17, 1908, and March 30 to October 31, 1912, non-recording gages downstream at several sites within 0.8 mi at different datums. May 1, 1909, to December 31, 1927, non-recording gages at different datums on river and diversion canals at Whalen Dam about 9.0 mi downstream. January 1, 1928, to September 30, 1964, water-stage recorder at present site and datum 1.50 ft higher.

REMARKS.--Flow completely regulated by Guernsey Reservoir since 1927. Small diversions for irrigation between this station and diversion dam at Whalen. Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft³/s, June 2 or 3, 1908, gage height, 11.5 ft, from floodmark, site and datum then in use, from rating curve extended above 13,000 ft³/s; no flow February 28, 1927, November 19 to December 8, December 10-12, 14, 15, 1951.

Monthly and annual streamflow 1903-27

Month	Maximum (ft³/s)	Minimum (ft³/s)	Mean (ft³/s)	Standard deviation (ft³/s)	Coefficient of variation	Percent of annual runoff
October	5690	419	1330	1140	0.86	4.7
November	2610	226	613	496	0.81	2.2
December	1000	100	386	228	0.59	1.4
January	800	99	381	228	0.60	1.3
February	900	128	453	242	0.53	1.6
March	2500	192	773	596	0.77	2.7
April	5680	271	1850	1190	0.64	6.5
May	7900	1210	4350	1830	0.42	15.4
June	15400	2020	6990	3540	0.51	24.7
July	9900	2020	4900	1900	0.39	17.4
August	6520	635	3540	1750	0.49	12.5
September	6090	382	2690	1510	0.56	9.5
Annual	3560	1640	2360	552	0.23	100

Magnitude and probability of annual low flow based on period of record 1903-27

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	127	55	26	0.00	---	---
3	146	73	51	37	---	---
7	181	101	74	58	---	---
14	221	127	95	74	---	---
30	240	145	112	90	---	---
60	278	169	130	104	---	---
90	314	194	151	122	---	---
120	351	220	172	140	---	---
183	517	407	376	359	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft³/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1903-27

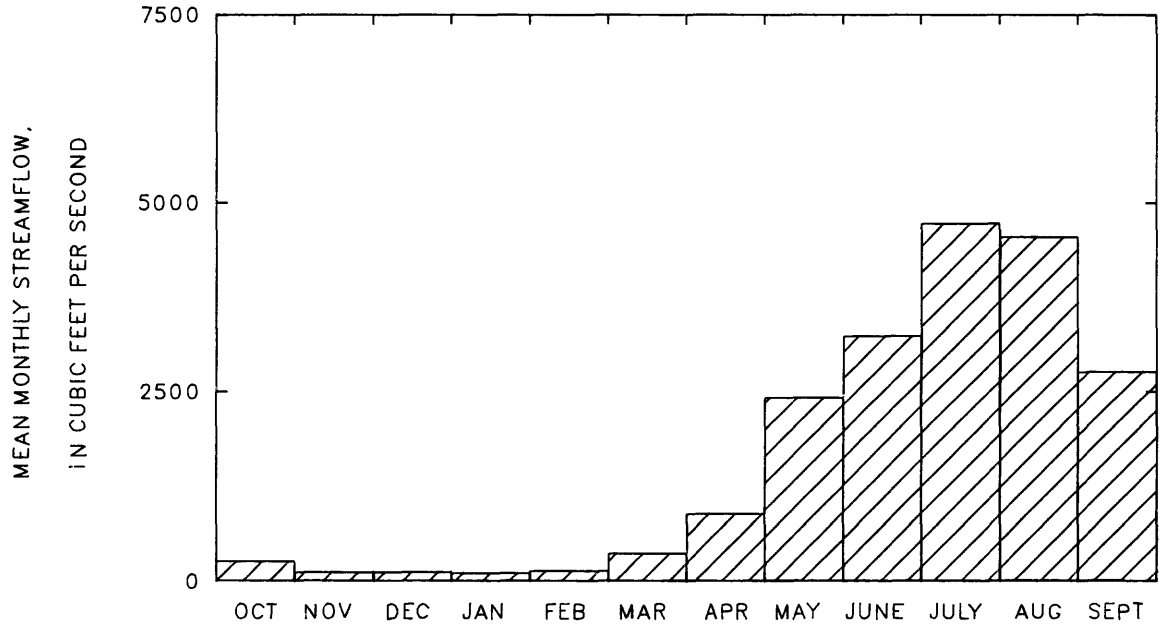
Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	9790	14800	18800	24700	---	---
3	9130	13700	17300	22700	---	---
7	8470	12700	16100	21100	---	---
15	7890	11600	14400	18300	---	---
30	7210	10300	12500	15300	---	---
60	6350	8610	9930	11400	---	---
90	5760	7510	8400	9290	---	---

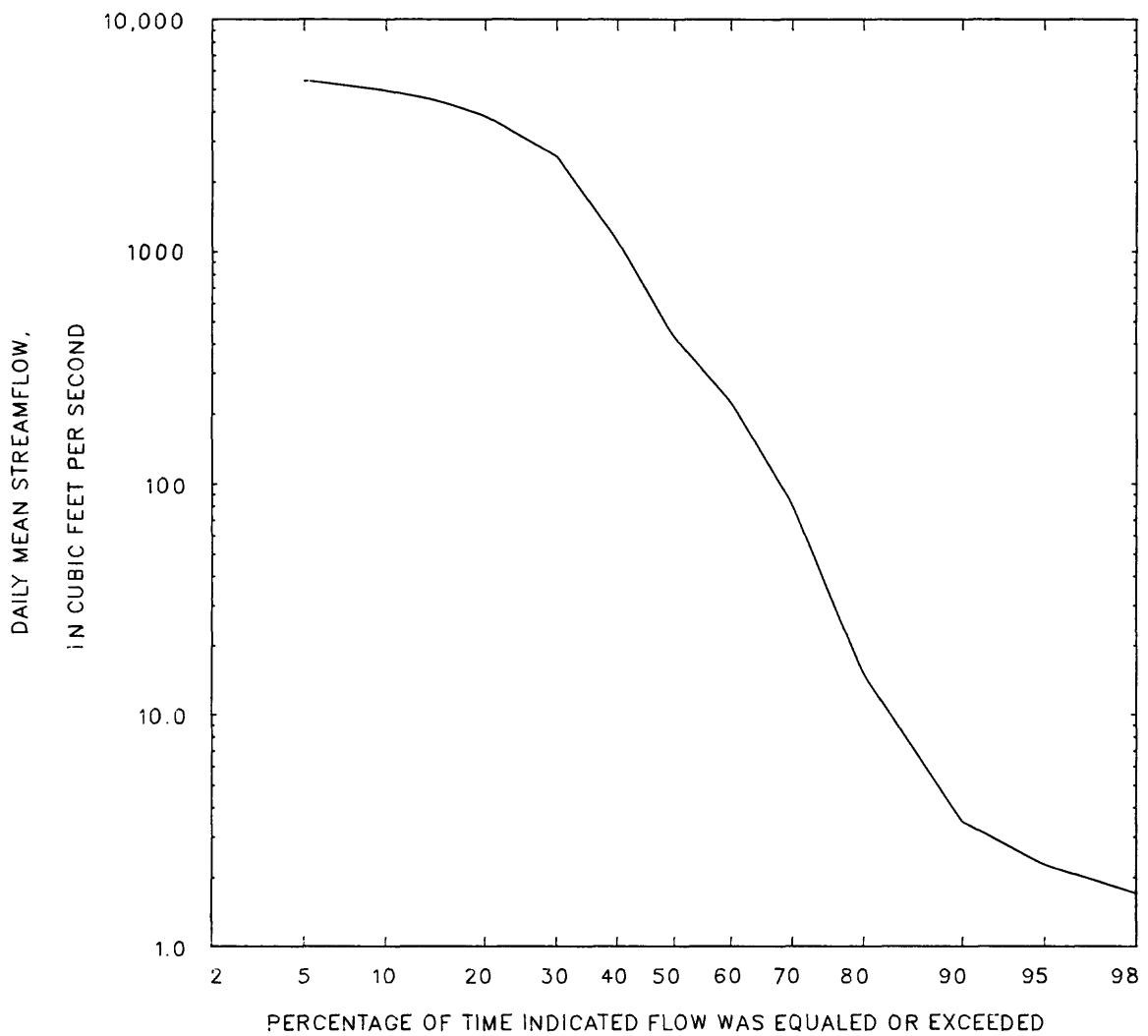
Duration of daily mean flow for period of record 1903-27

Discharge, in ft³/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
12900	7440	5820	4950	4370	3100	1940	1100	730	529	373	220	162	106	91	74	41

STATION 06656000 PERIOD OF RECORD 1928–84

NORTH PLATTE R. BL. GUERNSEY RES., WYO. (BEFORE CONSTRUCTION OF GUERNSEY DAM)





06656000 NORTH PLATTE RIVER BELOW GUERNSEY RESERVOIR, WYO.
(after construction of Guernsey Dam)

Monthly and annual streamflow 1928-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1040	3.0	264	256	0.97	1.3
November	477	1.4	116	143	1.2	0.6
December	441	1.3	118	134	1.1	0.6
January	410	1.4	103	117	1.1	0.5
February	685	1.7	135	160	1.2	0.7
March	3840	2.1	365	691	1.9	1.9
April	3970	12	889	708	0.80	4.5
May	5670	22	2420	1210	0.50	12.3
June	11100	413	3240	2240	0.69	16.5
July	8870	1650	4720	1070	0.23	24.0
August	9040	1820	4550	988	0.22	23.1
September	6520	251	2760	1030	0.37	14.0
Annual	3210	832	1650	517	0.31	100

Magnitude and probability of annual low flow
based on period of record 1929-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	7.4	1.6	0.65	0.21	0.00	0.00
3	7.9	1.7	0.71	0.25	0.00	0.00
7	8.5	1.8	0.76	0.27	0.00	0.00
14	9.3	1.9	0.80	0.28	0.00	0.00
30	11	2.7	1.3	0.79	0.45	0.31
60	18	3.7	1.6	0.84	0.40	0.25
90	22	4.4	1.9	0.96	0.44	0.26
120	29	5.7	2.4	1.2	0.50	0.28
183	125	54	34	23	14	10

Magnitude and probability of instantaneous peak flow
based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow
based on period of record 1928-84

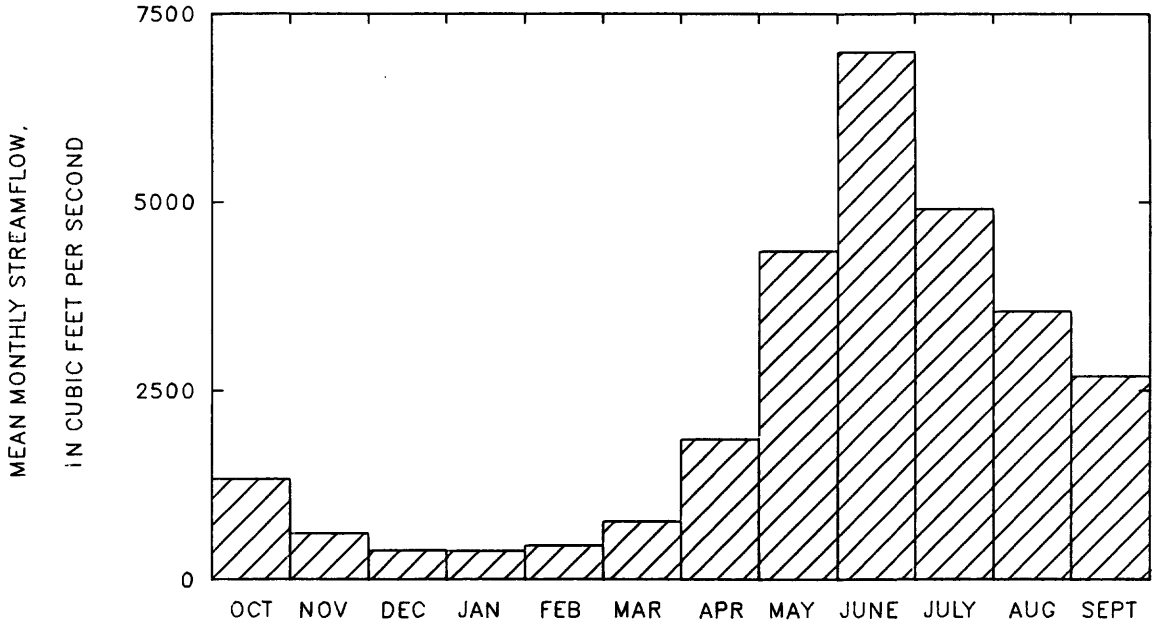
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	5420	6860	8190	10400	12400	14800
3	5310	6660	7940	10000	12000	14400
7	5230	6560	7810	9850	11800	14000
15	5110	6410	7570	9370	11000	12900
30	4950	6210	7210	8650	9880	11200
60	4800	5910	6610	7470	8100	8720
90	4310	5340	6030	6920	7590	8260

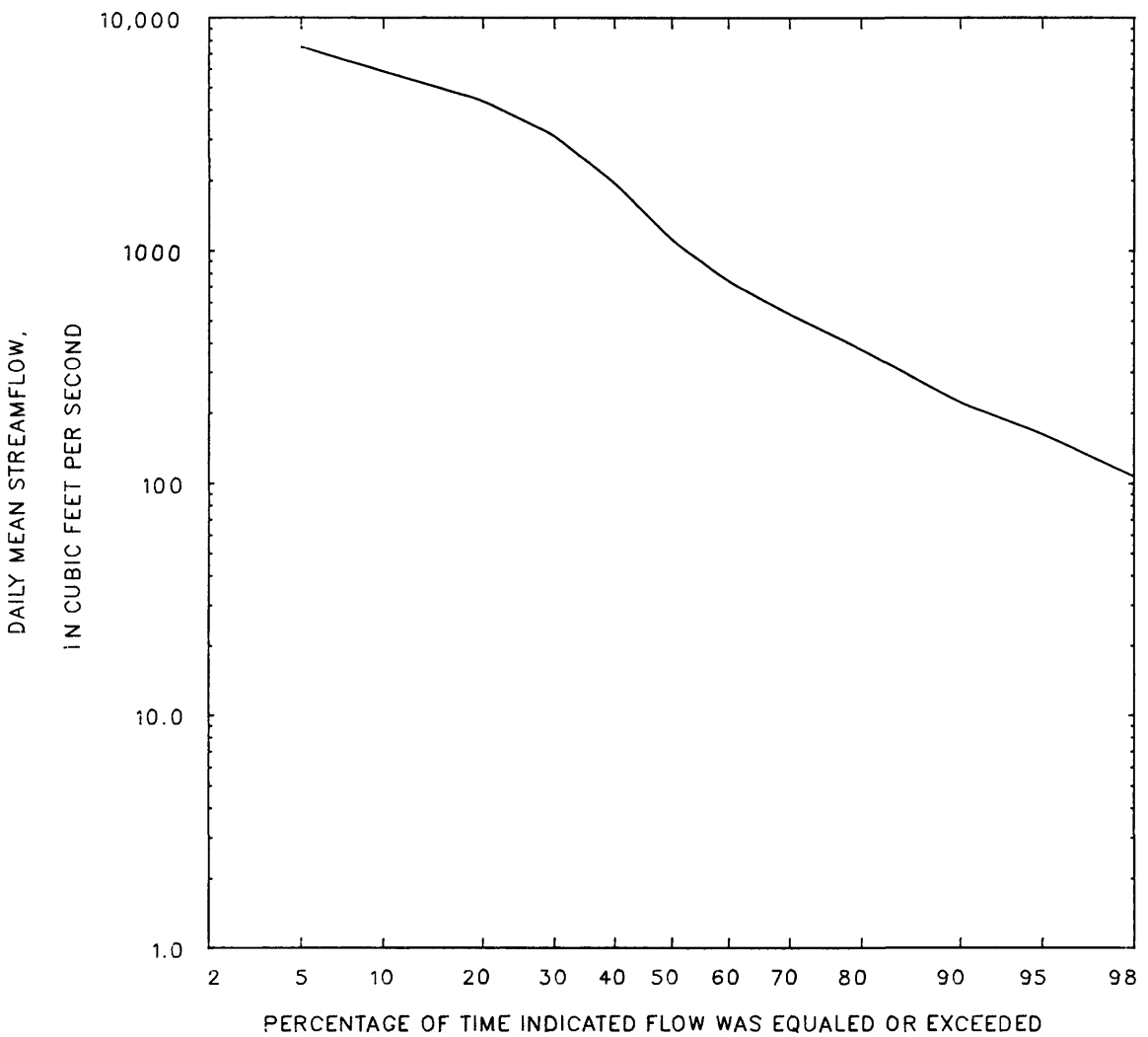
Duration of daily mean flow for period of record 1928-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
7920	5420	4910	4390	3830	2560	1110	423	223	81	15	3.5	2.3	1.7	1.5	1.2	0.50

STATION 06656000 PERIOD OF RECORD 1903–27

NORTH PLATTE R. BL. GUERNSEY RES., WYO. (AFTER CONSTRUCTION OF GUERNSEY DAM)





06657000 NORTH PLATTE RIVER BELOW WHALEN DIVERSION DAM, WYO.
(before construction of Guernsey Dam)

LOCATION.--Lat 42°14'20", long 104°36'29", in NE¼SW¼ sec.12, T.26 N., R.65 W., Goshen County, on left bank 0.2 mi downstream from Cottonwood Draw, 2.5 mi downstream from Whalen diversion dam, and 4.8 mi northwest of Fort Laramie.

DRAINAGE AREA.--16,425 mi^2, of which 1,219 mi^2 is probably noncontributing.

PERIOD OF RECORD.--May 1909 to current year. Prior to April 16, 1938, published as "below Whalen," and April 16, 1938, to September 30, 1974, as "at recorder station, below Whalen."

GAGE.--Water-stage recorder. Altitude of gage is 4,250 ft, from topographic map. Prior to April 16, 1938, non-recording gages at Whalen diversion dam and canals 2.5 mi upstream at different datums. April 16, 1938, to November 17, 1955, water-stage recorder at site 200 ft downstream, and November 18, 1955, to February 16, 1972, at present site at datum 1.00 ft higher.

REMARKS.--Flow regulated by Whalen diversion dam 2.5 mi upstream. Natural flow of stream affected by storage reservoirs, transbasin diversions, power development, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge determined, 22,000 ft^3/s, June 26, 1955, gage height, 9.85 ft, from rating curve extended above 4,500 ft^3/s on basis of studies of peak flow measurements of upstream floods; no flow at times in 1910, 1916, 1925-27, 1962-64, 1967, 1970-71, 1975-77, 1981.

Monthly and annual streamflow 1917-27

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1390	265	749	327	0.44	3.9
November	510	134	307	137	0.44	1.6
December	319	80	198	83	0.42	1.0
January	494	108	219	101	0.46	1.1
February	587	125	293	157	0.53	1.5
March	679	192	380	153	0.40	2.0
April	5240	175	1160	1400	1.2	6.1
May	5720	1390	3250	1670	0.51	16.9
June	14400	1790	5290	3970	0.75	27.5
July	8330	2020	3520	1750	0.50	18.3
August	2990	1690	2240	435	0.19	11.7
September	2880	698	1620	669	0.41	8.4
Annual	2990	973	1610	623	0.39	100

Magnitude and probability of annual low flow based on period of record 1917-27

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	2.8	0.00	0.00	---	---	---
3	32	0.00	0.00	---	---	---
7	76	36	23	---	---	---
14	102	61	46	---	---	---
30	139	93	74	---	---	---
60	166	118	98	---	---	---
90	188	136	115	---	---	---
120	216	153	127	---	---	---
183	353	269	230	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1917-27

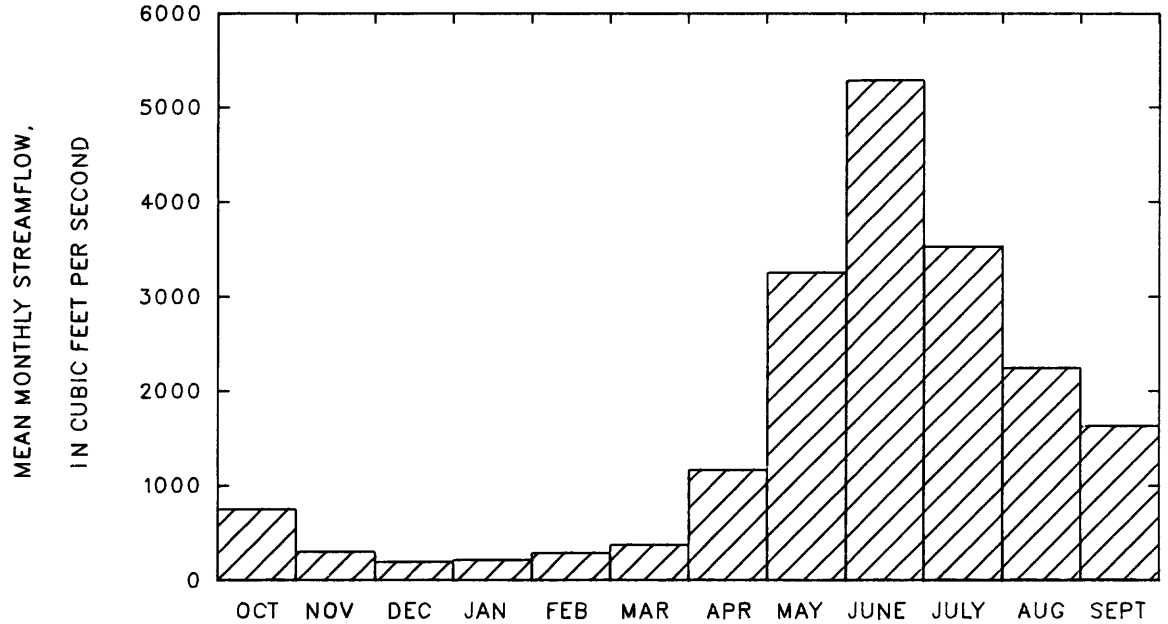
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	9120	13500	16700	---	---	---
3	7970	12000	15300	---	---	---
7	6650	10900	14600	---	---	---
15	5830	9940	13500	---	---	---
30	5040	8410	11300	---	---	---
60	4350	6760	8680	---	---	---
90	3780	5620	7030	---	---	---

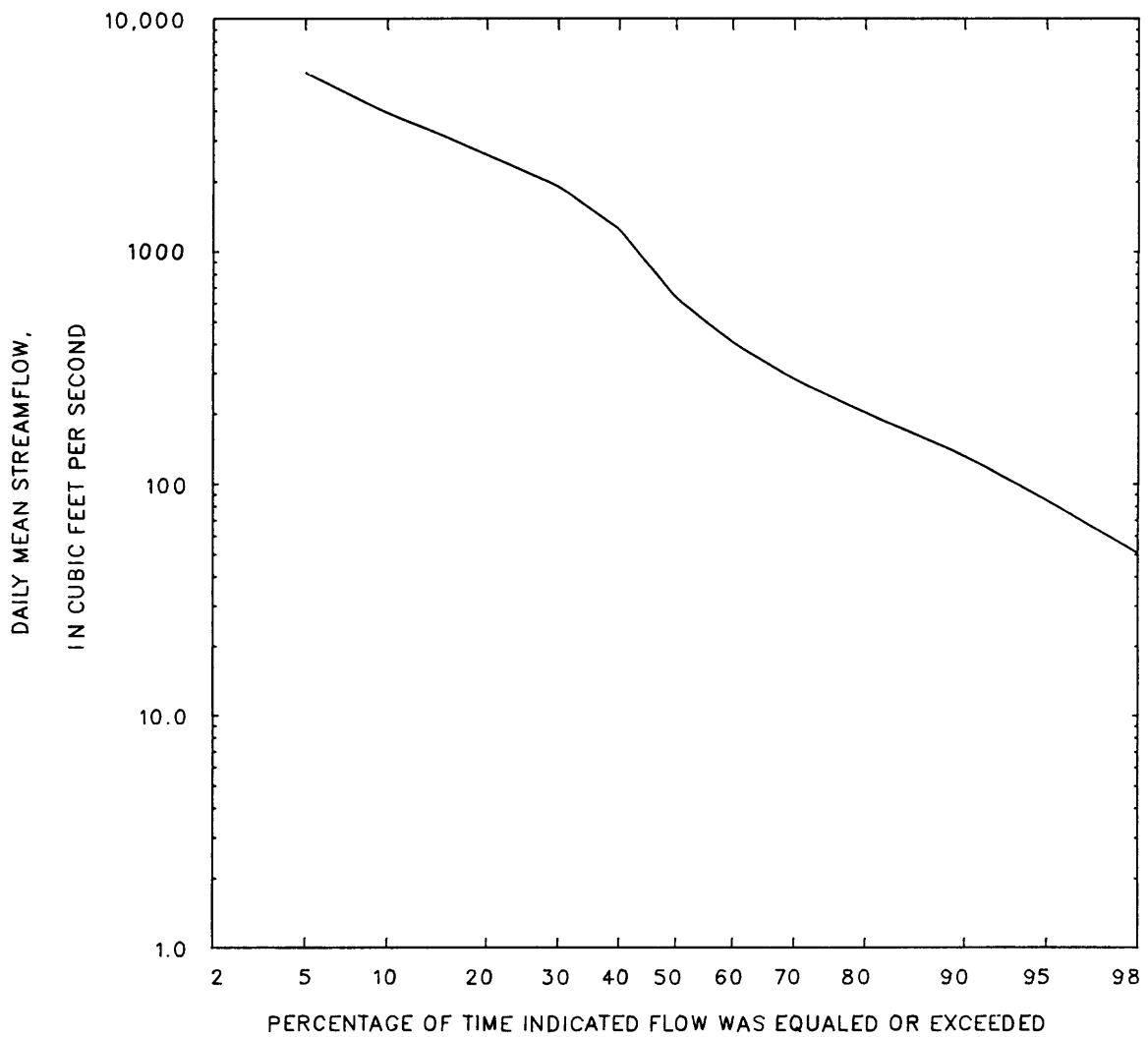
Duration of daily mean flow for period of record 1917-27

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
12300	5800	3890	3130	2610	1910	1250	630	405	281	201	132	85	50	37	19	4.7

STATION 06657000 PERIOD OF RECORD 1917–27

NORTH PLATTE R. BL. WHALEN DIV. DAM, WYO. (BEFORE CONSTRUCTION OF GUERNSEY DAM)





06657000 NORTH PLATTE RIVER BELOW WHALEN DIVERSION DAM, WYO.
(after construction of Guernsey Dam)

Monthly and annual streamflow 1928-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	632	4.2	99	132	1.3	1.5
November	477	0.71	58	106	1.8	0.9
December	405	0.30	46	85	1.8	0.7
January	354	0.24	36	72	2.0	0.5
February	604	0.01	57	124	2.2	0.9
March	3890	0.00	241	704	2.9	3.6
April	3780	2.8	341	721	2.1	5.1
May	4540	20	986	1010	1.0	14.6
June	8560	126	1510	1820	1.2	22.3
July	5340	559	1560	753	0.48	23.1
August	5470	87	1270	764	0.60	18.8
September	3980	44	544	591	1.1	8.1
Annual	2050	178	565	442	0.78	100

Magnitude and probability of annual low flow
based on period of record 1929-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.10	0.00	0.00	0.00	0.00	0.00
3	1.1	0.00	0.00	0.00	0.00	0.00
7	2.0	0.00	0.00	0.00	0.00	0.00
14	2.7	0.00	0.00	0.00	0.00	0.00
30	4.1	0.39	0.00	0.00	0.00	0.00
60	6.6	1.4	0.62	0.31	0.14	0.08
90	7.9	2.0	1.0	0.61	0.34	0.23
120	10	2.8	1.5	0.86	0.49	0.33
183	28	13	9.0	7.0	5.5	4.7

Magnitude and probability of instantaneous peak flow
based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow
based on period of record 1928-84

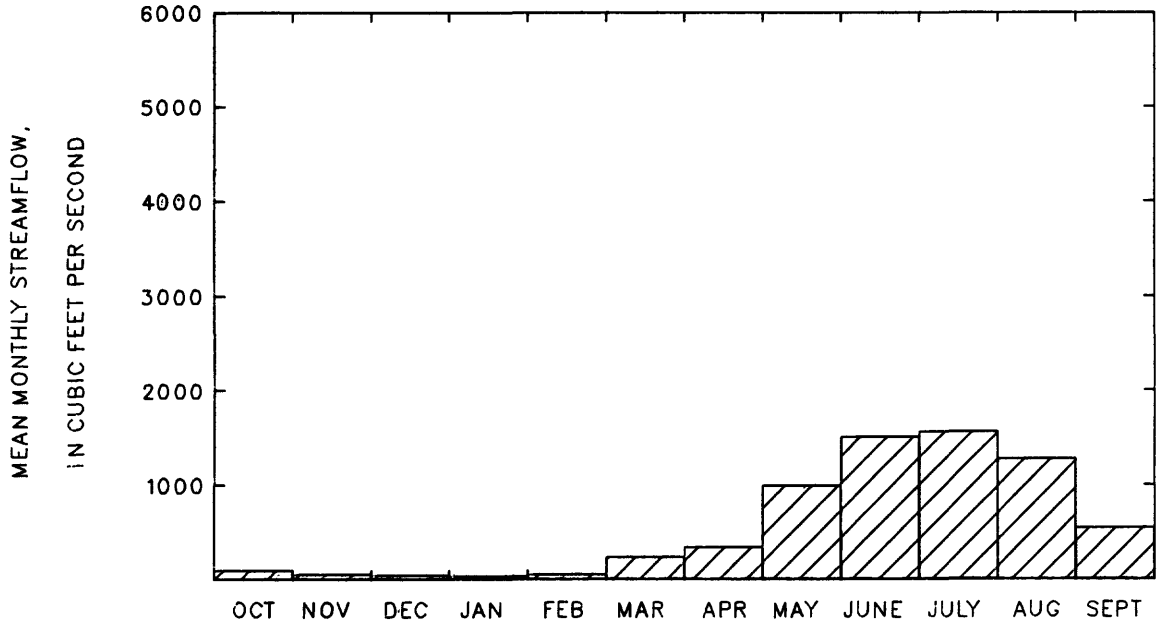
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2400	4060	5700	8580	11500	15200
3	2180	3600	5030	7620	10300	13800
7	2010	3290	4610	7040	9580	13000
15	1810	2970	4210	6530	9030	12400
30	1630	2690	3820	5960	8280	11500
60	1420	2290	3180	4810	6510	8770
90	1240	1980	2730	4050	5400	7150

