

FLOW-DURATION HYDROGRAPHS FOR  
SELECTED STREAMFLOW STATIONS  
ON SOUTH DAKOTA STREAMS

By John R. Little

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UNITED STATES DEPARTMENT OF THE INTERIOR

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FLOW-DURATION HYDROGRAPHS FOR SELECTED STREAMFLOW  
STATIONS ON SOUTH DAKOTA STREAMS

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INTRODUCTION

Duration hydrographs show the percent of the time which specified discharges were equaled or exceeded in a given period. The hydrographs in this report show the zero (highest), 20, 50 (median), 80, and 100 (lowest) percent exceedance values. The accompanying tables list the values plotted on the hydrographs plus the 10, 30, 70, and 90 percent exceedance values. The plotting point values in the tables for the hydrographs were calculated using program K596 (Wilson, 1981) which is documented in Chapter IV, Volume I of the U.S. Geological Survey's WATSTORE manual.

For readers who may prefer to use metric units rather than inch-pound units, the conversion factors for the terms in this report are listed below:

<u>Multiply inch-pound units</u>	<u>By</u>	<u>To obtain SI units</u>
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer
acre-foot (acre-ft)	$1.233 \times 10^3$	cubic meter
cubic foot per second (ft <sup>3</sup> /s)	$2.832 \times 10^{-1}$	liter per second

Altitudes given in the report are referenced to the National Geodetic Vertical Datum of 1929 (NGVD). NGVD is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level."

PURPOSE

The purpose of this report is to provide the data in a convenient format to be used for predicting discharges at selected gaging stations in South Dakota.

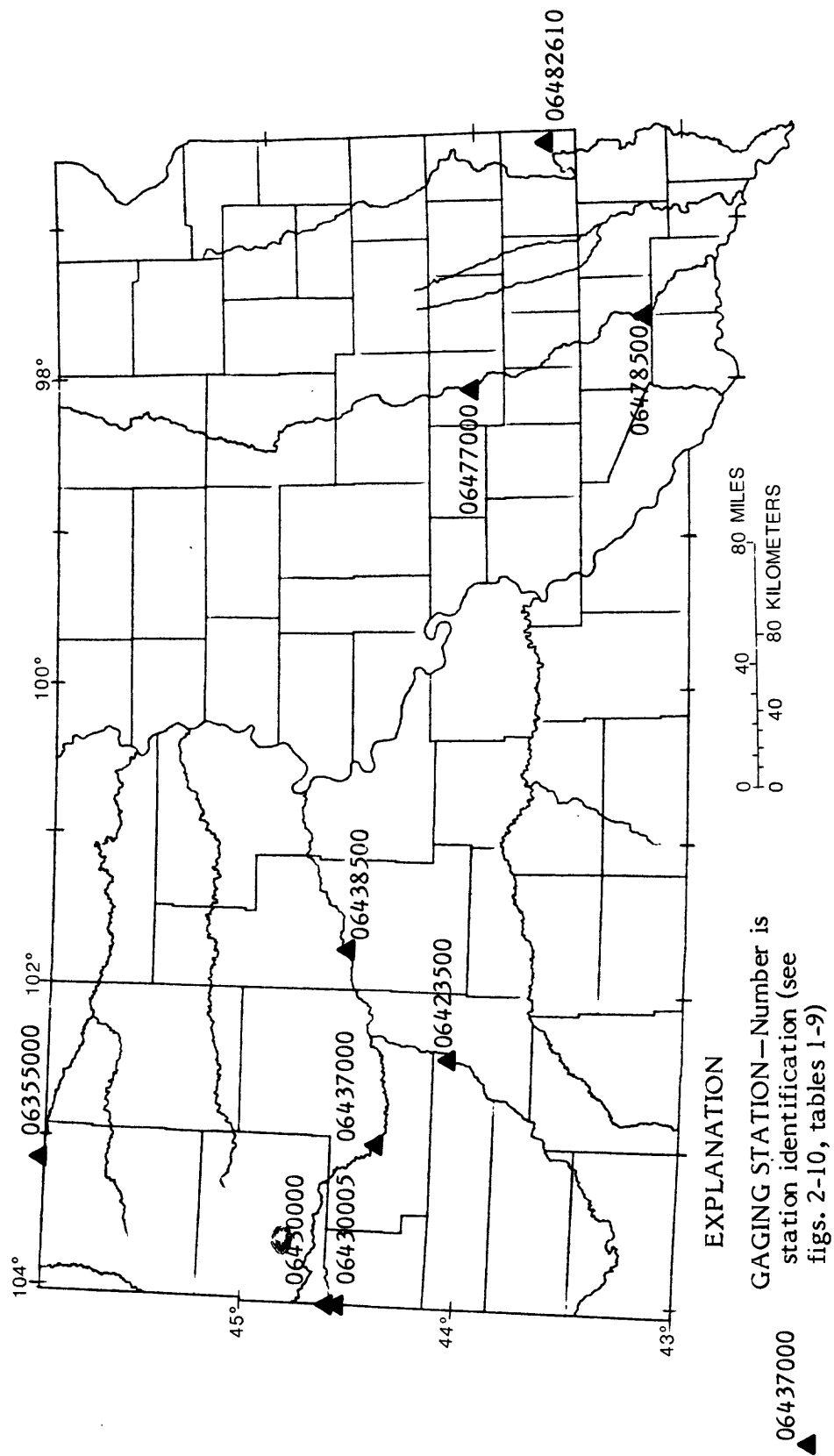


Figure 1.--Map of South Dakota showing the location of selected streamflow stations.

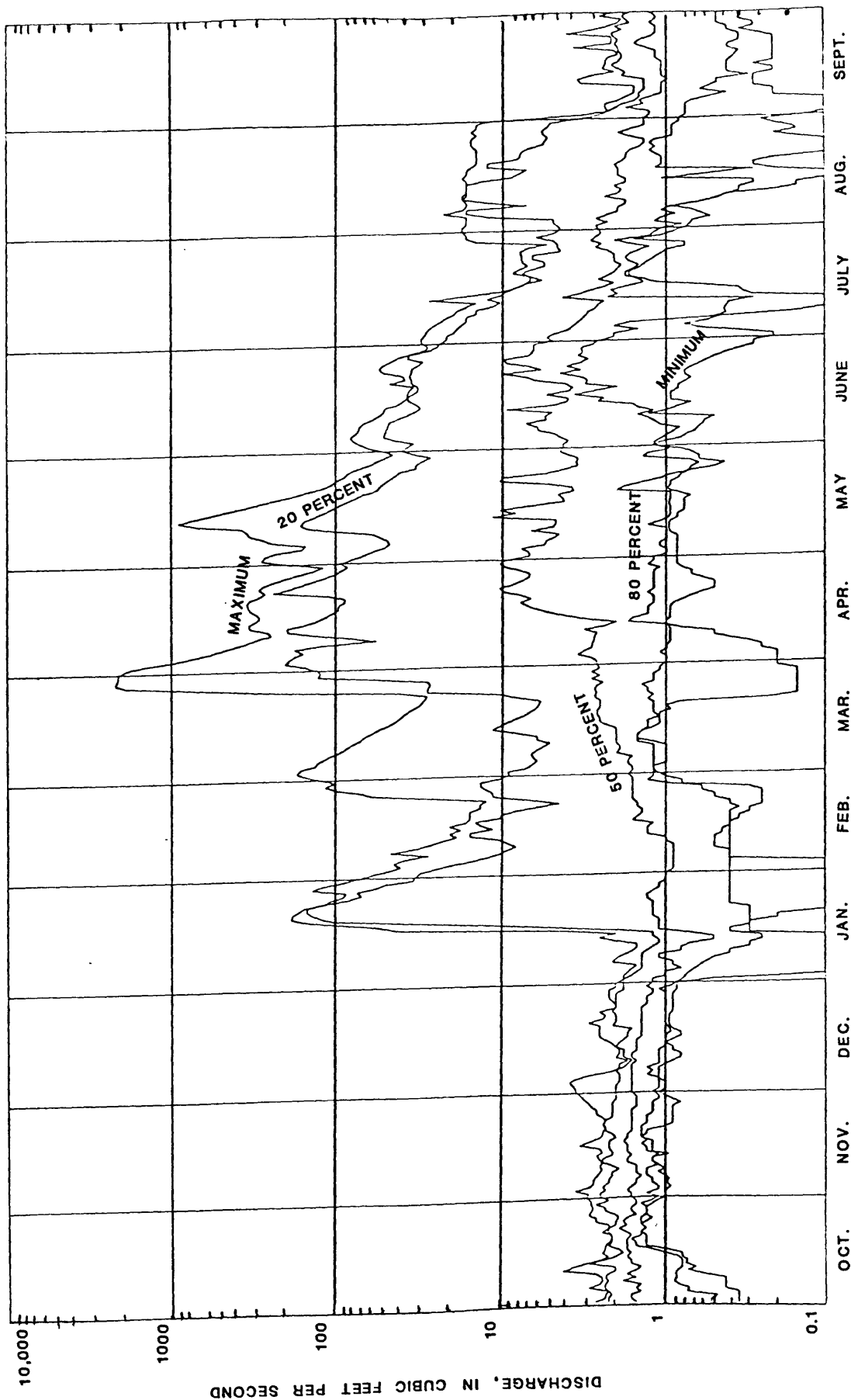


Figure 2.--Duration hydrograph for 9-year period beginning October 1972, Grand River basin, station 06355000, North Fork Grand River at Haley, N. Dak.

Table 1.--Plotting points for duration hydrograph for 9-year period beginning October 1972, Grand River basin, station 06355000, North Fork Grand River at Haley, N. Dak.

LOCATION.--Lat 45°57'39", long 103°07'09", at southwest corner of sec.30, T.129 N., R.99 W., Bowman County, Hydrologic Unit 10130301, on left bank 10 ft downstream from county highway bridge, 300 ft south of post office at Haley, and 1 mi north of South Dakota state line.

DRAINAGE AREA.--509 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1908 to September 1917, October 1945 to September 1981. Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS (WATER YEARS).--WSP 1239: 1908-10, 1913-15(M), 1917(M).

GAGE.--Water-stage recorder. Datum of gage is 2,658.60 ft National Geodetic Vertical Datum of 1929. Oct. 23, 1945, to June 18, 1951, nonrecording gage on downstream side of bridge near left abutment at present datum. See WSP 1729 or 1917 for history of changes prior to Oct. 23, 1945.

REMARKS.--Records good. Flow regulated since August 1966 by Bowman-Haley Lake (station 06354988) 8 mi upstream.

AVERAGE DISCHARGE.--45 years, 27.7 ft<sup>3</sup>/s (20,100 acre-ft/yr); median of yearly mean discharges, 22 ft<sup>3</sup>/s (15,900 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft<sup>3</sup>/s Apr. 7, 1952 (gage height, 17.03 ft), from rating curve extended above 4,500 ft<sup>3</sup>/s on basis of discharge measurement at gage height, 15.09 ft, half of which was indirect measurement of flow over roadway outside of main channel; maximum gage height, 17.10 ft Apr. 15, 1950; no flow at times.



Table 1.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Grand River basin, station 06355000,  
North Fork Grand River at Haley, N. Dak.--Continued

DATE	Percent exceedance values								
	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW
10-1	2.60	2.60	2.20	1.60	1.50	0.90	0.52	0.35	0.35
10-2	2.30	2.30	2.20	2.10	1.60	1.00	.51	.35	.35
10-3	2.30	2.30	2.10	1.60	1.60	1.20	.47	.35	.35
10-4	2.20	2.20	2.20	2.20	1.40	1.20	.73	.35	.35
10-5	2.90	2.90	2.30	2.20	1.50	1.20	.70	.42	.42
10-6	2.50	2.50	2.30	2.20	1.40	1.10	.82	.42	.42
10-7	2.40	2.40	2.20	2.10	1.80	1.10	.68	.42	.42
10-8	2.40	2.40	2.30	2.10	1.50	1.20	.84	.42	.42
10-9	2.60	2.60	2.20	1.80	1.70	1.40	.86	.56	.56
10-10	4.10	4.10	2.00	1.70	1.50	1.30	.83	.71	.71
10-11	3.60	3.00	2.00	1.70	1.40	1.30	.78	.64	.64
10-12	3.00	3.00	2.90	1.70	1.60	1.40	.78	.74	.74
10-13	2.50	2.50	2.30	1.60	1.60	1.40	.78	.72	.72
10-14	2.20	2.20	2.00	1.60	1.70	1.40	.83	.78	.78
10-15	2.40	2.40	1.80	1.70	1.60	1.20	.99	.78	.78
10-16	2.30	2.30	1.90	1.90	1.70	1.70	1.20	.97	.97
10-17	2.30	2.30	2.20	2.20	1.70	1.70	1.50	1.30	1.30
10-18	2.20	2.20	2.10	2.00	1.70	1.70	1.50	1.30	1.30
10-19	2.10	2.10	2.10	2.00	1.70	1.70	1.60	1.30	1.30
10-20	2.10	2.10	2.10	1.90	1.60	1.50	1.40	1.30	1.30
10-21	2.40	2.40	2.20	1.90	1.70	1.50	1.40	1.40	1.40
10-22	2.20	2.20	2.20	1.90	1.90	1.40	1.30	1.30	1.30
10-23	2.20	2.20	2.00	1.90	1.70	1.50	1.40	1.40	1.40
10-24	2.60	2.60	2.00	1.90	1.80	1.50	1.40	1.30	1.30
10-25	2.60	2.60	1.90	1.80	1.70	1.40	1.40	1.20	1.20
10-26	2.90	2.90	2.00	1.80	1.50	1.30	1.30	1.30	1.30
10-27	2.80	2.80	2.50	1.70	1.60	1.50	1.30	1.30	1.30
10-28	2.70	2.70	2.30	1.80	1.60	1.40	1.30	1.30	1.30
10-29	2.80	2.80	2.60	2.00	1.50	1.40	1.40	1.20	1.20
10-30	2.40	2.40	2.20	1.80	1.50	1.50	1.20	1.10	1.10
10-31	3.00	3.00	2.40	2.00	1.60	1.50	1.10	.97	.97
MEAN	2.52	2.52	1.93	1.67	1.61	1.49	1.00	1.04	1.04

Table 1.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Grand River basin, station 06355000,  
North Fork Grand River at Haley, N. Dak.--Continued

Percent exceedance values										
DATE	HIGH	.10	.20	.30	.50	.70	.80	.90	1.00	1.10
11- 1	2.90	2.90	2.50	2.10	1.60	1.40	1.30	1.00	1.00	1.00
11- 2	3.50	3.50	2.30	1.80	1.70	1.40	1.10	.98	.98	.98
11- 3	2.90	2.90	2.40	2.10	1.60	1.40	1.10	.92	.92	.92
11- 4	2.70	2.70	2.20	2.00	1.50	1.40	1.20	.98	.98	.98
11- 5	2.70	2.70	2.20	1.90	1.50	1.40	1.20	.95	.95	.95
11- 6	2.60	2.60	2.10	1.90	1.40	1.40	1.30	1.00	1.00	1.00
11- 7	2.50	2.50	2.10	1.50	1.50	1.40	1.30	1.10	1.10	1.10
11- 8	2.40	2.40	1.90	1.80	1.50	1.50	1.30	1.00	1.00	1.00
11- 9	2.50	2.50	2.10	1.80	1.50	1.30	1.10	1.10	1.10	1.10
11-10	2.40	2.40	2.40	1.90	1.70	1.30	1.20	1.20	1.20	1.20
11-11	2.50	2.50	2.40	2.00	1.70	1.50	1.20	1.20	1.20	1.20
11-12	2.60	2.60	2.10	2.00	1.60	1.20	1.10	.95	.95	.95
11-13	2.40	2.40	2.10	1.50	1.70	1.50	1.30	1.20	1.20	1.20
11-14	2.50	2.50	2.20	2.10	1.70	1.40	1.30	1.20	1.20	1.20
11-15	3.30	3.30	2.20	2.20	1.70	1.70	1.40	1.20	1.20	1.20
11-16	2.90	2.90	2.20	2.00	1.80	1.60	1.30	1.20	1.20	1.20
11-17	2.50	2.50	2.00	1.90	1.70	1.60	1.40	1.40	1.40	1.40
11-18	2.40	2.40	2.10	2.00	1.70	1.50	1.40	1.30	1.30	1.30
11-19	2.40	2.40	2.30	2.20	1.60	1.40	1.40	1.30	1.30	1.30
11-20	2.30	2.30	2.30	2.20	1.60	1.40	1.40	1.00	1.00	1.00
11-21	2.40	2.40	2.40	2.20	1.60	1.30	1.30	.90	.90	.90
11-22	2.30	2.30	2.30	2.10	1.60	1.30	1.30	.90	.90	.90
11-23	2.40	2.40	2.10	1.90	1.60	1.30	1.30	.90	.90	.90
11-24	2.60	2.60	2.10	1.80	1.60	1.30	1.20	.90	.90	.90
11-25	2.50	2.50	2.10	1.80	1.60	1.30	1.20	.90	.90	.90
11-26	2.80	2.80	2.10	1.80	1.50	1.30	1.20	.90	.90	.90
11-27	2.90	2.90	2.10	1.70	1.50	1.20	1.20	.80	.80	.80
11-28	3.10	3.10	2.00	1.60	1.50	1.10	1.10	.90	.90	.90
11-29	3.20	3.20	2.00	1.60	1.50	1.10	1.10	1.00	1.00	1.00
11-30	3.40	3.40	2.00	1.60	1.60	1.30	1.20	1.10	1.10	1.10
MEAN	2.47	2.47	2.24	1.95	1.56	1.37	1.21	1.16	1.16	1.16

Table 1.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Grand River basin, station 06355000,  
North Fork Grand River at Haley, N. Dak.--Continued

Percent exceedance values									
DATE	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW
12- 1	3.50	3.50	2.00	1.70	1.60	1.40	1.10	1.00	1.00
12- 2	3.60	3.60	2.00	1.60	1.60	1.40	1.10	1.00	1.00
12- 3	3.80	3.80	1.90	1.80	1.60	1.50	1.10	1.00	1.00
12- 4	3.50	3.50	1.90	1.70	1.60	1.40	1.10	1.10	1.10
12- 5	2.90	2.90	1.90	1.70	1.60	1.40	1.30	1.10	1.10
12- 6	2.10	2.10	2.00	1.60	1.60	1.40	1.20	1.10	1.10
12- 7	1.90	1.90	1.60	1.70	1.60	1.30	1.30	1.10	1.10
12- 8	1.90	1.90	1.70	1.60	1.60	1.40	1.10	1.00	1.00
12- 9	1.70	1.70	1.60	1.60	1.50	1.50	1.10	.90	.90
12-10	2.00	2.00	1.80	1.70	1.60	1.30	1.10	.80	.80
12-11	1.90	1.90	1.80	1.60	1.60	1.10	1.10	.80	.80
12-12	1.90	1.90	1.60	1.60	1.50	1.20	1.10	.90	.90
12-13	2.00	2.00	2.00	1.60	1.50	1.20	1.00	.90	.90
12-14	2.10	2.10	1.90	1.60	1.50	1.20	1.00	1.00	1.00
12-15	2.30	2.30	1.80	1.50	1.50	1.20	1.00	.90	.90
12-16	2.50	2.50	1.70	1.50	1.40	1.20	1.00	.80	.80
12-17	2.50	2.50	1.70	1.50	1.40	1.00	.93	.80	.80
12-18	2.50	2.50	1.60	1.50	1.40	1.10	.95	.90	.90
12-19	2.50	2.50	2.10	1.70	1.40	1.00	1.00	.95	.95
12-20	2.90	2.90	2.00	1.80	1.40	1.00	1.00	.95	.95
12-21	2.40	2.40	2.00	1.80	1.40	1.20	1.00	.95	.95
12-22	2.30	2.30	2.00	2.00	1.40	1.20	1.00	.95	.95
12-23	2.50	2.50	2.10	2.00	1.40	1.10	1.00	.90	.90
12-24	2.00	2.00	2.00	2.00	1.40	1.20	1.00	.90	.90
12-25	2.00	2.00	2.00	1.60	1.30	1.20	1.00	.90	.90
12-26	2.10	2.10	2.00	1.80	1.30	1.20	1.00	.90	.90
12-27	2.20	2.20	2.00	1.80	1.30	1.10	1.00	.90	.90
12-28	2.20	2.20	2.00	1.80	1.20	1.10	1.00	.90	.90
12-29	2.20	2.20	1.80	1.80	1.20	1.10	1.10	.85	.85
12-30	2.00	2.00	1.80	1.50	1.30	1.00	.93	.85	.85
12-31	2.00	2.00	1.80	1.30	1.20	.90	.85	.80	.80
MEAN	1.85	1.85	1.77	1.69	1.59	1.33	1.09	1.09	1.09

Table 1.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Grand River basin, station 06355000,  
North Fork Grand River at Haley, N. Dak.--Continued

DATE	HIGH	Percent exceedance values									
		1.0	2.0	3.0	5.0	7.0	8.0	9.0	10.0	11.0	12.0
1-1	1.80	1.80	1.80	1.30	1.20	0.85	0.78	0.50	0.50	0.50	0.50
1-2	1.80	1.80	1.60	1.30	1.60	.85	.75	.00	.00	.00	.00
1-3	1.70	1.70	1.50	1.30	1.00	.80	.70	.00	.00	.00	.00
1-4	1.50	1.60	1.40	1.40	.80	.80	.65	.00	.00	.00	.00
1-5	1.50	1.50	1.40	1.40	.90	.80	.60	.00	.00	.00	.00
1-6	2.10	2.10	1.40	1.40	.90	.80	.55	.00	.00	.00	.00
1-7	2.00	2.00	1.40	1.40	1.10	.60	.50	.00	.00	.00	.00
1-8	1.80	1.80	1.40	1.20	1.10	.45	.40	.00	.00	.00	.00
1-9	1.60	1.30	1.20	.60	.60	.40	.40	.00	.00	.00	.00
1-10	1.50	1.20	1.20	.80	.80	.55	.30	.00	.00	.00	.00
1-11	1.50	1.50	1.00	1.00	.70	.30	.30	.00	.00	.00	.00
1-12	2.00	2.00	1.00	1.00	.50	.30	.25	.00	.00	.00	.00
1-13	2.50	2.50	1.10	1.10	.50	.30	.25	.00	.00	.00	.00
1-14	2.00	2.00	1.10	1.10	.70	.40	.40	.30	.30	.30	.30
1-15	3.90	2.00	1.50	1.10	1.10	.40	.40	.50	.50	.50	.50
1-16	40.00	4.80	2.00	1.10	1.10	.40	.30	.30	.30	.30	.30
1-17	52.00	12.00	2.00	1.10	1.10	.40	.30	.30	.30	.30	.30
1-18	89.00	37.00	2.30	1.10	1.10	.50	.30	.20	.20	.20	.20
1-19	148.00	100.00	2.30	1.20	1.20	.50	.30	.20	.20	.20	.20
1-20	185.00	122.00	2.90	1.20	1.20	.50	.30	.10	.10	.10	.10
1-21	181.00	139.00	2.60	1.20	1.20	.50	.30	.10	.10	.10	.10
1-22	167.00	148.00	2.20	1.20	1.20	.50	.40	.05	.05	.05	.05
1-23	153.00	105.00	2.20	1.20	1.20	.50	.40	.05	.05	.05	.05
1-24	117.00	110.00	2.30	1.30	1.30	.50	.40	.05	.05	.05	.05
1-25	104.00	81.00	2.10	1.30	1.30	.50	.40	.05	.05	.05	.05
1-26	87.00	67.00	1.80	1.20	1.20	.40	.40	.05	.05	.05	.05
1-27	84.00	72.00	1.80	1.10	1.10	.40	.40	.05	.05	.05	.05
1-28	136.00	55.00	1.60	1.10	1.10	.40	.40	.05	.05	.05	.05
1-29	118.00	49.00	2.00	1.00	1.00	.40	.40	.03	.03	.03	.03
1-30	88.00	33.00	2.50	1.00	1.00	.40	.40	.03	.03	.03	.03
1-31	69.00	32.00	3.10	1.00	1.00	.40	.40	.03	.03	.03	.03
MEAN	56.39	41.63	2.01	1.17	.63	.46	.42	.42	.42	.42	.42

Table 1.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Grand River basin, station 06355000,  
North Fork Grand River at Haley, N. Dak.--Continued

DATE	Percent exceedance values								
	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW
2-1	57.00	57.00	30.00	3.60	0.90	0.40	0.40	0.03	0.03
2-2	46.00	46.00	25.00	4.50	.90	.40	.40	.03	.03
2-3	39.00	39.00	20.00	3.00	.90	.40	.40	.03	.03
2-4	44.00	43.00	15.00	2.20	.90	.65	.40	.40	.40
2-5	37.00	37.00	12.00	2.00	.90	.65	.40	.40	.40
2-6	27.00	27.00	10.00	1.50	.90	.60	.40	.40	.40
2-7	45.00	45.00	9.00	1.50	.90	.60	.50	.40	.40
2-8	32.00	32.00	8.00	1.50	.90	.55	.50	.40	.40
2-9	26.00	26.00	9.00	2.00	1.00	.70	.50	.40	.40
2-10	22.00	22.00	10.00	4.00	1.00	.70	.50	.40	.40
2-11	18.00	18.00	15.00	6.00	1.30	.70	.45	.40	.40
2-12	20.00	20.00	15.00	5.30	1.30	.70	.45	.40	.40
2-13	17.00	17.00	11.00	4.60	1.30	.60	.40	.40	.40
2-14	20.00	20.00	13.00	4.00	1.20	.90	.40	.40	.40
2-15	16.00	16.00	14.00	4.00	1.60	1.10	.40	.55	.55
2-16	15.00	15.00	10.00	3.60	1.50	1.20	.40	.55	.55
2-17	15.00	15.00	9.60	3.50	1.40	1.20	.40	.50	.50
2-18	15.00	15.00	8.00	3.10	1.40	1.00	.35	.50	.50
2-19	13.00	13.00	5.90	2.80	1.50	1.50	.40	.25	.25
2-20	13.00	13.00	4.40	2.70	1.50	1.40	.40	.25	.25
2-21	12.00	12.00	6.60	2.60	1.60	1.40	.50	.25	.25
2-22	26.00	26.00	11.00	2.60	1.60	1.40	.50	.25	.25
2-23	57.00	57.00	11.00	2.60	1.60	1.30	.60	.25	.25
2-24	69.00	69.00	12.00	2.60	1.60	1.00	.60	.50	.50
2-25	24.00	25.00	13.00	2.60	1.60	1.00	.46	.40	.40
2-26	112.00	112.00	13.00	2.60	1.60	1.30	1.50	.40	.40
2-27	98.00	98.00	10.00	2.40	1.60	1.20	1.20	1.00	1.00
2-28	115.00	115.00	8.70	2.70	1.70	1.50	1.20	1.10	1.10
MEAN	38.16	38.16	13.95	3.07	1.31	1.06	.54	.52	.52

Table 1.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Grand River basin, station 06355000,  
North Fork Grand River at Haley, N. Dak.--Continued

DATE	Percent exceedance values									
	HIGH	.10	.20	.30	.50	.70	.90	1.00	1.00	1.00
3-1	150.00	150.00	9.00	2.50	1.60	1.50	1.20	1.20	1.20	1.20
3-2	170.00	170.00	6.90	2.10	1.60	1.40	1.20	1.20	1.20	1.20
3-3	140.00	140.00	6.40	2.70	1.70	1.40	1.20	1.20	1.20	1.20
3-4	130.00	130.00	6.00	2.50	1.70	1.40	1.20	1.20	1.20	1.20
3-5	124.00	124.00	6.30	3.00	1.60	1.50	1.20	1.20	1.20	1.20
3-6	113.00	113.00	6.50	3.00	2.00	1.50	1.20	1.20	1.20	1.20
3-7	101.00	101.00	6.00	2.50	1.90	1.50	1.20	1.20	1.20	1.20
3-8	89.00	89.00	5.50	2.50	1.90	1.50	1.20	1.20	1.20	1.20
3-9	82.00	82.00	5.00	2.50	2.00	1.50	1.20	1.20	1.20	1.20
3-10	75.00	75.00	6.00	2.50	2.00	1.50	1.20	1.20	1.20	1.20
3-11	68.00	68.00	6.00	2.40	2.00	1.50	1.20	1.20	1.20	1.20
3-12	63.00	63.00	8.00	2.70	2.00	1.40	1.20	1.20	1.20	1.20
3-13	57.00	57.00	11.00	2.70	2.00	1.70	1.20	1.20	1.20	1.20
3-14	52.00	52.00	10.00	2.70	2.30	1.70	1.10	1.10	1.10	1.10
3-15	46.00	46.00	9.00	2.70	2.50	1.60	1.10	1.10	1.10	1.10
3-16	42.00	42.00	8.00	3.00	2.50	1.50	1.10	1.10	1.10	1.10
3-17	39.00	39.00	7.00	3.00	2.60	1.60	1.10	1.10	1.10	1.10
3-18	37.00	37.00	6.50	3.00	2.60	1.70	.94	.94	.94	.94
3-19	34.00	34.00	6.00	3.50	2.50	1.40	1.00	1.00	1.00	1.00
3-20	31.00	31.00	5.80	4.00	2.50	1.30	.81	.81	.81	.81
3-21	29.00	29.00	5.70	4.50	2.50	1.50	.22	.22	.22	.22
3-22	28.00	28.00	8.00	5.60	2.70	1.40	.15	.15	.15	.15
3-23	27.00	27.00	10.00	5.70	2.60	1.30	.15	.15	.15	.15
3-24	40.00	40.00	27.00	7.00	2.70	1.50	.15	.15	.15	.15
3-25	310.00	310.00	27.00	10.00	2.60	1.60	.15	.15	.15	.15
3-26	770.00	770.00	26.00	6.50	2.40	1.60	.15	.15	.15	.15
3-27	1950.00	1950.00	27.00	5.40	2.80	2.20	.15	.15	.15	.15
3-28	2250.00	2250.00	52.00	25.00	2.50	2.10	.15	.15	.15	.15
3-29	2200.00	2200.00	125.00	21.00	2.80	2.00	.15	.15	.15	.15
3-30	2160.00	2160.00	120.00	20.00	2.50	2.00	.20	.20	.20	.20
3-31	2130.00	2130.00	125.00	20.00	2.60	1.90	.20	.20	.20	.20
MEAN	582.99	582.99	62.58	16.21	2.25	1.86	1.13	1.13	1.13	1.13

Table 1.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Grand River basin, station 06355000,  
North Fork Grand River at Haley, N. Dak.--Continued

Percent exceedance values									
DAIF	HIGH	.10	.20	.30	.50	.70	.80	.90	1.00
4-1	1930.00	1930.00	150.00	19.00	2.60	1.90	1.00	0.20	0.20
4-2	1530.00	1530.00	200.00	17.00	2.40	1.90	1.00	.20	.20
4-3	1040.00	1040.00	120.00	17.00	3.40	1.80	1.10	.20	.20
4-4	804.00	804.00	175.00	16.00	3.10	1.80	1.00	.25	.25
4-5	627.00	627.00	155.00	15.00	2.80	1.80	1.00	.25	.25
4-6	515.00	515.00	175.00	15.00	2.80	1.80	.95	.30	.30
4-7	421.00	421.00	120.00	15.00	2.70	1.80	.95	.40	.40
4-8	354.00	354.00	55.00	14.00	2.70	1.80	.95	.50	.50
4-9	306.00	306.00	80.00	13.00	2.60	1.80	.95	.50	.50
4-10	248.00	248.00	130.00	12.00	3.10	1.90	.95	.80	.80
4-11	260.00	260.00	193.00	12.00	2.50	1.80	1.00	1.00	1.00
4-12	340.00	340.00	197.00	12.00	2.00	1.80	1.70	1.00	1.00
4-13	345.00	346.00	151.00	11.00	3.00	1.70	1.60	.95	.95
4-14	316.00	316.00	127.00	11.00	4.00	1.60	1.50	.95	.95
4-15	296.00	296.00	114.00	16.00	5.00	1.70	1.30	.95	.95
4-16	306.00	306.00	103.00	11.00	6.00	2.20	1.30	.95	.95
4-17	336.00	336.00	94.00	10.00	6.80	2.00	1.20	.90	.90
4-18	350.00	350.00	94.00	9.10	7.50	1.70	1.20	.80	.80
4-19	356.00	356.00	86.00	13.00	6.50	1.70	1.20	.70	.70
4-20	336.00	336.00	85.00	25.00	7.40	1.50	1.30	.60	.60
4-21	294.00	294.00	109.00	83.00	9.40	1.40	1.20	.50	.50
4-22	273.00	273.00	238.00	84.00	10.00	1.30	1.20	.50	.50
4-23	300.00	300.00	192.00	81.00	8.30	1.30	1.20	.50	.50
4-24	279.00	279.00	162.00	73.00	7.40	1.20	1.20	.60	.60
4-25	237.00	237.00	135.00	63.00	6.70	1.30	1.20	.70	.70
4-26	199.00	199.00	114.00	58.00	6.60	1.30	1.20	.70	.70
4-27	163.00	163.00	99.00	53.00	7.60	1.30	1.10	.80	.80
4-28	133.00	133.00	90.00	51.00	9.20	1.30	1.30	.86	.86
4-29	116.00	116.00	82.00	78.00	10.00	1.30	1.20	.86	.86
4-30	200.00	200.00	92.00	74.00	8.80	1.20	1.20	.86	.86
N-FAN	321.73	321.73	205.06	72.83	7.41	1.76	1.62	.85	.85

Table 1.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Grand River basin, station 06355000,  
North Fork Grand River at Haley, N. Dak.--Continued

Percent exceedance values									
DATE	HIGH	.10	.20	.30	.50	.70	.90	1.0K	
5-1	288.00	288.00	78.00	67.00	6.60	1.20	0.55	0.86	
5-2	273.00	273.00	68.00	60.00	6.70	1.30	0.56	0.86	
5-3	232.00	232.00	58.00	54.00	7.40	1.30	0.56	0.86	
5-4	160.00	160.00	50.00	46.00	5.40	1.30	0.56	0.86	
5-5	149.00	149.00	46.00	45.00	5.30	1.10	0.56	0.86	
5-6	246.00	246.00	47.00	40.00	4.70	1.10	0.56	0.86	
5-7	284.00	284.00	52.00	43.00	4.40	1.30	0.95	0.95	
5-8	343.00	343.00	59.00	48.00	6.50	1.30	0.97	0.97	
5-9	353.00	353.00	99.00	42.00	4.80	1.30	0.97	0.97	
5-10	381.00	381.00	149.00	41.00	4.60	1.50	0.95	0.95	
5-11	717.00	717.00	161.00	39.00	4.60	1.60	0.86	0.86	
5-12	947.00	947.00	152.00	36.00	11.00	1.60	0.86	0.86	
5-13	776.00	776.00	133.00	36.00	8.00	1.60	0.78	0.78	
5-14	600.00	600.00	118.00	32.00	10.00	1.90	0.95	0.95	
5-15	460.00	460.00	105.00	32.00	6.60	2.10	0.98	0.98	
5-16	357.00	357.00	94.00	30.00	4.10	2.10	0.95	0.95	
5-17	293.00	293.00	84.00	30.00	4.20	2.10	0.95	0.95	
5-18	230.00	230.00	74.00	32.00	4.50	1.70	0.86	0.86	
5-19	179.00	179.00	67.00	26.00	3.60	2.20	1.00	1.00	
5-20	147.00	147.00	55.00	29.00	3.70	1.80	0.95	0.95	
5-21	118.00	118.00	53.00	21.00	5.20	1.70	0.95	0.95	
5-22	104.00	104.00	50.00	20.00	9.90	1.60	0.85	0.85	
5-23	97.00	97.00	46.00	19.00	9.60	1.60	0.81	0.81	
5-24	87.00	87.00	43.00	16.00	5.30	1.50	0.71	0.71	
5-25	82.00	82.00	40.00	15.00	4.10	1.50	0.50	0.50	
5-26	73.00	73.00	32.00	14.00	3.40	2.10	0.43	0.43	
5-27	62.00	62.00	32.00	16.00	3.50	3.20	0.63	0.63	
5-28	55.00	55.00	29.00	19.00	3.40	2.40	0.63	0.63	
5-29	49.00	49.00	26.00	23.00	3.90	1.60	0.69	0.69	
5-30	44.00	44.00	23.00	26.00	4.40	1.60	0.80	0.80	
5-31	50.00	50.00	39.00	28.00	4.20	1.50	1.20	1.20	
MEAN	265.32	265.32	66.22	32.09	5.47	1.74	0.94	0.94	



Table 1.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Grand River basin, station 06355000,  
North Fork Grand River at Haley, N. Dak.--Continued

Percent exceedance values									
DATE	HIGH	.10	.20	.30	.50	.70	.80	.90	100
6-1	62.00	62.00	36.00	26.00	4.20	1.40	1.20	1.10	1.10
6-2	69.00	69.00	33.00	30.00	5.90	1.20	1.10	.83	.73
6-3	76.00	76.00	45.00	31.00	4.40	1.00	1.00	.76	.63
6-4	79.00	79.00	50.00	29.00	4.70	1.10	.92	.67	.67
6-5	74.00	74.00	49.00	27.00	5.90	1.00	.80	.60	.60
6-6	71.00	71.00	48.00	26.00	6.00	1.20	1.10	.60	.60
6-7	70.00	70.00	47.00	22.00	7.00	1.50	1.20	.58	.58
6-8	65.00	65.00	46.00	21.00	5.50	1.90	1.50	.50	.50
6-9	58.00	58.00	41.00	26.00	5.40	1.80	1.50	1.30	1.30
6-10	53.00	53.00	36.00	30.00	4.90	1.90	1.20	1.00	1.00
6-11	50.00	50.00	32.00	26.00	9.10	2.30	1.50	.45	.45
6-12	49.00	49.00	30.00	26.00	4.80	2.90	1.60	.71	.71
6-13	41.00	41.00	32.00	26.00	4.00	3.50	2.50	.95	.95
6-14	38.00	38.00	35.00	24.00	3.90	3.70	2.40	.95	.95
6-15	36.00	36.00	36.00	23.00	5.50	3.70	3.50	.45	.45
6-16	36.00	36.00	35.00	22.00	3.90	3.20	2.70	.86	.86
6-17	35.00	35.00	31.00	21.00	3.70	3.00	2.00	.86	.86
6-18	33.00	33.00	31.00	29.00	4.00	3.20	3.10	.78	.78
6-19	46.00	46.00	34.00	31.00	6.00	4.00	3.00	.71	.71
6-20	37.00	37.00	34.00	33.00	7.00	3.60	3.50	.78	.78
6-21	38.00	38.00	35.00	24.00	9.60	4.40	4.40	.78	.78
6-22	49.00	49.00	34.00	22.00	5.70	4.60	3.50	.71	.71
6-23	53.00	53.00	34.00	20.00	6.70	5.00	4.00	.63	.63
6-24	51.00	51.00	31.00	19.00	9.10	4.90	3.50	.56	.56
6-25	46.00	46.00	29.00	26.00	9.50	4.90	3.00	.49	.49
6-26	42.00	42.00	36.00	26.00	6.80	5.50	3.40	.42	.42
6-27	36.00	36.00	35.00	26.00	6.50	4.50	3.20	.35	.35
6-28	29.00	29.00	27.00	21.00	6.30	5.10	3.30	.28	.28
6-29	27.00	27.00	24.00	22.00	6.40	4.50	2.80	.28	.28
6-30	29.00	29.00	23.00	21.00	4.80	3.00	2.60	.21	.21
MEAN	42.96	42.96	36.33	30.80	5.89	3.87	2.69	.80	.80

Table 1.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Grand River basin, station 06355000,  
North Fork Grand River at Haley, N. Dak.--Continued

Percent exceedance values									
DATE	HIGH	.10	.20	.30	.50	.70	.80	.90	1.00
7- 1	30.00	30.00	21.00	20.00	5.50	2.40	2.10	0.21	0.21
7- 2	29.00	29.00	21.00	19.60	4.60	2.10	2.10	.35	.35
7- 3	28.00	28.00	19.00	15.00	4.00	2.40	1.50	.63	.63
7- 4	27.00	27.00	18.00	13.00	3.70	2.30	2.10	.78	.78
7- 5	25.00	25.00	17.00	11.00	3.50	2.20	1.70	.56	.56
7- 6	23.00	23.00	16.00	10.00	3.30	2.30	.52	.46	.46
7- 7	21.00	21.00	16.00	8.90	3.10	2.20	.42	.15	.15
7- 8	19.00	19.00	14.00	6.90	3.00	2.20	.40	.09	.09
7- 9	18.00	18.00	14.00	6.00	2.70	2.40	.42	.09	.09
7-10	16.00	16.00	11.00	5.50	2.60	2.40	.41	.06	.06
7-11	14.00	14.00	10.00	4.70	2.40	2.10	.28	.10	.10
7-12	27.00	27.00	12.00	11.00	4.50	2.50	2.30	.29	.29
7-13	16.00	16.00	10.00	5.10	3.40	2.40	2.00	.33	.33
7-14	9.70	9.70	9.10	4.60	2.90	2.50	2.20	.35	.35
7-15	8.10	8.10	8.10	3.70	2.40	2.00	1.80	.58	.58
7-16	7.20	7.20	7.10	2.80	2.10	1.90	1.40	1.20	1.20
7-17	6.60	6.60	5.70	3.10	2.60	1.60	1.50	1.40	1.40
7-18	6.70	6.70	6.60	3.30	2.30	2.00	1.80	1.70	1.70
7-19	8.50	8.50	7.50	3.90	2.10	1.80	1.80	1.70	1.70
7-20	7.80	7.80	6.50	3.90	2.00	1.60	1.60	1.50	1.50
7-21	6.90	6.90	5.50	5.50	1.90	1.50	1.50	1.40	1.40
7-22	7.40	7.40	5.50	4.50	2.10	1.60	1.70	1.30	1.30
7-23	7.50	7.50	6.50	4.20	2.10	1.80	1.80	1.20	1.20
7-24	7.50	7.50	6.50	4.20	2.10	1.60	1.70	1.10	1.10
7-25	7.70	7.70	4.40	4.40	2.30	1.70	1.50	1.00	1.00
7-26	6.90	6.90	4.60	4.60	2.70	1.80	1.30	.78	.78
7-27	5.30	5.30	4.60	3.80	2.50	1.60	1.70	.78	.78
7-28	14.00	14.00	4.90	4.40	2.90	2.20	2.10	1.60	1.60
7-29	16.00	16.00	6.20	4.40	2.70	2.60	1.50	1.10	1.10
7-30	16.00	16.00	4.90	4.60	2.50	1.90	1.20	.92	.92
7-31	17.00	17.00	4.40	3.90	2.60	2.20	1.10	.78	.78
MEAN	11.70	11.70	10.50	6.52	2.63	2.54	2.23	2.15	2.15

Table 1.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Grand River basin, station 06355000,  
North Fork Grand River at Haley, N. Dak.--Continued

DATE	Percent exceedance values									
	HIGH	.10	.20	.30	.50	.70	.80	.90	1.00	
8-1	17.00	17.00	4.60	4.20	2.70	2.50	0.82	0.73	0.73	
8-2	16.00	16.00	4.90	3.90	2.50	2.20	1.20	.70	.70	
8-3	16.00	16.00	4.90	4.40	2.70	1.90	1.10	.54	.54	
8-4	16.00	16.00	12.00	4.90	2.30	1.80	.96	.63	.63	
8-5	22.00	22.00	16.00	5.10	2.00	1.00	1.10	.71	.71	
8-6	17.00	17.00	16.00	5.50	2.00	1.60	.97	.95	.95	
8-7	16.00	16.00	7.60	5.10	1.80	1.40	.63	.63	.63	
8-8	16.00	16.00	12.00	5.30	1.80	1.60	.49	.49	.49	
8-9	17.00	17.00	17.00	5.10	2.40	1.60	.42	.42	.42	
8-10	17.00	17.00	16.00	5.30	2.00	1.60	.55	.21	.21	
8-11	16.00	16.00	16.00	5.50	1.90	1.60	.55	.15	.15	
8-12	16.00	16.00	16.00	5.30	2.10	1.60	.28	.15	.15	
8-13	16.00	16.00	16.00	5.30	1.80	1.50	.28	.05	.05	
8-14	16.00	16.00	13.00	5.30	1.80	1.30	1.10	.05	.05	
8-15	17.00	17.00	6.60	6.20	2.00	1.20	.56	.09	.09	
8-16	16.00	16.00	7.80	7.10	2.00	1.20	.28	.21	.21	
8-17	16.00	16.00	7.00	3.40	2.00	1.30	1.20	.28	.28	
8-18	15.00	15.00	12.00	6.10	2.10	1.30	1.10	.28	.28	
8-19	14.00	14.00	12.00	5.70	1.90	1.20	1.10	.21	.21	
8-20	14.00	14.00	8.00	5.70	1.80	1.20	1.10	.09	.09	
8-21	14.00	14.00	7.70	5.70	1.80	1.60	1.20	.09	.09	
8-22	14.00	14.00	7.60	5.70	1.70	1.50	1.30	.09	.09	
8-23	14.00	14.00	6.90	5.70	1.50	1.40	1.20	.09	.09	
8-24	15.00	15.00	5.70	4.60	1.40	1.40	1.30	.09	.09	
8-25	15.00	15.00	5.50	2.80	1.40	1.30	1.20	.15	.15	
8-26	15.00	15.00	5.30	2.60	1.70	1.30	.95	.21	.21	
8-27	14.00	14.00	5.70	2.70	2.00	1.30	.95	.15	.15	
8-28	15.00	15.00	5.70	2.60	1.70	1.20	.95	.16	.16	
8-29	14.00	14.00	5.30	2.40	1.40	1.10	.95	.21	.21	
8-30	14.00	14.00	5.10	2.20	1.40	1.10	.86	.25	.25	
8-31	11.00	11.00	3.40	2.10	1.40	1.20	.86	.13	.13	
MEAN	9.79	9.79	8.45	6.64	2.43	1.50	1.53	.35	.45	

Table 1.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Grand River basin, station 06355000,  
North Fork Grand River at Haley, N. Dak.--Continued

Percent exceedance values									
DATE	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW
9-1	3.20	3.20	2.60	2.30	1.30	1.10	0.78	0.09	0.09
9-2	2.30	2.30	2.30	1.60	1.30	.96	.78	.09	.09
9-3	2.40	2.40	2.10	1.90	1.80	.86	.78	.09	.09
9-4	2.40	2.40	1.90	1.80	1.40	.78	.78	.09	.09
9-5	2.00	2.00	1.60	1.50	1.50	.78	.71	.09	.09
9-6	1.80	1.80	1.50	1.40	1.30	.71	.56	.21	.21
9-7	1.60	1.60	1.50	1.30	1.10	.71	.42	.21	.21
9-8	1.60	1.60	1.40	1.40	1.10	.71	.63	.21	.21
9-9	1.60	1.60	1.40	1.40	1.10	.68	.56	.28	.28
9-10	3.30	3.30	1.40	1.20	1.10	.60	.49	.28	.28
9-11	3.50	3.50	1.40	1.40	1.00	.51	.49	.28	.28
9-12	2.90	2.90	1.90	1.40	1.10	.42	.30	.28	.28
9-13	2.10	2.10	1.60	1.40	1.10	.45	.42	.21	.21
9-14	2.50	2.50	2.00	1.60	1.10	.54	.42	.21	.21
9-15	2.40	2.40	2.20	2.10	1.10	.49	.42	.28	.28
9-16	2.40	2.40	2.00	1.90	1.10	.46	.42	.21	.21
9-17	2.30	2.30	1.90	1.60	1.20	.42	.39	.21	.21
9-18	2.00	2.00	1.90	1.70	1.20	.42	.37	.21	.21
9-19	2.10	2.10	2.00	1.40	1.20	.56	.35	.21	.21
9-20	3.70	3.70	2.00	1.70	1.40	.53	.42	.21	.21
9-21	2.20	2.20	2.10	1.90	1.60	.42	.41	.21	.21
9-22	2.20	2.20	2.00	1.80	1.50	.35	.35	.21	.21
9-23	2.20	2.20	2.10	1.60	1.30	.35	.35	.21	.21
9-24	4.10	4.10	2.20	1.60	1.20	.49	.35	.26	.26
9-25	2.60	2.80	1.90	1.80	1.20	.70	.42	.35	.35
9-26	2.30	2.30	2.10	1.80	1.20	.60	.42	.28	.28
9-27	2.00	2.00	1.70	1.40	1.30	.56	.49	.28	.28
9-28	1.90	1.90	1.60	1.40	1.20	.56	.49	.35	.35
9-29	2.60	2.60	1.90	1.40	1.20	.63	.49	.35	.35
9-30	2.10	2.10	1.70	1.70	1.30	.66	.49	.35	.35
MEAN	1.95	1.95	1.86	1.63	1.23	.69	.64	.36	.36

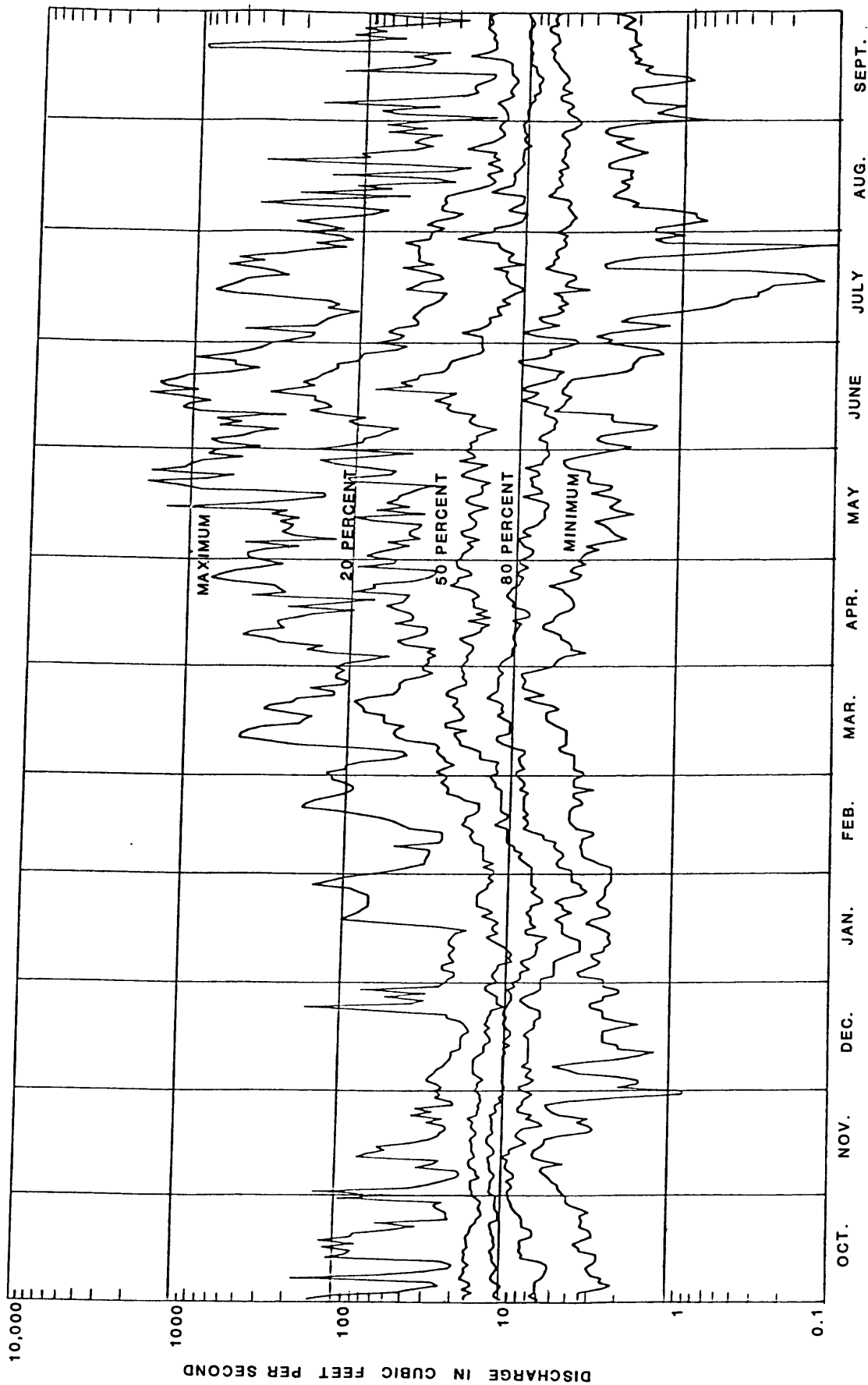


Figure 3.--Duration hydrograph for 29-year period beginning October 1952, Cheyenne River basin, station 06423500, Cheyenne River near Wasta, S. Dak.

