

Prepared under the auspices of the U.S. Task Force for Business and Stability Operations

Streamflow Characteristics at Streamgages in Northern Afghanistan and Selected Locations



Data Series 529

U.S. Department of the Interior
U.S. Geological Survey

USGS Afghanistan Project Product Number 179

Cover. Photograph showing the Balkhab River looking upstream at Sari Puhl in northern Afghanistan.
(Photograph by Thomas J. Mack, U.S. Geological Survey)



Prepared under the auspices of the U.S. Task Force for Business and Stability Operations

Streamflow Characteristics at Streamgages in Northern Afghanistan and Selected Locations

By Scott A. Olson and Tara Williams-Sether

Data Series 529

U.S. Department of the Interior
U.S. Geological Survey

USGS Afghanistan Project Product Number 179

U.S. Department of the Interior

KEN SALAZAR, Secretary

U.S. Geological Survey

Marcia K. McNutt, Director

U.S. Geological Survey, Reston, Virginia: 2010

For product and ordering information:
World Wide Web: <http://www.usgs.gov/pubprod>
Telephone: 1-888-ASK-USGS

For more information on the USGS—the Federal source for science about the Earth,
its natural and living resources, natural hazards, and the environment:
World Wide Web: <http://www.usgs.gov>
Telephone: 1-888-ASK-USGS

Suggested citation:
Olson, S.A., and Williams-Sether, T., 2010, Streamflow characteristics at streamgages in northern Afghanistan and selected locations: U.S. Geological Survey Data Series 529, 512 p., at <http://pubs.usgs.gov/ds/529/>.

Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Although this report is in the public domain, permission must be secured from the individual copyright owners to reproduce any copyrighted material contained within this report.

Contents

Abstract	1
Introduction.....	1
History of the Streamgaging Program in Afghanistan	8
Explanation of Streamgage Summaries	8
Station Description.....	8
Statistics of Monthly and Annual Mean Discharges	9
Monthly and Annual Flow Duration	10
Probability of Occurrence of High or Low Discharges.....	10
Annual Peak Discharges.....	11
Monthly and Annual Mean Discharges.....	11
Data Considerations	12
Selected References	12
Streamflow Statistics	14
1-0.000-1M Kabul River at Dakah.....	15
1-0.000-4S Kabul River near Daronta	21
1-0.000-5W Kabul River at Naghlu	27
1-0.000-6M Kabul River at Tang-i-Gharu.....	34
1-2.R00-7T Hazarnaw River at Sabay	41
1-4.1R0-1A Pech River at Chaghasarai.....	47
1-4.2R0-1A Landaisin River near Gawardesh.....	54
1-4.L00-1A Konar River at Pul-i-Kama.....	60
1-4.L00-2T Konar River near Konari	66
1-4.L00-3A Konar River at Nawabad	72
1-4.L00-4T Konar River near Asmar	78
1-5.R00-1A Surkhrud River near Sultanpur	84
1-6.L00-1A Laghman River at Pul-i-Qarghai.....	90
1-7.L00-1A Tagab River at Tagab.....	97
1-8.21L-1A Salang River at Bagh-i-Lala.....	103
1-8.2R0-1A Ghorband River at Pul-i-Aahawa	110
1-8.3R0-1A Shatul River at Gulbahar.....	117
1-8.L00-3A Panjsher River at Shukhi.....	123
1-8.L00-5A Panjsher River at Gulbahar	130
1-8.L00-8A Panjsher River at Omarz	137
1-9.R00-4W Chakari River at Band-i-Amir Ghazi.....	144
1-11.1L0-4W Qargha River Below Qargha Reservoir	151

1-11.1L0-5W	Qargha River above Qargha Reservoir	158
1-11.L00-1A	Paghman River at Pul-i-Sokhta	165
2-4.000-5A	Urgun River at Pirkoti	172
2-4.4L0-2T	Dahane Legad River near Urgun	178
8-0.000-1M	Hari Rud River at Tir Pul	184
8-0.000-2M	Hari Rud River at Pul-i-Hashimi	190
8-0.000-3S	Hari Rud River at Pul-i-Pashtoon	196
8-0.000-4M	Hari Rud River at Robot-i-Akhond	202
8-0.000-5M	Hari Rud River at Tagaw Ghaza	208
8-0.000-7M	Hari Rud River at Chekhcheran	215
8-0.000-9M	Hari Rud River at Daulatyar	222
8-1.R00-9T	Senjab River at Khush Rabat	228
8-2.R00-3A	Karukh River near Herat	234
8-3.L00-1A	Kowgan River at Langar	240
8-3.L00-6A	Kowgan River at Tangi Azu	247
8-11.L00-1A	Lal River at Shinya	254
9-0.000-1M	Murghab River at Bala Murghab	260
9-0.000-5M	Murghab River at Qala-i-Niazkhan	266
9-1.000-1A	Gulran River at Char Takhta	272
9-2.000-1A	Kushk River at Chil Dukhtaran	278
9-3.000-1A	Kashan River at Babulai	284
9-4.R00-8A	Chichaktu River at Chichaktu	290
9-5.L00-1A	Bum River at Luka-i-Surkh	296
10-0.000-3M	Shirin Tagab River at Pata Baba	302
10-0.000-4M	Shirin Tagab River at Daulatabad	309
10-0.000-6M	Shirin Tagab River at Khisht Pul	315
10-1.1L0-7A	Qaisar River at Qaisar	321
10-1.L00-1T	Maimana River near Pata Baba	327
11-0.000-4M	Sare Pul River at Asiabad	333
11-1.R00-1A	Shorab River River near Sare Pul	339
12-0.000-1M	Balkh River at Rabat-i-Bala	345
12-0.000-9M	Balkh River near Nayak	352
12-0.000-10M	Balkh River Below Band-i-Amir	358
12-1.R00-1A	Suf River near Kishandeh	364
13-0.000-1M	Khulm River at Tangi Tashqurghan	370
13-0.000-2M	Khulm River at Sayad	376
14-0.000-1M	Kunduz River at Kulukh Tapa	382

14-0.000-2M Kunduz River at Char Dara.....	388
14-0.000-3M Kunduz River at Gerdab	394
14-0.000-4M Kunduz River at Baghlan	401
14-0.000-5S Kunduz River at Pul-i-Khumri	407
14-0.000-6M Kunduz River at Pul-i-Konda Sang	414
14-0.000-8M Kunduz River at Dasht-i-Safed	420
14-1.1L0-1A Bangi River at Pul-i-Bangi	426
14-1.R00-2A Taloqan River at Pul-i-Chugha.....	433
14-1.R00-5A Farkhar River near Taloqan	440
14-5.R00-1A Andarab River at Doshi.....	446
14-9.5R0-1T Foladi River at Bamyan.....	452
14-9.R00-1A Bamyan River at Doab.....	458
14-9.R00-6T Bamyan River at Ahangaran	464
14-9.R00-8A Bamyan River at Bamyan	470
15-0.000-1M Kokcha River at Khogaghar	476
15-0.000-3M Kokcha River near Keshem	483
15-0.000-6M Kokcha River near Jurm	489
15-1.L00-1A Keshem River near Keshem.....	495
15-10.R00-1A Warduj River at Shashpul	501
15-10.R00-2A Warduj River near Baharak.....	507

Figures

Figure 1. Map showing location of streamgages within the Kabul and Indus Basins for which streamflow statistics are published in this report	2
Figure 2. Map showing location of streamgages within the Amu Darya Basin for which streamflow statistics are published in this report.....	3
Figure 3. Map showing locations of streamgages within the Northern Basins for which streamflow statistics are published in this report.....	4
Figure 4. Map showing locations of streamgages within the Hari Rud and Murghab Basins for which streamflow statistics are published in this report.....	5

Table

Table 1. List of streamgages in Afghanistan for which streamflow statistics are published in this report.....	6
--	---

Conversion Factors

Multiply	By	To obtain
Length		
meter (m)	3.281	foot (ft)
kilometer (km)	0.6214	mile (mi)
Area		
square meter (m ²)	0.0002471	acre
hectare (ha)	2.471	acre
square kilometer (km ²)	247.1	acre
square meter (m ²)	10.76	square foot (ft ²)
square hectometer (hm ²)	0.003861	section (640 acres or 1 square mile)
hectare (ha)	0.003861	square mile (mi ²)
square kilometer (km ²)	0.3861	square mile (mi ²)
Volume		
cubic meter (m ³)	264.2	gallon (gal)
cubic meter (m ³)	0.0002642	million gallons (Mgal)
cubic meter (m ³)	35.31	cubic foot (ft ³)
cubic meter (m ³)	1.308	cubic yard (yd ³)
cubic meter (m ³)	0.0008107	acre-foot (acre-ft)
Flow rate		
cubic meter per second (m ³ /s)	70.07	acre-foot per day (acre-ft/d)
cubic meter per second (m ³ /s)	35.31	cubic foot per second (ft ³ /s)
cubic meter per second per square kilometer [(m ³ /s)/km ²]	91.49	cubic foot per second per square mile [(ft ³ /s)/mi ²]
cubic meter per second (m ³ /s)	22.83	million gallons per day (Mgal/d)

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

Streamflow Characteristics at Streamgages in Northern Afghanistan and Selected Locations

By Scott A. Olson and Tara Williams-Sether

Abstract

Statistical summaries of streamflow data for 79 historical streamgages in Northern Afghanistan and other selected historical streamgages are presented in this report. The summaries for each streamgage include (1) station description, (2) graph of the annual mean discharge for the period of record, (3) statistics of monthly and annual mean discharges, (4) monthly and annual flow duration, (5) probability of occurrence of annual high discharges, (6) probability of occurrence of annual low discharges, (7) probability of occurrence of seasonal low discharges, (8) annual peak discharges for the period of record, and (9) monthly and annual mean discharges for the period of record.

Introduction

Preliminary hydrologic evaluations are needed to determine the water-resource priorities in all areas of Afghanistan for agricultural, industrial, and residential water uses. This report focuses on providing streamflow characteristics of 79 streamgages in the northern half of Afghanistan, primarily in the Kabul, Amu Darya, Northern, Hari Rud and Murghab Basins (figs. 1–4). This report also includes some streamgages in other parts of Afghanistan that were not included in previous reports (Williams-Sether, 2008; Vining, 2010). The basins represented in the report are in arid and mountainous environments, often fed by melting snow from the high mountains and infrequent storms.

Because there can be great fluctuations in streamflow, from flood to drought, in Afghanistan, knowledge of the magnitude and time distribution of streamflow is essential for all aspects of water management and environmental planning. To provide the Afghan managers with necessary streamflow information, the U.S. Geological Survey, in cooperation with the U.S. Task Force for Business and Stability Operations, computed streamflow statistics for data collected at historical streamgages in northern Afghanistan and selected locations in southeastern Afghanistan. Agencies responsible for the development and management of the surface-water resources of Afghanistan can use the data provided in this report to assist in making safe, economical, and environmentally sound water-resource planning decisions. The historical streamgages used are listed in table 1 and their locations are shown in figures 1–4.

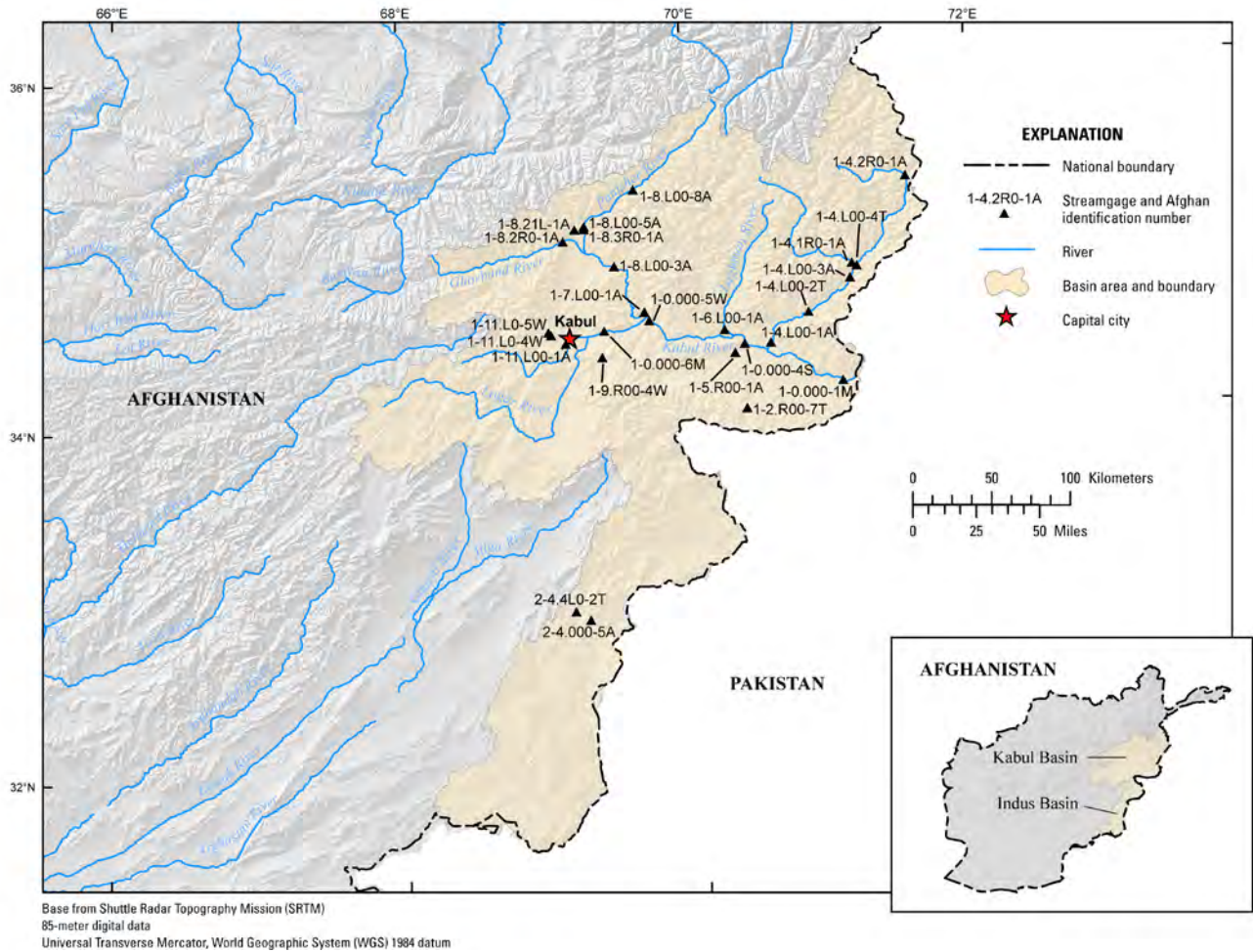


Figure 1. Location of streamgages within the Kabul and Indus Basins for which streamflow statistics are published in this report. Streamgauge identification data shown in table 1.

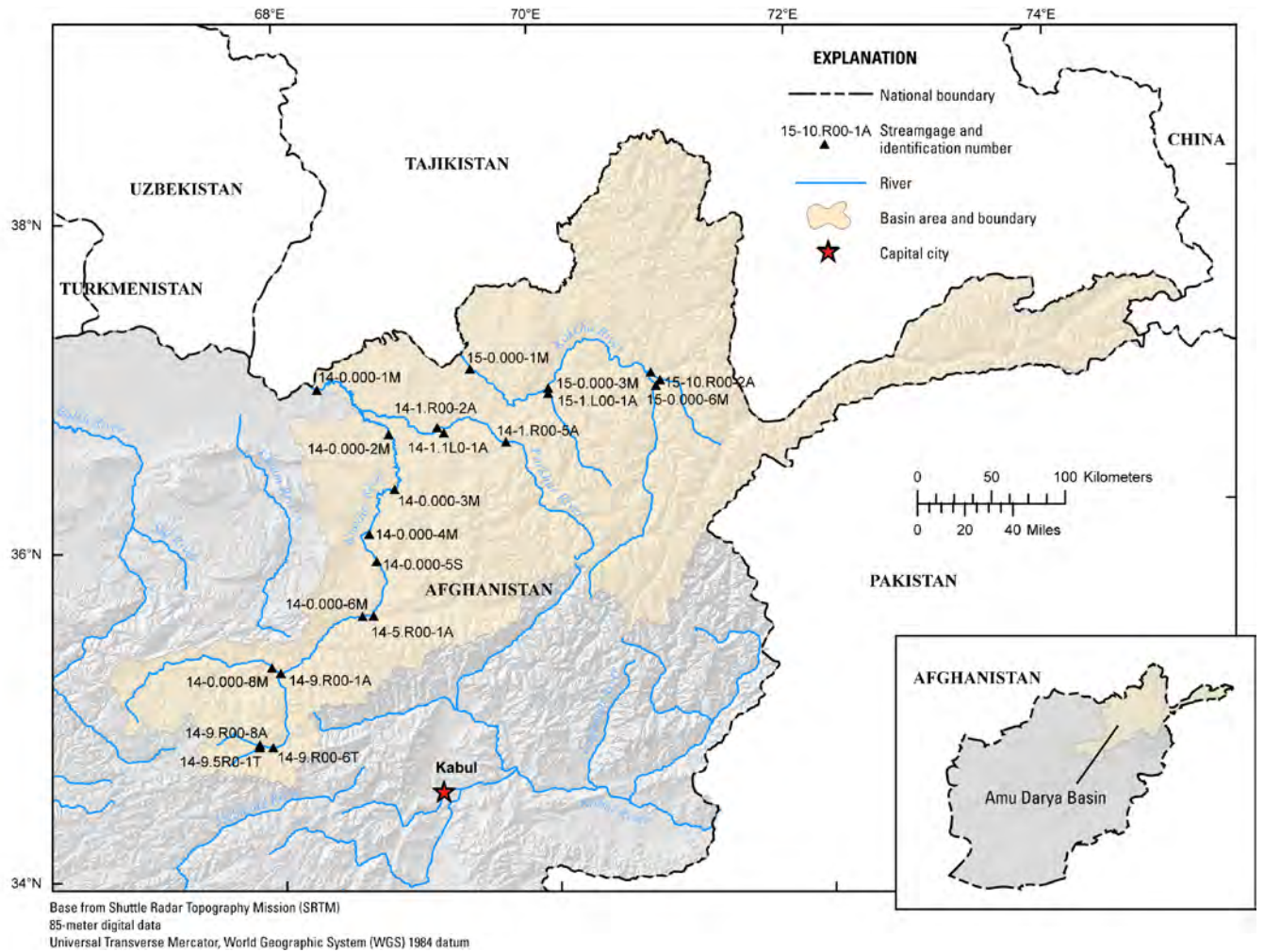


Figure 2. Location of streamgages within the Amu Darya Basin for which streamflow statistics are published in this report. Streamgauge identification data shown in table 1.

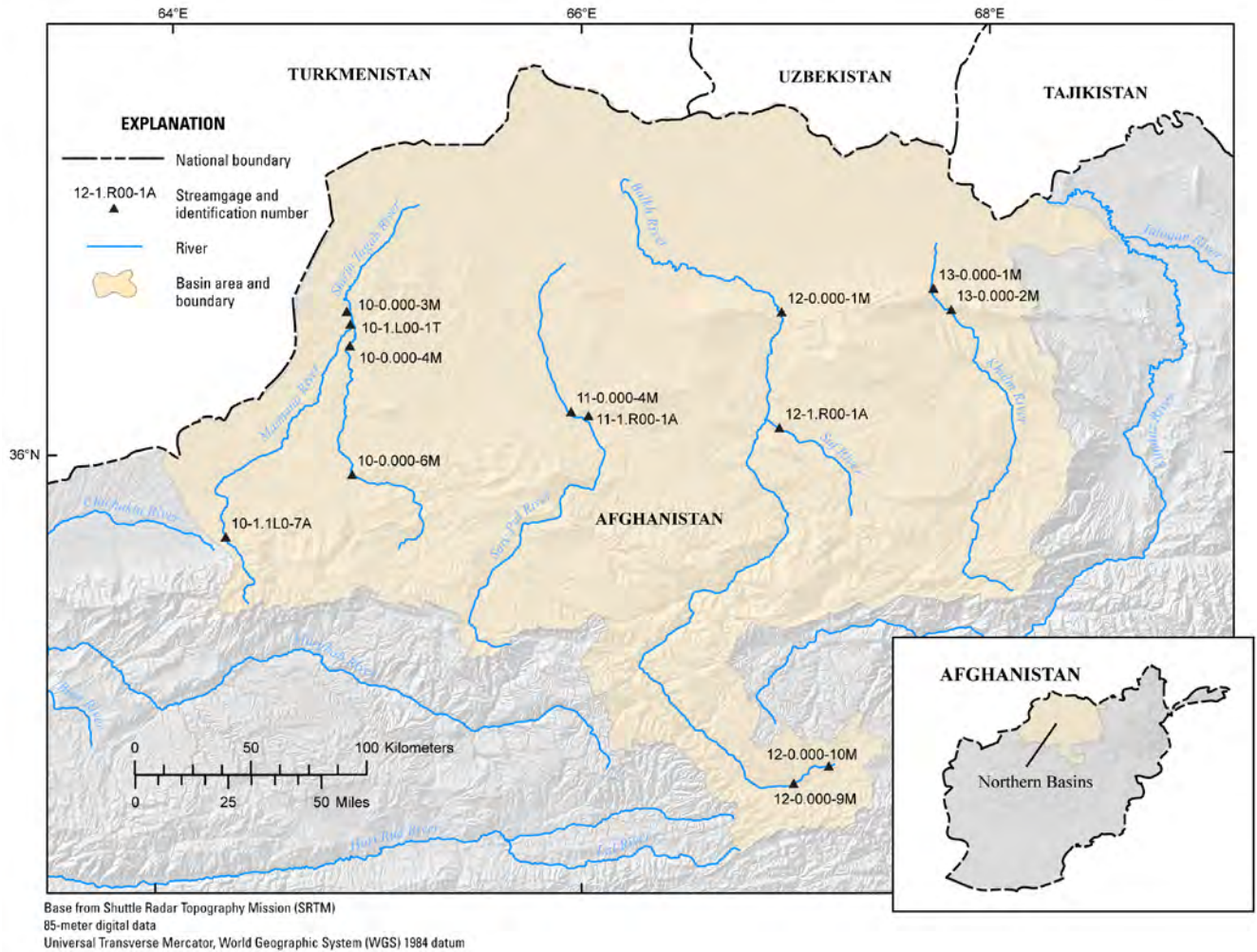


Figure 3. Locations of streamgages within the Northern Basins for which streamflow statistics are published in this report. Streamgauge identification data shown in table 1.



Figure 4. Locations of streamgages within the Hari Rud and Murghab Basins for which streamflow statistics are published in this report. Streamgauge identification data shown in table 1.

Table 1. List of streamgages in Afghanistan for which streamflow statistics are published in this report.

Afghan identification number	U.S. Geological Survey identification number	Station name
1-0.000-1M	341400071020000	Kabul River at Dakah
1-0.000-4S	342800070220000	Kabul River near Daronta
1-0.000-5W	343700069430000	Kabul River at Naghlu
1-0.000-6M	343400069240000	Kabul River at Tang-i-Gharu
1-2.R00-7T	340600070220000	Hazarnaw River at Sabay
1-4.1R0-1A	345400071080000	Pech River at Chaghasarai
1-4.2R0-1A	352300071320000	Landaisin River near Gawardesh
1-4.L00-1A	342800070330000	Konar River at Pul-i-Kama
1-4.L00-2T	343800070490000	Konar River near Konari
1-4.L00-3A	344900071070000	Konar River at Nawabad
1-4.L00-4T	345300071100000	Konar River near Asmar
1-5.R00-1A	342500070180000	Surkhrud River near Sultanpur
1-6.L00-1A	343300070140000	Laghman River at Pul-i-Qarghai
1-7.L00-1A	344000069410000	Tagab River at Tagab
1-8.21L-1A	350900069130000	Salang River at Bagh-i-Lala
1-8.2R0-1A	350500069080000	Ghorband River at Pul-i-Ashawa
1-8.3R0-1A	350900069170000	Shatul River at Gulbahar
1-8.L00-3A	345600069290000	Panjsher River at Shukhi
1-8.L00-5A	351000069170000	Panjsher River at Gulbahar
1-8.L00-8A	352200069380000	Panjsher River at Omarz
1-9.R00-4W	342500069230000	Chakari River at Band-i-Amir Ghazi
1-11.1L0-4W	343300069020000	Qargha River below Qargha Reservoir
1-11.1L0-5W	343400069010000	Qargha River above Qargha Reservoir
1-11.L00-1A	343000069080000	Paghman River at Pul-i-Sokhta
2-4.000-5A	325500069150000	Urgun River at Pirkoti
2-4.4L0-2T	325800069090000	Dahane Legad River near Urgun
8-0.000-1M	343600061160000	Hari Rud River at Tir Pul
8-0.000-2M	342000061560000	Hari Rud River at Pul-i-Hashimi
8-0.000-3S	341700062130000	Hari Rud River at Pul-i-Pashtoon
8-0.000-4M	341600062560000	Hari Rud River at Robot-I-Akhond
8-0.000-5M	342100063390000	Hari Rud River at Tagaw Ghaza
8-0.000-7M	343100065150000	Hari Rud River at Chekhcheran
8-0.000-9M	343300065460000	Hari Rud River at Daulatyar
8-1.R00-9T	344100062070000	Senjab River at Khush Rabat
8-2.R00-3A	342600062280000	Karukh River near Herat
8-3.L00-1A	341300063000000	Kowgan River at Langar
8-3.L00-6A	340800064120000	Kowgan River at Tangi Azu
8-11.L00-1A	343000065400000	Lal River at Shinya
9-0.000-1M	353500063190000	Murghab River at Bala Murghab
9-0.000-5M	350200064010000	Murghab River at Qala-i-Niazkhan
9-1.000-1A	352300062020000	Gulran River at Char Takhta

Table 1. List of streamgages in Afghanistan for which streamflow statistics are published in this report.

—Continued

Afghan identification number	U.S. Geological Survey identification number	Station name
9-2.000-1A	351300062170000	Kushk River at Chil Dukhtaran
9-3.000-1A	352000062550000	Kashan River at Babulai
9-4.R00-8A	354400064050000	Chichaktu River at Chichaktu
9-5.L00-1A	351400063280000	Bum River at Luka-i-Surkh
10-0.000-3M	363500064520000	Shirin Tagab River at Pata Baba
10-0.000-4M	362700064530000	Shirin Tagab River at Daulatabad
10-0.000-6M	355700064540000	Shirin Tagab River at Khisht Pul
10-1.1L0-7A	354200064180000	Qaisar River at Qaisar
10-1.L00-1T	363200064530000	Maimana River near Pata Baba
11-0.000-4M	361200065570000	Sare Pul River at Asiabad
11-1.R00-1A	361100066020000	Shorab River near Sare Pul
12-0.000-1M	363500066580000	Balkh River at Rabat-i-Bala
12-0.000-9M	344500067000000	Balkh River near Nayak
12-0.000-10M	344900067100000	Balkh River below Band-i-Amir
12-1.R00-1A	360800066570000	Suf River near Kishandeh
13-0.000-1M	364000067420000	Khulm River at Tangi Tashqurghan
13-0.000-2M	363500067470000	Khulm River at Sayad
14-0.000-1M	365900068180000	Kunduz River at Kulukh Tapa
14-0.000-2M	364200068500000	Kunduz River at Char Dara
14-0.000-3M	362200068520000	Kunduz River at Gerdab
14-0.000-4M	360600068400000	Kunduz River at Baghlan
14-0.000-5S	355600068430000	Kunduz River at Pul-i-Khumri
14-0.000-6M	353600068360000	Kunduz River at Pul-i-Konda Sang
14-0.000-8M	351800067550000	Kunduz River at Dasht-i-Safed
14-1.1L0-1A	364200069150000	Bangi River at Pul-i-Bangi
14-1.R00-2A	364400069120000	Taloqan River at Pul-i-Chughra
14-1.R00-5A	363800069430000	Farkhar River near Taloqan
14-5.R00-1A	353600068410000	Andarab River at Doshi
14-9.5R0-1T	344900067490000	Foladi River at Bamyan
14-9.R00-1A	351600067590000	Bamyan River at Doab
14-9.R00-6T	344900067550000	Bamyan River at Ahangaran
14-9.R00-8A	345000067490000	Bamyan River at Bamyan
15-0.000-1M	370500069280000	Kokcha River at Khojaghar
15-0.000-3M	365700070030000	Kokcha River near Keshem
15-0.000-6M	365600070520000	Kokcha River near Jurm
15-1.L00-1A	365500070030000	Keshem River near Keshem
15-10.R00-1A	370100070500000	Warduj River at Shashpul
15-10.R00-2A	365800070540000	Warduj River near Baharak

History of the Streamgaging Program in Afghanistan

Streamgaging began in Afghanistan in the mid-1940s at a few sites. The number of sites increased over the years until the late 1970s. Streamgaging was discontinued soon after the Soviet invasion of Afghanistan in 1979. Until 1978, Afghanistan had a network of approximately 160 streamgages. No streamflow data were collected after September 1980 until recently. In 2005, three historical streamgages were re-established and currently (2010) much of the historic network has been re-established and is being operated by the Afghanistan Ministry of Energy and Water.

Explanation of Streamgage Summaries

Streamgage summaries are presented so that each station description and tables of streamflow statistics are presented in the same order and format for each streamgage, including the same relative placement on the pages. Because the statistical information listed in the tables was created by computer “data retrievals” or from statistical program results, significant figures were not always rounded to U.S. Geological Survey standards. The order of presentation is as follows:

1. Station description,
2. Graph of the annual mean discharge for the period of record,
3. Table of statistics of monthly and annual mean discharges,
4. Table of monthly and annual flow duration,
5. Table of probability of occurrence of annual high discharges,
6. Table of probability of occurrence of annual low discharges,
7. Table of probability of occurrence of seasonal low discharges,
8. Table of annual peak discharge and corresponding gage height for the period of record, and
9. 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 streamgage included in this report are presented in the station description. This information is compiled from records originally published by the Afghanistan Ministry of Energy and Water. The following comments clarify information presented under the various headings of the station description.

LOCATION: Information on streamgage location is limited to latitude and longitude.

DRAINAGE AREA: Drainage area is as reported by the Afghanistan Ministry of Energy and Water from Survey of India maps. The accuracy of the drainage areas is unknown.

ALTITUDE: The datum of the streamgage referenced to mean sea level.

PERIOD OF RECORD: The period of record is the period for which there are published records for the streamgage or for an equivalent streamgage. An equivalent streamgage is a streamgage that was in operation prior to or after the subject streamgage, and whose location is such that records from it can reasonably be considered equivalent with records from the subject streamgage. This situation arises

when a streamgage is relocated upstream or downstream and given a new streamgage number or name, but the changes in drainage area and other basin characteristics are not significantly different.

GAGE: The type of streamgage or recorder that is or was used to collect data. A condensed history of the types, locations, and datums of previous streamgages are given under this heading when available.

Statistics of Monthly and Annual Mean Discharges

Statistics of monthly and annual mean discharges presented for each streamgage 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 that is comprised by each monthly mean discharge is listed in the table. The statistics of monthly and annual means discharges were computed using statistical applications built into the U.S. Geological Survey Automated Data Processing System (ADAPS) Version 4.9 (U.S. Geological Survey, 2009).

Each of the statistics is explained in the following paragraphs. As an aid to the readers' understanding of how the monthly mean and annual mean discharges are determined, data for the streamgage Kokcha River at Khojaghar (15-0.000-1M) are used as an example. Each monthly mean 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 for a given month during the period of record. The maximum mean value for October is 142 m³/s, which occurred during water year 1968. Similarly, the minimum monthly mean discharge is the minimum value of all the monthly mean values for a specific month over the period of record. The minimum mean value for October is 82.2 m³/s, which occurred during water year 1972. The maximum and minimum monthly mean values can be found in the *statistics of monthly and annual mean discharges* table or by searching the columns of the *monthly and annual mean discharges table*.

The mean monthly discharge is the mean of all the monthly mean discharges for a given month for the period of record, and the standard deviation is a measure of the variability of the values. The mean monthly discharge for October is 110 m³/s, and the standard deviation is 19.9 m³/s. The mean monthly discharge for October 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. The standard deviation is smaller 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. The coefficient of variation is dimensionless. Because monthly mean discharges are generally much greater in spring than in winter, the standard deviations also are generally much greater in spring than in winter. However, dividing the standard deviation by the mean monthly discharge tends to normalize the measures for all months so a more meaningful comparison among months can be made.

The percentage of annual discharge is the percentage of the annual discharge occurring each month. It is calculated by dividing the mean monthly discharge for a given month by the total of the

12 mean monthly discharges and multiplying by 100. Because of rounding of the monthly percentage, the sum of the 12 percentages may not always 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 annual mean discharge is listed with the mean discharge. For the Kokcha River at Khojaghar streamgage, the maximum annual mean discharge of 262 m³/s occurred in 1969, and the minimum annual mean discharge of 144 m³/s occurred in 1972. The mean annual discharge for the period of record is 198 m³/s.

Monthly and Annual Flow Duration

The monthly and annual flow-duration table is a magnitude and frequency analysis of daily discharge values. It is computed by tabulating the number of daily discharge values that fall within pre-selected 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 for all complete months of record, and annual values are calculated for all complete water years. The monthly and annual flow durations were computed using statistical applications built into U.S. Geological Survey ADAPS Version 4.9 (U.S. Geological Survey, 2009).

For example, at the Kokcha River at Khojaghar (15-0.000-1M) streamgage, the 90-percent flow-duration value for October is 77.3 m³/s. This indicates that 90 percent of all October daily discharge values for the period of record were equal to or greater than 77.3 m³/s.

Probability of Occurrence of High or Low Discharges

The probabilities of occurrence of annual high discharges, annual low discharges, and seasonal low discharges are presented in three tables for each streamgage. Probability of occurrence is an estimate of the likelihood that a particular discharge in a stream will be equaled or exceeded in 1 year or, in the case of low flows, the likelihood that the discharge will not be equaled or exceeded during the year or season. 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. For example, if the instantaneous discharge for the 0.20 exceedance probability is listed as 1,050 m³/s, then a 20-percent chance exists that a discharge equal to or greater than 1,050 m³/s will occur once during the year.

Recurrence interval is another way of expressing annual probability, and 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). For a long discharge record, the annual maximum discharge can be expected to equal or exceed 1,050 m³/s on average once every 5 years.

The table of probability of annual high discharges for each streamgage lists the maximum instantaneous discharge and the maximum mean discharge for 3, 7, 15, and 30 consecutive-day periods for selected exceedance probabilities and equivalent recurrence intervals. Values for the maximum instantaneous discharge are computed from the streamflow record according to the guidelines established by the U.S. 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. The U.S. Geological Survey PeakFQ software (Flynn and others, 2006) was used to compute the maximum instantaneous discharges for the selected exceedance probabilities.

Values for the maximum daily mean discharges for 3, 7, 15, and 30 consecutive-day periods are computed from the annual high mean values of the corresponding periods. The computations are based on the log-Pearson Type III distribution (Helsel and Hirsch, 1992) using values obtained for the water year.

The table of probability of annual low discharges for each streamgage lists the minimum daily mean discharge for 1, 3, 7, 14, 30, 60, 90, 120, and 183 consecutive-day periods for selected nonexceedance probabilities and equivalent 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).

The table of probability of seasonal low discharges for each streamgage lists the minimum daily mean discharge for 1, 7, 14, and 30 consecutive-day periods for selected probabilities and equivalent recurrence intervals. These values are computed from the seasonal low mean values of the corresponding periods using the log-Pearson Type III distribution. The seasonal periods provided are December through February, March through May, June through August, and September through November.

The probabilities of the maximum mean discharge and the annual and seasonal minimum mean discharge were computed using SWSTAT (Lumb and others, U.S. Geological Survey, written commun., 2002). SWSTAT is a U.S. Geological Survey computer program for interactive computation of surface-water statistics.

The annual low discharge and the seasonal 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. Evaluations of such processes and conditions should be made when using the statistics provided in this report.

Annual Peak Discharges

The annual peak discharges for each station are provided by water year. These peak discharges were used in the computation of the instantaneous maximum discharge exceedance probabilities for each streamgage. The data for the peaks discharges were taken directly from the Afghanistan Hydrologic Data Reports published by the Afghanistan Ministry of Water and Power. Peaks from incomplete water years were checked using hydrograph comparison with nearby streamgages to insure that the discharge was the annual peak discharge.

Monthly and Annual Mean Discharges

The monthly and annual mean discharges are found in the final table for each streamgage. The monthly and annual means discharges were computed using statistical applications built into U.S. Geological Survey ADAPS Version 4.9 (U.S. Geological Survey, 2009).

Data Considerations

The reliability of statistical data is related to the length of streamgage record. 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 each streamgage in Afghanistan can vary substantially. The 10-year requirement was relaxed in this report so statistics could be computed for all streamgages. Subsequently, extreme high or low flows may be included in the streamflow record of one streamgage and not in another, resulting in inconsistencies in the streamflow statistics when comparing streamgage data. In some instances, there was insufficient data to compute a statistic and the statistic is reported as “not given.”

Statistics provided in the report are presented as computed by software with little evaluation. In addition, any differences in statistical values for pre- and post-regulation periods were not addressed in this report. It is the user’s responsibility to interpret the data and understand the limitations of the statistics computed with limited record length.

Selected References

- Democratic Republic of Afghanistan, Ministry of Irrigation and Water Resources, 1985, Hydrological yearbook 1979–1980, Part I and II, Rivers of Indus and Helmand Basin (Kabul, Khuram, Helmand and Ghazni): Institute of Water Resources Development, Afghanistan Hydrologic Data Report RO 211, 131 p.
- Democratic Republic of Afghanistan, Ministry of Water and Power, 1976, Hydrological yearbook 1962–1975, Part III-8, Hari Rud river basin: Water and Soil Survey Department, Afghanistan Hydrologic Data Report RO 214, 118 p.
- Democratic Republic of Afghanistan, Ministry of Water and Power, 1977, Hydrological yearbook 1965–1975, Part I-1A, Lower Kabul river basin up to Naghlu reservoir: Water and Soil Survey Department, Afghanistan Hydrologic Data Report RO 213, 186 p.
- Democratic Republic of Afghanistan, Ministry of Water and Power, 1979a, Hydrological yearbook 1960–1975, Part V-14 and 15, Kunduz and Kokcha river basin: Water and Soil Survey Department, Afghanistan Hydrologic Data Report RO 222, 212 p.
- Democratic Republic of Afghanistan, Ministry of Water and Power, 1979b, Hydrological yearbook 1976–1978, Part V, Rivers of Amu basin (Kunduz and Kokcha): Water and Soil Survey Department, Afghanistan Hydrologic Data Report RO 220, 69 p.
- Democratic Republic of Afghanistan, Ministry of Water and Power, 1981, Hydrological yearbook 1976–1978, Part I, Rivers of Indus basin (Kabul, Khurran and Shamal): Water and Soil Survey Department, Afghanistan Hydrologic Data Report RO 218, 83 p.
- Democratic Republic of Afghanistan, Ministry of Water and Power, date unknown, Hydrological yearbook 1963–1975, Part I-2, Khurran river basin: Water and Soil Survey Department, Afghanistan Hydrologic Data Report RO 216, 110 p.

- Democratic Republic of Afghanistan, Ministry of Water and Power, date unknown, Hydrological yearbook 1964–1975, Part IV-9 to 13, Murghab, Shirintagab, Serepul, Balkh, and Khulm river basins: Water and Soil Survey Department, Afghanistan Hydrologic Data Report RO 208, 190 p.
- Democratic Republic of Afghanistan, Ministry of Water and Power, date unknown, Hydrological yearbook 1976–1978, Part III, West flowing rivers (Khash, Farah, Adraskan and Harirud): Water and Soil Survey Department, Afghanistan Hydrologic Data Report RO 219, 77 p.
- Democratic Republic of Afghanistan, Ministry of Water and Power, date unknown, Hydrological yearbook 1976–1978, Part IV, North flowing rivers (Murghab, Shirin Tagab, Sarepul, Balkh and Khulm): Water and Soil Survey Department, Afghanistan Hydrologic Data Report RO 209, 75 p.
- Flynn, K.M., Kirby, W.H., and Hummel, P.R., 2006, User's manual for program PeakFQ, Annual flood-frequency analysis using bulletin 17B guidelines: U.S. Geological Survey Techniques and Methods, book 4, chap. B4, 42 p.
- Helsel, D.R., and Hirsch, R.M., 1992, Statistical methods in water resources: New York, Elsevier Science Publishing Co., 522 p.
- Lumb, A.M., Thomas, W.O., Jr., and Flynn, K.M., 2002, User's manual for SWSTAT, a computer program for interactive computation of surface-water statistics: U.S. Geological Survey website accessed April 5, 2010, at <http://water.usgs.gov/software/SWSTAT/>.
- U.S. Interagency Advisory Committee on Water Data, 1982, Guidelines for determining flood flow frequency, Bulletin 17-B of the Hydrology Subcommittee: Reston, Va., U.S. Geological Survey, Office of Water Coordination, 183 p.
- U.S. Geological Survey, 2009, User's manual for the national water information system of the U.S. Geological Survey—Automated data processing system (ADAPS) Version 4.9: U.S. Geological Survey website accessed April 5, 2010, at <http://nwis.usgs.gov/currentdocs/adaps/adaps.book.html>.
- Vining, K.C., 2010, Streamflow characteristics of streams in southeastern Afghanistan: U.S. Geological Survey Data Series 508, 104 p.
- Williams-Sether, Tara, 2008, Streamflow characteristics of streams in the Helmand Basin, Afghanistan: U.S. Geological Survey Data Series 333, 341 p.

STEAMFLOW STATISTICS

1-0.000-1M KABIL RIVER AT DAKAH

(U.S. Geological Survey identification number: 341400071020000)

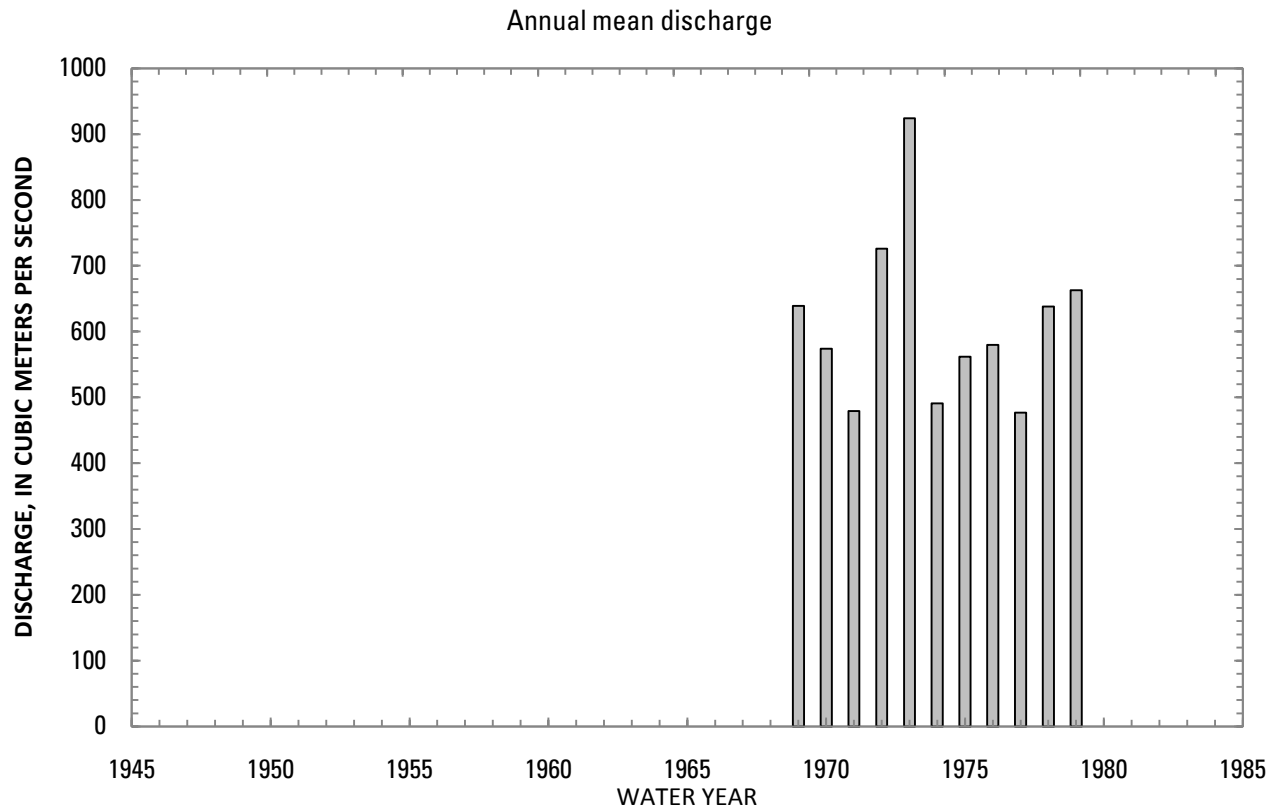
LOCATION: Lat 34°14'N., long 71°02'E.

DRAINAGE AREA: 67,370 km².

ELEVATION: 420 meters above mean sea level.

PERIOD OF RECORD: February 21, 1968 to July 22, 1980.

GAGE: Water-stage recorder.



1-0.000-1M KABUL RIVER AT DAKAH, Continued

Statistics of monthly and annual mean discharges
[m³/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	310	1974	209	1975	269	35.3	0.13	3.56
November	268	1970	132	1975	217	37.2	0.17	2.88
December	248	1970	105	1975	187	37.1	0.2	2.47
January	252	1970	89.1	1975	164	43.8	0.27	2.17
February	267	1980	81.2	1975	165	50.5	0.31	2.19
March	377	1968	104	1975	234	89.3	0.38	3.10
April	1,290	1973	369	1971	651	245	0.38	8.61
May	1,880	1973	593	1977	1,020	327	0.32	13.4
June	2,230	1972	1,150	1970	1,570	404	0.26	20.8
July	2,080	1973	999	1971	1,480	355	0.24	19.6
August	1,430	1973	817	1974	1,080	188	0.17	14.3
September	763	1973	380	1974	529	118	0.22	7.00
Annual	924	1973	477	1977	614	130	0.21	100

1-0.000-1M KABUL RIVER AT DAKAH, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	198	140	109	91.1	84.5	102	254	447	862	862	679	295	122
90	217	166	140	113	112	117	297	518	998	940	710	314	140
85	223	175	148	127	121	125	329	569	1,080	1,030	743	342	157
80	227	185	163	131	127	135	360	631	1,160	1,220	800	359	173
75	233	197	168	136	133	146	388	692	1,200	1,180	852	388	192
70	239	205	170	138	137	153	410	759	1,290	1,230	893	418	210
65	244	212	172	141	140	165	429	815	1,340	1,290	936	448	226
60	251	215	176	145	145	182	454	876	1,380	1,350	979	479	246
55	258	217	180	152	149	195	486	933	1,450	1,400	1,020	497	277
50	263	220	185	157	152	206	529	1,000	1,500	1,450	1,070	513	322
45	268	224	189	161	156	216	583	1,050	1,550	1,500	1,100	529	417
40	278	229	193	165	161	224	635	1,090	1,610	1,540	1,150	543	534
35	284	232	201	171	170	236	676	1,140	1,670	1,590	1,190	564	679
30	290	236	206	180	179	258	735	1,180	1,740	1,650	1,240	594	823
25	298	241	214	192	193	280	845	1,240	1,830	1,740	1,280	638	983
20	309	247	223	207	210	306	939	1,320	1,970	1,850	1,340	679	1,140
15	320	255	231	219	229	358	1,060	1,400	2,150	1,910	1,410	710	1,280
10	335	266	240	234	248	412	1,220	1,540	2,360	2,020	1,500	754	1,460
5	353	278	256	252	281	481	1,400	1,830	2,570	2,230	1,560	827	1,740

1-0.000-1M KABUL RIVER AT DAKAH, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	1,230	1,170	1,100	1,060	966
0.95	1.05	1,460	1,350	1,270	1,200	1,100
0.90	1.11	1,590	1,470	1,380	1,290	1,180
0.80	1.25	1,760	1,620	1,530	1,420	1,300
0.50	2	2,140	1,970	1,860	1,730	1,570
0.20	5	2,600	2,430	2,290	2,150	1,940
0.10	10	2,860	2,720	2,570	2,430	2,180
0.04	25	3,170	3,080	2,900	2,790	2,480
0.02	50	3,390	3,340	3,140	3,060	2,710
0.01	100	3,590	3,610	3,380	3,340	2,930
0.005	200	3,790	3,870	¹ 3,620	3,630	3,160
0.002	500	4,040	ng	ng	ng	ng

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

1-0.000-1M KABUL RIVER AT DAKAH, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	73.4	74.6	77.0	81.3	87.6	92.9	98.7	107	135
0.10	10	85.9	86.5	88.9	93.2	99.3	106	112	122	151
0.20	5	101	102	104	109	114	122	128	140	171
0.50	2	128	132	136	140	146	156	163	175	207

1-0.000-1M KABUL RIVER AT DAKAH, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	74.8	80.3	87.0	91.9	76.2	82.4	92.4	113
0.10	10	88.1	92.0	97.9	103	87.5	95.2	105	131
0.20	5	104	107	112	118	103	113	124	156
0.50	2	131	139	143	150	140	154	167	218
		June-July-August				September-October-November			
0.05	20	551	644	688	777	121	132	137	148
0.10	10	564	653	723	831	139	150	156	166
0.20	5	586	669	770	901	161	171	179	188
0.50	2	654	730	877	1,050	198	208	216	224

1-0.000-1M KABUL RIVER AT DAKAH, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1968	June 11, 1968	2,655	1978	July 8, 1978	3,016
1969	June 20, 1969	2,091	1973	June 13, 1973	2,870
1970	June 29, 1970	1,600	1972	June 16, 1972	2,750
1971	June 1, 1971	1,410	1968	June 11, 1968	2,655
1972	June 16, 1972	2,750	1979	June 28, 1979	2,218
1973	June 13, 1973	2,870	1975	May 17, 1975	2,180
1974	July 17, 1974	1,790	1969	June 20, 1969	2,091
1975	May 17, 1975	2,180	1976	July 10, 1976	2,050
1976	July 10, 1976	2,050	1980	June 26, 1980	1,962
1977	June 26, 1977	1,860	1977	June 26, 1977	1,860
1978	July 8, 1978	3,016	1974	July 17, 1974	1,790
1979	June 28, 1979	2,218	1970	June 29, 1970	1,600
1980	June 26, 1980	1,962	1971	June 1, 1971	1,410

1-0.000-1M KABUL RIVER AT DAKAH, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1968	--	--	--	--	--	377	861	1,190	2,220	1,870	1,230	500	--
1969	308	255	231	197	162	345	655	789	1,580	1,460	1,120	540	639
1970	309	268	248	252	227	222	507	858	1,150	1,030	1,120	676	574
1971	249	186	183	153	137	146	369	848	1,160	999	871	427	479
1972	224	218	176	126	131	196	569	1,260	2,230	1,710	1,210	650	726
1973	269	210	178	168	221	342	1,290	1,880	2,210	2,080	1,430	763	924
1974	310	220	168	139	135	172	417	679	1,240	1,190	817	380	491
1975	209	132	105	89.1	81.2	104	576	975	1,490	1,280	1,130	532	562
1976	251	199	180	164	175	185	659	899	1,300	1,550	891	496	580
1977	283	223	191	165	148	168	427	593	1,180	1,110	839	380	477
1978	237	197	158	132	150	228	563	1,030	1,470	1,740	1,160	543	638
1979	304	254	208	158	150	209	735	994	1,570	1,710	1,160	458	663
1980	278	246	216	222	267	351	834	1,200	1,590	--	--	--	--

1-0.000-4S KABIL RIVER NEAR DARONTA

(U.S. Geological Survey identification number: 342800070220000)

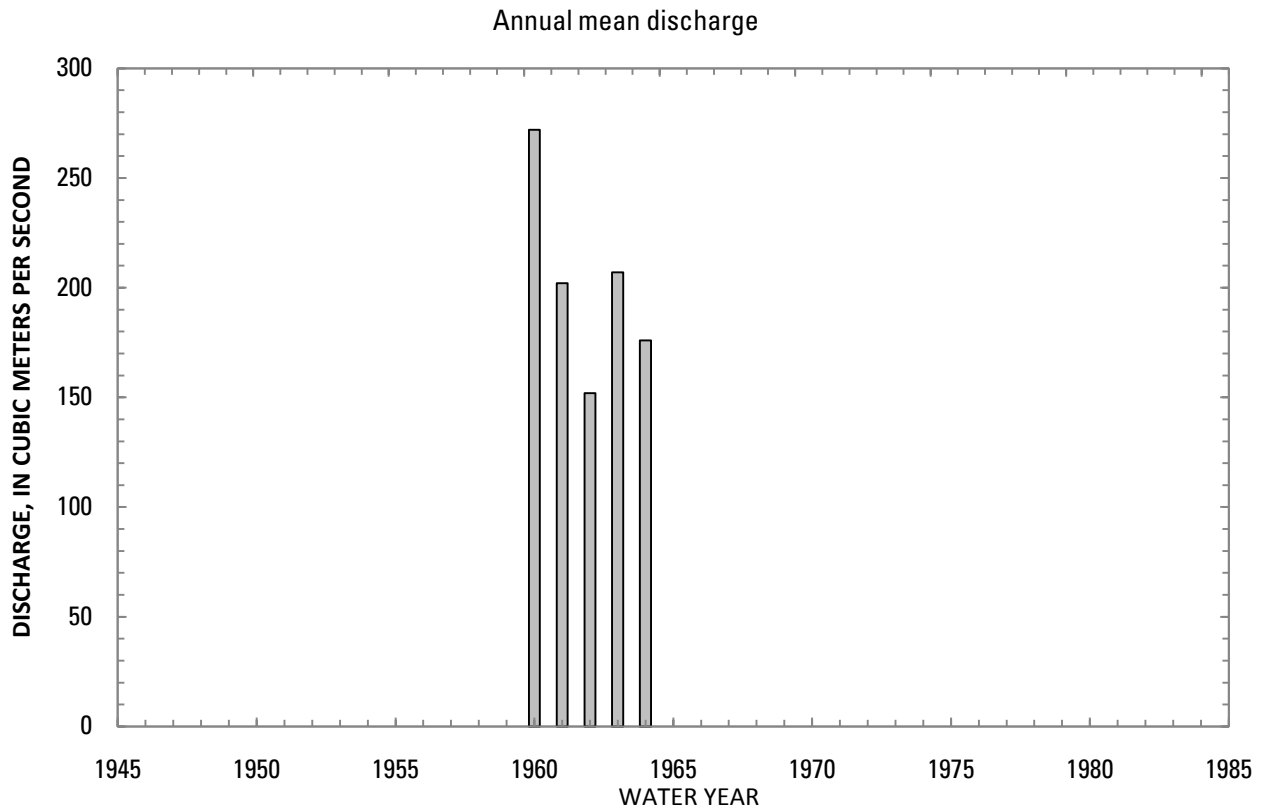
LOCATION: Lat 34°28'N., long 70°22'E.

DRAINAGE AREA: 34,375 km².

ELEVATION: 585 meters above mean sea level.

PERIOD OF RECORD: October 1, 1959 to September 30, 1964.

GAGE: Water-stage recorder.



1-0.000-4S KABUL RIVER NEAR DARONTA, Continued

Statistics of monthly and annual mean discharges
[m³/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	67.7	1961	50.2	1960	58.5	6.98	0.12	2.42
November	88.3	1960	64.9	1963	76.6	9.34	0.12	3.16
December	88.6	1961	83.6	1962	85.7	1.82	0.02	3.54
January	104	1964	80.2	1960	90.0	9.71	0.11	3.72
February	94.4	1964	73.8	1962	81.2	8.13	0.10	3.36
March	183	1960	70.5	1962	116	45.3	0.39	4.81
April	476	1960	164	1963	310	136	0.44	12.8
May	623	1960	202	1962	414	161	0.39	17.1
June	723	1963	415	1964	582	120	0.21	24.1
July	588	1960	296	1964	399	124	0.31	16.5
August	256	1960	94.1	1964	142	68.4	0.48	5.88
September	82.1	1960	51.9	1962	62.8	11.5	0.18	2.60
Annual	272	1960	152	1962	202	45.0	0.22	100

1-0.000-4S KABUL RIVER NEAR DARONTA, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	46.5	58.5	77.2	76.2	68.4	64.8	118	165	271	169	69.1	45.3	54.9
90	49.7	59.4	78.8	77.6	70.9	67.2	127	178	355	197	72.5	49.0	60.1
85	50.8	60.7	80.2	78.3	72.0	69.6	138	207	460	208	76.4	54.9	65.0
80	51.5	63.0	80.9	80.5	72.9	71.4	167	228	478	239	82.0	55.6	69.7
75	53.7	67.0	82.3	82.2	74.2	73.2	187	263	491	287	86.0	56.3	74.3
70	54.9	68.9	83.1	83.3	75.3	78.6	199	306	511	321	90.1	56.9	78.1
65	56.6	70.5	83.6	83.9	76.1	81.4	212	370	521	337	93.1	57.5	81.9
60	58.5	72.9	83.9	85.2	76.9	84.6	230	385	531	361	96.6	58.1	85.1
55	58.8	74.1	85.0	87.4	77.9	88.2	249	411	603	379	101	58.6	88.3
50	59.2	75.0	87.0	88.8	79.1	95.0	263	430	624	397	107	59.1	91.7
45	59.7	76.6	87.3	90.2	79.8	107	299	452	644	417	115	59.6	101
40	61.2	79.9	87.6	91.4	80.6	111	325	465	660	439	128	60.1	118
35	61.8	82.3	88.1	92.6	81.5	115	360	485	676	464	134	62.6	165
30	62.4	84.0	89.8	93.9	82.9	128	375	508	689	485	151	64.1	212
25	63.6	85.4	90.1	96.1	86.7	149	399	525	702	500	170	68.0	280
20	65.7	86.8	90.3	97.3	90.1	166	426	544	715	517	204	69.4	379
15	66.8	89.2	90.5	99.9	93.8	186	458	592	729	548	243	72.0	455
10	67.9	91.2	91.5	105	98.4	202	506	632	750	620	279	74.6	518
5	ng	100	93.2	110	105	228	594	678	780	693	316	86.3	655

1-0.000-4S KABUL RIVER NEAR DARONTA, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	423	416	395	² 378	394
0.95	1.05	492	491	480	464	448
0.90	1.11	541	539	528	510	479
0.80	1.25	614	603	588	564	519
0.50	2	821	754	705	656	600
0.20	5	1,170	951	822	728	690
0.10	10	1,440	1,080	881	756	741
0.04	25	1,850	1,230	941	² 779	797
0.02	50	2,190	1,350	978	² 790	835
0.01	100	2,570	1,460	1,010	² 799	869
0.005	200	3,000	1,580	1,040	² 805	902
0.002	500	3,650	ng	ng	ng	ng

¹Less than 10 years of data used.

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

1-0.000-4S KABUL RIVER NEAR DARONTA, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /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	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng

1-0.000-4S KABUL RIVER NEAR DARONTA, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	59.7	67.4	69.9	72.1	48.4	58.6	59.1	57.5
0.10	10	62.3	68.8	71.4	73.5	52.8	63.1	64.1	65.5
0.20	5	65.3	70.5	73.2	75.3	58.3	69.2	71.2	77.1
0.50	2	70.8	73.7	76.6	79.0	69.1	83.4	88.9	107
		June-July-August				September-October-November			
0.05	20	55.5	63.5	68.4	77.4	ng	ng	ng	ng
0.10	10	56.6	64.3	69.3	82.1	ng	ng	ng	ng
0.20	5	58.9	66.3	71.8	90.3	ng	ng	ng	ng
0.50	2	69.2	76.6	84.0	118	ng	ng	ng	ng

1-0.000-4S KABUL RIVER NEAR DARONTA, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1960	April 17, 1960	1,560	1960	April 17, 1960	1,560
1961	June 5, 1961	790	1962	June 12, 1962	900
1962	June 12, 1962	900	1963	June, 1963	795
1963	June, 1963	795	1961	June 5, 1961	790
1964	June 11, 1964	528	1964	June 11, 1964	528

1-0.000-4S KABUL RIVER NEAR DARONTA, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1960	50.2	88.3	85.8	80.2	78.9	183	476	623	670	588	256	82.1	272
1961	67.7	82.0	88.6	92.2	83.0	110	353	472	568	342	101	62.7	202
1962	61.4	77.8	83.6	81.3	73.8	70.5	176	202	536	310	103	51.9	152
1963	53.0	64.9	85.1	92.1	76.0	81.9	164	460	723	461	157	60.1	207
1964	60.2	69.9	85.5	104	94.4	137	382	315	415	296	94.1	57.2	176

1-0.000-5W KABL RIVER AT NAGHLU

(U.S. Geological Survey identification number: 343700069430000)

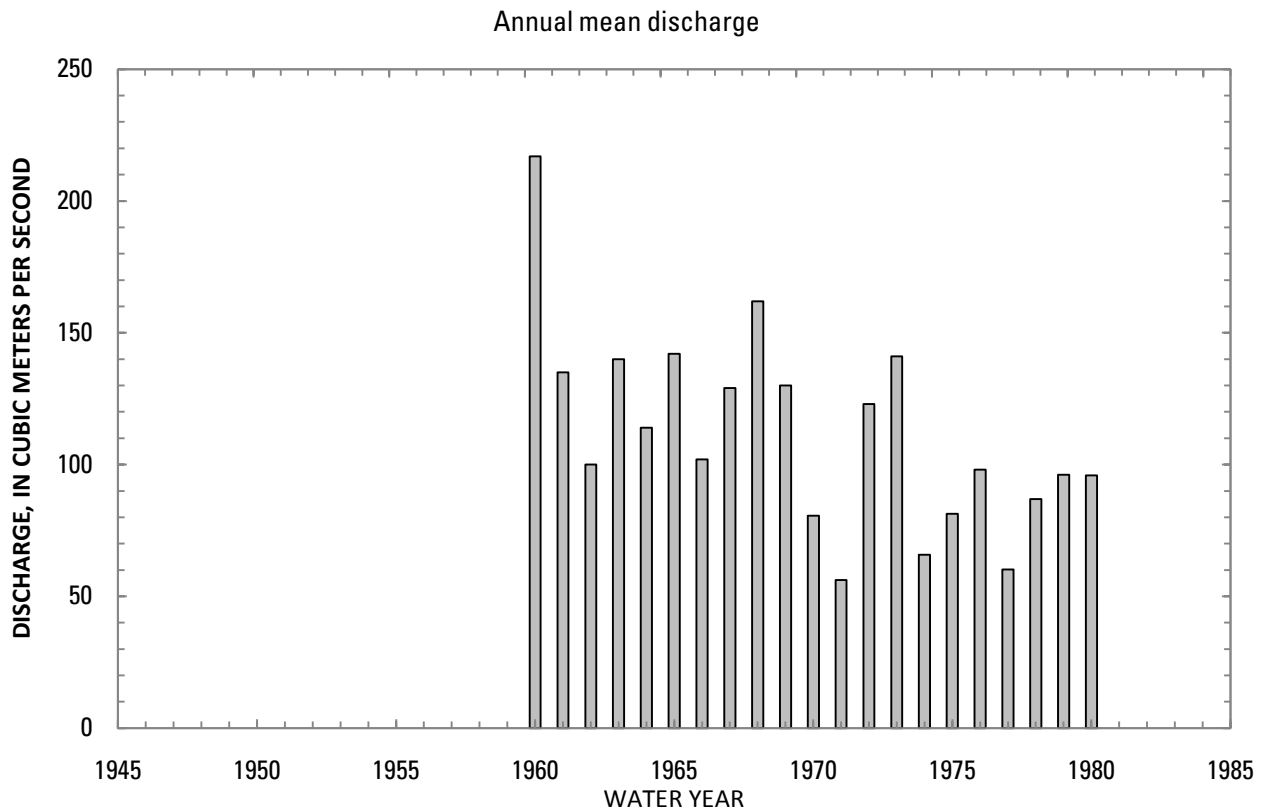
LOCATION: Lat 34°37'N., long 69°43'E.

DRAINAGE AREA: 26,046 km².

ELEVATION: 985 meters above mean sea level.

PERIOD OF RECORD: October 1, 1959 to September 30, 1980.

GAGE: Water-stage recorder.



1-0.000-5W KABUL RIVER AT NAGHLU, Continued

Statistics of monthly and annual mean discharges
[m³/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	60.2	1974	33.7	1967	44.8	8.01	0.18	3.32
November	70.0	1960	39.1	1976	54.2	10.2	0.19	4.03
December	85.6	1968	34.1	1978	55.0	15.2	0.28	4.09
January	102	1968	34.9	1972	59.9	16.8	0.28	4.45
February	89.2	1973	41.0	1979	57.5	12.4	0.22	4.27
March	159	1968	31.7	1967	67.1	32.8	0.49	4.98
April	362	1960	45.9	1971	171	86.7	0.51	12.7
May	475	1960	64.0	1977	228	95.9	0.42	16.9
June	563	1960	117	1971	313	131	0.42	23.3
July	524	1960	34.4	1971	185	112	0.60	13.8
August	178	1960	29.2	1971	67.3	32.5	0.48	5.00
September	62.0	1960	31.1	1971	42.8	7.68	0.18	3.18
Annual	217	1960	56.2	1971	112	37.9	0.34	100

1-0.000-5W KABUL RIVER AT NAGHLU, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	32.2	33.6	29.3	31.1	34.0	26.9	30.7	50.5	70.1	38.0	30.6	29.9	31.6
90	34.2	38.8	32.3	34.7	37.8	30.8	43.3	72.4	133	49.7	34.8	32.8	35.8
85	35.4	40.4	34.8	37.5	40.7	35.1	48.5	98.4	151	57.5	37.8	34.9	38.5
80	36.4	42.1	37.0	40.7	43.2	38.4	55.1	123	170	69.5	41.1	36.0	41.4
75	37.6	43.9	39.5	44.0	46.5	41.7	73.1	143	197	85.1	43.7	36.9	44.4
70	38.7	45.9	42.7	47.8	48.7	46.3	88.2	159	220	98.2	45.5	37.6	47.4
65	39.7	47.6	46.8	51.1	51.6	50.3	102	175	240	110	47.4	38.3	50.4
60	40.6	49.1	49.9	53.7	53.4	52.0	114	191	262	123	49.2	39.2	53.6
55	41.5	50.5	51.8	57.0	55.1	53.7	129	203	290	139	51.1	40.2	56.9
50	42.6	52.6	53.7	59.8	56.7	55.4	144	214	307	156	53.0	41.1	60.5
45	43.9	54.8	55.9	61.8	58.2	58.9	161	230	321	174	54.9	42.2	65.3
40	45.4	57.5	58.0	63.8	59.8	62.8	178	247	340	193	58.9	43.5	70.8
35	47.3	60.4	60.4	67.2	61.8	67.3	195	265	358	212	62.8	44.7	77.2
30	49.2	62.6	63.0	70.5	64.4	72.4	214	284	376	234	66.8	46.6	93.2
25	51.6	64.3	67.1	72.6	67.4	77.2	240	303	407	258	71.9	48.5	131
20	53.9	65.9	71.6	74.8	69.9	81.7	268	328	450	283	80.3	50.6	174
15	56.1	68.4	73.9	77.1	73.2	93.1	298	356	500	309	95.1	53.4	225
10	58.5	71.3	76.3	79.4	78.0	118	338	385	542	350	120	55.8	287
5	62.2	74.7	81.5	81.7	83.8	158	391	449	597	416	167	58.1	368

1-0.000-5W KABUL RIVER AT NAGHLU, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	188	178	157	143	124
0.95	1.05	251	235	208	188	166
0.90	1.11	294	271	241	217	193
0.80	1.25	354	320	286	257	231
0.50	2	506	435	392	354	320
0.20	5	721	582	525	481	436
0.10	10	867	672	607	563	509
0.04	25	1,050	779	704	663	597
0.02	50	1,200	855	773	736	659
0.01	100	1,340	928	839	807	720
0.005	200	1,490	999	902	878	779
0.002	500	1,680	ng	ng	ng	ng

1-0.000-5W KABUL RIVER AT NAGHLU, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	10.4	14.7	18.7	24.2	30.5	32.8	34.0	36.7	38.7
0.10	10	12.1	16.6	20.6	25.4	31.2	33.8	35.5	38.2	40.9
0.20	5	14.7	19.2	23.2	27.2	32.3	35.3	37.5	40.2	43.8
0.50	2	21.5	25.6	29.2	31.8	35.5	39.0	42.1	45.0	49.9

1-0.000-5W KABUL RIVER AT NAGHLU, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	14.4	22.6	26.2	30.8	11.2	18.9	23.1	27.5
0.10	10	17.5	25.9	29.2	33.8	14.7	23.3	27.2	31.8
0.20	5	22.0	30.5	33.5	38.0	20.0	29.4	33.1	38.2
0.50	2	33.3	41.0	43.4	47.6	33.6	43.9	47.5	55.8
		June-July-August				September-October-November			
0.05	20	24.3	29.5	33.8	34.2	20.7	27.6	29.9	31.9
0.10	10	26.1	31.2	35.4	37.8	22.3	28.8	31.0	33.1
0.20	5	28.7	33.9	37.9	43.2	24.5	30.5	32.6	34.7
0.50	2	36.1	41.5	45.8	58.2	29.8	34.9	36.6	38.7

1-0.000-5W KABUL RIVER AT NAGHLU, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1960	April 17, 1960	1,260	1960	April 17, 1960	1,260
1961	June 5, 1961	780	1967	April 28, 1967	863
1962	June 12, 1962	626	1961	June 5, 1961	780
1963	June 28, 1963	706	1968	June 11, 1968	733
1964	June 12, 1964	534	1963	June 28, 1963	706
1965	April 23, 1965	482	1978	July 7, 1978	698
1966	June 19, 1966	358	1962	June 12, 1962	626
1967	April 28, 1967	863	1972	April 28, 1972	580
1968	June 11, 1968	733	1964	June 12, 1964	534
1969	June 20, 1969	490	1973	June 13, 1973	531
1970	May 23, 1970	353	1980	May 15, 1980	500
1971	June 7, 1971	224	1969	June 20, 1969	490
1972	April 28, 1972	580	1965	April 23, 1965	482
1973	June 13, 1973	531	1976	April 25, 1976	474
1974	June 18, 1974	258	1979	June 24, 1979	427
1975	June 18, 1975	384	1975	June 18, 1975	384
1976	April 25, 1976	474	1966	June 19, 1966	358
1977	June 25, 1977	277	1970	May 23, 1970	353
1978	July 7, 1978	698	1977	June 25, 1977	277
1979	June 24, 1979	427	1974	June 18, 1974	258

1-0.000-5W KABUL RIVER AT NAGHLU, Continued

Monthly and annual mean discharges, in cubic meters per second
 [Data may not be rounded in accordance with U.S. Geological Survey publication standards]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1960	39.4	70.0	75.6	74.3	65.9	113	362	475	563	524	178	62.0	217
1961	41.8	58.9	60.5	62.0	58.3	60.5	279	305	394	196	62.9	38.5	135
1962	38.5	57.4	67.0	72.0	62.8	54.8	132	143	314	167	57.6	38.4	100
1963	35.1	42.4	54.7	59.2	49.0	52.8	104	310	525	307	100	39.5	140
1964	39.4	45.5	55.2	67.0	60.9	87.8	246	199	275	191	60.7	37.9	114
1965	36.1	44.6	56.0	65.2	58.0	76.4	251	325	343	286	100	56.7	142
1966	57.5	67.3	75.7	75.4	67.2	83.1	165	171	253	103	66.2	40.6	102
1967	33.7	47.7	60.6	73.4	64.8	31.7	102	292	425	296	87.8	35.0	129
1968	46.7	63.2	85.6	102	52.3	159	238	247	535	302	83.4	36.1	162
1969	45.8	62.7	73.3	74.5	74.7	111	211	170	368	230	90.1	45.6	130
1970	46.7	60.5	70.5	76.5	74.7	73.9	72.4	142	175	80.0	49.9	45.2	80.6
1971	36.9	59.1	41.1	50.9	43.8	36.8	45.9	148	117	34.4	29.2	31.1	56.2
1972	56.4	44.5	36.4	34.9	52.0	33.2	198	318	407	185	61.2	46.2	123
1973	55.4	61.5	44.3	47.0	89.2	103	307	313	406	166	51.1	48.6	141
1974	60.2	44.0	36.3	44.5	51.2	52.0	87.5	90.8	140	82.8	49.4	51.9	65.8
1975	42.0	51.9	39.2	36.8	43.1	43.5	104	157	234	135	47.8	39.9	81.3
1976	42.1	39.1	43.8	50.3	54.5	48.0	208	246	211	149	45.2	39.8	98.1
1977	43.8	39.1	42.1	59.2	44.9	41.7	85.7	64.0	157	73.8	36.2	36.4	60.2
1978	38.3	46.3	34.1	43.7	42.8	48.7	92.4	228	231	147	41.7	47.6	86.9
1979	53.6	64.5	46.7	38.7	41.0	35.2	123	196	270	166	69.3	47.1	96.1
1980	50.3	68.1	56.9	50.1	56.9	62.2	170	245	240	71.9	45.0	35.4	95.9

1-0.000-6M KABUL RIVER AT TANG-I-GHARU

(U.S. Geological Survey identification number: 343400069240000)

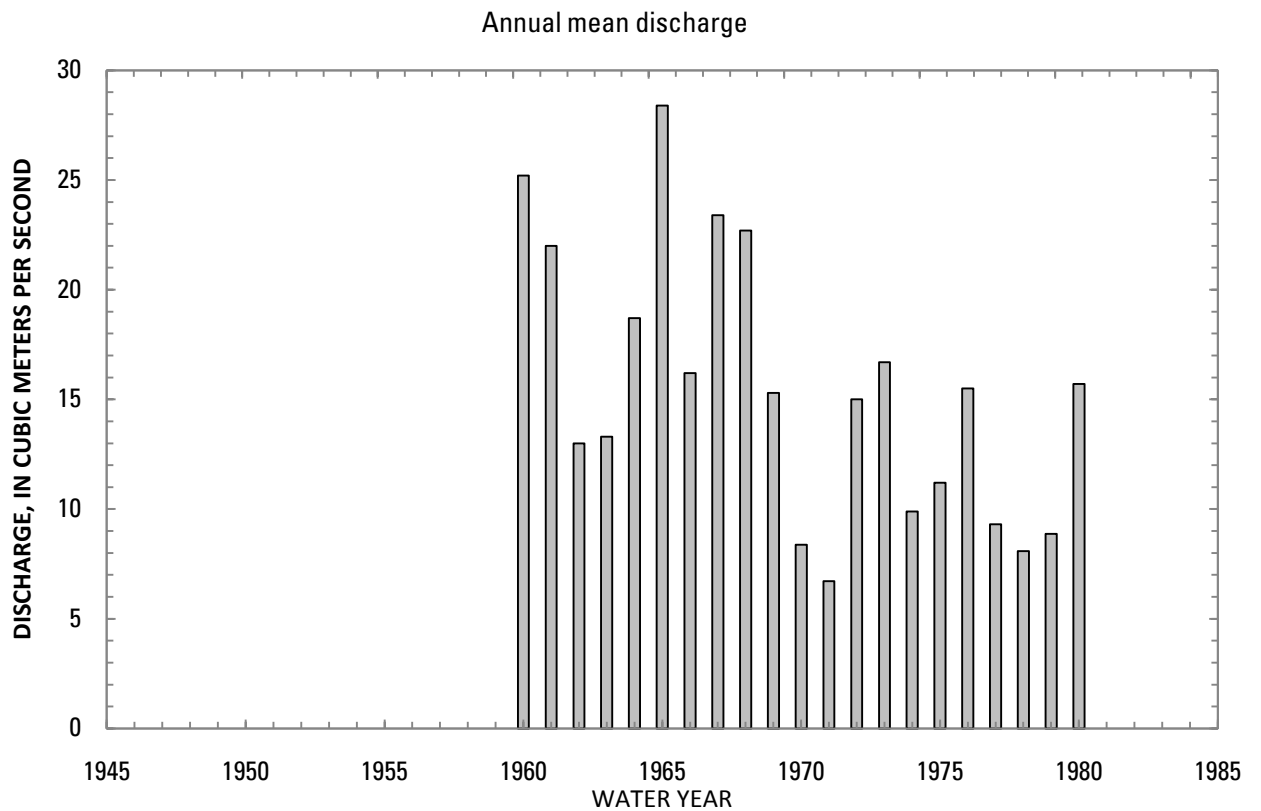
LOCATION: Lat 34°34'N., long 69°24'E.

DRAINAGE AREA: 12,850 km².

ELEVATION: 1,770 meters above mean sea level.

PERIOD OF RECORD: October 1, 1959 to September 30, 1980.

GAGE: Water-stage recorder.



1-0.000-6M KABL RIVER AT TANG-I-GHARU, Continued

Statistics of monthly and annual mean discharges
[m³/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	9.85	1961	0.06	1971	2.93	3.45	1.18	1.58
November	24.4	1961	0.56	1972	12.0	7.47	0.62	6.49
December	26.6	1966	6.77	1972	17.7	5.85	0.33	9.52
January	27.9	1968	11.5	1972	19.9	4.71	0.24	10.7
February	28.1	1969	13.5	1979	20.5	3.97	0.19	11.1
March	45.5	1968	14.4	1979	25.8	7.67	0.3	13.9
April	96.2	1964	6.17	1970	48.0	28.4	0.59	25.9
May	93.1	1965	0.44	1970	28.3	27.8	0.98	15.3
June	31.1	1965	0.15	1970	5.86	8.51	1.45	3.16
July	13.6	1965	0.09	1979	2.60	3.71	1.43	1.40
August	5.64	1978	0.01	1974	1.14	1.49	1.30	0.61
September	3.76	1965	0.04	1970	0.72	0.91	1.26	0.39
Annual	28.4	1965	6.71	1971	15.4	6.15	0.40	100

1-0.000-6M KABUL RIVER AT TANG-I-GHARU, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.07	0.22	8.65	12.2	13.6	13.8	4.93	0.29	0.12	0.08	0.03	0.04	0.12
90	0.12	0.47	10.0	13.8	15.6	15.6	8.67	0.46	0.18	0.09	0.08	0.08	0.19
85	0.15	3.03	10.9	14.8	16.2	16.8	13.5	0.67	0.25	0.13	0.11	0.13	0.27
80	0.19	4.51	11.5	15.8	16.8	18.4	17.1	1.05	0.33	0.16	0.14	0.14	0.38
75	0.21	5.64	12.6	16.2	17.3	19.5	21.0	2.25	0.42	0.19	0.15	0.16	0.64
70	0.22	6.62	13.8	16.8	17.8	20.4	27.3	5.21	0.52	0.22	0.17	0.18	1.04
65	0.24	7.35	15.2	18.3	18.3	21.2	31.4	7.00	0.67	0.27	0.20	0.20	2.30
60	0.31	8.12	16.8	18.9	18.8	21.8	34.3	9.99	0.78	0.34	0.24	0.23	4.65
55	0.47	9.34	17.3	19.4	19.4	22.4	37.3	13.3	0.94	0.40	0.30	0.26	7.78
50	0.70	11.2	17.8	19.9	20.5	23.3	40.3	16.9	1.27	0.47	0.34	0.28	11.5
45	0.91	13.2	18.6	20.4	21.2	24.3	44.4	20.8	1.94	0.59	0.40	0.31	14.3
40	1.79	14.9	19.3	20.8	21.9	25.5	48.9	24.5	2.49	0.78	0.50	0.37	16.9
35	2.76	16.4	20.1	21.6	22.5	26.8	54.4	30.0	3.14	1.00	0.65	0.51	18.6
30	3.62	17.7	21.1	22.2	23.1	28.1	59.6	36.6	4.43	1.29	0.81	0.65	20.2
25	4.60	19.0	22.3	23.2	23.5	30.1	64.6	43.1	6.70	2.20	0.98	0.77	21.9
20	5.69	20.5	23.3	24.1	24.5	32.1	72.7	52.4	10.4	3.07	1.22	0.91	24.6
15	6.82	22.0	24.4	25.8	24.9	34.4	83.8	65.5	14.7	5.17	1.53	1.21	27.8
10	8.54	23.7	25.5	26.6	25.9	38.0	95.2	78.3	20.5	8.28	2.48	2.08	32.9
5	12.9	25.7	26.8	27.8	26.8	48.1	122	102	27.5	12.3	4.57	3.50	52.8

1-0.000-6M KABUL RIVER AT TANG-I-GHARU, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	27.4	16.2	15.0	12.6	11.6
0.95	1.05	41.5	26.4	23.8	20.4	18.2
0.90	1.11	51.0	33.8	30.3	26.1	22.9
0.80	1.25	64.8	45.1	40.3	35.0	30.1
0.50	2	98.3	75.5	67.9	59.6	50.1
0.20	5	142	121	111	97.9	81.6
0.10	10	169	152	142	125	104
0.04	25	201	192	183	161	135
0.02	50	223	221	215	189	159
0.01	100	244	250	247	217	183
0.005	200	263	¹ 279	281	245	208
0.002	500	288	ng	ng	ng	ng

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

1-0.000-6M KABUL RIVER AT TANG-I-GHARU, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0.01	0.02	0.02	0.05	0.08	0.11	0.28
0.10	10	0.01	0.01	0.02	0.03	0.04	0.07	0.12	0.16	0.46
0.20	5	0.03	0.03	0.04	0.06	0.07	0.12	0.19	0.26	0.82
0.50	2	0.11	0.13	0.14	0.18	0.22	0.32	0.51	0.70	2.31

1-0.000-6M KABUL RIVER AT TANG-I-GHARU, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	4.95	6.06	6.93	8.42	0.04	0.12	0.18	0.56
0.10	10	6.79	7.90	8.72	10.1	0.14	0.29	0.44	1.28
0.20	5	9.44	10.5	11.2	12.3	0.50	0.80	1.19	3.06
0.50	2	15.3	16.0	16.5	17.1	3.65	4.24	5.99	11.7
		June-July-August				September-October-November			
0.05	20	0	0.01	0.02	0.03	0.01	0.02	0.03	0.05
0.10	10	0.01	0.03	0.04	0.05	0.03	0.03	0.05	0.07
0.20	5	0.03	0.05	0.07	0.09	0.05	0.06	0.08	0.12
0.50	2	0.14	0.17	0.22	0.29	0.16	0.20	0.23	0.33

1-0.000-6M KABUL RIVER AT TANG-I-GHARU, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1960	May 2, 1960	175	1967	April 28, 1967	192
1961	April 18, 1961	98.0	1960	May 2, 1960	175
1962	November 15, 1961	39.5	1963	May 19, 1963	165
1963	May 19, 1963	165	1964	April 10, 1964	158
1964	April 10, 1964	158	1965	April 25, 1965	156
1965	April 25, 1965	156	1976	April 25, 1976	128
1966	April 26, 1966	79.7	1968	April 30, 1968	115
1967	April 28, 1967	192	1978	July 7, 1978	109
1968	April 30, 1968	115	1972	April 28, 1972	107
1969	April 19, 1969	85.5	1973	April 11, 1973	107
1970	July 7, 1970	101	1980	April 19, 1980	107
1971	March 26, 1971	43.6	1970	July 7, 1970	101
1972	April 28, 1972	107	1961	April 18, 1961	98.0
1973	April 11, 1973	107	1969	April 19, 1969	85.5
1974	April 7, 1974	48.2	1966	April 26, 1966	79.7
1975	April 4, 1975	68.8	1979	April 14, 1979	69.5
1976	April 25, 1976	128	1975	April 4, 1975	68.8
1977	April 18, 1977	47.4	1974	April 7, 1974	48.2
1978	July 7, 1978	109	1977	April 18, 1977	47.4
1979	April 14, 1979	69.5	1971	March 26, 1971	43.6
1980	April 19, 1980	107	1962	November 15, 1961	39.5

1-0.000-6M KABUL RIVER AT TANG-I-GHARU, Continued

Monthly and annual mean discharges, in cubic meters per second
 [Data may not be rounded in accordance with U.S. Geological Survey publication standards]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1960	3.65	19.8	22.3	20.9	21.8	26.6	83.1	75.4	18.4	7.22	1.75	1.49	25.2
1961	9.85	24.4	24.6	26.1	25.6	28.2	69.4	41.3	6.89	5.51	1.47	1.07	22.0
1962	6.88	22.2	22.5	23.6	23.5	21.7	28.8	6.22	0.593	0.621	0.337	0.287	13.0
1963	2.33	10.2	19.8	20.4	18.7	17.4	13.5	50.5	4.43	0.386	0.85	0.293	13.3
1964	0.67	11.2	17.6	19.4	19.5	34.8	96.2	21.5	2.80	1.00	0.432	0.351	18.7
1965	1.81	15.3	19.8	18.7	21.9	28.4	89.5	93.1	31.1	13.6	3.86	3.76	28.4
1966	9.62	22.2	26.6	25.4	24.3	26.8	42.2	12.3	2.08	1.15	0.851	1.73	16.2
1967	5.32	16.0	20.2	22.5	23.6	23.7	60.0	74.3	22.8	7.75	2.62	2.04	23.4
1968	9.06	21.7	25.8	27.9	27.0	45.5	56.7	41.8	13.8	1.42	0.494	1.05	22.7
1969	6.51	18.1	26.6	27.9	28.1	32.9	30.9	10.6	2.25	0.335	0.306	0.321	15.3
1970	2.08	17.3	17.4	19.7	18.3	18.0	6.17	0.443	0.154	1.34	0.172	0.035	8.37
1971	0.06	4.26	12.8	15.3	16.7	19.0	11.6	0.697	0.438	0.134	0.13	0.164	6.71
1972	0.21	0.56	6.77	11.5	14.6	29.2	53.5	53.8	6.80	1.84	0.409	0.759	15.0
1973	0.79	8.90	16.5	19.1	18.8	39.1	78.9	17.2	1.29	0.743	0.392	0.235	16.7
1974	1.13	8.43	17.8	21.4	21.3	22.8	22.2	2.09	2.11	0.124	0.013	0.098	9.89
1975	0.20	4.41	10.5	16.9	18.4	24.4	43.6	14.0	1.71	0.253	0.601	0.149	11.2
1976	0.12	5.23	13.5	16.6	18.1	24.8	67.1	35.5	3.16	1.73	0.237	0.197	15.5
1977	0.64	9.83	16.8	21.8	22.8	18.3	20.6	1.26	0.222	0.142	0.149	0.13	9.30
1978	0.18	4.23	10.9	13.7	16.0	18.5	16.5	2.02	0.239	8.71	5.64	0.571	8.08
1979	0.23	4.27	10.2	13.2	13.5	14.4	34.6	12.9	0.289	0.086	3.12	0.212	8.87
1980	0.22	4.19	11.7	15.2	18.0	27.7	82.8	26.7	1.46	0.42	0.101	0.151	15.7

1-2.R00-7T HAZARNAW RIVER AT SABAY

(U.S. Geological Survey identification number: 340600070220000)

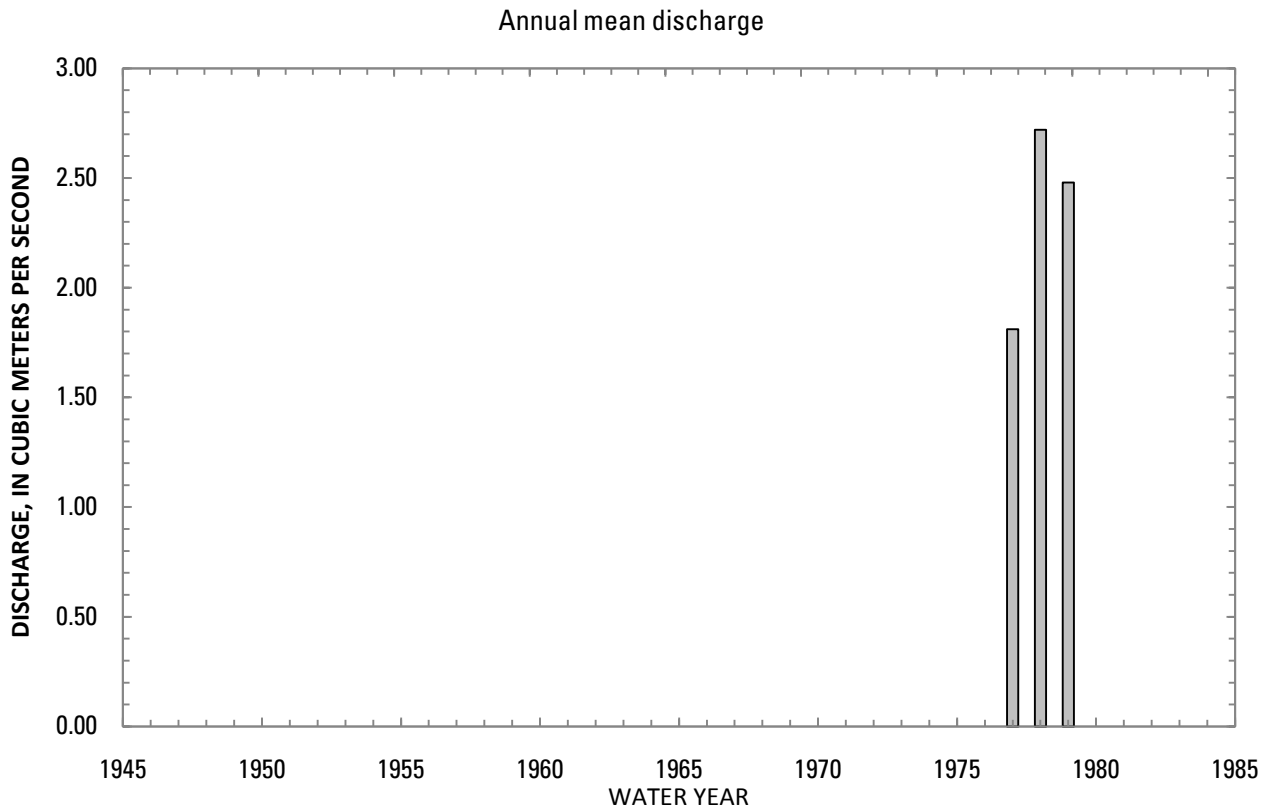
LOCATION: Lat 34°06'N., long 70°22'E.

DRAINAGE AREA: 120 km².

ELEVATION: 1,400 meters above mean sea level.

PERIOD OF RECORD: December 26, 1975 to September 30, 1979.

GAGE: Staff gage.



1-2.R00-7T HAZARNAW RIVER AT SABAY, Continued

Statistics of monthly and annual mean discharges
[m³/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	0.53	1977	0.30	1978	0.43	0.12	0.27	1.58
November	0.50	1977	0.31	1978	0.39	0.10	0.25	1.44
December	0.41	1977	0.28	1979	0.34	0.07	0.20	1.24
January	0.30	1979	0.25	1978	0.28	0.02	0.09	1.03
February	0.35	1977	0.17	1978	0.28	0.08	0.28	1.03
March	0.54	1977	0.36	1976	0.42	0.08	0.20	1.55
April	4.32	1978	2.76	1976	3.58	0.76	0.21	13.2
May	8.17	1978	4.95	1979	6.38	1.44	0.23	23.5
June	9.45	1978	4.93	1977	7.26	2.17	0.30	26.8
July	5.77	1978	1.88	1977	3.91	1.80	0.46	14.4
August	3.22	1979	0.76	1977	2.30	1.12	0.49	8.49
September	2.89	1977	0.91	1978	1.58	0.93	0.59	5.80
Annual	2.72	1978	1.81	1977	2.34	0.47	0.20	100

1-2.R00-7T HAZARNAW RIVER AT SABAY, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.27	0.29	0.26	0.20	0.15	0.26	0.67	2.53	3.35	1.24	0.54	0.45	0.26
90	0.29	0.29	0.27	0.23	0.16	0.27	0.82	3.06	3.77	1.53	0.60	0.53	0.27
85	0.29	0.29	0.29	0.25	0.19	0.29	0.98	3.50	4.13	1.85	0.71	0.55	0.29
80	0.30	0.30	0.29	0.26	0.20	0.29	1.27	3.81	4.28	2.07	0.83	0.56	0.30
75	0.30	0.30	0.29	0.26	0.27	0.30	1.96	4.31	4.55	2.49	1.06	0.58	0.32
70	0.30	0.30	0.29	0.27	0.27	0.33	2.22	4.48	4.94	2.64	1.20	0.61	0.37
65	0.43	0.30	0.30	0.27	0.28	0.34	2.49	4.66	5.29	2.80	1.42	0.67	0.42
60	0.43	0.33	0.30	0.27	0.28	0.36	2.67	4.92	6.29	3.00	1.66	0.75	0.46
55	0.44	0.34	0.30	0.28	0.29	0.38	2.82	5.13	6.64	3.24	1.80	0.84	0.50
50	0.44	0.37	0.30	0.29	0.29	0.38	3.24	5.33	7.29	3.50	1.91	0.90	0.56
45	0.44	0.38	0.30	0.29	0.30	0.39	3.50	5.52	7.65	3.67	2.01	0.96	0.80
40	0.49	0.43	0.36	0.30	0.31	0.42	3.77	5.71	7.89	3.83	2.13	1.22	1.41
35	0.53	0.48	0.37	ng	0.32	0.43	4.40	6.16	8.06	4.05	2.25	1.38	1.97
30	0.53	0.48	0.38	ng	0.32	0.44	4.95	6.64	8.23	4.26	2.41	1.43	2.61
25	0.53	0.49	0.39	ng	0.33	0.45	5.33	7.48	8.48	4.45	2.60	1.48	3.49
20	0.54	0.49	ng	ng	0.34	0.49	5.61	8.46	8.81	4.81	2.82	1.53	4.34
15	0.54	0.53	ng	ng	ng	0.61	5.92	9.35	10.00	5.65	3.16	1.63	5.25
10	ng	0.53	ng	ng	ng	0.66	6.25	10.10	11.60	6.76	4.05	1.83	6.46
5	ng	0.54	ng	ng	ng	0.81	7.21	11.80	13.90	8.23	4.63	4.54	8.67

1-2.R00-7T HAZARNAW RIVER AT SABAY, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

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

1-2.R00-7T HAZARNAW RIVER AT SABAY, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /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

1-2.R00-7T HAZARNAW RIVER AT SABAY, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng
		June-July-August				September-October-November			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng

1-2.R00-7T HAZARNAW RIVER AT SABAY, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1976	July 21, 1976	49.4	1977	September 4, 1977	110
1977	September 4, 1977	110	1976	July 21, 1976	49.4
1978	July 7, 1978	18.6	1979	August 7, 1979	38.5
1979	August 7, 1979	38.5	1978	July 7, 1978	18.6

1-2.R00-7T HAZARNAW RIVER AT SABAY, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1976	--	--	--	0.29	0.28	0.36	2.76	6.88	5.95	2.95	3.05	0.91	--
1977	0.53	0.50	0.41	0.28	0.35	0.54	3.12	5.53	4.93	1.88	0.76	2.89	1.81
1978	0.30	0.31	0.32	0.25	0.17	0.38	4.32	8.17	9.45	5.77	2.19	0.91	2.72
1979	0.47	0.37	0.28	0.30	0.32	0.41	4.12	4.95	8.72	5.03	3.22	1.59	2.48

1-4.1R0-1A PECH RIVER AT CHAGHASARAI

(U.S. Geological Survey identification number: 345400071080000)

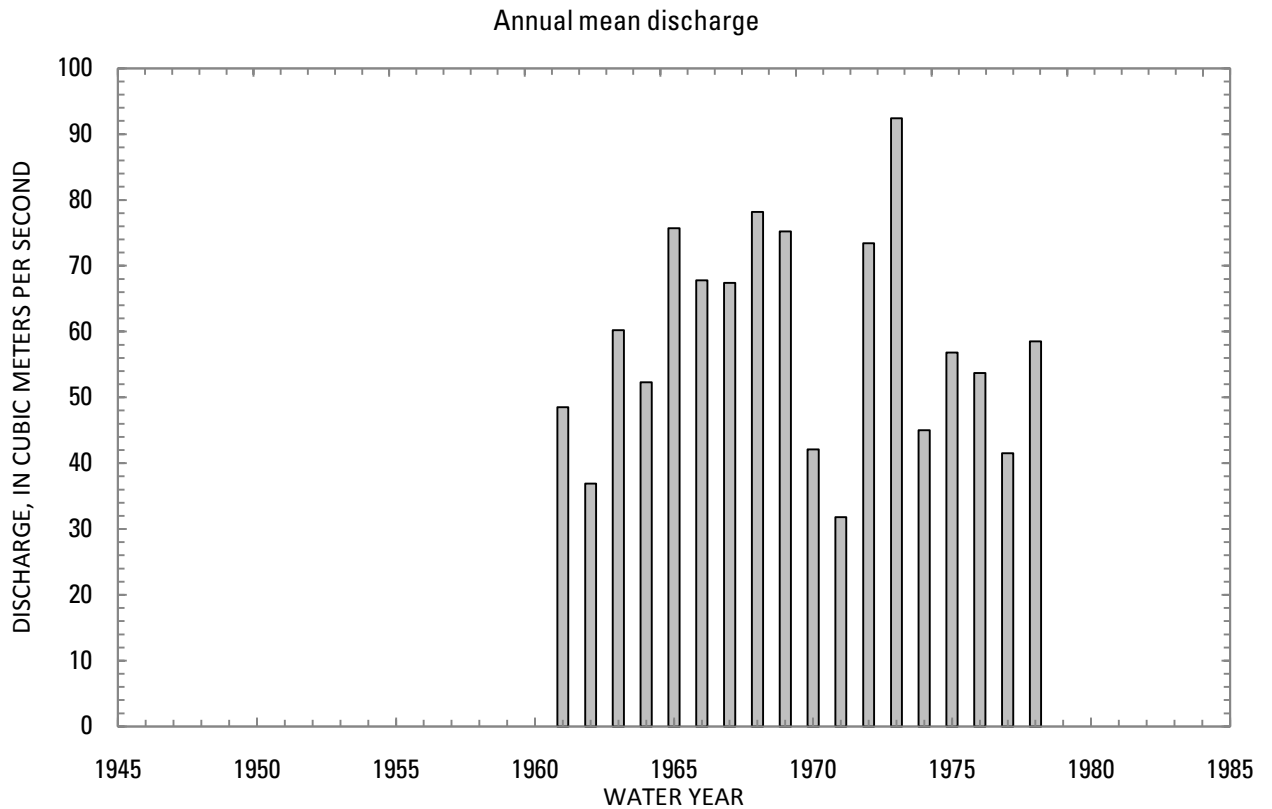
LOCATION: Lat 34°54'N., long 71°08'E.

DRAINAGE AREA: 3,855 km².

ELEVATION: 790 meters above mean sea level.

PERIOD OF RECORD: February 23, 1960 to February 28, 1979.

GAGE: Water-stage recorder.



1-4.1R0-1A PECH RIVER AT CHAGHASARAI, Continued

Statistics of monthly and annual mean discharges
[m³/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	30.1	1970	6.74	1972	14.4	6.30	0.44	2.05
November	23.1	1970	5.94	1972	11.3	4.21	0.37	1.62
December	13.1	1973	4.01	1972	8.59	2.39	0.28	1.22
January	13.2	1973	3.50	1971	7.68	2.19	0.28	1.09
February	16.9	1973	4.24	1971	9.78	3.30	0.34	1.39
March	54.7	1969	11.4	1975	24.9	13.0	0.52	3.55
April	174	1973	42.7	1977	82.7	29.3	0.35	11.8
May	278	1973	75.8	1962	150	42.3	0.28	21.3
June	331	1972	96.4	1971	206	64.5	0.31	29.4
July	219	1965	33.5	1970	118	51.5	0.44	16.9
August	84.5	1968	17.0	1974	46.5	17.6	0.38	6.62
September	33.8	1967	9.17	1971	21.8	6.65	0.31	3.10
Annual	92.4	1973	31.8	1971	58.7	16.4	0.28	100

1-4.1R0-1A PECH RIVER AT CHAGHASARAI, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	6.99	5.86	4.16	3.14	5.26	8.39	32.4	64.8	91.4	28.6	16.3	8.93	6.11
90	7.81	6.61	4.92	4.52	5.89	9.26	36.5	77.6	119	36.0	22.5	10.6	7.11
85	8.51	6.95	5.67	5.50	6.39	10.3	40.2	88.3	132	41.9	25.2	12.3	7.97
80	9.05	7.63	6.21	5.98	6.89	11.2	44.9	98.8	142	50.1	28.4	14.0	8.76
75	9.58	8.04	6.77	6.22	7.26	12.5	48.7	106	151	59.5	30.1	16.1	9.67
70	10.1	8.64	7.10	6.38	7.58	13.4	51.8	113	162	71.3	32.9	17.7	10.9
65	10.6	8.98	7.33	6.62	7.81	15.0	54.9	119	170	79.5	34.9	18.7	12.6
60	11.0	9.24	7.60	6.88	8.03	16.3	58.1	125	179	89.1	37.2	19.4	14.6
55	11.5	9.55	7.90	7.14	8.35	18.2	62.2	132	188	99.7	39.3	20.3	17.9
50	12.3	9.94	8.18	7.34	8.73	20.1	67.9	141	198	112	41.3	21.5	21.9
45	12.8	10.5	8.54	7.57	9.10	21.5	76.1	150	214	120	43.3	22.4	27.3
40	13.3	11.2	8.94	7.84	9.55	23.4	82.5	157	226	131	45.9	23.3	34.7
35	14.2	11.9	9.15	8.22	10.1	25.8	90.2	165	237	140	49.0	24.2	43.3
30	15.9	12.5	9.37	8.76	10.7	29.2	97.3	175	252	149	53.1	25.3	58.1
25	17.7	13.3	9.80	9.18	12.0	32.8	106	186	263	160	57.9	26.6	81.2
20	19.3	14.4	10.8	9.58	13.2	35.4	115	198	276	172	63.0	28.3	111
15	21.2	15.3	12.1	9.96	14.1	41.0	126	213	292	189	69.5	31.2	140
10	24.8	17.3	12.9	10.8	15.6	46.3	147	237	309	219	78.7	33.3	173
5	29.0	21.6	13.8	13.0	17.7	55.8	184	263	332	258	94.8	36.0	232

1-4.1R0-1A PECH RIVER AT CHAGHASARAI, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	181	139	135	129	117
0.95	1.05	228	176	167	154	140
0.90	1.11	256	198	186	170	154
0.80	1.25	293	225	209	190	172
0.50	2	373	279	256	234	215
0.20	5	465	332	305	285	267
0.10	10	517	359	331	316	300
0.04	25	576	385	357	351	339
0.02	50	616	401	¹ 374	375	367
0.01	100	652	415	¹ 388	398	394
0.005	200	686	427	¹ 401	¹ 420	421
0.002	500	728	ng	ng	ng	ng

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

1-4.1R0-1A PECH RIVER AT CHAGHASARAI, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	2.76	3.01	3.10	3.23	3.59	4.24	4.77	5.30	6.84
0.10	10	3.28	3.53	3.62	3.80	4.22	4.92	5.43	6.01	7.61
0.20	5	4.01	4.24	4.34	4.58	5.07	5.80	6.28	6.94	8.65
0.50	2	5.69	5.90	6.02	6.36	6.94	7.67	8.09	8.87	11.0

1-4.1R0-1A PECH RIVER AT CHAGHASARAI, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	2.81	3.15	3.28	3.64	5.19	6.11	7.32	10.3
0.10	10	3.31	3.67	3.84	4.26	5.91	7.04	8.40	11.9
0.20	5	4.02	4.40	4.61	5.10	7.01	8.45	10.0	14.2
0.50	2	5.69	6.06	6.35	6.92	10.1	12.4	14.7	20.9
		June-July-August				September-October-November			
0.05	20	13.9	16.4	17.0	19.1	4.40	5.17	5.58	6.13
0.10	10	16.9	19.5	20.8	23.6	4.99	5.66	6.02	6.72
0.20	5	20.9	23.6	25.9	30.0	5.80	6.37	6.70	7.59
0.50	2	29.0	31.9	36.2	44.5	7.70	8.24	8.61	9.92

1-4.1R0-1A PECH RIVER AT CHAGHASARAI, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1961	June 5, 1961	375	1972	June 25, 1972	540
1962	June 12, 1962	240	1978	July 6, 1978	530
1963	May 13, 1963	515	1965	April 18, 1965	525
1964	July 3, 1964	274	1963	May 13, 1963	515
1965	April 18, 1965	525	1967	June 12, 1967	456
1966	June 20, 1966	406	1969	June 18, 1969	445
1967	June 12, 1967	456	1973	June 12, 1973	435
1968	July 8, 1968	366	1966	June 20, 1966	406
1969	June 18, 1969	445	1975	June 16, 1975	387
1970	May 21, 1970	254	1961	June 5, 1961	375
1971	May 23, 1971	352	1968	July 8, 1968	366
1972	June 25, 1972	540	1974	June 5, 1974	362
1973	June 12, 1973	435	1971	May 23, 1971	352
1974	June 5, 1974	362	1979	June 23, 1979	326
1975	June 16, 1975	387	1977	May 25, 1977	315
1976	May 23, 1976	291	1976	May 23, 1976	291
1977	May 25, 1977	315	1964	July 3, 1964	274
1978	July 6, 1978	530	1970	May 21, 1970	254
1979	June 23, 1979	326	1962	June 12, 1962	240
1980	June 11, 1980	213	1980	June 11, 1980	213

1-4.1R0-1A PECH RIVER AT CHAGHASARAI, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1960	--	--	--	--	--	33.3	85.8	92.3	166	168	64.5	18.3	--
1961	10.5	13.5	8.18	6.46	8.49	15.4	58.4	124	179	85.5	41.5	30.7	48.5
1962	10.0	12.3	9.74	8.03	8.96	12.4	55.9	75.8	129	68.2	32.5	19.0	36.9
1963	22.1	15.1	7.97	6.58	7.86	27.0	74.9	145	216	124	53.3	20.5	60.2
1964	11.8	9.30	11.8	7.79	8.94	18.7	71.6	129	175	112	52.4	18.6	52.3
1965	10.2	8.47	9.03	8.26	9.18	21.7	93.0	166	272	219	61.2	26.9	75.7
1966	13.0	9.24	9.02	9.26	14.1	37.8	105	153	223	142	63.8	32.5	67.8
1967	24.6	15.9	8.37	6.17	7.89	18.4	77.9	149	246	161	56.1	33.8	67.4
1968	21.3	16.0	10.5	9.64	15.3	39.6	100	153	259	204	84.5	25.1	78.2
1969	19.6	13.8	12.6	10.2	13.5	54.7	102	163	290	145	52.1	24.3	75.2
1970	30.1	23.1	10.4	9.49	8.73	17.4	63.7	137	120	33.5	31.4	18.9	42.1
1971	9.32	6.44	4.73	3.50	4.24	14.5	46.1	127	96.4	38.2	19.4	9.17	31.8
1972	6.74	5.94	4.01	4.57	12.7	39.5	105	196	331	123	32.6	20.7	73.4
1973	15.1	13.2	13.1	13.2	16.9	46.1	174	278	306	151	60.1	20.1	92.4
1974	13.1	8.78	7.71	6.24	8.39	19.7	64.6	142	174	67.5	17.0	10.3	45.0
1975	8.60	7.85	6.84	6.85	6.15	11.4	87.2	138	213	112	55.4	27.7	56.8
1976	16.2	9.46	7.71	6.56	10.5	15.0	73.8	159	165	116	43.1	21.4	53.7
1977	10.4	8.24	6.60	7.59	7.60	18.3	42.7	125	171	57.9	25.0	15.6	41.5
1978	10.4	9.23	7.98	9.02	6.44	12.4	89.1	191	188	119	37.4	19.7	58.5
1979	10.8	9.54	7.00	6.60	9.90	--	--	--	--	--	--	--	--

1-4.2R0-1A LANDAISIN RIVER NEAR GAWARDESH

(U.S. Geological Survey identification number: 352300071320000)

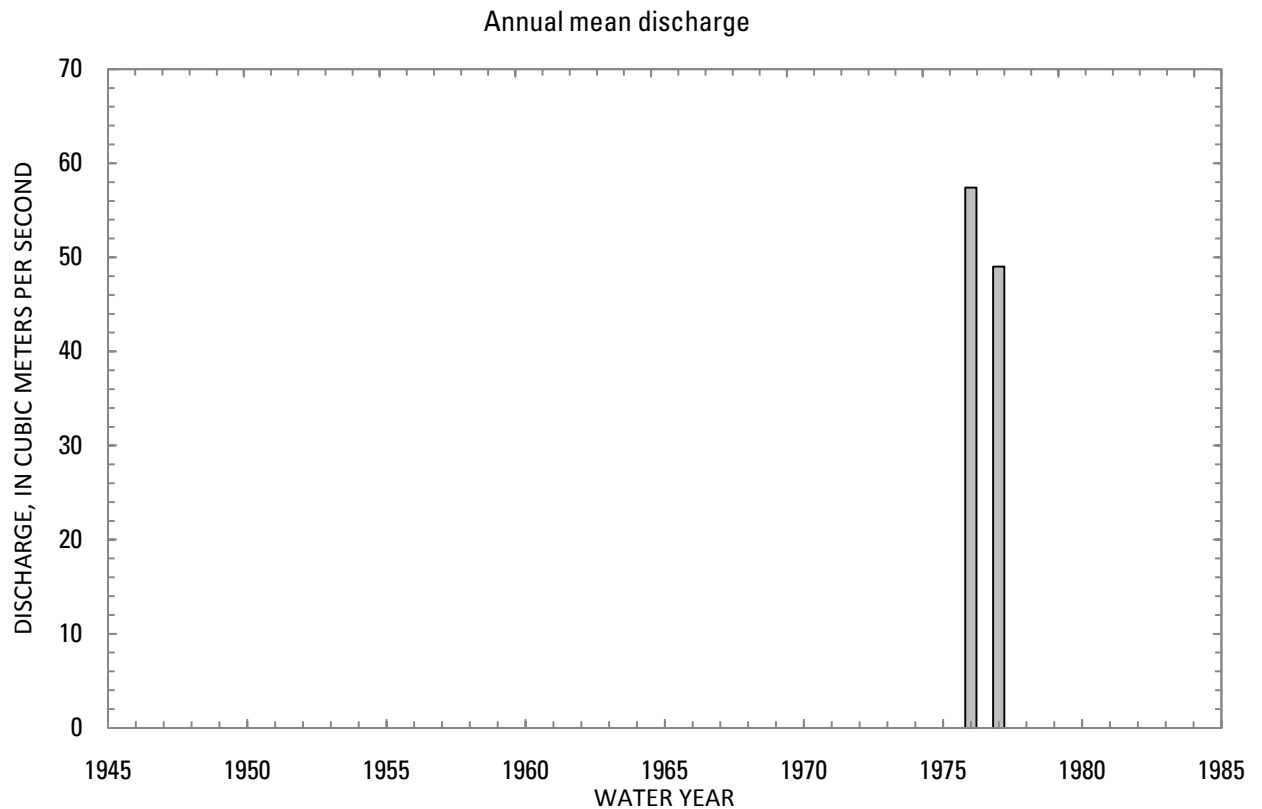
LOCATION: Lat 35°23'N., long 71°32'E.

DRAINAGE AREA: 3,130 km².

ELEVATION: 1,135 meters above mean sea level.

PERIOD OF RECORD: May 1, 1975 to July 22, 1978.

GAGE: Water-stage recorder. Staff gage at same site and datum prior to 1976 water year.



1-4.2R0-1A LANDAISIN RIVER NEAR GAWARDESH, Continued

Statistics of monthly and annual mean discharges
[m³/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	23.6	1976	21.8	1978	23.0	1.01	0.04	3.38
November	16.4	1977	15.6	1978	16.1	0.44	0.03	2.37
December	13.0	1977	11.4	1978	12.4	0.87	0.07	1.83
January	12.1	1976	9.7	1978	11.0	1.21	0.11	1.61
February	11.9	1976	10.3	1978	10.9	0.90	0.08	1.60
March	19.7	1977	14.1	1976	16.4	2.93	0.18	2.41
April	53.4	1976	44.4	1977	49.8	4.76	0.10	7.33
May	169	1975	80.0	1977	124	36.4	0.29	18.2
June	175	1978	150	1977	162	11.9	0.07	23.9
July	144	1976	112	1977	129	16.0	0.12	19.0
August	99.0	1975	69.9	1977	82.5	15.0	0.18	12.1
September	47.2	1975	35.5	1977	43.0	6.49	0.15	6.33
Annual	57.4	1976	49.0	1977	53.2	5.94	0.11	100

1-4.2R0-1A LANDAISIN RIVER NEAR GAWARDESH, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	18.6	13.5	10.5	9.33	9.33	11.7	16.6	51.2	121	82.5	55.3	29.6	11.1
90	19.3	14.2	11.1	9.36	9.37	12.0	19.1	62.0	130	90.8	62.5	30.3	11.8
85	19.5	14.3	11.2	9.39	9.84	12.7	23.6	68.6	136	93.3	67.2	31.1	12.4
80	20.0	14.9	11.6	9.90	9.86	13.2	33.4	75.7	141	99.0	68.2	31.8	12.9
75	20.6	15.0	11.7	9.94	9.89	13.4	34.8	88.1	147	109	69.2	32.5	13.4
70	20.9	15.1	12.1	10.5	9.91	14.1	36.9	104	152	114	71.3	34.0	14.4
65	21.7	15.5	12.1	10.6	10.5	14.3	39.5	113	156	118	73.9	35.1	16.1
60	21.8	15.6	12.2	10.6	10.6	14.5	40.5	120	161	122	76.5	36.1	18.6
55	22.3	15.7	12.2	11.0	10.6	14.7	41.3	125	163	127	78.8	38.6	23.0
50	22.5	15.7	12.7	11.1	11.0	14.9	42.1	129	167	133	81.2	41.1	28.6
45	23.4	16.0	12.8	11.1	11.1	15.6	47.1	133	169	137	82.3	44.8	34.9
40	23.6	16.5	12.8	11.7	11.1	15.8	51.8	138	170	140	83.5	46.9	43.5
35	24.1	17.0	12.8	11.7	11.6	16.0	53.9	142	172	143	84.7	47.5	55.6
30	24.3	17.2	12.9	ng	11.6	16.2	57.5	145	176	147	86.2	48.3	69.5
25	24.9	17.6	12.9	ng	11.7	16.5	62.3	150	179	151	89.9	50.4	80.8
20	25.1	17.8	13.5	ng	11.7	17.9	67.1	155	183	155	91.3	52.3	98.2
15	25.9	17.9	13.5	ng	12.2	19.5	79.4	160	190	158	98.2	56.0	125
10	27.5	18.4	ng	ng	12.3	21.8	88.4	166	194	162	106	61.5	141
5	29.1	18.5	ng	ng	ng	29.3	98.9	175	198	173	130	63.8	159

1-4.2R0-1A LANDAISIN RIVER NEAR GAWARDESH, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

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

1-4.2R0-1A LANDAISIN RIVER NEAR GAWARDESH, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /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

1-4.2R0-1A LANDAISIN RIVER NEAR GAWARDESH, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng
		June-July-August				September-October-November			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng

1-4.2R0-1A LANDAISIN RIVER NEAR GAWARDESH, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1975	May 15, 1975	342	1975	May 15, 1975	342
1976	June 4, 1976	222	1977	June 22, 1977	272
1977	June 22, 1977	272	1978	June 6, 1978	236
1978	June 6, 1978	236	1976	June 4, 1976	222

1-4.2R0-1A LANDAISIN RIVER NEAR GAWARDESH, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1975	--	--	--	--	--	--	--	169	169	130	99.0	47.2	--
1976	23.6	16.3	12.8	12.1	11.9	14.1	53.4	120	154	144	78.5	46.2	57.4
1977	23.5	16.4	13.0	11.1	10.4	19.7	44.4	80.0	150	112	69.9	35.5	49.0
1978	21.8	15.6	11.4	9.69	10.3	15.4	51.6	125	175	--	--	--	--

1-4.L00-1A KONAR RIVER AT PUL-I-KAMA

(U.S. Geological Survey identification number: 342800070330000)

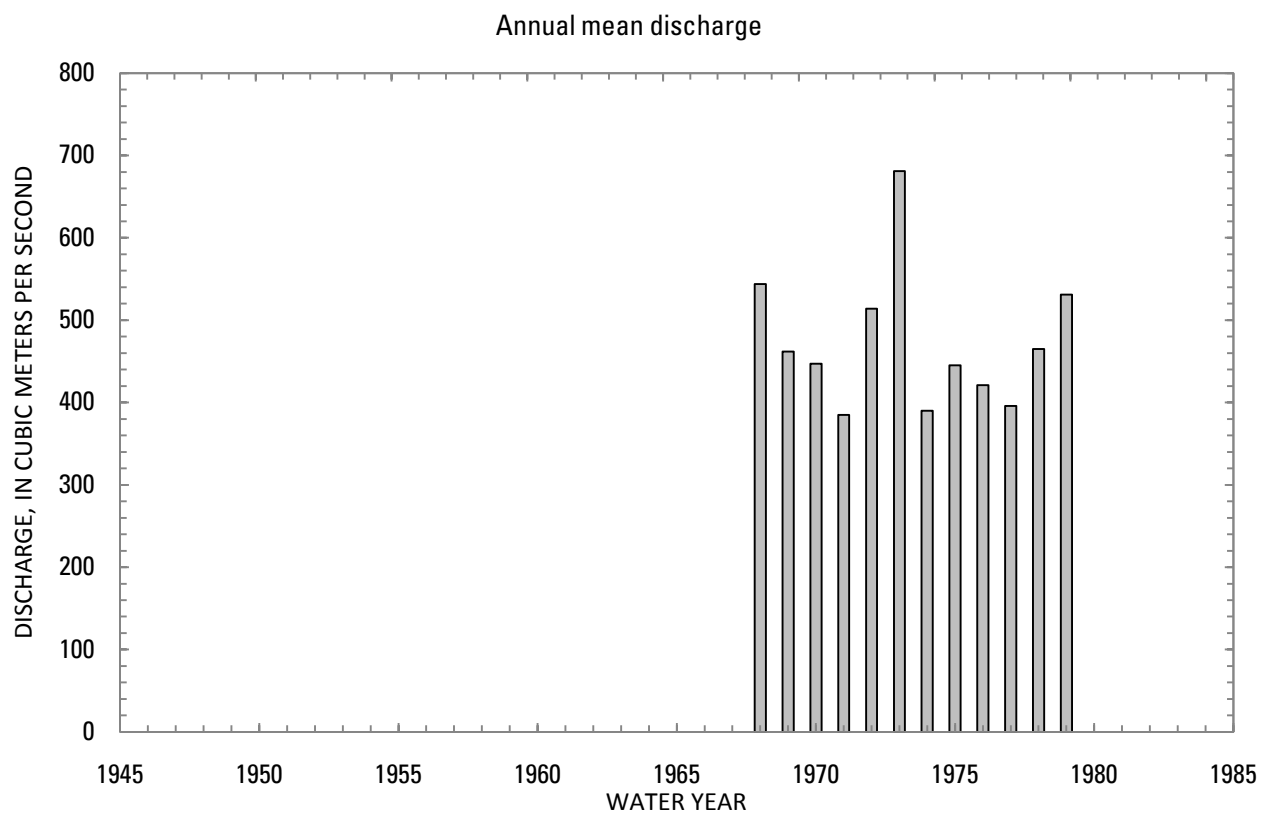
LOCATION: Lat 34°28'N., long 70°33'E.