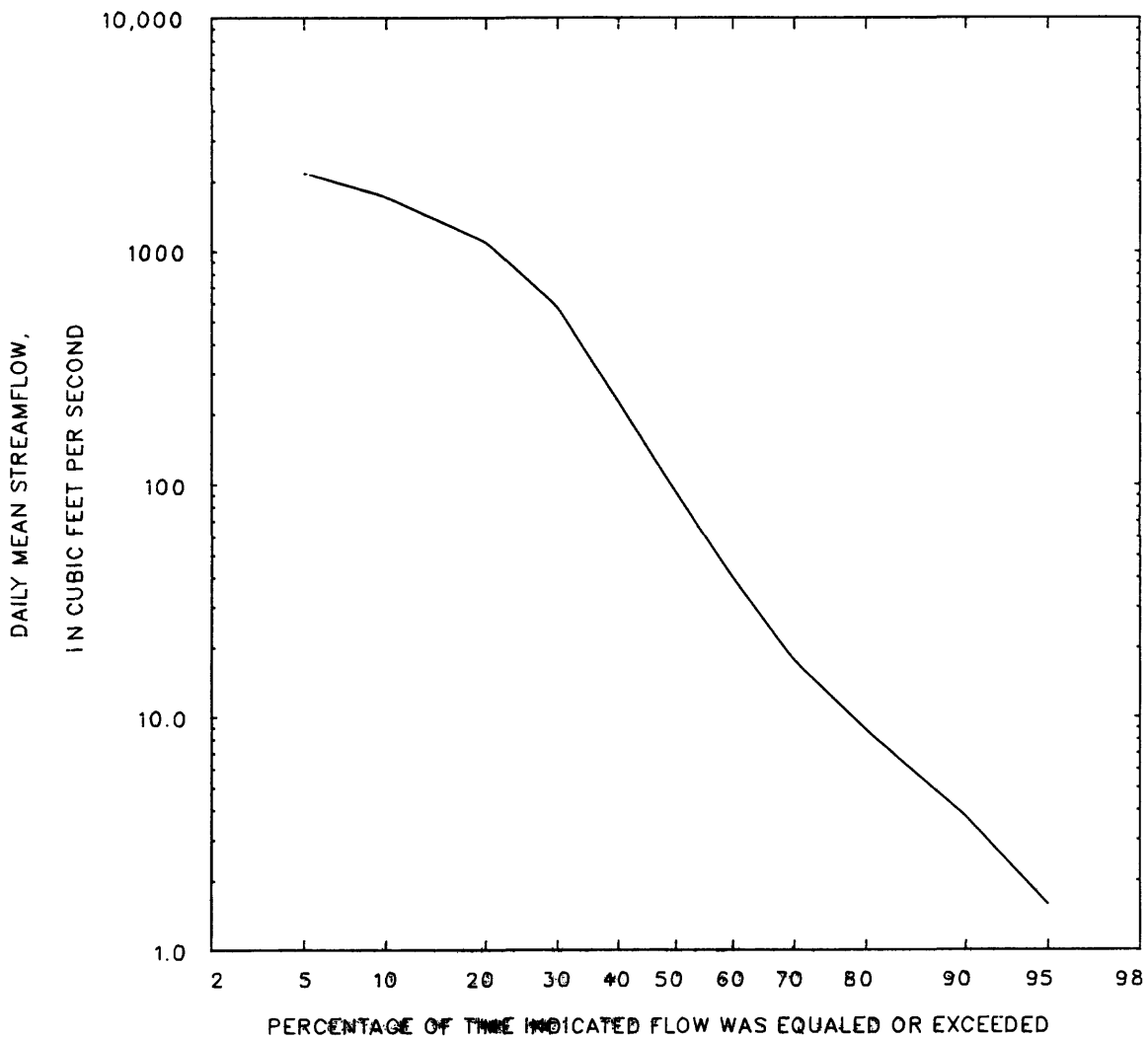
Duration of daily mean flow for period of record 1928-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
5660	2170	1710	1320	1090	573	224	92	39	17	8.7	3.7	1.6	0.45	0.01	0.00	0.00

STATION 06657000 PERIOD OF RECORD 1928–84

NORTH PLATTE R. BL. WHALEN DIV. DAM, WYO. (AFTER CONSTRUCTION OF GUERNSEY DAM)





06658500 LARAMIE RIVER NEAR JELM, WYO.

LOCATION.--Lat 41°00'08", long 106°00'51", in SE¼SE¼ sec.15, T.12 N., R.77 W., Albany County, on right bank 35 ft downstream from bridge on county road, 0.2 mi north of Colorado-Wyoming State line, 0.5 mi upstream from Johnson Creek, and 4 mi south of Jelm.

DRAINAGE AREA.--294 mi^2. Drainage area at mouth, 4,565 mi^2.

PERIOD OF RECORD.--June 1904 to October 1905, October 1910 to September 1971. Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 7,683.36 ft. June 22, 1904, to October 31, 1905, non-recording gage at site 0.8 mi upstream at different datum. May 7 to July 13, 1911, non-recording gage and July 14, 1911, to September 3, 1921, water-stage recorder, on downstream side of bridge 35 ft upstream at present datum.

REMARKS.--Diversions above station for irrigation of about 4,520 acres, of which about 120 acres are below station. Transbasin diversions above station to Cache la Poudre River and tributaries. Minor diversions to Warren ditch 2 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,200 ft^3/s, June 9, 1923, gage height, 4.15 ft; minimum recorded, 5.6 ft^3/s, December 2, 1933.

Monthly and annual streamflow 1905, 1912-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	156	26	59	22	0.37	3.1
November	103	28	48	15	0.30	2.5
December	70	24	36	10	0.27	1.9
January	65	15	31	9.2	0.29	1.6
February	62	14	32	9.0	0.28	1.7
March	75	17	40	12	0.30	2.1
April	272	45	100	45	0.45	5.2
May	957	176	462	169	0.37	24.0
June	2000	51	772	413	0.54	40.2
July	876	18	201	144	0.71	10.5
August	187	30	86	33	0.38	4.5
September	125	22	55	22	0.39	2.9
Annual	340	56	160	54	0.34	100

Magnitude and probability of annual low flow based on period of record 1912-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	24	17	13	11	8.7	7.3
3	25	17	14	11	8.8	7.4
7	26	18	15	12	9.2	7.6
14	26	19	16	14	12	11
30	28	21	18	16	14	12
60	30	23	20	18	16	14
90	31	25	22	19	17	16
120	33	27	24	22	20	19
183	39	32	30	28	26	25

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1905, 1912-71

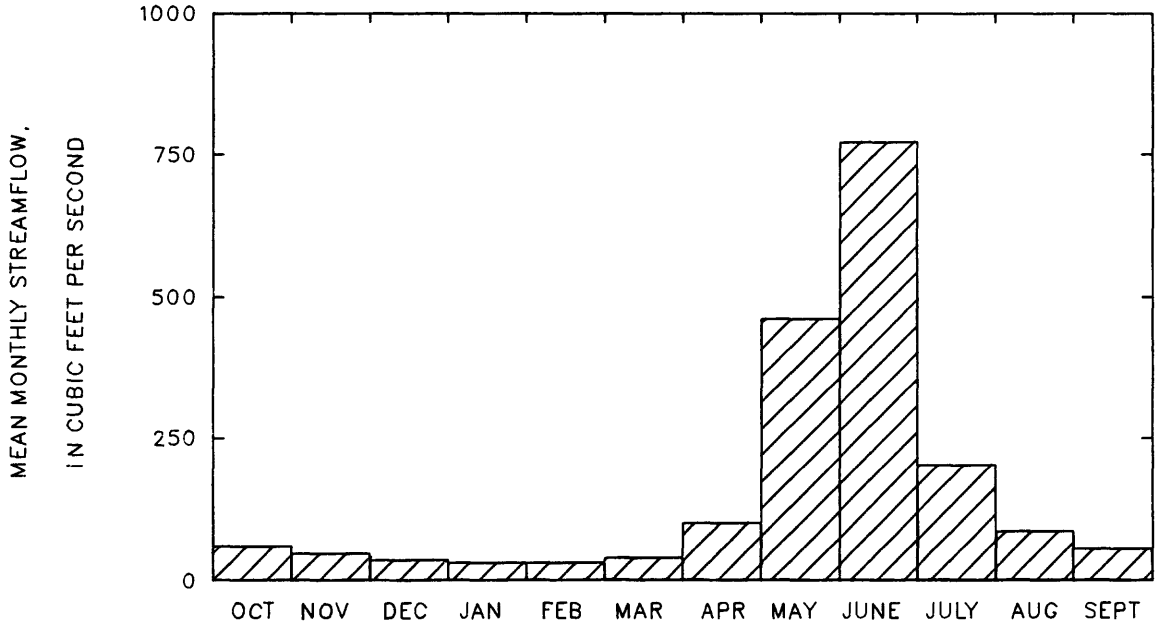
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1220	1820	2220	2730	3110	3490
3	1160	1720	2100	2580	2930	3280
7	1070	1620	1990	2450	2790	3130
15	964	1450	1770	2170	2460	2740
30	824	1210	1460	1760	1960	2160
60	614	874	1030	1210	1320	1430
90	468	656	765	888	970	1040

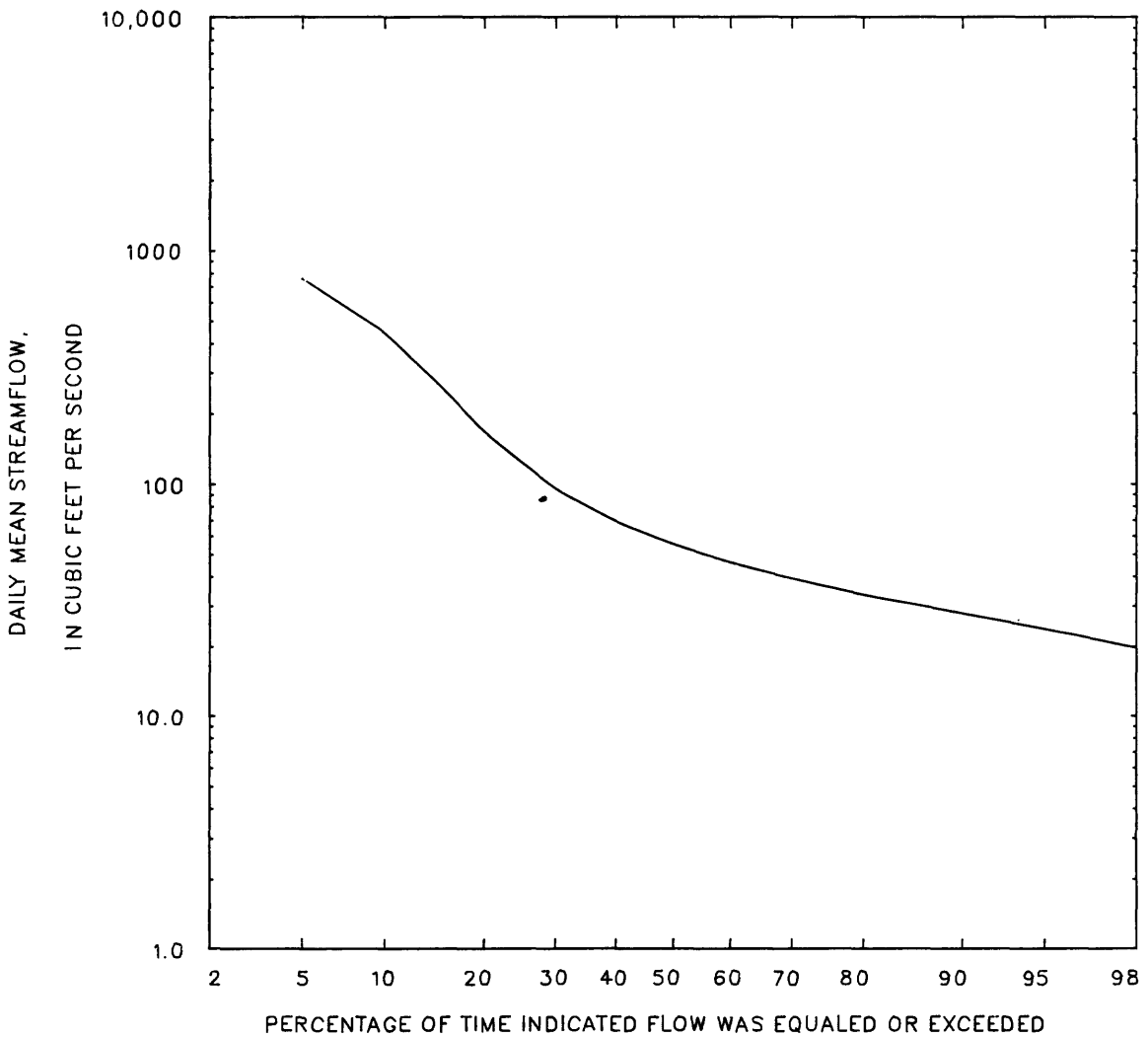
Duration of daily mean flow for period of record 1905, 1912-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1510	756	443	263	165	94	68	54	46	39	33	28	24	20	17	15	11

STATION 06658500 PERIOD OF RECORD 1905, 1912–71

LARAMIE RIVER NEAR JELM, WYO.





06659500 LARAMIE RIVER AND PIONEER CANAL NEAR WOODS LANDING, WYO.

LOCATION.--River: Lat 41°08'17", long 105°58'49", in NW¼SE¼ sec.36, T.14 N., R.77 W., Albany County, on left bank 100 ft upstream from diversion dam for Pioneer Canal, 2.2 mi downstream from Fox Creek, 2.5 mi northeast of Woods, and 23 mi southwest of Laramie.
Canal: Lat 41°08'21", long 105°58'45", in SE¼NE¼ sec.36, T.14 N., R.77 W., Albany County, on left bank 400 ft downstream from headgate.

DRAINAGE AREA.--434 mi^2. Drainage area at mouth, 4,565 mi^2.

PERIOD OF RECORD.--April 1912 to September 1924, October 1926 to September 1927, October 1931 to current year (no winter records since 1972). Monthly discharge only for some periods, published in WSP 1310.

GAGE.--River: Water-stage recorder and concrete control. Datum of gage is 7,388.99 ft. April 16 to November 15, 1912, non-recording gage and November 16, 1912, to September 22, 1915, water-stage recorder 90 ft downstream between dam crest and canal headgates at datum 1.00 ft higher. September 23, 1915, to September 30, 1924, April 19 to September 30, 1927, and April 11, 1932, to September 30, 1935, water-stage recorder at site 50 ft downstream at datum 1.00 ft higher. October 1, 1935, to July 13, 1950, water-stage recorder at site 50 ft downstream at present datum.
Canal: Water-stage recorder and Parshall flume. Altitude of gage is 7,390 ft, from topographic map. April 16, 1912, to April 10, 1923, non-recording gage; April 11, 1923, to September 30, 1924, and April 19 to June 9, 1927, water-stage recorder; June 10 to September 30, 1927, and April 11, 1932, to May 8, 1938, non-recording gage; May 9, 1938, to April 26, 1966, water-stage recorder at site 1.5 mi downstream at different datums. April 27, 1966, to May 8, 1967, at present site, at datum 0.06 ft lower.

REMARKS.--Pioneer Canal diverts from left bank of river at diversion dam 100 ft downstream for irrigation in vicinity of Laramie. Records show combined flow of river and canal. Three small reservoirs above station in Wyoming, total capacity, about 600 acre-ft for irrigation, stock water, and domestic use. Diversions for irrigation of about 5,200 acres above station. Transbasin diversions above station to Cache la Poudre River and tributaries.

EXTREMES FOR PERIOD OF RECORD (combined flow river and canal).--Maximum discharge, 5,060 ft^3/s, June 10, 1923 (river discharge by computation of peak flow over dam); minimum daily (1950-72) 10 ft^3/s, August 30, September 2-5, 1954.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1913-16, 1933-34, 1951-72

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	160	34	63	30	0.48	3.1
November	95	32	52	15	0.29	2.5
December	77	28	42	11	0.25	2.1
January	57	24	39	8.9	0.23	1.9
February	75	25	40	9.7	0.24	2.0
March	85	28	51	14	0.27	2.5
April	355	67	128	59	0.46	6.3
May	1060	233	556	245	0.44	27.3
June	2050	63	761	455	0.60	37.3
July	726	20	173	134	0.78	8.5
August	127	25	80	32	0.40	3.9
September	128	15	54	28	0.51	2.7
Annual	319	65	170	62	0.37	100

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual low flow based on period of record 1914-16, 1934, 1952-72

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	22	15	12	10	---	---
3	---	---	---	---	---	---
7	27	18	13	10	---	---
14	29	21	18	15	---	---
30	33	25	21	18	---	---
60	35	29	26	23	---	---
90	36	31	28	26	---	---
120	39	33	30	29	---	---
183	43	35	33	31	---	---

Magnitude and probability of annual high flow based on period of record 1913-16, 1933-34, 1951-72

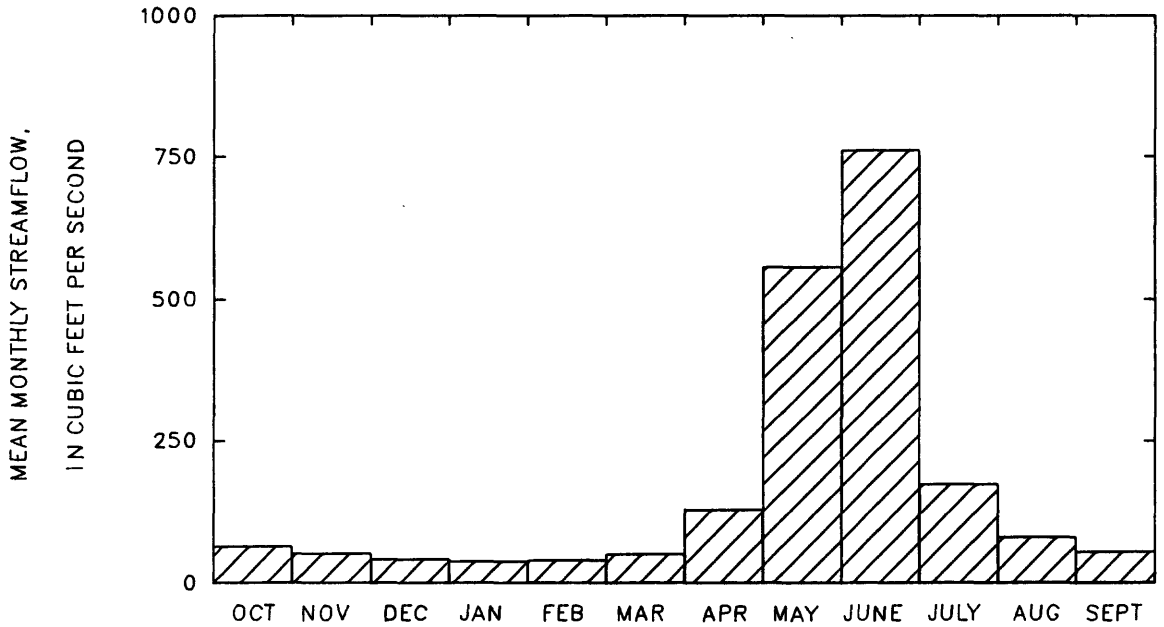
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1250	1890	2310	2800	---	---
3	1190	1810	2200	2660	---	---
7	1120	1730	2120	2580	---	---
15	1000	1560	1920	2340	---	---
30	858	1300	1580	1900	---	---
60	637	949	1140	1360	---	---
90	481	709	849	1010	---	---

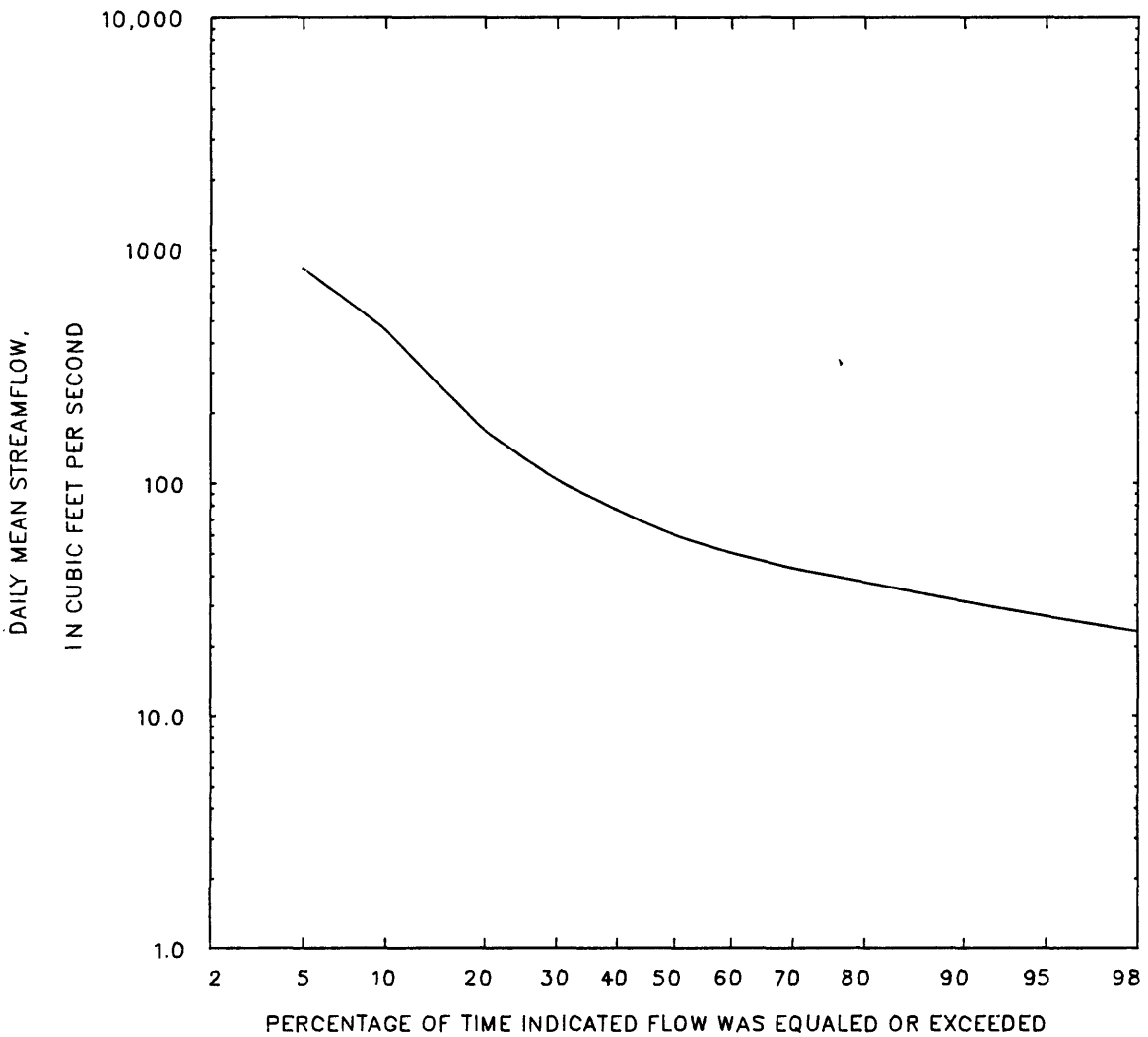
Duration of daily mean flow for period of record 1913-16, 1933-34, 1951-72

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1640	830	456	258	166	102	76	59	50	43	37	31	27	23	17	13	9.7

STATION 06659500 PERIOD OF RECORD 1913–16, 1933–34, 1951–72

LARAMIE RIVER AND PIONEER CANAL NEAR WOODS LANDING, WYO.





06659600 SAND CREEK NEAR TIE SIDING, WYO.

LOCATION.--Lat 41°00'47", long 105°45'19", in NE¼NW¼ sec.13, T.12 N., R.75 W., Albany County, on left bank 80 ft upstream from road bridge, 1.5 mi downstream from Colorado-Wyoming State line, and 15 mi southwest of Tie Siding.

DRAINAGE AREA.--39.9 mi^2. Most of area is in Colorado.

PERIOD OF RECORD.--April 1957 to September 1968.

GAGE.--Digital water-stage recorder. Altitude of gage is 7,490 ft, from topographic map. Graphic water-stage recorder at site 10 ft upstream at same datum prior to August 24, 1962, and at present site and datum August 24, 1962, to May 4, 1966.

REMARKS.--Natural flow affected by diversion above station to Cache la Poudre River basin through Wilson Supply ditch. Water imported above station from Deadman Creek in Laramie River basin is rediverted through Wilson Supply ditch but is wasted down Sand Creek at times.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 253 ft^3/s, June, 8, 1957, gage height, 7.69 ft. No flow September 3-17, 1959, August 29, September 1-3, 1960, July 19-23, 1963, August 29, 30, 1966.

Monthly and annual streamflow 1958-68

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	7.8	1.1	3.3	2.3	0.69	3.7
November	7.2	1.5	3.1	1.6	0.51	3.4
December	5.0	0.92	2.5	1.3	0.51	2.7
January	4.0	1.2	2.3	0.90	0.39	2.5
February	5.0	1.2	2.4	1.1	0.45	2.6
March	6.8	1.5	3.5	1.5	0.42	3.8
April	27	4.4	8.6	6.4	0.75	9.4
May	48	17	27	9.9	0.36	29.9
June	72	11	29	20	0.68	32.2
July	9.0	0.88	4.9	3.2	0.65	5.4
August	4.0	0.69	2.0	1.3	0.63	2.2
September	5.2	0.33	1.9	1.7	0.89	2.1
Annual	13	4.6	7.6	2.8	0.37	100

Magnitude and probability of annual low flow based on period of record 1958-68

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent: 2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	---	---	---
3	0.00	0.00	0.00	---	---	---
7	0.22	0.03	0.00	---	---	---
14	0.45	0.13	0.00	---	---	---
30	0.77	0.42	0.31	---	---	---
60	1.2	0.76	0.62	---	---	---
90	1.5	1.0	0.82	---	---	---
120	1.8	1.2	1.0	---	---	---
183	2.1	1.4	1.2	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent: 2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1958-68

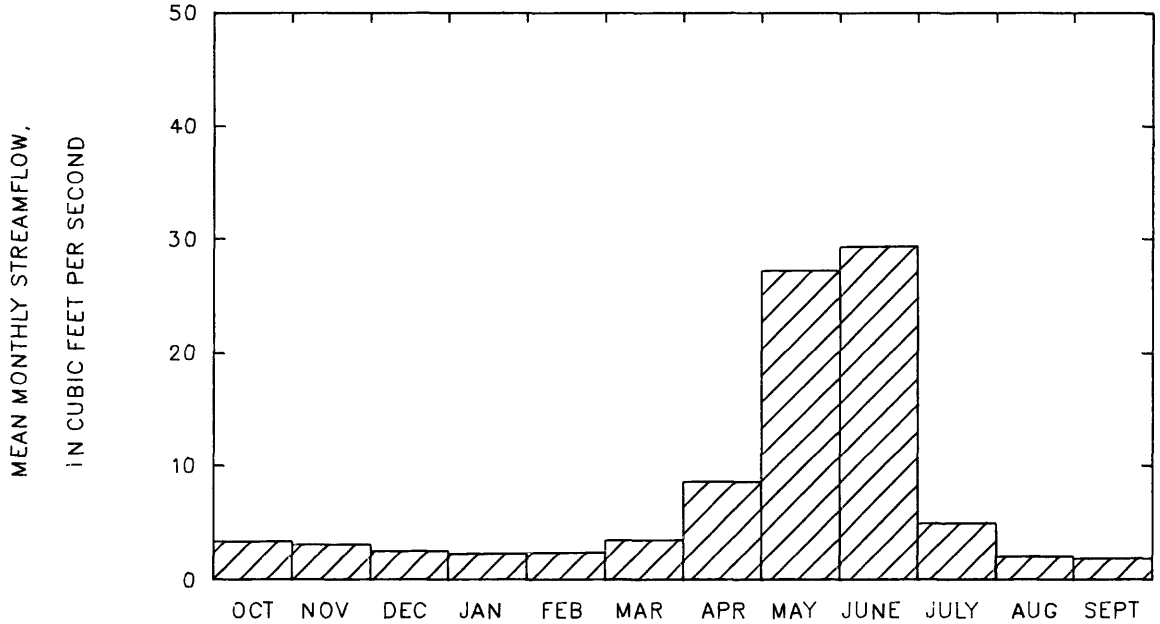
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent: 2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	57	106	151	---	---	---
3	51	94	136	---	---	---
7	45	83	120	---	---	---
15	39	67	92	---	---	---
30	34	53	69	---	---	---
60	26	38	48	---	---	---
90	20	29	36	---	---	---

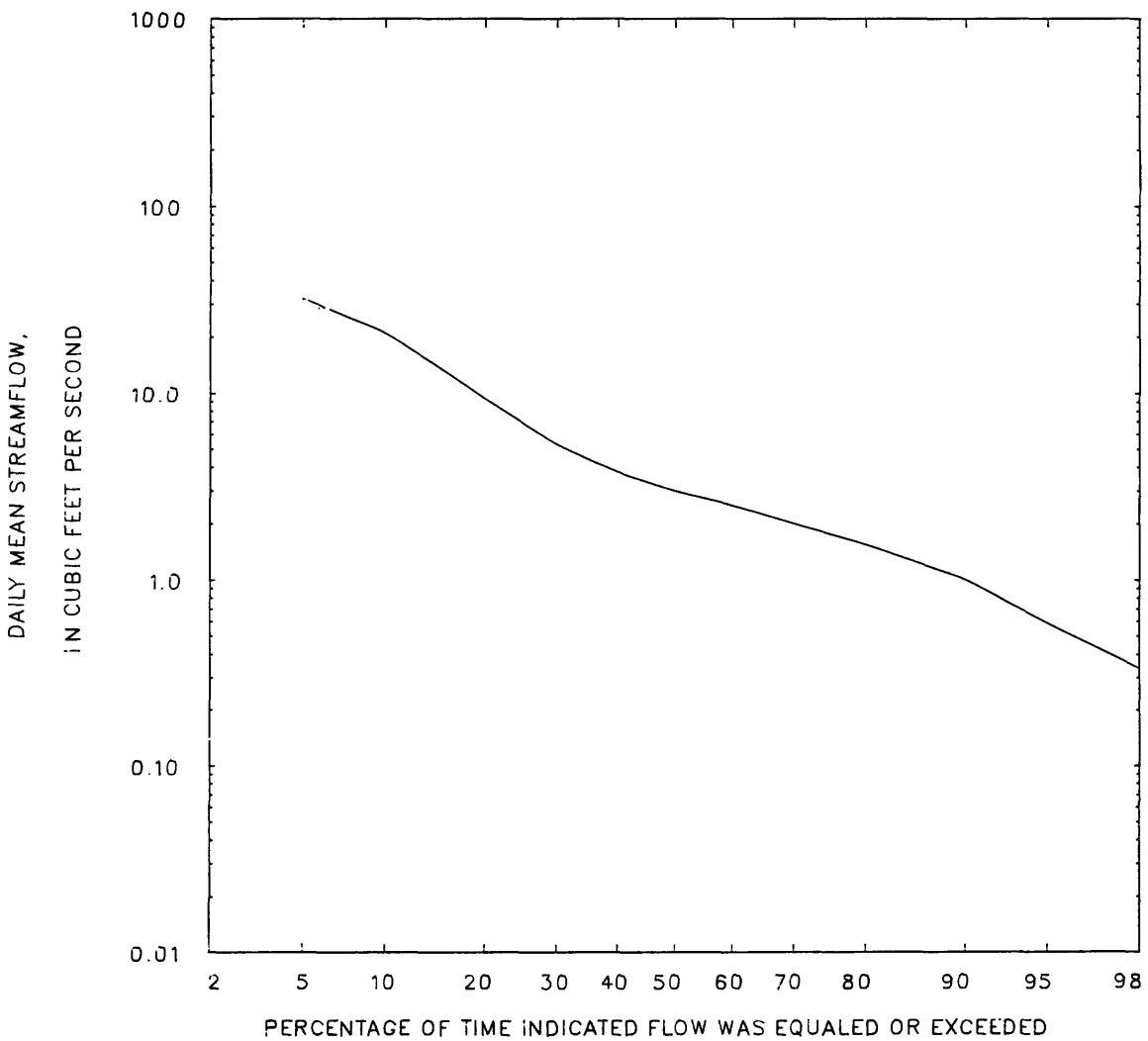
Duration of daily mean flow for period of record 1958-68

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time: 1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
66	32	21	14	9.3	5.2	3.7	2.9	2.5	2.0	1.5	1.0	0.58	0.33	0.16	0.01	0.00

STATION 06659600 PERIOD OF RECORD 1958–68

SAND CREEK NEAR TIE SIDING, WYO.