Table 2.--Plotting points for duration hydrograph for 29-year period beginning October 1952, Cheyenne River basin, station 06423500, Cheyenne River near Wasta, S. Dak.

LOCATION.--Lat 44°04'52", long 102°24'03", in NE¼NE¼NW¼ sec.2, T.1 N., R.14 E., Pennington County, Hydrologic Unit 10120111, on left bank at downstream side of highway bridge, 200 ft downstream from Chicago and North Western Transportation Co. bridge, 3.0 mi east of Wasta, and 8.6 mi downstream from Boxelder Creek.

DRAINAGE AREA.--12,800 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--July 1914 to June 1915, August 1928 to June 1932, March 1934 to current year. Monthly discharge only for some periods, published in WSP 1309. Records for Feb. 19-28, 1930, published in WSP 701, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 786: Drainage area. WSP 1279: 1930(M), 1931, 1937. See also Period of Record.

GAGE.--Water-stage recorder. Datum of gage is 2,260.78 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 1, 1940, nonrecording gage at site 50 ft upstream; Aug. 1, 1940, to Dec. 3, 1940, nonrecording gage and Dec. 4, 1940, to Sept. 30, 1968, water-stage recorder at present site all at datum 2.00 ft higher. Oct. 1, 1968, to Sept. 30, 1972, at datum 1.00 ft higher.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Angostura Reservoir 108 mi upstream (see station 06401000) since October 1949 and by upstream reservoirs on Rapid Creek since August 1956. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--51 years (water years 1929-31, 1935-82), 347 ft<sup>3</sup>/s (251,400 acre-ft/yr); median of yearly mean discharges, 290 ft<sup>3</sup>/s (210,000 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 46,300 ft<sup>3</sup>/s May 6, 1932 (gage height, 13.28 ft), present datum, from rating curve extended above 11,000 ft<sup>3</sup>/s on basis of an incomplete discharge measurement at gage height 10.65 ft, present datum; maximum gage height observed, 14.5 ft, present datum, June 13, 1915; minimum discharge, 0.6 ft<sup>3</sup>/s July 27, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1920 reached a stage of 18 ft, present datum, from information by local residents.

Table 2.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06423500,  
Cheyenne River near Wasta, S. Dak.--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
10- 1	1390.00	177.00	159.00	130.00	96.00	79.00	58.00	47.00		33.00	
10- 2	1000.00	257.00	159.00	132.00	106.00	79.00	65.00	50.00		33.00	
10- 3	412.00	256.00	142.00	128.00	105.00	75.00	60.00	45.00		33.00	
10- 4	319.00	196.00	163.00	127.00	99.00	79.00	60.00	42.00		24.00	
10- 5	227.00	177.00	146.00	131.00	96.00	80.00	60.00	34.00		21.00	
10- 6	250.00	214.00	149.00	136.00	105.00	78.00	60.00	40.00		25.00	
10- 7	1750.00	199.00	170.00	148.00	112.00	88.00	55.00	36.00		24.00	
10- 8	529.00	206.00	164.00	156.00	110.00	88.00	53.00	33.00		28.00	
10- 9	240.00	210.00	159.00	143.00	106.00	87.00	52.00	35.00		29.00	
10-10	194.00	145.00	162.00	139.00	102.00	86.00	51.00	32.00		30.00	
10-11	148.00	169.00	149.00	139.00	104.00	83.00	51.00	34.00		28.00	
10-12	223.00	173.00	162.00	131.00	109.00	86.00	57.00	33.00		26.00	
10-13	1100.00	172.00	162.00	131.00	109.00	85.00	74.00	42.00		26.00	
10-14	441.00	294.00	159.00	133.00	110.00	84.00	72.00	42.00		26.00	
10-15	790.00	201.00	163.00	130.00	114.00	84.00	76.00	40.00		33.00	
10-16	1150.00	217.00	153.00	142.00	107.00	85.00	74.00	43.00		33.00	
10-17	745.00	144.00	156.00	143.00	106.00	90.00	75.00	45.00		36.00	
10-18	1220.00	214.00	156.00	146.00	104.00	88.00	75.00	37.00		32.00	
10-19	749.00	175.00	159.00	134.00	107.00	85.00	64.00	43.00		28.00	
10-20	744.00	227.00	151.00	139.00	111.00	85.00	63.00	42.00		24.00	
10-21	456.00	241.00	149.00	130.00	111.00	84.00	64.00	44.00		29.00	
10-22	321.00	224.00	147.00	133.00	114.00	93.00	73.00	43.00		33.00	
10-23	572.00	160.00	138.00	131.00	114.00	89.00	73.00	46.00		32.00	
10-24	201.00	156.00	137.00	124.00	102.00	84.00	73.00	34.00		32.00	
10-25	210.00	156.00	129.00	120.00	102.00	84.00	75.00	45.00		33.00	
10-26	207.00	150.00	128.00	121.00	102.00	85.00	79.00	42.00		29.00	
10-27	231.00	155.00	134.00	123.00	106.00	88.00	83.00	39.00		32.00	
10-28	250.00	182.00	133.00	121.00	107.00	88.00	85.00	40.00		37.00	
10-29	220.00	147.00	128.00	121.00	107.00	89.00	86.00	45.00		40.00	
10-30	965.00	154.00	137.00	121.00	106.00	95.00	89.00	50.00		40.00	
10-31	354.00	225.00	147.00	134.00	106.00	101.00	89.00	52.00		40.00	
MEAN	251.29	147.51	159.03	149.48	127.32	94.64	85.90	50.93		44.77	

Table 2.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06423500,  
Cheyenne River near Wasta, S. Dak.--Continued

DATE	Percent exceedance values									LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90		
11- 1	1340.00	335.00	146.00	129.00	118.00	102.00	91.00	54.00	43.00	
11- 2	354.00	235.00	150.00	131.00	115.00	97.00	85.00	63.00	45.00	
11- 3	272.00	215.00	150.00	136.00	115.00	97.00	86.00	63.00	45.00	
11- 4	223.00	188.00	152.00	134.00	115.00	99.00	92.00	66.00	44.00	
11- 5	195.00	156.00	132.00	122.00	110.00	100.00	83.00	58.00	51.00	
11- 6	174.00	152.00	141.00	122.00	108.00	100.00	83.00	68.00	54.00	
11- 7	182.00	170.00	140.00	126.00	115.00	100.00	90.00	72.00	58.00	
11- 8	329.00	180.00	152.00	134.00	116.00	100.00	94.00	70.00	56.00	
11- 9	255.00	207.00	156.00	138.00	116.00	99.00	93.00	68.00	42.00	
11-10	234.00	189.00	155.00	144.00	119.00	101.00	90.00	70.00	56.00	
11-11	751.00	194.00	142.00	139.00	120.00	102.00	99.00	66.00	64.00	
11-12	651.00	206.00	146.00	132.00	110.00	91.00	88.00	68.00	65.00	
11-13	504.00	194.00	150.00	144.00	110.00	95.00	90.00	66.00	63.00	
11-14	573.00	200.00	149.00	129.00	114.00	101.00	80.00	65.00	58.00	
11-15	356.00	176.00	149.00	140.00	121.00	100.00	70.00	65.00	55.00	
11-16	276.00	176.00	155.00	142.00	123.00	107.00	76.00	58.00	55.00	
11-17	242.00	172.00	144.00	140.00	120.00	104.00	82.00	58.00	45.00	
11-18	233.00	170.00	140.00	135.00	111.00	90.00	79.00	56.00	30.00	
11-19	215.00	166.00	149.00	130.00	115.00	90.00	75.00	56.00	28.00	
11-20	219.00	192.00	152.00	136.00	114.00	90.00	56.00	50.00	30.00	
11-21	286.00	196.00	147.00	135.00	114.00	80.00	60.00	44.00	35.00	
11-22	226.00	193.00	140.00	135.00	114.00	85.00	70.00	44.00	30.00	
11-23	356.00	219.00	140.00	130.00	117.00	80.00	65.00	55.00	45.00	
11-24	261.00	160.00	140.00	135.00	107.00	95.00	80.00	60.00	50.00	
11-25	339.00	166.00	136.00	125.00	110.00	90.00	80.00	58.00	53.00	
11-26	194.00	151.00	140.00	125.00	110.00	90.00	75.00	58.00	55.00	
11-27	200.00	158.00	133.00	120.00	100.00	80.00	75.00	62.00	40.00	
11-28	254.00	164.00	136.00	120.00	105.00	85.00	70.00	60.00	20.00	
11-29	234.00	168.00	135.00	121.00	97.00	70.00	65.00	56.00	8.00	
11-30	253.00	172.00	147.00	130.00	100.00	82.00	75.00	50.00	8.00	
MEAN	226.66	173.53	148.26	138.63	117.80	100.70	94.53	65.16	57.70	



Table 2.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06423500,  
Cheyenne River near Wasta, S. Dak.--Continued

DATE	Percent exceedance values								
	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW
12- 1	229.00	188.00	140.00	125.00	96.00	80.00	80.00	50.00	20.00
12- 2	250.00	172.00	142.00	125.00	100.00	80.00	69.00	50.00	15.00
12- 3	290.00	182.00	130.00	129.00	100.00	82.00	64.00	50.00	15.00
12- 4	280.00	179.00	140.00	130.00	100.00	80.00	72.00	55.00	20.00
12- 5	260.00	170.00	150.00	135.00	100.00	80.00	70.00	68.00	35.00
12- 6	250.00	171.00	150.00	140.00	100.00	85.00	66.00	56.00	40.00
12- 7	230.00	211.00	150.00	140.00	100.00	85.00	76.00	50.00	50.00
12- 8	220.00	200.00	150.00	135.00	100.00	90.00	70.00	50.00	35.00
12- 9	210.00	200.00	150.00	130.00	100.00	80.00	70.00	60.00	20.00
12-10	204.00	200.00	140.00	125.00	100.00	80.00	70.00	50.00	15.00
12-11	206.00	190.00	130.00	120.00	95.00	75.00	70.00	54.00	12.00
12-12	180.00	150.00	130.00	120.00	100.00	75.00	70.00	60.00	20.00
12-13	180.00	140.00	130.00	120.00	90.00	75.00	70.00	50.00	20.00
12-14	180.00	140.00	120.00	112.00	100.00	75.00	70.00	45.00	25.00
12-15	180.00	140.00	120.00	110.00	95.00	80.00	70.00	50.00	25.00
12-16	175.00	140.00	125.00	110.00	90.00	80.00	75.00	50.00	25.00
12-17	160.00	140.00	130.00	115.00	90.00	85.00	70.00	50.00	25.00
12-18	165.00	140.00	120.00	115.00	95.00	80.00	65.00	45.00	20.00
12-19	171.00	130.00	130.00	120.00	100.00	80.00	65.00	40.00	15.00
12-20	180.00	150.00	125.00	115.00	100.00	80.00	65.00	40.00	20.00
12-21	220.00	144.00	125.00	120.00	95.00	80.00	60.00	40.00	25.00
12-22	220.00	145.00	120.00	105.00	100.00	70.00	60.00	48.00	25.00
12-23	600.00	170.00	120.00	103.00	100.00	75.00	60.00	45.00	25.00
12-24	1600.00	160.00	100.00	100.00	95.00	80.00	70.00	50.00	30.00
12-25	371.00	140.00	110.00	100.00	94.00	85.00	75.00	50.00	30.00
12-26	306.00	140.00	110.00	100.00	90.00	80.00	80.00	55.00	25.00
12-27	536.00	160.00	110.00	110.00	90.00	80.00	75.00	52.00	25.00
12-28	300.00	160.00	120.00	110.00	90.00	75.00	66.00	50.00	20.00
12-29	750.00	170.00	130.00	110.00	95.00	70.00	60.00	52.00	20.00
12-30	250.00	160.00	130.00	110.00	85.00	70.00	60.00	54.00	25.00
12-31	230.00	150.00	110.00	110.00	90.00	65.00	60.00	40.00	25.00
MEAN	215.09	149.13	129.58	120.16	96.61	88.87	74.35	70.96	31.16

Table 2.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06423500,  
Cheyenne River near Wasta, S. Dak.--Continued

DATE	HIGH	Percent exceedance values										LOW
		.10	.20	.30	.50	.70	.80	.90				
1- 1	220.00	160.00	115.00	110.00	80.00	70.00	60.00	45.00	25.00			
1- 2	200.00	180.00	120.00	100.00	80.00	60.00	50.00	40.00	35.00			
1- 3	200.00	160.00	115.00	90.00	80.00	60.00	50.00	40.00	36.00			
1- 4	240.00	140.00	110.00	90.00	70.00	65.00	50.00	44.00	32.00			
1- 5	240.00	160.00	110.00	90.00	76.00	60.00	50.00	40.00	28.00			
1- 6	200.00	180.00	90.00	85.00	80.00	60.00	50.00	37.00	26.00			
1- 7	210.00	160.00	95.00	90.00	70.00	55.00	45.00	34.00	29.00			
1- 8	220.00	140.00	90.00	90.00	65.00	50.00	40.00	30.00	30.00			
1- 9	210.00	180.00	95.00	80.00	65.00	50.00	35.00	28.00	25.00			
1-10	200.00	200.00	100.00	80.00	63.00	45.00	35.00	26.00	25.00			
1-11	220.00	200.00	110.00	85.00	65.00	45.00	35.00	25.00	23.00			
1-12	220.00	200.00	120.00	85.00	60.00	45.00	35.00	25.00	23.00			
1-13	210.00	150.00	130.00	90.00	55.00	46.00	40.00	30.00	24.00			
1-14	200.00	140.00	110.00	100.00	75.00	50.00	45.00	35.00	23.00			
1-15	170.00	150.00	120.00	100.00	75.00	50.00	45.00	35.00	25.00			
1-16	250.00	140.00	120.00	100.00	65.00	50.00	45.00	40.00	28.00			
1-17	500.00	140.00	110.00	98.00	70.00	52.00	45.00	40.00	32.00			
1-18	1000.00	150.00	120.00	90.00	70.00	50.00	50.00	40.00	30.00			
1-19	900.00	160.00	140.00	95.00	70.00	50.00	45.00	35.00	24.00			
1-20	800.00	160.00	120.00	100.00	75.00	50.00	40.00	35.00	23.00			
1-21	750.00	165.00	130.00	110.00	70.00	50.00	45.00	34.00	24.00			
1-22	700.00	160.00	150.00	100.00	70.00	50.00	45.00	33.00	27.00			
1-23	700.00	190.00	150.00	95.00	60.00	50.00	50.00	32.00	28.00			
1-24	700.00	200.00	150.00	100.00	60.00	50.00	45.00	31.00	26.00			
1-25	700.00	200.00	150.00	100.00	65.00	45.00	35.00	30.00	25.00			
1-26	800.00	200.00	140.00	95.00	70.00	45.00	32.00	30.00	25.00			
1-27	900.00	190.00	130.00	90.00	65.00	40.00	35.00	30.00	25.00			
1-28	1500.00	180.00	130.00	90.00	70.00	40.00	35.00	30.00	24.00			
1-29	1200.00	165.00	120.00	100.00	70.00	50.00	40.00	30.00	23.00			
1-30	1000.00	160.00	130.00	100.00	70.00	50.00	40.00	26.00	23.00			
1-31	700.00	180.00	120.00	110.00	70.00	50.00	40.00	30.00	23.00			
MEAN	447.74	183.54	124.19	93.22	66.61	55.71	52.09	40.48	30.03			

Table 2.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06423500,  
Cheyenne River near Wasta, S. Dak.--Continued

DATE	Percent exceedance values								LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90	
2- 1	500.00	180.00	120.00	95.00	70.00	50.00	40.00	35.00	25.00
2- 2	400.00	180.00	140.00	95.00	70.00	50.00	48.00	32.00	23.00
2- 3	320.00	180.00	120.00	100.00	75.00	55.00	50.00	38.00	27.00
2- 4	320.00	160.00	140.00	110.00	80.00	50.00	48.00	36.00	30.00
2- 5	310.00	160.00	140.00	110.00	85.00	55.00	45.00	35.00	34.00
2- 6	300.00	170.00	140.00	110.00	80.00	55.00	46.00	40.00	35.00
2- 7	300.00	180.00	140.00	120.00	90.00	60.00	50.00	44.00	35.00
2- 8	500.00	190.00	140.00	140.00	90.00	65.00	52.00	45.00	36.00
2- 9	260.00	200.00	160.00	140.00	100.00	70.00	50.00	42.00	35.00
2-10	250.00	200.00	165.00	140.00	100.00	70.00	60.00	38.00	35.00
2-11	250.00	200.00	170.00	150.00	100.00	80.00	60.00	40.00	30.00
2-12	250.00	200.00	160.00	140.00	100.00	80.00	70.00	50.00	30.00
2-13	400.00	250.00	170.00	160.00	100.00	85.00	80.00	55.00	38.00
2-14	450.00	250.00	190.00	160.00	120.00	85.00	75.00	60.00	40.00
2-15	500.00	350.00	180.00	150.00	110.00	85.00	75.00	70.00	42.00
2-16	600.00	300.00	180.00	140.00	100.00	86.00	80.00	70.00	42.00
2-17	800.00	230.00	160.00	120.00	100.00	85.00	75.00	75.00	42.00
2-18	1100.00	190.00	150.00	132.00	110.00	90.00	80.00	60.00	42.00
2-19	1800.00	200.00	150.00	140.00	110.00	95.00	80.00	50.00	40.00
2-20	1700.00	200.00	150.00	150.00	110.00	95.00	80.00	45.00	35.00
2-21	1500.00	250.00	185.00	140.00	110.00	90.00	80.00	45.00	36.00
2-22	1200.00	250.00	200.00	160.00	110.00	90.00	80.00	50.00	40.00
2-23	1000.00	350.00	240.00	160.00	110.00	90.00	75.00	50.00	40.00
2-24	900.00	350.00	230.00	150.00	110.00	90.00	85.00	60.00	30.00
2-25	900.00	400.00	240.00	180.00	120.00	90.00	80.00	70.00	40.00
2-26	1000.00	500.00	260.00	180.00	120.00	90.00	80.00	80.00	40.00
2-27	1200.00	438.00	240.00	170.00	125.00	100.00	85.00	75.00	40.00
2-28	1200.00	443.00	240.00	170.00	130.00	99.00	90.00	75.00	35.00
MEAN	668.57	231.25	158.57	149.39	129.46	82.50	79.00	70.00	44.92

Table 2.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06423500,  
Cheyenne River near Wasta, S. Dak.--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
3- 1	1300.00	400.00	280.00	200.00	115.00	100.00	90.00	70.00		35.00	
3- 2	1000.00	326.00	250.00	200.00	120.00	90.00	80.00	70.00		40.00	
3- 3	1000.00	400.00	215.00	180.00	120.00	90.00	85.00	55.00		40.00	
3- 4	800.00	350.00	245.00	200.00	115.00	95.00	86.00	50.00		40.00	
3- 5	500.00	380.00	250.00	179.00	150.00	105.00	88.00	60.00		40.00	
3- 6	430.00	370.00	270.00	190.00	150.00	110.00	81.00	70.00		40.00	
3- 7	450.00	390.00	280.00	200.00	150.00	110.00	80.00	60.00		48.00	
3- 8	800.00	400.00	270.00	218.00	170.00	110.00	95.00	75.00		50.00	
3- 9	2000.00	400.00	290.00	261.00	200.00	140.00	110.00	74.00		45.00	
3-10	2900.00	700.00	432.00	261.00	200.00	150.00	120.00	75.00		45.00	
3-11	4500.00	1500.00	500.00	270.00	210.00	135.00	120.00	70.00		45.00	
3-12	4400.00	2350.00	520.00	350.00	220.00	131.00	100.00	70.00		45.00	
3-13	3940.00	2500.00	500.00	350.00	182.00	130.00	100.00	55.00		45.00	
3-14	3210.00	2410.00	450.00	356.00	250.00	130.00	100.00	60.00		50.00	
3-15	1900.00	1310.00	600.00	400.00	250.00	135.00	98.00	70.00		55.00	
3-16	1800.00	1000.00	600.00	310.00	200.00	159.00	108.00	93.00		60.00	
3-17	1600.00	800.00	600.00	300.00	190.00	150.00	120.00	91.00		60.00	
3-18	2180.00	1360.00	794.00	327.00	200.00	163.00	110.00	90.00		60.00	
3-19	3180.00	1500.00	800.00	463.00	206.00	159.00	114.00	90.00		50.00	
3-20	2900.00	1500.00	855.00	459.00	227.00	148.00	110.00	87.00		55.00	
3-21	2110.00	1500.00	913.00	685.00	212.00	148.00	120.00	94.00		70.00	
3-22	2000.00	1250.00	770.00	419.00	212.00	165.00	140.00	95.00		82.00	
3-23	1200.00	967.00	530.00	478.00	250.00	179.00	130.00	99.00		62.00	
3-24	1200.00	704.00	500.00	413.00	243.00	163.00	120.00	95.00		73.00	
3-25	1670.00	1100.00	484.00	354.00	217.00	150.00	120.00	90.00		85.00	
3-26	1050.00	900.00	491.00	290.00	188.00	136.00	119.00	100.00		84.00	
3-27	1010.00	750.00	451.00	275.00	187.00	135.00	120.00	106.00		81.00	
3-28	1190.00	600.00	360.00	248.00	200.00	130.00	120.00	106.00		84.00	
3-29	1170.00	554.00	306.00	250.00	193.00	134.00	111.00	104.00		87.00	
3-30	1050.00	500.00	356.00	276.00	200.00	131.00	120.00	90.00		68.00	
3-31	1190.00	423.00	350.00	282.00	203.00	127.00	120.00	87.00		56.00	
MEAN	1199.16	718.12	503.96	333.77	258.48	180.64	151.16	122.71		90.83	

Table 2.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06423500,  
Cheyenne River near Wasta, S. Dak.--Continued

Percent exceedance values										
DATE	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW	
4- 1	1060.00	432.00	323.00	268.00	195.00	143.00	115.00	86.00	54.00	
4- 2	748.00	408.00	334.00	248.00	184.00	131.00	108.00	87.00	52.00	
4- 3	570.00	378.00	295.00	248.00	190.00	120.00	99.00	92.00	47.00	
4- 4	1250.00	569.00	335.00	237.00	181.00	135.00	99.00	89.00	35.00	
4- 5	1770.00	486.00	298.00	238.00	173.00	119.00	99.00	89.00	43.00	
4- 6	1420.00	828.00	460.00	318.00	173.00	142.00	93.00	87.00	43.00	
4- 7	2610.00	1080.00	514.00	333.00	194.00	131.00	96.00	84.00	45.00	
4- 8	2960.00	1300.00	428.00	303.00	211.00	124.00	98.00	83.00	50.00	
4- 9	4450.00	1150.00	353.00	271.00	176.00	124.00	98.00	82.00	50.00	
4-10	3960.00	996.00	336.00	262.00	158.00	116.00	94.00	75.00	56.00	
4-11	2440.00	642.00	341.00	284.00	154.00	116.00	92.00	76.00	65.00	
4-12	2660.00	1050.00	536.00	298.00	138.00	129.00	88.00	76.00	64.00	
4-13	2710.00	1020.00	421.00	302.00	188.00	119.00	99.00	78.00	56.00	
4-14	2080.00	705.00	412.00	276.00	136.00	118.00	79.00	72.00	55.00	
4-15	1660.00	790.00	440.00	245.00	168.00	120.00	78.00	60.00	52.00	
4-16	941.00	728.00	527.00	250.00	142.00	122.00	84.00	56.00	45.00	
4-17	2360.00	790.00	607.00	407.00	176.00	127.00	101.00	56.00	42.00	
4-18	1200.00	671.00	441.00	284.00	172.00	122.00	97.00	57.00	42.00	
4-19	715.00	535.00	461.00	309.00	178.00	126.00	104.00	54.00	43.00	
4-20	3990.00	707.00	438.00	269.00	161.00	120.00	110.00	52.00	45.00	
4-21	2420.00	1430.00	969.00	280.00	170.00	140.00	104.00	58.00	48.00	
4-22	2670.00	854.00	718.00	330.00	189.00	128.00	101.00	66.00	50.00	
4-23	2840.00	996.00	704.00	350.00	245.00	127.00	92.00	62.00	60.00	
4-24	5200.00	561.00	417.00	306.00	221.00	128.00	90.00	62.00	48.00	
4-25	7230.00	1360.00	333.00	255.00	219.00	117.00	86.00	66.00	40.00	
4-26	6380.00	889.00	305.00	235.00	180.00	137.00	95.00	62.00	38.00	
4-27	5140.00	1900.00	308.00	275.00	187.00	137.00	90.00	56.00	45.00	
4-28	3500.00	2600.00	918.00	471.00	218.00	157.00	81.00	55.00	43.00	
4-29	2550.00	1080.00	553.00	368.00	226.00	150.00	90.00	53.00	36.00	
4-30	3570.00	1340.00	537.00	400.00	226.00	134.00	92.00	52.00	40.00	
MEAN	1595.23	878.23	452.20	385.33	283.86	225.20	155.13	73.46	54.80	

Table 2.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06423500,  
Cheyenne River near Wasta, S. Dak.--Continued

DATE	Percent exceedance values								LUM
	HIGH	.10	.20	.30	.50	.70	.80	.90	
5- 1	4280.00	1340.00	823.00	336.00	211.00	111.00	81.00	49.00	38.00
5- 2	4340.00	1020.00	718.00	450.00	207.00	95.00	76.00	47.00	36.00
5- 3	3310.00	882.00	561.00	286.00	190.00	88.00	76.00	50.00	30.00
5- 4	2070.00	1020.00	450.00	252.00	180.00	97.00	87.00	64.00	36.00
5- 5	4520.00	964.00	609.00	375.00	196.00	105.00	90.00	79.00	28.00
5- 6	1240.00	894.00	387.00	300.00	164.00	123.00	94.00	75.00	20.00
5- 7	2200.00	800.00	453.00	287.00	205.00	108.00	80.00	67.00	23.00
5- 8	2640.00	900.00	450.00	359.00	216.00	106.00	89.00	51.00	25.00
5- 9	2390.00	1180.00	400.00	322.00	184.00	101.00	83.00	42.00	26.00
5-10	2250.00	777.00	379.00	291.00	175.00	88.00	72.00	37.00	28.00
5-11	2720.00	1560.00	750.00	325.00	172.00	88.00	69.00	36.00	32.00
5-12	2090.00	1800.00	1000.00	331.00	184.00	77.00	65.00	32.00	25.00
5-13	3100.00	1190.00	363.00	286.00	194.00	86.00	66.00	30.00	18.00
5-14	2470.00	1500.00	730.00	410.00	177.00	82.00	66.00	26.00	23.00
5-15	14400.00	1300.00	454.00	303.00	145.00	106.00	62.00	30.00	26.00
5-16	3800.00	1200.00	628.00	343.00	185.00	99.00	63.00	61.00	24.00
5-17	2280.00	1040.00	545.00	344.00	203.00	101.00	73.00	61.00	22.00
5-18	1470.00	998.00	527.00	379.00	192.00	101.00	90.00	56.00	26.00
5-19	1480.00	943.00	457.00	363.00	162.00	87.00	68.00	54.00	34.00
5-20	4710.00	952.00	399.00	325.00	159.00	85.00	70.00	47.00	26.00
5-21	11400.00	2600.00	313.00	284.00	164.00	88.00	80.00	45.00	25.00
5-22	19100.00	2230.00	1030.00	400.00	142.00	92.00	78.00	43.00	35.00
5-23	7410.00	2110.00	1100.00	538.00	181.00	106.00	82.00	65.00	36.00
5-24	5480.00	2970.00	598.00	472.00	219.00	102.00	71.00	65.00	35.00
5-25	18200.00	5320.00	558.00	275.00	202.00	117.00	73.00	64.00	35.00
5-26	11300.00	5130.00	876.00	282.00	172.00	112.00	88.00	60.00	47.00
5-27	10400.00	2720.00	1300.00	599.00	151.00	87.00	59.00	62.00	50.00
5-28	8770.00	2300.00	1610.00	365.00	226.00	85.00	68.00	60.00	51.00
5-29	4840.00	4210.00	794.00	266.00	179.00	81.00	64.00	53.00	42.00
5-30	8070.00	2500.00	440.00	384.00	185.00	98.00	62.00	51.00	32.00
5-31	7050.00	3150.00	1820.00	353.00	205.00	92.00	65.00	55.00	23.00
MEAN	2527.42	2363.42	839.32	467.71	282.90	165.45	115.71	92.29	71.80

Table 2.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06423500,  
Cheyenne River near Wasta, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
6-1	3720.00	2320.00	1200.00	344.00	188.00	88.00	65.00	38.00	19.00	
6-2	6600.00	2550.00	903.00	373.00	196.00	100.00	64.00	36.00	28.00	
6-3	7800.00	1990.00	890.00	500.00	174.00	87.00	73.00	40.00	32.00	
6-4	4880.00	1720.00	722.00	358.00	179.00	82.00	70.00	40.00	30.00	
6-5	4000.00	1530.00	646.00	265.00	155.00	80.00	63.00	40.00	21.00	
6-6	2880.00	1130.00	548.00	440.00	133.00	70.00	58.00	48.00	14.00	
6-7	6690.00	3060.00	982.00	713.00	176.00	64.00	59.00	48.00	13.00	
6-8	4970.00	3030.00	1100.00	749.00	198.00	74.00	56.00	47.00	25.00	
6-9	7210.00	3320.00	878.00	706.00	194.00	80.00	59.00	47.00	26.00	
6-10	2000.00	2000.00	1390.00	730.00	180.00	75.00	68.00	58.00	25.00	
6-11	9240.00	2200.00	1490.00	785.00	254.00	76.00	67.00	64.00	59.00	
6-12	11400.00	1710.00	1400.00	972.00	278.00	79.00	64.00	60.00	54.00	
6-13	10900.00	3550.00	1500.00	808.00	260.00	105.00	77.00	55.00	51.00	
6-14	7950.00	2210.00	1790.00	820.00	331.00	174.00	94.00	57.00	50.00	
6-15	11300.00	5080.00	1740.00	1040.00	274.00	143.00	80.00	57.00	46.00	
6-16	19200.00	5420.00	3350.00	1370.00	241.00	117.00	74.00	56.00	53.00	
6-17	9570.00	5320.00	2440.00	1210.00	772.00	127.00	96.00	60.00	53.00	
6-18	15000.00	10800.00	1770.00	1210.00	454.00	162.00	85.00	60.00	50.00	
6-19	14600.00	3370.00	2100.00	1410.00	541.00	181.00	70.00	56.00	49.00	
6-20	12400.00	5160.00	1750.00	1400.00	426.00	173.00	58.00	52.00	46.00	
6-21	11100.00	3400.00	1620.00	937.00	416.00	141.00	57.00	50.00	29.00	
6-22	5900.00	3470.00	1450.00	674.00	299.00	132.00	52.00	43.00	21.00	
6-23	3930.00	3200.00	1300.00	1020.00	279.00	114.00	71.00	42.00	19.00	
6-24	5710.00	2910.00	1340.00	1010.00	272.00	122.00	94.00	40.00	19.00	
6-25	5580.00	3620.00	996.00	821.00	264.00	114.00	101.00	38.00	18.00	
6-26	10200.00	2170.00	960.00	630.00	218.00	101.00	69.00	22.00	17.00	
6-27	6080.00	1950.00	929.00	602.00	181.00	92.00	62.00	26.00	12.00	
6-28	4390.00	1500.00	581.00	498.00	165.00	95.00	65.00	37.00	13.00	
6-29	3690.00	1300.00	501.00	425.00	170.00	78.00	51.00	34.00	19.00	
6-30	3510.00	1140.00	805.00	400.00	170.00	74.00	42.00	33.00	29.00	
MEAN	5269.76	2427.73	1736.50	1282.80	467.66	129.34	118.63	96.50	70.50	

Table 2.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06423500,  
Cheyenne River near Wasta, S. Dak.--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
7- 1	2480.00	1600.00	574.00	382.00	170.00	80.00	45.00	33.00	26.00		
7- 2	1900.00	800.00	525.00	355.00	170.00	87.00	77.00	36.00	33.00		
7- 3	1800.00	1000.00	658.00	478.00	229.00	133.00	96.00	57.00	26.00		
7- 4	5000.00	1660.00	589.00	388.00	178.00	109.00	72.00	52.00	15.00		
7- 5	1800.00	1450.00	438.00	383.00	160.00	96.00	56.00	17.00	11.00		
7- 6	1660.00	1000.00	434.00	227.00	151.00	91.00	72.00	29.00	23.00		
7- 7	1510.00	1000.00	471.00	306.00	156.00	84.00	76.00	36.00	20.00		
7- 8	1300.00	1020.00	446.00	234.00	129.00	77.00	59.00	35.00	14.00		
7- 9	1000.00	816.00	423.00	188.00	137.00	70.00	53.00	22.00	8.90		
7-10	1540.00	655.00	400.00	273.00	139.00	63.00	54.00	32.00	6.00		
7-11	1300.00	739.00	350.00	199.00	115.00	74.00	50.00	38.00	5.00		
7-12	1510.00	865.00	318.00	169.00	130.00	69.00	55.00	34.00	4.50		
7-13	3180.00	1130.00	307.00	261.00	117.00	92.00	55.00	32.00	3.10		
7-14	5870.00	858.00	290.00	246.00	106.00	84.00	62.00	32.00	3.10		
7-15	7830.00	913.00	524.00	246.00	93.00	74.00	37.00	32.00	2.70		
7-16	6550.00	836.00	454.00	269.00	103.00	70.00	53.00	32.00	2.50		
7-17	5090.00	611.00	412.00	211.00	117.00	63.00	51.00	26.00	1.20		
7-18	4870.00	468.00	306.00	211.00	120.00	64.00	45.00	24.00	1.40		
7-19	2670.00	1370.00	323.00	222.00	125.00	67.00	46.00	17.00	1.60		
7-20	3250.00	1740.00	404.00	200.00	120.00	64.00	59.00	24.00	3.30		
7-21	4380.00	977.00	553.00	248.00	148.00	100.00	70.00	51.00	29.00		
7-22	6570.00	1000.00	354.00	249.00	96.00	73.00	62.00	51.00	30.00		
7-23	3820.00	832.00	446.00	275.00	120.00	76.00	63.00	45.00	25.00		
7-24	5600.00	1370.00	436.00	262.00	120.00	66.00	58.00	54.00	17.00		
7-25	2960.00	1070.00	445.00	261.00	111.00	73.00	61.00	34.00	6.00		
7-26	2070.00	823.00	448.00	274.00	127.00	67.00	60.00	24.00	2.80		
7-27	1220.00	670.00	436.00	346.00	136.00	73.00	54.00	22.00	1.00		
7-28	1860.00	895.00	501.00	357.00	139.00	79.00	52.00	43.00	12.00		
7-29	1120.00	643.00	380.00	328.00	253.00	80.00	55.00	37.00	14.00		
7-30	1330.00	546.00	373.00	332.00	199.00	102.00	51.00	33.00	9.00		
7-31	2200.00	732.00	364.00	267.00	151.00	100.00	60.00	32.00	14.00		
MEAN	1738.74	869.25	424.74	355.38	201.80	121.45	93.96	53.65	34.74		



Table 2.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06423500,  
Cheyenne River near Wasta, S. Dak.--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
8-1	1240.00	679.00	307.00	241.00	149.00	84.00	54.00	31.00		14.00	
8-2	1690.00	695.00	392.00	229.00	114.00	84.00	50.00	25.00		9.50	
8-3	2470.00	1930.00	352.00	213.00	99.00	65.00	49.00	23.00		6.50	
8-4	1350.00	656.00	265.00	184.00	97.00	62.00	46.00	38.00		7.70	
8-5	847.00	551.00	236.00	147.00	92.00	62.00	48.00	36.00		7.70	
8-6	699.00	571.00	324.00	259.00	123.00	74.00	50.00	36.00		11.00	
8-7	1210.00	526.00	323.00	198.00	110.00	65.00	52.00	36.00		20.00	
8-8	4210.00	367.00	300.00	213.00	99.00	76.00	49.00	33.00		18.00	
8-9	2110.00	636.00	313.00	266.00	98.00	72.00	52.00	32.00		21.00	
8-10	509.00	358.00	299.00	229.00	97.00	74.00	69.00	58.00		27.00	
8-11	2370.00	566.00	242.00	204.00	158.00	70.00	63.00	52.00		25.00	
8-12	662.00	325.00	188.00	159.00	136.00	72.00	62.00	55.00		22.00	
8-13	1080.00	171.00	160.00	142.00	115.00	69.00	56.00	52.00		21.00	
8-14	245.00	170.00	148.00	139.00	114.00	65.00	58.00	53.00		24.00	
8-15	313.00	245.00	159.00	134.00	111.00	62.00	60.00	45.00		20.00	
8-16	1520.00	274.00	168.00	139.00	115.00	64.00	56.00	43.00		21.00	
8-17	291.00	179.00	134.00	122.00	106.00	74.00	60.00	47.00		20.00	
8-18	212.00	162.00	143.00	135.00	104.00	73.00	52.00	47.00		29.00	
8-19	702.00	374.00	168.00	134.00	98.00	70.00	54.00	46.00		29.00	
8-20	490.00	215.00	140.00	130.00	102.00	64.00	58.00	45.00		25.00	
8-21	909.00	346.00	156.00	147.00	101.00	62.00	55.00	44.00		20.00	
8-22	1030.00	480.00	147.00	140.00	100.00	62.00	55.00	43.00		16.00	
8-23	473.00	360.00	227.00	144.00	99.00	63.00	55.00	36.00		20.00	
8-24	372.00	227.00	191.00	141.00	90.00	60.00	52.00	50.00		23.00	
8-25	488.00	199.00	157.00	142.00	97.00	65.00	52.00	42.00		26.00	
8-26	442.00	178.00	142.00	117.00	100.00	59.00	54.00	40.00		20.00	
8-27	328.00	153.00	131.00	109.00	94.00	61.00	58.00	40.00		28.00	
8-28	713.00	176.00	136.00	126.00	99.00	65.00	56.00	44.00		31.00	
8-29	406.00	315.00	144.00	120.00	99.00	64.00	48.00	41.00		29.00	
8-30	730.00	168.00	139.00	123.00	102.00	70.00	44.00	31.00		19.00	
8-31	344.00	144.00	128.00	114.00	95.00	73.00	44.00	29.00		6.00	
MEAN	342.74	329.67	281.67	230.71	132.80	96.61	78.35	56.64		40.03	

Table 2.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06423500,  
Cheyenne River near Wasta, S. Dak.--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
9- 1	147.00	131.00	126.00	112.00	94.00	73.00	47.00	25.00		10.00	
9- 2	621.00	156.00	128.00	109.00	95.00	70.00	52.00	24.00		14.00	
9- 3	744.00	200.00	131.00	121.00	96.00	71.00	54.00	20.00		12.00	
9- 4	342.00	200.00	138.00	117.00	92.00	74.00	49.00	25.00		9.00	
9- 5	1770.00	155.00	148.00	117.00	91.00	72.00	51.00	32.00		17.00	
9- 6	651.00	136.00	128.00	102.00	85.00	69.00	59.00	26.00		18.00	
9- 7	230.00	134.00	116.00	110.00	88.00	63.00	59.00	28.00		20.00	
9- 8	195.00	149.00	124.00	104.00	80.00	61.00	50.00	37.00		21.00	
9- 9	209.00	139.00	120.00	106.00	80.00	64.00	58.00	35.00		20.00	
9-10	202.00	126.00	115.00	107.00	82.00	64.00	57.00	29.00		12.00	
9-11	173.00	122.00	109.00	106.00	78.00	65.00	53.00	30.00		8.00	
9-12	155.00	119.00	115.00	105.00	77.00	64.00	53.00	29.00		9.00	
9-13	152.00	126.00	121.00	105.00	83.00	67.00	55.00	33.00		15.00	
9-14	1330.00	144.00	121.00	105.00	85.00	67.00	58.00	42.00		17.00	
9-15	522.00	150.00	122.00	105.00	85.00	70.00	61.00	42.00		15.00	
9-16	349.00	204.00	121.00	110.00	94.00	75.00	62.00	26.00		20.00	
9-17	367.00	204.00	137.00	109.00	91.00	77.00	66.00	25.00		18.00	
9-18	513.00	248.00	220.00	116.00	92.00	79.00	67.00	32.00		20.00	
9-19	299.00	243.00	171.00	117.00	90.00	77.00	65.00	35.00		20.00	
9-20	9610.00	148.00	152.00	117.00	94.00	76.00	69.00	47.00		22.00	
9-21	9890.00	179.00	154.00	108.00	92.00	73.00	65.00	49.00		18.00	
9-22	1440.00	188.00	152.00	112.00	90.00	75.00	61.00	48.00		20.00	
9-23	572.00	300.00	162.00	122.00	95.00	78.00	62.00	45.00		20.00	
9-24	1140.00	202.00	155.00	122.00	95.00	77.00	63.00	49.00		20.00	
9-25	757.00	218.00	166.00	150.00	96.00	75.00	70.00	49.00		20.00	
9-26	1030.00	194.00	176.00	147.00	92.00	73.00	71.00	49.00		24.00	
9-27	463.00	241.00	163.00	132.00	88.00	75.00	62.00	49.00		22.00	
9-28	227.00	177.00	163.00	123.00	90.00	73.00	66.00	47.00		20.00	
9-29	495.00	210.00	172.00	123.00	94.00	72.00	64.00	48.00		22.00	
9-30	1000.00	141.00	151.00	123.00	96.00	72.00	58.00	49.00		24.00	
MEAN	851.53	207.43	168.00	146.43	100.06	77.96	68.00	34.16		22.43	

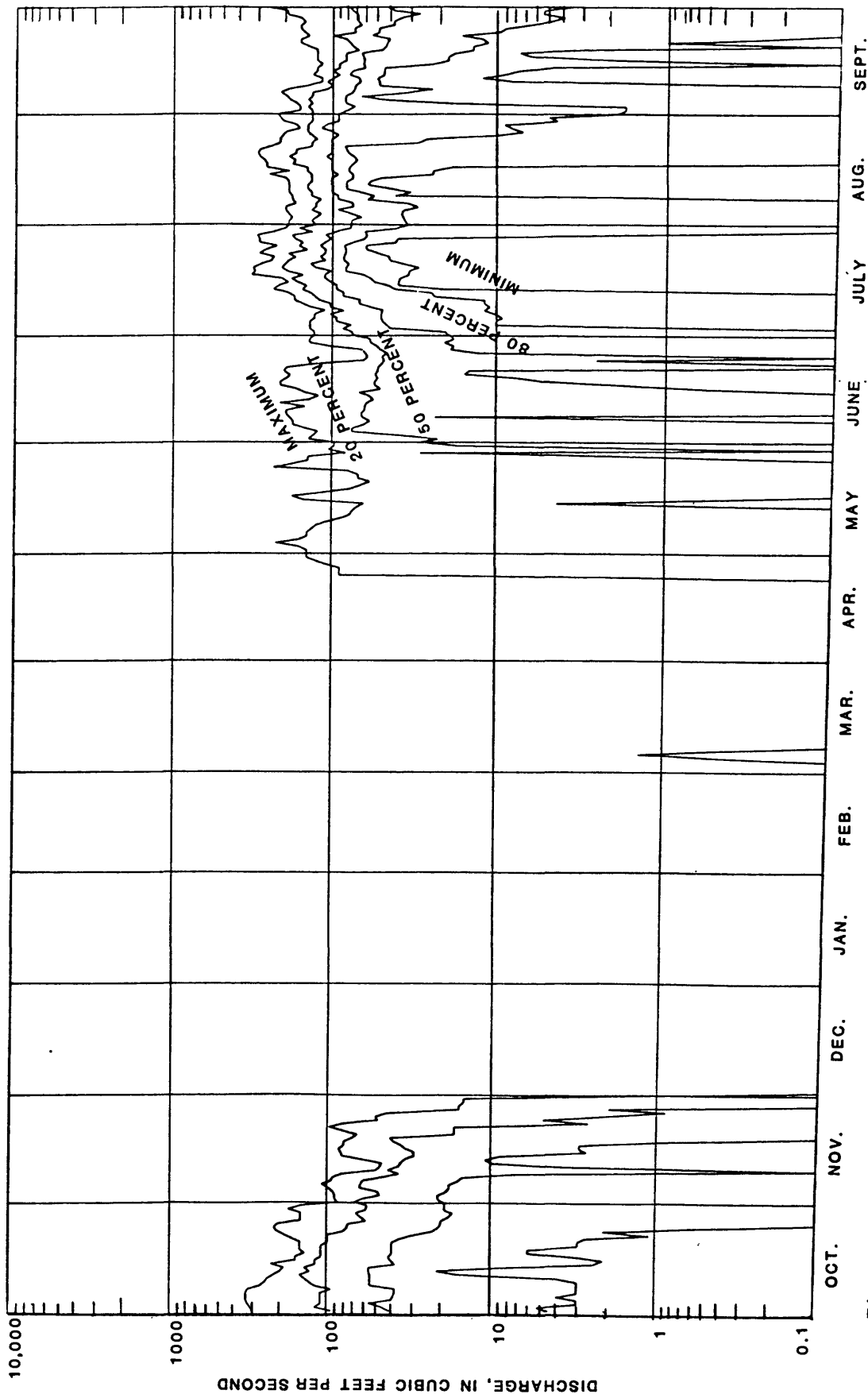


Figure 4.--Duration hydrograph for 19-year period beginning October 1962, Cheyenne River basin, station 06430000, Murray Ditch at Wyoming-South Dakota State line

Table 3.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430000,  
Murray Ditch at Wyoming-South Dakota State line

LOCATION.--Lat 44°34'35", long 104°02'58", in SW¼SW¼ sec.7, T.7 N., R.1 E., Butte County,  
Hydrologic Unit 10120203, on right bank 15 ft downstream from State line and 12 mi south-  
west of Belle Fourche, SD.

