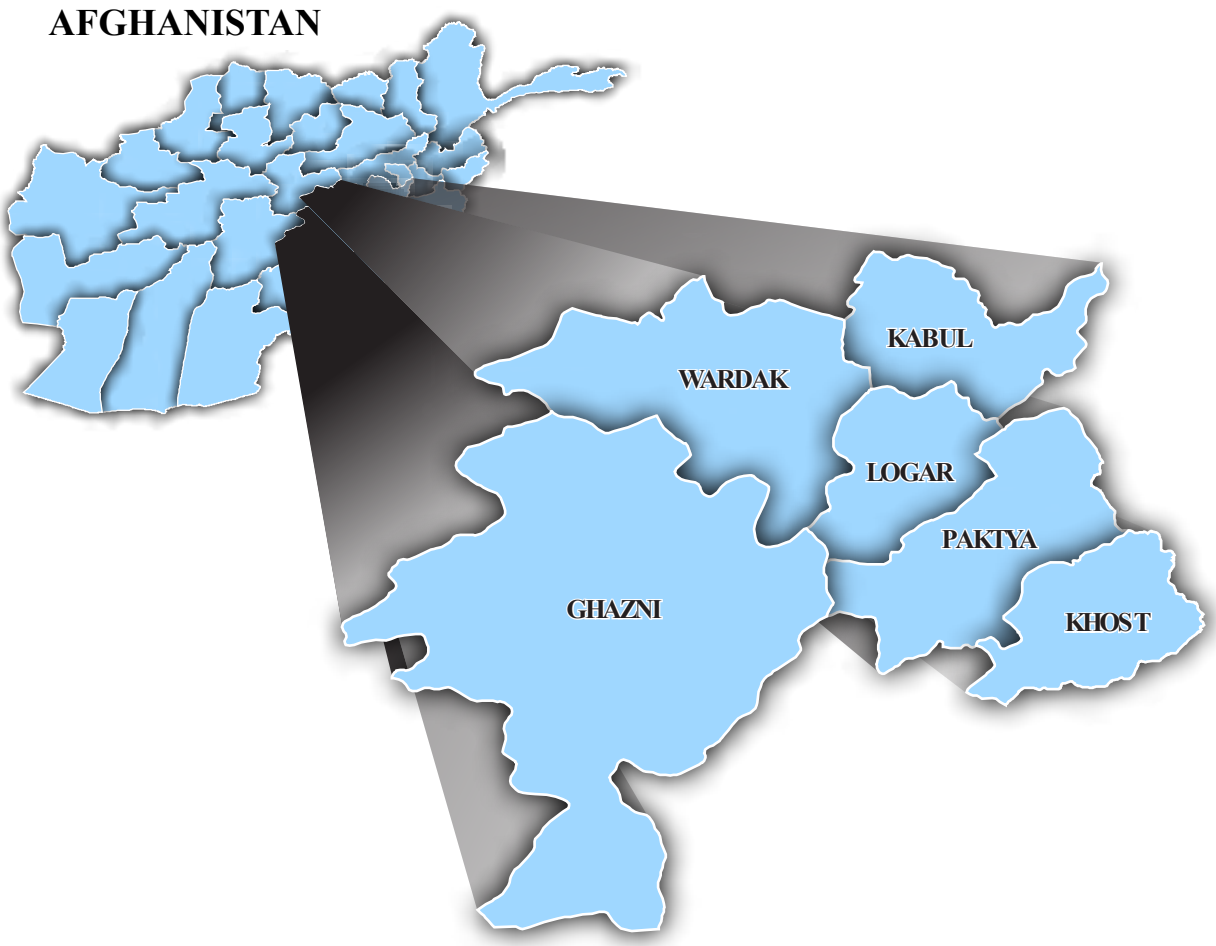
Prepared in cooperation with the U.S. Army Corps of Engineers

Streamflow Characteristics of Streams in Southeastern Afghanistan



Data Series 508

U.S. Department of the Interior
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USGS Afghanistan Project Product Number 178

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By Kevin C. Vining

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U.S. Department of the Interior
KEN SALAZAR, Secretary

U.S. Geological Survey
Marcia K. McNutt, Director

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Conversion Factors and Datums

SI to Inch/Pound

Multiply	By	To obtain
	Length	
meter (m)	3.281	foot (ft)
kilometer (km)	0.6214	mile (mi)
kilometer (km)	0.5400	mile, nautical (nmi)
	Area	
square kilometer (km^2)	247.1	acre
	Flow rate	
cubic meter per second (m^3/s)	35.31	cubic foot per second (ft^3/s)

Altitude, as used in this report, refers to distance above mean sea level at an unknown vetical datum.

Water year is the 12-month period from October 1 through September 30. The water year is designated by the calendar year in which the water year ends and that includes 9 of the 12 months. Thus, the water year ending September 30, 200X, is called the “200X water year.”

Streamflow Characteristics of Streams in Southeastern Afghanistan

By Kevin C. Vining

Abstract

Statistical summaries of streamflow data for all historical streamgaging stations that have available data in the southeastern Afghanistan provinces of Ghazni, Khost, Logar, Paktya, and Wardak, and a portion of Kabul Province are presented in this report. The summaries for each streamgaging station include a station desciption, table of statistics of monthly and annual mean discharges, table of monthly and annual flow duration, table of probability of occurrence of annual high discharges, table of probability of occurrence of annual low discharges, table of annual peak discharge and corresponding gage height for the period of record, and table of monthly and annual mean discharges for the period of record.

Introduction

Preliminary hydrologic evaluations are needed to determine water-resource priorities in all areas of Afghanistan for water supplies, irrigation, flood control, and hydropower production. The purpose of this administrative report is to provide summaries of streamflow characteristics for all historical streamgaging stations in southeastern Afghanistan that have available data (table 1). For this report, southeastern Afghanistan encompasses the provinces of Ghazni, Khost, Logar, Paktya, and Wardak, and a portion of Kabul Province.

Streamflow information was compiled and entered into spreadsheets from records maintained by the Democratic Republic of Afghanistan Ministry of Irrigation and Water Resources (now the Islamic Republic of Afghanistan Ministry of Energy and Water) and reports by the U.S. Geological Survey (USGS). The spreadsheet data were then reviewed and entered into the USGS National Water Information System (NWIS). Statistics presented in this report were generated using USGS statistical programs.

Explanation of Station Summaries

Station summaries are presented in order by USGS identification number. The order of information for all stations is the same, as shown below:

1. Station description,
2. Table of statistics of monthly and annual mean discharges,
3. Table of monthly and annual flow duration,
4. Table of probability of occurrence of annual high discharges,
5. Table of probability of occurrence of annual low discharges,
6. Table of annual peak discharge and corresponding gage height for the period of record, and
7. Table of monthly and annual mean discharges for the period of record.

Station Description

The location, drainage area, period of record, and other available information about each streamgaging station included in this report were compiled from records maintained by the Democratic Republic of Afghanistan Ministry of Irrigation and Water Resources (now the Islamic Republic of Afghanistan Ministry of Energy and Water) and reports by the USGS. Station names followed by an asterisk indicate those stations that have years with missing record. The following comments clarify information presented under the various headings of the station manuscript.

LOCATION.—Information on streamgaging station location is limited to latitude and longitude. When available, further information is furnished with respect to cultural and

Table 1. List of streamgaging stations in Afghanistan for which streamflow statistics are presented in this report.

[Page numbers are for this report. USGS, U.S. Geological Survey]

USGS identification number	Station name	Page
330800067280000	ARGHANDAB RIVER AT SANG-I-MASHA	6
331700069350000	SHUMAL RIVER AT DOMANDI	9
331700069360000	SPERA RIVER NEAR SPERA	12
331800068370000	JILGA RIVER BELOW SARDE RESERVOIR	15
332200070100000	SHUMAL RIVER AT TORA TIGHA	18
332300069530000	MATUN RIVER AT MATUN	21
333100068210000	SYAHGEL RIVER AT SYAHGEL	25
333300068250000	GHAZNI RIVER AT GHAZNI BRIDGE	28
333500069130000	JILGA RIVER AT GARDEZ	31
333800068250000	GHAZNI RIVER AT NAUBURJA	34
334300068520000	CHARKH RIVER AT KHARWAR DAM INFLOW	37
334400068520000	CHARKH RIVER AT KHARWAR DAM OUTFLOW	40
334500068230000	GHAZNI RIVER BELOW SERAJ RESERVOIR	43
334500069480000	GABER RIVER NEAR CHAMKANI	47
334600068210000	BARIKAB RIVER ABOVE SERAJ RESERVOIR	50
334601068210000	SARAB RIVER ABOVE SERAJ RESERVOIR	53
334800069400000	KHURRAM RIVER AT DODA	56
334800069480000	KHURRAM RIVER AT CHAMKANI	59
334800069530000	KHURRAM RIVER AT PUL-I-BANGAKH	63
334900069230000	JILGA RIVER NEAR MECHALGHU	67
335000069390000	KHURRAM RIVER AT AHMADKHEL	70
340500068450000	LOGAR RIVER AT SHEKHABAD	73
340600068340000	LOGAR RIVER ABOVE BAND-I-CHAK WARDHAK	77
341400068300000	LOGAR RIVER AT KAJAB	80
341900068510000	KABUL RIVER AT MAIDAN	84
342100067290000	MARKHANA RIVER AT DAHANE RISHQA	88
342400069050000	KABUL RIVER AT TANGI SAIDAN	91
342600069120000	LOGAR RIVER AT SANG-I-NAWESHTA	95
343000068160000	HELMAND RIVER AT GARDANDEWAL	99
343400068110000	SYAHSANG RIVER NEAR GARDANDEWAL	102

physical features in the vicinity of the streamgaging station and the community or landmark included in the streamgaging station name.

DRAINAGE AREA.—Drainage area is measured from Survey of India maps (where noted). The accuracy of the drainage areas is unknown.

ALTITUDE.—The datum of the gage referenced to mean sea level.

PERIOD OF RECORD.—The period of record is the period for which there are published records for the streamgaging station or for an equivalent streamgaging station. An equivalent streamgaging station is a streamgaging station that was in operation prior to the subject streamgaging station, and whose location is such that records from it can reasonably be considered equivalent with records from the subject streamgaging station. The phrase 'incomplete year' indicates that periods of record have missing data.

GAGE.—The type of gage or recorder that is or was used to collect data. Unknown gage types are marked with (--).

Statistics of Monthly and Annual Mean Discharges

Statistics of monthly and annual mean discharges presented for each streamgaging station include (1) the maximum, minimum, and mean monthly discharges and (2) the maximum, minimum, and mean annual discharges. The water years (October 1 through September 30) in which the maximum and minimum discharges occurred are listed with the respective values, and the standard deviation and coefficient of variation of the monthly and annual mean discharges are listed with the respective values. Also, the percentage of the annual discharge represented by each monthly mean discharge is listed in the table.

Each of the statistics is explained in the following paragraphs. Each monthly value is the mean of the daily values for the month. Months or years for which all daily values are not available are not included in the compilation of statistics.

The maximum monthly mean discharge is the maximum value of all the monthly mean values. Similarly, the minimum monthly mean discharge is the minimum value of all the monthly mean values. The maximum and minimum monthly mean values can be found in the statistics of monthly and annual mean discharges table or by searching the monthly and annual mean discharges table.

The mean monthly discharge is the mean of all the monthly mean discharges for a given month, and the standard deviation is a measure of the variability of the values. Except for rounding, the monthly mean discharge for October (mean of the mean monthly values) is the same as the mean of all October daily values for the period of record used. However, the standard deviation obtained using monthly values is smaller than the standard deviation obtained using all daily values because the monthly values have less variability than the daily values.

The coefficient of variation is the ratio of the standard deviation to the mean. Because monthly mean discharges are generally greater in spring than in winter, the standard deviations also are generally greater in spring than in winter. However, dividing the standard deviation by the mean monthly discharge tends to equalize the measures for all months.

The percentage of the annual discharge is the percentage that occurred during that month. It is calculated by dividing the mean discharge for the month by the total of the 12 monthly mean discharges and multiplying by 100. Because of rounding of the monthly percentage, the sum of the 12 percentages may not equal 100 percent

The maximum, minimum, and mean annual discharges are selected or computed from the annual mean discharges for the period of record. The water years of occurrence of the maximum and minimum values are listed with the respective values, and the standard deviation of the mean of the annual mean values is listed with the mean value.

Monthly and Annual Flow Durations

The monthly and annual flow duration table is a magnitude and frequency analysis of daily discharge values. The table is computed by tabulating the number of daily discharge values that fall within preselected class limits, computing the percentage of values within each class, and interpolating discharge values for the percentages shown in the table. Monthly values are calculated from daily values in all complete months in the record, and annual figures are calculated for all complete water years.

Probability of Occurrence of High or Low Discharges

The probability of discharge occurrence is an estimate of the likelihood that a particular discharge in a stream will be equaled or exceeded during a year or, in the case of low flows, the likelihood that the discharge will not be equaled or exceeded during a year. The probability of occurrence of a high flow is called the exceedance probability, and the probability of occurrence of low flow is called the nonexceedance probability.

Recurrence interval is another way of expressing annual probability; it is the reciprocal of the probability of occurrence. The recurrence interval for an exceedance probability of 0.20 is 5 years (1 divided by 0.20).

The table of probability of annual high discharges for each streamgaging station lists the maximum instantaneous discharge and the maximum mean discharge for 3, 7, 15, and 30 consecutive-day periods for selected exceedance probabilities and recurrence intervals. Values for the maximum instantaneous discharge are computed from the streamflow record according to the Hydrology Subcommittee of the Interagency Advisory Committee on Water Data (1982). No adjustments are made for length of record, and a station skew instead of

a regional skew was used in the computations. Values for the maximum mean discharges for 3, 7, 15, and 30 consecutive-day periods are computed from the annual high mean daily values of the corresponding periods. The computations are based on the log-Pearson Type III distribution using values obtained for the water year.

The table of probability of annual low discharges for each streamgaging station lists the minimum mean discharge for 1, 3, 7, 14, 30, 60, 90, 120, and 183 consecutive-day periods for selected nonexceedance probabilities and recurrence intervals. Values for the minimum mean discharges are computed from the annual low discharge values of the corresponding periods using the log-Pearson Type III distribution. Probabilities of annual low discharges are computed using values obtained for the climatic year (April 1 through March 31).

Annual Peak Discharges and Corresponding Gage Heights

These values are the greatest instantaneous discharge recorded during each year and water level recorded at the time of the greatest discharge.

Monthly and Annual Mean Discharges

These values are the average discharges determined for each month and each year for each station.

Data Considerations

All streamgage data presented in this report have been reviewed by USGS personnel for consistency and possible errors, but the data are provisional and subject to change. The possibility remains that other inconsistencies or errors may remain in the data for any streamgaging station. If other inconsistencies or errors are discovered, they will be addressed accordingly.

At many streamgaging stations, the first and last water years of record may have large periods that are incomplete. As a result, stations with streamflow records that do not begin on October 1 of a year and end on September 30 of a year may have streamflow statistics that do not accurately represent an entire water year. Of course, other years of a station's record may have incomplete periods as well.

The reliability of statistical data is related to the length of record for a stream. The Hydrology Subcommittee of the Interagency Advisory Committee on Water Data (1982) recommends that at least 10 years of record be used for computing flood frequency estimates; however, the record length for streamgaging stations in Afghanistan varies substantially. The 10-year requirement was relaxed so all statistics could be computed for as many streamgaging stations as possible. Subsequently, extreme high or low flows may be included in the streamflow record of one streamgaging station and not in another, resulting in inconsistencies in the streamflow statistics when comparing data from different stations. Differences in statistical data for possible pre- and post-regulation periods were not addressed in this report.

Annual low discharges that occur in any given year are sensitive to natural-channel processes, such as evapotranspiration, and human-induced hydrologic modifications, such as the operation of many small water-storage reservoirs; the effects of surface-water withdrawal for agricultural, municipal, and industrial use; and the effects of return flow to the river.

Summary

Preliminary hydrologic evaluation are needed to determine water-resource priorities in all areas of Afghanistan for water supplies, irrigation, flood control, and hydropower production. Summaries of streamflow characteristics for all historical streamgaging stations in southeastern Afghanistan that have available data are presented. Information presented for each streamgaging station include a station desciption, table of statistics of monthly and annual mean discharges, table of monthly and annual flow duration, table of probability of occurrence of annual high discharges, table of probability of occurrence of annual low discharges, table of annual peak discharge and corresponding gage height for the period of record, and table of monthly and annual mean discharges for the period of record.

All data presented in the report have been reviewed by USGS personnel for consistency and possible errors; however, the data are provisional and subject to change. Also, the reliability of statistical data for a streamgaging station is related to the length of record at the gage. Although it is recommended that at least 10 years of record be used for computing flood frequency estimates, the 10-year requirement was relaxed so all statiatics could be computed for as many streamgaging stations as possible.

Selected References

Hydrology Subcommittee of the Interagency Advisory Committee on Water Data, 1982, Guidelines for determining flood flow frequency: Hydrology Subcommittee Bulletin 17B, 28 p., 14 appendices.

Streamflow Statistics

4–1.L00–9A ARGHANDAB RIVER AT SANG-I-MASHA*

(U.S. Geological Survey identification number: 330800067280000)

LOCATION: Lat 33º08’N., long 67º28’E.

DRAINAGE AREA: 2,155 km^2.

ALTITUDE: 2,302 meters plus mean sea level.

PERIOD OF RECORD: June 22, 1969 to September 30, 1980 (incomplete year)*.

GAGE: --

4–1.L00–9A ARGHANDAB RIVER AT SANG-I-MASHA—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	8.92	1980	2.59	1972	4.90	1.80	0.37	4.60
November	10.4	1980	3.77	1972	6.12	2.19	0.36	5.74
December	10.3	1980	4.25	1971	6.10	1.84	0.30	5.72
January	9.54	1980	3.78	1971	5.87	1.80	0.31	5.51
February	10.2	1980	3.84	1971	6.15	1.89	0.31	5.77
March	20.2	1973	5.54	1971	12.0	4.41	0.37	11.2
April	59.4	1980	5.97	1971	29.3	15.4	0.53	27.5
May	58.9	1976	2.11	1971	15.3	9.30	0.61	14.3
June	10.1	1980	0.775	1971	5.57	3.09	0.56	5.23
July	17.0	1976	0.632	1971	6.33	5.34	0.84	5.95
August	11.6	1976	1.80	1971	4.95	2.99	0.60	4.65
September	7.50	1976	1.15	1971	3.98	1.93	0.48	3.73
Annual	15.1	1980	3.16	1971	8.89	3.33	0.37	100

4–1.L00–9A ARGHANDAB RIVER AT SANG-I-MASHA—Continued

Monthly and annual flow duration, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	3.74	3.71	4.57	6.53	2.42	0.71	0.62	1.26	1.29	2.77	3.49	4.13	1.92
90	3.86	3.83	5.70	12.9	3.72	1.63	1.06	1.76	1.71	2.89	3.92	4.31	2.68
85	4.05	4.11	6.51	15.0	5.19	2.44	1.83	1.96	2.15	3.29	4.05	4.35	3.19
80	4.14	4.29	6.74	16.2	5.82	2.79	2.06	2.44	2.47	3.52	4.21	4.39	3.72
75	4.21	4.60	6.96	17.2	6.47	3.03	2.39	2.55	2.68	3.73	4.38	4.54	4.04
70	4.44	4.90	7.66	18.7	7.35	3.20	2.83	2.65	2.83	3.86	4.45	4.60	4.37
65	4.90	5.27	8.01	19.9	9.13	3.74	3.29	2.99	3.01	3.96	4.53	4.66	4.71
60	5.22	5.58	8.45	20.9	10.4	4.10	3.67	3.27	3.18	4.09	4.96	4.84	5.05
55	5.29	5.76	9.10	22.3	11.6	4.52	3.87	3.56	3.30	4.23	5.60	5.63	5.44
50	5.57	5.98	9.83	24.1	13.4	4.99	4.07	3.91	3.42	4.38	5.81	6.13	5.83
45	5.95	6.22	10.6	26.5	14.2	5.41	4.26	4.39	3.90	4.61	6.05	6.28	6.24
40	6.14	6.56	11.3	28.6	15.4	5.96	4.66	4.61	4.10	4.82	6.19	6.36	6.66
35	6.39	6.67	12.1	31.7	17.2	6.55	5.13	4.84	4.42	5.30	6.39	6.50	7.08
30	6.63	6.90	14.3	36.1	19.2	7.09	5.51	5.41	4.87	5.73	6.98	6.81	7.85
25	7.21	7.09	15.4	39.1	22.1	7.73	5.89	5.83	5.17	5.91	7.40	7.21	8.98
20	7.46	7.21	17.2	42.0	24.5	8.34	6.33	6.22	5.47	6.14	8.40	7.34	10.5
15	7.79	7.83	19.5	46.5	27.1	8.99	6.87	6.78	5.85	6.59	8.72	7.82	13.8
10	8.17	8.96	21.2	55.5	31.3	9.79	8.10	9.64	6.45	7.48	9.57	8.39	19.2
5	0	9.82	24.7	66.3	36.9	11.8	19.6	12.9	6.90	9.18	0	0	28.7

4–1.L00–9A ARGHANDAB RIVER AT SANG-I-MASHA—Continued

Probability of occurrence of annual high discharges

[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	4.20	0.800	9.50	[1]4.23	[1]4.13	[1]4.27	[1]4.28
0.95	1.05	10.1	3.10	19.0	9.58	9.24	8.87	8.39
0.90	1.11	15.6	6.00	27.3	14.1	13.4	12.5	11.5
0.80	1.25	25.8	12.2	42.6	21.5	20.1	18.2	16.4
0.50	2	61.9	37.0	106	42.0	37.9	33.2	29.0
0.20	5	133	80.3	286	69.8	60.1	52.3	45.0
0.10	10	190	110	475	85.9	72.0	63.0	54.2
0.04	25	269	148	796	103	84.0	74.2	64.0
0.02	50	332	176	1,090	114	90.9	81.0	70.1
0.01	100	397	203	1,430	123	96.5	86.7	75.3
0.005	200	464	229	1,810	130	101	91.6	79.9
0.002	500	554	263	2,370	ng	ng	ng	ng

[1]Data does not fit log-Pearson Type III curve, use with caution.

4–1.L00–9A ARGHANDAB RIVER AT SANG-I-MASHA—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.456	0.457	0.484	0.510	0.603	0.843	1.04	1.22	1.66
0.10	10	0.692	0.697	0.732	0.769	0.901	1.20	1.43	1.64	2.12
0.20	5	1.10	1.11	1.15	1.20	1.39	1.78	2.04	2.27	2.79
0.50	2	2.30	2.33	2.38	2.47	2.75	3.34	3.65	3.89	4.44

4–1.L00–9A ARGHANDAB RIVER AT SANG-I-MASHA—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1970	15-Apr	--	23.0	1976	23-Jul	--	216
1971	15-Apr	--	7.98	1977	30-Jun	--	46.1
1972	27-Apr	--	46.5	1978	5-Jul	--	220
1973	20-Jul	--	111	1979	6-Aug	--	83.0
1974	28-Mar	--	26.9	1980	19-Apr	--	81.0
1975	3-Apr	--	57.6				
Annual peak discharge, from highest to lowest							
1978	5-Jul	--	220	1972	27-Apr	--	46.5
1976	23-Jul	--	216	1977	30-Jun	--	46.1
1973	20-Jul	--	111	1974	28-Mar	--	26.9
1979	6-Aug	--	83.0	1970	15-Apr	--	23.0
1980	19-Apr	--	81.0	1971	15-Apr	--	7.98
1975	3-Apr	--	57.6				

4–1.L00–9A ARGHANDAB RIVER AT SANG-I-MASHA—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1969	--	--	--	--	--	--	--	--	--	4.09	4.03	4.17	--
1970	5.94	7.95	5.11	5.19	5.76	9.51	16.92	8.37	3.19	2.16	2.58	2.46	6.25
1971	3.95	4.2	4.25	3.78	3.84	5.54	5.97	2.11	0.775	0.632	1.8	1.15	3.16
1972	2.59	3.77	4.39	4.1	3.98	9.65	24.99	20.74	7.06	4	3.24	3.39	7.66
1973	4.4	5.24	6.34	6.26	7.79	20.24	33.44	13.6	5.33	9.73	5.09	4.91	10.19
1974	5.84	6.76	7.58	7.85	6.67	13.95	19.75	8.62	2.6	2.36	2.45	2.71	7.26
1975	3.81	4.15	4.59	4.17	4.37	14.04	40.25	26.03	8.84	5.4	4.91	3.67	10.36
1976	4.57	6.05	6.24	5.93	6.32	10.41	42.02	28.93	6.27	16.99	11.63	7.5	12.75
1977	6.63	8.94	7.44	7.27	7.48	10.14	16.53	6.57	3.38	2.21	2.47	2.78	6.8
1978	3.18	4.12	4.48	4.47	5.16	9.81	22.01	8.4	4.01	16.06	6.15	2.4	7.53
1979	4.1	5.72	6.38	6.02	5.99	9.35	41.37	17.81	9.69	6.27	9.41	6.84	10.73
1980	8.92	10.37	10.27	9.54	10.24	18.86	59.36	26.89	10.1	6.1	5.62	5.72	15.12

2–5.000–8A SHUMAL RIVER AT DOMANDI*

(U.S. Geological Survey identification number: 331700069350000)

LOCATION: Lat 33º17’, long 69º35’.

DRAINAGE AREA: 750 km^2.

ALTITUDE: 1,495 meters plus mean sea level.

PERIOD OF RECORD: February 7, 1963 to July 24, 1965 (incomplete year)*.

GAGE: --

2–5.000–8A SHUMAL RIVER AT DOMANDI—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second; --, no data]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	0.984	1964	0.485	1965	0.73	0.35	0.48	2.50
November	0.820	1964	0.441	1965	0.63	0.27	0.43	2.15
December	0.887	1964	0.656	1965	0.77	0.16	0.21	2.63
January	1.28	1965	0.703	1964	0.99	0.41	0.41	3.37
February	1.86	1965	1.13	1964	1.50	0.52	0.35	5.09
March	2.64	1964	1.44	1963	2.03	0.60	0.30	6.90
April	19.3	1965	1.91	1964	8.57	9.38	1.09	29.2
May	13.8	1965	2.08	1964	6.70	6.24	0.93	22.8
June	4.74	1965	2.44	1964	3.34	1.23	0.37	11.4
July	2.52	1963	1.85	1964	2.18	0.47	0.22	7.44
August	1.19	1963	1.17	1964	1.18	0.01	0.01	4.02
September	0.782	1964	0.735	1963	0.76	0.03	0.04	2.58
Annual	1.45	1964	--	--	1.45	--	--	100

2–5.000–8A SHUMAL RIVER AT DOMANDI—Continued

Monthly and annual flow duration, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.49	0.34	1.22	0.32	1.30	1.67	0.98	0.27	0.34	0.36	0.34	0.38	0.50
90	0.51	0.42	1.30	1.07	1.60	1.92	1.29	0.35	0.42	0.37	0.38	0.40	0.64
85	0.60	0.91	1.32	1.63	1.88	1.99	1.42	0.50	0.61	0.38	0.40	0.51	0.71
80	0.62	0.98	1.39	2.51	2.42	2.19	1.59	0.59	0.69	0.41	0.41	0.62	0.75
75	0.70	1.13	1.43	2.72	2.53	2.38	1.73	0.63	0.70	0.42	0.41	0.71	0.78
70	0.72	1.30	1.56	2.92	2.82	2.62	1.84	0.74	0.79	0.50	0.49	0.79	0.82
65	0.79	1.34	1.59	3.08	3.43	2.73	1.99	0.79	0.79	0.60	0.50	0.79	0.87
60	0.82	1.36	1.62	3.24	3.63	2.80	2.13	0.83	0.80	0.62	0.50	0.80	0.95
55	0.87	1.38	1.77	3.41	3.75	2.88	2.23	0.99	0.80	0.70	0.51	0.80	1.02
50	0.89	1.40	1.96	4.25	3.86	3.00	2.32	1.08	0.80	0.71	0.61	0.80	1.10
45	0.90	1.42	2.17	4.62	3.97	3.15	2.40	1.18	0.81	0.81	0.72	0.80	1.18
40	0.97	1.56	2.23	4.99	4.53	3.26	2.47	1.30	0.81	0.91	0	0.81	1.46
35	1.00	1.73	2.38	5.35	5.00	3.47	2.54	1.36	0.81	0.93	0	0.89	1.62
30	1.08	1.76	2.52	5.71	5.91	3.67	2.60	1.45	0.81	0	0	0.90	1.95
25	1.19	1.79	2.55	6.39	10.1	3.82	2.64	1.59	0.82	0	0	0.90	2.21
20	1.34	1.82	2.57	8.48	13.8	4.91	2.69	1.71	0.82	0	0	0.90	2.41
15	1.40	2.03	2.72	12.2	15.3	5.32	2.73	1.91	0.91	0	0	0.91	2.56
10	1.64	0	2.90	28.2	17.8	5.49	2.77	2.21	0.93	0	0	0	2.72
5	2.06	0	2.97	44.0	19.5	5.61	2.97	2.52	0	0	0	0	3.02

2–5.000–8A SHUMAL RIVER AT DOMANDI—Continued

Probability of occurrence of annual high discharges

[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous[1] (m^3/s)	95 percent confidence limits[1]		Maximum mean discharge[1] (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	ng	ng	ng	ng	ng	ng	ng
0.95	1.05	ng	ng	ng	ng	ng	ng	ng
0.90	1.11	ng	ng	ng	ng	ng	ng	ng
0.80	1.25	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng
0.04	25	ng	ng	ng	ng	ng	ng	ng
0.02	50	ng	ng	ng	ng	ng	ng	ng
0.01	100	ng	ng	ng	ng	ng	ng	ng
0.005	200	ng	ng	ng	ng	ng	ng	ng
0.002	500	ng	ng	ng	ng	ng	ng	ng

[1]Only 3 years of data.

2–5.000–8A SHUMAL RIVER AT DOMANDI—Continued
Probability of occurrence of annual low discharges
[m³/s, cubic meters per second; ng, statistic not given]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge[1] (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng	ng

[1]Only 3 years of data.

2–5.000–8A SHUMAL RIVER AT DOMANDI—Continued
Annual peak discharge and corresponding gage height
[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1963	11-May	--	35.2	1965	22-Apr	--	63.0
1964	21-Aug	--	36.9				
Annual peak discharge, from highest to lowest							
1965	22-Apr	--	63.0	1963	11-May	--	35.2
1964	21-Aug	--	36.9				

2–5.000–8A SHUMAL RIVER AT DOMANDI—Continued
Monthly and annual mean discharges, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1963	--	--	--	--	--	1.44	4.5	4.21	2.85	2.52	1.19	0.735	--
1964	0.984	0.82	0.887	0.703	1.13	2.64	1.91	2.08	2.44	1.85	1.17	0.782	1.45
1965	0.485	0.441	0.656	1.28	1.86	2	19.3	13.8	4.74	--	--	--	--

2–5.8R0–1A SPERA RIVER NEAR SPERA*

(U.S. Geological Survey identification number: 331700069360000)

LOCATION: Lat 33º17’, long 69º36’.

DRAINAGE AREA: 755 km^2.

ALTITUDE: 1,500 meters plus mean sea level.

PERIOD OF RECORD: April 17, 1967 to February 15, 1979 (incomplete year)*.