06660000 LARAMIE RIVER AT LARAMIE, WYO.

LOCATION.--Lat 41°19'36", long 105°36'27", in NE¼SW¼ sec.29, T.16 N., R.73 W., Albany County, on left bank 400 ft upstream from bridge on access road to Interstate Highway 80, 1.2 mi northwest of city hall in Laramie, and 5 mi downstream from Fivemile Creek.

DRAINAGE AREA.--1,071 mi², of which 151 mi² is probably noncontributing. Drainage area at mouth, 4,565 mi².

PERIOD OF RECORD.--April 1933 to October 1971, April to September 1972. Irrigation seasons only prior to 1952. Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 7,125 ft, from river-profile map. Prior to April 10, 1936, non-recording gage on bridge on State Highways 130 and 230, 1.4 mi upstream at different datum. April 10, 1936, to April 7, 1951, non-recording gage, and April 8, 1952, to April 22, 1965, water-stage recorder on bridge pier, at present site and datum.

REMARKS.--Natural flow of stream affected by transbasin diversions, storage reservoirs, diversions for irrigation of about 45,000 acres above station, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 ft³/s, June 15, 1957, gage height, 6.83 ft; minimum daily, 0.1 ft³/s, September 7-9, 1950.

Monthly and annual streamflow 1952-71

Month	Maximum (ft³/s)	Minimum (ft³/s)	Mean (ft³/s)	Standard deviation (ft³/s)	Coefficient of variation	Percent of annual runoff
October	155	5.0	41	43	1.0	3.3
November	111	12	46	28	0.60	3.7
December	84	15	40	16	0.41	3.2
January	62	16	35	11	0.32	2.8
February	81	16	39	13	0.34	3.1
March	87	24	51	17	0.34	4.1
April	159	18	60	36	0.61	4.7
May	728	28	245	179	0.73	19.4
June	1570	14	534	433	0.81	42.3
July	557	15	110	129	1.2	8.7
August	86	8.2	41	22	0.54	3.3
September	79	2.2	19	20	1.0	1.5
Annual	223	25	105	54	0.51	100

Magnitude and probability of annual low flow based on period of record 1953-71

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	5.4	2.8	1.9	1.3	---	---
3	5.7	3.0	2.1	1.5	---	---
7	6.3	3.3	2.3	1.8	---	---
14	7.3	3.9	2.8	2.1	---	---
30	9.0	5.0	3.6	2.8	---	---
60	14	7.0	5.0	3.8	---	---
90	19	11	8.8	7.1	---	---
120	25	15	12	9.2	---	---
183	29	19	15	13	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft³/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1952-71

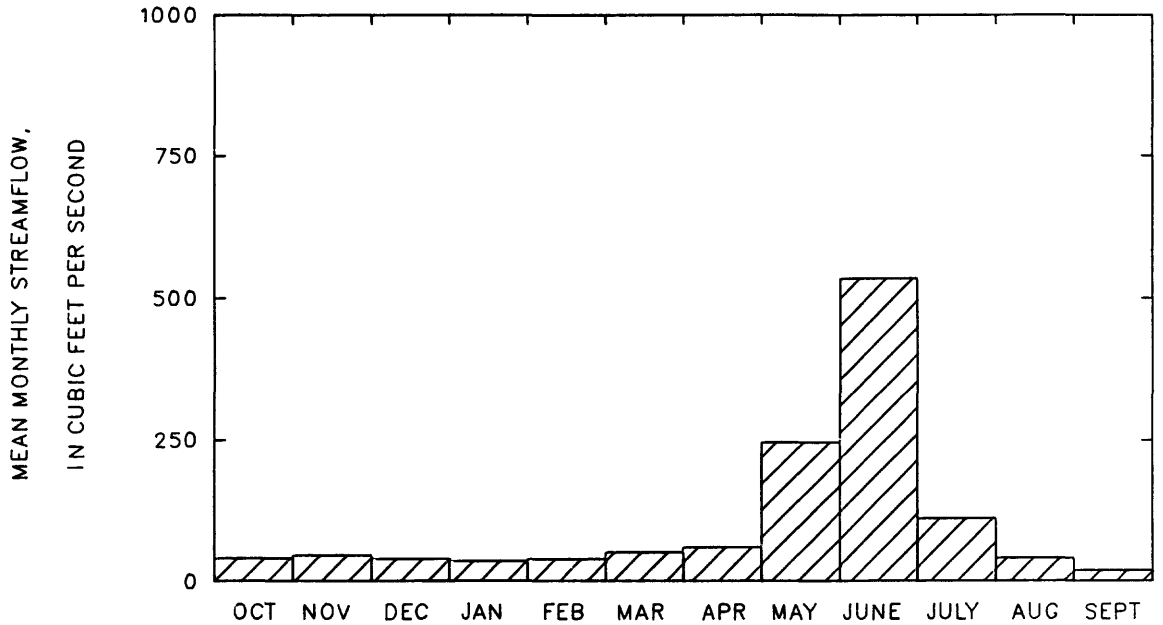
Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	837	1570	2070	2700	---	---
3	798	1490	1960	2530	---	---
7	722	1370	1810	2330	---	---
15	630	1200	1600	2090	---	---
30	516	999	1330	1730	---	---
60	357	671	876	1110	---	---
90	267	478	616	779	---	---

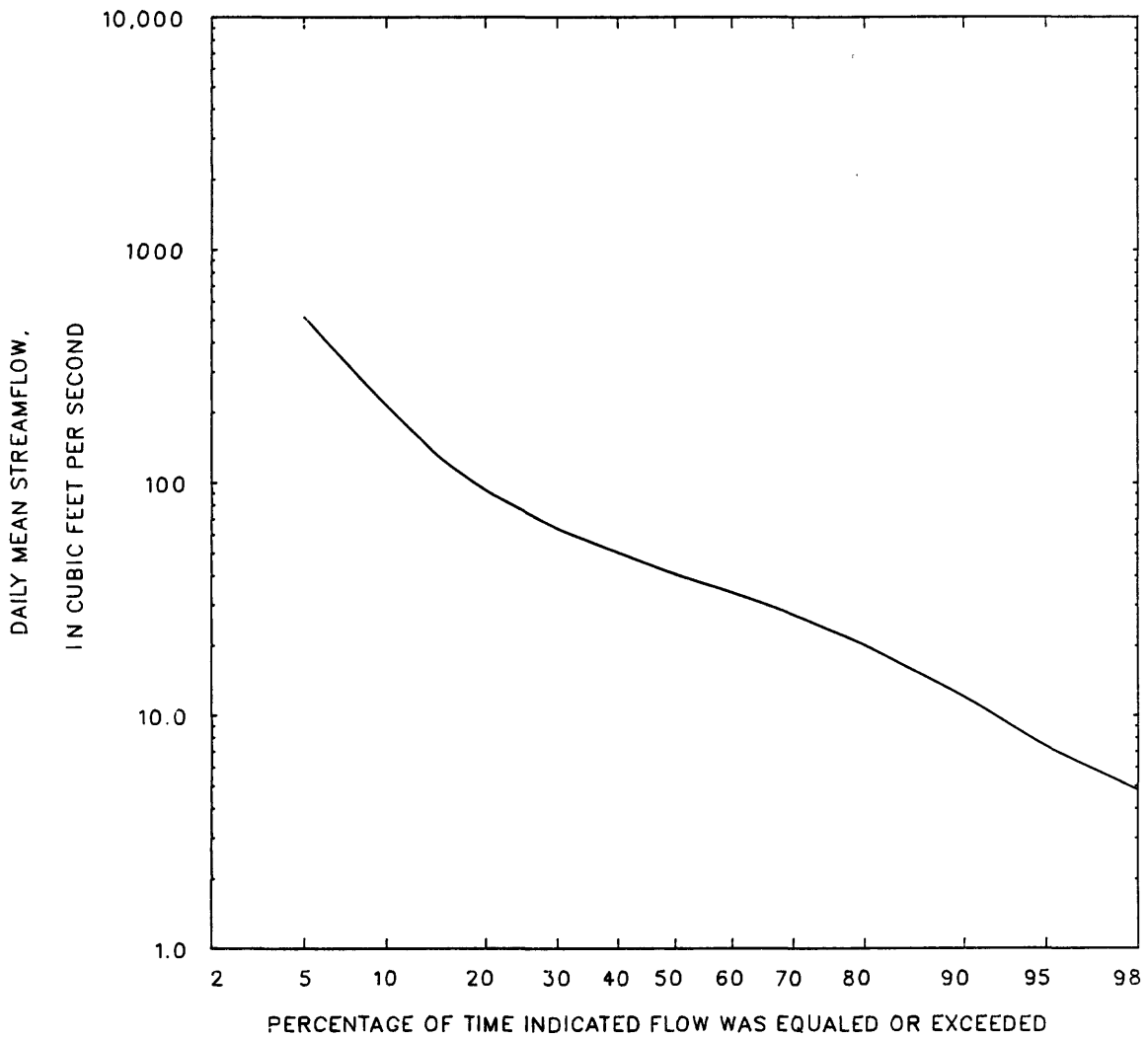
Duration of daily mean flow for period of record 1952-71

Discharge, in ft³/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1210	512	211	124	92	63	50	40	34	27	20	12	7.3	4.8	3.5	2.6	1.3

STATION 06660000 PERIOD OF RECORD 1952–71

LARAMIE RIVER AT LARAMIE, WYO.





06660500 LARAMIE RIVER AT TWO RIVERS, WYO.

LOCATION.--Lat 41°28'22", long 105°43'30", in NW¼NE¼SW¼ sec.5, T.17 N., R.74 W., Albany County, on left bank at old Two Rivers Post Office, 0.6 mi upstream from Little Laramie River, and 14 mi northwest of Laramie.

DRAINAGE AREA.--1,224 mi^2, of which 188 mi^2 is probably noncontributing. Drainage area at mouth, 4,565 mi^2.

PERIOD OF RECORD.--October 1908 to October 1927, October 1932 to October 1971, April to September 1972. Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 7,058.85 ft. See WSP 1918 for history of changes prior to May 1, 1920.

REMARKS.--Natural flow of stream affected by transbasin diversions, storage reservoirs, diversions above station for irrigation of about 51,200 acres, of which about 3,200 acres are below station, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,390 ft^3/s, June 13, 1923, gage height, 7.48 ft, from rating curve extended above 2,500 ft^3/s; no flow September 22-25, 1911, August 17 to September 6, September 9-22, 1939.

Monthly and annual streamflow 1911-27, 1933-35, 1937-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	174	1.2	38	38	0.99	2.9
November	132	2.2	43	25	0.59	3.3
December	99	6.7	35	18	0.51	2.7
January	73	8.0	31	14	0.44	2.4
February	84	8.6	35	16	0.44	2.7
March	114	16	51	22	0.42	3.9
April	185	8.5	81	44	0.55	6.1
May	787	7.2	246	176	0.72	18.7
June	1870	4.9	543	409	0.75	41.3
July	894	1.7	139	148	1.1	10.5
August	175	1.3	47	40	0.85	3.6
September	107	0.22	26	25	0.95	2.0
Annual	327	17	109	60	0.55	100

Magnitude and probability of annual low flow based on period of record 1911-27, 1934-35, 1938-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	5.4	1.2	0.27	0.00	0.00	0.00
3	5.8	1.4	0.31	0.00	0.00	0.00
7	6.9	1.9	0.76	0.11	0.00	0.00
14	8.1	2.5	1.1	0.17	0.00	0.00
30	13	4.0	1.5	0.58	0.15	0.06
60	16	6.1	3.1	1.7	0.74	0.41
90	21	8.6	4.7	2.7	1.3	0.75
120	26	12	6.8	4.1	2.1	1.3
183	31	16	10	6.6	3.8	2.5

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1911-27, 1933-35, 1937-71

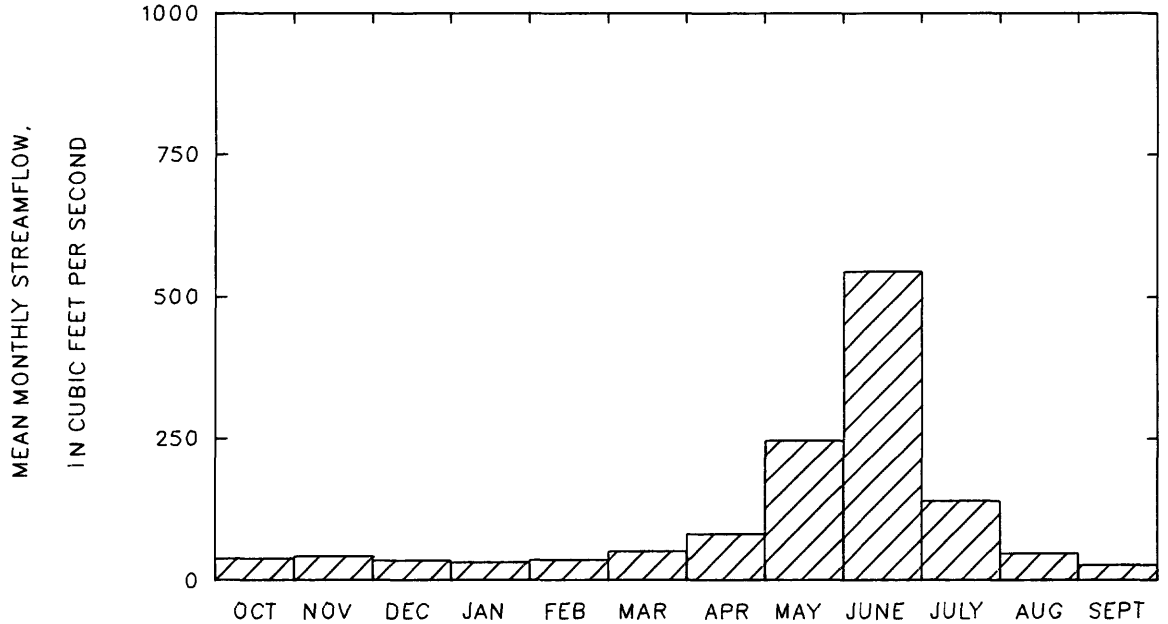
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	818	1520	1990	2570	2980	3360
3	778	1450	1900	2450	2840	3200
7	702	1310	1730	2240	2600	2950
15	615	1140	1510	1950	2260	2550
30	508	936	1220	1570	1800	2020
60	365	652	837	1050	1200	1330
90	280	485	617	772	878	975

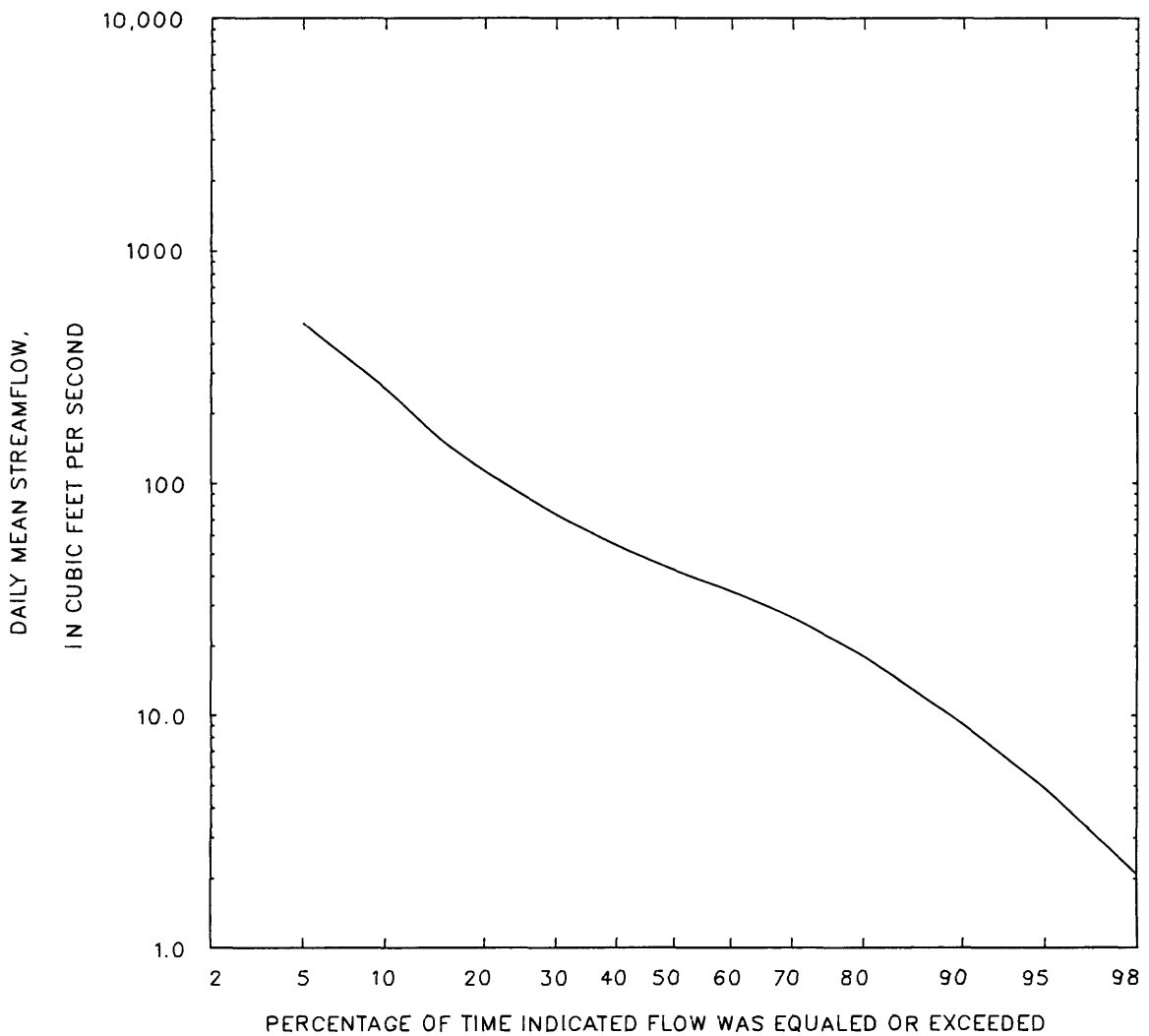
Duration of daily mean flow for period of record 1911-27, 1933-35, 1937-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1230	487	257	153	112	73	54	42	34	26	18	9.1	4.8	2.1	1.2	0.55	0.05

STATION 06660500 PERIOD OF RECORD 1911–27, 1933–35, 1937–71

LARAMIE RIVER AT TWO RIVERS, WYO.





06661000 LITTLE LARAMIE RIVER NEAR FILMORE, WYO.

LOCATION.--Lat 41°17'42", long 106°02'03", in SE¼NE¼SE¼ sec.4, T.15 N., R.77 W., Albany County, on right bank 40 ft downstream from State Highway 130, 1.2 mi west of Filmore, and 4.4 mi downstream from North Fork.

DRAINAGE AREA.--157 mi^2. Area at site used prior to September 8, 1976, 156 mi^2.

PERIOD OF RECORD.--July 1902 to September 1903 (published as "near Hatton"), May 1911 to November 1926, October 1932 to current year (no winter records since 1971). Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 7,610 ft, from topographic map. Prior to September 16, 1938, non-recording gages, and September 16, 1938, to September 7, 1976, water-stage recorder, at sites 0.7 mi upstream at different datums.

REMARKS.--Ten small reservoirs above station, combined capacity, about 160 acre-ft, for irrigation, stock water, recreation, and domestic use. Diversions above station for irrigation of about 11,020 acres, of which about 20 acres are below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,450 ft^3/s, June 10, 1965, gage height, 5.33 ft, site and datum then in use; minimum daily determined, 1.0 ft^3/s, September 17-20, 1913.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1903, 1912-26, 1933-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	77	13	31	14	0.44	2.5
November	50	10	28	9.4	0.33	2.3
December	40	10	24	7.0	0.29	1.9
January	35	8.8	20	4.9	0.25	1.6
February	54	8.0	21	6.7	0.33	1.7
March	48	10	26	8.4	0.32	2.1
April	136	18	56	24	0.44	4.5
May	502	70	242	104	0.43	19.6
June	1220	48	551	265	0.48	44.7
July	572	18	155	105	0.68	12.6
August	126	13	51	24	0.47	4.1
September	75	8.8	29	14	0.50	2.4
Annual	184	33	103	34	0.33	100

Magnitude and probability of annual low flow based on period of record 1913-26, 1934-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	16	10	7.1	4.8	2.8	1.8
3	17	11	7.6	5.1	2.9	1.8
7	17	11	8.3	6.0	3.8	2.7
14	17	12	9.9	8.4	6.9	6.0
30	17	13	11	9.6	8.2	7.3
60	19	15	13	11	9.4	8.4
90	20	16	13	12	10	9.1
120	21	17	14	12	11	9.4
183	23	18	15	13	12	10

Magnitude and probability of instantaneous peak flow based on 66 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1110	1560	1850	2210	2460	2700

Weighted skew = -0.263

Magnitude and probability of annual high flow based on period of record 1903, 1912-26, 1933-71

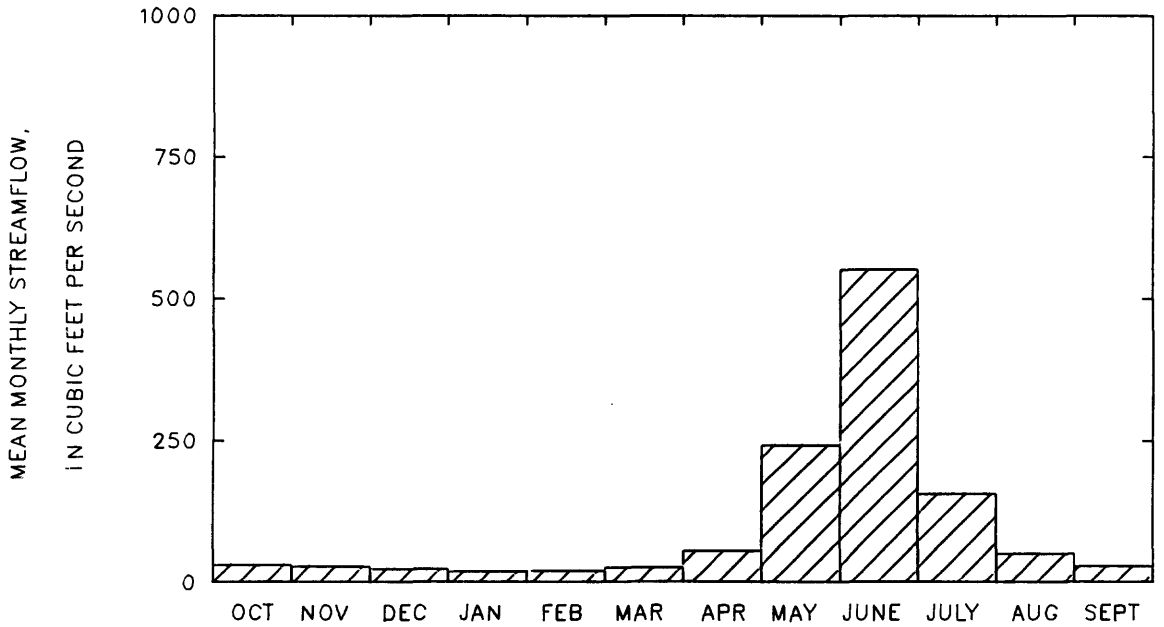
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	979	1390	1650	1970	2190	2410
3	899	1260	1480	1750	1940	2120
7	815	1140	1350	1590	1760	1930
15	725	1020	1200	1420	1570	1710
30	593	825	965	1130	1240	1340
60	413	565	652	749	812	869
90	311	425	489	560	607	648

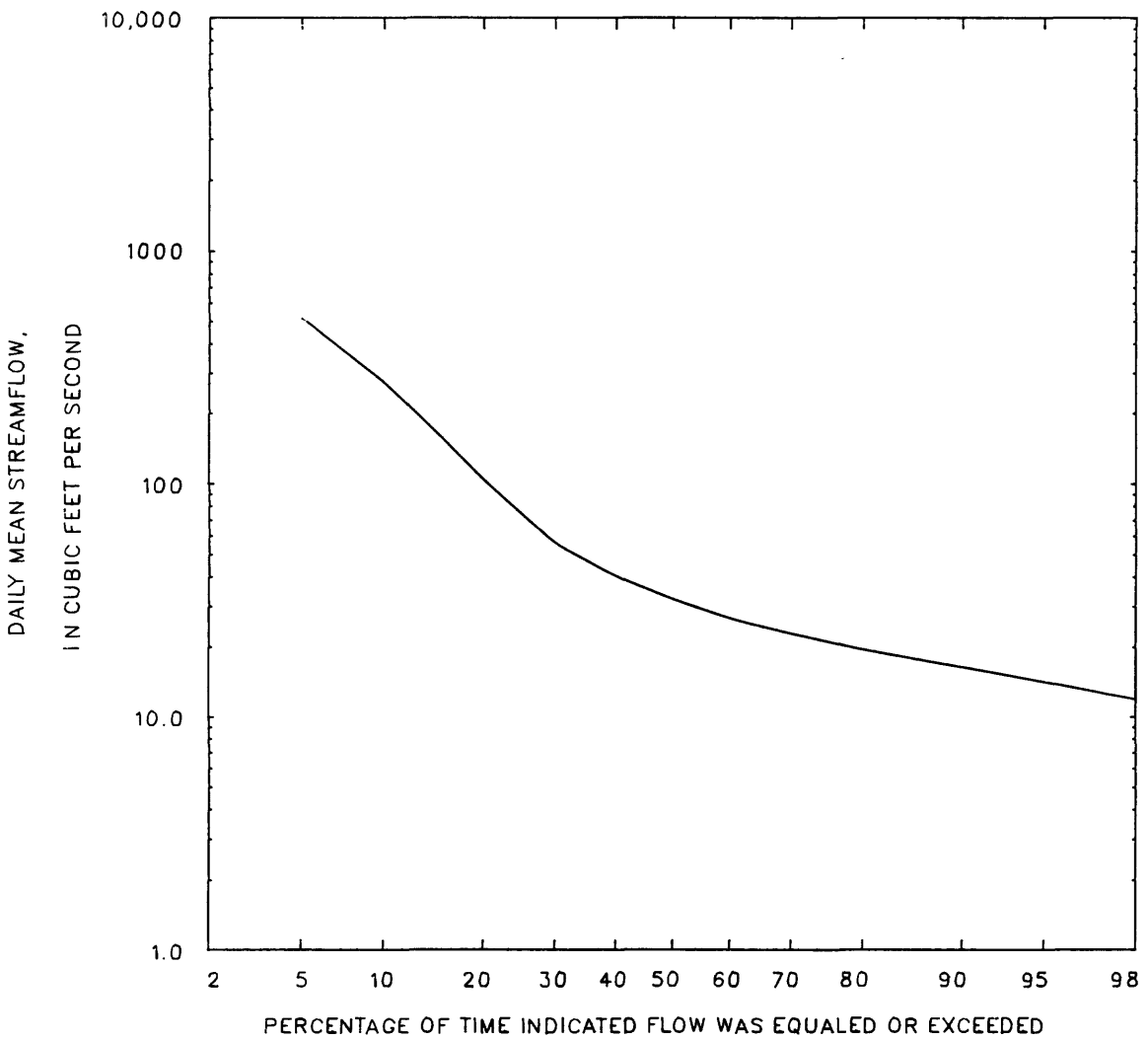
Duration of daily mean flow for period of record 1903, 1912-26, 1933-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1050	513	274	162	104	55	40	32	26	23	19	16	14	12	10	8.7	6.7

STATION 06661000 PERIOD OF RECORD 1903, 1912–26, 1933–71

LITTLE LARAMIE RIVER NEAR FILMORE, WYO.