PERIOD OF RECORD.--June 1954 to current year (irrigation seasons only prior to October  
1959).

GAGE.--Water-stage recorder. Altitude of gage is 3,440 ft, from topographic map.

REMARKS.--Records fair. Ditch diverts water from left bank of Redwater Creek, 2.0 mi up-  
stream, for irrigation of about 700 acres. Flow maintained during irrigation season  
only. Several observations of water temperature and specific conductance were made  
during the year.

3 EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 37 ft<sup>3</sup>/s July 17, 1973; no flow  
for long periods in each year.

Table 3.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430000,  
Murray Ditch at Wyoming-South Dakota State line--Continued

DATE	Percent exceedance values									LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90		
10- 1	30.00	13.00	9.50	8.30	4.10	2.30	0.45	0.00	0.00	
10- 2	31.00	13.00	12.00	7.40	4.60	2.10	.52	.35	.00	
10- 3	32.00	13.00	11.00	8.30	5.50	2.40	.30	.30	.00	
10- 4	33.00	15.00	11.00	8.10	4.00	1.60	.50	.00	.00	
10- 5	33.00	23.00	11.00	9.50	3.90	.70	.40	.00	.00	
10- 6	33.00	16.00	11.00	9.20	3.80	.70	.30	.00	.00	
10- 7	32.00	12.00	9.50	8.10	3.80	.60	.30	.14	.00	
10- 8	27.00	13.00	12.00	11.00	5.40	2.60	.30	.00	.00	
10- 9	25.00	17.00	13.00	12.00	5.40	2.60	.50	.00	.00	
10-10	24.00	19.00	14.00	12.00	5.40	2.40	.40	.00	.00	
10-11	22.00	20.00	15.00	12.00	5.40	2.40	1.60	.00	.00	
10-12	20.00	18.00	13.00	12.00	5.50	2.60	2.10	.00	.00	
10-13	19.00	18.00	14.00	12.00	5.50	2.10	.91	.00	.00	
10-14	23.00	16.00	12.00	10.00	3.80	1.90	.24	.00	.00	
10-15	16.00	15.00	12.00	10.00	4.00	1.90	.21	.00	.00	
10-16	16.00	14.00	11.00	5.60	4.20	2.00	.50	.00	.00	
10-17	14.00	13.00	11.00	5.70	4.00	.83	.60	.15	.00	
10-18	15.00	14.00	11.00	6.50	4.00	2.30	.60	.00	.00	
10-19	15.00	14.00	11.00	7.00	4.00	2.40	.50	.12	.00	
10-20	15.00	12.00	10.00	7.20	4.00	2.20	.30	.00	.00	
10-21	17.00	13.00	10.00	7.00	3.60	.80	.27	.00	.00	
10-22	19.00	12.00	10.00	7.50	3.00	.50	.11	.00	.00	
10-23	21.00	12.00	8.00	6.00	2.30	.27	.21	.00	.00	
10-24	22.00	15.00	7.60	5.60	2.10	.27	.06	.00	.00	
10-25	21.00	15.00	7.50	5.60	2.00	.30	.00	.00	.00	
10-26	15.00	13.00	5.80	3.00	2.00	.24	.00	.00	.00	
10-27	15.00	8.50	6.30	3.00	1.80	.35	.00	.00	.00	
10-28	15.00	8.40	6.70	3.00	1.70	.03	.00	.00	.00	
10-29	18.00	8.50	5.80	4.10	1.90	.02	.00	.00	.00	
10-30	15.00	8.50	5.70	5.00	1.90	.00	.00	.00	.00	
10-31	8.70	8.70	6.90	3.10	1.90	.50	.00	.00	.00	
MEAN	15.88	12.66	7.96	6.99	5.44	2.47	1.09	.63	.04	

Table 3.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430000,  
Murray Ditch at Wyoming-South Dakota State line--Continued

DATE	Percent exceedance values								
	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW
11-1	9.10	8.90	6.10	4.70	2.10	0.09	0.00	0.00	0.00
11-2	9.10	9.10	4.80	3.70	2.10	.09	.00	.00	.00
11-3	9.40	9.10	5.00	4.10	1.90	.00	.00	.00	.00
11-4	10.00	9.10	6.40	4.10	1.80	.00	.00	.00	.00
11-5	11.00	9.50	6.30	4.00	1.80	.09	.00	.00	.00
11-6	9.70	9.10	6.10	4.00	1.60	.00	.00	.00	.00
11-7	9.40	9.10	4.70	3.40	1.50	.00	.00	.00	.00
11-8	8.30	6.30	3.70	3.40	.74	.00	.00	.00	.00
11-9	5.10	4.90	4.30	3.40	.00	.00	.00	.00	.00
11-10	4.80	4.30	3.70	1.80	.38	.00	.00	.00	.00
11-11	4.70	4.40	3.60	1.70	1.00	.00	.00	.00	.00
11-12	6.20	4.30	3.40	1.70	1.10	.00	.00	.00	.00
11-13	8.30	4.30	3.00	1.70	.90	.00	.00	.00	.00
11-14	8.40	4.60	3.00	1.70	.27	.00	.00	.00	.00
11-15	8.70	4.60	3.40	1.70	.30	.00	.00	.00	.00
11-16	8.10	4.60	3.60	1.70	.30	.00	.00	.00	.00
11-17	8.10	4.70	4.00	1.70	.09	.00	.00	.00	.00
11-18	7.20	5.20	4.20	1.20	.00	.00	.00	.00	.00
11-19	6.70	4.80	1.70	1.00	.00	.00	.00	.00	.00
11-20	8.30	4.40	1.70	.40	.00	.00	.00	.00	.00
11-21	10.00	4.70	1.70	.24	.00	.00	.00	.00	.00
11-22	8.10	5.20	.27	.00	.00	.00	.00	.00	.00
11-23	5.00	3.90	.50	.00	.00	.00	.00	.00	.00
11-24	5.20	2.00	.21	.00	.00	.00	.00	.00	.00
11-25	4.40	1.70	.09	.00	.00	.00	.00	.00	.00
11-26	1.60	.60	.20	.00	.00	.00	.00	.00	.00
11-27	1.60	.70	.00	.00	.00	.00	.00	.00	.00
11-28	1.50	.00	.00	.00	.00	.00	.00	.00	.00
11-29	1.50	.00	.00	.00	.00	.00	.00	.00	.00
11-30	.10	.00	.00	.00	.00	.00	.00	.00	.00
MEAN	5.30	4.26	2.42	2.20	.98	.04	.00	.00	.00

Table 3.---Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430000,  
Murray Ditch at Wyoming-South Dakota State line--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
12- 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12- 2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12- 3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12- 4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12- 5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12- 6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12- 7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12- 8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12- 9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12-31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	

Table 3.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430000,  
Murray Ditch at Wyoming-South Dakota State line--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
1- 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1- 2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1- 3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1- 4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1- 5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1- 6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1- 7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1- 8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1- 9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
1-31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	



Table 3.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430000,  
Murray Ditch at Wyoming-South Dakota State line--Continued

DATE	Percent exceedance values									LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90		
2- 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2- 2	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2- 3	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2- 4	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2- 5	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2- 6	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2- 7	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2- 8	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2- 9	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-10	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-11	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-12	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-13	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-14	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-15	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-16	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-17	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-18	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-19	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-20	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-21	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-22	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-23	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-24	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-25	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-26	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-27	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2-28	.00	.00	.00	.00	.00	.00	.00	.00	.00	
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	.00	

Table 3.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430000,  
Murray Ditch at Wyoming-South Dakota State line--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
3- 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3- 2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3- 3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3- 4	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3- 5	.15	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3- 6	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3- 7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3- 8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3- 9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3-31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	

Table 3.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430000,  
Murray Ditch at Wyoming-South Dakota State line--Continued

DATE	Percent exceedance values									
	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW	
4- 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4- 2	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4- 3	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4- 4	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4- 5	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4- 6	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4- 7	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4- 8	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4- 9	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-10	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-11	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-12	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-13	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-14	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-15	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-16	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-17	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-18	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-19	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-20	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-21	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-22	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-23	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-24	10.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-25	10.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-26	10.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-27	12.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-28	14.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-29	16.00	.00	.00	.00	.00	.00	.00	.00	.00	
4-30	16.00	.00	.00	.00	.00	.00	.00	.00	.00	
MEAN	2.93	.00	.00	.00	.00	.00	.00	.00	.00	

Table 3.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430000,  
Murray Ditch at Wyoming-South Dakota State line--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
S- 1	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	
S- 2	18.00	.00	.00	.00	.00	.00	.00	.00		.00	
S- 3	25.00	.00	.00	.00	.00	.00	.00	.00		.00	
S- 4	18.00	.24	.00	.00	.00	.00	.00	.00		.00	
S- 5	16.00	.05	.00	.00	.00	.00	.00	.00		.00	
S- 6	16.00	.00	.00	.00	.00	.00	.00	.00		.00	
S- 7	15.00	.42	.00	.00	.00	.00	.00	.00		.00	
S- 8	14.00	.66	.00	.00	.00	.00	.00	.00		.00	
S- 9	12.00	.05	.00	.00	.00	.00	.00	.00		.00	
S-10	9.70	.20	.00	.00	.00	.00	.00	.00		.00	
S-11	8.70	.00	.00	.00	.00	.00	.00	.00		.00	
S-12	8.40	.00	.00	.00	.00	.00	.00	.00		.00	
S-13	7.90	.00	.00	.00	.00	.00	.00	.00		.00	
S-14	7.20	5.60	.50	.00	.00	.00	.00	.00		.00	
S-15	17.00	8.10	.08	.00	.00	.00	.00	.00		.00	
S-16	20.00	8.70	.00	.00	.00	.00	.00	.00		.00	
S-17	13.00	8.70	.00	.00	.00	.00	.00	.00		.00	
S-18	8.70	8.40	.00	.00	.00	.00	.00	.00		.00	
S-19	7.60	3.60	.00	.00	.00	.00	.00	.00		.00	
S-20	6.60	3.90	.00	.00	.00	.00	.00	.00		.00	
S-21	7.80	4.00	.00	.00	.00	.00	.00	.00		.00	
S-22	7.80	4.00	.00	.00	.00	.00	.00	.00		.00	
S-23	9.10	7.60	.00	.00	.00	.00	.00	.00		.00	
S-24	26.00	7.60	.00	.00	.00	.00	.00	.00		.00	
S-25	20.00	7.60	.00	.00	.00	.00	.00	.00		.00	
S-26	16.00	7.60	.00	.00	.00	.00	.00	.00		.00	
S-27	16.00	6.80	.10	.00	.00	.00	.00	.00		.00	
S-28	9.40	6.70	3.30	.00	.00	.00	.00	.00		.00	
S-29	12.00	6.70	.00	.00	.00	.00	.00	.00		.00	
S-30	11.00	8.00	1.90	.00	.00	.00	.00	.00		.00	
S-31	11.00	8.90	3.60	.00	.00	.00	.00	.00		.00	
MEAN	8.92	5.03	.47	.07	.00	.00	.00	.00		.00	

Table 3.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430000,  
Murray Ditch at Wyoming-South Dakota State line--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
6- 1	16.00	9.20	2.60	1.80	0.00	0.00	0.00	0.00		0.00	
6- 2	15.00	9.40	4.40	1.90	.00	.00	.00	.00		.00	
6- 3	14.00	9.40	8.70	4.20	.00	.00	.00	.00		.00	
6- 4	17.00	8.90	8.50	5.10	.00	.00	.00	.00		.00	
6- 5	20.00	15.00	7.30	5.20	.00	.00	.00	.00		.00	
6- 6	20.00	18.00	6.70	5.30	.00	.00	.00	.00		.00	
6- 7	21.00	12.00	7.40	5.40	2.70	.00	.00	.00		.00	
6- 8	22.00	15.00	7.60	5.20	.00	.00	.00	.00		.00	
6- 9	22.00	15.00	7.20	4.80	.00	.00	.00	.00		.00	
6-10	17.00	15.00	7.20	4.70	.00	.00	.00	.00		.00	
6-11	24.00	11.00	7.00	5.20	.00	.00	.00	.00		.00	
6-12	16.00	9.80	6.40	5.20	.00	.00	.00	.00		.00	
6-13	14.00	9.60	6.80	5.20	.00	.00	.00	.00		.00	
6-14	17.00	9.40	7.80	5.10	.00	.00	.00	.00		.00	
6-15	19.00	8.30	5.80	3.30	.06	.00	.00	.00		.00	
6-16	24.00	9.20	6.30	3.70	.20	.00	.00	.00		.00	
6-17	24.00	8.80	6.30	3.60	.61	.00	.00	.00		.00	
6-18	22.00	7.40	6.00	3.50	.90	.00	.00	.00		.00	
6-19	21.00	6.80	6.30	4.60	1.80	.00	.00	.00		.00	
6-20	23.00	6.70	6.00	5.50	1.70	.00	.00	.00		.00	
6-21	22.00	6.70	6.00	4.50	.00	.00	.00	.00		.00	
6-22	15.00	7.20	5.70	4.90	.00	.00	.00	.00		.00	
6-23	7.40	6.80	5.50	3.40	.30	.00	.00	.00		.00	
6-24	7.00	6.80	5.70	3.80	.00	.00	.00	.00		.00	
6-25	7.20	7.00	5.30	4.70	1.50	.00	.00	.00		.00	
6-26	7.60	7.50	5.80	5.20	2.20	.00	.00	.00		.00	
6-27	12.00	8.20	6.10	5.60	2.10	.00	.00	.00		.00	
6-28	16.00	10.00	6.70	5.50	2.40	.00	.00	.00		.00	
6-29	16.00	8.70	6.80	6.30	2.10	.13	.00	.00		.00	
6-30	15.00	11.00	8.50	7.60	2.20	.00	.00	.00		.00	
MEAN	12.62	7.42	5.54	4.20	2.92	1.01	.00	.00		.00	

Table 3.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430000,  
Murray Ditch at Wyoming-South Dakota State line--Continued

DATE	Percent exceedance values								LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90	
7- 1	15.00	15.00	8.80	7.60	2.40	1.20	0.00	0.00	0.00
7- 2	16.00	13.00	10.00	8.00	5.10	1.20	.00	.00	.00
7- 3	16.00	13.00	9.00	8.30	5.40	1.50	1.20	.00	.00
7- 4	16.00	12.00	11.00	9.00	5.70	1.70	1.20	.00	.00
7- 5	15.00	15.00	11.00	9.50	5.80	2.40	1.10	.00	.00
7- 6	15.00	13.00	12.00	10.00	5.80	2.80	1.20	.00	.00
7- 7	13.00	11.00	10.00	10.00	5.70	3.00	1.40	.00	.00
7- 8	16.00	15.00	12.00	11.00	6.90	3.30	1.30	.00	.00
7- 9	18.00	17.00	12.00	11.00	8.00	3.60	1.40	.00	.00
7-10	20.00	16.00	14.00	12.00	7.90	4.00	1.40	1.40	.00
7-11	20.00	18.00	15.00	13.00	10.00	5.30	2.80	1.40	.00
7-12	22.00	19.00	16.00	14.00	10.00	5.20	2.90	1.40	.00
7-13	27.00	20.00	18.00	17.00	11.00	5.30	4.80	3.60	2.50
7-14	25.00	19.00	17.00	16.00	11.00	8.40	5.30	4.80	4.60
7-15	22.00	20.00	19.00	17.00	12.00	10.00	6.40	5.00	4.60
7-16	24.00	24.00	21.00	16.00	13.00	11.00	6.80	5.00	4.50
7-17	37.00	23.00	18.00	15.00	13.00	11.00	7.60	5.30	4.00
7-18	35.00	24.00	22.00	16.00	12.00	11.00	9.70	5.30	4.00
7-19	36.00	26.00	24.00	17.00	15.00	11.00	9.70	5.30	3.50
7-20	32.00	28.00	23.00	20.00	16.00	12.00	9.30	5.30	4.40
7-21	28.00	26.00	22.00	20.00	13.00	11.00	10.00	8.90	5.20
7-22	27.00	25.00	20.00	16.00	14.00	11.00	10.00	8.70	5.30
7-23	33.00	25.00	22.00	15.00	13.00	11.00	9.80	8.50	6.20
7-24	30.00	24.00	17.00	16.00	13.00	10.00	9.70	7.50	7.30
7-25	26.00	22.00	19.00	18.00	14.00	12.00	10.00	8.10	7.30
7-26	33.00	21.00	18.00	18.00	13.00	10.00	8.90	7.20	4.80
7-27	33.00	24.00	20.00	17.00	12.00	9.50	7.50	6.80	4.70
7-28	34.00	22.00	21.00	15.00	13.00	8.30	7.20	4.90	.24
7-29	27.00	22.00	16.00	14.00	11.00	8.90	7.50	6.20	.00
7-30	23.00	21.00	19.00	16.00	9.10	7.50	4.80	3.00	.00
7-31	22.00	21.00	15.00	13.00	9.10	5.70	4.10	.10	.00
MEAN	17.89	17.83	13.22	13.12	11.97	9.74	6.83	5.38	4.50

Table 3.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430000,  
Murray Ditch at Wyoming-South Dakota State line--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
A- 1	22.00	21.00	16.00	13.00	9.00	5.70	4.30	0.00		0.00	
A- 2	21.00	17.00	15.00	12.00	7.90	6.00	4.40	.00		.00	
A- 3	22.00	17.00	14.00	12.00	9.20	7.80	4.50	.00		.00	
A- 4	23.00	17.00	16.00	13.00	11.00	7.50	4.40	.00		.00	
A- 5	23.00	18.00	15.00	12.00	8.80	6.00	3.60	.00		.00	
A- 6	20.00	17.00	15.00	13.00	9.00	6.40	4.10	.00		.00	
A- 7	21.00	17.00	14.00	13.00	11.00	8.70	7.20	3.90		.00	
A- 8	21.00	18.00	16.00	13.00	11.00	9.10	6.60	5.30		4.90	
A- 9	22.00	18.00	16.00	12.00	12.00	10.00	7.90	5.80		4.00	
A-10	22.00	18.00	17.00	15.00	12.00	11.00	9.80	6.20		5.20	
A-11	22.00	19.00	17.00	15.00	12.00	11.00	9.80	8.40		7.20	
A-12	22.00	18.00	16.00	15.00	12.00	10.00	9.70	8.10		6.90	
A-13	23.00	20.00	16.00	14.00	12.00	9.50	8.90	6.20		6.00	
A-14	24.00	22.00	16.00	14.00	11.00	9.70	8.90	6.30		2.50	
A-15	22.00	21.00	17.00	15.00	12.00	10.00	9.50	5.70		2.90	
A-16	30.00	23.00	17.00	14.00	12.00	10.00	9.40	6.00		2.20	
A-17	30.00	22.00	21.00	16.00	12.00	10.00	8.90	5.20		.00	
A-18	31.00	23.00	20.00	15.00	12.00	10.00	8.40	4.70		.00	
A-19	33.00	24.00	22.00	14.00	13.00	10.00	8.80	8.10		.00	
A-20	34.00	24.00	20.00	16.00	12.00	10.00	9.50	1.90		.00	
A-21	33.00	22.00	20.00	16.00	12.00	10.00	9.80	1.60		.00	
A-22	28.00	22.00	16.00	15.00	12.00	11.00	10.00	1.50		.00	
A-23	25.00	22.00	16.00	15.00	12.00	10.00	3.60	.46		.00	
A-24	25.00	24.00	15.00	14.00	12.00	10.00	3.20	.00		.00	
A-25	24.00	21.00	16.00	15.00	11.00	9.80	1.20	.00		.00	
A-26	23.00	17.00	17.00	16.00	12.00	10.00	.86	.00		.00	
A-27	19.00	18.00	17.00	17.00	14.00	10.00	1.00	.00		.00	
A-28	20.00	19.00	17.00	16.00	13.00	9.10	1.10	.00		.00	
A-29	24.00	19.00	16.00	15.00	11.00	7.50	.54	.00		.00	
A-30	25.00	16.00	16.00	15.00	11.00	6.90	.60	.22		.00	
A-31	26.00	17.00	16.00	15.00	11.00	4.20	.24	.00		.00	
MEAN	16.26	16.06	15.32	14.00	11.26	8.73	8.26	7.35		4.87	

Table 3.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430000,  
Murray Ditch at Wyoming-South Dakota State line--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
9- 1	19.00	18.00	16.00	15.00	9.70	4.30	0.21	0.00		0.00	
9- 2	19.00	17.00	17.00	14.00	8.80	2.70	.21	.00		.00	
9- 3	20.00	18.00	16.00	14.00	10.00	7.30	2.30	.00		.00	
9- 4	22.00	22.00	17.00	14.00	10.00	8.00	5.70	.15		.00	
9- 5	23.00	23.00	16.00	15.00	10.00	8.70	8.00	.15		.00	
9- 6	25.00	16.00	16.00	11.00	9.10	7.80	4.30	1.90		.00	
9- 7	22.00	17.00	13.00	11.00	8.80	7.50	3.00	2.20		.00	
9- 8	17.00	12.00	12.00	10.00	8.70	7.30	6.20	1.90		.00	
9- 9	14.00	13.00	13.00	10.00	8.10	6.70	6.20	1.80		1.00	
9-10	14.00	13.00	12.00	10.00	8.30	6.60	6.40	3.00		1.50	
9-11	16.00	13.00	11.00	11.00	9.50	6.90	5.80	3.00		1.10	
9-12	15.00	12.00	12.00	10.00	9.10	7.60	5.80	2.90		.91	
9-13	15.00	13.00	11.00	11.00	7.60	6.70	5.70	2.10		.55	
9-14	14.00	13.00	11.00	10.00	7.80	4.40	3.00	.35		.00	
9-15	15.00	13.00	10.00	9.80	7.70	3.10	2.40	1.40		.24	
9-16	15.00	13.00	10.00	9.40	7.80	4.90	2.40	1.10		.78	
9-17	15.00	11.00	10.00	8.40	8.00	4.10	2.20	.96		.91	
9-18	15.00	10.00	8.40	7.50	6.00	2.30	1.70	.45		.37	
9-19	17.00	13.00	9.10	8.00	5.70	1.90	1.70	.24		.01	
9-20	19.00	14.00	9.50	7.80	5.60	1.70	1.40	.36		.12	
9-21	19.00	15.00	10.00	8.30	5.40	4.30	1.50	.50		.03	
9-22	17.00	17.00	12.00	8.20	6.90	2.50	2.00	.40		.00	
9-23	18.00	17.00	8.80	8.00	6.30	2.10	1.20	.35		.00	
9-24	19.00	16.00	9.00	7.80	6.30	2.20	1.10	.35		.00	
9-25	19.00	16.00	8.10	6.60	5.10	3.30	.80	.24		.00	
9-26	18.00	17.00	8.50	7.60	5.10	2.60	.60	.21		.00	
9-27	19.00	13.00	8.50	7.00	4.60	1.50	.50	.09		.00	
9-28	23.00	15.00	8.60	7.20	3.60	2.60	.67	.30		.00	
9-29	23.00	13.00	9.20	8.40	5.10	2.50	.65	.05		.00	
9-30	30.00	13.00	9.60	8.30	5.60	2.40	.45	.00		.00	
MEAN	15.56	12.04	9.47	8.79	8.02	6.30	4.47	1.63		1.01	



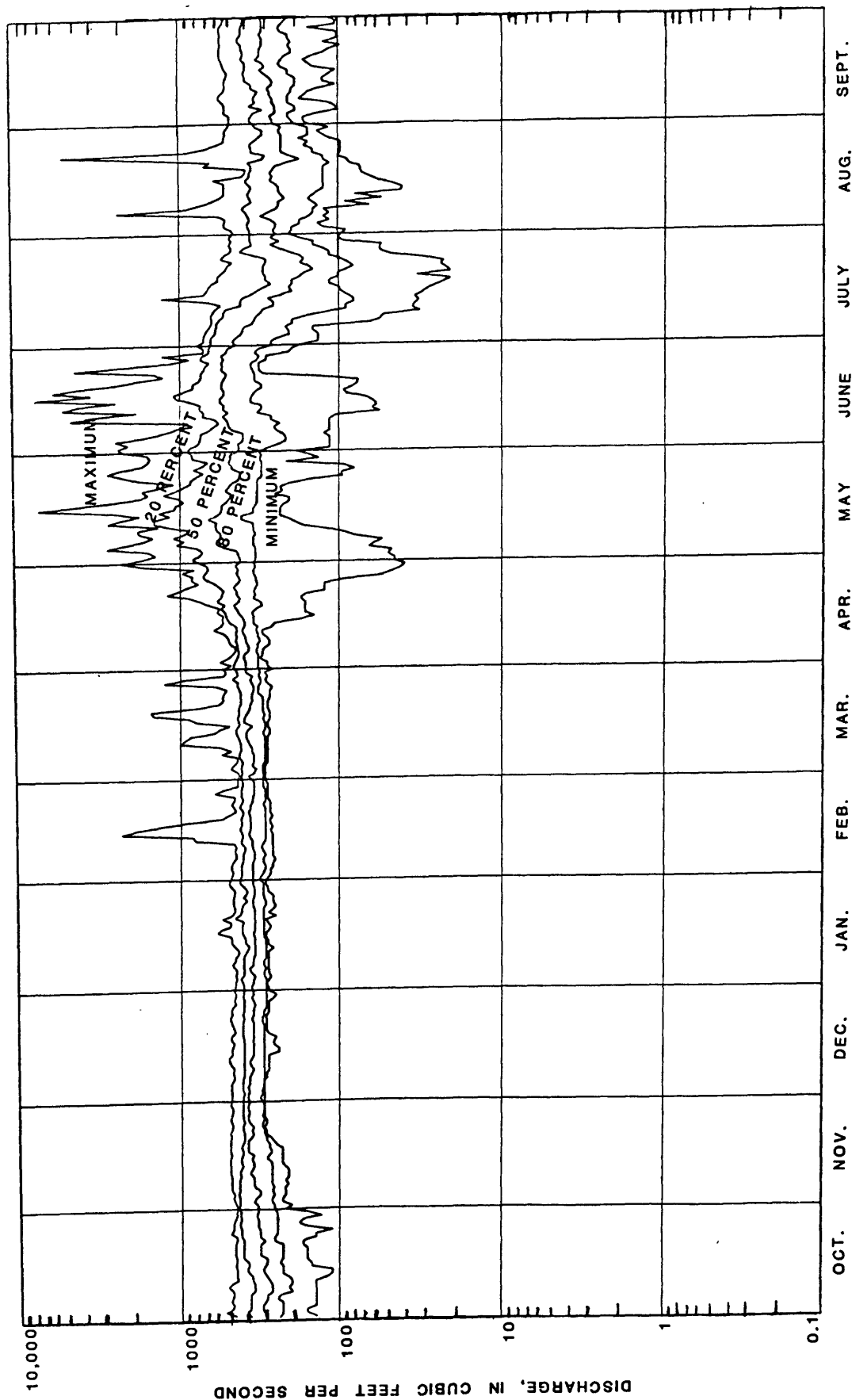


Figure 5.---Duration hydrograph for 19-year period beginning October 1962, Cheyenne River basin, station 06430500, Redwater Creek at Wyoming-South Dakota State line

Table 3.--Plotting points for duration hydrograph for 19-year period beginning October 1962, Cheyenne River basin, station 06430500, Redwater River 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, Hydrologic Unit 10120203, on left bank 800 ft downstream from State line, 5.7 mi upstream from Crow Creek, and 12 mi southwest of Belle Fourche, SD.

DRAINAGE AREA.--471 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1929 to September 1931 and February 1936 to July 1937 (published as "near Beulah, WY"), June 1954 to current year.

REVISED RECORDS.--WSP 1309: 1931(M), 1936-37(M).

GAGE.--Water-stage recorder. Altitude of gage is 3,410 ft, from topographic map. Apr. 25, 1929, to Sept. 30, 1931, and Feb. 28, 1936, to July 31, 1937, nonrecording gage at site 2 mi upstream at different datum.

REMARKS.--Records good. Large diversions for irrigation above station. Total flow passing State line may be obtained by adding flow of Murray ditch (see station 06430000). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--31 years, 36.0 ft<sup>3</sup>/s (26,080 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,440 ft<sup>3</sup>/s Aug. 22, 1973 (gage height, 12.19 ft), from rating curve extended above 1,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 11.95 ft; no flow Aug. 13-15, 1929.

Table 4.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430500,  
Redwater Creek at Wyoming-South Dakota State line--Continued

Percent exceedance values									
DATE	HIGH	.10	.20	.30	.50	.70	.80	.90	LIM
10- 1	46.00	44.00	37.00	33.00	30.00	25.00	24.00	17.00	14.00
10- 2	53.00	44.00	39.00	33.00	30.00	25.00	23.00	17.00	16.00
10- 3	48.00	46.00	37.00	32.00	31.00	26.00	23.00	18.00	16.00
10- 4	47.00	45.00	37.00	32.00	31.00	26.00	23.00	16.00	14.00
10- 5	49.00	44.00	37.00	32.00	30.00	26.00	23.00	16.00	14.00
10- 6	42.00	44.00	37.00	32.00	29.00	27.00	25.00	14.00	14.00
10- 7	47.00	47.00	37.00	35.00	29.00	26.00	24.00	15.00	14.00
10- 8	46.00	47.00	35.00	33.00	27.00	26.00	20.00	19.00	14.00
10- 9	51.00	46.00	35.00	33.00	27.00	24.00	21.00	16.00	14.00
10-10	48.00	44.00	35.00	34.00	27.00	23.00	20.00	16.00	14.00
10-11	44.00	43.00	36.00	35.00	28.00	23.00	20.00	15.00	14.00
10-12	45.00	43.00	36.00	35.00	29.00	24.00	21.00	12.00	12.00
10-13	45.00	43.00	38.00	35.00	30.00	25.00	23.00	12.00	11.00
10-14	45.00	45.00	39.00	35.00	31.00	26.00	23.00	12.00	11.00
10-15	46.00	45.00	38.00	35.00	30.00	25.00	23.00	21.00	15.00
10-16	45.00	45.00	38.00	35.00	29.00	25.00	24.00	21.00	15.00
10-17	45.00	45.00	41.00	36.00	29.00	25.00	23.00	21.00	16.00
10-18	46.00	45.00	41.00	35.00	32.00	26.00	23.00	21.00	16.00
10-19	46.00	46.00	41.00	35.00	32.00	27.00	23.00	21.00	16.00
10-20	46.00	45.00	41.00	35.00	32.00	25.00	23.00	23.00	16.00
10-21	46.00	43.00	41.00	37.00	32.00	24.00	23.00	23.00	17.00
10-22	45.00	44.00	41.00	38.00	30.00	27.00	26.00	22.00	17.00
10-23	45.00	43.00	42.00	40.00	32.00	26.00	26.00	22.00	14.00
10-24	49.00	43.00	42.00	41.00	32.00	28.00	25.00	17.00	14.00
10-25	47.00	44.00	42.00	41.00	32.00	30.00	25.00	17.00	11.00
10-26	47.00	45.00	43.00	41.00	33.00	30.00	25.00	18.00	16.00
10-27	47.00	45.00	43.00	40.00	33.00	30.00	25.00	18.00	16.00
10-28	46.00	45.00	42.00	40.00	33.00	29.00	25.00	23.00	17.00
10-29	45.00	44.00	43.00	39.00	34.00	30.00	25.00	23.00	15.00
10-30	45.00	45.00	42.00	39.00	33.00	30.00	25.00	23.00	16.00
10-31	44.00	44.00	44.00	39.00	33.00	28.00	26.00	23.00	22.00
MEAN	45.00	44.43	38.63	34.64	30.03	25.83	24.25	20.67	16.71

Table 4.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430500,  
Redwater Creek at Wyoming-South Dakota State line--Continued

DATE	HIGH	Percent exceedance values								11%
		.10	.20	.30	.50	.70	.80	.90		
11- 1	45.00	44.00	43.00	37.00	33.00	28.00	26.00	25.00	20.00	
11- 2	46.00	44.90	43.00	39.00	35.00	30.00	27.00	25.00	23.00	
11- 3	47.00	46.00	43.00	39.00	34.00	29.00	27.00	24.00	23.00	
11- 4	46.00	45.00	44.00	39.00	32.00	29.00	26.00	24.00	22.00	
11- 5	45.00	45.00	43.00	40.00	32.00	29.00	27.00	24.00	22.00	
11- 6	48.00	45.00	43.00	39.00	34.00	29.00	26.00	22.00	22.00	
11- 7	48.00	44.00	43.00	39.00	35.00	29.00	27.00	22.00	21.00	
11- 8	48.00	45.00	43.00	40.00	35.00	29.00	27.00	23.00	22.00	
11- 9	48.00	45.00	42.00	40.00	35.00	31.00	27.00	24.00	21.00	
11-10	49.00	45.00	43.00	40.00	37.00	31.00	27.00	23.00	21.00	
11-11	49.00	45.00	42.00	40.00	36.00	30.00	27.00	24.00	21.00	
11-12	49.00	45.00	41.00	40.00	35.00	30.00	27.00	24.00	22.00	
11-13	49.00	45.00	42.00	41.00	35.00	30.00	27.00	27.00	23.00	
11-14	49.00	45.00	42.00	40.00	36.00	29.00	29.00	26.00	23.00	
11-15	48.00	45.00	41.00	40.00	35.00	31.00	28.00	26.00	23.00	
11-16	49.00	45.00	41.00	40.00	38.00	31.00	27.00	27.00	23.00	
11-17	49.00	45.00	42.00	41.00	38.00	31.00	28.00	27.00	23.00	
11-18	49.00	45.00	41.00	40.00	38.00	30.00	28.00	27.00	25.00	
11-19	49.00	44.00	40.00	40.00	38.00	30.00	29.00	27.00	26.00	
11-20	48.00	44.00	40.00	39.00	36.00	32.00	29.00	27.00	27.00	
11-21	49.00	43.00	40.00	39.00	35.00	32.00	30.00	30.00	29.00	
11-22	48.00	43.00	41.00	40.00	36.00	32.00	30.00	29.00	29.00	
11-23	47.00	44.00	41.00	40.00	35.00	32.00	31.00	30.00	30.00	
11-24	48.00	44.00	40.00	39.00	37.00	32.00	31.00	30.00	29.00	
11-25	49.00	44.00	41.00	40.00	38.00	33.00	30.00	29.00	29.00	
11-26	48.00	45.00	41.00	40.00	38.00	33.00	31.00	30.00	30.00	
11-27	47.00	44.00	41.00	40.00	37.00	33.00	30.00	30.00	30.00	
11-28	47.00	43.00	41.00	40.00	38.00	32.00	30.00	30.00	30.00	
11-29	49.00	45.00	41.00	40.00	38.00	32.00	30.00	30.00	30.00	
11-30	48.00	45.00	41.00	40.00	37.00	32.00	31.00	30.00	30.00	
MEAN	47.93	44.56	41.26	39.76	36.36	31.13	27.90	27.30	25.66	

Table 4.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430500,  
Redwater Creek at Wyoming-South Dakota State line--Continued

Percent exceedance values										
DATE	PI-H	.10	.20	.30	.50	.70	.80	.90	LUW	
12- 1	46.00	47.00	41.00	40.00	36.00	33.00	32.00	30.00	30.00	
12- 2	48.00	46.00	46.00	40.00	38.00	32.00	31.00	30.00	30.00	
12- 3	48.00	45.00	41.00	40.00	37.00	32.00	31.00	30.00	30.00	
12- 4	46.00	42.00	41.00	40.00	38.00	32.00	30.00	30.00	30.00	
12- 5	48.00	41.00	41.00	40.00	37.00	31.00	30.00	30.00	30.00	
12- 6	46.00	41.00	41.00	40.00	37.00	31.00	30.00	30.00	30.00	
12- 7	46.00	41.00	40.00	39.00	37.00	30.00	30.00	29.00	29.00	
12- 8	47.00	40.00	40.00	38.00	36.00	31.00	30.00	29.00	29.00	
12- 9	46.00	41.00	40.00	38.00	35.00	31.00	30.00	30.00	30.00	
12-10	48.00	41.00	40.00	39.00	36.00	32.00	30.00	30.00	30.00	
12-11	49.00	41.00	40.00	39.00	37.00	32.00	30.00	29.00	29.00	
12-12	50.00	42.00	40.00	39.00	36.00	32.00	30.00	29.00	29.00	
12-13	47.00	44.00	40.00	39.00	35.00	32.00	30.00	28.00	28.00	
12-14	48.00	44.00	40.00	39.00	35.00	32.00	30.00	28.00	28.00	
12-15	47.00	43.00	40.00	39.00	35.00	32.00	30.00	28.00	28.00	
12-16	46.00	42.00	40.00	38.00	35.00	32.00	30.00	28.00	28.00	
12-17	48.00	42.00	40.00	39.00	35.00	33.00	30.00	28.00	28.00	
12-18	48.00	44.00	41.00	38.00	35.00	33.00	30.00	29.00	29.00	
12-19	45.00	44.00	41.00	39.00	35.00	33.00	30.00	28.00	28.00	
12-20	46.00	45.00	41.00	38.00	35.00	32.00	30.00	30.00	29.00	
12-21	47.00	45.00	41.00	38.00	35.00	33.00	30.00	29.00	29.00	
12-22	48.00	47.00	41.00	38.00	35.00	33.00	31.00	29.00	29.00	
12-23	49.00	45.00	40.00	37.00	36.00	33.00	31.00	29.00	29.00	
12-24	47.00	45.00	41.00	38.00	35.00	33.00	30.00	29.00	29.00	
12-25	46.00	44.00	40.00	38.00	35.00	32.00	30.00	29.00	28.00	
12-26	47.00	44.00	40.00	37.00	35.00	32.00	29.00	29.00	28.00	
12-27	45.00	44.00	40.00	38.00	34.00	32.00	29.00	29.00	28.00	
12-28	46.00	44.00	40.00	37.00	35.00	31.00	29.00	28.00	28.00	
12-29	45.00	44.00	41.00	37.00	36.00	30.00	29.00	28.00	26.00	
12-30	45.00	42.00	40.00	38.00	35.00	29.00	29.00	27.00	25.00	
12-31	46.00	42.00	40.00	38.00	35.00	30.00	29.00	28.00	28.00	
MEAN	47.09	42.71	40.09	38.54	35.77	31.38	29.71	29.22	28.35	

Table 4.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430500,  
Redwater Creek at Wyoming-South Dakota State line--Continued

Percent exceedance values										
DATE	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW	
1-1	45.00	42.00	40.00	38.00	36.00	30.00	29.00	28.00	28.00	28.00
1-2	45.00	43.00	41.00	39.00	35.00	31.00	29.00	29.00	29.00	29.00
1-3	44.00	43.00	42.00	39.00	35.00	30.00	29.00	29.00	29.00	29.00
1-4	45.00	43.00	40.00	39.00	34.00	32.00	30.00	29.00	29.00	27.00
1-5	44.00	44.00	40.00	39.00	36.00	33.00	30.00	29.00	29.00	28.00
1-6	45.00	42.00	40.00	38.00	37.00	33.00	29.00	29.00	29.00	28.00
1-7	47.00	42.00	40.00	38.00	35.00	33.00	30.00	29.00	29.00	28.00
1-8	45.00	42.00	40.00	38.00	35.00	31.00	30.00	28.00	28.00	26.00
1-9	45.00	42.00	40.00	36.00	35.00	31.00	29.00	28.00	28.00	26.00
1-10	43.00	41.00	39.00	37.00	34.00	31.00	29.00	28.00	28.00	28.00
1-11	43.00	41.00	38.00	36.00	34.00	30.00	29.00	28.00	28.00	28.00
1-12	45.00	41.00	37.00	37.00	34.00	30.00	29.00	27.00	27.00	26.00
1-13	47.00	42.00	39.00	37.00	34.00	30.00	29.00	28.00	28.00	23.00
1-14	47.00	45.00	39.00	38.00	34.00	30.00	29.00	29.00	29.00	28.00
1-15	48.00	45.00	40.00	38.00	34.00	32.00	30.00	29.00	29.00	29.00
1-16	58.00	47.00	41.00	38.00	35.00	31.00	30.00	29.00	29.00	29.00
1-17	55.00	47.00	41.00	38.00	34.00	32.00	30.00	29.00	28.00	28.00
1-18	48.00	46.00	41.00	38.00	34.00	30.00	30.00	28.00	27.00	27.00
1-19	48.00	45.00	40.00	38.00	34.00	30.00	30.00	28.00	28.00	28.00
1-20	54.00	53.00	45.00	38.00	34.00	30.00	30.00	29.00	29.00	29.00
1-21	47.00	46.00	42.00	37.00	34.00	31.00	30.00	29.00	29.00	25.00
1-22	45.00	45.00	41.00	37.00	34.00	30.00	30.00	28.00	28.00	28.00
1-23	45.00	45.00	41.00	36.00	34.00	32.00	30.00	26.00	26.00	26.00
1-24	46.00	45.00	40.00	38.00	35.00	30.00	29.00	28.00	25.00	25.00
1-25	46.00	45.00	38.00	37.00	35.00	30.00	29.00	26.00	26.00	26.00
1-26	46.00	46.00	40.00	36.00	35.00	31.00	30.00	29.00	28.00	28.00
1-27	45.00	45.00	38.00	36.00	34.00	31.00	30.00	29.00	29.00	26.00
1-28	45.00	44.00	38.00	37.00	34.00	31.00	30.00	29.00	29.00	26.00
1-29	47.00	45.00	40.00	37.00	34.00	31.00	30.00	28.00	28.00	28.00
1-30	49.00	45.00	42.00	39.00	35.00	32.00	30.00	29.00	29.00	29.00
1-31	48.00	44.00	42.00	37.00	35.00	32.00	32.00	30.00	30.00	29.00
MEAN	46.13	43.03	40.03	38.03	33.38	31.67	29.83	29.13	28.74	

Table 4.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430500,  
Redwater Creek at Wyoming-South Dakota State line--Continued.