GAGE: --

2–5.8R0–1A SPERA RIVER NEAR SPERA—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	0.680	1979	0.061	1972	0.33	0.18	0.56	2.55
November	0.667	1979	0.135	1972	0.39	0.18	0.46	3.02
December	0.584	1969	0.172	1972	0.36	0.14	0.38	2.78
January	0.744	1968	0.140	1971	0.35	0.17	0.50	2.70
February	1.60	1973	0.138	1970	0.69	0.43	0.63	5.30
March	4.87	1968	0.458	1971	2.27	1.55	0.68	17.6
April	9.19	1976	0.242	1971	3.11	2.69	0.86	24.0
May	7.17	1972	0.067	1970	2.19	2.33	1.07	16.9
June	2.22	1972	0.058	1971	0.80	0.86	1.07	6.21
July	6.32	1973	0.101	1969	1.19	1.74	1.46	9.21
August	3.94	1973	0.081	1970	0.87	1.08	1.24	6.70
September	1.24	1978	0.085	1969	0.40	0.30	0.76	3.06
Annual	1.93	1972	0.206	1971	1.03	0.66	0.64	100

2–5.8R0–1A SPERA RIVER NEAR SPERA—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.12	0.14	0.39	0.22	0.05	0.02	0.06	0.03	0.05	0.07	0.11	0.13	0.07
90	0.14	0.18	0.55	0.31	0.10	0.06	0.12	0.06	0.09	0.10	0.15	0.16	0.12
85	0.17	0.19	0.62	0.38	0.19	0.08	0.17	0.09	0.11	0.14	0.17	0.19	0.16
80	0.20	0.25	0.67	0.50	0.24	0.10	0.21	0.12	0.18	0.20	0.20	0.23	0.20
75	0.23	0.30	0.73	0.74	0.30	0.11	0.25	0.15	0.19	0.22	0.23	0.26	0.23
70	0.24	0.33	0.89	1.03	0.42	0.17	0.29	0.20	0.20	0.24	0.24	0.28	0.25
65	0.25	0.36	0.99	1.50	0.56	0.20	0.32	0.27	0.24	0.25	0.26	0.30	0.29
60	0.28	0.39	1.09	1.99	0.70	0.22	0.35	0.33	0.27	0.26	0.27	0.32	0.32
55	0.29	0.42	1.41	2.40	1.01	0.25	0.40	0.37	0.29	0.27	0.30	0.33	0.36
50	0.30	0.52	1.77	2.71	1.29	0.32	0.47	0.42	0.30	0.29	0.37	0.35	0.40
45	0.33	0.59	1.97	2.97	1.54	0.49	0.59	0.48	0.32	0.32	0.42	0.38	0.46
40	0.35	0.64	2.18	3.21	1.86	0.59	0.71	0.55	0.35	0.35	0.45	0.39	0.52
35	0.38	0.67	2.43	3.44	2.36	0.78	0.83	0.64	0.38	0.38	0.48	0.41	0.61
30	0.40	0.70	2.75	3.66	2.78	1.03	0.97	0.75	0.45	0.40	0.51	0.43	0.72
25	0.43	0.75	3.13	4.33	3.32	1.15	1.11	0.89	0.50	0.42	0.54	0.46	0.92
20	0.49	0.84	3.55	4.87	3.98	1.37	1.26	1.02	0.54	0.48	0.58	0.48	1.24
15	0.59	0.95	4.30	5.42	4.58	1.96	1.53	1.13	0.62	0.52	0.63	0.50	1.87
10	0.66	1.28	4.98	6.25	5.38	2.36	1.97	1.41	0.82	0.57	0.68	0.55	2.83
5	0.75	1.89	6.91	7.78	6.99	2.90	5.05	2.53	1.11	0.70	0.73	0.63	4.38

2–5.8R0–1A SPERA RIVER NEAR SPERA—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	2.70	0.50	6.70	0.312	0.205	0.194	0.177
0.95	1.05	7.80	2.30	15.4	0.806	0.567	0.520	0.457
0.90	1.11	12.9	4.70	23.4	1.30	0.940	0.844	0.729
0.80	1.25	22.9	10.5	38.9	2.27	1.67	1.46	1.24
0.50	2	60.9	35.5	108	6.08	4.56	3.76	3.09
0.20	5	139	81.4	309	14.8	10.9	8.43	6.76
0.10	10	202	114	521	22.8	16.5	12.2	9.68
0.04	25	290	154	872	35.1	24.6	17.5	13.7
0.02	50	358	184	1,180	45.7	31.3	21.7	16.9
0.01	100	427	212	1,530	57.4	38.3	25.9	20.1
0.005	200	497	239	1,920	70.2	45.7	30.2	23.3
0.002	500	588	273	2,460	ng	ng	ng	ng

2–5.8R0–1A SPERA RIVER NEAR SPERA—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.006	0.007	0.010	0.012	0.019	0.048	0.077	0.087	0.122
0.10	10	0.010	0.011	0.016	0.021	0.032	0.067	0.099	0.110	0.149
0.20	5	0.017	0.019	0.027	0.038	0.056	0.098	0.132	0.146	0.188
0.50	2	0.047	0.054	0.068	0.099	0.134	0.182	0.218	0.235	0.281

2–5.8R0–1A SPERA RIVER NEAR SPERA—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1967	8-Aug	--	16.8	1973	8-Aug	--	160
1968	10-Aug	--	47.1	1974	25-Sep	--	150
1969	9-May	--	31.5	1975	24-Apr	--	68.9
1970	24-Jul	--	9.80	1976	12-Aug	--	150
1971	1-Aug	--	9.46	1977	9-May	--	56.0
1972	5-May	--	150	1978	21-Aug	--	150
Annual peak discharge, from highest to lowest							
1973	8-Aug	--	160	1977	9-May	--	56.0
1972	5-May	--	150	1968	10-Aug	--	47.1
1974	25-Sep	--	150	1969	9-May	--	31.5
1976	12-Aug	--	150	1967	8-Aug	--	16.8
1978	21-Aug	--	150	1970	24-Jul	--	9.80
1975	24-Apr	--	68.9	1971	1-Aug	--	9.46

2–5.8R0–1A SPERA RIVER NEAR SPERA—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1967	--	--	--	--	--	--	--	5.94	2.19	1.14	0.987	0.509	--
1968	0.632	0.519	0.569	0.744	0.789	4.87	3.5	2.32	0.834	0.744	0.538	0.254	1.36
1969	0.335	0.508	0.584	0.449	0.54	0.933	0.768	0.682	0.138	0.101	0.104	0.085	0.435
1970	0.125	0.483	0.225	0.179	0.138	0.725	0.418	0.067	0.06	0.279	0.081	0.237	0.252
1971	0.319	0.136	0.197	0.14	0.223	0.458	0.242	0.125	0.058	0.266	0.143	0.157	0.206
1972	0.061	0.135	0.172	0.191	0.283	4.02	6.05	7.17	2.22	1.84	0.645	0.335	1.93
1973	0.37	0.25	0.345	0.513	1.6	3.06	2.65	1.7	0.644	6.32	3.94	0.525	1.84
1974	0.438	0.514	0.366	0.237	0.783	2.51	1.64	1.11	0.258	0.246	0.163	0.183	0.704
1975	0.199	0.203	0.342	0.272	0.682	2.42	4.41	2.55	0.648	0.379	1.09	0.358	1.13
1976	0.285	0.289	0.392	0.394	0.706	3.95	9.19	3.67	2.12	0.68	0.774	0.461	1.9
1977	0.246	0.579	0.447	0.267	0.56	0.634	1.88	0.236	0.141	0.256	0.311	0.417	0.495
1978	0.274	0.418	0.24	0.471	1.25	1.44	3.48	0.66	0.343	2.06	1.63	1.24	1.12
1979	0.68	0.667	0.448	0.341	--	--	--	--	--	--	--	--	--

3–4.L00–2A JILGA RIVER BELOW SARDE RESERVOIR*

(U.S. Geological Survey identification number: 331800068370000)

LOCATION: Lat 33º18’N., long 68º37’E.

DRAINAGE AREA: 4,340 km^2.

ALTITUDE: 2,086 meters plus mean sea level.

PERIOD OF RECORD: April 8, 1969 to September 30, 1979 (incomplete year)*.

GAGE: --

3–4.L00–2A JILGA RIVER BELOW SARDE RESERVOIR—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	0.393	1977	0.039	1972	0.22	0.11	0.51	2.05
November	0.324	1977	0.070	1970	0.21	0.09	0.44	1.93
December	0.320	1977	0.067	1972	0.21	0.09	0.42	1.92
January	0.301	1979	0.050	1972	0.21	0.09	0.44	1.94
February	0.786	1973	0.074	1972	0.28	0.21	0.72	2.67
March	18.5	1973	0.191	1972	2.59	5.74	2.22	24.3
April	21.9	1976	0.210	1971	4.04	7.09	1.76	37.8
May	7.98	1972	0.104	1971	1.56	2.45	1.57	14.6
June	1.47	1972	0.108	1971	0.50	0.39	0.79	4.65
July	0.675	1973	0.108	1971	0.36	0.19	0.51	3.39
August	0.477	1974	0.052	1971	0.27	0.14	0.49	2.58
September	0.361	1976	0.100	1970	0.23	0.10	0.41	2.20
Annual	2.90	1973	0.115	1971	0.90	0.97	1.07	100

3–4.L00–2A JILGA RIVER BELOW SARDE RESERVOIR—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.05	0.07	0.14	0.16	0.11	0.11	0.11	0.07	0.03	0.04	0.05	0.07	0.08
90	0.10	0.10	0.16	0.27	0.19	0.13	0.14	0.10	0.10	0.07	0.08	0.08	0.10
85	0.10	0.11	0.18	0.31	0.24	0.20	0.17	0.12	0.10	0.10	0.10	0.10	0.12
80	0.11	0.11	0.19	0.34	0.30	0.24	0.19	0.13	0.11	0.11	0.11	0.11	0.16
75	0.11	0.14	0.21	0.36	0.33	0.26	0.20	0.18	0.13	0.13	0.13	0.13	0.18
70	0.17	0.17	0.22	0.38	0.35	0.30	0.23	0.22	0.20	0.14	0.14	0.14	0.21
65	0.19	0.19	0.24	0.40	0.37	0.31	0.26	0.23	0.21	0.17	0.18	0.20	0.22
60	0.20	0.21	0.26	0.42	0.39	0.32	0.30	0.24	0.22	0.20	0.20	0.21	0.24
55	0.23	0.22	0.29	0.44	0.41	0.32	0.31	0.25	0.24	0.21	0.20	0.21	0.26
50	0.24	0.23	0.32	0.49	0.44	0.36	0.32	0.29	0.25	0.24	0.21	0.21	0.28
45	0.24	0.26	0.34	0.55	0.48	0.38	0.32	0.30	0.26	0.25	0.22	0.22	0.30
40	0.25	0.30	0.37	0.62	0.53	0.39	0.36	0.31	0.27	0.25	0.25	0.22	0.32
35	0.26	0.31	0.40	0.75	0.58	0.42	0.37	0.32	0.27	0.26	0.26	0.24	0.34
30	0.27	0.32	0.45	0.89	0.79	0.48	0.38	0.33	0.28	0.30	0.27	0.25	0.36
25	0.29	0.33	0.69	1.11	0.91	0.58	0.39	0.37	0.32	0.31	0.28	0.27	0.40
20	0.30	0.34	1.31	2.12	1.00	0.73	0.50	0.38	0.33	0.32	0.31	0.28	0.44
15	0.31	0.36	1.77	4.20	1.19	0.94	0.62	0.45	0.34	0.32	0	0.31	0.50
10	0	0.38	11.40	11.30	1.70	0.98	0.65	0.48	0.36	0.33	0	0.32	0.73
5	0	0.40	17.6	14.5	4.64	1.48	0.83	0.51	0.38	0	0	0.33	1.48

3–4.L00–2A JILGA RIVER BELOW SARDE RESERVOIR—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge[1] (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	0.100	0	0.400	[1]0.109	0.089	0.079	0.075
0.95	1.05	0.400	0.100	1.20	0.270	0.229	0.207	0.184
0.90	1.11	0.800	0.200	2.10	0.458	0.395	0.356	0.305
0.80	1.25	1.80	0.500	4.20	0.902	0.795	0.709	0.579
0.50	2	7.60	3.20	18.6	3.74	0.345	2.91	2.13
0.20	5	29.5	12.6	107	18.4	17.8	13.6	8.72
0.10	10	57.9	22.9	282	45.6	45.0	31.9	19.0
0.04	25	116	40.9	790	[1]126	[1]128	82.9	45.2
0.02	50	180	58.2	1,530	[1]252	[1]260	157	80.7
0.01	100	264	79.0	2,740	[1]478	[1]501	[1]283	137
0.005	200	373	104	4,640	[1]874	[1]930	[1]492	226
0.002	500	561	142	8,690	ng	ng	ng	ng

[1]Data does not fit log-Pearson Type III curve, use with caution.

3–4.L00–2A JILGA RIVER BELOW SARDE RESERVOIR—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.015	0.016	0.017	0.021	0.032	0.040	0.046	0.059	0.061
0.10	10	0.032	0.034	0.035	0.042	0.055	0.065	0.073	0.087	0.090
0.20	5	0.064	0.069	0.072	0.080	0.095	0.106	0.115	0.130	0.132
0.50	2	0.161	0.168	0.176	0.183	0.193	0.204	0.214	0.224	0.229

3–4.L00–2A JILGA RIVER BELOW SARDE RESERVOIR—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1969	25-Sep	--	2.50	1975	16-May	--	5.82
1970	29-Apr	--	1.37	1976	25-Apr	--	96.9
1971	7-Apr	--	0.38	1977	14-Mar	--	1.65
1972	6-May	--	28.1	1978	19-Aug	--	33.0
1973	6-Mar	--	26.9	1979	2-Apr	--	7.15
1974	24-Mar	--	11.8				
Annual peak discharge, from highest to lowest							
1976	25-Apr	--	96.9	1975	16-May	--	5.82
1978	19-Aug	--	33.0	1969	25-Sep	--	2.50
1972	6-May	--	28.1	1977	14-Mar	--	1.65
1973	6-Mar	--	26.9	1970	29-Apr	--	1.37
1974	24-Mar	--	11.8	1971	7-Apr	--	0.38
1979	2-Apr	--	7.15				

3–4.L00–2A JILGA RIVER BELOW SARDE RESERVOIR—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1969	--	--	--	--	--	--	--	0.709	0.335	0.157	0.129	0.22	--
1970	0.102	0.07	0.094	0.11	0.19	0.24	0.505	0.91	0.432	0.22	0.138	0.1	0.26
1971	0.112	0.118	0.124	0.1	0.1	0.219	0.21	0.104	0.108	0.108	0.052	0.023	0.115
1972	0.039	0.089	0.067	0.05	0.074	0.191	0.729	7.98	1.47	0.555	0.421	0.314	1.01
1973	0.218	0.282	0.259	0.247	0.786	18.5	11.1	1.04	0.98	0.675	0.274	0.25	2.9
1974	0.25	0.207	0.2	0.252	0.388	4.45	2.53	0.412	0.524	0.619	0.477	0.262	0.885
1975	0.253	0.217	0.29	0.283	0.229	0.235	0.303	0.319	0.28	0.296	0.353	0.223	0.274
1976	0.178	0.18	0.21	0.193	0.131	0.229	21.9	4.45	0.332	0.341	0.334	0.361	2.38
1977	0.393	0.324	0.32	0.31	0.323	1.17	0.393	0.413	0.387	0.329	0.231	0.29	0.408
1978	0.32	0.282	0.216	0.228	0.311	0.408	0.667	0.327	0.26	0.407	0.402	0.275	0.342
1979	0.32	0.287	0.27	0.301	0.315	0.267	2.02	0.452	0.352	0.274	0.213	0.264	0.443

2–5.000–2A SHUMAL RIVER AT TORA TIGHA*

(U.S. Geological Survey identification number: 332200070100000)

LOCATION: Lat 33º22’, long 70º10’.

DRAINAGE AREA: 4,220 km^2.

ALTITUDE: 987 meters plus mean sea level.

PERIOD OF RECORD: November 4, 1969 to September 30, 1978 (incomplete year)*.

GAGE: --

2–5.000–2A SHUMAL RIVER AT TORA TIGHA—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	3.63	1978	0.518	1973	1.80	1.14	0.63	4.52
November	2.36	1976	1.15	1973	1.63	0.40	0.25	4.09
December	3.06	1975	1.30	1977	2.25	0.56	0.25	5.65
January	3.89	1974	1.20	1977	2.91	0.81	0.28	7.29
February	5.21	1978	1.10	1977	3.76	1.23	0.33	9.43
March	15.9	1972	0.998	1977	5.53	4.63	0.84	13.9
April	21.3	1976	0.731	1970	6.89	6.49	0.94	17.3
May	15.0	1972	0.747	1970	3.66	4.53	1.24	9.17
June	3.61	1974	0.500	1977	1.54	1.09	0.71	3.85
July	15.9	1973	0.835	1977	4.61	4.59	0.99	11.6
August	4.04	1974	1.29	1977	2.65	1.04	0.39	6.65
September	5.19	1974	0.648	1978	2.62	1.78	0.68	6.58
Annual	5.40	1972	1.09	1977	3.44	1.42	0.41	100

2–5.000–2A SHUMAL RIVER AT TORA TIGHA—Continued

Monthly and annual flow duration, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	1.23	1.13	0.80	0.64	0.49	0.10	0.51	0.52	0.32	0.25	0.97	1.28	0.56
90	1.25	1.16	0.99	0.71	0.64	0.43	0.64	0.61	0.44	0.64	1.12	1.31	0.72
85	1.73	2.25	1.04	0.78	0.71	0.49	0.82	0.76	0.49	0.81	1.22	1.34	0.89
80	1.82	2.50	1.09	0.94	0.77	0.52	0.91	0.89	0.54	0.90	1.28	1.45	1.01
75	2.04	2.81	1.28	1.21	0.85	0.55	0.98	1.00	0.69	0.96	1.36	1.63	1.12
70	2.32	3.01	1.99	1.53	0.92	0.58	1.07	1.04	0.82	1.02	1.37	1.94	1.24
65	2.56	3.13	2.62	1.86	1.00	0.64	1.20	1.08	0.87	1.08	1.39	2.04	1.36
60	2.72	3.24	3.05	2.62	1.12	0.72	1.30	1.13	0.93	1.14	1.41	2.20	1.48
55	2.81	3.35	3.63	3.64	1.26	0.82	1.40	1.29	1.06	1.21	1.46	2.25	1.65
50	3.00	3.46	4.45	4.49	1.39	0.92	1.70	1.41	1.23	1.28	1.49	2.29	1.87
45	3.11	3.64	4.86	5.55	1.53	1.04	1.97	1.56	1.37	1.36	1.53	2.36	2.11
40	3.18	3.86	5.24	6.23	1.70	1.16	2.14	1.76	1.55	1.46	1.63	2.43	2.41
35	3.26	4.12	5.63	7.26	1.99	1.29	2.40	1.90	1.77	1.56	1.68	2.50	2.70
30	3.38	4.32	6.04	7.85	2.41	1.45	2.79	2.09	2.05	1.70	1.77	2.55	3.08
25	3.47	4.51	6.54	8.93	3.18	1.61	3.38	2.53	2.35	1.85	1.88	2.63	3.46
20	3.57	4.69	7.13	10.3	4.39	1.79	4.34	3.09	3.02	2.02	2.00	2.77	4.11
15	3.94	5.25	7.88	11.7	5.99	1.97	5.35	3.94	3.64	2.25	2.11	2.93	5.02
10	4.11	5.70	11.0	14.5	7.68	2.29	7.52	4.84	4.70	2.77	2.27	3.18	6.47
5	4.95	6.84	14.9	24.1	10.2	3.13	17.2	7.73	7.63	3.66	2.77	3.56	10.1

2–5.000–2A SHUMAL RIVER AT TORA TIGHA—Continued

Probability of occurrence of annual high discharges

[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous[1] (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	23.6	3.90	52.2	1.06	[2]0.561	[2]0.620	[2]0.627
0.95	1.05	66.5	21.7	114	3.34	1.96	1.68	1.48
0.90	1.11	105	45.3	165	5.79	3.53	2.72	2.26
0.80	1.25	169	92.9	252	10.6	6.66	4.66	3.67
0.50	2	332	221	539	28.9	18.1	11.4	8.39
0.20	5	500	334	956	64.1	38.2	23.6	17.1
0.10	10	569	375	1,160	90.1	51.4	32.4	23.7
0.04	25	622	405	1,330	123	66.3	43.6	32.6
0.02	50	645	418	1,400	147	75.9	51.7	39.4
0.01	100	660	426	1,460	169	84.1	59.3	46.2
0.005	200	669	432	1,490	189	91.1	66.5	52.9
0.002	500	677	436	1,510	ng	ng	ng	ng

[1]Less than 10 years of data used; no low outliers removed.

[2]Data does not fit log-Pearson Type III curve, use with caution.

2–5.000–2A SHUMAL RIVER AT TORA TIGHA—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.009	0.011	0.015	0.036	0.286	0.467	0.583	0.828	0.903
0.10	10	0.024	0.029	0.042	0.093	0.372	0.552	0.690	0.971	1.07
0.20	5	0.068	0.080	0.120	0.232	0.497	0.674	0.848	1.17	1.31
0.50	2	0.307	0.352	0.481	0.702	0.803	0.992	1.26	1.64	1.87

2–5.000–2A SHUMAL RIVER AT TORA TIGHA—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1970	5-Jul	--	370	1975	20-Jun	--	373
1971	27-Apr	--	243	1976	8-Apr	--	141
1972	5-May	--	420	1977	27-Apr	--	55.5
1973	7-Jul	--	550	1978	20-Aug	--	317
1974	25-Sep	--	490				
Annual peak discharge, from highest to lowest							
1973	7-Jul	--	550	1978	20-Aug	--	317
1974	25-Sep	--	490	1971	27-Apr	--	243
1972	5-May	--	420	1976	8-Apr	--	141
1975	20-Jun	--	373	1977	27-Apr	--	55.5
1970	5-Jul	--	370				

2–5.000–2A SHUMAL RIVER AT TORA TIGHA—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1970	--	--	2.17	2.98	3.39	2.92	0.731	0.747	0.633	4.55	2.23	4.51	--
1971	1.38	1.22	1.97	2.14	2.8	1.47	1.27	1.23	1.36	2.51	2.67	1.5	1.79
1972	1.23	1.43	1.66	2.76	4.25	15.9	11.4	15	1.06	4.35	1.44	4.15	5.4
1973	0.518	1.15	2.31	3.39	4.18	4.92	8.23	2.06	1.28	15.9	3.69	3.73	4.29
1974	3.42	1.72	2.68	3.89	3.85	2.24	4.35	3.64	3.61	2.85	4.04	5.19	3.45
1975	1.99	1.79	3.06	3.07	4.13	6.3	7.75	2.52	3.14	1.42	3.12	2.12	3.36
1976	1.11	2.36	2.84	3.28	4.89	7.79	21.3	5.57	1.36	2.47	1.7	0.85	4.6
1977	1.13	1.44	1.3	1.2	1.1	0.998	1.52	0.835	0.5	0.835	1.29	0.883	1.09
1978	3.63	1.93	2.28	3.45	5.21	7.26	5.48	1.3	0.88	6.65	3.66	0.648	3.53

2–5.3L0–2A MATUN RIVER AT MATUN*

(U.S. Geological Survey identification number: 332300069530000)

LOCATION: Lat 33º23’, long 69º53’.

DRAINAGE AREA: 340 km^2.

ALTITUDE: 1,291 meters plus mean sea level.

PERIOD OF RECORD: December 23, 1962 to May 20, 1979 (incomplete year)*.

GAGE: --

2–5.3L0–2A MATUN RIVER AT MATUN—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	0.653	1968	0.041	1977	0.29	0.17	0.57	3.08
November	1.12	1968	0.082	1972	0.31	0.24	0.77	3.32
December	1.56	1968	0.068	1972	0.33	0.35	1.06	3.43
January	1.41	1968	0.100	1971	0.31	0.30	0.97	3.22
February	1.28	1973	0.217	1971	0.56	0.34	0.61	5.90
March	2.44	1968	0.238	1971	1.27	0.82	0.64	13.4
April	4.33	1967	0.160	1971	1.90	1.32	0.69	20.0
May	5.06	1965	0.102	1970	1.68	1.59	0.95	17.7
June	3.54	1965	0.058	1970	0.77	0.87	1.13	8.11
July	1.96	1973	0.042	1969	0.70	0.49	0.70	7.36
August	3.57	1978	0.010	1976	0.83	0.87	1.04	8.79
September	1.32	1970	0.010	1976	0.54	0.34	0.64	5.64
Annual	1.42	1965	0.233	1971	0.77	0.40	0.52	100

2–5.3L0–2A MATUN RIVER AT MATUN—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.11	0.19	0.25	0.16	0.09	0.06	0.04	0.02	0.02	0.06	0.08	0.08	0.06
90	0.14	0.20	0.31	0.26	0.17	0.09	0.06	0.04	0.05	0.09	0.10	0.11	0.10
85	0.16	0.23	0.38	0.41	0.26	0.13	0.12	0.10	0.07	0.11	0.11	0.15	0.14
80	0.17	0.26	0.45	0.47	0.30	0.17	0.18	0.14	0.09	0.13	0.14	0.17	0.18
75	0.19	0.28	0.48	0.54	0.39	0.20	0.22	0.19	0.13	0.15	0.16	0.19	0.21
70	0.19	0.30	0.51	0.91	0.44	0.25	0.29	0.25	0.18	0.17	0.19	0.20	0.24
65	0.20	0.32	0.59	1.13	0.50	0.29	0.34	0.33	0.28	0.20	0.22	0.21	0.27
60	0.21	0.34	0.64	1.34	0.66	0.33	0.39	0.38	0.31	0.21	0.26	0.21	0.29
55	0.21	0.37	0.73	1.51	0.79	0.37	0.43	0.43	0.38	0.25	0.29	0.22	0.32
50	0.23	0.39	0.92	1.67	1.00	0.42	0.49	0.49	0.43	0.28	0.31	0.22	0.38
45	0.24	0.41	1.08	1.82	1.19	0.48	0.55	0.55	0.48	0.31	0.31	0.25	0.43
40	0.25	0.45	1.23	1.98	1.36	0.56	0.65	0.62	0.54	0.34	0.32	0.27	0.49
35	0.26	0.52	1.39	2.14	1.65	0.66	0.75	0.68	0.59	0.36	0.34	0.29	0.56
30	0.27	0.57	1.58	2.36	2.07	0.81	0.88	0.78	0.64	0.38	0.35	0.30	0.68
25	0.29	0.64	1.78	2.60	2.39	1.03	0.99	0.88	0.71	0.40	0.37	0.32	0.85
20	0.30	0.74	2.03	2.85	2.90	1.26	1.09	1.01	0.79	0.43	0.39	0.33	1.08
15	0.31	0.89	2.30	3.16	3.84	1.51	1.24	1.21	0.88	0.46	0.41	0.37	1.40
10	0.44	0.98	2.78	3.73	4.46	1.80	1.47	1.80	1.01	0.52	0.49	0.53	1.90
5	1.07	1.39	3.38	4.86	5.44	2.48	1.89	3.10	1.68	0.59	0.80	1.15	2.88

2–5.3L0–2A MATUN RIVER AT MATUN—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous[1] (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	7.80	3.10	13.1	0.583	0.448	0.345	0.275
0.95	1.05	17.3	9.40	25.0	1.02	0.810	0.653	0.510
0.90	1.11	24.9	15.4	34.0	1.37	1.10	0.904	0.700
0.80	1.25	36.8	25.6	48.3	1.95	1.59	1.32	1.02
0.50	2	66.8	51.1	89.4	3.78	3.15	2.63	2.00
0.20	5	101	76.8	148	7.22	6.07	4.97	3.75
0.10	10	118	88.3	181	10.1	8.46	6.80	5.13
0.04	25	134	98.5	214	14.3	12.0	9.34	7.07
0.02	50	142	104	232	17.9	14.9	11.4	8.64
0.01	100	149	108	246	21.8	18.1	13.5	10.3
0.005	200	154	111	258	26.1	21.6	15.8	12.0
0.002	500	159	114	269	ng	ng	ng	ng

[1]No low outliers removed.

2–5.3L0–2A MATUN RIVER AT MATUN—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.005	0.006	0.008	0.016	0.020	0.023	0.027	0.062	0.123
0.10	10	0.009	0.011	0.014	0.025	0.034	0.042	0.049	0.084	0.147
0.20	5	0.016	0.021	0.026	0.043	0.061	0.077	0.093	0.118	0.184
0.50	2	0.048	0.064	0.076	0.102	0.147	0.181	0.219	[1]0.215	0.286

[1]Data does not fit log-Pearson Type III curve, use with caution.

2–5.3L0–2A MATUN RIVER AT MATUN—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1963	28-Apr	--	94.0	1971	2-Aug	--	60.4
1964	15-Aug	--	38.6	1972	19-Sep	--	50.4
1965	28-Jul	--	97.0	1973	7-Jul	--	94.7
1966	25-Apr	--	64.9	1974	23-Jun	--	80.0
1967	28-Jun	--	91.0	1975	27-Aug	--	113
1968	3-Oct	--	12.6	1976	8-Jun	--	26.4
1969	1-Jul	--	21.9	1977	20-Aug	--	55.9
1970	8-Sep	--	114	1978	20-Aug	--	83.0
Annual peak discharge, from highest to lowest							
1970	8-Sep	--	114	1966	25-Apr	--	64.9
1975	27-Aug	--	113	1971	2-Aug	--	60.4
1965	28-Jul	--	97.0	1977	20-Aug	--	55.9
1973	7-Jul	--	94.7	1972	19-Sep	--	50.4
1963	28-Apr	--	94.0	1964	15-Aug	--	38.6
1967	28-Jun	--	91.0	1976	8-Jun	--	26.4
1978	20-Aug	--	83.0	1969	1-Jul	--	21.9
1974	23-Jun	--	80.0	1968	3-Oct	--	12.6

2–5.3L0–2A MATUN RIVER AT MATUN—Continued

Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1963	--	--	--	0.189	0.259	0.381	2.6	3.36	1.4	1.06	0.823	0.576	--
1964	0.356	0.344	0.276	0.274	0.302	0.548	0.457	0.335	0.253	0.555	0.32	0.425	0.371
1965	0.154	0.154	0.172	0.156	0.27	0.73	4.2	5.06	3.54	1.24	0.705	0.657	1.42
1966	0.369	0.381	0.257	0.238	0.807	2.24	3.35	3.24	1.33	0.654	0.583	0.561	1.17
1967	0.386	0.329	0.186	0.155	0.457	2.33	4.33	4.02	1.55	1.06	0.73	0.544	1.34
1968	0.653	1.12	1.56	1.41	1.07	2.44	1.41	0.559	0.489	0.211	0.315	0.111	0.946
1969	0.329	0.332	0.341	0.269	0.354	0.454	0.533	0.538	0.203	0.042	0.089	0.061	0.295
1970	0.205	0.281	0.213	0.233	0.328	0.761	0.244	0.102	0.058	0.626	0.392	1.32	0.397
1971	0.219	0.1	0.1	0.1	0.217	0.238	0.16	0.322	0.149	0.351	0.716	0.11	0.233
1972	0.093	0.082	0.068	0.192	0.843	2.43	2.05	3.47	0.671	0.827	1.08	0.635	1.04
1973	0.199	0.168	0.533	0.473	1.28	2.12	1.94	1.33	0.372	1.96	1.58	0.792	1.06
1974	0.476	0.331	0.293	0.286	0.386	0.433	0.701	0.315	0.316	0.481	0.222	0.526	0.397
1975	0.112	0.125	0.21	0.212	0.346	1.46	2.19	1.38	0.233	0.374	1.63	0.846	0.762
1976	0.317	0.237	0.241	0.244	0.527	1.54	1.73	1.4	0.768	0.313	0.01	0.01	0.611
1977	0.041	0.318	0.2	0.206	0.4	0.481	1.38	0.497	0.315	0.303	0.587	0.617	0.444
1978	0.248	0.263	0.265	0.252	0.525	1.51	1.65	1.01	0.666	1.12	3.57	0.77	0.993
1979	0.523	0.472	0.29	0.311	1.15	1.53	3.35	--	--	--	--	--	--

3–5.R00–3T SYAHGEL RIVER AT SYAHGEL*

(U.S. Geological Survey identification number: 333100068210000)

LOCATION: Lat 33º31’N., long 68º21’E.

DRAINAGE AREA: 145 km^2.

ALTITUDE: 2,241 meters plus mean sea level.

PERIOD OF RECORD: April 7, 1968 to September 22, 1976 (incomplete year)*.