06661500 LITTLE LARAMIE RIVER AT TWO RIVERS, WYO.

LOCATION.--Lat 41°28'07", long 105°43'56", in SE¼SE¼ sec.6, T.17 N., R.74 W., Albany County, on right bank at old Two Rivers Post Office, 0.5 mi upstream from mouth and 14 mi northwest of Laramie.

DRAINAGE AREA.--376 mi^2, of which 58 mi^2 is probably noncontributing.

PERIOD OF RECORD.--March to September 1903 (gage heights and discharge measurements only), October 1910 to October 1927, May to November 1933, May 1934 to September 1965. Published as "at Haley's Ranch, near Laramie," 1903.

GAGE.--Water-stage recorder. Datum of gage is 7,060.62 ft. March to September 1903 staff gage near present site at different datum. May 1, 1911, to April 13, 1913, staff gage at present site and datum. April 14, 1915, water-stage recorder at site 400 ft upstream at different datum. Datum lowered 1.0 ft July 1, 1913.

REMARKS.--Diversions for irrigation of about 56,000 acres above station. Fifteen small reservoirs above station (combined capacity, about 1,300 acre-ft) for irrigation, stock water, recreation, and domestic use.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,440 ft^3/s, June 11, 1965, gage height, 7.50 ft; no flow at times in most years.

Monthly and annual streamflow 1912, 1914-27, 1935-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	62	0.00	9.4	14	1.5	1.8
November	41	0.00	12	11	0.89	2.3
December	30	0.00	7.9	7.0	0.89	1.5
January	24	0.00	6.5	6.0	0.93	1.2
February	41	0.00	8.6	7.6	0.88	1.6
March	37	0.60	16	8.7	0.53	3.1
April	112	1.5	37	25	0.67	7.0
May	284	1.5	65	61	0.94	12.1
June	842	6.1	281	200	0.71	52.7
July	395	0.11	66	80	1.2	12.4
August	80	0.00	17	18	1.0	3.3
September	44	0.00	5.9	9.7	1.6	1.1
Annual	116	4.1	44	28	0.62	100

Magnitude and probability of annual low flow based on period of record 1912, 1915-27, 1936-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	0.00	---	---
3	0.00	0.00	0.00	0.00	---	---
7	0.00	0.00	0.00	0.00	---	---
14	0.00	0.00	0.00	0.00	---	---
30	0.00	0.00	0.00	0.00	---	---
60	0.37	0.00	0.00	0.00	---	---
90	2.4	0.19	0.00	0.00	---	---
120	4.3	1.2	0.47	0.20	---	---
183	5.0	1.8	1.0	0.61	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1912, 1914-27, 1935-71

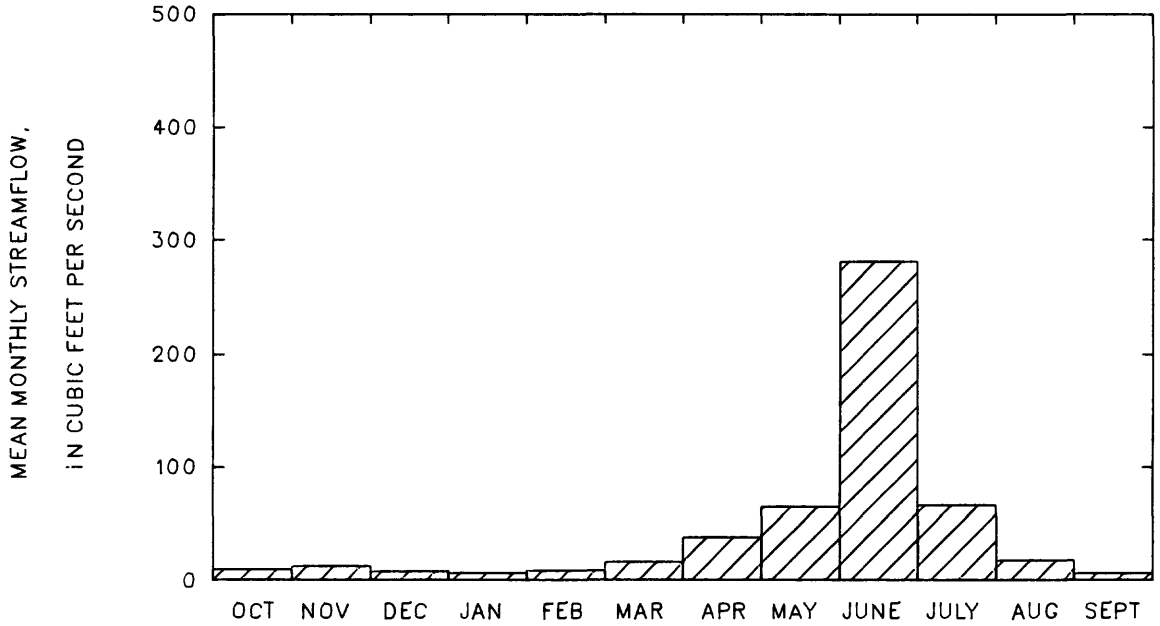
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	661	1110	1330	1530	---	---
3	593	991	1190	1370	---	---
7	481	825	1010	1190	---	---
15	380	666	825	986	---	---
30	270	490	618	752	---	---
60	166	309	396	490	---	---
90	122	224	289	362	---	---

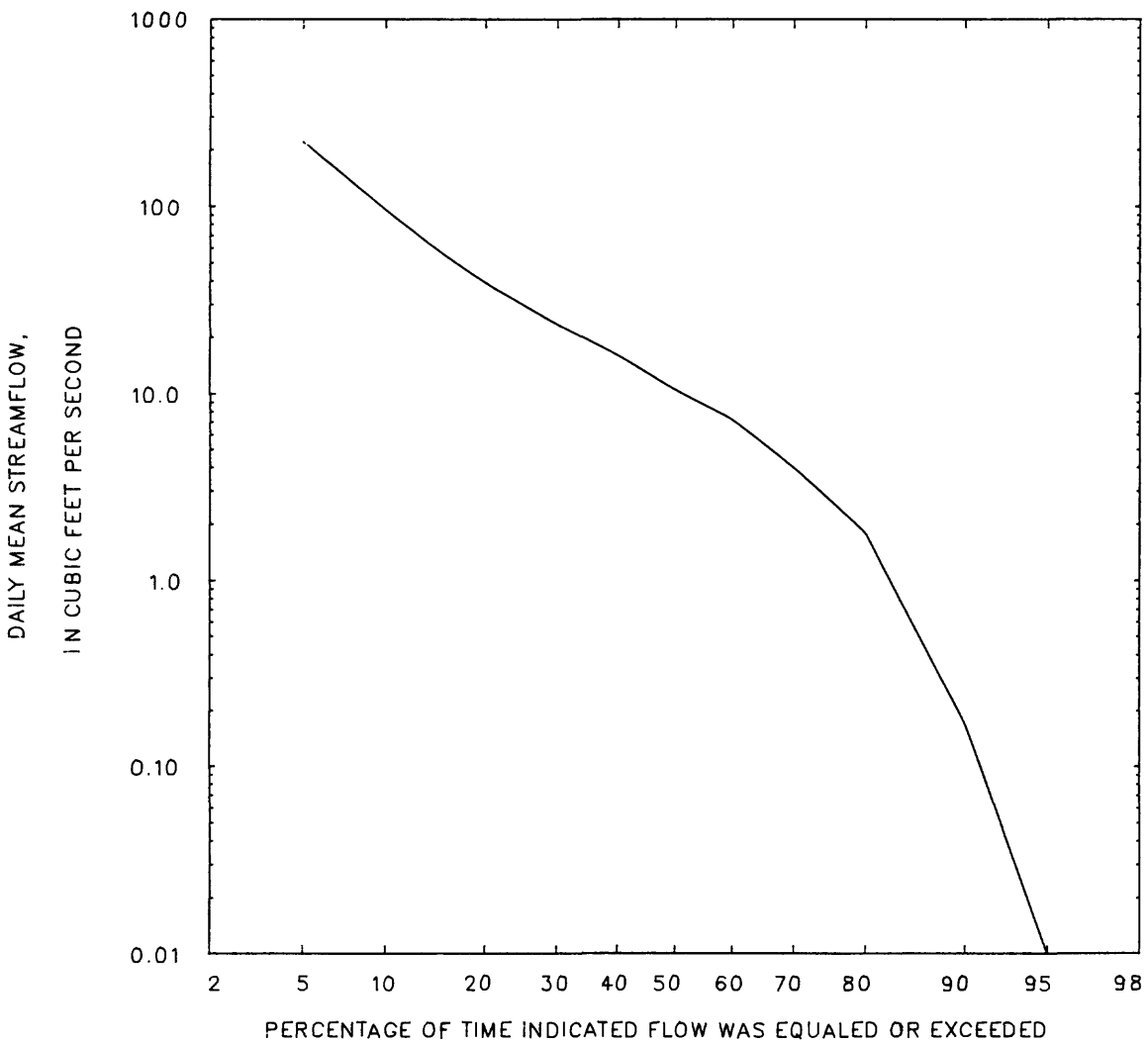
Duration of daily mean flow for period of record 1912, 1914-27, 1935-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
645	219	96	56	39	23	16	10	7.2	4.0	1.8	0.17	0.01	0.00	0.00	0.00	0.00

STATION 06661500 PERIOD OF RECORD 1912, 1914–27, 1935–71

LITTLE LARAMIE RIVER AT TWO RIVERS, WYO.





06661585 LARAMIE RIVER NEAR BOSLER, WYO.

LOCATION.--Lat 41°33'17", long 105°40'58", in NW¼NW¼NE¼ sec.10, T.18 N., R.74 W., Albany County, on left bank 50 ft upstream from bridge on U.S. Highways 30 and 287, 0.2 mi northwest of Bosler Junction, 1.7 mi south of Bosler, and 2.0 mi downstream from Soil Bank Boughton Canal diversion dam.

DRAINAGE AREA.--1,790 mi^2, of which 283 mi^2 is probably noncontributing.

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,030 ft, from topographic map.

REMARKS.--Natural flow of stream affected by transbasin diversions, storage reservoirs, diversion above station for irrigation of about 54,700 acres, of which about 2,300 acres are below station, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,460 ft^3/s, June 28, 1983, gage height, 7.43 ft; maximum gage height, 8.40 ft, April 22, 1973 (backwater from ice jam); minimum daily discharge, 0.20 ft^3/s, September 4, 1980.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1973-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	86	19	47	21	0.44	2.0
November	145	38	75	34	0.45	3.2
December	101	17	60	28	0.46	2.6
January	69	22	46	17	0.37	2.0
February	70	37	53	13	0.25	2.3
March	188	48	107	45	0.42	4.6
April	531	26	188	167	0.89	8.0
May	1200	53	334	368	1.1	14.2
June	2510	117	867	642	0.74	36.9
July	1530	14	397	413	1.0	16.9
August	428	6.1	136	128	0.94	5.8
September	140	1.3	41	41	1.0	1.7
Annual	475	39	196	129	0.66	100

Magnitude and probability of annual low flow based on period of record 1974-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	9.1	2.0	0.76	0.30	---	---
3	9.4	2.3	0.96	0.42	---	---
7	10	2.7	1.1	0.51	---	---
14	12	2.9	1.2	0.55	---	---
30	14	4.2	2.0	1.0	---	---
60	24	7.8	3.8	1.9	---	---
90	33	16	9.9	6.5	---	---
120	42	23	16	11	---	---
183	47	31	25	21	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1973-84

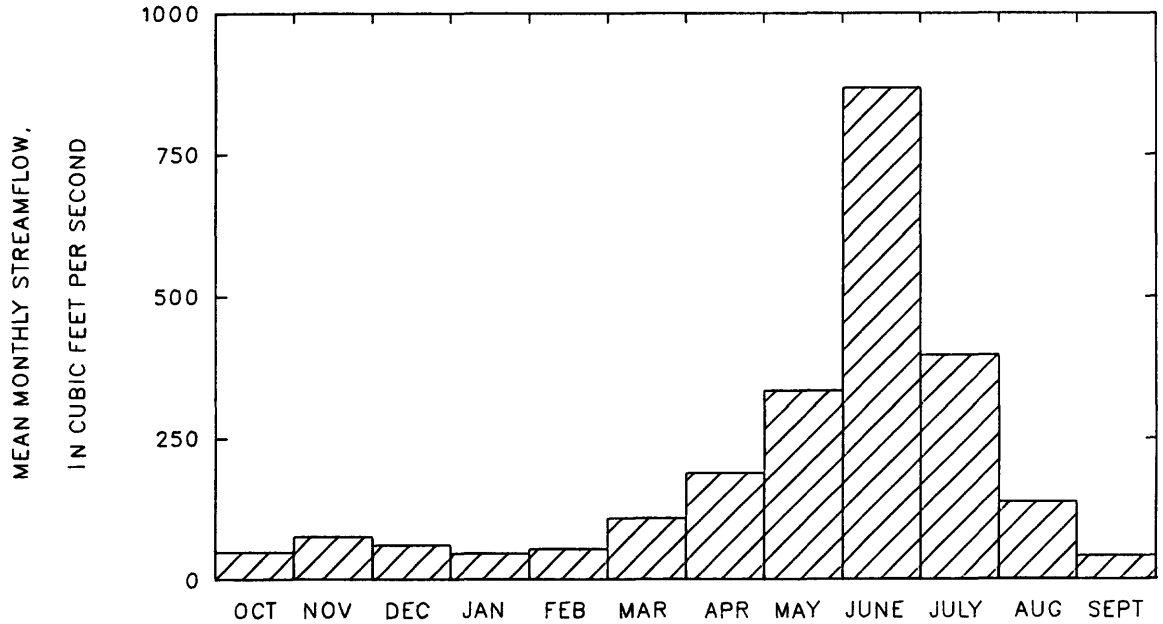
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1310	2370	3130	---	---	---
3	1270	2310	3050	---	---	---
7	1150	2120	2810	---	---	---
15	1000	1880	2500	---	---	---
30	842	1610	2140	---	---	---
60	609	1180	1560	---	---	---
90	477	898	1170	---	---	---

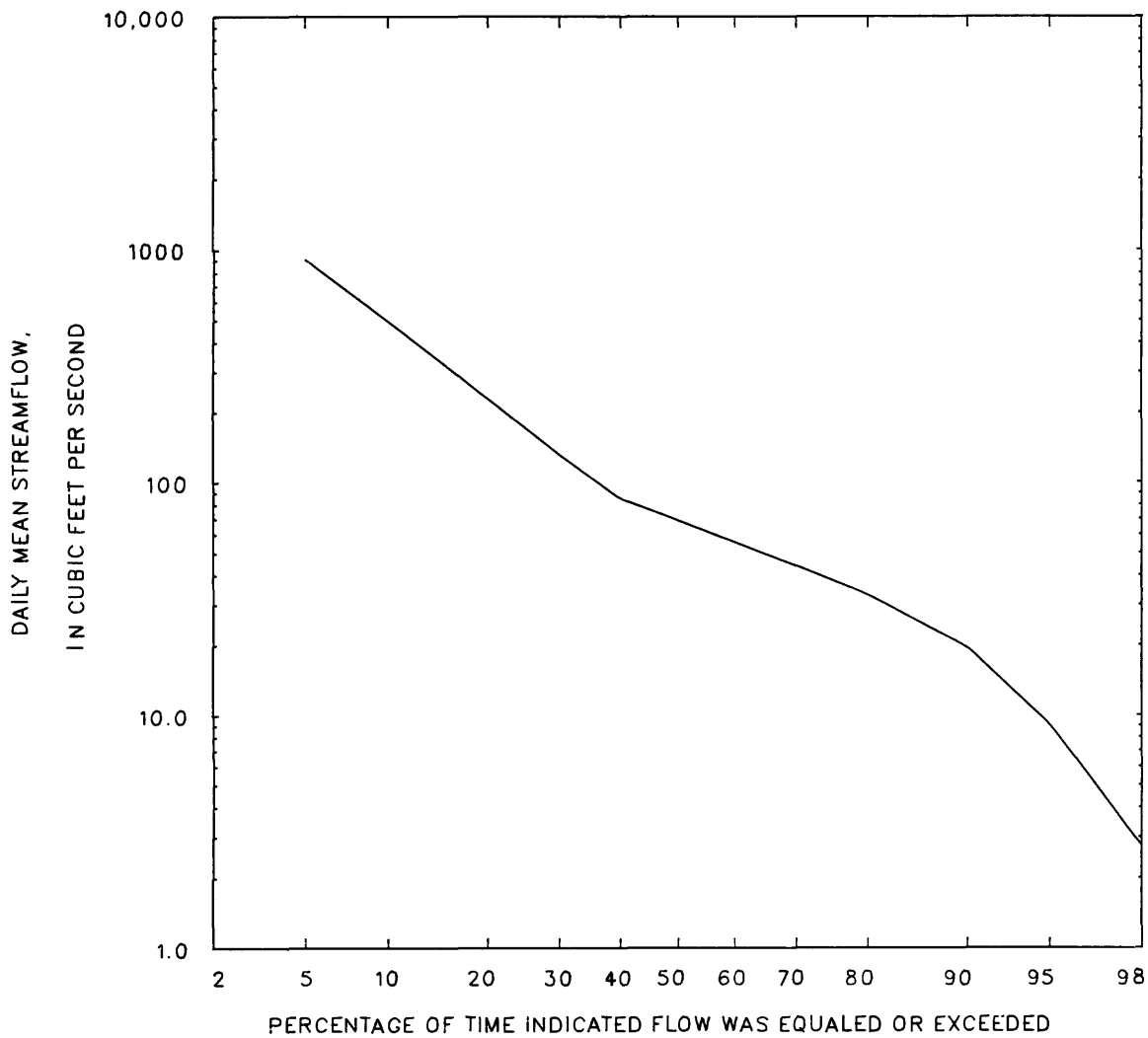
Duration of daily mean flow for period of record 1973-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2010	904	492	323	228	130	84	68	55	44	33	19	9.1	2.7	1.4	0.78	0.41

STATION 06661585 PERIOD OF RECORD 1973–84

LARAMIE RIVER NEAR BOSLER, WYO.





06662000 LARAMIE RIVER NEAR LOOKOUT, WYO.

LOCATION.--Lat 41°45'44", long 105°41'16", in NE¼NW¼SE¼ sec.27, T.21 N., R.74 W., Albany County, on right bank 155 ft downstream from bridge on county road, 1.0 mi upstream from Wheatland Reservoir No. 2, and 9.0 mi northeast of Lookout.

DRAINAGE AREA.--2,174 mi², of which 603 mi² is probably noncontributing.

PERIOD OF RECORD.--May 1912 to December 1917, January 1921 to December 1927, April 1932 to current year (no winter records since 1972). Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 6,962.68 ft. Prior to April 22, 1915, non-recording gage and April 22, 1915, to August 31, 1917, water-stage recorder, at bridge, 155 ft upstream at same datum. October 14, 1931, to September 17, 1938, at site 125 ft upstream at same datum.

REMARKS.--Natural flow of stream affected by transbasin diversions, storage reservoirs, diversions for irrigation of about 108,000 acres above station, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,380 ft³/s, June 29, 1983, gage height, 6.99 ft; maximum gage height, about 8.0 ft, occurred in 1973 (backwater from ice); no flow at times in 1934-35, 1939-40, 1954-55, 1977.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1915-17, 1933-72

Month	Maximum (ft³/s)	Minimum (ft³/s)	Mean (ft³/s)	Standard deviation (ft³/s)	Coefficient of variation	Percent of annual runoff
October	204	0.00	39	47	1.2	2.7
November	119	0.00	46	33	0.73	3.1
December	85	0.00	35	22	0.62	2.4
January	73	0.65	31	18	0.58	2.1
February	74	0.40	39	20	0.51	2.6
March	120	9.3	62	30	0.48	4.2
April	544	13	100	87	0.87	6.8
May	656	10	200	156	0.78	13.6
June	1900	9.0	640	434	0.68	43.5
July	1160	0.06	197	217	1.1	13.4
August	267	0.00	58	52	0.90	3.9
September	97	0.00	25	26	1.0	1.7
Annual	401	16	122	71	0.58	100

Magnitude and probability of annual low flow based on period of record 1916-17, 1934-72

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	2.6	0.27	0.00	0.00	0.00	---
3	3.1	0.36	0.00	0.00	0.00	---
7	3.7	0.54	0.00	0.00	0.00	---
14	5.0	0.90	0.00	0.00	0.00	---
30	7.7	1.6	0.00	0.00	0.00	---
60	13	3.5	0.00	0.00	0.00	---
90	19	6.4	0.00	0.00	0.00	---
120	28	7.2	0.16	0.00	0.00	---
183	38	11	2.3	0.03	0.00	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft³/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1915-17, 1933-72

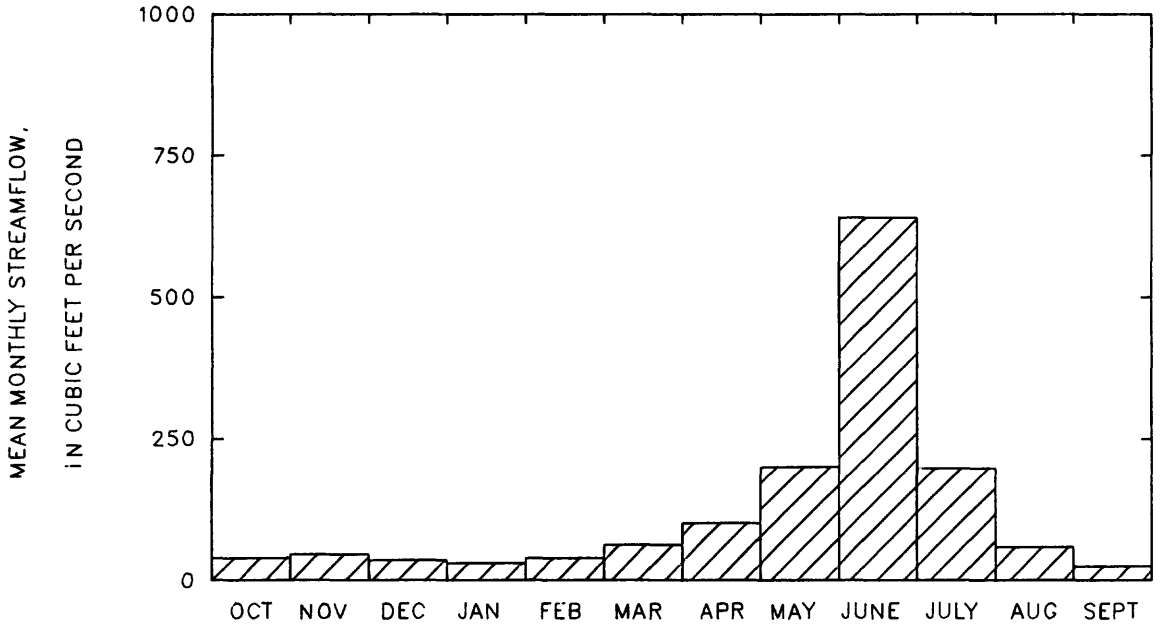
Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1060	1810	2220	2630	2880	---
3	1020	1740	2150	2570	2820	---
7	916	1590	1980	2390	2640	---
15	777	1360	1710	2090	2330	---
30	611	1070	1350	1640	1830	---
60	418	726	916	1130	1270	---
90	317	543	686	851	963	---

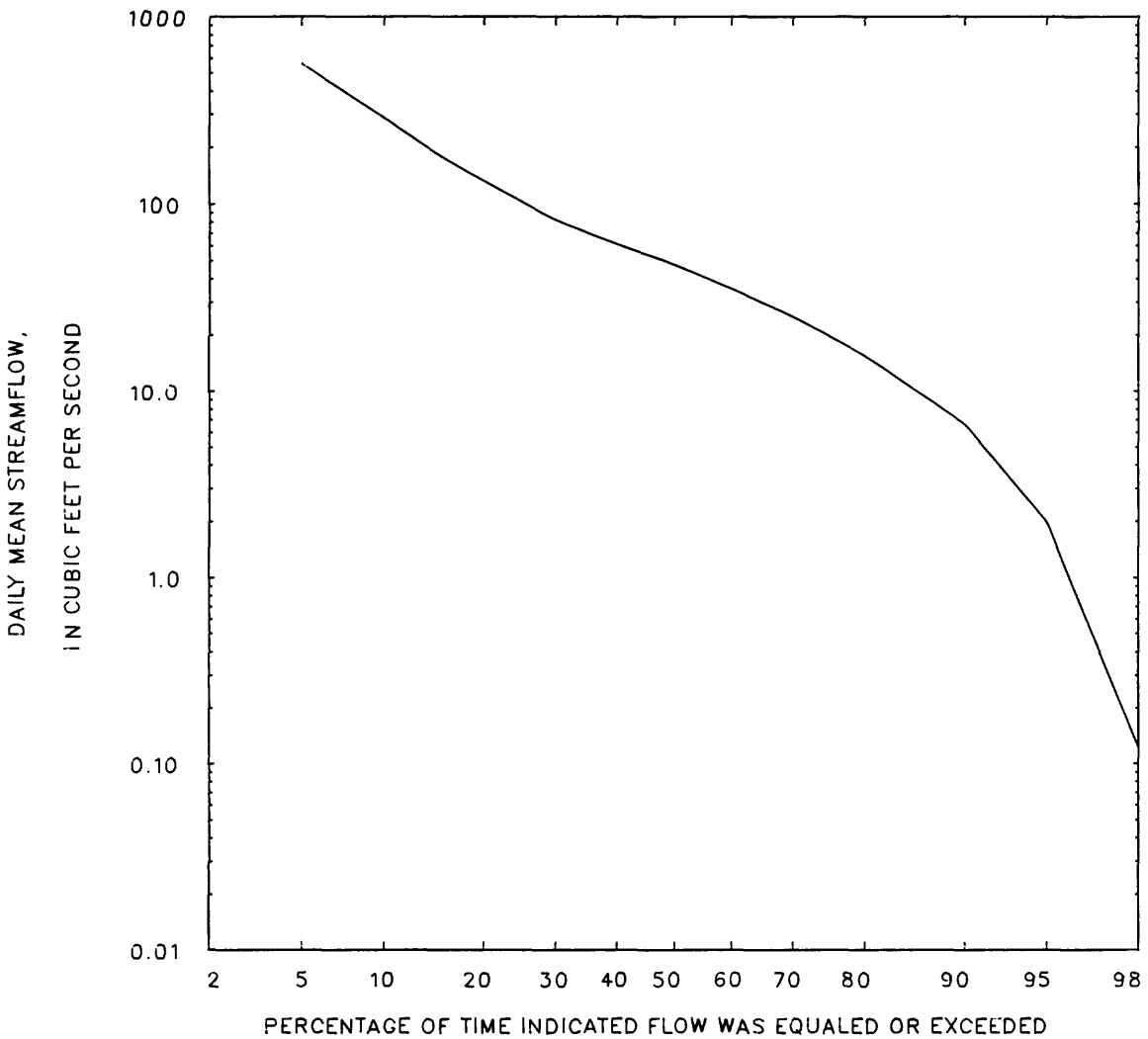
Duration of daily mean flow for period of record 1915-17, 1933-72

Discharge, in ft³/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1410	557	287	178	131	81	60	47	35	25	15	6.6	2.0	0.12	0.06	0.03	0.01

STATION 06662000 PERIOD OF RECORD 1915–17, 1933–72

LARAMIE RIVER NEAR LOOKOUT, WYO.





06663500 LARAMIE RIVER BELOW WHEATLAND RESERVOIR NO.2, WYO.

LOCATION.--Lat 41°55'35", long 105°34'36", in NE¼SE¼NW¼ sec.34, T.23 N., R.73 W., Albany County, on left bank 50 ft upstream from bridge on county road 0.4 mi downstream from mouth of reservoir spillway channel, 12.5 mi downstream from outlet gates of Wheatland Reservoir No. 2, and 22 mi northeast of Lookout.

DRAINAGE AREA.--2,248 mi^2, of which 606 mi^2 is probably noncontributing.

PERIOD OF RECORD.--May to August 1916, May to September 1917, October 1951 to September 1963. Published as "below McGill," 1916-17.

GAGE.--Water-stage recorder. Datum of gage is 6,883.81 ft. Prior to May 17, 1917, staff gage and May 17 to September 13, 1917, water-stage recorder, at bridge 50 ft downstream at different datum.