DATE	HIGH	Percent exceedance values							
		.10	.20	.30	.50	.70	.90	LOW	
2-1	47.00	45.00	41.00	38.00	35.00	32.00	29.00	26.00	
2-2	46.00	44.00	41.00	40.00	35.00	32.00	29.00	27.00	
2-3	47.00	44.00	41.00	38.00	35.00	31.00	27.00	27.00	
2-4	47.00	44.00	41.00	37.00	35.00	31.00	27.00	26.00	
2-5	46.00	46.00	40.00	37.00	35.00	32.00	27.00	26.00	
2-6	44.00	45.00	40.00	36.00	34.00	31.00	27.00	25.00	
2-7	44.00	44.00	40.00	38.00	34.00	32.00	26.00	26.00	
2-8	45.00	44.00	39.00	36.00	34.00	31.00	28.00	26.00	
2-9	44.00	44.00	39.00	36.00	35.00	32.00	26.00	26.00	
2-10	45.00	44.00	41.00	38.00	35.00	32.00	27.00	26.00	
2-11	79.00	46.00	41.00	36.00	35.00	31.00	27.00	26.00	
2-12	41.00	46.00	40.00	38.00	36.00	31.00	27.00	26.00	
2-13	224.00	45.00	41.00	40.00	37.00	31.00	27.00	26.00	
2-14	145.00	44.00	42.00	39.00	36.00	31.00	29.00	27.00	
2-15	133.00	44.00	41.00	38.00	36.00	31.00	26.00	26.00	
2-16	90.00	45.00	41.00	41.00	36.00	31.00	26.00	27.00	
2-17	54.00	45.00	41.00	40.00	36.00	30.00	29.00	27.00	
2-18	49.00	45.00	40.00	36.00	36.00	31.00	26.00	26.00	
2-19	44.00	44.00	40.00	34.00	37.00	31.00	29.00	27.00	
2-20	45.00	44.00	42.00	39.00	36.00	30.00	29.00	27.00	
2-21	47.00	45.00	41.00	40.00	36.00	30.00	28.00	27.00	
2-22	45.00	43.00	40.00	39.00	35.00	30.00	27.00	27.00	
2-23	45.00	43.00	41.00	40.00	35.00	30.00	26.00	28.00	
2-24	60.00	44.00	41.00	39.00	34.00	31.00	29.00	28.00	
2-25	53.00	44.00	41.00	38.00	34.00	31.00	26.00	28.00	
2-26	43.00	43.00	40.00	39.00	34.00	32.00	29.00	28.00	
2-27	43.00	42.00	40.00	39.00	34.00	33.00	29.00	28.00	
2-28	43.00	42.00	41.00	40.00	35.00	33.00	29.00	29.00	
MEAN	57.62	44.75	41.35	39.50	35.46	30.85	27.85	27.50	

Table 4.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430500,  
Redwater Creek at Wyoming-South Dakota State line--Continued

Percent exceedance values										
DATE	1934	.10	.20	.30	.50	.70	.80	.90	LOW	
3-1	42.00	42.00	41.00	40.00	37.00	32.00	30.00	29.00	29.00	29.00
3-2	43.00	42.00	40.00	39.00	34.00	32.00	30.00	29.00	29.00	29.00
3-3	47.00	42.00	41.00	38.00	35.00	31.00	30.00	29.00	29.00	29.00
3-4	45.00	42.00	40.00	36.00	35.00	30.00	30.00	29.00	29.00	29.00
3-5	43.00	42.00	40.00	40.00	34.00	30.00	29.00	29.00	29.00	28.00
3-6	43.00	42.00	42.00	40.00	34.00	30.00	29.00	28.00	28.00	28.00
3-7	54.00	42.00	42.00	40.00	34.00	30.00	29.00	28.00	28.00	28.00
3-8	47.00	42.00	41.00	39.00	35.00	30.00	29.00	28.00	28.00	28.00
3-9	55.00	44.00	41.00	41.00	35.00	31.00	29.00	29.00	29.00	28.00
3-10	46.00	42.00	41.00	40.00	36.00	32.00	29.00	29.00	29.00	28.00
3-11	41.00	45.00	42.00	40.00	37.00	32.00	29.00	29.00	29.00	28.00
3-12	44.00	45.00	43.00	40.00	38.00	33.00	29.00	29.00	29.00	28.00
3-13	60.00	45.00	44.00	43.00	38.00	32.00	30.00	29.00	29.00	27.00
3-14	55.00	50.00	44.00	42.00	37.00	30.00	29.00	29.00	29.00	27.00
3-15	48.00	43.00	42.00	41.00	35.00	30.00	29.00	28.00	28.00	28.00
3-16	76.00	48.00	42.00	41.00	39.00	30.00	29.00	29.00	29.00	28.00
3-17	85.00	51.00	43.00	42.00	39.00	30.00	30.00	29.00	29.00	27.00
3-18	140.00	44.00	42.00	40.00	38.00	32.00	29.00	29.00	29.00	27.00
3-19	146.00	46.00	42.00	40.00	37.00	32.00	30.00	29.00	29.00	27.00
3-20	75.00	43.00	42.00	39.00	36.00	31.00	30.00	30.00	30.00	28.00
3-21	56.00	44.00	41.00	40.00	36.00	32.00	30.00	29.00	29.00	28.00
3-22	53.00	48.00	41.00	39.00	35.00	32.00	30.00	29.00	29.00	28.00
3-23	53.00	46.00	41.00	39.00	35.00	32.00	30.00	29.00	29.00	27.00
3-24	52.00	45.00	41.00	39.00	35.00	33.00	32.00	29.00	29.00	27.00
3-25	50.00	44.00	42.00	39.00	34.00	33.00	32.00	28.00	28.00	27.00
3-26	54.00	48.00	43.00	40.00	34.00	32.00	32.00	28.00	28.00	26.00
3-27	121.00	48.00	43.00	40.00	35.00	32.00	31.00	29.00	29.00	28.00
3-28	94.00	48.00	46.00	41.00	36.00	32.00	31.00	29.00	29.00	29.00
3-29	53.00	44.00	43.00	40.00	35.00	32.00	32.00	29.00	29.00	28.00
3-30	50.00	47.00	43.00	41.00	38.00	33.00	31.00	29.00	29.00	29.00
3-31	53.00	51.00	45.00	41.00	38.00	34.00	32.00	31.00	31.00	26.00
MEAN	58.87	46.16	42.67	40.87	35.93	31.09	30.13	29.35	29.06	29.06



Table 4.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430500,  
Redwater Creek at Wyoming-South Dakota State line--Continued

DATE	HIGH	Percent exceedance values										LOW
		.10	.20	.30	.50	.70	.80	.90	100			
4-1	47.00	47.00	45.00	41.00	38.00	33.00	32.00	31.00	28.00			
4-2	55.00	47.00	44.00	42.00	38.00	35.00	32.00	31.00	28.00			
4-3	49.00	46.00	43.00	42.00	39.00	35.00	32.00	31.00	31.00			
4-4	46.00	45.00	42.00	42.00	39.00	34.00	32.00	31.00	30.00			
4-5	44.00	44.00	42.00	42.00	37.00	33.00	32.00	30.00	30.00			
4-6	44.00	44.00	43.00	41.00	36.00	33.00	32.00	31.00	29.00			
4-7	47.00	45.00	43.00	42.00	37.00	33.00	32.00	31.00	27.00			
4-8	48.00	46.00	44.00	43.00	38.00	34.00	31.00	31.00	27.00			
4-9	49.00	46.00	43.00	42.00	38.00	33.00	32.00	31.00	26.00			
4-10	52.00	49.00	44.00	41.00	39.00	33.00	32.00	30.00	30.00			
4-11	60.00	50.00	43.00	41.00	40.00	35.00	33.00	31.00	30.00			
4-12	55.00	50.00	44.00	42.00	39.00	36.00	32.00	31.00	26.00			
4-13	52.00	52.00	47.00	40.00	38.00	35.00	34.00	30.00	25.00			
4-14	53.00	50.00	49.00	43.00	39.00	37.00	34.00	30.00	17.00			
4-15	52.00	51.00	50.00	45.00	40.00	38.00	34.00	30.00	14.00			
4-16	57.00	55.00	51.00	48.00	42.00	38.00	35.00	29.00	16.00			
4-17	55.00	54.00	53.00	43.00	37.00	37.00	33.00	29.00	16.00			
4-18	64.00	59.00	50.00	45.00	40.00	40.00	30.00	30.00	16.00			
4-19	72.00	65.00	49.00	42.00	38.00	38.00	31.00	30.00	16.00			
4-20	84.00	74.00	47.00	41.00	36.00	36.00	34.00	30.00	17.00			
4-21	115.00	81.00	50.00	43.00	38.00	38.00	33.00	29.00	16.00			
4-22	99.00	73.00	49.00	43.00	40.00	40.00	34.00	29.00	12.00			
4-23	87.00	64.00	49.00	45.00	41.00	41.00	33.00	29.00	12.00			
4-24	75.00	73.00	49.00	43.00	40.00	40.00	32.00	29.00	12.00			
4-25	82.00	77.00	57.00	41.00	38.00	38.00	33.00	30.00	3.90			
4-26	41.00	77.00	58.00	42.00	37.00	37.00	33.00	29.00	5.30			
4-27	93.00	71.00	52.00	43.00	37.00	37.00	34.00	29.00	4.60			
4-28	79.00	78.00	56.00	42.00	39.00	39.00	34.00	29.00	4.10			
4-29	168.00	118.00	62.00	44.00	39.00	39.00	33.00	26.00	3.80			
4-30	220.00	135.00	61.00	41.00	38.00	38.00	34.00	27.00	4.40			
MEAN	60.90	57.76	52.26	46.30	42.26	37.86	33.50	30.36	18.80			

Table 4.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430500,  
Redwater Creek at Wyoming-South Dakota State line--Continued

DATE	Percent exceedance values								
	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW
5-1	162.00	87.00	81.00	67.00	41.00	38.00	35.00	25.00	4.40
5-2	136.00	101.00	73.00	60.00	42.00	37.00	35.00	25.00	4.40
5-3	150.00	117.00	70.00	61.00	43.00	38.00	35.00	24.00	4.60
5-4	268.00	110.00	76.00	70.00	51.00	36.00	33.00	26.00	6.30
5-5	207.00	109.00	101.00	72.00	57.00	38.00	34.00	28.00	5.00
5-6	161.00	139.00	91.00	87.00	57.00	40.00	34.00	32.00	5.20
5-7	141.00	136.00	105.00	84.00	54.00	39.00	34.00	30.00	7.50
5-8	170.00	144.00	89.00	77.00	54.00	39.00	33.00	30.00	8.60
5-9	173.00	155.00	84.00	80.00	57.00	41.00	34.00	30.00	11.00
5-10	130.00	128.00	115.00	87.00	58.00	41.00	34.00	30.00	16.00
5-11	264.00	182.00	137.00	99.00	57.00	41.00	34.00	30.00	16.00
5-12	220.00	166.00	137.00	85.00	64.00	40.00	40.00	30.00	20.00
5-13	170.00	145.00	111.00	102.00	57.00	40.00	40.00	29.00	23.00
5-14	248.00	154.00	128.00	94.00	54.00	39.00	34.00	30.00	23.00
5-15	706.00	149.00	104.00	83.00	53.00	40.00	34.00	31.00	23.00
5-16	420.00	146.00	101.00	73.00	53.00	41.00	33.00	29.00	22.00
5-17	251.00	153.00	91.00	68.00	49.00	38.00	32.00	30.00	20.00
5-18	167.00	164.00	96.00	65.00	47.00	36.00	32.00	29.00	20.00
5-19	150.00	149.00	120.00	68.00	46.00	36.00	32.00	26.00	25.00
5-20	163.00	131.00	104.00	74.00	50.00	36.00	32.00	24.00	22.00
5-21	127.00	118.00	92.00	68.00	48.00	36.00	32.00	23.00	23.00
5-22	105.00	103.00	83.00	62.00	46.00	35.00	32.00	23.00	20.00
5-23	173.00	122.00	82.00	74.00	42.00	35.00	32.00	25.00	15.00
5-24	211.00	102.00	76.00	68.00	41.00	36.00	30.00	23.00	9.20
5-25	265.00	157.00	69.00	63.00	40.00	36.00	30.00	23.00	9.20
5-26	220.00	124.00	79.00	65.00	45.00	36.00	30.00	23.00	7.70
5-27	164.00	116.00	70.00	62.00	46.00	35.00	30.00	23.00	9.00
5-28	151.00	126.00	65.00	63.00	48.00	36.00	30.00	23.00	21.00
5-29	145.00	108.00	80.00	59.00	46.00	35.00	31.00	23.00	13.00
5-30	150.00	101.00	81.00	64.00	47.00	36.00	30.00	22.00	15.00
5-31	211.00	100.00	85.00	62.00	42.00	38.00	31.00	19.00	18.00
MEAN	132.03	112.58	101.03	81.67	56.90	36.16	34.03	24.00	17.56

Table 4.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430500,  
Redwater Creek at Wyoming-South Dakota State line--Continued

Percent exceedance values										
DATE	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW	
6-1	226.00	187.00	84.00	62.00	41.00	36.00	28.00	18.00	11.00	
6-2	198.00	121.00	75.00	62.00	42.00	33.00	24.00	16.00	11.00	
6-3	235.00	95.00	72.00	61.00	39.00	33.00	21.00	16.00	11.00	
6-4	141.00	78.00	71.00	57.00	39.00	35.00	21.00	16.00	12.00	
6-5	126.00	75.00	71.00	56.00	39.00	33.00	22.00	16.00	11.00	
6-6	106.00	70.00	64.00	56.00	45.00	34.00	24.00	12.00	11.00	
6-7	94.00	71.00	59.00	57.00	47.00	30.00	25.00	14.00	11.00	
6-8	85.00	64.00	55.00	54.00	48.00	35.00	23.00	15.00	11.00	
6-9	448.00	80.00	58.00	55.00	49.00	36.00	26.00	17.00	11.00	
6-10	330.00	95.00	69.00	56.00	52.00	37.00	26.00	14.00	10.00	
6-11	175.00	91.00	68.00	55.00	48.00	34.00	32.00	16.00	5.40	
6-12	498.00	118.00	73.00	71.00	52.00	34.00	30.00	20.00	6.00	
6-13	408.00	113.00	71.00	63.00	51.00	34.00	30.00	25.00	5.60	
6-14	234.00	166.00	81.00	69.00	54.00	42.00	35.00	26.00	5.90	
6-15	732.00	151.00	99.00	72.00	54.00	42.00	35.00	28.00	6.50	
6-16	336.00	124.00	104.00	84.00	51.00	40.00	34.00	28.00	6.50	
6-17	570.00	111.00	91.00	76.00	51.00	36.00	33.00	26.00	9.00	
6-18	402.00	92.00	79.00	71.00	53.00	37.00	30.00	24.00	8.00	
6-19	239.00	155.00	80.00	73.00	53.00	36.00	30.00	25.00	7.40	
6-20	178.00	161.00	73.00	64.00	52.00	35.00	33.00	24.00	7.30	
6-21	120.00	103.00	70.00	61.00	50.00	36.00	33.00	26.00	13.00	
6-22	135.00	101.00	71.00	62.00	49.00	36.00	33.00	30.00	29.00	
6-23	420.00	110.00	68.00	64.00	53.00	36.00	34.00	33.00	31.00	
6-24	207.00	91.00	67.00	63.00	52.00	39.00	35.00	34.00	31.00	
6-25	111.00	85.00	63.00	60.00	53.00	45.00	35.00	32.00	31.00	
6-26	84.00	80.00	71.00	63.00	51.00	42.00	32.00	29.00	28.00	
6-27	122.00	74.00	70.00	62.00	53.00	42.00	31.00	28.00	26.00	
6-28	68.00	67.00	63.00	59.00	49.00	42.00	33.00	26.00	19.00	
6-29	68.00	67.00	63.00	53.00	48.00	42.00	31.00	25.00	17.00	
6-30	75.00	68.00	61.00	52.00	43.00	40.00	26.00	17.00	23.53	
MEAN	127.63	109.20	92.53	66.50	52.00	38.83	35.40	23.53	23.12	

Table 4.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430500,  
Redwater Creek at Wyoming-South Dakota State line--Continued

DATE	HIGH	Percent exceedance values										LUP
		.10	.20	.30	.50	.70	.80	.90				
7- 1	68.00	63.00	61.00	50.00	45.00	39.00	26.00	18.00	13.00			
7- 2	64.00	65.00	61.00	50.00	43.00	37.00	24.00	18.00	15.00			
7- 3	67.00	64.00	58.00	46.00	40.00	35.00	20.00	17.00	13.00			
7- 4	65.00	62.00	57.00	43.00	39.00	31.00	20.00	15.00	14.00			
7- 5	62.00	61.00	56.00	43.00	38.00	30.00	21.00	15.00	14.00			
7- 6	60.00	58.00	56.00	41.00	34.00	31.00	19.00	15.00	6.20			
7- 7	60.00	59.00	54.00	40.00	33.00	29.00	19.00	15.00	5.30			
7- 8	61.00	59.00	51.00	40.00	32.00	28.00	16.00	5.10	3.10			
7- 9	59.00	58.00	51.00	40.00	30.00	23.00	12.00	4.80	3.40			
7-10	57.00	55.00	49.00	36.00	29.00	18.00	8.70	4.80	3.30			
7-11	53.00	51.00	40.00	34.00	25.00	17.00	8.70	4.60	2.80			
7-12	66.00	49.00	40.00	37.00	25.00	13.00	7.70	4.10	2.50			
7-13	121.00	49.00	39.00	33.00	27.00	13.00	7.80	3.70	2.20			
7-14	69.00	48.00	35.00	29.00	22.00	12.00	6.60	3.20	2.00			
7-15	65.00	48.00	32.00	29.00	19.00	15.00	9.30	3.40	2.00			
7-16	63.00	48.00	29.00	23.00	20.00	15.00	9.60	6.20	2.50			
7-17	60.00	48.00	26.00	24.00	19.00	13.00	11.00	6.20	2.20			
7-18	55.00	48.00	28.00	26.00	19.00	14.00	11.00	7.20	2.00			
7-19	55.00	50.00	28.00	21.00	17.00	11.00	9.70	5.00	3.20			
7-20	52.00	49.00	29.00	26.00	16.00	11.00	9.70	6.50	2.00			
7-21	49.00	46.00	29.00	25.00	14.00	10.00	8.70	6.20	2.10			
7-22	48.00	42.00	29.00	25.00	15.00	10.00	7.80	4.70	2.30			
7-23	45.00	42.00	28.00	24.00	17.00	11.00	8.40	5.30	2.20			
7-24	53.00	41.00	28.00	22.00	16.00	11.00	9.30	7.20	2.90			
7-25	50.00	40.00	33.00	23.00	17.00	12.00	11.00	5.00	4.60			
7-26	46.00	44.00	40.00	28.00	20.00	14.00	11.00	7.90	5.20			
7-27	45.00	45.00	38.00	29.00	23.00	15.00	12.00	9.60	5.40			
7-28	47.00	45.00	34.00	30.00	26.00	17.00	14.00	9.90	5.20			
7-29	45.00	43.00	35.00	30.00	23.00	19.00	14.00	9.60	9.00			
7-30	47.00	44.00	35.00	33.00	26.00	20.00	17.00	13.00	9.60			
7-31	44.00	41.00	35.00	34.00	24.00	23.00	20.00	14.00	9.30			
MEAN	54.87	52.06	34.35	33.54	24.28	21.43	20.11	12.03	8.63			

Table 4.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430500,  
Redwater Creek at Wyoming-South Dakota State line--Continued

DATE	HIGH	Percent exceedance values										LOW
		.10	.20	.30	.50	.70	.80	.90	1.00			
8-1	45.00	40.00	35.00	32.00	25.00	22.00	19.00	14.00	14.00	8.60		
8-2	50.00	40.00	36.00	35.00	24.00	21.00	19.00	15.00	15.00	12.00		
8-3	50.00	39.00	36.00	34.00	24.00	21.00	17.00	15.00	15.00	13.00		
8-4	49.00	41.00	35.00	35.00	26.00	19.00	17.00	13.00	13.00	11.00		
8-5	54.00	48.00	36.00	34.00	30.00	21.00	15.00	14.00	14.00	12.00		
8-6	224.00	48.00	37.00	35.00	27.00	21.00	14.00	13.00	13.00	11.00		
8-7	86.00	48.00	39.00	31.00	24.00	16.00	14.00	12.00	12.00	12.00		
8-8	72.00	49.00	37.00	30.00	23.00	19.00	13.00	13.00	13.00	6.20		
8-9	60.00	49.00	34.00	27.00	23.00	17.00	14.00	14.00	14.00	8.80		
8-10	54.00	50.00	35.00	27.00	21.00	16.00	15.00	14.00	14.00	5.20		
8-11	50.00	47.00	36.00	27.00	22.00	14.00	14.00	13.00	13.00	7.60		
8-12	50.00	37.00	35.00	26.00	23.00	14.00	13.00	12.00	12.00	4.00		
8-13	50.00	39.00	34.00	29.00	23.00	15.00	12.00	11.00	11.00	3.90		
8-14	50.00	40.00	36.00	32.00	24.00	15.00	12.00	10.00	10.00	4.50		
8-15	58.00	44.00	37.00	32.00	26.00	21.00	12.00	6.50	6.50	5.40		
8-16	39.00	38.00	35.00	32.00	25.00	18.00	12.00	7.90	7.90	6.10		
8-17	37.00	36.00	35.00	31.00	26.00	13.00	12.00	7.00	7.00	6.80		
8-18	37.00	36.00	34.00	31.00	25.00	13.00	12.00	7.90	7.90	7.00		
8-19	67.00	38.00	34.00	29.00	24.00	12.00	12.00	7.60	7.60	7.10		
8-20	61.00	39.00	36.00	28.00	20.00	13.00	11.00	9.30	9.30	6.20		
8-21	142.00	54.00	29.00	25.00	17.00	13.00	12.00	9.30	9.30	8.50		
8-22	490.00	52.00	28.00	25.00	20.00	13.00	12.00	10.00	10.00	9.70		
8-23	85.00	51.00	34.00	24.00	22.00	15.00	14.00	9.70	9.70	9.30		
8-24	65.00	51.00	34.00	24.00	22.00	16.00	14.00	9.60	9.60	9.30		
8-25	55.00	50.00	35.00	27.00	22.00	18.00	16.00	10.00	10.00	9.30		
8-26	50.00	49.00	33.00	28.00	22.00	17.00	15.00	10.00	10.00	9.30		
8-27	50.00	49.00	31.00	27.00	22.00	18.00	17.00	12.00	12.00	11.00		
8-28	49.00	48.00	29.00	25.00	22.00	19.00	15.00	12.00	12.00	12.00		
8-29	49.00	45.00	29.00	24.00	23.00	16.00	15.00	14.00	14.00	13.00		
8-30	47.00	45.00	32.00	24.00	22.00	17.00	15.00	13.00	13.00	11.00		
8-31	46.00	45.00	33.00	28.00	25.00	19.00	18.00	16.00	16.00	15.00		
MEAN	50.93	48.45	32.77	29.25	22.97	20.22	16.29	12.93	12.93	12.41		

Table 4.--Plotting points for duration hydrograph for 19-year period beginning  
October 1962, Cheyenne River basin, station 06430500,  
Redwater Creek at Wyoming-South Dakota State line--Continued

DATE	HIGH	Percent exceedance values								
		.10	.20	.30	.50	.70	.80	.90	LOW	
9-1	46.00	45.00	35.00	28.00	25.00	23.00	19.00	17.00	16.00	
9-2	46.00	42.00	34.00	29.00	26.00	23.00	20.00	18.00	16.00	
9-3	50.00	46.00	35.00	29.00	24.00	23.00	20.00	15.00	13.00	
9-4	49.00	46.00	29.00	27.00	24.00	22.00	18.00	15.00	9.60	
9-5	49.00	46.00	35.00	29.00	24.00	20.00	18.00	15.00	10.00	
9-6	51.00	46.00	32.00	31.00	25.00	22.00	20.00	18.00	11.00	
9-7	54.00	46.00	33.00	31.00	25.00	21.00	20.00	18.00	17.00	
9-8	53.00	46.00	32.00	29.00	26.00	23.00	20.00	17.00	16.00	
9-9	50.00	46.00	31.00	30.00	26.00	23.00	19.00	16.00	15.00	
9-10	49.00	45.00	34.00	31.00	27.00	23.00	19.00	17.00	13.00	
9-11	49.00	46.00	34.00	31.00	25.00	20.00	18.00	16.00	10.00	
9-12	49.00	47.00	37.00	31.00	25.00	22.00	18.00	16.00	12.00	
9-13	48.00	46.00	37.00	36.00	26.00	23.00	18.00	15.00	12.00	
9-14	47.00	46.00	38.00	35.00	28.00	22.00	20.00	15.00	11.00	
9-15	49.00	46.00	37.00	36.00	30.00	23.00	20.00	14.00	10.00	
9-16	50.00	44.00	37.00	36.00	28.00	26.00	22.00	17.00	14.00	
9-17	51.00	42.00	37.00	35.00	29.00	25.00	23.00	16.00	15.00	
9-18	52.00	42.00	39.00	36.00	32.00	25.00	22.00	16.00	16.00	
9-19	53.00	41.00	36.00	36.00	30.00	25.00	21.00	15.00	14.00	
9-20	53.00	40.00	38.00	36.00	30.00	23.00	19.00	17.00	12.00	
9-21	53.00	41.00	39.00	35.00	30.00	24.00	19.00	15.00	11.00	
9-22	52.00	41.00	39.00	38.00	29.00	23.00	20.00	12.00	9.30	
9-23	53.00	44.00	41.00	38.00	29.00	24.00	19.00	12.00	12.00	
9-24	53.00	42.00	41.00	36.00	29.00	24.00	20.00	13.00	10.00	
9-25	52.00	43.00	39.00	36.00	30.00	25.00	20.00	15.00	9.60	
9-26	53.00	43.00	39.00	34.00	29.00	25.00	22.00	16.00	10.00	
9-27	53.00	44.00	39.00	34.00	29.00	26.00	23.00	18.00	15.00	
9-28	51.00	43.00	38.00	34.00	29.00	27.00	22.00	18.00	10.00	
9-29	50.00	44.00	38.00	34.00	29.00	27.00	21.00	17.00	10.00	
9-30	49.00	44.00	37.00	34.00	30.00	25.00	20.00	14.00	11.00	
MEAN	50.40	44.20	34.16	31.70	28.23	24.30	20.10	16.54	14.77	

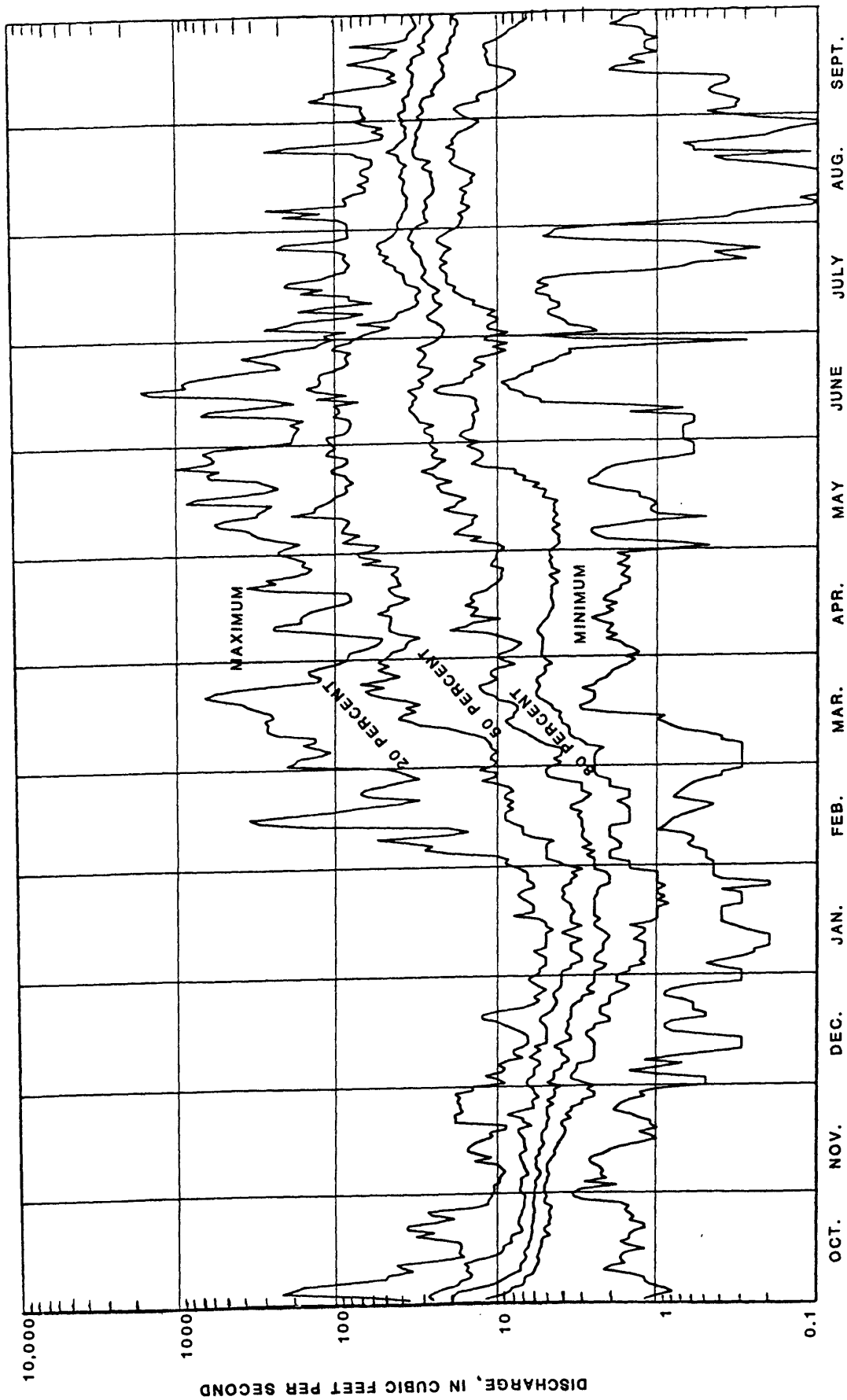


Figure 6.--Duration hydrograph for 29-year period beginning October 1952, Cheyenne River basin, station 06437000, Belle Fourche River near Sturgis, S. Dak.

Table 5.--Plotting points for duration hydrograph for 29-year period beginning October 1952, Cheyenne River basin, station 06437000, Belle Fourche River near Sturgis, S. Dak.

LOCATION.--Lat 44°30'47", long 103°08'11", in SE¼NW¼ sec.3, T.6 N., R.8 E., Meade County, Hydrologic Unit 10120202, on right bank near upstream end of bridge on State Highway 34, 0.5 mi upstream from Bear Butte Creek and 20 mi northeast of Sturgis.

DRAINAGE AREA.--5,870 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 2,526.13 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 31, 1946, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Keyhole Reservoir, usable capacity, 191,600 acre-ft, 246 mi upstream since February 1952. At a point 75 mi above station, water is diverted to Belle Fourche Reservoir (see station 06435000), through Inlet Canal (see station 06434500), with other small diversions from the main stem and tributaries for irrigation. Total diversion for irrigation of about 60,000 acres above station.

AVERAGE DISCHARGE.--37 years, 274 ft<sup>3</sup>/s (198,500 acre-ft/yr); median of yearly mean discharges, 228 ft<sup>3</sup>/s (165,000 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,400 ft<sup>3</sup>/s May 21, 1982 (gage height, 19.10 ft); no flow for many days in 1945, 1950, and Aug. 9, 1961.



Table 5.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06437000,  
Belle Fourche River near Sturgis, S. Dak.--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
10- 1	355.00	285.00	254.00	236.00	194.00	141.00	120.00	30.00		12.00	
10- 2	659.00	394.00	271.00	225.00	191.00	141.00	97.00	28.00		10.00	
10- 3	2260.00	308.00	248.00	222.00	179.00	123.00	86.00	28.00		8.00	
10- 4	1890.00	243.00	217.00	202.00	136.00	98.00	83.00	26.00		9.00	
10- 5	1640.00	235.00	179.00	168.00	110.00	88.00	71.00	25.00		11.00	
10- 6	834.00	224.00	172.00	147.00	98.00	76.00	69.00	23.00		12.00	
10- 7	494.00	235.00	149.00	128.00	90.00	70.00	69.00	25.00		12.00	
10- 8	479.00	245.00	145.00	110.00	82.00	67.00	62.00	25.00		15.00	
10- 9	338.00	241.00	159.00	107.00	74.00	65.00	60.00	25.00		22.00	
10-10	590.00	192.00	152.00	112.00	74.00	61.00	59.00	23.00		20.00	
10-11	424.00	187.00	164.00	110.00	73.00	60.00	57.00	23.00		16.00	
10-12	226.00	150.00	136.00	102.00	69.00	60.00	56.00	24.00		17.00	
10-13	162.00	133.00	110.00	95.00	67.00	59.00	58.00	24.00		17.00	
10-14	175.00	123.00	97.00	82.00	70.00	60.00	56.00	24.00		16.00	
10-15	172.00	121.00	93.00	82.00	68.00	59.00	56.00	30.00		12.00	
10-16	167.00	104.00	93.00	76.00	65.00	58.00	54.00	32.00		15.00	
10-17	172.00	94.00	82.00	74.00	65.00	58.00	54.00	31.00		17.00	
10-18	224.00	109.00	84.00	71.00	63.00	55.00	54.00	30.00		15.00	
10-19	322.00	90.00	82.00	70.00	63.00	55.00	48.00	30.00		15.00	
10-20	248.00	86.00	72.00	68.00	62.00	57.00	52.00	33.00		14.00	
10-21	363.00	82.00	71.00	68.00	62.00	58.00	52.00	35.00		12.00	
10-22	359.00	82.00	75.00	67.00	62.00	56.00	48.00	35.00		12.00	
10-23	231.00	80.00	75.00	68.00	61.00	53.00	49.00	36.00		15.00	
10-24	196.00	82.00	74.00	69.00	61.00	52.00	47.00	36.00		14.00	
10-25	257.00	86.00	72.00	68.00	61.00	54.00	49.00	32.00		15.00	
10-26	271.00	95.00	71.00	67.00	59.00	52.00	48.00	33.00		16.00	
10-27	136.00	92.00	69.00	68.00	61.00	54.00	46.00	32.00		15.00	
10-28	115.00	88.00	69.00	66.00	61.00	56.00	52.00	34.00		17.00	
10-29	115.00	82.00	69.00	66.00	61.00	54.00	52.00	35.00		30.00	
10-30	110.00	80.00	68.00	65.00	60.00	57.00	50.00	35.00		34.00	
10-31	107.00	84.00	71.00	65.00	60.00	56.00	52.00	36.00		34.00	
MEAN	393.38	147.38	123.06	101.87	90.71	72.19	66.83	33.00		16.19	

Table 5.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06437000,  
Belle Fourche River near Sturgis, S. Dak.--Continued

DATE	HIGH	Percent exceedance values										LOW
		.10	.20	.30	.50	.70	.80	.90				
11- 1	104.00	82.00	74.00	66.00	60.00	56.00	52.00	34.00	30.00			
11- 2	107.00	77.00	72.00	70.00	58.00	54.00	52.00	32.00	18.00			
11- 3	98.00	77.00	72.00	65.00	60.00	52.00	50.00	34.00	29.00			
11- 4	98.00	75.00	73.00	64.00	58.00	55.00	50.00	34.00	21.00			
11- 5	95.00	73.00	65.00	61.00	55.00	50.00	48.00	31.00	23.00			
11- 6	90.00	80.00	67.00	64.00	55.00	51.00	50.00	30.00	22.00			
11- 7	95.00	90.00	69.00	65.00	58.00	52.00	50.00	35.00	23.00			
11- 8	100.00	92.00	70.00	65.00	59.00	54.00	50.00	36.00	25.00			
11- 9	140.00	95.00	72.00	64.00	58.00	53.00	48.00	32.00	27.00			
11-10	110.00	85.00	73.00	64.00	59.00	50.00	46.00	31.00	26.00			
11-11	133.00	88.00	74.00	62.00	55.00	48.00	44.00	31.00	22.00			
11-12	154.00	84.00	67.00	65.00	57.00	48.00	45.00	30.00	20.00			
11-13	152.00	84.00	69.00	60.00	54.00	48.00	43.00	26.00	17.00			
11-14	141.00	84.00	69.00	63.00	52.00	48.00	42.00	26.00	13.00			
11-15	123.00	82.00	69.00	63.00	54.00	47.00	40.00	26.00	10.00			
11-16	107.00	80.00	71.00	65.00	54.00	48.00	39.00	26.00	11.00			
11-17	113.00	90.00	75.00	67.00	54.00	46.00	38.00	26.00	13.00			
11-18	90.00	84.00	75.00	60.00	51.00	45.00	38.00	25.00	10.00			
11-19	88.00	80.00	62.00	56.00	50.00	45.00	40.00	24.00	11.00			
11-20	184.00	96.00	70.00	60.00	50.00	44.00	40.00	25.00	11.00			
11-21	131.00	113.00	70.00	60.00	48.00	40.00	35.00	25.00	13.00			
11-22	136.00	140.00	88.00	60.00	50.00	40.00	38.00	21.00	15.00			
11-23	164.00	138.00	75.00	60.00	50.00	40.00	35.00	25.00	19.00			
11-24	176.00	137.00	60.00	56.00	50.00	42.00	35.00	25.00	18.00			
11-25	170.00	126.00	61.00	55.00	45.00	42.00	30.00	24.00	17.00			
11-26	180.00	102.00	62.00	55.00	50.00	40.00	30.00	24.00	15.00			
11-27	170.00	95.00	56.00	52.00	45.00	31.00	25.00	18.00	12.00			
11-28	185.00	82.00	60.00	54.00	44.00	30.00	25.00	20.00	13.00			
11-29	141.00	84.00	60.00	53.00	45.00	30.00	28.00	17.00	10.00			
11-30	145.00	82.00	65.00	53.00	40.00	30.00	25.00	20.00	5.00			
MEAN	111.06	95.60	67.56	59.36	55.06	48.33	44.40	27.46	20.13			

Table 5.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06437000,  
Belle Fourche River near Sturgis, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
12- 1	90.00	75.00	67.00	54.00	50.00	35.00	30.00	21.00	5.00	
12- 2	100.00	70.00	65.00	56.00	45.00	35.00	35.00	20.00	5.00	
12- 3	120.00	75.00	60.00	56.00	45.00	40.00	35.00	21.00	10.00	
12- 4	95.00	75.00	60.00	55.00	45.00	35.00	33.00	22.00	15.00	
12- 5	90.00	68.00	60.00	54.00	40.00	35.00	32.00	20.00	10.00	
12- 6	100.00	64.00	55.00	45.00	40.00	35.00	32.00	20.00	7.00	
12- 7	90.00	64.00	56.00	50.00	36.00	30.00	26.00	20.00	12.00	
12- 8	70.00	68.00	64.00	45.00	37.00	30.00	25.00	20.00	8.00	
12- 9	80.00	65.00	60.00	50.00	40.00	30.00	25.00	15.00	5.00	
12-10	80.00	65.00	55.00	50.00	40.00	30.00	25.00	12.00	3.00	
12-11	70.00	60.00	60.00	50.00	45.00	30.00	25.00	12.00	3.00	
12-12	65.00	60.00	50.00	45.00	40.00	31.00	25.00	14.00	5.00	
12-13	65.00	56.00	50.00	45.00	35.00	32.00	26.00	20.00	3.00	
12-14	65.00	60.00	50.00	45.00	35.00	30.00	28.00	18.00	5.00	
12-15	70.00	56.00	50.00	48.00	38.00	30.00	28.00	18.00	8.00	
12-16	80.00	60.00	50.00	45.00	37.00	30.00	25.00	15.00	9.00	
12-17	90.00	65.00	52.00	46.00	36.00	30.00	25.00	15.00	9.00	
12-18	100.00	70.00	55.00	50.00	37.00	26.00	20.00	15.00	8.00	
12-19	125.00	70.00	55.00	50.00	35.00	25.00	20.00	15.00	5.00	
12-20	125.00	65.00	50.00	48.00	35.00	25.00	23.00	15.00	5.00	
12-21	100.00	60.00	46.00	45.00	35.00	27.00	23.00	13.00	6.00	
12-22	70.00	65.00	45.00	43.00	35.00	25.00	23.00	15.00	6.00	
12-23	60.00	55.00	45.00	40.00	33.00	25.00	20.00	17.00	6.00	
12-24	55.00	50.00	43.00	35.00	30.00	20.00	20.00	17.00	7.00	
12-25	60.00	50.00	45.00	35.00	30.00	20.00	20.00	15.00	9.00	
12-26	55.00	50.00	45.00	35.00	25.00	20.00	18.00	15.00	9.00	
12-27	50.00	45.00	42.00	35.00	28.00	20.00	16.00	15.00	8.00	
12-28	55.00	45.00	40.00	35.00	27.00	20.00	15.00	15.00	6.00	
12-29	60.00	50.00	40.00	35.00	25.00	24.00	18.00	10.00	3.00	
12-30	65.00	45.00	40.00	39.00	25.00	20.00	18.00	9.00	3.00	
12-31	60.00	45.00	40.00	38.00	25.00	20.00	18.00	8.00	3.00	
MEAN	61.61	59.35	50.00	44.74	35.32	29.51	28.09	21.93	11.45	

Table 5.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06437000,  
Belle Fourche River near Sturgis, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
1- 1	55.00	50.00	40.00	35.00	25.00	19.00	15.00	7.00	3.00	
1- 2	55.00	42.00	35.00	30.00	22.00	15.00	15.00	6.00	4.00	
1- 3	50.00	40.00	35.00	30.00	21.00	17.00	12.00	6.00	5.00	
1- 4	50.00	40.00	30.00	30.00	25.00	17.00	13.00	7.00	4.00	
1- 5	50.00	40.00	30.00	26.00	25.00	20.00	12.00	7.00	3.00	
1- 6	55.00	40.00	32.00	25.00	24.00	20.00	12.00	8.00	2.50	
1- 7	60.00	45.00	35.00	25.00	22.00	20.00	12.00	8.00	2.50	
1- 8	50.00	45.00	35.00	30.00	22.00	15.00	12.00	6.00	2.00	
1- 9	50.00	45.00	35.00	30.00	22.00	17.00	12.00	8.00	2.00	
1-10	50.00	40.00	30.00	25.00	21.00	15.00	14.00	7.00	2.00	
1-11	50.00	44.00	35.00	30.00	20.00	17.00	13.00	7.00	2.00	
1-12	50.00	42.00	40.00	30.00	21.00	18.00	12.00	10.00	2.50	
1-13	45.00	40.00	35.00	29.00	23.00	19.00	12.00	10.00	3.00	
1-14	50.00	40.00	30.00	30.00	25.00	18.00	15.00	9.00	3.50	
1-15	50.00	40.00	35.00	30.00	25.00	17.00	11.00	8.00	4.00	
1-16	55.00	45.00	35.00	30.00	23.00	20.00	10.00	5.00	4.00	
1-17	80.00	50.00	35.00	30.00	25.00	20.00	10.00	8.00	4.00	
1-18	60.00	50.00	33.00	30.00	25.00	20.00	10.00	6.50	4.00	
1-19	60.00	40.00	35.00	30.00	25.00	15.00	10.00	7.50	4.00	
1-20	60.00	40.00	35.00	30.00	25.00	20.00	8.50	5.00	3.00	
1-21	65.00	45.00	38.00	30.00	25.00	15.00	10.00	5.00	3.00	
1-22	70.00	50.00	40.00	35.00	25.00	15.00	9.00	5.00	3.00	
1-23	75.00	45.00	38.00	35.00	24.00	15.00	10.00	6.50	3.00	
1-24	70.00	45.00	40.00	35.00	24.00	15.00	10.00	5.00	4.00	
1-25	60.00	45.00	39.00	30.00	23.00	16.00	9.00	5.00	2.00	
1-26	60.00	40.00	35.00	30.00	20.00	17.00	10.00	6.00	2.00	
1-27	65.00	40.00	35.00	30.00	20.00	15.00	10.00	7.00	4.00	
1-28	65.00	50.00	32.00	25.00	20.00	17.00	10.00	8.00	4.50	
1-29	65.00	55.00	35.00	25.00	21.00	24.00	10.00	7.00	4.50	
1-30	70.00	50.00	30.00	25.00	25.00	20.00	15.00	7.50	4.50	
1-31	80.00	50.00	38.00	30.00	25.00	20.00	15.00	8.00	4.50	
MEAN	47.90	39.51	33.38	29.51	22.83	20.32	14.58	10.22	4.71	

Table 5.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06437000,  
Belle Fourche River near Sturgis, S. Dak.--Continued

DATE	Percent exceedance values								LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90	
2-1	90.00	50.00	42.00	30.00	25.00	23.00	15.00	6.00	4.50
2-2	45.00	60.00	50.00	37.00	25.00	22.00	20.00	7.00	5.00
2-3	100.00	75.00	50.00	37.00	28.00	23.00	20.00	8.00	5.00
2-4	200.00	75.00	50.00	36.00	25.00	20.00	20.00	9.00	5.00
2-5	280.00	65.00	50.00	35.00	30.00	25.00	17.00	10.00	6.00
2-6	250.00	70.00	50.00	35.00	26.00	25.00	17.00	11.00	6.50
2-7	350.00	80.00	45.00	40.00	28.00	23.00	18.00	10.00	6.00
2-8	550.00	100.00	60.00	45.00	30.00	25.00	20.00	10.00	6.00
2-9	200.00	110.00	70.00	45.00	30.00	25.00	20.00	12.00	7.00
2-10	150.00	100.00	70.00	50.00	29.00	25.00	20.00	14.00	10.00
2-11	200.00	115.00	70.00	45.00	30.00	25.00	20.00	12.00	9.00
2-12	1500.00	140.00	80.00	50.00	30.00	20.00	15.00	10.00	8.50
2-13	3000.00	150.00	90.00	60.00	30.00	20.00	15.00	11.00	8.00
2-14	3500.00	140.00	90.00	50.00	32.00	23.00	15.00	13.00	7.00
2-15	2000.00	140.00	90.00	65.00	30.00	23.00	15.00	12.00	6.00
2-16	1000.00	110.00	80.00	60.00	35.00	23.00	15.00	10.00	5.00
2-17	700.00	100.00	88.00	60.00	35.00	20.00	16.00	10.00	4.50
2-18	400.00	100.00	80.00	65.00	30.00	22.00	18.00	10.00	6.00
2-19	300.00	250.00	90.00	60.00	28.00	23.00	15.00	12.00	8.00
2-20	600.00	250.00	90.00	50.00	26.00	23.00	15.00	10.00	7.50
2-21	700.00	200.00	80.00	60.00	30.00	23.00	15.00	10.00	7.00
2-22	650.00	160.00	85.00	60.00	30.00	20.00	20.00	11.00	6.50
2-23	500.00	150.00	100.00	60.00	30.00	23.00	20.00	13.00	6.00
2-24	400.00	200.00	126.00	60.00	40.00	26.00	20.00	10.00	5.00
2-25	300.00	250.00	104.00	60.00	48.00	25.00	24.00	12.00	4.00
2-26	350.00	180.00	100.00	65.00	50.00	25.00	25.00	12.00	4.00
2-27	400.00	170.00	130.00	65.00	50.00	28.00	25.00	12.00	3.00
2-28	500.00	180.00	110.00	60.00	46.00	29.00	25.00	12.00	3.00
MEAN	510.85	180.57	91.92	65.53	37.39	26.53	21.50	12.80	6.62

Table 5.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06437000,  
Belle Fourche River near Sturgis, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
3- 1	2010.00	180.00	100.00	70.00	40.00	30.00	25.00	14.00	3.00	
3- 2	1800.00	170.00	110.00	65.00	45.00	30.00	25.00	12.00	3.00	
3- 3	1720.00	173.00	110.00	90.00	40.00	30.00	25.00	12.00	3.00	
3- 4	1210.00	250.00	100.00	85.00	40.00	30.00	24.00	9.50	3.00	
3- 5	1080.00	220.00	110.00	80.00	40.00	30.00	22.00	13.00	3.00	
3- 6	1280.00	200.00	110.00	80.00	50.00	35.00	28.00	18.00	3.00	
3- 7	1580.00	200.00	115.00	80.00	55.00	34.00	30.00	19.00	4.00	
3- 8	1310.00	189.00	120.00	100.00	60.00	36.00	34.00	17.00	4.00	
3- 9	1330.00	205.00	140.00	120.00	65.00	50.00	36.00	17.00	5.00	
3-10	2310.00	250.00	170.00	140.00	70.00	54.00	36.00	19.00	7.00	
3-11	2640.00	350.00	200.00	160.00	80.00	55.00	36.00	18.00	8.00	
3-12	2660.00	580.00	300.00	200.00	85.00	55.00	40.00	17.00	9.00	
3-13	2610.00	577.00	336.00	255.00	90.00	50.00	40.00	17.00	10.00	
3-14	2750.00	929.00	410.00	200.00	80.00	50.00	42.00	17.00	9.00	
3-15	2420.00	1060.00	380.00	160.00	80.00	50.00	40.00	25.00	20.00	
3-16	2500.00	1190.00	317.00	180.00	75.00	50.00	45.00	32.00	30.00	
3-17	3000.00	1710.00	366.00	200.00	75.00	50.00	46.00	40.00	31.00	
3-18	3500.00	1140.00	300.00	260.00	80.00	58.00	50.00	32.00	27.00	
3-19	3830.00	1080.00	363.00	252.00	100.00	65.00	55.00	33.00	25.00	
3-20	5380.00	917.00	496.00	250.00	104.00	65.00	58.00	31.00	25.00	
3-21	6570.00	1000.00	600.00	300.00	119.00	65.00	58.00	31.00	25.00	
3-22	5710.00	1160.00	650.00	312.00	126.00	60.00	56.00	31.00	30.00	
3-23	4190.00	1030.00	500.00	370.00	130.00	60.00	55.00	30.00	25.00	
3-24	2340.00	800.00	690.00	305.00	110.00	60.00	58.00	30.00	24.00	
3-25	1280.00	758.00	500.00	300.00	100.00	62.00	57.00	30.00	21.00	
3-26	1210.00	696.00	400.00	289.00	110.00	63.00	52.00	35.00	20.00	
3-27	1410.00	622.00	477.00	299.00	110.00	58.00	50.00	40.00	19.00	
3-28	1470.00	923.00	540.00	320.00	100.00	56.00	52.00	35.00	17.00	
3-29	1200.00	834.00	466.00	317.00	78.00	50.00	46.00	35.00	15.00	
3-30	942.00	878.00	538.00	299.00	90.00	54.00	50.00	40.00	14.00	
3-31	844.00	750.00	500.00	292.00	100.00	64.00	53.00	50.00	16.00	
MEAN	1714.90	530.32	364.90	200.24	140.42	61.90	50.48	44.71	30.25	

Table 5.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06437000,  
Belle Fourche River near Sturgis, S. Dak.--Continued

DATE	Percent exceedance values								
	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW
4- 1	822.00	597.00	460.00	296.00	97.00	60.00	54.00	40.00	13.00
4- 2	806.00	538.00	443.00	289.00	82.00	64.00	53.00	40.00	14.00
4- 3	655.00	512.00	370.00	292.00	76.00	54.00	53.00	47.00	16.00
4- 4	560.00	482.00	362.00	299.00	71.00	55.00	53.00	50.00	17.00
4- 5	521.00	439.00	347.00	282.00	82.00	53.00	52.00	47.00	21.00
4- 6	505.00	414.00	300.00	240.00	96.00	57.00	54.00	44.00	18.00
4- 7	800.00	622.00	402.00	287.00	115.00	62.00	57.00	53.00	21.00
4- 8	1270.00	1020.00	460.00	303.00	197.00	67.00	57.00	49.00	20.00
4- 9	2410.00	1060.00	460.00	296.00	156.00	64.00	54.00	48.00	19.00
4-10	2380.00	1180.00	456.00	292.00	143.00	56.00	52.00	45.00	23.00
4-11	1610.00	1230.00	447.00	321.00	96.00	56.00	49.00	44.00	26.00
4-12	1690.00	1000.00	449.00	321.00	147.00	54.00	48.00	38.00	21.00
4-13	1560.00	872.00	545.00	325.00	139.00	58.00	47.00	31.00	19.00
4-14	1400.00	859.00	464.00	340.00	131.00	57.00	45.00	26.00	21.00
4-15	1120.00	769.00	464.00	343.00	156.00	52.00	45.00	32.00	18.00
4-16	872.00	668.00	390.00	254.00	138.00	50.00	46.00	33.00	22.00
4-17	784.00	674.00	351.00	245.00	147.00	57.00	47.00	32.00	21.00
4-18	790.00	613.00	422.00	204.00	142.00	61.00	46.00	30.00	19.00
4-19	822.00	525.00	453.00	266.00	118.00	58.00	46.00	28.00	17.00
4-20	2520.00	591.00	464.00	533.00	110.00	56.00	46.00	28.00	17.00
4-21	3580.00	646.00	390.00	235.00	102.00	46.00	42.00	26.00	15.00
4-22	2330.00	775.00	410.00	225.00	96.00	55.00	45.00	26.00	15.00
4-23	2690.00	823.00	411.00	228.00	94.00	71.00	48.00	24.00	17.00
4-24	1810.00	1010.00	447.00	247.00	94.00	68.00	41.00	22.00	16.00
4-25	1470.00	995.00	410.00	261.00	91.00	65.00	46.00	28.00	15.00
4-26	1380.00	1040.00	406.00	317.00	110.00	60.00	46.00	25.00	18.00
4-27	1610.00	742.00	677.00	351.00	107.00	54.00	48.00	25.00	16.00
4-28	1520.00	1010.00	521.00	473.00	102.00	57.00	46.00	27.00	15.00
4-29	1740.00	1150.00	696.00	426.00	101.00	54.00	48.00	26.00	18.00
4-30	2160.00	1150.00	727.00	439.00	98.00	52.00	47.00	28.00	8.80
MEAN	1133.83	727.30	517.70	326.20	153.33	63.03	59.66	38.46	21.19

Table 5.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06437000,  
Belle Fourche River near Sturgis, S. Dak.--Continued