DRAINAGE AREA: 26,005 km².

ELEVATION: 555 meters above mean sea level.

PERIOD OF RECORD: December 28, 1966 to September 30, 1979.

GAGE: Water-stage recorder.



1-4.L00-1A KONAR RIVER AT PUL-I-KAMA, Continued

Statistics of monthly and annual mean discharges
[m³/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	249	1979	177	1975	223	22.3	0.10	3.92
November	195	1972	113	1975	164	26.77	0.16	2.88
December	173	1970	88.2	1975	131	22.3	0.17	2.30
January	147	1970	74.8	1975	109	16.4	0.15	1.92
February	131	1970	60.2	1975	103	18.1	0.18	1.81
March	205	1969	65.0	1975	136	38.6	0.28	2.40
April	776	1973	223	1971	378	146	0.39	6.64
May	1,380	1973	408	1977	657	236	0.36	11.6
June	1,360	1968	800	1970	1,055	204	0.19	18.5
July	1,690	1973	883	1970	1,243	246	0.20	21.8
August	1,280	1973	786	1974	1,010	143	0.14	17.7
September	690	1973	335	1977	481	111	0.23	8.46
Annual	681	1973	385	1971	473	84.4	0.18	100

1-4.L00-1A KONAR RIVER AT PUL-I-KAMA, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	158	115	90.3	76.1	65.9	70.1	151	295	627	767	628	257	89.6
90	176	123	105	88.4	82.0	82.2	171	355	681	898	659	278	102
85	186	130	109	89.8	90.5	92.4	180	398	719	967	701	302	110
80	193	137	110	99.2	92.0	101	193	433	786	1,020	755	321	119
75	198	143	112	100	93.5	105	212	464	833	1,060	814	346	130
70	202	149	115	101	95.6	109	232	489	874	1,100	870	375	144
65	205	153	120	106	97.6	112	245	515	902	1,120	918	400	161
60	209	158	124	107	98.6	116	258	547	929	1,150	966	418	184
55	213	160	129	108	100	119	280	574	978	1,170	1,010	439	209
50	218	166	132	109	101	123	308	604	1,010	1,200	1,030	458	243
45	222	172	134	110	103	128	329	637	1,050	1,230	1,060	472	304
40	226	175	137	111	106	133	360	667	1,090	1,260	1,080	488	413
35	230	181	139	114	108	138	391	696	1,130	1,310	1,100	507	517
30	237	185	141	116	110	143	426	726	1,180	1,350	1,120	536	643
25	244	190	148	119	113	150	477	759	1,240	1,410	1,160	570	753
20	251	193	151	122	117	160	535	805	1,340	1,470	1,200	638	907
15	262	197	156	128	126	174	622	891	1,420	1,590	1,270	686	1,040
10	279	202	163	132	131	206	734	1,010	1,520	1,670	1,330	730	1,170
5	307	207	178	146	135	246	867	1,380	1,660	1,800	1,460	789	1,360

1-4.L00-1A KONAR RIVER AT PUL-I-KAMA, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	1,110	1,000	984	949	919
0.95	1.05	1,240	1,110	1,080	1,030	982
0.90	1.11	1,320	1,180	1,140	1,080	1,020
0.80	1.25	1,430	1,270	1,230	1,150	1,090
0.50	2	1,680	1,500	1,430	1,330	1,240
0.20	5	2,020	1,820	1,720	1,590	1,470
0.10	10	2,240	2,040	1,910	1,760	1,630
0.04	25	2,510	2,310	2,160	1,990	1,830
0.02	50	2,710	2,520	2,350	2,160	1,990
0.01	100	2,910	2,730	2,540	2,340	2,160
0.005	200	3,110	2,950	2,730	2,520	2,330
0.002	500	3,380	ng	ng	ng	ng

1-4.L00-1A KONAR RIVER AT PUL-I-KAMA, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	51.8	52.0	55.6	58.4	63.9	68.8	74.6	80.6	106
0.10	10	59.6	60.5	64.6	67.3	72.7	77.7	83.4	89.9	117
0.20	5	69.3	70.9	75.4	78.1	83.2	88.3	93.8	101	129
0.50	2	87.4	90.3	94.4	97.0	101	106	111	119	149

1-4.L00-1A KONAR RIVER AT PUL-I-KAMA, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	51.7	59.0	63.6	68.6	58.3	60.3	65.5	75.5
0.10	10	60.0	67.7	72.2	76.6	67.9	70.9	76.2	87.3
0.20	5	70.3	78.1	82.3	86.1	79.4	83.5	89.2	103
0.50	2	89.5	95.9	99.4	102	99.3	105	112	134
		June-July-August				September-October-November			
0.05	20	465	515	606	741	93.7	102	106	117
0.10	10	491	549	640	786	102	113	117	128
0.20	5	523	591	684	844	114	126	131	141
0.50	2	589	672	781	963	136	150	155	166

1-4.L00-1A KONAR RIVER AT PUL-I-KAMA, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1967	July 24, 1967	1,706	1973	July 18, 1973	2,350
1968	July 9, 1968	1,800	1975	May 16, 1975	2,342
1969	July 24, 1969	1,325	1978	July 8, 1978	2,200
1970	July 17, 1970	1,490	1979	July 7, 1979	1,900
1971	July 29, 1971	1,312	1968	July 9, 1968	1,800
1972	June 19, 1972	1,700	1967	July 24, 1967	1,706
1973	July 18, 1973	2,350	1972	June 19, 1972	1,700
1974	July 17, 1974	1,680	1974	July 17, 1974	1,680
1975	May 16, 1975	2,342	1970	July 17, 1970	1,490
1976	July 10, 1976	1,382	1977	June 25, 1977	1,414
1977	June 25, 1977	1,414	1976	July 10, 1976	1,382
1978	July 8, 1978	2,200	1969	July 24, 1969	1,325
1979	July 7, 1979	1,900	1971	July 29, 1971	1,312

1-4.L00-1A KONAR RIVER AT PUL-I-KAMA, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1967	--	--	--	111	109	134	351	587	1,170	1,460	1,100	603	--
1968	233	189	140	115	127	176	493	745	1,360	1,380	1,090	457	544
1969	235	164	131	102	93.8	205	408	535	1,030	1,140	980	494	462
1970	246	189	173	147	131	150	345	611	800	883	1,070	588	447
1971	203	123	110	99.7	93.8	115	223	539	930	923	839	402	385
1972	213	195	147	108	96.9	129	247	630	1,340	1,320	1,110	615	514
1973	241	158	138	114	116	198	776	1,380	1,350	1,690	1,280	690	681
1974	244	167	127	95.2	88.6	104	248	471	894	1,090	786	337	390
1975	177	113	88.2	74.8	60.2	65	343	717	1,120	1,080	1,050	424	445
1976	219	183	142	118	112	119	357	632	829	1,110	794	420	421
1977	217	151	120	109	100	123	265	408	835	1,160	908	335	396
1978	199	147	109	106	104	115	377	612	953	1,310	1,040	472	465
1979	249	187	148	121	106	141	481	679	1,100	1,610	1,080	422	531

1-4.L00-2T KONAR RIVER NEAR KONARI

(U.S. Geological Survey identification number: 343800070490000)

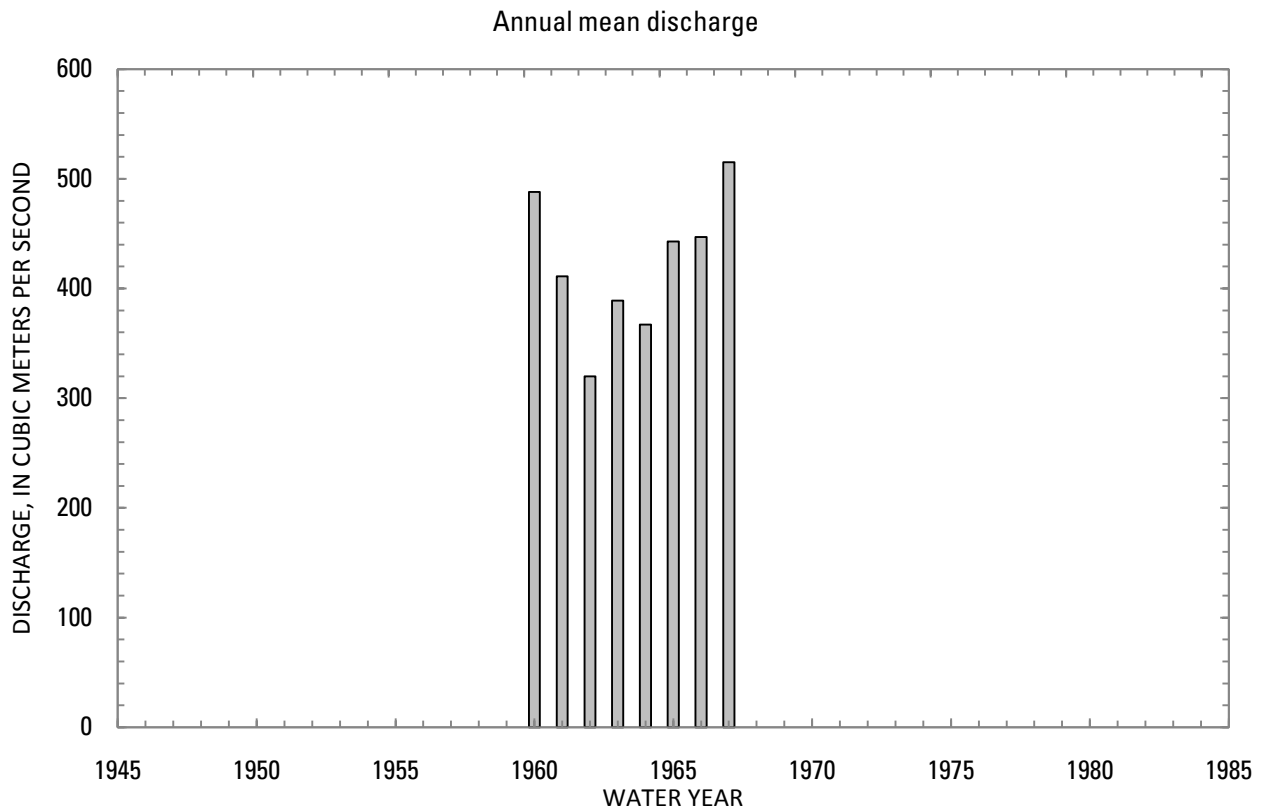
LOCATION: Lat 34°38'N., long 70°49'E.

DRAINAGE AREA: 24,895 km².

ELEVATION: 665 meters above mean sea level.

PERIOD OF RECORD: October 1, 1959 to September 30, 1967.

GAGE: Water-stage recorder.



1-4.L00-2T KONAR RIVER NEAR KONARI, Continued

Statistics of monthly and annual mean discharges
[m³/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	293	1960	175	1966	222	44.6	0.20	4.39
November	227	1960	133	1965	159	32.1	0.20	3.15
December	203	1960	116	1966	139	27.8	0.20	2.75
January	181	1960	103	1966	128	23.8	0.19	2.53
February	185	1960	100	1966	126	25.6	0.20	2.50
March	227	1960	122	1962	153	35.7	0.23	3.04
April	440	1965	197	1962	331	81.4	0.25	6.54
May	783	1965	289	1962	547	139	0.25	10.8
June	1,270	1967	597	1962	918	219	0.24	18.2
July	1,400	1967	745	1962	1,030	203	0.20	20.5
August	1,090	1967	672	1961	822	147	0.18	16.3
September	589	1961	393	1965	472	74.1	0.16	9.35
Annual	515	1967	320	1962	423	64.0	0.15	100

1-4.L00-2T KONAR RIVER NEAR KONARI, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	152	130	114	101	98.2	116	154	251	499	696	563	278	115
90	157	131	118	109	102	117	162	334	607	760	613	296	119
85	161	133	121	113	112	118	174	403	677	795	628	321	124
80	166	134	124	116	114	120	191	428	708	840	646	350	130
75	172	136	125	117	116	122	215	450	732	887	666	363	136
70	181	138	126	118	117	125	238	471	757	916	697	377	145
65	191	140	127	119	118	129	254	492	788	949	721	395	159
60	198	142	128	120	119	132	264	508	830	974	738	423	184
55	204	145	129	121	120	135	283	521	869	996	769	444	209
50	209	148	130	122	120	137	294	533	901	1,020	789	462	246
45	214	151	131	122	121	141	310	553	929	1,040	806	488	303
40	223	153	133	123	121	144	330	572	958	1,070	836	509	398
35	229	158	135	124	122	146	351	591	990	1,100	866	525	494
30	237	164	138	126	123	151	372	612	1,020	1,140	900	538	571
25	251	174	143	129	130	158	406	639	1,050	1,180	944	562	659
20	264	186	150	138	133	185	447	682	1,100	1,230	990	603	748
15	277	194	157	142	136	219	493	723	1,150	1,300	1060	632	850
10	300	213	198	175	180	228	544	768	1,370	1,330	1,120	668	978
5	364	229	206	184	188	250	621	823	1,490	1,420	1,190	722	1,130

1-4.L00-2T KONAR RIVER NEAR KONARI, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	836	679	677	² 657	672
0.95	1.05	975	822	805	783	772
0.90	1.11	1,060	905	880	855	830
0.80	1.25	1,160	1,010	976	948	905
0.50	2	1,380	1,230	1,180	1,140	1,070
0.20	5	1,620	1,460	1,400	1,350	1,250
0.10	10	1,760	1,580	1,520	1,460	1,350
0.04	25	1,910	1,710	1,660	1,580	1,480
0.02	50	2,010	1,800	1,750	1,660	1,560
0.01	100	2,110	1,880	1,840	1,740	1,640
0.005	200	2,200	1,950	1,910	1,810	1,710
0.002	500	2,310	ng	ng	ng	ng

¹Less than 10 years of data used.

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

1-4.L00-2T KONAR RIVER NEAR KONARI, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	95.4	96	97.3	97.9	99.2	101	106	111	131
0.10	10	101	101	102	102	104	105	109	114	133
0.20	5	106	107	107	108	109	110	113	117	136
0.50	2	116	117	117	117	118	119	120	123	144

1-4.L00-2T KONAR RIVER NEAR KONARI, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	97.8	99.6	100	101	104	111	113	115
0.10	10	100	102	102	103	105	111	114	119
0.20	5	105	106	106	107	108	113	115	124
0.50	2	117	117	118	118	117	121	124	142
		June-July-August				September-October-November			
0.05	20	304	361	482	585	102	124	125	129
0.10	10	361	410	515	617	110	125	127	131
0.20	5	430	472	560	662	119	128	130	135
0.50	2	549	595	664	767	136	136	138	145

1-4.L00-2T KONAR RIVER NEAR KONARI, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1960	July 11, 1960	1,490	1967	June 12, 1967	1,820
1961	July 16, 1961	1,410	1966	June 20, 1966	1,670
1962	July 22, 1962	998	1960	July 11, 1960	1,490
1963	June 28, 1963	1,110	1961	July 16, 1961	1,410
1964	July 29, 1964	1,280	1965	May 22, 1965	1,348
1965	May 22, 1965	1,348	1964	July 29, 1964	1,280
1966	June 20, 1966	1,670	1963	June 28, 1963	1,110
1967	June 12, 1967	1,820	1962	July 22, 1962	998

1-4.L00-2T KONAR RIVER NEAR KONARI, Continued

Monthly and annual mean discharges, in cubic meters per second

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1960	293	227	203	181	185	227	368	618	878	1,180	969	506	488
1961	256	183	150	139	134	143	292	518	824	1,010	672	589	411
1962	259	140	127	122	119	122	197	289	597	745	708	400	320
1963	189	151	132	124	121	143	274	547	868	890	805	405	389
1964	188	139	123	114	113	130	300	469	729	884	740	464	367
1965	180	133	126	119	119	136	440	783	1,070	1,090	713	393	443
1966	175	137	116	103	100	188	427	576	1,110	1,070	882	463	447
1967	233	163	133	120	118	138	346	578	1,270	1,400	1,090	559	515

1-4.L00-3A KONAR RIVER AT NAWABAD

(U.S. Geological Survey identification number: 344900071070000)

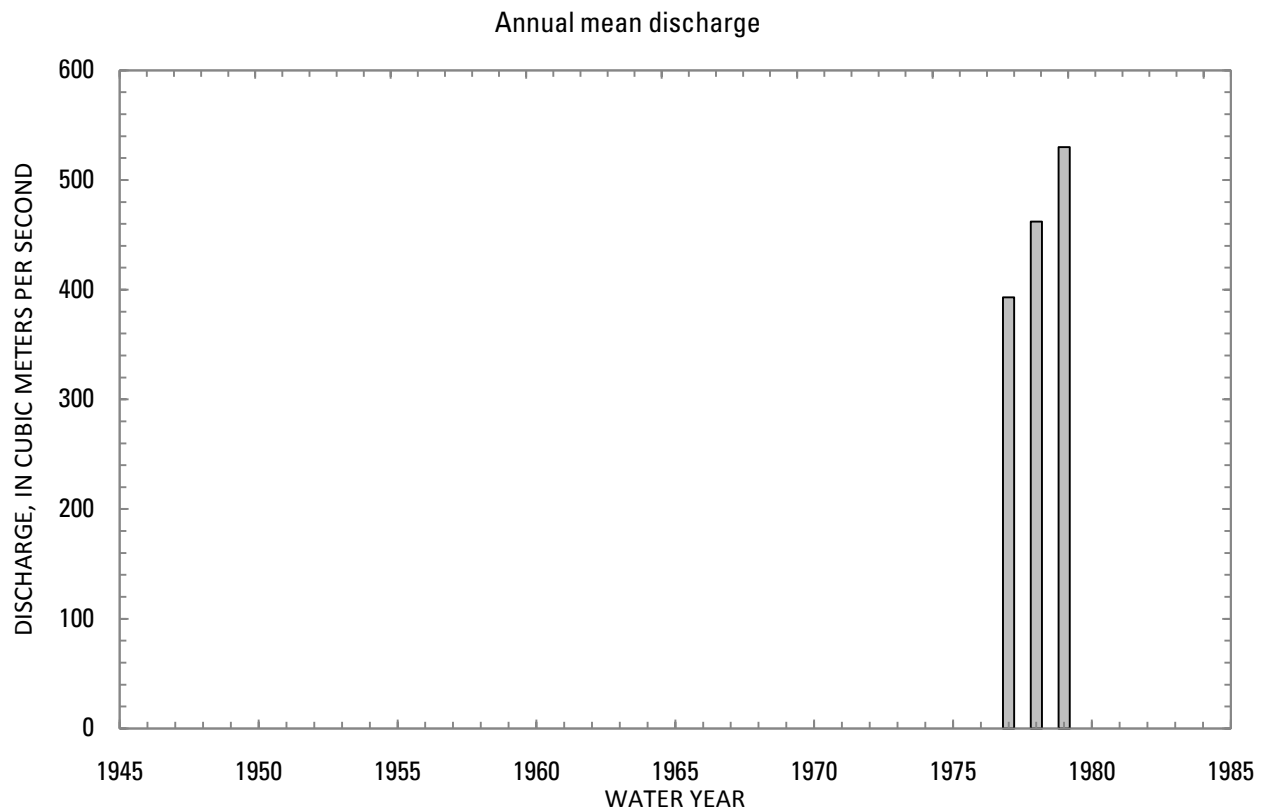
LOCATION: Lat 34°49'N., long 71°07'E.

DRAINAGE AREA: 23,960 km².

ELEVATION: 798 meters above mean sea level.

PERIOD OF RECORD: April 1, 1976 to September 30, 1979.

GAGE: Water-stage recorder.



1-4.L00-3A KONAR RIVER AT NAWABAD, Continued

Statistics of monthly and annual mean discharges
[m³/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	256	1979	203	1978	226	27.3	0.12	4.23
November	185	1979	142	1978	159	22.7	0.14	2.98
December	144	1979	109	1978	124	18.0	0.15	2.32
January	114	1979	87.0	1978	103	14.2	0.14	1.93
February	102	1979	90.0	1978	94.2	6.76	0.07	1.76
March	137	1979	123	1977	131	7.21	0.06	2.45
April	468	1979	236	1977	349	100	0.29	6.53
May	674	1979	423	1977	593	115	0.19	11.1
June	1,100	1979	785	1976	927	135	0.15	17.4
July	1,620	1979	1,050	1976	1,280	260	0.20	23.9
August	1,090	1979	746	1976	935	159	0.17	17.5
September	489	1978	382	1977	426	46.2	0.11	7.98
Annual	530	1979	393	1977	462	68.5	0.15	100

1-4.L00-3A KONAR RIVER AT NAWABAD, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	154	130	96.6	84.1	83.6	91.3	158	253	497	912	582	287	89.3
90	166	136	99.2	85.3	85.3	101	182	326	610	984	627	297	96.4
85	172	138	107	86.0	86.7	106	214	365	647	1,020	663	308	107
80	176	139	110	86.9	87.7	110	219	450	673	1,070	726	318	117
75	179	142	113	89.2	88.5	115	225	465	700	1,100	765	327	127
70	187	144	115	91.0	89.1	117	235	493	733	1,110	803	353	138
65	192	146	116	94.7	89.5	120	242	528	784	1,130	837	366	153
60	198	151	117	96.5	89.9	123	252	558	814	1,140	858	387	173
55	201	158	119	100	90.2	124	268	575	833	1,160	880	403	196
50	205	159	121	101	90.6	126	288	599	852	1,180	912	412	237
45	214	161	125	103	91.6	130	296	631	873	1,200	942	442	296
40	226	167	129	107	92.8	132	303	663	910	1,220	967	462	376
35	235	172	131	109	93.6	134	340	686	965	1,250	1,020	481	482
30	244	174	136	111	94.3	137	382	700	1,020	1,330	1,060	493	582
25	254	179	140	116	95.6	141	468	714	1,100	1,460	1,090	504	695
20	266	181	141	120	97.8	145	518	738	1,160	1,610	1,120	515	853
15	287	189	145	121	103	153	579	763	1,220	1,690	1,170	534	1,030
10	293	191	147	122	106	159	628	785	1,360	1,760	1,230	561	1,150
5	388	193	ng	126	111	191	732	875	1,690	1,890	1,430	612	1,390

1-4.L00-3A KONAR RIVER AT NAWABAD, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

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

1-4.L00-3A KONAR RIVER AT NAWABAD, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /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	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng

1-4.L00-3A KONAR RIVER AT NAWABAD, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng
		June-July-August				September-October-November			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng

1-4.L00-3A KONAR RIVER AT NAWABAD, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1976	July 21, 1976	1,190	1978	July 8, 1978	2,000
1977	June 24, 1977	1,394	1979	July 8, 1979	1,900
1978	July 8, 1978	2,000	1977	June 24, 1977	1,394
1979	July 8, 1979	1,900	1976	July 21, 1976	1,190

1-4.L00-3A KONAR RIVER AT NAWABAD, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1976	--	--	--	--	--	--	386	654	785	1,050	746	404	--
1977	218	151	119	108	90.6	123	236	423	867	1,100	863	382	393
1978	203	142	109	87.0	90.0	133	306	619	954	1,330	1,040	489	462
1979	256	185	144	114	102	137	468	674	1,100	1,620	1,090	430	530

1-4.L00-4T KONAR RIVER NEAR ASMAR

(U.S. Geological Survey identification number: 345300071100000)

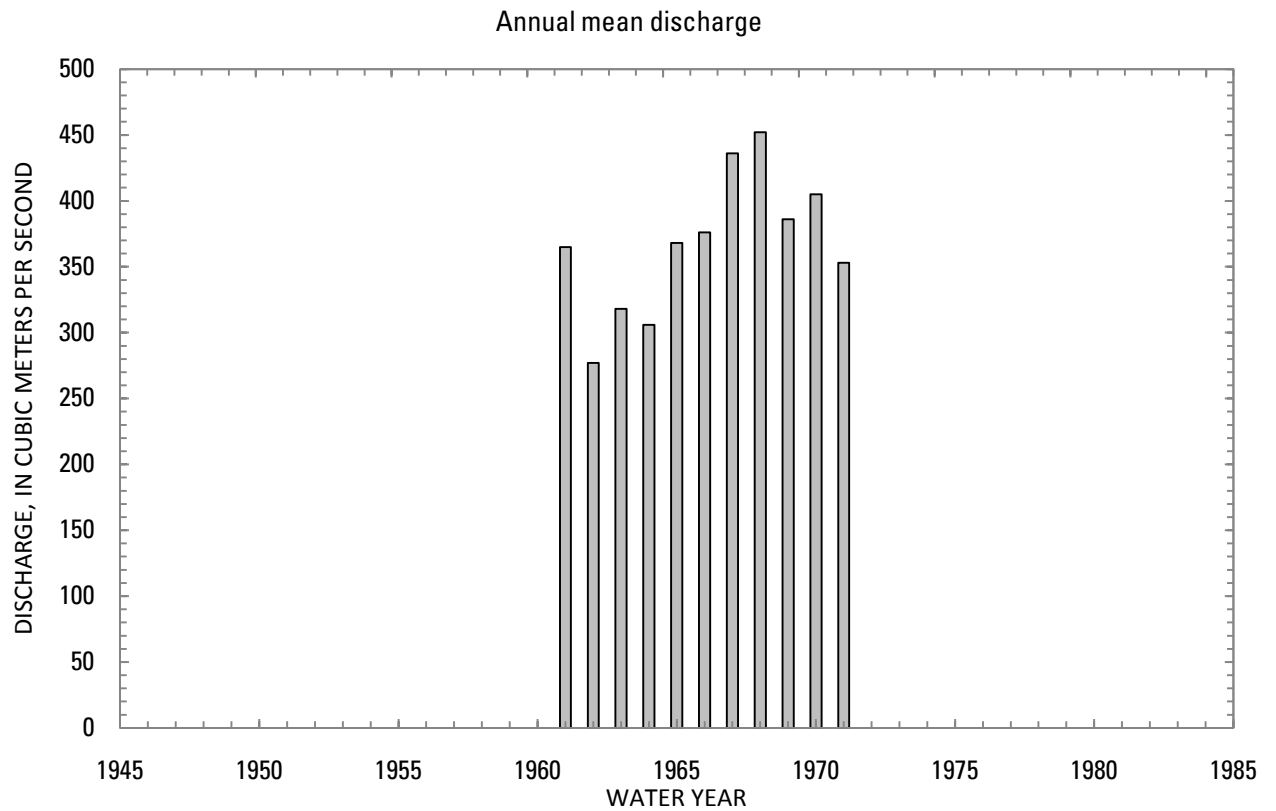
LOCATION: Lat 34°53'N., long 71°10'E.

DRAINAGE AREA: 19,960 km².

ELEVATION: 795 meters above mean sea level.

PERIOD OF RECORD: February 23, 1960 to September 30, 1971.

GAGE: Water-stage recorder.



1-4.L00-4T KONAR RIVER NEAR ASMAR, Continued

Statistics of monthly and annual mean discharges
[m³/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	251	1961	144	1963	194	35.2	0.18	4.38
November	176	1970	107	1964	135	26.9	0.20	3.06
December	161	1970	88.9	1964	112	21.2	0.19	2.53
January	137	1970	75.4	1966	97.7	16.2	0.17	2.21
February	123	1970	75.6	1966	89.7	13.0	0.14	2.03
March	167	1960	95.3	1963	121	22.2	0.18	2.73
April	373	1968	157	1962	263	65.7	0.25	5.96
May	593	1965	236	1962	437	94.4	0.22	9.88
June	1070	1968	503	1962	760	158	0.21	17.2
July	1200	1967	674	1962	925	155	0.17	20.9
August	1040	1970	644	1962	831	144	0.17	18.8
September	583	1961	361	1963	454	79.4	0.18	10.3
Annual	452	1968	277	1962	367	53.2	0.14	100

1-4.L00-4T KONAR RIVER NEAR ASMAR, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	120	103	85.9	76.7	71.5	82.4	114	204	448	629	579	245	84.9
90	129	108	88.4	82.5	76.4	85.2	133	259	523	684	621	264	90.0
85	138	110	90.8	84.3	80.4	89.2	143	304	568	709	639	292	95.1
80	145	111	93.1	85.2	81.2	91.5	149	327	599	758	665	314	102
75	155	113	97.0	86.2	82.1	93.4	165	347	623	798	685	341	109
70	165	114	100	87.3	82.9	95.3	183	368	644	825	701	357	118
65	170	116	102	88.7	83.7	97.7	195	384	669	852	719	376	131
60	178	117	104	90.6	84.5	100	206	398	695	874	739	399	148
55	184	119	104	93.3	85.6	103	221	409	712	894	759	420	174
50	190	127	105	95.2	86.8	105	236	422	732	913	782	438	208
45	199	133	109	96.1	87.9	113	250	444	756	941	806	462	253
40	205	138	114	97.1	89.0	123	268	470	784	966	835	479	326
35	209	143	117	98.5	90.7	128	280	489	817	990	883	492	407
30	214	151	118	101	92.3	133	294	507	854	1,020	938	509	502
25	222	158	123	106	94.1	138	312	534	885	1,050	990	527	598
20	229	166	125	113	96.8	147	359	551	916	1,090	1,040	551	679
15	239	179	130	114	99.9	157	397	577	972	1,120	1,080	614	761
10	267	182	140	119	104	173	470	616	1,090	1,180	1,120	677	881
5	297	187	160	0.05	119	205	500	677	1,180	1,270	1,170	739	1,050

1-4.L00-4T KONAR RIVER NEAR ASMAR, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	766	650	642	638	620
0.95	1.05	876	771	755	742	712
0.90	1.11	939	841	820	801	764
0.80	1.25	1,020	930	903	875	831
0.50	2	1,180	1,110	1,080	1,030	967
0.20	5	1,350	1,310	1,260	1,190	1,110
0.10	10	1,450	1,410	1,370	1,280	1,200
0.04	25	1,550	1,530	1,480	1,370	1,290
0.02	50	1,620	1,600	1,560	1,430	1,350
0.01	100	1,680	1,670	1,630	1,490	1,400
0.005	200	1,740	1,730	1,700	1,540	1,450
0.002	500	1,820	ng	ng	ng	ng

1-4.L00-4T KONAR RIVER NEAR ASMAR, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	32.1	61.5	66.9	69.1	74.6	77.9	81.6	85.4	99.8
0.10	10	43.1	65.0	69.4	71.3	75.8	79.1	83.2	87.2	104
0.20	5	57.8	69.9	73.0	74.5	77.8	81.1	85.6	90.0	110
0.50	2	84.4	81.1	82.1	82.9	84.4	87.8	92.9	98.1	123

1-4.L00-4T KONAR RIVER NEAR ASMAR, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	32.6	68.3	71.4	76.0	63.7	71.8	84.0	88.8
0.10	10	44.1	70.5	73.1	77.2	68.5	74.6	85.1	93.7
0.20	5	59.2	73.7	75.9	79.2	74.8	78.9	87.3	100
0.50	2	85.7	82.2	83.5	85.6	88.4	91.0	95.5	116
		June-July-August				September-October-November			
0.05	20	275	322	413	516	92.0	92.8	95.8	98.8
0.10	10	329	377	460	558	96.8	97.8	100	105
0.20	5	394	446	518	613	103	104	107	113
0.50	2	504	567	632	726	116	119	123	131

1-4.L00-4T KONAR RIVER NEAR ASMAR, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1960	July 11, 1960	1,230	1967	July 24, 1967	1,530
1961	July 16, 1961	1,180	1968	July 10, 1968	1,472
1962	July 26, 1962	876	1970	July 3, 1970	1,290
1963	July 12, 1963	926	1966	June 20, 1966	1,263
1964	July 13, 1964	976	1960	July 11, 1960	1,230
1965	July 27, 1965	1,165	1969	August 12, 1969	1,196
1966	June 20, 1966	1,263	1961	July 16, 1961	1,180
1967	July 24, 1967	1,530	1965	July 27, 1965	1,165
1968	July 10, 1968	1,472	1971	July 14, 1971	1,130
1969	August 12, 1969	1,196	1964	July 13, 1964	976
1970	July 3, 1970	1,290	1963	July 12, 1963	926
1971	July 14, 1971	1,130	1962	July 26, 1962	876

1-4.L00-4T KONAR RIVER NEAR ASMAR, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1960	--	--	--	--	--	167	338	528	739	1,010	858	473	--
1961	251	158	117	101	100	117	245	418	654	885	736	583	365
1962	217	116	102	95.7	92.9	95.9	157	236	503	674	644	369	277
1963	144	109	93.2	86.3	86.0	95.3	186	424	710	798	700	361	318
1964	144	107	88.9	84.2	84.0	123	244	347	544	767	699	432	306
1965	153	110	104	94.0	85.1	99.1	312	593	850	937	681	372	368
1966	175	122	88.9	75.4	75.6	147	295	442	883	929	827	430	376
1967	208	146	119	113	91.1	110	270	462	887	1,200	1,030	569	436
1968	208	175	130	97.5	81.1	124	373	535	1,070	1,180	1,010	434	452
1969	220	153	120	94.2	79.0	133	285	373	767	988	932	461	386
1970	216	176	161	137	123	136	279	473	682	849	1,040	562	405
1971	193	116	105	96.3	88.8	102	175	410	836	885	816	396	353

1-5.R00-1A SURKHRUD RIVER AT SULTANPUR

(U.S. Geological Survey identification number: 342500070180000)

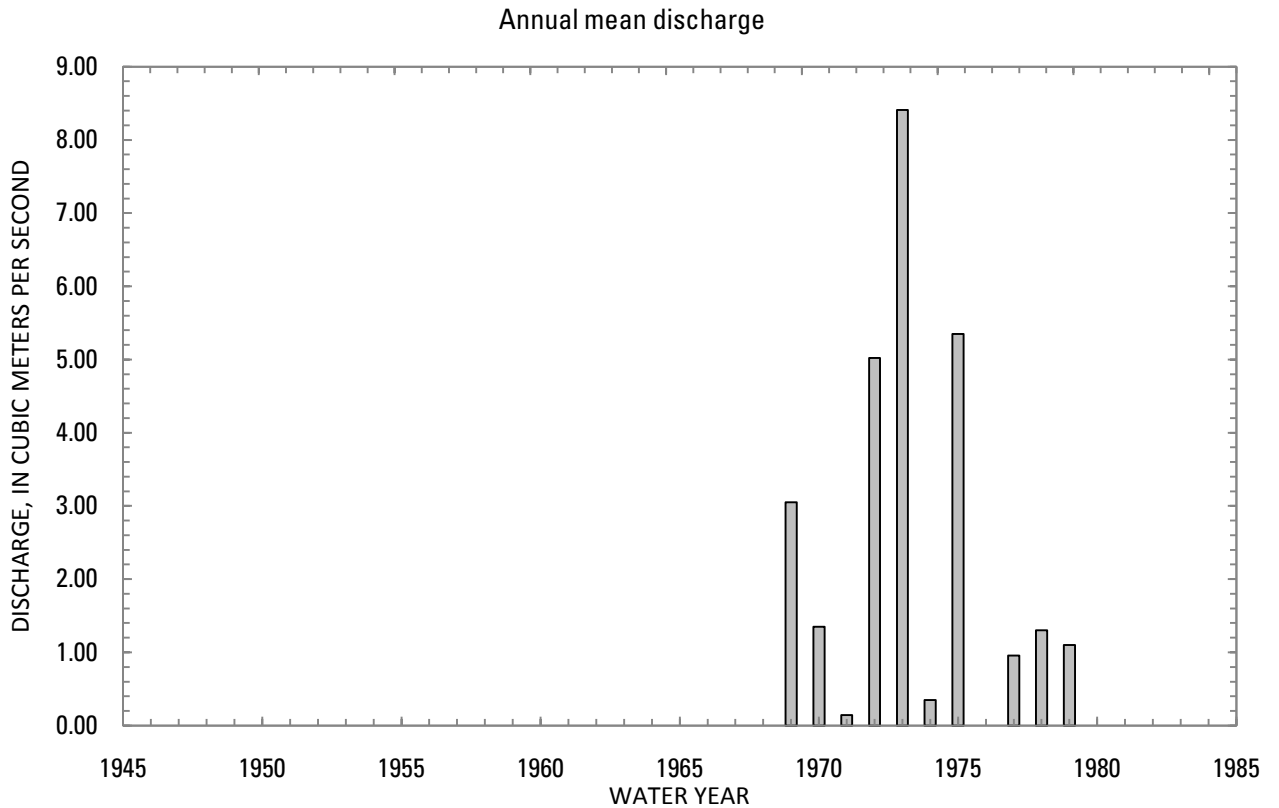
LOCATION: Lat 34°25'N., long 70°18'E.

DRAINAGE AREA: 2,590 km².

ELEVATION: 700 meters above mean sea level.

PERIOD OF RECORD: March 8, 1968 to September 30, 1975 and January 15, 1976 to March 31, 1980.

GAGE: Water-stage recorder.



1-5.R00-1A SURKHRUD RIVER NEAR SULTANPUR, Continued

Statistics of monthly and annual mean discharges
[m³/s, cubic meters per second; ng, not given]

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	1.33	1969	0.01	1972	0.49	0.39	0.79	1.40
November	2.71	1970	0.07	1972	0.82	0.9	1.09	2.36
December	3.13	1969	0.09	1972	1.09	1.04	0.95	3.12
January	2.01	1973	0.18	1971	0.89	0.65	0.74	2.54
February	2.47	1979	0.15	1974	1.18	0.87	0.74	3.38
March	8.16	1973	0.18	1971	1.92	2.25	1.17	5.51
April	22.6	1973	0.35	1974	7.23	6.62	0.92	20.7
May	27.5	1972	0.14	1971	11.0	11.4	1.04	31.6
June	24.1	1973	0	1971	6.63	8.38	1.27	19.0
July	8.98	1973	0	ng	1.83	2.57	1.41	5.24
August	5.50	1975	0	ng	1.33	1.88	1.41	3.81
September	1.35	1972	0	ng	0.48	0.47	0.98	1.38
Annual	8.41	1973	0.15	1971	2.70	2.72	1.01	100

1-5.R00-1A SURKHRUD RIVER NEAR SULTANPUR, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0	0.09	0.09	0.09	0.13	0.14	0.20	0	0	0	0	0	0
90	0.02	0.12	0.16	0.18	0.18	0.18	0.26	0.12	0.01	0	0	0	0
85	0.10	0.16	0.18	0.19	0.20	0.19	0.34	0.17	0.07	0	0	0	0.05
80	0.13	0.18	0.18	0.21	0.25	0.21	0.39	0.21	0.11	0	0	0	0.11
75	0.18	0.19	0.23	0.26	0.30	0.25	0.65	0.41	0.16	0	0	0	0.18
70	0.21	0.20	0.35	0.32	0.33	0.31	1.01	0.89	0.29	0	0	0	0.20
65	0.22	0.21	0.42	0.37	0.36	0.35	1.35	1.49	0.43	0	0	0.01	0.22
60	0.23	0.29	0.53	0.41	0.41	0.41	1.76	2.07	0.57	0.13	0.08	0.09	0.29
55	0.25	0.39	0.61	0.47	0.55	0.58	2.29	3.11	0.78	0.42	0.15	0.17	0.37
50	0.28	0.47	0.71	0.58	0.81	0.71	3.30	5.18	1.61	0.52	0.18	0.19	0.45
45	0.31	0.62	0.85	0.74	1.02	0.89	4.95	9.63	2.63	0.66	0.20	0.22	0.56
40	0.36	0.68	0.96	0.90	1.23	1.23	6.01	13.0	5.20	0.84	0.22	0.27	0.73
35	0.51	0.74	1.04	1.00	1.38	1.64	6.98	15.7	7.63	0.94	0.31	0.31	0.94
30	0.65	0.82	1.26	1.22	1.51	1.95	7.83	18.0	9.21	1.11	0.36	0.38	1.19
25	0.74	1.01	1.44	1.45	1.67	2.13	9.83	20.2	11.2	1.53	0.44	0.53	1.65
20	0.87	1.27	2.08	1.60	1.83	2.37	13.1	23.3	14.2	1.91	0.58	0.60	2.21
15	0.93	1.91	2.47	1.94	2.07	2.66	17.8	26.9	18.0	3.35	0.91	0.72	3.16
10	0.99	2.37	3.03	2.18	2.34	4.17	21.3	29.7	22.2	5.27	1.28	0.86	7.56
5	1.35	3.05	3.37	2.46	2.64	9.03	25.6	32.5	25.3	9.21	3.55	1.08	18.9

1-5.R00-1A SURKHRUD RIVER NEAR SULTANPUR, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	1.40	0.35	0.35	0.25	0.17
0.95	1.05	7.80	1.45	1.21	0.84	0.58
0.90	1.11	16.3	2.81	2.18	1.53	1.06
0.80	1.25	33.9	5.70	4.20	3.00	2.10
0.50	2	88.7	17.1	12.3	9.33	6.99
0.20	5	144	37.4	28.6	24.1	20.2
0.10	10	162	50.6	41.0	37.0	33.3
0.04	25	173	65.0	57.0	55.4	54.5
0.02	50	176	73.8	¹ 68.4	¹ 70.2	73.4
0.01	100	178	¹ 81.2	¹ 79.2	¹ 85.4	94.6
0.005	200	179	¹ 87.2	¹ 89.2	¹ 101	118
0.002	500	179	ng	ng	ng	ng

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

1-5.R00-1A SURKHRUD RIVER NEAR SULTANPUR, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0	0	0	0	0	0	0.01
0.10	10	0	0	0	0	0	0	0	0	0.03
0.20	5	0	0	0	0	0	0	0.01	0.05	0.10
0.50	2	0	0	0	0.07	0.10	0.15	0.20	0.30	0.47

1-5.R00-1A SURKHRUD RIVER NEAR SULTANPUR, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.02	0.05	0.06	0.07	0	0	0	0.09
0.10	10	0.04	0.07	0.08	0.11	0.02	0.05	0.06	0.15
0.20	5	0.06	0.10	0.13	0.17	0.05	0.11	0.14	0.28
0.50	2	0.16	0.23	0.29	0.40	0.15	0.29	0.38	0.86
		June-July-August				September-October-November			
0.05	20	0	0	0	0	0	0	0	0
0.10	10	0	0	0	0	0	0	0	0
0.20	5	0	0	0	0	0	0	0	0.01
0.50	2	0	0.01	0.10	0.24	0	0.04	0.10	0.18

1-5.R00-1A SURKHRUD RIVER NEAR SULTANPUR, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1968	March 10, 1968	62.8	1975	August 13, 1975	281
1969	May 22, 1969	41.8	1978	August 16, 1978	117
1970	April 16, 1970	105	1971	April 27, 1971	115
1971	April 27, 1971	115	1970	April 16, 1970	105
1972	September 18, 1972	80.0	1972	September 18, 1972	80.0
1973	April 25, 1973	47.0	1979	February 18, 1979	74.8
1974	April 8, 1974	3.36	1977	April 4, 1977	73.2
1975	August 13, 1975	281	1976	August 15, 1976	64.1
1976	August 15, 1976	64.1	1968	March 10, 1968	62.8
1977	April 4, 1977	73.2	1973	April 25, 1973	47.0
1978	August 16, 1978	117	1969	May 22, 1969	41.8
1979	February 18, 1979	74.8	1974	April 8, 1974	3.36

1-5.R00-1A SURKHRUD RIVER NEAR SULTANPUR, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1968	--	--	--	--	--	--	8.20	18.4	14.1	4.28	0.74	0.43	--
1969	1.33	2.35	3.13	2.00	1.92	1.14	6.91	10.4	5.87	1.32	0.24	0	3.05
1970	0.39	2.71	1.95	0.92	0.97	0.84	5.75	2.49	0.19	0	0	0.08	1.35
1971	0.20	0.20	0.18	0.18	0.18	0.18	0.49	0.14	0	0	0	0	0.15
1972	0.01	0.07	0.09	0.40	1.44	2.03	6.11	27.5	19.6	1.45	0.27	1.35	5.02
1973	1.00	1.05	2.61	2.01	2.22	8.16	22.6	27.5	24.1	8.98	0.28	0.25	8.41
1974	0.62	0.79	1.11	0.54	0.15	0.20	0.35	0.17	0.21	0	0	0.01	0.35
1975	0.15	0.23	0.36	0.33	0.36	3.84	15.5	27.3	8.25	1.25	5.50	0.72	5.35
1976	--	--	--	--	2.11	1.83	11.9	13.0	5.75	0.98	1.47	1.28	--
1977	0.50	0.50	0.72	1.23	0.49	0.27	2.49	0.93	0.65	0.96	2.36	0.34	0.96
1978	0.55	0.34	0.54	0.44	0.35	0.45	1.92	2.30	0.68	2.57	4.60	0.65	1.30
1979	0.29	0.18	0.22	0.48	2.47	1.66	4.53	2.09	0.13	0.15	0.51	0.68	1.10
1980	0.36	0.66	1.08	1.23	1.51	2.48	--	--	--	--	--	--	--

1-6.L00-1A LAGHMAN RIVER AT PUL-I-QARGHAI

(U.S. Geological Survey identification number: 343300070140000)

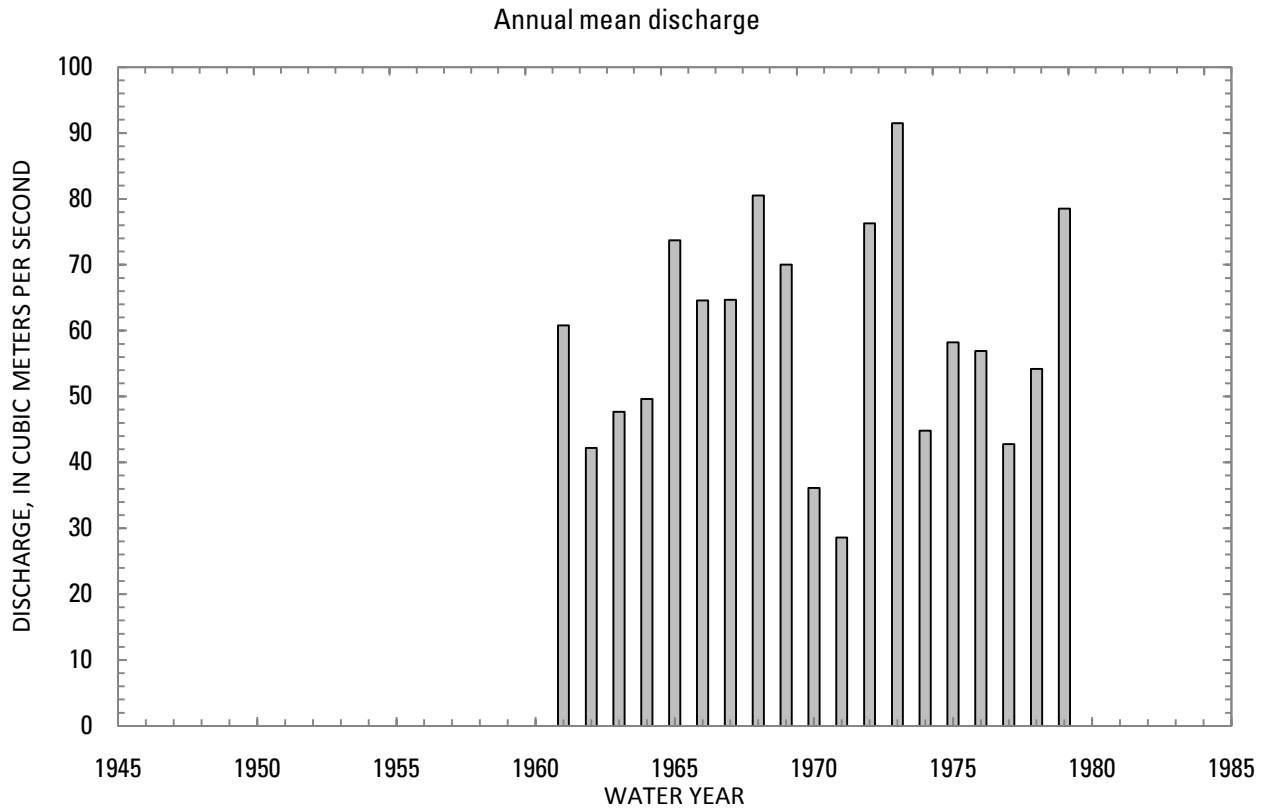
LOCATION: Lat 34°33'N., long 70°14'E.

DRAINAGE AREA: 6,155 km².

ELEVATION: 640 meters above mean sea level.

PERIOD OF RECORD: October 1, 1960 to September 30, 1979.

GAGE: Water-stage recorder.



1-6.L00-1A LAGHMAN RIVER AT PUL-I-QARGHAI, Continued

Statistics of monthly and annual mean discharges
[m³/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	18.6	1962	1.50	1972	6.37	4.33	0.68	0.90
November	15.2	1962	1.23	1972	5.41	3.10	0.57	0.76
December	14.0	1963	0.95	1972	5.09	3.43	0.67	0.72
January	12.5	1962	1.23	1971	4.67	2.69	0.58	0.66
February	23.1	1972	1.79	1971	6.38	5.08	0.80	0.90
March	58.2	1969	4.88	1970	24.4	15.5	0.63	3.45
April	203	1973	46.6	1962	106	35.7	0.34	15.0
May	282	1973	55.9	1962	169	47.8	0.28	23.9
June	358	1972	81.5	1971	225	70.3	0.31	31.8
July	196	1965	13.8	1971	112	51.00	0.46	15.8
August	67.5	1979	9.02	1971	33.0	19.0	0.58	4.67
September	27.6	1961	2.79	1962	10.1	6.17	0.61	1.43
Annual	91.5	1973	28.6	1971	59.0	16.7	0.28	100

1-6.L00-1A LAGHMAN RIVER AT PUL-I-QARGHAI, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	1.67	1.30	1.06	1.03	1.89	2.92	30.1	64.7	88.9	14.4	7.23	2.05	2.11
90	1.92	2.20	2.04	1.90	2.11	3.99	39.3	90.3	125	22.0	8.29	2.98	2.89
85	2.01	2.86	2.10	2.00	2.65	4.93	50.2	106	150	32.3	10.2	4.18	3.48
80	2.78	3.01	2.82	2.60	2.96	5.62	57.9	114	167	48.0	11.4	4.78	4.28
75	3.46	3.20	2.96	2.84	3.13	6.83	65.0	121	176	57.9	12.9	5.31	4.80
70	4.07	3.50	3.15	3.04	3.32	8.31	71.4	130	184	67.2	15.5	5.90	5.40
65	4.37	4.14	3.44	3.27	3.61	10.5	77.6	140	193	77.5	18.8	6.41	6.21
60	4.59	4.42	3.74	3.50	3.99	12.8	83.8	152	202	89.1	21.0	6.95	7.49
55	4.89	4.61	4.33	3.82	4.60	15.3	90.0	164	209	97.3	23.6	7.55	9.32
50	5.23	4.81	4.59	4.14	4.79	18.3	96.2	173	216	105	26.3	8.27	12.5
45	5.52	5.01	4.79	4.42	4.97	20.0	103	181	226	113	30.0	9.50	17.7
40	5.87	5.23	4.93	4.67	5.45	21.8	111	190	237	126	32.7	10.3	25.4
35	6.39	5.46	5.07	4.82	5.90	23.7	118	198	251	136	36.1	10.8	40.8
30	7.10	5.79	5.27	4.97	6.41	26.9	126	203	266	146	39.8	11.6	64.4
25	7.62	6.23	5.57	5.12	7.34	30.8	135	207	284	157	44.8	13.0	92.4
20	8.12	6.67	5.94	5.55	8.90	40.7	144	214	300	168	53.5	14.8	124
15	9.65	7.05	6.94	5.96	10.6	48.7	161	225	316	186	60.9	16.3	159
10	12.2	9.11	11.1	7.97	12.7	56.4	185	247	343	209	71.3	18.6	195
5	17.8	12.9	14.0	12.1	16.3	70.1	224	278	372	238	81.5	25.6	239

1-6.L00-1A LAGHMAN RIVER AT PUL-I-QARGHAI, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	222	177	161	155	148
0.95	1.05	263	202	184	175	165
0.90	1.11	288	218	199	188	176
0.80	1.25	320	239	219	206	192
0.50	2	389	288	266	248	229
0.20	5	470	349	327	304	280
0.10	10	517	388	367	342	315
0.04	25	571	436	417	390	359
0.02	50	609	471	454	426	393
0.01	100	644	505	491	462	427
0.005	200	677	539	528	499	462
0.002	500	720	ng	ng	ng	ng

1-6.L00-1A LAGHMAN RIVER AT PUL-I-QARGHAI, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	1.01	1.01	1.03	1.05	1.07	1.24	1.41	1.58	2.49
0.10	10	1.31	1.32	1.34	1.37	1.40	1.60	1.79	2.01	2.93
0.20	5	1.75	1.76	1.80	1.84	1.91	2.13	2.36	2.64	3.56
0.50	2	2.85	2.89	2.95	3.02	3.18	3.47	3.77	4.19	5.19

1-6.L00-1A LAGHMAN RIVER AT PUL-I-QARGHAI, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	1.08	1.10	1.10	1.12	1.86	2.46	2.75	5.85
0.10	10	1.40	1.44	1.44	1.47	2.30	3.05	3.60	7.75
0.20	5	1.88	1.95	1.96	2.01	3.04	4.02	5.01	10.8
0.50	2	3.01	3.19	3.25	3.40	5.55	7.26	9.60	19.7
		June-July-August				September-October-November			
0.05	20	4.73	5.51	6.52	8.10	1.31	1.35	1.42	1.49
0.10	10	5.88	6.92	8.32	10.9	1.68	1.71	1.80	1.89
0.20	5	7.64	9.10	11.1	15.3	2.24	2.25	2.39	2.53
0.50	2	12.6	15.3	18.9	27.9	3.70	3.76	3.99	4.34

1-6.L00-1A LAGHMAN RIVER AT PUL-I-QARGHAI, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1961	May 6, 1961	250	1968	April 30, 1968	592
1962	June 12, 1962	421	1972	June 16, 1972	519
1963	May 13, 1963	359	1967	June 12, 1967	506
1964	July 3, 1964	450	1979	June 11, 1979	465
1965	April 18, 1965	442	1964	July 3, 1964	450
1966	June 19, 1966	410	1973	June 3, 1973	444
1967	June 12, 1967	506	1965	April 18, 1965	442
1968	April 30, 1968	592	1962	June 12, 1962	421
1969	June 16, 1969	417	1969	June 16, 1969	417
1970	May 22, 1970	332	1966	June 19, 1966	410
1971	May 20, 1971	336	1963	May 13, 1963	359
1972	June 16, 1972	519	1978	July 6, 1978	353
1973	June 3, 1973	444	1975	June 17, 1975	339
1974	May 31, 1974	270	1971	May 20, 1971	336
1975	June 17, 1975	339	1976	June 4, 1976	334
1976	June 4, 1976	334	1970	May 22, 1970	332
1977	June 23, 1977	292	1977	June 23, 1977	292
1978	July 6, 1978	353	1974	May 31, 1974	270
1979	June 11, 1979	465	1961	May 6, 1961	250

1-6.L00-1A LAGHMAN RIVER AT PUL-I-QARGHAI, Continued

Monthly and annual mean discharges, in cubic meters per second

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1961	4.37	4.13	6.1	5.29	5.06	25.6	110	205	184	106	43.3	27.6	60.8
1962	18.6	15.2	13.5	12.5	9.21	8.09	46.6	55.9	210	93.6	20.7	2.79	42.2
1963	2.07	5.95	14.0	8.92	1.94	20.1	72.3	132	182	103	22.9	5.49	47.7
1964	4.45	4.57	4.65	4.83	5.10	14.3	88.8	134	178	117	32.7	6.80	49.6
1965	5.29	4.91	4.81	5.32	6.61	17.5	107	194	265	196	60.2	14.6	73.7
1966	8.55	6.36	5.50	5.36	10.0	42.6	120	168	243	104	40.6	19.2	64.6
1967	12.9	8.15	3.58	4.18	5.13	12.9	82	155	276	166	39.6	8.85	64.7
1968	5.70	5.68	5.79	4.11	6.10	42.2	131	184	324	190	55.9	11.6	80.5
1969	6.65	4.23	5.02	4.91	5.85	58.2	98.5	149	262	173	54.4	14.5	70.0
1970	12.2	9.33	5.31	3.24	3.00	4.88	73.2	143	126	27.9	12.5	11.2	36.1
1971	3.58	2.77	2.00	1.23	1.79	10.4	59.0	154	81.5	13.8	9.02	3.24	28.6
1972	1.50	1.23	0.95	2.42	23.1	50.2	115	213	358	119	21.4	12.6	76.3
1973	8.65	7.00	6.84	7.93	14.2	43.1	203	282	327	156	31.5	8.00	91.5
1974	5.16	4.66	2.44	2.23	2.93	23.5	87.5	143	184	65.1	11.5	3.98	44.8
1975	2.00	2.21	2.02	1.96	2.24	8.01	114	162	224	113	54.2	11.4	58.2
1976	7.25	5.14	4.25	3.81	6.28	19.5	142	172	187	97.0	28.7	9.98	56.9
1977	4.74	2.94	3.07	4.36	3.71	19.1	95.3	131	181	54.8	10.4	3.75	42.8
1978	2.35	3.11	3.34	2.77	3.36	19.1	125	192	202	81.2	9.91	5.03	54.2
1979	5.00	5.17	3.44	3.34	5.64	24.7	145	238	282	147	67.5	12.0	78.5

1-7.L00-1A TAGAB RIVER AT TAGAB

(U.S. Geological Survey identification number: 344000069410000)

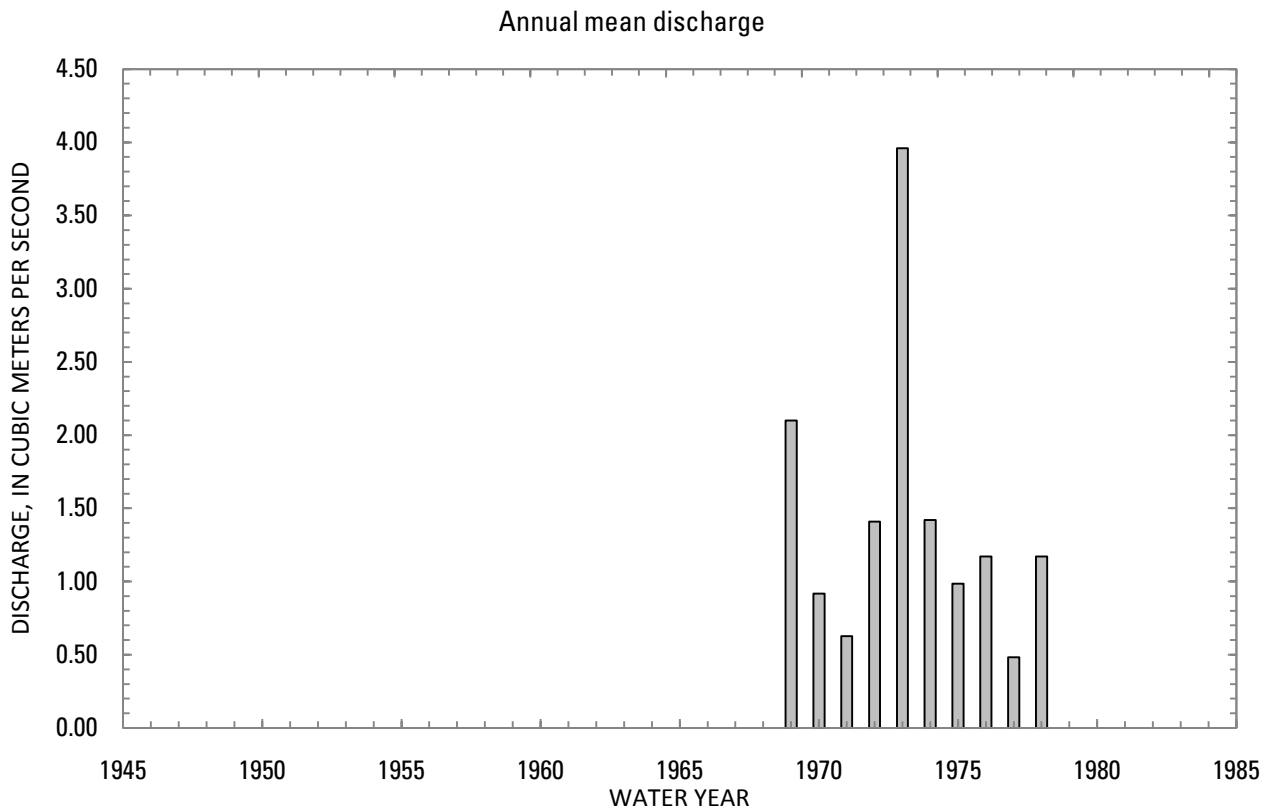
LOCATION: Lat 34°40'N., long 69°41'E.

DRAINAGE AREA: 800 km².

ELEVATION: 1,060 meters above mean sea level.

PERIOD OF RECORD: August 7, 1968 to April 30, 1979.

GAGE: Water-stage recorder.



1-7.L00-1A TAGAB RIVER AT TAGAB, Continued

Statistics of monthly and annual mean discharges
[m³/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	1.18	1974	0.06	1979	0.46	0.37	0.80	2.76
November	1.64	1970	0.20	1976	0.70	0.52	0.75	4.15
December	2.32	1973	0.43	1978	1.06	0.62	0.59	6.30
January	1.90	1973	0.47	1978	1.16	0.51	0.44	6.89
February	2.35	1973	0.56	1978	1.28	0.57	0.44	7.63
March	4.69	1973	0.41	1977	1.48	1.16	0.78	8.83
April	18.4	1973	0.27	1977	5.37	4.79	0.89	32.0
May	10.8	1973	0.07	1977	3.84	3.64	0.95	22.9
June	2.29	1973	0.07	1975	0.70	0.86	1.23	4.19
July	2.16	1978	0.01	1977	0.45	0.77	1.69	2.69
August	0.26	1973	0.01	1976	0.09	0.10	1.11	0.53
September	0.80	1973	0.01	1977	0.20	0.24	1.15	1.21
Annual	3.96	1973	0.48	1977	1.42	1.00	0.70	100

1-7.L00-1A TAGAB RIVER AT TAGAB, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.05	0.20	0.41	0.52	0.55	0.23	0.22	0.04	0.07	0	0.01	0.01	0.02
90	0.10	0.23	0.45	0.58	0.63	0.51	0.45	0.11	0.10	0.01	0.01	0.01	0.03
85	0.12	0.25	0.47	0.60	0.66	0.65	0.87	0.13	0.11	0.01	0.01	0.02	0.09
80	0.15	0.27	0.48	0.62	0.70	0.72	1.16	0.27	0.12	0.02	0.01	0.02	0.12
75	0.19	0.30	0.52	0.68	0.79	0.83	1.43	0.41	0.13	0.02	0.01	0.02	0.17
70	0.22	0.32	0.55	0.73	0.89	0.87	1.74	0.52	0.13	0.02	0.02	0.03	0.23
65	0.24	0.34	0.62	0.90	0.97	0.91	2.02	0.77	0.14	0.03	0.02	0.05	0.29
60	0.26	0.36	0.69	1.00	1.02	0.95	2.57	1.04	0.16	0.06	0.02	0.08	0.37
55	0.27	0.38	0.77	1.06	1.06	1.02	2.79	2.02	0.17	0.10	0.02	0.09	0.47
50	0.30	0.40	0.86	1.14	1.16	1.12	3.11	2.29	0.19	0.10	0.05	0.10	0.59
45	0.33	0.47	0.95	1.20	1.26	1.21	3.75	2.90	0.21	0.11	0.06	0.10	0.73
40	0.39	0.56	1.18	1.25	1.43	1.28	4.67	3.37	0.26	0.12	0.09	0.11	0.88
35	0.46	0.83	1.34	1.31	1.54	1.37	5.77	4.59	0.50	0.13	0.10	0.17	1.03
30	0.58	1.04	1.43	1.50	1.67	1.48	6.77	5.65	0.63	0.17	0.11	0.19	1.21
25	0.77	1.13	1.51	1.58	1.75	1.62	7.70	6.56	0.70	0.22	0.12	0.25	1.43
20	0.86	1.21	1.60	1.69	1.80	1.78	8.55	7.56	0.79	0.31	0.16	0.29	1.70
15	0.93	1.31	1.73	1.78	1.85	2.17	9.90	8.78	0.94	0.43	0.24	0.37	2.06
10	1.03	1.48	1.99	1.88	1.90	2.63	12.1	9.90	2.12	0.60	0.26	0.44	2.95
5	1.27	1.85	2.31	1.99	2.04	3.39	18.2	11.0	3.89	0.93	0.29	0.67	7.04

1-7.L00-1A TAGAB RIVER AT TAGAB, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	3.00	1.30	1.16	1.06	0.97
0.95	1.05	6.00	2.64	2.34	2.04	1.65
0.90	1.11	8.50	3.73	3.28	2.81	2.17
0.80	1.25	12.8	5.49	4.79	4.03	3.02
0.50	2	25.6	10.6	8.97	7.45	5.60
0.20	5	46.8	18.2	14.9	12.6	10.1
0.10	10	62.0	23.1	18.6	15.9	13.7
0.04	25	81.7	29.1	22.8	20.0	18.9
0.02	50	96.4	33.2	25.6	¹ 22.9	23.1
0.01	100	111	37.1	28.1	¹ 25.7	27.6
0.005	200	125	40.7	¹ 30.4	¹ 28.3	32.4
0.002	500	144	ng	ng	ng	ng

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

1-7.L00-1A TAGAB RIVER AT TAGAB, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0	0	0	0	0.01	0.03	0.06
0.10	10	0	0	0	0	0	0.01	0.01	0.04	0.08
0.20	5	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.05	0.11
0.50	2	0.02	0.03	0.03	0.03	0.03	0.04	0.06	0.11	0.23

1-7.L00-1A TAGAB RIVER AT TAGAB, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.26	0.29	0.30	0.34	0.03	0.03	0.04	0.10
0.10	10	0.31	0.35	0.37	0.42	0.04	0.06	0.07	0.19
0.20	5	0.40	0.44	0.47	0.53	0.08	0.12	0.14	0.39
0.50	2	0.65	0.70	0.75	0.83	0.25	0.38	0.47	1.09
		June-July-August				September-October-November			
0.05	20	0	0	0	0	0.01	0.01	0.01	0.01
0.10	10	0	0	0	0	0.01	0.01	0.01	0.01
0.20	5	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.03
0.50	2	0.02	0.03	0.03	0.04	0.03	0.04	0.05	0.10

1-7.L00-1A TAGAB RIVER AT TAGAB, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1969	April 20, 1969	21.4	1978	July 6, 1978	60.0
1970	April 15, 1970	41.5	1973	April 4, 1973	56.3
1971	March 26, 1971	15.0	1976	April 24, 1976	50.0
1972	April 28, 1972	25.8	1970	April 15, 1970	41.5
1973	April 4, 1973	56.3	1972	April 28, 1972	25.8
1974	April 8, 1974	10.1	1969	April 20, 1969	21.4
1975	April 5, 1975	18.5	1975	April 5, 1975	18.5
1976	April 24, 1976	50.0	1971	March 26, 1971	15.0
1977	January 10, 1977	5.80	1974	April 8, 1974	10.1
1978	July 6, 1978	60.0	1977	January 10, 1977	5.80

1-7.L00-1A TAGAB RIVER AT TAGAB, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1968	--	--	--	--	--	--	--	--	--	--	--	0.21	--
1969	0.76	1.24	1.58	1.55	1.71	2.20	5.68	7.37	2.09	0.37	0.26	0.42	2.10
1970	0.92	1.64	1.51	1.20	1.06	1.28	2.59	0.39	0.16	0.13	0.05	0.12	0.92
1971	0.23	0.30	0.62	0.60	0.65	0.72	2.37	1.53	0.21	0.10	0.10	0.10	0.63
1972	0.27	0.34	0.47	0.64	0.75	1.30	3.45	7.79	1.29	0.13	0.13	0.31	1.41
1973	0.76	1.36	2.32	1.90	2.35	4.69	18.4	10.8	2.29	1.58	0.26	0.80	3.96
1974	1.18	1.08	1.66	1.73	1.87	1.35	6.51	1.55	0.16	0.03	0.01	0.10	1.42
1975	0.27	0.31	0.62	1.04	1.02	0.98	4.55	2.86	0.07	0.02	0.01	0.13	0.99
1976	0.18	0.20	0.54	0.76	1.02	0.85	5.57	4.44	0.54	0.01	0.01	0.04	1.17
1977	0.35	0.40	1.05	1.71	1.42	0.41	0.27	0.07	0.12	0.01	0.01	0.01	0.48
1978	0.14	0.35	0.43	0.47	0.56	0.97	7.16	1.60	0.12	2.16	0.06	0.01	1.17
1979	0.06	0.45	0.87	1.15	1.69	1.57	2.54	--	--	--	--	--	--

1-8.21L-1A SALANG RIVER AT BAGH-I-LALA

(U.S. Geological Survey identification number: 350900069130000)

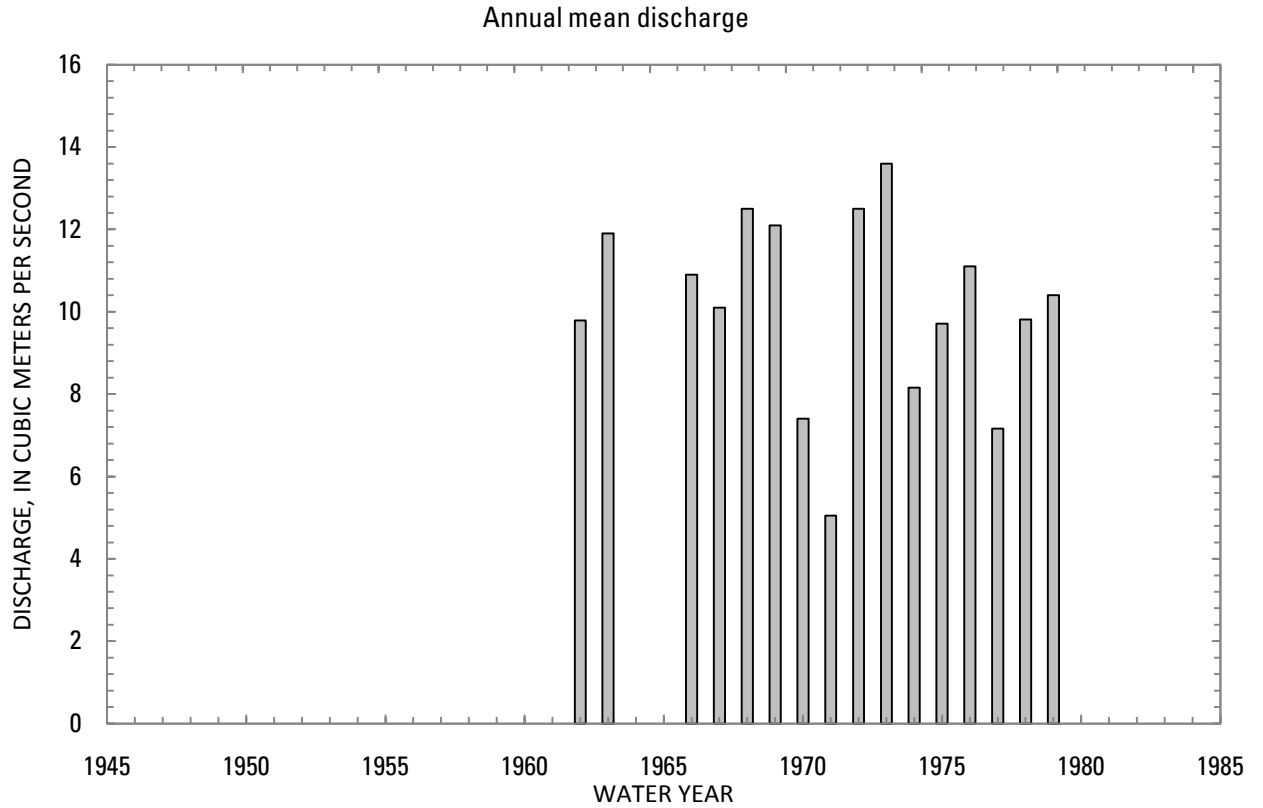
LOCATION: Lat 35°09'N., long 69°13'E.

DRAINAGE AREA: 485 km².

ELEVATION: 1,660 meters above mean sea level.

PERIOD OF RECORD: October 1, 1961 to March 23, 1964 and December 2, 1964 to February 29, 1980.

GAGE: Water-stage recorder. Station was destroyed by flooding on March 23, 1964.



1-8.21L-1A SALANG RIVER AT BAGH-I-LALA, Continued

Statistics of monthly and annual mean discharges
[m³/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	5.08	1962	2.39	1979	3.47	0.69	0.20	2.78
November	4.59	1962	2.23	1975	3.12	0.69	0.22	2.50
December	4.37	1962	1.92	1975	2.90	0.57	0.20	2.33
January	4.30	1962	1.97	1964	2.73	0.60	0.22	2.19
February	4.81	1980	1.71	1971	3.17	0.84	0.26	2.54
March	15.3	1969	4.03	1975	7.80	3.18	0.41	6.25
April	31.7	1973	10.3	1971	22.4	5.68	0.25	18.0
May	43.9	1973	11.1	1971	27.4	8.68	0.32	22.0
June	45.4	1968	9.55	1971	27.1	9.24	0.34	21.7
July	30.8	1965	6.47	1971	14.1	5.79	0.41	11.3
August	11.7	1965	3.90	1971	6.48	1.88	0.29	5.19
September	5.51	1962	3.24	1975	4.11	0.73	0.18	3.30
Annual	13.6	1973	5.05	1971	10.14	2.28	0.23	100

1-8.21L-1A SALANG RIVER AT BAGH-I-LALA, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	2.44	2.12	2.01	1.90	1.78	3.01	8.77	12.0	11.2	6.07	3.63	2.94	2.24
90	2.65	2.29	2.25	2.03	2.13	3.20	10.7	14.8	13.5	6.87	3.99	3.06	2.53
85	2.73	2.43	2.44	2.11	2.22	3.60	12.2	16.9	16.5	7.39	4.30	3.26	2.69
80	2.84	2.58	2.48	2.23	2.34	4.16	13.4	19.4	17.9	8.61	4.67	3.36	2.88
75	2.98	2.62	2.59	2.27	2.42	4.53	14.7	21.1	19.3	9.39	5.04	3.46	3.09
70	3.08	2.67	2.62	2.40	2.55	4.87	15.9	22.0	20.5	10.1	5.21	3.51	3.30
65	3.13	2.81	2.66	2.46	2.72	5.18	17.5	22.9	21.8	10.5	5.42	3.56	3.51
60	3.21	2.88	2.72	2.51	2.86	5.50	18.3	23.8	23.7	10.9	5.63	3.72	3.78
55	3.40	2.94	2.76	2.59	2.96	5.94	19.3	24.7	25.1	11.5	5.86	3.78	4.10
50	3.47	3.06	2.80	2.66	3.06	6.24	20.6	25.6	26.2	12.1	6.04	3.95	4.62
45	3.55	3.11	2.88	2.72	3.22	6.67	22.0	26.6	27.9	13.3	6.23	4.01	5.30
40	3.63	3.16	2.92	2.76	3.32	7.26	23.6	27.8	29.1	14.2	6.64	4.20	6.49
35	3.67	3.21	2.96	2.81	3.44	7.86	25.8	29.4	30.4	15.2	6.88	4.41	8.40
30	3.71	3.25	3.09	2.90	3.59	8.74	27.5	31.4	31.6	16.2	7.17	4.56	10.9
25	3.74	3.44	3.18	3.09	3.71	9.56	28.7	34.1	33.3	17.4	7.62	4.78	14.6
20	3.94	3.60	3.31	3.21	3.90	10.5	30.1	36.1	37.3	18.9	8.11	4.92	18.5
15	4.20	3.91	3.57	3.49	4.09	12.0	32.1	38.9	39.5	20.8	8.57	5.02	22.3
10	4.50	4.37	3.68	3.57	4.30	15.3	35.2	42.7	41.9	22.9	9.30	5.28	26.8
5	4.88	4.61	4.17	3.98	4.73	18.8	40.1	45.0	45.2	29.3	10.2	5.69	32.8

1-8.21L-1A SALANG RIVER AT BAGH-I-LALA, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	18.9	11.9	10.7	10.1	9.83
0.95	1.05	26.8	17.7	16.7	16.0	15.1
0.90	1.11	32.0	21.6	20.6	19.7	18.5
0.80	1.25	39.4	27.1	26.0	24.7	22.9
0.50	2	57.2	40.1	37.7	34.8	31.8
0.20	5	80.6	56.2	50.3	44.4	40.2
0.10	10	95.2	65.8	56.7	48.6	44.0
0.04	25	113	76.7	63.1	52.4	47.3
0.02	50	125	84.0	66.9	54.3	49.1
0.01	100	137	90.8	70.1	55.8	50.5
0.005	200	149	97.0	72.7	57.0	51.5
0.002	500	164	ng	ng	ng	ng

1-8.21L-1A SALANG RIVER AT BAGH-I-LALA, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	1.28	1.54	1.58	1.63	1.73	1.86	2.04	2.14	2.44
0.10	10	1.41	1.66	1.70	1.75	1.86	1.99	2.16	2.26	2.56
0.20	5	1.59	1.81	1.87	1.92	2.03	2.17	2.32	2.42	2.72
0.50	2	2.00	2.17	2.25	2.30	2.41	2.55	2.67	2.77	3.09

1-8.21L-1A SALANG RIVER AT BAGH-I-LALA, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	1.18	1.47	1.63	1.76	2.15	2.24	2.56	4.00
0.10	10	1.34	1.63	1.76	1.88	2.45	2.63	2.98	4.46
0.20	5	1.56	1.85	1.94	2.05	2.83	3.14	3.56	5.14
0.50	2	2.07	2.34	2.37	2.45	3.63	4.19	4.88	6.93
		June-July-August				September-October-November			
0.05	20	3.00	3.16	3.45	3.95	1.79	1.83	1.91	2.10
0.10	10	3.35	3.51	3.79	4.34	1.97	2.01	2.09	2.25
0.20	5	3.80	3.97	4.25	4.88	2.19	2.25	2.32	2.46
0.50	2	4.70	4.92	5.24	6.13	2.65	2.72	2.79	2.90

1-8.21L-1A SALANG RIVER AT BAGH-I-LALA, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1962	April 25, 1962	43.8	1967	April 27, 1967	124
1963	May 14, 1963	92.8	1963	May 14, 1963	92.8
1965	June 13, 1965	50.0	1969	April 14, 1969	91.0
1966	April 25, 1966	60.6	1972	May 13, 1972	80.8
1967	April 27, 1967	124	1968	April 29, 1968	76.1
1968	April 29, 1968	76.1	1966	April 25, 1966	60.6
1969	April 14, 1969	91.0	1975	May 15, 1975	60.0
1970	April 15, 1970	58.5	1970	April 15, 1970	58.5
1971	May 19, 1971	22.4	1973	June 3, 1973	56.7
1972	May 13, 1972	80.8	1976	April 23, 1976	53.1
1973	June 3, 1973	56.7	1965	June 13, 1965	50.0
1974	May 1, 1974	45.5	1979	April 30, 1979	48.9
1975	May 15, 1975	60.0	1974	May 1, 1974	45.5
1976	April 23, 1976	53.1	1962	April 25, 1962	43.8
1977	May 27, 1977	27.9	1978	May 4, 1978	41.6
1978	May 4, 1978	41.6	1977	May 27, 1977	27.9
1979	April 30, 1979	48.9	1971	May 19, 1971	22.4

1-8.21L-1A SALANG RIVER AT BAGH-I-LALA, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1962	5.08	4.59	4.37	4.30	4.39	5.59	19.8	23.2	20.6	12.6	7.33	5.51	9.79
1963	4.51	4.12	3.55	3.52	3.87	7.73	17.5	39.6	34.1	14.2	6.36	3.35	11.9
1964	2.86	2.57	2.21	1.97	3.25	--	--	--	--	--	--	--	--
1965	--	--	--	3.33	4.06	8.93	25.7	38.1	40.5	30.8	11.7	5.25	--
1966	3.72	3.26	2.86	2.84	3.46	9.05	26.2	25.1	32.3	11.8	6.25	4.56	10.9
1967	3.62	3.10	2.75	2.45	2.37	5.35	28.2	23.0	25.6	12.8	6.63	5.02	10.1
1968	3.60	2.28	2.54	2.38	2.76	9.03	23.5	26.8	45.4	19.5	7.26	4.66	12.5
1969	3.74	3.27	3.79	2.75	3.68	15.3	29.1	21.4	30.7	18.0	8.18	4.54	12.1
1970	3.60	3.82	2.82	2.26	2.79	5.62	16.6	21.1	15.0	7.28	4.42	3.34	7.40
1971	2.66	2.52	2.72	1.97	1.71	4.29	10.3	11.1	9.55	6.47	3.90	3.28	5.05
1972	2.70	2.62	2.53	2.82	3.12	13.7	24.2	36.8	32.0	18.0	7.43	4.37	12.5
1973	4.13	4.22	3.33	3.42	4.24	11.4	31.7	43.9	33.5	13.5	6.40	3.70	13.6
1974	3.75	3.05	2.55	2.06	2.28	5.81	18.6	23.2	19.4	8.72	4.60	3.66	8.16
1975	3.09	2.23	1.92	2.19	2.18	4.03	23.2	28.0	26.9	14.0	5.30	3.24	9.71
1976	3.18	2.91	2.96	2.51	2.72	5.50	23.4	33.1	28.8	16.9	7.08	4.37	11.1
1977	3.94	3.27	2.91	2.79	2.84	7.09	13.6	15.9	17.1	8.75	4.21	3.34	7.16
1978	3.02	3.06	2.93	3.04	3.23	7.74	23.5	30.6	21.0	10.1	5.36	3.94	9.81
1979	2.39	2.23	2.80	2.61	2.45	6.48	26.3	25.0	27.6	15.6	7.71	3.77	10.4
1980	2.90	3.01	2.67	2.67	4.81	--	--	--	--	--	--	--	--

1-8.2R0-1A Ghorband River at Pul-i-Ashawa

(U.S. Geological Survey identification number: 350500069080000)

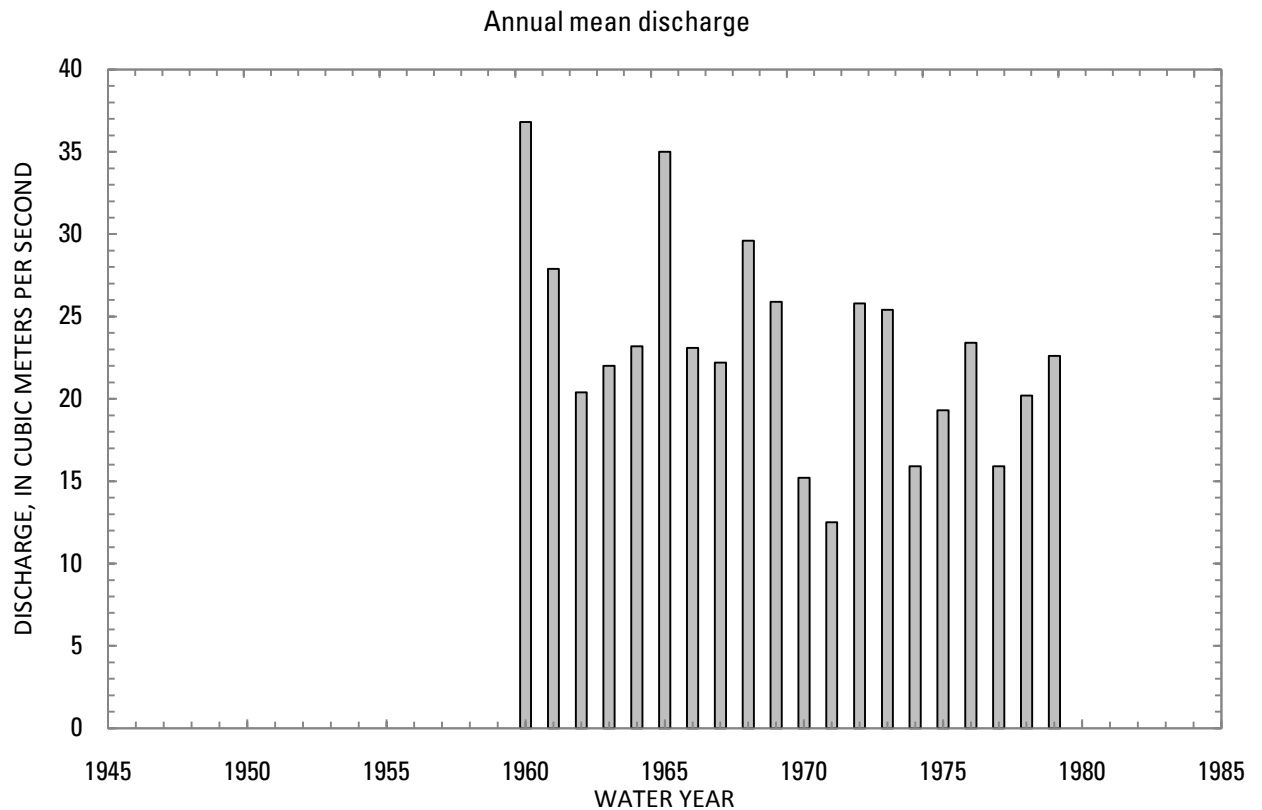
LOCATION: Lat 35°05'N., long 69°08'E.

DRAINAGE AREA: 4,020 km².

ELEVATION: 1,610 meters above mean sea level.

PERIOD OF RECORD: October 1, 1959 to February 4, 1980.

GAGE: Water-stage recorder.



1-8.2R0-1A GHORBAND RIVER AT PUL-I-ASHAWA, Continued

Statistics of monthly and annual mean discharges
[m³/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	15.4	1961	5.08	1972	9.08	2.49	0.27	3.28
November	16.2	1961	6.76	1960	10.3	2.33	0.23	3.73
December	14.4	1961	6.68	1960	9.74	2.11	0.22	3.52
January	13.0	1961	5.72	1972	8.80	1.97	0.22	3.18
February	16.0	1960	4.63	1971	8.82	2.78	0.32	3.19
March	35.0	1960	8.45	1970	15.5	6.11	0.40	5.58
April	54.1	1965	21.7	1970	36.5	10.5	0.29	13.2
May	94.9	1960	33.2	1977	57.6	16.7	0.29	20.8
June	107	1968	22.5	1971	66.8	22.7	0.34	24.1
July	75.0	1965	7.68	1971	32.7	17.1	0.52	11.8
August	26.8	1960	3.40	1971	12.5	6.11	0.49	4.50
September	16.4	1960	3.41	1971	8.56	3.49	0.41	3.09
Annual	36.8	1960	12.5	1971	23.1	6.18	0.27	100

1-8.2R0-1A GHORBAND RIVER AT PUL-I-ASHAWA, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	5.63	6.81	6.82	5.61	4.92	7.19	15.9	27.2	26.5	9.06	3.88	3.40	5.73
90	6.22	7.82	7.19	6.18	5.55	7.87	18.9	33.1	33.5	12.0	5.26	4.27	6.76
85	6.70	8.16	8.05	6.61	6.09	8.54	20.7	36.8	39.8	13.8	5.82	4.91	7.43
80	7.11	8.55	8.37	7.06	6.39	9.06	22.1	39.9	46.1	15.7	6.60	5.61	8.04
75	7.43	8.91	8.59	7.39	6.76	9.87	23.6	43.5	49.9	17.4	7.74	6.08	8.63
70	7.68	9.10	8.69	7.74	7.06	10.9	25.1	46.3	53.5	19.7	8.74	6.55	9.11
65	7.89	9.26	8.79	8.10	7.28	11.7	26.8	48.4	56.2	21.7	9.53	6.96	9.58
60	8.10	9.41	8.91	8.29	7.64	12.4	28.4	50.6	59.1	23.4	10.2	7.16	10.1
55	8.30	9.58	9.03	8.49	8.05	13.0	30.5	53.1	61.8	25.2	10.9	7.36	11.0
50	8.58	9.82	9.23	8.75	8.41	13.5	33.0	55.6	64.4	28.1	11.6	7.72	11.9
45	8.83	9.98	9.38	8.95	8.72	14.1	35.4	58.3	67.4	30.3	12.2	8.20	12.9
40	9.03	10.2	9.51	9.17	9.11	14.6	37.6	61.0	70.9	32.9	12.7	8.95	14.6
35	9.38	10.4	9.88	9.42	9.59	15.5	39.6	63.5	75.3	36.3	13.3	9.66	17.2
30	10.1	10.7	10.1	9.64	10.0	17.1	41.6	66.2	80.3	39.6	14.2	10.3	22.6
25	10.7	11.9	10.2	9.87	10.5	18.4	44.2	70.4	84.7	43.3	15.5	10.9	29.4
20	11.1	12.4	11.0	10.1	11.3	20.4	48.4	75.2	90.1	47.3	16.7	11.8	38.6
15	12.3	12.8	12.4	10.7	12.0	23.3	53.1	79.8	96.1	52.3	18.3	12.5	48.5
10	13.0	13.6	13.7	11.9	12.5	26.4	59.7	85.0	103	59.9	20.5	13.7	59.6
5	14.8	15.6	14.4	12.9	13.0	29.9	74.3	93.4	111	76.5	24.8	15.3	76.7

1-8.2R0-1A GHORBAND RIVER AT PUL-I-ASHAWA, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	55.0	48.0	44.4	41.5	38.2
0.95	1.05	67.0	57.1	53.0	49.6	45.7
0.90	1.11	74.2	62.6	58.3	54.6	50.3
0.80	1.25	83.7	70.0	65.5	61.2	56.4
0.50	2	104	86.8	81.8	76.3	70.3
0.20	5	129	107	102	94.9	87.7
0.10	10	143	120	115	106	98.4
0.04	25	159	135	130	120	111
0.02	50	170	146	142	130	121
0.01	100	181	157	152	139	130
0.005	200	190	167	163	148	138
0.002	500	203	ng	ng	ng	ng

1-8.2R0-1A GHORBAND RIVER AT PUL-I-ASHAWA, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	3.27	3.34	3.43	3.57	3.77	4.12	4.65	5.31	6.00
0.10	10	3.81	3.89	3.99	4.15	4.39	4.79	5.37	5.98	6.56
0.20	5	4.54	4.66	4.77	4.95	5.23	5.69	6.31	6.85	7.31
0.50	2	6.26	6.45	6.58	6.78	7.11	7.62	8.25	8.67	8.95

1-8.2R0-1A GHORBAND RIVER AT PUL-I-ASHAWA, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	4.22	4.44	4.70	5.09	5.74	6.52	7.07	8.81
0.10	10	4.72	4.99	5.24	5.64	6.15	6.92	7.57	9.53
0.20	5	5.40	5.73	5.96	6.36	6.79	7.56	8.35	10.6
0.50	2	6.95	7.37	7.56	7.96	8.66	9.46	10.7	13.7
		June-July-August				September-October-November			
0.05	20	3.44	3.70	3.92	4.45	2.40	2.90	3.50	3.95
0.10	10	4.26	4.56	4.85	5.57	3.20	3.61	4.13	4.57
0.20	5	5.46	5.82	6.20	7.21	4.35	4.63	5.01	5.45
0.50	2	8.50	8.97	9.57	11.3	7.04	7.05	7.14	7.52

1-8.2R0-1A GHORBAND RIVER AT PUL-I-ASHAWA, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1960	April 18, 1960	146	1967	April 27, 1967	161
1961	June 5, 1961	139	1960	April 18, 1960	146
1962	June 11, 1962	84.4	1961	June 5, 1961	139
1963	May 15, 1963	96.2	1968	June 10, 1968	131
1964	April 11, 1964	93.0	1976	June 4, 1976	130
1965	June 13, 1965	118	1972	June 13, 1972	123
1966	June 18, 1966	108	1975	May 16, 1975	121
1967	April 27, 1967	161	1965	June 13, 1965	118
1968	June 10, 1968	131	1973	June 4, 1973	111
1969	June 17, 1969	97.5	1966	June 18, 1966	108
1970	May 21, 1970	73.2	1969	June 17, 1969	97.5
1971	May 20, 1971	69.7	1979	June 22, 1979	96.8
1972	June 13, 1972	123	1963	May 15, 1963	96.2
1973	June 4, 1973	111	1964	April 11, 1964	93.0
1974	June 1, 1974	63.2	1977	May 27, 1977	86.4
1975	May 16, 1975	121	1978	April 17, 1978	85.6
1976	June 4, 1976	130	1962	June 11, 1962	84.4
1977	May 27, 1977	86.4	1970	May 21, 1970	73.2
1978	April 17, 1978	85.6	1971	May 20, 1971	69.7
1979	June 22, 1979	96.8	1974	June 1, 1974	63.2

1-8.2R0-1A GHORBAND RIVER AT PUL-I-ASHAWA, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1960	6.21	6.76	6.68	7.48	16.0	35.0	54.0	94.9	102	68.4	26.8	16.4	36.8
1961	15.4	16.2	14.4	13.0	12.1	13.6	39.3	68.3	77.7	37.1	15.8	11.7	27.9
1962	11.1	12.8	13.7	12.9	12.6	14.0	29.1	40.5	48.2	23.7	12.3	14.1	20.4
1963	8.40	9.63	8.95	8.01	7.00	10.3	22.2	61.1	72.8	35.9	10.9	7.58	22.0
1964	7.61	9.66	9.53	9.26	9.02	16.0	46.5	59.0	62.1	31.3	11.3	6.85	23.2
1965	7.66	9.07	8.65	8.44	7.99	18.6	54.1	89.5	100	75.0	25.7	13.4	35.0
1966	12.7	12.9	12.0	10.3	10.5	14.9	34.5	53.0	72.0	25.7	10.5	8.51	23.1
1967	9.18	9.49	8.43	7.24	6.77	10.5	33.8	48.1	70.6	35.7	15.2	11.1	22.2
1968	9.45	9.88	10.2	9.23	9.32	19.3	42.9	59.1	107	51.9	17.0	10.1	29.6
1969	11.8	12.3	13.9	10.5	11.5	23.2	39.3	50.0	74.7	38.1	15.0	10.5	25.9
1970	12.4	14.4	9.43	8.29	7.38	8.45	21.7	40.8	34.0	13.4	6.21	5.85	15.2
1971	8.57	9.28	8.10	6.12	4.63	10.9	22.8	42.6	22.5	7.68	3.40	3.41	12.5
1972	5.08	6.91	6.84	5.72	5.26	19.7	36.7	74.0	91.1	36.9	13.2	7.98	25.8
1973	10.4	10.8	10.1	10.4	9.73	19.8	45.1	73.1	67.3	25.4	12.5	9.24	25.4
1974	9.47	10.5	9.95	9.82	8.57	11.1	23.1	39.5	42.6	14.9	5.60	5.86	15.9
1975	8.30	8.96	8.48	6.99	6.32	11.2	29.2	49.2	61.1	29.0	8.48	4.43	19.3
1976	6.85	8.18	9.29	8.63	6.24	11.7	41.5	71.3	69.8	31.9	8.51	7.27	23.4
1977	8.20	8.73	9.50	9.45	10.0	15.2	24.7	33.2	47.9	13.6	5.63	4.55	15.9
1978	6.60	8.89	8.91	9.03	8.77	15.6	47.5	57.3	42.8	20.7	8.85	7.22	20.2
1979	8.21	10.1	9.27	8.05	6.71	10.2	42.3	47.5	70.5	37.1	16.2	5.21	22.6
1980	7.12	11.2	8.27	6.03	--	--	--	--	--	--	--	--	--

1-8.3R0-1A SHATUL RIVER AT GULBAHAR

(U.S. Geological Survey identification number: 350900069170000)

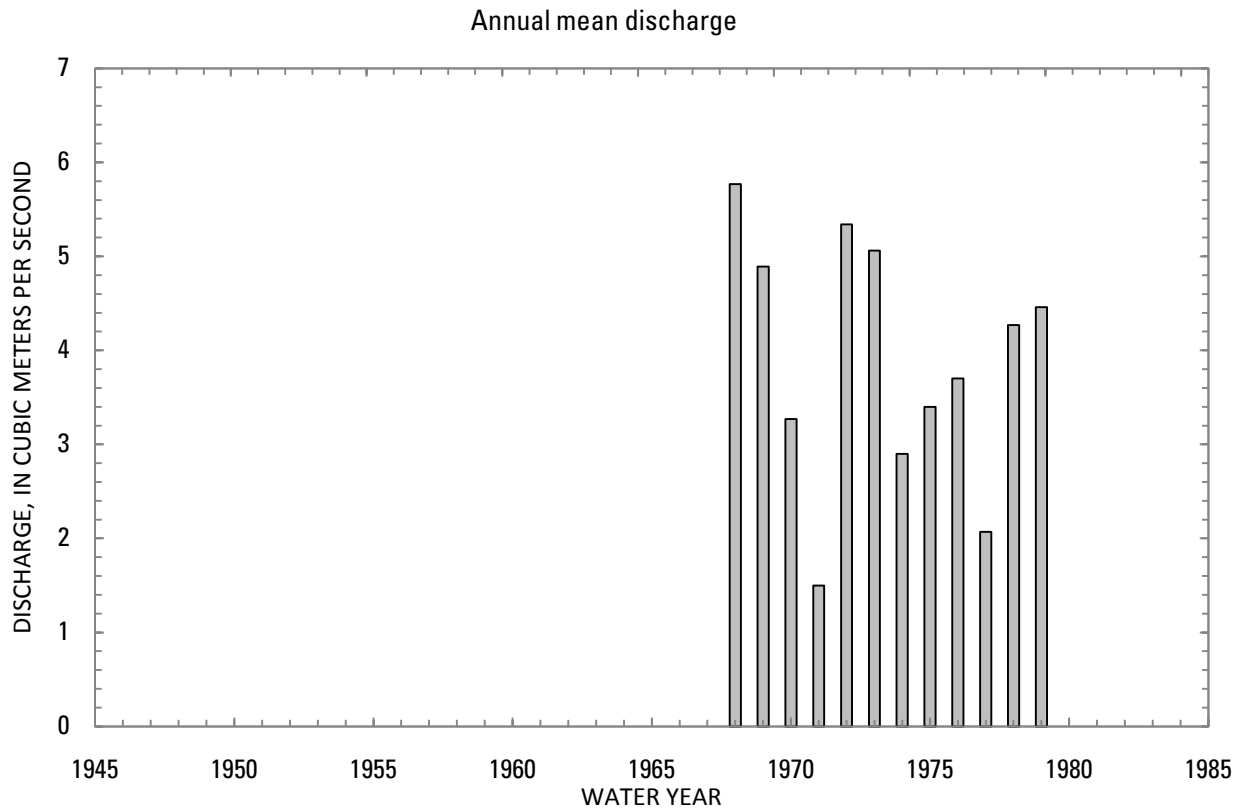
LOCATION: Lat 35°09'N., long 69°17'E.

DRAINAGE AREA: 205 km².

ELEVATION: 1,590 meters above mean sea level.

PERIOD OF RECORD: May 30, 1967 to March 6, 1980.

GAGE: Water-stage recorder.



1-8.3R0-1A SHATUL RIVER AT GULBAHAR, Continued

Statistics of monthly and annual mean discharges
[m³/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	1.03	1970	0.03	1971	0.25	0.27	1.09	0.53
November	0.59	1970	0.03	1979	0.14	0.15	1.13	0.29
December	0.27	1970	0.03	1979	0.12	0.10	0.82	0.25
January	0.62	1973	0.02	1979	0.19	0.17	0.90	0.39
February	0.58	1976	0.01	1971	0.29	0.17	0.60	0.62
March	3.51	1969	0.36	1971	1.77	0.91	0.51	3.73
April	11.0	1978	2.20	1971	7.05	2.47	0.35	14.9
May	17.5	1978	5.23	1977	10.7	3.71	0.35	22.5
June	25.3	1972	6.13	1971	15.6	5.53	0.36	32.9
July	15.7	1968	1.27	1971	8.38	4.55	0.54	17.7
August	6.16	1968	0.75	1974	2.44	1.89	0.77	5.16
September	1.58	1969	0.03	1979	0.53	0.50	0.96	1.11
Annual	5.77	1968	1.50	1971	3.89	1.32	0.34	100

1-8.3R0-1A SHATUL RIVER AT GULBAHAR, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.04	0.02	0.02	0.02	0.02	0.07	2.09	3.64	6.37	1.03	0.22	0.02	0.03
90	0.05	0.03	0.03	0.03	0.06	0.25	2.90	4.61	8.14	1.51	0.37	0.03	0.04
85	0.06	0.03	0.03	0.03	0.07	0.34	3.45	5.54	9.15	1.88	0.49	0.06	0.06
80	0.07	0.04	0.04	0.04	0.09	0.39	3.78	6.32	10.1	2.72	0.64	0.07	0.08
75	0.08	0.04	0.04	0.04	0.10	0.48	4.13	6.97	11.0	3.57	0.78	0.08	0.12
70	0.10	0.05	0.04	0.05	0.12	0.66	4.45	7.80	11.8	4.66	0.93	0.12	0.17
65	0.11	0.05	0.05	0.06	0.15	0.75	4.93	8.37	12.7	5.22	1.10	0.17	0.23
60	0.12	0.05	0.06	0.06	0.17	0.88	5.43	8.90	13.5	6.39	1.33	0.20	0.32
55	0.13	0.06	0.06	0.07	0.22	1.05	6.11	9.58	14.2	7.02	1.46	0.23	0.44
50	0.15	0.06	0.07	0.09	0.24	1.35	6.53	10.3	15.0	7.84	1.65	0.27	0.69
45	0.17	0.08	0.07	0.12	0.28	1.61	7.04	11.0	16.1	8.73	1.95	0.33	1.01
40	0.19	0.10	0.09	0.16	0.33	1.82	7.49	11.5	17.3	9.50	2.21	0.40	1.68
35	0.21	0.13	0.10	0.19	0.35	2.03	8.14	12.2	18.3	10.3	2.74	0.49	2.84
30	0.28	0.15	0.13	0.24	0.37	2.37	8.92	13.2	19.2	11.5	3.02	0.72	4.13
25	0.36	0.18	0.16	0.30	0.40	2.96	9.61	14.6	20.1	12.7	3.49	0.85	6.08
20	0.42	0.22	0.20	0.34	0.43	3.28	10.3	15.5	21.2	13.7	4.00	0.99	8.15
15	0.46	0.25	0.27	0.38	0.50	3.58	11.4	16.2	22.6	14.6	4.82	1.19	10.4
10	0.52	0.31	0.29	0.43	0.64	4.02	12.4	17.2	24.4	15.5	5.99	1.47	13.1
5	0.93	0.52	0.36	0.59	0.82	4.71	13.6	18.7	26.7	18.1	7.39	1.76	17.1

1-8.3R0-1A SHATUL RIVER AT GULBAHAR, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	16.4	9.49	8.84	8.19	7.05
0.95	1.05	19.2	11.9	11.2	10.3	9.10
0.90	1.11	20.9	13.4	12.6	11.7	10.4
0.80	1.25	23.2	15.4	14.5	13.5	12.1
0.50	2	28.5	19.8	18.6	17.5	15.9
0.20	5	35.2	25.0	23.7	22.4	20.6
0.10	10	39.5	28.0	26.6	25.4	23.4
0.04	25	44.6	31.5	30.0	28.9	26.7
0.02	50	48.4	33.9	32.4	31.3	28.9
0.01	100	52.1	36.1	34.6	33.6	31.0
0.005	200	55.7	38.2	36.7	35.9	33.0
0.002	500	60.6	ng	ng	ng	ng

1-8.3R0-1A SHATUL RIVER AT GULBAHAR, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03
0.10	10	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.05
0.20	5	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.07
0.50	2	0.02	0.02	0.02	0.03	0.04	0.05	0.07	0.08	0.16

1-8.3R0-1A SHATUL RIVER AT GULBAHAR, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.01	0.01	0.01	0.01	0.02	0.03	0.04	0.40
0.10	10	0.01	0.01	0.02	0.02	0.05	0.07	0.11	0.59
0.20	5	0.01	0.02	0.02	0.03	0.11	0.17	0.26	0.88
0.50	2	0.03	0.03	0.05	0.06	0.34	0.50	0.81	1.64
		June-July-August				September-October-November			
0.05	20	0.05	0.10	0.18	0.54	0.01	0.01	0.01	0.01
0.10	10	0.09	0.16	0.26	0.69	0.01	0.01	0.01	0.02
0.20	5	0.17	0.26	0.40	0.94	0.01	0.02	0.02	0.03
0.50	2	0.55	0.70	0.93	1.74	0.03	0.04	0.05	0.07

1-8.3R0-1A SHATUL RIVER AT GULBAHAR, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1968	June 25, 1968	41.8	1968	June 25, 1968	41.8
1969	June 16, 1969	28.2	1972	June 12, 1972	40.6
1970	May 21, 1970	27.6	1973	June 11, 1973	35.1
1971	May 19, 1971	20.6	1979	June 13, 1979	35.0
1972	June 12, 1972	40.6	1975	June 17, 1975	30.9
1973	June 11, 1973	35.1	1969	June 16, 1969	28.2
1974	June 4, 1974	21.6	1970	May 21, 1970	27.6
1975	June 17, 1975	30.9	1978	June 5, 1978	27.0
1976	July 6, 1976	24.5	1976	July 6, 1976	24.5
1977	June 22, 1977	20.7	1974	June 4, 1974	21.6
1978	June 5, 1978	27.0	1977	June 22, 1977	20.7
1979	June 13, 1979	35.0	1971	May 19, 1971	20.6

1-8.3R0-1A SHATUL RIVER AT GULBAHAR, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1967	--	--	--	--	--	--	--	--	19.1	12.5	4.03	0.92	--
1968	0.45	0.23	0.19	0.37	0.35	2.54	8.24	11.3	22.5	15.7	6.16	1.21	5.77
1969	0.42	0.23	0.26	0.22	0.39	3.51	8.36	9.03	16.1	12.5	5.85	1.58	4.89
1970	1.03	0.59	0.27	0.30	0.35	1.67	6.47	12.3	12.2	2.92	0.99	0.04	3.27
1971	0.03	0.04	0.03	0.03	0.01	0.36	2.20	6.89	6.13	1.27	0.75	0.17	1.50
1972	0.18	0.10	0.06	0.06	0.08	2.37	6.42	13.5	25.3	11.8	3.53	0.78	5.34
1973	0.37	0.06	0.21	0.62	0.44	2.86	9.84	16.3	19.8	8.57	1.28	0.24	5.06
1974	0.17	0.10	0.08	0.08	0.37	1.56	6.82	8.91	10.7	5.08	0.75	0.13	2.90
1975	0.09	0.03	0.03	0.05	0.16	0.67	6.14	7.47	14.4	9.38	1.98	0.33	3.40
1976	0.19	0.08	0.07	0.13	0.58	1.71	6.30	9.28	12.2	11.0	2.40	0.44	3.70
1977	0.09	0.04	0.04	0.15	0.33	1.34	3.76	5.23	9.55	3.49	0.75	0.07	2.07
1978	0.09	0.05	0.04	0.18	0.13	1.29	11.0	17.5	14.5	3.91	1.47	0.90	4.27
1979	0.06	0.03	0.03	0.02	0.12	1.31	9.05	10.1	20.0	10.8	1.84	0.03	4.46
1980	0.10	0.19	0.23	0.22	0.49	--	--	--	--	--	--	--	--

1-8.L00-3A PANJSHER RIVER AT SHUKHI

(U.S. Geological Survey identification number: 345600069290000)

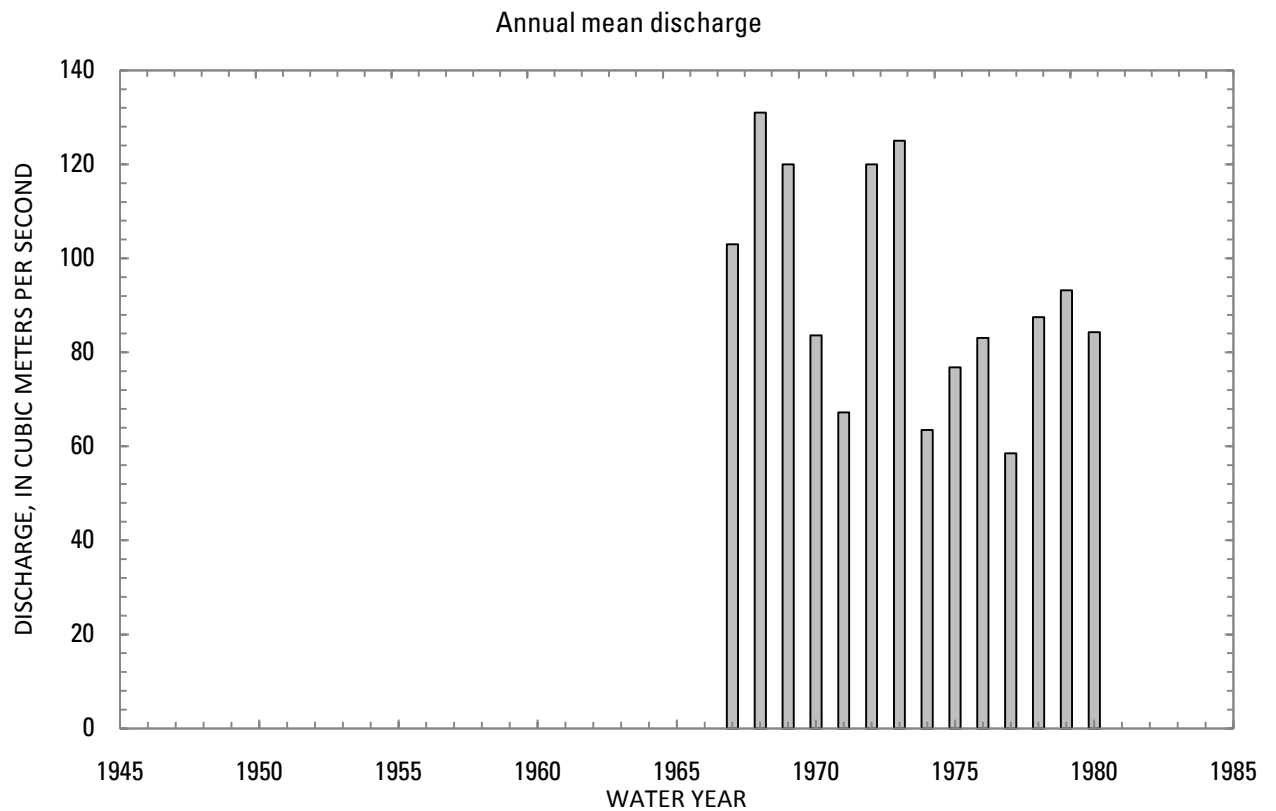
LOCATION: Lat 34°56'N., long 69°29'E.

DRAINAGE AREA: 10,850 km².

ELEVATION: 1,400 meters above mean sea level.

PERIOD OF RECORD: October 1, 1966 to September 30, 1980.

GAGE: Water-stage recorder.