GAGE: --

3–5.R00–3T SYAHGEL RIVER AT SYAHGEL—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	0.110	1970	0.010	1969	0.04	0.03	0.86	1.43
November	0.220	1973	0.010	1969	0.05	0.07	1.29	2.08
December	0.390	1973	0.034	1969	0.12	0.14	1.11	4.84
January	0.796	1969	0.066	1975	0.29	0.26	0.9	11.2
February	0.960	1969	0.078	1975	0.34	0.29	0.85	13.5
March	0.727	1976	0.154	1970	0.42	0.19	0.45	16.3
April	1.94	1972	0.057	1969	0.57	0.66	1.16	22.3
May	1.07	1968	0.023	1971	0.34	0.38	1.12	13.5
June	0.606	1972	0.012	1970	0.14	0.18	1.30	5.54
July	0.298	1969	0.025	1972	0.10	0.10	0.96	4.02
August	0.410	1969	0.019	1972	0.10	0.12	1.18	4.05
September	0.060	1969	0.012	1970	0.03	0.02	0.49	1.29
Annual	0.364	1972	0.062	1970	0.19	0.11	0.56	100

3–5.R00–3T SYAHGEL RIVER AT SYAHGEL—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.04	0.06	0.07	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02
90	0.06	0.07	0.11	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.02
85	0.07	0.08	0.15	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.02
80	0.08	0.10	0.19	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.04	0.03
75	0.08	0.11	0.23	0.06	0.05	0.03	0.03	0.03	0.03	0.02	0.02	0.04	0.03
70	0.09	0.15	0.25	0.07	0.05	0.04	0.03	0.03	0.03	0.02	0.03	0.04	0.04
65	0.10	0.20	0.28	0.08	0.06	0.04	0.03	0.03	0.03	0.03	0.03	0.05	0.04
60	0.13	0.24	0.34	0.14	0.07	0.05	0.04	0.04	0.03	0.03	0.03	0.05	0.05
55	0.21	0.25	0.38	0.23	0.08	0.05	0.04	0.04	0.03	0.03	0.03	0.06	0.05
50	0.23	0.27	0.40	0.31	0.11	0.06	0.04	0.04	0.03	0.03	0.03	0.06	0.06
45	0.25	0.29	0.42	0.37	0.20	0.06	0.05	0.05	0.03	0.03	0.03	0.07	0.07
40	0.26	0.31	0.45	0.47	0.32	0.07	0.05	0.05	0.04	0.03	0.04	0.07	0.08
35	0.27	0.33	0.47	0.52	0.36	0.09	0.06	0.05	0.04	0.04	0.04	0.09	0.10
30	0.28	0.35	0.52	0.60	0.43	0.11	0.06	0.06	0.04	0.04	0.04	0.11	0.16
25	0.29	0.42	0.57	0.89	0.53	0.12	0.07	0.08	0.04	0.04	0.05	0.13	0.24
20	0.35	0.54	0.61	1.00	0.66	0.16	0.08	0.10	0.05	0.04	0.06	0.20	0.30
15	0.54	0.69	0.67	1.29	0.85	0.22	0.14	0.13	0.05	0.06	0.07	0.34	0.38
10	0.68	0.82	0.82	1.64	0.93	0.30	0.19	0.15	0.07	0.07	0.16	0.37	0.53
5	1	1.09	0.93	1.91	1.24	0.44	0.36	0.66	0.09	0.14	0	0	0.82

3–5.R00–3T SYAHGEL RIVER AT SYAHGEL—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous[1] (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	0.800	0.200	1.50	0.242	0.135	0.124	0.095
0.95	1.05	1.60	0.600	2.60	0.362	0.232	0.213	0.171
0.90	1.11	2.20	1.00	3.40	0.458	0.310	0.283	0.232
0.80	1.25	3.20	1.70	4.70	0.621	0.443	0.400	0.332
0.50	2	5.90	4.00	9.20	1.18	0.879	0.770	0.641
0.20	5	10.1	6.80	19.1	2.45	1.76	1.48	1.19
0.10	10	12.8	8.40	27.5	3.70	2.55	2.07	1.63
0.04	25	16.0	10.1	39.2	5.92	3.78	2.97	2.24
0.02	50	18.3	11.3	48.4	8.14	4.89	3.74	2.74
0.01	100	20.4	12.3	57.7	11.0	6.16	4.60	3.28
0.005	200	22.4	13.2	67.0	14.5	7.62	5.57	3.85
0.002	500	24.8	14.3	79.3	ng	ng	ng	ng

[1]Less than 10 years of data used.

3–5.R00–3T SYAHGEL RIVER AT SYAHGEL—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.007	0.007	0.009	0.010	0.010	0.015	0.015	0.017	0.022
0.10	10	0.008	0.008	0.010	0.012	0.012	0.016	0.016	0.019	0.025
0.20	5	0.010	0.010	0.011	0.014	0.015	0.017	0.018	0.021	0.031
0.50	2	0.013	0.013	0.015	0.018	0.021	0.022	0.024	0.027	0.046

3–5.R00–3T SYAHGEL RIVER AT SYAHGEL—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1968	19-May	--	2.58	1973	7-Aug	--	5.20
1969	9-May	--	3.00	1974	12-May	--	10.0
1970	7-Jul	--	6.60	1975	11-Aug	--	12.0
1971	4-Jul	--	9.00	1976	23-Apr	--	1.69
1972	26-Apr	--	10.0				
Annual peak discharge, from highest to lowest							
1975	11-Aug	--	12.0	1973	7-Aug	--	5.20
1974	12-May	--	10.0	1969	9-May	--	3.00
1972	26-Apr	--	10.0	1968	19-May	--	2.58
1971	4-Jul	--	9.00	1976	23-Apr	--	1.69
1970	7-Jul	--	6.60				

3–5.R00–3T SYAHGEL RIVER AT SYAHGEL—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1968	--	--	--	--	--	--	--	1.07	0.181	0.047	0.072	0.054	--
1969	0.01	0.01	0.034	0.796	0.96	0.263	0.057	0.19	0.149	0.298	0.41	0.06	0.266
1970	0.11	0.048	0.08	0.073	0.081	0.154	0.075	0.027	0.012	0.046	0.022	0.012	0.062
1971	0.02	0.036	0.053	0.089	0.146	0.58	0.1	0.023	0.022	0.238	0.028	0.034	0.115
1972	0.032	0.042	0.058	0.254	0.237	0.332	1.94	0.82	0.606	0.025	0.019	0.027	0.364
1973	0.044	0.22	0.39	0.308	0.314	0.396	0.629	0.283	0.093	0.065	0.097	0.03	0.238
1974	0.03	0.03	0.293	0.533	0.481	0.546	0.318	0.071	0.045	0.048	0.045	0.026	0.204
1975	0.02	0.02	0.043	0.066	0.078	0.336	0.293	0.062	0.045	0.035	0.107	0.021	0.094
1976	0.026	0.02	0.039	0.178	0.457	0.727	1.14	0.553	0.121	0.122	0.132	--	--

3–0.000–7M GHAZNI RIVER AT GHAZNI BRIDGE*

(U.S. Geological Survey identification number: 333300068250000)

LOCATION: Lat 33º33’N., long 68º25’E., on downstream side of pier, near center of span of bridge on Kabul-Kandahar Highway, at Ghazni.

DRAINAGE AREA: 1,555 km^2.

ALTITUDE: 2,173 meters plus mean sea level.

PERIOD OF RECORD: April 11, 1968 to September 30, 1980 (incomplete year)*.

GAGE: Water-stage recorder.

3–0.000–7M GHAZNI RIVER AT GHAZNI BRIDGE—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second; m, more than 2 years of occurrence]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	0.989	1979	0	1976	0.20	0.27	1.39	1.67
November	1.89	1969	0.333	1975	0.99	0.46	0.47	8.34
December	2.90	1969	0.707	1980	1.54	0.64	0.41	13.1
January	3.57	1969	0.956	1972	2.27	0.85	0.37	19.2
February	2.42	1977	0.739	1980	1.54	0.52	0.34	13.0
March	3.56	1973	0.163	1970	1.04	1.07	1.02	8.83
April	8.23	1979	0	1971	2.35	2.72	1.16	19.9
May	2.42	1968	0	1975, 1980	0.67	0.76	1.12	5.70
June	1.50	1979	0	1971, 1980	0.61	0.47	0.78	5.12
July	1.87	1978	0	m	0.25	0.58	2.33	2.11
August	0.809	1978	0	m	0.09	0.23	2.63	0.73
September	1.20	1978	0	m	0.27	0.34	1.24	2.31
Annual	1.74	1979	0.593	1975	0.97	0.35	0.37	100

3–0.000–7M GHAZNI RIVER AT GHAZNI BRIDGE—Continued
Monthly and annual flow duration, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.92	0.26	0.01	0	0	0	0	0	0	0	0.03	0.59	0
90	0.97	0.66	0.10	0	0	0	0	0	0	0	0.20	0.73	0
85	1.10	0.71	0.16	0	0	0	0	0	0	0	0.27	0.85	0
80	1.56	0.78	0.19	0	0	0	0	0	0	0	0.40	0.93	0
75	1.62	0.90	0.22	0.01	0	0	0	0	0	0	0.46	0.99	0
70	1.77	0.97	0.26	0.01	0	0	0	0	0.01	0	0.54	1.03	0
65	1.94	1.06	0.31	0.02	0	0	0	0	0.01	0	0.65	1.21	0
60	2.11	1.30	0.47	0.02	0	0	0	0	0.02	0	0.72	1.27	0
55	2.17	1.40	0.53	0.09	0	0	0	0	0.02	0	0.77	1.42	0.08
50	2.32	1.49	0.58	0.28	0	0	0	0	0.02	0	0.85	1.46	0.27
45	2.36	1.59	0.64	0.79	0	0	0	0	0.02	0	0.94	1.50	0.57
40	2.40	1.71	0.76	1.52	0	0	0	0	0.02	0.02	1.01	1.68	0.76
35	2.45	1.82	0.88	2.44	0	0	0	0	0.03	0.07	1.09	1.76	0.96
30	2.68	2.11	1.00	3.35	0	0.29	0	0	0.03	0.13	1.27	1.89	1.17
25	2.83	2.37	1.12	3.92	0.52	1.01	0	0	0.03	0.21	1.41	2.00	1.56
20	3.15	2.43	1.23	4.91	0.90	1.44	0	0	0.36	0.28	1.53	2.10	1.88
15	3.48	2.49	1.87	6.58	1.92	1.86	0	0	0.73	0.38	1.71	2.19	2.30
10	3.57	2.55	2.63	7.93	2.99	2.26	0.03	0	1.16	0.57	1.98	2.40	2.65
5	0	2.70	4.86	8.78	4.59	2.74	0.51	0.02	1.71	0.81	2.33	2.85	3.69

3–0.000–7M GHAZNI RIVER AT GHAZNI BRIDGE—Continued
Probability of occurrence of annual high discharges

[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	1.60	0.400	3.60	[1]1.83	[1]1.83	[1]1.74	[1]1.27
0.95	1.05	2.80	0.800	5.70	2.66	2.44	2.10	1.63
0.90	1.11	3.90	1.30	7.60	3.23	2.86	2.37	1.89
0.80	1.25	6.10	2.50	11.3	4.07	3.48	2.79	2.28
0.50	2	16.3	8.50	30.2	6.24	5.13	4.05	3.38
0.20	5	52.6	28.5	127	9.39	7.66	6.40	5.25
0.10	10	105	52.7	326	11.5	9.51	8.41	6.74
0.04	25	234	102.5	1,020	14.3	12.0	11.6	8.92
0.02	50	407	160	2,280	16.4	14.0	[1]14.5	10.8
0.01	100	685	241	4,880	18.5	16.1	[1]17.9	12.9
0.005	200	1,120	354	10,100	20.6	18.4	[1]21.9	15.2
0.002	500	2,110	575	25,700	ng	ng	ng	ng

[1]Data does not fit log-Pearson Type III curve, use with caution.

3–0.000–7M GHAZNI RIVER AT GHAZNI BRIDGE—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second; ng, statistic not given]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	ng	ng	ng	ng	ng	0	0	0	0.042
0.10	10	ng	ng	ng	ng	ng	0	0	0.015	0.071
0.20	5	ng	ng	ng	ng	ng	0	0	0.025	0.122
0.50	2	ng	ng	ng	ng	ng	0	0.021	0.054	0.267

3–0.000–7M GHAZNI RIVER AT GHAZNI BRIDGE—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1968	18-May	--	25.6	1975	18-Jan	--	3.48
1969	23-Apr	--	6.70	1976	25-Apr	--	9.40
1970	12-Aug	--	112	1977	12-Jul	--	76.4
1971	4-May	--	4.06	1978	13-Jul	--	237
1972	26-Jun	--	21.0	1979	29-Mar	--	19.0
1973	16-Aug	--	29.8	1980	8-Apr	--	5.80
1974	27-Apr	--	9.85				
Annual peak discharge, from highest to lowest							
1978	13-Jul	--	237	1974	27-Apr	--	9.85
1970	12-Aug	--	112	1976	25-Apr	--	9.40
1977	12-Jul	--	76.4	1969	23-Apr	--	6.70
1973	16-Aug	--	29.8	1980	8-Apr	--	5.80
1968	18-May	--	25.6	1971	4-May	--	4.06
1972	26-Jun	--	21.0	1975	18-Jan	--	3.48
1979	29-Mar	--	19.0				

3–0.000–7M GHAZNI RIVER AT GHAZNI BRIDGE—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1968	--	--	--	--	--	--	--	2.42	0.678	0	0.006	0.34	--
1969	0.244	1.89	2.9	3.57	1.82	0.272	0.067	0.458	1.08	0	0	0.127	1.03
1970	0.061	0.985	1.03	2.34	1.18	0.163	0.436	1.4	0.043	0	0.076	0.039	0.644
1971	0.212	1.14	1.56	2.26	2.08	0.797	0	0.956	0	0	0	0	0.743
1972	0.031	1.11	0.737	0.956	0.769	2.75	3.39	1.3	0.867	0.033	0	0.425	1.03
1973	0.131	0.639	2.1	3.54	1.46	3.56	4.95	0.005	0.918	0.045	0.232	0.63	1.51
1974	0.249	0.63	0.995	1.6	1.39	0.52	1.44	0.078	0.865	0	0	0.267	0.663
1975	0.015	0.333	1.5	2.12	1.36	0.494	0.554	0	0.576	0	0	0.216	0.593
1976	0	0.681	1.61	2.15	1.75	1.04	5.2	0.536	0.411	0.007	0	0.266	1.13
1977	0.025	0.674	1.6	3.23	2.42	0.43	0.121	0.042	0.843	1.15	0	0.043	0.875
1978	0.056	0.799	1.64	2.24	2.14	0.198	0.01	0.23	0.092	1.87	0.809	1.2	0.935
1979	0.989	1.68	2.14	2.23	1.35	1.42	8.23	1.33	1.5	0.129	0	0	1.74
1980	0.353	1.26	0.707	1.05	0.739	0.882	3.78	0	0	0	0	0	0.725

3–4.L00–7A JILGA RIVER AT GARDEZ*

(U.S. Geological Survey identification number: 333500069130000)

LOCATION: Lat 33º35'N., long 69º13'E.

DRAINAGE AREA: 1,065 km^2.

ALTITUDE: 2,294 meters plus mean sea level.

PERIOD OF RECORD: August 6, 1970 to September 30, 1978 (incomplete year)*.

GAGE: --

3–4.L00–7A JILGA RIVER AT GARDEZ—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	0.726	1977	0.029	1972	0.37	0.24	0.67	2.43
November	1.38	1977	0.317	1972	0.89	0.37	0.41	5.88
December	1.99	1977	0.565	1971	1.22	0.55	0.45	8.06
January	1.94	1977	0.360	1972	1.21	0.52	0.43	8.00
February	1.78	1978	0.582	1972	1.31	0.42	0.32	8.67
March	3.36	1976	1.63	1971	2.60	0.58	0.22	17.2
April	17.3	1976	0.700	1971	5.29	5.54	1.05	35.1
May	5.53	1972	0.002	1977	1.15	1.84	1.60	7.65
June	0.674	1972	0.004	1977	0.16	0.24	1.57	1.03
July	2.16	1973	0	1971	0.55	0.73	1.33	3.64
August	0.936	1975	0	1977	0.23	0.33	1.43	1.52
September	0.440	1976	0.002	1977	0.12	0.14	1.14	0.83
Annual	2.42	1976	0.515	1971	1.25	0.57	0.46	100

3–4.L00–7A JILGA RIVER AT GARDEZ—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.32	0.46	1.04	0.17	0	0	0	0	0	0	0.30	0.44	0
90	0.47	0.64	1.24	0.56	0	0	0	0	0	0.01	0.33	0.59	0
85	0.64	0.75	1.33	0.92	0.01	0	0	0	0	0.03	0.40	0.63	0.01
80	0.69	0.87	1.47	1.28	0.01	0	0.01	0	0	0.10	0.45	0.66	0.02
75	0.77	1.10	1.62	1.53	0.01	0	0.01	0	0.01	0.11	0.57	0.74	0.03
70	0.91	1.18	1.72	1.75	0.02	0.01	0.01	0	0.02	0.11	0.61	0.77	0.10
65	0.97	1.23	1.84	1.97	0.02	0.01	0.01	0	0.02	0.12	0.77	0.86	0.18
60	1.04	1.30	2.07	2.18	0.03	0.01	0.02	0	0.05	0.15	0.86	0.97	0.32
55	1.26	1.36	2.18	2.85	0.05	0.01	0.02	0.01	0.06	0.20	0.91	1.16	0.44
50	1.34	1.40	2.26	3.51	0.08	0.02	0.02	0.01	0.07	0.27	1.00	1.27	0.64
45	1.37	1.43	2.41	4.07	0.13	0.02	0.02	0.02	0.09	0.31	1.03	1.31	0.79
40	1.39	1.47	2.62	4.59	0.41	0.02	0.03	0.02	0.11	0.37	1.06	1.36	0.96
35	1.44	1.50	2.75	5.12	0.53	0.02	0.05	0.04	0.11	0.42	1.08	1.42	1.14
30	1.52	1.53	2.93	5.66	0.72	0.02	0.12	0.09	0.12	0.54	1.12	1.48	1.32
25	1.58	1.56	3.10	6.23	0.90	0.03	0.29	0.12	0.15	0.61	1.15	1.60	1.49
20	1.64	1.60	3.40	7.17	1.15	0.09	0.43	0.14	0.20	0.73	1.19	1.78	1.66
15	1.71	1.64	3.93	8.21	1.90	0.28	0.92	0.19	0.30	0.83	1.25	1.92	1.99
10	1.93	1.68	4.47	9.78	3.49	0.32	1.89	0.29	0.34	0.91	1.34	2.04	2.65
5	0	1.78	5.48	18.9	8.03	0.43	3.41	0.66	0.45	0.98	1.49	2.17	4.76

3–4.L00–7A JILGA RIVER AT GARDEZ—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous[1] (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	2.80	0.600	5.40	2.02	1.89	1.59	1.13
0.95	1.05	5.00	1.60	8.40	2.39	2.22	1.91	1.56
0.90	1.11	6.70	2.70	10.7	2.72	2.52	2.19	1.88
0.80	1.25	9.50	4.70	14.5	3.34	3.06	2.70	2.43
0.50	2	17.7	11.2	28.4	5.84	5.22	4.63	4.29
0.20	5	31.7	20.7	65.1	13.2	11.3	9.82	8.40
0.10	10	42.2	26.6	103	22.7	18.8	16.0	12.5
0.04	25	56.5	33.8	167	44.4	35.4	28.9	19.7
0.02	50	67.8	39.0	228	[2]72.2	55.8	44.3	27.0
0.01	100	79.5	44.1	299	[2]116	[2]86.8	66.9	36.3
0.005	200	91.6	49.1	382	[2]184	[2]134	[2]100	48.1
0.002	500	108	55.7	510	ng	ng	ng	ng

[1]Less than 10 years of data used.

[2]Data does not fit log-Pearson Type III curve, use with caution.

3–4.L00–7A JILGA RIVER AT GARDEZ—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second; ng, statistic not given]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	ng	ng	ng	ng	0	0	0.001	0.002	0.020
0.10	10	ng	ng	ng	ng	0	0	0.002	0.004	0.035
0.20	5	ng	ng	ng	ng	0	0	0.005	0.013	0.067
0.50	2	ng	ng	ng	ng	0.002	0.010	0.030	0.077	0.201

3–4.L00–7A JILGA RIVER AT GARDEZ—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1971	26-Mar	--	5.11	1975	14-Aug	--	24.4
1972	30-Jun	--	25.5	1976	19-Apr	--	50.0
1973	16-Aug	--	28.8	1977	17-Apr	--	12.8
1974	7-Apr	--	12.8	1978	5-Jul	--	10.0
Annual peak discharge, from highest to lowest							
1976	19-Apr	--	50.0	1977	17-Apr	--	12.8
1973	16-Aug	--	28.8	1974	7-Apr	--	12.8
1972	30-Jun	--	25.5	1978	5-Jul	--	10.0
1975	14-Aug	--	24.4	1971	26-Mar	--	5.11

3–4.L00–7A JILGA RIVER AT GARDEZ—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1970	--	--	--	--	--	--	--	--	--	--	--	0.174	--
1971	0.211	0.543	0.565	1.11	1.35	1.63	0.7	0.012	0.005	0	0.088	0.032	0.515
1972	0.029	0.317	0.569	0.36	0.582	2.67	8.71	5.53	0.674	0.524	0.003	0.003	1.66
1973	0.148	0.604	0.825	0.676	0.836	2.9	3.86	0.75	0.35	2.16	0.362	0.177	1.14
1974	0.675	1.2	1.81	1.53	1.64	2.46	1.44	0.174	0.171	0.083	0.004	0.031	0.932
1975	0.33	0.899	1.07	1.01	1.19	2.18	6.06	1.51	0.007	0.079	0.936	0.2	1.29
1976	0.371	1.1	1.4	1.62	1.46	3.36	17.3	0.961	0.019	0.884	0.386	0.44	2.42
1977	0.726	1.38	1.99	1.94	1.62	2.32	2.31	0.002	0.004	0.013	0	0.002	1.02
1978	0.441	1.05	1.5	1.41	1.78	3.26	1.94	0.285	0.01	0.646	0.054	0.062	1.03

3–0.000–7S GHAZNI RIVER AT NAUBURJA*

(U.S. Geological Survey identification number: 333800068250000)

LOCATION: Lat 33º38’N., long 68º25’E.

DRAINAGE AREA: 1,425 km^2.

ALTITUDE: 2,235 meters plus mean sea level.

PERIOD OF RECORD: October 1, 1961 to September 30, 1967 (incomplete year)*.

GAGE: --

3–0.000–7S GHAZNI RIVER AT NAUBURJA—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	2.45	1962	0.468	1967	1.63	0.79	0.49	5.60
November	3.09	1962	1.50	1967	2.19	0.60	0.27	7.51
December	5.62	1966	2.79	1967	3.77	1.03	0.27	12.9
January	5.05	1966	2.98	1964	3.95	0.84	0.21	13.5
February	3.21	1966	0.877	1962	2.18	0.92	0.42	7.46
March	2.86	1967	1.02	1963	1.93	0.76	0.39	6.60
April	12.5	1967	1.22	1963	6.11	4.58	0.75	20.9
May	11.5	1967	0.048	1962	3.24	4.83	1.49	11.1
June	2.85	1962	0.128	1964	1.74	1.11	0.64	5.96
July	1.86	1967	0.123	1964	0.54	0.74	1.38	1.85
August	1.10	1967	0.068	1966	0.33	0.44	1.31	1.14
September	4.23	1965	0.037	1963	1.58	1.59	1.01	5.40
Annual	3.71	1967	1.78	1963	2.38	0.77	0.32	100

3–0.000–7S GHAZNI RIVER AT NAUBURJA—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	2.86	0.66	0.58	0.77	0	0.08	0.07	0.04	0.02	0.24	1.13	2.39	0.03
90	2.97	0.68	0.64	0.84	0	0.13	0.07	0.05	0.03	0.42	1.47	2.50	0.07
85	3.03	0.69	0.70	1.06	0.01	0.15	0.08	0.06	0.04	0.53	1.56	2.84	0.17
80	3.14	0.72	0.74	1.49	0.01	0.17	0.13	0.07	0.07	0.59	1.60	2.96	0.23
75	3.29	0.75	0.92	2.33	0.01	0.20	0.14	0.08	0.11	0.63	1.62	3.06	0.34
70	3.43	0.79	0.99	2.54	0.02	0.31	0.15	0.08	0.19	0.67	1.65	3.24	0.56
65	3.61	1.04	1.02	3.04	0.02	0.43	0.17	0.09	0.22	0.81	1.74	3.30	0.73
60	3.65	1.07	1.04	3.62	0.02	0.50	0.20	0.15	0.25	0.91	1.93	3.36	0.94
55	3.72	1.10	1.07	4.25	0.04	0.66	0.21	0.17	0.29	1.09	2.14	3.42	1.11
50	3.82	1.13	1.10	4.72	0.65	0.75	0.22	0.18	0.45	1.20	2.19	3.62	1.38
45	3.87	2.73	1.14	5.11	1.04	0.88	0.25	0.19	0.64	1.44	2.34	3.68	1.89
40	4.06	3.16	1.25	5.87	1.31	1.03	0.27	0.20	0.93	1.67	2.49	3.74	2.34
35	4.30	3.29	1.52	6.69	2.08	1.21	0.29	0.24	1.03	1.86	2.53	3.82	2.77
30	4.46	3.60	2.23	7.53	3.42	2.51	0.30	0.25	1.63	2.13	2.57	4.06	3.18
25	4.52	3.76	2.41	8.73	5.28	3.74	0.33	0.27	2.72	2.29	2.62	4.18	3.54
20	4.63	3.91	3.45	9.85	6.66	4.04	0.38	0.28	4.21	2.42	2.68	4.39	3.92
15	4.71	4.05	4.24	12.1	8.89	4.35	0.47	0.61	4.85	2.70	2.88	5.02	4.45
10	4.83	4.22	4.49	14.3	10.4	4.80	0.79	0.84	5.40	3.73	3.01	5.86	5.15
5	0	0	0	17.9	15.0	5.47	4.76	1.45	0	4.8	3.29	6.23	6.96

3–0.000–7S GHAZNI RIVER AT NAUBURJA—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous[1] (m^3/s)	95 percent confidence limits		Maximum mean discharge[2] (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	3.80	0.800	6.8	4.11	4.31	3.38	2.55
0.95	1.05	5.10	1.4	8.6	5.24	5.11	4.00	3.12
0.90	1.11	6.10	2.0	10.0	6.02	5.70	4.48	3.55
0.80	1.25	7.80	3.1	12.4	7.20	6.62	5.26	4.25
0.50	2	13.1	7.4	22.1	10.4	9.34	7.74	6.45
0.20	5	24.4	15.3	58.7	15.6	14.3	12.8	10.8
0.10	10	35.1	21.1	115	19.7	18.5	17.4	14.9
0.04	25	53.2	29.2	261	25.5	25.1	25.2	21.6
0.02	50	70.9	36.1	464	30.3	31.0	32.8	28.0
0.01	100	92.8	43.7	800	35.5	37.9	42.1	35.8
0.005	200	120	52.4	1,350	41.3	46.0	53.7	45.5
0.002	500	166	65.5	2,610	ng	ng	ng	ng

[1]Less than 10 years of data used.

[2]Data does not fit log-Pearson Type III curve, use with caution.

3–0.000–7S GHAZNI RIVER AT NAUBURJA—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second; ng, statistic not given]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	ng	ng	0.010	[1]0.009	[1]0.006	0.031	0.074	0.224	0.581
0.10	10	ng	ng	0.010	[1]0.009	[1]0.008	0.036	0.091	0.257	0.645
0.20	5	ng	ng	0.010	0.010	0.011	0.046	0.118	0.301	0.722
0.50	2	ng	ng	0.010	0.011	0.023	0.084	0.202	0.397	0.851

[1]Data does not fit log-Pearson Type III curve, use with caution.

3–0.000–7S GHAZNI RIVER AT NAUBURJA—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1962	14-Apr	--	8.10	1965	4-Sep	--	9.90
1963	15-May	--	41.2	1966	24-Dec	--	6.41
1964	10-Apr	--	17.7	1967	22-Apr	--	20.3
Annual peak discharge, from highest to lowest							
1963	15-May	--	41.2	1965	4-Sep	--	9.90
1967	22-Apr	--	20.3	1962	14-Apr	--	8.10
1964	10-Apr	--	17.7	1966	24-Dec	--	6.41

3–0.000–7S GHAZNI RIVER AT NAUBURJA—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1962	2.45	3.09	4.09	4.52	0.877	1.65	4.18	0.048	2.85	0.335	0.249	0.692	2.09
1963	1.15	2.39	3.67	3.8	1.66	1.02	1.22	3.59	2.39	0.251	0.07	0.037	1.78
1964	1.29	1.87	2.89	2.98	2.47	1.56	9.09	0.434	0.128	0.123	0.172	1.04	1.99
1965	2.04	2.58	3.55	--	--	--	--	--	--	--	--	4.23	--
1966	2.41	1.73	5.62	5.05	3.21	2.54	3.56	0.641	2.24	0.127	0.068	0.711	2.32
1967	0.468	1.5	2.79	3.41	2.67	2.86	12.5	11.5	1.09	1.86	1.1	2.75	3.71

1–10.1R0–6W CHARKH RIVER AT KHARWAR DAM INFLOW*

(U.S. Geological Survey identification number: 334300068520000)

LOCATION: Lat 33º43’, long 68º52’.

DRAINAGE AREA: 555 km^2.

ALTITUDE: 2,425 meters plus mean sea level.

PERIOD OF RECORD: October 1, 1972 to March 20, 1979 (incomplete year)*.

GAGE: --

1–10.1R0–6W CHARKH RIVER AT KHARWAR DAM INFLOW—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	0.365	1979	0.051	1975	0.23	0.12	0.53	5.54
November	0.650	1978	0.100	1975	0.32	0.19	0.58	7.86
December	0.775	1978	0.274	1977	0.42	0.17	0.41	10.1
January	0.614	1978	0.209	1977	0.40	0.14	0.36	9.66
February	0.582	1976	0.246	1977	0.40	0.12	0.29	9.71
March	0.985	1976	0.393	1978	0.64	0.22	0.35	15.5
April	1.07	1976	0.223	1973	0.57	0.30	0.52	13.9
May	0.348	1978	0.063	1973	0.20	0.11	0.56	4.84
June	0.218	1975	0.039	1974	0.13	0.08	0.66	3.11
July	1.38	1978	0.040	1977	0.34	0.52	1.52	8.26
August	0.815	1978	0.024	1977	0.30	0.30	1.01	7.21
September	0.355	1975	0.049	1974	0.18	0.13	0.73	4.30
Annual	0.544	1978	0.218	1977	0.34	0.13	0.39	100

1–10.1R0–6W CHARKH RIVER AT KHARWAR DAM INFLOW—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.20	0.25	0.35	0.08	0.04	0.04	0.04	0.02	0.04	0.05	0.07	0.19	0.04
90	0.21	0.26	0.37	0.13	0.05	0.05	0.04	0.03	0.05	0.06	0.11	0.22	0.05
85	0.24	0.26	0.38	0.15	0.06	0.05	0.04	0.03	0.05	0.08	0.13	0.26	0.07
80	0.26	0.28	0.41	0.18	0.07	0.06	0.05	0.04	0.06	0.12	0.13	0.28	0.09
75	0.30	0.30	0.42	0.21	0.07	0.06	0.05	0.04	0.06	0.13	0.14	0.29	0.14
70	0.32	0.31	0.43	0.25	0.08	0.06	0.06	0.05	0.07	0.15	0.24	0.31	0.17
65	0.33	0.33	0.47	0.30	0.08	0.07	0.06	0.08	0.08	0.16	0.25	0.34	0.19
60	0.35	0.37	0.48	0.34	0.09	0.07	0.10	0.12	0.09	0.20	0.29	0.36	0.22
55	0.36	0.39	0.49	0.41	0.13	0.07	0.15	0.14	0.12	0.21	0.30	0.37	0.24
50	0.39	0.40	0.58	0.45	0.16	0.07	0.18	0.16	0.14	0.23	0.32	0.40	0.26
45	0.40	0.41	0.59	0.50	0.18	0.17	0.19	0.18	0.15	0.26	0.33	0.41	0.30
40	0.40	0.43	0.64	0.56	0.20	0.18	0.19	0.22	0.17	0.27	0.37	0.42	0.34
35	0.41	0.46	0.68	0.68	0.21	0.18	0.20	0.23	0.26	0.30	0.39	0.43	0.37
30	0.51	0.47	0.72	0.72	0.23	0.19	0.20	0.24	0.27	0.32	0.42	0.44	0.40
25	0.52	0.48	0.84	0.76	0.29	0.20	0.21	0.25	0.28	0.34	0.43	0.49	0.43
20	0.52	0.52	0.89	0.89	0.31	0.22	0.23	0.28	0.30	0.35	0.45	0.53	0.52
15	0.53	0.53	0.97	1.12	0.38	0	0.25	0.39	0.33	0.37	0.46	0.64	0.58
10	0.59	0	0	1.21	0.42	0	0.80	0.79	0.35	0.39	0.66	0.71	0.69
5	0	0	0	1.40	0.46	0	0.96	0.97	0.41	0.42	0	0	0.87

1–10.1R0–6W CHARKH RIVER AT KHARWAR DAM INFLOW—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous[1] (m^3/s)	95 percent confidence limits		Maximum mean discharge[2] (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	0.20	0	0.60	0.556	0.518	0.453	0.386
0.95	1.05	0.50	0	1.50	0.636	0.597	0.554	0.509
0.90	1.11	0.90	0.10	2.40	0.711	0.663	0.627	0.587
0.80	1.25	1.70	0.30	4.30	0.855	0.778	0.739	0.694
0.50	2	5.70	2.00	17.2	1.45	1.19	1.06	0.939
0.20	5	16.8	6.70	100	3.23	2.17	1.64	1.25
0.10	10	28.1	10.5	262	5.55	3.20	2.12	1.43
0.04	25	47.2	16.0	711	10.9	5.16	2.85	1.66
0.02	50	64.7	20.4	1,320	17.9	7.27	3.49	1.81
0.01	100	84.9	25.0	2,270	29.0	10.1	4.23	1.96
0.005	200	108	29.8	3,670	46.6	14.0	5.07	2.10
0.002	500	142	36.5	6,420	ng	ng	ng	ng

[1]Less than 10 years of data used; no low outliers removed.

[2]Data does not fit log-Pearson Type III curve, use with caution.