DATE	HIGH	Percent exceedance values										LOW
		.10	.20	.30	.50	.70	.80	.90				
5- 1	2260.00	971.00	565.00	480.00	90.00	51.00	44.00	28.00		4.80		
5- 2	1940.00	866.00	530.00	386.00	100.00	50.00	41.00	27.00		8.10		
5- 3	1650.00	1190.00	885.00	361.00	147.00	64.00	42.00	26.00		21.00		
5- 4	2270.00	905.00	806.00	363.00	125.00	60.00	41.00	36.00		24.00		
5- 5	2940.00	1010.00	696.00	363.00	185.00	53.00	44.00	33.00		26.00		
5- 6	3250.00	2660.00	896.00	436.00	171.00	52.00	46.00	39.00		26.00		
5- 7	3540.00	2930.00	872.00	419.00	154.00	51.00	41.00	33.00		17.00		
5- 8	5260.00	3380.00	834.00	498.00	140.00	51.00	45.00	35.00		12.00		
5- 9	5620.00	3440.00	800.00	646.00	142.00	51.00	45.00	35.00		5.00		
5-10	4720.00	2330.00	898.00	598.00	132.00	49.00	42.00	36.00		10.00		
5-11	3080.00	2210.00	1870.00	828.00	176.00	50.00	45.00	34.00		11.00		
5-12	3000.00	2160.00	1330.00	727.00	213.00	52.00	44.00	31.00		11.00		
5-13	2710.00	1520.00	1320.00	646.00	180.00	56.00	45.00	29.00		10.00		
5-14	2450.00	1950.00	1170.00	588.00	174.00	53.00	42.00	38.00		11.00		
5-15	8470.00	1980.00	1050.00	538.00	155.00	61.00	53.00	36.00		13.00		
5-16	7430.00	1630.00	995.00	584.00	183.00	69.00	51.00	38.00		13.00		
5-17	3980.00	1430.00	866.00	588.00	220.00	97.00	50.00	39.00		18.00		
5-18	2600.00	1440.00	823.00	439.00	226.00	102.00	61.00	34.00		23.00		
5-19	2230.00	1970.00	859.00	661.00	235.00	83.00	55.00	34.00		27.00		
5-20	2600.00	1380.00	763.00	603.00	189.00	116.00	70.00	34.00		27.00		
5-21	3010.00	1230.00	826.00	490.00	235.00	103.00	67.00	32.00		24.00		
5-22	5950.00	1180.00	848.00	422.00	246.00	132.00	78.00	38.00		23.00		
5-23	6230.00	2350.00	1020.00	452.00	292.00	137.00	77.00	38.00		21.00		
5-24	5240.00	3000.00	1040.00	330.00	245.00	164.00	124.00	62.00		18.00		
5-25	9890.00	1800.00	888.00	359.00	230.00	158.00	145.00	93.00		13.00		
5-26	6270.00	1680.00	822.00	378.00	207.00	140.00	129.00	76.00		8.00		
5-27	5600.00	1740.00	839.00	439.00	250.00	149.00	123.00	88.00		6.00		
5-28	5850.00	2160.00	1120.00	390.00	249.00	164.00	123.00	96.00		6.00		
5-29	6640.00	2120.00	1070.00	593.00	231.00	188.00	137.00	85.00		6.00		
5-30	5690.00	1750.00	977.00	555.00	250.00	169.00	154.00	82.00		6.00		
5-31	2720.00	1800.00	1030.00	449.00	263.00	158.00	128.00	98.00		7.00		
MEAN	2339.58	1915.32	1104.74	961.93	265.32	129.42	85.54	59.61		15.83		



Table 5.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06437000,  
Belle Fourche River near Sturgis, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
6- 1	1850.00	1680.00	1090.00	482.00	245.00	175.00	156.00	112.00	7.00	
6- 2	1810.00	1450.00	1110.00	452.00	249.00	191.00	170.00	75.00	7.00	
6- 3	1780.00	1380.00	865.00	471.00	277.00	182.00	162.00	73.00	7.00	
6- 4	1730.00	1180.00	817.00	424.00	278.00	160.00	141.00	64.00	7.00	
6- 5	1650.00	1250.00	795.00	419.00	244.00	159.00	141.00	64.00	6.00	
6- 6	1890.00	1370.00	779.00	460.00	295.00	176.00	138.00	54.00	6.00	
6- 7	1540.00	1180.00	604.00	399.00	303.00	167.00	138.00	54.00	6.00	
6- 8	2120.00	1490.00	1010.00	651.00	316.00	171.00	144.00	48.00	15.00	
6- 9	6740.00	1810.00	924.00	535.00	333.00	165.00	130.00	80.00	7.00	
6-10	6030.00	2390.00	929.00	574.00	348.00	204.00	133.00	84.00	15.00	
6-11	2960.00	1480.00	1010.00	566.00	326.00	177.00	137.00	74.00	54.00	
6-12	1760.00	1520.00	706.00	622.00	328.00	160.00	133.00	68.00	54.00	
6-13	2400.00	1690.00	1280.00	602.00	307.00	194.00	148.00	93.00	68.00	
6-14	4160.00	1590.00	836.00	646.00	323.00	264.00	224.00	98.00	70.00	
6-15	14000.00	2770.00	1240.00	822.00	351.00	260.00	245.00	107.00	84.00	
6-16	15900.00	3570.00	1490.00	763.00	292.00	243.00	220.00	116.00	86.00	
6-17	8310.00	4720.00	1230.00	678.00	278.00	220.00	161.00	137.00	94.00	
6-18	8860.00	2010.00	1200.00	762.00	304.00	199.00	158.00	116.00	76.00	
6-19	8030.00	3730.00	1240.00	710.00	273.00	161.00	141.00	129.00	72.00	
6-20	5510.00	4260.00	1210.00	795.00	255.00	160.00	145.00	88.00	61.00	
6-21	3540.00	2210.00	1000.00	758.00	246.00	157.00	128.00	80.00	61.00	
6-22	2140.00	1130.00	872.00	734.00	303.00	154.00	118.00	82.00	52.00	
6-23	2260.00	1270.00	808.00	646.00	298.00	159.00	139.00	86.00	44.00	
6-24	2950.00	1280.00	834.00	466.00	281.00	157.00	132.00	73.00	41.00	
6-25	3760.00	1480.00	844.00	521.00	271.00	146.00	102.00	66.00	35.00	
6-26	2630.00	1870.00	779.00	469.00	278.00	154.00	88.00	65.00	36.00	
6-27	2050.00	1270.00	1020.00	554.00	305.00	191.00	106.00	58.00	12.00	
6-28	1300.00	1070.00	948.00	487.00	261.00	188.00	86.00	50.00	2.80	
6-29	1170.00	891.00	785.00	438.00	236.00	194.00	120.00	67.00	33.00	
6-30	1010.00	859.00	730.00	305.00	220.00	174.00	113.00	62.00	57.00	
MEAN	2499.46	1465.93	1025.80	882.40	397.46	248.13	194.50	91.86	80.69	

Table 5.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06437000,  
Belle Fourche River near Sturgis, S. Dak.--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
7- 1	1160.00	930.00	658.00	358.00	214.00	146.00	85.00	53.00	24.00		
7- 2	829.00	800.00	550.00	306.00	207.00	140.00	111.00	48.00	26.00		
7- 3	2690.00	841.00	449.00	285.00	215.00	140.00	115.00	65.00	36.00		
7- 4	1950.00	1190.00	718.00	373.00	231.00	146.00	102.00	53.00	38.00		
7- 5	1690.00	849.00	444.00	348.00	257.00	112.00	98.00	47.00	42.00		
7- 6	834.00	702.00	409.00	295.00	266.00	143.00	114.00	92.00	48.00		
7- 7	651.00	570.00	401.00	310.00	245.00	172.00	102.00	83.00	46.00		
7- 8	1650.00	615.00	347.00	303.00	232.00	165.00	120.00	90.00	41.00		
7- 9	1120.00	568.00	310.00	275.00	215.00	178.00	141.00	73.00	41.00		
7-10	576.00	494.00	299.00	273.00	236.00	162.00	136.00	60.00	47.00		
7-11	792.00	475.00	311.00	278.00	241.00	200.00	157.00	65.00	47.00		
7-12	785.00	431.00	310.00	274.00	245.00	195.00	172.00	63.00	58.00		
7-13	1580.00	748.00	289.00	285.00	222.00	196.00	185.00	75.00	57.00		
7-14	1150.00	565.00	303.00	296.00	236.00	219.00	177.00	96.00	48.00		
7-15	2010.00	443.00	355.00	310.00	260.00	212.00	200.00	68.00	57.00		
7-16	1890.00	491.00	363.00	320.00	271.00	222.00	203.00	181.00	52.00		
7-17	1170.00	719.00	369.00	347.00	288.00	235.00	200.00	189.00	36.00		
7-18	1040.00	515.00	371.00	341.00	274.00	230.00	203.00	182.00	11.00		
7-19	834.00	528.00	415.00	365.00	268.00	222.00	219.00	186.00	7.00		
7-20	823.00	460.00	413.00	377.00	278.00	236.00	222.00	160.00	6.00		
7-21	776.00	598.00	456.00	363.00	281.00	245.00	199.00	157.00	2.80		
7-22	823.00	575.00	493.00	370.00	286.00	248.00	222.00	143.00	3.80		
7-23	860.00	657.00	454.00	394.00	289.00	241.00	213.00	137.00	4.50		
7-24	824.00	722.00	521.00	399.00	307.00	256.00	208.00	104.00	2.30		
7-25	982.00	751.00	503.00	394.00	320.00	257.00	189.00	100.00	4.10		
7-26	2220.00	755.00	535.00	464.00	330.00	259.00	211.00	109.00	6.00		
7-27	2020.00	718.00	525.00	443.00	317.00	288.00	230.00	109.00	28.00		
7-28	968.00	675.00	468.00	429.00	346.00	264.00	230.00	140.00	52.00		
7-29	797.00	613.00	432.00	423.00	340.00	262.00	212.00	121.00	46.00		
7-30	807.00	580.00	414.00	374.00	330.00	271.00	196.00	102.00	44.00		
7-31	807.00	523.00	394.00	372.00	322.00	257.00	177.00	82.00	22.00		
MEAN	800.12	526.38	427.93	344.12	309.71	257.67	240.64	136.77	52.38		

Table 5.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06437000,  
Belle Fourche River near Sturgis, S. Dak.--Continued

Percent exceedance values										
DATE	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW	
8- 1	807.00	591.00	404.00	351.00	295.00	259.00	167.00	82.00	9.00	
8- 2	818.00	624.00	398.00	330.00	260.00	239.00	165.00	92.00	3.80	
8- 3	936.00	776.00	382.00	363.00	275.00	226.00	160.00	88.00	3.30	
8- 4	2050.00	859.00	376.00	340.00	274.00	208.00	172.00	82.00	2.30	
8- 5	1180.00	521.00	367.00	325.00	278.00	204.00	154.00	82.00	1.10	
8- 6	2600.00	374.00	351.00	340.00	263.00	212.00	145.00	116.00	1.80	
8- 7	832.00	435.00	351.00	343.00	267.00	187.00	165.00	113.00	1.30	
8- 8	818.00	486.00	355.00	332.00	274.00	194.00	159.00	112.00	.10	
8- 9	845.00	414.00	348.00	330.00	259.00	184.00	160.00	122.00	.00	
8-10	768.00	414.00	366.00	326.00	245.00	179.00	150.00	113.00	.80	
8-11	624.00	453.00	374.00	325.00	239.00	186.00	168.00	108.00	.80	
8-12	624.00	466.00	373.00	326.00	242.00	182.00	152.00	69.00	.80	
8-13	701.00	487.00	362.00	319.00	247.00	186.00	140.00	69.00	.60	
8-14	602.00	440.00	367.00	330.00	243.00	161.00	144.00	73.00	.80	
8-15	598.00	523.00	390.00	328.00	252.00	180.00	134.00	78.00	.90	
8-16	674.00	575.00	374.00	326.00	248.00	182.00	149.00	73.00	1.40	
8-17	665.00	560.00	377.00	316.00	282.00	220.00	169.00	129.00	2.10	
8-18	585.00	530.00	351.00	329.00	273.00	203.00	184.00	155.00	3.80	
8-19	565.00	511.00	386.00	348.00	251.00	213.00	193.00	162.00	4.50	
8-20	575.00	550.00	393.00	344.00	307.00	212.00	180.00	149.00	1.10	
8-21	698.00	521.00	400.00	366.00	317.00	216.00	181.00	132.00	6.00	
8-22	741.00	635.00	470.00	346.00	322.00	232.00	178.00	149.00	6.00	
8-23	2650.00	591.00	418.00	359.00	322.00	216.00	203.00	78.00	7.00	
8-24	1860.00	545.00	398.00	363.00	306.00	216.00	181.00	62.00	3.60	
8-25	670.00	525.00	378.00	354.00	312.00	196.00	188.00	66.00	2.10	
8-26	500.00	427.00	354.00	342.00	298.00	200.00	177.00	62.00	1.60	
8-27	487.00	380.00	355.00	340.00	311.00	211.00	170.00	61.00	1.40	
8-28	572.00	431.00	363.00	325.00	302.00	210.00	152.00	58.00	.20	
8-29	491.00	443.00	351.00	316.00	291.00	226.00	137.00	56.00	.70	
8-30	642.00	438.00	384.00	319.00	285.00	234.00	126.00	55.00	2.30	
8-31	727.00	433.00	366.00	321.00	282.00	216.00	146.00	58.00	3.60	
MEAN	625.06	470.38	405.09	366.93	299.77	201.74	176.67	103.22	2.38	

Table 5.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06437000,  
Belle Fourche River near Sturgis, S. Dak.--Continued

DATE	Percent exceedance values								LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90	
9- 1	622.00	423.00	389.00	334.00	305.00	219.00	162.00	58.00	5.00
9- 2	646.00	512.00	393.00	336.00	280.00	226.00	174.00	52.00	3.30
9- 3	666.00	439.00	358.00	343.00	275.00	218.00	180.00	46.00	3.30
9- 4	651.00	389.00	358.00	348.00	290.00	206.00	162.00	40.00	3.10
9- 5	919.00	397.00	362.00	330.00	286.00	185.00	126.00	37.00	3.60
9- 6	1380.00	401.00	374.00	332.00	278.00	177.00	132.00	36.00	4.50
9- 7	1100.00	454.00	340.00	326.00	237.00	168.00	124.00	41.00	4.90
9- 8	1110.00	471.00	339.00	312.00	247.00	158.00	103.00	36.00	4.50
9- 9	727.00	436.00	330.00	298.00	237.00	162.00	92.00	35.00	3.80
9-10	477.00	391.00	319.00	298.00	234.00	149.00	86.00	34.00	3.60
9-11	401.00	368.00	326.00	298.00	219.00	147.00	80.00	35.00	3.80
9-12	460.00	368.00	322.00	282.00	207.00	168.00	76.00	35.00	12.00
9-13	405.00	374.00	314.00	275.00	204.00	168.00	76.00	36.00	20.00
9-14	447.00	383.00	340.00	298.00	214.00	162.00	87.00	40.00	18.00
9-15	570.00	388.00	343.00	290.00	207.00	143.00	110.00	41.00	12.00
9-16	794.00	339.00	321.00	299.00	214.00	152.00	112.00	34.00	15.00
9-17	598.00	398.00	328.00	292.00	223.00	144.00	113.00	30.00	14.00
9-18	464.00	347.00	308.00	268.00	214.00	152.00	116.00	42.00	10.00
9-19	443.00	356.00	271.00	254.00	193.00	159.00	111.00	39.00	12.00
9-20	394.00	319.00	278.00	218.00	199.00	164.00	118.00	30.00	12.00
9-21	762.00	332.00	299.00	245.00	194.00	152.00	118.00	32.00	12.00
9-22	406.00	325.00	268.00	240.00	186.00	159.00	102.00	32.00	10.00
9-23	344.00	301.00	274.00	206.00	189.00	151.00	93.00	31.00	12.00
9-24	340.00	288.00	268.00	227.00	177.00	134.00	86.00	29.00	12.00
9-25	328.00	291.00	254.00	207.00	176.00	118.00	82.00	33.00	13.00
9-26	308.00	292.00	245.00	228.00	177.00	108.00	75.00	33.00	20.00
9-27	299.00	293.00	239.00	228.00	168.00	123.00	71.00	28.00	17.00
9-28	312.00	278.00	248.00	235.00	170.00	118.00	64.00	29.00	16.00
9-29	315.00	278.00	250.00	228.00	186.00	139.00	66.00	29.00	13.00
9-30	330.00	282.00	243.00	225.00	173.00	139.00	63.00	29.00	13.00
MEAN	406.23	348.46	303.00	268.93	224.96	189.20	120.43	35.56	10.21

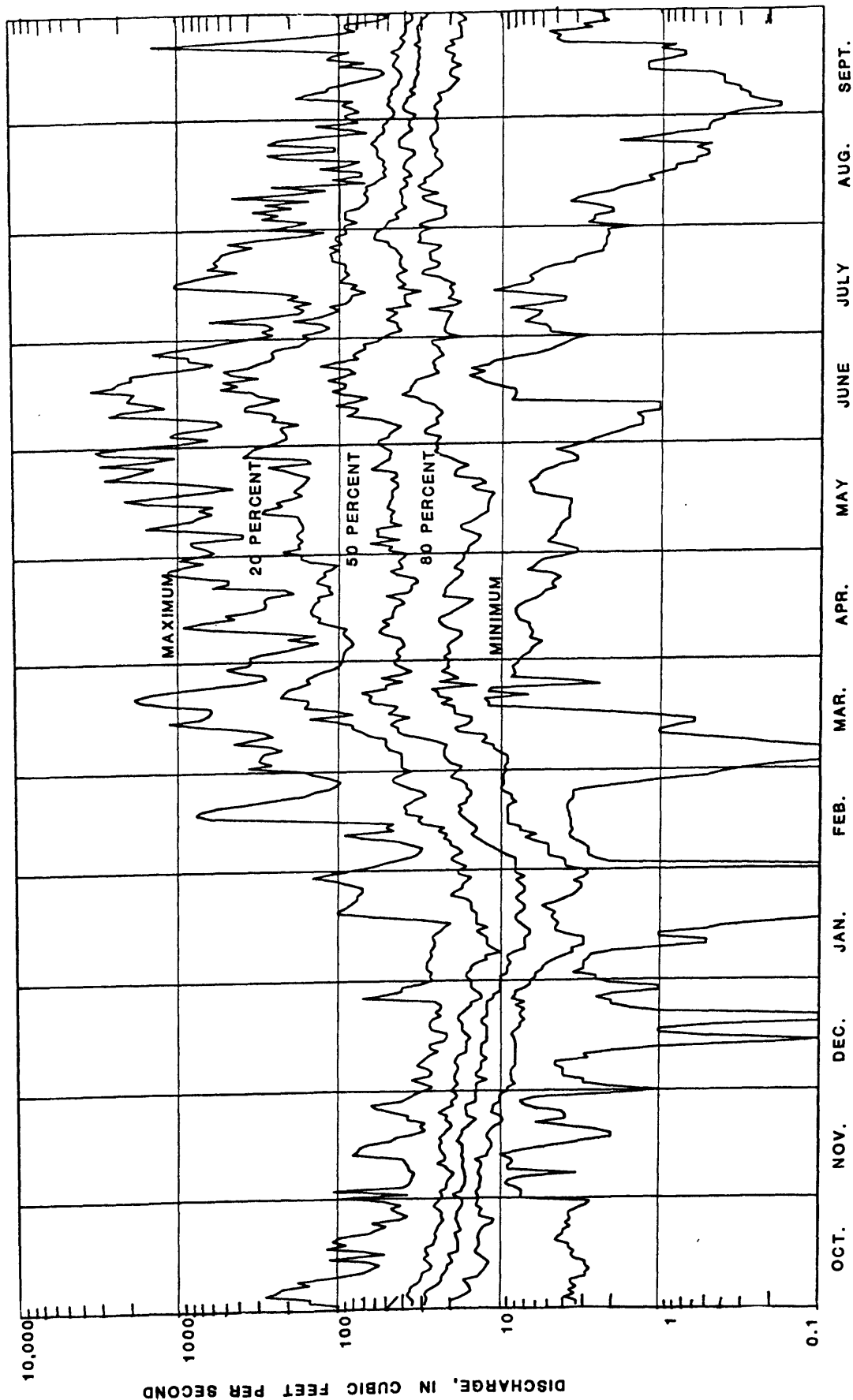


Figure 7.---Duration hydrograph for 29-year period beginning October 1952, Cheyenne River basin, station 06438500, Cheyenne River near Plainview, S. Dak.

Table 6.--Plotting points for duration hydrograph for 29-year period beginning October 1952, Cheyenne River basin, station 06438500, Cheyenne River near Plainview, S. Dak.

LOCATION.--Lat 44°31'16", long 101°59'34", in NE¼SW¼ sec.31, T.7 N., R.18 E., Ziebach County, Hydrologic Unit 10120112, near left bank on downstream side of highway bridge, 1.0 mi downstream from Ash Creek and 10 mi southeast of Plainview.

DRAINAGE AREA.--21,600 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--October 1950 to September 1981 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,877.65 ft National Geodetic Vertical Datum of 1929. Prior to Mar. 22, 1951, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Flow slightly regulated by Angostura Reservoir 164 mi upstream (see station 06401000) since October 1949 and upstream reservoirs on Rapid Creek since 1956 and Belle Fourche River since 1952. Flow also affected by diversions for irrigation of about 70,000 acres and return flow from irrigated areas. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--31 years, 610 ft<sup>3</sup>/s (441,900 acre-ft/yr); median of yearly mean discharges, 570 ft<sup>3</sup>/s (413,000 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,700 ft<sup>3</sup>/s May 26, 1957, from rating curve extended above 18,000 ft<sup>3</sup>/s; maximum gage height, 11.68 ft May 26, 1965; no flow Dec. 14, 19-21, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood late in May 1920 reached a stage of about 17.5 ft, and flood in May 1927 reached a stage of about 14 ft, from information by local residents.

Table 6.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06438500,  
Cheyenne River near Plainview, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LWK
		.10	.20	.30	.50	.70	.80	.90		
10- 1	975.00	362.00	345.00	328.00	291.00	227.00	202.00	81.00	33.00	
10- 2	1480.00	448.00	339.00	325.00	287.00	236.00	203.00	77.00	33.00	
10- 3	1460.00	545.00	356.00	322.00	282.00	232.00	180.00	75.00	39.00	
10- 4	2770.00	476.00	373.00	327.00	292.00	222.00	162.00	68.00	34.00	
10- 5	2390.00	454.00	357.00	316.00	282.00	208.00	151.00	70.00	37.00	
10- 6	2190.00	384.00	357.00	312.00	257.00	192.00	154.00	68.00	33.00	
10- 7	1480.00	373.00	325.00	304.00	237.00	211.00	160.00	73.00	36.00	
10- 8	1770.00	353.00	309.00	267.00	230.00	192.00	170.00	68.00	36.00	
10- 9	1040.00	324.00	304.00	255.00	230.00	176.00	138.00	65.00	29.00	
10-10	700.00	405.00	300.00	255.00	219.00	167.00	130.00	64.00	29.00	
10-11	627.00	334.00	270.00	249.00	210.00	163.00	125.00	62.00	27.00	
10-12	552.00	396.00	262.00	249.00	210.00	159.00	121.00	65.00	29.00	
10-13	644.00	398.00	278.00	236.00	194.00	156.00	116.00	66.00	29.00	
10-14	1120.00	430.00	296.00	241.00	200.00	166.00	126.00	65.00	34.00	
10-15	512.00	384.00	274.00	246.00	208.00	157.00	134.00	95.00	36.00	
10-16	693.00	365.00	288.00	246.00	180.00	154.00	143.00	100.00	34.00	
10-17	1160.00	346.00	288.00	246.00	180.00	154.00	138.00	84.00	37.00	
10-18	890.00	318.00	259.00	240.00	180.00	157.00	134.00	118.00	37.00	
10-19	1070.00	337.00	252.00	235.00	180.00	157.00	134.00	96.00	45.00	
10-20	970.00	351.00	245.00	231.00	184.00	153.00	137.00	96.00	43.00	
10-21	645.00	399.00	252.00	227.00	188.00	154.00	134.00	90.00	40.00	
10-22	584.00	364.00	244.00	230.00	172.00	148.00	131.00	80.00	40.00	
10-23	504.00	306.00	240.00	210.00	179.00	145.00	126.00	84.00	36.00	
10-24	616.00	270.00	231.00	214.00	180.00	151.00	112.00	80.00	39.00	
10-25	412.00	259.00	223.00	216.00	188.00	157.00	109.00	95.00	36.00	
10-26	370.00	281.00	231.00	200.00	183.00	154.00	134.00	98.00	37.00	
10-27	424.00	266.00	227.00	197.00	184.00	151.00	134.00	107.00	37.00	
10-28	468.00	294.00	241.00	209.00	176.00	145.00	129.00	105.00	33.00	
10-29	404.00	316.00	255.00	204.00	170.00	145.00	140.00	105.00	29.00	
10-30	530.00	252.00	241.00	210.00	168.00	144.00	138.00	100.00	27.00	
10-31	946.00	282.00	231.00	209.00	173.00	151.00	135.00	107.00	75.00	
MEAN	744.64	378.42	281.80	262.61	219.00	196.58	177.67	115.64	39.22	

Table 6.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06438500,  
Cheyenne River near Plainview, S. Dak.--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
11- 1	368.00	341.00	223.00	214.00	195.00	160.00	138.00	114.00		73.00	
11- 2	1060.00	310.00	236.00	212.00	172.00	157.00	141.00	130.00		73.00	
11- 3	398.00	260.00	213.00	207.00	170.00	144.00	133.00	125.00		81.00	
11- 4	364.00	295.00	212.00	195.00	163.00	148.00	133.00	120.00		93.00	
11- 5	352.00	246.00	209.00	179.00	163.00	148.00	131.00	100.00		89.00	
11- 6	346.00	236.00	201.00	182.00	162.00	152.00	131.00	89.00		70.00	
11- 7	334.00	220.00	190.00	182.00	163.00	152.00	136.00	80.00		33.00	
11- 8	358.00	217.00	206.00	182.00	165.00	157.00	134.00	92.00		89.00	
11- 9	364.00	227.00	215.00	200.00	170.00	144.00	130.00	107.00		90.00	
11-10	377.00	270.00	243.00	210.00	167.00	141.00	130.00	125.00		83.00	
11-11	391.00	302.00	217.00	199.00	167.00	149.00	143.00	120.00		86.00	
11-12	811.00	334.00	217.00	200.00	173.00	130.00	120.00	107.00		100.00	
11-13	754.00	310.00	226.00	215.00	168.00	130.00	119.00	96.00		80.00	
11-14	729.00	285.00	234.00	202.00	170.00	148.00	114.00	80.00		60.00	
11-15	643.00	281.00	237.00	202.00	170.00	156.00	112.00	87.00		40.00	
11-16	470.00	270.00	225.00	206.00	182.00	161.00	114.00	83.00		30.00	
11-17	434.00	264.00	236.00	210.00	176.00	161.00	120.00	75.00		20.00	
11-18	326.00	244.00	220.00	209.00	170.00	148.00	120.00	75.00		20.00	
11-19	287.00	230.00	212.00	200.00	170.00	130.00	115.00	80.00		25.00	
11-20	310.00	225.00	197.00	180.00	157.00	133.00	110.00	85.00		40.00	
11-21	290.00	225.00	200.00	185.00	150.00	115.00	100.00	70.00		60.00	
11-22	370.00	255.00	217.00	192.00	140.00	100.00	95.00	80.00		39.00	
11-23	364.00	253.00	209.00	186.00	159.00	115.00	100.00	98.00		39.00	
11-24	461.00	286.00	239.00	200.00	160.00	120.00	114.00	100.00		41.00	
11-25	569.00	305.00	217.00	195.00	162.00	125.00	110.00	100.00		60.00	
11-26	622.00	295.00	193.00	185.00	160.00	125.00	110.00	100.00		70.00	
11-27	405.00	257.00	200.00	168.00	140.00	118.00	100.00	90.00		75.00	
11-28	365.00	243.00	185.00	170.00	140.00	119.00	100.00	80.00		60.00	
11-29	333.00	250.00	183.00	169.00	142.00	110.00	100.00	70.00		20.00	
11-30	293.00	250.00	200.00	170.00	140.00	110.00	90.00	70.00		10.00	
MEAN	325.30	235.20	203.46	189.46	168.76	141.66	127.33	114.06		93.76	



Table 6.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06438500,  
Cheyenne River near Plainview, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LUM
		.10	.20	.30	.50	.70	.80	.90		
12- 1	260.00	232.00	190.00	170.00	140.00	100.00	90.00	70.00	20.00	
12- 2	300.00	225.00	180.00	160.00	140.00	100.00	80.00	70.00	30.00	
12- 3	350.00	243.00	190.00	170.00	120.00	110.00	85.00	70.00	30.00	
12- 4	274.00	250.00	190.00	175.00	140.00	100.00	85.00	70.00	40.00	
12- 5	259.00	200.00	185.00	170.00	140.00	90.00	85.00	70.00	40.00	
12- 6	277.00	220.00	180.00	162.00	130.00	90.00	85.00	70.00	40.00	
12- 7	324.00	230.00	180.00	162.00	130.00	85.00	80.00	70.00	45.00	
12- 8	306.00	220.00	190.00	170.00	130.00	90.00	80.00	70.00	45.00	
12- 9	288.00	200.00	185.00	170.00	120.00	90.00	80.00	50.00	28.00	
12-10	270.00	210.00	180.00	160.00	130.00	95.00	80.00	45.00	30.00	
12-11	240.00	200.00	160.00	150.00	130.00	100.00	80.00	45.00	20.00	
12-12	270.00	185.00	160.00	140.00	130.00	110.00	80.00	40.00	10.00	
12-13	270.00	180.00	160.00	140.00	130.00	110.00	80.00	40.00	2.00	
12-14	222.00	180.00	160.00	140.00	120.00	90.00	80.00	35.00	.00	
12-15	210.00	180.00	150.00	130.00	120.00	100.00	82.00	35.00	5.00	
12-16	210.00	190.00	160.00	140.00	120.00	90.00	85.00	45.00	10.00	
12-17	260.00	180.00	170.00	150.00	120.00	100.00	80.00	45.00	10.00	
12-18	270.00	190.00	170.00	150.00	120.00	100.00	75.00	50.00	5.00	
12-19	270.00	200.00	170.00	160.00	130.00	95.00	75.00	55.00	.00	
12-20	260.00	210.00	180.00	160.00	130.00	90.00	70.00	50.00	.00	
12-21	230.00	210.00	180.00	160.00	120.00	100.00	75.00	50.00	.00	
12-22	250.00	200.00	170.00	160.00	120.00	100.00	75.00	50.00	10.00	
12-23	230.00	210.00	160.00	150.00	120.00	100.00	70.00	50.00	15.00	
12-24	230.00	210.00	150.00	140.00	120.00	90.00	80.00	65.00	20.00	
12-25	250.00	200.00	150.00	140.00	120.00	95.00	70.00	65.00	20.00	
12-26	700.00	160.00	130.00	130.00	110.00	90.00	85.00	65.00	25.00	
12-27	500.00	150.00	130.00	120.00	110.00	90.00	80.00	60.00	20.00	
12-28	400.00	170.00	140.00	120.00	100.00	85.00	80.00	60.00	10.00	
12-29	400.00	180.00	150.00	140.00	100.00	80.00	70.00	60.00	10.00	
12-30	500.00	200.00	150.00	140.00	100.00	80.00	65.00	60.00	20.00	
12-31	260.00	200.00	150.00	130.00	100.00	80.00	65.00	55.00	25.00	
MEAN	206.35	176.29	157.09	150.96	122.74	102.90	94.38	80.03	28.61	

Table 6.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06438500,  
Cheyenne River near Plainview, S. Dak.--Continued

Percent exceedance values										
DATE	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW	
1- 1	270.00	190.00	160.00	120.00	100.00	80.00	60.00	50.00	25.00	
1- 2	260.00	180.00	160.00	130.00	90.00	70.00	60.00	45.00	35.00	
1- 3	280.00	180.00	150.00	130.00	90.00	70.00	55.00	40.00	40.00	
1- 4	280.00	180.00	150.00	120.00	90.00	70.00	54.00	35.00	30.00	
1- 5	290.00	160.00	140.00	110.00	85.00	60.00	50.00	30.00	30.00	
1- 6	270.00	160.00	120.00	100.00	90.00	50.00	45.00	35.00	26.00	
1- 7	260.00	160.00	125.00	95.00	90.00	50.00	40.00	35.00	27.00	
1- 8	270.00	158.00	100.00	100.00	80.00	55.00	35.00	34.00	20.00	
1- 9	260.00	150.00	110.00	90.00	70.00	55.00	36.00	30.00	10.00	
1-10	250.00	170.00	120.00	95.00	70.00	52.00	30.00	28.00	5.00	
1-11	250.00	200.00	120.00	100.00	70.00	50.00	30.00	27.00	5.00	
1-12	260.00	220.00	120.00	100.00	70.00	40.00	30.00	26.00	10.00	
1-13	250.00	230.00	130.00	90.00	65.00	50.00	38.00	30.00	10.00	
1-14	230.00	200.00	140.00	100.00	65.00	50.00	45.00	30.00	5.00	
1-15	220.00	150.00	120.00	100.00	70.00	50.00	45.00	30.00	4.00	
1-16	200.00	150.00	140.00	100.00	75.00	50.00	43.00	29.00	2.00	
1-17	300.00	160.00	140.00	100.00	80.00	55.00	46.00	30.00	1.00	
1-18	600.00	170.00	140.00	100.00	80.00	58.00	48.00	30.00	1.00	
1-19	1000.00	180.00	140.00	110.00	75.00	60.00	45.00	25.00	1.00	
1-20	950.00	200.00	150.00	110.00	70.00	65.00	50.00	20.00	1.00	
1-21	850.00	210.00	150.00	130.00	70.00	60.00	55.00	25.00	1.00	
1-22	800.00	210.00	150.00	100.00	75.00	60.00	45.00	25.00	1.00	
1-23	750.00	230.00	160.00	100.00	80.00	60.00	40.00	25.00	1.00	
1-24	750.00	220.00	200.00	110.00	75.00	50.00	35.00	20.00	1.00	
1-25	700.00	210.00	190.00	120.00	70.00	50.00	33.00	20.00	1.00	
1-26	700.00	220.00	170.00	120.00	70.00	45.00	31.00	20.00	1.00	
1-27	850.00	220.00	170.00	120.00	75.00	45.00	31.00	20.00	1.00	
1-28	1000.00	210.00	160.00	120.00	80.00	40.00	35.00	25.00	1.00	
1-29	1400.00	210.00	150.00	110.00	70.00	40.00	30.00	20.00	1.00	
1-30	1100.00	200.00	180.00	120.00	80.00	40.00	28.00	20.00	1.00	
1-31	800.00	220.00	180.00	130.00	80.00	45.00	30.00	25.00	1.00	
MEAN	436.61	180.00	147.25	108.06	84.67	60.16	54.00	33.58	10.03	

Table 6.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06438500,  
Cheyenne River near Plainview, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
2- 1	600.00	250.00	160.00	120.00	80.00	50.00	39.00	27.00	1.00	
2- 2	500.00	270.00	180.00	120.00	80.00	50.00	39.00	25.00	20.00	
2- 3	400.00	300.00	200.00	120.00	80.00	50.00	40.00	40.00	25.00	
2- 4	330.00	280.00	190.00	120.00	90.00	60.00	50.00	40.00	28.00	
2- 5	310.00	250.00	170.00	150.00	100.00	60.00	50.00	38.00	28.00	
2- 6	300.00	250.00	180.00	150.00	110.00	60.00	50.00	45.00	28.00	
2- 7	350.00	280.00	200.00	160.00	120.00	70.00	50.00	40.00	30.00	
2- 8	420.00	270.00	200.00	170.00	130.00	75.00	60.00	45.00	33.00	
2- 9	700.00	350.00	220.00	170.00	140.00	80.00	70.00	50.00	36.00	
2-10	900.00	340.00	210.00	180.00	150.00	90.00	60.00	50.00	37.00	
2-11	450.00	300.00	240.00	190.00	140.00	100.00	75.00	55.00	35.00	
2-12	500.00	330.00	220.00	190.00	140.00	95.00	75.00	55.00	36.00	
2-13	450.00	400.00	300.00	200.00	150.00	95.00	90.00	70.00	36.00	
2-14	1500.00	400.00	320.00	200.00	160.00	100.00	90.00	80.00	36.00	
2-15	6000.00	500.00	300.00	210.00	170.00	100.00	90.00	80.00	37.00	
2-16	7500.00	600.00	382.00	220.00	180.00	120.00	90.00	75.00	37.00	
2-17	6970.00	550.00	369.00	210.00	170.00	120.00	90.00	75.00	38.00	
2-18	5380.00	500.00	390.00	200.00	180.00	130.00	90.00	70.00	38.00	
2-19	3330.00	500.00	356.00	220.00	160.00	120.00	80.00	75.00	37.00	
2-20	2450.00	600.00	328.00	200.00	160.00	110.00	85.00	70.00	35.00	
2-21	1600.00	1000.00	285.00	230.00	150.00	120.00	85.00	75.00	35.00	
2-22	1400.00	1100.00	500.00	232.00	150.00	110.00	95.00	75.00	35.00	
2-23	1100.00	900.00	350.00	239.00	160.00	110.00	100.00	70.00	25.00	
2-24	1000.00	791.00	400.00	260.00	160.00	130.00	95.00	60.00	15.00	
2-25	950.00	700.00	450.00	250.00	170.00	120.00	95.00	70.00	10.00	
2-26	1100.00	700.00	450.00	260.00	200.00	120.00	95.00	80.00	5.00	
2-27	1400.00	740.00	400.00	270.00	190.00	130.00	95.00	80.00	4.00	
2-28	1600.00	850.00	350.00	250.00	180.00	130.00	90.00	80.00	3.00	
MEAN	1431.03	473.57	268.28	224.64	169.64	120.35	88.75	73.39	42.14	

Table 6.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06438500,  
Cheyenne River near Plainview, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
3-1	3500.00	1100.00	400.00	300.00	170.00	120.00	95.00	75.00	2.00	
3-2	2500.00	1000.00	400.00	300.00	200.00	100.00	90.00	70.00	1.00	
3-3	3000.00	1000.00	400.00	300.00	210.00	139.00	90.00	70.00	1.00	
3-4	2900.00	955.00	400.00	330.00	220.00	142.00	90.00	70.00	1.00	
3-5	2780.00	700.00	403.00	346.00	220.00	140.00	100.00	75.00	1.00	
3-6	2170.00	700.00	475.00	350.00	220.00	150.00	110.00	75.00	1.00	
3-7	2540.00	690.00	497.00	350.00	210.00	140.00	110.00	90.00	2.00	
3-8	4320.00	700.00	500.00	400.00	240.00	150.00	130.00	90.00	3.00	
3-9	3220.00	700.00	500.00	450.00	300.00	180.00	121.00	90.00	6.00	
3-10	2460.00	1000.00	636.00	500.00	380.00	200.00	124.00	90.00	10.00	
3-11	2800.00	1000.00	700.00	561.00	420.00	280.00	180.00	85.00	10.00	
3-12	4000.00	3080.00	800.00	581.00	420.00	220.00	190.00	85.00	8.00	
3-13	7270.00	4000.00	800.00	592.00	468.00	250.00	160.00	80.00	6.00	
3-14	10900.00	4750.00	1000.00	700.00	432.00	250.00	150.00	85.00	6.00	
3-15	7000.00	4720.00	1470.00	700.00	360.00	219.00	150.00	100.00	10.00	
3-16	6240.00	5220.00	800.00	700.00	480.00	200.00	190.00	120.00	20.00	
3-17	5880.00	4050.00	1000.00	800.00	442.00	217.00	190.00	150.00	50.00	
3-18	5960.00	3830.00	1590.00	1000.00	421.00	250.00	193.00	150.00	119.00	
3-19	11900.00	2500.00	1500.00	1000.00	600.00	262.00	230.00	134.00	117.00	
3-20	16600.00	2200.00	1500.00	1370.00	641.00	280.00	198.00	132.00	126.00	
3-21	18100.00	3000.00	2210.00	1440.00	611.00	300.00	240.00	137.00	67.00	
3-22	15100.00	2980.00	2100.00	1600.00	712.00	376.00	241.00	160.00	118.00	
3-23	10500.00	2360.00	2000.00	1500.00	500.00	357.00	265.00	121.00	115.00	
3-24	5980.00	1910.00	1700.00	1400.00	500.00	328.00	140.00	100.00	24.00	
3-25	3470.00	2260.00	1460.00	1040.00	397.00	300.00	237.00	120.00	35.00	
3-26	2690.00	2170.00	1540.00	990.00	534.00	316.00	180.00	124.00	86.00	
3-27	2800.00	1760.00	1380.00	992.00	401.00	289.00	200.00	117.00	80.00	
3-28	3940.00	1920.00	1230.00	910.00	352.00	263.00	230.00	112.00	82.00	
3-29	4780.00	2600.00	1030.00	708.00	400.00	290.00	206.00	110.00	84.00	
3-30	3430.00	2260.00	955.00	568.00	446.00	270.00	210.00	112.00	78.00	
3-31	3540.00	1850.00	935.00	645.00	440.00	298.00	205.00	112.00	76.00	
MEAN	4359.35	2224.51	1074.45	873.58	472.96	376.38	277.03	177.25	123.77	

Table 6.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06438500,  
Cheyenne River near Plainview, S. Dak.--Continued

Percent exceedance values									
DATE	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW
4- 1	3420.00	1530.00	918.00	656.00	405.00	286.00	223.00	107.00	72.00
4- 2	2870.00	1310.00	911.00	500.00	431.00	267.00	203.00	120.00	66.00
4- 3	2020.00	1140.00	888.00	604.00	419.00	280.00	206.00	140.00	64.00
4- 4	1640.00	980.00	812.00	687.00	384.00	277.00	210.00	120.00	60.00
4- 5	1290.00	900.00	791.00	732.00	391.00	240.00	200.00	160.00	55.00
4- 6	2000.00	1070.00	835.00	741.00	405.00	246.00	184.00	157.00	66.00
4- 7	1350.00	1250.00	883.00	760.00	500.00	289.00	173.00	166.00	63.00
4- 8	2380.00	1970.00	920.00	791.00	554.00	336.00	173.00	157.00	63.00
4- 9	5560.00	2180.00	868.00	658.00	525.00	331.00	210.00	157.00	66.00
4-10	8900.00	1840.00	1070.00	690.00	478.00	316.00	227.00	147.00	66.00
4-11	6850.00	1510.00	1310.00	774.00	528.00	307.00	239.00	136.00	76.00
4-12	4250.00	1960.00	1250.00	690.00	451.00	289.00	235.00	136.00	78.00
4-13	4800.00	2150.00	1400.00	845.00	455.00	315.00	203.00	119.00	80.00
4-14	3220.00	2110.00	1440.00	1110.00	444.00	311.00	188.00	117.00	80.00
4-15	2750.00	1960.00	1400.00	780.00	435.00	270.00	173.00	122.00	77.00
4-16	2670.00	1680.00	1370.00	732.00	383.00	241.00	157.00	114.00	70.00
4-17	2700.00	1600.00	1270.00	684.00	408.00	231.00	147.00	100.00	61.00
4-18	2640.00	1360.00	1310.00	639.00	500.00	242.00	226.00	93.00	56.00
4-19	1830.00	1270.00	1060.00	641.00	366.00	222.00	216.00	87.00	53.00
4-20	2080.00	1650.00	1120.00	920.00	346.00	234.00	217.00	85.00	45.00
4-21	5610.00	1620.00	1110.00	919.00	350.00	227.00	206.00	83.00	48.00
4-22	4590.00	2160.00	1320.00	980.00	315.00	240.00	196.00	85.00	46.00
4-23	4570.00	3190.00	1280.00	725.00	331.00	244.00	182.00	74.00	42.00
4-24	7670.00	2240.00	1170.00	957.00	421.00	277.00	172.00	79.00	47.00
4-25	11000.00	1850.00	1200.00	744.00	469.00	292.00	169.00	81.00	68.00
4-26	11000.00	1770.00	1060.00	639.00	392.00	300.00	192.00	72.00	62.00
4-27	8680.00	1970.00	990.00	641.00	402.00	295.00	180.00	70.00	59.00
4-28	6610.00	1770.00	1440.00	978.00	420.00	245.00	170.00	66.00	55.00
4-29	9410.00	4310.00	1670.00	1240.00	388.00	236.00	166.00	64.00	41.00
4-30	6980.00	3460.00	1610.00	1100.00	372.00	213.00	168.00	64.00	33.00
MEAN	2640.46	2409.50	1272.93	734.60	551.60	374.90	303.56	139.30	71.33

Table 6.---Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06438500,  
Cheyenne River near Plainview, S. Dak.--Continued

DATE	HIGH	Percent exceedance values										LOW
		.10	.20	.30	.50	.70	.80	.90				
5- 1	5610.00	3370.00	2150.00	1080.00	484.00	216.00	156.00	64.00	33.00			
5- 2	6390.00	2510.00	1660.00	1340.00	452.00	197.00	156.00	63.00	40.00			
5- 3	7700.00	3080.00	1730.00	1200.00	626.00	183.00	145.00	63.00	51.00			
5- 4	7900.00	2300.00	1610.00	979.00	410.00	179.00	136.00	70.00	48.00			
5- 5	3760.00	2970.00	1720.00	1070.00	568.00	179.00	132.00	84.00	45.00			
5- 6	3720.00	2250.00	1750.00	1410.00	550.00	209.00	148.00	88.00	45.00			
5- 7	6670.00	3230.00	1620.00	1170.00	576.00	199.00	173.00	114.00	43.00			
5- 8	15200.00	6350.00	1600.00	943.00	401.00	185.00	175.00	112.00	42.00			
5- 9	11200.00	8330.00	1650.00	1060.00	474.00	200.00	153.00	92.00	40.00			
5-10	7710.00	5580.00	1700.00	1240.00	456.00	204.00	140.00	98.00	37.00			
5-11	7000.00	3960.00	1720.00	1360.00	465.00	163.00	129.00	91.00	37.00			
5-12	5770.00	4220.00	2640.00	1340.00	440.00	151.00	118.00	87.00	37.00			
5-13	7030.00	3960.00	2710.00	1280.00	490.00	138.00	120.00	81.00	37.00			
5-14	5740.00	2950.00	2150.00	1160.00	475.00	140.00	118.00	67.00	36.00			
5-15	14800.00	3250.00	2330.00	1030.00	468.00	200.00	117.00	67.00	36.00			
5-16	20500.00	3100.00	1890.00	1000.00	453.00	209.00	114.00	97.00	50.00			
5-17	11900.00	2630.00	1630.00	1290.00	457.00	200.00	109.00	71.00	62.00			
5-18	6560.00	2410.00	1830.00	1450.00	454.00	249.00	140.00	99.00	62.00			
5-19	4300.00	2610.00	1730.00	1030.00	422.00	249.00	151.00	99.00	64.00			
5-20	6250.00	3240.00	1600.00	1240.00	421.00	231.00	122.00	91.00	66.00			
5-21	10400.00	6530.00	1530.00	1190.00	468.00	227.00	133.00	95.00	60.00			
5-22	27000.00	5770.00	1460.00	976.00	424.00	234.00	189.00	109.00	58.00			
5-23	20000.00	3410.00	1770.00	1020.00	433.00	254.00	189.00	105.00	55.00			
5-24	16700.00	7670.00	2080.00	1270.00	618.00	230.00	180.00	105.00	47.00			
5-25	13400.00	8380.00	2610.00	1260.00	558.00	218.00	157.00	105.00	42.00			
5-26	29000.00	10200.00	1440.00	1080.00	513.00	310.00	182.00	136.00	33.00			
5-27	13800.00	11500.00	1520.00	1100.00	472.00	259.00	200.00	160.00	33.00			
5-28	9950.00	7130.00	3750.00	943.00	472.00	250.00	232.00	205.00	36.00			
5-29	27400.00	5960.00	3410.00	860.00	460.00	270.00	250.00	173.00	45.00			
5-30	30800.00	4630.00	3230.00	1230.00	506.00	282.00	238.00	173.00	36.00			
5-31	18900.00	5510.00	2740.00	1220.00	551.00	287.00	250.00	167.00	29.00			
MEAN	6278.86	5106.25	2679.80	1705.16	530.35	377.87	232.58	170.87	83.25			

Table 6.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06438500,  
Cheyenne River near Plainview, S. Dak.--Continued