1-8.L00-3A PANJSHER RIVER AT SHUKHI, Continued

Statistics of monthly and annual mean discharges
[m³/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	32.2	1973	23.6	1970	27.7	2.52	0.09	2.49
November	32.9	1970	22.6	1972	29.4	3.24	0.11	2.64
December	45.0	1969	23.9	1972	32.8	5.25	0.16	2.95
January	44.1	1969	26.0	1972	34.9	5.20	0.15	3.13
February	37.2	1969	24.7	1972	31.3	4.20	0.13	2.81
March	67.2	1969	29.0	1974	41.3	11.5	0.28	3.71
April	207	1973	60.2	1977	123	38.3	0.31	11.1
May	345	1973	95.5	1977	203	64.6	0.32	18.2
June	493	1968	190	1971	326	102	0.31	29.3
July	362	1968	45.2	1971	177	93.0	0.53	15.9
August	112	1968	25.9	1980	55.9	26.9	0.48	5.02
September	38.9	1970	22.9	1980	30.6	4.13	0.13	2.75
Annual	131	1968	58.5	1977	92.6	23.7	0.26	100

1-8.L00-3A PANJSHER RIVER AT SHUKHI, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	22.7	22.9	25.0	25.9	24.1	24.5	44.5	70.0	133	37.7	25.6	22.7	24.6
90	24.2	23.9	26.0	28.5	25.1	25.6	50.2	98.5	175	47.6	27.2	23.1	26.3
85	24.4	24.6	28.1	29.5	26.0	27.0	57.5	111	197	57.9	28.5	25.9	27.8
80	25.2	27.1	28.9	30.0	27.2	27.8	64.1	124	216	70.3	30.5	27.0	28.6
75	25.5	27.6	29.5	30.4	27.7	28.6	72.7	134	230	81.1	31.7	27.7	29.4
70	26.2	28.1	30.2	30.7	28.6	29.3	79.7	141	250	94.1	34.3	28.3	30.3
65	26.9	28.5	30.7	31.3	28.8	29.9	87.2	153	262	109	36.0	29.1	31.4
60	27.2	28.8	31.1	32.6	29.0	31.9	96.9	165	284	120	37.9	29.6	32.8
55	27.5	29.1	31.7	34.2	29.5	33.1	105	179	302	135	40.1	29.9	34.3
50	27.7	29.4	32.2	34.7	30.1	34.3	112	194	316	155	43.0	30.3	36.4
45	28.0	29.7	32.5	35.4	30.7	35.4	118	204	336	174	48.4	30.7	39.0
40	28.4	30.1	33.0	36.4	31.9	36.7	127	214	360	192	52.3	31.2	43.8
35	28.8	30.9	33.7	37.3	32.6	38.1	135	226	378	205	56.3	31.6	56.3
30	29.2	31.3	34.5	37.9	33.7	40.3	144	243	392	224	60.2	32.7	81.2
25	29.6	31.9	35.3	39.0	34.8	43.6	160	261	412	239	66.5	33.2	114
20	29.9	32.5	36.1	39.9	35.8	49.4	175	290	437	265	73.0	33.9	152
15	30.2	33.3	37.8	41.5	36.6	58.3	193	312	471	298	83.0	35.0	201
10	30.6	34.2	39.1	42.2	38.2	67.9	213	341	508	349	108	36.1	255
5	32.0	35.4	44.3	44.1	40.8	90.9	248	376	543	422	139	40.1	353

1-8.L00-3A PANJSHER RIVER AT SHUKHI, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	318	248	227	200	178
0.95	1.05	375	296	273	242	215
0.90	1.11	409	325	300	267	238
0.80	1.25	453	362	336	300	268
0.50	2	548	440	412	374	338
0.20	5	659	528	499	461	424
0.10	10	724	577	549	514	477
0.04	25	798	633	605	575	541
0.02	50	849	670	644	617	586
0.01	100	897	705	679	658	630
0.005	200	943	737	713	696	673
0.002	500	1,000	ng	ng	ng	ng

1-8.L00-3A PANJSHER RIVER AT SHUKHI, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	20.7	20.8	21.2	21.5	21.9	23.0	24.3	24.9	26.0
0.10	10	21.6	21.7	22.0	22.4	22.8	24.0	25.3	25.9	27.0
0.20	5	22.7	22.8	23.1	23.4	24.0	25.2	26.5	27.2	28.2
0.50	2	24.8	24.9	25.1	25.4	26.2	27.6	28.6	29.6	30.6

1-8.L00-3A PANJSHER RIVER AT SHUKHI, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	22.9	23.0	23.5	24.5	22.7	23.0	24.0	27.3
0.10	10	23.9	24.1	24.6	25.6	23.7	23.9	25.1	29.0
0.20	5	25.0	25.4	25.9	27.1	24.9	25.1	26.7	31.5
0.50	2	27.1	27.8	28.5	30.2	27.3	27.9	30.6	38.2
		June-July-August				September-October-November			
0.05	20	23.1	23.3	23.3	23.7	20.6	21.1	21.5	21.8
0.10	10	25.1	25.6	26.2	27.7	21.7	22.1	22.5	22.9
0.20	5	27.8	28.6	30.1	33.6	23.0	23.4	23.8	24.2
0.50	2	33.7	35.6	39.4	49.2	25.5	25.8	26.0	26.7

1-8.L00-3A PANJSHER RIVER AT SHUKHI, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1967	June 12, 1967	750	1967	June 12, 1967	750
1968	June 25, 1968	680	1972	June 28, 1972	719
1969	June 20, 1969	626	1973	June 13, 1973	700
1970	June 3, 1970	509	1968	June 25, 1968	680
1971	May 28, 1971	522	1969	June 20, 1969	626
1972	June 28, 1972	719	1978	July 7, 1978	590
1973	June 13, 1973	700	1979	June 22, 1979	558
1974	June 18, 1974	380	1971	May 28, 1971	522
1975	June 17, 1975	451	1970	June 3, 1970	509
1976	June 4, 1976	482	1976	June 4, 1976	482
1977	June 23, 1977	392	1980	June 9, 1980	452
1978	July 7, 1978	590	1975	June 17, 1975	451
1979	June 22, 1979	558	1977	June 23, 1977	392
1980	June 9, 1980	452	1974	June 18, 1974	380

1-8.L00-3A PANJSHER RIVER AT SHUKHI, Continued

Monthly and annual mean discharges, in cubic meters per second
 [Data may not be rounded in accordance with U.S. Geological Survey publication standards]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1967	27.8	28.3	33.8	36.1	25.8	29.6	122	176	390	268	70.0	32.5	103
1968	29.5	30.2	37.2	42.3	36.0	56.1	143	201	493	362	112	34.4	131
1969	29.4	32.1	45.0	44.1	37.2	67.2	164	167	407	312	104	33.5	120
1970	23.6	32.9	32.7	37.7	28.6	34.3	98.3	216	270	125	64.5	38.9	83.6
1971	30.1	28.1	30.2	30.2	28.5	36.8	86.7	241	190	45.2	29.1	29.1	67.2
1972	27.7	22.6	23.9	26.0	24.7	45.0	143	298	492	244	65.1	32.9	120
1973	32.2	32.8	38.2	40.6	36.3	55.3	207	345	439	194	51.1	31.9	125
1974	29.7	29.0	31.6	32.8	31.5	29.0	82.2	136	217	87.9	28.0	27.8	63.5
1975	27.8	27.7	28.8	30.5	30.2	31.9	91.2	145	267	157	53.3	30.1	76.8
1976	25.5	23.8	26.6	28.8	27.8	37.9	123	198	261	173	40.7	30.8	83.1
1977	25.9	28.2	31.2	37.0	35.1	31.1	60.2	95.5	207	88.7	32.6	29.5	58.5
1978	29.3	31.7	31.3	33.9	30.8	35.1	120	230	294	143	39.5	29.9	87.5
1979	26.3	32.5	36.3	33.1	28.8	44.1	138	170	324	193	66.7	23.7	93.2
1980	23.6	31.6	32.0	35.1	36.2	45.1	150	217	315	80.2	25.9	22.9	84.3

1-8.L00-5A PANJSHER RIVER AT GULBAHAR

(U.S. Geological Survey identification number: 351000069170000)

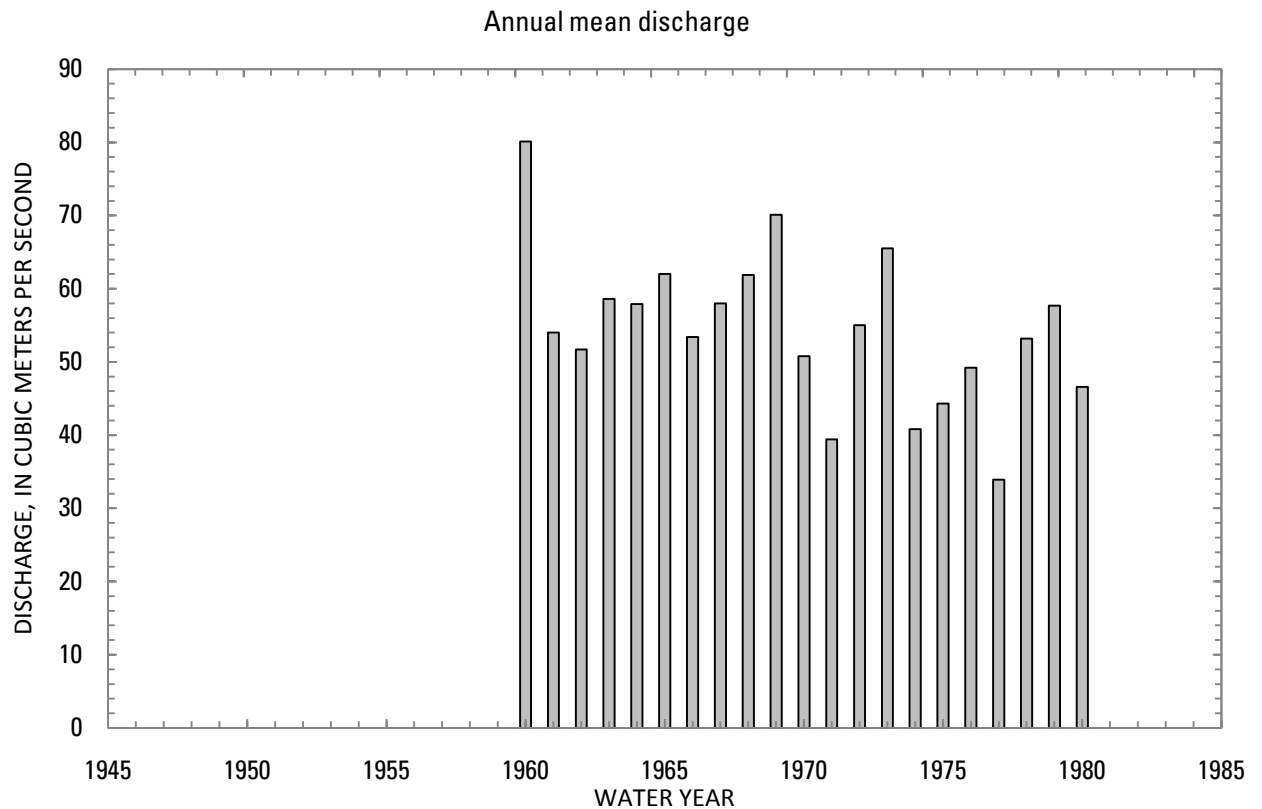
LOCATION: Lat 35°10'N., long 69°17'E.

DRAINAGE AREA: 3,565 km².

ELEVATION: 1,605 meters above mean sea level.

PERIOD OF RECORD: October 1, 1959 to September 30, 1980.

GAGE: Water-stage recorder.



1-8.L00-5A PANJSHER RIVER AT GULBAHAR, Continued

Statistics of monthly and annual mean discharges
[m³/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	27.1	1970	12.3	1964	17.2	3.40	0.20	2.64
November	24.3	1970	10.5	1964	14.4	3.10	0.22	2.20
December	19.3	1970	8.59	1971	12.2	2.48	0.20	1.87
January	17.2	1970	7.24	1971	10.6	2.40	0.23	1.62
February	14.1	1970	7.18	1971	10.4	2.01	0.19	1.59
March	23.4	1968	8.48	1962	13.9	3.55	0.26	2.12
April	62.9	1973	19.1	1977	36.2	10.0	0.28	5.54
May	148	1971	49.8	1977	92.8	27.7	0.30	14.2
June	316	1963	131	1971	219	51.5	0.24	33.5
July	298	1960	47.8	1971	148	60.6	0.41	22.7
August	99.4	1969	30.3	1971	53.9	19.0	0.35	8.26
September	36.3	1969	13.7	1963	24.4	5.61	0.23	3.74
Annual	80.1	1960	33.9	1977	54.5	10.6	0.19	100

1-8.L00-5A PANJSHER RIVER AT GULBAHAR, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	12.5	10.9	8.85	7.16	7.06	7.81	14.9	36.5	96.2	48.2	25.3	14.4	8.63
90	13.0	11.1	9.42	7.54	7.49	8.84	16.2	42.6	119	58.1	27.9	16.3	10.0
85	13.3	11.4	9.93	8.03	7.96	9.72	18.1	50.1	137	69.5	30.5	17.7	10.9
80	13.9	11.8	10.2	8.70	8.24	10.5	19.7	55.7	152	78.9	32.8	18.5	11.6
75	14.5	12.0	10.5	9.00	8.91	10.9	21.0	61.4	167	89.1	35.0	19.5	12.4
70	15.4	12.2	10.7	9.21	9.12	11.4	23.0	66.3	177	96.0	36.9	20.1	13.3
65	16.0	12.4	10.9	9.43	9.77	11.9	25.0	70.1	186	102	39.8	21.1	14.4
60	16.3	12.9	11.1	9.78	10.0	12.2	27.0	74.0	197	111	42.2	22.1	15.8
55	16.6	13.2	11.6	10.0	10.2	12.6	29.0	78.1	208	121	45.5	22.8	17.2
50	16.9	13.6	11.8	10.1	10.5	13.1	31.3	83.1	216	130	48.7	23.6	19.3
45	17.2	14.2	12.1	10.2	10.7	13.4	34.2	88.8	224	142	51.3	24.6	22.9
40	17.5	14.9	12.6	10.7	11.0	13.7	37.3	95.3	235	154	53.9	25.4	28.0
35	17.8	15.3	12.9	11.0	11.2	14.3	39.9	102	249	167	57.4	26.2	35.6
30	18.3	15.7	13.1	11.3	11.6	15.0	42.8	110	261	184	60.8	27.5	47.5
25	18.9	16.0	13.6	11.7	11.9	15.5	47.0	118	272	198	67.2	28.8	63.3
20	19.7	16.4	14.1	12.5	12.2	16.2	50.4	129	284	219	71.5	30.1	83.3
15	20.5	17.0	14.9	13.1	12.6	17.6	54.1	142	303	236	78.4	31.6	116
10	21.8	18.0	15.6	14.0	13.0	19.4	61.2	158	326	252	86.5	33.2	164
5	25.6	21.1	17.0	15.2	13.8	22.7	71.2	185	354	277	109	37.0	230

1-8.L00-5A PANJSHER RIVER AT GULBAHAR, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	209	179	166	147	125
0.95	1.05	255	209	193	172	152
0.90	1.11	282	227	210	188	168
0.80	1.25	318	250	232	209	189
0.50	2	394	300	281	257	234
0.20	5	483	360	343	317	286
0.10	10	534	395	381	353	316
0.04	25	592	436	427	397	349
0.02	50	631	465	460	429	372
0.01	100	668	492	492	460	393
0.005	200	702	¹ 518	523	490	413
0.002	500	746	ng	ng	ng	ng

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

1-8.L00-5A PANJSHER RIVER AT GULBAHAR, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	6.39	6.47	6.59	6.72	6.85	7.20	7.60	8.31	10.0
0.10	10	6.89	7.00	7.14	7.28	7.44	7.78	8.18	8.83	10.5
0.20	5	7.53	7.69	7.86	8.01	8.19	8.53	8.94	9.52	11.1
0.50	2	8.91	9.14	9.34	9.52	9.74	10.1	10.6	11.1	12.7

1-8.L00-5A PANJSHER RIVER AT GULBAHAR, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	6.43	6.66	6.77	6.93	7.04	7.30	7.68	9.15
0.10	10	6.89	7.20	7.32	7.49	7.76	8.11	8.44	9.85
0.20	5	7.49	7.88	8.02	8.21	8.67	9.13	9.45	10.8
0.50	2	8.84	9.33	9.50	9.74	10.4	11.2	11.6	13.1
		June-July-August				September-October-November			
0.05	20	17.5	19.1	22.8	29.2	9.85	10.2	10.4	10.8
0.10	10	20.5	22.2	25.6	32.7	10.2	10.5	10.7	11.2
0.20	5	24.3	26.3	29.4	37.7	10.7	11.1	11.3	11.8
0.50	2	32.3	34.8	38.3	49.7	12.2	12.6	12.9	13.5

1-8.L00-5A PANJSHER RIVER AT GULBAHAR, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1960	July 10, 1960	584	1960	July 10, 1960	584
1961	June 5, 1961	515	1964	July 4, 1964	569
1962	June 10, 1962	488	1963	June 20, 1963	520
1963	June 20, 1963	520	1961	June 5, 1961	515
1964	July 4, 1964	569	1962	June 10, 1962	488
1965	July 15, 1965	300	1979	June 23, 1979	477
1966	June 19, 1966	335	1973	June 13, 1973	473
1967	June 12, 1967	358	1969	June 20, 1969	424
1968	July 8, 1968	412	1978	June 5, 1978	418
1969	June 20, 1969	424	1968	July 8, 1968	412
1970	June 3, 1970	350	1972	June 25, 1972	385
1971	June 9, 1971	321	1967	June 12, 1967	358
1972	June 25, 1972	385	1970	June 3, 1970	350
1973	June 13, 1973	473	1977	June 23, 1977	338
1974	June 16, 1974	292	1966	June 19, 1966	335
1975	June 17, 1975	335	1975	June 17, 1975	335
1976	June 4, 1976	327	1976	June 4, 1976	327
1977	June 23, 1977	338	1971	June 9, 1971	321
1978	June 5, 1978	418	1965	July 15, 1965	300
1979	June 23, 1979	477	1974	June 16, 1974	292
1980	June 9, 1980	220	1980	June 9, 1980	220

1-8.L00-5A PANJSHER RIVER AT GULBAHAR, Continued

Monthly and annual mean discharges, in cubic meters per second
 [Data may not be rounded in accordance with U.S. Geological Survey publication standards]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1960	17.3	15.4	12.2	9.58	10.1	16.2	37.8	110	306	298	93.5	33.5	80.1
1961	20.3	16.1	12.4	9.64	8.07	9.15	25.4	92.4	235	138	52.8	27.7	54.0
1962	17.7	14.7	10.5	8.82	7.84	8.48	24.3	57.8	238	153	48.6	29.5	51.7
1963	17.9	13.4	9.70	7.44	7.57	11.7	27.4	75.6	316	162	41.2	13.7	58.6
1964	12.3	10.5	9.74	7.78	7.46	12.6	40.8	99.7	226	191	54.1	21.6	57.9
1965	15.4	13.4	12.9	11.9	11.7	15.2	38.4	90.6	202	231	68.5	28.2	62.0
1966	22.4	18.1	14.8	10.7	10.6	14.4	39.0	80.7	228	120	56.0	25.1	53.4
1967	16.7	13.0	10.7	9.22	12.9	14.1	35.5	77.1	219	184	72.3	30.5	58.0
1968	17.2	12.9	13.6	13.3	12.2	23.4	37.1	64.2	246	203	73.9	26.3	61.9
1969	20.0	16.8	15.3	13.4	11.7	19.1	37.8	88.9	257	222	99.4	36.3	70.1
1970	27.1	24.3	19.3	17.2	14.1	14.5	41.9	121	177	74.6	48.9	27.8	50.8
1971	15.0	12.0	8.59	7.24	7.18	11.1	34.5	148	131	47.8	30.3	17.4	39.4
1972	13.5	12.0	11.3	8.84	10.0	12.5	21.1	70.9	271	155	50.0	25.0	55.0
1973	17.4	15.5	13.5	11.7	12.5	20.3	62.9	146	280	138	44.5	22.4	65.5
1974	19.3	15.2	12.2	10.2	10.0	12.7	33.1	82.0	152	91.2	31.5	18.2	40.8
1975	13.7	11.5	9.98	9.32	9.20	10.7	31.4	66.4	175	119	52.2	22.6	44.3
1976	16.7	14.8	12.0	11.3	10.9	12.9	38.6	99.2	164	139	46.5	23.7	49.2
1977	15.7	11.8	10.6	10.8	11.2	12.2	19.1	49.8	138	80.2	30.6	16.5	33.9
1978	13.2	11.7	11.1	9.55	9.18	12.6	41.4	138	221	103	44.4	22.0	53.2
1979	14.6	11.6	11.0	10.0	10.5	13.3	53.6	81.4	223	175	62.0	23.6	57.7
1980	18.0	16.7	15.5	13.9	13.0	13.7	38.4	108	189	82.8	31.1	20.5	46.6

1-8.L00-8A PANJSHER RIVER AT OMARZ

(U.S. Geological Survey identification number: 352200069380000)

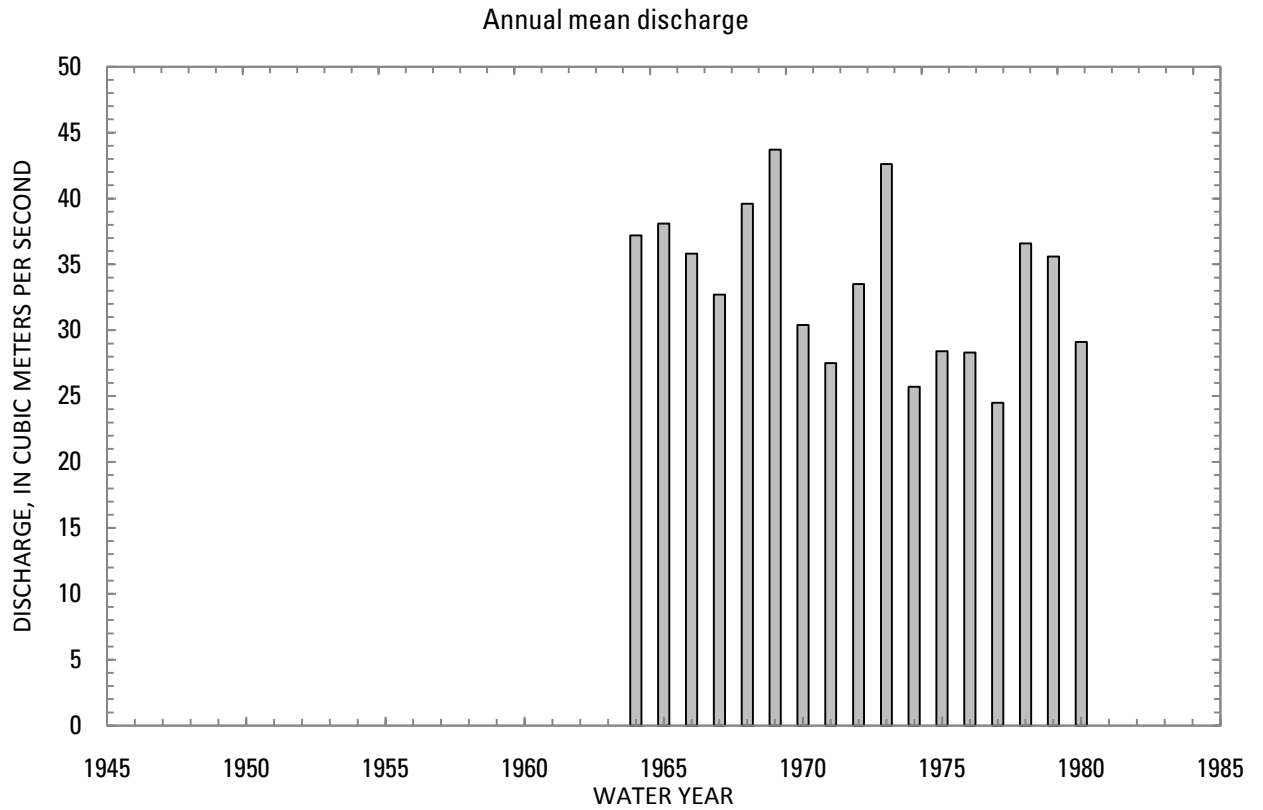
LOCATION: Lat 35°22'N., long 69°38'E.

DRAINAGE AREA: 2,240 km².

ELEVATION: 2,010 meters above mean sea level.

PERIOD OF RECORD: October 1, 1962 to February 20, 1963 and June 25, 1963 to September 30, 1980.

GAGE: Water-stage recorder.



1-8.L00-8A PANJSHER RIVER AT OMARZ, Continued

Statistics of monthly and annual mean discharges
[m³/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	15.8	1970	7.90	1972	11.9	2.05	0.17	2.95
November	12.4	1973	7.51	1972	9.50	1.55	0.16	2.36
December	10.7	1973	6.04	1975	7.96	1.35	0.17	1.98
January	9.11	1970	5.27	1979	6.85	1.18	0.17	1.71
February	8.72	1970	5.05	1975	6.46	0.92	0.14	1.61
March	10.0	1971	5.55	1975	7.45	1.32	0.18	1.86
April	23.7	1971	10.5	1977	16.3	4.12	0.25	4.05
May	92.4	1971	32.1	1977	50.1	18.1	0.36	12.5
June	190	1973	89.2	1971	131	28.5	0.22	32.5
July	153	1969	34.7	1971	95.8	33.3	0.35	23.9
August	75.5	1969	24.0	1974	40.3	13.2	0.33	10.0
September	27.6	1969	11.9	1971	18.5	3.72	0.20	4.60
Annual	43.7	1969	24.5	1977	33.5	5.80	0.17	100

1-8.L00-8A PANJSHER RIVER AT OMARZ, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	8.49	7.02	5.88	5.12	4.96	5.52	7.15	17.3	57.5	35.9	20.2	11.7	5.78
90	9.04	7.43	6.19	5.42	5.40	5.67	8.45	20.1	68.9	41.2	22.7	12.7	6.26
85	9.55	7.78	6.30	5.51	5.67	5.97	9.04	22.5	79.0	46.5	23.9	14.2	6.73
80	9.79	8.10	6.62	5.74	5.77	6.09	9.63	25.4	86.8	55.1	25.1	14.8	7.18
75	10.0	8.22	6.94	6.00	5.85	6.19	10.0	29.1	94.9	62.7	26.8	15.4	7.74
70	10.5	8.37	7.05	6.09	5.92	6.28	10.6	31.9	101	66.8	28.7	15.7	8.38
65	11.0	8.57	7.20	6.19	5.99	6.58	11.4	34.3	108	70.8	31.4	16.1	9.03
60	11.2	8.76	7.51	6.29	6.13	6.69	12.1	36.8	114	75.0	33.2	16.7	9.81
55	11.4	8.92	7.72	6.62	6.22	6.83	13.3	39.9	123	81.4	34.8	17.4	11.0
50	11.7	9.07	8.00	6.82	6.29	6.99	14.2	43.9	130	88.8	36.4	17.8	12.3
45	12.0	9.48	8.13	6.95	6.53	7.27	15.2	48.0	137	95.6	38.5	18.1	14.8
40	12.4	9.77	8.24	7.21	6.63	7.44	16.7	51.0	145	102	40.7	19.2	18.2
35	12.8	10.0	8.38	7.3	6.91	7.62	17.8	54.2	154	108	42.7	20.0	22.0
30	13.0	10.4	8.55	7.46	6.99	7.84	19.2	58.1	161	115	45.0	20.7	28.6
25	13.4	10.6	9.00	7.73	7.08	8.36	20.0	63.2	170	123	49.0	21.4	37.9
20	13.8	11.1	9.18	7.87	7.18	9.02	21.7	69.3	177	139	53.7	22.1	52.1
15	14.4	11.7	9.35	8.08	7.34	9.34	23.3	76.9	185	153	58.3	22.9	70.2
10	14.9	12.1	9.89	8.76	7.65	9.74	26.1	91.2	194	163	62.6	24.9	100
5	15.7	12.7	10.8	8.95	ng	10.8	31.8	109	204	180	71.9	28.3	144

1-8.L00-8A PANJSHER RIVER AT OMARZ, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	181	125	113	97.8	82.1
0.95	1.05	202	142	130	114	98.0
0.90	1.11	214	152	139	124	107
0.80	1.25	230	163	151	135	119
0.50	2	264	187	174	160	144
0.20	5	303	213	200	185	172
0.10	10	326	227	214	199	187
0.04	25	353	242	229	214	204
0.02	50	371	252	239	224	216
0.01	100	389	261	248	233	226
0.005	200	405	270	257	241	236
0.002	500	427	ng	ng	ng	ng

1-8.L00-8A PANJSHER RIVER AT OMARZ, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	3.83	4.27	4.63	4.77	4.99	5.15	5.28	5.54	6.55
0.10	10	4.10	4.52	4.83	4.98	5.17	5.35	5.52	5.80	6.85
0.20	5	4.47	4.84	5.11	5.27	5.44	5.62	5.83	6.14	7.24
0.50	2	5.26	5.56	5.76	5.93	6.06	6.26	6.54	6.91	8.13

1-8.L00-8A PANJSHER RIVER AT OMARZ, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	3.81	4.6	4.76	4.95	5.06	5.31	5.34	5.55
0.10	10	4.14	4.86	5.02	5.20	5.25	5.53	5.59	5.87
0.20	5	4.57	5.20	5.35	5.54	5.52	5.82	5.92	6.31
0.50	2	5.47	5.94	6.09	6.27	6.14	6.47	6.66	7.26
		June-July-August				September-October-November			
0.05	20	17.7	18.6	18.7	22.5	6.49	6.68	6.76	7.23
0.10	10	18.8	20.0	20.8	25.1	6.79	6.98	7.10	7.6
0.20	5	20.2	21.9	23.6	28.6	7.20	7.39	7.55	8.10
0.50	2	23.8	26.3	29.9	37.4	8.16	8.38	8.61	9.24

1-8.L00-8A PANJSHER RIVER AT OMARZ, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1964	July 2, 1964	272	1973	June 12, 1973	342
1965	July 14, 1965	224	1979	June 23, 1979	326
1966	June 19, 1966	300	1968	July 18, 1968	318
1967	June 28, 1967	237	1972	June 21, 1972	306
1968	July 18, 1968	318	1978	July 6, 1978	305
1969	June 20, 1969	279	1966	June 19, 1966	300
1970	June 3, 1970	226	1977	June 22, 1977	284
1971	May 27, 1971	252	1969	June 20, 1969	279
1972	June 21, 1972	306	1964	July 2, 1964	272
1973	June 12, 1973	342	1971	May 27, 1971	252
1974	June 16, 1974	219	1967	June 28, 1967	237
1975	June 15, 1975	228	1975	June 15, 1975	228
1976	July 8, 1976	210	1970	June 3, 1970	226
1977	June 22, 1977	284	1965	July 14, 1965	224
1978	July 6, 1978	305	1974	June 16, 1974	219
1979	June 23, 1979	326	1980	June 11, 1980	213
1980	June 11, 1980	213	1976	July 8, 1976	210

1-8.L00-8A PANJSHER RIVER AT OMARZ, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1963	12.1	10.4	8.71	7.61	--	--	--	--	--	105	41.1	19.4	--
1964	14.8	10.9	8.32	7.43	7.58	8.45	14.5	45.3	130	126	52.7	20.2	37.2
1965	11.0	7.64	6.21	6.20	6.02	8.53	12.6	42.1	139	140	53.0	22.6	38.1
1966	12.9	11.4	9.67	8.39	6.67	6.82	13.8	54.1	143	93.8	45.7	21.7	35.8
1967	11.9	8.68	6.79	5.79	5.97	6.07	11.5	33.3	126	113	42.3	19.5	32.7
1968	11.2	8.19	7.19	6.72	6.42	7.65	17.2	34.4	161	142	54.2	19.0	39.6
1969	13.8	10.2	9.25	7.26	7.08	9.56	20.5	38.4	149	153	75.5	27.6	43.7
1970	15.8	12.2	9.73	9.11	8.72	9.27	19.4	63.9	103	53.3	37.3	21.8	30.4
1971	11.8	9.52	7.77	6.09	6.47	10.0	23.7	92.4	89.2	34.7	25.1	11.9	27.5
1972	7.90	7.51	6.08	5.34	5.67	7.28	12.3	34.3	151	104	40.9	19.6	33.5
1973	14.7	12.4	10.7	8.71	7.19	7.15	21.1	79.1	190	106	36.4	17.4	42.6
1974	10.4	8.16	7.40	6.00	6.03	7.56	14.8	41.7	101	67.5	24.0	13.2	25.7
1975	9.50	7.63	6.04	5.51	5.05	5.55	12.5	35.8	113	86.0	37.6	16.0	28.4
1976	9.71	8.05	7.08	5.90	5.63	5.79	13.0	45.3	95.0	92.6	32.1	18.1	28.3
1977	12.5	10.1	8.84	7.82	6.84	7.10	10.5	32.1	98.8	57.5	25.8	15.2	24.5
1978	9.74	8.78	8.05	7.26	6.93	7.32	19.4	73.4	168	80.6	31.5	17.6	36.6
1979	12.1	9.56	7.18	5.27	5.08	6.23	21.9	41.4	142	113	45.2	17.5	35.6
1980	11.6	9.68	8.21	6.95	6.51	6.42	17.6	63.8	123	56.8	24.2	14.5	29.1

1-9.R00-4W CHAKARI RIVER AT BAND-I-AMIR GHAZI

(U.S. Geological Survey identification number: 342500069230000)

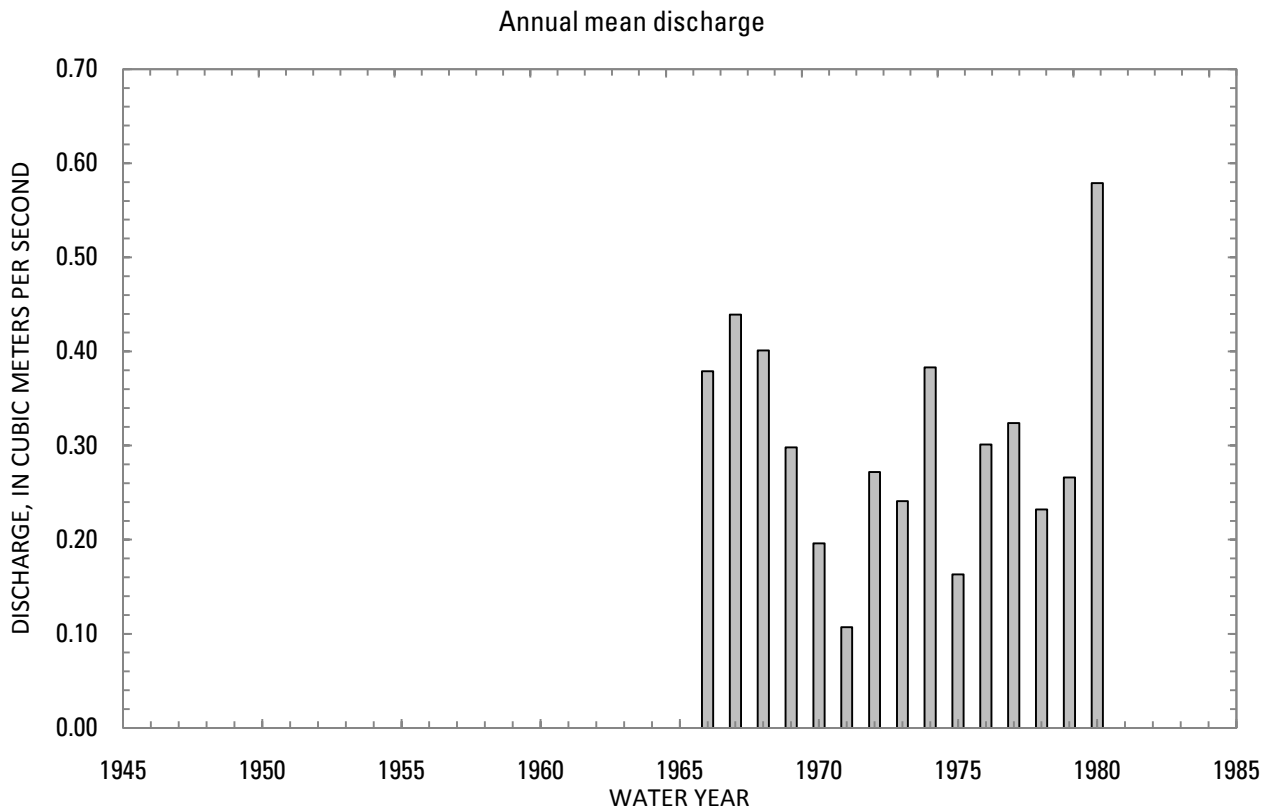
LOCATION: Lat 34°25'N., long 69°23'E.

DRAINAGE AREA: 395 km².

ELEVATION: 2,050 meters above mean sea level.

PERIOD OF RECORD: May 26, 1965 to September 30, 1980.

GAGE: Staff gage.



1-9.R00-4W CHAKARI RIVER AT BAND-I-AMIR GHAZI, Continued

Statistics of monthly and annual mean discharges
[m³/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	0.68	1968	0.05	1972	0.33	0.17	0.53	8.80
November	1.06	1968	0.10	1971	0.34	0.24	0.73	9.06
December	0.94	1968	0.02	1978	0.15	0.22	1.53	3.95
January	0.25	1967	0.01	1978	0.05	0.06	1.33	1.22
February	0.38	1967	0.01	1978	0.10	0.11	1.17	2.57
March	0.62	1980	0.01	1977	0.18	0.21	1.20	4.80
April	1.71	1980	0.03	1975	0.44	0.40	0.89	12.0
May	0.96	1967	0.05	1975	0.55	0.26	0.47	14.9
June	0.93	1974	0.04	1971	0.52	0.29	0.56	14.0
July	0.97	1980	0.03	1971	0.39	0.23	0.58	10.7
August	0.94	1980	0.05	1971	0.34	0.22	0.65	9.14
September	0.86	1979	0.06	1971	0.33	0.20	0.59	8.99
Annual	0.58	1980	0.11	1971	0.31	0.12	0.39	100

1-9.R00-4W CHAKARI RIVER AT BAND-I-AMIR GHAZI, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.06	0.07	0.02	0.01	0.01	0.01	0.02	0.07	0.04	0.03	0.05	0.05	0.02
90	0.08	0.10	0.02	0.02	0.02	0.02	0.03	0.13	0.07	0.12	0.07	0.07	0.02
85	0.12	0.12	0.02	0.02	0.02	0.02	0.09	0.25	0.23	0.14	0.11	0.10	0.03
80	0.19	0.13	0.02	0.02	0.02	0.02	0.13	0.25	0.24	0.21	0.13	0.20	0.04
75	0.20	0.15	0.03	0.02	0.02	0.03	0.14	0.34	0.31	0.23	0.20	0.21	0.06
70	0.21	0.16	0.03	0.02	0.03	0.03	0.17	0.41	0.35	0.24	0.22	0.22	0.08
65	0.24	0.22	0.03	0.02	0.03	0.03	0.25	0.48	0.38	0.26	0.23	0.24	0.13
60	0.25	0.23	0.04	0.03	0.04	0.04	0.31	0.49	0.41	0.31	0.25	0.25	0.17
55	0.29	0.25	0.04	0.03	0.04	0.04	0.40	0.50	0.45	0.33	0.30	0.26	0.22
50	0.30	0.26	0.05	0.03	0.05	0.05	0.44	0.51	0.47	0.34	0.32	0.31	0.25
45	0.31	0.31	0.05	0.03	0.05	0.10	0.46	0.52	0.49	0.36	0.33	0.32	0.27
40	0.32	0.33	0.06	0.03	0.06	0.15	0.48	0.57	0.51	0.38	0.35	0.34	0.30
35	0.34	0.36	0.07	0.04	0.07	0.19	0.49	0.67	0.56	0.41	0.38	0.36	0.34
30	0.36	0.39	0.09	0.04	0.10	0.20	0.51	0.71	0.72	0.44	0.41	0.38	0.40
25	0.39	0.42	0.12	0.05	0.14	0.26	0.54	0.75	0.80	0.48	0.44	0.40	0.44
20	0.44	0.48	0.15	0.05	0.18	0.37	0.58	0.82	0.87	0.53	0.47	0.44	0.48
15	0.48	0.51	0.23	0.06	0.23	0.40	0.71	0.88	0.93	0.60	0.50	0.50	0.53
10	0.51	0.67	0.31	0.07	0.30	0.53	0.79	1.01	1.00	0.79	0.52	0.54	0.75
5	0.86	0.90	0.82	0.20	0.37	0.62	1.58	1.13	1.07	0.96	0.69	0.80	0.95

1-9.R00-4W CHAKARI RIVER AT BAND-I-AMIR GHAZI, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	0.30	0.27	0.27	0.25	0.24
0.95	1.05	0.40	0.39	0.39	0.36	0.34
0.90	1.11	0.50	0.47	0.47	0.44	0.42
0.80	1.25	0.60	0.59	0.59	0.55	0.52
0.50	2	1.00	0.90	0.89	0.85	0.78
0.20	5	1.40	1.34	1.32	1.27	1.14
0.10	10	1.70	1.64	1.61	1.55	1.38
0.04	25	2.00	2.03	1.99	1.92	1.68
0.02	50	2.20	2.31	2.27	2.19	1.89
0.01	100	2.40	2.60	2.55	2.46	2.11
0.005	200	2.60	2.89	2.83	2.73	2.32
0.002	500	2.90	ng	ng	ng	ng

1-9.R00-4W CHAKARI RIVER AT BAND-I-AMIR GHAZI, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0	0.01	0.01	0.01	0.01	0.02	0.05
0.10	10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.07
0.20	5	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.09
0.50	2	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.06	0.15

1-9.R00-4W CHAKARI RIVER AT BAND-I-AMIR GHAZI, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.10	10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.20	5	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
0.50	2	0.02	0.02	0.02	0.02	0.05	0.05	0.05	0.07
		June-July-August				September-October-November			
0.05	20	0.01	0.01	0.02	0.04	0	0	0.04	0.06
0.10	10	0.01	0.02	0.03	0.07	0.01	0.01	0.06	0.08
0.20	5	0.03	0.04	0.06	0.13	0.03	0.04	0.08	0.12
0.50	2	0.11	0.13	0.18	0.27	0.11	0.12	0.16	0.22

1-9.R00-4W CHAKARI RIVER AT BAND-I-AMIR GHAZI, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1966	May 1, 1966	1.00	1980	April 17, 1980	1.92
1967	May 23, 1967	1.26	1968	December 9, 1967	1.67
1968	December 9, 1967	1.67	1979	September 13, 1979	1.43
1969	March 13, 1968	0.55	1972	June 18, 1972	1.36
1970	July 17, 1970	0.96	1967	May 23, 1967	1.26
1971	May 1, 1971	0.55	1978	June 9, 1978	1.19
1972	June 18, 1972	1.36	1974	June 8, 1974	1.06
1973	April 21, 1973	0.55	1966	May 1, 1966	1.00
1974	June 8, 1974	1.06	1970	July 17, 1970	0.96
1975	June 8, 1975	0.39	1976	May 17, 1976	0.82
1976	May 17, 1976	0.82	1977	August 9, 1977	0.82
1977	August 9, 1977	0.82	1969	March 13, 1968	0.55
1978	June 9, 1978	1.19	1971	May 1, 1971	0.55
1979	September 13, 1979	1.43	1973	April 21, 1973	0.55
1980	April 17, 1980	1.92	1975	June 8, 1975	0.39

1-9.R00-4W CHAKARI RIVER AT BAND-I-AMIR GHAZI, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1965	--	--	--	--	--	--	--	--	0.76	0.57	0.49	0.42	--
1966	0.44	0.43	0.19	0.07	0.31	0.59	0.74	0.58	0.41	0.29	0.29	0.22	0.38
1967	0.35	0.33	0.05	0.25	0.38	0.40	0.33	0.96	0.90	0.54	0.32	0.46	0.44
1968	0.68	1.06	0.94	0.05	0.05	0.03	0.34	0.48	0.26	0.25	0.36	0.32	0.40
1969	0.23	0.19	0.12	0.03	0.14	0.38	0.42	0.47	0.40	0.43	0.44	0.30	0.30
1970	0.29	0.39	0.07	0.03	0.15	0.19	0.37	0.31	0.22	0.15	0.11	0.08	0.20
1971	0.07	0.10	0.04	0.02	0.04	0.03	0.43	0.39	0.04	0.03	0.05	0.06	0.11
1972	0.05	0.15	0.07	0.04	0.06	0.10	0.43	0.85	0.86	0.27	0.20	0.20	0.27
1973	0.20	0.10	0.05	0.05	0.03	0.03	0.28	0.47	0.50	0.49	0.34	0.34	0.24
1974	0.28	0.25	0.09	0.03	0.09	0.18	0.56	0.84	0.93	0.72	0.34	0.28	0.38
1975	0.25	0.30	0.13	0.01	0.02	0.02	0.03	0.05	0.26	0.30	0.30	0.29	0.16
1976	0.43	0.22	0.06	0.02	0.02	0.07	0.46	0.77	0.76	0.24	0.26	0.31	0.30
1977	0.24	0.52	0.15	0.02	0.01	0.01	0.36	0.52	0.41	0.37	0.66	0.62	0.32
1978	0.34	0.20	0.02	0.01	0.01	0.01	0.08	0.45	0.89	0.28	0.23	0.26	0.23
1979	0.45	0.56	0.16	0.01	0.02	0.02	0.11	0.24	0.26	0.42	0.09	0.86	0.27
1980	0.59	0.23	0.07	0.04	0.11	0.62	1.71	0.88	0.43	0.97	0.94	0.35	0.58

1-11.1L0-4W QARGHA RIVER BELOW QARGHA RESERVOIR

(U.S. Geological Survey identification number: 343300069020000)

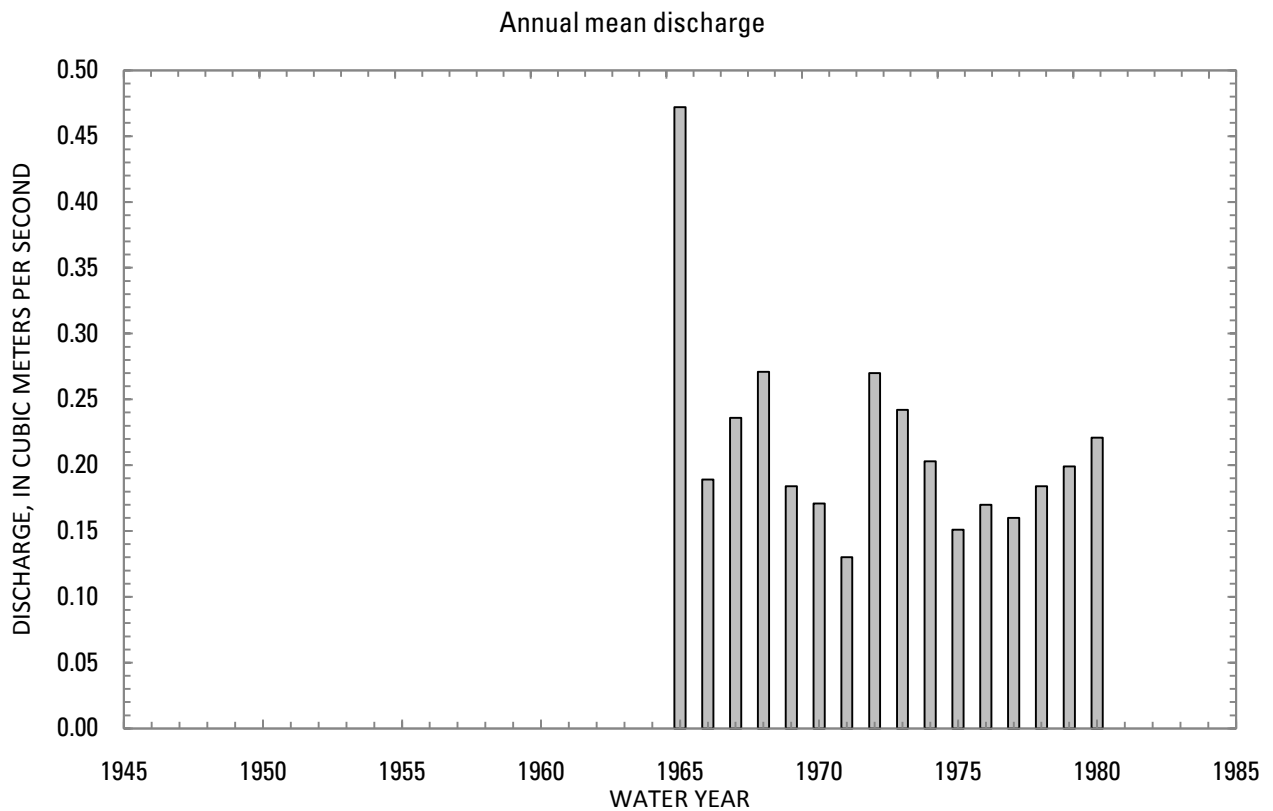
LOCATION: Lat 34°33'N., long 69°02'E.

DRAINAGE AREA: 115 km².

ELEVATION: 1,950 meters above mean sea level.

PERIOD OF RECORD: October 1, 1964 to September 30, 1980.

GAGE: Water-stage recorder.



1-11.1L0-4W QARGHA RIVER BELOW QARGHA RESERVOIR, Continued

Statistics of monthly and annual mean discharges
[m³/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	0.60	1974	0.07	1972	0.24	0.13	0.55	9.26
November	0.37	1974	0.06	1970	0.15	0.09	0.62	5.84
December	0.33	1965	0.03	1976	0.09	0.07	0.78	3.55
January	0.28	1965	0.02	1976	0.08	0.06	0.76	3.08
February	0.31	1965	0.02	1976	0.09	0.07	0.79	3.51
March	0.31	1965	0.03	1976	0.10	0.07	0.73	3.76
April	0.42	1965	0.05	1976	0.13	0.09	0.67	5.21
May	0.88	1972	0.12	1977	0.32	0.23	0.71	12.5
June	0.97	1965	0.20	1975	0.38	0.23	0.60	14.8
July	0.54	1973	0.13	1966	0.33	0.11	0.34	12.9
August	0.62	1965	0.14	1969	0.34	0.12	0.34	13.3
September	0.68	1965	0.10	1971	0.32	0.15	0.46	12.3
Annual	0.47	1965	0.13	1971	0.22	0.08	0.37	100

1-11.1L0-4W QARGHA RIVER BELOW QARGHA RESERVOIR, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.07	0.04	0.03	0.03	0.03	0.03	0.04	0.09	0.17	0.15	0.13	0.10	0.04
90	0.08	0.06	0.04	0.03	0.03	0.04	0.05	0.11	0.20	0.19	0.16	0.12	0.05
85	0.09	0.06	0.04	0.04	0.04	0.04	0.06	0.13	0.20	0.21	0.21	0.15	0.06
80	0.12	0.07	0.05	0.04	0.04	0.04	0.07	0.14	0.21	0.22	0.24	0.20	0.07
75	0.15	0.07	0.05	0.04	0.04	0.05	0.08	0.16	0.21	0.25	0.27	0.23	0.08
70	0.17	0.08	0.06	0.05	0.05	0.05	0.09	0.17	0.25	0.26	0.30	0.24	0.10
65	0.19	0.09	0.06	0.05	0.05	0.06	0.10	0.18	0.26	0.28	0.31	0.26	0.11
60	0.20	0.10	0.07	0.06	0.06	0.07	0.10	0.19	0.27	0.30	0.31	0.29	0.13
55	0.21	0.10	0.07	0.06	0.07	0.09	0.11	0.21	0.29	0.31	0.32	0.30	0.14
50	0.23	0.12	0.07	0.07	0.07	0.09	0.12	0.22	0.31	0.32	0.34	0.32	0.16
45	0.25	0.13	0.08	0.07	0.09	0.10	0.12	0.24	0.33	0.35	0.35	0.33	0.19
40	0.26	0.15	0.08	0.08	0.09	0.10	0.13	0.26	0.36	0.36	0.35	0.34	0.22
35	0.28	0.17	0.09	0.09	0.10	0.10	0.13	0.28	0.37	0.40	0.37	0.36	0.26
30	0.30	0.20	0.10	0.09	0.12	0.11	0.13	0.30	0.40	0.41	0.40	0.37	0.29
25	0.32	0.22	0.12	0.10	0.13	0.12	0.14	0.34	0.44	0.42	0.43	0.38	0.32
20	0.33	0.26	0.13	0.10	0.13	0.13	0.16	0.41	0.52	0.43	0.45	0.41	0.34
15	0.35	0.28	0.14	0.12	0.14	0.15	0.20	0.50	0.60	0.47	0.49	0.47	0.39
10	0.42	0.32	0.16	0.15	0.18	0.20	0.27	0.64	0.69	0.52	0.51	0.50	0.44
5	ng	0.37	ng	ng	0.28	0.27	0.39	1.05	0.93	0.58	0.59	0.65	0.56

1-11.1L0-4W QARGHA RIVER BELOW QARGHA RESERVOIR, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	0.40	0.35	0.32	0.29	0.25
0.95	1.05	0.40	0.37	0.34	0.32	0.28
0.90	1.11	0.40	0.38	0.36	0.34	0.30
0.80	1.25	0.50	0.42	0.40	0.37	0.33
0.50	2	0.70	0.54	0.53	0.49	0.43
0.20	5	1.30	0.87	0.82	0.72	0.62
0.10	10	2.10	1.22	1.11	0.92	0.79
0.04	25	4.00	1.87	1.62	1.26	1.05
0.02	50	6.50	2.59	2.14	1.58	1.28
0.01	100	10.6	3.56	2.82	1.97	1.56
0.005	200	17.0	4.87	3.70	2.45	1.89
0.002	500	32.0	ng	ng	ng	ng

1-11.1L0-4W QARGHA RIVER BELOW QARGHA RESERVOIR, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.06
0.10	10	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.07
0.20	5	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.08
0.50	2	0.03	0.04	0.04	0.04	0.04	0.05	0.06	0.07	0.11

1-11.1L0-4W QARGHA RIVER BELOW QARGHA RESERVOIR, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03
0.10	10	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.04
0.20	5	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05
0.50	2	0.04	0.04	0.04	0.05	0.05	0.06	0.06	0.07
		June-July-August				September-October-November			
0.05	20	0.08	0.08	0.09	0.13	0.03	0.03	0.04	0.06
0.10	10	0.10	0.10	0.11	0.15	0.03	0.03	0.05	0.07
0.20	5	0.13	0.13	0.14	0.18	0.04	0.04	0.06	0.08
0.50	2	0.19	0.21	0.22	0.25	0.06	0.07	0.08	0.11

1-11.1L0-4W QARGHA RIVER BELOW QARGHA RESERVOIR, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1965	May 11, 1965	1.27	1972	May 14, 1972	5.90
1966	August 22, 1966	0.44	1978	July 6, 1978	3.06
1967	June 18, 1967	0.58	1965	May 11, 1965	1.27
1968	May 2, 1968	1.20	1968	May 2, 1968	1.20
1969	June 1, 1969	0.93	1969	June 1, 1969	0.93
1970	June 20, 1970	0.63	1973	July 18, 1973	0.70
1971	June 7, 1971	0.50	1976	May 18, 1976	0.65
1972	May 14, 1972	5.90	1970	June 20, 1970	0.63
1973	July 18, 1973	0.70	1974	October 1, 1973	0.60
1974	October 1, 1973	0.60	1967	June 18, 1967	0.58
1975	August 21, 1975	0.55	1979	July 11, 1979	0.56
1976	May 18, 1976	0.65	1975	August 21, 1975	0.55
1977	October 18, 1976	0.45	1971	June 7, 1971	0.50
1978	July 6, 1978	3.06	1980	July 28, 1980	0.48
1979	July 11, 1979	0.56	1977	October 18, 1976	0.45
1980	July 28, 1980	0.48	1966	August 22, 1966	0.44

1-11.1L0-4W QARGHA RIVER BELOW QARGHA RESERVOIR, Continued

Monthly and annual mean discharges, in cubic meters per second
 [Data may not be rounded in accordance with U.S. Geological Survey publication standards]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1965	0.15	0.33	0.33	0.28	0.31	0.31	0.42	0.75	0.97	0.53	0.62	0.68	0.47
1966	0.37	0.14	0.12	0.09	0.12	0.12	0.13	0.17	0.28	0.13	0.33	0.27	0.19
1967	0.25	0.27	0.10	0.07	0.09	0.09	0.07	0.28	0.39	0.43	0.45	0.34	0.24
1968	0.27	0.09	0.09	0.10	0.12	0.10	0.23	0.65	0.61	0.44	0.31	0.24	0.27
1969	0.13	0.11	0.13	0.14	0.18	0.19	0.22	0.27	0.35	0.23	0.14	0.11	0.18
1970	0.08	0.06	0.05	0.07	0.12	0.11	0.11	0.21	0.35	0.33	0.30	0.26	0.17
1971	0.21	0.08	0.06	0.04	0.06	0.07	0.11	0.22	0.20	0.26	0.14	0.10	0.13
1972	0.07	0.08	0.07	0.08	0.03	0.04	0.10	0.88	0.83	0.38	0.45	0.23	0.27
1973	0.16	0.21	0.04	0.04	0.06	0.12	0.11	0.22	0.44	0.54	0.42	0.53	0.24
1974	0.60	0.37	0.08	0.03	0.06	0.05	0.11	0.21	0.20	0.21	0.24	0.28	0.20
1975	0.19	0.07	0.06	0.06	0.04	0.04	0.06	0.14	0.20	0.27	0.37	0.32	0.15
1976	0.19	0.09	0.03	0.02	0.02	0.03	0.05	0.35	0.23	0.36	0.34	0.33	0.17
1977	0.31	0.10	0.04	0.06	0.04	0.08	0.11	0.12	0.22	0.29	0.30	0.24	0.16
1978	0.22	0.13	0.07	0.07	0.09	0.10	0.10	0.24	0.24	0.27	0.34	0.34	0.18
1979	0.28	0.14	0.07	0.09	0.08	0.06	0.11	0.14	0.26	0.31	0.39	0.46	0.20
1980	0.36	0.15	0.12	0.05	0.04	0.04	0.14	0.33	0.35	0.36	0.36	0.34	0.22

1-11.1L0-5W QARGHA RIVER ABOVE QARGHA RESERVOIR

(U.S. Geological Survey identification number: 343400069010000)

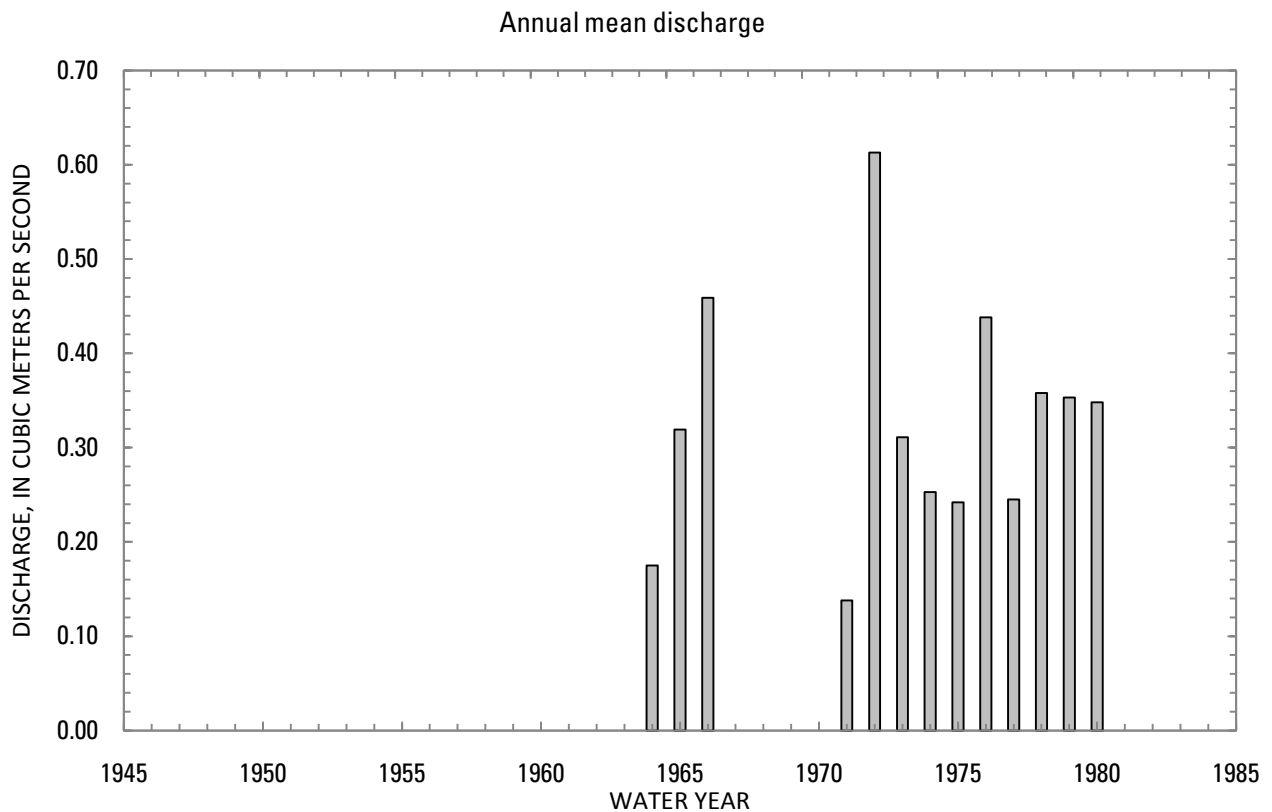
LOCATION: Lat 34°34'N., long 69°01'E.

DRAINAGE AREA: 70 km².

ELEVATION: 2,035 meters above mean sea level.

PERIOD OF RECORD: April 16, 1963 to September 30, 1966 and March 18, 1970 to September 30, 1980.

GAGE: Water-stage recorder.



1-11.1L0-5W QARGHA RIVER ABOVE QARGHA RESERVOIR, Continued

Statistics of monthly and annual mean discharges
[m³/s, cubic meters per second; ng, not given]

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	0.06	1973	0	ng	0	0.02	3.61	0.12
November	0.11	1973	0	ng	0.01	0.03	3.61	0.21
December	0.12	1973	0	ng	0.01	0.04	2.62	0.35
January	0.32	1980	0	ng	0.04	0.09	2.22	1.03
February	0.29	1977	0	ng	0.09	0.11	1.22	2.28
March	1.23	1976	0.05	1964	0.62	0.36	0.58	16.0
April	3.35	1980	0.86	1964	1.93	0.82	0.42	49.7
May	1.82	1979	0	1977	0.87	0.56	0.65	22.4
June	1.18	1972	0	ng	0.20	0.34	1.67	5.21
July	0.48	1965	0	ng	0.10	0.18	1.83	2.50
August	0.16	1978	0	ng	0.01	0.04	3.87	0.27
September	0.00	1963	0	ng	0	0	ng	0
Annual	0.61	1972	0.14	1971	0.33	0.13	0.39	100

1-11.1L0-5W QARGHA RIVER ABOVE QARGHA RESERVOIR, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0	0	0	0	0	0.01	0.55	0	0	0	0	0	0
90	0	0	0	0	0	0.02	0.73	0	0	0	0.01	0	0
85	0	0.01	0	0	0	0.03	0.81	0.01	0	0	0.02	0	0
80	0	0.02	0	0	0	0.04	0.91	0.02	0	0	0.02	0	0
75	0	0.02	0	0	0	0.06	1.04	0.08	0	0	0.03	0	0
70	0	0.03	0	0	0	0.09	1.20	0.23	0	0	0.03	0	0
65	0	0.03	0	0	0	0.13	1.38	0.40	0	0	0.04	0	0
60	0	0.04	0	0	0.01	0.21	1.49	0.57	0	0	0.04	0	0
55	0	0.04	0	0	0.02	0.33	1.60	0.64	0	0	0.05	0	0
50	0	0.05	0	0	0.02	0.47	1.73	0.77	0	0	0.05	0	0
45	0	0.05	0	0	0.04	0.56	1.87	0.85	0	0	0.06	0	0
40	0	0.06	0	0	0.05	0.67	2.02	0.93	0.02	0	0.06	0	0
35	0	0.06	0	0	0.07	0.77	2.17	1.02	0.07	0	0.07	0	0.02
30	0	0.07	0	0.01	0.10	0.87	2.36	1.11	0.17	0	0.07	0	0.08
25	0	0.07	0	0.02	0.12	0.99	2.58	1.29	0.30	0	0.08	0	0.17
20	0	0.08	0	0.06	0.15	1.14	2.87	1.53	0.42	0	0.08	0	0.48
15	0	0.08	0	0.08	0.21	1.28	3.21	1.75	0.54	0.10	0.09	0	0.84
10	0	0.09	0.05	0.10	0.28	1.45	3.69	1.93	0.77	0.42	0.09	0	1.20
5	0.02	0.10	0.06	0.11	0.43	1.78	4.19	2.49	1.00	0.56	0.10	0	1.90

1-11.1L0-5W QARGHA RIVER ABOVE QARGHA RESERVOIR, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	1.70	1.51	1.31	1.03	0.90
0.95	1.05	2.30	1.94	1.65	1.33	1.13
0.90	1.11	2.70	2.20	1.87	1.52	1.27
0.80	1.25	3.20	2.54	2.17	1.79	1.48
0.50	2	4.20	3.32	2.88	2.47	2.00
0.20	5	5.30	4.26	3.83	3.43	2.73
0.10	10	5.90	4.81	4.44	4.08	3.23
0.04	25	6.60	5.45	5.20	4.93	3.89
0.02	50	7.00	5.89	5.76	5.57	4.39
0.01	100	7.30	¹ 6.30	6.32	6.23	4.90
0.005	200	7.60	¹ 6.69	¹ 6.87	6.90	5.44
0.002	500	8.00	ng	ng	ng	ng

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

1-11.1L0-5W QARGHA RIVER ABOVE QARGHA RESERVOIR, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /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

1-11.1L0-5W QARGHA RIVER ABOVE QARGHA RESERVOIR, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	ng	ng	ng	ng	0	0	0	0
0.10	10	ng	ng	ng	ng	0	0	0	0.01
0.20	5	ng	ng	ng	ng	0	0	0	0.04
0.50	2	ng	ng	ng	ng	0	0.01	0.03	0.35
		June-July-August				September-October-November			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng

1-11.1L0-5W QARGHA RIVER ABOVE QARGHA RESERVOIR, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1963	May 12, 1963	3.34	1966	April 24, 1966	6.15
1964	May 8, 1964	4.31	1980	April 5, 1980	6.11
1965	April 21, 1965	3.30	1974	March 21, 1974	5.60
1966	April 24, 1966	6.15	1972	April 7, 1972	5.25
1970	May 1, 1970	4.80	1978	July 6, 1978	5.00
1971	April 16, 1971	2.50	1970	May 1, 1970	4.80
1972	April 7, 1972	5.25	1964	May 8, 1964	4.31
1973	April 2, 1973	2.08	1979	May 19, 1979	4.10
1974	March 21, 1974	5.60	1976	April 22, 1976	4.00
1975	April 4, 1975	3.50	1977	April 15, 1977	3.55
1976	April 22, 1976	4.00	1975	April 4, 1975	3.50
1977	April 15, 1977	3.55	1963	May 12, 1963	3.34
1978	July 6, 1978	5.00	1965	April 21, 1965	3.30
1979	May 19, 1979	4.10	1971	April 16, 1971	2.50
1980	April 5, 1980	6.11	1973	April 2, 1973	2.08

1-11.1L0-5W QARGHA RIVER ABOVE QARGHA RESERVOIR, Continued

Monthly and annual mean discharges, in cubic meters per second
 [Data may not be rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1963	--	--	--	--	--	--	--	1.43	0.21	0	0	0	--
1964	0	0	0	0	0	0.05	0.86	1.07	0.12	0	0	0	0.18
1965	0	0	0	0	0.01	0.28	1.39	0.96	0.71	0.48	0	0	0.32
1966	0	0	0	0.01	0.17	1.03	2.47	1.31	0.36	0.18	0	0	0.46
1970	--	--	--	--	--	--	1.31	0.63	0	0	0	0	--
1971	0	0	0	0	0.01	0.45	1.19	0.01	0	0	0	0	0.14
1972	0	0	0	0	0	0.96	3.15	1.74	1.18	0.35	0	0	0.61
1973	0.06	0.11	0.12	0	0.05	1.05	0.92	1.03	0.37	0	0	0	0.31
1974	0	0	0	0	0.01	0.79	1.53	0.64	0.06	0	0	0	0.25
1975	0	0	0	0	0	0.29	1.69	0.89	0.03	0	0	0	0.24
1976	0	0	0.05	0.10	0.27	1.23	2.95	0.69	0	0	0	0	0.44
1977	0	0	0	0.03	0.29	0.53	2.12	0	0	0	0	0	0.25
1978	0	0	0	0.05	0.07	0.64	2.30	0.62	0	0.45	0.16	0	0.36
1979	0	0	0	0.01	0.21	0.45	1.75	1.82	0	0	0	0	0.35
1980	0	0	0.00	0.32	0.06	0.32	3.35	0.17	0	0	0	0	0.35

1-11.L00-1A PAGHMAN RIVER AT PUL-I-SOKHTA

(U.S. Geological Survey identification number: 343000069080000)

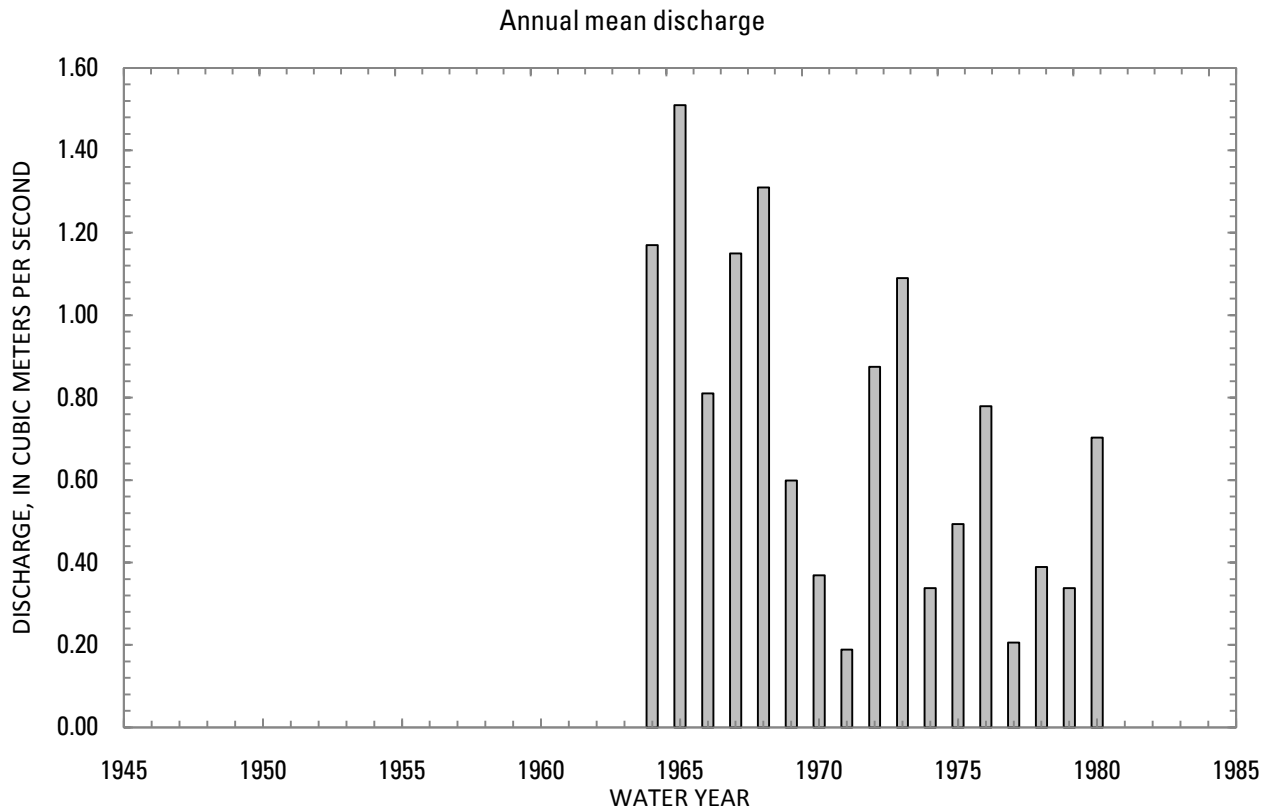
LOCATION: Lat 34°30'N., long 69°08'E.

DRAINAGE AREA: 500 km².

ELEVATION: 1,805 meters above mean sea level.

PERIOD OF RECORD: March 1, 1963 to September 30, 1980.

GAGE: Water-stage recorder.



1-11.L00-1A PAGHMAN RIVER AT PUL-I-SOKHTA, Continued

Statistics of monthly and annual mean discharges
[m³/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	0.32	1969	0.00	1973	0.09	0.09	1.03	1.06
November	0.72	1970	0.01	1972	0.22	0.24	1.06	2.59
December	0.88	1968	0.04	1972	0.37	0.30	0.82	4.23
January	1.16	1966	0.07	1972	0.44	0.30	0.69	5.14
February	1.20	1966	0.07	1972	0.48	0.28	0.59	5.50
March	2.77	1968	0.38	1977	1.22	0.71	0.58	14.1
April	8.88	1964	0.21	1970	3.64	2.66	0.73	42.0
May	6.55	1965	0.03	1978	1.68	2.03	1.21	19.4
June	1.12	1965	0.01	1966	0.18	0.28	1.59	2.06
July	0.79	1978	0.01	1966	0.17	0.22	1.32	1.94
August	0.34	1975	0.01	1977	0.10	0.10	1.02	1.14
September	0.32	1968	0	1966	0.08	0.09	1.11	0.89
Annual	1.51	1965	0.19	1971	0.72	0.41	0.56	100

1-11.L00-1A PAGHMAN RIVER AT PUL-I-SOKHTA, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0	0.01	0.02	0.07	0.08	0.22	0.10	0.02	0.01	0.01	0.01	0	0.01
90	0.01	0.01	0.03	0.13	0.20	0.36	0.22	0.03	0.01	0.01	0.01	0	0.02
85	0.01	0.01	0.05	0.18	0.22	0.44	0.56	0.04	0.02	0.02	0.02	0.01	0.02
80	0.01	0.02	0.08	0.20	0.22	0.50	0.89	0.05	0.02	0.02	0.02	0.01	0.03
75	0.02	0.02	0.09	0.22	0.23	0.57	1.18	0.06	0.03	0.02	0.02	0.02	0.04
70	0.02	0.02	0.13	0.23	0.27	0.63	1.41	0.09	0.03	0.03	0.02	0.02	0.06
65	0.02	0.03	0.17	0.26	0.29	0.68	1.62	0.12	0.04	0.03	0.03	0.02	0.08
60	0.02	0.04	0.19	0.29	0.36	0.74	1.85	0.14	0.05	0.04	0.03	0.03	0.11
55	0.03	0.06	0.22	0.31	0.38	0.81	2.10	0.16	0.06	0.05	0.04	0.04	0.14
50	0.04	0.14	0.25	0.33	0.41	0.96	2.50	0.27	0.07	0.05	0.05	0.05	0.18
45	0.08	0.17	0.31	0.37	0.43	1.03	2.82	0.36	0.09	0.06	0.07	0.07	0.23
40	0.11	0.20	0.49	0.50	0.48	1.11	3.13	0.49	0.11	0.08	0.08	0.08	0.28
35	0.13	0.24	0.57	0.56	0.55	1.24	3.55	0.78	0.12	0.11	0.09	0.09	0.36
30	0.15	0.30	0.60	0.62	0.60	1.37	4.09	1.22	0.13	0.13	0.11	0.10	0.47
25	0.17	0.36	0.63	0.67	0.64	1.49	5.06	1.72	0.16	0.14	0.13	0.12	0.60
20	0.18	0.42	0.66	0.72	0.72	1.79	6.24	2.48	0.19	0.16	0.15	0.14	0.74
15	0.20	0.50	0.71	0.77	0.77	2.15	7.47	3.65	0.26	0.21	0.17	0.15	0.97
10	0.25	0.66	0.77	0.91	0.83	2.59	8.84	4.76	0.46	0.44	0.21	0.19	1.56
5	0.32	0.80	0.91	ng	1.15	3.53	11.0	8.34	1.05	0.55	0.27	0.31	3.40

1-11.L00-1A PAGHMAN RIVER AT PUL-I-SOKHTA, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	1.80	0.89	0.63	0.45	0.39
0.95	1.05	3.40	1.70	1.25	0.97	0.80
0.90	1.11	4.70	2.37	1.79	1.41	1.14
0.80	1.25	7.20	3.50	2.71	2.20	1.73
0.50	2	16.0	7.13	5.81	4.78	3.65
0.20	5	35.6	13.9	11.9	9.57	7.18
0.10	10	54.3	19.4	16.9	13.3	9.95
0.04	25	85.0	27.2	24.4	18.6	13.8
0.02	50	114	33.7	30.7	22.7	16.9
0.01	100	148	40.6	37.6	27.0	20.1
0.005	200	188	48.1	45.0	31.4	23.5
0.002	500	251	ng	ng	ng	ng

1-11.L00-1A PAGHMAN RIVER AT PUL-I-SOKHTA, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0	0	0	0	0	0.01	0.01
0.10	10	0	0	0	0	0	0	0	0.01	0.02
0.20	5	0	0	0.01	0.01	0.01	0.01	0.01	0.01	0.03
0.50	2	0.01	0.01	0.02	0.02	0.02	0.03	0.04	0.04	0.08

1-11.L00-1A PAGHMAN RIVER AT PUL-I-SOKHTA, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.01	0.01	0.01	0.03	0	0.01	0.01	0.03
0.10	10	0.02	0.02	0.02	0.05	0.01	0.02	0.02	0.06
0.20	5	0.04	0.04	0.05	0.09	0.02	0.03	0.04	0.12
0.50	2	0.15	0.16	0.18	0.23	0.09	0.11	0.16	0.41
		June-July-August				September-October-November			
0.05	20	0	0	0	0	0	0	0	0
0.10	10	0	0	0	0	0	0	0	0
0.20	5	0.01	0.01	0.01	0.01	0	0.01	0.01	0.01
0.50	2	0.02	0.02	0.02	0.04	0.02	0.02	0.03	0.03

1-11.L00-1A PAGHMAN RIVER AT PUL-I-SOKHTA, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1963	May 12, 1963	17.8	1975	August 13, 1975	80.0
1964	April 10, 1964	15.5	1978	August 17, 1978	70.5
1965	May 7, 1965	16.0	1968	April 30, 1968	48.8
1966	April 27, 1966	5.56	1979	March 29, 1979	39.2
1967	April 27, 1967	34.8	1967	April 27, 1967	34.8
1968	April 30, 1968	48.8	1980	April 11, 1980	23.7
1969	April 19, 1969	4.65	1972	May 6, 1972	19.5
1970	July 7, 1970	4.00	1963	May 12, 1963	17.8
1971	April 12, 1971	3.42	1973	August 2, 1973	17.1
1972	May 6, 1972	19.5	1965	May 7, 1965	16.0
1973	August 2, 1973	17.1	1964	April 10, 1964	15.5
1974	April 7, 1974	10.5	1976	April 27, 1976	13.1
1975	August 13, 1975	80.0	1974	April 7, 1974	10.5
1976	April 27, 1976	13.1	1977	April 10, 1977	7.40
1977	April 10, 1977	7.40	1966	April 27, 1966	5.56
1978	August 17, 1978	70.5	1969	April 19, 1969	4.65
1979	March 29, 1979	39.2	1970	July 7, 1970	4.00
1980	April 11, 1980	23.7	1971	April 12, 1971	3.42

1-11.L00-1A PAGHMAN RIVER AT PUL-I-SOKHTA, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1963	--	--	--	--	--	0.95	1.40	3.14	0.19	0.14	0.15	0.15	--
1964	0.15	0.17	0.19	0.24	0.25	2.42	8.88	1.34	0.13	0.05	0.10	0.19	1.17
1965	0.18	0.31	0.58	0.53	0.58	0.55	6.73	6.55	1.12	0.57	0.20	0.14	1.51
1966	0.21	0.66	0.81	1.16	1.20	1.41	3.41	0.90	0.01	0.01	0.02	0.00	0.81
1967	0.07	0.47	0.67	0.61	0.61	0.72	4.68	4.66	0.35	0.47	0.32	0.16	1.15
1968	0.21	0.47	0.88	0.81	0.63	2.77	3.91	4.69	0.67	0.18	0.16	0.32	1.31
1969	0.32	0.43	0.61	0.87	0.86	1.27	2.22	0.42	0.04	0.05	0.07	0.09	0.60
1970	0.12	0.72	0.64	0.69	0.75	0.85	0.21	0.07	0.06	0.29	0.03	0.04	0.37
1971	0.07	0.04	0.14	0.26	0.41	0.58	0.67	0.06	0.02	0.02	0.02	0.02	0.19
1972	0.02	0.01	0.04	0.07	0.07	1.16	5.01	3.94	0.13	0.05	0.02	0.00	0.88
1973	0.00	0.06	0.34	0.38	0.58	2.49	8.28	0.67	0.02	0.13	0.14	0.09	1.09
1974	0.12	0.19	0.68	0.62	0.34	0.64	0.93	0.12	0.12	0.11	0.10	0.08	0.34
1975	0.05	0.05	0.23	0.28	0.23	0.98	3.34	0.27	0.11	0.04	0.34	0.05	0.49
1976	0.02	0.04	0.09	0.17	0.20	1.16	5.46	2.10	0.09	0.03	0.03	0.01	0.78
1977	0.01	0.04	0.19	0.28	0.32	0.38	1.19	0.03	0.02	0.01	0.01	0.01	0.21
1978	0.01	0.15	0.08	0.22	0.31	1.90	1.07	0.03	0.02	0.79	0.07	0.01	0.39
1979	0.01	0.01	0.04	0.20	0.32	0.87	2.08	0.35	0.09	0.08	0.01	0.01	0.34
1980	0.01	0.01	0.04	0.18	0.43	0.87	6.00	0.89	0.04	0.02	0.02	0.03	0.70

2-4.000-5A URGUN RIVER AT PIRKOTI

(U.S. Geological Survey identification number: 325500069150000)

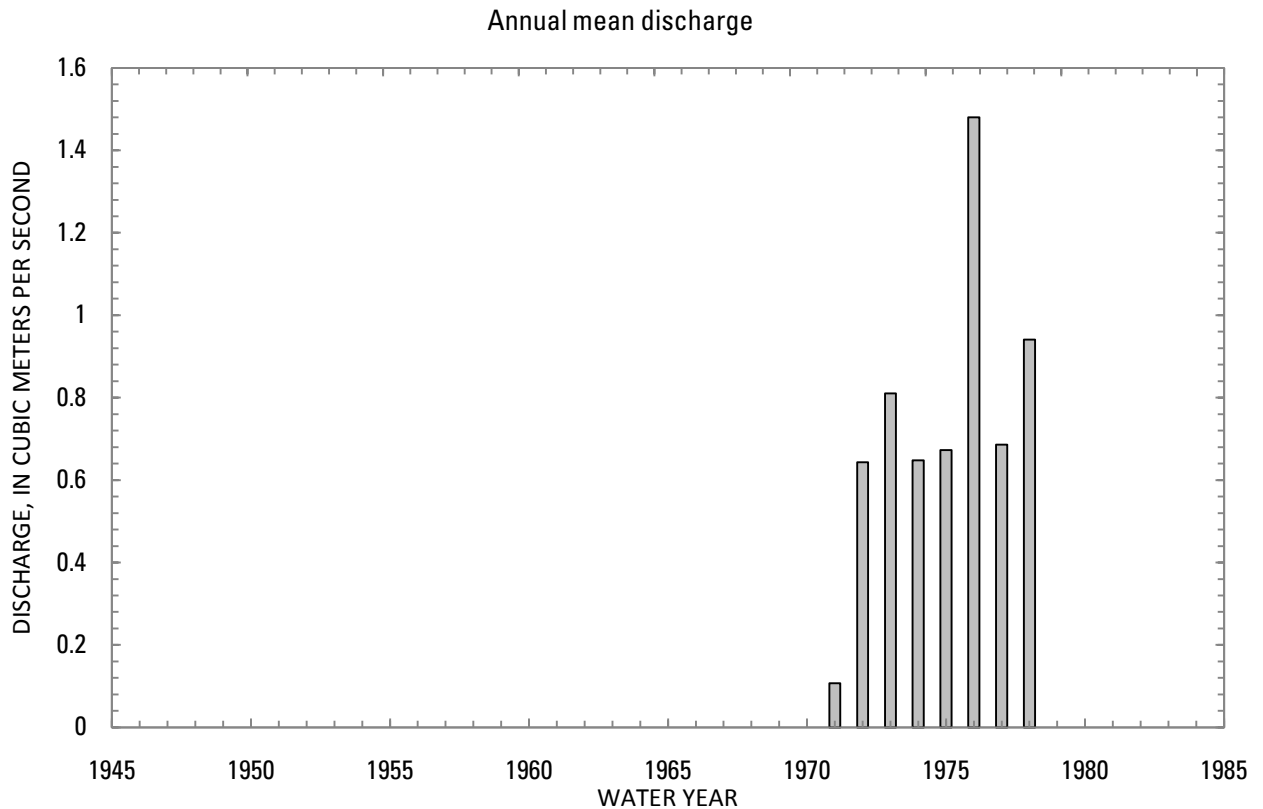
LOCATION: Lat 32°55'N., long 69°15'E.

DRAINAGE AREA: 780 km².

ELEVATION: 2,108 meters above mean sea level.

PERIOD OF RECORD: August 13, 1970 to September 30, 1978.

GAGE: Water-stage recorder.



2-4.000-5A URGUN RIVER AT PIRKOTI, Continued

Statistics of monthly and annual mean discharges
[m³/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	0.30	1977	0	1972	0.10	0.11	1.13	1.08
November	0.49	1978	0	1972	0.20	0.17	0.86	2.22
December	0.50	1977	0.01	1972	0.28	0.18	0.64	3.12
January	0.81	1977	0.01	1972	0.32	0.24	0.74	3.55
February	2.18	1973	0.24	1971	0.90	0.57	0.63	10.0
March	4.27	1976	0.25	1971	2.31	1.49	0.64	25.6
April	7.64	1976	0.06	1971	2.11	2.41	1.14	23.4
May	1.76	1972	0.04	1978	0.61	0.67	1.10	6.78
June	0.74	1972	0.03	1971	0.23	0.30	1.28	2.60
July	6.12	1978	0.10	1974	1.27	2.01	1.59	14.03
August	1.14	1977	0.01	1971	0.46	0.47	1.02	5.07
September	0.50	1970	0	1971	0.22	0.21	0.93	2.49
Annual	1.48	1976	0.11	1971	0.75	0.38	0.51	100

2-4.000-5A URGUN RIVER AT PIRKOTI, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0	0	0.01	0.01	0.18	0.25	0.05	0.02	0.01	0.02	0	0	0.01
90	0	0	0.02	0.02	0.21	0.28	0.06	0.04	0.02	0.04	0	0	0.02
85	0.01	0.02	0.05	0.15	0.22	0.47	0.19	0.05	0.02	0.06	0.01	0.01	0.03
80	0.01	0.03	0.10	0.18	0.23	0.66	0.31	0.06	0.02	0.07	0.01	0.02	0.04
75	0.02	0.04	0.13	0.20	0.24	0.85	0.38	0.07	0.03	0.08	0.02	0.02	0.06
70	0.03	0.05	0.14	0.21	0.25	1.02	0.50	0.08	0.04	0.10	0.02	0.03	0.08
65	0.03	0.06	0.21	0.22	0.31	1.15	0.60	0.14	0.04	0.12	0.02	0.05	0.11
60	0.04	0.06	0.23	0.24	0.37	1.40	0.74	0.17	0.05	0.14	0.03	0.07	0.17
55	0.04	0.08	0.28	0.25	0.46	1.50	0.90	0.23	0.05	0.20	0.07	0.08	0.20
50	0.04	0.10	0.30	0.26	0.51	1.83	1.10	0.31	0.05	0.24	0.09	0.10	0.24
45	0.05	0.14	0.32	0.31	0.56	1.99	1.34	0.35	0.06	0.31	0.14	0.11	0.29
40	0.07	0.18	0.34	0.34	0.71	2.41	1.50	0.39	0.08	0.39	0.21	0.12	0.34
35	0.10	0.20	0.40	0.36	0.81	2.77	1.70	0.46	0.10	0.48	0.31	0.17	0.42
30	0.14	0.21	0.42	0.38	0.99	2.98	1.97	0.55	0.13	0.54	0.41	0.21	0.49
25	0.16	0.25	0.43	0.40	1.08	3.19	2.41	0.89	0.19	0.65	0.49	0.27	0.56
20	0.20	0.28	0.50	0.44	1.15	3.90	3.74	1.21	0.26	0.95	0.55	0.36	0.85
15	0.22	0.31	0.52	0.48	1.22	4.30	4.95	1.66	0.31	1.53	0.66	0.38	1.18
10	0.31	0.44	0.54	0.62	1.48	5.34	6.19	1.89	0.50	2.39	0.85	0.41	1.87
5	ng	0.51	0.56	0.00	3.31	5.74	9.00	2.15	1.13	7.95	1.51	0.75	3.73

2-4.000-5A URGUN RIVER AT PIRKOTI, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	6.40	0.82	0.39	0.17	0.09
0.95	1.05	11.8	1.81	1.13	0.64	0.37
0.90	1.11	15.8	2.65	1.84	1.16	0.72
0.80	1.25	21.7	4.05	3.06	2.13	1.41
0.50	2	36.2	8.20	6.58	5.05	3.65
0.20	5	53.7	14.5	11.0	8.44	6.44
0.10	10	63.1	18.7	13.2	9.88	7.68
0.04	25	73.0	23.5	15.2	11.0	8.64
0.02	50	78.9	26.9	16.2	11.5	9.07
0.01	100	84.0	29.9	17.0	11.8	9.34
0.005	200	88.2	32.7	17.6	12.0	9.50
0.002	500	92.9	ng	ng	ng	ng

¹Less than 10 years of data used.

2-4.000-5A URGUN RIVER AT PIRKOTI, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0	0	0	0	0	0	0
0.10	10	0	0	0	0	0	0	0	0	0.01
0.20	5	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.03
0.50	2	0.01	0.01	0.02	0.02	0.03	0.11	0.11	0.13	0.16

2-4.000-5A URGUN RIVER AT PIRKOTI, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0	0	0	0.01	0.01	0.01	0.01	0.02
0.10	10	0	0	0.01	0.03	0.02	0.02	0.03	0.04
0.20	5	0.05	0.06	0.04	0.07	0.03	0.04	0.05	0.08
0.50	2	0.15	0.20	0.20	0.23	0.09	0.13	0.18	0.25
		June-July-August				September-October-November			
0.05	20	0	0	0	0.01	0	0	0	0
0.10	10	0	0	0	0.01	0	0	0	0
0.20	5	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01
0.50	2	0.01	0.02	0.02	0.06	0.02	0.02	0.02	0.04

2-4.000-5A URGUN RIVER AT PIRKOTI, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1970	August 22, 1970	82.0	1970	August 22, 1970	82.0
1971	August 4, 1971	26.5	1975	July 12, 1975	45.1
1972	May 4, 1972	38.0	1974	April 27, 1974	42.5
1973	August 5, 1973	32.6	1972	May 4, 1972	38.0
1974	April 27, 1974	42.5	1973	August 5, 1973	32.6
1975	July 12, 1975	45.1	1977	May 27, 1977	32.6
1976	April 23, 1976	10.0	1978	July 5, 1978	30.0
1977	May 27, 1977	32.6	1971	August 4, 1971	26.5
1978	July 5, 1978	30.0	1976	April 23, 1976	10.0

2-4.000-5A URGUN RIVER AT PIRKOTI, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1970	--	--	--	--	--	--	--	--	--	--	--	0.50	--
1971	0.03	0.04	0.08	0.19	0.24	0.25	0.06	0.05	0.03	0.30	0.01	0	0.11
1972	0	0	0.01	0.01	0.92	1.11	2.73	1.76	0.74	0.30	0.11	0.09	0.64
1973	0.10	0.15	0.25	0.22	2.18	3.27	1.02	0.39	0.06	1.16	0.62	0.39	0.81
1974	0.24	0.37	0.45	0.40	0.81	3.37	1.65	0.31	0.05	0.10	0.01	0.01	0.65
1975	0.04	0.08	0.21	0.27	0.70	3.65	2.40	0.40	0.07	0.15	0.07	0.05	0.67
1976	0.07	0.18	0.30	0.42	0.80	4.27	7.64	1.59	0.21	1.14	0.68	0.45	1.48
1977	0.30	0.30	0.50	0.81	1.04	1.22	0.61	0.36	0.69	0.86	1.14	0.43	0.69
1978	0.01	0.49	0.45	0.23	0.56	1.34	0.79	0.04	0.04	6.12	1.01	0.11	0.94

2-4.4L0-2T DAHANE LEGAD RIVER NEAR URGUN

(U.S. Geological Survey identification number: 325800069090000)

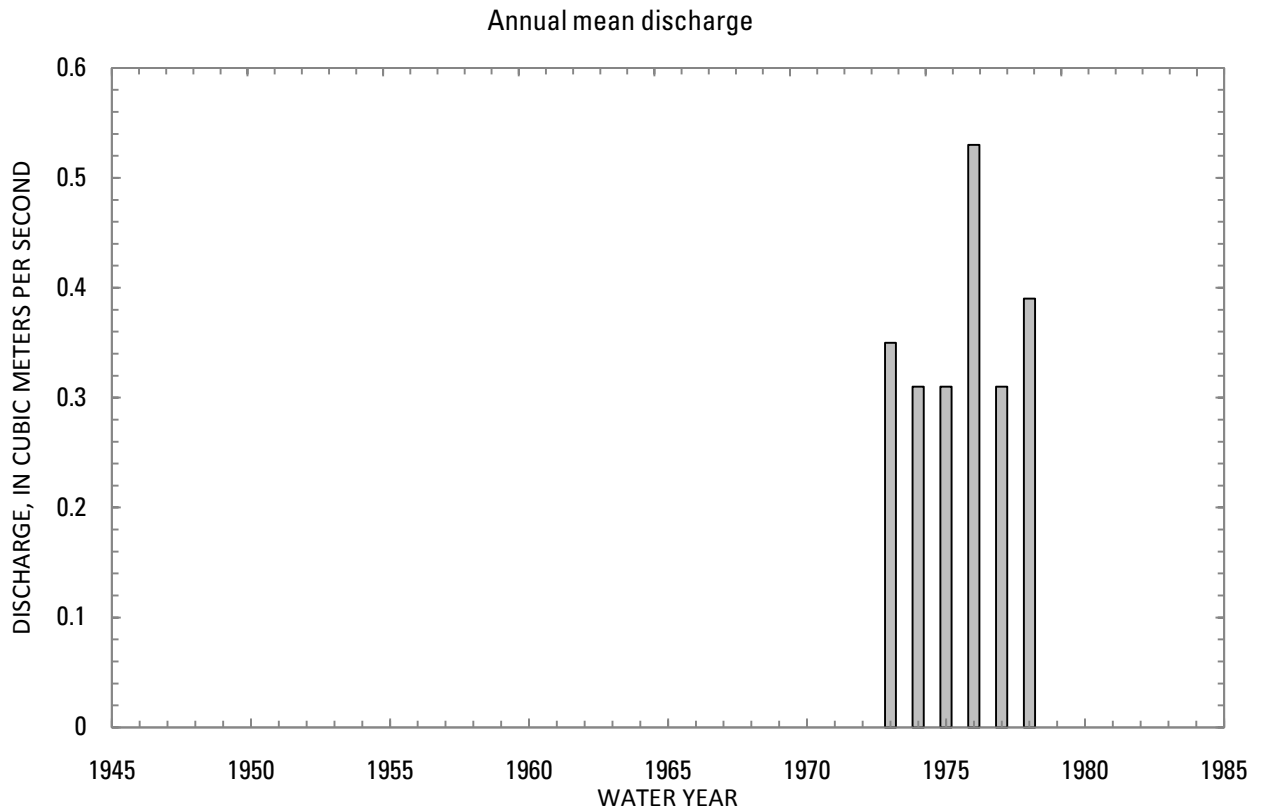
LOCATION: Lat 32°58'N., long 69°09'E.

DRAINAGE AREA: 185 km².

ELEVATION: 2,215 meters above mean sea level.

PERIOD OF RECORD: April 9, 1972 to September 30, 1978.

GAGE: Water-stage recorder.



2-4.4L0-2T DAHANE LEGAD RIVER NEAR URGUN, Continued

Statistics of monthly and annual mean discharges
[m³/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	0.12	1977	0.01	1974	0.03	0.04	1.52	0.66
November	0.16	1978	0.01	1975	0.06	0.06	0.93	1.43
December	0.17	1978	0.03	1973	0.08	0.06	0.73	1.89
January	0.20	1977	0.03	1976	0.09	0.06	0.70	1.95
February	1.25	1973	0.12	1976	0.45	0.41	0.90	10.3
March	1.68	1973	0.60	1977	1.33	0.51	0.39	30.4
April	2.88	1976	0.34	1978	1.09	0.95	0.88	24.8
May	0.77	1972	0.03	1978	0.34	0.27	0.81	7.65
June	0.42	1977	0.01	1974	0.13	0.15	1.15	3.02
July	2.36	1978	0.01	1974	0.53	0.83	1.55	12.2
August	0.46	1977	0.01	1974	0.18	0.18	1.05	4.01
September	0.23	1977	0.01	1974	0.07	0.09	1.23	1.67
Annual	0.53	1976	0.31	1975	0.37	0.09	0.24	100

2-4.4L0-2T DAHANE LEGAD RIVER NEAR URGUN, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.01	0	0.01	0.01	0.03	0.35	0.12	0.02	0.01	0.01	0.01	0.01	0.01
90	0.01	0.01	0.02	0.01	0.05	0.46	0.17	0.02	0.01	0.02	0.01	0.01	0.01
85	0.01	0.01	0.02	0.02	0.05	0.51	0.27	0.04	0.01	0.02	0.01	0.01	0.02
80	0.01	0.01	0.02	0.02	0.06	0.56	0.32	0.05	0.01	0.02	0.01	0.01	0.02
75	0.01	0.01	0.03	0.02	0.08	0.68	0.39	0.07	0.02	0.03	0.02	0.01	0.02
70	0.01	0.02	0.04	0.03	0.11	0.77	0.43	0.09	0.02	0.03	0.02	0.02	0.02
65	0.01	0.02	0.05	0.04	0.15	0.83	0.51	0.13	0.02	0.05	0.02	0.02	0.03
60	0.02	0.02	0.06	0.04	0.18	0.95	0.54	0.15	0.02	0.06	0.02	0.02	0.05
55	0.02	0.02	0.06	0.05	0.20	1.00	0.58	0.17	0.03	0.08	0.03	0.02	0.06
50	0.02	0.02	0.07	0.06	0.22	1.06	0.66	0.21	0.05	0.09	0.03	0.02	0.08
45	0.02	0.03	0.07	0.06	0.23	1.17	0.73	0.25	0.06	0.10	0.05	0.02	0.11
40	0.02	0.03	0.09	0.07	0.27	1.26	0.82	0.30	0.07	0.11	0.06	0.02	0.15
35	0.02	0.05	0.10	0.10	0.30	1.41	0.92	0.34	0.09	0.13	0.08	0.03	0.17
30	0.02	0.06	0.14	0.13	0.39	1.57	1.11	0.40	0.11	0.16	0.10	0.04	0.19
25	0.02	0.07	0.14	0.15	0.47	1.86	1.57	0.48	0.12	0.20	0.11	0.05	0.27
20	0.03	0.09	0.15	0.16	0.56	1.96	1.84	0.63	0.16	0.29	0.15	0.05	0.43
15	0.08	0.10	0.15	0.20	0.66	2.26	2.38	0.78	0.22	0.53	0.17	0.16	0.64
10	ng	0.13	0.16	0.21	0.84	2.45	3.01	0.90	0.26	1.12	0.21	0.17	1.04
5	ng	0.16	0.20	0.28	1.85	2.99	3.36	1.04	0.41	3.98	0.48	0.18	1.93

2-4.4L0-2T DAHANE LEGAD RIVER NEAR URGUN, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	10.6	² 2.01	2.18	0.97	0.45
0.95	1.05	14.2	2.51	2.36	1.38	0.82
0.90	1.11	16.5	2.85	2.50	1.64	1.06
0.80	1.25	19.9	3.34	2.72	1.99	1.40
0.50	2	28.3	4.62	3.40	2.76	2.10
0.20	5	40.0	6.59	4.65	3.64	2.72
0.10	10	48.0	8.04	5.69	4.13	2.97
0.04	25	58.2	10.0	7.28	4.65	3.16
0.02	50	65.8	11.6	8.69	4.99	3.25
0.01	100	73.5	13.3	10.3	5.29	3.31
0.005	200	81.3	15.1	12.2	5.55	3.35
0.002	500	91.9	ng	ng	ng	ng

¹Less than 10 years of data used.

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

2-4.4L0-2T DAHANE LEGAD RIVER NEAR URGUN, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0	0	0.01	0.01	0.01	0.01	0.01
0.10	10	0	0	0	0	0.01	0.01	0.01	0.01	0.01
0.20	5	0	0	0	0.01	0.01	0.01	0.01	0.02	0.02
0.50	2	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.04

2-4.4L0-2T DAHANE LEGAD RIVER NEAR URGUN, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.02
0.10	10	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.03
0.20	5	0.01	0.01	0.01	0.02	0.01	0.02	0.03	0.05
0.50	2	0.01	0.01	0.02	0.03	0.02	0.07	0.10	0.15
		June-July-August				September-October-November			
0.05	20	0.01	0.01	0.01	0.01	0	0	0	0.01
0.10	10	0.01	0.01	0.01	0.01	0	0	0.01	0.01
0.20	5	0.01	0.01	0.01	0.01	0.01	0	0.01	0.01
0.50	2	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01

2-4.4L0-2T DAHANE LEGAD RIVER NEAR URGUN, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1973	September 19, 1973	49.0	1973	September 19, 1973	49.0
1974	April 27, 1974	19.8	1976	July 14, 1976	37.0
1975	August 12, 1975	35.0	1975	August 12, 1975	35.0
1976	July 14, 1976	37.0	1977	May 25, 1977	24.4
1977	May 25, 1977	24.4	1974	April 27, 1974	19.8
1978	July 5, 1978	16.4	1978	July 5, 1978	16.4

2-4.4L0-2T DAHANE LEGAD RIVER NEAR URGUN, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1972	--	--	--	--	--	--	--	0.77	0.23	0.08	0.03	0.02	--
1973	0.01	0.05	0.03	0.10	1.25	1.68	0.49	0.15	0.02	0.29	0.11	0.04	0.35
1974	0.01	0.03	0.05	0.06	0.48	1.63	1.24	0.20	0.01	0.01	0.01	0.01	0.31
1975	0.01	0.01	0.03	0.05	0.27	1.68	1.11	0.33	0.08	0.07	0.04	0.01	0.31
1976	0.01	0.03	0.06	0.03	0.12	1.68	2.88	0.65	0.16	0.44	0.18	0.17	0.53
1977	0.12	0.11	0.15	0.20	0.24	0.60	0.45	0.22	0.42	0.49	0.46	0.23	0.31
1978	0.01	0.16	0.17	0.07	0.36	0.75	0.34	0.03	0.01	2.36	0.40	0.04	0.39

8-0.000-1M HARI RUD RIVER AT TIR PUL

(U.S. Geological Survey identification number: 343600061160000)

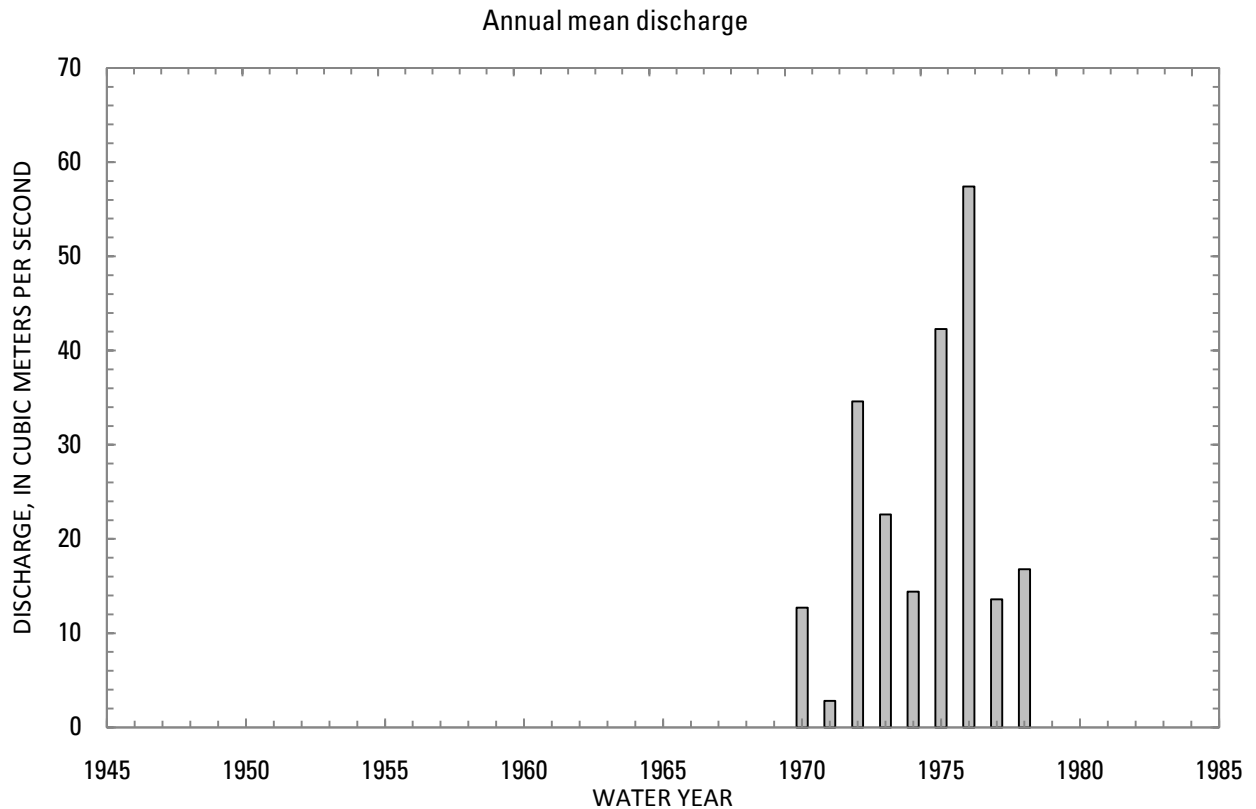
LOCATION: Lat 34°36'N., long 61°16'E.

DRAINAGE AREA: 31,760 km².

ELEVATION: 760 meters above mean sea level.

PERIOD OF RECORD: March 11, 1969 to September 30, 1978.

GAGE: Water-stage recorder.



8-0.000-1M HARI RUD RIVER AT TIR PUL, Continued

Statistics of monthly and annual mean discharges
[m³/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	0.54	1970	0.04	1974	0.16	0.15	0.94	0.05
November	9.76	1977	0.04	1974	2.74	3.95	1.44	0.79
December	12.8	1977	0.22	1974	4.66	5.06	1.09	1.34
January	20.2	1978	0.80	1971	12.8	6.42	0.50	3.67
February	35.5	1976	1.30	1971	22.4	10.1	0.45	6.44
March	94.0	1972	3.39	1971	47.2	24.2	0.51	13.6
April	374	1969	16.9	1971	125	112	0.89	35.8
May	302	1969	1.03	1970	108	114	1.05	31.2
June	95.3	1969	0.06	1970	23.9	32.7	1.37	6.87
July	5.64	1969	0.03	1974	0.88	1.79	2.04	0.25
August	0.44	1969	0.01	1973	0.09	0.13	1.36	0.03
September	0.23	1969	0.01	1970	0.08	0.07	0.85	0.02
Annual	57.4	1976	2.83	1971	24.1	17.3	0.72	100

8-0.000-1M HARI RUD RIVER AT TIR PUL, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.02	0.03	0.10	0.81	1.25	1.98	7.83	0.27	0.05	0.02	0	0	0.02
90	0.04	0.06	0.17	0.94	1.71	11.7	19.4	0.61	0.06	0.03	0.01	0	0.04
85	0.05	0.09	0.25	1.92	13.5	25.6	30.9	2.72	0.09	0.03	0.02	0.01	0.05
80	0.07	0.11	0.38	2.86	15.7	29.1	36.3	5.71	0.12	0.04	0.02	0.02	0.08
75	0.07	0.13	0.45	4.98	16.9	32.3	40.2	10.0	0.24	0.04	0.03	0.03	0.10
70	0.08	0.14	0.50	6.06	18.1	33.9	44.7	16.7	0.37	0.05	0.03	0.03	0.11
65	0.08	0.16	0.54	6.97	19.2	35.6	50.8	23.4	0.51	0.07	0.03	0.04	0.17
60	0.09	0.18	0.71	7.96	19.9	37.2	60.3	30.6	0.69	0.08	0.04	0.04	0.28
55	0.09	0.20	1.42	10.1	20.6	38.9	72.8	37.0	1.27	0.09	0.04	0.06	0.51
50	0.10	0.28	1.89	12.6	21.3	40.6	84.2	66.2	3.22	0.11	0.05	0.08	1.24
45	0.10	0.31	2.21	14.1	22.1	42.7	93.6	89.3	5.93	0.12	0.07	0.08	3.32
40	0.11	0.33	3.15	15.5	23.8	44.7	105	117	9.21	0.14	0.08	0.09	8.34
35	0.11	0.41	3.99	16.9	25.5	46.8	117	134	14.4	0.17	0.08	0.09	13.5
30	0.12	0.97	5.36	18.2	27.3	48.9	130	156	21.8	0.21	0.09	0.10	18.9
25	0.14	1.87	7.59	19.4	30.0	52.7	149	178	34.0	0.26	0.10	0.10	24.4
20	0.15	3.78	9.30	20.6	32.9	59.4	174	207	47.2	0.41	0.11	0.11	34.1
15	0.19	9.40	10.7	22.0	35.2	68.6	206	239	61.1	0.69	0.14	0.14	43.4
10	0.24	12.1	12.3	23.5	38.5	83.5	282	283	83.3	1.33	0.35	0.20	66.9
5	0.29	14.0	16.0	27.2	43.8	116	486	346	107	5.89	ng	0.22	125

8-0.000-1M HARI RUD RIVER AT TIR PUL, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	21.4	20.2	19.3	13.4	8.58
0.95	1.05	40.6	35.1	31.9	25.1	18.4
0.90	1.11	57.3	47.5	42.3	34.8	27.0
0.80	1.25	87.4	68.7	60.2	51.6	42.3
0.50	2	199	141	122	108	95.0
0.20	5	458	296	259	223	199
0.10	10	714	438	391	325	286
0.04	25	1,150	671	615	481	412
0.02	50	1,570	886	831	619	517
0.01	100	2,080	1,140	1,100	775	629
0.005	200	2,700	1,440	1,420	950	748
0.002	500	3,710	ng	ng	ng	ng

8-0.000-1M HARI RUD RIVER AT TIR PUL, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0	0	0	0.01	0.02	0.02	0.03
0.10	10	0	0	0	0	0	0.01	0.02	0.03	0.05
0.20	5	0	0	0	0	0.01	0.02	0.03	0.03	0.10
0.50	2	0.02	0.02	0.02	0.02	0.03	0.04	0.05	0.07	0.41

8-0.000-1M HARI RUD RIVER AT TIR PUL, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.04	0.04	0.05	0.19	0.05	0.09	0.18	0.93
0.10	10	0.06	0.08	0.10	0.34	0.16	0.26	0.52	2.33
0.20	5	0.12	0.16	0.20	0.67	0.57	0.90	1.74	6.16
0.50	2	0.45	0.71	0.85	2.32	4.59	6.95	11.7	26.5
		June-July-August				September-October-November			
0.05	20	0	0	0	0	0	0	0	0.01
0.10	10	0	0	0	0	0	0	0	0.01
0.20	5	0	0.01	0.01	0.02	0	0	0	0.02
0.50	2	0.02	0.03	0.03	0.04	0.02	0.02	0.03	0.05

8-0.000-1M HARI RUD RIVER AT TIR PUL, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1969	April 15, 1969	776	1969	April 15, 1969	776
1970	April 1, 1970	118	1976	April 24, 1976	734
1971	April 16, 1971	60.0	1975	April 27, 1975	480
1972	April 27, 1972	353	1972	April 27, 1972	353
1973	May 6, 1973	177	1973	May 6, 1973	177
1974	April 4, 1974	140	1974	April 4, 1974	140
1975	April 27, 1975	480	1978	April 19, 1978	132
1976	April 24, 1976	734	1970	April 1, 1970	118
1977	April 10, 1977	47.6	1971	April 16, 1971	60.0
1978	April 19, 1978	132	1977	April 10, 1977	47.6

8-0.000-1M HARI RUD RIVER AT TIR PUL, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1969	--	--	--	--	--	--	374	302	95.3	5.64	0.44	0.23	--
1970	0.54	8.96	2.18	19.2	34.2	47.7	40.7	1.03	0.06	0.04	0.02	0.01	12.7
1971	0.18	0.31	0.46	0.80	1.30	3.39	16.9	7.51	2.91	0.20	0.05	0.07	2.83
1972	0.09	1.34	1.26	7.74	21.5	94.0	149	120	20.2	0.12	0.09	0.09	34.6
1973	0.11	0.18	1.70	14.3	19.6	54.3	81.2	96.1	3.38	0.06	0.01	0.01	22.6
1974	0.04	0.04	0.22	11.2	27.4	45.0	78.4	12.8	0.08	0.03	0.03	0.07	14.4
1975	0.08	0.09	2.68	8.41	18.3	51.0	183	194	48.8	0.22	0.02	0.02	42.3
1976	0.08	0.19	8.55	14.2	35.5	60.2	229	281	58.3	2.17	0.09	0.08	57.4
1977	0.13	9.76	12.8	19.0	23.1	30.4	38.8	22.5	7.51	0.19	0.11	0.11	13.6
1978	0.21	3.84	12.1	20.2	20.8	38.9	55.2	47.6	2.47	0.13	0.06	0.09	16.8

8-0.000-2M HARI RUD RIVER AT PUL-I-HASHIMI

(U.S. Geological Survey identification number: 342000061560000)

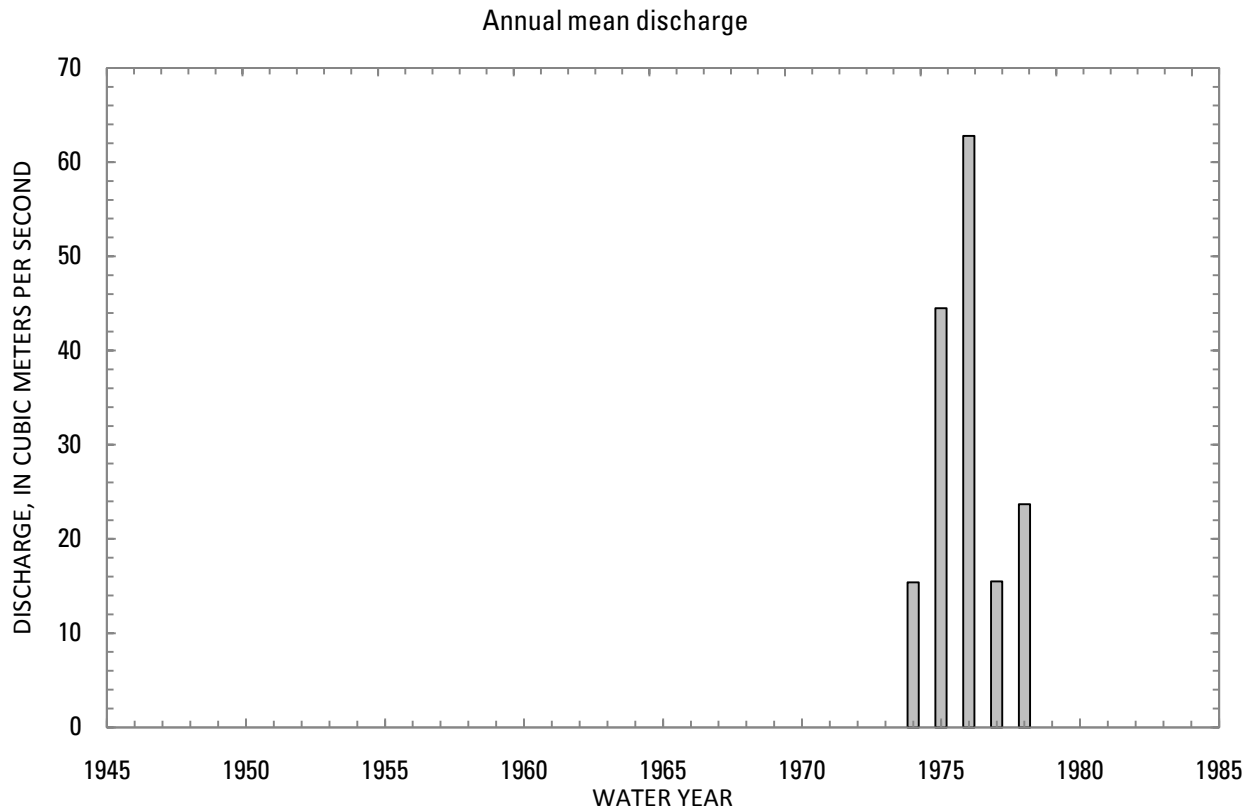
LOCATION: Lat 34°20'N., long 61°56'E.

