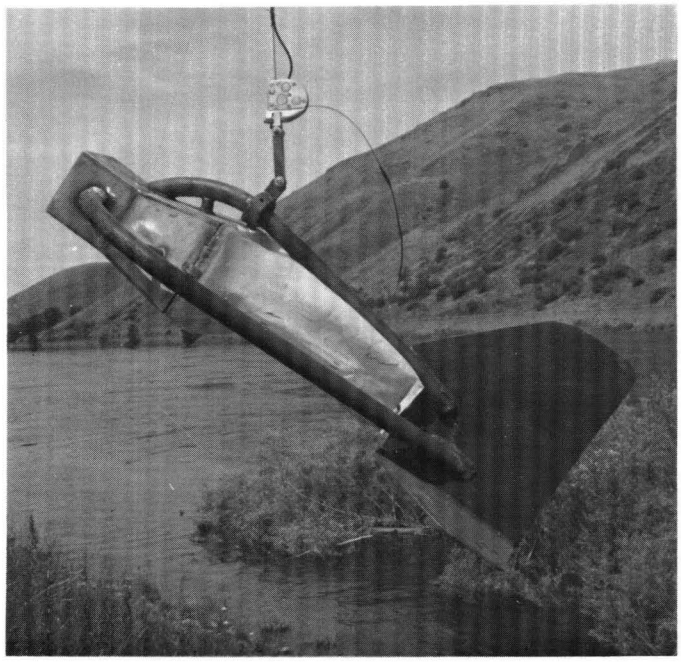
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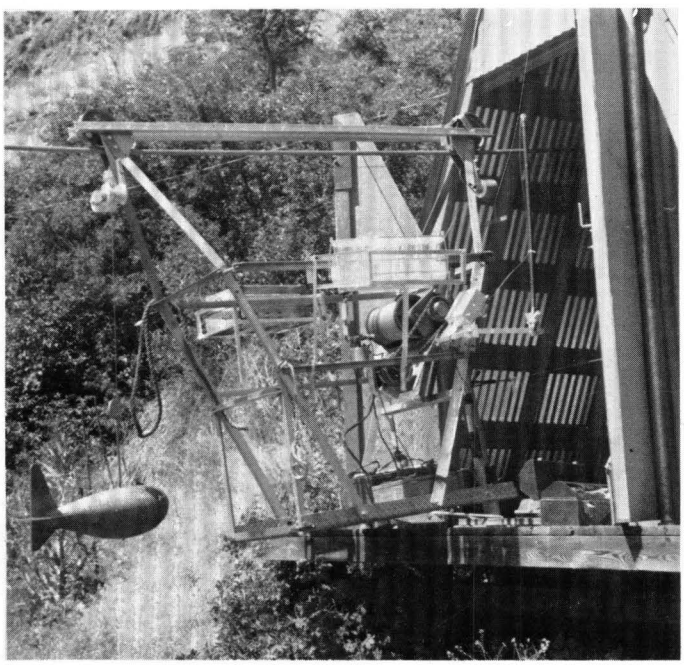
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SEDIMENT TRANSPORT IN THE SNAKE AND CLEARWATER RIVERS IN THE VICINITY OF LEWISTON, IDAHO

By Michael L. Jones and Harold R. Seitz

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CONVERSION FACTORS

The following conversion table is included for the convenience of those who prefer to use SI (International System of Units) rather than the inch-pound system of units. To assist readers of this report, many of the measurements reported herein are given in both units. The factors listed below are presented as an aid to conversion from one system of units to another. Chemical data for concentrations are given in mg/L (milligrams per liter), which are (within the range of values presented) numerically equal to parts per million.