DATE	Percent exceedance values								
	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW
6- 1	8570.00	4480.00	2320.00	1540.00	558.00	357.00	242.00	187.00	26.00
6- 2	6100.00	5230.00	2010.00	1140.00	481.00	385.00	230.00	198.00	22.00
6- 3	10700.00	3810.00	2020.00	1240.00	472.00	391.00	289.00	212.00	18.00
6- 4	9840.00	3600.00	2130.00	1440.00	440.00	339.00	289.00	217.00	16.00
6- 5	6230.00	2750.00	2200.00	1410.00	402.00	304.00	265.00	213.00	13.00
6- 6	5020.00	2670.00	1720.00	900.00	472.00	287.00	238.00	188.00	13.00
6- 7	5410.00	3480.00	2490.00	1270.00	548.00	293.00	249.00	154.00	13.00
6- 8	9670.00	4900.00	2320.00	1680.00	851.00	326.00	232.00	165.00	14.00
6- 9	25100.00	4570.00	2490.00	1810.00	771.00	371.00	223.00	130.00	10.00
6-10	20700.00	4450.00	3630.00	1990.00	735.00	352.00	241.00	116.00	10.00
6-11	11400.00	5360.00	3580.00	1950.00	1000.00	350.00	253.00	128.00	10.00
6-12	13900.00	5270.00	2800.00	1200.00	770.00	397.00	300.00	180.00	85.00
6-13	19500.00	3990.00	2240.00	2010.00	650.00	368.00	321.00	234.00	81.00
6-14	18600.00	3740.00	2990.00	2000.00	888.00	452.00	400.00	198.00	79.00
6-15	17500.00	5690.00	3260.00	2580.00	1060.00	498.00	356.00	300.00	81.00
6-16	32700.00	13600.00	5130.00	3210.00	894.00	453.00	352.00	280.00	100.00
6-17	23800.00	20700.00	4010.00	2450.00	870.00	415.00	333.00	283.00	122.00
6-18	21900.00	11700.00	4950.00	2250.00	1120.00	360.00	326.00	240.00	133.00
6-19	19000.00	10500.00	2980.00	2240.00	920.00	583.00	276.00	192.00	154.00
6-20	18600.00	10500.00	4360.00	2460.00	769.00	554.00	236.00	206.00	124.00
6-21	11700.00	7930.00	4910.00	2060.00	836.00	408.00	251.00	200.00	151.00
6-22	7440.00	5850.00	3420.00	2180.00	1250.00	320.00	251.00	146.00	118.00
6-23	5660.00	4590.00	3000.00	1520.00	1020.00	311.00	259.00	133.00	109.00
6-24	8030.00	3860.00	2540.00	1520.00	734.00	287.00	243.00	151.00	82.00
6-25	8030.00	3890.00	2390.00	1480.00	797.00	328.00	222.00	122.00	61.00
6-26	13500.00	4930.00	2500.00	1400.00	732.00	320.00	232.00	89.00	49.00
6-27	10400.00	3570.00	2310.00	1280.00	658.00	304.00	236.00	66.00	44.00
6-28	6520.00	2740.00	1680.00	1400.00	681.00	302.00	256.00	110.00	39.00
6-29	4630.00	2500.00	1550.00	1120.00	550.00	294.00	264.00	75.00	35.00
6-30	3370.00	2400.00	1430.00	920.00	518.00	260.00	173.00	60.00	28.00
MEAN	8981.20	4766.03	3343.50	2075.83	1248.56	400.20	328.90	215.33	172.36

Table 6.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06438500,  
Cheyenne River near Plainview, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
7-1	2420.00	2260.00	1620.00	992.00	463.00	274.00	210.00	140.00	49.00	
7-2	2840.00	2170.00	1230.00	760.00	396.00	243.00	219.00	138.00	49.00	
7-3	2410.00	1450.00	1100.00	705.00	419.00	250.00	215.00	133.00	52.00	
7-4	2680.00	1520.00	1230.00	770.00	423.00	256.00	213.00	140.00	71.00	
7-5	5940.00	2530.00	1840.00	775.00	492.00	272.00	207.00	130.00	64.00	
7-6	2740.00	1780.00	1260.00	732.00	452.00	267.00	200.00	109.00	58.00	
7-7	1700.00	1300.00	1080.00	661.00	419.00	310.00	195.00	131.00	55.00	
7-8	1560.00	1200.00	957.00	640.00	496.00	322.00	273.00	139.00	87.00	
7-9	1820.00	1340.00	1100.00	802.00	350.00	314.00	188.00	88.00	54.00	
7-10	1420.00	1330.00	865.00	692.00	378.00	275.00	173.00	87.00	40.00	
7-11	1940.00	1020.00	815.00	622.00	379.00	264.00	207.00	91.00	39.00	
7-12	1700.00	1230.00	802.00	570.00	382.00	250.00	194.00	107.00	67.00	
7-13	2370.00	1240.00	669.00	531.00	304.00	226.00	193.00	117.00	109.00	
7-14	5070.00	1330.00	812.00	470.00	421.00	280.00	205.00	182.00	86.00	
7-15	9900.00	1070.00	744.00	508.00	373.00	280.00	190.00	130.00	67.00	
7-16	9700.00	1330.00	945.00	700.00	401.00	315.00	212.00	125.00	62.00	
7-17	7520.00	1110.00	896.00	872.00	421.00	311.00	234.00	119.00	66.00	
7-18	5980.00	1360.00	829.00	650.00	417.00	333.00	300.00	117.00	60.00	
7-19	4000.00	3350.00	880.00	494.00	369.00	327.00	291.00	125.00	55.00	
7-20	6110.00	2480.00	871.00	713.00	400.00	293.00	241.00	128.00	46.00	
7-21	5240.00	1660.00	870.00	708.00	406.00	267.00	232.00	125.00	35.00	
7-22	5600.00	1750.00	1060.00	797.00	406.00	304.00	266.00	136.00	34.00	
7-23	5180.00	1480.00	1050.00	624.00	394.00	320.00	266.00	188.00	29.00	
7-24	5010.00	2280.00	1090.00	827.00	414.00	360.00	270.00	184.00	23.00	
7-25	4160.00	1810.00	960.00	869.00	428.00	335.00	240.00	154.00	23.00	
7-26	3230.00	2260.00	1100.00	945.00	470.00	336.00	227.00	128.00	22.00	
7-27	4560.00	1540.00	921.00	842.00	477.00	362.00	317.00	200.00	22.00	
7-28	3010.00	1150.00	1010.00	788.00	585.00	384.00	301.00	203.00	22.00	
7-29	1680.00	1400.00	1000.00	762.00	581.00	388.00	312.00	119.00	21.00	
7-30	1180.00	980.00	857.00	775.00	568.00	375.00	301.00	136.00	22.00	
7-31	2690.00	1030.00	888.00	722.00	512.00	344.00	263.00	144.00	15.00	
MEAN	2584.54	1484.25	944.93	859.54	507.38	413.67	350.32	172.45	61.80	



Table 6.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06438500,  
Cheyenne River near Plainview, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
8- 1	1810.00	1030.00	894.00	745.00	492.00	378.00	315.00	170.00	29.00	
8- 2	1510.00	940.00	750.00	676.00	475.00	344.00	280.00	179.00	26.00	
8- 3	2830.00	1320.00	880.00	672.00	411.00	304.00	223.00	130.00	26.00	
8- 4	2240.00	1180.00	870.00	568.00	435.00	286.00	210.00	107.00	20.00	
8- 5	3210.00	1180.00	880.00	664.00	408.00	273.00	219.00	122.00	20.00	
8- 6	1870.00	1040.00	732.00	486.00	364.00	273.00	210.00	119.00	25.00	
8- 7	2710.00	950.00	684.00	652.00	397.00	333.00	251.00	148.00	37.00	
8- 8	1460.00	860.00	647.00	540.00	395.00	338.00	289.00	139.00	33.00	
8- 9	4300.00	790.00	641.00	475.00	390.00	357.00	300.00	194.00	27.00	
8-10	1850.00	850.00	682.00	546.00	402.00	306.00	238.00	197.00	20.00	
8-11	1170.00	726.00	645.00	451.00	405.00	357.00	296.00	195.00	18.00	
8-12	2450.00	704.00	657.00	525.00	369.00	336.00	316.00	130.00	14.00	
8-13	665.00	626.00	584.00	526.00	363.00	310.00	285.00	107.00	11.00	
8-14	1050.00	678.00	545.00	472.00	388.00	326.00	291.00	100.00	12.00	
8-15	695.00	622.00	493.00	444.00	347.00	285.00	263.00	93.00	10.00	
8-16	704.00	664.00	520.00	475.00	357.00	293.00	253.00	91.00	8.00	
8-17	1250.00	860.00	492.00	452.00	388.00	271.00	232.00	96.00	8.00	
8-18	834.00	626.00	521.00	434.00	384.00	280.00	223.00	91.00	6.00	
8-19	722.00	590.00	504.00	397.00	373.00	303.00	232.00	202.00	6.00	
8-20	2130.00	750.00	547.00	468.00	355.00	297.00	248.00	203.00	5.00	
8-21	2610.00	665.00	561.00	459.00	328.00	290.00	250.00	192.00	5.00	
8-22	1010.00	735.00	554.00	484.00	337.00	271.00	238.00	151.00	6.00	
8-23	1010.00	785.00	568.00	494.00	408.00	316.00	256.00	119.00	4.80	
8-24	2580.00	831.00	612.00	571.00	408.00	306.00	260.00	112.00	18.00	
8-25	2240.00	654.00	570.00	516.00	410.00	298.00	265.00	128.00	11.00	
8-26	1230.00	629.00	560.00	479.00	388.00	285.00	266.00	238.00	8.00	
8-27	654.00	592.00	514.00	440.00	368.00	270.00	249.00	209.00	5.00	
8-28	839.00	550.00	505.00	446.00	341.00	267.00	240.00	93.00	5.00	
8-29	1330.00	574.00	522.00	446.00	359.00	293.00	240.00	75.00	4.80	
8-30	732.00	587.00	489.00	436.00	357.00	306.00	244.00	73.00	4.00	
8-31	818.00	578.00	476.00	433.00	344.00	292.00	252.00	110.00	4.00	
MEAN	834.58	718.51	594.93	564.93	433.54	366.58	284.00	147.22	47.98	

Table 6.---Plotting points for duration hydrograph for 29-year period beginning  
October 1952, Cheyenne River basin, station 06438500,  
Cheyenne River near Plainview, S. Dak.--Continued

DATE	Percent exceedance values								LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90	
9- 1	888.00	466.00	441.00	417.00	326.00	289.00	240.00	93.00	3.20
9- 2	725.00	468.00	441.00	412.00	369.00	301.00	240.00	81.00	1.80
9- 3	802.00	565.00	455.00	420.00	388.00	291.00	253.00	79.00	1.80
9- 4	920.00	658.00	486.00	434.00	385.00	278.00	246.00	83.00	2.40
9- 5	791.00	612.00	465.00	428.00	369.00	270.00	229.00	85.00	2.80
9- 6	1760.00	558.00	480.00	411.00	364.00	272.00	230.00	83.00	2.80
9- 7	1500.00	506.00	453.00	392.00	331.00	246.00	240.00	79.00	3.20
9- 8	1150.00	502.00	461.00	408.00	357.00	251.00	206.00	73.00	3.20
9- 9	1100.00	480.00	435.00	418.00	331.00	243.00	195.00	66.00	4.00
9-10	678.00	446.00	414.00	389.00	332.00	232.00	188.00	62.00	4.00
9-11	696.00	426.00	411.00	377.00	329.00	234.00	177.00	67.00	4.00
9-12	552.00	411.00	394.00	352.00	320.00	249.00	199.00	64.00	4.80
9-13	505.00	433.00	401.00	379.00	312.00	277.00	202.00	60.00	12.00
9-14	544.00	454.00	418.00	363.00	322.00	257.00	195.00	57.00	12.00
9-15	955.00	495.00	447.00	379.00	312.00	257.00	173.00	55.00	12.00
9-16	676.00	620.00	440.00	374.00	318.00	228.00	195.00	61.00	9.00
9-17	1140.00	479.00	426.00	408.00	312.00	208.00	196.00	87.00	7.00
9-18	1050.00	508.00	411.00	388.00	306.00	208.00	186.00	131.00	7.00
9-19	827.00	569.00	460.00	381.00	315.00	234.00	212.00	129.00	10.00
9-20	4630.00	463.00	408.00	384.00	303.00	238.00	212.00	133.00	8.00
9-21	13400.00	486.00	395.00	368.00	332.00	216.00	188.00	137.00	40.00
9-22	4270.00	444.00	378.00	357.00	304.00	222.00	202.00	131.00	45.00
9-23	1940.00	525.00	405.00	348.00	309.00	207.00	170.00	119.00	42.00
9-24	1110.00	534.00	380.00	368.00	314.00	207.00	170.00	117.00	50.00
9-25	770.00	385.00	372.00	361.00	314.00	223.00	173.00	119.00	27.00
9-26	879.00	472.00	374.00	354.00	320.00	207.00	173.00	122.00	31.00
9-27	883.00	596.00	373.00	339.00	305.00	219.00	180.00	118.00	21.00
9-28	535.00	432.00	341.00	328.00	300.00	173.00	159.00	108.00	23.00
9-29	470.00	391.00	339.00	334.00	278.00	182.00	167.00	104.00	23.00
9-30	600.00	370.00	350.00	323.00	275.00	214.00	186.00	107.00	29.00
MEAN	1110.36	512.46	413.46	397.66	334.16	255.90	237.66	134.06	16.16

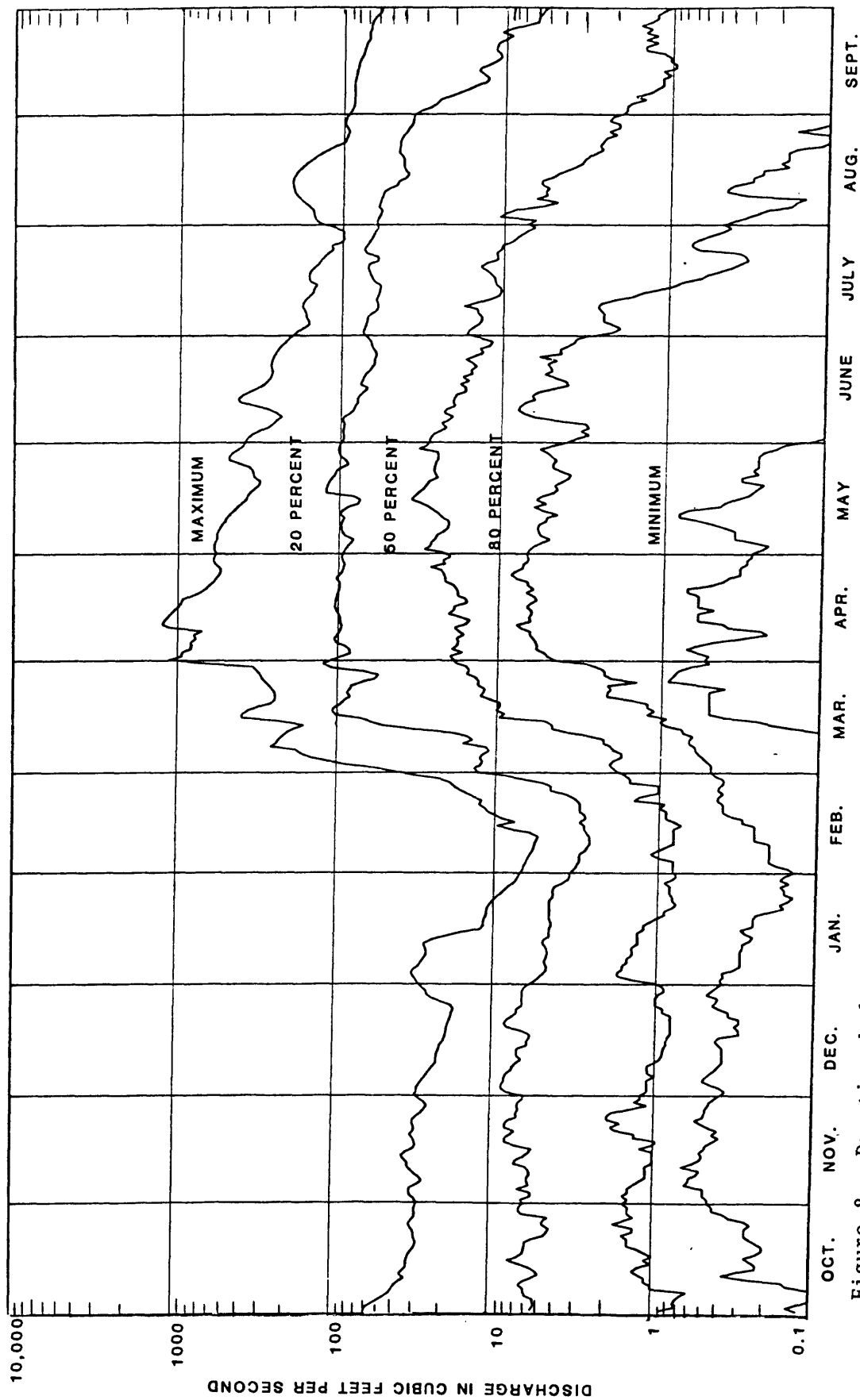


Figure 8.--Duration hydrograph for 29-year period beginning October 1952, James River basin, station 06477000, James River near Forestburg, S. Dak.

Table 7.--Plotting points for duration hydrograph for 29-year period beginning October 1952, James River basin, station 06477000, James River near Forestburg, S. Dak.

LOCATION.--Lat 43°58'26", long 98°04'14", in SW¼SW¼NW¼ sec.20, T.106 N., R.60 W., Sanborn County, Hydrologic Unit 10160011, on right bank 5.0 ft downstream from highway bridge, 3.8 mi southeast of Forestburg, 5.4 mi downstream from Chicago, Milwaukee, St. Paul and Pacific Railroad bridge, and 6.1 mi downstream from Sand Creek.

DRAINAGE AREA.--18,600 mi<sup>2</sup>, approximately, of which about 4,790 mi<sup>2</sup> is probably noncontributing.

PERIOD OF RECORD.--March 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,208.34 ft National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark). Prior to Sept. 5, 1951, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Flow regulated by Arrowwood and Jim Lakes, and Jamestown Reservoir, combined capacity, 246,000 acre-ft, the largest of which is Jamestown Reservoir, capacity, 229,470 acre-ft, 408 mi upstream since May 1953. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--32 years, 270 ft<sup>3</sup>/s (195,600 acre-ft/yr); median of yearly mean discharges, 140 ft<sup>3</sup>/s (101,000 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft<sup>3</sup>/s Apr. 9, 1969 (gage height, 17.16 ft); no flow at times in 1950, 1955, 1959, 1961, 1970, 1976, 1977, 1981, 1982.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods in March 1920 and March 1922 reached a stage of about 18 ft, from information by local residents.

Table 7.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, James River basin, station 06477000,  
James River near Forestsburg, S. Dak.--Continued

DATE	HIGH	Percent exceedance values							
		.10	.20	.30	.50	.70	.80	.90	LOW
10- 1	595.00	86.00	54.00	47.00	8.80	3.00	1.20	0.30	0.00
10- 2	578.00	85.00	52.00	46.00	7.00	3.30	1.40	.31	.00
10- 3	530.00	78.00	52.00	44.00	7.20	3.30	1.20	.22	.00
10- 4	481.00	85.00	52.00	41.00	7.00	2.70	1.00	.10	.00
10- 5	443.00	87.00	58.00	39.00	6.60	2.20	.80	.18	.00
10- 6	414.00	93.00	60.00	41.00	6.00	2.20	.68	.31	.00
10- 7	398.00	93.00	60.00	43.00	10.00	2.40	.80	.60	.00
10- 8	387.00	96.00	64.00	41.00	10.00	2.60	1.40	.71	.00
10- 9	360.00	105.00	61.00	42.00	11.00	4.20	1.50	.81	.00
10-10	336.00	107.00	54.00	46.00	11.00	4.50	2.60	.67	.00
10-11	359.00	105.00	49.00	46.00	12.00	4.80	3.60	.60	.00
10-12	342.00	112.00	51.00	33.00	13.00	5.70	3.00	.60	.00
10-13	327.00	114.00	55.00	35.00	12.00	5.60	2.20	.55	.00
10-14	326.00	110.00	64.00	41.00	10.00	4.40	2.20	.49	.00
10-15	323.00	158.00	75.00	45.00	11.00	4.20	2.40	.49	.00
10-16	320.00	225.00	66.00	44.00	9.90	2.80	2.60	.46	.00
10-17	310.00	172.00	61.00	42.00	11.00	3.90	2.20	.38	.00
10-18	298.00	134.00	60.00	40.00	12.00	4.20	2.00	.53	.00
10-19	288.00	146.00	59.00	36.00	14.00	3.90	2.00	.50	.00
10-20	285.00	149.00	59.00	33.00	14.00	3.60	2.20	.45	.00
10-21	292.00	157.00	54.00	30.00	14.00	3.60	2.40	.42	.00
10-22	294.00	166.00	45.00	24.00	15.00	4.50	2.60	.45	.00
10-23	296.00	163.00	43.00	24.00	13.00	3.60	2.60	.54	.00
10-24	307.00	152.00	42.00	23.00	13.00	4.50	2.60	.61	.00
10-25	316.00	154.00	46.00	20.00	17.00	4.50	2.40	.67	.00
10-26	307.00	151.00	46.00	30.00	15.00	7.00	2.60	.69	.00
10-27	292.00	150.00	43.00	31.00	13.00	6.00	3.30	2.20	.00
10-28	291.00	152.00	62.00	26.00	14.00	5.00	3.60	2.60	.00
10-29	294.00	148.00	65.00	24.00	14.00	6.90	4.20	3.00	.00
10-30	289.00	159.00	64.00	27.00	14.00	7.80	4.20	2.80	.00
10-31	284.00	190.00	61.00	28.00	15.00	7.70	4.50	2.20	.00
MEAN	325.06	124.54	60.22	39.77	11.16	4.09	3.37	2.03	.00

Table 7.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, James River basin, station 06477000,  
James River near Forestsburg, S. Dak.--Continued

DATE	Percent exceedance values									LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90		
11- 1	293.00	193.00	63.00	27.00	14.00	7.60	4.50	2.20	0.00	
11- 2	311.00	188.00	55.00	36.00	15.00	7.40	4.80	2.20	.00	
11- 3	316.00	193.00	55.00	39.00	14.00	7.10	4.80	2.20	.00	
11- 4	313.00	191.00	66.00	40.00	14.00	7.60	4.80	2.40	.00	
11- 5	283.00	184.00	57.00	41.00	13.00	7.60	6.30	2.40	.00	
11- 6	265.00	170.00	58.00	37.00	12.00	7.20	6.00	2.60	.00	
11- 7	276.00	140.00	58.00	31.00	11.00	7.20	5.90	2.20	.00	
11- 8	296.00	150.00	56.00	30.00	11.00	7.20	5.30	2.00	.00	
11- 9	310.00	170.00	57.00	24.00	11.00	7.00	5.10	2.20	.00	
11-10	326.00	130.00	59.00	31.00	11.00	7.00	6.60	2.20	.00	
11-11	325.00	134.00	70.00	39.00	10.00	7.00	5.70	2.40	.00	
11-12	341.00	149.00	68.00	39.00	10.00	6.90	5.10	2.60	.00	
11-13	356.00	162.00	61.00	39.00	10.00	6.00	4.90	3.30	.00	
11-14	335.00	145.00	57.00	38.00	10.00	6.00	5.10	3.60	.00	
11-15	301.00	140.00	55.00	38.00	12.00	7.00	4.80	3.60	.00	
11-16	292.00	150.00	69.00	38.00	10.00	6.00	4.70	3.60	.00	
11-17	297.00	160.00	80.00	39.00	9.60	6.30	4.30	3.30	.00	
11-18	303.00	150.00	80.00	48.00	13.00	7.00	3.90	2.80	.00	
11-19	316.00	145.00	75.00	50.00	13.00	7.00	4.30	3.00	.00	
11-20	300.00	140.00	70.00	44.00	17.00	7.90	4.00	3.00	.00	
11-21	299.00	150.00	80.00	56.00	18.00	8.10	4.50	2.40	.00	
11-22	305.00	160.00	80.00	54.00	16.00	7.20	5.00	2.20	.00	
11-23	305.00	160.00	76.00	51.00	19.00	7.00	5.50	2.10	.00	
11-24	290.00	155.00	68.00	50.00	19.00	6.00	4.90	2.10	.00	
11-25	272.00	140.00	69.00	49.00	18.00	7.00	4.80	1.40	.00	
11-26	260.00	135.00	67.00	49.00	14.00	6.00	4.80	1.40	.00	
11-27	250.00	120.00	68.00	44.00	11.00	6.00	4.60	1.40	.00	
11-28	260.00	105.00	67.00	40.00	13.00	6.00	4.50	1.60	.00	
11-29	280.00	100.00	63.00	41.00	12.00	5.00	4.20	1.20	.00	
11-30	300.00	96.00	62.00	48.00	12.00	5.00	3.90	1.40	.00	
MEAN	282.16	122.43	65.13	34.80	14.03	8.70	5.89	3.47	.00	

Table 7.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, James River basin, station 06477000,  
James River near Forestsburg, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
12- 1	290.00	130.00	79.00	47.00	11.00	5.00	3.60	1.20	0.00	
12- 2	290.00	119.00	85.00	46.00	11.00	5.40	3.90	1.80	.00	
12- 3	280.00	105.00	85.00	46.00	11.00	6.00	4.50	1.60	.00	
12- 4	270.00	104.00	82.00	46.00	11.00	7.00	5.00	1.60	.00	
12- 5	260.00	109.00	82.00	46.00	10.00	7.00	4.80	1.80	.00	
12- 6	250.00	123.00	80.00	46.00	11.00	7.00	4.50	1.60	.00	
12- 7	240.00	141.00	75.00	46.00	11.00	7.00	4.20	1.60	.00	
12- 8	230.00	110.00	73.00	46.00	11.00	7.00	4.00	1.60	.00	
12- 9	220.00	108.00	70.00	46.00	10.00	6.00	3.80	1.40	.00	
12-10	220.00	105.00	65.00	46.00	9.30	6.00	3.80	1.40	.00	
12-11	218.00	105.00	69.00	45.00	9.00	6.00	3.80	1.20	.00	
12-12	216.00	103.00	69.00	45.00	8.90	6.50	3.80	1.40	.00	
12-13	210.00	102.00	69.00	45.00	8.80	6.50	3.80	1.50	.00	
12-14	208.00	100.00	60.00	52.00	8.50	6.30	4.00	1.50	.00	
12-15	200.00	98.00	60.00	47.00	8.50	6.30	4.20	1.80	.00	
12-16	196.00	97.00	58.00	47.00	8.30	6.00	4.00	2.00	.00	
12-17	193.00	95.00	58.00	53.00	8.00	6.00	3.00	2.00	.00	
12-18	191.00	95.00	65.00	49.00	8.00	5.70	3.00	2.00	.00	
12-19	189.00	94.00	80.00	47.00	8.00	6.00	3.20	2.00	.00	
12-20	186.00	96.00	83.00	46.00	8.00	5.90	3.00	1.50	.00	
12-21	182.00	100.00	80.00	45.00	8.00	6.00	3.00	1.50	.00	
12-22	179.00	120.00	75.00	44.00	8.00	6.00	3.50	2.00	.00	
12-23	177.00	135.00	70.00	43.00	9.00	5.10	3.50	2.90	.00	
12-24	172.00	145.00	70.00	42.00	9.00	5.60	4.00	2.50	.00	
12-25	180.00	165.00	65.00	40.00	10.00	6.00	4.40	2.20	.00	
12-26	210.00	160.00	65.00	40.00	10.00	6.00	4.20	1.80	.00	
12-27	240.00	155.00	65.00	45.00	10.00	6.00	4.10	1.40	.00	
12-28	255.00	150.00	65.00	48.00	9.60	6.00	4.80	1.50	.00	
12-29	260.00	140.00	65.00	50.00	8.80	6.00	4.50	1.80	.00	
12-30	275.00	135.00	63.00	50.00	9.00	6.00	4.20	2.00	.00	
12-31	290.00	130.00	59.00	48.00	10.00	5.00	3.90	2.60	.00	
MEAN	195.96	118.71	81.09	48.71	10.67	6.50	4.33	2.30	.00	

Table 7.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, James River basin, station 06477000,  
James River near Forestsburg, S. Dak.--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
1- 1	300.00	125.00	54.00	45.00	14.00	6.00	4.00	2.60		0.00	
1- 2	310.00	120.00	51.00	35.00	17.00	5.00	3.60	2.80		.00	
1- 3	320.00	115.00	48.00	40.00	17.00	4.00	3.90	2.60		.00	
1- 4	310.00	110.00	46.00	40.00	16.00	4.30	3.30	2.00		.00	
1- 5	290.00	105.00	47.00	39.00	16.00	4.30	3.00	1.60		.00	
1- 6	280.00	100.00	48.00	39.00	15.00	3.90	3.00	1.20		.00	
1- 7	270.00	92.00	47.00	37.00	15.00	3.80	3.00	1.40		.00	
1- 8	260.00	88.00	46.00	35.00	14.00	3.80	3.00	1.20		.00	
1- 9	260.00	84.00	46.00	33.00	14.00	3.30	3.00	1.20		.00	
1-10	265.00	86.00	47.00	34.00	14.00	4.00	2.90	1.20		.00	
1-11	270.00	86.00	49.00	32.00	13.00	3.90	2.90	1.60		.00	
1-12	240.00	82.00	49.00	31.00	13.00	3.50	2.60	1.60		.00	
1-13	200.00	79.00	45.00	30.00	13.00	3.00	2.50	1.60		.00	
1-14	160.00	75.00	45.00	28.00	13.00	3.30	2.80	1.60		.00	
1-15	120.00	70.00	45.00	31.00	12.00	3.70	3.00	1.50		.00	
1-16	115.00	66.00	44.00	30.00	12.00	3.00	2.50	1.40		.00	
1-17	115.00	63.00	44.00	30.00	11.00	3.60	2.50	1.40		.00	
1-18	113.00	62.00	45.00	32.00	10.00	4.50	2.50	1.40		.00	
1-19	110.00	65.00	45.00	32.00	9.00	4.30	2.40	1.40		.00	
1-20	110.00	75.00	45.00	32.00	9.00	2.50	2.00	1.50		.00	
1-21	108.00	81.00	45.00	32.00	8.00	2.50	1.60	1.40		.00	
1-22	105.00	80.00	45.00	32.00	7.60	2.50	1.70	1.20		.00	
1-23	100.00	70.00	45.00	31.00	8.00	2.50	1.50	1.00		.00	
1-24	95.00	60.00	43.00	31.00	8.00	2.50	1.40	1.00		.00	
1-25	90.00	50.00	43.00	31.00	8.40	2.50	1.60	1.00		.00	
1-26	85.00	48.00	43.00	31.00	8.40	2.20	1.60	1.00		.00	
1-27	80.00	45.00	42.00	30.00	8.40	2.00	1.70	1.40		.00	
1-28	75.00	42.00	38.00	30.00	9.00	2.10	1.50	1.10		.00	
1-29	72.00	41.00	35.00	30.00	8.00	2.00	1.70	1.00		.00	
1-30	70.00	40.00	34.00	30.00	7.60	2.50	1.60	.90		.00	
1-31	68.00	40.00	34.00	30.00	8.00	3.00	1.40	.90		.00	
MEAN	172.87	72.13	45.48	31.93	10.96	3.21	2.38	1.88		.00	



Table 7.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, James River basin, station 06477000,  
James River near Forestsburg, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
2- 1	66.00	40.00	32.00	29.00	8.00	3.00	1.50	1.00	0.00	
2- 2	65.00	36.00	31.00	28.00	8.00	3.00	1.80	1.10	.00	
2- 3	63.00	35.00	30.00	28.00	6.00	2.60	2.00	1.00	.00	
2- 4	62.00	35.00	30.00	29.00	10.00	3.00	2.00	1.20	.00	
2- 5	60.00	35.00	30.00	26.00	11.00	2.80	2.00	1.30	.00	
2- 6	58.00	35.00	28.00	24.00	10.00	2.80	2.00	1.20	.00	
2- 7	57.00	35.00	27.00	24.00	9.00	3.30	2.00	1.20	.00	
2- 8	56.00	35.00	26.00	21.00	8.00	3.90	2.00	1.00	.00	
2- 9	55.00	37.00	26.00	21.00	8.00	3.90	2.50	.90	.00	
2-10	54.00	44.00	26.00	21.00	8.00	4.00	2.50	.90	.00	
2-11	60.00	46.00	27.00	20.00	8.00	4.50	2.50	.90	.00	
2-12	80.00	48.00	28.00	21.00	8.00	4.80	2.50	1.00	.00	
2-13	95.00	50.00	28.00	21.00	7.20	5.00	2.50	.90	.00	
2-14	75.00	50.00	30.00	20.00	8.00	5.00	3.00	1.00	.00	
2-15	90.00	50.00	28.00	21.00	9.00	5.00	3.00	1.00	.00	
2-16	100.00	49.00	28.00	22.00	9.00	6.00	3.70	1.00	.00	
2-17	110.00	49.00	30.00	21.00	9.00	6.00	4.00	.90	.00	
2-18	115.00	48.00	30.00	22.00	9.80	5.00	4.00	.80	.00	
2-19	125.00	50.00	30.00	22.00	9.20	6.00	4.00	.46	.00	
2-20	120.00	80.00	31.00	22.00	14.00	5.00	4.30	.54	.00	
2-21	135.00	98.00	33.00	26.00	13.00	5.00	4.30	.70	.00	
2-22	150.00	100.00	37.00	30.00	10.00	5.00	4.00	.80	.00	
2-23	165.00	97.00	45.00	35.00	10.00	6.00	4.30	.90	.00	
2-24	180.00	93.00	45.00	35.00	10.00	6.70	4.20	1.00	.00	
2-25	190.00	120.00	50.00	30.00	15.00	7.00	4.00	1.00	.00	
2-26	220.00	170.00	65.00	30.00	15.00	7.00	4.00	1.00	.00	
2-27	320.00	170.00	85.00	30.00	16.00	7.40	4.50	1.20	.00	
2-28	420.00	160.00	125.00	40.00	18.00	10.00	4.80	1.40	.00	
MEAN	93.75	64.60	37.60	27.78	10.51	7.12	5.36	.97	.00	

Table 7.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, James River basin, station 06477000,  
James River near Forestsburg, S. Dak.--Continued

DATE	HIGH	Percent exceedance values							LOW
		.10	.20	.30	.50	.70	.80	.90	
3- 1	550.00	160.00	135.00	60.00	19.00	11.00	4.80	2.50	0.00
3- 2	850.00	170.00	125.00	75.00	20.00	12.00	4.80	2.40	.00
3- 3	1120.00	200.00	120.00	100.00	19.00	10.00	5.10	2.40	.00
3- 4	1450.00	350.00	125.00	80.00	17.00	10.00	5.40	2.20	.00
3- 5	1650.00	600.00	120.00	80.00	17.00	10.00	5.70	2.20	.00
3- 6	1800.00	695.00	110.00	90.00	19.00	9.00	6.00	2.40	.00
3- 7	2620.00	700.00	115.00	95.00	20.00	8.00	6.10	2.40	.00
3- 8	2410.00	665.00	160.00	86.00	22.00	9.20	6.60	2.40	.00
3- 9	2320.00	575.00	140.00	90.00	22.00	12.00	6.60	2.60	.00
3-10	2200.00	485.00	150.00	125.00	27.00	12.00	6.30	2.60	.00
3-11	2060.00	410.00	185.00	130.00	37.00	15.00	7.20	5.00	.50
3-12	1840.00	600.00	325.00	135.00	45.00	20.00	7.40	5.00	1.50
3-13	1620.00	1100.00	500.00	175.00	45.00	18.00	9.20	5.00	2.00
3-14	2300.00	1480.00	600.00	215.00	50.00	19.00	10.00	5.00	2.50
3-15	3960.00	1370.00	700.00	350.00	95.00	20.00	9.20	5.00	4.00
3-16	3940.00	1260.00	1000.00	650.00	89.00	18.00	12.00	6.00	5.00
3-17	3630.00	1540.00	1060.00	650.00	100.00	26.00	11.00	5.00	5.00
3-18	3170.00	1790.00	1030.00	600.00	95.00	25.00	12.00	5.00	5.00
3-19	2610.00	2040.00	940.00	520.00	95.00	24.00	12.00	9.20	5.00
3-20	2460.00	1870.00	890.00	700.00	110.00	24.00	15.00	9.60	5.00
3-21	2460.00	1750.00	820.00	729.00	125.00	24.00	21.00	11.00	5.00
3-22	2480.00	1950.00	850.00	639.00	120.00	28.00	21.00	10.00	5.00
3-23	2580.00	2160.00	820.00	570.00	118.00	30.00	20.00	11.00	4.00
3-24	2700.00	2310.00	800.00	520.00	130.00	33.00	21.00	12.00	6.00
3-25	2860.00	2410.00	680.00	418.00	128.00	37.00	14.00	12.00	9.00
3-26	2990.00	2450.00	569.00	390.00	135.00	40.00	20.00	11.00	8.60
3-27	3090.00	2430.00	545.00	390.00	153.00	50.00	22.00	12.00	8.20
3-28	3230.00	2330.00	682.00	490.00	148.00	52.00	22.00	11.00	7.80
3-29	3400.00	2130.00	1080.00	518.00	154.00	57.00	24.00	12.00	6.60
3-30	7450.00	1970.00	1220.00	491.00	180.00	61.00	28.00	14.00	5.10
3-31	11100.00	4400.00	1100.00	456.00	185.00	63.00	43.00	18.00	5.40
MEAN	1456.77	1106.76	871.61	499.90	138.80	63.58	20.93	12.47	11.63

Table 7.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, James River basin, station 06477000,  
James River near Forestsburg, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
4- 1	9310.00	4760.00	957.00	430.00	195.00	79.00	49.00	19.00	5.10	
4- 2	9240.00	4770.00	822.00	411.00	165.00	76.00	51.00	15.00	6.00	
4- 3	8230.00	4710.00	830.00	394.00	190.00	69.00	57.00	26.00	7.00	
4- 4	8120.00	4620.00	882.00	648.00	177.00	67.00	57.00	37.00	6.00	
4- 5	8180.00	4470.00	1000.00	606.00	174.00	66.00	58.00	43.00	4.80	
4- 6	7650.00	4360.00	1040.00	580.00	178.00	75.00	60.00	42.00	3.20	
4- 7	7850.00	4270.00	1000.00	556.00	162.00	72.00	63.00	44.00	2.20	
4- 8	7040.00	5750.00	971.00	496.00	174.00	88.00	63.00	34.00	2.40	
4- 9	11100.00	6010.00	943.00	428.00	184.00	89.00	71.00	29.00	3.50	
4-10	12200.00	5270.00	937.00	428.00	157.00	95.00	76.00	29.00	4.20	
4-11	11900.00	4710.00	952.00	424.00	149.00	89.00	63.00	24.00	6.00	
4-12	11300.00	4220.00	955.00	397.00	174.00	88.00	64.00	20.00	6.00	
4-13	10800.00	3690.00	977.00	401.00	201.00	83.00	62.00	36.00	6.00	
4-14	10300.00	3200.00	1010.00	441.00	186.00	92.00	62.00	32.00	4.80	
4-15	9770.00	2760.00	1030.00	460.00	185.00	90.00	66.00	31.00	6.00	
4-16	9440.00	2450.00	1030.00	462.00	156.00	78.00	63.00	30.00	6.00	
4-17	9240.00	2320.00	1020.00	470.00	156.00	90.00	58.00	43.00	6.00	
4-18	8180.00	2290.00	1010.00	498.00	177.00	82.00	60.00	52.00	6.00	
4-19	7220.00	2270.00	995.00	532.00	177.00	77.00	67.00	46.00	7.00	
4-20	6670.00	2240.00	973.00	508.00	181.00	76.00	61.00	34.00	7.00	
4-21	6380.00	2140.00	966.00	503.00	189.00	95.00	65.00	24.00	5.00	
4-22	5980.00	2160.00	966.00	493.00	212.00	121.00	66.00	20.00	4.20	
4-23	5760.00	2150.00	1020.00	496.00	212.00	123.00	76.00	17.00	3.90	
4-24	5540.00	2130.00	970.00	485.00	216.00	99.00	83.00	16.00	3.30	
4-25	5400.00	2100.00	934.00	477.00	224.00	88.00	78.00	14.00	3.30	
4-26	5560.00	2050.00	922.00	562.00	262.00	80.00	71.00	18.00	3.30	
4-27	5880.00	1980.00	902.00	584.00	215.00	95.00	70.00	22.00	3.00	
4-28	6010.00	1920.00	927.00	562.00	220.00	104.00	66.00	19.00	3.00	
4-29	5940.00	1880.00	942.00	591.00	199.00	110.00	66.00	18.00	2.80	
4-30	5790.00	1810.00	936.00	663.00	216.00	111.00	67.00	18.00	2.80	
MEAN	6283.66	3550.53	1026.26	520.43	206.26	107.50	91.80	31.86	4.77	

Table 7.---Plotting points for duration hydrograph for 29-year period beginning  
October 1952, James River basin, station 06477000,  
James River near Forestsburg, S. Dak.--Continued

DATE	Percent exceedance values									LUM
	HIGH	.10	.20	.30	.50	.70	.80	.90		
5- 1	5940.00	1740.00	902.00	682.00	290.00	116.00	65.00	27.00	2.40	
5- 2	5940.00	1670.00	871.00	711.00	267.00	101.00	61.00	30.00	2.20	
5- 3	5880.00	1630.00	824.00	681.00	262.00	111.00	55.00	26.00	2.80	
5- 4	5740.00	1620.00	800.00	760.00	247.00	115.00	49.00	22.00	3.60	
5- 5	5740.00	1680.00	898.00	737.00	240.00	96.00	55.00	20.00	3.60	
5- 6	5680.00	1630.00	939.00	691.00	221.00	99.00	57.00	18.00	3.60	
5- 7	5510.00	1610.00	957.00	632.00	209.00	94.00	58.00	16.00	4.20	
5- 8	5350.00	1600.00	963.00	593.00	205.00	98.00	57.00	15.00	5.00	
5- 9	5140.00	1590.00	942.00	581.00	206.00	102.00	52.00	13.00	6.00	
5-10	5030.00	1490.00	918.00	604.00	228.00	91.00	51.00	12.00	8.00	
5-11	4790.00	1450.00	970.00	621.00	238.00	77.00	44.00	12.00	8.00	
5-12	4540.00	1480.00	944.00	617.00	258.00	80.00	54.00	11.00	7.00	
5-13	4300.00	1460.00	872.00	615.00	278.00	82.00	61.00	9.10	4.50	
5-14	4060.00	1630.00	750.00	619.00	309.00	77.00	52.00	7.80	4.20	
5-15	3630.00	1720.00	728.00	640.00	350.00	85.00	59.00	7.10	3.60	
5-16	3760.00	1760.00	808.00	580.00	334.00	83.00	55.00	6.80	3.00	
5-17	3610.00	1790.00	1200.00	530.00	316.00	79.00	47.00	7.00	2.80	
5-18	3400.00	1830.00	1200.00	506.00	297.00	91.00	44.00	6.60	2.60	
5-19	3220.00	2490.00	1180.00	506.00	286.00	94.00	46.00	6.40	2.40	
5-20	3160.00	2450.00	1150.00	501.00	274.00	85.00	42.00	6.50	3.30	
5-21	3400.00	2350.00	1110.00	500.00	243.00	86.00	38.00	8.60	3.30	
5-22	3470.00	2240.00	1060.00	485.00	250.00	86.00	37.00	12.00	2.60	
5-23	3520.00	2210.00	1040.00	481.00	256.00	76.00	42.00	10.00	2.80	
5-24	3690.00	2260.00	975.00	492.00	253.00	81.00	47.00	10.00	2.60	
5-25	4290.00	2280.00	875.00	520.00	250.00	92.00	47.00	8.90	2.60	
5-26	4910.00	2320.00	905.00	557.00	243.00	89.00	45.00	8.60	2.60	
5-27	4910.00	2220.00	972.00	613.00	241.00	95.00	48.00	8.40	2.60	
5-28	4670.00	2120.00	996.00	602.00	245.00	85.00	51.00	8.00	2.40	
5-29	4300.00	2020.00	1010.00	604.00	317.00	81.00	57.00	8.00	2.00	
5-30	4040.00	1910.00	999.00	608.00	285.00	77.00	49.00	12.00	1.80	
5-31	3920.00	1770.00	968.00	617.00	275.00	89.00	40.00	12.00	1.20	
MEAN	3880.64	2027.74	1254.83	585.48	281.93	87.87	63.06	12.33	5.60	

Table 7.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, James River basin, station 06477000,  
James River near Forestsburg, S. Dak.--Continued

DATE	Percent exceedance values								LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90	
6-1	3790.00	1670.00	939.00	617.00	272.00	112.00	35.00	16.00	1.00
6-2	3560.00	1600.00	939.00	613.00	260.00	116.00	29.00	12.00	.66
6-3	3220.00	1530.00	944.00	595.00	231.00	116.00	32.00	11.00	.70
6-4	2830.00	1480.00	936.00	582.00	216.00	94.00	29.00	8.00	.56
6-5	2650.00	1440.00	929.00	569.00	231.00	95.00	30.00	8.00	.47
6-6	2520.00	1390.00	951.00	562.00	211.00	75.00	44.00	8.00	.37
6-7	2340.00	1350.00	944.00	562.00	199.00	101.00	62.00	7.00	.34
6-8	2520.00	1310.00	862.00	553.00	224.00	108.00	72.00	5.00	.43
6-9	2830.00	1280.00	816.00	487.00	217.00	123.00	78.00	5.00	.50
6-10	3500.00	1250.00	797.00	397.00	191.00	114.00	76.00	4.50	.56
6-11	4220.00	1220.00	767.00	390.00	197.00	100.00	71.00	5.00	.54
6-12	4340.00	1180.00	771.00	432.00	194.00	86.00	62.00	10.00	.47
6-13	4090.00	1160.00	744.00	458.00	188.00	83.00	64.00	15.00	.42
6-14	3690.00	1060.00	709.00	492.00	165.00	100.00	59.00	12.00	.38
6-15	3300.00	1010.00	668.00	532.00	165.00	107.00	48.00	11.00	.45
6-16	3030.00	1060.00	737.00	510.00	178.00	107.00	39.00	10.00	.60
6-17	2880.00	1070.00	723.00	547.00	159.00	101.00	40.00	10.00	.62
6-18	2760.00	1060.00	709.00	489.00	172.00	86.00	46.00	11.00	.53
6-19	2700.00	1030.00	689.00	446.00	151.00	87.00	54.00	8.20	.37
6-20	2690.00	1010.00	653.00	453.00	153.00	74.00	49.00	7.40	.36
6-21	2730.00	984.00	630.00	527.00	142.00	68.00	50.00	6.00	.31
6-22	2730.00	972.00	606.00	496.00	151.00	72.00	52.00	5.00	.28
6-23	2690.00	949.00	608.00	445.00	165.00	71.00	46.00	4.80	.20
6-24	2630.00	941.00	595.00	406.00	144.00	63.00	58.00	4.20	.16
6-25	2550.00	933.00	589.00	401.00	129.00	76.00	43.00	3.90	.11
6-26	2480.00	936.00	615.00	360.00	135.00	79.00	44.00	3.30	.10
6-27	2370.00	953.00	632.00	344.00	118.00	75.00	40.00	3.30	.05
6-28	2240.00	979.00	641.00	360.00	114.00	67.00	36.00	2.40	.04
6-29	2120.00	972.00	663.00	332.00	136.00	59.00	35.00	2.20	.04
6-30	1990.00	950.00	705.00	310.00	164.00	60.00	29.00	2.40	.02
MEAN	2919.66	1150.76	746.13	576.13	168.76	89.00	58.06	12.26	.39

Table 7.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, James River basin, station 06477000,  
James River near Forestsburg, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
7- 1	1880.00	926.00	718.00	312.00	160.00	55.00	21.00	2.40	0.00	
7- 2	1740.00	917.00	702.00	302.00	150.00	47.00	19.00	2.20	.00	
7- 3	1590.00	934.00	689.00	335.00	138.00	41.00	21.00	2.20	.03	
7- 4	1600.00	918.00	679.00	353.00	133.00	36.00	24.00	2.00	.02	
7- 5	1650.00	903.00	675.00	344.00	132.00	34.00	24.00	1.60	.02	
7- 6	1670.00	895.00	643.00	339.00	141.00	60.00	24.00	1.70	.00	
7- 7	1710.00	877.00	599.00	333.00	142.00	52.00	25.00	1.60	.00	
7- 8	1760.00	866.00	584.00	349.00	170.00	44.00	26.00	1.40	.00	
7- 9	1740.00	851.00	586.00	331.00	141.00	41.00	25.00	1.00	.00	
7-10	1680.00	833.00	599.00	301.00	118.00	41.00	21.00	.98	.00	
7-11	1580.00	822.00	584.00	289.00	104.00	46.00	16.00	1.80	.00	
7-12	1500.00	855.00	573.00	306.00	101.00	45.00	14.00	1.50	.00	
7-13	1480.00	820.00	566.00	299.00	102.00	48.00	11.00	1.10	.00	
7-14	1420.00	822.00	562.00	321.00	108.00	39.00	9.00	.85	.00	
7-15	1570.00	800.00	608.00	338.00	110.00	33.00	8.00	.76	.00	
7-16	1600.00	832.00	635.00	349.00	112.00	36.00	6.30	.63	.00	
7-17	1600.00	814.00	652.00	358.00	118.00	37.00	5.70	.54	.00	
7-18	1560.00	797.00	666.00	370.00	125.00	33.00	4.80	.30	.00	
7-19	1480.00	810.00	679.00	390.00	136.00	30.00	4.00	.40	.00	
7-20	1390.00	800.00	663.00	367.00	126.00	24.00	3.60	.31	.00	
7-21	1340.00	785.00	586.00	340.00	107.00	21.00	3.20	.52	.00	
7-22	1270.00	787.00	586.00	322.00	107.00	26.00	3.30	.46	.00	
7-23	1200.00	785.00	689.00	377.00	108.00	19.00	3.60	.39	.00	
7-24	1120.00	760.00	715.00	420.00	101.00	20.00	6.50	.46	.00	
7-25	1140.00	748.00	690.00	433.00	100.00	20.00	7.10	.40	.00	
7-26	998.00	764.00	668.00	432.00	88.00	19.00	7.00	.40	.00	
7-27	960.00	807.00	646.00	401.00	82.00	20.00	6.30	.40	.00	
7-28	972.00	848.00	629.00	369.00	78.00	20.00	5.50	.20	.00	
7-29	967.00	916.00	615.00	371.00	71.00	20.00	4.60	.10	.00	
7-30	1100.00	874.00	589.00	352.00	64.00	23.00	4.10	.09	.00	
7-31	1310.00	870.00	595.00	328.00	71.00	25.00	4.60	.08	.00	
MEAN	1413.80	855.45	631.38	339.19	116.25	49.51	13.71	.95	.00	