REMARKS.--Flow completely regulated by Wheatland Reservoir No. 2. Natural flow of stream affected by transbasin diversions, storage reservoirs, diversions for irrigation, and return flow from irrigated area.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,860 ft^3/s, June 26-30, 1917, gage height, 5.6 ft, site and datum then in use; maximum gage height, 5.82 ft, March 29, 1962 (backwater from ice); minimum daily discharge determined, 1 ft^3/s, September 8, 9, 1916.

Monthly and annual streamflow 1952-63

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	40	4.7	13	10	0.81	1.1
November	15	4.9	8.5	3.3	0.40	0.7
December	15	3.8	7.1	3.4	0.47	0.6
January	14	3.0	6.7	3.3	0.50	0.6
February	17	3.5	8.9	5.0	0.56	0.8
March	24	6.5	12	5.9	0.49	1.0
April	177	7.9	31	48	1.5	2.7
May	346	8.4	101	115	1.1	8.9
June	685	16	292	195	0.67	25.6
July	593	21	318	179	0.56	27.9
August	507	7.3	252	162	0.64	22.1
September	242	6.4	91	74	0.81	8.0
Annual	186	19	96	51	0.53	100

Magnitude and probability of annual low flow based on period of record 1953-63

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	4.1	3.2	2.9	2.7	---	---
3	4.3	3.4	3.1	2.9	---	---
7	4.6	3.6	3.2	2.9	---	---
14	4.8	3.6	3.2	2.9	---	---
30	5.0	3.7	3.2	2.9	---	---
60	5.4	4.2	3.7	3.4	---	---
90	5.8	4.4	3.9	3.5	---	---
120	6.1	4.7	4.1	3.8	---	---
183	7.6	5.5	4.8	4.2	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1952-63

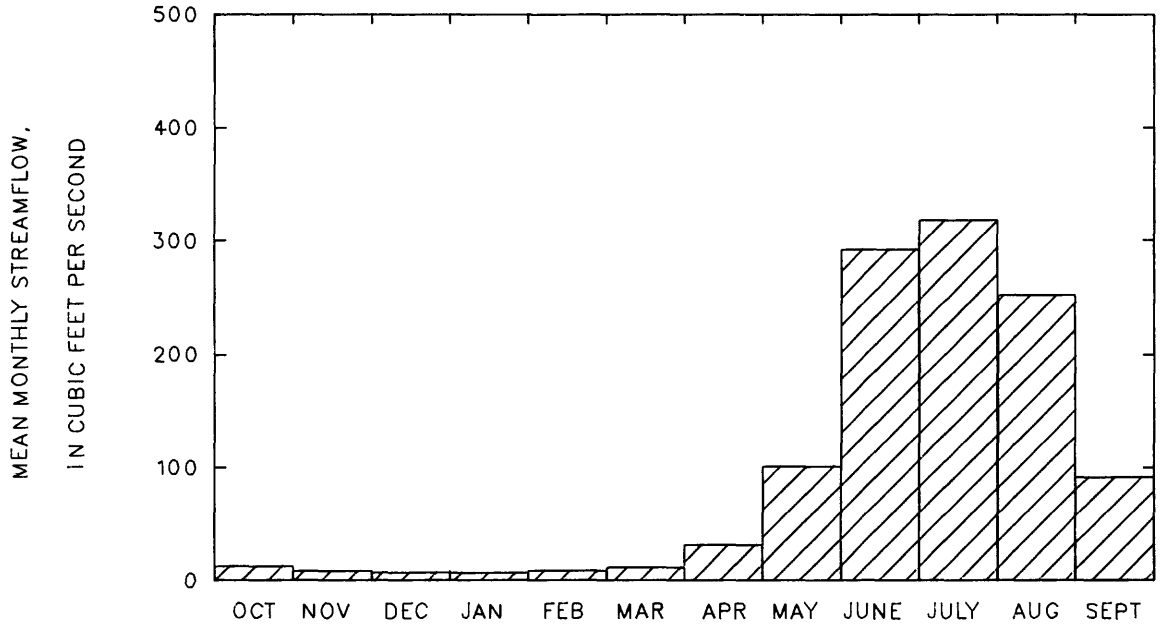
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	502	686	803	---	---	---
3	486	672	794	---	---	---
7	454	648	778	---	---	---
15	431	624	741	---	---	---
30	388	564	653	---	---	---
60	351	533	613	---	---	---
90	302	470	544	---	---	---

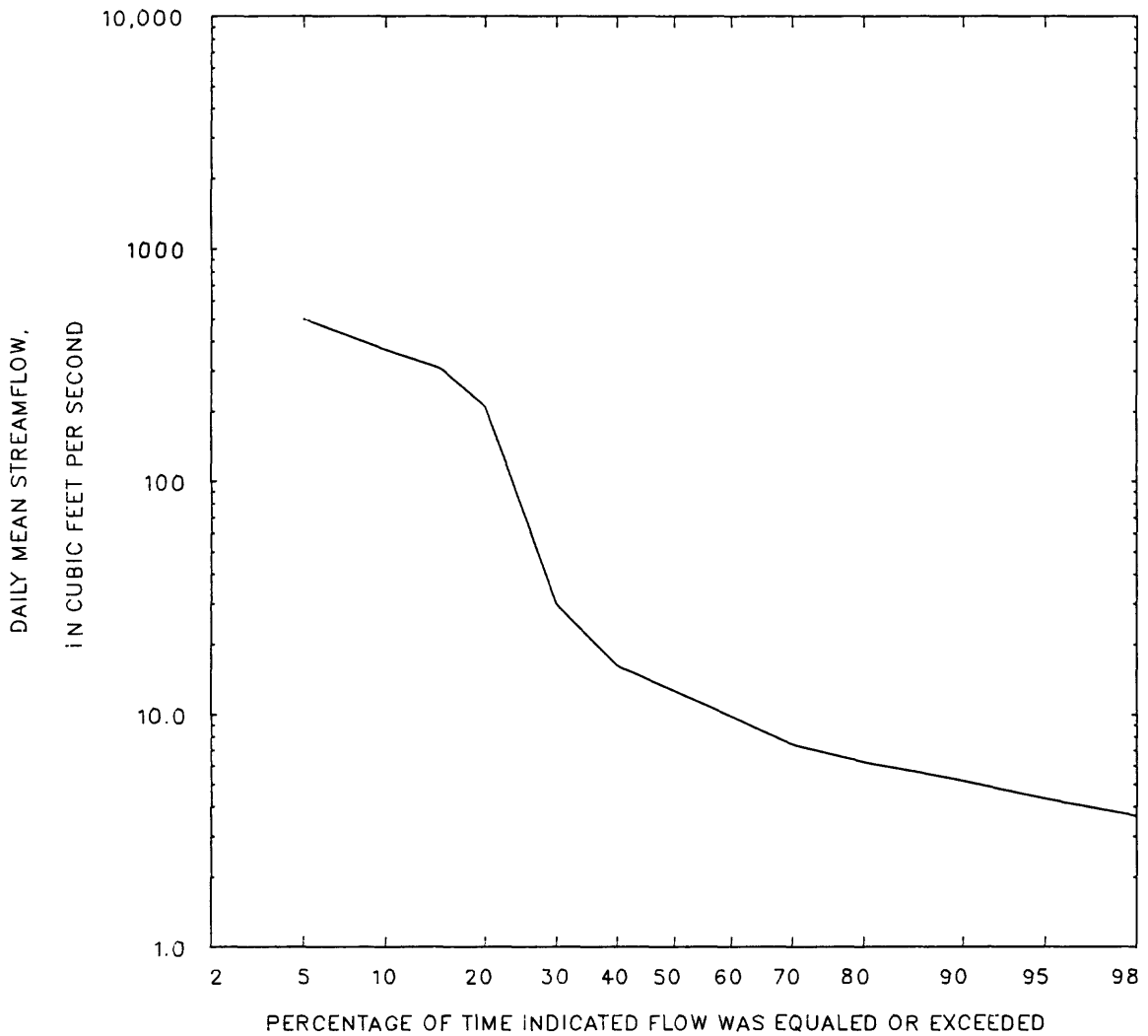
Duration of daily mean flow for period of record 1952-63

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
649	496	366	304	210	30	16	13	9.8	7.4	6.2	5.1	4.3	3.6	3.4	3.1	2.9

STATION 06663500 PERIOD OF RECORD 1952–63

LARAMIE RIVER BELOW WHEATLAND RESERVOIR NO. 2, WYO.





06664500 SYBILLE CREEK ABOVE BLUEGRASS CREEK, NEAR WHEATLAND, WYO.

LOCATION.--Lat 41°52'05", long 105°12'42", in NW¼NW¼ sec.23, T.22 N., R.70 W., Platte County, on right bank 0.25 mi upstream from Bluegrass Creek and 18 mi southwest of Wheatland.

DRAINAGE AREA.--225 mi^2.

PERIOD OF RECORD.--March 1941 to September 1968. Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 5,246 ft, from topographic map.

REMARKS.--Diversions for irrigation of about 3,600 acres above station. One small diversion between station and Bluegrass Creek. Seven small reservoirs above station (combined capacity, about 400 acre-ft) for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 4,300 ft^3/s, July 24, 1963, gage height, 7.3 ft, from rating curve extended above 210 ft^3/s on basis of slope-area measurement of peak flow at gage height 5.90 ft, and computation of peak flow from slope-area measurement at station below Bluegrass Creek adjusted for channel storage; minimum daily, 0.20 ft^3/s, October 7-21, 1956.

Monthly and annual streamflow 1942-68

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	37	0.28	8.6	9.2	1.1	4.0
November	45	0.33	10	9.6	0.93	4.8
December	36	0.40	9.8	7.8	0.79	4.6
January	25	0.49	8.2	5.9	0.72	3.8
February	23	0.72	8.3	5.6	0.67	3.9
March	59	0.98	11	12	1.0	5.2
April	91	2.0	27	26	0.94	12.7
May	279	3.4	47	58	1.2	21.8
June	273	1.5	42	53	1.3	19.7
July	134	0.76	26	27	1.0	12.2
August	56	0.45	9.9	12	1.2	4.6
September	27	0.40	5.7	5.8	1.0	2.6
Annual	59	2.0	18	14	0.77	100

Magnitude and probability of annual low flow based on period of record 1942-68

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.5	0.62	0.39	0.26	0.17	---
3	1.6	0.63	0.39	0.26	0.17	---
7	1.8	0.68	0.41	0.27	0.17	---
14	2.1	0.75	0.43	0.27	0.18	---
30	2.6	0.96	0.54	0.34	0.19	---
60	3.4	1.2	0.70	0.42	0.23	---
90	4.3	1.6	0.88	0.52	0.27	---
120	5.2	1.9	1.0	0.62	0.32	---
183	6.0	2.4	1.4	0.87	0.48	---

Magnitude and probability of instantaneous peak flow based on 28 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
393	1080	1820	3150	4470	6100

Weighted skew = -0.090

Magnitude and probability of annual high flow based on period of record 1942-68

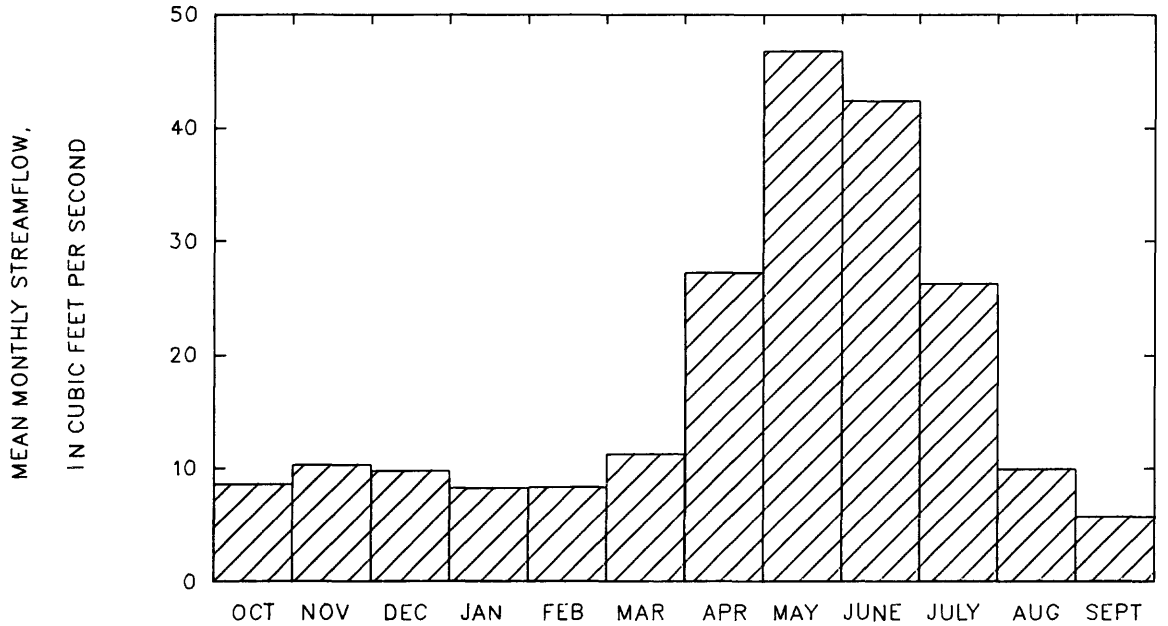
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	118	245	349	499	623	---
3	85	185	275	414	536	---
7	68	151	225	338	437	---
15	55	123	185	284	373	---
30	43	98	150	236	316	---
60	35	77	116	179	237	---
90	31	66	97	147	191	---

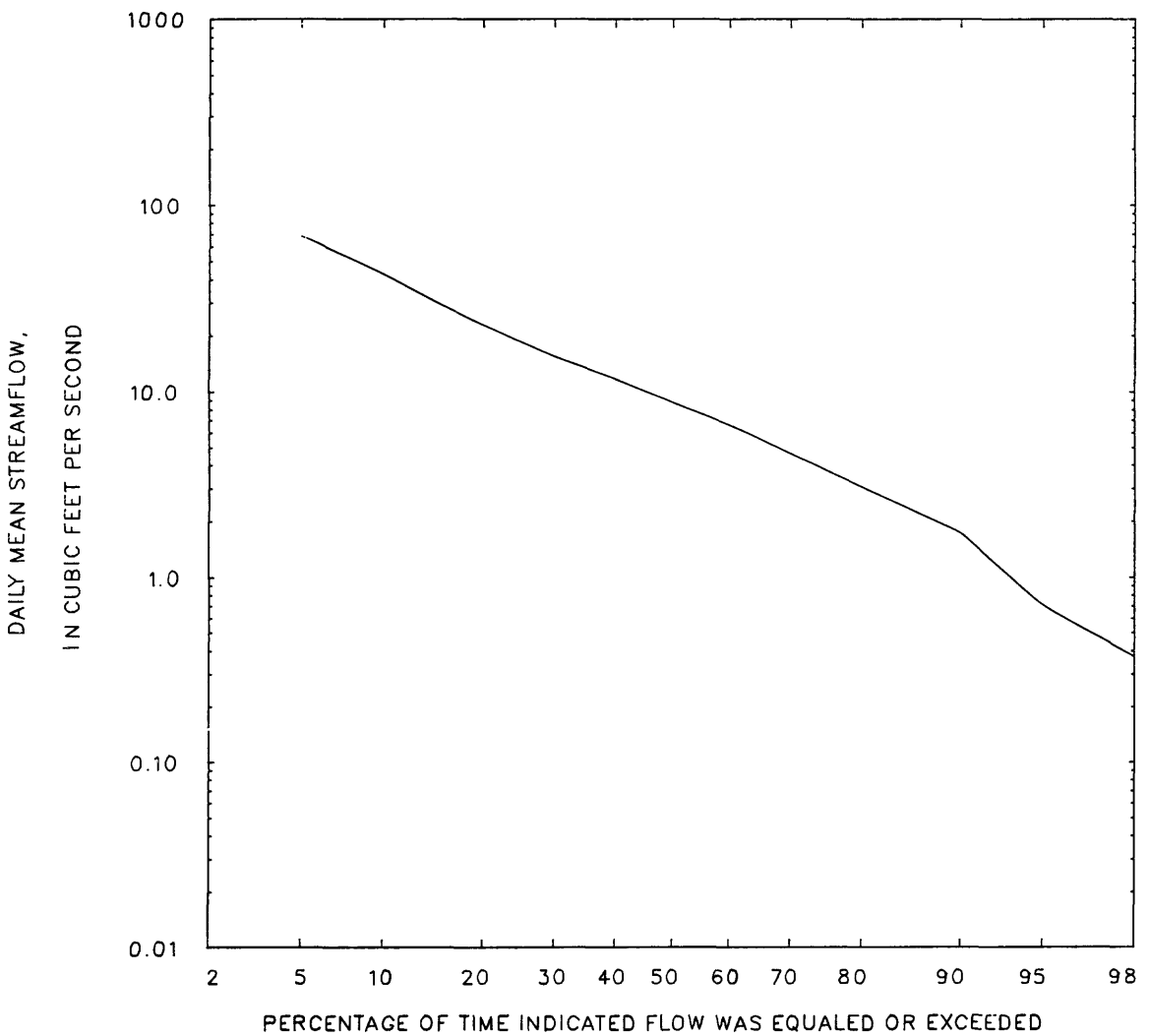
Duration of daily mean flow for period of record 1942-68

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
153	68	43	29	23	15	12	8.7	6.6	4.6	3.0	1.7	0.70	0.37	0.33	0.29	0.23

STATION 06664500 PERIOD OF RECORD 1942–68

SYBILLE CREEK ABOVE BLUEGRASS CREEK, NEAR WHEATLAND, WYO.





06665000 SYBILLE CREEK BELOW BLUEGRASS CREEK, NEAR WHEATLAND, WYO.

LOCATION.--Lat 41°52'40", long 105°12'17", in NE¼SW¼ sec.14, T.22 N., R.70 W., Platte County, on left bank 0.7 mile downstream from Bluegrass Creek, 1 mile upstream from Wheatland Canal No. 1, and 17 mi southwest of Wheatland.

DRAINAGE AREA.--366 mi^2. Drainage area at mouth, 515 mi^2.

PERIOD OF RECORD.--March 1950 to September 1968.

GAGE.--Digital water-stage recorder. Altitude of gage is 5,220 ft, from topographic map. Prior to March 18, 1959, graphic water-stage recorder at site 120 ft downstream at same datum, and March 18, 1959, to July 13, 1966, at present site and datum.

REMARKS.--Most of flow during irrigation season is water released from Wheatland Reservoir No. 2 (capacity, 98,930 acre-ft) on the Laramie River and diverted down Bluegrass Creek for irrigation of land near Wheatland. Diversions for irrigation of about 4,400 acres above station. Ten small reservoirs above station (combined capacity, about 400 acre-ft) for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, June 8, 1968, from rating curve extended above 1,150 ft^3/s on basis of slope-area measurements at gage heights 3.77 and 4.99 ft; minimum daily, 0.1 ft^3/s, July 2-4, September 9-12, December 15, 1954.

Monthly and annual streamflow 1951-68

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	62	0.46	16	16	1.0	1.2
November	32	0.46	14	11	0.78	1.1
December	28	0.41	13	8.6	0.65	1.1
January	30	0.54	12	7.6	0.61	1.0
February	37	0.82	15	9.2	0.63	1.2
March	61	4.0	22	16	0.72	1.7
April	206	5.1	53	59	1.1	4.1
May	371	6.3	120	105	0.88	9.4
June	590	9.4	271	162	0.60	21.3
July	611	15	348	172	0.49	27.4
August	475	1.9	284	145	0.51	22.4
September	222	0.48	103	74	0.72	8.1
Annual	200	17	107	49	0.46	100

Magnitude and probability of annual low flow based on period of record 1951-68

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	3.7	1.1	0.48	0.23	---	---
3	4.1	1.2	0.53	0.25	---	---
7	4.6	1.4	0.63	0.31	---	---
14	5.1	1.7	0.84	0.45	---	---
30	5.9	1.9	0.93	0.50	---	---
60	7.4	2.3	1.1	0.57	---	---
90	9.2	2.9	1.4	0.69	---	---
120	10	3.4	1.7	0.84	---	---
183	13	4.5	2.3	1.2	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1951-68

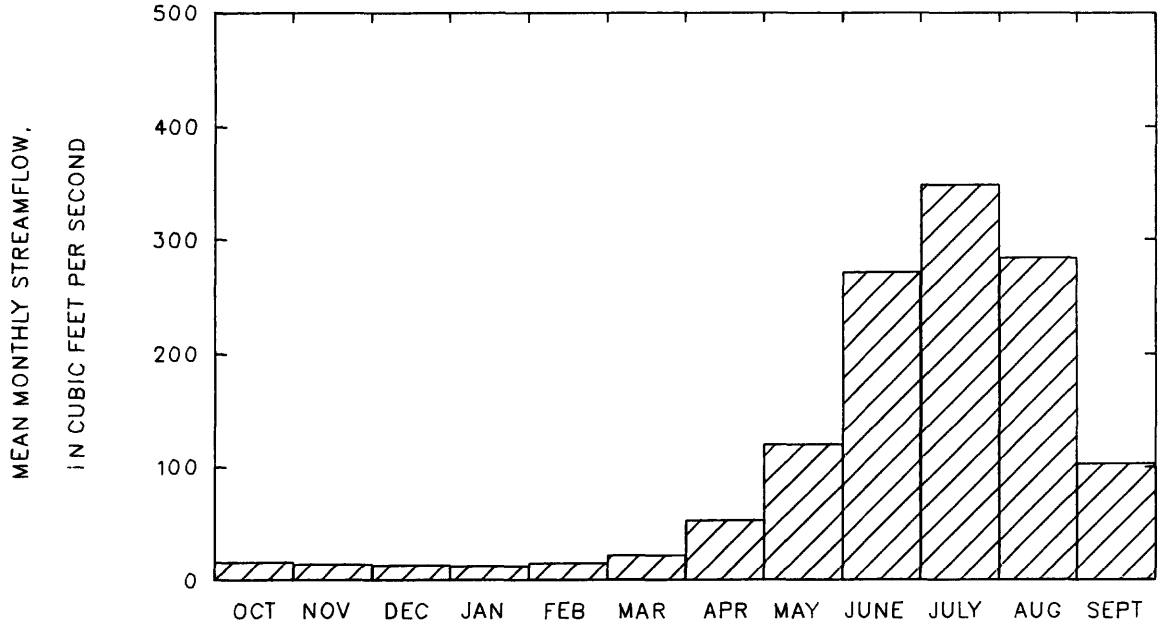
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	559	744	854	980	---	---
3	520	648	710	770	---	---
7	488	620	683	744	---	---
15	462	598	660	716	---	---
30	435	566	614	649	---	---
60	395	520	557	577	---	---
90	339	460	496	516	---	---

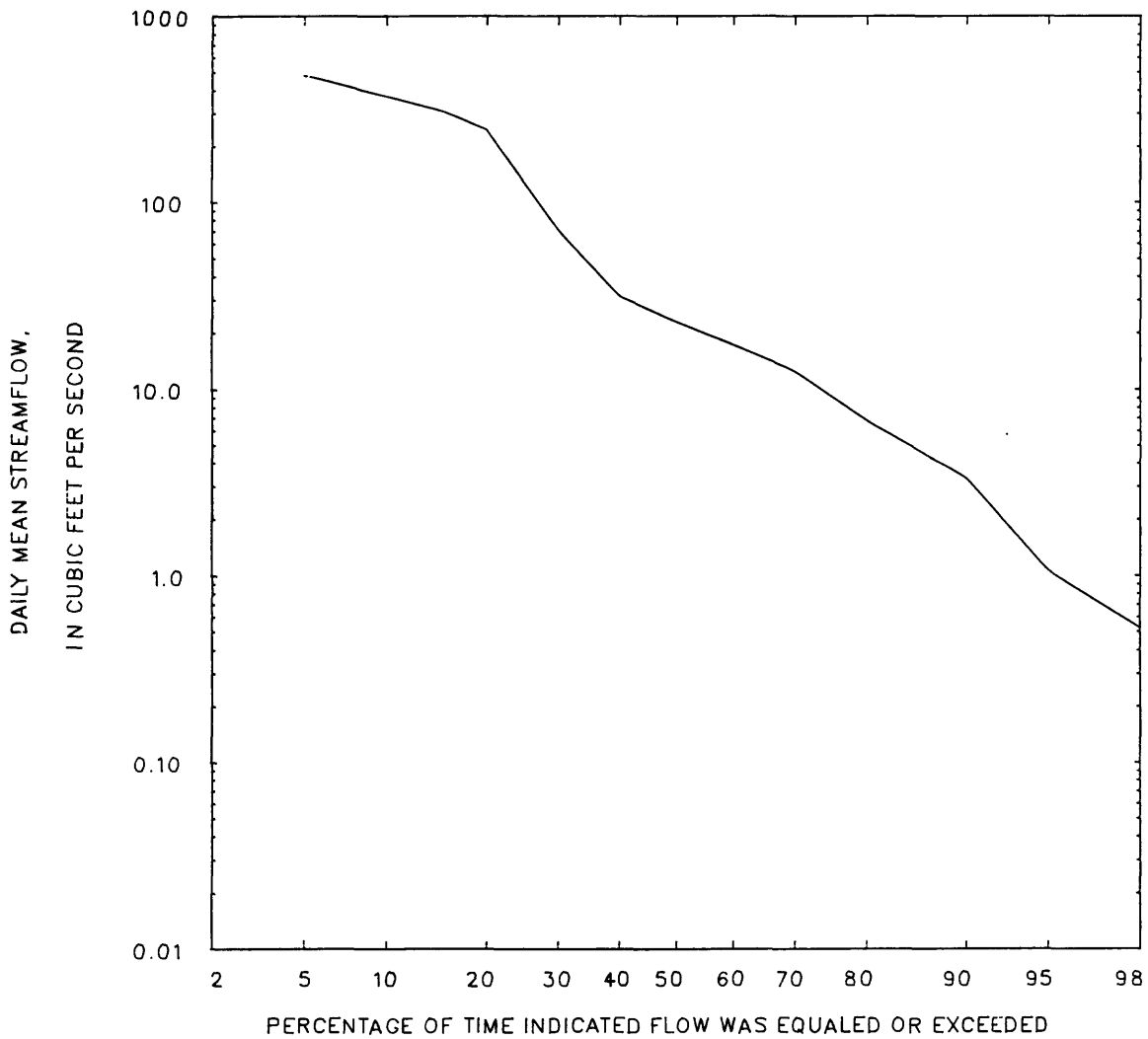
Duration of daily mean flow for period of record 1951-68

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
626	482	370	310	244	70	31	23	17	12	6.7	3.3	1.0	0.52	0.44	0.40	0.12

STATION 06665000 PERIOD OF RECORD 1951–68

SYBILLE CREEK BELOW BLUEGRASS CREEK, NEAR WHEATLAND, WYO.





06667500 NORTH LARAMIE RIVER NEAR WHEATLAND, WYO.

LOCATION.--Lat 42°09'58", long 105°12'23", in NE¼SE¼ sec.2, T.25 N., R.70 W., Platte County, on left bank 0.3 mi upstream from headgate of North Laramie Land Company canal, 1.2 mi downstream from Spring Creek, and 15 mi northwest of Wheatland.

DRAINAGE AREA.--370 mi^2. Drainage area at mouth, 530 mi^2.

PERIOD OF RECORD.--October 1914 to September 1923, July 1939 to September 1971, October 1973 to September 1974. Monthly discharge only for some periods; published in WSP 1310. Published as "at upper station near Wheatland" in WSP 469. January 1912 to November 1914 at site 1.2 mi downstream; records not equivalent owing to diversion.

GAGE.--Water-stage recorder. Altitude of gage is 4,840 ft, from topographic map. November 6, 1914, to September 30, 1923, water-stage recorder at present site at different datum; July 25, 1939, to August 12, 1954, at site 460 ft downstream at datum 1.84 ft lower.

REMARKS.--Seven small reservoirs above station, total capacity, about 290 acre-ft for irrigation and stock water. Diversions for irrigation of about 4,800 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,260 ft^3/s, July 27, 1951, gage height, 12.9 ft, from floodmarks, present site and datum, from rating curve extended above 800 ft^3/s on basis of slope-area measurements at gage heights 8.09 ft and 12.9 ft; no flow November 29, 1915, at times July to September 1919, August 3 to October 24, 1954, October 1-6, 1956, August 25 to September 8, 1960.