Multiply Inch-Pound Unit	By	To Obtain SI Unit
Length		
inch (in.)	25.40	millimeter (mm)
foot (ft)	0.3048	meter (m)
Volume		
cubic yard (yd^3)	0.7646	cubic meter (m^3)
acre-foot (acre-ft)	1233	cubic meter (m^3)
Flow		
cubic foot per second (ft^3/s)	0.02832	cubic meter per second (m^3/s)
Mass		
ton (short)	0.9072	metric ton (t)
pound (lb avoirdupois)	.4536	kilogram (kg)
Mass Per Unit Volume		
pound per cubic foot (lb/ft^3)	16.02	kilogram per cubic meter (kg/m^3)

SEDIMENT TRANSPORT IN THE SNAKE AND CLEARWATER RIVERS IN THE VICINITY OF LEWISTON, IDAHO

By

Michael L. Jones and Harold R. Seitz

ABSTRACT

During the period 1972-79, bedload in the Clearwater River ranged from about 50,000 tons (45,000 metric tons) per year in 1972 and 1974 to about 1,000 tons (910 metric tons) per year in the drought years of 1973 and 1977. Suspended-sediment load at the same location ranged from about 1,000,000 tons (910,000 metric tons) per year to about 50,000 tons (45,000 metric tons) per year for the same respective years.

In the Snake River, bedload ranged from about 200,000 tons (180,000 metric tons) per year for 1972 and 1974 to about 10,000 tons (9,100 metric tons) per year in 1973; bedload was too low for determination in 1977. Suspended-sediment load ranged from about 5,000,000 tons (4,500,000 metric tons) per year in 1974 to about 50,000 tons (45,000 metric tons) per year in 1977.

Bedload thus ranged from about 2 to 10 percent of suspended load and averaged about 5 percent.

For either river, bedload particle size was bimodal. Modes were in the medium- to coarse-sand range and in the very coarse-gravel range. Suspended-sediment particle size was generally finer than sand.

INTRODUCTION

Impoundment of water in the Snake and Clearwater River arms behind Lower Granite Dam (fig. 1) began in June 1975. At that time, Lower Granite Reservoir and Lock facilities, constructed by the U.S. Army Corps of Engineers, Walla Walla District, became operational. Construction and operation of this facility necessitated collection of hydrologic data that did not previously exist. The Corps of Engineers requested the U.S. Geological Survey to collect hydraulic- and channel-geometry data and describe sediment-transport characteristics, beginning in the spring of 1972. Data collection was completed in the fall of 1979.

This report summarizes information collected during 1972-79. It contains a compilation of data previously reported in five data reports (Emmett and Seitz, 1973; Emmett and Seitz, 1974; Seitz, 1975; Seitz, 1976; and Jones and Seitz, 1979), as well as some new and previously unreported data. In some instances, review of records has necessitated modification of previously reported data. Although the modifications are minor, where discrepancies appear, values reported herein supercede previously reported values. Data are presented in both tabular and graphical forms. The tables are complete with respect to the data collected. Graphs are used to emphasize particular concepts that are not readily visible from data in tabular form. Thus, some of the graphs show plots of only selected data, whereas others show plots of all data. Because this is primarily a data report, no interpretation is provided.

This study program was funded by the U.S. Army Corps of Engineers through a cooperative agreement with the Geological Survey. All field work, laboratory analyses, and compilation of data were conducted by the Geological Survey.

STUDY OBJECTIVES

Study objectives were decided jointly by the U.S. Geological Survey and the U.S. Army Corps of Engineers. Data-collection sites were established at the Geological Survey gaging stations Snake River near Anatone, Washington (station number 13334300), and Clearwater River at Spalding, Idaho (station number 13342500). Streamflow data for these stations are published in the annual series, "Water-Resources Data for Idaho" (U.S. Geological Survey, 1972-79).

Primary objectives of the study were to define, for the two stations, (1) sediment-transport rates as functions of stream discharge, and (2) size distributions of the sediment loads.

INSTRUMENTATION AND DATA COLLECTION

Streamflow gage heights were documented at 15-minute time increments with digital-punch tape recorders. Computer scanning of punched tapes enabled printouts to be made of daily maximum, minimum, and mean gage heights, as well as hourly and daily mean values of discharge. Stream temperatures were recorded on a continuous-trace thermograph at the Clearwater River station and on a digital-punch tape recorder at the Snake River station. All measurements of

stream-channel processes were made from cableways. Frequent discharge measurements confirmed stable gage height-discharge relations for both rivers and indicated little or no channel scour or fill during periods of high streamflow.