1–10.1R0–6W CHARKH RIVER AT KHARWAR DAM INFLOW—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.010	0.011	0.012	0.013	0.013	0.020	0.022	0.024	0.033
0.10	10	0.013	0.015	0.016	0.017	0.019	0.026	0.030	0.033	0.044
0.20	5	0.020	0.022	0.023	0.025	0.029	0.037	0.043	0.048	0.063
0.50	2	0.045	0.049	0.051	0.055	0.066	0.073	0.086	0.099	0.122

1–10.1R0–6W CHARKH RIVER AT KHARWAR DAM INFLOW—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1973	3-Jul	--	19.5	1976	14-Apr	--	1.85
1974	7-Apr	--	14.0	1977	29-Mar	--	0.78
1975	7-Apr	--	2.95	1978	7-Jul	--	18.0
Annual peak discharge, from highest to lowest							
1973	3-Jul	--	19.5	1975	7-Apr	--	2.95
1978	7-Jul	--	18.0	1976	14-Apr	--	1.85
1974	7-Apr	--	14.0	1977	29-Mar	--	0.78

1–10.1R0–6W CHARKH RIVER AT KHARWAR DAM INFLOW—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1973	0.217	0.264	0.371	0.344	0.438	0.513	0.223	0.063	0.059	0.161	0.196	0.096	0.245
1974	0.114	0.124	0.285	0.417	0.427	0.807	0.494	0.156	0.039	0.041	0.037	0.049	0.249
1975	0.051	0.100	0.372	0.386	0.334	0.600	0.732	0.276	0.218	0.209	0.457	0.355	0.341
1976	0.364	0.384	0.465	0.540	0.582	0.985	1.07	0.253	0.176	0.202	0.245	0.257	0.459
1977	0.292	0.314	0.274	0.209	0.246	0.514	0.499	0.095	0.060	0.040	0.024	0.051	0.218
1978	0.189	0.650	0.775	0.614	0.470	0.393	0.402	0.348	0.214	1.38	0.815	0.250	0.544
1979	0.365	0.423	0.371	0.264	0.291	--	--	--	--	--	--	--	--

1–10.1R0–5W CHARKH RIVER AT KHARWAR DAM OUTFLOW*

(U.S. Geological Survey identification number: 334400068520000)

LOCATION: Lat 33º44’, long 68º52’.

DRAINAGE AREA: 555 km^2.

ALTITUDE: 2,375 meters plus mean sea level.

PERIOD OF RECORD: October 1, 1972 to March 20, 1979 (incomplete year)*.

GAGE: --

1–10.1R0–5W CHARKH RIVER AT KHARWAR DAM OUTFOW—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	0.640	1977	0.460	1976	0.55	0.08	0.15	6.07
November	0.873	1977	0.512	1976	0.67	0.11	0.17	7.48
December	1.33	1977	0.500	1976	0.81	0.26	0.32	9.04
January	1.08	1977	0.506	1976	0.82	0.21	0.26	9.09
February	1.15	1975	0.516	1976	0.86	0.22	0.26	9.51
March	1.48	1975	0.640	1978	1.04	0.27	0.26	11.5
April	1.62	1976	0.598	1978	1.06	0.37	0.35	11.8
May	0.706	1976	0.314	1977	0.48	0.17	0.36	5.38
June	0.713	1976	0.188	1974	0.41	0.22	0.54	4.53
July	2.94	1978	0.315	1977	0.89	1.02	1.15	9.87
August	2.63	1978	0.222	1977	0.91	0.90	0.99	10.1
September	0.705	1978	0.318	1973	0.50	0.15	0.29	5.56
Annual	0.956	1978	0.633	1973	0.76	0.13	0.18	100

1–10.1R0–5W CHARKH RIVER AT KHARWAR DAM OUTFOW—Continued

Monthly and annual flow duration, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.51	0.51	0.59	0.29	0.19	0.19	0.21	0.17	0.15	0.34	0.50	0.50	0.22
90	0.52	0.52	0.65	0.45	0.22	0.20	0.26	0.20	0.26	0.42	0.52	0.53	0.29
85	0.59	0.64	0.68	0.53	0.25	0.21	0.30	0.22	0.29	0.47	0.53	0.60	0.32
80	0.63	0.68	0.72	0.56	0.29	0.21	0.31	0.24	0.30	0.48	0.53	0.64	0.37
75	0.64	0.69	0.80	0.57	0.31	0.23	0.32	0.26	0.31	0.50	0.59	0.66	0.47
70	0.69	0.70	0.92	0.59	0.32	0.24	0.33	0.29	0.36	0.51	0.60	0.69	0.50
65	0.72	0.73	0.95	0.61	0.33	0.29	0.34	0.39	0.37	0.52	0.61	0.70	0.53
60	0.74	0.74	0.98	0.66	0.34	0.31	0.39	0.44	0.38	0.52	0.65	0.73	0.57
55	0.77	0.86	1.00	0.87	0.38	0.31	0.48	0.47	0.38	0.53	0.66	0.74	0.61
50	0.78	0.92	1.02	1.00	0.41	0.32	0.52	0.60	0.39	0.53	0.68	0.77	0.64
45	0.85	0.96	1.04	1.09	0.43	0.33	0.54	0.63	0.43	0.56	0.68	0.79	0.67
40	0.91	0.97	1.05	1.14	0.52	0.34	0.57	0.65	0.46	0.59	0.70	0.82	0.71
35	0.96	0.98	1.07	1.21	0.58	0.49	0.65	0.66	0.52	0.60	0.71	0.87	0.75
30	0.99	1.00	1.16	1.30	0.63	0.57	0.70	0.70	0.53	0.60	0.74	0.88	0.83
25	1.02	1.01	1.20	1.39	0.65	0.66	0.72	1.07	0.54	0.63	0.75	0.89	0.93
20	1.07	1.02	1.24	1.49	0.67	0.68	0.75	1.28	0.55	0.64	0.78	0.91	1.00
15	1.08	1.08	1.29	1.60	0.69	0.69	1.47	1.36	0.59	0.65	0.78	0.97	1.08
10	1.10	1.14	1.35	1.84	0.82	0	1.80	1.59	0.68	0.68	0.79	1.30	1.22
5	1.14	0	1.75	2.12	0.87	0	2.15	2.55	1.12	0.70	0.93	1.35	1.45

1–10.1R0–5W CHARKH RIVER AT KHARWAR DAM OUTFOW—Continued

Probability of occurrence of annual high discharges

[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous[1] (m^3/s)	95 percent confidence limits		Maximum mean discharge[2] (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	0.900	0.100	1.90	1.62	1.55	1.24	1.15
0.95	1.05	2.30	0.600	3.90	1.67	1.57	1.27	1.18
0.90	1.11	3.60	1.40	5.40	1.74	1.59	1.30	1.21
0.80	1.25	5.40	2.90	7.90	1.88	1.67	1.38	1.26
0.50	2	8.90	6.00	15.3	2.55	2.06	1.72	1.50
0.20	5	11.1	7.60	22.1	4.49	3.32	2.58	2.04
0.10	10	11.6	7.90	23.9	6.83	4.84	3.49	2.55
0.04	25	11.8	8.00	24.6	11.8	8.08	5.19	3.43
0.02	50	11.9	8.10	24.8	17.9	12.0	6.98	4.27
0.01	100	11.9	8.10	24.9	27.1	17.8	9.39	5.32
0.005	200	11.9	8.10	24.9	41.0	26.5	12.6	6.61
0.002	500	11.9	8.10	24.9	ng	ng	ng	ng

[1]Less than 10 years of data used; no low outliers removed.

[2]Data does not fit log-Pearson Type III curve, use with caution.

1–10.1R0–5W CHARKH RIVER AT KHARWAR DAM OUTFOW—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.096	0.111	0.115	0.130	0.155	0.195	0.225	0.255	0.304
0.10	10	0.112	0.124	0.128	0.144	0.170	0.217	0.248	0.274	0.322
0.20	5	0.135	0.145	0.150	0.167	0.193	0.250	0.281	0.304	0.350
0.50	2	0.201	0.211	0.221	0.238	0.265	0.338	0.369	0.385	0.425

1–10.1R0–5W CHARKH RIVER AT KHARWAR DAM OUTFOW—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1973	4-Apr	--	9.70	1976	16-Apr	--	2.32
1974	7-Apr	--	8.32	1977	6-Apr	--	8.55
1975	14-Aug	--	9.70	1978	20-Aug	--	9.97
Annual peak discharge, from highest to lowest							
1978	20-Aug	--	9.97	1977	6-Apr	--	8.55
1973	4-Apr	--	9.70	1974	7-Apr	--	8.32
1975	14-Aug	--	9.70	1976	16-Apr	--	2.32

1–10.1R0–5W CHARKH RIVER AT KHARWAR DAM OUTFOW—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1973	0.470	0.612	0.727	0.821	0.976	1.08	1.09	0.367	0.350	0.445	0.381	0.318	0.633
1974	0.636	0.732	0.899	0.971	0.922	1.03	0.783	0.401	0.188	0.339	0.435	0.484	0.651
1975	0.539	0.715	0.861	1.00	1.15	1.48	1.33	0.697	0.647	0.570	1.15	0.571	0.892
1976	0.460	0.512	0.500	0.506	0.516	1.01	1.62	0.706	0.713	0.715	0.640	0.572	0.705
1977	0.640	0.873	1.33	1.08	1.01	0.978	0.967	0.314	0.320	0.315	0.222	0.352	0.698
1978	0.471	0.615	0.731	0.722	0.696	0.640	0.598	0.418	0.226	2.94	2.63	0.705	0.956
1979	0.603	0.650	0.643	0.621	0.717	--	--	--	--	--	--	--	--

3–0.000–8W GHAZNI RIVER BELOW SERAJ RESERVOIR*

(U.S. Geological Survey identification number: 334500068230000)

LOCATION: Lat 33º45’N., long 68º23’E., 500 m downstream, from Seraj Dam and about 24 km upstream from Ghazni.

DRAINAGE AREA: 1,165 km^2.

ALTITUDE: 2,338 meters plus mean sea level.

PERIOD OF RECORD: December 7, 1947 to September 30, 1980 (incomplete year)*.

GAGE: Water-stage recorder. January 11 to May 10, 1948, at site 14 km downstream at different datum; March 1, 1949 to April 30, 1952, at same site but different datum.

3–0.000–8W GHAZNI RIVER BELOW SERAJ RESERVOIR—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	3.39	1973	0.526	1980	1.30	0.82	0.63	6.20
November	3.76	1969	1.12	1976	2.24	0.74	0.33	10.7
December	3.37	1952	0.881	1980	2.15	0.66	0.31	10.2
January	3.51	1952	0.897	1980	2.11	0.68	0.32	10.1
February	3.44	1952	0.669	1980	1.76	0.74	0.42	8.42
March	4.82	1952	0.171	1969	1.61	1.45	0.90	7.69
April	9.44	1979	0.324	1971	3.69	2.66	0.72	17.6
May	5.85	1951	0.090	1980	2.32	1.69	0.73	11.0
June	3.72	1976	0.330	1971	1.83	1.36	0.74	8.75
July	1.84	1978	0.012	1973	0.44	0.47	1.06	2.10
August	1.37	1978	0.010	1973	0.44	0.41	0.92	2.10
September	2.71	1978	0.064	1979	1.07	0.68	0.63	5.11
Annual	2.55	1951	0.731	1980	1.66	0.48	0.29	100

3–0.000–8W GHAZNI RIVER BELOW SERAJ RESERVOIR—Continued
Monthly and annual flow duration, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.81	0.16	0.08	0.32	0.11	0.06	0.02	0.02	0.05	0.07	0.92	0.74	0.06
90	0.98	0.49	0.15	0.35	0.35	0.08	0.05	0.04	0.07	0.40	1.16	1.02	0.14
85	1.22	0.67	0.19	0.39	0.43	0.17	0.06	0.07	0.09	0.44	1.37	1.41	0.20
80	1.61	0.82	0.23	0.47	0.46	0.21	0.07	0.11	0.18	0.48	1.46	1.56	0.29
75	1.74	1.21	0.26	0.79	0.51	0.23	0.08	0.17	0.21	0.60	1.53	1.62	0.37
70	1.90	1.45	0.31	1.01	0.63	0.27	0.16	0.19	0.25	0.65	1.59	1.80	0.45
65	1.98	1.60	0.47	1.38	0.74	0.36	0.19	0.20	0.29	0.79	1.65	1.99	0.57
60	2.03	1.75	0.51	1.82	0.83	0.38	0.21	0.21	0.39	0.84	1.81	2.07	0.73
55	2.08	1.82	0.56	2.36	0.96	0.41	0.23	0.27	0.42	0.89	1.92	2.15	0.88
50	2.16	1.90	0.77	2.85	1.12	0.54	0.31	0.30	0.46	1.02	2.01	2.24	1.08
45	2.24	1.97	1.05	3.43	1.26	0.65	0.33	0.32	0.51	1.15	2.12	2.28	1.31
40	2.32	2.04	1.35	3.95	1.46	0.79	0.37	0.46	0.56	1.27	2.26	2.32	1.56
35	2.40	2.13	2.38	4.70	1.70	1.01	0.41	0.49	0.69	1.39	2.43	2.35	1.83
30	2.49	2.23	2.55	5.25	2.35	1.22	0.45	0.51	0.82	1.50	2.60	2.39	2.06
25	2.58	2.33	2.73	5.80	2.97	1.54	0.49	0.56	1.20	1.77	2.77	2.54	2.27
20	2.65	2.43	2.91	6.65	4.05	2.47	0.58	0.62	1.45	1.93	2.99	2.72	2.51
15	2.71	2.58	3.40	7.49	5.52	6.55	0.70	0.70	2.11	2.27	3.28	2.88	2.83
10	2.78	2.82	3.99	8.43	6.89	7.53	0.94	1.04	3.34	2.79	3.67	3.07	3.50
5	3.36	3.17	5.02	10.0	8.35	8.52	1.10	1.23	5.16	3.28	4.13	3.38	5.88

3–0.000–8W GHAZNI RIVER BELOW SERAJ RESERVOIR—Continued
Probability of occurrence of annual high discharges

[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge[1] (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	2.60	1.50	3.60	2.82	2.50	2.79	1.99
0.95	1.05	4.10	2.90	5.20	4.50	3.97	3.73	2.46
0.90	1.11	5.10	3.80	6.30	5.53	4.91	4.31	2.78
0.80	1.25	6.50	5.20	7.70	6.86	6.14	5.09	3.25
0.50	2	9.60	8.20	11.5	9.33	8.57	6.83	4.54
0.20	5	13.0	11.0	16.5	11.3	10.7	8.86	6.59
0.10	10	14.8	12.3	19.3	12.0	11.6	10.0	8.15
0.04	25	16.5	13.6	22.4	12.5	12.4	11.3	10.4
0.02	50	17.6	14.3	24.3	12.7	12.8	12.2	12.2
0.01	100	18.5	14.9	25.9	12.9	13.0	13.0	14.2
0.005	200	19.2	15.4	27.4	13.0	13.2	13.7	16.3
0.002	500	20.1	16.0	28.9	ng	ng	ng	ng

[1]Data does not fit log-Pearson Type III curve, use with caution.

3–0.000–8W GHAZNI RIVER BELOW SERAJ RESERVOIR—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.010	0.015	0.017	0.018	0.020	0.023	0.031	0.112	0.427
0.10	10	0.017	0.022	0.027	0.031	0.038	0.046	0.063	0.182	0.516
0.20	5	0.030	0.037	0.046	0.056	0.076	0.098	0.134	0.302	0.644
0.50	2	0.089	0.096	0.122	0.153	0.212	0.300	0.410	0.639	0.951

3–0.000–8W GHAZNI RIVER BELOW SERAJ RESERVOIR—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1948	2-Apr	0.30	3.45	1972	28-Apr	--	9.63
1949	10-Apr	10.46	5.66	1973	15-Apr	--	9.63
1950	28-Apr	10.52	6.85	1974	6-Jun	--	9.63
1951	6-May	10.75	12.8	1975	8-Jun	--	8.80
1952	7-Apr	10.61	8.97	1976	22-Apr	--	11.1
1968	9-Apr	--	11.6	1977	1-Jun	--	10.2
1969	27-Sep	--	7.60	1978	5-Jul	--	18.8
1970	21-May	--	10.7	1979	16-Apr	--	14.4
1971	2-May	--	12.3	1980	29-Oct	--	4.00
Annual peak discharge, from highest to lowest							
1978	5-Jul	--	18.8	1973	15-Apr	--	9.63
1979	16-Apr	--	14.4	1972	28-Apr	--	9.63
1951	6-May	10.75	12.8	1952	7-Apr	10.61	8.97
1971	2-May	--	12.3	1975	8-Jun	--	8.80
1968	9-Apr	--	11.6	1969	27-Sep	--	7.60
1976	22-Apr	--	11.1	1950	28-Apr	10.52	6.85
1970	21-May	--	10.7	1949	10-Apr	10.46	5.66
1977	1-Jun	--	10.2	1980	29-Oct	--	4.00
1974	6-Jun	--	9.63	1948	2-Apr	0.30	3.45

3–0.000–8W GHAZNI RIVER BELOW SERAJ RESERVOIR—Continued

Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1948	--	--	--	2.12	2.07	2.52	2.22	--	--	--	--	--	--
1949	--	--	--	--	--	2.99	3.25	0.564	0.4	0.4	0.636	0.488	--
1950	1.04	1.92	2.26	2.43	2.1	2.76	5.34	3.04	0.682	0.503	0.701	0.484	1.93
1951	1.37	1.87	2.27	2.55	2.01	2.69	7.13	5.85	1.3	1.01	1.27	1.26	2.55
1952	1.9	2.86	3.37	3.51	3.44	4.82	6.74	--	--	--	--	--	--
1968	--	--	--	--	--	--	--	5.27	2.9	0.471	0.45	1.27	--
1969	1.14	3.76	2.8	1.94	1.27	0.171	0.984	1.74	1.28	0.683	0.667	1.31	1.48
1970	0.946	1.48	1.61	1.64	1.11	0.435	1.81	3.67	0.444	0.058	0.194	0.841	1.19
1971	0.67	3.24	1.99	1.01	1.47	0.619	0.324	3.56	0.33	0.28	0.194	0.403	1.17
1972	0.544	2.02	1.91	1.97	0.85	2.74	4.02	3.17	3.16	0.155	0.246	1.82	1.88
1973	3.39	2.81	2.33	2.6	1.84	3.65	6.25	0.944	3.14	0.012	0.01	1.1	2.33
1974	2.54	2.55	1.01	1.17	1.27	0.333	3.04	1	3.41	0.258	0.245	1.64	1.53
1975	0.928	1.53	2.24	2.54	2.35	0.223	2.62	0.691	3.21	0.234	0.246	1.32	1.5
1976	0.665	1.12	1.77	2.2	2.27	1.21	5.68	1.86	3.72	0.743	0.477	1.48	1.92
1977	1.64	1.87	2.56	2.75	2.56	0.404	1.18	0.956	3.45	0.296	0.227	0.552	1.53
1978	0.573	1.8	2.42	2.32	2.1	0.237	0.393	2.6	0.745	1.84	1.37	2.71	1.59
1979	1.61	2.93	2.76	2.19	0.856	0.751	9.44	2.05	0.75	0.06	0.068	0.064	1.96
1980	0.526	1.78	0.881	0.897	0.669	0.858	2.23	0.09	0.429	0.042	0.04	0.391	0.731

2–6.R00–1A GABER RIVER NEAR CHAMKANI*

(U.S. Geological Survey identification number: 334500069480000)

LOCATION: Lat 33º45’, long 69º48’.

DRAINAGE AREA: 455 km^2.

ALTITUDE: 1,729 meters plus mean sea level.

PERIOD OF RECORD: October 1, 1967 to September 30, 1979 (incomplete year)*.

GAGE: --

2–6.R00–1A GABER RIVER NEAR CHAMKANI—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	0.616	1979	0.011	1978	0.23	0.20	0.88	2.42
November	0.531	1979	0.062	1975	0.26	0.16	0.62	2.70
December	0.367	1969	0.040	1970	0.21	0.10	0.48	2.24
January	0.426	1979	0.032	1970	0.23	0.14	0.59	2.46
February	0.701	1979	0.040	1978	0.33	0.25	0.77	3.48
March	2.63	1968	0.125	1970	1.23	0.87	0.70	13.0
April	6.14	1979	0.577	1970	3.29	2.18	0.66	34.6
May	4.32	1968	0.145	1970	2.13	1.60	0.75	22.4
June	1.71	1968	0.020	1970	0.50	0.53	1.06	5.28
July	1.23	1973	0	1974	0.40	0.42	1.06	4.19
August	1.00	1978	0.006	1974	0.48	0.31	0.66	5.00
September	0.577	1978	0	1969, 1974	0.22	0.20	0.94	2.26
Annual	1.40	1979	0.260	1974	0.86	0.44	0.52	100

2–6.R00–1A GABER RIVER NEAR CHAMKANI—Continued

Monthly and annual flow duration, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.03	0.04	0.11	0.31	0.11	0	0	0	0	0.01	0.02	0.04	0
90	0.04	0.06	0.16	0.38	0.17	0.01	0	0	0	0.02	0.05	0.06	0.02
85	0.06	0.07	0.19	0.78	0.27	0.02	0	0	0	0.02	0.10	0.09	0.05
80	0.09	0.09	0.26	1.11	0.40	0.03	0	0.01	0	0.04	0.11	0.12	0.10
75	0.12	0.13	0.29	1.27	0.57	0.05	0	0.02	0.01	0.05	0.13	0.13	0.15
70	0.13	0.15	0.35	1.43	0.69	0.06	0.01	0.02	0.03	0.06	0.15	0.16	0.18
65	0.18	0.17	0.46	1.63	0.80	0.08	0.02	0.05	0.05	0.10	0.16	0.18	0.21
60	0.20	0.20	0.63	1.92	0.91	0.18	0.04	0.09	0.06	0.14	0.19	0.20	0.25
55	0.22	0.21	0.75	2.62	1.05	0.24	0.14	0.17	0.08	0.16	0.21	0.21	0.28
50	0.24	0.23	0.91	3.10	1.33	0.30	0.17	0.31	0.11	0.21	0.24	0.22	0.32
45	0.27	0.25	1.09	3.42	1.68	0.37	0.22	0.40	0.13	0.23	0.26	0.22	0.38
40	0.29	0.29	1.26	3.77	2.04	0.48	0.31	0.43	0.16	0.26	0.28	0.25	0.43
35	0.30	0.35	1.44	4.16	2.60	0.62	0.40	0.48	0.21	0.27	0.31	0.27	0.49
30	0.32	0.41	1.76	4.67	3.21	0.72	0.55	0.52	0.30	0.29	0.34	0.28	0.60
25	0.33	0.45	1.90	5.33	3.60	0.79	0.63	0.59	0.37	0.32	0.39	0.30	0.82
20	0.37	0.49	2.10	5.74	4.07	0.94	0.70	0.68	0.40	0.37	0.43	0.32	1.14
15	0.41	0.52	2.38	6.15	4.62	1.10	0.87	0.92	0.51	0.43	0.45	0.34	1.61
10	0.44	0.55	2.89	6.69	5.29	1.31	1.07	1.31	0.55	0.49	0.47	0.36	2.58
5	0.47	0.91	3.32	7.36	5.96	1.60	1.55	1.77	0.65	0.58	0.53	0.39	4.12

2–6.R00–1A GABER RIVER NEAR CHAMKANI—Continued

Probability of occurrence of annual high discharges

[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous[1] (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	3.20	1.10	5.10	0.591	0.546	0.534	0.447
0.95	1.05	4.70	2.20	6.90	1.21	1.11	1.05	0.893
0.90	1.11	5.80	3.00	8.20	1.71	1.57	1.47	1.25
0.80	1.25	7.50	4.50	10.3	2.51	2.30	2.13	1.83
0.50	2	12.1	8.60	17.0	4.71	4.37	3.99	3.49
0.20	5	19.5	14.1	32.6	7.79	7.36	6.73	6.00
0.10	10	25.0	17.6	47.6	9.67	9.26	8.50	7.66
0.04	25	32.5	21.8	72.4	11.8	11.5	10.6	9.66
0.02	50	38.5	25.0	95.3	13.2	13.0	12.1	11.1
0.01	100	44.8	28.1	122	14.5	14.3	13.4	12.4
0.005	200	51.5	31.2	154	15.6	15.6	14.7	13.6
0.002	500	61.0	35.4	203	ng	ng	ng	ng

[1]Less than 10 years of data used.

2–6.R00–1A GABER RIVER NEAR CHAMKANI—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0	0	0	0.002	0.003	0.007	0.020
0.10	10	0	0	0	0	0	0.005	0.008	0.015	0.033
0.20	5	0	0	0	0	0	0.013	0.024	0.036	0.057
0.50	2	0	0	0	0	0.036	0.071	0.114	0.131	0.148

2–6.R00–1A GABER RIVER NEAR CHAMKANI—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1968	20-May	--	17.8	1976	14-Aug	--	21.7
1969	31-May	--	6.99	1977	28-Aug	--	7.76
1973	30-Aug	--	18.0	1978	19-Apr	--	5.12
1974	29-Apr	--	9.66	1979	30-Apr	--	10.6
1975	6-Sep	--	27.0				
Annual peak discharge, from highest to lowest							
1975	6-Sep	--	27.0	1974	29-Apr	--	9.66
1976	14-Aug	--	21.7	1977	28-Aug	--	7.76
1973	30-Aug	--	18.0	1969	31-May	--	6.99
1968	20-May	--	17.8	1978	19-Apr	--	5.12
1979	30-Apr	--	10.6				

2–6.R00–1A GABER RIVER NEAR CHAMKANI—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1968	0.479	0.388	0.304	0.416	0.565	2.63	3.73	4.32	1.71	0.268	0.364	0.084	1.27
1969	0.337	0.451	0.367	0.313	0.461	1.64	1.58	1.2	0.256	0.002	0.088	0	0.558
1970	0.061	0.117	0.04	0.032	0.065	0.125	0.577	0.145	0.02	--	--	--	--
1973	0.279	0.227	0.3	0.316	0.699	2.17	5	2.74	0.894	1.23	0.483	0.382	1.23
1974	0.198	0.302	0.228	0.202	0.228	0.539	0.924	0.456	0.041	0	0.006	0	0.26
1975	0.025	0.062	0.103	0.053	0.13	1	5.8	2.7	0.347	0.159	0.61	0.283	0.939
1976	0.209	0.194	0.209	0.258	0.241	1.32	5.34	4.24	0.686	0.709	0.803	0.206	1.2
1977	0.085	0.219	0.187	0.204	0.179	0.252	1.04	0.603	0.072	0.016	0.443	0.043	0.278
1978	0.011	0.074	0.117	0.118	0.04	0.608	2.77	1.25	0.178	0.471	1	0.577	0.602
1979	0.616	0.531	0.274	0.426	0.701	2.03	6.14	3.69	0.823	0.735	0.481	0.363	1.4

3–8.1L0–1W BARIKAB RIVER ABOVE SERAJ RESERVOIR*

(U.S. Geological Survey identification number: 334600068210000)

LOCATION: Lat 33º46’N., long 68º21’E., on left bank at Khojagan.

DRAINAGE AREA: 165 km^2.

ALTITUDE: 2,386 meters plus mean sea level.

PERIOD OF RECORD: April 16, 1968 to September 18, 1976 (incomplete year)*.

GAGE: Staff gage read once or twice daily.

3–8.1L0–1W BARIKAB RIVER ABOVE SERAJ RESERVOIR—Continued

Statistics of monthly and annual mean discharges

[m^3/s, cubic meters per second; m, more than 2 years of occurrence]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	0.215	1975	0.010	m	0.06	0.07	1.25	3.12
November	0.465	1973	0.011	1976	0.13	0.15	1.17	6.87
December	0.640	1973	0.010	1976	0.17	0.21	1.24	8.73
January	0.575	1973	0.010	1969	0.24	0.21	0.84	12.8
February	0.496	1973	0.010	1969	0.23	0.18	0.77	12.3
March	0.639	1973	0.014	1969	0.29	0.21	0.73	15.2
April	1.35	1973	0.067	1971	0.51	0.47	0.93	26.5
May	0.117	1969	0.035	1971	0.07	0.03	0.40	3.66
June	0.106	1974	0.010	1971	0.04	0.03	0.73	2.30
July	0.170	1974	0.019	1975	0.06	0.05	0.80	3.23
August	0.359	1970	0.005	1971	0.08	0.11	1.35	4.19
September	0.083	1968	0	1971	0.02	0.03	1.17	1.18
Annual	0.370	1973	0.050	1969	0.16	0.11	0.67	100

3–8.1L0–1W BARIKAB RIVER ABOVE SERAJ RESERVOIR—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.01	0.01	0.02	0.04	0.02	0.01	0.01	0	0	0.01	0.01	0.01	0.01
90	0.02	0.02	0.02	0.05	0.03	0.01	0.01	0.01	0	0.01	0.02	0.02	0.01
85	0.02	0.02	0.04	0.06	0.03	0.02	0.02	0.01	0.01	0.01	0.02	0.02	0.02
80	0.03	0.03	0.07	0.07	0.04	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02
75	0.05	0.05	0.11	0.09	0.04	0.02	0.02	0.02	0.01	0.01	0.03	0.03	0.02
70	0.13	0.09	0.12	0.10	0.04	0.02	0.03	0.02	0.01	0.02	0.03	0.05	0.03
65	0.16	0.13	0.18	0.11	0.05	0.03	0.03	0.03	0.01	0.02	0.03	0.06	0.03
60	0.16	0.14	0.22	0.15	0.05	0.03	0.03	0.03	0.02	0.02	0.05	0.06	0.04
55	0.17	0.18	0.24	0.23	0.05	0.03	0.03	0.04	0.02	0.02	0.06	0.07	0.05
50	0.18	0.23	0.29	0.28	0.06	0.04	0.04	0.05	0.02	0.02	0.07	0.09	0.06
45	0.20	0.26	0.34	0.35	0.06	0.04	0.04	0.05	0.02	0.02	0.08	0.12	0.07
40	0.26	0.27	0.37	0.46	0.07	0.04	0.04	0.06	0.02	0.04	0.10	0.14	0.09
35	0.34	0.29	0.39	0.53	0.07	0.05	0.06	0.07	0.02	0.06	0.12	0.15	0.11
30	0.41	0.38	0.41	0.60	0.08	0.06	0.07	0.08	0.03	0.09	0.16	0.17	0.16
25	0.42	0.42	0.43	0.71	0.09	0.07	0.08	0.08	0.03	0.10	0.19	0.19	0.21
20	0.44	0.46	0.44	0.82	0.10	0.08	0.09	0.09	0.04	0.11	0.22	0.29	0.26
15	0.48	0.49	0.48	1.06	0.12	0.09	0.10	0.09	0.05	0.13	0.26	0.34	0.35
10	0.56	0.51	0.51	1.46	0.13	0.09	0.15	0.10	0	0.18	0.31	0.57	0.46
5	0	0.53	0.64	2.01	0.18	0.11	0.24	0.10	0	0.23	0.58	0.66	0.56

3–8.1L0–1W BARIKAB RIVER ABOVE SERAJ RESERVOIR—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous[1] (m^3/s)	95 percent confidence limits		Maximum mean discharge[2] (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	0.100	0	0.200	0.075	0.069	0.069	0.062
0.95	1.05	0.100	0	0.300	0.154	0.149	0.134	0.119
0.90	1.11	0.200	0	0.400	0.224	0.218	0.188	0.166
0.80	1.25	0.300	0.100	0.600	0.353	0.339	0.281	0.243
0.50	2	0.800	0.300	1.90	0.823	0.731	0.581	0.485
0.20	5	3.00	1.30	10.6	1.88	1.44	1.14	0.913
0.10	10	6.10	2.50	32.0	2.86	1.99	1.60	1.24
0.04	25	13.9	4.90	119	4.46	2.73	2.25	1.70
0.02	50	24.2	7.50	295	5.92	3.31	2.79	2.06
0.01	100	40.7	11.2	693	7.61	3.90	3.36	2.44
0.005	200	66.5	16.2	1,560	9.56	4.50	3.97	2.84
0.002	500	123	25.5	4,350	ng	ng	ng	ng

[1]Less than 10 years of data used.

[2]Data does not fit log-Pearson Type III curve, use with caution.

3–8.1L0–1W BARIKAB RIVER ABOVE SERAJ RESERVOIR—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second; ng, statistic not given]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	ng	0	0	0	ng	0.002	0.005	0.007	0.010
0.10	10	ng	0	0	0	ng	0.003	0.006	0.009	0.014
0.20	5	ng	0.006	0.009	0.009	ng	[1]0.006	0.009	0.011	0.020
0.50	2	ng	0.009	0.010	0.010	ng	0.012	0.016	0.021	0.039

[1]Data does not fit log-Pearson Type III curve, use with caution.