DRAINAGE AREA: 27,260 km².

ELEVATION: 850 meters above mean sea level.

PERIOD OF RECORD: December 14, 1972 to September 30, 1978.

GAGE: Water-stage recorder. Staff gage at same site and datum prior to 1977 water year.



8-0.000-2M HARI RUD RIVER AT PUL-I-HASHIMI, Continued

Statistics of monthly and annual mean discharges
[m³/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	2.28	1978	1.05	1975	1.68	0.46	0.27	0.44
November	12.2	1977	1.38	1975	4.96	4.58	0.92	1.30
December	13.8	1978	3.71	1974	9.40	4.59	0.49	2.46
January	20.4	1978	6.20	1975	13.0	5.28	0.41	3.40
February	28.6	1976	9.16	1975	20.3	6.69	0.33	5.30
March	68.3	1973	27.1	1977	48.3	14.5	0.30	12.6
April	247	1976	57.0	1977	130	77.5	0.59	34.2
May	315	1976	21.5	1974	127	115	0.91	33.4
June	72.5	1976	0.74	1974	23.0	29.8	1.29	6.03
July	3.01	1976	0.67	1974	1.52	0.85	0.56	0.40
August	1.50	1977	0.71	1974	1.00	0.28	0.28	0.26
September	1.28	1978	0.86	1974	1.11	0.17	0.15	0.29
Annual	62.8	1976	15.4	1974	32.4	20.7	0.64	100

8-0.000-2M HARI RUD RIVER AT PUL-I-HASHIMI, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.86	1.27	2.37	4.17	7.99	21.8	31.9	5.35	0.71	0.68	0.67	0.79	0.75
90	1.14	1.33	3.00	4.98	9.10	24.8	46.6	16.2	0.75	0.69	0.75	0.81	0.88
85	1.18	1.39	3.44	5.25	12.0	28.3	51.2	21.9	0.89	0.71	0.76	0.85	1.05
80	1.32	1.49	3.88	5.64	13.0	30.4	57.4	24.9	1.00	0.86	0.78	0.87	1.20
75	1.41	1.57	4.38	6.22	13.7	31.6	62.5	30.3	1.12	0.90	0.79	0.95	1.41
70	1.42	1.66	6.34	6.49	15.5	33.6	68.0	37.9	1.53	0.92	0.80	1.00	1.63
65	1.44	2.10	7.57	7.54	16.6	35.6	77.9	44.7	1.91	0.95	0.81	1.08	1.89
60	1.46	2.18	8.61	11.1	17.2	37.5	83.5	52.0	2.13	1.00	0.87	1.11	2.28
55	1.56	2.25	9.39	11.7	17.7	39.3	89.1	61.5	2.43	1.12	0.93	1.12	3.60
50	1.62	2.48	9.77	12.3	18.2	41.3	100	87.9	3.56	1.15	0.95	1.13	6.97
45	1.65	2.62	10.1	14.1	19.0	43.4	107	112	6.25	1.18	0.99	1.15	10.6
40	1.71	2.75	10.4	15.3	20.0	46.5	118	135	9.47	1.46	1.01	1.19	13.6
35	1.77	2.87	11.0	15.8	20.9	50.8	128	152	13.3	1.73	1.08	1.20	17.1
30	1.86	3.22	11.6	16.3	21.7	56.3	136	175	18.4	1.79	1.09	1.21	20.9
25	1.99	9.09	12.0	17.1	22.7	59.0	144	203	24.8	1.85	1.10	1.23	27.9
20	2.05	11.5	12.6	18.9	25.8	63.2	161	235	33.2	1.90	1.12	1.26	37.5
15	2.16	12.0	13.4	20.4	29.1	66.7	182	271	55.4	1.94	1.19	1.32	54.5
10	2.23	12.8	14.0	21.1	31.0	78.3	233	319	87.2	1.99	1.56	1.47	85.1
5	2.80	15.5	22.6	21.8	41.2	94.3	396	358	119	3.87	1.60	1.50	159

8-0.000-2M HARI RUD RIVER AT PUL-I-HASHIMI, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	35.9	² 28.1	29.4	28.9	27.7
0.95	1.05	56.1	47.4	46.5	45.4	42.8
0.90	1.11	72.4	63.4	60.5	58.4	54.7
0.80	1.25	100	91.4	84.6	80.2	74.4
0.50	2	197	191	170	152	139
0.20	5	413	420	366	303	274
0.10	10	628	648	564	442	398
0.04	25	1,000	1,050	915	672	602
0.02	50	1,370	1,440	1,270	887	793
0.01	100	1,840	1,920	1,710	1,150	1,020
0.005	200	2,410	2,520	2,280	1,460	1,300
0.002	500	3,390	ng	ng	ng	ng

¹Less than 10 years of data used.

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

8-0.000-2M HARI RUD RIVER AT PUL-I-HASHIMI, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.61	0.60	0.60	0.60	0.61	0.61	0.63	0.66	0.67
0.10	10	0.67	0.67	0.67	0.67	0.68	0.68	0.73	0.79	0.90
0.20	5	0.75	0.75	0.76	0.77	0.77	0.79	0.86	0.96	1.26
0.50	2	0.92	0.93	0.95	0.95	0.96	1.00	1.12	1.29	2.33

8-0.000-2M HARI RUD RIVER AT PUL-I-HASHIMI, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	1.23	1.35	1.67	2.85	0.98	1.30	4.54	18.0
0.10	10	1.77	1.98	2.36	3.79	2.40	3.16	7.87	21.5
0.20	5	2.66	3.04	3.49	5.22	5.81	7.57	13.8	26.6
0.50	2	5.40	6.30	6.78	8.86	18.0	23.2	29.3	39.2
		June-July-August				September-October-November			
0.05	20	0.62	0.62	0.62	0.63	0.60	0.68	0.70	0.80
0.10	10	0.67	0.68	0.67	0.68	0.67	0.74	0.76	0.86
0.20	5	0.73	0.75	0.75	0.75	0.77	0.82	0.84	0.94
0.50	2	0.88	0.91	0.92	0.93	0.95	0.98	0.99	1.09

8-0.000-2M HARI RUD RIVER AT PUL-I-HASHIMI, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1973	May 1, 1973	190	1976	April 23, 1976	680
1974	April 4, 1974	111	1975	April 26, 1975	448
1975	April 26, 1975	448	1973	May 1, 1973	190
1976	April 23, 1976	680	1978	April 19, 1978	169
1977	April 15, 1977	71.3	1974	April 4, 1974	111
1978	April 19, 1978	169	1977	April 15, 1977	71.3

8-0.000-2M HARI RUD RIVER AT PUL-I-HASHIMI, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1973	--	--	--	15.2	19.4	68.3	119	101	7.80	1.08	1.03	1.13	--
1974	1.46	1.86	3.71	8.19	21.4	46.5	78.4	21.5	0.74	0.67	0.71	0.86	15.4
1975	1.05	1.38	5.50	6.20	9.16	38.8	204	216	47.5	1.64	0.80	0.97	44.5
1976	1.84	2.56	10.6	11.9	28.6	58.0	247	315	72.5	3.01	1.09	1.27	62.8
1977	1.76	12.2	13.4	16.0	17.9	27.1	57.0	30.3	6.09	1.84	1.50	1.18	15.5
1978	2.28	6.80	13.8	20.4	25.1	50.9	77.5	80.7	3.53	0.92	0.88	1.28	23.7

8-0.000-3S HARI RUD RIVER AT PUL-I-PASHTOON

(U.S. Geological Survey identification number: 341700062130000)

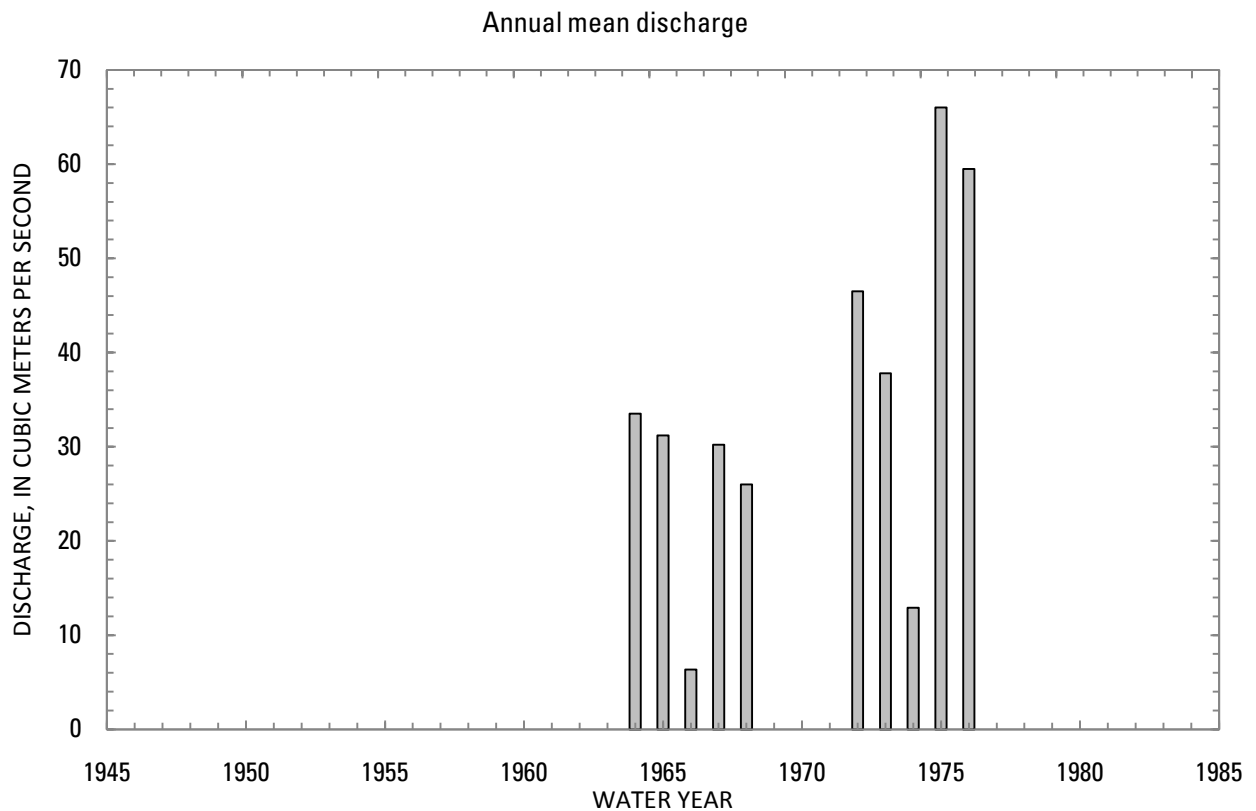
LOCATION: Lat 34°17'N., long 62°13'E.

DRAINAGE AREA: 26,130 km².

ELEVATION: 940 meters above mean sea level.

PERIOD OF RECORD: April 1, 1963 to January 31, 1977.

GAGE: Water-stage recorder. Staff gage at same site and datum prior to 1969 water year.



8-0.000-3S HARI RUD RIVER AT PUL-I-PASHTOON, Continued

Statistics of monthly and annual mean discharges
[m³/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	1.03	1967	0.35	1975	0.57	0.20	0.35	0.14
November	9.59	1977	0.35	1975	1.83	2.68	1.47	0.45
December	8.65	1977	0.05	1965	2.29	3.15	1.37	0.56
January	12.3	1964	0.89	1967	5.69	3.62	0.64	1.40
February	29.6	1964	1.37	1975	12.9	9.03	0.70	3.16
March	128	1972	10.5	1967	50.7	34.2	0.67	12.5
April	266	1975	30.0	1963	133	82.4	0.62	32.6
May	398	1975	13.9	1974	168	112	0.67	41.3
June	79.5	1975	0.21	1974	31.6	30.3	0.96	7.75
July	1.40	1976	0.02	1968	0.42	0.40	0.95	0.10
August	0.52	1967	0.04	1968	0.28	0.17	0.62	0.07
September	0.78	1964	0.08	1968	0.34	0.18	0.53	0.08
Annual	66.0	1975	6.35	1966	35.0	18.7	0.53	100

8-0.000-3S HARI RUD RIVER AT PUL-I-PASHTOON, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.24	0.24	0.04	0.41	1.13	3.48	4.84	1.53	0.23	0.03	0.03	0.07	0.06
90	0.32	0.33	0.06	0.67	1.40	5.42	13.3	12.1	0.27	0.03	0.04	0.10	0.18
85	0.33	0.36	0.08	0.80	1.90	6.33	30.4	32.8	0.38	0.04	0.06	0.14	0.28
80	0.38	0.39	0.30	0.89	3.61	9.34	44.4	49.2	0.52	0.08	0.10	0.22	0.35
75	0.40	0.43	0.36	0.99	4.62	12.0	58.8	67.0	0.73	0.14	0.12	0.23	0.41
70	0.42	0.48	0.42	1.16	6.55	15.6	68.7	86.2	0.89	0.16	0.17	0.28	0.47
65	0.43	0.53	0.47	1.39	8.04	21.9	76.0	112	1.00	0.18	0.19	0.30	0.52
60	0.45	0.60	0.52	1.91	8.87	25.5	83.5	131	1.20	0.20	0.22	0.30	0.63
55	0.47	0.67	0.56	2.52	9.62	28.7	94.4	147	2.15	0.24	0.25	0.31	0.83
50	0.49	0.73	0.71	3.08	10.3	32.8	105	159	5.59	0.28	0.28	0.32	1.02
45	0.50	0.79	0.91	3.82	11.0	37.9	119	171	9.77	0.32	0.31	0.33	1.46
40	0.52	0.89	0.98	5.12	12.1	45.7	133	182	14.6	0.36	0.33	0.34	3.47
35	0.53	1.00	1.06	6.49	14.1	51.7	145	196	21.0	0.42	0.40	0.39	6.92
30	0.56	1.12	2.09	7.56	18.5	61.5	158	216	31.3	0.49	0.42	0.41	10.7
25	0.62	1.30	2.69	8.74	20.4	68.6	170	235	46.6	0.57	0.44	0.42	21.0
20	0.69	1.89	3.86	9.91	21.5	75.9	191	270	62.7	0.65	0.46	0.44	40.5
15	0.76	3.45	7.30	11.1	22.5	85.8	218	310	84.4	0.74	0.49	0.47	77.5
10	0.98	6.21	8.23	12.2	27.4	111	269	344	103	0.85	0.53	0.52	131
5	1.31	8.68	9.33	17.8	33.6	184	397	378	139	1.06	0.58	ng	209

8-0.000-3S HARI RUD RIVER AT PUL-I-PASHTOON, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	84.3	66.5	49.9	31.2	23.7
0.95	1.05	132	110	88.6	64.5	51.3
0.90	1.11	165	141	117	90.6	73.6
0.80	1.25	215	187	160	131	109
0.50	2	341	308	272	234	202
0.20	5	518	476	423	360	319
0.10	10	632	584	514	427	384
0.04	25	772	714	619	495	449
0.02	50	873	805	690	534	488
0.01	100	970	892	754	567	520
0.005	200	1,060	975	813	593	546
0.002	500	1,190	ng	ng	ng	ng

8-0.000-3S HARI RUD RIVER AT PUL-I-PASHTOON, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.01	0.01	0.01	0.01	0.02	0.04	0.10	0.15	0.30
0.10	10	0.01	0.01	0.01	0.02	0.03	0.07	0.13	0.19	0.31
0.20	5	0.02	0.02	0.02	0.03	0.05	0.11	0.17	0.23	0.35
0.50	2	0.06	0.06	0.07	0.09	0.13	0.22	0.26	0.32	0.47

8-0.000-3S HARI RUD RIVER AT PUL-I-PASHTOON, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.01	0.01	0.01	0.03	0.28	0.38	0.92	6.90
0.10	10	0.02	0.03	0.03	0.06	0.59	0.84	1.68	10.2
0.20	5	0.05	0.07	0.09	0.15	1.34	2.06	3.38	16.0
0.50	2	0.33	0.44	0.51	0.70	5.53	8.66	11.8	35.3
		June-July-August				September-October-November			
0.05	20	0	0.01	0.02	0.02	0.01	0.08	0.10	0.14
0.10	10	0	0.02	0.03	0.04	0.03	0.10	0.14	0.17
0.20	5	0.03	0.04	0.05	0.07	0.06	0.14	0.18	0.22
0.50	2	0.13	0.14	0.15	0.20	0.19	0.24	0.29	0.33

8-0.000-3S HARI RUD RIVER AT PUL-I-PASHTOON, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1963	May 8, 1963	320	1975	May 17, 1975	652
1964	April 26, 1964	275	1976	April 23, 1976	650
1965	May 7, 1965	259	1967	April 27, 1967	560
1966	April 27, 1966	135	1972	May 8, 1972	410
1967	April 27, 1967	560	1968	May 1, 1968	340
1968	May 1, 1968	340	1973	April 25, 1973	333
1972	May 8, 1972	410	1963	May 8, 1963	320
1973	April 25, 1973	333	1964	April 26, 1964	275
1974	April 4, 1974	150	1965	May 7, 1965	259
1975	May 17, 1975	652	1974	April 4, 1974	150
1976	April 23, 1976	650	1966	April 27, 1966	135

8-0.000-3S HARI RUD RIVER AT PUL-I-PASHTOON, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1963	--	--	--	--	--	--	30.0	130	33.1	0.19	0.30	0.23	--
1964	0.43	2.24	0.07	12.3	29.6	64.8	167	118	7.11	0.65	0.51	0.78	33.5
1965	0.44	0.46	0.05	6.59	14.6	48.1	81.1	182	37.9	0.28	0.30	0.29	31.2
1966	0.46	0.66	1.00	3.29	5.68	12.0	36.7	15.3	0.76	0.35	0.14	0.31	6.35
1967	1.03	0.96	0.45	0.89	1.85	10.5	143	180	21.2	0.75	0.52	0.42	30.2
1968	0.43	0.53	0.93	4.16	8.30	35.2	49.9	145	66.7	0.02	0.04	0.08	26.0
1972	0.56	2.62	2.05	5.63	22.4	128	200	181	14.9	0.04	0.04	0.19	46.5
1973	0.56	1.33	2.88	6.68	14.3	79.3	165	173	8.13	0.23	0.24	0.40	37.8
1974	0.69	0.44	0.52	3.54	12.1	43.1	81.0	13.9	0.21	0.20	0.17	0.26	12.9
1975	0.35	0.35	0.43	0.94	1.37	39.7	266	398	79.5	0.50	0.35	0.35	66.0
1976	0.80	0.95	8.19	8.58	18.5	46.6	239	311	77.5	1.40	0.47	0.45	59.5
1977	0.53	9.59	8.65	10.0	--	--	--	--	--	--	--	--	--

8-0.000-4M HARI RUD RIVER AT ROBAT-I-AKHOND

(U.S. Geological Survey identification number: 341600062560000)

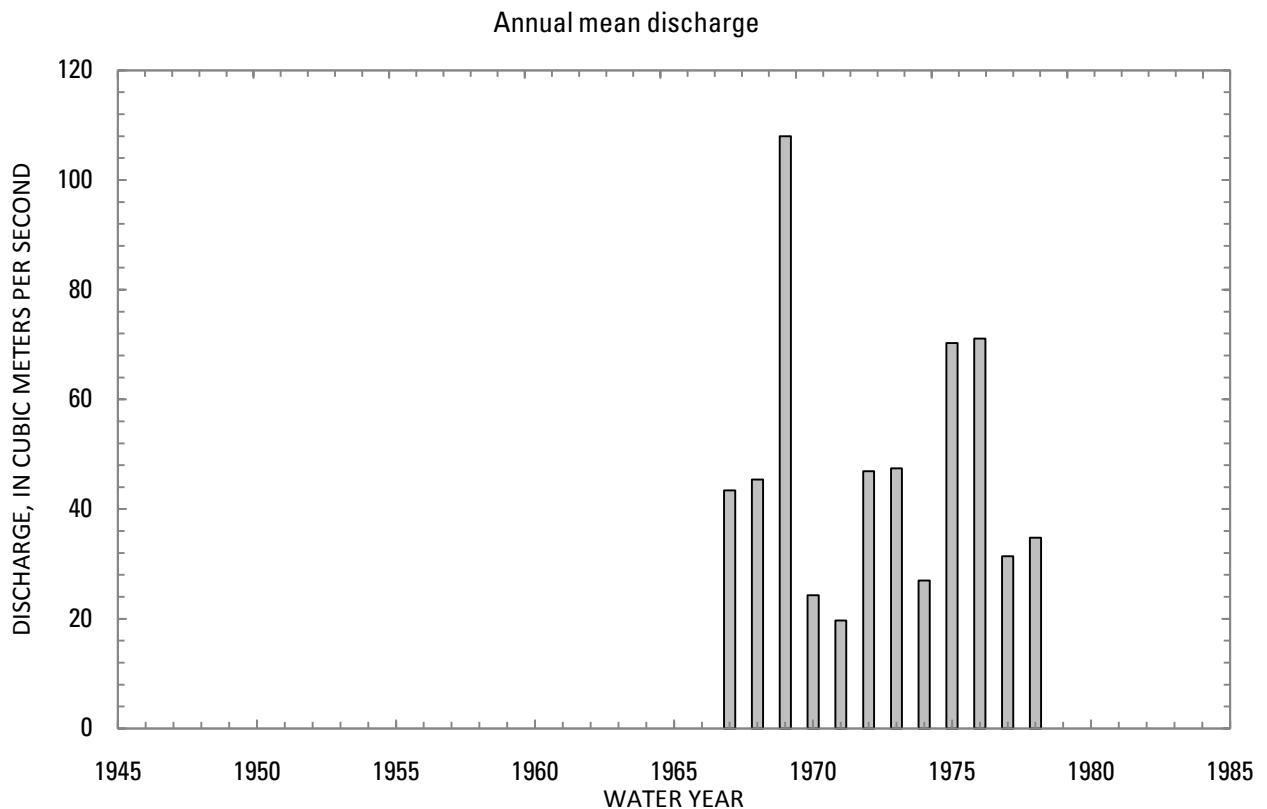
LOCATION: Lat 34°16'N., long 62°56'E.

DRAINAGE AREA: 21,630 km².

ELEVATION: 1,170 meters above mean sea level.

PERIOD OF RECORD: April 18, 1966 to September 30, 1978.

GAGE: Water-stage recorder. Staff gage at same site and datum prior to 1969 water year.



8-0.000-4M HARI RUD RIVER AT ROBAT-I-AKHOND, Continued

Statistics of monthly and annual mean discharges
[m³/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	14.2	1970	3.23	1972	6.50	3.79	0.58	1.17
November	28.5	1970	3.97	1972	10.1	7.52	0.75	1.82
December	25.5	1969	3.84	1972	12.2	7.05	0.58	2.19
January	21.9	1969	5.54	1967	12.6	5.89	0.47	2.27
February	25.2	1969	8.63	1967	15.9	4.98	0.31	2.86
March	219	1969	20.0	1967	57.0	52.1	0.91	10.3
April	419	1969	94.4	1970	183	92.9	0.51	32.9
May	377	1969	48.4	1970	182	118	0.65	32.8
June	139	1969	8.22	1970	54.9	43.5	0.79	9.88
July	27.4	1969	1.41	1970	10.9	7.57	0.69	1.96
August	11.6	1969	1.63	1970	5.27	2.42	0.46	0.95
September	11.3	1969	3.04	1971	5.11	2.42	0.47	0.92
Annual	108	1969	19.7	1971	47.5	25.1	0.53	100

8-0.000-4M HARI RUD RIVER AT ROBAT-I-AKHOND, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	3.17	3.93	4.10	5.24	8.70	14.5	61.9	36.6	5.28	1.58	2.09	2.56	3.48
90	3.41	4.27	5.04	6.03	9.62	16.9	69.1	47.6	7.22	3.27	2.81	2.93	4.09
85	3.77	4.47	5.41	6.27	10.3	18.6	82.0	57.9	9.16	4.20	3.17	3.20	4.55
80	3.90	4.66	5.77	6.83	10.6	20.3	92.2	67.2	10.0	4.60	3.45	3.51	5.11
75	4.00	4.85	6.07	7.57	11.2	22.0	102	77.1	11.7	4.88	3.68	3.70	5.68
70	4.11	5.03	6.35	8.19	11.6	24.7	109	89.3	14.7	5.20	3.89	3.80	6.61
65	4.28	5.30	6.62	8.85	12.2	26.6	115	101	18.1	5.55	4.12	3.88	7.72
60	4.43	5.71	7.15	9.29	13.1	29.0	122	117	20.6	6.58	4.31	3.96	9.09
55	4.59	6.32	10.4	9.68	14.1	33.3	130	132	26.0	7.50	4.45	4.12	10.8
50	4.81	7.46	11.5	10.9	15.0	36.7	136	154	33.9	8.08	4.61	4.31	12.4
45	5.13	8.15	11.9	12.4	16.3	41.5	145	174	40.6	8.71	4.93	4.57	14.8
40	5.71	8.55	12.2	13.6	17.1	47.5	165	199	49.7	9.47	5.32	4.79	17.5
35	6.31	10.3	14.0	14.9	17.5	51.6	187	221	59.8	10.9	5.62	4.94	20.1
30	6.73	11.3	17.3	16.6	17.9	55.9	208	241	70.1	12.4	6.15	5.16	24.9
25	7.25	12.0	18.0	17.4	18.7	61.6	239	264	80.1	13.7	6.52	5.49	37.7
20	8.99	13.0	18.6	18.4	19.9	68.6	269	294	98.9	16.0	6.81	6.45	62.3
15	11.9	18.1	19.1	19.4	21.4	80.5	305	312	116	20.1	7.44	7.29	99.4
10	13.8	21.5	21.1	19.9	24.0	118	355	349	143	24.3	8.21	9.37	145
5	14.8	26.7	22.7	20.7	27.1	205	456	418	174	30.6	10.8	ng	245

8-0.000-4M HARI RUD RIVER AT ROBAT-I-AKHOND, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	74.1	67.6	67.1	65.7	57.2
0.95	1.05	107	102	98.6	93.8	83.9
0.90	1.11	131	127	121	114	103
0.80	1.25	167	165	156	143	131
0.50	2	275	274	254	225	206
0.20	5	461	454	415	354	323
0.10	10	611	591	538	450	406
0.04	25	830	783	711	582	518
0.02	50	1,020	938	852	687	605
0.01	100	1,220	1,100	1,000	799	695
0.005	200	1,450	1,280	1,170	918	789
0.002	500	1,790	ng	ng	ng	ng

8-0.000-4M HARI RUD RIVER AT ROBAT-I-AKHOND, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.97	0.97	1.09	1.33	1.63	1.83	2.26	2.56	3.25
0.10	10	1.40	1.40	1.54	1.80	2.09	2.30	2.69	2.98	3.87
0.20	5	2.09	2.10	2.24	2.52	2.76	2.99	3.33	3.62	4.79
0.50	2	3.90	3.92	4.04	4.30	4.42	4.71	5.03	5.47	7.32

8-0.000-4M HARI RUD RIVER AT ROBAT-I-AKHOND, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	2.80	3.00	3.22	3.75	10.3	11.4	13.2	23.3
0.10	10	3.61	3.90	4.14	4.69	11.8	12.8	14.4	24.8
0.20	5	4.84	5.27	5.55	6.11	13.9	15.0	16.5	27.7
0.50	2	8.22	9.00	9.34	9.90	18.9	21.4	23.8	38.8
		June-July-August				September-October-November			
0.05	20	1.09	1.25	1.49	1.82	1.95	2.28	2.56	2.70
0.10	10	1.57	1.76	2.05	2.38	2.21	2.55	2.79	2.93
0.20	5	2.30	2.54	2.86	3.19	2.60	2.95	3.16	3.29
0.50	2	4.10	4.37	4.71	5.08	3.72	4.08	4.22	4.40

8-0.000-4M HARI RUD RIVER AT ROBAT-I-AKHOND, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1966	April 26, 1966	167	1969	April 16, 1969	740
1967	April 26, 1967	355	1975	May 17, 1975	592
1968	May 1, 1968	425	1976	April 24, 1976	570
1969	April 16, 1969	740	1968	May 1, 1968	425
1970	April 12, 1970	122	1967	April 26, 1967	355
1971	April 13, 1971	174	1973	May 1, 1973	305
1972	May 7, 1972	261	1978	April 18, 1978	292
1973	May 1, 1973	305	1972	May 7, 1972	261
1974	April 8, 1974	143	1971	April 13, 1971	174
1975	May 17, 1975	592	1966	April 26, 1966	167
1976	April 24, 1976	570	1974	April 8, 1974	143
1977	April 30, 1977	141	1977	April 30, 1977	141
1978	April 18, 1978	292	1970	April 12, 1970	122

8-0.000-4M HARI RUD RIVER AT ROBAT-I-AKHOND, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1966	--	--	--	--	--	--	--	75.8	13.3	3.86	3.35	3.44	--
1967	4.02	4.89	5.59	5.54	8.63	20.0	147	224	78.0	12.6	5.00	4.75	43.4
1968	6.32	8.30	12.0	13.8	16.5	44.7	159	189	77.7	8.40	4.76	5.12	45.4
1969	6.40	10.6	25.5	21.9	25.2	219	419	377	139	27.4	11.6	11.3	108
1970	14.2	28.5	21.2	20.3	18.1	32.3	94.4	48.4	8.22	1.41	1.63	3.08	24.3
1971	4.00	4.79	6.06	6.28	10.8	28.3	99.0	50.0	12.0	7.41	4.75	3.04	19.7
1972	3.23	3.97	3.84	7.21	12.4	55.6	178	194	79.8	14.5	6.66	4.06	46.9
1973	4.45	7.89	11.2	9.48	14.5	52.2	189	207	54.2	9.84	3.73	3.85	47.4
1974	4.28	4.28	6.01	8.55	11.5	50.5	127	78.5	13.6	8.21	6.22	4.80	27.0
1975	4.71	5.59	6.57	8.33	12.5	48.3	275	338	108	22.2	5.65	6.64	70.3
1976	8.35	12.4	17.7	18.1	20.7	37.8	248	366	90.2	16.3	7.27	8.58	71.1
1977	13.9	21.1	18.2	19.0	18.8	45.8	108	96.4	22.3	4.66	4.00	4.08	31.4
1978	4.19	8.79	12.3	12.6	21.0	49.3	152	128	17.3	4.80	3.92	3.67	34.8

8-0.000-5M HARI RUD RIVER AT TAGAW GHAZA

(U.S. Geological Survey identification number: 342100063390000)

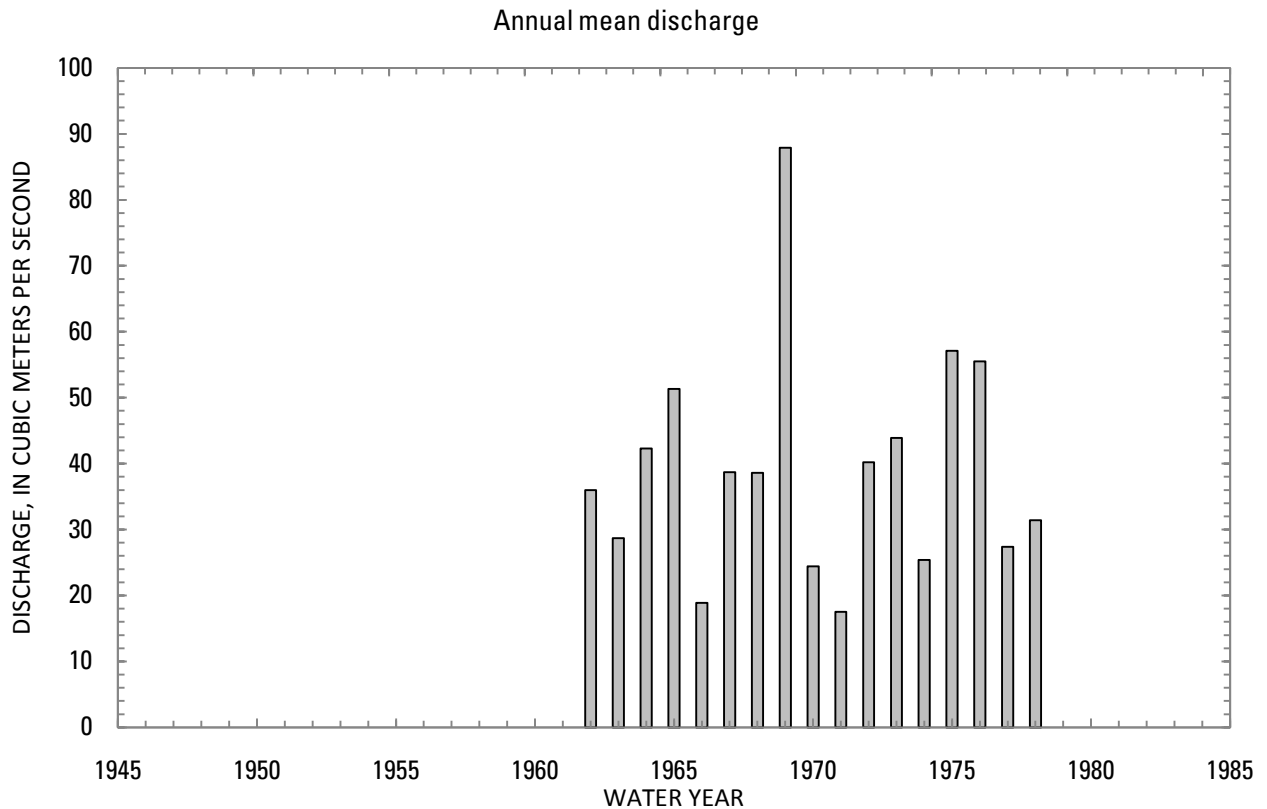
LOCATION: Lat 34°21'N., long 63°39'E.

DRAINAGE AREA: 11,920 km².

ELEVATION: 1,460 meters above mean sea level.

PERIOD OF RECORD: October 1, 1961 to September 30, 1978.

GAGE: Water-stage recorder. Staff gage at same site and datum prior to 1963 water year.



8-0.000-5M HARI RUD RIVER AT TAGAW GHAZA, Continued

Statistics of monthly and annual mean discharges
[m³/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	12.9	1970	5.34	1972	7.40	1.95	0.26	1.58
November	20.8	1970	5.49	1975	8.23	3.69	0.45	1.76
December	14.6	1970	5.12	1974	7.76	2.44	0.31	1.66
January	15.5	1969	5.18	1975	8.13	3.09	0.38	1.74
February	14.8	1973	6.20	1972	9.59	2.79	0.29	2.05
March	132	1969	10.8	1966	33.6	27.5	0.82	7.17
April	352	1969	43.8	1966	138	68.8	0.50	29.4
May	331	1969	56.0	1971	170	83.5	0.49	36.4
June	124	1969	10.9	1971	56.7	33.3	0.59	12.1
July	31.1	1969	4.26	1971	14.2	7.38	0.52	3.02
August	14.3	1969	3.17	1971	7.54	2.97	0.39	1.61
September	13.7	1969	4.47	1971	7.34	2.32	0.32	1.57
Annual	87.9	1969	17.5	1971	39.1	17.2	0.44	100

8-0.000-5M HARI RUD RIVER AT TAGAW GHAZA, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	5.55	5.20	4.74	4.64	5.37	8.73	27.2	55.2	10.5	4.91	3.66	4.95	5.10
90	5.62	5.39	5.20	5.01	5.94	10.2	43.4	69.2	13.7	5.80	4.39	5.32	5.59
85	5.68	5.58	5.44	5.25	6.34	11.8	53.3	76.3	17.0	6.58	4.78	5.50	5.93
80	5.86	5.77	5.73	5.48	6.86	13.3	68.4	83.7	20.2	7.30	5.25	5.83	6.27
75	6.13	5.93	5.94	5.78	7.11	14.6	76.5	91.8	24.3	7.80	5.45	6.01	6.66
70	6.30	6.10	6.16	6.02	7.40	15.7	81.9	103	27.5	8.51	5.59	6.14	7.04
65	6.64	6.36	6.36	6.25	7.74	16.8	88.0	115	31.0	9.33	5.85	6.22	7.47
60	6.73	6.60	6.53	6.47	8.10	17.8	94.8	129	34.3	10.1	6.20	6.30	8.12
55	6.82	6.82	6.80	6.73	8.51	19.3	104	140	37.5	11.0	6.50	6.42	8.81
50	6.91	7.17	7.27	6.99	8.87	21.2	112	157	42.6	12.0	6.80	6.55	9.74
45	6.99	7.45	7.66	7.28	9.19	22.8	120	169	47.8	12.9	7.13	6.71	10.9
40	7.08	7.65	8.06	7.79	9.42	26.5	128	183	52.9	13.8	7.48	6.87	12.5
35	7.15	7.98	8.36	8.21	9.69	30.4	138	200	58.7	14.8	8.10	7.04	15.2
30	7.23	8.58	8.64	8.61	10.6	33.9	156	216	66.9	16.2	8.55	7.59	19.9
25	7.64	9.26	8.92	9.06	11.4	37.4	179	234	76.5	17.8	9.13	8.59	30.6
20	9.30	9.57	9.32	10.1	12.1	44.8	204	247	88.6	20.1	10.1	8.90	51.1
15	9.54	9.79	10.0	10.9	13.1	54.9	241	263	103	22.6	10.9	10.1	82.9
10	9.71	10.4	10.9	12.9	14.8	65.8	271	286	128	26.7	12.0	10.5	123
5	12.7	16.6	14.1	14.6	16.9	93.4	325	337	150	31.8	13.5	ng	199

8-0.000-5M HARI RUD RIVER AT TAGAW GHAZA, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	64.8	64.1	62.2	58.0	56.0
0.95	1.05	99.2	95.7	91.9	85.3	81.4
0.90	1.11	124	118	112	104	98.6
0.80	1.25	162	151	143	131	123
0.50	2	269	239	222	200	185
0.20	5	441	372	339	297	269
0.10	10	569	464	419	362	323
0.04	25	744	586	522	442	390
0.02	50	883	679	599	502	439
0.01	100	1,030	773	677	560	486
0.005	200	1,180	869	756	618	533
0.002	500	1,400	ng	ng	ng	ng

8-0.000-5M HARI RUD RIVER AT TAGAW GHAZA, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	2.95	3.00	3.14	3.34	3.63	4.00	4.35	4.66	4.98
0.10	10	3.38	3.43	3.57	3.78	4.04	4.38	4.70	4.97	5.31
0.20	5	3.96	4.02	4.17	4.38	4.62	4.94	5.21	5.44	5.80
0.50	2	5.28	5.40	5.57	5.83	6.04	6.33	6.55	6.74	7.13

8-0.000-5M HARI RUD RIVER AT TAGAW GHAZA, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	3.52	3.99	4.35	4.58	6.53	7.36	8.64	13.0
0.10	10	3.86	4.35	4.70	4.93	7.19	8.19	9.38	14.3
0.20	5	4.34	4.85	5.20	5.43	8.20	9.48	10.6	16.6
0.50	2	5.44	6.02	6.43	6.73	11.0	13.3	14.9	24.4
		June-July-August				September-October-November			
0.05	20	3.21	3.33	3.43	3.65	4.04	4.25	4.43	4.74
0.10	10	3.71	3.87	3.96	4.22	4.36	4.55	4.71	4.99
0.20	5	4.42	4.61	4.71	5.03	4.82	4.99	5.13	5.38
0.50	2	6.19	6.43	6.53	7.00	6.07	6.20	6.29	6.47

8-0.000-5M HARI RUD RIVER AT TAGAW GHAZA, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1962	April 26, 1962	297	1969	May 10, 1969	723
1963	May 5, 1963	221	1975	May 17, 1975	670
1964	May 2, 1964	300	1976	May 13, 1976	500
1965	May 22, 1965	350	1967	April 27, 1967	414
1966	May 8, 1966	132	1968	April 30, 1968	351
1967	April 27, 1967	414	1965	May 22, 1965	350
1968	April 30, 1968	351	1973	May 3, 1973	340
1969	May 10, 1969	723	1964	May 2, 1964	300
1970	April 27, 1970	124	1962	April 26, 1962	297
1971	May 2, 1971	97.2	1978	April 17, 1978	282
1972	May 9, 1972	244	1972	May 9, 1972	244
1973	May 3, 1973	340	1963	May 5, 1963	221
1974	April 22, 1974	134	1977	April 19, 1977	146
1975	May 17, 1975	670	1974	April 22, 1974	134
1976	May 13, 1976	500	1966	May 8, 1966	132
1977	April 19, 1977	146	1970	April 27, 1970	124
1978	April 17, 1978	282	1971	May 2, 1971	97.2

8-0.000-5M HARI RUD RIVER AT TAGAW GHAZA, Continued

Monthly and annual mean discharges, in cubic meters per second

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1962	5.60	6.04	5.83	6.00	10.9	37.3	157	141	39.3	10.5	6.05	5.68	36.0
1963	7.08	6.99	5.98	6.07	7.77	15.3	62.0	141	63.0	13.4	7.60	7.14	28.7
1964	7.01	10.9	8.41	6.28	9.69	41.7	160	186	47.8	14.6	8.14	6.85	42.3
1965	6.70	6.50	6.50	7.89	10.6	45.7	133	256	99.4	22.7	9.17	8.72	51.3
1966	9.51	9.65	8.41	8.15	9.78	10.8	43.8	84.7	23.3	7.12	5.48	5.71	18.9
1967	6.32	5.93	5.24	5.46	6.47	15.0	117	196	75.6	15.8	7.45	6.18	38.7
1968	5.88	5.66	8.30	7.70	8.36	25.1	127	174	75.4	12.4	6.31	6.59	38.6
1969	6.95	7.93	10.3	15.5	14.3	132	352	331	124	31.1	14.3	13.7	87.9
1970	12.9	20.8	14.6	13.2	13.8	22.7	90.4	69.5	19.1	6.39	4.34	5.82	24.4
1971	7.33	7.56	6.88	6.65	7.23	20.2	75.6	56.0	10.9	4.26	3.17	4.47	17.5
1972	5.34	5.67	5.86	5.66	6.20	23.6	123	195	75.1	18.3	9.09	8.53	40.2
1973	7.11	7.09	7.84	12.2	14.8	42.5	174	187	47.8	12.8	6.87	6.20	43.9
1974	5.79	5.51	5.12	5.18	6.57	36.4	108	87.0	24.5	8.29	5.54	5.76	25.4
1975	6.07	5.49	5.28	5.18	6.48	27.2	192	285	102	24.4	12.4	10.5	57.1
1976	9.35	9.60	10.1	10.7	11.5	18.6	178	294	79.6	21.8	11.4	10.2	55.5
1977	9.78	10.4	9.62	9.63	9.58	34.9	110	86.3	26.8	8.14	6.17	6.58	27.4
1978	7.08	8.16	7.71	6.80	9.05	21.8	140	126	31.0	8.56	4.70	6.11	31.4

8-0.000-7M HARI RUD RIVER AT CHEKHCHERAN

(U.S. Geological Survey identification number: 343100065150000)

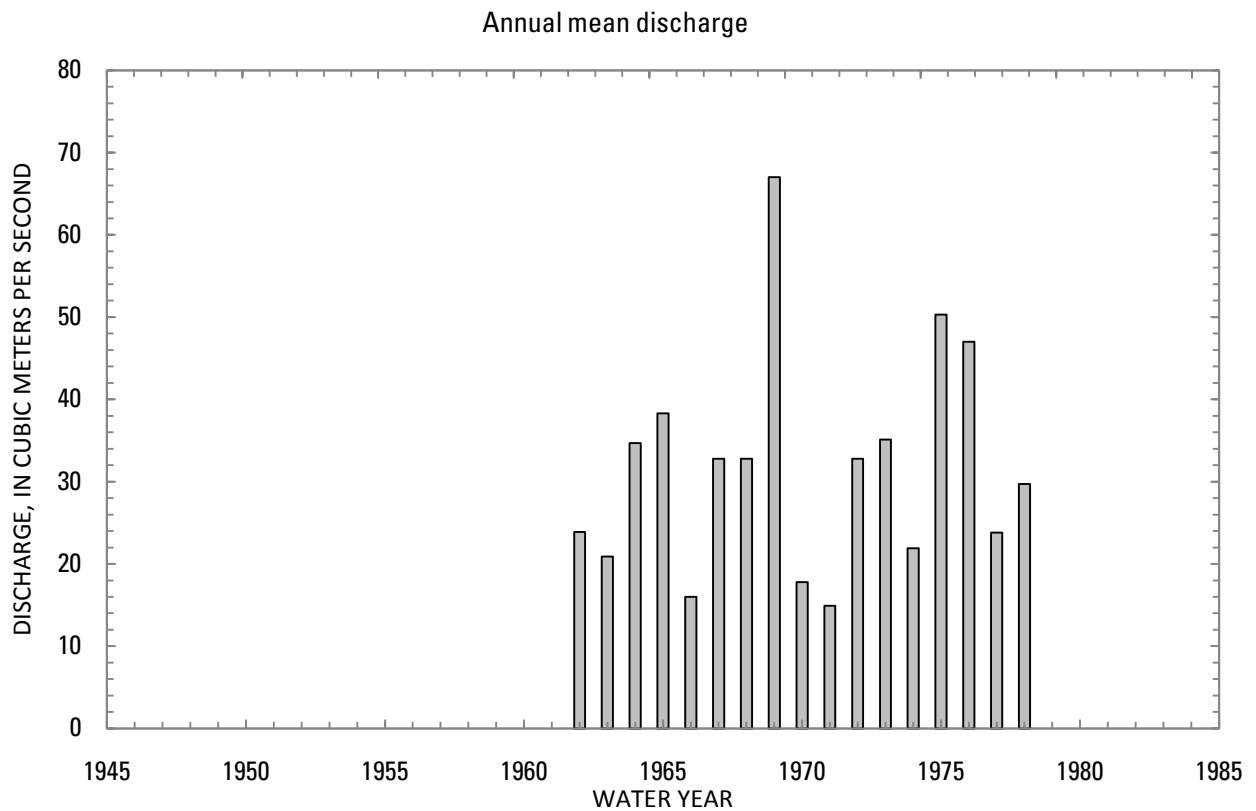
LOCATION: Lat 34°31'N., long 65°15'E.

DRAINAGE AREA: 6,090 km².

ELEVATION: 2,250 meters above mean sea level.

PERIOD OF RECORD: October 1, 1961 to September 30, 1978.

GAGE: Water-stage recorder.



8-0.000-7M HARI RUD RIVER AT CHEKHCHERAN, Continued

Statistics of monthly and annual mean discharges
[m³/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	7.42	1970	3.47	1972	5.48	1.10	0.20	1.44
November	10.5	1970	3.33	1971	5.53	1.67	0.30	1.45
December	6.66	1970	2.42	1965	4.96	1.10	0.22	1.30
January	6.60	1976	3.03	1965	4.75	1.02	0.21	1.25
February	8.30	1969	4.36	1974	5.78	1.11	0.19	1.52
March	74.4	1969	5.75	1966	19.4	16.4	0.85	5.10
April	255	1969	38.6	1966	110	50.1	0.45	29.0
May	309	1969	55.3	1971	153	80.4	0.52	40.3
June	104	1975	11.2	1971	48.0	28.1	0.59	12.6
July	23.2	1969	3.06	1971	11.3	5.72	0.51	2.97
August	11.1	1969	3.00	1971	5.80	2.12	0.37	1.53
September	8.74	1969	3.00	1971	5.79	1.59	0.27	1.52
Annual	67.0	1969	14.9	1971	31.8	13.6	0.43	100

8-0.000-7M HARI RUD RIVER AT CHEKHCHERAN, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	3.83	3.24	2.50	2.97	3.95	5.12	15.0	53.1	9.65	3.21	3.12	3.08	3.45
90	3.90	3.85	3.50	3.33	4.03	5.35	28.5	67.4	11.5	4.90	3.61	3.86	3.99
85	4.36	4.02	3.67	3.48	4.38	5.77	36.9	72.1	14.0	5.56	3.75	3.99	4.35
80	4.61	4.31	4.05	3.73	4.44	6.66	47.0	75.8	16.6	5.88	3.85	4.31	4.69
75	4.67	4.42	4.14	3.93	4.67	7.32	53.8	81.7	19.6	6.46	3.97	4.87	4.96
70	4.81	4.54	4.37	4.21	5.01	7.96	58.8	87.7	22.3	7.22	4.40	4.93	5.22
65	4.98	4.70	4.48	4.29	5.07	8.63	66.9	94.4	25.2	7.87	4.68	4.99	5.48
60	5.08	4.93	4.66	4.40	5.13	9.31	75.8	103	28.6	8.46	4.85	5.23	5.81
55	5.24	5.08	4.73	4.59	5.39	10.4	82.0	114	32.1	8.88	5.01	5.38	6.15
50	5.39	5.20	4.84	4.82	5.50	11.6	89.4	129	36.3	9.26	5.22	5.62	6.48
45	5.66	5.43	5.11	4.90	5.87	12.8	98.0	147	40.2	9.75	5.46	5.71	7.13
40	5.76	5.65	5.28	4.97	5.97	14.7	106	160	43.7	10.5	5.83	6.03	7.91
35	6.00	5.82	5.49	5.23	6.03	15.7	114	173	47.6	11.5	6.52	6.41	9.47
30	6.33	5.96	5.64	5.48	6.10	17.2	125	192	53.5	12.6	6.78	6.60	12.9
25	6.38	6.10	5.75	5.65	6.33	19.9	147	210	63.5	14.1	7.11	6.96	21.1
20	6.44	6.47	6.07	5.97	6.67	23.2	172	229	74.1	15.7	7.43	7.32	38.3
15	6.50	6.85	6.28	6.05	7.33	31.8	203	251	89.0	18.6	7.91	7.89	68.6
10	7.13	7.26	6.55	6.14	7.96	40.4	230	273	109	21.9	8.73	8.23	100
5	7.30	8.33	7.04	6.46	9.38	66.3	270	320	133	26.3	10.4	8.54	169

8-0.000-7M HARI RUD RIVER AT CHEKHCHERAN, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	60.4	60.0	57.4	52.9	49.8
0.95	1.05	86.8	85.3	81.3	75.5	70.7
0.90	1.11	106	103	98.1	91.1	85.0
0.80	1.25	136	130	123	114	106
0.50	2	224	206	191	174	159
0.20	5	381	329	298	264	236
0.10	10	508	423	376	327	288
0.04	25	697	554	484	409	356
0.02	50	860	662	569	473	407
0.01	100	1,040	777	659	538	458
0.005	200	1,250	902	754	605	510
0.002	500	1,550	ng	ng	ng	ng

8-0.000-7M HARI RUD RIVER AT CHEKHCHERAN, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	2.40	2.46	2.51	2.53	2.61	2.73	3.08	3.27	3.67
0.10	10	2.62	2.69	2.77	2.80	2.92	3.10	3.41	3.59	3.94
0.20	5	2.91	3.00	3.11	3.17	3.31	3.56	3.83	4.00	4.31
0.50	2	3.58	3.71	3.87	3.97	4.16	4.51	4.68	4.86	5.12

8-0.000-7M HARI RUD RIVER AT CHEKHCHERAN, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	2.48	2.65	2.70	2.79	3.77	4.24	4.51	5.97
0.10	10	2.74	2.93	3.01	3.14	4.24	4.74	5.15	6.92
0.20	5	3.06	3.30	3.40	3.58	4.92	5.47	6.11	8.50
0.50	2	3.76	4.07	4.19	4.44	6.76	7.38	8.78	13.7
		June-July-August				September-October-November			
0.05	20	2.94	2.99	3.04	3.13	2.73	2.81	2.96	3.15
0.10	10	3.23	3.31	3.37	3.50	3.06	3.14	3.31	3.54
0.20	5	3.67	3.77	3.84	4.02	3.50	3.59	3.78	4.03
0.50	2	4.77	4.93	5.02	5.34	4.44	4.59	4.80	5.08

8-0.000-7M HARI RUD RIVER AT CHEKHCHERAN, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1962	April 21, 1962	158	1969	May 5, 1969	693
1963	May 5, 1963	158	1975	May 16, 1975	610
1964	May 2, 1964	277	1976	May 12, 1976	438
1965	May 4, 1965	285	1968	April 29, 1968	348
1966	May 6, 1966	109	1967	April 26, 1967	334
1967	April 26, 1967	334	1965	May 4, 1965	285
1968	April 29, 1968	348	1978	April 16, 1978	280
1969	May 5, 1969	693	1964	May 2, 1964	277
1970	April 25, 1970	118	1973	May 1, 1973	275
1971	April 30, 1971	97.6	1972	April 27, 1972	235
1972	April 27, 1972	235	1962	April 21, 1962	158
1973	May 1, 1973	275	1963	May 5, 1963	158
1974	April 16, 1974	106	1977	April 19, 1977	129
1975	May 16, 1975	610	1970	April 25, 1970	118
1976	May 12, 1976	438	1966	May 6, 1966	109
1977	April 19, 1977	129	1974	April 16, 1974	106
1978	April 16, 1978	280	1971	April 30, 1971	97.6

8-0.000-7M HARI RUD RIVER AT CHEKHCHERAN, Continued

Monthly and annual mean discharges, in cubic meters per second

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1962	4.81	4.62	4.68	3.77	4.79	23.6	94.4	93.8	30.1	10.1	5.83	6.12	23.9
1963	6.42	5.37	4.22	3.80	6.13	12.9	48.8	96.6	40.4	11.2	6.98	7.56	20.9
1964	6.09	6.45	6.03	4.50	7.50	25.3	126	170	41.8	11.4	5.30	5.72	34.7
1965	5.17	4.21	2.42	3.03	5.83	20.4	89.0	216	73.0	22.0	8.61	7.89	38.3
1966	7.12	7.02	5.96	6.00	5.39	5.75	38.6	80.9	21.5	5.90	3.69	3.88	16.0
1967	4.13	3.96	3.99	4.23	4.83	8.46	94.3	174	71.9	12.3	4.75	5.47	32.8
1968	5.72	5.61	4.69	4.24	4.84	8.62	112	153	67.2	11.8	8.02	7.48	32.8
1969	6.46	6.37	6.39	5.64	8.30	74.4	255	309	87.0	23.2	11.1	8.74	67.0
1970	7.42	10.5	6.66	6.00	6.40	9.73	68.4	66.6	17.5	6.61	3.90	4.06	17.8
1971	4.17	3.33	4.00	5.00	6.00	16.0	64.8	55.3	11.2	3.06	3.00	3.00	14.9
1972	3.47	5.13	5.40	4.63	5.94	14.1	109	166	59.5	10.2	5.09	5.17	32.8
1973	4.93	4.50	4.60	4.48	4.43	12.7	141	181	41.8	9.92	5.02	4.90	35.1
1974	4.59	4.14	4.47	4.55	4.36	32.9	93.7	80.7	18.6	5.51	3.91	4.87	21.9
1975	4.77	4.62	3.95	3.24	4.38	10.4	154	279	104	19.2	7.26	6.90	50.3
1976	5.75	5.43	5.20	6.60	6.40	6.91	135	283	79.3	15.0	7.12	6.82	47.0
1977	6.41	6.97	5.70	5.84	6.63	31.5	101	79.2	23.9	6.74	5.12	5.58	23.8
1978	5.72	5.82	5.97	5.25	6.18	15.8	149	120	27.3	7.76	3.90	4.27	29.7

8-0.000-9M HARI RUD RIVER AT DAULATYAR

(U.S. Geological Survey identification number: 343300065460000)

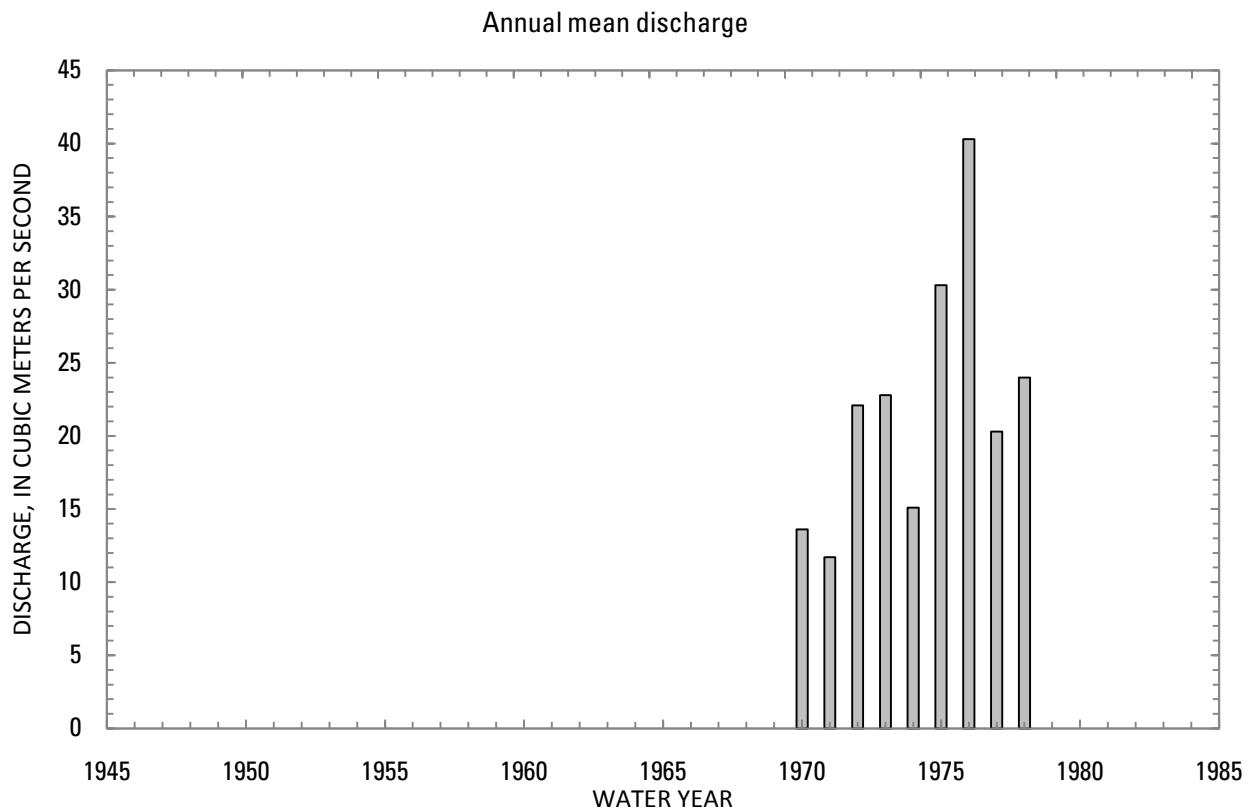
LOCATION: Lat 34°33'N., long 65°46'E.

DRAINAGE AREA: 2,840 km².

ELEVATION: 2,440 meters above mean sea level.

PERIOD OF RECORD: August 6, 1969 to September 30, 1978.

GAGE: Water-stage recorder.



8-0.000-9M HARI RUD RIVER AT DAULATYAR, Continued

Statistics of monthly and annual mean discharges
[m³/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	5.73	1970	2.29	1972	3.75	0.97	0.26	1.41
November	7.29	1970	2.57	1972	3.66	1.42	0.39	1.37
December	5.46	1970	2.71	1973	3.38	0.86	0.25	1.27
January	4.96	1970	2.40	1975	3.46	0.86	0.25	1.30
February	5.39	1977	2.96	1975	3.86	0.82	0.21	1.45
March	27.3	1977	5.07	1976	11.7	7.86	0.67	4.38
April	126	1978	58.2	1970	81.5	25.1	0.31	30.6
May	257	1976	36.3	1971	108	72.4	0.67	40.5
June	65.6	1976	7.53	1971	30.9	22.1	0.71	11.6
July	15.4	1975	2.90	1971	7.50	3.79	0.51	2.82
August	6.48	1976	2.20	1971	4.29	1.33	0.31	1.61
September	6.59	1969	2.42	1971	4.36	1.26	0.29	1.64
Annual	40.3	1976	11.7	1971	22.2	8.91	0.40	100

8-0.000-9M HARI RUD RIVER AT DAULATYAR, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	2.27	2.05	2.44	2.35	2.91	3.37	19.0	27.9	6.73	2.84	2.30	2.40	2.52
90	2.47	2.54	2.50	2.52	3.00	3.56	27.0	36.9	7.68	3.50	2.50	2.86	2.95
85	3.06	2.89	2.63	2.93	3.04	3.85	32.3	45.5	8.53	3.95	3.23	3.27	3.08
80	3.10	2.98	2.69	2.95	3.07	4.35	39.1	50.4	9.35	4.28	3.34	3.36	3.21
75	3.14	3.06	2.76	2.97	3.12	4.62	45.3	53.4	11.0	4.50	3.39	3.46	3.34
70	3.22	3.13	2.90	2.99	3.17	4.86	52.3	57.8	12.8	4.74	3.45	3.52	3.48
65	3.28	3.21	3.02	3.01	3.33	5.23	55.6	62.1	14.1	5.07	3.50	3.59	3.73
60	3.32	3.27	3.10	3.18	3.41	5.82	60.2	66.2	16.3	5.57	3.70	3.75	3.98
55	3.37	3.31	3.15	3.22	3.50	6.16	65.1	73.3	17.9	5.92	3.89	4.12	4.28
50	3.66	3.35	3.19	3.26	3.88	6.55	68.9	78.8	20.8	6.18	4.08	4.25	4.65
45	3.78	3.39	3.27	3.37	3.97	7.43	73.1	87.9	24.2	6.79	4.37	4.45	5.07
40	3.90	3.43	3.34	3.39	4.00	8.28	78.0	102	28.3	7.08	4.49	4.57	5.59
35	4.00	3.48	3.41	3.41	4.03	8.95	84.5	114	31.3	7.69	4.61	4.85	6.50
30	4.05	3.53	3.46	3.43	4.06	12.3	93.3	130	34.3	8.07	4.95	4.99	8.06
25	4.10	3.59	3.51	3.48	4.26	14.6	103	146	39.0	8.37	5.09	5.15	14.2
20	4.29	3.88	3.78	4.25	4.54	16.2	109	160	44.2	9.83	5.59	5.56	26.1
15	4.47	4.11	4.22	4.59	4.66	18.5	129	178	55.2	10.9	5.87	5.86	47.5
10	5.38	5.92	5.17	4.87	4.99	26.9	146	229	68.5	14.0	6.04	5.98	68.1
5	5.70	7.14	ng	5.27	5.87	46.3	189	286	91.8	18.1	6.81	6.44	112

8-0.000-9M HARI RUD RIVER AT DAULATYAR, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	49.7	44.7	43.3	42.1	39.4
0.95	1.05	66.6	61.5	58.9	56.3	52.3
0.90	1.11	79.2	73.8	70.2	66.4	61.4
0.80	1.25	99.2	93.1	87.8	81.9	75.2
0.50	2	161	151	139	126	114
0.20	5	279	256	232	203	179
0.10	10	384	345	308	264	230
0.04	25	551	483	423	355	304
0.02	50	705	604	523	433	366
0.01	100	888	744	638	520	435
0.005	200	1,100	905	768	618	511
0.002	500	1,450	ng	ng	ng	ng

¹Less than 10 years of data used.

8-0.000-9M HARI RUD RIVER AT DAULATYAR, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	1.42	1.50	1.60	1.78	2.04	2.19	2.29	2.35	2.62
0.10	10	1.59	1.68	1.78	1.94	2.20	2.33	2.43	2.50	2.74
0.20	5	1.81	1.90	2.01	2.15	2.41	2.52	2.61	2.68	2.91
0.50	2	2.28	2.39	2.51	2.60	2.81	2.91	2.99	3.08	3.30

8-0.000-9M HARI RUD RIVER AT DAULATYAR, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	1.77	1.97	2.16	2.41	2.79	2.95	3.33	4.36
0.10	10	1.89	2.10	2.26	2.50	3.08	3.19	3.49	4.89
0.20	5	2.07	2.29	2.41	2.64	3.49	3.57	3.79	5.76
0.50	2	2.53	2.76	2.82	3.03	4.57	4.68	4.86	8.64
		June-July-August				September-October-November			
0.05	20	1.80	1.96	2.09	2.28	1.49	1.71	1.88	2.16
0.10	10	2.20	2.34	2.46	2.65	1.73	1.94	2.09	2.34
0.20	5	2.72	2.85	2.94	3.13	2.06	2.25	2.38	2.60
0.50	2	3.82	3.90	3.97	4.19	2.82	2.97	3.07	3.24

8-0.000-9M HARI RUD RIVER AT DAULATYAR, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1970	April 25, 1970	107	1975	May 14, 1975	446
1971	April 22, 1971	92.0	1976	April 24, 1976	350
1972	April 28, 1972	157	1978	April 15, 1978	299
1973	May 1, 1973	170	1973	May 1, 1973	170
1974	April 12, 1974	81.8	1972	April 28, 1972	157
1975	May 14, 1975	446	1977	April 18, 1977	111
1976	April 24, 1976	350	1970	April 25, 1970	107
1977	April 18, 1977	111	1971	April 22, 1971	92.0
1978	April 15, 1978	299	1974	April 12, 1974	81.8

8-0.000-9M HARI RUD RIVER AT DAULATYAR, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1969	--	--	--	--	--	--	--	--	--	--	--	6.59	--
1970	5.73	7.29	5.46	4.96	4.71	7.28	58.2	46.6	11.6	4.85	3.35	3.35	13.6
1971	3.19	2.71	2.82	3.40	4.00	11.1	62.1	36.3	7.53	2.90	2.20	2.42	11.7
1972	2.29	2.57	3.12	3.02	4.00	7.23	67.5	110	46.9	8.58	4.62	4.81	22.1
1973	4.16	3.59	2.71	3.00	3.00	8.91	88.0	113	29.0	8.47	4.65	4.23	22.8
1974	4.01	3.39	3.35	3.20	3.10	22.7	62.0	53.3	13.8	5.09	3.44	3.46	15.1
1975	3.27	3.20	2.86	2.40	2.96	5.90	64.2	187	62.6	15.4	5.89	5.25	30.3
1976	3.68	3.08	2.98	3.02	3.48	5.07	115	257	65.6	10.7	6.48	5.75	40.3
1977	4.28	3.86	3.90	4.80	5.39	27.3	90.9	69.8	20.3	5.37	3.60	3.42	20.3
1978	3.17	3.26	3.19	3.35	4.05	9.53	126	98.8	20.9	6.15	4.39	4.31	24.0

8-1.R00-9T SENJAB RIVER AT KHUSH RABAT

(U.S. Geological Survey identification number: 344100062070000)

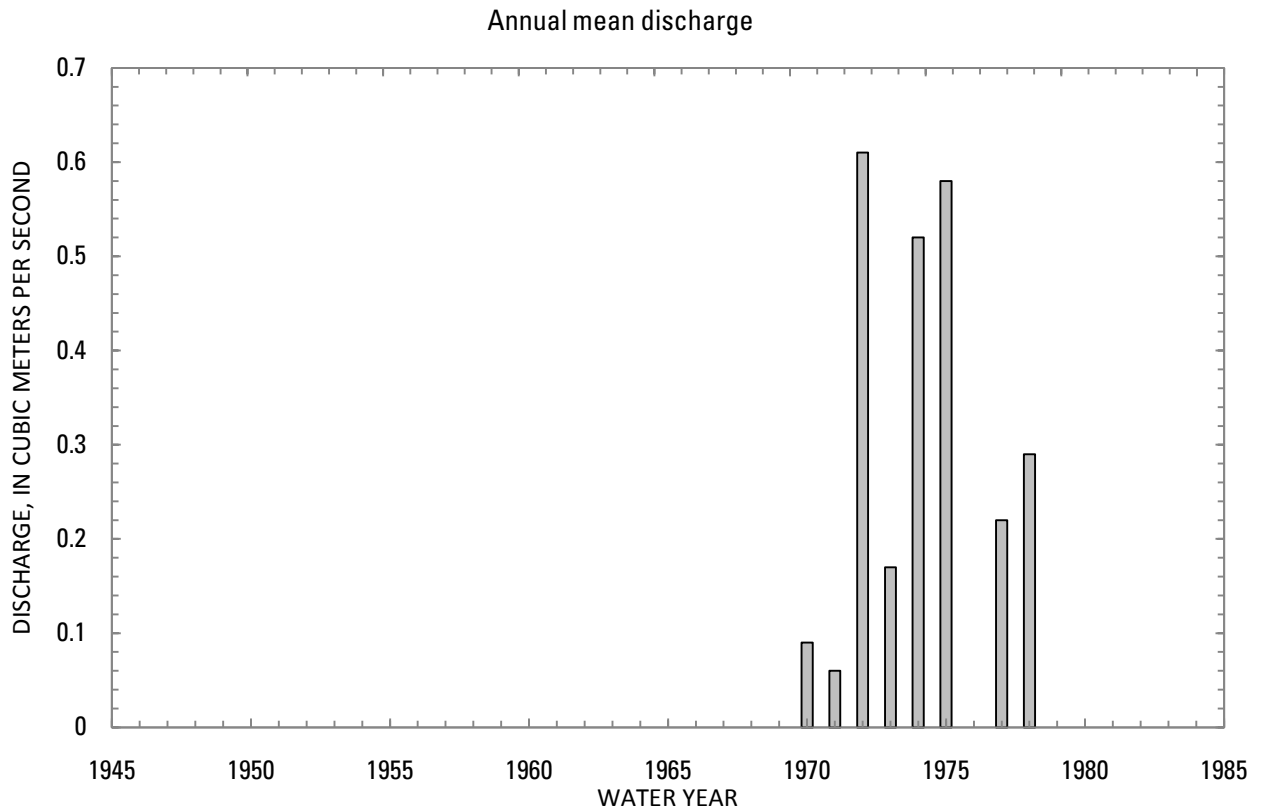
LOCATION: Lat 34°41'N., long 62°07'E.

DRAINAGE AREA: 65 km².

ELEVATION: 1,320 meters above mean sea level.

PERIOD OF RECORD: May 24, 1969 to September 30, 1978.

GAGE: Water-stage recorder. Staff gage at same site and datum prior to 1970 water year.



8-1.R00-9T SENJAB RIVER AT KHUSH RABAT, Continued

Statistics of monthly and annual mean discharges
[m³/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	0.06	1975	0	1972	0.01	0.02	1.57	0.33
November	0.37	1972	0	1974	0.13	0.13	1.06	3.18
December	0.99	1978	0.01	1974	0.22	0.33	1.47	5.68
January	1.33	1972	0.06	1971	0.59	0.50	0.85	14.9
February	1.62	1972	0.06	1971	0.61	0.62	1.02	15.4
March	2.62	1972	0.20	1971	1.12	0.81	0.72	28.5
April	2.44	1975	0.24	1973	1.05	0.95	0.90	26.7
May	0.27	1976	0.04	1973	0.13	0.08	0.60	3.38
June	0.13	1969	0	1971	0.05	0.05	1.09	1.20
July	0.08	1972	0	1971	0.02	0.03	1.31	0.54
August	0.03	1972	0	1969	0.01	0.01	1.68	0.19
September	0.02	1976	0	1969	0	0.01	1.74	0.12
Annual	0.61	1972	0.06	1971	0.32	0.22	0.69	100

8-1.R00-9T SENJAB RIVER AT KHUSH RABAT, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0	0	0	0.01	0.03	0.02	0.10	0.02	0	0	0	0	0
90	0	0	0	0.02	0.05	0.03	0.14	0.03	0	0	0	0	0
85	0	0	0.01	0.02	0.06	0.08	0.17	0.04	0	0	0	0	0
80	0	0.01	0.02	0.02	0.08	0.25	0.20	0.05	0.01	0	0	0	0
75	0	0.01	0.02	0.03	0.08	0.36	0.23	0.06	0.01	0	0	0	0
70	0	0.01	0.02	0.08	0.09	0.44	0.27	0.07	0.01	0	0	0	0.01
65	0	0.02	0.03	0.09	0.10	0.50	0.29	0.09	0.02	0	0	0	0.02
60	0	0.02	0.03	0.10	0.14	0.57	0.31	0.10	0.02	0.01	0	0	0.02
55	0	0.02	0.04	0.13	0.21	0.70	0.40	0.10	0.02	0.01	0	0	0.03
50	0	0.03	0.04	0.20	0.26	0.77	0.47	0.11	0.03	0.02	0	0	0.04
45	0.01	0.04	0.05	0.26	0.33	0.86	0.56	0.11	0.03	0.02	0	0	0.05
40	0.01	0.04	0.06	0.34	0.51	1.00	0.72	0.13	0.04	0.02	0	0	0.07
35	0.01	0.05	0.07	0.47	0.64	1.12	0.79	0.14	0.05	0.02	0	0	0.09
30	0.02	0.05	0.08	0.57	0.78	1.23	0.89	0.15	0.07	0.03	0.01	0	0.12
25	0.02	0.07	0.10	0.72	0.99	1.37	1.06	0.18	0.09	0.03	0.02	0.01	0.21
20	0.03	0.10	0.15	0.89	1.20	1.53	1.37	0.2	0.11	0.05	0.02	0.02	0.30
15	0.04	0.20	0.30	1.07	1.36	1.83	2.17	0.23	0.12	0.06	0.03	0.02	0.57
10	ng	0.28	0.37	1.45	1.60	2.47	2.97	0.27	0.13	0.08	0.03	0.02	0.92
5	ng	0.52	0.87	2.55	1.98	3.49	4.06	0.37	0.16	ng	0.04	0.03	1.5

8-1.R00-9T SENJAB RIVER AT KHUSH RABAT, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	4.40	0.72	0.49	0.29	0.21
0.95	1.05	6.50	1.19	0.78	0.49	0.37
0.90	1.11	8.10	1.54	0.99	0.66	0.50
0.80	1.25	10.7	2.12	1.35	0.93	0.71
0.50	2	18.6	3.85	2.43	1.79	1.34
0.20	5	33.7	6.90	4.47	3.42	2.48
0.10	10	46.7	9.31	6.18	4.78	3.37
0.04	25	67.0	12.8	8.79	6.84	4.64
0.02	50	85.1	15.6	11.1	8.60	5.68
0.01	100	106	18.7	13.6	10.6	6.78
0.005	200	130	22.0	16.5	12.7	7.96
0.002	500	168	ng	ng	ng	ng

¹Less than 10 years of data used.

8-1.R00-9T SENJAB RIVER AT KHUSH RABAT, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /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
0.10	10	ng	ng	ng	ng	ng	0	0	0	0
0.20	5	ng	ng	ng	ng	ng	0	0	0	0
0.50	2	ng	ng	ng	ng	ng	0	0	0	0.01

8-1.R00-9T SENJAB RIVER AT KHUSH RABAT, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0	0	0	0.01	0	0	0.01	0.03
0.10	10	0	0	0	0.01	0	0.01	0.01	0.04
0.20	5	0	0	0.01	0.01	0.01	0.01	0.02	0.06
0.50	2	0	0.02	0.02	0.04	0.04	0.05	0.06	0.11
		June-July-August				September-October-November			
0.05	20	0	0	0	0	ng	ng	ng	ng
0.10	10	0	0	0	0	ng	ng	ng	ng
0.20	5	0	0	0	0	ng	ng	ng	ng
0.50	2	0	0	0	0	ng	ng	ng	ng

8-1.R00-9T SENJAB RIVER AT KHUSH RABAT, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1970	April 13, 1970	7.38	1976	April 22, 1976	54.0
1971	March 30, 1971	17.0	1972	April 14, 1972	48.0
1972	April 14, 1972	48.0	1978	December 24, 1977	27.4
1973	February 23, 1973	18.1	1973	February 23, 1973	18.1
1974	April 1, 1974	14.6	1975	March 20, 1975	17.5
1975	March 20, 1975	17.5	1971	March 30, 1971	17.0
1976	April 22, 1976	54.0	1974	April 1, 1974	14.6
1977	April 22, 1977	8.40	1977	April 22, 1977	8.40
1978	December 24, 1977	27.4	1970	April 13, 1970	7.38

8-1.R00-9T SENJAB RIVER AT KHUSH RABAT, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1969	--	--	--	--	--	--	--	--	0.13	0.03	0	0	--
1970	0.01	0.12	0.03	0.15	0.09	0.25	0.41	0.05	0.01	0	0	0	0.09
1971	0	0.02	0.02	0.06	0.06	0.20	0.28	0.09	0	0	0	0	0.06
1972	0	0.37	0.05	1.33	1.62	2.62	0.92	0.20	0.12	0.08	0.03	0.01	0.61
1973	0	0.01	0.05	0.36	0.38	1.01	0.24	0.04	0	0	0	0	0.17
1974	0	0	0.01	1.19	0.56	1.94	2.23	0.17	0.04	0.02	0.02	0.02	0.52
1975	0.06	0.04	0.38	0.91	1.54	1.44	2.44	0.17	0.01	0	0	0	0.58
1976	0.01	0.18	0.41	0.27	--	0.62	2.17	0.27	0.11	0.06	0.02	0.02	--
1977	0.03	0.10	0.07	0.91	0.37	0.63	0.46	0.06	0.02	0.01	0	0	0.22
1978	0.01	0.30	0.99	0.09	0.25	1.37	0.28	0.16	0.03	0.01	0	0	0.29

8-2.R00-3A KARUKH RIVER NEAR HERAT

(U.S. Geological Survey identification number: 342600062280000)

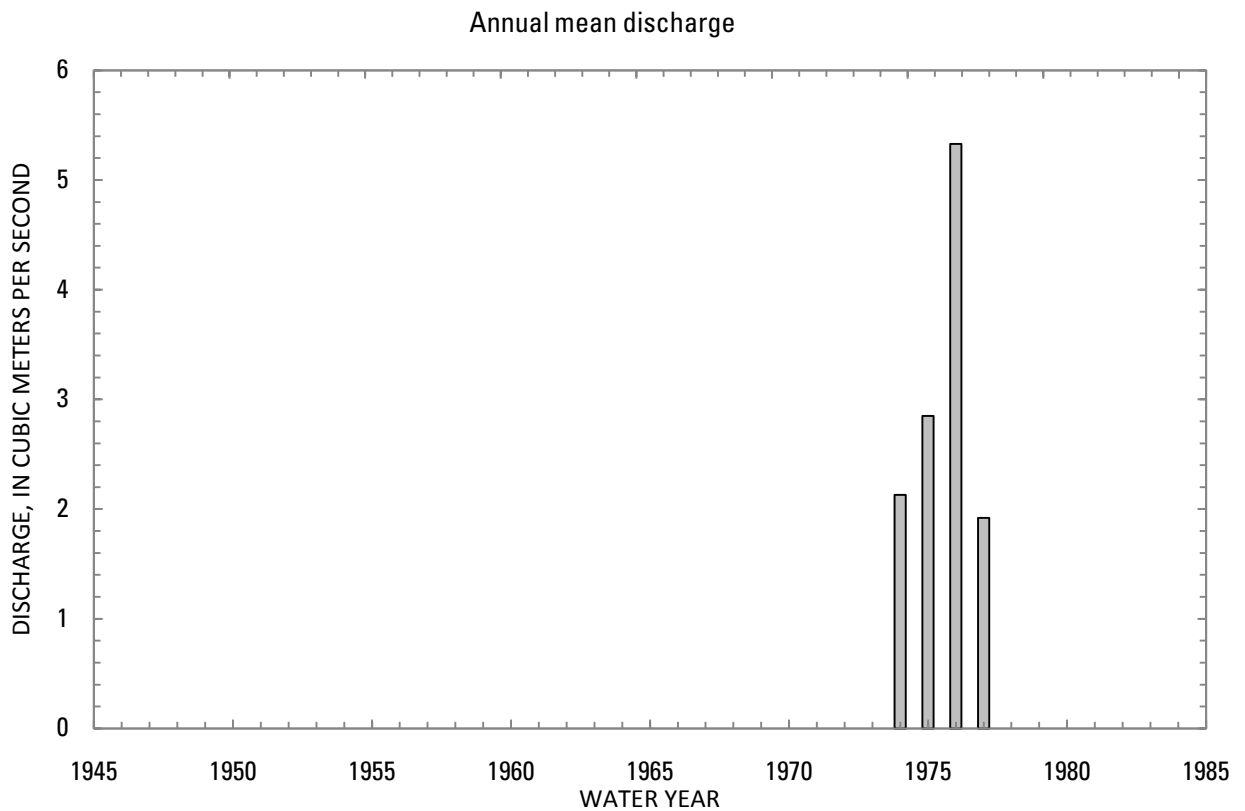
LOCATION: Lat 34°26'N., long 62°28'E.

DRAINAGE AREA: 1,390 km².

ELEVATION: 1,145 meters above mean sea level.

PERIOD OF RECORD: December 11, 1973 to September 30, 1977.

GAGE: Water-stage recorder.



8-2.R00-3A KARUKH RIVER NEAR HERAT, Continued

Statistics of monthly and annual mean discharges
[m³/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	1.30	1974	0.99	1975	1.16	0.14	0.12	3.38
November	1.53	1977	1.19	1975	1.36	0.15	0.11	3.96
December	2.48	1977	1.31	1975	1.70	0.53	0.31	4.97
January	2.31	1973	0.78	1975	1.83	0.67	0.36	5.35
February	5.63	1976	2.13	1975	3.40	1.32	0.39	9.94
March	17.8	1976	4.37	1977	8.40	5.39	0.64	24.5
April	17.5	1976	3.31	1973	9.45	6.63	0.70	27.6
May	13.7	1976	0.96	1973	4.33	5.39	1.24	12.7
June	0.90	1976	0.40	1974	0.59	0.21	0.35	1.73
July	1.00	1976	0.46	1977	0.62	0.22	0.37	1.80
August	0.95	1976	0.41	1973	0.60	0.21	0.34	1.75
September	1.02	1973	0.61	1975	0.79	0.16	0.21	2.32
Annual	5.33	1976	1.92	1977	3.06	1.57	0.51	100

8-2.R00-3A KARUKH RIVER NEAR HERAT, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.96	1.10	0.85	0.55	1.29	3.34	2.02	0.52	0.37	0.44	0.40	0.51	0.45
90	0.96	1.10	0.99	0.73	1.78	3.40	2.99	0.55	0.39	0.47	0.40	0.52	0.49
85	0.97	1.11	1.31	0.75	2.29	3.46	3.13	0.76	0.40	0.48	0.41	0.59	0.54
80	1.00	1.23	1.33	1.36	2.38	3.57	3.97	0.83	0.41	0.49	0.45	0.61	0.63
75	1.01	1.24	1.35	1.41	2.42	4.00	4.17	0.93	0.41	0.49	0.51	0.67	0.74
70	1.10	1.25	1.37	1.52	2.45	4.67	4.61	0.97	0.42	0.50	0.52	0.70	0.82
65	1.10	1.30	1.39	1.56	2.49	4.92	4.86	1.01	0.44	0.50	0.52	0.70	0.96
60	1.11	1.31	1.41	1.60	2.54	6.03	5.03	1.06	0.59	0.50	0.52	0.71	1.06
55	1.15	1.32	1.43	1.69	2.61	6.24	5.20	1.16	0.60	0.50	0.53	0.71	1.19
50	1.20	1.40	1.46	1.83	2.70	6.49	6.13	1.99	0.60	0.51	0.55	0.76	1.29
45	1.21	1.41	1.51	1.96	2.82	6.91	8.07	2.11	0.61	0.51	0.56	0.79	1.37
40	1.23	1.41	1.72	2.02	2.89	7.25	9.11	2.22	0.61	0.56	0.60	0.80	1.45
35	1.29	1.42	1.80	2.08	2.95	7.93	10.1	2.45	0.62	0.61	0.60	0.81	1.89
30	1.29	1.42	1.85	2.15	3.02	8.32	11.6	3.07	0.64	0.62	0.61	0.91	2.23
25	1.30	1.42	1.89	2.46	3.69	8.79	13.6	4.01	0.71	0.62	0.61	0.92	2.91
20	1.30	1.43	1.93	2.51	4.06	9.31	14.9	7.50	0.73	0.63	0.78	0.93	3.57
15	1.31	1.52	1.97	2.55	6.45	10.3	17.5	9.78	0.81	ng	ng	1.01	4.92
10	ng	1.62	2.01	2.65	6.84	14.8	19.1	14.7	0.83	ng	ng	1.08	7.74
5	ng	ng	3.13	2.94	7.58	ng	20	18.4	1.05	ng	ng	ng	14.3

8-2.R00-3A KARUKH RIVER NEAR HERAT, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	9.80	5.85	3.56	2.79	2.47
0.95	1.05	10.3	7.10	5.15	4.34	3.90
0.90	1.11	10.9	8.11	6.34	5.50	4.95
0.80	1.25	12.4	9.84	8.24	7.35	6.57
0.50	2	20.0	15.9	14.0	12.9	11.1
0.20	5	49.7	30.2	25.0	22.9	18.3
0.10	10	98.0	45.1	34.4	31.0	23.6
0.04	25	239	73.3	49.1	43.0	30.8
0.02	50	468	103	62.2	53.3	36.4
0.01	100	916	144	77.4	64.6	42.2
0.005	200	1,790	199	94.9	77.2	48.2
0.002	500	4,390	ng	ng	ng	ng

¹Less than 10 years of data used.

8-2.R00-3A KARUKH RIVER NEAR HERAT, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /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

8-2.R00-3A KARUKH RIVER NEAR HERAT, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.33	0.33	0.39	0.51	0.32	0.45	0.49	0.62
0.10	10	0.48	0.49	0.54	0.67	0.37	0.47	0.53	0.74
0.20	5	0.70	0.73	0.77	0.90	0.44	0.53	0.62	0.98
0.50	2	1.22	1.28	1.31	1.44	0.69	0.81	1.07	2.03
		June-July-August				September-October-November			
0.05	20	0.31	0.32	0.33	0.35	ng	ng	ng	ng
0.10	10	0.33	0.34	0.34	0.36	ng	ng	ng	ng
0.20	5	0.35	0.36	0.37	0.38	ng	ng	ng	ng
0.50	2	0.42	0.43	0.44	0.45	ng	ng	ng	ng

8-2.R00-3A KARUKH RIVER NEAR HERAT, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1973	January 16, 1973	21.4	1976	April 22, 1976	150
1974	April 1, 1974	13.0	1975	April 18, 1975	22.5
1975	April 18, 1975	22.5	1973	January 16, 1973	21.4
1976	April 22, 1976	150	1977	March 28, 1977	15.0
1977	March 28, 1977	15.0	1974	April 1, 1974	13.0

8-2.R00-3A KARUKH RIVER NEAR HERAT, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1973	--	--	--	2.31	3.18	7.54	3.31	0.96	0.60	0.50	0.41	1.02	--
1974	1.30	1.40	1.45	2.23	3.24	6.57	6.08	1.15	0.40	0.50	0.60	0.72	2.13
1975	0.99	1.19	1.31	0.78	2.13	5.71	15.7	4.14	0.66	0.62	0.51	0.61	2.85
1976	1.23	1.30	1.57	1.54	5.63	17.8	17.5	13.7	0.90	1.00	0.95	0.90	5.33
1977	1.10	1.53	2.48	2.29	2.83	4.37	4.64	1.72	0.41	0.46	0.53	0.73	1.92

8-3.L00-1A KOWGAN RIVER AT LANGAR

(U.S. Geological Survey identification number: 341300063000000)

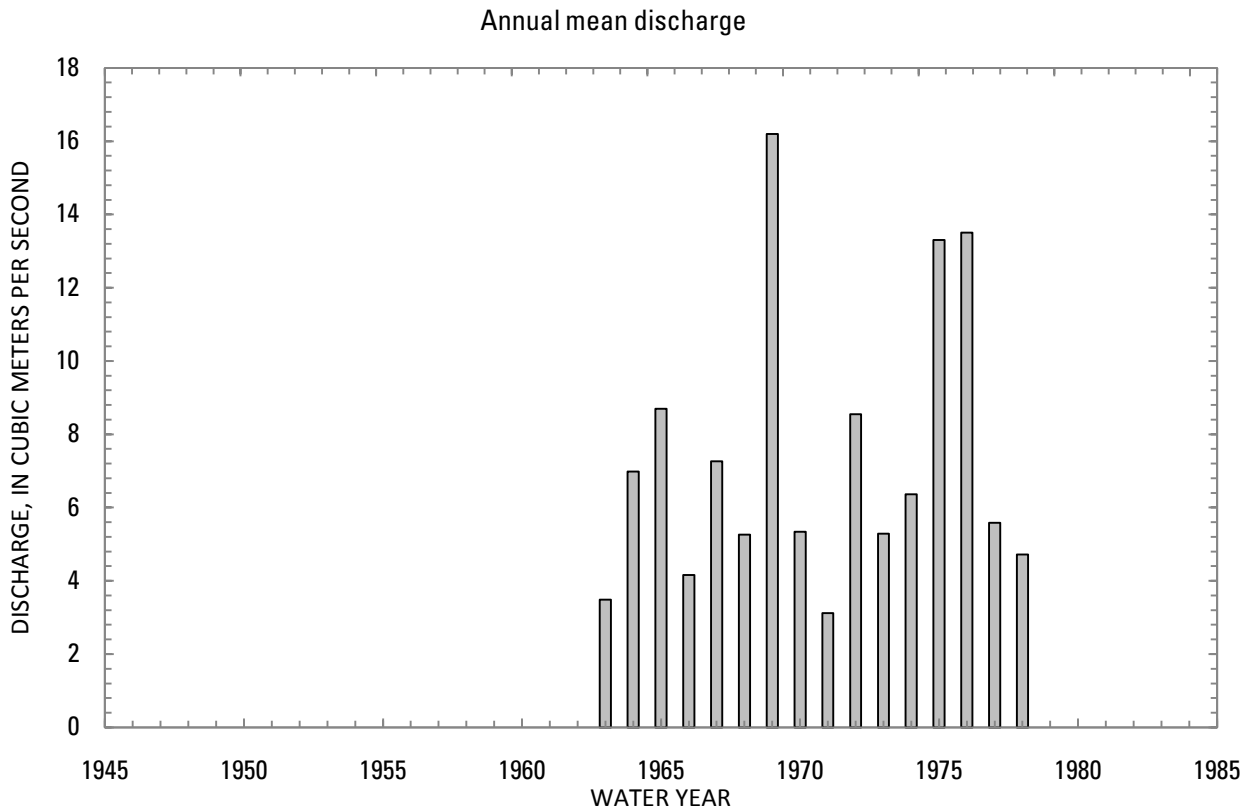
LOCATION: Lat 34°13'N., long 63°00'E.

DRAINAGE AREA: 7,490 km².

ELEVATION: 1,230 meters above mean sea level.

PERIOD OF RECORD: April 25, 1962 to September 30, 1978.

GAGE: Water-stage recorder. Staff gage at same site and datum prior to 1965 water year.



8-3.L00-1A KOWGAN RIVER AT LANGAR, Continued

Statistics of monthly and annual mean discharges
[m³/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	5.68	1977	1.41	1964	3.03	1.38	0.46	3.51
November	8.72	1970	2.09	1972	4.40	2.02	0.46	5.10
December	8.42	1969	2.25	1964	4.42	1.75	0.40	5.12
January	7.38	1969	1.81	1964	4.43	1.64	0.37	5.14
February	11.1	1969	2.99	1972	5.94	2.16	0.36	6.89
March	43.3	1969	4.27	1963	13.7	9.05	0.66	15.9
April	66.0	1969	5.51	1963	25.1	18.9	0.75	29.2
May	42.2	1975	1.86	1971	15.4	13.0	0.84	17.9
June	11.0	1975	0.77	1963	3.91	3.31	0.85	4.53
July	5.10	1975	0.19	1963	1.84	1.54	0.83	2.14
August	4.50	1974	0.29	1963	1.74	1.35	0.77	2.02
September	4.79	1969	0.86	1966	2.29	1.25	0.54	2.66
Annual	16.2	1969	3.12	1971	7.36	3.84	0.52	100

8-3.L00-1A KOWGAN RIVER AT LANGAR, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	1.39	1.94	2.31	1.67	2.84	4.22	5.07	2.12	0.29	0.19	0.22	0.62	0.60
90	1.52	2.49	2.62	2.20	3.19	4.70	7.12	2.66	0.57	0.23	0.29	0.92	1.11
85	1.66	2.64	2.81	2.59	3.61	5.34	8.16	3.27	0.77	0.33	0.40	1.15	1.43
80	1.78	2.72	2.98	2.93	3.86	5.79	8.72	3.82	0.93	0.45	0.65	1.25	1.76
75	1.96	2.81	3.10	3.35	4.17	6.47	9.51	4.40	1.18	0.65	0.82	1.34	2.13
70	2.17	2.94	3.23	3.60	4.48	7.26	11.0	5.27	1.37	0.78	0.90	1.47	2.51
65	2.27	3.06	3.36	3.73	4.67	7.75	12.7	6.30	1.55	0.91	0.97	1.61	2.91
60	2.39	3.28	3.50	3.88	4.93	8.61	14.2	7.38	1.73	1.04	1.08	1.73	3.30
55	2.49	3.46	3.63	4.09	5.22	9.14	15.6	8.39	1.95	1.17	1.18	1.85	3.69
50	2.58	3.59	3.80	4.29	5.39	9.82	17.0	9.75	2.19	1.30	1.31	1.95	4.04
45	2.70	3.73	4.05	4.48	5.56	10.8	18.8	10.8	2.60	1.44	1.43	2.07	4.40
40	2.95	4.11	4.40	4.68	5.85	11.7	21.8	13.2	3.06	1.64	1.55	2.20	4.78
35	3.24	4.32	4.81	4.88	6.31	12.7	26.3	15.6	3.62	2.00	1.69	2.37	5.40
30	3.43	4.59	5.09	5.08	6.74	14.6	29.3	18.5	4.58	2.30	1.85	2.55	6.02
25	3.89	4.95	5.50	5.40	7.20	16.4	32.5	21.9	5.55	2.64	2.24	2.98	7.11
20	4.36	5.57	5.86	5.88	7.66	18.2	37.0	26.6	6.81	3.55	3.43	3.56	8.61
15	5.05	6.13	6.42	6.25	8.20	21.7	42.5	33.3	8.22	4.01	3.70	4.16	11.3
10	5.25	6.97	6.71	6.56	9.42	26.7	52.8	37.9	10.0	4.40	4.00	4.62	16.6
5	5.65	8.19	7.21	7.09	10.8	41.7	70.8	47.1	12.2	4.90	4.41	4.94	29.6

8-3.L00-1A KOWGAN RIVER AT LANGAR, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	18.1	11.5	8.82	7.54	5.91
0.95	1.05	25.6	15.2	12.1	10.5	8.54
0.90	1.11	31.4	18.2	14.6	12.7	10.5
0.80	1.25	40.9	23.0	18.7	16.2	13.7
0.50	2	71.4	39.0	32.0	27.4	23.4
0.20	5	134	73.7	59.7	49.6	41.9
0.10	10	192	108	85.7	69.6	57.8
0.04	25	289	167	129	102	82.8
0.02	50	381	225	172	132	105
0.01	100	493	300	224	169	131
0.005	200	629	394	288	212	161
0.002	500	853	ng	ng	ng	ng

8-3.L00-1A KOWGAN RIVER AT LANGAR, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0.13	0.19	0.23	0.28	0.35	0.54	1.02
0.10	10	0.16	0.18	0.21	0.30	0.35	0.41	0.50	0.70	1.22
0.20	5	0.33	0.35	0.38	0.48	0.55	0.64	0.75	0.96	1.52
0.50	2	0.87	0.91	0.98	1.10	1.21	1.34	1.50	1.72	2.34

8-3.L00-1A KOWGAN RIVER AT LANGAR, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	1.18	1.28	1.36	1.71	1.04	1.38	1.65	2.37
0.10	10	1.51	1.65	1.75	2.08	1.32	1.74	2.07	3.08
0.20	5	1.99	2.19	2.31	2.60	1.79	2.33	2.76	4.23
0.50	2	3.16	3.47	3.64	3.82	3.37	4.23	4.97	7.74
		June-July-August				September-October-November			
0.05	20	0	0.11	0.18	0.22	0.30	0.52	0.61	0.87
0.10	10	0.11	0.19	0.28	0.33	0.43	0.66	0.77	1.04
0.20	5	0.25	0.33	0.44	0.51	0.67	0.89	1.02	1.30
0.50	2	0.78	0.88	1.01	1.14	1.40	1.56	1.72	2.00

8-3.L00-1A KOWGAN RIVER AT LANGAR, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1962	April 25, 1962	22.3	1969	April 13, 1969	290
1963	May 7, 1963	32.4	1975	April 25, 1975	240
1964	April 23, 1964	198	1964	April 23, 1964	198
1965	April 22, 1965	47.1	1968	May 19, 1968	148
1966	April 26, 1966	67.0	1976	April 25, 1976	103
1967	April 27, 1967	78.4	1972	March 26, 1972	86.0
1968	May 19, 1968	148	1967	April 27, 1967	78.4
1969	April 13, 1969	290	1977	May 26, 1977	71.1
1970	November 6, 1969	43.4	1971	April 13, 1971	70.4
1971	April 13, 1971	70.4	1966	April 26, 1966	67.0
1972	March 26, 1972	86.0	1973	March 25, 1973	60.5
1973	March 25, 1973	60.5	1965	April 22, 1965	47.1
1974	April 3, 1974	39.5	1978	November 18, 1977	46.6
1975	April 25, 1975	240	1970	November 6, 1969	43.4
1976	April 25, 1976	103	1974	April 3, 1974	39.5
1977	May 26, 1977	71.1	1963	May 7, 1963	32.4
1978	November 18, 1977	46.6	1962	April 25, 1962	22.3

8-3.L00-1A KOWGAN RIVER AT LANGAR, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1962	--	--	--	4.49	5.65	7.13	10.4	5.85	1.12	0.87	0.93	1.89	--
1963	2.69	3.59	3.80	3.72	3.83	4.27	5.51	12.2	0.77	0.19	0.29	0.96	3.49
1964	1.41	3.21	2.25	1.81	4.19	15.2	36.2	13.0	2.62	1.34	1.28	1.57	6.98
1965	2.01	2.99	3.07	4.78	9.24	17.9	26.3	25.3	6.51	1.91	1.63	2.93	8.70
1966	3.97	4.40	4.89	4.90	5.47	5.64	12.6	5.51	1.08	0.41	0.42	0.86	4.16
1967	1.97	2.85	3.10	2.11	3.82	7.69	26.9	26.6	6.65	2.00	1.46	1.86	7.26
1968	3.46	4.51	4.95	5.02	4.90	11.2	8.12	11.2	4.68	1.18	1.51	2.38	5.26
1969	3.42	5.40	8.42	7.38	11.1	43.3	66.0	30.0	7.37	4.01	3.78	4.79	16.2
1970	5.47	8.72	5.70	6.46	6.83	11.1	11.0	3.76	1.36	0.95	1.00	1.80	5.34
1971	2.66	3.63	3.89	3.61	4.11	5.80	9.07	1.86	0.85	0.60	0.60	0.98	3.12
1972	1.56	2.09	2.83	2.13	2.99	22.5	37.0	18.0	6.87	2.74	1.74	2.23	8.55
1973	2.54	3.18	3.38	3.86	6.78	13.9	16.8	6.90	2.26	1.11	1.22	1.76	5.29
1974	1.97	2.63	2.78	3.19	3.83	15.4	24.4	8.74	2.41	3.44	4.50	2.99	6.36
1975	2.02	3.00	3.36	4.35	6.34	16.1	57.8	42.2	11.0	5.10	3.72	4.33	13.3
1976	5.18	6.14	6.85	6.26	7.15	13.8	54.1	40.9	8.85	4.39	3.85	4.57	13.5
1977	5.68	8.68	6.79	6.75	7.58	9.84	12.4	4.66	1.18	0.62	1.19	1.88	5.58
1978	2.42	5.38	4.60	4.51	7.22	11.7	12.8	5.21	0.89	0.50	0.49	1.17	4.72

8-3.L00-6A KOWGAN RIVER AT TANGI AZU

(U.S. Geological Survey identification number: 340800064120000)

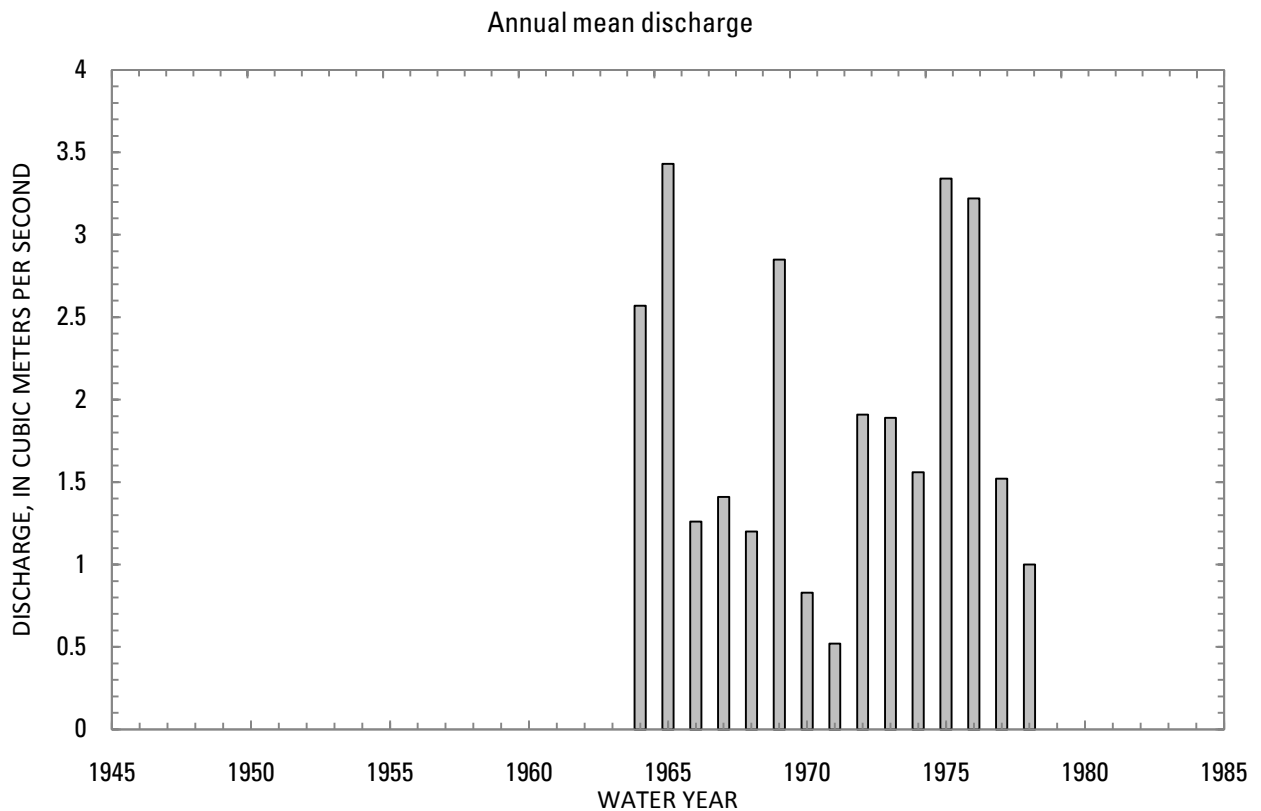
LOCATION: Lat 34°08'N., long 64°12'E.

DRAINAGE AREA: 2,030 km².

ELEVATION: 2,200 meters above mean sea level.

PERIOD OF RECORD: October 16, 1962 to September 30, 1978.

GAGE: Water-stage recorder.



8-3.L00-6A KOWGAN RIVER AT TANGI AZU, Continued

Statistics of monthly and annual mean discharges
[m³/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	1.62	1966	0.44	1971	0.79	0.36	0.46	3.54
November	1.49	1966	0.38	1970	0.84	0.36	0.43	3.76
December	1.60	1970	0.32	1971	0.86	0.34	0.39	3.86
January	1.47	1965	0.24	1971	0.81	0.35	0.43	3.64
February	2.29	1965	0.29	1971	0.90	0.54	0.60	4.04
March	8.36	1969	0.61	1967	3.15	2.29	0.73	14.2
April	17.7	1975	1.03	1971	6.99	5.12	0.73	31.5
May	9.84	1975	0.38	1971	4.54	3.18	0.70	20.4
June	3.78	1975	0.36	1971	1.39	1.08	0.78	6.24
July	1.38	1975	0.34	1978	0.64	0.29	0.44	2.88
August	1.22	1975	0.30	1978	0.62	0.25	0.41	2.78
September	1.58	1975	0.38	1978	0.71	0.35	0.50	3.20
Annual	3.43	1965	0.52	1971	1.90	0.96	0.50	100

8-3.L00-6A KOWGAN RIVER AT TANGI AZU, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.45	0.37	0.34	0.25	0.27	0.46	0.66	0.39	0.38	0.34	0.33	0.39	0.36
90	0.50	0.47	0.47	0.34	0.33	0.61	1.34	0.88	0.41	0.37	0.38	0.41	0.41
85	0.51	0.50	0.53	0.42	0.36	0.84	1.53	1.16	0.48	0.38	0.38	0.45	0.46
80	0.52	0.53	0.61	0.49	0.39	1.00	1.80	1.45	0.52	0.39	0.42	0.46	0.52
75	0.53	0.61	0.62	0.53	0.45	1.13	1.94	1.70	0.55	0.45	0.45	0.51	0.56
70	0.57	0.64	0.63	0.57	0.49	1.30	2.30	2.01	0.57	0.46	0.46	0.53	0.61
65	0.60	0.67	0.64	0.60	0.54	1.45	3.24	2.36	0.61	0.47	0.47	0.54	0.65
60	0.61	0.68	0.68	0.62	0.64	1.59	4.12	2.76	0.65	0.47	0.49	0.55	0.69
55	0.62	0.70	0.70	0.68	0.74	1.74	4.75	3.12	0.75	0.52	0.52	0.56	0.73
50	0.63	0.72	0.73	0.73	0.82	1.84	5.49	3.64	0.86	0.54	0.53	0.62	0.81
45	0.64	0.73	0.78	0.78	0.88	1.94	6.92	4.10	0.95	0.56	0.60	0.63	0.92
40	0.69	0.75	0.85	0.84	0.94	2.09	7.65	4.77	1.03	0.68	0.62	0.64	1.04
35	0.71	0.89	0.97	0.90	1.03	2.45	8.73	5.43	1.08	0.73	0.70	0.71	1.18
30	0.84	0.97	1.07	1.01	1.16	3.07	9.62	6.37	1.35	0.76	0.71	0.76	1.35
25	0.93	1.19	1.16	1.12	1.26	4.15	10.4	7.02	1.69	0.78	0.76	0.77	1.53
20	1.23	1.29	1.22	1.19	1.33	5.05	11.4	7.66	2.09	0.87	0.80	0.78	1.82
15	1.31	1.37	1.25	1.25	1.42	6.66	12.7	8.48	2.44	0.96	0.85	1.06	2.76
10	1.41	1.45	1.41	1.34	1.57	8.43	14.5	9.30	3.19	1.00	0.99	1.48	5.09
5	ng	1.55	1.58	1.53	2.14	10.1	19.4	11.4	5.03	1.25	1.20	ng	8.74

8-3.L00-6A KOWGAN RIVER AT TANGI AZU, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	ng	1.30	1.03	0.80	0.72
0.95	1.05	ng	2.51	2.05	1.68	1.52
0.90	1.11	4.40	3.48	2.90	2.42	2.19
0.80	1.25	6.70	5.04	4.30	3.69	3.32
0.50	2	13.2	9.56	8.52	7.61	6.78
0.20	5	22.2	16.6	15.5	14.2	12.6
0.10	10	27.6	21.5	20.5	19.0	16.7
0.04	25	33.3	27.6	27.0	25.2	22.0
0.02	50	37.0	32.1	31.9	29.8	25.9
0.01	100	40.1	¹ 36.4	36.7	34.3	29.8
0.005	200	42.7	¹ 40.6	41.5	38.8	33.6
0.002	500	45.7	ng	ng	ng	ng

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

8-3.L00-6A KOWGAN RIVER AT TANGI AZU, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.04	0.07	0.10	0.19	0.25	0.28	0.31	0.33	0.38
0.10	10	0.06	0.11	0.15	0.23	0.28	0.32	0.34	0.37	0.42
0.20	5	0.11	0.17	0.22	0.28	0.33	0.37	0.39	0.42	0.48
0.50	2	0.29	0.34	0.41	0.42	0.46	0.51	0.54	0.57	0.65

8-3.L00-6A KOWGAN RIVER AT TANGI AZU, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.06	0.11	0.20	0.25	0.32	0.34	0.37	0.47
0.10	10	0.10	0.17	0.25	0.31	0.39	0.43	0.48	0.66
0.20	5	0.18	0.28	0.34	0.39	0.50	0.57	0.67	0.99
0.50	2	0.44	0.55	0.57	0.61	0.81	0.97	1.24	2.06
		June-July-August				September-October-November			
0.05	20	0.29	0.29	0.29	0.29	0.10	0.29	0.32	0.36
0.10	10	0.31	0.32	0.32	0.33	0.17	0.32	0.35	0.39
0.20	5	0.34	0.35	0.37	0.38	0.30	0.38	0.40	0.44
0.50	2	0.44	0.47	0.49	0.52	0.62	0.54	0.56	0.59

8-3.L00-6A KOWGAN RIVER AT TANGI AZU, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1963	May 11, 1963	5.36	1968	June 8, 1968	33.0
1964	April 23, 1964	19.3	1976	April 24, 1976	27.0
1965	April 22, 1965	15.7	1969	April 16, 1969	24.0
1966	April 25, 1966	8.86	1975	April 8, 1975	24.0
1967	April 27, 1967	14.8	1964	April 23, 1964	19.3
1968	June 8, 1968	33.0	1965	April 22, 1965	15.7
1969	April 16, 1969	24.0	1967	April 27, 1967	14.8
1970	April 26, 1970	1.90	1972	March 23, 1972	13.0
1971	April 8, 1971	10.9	1973	April 14, 1973	12.9
1972	March 23, 1972	13.0	1974	March 25, 1974	11.4
1973	April 14, 1973	12.9	1971	April 8, 1971	10.9
1974	March 25, 1974	11.4	1966	April 25, 1966	8.86
1975	April 8, 1975	24.0	1977	April 11, 1977	6.28
1976	April 24, 1976	27.0	1963	May 11, 1963	5.36
1977	April 11, 1977	6.28	1978	April 17, 1978	5.32
1978	April 17, 1978	5.32	1970	April 26, 1970	1.90

8-3.L00-6A KOWGAN RIVER AT TANGI AZU, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1963	--	1.00	0.85	0.76	0.82	1.83	1.66	2.98	0.73	0.73	0.70	0.73	--
1964	0.53	0.61	0.65	0.61	0.87	5.61	11.6	6.34	1.61	0.94	0.75	0.76	2.57
1965	0.80	0.89	1.07	1.47	2.29	7.30	11.9	9.68	2.26	0.93	1.05	1.47	3.43
1966	1.62	1.49	1.14	1.12	1.15	1.53	2.76	2.13	0.58	0.54	0.51	0.53	1.26
1967	0.60	0.65	0.55	0.39	0.35	0.61	4.85	5.47	1.37	0.72	0.63	0.73	1.41
1968	1.01	1.30	1.17	0.88	0.73	1.66	2.17	2.40	1.74	0.38	0.41	0.48	1.20
1969	0.61	0.70	0.65	0.74	1.04	8.36	11.3	6.92	1.59	0.86	0.75	0.54	2.85
1970	0.59	0.38	1.60	1.20	1.29	1.28	1.09	0.88	0.47	0.36	0.37	0.43	0.83
1971	0.44	0.41	0.32	0.24	0.29	1.22	1.03	0.38	0.36	0.41	0.50	0.58	0.52
1972	0.66	0.67	0.64	0.69	0.48	3.80	7.67	5.29	1.33	0.45	0.56	0.65	1.91
1973	0.65	0.70	0.67	0.68	0.58	4.43	9.22	3.74	0.70	0.47	0.40	0.42	1.89
1974	0.54	0.72	0.90	0.66	0.35	3.75	6.79	2.83	0.56	0.46	0.48	0.60	1.56
1975	0.61	0.51	0.53	0.48	0.51	2.02	17.7	9.84	3.78	1.38	1.22	1.58	3.34
1976	1.36	1.38	1.27	1.34	1.40	2.00	13.9	9.75	3.74	0.80	0.79	0.98	3.22
1977	1.29	1.32	1.09	1.12	1.55	3.57	4.32	1.80	0.79	0.49	0.47	0.50	1.52
1978	0.52	0.65	0.63	0.55	0.65	1.42	3.80	2.23	0.56	0.34	0.30	0.38	1.00

8-11.L00-1A LAL RIVER AT SHINYA

(U.S. Geological Survey identification number: 343000065400000)

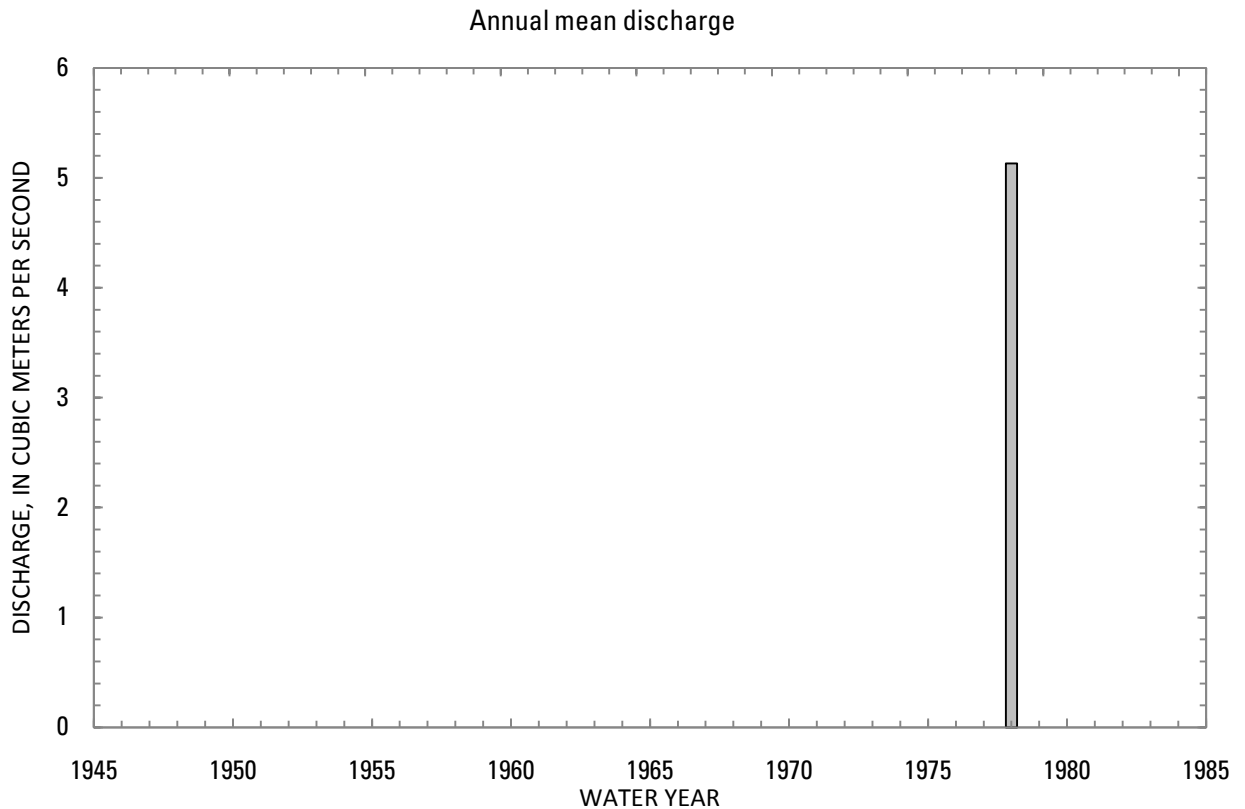
LOCATION: Lat 34°30'N., long 65°40'E.