Either P-61 or P-63 suspended-sediment samplers (Guy and Norman, 1970) was used to collect point- and depth-integrated water samples for analysis of suspended-sediment concentration, size distribution, and spatial distribution in the cross section.

Bedload samplers of the Helley-Smith type (Helley and Smith, 1971) were used to collect bedload samples that enabled determination of transport rate, size distribution, and spatial distribution. The bedload sampler used during 1972 was of conventional design with a 3-in. (76-mm) square orifice, but externally weighted to about 150 lb (70 kg) to enable use in deep, fast rivers. The bedload sampler used during 1973-79 incorporated a 6-in. (150-mm) square orifice in a geometric scale-up of the Helley-Smith design. It was internally weighted to about 165 lb (75 kg), which allowed a streamlined design and increased stability. For each date of bedload-data collection during 1972-74, samples were collected at each of at least 20 equally spaced cross-channel locations. Sampling duration was either 30 or 60 seconds at each location. Samples were individually tagged, air dried, and sieved. During 1975-79, samples were collected at 20 equally spaced cross-channel locations. Sampling duration was 60 seconds at each location. Samples were individually tagged, air dried, and composited into one sample per traverse. Size distribution was determined by the weight percentage of each size fraction retained on sieves that had incremental mesh-size openings differing by a factor of $\sqrt{2}$, or 1.414.

The Helley-Smith bedload sampler has not yet been certified by the U.S. Geological Survey for technical performance. However, a field determination of the sediment-trapping characteristics of the Helley-Smith bedload sampler has shown that for the transport rates and sizes of bedload measured in this study, the sampler has a near-perfect sediment-trapping efficiency (Emmett, 1979).

EXPLANATION OF TABLES AND GRAPHS

Relations of Hydraulic Geometry and Channel Geometry to Values of Streamflow

Relations of hydraulic and channel parameters to values of stream discharge for the Snake and Clearwater Rivers are shown in figures 2 and 3, respectively. Relations of width,

depth, and velocity to discharge are at-a-station curves of hydraulic geometry developed by Leopold and Maddock (1953). The gage-height curve is the current rating curve. The recurrence-interval curve is the annual flood-frequency curve. Snake River floods are affected by upstream flow regulation. The Clearwater River recurrence-interval curve is for the period prior to the construction of Dworshak Dam on the North Fork Clearwater River. Curves of water-surface slope, determined by field measurements during the 1972-73 runoff seasons, show increasing values of slope with increasing discharge. Both sampling sections are located in relatively flat reaches of river. Rising river stages promote a tendency toward uniform energy gradient.

Changes in At-a-Station Hydraulic Geometry

Stream-discharge measurements are available for a range of discharges each year. Data from these measurements were used to define the at-a-station hydraulic-geometry relations for each year of the study (tables 1 and 2). Stream discharges of 80,000 and 50,000 ft^3/s (2,270 and 1,420 m^3/s) for the Snake and Clearwater Rivers, respectively, were used to compare the yearly variation and 1971-79 average velocity, depth, and width (tables 1 and 2). The yearly changes in velocity, depth, and width reflect stream cross-section adaptation to flow conditions each year.

Values of Streamflow, 1972-79

Values of daily mean discharge for the Snake and Clearwater Rivers are listed in tables 3 and 4, respectively. (Only values for the period January to July of the inclusive years are listed; sediment-transport rates for the remainder of the year are minimal.)