Monthly and annual streamflow 1915-23, 1940-71, 1974

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	26	0.03	8.4	6.7	0.80	1.7
November	24	0.58	8.3	5.4	0.65	1.7
December	18	1.6	7.0	4.1	0.59	1.4
January	16	1.3	6.1	3.8	0.62	1.3
February	33	1.6	7.4	5.8	0.78	1.5
March	126	3.5	22	23	1.1	4.5
April	368	12	83	72	0.87	16.9
May	870	7.8	196	187	0.96	40.1
June	518	3.5	102	105	1.0	20.8
July	122	0.68	28	26	0.96	5.7
August	92	0.01	14	16	1.2	2.8
September	55	0.00	8.1	10	1.3	1.7
Annual	131	3.7	41	29	0.72	100

Magnitude and probability of annual low flow based on period of record 1916-23, 1941-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.8	0.00	0.00	0.00	0.00	---
3	2.1	0.40	0.00	0.00	0.00	---
7	2.4	0.48	0.00	0.00	0.00	---
14	2.8	0.64	0.00	0.00	0.00	---
30	3.2	0.90	0.34	0.01	0.00	---
60	3.7	1.4	0.61	0.02	0.00	---
90	4.4	1.8	0.97	0.02	0.00	---
120	5.7	2.4	1.3	0.68	0.30	---
183	6.1	3.0	1.9	1.3	0.76	---

Magnitude and probability of instantaneous peak flow based on 40 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
644	1680	2830	5020	7330	10400

Weighted skew = 0.192

Magnitude and probability of annual high flow based on period of record 1915-23, 1940-71, 1974

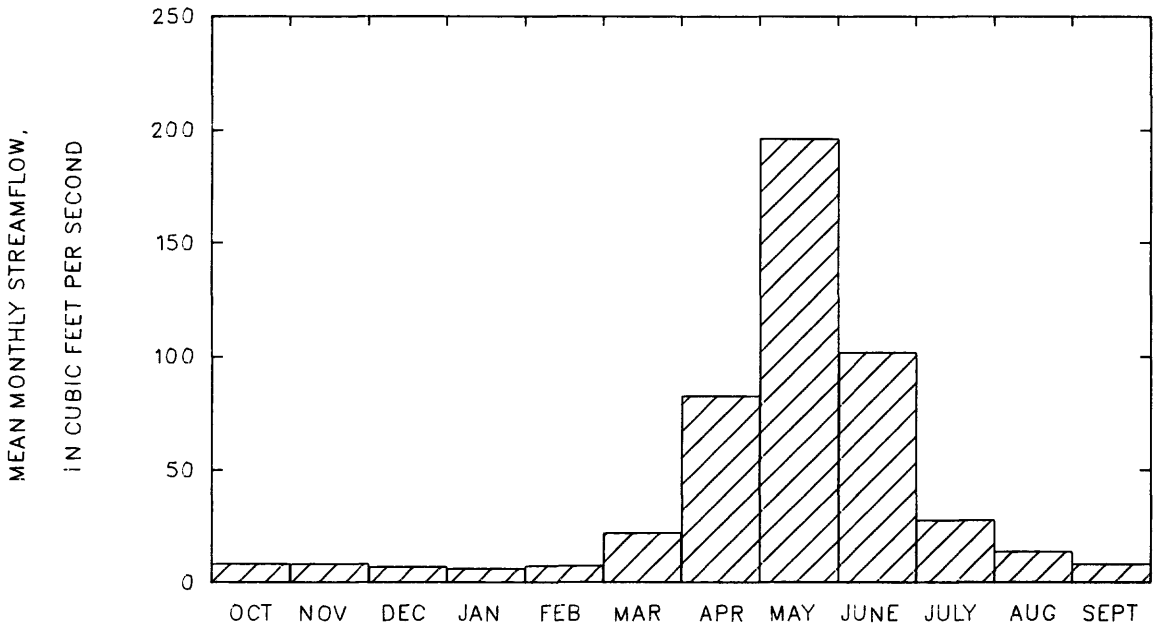
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	391	871	1310	1990	2600	---
3	326	713	1050	1570	2020	---
7	269	559	794	1130	1400	---
15	216	437	612	858	1060	---
30	175	352	489	677	823	---
60	133	265	367	505	613	---
90	104	203	277	377	454	---

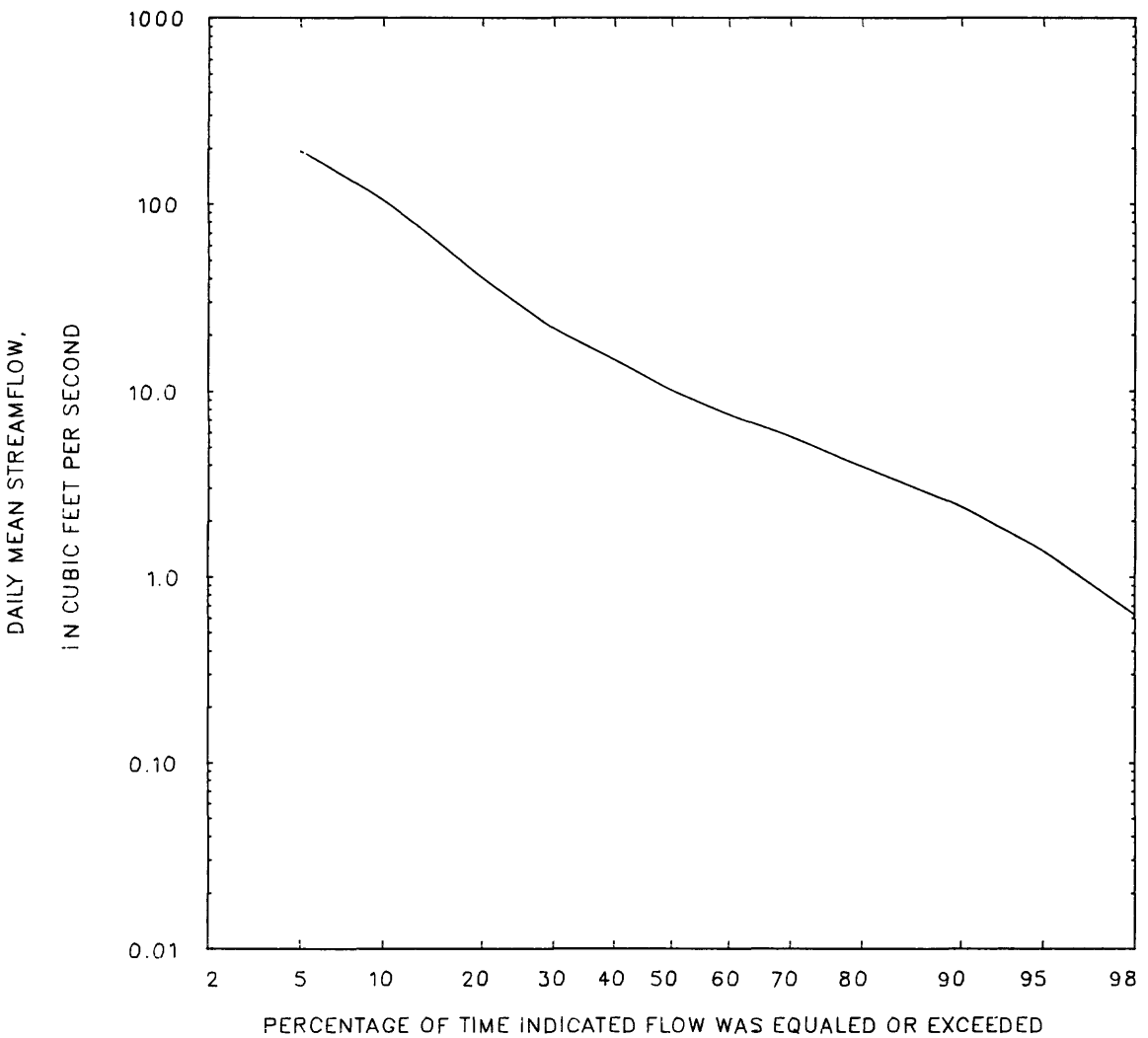
Duration of daily mean flow for period of record 1915-23, 1940-71, 1974

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
511	192	104	62	40	21	15	9.9	7.3	5.6	3.9	2.4	1.4	0.62	0.25	0.07	0.01

STATION 06667500 PERIOD OF RECORD 1915–23, 1940–71, 1974

NORTH LARAMIE RIVER NEAR WHEATLAND, WYO.





06669500 CHUGWATER CREEK AT CHUGWATER, WYO.

LOCATION.--Lat 41°45'10", long 104°48'55", in NE¼ sec.31, T.21 N., R.66 W., Platte County, 270 ft upstream from old highway bridge, 0.25 mi southeast of Chugwater, and 0.50 mi upstream from headgate for Ramsey ditch.

DRAINAGE AREA.--380 mi^2, approximately.

PERIOD OF RECORD.--May 1911 to September 1921, June 1938 to June 1940.

GAGE.--Chain gage. Altitude of gage is 5,270 ft, from topographic map. May 22, 1911, to February 5, 1912, staff gage at site 300 ft downstream at different datum. February 6, 1912, to April 5, 1916, staff gage and April 6, 1916, to September 30, 1921, chain gage at same site at different datum.

REMARKS.--Diversions above station for irrigation of about 5,000 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 350 ft^3/s, September 4, 1915, gage height, 4.5 ft, datum then in use, from rating curve extended above 230 ft^3/s; no flow at times in 1913.

COOPERATION--Records for 1913 and 1914 furnished by the State engineer of Wyoming.

Monthly and annual streamflow 1912-21, 1939

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	31	3.7	13	9.8	0.75	5.3
November	26	3.5	13	8.0	0.60	5.4
December	22	2.7	10	7.2	0.69	4.2
January	31	2.9	11	8.4	0.80	4.3
February	27	3.2	12	7.9	0.66	4.9
March	41	7.3	23	14	0.59	9.3
April	98	14	44	27	0.63	17.8
May	122	4.0	48	45	0.94	19.5
June	129	3.3	30	37	1.2	12.2
July	21	2.3	11	6.7	0.63	4.3
August	42	2.6	18	13	0.76	7.2
September	43	1.5	14	13	0.96	5.6
Annual	32	6.3	21	8.1	0.40	100

Magnitude and probability of annual low flow based on period of record 1913-21, 1940

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	2.8	0.00	0.00	---	---	---
3	3.2	0.00	0.00	---	---	---
7	3.9	1.6	0.94	---	---	---
14	4.5	2.0	1.3	---	---	---
30	5.1	2.3	1.5	---	---	---
60	6.0	2.8	1.8	---	---	---
90	7.1	3.4	2.2	---	---	---
120	7.9	3.7	2.4	---	---	---
183	8.9	4.1	2.6	---	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1912-21, 1939

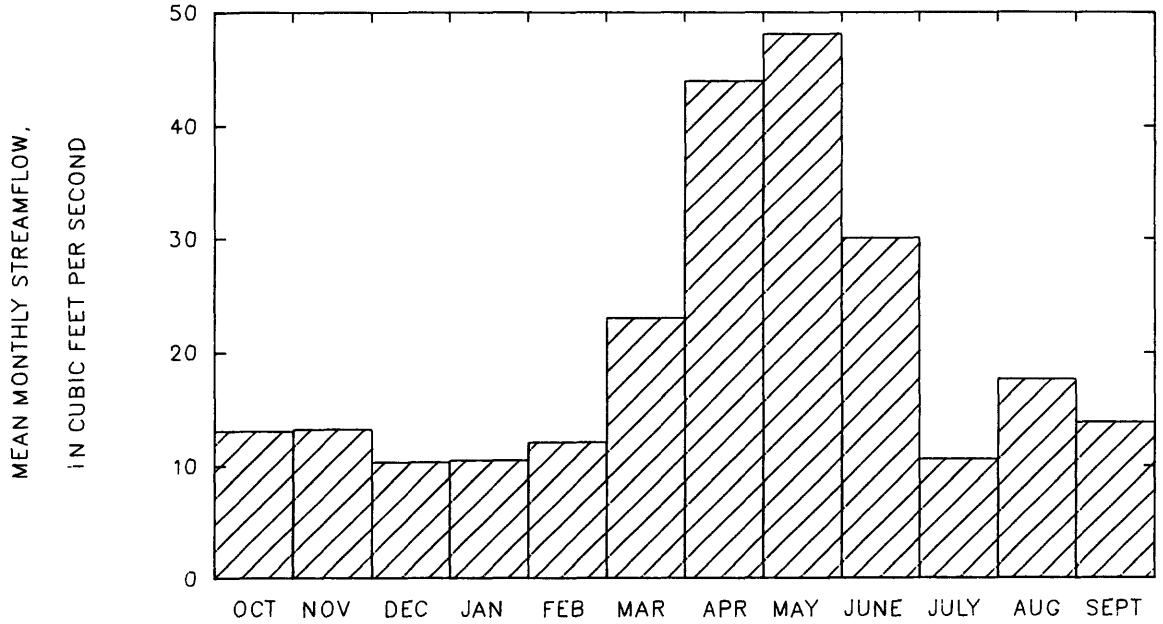
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	154	252	313	---	---	---
3	111	185	231	---	---	---
7	92	159	206	---	---	---
15	80	138	180	---	---	---
30	70	117	150	---	---	---
60	52	82	102	---	---	---
90	42	66	80	---	---	---

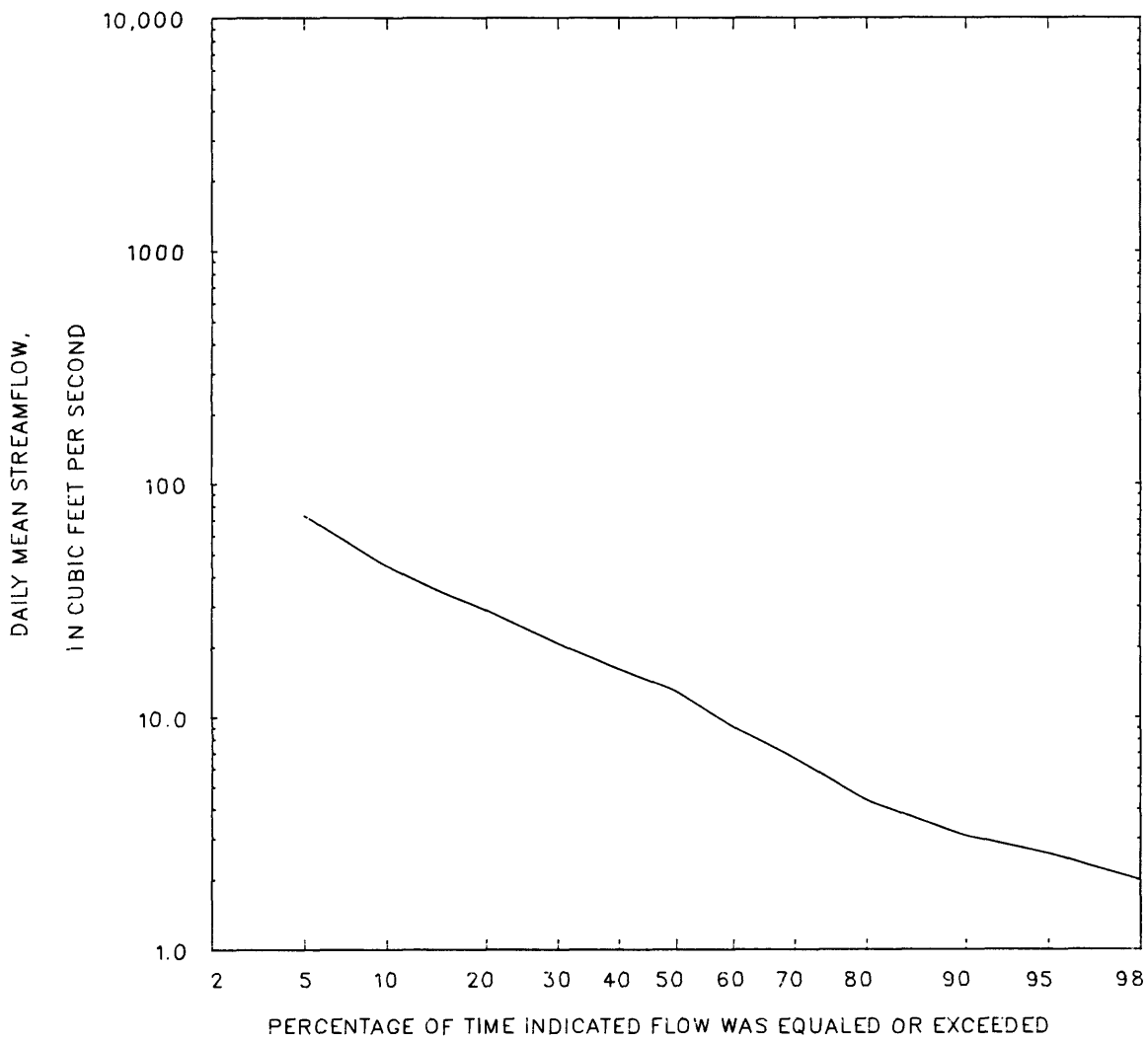
Duration of daily mean flow for period of record 1912-21, 1939

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
156	73	44	34	29	20	16	13	9.0	6.6	4.3	3.0	2.6	2.0	1.2	1.0	0.24

STATION 06669500 PERIOD OF RECORD 1912–21, 1939

CHUGWATER CREEK AT CHUGWATER, WYO.





06670000 LARAMIE RIVER NEAR UVA, WYO.

LOCATION.--Lat 42°08'16", long 104°46'33", in NW¼SE¼ sec. 16, T.25 N., R.66 W., Platte County, on right bank at private bridge, 7.5 mi east of Uva, and 9.5 mi downstream from Chugwater Creek.

DRAINAGE AREA.--4,440 mi^2, of which 622 mi^2 is probably noncontributing. Drainage area at mouth, 4,565 mi^2.

PERIOD OF RECORD.--October 1952 to October 1957, June 1958 to September 1968.

GAGE.--Digital water-stage recorder. Altitude of gage is 4,375 ft, from topographic map. Prior to February 26, 1963, graphic water-stage recorder at same site and datum.

REMARKS.--Natural flow of stream affected by transbasin diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,760 ft^3/s, May 29, 1957, from rating curve extended above 600 ft^3/s on basis of slope-area measurement; maximum gage height, that of June 10, 1968; minimum daily discharge, 0.3 ft^3/s, July 28, August 2, 3, 1960.

Monthly and annual streamflow 1953-57, 1959-68

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	88	10	42	26	0.63	4.6
November	102	39	66	19	0.28	7.2
December	132	48	75	23	0.30	8.2
January	125	45	76	27	0.35	8.3
February	124	43	80	24	0.30	8.8
March	152	49	89	33	0.37	9.7
April	205	52	93	45	0.49	10.2
May	357	22	131	118	0.90	14.3
June	519	5.1	160	169	1.1	17.4
July	231	1.4	55	72	1.3	6.0
August	84	0.72	24	24	0.99	2.6
September	75	1.3	25	25	0.98	2.7
Annual	138	38	76	29	0.38	100

Magnitude and probability of annual low flow based on period of record 1954-57, 1960-68

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	2.9	1.0	0.55	0.33	---	---
3	3.2	1.1	0.60	0.36	---	---
7	3.8	1.3	0.68	0.40	---	---
14	4.5	1.5	0.79	0.46	---	---
30	6.3	2.2	1.2	0.68	---	---
60	9.2	3.7	2.2	1.4	---	---
90	13	5.4	3.3	2.2	---	---
120	18	7.9	5.1	3.5	---	---
183	30	17	12	9.3	---	---

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1953-57, 1959-68

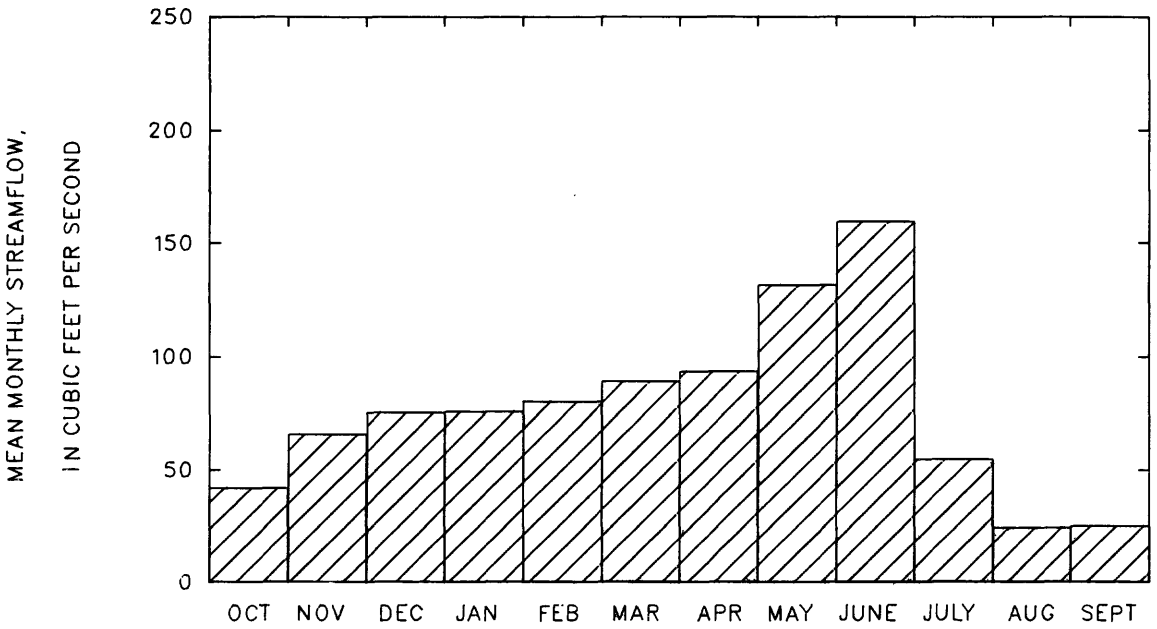
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	587	1160	1600	2190	---	---
3	472	904	1220	1650	---	---
7	354	644	859	1150	---	---
15	261	473	644	894	---	---
30	199	350	476	668	---	---
60	158	263	348	476	---	---
90	137	211	269	353	---	---

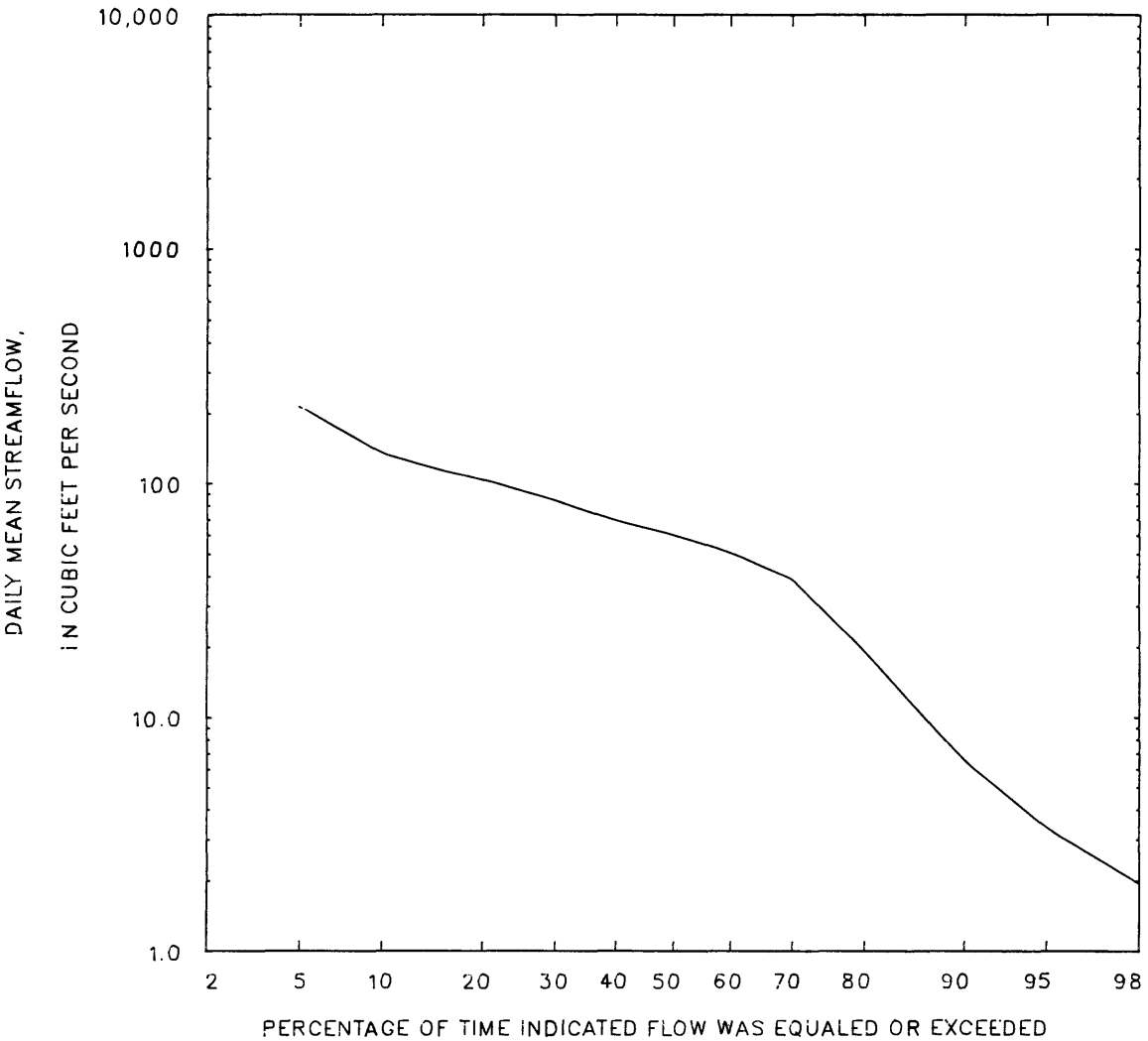
Duration of daily mean flow for period of record 1953-57, 1959-68

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
533	212	134	114	103	84	69	60	50	38	19	6.4	3.3	1.9	0.97	0.52	0.40

STATION 06670000 PERIOD OF RECORD 1953–57, 1959–68

LARAMIE RIVER NEAR UVA, WYO.





06670500 LARAMIE RIVER NEAR FORT LARAMIE, WYO.

LOCATION.--Lat 42°12'02", long 104°32'16", in NE¼SE¼NE¼ sec.28, T.26 N., R.64 W., Goshen County, on right bank 600 ft upstream from bridge on county road, 0.6 mi upstream from mouth, and 1.1 mi southwest of Fort Laramie.

DRAINAGE AREA.--4,564 mi^2, of which 631 mi^2 is probably noncontributing. Drainage area at mouth, 4,565 mi^2.

PERIOD OF RECORD.--April 1915 to current year (no winter records prior to 1927). Monthly discharge only for some periods; published in WSP 1310. Records for water years 1926-39, previously published including diversions to Gering-Fort Laramie Canal, were adjusted to exclude flow in the canal in WSP 1310. Prior to October 1931, published as "at Fort Laramie."

GAGE.--Water-stage recorder. Altitude of gage is 4,220 ft, from topographic map. April 4, 1915, to March 31, 1925, non-recording gage at site 0.1 mi downstream at different datum. April 1, 1925, to September 30, 1932, non-recording gage and October 1, 1932, to August 20, 1935, water-stage recorder at site 4.3 mi upstream at different datum. August 21, 1935, to November 2, 1970, water-stage recorder at site 0.3 mi upstream at different datum. November 3, 1970, to May 9, 1973, water-stage recorder 0.1 mi downstream at different datum. May 10, 1973, to April 5, 1977, water-stage recorder 4.3 mi upstream at different datum.

REMARKS.--Diversion, at times, to Gering-Fort Laramie Canal, 5.4 mi upstream. Natural flow of stream affected by transbasin diversions, storage reservoirs, ground-water withdrawals and diversions for irrigation of about 176,000 acres above station, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,260 ft^3/s, May 10, 1973, gage height, 9.40 ft, site and datum then in use; no flow January 31 to March 20, 1926, October 24 to December 17, 1926, March 1-26, 1927, April 14, 1938 (all flow diverted by Gering-Fort Laramie Canal).