DRAINAGE AREA: 1,685 km².

ELEVATION: 2,420 meters above mean sea level.

PERIOD OF RECORD: October 27, 1976 to September 30, 1978.

GAGE: Water-stage recorder.



8-11.L00-1A LAL RIVER AT SHINYA, Continued

Statistics of monthly and annual mean discharges
[m³/s, cubic meters per second; ng, not given]

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	0.95	1978	0.95	1978	0.95	ng	ng	1.73
November	1.06	1978	0.95	1977	1.01	0.07	0.07	1.84
December	1.32	1978	0.81	1977	1.07	0.36	0.34	1.95
January	1.66	1978	0.80	1977	1.23	0.61	0.50	2.24
February	1.26	1978	0.76	1977	1.01	0.36	0.35	1.84
March	3.53	1977	2.19	1978	2.86	0.95	0.33	5.22
April	22.7	1978	11.6	1977	17.2	7.85	0.46	31.3
May	25.6	1978	17.5	1977	21.6	5.73	0.27	39.3
June	5.87	1977	4.19	1978	5.03	1.19	0.24	9.17
July	1.38	1977	0.38	1978	0.88	0.71	0.81	1.60
August	2.29	1977	0.08	1978	1.18	1.57	1.32	2.16
September	1.82	1977	0.08	1978	0.95	1.23	1.30	1.73
Annual	5.13	1978	5.13	1978	5.13	ng	ng	100

8-11.L00-1A LAL RIVER AT SHINYA, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.70	0.69	0.68	0.76	0.70	0.87	5.76	13.9	1.12	0.18	0.05	0.05	0.06
90	0.71	0.70	0.69	0.76	0.71	1.01	5.95	14.2	1.32	0.21	0.06	0.06	0.08
85	0.75	0.75	0.74	0.77	0.71	1.04	7.55	14.8	1.55	0.22	0.06	0.06	0.11
80	0.76	0.76	0.76	0.79	0.75	1.07	9.46	15.1	1.69	0.31	0.06	0.08	0.31
75	0.76	0.86	0.86	0.80	0.75	1.09	11.2	15.9	1.77	0.33	0.07	0.08	0.64
70	0.76	0.87	0.87	0.81	0.76	1.47	12.1	16.2	1.91	0.42	0.08	0.09	0.77
65	0.77	0.87	0.89	0.83	0.76	1.55	12.5	16.8	2.26	0.45	0.09	0.09	0.86
60	0.87	0.87	0.89	0.84	0.80	1.97	12.8	17.9	2.55	0.56	0.11	0.10	1.13
55	0.88	0.88	0.90	0.85	0.89	2.44	13.2	18.7	3.02	0.69	0.13	0.11	1.22
50	0.88	0.88	1.09	0.86	0.91	2.55	14.3	19.3	3.56	0.78	0.15	0.12	1.30
45	0.88	0.89	1.10	1.55	1.09	2.79	14.7	20.4	4.56	0.88	1.86	1.53	1.39
40	0.89	1.11	1.23	1.58	1.10	3.56	15.2	21.1	5.39	1.09	1.94	1.62	1.48
35	1.09	1.12	1.24	1.59	1.10	3.92	17.6	22.5	6.19	1.16	2.06	1.69	1.56
30	1.10	1.22	1.34	1.60	1.11	4.63	24.7	23.4	6.91	1.35	2.22	1.75	1.71
25	1.21	1.22	1.35	1.61	ng	ng	26.1	26.1	7.50	1.46	2.42	1.80	2.52
20	1.22	1.32	1.36	1.67	ng	ng	27.0	29.4	8.50	1.53	ng	1.86	4.58
15	1.22	1.33	ng	ng	ng	ng	29.2	32.2	9.24	1.67	ng	ng	11.4
10	1.23	1.34	ng	ng	ng	ng	31.8	33.3	10.4	ng	ng	ng	23.4
5	ng	1.35	ng	ng	ng	ng	33.7	35.9	12.3	ng	ng	ng	30.00

8-11.L00-1A LAL RIVER AT SHINYA, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

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

8-11.L00-1A LAL RIVER AT SHINYA, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /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

8-11.L00-1A LAL RIVER AT SHINYA, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng
		June-July-August				September-October-November			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng

8-11.L00-1A LAL RIVER AT SHINYA, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1977	May 22, 1977	23.3	1978	May 5, 1978	38.5
1978	May 5, 1978	38.5	1977	May 22, 1977	23.3

8-11.L00-1A LAL RIVER AT SHINYA, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1977	--	0.95	0.81	0.80	0.76	3.53	11.6	17.5	5.87	1.38	2.29	1.82	--
1978	0.95	1.06	1.32	1.66	1.26	2.19	22.7	25.6	4.19	0.38	0.08	0.08	5.13

9-0.000-1M MURGHAB RIVER AT BALA MURGHAB

(U.S. Geological Survey identification number: 353500063190000)

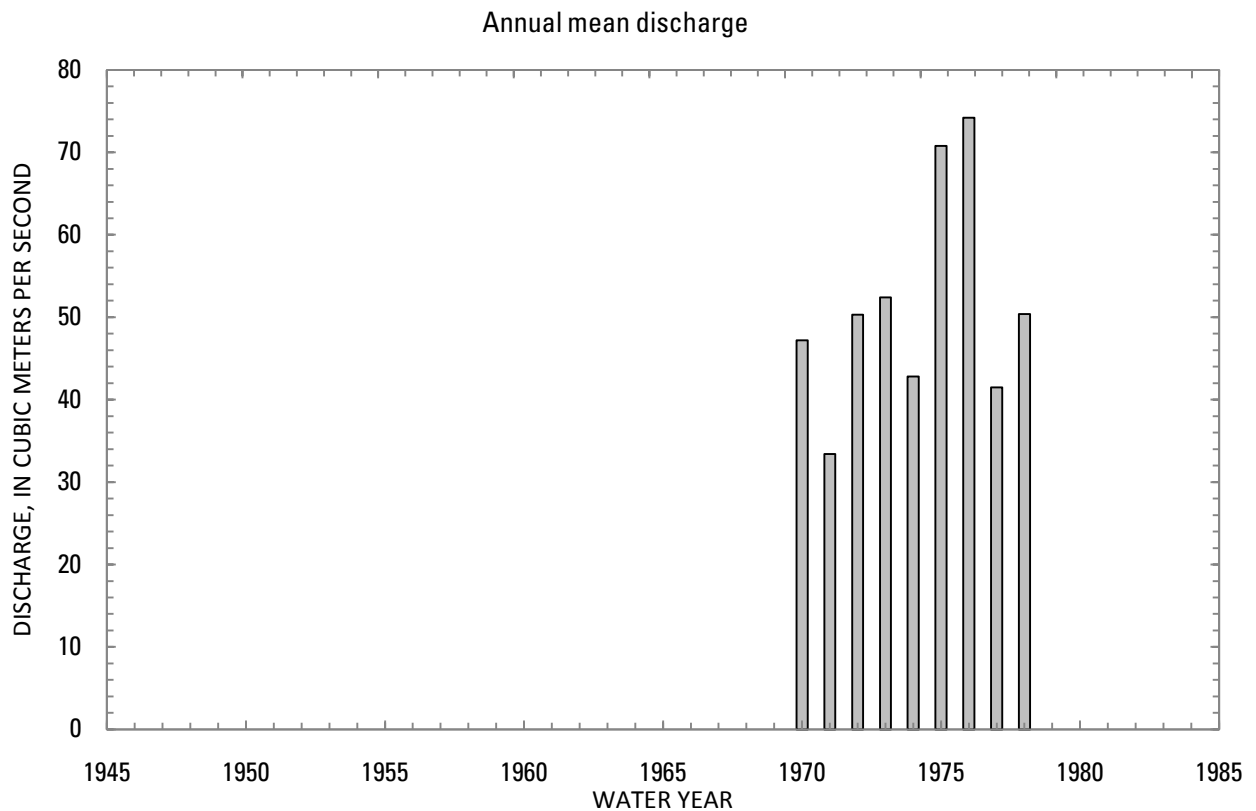
LOCATION: Lat 35°35'N., long 63°19'E.

DRAINAGE AREA: 20,525 km².

ELEVATION: 468 meters above mean sea level.

PERIOD OF RECORD: April 1, 1969 to September 30, 1978.

GAGE: Water-stage recorder. Staff gage prior to 1970 water year.



9-0.000-1M MURGHAB RIVER AT BALA MURGHAB, Continued

Statistics of monthly and annual mean discharges
[m³/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	50.0	1977	29.2	1972	38.3	8.21	0.21	5.74
November	52.5	1970	29.6	1972	38.1	8.41	0.22	5.71
December	44.5	1970	27.1	1972	36.0	6.78	0.19	5.40
January	41.7	1970	26.4	1972	33.3	5.56	0.17	4.99
February	44.8	1976	25.4	1972	33.9	5.91	0.17	5.09
March	58.9	1973	33.3	1971	48.4	8.04	0.17	7.26
April	281	1969	51.5	1971	113	67.9	0.60	17.0
May	228	1969	46.4	1971	116	63.5	0.55	17.4
June	167	1969	34.6	1971	80	42.5	0.53	12.0
July	93.5	1969	30.0	1971	50.7	21.3	0.42	7.61
August	64.3	1969	26.8	1971	40.3	12.9	0.32	6.05
September	54.1	1969	27.9	1971	38.5	9.4	0.24	5.77
Annual	74.2	1976	33.4	1971	51.4	13.3	0.26	100

9-0.000-1M MURGHAB RIVER AT BALA MURGHAB, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	29.4	29.3	27.0	26.5	25.2	30.2	46.6	46.6	34.6	28.4	27.1	27.9	28.0
90	29.7	29.7	28.7	26.7	26.6	31.3	53.9	49.4	36.5	29.9	27.7	29.4	29.3
85	30.8	30.0	29.3	27.6	28.2	35.1	57.4	51.0	40.1	31.3	28.3	30.5	30.6
80	31.1	30.2	29.7	28.2	28.6	38.0	61.8	60.5	44.1	33.8	29.1	30.9	31.6
75	31.9	31.3	30.5	28.4	29.0	38.6	67.0	65.2	46.7	35.0	31.9	32.0	32.5
70	32.9	31.6	31.0	28.6	29.4	39.2	72.7	70.1	49.7	36.6	33.1	32.5	33.5
65	33.9	32.6	31.4	29.4	29.9	39.8	76.8	73.0	52.7	37.5	33.9	32.9	34.5
60	34.2	34.0	31.9	30.4	30.5	40.4	79.7	85.2	56.1	38.7	34.8	34.2	36.1
55	34.5	34.5	32.5	31.4	31.9	41.6	83.2	93.7	59.7	40.8	35.3	34.7	37.7
50	34.9	35.1	33.7	32.4	33.3	42.9	87.7	97.9	65.9	42.9	35.8	35.3	39.8
45	35.8	36.3	34.5	33.0	33.8	46.1	93.0	104	71.6	44.6	36.2	35.8	41.8
40	36.1	37.9	37.3	34.8	34.2	47.2	98.5	111	80.2	46.7	37.1	36.2	44.3
35	37.3	40.8	39.4	35.2	36.2	48.3	104	124	87.4	51.0	38.2	36.6	46.9
30	46.4	43.6	41.8	36.7	37.1	51.8	115	147	94.3	58.6	49.1	47.8	49.9
25	47.1	45.0	43.3	38.2	37.5	53.8	125	176	105	64.7	51.8	48.9	54.1
20	48.5	45.6	43.8	39.3	37.8	56.2	138	184	118	69.8	54.9	50.4	61.2
15	49.2	47.6	44.3	40.9	40.0	60.3	172	193	133	76.6	57.4	51.2	73.7
10	ng	49.4	45.1	41.4	43.9	68.1	217	202	143	85.3	58.6	51.8	92.2
5	ng	53.2	46	ng	46.5	83.2	258	219	171	94.6	65.1	53.1	121

9-0.000-1M MURGHAB RIVER AT BALA MURGHAB, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	40.7	¹ 45.7	46.1	41.8	37.5
0.95	1.05	64.9	59.0	56.9	53.1	48.9
0.90	1.11	83.5	68.4	64.6	60.9	56.8
0.80	1.25	114	82.3	76.3	72.6	68.5
0.50	2	208	121	110	105	101
0.20	5	387	184	167	158	152
0.10	10	539	234	214	199	192
0.04	25	769	304	283	258	247
0.02	50	971	363	343	307	293
0.01	100	1200	428	411	361	342
0.005	200	1460	499	488	421	396
0.002	500	1850	ng	ng	ng	ng

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

9-0.000-1M MURGHAB RIVER AT BALA MURGHAB, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	22.6	23.0	23.6	23.9	24.7	25.2	25.5	26.1	26.6
0.10	10	23.9	24.2	24.7	25.0	25.7	26.3	26.7	27.3	28.0
0.20	5	25.6	25.8	26.2	26.4	27.1	27.8	28.4	29.0	30.0
0.50	2	29.4	29.5	29.7	29.9	30.5	31.4	32.2	33.0	34.6

9-0.000-1M MURGHAB RIVER AT BALA MURGHAB, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	22.6	23.6	23.9	24.8	24.9	27.3	30.5	34.1
0.10	10	24.2	25.0	25.3	26.1	27.1	29.2	32.0	37.4
0.20	5	26.2	26.9	27.1	27.9	29.9	31.7	34.1	41.4
0.50	2	30.4	30.8	31.0	31.6	35.7	37.1	38.6	48.5
		June-July-August				September-October-November			
0.05	20	24.3	24.4	24.6	25.0	25.1	25.2	25.5	26.1
0.10	10	26.0	26.2	26.4	26.9	26.6	26.7	27.0	27.6
0.20	5	28.5	28.7	29.1	29.8	28.7	28.9	29.1	29.8
0.50	2	35.2	35.4	36.0	37.3	33.7	34.0	34.3	35.1

9-0.000-1M MURGHAB RIVER AT BALA MURGHAB, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1969	April 15, 1969	765	1969	April 15, 1969	765
1970	March 25, 1970	101	1975	May 9, 1975	359
1971	April 18, 1971	69.8	1972	April 26, 1972	330
1972	April 26, 1972	330	1977	April 9, 1977	278
1973	March 26, 1973	250	1976	April 24, 1976	270
1974	April 13, 1974	103	1973	March 26, 1973	250
1975	May 9, 1975	359	1978	December 25, 1977	139
1976	April 24, 1976	270	1974	April 13, 1974	103
1977	April 9, 1977	278	1970	March 25, 1970	101
1978	December 25, 1977	139	1971	April 18, 1971	69.8

9-0.000-1M MURGHAB RIVER AT BALA MURGHAB, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1969	--	--	--	--	--	--	281	228	167	93.5	64.3	54.1	--
1970	49.7	52.5	44.5	41.7	38.0	44.9	71.4	69.9	49.5	38.2	33.1	32.0	47.2
1971	32.3	30.4	29.9	29.0	28.9	33.3	51.5	46.4	34.6	30.0	26.8	27.9	33.4
1972	29.2	29.6	27.1	26.4	25.4	52.5	96.0	118	80.8	46.6	36.7	34.3	50.3
1973	34.6	33.3	31.9	29.6	33.0	58.9	106	107	73.5	46.7	37.6	36.2	52.4
1974	36.1	34.9	33.5	32.3	30.6	43.1	81.2	70.2	49.6	36.3	32.8	32.5	42.8
1975	31.2	30.6	30.4	27.7	30.4	51.2	160	191	120	72.1	53.9	49.1	70.8
1976	46.7	44.6	42.0	39.9	44.8	56.7	138	182	118	72.1	55.6	51.3	74.2
1977	50.0	47.8	44.2	37.3	36.4	42.9	57.6	50.9	41.3	30.4	27.9	31.0	41.5
1978	34.5	38.8	40.6	35.6	37.9	52.2	90.1	96.9	65.9	41.4	34.6	36.2	50.4

9-0.000-5M MURGHAB RIVER AT QALA-I-NIAZKHAN

(U.S. Geological Survey identification number: 350200064010000)

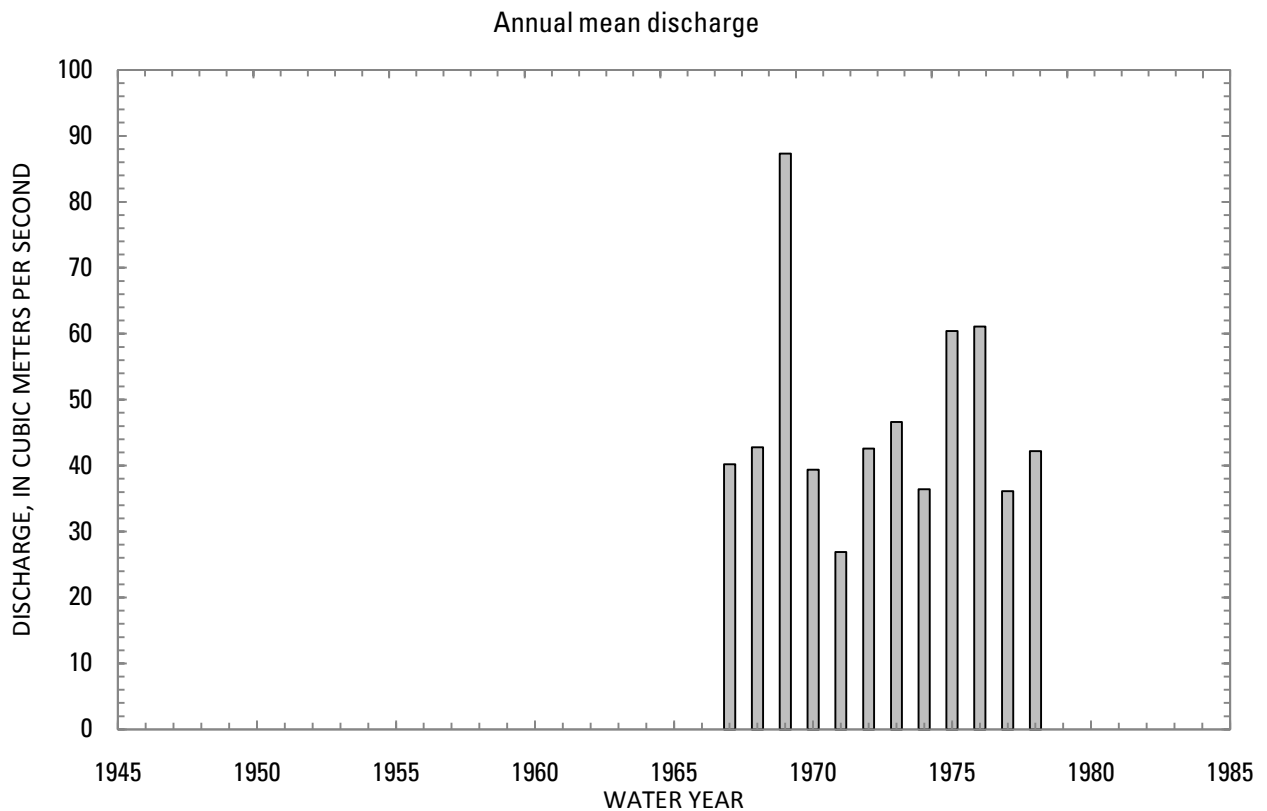
LOCATION: Lat 35°02'N., long 64°01'E.

DRAINAGE AREA: 13,805 km².

ELEVATION: 800 meters above mean sea level.

PERIOD OF RECORD: January 8, 1966 to September 30, 1978.

GAGE: Water-stage recorder.



9-0.000-5M MURGHAB RIVER AT QALA-I-NIAZKHAN, Continued

Statistics of monthly and annual mean discharges
[m³/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	44.3	1976	19.9	1972	32.7	7.17	0.22	5.94
November	43.2	1970	22.3	1972	31.5	6.31	0.20	5.73
December	37.0	1976	22.2	1972	29.5	5.23	0.18	5.36
January	35.5	1976	22.4	1971	28.7	4.13	0.14	5.21
February	39.3	1976	20.3	1972	28.4	4.97	0.18	5.16
March	113	1969	26.6	1971	41.2	22.3	0.54	7.49
April	214	1969	42.0	1966	80.3	46.4	0.58	14.6
May	202	1969	36.8	1971	92.0	50.6	0.55	16.7
June	146	1969	28.5	1971	67.5	34.1	0.50	12.3
July	89.0	1969	24.9	1971	45.9	17.4	0.38	8.35
August	59.2	1969	22.9	1971	37.6	10.6	0.28	6.84
September	48.2	1975	21.1	1971	34.7	8.31	0.24	6.31
Annual	87.3	1969	26.9	1971	46.8	16.0	0.34	100

9-0.000-5M MURGHAB RIVER AT QALA-I-NIAZKHAN, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	20.3	22.5	22.1	22.1	20.4	23.5	33.4	37.5	28.3	25.5	23.2	21.5	22.5
90	25.0	23.5	22.8	22.5	22.2	25.9	37.3	42.5	35.9	29.9	28.2	26.8	24.5
85	25.6	24.3	23.5	24.0	22.9	27.5	41.4	46.9	38.0	31.9	28.9	27.6	26.2
80	26.2	25.0	24.1	24.4	23.3	28.3	44.2	51.3	39.9	33.2	29.4	28.3	27.7
75	27.3	26.0	24.9	25.4	25.6	28.9	46.2	55.5	42.1	34.0	29.9	29.8	29.0
70	29.2	28.1	26.3	26.4	26.3	29.6	48.3	60.2	44.9	35.1	30.4	30.1	30.0
65	29.6	29.3	27.0	27.0	26.8	30.8	51.0	63.3	47.6	36.5	31.0	30.4	31.0
60	30.6	30.0	27.5	27.6	27.2	31.9	55.0	68.3	49.6	38.0	32.3	30.8	32.1
55	31.1	30.6	28.2	28.4	27.9	33.0	57.6	73.9	52.1	39.1	34.4	31.6	33.7
50	31.8	31.3	28.6	28.9	28.7	34.1	62.0	77.8	56.1	41.3	36.1	34.2	35.2
45	32.9	31.7	29.2	29.3	29.0	35.1	68.0	81.7	60.3	42.9	36.6	34.7	36.7
40	33.7	32.0	32.0	30.0	29.4	36.2	73.4	87.0	63.3	44.5	37.3	35.5	38.6
35	34.9	32.3	32.4	30.3	29.8	37.1	79.3	90.7	68.8	46.6	38.0	36.2	40.9
30	35.5	33.8	32.8	30.6	30.4	38.0	89.1	95.9	77.9	48.7	39.5	36.7	44.5
25	37.5	35.2	33.7	31.1	30.8	39.4	96.0	109	86.8	54.6	40.7	37.5	48.7
20	40.8	36.5	35.0	31.8	31.4	41.2	101	140	93.9	58.4	49.2	45.6	56.4
15	41.6	38.2	36.2	32.8	32.7	45.6	117	155	109	63.8	51.6	46.4	66.7
10	43.1	40.7	36.9	33.8	34.6	60.0	157	173	121	72.2	54.6	47.6	84.6
5	44.7	42.3	37.3	35.3	38.0	108	180	193	142	81.6	56.8	49.0	117

9-0.000-5M MURGHAB RIVER AT QALA-I-NIAZKHAN, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, statistic not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	31.7	42.3	39.8	37.9	33.5
0.95	1.05	48.8	52.1	50.0	47.2	43.2
0.90	1.11	61.4	59.4	57.3	53.9	50.0
0.80	1.25	80.9	70.7	68.5	64.2	60.3
0.50	2	137	105	101	94.2	88.8
0.20	5	231	169	158	148	136
0.10	10	304	224	205	192	173
0.04	25	406	311	277	259	227
0.02	50	489	390	340	319	272
0.01	100	578	483	411	388	321
0.005	200	673	593	493	467	376
0.002	500	810	ng	ng	ng	ng

9-0.000-5M MURGHAB RIVER AT QALA-I-NIAZKHAN, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	19.3	19.5	19.6	19.9	20.3	20.8	21.2	21.4	21.9
0.10	10	20.7	20.8	21.0	21.3	21.7	22.3	22.6	23.0	23.6
0.20	5	22.4	22.5	22.8	23.1	23.5	24.1	24.5	24.9	25.8
0.50	2	25.7	25.9	26.3	26.7	27.1	27.8	28.3	28.8	30.2

9-0.000-5M MURGHAB RIVER AT QALA-I-NIAZKHAN, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	19.8	20.1	20.3	20.6	20.9	21.7	24.7	28.2
0.10	10	21.0	21.3	21.6	22.0	22.4	22.7	25.0	28.5
0.20	5	22.6	22.9	23.3	23.7	24.3	24.2	25.7	29.1
0.50	2	25.7	26.3	26.7	27.2	28.0	28.5	29.0	33.2
		June-July-August				September-October-November			
0.05	20	23.3	23.3	23.4	23.9	20.1	20.2	20.4	20.9
0.10	10	25.2	25.2	25.4	25.9	22.0	22.3	22.5	23.0
0.20	5	27.7	27.9	28.1	28.7	24.3	24.8	25.0	25.6
0.50	2	33.9	34.3	34.7	35.6	29.0	29.7	30.1	30.8

9-0.000-5M MURGHAB RIVER AT QALA-I-NIAZKHAN, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1966	April 27, 1966	57.1	1969	April 11, 1969	381
1967	April 24, 1967	295	1967	April 24, 1967	295
1968	April 25, 1968	170	1975	May 8, 1975	229
1969	April 11, 1969	381	1973	March 25, 1973	215
1970	April 27, 1970	74.0	1976	April 25, 1976	184
1971	April 16, 1971	56.6	1968	April 25, 1968	170
1972	March 19, 1972	150	1972	March 19, 1972	150
1973	March 25, 1973	215	1977	April 9, 1977	131
1974	May 3, 1974	74.0	1978	May 6, 1978	96.7
1975	May 8, 1975	229	1970	April 27, 1970	74.0
1976	April 25, 1976	184	1974	May 3, 1974	74.0
1977	April 9, 1977	131	1966	April 27, 1966	57.1
1978	May 6, 1978	96.7	1971	April 16, 1971	56.6

9-0.000-5M MURGHAB RIVER AT QALA-I-NIAZKHAN, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1966	--	--	--	--	29.8	29.4	42.0	51.0	40.4	33.7	31.1	30.8	--
1967	31.0	29.0	27.4	28.7	26.6	28.4	62.2	72.7	55.2	45.2	39.3	36.1	40.2
1968	34.0	31.7	26.9	26.8	25.8	34.7	55.4	85.6	75.7	44.4	36.7	36.3	42.8
1969	35.5	34.0	36.3	34.8	33.4	113	214	202	146	89.0	59.2	47.3	87.3
1970	40.5	43.2	34.9	31.1	28.1	34.4	63.2	62.3	43.7	35.1	29.2	27.3	39.4
1971	25.6	24.8	23.7	22.4	22.5	26.6	42.6	36.8	28.5	24.9	22.9	21.1	26.9
1972	19.9	22.3	22.2	23.0	20.3	41.1	79.1	98.5	78.8	42.7	32.6	30.3	42.6
1973	31.3	31.7	32.1	30.0	31.0	48.1	91.6	86.9	57.6	45.4	38.7	34.6	46.6
1974	32.4	29.9	27.3	27.6	29.8	37.4	55.5	58.4	45.4	35.9	29.6	27.9	36.4
1975	26.2	24.3	23.0	24.6	23.2	31.7	123	172	113	64.0	50.9	48.2	60.4
1976	44.3	37.9	37.0	35.5	39.3	39.1	94.8	143	98.5	64.7	52.5	46.5	61.1
1977	42.1	39.3	33.6	30.3	30.5	35.5	49.6	44.6	38.3	30.3	29.2	29.9	36.1
1978	29.4	30.0	29.5	29.2	28.3	36.3	71.0	82.0	56.4	41.7	37.0	34.7	42.2

9-1.000-1A GULRAN RIVER AT CHAR TAKHTA

(U.S. Geological Survey identification number: 352300062020000)

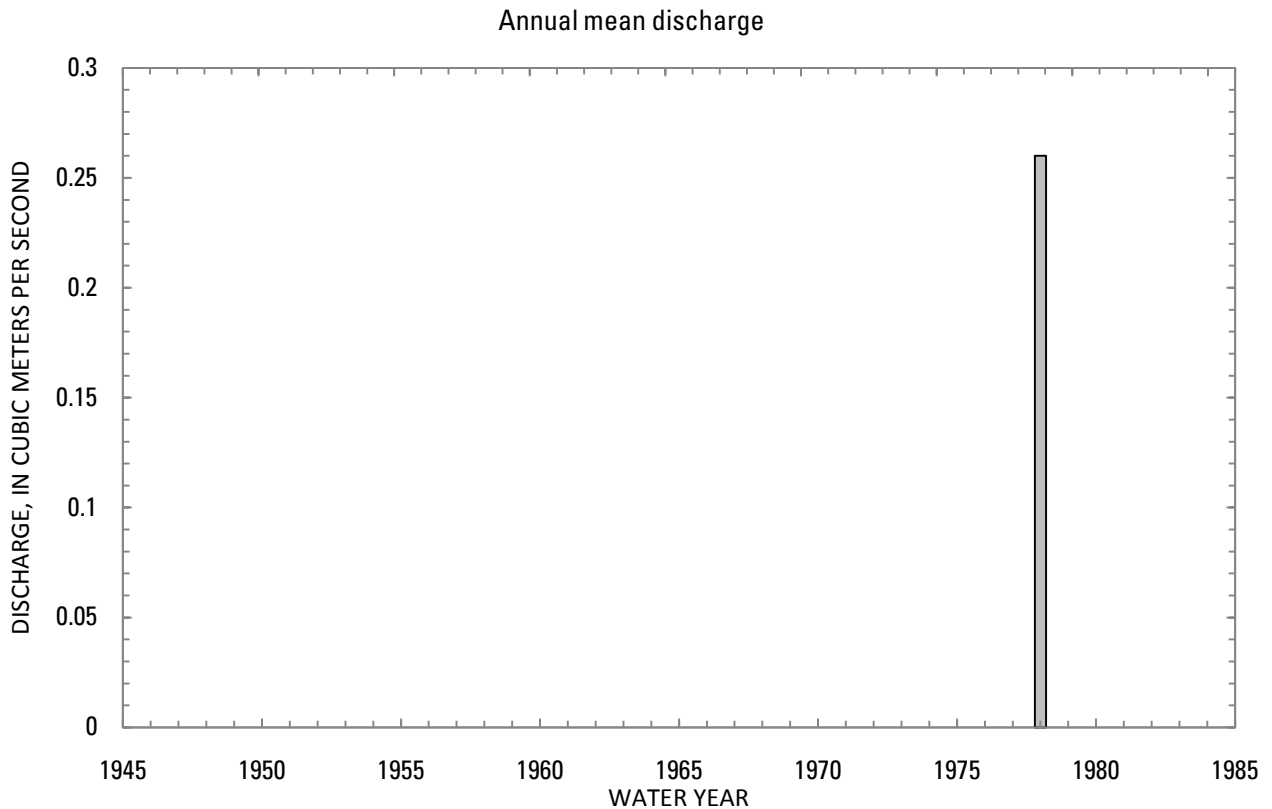
LOCATION: Lat 35°23'N., long 62°02'E.

DRAINAGE AREA: 2,895 km².

ELEVATION: 568 meters above mean sea level.

PERIOD OF RECORD: June 20, 1977 to September 30, 1978.

GAGE: Water-stage recorder.



9-1.000-1A GULRAN RIVER AT CHAR TAKHTA, Continued

Statistics of monthly and annual mean discharges
[m³/s, cubic meters per second; ng, not given]

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	0.13	1978	0.13	1978	0.12	ng	ng	3.95
November	0.57	1978	0.57	1978	0.57	ng	ng	18.0
December	0.53	1978	0.53	1978	0.53	ng	ng	16.8
January	0.03	1978	0.03	1978	0.03	ng	ng	0.98
February	0.37	1978	0.37	1978	0.37	ng	ng	11.7
March	0.78	1978	0.78	1978	0.78	ng	ng	24.8
April	0.48	1978	0.48	1978	0.48	ng	ng	15.3
May	0.06	1978	0.06	1978	0.06	ng	ng	1.99
June	0.05	1978	0.05	1978	0.05	ng	ng	1.61
July	0.04	1978	0.04	1977	0.04	0	0.05	1.25
August	0.06	1977	0.04	1978	0.05	0.02	0.33	1.64
September	0.09	1977	0.04	1978	0.07	0.04	0.55	2.12
Annual	0.26	1978	0.26	1978	0.26	ng	ng	100

9-1.000-1A GULRAN RIVER AT CHAR TAKHTA, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.11	0.20	0.09	0.03	0.03	0.50	0.11	0.04	ng	0.03	0.04	0.04	0.03
90	0.12	0.21	0.10	0.03	0.03	0.50	0.11	0.04	ng	0.04	0.04	0.04	0.04
85	0.12	0.25	0.10	0.03	0.03	0.51	0.11	0.04	ng	ng	0.04	0.04	0.04
80	0.12	0.25	0.10	0.03	0.03	0.51	0.12	0.05	ng	ng	0.04	0.04	0.04
75	0.12	0.25	0.10	0.03	0.03	0.51	0.12	0.05	ng	ng	0.05	0.05	0.04
70	0.12	0.25	0.11	0.03	0.04	0.51	0.15	0.05	ng	ng	0.05	0.05	0.05
65	0.12	0.26	0.11	0.03	0.04	0.52	0.19	0.05	ng	ng	0.05	0.05	0.05
60	0.12	0.26	0.11	0.03	0.04	0.52	0.22	0.06	ng	ng	0.05	0.05	0.05
55	0.13	0.26	0.11	0.03	0.04	0.6	0.31	0.06	ng	ng	0.05	0.05	0.06
50	0.13	0.26	0.14	0.04	0.04	0.61	0.33	0.07	ng	ng	0.05	0.07	0.07
45	0.13	0.31	0.14	0.04	0.05	0.71	0.42	0.07	ng	ng	ng	0.08	0.09
40	0.13	0.33	0.15	0.04	0.05	0.72	0.51	0.07	ng	ng	ng	0.09	0.11
35	0.13	0.41	0.15	0.04	0.06	0.81	0.58	ng	ng	ng	ng	0.09	0.12
30	0.13	0.49	0.15	0.04	0.11	0.82	0.60	ng	ng	ng	ng	0.10	0.15
25	ng	0.51	0.16	0.04	0.23	0.98	0.68	ng	ng	ng	ng	0.10	0.20
20	ng	0.53	0.16	0.04	0.95	0.99	0.73	ng	ng	ng	ng	ng	0.31
15	ng	1.10	0.30	0.04	1.04	1.00	0.78	ng	ng	ng	ng	ng	0.54
10	ng	1.51	1.08	0.04	ng	1.01	1.13	ng	ng	ng	ng	ng	0.73
5	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	1.11

9-1.000-1A GULRAN RIVER AT CHAR TAKHTA, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

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

9-1.000-1A GULRAN RIVER AT CHAR TAKHTA, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /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

9-1.000-1A GULRAN RIVER AT CHAR TAKHTA, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng
		June-July-August				September-October-November			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng

9-1.000-1A GULRAN RIVER AT CHAR TAKHTA, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1978	November 18, 1977	23.4	1978	November 18, 1977	23.4

9-1.000-1A GULRAN RIVER AT CHAR TAKHTA, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1977	--	--	--	--	--	--	--	--	--	0.04	0.06	0.09	--
1978	0.13	0.57	0.53	0.03	0.37	0.78	0.48	0.06	0.05	0.04	0.04	0.04	0.26

9-2.000-1A KUSHK RIVER AT CHIL DUKHTARAN

(U.S. Geological Survey identification number: 351300062170000)

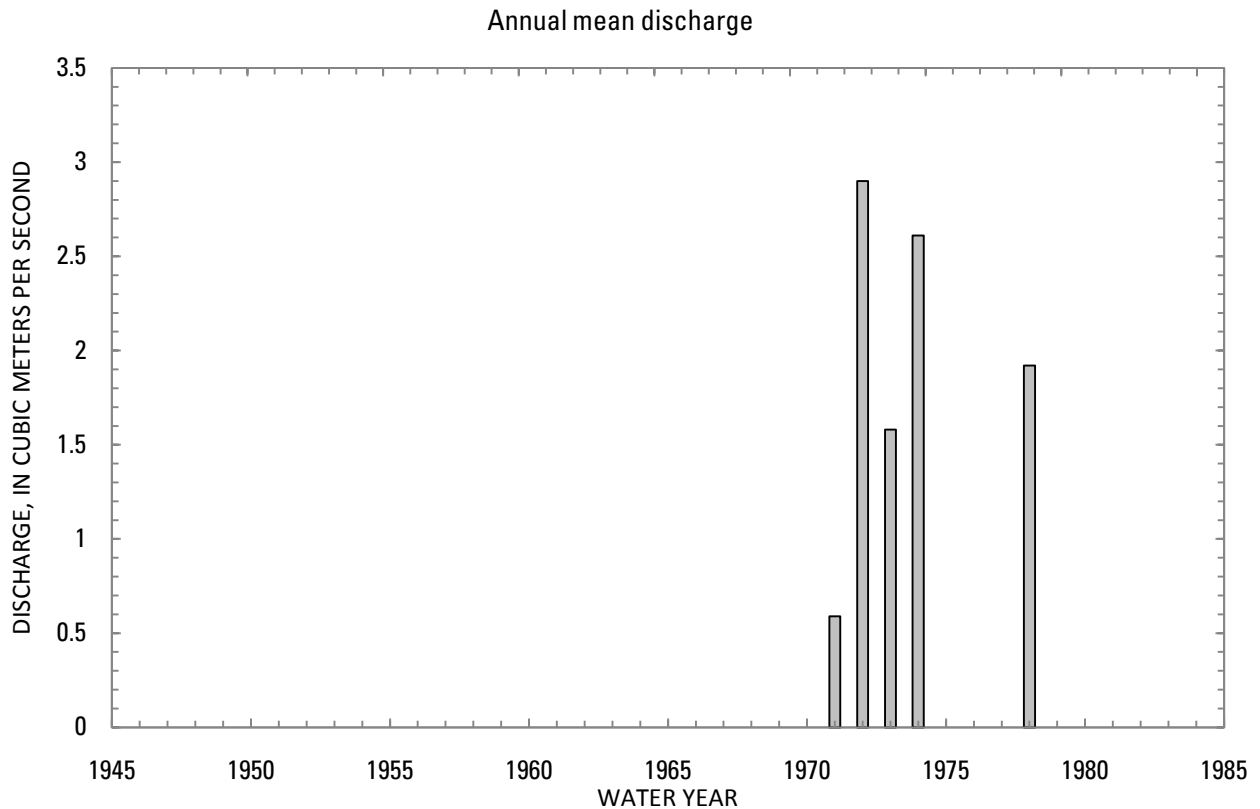
LOCATION: Lat 35°13'N., long 62°17'E.

DRAINAGE AREA: 2,240 km².

ELEVATION: 768 meters above mean sea level.

PERIOD OF RECORD: July 6, 1970 to March 29, 1975 and June 14, 1977 to September 30, 1978.

GAGE: Water-stage recorder.



9-2.000-1A KUSHK RIVER AT CHIL DUKHTARAN, Continued

Statistics of monthly and annual mean discharges
[m³/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	0.35	1973	0.09	1974	0.18	0.10	0.55	0.77
November	1.07	1972	0.17	1974	0.58	0.40	0.69	2.48
December	1.85	1978	0.57	1972	1.02	0.52	0.52	4.37
January	2.03	1974	0.65	1971	1.41	0.48	0.34	6.08
February	3.68	1975	1.57	1978	2.70	0.96	0.35	11.6
March	10.1	1972	1.11	1971	7.06	3.60	0.51	30.3
April	13.6	1974	2.31	1971	7.45	4.22	0.57	32.0
May	7.18	1972	0.16	1971	2.06	2.98	1.45	8.84
June	1.65	1972	0.04	1974	0.42	0.69	1.64	1.81
July	0.48	1972	0.04	1974	0.15	0.17	1.13	0.65
August	0.38	1972	0.02	1977	0.12	0.15	1.18	0.53
September	0.26	1978	0.05	1973	0.12	0.07	0.59	0.54
Annual	2.90	1972	0.59	1971	1.92	0.91	0.47	100

9-2.000-1A KUSHK RIVER AT CHIL DUKHTARAN, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.08	0.10	0.30	0.54	0.75	0.14	0.50	0.04	0.04	0.02	0.01	0.03	0.04
90	0.09	0.13	0.37	0.60	0.99	0.81	1.14	0.07	0.05	0.03	0.02	0.04	0.05
85	0.09	0.16	0.40	0.64	1.03	1.38	1.67	0.09	0.05	0.04	0.02	0.05	0.06
80	0.10	0.17	0.43	0.73	1.07	3.15	2.35	0.10	0.05	0.04	0.02	0.05	0.09
75	0.10	0.24	0.47	0.77	1.34	3.44	2.97	0.12	0.06	0.05	0.03	0.06	0.12
70	0.10	0.27	0.51	0.92	1.54	3.72	4.19	0.14	0.06	0.05	0.03	0.07	0.16
65	0.12	0.30	0.56	0.98	1.69	4.22	4.87	0.2	0.07	0.05	0.04	0.07	0.23
60	0.13	0.34	0.63	1.03	1.83	5.08	5.39	0.22	0.07	0.06	0.04	0.08	0.28
55	0.15	0.36	0.68	1.06	2.01	6.07	5.92	0.23	0.08	0.06	0.05	0.08	0.37
50	0.16	0.38	0.72	1.10	2.09	6.71	6.46	0.32	0.11	0.07	0.05	0.09	0.44
45	0.17	0.41	0.76	1.15	2.17	7.35	7.22	0.45	0.13	0.11	0.06	0.11	0.55
40	0.19	0.51	0.80	1.20	2.51	8.18	7.86	0.57	0.14	0.13	0.07	0.12	0.75
35	0.20	0.54	0.88	1.26	2.77	9.01	8.45	0.84	0.15	0.14	0.09	0.14	0.92
30	0.21	0.56	0.98	1.35	2.98	9.64	9.48	1.31	0.29	0.14	0.12	0.15	1.16
25	0.21	0.60	1.13	1.55	3.21	10.3	10.8	3.58	0.33	0.22	0.27	0.19	1.65
20	0.22	0.66	1.29	1.88	3.92	10.9	12.1	5.16	0.37	0.25	0.29	0.24	2.56
15	0.24	0.76	1.43	2.02	4.42	11.9	13.2	6.62	0.75	0.32	0.30	0.26	4.22
10	0.39	0.92	1.63	2.63	4.95	13.2	15.4	7.22	0.98	0.36	0.35	0.27	6.73
5	0.47	1.38	2.12	3.16	6.07	15.5	17.6	8.44	2.82	0.47	ng	0.28	10.1

9-2.000-1A KUSHK RIVER AT CHIL DUKHTARAN, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	7.90	5.75	3.17	1.55	0.96
0.95	1.05	14.0	8.20	5.69	3.54	2.45
0.90	1.11	18.8	9.71	7.36	5.07	3.69
0.80	1.25	26.5	11.7	9.56	7.31	5.60
0.50	2	49.1	15.9	13.7	12.1	9.96
0.20	5	86.7	20.3	16.9	16.0	13.8
0.10	10	114	22.5	17.9	17.3	15.1
0.04	25	152	24.8	18.6	18.1	16.0
0.02	50	181	26.1	18.9	18.4	16.4
0.01	100	211	27.3	19.1	18.6	16.6
0.005	200	241	28.2	19.2	18.7	16.7
0.002	500	283	ng	ng	ng	ng

¹Less than 10 years of data used.

9-2.000-1A KUSHK RIVER AT CHIL DUKHTARAN, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.03	0.04
0.10	10	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.05
0.20	5	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.05	0.06
0.50	2	0.02	0.02	0.02	0.03	0.04	0.06	0.08	0.09	0.11

9-2.000-1A KUSHK RIVER AT CHIL DUKHTARAN, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.01	0.29	0.34	0.45	0.01	0.02	0.04	0.09
0.10	10	0.03	0.30	0.36	0.51	0.02	0.02	0.05	0.13
0.20	5	0.08	0.31	0.40	0.59	0.02	0.03	0.06	0.21
0.50	2	0.31	0.38	0.52	0.80	0.07	0.10	0.15	0.65
		June-July-August				September-October-November			
0.05	20	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.04
0.10	10	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05
0.20	5	0.01	0.02	0.02	0.03	0.02	0.03	0.04	0.06
0.50	2	0.04	0.04	0.05	0.06	0.03	0.04	0.05	0.09

9-2.000-1A KUSHK RIVER AT CHIL DUKHTARAN, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1971	April 9, 1971	17.8	1978	December 24, 1977	116
1972	March 18, 1972	58.0	1973	March 24, 1973	61.0
1973	March 24, 1973	61.0	1972	March 18, 1972	58.0
1974	April 12, 1974	32.8	1974	April 12, 1974	32.8
1978	December 24, 1977	116	1971	April 9, 1971	17.8

9-2.000-1A KUSHK RIVER AT CHIL DUKHTARAN, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1970	--	--	--	--	--	--	--	--	--	--	0.06	0.08	--
1971	0.18	0.33	0.59	0.65	1.57	1.11	2.31	0.16	0.10	0.06	0.06	0.11	0.59
1972	0.15	1.07	0.57	1.62	2.55	10.1	8.90	7.18	1.65	0.48	0.38	0.18	2.90
1973	0.35	0.56	1.21	1.69	3.28	6.33	5.22	0.33	0.06	0.05	0.04	0.05	1.58
1974	0.09	0.17	0.60	2.03	3.53	9.16	13.6	2.17	0.04	0.04	0.04	0.06	2.61
1975	0.09	0.27	1.29	1.36	3.68	--	--	--	--	--	--	--	--
1977	--	--	--	--	--	--	--	--	--	0.10	0.02	0.13	--
1978	0.21	1.07	1.85	1.14	1.57	8.60	7.21	0.44	0.26	0.18	0.28	0.26	1.92

9-3.000-1A KASHAN RIVER AT BABULAI

(U.S. Geological Survey identification number: 352000062550000)

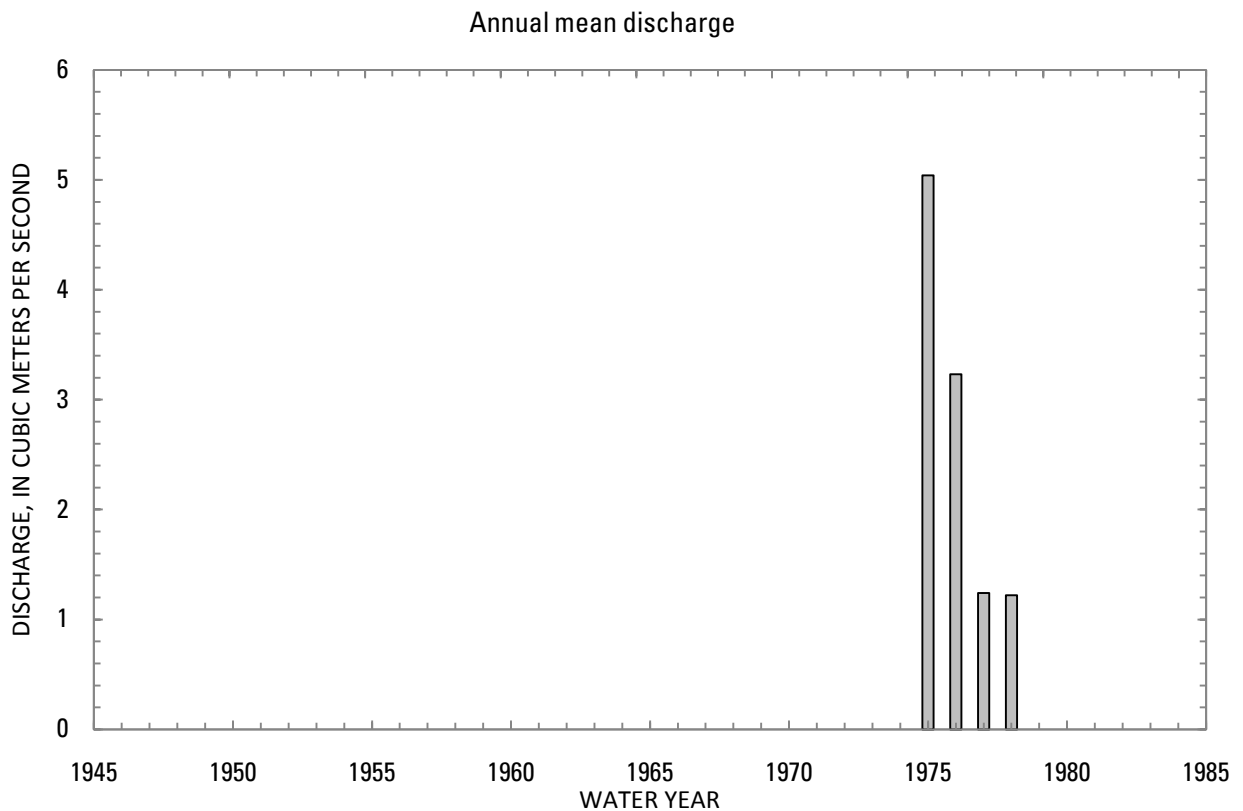
LOCATION: Lat 35°20'N., long 62°55'E.

DRAINAGE AREA: 5,265 km².

ELEVATION: 557 meters above mean sea level.

PERIOD OF RECORD: December 22, 1973 to September 30, 1978.

GAGE: Water-stage recorder.



9-3.000-1A KASHAN RIVER AT BABULAI, Continued

Statistics of monthly and annual mean discharges
[m³/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	0.77	1977	0.14	1978	0.45	0.30	0.66	1.61
November	1.06	1978	0.87	1975	0.99	0.09	0.09	3.50
December	4.38	1978	1.14	1976	2.52	1.59	0.63	8.93
January	2.29	1975	0.77	1974	1.38	0.56	0.40	4.88
February	4.82	1975	0.84	1974	2.75	1.90	0.69	9.72
March	14.8	1975	1.37	1977	5.87	5.58	0.95	20.8
April	26.9	1975	1.88	1978	10.6	10.6	1.00	37.5
May	6.99	1975	0.09	1978	3.39	3.22	0.95	12.0
June	0.37	1975	0.01	1978	0.17	0.18	1.03	0.62
July	0.20	1976	0	1978	0.06	0.09	1.46	0.21
August	0.04	1976	0	1975	0.01	0.02	1.82	0.04
September	0.35	1976	0	1974	0.07	0.16	2.22	0.25
Annual	5.04	1975	1.22	1978	2.68	1.83	0.68	100

9-3.000-1A KASHAN RIVER AT BABULAI, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0	0.58	0.80	0.54	0.69	0.91	0.41	0.02	0	0	0	0	0
90	0	0.70	0.85	0.57	0.74	1.04	0.70	0.05	0	0	0	0	0
85	0.01	0.73	0.89	0.61	0.85	1.21	0.88	0.09	0.01	0	0	0	0
80	0.04	0.75	1.02	0.70	0.94	1.33	1.19	0.12	0.01	0	0	0	0.01
75	0.10	0.82	1.09	0.74	1.02	1.44	1.44	0.15	0.02	0	0	0	0.02
70	0.12	0.85	1.15	0.83	1.07	1.52	1.98	0.20	0.02	0	0	0	0.19
65	0.29	0.87	1.19	0.96	1.11	1.61	2.31	0.22	0.03	0	0	0	0.27
60	0.31	0.90	1.22	1.04	1.32	1.78	2.57	0.24	0.03	0	0	0	0.42
55	0.48	0.94	1.26	1.23	1.44	2.28	3.43	0.26	0.04	0.01	0	0	0.66
50	0.52	0.99	1.30	1.27	1.49	2.58	4.52	0.31	0.05	0.01	0	0	0.80
45	0.55	1.04	1.33	1.29	1.54	2.78	5.77	0.62	0.06	0.01	0	0	0.95
40	0.59	1.06	1.36	1.32	1.64	2.97	7.56	1.15	0.23	0.02	0	0	1.12
35	0.64	1.07	1.40	1.35	1.79	4.21	9.01	1.96	0.25	0.02	0.01	0	1.26
30	0.67	1.09	1.43	1.41	2.01	5.38	11.5	2.56	0.26	0.02	0.01	0	1.39
25	0.71	1.10	1.49	1.46	3.00	5.93	13.6	3.20	0.27	0.08	0.01	0	1.52
20	0.74	1.13	1.56	1.52	3.81	6.81	15.8	4.79	0.29	ng	0.02	0.02	1.99
15	0.78	1.18	1.63	1.57	4.63	8.14	18.1	6.02	0.31	ng	0.02	0.25	3.28
10	0.85	1.24	1.92	1.77	6.12	12.9	30.2	7.47	0.46	ng	0.02	0.27	5.88
5	0.97	1.33	8.32	2.81	11.0	18.3	40.8	14.6	0.61	ng	ng	ng	12.3

9-3.000-1A KASHAN RIVER AT BABULAI, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	ng	25.6	9.21	3.17	1.35
0.95	1.05	ng	27.1	10.6	4.36	2.22
0.90	1.11	ng	28.5	11.8	5.35	2.96
0.80	1.25	ng	31.2	14.0	7.13	4.30
0.50	2	82.9	40.9	22.7	14.0	9.45
0.20	5	111	62.8	46.2	32.7	23.0
0.10	10	119	84.5	74.2	54.9	38.2
0.04	25	125	² 123	134	101	67.8
0.02	50	127	² 162	205	156	100
0.01	100	128	² 212	310	234	144
0.005	200	129	² 277	467	348	202
0.002	500	129	ng	ng	ng	ng

¹Less than 10 years of data used.

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

9-3.000-1A KASHAN RIVER AT BABULAI, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /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

9-3.000-1A KASHAN RIVER AT BABULAI, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.38	0.46	0.50	0.73	0.01	0.01	0	0.03
0.10	10	0.44	0.54	0.59	0.80	0.01	0.01	0.01	0.06
0.20	5	0.52	0.64	0.72	0.91	0.04	0.04	0.04	0.13
0.50	2	0.73	0.90	1.00	1.18	0.19	0.23	0.31	0.63
		June-July-August				September-October-November			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng

9-3.000-1A KASHAN RIVER AT BABULAI, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1974	April 7, 1974	26.0	1975	April 3, 1975	106
1975	April 3, 1975	106	1977	April 9, 1977	102
1976	April 28, 1976	75.1	1978	December 24, 1977	80.4
1977	April 9, 1977	102	1976	April 28, 1976	75.1
1978	December 24, 1977	80.4	1974	April 7, 1974	26.0

9-3.000-1A KASHAN RIVER AT BABULAI, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1974	--	--	--	0.77	0.84	1.60	4.46	0.24	0.04	0.01	0.01	0	--
1975	0.27	0.87	3.31	2.29	4.82	14.8	26.9	6.99	0.37	0.08	0	0	5.04
1976	0.64	0.96	1.14	1.20	4.76	7.58	15.6	6.14	0.36	0.20	0.04	0.35	3.23
1977	0.77	1.06	1.26	1.35	1.48	1.37	4.05	3.48	0.09	0	0	0	1.24
1978	0.14	1.06	4.38	1.28	1.83	4.01	1.88	0.09	0.01	0	0	0	1.22

9-4.R00-8A CHICHAKTU RIVER AT CHICHAKTU

(U.S. Geological Survey identification number: 354400064050000)

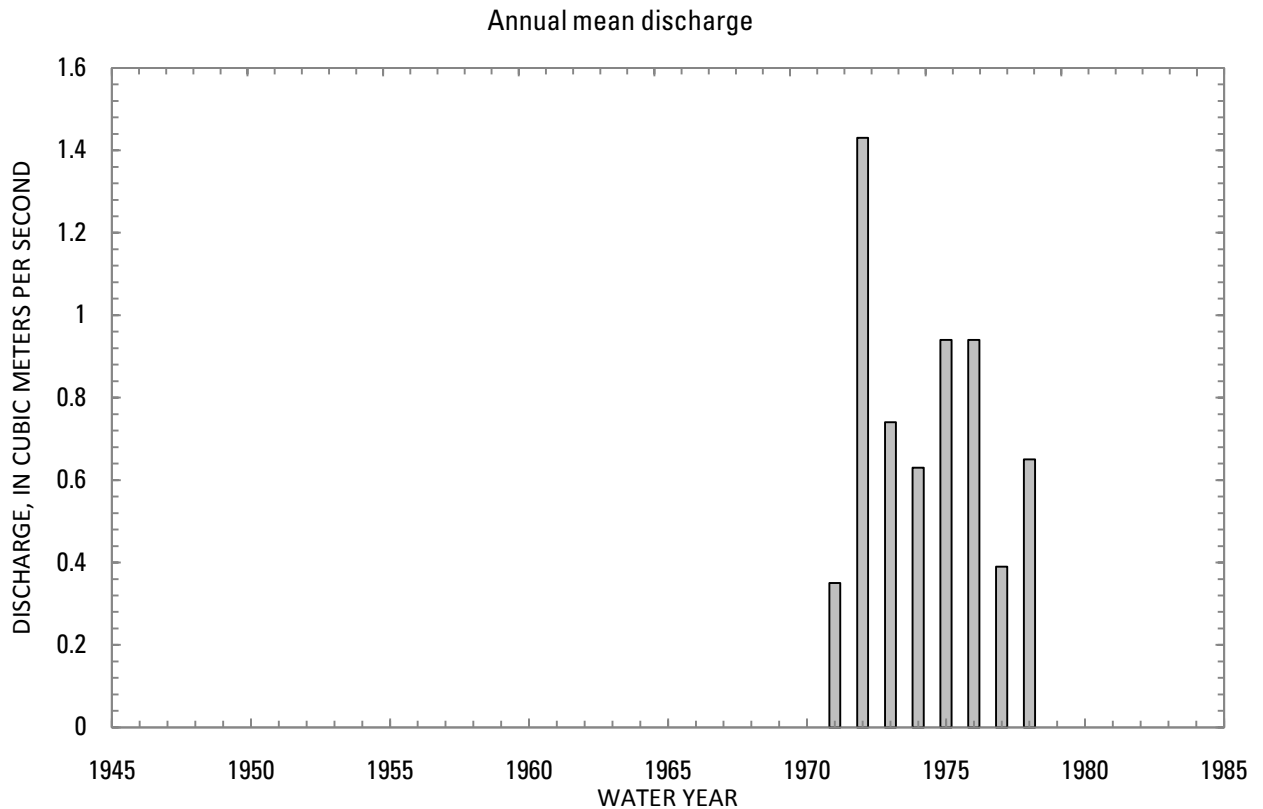
LOCATION: Lat 35°44'N., long 64°05'E.

DRAINAGE AREA: 415 km².

ELEVATION: 1,023 meters above mean sea level.

PERIOD OF RECORD: May 1, 1970 to September 30, 1978

GAGE: Water-stage recorder.



9-4.R00-8A CHICHAKTU RIVER AT CHICHAKTU, Continued

Statistics of monthly and annual mean discharges
[m³/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	0.57	1975	0.29	1978	0.44	0.10	0.24	4.94
November	0.61	1975	0.26	1978	0.45	0.14	0.31	5.09
December	0.90	1978	0.35	1972	0.54	0.19	0.35	6.14
January	0.76	1973	0.26	1978	0.52	0.17	0.33	5.82
February	1.24	1975	0.53	1974	0.71	0.23	0.33	8.01
March	5.19	1972	0.51	1977	1.64	1.62	0.99	18.5
April	5.10	1972	0.45	1977	1.96	1.62	0.82	22.1
May	3.58	1976	0.18	1971	1.05	1.10	1.05	11.8
June	1.42	1972	0.15	1977	0.58	0.43	0.73	6.56
July	0.60	1976	0.12	1977	0.35	0.18	0.52	3.94
August	0.57	1975	0.14	1970	0.32	0.15	0.46	3.61
September	0.49	1973	0.21	1971	0.31	0.11	0.35	3.54
Annual	1.43	1972	0.35	1971	0.76	0.35	0.46	100

9-4.R00-8A CHICHAKTU RIVER AT CHICHAKTU, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.19	0.26	0.31	0.25	0.25	0.38	0.21	0.08	0.05	0.03	0.03	0.14	0.15
90	0.26	0.28	0.35	0.31	0.33	0.52	0.31	0.15	0.13	0.08	0.09	0.17	0.21
85	0.29	0.29	0.36	0.39	0.46	0.55	0.44	0.20	0.17	0.11	0.14	0.20	0.26
80	0.32	0.29	0.37	0.40	0.48	0.58	0.51	0.23	0.20	0.16	0.16	0.21	0.28
75	0.33	0.31	0.38	0.40	0.53	0.60	0.59	0.27	0.23	0.19	0.19	0.24	0.31
70	0.34	0.35	0.39	0.41	0.56	0.65	0.69	0.3	0.27	0.22	0.21	0.26	0.34
65	0.35	0.36	0.41	0.43	0.57	0.70	0.86	0.32	0.31	0.26	0.24	0.28	0.38
60	0.37	0.37	0.43	0.47	0.58	0.72	0.93	0.35	0.36	0.29	0.26	0.29	0.42
55	0.39	0.42	0.46	0.48	0.59	0.75	1.00	0.41	0.40	0.30	0.28	0.29	0.45
50	0.41	0.44	0.48	0.49	0.60	0.77	1.12	0.61	0.55	0.31	0.30	0.30	0.49
45	0.45	0.49	0.49	0.50	0.61	0.81	1.23	0.76	0.62	0.37	0.31	0.31	0.52
40	0.49	0.50	0.50	0.51	0.64	0.86	1.31	0.89	0.68	0.40	0.36	0.31	0.56
35	0.51	0.53	0.52	0.58	0.66	0.94	1.38	0.99	0.75	0.45	0.38	0.33	0.60
30	0.52	0.57	0.53	0.59	0.69	1.08	1.71	1.10	0.80	0.50	0.40	0.38	0.65
25	0.53	0.58	0.59	0.61	0.71	1.24	2.24	1.22	0.84	0.52	0.43	0.40	0.71
20	0.57	0.59	0.63	0.70	0.74	1.47	2.83	1.64	0.89	0.55	0.50	0.43	0.77
15	0.61	0.60	0.66	0.73	0.8	1.98	3.75	1.81	1.00	0.59	0.53	0.48	0.96
10	0.63	0.69	0.69	0.77	1.10	3.01	4.53	1.98	1.29	0.64	0.58	0.51	1.26
5	0.67	0.71	0.82	0.82	1.42	6.89	6.79	2.9	1.51	ng	ng	0.54	1.96

9-4.R00-8A CHICHAKTU RIVER AT CHICHAKTU, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	0.50	0.47	0.35	² 0.26	0.27
0.95	1.05	1.40	0.91	0.66	0.51	0.50
0.90	1.11	2.50	1.29	0.93	0.73	0.69
0.80	1.25	4.60	1.98	1.42	1.13	1.02
0.50	2	13.2	4.54	3.27	2.53	2.09
0.20	5	32.3	10.6	7.75	5.61	4.22
0.10	10	48.7	16.6	12.3	8.47	6.04
0.04	25	72.2	26.8	20.3	13.1	8.82
0.02	50	91.1	36.7	28.2	17.3	11.2
0.01	100	111	48.7	38.0	22.1	13.9
0.005	200	131	63.2	50.1	27.8	16.9
0.002	500	157	ng	ng	ng	ng

¹Less than 10 years of data used.

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

9-4.R00-8A CHICHAKTU RIVER AT CHICHAKTU, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0.04	0.08	0.10	0.11	0.13	0.14	0.18
0.10	10	0	0	0.06	0.09	0.12	0.13	0.16	0.17	0.22
0.20	5	0	0.02	0.07	0.11	0.14	0.17	0.20	0.22	0.27
0.50	2	0.06	0.09	0.14	0.16	0.20	0.25	0.30	0.33	0.38

9-4.R00-8A CHICHAKTU RIVER AT CHICHAKTU, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.15	0.19	0.20	0.22	0.01	0.10	0.11	0.15
0.10	10	0.19	0.23	0.24	0.26	0.02	0.13	0.15	0.20
0.20	5	0.24	0.29	0.30	0.32	0.04	0.19	0.21	0.29
0.50	2	0.36	0.39	0.41	0.42	0.16	0.35	0.40	0.55
		June-July-August				September-October-November			
0.05	20	0	0.05	0.08	0.09	0.01	0.10	0.13	0.18
0.10	10	0	0.06	0.09	0.12	0.02	0.12	0.14	0.19
0.20	5	0	0.09	0.12	0.15	0.05	0.14	0.16	0.21
0.50	2	0.07	0.18	0.20	0.24	0.14	0.21	0.23	0.28

9-4.R00-8A CHICHAKTU RIVER AT CHICHAKTU, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1971	April 8, 1971	2.82	1977	April 9, 1977	56.5
1972	March 27, 1972	20.0	1978	December 24, 1977	26.4
1973	June 6, 1973	1.74	1976	May 12, 1976	25.0
1974	March 31, 1974	8.86	1972	March 27, 1972	20.0
1975	April 7, 1975	11.3	1975	April 7, 1975	11.3
1976	May 12, 1976	25.0	1974	March 31, 1974	8.86
1977	April 9, 1977	56.5	1971	April 8, 1971	2.82
1978	December 24, 1977	26.4	1973	June 6, 1973	1.74

9-4.R00-8A CHICHAKTU RIVER AT CHICHAKTU, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1970	--	--	--	--	--	--	--	0.22	0.28	0.16	0.14	0.24	--
1971	0.33	0.34	0.37	0.46	0.61	0.61	0.55	0.18	0.15	0.25	0.18	0.21	0.35
1972	0.42	0.38	0.35	0.53	0.58	5.19	5.10	1.90	1.42	0.40	0.41	0.42	1.43
1973	0.52	0.59	0.52	0.76	0.70	0.80	1.35	1.13	1.02	0.54	0.45	0.49	0.74
1974	0.50	0.54	0.48	0.53	0.53	0.89	1.55	0.99	0.48	0.23	0.32	0.47	0.63
1975	0.57	0.61	0.72	0.75	1.24	1.45	3.08	0.82	0.68	0.56	0.57	0.25	0.94
1976	0.36	0.33	0.42	0.42	0.57	0.80	2.89	3.58	0.73	0.60	0.35	0.22	0.94
1977	0.53	0.56	0.60	0.43	0.62	0.51	0.45	0.26	0.15	0.12	0.16	0.27	0.39
1978	0.29	0.26	0.90	0.26	0.85	2.86	0.74	0.34	0.35	0.31	0.31	0.28	0.65

9-5.L00-1A BUM RIVER AT LUKA-I-SURKH

(U.S. Geological Survey identification number: 351400063280000)

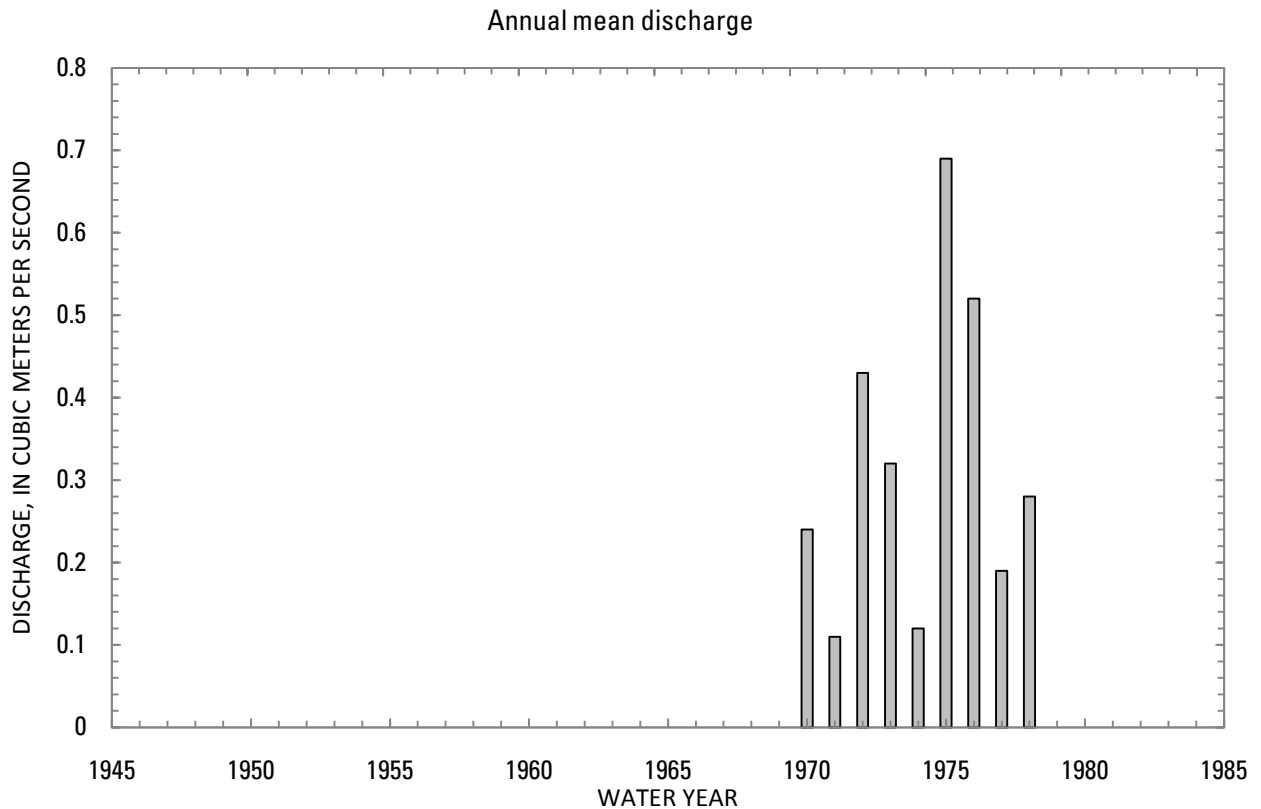
LOCATION: Lat 35°14'N., long 63°28'E.

DRAINAGE AREA: 1,225 km².

ELEVATION: 594 meters above mean sea level.

PERIOD OF RECORD: April 3, 1969 to September 30, 1978.

GAGE: Water-stage recorder.



9-5.L00-1A BUM RIVER AT LUKA-I-SURKH, Continued

Statistics of monthly and annual mean discharges
[m³/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	0.38	1970	0.07	1973	0.16	0.09	0.59	3.89
November	0.54	1970	0.08	1975	0.20	0.14	0.70	4.95
December	0.53	1978	0.12	1974	0.22	0.13	0.59	5.49
January	0.38	1973	0.11	1976	0.21	0.11	0.51	5.07
February	0.38	1975	0.11	1971	0.28	0.10	0.37	6.87
March	1.44	1972	0.18	1974	0.65	0.42	0.64	16.0
April	3.48	1975	0.13	1970	1.16	1.09	0.94	28.3
May	2.66	1969	0.02	1971	0.88	1.02	1.15	21.6
June	0.47	1975	0.01	1971	0.15	0.16	1.07	3.74
July	0.13	1976	0.01	1971	0.04	0.04	1.02	0.98
August	0.09	1969	0.01	1972	0.03	0.03	0.95	0.72
September	0.27	1969	0.01	1974	0.10	0.08	0.79	2.49
Annual	0.69	1975	0.11	1971	0.32	0.19	0.60	100

9-5.L00-1A BUM RIVER AT LUKA-I-SURKH, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.05	0.07	0.09	0.07	0.08	0.09	0.06	0.01	0.01	0	0.01	0.01	0.01
90	0.06	0.09	0.10	0.09	0.10	0.15	0.10	0.02	0.01	0.01	0.01	0.01	0.02
85	0.07	0.09	0.11	0.10	0.12	0.18	0.18	0.02	0.01	0.01	0.01	0.02	0.02
80	0.08	0.10	0.13	0.12	0.15	0.23	0.24	0.02	0.02	0.01	0.01	0.02	0.02
75	0.10	0.11	0.14	0.13	0.18	0.24	0.32	0.03	0.02	0.01	0.01	0.02	0.04
70	0.10	0.13	0.15	0.14	0.19	0.27	0.38	0.05	0.02	0.01	0.01	0.03	0.07
65	0.12	0.14	0.16	0.15	0.23	0.31	0.44	0.06	0.02	0.02	0.02	0.04	0.09
60	0.13	0.15	0.16	0.15	0.24	0.34	0.57	0.09	0.02	0.02	0.02	0.06	0.11
55	0.14	0.16	0.17	0.16	0.26	0.36	0.70	0.15	0.03	0.02	0.02	0.07	0.14
50	0.15	0.17	0.19	0.17	0.27	0.39	0.81	0.25	0.05	0.02	0.02	0.10	0.15
45	0.16	0.19	0.20	0.18	0.32	0.42	0.90	0.38	0.07	0.02	0.02	0.11	0.17
40	0.16	0.20	0.22	0.21	0.33	0.48	1.00	0.58	0.13	0.02	0.02	0.13	0.19
35	0.19	0.20	0.23	0.24	0.34	0.57	1.10	0.73	0.18	0.02	0.03	0.14	0.22
30	0.20	0.21	0.24	0.25	0.35	0.63	1.31	1.13	0.21	0.04	0.03	0.15	0.26
25	0.20	0.24	0.25	0.27	0.36	0.72	1.62	1.38	0.24	0.06	0.04	0.16	0.31
20	0.21	0.26	0.26	0.30	0.38	0.94	2.12	1.61	0.28	0.08	0.05	0.17	0.36
15	0.25	0.32	0.32	0.35	0.40	1.18	2.38	1.98	0.35	0.10	0.07	0.20	0.44
10	0.32	0.40	0.36	0.38	0.43	1.49	2.76	2.70	0.42	0.14	0.08	0.24	0.70
5	0.38	0.42	0.39	0.43	0.52	2.17	3.88	3.09	0.66	0.20	0.12	0.27	1.42

9-5.L00-1A BUM RIVER AT LUKA-I-SURKH, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	0.80	0.31	0.27	0.26	0.18
0.95	1.05	1.80	0.63	0.49	0.40	0.29
0.90	1.11	2.80	0.90	0.67	0.52	0.37
0.80	1.25	4.50	1.35	0.95	0.70	0.52
0.50	2	11.2	2.72	1.81	1.30	1.00
0.20	5	27.4	4.98	3.29	2.49	2.04
0.10	10	43.2	6.61	4.41	3.54	3.01
0.04	25	69.6	8.72	5.96	5.20	4.66
0.02	50	94.4	10.3	7.18	6.71	6.22
0.01	100	124	11.8	¹ 8.44	8.47	8.13
0.005	200	158	13.4	¹ 9.76	10.5	10.4
0.002	500	213	ng	ng	ng	ng

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

9-5.L00-1A BUM RIVER AT LUKA-I-SURKH, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0	0	0	0.01	0.01	0.01	0.02
0.10	10	0	0	0	0	0	0.01	0.01	0.01	0.03
0.20	5	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.04
0.50	2	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.07

9-5.L00-1A BUM RIVER AT LUKA-I-SURKH, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.01	0.05	0.06	0.08	0	0.01	0	0.01
0.10	10	0.01	0.05	0.07	0.09	0.01	0.01	0.01	0.01
0.20	5	0.02	0.06	0.08	0.10	0.01	0.02	0.02	0.03
0.50	2	0.04	0.09	0.11	0.13	0.03	0.05	0.07	0.15
		June-July-August				September-October-November			
0.05	20	0	0	0	0	0.01	0.01	0.01	0.01
0.10	10	0	0	0	0	0.01	0.01	0.01	0.02
0.20	5	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.03
0.50	2	0.01	0.01	0.01	0.01	0.02	0.04	0.05	0.07

9-5.L00-1A BUM RIVER AT LUKA-I-SURKH, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1969	April 14, 1969	39.4	1972	May 7, 1972	40.0
1970	March 25, 1970	9.00	1969	April 14, 1969	39.4
1971	April 4, 1971	2.24	1975	May 8, 1975	39.0
1972	May 7, 1972	40.0	1977	April 9, 1977	18.8
1973	March 26, 1973	4.91	1978	December 27, 1977	9.45
1974	April 8, 1974	2.77	1970	March 25, 1970	9.00
1975	May 8, 1975	39.0	1976	April 27, 1976	8.98
1976	April 27, 1976	8.98	1973	March 26, 1973	4.91
1977	April 9, 1977	18.8	1974	April 8, 1974	2.77
1978	December 27, 1977	9.45	1971	April 4, 1971	2.24

9-5.L00-1A BUM RIVER AT LUKA-I-SURKH, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1969	--	--	--	--	--	--	--	2.66	0.32	0.07	0.09	0.27	--
1970	0.38	0.54	0.35	0.38	0.32	0.48	0.13	0.04	0.03	0.01	0.03	0.14	0.24
1971	0.17	0.16	0.14	0.13	0.11	0.19	0.34	0.02	0.01	0.01	0.02	0.04	0.11
1972	0.08	0.13	0.13	0.20	0.37	1.44	1.33	1.38	0.02	0.01	0.01	0.02	0.43
1973	0.07	0.10	0.20	0.38	0.30	0.88	1.24	0.23	0.15	0.07	0.06	0.16	0.32
1974	0.17	0.13	0.12	0.12	0.17	0.18	0.46	0.06	0.01	0.01	0.01	0.01	0.12
1975	0.07	0.08	0.15	0.14	0.38	0.82	3.48	2.46	0.47	0.07	0.01	0.09	0.69
1976	0.20	0.18	0.20	0.11	0.36	0.98	2.20	1.38	0.32	0.13	0.01	0.15	0.52
1977	0.17	0.21	0.20	0.22	0.35	0.34	0.31	0.32	0.15	0.01	0.01	0.05	0.19
1978	0.14	0.31	0.53	0.18	0.17	0.59	0.92	0.29	0.05	0.02	0.04	0.08	0.28

10-0.000-3M SHIRIN TAGAB RIVER AT PATA BABA

(U.S. Geological Survey identification number: 363500064520000)

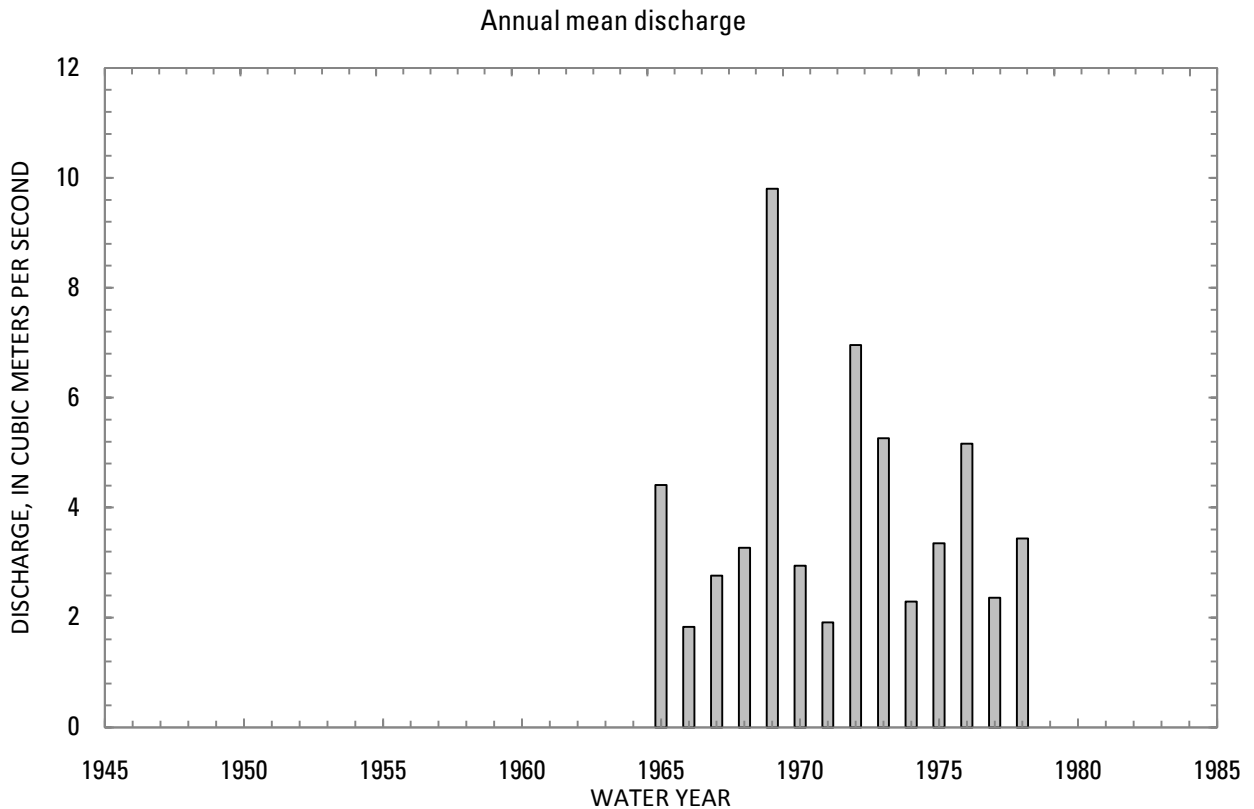
LOCATION: Lat 36°35'N., long 64°52'E.

DRAINAGE AREA: 11,775 km².

ELEVATION: 371 meters above mean sea level.

PERIOD OF RECORD: May 23, 1964 to September 30, 1978.

GAGE: Water-stage recorder. Staff gage at same site and datum prior to 1970 water year.



10-0.000-3M SHIRIN TAGAB RIVER AT PATA BABA, Continued

Statistics of monthly and annual mean discharges
[m³/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	3.42	1970	0.82	1976	1.87	0.70	0.38	3.90
November	5.91	1970	1.26	1975	2.76	1.21	0.44	5.76
December	10.2	1969	1.16	1972	3.72	2.41	0.65	7.78
January	8.09	1973	1.10	1972	3.45	1.88	0.54	7.22
February	9.16	1973	2.59	1972	4.12	1.86	0.45	8.60
March	22.4	1972	2.57	1977	7.74	6.51	0.84	16.2
April	42.4	1969	1.98	1966	11.9	11.1	0.94	24.8
May	21.4	1969	0.53	1971	7.59	7.50	0.99	15.9
June	8.03	1972	0.59	1974	1.77	1.95	1.10	3.70
July	2.48	1972	0.47	1977	1.04	0.63	0.61	2.16
August	2.03	1969	0.37	1977	0.97	0.50	0.51	2.03
September	2.10	1969	0.42	1975	0.96	0.48	0.50	2.02
Annual	9.80	1969	1.83	1966	3.98	2.22	0.56	100

10-0.000-3M SHIRIN TAGAB RIVER AT PATA BABA, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.71	1.10	1.20	1.11	2.04	2.14	1.05	0.46	0.40	0.31	0.30	0.35	0.42
90	0.77	1.26	1.37	1.41	2.25	2.57	1.50	0.59	0.47	0.36	0.33	0.39	0.57
85	0.87	1.38	1.68	1.60	2.48	2.76	1.71	0.62	0.57	0.41	0.37	0.45	0.71
80	0.97	1.56	1.84	1.80	2.71	2.95	2.06	0.66	0.66	0.47	0.48	0.52	0.84
75	1.09	1.83	2.04	1.98	2.92	3.11	2.40	0.69	0.71	0.50	0.53	0.56	1.02
70	1.23	2.05	2.34	2.22	3.11	3.28	2.69	0.90	0.78	0.54	0.62	0.60	1.19
65	1.34	2.33	2.58	2.41	3.24	3.45	3.06	1.18	0.85	0.61	0.67	0.69	1.41
60	1.49	2.53	2.70	2.55	3.34	3.63	3.51	1.39	0.92	0.67	0.71	0.74	1.65
55	1.68	2.60	2.83	2.70	3.42	3.80	4.32	1.69	1.00	0.72	0.74	0.77	1.90
50	1.80	2.67	2.95	2.88	3.50	4.10	5.22	2.68	1.07	0.78	0.80	0.81	2.15
45	1.95	2.75	3.08	3.13	3.58	4.41	6.19	3.59	1.16	0.87	0.90	0.87	2.41
40	2.09	2.83	3.24	3.38	3.68	4.82	7.70	4.84	1.27	1.04	1.05	0.97	2.68
35	2.18	2.96	3.45	3.56	3.78	5.63	9.66	6.54	1.39	1.13	1.12	1.05	2.98
30	2.28	3.11	3.75	3.77	3.88	6.74	11.4	9.19	1.54	1.31	1.19	1.13	3.30
25	2.39	3.28	4.04	4.06	4.23	8.27	12.6	11.2	1.74	1.53	1.34	1.24	3.68
20	2.55	3.43	4.29	4.52	4.76	9.37	14.5	13.5	2.02	1.69	1.45	1.42	4.18
15	2.71	3.63	4.73	5.22	5.45	11.2	19.5	16.2	2.41	1.84	1.65	1.62	5.31
10	3.04	3.96	5.39	6.31	7.02	15.2	30.6	20.8	3.16	2.12	1.93	1.89	7.70
5	3.80	5.68	6.56	8.16	8.64	24.6	53.3	27.7	4.98	2.39	2.13	2.09	13.4

10-0.000-3M SHIRIN TAGAB RIVER AT PATA BABA, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	ng	2.13	2.06	¹ 1.88	2.02
0.95	1.05	ng	6.63	5.12	3.99	3.49
0.90	1.11	21.9	11.1	7.86	5.79	4.65
0.80	1.25	40.8	18.9	12.5	8.83	6.56
0.50	2	94.5	41.4	26.4	18.3	12.5
0.20	5	149	68.6	46.4	34.1	23.4
0.10	10	168	81.4	58.3	45.5	32.3
0.04	25	180	92.4	71.2	60.2	45.2
0.02	50	185	97.8	79.3	71.1	56.1
0.01	100	187	102	86.2	81.7	68.0
0.005	200	188	104	¹ 92.1	92.2	80.9
0.002	500	189	ng	ng	ng	ng

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

10-0.000-3M SHIRIN TAGAB RIVER AT PATA BABA, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.16	0.18	0.20	0.26	0.32	0.37	0.40	0.44	0.59
0.10	10	0.18	0.19	0.22	0.27	0.35	0.41	0.45	0.49	0.67
0.20	5	0.20	0.22	0.25	0.31	0.40	0.47	0.52	0.58	0.80
0.50	2	0.30	0.32	0.36	0.44	0.57	0.68	0.75	0.83	1.17

10-0.000-3M SHIRIN TAGAB RIVER AT PATA BABA, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.86	0.94	1.02	1.13	0.27	0.35	0.36	0.42
0.10	10	1.04	1.16	1.25	1.37	0.32	0.42	0.48	0.6
0.20	5	1.28	1.46	1.57	1.71	0.41	0.57	0.68	0.92
0.50	2	1.88	2.16	2.31	2.6	0.79	1.17	1.49	2.26
		June-July-August				September-October-November			
0.05	20	0.15	0.2	0.26	0.36	0.19	0.27	0.34	0.41
0.10	10	0.18	0.22	0.29	0.41	0.23	0.31	0.38	0.46
0.20	5	0.22	0.27	0.34	0.49	0.29	0.37	0.45	0.55
0.50	2	0.36	0.43	0.52	0.73	0.49	0.57	0.66	0.79

10-0.000-3M SHIRIN TAGAB RIVER AT PATA BABA, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1965	April 23, 1965	134	1977	April 10, 1977	195
1965	December 5, 1965	5.45	1976	April 9, 1976	160
1967	May 10, 1967	50.0	1969	April 14, 1969	140
1968	April 26, 1968	87.0	1972	March 19, 1972	135
1969	April 14, 1969	140	1965	April 23, 1965	134
1970	March 27, 1970	80.0	1974	April 7, 1974	100
1971	April 16, 1971	27.0	1968	April 26, 1968	87.0
1972	March 19, 1972	135	1970	March 27, 1970	80.0
1973	March 26, 1973	72.0	1973	March 26, 1973	72.0
1974	April 7, 1974	100	1978	December 25, 1977	61.1
1975	May 4, 1975	60.0	1975	May 4, 1975	60.0
1976	April 9, 1976	160	1967	May 10, 1967	50.0
1977	April 10, 1977	195	1971	April 16, 1971	27.0
1978	December 25, 1977	61.1	1965	December 5, 1965	5.45

10-0.000-3M SHIRIN TAGAB RIVER AT PATA BABA, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1964	--	--	--	--	--	--	--	--	1.21	1.26	1.13	1.09	--
1965	2.17	3.24	3.79	4.30	6.16	8.19	15.2	5.95	1.60	0.86	0.91	0.77	4.41
1966	2.37	3.07	3.25	1.65	2.73	3.37	1.98	0.81	0.91	0.51	0.57	0.74	1.83
1967	1.69	2.12	1.42	2.24	3.13	3.58	5.01	10.6	0.75	0.61	1.01	0.95	2.76
1968	2.22	3.28	3.23	3.20	3.44	3.39	8.83	8.64	1.08	0.81	0.61	0.51	3.27
1969	1.69	3.03	10.2	6.22	5.98	16.4	42.4	21.4	4.10	2.11	2.03	2.10	9.80
1970	3.42	5.91	4.78	3.69	3.66	7.71	2.66	0.61	0.72	0.53	0.56	1.01	2.94
1971	2.36	2.94	2.96	2.69	3.60	3.47	2.07	0.53	0.60	0.51	0.71	0.62	1.91
1972	0.94	1.38	1.16	1.10	2.59	22.4	21.9	19.1	8.03	2.48	1.41	0.91	6.96
1973	2.14	2.97	4.56	8.09	9.16	18.2	11.3	1.55	1.05	1.36	1.28	1.58	5.26
1974	1.59	1.46	2.94	3.42	3.01	2.69	8.07	2.25	0.59	0.50	0.60	0.46	2.29
1975	0.88	1.26	2.05	2.20	2.96	3.95	12.0	12.0	1.19	0.81	0.52	0.42	3.35
1976	0.82	1.58	1.86	1.89	2.64	4.31	23.3	18.1	2.43	1.67	1.86	1.52	5.16
1977	2.22	2.67	2.82	3.28	3.57	2.57	5.97	2.98	1.05	0.47	0.37	0.54	2.36
1978	1.64	3.68	7.09	4.37	4.99	8.08	5.13	1.80	1.25	1.03	1.03	1.24	3.44

10-0.000-4M SHIRIN TAGAB RIVER AT DAULATABAD

(U.S. Geological Survey identification number: 362700064530000)

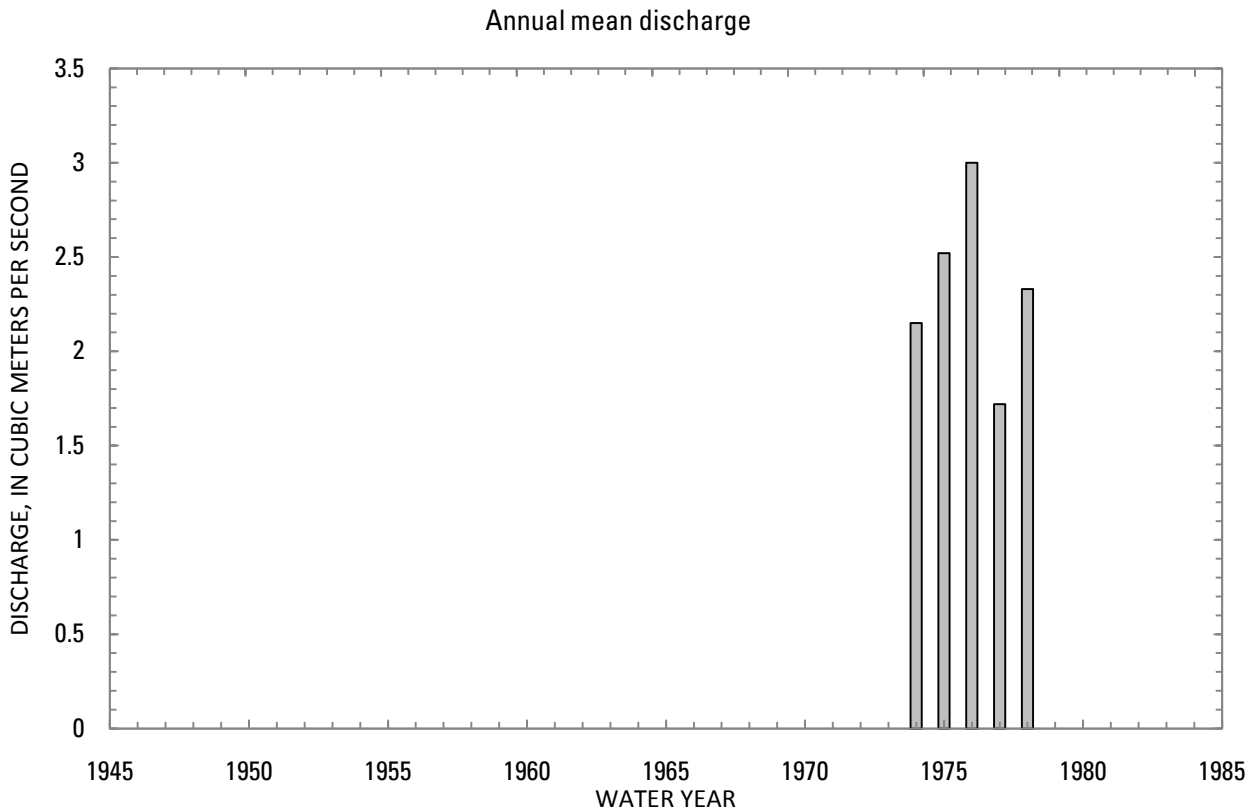
LOCATION: Lat 36°27'N., long 64°53'E.

DRAINAGE AREA: 4,645 km².

ELEVATION: 391 meters above mean sea level.

PERIOD OF RECORD: January 16, 1969 to May 31, 1970 and June 1, 1973 to September 30, 1978.

GAGE: Staff gage from January 16, 1969 to May 31, 1970. Water-stage recorder at same site and datum June 1, 1973 to September 30, 1978.



10-0.000-4M SHIRIN TAGAB RIVER AT DAULATABAD, Continued

Statistics of monthly and annual mean discharges
[m³/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	4.97	1970	0.83	1978	1.77	1.59	0.89	5.51
November	7.50	1970	1.31	1975	2.87	2.30	0.80	8.91
December	4.87	1970	1.86	1975	3.19	1.28	0.40	9.93
January	3.58	1974	1.83	1975	2.70	0.75	0.28	8.40
February	4.55	1978	2.77	1969	3.54	0.63	0.18	11.0
March	6.74	1978	2.15	1977	4.74	1.72	0.36	14.8
April	13.5	1969	1.41	1970	5.92	4.73	0.80	18.4
May	7.35	1975	0.54	1970	3.25	2.85	0.88	10.1
June	1.69	1969	0.87	1974	1.18	0.29	0.25	3.65
July	1.62	1969	0.63	1977	1.04	0.37	0.35	3.25
August	1.89	1969	0.67	1978	1.05	0.46	0.44	3.26
September	2.33	1969	0.54	1975	0.91	0.65	0.71	2.84
Annual	3.00	1976	1.72	1977	2.34	0.47	0.20	100

10-0.000-4M SHIRIN TAGAB RIVER AT DAULATABAD, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.51	1.00	1.56	1.42	2.27	1.12	0.57	0.31	0.33	0.25	0.22	0.25	0.32
90	0.61	1.25	1.75	1.54	2.47	1.92	0.78	0.35	0.36	0.35	0.25	0.28	0.42
85	0.73	1.43	2.03	1.64	2.55	2.54	0.99	0.39	0.46	0.38	0.31	0.33	0.54
80	0.81	1.64	2.17	1.75	2.64	2.68	1.18	0.45	0.62	0.41	0.41	0.41	0.67
75	0.87	1.73	2.28	1.93	2.72	3.03	1.30	0.51	0.70	0.45	0.44	0.47	0.84
70	0.92	1.83	2.32	2.03	2.87	3.37	1.43	0.57	0.89	0.51	0.49	0.50	1.00
65	0.97	1.93	2.35	2.20	2.99	3.55	1.58	0.65	1.03	0.60	0.58	0.52	1.12
60	1.02	2.01	2.39	2.29	3.27	3.73	1.92	0.79	1.09	0.67	0.74	0.56	1.25
55	1.07	2.08	2.52	2.43	3.40	3.91	2.40	1.01	1.15	0.81	0.81	0.61	1.40
50	1.19	2.14	2.65	2.54	3.51	4.09	2.82	1.24	1.22	0.95	0.88	0.65	1.59
45	1.31	2.20	2.78	2.65	3.63	4.30	3.61	1.70	1.30	1.08	0.98	0.72	1.83
40	1.38	2.27	3.11	2.78	3.70	4.53	4.03	2.15	1.34	1.15	1.05	0.79	2.07
35	1.44	2.34	3.25	2.91	3.80	4.83	4.61	2.85	1.38	1.20	1.13	0.84	2.29
30	1.50	2.44	3.40	3.07	3.91	5.20	5.54	3.62	1.45	1.25	1.33	0.93	2.52
25	1.79	2.58	3.56	3.26	4.01	5.52	6.88	4.84	1.55	1.53	1.54	1.03	2.76
20	1.95	2.80	4.00	3.46	4.14	5.93	7.96	5.72	1.65	1.75	1.68	1.19	3.31
15	3.13	6.35	4.37	3.75	4.31	6.76	8.78	6.49	1.71	1.94	1.88	1.50	3.84
10	4.47	7.36	5.07	4.01	4.49	7.80	12.4	7.7	1.81	2.03	2.03	2.44	4.56
5	5.97	8.22	5.60	4.66	5.61	9.67	18.5	9.34	1.99	2.19	2.78	2.77	6.41

10-0.000-4M SHIRIN TAGAB RIVER AT DAULATABAD, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	20.9	10.5	6.23	3.78	1.73
0.95	1.05	28.5	12.5	7.46	4.87	2.69
0.90	1.11	33.8	13.8	8.31	5.60	3.36
0.80	1.25	41.9	15.9	9.60	6.66	4.37
0.50	2	64.9	21.4	13.2	9.42	6.99
0.20	5	104	30.3	19.2	13.6	10.8
0.10	10	135	37.2	23.9	16.6	13.3
0.04	25	179	46.9	30.7	20.6	16.4
0.02	50	217	55.0	36.6	23.8	18.8
0.01	100	258	63.9	43.1	27.1	21.1
0.005	200	304	73.6	50.3	30.6	23.3
0.002	500	372	ng	ng	ng	ng

¹Less than 10 years of data used.

10-0.000-4M SHIRIN TAGAB RIVER AT DAULATABAD, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.14	0.16	0.20	0.28	0.30	0.48	0.53	0.55	0.68
0.10	10	0.17	0.19	0.22	0.30	0.33	0.51	0.57	0.59	0.72
0.20	5	0.21	0.22	0.25	0.34	0.37	0.57	0.63	0.66	0.79
0.50	2	0.29	0.30	0.31	0.46	0.53	0.75	0.83	0.88	1.09

10-0.000-4M SHIRIN TAGAB RIVER AT DAULATABAD, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.91	1.10	1.19	1.36	0.20	0.20	0.21	0.24
0.10	10	1.03	1.24	1.35	1.56	0.24	0.25	0.28	0.36
0.20	5	1.19	1.44	1.55	1.83	0.29	0.34	0.41	0.60
0.50	2	1.57	1.88	2.04	2.43	0.51	0.68	0.95	1.54
		June-July-August				September-October-November			
0.05	20	0.14	0.21	0.31	0.52	0.18	0.25	0.32	0.42
0.10	10	0.16	0.23	0.34	0.58	0.21	0.29	0.34	0.44
0.20	5	0.20	0.26	0.39	0.67	0.26	0.34	0.39	0.50
0.50	2	0.27	0.32	0.52	0.87	0.37	0.50	0.57	0.70

10-0.000-4M SHIRIN TAGAB RIVER AT DAULATABAD, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1969	April 14, 1969	80.0	1977	April 10, 1977	141
1970	March 26, 1970	41.0	1976	April 9, 1976	120
1974	April 7, 1974	63.0	1969	April 14, 1969	80.0
1975	May 4, 1975	49.0	1974	April 7, 1974	63.0
1976	April 9, 1976	120	1975	May 4, 1975	49.0
1977	April 10, 1977	141	1970	March 26, 1970	41.0
1978	December 25, 1977	33.4	1978	December 25, 1977	33.4

10-0.000-4M SHIRIN TAGAB RIVER AT DAULATABAD, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1969	--	--	--	--	2.77	6.50	13.5	6.68	1.69	1.62	1.89	2.33	--
1970	4.97	7.50	4.87	3.18	3.60	5.57	1.41	0.54	--	--	--	--	--
1973	--	--	--	--	--	--	--	--	1.11	1.32	1.27	1.05	--
1974	1.36	1.94	3.16	3.58	4.04	2.98	4.24	1.57	0.87	0.90	0.80	0.55	2.15
1975	0.87	1.31	1.86	1.83	3.63	4.38	5.78	7.35	1.25	0.88	0.69	0.54	2.52
1976	1.14	1.90	2.37	2.20	3.23	4.87	11.4	4.28	1.38	1.27	1.31	0.76	3.00
1977	1.48	2.12	2.26	2.08	2.93	2.15	3.25	1.51	1.04	0.63	0.70	0.61	1.72
1978	0.83	2.43	4.64	3.34	4.55	6.74	1.87	0.83	0.88	0.68	0.67	0.56	2.33

10-0.000-6M SHIRIN TAGAB RIVER AT KHISHT PUL

(U.S. Geological Survey identification number: 355700064540000)

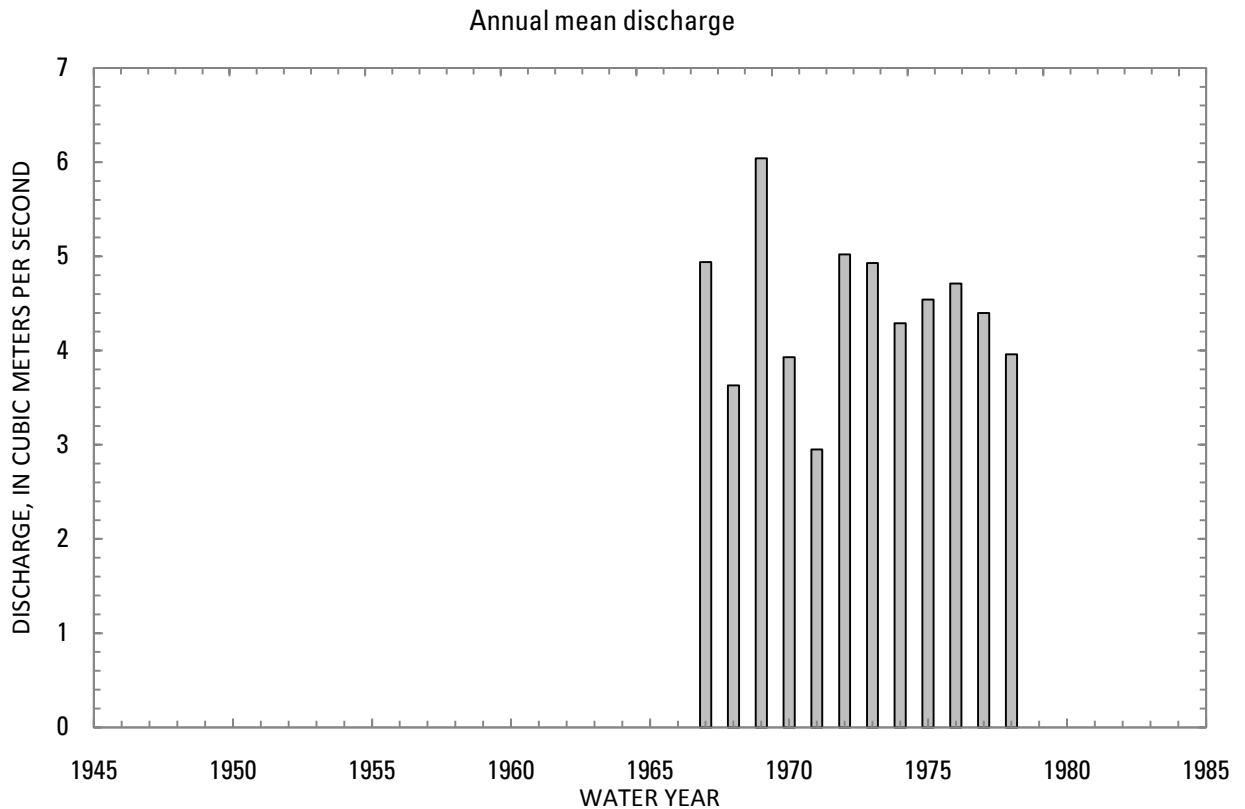
LOCATION: Lat 35°57'N., long 64°54'E.

DRAINAGE AREA: 3,280 km².

ELEVATION: 769 meters above mean sea level.

PERIOD OF RECORD: January 1, 1966 to September 30, 1978.

GAGE: Water-stage recorder. Staff gage at same site and datum prior to 1969 water year.



10-0.000-6M SHIRIN TAGAB RIVER AT KHISHT PUL, Continued

Statistics of monthly and annual mean discharges
[m³/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	6.18	1970	2.72	1972	3.96	0.99	0.25	7.55
November	6.46	1970	3.06	1972	4.52	0.97	0.21	8.63
December	6.16	1969	2.23	1972	4.89	1.14	0.23	9.34
January	6.13	1973	3.43	1966	4.78	0.88	0.18	9.13
February	7.11	1973	3.89	1968	5.23	0.94	0.18	9.99
March	12.5	1972	4.98	1976	6.85	2.59	0.38	13.1
April	16.8	1969	4.55	1971	8.49	3.57	0.42	16.2
May	11.1	1972	1.48	1970	5.30	3.11	0.59	10.1
June	5.94	1972	0.92	1966	2.24	1.30	0.58	4.27
July	3.00	1969	0.60	1971	1.88	0.68	0.36	3.60
August	3.50	1969	0.29	1971	1.72	0.83	0.48	3.29
September	4.22	1969	1.08	1971	2.53	0.83	0.33	4.83
Annual	6.04	1969	2.95	1971	4.45	0.79	0.18	100

10-0.000-6M SHIRIN TAGAB RIVER AT KHISHT PUL, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	2.59	3.14	2.28	3.50	3.93	4.23	3.71	0.77	0.69	0.59	0.30	1.16	1.12
90	2.72	3.28	3.63	3.68	4.00	4.43	4.07	1.18	1.03	0.86	0.76	1.33	1.53
85	2.83	3.54	3.85	3.74	4.11	4.57	4.42	1.72	1.12	1.09	0.87	1.52	1.87
80	2.94	3.73	4.16	3.95	4.26	4.71	4.75	1.95	1.20	1.23	1.01	1.69	2.14
75	3.28	3.87	4.29	4.03	4.37	4.84	4.97	2.25	1.29	1.40	1.08	1.82	2.41
70	3.42	4.10	4.42	4.11	4.50	4.96	5.20	2.59	1.39	1.55	1.17	1.93	2.71
65	3.47	4.16	4.55	4.27	4.56	5.09	5.39	2.82	1.50	1.64	1.29	2.09	3.03
60	3.51	4.23	4.68	4.37	4.61	5.21	5.58	3.07	1.66	1.74	1.45	2.21	3.47
55	3.68	4.33	4.79	4.47	4.91	5.53	5.78	3.33	1.90	1.96	1.58	2.39	3.81
50	3.74	4.46	4.88	4.57	5.02	5.73	6.01	3.60	2.04	2.04	1.70	2.57	4.08
45	3.79	4.55	4.96	4.84	5.11	5.83	6.26	4.02	2.17	2.11	1.81	2.71	4.36
40	4.09	4.67	5.05	4.94	5.32	5.92	6.52	4.55	2.28	2.17	1.94	2.83	4.60
35	4.26	4.81	5.22	5.09	5.58	6.02	6.88	4.91	2.39	2.22	2.08	2.99	4.82
30	4.36	4.87	5.41	5.25	5.76	6.12	7.27	5.39	2.53	2.28	2.15	3.13	5.05
25	4.44	4.93	5.55	5.38	5.95	6.29	8.52	6.01	2.67	2.35	2.22	3.23	5.28
20	4.56	5.19	5.68	5.55	6.13	6.56	9.54	6.87	2.82	2.44	2.28	3.33	5.66
15	4.85	5.78	5.81	5.77	6.25	6.97	11.0	7.72	2.97	2.53	2.52	3.51	6.10
10	5.53	6.06	6.26	6.10	6.56	8.23	13.5	8.50	3.16	2.82	3.10	3.71	6.65
5	6.08	ng	6.63	6.41	6.95	19.0	23.8	15.0	4.24	3.09	3.37	4.09	7.92

10-0.000-6M SHIRIN TAGAB RIVER AT KHISHT PUL, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	15.2	5.16	4.18	3.64	3.59
0.95	1.05	26.2	8.78	6.27	5.26	4.91
0.90	1.11	34.2	11.4	7.75	6.38	5.78
0.80	1.25	46.0	15.1	9.98	8.03	7.02
0.50	2	75.4	24.5	15.9	12.3	10.1
0.20	5	113	36.3	25.0	18.7	14.3
0.10	10	135	43.1	31.4	23.1	17.0
0.04	25	160	50.7	39.9	28.9	20.5
0.02	50	176	55.6	46.4	33.3	23.1
0.01	100	190	60.0	53.1	37.7	25.6
0.005	200	203	63.9	59.9	42.3	28.1
0.002	500	218	ng	ng	ng	ng

10-0.000-6M SHIRIN TAGAB RIVER AT KHISHT PUL, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0.23	0.27	0.35	0.48	0.70	0.79	1.41
0.10	10	0.21	0.26	0.35	0.40	0.51	0.68	0.87	0.98	1.63
0.20	5	0.50	0.56	0.56	0.62	0.77	0.98	1.13	1.24	1.92
0.50	2	1.04	1.09	1.12	1.20	1.41	1.67	1.72	1.86	2.55

10-0.000-6M SHIRIN TAGAB RIVER AT KHISHT PUL, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	2.23	2.44	2.47	2.64	0.46	0.6	0.71	1.34
0.10	10	2.69	2.94	3.00	3.14	0.66	0.84	0.99	1.73
0.20	5	3.23	3.53	3.63	3.73	0.98	1.23	1.43	2.32
0.50	2	4.08	4.46	4.63	4.74	1.94	2.34	2.68	3.87
		June-July-August				September-October-November			
0.05	20	0	0.24	0.30	0.39	0.43	0.59	0.78	1.23
0.10	10	0.25	0.38	0.45	0.58	0.63	0.84	1.04	1.49
0.20	5	0.54	0.60	0.69	0.87	0.95	1.21	1.40	1.84
0.50	2	1.09	1.17	1.27	1.53	1.79	2.08	2.21	2.58

10-0.000-6M SHIRIN TAGAB RIVER AT KHISHT PUL, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1967	May 9, 1967	57.9	1977	April 10, 1977	150
1968	April 25, 1968	100	1976	April 8, 1976	140
1969	April 14, 1969	103	1969	April 14, 1969	103
1970	March 25, 1970	50.0	1968	April 25, 1968	100
1971	April 14, 1971	21.3	1972	May 15, 1972	95.0
1972	May 15, 1972	95.0	1974	April 7, 1974	78.7
1973	March 26, 1973	60.6	1973	March 26, 1973	60.6
1974	April 7, 1974	78.7	1975	May 3, 1975	60.0
1975	May 3, 1975	60.0	1967	May 9, 1967	57.9
1976	April 8, 1976	140	1970	March 25, 1970	50.0
1977	April 10, 1977	150	1978	April 26, 1978	43.4
1978	April 26, 1978	43.4	1971	April 14, 1971	21.3

10-0.000-6M SHIRIN TAGAB RIVER AT KHISHT PUL, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1966	--	--	--	3.43	4.19	5.31	5.55	2.64	0.92	1.00	1.10	2.58	--
1967	5.24	5.99	5.93	5.79	6.46	6.18	9.42	8.36	1.87	1.57	1.07	1.55	4.94
1968	3.26	4.48	4.47	3.94	3.89	5.31	6.41	5.51	1.60	1.54	1.13	2.06	3.63
1969	3.63	3.78	6.16	5.86	5.94	8.05	16.8	8.82	2.87	3.00	3.50	4.22	6.04
1970	6.18	6.46	5.82	5.19	5.10	6.23	4.79	1.48	1.16	1.25	1.14	2.45	3.93
1971	4.21	4.55	3.85	3.86	4.69	5.13	4.55	1.49	1.22	0.60	0.29	1.08	2.95
1972	2.72	3.06	2.23	3.94	4.21	12.5	8.75	11.1	5.94	2.09	1.59	2.01	5.02
1973	2.73	3.49	5.82	6.13	7.11	12.3	9.96	2.25	2.30	2.22	1.99	3.06	4.93
1974	3.57	4.20	4.76	5.55	5.73	6.20	8.64	4.16	2.03	2.37	1.81	2.63	4.29
1975	3.53	4.00	4.30	4.30	5.03	5.28	10.8	8.41	1.27	2.03	2.39	3.25	4.54
1976	4.19	4.57	4.63	4.66	4.60	4.98	12.9	6.37	2.31	2.22	2.25	2.91	4.71
1977	4.19	4.78	4.83	5.03	5.67	6.17	6.17	4.48	3.02	2.72	2.60	3.20	4.40
1978	4.04	4.92	5.93	4.51	5.43	5.40	5.66	3.87	2.56	1.89	1.56	1.90	3.96

10-1.1L0-7A QAISAR RIVER AT QAISAR

(U.S. Geological Survey identification number: 354200064180000)

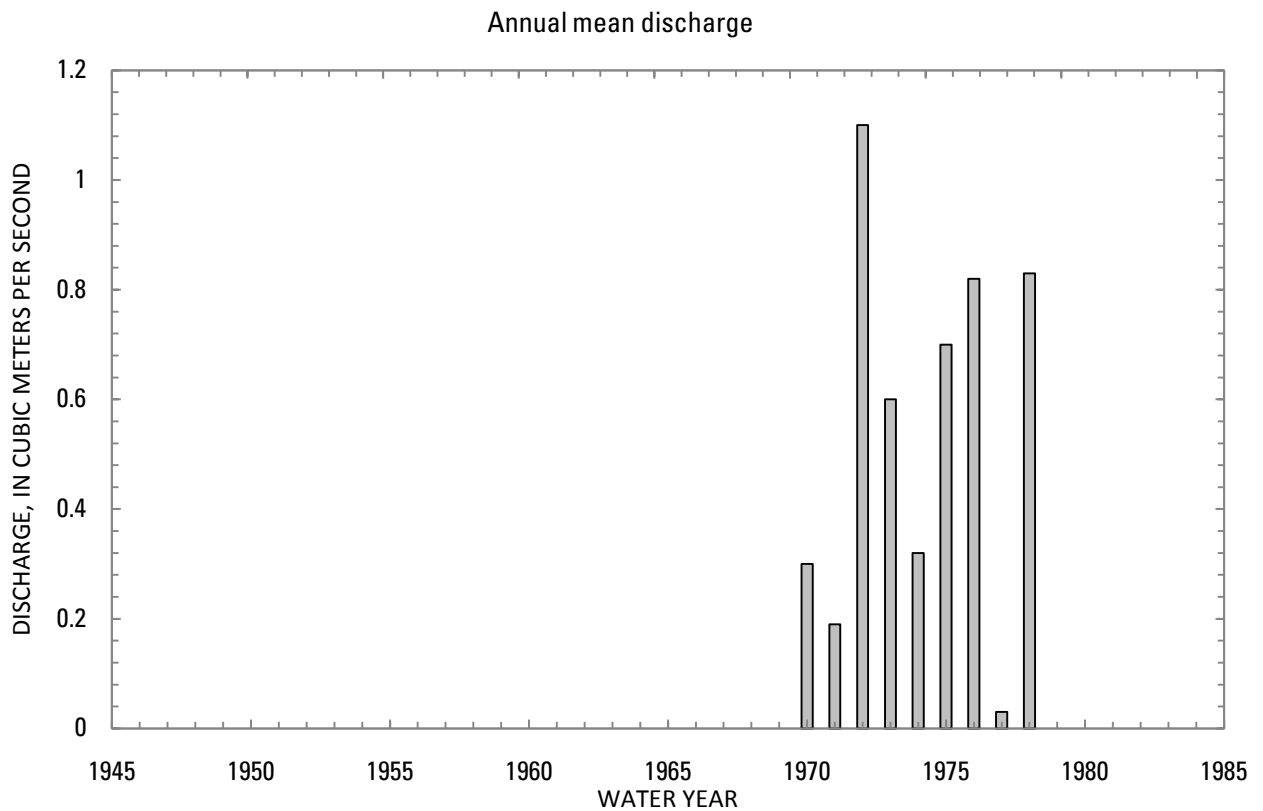
LOCATION: Lat 35°42'N., long 64°18'E.