Suspended-Sediment Transport Data and Relation to Stream Discharge

Measured values of instantaneous discharge, water temperature, and suspended-sediment concentration for the Snake and Clearwater Rivers are listed in tables 5 and 6, respectively. Suspended-sediment load was computed as:

$$\underset{(ton/d)}{\text{Load}} = \underset{(ft^3/s)}{\text{Discharge}} \times \underset{(mg/L)}{\text{Concentration}} \times 0.0027.$$

Relations of suspended-sediment transport as a function of stream discharge for the Snake and Clearwater Rivers are shown in figures 4 and 5, respectively. Data points are identified by year of collection. The scatter of points below 20,000 ft^3/s plotted in figure 5 reflects both the effects of minor precipitation on cultivated lands and the removal of an upstream bridge in the spring of 1973.

Curves shown in the figures were developed by a group-average method, and a smooth curve was drawn between the points. Curves were not drawn below 20,000 ft^3/s (566 m^3/s) in figure 4 and 15,000 ft^3/s (425 m^3/s) in figure 5.

Bedload-Transport Data and Relation to Stream Discharge

Values of instantaneous discharge and bedload-transport rate for the Snake and Clearwater Rivers are listed in tables 7 and 8, respectively. Values taken from the hydraulic- and channel-geometry data given in figures 2 and 3 are also included to facilitate further computations.

Figures 6 and 7 illustrate the data of tables 7 and 8. Each data point in figures 6 and 7 represents the average of up to 40 individual bedload samples and thus is a mean value relatively free of influence from spatial and temporal variability factors. The curved lines shown in figures 6 and 7 were adapted to the data by using the concept of stream power suggested by Bagnold (1966). It is the same concept used by Emmett (1976) in discussing the importance of availability of material on the measured values of bedload-transport rate. The daily mean discharge values of tables 3 and 4 and the curves from figures 6 and 7 were used to compute the bedload in tons per day in tables 15 and 16.

Cross-Channel Variability in Velocity, Depth, and Sediment Transport

Figures 8 and 9 for the Snake and Clearwater Rivers, respectively, typify the cross-channel variability in velocity, depth, and suspended-sediment load for relatively high flow on May 19, 1972. The relative magnitude of average bedload transport for 1973 and 1974 indicates the cross-channel distribution of bedload. Almost all bedload transport occurs in a part of the channel occupying only about one-half the total width of channel. The 1975-79 bedload data cannot be plotted in figures 8 and 9 because bedload samples for each traverse of the stream cross section were composited to determine mean values only.

Suspended-Sediment Particle-Size Distribution

Measured suspended-sediment particle-size distributions for the Snake and Clearwater Rivers are listed in tables 9 and 10, respectively. Seasonal variation during 1979 is shown in figures 10 and 11. Particle-size distributions in 1979 for the Snake River show that about 92 percent of the material, by weight, was finer than sand (0.062 mm) at the beginning of the runoff season (March 8, 1979) and about 68 percent was finer than sand at the end of the runoff season (June 7, 1979). For the Clearwater River, 98 percent of the material, by weight, was finer than sand at the beginning of the runoff season (March 5, 1979) and 37 percent was finer than sand at the end of the runoff season (June 6, 1979).

Bedload Particle-Size Distribution

Data for the size distribution of bedload in the Snake and Clearwater Rivers are listed in tables 11 and 12, respectively. Data shown represent a composite of all cross-channel locations sampled on a given date. For 1979, the data in tables 11 and 12 were mathematically composited for the year and are shown graphically in figures 12 and 13 for the two rivers. The relations shown in figures 11 and 12 illustrate size distribution of bedload. The dominant mode occurs for the finer sized material at the medium- to coarse-sand fractions and a lesser mode for the larger sized material at the very coarse-gravel to small-cobble fractions. In other years, the dominant mode occurred for the larger sized material.

Summary data of the bedload size distribution for the Snake and Clearwater Rivers, shown as functions of the discharge and bedload-transport rate for each date of bedload sampling, are listed in tables 13 and 14, respectively. The particle sizes are listed in the tables as 16, 35, 50, 65, and 84 percent finer by weight. The term D_{50} thus denotes median particle size; and, for either river, the median size is within the range of one or the other of the dominant modes.