3–8.1L0–1W BARIKAB RIVER ABOVE SERAJ RESERVOIR—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1968	11-Aug	--	0.09	1973	17-Apr	--	2.22
1969	14-May	--	0.28	1974	7-Apr	--	0.58
1970	21-Aug	--	15.1	1975	11-Apr	--	1.10
1971	16-Jul	--	0.50	1976	20-Apr	--	1.64
1972	13-Apr	--	1.10				
Annual peak discharge, from highest to lowest							
1970	21-Aug	--	15.1	1974	7-Apr	--	0.58
1973	17-Apr	--	2.22	1971	16-Jul	--	0.50
1976	20-Apr	--	1.64	1969	14-May	--	0.28
1975	11-Apr	--	1.10	1968	11-Aug	--	0.09
1972	13-Apr	--	1.10				

3–8.1L0–1W BARIKAB RIVER ABOVE SERAJ RESERVOIR—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1968	--	--	--	--	--	--	--	0.062	0.077	0.08	0.081	0.083	--
1969	0.097	0.075	0.042	0.01	0.01	0.014	0.074	0.117	0.06	0.043	0.05	0.01	0.05
1970	0.017	0.083	0.193	0.39	0.417	0.467	0.134	0.039	0.025	0.026	0.359	0.018	0.18
1971	0.01	0.027	0.085	0.214	0.274	0.28	0.067	0.035	0.01	0.043	0.005	0	0.087
1972	0.01	0.02	0.022	0.029	0.026	0.083	0.591	0.101	0.015	0.029	0.017	0.035	0.081
1973	0.105	0.465	0.64	0.575	0.496	0.639	1.35	0.075	0.046	0.04	0.023	0.01	0.37
1974	0.013	0.138	0.228	0.446	0.344	0.238	0.277	0.064	0.106	0.17	0.057	0.014	0.174
1975	0.215	0.231	0.115	0.163	0.201	0.435	0.554	0.049	0.019	0.019	0.039	0.01	0.17
1976	0.01	0.011	0.01	0.122	0.106	0.168	1.01	0.087	0.037	0.105	0.09	--	--

3–8.R00–1W SARAB RIVER ABOVE SERAJ RESERVOIR*

(U.S. Geological Survey identification number: 334601068210000)

LOCATION: Lat 33º46’01’’N., long 68º21’E., on right bank at Khojagan.

DRAINAGE AREA: 730 km^2.

ALTITUDE: 2,385 meters plus mean sea level.

PERIOD OF RECORD: April 16, 1968 to September 30, 1980 (incomplete year)*.

GAGE: Staff gage read once or twice daily.

3–8.R00–1W SARAB RIVER ABOVE SERAJ RESERVOIR—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second; m, more than 2 years of occurrence]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	1.37	1969	0.155	1976	0.55	0.36	0.66	3.56
November	2.61	1980	0.606	1976	1.34	0.59	0.44	8.63
December	3.20	1980	0.893	1976	1.59	0.66	0.41	10.2
January	3.27	1980	0.908	1971	1.75	0.72	0.41	11.2
February	3.40	1980	0.770	1976	1.72	0.76	0.44	11.1
March	4.58	1980	0.851	1976	2.12	0.95	0.45	13.6
April	10.4	1980	0.716	1969	3.62	3.31	0.91	23.3
May	5.26	1980	0.122	1978	1.50	1.60	1.07	9.62
June	1.45	1980	0.020	1971	0.42	0.45	1.07	2.68
July	0.755	1978	0.040	1970	0.38	0.26	0.69	2.45
August	1.68	1970	0.028	1975	0.41	0.46	1.13	2.63
September	0.662	1968	0.010	m	0.15	0.19	1.24	1.00
Annual	2.94	1980	0.542	1971	1.27	0.62	0.49	100

3–8.R00–1W SARAB RIVER ABOVE SERAJ RESERVOIR—Continued
Monthly and annual flow duration, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.85	0.79	0.81	0.24	0.09	0.03	0.04	0.02	0.01	0.06	0.59	0.91	0.03
90	0.92	0.80	0.91	0.32	0.11	0.05	0.05	0.03	0.01	0.10	0.75	0.95	0.06
85	0.93	0.81	1.14	0.40	0.18	0.07	0.06	0.04	0.02	0.12	0.83	1.01	0.10
80	1.00	0.89	1.40	0.74	0.21	0.09	0.08	0.05	0.02	0.14	0.87	1.06	0.14
75	1.17	1.13	1.48	1.00	0.24	0.10	0.09	0.06	0.02	0.16	0.93	1.13	0.20
70	1.29	1.39	1.54	1.37	0.29	0.12	0.10	0.07	0.02	0.21	0.98	1.16	0.28
65	1.46	1.45	1.66	1.65	0.32	0.17	0.15	0.10	0.04	0.28	1.02	1.24	0.37
60	1.51	1.47	1.80	1.92	0.35	0.20	0.17	0.12	0.05	0.33	1.05	1.27	0.54
55	1.59	1.50	1.90	2.25	0.43	0.22	0.18	0.14	0.07	0.39	1.13	1.34	0.75
50	1.64	1.56	1.98	2.72	0.55	0.25	0.20	0.16	0.10	0.44	1.20	1.44	0.88
45	1.67	1.67	2.05	2.94	0.72	0.27	0.22	0.17	0.11	0.52	1.25	1.48	1.04
40	1.75	1.74	2.13	3.21	0.88	0.30	0.24	0.18	0.12	0.61	1.29	1.52	1.21
35	1.96	1.82	2.20	3.70	1.29	0.35	0.29	0.19	0.13	0.68	1.37	1.57	1.40
30	2.09	2.06	2.29	4.17	1.61	0.41	0.40	0.22	0.15	0.75	1.46	1.79	1.58
25	2.36	2.14	2.40	4.73	2.12	0.48	0.57	0.40	0.18	0.83	1.58	2.07	1.77
20	2.42	2.23	2.71	5.78	2.76	0.59	0.64	0.50	0.33	0.92	1.82	2.13	1.99
15	2.49	2.42	2.92	7.33	3.83	0.66	0.73	0.56	0.36	1.03	2.20	2.20	2.23
10	0	3.12	3.54	9.90	4.31	0.99	0.85	0.72	0.38	1.24	2.37	2.36	2.78
5	0	0	4.04	11.2	5.22	1.29	1.05	1.06	0.63	1.51	2.68	0	3.73

3–8.R00–1W SARAB RIVER ABOVE SERAJ RESERVOIR—Continued
Probability of occurrence of annual high discharges

[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	1.80	0.700	3.20	1.55	0.978	[1]0.995	0.953
0.95	1.05	2.30	1.00	3.90	2.07	1.52	1.43	1.31
0.90	1.11	2.70	1.20	4.60	2.47	1.92	1.75	1.58
0.80	1.25	3.50	1.70	5.80	3.12	2.56	2.27	2.01
0.50	2	7.10	4.10	11.5	5.19	4.48	3.86	3.34
0.20	5	18.5	11.4	36.6	9.43	7.88	6.86	5.92
0.10	10	34.6	19.9	85.8	13.4	10.6	9.44	8.20
0.04	25	74.4	37.4	256	20.0	14.6	13.5	11.9
0.02	50	129	57.9	571	26.3	18.0	17.1	15.2
0.01	100	219	87.8	1,250	34.1	21.8	21.3	19.2
0.005	200	368	131	2,690	43.7	25.9	[1]26.2	23.9
0.002	500	720	220	7,300	ng	ng	ng	ng

[1]Data does not fit log-Pearson Type III curve, use with caution.

3–8.R00–1W SARAB RIVER ABOVE SERAJ RESERVOIR—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0.005	0.005	0.005	0.006	0.017	0.029	0.053	0.117
0.10	10	0.004	0.007	0.008	0.008	0.008	0.023	0.041	0.070	0.145
0.20	5	0.009	0.011	0.012	0.012	0.014	0.033	0.061	0.099	0.189
0.50	2	0.027	0.028	0.032	0.034	0.040	0.071	0.130	0.184	0.314

3–8.R00–1W SARAB RIVER ABOVE SERAJ RESERVOIR—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1968	11-Apr	--	7.60	1975	14-Apr	--	6.22
1969	20-Nov	--	2.71	1976	17-Jul	--	25.0
1970	23-Aug	--	35.2	1977	13-Apr	--	2.96
1971	16-Jul	--	5.00	1978	5-Jul	--	8.00
1972	12-May	--	5.06	1979	17-Apr	--	11.9
1973	18-Apr	--	5.56	1980	18-Apr	--	90.0
1974	20-Apr	--	3.30				
Annual peak discharge, from highest to lowest							
1980	18-Apr	--	90.0	1973	18-Apr	--	5.56
1970	23-Aug	--	35.2	1972	12-May	--	5.06
1976	17-Jul	--	25.0	1971	16-Jul	--	5.00
1979	17-Apr	--	11.9	1974	20-Apr	--	3.30
1978	5-Jul	--	8.00	1977	13-Apr	--	2.96
1968	11-Apr	--	7.60	1969	20-Nov	--	2.71
1975	14-Apr	--	6.22				

3–8.R00–1W SARAB RIVER ABOVE SERAJ RESERVOIR—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1968	--	--	--	--	--	--	--	2.78	0.78	0.724	0.648	0.662	--
1969	1.37	2.25	2.2	2.13	2.14	1.93	0.716	0.743	0.171	0.07	0.144	0.102	1.16
1970	0.615	1.6	1.48	1.7	1.52	2.02	1.13	0.201	0.062	0.04	1.68	0.01	1
1971	0.293	1	1.07	0.908	0.78	0.948	0.914	0.219	0.02	0.328	0.039	0.01	0.542
1972	0.265	1.02	1.43	1.61	1.72	2.37	3.37	3.1	0.557	0.306	0.085	0.077	1.32
1973	0.565	1.15	1.73	1.94	1.83	2.72	3.45	0.471	0.302	0.444	0.292	0.03	1.24
1974	0.233	1.02	1.44	2.48	2.42	1.74	2.13	0.447	0.295	0.422	0.152	0.015	1.06
1975	0.545	0.96	0.99	0.912	0.955	1.68	4.11	0.67	0.107	0.095	0.028	0.01	0.918
1976	0.155	0.606	0.893	0.985	0.77	0.851	5.07	2.55	0.245	0.665	0.578	0.345	1.14
1977	0.967	1.7	2.16	2.34	2.2	2.33	1.61	0.27	0.229	0.21	0.167	0.108	1.19
1978	0.178	0.912	1.12	1.22	1.45	1.92	0.892	0.122	0.072	0.755	0.841	0.135	0.799
1979	0.719	1.28	1.35	1.49	1.48	2.32	9.68	2.62	1.13	0.713	0.505	0.36	1.96
1980	0.743	2.61	3.2	3.27	3.4	4.58	10.4	5.26	1.45	0.183	0.152	0.148	2.94

2–0.000–5M KHURRAM RIVER AT DODA*

(U.S. Geological Survey identification number: 334800069400000)

LOCATION: Lat 33º48’, long 69º40’.

DRAINAGE AREA: 1,015 km^2.

ALTITUDE: 1,844 meters plus mean sea level.

PERIOD OF RECORD: October 23, 1972 to September 30, 1979 (incomplete year)*.

GAGE: --

2–0.000–5M KHURRAM RIVER AT DODA—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	4.20	1977	1.34	1975	2.59	1.00	0.39	5.08
November	4.41	1977	2.18	1975	3.01	0.71	0.24	5.90
December	3.89	1977	2.25	1975	3.14	0.56	0.18	6.16
January	3.54	1977	1.97	1975	2.77	0.46	0.17	5.43
February	3.20	1977	1.64	1975	2.51	0.63	0.25	4.93
March	5.92	1973	2.54	1978	3.81	1.07	0.28	7.48
April	20.1	1973	4.73	1977	10.8	5.64	0.52	21.1
May	16.5	1976	2.56	1974	8.34	5.58	0.67	16.4
June	8.37	1976	2.01	1974	4.89	2.70	0.55	9.59
July	6.19	1979	0.853	1977	3.42	2.17	0.63	6.71
August	5.37	1979	0.871	1974	3.11	1.48	0.48	6.09
September	3.56	1976	1.22	1974	2.62	0.80	0.30	5.14
Annual	5.72	1976	2.58	1974	4.04	1.27	0.32	100

2–0.000–5M KHURRAM RIVER AT DODA—Continued

Monthly and annual flow duration, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	1.29	1.61	2.14	3.70	1.83	1.86	0.69	0.83	1.20	1.32	2.08	2.11	1.21
90	2.09	1.64	2.48	4.35	2.05	2.00	0.76	0.89	1.36	1.35	2.29	2.35	1.65
85	2.11	1.80	2.61	4.58	2.17	2.06	0.96	1.03	1.66	1.58	2.36	2.67	1.95
80	2.48	1.86	2.68	4.84	2.44	2.11	1.09	1.15	1.90	1.83	2.47	2.71	2.13
75	2.54	2.04	2.79	5.33	2.79	2.37	1.23	1.47	2.00	1.96	2.52	2.86	2.27
70	2.67	2.07	2.99	5.82	3.22	2.49	1.46	1.87	2.07	2.09	2.66	2.89	2.43
65	2.69	2.10	3.12	6.36	3.81	2.64	1.90	2.11	2.26	2.13	2.70	2.91	2.69
60	2.71	2.21	3.23	7.00	5.61	2.97	2.20	2.39	2.34	2.18	2.80	3.07	2.81
55	2.78	2.24	3.28	8.02	7.55	3.69	2.56	2.53	2.48	2.26	2.84	3.08	2.93
50	2.80	2.53	3.34	9.41	8.45	4.07	2.94	2.85	2.63	2.33	2.87	3.10	3.06
45	2.82	2.73	3.43	10.0	8.67	4.98	3.44	3.09	2.73	2.49	2.93	3.11	3.20
40	2.89	2.89	3.56	10.9	8.89	5.47	4.12	3.26	2.84	2.80	3.06	3.12	3.35
35	2.91	2.94	3.80	11.8	9.38	5.87	4.44	3.42	2.98	2.96	3.09	3.33	3.52
30	2.93	3.10	4.21	13.2	10.6	7.04	4.64	3.55	3.05	3.05	3.29	3.41	3.77
25	3.05	3.13	4.40	15.0	12.1	7.63	4.88	3.77	3.13	3.12	3.33	3.62	4.12
20	3.08	3.16	4.72	16.9	13.9	8.06	5.17	4.18	3.33	3.39	3.36	3.68	4.72
15	3.30	3.19	4.98	19.2	15.6	8.37	6.06	4.67	3.46	3.96	3.53	3.87	5.96
10	0	3.24	5.50	21.3	17.1	8.82	6.75	5.27	3.60	4.11	0	3.91	8.22
5	0	3.29	6.56	23.0	19.4	9.78	7.54	7.42	3.95	0	0	0	10.8

2–0.000–5M KHURRAM RIVER AT DODA—Continued

Probability of occurrence of annual high discharges

[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous[1] (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	11.9	4.70	17.2	2.83	2.76	2.54	2.50
0.95	1.05	16.5	8.50	22.0	4.40	4.22	3.89	3.66
0.90	1.11	19.5	11.4	25.1	5.56	5.27	4.87	4.50
0.80	1.25	23.4	15.7	29.5	7.39	6.90	6.35	5.78
0.50	2	32.5	25.2	42.4	12.7	11.5	10.5	9.39
0.20	5	43.2	34.3	65.4	21.8	19.0	17.0	15.3
0.10	10	49.4	38.6	82.1	28.9	24.6	21.8	19.9
0.04	25	56.4	43.0	104	39.1	32.4	28.3	26.3
0.02	50	61.0	45.8	120	47.4	38.7	33.4	31.5
0.01	100	65.3	48.2	135	56.4	45.4	38.7	37.1
0.005	200	69.3	50.4	150	66.1	52.4	44.2	43.1
0.002	500	74.1	53.0	170	ng	ng	ng	ng

[1]Less than 10 years of data used.

2–0.000–5M KHURRAM RIVER AT DODA—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.324	0.384	0.516	0.511	0.630	0.787	0.969	1.06	1.35
0.10	10	0.412	0.464	0.604	0.646	0.784	0.991	1.20	1.32	1.58
0.20	5	0.552	0.596	0.744	0.855	1.01	1.29	1.52	1.66	1.88
0.50	2	0.985	1.01	1.18	1.44	1.63	2.01	2.24	2.41	2.55

2–0.000–5M KHURRAM RIVER AT DODA—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1973	3-Jul	--	44.4	1977	24-Jun	--	24.5
1974	6-Jul	--	24.8	1978	20-Aug	--	48.4
1975	--	--	35.2	1979	17-Jul	--	17.7
1976	24-Apr	--	38.4				
Annual peak discharge, from highest to lowest							
1978	20-Aug	--	48.4	1974	6-Jul	--	24.8
1973	3-Jul	--	44.4	1977	24-Jun	--	24.5
1976	24-Apr	--	38.4	1979	17-Jul	--	17.7
1975	--	--	35.2				

2–0.000–5M KHURRAM RIVER AT DODA—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1973	--	2.88	3.19	2.71	2.83	5.92	20.1	10.6	4.45	5.87	2.88	2.35	--
1974	2.62	3.03	3.74	2.82	2.16	3.8	4.9	2.56	2.01	1.22	0.871	1.22	2.58
1975	1.34	2.18	2.25	1.97	1.64	3.61	15	13.6	6.55	3.11	3.71	2.85	4.83
1976	3.15	3.29	3.07	2.76	2.87	4.26	12.7	16.5	8.37	4.59	3.53	3.56	5.72
1977	4.2	4.41	3.89	3.54	3.2	3.42	4.73	2.61	2.5	0.853	1.65	2.45	3.12
1978	2.26	2.68	3.03	2.65	1.82	2.54	7.39	3.72	2.48	2.11	3.73	2.42	3.07
1979	1.96	2.59	2.8	2.93	3.08	3.13	10.6	8.79	7.86	6.19	5.37	3.5	4.9

2–0.000–3M KHURRAM RIVER AT CHAMKANI*

(U.S. Geological Survey identification number: 334800069480000)

LOCATION: Lat 33º48’, long 69º48’.

DRAINAGE AREA: 1,325 km^2.

ALTITUDE: 1,718 meters plus mean sea level.

PERIOD OF RECORD: December 3, 1962 to September 30, 1979 (incomplete year)*.

GAGE: --

2–0.000–3M KHURRAM RIVER AT CHAMKANI—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	3.10	1967	0.078	1971	1.72	0.94	0.55	3.99
November	3.33	1966	0.451	1972	1.85	0.85	0.46	4.30
December	2.99	1977	0.522	1972	1.91	0.71	0.37	4.42
January	2.62	1977	0.437	1972	1.75	0.60	0.34	4.07
February	2.86	1969	0.595	1971	1.69	0.61	0.36	3.92
March	6.52	1969	0.942	1971	2.93	1.60	0.55	6.80
April	20.9	1973	1.39	1970	8.80	5.67	0.64	20.4
May	29.7	1965	0.320	1971	10.2	8.01	0.79	23.6
June	19.8	1965	0.196	1971	5.28	5.11	0.97	12.3
July	10.2	1965	0.192	1977	3.19	2.78	0.87	7.39
August	4.18	1965	0.256	1974	2.27	1.16	0.51	5.28
September	2.97	1965	0.159	1971	1.55	0.84	0.54	3.60
Annual	7.46	1965	0.651	1971	3.68	1.81	0.49	100

2–0.000–3M KHURRAM RIVER AT CHAMKANI—Continued

Monthly and annual flow duration, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.47	0.56	0.85	1.19	0.40	0.10	0.11	0.19	0.10	0.10	0.40	0.60	0.30
90	0.75	0.63	1.01	1.73	0.83	0.39	0.22	0.30	0.30	0.22	0.61	0.90	0.57
85	1.07	1.01	1.32	2.46	1.71	0.95	0.37	0.45	0.37	0.61	0.86	1.09	0.92
80	1.23	1.14	1.57	3.04	2.06	1.17	0.48	0.80	0.79	0.90	1.06	1.26	1.15
75	1.35	1.32	1.66	3.48	2.40	1.37	0.89	0.99	0.91	1.02	1.24	1.34	1.35
70	1.47	1.44	1.78	4.20	4.10	1.68	1.16	1.24	1.02	1.13	1.36	1.49	1.53
65	1.59	1.52	1.91	4.88	5.29	1.99	1.42	1.51	1.11	1.34	1.46	1.64	1.69
60	1.69	1.58	2.06	5.50	6.47	2.43	1.92	1.67	1.33	1.56	1.59	1.73	1.84
55	1.77	1.62	2.22	6.09	7.49	3.04	2.33	1.83	1.44	1.69	1.71	1.80	1.99
50	1.82	1.67	2.42	6.95	8.56	3.59	2.58	1.99	1.56	1.77	1.85	1.96	2.15
45	1.87	1.74	2.62	7.77	9.85	4.13	2.83	2.20	1.67	1.86	2.06	2.06	2.33
40	1.96	1.81	2.82	8.54	11.1	4.71	3.11	2.43	1.77	1.97	2.18	2.17	2.51
35	2.04	1.88	3.05	9.46	12.3	5.39	3.41	2.62	1.91	2.10	2.26	2.29	2.69
30	2.12	1.95	3.33	10.5	13.9	6.25	3.72	2.81	2.07	2.24	2.34	2.38	3.04
25	2.22	2.07	3.61	11.8	15.6	7.47	4.20	3.20	2.24	2.39	2.45	2.48	3.44
20	2.40	2.24	3.90	13.5	17.2	8.75	4.76	3.52	2.41	2.54	2.59	2.60	4.29
15	2.46	2.42	4.26	16.5	18.8	10.6	5.86	3.82	2.59	2.74	2.84	2.77	6.05
10	2.51	2.57	5.07	19.9	21.1	13.6	7.01	4.33	2.79	2.97	3.07	2.85	9.13
5	2.65	2.84	6.97	24.1	23.7	16.1	10.5	5.21	2.99	3.32	3.34	2.92	14.6

2–0.000–3M KHURRAM RIVER AT CHAMKANI—Continued

Probability of occurrence of annual high discharges

[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge[1] (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	5.60	3.10	8.00	3.70	2.74	1.60	1.08
0.95	1.05	8.80	5.70	11.4	5.74	4.40	3.12	2.36
0.90	1.11	10.9	7.70	13.7	7.22	5.65	4.34	3.46
0.80	1.25	14.0	10.6	17.2	9.48	7.63	6.34	5.32
0.50	2	21.7	17.7	26.8	15.8	13.4	12.3	11.0
0.20	5	31.9	25.9	42.4	25.9	23.3	22.0	20.1
0.10	10	38.3	30.5	53.6	33.3	30.9	29.0	26.3
0.04	25	45.7	35.6	67.9	43.4	41.7	38.0	33.9
0.02	50	51.0	39.0	78.5	51.3	50.5	44.7	39.3
0.01	100	55.9	42.1	88.9	59.5	60.0	51.4	44.5
0.005	200	60.5	44.9	99.1	68.1	70.0	58.0	49.3
0.002	500	66.3	48.5	112	ng	ng	ng	ng

[1]Data does not fit log-Pearson Type III curve, use with caution.

2–0.000–3M KHURRAM RIVER AT CHAMKANI—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.010	0.014	0.040	0.062	0.085	0.153	0.257	0.342	0.439
0.10	10	0.026	0.033	0.076	0.114	0.159	0.268	0.403	0.506	0.624
0.20	5	0.071	0.085	0.156	0.224	0.312	0.485	0.653	0.769	0.908
0.50	2	0.372	0.402	0.517	0.674	0.882	1.18	1.36	1.47	1.62

2–0.000–3M KHURRAM RIVER AT CHAMKANI—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1963	13-May	--	21.9	1972	17-Apr	--	32.0
1964	10-Apr	--	28.9	1973	26-Apr	--	26.0
1965	21-May	--	46.0	1974	21-Mar	--	10.4
1966	2-Jul	--	21.3	1975	20-Apr	--	22.0
1967	27-Apr	--	31.5	1976	25-Apr	--	36.0
1968	30-Apr	--	29.7	1977	27-Jun	--	9.42
1969	13-Aug	--	22.3	1978	27-Apr	--	13.3
1970	22-Aug	--	10.0	1979	10-May	--	23.7
1971	28-Jul	--	10.6				
Annual peak discharge, from highest to lowest							
1965	21-May	--	46.0	1975	20-Apr	--	22.0
1976	25-Apr	--	36.0	1963	13-May	--	21.9
1972	17-Apr	--	32.0	1966	2-Jul	--	21.3
1967	27-Apr	--	31.5	1978	27-Apr	--	13.3
1968	30-Apr	--	29.7	1971	28-Jul	--	10.6
1964	10-Apr	--	28.9	1974	21-Mar	--	10.4
1973	26-Apr	--	26.0	1970	22-Aug	--	10.0
1979	10-May	--	23.7	1977	27-Jun	--	9.42
1969	13-Aug	--	22.3				

2–0.000–3M KHURRAM RIVER AT CHAMKANI—Continued

Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1963	--	--	--	1.11	1.19	2.04	2.86	7.96	2.65	1.56	1.37	1.57	--
1964	1.54	1.61	1.57	1.8	1.25	1.79	8.95	7.11	3.94	1.82	1.14	0.804	2.77
1965	1.05	1.07	1.29	1.33	1.76	3	12.8	29.7	19.8	10.2	4.18	2.97	7.46
1966	2.95	3.33	2.79	1.99	2.21	3.61	10.3	12.8	8.14	5.75	2.88	2.57	4.96
1967	3.1	2.6	1.9	2.09	2.25	2.58	7.62	18.7	11.1	7.89	3.56	2.16	5.49
1968	2.79	2.53	2.63	2.5	2.51	3.81	6.84	14.7	9.98	3.66	2.92	1.07	4.67
1969	1.86	2.14	2.38	2.27	2.86	6.52	9.78	8.81	2.51	0.578	1.76	1.31	3.57
1970	1.81	1.97	1.72	1.76	1.61	1.57	1.39	0.703	0.283	1.05	3.08	0.34	1.44
1971	0.078	0.507	0.905	0.71	0.595	0.942	1.77	0.32	0.196	1.27	0.355	0.159	0.651
1972	0.195	0.451	0.522	0.437	0.606	1.53	20.1	21.2	9.22	3.38	1.77	1.55	5.08
1973	1.64	1.68	2.16	2.07	2.1	6.69	20.9	10.9	4.01	5.75	2.72	2.06	5.23
1974	2.2	2.13	2.46	2.29	1.51	3.16	4.35	2.18	1.2	0.434	0.256	0.35	1.88
1975	0.707	0.99	1.18	1.59	1.68	2.9	12.5	11.6	4.63	2.6	3.15	1.58	3.77
1976	2.07	2.38	2.49	1.85	1.75	2.94	12	14.9	6.97	3.5	2.92	2.82	4.72
1977	2.87	3.2	2.99	2.62	1.79	2.16	3.85	2.03	1.36	0.192	0.866	1.23	2.1
1978	0.978	1.35	1.47	1.42	1.26	1.45	7.1	3.77	1.55	1.69	3.32	1.87	2.27
1979	1.65	1.71	2.05	1.97	1.8	3.14	6.42	5.21	2.29	2.84	2.42	2	2.8

2–0.000–1M KHURRAM RIVER AT PUL-I-BANGAKH*

(U.S. Geological Survey identification number: 334800069530000)

LOCATION: Lat 33º48’, long 69º53’.

DRAINAGE AREA: 1,915 km^2.

ALTITUDE: 1,629 meters plus mean sea level.

PERIOD OF RECORD: December 1, 1962 to April 6, 1979 (incomplete year)*.

GAGE: --

2–0.000–1M KHURRAM RIVER AT PUL-I-BANGAKH—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	3.90	1966	0.033	1972	2.19	1.37	0.63	3.88
November	3.81	1966	0.447	1972	2.40	1.16	0.48	4.26
December	3.77	1974	0.646	1972	2.38	0.93	0.39	4.22
January	3.04	1968	0.894	1972	2.25	0.68	0.30	3.99
February	3.82	1973	0.951	1971	2.27	0.89	0.39	4.03
March	9.43	1973	1.39	1971	4.15	2.17	0.52	7.35
April	25.9	1972	1.99	1971	12.2	7.38	0.6	21.6
May	39.6	1965	0.120	1971	13.2	10.7	0.81	23.5
June	27.8	1965	0	1971	6.81	7.28	1.07	12.1
July	12.5	1965	0.018	1974	3.85	3.52	0.91	6.83
August	5.70	1965	0.002	1974	2.78	1.66	0.60	4.93
September	3.73	1965	0	1971	1.91	1.18	0.62	3.38
Annual	9.72	1965	0.713	1971	4.79	2.48	0.52	100

2–0.000–1M KHURRAM RIVER AT PUL-I-BANGAKH—Continued

Monthly and annual flow duration, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	1.09	0.93	1.25	1.88	0.29	0	0	0	0	0.06	0.47	0.75	0.03
90	1.16	1.14	1.66	2.41	0.60	0.05	0	0	0.02	0.20	0.61	1.04	0.53
85	1.35	1.24	1.87	3.06	1.92	0.39	0.02	0.05	0.09	0.32	0.81	1.23	0.95
80	1.58	1.46	2.05	3.93	2.53	0.73	0.63	0.85	0.89	0.53	1.15	1.42	1.25
75	1.74	1.64	2.32	5.08	3.05	1.19	1.08	0.98	1.09	0.87	1.38	1.60	1.57
70	1.97	1.73	2.56	5.71	5.47	1.69	1.37	1.22	1.26	1.11	1.61	1.84	1.91
65	2.13	1.81	2.73	6.72	7.83	2.37	1.74	1.69	1.44	1.29	1.84	2.06	2.16
60	2.24	1.93	2.86	8.09	9.33	2.86	2.09	2.04	1.61	1.58	2.43	2.26	2.41
55	2.33	2.02	3.00	9.58	10.6	3.97	2.36	2.28	1.77	2.08	2.68	2.41	2.60
50	2.40	2.11	3.24	10.3	11.9	4.63	2.69	2.59	1.93	2.40	2.84	2.55	2.78
45	2.47	2.23	3.59	11.1	13.1	5.49	3.06	2.93	2.09	2.63	2.93	2.67	2.97
40	2.53	2.46	3.84	12.1	14.4	6.53	4.10	3.17	2.24	2.75	3.03	2.76	3.15
35	2.64	2.57	4.10	13.6	15.9	7.36	4.58	3.41	2.41	2.88	3.12	2.87	3.50
30	2.72	2.69	4.62	15.2	17.9	8.20	5.08	3.70	2.57	3.00	3.22	2.99	3.87
25	2.77	2.86	5.10	17.1	20.0	9.93	5.66	4.20	2.74	3.13	3.34	3.10	4.51
20	2.83	2.96	5.86	19.1	22.0	11.6	6.26	4.68	2.91	3.40	3.45	3.24	5.96
15	2.97	3.06	6.89	23.3	23.9	13.2	7.85	5.14	3.09	3.69	3.57	3.39	8.40
10	3.07	3.40	8.09	26.1	26.2	17.1	9.21	5.70	3.28	4.05	3.74	3.52	12.3
5	3.17	3.72	9.44	29.8	33.0	21.7	11.6	6.53	3.84	4.49	3.93	3.76	19.0

2–0.000–1M KHURRAM RIVER AT PUL-I-BANGAKH—Continued

Probability of occurrence of annual high discharges

[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	5.10	2.20	8.20	3.56	2.41	1.42	1.09
0.95	1.05	10.0	5.70	14.1	5.94	4.52	3.28	2.67
0.90	1.11	13.7	8.80	18.4	7.75	6.20	4.90	4.11
0.80	1.25	19.4	13.7	25.1	10.6	8.95	7.69	6.62
0.50	2	33.8	26.3	44.3	18.9	17.2	16.3	14.6
0.20	5	51.4	39.7	73.8	32.7	31.0	29.9	27.5
0.10	10	61.1	46.3	92.3	43.1	41.3	39.1	36.2
0.04	25	71.1	52.8	113	57.3	54.9	50.1	46.6
0.02	50	77.1	56.6	126	68.6	65.5	57.7	53.8
0.01	100	82.1	59.8	137	80.4	76.2	64.8	60.4
0.005	200	86.3	62.3	147	[1]92.7	[1]87.1	71.4	66.5
0.002	500	90.9	65.1	158	ng	ng	ng	ng

[1]Data does not fit log-Pearson Type III curve, use with caution.

2–0.000–1M KHURRAM RIVER AT PUL-I-BANGAKH—Continued
Probability of occurrence of annual low discharges
[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0	0	0	0.004	0.029	0.100	0.268
0.10	10	0	0	0	0	0	0.026	0.100	0.243	0.475
0.20	5	0.001	0.002	0.012	0.034	0.279	[1]0.159	0.345	0.591	0.861
0.50	2	0.698	0.752	1.04	1.30	1.48	1.57	1.74	1.93	2.03

[1]Data does not fit log-Pearson Type III curve, use with caution.