Table 7.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, James River basin, station 06477000,  
James River near Forestsburg, S. Dak.--Continued

DATE	HIGH	Percent exceedance values							LOW
		.10	.20	.30	.50	.70	.80	.90	
8-1	1440.00	860.00	599.00	300.00	63.00	17.00	3.90	0.06	0.00
8-2	1480.00	885.00	582.00	276.00	104.00	15.00	3.30	.00	.00
8-3	1500.00	891.00	566.00	307.00	96.00	12.00	2.80	.08	.02
8-4	1520.00	886.00	557.00	470.00	82.00	11.00	2.40	.23	.00
8-5	1610.00	890.00	586.00	430.00	56.00	10.00	1.70	.43	.00
8-6	1730.00	902.00	575.00	401.00	47.00	8.00	1.60	.30	.00
8-7	1840.00	864.00	565.00	395.00	63.00	10.00	1.40	.18	.00
8-8	1930.00	845.00	554.00	403.00	54.00	9.60	3.30	.10	.00
8-9	2000.00	845.00	545.00	409.00	55.00	8.00	4.40	.00	.00
8-10	2020.00	836.00	510.00	407.00	53.00	6.90	4.30	.00	.00
8-11	2040.00	840.00	451.00	330.00	58.00	5.70	3.90	.00	.00
8-12	2050.00	838.00	443.00	286.00	58.00	5.10	3.00	.00	.00
8-13	2020.00	830.00	401.00	310.00	50.00	5.60	3.00	.00	.00
8-14	1950.00	830.00	382.00	294.00	46.00	5.90	2.60	.00	.00
8-15	1880.00	830.00	401.00	284.00	41.00	7.00	2.60	.06	.00
8-16	1790.00	820.00	412.00	283.00	36.00	7.20	1.80	.06	.00
8-17	1690.00	820.00	414.00	289.00	33.00	6.30	2.00	.08	.00
8-18	1570.00	820.00	412.00	294.00	32.00	5.10	1.80	.08	.00
8-19	1460.00	820.00	420.00	286.00	30.00	3.90	1.80	.03	.00
8-20	1330.00	820.00	439.00	267.00	27.00	3.30	1.80	.02	.00
8-21	1200.00	820.00	439.00	254.00	25.00	2.40	1.60	.00	.00
8-22	1080.00	820.00	435.00	246.00	26.00	2.40	1.10	.10	.00
8-23	959.00	820.00	435.00	238.00	25.00	3.00	.80	.10	.00
8-24	941.00	820.00	426.00	222.00	24.00	2.60	.60	.21	.00
8-25	917.00	742.00	414.00	206.00	21.00	2.10	.50	.25	.00
8-26	906.00	642.00	397.00	184.00	23.00	2.50	1.60	.30	.00
8-27	929.00	556.00	386.00	153.00	20.00	2.30	1.20	.30	.00
8-28	960.00	538.00	370.00	131.00	20.00	2.10	.98	.30	.00
8-29	961.00	520.00	363.00	131.00	23.00	1.90	.71	.20	.00
8-30	937.00	509.00	361.00	123.00	22.00	2.00	.56	.10	.00
8-31	906.00	520.00	357.00	109.00	19.00	2.00	.46	.10	.00
MEAN	1374.93	829.74	424.96	277.87	40.45	8.05	3.57	.14	.00

Table 7.--Plotting points for duration hydrograph for 29-year period beginning  
October 1952, James River basin, station 06477000,  
James River near Forestsburg, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
9- 1	872.00	516.00	326.00	98.00	18.00	2.10	0.50	0.26	0.00	
9- 2	852.00	483.00	283.00	91.00	18.00	2.00	.32	.29	.00	
9- 3	840.00	449.00	261.00	76.00	17.00	4.00	.40	.10	.00	
9- 4	840.00	409.00	249.00	72.00	14.00	4.30	.26	.02	.00	
9- 5	840.00	407.00	222.00	70.00	16.00	4.00	.21	.00	.00	
9- 6	840.00	388.00	192.00	66.00	13.00	3.30	.20	.00	.00	
9- 7	840.00	367.00	167.00	63.00	12.00	2.40	.20	.00	.00	
9- 8	840.00	346.00	151.00	66.00	11.00	2.30	.20	.00	.00	
9- 9	840.00	326.00	130.00	75.00	11.00	2.30	.30	.00	.00	
9-10	830.00	310.00	125.00	67.00	11.00	2.00	.60	.00	.00	
9-11	820.00	298.00	132.00	63.00	10.00	1.60	.40	.00	.00	
9-12	810.00	288.00	144.00	64.00	11.00	1.60	.40	.00	.00	
9-13	800.00	260.00	140.00	62.00	9.20	1.70	.30	.00	.00	
9-14	790.00	243.00	124.00	58.00	9.20	1.30	.10	.00	.00	
9-15	780.00	254.00	112.00	58.00	10.00	1.80	.10	.00	.00	
9-16	760.00	245.00	105.00	57.00	10.00	2.00	.16	.00	.00	
9-17	740.00	228.00	107.00	56.00	11.00	2.50	.26	.00	.00	
9-18	732.00	214.00	113.00	54.00	14.00	2.20	.12	.00	.00	
9-19	717.00	207.00	112.00	49.00	14.00	2.20	.12	.00	.00	
9-20	705.00	201.00	109.00	47.00	12.00	2.40	.10	.00	.00	
9-21	682.00	192.00	99.00	51.00	14.00	2.20	.20	.00	.00	
9-22	677.00	183.00	90.00	59.00	12.00	1.60	.30	.10	.00	
9-23	679.00	170.00	104.00	59.00	14.00	1.30	.40	.13	.00	
9-24	662.00	132.00	92.00	54.00	13.00	1.20	.50	.10	.00	
9-25	662.00	113.00	75.00	46.00	15.00	1.20	1.00	.07	.00	
9-26	652.00	108.00	63.00	43.00	13.00	1.80	1.00	.10	.00	
9-27	631.00	101.00	63.00	42.00	12.00	2.20	.80	.08	.00	
9-28	606.00	97.00	60.00	39.00	12.00	2.40	.70	.07	.00	
9-29	572.00	96.00	58.00	40.00	11.00	2.80	.50	.05	.00	
9-30	576.00	89.00	55.00	43.00	10.00	2.60	.40	.05	.00	
MEAN	747.36	233.70	121.60	53.70	15.52	2.52	.62	.16	.00	



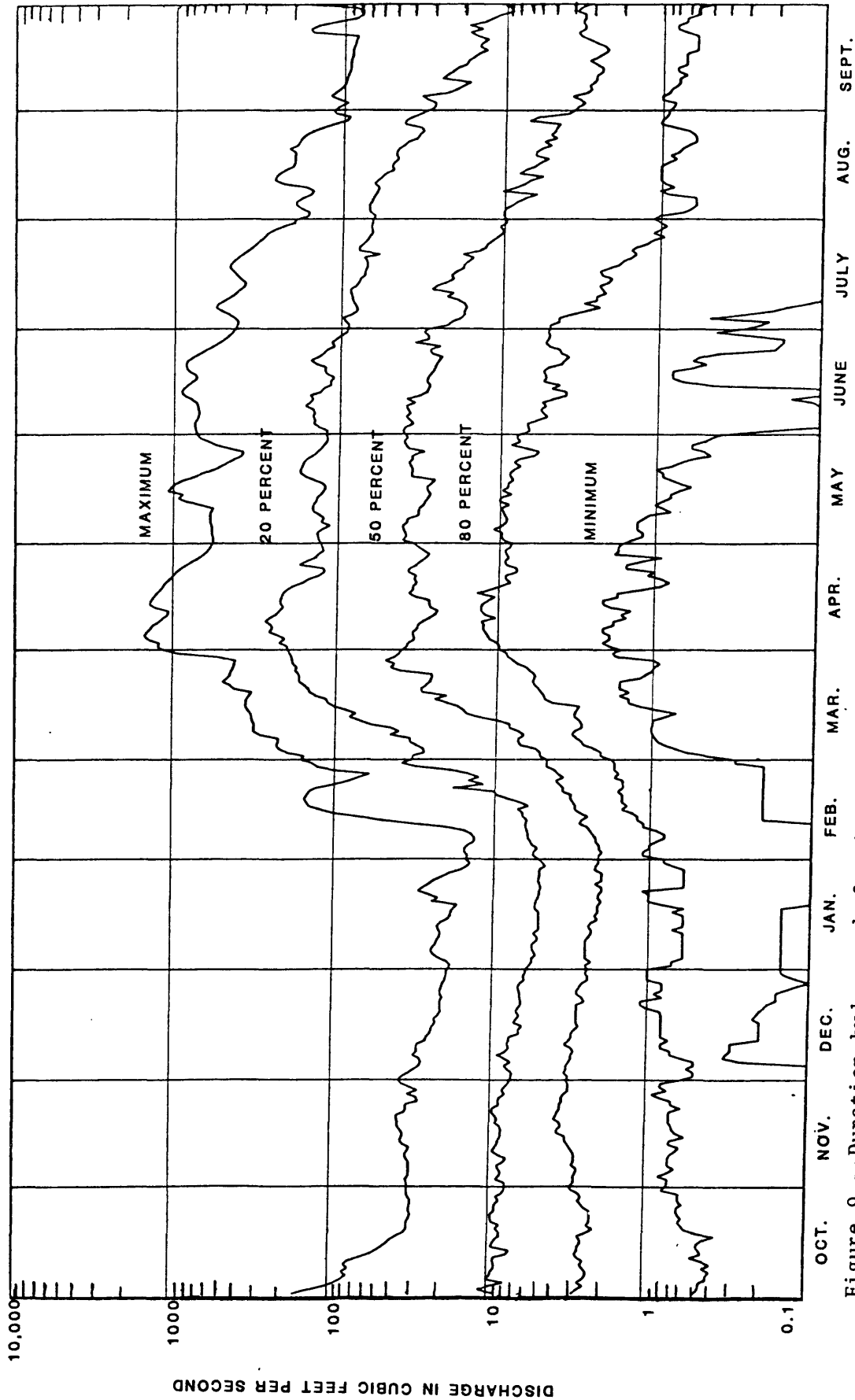


Figure 9.--Duration hydrograph for 49-year period beginning October 1932, James River basin, station 06478500, James River near Scotland, S. Dak.

Table 8.--Plotting points for duration hydrograph for 49-year period beginning October 1932, James River basin, station 06478500, James River near Scotland, S. Dak.

LOCATION.--Lat 43°11'09", long 97°38'07", in SW¼SW¼ sec.30, T.97 N., R.57 W., Hutchinson County, Hydrologic Unit 10160011, on right bank 5.0 ft downstream from highway bridge, 0.3 mi upstream from Dawson Creek and 5.2 mi northeast of Scotland.

DRAINAGE AREA.--21,550 mi<sup>2</sup>, approximately, of which about 4,790 mi<sup>2</sup> is probably noncontributing.

PERIOD OF RECORD.--September 1928 to September 1982. Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 786: Drainage area. WSP 956: 1937-38. WSP 1279: 1932, 1948.

GAGE.--Water-stage recorder and rock and earth control. Datum of gage is 1,168.51 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 28, 1972, at site 0.25 mi downstream at present datum.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Arrowwood and Jim Lakes, and Jamestown Reservoir, combined capacity, 246,000 acre-ft, the largest of which is Jamestown Reservoir, capacity, 229,470 acre-ft, 527 mi upstream since May 1953. Occasional backwater caused by Dawson Creek; reverse flow occurred for part of May 15, 1961, from information by local residents.

AVERAGE DISCHARGE.--54 years, 366 ft<sup>3</sup>/s (265,200 acre-ft/yr); median of yearly mean discharges, 190 ft<sup>3</sup>/s (138,000 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,200 ft<sup>3</sup>/s Apr. 3, 1962 (gage height, 18.74 ft); no flow for many days in some years.

Table 8.--Plotting points for duration hydrograph for 49-year period beginning  
October 1932, James River basin, station 06478500,  
James River near Scotland, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
10- 1	1640.00	147.00	88.00	52.00	28.00	10.00	4.80	2.60	0.00	
10- 2	1340.00	130.00	112.00	51.00	26.00	8.20	4.50	2.00	.00	
10- 3	1050.00	120.00	98.00	51.00	24.00	7.60	4.40	1.90	.00	
10- 4	900.00	123.00	78.00	58.00	26.00	7.70	4.40	1.60	.00	
10- 5	820.00	138.00	100.00	58.00	24.00	7.00	4.00	1.40	.00	
10- 6	762.00	134.00	94.00	61.00	23.00	7.00	4.00	1.20	.00	
10- 7	807.00	125.00	93.00	56.00	23.00	8.00	3.80	1.00	.00	
10- 8	741.00	120.00	89.00	55.00	24.00	11.00	4.20	.60	.00	
10- 9	785.00	117.00	89.00	55.00	25.00	10.00	3.80	.50	.00	
10-10	741.00	120.00	90.00	56.00	24.00	9.00	4.20	.50	.00	
10-11	631.00	120.00	90.00	56.00	26.00	8.00	5.00	.20	.00	
10-12	545.00	113.00	74.00	58.00	27.00	7.00	4.30	1.70	.00	
10-13	502.00	109.00	71.00	52.00	26.00	6.00	4.40	1.80	.00	
10-14	462.00	163.00	93.00	54.00	26.00	7.00	4.60	1.60	.00	
10-15	428.00	166.00	91.00	51.00	25.00	8.00	4.50	1.50	.00	
10-16	404.00	131.00	88.00	58.00	25.00	8.00	4.20	1.60	.00	
10-17	372.00	128.00	83.00	59.00	26.00	8.00	3.60	1.80	.00	
10-18	338.00	127.00	83.00	57.00	23.00	7.00	4.70	1.80	.00	
10-19	322.00	126.00	88.00	58.00	21.00	9.00	5.50	1.90	.00	
10-20	322.00	119.00	85.00	60.00	23.00	13.00	5.70	1.90	.00	
10-21	322.00	112.00	93.00	57.00	22.00	12.00	6.00	1.60	.00	
10-22	315.00	128.00	94.00	52.00	22.00	13.00	5.70	.80	.00	
10-23	306.00	143.00	95.00	46.00	22.00	12.00	6.00	.80	.00	
10-24	311.00	132.00	90.00	46.00	22.00	10.00	6.10	1.40	.00	
10-25	313.00	118.00	90.00	48.00	24.00	12.00	6.10	2.90	.00	
10-26	309.00	111.00	89.00	46.00	25.00	10.00	5.70	3.40	.00	
10-27	306.00	119.00	84.00	58.00	26.00	11.00	6.00	3.30	.00	
10-28	316.00	113.00	88.00	55.00	25.00	12.00	6.00	3.10	.00	
10-29	322.00	108.00	81.00	59.00	26.00	13.00	6.00	2.10	.00	
10-30	322.00	112.00	78.00	59.00	29.00	14.00	7.60	1.60	.00	
10-31	322.00	131.00	77.00	55.00	30.00	13.00	7.20	1.40	.00	
MEAN	529.32	126.29	94.42	50.96	23.74	9.13	4.98	2.55	.00	

Table 8.--Plotting points for duration hydrograph for 49-year period beginning  
October 1932, James River basin, station 06478500,  
James River near Scotland, S. Dak.--Continued

DATE	HIGH	Percent exceedance values							
		.10	.20	.30	.50	.70	.80	.90	1.00
11- 1	322.00	142.00	77.00	53.00	28.00	12.00	7.00	1.60	0.00
11- 2	328.00	125.00	88.00	55.00	28.00	12.00	7.00	3.80	.00
11- 3	315.00	118.00	84.00	57.00	28.00	15.00	8.00	4.00	.00
11- 4	315.00	118.00	82.00	56.00	27.00	12.00	7.00	4.60	.00
11- 5	315.00	113.00	85.00	55.00	27.00	13.00	6.40	.80	.00
11- 6	315.00	114.00	87.00	58.00	29.00	13.00	7.00	.60	.00
11- 7	315.00	128.00	79.00	61.00	28.00	17.00	7.00	.50	.00
11- 8	328.00	154.00	76.00	62.00	28.00	17.00	7.00	.80	.00
11- 9	334.00	175.00	86.00	62.00	28.00	15.00	6.80	.80	.00
11-10	322.00	172.00	93.00	58.00	29.00	15.00	6.30	.70	.00
11-11	315.00	172.00	90.00	56.00	30.00	14.00	6.00	.60	.00
11-12	348.00	175.00	87.00	52.00	31.00	15.00	7.00	.60	.00
11-13	340.00	184.00	86.00	51.00	32.00	15.00	6.80	.60	.00
11-14	348.00	184.00	83.00	51.00	32.00	13.00	5.60	.60	.00
11-15	348.00	172.00	83.00	54.00	36.00	16.00	6.30	.60	.00
11-16	360.00	172.00	82.00	66.00	36.00	16.00	6.60	1.10	.00
11-17	374.00	190.00	84.00	65.00	34.00	15.00	6.70	2.00	.00
11-18	374.00	182.00	90.00	58.00	35.00	17.00	7.00	2.10	.00
11-19	380.00	169.00	88.00	70.00	38.00	19.00	7.00	2.10	.00
11-20	380.00	160.00	91.00	65.00	37.00	19.00	7.00	2.20	.00
11-21	340.00	167.00	95.00	73.00	36.00	18.00	7.00	2.40	.00
11-22	334.00	167.00	94.00	78.00	35.00	19.00	6.00	2.60	.00
11-23	334.00	165.00	86.00	69.00	35.00	20.00	6.80	2.60	.00
11-24	279.00	160.00	87.00	70.00	34.00	20.00	6.80	2.90	.00
11-25	287.00	163.00	85.00	65.00	34.00	20.00	8.00	4.20	.00
11-26	327.00	167.00	79.00	62.00	33.00	19.00	9.00	3.80	.00
11-27	282.00	142.00	82.00	63.00	31.00	19.00	7.30	4.70	.00
11-28	322.00	151.00	79.00	64.00	31.00	18.00	8.00	5.00	.00
11-29	360.00	138.00	75.00	62.00	31.00	17.00	7.90	5.60	.00
11-30	374.00	138.00	73.00	62.00	32.00	17.00	6.00	5.00	.00
MEAN	323.63	165.60	86.00	64.90	32.10	19.06	6.81	3.41	.00

Table 8.--Plotting points for duration hydrograph for 49-year period beginning  
October 1932, James River basin, station 06478500,  
James River near Scotland, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
12- 1	354.00	132.00	72.00	65.00	31.00	17.00	5.00	4.00	0.00	
12- 2	322.00	126.00	71.00	65.00	33.00	18.00	5.00	4.50	.00	
12- 3	296.00	122.00	76.00	65.00	32.00	19.00	5.50	4.00	.00	
12- 4	276.00	120.00	80.00	62.00	32.00	20.00	5.00	4.00	.00	
12- 5	270.00	120.00	73.00	62.00	31.00	19.00	5.00	4.20	2.60	
12- 6	277.00	115.00	80.00	62.00	30.00	16.00	6.00	4.00	3.30	
12- 7	305.00	115.00	88.00	61.00	30.00	21.00	7.00	4.00	3.20	
12- 8	287.00	110.00	79.00	58.00	29.00	20.00	7.00	4.50	3.00	
12- 9	289.00	110.00	75.00	56.00	30.00	19.00	8.00	4.20	3.00	
12-10	286.00	105.00	77.00	51.00	33.00	18.00	8.00	4.20	3.00	
12-11	254.00	105.00	75.00	49.00	31.00	19.00	7.20	4.50	2.00	
12-12	250.00	110.00	75.00	50.00	30.00	18.00	8.00	4.50	2.00	
12-13	238.00	115.00	65.00	53.00	30.00	16.00	8.00	4.70	2.00	
12-14	235.00	115.00	66.00	53.00	29.00	16.00	6.00	4.70	2.00	
12-15	230.00	95.00	62.00	50.00	27.00	18.00	8.00	5.00	2.00	
12-16	220.00	100.00	70.00	53.00	28.00	17.00	8.00	4.00	2.00	
12-17	226.00	100.00	68.00	55.00	28.00	18.00	8.00	5.00	2.20	
12-18	213.00	101.00	65.00	55.00	28.00	18.00	8.00	4.00	2.10	
12-19	205.00	98.00	68.00	54.00	28.00	20.00	8.20	4.00	2.00	
12-20	208.00	100.00	67.00	54.00	28.00	19.00	10.00	4.00	1.90	
12-21	208.00	104.00	64.00	55.00	28.00	19.00	11.00	5.00	1.80	
12-22	208.00	100.00	64.00	50.00	25.00	18.00	11.00	5.00	1.60	
12-23	202.00	100.00	65.00	51.00	26.00	18.00	8.00	5.00	1.60	
12-24	208.00	97.00	65.00	51.00	28.00	17.00	9.00	5.00	1.60	
12-25	208.00	95.00	66.00	50.00	28.00	17.00	8.00	5.00	1.40	
12-26	204.00	99.00	67.00	46.00	27.00	17.00	8.00	4.50	1.20	
12-27	200.00	103.00	65.00	45.00	26.00	17.00	8.00	4.00	1.00	
12-28	194.00	112.00	61.00	44.00	24.00	16.00	10.00	4.00	1.20	
12-29	192.00	115.00	62.00	44.00	24.00	15.00	10.00	4.00	1.40	
12-30	190.00	115.00	60.00	46.00	25.00	15.00	10.00	5.00	1.50	
12-31	188.00	113.00	60.00	45.00	24.00	15.00	10.00	5.00	1.50	
MEAN	228.51	108.06	68.80	57.06	29.19	16.05	7.16	4.06	2.71	

Table 8.--Plotting points for duration hydrograph for 49-year period beginning  
October 1932, James River basin, station 06478500,  
James River near Scotland, S. Dak.--Continued

DATE	Percent exceedance values									
	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW	
1- 1	180.00	111.00	57.00	40.00	25.00	15.00	7.00	5.00	1.50	
1- 2	190.00	107.00	55.00	40.00	23.00	16.00	7.00	4.00	1.50	
1- 3	215.00	106.00	55.00	40.00	25.00	16.00	6.00	4.00	1.50	
1- 4	230.00	104.00	52.00	45.00	25.00	16.00	6.00	3.10	1.50	
1- 5	240.00	104.00	54.00	40.00	25.00	16.00	6.00	2.90	1.50	
1- 6	235.00	102.00	55.00	42.00	25.00	16.00	6.00	3.60	1.50	
1- 7	225.00	102.00	55.00	42.00	25.00	15.00	6.00	3.70	1.50	
1- 8	220.00	102.00	51.00	42.00	25.00	15.00	6.00	3.70	1.50	
1- 9	213.00	95.00	51.00	44.00	24.00	15.00	6.00	3.40	1.50	
1-10	210.00	90.00	54.00	45.00	23.00	14.00	6.00	3.00	1.50	
1-11	215.00	80.00	50.00	44.00	23.00	15.00	7.00	2.80	1.50	
1-12	220.00	70.00	50.00	44.00	24.00	14.00	6.00	2.40	1.50	
1-13	210.00	60.00	50.00	43.00	23.00	14.00	6.00	2.20	1.50	
1-14	190.00	60.00	50.00	42.00	21.00	14.00	6.00	2.00	1.50	
1-15	182.00	72.00	50.00	44.00	22.00	15.00	6.00	3.00	1.50	
1-16	180.00	75.00	50.00	42.00	21.00	15.00	7.00	3.00	1.50	
1-17	175.00	81.00	53.00	42.00	21.00	14.00	6.00	3.00	1.50	
1-18	165.00	90.00	53.00	41.00	21.00	14.00	8.00	3.00	1.00	
1-19	236.00	88.00	52.00	38.00	20.00	15.00	10.00	3.00	1.00	
1-20	220.00	86.00	51.00	41.00	21.00	15.00	10.00	4.00	1.00	
1-21	254.00	80.00	50.00	40.00	21.00	14.00	10.00	4.00	1.00	
1-22	292.00	74.00	50.00	43.00	20.00	14.00	11.00	4.00	1.00	
1-23	273.00	66.00	49.00	44.00	20.00	14.00	6.00	4.00	1.00	
1-24	250.00	63.00	50.00	43.00	22.00	14.00	6.00	4.50	1.00	
1-25	234.00	61.00	51.00	39.00	20.00	13.00	6.00	4.70	1.00	
1-26	208.00	65.00	50.00	36.00	20.00	12.00	6.00	4.70	1.00	
1-27	188.00	66.00	50.00	45.00	20.00	13.00	6.00	5.00	1.00	
1-28	158.00	63.00	50.00	44.00	22.00	13.00	6.00	5.50	1.00	
1-29	144.00	65.00	46.00	44.00	22.00	13.00	7.00	5.50	1.00	
1-30	138.00	70.00	48.00	45.00	21.00	14.00	8.00	5.50	.00	
1-31	148.00	67.00	51.00	45.00	21.00	12.00	8.00	5.50	.00	
MEAN	171.49	83.71	50.77	40.38	20.38	15.83	7.16	4.00	1.51	

Table 8.--Plotting points for duration hydrograph for 49-year period beginning  
October 1932, James River basin, station 06478500,  
James River near Scotland, S. Dak.--Continued

DATE	HIGH	Percent exceedance values										LOW
		10	20	30	40	50	60	70	80	90	100	
2-1	145.00	61.00	55.00	42.00	21.00	13.00	11.00	5.70	5.70	0.00	0.00	
2-2	150.00	70.00	55.00	40.00	20.00	14.00	11.00	6.10	6.10	0.00	0.00	
2-3	150.00	80.00	52.00	40.00	21.00	14.00	10.00	6.50	6.50	0.00	0.00	
2-4	145.00	90.00	56.00	42.00	21.00	15.00	10.00	6.50	6.50	0.00	0.00	
2-5	130.00	90.00	58.00	40.00	22.00	16.00	9.00	6.50	6.50	1.00	1.00	
2-6	130.00	90.00	60.00	39.00	22.00	16.00	8.00	6.90	6.90	1.00	1.00	
2-7	135.00	100.00	60.00	38.00	23.00	16.00	8.00	7.00	7.00	1.00	1.00	
2-8	150.00	93.00	61.00	44.00	24.00	16.00	9.00	7.00	7.00	1.00	1.00	
2-9	200.00	100.00	62.00	44.00	25.00	16.00	11.00	5.00	5.00	1.00	1.00	
2-10	530.00	125.00	62.00	45.00	28.00	17.00	11.00	5.00	5.00	1.00	1.00	
2-11	500.00	125.00	61.00	45.00	27.00	17.00	12.00	5.00	5.00	2.00	2.00	
2-12	700.00	90.00	65.00	38.00	25.00	18.00	12.00	5.00	5.00	2.00	2.00	
2-13	1000.00	93.00	65.00	41.00	28.00	16.00	13.00	7.00	7.00	2.00	2.00	
2-14	1200.00	120.00	70.00	46.00	30.00	17.00	15.00	8.00	8.00	2.00	2.00	
2-15	1400.00	120.00	60.00	50.00	30.00	18.00	14.00	8.00	8.00	2.00	2.00	
2-16	1450.00	120.00	68.00	50.00	31.00	20.00	15.00	7.00	7.00	2.00	2.00	
2-17	1500.00	229.00	81.00	50.00	32.00	20.00	15.00	7.00	7.00	2.00	2.00	
2-18	1450.00	270.00	95.00	60.00	32.00	21.00	15.00	7.00	7.00	2.00	2.00	
2-19	1400.00	290.00	100.00	75.00	36.00	20.00	16.00	7.00	7.00	2.00	2.00	
2-20	1300.00	290.00	180.00	80.00	36.00	20.00	15.00	7.00	7.00	2.00	2.00	
2-21	1000.00	240.00	117.00	85.00	38.00	20.00	15.00	7.00	7.00	2.00	2.00	
2-22	800.00	247.00	144.00	85.00	40.00	20.00	15.00	7.00	7.00	2.00	2.00	
2-23	700.00	245.00	125.00	80.00	36.00	20.00	17.00	7.00	7.00	2.00	2.00	
2-24	600.00	387.00	145.00	69.00	39.00	21.00	16.00	7.00	7.00	2.00	2.00	
2-25	1000.00	460.00	190.00	70.00	41.00	22.00	17.00	7.00	7.00	2.00	2.00	
2-26	1250.00	440.00	312.00	80.00	46.00	20.00	17.00	7.00	7.00	2.00	2.00	
2-27	1350.00	450.00	340.00	90.00	46.00	22.00	17.00	10.00	10.00	3.00	3.00	
2-28	1570.00	450.00	330.00	92.00	46.00	22.00	18.00	10.00	10.00	3.00	3.00	
MEAN	648.59	167.96	141.14	67.64	37.92	18.92	15.50	7.49	7.49	2.07	2.07	

Table 8.--Plotting points for duration hydrograph for 49-year period beginning  
October 1932, James River basin, station 06478500,  
James River near Scotland, S. Dak.--Continued

DATE	HIGH	Percent exceedance values									
		1.0	.20	.30	.50	.70	.80	.90	1.00		
3-1	1520.00	400.00	326.00	95.00	51.00	25.00	21.00	16.00	10.00		
3-2	1940.00	390.00	276.00	120.00	51.00	30.00	21.00	18.00	6.00		
3-3	2150.00	650.00	279.00	150.00	54.00	29.00	23.00	18.00	7.00		
3-4	2250.00	700.00	310.00	178.00	68.00	33.00	27.00	20.00	8.20		
3-5	2200.00	1310.00	540.00	200.00	70.00	35.00	28.00	20.00	9.00		
3-6	2200.00	1100.00	540.00	240.00	70.00	37.00	30.00	20.00	9.40		
3-7	2450.00	1120.00	450.00	210.00	65.00	37.00	32.00	20.00	9.80		
3-8	3120.00	1200.00	400.00	228.00	70.00	37.00	31.00	20.00	10.00		
3-9	3110.00	930.00	450.00	350.00	80.00	37.00	28.00	20.00	10.00		
3-10	3100.00	950.00	610.00	443.00	80.00	38.00	28.00	22.00	9.80		
3-11	3170.00	1250.00	700.00	540.00	95.00	40.00	29.00	20.00	9.80		
3-12	3210.00	1660.00	800.00	600.00	128.00	44.00	31.00	20.00	8.20		
3-13	3240.00	1770.00	738.00	571.00	150.00	45.00	31.00	21.00	7.00		
3-14	3590.00	1780.00	850.00	565.00	158.00	50.00	30.00	21.00	9.40		
3-15	3490.00	1560.00	1000.00	602.00	171.00	50.00	29.00	22.00	12.00		
3-16	3500.00	1420.00	1090.00	622.00	200.00	67.00	43.00	22.00	14.00		
3-17	3450.00	1410.00	1120.00	850.00	238.00	71.00	48.00	22.00	14.00		
3-18	3350.00	1620.00	1300.00	900.00	202.00	75.00	49.00	20.00	16.00		
3-19	3220.00	1890.00	1410.00	1040.00	283.00	81.00	51.00	20.00	14.00		
3-20	4120.00	2000.00	1450.00	1110.00	291.00	93.00	53.00	20.00	16.00		
3-21	4350.00	2100.00	1570.00	1000.00	270.00	100.00	56.00	20.00	16.00		
3-22	4040.00	2200.00	1650.00	968.00	255.00	94.00	58.00	20.00	16.00		
3-23	4590.00	2460.00	1640.00	934.00	250.00	102.00	56.00	22.00	12.00		
3-24	4000.00	2340.00	1670.00	929.00	250.00	120.00	57.00	22.00	11.00		
3-25	4340.00	2380.00	1760.00	1380.00	395.00	140.00	61.00	23.00	10.00		
3-26	4210.00	2390.00	1720.00	1370.00	454.00	157.00	64.00	26.00	9.80		
3-27	4140.00	2510.00	1820.00	1500.00	430.00	152.00	73.00	30.00	9.00		
3-28	4070.00	3180.00	1830.00	1540.00	488.00	154.00	76.00	31.00	9.80		
3-29	5250.00	3640.00	1860.00	1570.00	429.00	145.00	84.00	36.00	17.00		
3-30	4380.00	4070.00	1910.00	1360.00	401.00	153.00	86.00	40.00	18.00		
3-31	11300.00	4080.00	1960.00	1540.00	388.00	145.00	95.00	44.00	16.00		
MEAN	2490.32	1366.83	1079.83	970.00	441.74	148.71	61.77	30.22	16.78		



Table 8.--Plotting points for duration hydrograph for 49-year period beginning  
October 1932, James River basin, station 06478500,  
James River near Scotland, S. Dak.--Continued

DATE	Percent exceedance values								
	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW
4-1	12400.00	4120.00	1990.00	1520.00	362.00	122.00	95.00	49.00	19.00
4-2	12200.00	4110.00	2210.00	1500.00	356.00	117.00	99.00	41.00	21.00
4-3	14300.00	4060.00	2050.00	1450.00	325.00	147.00	110.00	53.00	19.00
4-4	15000.00	4290.00	2250.00	1350.00	330.00	144.00	113.00	55.00	19.00
4-5	14500.00	4430.00	2550.00	1220.00	333.00	143.00	117.00	64.00	21.00
4-6	13800.00	5100.00	2440.00	1130.00	314.00	156.00	121.00	55.00	21.00
4-7	13300.00	5200.00	2500.00	1100.00	308.00	156.00	120.00	43.00	18.00
4-8	12200.00	4980.00	2690.00	1060.00	290.00	157.00	124.00	48.00	18.00
4-9	11500.00	5260.00	2530.00	986.00	263.00	153.00	102.00	56.00	15.00
4-10	10800.00	5380.00	2320.00	963.00	244.00	139.00	118.00	53.00	16.00
4-11	10600.00	5340.00	2210.00	1180.00	233.00	145.00	125.00	50.00	14.00
4-12	12900.00	5250.00	2100.00	1070.00	258.00	165.00	125.00	50.00	19.00
4-13	13900.00	5110.00	2180.00	1020.00	262.00	158.00	122.00	51.00	21.00
4-14	13700.00	4810.00	2180.00	985.00	264.00	158.00	112.00	44.00	21.00
4-15	13200.00	4530.00	2140.00	940.00	324.00	158.00	103.00	41.00	17.00
4-16	12600.00	4290.00	2100.00	930.00	353.00	143.00	132.00	39.00	17.00
4-17	12000.00	4120.00	1990.00	941.00	333.00	140.00	110.00	35.00	12.00
4-18	11500.00	3470.00	1830.00	829.00	335.00	125.00	95.00	32.00	9.00
4-19	11100.00	3840.00	1590.00	922.00	315.00	118.00	82.00	31.00	8.00
4-20	10500.00	3750.00	1450.00	844.00	328.00	118.00	88.00	32.00	9.00
4-21	10000.00	3660.00	1260.00	870.00	322.00	118.00	88.00	36.00	11.00
4-22	9520.00	3540.00	1170.00	922.00	360.00	123.00	75.00	40.00	10.00
4-23	8970.00	3420.00	1190.00	1000.00	351.00	123.00	75.00	44.00	15.00
4-24	8310.00	3290.00	1680.00	988.00	320.00	122.00	88.00	43.00	15.00
4-25	7600.00	3070.00	1520.00	986.00	300.00	120.00	90.00	45.00	12.00
4-26	6980.00	2880.00	1350.00	1010.00	280.00	120.00	85.00	41.00	9.00
4-27	6470.00	2630.00	1220.00	951.00	266.00	139.00	88.00	41.00	18.00
4-28	6140.00	2250.00	1190.00	938.00	288.00	153.00	90.00	40.00	17.00
4-29	5910.00	2290.00	1220.00	909.00	314.00	126.00	83.00	39.00	17.00
4-30	5750.00	2320.00	1240.00	922.00	336.00	155.00	82.00	49.00	16.00
MFAN	8183.33	4224.00	1816.60	1140.93	282.83	158.26	114.53	76.90	18.46

Table 8.--Plotting points for duration hydrograph for 49-year period beginning  
October 1932, James River basin, station 06478500,  
James River near Scotland, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
5- 1	5670.00	2250.00	1280.00	963.00	393.00	183.00	92.00	52.00	14.00	
5- 2	5710.00	2250.00	1300.00	1010.00	372.00	191.00	95.00	50.00	12.00	
5- 3	5780.00	2250.00	1310.00	1000.00	378.00	185.00	94.00	47.00	12.00	
5- 4	5770.00	2460.00	1220.00	1010.00	388.00	172.00	106.00	41.00	13.00	
5- 5	5800.00	2500.00	1100.00	1010.00	393.00	167.00	94.00	41.00	13.00	
5- 6	5380.00	2440.00	1240.00	986.00	370.00	169.00	89.00	40.00	13.00	
5- 7	5930.00	2420.00	1190.00	986.00	367.00	170.00	88.00	42.00	12.00	
5- 8	5930.00	2410.00	1270.00	963.00	315.00	168.00	91.00	45.00	11.00	
5- 9	5880.00	2380.00	1380.00	928.00	315.00	158.00	93.00	49.00	8.00	
5-10	5620.00	2350.00	1400.00	896.00	310.00	166.00	95.00	44.00	9.00	
5-11	6700.00	2320.00	1380.00	892.00	293.00	134.00	86.00	38.00	10.00	
5-12	9300.00	2290.00	1330.00	890.00	285.00	125.00	98.00	35.00	9.00	
5-13	9250.00	2380.00	1310.00	896.00	274.00	124.00	96.00	30.00	8.00	
5-14	8750.00	2500.00	1240.00	917.00	265.00	125.00	83.00	28.00	8.00	
5-15	10800.00	2410.00	1190.00	895.00	275.00	120.00	94.00	27.00	7.00	
5-16	10300.00	2330.00	1170.00	895.00	279.00	120.00	87.00	25.00	6.00	
5-17	9750.00	2210.00	1220.00	910.00	263.00	120.00	87.00	21.00	7.00	
5-18	8750.00	2100.00	1380.00	944.00	249.00	118.00	81.00	22.00	8.00	
5-19	7450.00	2500.00	1550.00	840.00	347.00	122.00	84.00	21.00	9.00	
5-20	6700.00	2620.00	1660.00	1030.00	347.00	113.00	85.00	20.00	9.00	
5-21	5690.00	2560.00	1660.00	986.00	344.00	107.00	80.00	24.00	10.00	
5-22	5140.00	2390.00	1620.00	1000.00	350.00	104.00	73.00	30.00	8.00	
5-23	4670.00	2400.00	1590.00	1150.00	364.00	139.00	80.00	28.00	7.00	
5-24	4270.00	2550.00	1530.00	1150.00	345.00	139.00	75.00	26.00	6.00	
5-25	3820.00	2670.00	1400.00	963.00	348.00	132.00	59.00	21.00	4.60	
5-26	3760.00	2500.00	1320.00	963.00	294.00	116.00	56.00	20.00	5.00	
5-27	4570.00	2500.00	1250.00	963.00	368.00	116.00	67.00	20.00	6.00	
5-28	5520.00	2600.00	1200.00	864.00	380.00	118.00	84.00	32.00	6.00	
5-29	6160.00	2710.00	1150.00	739.00	392.00	97.00	74.00	32.00	5.00	
5-30	6670.00	2460.00	1150.00	869.00	372.00	96.00	78.00	29.00	4.60	
5-31	7170.00	2180.00	1170.00	873.00	386.00	97.00	75.00	28.00	4.00	
MEAN	5003.25	2200.61	1499.74	899.67	334.35	137.16	104.13	41.77	8.52	

Table 8.--Plotting points for duration hydrograph for 49-year period beginning  
October 1932, James River basin, station 06478500,  
James River near Scotland, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								
		.10	.20	.30	.50	.70	.80	.90	1.00	
6- 1	7260.00	2070.00	1150.00	829.00	398.00	100.00	65.00	25.00	2.20	
6- 2	7390.00	2460.00	1300.00	940.00	386.00	115.00	66.00	21.00	.90	
6- 3	7430.00	2740.00	1390.00	902.00	345.00	110.00	67.00	21.00	.60	
6- 4	7500.00	2640.00	1370.00	1010.00	360.00	111.00	58.00	22.00	.40	
6- 5	7070.00	2500.00	1410.00	1030.00	382.00	111.00	50.00	20.00	.30	
6- 6	7010.00	2360.00	1380.00	1020.00	360.00	104.00	53.00	20.00	.10	
6- 7	6990.00	2240.00	1410.00	1000.00	371.00	107.00	55.00	20.00	.30	
6- 8	7110.00	2090.00	1570.00	980.00	380.00	102.00	51.00	18.00	.52	
6- 9	7240.00	1940.00	1470.00	960.00	338.00	86.00	54.00	17.00	1.10	
6-10	7760.00	1910.00	1410.00	986.00	380.00	75.00	46.00	16.00	1.50	
6-11	8560.00	1830.00	1470.00	986.00	312.00	91.00	34.00	15.00	.92	
6-12	8960.00	1890.00	1270.00	914.00	285.00	102.00	38.00	18.00	.63	
6-13	8760.00	1890.00	1220.00	870.00	279.00	94.00	47.00	21.00	1.00	
6-14	8290.00	2100.00	1100.00	854.00	272.00	130.00	42.00	20.00	4.60	
6-15	7710.00	2290.00	1110.00	859.00	286.00	107.00	53.00	18.00	7.00	
6-16	7240.00	2410.00	1050.00	837.00	281.00	85.00	51.00	18.00	8.00	
6-17	7360.00	2460.00	1150.00	940.00	272.00	75.00	52.00	18.00	8.00	
6-18	8060.00	2500.00	1200.00	937.00	260.00	77.00	53.00	18.00	8.00	
6-19	9320.00	2460.00	1180.00	995.00	253.00	84.00	50.00	14.00	6.00	
6-20	8400.00	2220.00	1360.00	940.00	248.00	82.00	41.00	13.00	5.00	
6-21	8220.00	2080.00	1460.00	940.00	239.00	77.00	39.00	12.00	6.00	
6-22	7670.00	1890.00	1320.00	974.00	232.00	74.00	37.00	13.00	5.50	
6-23	7010.00	1740.00	1220.00	883.00	267.00	69.00	41.00	12.00	4.20	
6-24	6360.00	1860.00	1160.00	842.00	272.00	67.00	42.00	13.00	1.90	
6-25	5820.00	1620.00	1050.00	885.00	237.00	82.00	49.00	16.00	1.80	
6-26	5380.00	1400.00	1100.00	736.00	341.00	84.00	52.00	16.00	1.70	
6-27	4990.00	2130.00	1030.00	801.00	280.00	84.00	50.00	14.00	1.70	
6-28	4680.00	2190.00	960.00	807.00	281.00	83.00	49.00	14.00	2.60	
6-29	4440.00	2200.00	882.00	763.00	300.00	79.00	50.00	13.00	4.40	
6-30	4250.00	2170.00	877.00	659.00	278.00	88.00	49.00	15.00	3.00	
MEAN	7101.33	1700.73	1508.53	885.23	297.36	120.90	67.73	20.43	5.13	

Table 8.--Plotting points for duration hydrograph for 49-year period beginning  
October 1932, James River basin, station 06478500,  
James River near Scotland, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
7- 1	4160.00	2140.00	860.00	580.00	214.00	82.00	49.00	14.00	2.40	
7- 2	4070.00	2090.00	905.00	542.00	202.00	70.00	43.00	13.00	2.10	
7- 3	4260.00	1900.00	940.00	525.00	178.00	73.00	43.00	15.00	4.80	
7- 4	4620.00	1700.00	825.00	554.00	169.00	54.00	36.00	16.00	5.00	
7- 5	5110.00	1580.00	771.00	565.00	169.00	49.00	29.00	12.00	2.00	
7- 6	5590.00	1400.00	777.00	513.00	164.00	37.00	24.00	11.00	1.60	
7- 7	5390.00	1270.00	805.00	486.00	169.00	36.00	30.00	17.00	1.20	
7- 8	4940.00	1170.00	823.00	521.00	185.00	39.00	25.00	18.00	.30	
7- 9	4540.00	1100.00	829.00	554.00	217.00	37.00	25.00	14.00	.30	
7-10	4230.00	1150.00	645.00	635.00	199.00	43.00	22.00	11.00	.20	
7-11	3940.00	1190.00	851.00	575.00	270.00	43.00	23.00	12.00	.10	
7-12	3740.00	1140.00	782.00	584.00	250.00	53.00	24.00	10.90	.00	
7-13	3700.00	1060.00	755.00	522.00	220.00	49.00	21.00	10.90	.00	
7-14	3940.00	1050.00	741.00	516.00	198.00	52.00	20.00	11.80	.00	
7-15	4130.00	1050.00	697.00	521.00	204.00	60.00	23.00	14.50	.00	
7-16	4340.00	1030.00	697.00	490.00	191.00	50.00	24.00	13.00	.00	
7-17	4560.00	1000.00	675.00	452.00	173.00	39.00	21.00	11.00	.00	
7-18	4560.00	902.00	675.00	426.00	170.00	31.00	18.00	10.00	.00	
7-19	4370.00	879.00	675.00	401.00	160.00	32.00	17.00	8.50	.00	
7-20	4110.00	854.00	710.00	384.00	150.00	27.00	15.00	8.00	.00	
7-21	3840.00	998.00	571.00	437.00	174.00	26.00	14.00	9.30	.00	
7-22	3570.00	1000.00	757.00	400.00	136.00	23.00	15.00	8.50	.00	
7-23	3340.00	1010.00	752.00	405.00	126.00	23.00	14.00	8.00	.00	
7-24	3150.00	1010.00	710.00	405.00	122.00	25.00	12.00	6.70	.00	
7-25	2990.00	1000.00	674.00	382.00	114.00	26.00	11.00	6.00	.00	
7-26	2840.00	909.00	655.00	352.00	106.00	23.00	9.40	4.40	.00	
7-27	2710.00	829.00	631.00	362.00	99.00	22.00	11.00	4.20	.00	
7-28	2500.00	832.00	637.00	337.00	98.00	23.00	10.00	4.00	.00	
7-29	2190.00	859.00	646.00	303.00	103.00	28.00	9.10	4.00	.00	
7-30	1840.00	898.00	631.00	284.00	94.00	27.00	10.00	4.70	.00	
7-31	1830.00	915.00	631.00	294.00	94.00	22.00	11.00	4.30	.00	
MEAN	3844.51	1140.83	766.87	561.51	158.32	45.19	22.54	11.57	.79	

Table 8.--Plotting points for duration hydrograph for 49-year period beginning  
October 1932, James River basin, station 06478500,  
James River near Scotland, S. Dak.--Continued

DATE	Percent exceedance values								LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90	
8- 1	1540.00	921.00	609.00	312.00	98.00	17.00	10.00	5.00	0.00
8- 2	1520.00	922.00	657.00	257.00	98.00	20.00	7.00	4.70	.00
8- 3	1700.00	1070.00	664.00	239.00	96.00	19.00	6.30	3.30	.00
8- 4	1830.00	1260.00	664.00	231.00	87.00	18.00	5.90	2.60	.00
8- 5	1830.00	1260.00	641.00	216.00	81.00	19.00	6.00	2.20	.00
8- 6	1680.00	1140.00	629.00	206.00	72.00	19.00	6.00	2.10	.00
8- 7	1500.00	1050.00	610.00	200.00	61.00	20.00	9.00	2.40	.00
8- 8	1430.00	1000.00	593.00	302.00	99.00	21.00	10.00	2.60	.00
8- 9	1580.00	914.00	581.00	278.00	83.00	23.00	8.30	2.60	.00
8-10	2200.00	773.00	621.00	248.00	73.00	23.00	9.40	2.20	.00
8-11	2480.00	869.00	590.00	231.00	67.00	23.00	10.00	2.10	.00
8-12	2400.00	849.00	558.00	229.00	56.00	30.00	10.00	2.10	.00
8-13	2520.00	821.00	530.00	280.00	79.00	23.00	10.00	2.20	.00
8-14	2130.00	810.00	472.00	234.00	72.00	17.00	10.00	2.10	.00
8-15	1930.00	786.00	488.00	260.00	63.00	14.00	10.00	3.10	.00
8-16	1870.00	768.00	470.00	320.00	58.00	16.00	9.00	3.30	.00
8-17	1870.00	749.00	445.00	310.00	52.00	15.00	8.00	3.50	.00
8-18	1870.00	895.00	456.00	355.00	62.00	15.00	8.70	4.00	.00
8-19	1870.00	896.00	456.00	342.00	62.00	17.00	7.70	3.80	.00
8-20	2030.00	740.00	439.00	322.00	57.00	14.00	7.30	2.80	.00
8-21	1820.00	724.00	410.00	284.00	50.00	13.00	6.70	2.00	.00
8-22	1760.00	597.00	386.00	303.00	55.00	14.00	6.00	1.70	.00
8-23	1690.00	571.00	340.00	200.00	46.00	16.00	6.00	1.50	.00
8-24	1590.00	545.00	330.00	181.00	50.00	13.00	6.20	1.70	.00
8-25	1450.00	587.00	310.00	164.00	47.00	14.00	6.70	2.90	.00
8-26	1270.00	597.00	326.00	166.00	46.00	15.00	8.20	2.50	.00
8-27	1030.00	510.00	407.00	152.00	44.00	47.00	10.00	2.60	.00
8-28	913.00	612.00	408.00	143.00	69.00	18.00	10.00	3.20	.00
8-29	869.00	614.00	372.00	136.00	61.00	17.00	9.40	2.80	.00
8-30	1060.00	576.00	326.00	136.00	39.00	16.00	9.00	2.20	.00
8-31	1100.00	592.00	292.00	128.00	36.00	14.00	9.00	2.00	.00
MFAN	1435.77	776.38	527.38	283.87	67.83	20.00	10.33	4.06	.00