DRAINAGE AREA: 425 km².

ELEVATION: 1,312 meters above mean sea level.

PERIOD OF RECORD: March 30, 1969 to September 30, 1978.

GAGE: Water-stage recorder.



10-1.1L0-7A QAISAR RIVER AT QAISAR, Continued

Statistics of monthly and annual mean discharges
[m³/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	0.01	1975	0	1970	0	0	1.66	0.02
November	0.13	1978	0	1972	0.02	0.04	1.89	0.31
December	0.59	1978	0	1970	0.08	0.19	2.40	1.10
January	0.03	1974	0	1970	0.01	0.01	1.29	0.10
February	0.87	1975	0	1970	0.13	0.29	2.20	1.77
March	4.44	1972	0.02	1971	1.30	1.51	1.16	17.8
April	7.30	1969	0.33	1977	3.79	2.06	0.55	51.7
May	5.57	1969	0.02	1977	1.90	2.03	1.07	25.9
June	0.51	1972	0	1970	0.08	0.16	1.89	1.13
July	0.02	1975	0	1969	0	0.01	1.89	0.05
August	0.01	1976	0	1969	0	0	1.69	0.02
September	0.02	1978	0	1970	0	0.01	1.66	0.06
Annual	1.10	1972	0.03	1977	0.54	0.35	0.65	100

10-1.1L0-7A QAISAR RIVER AT QAISAR, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0	0	0	0	0	0	0.05	0	0	0	0	0	0
90	0	0	0	0	0	0	0.27	0	0	0	0	0	0
85	0	0	0	0	0	0	0.50	0.01	0	0	0	0	0
80	0	0	0	0	0	0	1.38	0.02	0	0	0	0	0
75	0	0	0	0	0	0.01	1.68	0.04	0	0	0	0	0
70	0	0	0	0	0	0.02	1.87	0.05	0	0	0	0	0
65	0	0	0	0	0	0.02	2.07	0.11	0	0	0	0	0
60	0	0	0	0	0	0.06	2.33	0.18	0	0	0	0	0
55	0	0	0	0	0	0.19	2.60	0.23	0	0	0	0	0
50	0	0	0	0	0	0.35	3.02	0.41	0	0	0	0	0
45	0	0	0	0	0	0.38	3.83	0.76	0	0	0	0	0
40	0	0	0	0	0	0.41	4.36	1.23	0	0	0	0	0
35	0	0	0	0	0	0.50	4.80	2.05	0.01	0	0	0	0.01
30	0	0	0.01	0	0.01	0.93	5.24	2.39	0.02	0	0	0	0.02
25	0	0	0.01	0	0.02	1.22	5.67	3.27	0.02	0	0	0	0.04
20	0	0	0.02	0.01	0.04	1.65	6.09	3.97	0.04	0	0	0	0.14
15	0	0.01	0.03	0.02	0.06	2.19	6.89	5.02	0.10	0	0	0.01	0.51
10	0	0.04	0.05	0.04	0.45	3.99	7.83	6.02	0.29	0.02	0	0.02	1.96
5	0.02	0.06	0.07	0.05	1	6.22	9.52	7.07	0.43	0.03	0.01	0.05	4.20

10-1.1L0-7A QAISAR RIVER AT QAISAR, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	3.20	1.10	0.49	0.25	0.13
0.95	1.05	4.40	1.99	1.22	0.80	0.51
0.90	1.11	5.20	2.68	1.85	1.34	0.93
0.80	1.25	6.50	3.78	2.92	2.30	1.73
0.50	2	10.0	6.93	5.98	4.96	4.10
0.20	5	15.7	12.0	10.2	7.98	6.71
0.10	10	20.0	15.5	12.5	9.31	7.74
0.04	25	26.0	20.2	15.0	10.4	8.48
0.02	50	31.0	23.6	16.5	10.9	8.77
0.01	100	36.4	27.1	17.7	11.2	8.95
0.005	200	42.2	30.6	18.7	11.4	9.05
0.002	500	50.6	ng	ng	ng	ng

10-1.1L0-7A QAISAR RIVER AT QAISAR, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)									
		Number of consecutive days									
		1	3	7	14	30	60	90	120	183	
0.05	20	ng	ng	ng	ng	ng	ng	ng	0	0	0
0.10	10	ng	ng	ng	ng	ng	ng	ng	0	0	0
0.20	5	ng	ng	ng	ng	ng	ng	ng	0	0	0
0.50	2	ng	ng	ng	ng	ng	ng	ng	0	0	0

10-1.1L0-7A QAISAR RIVER AT QAISAR, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0	0	0	0	0	0	0	0.01
0.10	10	0	0	0	0	0	0	0	0.02
0.20	5	0	0	0	0	0	0	0	0.05
0.50	2	0	0	0	0	0	0.01	0.02	0.28
		June-July-August				September-October-November			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng

10-1.1L0-7A QAISAR RIVER AT QAISAR, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1969	April 14, 1969	11.2	1976	May 11, 1976	25.0
1970	March 25, 1970	10.5	1972	March 27, 1972	20.0
1971	April 14, 1971	9.08	1978	April 12, 1978	12.0
1972	March 27, 1972	20.0	1969	April 14, 1969	11.2
1973	April 7, 1973	7.00	1970	March 25, 1970	10.5
1974	May 2, 1974	7.40	1971	April 14, 1971	9.08
1975	April 19, 1975	8.58	1975	April 19, 1975	8.58
1976	May 11, 1976	25.0	1974	May 2, 1974	7.40
1977	April 9, 1977	4.00	1973	April 7, 1973	7.00
1978	April 12, 1978	12.0	1977	April 9, 1977	4.00

10-1.1L0-7A QAISAR RIVER AT QAISAR, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1969	--	--	--	--	--	--	7.30	5.57	0.07	0	0	0	--
1970	0	0.05	0	0	0	0.79	2.71	0.03	0	0.01	0	0	0.30
1971	0	0.02	0.01	0.01	0.01	0.02	1.74	0.51	0	0	0	0.01	0.19
1972	0	0	0.01	0	0	4.44	5.75	2.53	0.51	0	0	0	1.10
1973	0	0	0	0	0.04	1.16	4.37	1.61	0	0	0	0	0.60
1974	0	0	0.01	0.03	0.01	0.67	2.22	0.81	0.10	0	0	0.01	0.32
1975	0.01	0	0.10	0.01	0.87	1.11	4.31	1.97	0.01	0.02	0	0	0.70
1976	0	0	0	0.01	0.02	0.31	4.03	5.29	0.14	0.01	0.01	0.01	0.82
1977	0.01	0	0.01	0	0.01	0.05	0.33	0.02	0	0	0	0	0.03
1978	0	0.13	0.59	0.01	0.21	3.15	5.12	0.66	0	0	0.01	0.02	0.83

10-1.L00-1T MAIMANA RIVER NEAR PATA BABA

(U.S. Geological Survey identification number: 363200064530000)

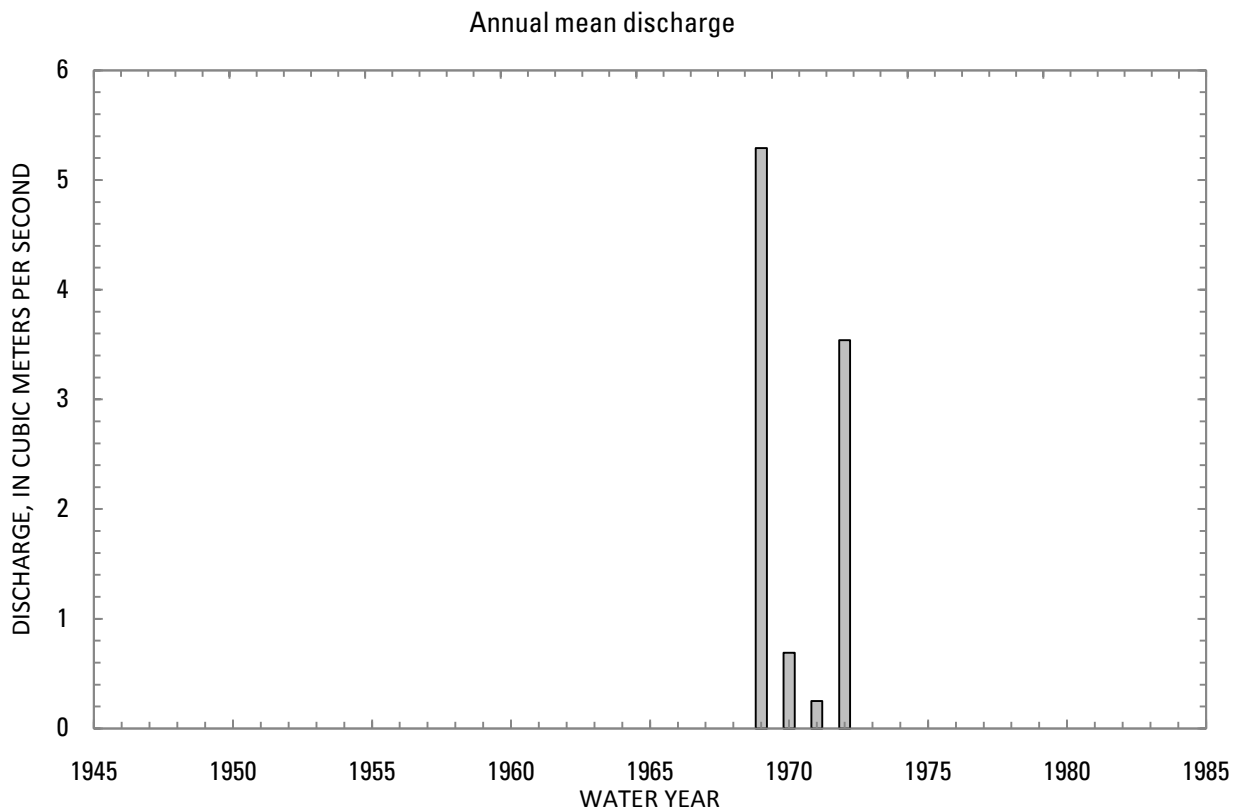
LOCATION: Lat 36°32'N., long 64°53'E.

DRAINAGE AREA: 6,685 km².

ELEVATION: 381 meters above mean sea level.

PERIOD OF RECORD: November 11, 1967 to September 30, 1972

GAGE: Water-stage recorder. Staff gage prior to 1970 water year.



10-1.L00-1T MAIMANA RIVER NEAR PATA BABA, Continued

Statistics of monthly and annual mean discharges
[m³/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	0.71	1970	0.06	1972	0.32	0.28	0.87	1.26
November	1.30	1970	0.23	1972	0.51	0.52	1.02	2.01
December	2.33	1969	0.16	1968	0.80	0.91	1.15	3.12
January	1.50	1969	0.13	1968	0.68	0.52	0.77	2.66
February	5.38	1972	0.30	1968	2.08	2.34	1.12	8.13
March	9.74	1972	0.53	1971	4.29	4.31	1.00	16.8
April	28.0	1969	0.62	1971	9.05	11.5	1.27	35.4
May	16.9	1969	0.01	1971	6.27	7.24	1.15	24.6
June	3.45	1972	0	1971	1.07	1.51	1.41	4.19
July	0.47	1972	0	1970	0.13	0.20	1.56	0.50
August	0.45	1972	0	1970	0.13	0.20	1.50	0.52
September	0.48	1969	0	1971	0.21	0.23	1.11	0.81
Annual	5.29	1969	0.25	1971	2.44	2.39	0.98	100

10-1.L00-1T MAIMANA RIVER NEAR PATA BABA, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.01	0.19	0.01	0	0.18	0.10	0.07	0	0	0	0	0	0
90	0.03	0.21	0.05	0	0.21	0.14	0.13	0.01	0	0	0	0	0
85	0.08	0.22	0.10	0.02	0.29	0.17	0.20	0.01	0	0	0	0	0
80	0.11	0.23	0.13	0.10	0.39	0.24	0.22	0.02	0	0	0	0	0.02
75	0.13	0.23	0.16	0.22	0.43	0.36	0.31	0.02	0	0	0	0	0.10
70	0.17	0.24	0.19	0.25	0.46	0.42	0.39	0.05	0.03	0	0	0	0.18
65	0.21	0.25	0.22	0.30	0.49	0.50	0.51	0.09	0.04	0	0	0.01	0.22
60	0.22	0.25	0.25	0.35	0.53	0.64	0.75	0.45	0.06	0	0	0.02	0.27
55	0.23	0.26	0.28	0.37	0.56	0.73	1.04	1.29	0.11	0	0	0.10	0.32
50	0.24	0.26	0.34	0.39	0.60	0.85	1.71	1.90	0.15	0.02	0	0.13	0.37
45	0.25	0.27	0.39	0.44	0.67	1.37	2.76	3.70	0.19	0.02	0	0.17	0.43
40	0.29	0.31	0.44	0.52	0.76	2.27	5.88	4.97	0.23	0.03	0.01	0.24	0.48
35	0.31	0.33	0.50	0.58	0.95	4.00	7.20	6.06	0.45	0.04	0.14	0.34	0.57
30	0.33	0.35	0.63	0.65	2.59	5.07	9.05	7.53	0.66	0.12	0.26	0.41	0.71
25	0.37	0.37	0.70	0.71	3.71	6.12	10.6	9.64	1.01	0.29	0.30	0.43	1.00
20	0.54	1.04	0.84	0.85	4.36	7.53	13.2	12.5	1.20	0.41	ng	0.45	1.60
15	0.63	1.14	1.12	1.04	5.47	8.97	18.9	14.1	1.94	0.46	ng	0.48	4.13
10	0.67	1.39	1.63	1.21	6.00	12.0	30.1	15.7	3.29	0.49	ng	0.51	6.64
5	1.03	1.56	3.80	1.48	6.53	16.2	48.7	28.0	5.50	ng	ng	0.65	12.9

10-1.L00-1T MAIMANA RIVER NEAR PATA BABA, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	ng	0.77	0.38	0.13	0.08
0.95	1.05	ng	2.62	1.20	0.50	0.34
0.90	1.11	ng	4.64	2.12	1.01	0.71
0.80	1.25	ng	8.65	4.09	2.23	1.60
0.50	2	40.1	23.1	13.1	9.01	6.70
0.20	5	60.8	48.2	37.3	31.1	23.4
0.10	10	70.7	64.8	61.5	55.9	42.0
0.04	25	79.4	² 83.6	101	100	74.6
0.02	50	84.0	² 95.6	² 137	142	105
0.01	100	87.3	² 106	² 179	193	141
0.005	200	89.8	² 115	² 225	251	182
0.002	500	92.1	ng	ng	ng	ng

¹Less than 10 years of data used.

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

10-1.L00-1T MAIMANA RIVER NEAR PATA BABA, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /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

10-1.L00-1T MAIMANA RIVER NEAR PATA BABA, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0	0	0	0	0	0	0	0
0.10	10	0	0	0	0.01	0	0	0	0.01
0.20	5	0	0	0.01	0.03	0	0	0.02	0.03
0.50	2	0.07	0	0.13	0.27	0.02	0.14	0.20	0.50
		June-July-August				September-October-November			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng

10-1.L00-1T MAIMANA RIVER NEAR PATA BABA, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1968	April 27, 1968	31.0	1969	April 14, 1969	60.0
1969	April 14, 1969	60.0	1972	March 19, 1972	60.0
1970	April 15, 1970	38.8	1970	April 15, 1970	38.8
1971	April 16, 1971	12.0	1968	April 27, 1968	31.0
1972	March 19, 1972	60.0	1971	April 16, 1971	12.0

10-1.L00-1T MAIMANA RIVER NEAR PATA BABA, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1968	--	--	0.16	0.13	0.30	0.73	3.51	4.30	0.16	0.04	0	0.08	--
1969	0.25	0.24	2.33	1.50	3.73	8.08	28.0	16.9	1.71	0.13	0.22	0.48	5.29
1970	0.71	1.30	0.95	0.82	0.48	2.40	1.50	0.04	0.03	0	0	0.04	0.69
1971	0.27	0.28	0.37	0.39	0.50	0.53	0.62	0.01	0	0	0	0	0.25
1972	0.06	0.23	0.18	0.58	5.38	9.74	11.6	10.1	3.45	0.47	0.45	0.43	3.54

11-0.000-4M SARE PUL RIVER AT ASIABAD

(U.S. Geological Survey identification number: 361200065570000)

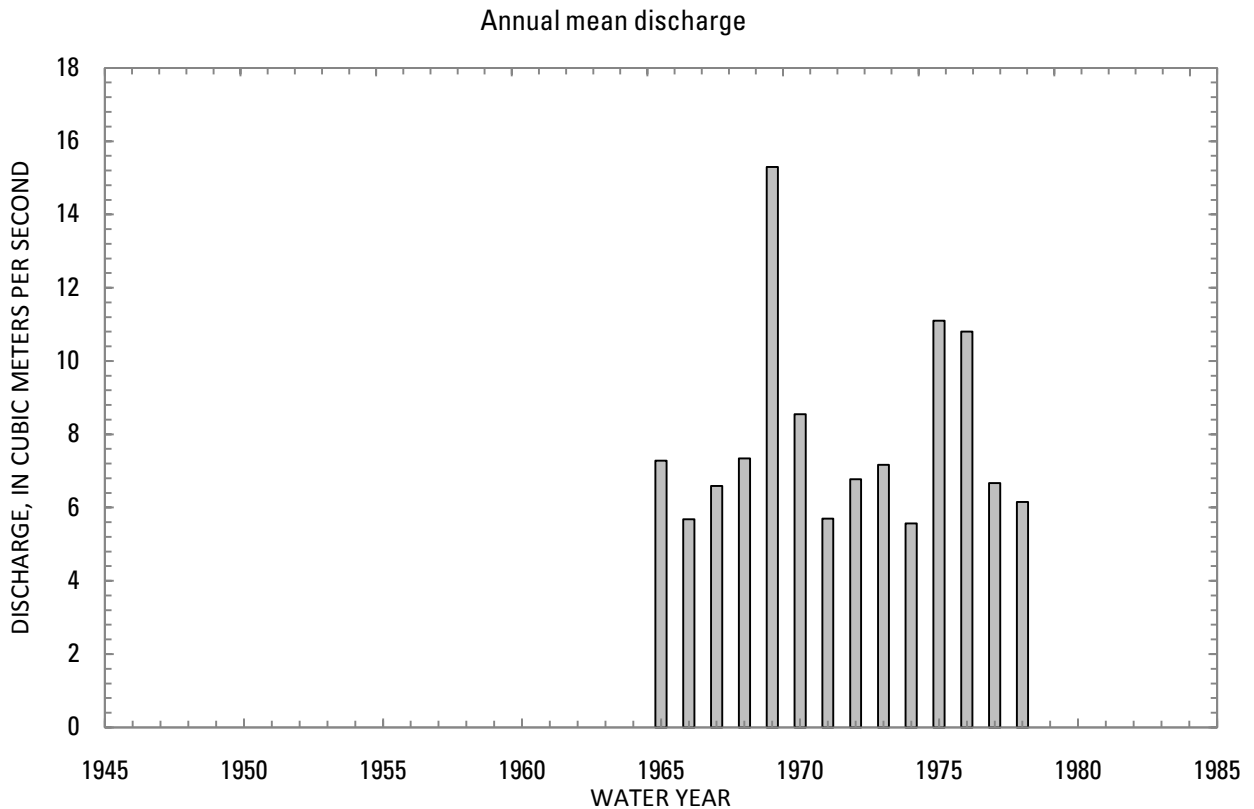
LOCATION: Lat 36°12'N., long 65°57'E.

DRAINAGE AREA: 6,950 km².

ELEVATION: 642 meters above mean sea level.

PERIOD OF RECORD: October 1, 1964 to September 30, 1978.

GAGE: Water-stage recorder. Staff gage at same site and datum prior to 1970 water year.



11-0.000-4M SARE PUL RIVER AT ASIABAD, Continued

Statistics of monthly and annual mean discharges
[m³/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	13.1	1970	4.74	1972	7.21	2.23	0.31	7.60
November	11.7	1970	5.38	1973	7.70	1.75	0.23	8.12
December	10.3	1976	5.11	1973	7.36	1.75	0.24	7.76
January	9.41	1976	5.73	1973	7.01	1.29	0.18	7.39
February	9.81	1976	5.80	1968	7.59	1.26	0.17	8.00
March	15.7	1969	6.29	1967	9.31	2.53	0.27	9.81
April	31.1	1969	6.36	1966	12.2	7.06	0.58	12.9
May	29.9	1969	3.77	1971	12.5	8.19	0.66	13.2
June	23.6	1969	3.14	1977	7.91	5.62	0.71	8.34
July	15.6	1969	2.27	1977	5.52	3.53	0.64	5.82
August	12.1	1969	2.19	1977	4.90	2.71	0.55	5.16
September	12.4	1969	3.27	1966	5.65	2.56	0.45	5.95
Annual	15.3	1969	5.57	1974	7.90	2.74	0.35	100

11-0.000-4M SARE PUL RIVER AT ASIABAD, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	4.25	5.23	4.73	5.23	5.68	6.06	5.28	3.42	2.51	2.11	1.93	2.56	2.80
90	4.82	5.69	5.26	5.54	5.88	6.36	5.64	4.22	2.88	2.43	2.28	3.01	3.63
85	5.30	5.94	5.51	5.70	6.08	6.63	5.91	4.93	3.38	2.59	2.47	3.32	4.21
80	5.49	6.13	5.69	5.80	6.23	6.87	6.15	5.22	3.63	2.92	2.72	3.51	4.79
75	5.68	6.40	5.96	5.92	6.36	7.09	6.40	5.53	3.89	3.23	2.97	3.81	5.24
70	5.87	6.59	6.24	6.05	6.57	7.30	6.73	6.22	4.23	3.55	3.18	3.97	5.60
65	6.01	6.78	6.47	6.12	6.77	7.51	7.09	6.76	4.63	3.79	3.40	4.19	5.95
60	6.17	7.04	6.68	6.20	6.93	7.73	7.67	7.54	5.02	4.00	3.66	4.41	6.26
55	6.39	7.37	6.88	6.29	7.10	7.95	8.24	8.17	5.62	4.21	3.80	4.69	6.56
50	6.77	7.52	7.13	6.46	7.25	8.17	8.79	8.84	6.05	4.42	3.91	4.94	6.86
45	7.11	7.70	7.35	6.82	7.37	8.39	9.33	9.79	6.80	4.79	4.20	5.13	7.21
40	7.40	7.86	7.55	7.13	7.57	8.69	9.98	10.7	7.48	5.08	4.73	5.82	7.56
35	7.66	7.98	7.71	7.45	8.02	9.05	10.8	11.9	8.13	5.35	5.05	6.10	7.94
30	7.97	8.09	7.87	7.68	8.54	9.70	12.1	13.0	9.19	5.64	5.33	6.45	8.39
25	8.32	8.45	8.21	7.85	8.84	10.1	13.5	14.6	9.95	6.33	5.92	7.03	8.83
20	8.63	8.78	8.76	8.45	9.06	10.4	14.6	17.8	10.9	7.34	6.65	7.45	9.60
15	9.11	10.1	9.67	9.01	9.27	10.9	16.3	21.9	12.7	8.25	8.33	8.42	10.5
10	10.1	10.5	10.4	9.24	9.64	12.8	22.0	25.3	15.9	10.6	9.06	8.97	12.1
5	12.7	11.1	10.8	9.44	10.2	16.1	30.4	30.9	20.7	14.6	11.7	12.0	15.8

11-0.000-4M SARE PUL RIVER AT ASIABAD, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	5.00	¹ 5.20	¹ 5.08	¹ 5.36	5.73
0.95	1.05	11.3	8.28	7.33	7.04	6.98
0.90	1.11	17.0	10.6	8.99	8.25	7.89
0.80	1.25	27.6	14.5	11.6	10.1	9.29
0.50	2	64.9	26.2	19.3	15.7	13.4
0.20	5	141	47.8	33.3	25.9	20.7
0.10	10	205	65.8	44.7	34.5	26.8
0.04	25	300	92.8	62.0	47.7	36.2
0.02	50	378	116	77.0	59.4	44.5
0.01	100	462	142	93.9	73.0	54.0
0.005	200	552	171	113	88.6	65.1
0.002	500	679	ng	ng	ng	ng

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

11-0.000-4M SARE PUL RIVER AT ASIABAD, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	1.34	1.52	1.60	2.05	2.15	2.23	2.38	2.57	3.26
0.10	10	1.54	1.70	1.79	2.31	2.43	2.55	2.72	2.93	3.62
0.20	5	1.86	2.00	2.10	2.70	2.85	3.01	3.22	3.46	4.14
0.50	2	2.81	2.91	3.03	3.81	4.01	4.27	4.55	4.84	5.50

11-0.000-4M SARE PUL RIVER AT ASIABAD, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	3.77	4.03	4.50	4.97	2.34	2.79	3.44	3.98
0.10	10	4.16	4.40	4.81	5.22	2.80	3.22	3.90	4.51
0.20	5	4.68	4.90	5.23	5.57	3.45	3.85	4.56	5.26
0.50	2	5.86	6.04	6.24	6.46	4.99	5.50	6.22	7.15
		June-July-August				September-October-November			
0.05	20	1.40	1.71	2.14	2.24	1.68	2.12	2.59	3.02
0.10	10	1.55	1.85	2.34	2.46	1.94	2.37	2.90	3.33
0.20	5	1.82	2.09	2.66	2.82	2.33	2.75	3.36	3.80
0.50	2	2.69	2.92	3.69	3.91	3.49	3.89	4.64	5.10

11-0.000-4M SARE PUL RIVER AT ASIABAD, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1965	May 6, 1965	24.5	1976	April 28, 1976	220
1966	March 22, 1966	15.0	1977	May 29, 1977	195
1967	May 1, 1967	97.2	1972	March 27, 1972	170
1968	November 27, 1967	58.0	1975	April 22, 1975	150
1969	March 29, 1969	95.0	1967	May 1, 1967	97.2
1970	March 8, 1970	30.0	1978	April 26, 1978	97.0
1971	April 15, 1971	23.9	1969	March 29, 1969	95.0
1972	March 27, 1972	170	1973	March 25, 1973	60.4
1973	March 25, 1973	60.4	1968	November 27, 1967	58.0
1974	May 3, 1974	11.8	1970	March 8, 1970	30.0
1975	April 22, 1975	150	1965	May 6, 1965	24.5
1976	April 28, 1976	220	1971	April 15, 1971	23.9
1977	May 29, 1977	195	1966	March 22, 1966	15.0
1978	April 26, 1978	97.0	1974	May 3, 1974	11.8

11-0.000-4M SARE PUL RIVER AT ASIABAD, Continued

Monthly and annual mean discharges, in cubic meters per second
 [Data may not be rounded in accordance with U.S. Geological Survey publication standards]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1965	6.96	7.62	7.56	7.43	8.08	9.37	8.87	9.96	6.67	4.71	4.35	5.88	7.28
1966	7.82	7.39	6.64	5.93	7.73	9.31	6.36	4.70	3.33	2.95	2.81	3.27	5.68
1967	5.20	6.05	5.57	5.90	6.00	6.29	7.52	15.4	7.49	4.97	4.20	4.48	6.59
1968	5.76	7.09	5.57	5.83	5.80	7.25	9.76	12.5	9.79	6.38	5.84	6.58	7.34
1969	7.98	8.39	9.75	7.81	8.55	15.7	31.1	29.9	23.6	15.6	12.1	12.4	15.3
1970	13.1	11.7	10.2	9.31	9.55	11.3	11.0	7.27	4.72	4.63	4.43	5.41	8.55
1971	7.53	7.90	7.97	7.33	7.30	6.83	7.16	3.77	3.16	2.90	3.05	3.59	5.70
1972	4.74	5.51	5.58	6.19	7.13	11.1	7.91	14.3	7.60	3.89	3.38	3.91	6.77
1973	5.41	5.38	5.11	5.73	6.75	11.1	14.5	10.6	7.31	4.45	4.14	5.63	7.17
1974	6.23	6.53	6.36	6.05	6.65	7.06	6.67	6.58	4.21	3.45	3.21	3.94	5.57
1975	6.02	7.05	6.72	5.97	7.55	8.93	20.6	28.6	15.1	9.96	8.15	8.37	11.1
1976	9.67	10.3	10.3	9.41	9.81	10.7	19.3	17.5	10.1	7.38	7.60	8.17	10.8
1977	8.80	8.76	7.73	8.26	8.88	7.80	12.4	6.39	3.14	2.27	2.19	3.61	6.67
1978	5.74	8.17	8.01	6.96	6.44	7.56	8.14	7.45	4.51	3.81	3.15	3.83	6.15

11-1.R00-1A SHORAB RIVER NEAR SARE PUL

(U.S. Geological Survey identification number: 361100066020000)

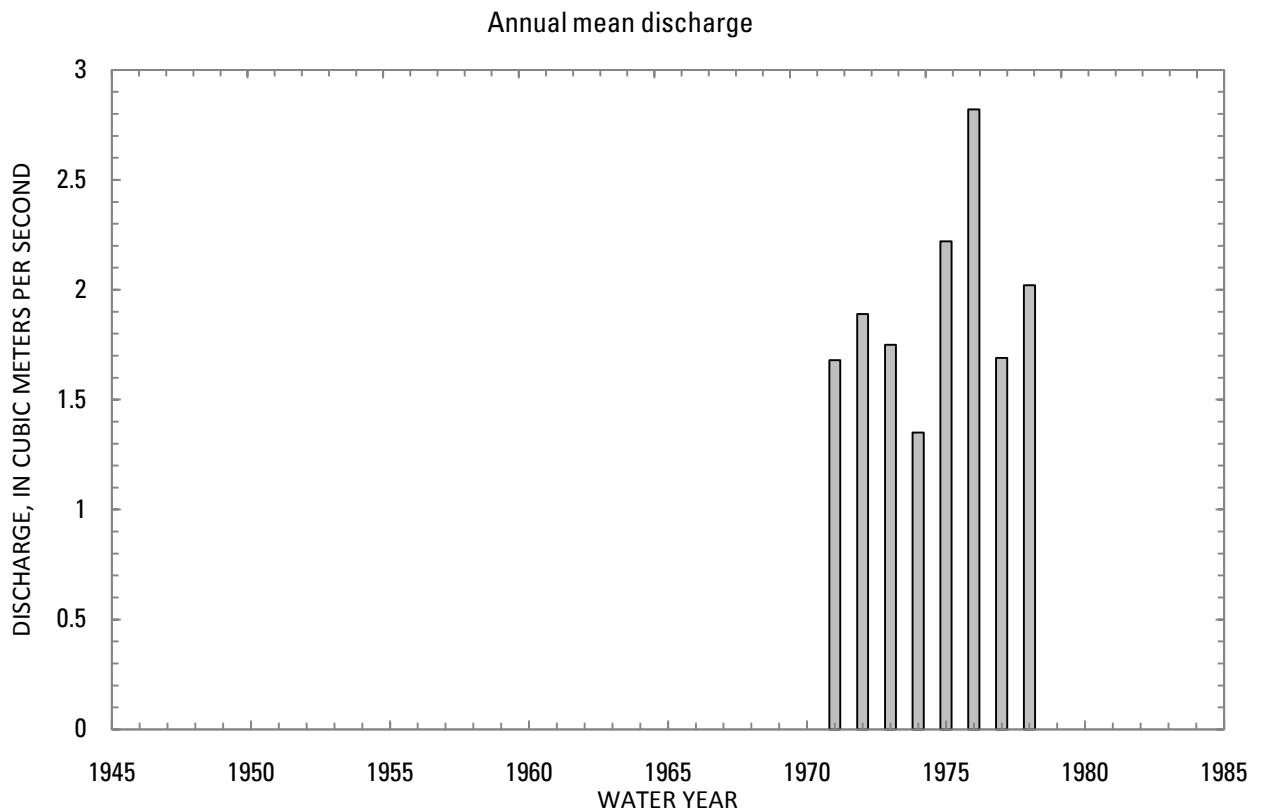
LOCATION: Lat 36°11'N., long 66°02'E.

DRAINAGE AREA: 3,700 km².

ELEVATION: 703 meters above mean sea level.

PERIOD OF RECORD: November 24, 1969 to September 30, 1978.

GAGE: Water-stage recorder.



11-1.R00-1A SHORAB RIVER NEAR SARE PUL, Continued

Statistics of monthly and annual mean discharges
[m³/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	3.11	1976	1.77	1975	2.28	0.53	0.23	9.87
November	4.05	1978	2.24	1973	2.81	0.74	0.26	12.1
December	3.31	1976	2.08	1972	2.60	0.49	0.19	11.3
January	3.04	1977	1.67	1973	2.31	0.38	0.17	9.99
February	3.74	1971	2.01	1973	2.70	0.54	0.20	11.7
March	4.28	1970	2.37	1974	3.30	0.71	0.22	14.3
April	6.54	1976	1.40	1974	3.39	1.51	0.45	14.6
May	6.11	1975	0.56	1971	2.30	2.21	0.96	9.94
June	0.95	1972	0.08	1974	0.26	0.27	1.05	1.11
July	0.39	1973	0.01	1972	0.10	0.13	1.21	0.45
August	0.58	1973	0.03	1977	0.25	0.18	0.72	1.09
September	1.46	1975	0.31	1974	0.82	0.43	0.53	3.56
Annual	2.82	1976	1.35	1974	1.93	0.44	0.23	100

11-1.R00-1A SHORAB RIVER NEAR SARE PUL, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	1.31	2.11	1.85	1.70	1.85	1.96	0.72	0.03	0.01	0.01	0.01	0.02	0.02
90	1.51	2.22	2.03	1.89	2.01	2.06	1.25	0.05	0.02	0.01	0.02	0.05	0.03
85	1.75	2.25	2.12	1.94	2.08	2.14	1.54	0.14	0.02	0.02	0.02	0.14	0.04
80	1.87	2.28	2.18	1.99	2.13	2.26	1.77	0.24	0.02	0.02	0.02	0.18	0.16
75	1.92	2.30	2.22	2.03	2.19	2.46	1.98	0.36	0.03	0.02	0.03	0.27	0.39
70	1.96	2.33	2.26	2.08	2.25	2.62	2.12	0.45	0.03	0.02	0.03	0.37	0.65
65	1.99	2.35	2.29	2.13	2.30	2.72	2.31	0.60	0.03	0.02	0.04	0.49	1.14
60	2.02	2.37	2.32	2.17	2.35	2.86	2.57	0.82	0.04	0.03	0.04	0.60	1.61
55	2.05	2.39	2.35	2.21	2.42	3.01	2.81	1.08	0.04	0.03	0.07	0.74	1.93
50	2.11	2.41	2.41	2.26	2.49	3.19	2.97	1.32	0.08	0.03	0.13	0.82	2.05
45	2.19	2.54	2.52	2.31	2.62	3.28	3.16	1.56	0.11	0.03	0.16	0.92	2.17
40	2.30	2.63	2.60	2.38	2.80	3.35	3.42	1.8	0.13	0.04	0.19	1.03	2.29
35	2.42	2.73	2.69	2.44	2.90	3.46	3.56	2.33	0.15	0.04	0.27	1.20	2.42
30	2.52	2.83	2.79	2.50	3.00	3.62	3.70	2.72	0.17	0.05	0.32	1.27	2.61
25	2.60	3.23	2.90	2.57	3.18	3.77	3.91	3.46	0.24	0.13	0.43	1.34	2.80
20	2.71	3.41	3.11	2.65	3.33	3.89	4.31	4.15	0.30	0.20	0.52	1.42	2.98
15	2.91	3.81	3.25	2.75	3.44	4.25	4.99	4.89	0.42	0.29	0.61	1.50	3.30
10	3.16	3.93	3.39	2.96	3.70	4.68	5.64	5.72	0.64	0.37	0.70	1.59	3.68
5	3.73	4.16	3.61	3.35	3.90	5.83	6.40	7.05	1.50	0.47	0.92	1.76	4.53

11-1.R00-1A SHORAB RIVER NEAR SARE PUL, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	3.60	2.10	2.02	2.01	² 2.02
0.95	1.05	5.50	2.67	2.57	2.52	2.47
0.90	1.11	7.00	3.12	2.98	2.87	2.77
0.80	1.25	9.50	3.89	3.64	3.39	3.21
0.50	2	17.9	6.54	5.64	4.77	4.34
0.20	5	35.3	12.7	9.51	6.94	6.06
0.10	10	51.5	19.1	12.9	8.57	7.31
0.04	25	78.4	31.1	18.5	10.9	9.02
0.02	50	104	43.7	23.6	12.7	10.4
0.01	100	134	60.5	29.8	14.7	11.8
0.005	200	171	82.7	37.2	16.9	13.4
0.002	500	231	ng	ng	ng	ng

¹Less than 10 years of data used.

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

11-1.R00-1A SHORAB RIVER NEAR SARE PUL, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.13	0.44
0.10	10	0.01	0.01	0.01	0.01	0.01	0.02	0.04	0.15	0.49
0.20	5	0.01	0.01	0.01	0.01	0.02	0.02	0.06	0.18	0.58
0.50	2	0.01	0.01	0.01	0.03	0.03	0.05	0.14	0.26	0.79

11-1.R00-1A SHORAB RIVER NEAR SARE PUL, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.72	0.88	0.98	1.59	0.01	0.02	0.04	0.30
0.10	10	0.98	1.15	1.25	1.74	0.01	0.03	0.07	0.42
0.20	5	1.33	1.49	1.59	1.92	0.02	0.06	0.15	0.62
0.50	2	1.90	2.03	2.10	2.19	0.12	0.25	0.58	1.26
		June-July-August				September-October-November			
0.05	20	0.01	0.01	0.01	0.01	0	0.02	0.05	0.29
0.10	10	0.01	0.01	0.01	0.01	0.01	0.03	0.08	0.37
0.20	5	0.01	0.01	0.01	0.02	0.01	0.05	0.14	0.49
0.50	2	0.01	0.01	0.02	0.03	0.06	0.19	0.40	0.80

11-1.R00-1A SHORAB RIVER NEAR SARE PUL, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1970	April 13, 1970	16.2	1976	April 28, 1976	66.0
1971	April 15, 1971	10.5	1975	May 4, 1975	53.0
1972	May 16, 1972	23.0	1972	May 16, 1972	23.0
1973	April 14, 1973	16.2	1977	May 29, 1977	16.4
1974	April 1, 1974	5.1	1970	April 13, 1970	16.2
1975	May 4, 1975	53.0	1973	April 14, 1973	16.2
1976	April 28, 1976	66.0	1978	April 26, 1978	14.0
1977	May 29, 1977	16.4	1971	April 15, 1971	10.5
1978	April 26, 1978	14.0	1974	April 1, 1974	5.1

11-1.R00-1A SHORAB RIVER NEAR SARE PUL, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1970	--	--	3.15	2.38	2.51	4.28	2.99	0.80	0.15	0.16	0.13	0.94	--
1971	2.25	2.34	2.29	2.42	3.74	2.85	2.58	0.56	0.12	0.04	0.38	0.72	1.68
1972	1.84	2.30	2.08	2.37	2.71	3.81	3.50	2.66	0.95	0.01	0.08	0.45	1.89
1973	1.97	2.24	2.14	1.67	2.01	3.18	3.97	1.15	0.30	0.39	0.58	1.44	1.75
1974	2.03	2.33	2.25	1.97	2.18	2.37	1.40	0.96	0.08	0.20	0.16	0.31	1.35
1975	1.77	2.45	2.43	2.06	2.53	2.71	4.52	6.11	0.20	0.02	0.41	1.46	2.22
1976	3.11	3.89	3.31	2.44	2.86	4.14	6.54	5.95	0.12	0.03	0.33	1.08	2.82
1977	2.20	2.86	2.55	3.04	3.32	2.58	2.14	0.76	0.29	0.02	0.03	0.57	1.69
1978	3.08	4.05	3.24	2.43	2.43	3.76	2.83	1.74	0.09	0.05	0.17	0.42	2.02

12-0.000-1M BALKH RIVER AT RABAT-I-BALA

(U.S. Geological Survey identification number: 363500066580000)

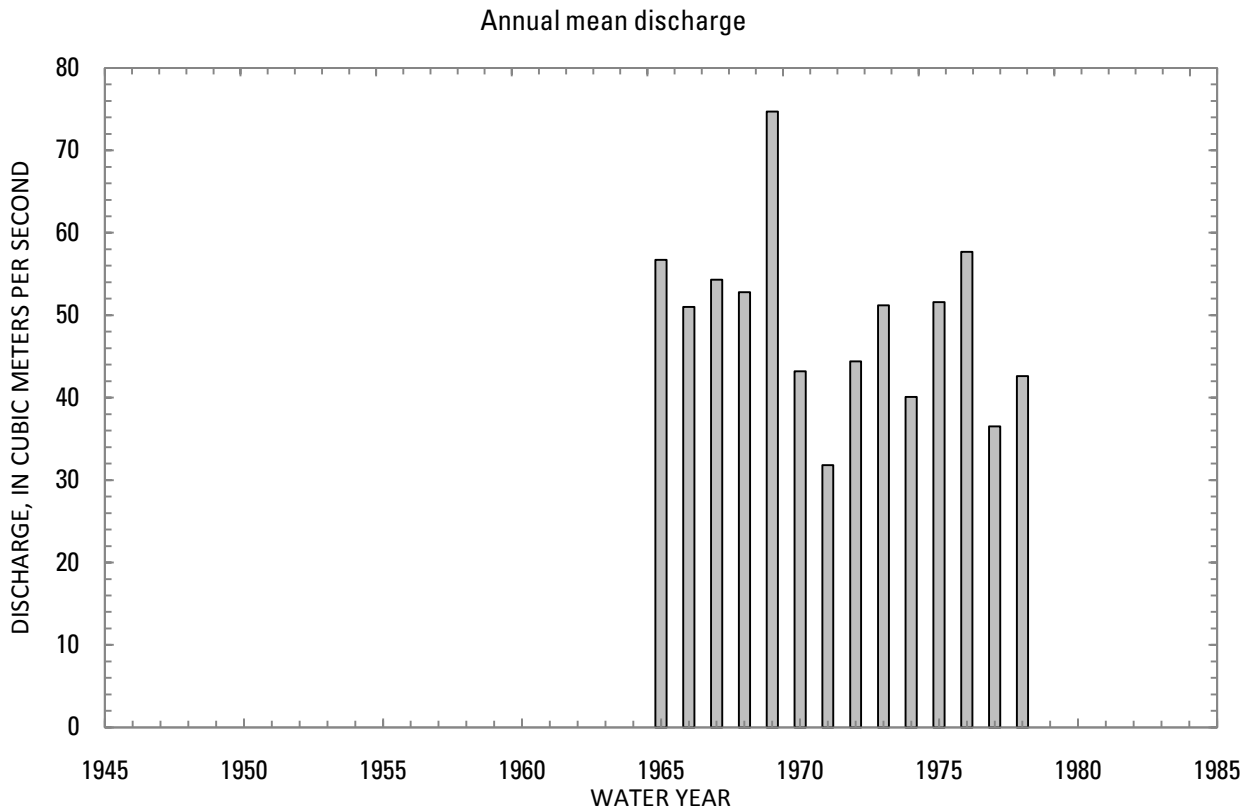
LOCATION: Lat 36°35'N., long 66°58'E.

DRAINAGE AREA: 18,035 km².

ELEVATION: 432 meters above mean sea level.

PERIOD OF RECORD: April 1, 1964 to September 30, 1978.

GAGE: Water-stage recorder. Staff gage at same site and datum prior to 1968 water year.



12-0.000-1M BALKH RIVER AT RABAT-I-BALA, Continued

Statistics of monthly and annual mean discharges
[m³/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	51.1	1970	22.7	1978	36.6	7.91	0.22	6.17
November	53.5	1970	26.0	1978	36.9	7.66	0.21	6.23
December	47.3	1966	27.1	1978	35.8	6.47	0.18	6.04
January	47.3	1966	25.5	1973	34.5	5.91	0.17	5.83
February	48.2	1966	27.9	1975	34.8	5.47	0.16	5.86
March	55.9	1966	28.9	1971	39.6	7.53	0.19	6.67
April	104	1969	42.1	1971	59.4	15.3	0.26	10.02
May	150	1976	52.4	1971	101	31.1	0.31	17.07
June	169	1969	29.9	1971	95.3	39.5	0.41	16.07
July	104	1969	19.8	1971	47.7	20.1	0.42	8.05
August	65.0	1969	19.8	1971	35.8	10.7	0.30	6.04
September	55.4	1969	20.8	1971	35.3	8.15	0.23	5.95
Annual	74.7	1969	31.8	1971	49.2	10.7	0.22	100

12-0.000-1M BALKH RIVER AT RABAT-I-BALA, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	23.1	24.2	26.7	26.3	27.5	28.7	35.6	46.7	31.4	21.4	20.2	22.0	24.4
90	24.0	27.0	27.4	27.3	28.1	30.9	37.9	54.9	37.0	25.3	23.0	24.8	28.0
85	29.0	29.2	28.3	27.9	28.7	32.2	40.3	59.9	44.2	28.8	24.6	28.2	29.5
80	30.9	30.2	28.9	29.4	29.8	33.3	42.9	64.4	51.8	31.4	28.2	29.9	31.1
75	32.0	31.5	29.6	30.1	30.3	33.8	44.7	69.9	58.8	33.5	28.9	30.7	32.8
70	33.0	32.4	32.0	31.9	30.7	34.5	45.7	75.1	63.9	35.5	31.2	31.5	34.0
65	33.7	33.2	33.0	32.5	31.8	35.3	46.7	78.4	70.0	37.7	32.4	32.3	35.2
60	34.3	34.3	34.5	33.0	32.4	36.2	48.0	81.2	76.7	39.9	33.2	33.0	36.3
55	35.0	36.0	35.4	33.6	33.3	37.0	49.8	85.2	82.3	42.1	33.8	33.8	37.4
50	37.2	36.8	35.9	34.4	34.1	37.7	51.7	94.3	87.7	44.0	34.6	35.5	38.5
45	39.6	38.8	36.6	35.0	35.6	38.1	53.7	102	94.6	45.8	35.6	36.4	39.6
40	39.9	39.6	37.3	35.5	36.3	38.5	55.5	106	104	47.7	37.3	37.1	41.6
35	40.2	40.1	37.8	36.5	36.8	39.5	57.4	116	114	49.7	38.1	37.7	43.7
30	40.6	40.7	39.0	36.9	37.3	41.1	60.1	124	119	52.1	38.8	38.4	46.3
25	41.1	41.3	40.1	37.5	38.0	42.3	63.7	131	129	55.1	40.0	39.1	50.3
20	41.6	41.9	41.5	38.4	38.8	45.8	69.6	138	141	58.0	42.3	39.8	56.1
15	44.2	44.8	43.4	39.5	39.7	49.7	78.2	144	148	65.4	43.5	41.6	67.5
10	45.7	46.7	46.5	43.5	40.8	53.1	90.9	153	156	76.2	45.1	43.4	87.3
5	50.8	51.3	47.1	ng	47.3	57.8	113	169	178	90.8	60.5	55.2	125

12-0.000-1M BALKH RIVER AT RABAT-I-BALA, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	39.1	46.4	44.3	43.1	38.9
0.95	1.05	68.8	66.9	65.7	62.1	55.7
0.90	1.11	91.6	80.5	79.3	74.1	66.4
0.80	1.25	128	99.7	97.6	90.3	81.0
0.50	2	231	147	137	126	114
0.20	5	397	208	180	165	152
0.10	10	516	247	201	186	173
0.04	25	673	293	223	209	197
0.02	50	791	326	237	223	212
0.01	100	911	357	248	235	226
0.005	200	1,030	387	258	246	238
0.002	500	1,190	ng	ng	ng	ng

12-0.000-1M BALKH RIVER AT RABAT-I-BALA, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	18.5	18.6	19.2	19.6	20.6	21.1	21.6	22.3	23.6
0.10	10	20.9	21.1	21.5	21.9	22.9	23.6	24.2	24.9	26.0
0.20	5	23.9	24.1	24.4	24.7	25.7	26.7	27.4	28.1	29.1
0.50	2	29.8	29.9	30.1	30.4	31.2	32.5	33.5	34.1	35.0

12-0.000-1M BALKH RIVER AT RABAT-I-BALA, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	23.1	23.5	24.1	25.2	27.7	28.5	28.9	30.6
0.10	10	24.5	24.9	25.3	26.4	28.5	29.3	29.9	31.7
0.20	5	26.4	26.7	27.0	28.1	29.7	30.7	31.4	33.3
0.50	2	30.7	30.8	31.1	32.0	32.9	34.3	35.4	37.7
		June-July-August				September-October-November			
0.05	20	19.3	20.0	20.4	21.4	20.2	20.6	21.0	22.0
0.10	10	21.9	22.5	22.8	23.7	22.9	23.3	23.7	24.7
0.20	5	25.3	25.8	26.1	26.9	26.4	26.7	27.1	28.1
0.50	2	32.7	33.1	33.5	34.2	33.3	33.6	33.9	34.8

12-0.000-1M BALKH RIVER AT RABAT-I-BALA, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1964	May 20, 1964	152	1977	May 29, 1977	531
1965	June 4, 1965	152	1972	June 2, 1972	507
1966	April 16, 1966	117	1976	April 28, 1976	490
1967	May 9, 1967	157	1973	April 25, 1973	441
1968	May 20, 1968	168	1975	May 4, 1975	345
1969	April 20, 1969	309	1969	April 20, 1969	309
1970	May 23, 1970	79.9	1978	April 27, 1978	309
1971	May 21, 1971	64.5	1974	May 26, 1974	235
1972	June 2, 1972	507	1968	May 20, 1968	168
1973	April 25, 1973	441	1967	May 9, 1967	157
1974	May 26, 1974	235	1964	May 20, 1964	152
1975	May 4, 1975	345	1965	June 4, 1965	152
1976	April 28, 1976	490	1966	April 16, 1966	117
1977	May 29, 1977	531	1970	May 23, 1970	79.9
1978	April 27, 1978	309	1971	May 21, 1971	64.5

12-0.000-1M BALKH RIVER AT RABAT-I-BALA, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1964	--	--	--	--	--	--	66.1	128	97.2	52.3	36.8	37.5	--
1965	40.2	39.5	37.0	36.6	37.8	42.8	52.8	110	131	66.2	42.6	42.5	56.7
1966	45.0	45.9	47.3	47.3	48.2	55.9	61.8	73.7	67.6	44.0	37.6	37.3	51.0
1967	42.1	41.7	40.9	37.8	37.6	40.0	61.7	104	112	54.2	40.4	39.3	54.3
1968	42.2	41.6	39.0	35.7	33.5	37.0	54.9	88.7	120	56.1	45.2	40.1	52.8
1969	39.8	40.5	40.3	36.0	39.1	55.3	104	147	169	104	65.0	55.4	74.7
1970	51.1	53.5	45.3	43.1	35.5	40.7	50.2	64.6	46.5	29.8	26.7	31.1	43.2
1971	34.9	35.8	34.7	31.9	30.3	28.9	42.1	52.4	29.9	19.8	19.8	20.8	31.8
1972	23.7	26.3	27.4	29.0	29.6	35.5	45.6	92.5	121	41.4	31.0	30.0	44.4
1973	30.0	29.6	28.3	25.5	28.3	37.7	68.9	142	108	44.9	34.7	35.3	51.2
1974	33.4	32.9	34.5	33.4	32.0	35.8	44.7	79.0	55.2	34.1	32.7	32.7	40.1
1975	34.6	33.7	32.6	29.9	27.9	34.9	55.5	113	124	54.8	38.4	39.4	51.6
1976	40.0	38.5	37.5	36.8	36.7	38.4	72.3	150	125	50.6	34.1	31.9	57.7
1977	32.7	31.7	29.1	33.1	38.5	36.2	49.2	66.5	48.0	25.4	23.1	24.4	36.5
1978	22.7	26.0	27.1	27.5	31.7	34.9	61.0	107	74.4	38.1	29.1	31.3	42.6

12-0.000-9M BALKH RIVER NEAR NAYAK

(U.S. Geological Survey identification number: 344500067000000)

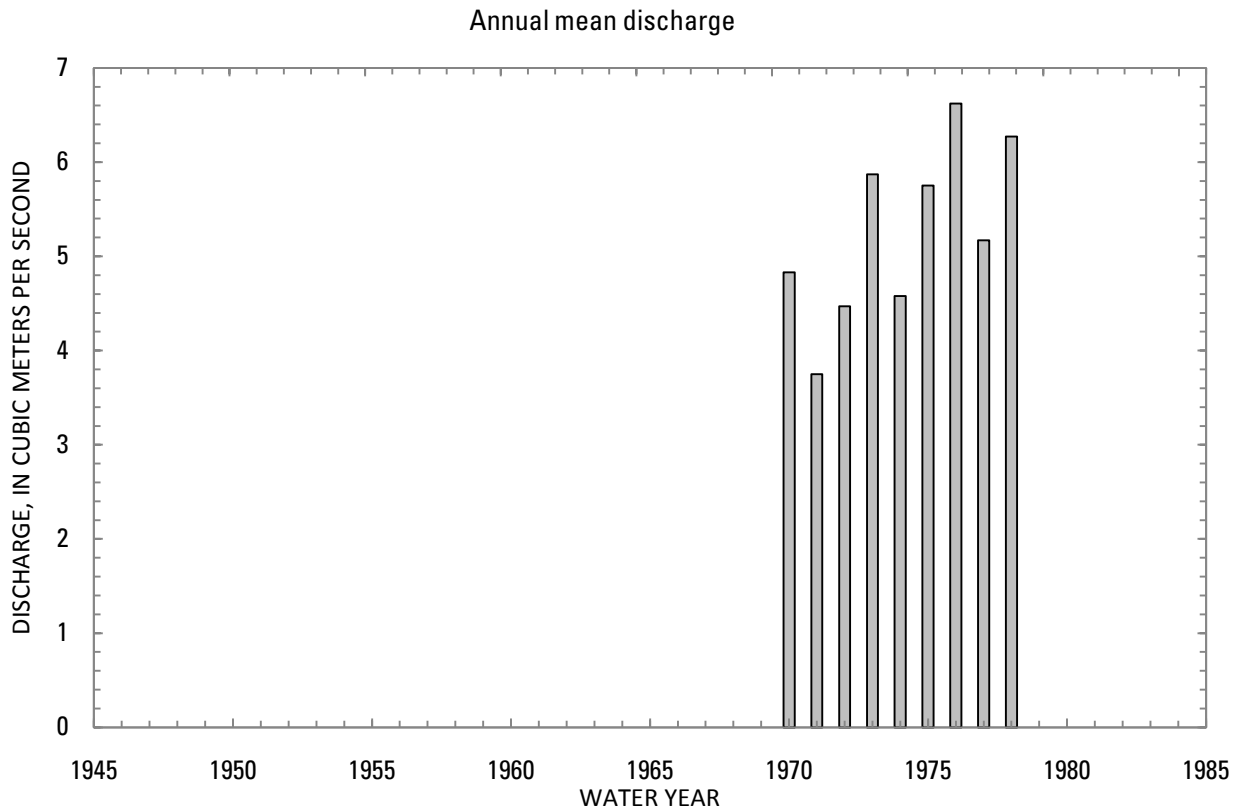
LOCATION: Lat 34°45'N., long 67°00'E.

DRAINAGE AREA: 1,460 km².

ELEVATION: 2,580 meters above mean sea level.

PERIOD OF RECORD: January 15, 1969 to September 30, 1978.

GAGE: Water-stage recorder.



12-0.000-9M BALKH RIVER NEAR NAYAK, Continued

Statistics of monthly and annual mean discharges
[m³/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	5.77	1970	2.39	1972	3.81	0.89	0.23	5.84
November	5.50	1970	2.43	1972	3.68	0.86	0.23	5.63
December	4.54	1970	2.44	1972	3.55	0.66	0.19	5.44
January	4.26	1970	2.27	1972	3.55	0.71	0.20	5.44
February	4.82	1978	1.87	1972	3.47	0.99	0.29	5.31
March	5.22	1978	2.17	1972	3.87	0.95	0.24	5.93
April	9.40	1978	2.93	1972	6.41	1.69	0.26	9.83
May	19.5	1976	6.83	1971	13.6	4.61	0.34	20.9
June	20.6	1969	3.44	1971	10.7	5.50	0.52	16.4
July	9.99	1969	2.96	1971	4.95	2.11	0.43	7.59
August	6.56	1969	2.73	1971	3.78	1.10	0.29	5.79
September	6.12	1969	2.47	1971	3.91	0.92	0.23	6.00
Annual	6.62	1976	3.75	1971	5.26	0.94	0.18	100

12-0.000-9M BALKH RIVER NEAR NAYAK, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	2.36	2.40	2.43	2.17	1.92	2.13	2.62	6.61	3.28	2.96	2.72	2.61	2.46
90	2.53	2.60	2.68	2.29	1.96	2.37	3.67	7.26	3.84	3.03	2.74	2.67	2.79
85	3.35	3.00	2.81	2.57	2.03	2.70	4.24	7.63	4.09	3.09	2.78	3.33	2.99
80	3.39	3.18	3.01	2.99	2.22	3.19	4.52	8.07	4.60	3.28	2.82	3.38	3.27
75	3.52	3.24	3.12	3.13	2.79	3.32	4.82	8.86	5.26	3.43	2.95	3.56	3.39
70	3.55	3.38	3.17	3.16	3.00	3.57	5.03	9.35	6.02	3.51	3.00	3.62	3.50
65	3.58	3.41	3.36	3.38	3.21	3.66	5.21	9.89	6.80	3.58	3.14	3.67	3.60
60	3.60	3.45	3.39	3.53	3.40	3.77	5.40	10.6	7.58	3.70	3.30	3.75	3.71
55	3.63	3.48	3.41	3.58	3.68	3.88	5.71	11.1	8.51	3.91	3.54	3.81	3.83
50	3.66	3.52	3.43	3.72	3.84	3.97	6.15	12.1	9.30	4.46	3.73	3.84	3.94
45	3.69	3.55	3.60	3.78	3.89	4.01	6.30	13.0	10.0	4.63	3.78	3.86	4.06
40	3.72	3.72	3.78	3.92	3.93	4.05	6.47	14.5	11.7	4.83	3.83	3.89	4.18
35	3.86	3.80	3.94	3.96	3.98	4.09	6.77	15.7	12.8	5.17	3.90	3.92	4.30
30	3.91	3.89	4.00	4.11	4.02	4.32	7.20	17.5	14.2	5.45	4.09	4.10	4.59
25	4.08	4.11	4.06	4.15	4.14	4.44	7.44	18.6	15.2	5.65	4.16	4.16	5.10
20	4.20	4.20	4.21	ng	4.27	4.63	7.90	19.6	16.0	6.33	4.23	4.22	5.86
15	4.27	4.31	4.26	ng	4.41	4.86	8.45	20.4	17.6	6.94	4.28	4.30	7.26
10	5.60	4.74	4.42	ng	4.55	5.30	10.3	21.5	19.8	8.32	4.58	4.52	9.64
5	5.74	5.70	4.52	ng	4.75	5.49	11.7	24.6	22.9	9.29	6.45	5.98	14.4

12-0.000-9M BALKH RIVER NEAR NAYAK, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	5.00	5.23	5.07	4.81	4.52
0.95	1.05	8.10	7.64	7.24	6.89	6.47
0.90	1.11	10.3	9.21	8.67	8.26	7.75
0.80	1.25	13.4	11.4	10.7	10.2	9.55
0.50	2	21.1	16.6	15.6	14.9	13.9
0.20	5	30.9	23.1	21.9	20.9	19.5
0.10	10	36.6	26.9	25.8	24.7	22.9
0.04	25	43.1	31.3	30.6	29.2	27.0
0.02	50	47.4	34.3	33.9	32.3	29.8
0.01	100	51.3	37.1	37.0	35.3	32.5
0.005	200	54.8	¹ 39.6	40.1	38.2	35.1
0.002	500	59.0	ng	ng	ng	ng

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

12-0.000-9M BALKH RIVER NEAR NAYAK, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	1.40	1.40	1.60	1.77	1.97	2.12	2.18	2.29	2.37
0.10	10	1.66	1.68	1.86	2.01	2.23	2.39	2.47	2.57	2.65
0.20	5	2.01	2.05	2.19	2.32	2.55	2.72	2.82	2.90	2.99
0.50	2	2.69	2.79	2.86	2.95	3.17	3.32	3.44	3.50	3.62

12-0.000-9M BALKH RIVER NEAR NAYAK, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	1.42	1.64	1.81	2.00	1.80	1.93	1.98	2.24
0.10	10	1.76	1.98	2.14	2.33	2.08	2.25	2.32	2.59
0.20	5	2.20	2.42	2.56	2.73	2.46	2.67	2.75	3.03
0.50	2	3.04	3.23	3.33	3.45	3.25	3.50	3.61	3.89
		June-July-August				September-October-November			
0.05	20	2.42	2.51	2.54	2.62	2.13	2.25	2.36	2.45
0.10	10	2.53	2.60	2.63	2.72	2.37	2.48	2.57	2.64
0.20	5	2.70	2.75	2.79	2.89	2.68	2.78	2.85	2.90
0.50	2	3.19	3.23	3.27	3.41	3.29	3.39	3.43	3.49

12-0.000-9M BALKH RIVER NEAR NAYAK, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1969	May 31, 1969	29.0	1975	May 15, 1975	41.0
1970	April 13, 1970	10.3	1976	June 3, 1976	29.7
1971	May 9, 1971	8.12	1969	May 31, 1969	29.0
1972	May 31, 1972	26.4	1972	May 31, 1972	26.4
1973	May 16, 1973	21.8	1978	May 24, 1978	22.8
1974	May 25, 1974	19.0	1973	May 16, 1973	21.8
1975	May 15, 1975	41.0	1974	May 25, 1974	19.0
1976	June 3, 1976	29.7	1977	May 26, 1977	14.2
1977	May 26, 1977	14.2	1970	April 13, 1970	10.3
1978	May 24, 1978	22.8	1971	May 9, 1971	8.12

12-0.000-9M BALKH RIVER NEAR NAYAK, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1969	--	--	--	--	1.99	2.70	6.58	16.4	20.6	9.99	6.56	6.12	--
1970	5.77	5.50	4.54	4.26	4.00	4.01	7.22	7.96	4.93	3.42	3.00	3.38	4.83
1971	3.40	3.26	3.26	3.52	3.67	4.12	5.31	6.83	3.44	2.96	2.73	2.47	3.75
1972	2.39	2.43	2.44	2.27	1.87	2.17	2.93	12.0	12.0	5.12	3.98	4.01	4.47
1973	3.74	3.50	3.35	3.15	3.15	3.69	7.71	17.0	11.5	5.36	4.24	3.93	5.87
1974	3.70	3.37	3.30	3.65	3.86	4.46	6.35	10.2	5.10	3.67	3.37	3.80	4.58
1975	3.49	3.10	2.97	2.73	2.80	3.65	5.45	16.1	15.3	5.87	3.82	3.64	5.75
1976	3.74	3.98	3.94	4.11	4.21	3.66	6.28	19.5	15.6	6.12	3.98	4.27	6.62
1977	4.27	4.28	4.22	4.08	4.32	5.06	6.92	10.9	7.65	3.22	3.18	4.00	5.17
1978	3.83	3.68	3.92	4.18	4.82	5.22	9.40	19.2	10.6	3.81	2.96	3.53	6.27

12-0.000-10M BALKH RIVER BELOW BAND-I-AMIR

(U.S. Geological Survey identification number: 344900067100000)

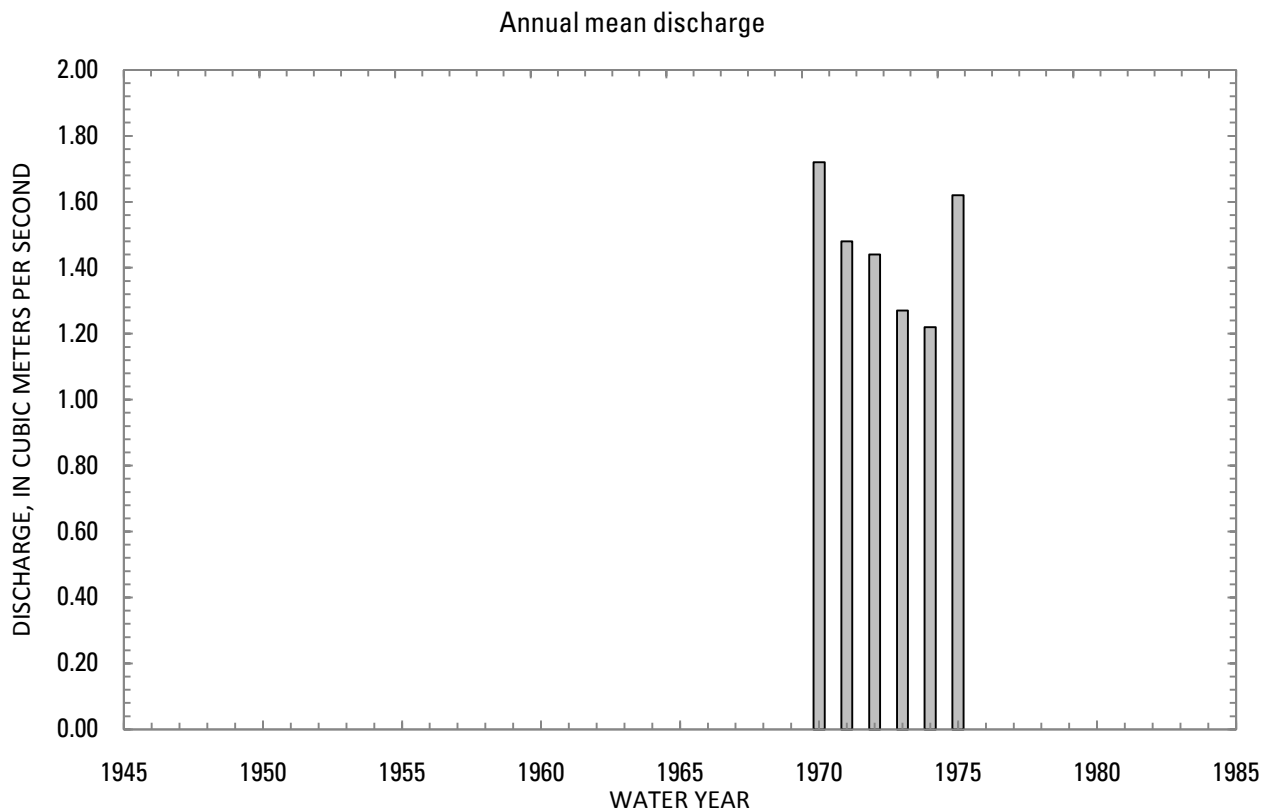
LOCATION: Lat 34°49'N., long 67°10'E.

DRAINAGE AREA: 445 km².

ELEVATION: 2,882 meters above mean sea level.

PERIOD OF RECORD: October 1, 1969 to March 20, 1976.

GAGE: Staff gage.



12-0.000-10M BALKH RIVER BELOW BAND-I-AMIR, Continued

Statistics of monthly and annual mean discharges
[m³/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	1.95	1970	1.08	1976	1.24	0.31	0.25	7.15
November	1.83	1970	0.83	1975	1.27	0.33	0.26	7.29
December	1.61	1970	0.64	1975	1.16	0.30	0.26	6.70
January	1.75	1970	0.51	1975	1.18	0.41	0.35	6.78
February	1.85	1970	0.65	1975	1.30	0.41	0.32	7.50
March	2.18	1970	0.76	1975	1.47	0.48	0.33	8.48
April	3.02	1971	1.17	1974	2.17	0.74	0.34	12.5
May	6.83	1975	1.26	1974	2.71	2.05	0.76	15.6
June	1.91	1975	1.07	1971	1.52	0.31	0.20	8.76
July	1.29	1974	0.93	1971	1.17	0.13	0.11	6.73
August	1.25	1975	0.93	1971	1.06	0.12	0.11	6.13
September	1.24	1975	0.87	1973	1.11	0.13	0.11	6.38
Annual	1.72	1970	1.22	1974	1.46	0.19	0.13	100

12-0.000-10M BALKH RIVER BELOW BAND-I-AMIR, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.97	0.78	0.60	0.51	0.64	0.71	1.16	1.28	0.87	0.93	0.92	0.88	0.74
90	1.01	0.90	0.70	0.55	0.65	0.73	1.18	1.31	1.17	0.94	0.93	0.91	0.89
85	1.05	0.97	1.01	0.87	0.95	0.88	1.20	1.35	1.26	0.94	0.93	0.91	0.95
80	1.07	1.07	1.07	0.93	1.04	1.18	1.38	1.47	1.28	1.09	0.93	0.94	1.04
75	1.08	1.09	1.09	0.95	1.08	1.20	1.47	1.57	1.30	1.10	0.94	1.02	1.08
70	1.09	1.11	1.09	0.97	1.10	1.28	1.59	1.75	1.32	1.13	1.00	1.02	1.12
65	1.09	1.15	1.10	1.05	1.12	1.31	1.69	1.93	1.34	1.14	1.01	1.06	1.16
60	1.10	1.17	1.11	1.08	1.14	1.33	1.74	1.99	1.42	1.18	1.01	1.09	1.19
55	1.13	1.18	1.11	1.10	1.19	1.35	1.78	2.02	1.44	1.18	1.01	1.10	1.23
50	1.15	1.19	1.12	1.11	1.24	1.44	1.81	2.06	1.47	1.19	1.02	1.10	1.27
45	1.17	1.20	1.14	1.14	1.27	1.59	1.94	2.10	1.49	1.20	1.09	1.11	1.32
40	1.18	1.21	1.16	1.42	1.50	1.62	2.08	2.17	1.51	1.21	1.09	1.14	1.36
35	1.19	1.27	1.19	1.45	1.60	1.65	2.54	2.24	1.60	1.25	1.10	1.18	1.46
30	1.21	1.34	1.35	1.47	1.62	1.68	2.69	2.38	1.64	1.26	1.11	1.19	1.56
25	1.26	1.49	1.40	1.49	1.65	1.70	2.80	2.46	1.68	1.26	1.18	1.20	1.64
20	1.28	1.57	1.42	1.51	1.67	1.78	2.99	2.55	1.75	1.26	1.19	1.25	1.74
15	1.34	1.60	1.44	1.53	1.69	2.10	3.13	4.23	1.84	1.27	1.23	1.32	1.85
10	ng	1.70	1.53	ng	ng	2.14	3.35	5.82	2.01	1.34	1.27	1.34	2.04
5	ng	ng	ng	ng	ng	2.27	3.75	8.39	2.18	1.35	ng	1.41	2.59

12-0.000-10M BALKH RIVER BELOW BAND-I-AMIR, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	ng	¹ 1.31	¹ 1.32	1.34	1.31
0.95	1.05	ng	1.49	1.49	1.49	1.46
0.90	1.11	ng	1.65	1.63	1.62	1.58
0.80	1.25	ng	1.92	1.88	1.85	1.79
0.50	2	ng	2.87	2.78	2.66	2.51
0.20	5	ng	5.08	4.91	4.58	4.07
0.10	10	ng	7.37	7.15	6.56	5.59
0.04	25	ng	11.6	11.4	10.3	8.25
0.02	50	ng	16.1	15.9	14.2	10.9
0.01	100	ng	22.2	22.0	19.5	14.4
0.005	200	ng	30.2	30.2	26.6	18.8
0.002	500	ng	ng	ng	ng	ng

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

12-0.000-10M BALKH RIVER BELOW BAND-I-AMIR, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.41	0.41	0.42	0.44	0.45	0.51	0.55	0.59	0.72
0.10	10	0.49	0.49	0.51	0.53	0.56	0.61	0.65	0.70	0.81
0.20	5	0.59	0.60	0.62	0.65	0.68	0.73	0.78	0.83	0.92
0.50	2	0.80	0.82	0.84	0.87	0.91	0.95	0.99	1.04	1.08

12-0.000-10M BALKH RIVER BELOW BAND-I-AMIR, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.46	0.47	0.49	0.50	0.68	0.68	0.67	0.71
0.10	10	0.59	0.59	0.61	0.62	0.81	0.82	0.82	0.86
0.20	5	0.75	0.76	0.77	0.79	0.97	1.00	1.00	1.04
0.50	2	1.08	1.09	1.10	1.13	1.28	1.32	1.35	1.41
		June-July-August				September-October-November			
0.05	20	0.74	0.79	0.83	0.87	0.70	0.72	0.73	0.79
0.10	10	0.79	0.84	0.86	0.91	0.74	0.76	0.79	0.84
0.20	5	0.85	0.89	0.91	0.96	0.79	0.82	0.85	0.90
0.50	2	0.96	0.99	1.00	1.04	0.90	0.92	0.97	1.01

12-0.000-10M BALKH RIVER BELOW BAND-I-AMIR, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1970	April 12, 1970	4.00	1975	May 21, 1975	9.89
1971	April 18, 1971	3.43	1970	April 12, 1970	4.00
1972	May 20, 1972	2.63	1971	April 18, 1971	3.43
1973	May 16, 1973	2.10	1972	May 20, 1972	2.63
1974	June 7, 1974	1.67	1973	May 16, 1973	2.10
1975	May 21, 1975	9.89	1974	June 7, 1974	1.67

12-0.000-10M BALKH RIVER BELOW BAND-I-AMIR, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1970	1.95	1.83	1.61	1.75	1.85	2.18	2.93	1.81	1.29	1.22	1.12	1.12	1.72
1971	1.11	1.27	1.41	1.49	1.67	1.71	3.02	2.01	1.07	0.93	0.93	1.19	1.48
1972	1.10	1.11	1.15	1.44	1.56	1.64	1.82	2.36	1.78	1.24	0.96	1.09	1.44
1973	1.19	1.20	1.10	1.10	1.13	1.25	1.65	2.00	1.55	1.16	1.03	0.87	1.27
1974	1.16	1.54	1.13	0.92	1.13	1.31	1.17	1.26	1.54	1.29	1.10	1.14	1.22
1975	1.11	0.83	0.64	0.51	0.65	0.76	2.43	6.83	1.91	1.18	1.25	1.24	1.62
1976	1.08	1.09	1.11	1.04	1.14	--	--	--	--	--	--	--	--

12-1.R00-1A **SUF RIVER NEAR KISHANDEH**

(U.S. Geological Survey identification number: 360800066570000)

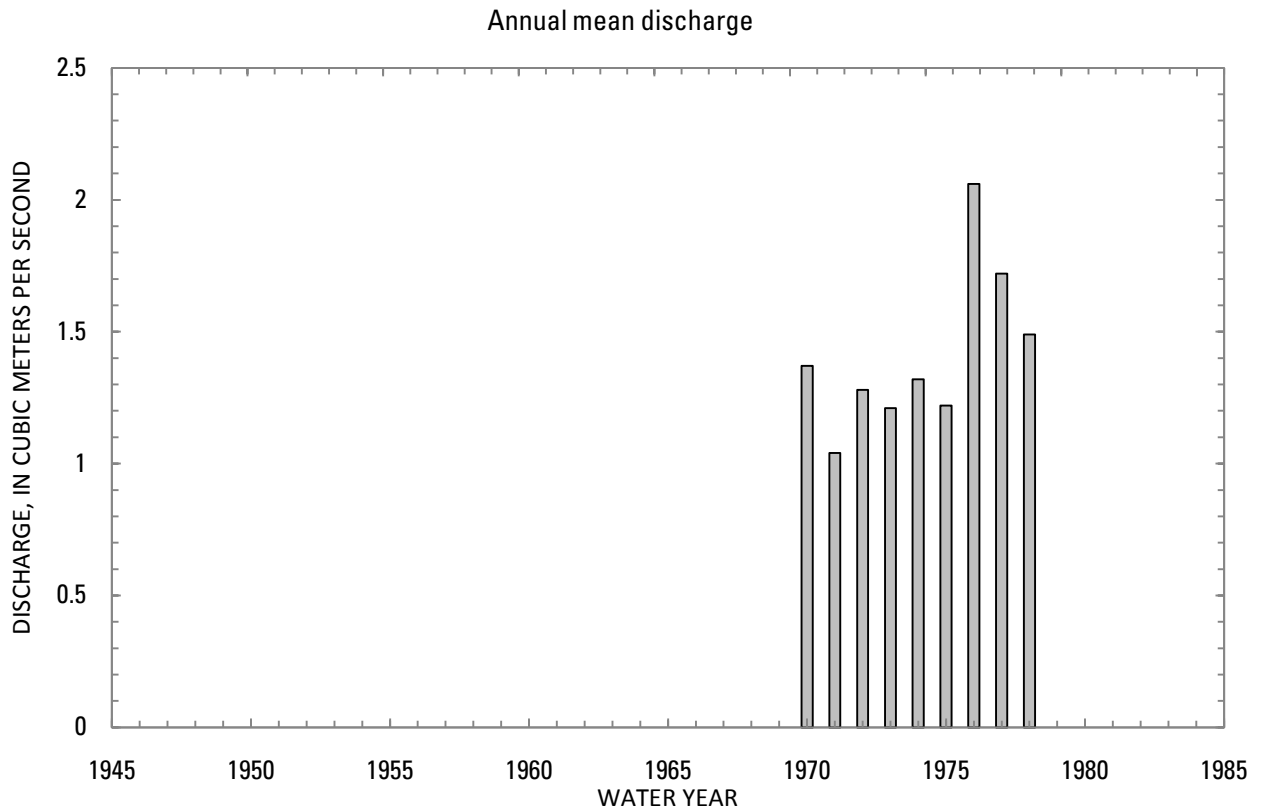
LOCATION: Lat 36°08'N., long 66°57'E.

DRAINAGE AREA: 3,070 km².

ELEVATION: 753 meters above mean sea level.

PERIOD OF RECORD: January 9, 1969 to September 30, 1978.

GAGE: Water-stage recorder.



12-1.R00-1A SUF RIVER NEAR KISHANDEH, Continued

Statistics of monthly and annual mean discharges
[m³/s, cubic meters per second; ng, not given]

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	2.12	1970	0.40	1972	1.38	0.52	0.38	7.74
November	2.67	1977	0.67	1972	1.71	0.53	0.31	9.60
December	3.38	1977	0.96	1972	1.97	0.72	0.36	11.0
January	3.15	1977	1.13	1972	2.06	0.58	0.28	11.5
February	2.89	1969	1.27	1972	2.02	0.52	0.26	11.3
March	2.98	1969	1.67	1973	2.05	0.44	0.22	11.5
April	4.53	1976	1.18	1974	2.22	1.03	0.46	12.5
May	7.70	1976	0.09	1971	2.39	2.34	0.98	13.4
June	2.64	1972	0	1975	0.52	0.82	1.57	2.93
July	1.11	1969	0	ng	0.16	0.34	2.19	0.88
August	1.57	1969	0.02	1971	0.37	0.46	1.25	2.05
September	2.04	1969	0.12	1971	1.00	0.53	0.53	5.60
Annual	2.06	1976	1.04	1971	1.41	0.31	0.22	100

12-1.R00-1A SUF RIVER NEAR KISHANDEH, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.37	0.66	0.98	1.14	1.15	1.30	0.78	0	0	0	0	0.04	0
90	0.47	0.75	1.05	1.16	1.27	1.40	0.97	0	0	0	0	0.30	0
85	1.00	1.27	1.48	1.61	1.40	1.56	1.13	0	0	0	0	0.47	0
80	1.05	1.39	1.62	1.73	1.53	1.69	1.24	0	0	0	0	0.58	0.09
75	1.08	1.44	1.71	1.75	1.60	1.73	1.31	0.01	0	0	0	0.62	0.39
70	1.14	1.55	1.75	1.77	1.71	1.76	1.37	0.45	0	0	0	0.67	0.64
65	1.23	1.66	1.77	1.85	1.76	1.80	1.50	0.73	0	0	0	0.72	0.92
60	1.37	1.70	1.78	1.92	1.93	1.86	1.65	0.89	0	0	0.01	0.78	1.08
55	1.41	1.72	1.80	1.93	2.07	1.90	1.76	1.06	0.01	0	0.02	0.86	1.25
50	1.43	1.74	1.81	1.95	2.10	1.93	1.87	1.23	0.02	0	0.18	0.93	1.41
45	1.45	1.77	1.83	2.05	2.18	1.96	1.97	1.42	0.04	0	0.25	0.98	1.54
40	1.47	1.79	1.85	2.09	2.22	2.00	2.03	1.61	0.11	0	0.28	1.05	1.64
35	1.49	1.82	1.88	2.15	2.26	2.05	2.09	1.79	0.18	0.01	0.39	1.12	1.74
30	1.57	1.86	1.91	2.23	2.31	2.12	2.16	2.21	0.39	0.04	0.47	1.22	1.84
25	1.68	1.92	1.95	2.31	2.38	2.25	2.25	2.92	0.72	0.09	0.59	1.33	1.96
20	1.96	2.02	2.45	2.55	2.41	2.39	2.39	3.74	0.90	0.22	0.66	1.48	2.10
15	2.07	2.22	3.06	2.73	2.52	2.80	2.64	5.18	1.01	0.30	0.71	1.80	2.25
10	2.12	2.36	3.18	3.03	2.77	2.97	3.23	6.66	1.23	0.71	1.16	1.93	2.42
5	2.16	ng	ng	ng	ng	3.12	4.75	9.09	1.61	ng	1.58	2.04	3.15

12-1.R00-1A SUF RIVER NEAR KISHANDEH, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	1.40	¹ 1.24	¹ 1.45	1.78	1.57
0.95	1.05	3.30	¹ 1.95	¹ 1.92	1.99	1.79
0.90	1.11	5.00	2.49	2.26	2.16	1.97
0.80	1.25	8.00	3.37	2.80	2.45	2.24
0.50	2	18.0	6.18	4.43	3.40	3.07
0.20	5	36.4	11.6	7.48	5.37	4.63
0.10	10	50.5	16.4	10.1	7.23	5.99
0.04	25	69.5	23.8	14.2	10.4	8.14
0.02	50	84.1	30.4	18.0	13.5	10.1
0.01	100	98.8	38.0	22.3	17.4	12.4
0.005	200	114	46.9	27.4	22.2	15.2
0.002	500	133	ng	ng	ng	ng

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

12-1.R00-1A SUF RIVER NEAR KISHANDEH, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	ng	ng	ng	0	0	0	0.03	0.03	0.14
0.10	10	ng	ng	ng	0	0	0	0.04	0.06	0.22
0.20	5	ng	ng	ng	0	0	0.01	0.06	0.12	0.36
0.50	2	ng	ng	ng	0	0	0.02	0.13	0.34	0.72

12-1.R00-1A SUF RIVER NEAR KISHANDEH, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.87	0.90	0.94	1.01	0	0	0	0.10
0.10	10	1.00	1.05	1.08	1.15	0	0	0	0.21
0.20	5	1.16	1.23	1.27	1.33	0	0	0	0.44
0.50	2	1.51	1.61	1.64	1.72	0	0	0.36	1.21
		June-July-August				September-October-November			
0.05	20	ng	ng	0	0	0	0	0.05	0.16
0.10	10	ng	ng	0	0	0	0	0.12	0.27
0.20	5	ng	ng	0	0	0.10	0.36	0.26	0.46
0.50	2	ng	ng	0	0	0.46	0.53	0.75	0.97

12-1.R00-1A SUF RIVER NEAR KISHANDEH, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1969	April 20, 1969	10.0	1976	April 19, 1976	66.8
1970	April 16, 1970	5.92	1977	April 15, 1977	40.4
1971	April 10, 1971	3.02	1972	May 13, 1972	25.6
1972	May 13, 1972	25.6	1973	April 24, 1973	24.3
1973	April 24, 1973	24.3	1975	May 3, 1975	24.3
1974	March 28, 1974	14.5	1978	May 26, 1978	16.0
1975	May 3, 1975	24.3	1974	March 28, 1974	14.5
1976	April 19, 1976	66.8	1969	April 20, 1969	10.0
1977	April 15, 1977	40.4	1970	April 16, 1970	5.92
1978	May 26, 1978	16.0	1971	April 10, 1971	3.02

12-1.R00-1A SUF RIVER NEAR KISHANDEH, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1969	--	--	--	--	2.89	2.98	3.35	3.80	0.87	1.11	1.57	2.04	--
1970	2.12	2.13	1.89	1.94	1.72	2.70	2.25	0.55	0.10	0.15	0.18	0.69	1.37
1971	1.43	1.72	1.82	2.07	2.29	1.77	1.23	0.09	0.03	0.03	0.02	0.12	1.04
1972	0.40	0.67	0.96	1.13	1.27	1.76	2.02	3.69	2.64	0	0.10	0.73	1.28
1973	1.39	1.73	1.74	1.95	1.36	1.67	1.73	1.41	0.02	0.04	0.64	0.84	1.21
1974	1.08	1.59	2.85	2.67	2.32	2.14	1.18	0.73	0.11	0	0.18	1.01	1.32
1975	1.38	1.69	1.74	1.70	1.60	1.76	2.01	1.58	0	0.19	0.35	0.70	1.22
1976	1.08	1.45	1.83	2.19	2.06	2.02	4.53	7.70	0.16	0.04	0.26	1.40	2.06
1977	2.06	2.67	3.38	3.15	2.49	1.81	2.41	0.71	0.93	0	0.08	1.03	1.72
1978	1.50	1.78	1.54	1.75	2.17	1.92	1.53	3.64	0.36	0	0.28	1.45	1.49

13-0.000-1M KHULM RIVER AT TANGI TASHQURGHAN

(U.S. Geological Survey identification number: 364000067420000)

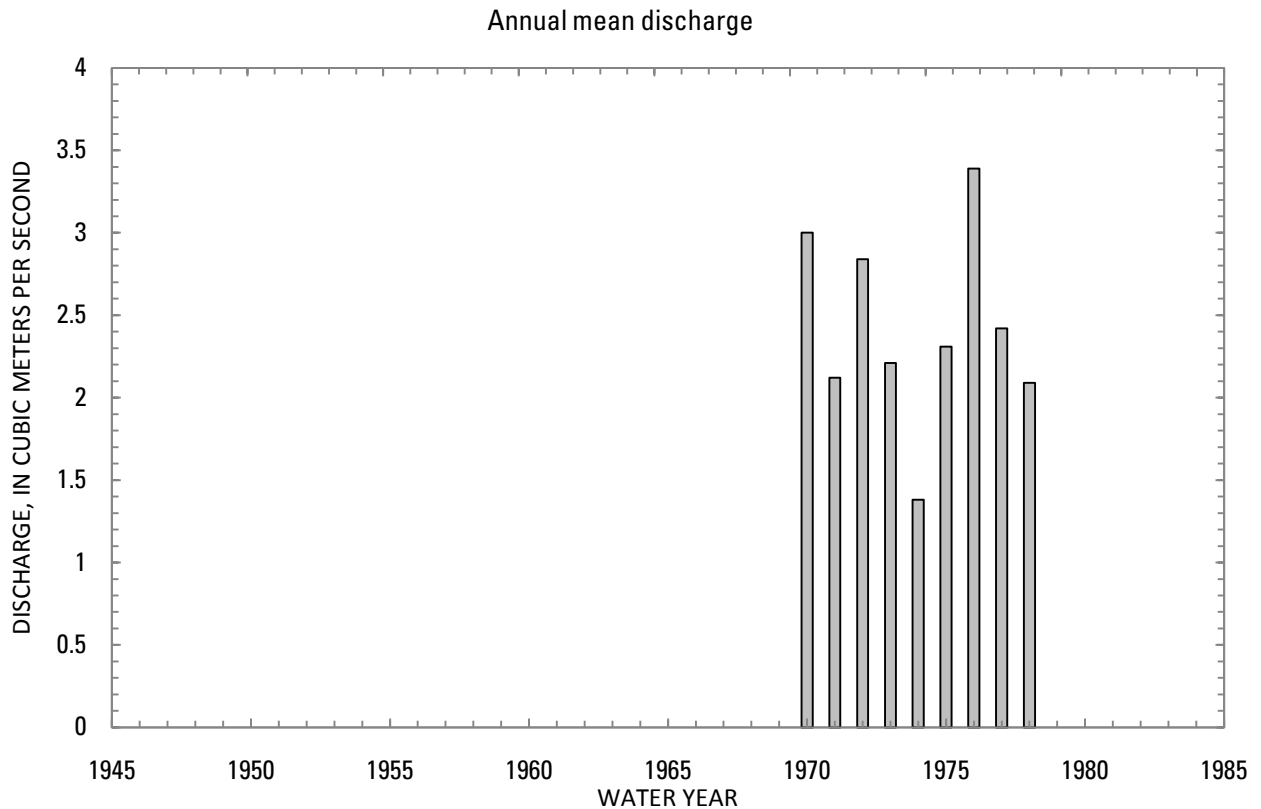
LOCATION: Lat 36°40'N., long 67°42'E.

DRAINAGE AREA: 8,220 km².

ELEVATION: 515 meters above mean sea level.

PERIOD OF RECORD: February 17, 1969 to September 30, 1978.

GAGE: Water-stage recorder. Staff gage at same site and datum prior to 1970 water year.



13-0.000-1M KHULM RIVER AT TANGI TASHQURGHAN, Continued

Statistics of monthly and annual mean discharges
[m³/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	2.26	1978	1.21	1974	1.71	0.35	0.21	5.50
November	4.75	1978	1.61	1974	2.59	1.01	0.39	8.35
December	4.56	1970	1.70	1974	2.97	0.99	0.33	9.57
January	4.05	1970	1.44	1974	2.81	0.75	0.27	9.04
February	3.55	1970	1.44	1974	2.64	0.66	0.25	8.51
March	6.12	1969	2.31	1973	3.57	1.30	0.36	11.5
April	11.7	1976	1.09	1978	3.96	3.13	0.79	12.8
May	11.3	1969	1.13	1971	4.66	3.45	0.74	15.0
June	4.90	1969	0.94	1974	2.10	1.18	0.56	6.77
July	2.61	1969	0.82	1977	1.36	0.52	0.38	4.37
August	2.33	1969	0.70	1978	1.22	0.43	0.35	3.94
September	2.52	1969	0.76	1978	1.45	0.46	0.32	4.68
Annual	3.39	1976	1.38	1974	2.42	0.59	0.24	100

13-0.000-1M KHULM RIVER AT TANGI TASHQURGHAN, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.96	1.21	1.39	1.33	1.31	1.47	0.89	0.62	0.82	0.76	0.58	0.76	0.81
90	1.07	1.42	1.55	1.68	1.78	1.76	1.07	0.93	0.94	0.82	0.69	0.87	0.95
85	1.16	1.53	1.77	2.09	1.89	1.96	1.22	1.10	1.01	0.86	0.74	0.95	1.06
80	1.30	1.59	2.17	2.21	2.00	2.23	1.34	1.22	1.06	0.89	0.78	0.99	1.15
75	1.33	1.66	2.35	2.32	2.16	2.46	1.48	1.31	1.18	0.94	0.83	1.12	1.25
70	1.39	1.90	2.44	2.39	2.30	2.61	1.65	1.39	1.25	0.97	0.92	1.22	1.35
65	1.45	2.07	2.51	2.48	2.37	2.73	1.86	1.48	1.31	1.04	1.00	1.26	1.45
60	1.50	2.20	2.59	2.59	2.45	2.88	2.09	1.58	1.35	1.09	1.04	1.29	1.57
55	1.54	2.33	2.67	2.68	2.51	3.03	2.33	1.71	1.40	1.14	1.08	1.32	1.70
50	1.57	2.42	2.99	2.76	2.56	3.19	2.57	2.02	1.47	1.20	1.12	1.35	1.84
45	1.61	2.52	3.10	2.81	2.66	3.46	2.91	2.51	1.55	1.24	1.16	1.40	2.06
40	1.74	2.62	3.20	2.85	2.76	3.66	3.21	2.98	1.62	1.31	1.21	1.44	2.26
35	1.84	2.73	3.41	2.92	2.90	3.98	3.46	3.60	1.69	1.39	1.27	1.48	2.45
30	1.92	2.83	3.52	3.14	3.10	4.13	3.70	4.34	1.86	1.46	1.35	1.55	2.64
25	2.02	2.99	3.64	3.24	3.24	4.27	4.00	5.05	2.00	1.51	1.45	1.67	2.90
20	2.15	3.30	3.96	3.53	3.37	4.43	4.32	6.42	2.39	1.64	1.56	1.75	3.19
15	2.33	3.81	4.34	3.93	3.49	4.63	4.90	7.85	3.63	1.84	1.68	1.91	3.63
10	2.47	4.19	4.52	4.02	3.56	5.28	6.26	10.8	4.06	2.14	1.86	2.12	4.17
5	2.78	4.46	4.70	4.28	3.62	6.35	10.4	18.4	5.60	ng	2.44	2.59	4.77

13-0.000-1M KHULM RIVER AT TANGI TASHQURGHAN, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	0.90	¹ 1.63	¹ 2.00	2.09	2.00
0.95	1.05	3.20	¹ 2.81	2.83	2.70	2.52
0.90	1.11	5.90	3.77	3.47	3.16	2.89
0.80	1.25	11.4	5.40	4.55	3.92	3.45
0.50	2	33.6	10.8	8.18	6.31	5.06
0.20	5	78.1	21.7	16.1	11.2	7.88
0.10	10	111	31.4	23.9	15.7	10.2
0.04	25	153	46.7	37.5	23.3	13.6
0.02	50	182	60.5	51.1	30.5	16.6
0.01	100	209	76.3	68.2	39.5	20.0
0.005	200	234	94.6	89.7	50.5	23.8
0.002	500	264	ng	ng	ng	ng

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

13-0.000-1M KHULM RIVER AT TANGI TASHQURGHAN, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.06	0.09	0.11	0.60	0.77	0.95	1.05	1.09	1.12
0.10	10	0.11	0.15	0.22	0.65	0.79	0.96	1.05	1.10	1.18
0.20	5	0.19	0.27	0.40	0.73	0.84	0.99	1.07	1.13	1.27
0.50	2	0.48	0.61	0.81	0.91	0.99	1.11	1.17	1.24	1.54

13-0.000-1M KHULM RIVER AT TANGI TASHQURGHAN, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.92	1.00	1.13	1.43	0.12	0.51	0.57	0.87
0.10	10	1.03	1.15	1.30	1.60	0.22	0.60	0.74	1.07
0.20	5	1.19	1.36	1.53	1.82	0.40	0.74	1.00	1.36
0.50	2	1.60	1.86	2.05	2.29	0.93	1.13	1.69	2.19
		June-July-August				September-October-November			
0.05	20	0.12	0.12	0.63	0.71	0.43	0.76	0.98	1.05
0.10	10	0.21	0.23	0.66	0.74	0.53	0.81	1.02	1.1
0.20	5	0.36	0.42	0.71	0.79	0.67	0.86	1.07	1.17
0.50	2	0.72	0.86	0.86	0.97	0.92	0.98	1.19	1.35

13-0.000-1M KHULM RIVER AT TANGI TASHQURGHAN, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1969	May 11, 1969	50.4	1976	May 25, 1976	85.2
1970	May 10, 1970	7.54	1973	May 16, 1973	80.0
1971	April 14, 1971	4.60	1978	November 8, 1977	72.8
1972	May 16, 1972	30.0	1977	May 29, 1977	57.0
1973	May 16, 1973	80.0	1969	May 11, 1969	50.4
1974	May 10, 1974	4.80	1975	May 16, 1975	49.2
1975	May 16, 1975	49.2	1972	May 16, 1972	30.0
1976	May 25, 1976	85.2	1970	May 10, 1970	7.54
1977	May 29, 1977	57.0	1974	May 10, 1974	4.80
1978	November 8, 1977	72.8	1971	April 14, 1971	4.60

13-0.000-1M KHULM RIVER AT TANGI TASHQURGHAN, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1969	--	--	--	--	--	6.12	6.67	11.3	4.90	2.61	2.33	2.52	--
1970	2.25	3.78	4.56	4.05	3.55	4.16	3.30	3.44	2.72	1.79	1.05	1.39	3.00
1971	1.49	2.52	3.44	2.77	2.98	3.11	2.64	1.13	1.24	1.34	1.15	1.68	2.12
1972	1.84	1.99	2.12	2.39	2.26	4.20	3.82	9.22	2.25	1.38	1.04	1.48	2.84
1973	1.57	2.26	2.50	2.86	2.64	2.31	3.62	3.35	1.38	1.26	1.32	1.51	2.21
1974	1.21	1.61	1.70	1.44	1.44	2.40	1.31	1.30	0.94	1.00	1.07	1.13	1.38
1975	1.53	2.26	3.18	2.77	2.26	2.66	2.75	4.95	1.78	1.28	1.03	1.24	2.31
1976	1.51	2.23	3.04	2.42	2.83	5.17	11.7	6.57	1.54	1.17	1.29	1.24	3.39
1977	1.70	1.92	2.00	3.64	3.45	3.03	2.69	4.07	2.95	0.82	1.24	1.59	2.42
1978	2.26	4.75	4.20	2.91	2.37	2.52	1.09	1.28	1.31	0.93	0.70	0.76	2.09

13-0.000-2M KHULM RIVER AT SAYAD

(U.S. Geological Survey identification number: 363500067470000)

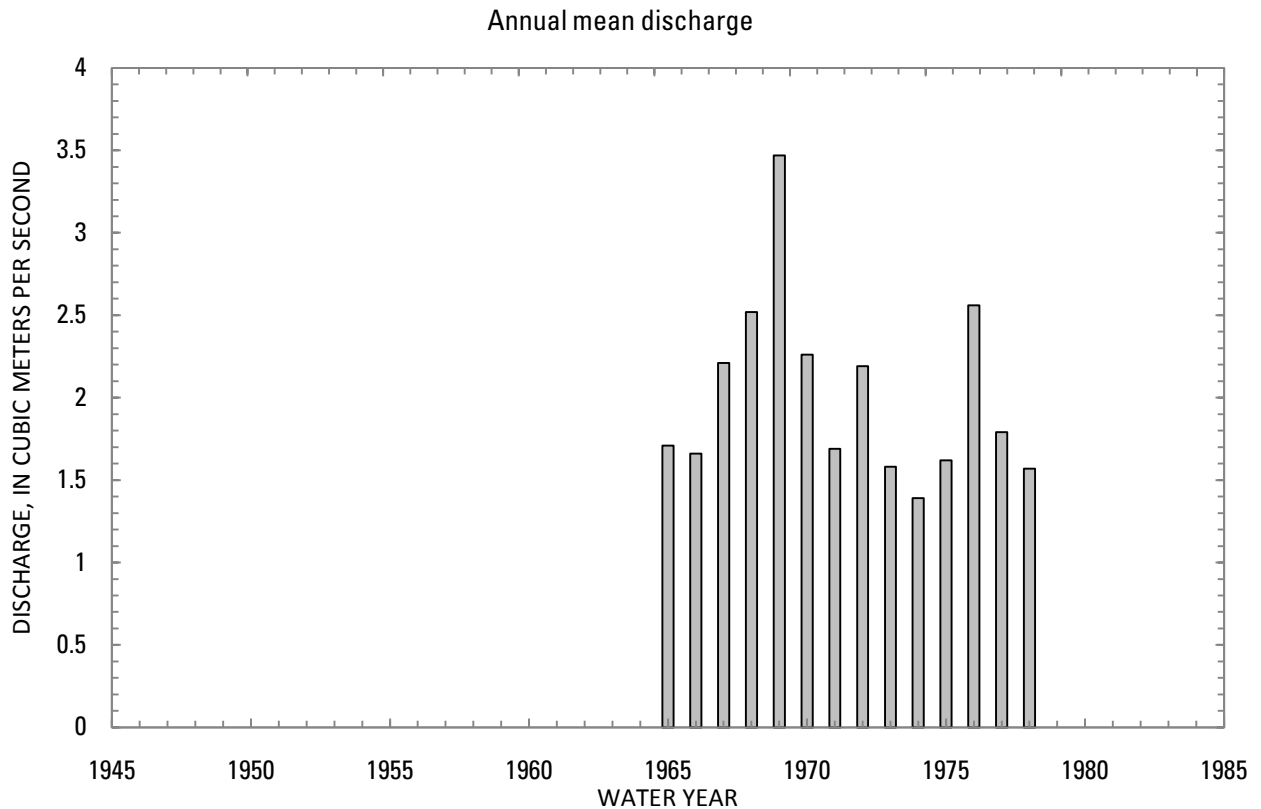
LOCATION: Lat 36°35'N., long 67°47'E.

DRAINAGE AREA: 8,170 km².

ELEVATION: 669 meters above mean sea level.

PERIOD OF RECORD: May 13, 1964 to September 30, 1978.

GAGE: Water-stage recorder. Staff gage at same site and datum prior to 1970 water year.



13-0.000-2M KHULM RIVER AT SAYAD, Continued

Statistics of monthly and annual mean discharges
[m³/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	2.41	1968	0.80	1965	1.44	0.44	0.30	5.98
November	3.38	1970	0.91	1965	1.92	0.77	0.40	7.98
December	3.25	1970	0.75	1965	2.12	0.67	0.32	8.80
January	3.06	1969	1.21	1965	2.06	0.48	0.23	8.53
February	3.33	1969	1.63	1973	2.13	0.43	0.20	8.83
March	5.52	1969	1.73	1977	2.66	0.98	0.37	11.0
April	10.1	1976	1.07	1978	2.91	2.31	0.79	12.1
May	9.73	1969	0.99	1978	3.90	2.69	0.69	16.2
June	3.25	1968	0.64	1976	1.45	0.78	0.53	6.02
July	1.82	1969	0.71	1975	1.15	0.35	0.30	4.79
August	1.84	1967	0.84	1976	1.10	0.30	0.28	4.58
September	1.99	1967	0.84	1978	1.25	0.36	0.29	5.18
Annual	3.47	1969	1.39	1974	2.02	0.56	0.28	100

13-0.000-2M KHULM RIVER AT SAYAD, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.72	0.85	0.78	1.27	1.36	1.29	0.92	0.87	0.56	0.69	0.79	0.72	0.78
90	0.85	0.93	1.28	1.38	1.46	1.55	1.06	0.95	0.71	0.74	0.82	0.81	0.87
85	0.89	1.01	1.52	1.57	1.57	1.70	1.16	0.99	0.79	0.79	0.84	0.89	0.94
80	0.95	1.14	1.60	1.64	1.65	1.89	1.24	1.03	0.86	0.83	0.86	0.92	1.00
75	0.99	1.28	1.67	1.71	1.78	1.98	1.33	1.10	0.89	0.87	0.87	0.95	1.07
70	1.03	1.52	1.74	1.77	1.87	2.06	1.44	1.18	0.93	0.89	0.89	0.98	1.15
65	1.09	1.59	1.82	1.83	1.95	2.22	1.55	1.32	0.97	0.91	0.92	1.00	1.26
60	1.14	1.65	1.89	1.94	2.05	2.31	1.67	1.45	1.00	0.94	0.94	1.02	1.39
55	1.21	1.70	1.99	2.02	2.10	2.38	1.81	1.60	1.04	0.96	0.96	1.05	1.51
50	1.30	1.76	2.09	2.08	2.15	2.46	1.97	1.80	1.08	1.00	0.98	1.08	1.64
45	1.39	1.83	2.17	2.11	2.19	2.55	2.12	2.06	1.12	1.07	1.00	1.15	1.75
40	1.48	1.91	2.26	2.15	2.24	2.65	2.29	2.36	1.16	1.14	1.02	1.20	1.87
35	1.59	2.00	2.34	2.20	2.29	2.76	2.45	2.84	1.25	1.19	1.04	1.31	2.00
30	1.69	2.10	2.45	2.25	2.33	2.86	2.65	3.43	1.36	1.27	1.08	1.41	2.14
25	1.78	2.31	2.64	2.32	2.37	3.04	2.87	3.83	1.49	1.36	1.13	1.48	2.30
20	1.89	2.60	2.81	2.43	2.44	3.22	3.11	4.69	1.66	1.54	1.20	1.62	2.45
15	1.99	2.84	2.94	2.57	2.55	3.41	3.46	6.14	1.82	1.64	1.43	1.81	2.71
10	2.15	3.12	3.09	2.77	2.71	3.73	4.29	9.14	2.30	1.79	1.73	2.03	3.08
5	2.60	3.42	3.27	3.12	2.98	4.20	6.46	16.5	4.38	2.03	1.95	2.16	3.81

13-0.000-2M KHULM RIVER AT SAYAD, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	1.00	¹ 1.30	¹ 1.51	¹ 1.63	1.70
0.95	1.05	2.90	2.50	2.40	2.27	2.15
0.90	1.11	4.80	3.49	3.10	2.74	2.47
0.80	1.25	8.50	5.19	4.25	3.48	2.97
0.50	2	22.6	10.7	7.93	5.72	4.38
0.20	5	52.0	21.1	15.3	9.88	6.86
0.10	10	76.1	29.6	21.7	13.4	8.88
0.04	25	110	41.8	31.9	18.9	11.9
0.02	50	137	51.9	41.2	23.9	14.6
0.01	100	164	62.8	51.9	29.5	17.6
0.005	200	192	74.5	64.4	36.1	21.0
0.002	500	228	ng	ng	ng	ng

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

13-0.000-2M KHULM RIVER AT SAYAD, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.38	0.41	0.42	0.47	0.56	0.64	0.70	0.77	0.92
0.10	10	0.45	0.47	0.49	0.54	0.62	0.70	0.76	0.83	0.97
0.20	5	0.53	0.56	0.58	0.64	0.70	0.79	0.85	0.91	1.05
0.50	2	0.71	0.74	0.77	0.85	0.91	1.01	1.06	1.11	1.27

13-0.000-2M KHULM RIVER AT SAYAD, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.77	0.83	0.87	0.95	0.72	0.8	0.84	0.93
0.10	10	0.91	0.99	1.03	1.14	0.74	0.83	0.91	1.04
0.20	5	1.08	1.19	1.25	1.38	0.78	0.88	1.02	1.21
0.50	2	1.44	1.59	1.68	1.85	0.91	1.06	1.33	1.69
		June-July-August				September-October-November			
0.05	20	0.41	0.46	0.50	0.59	0.57	0.61	0.68	0.79
0.10	10	0.48	0.53	0.58	0.65	0.61	0.65	0.74	0.84
0.20	5	0.57	0.63	0.68	0.74	0.66	0.72	0.82	0.92
0.50	2	0.76	0.83	0.89	0.95	0.81	0.89	1.03	1.12

13-0.000-2M KHULM RIVER AT SAYAD, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1965	May 7, 1965	24.4	1976	May 25, 1976	80.0
1966	April 14, 1966	4.08	1973	May 16, 1973	75.0
1967	May 24, 1967	17.0	1978	November 8, 1977	70.0
1968	May 20, 1968	23.6	1969	May 11, 1969	45.0
1969	May 11, 1969	45.0	1977	April 14, 1977	36.5
1970	April 7, 1970	10.2	1972	May 16, 1972	25.0
1971	March 13, 1971	3.87	1975	May 17, 1975	25.0
1972	May 16, 1972	25.0	1965	May 7, 1965	24.4
1973	May 16, 1973	75.0	1968	May 20, 1968	23.6
1974	March 15, 1974	3.20	1967	May 24, 1967	17.0
1975	May 17, 1975	25.0	1970	April 7, 1970	10.2
1976	May 25, 1976	80.0	1966	April 14, 1966	4.08
1977	April 14, 1977	36.5	1971	March 13, 1971	3.87
1978	November 8, 1977	70.0	1974	March 15, 1974	3.20

13-0.000-2M KHULM RIVER AT SAYAD, Continued

Monthly and annual mean discharges, in cubic meters per second
 [Data may not be rounded in accordance with U.S. Geological Survey publication standards; --, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1964	--	--	--	--	--	--	--	--	0.94	0.90	0.97	0.96	--
1965	0.80	0.91	0.75	1.21	2.05	2.25	2.27	5.31	1.39	1.29	0.91	1.35	1.71
1966	1.31	1.95	2.22	2.11	2.25	2.45	1.99	1.51	1.15	1.05	0.90	1.10	1.66
1967	1.75	1.98	2.20	2.31	2.23	1.86	1.72	5.40	1.52	1.64	1.84	1.99	2.21
1968	2.41	3.00	2.85	2.13	1.85	2.31	2.64	5.15	3.25	1.51	1.39	1.75	2.52
1969	1.60	1.63	2.86	3.06	3.33	5.52	5.37	9.73	3.05	1.82	1.68	1.87	3.47
1970	2.07	3.38	3.25	2.81	2.40	3.50	2.56	1.71	1.31	1.53	1.21	1.44	2.26
1971	1.42	2.02	2.72	2.18	2.24	2.31	1.87	1.05	1.24	1.23	1.03	1.01	1.69
1972	0.93	1.22	1.52	1.82	2.12	3.14	3.10	7.50	1.58	1.05	1.07	1.20	2.19
1973	1.14	1.41	1.53	1.61	1.63	2.29	2.76	2.27	1.20	1.20	0.96	0.97	1.58
1974	1.43	1.43	1.70	1.71	1.85	2.42	1.22	1.19	0.93	0.95	0.90	0.97	1.39
1975	1.15	1.48	1.95	1.95	1.78	2.15	2.18	3.52	0.72	0.71	0.84	0.97	1.62
1976	1.09	1.60	1.93	1.62	1.94	3.30	10.10	5.90	0.64	0.72	0.84	1.10	2.56
1977	1.40	1.62	1.70	2.20	2.46	1.73	1.94	3.40	2.01	0.80	1.03	1.22	1.79
1978	1.67	3.31	2.50	2.06	1.66	2.01	1.07	0.99	0.85	0.90	0.99	0.84	1.57

14-0.000-1M KUNDUZ RIVER AT KULUKH TEPA

(U.S. Geological Survey identification number: 365900068180000)

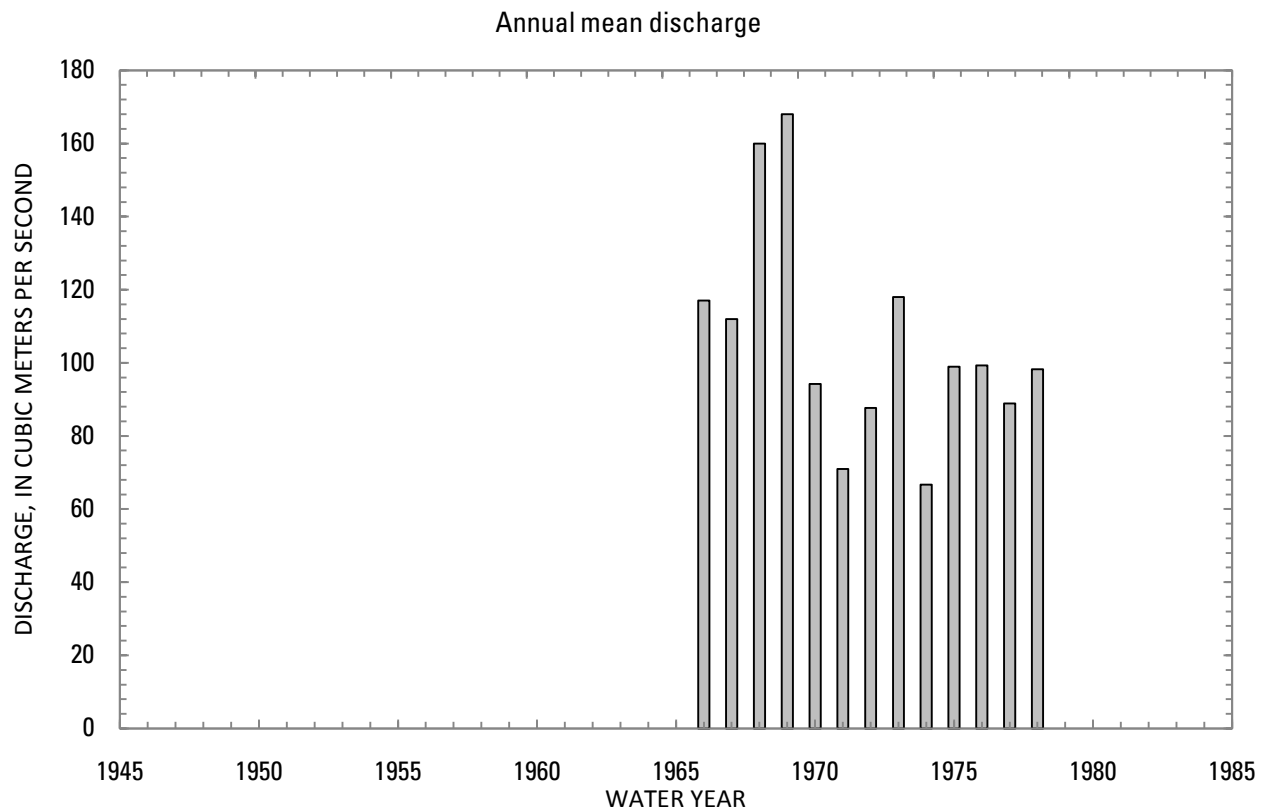
LOCATION: Lat 36°59'N., long 68°18'E.

DRAINAGE AREA: 37,100 km².

ELEVATION: 320 meters above mean sea level.

PERIOD OF RECORD: October 1, 1965 to September 30, 1978.

GAGE: Water-stage recorder. Staff gage at same site and datum prior to 1969 water year.