2–0.000–1M KHURRAM RIVER AT PUL-I-BANGAKH—Continued
Annual peak discharge and corresponding gage height
[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1963	13-May	--	23.8	1971	28-Jul	--	9.00
1964	10-Apr	--	30.0	1972	17-Apr	--	39.0
1965	16-May	--	73.0	1973	4-Apr	--	37.2
1966	25-Mar	--	48.6	1974	13-Apr	--	9.50
1967	7-Sep	--	50.3	1975	11-Aug	--	25.8
1968	30-Apr	--	43.4	1976	25-Apr	--	56.0
1696	10-May	--	28.9	1977	5-Apr	--	33.5
1970	22-Aug	--	45.1	1978	27-Apr	--	15.0
Annual peak discharge, from highest to lowest							
1965	16-May	--	73.0	1977	5-Apr	--	33.5
1976	25-Apr	--	56.0	1964	10-Apr	--	30.0
1967	7-Sep	--	50.3	1696	10-May	--	28.9
1966	25-Mar	--	48.6	1975	11-Aug	--	25.8
1970	22-Aug	--	45.1	1963	13-May	--	23.8
1968	30-Apr	--	43.4	1978	27-Apr	--	15.0
1972	17-Apr	--	39.0	1974	13-Apr	--	9.50
1973	4-Apr	--	37.2	1971	28-Jul	--	9.00

2–0.000–1M KHURRAM RIVER AT PUL-I-BANGAKH—Continued

Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1963	--	--	1.6	1.63	1.3	3.06	5.93	11	3.85	2.41	1.48	1.49	--
1964	1.26	1.73	1.98	2.22	1.98	2.92	14.9	8.9	4.65	2.04	1.31	1.13	3.74
1965	1.23	1.27	1.3	1.31	1.71	3.38	16.7	39.6	27.8	12.5	5.7	3.73	9.72
1966	3.9	3.81	3.12	2.81	3.51	6.44	14.9	17.6	11.9	6.63	3.81	3.1	6.8
1967	3.84	3.12	2.5	2.65	2.76	3.44	9.9	23.3	15.2	9.48	4.69	3.66	7.07
1968	3.8	3.6	3.46	3.04	3	7.23	12.1	16	9.57	4.88	4.31	2.49	6.13
1969	2.95	3.67	3.27	2.74	3.4	7.17	10.8	9.64	3.35	1.27	2.2	1.32	4.32
1970	2.18	3.04	2.59	2.33	1.83	1.92	2.27	0.67	0.3	1.32	3.16	0.367	1.83
1971	0.259	0.591	1.07	1.14	0.951	1.39	1.99	0.12	0	0.968	0.084	0	0.713
1972	0.033	0.447	0.646	0.894	0.988	2.41	25.9	26.5	11.9	4.45	2.9	2.6	6.64
1973	2.87	2.69	3.11	2.96	3.82	9.43	25.4	13.3	4.84	6.99	3.25	2.54	6.78
1974	2.66	3.07	3.77	2.74	2.12	4.14	5.31	2.77	0.354	0.018	0.002	0.013	2.25
1975	0.237	0.754	1.3	1.73	1.8	3.22	17.4	14.8	4.78	2.23	3.38	2	4.47
1976	2.63	2.98	2.52	2.43	2.19	4.21	17.6	20.5	7.8	4.08	2.92	2.43	6.03
1977	3.36	3.33	3.25	3.02	2.75	2.77	4.47	2.24	1.22	0.215	0.958	1.22	2.4
1978	0.662	1.57	2.12	2.07	1.45	3.11	9.65	5	1.45	2.19	4.35	2.44	3.01
1979	3.16	2.8	2.85	2.57	3.11	4.26	--	--	--	--	--	--	--

3–4.L00–9T JILGA RIVER NEAR MECHALGHU*

(U.S. Geological Survey identification number: 334900069230000)

LOCATION: Lat 33º49’N., long 69º23’E.

DRAINAGE AREA: 65 km^2.

ALTITUDE: 2,690 meters plus mean sea level.

PERIOD OF RECORD: August 11, 1970 to September 30, 1978 (incomplete year)*.

GAGE: --

3–4.L00–9T JILGA RIVER NEAR MECHALGHU—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	0.626	1977	0.344	1975	0.47	0.10	0.22	5.86
November	0.625	1977	0.177	1973	0.43	0.14	0.32	5.38
December	0.707	1978	0.222	1973	0.46	0.17	0.37	5.73
January	0.652	1978	0.098	1973	0.41	0.21	0.51	5.10
February	0.691	1978	0.209	1973	0.44	0.18	0.41	5.52
March	1.09	1978	0.518	1971	0.78	0.20	0.25	9.79
April	4.49	1976	0.627	1971	1.86	1.35	0.73	23.4
May	2.18	1976	0.380	1971	1.06	0.56	0.53	13.3
June	1.09	1972	0.297	1978	0.61	0.29	0.48	7.69
July	1.04	1976	0.334	1971	0.60	0.25	0.41	7.52
August	0.687	1976	0.311	1978	0.45	0.14	0.32	5.62
September	0.653	1976	0.233	1978	0.40	0.14	0.34	5.07
Annual	1.15	1976	0.393	1971	0.66	0.23	0.34	100

3–4.L00–9T JILGA RIVER NEAR MECHALGHU—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.08	0.20	0.36	0.63	0.38	0.29	0.27	0.28	0.20	0.34	0.16	0.23	0.21
90	0.15	0.21	0.40	0.67	0.44	0.29	0.28	0.29	0.21	0.35	0.24	0.24	0.29
85	0.16	0.26	0.41	0.71	0.64	0.30	0.29	0.29	0.27	0.36	0.30	0.29	0.31
80	0.17	0.30	0.46	0.75	0.65	0.35	0.30	0.30	0.28	0.36	0.33	0.34	0.34
75	0.26	0.31	0.51	0.87	0.66	0.42	0.33	0.3	0.30	0.37	0.36	0.35	0.37
70	0.30	0.31	0.52	0.92	0.67	0.44	0.36	0.32	0.33	0.37	0.37	0.36	0.40
65	0.31	0.32	0.57	1.01	0.68	0.44	0.41	0.36	0.34	0.41	0.38	0.37	0.43
60	0.34	0.36	0.59	1.09	0.81	0.45	0.43	0.37	0.35	0.44	0.40	0.38	0.46
55	0.36	0.40	0.69	1.14	0.83	0.46	0.44	0.39	0.37	0.45	0.41	0.41	0.49
50	0.43	0.46	0.73	1.23	0.87	0.48	0.45	0.41	0.38	0.46	0.42	0.44	0.51
45	0.49	0.50	0.78	1.39	1.02	0.55	0.58	0.44	0.39	0.47	0.43	0.45	0.54
40	0.55	0.52	0.81	1.57	1.16	0.62	0.62	0.46	0.40	0.48	0.44	0.46	0.58
35	0.56	0.54	0.83	1.74	1.23	0.65	0.64	0.48	0.41	0.49	0.46	0.55	0.61
30	0.57	0.56	0.87	1.91	1.28	0.70	0.65	0.49	0.46	0.56	0.56	0.56	0.65
25	0.59	0.59	0.96	2.31	1.31	0.75	0.69	0.52	0.48	0.57	0.58	0.57	0.69
20	0.60	0.61	0.99	2.60	1.42	0.86	0.75	0.56	0.57	0.57	0.60	0.64	0.78
15	0.62	0.64	1.11	3.09	1.53	0.90	0.84	0.59	0.59	0.6	0.63	0.66	0.95
10	0.63	0.68	1.23	3.69	1.67	0.93	1.04	0.60	0.61	0	0	0.68	1.16
5	0.66	0.73	1.53	5.29	2.43	1.09	1.29	0.63	0.63	0	0	0.85	1.65

3–4.L00–9T JILGA RIVER NEAR MECHALGHU—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous[1] (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	0.700	0.100	1.60	0.569	0.492	0.468	0.434
0.95	1.05	1.20	0.300	2.30	0.794	0.667	0.627	0.583
0.90	1.11	1.60	0.500	3.00	0.973	0.806	0.752	0.696
0.80	1.25	2.30	0.900	4.10	1.28	1.04	0.960	0.883
0.50	2	5.00	2.70	9.00	2.32	1.86	1.66	1.48
0.20	5	11.3	6.50	28.6	4.75	3.74	3.24	2.74
0.10	10	17.9	9.70	59.8	7.23	5.69	4.82	3.92
0.04	25	30.0	14.7	141	11.8	9.27	7.65	5.92
0.02	50	42.4	19.2	255	16.4	13.0	10.5	7.86
0.01	100	58.3	24.4	443	22.5	17.9	14.2	10.3
0.005	200	78.6	30.4	745	30.4	24.3	19.0	13.2
0.002	500	114	39.9	1,430	ng	ng	ng	ng

[1]Less than 10 years of data used.

3–4.L00–9T JILGA RIVER NEAR MECHALGHU—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.060	0.067	0.069	0.069	0.074	0.123	0.145	0.164	0.230
0.10	10	0.082	0.097	0.102	0.104	0.109	0.160	0.184	0.205	0.262
0.20	5	0.117	0.145	0.155	0.159	0.165	0.213	0.240	0.261	0.306
0.50	2	0.219	0.269	0.290	0.299	0.308	0.339	0.366	0.386	0.405

3–4.L00–9T JILGA RIVER NEAR MECHALGHU—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1971	30-Jul	--	20.8	1975	25-Apr	--	4.12
1972	28-Apr	--	7.34	1976	18-Apr	--	17.4
1973	2-Jul	--	4.40	1977	17-Apr	--	1.91
1974	23-Mar	--	1.50	1978	5-Jul	--	4.00
Annual peak discharge, from highest to lowest							
1971	30-Jul	--	20.8	1975	25-Apr	--	4.12
1976	18-Apr	--	17.4	1978	5-Jul	--	4.00
1972	28-Apr	--	7.34	1977	17-Apr	--	1.91
1973	2-Jul	--	4.40	1974	23-Mar	--	1.50

3–4.L00–9T JILGA RIVER NEAR MECHALGHU—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1970	--	--	--	--	--	--	--	--	--	--	--	0.372	--
1971	0.423	0.399	0.39	0.353	0.367	0.518	0.627	0.38	0.313	0.334	0.34	0.267	0.393
1972	0.36	0.323	0.324	0.166	0.264	0.85	3.16	1.22	1.09	0.859	0.418	0.401	0.785
1973	0.416	0.177	0.222	0.098	0.209	0.71	1.8	1.22	0.756	0.679	0.535	0.558	0.616
1974	0.561	0.469	0.463	0.51	0.535	0.826	0.713	0.62	0.496	0.375	0.345	0.354	0.522
1975	0.344	0.39	0.333	0.3	0.3	0.56	1.99	1.3	0.54	0.507	0.606	0.475	0.637
1976	0.544	0.492	0.56	0.577	0.648	0.979	4.49	2.18	0.951	1.04	0.687	0.653	1.15
1977	0.626	0.625	0.648	0.589	0.5	0.692	1.02	0.819	0.45	0.438	0.335	0.314	0.589
1978	0.456	0.546	0.707	0.652	0.691	1.09	1.08	0.735	0.297	0.55	0.311	0.233	0.612

2–0.000–6M KHURRAM RIVER AT AHMADKHEL*

(U.S. Geological Survey identification number: 335000069390000)

LOCATION: Lat 33º50’, long 69º39’.

DRAINAGE AREA: 730 km^2.

ALTITUDE: 1,906 meters plus mean sea level.

PERIOD OF RECORD: August 14, 1967 to September 30, 1980 (incomplete year)*.

GAGE: --

2–0.000–6M KHURRAM RIVER AT AHMADKHEL—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	3.67	1977	0.945	1972	2.18	0.73	0.33	5.51
November	3.70	1980	0.940	1972	2.39	0.72	0.30	6.03
December	3.70	1980	1.12	1972	2.32	0.67	0.29	5.85
January	3.20	1980	1.17	1972	2.13	0.58	0.27	5.38
February	3.24	1980	1.06	1972	2.00	0.61	0.30	5.05
March	5.73	1973	1.17	1972	2.96	1.40	0.47	7.47
April	16.7	1972	1.72	1970	7.56	4.52	0.60	19.1
May	17.6	1972	1.66	1970	6.74	4.94	0.73	17.0
June	7.63	1972	0.985	1970	4.23	2.35	0.56	10.7
July	4.70	1979	0.637	1977	2.73	1.34	0.49	6.90
August	3.69	1980	0.755	1971	2.32	0.94	0.41	5.85
September	3.59	1980	0.734	1971	2.05	0.79	0.39	5.18
Annual	4.88	1980	1.75	1971	3.30	1.11	0.34	100

2–0.000–6M KHURRAM RIVER AT AHMADKHEL—Continued

Monthly and annual flow duration, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	1.21	1.13	1.18	1.88	1.24	1.00	0.56	0.57	0.75	0.96	1.03	1.15	0.92
90	1.49	1.31	1.66	2.57	1.45	1.23	0.70	0.67	1.02	1.30	1.66	1.65	1.19
85	1.55	1.41	1.76	2.91	1.60	1.37	0.85	0.80	1.23	1.43	1.72	1.69	1.41
80	1.61	1.46	1.86	3.27	1.82	1.52	0.95	1.04	1.34	1.53	1.82	1.80	1.60
75	1.68	1.54	1.95	3.63	2.08	1.72	1.10	1.24	1.48	1.59	1.96	1.84	1.74
70	1.80	1.60	2.02	3.92	2.54	1.90	1.65	1.33	1.54	1.71	2.03	1.90	1.86
65	1.87	1.75	2.11	4.45	3.11	2.61	1.97	1.51	1.59	1.90	2.10	2.05	1.97
60	1.96	1.78	2.25	4.94	5.55	3.06	2.21	1.76	1.77	1.98	2.19	2.12	2.09
55	2.00	1.82	2.38	5.53	6.07	3.81	2.53	1.92	1.87	2.06	2.26	2.22	2.22
50	2.06	1.90	2.51	5.85	6.50	4.27	2.77	2.07	1.94	2.20	2.34	2.30	2.40
45	2.18	1.96	2.66	6.67	6.90	4.91	2.96	2.26	2.01	2.31	2.41	2.34	2.56
40	2.25	2.02	2.89	7.55	7.32	5.28	3.14	2.55	2.08	2.39	2.51	2.38	2.73
35	2.30	2.07	3.00	8.41	7.75	5.62	3.32	2.73	2.17	2.44	2.62	2.43	2.95
30	2.33	2.13	3.12	9.02	8.42	5.95	3.50	2.88	2.30	2.49	2.73	2.58	3.24
25	2.38	2.32	3.49	9.70	9.10	6.25	3.70	3.07	2.50	2.57	2.96	2.73	3.53
20	2.47	2.61	3.97	10.7	9.87	6.56	3.90	3.30	2.87	2.68	3.05	2.85	4.01
15	2.84	2.77	4.33	13.0	11.6	6.89	4.35	3.65	3.29	2.78	3.22	3.07	5.14
10	3.10	2.89	4.92	15.2	13.9	7.33	4.90	4.06	3.51	3.41	3.44	3.34	6.63
5	3.29	3.07	5.98	18.6	17.8	8.38	5.76	4.92	3.65	0	0	3.73	8.99

2–0.000–6M KHURRAM RIVER AT AHMADKHEL—Continued

Probability of occurrence of annual high discharges

[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge[1] (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	5.80	3.30	7.80	3.19	2.88	2.08	1.84
0.95	1.05	8.00	5.30	10.2	4.43	3.98	3.15	2.73
0.90	1.11	9.50	6.70	11.7	5.31	4.77	3.92	3.39
0.80	1.25	11.6	8.80	14.0	6.63	5.96	5.11	4.42
0.50	2	16.4	13.6	20.0	10.3	9.29	8.47	7.43
0.20	5	22.6	18.7	29.9	16.3	14.8	14.0	12.7
0.10	10	26.5	21.5	37.0	20.8	19.1	18.1	16.9
0.04	25	31.0	24.6	46.2	27.2	25.1	23.9	23.1
0.02	50	34.2	26.6	53.2	32.4	30.1	28.6	28.3
0.01	100	37.2	28.5	60.1	38.1	35.6	33.5	34.1
0.005	200	40.1	30.3	67.0	44.2	41.6	38.8	40.5
0.002	500	43.8	32.5	76.2	ng	ng	ng	ng

[1]Data does not fit log-Pearson Type III curve, use with caution.

2–0.000–6M KHURRAM RIVER AT AHMADKHEL—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.287	0.311	0.386	0.439	0.533	0.691	0.834	0.896	1.04
0.10	10	0.368	0.393	0.471	0.543	0.648	0.840	1.00	1.09	1.23
0.20	5	0.495	0.519	0.601	0.699	0.816	1.05	1.23	1.34	1.48
0.50	2	0.856	0.882	0.961	1.11	1.24	1.54	1.74	1.89	2.03

2–0.000–6M KHURRAM RIVER AT AHMADKHEL—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1968	29-May	--	26.3	1975	11-Aug	--	22.8
1969	29-Jun	--	14.2	1976	24-Apr	--	24.7
1970	22-Aug	--	10.0	1977	8-Aug	--	19.3
1971	31-Jul	--	8.00	1978	16-Apr	--	10.5
1972	17-Apr	--	25.0	1979	6-Aug	--	15.3
1973	3-May	--	22.3	1980	6-Apr	--	11.3
1974	28-Mar	--	14.7				
Annual peak discharge, from highest to lowest							
1968	29-May	--	26.3	1974	28-Mar	--	14.7
1972	17-Apr	--	25.0	1969	29-Jun	--	14.2
1976	24-Apr	--	24.7	1980	6-Apr	--	11.3
1975	11-Aug	--	22.8	1978	16-Apr	--	10.5
1973	3-May	--	22.3	1970	22-Aug	--	10.0
1977	8-Aug	--	19.3	1971	31-Jul	--	8.00
1979	6-Aug	--	15.3				

2–0.000–6M KHURRAM RIVER AT AHMADKHEL—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1967	--	--	--	--	--	--	--	--	--	--	--	2.15	--
1968	2.47	2.96	2.56	1.61	1.37	2.11	5.04	8.23	6.62	3.56	2.05	1.74	3.36
1969	2.39	2.9	2.71	2.32	2.53	4.33	5.96	6.13	4.64	2.36	2.14	2.21	3.39
1970	2.46	2.28	1.72	1.94	1.89	1.77	1.72	1.66	0.985	2.38	3.36	1.21	1.95
1971	1.42	1.82	2.15	2.15	2.09	2.33	2.88	1.89	1.28	1.5	0.755	0.734	1.75
1972	0.945	0.94	1.12	1.17	1.06	1.17	16.7	17.6	7.63	3.18	2.82	2.77	4.75
1973	2.58	2.3	2.16	2.07	2.25	5.73	14.4	9.6	4.5	4.29	1.97	1.73	4.47
1974	2.47	2.38	2.68	2.29	1.86	2.62	4.32	2.12	1.75	1.04	0.769	1.45	2.14
1975	1.47	2.05	1.72	1.63	1.5	2.51	10.6	9.5	4.62	2.87	2.75	2.25	3.63
1976	2.1	2.46	2.4	2.06	1.62	2.9	9.81	13.1	6.46	2.99	3.08	3.46	4.38
1977	3.67	3.35	3.13	3.18	2.85	3.04	3.71	1.69	2.2	0.637	1.27	1.65	2.53
1978	1.54	1.71	1.8	1.74	1.67	2.18	5.52	2.37	1.8	1.4	2.46	1.85	2.17
1979	1.89	2.18	2.25	2.36	2.07	2.21	7.66	6.05	5.73	4.7	3	1.95	3.51
1980	2.97	3.7	3.7	3.2	3.24	5.58	9.99	7.63	6.73	4.6	3.69	3.59	4.88

1–10.R00–4A LOGAR RIVER AT SHEKHABAD

(U.S. Geological Survey identification number: 340500068450000)

LOCATION: Lat 34º05’, long 68º45’.

DRAINAGE AREA: 4,825 km^2.

ALTITUDE: 2,050 meters plus mean sea level.

PERIOD OF RECORD: October 1, 1961 to September 30, 1980.

GAGE: --

1–10.R00–4A LOGAR RIVER AT SHEKHABAD—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	8.15	1966	0.402	1980	5.48	1.84	0.34	5.64
November	9.95	1966	3.67	1980	7.17	1.47	0.21	7.37
December	10.9	1969	5.78	1972	7.67	1.49	0.19	7.90
January	10.1	1962	5.00	1972	7.39	1.47	0.20	7.61
February	10.1	1969	4.31	1972	7.70	1.47	0.19	7.93
March	18.0	1969	6.16	1972	10.4	2.88	0.28	10.7
April	50.3	1980	8.60	1971	23.3	12.0	0.52	24.0
May	39.9	1965	0.631	1971	14.2	10.7	0.75	14.6
June	17.2	1965	0.103	1971	4.10	4.32	1.05	4.22
July	10.4	1965	0.679	1971	3.17	2.47	0.78	3.26
August	7.97	1965	0.308	1980	2.93	1.75	0.60	3.01
September	7.82	1965	0.744	1980	3.65	1.57	0.43	3.76
Annual	4.64	1965	4.64	1971	8.08	2.44	0.30	100

1–10.R00–4A LOGAR RIVER AT SHEKHABAD—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	5.08	4.53	5.23	8.02	0.76	0.17	0.46	0.38	0.82	0.82	4.69	5.40	0.74
90	5.37	5.65	6.92	9.39	1.76	0.36	0.66	0.66	1.56	2.91	5.48	5.77	1.65
85	5.61	6.12	7.22	10.2	3.08	0.44	0.77	0.94	1.97	3.68	5.86	6.18	2.47
80	6.00	6.32	7.59	11.5	4.05	0.59	0.91	1.15	2.26	4.18	6.14	6.46	3.00
75	6.19	6.84	7.86	12.6	5.09	0.81	1.13	1.42	2.62	4.59	6.36	6.61	3.62
70	6.55	6.98	8.14	13.4	6.41	1.45	1.60	1.63	2.75	4.85	6.51	6.75	4.33
65	6.76	7.12	8.53	14.1	8.08	2.05	1.79	1.86	2.91	5.11	6.66	6.94	5.01
60	6.91	7.27	8.70	15.3	9.37	2.38	2.01	2.13	3.15	5.35	6.81	7.24	5.68
55	7.19	7.40	8.87	16.7	10.6	2.59	2.24	2.45	3.40	5.52	6.97	7.34	6.12
50	7.29	7.56	9.09	18.2	11.7	2.81	2.45	2.86	3.57	5.70	7.13	7.44	6.55
45	7.45	7.86	9.38	20.1	12.9	3.12	2.65	2.99	3.71	5.88	7.30	7.60	6.99
40	7.68	8.42	9.83	22.7	14.3	3.46	2.85	3.10	3.88	6.05	7.46	7.93	7.42
35	7.89	8.57	10.5	25.0	15.7	3.87	3.05	3.20	4.10	6.25	7.69	8.13	8.00
30	8.32	8.66	11.0	27.2	17.2	4.35	3.34	3.31	4.35	6.49	7.96	8.29	8.58
25	8.61	8.75	11.8	29.6	19.5	5.08	3.76	3.6	4.64	6.73	8.22	8.45	9.17
20	8.75	8.93	12.4	32.5	21.8	6.10	4.34	3.93	4.95	6.97	8.48	8.61	9.75
15	9.03	9.19	13.8	36.9	25.5	7.15	5.32	4.29	5.29	7.26	8.74	8.96	11.7
10	9.42	9.69	16.0	46.2	30.2	10.5	6.47	5.66	5.75	7.74	9.05	9.82	15.1
5	10.2	10.2	20.9	58.5	37.9	14.7	9.99	7.80	7.01	8.22	9.75	11.2	23.1

1–10.R00–4A LOGAR RIVER AT SHEKHABAD—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	11.0	6.20	15.4	10.1	9.92	9.43	8.21
0.95	1.05	16.0	10.4	21.1	13.7	13.3	12.4	10.9
0.90	1.11	19.6	13.5	25.1	16.3	15.7	14.5	12.7
0.80	1.25	25.0	18.5	31.2	20.4	19.3	17.8	15.5
0.50	2	39.7	31.8	49.6	31.9	29.7	26.9	23.3
0.20	5	62.9	50.3	85.2	51.9	47.7	42.3	36.0
0.10	10	80.0	62.4	116	68.1	62.1	54.7	45.8
0.04	25	103	77.6	162	92.0	83.4	72.7	59.8
0.02	50	122	89.1	202	112	102	88.1	71.5
0.01	100	141	101	246	135	122	105	84.3
0.005	200	161	112	296	161	145	124	98.3
0.002	500	190	128	369	ng	ng	ng	ng

1–10.R00–4A LOGAR RIVER AT SHEKHABAD—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0.062	0.088	0.140	0.188	0.380	0.557	0.725	1.53
0.10	10	0.187	[1]0.165	0.207	0.279	0.367	0.629	0.835	1.07	2.00
0.20	5	0.496	[1]0.442	0.502	0.582	0.740	1.08	1.30	1.62	2.68
0.50	2	1.56	1.71	1.76	1.77	2.09	2.47	2.67	3.10	4.25

[1]Data does not fit log-Pearson Type III curve, use with caution.

1–10.R00–4A LOGAR RIVER AT SHEKHABAD—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1962	21-Apr	--	22.3	1971	26-Mar	--	15.0
1963	16-May	--	35.6	1972	28-Apr	--	41.6
1964	11-Apr	--	65.6	1973	1-Aug	--	73.0
1965	22-Apr	--	77.3	1974	28-Mar	--	36.2
1966	28-Apr	--	31.4	1975	5-Apr	--	34.6
1967	28-Apr	--	102	1976	25-Apr	--	71.8
1968	30-Apr	--	46.9	1977	27-May	--	29.8
1969	15-Apr	--	31.7	1978	11-Apr	--	20.5
1970	15-Apr	--	18.5	1980	19-Apr	--	65.8
Annual peak discharge, from highest to lowest							
1967	28-Apr	--	102	1963	16-May	--	35.6
1965	22-Apr	--	77.3	1975	5-Apr	--	34.6
1973	1-Aug	--	73.0	1969	15-Apr	--	31.7
1976	25-Apr	--	71.8	1966	28-Apr	--	31.4
1980	19-Apr	--	65.8	1977	27-May	--	29.8
1964	11-Apr	--	65.6	1962	21-Apr	--	22.3
1968	30-Apr	--	46.9	1978	11-Apr	--	20.5
1972	28-Apr	--	41.6	1970	15-Apr	--	18.5
1974	28-Mar	--	36.2	1971	26-Mar	--	15.0

1–10.R00–4A LOGAR RIVER AT SHEKHABAD—Continued

Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1962	6.34	8.58	8.77	10.1	8.79	10.2	16.8	9.05	2.85	2.51	2.51	3.63	7.49
1963	6.55	8.39	7.94	8.55	8.97	8.79	9.38	14.8	2.48	2.82	3.05	3.65	7.11
1964	5.29	6.48	6.88	7.2	6.99	10.8	37.4	12.6	4.35	2.98	2.97	3.23	8.9
1965	5.04	6.49	7.08	7.72	7.79	11.4	43.3	39.9	17.2	10.4	7.97	7.82	14.3
1966	8.15	9.95	10.8	8.23	8.73	10.7	18.8	10.1	3.2	3.39	3.24	3.94	8.25
1967	5.45	6.57	6.86	6.04	7.34	8.42	27.9	36.9	11.4	6.38	4.41	5.25	11.1
1968	7.51	8.96	8.57	9.43	9.91	14.2	28.1	21.2	8.03	4.86	3.72	5.15	10.8
1969	7.45	9.14	10.9	9.5	10.1	18	19.5	11.9	3.03	2.23	3.07	4.76	9.12
1970	6.42	6.8	6.1	5.89	5.85	8.53	12.4	2.69	0.467	1.16	1.89	2.66	5.06
1971	4.63	7.21	7.77	6.74	7.04	10.2	8.6	0.631	0.103	0.679	0.63	1.58	4.64
1972	3.07	5.29	5.78	5	4.31	6.16	19.7	19.1	4.22	2.04	2.12	3.69	6.7
1973	5.94	7.08	7.36	7.7	8.79	13.4	32.8	15.4	3.77	4.78	4.39	4.3	9.62
1974	6.05	7.51	8.32	8.46	8.67	13.1	12.3	5.01	0.43	0.766	1.18	3.31	6.24
1975	6.09	6.83	6.83	6.6	7.23	8.02	25.5	14.5	3.65	1.64	1.46	3.05	7.6
1976	4.41	6.4	7.37	6.96	7.33	8.72	30.3	18.7	5.17	5.57	3.48	4.08	9.03
1977	6.43	7.26	8.67	7.7	8.09	7.27	12.3	4.56	1.66	1.69	2.18	1.99	5.79
1978	3.42	6.38	6.3	5.78	6.5	8.28	14	3.33	0.463	2.43	4.15	2.88	5.31
1980	0.402	3.67	5.83	5.46	6.23	11.1	50.3	15.6	1.33	0.765	0.308	0.744	8.44

1–10.R00–5A LOGAR RIVER ABOVE BAND-I-CHAK WARDHAK*

(U.S. Geological Survey identification number: 340600068340000)

LOCATION: Lat 34º06’, long 68º34’.

DRAINAGE AREA: 4,415 km^2.

ALTITUDE: 2,190 meters plus mean sea level.

PERIOD OF RECORD: May 5, 1975 to September 30, 1980 (incomplete year)*.

GAGE: --

1–10.R00–5A LOGAR RIVER ABOVE BAND-I-CHAK WARDHAK—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	6.85	1977	3.45	1978	4.79	1.44	0.30	6.01
November	9.48	1977	4.69	1980	6.29	1.98	0.31	7.89
December	9.62	1977	4.76	1980	6.65	1.92	0.29	8.35
January	8.79	1977	3.21	1980	6.14	2.04	0.33	7.70
February	8.11	1977	3.55	1980	6.29	1.71	0.27	7.90
March	9.68	1977	5.66	1980	7.14	1.64	0.23	8.96
April	29.9	1976	12.1	1977	18.2	7.17	0.39	22.8
May	24.6	1976	3.59	1977	10.5	8.50	0.81	13.2
June	5.83	1976	1.78	1978	3.64	1.60	0.44	4.57
July	4.65	1976	1.76	1975	3.03	1.23	0.41	3.80
August	6.82	1978	2.27	1977	3.58	1.82	0.51	4.50
September	5.88	1976	1.98	1977	3.44	1.38	0.40	4.32
Annual	9.70	1976	5.68	1980	6.66	1.72	0.26	100

1–10.R00–5A LOGAR RIVER ABOVE BAND-I-CHAK WARDHAK—Continued

Monthly and annual flow duration, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	3.12	3.29	4.51	8.69	2.45	1.53	1.42	1.59	1.92	3.05	4.28	4.59	1.75
90	3.24	3.46	5.01	9.62	2.56	1.60	1.52	1.67	1.99	3.21	4.50	4.86	2.21
85	3.31	3.82	5.28	10.2	2.75	1.67	1.61	1.97	2.06	3.45	4.58	5.03	2.53
80	3.44	4.11	5.49	10.6	3.51	1.79	1.66	2.16	2.12	3.56	4.72	5.10	2.95
75	5.39	5.69	5.69	11.2	4.11	1.92	1.72	2.21	2.32	3.63	4.80	5.17	3.31
70	5.49	6.02	6.04	11.9	5.28	2.22	1.78	2.26	2.77	3.70	5.03	5.25	3.66
65	5.56	6.22	6.24	12.4	5.76	2.49	1.85	2.30	2.89	3.84	5.15	5.36	4.29
60	6.17	6.35	6.47	12.9	6.65	2.83	1.98	2.47	2.97	4.18	5.37	5.75	4.71
55	6.24	6.44	6.77	13.4	7.26	3.10	2.16	2.57	3.08	4.41	5.48	6.29	5.05
50	6.32	6.55	6.97	14.1	7.68	3.53	2.29	2.63	3.23	4.52	5.70	6.44	5.44
45	6.41	6.72	7.14	14.8	8.48	3.86	2.40	2.70	3.29	4.69	5.75	6.58	5.84
40	6.55	6.86	7.40	15.4	9.53	4.04	2.51	2.79	3.36	4.81	5.94	6.79	6.23
35	6.68	6.99	7.71	16.4	10.2	4.25	2.62	2.89	3.50	4.94	6.79	7.12	6.62
30	6.82	7.13	7.94	18.4	11.5	4.56	2.79	3.53	3.72	5.30	6.89	7.23	7.02
25	7.09	7.42	8.16	20.1	12.7	4.83	2.94	4.14	4.04	6.15	6.99	7.37	7.47
20	7.74	7.80	8.46	21.6	14.6	5.09	3.16	4.40	4.54	6.31	7.13	7.74	8.42
15	8.80	8.06	8.96	24.2	16.7	5.55	3.46	4.74	5.50	6.43	9.30	9.47	9.38
10	0	8.16	10.0	30.4	25.7	5.98	6.36	4.95	5.86	6.60	9.72	9.74	11.0
5	0	8.26	10.6	55.0	31.0	6.98	8.60	9.12	6.22	7.45	0	0	15.9

1–10.R00–5A LOGAR RIVER ABOVE BAND-I-CHAK WARDHAK—Continued

Probability of occurrence of annual high discharges

[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous[1] (m^3/s)	95 percent confidence limits		Maximum mean discharge[2] (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	13.3	4.60	19.7	12.8	10.9	10.3	9.93
0.95	1.05	16.4	7.10	23.2	14.1	12.3	11.5	10.7
0.90	1.11	18.6	9.00	25.8	15.3	13.5	12.5	11.4
0.80	1.25	22.0	12.2	29.8	17.3	15.6	14.3	12.6
0.50	2	31.1	21.6	43.8	24.3	22.6	20.3	16.8
0.20	5	46.4	34.3	82.3	40.1	38.3	33.3	26.3
0.10	10	58.3	41.9	126	55.9	54.1	46.2	35.6
0.04	25	75.6	51.4	210	84.3	82.4	68.9	52.1
0.02	50	90.2	58.6	299	114	112	92.0	68.7
0.01	100	106	65.9	417	152	150	122	90.0
0.005	200	124	73.6	573	202	199	160	118
0.002	500	151	84.4	856	ng	ng	ng	ng

[1]Less than 10 years of data used.