Table 8.--Plotting points for duration hydrograph for 49-year period beginning  
October 1932, James River basin, station 06478500,  
James River near Scotland, S. Dak.--Continued

DATE	HIGH	Percent exceedance values										LOW
		.10	.20	.30	.50	.70	.80	.90				
9- 1	1010.00	504.00	268.00	124.00	34.00	14.00	8.40	3.00	0.00			
9- 2	902.00	494.00	265.00	137.00	31.00	13.90	8.20	2.00	.10			
9- 3	1020.00	479.00	297.00	118.00	33.00	13.00	10.00	2.00	.50			
9- 4	1100.00	479.00	323.00	102.00	37.00	13.00	9.90	2.10	1.00			
9- 5	1070.00	443.00	224.00	101.00	30.00	14.00	9.00	2.10	.00			
9- 6	992.00	412.00	196.00	97.00	28.00	13.00	8.70	1.60	.00			
9- 7	945.00	372.00	179.00	101.00	29.00	11.80	8.00	1.40	.00			
9- 8	922.00	322.00	162.00	102.00	27.00	11.30	7.70	2.30	.00			
9- 9	915.00	344.00	241.00	116.00	26.00	12.00	7.80	2.70	.00			
9-10	898.00	330.00	227.00	113.00	26.00	10.90	7.00	3.10	.00			
9-11	880.00	326.00	209.00	105.00	24.00	12.00	7.90	3.20	.00			
9-12	865.00	302.00	194.00	109.00	24.00	12.00	8.00	3.40	.00			
9-13	868.00	327.00	172.00	97.00	26.00	10.00	7.00	.20	.00			
9-14	865.00	282.00	167.00	90.00	29.00	9.00	7.00	.10	.00			
9-15	848.00	279.00	154.00	89.00	26.00	9.50	7.00	3.60	.00			
9-16	842.00	260.00	145.00	83.00	24.00	9.80	7.00	2.40	.00			
9-17	842.00	263.00	128.00	75.00	22.00	11.00	6.00	2.00	.00			
9-18	830.00	255.00	142.00	72.00	23.00	11.00	6.00	1.80	.00			
9-19	812.00	252.00	137.00	78.00	26.00	9.80	6.00	1.90	.00			
9-20	800.00	223.00	126.00	77.00	30.00	9.50	6.00	1.80	.00			
9-21	785.00	220.00	148.00	71.00	33.00	10.00	6.00	2.90	.00			
9-22	1460.00	209.00	164.00	72.00	34.00	10.00	7.00	1.40	.00			
9-23	1520.00	237.00	138.00	69.00	31.00	10.00	8.00	1.00	.00			
9-24	1350.00	227.00	166.00	80.00	31.00	10.00	8.00	.47	.00			
9-25	1050.00	219.00	132.00	75.00	32.00	9.30	7.00	.62	.00			
9-26	800.00	204.00	119.00	55.00	31.00	11.00	7.00	2.50	.00			
9-27	740.00	188.00	106.00	56.00	31.00	9.00	6.00	3.00	.00			
9-28	730.00	166.00	88.00	63.00	35.00	8.40	6.00	3.30	.00			
9-29	810.00	150.00	93.00	63.00	33.00	8.40	6.00	3.00	.00			
9-30	1540.00	148.00	92.00	57.00	29.00	8.30	5.00	3.00	.00			
MEAN	887.10	299.43	203.13	91.60	39.26	12.58	8.41	4.64	.26			

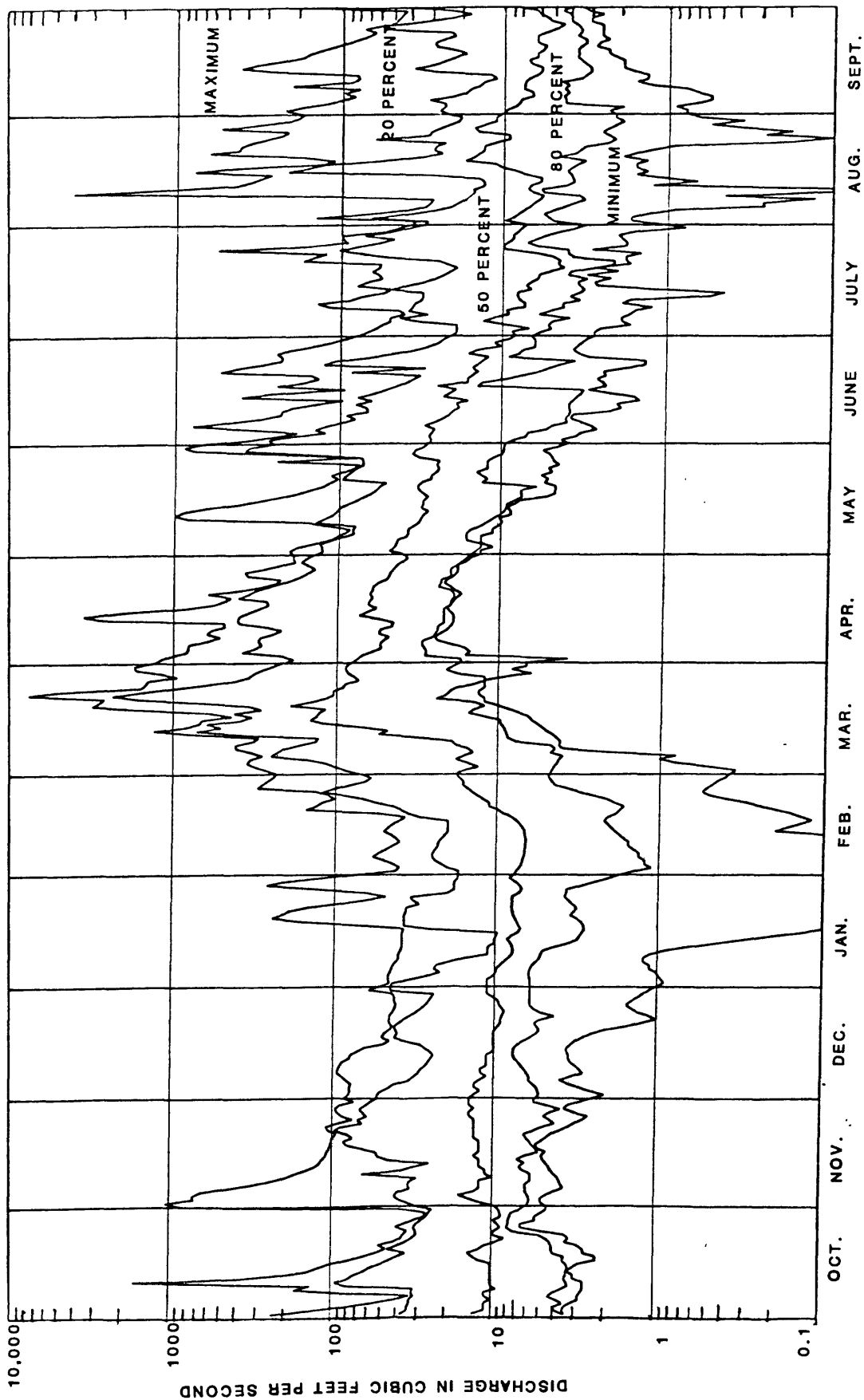


Figure 10.---Duration hydrograph for 9-year period beginning October 1972, Big Sioux River basin, station 06482610, Split Rock Creek at Corson, S. Dak.

Table 9.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Big Sioux basin, station 06482610,  
Split Rock Creek at Corson, S. Dak.

LOCATION.--Lat 43°36'59", long 96°33'54", in NE¼NW¼ sec.26, T.102 N., R.48 W., Minnehaha  
County, Hydrologic Unit 10170203, on left bank 6 ft downstream from highway bridge,  
0.3 mi east of Corson and 3.4 mi upstream from mouth.

DRAINAGE AREA.--475 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--October 1965 to current year. February 1951 to September 1965 (gage  
heights and discharge measurements only in files of Corps of Engineers).

GAGE.--Water-stage recorder. Datum of gage is 1,304.22 ft National Geodetic Vertical Datum  
of 1929 (levels by Corps of Engineers). Prior to Aug. 15, 1964, nonrecording gage at  
datum 0.15 ft higher and Aug. 15, 1964, to Sept. 3, 1970, nonrecording gage at present  
site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Several observa-  
tions of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--17 years, 64.7 ft<sup>3</sup>/s (46,880 acre-ft/yr); median of yearly mean dis-  
charges, 52 ft<sup>3</sup>/s (37,700 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,800 ft<sup>3</sup>/s Apr. 8, 1969 (gage height,  
15.00 ft); no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1951, 15.41 ft June 17, 1957,  
discharge, 19,300 ft<sup>3</sup>/s.



Table 9.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Big Sioux basin, station 06482610,  
Split Rock Creek at Corson, S. Dak.--Continued

Percent exceedance values										
DATE	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW	
10- 1	235.00	235.00	37.00	25.00	13.00	4.00	3.50	3.40	3.40	
10- 2	139.00	139.00	34.00	18.00	11.00	4.20	3.90	3.50	3.50	
10- 3	85.00	85.00	34.00	15.00	11.00	4.70	4.00	3.40	3.40	
10- 4	56.00	56.00	33.00	15.00	11.00	6.10	3.50	3.10	3.10	
10- 5	40.00	40.00	33.00	12.00	10.00	5.30	3.80	2.80	2.80	
10- 6	33.00	33.00	31.00	16.00	11.00	4.40	4.30	2.80	2.80	
10- 7	100.00	100.00	32.00	16.00	11.00	4.40	4.00	2.70	2.70	
10- 8	171.00	171.00	31.00	18.00	9.30	4.30	3.60	2.60	2.60	
10- 9	136.00	136.00	80.00	31.00	10.00	4.10	3.20	2.60	2.60	
10-10	1640.00	1640.00	94.00	31.00	10.00	3.50	3.30	2.60	2.60	
10-11	386.00	386.00	79.00	34.00	10.00	3.50	3.40	3.00	3.00	
10-12	210.00	210.00	72.00	34.00	10.00	3.70	3.30	3.00	3.00	
10-13	142.00	142.00	63.00	32.00	10.00	3.90	3.30	3.30	3.30	
10-14	121.00	121.00	57.00	30.00	10.00	4.50	3.20	3.00	3.00	
10-15	102.00	102.00	49.00	30.00	10.00	4.50	3.30	2.80	2.80	
10-16	79.00	79.00	44.00	29.00	12.00	4.40	3.50	2.20	2.20	
10-17	63.00	63.00	39.00	28.00	13.00	4.30	3.40	2.20	2.20	
10-18	53.00	53.00	35.00	30.00	14.00	4.10	4.00	2.60	2.60	
10-19	46.00	46.00	45.00	32.00	12.00	5.00	4.10	2.60	2.60	
10-20	51.00	51.00	39.00	30.00	11.00	5.40	4.10	2.80	2.80	
10-21	41.00	41.00	35.00	27.00	9.40	6.00	4.20	3.40	3.40	
10-22	37.00	37.00	32.00	26.00	8.20	6.80	4.40	3.20	3.20	
10-23	36.00	36.00	30.00	25.00	9.80	7.10	4.90	3.40	3.40	
10-24	34.00	34.00	30.00	24.00	9.50	8.00	7.20	4.80	4.80	
10-25	40.00	40.00	31.00	30.00	8.70	8.00	7.90	6.40	6.40	
10-26	36.00	36.00	30.00	28.00	9.00	7.80	7.70	6.40	6.40	
10-27	31.00	31.00	28.00	26.00	9.60	8.70	7.70	5.20	5.20	
10-28	27.00	27.00	26.00	24.00	8.60	8.00	7.50	5.20	5.20	
10-29	26.00	26.00	25.00	23.00	8.70	7.50	7.40	4.80	4.80	
10-30	36.00	36.00	24.00	23.00	8.90	7.20	6.50	4.40	4.40	
10-31	826.00	826.00	30.00	24.00	9.50	7.20	6.00	4.40	4.40	
MEAN	109.91	109.91	60.64	58.80	9.46	5.34	5.15	3.50	3.50	

Table 9.---Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Big Sioux basin, station 06482610,  
Split Rock Creek at Corson, S. Dak.---Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90			
11-1	1040.00	1040.00	34.00	23.00	12.00	7.10	5.70	4.80		4.80	
11-2	710.00	710.00	39.00	33.00	14.00	6.80	5.60	4.80		4.80	
11-3	717.00	717.00	41.00	29.00	16.00	6.60	5.80	4.50		4.50	
11-4	646.00	646.00	39.00	25.00	13.00	6.40	6.00	4.00		4.00	
11-5	459.00	459.00	33.00	23.00	12.00	6.40	6.00	3.50		3.50	
11-6	330.00	330.00	34.00	23.00	12.00	6.40	6.10	3.60		3.60	
11-7	245.00	245.00	33.00	23.00	12.00	6.40	5.60	3.70		3.70	
11-8	201.00	201.00	30.00	24.00	10.00	6.40	5.60	3.80		3.80	
11-9	175.00	175.00	64.00	28.00	11.00	6.70	5.60	4.00		4.00	
11-10	147.00	147.00	38.00	27.00	11.00	6.80	6.30	4.20		4.20	
11-11	129.00	129.00	32.00	26.00	12.00	6.70	6.60	4.30		4.30	
11-12	119.00	119.00	25.00	24.00	12.00	7.10	6.10	4.50		4.50	
11-13	116.00	116.00	45.00	26.00	12.00	7.70	6.80	4.70		4.70	
11-14	109.00	109.00	52.00	23.00	13.00	8.50	6.10	4.80		4.80	
11-15	107.00	107.00	53.00	21.00	12.00	7.80	5.00	4.50		4.50	
11-16	104.00	104.00	64.00	23.00	12.00	7.50	5.20	5.10		5.10	
11-17	102.00	102.00	80.00	23.00	12.00	8.00	5.50	5.20		5.20	
11-18	100.00	100.00	84.00	24.00	12.00	8.70	5.70	4.80		4.80	
11-19	99.00	99.00	74.00	25.00	13.00	8.30	6.00	4.50		4.50	
11-20	93.00	93.00	80.00	25.00	13.00	8.00	6.20	4.20		4.20	
11-21	105.00	105.00	96.00	25.00	13.00	8.00	5.40	3.70		3.70	
11-22	109.00	109.00	88.00	29.00	13.00	8.40	4.80	3.30		3.30	
11-23	89.00	89.00	65.00	28.00	13.00	8.60	4.00	3.00		3.00	
11-24	75.00	75.00	69.00	26.00	13.00	8.80	4.30	2.70		2.70	
11-25	87.00	87.00	61.00	28.00	14.00	8.80	4.70	2.50		2.50	
11-26	92.00	92.00	64.00	28.00	14.00	8.70	4.30	3.00		3.00	
11-27	95.00	95.00	67.00	28.00	13.00	8.60	3.70	3.50		3.50	
11-28	88.00	88.00	62.00	27.00	14.00	8.30	4.50	3.30		3.30	
11-29	73.00	73.00	58.00	26.00	14.00	8.40	5.40	2.80		2.80	
11-30	85.00	85.00	53.00	24.00	14.00	8.50	5.30	2.40		2.40	
MEAN	219.73	219.73	54.70	26.66	12.70	8.05	4.97	4.41		4.41	

Table 9.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Big Sioux basin, station 06482610,  
Split Rock Creek at Corson, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
12- 1	79.00	79.00	53.00	25.00	13.00	8.70	5.00	2.00	2.00	
12- 2	77.00	77.00	50.00	22.00	12.00	8.20	5.10	2.40	2.40	
12- 3	78.00	78.00	45.00	25.00	13.00	8.00	5.20	2.80	2.80	
12- 4	76.00	76.00	42.00	25.00	13.00	7.80	5.50	3.30	3.30	
12- 5	82.00	82.00	34.00	22.00	12.00	7.60	5.80	3.70	5.70	
12- 6	87.00	87.00	32.00	24.00	11.00	7.60	5.80	3.20	3.20	
12- 7	94.00	94.00	30.00	24.00	12.00	6.40	6.00	2.70	2.70	
12- 8	92.00	92.00	29.00	23.00	12.00	7.00	6.20	2.80	2.80	
12- 9	90.00	90.00	27.00	22.00	11.00	7.50	6.50	3.00	3.00	
12-10	87.00	87.00	26.00	21.00	11.00	7.90	6.80	3.20	3.20	
12-11	79.00	79.00	25.00	22.00	11.00	6.00	7.20	3.30	3.30	
12-12	77.00	77.00	24.00	22.00	11.00	7.90	7.40	3.30	3.30	
12-13	70.00	70.00	25.00	21.00	10.00	7.80	7.40	3.40	3.40	
12-14	64.00	64.00	27.00	20.00	9.80	7.40	7.30	3.40	3.40	
12-15	49.00	49.00	29.00	20.00	10.00	7.20	6.90	3.20	3.20	
12-16	45.00	45.00	36.00	20.00	10.00	7.20	6.40	3.00	3.00	
12-17	50.00	50.00	42.00	19.00	9.90	7.20	5.80	2.70	2.70	
12-18	48.00	48.00	40.00	18.00	10.00	7.30	5.30	2.40	2.40	
12-19	45.00	45.00	41.00	17.00	9.70	7.30	5.00	2.00	2.00	
12-20	43.00	43.00	42.00	17.00	9.30	6.60	5.20	1.50	1.50	
12-21	45.00	45.00	39.00	16.00	8.90	5.60	5.40	1.20	1.20	
12-22	45.00	45.00	37.00	16.00	9.00	5.70	5.00	1.00	1.00	
12-23	45.00	45.00	34.00	18.00	8.80	6.00	4.10	1.10	1.10	
12-24	43.00	43.00	31.00	19.00	8.50	6.20	5.00	1.30	1.30	
12-25	42.00	42.00	29.00	20.00	8.80	6.40	5.50	1.40	1.40	
12-26	41.00	41.00	27.00	19.00	9.20	6.70	5.80	1.50	1.50	
12-27	42.00	42.00	26.00	18.00	9.30	7.00	5.80	1.40	1.40	
12-28	42.00	42.00	25.00	16.00	10.00	7.20	5.80	1.30	1.30	
12-29	43.00	43.00	24.00	15.00	11.00	7.50	5.80	1.20	1.20	
12-30	60.00	60.00	44.00	26.00	11.00	7.70	5.80	1.10	1.10	
12-31	52.00	52.00	45.00	30.00	11.00	7.70	5.80	1.00	1.00	
MEAN	60.29	60.29	33.77	19.77	11.02	6.63	6.46	2.28	2.28	

Table 9.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Big Sioux basin, station 06482610,  
Split Rock Creek at Corson, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
1- 1	45.00	45.00	43.00	26.00	11.00	7.70	5.80	0.90	0.90	
1- 2	46.00	46.00	35.00	23.00	11.00	7.70	5.80	.93	.93	
1- 3	46.00	46.00	27.00	20.00	10.00	7.50	5.90	.97	.97	
1- 4	45.00	45.00	22.00	22.00	9.70	6.80	5.90	1.00	1.00	
1- 5	44.00	44.00	24.00	18.00	9.50	6.30	5.80	1.10	1.10	
1- 6	43.00	43.00	23.00	14.00	9.00	6.00	5.60	1.10	1.10	
1- 7	41.00	41.00	19.00	11.00	8.50	5.60	5.30	1.20	1.20	
1- 8	40.00	40.00	15.00	11.00	8.00	5.50	5.10	1.20	1.20	
1- 9	40.00	40.00	11.00	11.00	7.60	5.70	5.00	1.10	1.10	
1-10	39.00	39.00	11.00	8.90	7.50	5.80	4.90	.90	.90	
1-11	38.00	38.00	11.00	9.00	7.60	5.80	4.20	.65	.65	
1-12	38.00	38.00	10.00	8.80	7.80	6.10	3.50	.45	.45	
1-13	38.00	38.00	10.00	8.50	8.20	6.30	3.00	.30	.30	
1-14	38.00	38.00	9.70	8.60	7.70	6.50	2.90	.20	.20	
1-15	38.00	38.00	9.50	9.20	7.00	6.60	2.80	.13	.13	
1-16	37.00	37.00	26.00	10.00	6.70	6.00	2.70	.09	.09	
1-17	70.00	70.00	37.00	11.00	6.90	5.40	2.70	.06	.06	
1-18	160.00	160.00	37.00	12.00	7.10	4.70	2.80	.05	.05	
1-19	240.00	240.00	37.00	12.00	7.30	4.20	3.00	.05	.05	
1-20	210.00	210.00	37.00	13.00	7.50	3.70	3.30	.06	.06	
1-21	190.00	190.00	36.00	13.00	7.60	3.30	3.10	.07	.07	
1-22	145.00	145.00	36.00	14.00	7.70	3.10	3.00	.07	.07	
1-23	90.00	90.00	30.00	14.00	7.60	3.50	3.20	.08	.08	
1-24	62.00	62.00	33.00	14.00	7.70	4.10	3.40	.08	.08	
1-25	48.00	48.00	34.00	14.00	7.60	3.60	3.60	.08	.08	
1-26	64.00	64.00	20.00	15.00	6.90	3.80	3.50	.05	.05	
1-27	135.00	135.00	18.00	15.00	6.60	3.60	3.50	.01	.01	
1-28	260.00	260.00	18.00	15.00	6.80	3.40	2.90	.00	.00	
1-29	205.00	205.00	18.00	16.00	7.30	3.30	2.40	.00	.00	
1-30	120.00	120.00	17.00	16.00	8.00	3.20	2.00	.00	.00	
1-31	70.00	70.00	17.00	16.00	7.50	3.30	1.70	.00	.00	
MEAN	75.30	75.30	34.83	11.45	9.04	6.94	3.98	.41	.41	

Table 9.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Big Sioux basin, station 06482610,  
Split Rock Creek at Corson, S. Dak.--Continued

DATE	Percent exceedance values										LOW
	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW		
2- 1	42.00	42.00	17.00	16.00	7.20	3.40	1.40	0.00	0.00		
2- 2	40.00	40.00	20.00	16.00	6.90	3.50	1.10	.00	.00		
2- 3	44.00	44.00	22.00	15.00	6.70	3.70	1.20	.00	.00		
2- 4	50.00	50.00	24.00	14.00	6.60	4.10	1.20	.00	.00		
2- 5	58.00	58.00	25.00	13.00	6.50	4.20	1.30	.00	.00		
2- 6	53.00	53.00	25.00	12.00	6.40	4.20	1.30	.00	.00		
2- 7	48.00	48.00	24.00	12.00	6.40	4.10	1.40	.02	.02		
2- 8	44.00	44.00	23.00	11.00	6.30	3.80	1.50	.03	.03		
2- 9	40.00	40.00	23.00	11.00	6.30	3.20	1.50	.04	.04		
2-10	42.00	42.00	22.00	12.00	6.30	3.30	1.60	.06	.06		
2-11	45.00	45.00	21.00	13.00	6.40	3.40	1.70	.10	.10		
2-12	50.00	50.00	20.00	13.00	6.40	3.50	1.80	.20	.20		
2-13	47.00	47.00	20.00	14.00	6.60	3.70	1.90	.17	.17		
2-14	44.00	44.00	20.00	16.00	6.90	3.90	2.00	.14	.14		
2-15	40.00	40.00	20.00	19.00	7.30	4.20	2.10	.12	.12		
2-16	37.00	37.00	30.00	19.00	7.90	4.50	2.00	.14	.14		
2-17	55.00	55.00	35.00	18.00	8.90	4.90	1.80	.16	.16		
2-18	150.00	150.00	39.00	17.00	9.70	5.10	1.70	.20	.20		
2-19	130.00	130.00	44.00	16.00	11.00	4.50	1.60	.25	.25		
2-20	120.00	120.00	55.00	17.00	11.00	4.10	1.80	.30	.30		
2-21	100.00	100.00	65.00	19.00	12.00	3.60	2.00	.40	.40		
2-22	110.00	110.00	85.00	21.00	13.00	3.70	2.40	.50	.50		
2-23	130.00	130.00	120.00	22.00	14.00	3.90	2.90	.55	.55		
2-24	300.00	300.00	100.00	21.00	15.00	4.10	3.50	.52	.52		
2-25	280.00	280.00	80.00	20.00	16.00	4.30	4.20	.48	.48		
2-26	260.00	260.00	65.00	27.00	16.00	5.00	4.40	.45	.45		
2-27	240.00	240.00	60.00	35.00	17.00	4.80	4.60	.40	.40		
2-28	230.00	230.00	70.00	45.00	18.00	4.80	4.60	.38	.38		
MEAN	88.82	88.82	49.96	20.28	9.63	4.02	2.19	.20	.20		

Table 9.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Big Sioux basin, station 06482610,  
Split Rock Creek at Corson, S. Dak.--Continued

DATE	Percent exceedance values								
	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW
3-1	270.00	270.00	85.00	80.00	16.00	4.90	4.40	0.35	0.35
3-2	310.00	310.00	100.00	74.00	13.00	5.00	4.30	.50	.50
3-3	350.00	350.00	115.00	68.00	15.00	5.00	4.10	.80	.80
3-4	330.00	330.00	150.00	63.00	18.00	4.90	4.00	1.00	1.00
3-5	280.00	280.00	250.00	57.00	16.00	4.70	3.80	.80	.80
3-6	330.00	330.00	230.00	54.00	14.00	4.80	4.50	2.00	2.00
3-7	403.00	403.00	210.00	50.00	15.00	6.00	4.20	3.80	3.80
3-8	410.00	410.00	173.00	52.00	18.00	8.00	4.50	4.00	4.00
3-9	320.00	320.00	133.00	54.00	19.00	8.30	7.50	3.90	3.90
3-10	295.00	295.00	128.00	60.00	30.00	13.00	8.40	4.10	4.10
3-11	700.00	700.00	568.00	133.00	54.00	20.00	8.60	4.40	4.40
3-12	1250.00	1250.00	700.00	578.00	48.00	21.00	8.80	4.80	4.80
3-13	804.00	804.00	500.00	401.00	70.00	21.00	9.00	5.10	5.10
3-14	674.00	674.00	608.00	400.00	120.00	20.00	9.50	5.50	5.50
3-15	654.00	654.00	381.00	350.00	143.00	19.00	9.50	5.90	5.90
3-16	431.00	431.00	330.00	320.00	132.00	17.00	12.00	6.20	6.20
3-17	600.00	600.00	416.00	290.00	126.00	15.00	15.00	7.30	7.30
3-18	1500.00	1500.00	288.00	243.00	116.00	74.00	14.00	8.50	8.50
3-19	3000.00	3000.00	340.00	322.00	191.00	50.00	12.00	10.00	10.00
3-20	2700.00	2700.00	700.00	332.00	139.00	37.00	14.00	12.00	12.00
3-21	2530.00	2530.00	1550.00	299.00	114.00	30.00	24.00	12.00	12.00
3-22	7510.00	7510.00	2230.00	334.00	103.00	31.00	21.00	13.00	13.00
3-23	5060.00	5060.00	1490.00	277.00	103.00	25.00	20.00	13.00	13.00
3-24	1500.00	1500.00	959.00	207.00	90.00	20.00	18.00	12.00	12.00
3-25	1400.00	1400.00	601.00	165.00	87.00	18.00	14.00	12.00	12.00
3-26	1360.00	1360.00	415.00	135.00	72.00	17.00	12.00	12.00	12.00
3-27	917.00	917.00	340.00	119.00	76.00	17.00	12.00	8.50	8.50
3-28	1130.00	1130.00	319.00	108.00	83.00	19.00	18.00	6.00	6.00
3-29	1590.00	1590.00	286.00	103.00	86.00	25.00	21.00	8.00	8.00
3-30	1650.00	1650.00	244.00	95.00	86.00	28.00	19.00	6.40	6.40
3-31	1270.00	1270.00	213.00	95.00	80.00	29.00	17.00	6.50	6.50
MEAN	844.78	844.78	589.33	272.54	143.89	88.09	17.64	11.12	11.12

Table 9.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Big Sioux basin, station 06482610,  
Split Rock Creek at Corson, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LLW
		.10	.20	.30	.50	.70	.80	.90		
4- 1	1140.00	1140.00	184.00	87.00	74.00	25.00	17.00	3.60	3.60	
4- 2	992.00	992.00	220.00	90.00	69.00	35.00	29.00	16.00	16.00	
4- 3	804.00	804.00	375.00	114.00	60.00	35.00	28.00	15.00	15.00	
4- 4	788.00	788.00	316.00	179.00	53.00	34.00	29.00	16.00	16.00	
4- 5	783.00	783.00	286.00	133.00	54.00	31.00	30.00	20.00	20.00	
4- 6	607.00	607.00	300.00	114.00	52.00	30.00	30.00	24.00	24.00	
4- 7	510.00	510.00	292.00	110.00	48.00	41.00	26.00	25.00	25.00	
4- 8	611.00	611.00	244.00	120.00	55.00	36.00	25.00	23.00	23.00	
4- 9	572.00	572.00	218.00	170.00	54.00	35.00	24.00	21.00	21.00	
4-10	476.00	476.00	270.00	231.00	46.00	32.00	24.00	20.00	20.00	
4-11	478.00	478.00	389.00	223.00	45.00	31.00	22.00	19.00	19.00	
4-12	2650.00	2650.00	401.00	197.00	56.00	29.00	22.00	19.00	19.00	
4-13	3380.00	3380.00	386.00	168.00	72.00	29.00	22.00	20.00	20.00	
4-14	1920.00	1920.00	339.00	140.00	64.00	32.00	22.00	20.00	20.00	
4-15	841.00	841.00	298.00	117.00	57.00	32.00	22.00	21.00	21.00	
4-16	556.00	556.00	262.00	104.00	64.00	36.00	20.00	20.00	20.00	
4-17	479.00	479.00	267.00	120.00	63.00	32.00	20.00	19.00	19.00	
4-18	440.00	440.00	397.00	258.00	60.00	32.00	19.00	18.00	18.00	
4-19	602.00	602.00	344.00	235.00	63.00	29.00	19.00	17.00	17.00	
4-20	382.00	382.00	312.00	211.00	60.00	28.00	20.00	19.00	19.00	
4-21	289.00	289.00	266.00	194.00	60.00	28.00	24.00	20.00	20.00	
4-22	235.00	235.00	220.00	172.00	56.00	26.00	23.00	22.00	22.00	
4-23	220.00	220.00	189.00	150.00	50.00	27.00	23.00	21.00	21.00	
4-24	344.00	344.00	165.00	136.00	48.00	32.00	20.00	19.00	19.00	
4-25	362.00	362.00	149.00	127.00	47.00	39.00	20.00	18.00	18.00	
4-26	274.00	274.00	136.00	133.00	45.00	39.00	20.00	18.00	18.00	
4-27	217.00	217.00	150.00	119.00	43.00	35.00	18.00	18.00	18.00	
4-28	179.00	179.00	165.00	105.00	40.00	32.00	17.00	16.00	16.00	
4-29	184.00	184.00	153.00	114.00	37.00	32.00	16.00	15.00	15.00	
4-30	184.00	184.00	138.00	119.00	39.00	30.00	15.00	13.00	13.00	
MEAN:	674.06	674.06	252.33	176.76	58.16	37.40	22.20	21.02	21.02	

Table 9.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Big Sioux basin, station 06482610,  
Split Rock Creek at Corson, S. Dak.--Continued

DATE	HIGH	Percent exceedance values							
		.10	.20	.30	.50	.70	.80	.90	LOW
5- 1	145.00	195.00	122.00	113.00	48.00	28.00	14.00	13.00	13.00
5- 2	177.00	177.00	124.00	109.00	45.00	27.00	13.00	11.00	11.00
5- 3	138.00	138.00	127.00	99.00	44.00	25.00	13.00	13.00	13.00
5- 4	112.00	112.00	111.00	91.00	43.00	25.00	16.00	13.00	13.00
5- 5	99.00	99.00	92.00	84.00	38.00	24.00	16.00	13.00	13.00
5- 6	90.00	90.00	79.00	78.00	37.00	22.00	16.00	11.00	11.00
5- 7	83.00	83.00	80.00	78.00	37.00	21.00	15.00	11.00	11.00
5- 8	121.00	121.00	77.00	70.00	34.00	22.00	13.00	10.00	10.00
5- 9	154.00	154.00	136.00	63.00	32.00	21.00	12.00	9.50	9.50
5-10	795.00	795.00	121.00	59.00	31.00	20.00	11.00	10.00	10.00
5-11	954.00	954.00	108.00	56.00	30.00	19.00	10.00	8.40	8.40
5-12	836.00	836.00	100.00	54.00	28.00	18.00	9.30	8.40	8.40
5-13	615.00	615.00	96.00	51.00	31.00	19.00	9.00	8.90	8.90
5-14	397.00	397.00	88.00	49.00	30.00	18.00	8.90	7.90	7.90
5-15	293.00	293.00	77.00	49.00	30.00	16.00	8.00	7.30	7.30
5-16	222.00	222.00	70.00	44.00	28.00	16.00	7.10	5.00	5.00
5-17	176.00	176.00	63.00	40.00	30.00	15.00	7.20	4.40	4.40
5-18	146.00	146.00	58.00	38.00	32.00	13.00	7.20	4.40	4.40
5-19	123.00	123.00	56.00	34.00	33.00	13.00	5.80	4.40	4.40
5-20	112.00	112.00	51.00	43.00	31.00	25.00	13.00	5.20	5.20
5-21	99.00	99.00	92.00	47.00	27.00	16.00	12.00	4.90	4.90
5-22	110.00	110.00	89.00	44.00	27.00	24.00	13.00	5.40	5.40
5-23	92.00	92.00	83.00	40.00	25.00	23.00	14.00	4.60	4.60
5-24	80.00	80.00	78.00	38.00	24.00	22.00	12.00	4.90	4.90
5-25	73.00	73.00	70.00	35.00	25.00	19.00	12.00	4.20	4.20
5-26	233.00	233.00	70.00	57.00	24.00	16.00	12.00	4.50	4.50
5-27	74.00	74.00	71.00	48.00	32.00	16.00	11.00	4.60	4.60
5-28	235.00	235.00	155.00	68.00	35.00	16.00	9.70	4.80	4.80
5-29	730.00	730.00	366.00	63.00	34.00	13.00	9.40	5.30	5.30
5-30	840.00	840.00	543.00	66.00	30.00	10.00	9.40	4.30	4.30
5-31	640.00	640.00	242.00	67.00	28.00	10.00	9.20	3.70	3.70
MEAN	208.77	208.77	114.80	104.13	40.64	16.83	13.95	7.86	7.86



Table 9.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Big Sioux basin, station 06482610,  
Split Rock Creek at Corson, S. Dak.--Continued

DATE	HIGH	Percent exceedance values										LOW
		.10	.20	.30	.50	.70	.80	.90				
6-1	350.00	350.00	266.00	67.00	27.00	9.00	8.10	4.10	4.10			
6-2	200.00	240.00	200.00	65.00	28.00	8.20	6.80	3.30	3.30			
6-3	178.00	178.00	120.00	64.00	27.00	6.90	6.60	3.10	3.10			
6-4	345.00	345.00	139.00	59.00	26.00	6.20	5.10	2.50	2.50			
6-5	748.00	748.00	117.00	60.00	30.00	5.10	4.70	2.70	2.70			
6-6	474.00	474.00	94.00	50.00	26.00	4.40	3.80	3.10	3.10			
6-7	292.00	292.00	79.00	55.00	23.00	4.30	3.90	3.60	3.60			
6-8	224.00	224.00	89.00	63.00	21.00	4.20	3.70	3.50	3.50			
6-9	220.00	220.00	66.00	56.00	20.00	5.10	3.60	2.10	2.10			
6-10	193.00	193.00	67.00	47.00	18.00	4.70	3.70	1.80	1.80			
6-11	135.00	135.00	77.00	41.00	19.00	4.20	3.70	1.90	1.90			
6-12	93.00	93.00	63.00	36.00	16.00	5.20	3.50	1.40	1.40			
6-13	386.00	386.00	76.00	53.00	23.00	6.80	3.30	1.50	1.50			
6-14	260.00	260.00	62.00	47.00	21.00	10.00	3.10	2.10	2.10			
6-15	91.00	91.00	52.00	44.00	19.00	15.00	3.60	2.80	2.80			
6-16	235.00	235.00	45.00	38.00	25.00	14.00	14.00	2.20	2.20			
6-17	165.00	165.00	39.00	25.00	16.00	13.00	13.00	2.30	2.30			
6-18	132.00	132.00	35.00	23.00	16.00	9.10	8.90	2.50	2.50			
6-19	145.00	145.00	32.00	28.00	15.00	13.00	7.20	2.20	2.20			
6-20	511.00	511.00	83.00	29.00	14.00	11.00	5.70	2.30	2.30			
6-21	419.00	419.00	30.00	26.00	15.00	9.70	4.90	1.60	1.60			
6-22	291.00	291.00	123.00	26.00	14.00	9.30	4.20	1.30	1.30			
6-23	223.00	223.00	106.00	24.00	13.00	9.10	3.40	1.30	1.30			
6-24	219.00	219.00	64.00	23.00	12.00	9.90	8.90	2.80	2.80			
6-25	238.00	238.00	48.00	27.00	16.00	12.00	7.60	3.20	3.20			
6-26	199.00	199.00	35.00	24.00	14.00	11.00	7.20	3.50	3.50			
6-27	149.00	149.00	29.00	25.00	10.00	7.60	6.00	3.30	3.30			
6-28	114.00	114.00	25.00	22.00	11.00	8.80	6.00	3.10	3.10			
6-29	92.00	92.00	23.00	20.00	8.80	8.30	6.00	2.90	2.90			
6-30	78.00	78.00	21.00	20.00	8.00	6.80	6.40	2.60	2.60			
MEAN	137.63	137.63	135.36	71.36	20.16	16.14	6.86	3.57	3.57			

Table 9.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Big Sioux basin, station 06482610,  
Split Rock Creek at Corson, S. Dak.--Continued

DATE	Percent exceedance values								
	HIGH	.10	.20	.30	.50	.70	.80	.90	LOW
7- 1	67.00	67.00	19.00	19.00	8.50	6.00	5.60	2.60	2.60
7- 2	60.00	60.00	19.00	19.00	6.60	4.80	4.80	2.40	2.40
7- 3	55.00	55.00	19.00	18.00	9.40	6.40	5.00	1.60	1.60
7- 4	49.00	49.00	33.00	16.00	13.00	5.60	4.70	1.80	1.80
7- 5	49.00	49.00	43.00	17.00	11.00	5.90	3.70	1.80	1.80
7- 6	40.00	40.00	29.00	19.00	8.90	6.40	5.70	1.60	1.60
7- 7	44.00	44.00	38.00	27.00	9.30	6.80	4.90	1.50	1.50
7- 8	113.00	113.00	36.00	24.00	7.10	6.50	4.00	1.20	1.20
7- 9	135.00	135.00	35.00	23.00	7.00	4.60	4.10	1.80	1.80
7-10	86.00	86.00	32.00	21.00	7.60	4.80	3.20	1.60	1.60
7-11	72.00	72.00	31.00	19.00	7.90	5.30	3.70	.55	.55
7-12	53.00	53.00	31.00	19.00	7.80	5.70	3.20	.45	.45
7-13	49.00	49.00	48.00	16.00	6.40	4.60	3.00	1.20	1.20
7-14	77.00	77.00	40.00	16.00	6.90	4.30	3.20	2.50	2.50
7-15	68.00	68.00	31.00	15.00	6.40	4.80	3.30	2.60	2.60
7-16	55.00	55.00	26.00	14.00	5.80	4.30	2.90	2.10	2.10
7-17	57.00	57.00	23.00	13.00	5.70	4.20	3.80	2.90	2.90
7-18	63.00	63.00	21.00	13.00	4.80	4.00	3.60	1.90	1.90
7-19	57.00	57.00	19.00	12.00	4.00	3.40	2.60	2.60	2.60
7-20	56.00	56.00	22.00	18.00	4.40	3.70	2.00	1.60	1.60
7-21	164.00	164.00	25.00	17.00	4.20	3.60	2.00	1.70	1.70
7-22	141.00	141.00	51.00	8.60	4.70	4.00	3.50	1.70	1.70
7-23	119.00	119.00	70.00	8.70	5.90	5.20	3.80	1.40	1.40
7-24	529.00	529.00	100.00	65.00	9.50	6.30	3.80	2.70	2.70
7-25	156.00	156.00	77.00	56.00	9.80	7.20	5.90	1.70	1.70
7-26	88.00	88.00	57.00	51.00	9.10	7.30	6.80	1.70	1.70
7-27	94.00	94.00	47.00	25.00	8.40	6.10	6.00	1.80	1.80
7-28	95.00	95.00	70.00	42.00	8.40	5.30	5.20	1.90	1.90
7-29	53.00	53.00	50.00	29.00	7.80	5.10	4.30	1.50	1.50
7-30	44.00	44.00	39.00	20.00	7.40	4.80	3.40	.77	.77
7-31	37.00	37.00	31.00	15.00	6.90	5.00	3.00	1.00	1.00
MEAN	60.54	60.54	47.67	33.14	12.46	5.47	5.40	2.42	2.42

Table 9.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Big Sioux basin, station 06482610,  
Split Rock Creek at Corson, S. Dak.--Continued

DATE	HIGH	Percent exceedance values								LOW
		.10	.20	.30	.50	.70	.80	.90		
8-1	34.00	34.00	29.00	23.00	9.60	5.50	4.70	1.60	1.60	
8-2	138.00	138.00	64.00	24.00	8.40	6.50	5.00	1.60	1.60	
8-3	68.00	68.00	40.00	15.00	7.80	5.70	5.40	1.30	1.30	
8-4	40.00	40.00	27.00	13.00	7.20	5.70	4.70	.89	.89	
8-5	30.00	30.00	21.00	16.00	6.60	4.80	4.00	.26	.26	
8-6	28.00	28.00	19.00	12.00	6.20	4.80	3.50	.27	.27	
8-7	27.00	27.00	17.00	10.00	5.70	4.10	3.00	.13	.13	
8-8	119.00	119.00	16.00	8.60	5.40	3.90	3.20	.45	.45	
8-9	3870.00	3870.00	15.00	7.60	6.30	5.70	5.40	.02	.02	
8-10	1130.00	1130.00	15.00	14.00	6.80	5.60	5.60	.10	.10	
8-11	424.00	424.00	13.00	13.00	6.50	5.20	3.90	1.20	1.20	
8-12	339.00	339.00	13.00	12.00	5.60	4.60	3.50	.66	.66	
8-13	297.00	297.00	14.00	11.00	5.60	4.20	3.60	1.00	1.00	
8-14	256.00	256.00	29.00	10.00	7.00	4.60	3.70	1.50	1.50	
8-15	726.00	726.00	204.00	28.00	8.20	6.00	3.90	1.30	1.30	
8-16	423.00	423.00	154.00	20.00	10.00	6.00	3.60	1.50	1.50	
8-17	126.00	126.00	122.00	27.00	11.00	6.40	3.30	1.50	1.50	
8-18	107.00	107.00	58.00	31.00	17.00	10.00	3.00	1.30	1.30	
8-19	169.00	169.00	32.00	28.00	15.00	7.80	4.40	1.80	1.80	
8-20	592.00	592.00	24.00	22.00	14.00	5.80	3.40	1.50	1.50	
8-21	399.00	399.00	27.00	26.00	13.00	5.20	3.20	1.20	1.20	
8-22	389.00	389.00	26.00	19.00	13.00	4.00	3.00	.89	.89	
8-23	540.00	540.00	23.00	20.00	11.00	4.90	2.20	.18	.18	
8-24	271.00	271.00	61.00	24.00	8.90	5.60	2.00	.10	.10	
8-25	219.00	219.00	29.00	26.00	9.10	7.60	2.20	.26	.26	
8-26	205.00	205.00	26.00	24.00	14.00	6.40	2.40	.18	.18	
8-27	512.00	512.00	25.00	23.00	15.00	6.40	2.20	.35	.35	
8-28	320.00	320.00	22.00	21.00	13.00	6.40	2.00	.55	.55	
8-29	203.00	203.00	19.00	16.00	11.00	4.80	1.80	.35	.35	
8-30	176.00	176.00	18.00	14.00	11.00	4.40	2.00	.66	.66	
8-31	164.00	164.00	22.00	12.00	10.00	4.40	2.00	.77	.77	
MEAN	363.61	363.61	56.13	19.71	9.30	8.53	4.33	.81	.81	

Table 9.--Plotting points for duration hydrograph for 9-year period beginning  
October 1972, Big Sioux basin, station 06482610,  
Split Rock Creek at Corson, S. Dak.--Continued

Percent exceedance values										
DATE	HIGH	.10	.20	.30	.50	.70	.80	.90	LUM	
9- 1	214.00	214.00	25.00	11.00	9.40	4.40	2.20	0.77	0.77	
9- 2	168.00	168.00	23.00	16.00	8.20	4.80	1.80	.89	.89	
9- 3	118.00	118.00	23.00	18.00	7.80	4.80	4.00	.66	.66	
9- 4	96.00	96.00	29.00	15.00	7.50	4.80	4.00	.55	.55	
9- 5	81.00	81.00	21.00	12.00	6.30	4.40	4.10	.55	.55	
9- 6	93.00	93.00	17.00	16.00	6.40	4.50	3.80	.66	.66	
9- 7	76.00	76.00	16.00	14.00	7.30	4.40	4.10	.77	.77	
9- 8	193.00	193.00	14.00	12.00	7.20	4.40	3.80	1.20	1.20	
9- 9	84.00	84.00	13.00	12.00	7.10	4.20	4.20	1.50	1.50	
9-10	76.00	76.00	11.00	16.00	6.70	4.80	3.20	1.30	1.30	
9-11	78.00	78.00	12.00	9.60	6.00	5.20	3.00	1.30	1.30	
9-12	243.00	243.00	27.00	15.00	5.60	5.00	2.80	1.60	1.60	
9-13	348.00	348.00	36.00	21.00	5.60	4.70	2.80	1.80	1.80	
9-14	312.00	312.00	27.00	22.00	6.50	4.20	3.00	1.80	1.80	
9-15	216.00	216.00	23.00	18.00	6.80	3.90	3.20	1.80	1.80	
9-16	167.00	167.00	20.00	15.00	6.00	4.80	3.40	2.00	2.00	
9-17	152.00	152.00	17.00	13.00	6.00	5.20	3.30	2.20	2.20	
9-18	130.00	130.00	20.00	12.00	5.50	3.40	3.40	2.20	2.20	
9-19	106.00	106.00	26.00	12.00	5.30	3.30	3.20	2.60	2.60	
9-20	89.00	89.00	27.00	13.00	6.00	4.00	3.00	2.50	2.50	
9-21	77.00	77.00	24.00	11.00	6.00	4.10	3.00	2.20	2.20	
9-22	67.00	67.00	20.00	13.00	6.00	3.70	3.40	2.40	2.40	
9-23	61.00	61.00	21.00	18.00	5.20	3.70	3.20	2.40	2.40	
9-24	71.00	71.00	55.00	17.00	4.50	3.80	3.20	2.40	2.40	
9-25	54.00	54.00	51.00	17.00	4.10	3.90	3.40	2.40	2.40	
9-26	46.00	46.00	33.00	16.00	4.90	4.00	3.70	2.80	2.80	
9-27	44.00	44.00	21.00	16.00	5.20	4.30	3.70	2.80	2.80	
9-28	42.00	42.00	16.00	15.00	5.80	4.00	3.80	2.40	2.40	
9-29	40.00	40.00	21.00	16.00	6.00	4.60	4.20	2.90	2.90	
9-30	210.00	210.00	38.00	25.00	8.00	4.10	3.70	3.10	3.10	
MEAN	120.03	120.03	26.92	15.15	5.59	5.19	4.70	1.81	1.61	

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