14-0.000-1M KUNDUZ RIVER AT KULUKH TEPA, Continued

Statistics of monthly and annual mean discharges
[m³/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	101	1970	40.9	1975	71.0	16.6	0.23	5.57
November	103	1970	61.4	1973	84.1	11.4	0.14	6.60
December	95.1	1969	66.3	1973	81.8	9.05	0.11	6.42
January	80.7	1969	58.3	1975	69.9	8.36	0.12	5.49
February	74.1	1970	53.8	1975	65.8	5.88	0.09	5.17
March	96.3	1969	55.2	1975	74.0	10.8	0.15	5.81
April	179	1969	30.8	1977	76.9	39.5	0.51	6.04
May	236	1973	28.1	1974	141	58.5	0.41	11.1
June	618	1968	148	1971	320	132	0.41	25.1
July	408	1968	12.0	1971	204	112	0.55	16.0
August	154	1969	5.47	1974	54.7	46.4	0.85	4.29
September	60.4	1969	4.44	1974	30.8	14.6	0.47	2.41
Annual	168	1969	66.7	1974	106	29.9	0.28	100

14-0.000-1M KUNDUZ RIVER AT KULUKH TEPA, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	34.6	60.0	62.1	52.3	51.7	51.2	19.5	15.0	86.6	11.3	3.88	5.04	17.6
90	41.3	64.3	66.1	56.1	56.1	55.6	25.7	25.9	125	39.8	7.50	11.7	28.1
85	47.6	71.4	69.0	58.4	58.2	58.5	32.9	33.0	163	64.9	11.5	16.1	38.4
80	51.6	75.3	71.8	60.8	59.8	61.0	38.5	49.4	189	82.2	15.2	17.6	49.0
75	55.3	76.9	74.5	63.1	61.6	63.2	43.6	63.5	207	97.8	19.9	19.5	56.0
70	58.9	79.4	76.5	64.6	63.1	65.2	48.6	77.6	220	113	22.9	21.6	61.3
65	61.9	81.6	78.2	65.8	64.1	67.0	54.0	89.2	236	126	28.0	23.8	64.8
60	64.0	83.0	81.4	67.6	64.9	68.7	59.4	103	255	144	31.8	25.4	68.3
55	66.1	84.2	83.4	69.3	65.7	70.3	64.9	117	275	162	35.2	27.0	71.9
50	69.9	85.0	84.3	70.5	66.4	71.8	69.5	132	292	180	38.9	28.5	75.6
45	72.9	85.9	85.2	71.6	67.2	73.8	74.2	148	309	197	42.1	30.5	79.4
40	75.0	86.8	86.1	73.1	67.9	75.9	79.2	166	327	217	45.8	32.4	83.2
35	77.2	88.0	87.1	74.7	68.8	78.8	84.2	184	354	241	50.7	34.1	88.2
30	80.8	89.3	88.5	76.2	70.0	82.4	90.9	197	388	269	62.8	35.9	94.2
25	85.1	91.0	90.0	78.1	71.0	85.6	97.9	211	414	297	71.3	37.7	100
20	90.2	92.9	91.2	79.5	72.1	88.2	106	229	446	328	83.9	41.1	122
15	96.3	95.3	92.4	81.2	73.2	91.3	115	247	485	368	101	47.9	176
10	104	98.3	94.4	83.4	75.0	95.2	129	266	551	410	134	56.0	238
5	115	109	98.4	85.8	77.3	102	168	301	664	471	182	66.9	339

14-0.000-1M KUNDUZ RIVER AT KULUKH TEPA, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	252	221	216	188	166
0.95	1.05	306	273	262	227	199
0.90	1.11	340	307	292	252	221
0.80	1.25	388	353	333	288	252
0.50	2	505	464	432	378	329
0.20	5	665	614	568	508	440
0.10	10	773	713	659	599	517
0.04	25	911	837	775	718	619
0.02	50	1,020	929	863	812	698
0.01	100	1,120	1,020	951	908	779
0.005	200	1,230	1,110	1,040	1,010	865
0.002	500	1,380	ng	ng	ng	ng

14-0.000-1M KUNDUZ RIVER AT KULUKH TEPA, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	3.11	3.12	3.12	3.38	3.73	6.27	14.7	24.4	39.6
0.10	10	4.92	4.97	5.02	5.40	6.09	9.79	19.9	30.4	44.5
0.20	5	8.14	8.28	8.44	9.00	10.3	15.8	27.6	38.4	50.5
0.50	2	18.3	18.8	19.3	20.3	23.4	32.7	45.8	55.3	62.5

14-0.000-1M KUNDUZ RIVER AT KULUKH TEPA, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	40.4	46.6	50.0	52.6	5.84	7.21	8.77	16.9
0.10	10	43.8	49.3	52.5	55.2	8.81	11.3	14.1	23.6
0.20	5	48.0	52.8	55.7	58.3	13.9	18.3	22.9	33.5
0.50	2	56.2	59.4	61.9	64.2	29.3	37.7	45.6	56.4
		June-July-August				September-October-November			
0.05	20	3.38	3.39	3.68	5.12	4.16	4.23	4.67	7.04
0.10	10	5.60	5.66	6.13	8.51	6.53	6.75	7.62	10.9
0.20	5	9.72	9.98	10.8	15.1	10.5	11.0	12.6	17.1
0.50	2	23.4	25.3	28.1	39.2	21.6	22.8	25.6	31.8

14-0.000-1M KUNDUZ RIVER AT KULUKH TEPA, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1966	June 21, 1966	739	1968	June 13, 1968	830
1967	June 13, 1967	588	1977	May 29, 1977	800
1968	June 13, 1968	830	1966	June 21, 1966	739
1969	June 22, 1969	640	1969	June 22, 1969	640
1970	June 2, 1970	348	1967	June 13, 1967	588
1971	May 30, 1971	340	1973	June 11, 1973	531
1972	June 25, 1972	503	1972	June 25, 1972	503
1973	June 11, 1973	531	1975	June 19, 1975	450
1974	June 18, 1974	337	1976	June 6, 1976	450
1975	June 19, 1975	450	1978	June 9, 1978	390
1976	June 6, 1976	450	1970	June 2, 1970	348
1977	May 29, 1977	800	1971	May 30, 1971	340
1978	June 9, 1978	390	1974	June 18, 1974	337

14-0.000-1M KUNDUZ RIVER AT KULUKH TEPA, Continued

Monthly and annual mean discharges, in cubic meters per second
 [Data may not be rounded in accordance with U.S. Geological Survey publication standards]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1966	69.8	87.0	86.2	71.9	61.8	83.8	95.5	157	428	157	64.8	37.0	117
1967	86.5	93.8	80.0	71.1	68.7	66.5	60.6	112	334	258	78.4	32.5	112
1968	70.1	83.2	87.1	79.6	67.7	62.2	85.7	174	618	408	142	46.2	160
1969	78.7	88.7	95.1	80.7	70.9	96.3	179	234	484	390	154	60.4	168
1970	101	103	91.1	80.3	74.1	76.3	63.2	150	198	107	37.4	47.8	94.2
1971	75.1	80.6	88.7	75.6	67.8	69.0	62.9	138	148	12.0	10.8	23.8	71.0
1972	52.8	77.5	67.3	60.5	55.9	66.0	68.1	90.0	285	166	44.2	19.8	87.7
1973	51.0	61.4	66.3	59.0	65.2	84.7	130	236	364	230	39.7	31.6	118
1974	87.1	76.7	81.8	61.4	63.4	73.7	38.9	28.1	181	99.9	5.47	4.44	66.7
1975	40.9	69.8	73.1	58.3	53.8	55.2	66.6	150	304	236	52.2	24.6	98.9
1976	79.5	98.7	75.2	64.1	66.4	73.2	55.4	137	211	261	42.7	25.9	99.3
1977	60.6	83.6	82.5	70.9	68.6	73.4	30.8	68.6	314	182	13.0	18.2	88.9
1978	69.2	88.8	89.0	75.6	71.4	81.0	63.1	161	286	140	26.2	27.5	98.2

14-0.000-2M KUNDUZ RIVER AT CHAR DARA

(U.S. Geological Survey identification number: 364200068500000)

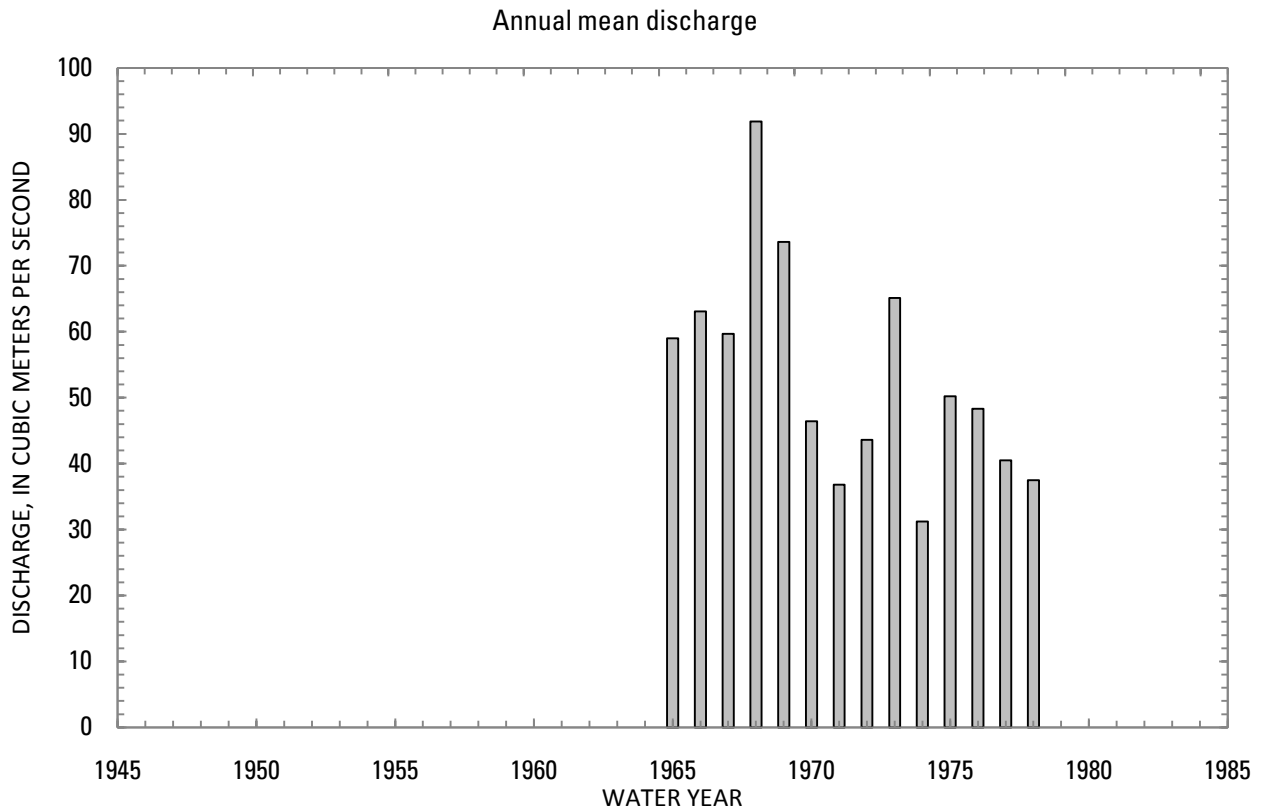
LOCATION: Lat 36°42'N., long 68°50'E.

DRAINAGE AREA: 24,820 km².

ELEVATION: 401 meters above mean sea level.

PERIOD OF RECORD: August 5, 1964 to September 30, 1978.

GAGE: Water-stage recorder.



14-0.000-2M KUNDUZ RIVER AT CHAR DARA, Continued

Statistics of monthly and annual mean discharges
[m³/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	41.7	1969	10.0	1972	27.2	8.89	0.33	4.25
November	49.2	1970	19.7	1972	32.6	7.94	0.24	5.10
December	44.9	1969	21.0	1972	35.0	6.00	0.17	5.46
January	40.8	1969	21.0	1972	32.4	4.81	0.15	5.06
February	40.4	1969	21.0	1972	31.4	4.48	0.14	4.90
March	42.7	1966	24.6	1972	33.8	4.63	0.14	5.28
April	77.8	1973	16.8	1974	37.9	16.9	0.45	5.92
May	159	1973	45.1	1974	91.6	33.5	0.37	14.3
June	406	1968	72.2	1971	186	88.4	0.48	29.0
July	203	1968	13.1	1971	93.1	57.0	0.61	14.6
August	66.3	1968	2.16	1974	23.6	20.1	0.85	3.69
September	32.7	1968	2.59	1974	16.1	8.76	0.54	2.51
Annual	91.9	1968	31.2	1974	53.4	16.6	0.31	100

14-0.000-2M KUNDUZ RIVER AT CHAR DARA, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	10.3	19.2	21.4	21.4	21.3	23.9	9.80	11.0	57.7	9.26	1.89	3.05	7.80
90	15.3	21.5	29.0	27.3	26.4	25.2	15.3	18.3	78.3	15.9	2.83	4.09	13.5
85	17.5	23.6	30.6	27.9	27.4	27.3	19.2	30.9	89.0	24.5	3.49	6.82	19.1
80	18.8	26.5	31.7	28.6	28.0	28.7	22.0	35.1	96.9	32.4	4.83	8.05	22.6
75	20.6	28.4	32.2	29.6	29.2	29.9	23.9	38.8	106	38.7	5.93	10.1	25.4
70	21.8	29.7	32.6	30.1	29.9	30.7	25.3	44.2	121	46.6	7.66	11.6	27.5
65	23.5	30.6	33.1	30.8	30.3	31.5	27.5	53.4	140	55.7	10.1	12.4	29.5
60	25.1	31.1	33.6	31.7	30.6	32.2	29.4	66.8	150	64.6	11.8	13.2	31.1
55	26.8	31.7	34.1	32.3	31.0	32.6	31.0	78.6	158	73.2	14.1	13.9	32.4
50	27.6	32.4	34.6	32.8	31.5	33.0	32.7	86.2	172	79.4	18.2	14.8	33.6
45	29.1	33.2	35.0	33.2	32.0	33.7	34.6	94.4	185	86.8	20.5	16.2	34.8
40	29.8	34.2	36.2	33.6	32.3	34.6	36.9	103	201	96.5	23.0	17.6	36.1
35	30.4	35.2	36.8	34.0	32.5	35.5	39.5	111	223	106	26.2	18.4	38.5
30	31.4	36.1	37.9	34.6	33.1	36.6	44.7	121	234	119	29.5	19.2	41.8
25	32.8	37.5	38.4	35.3	34.1	38.0	48.4	133	245	135	34.2	20.6	47.0
20	35.7	39.0	39.4	36.0	35.1	38.8	52.6	146	259	151	39.2	22.9	61.7
15	38.3	40.1	41.3	36.9	36.0	40.0	58.0	159	275	172	45.7	27.7	90.2
10	39.5	42.7	43.8	38.9	37.5	42.8	65.1	175	296	197	54.8	30.8	133
5	42.1	48.1	45.6	40.8	39.0	45.6	81.2	199	346	223	70.8	33.2	191

14-0.000-2M KUNDUZ RIVER AT CHAR DARA, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	113	105	95.7	80.6	74.7
0.95	1.05	149	136	124	107	97.3
0.90	1.11	172	156	142	124	112
0.80	1.25	202	184	168	148	133
0.50	2	271	249	230	209	185
0.20	5	354	333	316	295	258
0.10	10	403	387	372	354	307
0.04	25	459	451	444	428	370
0.02	50	498	498	497	485	418
0.01	100	535	¹ 543	550	542	466
0.005	200	569	¹ 587	603	600	515
0.002	500	612	ng	ng	ng	ng

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

14-0.000-2M KUNDUZ RIVER AT CHAR DARA, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	1.68	1.7	1.75	1.84	2.17	2.92	6.02	8.37	13.9
0.10	10	2.78	2.81	2.88	3.01	3.48	4.61	8.25	11.1	16.7
0.20	5	4.78	4.84	4.93	5.14	5.81	7.56	11.7	14.9	20.4
0.50	2	11.1	11.4	11.6	12.0	13.1	16.3	20.3	23.8	27.7

14-0.000-2M KUNDUZ RIVER AT CHAR DARA, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	22.5	22.7	22.9	23.2	5.68	6.77	7.49	10.5
0.10	10	23.8	24.1	24.4	25.0	7.50	9.06	10.2	13.8
0.20	5	25.4	25.8	26.3	27.1	10.2	12.4	14.3	18.5
0.50	2	28.4	29.1	29.8	31.0	17.3	20.6	23.5	28.2
		June-July-August				September-October-November			
0.05	20	1.34	1.42	1.49	1.98	1.98	2.06	2.16	3.76
0.10	10	2.28	2.40	2.50	3.29	3.30	3.49	3.68	5.53
0.20	5	4.13	4.30	4.50	5.87	5.66	6.08	6.39	8.36
0.50	2	11.0	11.4	12.1	16.0	12.7	13.6	14.2	15.8

14-0.000-2M KUNDUZ RIVER AT CHAR DARA, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1965	June 17, 1965	290	1968	June 12, 1968	500
1966	June 20, 1966	340	1966	June 20, 1966	340
1967	June 12, 1967	297	1973	June 11, 1973	340
1968	June 12, 1968	500	1969	June 21, 1969	331
1969	June 21, 1969	331	1976	May 25, 1976	308
1970	May 20, 1970	190	1967	June 12, 1967	297
1971	May 22, 1971	200	1965	June 17, 1965	290
1972	June 18, 1972	275	1972	June 18, 1972	275
1973	June 11, 1973	340	1977	May 29, 1977	272
1974	June 19, 1974	146	1975	June 19, 1975	269
1975	June 19, 1975	269	1971	May 22, 1971	200
1976	May 25, 1976	308	1970	May 20, 1970	190
1977	May 29, 1977	272	1978	May 25, 1978	156
1978	May 25, 1978	156	1974	June 19, 1974	146

14-0.000-2M KUNDUZ RIVER AT CHAR DARA, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1964	--	--	--	--	--	--	--	--	--	--	--	15.4	--
1965	18.6	22.5	29.8	28.6	28.7	29.1	37.7	57.9	211	172	48.1	23.2	59.0
1966	29.5	31.9	37.0	34.5	34.4	42.7	58.3	116	240	83.3	31.5	18.9	63.1
1967	32.5	33.7	33.9	32.9	36.0	34.3	30.3	80.5	213	135	37.4	15.7	59.7
1968	34.7	41.2	40.2	34.5	29.8	27.8	47.6	140	406	203	66.3	32.7	91.9
1969	41.7	40.6	44.9	40.8	40.4	39.9	48.3	107	237	161	49.0	31.8	73.6
1970	40.0	49.2	43.3	38.8	33.0	37.1	34.9	86.3	96.2	51.2	24.7	21.1	46.4
1971	30.8	34.1	35.5	33.5	31.7	33.1	41.2	108	72.2	13.1	3.86	5.41	36.8
1972	10.0	19.7	21.0	21.0	21.0	24.6	20.5	51.4	215	92.9	14.6	12.7	43.6
1973	24.4	29.3	31.0	28.5	28.0	35.4	77.8	159	242	88.4	17.4	20.4	65.1
1974	29.6	31.6	32.7	31.3	29.2	33.8	16.8	45.1	90.9	29.1	2.16	2.59	31.2
1975	15.5	22.6	32.0	28.7	29.4	34.9	32.5	93.8	188	101	14.6	8.77	50.2
1976	25.4	33.9	36.7	33.4	34.3	34.0	43.5	99.0	125	88.6	12.8	12.3	48.3
1977	25.8	30.2	33.4	32.6	31.9	31.9	17.0	54.6	165	48.7	5.87	10.8	40.5
1978	22.1	36.4	38.2	34.4	31.8	34.8	24.4	83.6	96.2	36.5	2.53	9.46	37.5

14-0.000-3M KUNDUZ RIVER AT GERDAB

(U.S. Geological Survey identification number: 362200068520000)

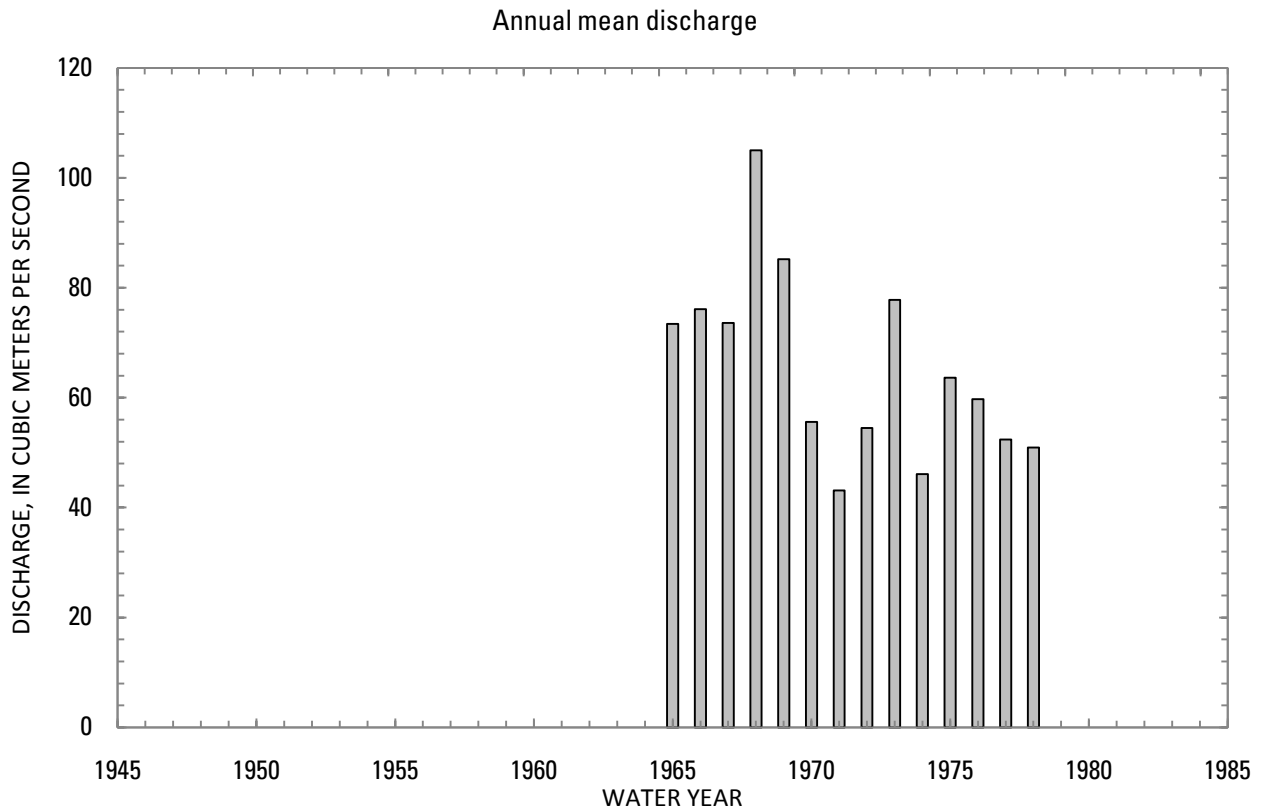
LOCATION: Lat 36°22'N., long 68°52'E.

DRAINAGE AREA: 22,930 km².

ELEVATION: 464 meters above mean sea level.

PERIOD OF RECORD: April 21, 1964 to September 30, 1978.

GAGE: Staff gage. Water-stage recorder at same site and datum during the 1978 water year.



14-0.000-3M KUNDUZ RIVER AT GERDAB, Continued

Statistics of monthly and annual mean discharges
[m³/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	51.5	1969	23.3	1972	38.8	8.17	0.21	4.95
November	56.8	1970	29.4	1972	41.7	7.49	0.18	5.33
December	51.4	1969	28.4	1972	42.3	5.53	0.13	5.4
January	44.8	1969	28.3	1972	39.1	4.58	0.12	4.99
February	44.7	1974	29	1972	37.4	3.97	0.11	4.77
March	47.3	1970	31.1	1972	39	4.95	0.13	4.97
April	93.6	1973	27.1	1972	51.2	18.2	0.36	6.53
May	184	1973	63.5	1974	112	34.3	0.31	14.3
June	400	1968	77.5	1971	204	82.5	0.4	26
July	239	1968	18.9	1971	112	60	0.54	14.3
August	92.4	1968	10.6	1971	37.5	22.8	0.61	4.79
September	48.6	1968	13.5	1971	28.9	10.6	0.37	3.69
Annual	105	1968	43.1	1971	65.5	17.2	0.26	100

14-0.000-3M KUNDUZ RIVER AT GERDAB, Continued

Monthly and annual flow duration, in cubic meters per second
 [Data may not be rounded in accordance with U.S. Geological Survey publication standards]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	23.4	30.2	28.7	28.8	29.4	29.6	22.8	26.6	67.7	19.9	11	12.3	19.7
90	29.2	31.1	36.4	33.7	32.1	31.4	28	37	88.7	29.4	14.4	15	26.5
85	30.4	33.5	38.1	34.5	33	32.1	30.6	47.1	102	37.8	15.3	17.3	29.8
80	32.8	34.8	38.5	35.1	33.6	33.1	32.5	53.7	113	45.2	16.6	19.5	32.2
75	33.4	36.2	38.9	35.9	34.3	34	34.2	58	123	55.2	18.1	20.8	34.3
70	34	38.4	39.5	36.4	35	34.8	36.7	66.5	148	66	20.1	22.1	36
65	34.6	39.6	40.5	36.8	35.6	35.7	38.1	76	163	74.8	23.6	23.9	37.4
60	35.4	40.1	41.7	37.4	35.9	36.7	39.5	86	174	80.4	26.9	25.3	38.9
55	36.4	40.5	42.3	39.3	36.3	37.7	41	95.2	185	88.1	28.8	26.1	40.4
50	37.3	40.9	42.8	40.1	37.1	38.9	42.6	105	198	95.4	30.7	27.1	41.8
45	38.9	41.5	43.3	40.9	37.8	39.6	45.1	113	212	104	33.2	28.3	43.3
40	40.3	42.2	43.9	41.5	38.7	40.2	50.2	123	228	114	36.1	29.8	44.7
35	41.8	43.3	44.7	42	39.1	40.7	54.8	131	244	130	41.2	31.5	47.5
30	44.3	46	45.6	42.5	39.7	41.2	58.1	141	257	143	45.1	33.2	50.3
25	46.8	47.2	46.4	43	40.4	41.9	62.7	156	266	157	48.4	36.5	57.1
20	48.1	48.3	46.9	43.4	41.4	43	67.4	171	275	174	53.6	42.2	78.9
15	48.9	49.5	47.5	43.8	42.5	45.3	73.4	188	293	195	62.5	43.6	110
10	50.2	51.8	48.5	44.3	43.6	48.2	85.3	202	320	216	72	45.3	154
5	51.6	55.2	51.2	45.5	44.2	53.7	106	230	372	250	88.3	47.7	217

14-0.000-3M KUNDUZ RIVER AT GERDAB, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	181	159	134	113	101
0.95	1.05	209	186	162	139	125
0.90	1.11	226	203	180	157	140
0.80	1.25	249	226	204	180	161
0.50	2	301	280	261	237	211
0.20	5	369	349	336	313	279
0.10	10	413	394	383	363	323
0.04	25	466	449	442	426	379
0.02	50	504	489	485	473	420
0.01	100	542	529	528	519	462
0.005	200	580	¹ 569	571	566	503
0.002	500	631	ng	ng	ng	ng

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

14-0.000-3M KUNDUZ RIVER AT GERDAB, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	7.95	8.3	8.59	9.47	10.8	12.6	16.1	18.9	23.4
0.10	10	10.2	10.6	10.9	11.7	13.2	15.6	19.3	22.3	26.6
0.20	5	13.4	13.9	14.2	15	16.7	19.7	23.6	26.7	30.5
0.50	2	21.3	21.8	22.3	23	24.9	28.6	32.2	35	37.5

14-0.000-3M KUNDUZ RIVER AT GERDAB, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	26.6	28.4	29.1	29.8	13	16.1	17.8	23.8
0.10	10	28.1	29.5	30.3	31.4	16.2	19.4	21.2	26.5
0.20	5	30	31	31.9	33.3	20.4	23.5	25.3	29.8
0.50	2	33.7	34.2	35	36.8	28.4	30.9	32.7	36
		June-July-August				September-October-November			
0.05	20	8.24	10.1	10.4	11.6	8.49	9.18	10.2	14.3
0.10	10	10.5	12.3	12.7	14.4	10.7	11.4	12.5	16.7
0.20	5	13.9	15.6	16.3	18.7	13.9	14.6	15.8	19.9
0.50	2	23.1	24.8	26.1	31.1	22.1	22.9	24.2	27.7

14-0.000-3M KUNDUZ RIVER AT GERDAB, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1964	June 29, 1964	275	1968	June 12, 1968	498
1965	June 23, 1965	317	1969	June 21, 1969	376
1966	June 19, 1966	358	1973	June 15, 1973	376
1967	June 8, 1967	274	1966	June 19, 1966	358
1968	June 12, 1968	498	1977	May 28, 1977	350
1969	June 21, 1969	376	1976	June 5, 1976	328
1970	May 19, 1970	224	1965	June 23, 1965	317
1971	May 21, 1971	252	1972	June 15, 1972	314
1972	June 15, 1972	314	1975	June 19, 1975	303
1973	June 15, 1973	376	1964	June 29, 1964	275
1974	June 19, 1974	220	1967	June 8, 1967	274
1975	June 19, 1975	303	1971	May 21, 1971	252
1976	June 5, 1976	328	1970	May 19, 1970	224
1977	May 28, 1977	350	1974	June 19, 1974	220
1978	June 6, 1978	210	1978	June 6, 1978	210

14-0.000-3M KUNDUZ RIVER AT GERDAB, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1964	--	--	--	--	--	--	--	74.5	196	138	40.3	22.1	--
1965	32.0	32.7	38.5	35.8	37.1	36.9	50.6	85.5	239	199	60.5	32.4	73.4
1966	39.2	41.1	43.2	39.0	36.1	46.8	72.6	134	263	105	49.2	43.4	76.1
1967	49.4	48.9	46.3	43.9	43.8	41.2	43.4	105	232	146	53.4	28.8	73.6
1968	44.6	42.1	47.3	41.9	35.8	34.2	66.5	164	400	239	92.4	48.6	105
1969	51.5	50.3	51.4	44.8	41.0	41.9	60.4	133	267	168	66.3	44.5	85.2
1970	49.6	56.8	46.5	42.2	38.6	47.3	49.1	108	110	58.0	30.5	29.8	55.6
1971	35.5	37.7	38.5	36.7	34.6	37.2	48.1	128	77.5	18.9	10.6	13.5	43.1
1972	23.3	29.4	28.4	28.3	29.0	31.1	27.1	68.9	238	110	22.4	18.9	54.5
1973	30.4	33.7	39.2	34.4	36.1	40.1	93.6	184	263	108	32.7	38.0	77.8
1974	43.0	40.4	44.5	43.4	44.7	44.5	27.6	63.5	116	52.3	17.5	16.5	46.1
1975	34.3	38.1	39.0	40.6	34.0	33.9	51.1	119	204	115	29.4	24.8	63.6
1976	39.7	44.2	42.0	36.2	38.0	38.0	55.0	116	152	107	24.5	23.7	59.7
1977	37.2	40.8	43.0	37.7	36.8	34.2	32.7	81.9	183	61.5	16.4	24.9	52.4
1978	33.0	48.1	45.0	42.7	37.5	38.4	38.3	117	120	49.6	16.9	23.7	50.9

14-0.000-4M KUNDUZ RIVER AT BAGHLAN

(U.S. Geological Survey identification number: 360600068400000)

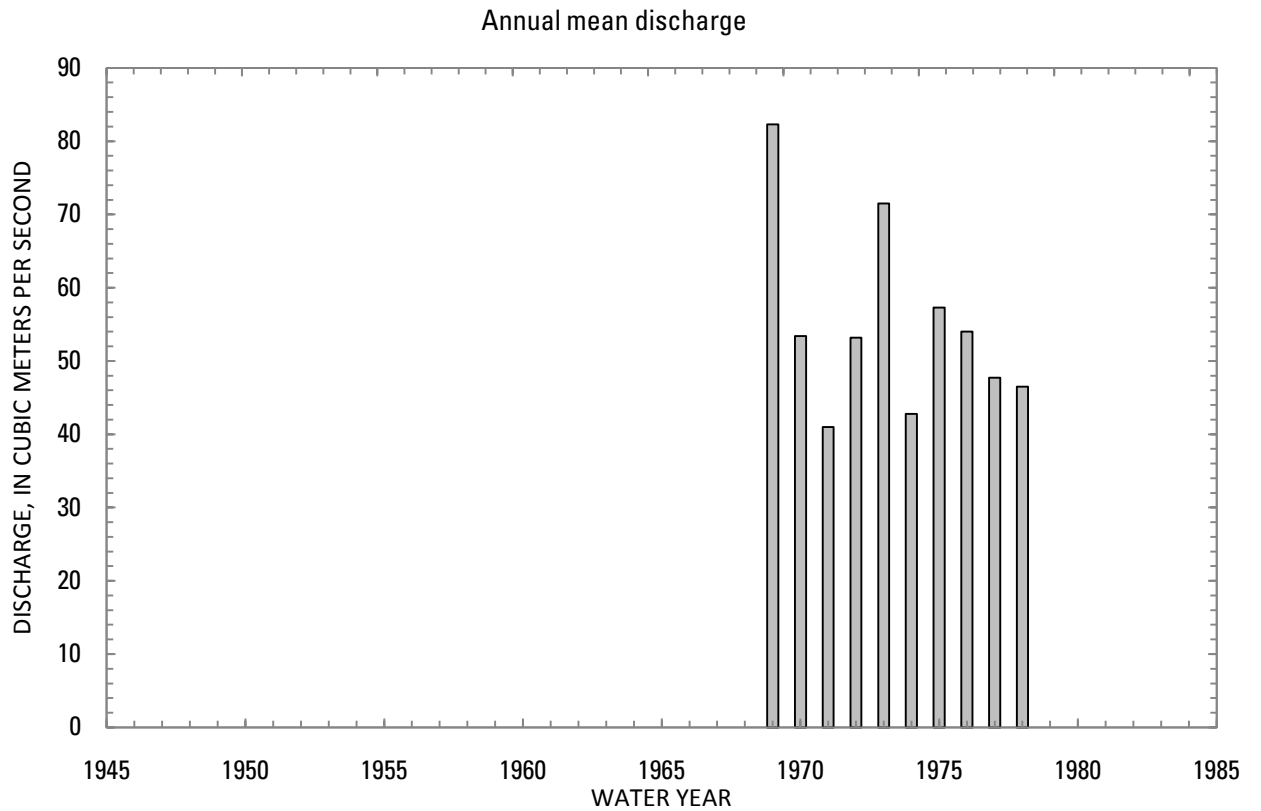
LOCATION: Lat 36°06'N., long 68°40'E.

DRAINAGE AREA: 19,740 km².

ELEVATION: 562 meters above mean sea level.

PERIOD OF RECORD: April 7, 1968 to September 30, 1978.

GAGE: Water-stage recorder.



14-0.000-4M KUNDUZ RIVER AT BAGHLAN, Continued

Statistics of monthly and annual mean discharges
[m³/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	43.8	1969	21.0	1972	32.5	7.15	0.22	4.60
November	48.5	1970	27.0	1972	35.2	6.73	0.19	4.99
December	45.1	1969	25.9	1972	34.8	5.31	0.15	4.94
January	38.4	1970	26.0	1972	32.0	3.49	0.11	4.54
February	35.4	1970	24.8	1978	29.8	3.40	0.11	4.23
March	37.7	1970	26.4	1972	32.3	3.77	0.12	4.58
April	82.2	1973	22.0	1972	43.4	17.4	0.40	6.15
May	169	1973	58.9	1972	111	35.0	0.32	15.7
June	375	1968	79.8	1971	184	85.6	0.46	26.1
July	248	1968	25.1	1971	102	64.7	0.64	14.4
August	97.1	1968	15.0	1971	39.7	25.4	0.64	5.63
September	48.9	1968	15.8	1971	29.1	10.6	0.37	4.13
Annual	82.3	1969	41.0	1971	55.0	12.9	0.23	100

14-0.000-4M KUNDUZ RIVER AT BAGHLAN, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	20.8	27.5	25.9	25.8	24.4	24.2	18.9	27.7	56.7	24.8	14.9	15.1	20.8
90	24.2	27.9	28.6	27.7	25.0	25.7	21.6	34.5	85.9	28.3	18.6	19.3	23.9
85	27.4	28.7	31.0	29.0	25.9	26.6	25.0	43.6	96.5	34.0	19.7	20.4	26.0
80	27.9	29.8	32.0	29.5	26.5	28.0	27.3	52.1	106	44.9	20.9	20.9	27.5
75	28.4	30.2	32.3	30.5	26.9	28.7	29.0	56.1	114	48.6	22.0	21.3	29.1
70	28.8	30.7	32.5	30.9	27.9	29.2	31.1	67.6	122	55.7	23.1	22.3	30.0
65	29.2	31.2	32.8	31.2	28.3	29.7	32.4	80.9	133	62.0	24.7	23.3	30.8
60	29.5	31.8	33.1	31.4	28.9	30.2	33.7	90.2	146	68.3	26.7	24.1	31.7
55	29.8	33.0	33.3	31.6	29.2	30.8	35.4	101	157	74.9	29.0	24.7	32.7
50	30.2	33.7	33.6	31.8	29.9	31.4	37.0	112	169	81.0	31.2	25.5	34.1
45	31.2	34.4	34.0	31.9	30.2	32.1	38.7	120	179	88.6	33.1	26.4	35.4
40	32.0	35.5	34.4	32.2	30.6	33.5	40.6	127	189	96.9	35.3	28.8	37.4
35	32.8	36.7	34.9	32.5	31.0	34.3	44.0	136	198	107	38.4	30.5	39.8
30	35.2	38.2	35.7	32.9	32.0	34.9	48.7	143	224	122	41.4	33.1	43.7
25	37.7	39.3	37.1	33.4	32.7	35.7	50.7	150	242	136	44.2	34.7	49.1
20	39.4	41.1	39.8	34.8	33.5	36.5	57.3	161	260	151	53.4	35.8	65.7
15	41.9	44.2	41.7	36.0	34.0	37.3	63.5	172	277	168	65.9	44.1	95.2
10	44.1	45.4	42.9	37.9	35.0	39.0	77.5	191	307	198	83.9	45.9	128
5	45.2	48.9	45.2	39.1	35.3	40.7	90.3	224	411	243	94.8	49.1	177

14-0.000-4M KUNDUZ RIVER AT BAGHLAN, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	166	143	122	106	97.0
0.95	1.05	192	167	145	127	115
0.90	1.11	208	181	158	140	127
0.80	1.25	231	200	177	158	142
0.50	2	286	242	219	199	178
0.20	5	362	292	274	251	225
0.10	10	412	322	308	285	255
0.04	25	477	358	349	327	291
0.02	50	525	383	379	357	318
0.01	100	574	¹ 406	409	387	345
0.005	200	625	¹ 429	438	417	371
0.002	500	694	ng	ng	ng	ng

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

14-0.000-4M KUNDUZ RIVER AT BAGHLAN, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	13.3	13.4	13.7	14.0	14.7	16.2	18.2	19.7	22.5
0.10	10	14.6	14.8	15.1	15.6	16.6	18.5	20.3	22.0	24.2
0.20	5	16.5	16.7	17.1	17.7	19.1	21.3	23.0	24.7	26.3
0.50	2	21.1	21.3	21.8	22.6	24.4	26.6	28.1	29.6	30.6

14-0.000-4M KUNDUZ RIVER AT BAGHLAN, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	21.8	22.6	23.1	24.1	16.1	17.1	18.3	22.2
0.10	10	22.9	23.6	24.3	25.2	18.1	19.1	20.2	23.9
0.20	5	24.3	24.9	25.7	26.7	20.6	21.6	22.7	26.1
0.50	2	27.3	27.8	28.6	29.5	25.2	26.2	27.2	30.2
		June-July-August				September-October-November			
0.05	20	14.2	14.4	14.6	15.2	13.9	14.1	14.9	16.4
0.10	10	15.6	15.9	16.3	17.4	15.7	15.9	16.8	18.3
0.20	5	17.9	18.3	19.0	21.0	18.2	18.5	19.5	21.0
0.50	2	24.9	25.6	27.3	31.8	24.3	24.7	25.9	27.3

14-0.000-4M KUNDUZ RIVER AT BAGHLAN, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1968	June 25, 1968	492	1968	June 25, 1968	492
1969	June 17, 1969	337	1972	June 22, 1972	338
1970	May 22, 1970	222	1969	June 17, 1969	337
1971	May 27, 1971	235	1973	June 9, 1973	331
1972	June 22, 1972	338	1977	May 29, 1977	327
1973	June 9, 1973	331	1976	May 24, 1976	320
1974	June 18, 1974	200	1975	June 16, 1975	286
1975	June 16, 1975	286	1971	May 27, 1971	235
1976	May 24, 1976	320	1970	May 22, 1970	222
1977	May 29, 1977	327	1978	June 5, 1978	214
1978	June 5, 1978	214	1974	June 18, 1974	200

14-0.000-4M KUNDUZ RIVER AT BAGHLAN, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1968	--	--	--	--	--	--	--	156	375	248	97.1	48.9	--
1969	43.8	43.6	45.1	36.8	33.7	35.0	59.9	122	261	180	78.4	47.3	82.3
1970	43.8	48.5	41.8	38.4	35.4	37.7	46.0	106	112	61.0	37.3	31.9	53.4
1971	30.6	32.0	33.3	30.5	28.3	32.5	45.5	123	79.8	25.1	15.0	15.8	41.0
1972	21.0	27.0	25.9	26.0	25.4	26.4	22.0	58.9	217	128	37.9	23.8	53.2
1973	29.2	30.7	34.3	32.1	30.6	34.6	82.2	169	242	98.0	40.3	34.9	71.5
1974	37.3	37.6	34.7	32.7	32.3	36.7	26.7	63.8	111	53.6	25.3	22.4	42.8
1975	28.3	29.8	32.8	32.0	29.2	29.3	42.0	114	184	104	35.3	25.8	57.3
1976	30.3	30.2	31.5	30.5	30.3	32.0	42.2	116	148	104	28.8	23.9	54.0
1977	31.3	36.6	35.5	31.5	28.0	30.9	31.8	71.3	170	61.0	20.7	23.9	47.7
1978	29.1	35.9	33.4	29.9	24.8	27.7	35.6	116	125	56.2	21.0	21.8	46.5

14-0.000-5S KUNDUZ RIVER AT PUL-I-KHUMRI

(U.S. Geological Survey identification number: 355600068430000)

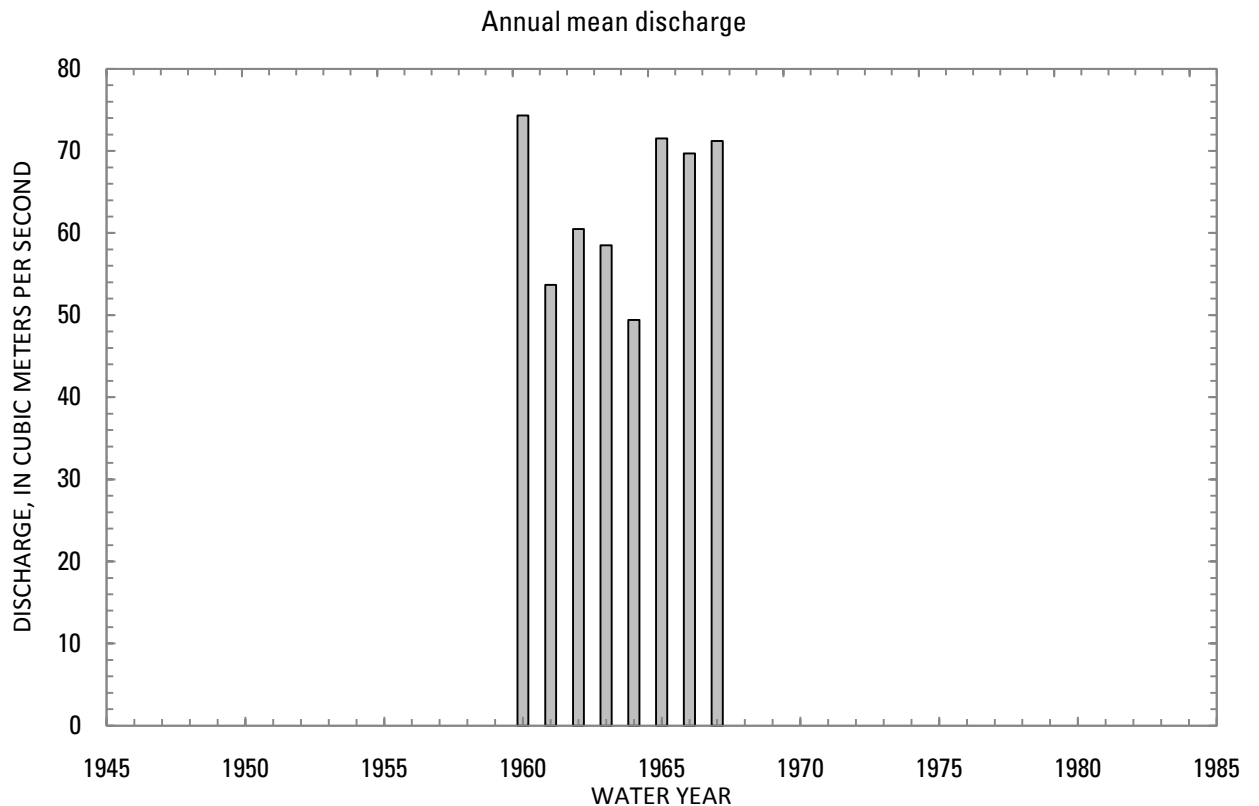
LOCATION: Lat 35°56'N., long 68°43'E.

DRAINAGE AREA: 17,405 km².

ELEVATION: 639 meters above mean sea level.

PERIOD OF RECORD: Monthly mean values April 1, 1950 to September 30 1959. Daily mean values October 1, 1959 to March 26, 1968.

GAGE: Water-stage recorder. Head works gage prior to January 1966 at hydropower station 2 km downstream.



14-0.000-5S KUNDUZ RIVER AT PUL-I-KHUMRI, Continued

Statistics of monthly and annual mean discharges
[m³/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	46.5	1968	26.6	1962	34.6	6.70	0.19	4.50
November	43.6	1968	25.3	1965	31.9	6.23	0.20	4.15
December	39.9	1968	22.6	1964	29.4	6.17	0.21	3.83
January	36.6	1966	20.0	1964	27.5	6.05	0.22	3.58
February	35.5	1966	20.6	1964	26.7	4.70	0.18	3.48
March	34.7	1966	20.3	1964	26.0	4.27	0.16	3.38
April	53.9	1966	26.5	1961	36.9	9.55	0.26	4.80
May	139	1966	67.5	1964	95.1	21.9	0.23	12.4
June	261	1963	153	1964	224	36.9	0.16	29.2
July	229	1960	97.2	1966	143	53.7	0.38	18.6
August	81.8	1960	40.2	1963	56.7	15.3	0.27	7.38
September	44.2	1966	28.8	1963	36.5	6.37	0.17	4.74
Annual	74.3	1960	49.4	1964	63.6	9.31	0.15	100

14-0.000-5S KUNDUZ RIVER AT PUL-I-KHUMRI, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	22.3	23.4	21.2	20.2	20.2	20.0	22.4	41.7	111	65.8	31.1	26.8	21.4
90	25.4	24.4	22.9	20.4	20.4	20.2	24.0	53.6	141	74.7	32.7	27.5	23.1
85	27.8	25.2	23.5	21.1	22.2	21.5	24.9	60.0	153	80.4	36.3	28.2	24.1
80	29.1	25.9	24.2	22.4	22.8	21.8	25.6	66.0	163	84.9	38.4	28.6	25.1
75	30.2	27.0	24.6	23.1	23.1	22.7	26.3	69.8	171	90.4	42.4	29.5	26.3
70	31.0	27.5	24.9	23.5	23.4	23.1	26.9	72.6	182	96.1	45.4	30.6	27.7
65	31.6	28.4	25.3	23.7	23.6	23.7	27.5	75.1	198	103	48.2	31.6	29.3
60	32.1	29.2	25.9	24.2	24.1	24.0	28.7	78.1	211	113	50.6	33.0	31.0
55	32.6	30.1	26.5	24.7	24.6	24.5	30.5	81.7	220	122	52.2	34.5	32.7
50	33.2	31.2	27.4	25.2	25.2	25.0	32.1	86.4	232	130	54.0	36.8	34.5
45	34.5	31.8	28.4	26.0	26.8	25.6	33.5	90.3	242	136	56.0	37.6	36.3
40	35.0	33.0	29.8	27.5	27.6	26.1	35.1	95.1	252	141	58.5	40.0	39.5
35	36.4	34.4	31.9	29.6	29.0	27.0	36.7	101	261	148	61.2	40.9	43.7
30	37.8	34.7	34.5	33.6	29.7	27.7	40.2	107	269	156	63.3	42.0	53.6
25	40.2	35.1	35.0	34.4	30.4	28.5	44.2	115	277	178	65.2	42.9	68.3
20	42.5	38.2	35.7	34.9	31.0	29.3	48.3	126	285	198	69.9	43.5	84.8
15	43.8	39.6	36.9	35.5	31.8	31.8	53.0	138	295	223	76.1	44.4	116
10	44.9	42.4	38.6	36.2	32.7	34.2	59.6	152	306	246	80.9	45.7	159
5	46.2	43.8	40.5	37.1	35.5	34.9	67.5	183	322	283	95.8	47.1	236

14-0.000-5S KUNDUZ RIVER AT PUL-I-KHUMRI, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	235	233	229	191	158
0.95	1.05	265	257	247	213	180
0.90	1.11	280	269	256	225	192
0.80	1.25	299	284	268	241	207
0.50	2	334	311	292	271	238
0.20	5	365	335	317	303	270
0.10	10	380	346	330	320	287
0.04	25	394	358	345	338	306
0.02	50	403	364	355	350	318
0.01	100	410	370	363	361	329
0.005	200	416	375	372	371	340
0.002	500	423	ng	ng	ng	ng

¹Less than 10 years of data used.

14-0.000-5S KUNDUZ RIVER AT PUL-I-KHUMRI, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	18.8	18.9	19.4	19.5	19.6	19.8	19.7	20.1	22.0
0.10	10	19.2	19.6	20.1	20.3	20.3	20.6	20.6	21.1	23.0
0.20	5	19.7	20.4	21.0	21.4	21.4	21.7	21.9	22.5	24.4
0.50	2	21.1	22.2	22.8	23.6	24.1	24.6	25.2	25.9	27.7

14-0.000-5S KUNDUZ RIVER AT PUL-I-KHUMRI, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	18.4	19.1	19.4	19.6	19.1	19.8	19.9	20.6
0.10	10	19.1	20.0	20.4	20.6	19.4	20.3	20.5	21.2
0.20	5	20.2	21.3	21.8	22.1	19.9	21.0	21.5	22.3
0.50	2	22.7	24.1	24.8	25.5	21.7	23.1	23.9	24.9
		June-July-August				September-October-November			
0.05	20	25.2	27.4	28.8	35.7	17.3	19.2	20.4	21.7
0.10	10	27.4	30.1	31.8	38.9	18.9	20.8	22.0	23.3
0.20	5	30.6	33.6	35.7	43.2	21.1	23.0	24.2	25.4
0.50	2	37.8	41.6	44.6	53.5	26.5	28.2	29.3	30.3

14-0.000-5S KUNDUZ RIVER AT PUL-I-KHUMRI, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest ²		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1950	June 15, 1950	403 ¹	1960	July 3, 1960	382
1951	May 29, 1951	280 ¹	1965	June 22, 1965	368
1952	June 22, 1952	305 ¹	1966	June 18, 1966	358
1953	June 14, 1953	373 ¹	1962	June 13, 1962	338
1954	June 4, 1954	406 ¹	1963	June 8, 1963	320
1955	June 12, 1955	727 ¹	1961	June 3, 1961	319
1956	July 27, 1956	208 ¹	1967	June 14, 1967	300
1957	June 12, 1957	416 ¹	1964	June 28, 1964	264
1958	June 18, 1958	408 ¹			
1959	June 4, 1959	358 ¹			
1960	July 3, 1960	382			
1961	June 3, 1961	319			
1962	June 13, 1962	338			
1963	June 8, 1963	320			
1964	June 28, 1964	264			
1965	June 22, 1965	368			
1966	June 18, 1966	358			
1967	June 14, 1967	300			

¹ Published as a maximum daily discharge.

² Only instantaneous annual peaks shown.

14-0.000-5S KUNDUZ RIVER AT PUL-I-KHUMRI, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1960	33.1	31.1	27.2	25.1	26.0	24.4	35.5	95.4	241	229	81.8	41.1	74.3
1961	36.6	31.3	29.2	26.4	24.8	25.5	26.5	82.6	191	99.3	41.1	30.0	53.7
1962	26.6	26.8	24.0	23.3	24.0	27.5	48.0	110	216	115	49.3	34.5	60.5
1963	32.3	28.8	26.2	25.2	24.7	24.7	29.3	83.1	261	97.8	40.2	28.8	58.5
1964	30.7	26.1	22.6	20.0	20.6	20.3	29.3	67.5	153	127	45.7	29.8	49.4
1965	27.2	25.3	24.3	22.2	23.2	23.0	36.8	83.9	261	217	71.7	40.8	71.5
1966	34.9	35.0	34.5	36.6	35.5	34.7	53.9	139	232	97.2	57.9	44.2	69.7
1967	43.1	39.0	36.6	34.0	30.5	27.9	35.8	99.5	240	159	65.7	42.4	71.2
1968	46.5	43.6	39.9	34.8	31.2	--	--	--	--	--	--	--	--

14-0.000-6M KUNDUZ RIVER AT PUL-I-KONDA SANG

(U.S. Geological Survey identification number: 353600068360000)

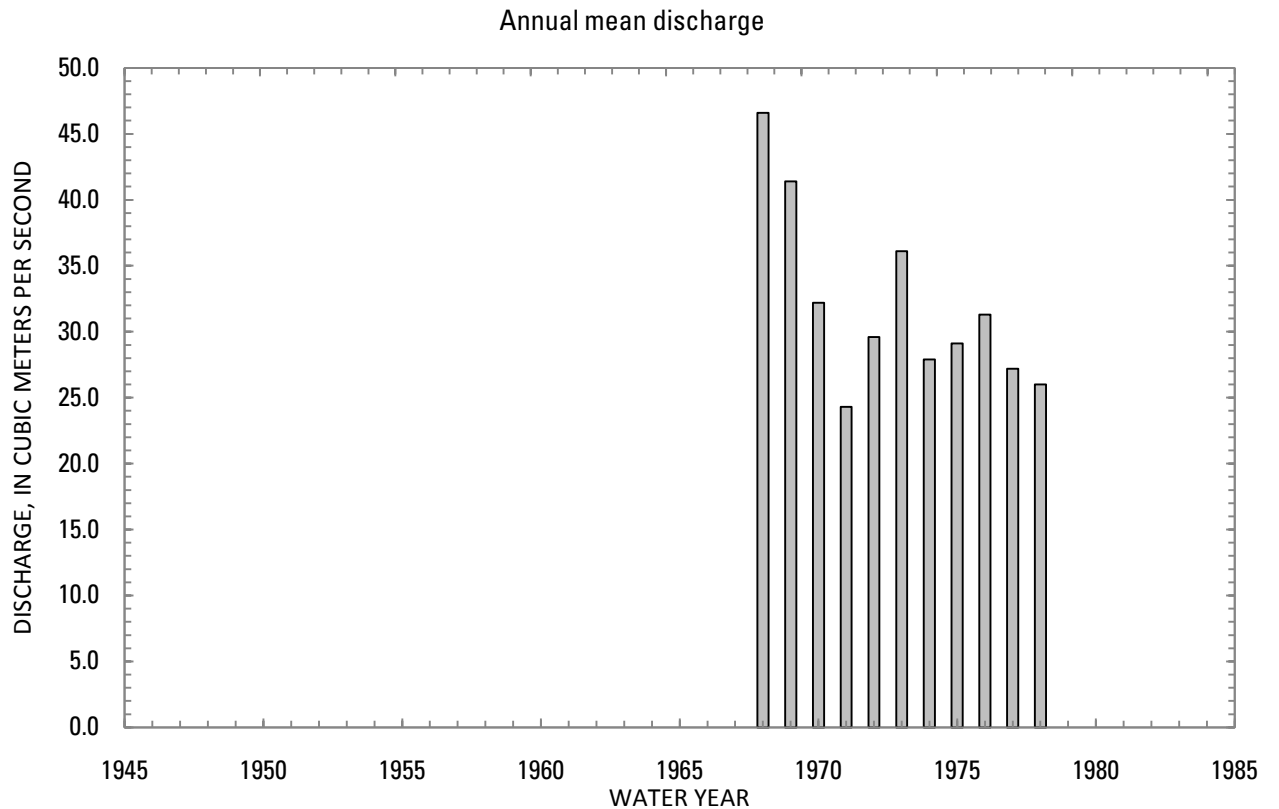
LOCATION: Lat 35°36'N., long 68°36'E.

DRAINAGE AREA: 12,610 km².

ELEVATION: 899 meters above mean sea level.

PERIOD OF RECORD: October 1, 1967 to September 30, 1978.

GAGE: Water-stage recorder.



14-0.000-6M KUNDUZ RIVER AT PUL-I-KONDA SANG, Continued

Statistics of monthly and annual mean discharges
[m³/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	29.6	1970	14.2	1978	22.2	4.64	0.21	5.78
November	28.6	1970	14.5	1978	21.3	4.20	0.20	5.56
December	25.9	1970	11.5	1978	19.4	4.00	0.21	5.06
January	23.2	1970	13.8	1978	18.1	2.94	0.16	4.73
February	23.0	1970	14.0	1976	17.6	2.87	0.16	4.58
March	22.8	1974	14.8	1978	18.1	2.71	0.15	4.71
April	29.3	1968	16.7	1971	21.3	4.52	0.21	5.55
May	64.3	1971	35.0	1972	51.4	11.7	0.23	13.4
June	166	1968	41.8	1971	92.6	33.4	0.36	24.2
July	98.9	1968	17.8	1971	52.8	23.6	0.45	13.8
August	42.9	1968	16.2	1977	26.6	8.56	0.32	6.92
September	33.3	1968	15.1	1977	22.2	6.06	0.27	5.78
Annual	46.6	1968	26.0	1978	32.0	6.84	0.21	100

14-0.000-6M KUNDUZ RIVER AT PUL-I-KONDA SANG, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	14.3	13.0	11.5	13.8	13.8	14.4	14.1	16.0	40.8	17.6	16.0	15.0	14.5
90	16.7	16.7	13.8	14.4	14.0	14.8	14.8	20.0	52.7	20.5	16.6	15.2	15.2
85	17.7	17.2	15.9	15.2	14.5	15.2	15.2	22.4	59.2	25.0	17.3	16.0	16.0
80	18.2	18.1	16.6	15.7	14.9	15.4	16.0	26.8	65.6	28.9	18.7	17.0	16.6
75	19.1	19.1	17.0	15.8	15.3	15.9	16.5	30.9	70.2	31.5	21.1	17.3	17.3
70	19.3	19.5	17.3	16.1	15.8	16.1	17.0	34.6	73.7	34.4	21.9	18.1	18.1
65	19.6	19.7	18.0	16.7	16.0	16.6	17.4	38.9	76.7	37.6	22.5	18.5	19.0
60	19.8	19.9	18.3	16.9	16.6	16.8	18.2	40.7	80.2	40.9	23.0	19.3	19.9
55	20.4	20.1	19.1	17.2	16.8	17.0	19.4	43.2	84.0	43.9	23.9	19.9	20.7
50	22.8	20.4	19.3	17.6	17.0	17.3	20.0	47.0	87.9	46.5	24.9	20.4	21.7
45	23.2	20.8	19.7	18.2	17.2	18.1	20.5	49.1	91.6	50.3	25.7	23.0	22.8
40	23.6	22.3	20.1	18.7	17.4	18.8	21.1	54.0	95.1	55.3	26.3	23.6	24.0
35	24.5	22.8	20.5	19.0	18.2	19.2	22.0	58.4	101	59.8	27.3	24.1	25.2
30	24.7	23.4	21.5	19.6	19.1	19.6	23.8	62.7	106	63.8	28.1	24.5	27.3
25	25.2	24.2	22.1	20.2	19.8	20.4	24.7	69.0	110	67.4	30.4	25.0	30.8
20	25.8	25.5	22.9	21.0	20.7	20.8	25.7	76.0	119	73.1	33.0	25.5	38.2
15	26.8	27.2	24.6	22.0	21.9	21.1	28.5	80.9	127	83.0	35.2	31.2	52.0
10	28.5	28.1	25.3	22.7	22.2	22.0	30.2	88.5	144	91.9	39.7	32.0	70.6
5	29.4	29.1	25.9	22.9	22.6	22.4	33.0	101	172	109	47.4	33.6	93.0

14-0.000-6M KUNDUZ RIVER AT PUL-I-KONDA SANG, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	97.0	81.3	76.4	73.5	66.8
0.95	1.05	104	86.9	81.6	77.6	70.5
0.90	1.11	109	91.1	85.5	80.9	73.4
0.80	1.25	117	97.5	91.6	86.2	78.1
0.50	2	138	116	109	102	92.1
0.20	5	170	145	138	130	117
0.10	10	194	168	160	152	136
0.04	25	227	200	192	184	164
0.02	50	254	226	218	211	188
0.01	100	282	255	247	241	214
0.005	200	313	286	279	274	243
0.002	500	357	ng	ng	ng	ng

14-0.000-6M KUNDUZ RIVER AT PUL-I-KONDA SANG, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	9.39	10.4	10.7	11.4	11.8	12.5	13.1	13.6	14.2
0.10	10	10.1	10.9	11.2	12.0	12.7	13.4	13.9	14.4	15.1
0.20	5	11.0	11.6	12.0	12.8	13.8	14.5	15.0	15.5	16.3
0.50	2	13.0	13.3	13.9	14.8	16.1	16.9	17.3	17.7	19.0

14-0.000-6M KUNDUZ RIVER AT PUL-I-KONDA SANG, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	10.9	11.3	11.6	12.0	9.80	11.6	13.0	13.9
0.10	10	11.7	12.1	12.4	13.0	10.9	12.4	13.6	14.5
0.20	5	12.8	13.1	13.5	14.2	12.2	13.5	14.5	15.3
0.50	2	15.1	15.5	15.9	16.7	14.7	15.7	16.3	17.1
		June-July-August				September-October-November			
0.05	20	12.9	13.8	14.5	15.7	12.2	12.4	12.6	14.4
0.10	10	14.5	15.3	15.9	17.2	13.4	13.8	14.0	15.4
0.20	5	16.7	17.3	18.0	19.3	15.0	15.5	15.7	16.8
0.50	2	21.6	21.9	22.7	24.7	18.3	18.9	19.4	20.0

14-0.000-6M KUNDUZ RIVER AT PUL-I-KONDA SANG, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1968	June 10, 1968	236	1968	June 10, 1968	236
1969	June 17, 1969	150	1973	June 4, 1973	180
1970	May 22, 1970	133	1972	June 22, 1972	154
1971	May 20, 1971	126	1976	June 3, 1976	154
1972	June 22, 1972	154	1969	June 17, 1969	150
1973	June 4, 1973	180	1975	June 17, 1975	142
1974	June 4, 1974	114	1970	May 22, 1970	133
1975	June 17, 1975	142	1971	May 20, 1971	126
1976	June 3, 1976	154	1974	June 4, 1974	114
1977	June 23, 1977	113	1977	June 23, 1977	113
1978	June 7, 1978	106	1978	June 7, 1978	106

14-0.000-6M KUNDUZ RIVER AT PUL-I-KONDA SANG, Continued

Monthly and annual mean discharges, in cubic meters per second
 [Data may not be rounded in accordance with U.S. Geological Survey publication standards]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1968	25.8	24.0	22.0	19.9	16.8	17.0	29.3	63.1	166	98.9	42.9	33.3	46.6
1969	27.5	27.5	25.0	22.2	21.5	20.5	29.2	54.3	114	82.1	40.4	31.7	41.4
1970	29.6	28.6	25.9	23.2	23.0	21.6	23.4	63.1	60.9	34.8	26.6	24.5	32.2
1971	24.1	20.8	19.3	16.8	19.0	16.8	16.7	64.3	41.8	17.8	16.8	16.8	24.3
1972	17.5	16.9	16.3	15.1	15.9	17.5	17.2	35.0	95.9	62.7	26.5	19.2	29.6
1973	19.9	18.8	17.5	16.5	16.7	20.0	21.9	63.3	125	59.1	29.8	24.3	36.1
1974	23.2	20.5	18.2	18.8	16.9	22.8	21.5	41.1	74.8	39.0	20.3	17.8	27.9
1975	18.8	19.7	18.6	16.7	15.7	15.1	18.2	35.6	91.9	54.7	23.4	20.7	29.1
1976	19.2	20.5	18.5	16.4	14.0	16.0	18.5	53.3	87.9	61.3	25.8	23.9	31.3
1977	24.0	22.6	20.5	19.9	19.3	16.6	17.1	39.6	82.7	32.6	16.2	15.1	27.2
1978	14.2	14.5	11.5	13.8	14.2	14.8	20.9	52.1	77.9	37.8	23.3	16.6	26.0

14-0.000-8M KUNDUZ RIVER AT DASHT-I-SAFED

(U.S. Geological Survey identification number: 351800067550000)

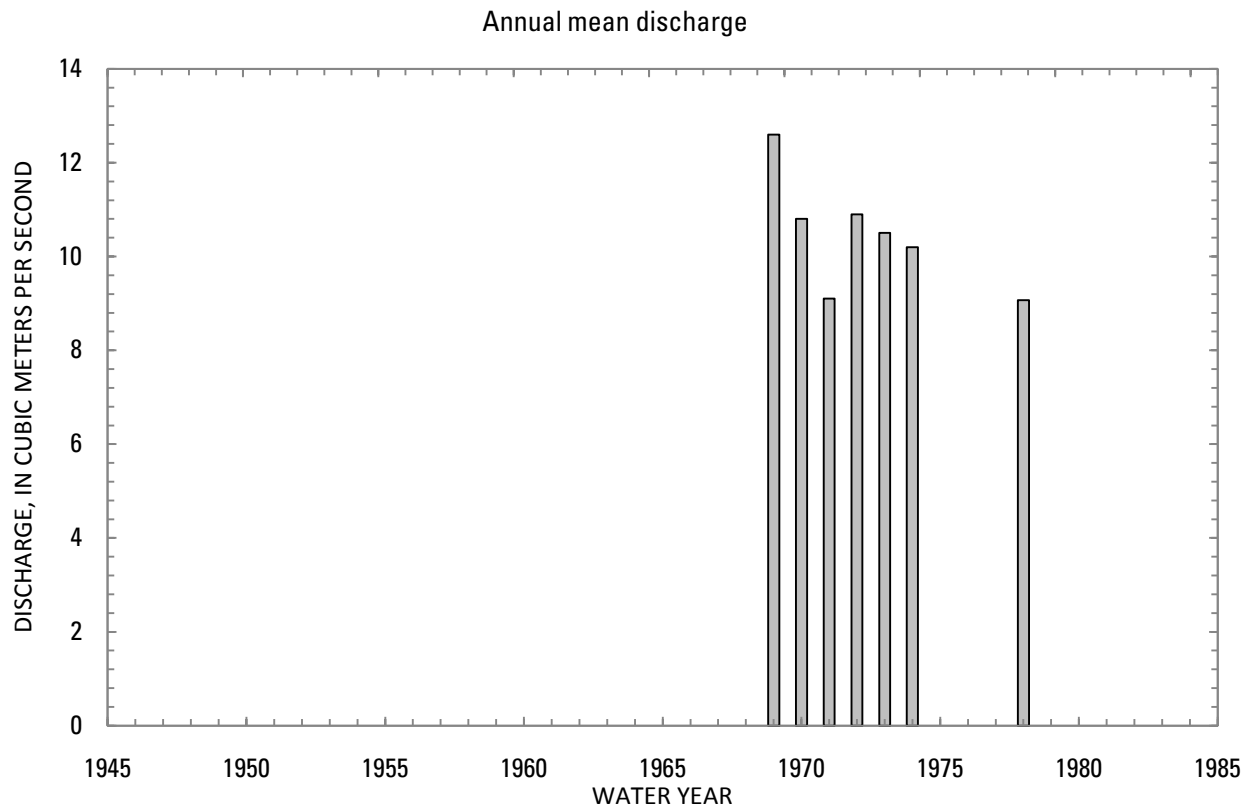
LOCATION: Lat 35°18'N., long 67°55'E.

DRAINAGE AREA: 3,795 km².

ELEVATION: 1,588 meters above mean sea level.

PERIOD OF RECORD: October 12, 1967 to May 5, 1975 and August 13, 1977 to September 30, 1978.

GAGE: Water-stage recorder. Site damaged by floods on May 5, 1975 and re-established 10 km downstream (Kunduz River at Doab) on August 13, 1977.



14-0.000-8M KUNDUZ RIVER AT DASHT-I-SAFED, Continued

Statistics of monthly and annual mean discharges
[m³/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	13.0	1970	8.78	1971	10.6	1.67	0.16	8.33
November	12.8	1970	7.91	1971	9.96	1.38	0.14	7.85
December	13.5	1970	7.64	1971	10.5	1.81	0.17	8.31
January	13.7	1969	9.37	1972	11.0	1.48	0.13	8.65
February	12.9	1969	8.22	1978	10.2	1.46	0.14	8.02
March	12.5	1969	7.07	1978	9.51	1.54	0.16	7.49
April	12.4	1969	7.64	1978	9.62	1.43	0.15	7.58
May	14.2	1972	8.13	1974	10.4	1.93	0.19	8.21
June	21.7	1972	7.32	1971	13.4	5.52	0.41	10.5
July	13.8	1968	8.31	1970	11.2	1.90	0.17	8.80
August	12.7	1968	8.82	1970	10.5	1.22	0.12	8.28
September	12.8	1969	8.49	1972	10.1	1.66	0.16	7.96
Annual	12.6	1969	9.07	1978	10.5	1.21	0.12	100

14-0.000-8M KUNDUZ RIVER AT DASHT-I-SAFED, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	8.35	7.61	7.26	9.22	7.94	7.01	7.16	7.92	7.19	8.08	8.41	7.67	7.56
90	8.73	7.69	7.74	9.26	8.29	7.14	7.62	8.13	7.37	8.52	8.89	8.07	7.95
85	8.80	8.41	8.86	9.30	8.40	7.55	8.11	8.34	8.05	8.88	9.05	8.35	8.32
80	8.87	8.77	8.98	9.34	8.49	8.46	8.32	8.55	8.57	9.29	9.13	8.47	8.68
75	9.25	8.92	9.61	10.2	8.57	8.84	8.52	8.91	9.00	9.44	9.21	8.90	9.03
70	9.30	9.10	9.73	10.3	9.67	9.06	8.92	9.23	9.65	9.58	9.29	9.14	9.28
65	9.35	9.64	9.90	10.4	10.1	9.20	9.17	9.39	9.88	10.2	9.75	9.19	9.45
60	10.1	9.70	10.2	10.6	10.2	9.32	9.39	9.50	10.1	10.9	10.1	9.24	9.61
55	10.1	9.75	10.3	10.6	10.2	9.48	9.54	9.61	10.5	11.0	10.4	9.29	9.78
50	10.2	9.99	10.7	10.7	10.4	9.59	9.64	9.72	10.9	11.3	10.7	9.70	10.1
45	10.6	10.1	10.9	10.7	10.5	9.74	9.74	9.84	11.2	11.6	10.9	9.82	10.4
40	11.0	10.2	11.0	10.7	10.6	9.92	9.89	9.97	12.2	11.7	11.0	10.2	10.7
35	11.2	10.4	11.1	11.0	10.7	9.97	10.1	10.1	12.6	12.0	11.1	11.0	10.9
30	11.9	10.6	11.4	11.5	10.8	10.0	10.4	10.5	14.8	12.1	11.2	11.5	11.1
25	12.3	10.7	11.6	12.0	11.1	10.1	10.5	10.8	15.5	12.9	11.6	11.6	11.6
20	12.5	11.0	12.1	12.3	11.2	10.2	10.7	11.1	17.1	13.4	11.9	11.9	12.1
15	12.6	11.1	12.5	13.0	11.5	10.6	10.8	11.7	19.4	13.7	12.1	12.1	12.4
10	12.9	12.1	13.0	13.4	12.6	12.2	11.3	12.6	21.6	ng	12.4	12.6	12.9
5	13.1	13.0	13.5	ng	12.8	ng	11.9	13.4	26.7	ng	ng	ng	13.5

14-0.000-8M KUNDUZ RIVER AT DASHT-I-SAFED, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	10.6	10.6	10.5	10.3	9.90
0.95	1.05	12.0	10.8	10.7	10.5	10.1
0.90	1.11	13.0	10.9	10.9	10.7	10.4
0.80	1.25	14.6	11.4	11.4	11.2	10.9
0.50	2	19.6	13.8	13.6	13.4	12.8
0.20	5	29.0	20.8	19.5	18.8	17.1
0.10	10	37.1	28.7	25.6	24.3	21.0
0.04	25	49.8	44.2	36.8	34.2	27.5
0.02	50	61.5	61.4	48.5	44.3	33.7
0.01	100	75.2	85.5	63.8	57.3	41.2
0.005	200	91.5	119	84.1	74.1	50.3
0.002	500	118	ng	ng	ng	ng

¹Less than 10 years of data used.

14-0.000-8M KUNDUZ RIVER AT DASHT-I-SAFED, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	6.43	6.44	6.42	6.55	6.76	7.23	7.58	7.94	8.02
0.10	10	6.68	6.71	6.71	6.84	7.07	7.52	7.94	8.33	8.45
0.20	5	7.02	7.06	7.10	7.23	7.48	7.91	8.41	8.83	9.02
0.50	2	7.81	7.87	7.97	8.11	8.40	8.80	9.44	9.90	10.2

14-0.000-8M KUNDUZ RIVER AT DASHT-I-SAFED, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	6.69	6.73	7.04	7.47	5.81	6.14	6.36	6.69
0.10	10	7.15	7.20	7.47	7.90	6.19	6.50	6.71	7.06
0.20	5	7.73	7.80	8.03	8.46	6.70	6.98	7.18	7.56
0.50	2	8.91	9.01	9.20	9.62	7.84	8.07	8.26	8.69
		June-July-August				September-October-November			
0.05	20	6.57	6.89	6.97	7.12	6.68	6.81	7.04	7.76
0.10	10	6.98	7.29	7.41	7.65	7.03	7.14	7.34	8.01
0.20	5	7.54	7.84	8.00	8.32	7.51	7.60	7.77	8.38
0.50	2	8.86	9.10	9.31	9.75	8.65	8.70	8.84	9.33

14-0.000-8M KUNDUZ RIVER AT DASHT-I-SAFED, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1968	June 11, 1968	28.0	1972	June 2, 1972	47.0
1969	June 7, 1969	18.0	1968	June 11, 1968	28.0
1970	April 27, 1970	16.5	1978	April 26, 1978	27.5
1971	April 4, 1971	18.2	1971	April 4, 1971	18.2
1972	June 2, 1972	47.0	1969	June 7, 1969	18.0
1973	January 5, 1973	12.9	1970	April 27, 1970	16.5
1974	July 23, 1974	14.9	1974	July 23, 1974	14.9
1978	April 26, 1978	27.5	1973	January 5, 1973	12.9

14-0.000-8M KUNDUZ RIVER AT DASHT-I-SAFED, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1968	--	8.95	9.86	10.4	10.5	10.00	10.4	10.6	20.9	13.8	12.7	11.8	--
1969	12.2	10.1	12.2	13.7	12.9	12.5	12.4	11.8	15.9	13.4	11.3	12.8	12.6
1970	13.0	12.8	13.5	12.6	11.1	10.1	10.2	10.7	9.72	8.31	8.82	8.66	10.8
1971	8.78	7.91	7.64	9.85	10.5	10.0	10.1	8.54	7.32	9.95	9.57	9.06	9.10
1972	9.04	9.58	10.2	9.37	8.52	8.97	8.29	14.2	21.7	11.3	10.7	8.49	10.9
1973	10.2	10.8	11.4	11.9	8.99	7.79	9.52	9.58	11.00	11.5	11.2	12.0	10.5
1974	12.1	10.5	11.4	10.8	10.9	9.50	8.34	8.13	8.74	11.7	10.0	9.99	10.2
1975	10.4	9.86	10.2	10.7	10.0	9.67	9.72	--	--	--	--	--	--
1977	--	--	--	--	--	--	--	--	--	--	--	8.62	--
1978	8.85	9.13	8.47	9.46	8.22	7.07	7.64	9.84	11.5	9.35	9.80	9.47	9.07

14-1.1L0-1A BANGI RIVER AT PUL-I-BANGI

(U.S. Geological Survey identification number: 364200069150000)

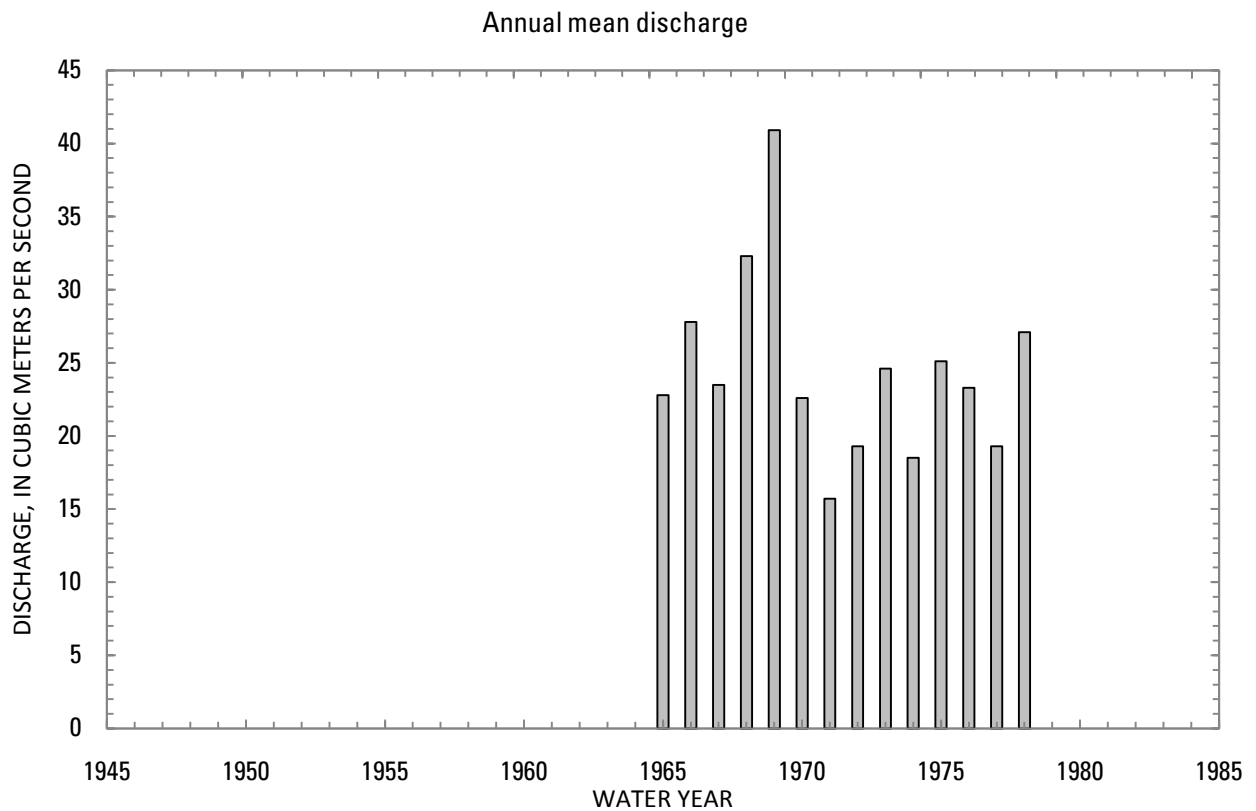
LOCATION: Lat 36°42'N., long 69°15'E.

DRAINAGE AREA: 4,200 km².

ELEVATION: 610 meters above mean sea level.

PERIOD OF RECORD: August 19, 1964 to September 30, 1978.

GAGE: Water-stage recorder.



14-1.1L0-1A BANGI RIVER AT PUL-I-BANGI, Continued

Statistics of monthly and annual mean discharges
[m³/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	20.9	1970	9.01	1972	13.2	3.12	0.24	4.51
November	17.3	1970	9.20	1975	12.9	2.42	0.19	4.41
December	17.6	1969	9.52	1972	12.8	2.26	0.18	4.36
January	17.1	1969	8.98	1972	12.2	2.08	0.17	4.15
February	17.0	1969	7.76	1975	11.7	2.51	0.21	3.99
March	21.5	1969	7.55	1975	12.7	3.70	0.29	4.33
April	43.4	1969	8.93	1977	21.2	8.61	0.41	7.24
May	57.0	1969	27.6	1972	39.9	10.1	0.25	13.6
June	113	1966	34.9	1971	72.1	25.1	0.35	24.6
July	107	1969	12.7	1971	50.0	25.5	0.51	17.1
August	51.3	1969	9.02	1971	21.5	11.0	0.51	7.32
September	23.6	1969	7.51	1971	13.0	3.79	0.29	4.43
Annual	40.9	1969	15.7	1971	24.5	6.35	0.26	100

14-1.1L0-1A BANGI RIVER AT PUL-I-BANGI, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	9.05	9.11	9.59	9.20	8.05	7.61	8.53	13.0	30.2	13.1	9.76	7.94	8.75
90	9.41	9.63	10.4	9.50	8.55	8.04	10.0	16.5	35.0	18.3	10.9	8.42	9.61
85	10.0	10.7	10.7	9.98	8.80	8.89	11.1	19.8	38.2	23.1	12.3	8.84	10.4
80	10.4	11.1	10.9	10.3	9.06	9.50	12.7	24.4	41.2	26.0	13.1	9.65	11.1
75	10.7	11.5	11.3	10.5	9.40	9.92	13.4	27.2	45.5	28.8	13.7	11.0	11.7
70	11.5	11.7	11.6	10.9	10.3	10.2	13.9	29.1	49.6	31.3	14.6	11.7	12.2
65	12.1	11.9	11.8	11.4	10.8	10.5	14.4	30.7	51.6	33.6	15.5	12.0	12.6
60	12.5	12.1	11.9	11.7	11.2	10.9	15.3	32.6	54.1	36.7	16.3	12.2	13.1
55	12.7	12.3	12.1	11.9	11.5	11.5	16.4	34.9	58.8	39.2	17.0	12.6	13.5
50	12.9	12.6	12.3	12.1	11.7	11.9	17.5	37.1	63.5	42.7	17.8	12.9	14.2
45	13.2	12.7	12.5	12.4	11.8	12.5	18.5	39.5	67.1	47.9	18.7	13.2	15.0
40	13.8	12.8	12.8	12.7	12.3	12.8	20.5	41.6	71.1	52.0	19.6	13.4	16.4
35	14.1	13.6	13.0	12.9	12.7	13.3	22.0	44.2	76.0	56.0	20.7	13.7	18.2
30	14.5	14.0	13.3	13.0	13.0	13.8	23.3	47.8	81.4	59.5	22.0	14.0	20.9
25	15.1	14.2	13.8	13.2	13.3	14.2	24.5	51.2	86.7	63.2	24.5	14.5	26.6
20	15.4	15.1	14.1	13.8	13.7	15.1	27.8	54.6	93.7	70.6	27.9	15.0	33.2
15	15.6	15.9	15.4	14.0	14.2	16.8	30.1	59.5	108	75.5	31.7	15.5	42.5
10	16.3	17.1	16.9	14.5	15.0	19.5	34.8	64.0	123	93.8	37.1	16.1	55.7
5	20.1	17.4	17.6	16.7	17.1	21.2	45.9	74.2	154	117	49.6	22.4	73.7

14-1.1L0-1A BANGI RIVER AT PUL-I-BANGI, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	40.6	51.9	48.1	42.1	37.6
0.95	1.05	67.9	62.8	57.8	51.0	45.4
0.90	1.11	88.1	70.2	64.5	56.9	50.4
0.80	1.25	120	81.3	74.3	65.2	57.3
0.50	2	207	111	100	86.1	74.0
0.20	5	343	160	142	116	96.8
0.10	10	439	197	173	138	112
0.04	25	564	250	217	165	131
0.02	50	658	294	253	187	146
0.01	100	754	343	293	210	161
0.005	200	850	396	335	233	176
0.002	500	978	ng	ng	ng	ng

14-1.1L0-1A BANGI RIVER AT PUL-I-BANGI, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	5.68	5.88	5.94	6.17	6.94	7.58	8.18	8.71	9.09
0.10	10	6.37	6.57	6.65	6.84	7.54	8.17	8.74	9.21	9.71
0.20	5	7.26	7.44	7.56	7.73	8.35	8.95	9.48	9.88	10.5
0.50	2	9.05	9.19	9.46	9.67	10.1	10.6	11.1	11.4	12.2

14-1.1L0-1A BANGI RIVER AT PUL-I-BANGI, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	7.56	7.60	7.73	8.14	6.17	6.71	7.04	7.72
0.10	10	8.00	8.12	8.28	8.66	6.86	7.37	7.72	8.46
0.20	5	8.62	8.82	9.02	9.36	7.79	8.29	8.65	9.49
0.50	2	10.1	10.4	10.7	11.0	9.93	10.5	10.9	12.0
		June-July-August				September-October-November			
0.05	20	7.34	7.91	8.31	9.92	6.61	6.87	7.1	7.84
0.10	10	8.56	9.09	9.44	11.2	7.47	7.74	7.97	8.66
0.20	5	10.2	10.7	11.1	13.1	8.59	8.86	9.08	9.71
0.50	2	14.0	14.8	15.5	18.4	10.9	11.2	11.4	11.9

14-1.1L0-1A BANGI RIVER AT PUL-I-BANGI, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1965	June 15, 1965	91.0	1969	May 22, 1969	398
1966	June 15, 1966	390	1966	June 15, 1966	390
1967	May 23, 1967	377	1972	May 12, 1972	382
1968	June 10, 1968	215	1967	May 23, 1967	377
1969	May 22, 1969	398	1976	April 27, 1976	370
1970	June 2, 1970	94.0	1977	May 29, 1977	300
1971	May 27, 1971	152	1978	April 27, 1978	230
1972	May 12, 1972	382	1968	June 10, 1968	215
1973	June 25, 1973	82.0	1971	May 27, 1971	152
1974	June 19, 1974	88.0	1975	May 16, 1975	148
1975	May 16, 1975	148	1970	June 2, 1970	94.0
1976	April 27, 1976	370	1965	June 15, 1965	91.0
1977	May 29, 1977	300	1974	June 19, 1974	88.0
1978	April 27, 1978	230	1973	June 25, 1973	82.0

14-1.1L0-1A BANGI RIVER AT PUL-I-BANGI, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1964	--	--	--	--	--	--	--	--	--	--	--	11.4	--
1965	13.0	12.0	11.9	10.5	9.31	10.5	17.1	30.8	72.8	48.1	21.0	15.7	22.8
1966	13.2	13.8	13.3	12.0	13.3	17.0	27.7	46.9	113	31.1	18.5	13.7	27.8
1967	15.7	15.2	13.3	13.0	11.4	10.0	12.9	31.4	63.4	59.8	21.3	13.5	23.5
1968	14.5	14.1	13.5	13.0	11.3	11.6	17.3	40.3	113	86.6	36.1	16.0	32.3
1969	15.3	17.0	17.6	17.1	17.0	21.5	43.4	57.0	101	107	51.3	23.6	40.9
1970	20.9	17.3	16.1	14.1	14.4	14.7	20.6	41.4	51.8	31.1	16.0	12.5	22.6
1971	12.7	12.4	11.3	11.3	12.4	12.7	14.4	37.5	34.9	12.7	9.02	7.51	15.7
1972	9.01	9.71	9.52	8.98	8.65	11.5	14.6	27.6	55.2	38.8	25.6	12.5	19.3
1973	10.2	10.9	11.7	12.6	13.4	14.1	20.0	37.2	66.7	61.0	23.9	12.7	24.6
1974	12.3	11.6	12.0	11.8	11.4	15.8	23.3	28.1	44.1	30.2	12.9	8.82	18.5
1975	10.3	9.20	10.8	10.2	7.76	7.55	21.9	46.3	69.7	69.9	22.3	13.6	25.1
1976	13.0	12.1	11.1	12.1	11.6	10.3	26.5	50.5	49.8	54.5	14.3	12.9	23.3
1977	15.5	13.6	11.4	9.82	8.90	8.33	8.93	28.0	79.4	26.0	12.7	8.63	19.3
1978	9.56	12.2	15.4	14.0	13.0	12.3	28.4	55.0	94.5	43.0	15.6	11.8	27.1

14-1.R00-2A TALOQAN RIVER AT PUL-I-CHUGHA

(U.S. Geological Survey identification number: 364400069120000)

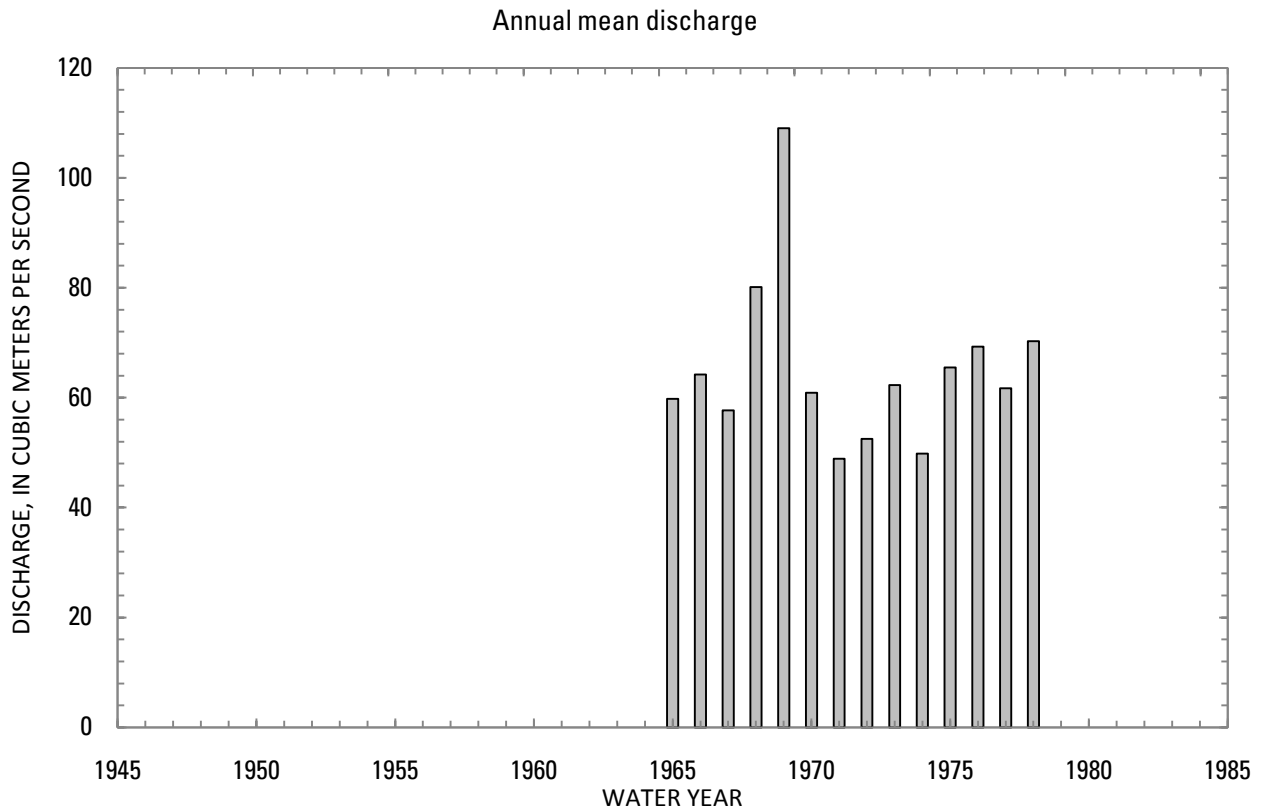
LOCATION: Lat 36°44'N., long 69°12'E.

DRAINAGE AREA: 9,760 km².

ELEVATION: 558 meters above mean sea level.

PERIOD OF RECORD: April 19, 1960 to September 30, 1960 and August 2, 1964 to September 30, 1978.

GAGE: Water-stage recorder.



14-1.R00-2A TALOQAN RIVER AT PUL-I-CHUGHA, Continued

Statistics of monthly and annual mean discharges
[m³/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	47.0	1970	29.3	1966	36.2	5.05	0.14	4.71
November	42.9	1970	31.0	1973	36.3	3.26	0.09	4.72
December	42.1	1969	29.4	1972	34.6	3.88	0.11	4.51
January	35.8	1977	23.0	1966	29.5	3.54	0.12	3.84
February	35.2	1976	22.4	1965	27.8	3.81	0.14	3.62
March	50.2	1969	20.3	1967	31.5	7.44	0.24	4.11
April	144	1969	24.9	1977	52.5	28.9	0.55	6.84
May	178	1969	51.9	1974	88.7	30.6	0.35	11.6
June	285	1969	90.0	1960	179	57.0	0.32	23.4
July	267	1969	53.0	1971	146	56.2	0.38	19.0
August	133	1969	46.3	1974	69.4	22.1	0.32	9.04
September	55.2	1969	26.1	1977	35.8	7.34	0.20	4.66
Annual	109	1969	48.9	1971	65.1	15.1	0.23	100

14-1.R00-2A TALOQAN RIVER AT PUL-I-CHUGHA, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	28.3	30.7	29.4	22.0	21.7	20.3	23.4	37.1	78.2	55.1	39.9	25.5	24.0
90	30.2	31.0	29.8	24.5	22.6	21.6	26.2	44.4	85.7	73.2	41.7	27.7	26.4
85	31.1	31.4	30.3	25.0	23.8	22.7	29.9	48.1	97.8	83.4	45.1	28.9	28.5
80	31.4	32.3	30.9	25.6	24.1	24.1	31.3	51.0	112	93.0	48.0	29.9	29.6
75	31.7	32.5	31.1	26.3	24.4	25.2	32.9	53.3	123	99.4	50.3	30.7	30.7
70	32.7	33.2	31.4	26.8	24.9	26.4	34.7	56.0	133	105	52.6	31.3	31.8
65	33.0	34.5	32.4	27.6	25.8	27.4	36.2	59.7	140	110	56.4	31.9	33.1
60	33.7	35.6	32.7	28.7	26.4	28.6	37.5	66.4	151	117	59.3	32.5	34.4
55	34.6	36.3	32.9	29.4	26.9	29.5	39.4	71.1	158	123	61.3	32.9	36.1
50	36.1	36.7	33.9	30.1	27.8	30.3	42.3	75.2	167	131	63.2	33.4	37.9
45	37.1	37.3	34.3	30.5	28.2	31.0	44.4	81.8	176	140	65.1	34.2	40.1
40	37.9	38.1	35.5	30.7	28.6	31.7	46.5	89.2	187	146	67.7	36.0	42.7
35	38.4	38.4	36.4	30.8	29.3	32.5	48.7	96.0	201	155	71.3	36.9	48.2
30	39.3	38.6	36.9	31.0	29.8	34.4	51.3	102	212	165	75.1	37.5	56.6
25	40.1	38.9	38.0	31.6	31.2	36.0	54.7	113	227	178	78.8	38.1	70.6
20	40.6	39.8	39.2	32.8	31.5	37.4	61.3	125	244	192	84.5	40.6	91.3
15	42.0	40.2	40.2	34.1	32.6	39.1	71.1	138	269	211	91.1	45.0	118
10	45.1	40.5	40.9	34.8	33.9	41.1	84.6	155	288	250	102	49.4	154
5	46.1	42.7	41.8	36.9	34.8	44.7	126	181	324	304	131	53.6	203

14-1.R00-2A TALOQAN RIVER AT PUL-I-CHUGHA, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	150	156	140	117	112
0.95	1.05	176	178	163	141	133
0.90	1.11	193	193	177	156	145
0.80	1.25	220	213	197	176	162
0.50	2	292	262	245	223	201
0.20	5	409	333	310	281	250
0.10	10	498	382	353	318	281
0.04	25	625	446	407	362	319
0.02	50	731	495	447	394	346
0.01	100	847	546	488	425	372
0.005	200	975	598	529	456	399
0.002	500	1,160	ng	ng	ng	ng

14-1.R00-2A TALOQAN RIVER AT PUL-I-CHUGHA, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	16.7	16.8	17.8	19.1	20.3	22.5	23.9	25.7	28.7
0.10	10	17.8	18.0	18.8	20.0	21.5	23.7	25.2	26.8	29.4
0.20	5	19.1	19.4	20.0	21.2	22.9	25.2	26.7	28.2	30.3
0.50	2	21.7	22.1	22.5	23.9	25.6	27.8	29.3	30.7	32.3

14-1.R00-2A TALOQAN RIVER AT PUL-I-CHUGHA, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	19.3	19.8	20.1	21.3	16.6	17.8	19.4	21.2
0.10	10	20.2	20.8	21.3	22.4	18	19.4	20.8	22.8
0.20	5	21.3	22.1	22.7	23.8	19.9	21.4	22.7	25.0
0.50	2	23.9	24.7	25.4	26.6	23.8	25.9	27.1	30.0
		June-July-August				September-October-November			
0.05	20	30.5	34.0	38.4	46.9	21.8	23.0	23.5	25.7
0.10	10	32.7	36.1	40.2	48.9	23.2	24.3	24.8	26.9
0.20	5	35.7	39.2	43.1	52.3	25.1	26.1	26.6	28.4
0.50	2	42.8	46.9	51.3	62.7	29.3	30.0	30.5	32.0

14-1.R00-2A TALOQAN RIVER AT PUL-I-CHUGHA, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1960	May 17, 1960	180	1969	April 20, 1969	640
1965	June 15, 1965	240	1977	May 29, 1977	540
1966	June 20, 1966	447	1966	June 20, 1966	447
1967	June 12, 1967	244	1976	April 27, 1976	382
1968	July 10, 1968	377	1968	July 10, 1968	377
1969	April 20, 1969	640	1975	June 18, 1975	330
1970	June 30, 1970	300	1978	June 7, 1978	305
1971	June 1, 1971	216	1970	June 30, 1970	300
1972	June 13, 1972	199	1974	June 19, 1974	249
1973	June 13, 1973	220	1967	June 12, 1967	244
1974	June 19, 1974	249	1965	June 15, 1965	240
1975	June 18, 1975	330	1973	June 13, 1973	220
1976	April 27, 1976	382	1971	June 1, 1971	216
1977	May 29, 1977	540	1972	June 13, 1972	199
1978	June 7, 1978	305	1960	May 17, 1960	180

14-1.R00-2A TALOQAN RIVER AT PUL-I-CHUGHA, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1960	--	--	--	--	--	--	--	60.2	90.0	117	59.5	31.9	--
1964	--	--	--	--	--	--	--	--	--	--	64.0	32.7	--
1965	31.4	32.0	30.8	25.3	22.4	26.4	41.3	68.8	193	144	62.9	38.3	59.8
1966	29.3	34.1	32.1	23.0	24.4	32.9	45.0	97.5	237	109	67.0	38.2	64.2
1967	39.1	39.0	32.4	25.6	24.8	20.3	33.2	64.1	166	154	62.6	29.9	57.7
1968	31.2	37.8	32.0	30.2	25.3	30.4	47.6	83.6	257	239	106	40.3	80.1
1969	43.0	38.5	42.1	33.9	29.2	50.2	144	178	285	267	133	55.2	109
1970	47.0	42.9	38.2	31.3	30.2	29.6	41.9	93.1	161	99.8	66.3	47.9	60.9
1971	41.0	38.6	37.2	30.8	29.6	31.6	36.8	84.8	119	53.0	51.6	32.5	48.9
1972	36.7	33.1	29.4	26.7	23.8	26.7	40.3	69.2	148	98.6	65.0	32.4	52.5
1973	31.0	31.0	31.0	31.0	32.6	40.7	50.4	88.8	162	144	70.4	32.1	62.3
1974	35.6	33.5	36.7	29.6	24.8	37.5	47.5	51.9	111	113	46.3	28.4	49.8
1975	37.1	35.4	33.9	32.6	28.2	27.4	45.9	88	172	164	84.9	33.9	65.5
1976	36.9	38.1	32.5	27.7	35.2	33.7	74.7	101	137	210	65.6	37.7	69.3
1977	33.0	37.5	40.6	35.8	32.0	25.1	24.9	77.8	213	146	48.0	26.1	61.7
1978	34.5	36.2	36.0	29.0	26.9	29.0	62.1	123	240	133	57.7	35.3	70.3

14-1.R00-5A FARKHAR RIVER NEAR TALOQAN

(U.S. Geological Survey identification number: 363800069430000)

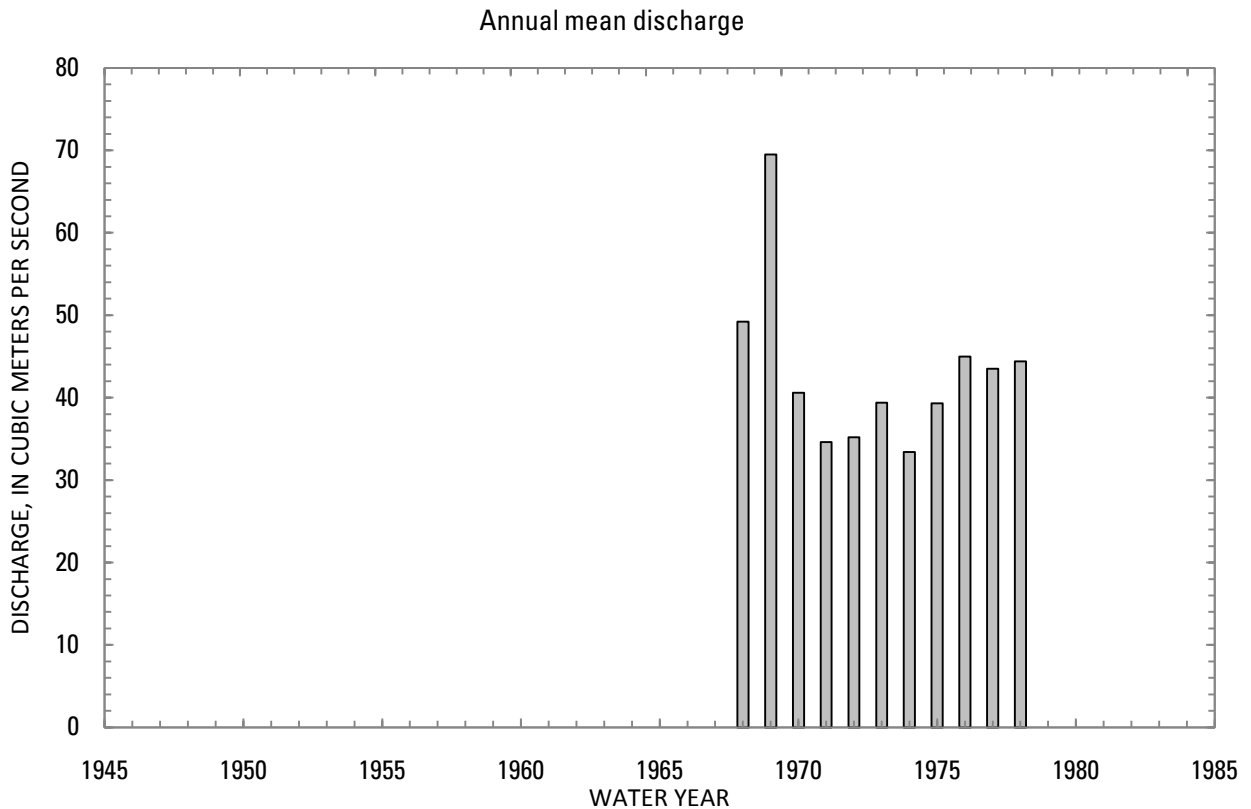
LOCATION: Lat 36°38'N., long 69°43'E.

DRAINAGE AREA: 4,110 km².

ELEVATION: 991 meters above mean sea level.

PERIOD OF RECORD: November 22, 1966 to September 30, 1978.

GAGE: Water-stage recorder.



14-1.R00-5A FARKHAR RIVER NEAR TALOQAN, Continued

Statistics of monthly and annual mean discharges
[m³/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	24.5	1970	15.9	1972	20.1	2.74	0.14	3.95
November	18.2	1970	12.6	1975	15.7	1.74	0.11	3.08
December	18.4	1969	11.6	1972	13.4	1.88	0.14	2.63
January	14.7	1969	10.2	1971	11.7	1.56	0.13	2.30
February	14.1	1973	8.83	1971	11.1	1.67	0.15	2.18
March	20.4	1969	9.49	1967	12.8	3.32	0.26	2.51
April	82.0	1969	14.0	1977	29.0	17.9	0.62	5.70
May	123	1969	35.4	1974	59.8	22.1	0.37	11.8
June	184	1969	85.0	1974	124	30.5	0.25	24.4
July	182	1969	56.1	1971	113	38.8	0.34	22.3
August	110	1969	47.2	1974	65.1	17.9	0.28	12.8
September	48.7	1970	24.0	1973	32.5	7.36	0.23	6.39
Annual	69.5	1969	33.4	1974	43.1	10.0	0.23	100

14-1.R00-5A FARKHAR RIVER NEAR TALOQAN, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	14.9	11.9	11.4	9.70	8.99	9.01	11.0	19.5	64.4	55.0	37.7	21.3	9.83
90	15.6	12.7	11.6	10.0	9.11	9.34	12.0	23.7	71.5	64.6	41.9	23.0	10.8
85	17.0	13.2	11.8	10.1	9.53	9.59	12.7	28.5	77.2	69.0	44.7	23.9	11.6
80	17.4	13.8	12.0	10.5	9.66	9.82	13.6	31.1	84.7	73.3	47.2	25.0	12.4
75	17.8	14.2	12.0	10.6	9.93	9.99	14.4	33.7	90.1	79.7	48.6	26.2	13.1
70	18.1	14.6	12.1	10.7	9.99	10.2	15.4	36.2	95.4	84.2	50.5	26.9	13.9
65	18.3	15.1	12.4	11.0	10.0	10.4	17.6	38.9	101	88.0	53.1	27.8	15.2
60	18.6	15.4	12.5	11.1	10.1	10.7	19.6	42.3	106	91.3	55.7	28.9	16.7
55	19.0	15.7	12.7	11.2	10.4	11.1	20.6	46.7	111	94.1	58.3	30.0	18.4
50	19.6	16.1	12.9	11.3	10.6	11.8	22.1	50.9	117	99.6	60.9	30.7	20.6
45	20.1	16.2	13.0	11.5	10.7	12.0	23.8	55.3	122	104	64.8	31.7	24.5
40	20.5	16.6	13.1	11.6	11.0	12.2	25.3	60.7	127	109	68.3	32.9	29.4
35	21.0	16.7	13.4	11.9	11.9	12.4	27.1	66.4	134	116	70.8	34.1	36.4
30	22.0	16.8	13.7	12.6	12.1	13.0	29.5	71.3	140	126	73.6	35.2	45.7
25	23.0	17.1	14.2	13.0	12.3	13.7	34.0	75.9	149	141	75.5	36.2	59.2
20	23.7	17.4	15.0	13.1	12.9	14.8	37.7	81.8	159	156	77.5	38.0	72.1
15	24.4	17.8	15.5	13.7	13.3	16.3	41.3	92.3	174	170	82.1	39.9	86.8
10	25.2	18.0	16.1	14.3	13.7	18.2	47.2	109	190	194	94.5	45.2	109
5	26.9	19.0	18.1	14.9	14.1	20.3	71.9	137	221	212	114	53.7	146

14-1.R00-5A FARKHAR RIVER NEAR TALOQAN, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	104	102	92.0	84.1	80.2
0.95	1.05	128	118	109	98.7	93.3
0.90	1.11	143	129	119	108	102
0.80	1.25	166	144	134	121	113
0.50	2	223	181	170	153	140
0.20	5	305	233	220	197	177
0.10	10	363	268	253	227	201
0.04	25	440	314	297	265	231
0.02	50	499	349	330	295	254
0.01	100	561	384	363	325	277
0.005	200	625	421	398	355	300
0.002	500	715	ng	ng	ng	ng

14-1.R00-5A FARKHAR RIVER NEAR TALOQAN, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	8.17	8.24	8.48	8.62	8.83	9.02	9.51	10.2	12.1
0.10	10	8.45	8.54	8.76	8.91	9.12	9.37	9.83	10.5	12.5
0.20	5	8.85	8.95	9.15	9.31	9.53	9.84	10.3	10.9	13.1
0.50	2	9.81	9.92	10.1	10.3	10.5	10.9	11.4	11.9	14.2

14-1.R00-5A FARKHAR RIVER NEAR TALOQAN, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	8.23	8.53	8.72	8.97	7.88	8.25	8.4	8.96
0.10	10	8.52	8.77	8.95	9.21	8.31	8.69	8.86	9.46
0.20	5	8.92	9.12	9.29	9.57	8.87	9.29	9.49	10.2
0.50	2	9.88	10.0	10.2	10.5	10.1	10.6	11.0	12.0
		June-July-August				September-October-November			
0.05	20	28.7	31.6	37.4	46.1	10.5	11.4	11.8	12.3
0.10	10	30.7	33.8	39.1	47.9	11.3	12.1	12.5	13.1
0.20	5	33.6	37.0	41.8	50.9	12.4	12.9	13.3	14.1
0.50	2	41.0	44.8	49.6	59.8	14.2	14.5	14.9	15.8

14-1.R00-5A FARKHAR RIVER NEAR TALOQAN, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1967	June 11, 1967	150	1969	April 19, 1969	400
1968	July 9, 1968	276	1976	May 24, 1976	343
1969	April 19, 1969	400	1978	April 22, 1978	330
1970	June 2, 1970	167	1977	June 23, 1977	320
1971	May 28, 1971	191	1968	July 9, 1968	276
1972	April 15, 1972	189	1974	June 18, 1974	202
1973	June 12, 1973	135	1971	May 28, 1971	191
1974	June 18, 1974	202	1972	April 15, 1972	189
1975	June 16, 1975	181	1975	June 16, 1975	181
1976	May 24, 1976	343	1970	June 2, 1970	167
1977	June 23, 1977	320	1967	June 11, 1967	150
1978	April 22, 1978	330	1973	June 12, 1973	135

14-1.R00-5A FARKHAR RIVER NEAR TALOQAN, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1967	--	--	11.8	10.3	9.63	9.49	15.4	44.5	110	102	56.6	32.9	--
1968	21.8	16.6	12.9	11.1	9.99	12.2	24.9	43.7	154	162	86.5	32.8	49.2
1969	21.7	17.2	18.4	14.7	11.5	20.4	82.0	123	184	182	110	43.7	69.5
1970	24.5	18.2	13.3	10.4	10.4	10.8	21.6	59.4	112	83.1	73.2	48.7	40.6
1971	22.3	15.8	12.8	10.2	8.83	10.1	21.5	70.6	109	56.1	49.7	26.6	34.6
1972	15.9	13.6	11.6	10.7	10.2	13.0	24.3	52.5	107	78.6	56.4	28.0	35.2
1973	18.2	16.8	15.5	14.4	14.1	16.2	28.1	64.0	105	92.8	61.7	24.0	39.4
1974	17.6	13.9	12.2	12.0	13.1	16.4	24.5	35.4	85.0	95.3	47.2	26.3	33.4
1975	16.7	12.6	12.8	10.8	9.98	10.2	22.0	54.4	113	104	68.6	34.2	39.3
1976	22.5	17.0	14.0	13.0	12.1	12.0	34.0	54.1	96.6	164	63.7	35.6	45.0
1977	20.5	14.9	13.0	12.0	10.1	9.82	14.0	54.8	152	136	54.5	27.9	43.5
1978	19.3	16.0	12.5	11.0	13.2	12.5	36.0	61.6	161	106	52.9	29.7	44.4

14-5.R00-1A ANDARAB RIVER AT DOSHI

(U.S. Geological Survey identification number: 353600068410000)

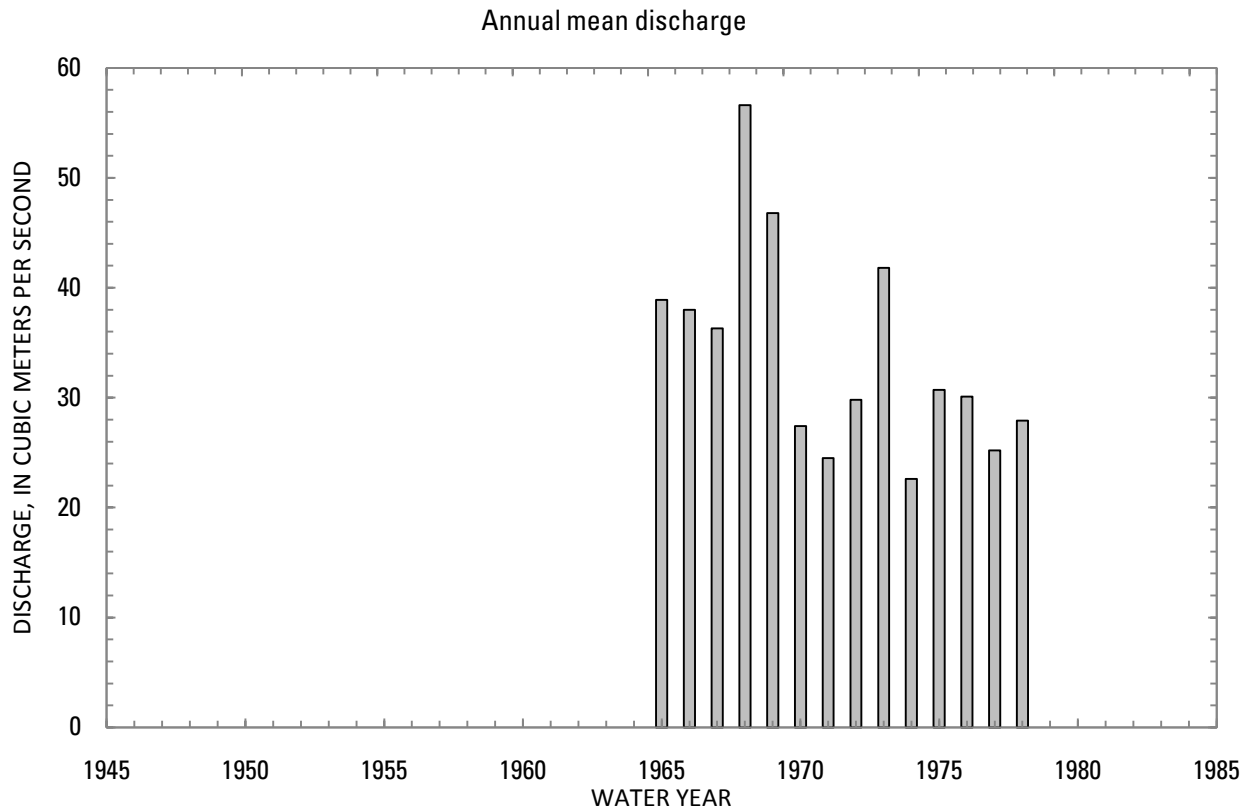
LOCATION: Lat 35°36'N., long 68°41'E.

DRAINAGE AREA: 3,705 km².

ELEVATION: 860 meters above mean sea level.

PERIOD OF RECORD: October 1, 1964 to September 30, 1978.

GAGE: Water-stage recorder.