Monthly and annual streamflow 1927-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	274	7.9	71	55	0.77	4.4
November	265	7.2	82	62	0.76	5.0
December	245	6.4	78	56	0.72	4.8
January	272	6.2	79	58	0.74	4.8
February	418	5.6	90	77	0.86	5.5
March	425	5.0	102	88	0.86	6.3
April	1060	6.9	172	189	1.1	10.6
May	3150	15	393	665	1.7	24.1
June	2970	7.2	299	470	1.6	18.4
July	1930	8.5	126	256	2.0	7.8
August	390	4.1	72	76	1.0	4.4
September	245	8.9	63	58	0.92	3.9
Annual	672	23	136	134	0.99	100

Magnitude and probability of annual low flow based on period of record 1928-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	12	6.4	4.7	3.6	2.8	2.3
3	13	6.8	4.9	3.8	2.9	2.5
7	14	7.4	5.5	4.3	3.4	2.9
14	15	8.0	5.9	4.7	3.6	3.1
30	17	8.8	6.4	5.0	3.9	3.3
60	22	11	7.4	5.6	4.2	3.5
90	27	12	8.5	6.2	4.5	3.6
120	31	14	9.5	6.8	4.7	3.7
183	45	22	15	11	7.4	5.8

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
---	---	---	---	---	---

Magnitude and probability of annual high flow based on period of record 1927-84

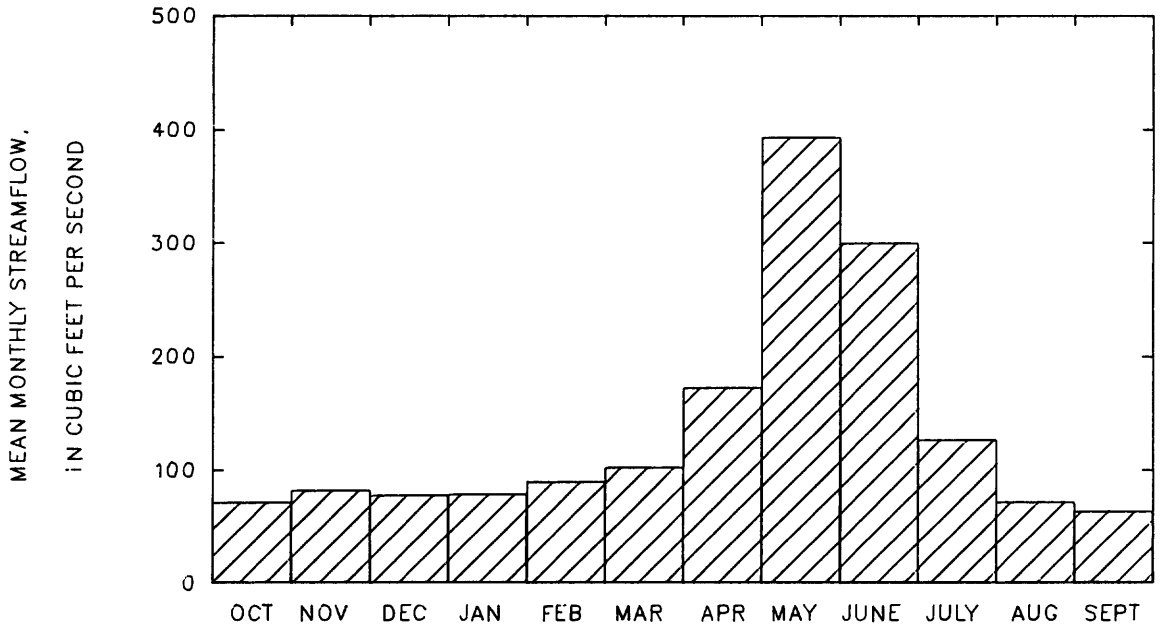
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	657	1540	2380	3790	5110	6670
3	537	1260	2010	3330	4650	6310
7	427	1030	1690	2970	4340	6170
15	338	828	1390	2540	3820	5600
30	270	662	1130	2100	3240	4860
60	214	508	855	1570	2400	3590
90	183	416	680	1210	1800	2640

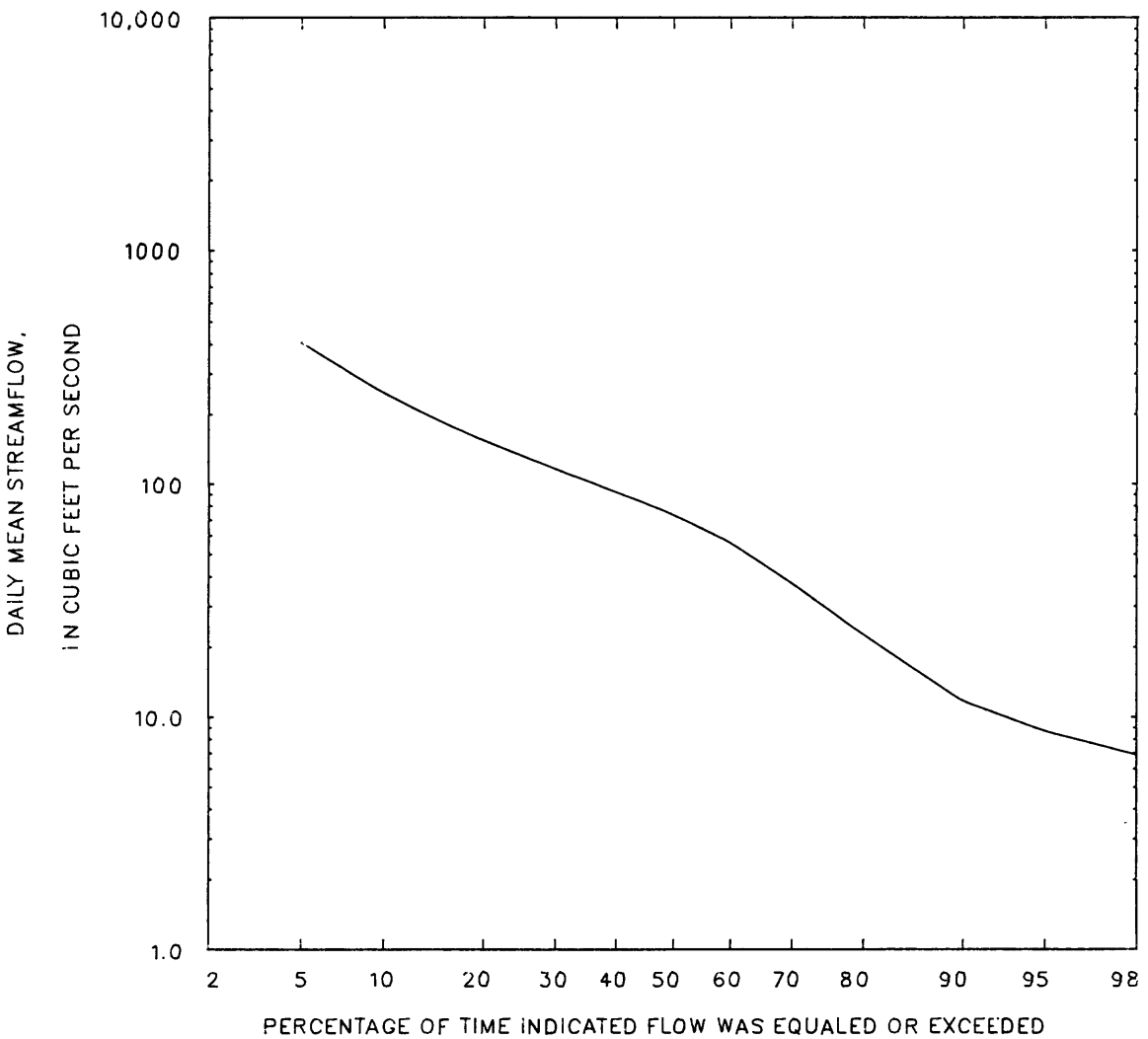
Duration of daily mean flow for period of record 1927-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1660	402	245	186	152	115	91	73	55	37	23	12	8.6	6.8	5.7	5.0	3.0

STATION 06670500 PERIOD OF RECORD 1927–84

LARAMIE RIVER NEAR FORT LARAMIE, WYO.





06671000 RAWHIDE CREEK NEAR LINGLE, WYO.

LOCATION.--Lat 42°07'32", long 104°19'36", in SE¼NE¼ sec.20, T.25 N., R.62 W., Goshen County, on right bank 200 ft upstream from bridge on U.S. Highway 26, 1.0 mi east of Lingle, and 1.0 mi upstream from mouth.

DRAINAGE AREA.--522 mi^2.

PERIOD OF RECORD.--May 1928 to current year (no winter records since 1971). Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 4,160 ft, from topographic map. See WSP 1918 for history of changes prior to May 16, 1955.

REMARKS.--Low flow represents return water from lands irrigated by Interstate Canal in Rawhide Creek basin. Six small reservoirs above station, combined capacity, about 460 acre-ft, for irrigation. Diversions for irrigation of about 1,600 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,970 ft^3/s, September 7, 1946, gage height, 11.76 ft; no flow July 5-7, 1961, April 12, 29, 1966, March 20-28, 1967, April 13, 1971.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1929-71

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	55	3.8	24	11	0.47	9.3
November	46	5.0	18	8.0	0.43	7.2
December	28	4.3	17	4.9	0.29	6.5
January	21	6.5	15	3.7	0.25	5.7
February	31	6.1	15	4.4	0.30	5.8
March	32	7.0	17	5.2	0.31	6.5
April	69	2.0	19	10	0.54	7.4
May	43	4.4	26	9.5	0.37	10.0
June	100	4.5	29	18	0.59	11.4
July	102	1.2	21	17	0.81	8.2
August	57	1.4	25	13	0.54	9.6
September	125	8.9	32	19	0.59	12.4
Annual	37	8.5	21	6.1	0.29	100

Magnitude and probability of annual low flow based on period of record 1930-71

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	3.5	0.79	0.04	0.00	0.00	---
3	4.3	1.2	0.12	0.00	0.00	---
7	6.1	1.8	0.65	0.00	0.00	---
14	7.0	2.9	1.7	1.0	0.58	---
30	9.4	4.6	2.9	1.9	1.2	---
60	13	7.4	5.0	3.5	2.2	---
90	14	9.1	6.8	5.2	3.7	---
120	14	10	8.0	6.5	5.0	---
183	16	12	10	8.7	7.3	---

Magnitude and probability of instantaneous peak flow based on 55 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
192	495	868	1670	2620	4010

Weighted skew = 0.657

Magnitude and probability of annual high flow based on period of record 1929-71

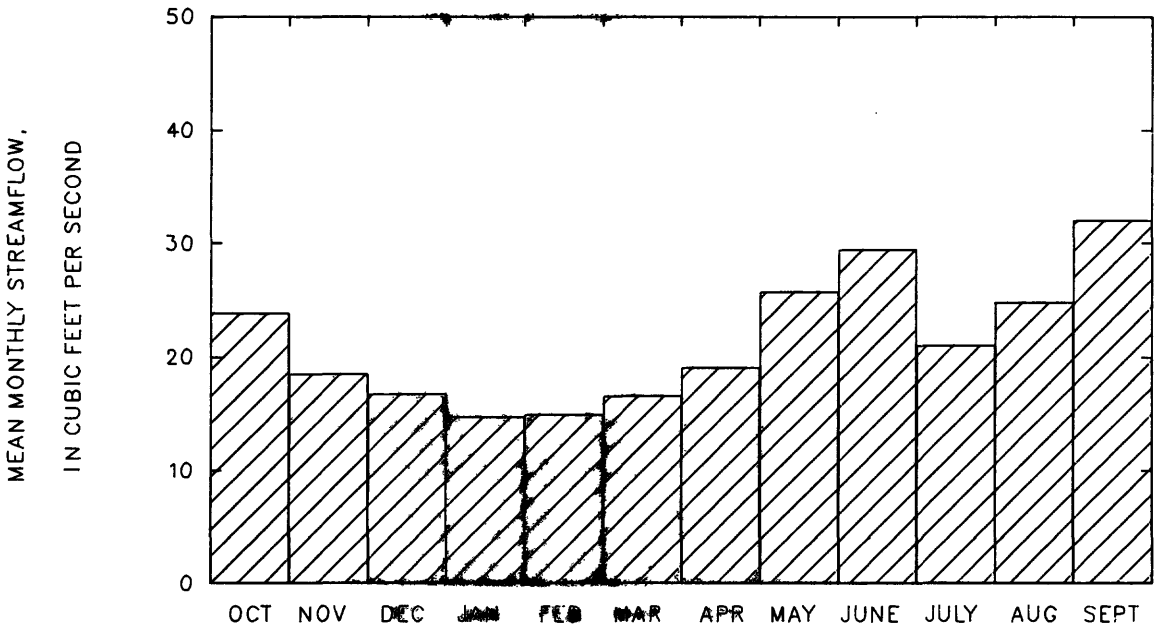
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	109	253	421	765	1160	---
3	80	164	258	445	655	---
7	59	107	155	243	335	---
15	48	78	105	148	187	---
30	41	61	75	95	110	---
60	35	48	57	68	76	---
90	30	41	47	55	60	---

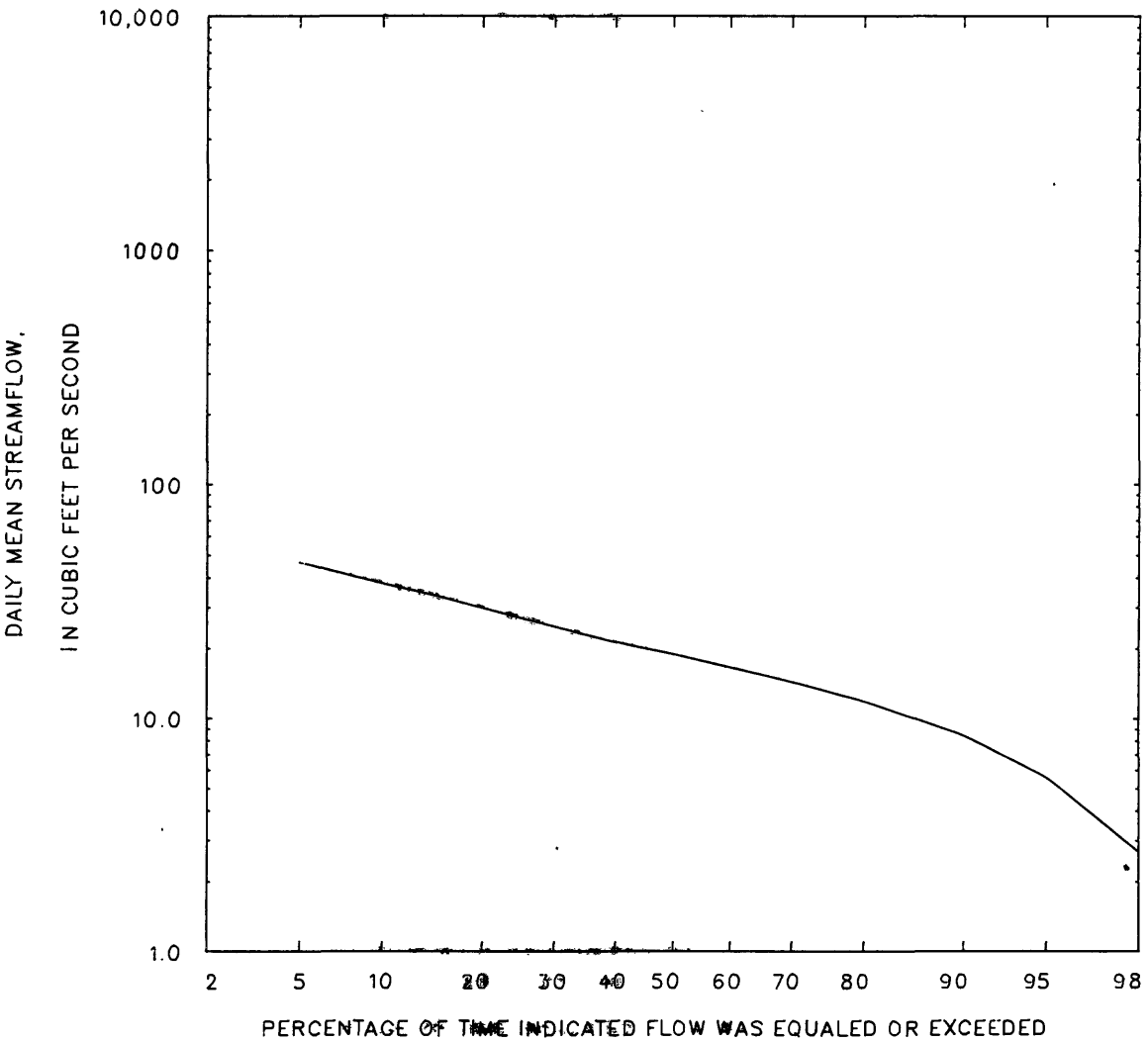
Duration of daily mean flow for period of record 1929-71

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
75	46	38	33	29	25	21	19	16	14	12	8.4	5.6	2.7	1.7	0.93	0.10

STATION 06671000 PERIOD OF RECORD 1929--71

RAWHIDE CREEK NEAR LINGLE, WYO.





06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE

LOCATION.--Lat 41°59'25", long 104°02'57", in SW¼NE¼SE¼ sec.4, T.23 N., R.58 W., Scottsbluff County, Nebr., on right bank 650 ft upstream from bridge on Nebraska State Highway 86, 700 ft downstream from Wyoming-Nebraska State line, and 0.5 mi south of Henry, Nebr.

DRAINAGE AREA.--22,218 mi^2, of which 1,929 mi^2 is probably noncontributing.

PERIOD OF RECORD.--April 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,021.35 ft. Prior to November 6, 1929, non-recording gage and November 6, 1929, to September 30, 1959, water-stage recorder at site 0.5 mi upstream at datum 4.42 ft higher. October 7, 1959, to February 22, 1972, water-stage recorder at site 0.5 mi upstream at datum 3.42 ft higher.

REMARKS.--Natural flow of stream affected by storage reservoirs, transbasin diversions, power development, groundwater withdrawals and diversions for irrigation, and return flow from irrigated areas. Gering-Mitchell Canal diverts from right bank 0.8 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,900 ft^3/s, June 2, 1929, gage height, 7.04 ft, site and datum then in use; minimum daily, 13 ft^3/s, May 12, 1961.

Monthly and annual streamflow 1930-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	1450	150	506	225	0.44	5.3
November	1020	174	432	159	0.37	4.5
December	895	219	396	142	0.36	4.1
January	751	171	355	131	0.37	3.7
February	1060	149	371	180	0.48	3.9
March	4200	141	519	725	1.4	5.4
April	4410	144	626	831	1.3	6.5
May	7230	123	1230	1570	1.3	12.8
June	7550	207	1550	1710	1.1	16.2
July	7170	611	1490	971	0.65	15.5
August	5750	154	1280	803	0.63	13.3
September	4770	230	857	636	0.74	8.9
Annual	2860	388	803	520	0.65	100

Magnitude and probability of annual low flow based on period of record 1931-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	186	94	57	34	18	11
3	203	108	68	44	24	16
7	210	129	95	72	50	39
14	230	153	120	97	75	62
30	262	185	152	129	106	93
60	303	221	186	162	138	123
90	317	236	203	179	156	142
120	331	249	215	191	167	153
183	368	282	250	228	208	197

Magnitude and probability of instantaneous peak flow based on --- years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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Magnitude and probability of annual high flow based on period of record 1930-84

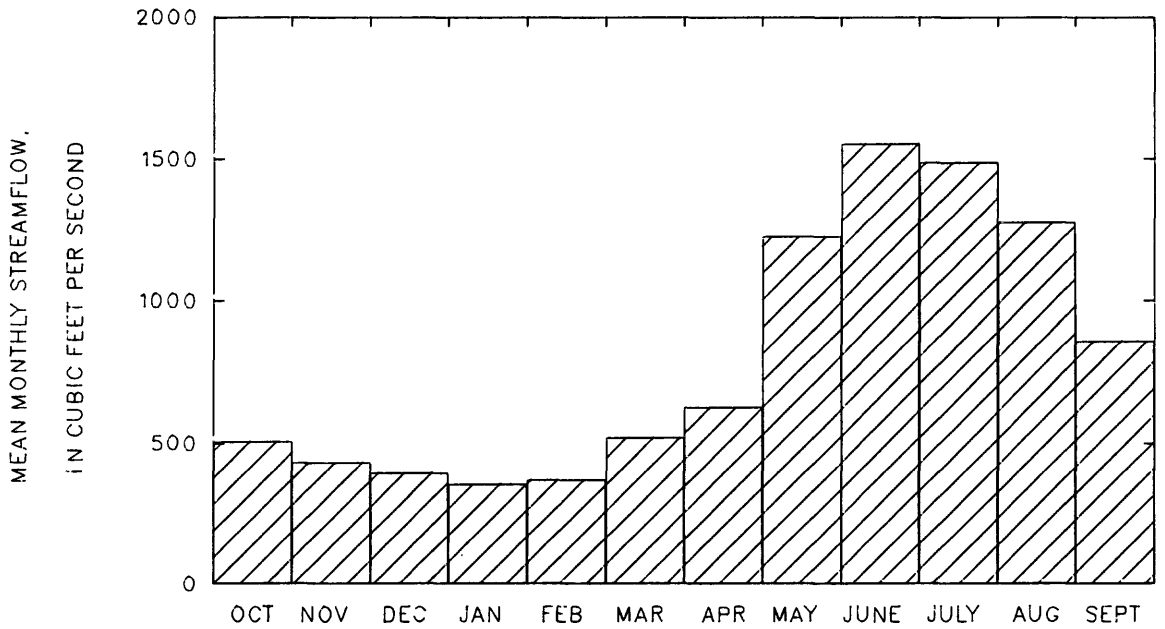
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2380	4140	5830	8760	11700	15300
3	2200	3740	5180	7640	10100	13100
7	1980	3310	4610	6900	9210	12200
15	1740	2900	4100	6330	8680	11800
30	1520	2510	3610	5770	8190	11600
60	1320	2160	3090	4960	7060	10000
90	1200	1930	2740	4310	6060	8510

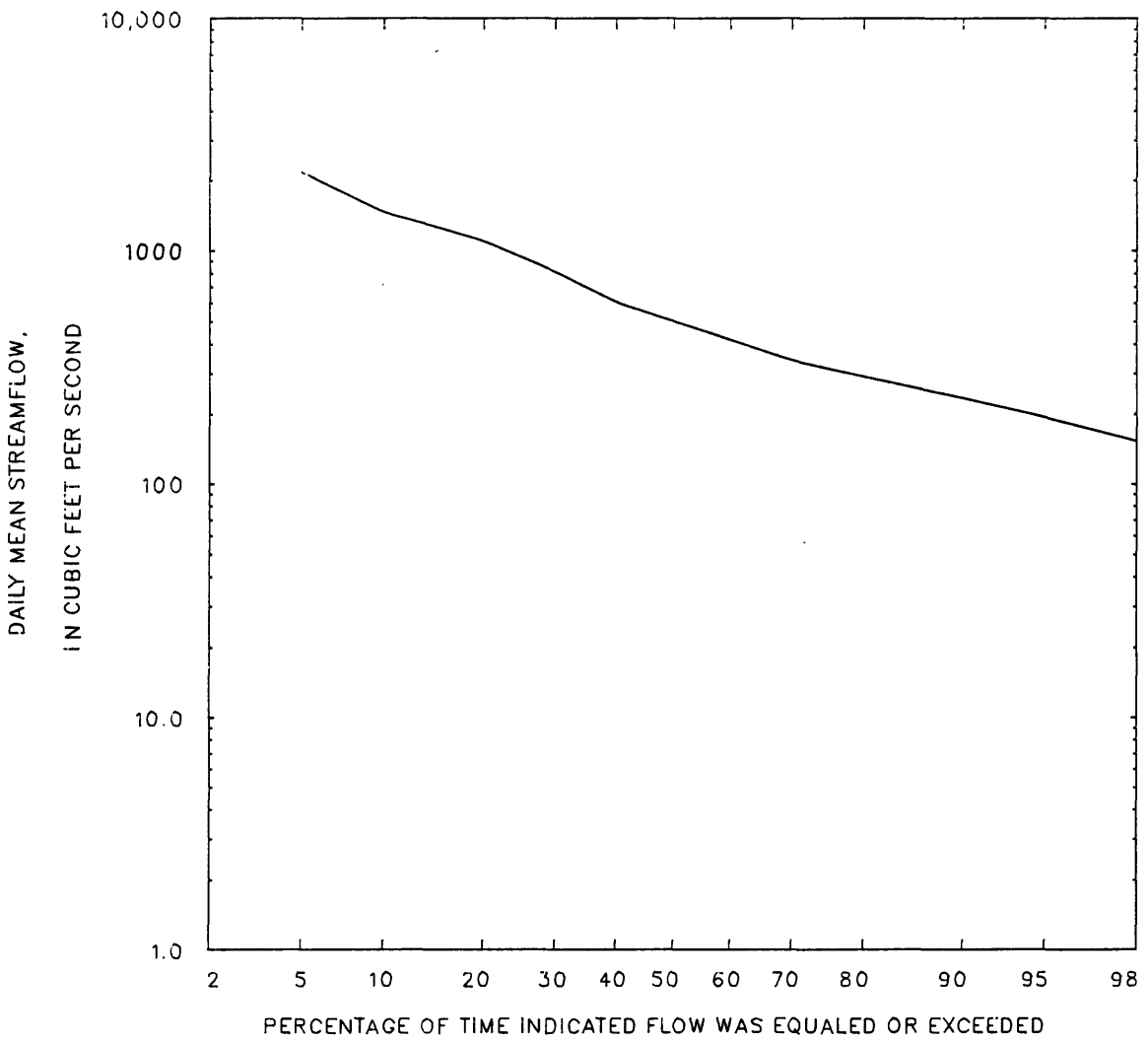
Duration of daily mean flow for period of record 1930-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
6330	2170	1450	1240	1090	809	601	499	415	339	289	233	193	152	127	104	54

STATION 06674500 PERIOD OF RECORD 1930–84

NORTH PLATTE RIVER AT WYOMING--NEBRASKA STATE LINE





06677500 HORSE CREEK NEAR LYMAN, NEB.

LOCATION.--Lat 41°56'21", long 103°59'13", in SE¼NE¼ sec.25, T.23 N., R.58 W., Scotts Bluff County, Nebr., on right bank 10 ft upstream from county highway bridge, 1.8 mi upstream from mouth, 2.2 mi downstream from Owl Creek, and 3.2 mi northwest of Lyman.

DRAINAGE AREA.--1,570 mi^2, approximately, of which about 40 mi^2 is noncontributing.

PERIOD OF RECORD.--February 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,992.84 ft, from levels by private engineering firm. See WSP 2118 for history of changes prior to April 17, 1967.

REMARKS.--Natural flow of stream affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,110 ft^3/s, June 6, 1967, gage height, 10.82 ft, from rating curve extended above 1,900 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 0.4 ft^3/s, February 1, 2, 1949.

Monthly and annual streamflow 1932-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	117	13	69	22	0.32	7.9
November	62	11	40	10	0.26	4.5
December	54	12	29	7.5	0.26	3.3
January	100	4.2	24	14	0.57	2.8
February	141	7.8	31	25	0.81	3.6
March	173	7.4	33	30	0.91	3.8
April	229	9.4	37	40	1.1	4.2
May	464	8.4	98	81	0.83	11.3
June	456	10	157	93	0.60	18.0
July	209	13	99	50	0.51	11.3
August	273	5.9	93	48	0.52	10.7
September	334	13	162	84	0.52	18.6
Annual	174	18	73	31	0.43	100

Magnitude and probability of annual low flow based on period of record 1932-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	11	5.5	3.3	1.9	0.97	0.57
3	12	6.3	3.8	2.2	1.1	0.65
7	14	7.5	4.7	2.9	1.5	0.94
14	15	9.1	6.2	4.2	2.5	1.7
30	19	12	8.1	5.7	3.5	2.4
60	21	15	13	11	8.9	7.7
90	23	17	14	12	10	8.9
120	25	18	15	13	11	9.7
183	37	26	21	17	14	12

Magnitude and probability of instantaneous peak flow based on 53 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
738	1430	2050	3050	3970	5060

Weighted skew = 0.230

Magnitude and probability of annual high flow based on period of record 1932-84

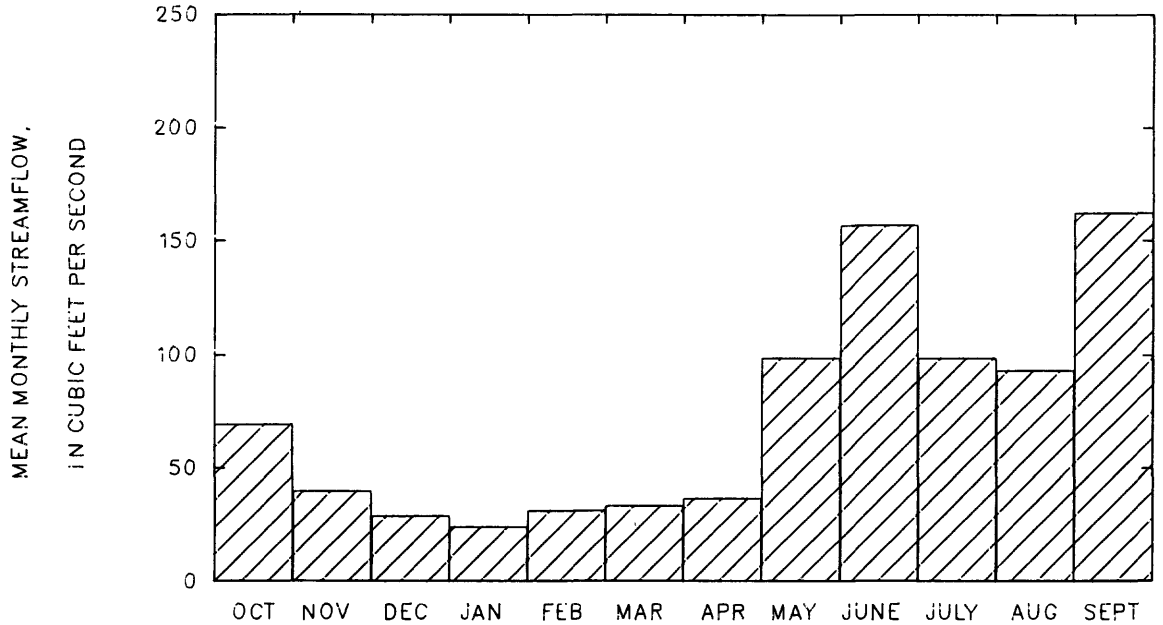
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	531	721	796	853	879	896
3	429	544	579	601	609	613
7	337	439	477	506	518	526
15	258	359	408	455	481	502
30	198	286	334	385	416	443
60	150	223	268	319	353	385
90	130	192	228	270	298	323

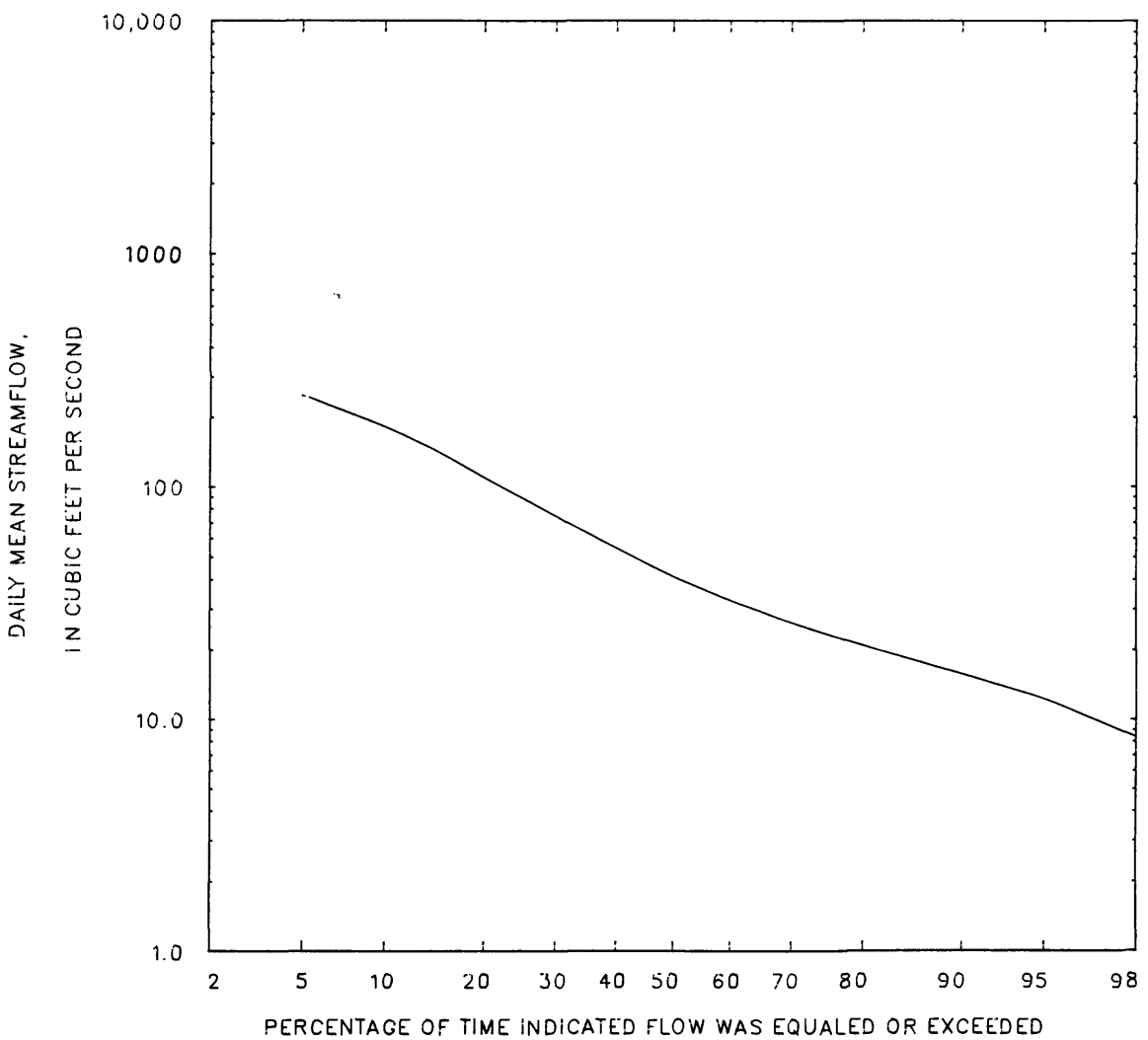
Duration of daily mean flow for period of record 1932-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
411	248	182	140	109	74	54	41	32	26	21	16	12	8.3	6.5	5.2	1.8

STATION 06677500 PERIOD OF RECORD 1932–84

HORSE CREEK NEAR LYMAN, NEB.