[2]Data does not fit log-Pearson Type III curve, use with caution.

1–10.R00–5A LOGAR RIVER ABOVE BAND-I-CHAK WARDHAK—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	1.12	1.12	1.14	1.21	1.42	1.63	1.76	[1]1.62	2.15
0.10	10	1.23	1.23	1.24	1.31	1.49	1.74	1.88	1.88	2.38
0.20	5	1.37	1.37	1.38	1.45	1.61	1.93	2.07	2.26	2.74
0.50	2	1.73	1.73	1.74	1.79	1.96	2.52	2.66	3.21	3.68

[1]Data does not fit log-Pearson Type III curve, use with caution.

1–10.R00–5A LOGAR RIVER ABOVE BAND-I-CHAK WARDHAK—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1975	17-May	--	18.0	1978	20-Aug	--	39.5
1976	25-Apr	--	66.0	1979	17-Apr	--	32.0
1977	27-May	--	32.4	1980	20-Apr	--	23.1
Annual peak discharge, from highest to lowest							
1976	25-Apr	--	66.0	1979	17-Apr	--	32.0
1978	20-Aug	--	39.5	1980	20-Apr	--	23.1
1977	27-May	--	32.4	1975	17-May	--	18.0

1–10.R00–5A LOGAR RIVER ABOVE BAND-I-CHAK WARDHAK—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1975	--	--	--	--	--	--	--	--	3.43	1.76	2.47	3.87	--
1976	5.55	6.91	7.23	6.86	6.67	7.72	29.9	24.6	5.83	4.65	4.71	5.88	9.7
1977	6.85	9.48	9.62	8.79	8.11	9.68	12.1	3.59	1.97	1.99	2.27	1.98	6.35
1978	3.45	4.95	6.41	6.36	7.13	6.73	12.7	4.61	1.78	4.32	6.82	3.49	5.71
1979	4.58	5.42	5.23	5.46	6.01	5.89	18.9	7.98	3.94	2.26	2.54	2.39	5.86
1980	3.5	4.69	4.76	3.21	3.55	5.66	17.3	11.8	4.89	3.19	2.69	3.06	5.68

1–10.R00–6A LOGAR RIVER AT KAJAB*

(U.S. Geological Survey identification number: 341400068300000)

LOCATION: Lat 34º14’, long 68º30’.

DRAINAGE AREA: 3,780 km^2.

ALTITUDE: 2,320 meters plus mean sea level.

PERIOD OF RECORD: February 15, 1963 to September 30, 1979 (incomplete year)*.

GAGE: --

1–10.R00–6A LOGAR RIVER AT KAJAB—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	7.79	1964	3.51	1979	5.60	1.31	0.23	6.27
November	9.45	1964	4.87	1972	6.74	1.28	0.19	7.56
December	10.4	1964	4.90	1979	6.84	1.33	0.19	7.67
January	10.6	1964	3.90	1979	6.77	1.58	0.23	7.60
February	9.49	1964	3.32	1979	6.79	1.56	0.23	7.62
March	13.1	1964	3.38	1979	8.8	2.53	0.29	9.87
April	31.6	1976	8.41	1971	19.0	6.63	0.35	21.3
May	36.5	1967	1.76	1971	13.7	9.57	0.70	15.4
June	10.5	1965	1.04	1971	4.28	3.02	0.71	4.80
July	5.96	1978	1.23	1977	3.06	1.46	0.48	3.43
August	7.97	1978	2.08	1977	3.58	1.45	0.40	4.01
September	5.96	1968	2.52	1977	4.01	1.11	0.28	4.50
Annual	10.6	1965	4.32	1971	7.41	1.95	0.26	100

1–10.R00–6A LOGAR RIVER AT KAJAB—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	4.08	3.47	3.47	7.90	1.85	1.09	1.01	1.63	2.55	3.26	4.93	5.02	1.69
90	5.35	5.60	5.70	9.59	2.58	1.18	1.18	1.97	2.73	3.68	5.15	5.39	2.27
85	5.67	5.67	6.11	10.5	3.19	1.36	1.46	2.20	2.95	4.16	5.39	5.67	2.82
80	5.77	5.73	6.44	11.4	4.16	1.51	1.60	2.34	3.05	4.35	5.61	5.80	3.13
75	5.87	5.81	6.61	12.3	5.59	1.75	1.83	2.46	3.10	4.63	5.70	5.91	3.61
70	5.97	5.91	6.78	12.8	6.52	1.94	1.91	2.58	3.14	4.89	5.93	6.15	4.34
65	6.07	6.01	6.98	13.3	8.06	2.14	1.98	2.71	3.18	5.00	6.07	6.26	4.90
60	6.17	6.11	7.18	14.3	9.26	2.53	2.09	2.83	3.28	5.11	6.18	6.38	5.29
55	6.28	6.21	7.69	15.2	10.3	2.72	2.35	2.97	3.41	5.39	6.27	6.50	5.66
50	6.56	6.52	8.16	16.2	11.8	3.13	2.60	3.13	3.55	5.51	6.60	6.57	5.95
45	6.63	6.60	8.51	17.6	13.3	3.47	2.74	3.28	4.02	5.63	6.66	6.64	6.22
40	6.70	6.68	9.22	19.3	14.3	4.15	2.87	3.45	4.23	5.81	6.80	6.90	6.48
35	6.84	7.17	9.76	20.6	15.5	4.58	3.07	3.62	4.64	6.06	7.18	7.05	6.91
30	7.52	7.88	10.5	21.7	16.7	4.97	3.32	3.83	4.87	6.30	7.54	7.31	7.55
25	8.04	8.11	11.2	23.1	17.7	5.59	3.66	4.06	5.06	6.77	7.79	7.48	8.18
20	8.15	8.30	11.8	25.1	19.3	6.56	3.98	4.27	5.33	6.92	8.08	7.76	8.81
15	8.25	8.52	12.3	28.2	23.0	7.76	4.31	4.46	5.54	7.26	8.19	8.17	10.7
10	8.55	8.83	13.0	31.2	30.0	9.18	4.64	4.64	5.74	7.50	8.53	8.39	13.6
5	10.3	9.55	14.4	35.6	34.9	11.9	6.27	5.19	6.08	8.04	9.15	9.99	19.9

1–10.R00–6A LOGAR RIVER AT KAJAB—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	10.8	6.30	15.1	9.73	[1]9.87	9.33	8.51
0.95	1.05	15.2	9.90	19.9	12.9	12.4	11.7	10.7
0.90	1.11	18.2	12.6	23.3	15.1	14.2	13.4	12.3
0.80	1.25	22.8	16.9	28.5	18.5	17.0	15.9	14.5
0.50	2	35.4	28.4	44.2	28.1	24.8	22.8	20.5
0.20	5	55.7	44.6	75.4	44.5	38.5	34.4	29.8
0.10	10	70.9	55.4	103	57.4	49.6	43.5	36.8
0.04	25	92.0	69.1	146	76.4	66.2	56.8	46.4
0.02	50	109	79.6	184	92.6	80.6	67.9	54.2
0.01	100	127	90.4	227	111	96.9	80.3	62.7
0.005	200	147	102	276	131	115	94.1	71.7
0.002	500	175	117	351	ng	ng	ng	ng

[1]Data does not fit log-Pearson Type III curve, use with caution.

1–10.R00–6A LOGAR RIVER AT KAJAB—Continued
Probability of occurrence of annual low discharges
[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.923	0.927	0.927	0.954	1.03	1.19	1.40	1.66	2.34
0.10	10	1.10	1.11	1.12	1.15	1.25	1.46	1.70	1.98	2.72
0.20	5	1.35	1.37	1.39	1.44	1.57	1.84	2.11	2.42	3.21
0.50	2	1.98	2.01	2.06	2.15	2.35	2.74	3.05	3.41	4.29

1–10.R00–6A LOGAR RIVER AT KAJAB—Continued
Annual peak discharge and corresponding gage height
[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1963	19-May	--	22.6	1972	28-Apr	--	27.0
1964	21-Apr	--	26.8	1973	20-Jul	--	50.6
1965	6-May	--	37.8	1974	29-Mar	--	17.2
1966	26-Apr	--	28.0	1975	26-Apr	--	25.0
1967	29-Apr	--	92.0	1976	25-Apr	--	70.3
1968	23-Apr	--	44.0	1977	10-Aug	--	39.0
1969	14-Aug	--	34.0	1978	19-Aug	--	86.0
1970	21-Aug	--	43.0	1979	15-Apr	--	38.0
1971	27-Mar	--	12.8				
Annual peak discharge, from highest to lowest							
1967	29-Apr	--	92.0	1969	14-Aug	--	34.0
1978	19-Aug	--	86.0	1966	26-Apr	--	28.0
1976	25-Apr	--	70.3	1972	28-Apr	--	27.0
1973	20-Jul	--	50.6	1964	21-Apr	--	26.8
1968	23-Apr	--	44.0	1975	26-Apr	--	25.0
1970	21-Aug	--	43.0	1963	19-May	--	22.6
1977	10-Aug	--	39.0	1974	29-Mar	--	17.2
1979	15-Apr	--	38.0	1971	27-Mar	--	12.8
1965	6-May	--	37.8				

1–10.R00–6A LOGAR RIVER AT KAJAB—Continued

Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1963	--	--	--	--	--	11.2	12.3	16.8	5.89	3.54	4.28	5.32	--
1964	7.79	9.45	10.4	10.6	9.49	13.1	23.4	14.2	6.23	2.48	2.96	3.81	9.48
1965	5.7	6.82	7.13	8.43	8.96	11.5	26.8	29.8	10.5	4.08	3.53	4.43	10.6
1966	6.47	7.22	6.81	6.88	7.24	8.47	18.1	11	3.44	2.96	3.57	4.77	7.24
1967	5.44	6.12	6.25	5.39	6.06	6.96	21.5	36.5	10.3	5.12	4.51	5.51	9.99
1968	7.33	7.6	7.45	7.81	8.38	11.7	26.9	19.3	7.55	4.37	4.98	5.96	9.93
1969	7.2	8.29	8.45	8.28	8.45	12	14.1	9.88	4.07	2.82	4.91	5.19	7.8
1970	6.09	8.24	7.22	6.44	6.14	7.54	14.2	3.66	1.4	1.64	2.62	2.81	5.65
1971	3.95	5.26	5.68	5.68	5.69	7.59	8.41	1.76	1.04	1.39	2.36	3.15	4.32
1972	4.02	4.87	5.25	5.51	5.68	6.64	13.3	12.9	3.56	2.14	2.84	3.63	5.86
1973	5.07	5.71	5.94	5.94	6.1	8.72	27.1	11.3	3.12	4.56	3.05	3.15	7.47
1974	5.28	6.42	6.86	6.62	6.58	9.67	11.3	5.55	1.78	1.67	2.25	3.24	5.59
1975	4.82	6.07	6.57	6.58	6.58	7.28	20.6	13.1	2.97	1.9	2.5	3.53	6.87
1976	5.21	6.36	6.3	6.2	6.2	7.4	31.6	26.1	6.08	4.36	3.42	5.26	9.53
1977	7.17	8.01	7.9	8.1	8.1	9.91	14.9	4.12	1.61	1.23	2.08	2.52	6.29
1978	4.47	5.92	6.37	6.03	5.75	6.57	16.6	6.7	2.14	5.96	7.97	3.17	6.47
1979	3.51	5.56	4.9	3.9	3.32	3.38	22	10.2	1.12	1.72	3	2.77	5.44

1–0.000–9M KABUL RIVER AT MAIDAN

(U.S. Geological Survey identification number: 341900068510000)

LOCATION: Lat 34º19’, long 68º51’.

DRAINAGE AREA: 1,305 km^2.

ALTITUDE: 2,130 meters plus mean sea level.

PERIOD OF RECORD: October 1, 1961 to September 30, 1980.

GAGE: --

1–0.000–9M KABUL RIVER AT MAIDAN—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	2.46	1966	0.434	1980	1.08	0.55	0.51	1.77
November	3.40	1966	0.460	1972	1.63	0.91	0.56	2.67
December	3.78	1966	0.391	1972	2.12	1.00	0.47	3.46
January	4.16	1968	0.799	1972	2.50	0.96	0.38	4.10
February	4.25	1968	1.45	1972	2.65	0.77	0.29	4.33
March	12.4	1973	2.60	1963	6.65	3.27	0.49	10.9
April	50.3	1980	6.17	1970	20.7	12.8	0.62	33.8
May	31.8	1965	1.74	1971	14.4	9.73	0.68	23.5
June	20.6	1965	0.742	1971	5.71	5.42	0.95	9.34
July	6.99	1965	0.206	1980	1.72	1.49	0.87	2.81
August	2.75	1965	0.236	1980	1.09	0.53	0.49	1.79
September	1.81	1965	0.338	1980	0.92	0.35	0.38	1.50
Annual	9.10	1965	1.72	1971	5.09	2.31	0.45	100

1–0.000–9M KABUL RIVER AT MAIDAN—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.75	1.50	2.03	5.08	1.51	0.77	0.52	0.31	0.38	0.47	0.47	0.45	0.53
90	1.35	1.62	2.24	6.49	2.08	0.87	0.59	0.51	0.49	0.53	0.55	0.73	0.66
85	1.50	1.72	2.4	7.25	3.01	0.94	0.66	0.56	0.53	0.55	0.60	0.94	0.80
80	1.65	1.78	2.63	8.37	4.09	1.09	0.73	0.62	0.60	0.57	0.69	1.02	0.92
75	1.85	2.02	2.99	9.37	4.67	1.30	0.83	0.67	0.64	0.68	0.80	1.25	1.04
70	1.94	2.10	3.37	10.3	6.28	1.54	0.89	0.77	0.68	0.71	0.97	1.52	1.17
65	2.10	2.16	3.71	11.5	7.83	1.86	0.95	0.84	0.78	0.83	1.10	1.73	1.32
60	2.31	2.39	3.99	12.8	8.99	2.24	1.03	0.93	0.86	0.87	1.23	1.84	1.54
55	2.44	2.51	4.44	14.0	10.2	2.60	1.13	0.99	0.89	0.90	1.28	1.92	1.80
50	2.54	2.77	4.78	15.2	11.5	2.94	1.23	1.03	0.92	0.93	1.48	2.06	2.09
45	2.63	2.85	5.24	16.3	13.0	3.90	1.32	1.06	0.96	1.01	1.61	2.30	2.40
40	2.73	2.93	6.18	18.4	14.5	4.78	1.42	1.10	1.00	1.03	1.72	2.46	2.71
35	2.86	3.00	6.77	21.1	16.3	5.90	1.52	1.13	1.05	1.05	1.87	2.54	3.04
30	3.07	3.10	7.71	23.7	18.8	6.59	1.63	1.17	1.10	1.11	2.07	2.68	3.45
25	3.30	3.23	8.63	28.1	21.7	7.92	1.74	1.22	1.14	1.25	2.31	2.88	4.17
20	3.46	3.37	9.62	32.3	25.0	9.59	1.87	1.28	1.18	1.58	2.59	3.10	5.99
15	3.58	3.45	11.4	36.9	29.0	12.1	2.48	1.37	1.24	1.86	2.77	3.29	9.21
10	3.72	3.60	13.2	44.7	31.7	14.4	3.31	1.69	1.30	1.98	3.00	3.44	13.7
5	4.01	4.10	16.5	54.4	35.8	19.5	5.11	2.62	0	2.43	3.34	3.69	22.9

1–0.000–9M KABUL RIVER AT MAIDAN—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	8.60	4.30	13.0	6.36	5.62	5.11	4.33
0.95	1.05	15.0	9.20	20.7	10.0	8.97	8.09	6.86
0.90	1.11	19.9	13.2	26.3	12.7	11.5	10.3	8.74
0.80	1.25	27.4	19.8	35.0	17.0	15.4	13.7	11.7
0.50	2	47.6	37.4	61.0	29.6	26.7	23.5	20.0
0.20	5	76.9	60.1	107	51.3	45.9	39.6	33.7
0.10	10	96.1	73.4	142	68.4	60.6	51.8	44.0
0.04	25	120	88.7	188	92.8	81.1	68.7	58.1
0.02	50	136	99.0	224	113	97.7	82.2	69.5
0.01	100	152	109	259	135	115	96.4	81.3
0.005	200	167	118	294	158	134	111	93.9
0.002	500	186	129	340	ng	ng	ng	ng

1–0.000–9M KABUL RIVER AT MAIDAN—Continued
Probability of occurrence of annual low discharges
[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.368	[1]0.365	[1]0.364	0.376	0.400	0.441	0.498	0.536	0.594
0.10	10	0.410	0.413	0.416	0.432	0.460	0.500	0.555	0.602	0.700
0.20	5	0.473	0.484	0.493	0.512	0.545	0.586	0.640	0.699	0.853
0.50	2	0.648	0.674	0.694	0.720	0.760	0.807	0.866	0.962	1.24

[1]Data does not fit log-Pearson Type III curve, use with caution.

1–0.000–9M KABUL RIVER AT MAIDAN—Continued
Annual peak discharge and corresponding gage height
[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1962	30-Apr	--	20.0	1972	27-Apr	--	86.0
1963	12-May	--	36.6	1973	10-Apr	--	68.0
1964	10-Apr	--	61.7	1974	7-Apr	--	36.0
1965	6-May	--	42.1	1975	4-Apr	--	46.8
1966	27-Apr	--	27.2	1976	24-Apr	--	110
1967	27-Apr	--	108	1977	27-May	--	30.2
1968	30-Apr	--	58.6	1978	6-Jul	--	86.9
1969	15-Apr	--	34.2	1979	6-Aug	--	65.4
1970	25-Apr	--	18.0	1980	19-Apr	--	63.8
1971	16-Apr	--	11.7				
Annual peak discharge, from highest to lowest							
1976	24-Apr	--	110	1965	6-May	--	42.1
1967	27-Apr	--	108	1963	12-May	--	36.6
1978	6-Jul	--	86.9	1974	7-Apr	--	36.0
1972	27-Apr	--	86.0	1969	15-Apr	--	34.2
1973	10-Apr	--	68.0	1977	27-May	--	30.2
1979	6-Aug	--	65.4	1966	27-Apr	--	27.2
1980	19-Apr	--	63.8	1962	30-Apr	--	20.0
1964	10-Apr	--	61.7	1970	25-Apr	--	18.0
1968	30-Apr	--	58.6	1971	16-Apr	--	11.7
1975	4-Apr	--	46.8				

1–0.000–9M KABUL RIVER AT MAIDAN—Continued

Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1962	1.8	3.21	3.32	3.69	2.44	2.85	11.2	7.31	2.32	1.23	1.22	1.41	3.49
1963	1.91	2.11	2.66	3.46	3.13	2.6	7.81	18.4	5.88	1.65	1.14	1.07	4.33
1964	1.04	1.39	2.57	2.56	2.84	11.3	38.4	15	4.87	1.6	1.24	1.13	6.98
1965	0.981	1.77	2.46	2.68	3.25	10	23.8	31.8	20.6	6.99	2.75	1.81	9.1
1966	2.46	3.4	3.78	3.69	3.32	4.75	13.9	12.8	6.12	1.36	0.913	0.766	4.77
1967	0.698	1.75	2.03	1.97	2.1	3.56	25.6	24.7	13	3.21	1.4	1.13	6.75
1968	1.83	2.86	3.7	4.16	4.25	11	22.1	20.7	15.2	2.9	1.03	0.985	7.55
1969	1.32	2.54	3.18	3.43	3.54	8.2	11.7	8.64	5.61	1.96	0.965	0.875	4.33
1970	0.915	2.41	1.9	2.77	2.88	4.24	6.17	2.53	0.976	0.816	0.606	0.787	2.24
1971	0.965	0.774	0.69	0.845	1.57	3.82	7.85	1.74	0.742	0.73	0.52	0.52	1.72
1972	0.604	0.46	0.391	0.799	1.45	10.7	30.8	29.3	9.94	1.34	0.9	1.03	7.31
1973	1.2	1.78	2.93	3.16	3.36	12.4	36.2	18.9	4.12	1.57	1.21	1.09	7.32
1974	1.05	1.16	1.88	2.34	2.08	6.37	9.77	4.2	1.55	1.25	1.55	1.17	2.86
1975	0.746	0.525	1.05	1.8	1.7	3.81	18.6	10.4	3.84	0.98	0.797	0.728	3.75
1976	0.695	0.984	1.7	1.97	2.47	6.84	38.7	27	6.4	1.26	1.05	0.896	7.48
1977	0.855	1.51	2.29	2.56	3.07	4.93	10.1	3.45	1.73	0.657	0.702	0.607	2.7
1978	0.547	0.753	0.961	1.51	2.05	5.89	12.2	6.03	1.56	2.38	0.864	0.643	2.95
1979	0.561	0.9	1.35	1.58	1.77	3.41	17.8	6.7	1.13	0.6	1.68	0.433	3.15
1980	0.434	0.719	1.36	2.61	3.07	9.64	50.3	23.4	2.89	0.206	0.236	0.338	7.9

4-14.R00–1A MARKHANA RIVER AT DAHANE RISHQA*

(U.S. Geological Survey identification number: 342100067290000)

LOCATION: Lat 34º21’N., long 67º29’E.

DRAINAGE AREA: 1,080 km^2.

ALTITUDE: 2,580 meters plus mean sea level.

PERIOD OF RECORD: August 9, 1969 to September 30, 1978 (incomplete year)*.

GAGE: --

4–14.R00–1A MARKHANA RIVER AT DAHANE RISHQA—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	5.13	1970	2.31	1972	3.47	0.85	0.24	3.64
November	5.35	1970	2.19	1972	3.25	0.92	0.28	3.41
December	4.64	1970	2.27	1972	3.04	0.73	0.24	3.19
January	3.62	1970	2.38	1978	2.86	0.44	0.15	3.00
February	5.56	1975	2.31	1978	3.19	1.01	0.32	3.35
March	9.89	1974	2.55	1976	5.91	3.03	0.51	6.21
April	27.6	1975	7.63	1971	18.8	6.08	0.32	19.7
May	44.7	1976	7.83	1971	27.2	13.2	0.48	28.5
June	25.2	1975	3.18	1971	13.6	6.65	0.49	14.3
July	11.0	1975	2.24	1971	6.23	2.72	0.44	6.54
August	5.39	1976	2.23	1971	3.88	1.12	0.29	4.08
September	5.36	1969	2.58	1971	3.77	0.82	0.22	3.96
Annual	12.0	1975	3.56	1971	7.94	2.49	0.31	100

4–14.R00–1A MARKHANA RIVER AT DAHANE RISHQA—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	2.25	1.91	2.17	4.80	7.24	2.80	2.13	1.93	2.59	1.60	2.23	2.26	2.24
90	2.30	2.20	2.30	6.15	10.2	4.02	2.40	2.59	2.80	2.40	2.27	2.28	2.35
85	2.35	2.28	2.54	7.72	14.9	6.96	2.78	2.68	3.08	2.46	2.40	2.30	2.51
80	2.40	2.39	2.71	8.99	16.6	7.83	3.57	2.79	3.13	2.80	2.44	2.31	2.74
75	2.43	2.45	2.88	12.7	17.3	8.72	3.91	3.16	3.25	3.01	2.56	2.41	2.90
70	2.46	2.51	3.16	14.0	18.0	9.48	4.08	3.28	3.29	3.07	2.61	2.62	3.06
65	2.54	2.58	3.27	15.4	18.6	10.3	4.31	3.41	3.42	3.15	2.76	2.76	3.23
60	2.57	2.64	3.55	16.3	19.5	11.1	4.57	3.50	3.45	3.27	2.93	2.79	3.41
55	2.60	2.71	3.96	17.1	21.4	11.8	5.23	3.58	3.47	3.30	2.97	2.91	3.59
50	2.62	2.77	4.44	17.9	23.3	12.4	5.60	3.64	3.50	3.42	3.01	2.94	3.78
45	2.75	2.83	5.21	18.7	24.8	13.1	5.99	3.71	3.54	3.45	3.16	2.97	4.13
40	2.79	2.95	5.80	19.4	28.3	13.9	6.80	3.82	3.69	3.47	3.20	3.09	4.68
35	2.93	3.07	6.84	20.2	31.0	14.8	7.23	4.24	3.86	3.59	3.28	3.13	5.20
30	2.99	3.21	7.59	22.0	34.3	16.2	7.63	4.61	3.95	3.63	3.47	3.26	6.40
25	3.15	3.51	8.04	23.9	36.9	17.7	8.02	4.95	4.17	3.67	3.56	3.30	8.43
20	3.23	3.94	8.68	26.4	39.7	19.3	8.47	5.07	4.59	4.13	3.81	3.45	12.0
15	3.46	4.22	11.4	28.9	44.1	21.9	9.42	5.20	4.70	4.34	4.13	3.57	15.8
10	3.62	4.63	12.4	33.7	50.4	24.0	11.1	5.36	4.82	5.03	4.99	4.56	19.4
5	3.91	5.89	13.2	37.8	55.1	29.5	12.5	5.95	5.82	5.12	5.16	0	29.0

4–14.R00–1A MARKHANA RIVER AT DAHANE RISHQA—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous[1] (m^3/s)	95 percent confidence limits		Maximum mean discharge[2] (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	5.90	1.50	11.0	6.01	6.16	5.98	5.61
0.95	1.05	12.9	5.40	19.7	10.8	10.6	10.2	9.72
0.90	1.11	18.2	9.40	26.0	14.4	13.9	13.2	12.7
0.80	1.25	26.2	16.3	36.0	19.8	18.8	17.8	17.0
0.50	2	44.7	32.3	65.2	33.6	31.6	29.7	27.6
0.20	5	63.0	45.7	105	51.8	49.2	46.0	40.9
0.10	10	70.7	50.8	125	62.5	60.3	56.3	48.5
0.04	25	77.1	54.7	143	74.6	73.4	68.5	56.7
0.02	50	80.1	56.6	152	82.5	82.4	76.9	62.0
0.01	100	82.2	57.8	158	89.6	90.8	84.8	66.6
0.005	200	83.7	58.6	162	96.0	98.8	92.2	70.7
0.002	500	84.9	59.4	166	ng	ng	ng	ng

[1]Less than 10 years of data used; no low outliers removed.

[2]Data does not fit log-Pearson Type III curve, use with caution.

4–14.R00–1A MARKHANA RIVER AT DAHANE RISHQA—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	1.40	1.50	1.58	1.76	1.91	2.12	2.15	2.18	2.23
0.10	10	1.54	1.62	1.71	1.86	2.05	2.23	2.26	2.30	2.39
0.20	5	1.71	1.77	1.87	1.99	2.22	2.36	2.40	2.45	2.58
0.50	2	2.02	2.06	2.17	2.23	2.50	2.63	2.68	2.76	2.96

4–14.R00–1A MARKHANA RIVER AT DAHANE RISHQA—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1970	26-Apr	--	24.5	1975	18-May	--	60.6
1971	4-May	--	11.2	1976	18-May	--	72.0
1972	20-May	--	57.0	1977	26-May	--	35.4
1973	2-May	--	52.1	1978	6-May	--	47.2
1974	10-May	--	36.5				
Annual peak discharge, from highest to lowest							
1976	18-May	--	72.0	1974	10-May	--	36.5
1975	18-May	--	60.6	1977	26-May	--	35.4
1972	20-May	--	57.0	1970	26-Apr	--	24.5
1973	2-May	--	52.1	1971	4-May	--	11.2
1978	6-May	--	47.2				

4–14.R00–1A MARKHANA RIVER AT DAHANE RISHQA—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1969	--	--	--	--	--	--	--	--	--	--	--	5.36	--
1970	5.13	5.35	4.64	3.62	3.54	5.64	16.9	17.1	8.96	4.61	3.39	3.47	6.87
1971	3.34	2.82	2.4	2.58	2.56	3.31	7.63	7.83	3.18	2.24	2.23	2.58	3.56
1972	2.31	2.19	2.27	2.41	2.77	3.38	21.9	37.6	17.3	7.33	3.74	3.35	8.89
1973	3.43	3.69	3.27	3.46	2.93	8.69	26.5	34.4	16.3	7.16	5.08	4.07	9.94
1974	3.39	2.82	2.86	2.68	2.77	9.89	19.9	20	12.6	5.38	3.5	3.19	7.43
1975	3.05	3.2	3.46	2.98	5.56	8.58	27.6	43.5	25.2	11	5.34	3.91	12
1976	3.7	3.38	3.02	2.62	2.48	2.55	16.1	44.7	19.6	8.78	5.39	4.83	9.79
1977	4.26	3.34	3.06	2.98	3.81	8.57	16.3	17.4	8.64	3.28	2.98	3.28	6.5
1978	2.6	2.45	2.35	2.38	2.31	2.59	16.3	22	11.1	6.3	3.31	3.68	6.46

1–0.000–8M KABUL RIVER AT TANGI SAIDAN

(U.S. Geological Survey identification number: 342400069050000)

LOCATION: Lat 34º24’, long 69º05’.

DRAINAGE AREA: 1,625 km^2.

ALTITUDE: 1,875 meters plus mean sea level.

PERIOD OR RECORD: October 1, 1961 to September 30, 1980.

GAGE: --

1–0.000–8M KABUL RIVER AT TANGI SAIDAN—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	1.20	1966	0.128	1980	0.44	0.30	0.68	0.90
November	2.57	1966	0.219	1972	1.05	0.79	0.74	2.16
December	3.52	1966	0.417	1972	1.61	0.96	0.60	3.30
January	4.15	1962	0.961	1971	2.48	0.97	0.39	5.09
February	4.57	1968	1.31	1971	2.67	0.92	0.34	5.47
March	12.5	1968	1.56	1963	6.15	3.01	0.49	12.6
April	43.9	1980	3.48	1970	17.2	10.5	0.61	35.3
May	26.8	1965	0.406	1970	11.1	8.21	0.74	22.7
June	18.1	1965	0.070	1971	4.38	5.13	1.17	8.98
July	6.83	1965	0.079	1971	1.00	1.55	1.55	2.04
August	1.31	1965	0.076	1980	0.40	0.29	0.72	0.81
September	0.572	1962	0.097	1971	0.31	0.15	0.50	0.63
Annual	7.96	1965	1.13	1971	4.05	2.09	0.51	100

1–0.000–8M KABUL RIVER AT TANGI SAIDAN—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.90	1.27	1.61	2.68	0.29	0.07	0.07	0.06	0.09	0.11	0.12	0.38	0.10
90	1.12	1.52	1.85	4.36	0.68	0.11	0.09	0.08	0.11	0.16	0.23	0.44	0.21
85	1.27	1.65	2.16	5.66	1.06	0.23	0.17	0.10	0.15	0.17	0.27	0.53	0.25
80	1.59	1.77	2.53	7.34	1.96	0.31	0.20	0.14	0.17	0.19	0.32	0.71	0.30
75	1.83	1.86	2.71	8.49	2.81	0.42	0.22	0.19	0.20	0.21	0.36	0.82	0.36
70	1.99	2.03	2.89	9.62	4.38	0.52	0.25	0.22	0.20	0.25	0.40	0.94	0.46
65	2.11	2.15	3.16	10.8	5.79	0.65	0.28	0.23	0.21	0.27	0.49	1.03	0.56
60	2.27	2.33	3.58	11.7	6.78	0.81	0.32	0.25	0.24	0.29	0.59	1.10	0.77
55	2.40	2.54	4.06	13.1	8.18	1.19	0.35	0.27	0.26	0.30	0.71	1.17	1.08
50	2.49	2.68	4.40	14.5	9.52	1.72	0.39	0.29	0.30	0.32	0.80	1.26	1.42
45	2.58	2.75	5.11	15.8	10.8	2.37	0.44	0.31	0.31	0.34	1.01	1.36	1.84
40	2.66	2.87	5.75	17.1	12.1	3.34	0.50	0.35	0.33	0.37	1.10	1.73	2.19
35	2.74	3.00	6.48	18.6	13.4	4.29	0.55	0.39	0.35	0.40	1.26	1.93	2.59
30	2.87	3.14	7.25	20.3	14.9	5.42	0.59	0.43	0.41	0.45	1.45	2.05	3.04
25	3.02	3.31	7.98	22.3	16.5	6.38	0.66	0.47	0.45	0.52	1.62	2.25	3.77
20	3.34	3.50	9.48	25.2	18.8	7.99	0.90	0.55	0.48	0.63	1.85	2.72	5.06
15	3.75	3.71	11.2	28.9	21.5	10.5	1.18	0.61	0.52	0.73	2.06	2.99	8.12
10	4.00	3.99	12.6	34.6	24.8	14.3	2.02	0.67	0.57	0.92	2.25	3.23	12.6
5	4.23	4.31	15.9	44.8	29.5	17.4	4.83	0.88	0.60	1.35	2.80	3.56	18.9

1–0.000–8M KABUL RIVER AT TANGI SAIDAN—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	7.4	3.90	10.9	5.40	4.08	3.44	2.73
0.95	1.05	12.5	7.90	16.8	8.40	6.93	6.04	4.94
0.90	1.11	16.3	11.2	21.0	10.6	9.08	8.01	6.63
0.80	1.25	21.9	16.2	27.3	14.1	12.4	11.1	9.29
0.50	2	36.3	29.2	45.6	24.3	22.0	19.7	16.7
0.20	5	56.2	44.8	76.2	41.7	37.1	32.8	28.0
0.10	10	68.7	53.7	98.2	55.2	48.0	41.9	35.7
0.04	25	83.4	63.5	126	74.4	62.3	53.5	45.3
0.02	50	93.6	70.1	147	90.2	73.3	62.0	52.3
0.01	100	103	76.0	167	[1]107	84.4	70.4	59.1
0.005	200	112	81.5	187	[1]126	95.6	78.7	65.7
0.002	500	123	88.2	212	ng	ng	ng	ng

[1]Data does not fit log-Pearson Type III curve, use with caution.