14-5.R00-1A ANDARAB RIVER AT DOSHI, Continued

Statistics of monthly and annual mean discharges
[m³/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	22.5	1969	11.7	1972	16.5	3.31	0.20	4.05
November	18.6	1978	10.3	1975	14.0	2.51	0.18	3.44
December	15.0	1973	9.40	1972	12.2	1.98	0.16	3.00
January	14.0	1973	8.49	1975	11.2	1.75	0.16	2.75
February	13.6	1973	8.13	1975	10.9	1.70	0.16	2.66
March	19.3	1966	8.12	1975	12.2	3.23	0.26	3.00
April	61.2	1973	10.1	1972	24.1	12.9	0.54	5.91
May	111	1973	37.9	1972	67.2	21.0	0.31	16.5
June	224	1968	57.7	1971	117	48.1	0.41	28.7
July	169	1968	28.3	1971	73.6	39.1	0.53	18.1
August	58.0	1968	17.8	1971	31.1	12.6	0.41	7.62
September	27.5	1969	10.9	1974	17.4	4.58	0.26	4.28
Annual	56.6	1968	22.6	1974	34.0	9.62	0.28	100

14-5.R00-1A ANDARAB RIVER AT DOSHI, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	11.4	10.2	9.10	8.48	8.10	8.03	9.44	16.2	44.5	25.6	15.7	11.3	9.03
90	12.3	11.0	9.53	8.73	8.59	8.26	10.1	26.6	51.5	31.1	17.6	12.3	10.0
85	13.1	11.4	10.0	9.01	9.05	8.64	10.8	30.5	58.8	35.3	18.9	13.0	10.6
80	14.0	11.6	10.2	9.41	9.35	8.99	11.7	34.4	70.1	41.4	19.7	13.3	11.2
75	14.4	11.8	10.6	10.0	9.66	9.45	12.8	37.8	75.2	44.3	20.5	14.0	12.0
70	14.9	12.3	10.9	10.1	9.77	9.82	13.9	44.2	80.8	46.9	21.3	14.3	12.7
65	15.1	13.1	11.1	10.3	10.0	10.2	14.7	49.4	85.0	50.1	22.3	15.1	13.3
60	15.4	13.3	11.6	10.7	10.2	10.5	15.5	53.9	88.9	52.7	23.4	15.5	13.9
55	15.8	13.5	11.8	11.0	10.3	10.9	16.3	59.1	97.1	55.1	25.2	16.2	14.8
50	16.0	13.9	12.0	11.1	10.6	11.3	17.8	63.9	103	57.8	26.5	16.9	16.0
45	16.4	14.1	12.5	11.3	11.0	12.1	19.6	69.4	118	60.9	28.4	17.9	17.6
40	16.8	14.3	12.7	11.7	11.2	12.7	23.1	72.3	129	66.0	30.6	18.2	19.6
35	17.0	14.6	13.1	12.0	11.3	13.2	24.5	75.2	143	72.8	32.3	18.5	22.6
30	17.5	15.0	13.6	12.5	11.7	13.7	26.0	80.8	151	83.5	34.1	18.9	28.3
25	18.1	15.6	14.1	12.7	12.1	14.4	29.6	87.6	157	91.2	36.5	19.4	36.8
20	19.1	16.2	14.3	13.0	12.6	15.0	32.8	97.2	164	112	40.0	20.3	48.8
15	20.5	17.1	14.6	13.2	13.1	15.9	39.9	108	174	124	43.0	22.3	66.1
10	22.0	18.2	15.0	13.8	14.0	17.5	47.1	118	187	138	48.3	24.8	84.3
5	23.7	19.6	15.8	14.2	14.2	19.9	59.1	140	206	159	66.1	27.4	129

14-5.R00-1A ANDARAB RIVER AT DOSHI, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	128	79.1	66.5	58.0	52.6
0.95	1.05	134	96.0	82.9	74.0	67.0
0.90	1.11	139	107	93.6	84.4	76.2
0.80	1.25	147	122	109	98.8	89.1
0.50	2	173	159	146	134	120
0.20	5	222	210	199	181	163
0.10	10	262	245	236	212	191
0.04	25	323	289	283	251	227
0.02	50	375	323	320	280	253
0.01	100	435	357	357	309	280
0.005	200	502	¹ 393	395	338	307
0.002	500	606	ng	ng	ng	ng

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

14-5.R00-1A ANDARAB RIVER AT DOSHI, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	7.09	7.29	7.49	7.69	8.01	8.18	8.42	8.72	9.64
0.10	10	7.46	7.62	7.79	8.00	8.35	8.59	8.86	9.23	10.3
0.20	5	7.93	8.04	8.17	8.40	8.77	9.13	9.44	9.89	11.1
0.50	2	8.86	8.91	9.02	9.26	9.64	10.3	10.7	11.2	12.7

14-5.R00-1A ANDARAB RIVER AT DOSHI, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	7.87	7.83	8.00	8.27	6.75	7.16	7.53	7.96
0.10	10	8.13	8.16	8.34	8.65	7.30	7.68	8.03	8.56
0.20	5	8.50	8.61	8.80	9.15	8.05	8.41	8.74	9.41
0.50	2	9.39	9.64	9.85	10.2	9.83	10.2	10.5	11.5
		June-July-August				September-October-November			
0.05	20	11.0	12.5	14.3	16.8	9.16	9.50	9.82	10.2
0.10	10	12.5	14.0	15.7	18.5	9.79	10.1	10.4	10.9
0.20	5	14.6	16.0	17.6	20.9	10.6	10.9	11.2	11.8
0.50	2	19.4	20.7	22.6	27.6	12.2	12.5	12.9	13.7

14-5.R00-1A ANDARAB RIVER AT DOSHI, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1965	June 17, 1965	190	1968	June 17, 1968	381
1966	June 18, 1966	220	1966	June 18, 1966	220
1967	May 24, 1967	190	1969	June 19, 1969	220
1968	June 17, 1968	381	1965	June 17, 1965	190
1969	June 19, 1969	220	1967	May 24, 1967	190
1970	April 12, 1970	160	1973	June 8, 1973	190
1971	May 20, 1971	150	1972	June 21, 1972	180
1972	June 21, 1972	180	1976	June 4, 1976	180
1973	June 8, 1973	190	1975	May 15, 1975	170
1974	May 9, 1974	161	1974	May 9, 1974	161
1975	May 15, 1975	170	1970	April 12, 1970	160
1976	June 4, 1976	180	1977	May 28, 1977	160
1977	May 28, 1977	160	1971	May 20, 1971	150
1978	May 22, 1978	115	1978	May 22, 1978	115

14-5.R00-1A ANDARAB RIVER AT DOSHI, Continued

Monthly and annual mean discharges, in cubic meters per second
 [Data may not be rounded in accordance with U.S. Geological Survey publication standards]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1965	15.0	11.8	12.6	12.4	12.9	13.2	19.1	53.0	144	126	31.0	14.0	38.9
1966	16.9	16.0	14.7	12.9	12.1	19.3	34.6	61.5	162	54.4	33.1	18.7	38.0
1967	17.3	14.9	11.5	11.5	11.4	11.9	17.0	59.1	144	94.5	26.6	15.2	36.3
1968	17.1	14.3	13.1	11.2	9.64	9.67	27.6	99.5	224	169	58.0	24.7	56.6
1969	22.5	17.9	10.5	13.0	13.4	15.8	33.7	78.6	157	112	57.3	27.5	46.8
1970	21.9	16.5	14.4	13.4	11.2	11.6	22.6	58.1	60.3	48.7	34.4	14.0	27.4
1971	14.7	12.0	11.5	10.5	10.9	14.8	25.7	76.5	57.7	28.3	17.8	13.1	24.5
1972	11.7	11.3	9.40	9.14	9.23	9.89	10.1	37.9	138	73.0	23.8	14.3	29.8
1973	15.0	13.7	15.0	14.0	13.6	15.9	61.2	111	130	58.2	31.8	20.8	41.8
1974	14.4	13.8	12.9	10.7	10.5	10.7	15.0	43.5	62.8	47.5	18.0	10.9	22.6
1975	11.9	10.3	9.60	8.49	8.13	8.12	18.3	73.8	101	68.0	31.2	18.3	30.7
1976	16.0	13.3	10.8	9.14	9.74	9.67	21.9	71.8	81.2	66.9	30.9	18.5	30.1
1977	15.8	12.0	10.2	10.6	10.2	8.60	12.5	42.4	97.7	43.2	20.5	18.5	25.2
1978	20.9	18.6	14.7	9.65	8.89	12.1	17.9	74.5	80.3	40.2	20.5	15.7	27.9

14-9.5R0-1T FOLADI RIVER AT BAMYAN

(U.S. Geological Survey identification number: 344900067490000)

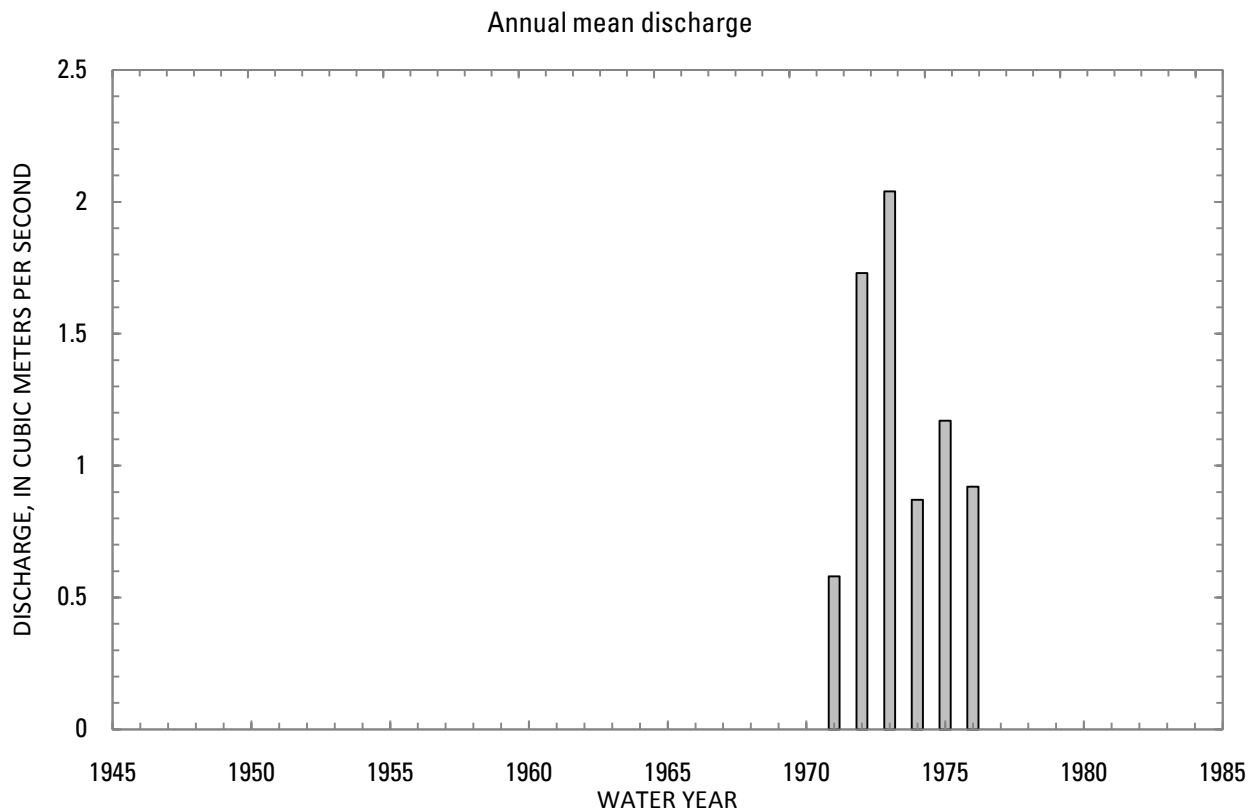
LOCATION: Lat 34°49'N., long 67°49'E.

DRAINAGE AREA: 320 km².

ELEVATION: 2,507 meters above mean sea level.

PERIOD OF RECORD: December 4, 1969 to May 21, 1977.

GAGE: Staff gage.



14-9.5R0-1T FOLADI RIVER AT BAMYAN, Continued

Statistics of monthly and annual mean discharges
[m³/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	1.22	1973	0.56	1972	0.94	0.24	0.26	6.45
November	1.20	1973	0.29	1976	0.69	0.33	0.47	4.78
December	1.25	1977	0.39	1972	0.84	0.37	0.44	5.78
January	1.20	1970	0.55	1974	0.82	0.24	0.29	5.65
February	1.04	1970	0.40	1975	0.72	0.21	0.29	4.94
March	0.91	1973	0.28	1971	0.57	0.22	0.38	3.95
April	1.62	1973	0.07	1971	0.47	0.52	1.10	3.25
May	4.26	1973	0.99	1970	1.87	1.21	0.65	12.9
June	10.6	1972	0.60	1971	4.17	3.30	0.79	28.8
July	2.64	1975	0.09	1971	1.64	0.95	0.58	11.3
August	2.15	1973	0.08	1971	0.84	0.67	0.80	5.75
September	1.58	1973	0.65	1974	0.94	0.35	0.37	6.50
Annual	2.04	1973	0.58	1971	1.22	0.56	0.46	100

14-9.5R0-1T FOLADI RIVER AT BAMYAN, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.49	0.20	0.16	0.51	0.39	0.24	0.03	0.04	0.44	0.09	0.08	0.52	0.09
90	0.50	0.28	0.23	0.52	0.42	0.26	0.06	0.06	0.61	0.10	0.09	0.57	0.22
85	0.60	0.32	0.27	0.53	0.47	0.31	0.08	0.16	0.89	0.22	0.41	0.62	0.32
80	0.71	0.37	0.44	0.57	0.49	0.34	0.09	0.26	1.27	0.46	0.46	0.66	0.45
75	0.72	0.40	0.48	0.59	0.54	0.40	0.11	0.49	1.68	0.82	0.50	0.70	0.50
70	0.73	0.47	0.68	0.64	0.57	0.43	0.15	0.56	2.01	0.90	0.52	0.73	0.55
65	0.75	0.50	0.73	0.67	0.60	0.48	0.20	0.92	2.28	0.95	0.54	0.75	0.60
60	0.76	0.58	0.77	0.70	0.64	0.51	0.22	1.33	2.52	1.00	0.59	0.78	0.64
55	0.90	0.68	0.83	0.75	0.67	0.54	0.24	1.57	2.74	1.17	0.61	0.80	0.70
50	0.97	0.72	0.92	0.79	0.73	0.57	0.27	1.72	2.94	1.36	0.63	0.83	0.76
45	0.99	0.73	0.96	0.81	0.74	0.60	0.31	1.83	3.57	1.46	0.65	0.87	0.82
40	1.03	0.75	0.99	0.86	0.76	0.62	0.40	1.94	4.13	1.78	0.73	0.91	0.89
35	1.19	0.77	1.04	0.91	0.79	0.65	0.45	2.10	4.57	1.98	0.82	0.96	0.97
30	1.20	0.81	1.13	0.98	0.84	0.69	0.55	2.32	5.37	2.37	0.93	1.01	1.09
25	1.22	0.90	1.18	1.01	0.88	0.75	0.71	2.66	6.13	2.45	1.17	1.18	1.23
20	1.23	1.14	1.21	1.02	0.92	0.81	0.81	3.22	6.77	2.54	1.25	1.38	1.43
15	1.25	1.21	1.23	1.04	0.96	0.84	0.93	3.68	7.71	2.64	1.32	1.46	1.99
10	1.28	1.24	1.26	1.22	0.99	0.88	1.32	4.34	9.73	2.99	2.11	1.56	2.52
5	1.33	1.28	1.51	1.33	1.18	0.96	1.7	5.39	11.1	4.14	ng	1.71	4.14

14-9.5R0-1T FOLADI RIVER AT BAMYAN, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	2.30	2.14	2.02	1.48	1.13
0.95	1.05	3.30	2.74	2.54	2.02	1.58
0.90	1.11	3.90	3.17	2.91	2.40	1.90
0.80	1.25	4.90	3.82	3.50	3.00	2.42
0.50	2	7.10	5.69	5.21	4.74	3.98
0.20	5	10.1	8.92	8.31	7.78	6.90
0.10	10	11.9	11.5	10.9	10.3	9.40
0.04	25	14.1	15.4	15.0	13.9	13.3
0.02	50	15.7	18.8	18.5	17.1	16.8
0.01	100	17.1	² 22.6	22.7	² 20.7	20.8
0.005	200	18.5	² 26.9	27.5	² 24.7	25.5
0.002	500	20.3	ng	ng	ng	ng

¹Less than 10 years of data used.

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

14-9.5R0-1T FOLADI RIVER AT BAMYAN, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0	0.01	0.03	0.09	0.18	0.31	0.32
0.10	10	0	0	0	0.02	0.05	0.15	0.24	0.37	0.39
0.20	5	0	0	0	0.03	0.08	0.24	0.34	0.45	0.50
0.50	2	0.04	0.05	0.07	0.12	0.19	0.49	0.57	0.63	0.72

14-9.5R0-1T FOLADI RIVER AT BAMYAN, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.08	0.11	0.14	0.33	0	0	0.01	0.03
0.10	10	0.11	0.15	0.18	0.36	0	0	0.02	0.05
0.20	5	0.16	0.21	0.24	0.40	0	0	0.03	0.08
0.50	2	0.33	0.39	0.42	0.52	0.04	0.07	0.13	0.20
		June-July-August				September-October-November			
0.05	20	0.08	0.08	0.08	0.08	0.06	0.12	0.18	0.25
0.10	10	0.11	0.13	0.13	0.14	0.10	0.17	0.23	0.32
0.20	5	0.18	0.22	0.24	0.27	0.17	0.25	0.31	0.41
0.50	2	0.43	0.54	0.59	0.69	0.38	0.45	0.49	0.61

14-9.5R0-1T FOLADI RIVER AT BAMYAN, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1970	June 28, 1970	9.29	1972	June 22, 1972	13.1
1971	May 19, 1971	3.42	1970	June 28, 1970	9.29
1972	June 22, 1972	13.1	1973	May 7, 1973	8.00
1973	May 7, 1973	8.00	1975	June 20, 1975	7.50
1974	June 6, 1974	5.00	1976	May 24, 1976	6.39
1975	June 20, 1975	7.50	1974	June 6, 1974	5.00
1976	May 24, 1976	6.39	1971	May 19, 1971	3.42

14-9.5R0-1T FOLADI RIVER AT BAMYAN, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1970	--	--	--	1.20	1.04	0.33	0.21	0.99	2.26	2.05	1.20	1.00	--
1971	1.00	0.69	0.63	0.80	0.53	0.28	0.07	1.52	0.60	0.09	0.08	0.69	0.58
1972	0.56	0.32	0.39	0.71	0.77	0.76	0.80	2.69	10.6	1.83	0.66	0.79	1.73
1973	1.22	1.20	1.21	0.99	0.93	0.91	1.62	4.26	5.74	2.59	2.15	1.58	2.04
1974	1.16	0.66	0.87	0.55	0.69	0.58	0.23	1.03	2.81	0.69	0.48	0.65	0.87
1975	0.74	0.73	1.11	0.60	0.40	0.49	0.10	1.01	4.71	2.64	0.76	0.68	1.17
1976	0.78	0.29	0.42	0.66	0.61	0.51	0.30	1.58	2.50	1.60	0.53	1.22	0.92
1977	1.10	0.96	1.25	1.06	0.78	0.74	0.44	--	--	--	--	--	--

14-9.R00-1A BAMYAN RIVER AT DOAB

(U.S. Geological Survey identification number: 351600067590000)

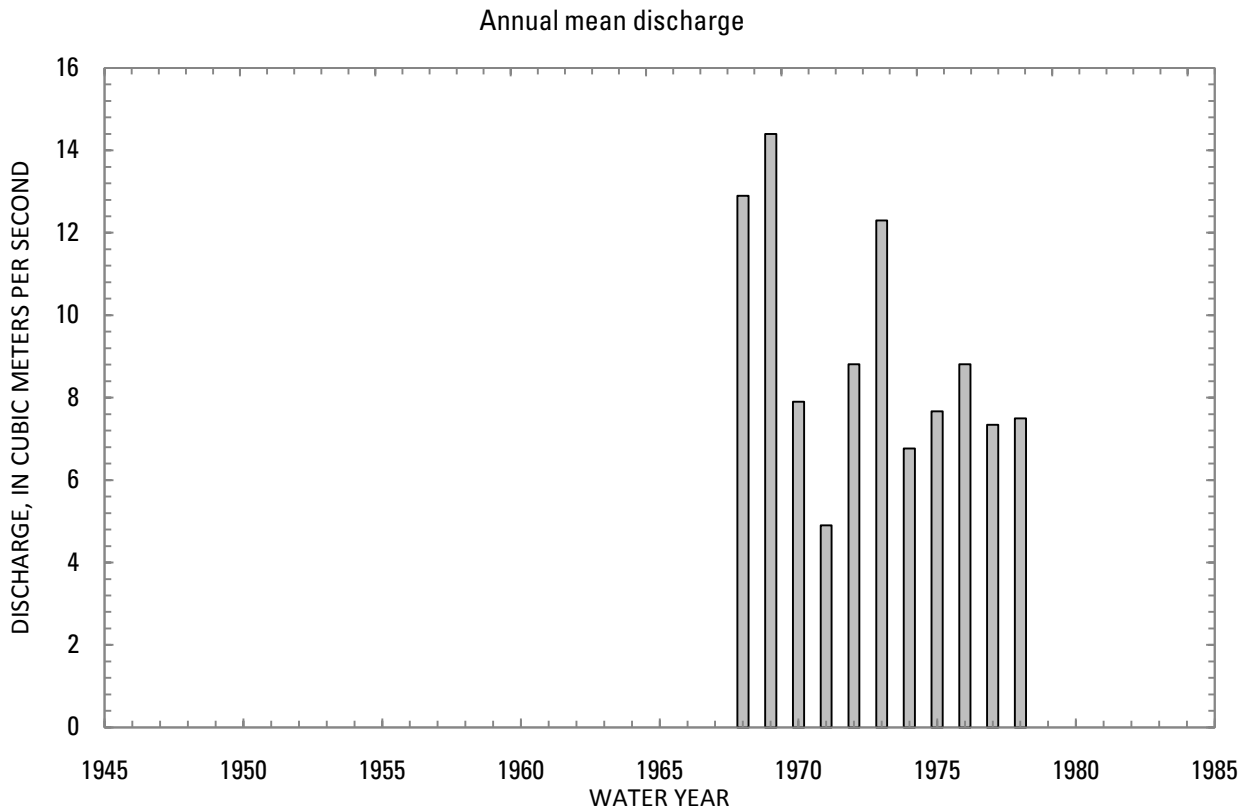
LOCATION: Lat 35°16'N., long 67°59'E.

DRAINAGE AREA: 5,005 km².

ELEVATION: 1,468 meters above mean sea level.

PERIOD OF RECORD: October 1, 1967 to September 30, 1978.

GAGE: Water-stage recorder.



14-9.R00-1A BAMYAN RIVER AT DOAB, Continued

Statistics of monthly and annual mean discharges
[m³/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	8.55	1970	3.10	1972	5.99	1.69	0.28	5.53
November	8.82	1970	3.26	1972	5.70	1.64	0.29	5.27
December	7.92	1970	2.98	1972	4.85	1.33	0.27	4.48
January	6.69	1970	2.70	1978	4.43	1.16	0.26	4.10
February	5.85	1969	2.46	1978	4.15	1.15	0.28	3.83
March	5.32	1968	2.82	1975	4.18	0.85	0.20	3.86
April	8.25	1968	3.06	1972	4.90	1.67	0.34	4.52
May	26.6	1973	10.4	1975	14.9	4.83	0.32	13.8
June	56.1	1969	9.35	1971	30.7	14.6	0.47	28.4
July	31.5	1969	2.66	1971	15.5	8.79	0.57	14.3
August	13.3	1969	2.65	1971	6.85	3.18	0.46	6.33
September	10.5	1969	1.97	1971	6.06	2.61	0.43	5.60
Annual	14.4	1969	4.90	1971	9.03	2.92	0.32	100

14-9.R00-1A BAMYAN RIVER AT DOAB, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	3.15	3.23	3.07	2.75	2.45	2.74	2.68	3.88	10.2	2.80	2.75	1.62	2.77
90	3.98	3.61	3.22	3.06	2.55	2.96	2.85	4.56	13.6	3.81	3.78	3.52	3.17
85	4.51	3.89	3.45	3.23	2.69	3.01	2.98	5.66	16.0	5.27	4.08	4.01	3.52
80	4.64	4.37	3.64	3.51	2.98	3.20	3.06	6.22	17.9	6.42	4.22	4.20	3.91
75	4.86	4.52	3.83	3.58	3.16	3.38	3.24	6.87	20.1	7.05	4.36	4.38	4.15
70	4.98	4.78	4.06	3.65	3.34	3.48	3.58	7.73	21.8	8.53	4.77	4.57	4.38
65	5.10	4.90	4.30	3.81	3.66	3.77	3.82	8.79	23.2	9.61	4.96	4.91	4.60
60	5.23	5.02	4.44	3.97	3.89	3.97	4.01	10.0	24.3	10.9	5.13	5.05	4.81
55	5.43	5.11	4.50	4.11	4.26	4.03	4.15	11.6	25.8	11.8	5.46	5.19	5.02
50	5.59	5.21	4.57	4.24	4.32	4.22	4.35	13.5	27.6	13.0	5.88	5.41	5.33
45	5.79	5.44	4.90	4.41	4.39	4.34	4.56	15.1	29.2	15.1	6.40	5.70	5.66
40	6.26	5.97	5.02	4.58	4.48	4.53	4.80	16.4	31.8	16.4	7.15	6.05	6.17
35	6.51	6.30	5.11	4.80	4.61	4.64	5.02	17.5	34.7	18.2	7.58	6.62	6.81
30	6.99	6.67	5.19	5.01	4.88	4.76	5.44	18.7	37.3	19.3	8.02	7.05	7.59
25	7.41	6.88	5.53	5.27	5.03	4.95	6.07	20.2	40.9	20.9	8.54	7.39	8.49
20	8.02	7.19	5.74	5.49	5.29	5.04	6.57	22.2	46.2	24.2	9.23	7.85	10.4
15	8.26	7.64	6.09	5.86	5.43	5.11	7.44	25.0	51.7	27.1	9.69	8.83	15.1
10	8.46	8.13	6.52	6.26	5.67	5.31	8.09	28.5	54.6	31.3	11.1	9.94	21.2
5	8.76	9.09	7.92	6.70	5.91	6.00	8.71	34.2	58.1	36.5	14.2	11.7	30.7

14-9.R00-1A BAMYAN RIVER AT DOAB, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	25.3	15.3	13.7	12.3	11.2
0.95	1.05	28.6	20.3	18.2	16.4	14.9
0.90	1.11	30.9	23.5	21.2	19.2	17.4
0.80	1.25	34.5	27.9	25.4	23.1	20.9
0.50	2	44.8	38.1	35.4	32.8	29.8
0.20	5	62.3	51.0	48.9	46.5	42.5
0.10	10	76.3	59.0	57.6	55.7	51.1
0.04	25	96.9	68.6	68.3	67.5	62.2
0.02	50	115	¹ 75.4	¹ 76.1	76.3	70.6
0.01	100	134	¹ 81.9	¹ 83.8	85.2	79.2
0.005	200	157	¹ 88.2	¹ 91.5	94.3	87.9
0.002	500	191	ng	ng	ng	ng

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

14-9.R00-1A BAMYAN RIVER AT DOAB, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0.98	1.08	1.27	1.52	1.96	2.17	2.36	2.57	2.84
0.10	10	1.20	1.33	1.52	1.79	2.17	2.47	2.66	2.87	3.19
0.20	5	1.52	1.67	1.87	2.15	2.47	2.87	3.07	3.28	3.65
0.50	2	2.26	2.45	2.64	2.94	3.16	3.73	3.96	4.17	4.67

14-9.R00-1A BAMYAN RIVER AT DOAB, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	1.38	1.60	2.06	2.29	1.22	1.66	2.23	2.54
0.10	10	1.66	1.95	2.36	2.58	1.57	1.95	2.44	2.77
0.20	5	2.05	2.42	2.76	2.97	2.05	2.35	2.73	3.07
0.50	2	2.93	3.42	3.61	3.83	3.08	3.20	3.38	3.75
		June-July-August				September-October-November			
0.05	20	1.77	2.09	2.33	2.84	1.58	1.71	1.77	2.29
0.10	10	2.36	2.67	2.90	3.36	2.13	2.34	2.41	2.89
0.20	5	3.22	3.50	3.71	4.12	2.90	3.22	3.30	3.71
0.50	2	5.28	5.47	5.64	6.11	4.56	5.03	5.17	5.40

14-9.R00-1A BAMYAN RIVER AT DOAB, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1968	June 15, 1968	61.5	1969	May 26, 1969	101
1969	May 26, 1969	101	1973	June 9, 1973	61.8
1970	June 3, 1970	30.3	1968	June 15, 1968	61.5
1971	May 20, 1971	32.0	1972	June 2, 1972	61.4
1972	June 2, 1972	61.4	1978	June 7, 1978	45.0
1973	June 9, 1973	61.8	1975	May 16, 1975	44.6
1974	June 6, 1974	33.8	1977	May 28, 1977	40.5
1975	May 16, 1975	44.6	1976	June 2, 1976	40.0
1976	June 2, 1976	40.0	1974	June 6, 1974	33.8
1977	May 28, 1977	40.5	1971	May 20, 1971	32.0
1978	June 7, 1978	45.0	1970	June 3, 1970	30.3

14-9.R00-1A BAMYAN RIVER AT DOAB, Continued

Monthly and annual mean discharges, in cubic meters per second

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1968	7.22	6.19	4.57	4.34	4.97	5.32	8.25	14.4	51.0	27.5	11.3	10.3	12.9
1969	7.44	7.22	5.19	5.55	5.85	5.19	6.02	18.5	56.1	31.5	13.3	10.5	14.4
1970	8.55	8.82	7.92	6.69	5.41	4.80	5.81	11.4	16.4	8.37	5.51	5.08	7.90
1971	5.14	4.79	4.31	3.64	3.32	3.81	3.98	13.0	9.35	2.66	2.65	1.97	4.90
1972	3.10	3.26	2.98	3.55	4.05	3.32	3.06	11.1	36.8	19.8	8.02	6.89	8.81
1973	8.08	7.44	5.89	5.72	5.18	4.23	5.90	26.6	43.7	18.6	8.06	7.62	12.3
1974	6.29	5.90	4.21	3.60	2.56	4.32	3.17	13.7	21.5	7.82	4.03	4.00	6.77
1975	4.83	3.80	3.51	3.86	3.21	2.82	3.25	10.4	25.4	18.2	6.95	5.69	7.67
1976	5.19	5.12	5.02	4.59	4.41	4.47	6.23	18.9	25.1	16.1	4.85	5.55	8.81
1977	5.66	5.28	5.62	4.54	4.24	4.67	4.67	11.0	23.9	9.47	4.57	4.40	7.34
1978	4.34	4.93	4.15	2.70	2.46	3.01	3.52	15.2	28.3	10.5	6.11	4.62	7.50

14-9.R00-6T BAMYAN RIVER AT AHANGARAN

(U.S. Geological Survey identification number: 344900067550000)

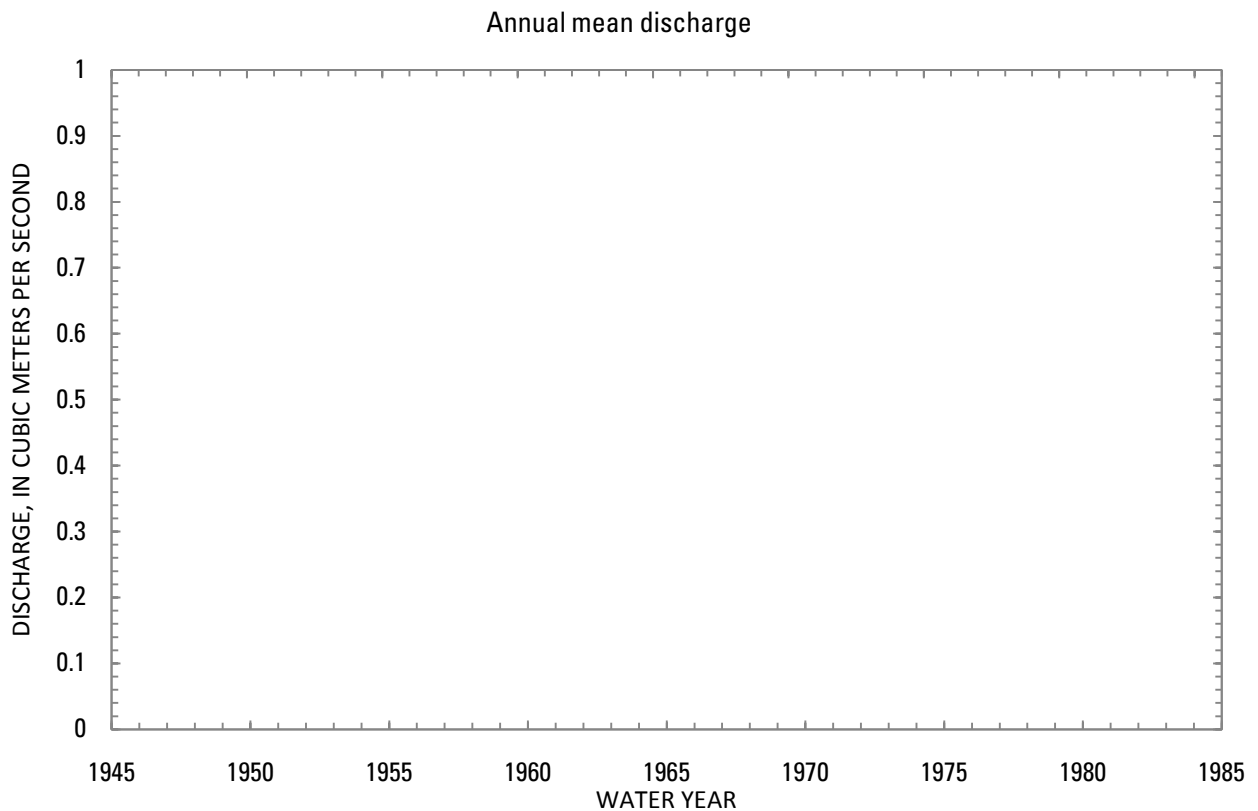
LOCATION: Lat 34°49'N., long 67°55'E.

DRAINAGE AREA: 1,660 km².

ELEVATION: 2,450 meters above mean sea level.

PERIOD OF RECORD: April 14, 1975 to May 21, 1976.

GAGE: Staff gage.



14-9.R00-6T BAMYAN RIVER AT AHANGARAN, Continued

Statistics of monthly and annual mean discharges
[m³/s, cubic meters per second; ng, not given]

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	2.97	1976	2.97	1976	2.97	ng	ng	5.49
November	2.59	1976	2.59	1976	2.59	ng	ng	4.79
December	2.53	1976	2.53	1976	2.53	ng	ng	4.68
January	2.29	1976	2.29	1976	2.29	ng	ng	4.23
February	2.32	1976	2.32	1976	2.32	ng	ng	4.29
March	2.24	1976	2.24	1976	2.24	ng	ng	4.14
April	3.24	1976	3.24	1976	3.23	ng	ng	5.98
May	6.77	1975	6.77	1975	6.77	ng	ng	12.5
June	12.8	1975	12.8	1975	12.8	ng	ng	23.7
July	7.75	1975	7.75	1975	7.75	ng	ng	14.3
August	4.47	1975	4.47	1975	4.47	ng	ng	8.26
September	4.12	1975	4.12	1975	4.12	ng	ng	7.62
Annual	ng	ng	ng	ng	ng	ng	ng	100

14-9.R00-6T BAMYAN RIVER AT AHANGARAN, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	2.70	1.20	2.05	1.57	2.04	2.03	1.75	1.69	8.63	6.32	3.90	3.42	ng
90	2.70	2.40	2.37	2.02	2.21	2.03	1.91	1.73	9.68	6.35	4.12	3.43	ng
85	2.71	ng	2.38	2.04	2.21	2.04	1.95	1.78	10.1	6.37	4.14	3.45	ng
80	2.71	ng	2.38	2.21	2.21	2.04	1.99	2.09	10.5	6.40	4.32	3.67	ng
75	2.71	ng	2.39	2.22	2.21	2.04	2.05	2.41	11.4	6.43	4.33	3.89	ng
70	2.87	ng	2.39	2.23	2.22	2.05	2.10	2.48	11.9	6.75	4.33	3.91	ng
65	2.88	ng	2.40	2.23	2.22	2.05	2.19	2.55	12.0	6.81	4.34	3.92	ng
60	2.88	ng	2.53	2.24	2.22	2.20	2.38	3.51	12.1	7.25	4.34	4.12	ng
55	ng	ng	2.53	2.25	ng	2.20	2.41	4.08	13.0	7.29	4.35	4.14	ng
50	ng	ng	2.54	2.37	ng	2.21	2.45	4.62	13.1	7.32	4.35	4.15	ng
45	ng	ng	2.55	2.38	ng	2.21	2.86	4.90	13.1	7.36	4.57	4.35	ng
40	ng	ng	2.55	2.39	ng	2.21	3.10	7.84	13.2	7.57	4.58	4.36	ng
35	ng	ng	2.69	2.40	ng	2.22	3.38	10.0	13.6	7.85	4.59	4.37	ng
30	ng	ng	2.70	2.41	ng	2.22	3.88	10.3	13.7	8.20	4.60	4.38	ng
25	ng	ng	2.70	ng	ng	ng	4.16	10.6	14.5	8.50	4.61	ng	ng
20	ng	ng	2.71	ng	ng	ng	4.34	11.3	15.2	9.30	4.81	ng	ng
15	ng	ng	2.72	ng	ng	ng	4.98	13.5	15.7	10.1	4.83	ng	ng
10	ng	ng	2.73	ng	ng	ng	5.12	14.2	16.0	10.2	4.85	ng	ng
5	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng

14-9.R00-6T BAMYAN RIVER AT AHANGARAN, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

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

14-9.R00-6T BAMYAN RIVER AT AHANGARAN, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /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

14-9.R00-6T BAMYAN RIVER AT AHANGARAN, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second; ng, not given]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng
		June-July-August				September-October-November			
0.05	20	ng	ng	ng	ng	ng	ng	ng	ng
0.10	10	ng	ng	ng	ng	ng	ng	ng	ng
0.20	5	ng	ng	ng	ng	ng	ng	ng	ng
0.50	2	ng	ng	ng	ng	ng	ng	ng	ng

14-9.R00-6T BAMYAN RIVER AT AHANGARAN, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1975	June 20, 1975	23.1	1975	June 20, 1975	23.1

14-9.R00-6T BAMYAN RIVER AT AHANGARAN, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1975	--	--	--	--	--	--	--	6.77	12.8	7.75	4.47	4.12	--
1976	2.97	2.59	2.53	2.29	2.32	2.24	3.24	--	--	--	--	--	--

14-9.R00-8A BAMYAN RIVER AT BAMYAN

(U.S. Geological Survey identification number: 345000067490000)

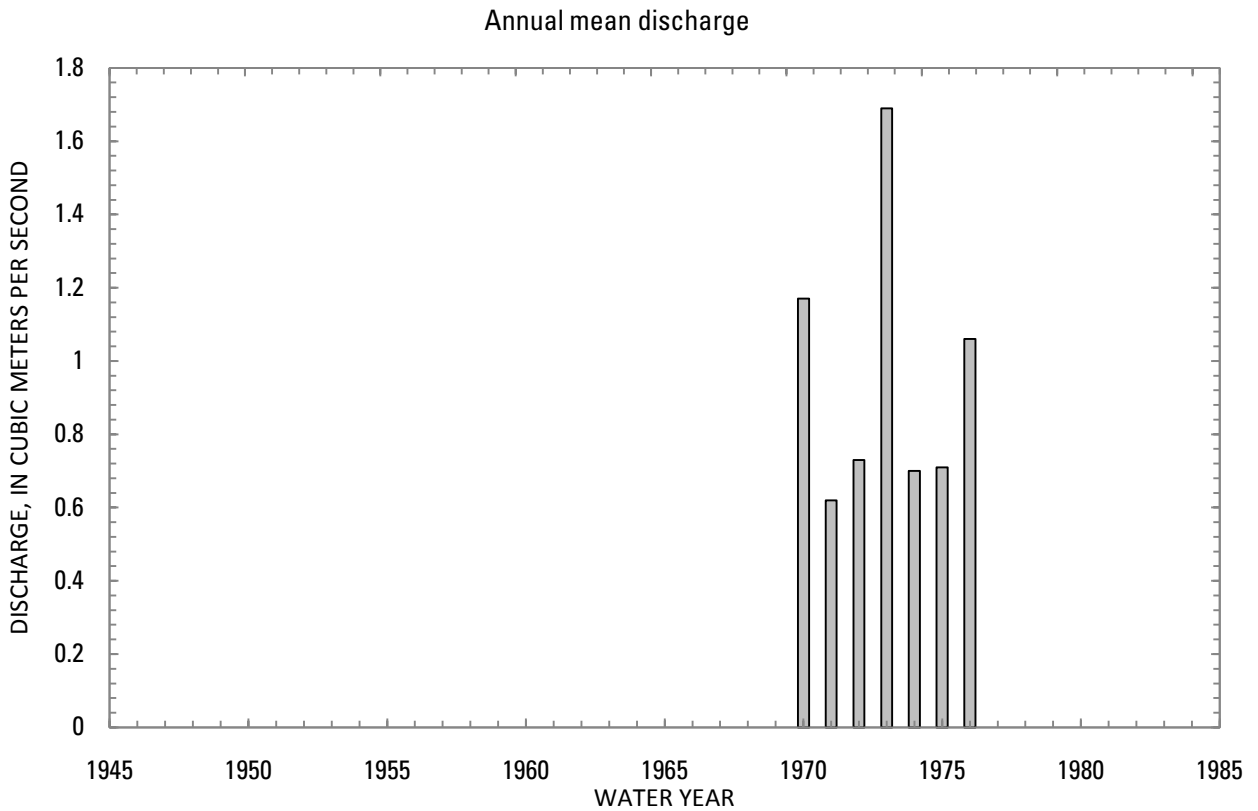
LOCATION: Lat 34°50'N., long 67°49'E.

DRAINAGE AREA: 945 km².

ELEVATION: 2,506 meters above mean sea level.

PERIOD OF RECORD: October 1, 1969 to May 21, 1977.

GAGE: Staff gage.



14-9.R00-8A BAMYAN RIVER AT BAMYAN, Continued

Statistics of monthly and annual mean discharges
[m³/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	1.97	1970	0.78	1977	1.07	0.39	0.36	9.39
November	1.96	1970	0.59	1971	1.05	0.44	0.42	9.29
December	1.54	1970	0.36	1971	0.76	0.45	0.58	6.74
January	1.43	1973	0.23	1975	0.67	0.41	0.61	5.92
February	0.93	1976	0.26	1975	0.63	0.25	0.41	5.51
March	1.46	1971	0.46	1972	0.98	0.40	0.41	8.65
April	2.33	1973	0.41	1972	1.07	0.70	0.66	9.46
May	3.01	1973	0.63	1972	1.38	0.81	0.58	12.2
June	4.15	1973	0.52	1974	1.33	1.27	0.96	11.7
July	2.09	1973	0.38	1975	0.86	0.59	0.69	7.59
August	1.10	1973	0.19	1971	0.71	0.29	0.41	6.25
September	1.19	1973	0.68	1971	0.83	0.17	0.21	7.33
Annual	1.69	1973	0.62	1971	0.96	0.39	0.40	100

14-9.R00-8A BAMYAN RIVER AT BAMYAN, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	0.68	0.44	0.32	0.21	0.21	0.38	0.19	0.35	0.42	0.19	0.24	0.55	0.29
90	0.73	0.53	0.36	0.28	0.30	0.42	0.30	0.48	0.45	0.25	0.30	0.63	0.36
85	0.75	0.61	0.37	0.29	0.31	0.43	0.33	0.54	0.47	0.30	0.42	0.64	0.41
80	0.79	0.64	0.37	0.30	0.37	0.46	0.39	0.59	0.48	0.38	0.49	0.68	0.46
75	0.81	0.70	0.39	0.34	0.41	0.49	0.44	0.63	0.57	0.46	0.56	0.68	0.52
70	0.87	0.75	0.41	0.37	0.42	0.53	0.58	0.69	0.61	0.53	0.63	0.69	0.58
65	0.89	0.84	0.42	0.42	0.43	0.58	0.63	0.76	0.65	0.61	0.64	0.75	0.64
60	0.91	0.89	0.48	0.49	0.56	0.69	0.66	0.85	0.70	0.67	0.67	0.77	0.71
55	0.93	0.97	0.54	0.55	0.61	0.82	0.69	0.95	0.76	0.71	0.73	0.80	0.76
50	0.95	1.00	0.61	0.57	0.62	0.88	0.72	1.03	0.80	0.73	0.77	0.81	0.82
45	1.04	1.03	0.67	0.60	0.67	0.94	0.77	1.12	0.87	0.76	0.79	0.86	0.86
40	1.09	1.10	0.74	0.63	0.69	0.97	0.88	1.27	0.94	0.79	0.81	0.88	0.90
35	1.12	1.14	0.82	0.73	0.76	1.02	1.01	1.53	1.01	0.82	0.82	0.90	0.98
30	1.13	1.29	0.96	0.83	0.79	1.09	1.12	1.67	1.12	0.96	0.84	0.91	1.05
25	1.15	1.35	1.12	0.98	0.81	1.17	1.41	2.02	1.27	1.09	0.89	0.92	1.10
20	1.16	1.40	1.32	1.03	0.85	1.51	1.76	2.31	1.82	1.16	0.92	0.94	1.21
15	1.32	1.45	1.39	1.10	0.90	1.60	2.15	2.67	2.42	1.37	1.02	1.04	1.41
10	1.88	1.87	1.44	1.25	0.96	1.99	2.49	2.90	3.72	1.79	1.10	1.18	1.79
5	2.01	1.99	1.65	1.54	1.14	2.31	2.83	3.19	4.52	2.15	1.14	1.21	2.33

14-9.R00-8A BAMYAN RIVER AT BAMYAN, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	1.20	1.17	² 1.03	² 1.01	1.07
0.95	1.05	1.60	1.56	1.33	1.22	1.16
0.90	1.11	1.90	1.82	1.53	1.36	1.24
0.80	1.25	2.30	2.18	1.82	1.57	1.36
0.50	2	3.40	3.08	2.58	2.16	1.76
0.20	5	5.10	4.32	3.71	3.16	2.56
0.10	10	6.30	5.13	4.52	3.95	3.26
0.04	25	7.90	6.17	5.60	5.10	4.41
0.02	50	9.10	6.93	6.45	6.08	5.48
0.01	100	10.4	7.69	7.33	7.18	6.77
0.005	200	11.8	8.46	² 8.26	8.40	8.33
0.002	500	13.7	ng	ng	ng	ng

¹Less than 10 years of data used.

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

14-9.R00-8A BAMYAN RIVER AT BAMYAN, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	0	0	0	0	0.10	0.21	0.26	0.30	0.49
0.10	10	0	0	0	0	0.14	0.24	0.29	0.33	0.52
0.20	5	0.12	0.12	0.12	0.16	0.19	0.28	0.33	0.38	0.56
0.50	2	0.18	0.19	0.21	0.24	0.30	0.37	0.44	0.49	0.65

14-9.R00-8A BAMYAN RIVER AT BAMYAN, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	0.14	0.14	0.16	0.18	0.14	0.14	0.17	0.34
0.10	10	0.19	0.19	0.21	0.23	0.17	0.18	0.22	0.38
0.20	5	0.25	0.27	0.28	0.31	0.22	0.25	0.28	0.43
0.50	2	0.41	0.45	0.47	0.51	0.34	0.41	0.45	0.56
		June-July-August				September-October-November			
0.05	20	0	0	0	0.11	0.32	0.39	0.44	0.59
0.10	10	0	0	0	0.17	0.35	0.41	0.47	0.62
0.20	5	0.14	0.19	0.23	0.27	0.38	0.45	0.5	0.65
0.50	2	0.36	0.42	0.47	0.57	0.45	0.53	0.59	0.71

14-9.R00-8A BAMYAN RIVER AT BAMYAN, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1970	April 5, 1970	2.90	1976	April 22, 1976	6.14
1971	March 20, 1971	2.04	1973	June 14, 1973	5.30
1972	June 24, 1972	2.04	1975	May 16, 1975	5.18
1973	June 14, 1973	5.30	1970	April 5, 1970	2.90
1974	March 20, 1974	2.90	1974	March 20, 1974	2.90
1975	May 16, 1975	5.18	1971	March 20, 1971	2.04
1976	April 22, 1976	6.14	1972	June 24, 1972	2.04

14-9.R00-8A BAMYAN RIVER AT BAMYAN, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1970	1.97	1.96	1.54	1.06	0.85	1.06	1.07	1.34	0.74	0.76	0.80	0.89	1.17
1971	0.83	0.59	0.36	0.38	0.49	1.46	0.59	0.67	0.68	0.47	0.19	0.68	0.62
1972	0.81	0.83	0.56	0.54	0.62	0.46	0.41	0.63	1.07	1.13	0.89	0.86	0.73
1973	1.09	1.27	1.06	1.43	0.88	0.72	2.33	3.01	4.15	2.09	1.10	1.19	1.69
1974	1.11	0.75	0.37	0.29	0.33	1.39	0.57	1.04	0.52	0.66	0.63	0.71	0.70
1975	1.00	0.92	0.37	0.23	0.26	0.48	1.13	1.34	1.14	0.38	0.54	0.75	0.71
1976	0.94	1.32	1.20	0.79	0.93	0.93	1.92	1.67	0.97	0.55	0.81	0.76	1.06
1977	0.78	0.81	0.66	0.65	0.66	1.36	0.58	--	--	--	--	--	--

15-0.000-1M KOKCHA RIVER AT KHOJAGHAR

(U.S. Geological Survey identification number: 370500069280000)

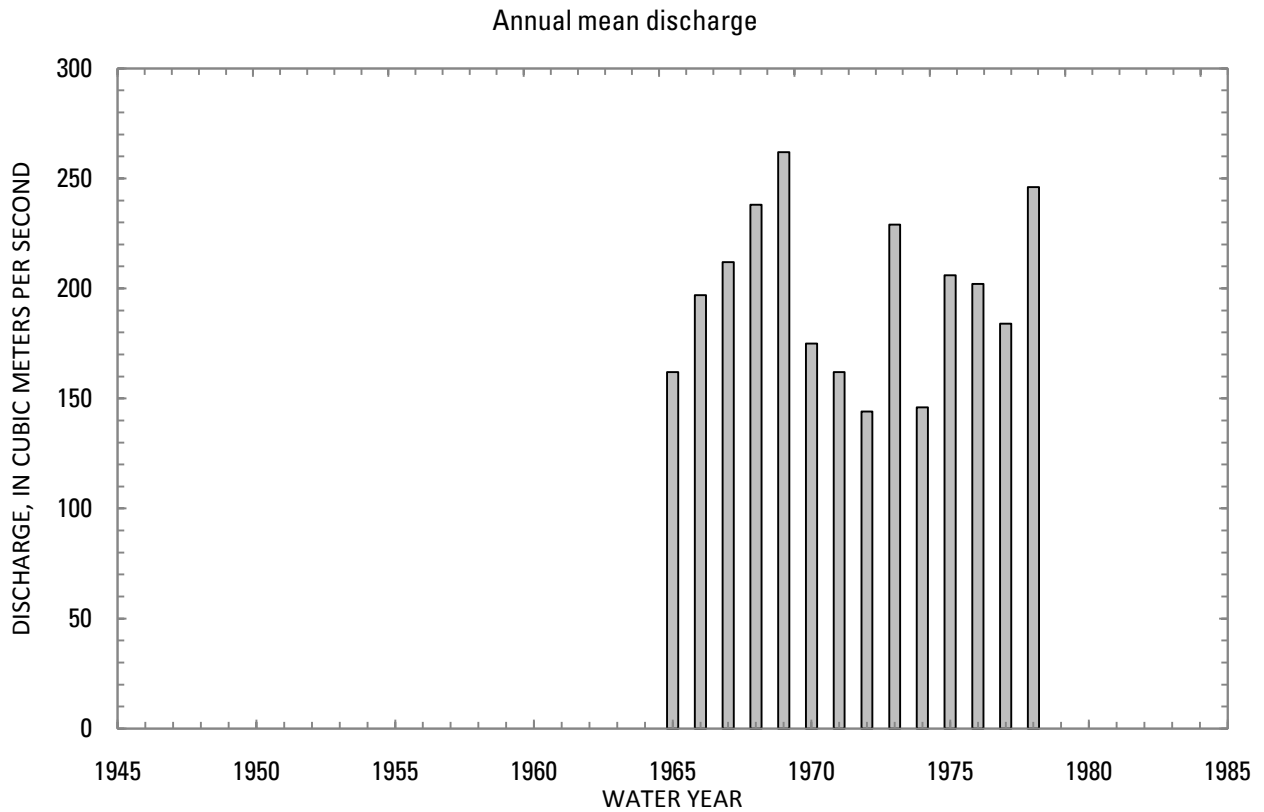
LOCATION: Lat 37°05'N., long 69°28'E.

DRAINAGE AREA: 20,645 km².

ELEVATION: 446 meters above mean sea level.

PERIOD OF RECORD: April 26, 1964 to September 30, 1978.

GAGE: Staff gage. Water-stage recorder at same site and datum during water years 1970-73 and 1978.



15-0.000-1M KOKCHA RIVER AT KHOJAGHAR, Continued

Statistics of monthly and annual mean discharges
[m³/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	142	1968	82.2	1972	110	19.9	0.18	4.67
November	111	1970	64.8	1978	85.9	16.3	0.19	3.65
December	99.8	1970	53.1	1973	72.3	13.8	0.19	3.08
January	92.7	1970	42.5	1973	62.6	15.2	0.24	2.66
February	84.3	1970	46.5	1971	63.3	14.1	0.22	2.69
March	153	1969	42.7	1977	80.4	24.2	0.30	3.42
April	201	1978	60.7	1977	133	47.4	0.36	5.67
May	368	1969	128	1974	225	70.7	0.31	9.57
June	748	1978	291	1974	484	137	0.28	20.6
July	703	1969	313	1970	511	133	0.26	21.7
August	472	1967	205	1972	338	76.5	0.23	14.4
September	240	1967	130	1972	186	30.9	0.17	7.90
Annual	262	1969	144	1972	198	37.4	0.19	100

15-0.000-1M KOKCHA RIVER AT KHOJAGHAR, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	73.6	59.6	50.0	40.5	42.8	41.9	58.9	97.4	205	267	208	120	49.0
90	77.3	63.7	53.8	43.0	44.4	54.0	67.8	112	240	296	229	131	56.8
85	81.9	66.8	56.1	44.2	46.2	56.6	72.8	125	268	327	242	135	64.0
80	86.5	69.2	58.8	46.4	48.2	59.3	78.1	138	295	355	254	139	68.4
75	91.3	71.8	61.4	50.5	49.5	62.0	83.4	146	326	380	267	150	72.5
70	94.4	73.5	63.3	51.9	50.6	64.7	89.9	156	360	400	279	157	77.4
65	98.3	75.7	65.2	54.9	52.7	66.7	94.7	167	384	422	287	164	83.8
60	103	79.2	67.1	57.5	55.7	68.5	100	176	408	443	296	170	91.5
55	109	82.9	69.6	60.8	58.4	70.1	106	185	434	462	307	178	101
50	113	85.2	71.6	63.1	61.9	71.6	112	198	458	485	321	185	115
45	115	88.0	73.7	64.7	64.3	73.0	119	215	479	511	335	190	132
40	118	90.8	76.0	66.1	66.2	74.8	127	230	512	547	350	198	153
35	121	93.2	78.0	67.3	67.9	77.0	134	248	549	569	364	203	186
30	124	95.4	80.3	68.6	72.6	79.6	144	267	584	587	385	209	225
25	128	98.0	82.1	70.3	75.4	83.1	160	283	635	608	403	219	267
20	132	103	84.5	73.8	77.6	90.3	179	307	677	652	422	227	318
15	136	107	88.5	78.6	80.3	99.8	196	336	721	717	453	238	388
10	141	110	91.0	86.3	86.0	124	221	362	764	780	484	252	468
5	149	115	101	92.8	90.3	158	288	400	833	844	525	270	594

15-0.000-1M KOKCHA RIVER AT KHOJAGHAR, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	398	361	343	325	287
0.95	1.05	483	457	426	400	358
0.90	1.11	537	514	476	445	400
0.80	1.25	613	588	541	504	457
0.50	2	797	742	682	633	582
0.20	5	1,050	909	844	785	728
0.10	10	1,220	1,000	936	873	813
0.04	25	1,430	1,100	1,040	975	911
0.02	50	1,590	1,160	1,110	1,040	977
0.01	100	1,760	1,220	1,170	1,110	1,040
0.005	200	1,920	1,270	1,230	1,170	1,100
0.002	500	2,150	ng	ng	ng	ng

15-0.000-1M KOKCHA RIVER AT KHOJAGHAR, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	32.4	33.7	34.9	36.3	38.0	41.0	44.0	47.9	58.5
0.10	10	35.2	36.5	38.0	39.6	41.4	44.3	47.3	51.1	62.1
0.20	5	39.1	40.3	42.1	44.0	45.9	48.8	51.7	55.3	66.8
0.50	2	48.0	49.1	51.3	53.7	55.9	58.8	61.6	65.0	77.4

15-0.000-1M KOKCHA RIVER AT KHOJAGHAR, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	33.4	36.4	37.8	39.6	38.0	42.2	44.4	51.2
0.10	10	36.4	39.5	41.1	42.9	42.2	46.5	48.0	55.1
0.20	5	40.5	43.6	45.5	47.4	47.6	52.1	53.0	60.7
0.50	2	49.8	52.9	55.4	57.6	58.3	63.8	65.1	74.7
		June-July-August				September-October-November			
0.05	20	144	172	192	215	51.8	53.0	55.3	61.4
0.10	10	163	189	210	239	56.7	58.0	60.2	66.0
0.20	5	186	210	232	269	62.8	64.4	66.4	71.9
0.50	2	228	251	280	331	75.4	77.4	79.3	84.7

15-0.000-1M KOKCHA RIVER AT KHOJAGHAR, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1964	June 30, 1964	775	1969	May 22, 1969	1,550
1965	June 21, 1965	555	1977	June 23, 1977	1,110
1966	June 19, 1966	805	1978	June 30, 1978	1,065
1967	June 29, 1967	751	1973	June 12, 1973	1,008
1968	July 8, 1968	969	1968	July 8, 1968	969
1969	May 22, 1969	1,550	1975	June 18, 1975	889
1970	June 30, 1970	484	1976	May 25, 1976	889
1971	June 10, 1971	600	1966	June 19, 1966	805
1972	June 24, 1972	680	1964	June 30, 1964	775
1973	June 12, 1973	1,008	1967	June 29, 1967	751
1974	July 1, 1974	520	1972	June 24, 1972	680
1975	June 18, 1975	889	1971	June 10, 1971	600
1976	May 25, 1976	889	1965	June 21, 1965	555
1977	June 23, 1977	1,110	1974	July 1, 1974	520
1978	June 30, 1978	1,065	1970	June 30, 1970	484

15-0.000-1M KOKCHA RIVER AT KHOJAGHAR, Continued

Monthly and annual mean discharges, in cubic meters per second

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

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1964	--	--	--	--	--	--	--	191	445	466	312	188	--
1965	108	74.2	68.2	67.7	83.3	80.6	113	161	380	412	243	147	162
1966	105	95.3	80.5	70.2	78.4	84.9	108	201	503	476	360	189	197
1967	125	90.3	78.8	68.3	66.8	68.7	102	177	460	581	472	240	212
1968	142	108	86.0	67.1	66.5	84.0	135	219	648	672	429	191	238
1969	126	100	89.9	87.0	79.9	153	194	368	615	703	433	178	262
1970	123	111	99.8	92.7	84.3	76.9	115	216	364	313	294	209	175
1971	94.7	67.0	55.4	43.6	46.5	63.4	99.9	210	429	339	332	159	162
1972	82.2	72.2	63.1	53.1	49.0	80.3	110	176	373	337	205	130	144
1973	84.9	72.6	53.1	42.5	50.2	85.5	191	316	690	592	338	224	229
1974	113	84.1	72.1	64.1	57.8	74.2	73.8	128	291	382	250	153	146
1975	92.4	66.1	61.8	52.3	51.9	62.3	185	298	531	499	364	195	206
1976	126	98.7	75.6	67.7	70.3	85.5	179	236	328	604	330	218	202
1977	133	98.0	70.6	53.8	46.5	42.7	60.7	152	452	631	295	162	184
1978	83.5	64.8	57.7	45.8	55.0	83.1	201	326	748	654	418	202	246

15-0.000-3M KOKCHA RIVER NEAR KESHEM

(U.S. Geological Survey identification number: 365700070030000)

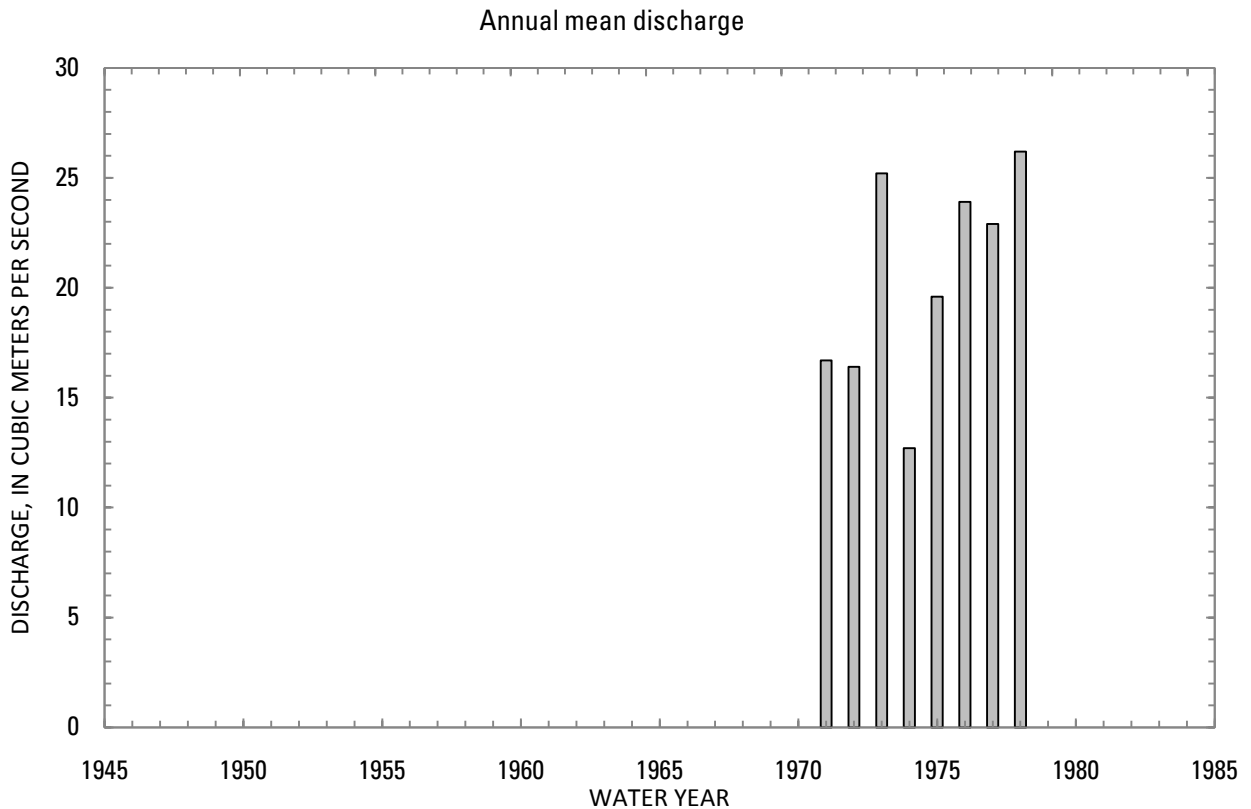
LOCATION: Lat 36°57'N., long 70°03'E.

DRAINAGE AREA: 16,765 km².

ELEVATION: 805 meters above mean sea level.

PERIOD OF RECORD: October 1, 1969 to September 30, 1978.

GAGE: Water-stage recorder.



15-0.000-3M KOKCHA RIVER NEAR KESHEM, Continued

Statistics of monthly and annual mean discharges
[m³/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	116	1970	69.5	1978	92.9	15.6	0.17	4.86
November	105	1970	47.7	1978	71.1	16.7	0.23	3.72
December	80.7	1970	41.0	1978	56.1	11.3	0.20	2.93
January	73.0	1970	35.9	1978	48.4	11.4	0.24	2.53
February	67.4	1970	39.0	1977	48.1	9.37	0.19	2.51
March	67.5	1973	39.6	1977	57.0	8.59	0.15	2.98
April	153	1975	49.3	1977	102	38.0	0.37	5.34
May	271	1978	105	1977	196	61.8	0.31	10.3
June	666	1978	262	1974	402	146	0.36	21.0
July	579	1978	285	1970	414	111	0.27	21.6
August	374	1978	171	1972	274	56.2	0.21	14.3
September	180	1978	104	1972	151	25.9	0.17	7.89
Annual	210	1978	122	1972	160	29.3	0.18	100

15-0.000-3M KOKCHA RIVER NEAR KESHEM, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	60.2	47.0	40.1	34.9	36.6	37.2	45.4	67.4	164	210	163	98.3	40.0
90	72.0	50.1	42.7	35.8	38.5	41.4	52.0	83.7	189	254	183	105	44.7
85	75.2	54.9	44.7	36.7	39.9	45.3	56.9	98.1	205	279	206	111	48.2
80	77.3	59.4	46.2	38.0	40.3	47.2	59.3	105	224	297	224	114	51.6
75	79.0	61.2	47.9	40.5	40.7	48.8	62.4	117	250	324	235	117	56.4
70	81.1	62.7	49.5	42.0	41.1	50.1	68.0	125	274	339	244	121	60.4
65	82.6	63.9	50.5	43.0	42.1	51.6	71.9	137	297	351	252	129	65.4
60	84.0	65.3	51.5	44.0	43.7	53.4	76.5	153	321	363	260	135	71.7
55	87.6	66.7	52.7	45.1	44.6	54.2	79.7	170	345	376	266	141	79.5
50	90.6	67.8	54.3	46.8	46.0	55.1	82.8	194	368	396	274	147	90.7
45	94.9	68.8	55.4	47.6	46.7	56.0	88.2	209	388	409	281	153	105
40	99.6	70.1	56.9	48.2	48.0	57.1	92.9	232	420	421	287	159	121
35	103	71.7	58.3	49.1	49.3	58.3	101	251	453	446	294	166	150
30	105	74.1	60.2	50.3	52.3	59.7	108	260	486	470	302	172	188
25	107	77.7	61.1	52.9	54.2	61.7	118	269	530	485	313	180	229
20	109	82.1	63.4	57.4	55.3	63.9	135	280	581	505	326	189	271
15	111	89.0	68.3	59.0	56.5	65.7	162	292	627	546	341	197	308
10	115	96.1	76.8	71.1	65.1	69.5	179	309	680	613	359	207	367
5	122	107	81.5	73.1	68.5	88.3	218	345	738	700	404	220	474

15-0.000-3M KOKCHA RIVER NEAR KESHEM, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	392	389	337	307	273
0.95	1.05	449	433	384	350	312
0.90	1.11	485	462	413	378	338
0.80	1.25	532	502	456	417	375
0.50	2	642	601	560	517	467
0.20	5	782	742	706	662	602
0.10	10	871	838	805	763	696
0.04	25	981	963	935	897	821
0.02	50	1,060	1,060	1,030	1,000	919
0.01	100	1,140	1,160	1,140	1,110	1,020
0.005	200	1,220	1,260	1,240	1,230	1,130
0.002	500	1,320	ng	ng	ng	ng

¹Less than 10 years of data used.

15-0.000-3M KOKCHA RIVER NEAR KESHEM, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	31.6	31.6	32.0	32.6	34.2	35.5	37.2	40.4	50.5
0.10	10	33.1	33.2	33.6	34.2	35.8	37.1	38.9	41.9	52.1
0.20	5	35.2	35.4	35.8	36.3	37.8	39.3	41.0	43.9	54.3
0.50	2	40.0	40.3	40.6	41.2	42.5	44.2	45.7	48.3	59.1

15-0.000-3M KOKCHA RIVER NEAR KESHEM, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	31.4	32.0	32.7	34.4	34.9	36.5	37.5	41.2
0.10	10	33.0	33.6	34.3	35.9	37.5	39.6	40.7	45.3
0.20	5	35.4	36.0	36.7	38.1	40.9	43.2	44.5	50.0
0.50	2	41.5	42.1	42.7	44.0	47.5	50.0	51.4	58.0
		June-July-August				September-October-November			
0.05	20	103	127	154	176	42.4	43.7	45.1	48.6
0.10	10	119	144	167	195	46.1	47.1	48.7	52.4
0.20	5	140	165	184	219	50.6	51.5	53.3	57.1
0.50	2	182	208	224	267	59.4	60.4	62.1	66.6

15-0.000-3M KOKCHA RIVER NEAR KESHEM, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1970	June 30, 1970	490	1978	June 29, 1978	930
1971	June 10, 1971	550	1973	June 12, 1973	800
1972	June 23, 1972	600	1977	June 24, 1977	800
1973	June 12, 1973	800	1975	June 18, 1975	659
1974	June 17, 1974	480	1976	July 8, 1976	650
1975	June 18, 1975	659	1972	June 23, 1972	600
1976	July 8, 1976	650	1971	June 10, 1971	550
1977	June 24, 1977	800	1970	June 30, 1970	490
1978	June 29, 1978	930	1974	June 17, 1974	480

15-0.000-3M KOKCHA RIVER NEAR KESHEM, Continued

Monthly and annual mean discharges, in cubic meters per second

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1970	116	105	80.7	73.0	67.4	63.4	84.8	199	330	285	264	160	153
1971	96.1	59.8	46.0	43.0	40.5	49.6	89.8	215	390	307	296	141	148
1972	78.5	64.4	53.5	48.0	45.5	58.1	79.4	145	318	297	171	104	122
1973	80.1	67.0	50.4	38.6	43.2	67.5	132	260	621	527	287	179	197
1974	111	72.4	61.0	58.0	55.1	56	59	112	262	336	225	122	128
1975	87.5	64.1	54.0	49.3	46.3	55	153	239	417	424	303	160	172
1976	104	88.0	59.5	48.8	55.2	58.7	128	221	266	462	290	170	163
1977	93.2	71.3	58.6	40.7	39.0	39.6	49.3	105	352	505	254	142	147
1978	69.5	47.7	41.0	35.9	40.6	65.5	144	271	666	579	374	180	210

15-0.000-6M KOKCHA RIVER NEAR JURM

(U.S. Geological Survey identification number: 365600070520000)

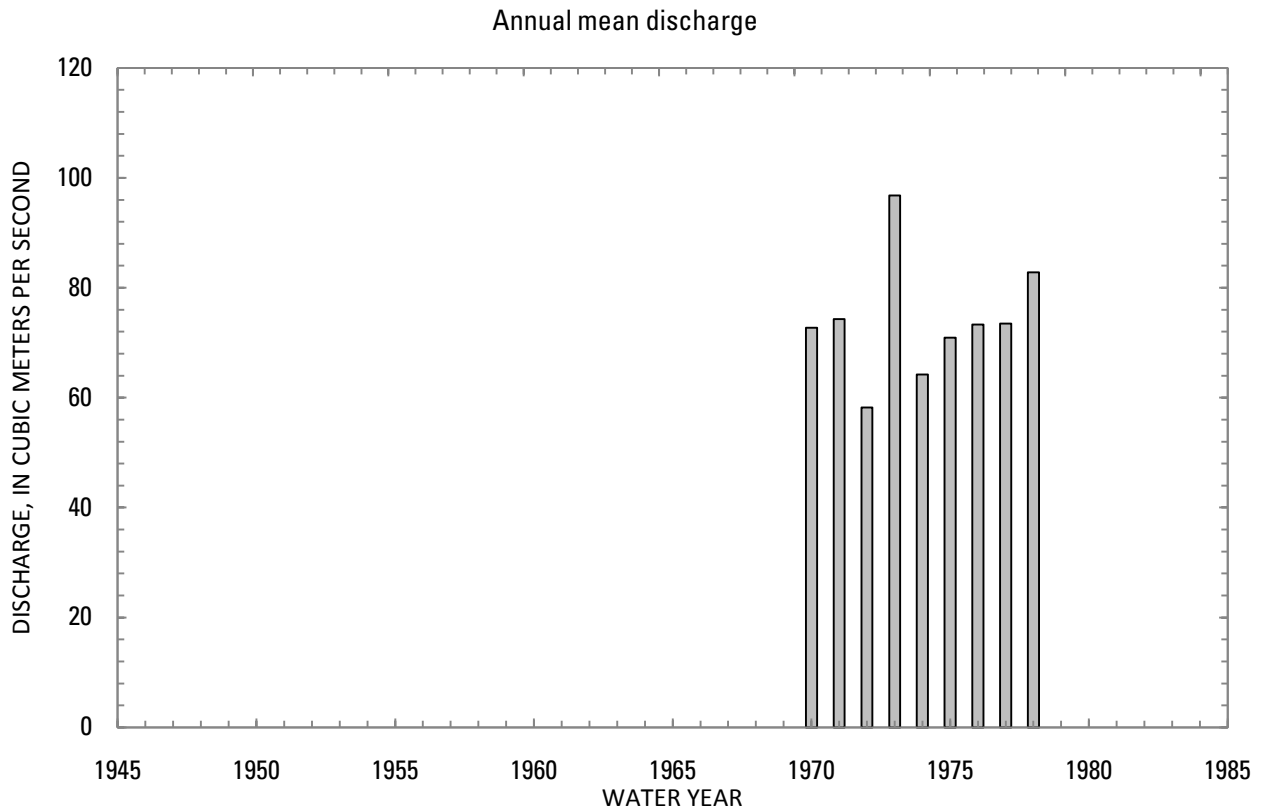
LOCATION: Lat 36°56'N., long 70°52'E.

DRAINAGE AREA: 7,670 km².

ELEVATION: 1,449 meters above mean sea level.

PERIOD OF RECORD: October 1, 1969 to September 30, 1978.

GAGE: Water-stage recorder.



15-0.000-6M KOKCHA RIVER NEAR JURM, Continued

Statistics of monthly and annual mean discharges
[m³/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	54.4	1970	35.3	1975	46.3	6.78	0.15	5.23
November	41.4	1974	29.4	1975	34.6	4.10	0.12	3.91
December	32.8	1977	24.0	1975	28.2	3.05	0.11	3.19
January	30.0	1970	19.1	1972	24.2	3.40	0.14	2.73
February	27.9	1974	17.2	1971	22.0	3.56	0.16	2.48
March	23.6	1971	17.9	1978	20.5	1.76	0.09	2.31
April	39.2	1971	18.2	1977	26.6	6.94	0.26	3.01
May	112	1971	38.0	1972	63.3	25.4	0.40	7.15
June	282	1973	107	1976	175	52.5	0.30	19.7
July	302	1973	150	1970	207	53.9	0.26	23.3
August	186	1973	112	1972	151	23.5	0.16	17.0
September	112	1970	69.5	1972	88.0	12.5	0.14	9.94
Annual	96.8	1973	58.2	1972	74.1	10.9	0.15	100

15-0.000-6M KOKCHA RIVER NEAR JURM, Continued

Monthly and annual flow duration, in cubic meters per second

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	34.2	28.1	23.2	18.5	16.0	17.5	17.4	20.9	74.8	129	101	55.8	18.3
90	34.8	29.2	23.9	20.1	17.1	17.8	18.1	24.9	82.0	136	113	61.2	19.8
85	35.4	29.9	24.8	20.9	17.9	18.0	18.5	29.1	90.1	147	118	64.7	21.0
80	36.6	30.4	25.5	21.4	18.9	18.2	18.9	33.7	106	151	122	67.8	22.6
75	37.9	31.3	26.0	21.9	19.4	18.9	19.3	35.9	117	160	131	71.9	24.4
70	40.5	31.6	26.5	22.0	20.1	19.3	19.6	37.1	125	166	135	74.5	26.5
65	41.9	32.0	26.8	22.6	20.5	19.9	20.0	38.8	135	172	140	77.6	28.6
60	43.3	32.7	27.0	23.0	20.9	20.0	20.5	41.8	146	178	144	79.1	30.9
55	44.8	33.2	27.1	23.8	21.3	20.1	21.6	48.3	159	184	148	80.8	33.7
50	45.6	34.0	28.0	24.0	22.2	20.2	22.5	55.0	168	190	151	83.0	37.4
45	46.9	34.7	29.1	24.3	22.6	20.3	23.5	60.9	175	195	155	86.4	42.6
40	47.8	35.3	29.3	24.9	23.0	20.5	25.9	64.7	186	202	158	91.2	52.1
35	49.0	35.6	30.0	25.5	23.3	20.8	27.6	69.2	195	211	162	95.2	66.6
30	51.0	36.9	30.2	25.9	23.6	21.2	30.0	75.6	208	225	166	99.2	86.0
25	52.4	38.3	30.4	26.8	24.3	21.4	32.3	84.2	221	249	171	103	113
20	53.3	39.1	31.3	27.5	25.0	22.0	35.5	95.3	233	267	175	108	133
15	56.0	40.0	32.1	28.7	26.1	22.2	38.5	110	249	282	180	113	155
10	59.4	41.2	33.1	29.4	27.2	23.0	40.6	117	287	295	185	117	178
5	61.8	43.1	33.6	30.3	28.2	26.2	44.7	123	319	331	193	130	218

15-0.000-6M KOKCHA RIVER NEAR JURM, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	172	² 158	162	148	140
0.95	1.05	203	185	183	171	159
0.90	1.11	223	202	197	185	170
0.80	1.25	251	225	215	204	186
0.50	2	318	281	262	249	223
0.20	5	409	355	326	306	272
0.10	10	470	403	370	342	304
0.04	25	548	464	426	387	343
0.02	50	607	510	469	420	373
0.01	100	666	555	513	453	402
0.005	200	727	601	559	485	432
0.002	500	810	ng	ng	ng	ng

¹Less than 10 years of data used.

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

15-0.000-6M KOKCHA RIVER NEAR JURM, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	14.0	14.1	14.6	15.2	16.4	17.4	18.6	19.9	24.1
0.10	10	14.8	14.9	15.4	15.8	16.9	18.0	19.2	20.6	25.1
0.20	5	15.8	15.9	16.3	16.6	17.5	18.7	20.0	21.4	26.4
0.50	2	17.5	17.8	18.1	18.3	18.9	20.5	21.6	23.2	28.9

15-0.000-6M KOKCHA RIVER NEAR JURM, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	14.1	14.6	15.3	16.7	15.0	16.6	17.1	17.4
0.10	10	15.4	15.8	16.4	17.6	15.7	17.1	17.5	17.8
0.20	5	16.9	17.3	17.8	18.8	16.6	17.6	18.1	18.3
0.50	2	19.7	20.2	20.5	21.4	18.1	18.6	19	19.5
		June-July-August				September-October-November			
0.05	20	47.5	57.9	69.5	103	26.0	26.2	26.9	28.4
0.10	10	57.1	67.1	77.7	110	26.9	27.2	27.8	29.3
0.20	5	69.6	79.1	88.6	120	28.1	28.4	29.0	30.6
0.50	2	94.6	104	112	140	30.6	31.0	31.7	33.6

15-0.000-6M KOKCHA RIVER NEAR JURM, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1970	June 29, 1970	240	1978	July 8, 1978	465
1971	June 11, 1971	230	1973	June 25, 1973	460
1972	June 22, 1972	310	1977	June 24, 1977	446
1973	June 25, 1973	460	1976	July 24, 1976	323
1974	July 1, 1974	233	1972	June 22, 1972	310
1975	June 19, 1975	296	1975	June 19, 1975	296
1976	July 24, 1976	323	1970	June 29, 1970	240
1977	June 24, 1977	446	1974	July 1, 1974	233
1978	July 8, 1978	465	1971	June 11, 1971	230

15-0.000-6M KOKCHA RIVER NEAR JURM, Continued

Monthly and annual mean discharges, in cubic meters per second

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1970	54.4	38.4	30.2	30.0	24.8	20.9	28.6	71.8	156	150	152	112	72.7
1971	52.5	36.0	29.1	23.5	17.2	23.6	39.2	112	197	152	131	75.5	74.3
1972	37.0	30.5	24.8	19.1	17.4	19.1	19.0	38.0	146	165	112	69.5	58.2
1973	41.8	32.5	26.9	21.2	24.3	20.4	33.2	89.6	282	302	186	97.5	96.8
1974	51.4	41.4	32.0	27.5	27.9	22.4	20.3	39.2	127	172	125	81.2	64.2
1975	35.3	29.4	24.0	22.0	20.5	20.0	29.5	55.0	178	186	160	87.3	70.9
1976	48.9	35.1	27.6	24.4	23.2	20.9	24.9	53.0	107	257	163	89.4	73.3
1977	47.3	37.3	32.8	26.8	22.7	19.0	18.2	39.7	161	230	157	86.1	73.5
1978	47.8	30.6	26.6	23.4	19.8	17.9	26.7	71.6	217	245	169	93.6	82.8

15-1.L00-1A KESHAM RIVER NEAR KESHAM

(U.S. Geological Survey identification number: 365500070030000)

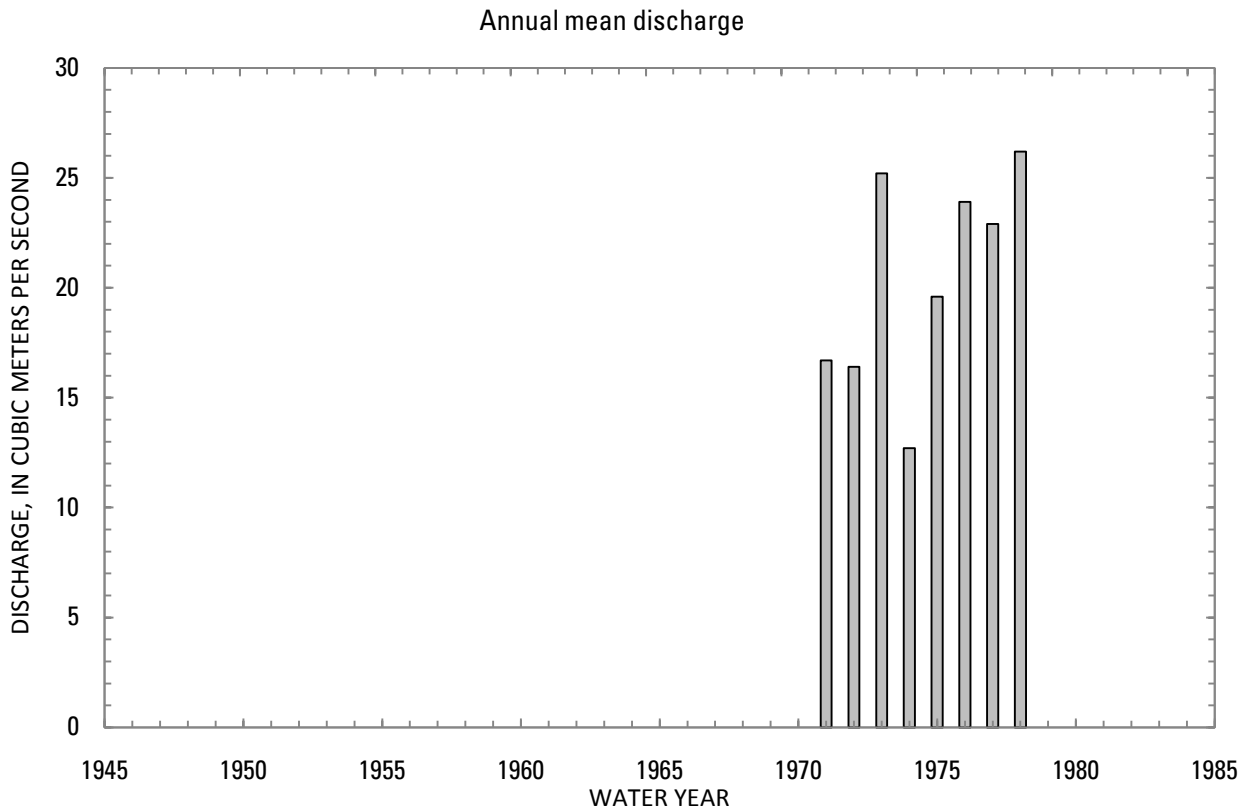
LOCATION: Lat 36°55'N., long 70°03'E.

DRAINAGE AREA: 2,145 km².

ELEVATION: 822 meters above mean sea level.

PERIOD OF RECORD: October 8, 1969 to September 30, 1978.

GAGE: Water-stage recorder.



15-1.L00-1A KESHAM RIVER NEAR KESHAM, Continued

Statistics of monthly and annual mean discharges
[m³/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	12.2	1973	9.39	1972	11.4	0.99	0.09	4.78
November	10.6	1973	7.67	1974	8.93	1.05	0.12	3.75
December	10.1	1978	5.56	1970	7.60	1.54	0.20	3.19
January	8.25	1978	5.20	1970	6.45	1.11	0.17	2.71
February	8.01	1978	3.83	1972	5.84	1.48	0.25	2.46
March	11.7	1973	4.59	1974	7.09	2.11	0.30	2.98
April	24.4	1978	4.90	1974	14.5	6.65	0.46	6.1
May	48.3	1978	8.62	1974	28.6	11.1	0.39	12.0
June	74.7	1978	28.8	1974	50.7	16.6	0.33	21.3
July	83.8	1976	27.5	1970	50.1	19.8	0.40	21.00
August	41.3	1973	20.8	1974	29.5	6.12	0.21	12.4
September	23.4	1973	13.0	1971	17.2	3.84	0.22	7.25
Annual	26.2	1978	12.7	1974	20.5	4.85	0.24	100

15-1.L00-1A KESHEM RIVER NEAR KESHEM, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	8.72	6.87	5.27	4.81	3.67	4.28	4.62	5.83	23.0	24.8	19.3	10.5	4.81
90	9.41	7.22	5.88	5.11	4.29	4.60	5.62	9.81	26.7	26.2	21.4	11.9	5.52
85	9.72	7.63	6.03	5.24	4.56	4.82	6.15	12.4	29.8	28.3	22.7	12.6	6.12
80	9.96	7.88	6.17	5.43	4.60	5.05	7.26	15.2	32.4	30.8	23.3	13.4	6.94
75	10.3	8.24	6.28	5.51	4.65	5.26	8.06	17.6	35.3	33.8	23.7	14.0	7.52
70	10.5	8.30	6.40	5.64	4.69	5.44	8.57	19.2	38.9	36.0	24.1	14.4	8.07
65	10.7	8.36	6.50	5.71	4.80	5.69	9.30	20.6	40.8	38.2	24.9	14.8	8.60
60	11.0	8.68	6.60	5.90	5.04	5.93	10.3	22.0	42.7	40.1	25.9	15.2	9.32
55	11.2	8.75	7.09	5.97	5.57	6.14	10.9	23.7	44.5	41.8	26.7	16.0	10.1
50	11.5	8.86	7.38	6.26	5.76	6.39	11.6	26.7	46.4	44.2	27.7	16.5	11.1
45	11.6	9.02	7.88	6.55	5.87	6.69	12.6	29.1	48.7	46.4	29.8	17.1	12.7
40	11.8	9.16	8.15	6.63	6.06	7.18	14.0	32.9	52.7	48.9	31.1	17.7	15.0
35	12.1	9.34	8.29	6.86	6.58	7.61	15.4	35.6	56.3	52.4	32.6	18.4	18.7
30	12.3	9.60	8.44	7.17	6.82	7.86	16.7	38.2	59.4	57.2	34.0	19.2	23.3
25	12.4	9.83	8.64	7.58	7.35	8.18	18.2	41.1	62.2	61.1	35.3	20.7	28.1
20	12.6	10.0	8.83	7.74	7.49	8.57	20.8	44.1	65.7	65.6	36.6	21.9	34.2
15	13.0	10.4	9.05	7.97	7.59	8.85	22.2	46.8	69.8	72.1	38.1	22.6	40.9
10	13.2	10.5	9.35	8.13	7.79	9.26	25.1	48.9	75.9	82.1	40.2	23.6	47.8
5	13.7	11.0	9.74	ng	8.01	10.5	31.4	51.9	97.3	99.7	42.5	25.5	61.0

15-1.L00-1A KESHAM RIVER NEAR KESHAM, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	34.7	35.4	31.5	30.4	28.9
0.95	1.05	44.3	42.7	39.1	37.5	35.4
0.90	1.11	51.0	47.8	44.2	42.1	39.6
0.80	1.25	60.9	55.2	51.6	48.7	45.5
0.50	2	88.0	75.3	70.7	65.5	60.0
0.20	5	132	108	99.7	89.9	80.4
0.10	10	166	132	121	107	94.3
0.04	25	214	167	149	130	112
0.02	50	254	196	172	147	126
0.01	100	297	227	195	166	140
0.005	200	345	261	221	185	155
0.002	500	415	ng	ng	ng	ng

¹Less than 10 years of data used.

15-1.L00-1A KESHAM RIVER NEAR KESHAM, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	2.85	2.90	3.10	3.43	3.54	4.08	4.48	4.86	6.30
0.10	10	3.16	3.24	3.45	3.76	3.88	4.36	4.77	5.17	6.60
0.20	5	3.60	3.70	3.93	4.22	4.35	4.75	5.17	5.60	7.00
0.50	2	4.63	4.77	5.05	5.28	5.46	5.70	6.11	6.57	7.87

15-1.L00-1A KESHAM RIVER NEAR KESHAM, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	3.00	3.28	3.54	3.77	3.25	3.64	4.00	4.60
0.10	10	3.36	3.64	3.86	4.06	3.57	3.94	4.28	4.91
0.20	5	3.84	4.13	4.30	4.46	4.03	4.37	4.67	5.36
0.50	2	4.98	5.27	5.34	5.44	5.15	5.41	5.67	6.57
		June-July-August				September-October-November			
0.05	20	10.2	17.1	18.4	20.8	6.07	6.38	6.59	7.31
0.10	10	12.6	18.2	19.6	22.3	6.45	6.76	6.99	7.63
0.20	5	15.7	19.6	21.2	24.2	6.96	7.24	7.50	8.04
0.50	2	21.4	23.3	25.0	28.6	8.01	8.24	8.51	8.92

15-1.L00-1A KESHAM RIVER NEAR KESHAM, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1970	June 20, 1970	54.2	1977	June 24, 1977	177
1971	June 9, 1971	53.6	1976	July 10, 1976	150
1972	July 2, 1972	62.2	1978	April 29, 1978	149
1973	July 1, 1973	86.0	1975	June 16, 1975	94.4
1974	July 1, 1974	69.2	1973	July 1, 1973	86.0
1975	June 16, 1975	94.4	1974	July 1, 1974	69.2
1976	July 10, 1976	150	1972	July 2, 1972	62.2
1977	June 24, 1977	177	1970	June 20, 1970	54.2
1978	April 29, 1978	149	1971	June 9, 1971	53.6

15-1.L00-1A KESHEM RIVER NEAR KESHEM, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1970	--	8.47	5.56	5.20	6.11	6.07	10.7	27.2	32.3	27.5	24.3	20.9	--
1971	11.9	8.46	6.97	6.07	4.73	6.29	13.1	29.5	40.0	32.4	27.0	13.0	16.7
1972	9.39	8.27	6.11	5.57	3.83	7.07	12.3	20.2	43.0	38.4	26.3	15.6	16.4
1973	12.2	10.6	8.83	7.71	7.56	11.7	20.4	38.0	62.4	56.6	41.3	23.4	25.2
1974	11.9	7.67	6.35	5.46	4.56	4.59	4.9	8.62	28.8	35.0	20.8	13.3	12.7
1975	10.3	7.76	7.14	5.61	4.88	6.08	12.9	31.1	53.6	46.0	32.5	16.7	19.6
1976	11.7	9.22	8.27	7.07	7.20	7.67	23.1	31.2	49.2	83.8	31.5	15.6	23.9
1977	11.7	10.0	9.08	7.08	5.72	5.59	8.90	23.2	72.5	77.5	27.7	14.8	22.9
1978	11.9	9.92	10.1	8.25	8.01	8.77	24.4	48.3	74.7	53.3	34.5	21.9	26.2

15-10.R00-1A WARDUJ RIVER AT SHASHPUL

(U.S. Geological Survey identification number: 370100070500000)

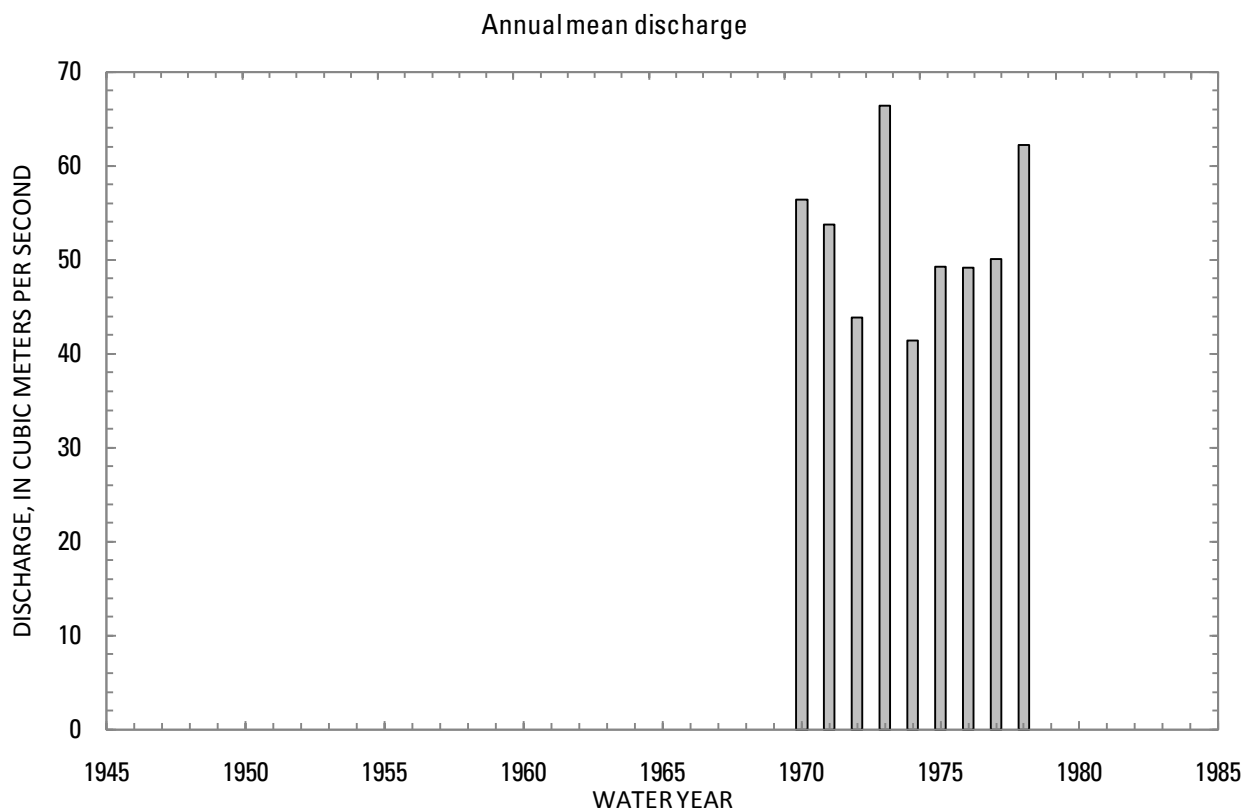
LOCATION: Lat 37°01'N., long 70°50'E.

DRAINAGE AREA: 4,485 km².

ELEVATION: 1,407 meters above mean sea level.

PERIOD OF RECORD: October 1, 1969 to September 30, 1978.

GAGE: Water-stage recorder.



15-10.R00-1A WARDUJ RIVER AT SHASHPUL, Continued

Statistics of monthly and annual mean discharges
[m³/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	45.1	1970	25.8	1972	31.3	5.82	0.19	4.99
November	30.5	1970	19.5	1976	23.5	3.30	0.14	3.74
December	23.5	1970	16.2	1976	19.1	2.17	0.11	3.04
January	23.2	1970	13.5	1972	15.8	2.91	0.18	2.52
February	21.0	1970	11.8	1972	14.6	2.75	0.19	2.33
March	16.0	1970	11.8	1975	13.6	1.34	0.10	2.17
April	29.2	1978	13.8	1977	20.4	4.99	0.24	3.25
May	70.6	1973	23.4	1974	45.2	17.6	0.39	7.21
June	203	1973	84.2	1976	134	39.7	0.30	21.3
July	184	1973	115	1970	146	27.9	0.19	23.3
August	126	1978	77.3	1974	105	15.4	0.15	16.7
September	74.1	1970	44.3	1974	59.5	11.3	0.19	9.48
Annual	66.4	1973	41.4	1974	52.5	8.14	0.15	100

15-10.R00-1A WARDUJ RIVER AT SHASPUL, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	23.6	19.0	15.7	12.2	10.5	11.4	12.3	15.9	47.5	93.0	68.1	34.9	12.6
90	24.5	19.7	16.2	13.3	11.6	11.6	12.9	18.5	56.5	99.3	74.9	37.9	13.5
85	25.4	20.1	16.6	13.7	12.6	12.0	13.3	20.9	62.0	104	80.0	40.5	14.4
80	26.1	20.5	17.0	14.0	13.0	12.2	13.8	24.0	69.8	108	83.3	43.3	15.4
75	26.5	20.9	17.4	14.2	13.3	12.4	14.3	26.4	79.4	114	89.0	45.1	16.4
70	27.0	21.1	17.5	14.4	13.5	12.6	14.7	28.0	93.8	120	93.7	47.1	17.6
65	27.5	21.4	17.7	14.7	13.7	12.7	15.2	29.8	104	124	96.3	50.6	19.4
60	28.2	22.0	18.1	15.3	14.0	12.9	15.7	32.5	114	128	101	52.6	21.5
55	28.8	22.5	18.3	15.5	14.1	13.0	16.2	36.0	122	132	104	54.8	23.6
50	29.6	22.8	18.5	15.6	14.2	13.2	16.7	40.0	131	137	106	57.8	26.1
45	30.5	23.6	18.9	15.7	14.4	13.5	17.2	42.9	139	142	109	60.1	29.6
40	31.4	24.1	19.4	15.8	14.9	13.6	18.4	46.0	147	145	111	62.2	36.6
35	32.2	24.4	19.8	15.9	15.2	13.9	19.9	49.2	153	151	112	64.4	45.6
30	33.0	25.1	20.0	16.1	15.4	14.1	22.2	52.7	162	160	114	67.9	60.0
25	34.8	25.3	20.4	16.2	15.6	14.7	24.5	59.5	174	170	116	70.6	74.4
20	36.0	25.6	21.3	16.5	15.7	15.4	27.4	64.4	186	183	120	73.3	96.0
15	39.3	25.9	22.4	16.9	16.0	15.7	29.4	69.7	198	190	126	80.1	111
10	41.8	26.8	23.1	21.6	20.2	16.4	35.3	80.0	218	214	139	84.1	132
5	44.7	30.2	ng	ng	21.3	17.7	38.9	97.3	252	239	147	95.9	163

15-10.R00-1A WARDUJ RIVER AT SHASPUL, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge ¹ (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	147	140	124	122	108
0.95	1.05	176	155	139	134	121
0.90	1.11	194	165	149	142	129
0.80	1.25	221	179	162	154	140
0.50	2	286	216	196	182	166
0.20	5	377	269	242	220	199
0.10	10	439	307	273	247	220
0.04	25	521	357	313	280	247
0.02	50	583	396	344	306	266
0.01	100	647	436	375	332	285
0.005	200	713	479	407	359	304
0.002	500	804	ng	ng	ng	ng

¹Less than 10 years of data used.

15-10.R00-1A WARDUJ RIVER AT SHASPUL, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	7.74	8.25	9.48	10.1	10.9	11.8	12.6	13.8	17.0
0.10	10	8.06	8.57	9.87	10.5	11.2	12.1	12.9	14.2	17.5
0.20	5	8.51	9.00	10.3	11.0	11.6	12.5	13.2	14.5	18.0
0.50	2	9.58	9.99	11.2	12.0	12.6	13.4	13.9	15.2	19.0

15-10.R00-1A WARDUJ RIVER AT SHASPUL, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	7.52	9.51	10.7	11.8	8.4	9.43	10.4	11.5
0.10	10	8.28	10.1	11.1	12.1	9.01	10.2	10.9	11.9
0.20	5	9.34	10.9	11.6	12.5	9.76	11	11.4	12.4
0.50	2	11.9	12.9	13.3	13.8	11.2	12.2	12.4	13.3
		June-July-August				September-October-November			
0.05	20	32.3	39.9	47.5	75.6	17.9	18	18.3	19.2
0.10	10	37.6	45.6	53.5	80.7	18.2	18.5	18.8	19.9
0.20	5	44.8	53.5	61.4	87.2	18.6	19.1	19.6	20.8
0.50	2	61.1	71.5	79.2	101	19.7	20.6	21.1	22.6

15-10.R00-1A WARDUJ RIVER AT SHASPUL, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1970	July 2, 1970	226	1977	June 24, 1977	495
1971	June 10, 1971	239	1973	July 1, 1973	382
1972	July 4, 1972	180	1978	July 1, 1978	378
1973	July 1, 1973	382	1976	July 7, 1976	311
1974	June 30, 1974	232	1975	July 14, 1975	286
1975	July 14, 1975	286	1971	June 10, 1971	239
1976	July 7, 1976	311	1974	June 30, 1974	232
1977	June 24, 1977	495	1970	July 2, 1970	226
1978	July 1, 1978	378	1972	July 4, 1972	180

15-10.R00-1A WARDUJ RIVER AT SHASHPUL, Continued

Monthly and annual mean discharges, in cubic meters per second

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1970	45.1	30.5	23.5	23.2	21.0	16.0	21.7	60.0	135	115	110	74.1	56.4
1971	34.0	25.9	21.3	15.1	12.0	13.8	25.3	67.0	147	120	110	50.0	53.7
1972	25.8	20.4	17.4	13.5	11.8	13.0	16.6	28.9	96.5	119	101	59.8	43.8
1973	32.8	24.2	18.0	13.9	13.2	12.5	23.6	70.6	203	184	125	72.1	66.4
1974	31.1	23.0	19.0	16.4	15.2	14.2	15.9	23.4	91.2	124	77.3	44.3	41.4
1975	27.0	21.2	18.3	15.2	14.1	11.8	17.9	36.9	132	140	102	53.1	49.3
1976	27.9	19.5	16.2	15.8	15.8	15.2	19.3	42.9	84.2	169	102	60.5	49.2
1977	28.5	22.8	18.7	15.4	13.7	12.7	13.8	28.1	135	170	91.0	48.6	50.1
1978	29.5	23.6	19.2	14.1	14.9	13.5	29.2	49.2	178	174	126	72.7	62.2

15-10.R00-2A WARDUJ RIVER NEAR BAHARAK

(U.S. Geological Survey identification number: 365800070540000)

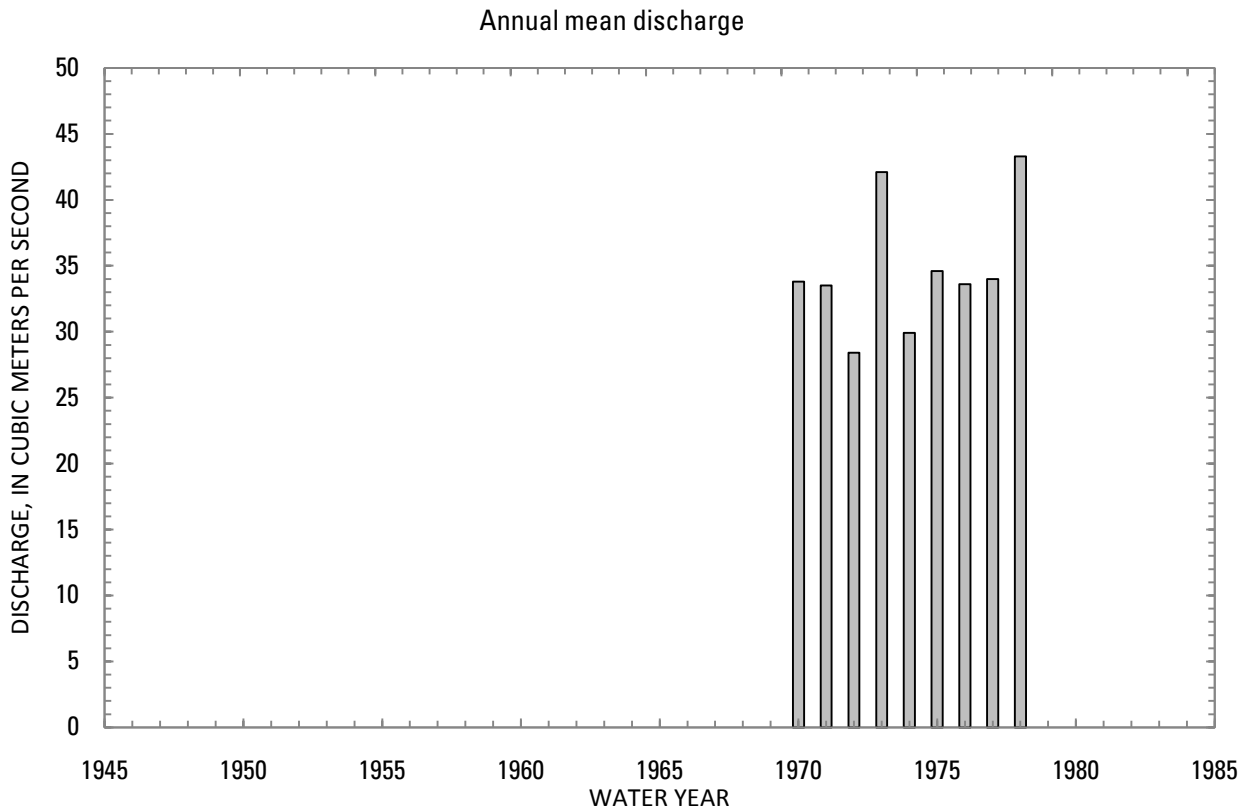
LOCATION: Lat 36°58'N., long 70°54'E.

DRAINAGE AREA: 3,350 km².

ELEVATION: 1,465 meters above mean sea level.

PERIOD OF RECORD: April 22, 1969 to September 30, 1978.

GAGE: Water-stage recorder.



15-10.R00-2A WARDUJ RIVER NEAR BAHARAK, Continued

Statistics of monthly and annual mean discharges
[m³/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	25.4	1970	18.8	1973	21.5	2.19	0.10	5.14
November	16.1	1973	14.3	1977	15.4	0.58	0.04	3.67
December	13.7	1973	11.4	1977	12.8	0.69	0.05	3.05
January	12.4	1970	9.86	1977	11.2	0.98	0.09	2.68
February	11.4	1973	8.44	1971	10.5	1.12	0.11	2.51
March	11.2	1972	7.38	1971	9.55	1.14	0.12	2.28
April	12.1	1978	7.35	1977	10.5	1.57	0.15	2.52
May	28.5	1971	10.3	1977	19.3	7.57	0.39	4.62
June	119	1973	43.9	1976	74.8	26.0	0.35	17.9
July	128	1978	73.3	1972	103	22.1	0.21	24.7
August	113	1969	61.0	1974	84.6	15.8	0.19	20.2
September	56.3	1973	36.2	1972	45.2	7.61	0.17	10.8
Annual	43.3	1978	28.4	1972	34.8	4.94	0.14	100

15-10.R00-2A WARDUJ RIVER NEAR BAHARAK, Continued

Monthly and annual flow duration, in cubic meters per second
[ng, not given]

Percentage of days discharge equaled or exceeded	Month												Annual
	October	November	December	January	February	March	April	May	June	July	August	September	
95	16.8	13.0	11.2	9.21	8.40	7.39	7.18	8.00	26.2	58.5	52.2	26.2	8.61
90	17.1	13.7	11.6	9.51	9.05	8.06	7.93	8.61	29.5	63.0	59.4	28.1	9.46
85	17.7	13.9	11.7	9.81	9.10	8.17	8.37	9.18	31.5	67.0	66.1	30.8	10.1
80	18.1	14.0	12.1	9.87	9.15	8.65	8.62	9.64	35.3	71.2	69.0	32.0	10.7
75	18.8	14.3	12.2	10.6	9.37	8.76	8.78	10.2	40.4	77.0	71.8	33.7	11.3
70	19.0	14.4	12.6	10.7	9.45	9.18	9.42	11.3	45.6	84.6	74.6	35.1	11.9
65	19.1	14.5	12.6	10.8	10.3	9.44	9.66	12.4	52.4	87.6	76.4	37.3	12.6
60	20.1	15.0	12.7	11.2	10.7	9.50	9.84	13.1	59.1	93.0	78.2	39.2	13.3
55	20.4	15.4	12.7	11.3	10.8	9.55	10.0	14.2	64.6	97.4	80.1	40.6	14.3
50	20.7	15.5	13.0	11.5	11.2	9.61	10.2	15.8	71.0	102	81.7	43.2	15.8
45	21.4	15.5	13.1	11.6	11.2	9.84	10.3	16.9	75.8	106	83.4	46.4	18.0
40	21.9	16.1	13.1	11.6	11.2	9.90	10.9	18.8	78.5	111	85.2	47.8	21.9
35	22.7	16.2	13.2	11.7	11.3	10.3	11.2	20.7	82.7	115	87.6	51.3	26.8
30	23.0	16.3	13.5	12.1	11.3	10.4	11.5	22.3	89.9	120	91.9	53.0	35.2
25	23.8	16.5	13.6	12.1	11.3	10.4	11.8	24.4	97.4	126	96.2	54.4	51.8
20	24.5	16.6	13.6	12.2	11.3	10.7	12.2	26.5	107	132	99.3	56.2	65.0
15	25.5	16.7	13.7	12.5	11.6	10.8	12.8	29.2	120	139	103	60.7	77.4
10	26.4	17.1	ng	12.6	11.7	11.1	13.5	33.6	132	147	112	63.3	90.0
5	28.1	18.0	ng	12.7	ng	11.3	14.4	44.0	156	158	123	68.5	113

15-10.R00-2A WARDUJ RIVER NEAR BAHARAK, Continued

Probability of occurrence of annual high discharges
[m³/s, cubic meters per second; ng, not given]

Exceedance probability	Recurrence interval (years)	Maximum instantaneous discharge (m ³ /s)	Maximum daily mean discharge (m ³ /s)			
			3-day period	7-day period	15-day period	30-day period
0.99	1.01	107	80.6	74.8	70.2	65.9
0.95	1.05	132	98.0	90.9	83.1	76.5
0.90	1.11	147	108	100	90.7	82.9
0.80	1.25	166	120	111	101	91.2
0.50	2	205	145	133	122	110
0.20	5	246	171	154	146	131
0.10	10	269	185	165	159	145
0.04	25	293	198	176	175	160
0.02	50	308	207	¹ 182	186	171
0.01	100	322	215	¹ 188	196	181
0.005	200	335	222	¹ 192	205	191
0.002	500	350	ng	ng	ng	ng

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

15-10.R00-2A WARDUJ RIVER NEAR BAHARAK, Continued

Probability of occurrence of annual low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)								
		Number of consecutive days								
		1	3	7	14	30	60	90	120	183
0.05	20	6.22	6.29	6.43	6.72	6.96	7.75	8.46	9.32	12.4
0.10	10	6.64	6.72	6.86	7.12	7.42	8.24	8.93	9.72	12.6
0.20	5	7.16	7.25	7.37	7.61	7.96	8.81	9.49	10.2	12.9
0.50	2	8.14	8.24	8.34	8.52	8.93	9.86	10.4	11.0	13.5

15-10.R00-2A WARDUJ RIVER NEAR BAHARAK, Continued

Probability of occurrence of seasonal low discharges
[m³/s, meters per second]

Nonexceedance probability	Recurrence interval (years)	Minimum daily mean discharge (m ³ /s)							
		Number of consecutive days							
		1	7	14	30	1	7	14	30
		December-January-February				March-April-May			
0.05	20	7.30	7.71	8.04	8.45	6.28	6.50	6.79	7.08
0.10	10	7.89	8.31	8.62	8.99	6.80	7.03	7.27	7.55
0.20	5	8.58	9.00	9.30	9.61	7.43	7.66	7.86	8.13
0.50	2	9.77	10.2	10.4	10.7	8.60	8.83	8.96	9.23
		June-July-August				September-October-November			
0.05	20	16.2	20.3	24.5	43.9	11.9	12.3	12.6	14.3
0.10	10	18.6	23.1	27.5	48.0	12.4	12.7	13.1	14.6
0.20	5	21.9	27.2	31.9	53.6	12.9	13.2	13.6	14.9
0.50	2	29.8	38.4	43.7	66.6	13.7	14.1	14.4	15.4

15-10.R00-2A WARDUJ RIVER NEAR BAHARAK, Continued

Annual peak discharges
[m³/s, meters per second]

Annual peak discharge, by year			Annual peak discharge, from highest to lowest		
Water year	Date	Peak discharge (m ³ /s)	Water year	Date	Peak discharge (m ³ /s)
1969	July 24, 1969	215	1977	June 23, 1977	288
1970	June 27, 1970	152	1973	June 25, 1973	243
1971	June 9, 1971	152	1978	June 30, 1978	231
1972	July 3, 1972	137	1976	July 7, 1976	217
1973	June 25, 1973	243	1969	July 24, 1969	215
1974	July 1, 1974	209	1975	July 16, 1975	215
1975	July 16, 1975	215	1974	July 1, 1974	209
1976	July 7, 1976	217	1970	June 27, 1970	152
1977	June 23, 1977	288	1971	June 9, 1971	152
1978	June 30, 1978	231	1972	July 3, 1972	137

15-10.R00-2A WARDUJ RIVER NEAR BAHARAK, Continued

Monthly and annual mean discharges, in cubic meters per second
 [--, no data]

Water year	Monthly mean discharge												Annual discharge
	October	November	December	January	February	March	April	May	June	July	August	September	
1969	--	--	--	--	--	--	--	10.9	60.8	123	113	44.6	--
1970	25.4	15.3	13.0	12.4	11.0	10.2	11.0	28.2	71.3	74.1	79.3	52.6	33.8
1971	21.8	15.5	12.5	9.90	8.44	7.38	9.02	28.5	90.6	76.4	82.2	37.7	33.5
1972	19.5	15.0	13.1	11.3	11.0	11.2	11.8	15.1	56.3	73.3	66.2	36.2	28.4
1973	18.8	16.1	13.7	12.3	11.4	9.68	11.8	26.7	119	110	97.2	56.3	42.1
1974	23.9	15.9	13.2	11.6	11.4	9.79	9.78	10.4	50.3	102	61.0	37.9	29.9
1975	19.4	15.6	13.2	11.9	11.3	10.3	11.5	20.6	64.9	98.1	89.5	47.4	34.6
1976	21.7	14.8	12.1	11.5	11.2	10.1	10.4	16.8	43.9	126	80.9	40.7	33.6
1977	20.6	14.3	11.4	9.86	9.38	8.51	7.35	10.3	74.7	121	76.2	42.4	34.0
1978	22.4	15.8	12.8	10.3	9.4	8.84	12.1	25.7	116	128	100	56.1	43.3

Prepared by the Pembroke Publishing Service Center.

For more information concerning this report, contact:

Chief
International Water Resources Branch
U.S. Geological Survey
420 National Center
Reston, VA 20192
vrschnei@usgs.gov

or visit our Web site at:

<http://water.usgs.gov/international>