06754500 MIDDLE CROW CREEK NEAR HECLA, WYO.

LOCATION.--Lat 41°10'30", long 105°15'05", in NE¼NE¼ sec.20, T.14 N., R.70 W., Laramie County, on left bank 0.1 mile upstream from high-water line of Granite Springs Reservoir, 4.2 mi northwest of Hecla, and 7 mi northwest of Granite Canyon.

DRAINAGE AREA.--25.8 mi^2.

PERIOD OF RECORD.--April to July 1902, April to November 1903, April 1933 to September 1969 Monthly discharge only for some periods; published in WSP 1310. Published as Middle Fork Crow Creek near Hecla 1933-45, 1948-55.

GAGE.--Water-stage recorder and Cippoletti weir. Altitude of gage is 7,270 ft, from topographic map. April 1, 1902, to November 21, 1903, non-recording gages at sites 1.2 mi downstream at different datums.

REMARKS.--Diversions above station for irrigation of about 100 acres. Release from Lake Owen into Middle Crow Creek above station for municipal use by City of Cheyenne began December 1963.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 495 ft^3/s, September 8, 1933, gage height, 4.90 ft, from rating curve extended above 80 ft^3/s on basis of slope-area measurement of peak flow; no flow for many days in most years prior to December 1963.

Monthly and annual streamflow 1934-45, 1948-63

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	8.4	0.00	1.2	1.7	1.3	2.5
November	7.2	0.03	1.3	1.4	1.1	2.5
December	3.5	0.10	0.85	0.67	0.79	1.7
January	1.0	0.20	0.57	0.27	0.47	1.1
February	3.1	0.10	0.68	0.60	0.88	1.4
March	4.2	0.50	1.5	1.0	0.71	2.9
April	24	2.2	11	5.7	0.52	22.0
May	62	2.5	19	15	0.79	38.0
June	41	0.25	9.8	9.4	0.96	19.5
July	8.1	0.00	2.7	2.5	0.93	5.3
August	3.8	0.00	0.88	1.0	1.2	1.8
September	5.1	0.00	0.67	1.1	1.6	1.3
Annual	11	0.89	4.2	2.5	0.60	100

Magnitude and probability of annual low flow based on period of record 1934-45, 1949-63

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	0.00	---	---
3	0.00	0.00	0.00	0.00	---	---
7	0.00	0.00	0.00	0.00	---	---
14	0.00	0.00	0.00	0.00	---	---
30	0.00	0.00	0.00	0.00	---	---
60	0.00	0.00	0.00	0.00	---	---
90	0.01	0.00	0.00	0.00	---	---
120	0.40	0.00	0.00	0.00	---	---
183	0.57	0.19	0.09	0.05	---	---

Magnitude and probability of instantaneous peak flow based on 39 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
54	115	171	263	348	449

Weighted skew = 0.060

Magnitude and probability of annual high flow based on period of record 1934-45, 1948-63

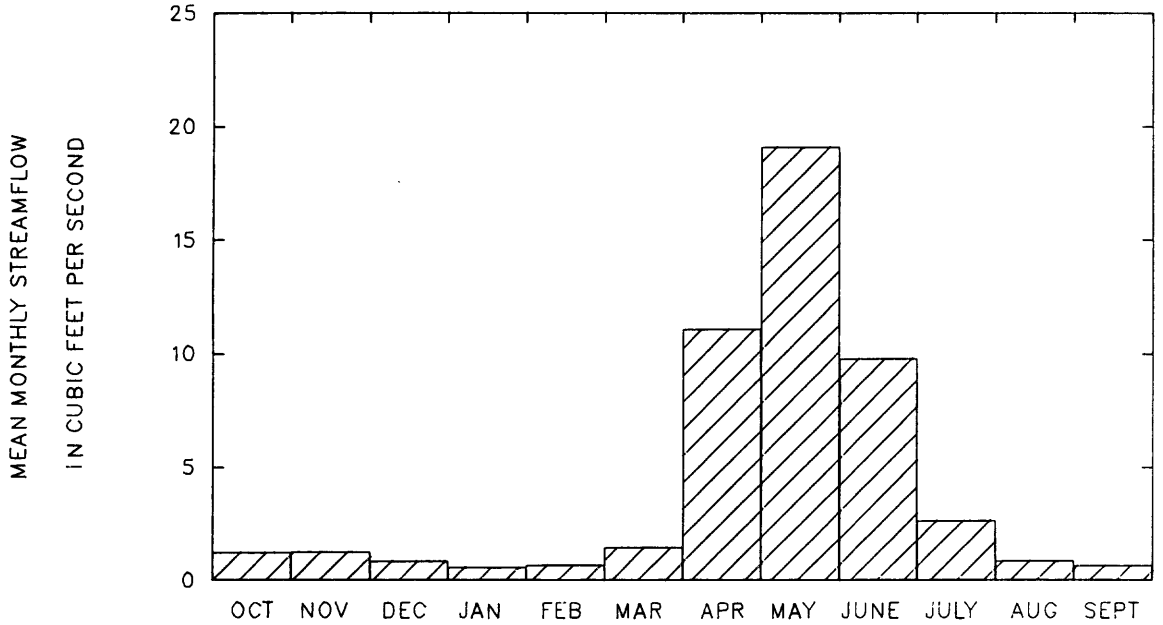
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	34	60	79	---	---	---
3	29	53	72	---	---	---
7	25	47	65	---	---	---
15	22	41	56	---	---	---
30	18	34	46	---	---	---
60	14	26	34	---	---	---
90	11	20	27	---	---	---

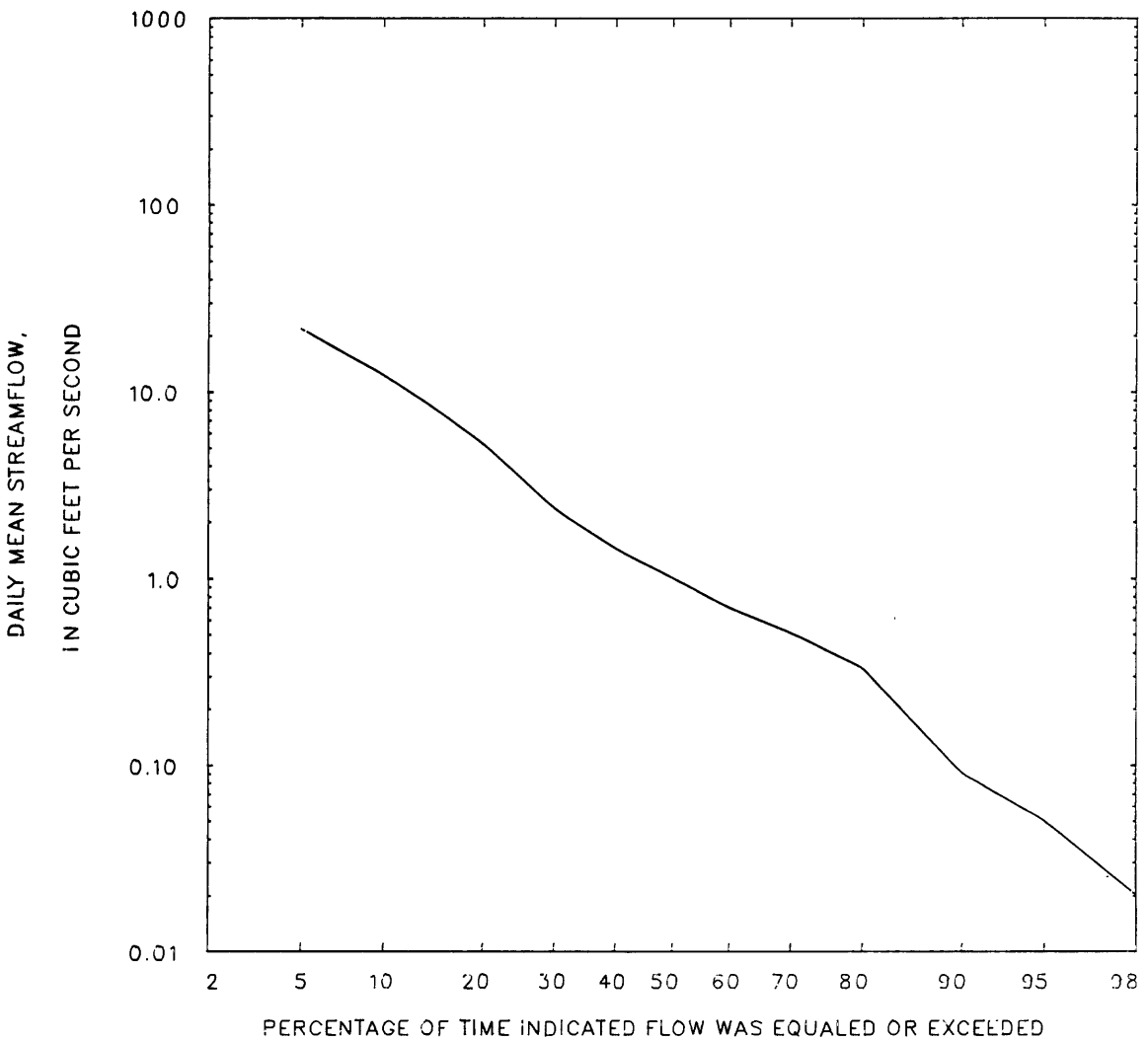
Duration of daily mean flow for period of record 1934-45, 1948-63

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
48	22	12	7.8	5.2	2.3	1.4	1.0	0.69	0.51	0.33	0.09	0.05	0.02	0.01	0.00	0.00

STATION 06754500 PERIOD OF RECORD 1934–45, 1948–63

MIDDLE CROW CREEK NEAR HECLA, WYO.





06755000 SOUTH CROW CREEK NEAR HECLA, WYO.

LOCATION.--Lat 41°07'35", long 105°11'38", in SE¼NE¼ sec.2, T.13 N., R.70 W., Laramie County, on left bank just upstream from high-water line of South Crow Creek Reservoir, 2.5 mi southwest of Hecla, and 2.5 mi northwest of Granite Canyon.

DRAINAGE AREA.--13.9 mi^2.

PERIOD OF RECORD.--May 1933 to September 1969 (no winter records water years 1936-50). Monthly discharge only for some periods; published in WSP 1310. Prior to October 1950, published as South Fork Crow Creek near Hecla.

GAGE.--Water-stage recorder. Altitude of gage is 7,130 ft, from topographic map.

REMARKS.--Diversion above station for irrigation of about 100 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 110 ft^3/s, July 21, 1945, gage height, 3.78 ft, from rating curve extended above 20 ft^3/s; no flow for many days in most years.

Monthly and annual streamflow 1951-69

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	2.1	0.00	0.49	0.55	1.1	3.0
November	1.8	0.00	0.59	0.49	0.83	3.6
December	1.6	0.00	0.46	0.37	0.80	2.8
January	1.3	0.00	0.39	0.32	0.81	2.4
February	1.7	0.00	0.43	0.40	0.91	2.7
March	2.8	0.03	0.98	0.70	0.72	6.0
April	9.2	1.3	4.3	2.3	0.54	26.4
May	13	0.94	4.4	3.5	0.79	27.2
June	19	0.13	2.8	4.1	1.5	17.1
July	5.5	0.00	0.87	1.3	1.5	5.4
August	1.8	0.00	0.31	0.46	1.5	1.9
September	1.8	0.00	0.23	0.46	2.0	1.4
Annual	2.6	0.45	1.4	0.66	0.48	100

Magnitude and probability of annual low flow based on period of record 1952-69

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	---	---	---	---
3	0.00	0.00	---	---	---	---
7	0.00	0.00	---	---	---	---
14	0.00	0.00	---	---	---	---
30	0.00	0.00	---	---	---	---
60	0.00	0.00	---	---	---	---
90	0.00	0.00	---	---	---	---
120	0.00	0.00	---	---	---	---
183	0.17	0.00	---	---	---	---

Magnitude and probability of instantaneous peak flow based on 35 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
17	38	57	91	125	165

Weighted skew = 0.210

Magnitude and probability of annual high flow based on period of record 1951-69

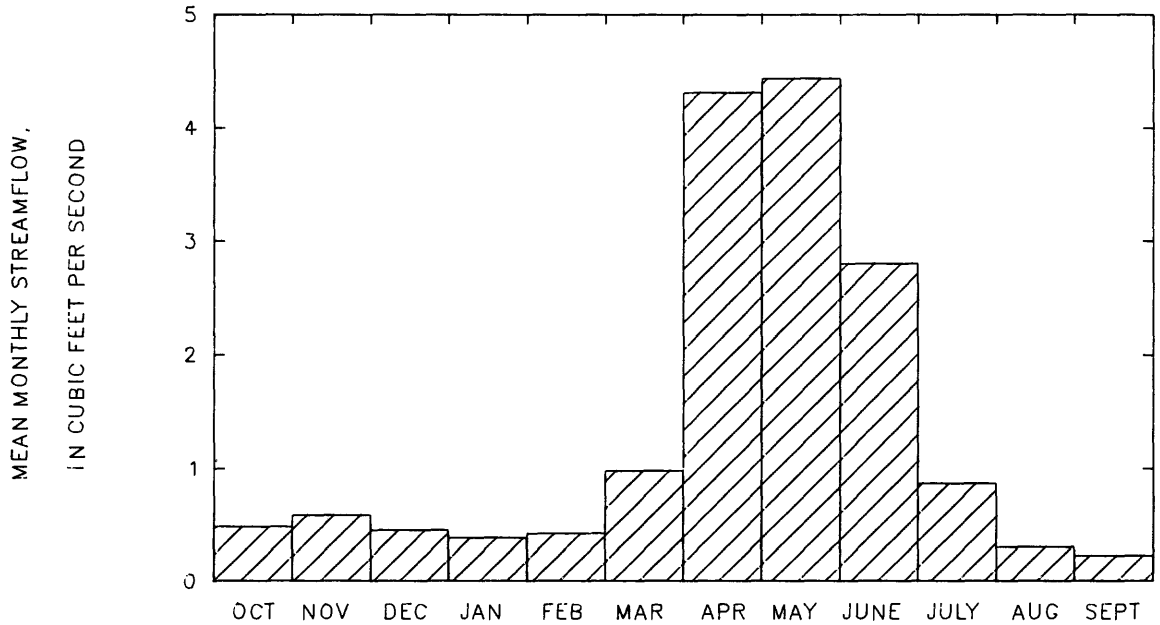
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	11	24	---	---	---	---
3	9.6	19	---	---	---	---
7	7.9	15	---	---	---	---
15	6.4	12	---	---	---	---
30	5.5	9.7	---	---	---	---
60	4.5	7.4	---	---	---	---
90	3.6	5.8	---	---	---	---

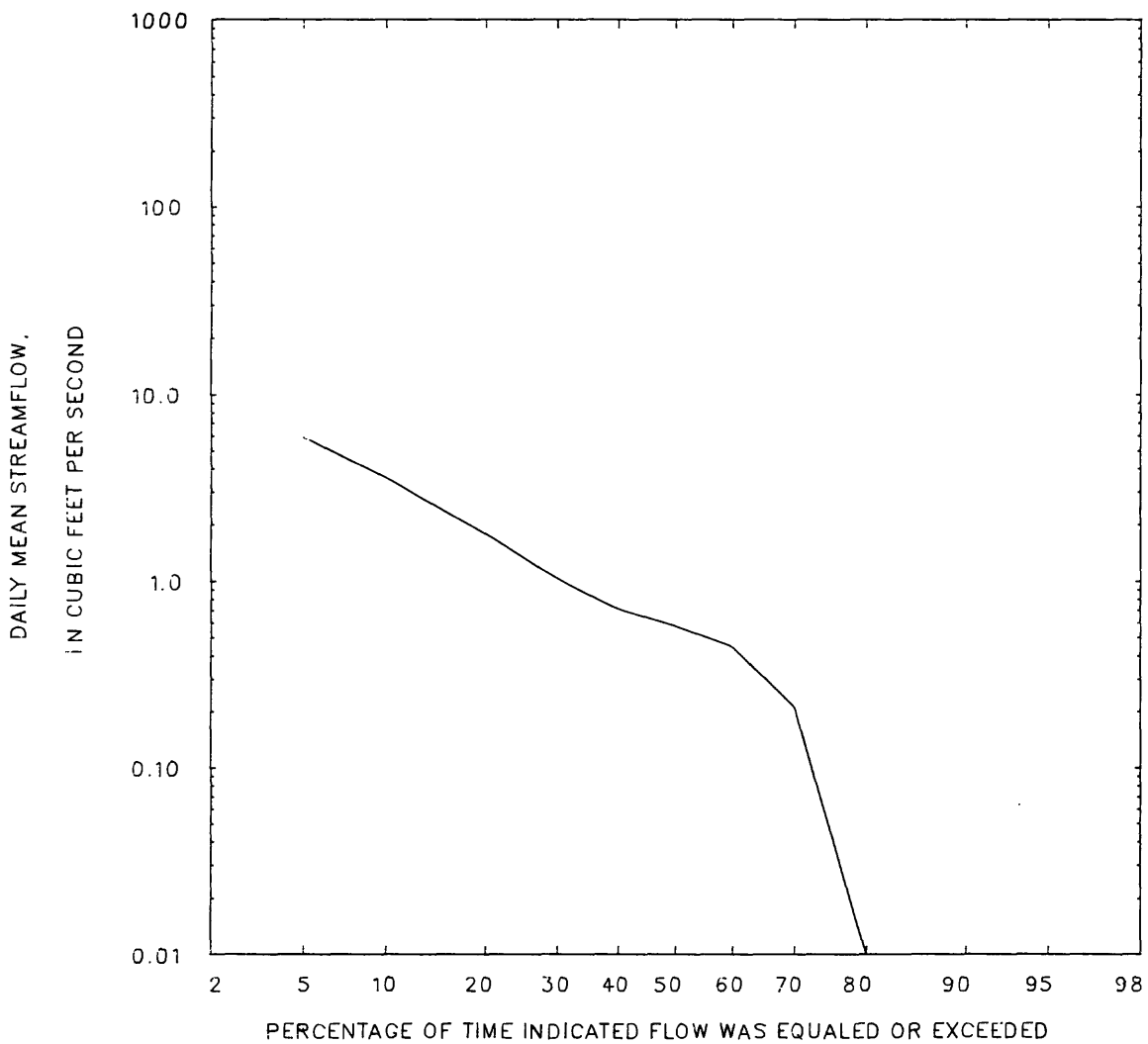
Duration of daily mean flow for period of record 1951-69

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
14	5.8	3.6	2.4	1.8	1.0	0.70	0.57	0.44	0.21	0.01	0.00	0.00	0.00	0.00	0.00	0.00

STATION 06755000 PERIOD OF RECORD 1951–69

SOUTH CROW CREEK NEAR HECLA, WYO.





06762500 LODGEPOLE CREEK AT BUSHNELL, NEB.

LOCATION.--Lat 41°13'50", long 103°53'28", in sec.32, T.15, N., R.57 W., Kimball County, Nebr., on right bank 0.1 mi south of Bushnell at south end of highway bridge on State Highway 53C.

DRAINAGE AREA.--1,350 mi^2.

PERIOD OF RECORD.--October 1931 to current year. Records for March to September 1931 at site 1.5 mi upstream not equivalent owing to diversions. Monthly discharge only for some periods; published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 4,845.31 ft. Prior to March 26, 1938, non-recording gage, March 26, 1938, to July 2, 1981, water stage recorder, July 3 to September 30, 1981, a non-recording gage at previous site 1.7 mi downstream from present site at datum 33.01 ft lower.

REMARKS.--Natural flow of stream affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas. Diversions for irrigation of about 12,600 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft^3/s, September 15, 1950, gage height, 9.98 ft, from rating curve extended above 2,700 ft^3/s on basis of slope-area measurement of peak flow; maximum gage height, 10.06 ft, July 2, 1981, from highwater mark, site and datum then in use; minimum daily discharge, 0.09 ft^3/s, July 20, 1976.

Monthly and annual streamflow 1935-84

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Coefficient of variation	Percent of annual runoff
October	15	2.2	8.8	3.2	0.37	6.9
November	19	3.4	9.6	3.4	0.35	7.5
December	16	3.6	9.2	3.3	0.36	7.2
January	16	2.9	9.1	3.2	0.35	7.1
February	17	4.3	11	3.6	0.33	8.5
March	21	4.8	12	4.1	0.33	9.6
April	22	4.6	12	4.0	0.33	9.6
May	40	3.2	12	6.5	0.52	9.8
June	70	2.6	14	13	0.94	10.8
July	56	0.85	11	9.2	0.84	8.6
August	19	0.90	7.9	4.0	0.50	6.2
September	59	1.3	10	11	1.1	8.2
Annual	18	3.3	11	3.3	0.31	100

Magnitude and probability of annual low flow based on period of record 1935-84

Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	4.1	1.6	0.80	0.40	0.16	0.08
3	4.5	2.1	1.2	0.67	0.32	0.19
7	5.0	2.4	1.4	0.87	0.46	0.28
14	5.5	2.9	1.8	1.1	0.62	0.39
30	5.8	3.2	2.2	1.5	0.93	0.66
60	6.4	3.8	2.7	2.0	1.3	1.0
90	6.9	4.2	3.0	2.2	1.5	1.2
120	7.4	4.6	3.3	2.5	1.8	1.3
183	8.1	5.3	4.1	3.2	2.3	1.9

Magnitude and probability of instantaneous peak flow based on 41 years of record

Discharge, in ft^3/s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
186	876	2130	5860	11600	22100

Weighted skew = 0.460

Magnitude and probability of annual high flow based on period of record 1935-84

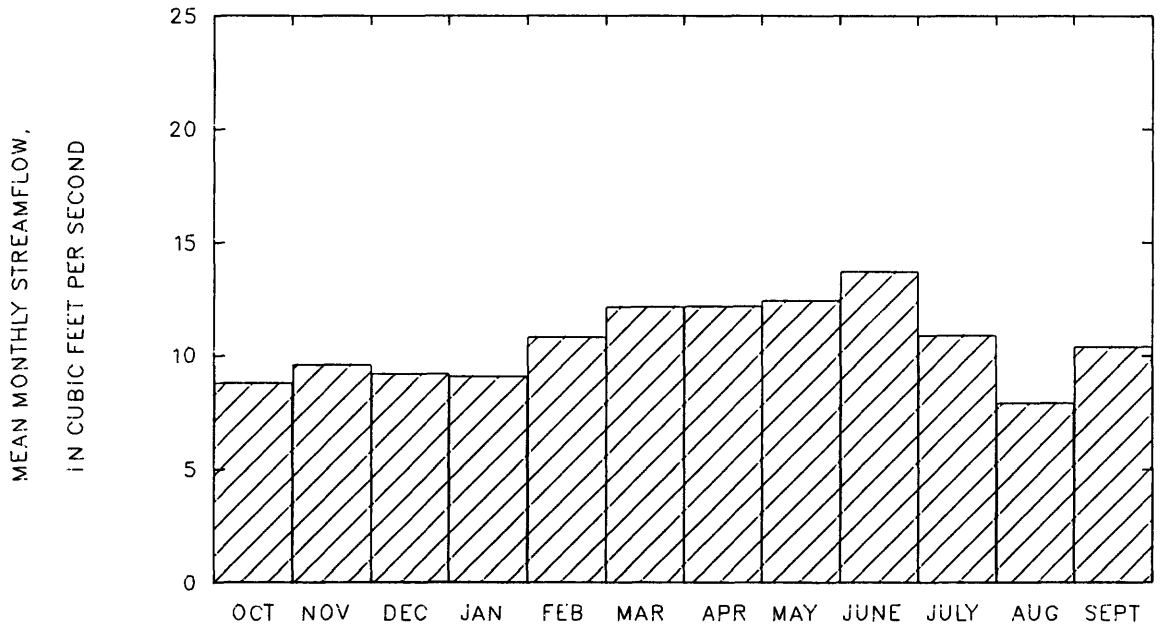
Period (consecutive days)	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	73	222	415	840	1350	2100
3	47	120	205	378	573	845
7	33	70	109	181	256	356
15	24	45	64	97	129	168
30	19	32	44	60	75	93
60	16	24	30	37	42	48
90	15	21	25	30	33	36

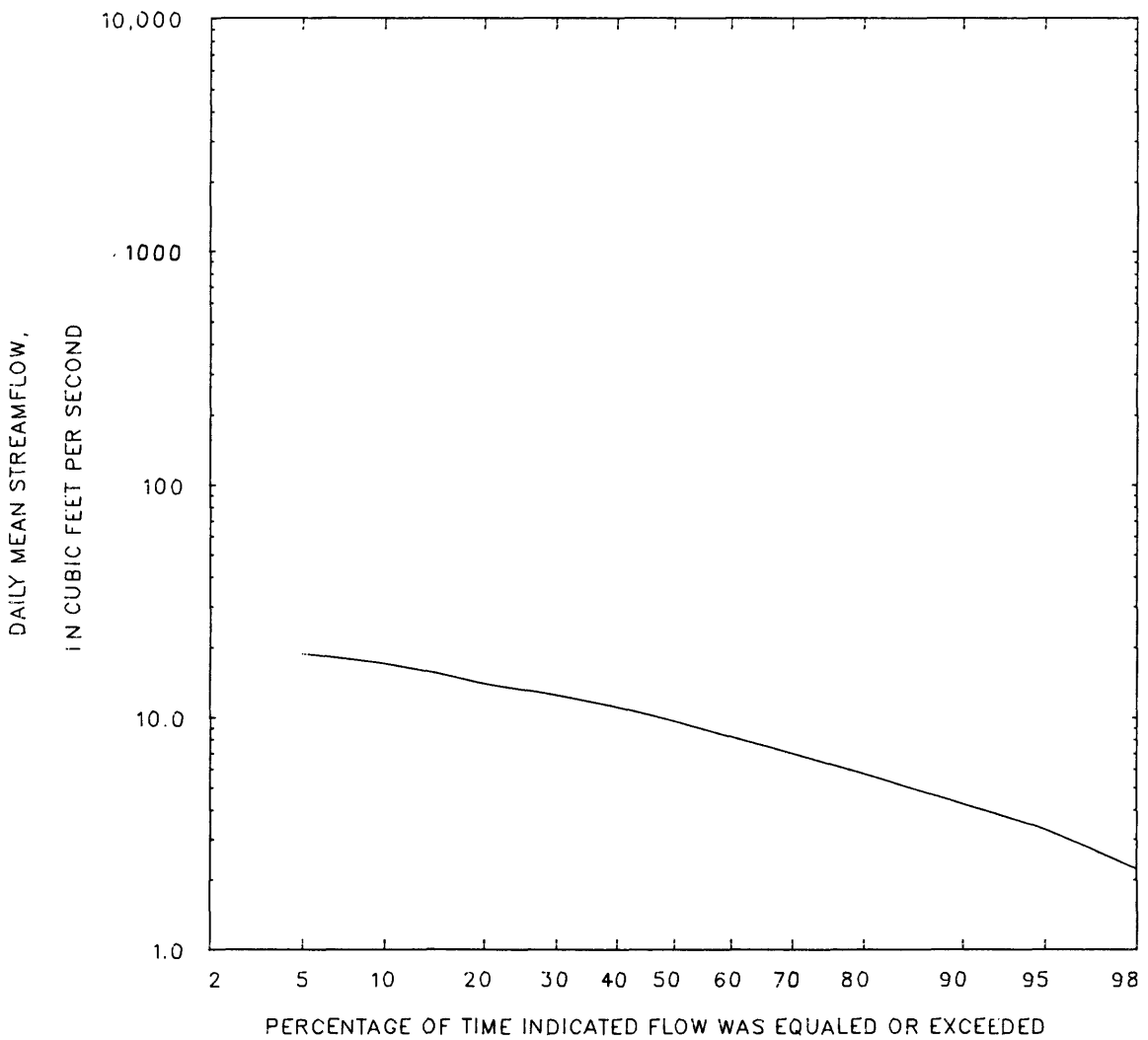
Duration of daily mean flow for period of record 1935-84

Discharge, in ft^3/s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
34	19	17	15	14	12	11	9.6	8.2	7.0	5.7	4.2	3.3	2.2	1.5	1.0	0.46

STATION 06762500 PERIOD OF RECORD 1935--84

LODGEPOLE CREEK AT BUSHNELL, NEB.





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