1–0.000–8M KABUL RIVER AT TANGI SAIDAN—Continued
Probability of occurrence of annual low discharges
[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.000	0.009	0.017	0.045	0.073	0.089	0.100	0.116	0.163
0.10	10	0.008	0.017	0.029	0.060	0.093	0.115	0.127	0.145	0.211
0.20	5	0.023	0.033	0.052	0.084	0.124	0.153	0.168	0.192	0.288
0.50	2	0.089	0.104	0.135	0.159	0.208	0.254	0.283	0.334	0.530

1–0.000–8M KABUL RIVER AT TANGI SAIDAN—Continued
Annual peak discharge and corresponding gage height
[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1962	20-Apr	--	25.7	1972	28-Apr	--	58.2
1963	4-May	--	30.7	1973	11-Apr	--	47.0
1964	12-Apr	--	34.3	1974	7-Apr	--	18.5
1965	23-Apr	--	37.4	1975	4-Apr	--	32.0
1966	27-Apr	--	21.8	1976	24-Apr	--	65.6
1967	27-Apr	--	87.2	1977	27-May	--	28.4
1968	30-Apr	--	57.8	1978	6-Jul	--	57.8
1969	15-Apr	--	32.2	1979	7-Aug	--	35.5
1970	26-Apr	--	11.5	1980	19-Apr	--	60.8
1971	26-Mar	--	10.8				
Annual peak discharge, from highest to lowest							
1967	27-Apr	--	87.2	1969	15-Apr	--	32.2
1976	24-Apr	--	65.6	1975	4-Apr	--	32.0
1980	19-Apr	--	60.8	1963	4-May	--	30.7
1972	28-Apr	--	58.2	1977	27-May	--	28.4
1968	30-Apr	--	57.8	1962	20-Apr	--	25.7
1978	6-Jul	--	57.8	1966	27-Apr	--	21.8
1973	11-Apr	--	47.0	1974	7-Apr	--	18.5
1965	23-Apr	--	37.4	1970	26-Apr	--	11.5
1979	7-Aug	--	35.5	1971	26-Mar	--	10.8
1964	12-Apr	--	34.3				

1–0.000–8M KABUL RIVER AT TANGI SAIDAN—Continued

Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1962	0.882	2.54	3.25	4.15	3.2	2.99	10.7	4.05	0.702	0.29	0.44	0.572	2.8
1963	0.419	0.767	1.51	2.44	1.95	1.56	5.35	8	3.51	0.626	0.399	0.287	2.23
1964	0.595	1.31	1.32	2.52	3.11	9.76	25	15.9	5.52	1.29	0.725	0.524	5.62
1965	0.414	1.32	2.47	2.99	3.35	9.18	22.1	26.8	18.1	6.83	1.31	0.512	7.96
1966	1.2	2.57	3.52	4.03	4.07	5.11	14	9.77	4.08	0.553	0.317	0.372	4.12
1967	0.35	1.16	1.57	2.65	2.61	5.37	23.8	19.8	12	2.11	0.574	0.448	6.03
1968	0.952	1.92	2.6	3.55	4.57	12.5	20.6	19.6	13.6	1.12	0.555	0.561	6.83
1969	0.721	1.88	3.1	4.01	3.75	8.09	11.4	6.41	2.71	0.428	0.279	0.172	3.57
1970	0.46	2.02	2.08	2.65	2.6	3.35	3.48	0.406	0.24	0.273	0.314	0.301	1.51
1971	0.28	0.28	0.612	0.961	1.31	3.33	5.93	0.635	0.07	0.079	0.097	0.097	1.13
1972	0.276	0.219	0.417	1.07	1.48	8.97	22.1	24.4	8.54	1.48	0.336	0.194	5.79
1973	0.198	0.696	1.67	2.74	3.32	9.69	29.5	14.2	2.58	0.241	0.225	0.255	5.43
1974	0.157	0.535	1.17	1.98	2.09	5	6.95	3.04	0.14	0.125	0.107	0.26	1.79
1975	0.231	0.346	0.657	1.62	1.6	4.59	17.5	9.15	2.46	0.287	0.253	0.229	3.23
1976	0.254	0.247	0.833	1.92	1.92	6.09	30	16.7	4.7	0.504	0.271	0.42	5.3
1977	0.321	0.879	1.25	2.36	2.71	3.16	8.02	2.15	0.624	0.317	0.183	0.158	1.83
1978	0.228	0.422	0.526	1.28	2.06	5.3	10.4	4.35	0.724	2.02	0.418	0.207	2.32
1979	0.242	0.56	0.987	1.66	1.87	3.78	16.8	6.38	0.669	0.255	0.633	0.194	2.82
1980	0.128	0.36	1.06	2.6	3.09	9.04	43.9	18.4	2.22	0.115	0.076	0.112	6.72

1–10.R00–1A LOGAR RIVER AT SANG-I-NAWESHTA

(U.S. Geological Survey identification number: 342600069120000)

LOCATION: Lat 34º26’, long 69º12’.

DRAINAGE AREA: 9,735 km^2.

ALTITUDE: 1,805 meters plus mean sea level.

PERIOD OF RECORD: October 1, 1961 to September 30, 1980.

GAGE: --

1–10.R00–1A LOGAR RIVER AT SANG-I-NAWESHTA—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	11.2	1966	0.212	1975	3.82	3.43	0.90	3.29
November	20.3	1966	3.14	1972	10.9	4.65	0.43	9.38
December	20.3	1966	7.99	1972	14.4	3.18	0.22	12.4
January	20.1	1962, 1966	10.5	1972	15.8	2.85	0.18	13.6
February	20.1	1969	10.2	1972	15.8	2.77	0.18	13.6
March	27.1	1968	11.1	1979	17.4	3.97	0.23	15.0
April	45.9	1965	7.07	1963	22.9	12.6	0.55	19.7
May	39.0	1965	0.235	1971	10.3	11.1	1.08	8.87
June	9.44	1965	0.084	1970	1.58	2.36	1.49	1.37
July	9.16	1978	0.006	1971	1.55	2.57	1.66	1.34
August	3.87	1978	0.017	1971	0.80	1.12	1.40	0.69
September	3.68	1965	0.030	1975	0.75	0.95	1.27	0.64
Annual	15.8	1965	5.48	1971	9.63	2.81	0.29	100

1–10.R00–1A LOGAR RIVER AT SANG-I-NAWESHTA—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	10.7	10.9	10.6	2.43	0.19	0.06	0.02	0.02	0.03	0.08	2.40	8.82	0.06
90	11.7	11.9	11.4	3.86	0.48	0.08	0.04	0.03	0.04	0.15	4.65	9.80	0.11
85	12.4	12.5	12.5	6.01	0.69	0.10	0.06	0.04	0.05	0.23	5.28	11.5	0.21
80	13.0	13.2	13.2	8.70	1.20	0.15	0.08	0.05	0.06	0.30	6.35	12.0	0.37
75	13.4	14.2	14.2	11.6	1.80	0.24	0.10	0.06	0.08	0.44	7.24	12.3	0.62
70	14.1	14.7	15.0	13.2	2.16	0.27	0.13	0.07	0.09	0.58	8.00	12.9	1.08
65	14.6	15.0	15.7	15.9	2.65	0.38	0.22	0.09	0.13	1.08	8.64	13.3	1.88
60	15.6	15.5	16.2	18.2	3.12	0.46	0.28	0.12	0.16	1.46	9.20	13.8	3.30
55	16.2	15.7	16.8	19.5	4.27	0.54	0.34	0.17	0.18	2.23	9.81	14.3	5.48
50	16.3	15.9	17.3	20.8	5.05	0.62	0.41	0.21	0.20	3.02	10.4	14.7	8.19
45	16.5	16.2	17.6	22.3	5.81	0.82	0.46	0.25	0.24	3.43	11.2	15.0	10.5
40	16.9	16.5	18.0	23.8	6.95	0.99	0.52	0.31	0.34	3.89	11.9	15.3	12.3
35	17.2	16.7	18.6	25.4	8.29	1.06	0.71	0.38	0.65	4.53	12.7	15.7	13.7
30	17.5	17.1	19.2	27.3	10.7	1.13	0.91	0.54	1.03	5.25	13.8	16.2	14.8
25	17.9	17.7	19.9	29.4	14.1	1.31	1.03	0.71	1.21	6.02	15.1	16.7	15.9
20	18.3	18.6	20.5	32.9	16.9	1.79	1.28	0.97	1.33	6.82	16.0	17.2	17.0
15	18.8	19.2	21.4	37.8	21.7	2.80	1.89	1.16	1.52	7.73	16.9	18.0	19.0
10	19.6	19.7	23.7	45.0	28.1	4.20	3.73	1.79	2.06	9.11	17.9	18.7	21.0
5	20.1	20.2	27.8	54.8	38.5	7.49	7.23	2.52	3.04	12.60	19.4	19.9	25.2

1–10.R00–1A LOGAR RIVER AT SANG-I-NAWESHTA—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	16.1	10.4	21.1	13.0	[1]13.3	12.3	11.2
0.95	1.05	22.0	15.7	27.4	18.0	17.3	15.5	13.7
0.90	1.11	26.0	19.5	31.6	21.4	20.0	17.8	15.5
0.80	1.25	31.7	25	37.7	26.3	24.0	21.0	18.0
0.50	2	46.0	38.7	54.7	39.1	34.8	29.9	25.0
0.20	5	66.4	55.8	84.1	58.2	51.4	44.1	36.1
0.10	10	80.3	66.1	107	71.6	63.8	54.7	44.4
0.04	25	98.0	78.5	139	89.4	80.8	69.7	56.4
0.02	50	111	87.3	164	103	94.5	82.1	66.2
0.01	100	125	96.0	191	117	109	95.4	76.8
0.005	200	138	105	220	132	125	110	88.5
0.002	500	157	116	260	ng	ng	ng	ng

[1]Data does not fit log-Pearson Type III curve, use with caution.

1–10.R00–1A LOGAR RIVER AT SANG-I-NAWESHTA—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.000	0.000	0.000	0.004	0.009	0.020	0.035	0.056	0.209
0.10	10	0.000	0.005	0.008	0.008	0.016	0.034	0.065	0.098	0.361
0.20	5	0.012	0.014	0.018	0.019	0.033	0.063	0.133	0.187	0.660
0.50	2	0.068	0.069	0.077	0.096	0.124	0.205	0.456	0.581	1.78

1–10.R00–1A LOGAR RIVER AT SANG-I-NAWESHTA—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1962	31-Mar	--	36.6	1972	28-Apr	--	58.6
1963	13-May	--	52.9	1973	13-Apr	--	62.0
1964	13-Apr	--	65.3	1974	8-Apr	--	41.2
1965	25-Apr	--	85.0	1975	5-Apr	--	40.0
1966	14-Apr	--	27.9	1976	27-Apr	--	57.6
1967	28-Apr	--	95.0	1977	28-May	--	28.1
1968	9-Apr	--	36.0	1978	9-Jul	--	88.0
1969	20-Apr	--	34.0	1979	14-Apr	--	45.3
1970	12-Nov	--	25.3	1980	19-Apr	--	53.5
1971	26-Mar	--	19.7				
Annual peak discharge, from highest to lowest							
1967	28-Apr	--	95.0	1974	8-Apr	--	41.2
1978	9-Jul	--	88.0	1975	5-Apr	--	40.0
1965	25-Apr	--	85.0	1962	31-Mar	--	36.6
1964	13-Apr	--	65.3	1968	9-Apr	--	36.0
1973	13-Apr	--	62.0	1969	20-Apr	--	34.0
1972	28-Apr	--	58.6	1977	28-May	--	28.1
1976	27-Apr	--	57.6	1966	14-Apr	--	27.9
1980	19-Apr	--	53.5	1970	12-Nov	--	25.3
1963	13-May	--	52.9	1971	26-Mar	--	19.7
1979	14-Apr	--	45.3				

1–10.R00–1A LOGAR RIVER AT SANG-I-NAWESHTA—Continued

Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1962	7.13	17.1	18.9	20.1	19.9	19.9	21.7	4.48	0.525	0.424	0.338	0.23	10.8
1963	3.81	11.1	15.9	16.7	15.1	13.2	7.07	19.3	1.12	1.01	1.18	1.3	8.89
1964	2.23	10.4	16.3	17.2	15.9	18.8	37	5.11	0.389	0.297	0.054	0.221	10.3
1965	6.68	10.5	15.2	16.5	15.7	16.1	45.9	39	9.44	7.83	2.98	3.68	15.8
1966	11.2	20.3	20.3	20.1	19.7	20.7	22.9	4	1.1	0.61	0.439	1.35	11.8
1967	6.51	14.4	16.6	17.9	18.6	19.7	37.8	35	5.49	3.32	0.943	1.98	14.8
1968	9.43	17	16.7	17.6	18.4	27.1	28.3	20.1	3.98	1.19	0.393	1.15	13.4
1969	7.52	16.2	17.9	18.8	20.1	23.9	17.2	6.62	2.14	0.746	0.318	0.618	11
1970	2.94	16.1	15	17.1	16.5	17.9	7.86	0.522	0.084	0.062	0.033	0.053	7.79
1971	0.697	7.62	12.8	14.1	14.2	12.8	3.79	0.235	0.085	0.006	0.017	0.066	5.48
1972	0.364	3.14	7.99	10.5	10.2	15.6	21	16.1	1.65	1.04	0.073	0.931	7.38
1973	3.49	7.86	12	14.3	15.5	18.1	38.5	5.95	0.534	0.71	1.31	1.76	9.93
1974	5.19	9.72	14.5	15.5	15.4	17.4	14.1	2.26	0.796	0.426	0.288	0.114	7.94
1975	0.212	8.27	12.5	13.1	15.9	17.5	23.3	5.37	0.564	0.107	0.109	0.03	8.02
1976	0.573	7.51	14.7	16.7	16.6	17.4	28.5	10.7	0.465	1.65	0.24	0.312	9.57
1977	3.55	9.75	14.1	17.3	16.3	15	13.1	1.79	0.568	0.551	0.029	0.056	7.63
1978	0.595	7.51	12.7	13	12.1	11.7	9.03	1.49	0.387	9.16	3.87	0.116	6.79
1979	0.235	6.78	8.96	11.1	11.9	11.1	16.9	6.39	0.229	0.045	2.51	0.062	6.3
1980	0.302	5.63	11	12	12.9	17.6	41.4	11.1	0.567	0.282	0.083	0.165	9.36

4–0.000–10M HELMAND RIVER AT GARDANDEWAL*

(U.S. Geological Survey identification number: 343000068160000)

LOCATION: Lat 34º30’N., long 68º16’E.

DRAINAGE AREA: 605 km^2.

ALTITUDE: 2,955 meters plus mean sea level.

PERIOD OF RECORD: August 8, 1969 to September 30, 1980 (incomplete year)*.

GAGE: --

4–0.000–10M HELMAND RIVER AT GARDANDEWAL—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	1.54	1970	0.811	1978	1.19	0.24	0.20	2.55
November	1.62	1973	1.00	1972	1.24	0.21	0.17	2.65
December	1.87	1973	0.935	1980	1.22	0.27	0.22	2.60
January	1.85	1973	0.889	1976	1.24	0.30	0.25	2.64
February	1.77	1970	0.960	1976	1.31	0.33	0.25	2.80
March	2.53	1978	1.58	1980	2.05	0.38	0.18	4.37
April	13.5	1976	5.52	1971	8.93	2.74	0.31	19.1
May	24.2	1976	8.78	1971	15.3	5.91	0.39	32.7
June	17.1	1972	3.03	1971	8.47	4.38	0.52	18.1
July	5.68	1980	1.68	1971	2.91	1.09	0.37	6.22
August	2.08	1979	0.945	1971	1.58	0.32	0.21	3.37
September	1.79	1969	0.910	1977	1.39	0.32	0.23	2.97
Annual	5.21	1976	2.52	1971	3.90	0.96	0.25	100

4–0.000–10M HELMAND RIVER AT GARDANDEWAL—Continued
Monthly and annual flow duration, in cubic meters per second
[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.87	0.94	1.12	3.23	7.75	2.63	1.56	0.95	0.94	0.86	0.88	0.94	0.90
90	0.94	0.95	1.23	4.09	8.18	3.33	1.71	1.04	0.96	0.93	0.94	0.95	0.97
85	0.95	0.96	1.28	4.56	8.54	3.56	1.94	1.20	1.03	0.95	0.95	0.95	1.04
80	0.96	1.02	1.32	5.02	8.89	3.99	2.03	1.24	1.04	1.02	1.02	0.96	1.10
75	1.03	1.04	1.45	5.53	9.29	4.28	2.09	1.36	1.13	1.03	1.03	1.03	1.15
70	1.03	1.05	1.50	5.88	10.3	4.53	2.17	1.39	1.14	1.03	1.03	1.04	1.21
65	1.04	1.06	1.57	6.23	10.8	5.01	2.29	1.47	1.20	1.04	1.10	1.12	1.32
60	1.05	1.12	1.66	6.72	11.4	5.46	2.39	1.52	1.22	1.04	1.12	1.13	1.43
55	1.13	1.14	1.80	7.19	12.5	5.85	2.49	1.56	1.32	1.12	1.21	1.14	1.52
50	1.19	1.22	1.85	7.83	13.6	6.31	2.57	1.59	1.40	1.12	1.22	1.19	1.63
45	1.20	1.30	1.94	8.43	15.0	6.82	2.66	1.63	1.43	1.13	1.31	1.20	1.77
40	1.21	1.33	1.98	8.80	16.0	7.86	2.76	1.74	1.49	1.22	1.33	1.21	1.91
35	1.22	1.46	2.01	9.56	17.0	8.82	2.91	1.77	1.54	1.30	1.38	1.21	2.13
30	1.40	1.58	2.20	10.3	18.1	10.6	3.16	1.79	1.63	1.31	1.39	1.22	2.66
25	1.48	1.60	2.34	11.0	19.6	11.5	3.37	1.81	1.65	1.40	1.41	1.33	3.75
20	1.56	1.67	2.53	12.2	21.2	13.5	3.51	1.93	1.67	1.50	1.46	1.41	5.40
15	1.60	1.77	2.77	13.1	23.0	14.2	3.82	1.97	1.74	1.52	1.48	1.50	8.04
10	1.66	1.80	3.47	15.2	25.5	16.4	4.28	2.01	1.77	1.54	1.55	1.57	10.7
5	0	1.89	4.18	20.0	29.3	20.1	5.44	2.05	1.97	1.56	1.78	0	16.0

4–0.000–10M HELMAND RIVER AT GARDANDEWAL—Continued
Probability of occurrence of annual high discharges
[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	8.30	4.30	11.5	6.51	6.46	6.12	5.88
0.95	1.05	11.2	6.90	14.6	9.23	8.96	8.33	7.84
0.90	1.11	13.2	8.80	16.7	11.0	10.6	9.80	9.12
0.80	1.25	16.0	11.5	19.8	13.7	13.0	11.9	10.9
0.50	2	22.9	18.3	28.8	20.1	18.9	17.2	15.4
0.20	5	32.5	26.2	45.1	29.0	27.2	24.5	21.6
0.10	10	38.9	30.7	58.3	34.7	32.7	29.5	25.8
0.04	25	46.9	35.9	76.9	41.9	39.6	35.8	31.0
0.02	50	52.9	39.5	92.1	47.1	44.8	40.4	34.9
0.01	100	58.8	43.0	108	52.2	49.9	45.2	38.7
0.005	200	64.7	46.3	126	57.2	55.0	49.9	42.7
0.002	500	72.6	50.6	150	ng	ng	ng	ng

4–0.000–10M HELMAND RIVER AT GARDANDEWAL—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.774	0.778	0.780	0.782	0.815	0.835	0.866	0.910	0.983
0.10	10	0.796	0.800	0.806	0.811	0.840	0.863	0.897	0.936	1.01
0.20	5	0.830	0.835	0.844	0.852	0.877	0.905	0.943	0.976	1.04
0.50	2	0.925	0.929	0.945	0.957	0.978	1.02	1.06	1.09	1.15

4–0.000–10M HELMAND RIVER AT GARDANDEWAL—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1970	21-May	--	15.6	1976	15-May	--	39.5
1971	12-May	--	13.1	1977	27-May	--	13.9
1972	21-May	--	39.5	1978	16-Apr	--	25.8
1973	9-May	--	30.5	1979	26-Apr	--	20.8
1974	31-May	--	13.9	1980	20-May	--	27.0
1975	16-May	--	31.2				
Annual peak discharge, from highest to lowest							
1976	15-May	--	39.5	1979	26-Apr	--	20.8
1972	21-May	--	39.5	1970	21-May	--	15.6
1975	16-May	--	31.2	1977	27-May	--	13.9
1973	9-May	--	30.5	1974	31-May	--	13.9
1980	20-May	--	27.0	1971	12-May	--	13.1
1978	16-Apr	--	25.8				

4–0.000–10M HELMAND RIVER AT GARDANDEWAL—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1969	--	--	--	--	--	--	--	--	--	--	--	1.79	--
1970	1.54	1.44	1.24	1.28	1.77	2.15	6.71	10.3	5.14	1.98	1.18	1.02	2.98
1971	1	1.33	1.35	1.59	1.75	2.12	5.52	8.78	3.03	1.68	0.945	1.07	2.52
1972	1.15	1	1.09	1.04	1.04	1.63	7.5	22.2	17.1	3.73	1.79	1.4	5.06
1973	1.34	1.62	1.87	1.85	1.76	2.19	11.7	21.6	9.33	2.81	1.62	1.27	4.92
1974	1.07	1.4	1.2	1.19	1.28	2.6	6.69	9.99	6.22	2.21	1.38	1.13	3.03
1975	1.02	1.08	1.14	1.05	1.01	1.61	7.65	18.2	11.7	2.99	1.64	1.64	4.24
1976	1.13	1.02	1	0.889	0.96	1.76	13.5	24.2	11.3	3.24	1.77	1.66	5.21
1977	1.49	1.35	1.5	1.53	1.53	2.43	8.21	9.07	5.5	2.19	1.45	0.91	3.1
1978	0.811	1.01	1.13	1.23	1.26	2.53	11.9	15.3	5.57	2.67	1.6	1.26	3.87
1979	1.06	1.27	0.957	1.01	1.03	1.9	11.8	9.94	4.98	2.85	2.08	1.75	3.38
1980	1.5	1.14	0.935	0.932	1.04	1.58	7.07	18.6	13.3	5.68	1.89	1.77	4.63

4-16.R00–3A SYAHSANG RIVER NEAR GARDANDEWAL*

(U.S. Geological Survey identification number: 343400068110000)

LOCATION: Lat 34º34’N., long 68º11’E.

DRAINAGE AREA: 160 km^2.

ALTITUDE: 3,010 meters plus mean sea level.

PERIOD OF RECORD: May 9, 1970 to September 30, 1980 (incomplete year)*.

GAGE: --

4–16.R00–3A SYAHSANG RIVER NEAR GARDANDEWAL—Continued
Statistics of monthly and annual mean discharges
[m^3/s, cubic meters per second]

Month	Maximum		Minimum		Mean			
	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Water year of occurrence	Discharge (m^3/s)	Standard deviation (m^3/s)	Coefficient of variation	Percentage of annual discharge
October	1.12	1973	0.554	1972	0.75	0.18	0.24	3.81
November	1.06	1977	0.513	1972	0.72	0.18	0.25	3.66
December	0.916	1973	0.386	1972	0.64	0.16	0.25	3.27
January	0.820	1973	0.451	1972	0.63	0.13	0.21	3.18
February	0.820	1973	0.470	1972	0.63	0.11	0.18	3.22
March	1.31	1977	0.588	1972	0.91	0.24	0.26	4.63
April	6.79	1973	2.32	1980	3.97	1.37	0.34	20.2
May	12.5	1976	2.80	1979	6.60	3.62	0.55	33.6
June	4.89	1972	1.12	1971	2.46	1.43	0.58	12.5
July	2.72	1980	0.181	1971	0.99	0.67	0.67	5.04
August	0.925	1978	0.125	1971	0.62	0.24	0.39	3.15
September	1.00	1972	0.486	1971	0.74	0.18	0.24	3.77
Annual	2.29	1976	1.07	1971, 1979	1.66	0.48	0.29	100

4–16.R00–3A SYAHSANG RIVER NEAR GARDANDEWAL—Continued

Monthly and annual flow duration, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	January	February	March	April	May	June	July	August	September	October	November	December	Annual
95	0.43	0.47	0.52	1.19	2.10	0.53	0.18	0.14	0.50	0.56	0.50	0.34	0.44
90	0.45	0.48	0.57	1.59	2.51	0.94	0.34	0.28	0.54	0.57	0.52	0.49	0.50
85	0.47	0.50	0.60	1.86	2.86	1.02	0.43	0.36	0.56	0.59	0.57	0.50	0.55
80	0.48	0.51	0.63	2.16	3.29	1.09	0.50	0.43	0.58	0.60	0.60	0.50	0.58
75	0.50	0.55	0.67	2.36	3.55	1.16	0.53	0.48	0.59	0.61	0.61	0.51	0.61
70	0.51	0.59	0.70	2.61	3.78	1.29	0.56	0.50	0.60	0.61	0.61	0.58	0.64
65	0.57	0.60	0.72	2.75	4.14	1.39	0.71	0.52	0.64	0.66	0.61	0.59	0.67
60	0.59	0.61	0.74	2.93	4.51	1.48	0.75	0.55	0.67	0.67	0.62	0.60	0.70
55	0.60	0.62	0.76	3.16	4.77	1.58	0.79	0.58	0.69	0.67	0.67	0.61	0.73
50	0.62	0.67	0.82	3.36	5.04	1.79	0.87	0.60	0.72	0.68	0.68	0.62	0.76
45	0.68	0.67	0.84	3.59	5.47	1.96	0.92	0.68	0.76	0.71	0.68	0.62	0.82
40	0.69	0.68	0.85	4.01	5.81	2.18	0.97	0.72	0.78	0.74	0.69	0.63	0.88
35	0.71	0.70	0.91	4.36	7.22	2.64	1.04	0.73	0.81	0.75	0.74	0.68	0.96
30	0.72	0.71	0.94	4.74	8.16	3.23	1.11	0.75	0.83	0.82	0.76	0.74	1.05
25	0.72	0.71	1.03	5.25	8.78	3.80	1.17	0.78	0.90	0.83	0.83	0.81	1.32
20	0	0.72	1.12	5.80	9.74	4.47	1.24	0.81	0.93	0.94	0.87	0.83	1.94
15	0	0	1.27	6.34	11.3	4.72	1.34	0.85	0.95	1.00	0.93	0.84	2.96
10	0	0	1.49	6.92	13.8	4.99	1.67	0.89	0.99	1.06	1.02	0.85	4.45
5	0	0	1.73	8.41	15.5	5.48	2.31	0.98	1.06	0	1.06	0	6.09

4–16.R00–3A SYAHSANG RIVER NEAR GARDANDEWAL—Continued

Probability of occurrence of annual high discharges

[m^3/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous (m^3/s)	95 percent confidence limits		Maximum mean discharge (m^3/s)			
			Lower	Upper	3-day period	7-day period	15-day period	30-day period
0.99	1.01	2.70	1.10	4.20	[1]2.72	[1]2.68	[1]2.71	[1]2.55
0.95	1.05	4.20	2.10	6.00	3.74	3.64	3.56	3.30
0.90	1.11	5.20	3.00	7.20	4.45	4.32	4.16	3.81
0.80	1.25	6.70	4.30	9.00	5.54	5.35	5.05	4.57
0.50	2	10.8	8.00	14.7	8.57	8.20	7.54	6.63
0.20	5	16.7	12.5	26.1	13.6	12.9	11.7	9.93
0.10	10	20.6	15.1	35.8	17.4	16.6	14.9	12.4
0.04	25	25.6	18.1	49.9	23.0	21.8	19.5	15.9
0.02	50	29.3	20.1	61.5	27.5	26.1	23.3	18.8
0.01	100	33.0	22.1	73.9	32.5	30.9	27.6	21.9
0.005	200	36.7	24.0	87.2	[1]38.0	36.1	32.2	25.3
0.002	500	41.5	26.4	106	ng	ng	ng	ng

[1]Data does not fit log-Pearson Type III curve, use with caution.

4–16.R00–3A SYAHSANG RIVER NEAR GARDANDEWAL—Continued
Probability of occurrence of annual low discharges

[m³/s, cubic meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum mean discharge (m³/s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.129	0.129	0.131	0.132	0.153	0.186	0.252	0.322	0.384
0.10	10	0.194	0.196	0.201	0.205	0.227	0.264	0.325	0.384	0.436
0.20	5	0.291	0.298	0.306	0.315	0.336	0.375	0.423	0.464	0.504
0.50	2	0.492	0.512	0.528	0.545	0.562	0.595	0.612	0.624	0.650

4–16.R00–3A SYAHSANG RIVER NEAR GARDANDEWAL—Continued
Annual peak discharge and corresponding gage height

[m³/s, cubic meters per second; --, no data]

Water year	Date	Gage height (meters)	Peak discharge (m³/s)	Water year	Date	Gage height (meters)	Peak discharge (m³/s)
Annual peak discharge, by year							
1971	18-Apr	--	4.66	1976	14-May	--	21.5
1972	20-May	--	16.7	1977	15-Nov	--	14.6
1973	5-May	--	17.4	1978	19-Apr	--	8.84
1974	31-May	--	6.00	1979	18-Apr	--	5.65
1975	22-May	--	9.00	1980	21-May	--	14.6
Annual peak discharge, from highest to lowest							
1976	14-May	--	21.5	1975	22-May	--	9.00
1973	5-May	--	17.4	1978	19-Apr	--	8.84
1972	20-May	--	16.7	1974	31-May	--	6.00
1980	21-May	--	14.6	1979	18-Apr	--	5.65
1977	15-Nov	--	14.6	1971	18-Apr	--	4.66

4–16.R00–3A SYAHSANG RIVER NEAR GARDANDEWAL—Continued
Monthly and annual mean discharges, in cubic meters per second

[Data were not rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	October	November	December	January	February	March	April	May	June	July	August	September	Annual
1970	--	--	--	--	--	--	--	--	1.48	0.52	0.374	0.668	--
1971	0.742	0.623	0.61	0.694	0.71	1.03	2.54	3.91	1.12	0.181	0.125	0.486	1.07
1972	0.554	0.513	0.386	0.451	0.47	0.588	3.08	11.5	4.89	1.28	0.848	1	2.14
1973	1.12	0.979	0.916	0.82	0.82	1.2	6.79	9.44	2.34	1.02	0.756	0.947	2.27
1974	0.852	0.798	0.82	0.76	0.71	0.88	3.31	4.76	1.96	0.55	0.502	0.533	1.37
1975	0.589	0.61	0.607	0.573	0.61	0.851	4.65	8	3.7	1.26	0.598	0.782	1.91
1976	0.73	0.672	0.652	0.644	0.687	0.936	4.94	12.5	2.92	1.01	0.753	0.981	2.29
1977	0.977	1.06	0.811	0.75	0.701	1.31	3.8	2.81	1.41	0.535	0.438	0.708	1.28
1978	0.667	0.725	0.603	0.624	0.607	0.997	4.95	3.51	1.19	1.02	0.925	0.642	1.37
1979	0.655	0.651	0.52	0.474	0.513	0.665	3.31	2.8	1.21	0.81	0.616	0.595	1.07
1980	0.6	0.557	0.5	0.466	0.509	0.641	2.32	6.78	4.79	2.72	0.871	0.8	1.8

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