Mesh size of the bedload-sampler collection chamber is 0.2 mm. Thus, particles smaller than this size are likely to escape from the sampler. This factor probably alters the size distribution of bedload only slightly, because these smaller particles would be in suspension, rather than in the bedload.

Annual Sediment Discharge

Daily suspended sediment and bedload transport can be computed by using daily mean stream discharge (tables 3 and 4) and the relations of figures 4 through 7. Annual sediment transport is obtained by accumulating the daily sediment values. As only the highest stream discharges are effective in transporting sediment, the computation of data need include only the highest flows.

Daily mean stream discharges are ranked in tables 15 and 16 for the Snake and Clearwater Rivers, respectively. Table 15 includes all daily mean discharges above 28,000 ft^3/s (793 m^3/s), except during the 1977 drought period; table 16 includes all daily mean discharges above 15,000 ft^3/s (425 m^3/s).

Curves of accumulative sediment transport as a function of time for suspended sediment in the Snake and Clearwater Rivers using data from tables 15 and 16 are shown in figures 14 and 15, respectively. Similar curves for bedload for these rivers using data from tables 15 and 16 are shown in figures 16 and 17, and the significance of high-water events is defined. For example, as illustrated in figure 14 for the Snake River, more suspended sediment was transported in the single high day (0.27 percent of time) of 1974 than was transported in all of either 1973 or 1977.

The data are sufficient to indicate that large quantities of sediment are transported by the Clearwater and Snake Rivers in the Lewiston, Idaho, area. The combined 1979 totals show that approximately 670,000 tons (607,000 t) of sediment passed the Lewiston area, compared to the high of 6,800,000 tons (6,200,000 t) during 1974. Assuming a unit weight of about 100 lb/ft^3 (1,600 kg/m^3), this represents about 500,000 yd^3 (380,000 m^3) of sediment transported in 1979 and 5,000,000 yd^3 (3,900,000 m^3) transported in 1974. The ratio of bedload to suspended load is also included in tables 15 and 16.

Figure 18 illustrates the ratio of bedload to suspended load as a function of percentage of time for 1972-79. In 1974, the highest year of sediment transport, bedload transported at the highest flows represented about 1 percent of suspended load for both the Snake and Clearwater Rivers, but this ratio increased as the flows decreased, so that bedload represented about 4 percent of suspended load for both rivers. The 1977 drought period produced minor amounts of sediment transport in both rivers. In 1979, bedload transported represented about 9 percent of suspended load at high flows for the Snake River. Bedload averaged about 8 percent

of suspended load for the year. Bedload represented about 6 percent of suspended load at high flows for the Clearwater River in 1979. Bedload averaged about 6 percent of suspended load for the year. For most years, the ratio of bedload to suspended load increased as the flow decreased to about the median-flow regime; the ratio decreased as the flow decreased to the low-flow regime.

Bed-Material Size Distribution

Figures 19 and 20 illustrate particle-size distribution curves of bed material in 1972 for the Snake and Clearwater Rivers, respectively. For each river, data are included for a pebble count of bed-surface material; a sieve analysis of a cubic foot of bed material with the coarsest armoring particles discarded; and a sieve analysis of a cubic foot of bed material with all particles greater than 64 mm discarded. Data are generally similar between rivers and indicate that the median bed-surface particle size is about 64 mm, and the median size of the material underlying this armor is about 22 mm.

Figure 21 illustrates the size distribution by sieve analysis of bed material recovered from the walls of an open trench that was dug (1972) in the river channel at the confluence of the two rivers. All material recovered was used in the analysis. These curves indicate that median particle size decreased with depth below the streambed; but equally large particles were found at a 2-ft (0.6-m) depth as at a 1-ft (0.3-m) depth. Median particle size is about 32 mm.

Figures 19, 20, and 21 illustrate a bimodal distribution of bed-material size in that a large-sand fraction (0.5 to 1.0 mm) was present in all samples. Sandbar deposits are numerous along both rivers, and sediment of this size is dominant in many of the bedload samples. Size distribution of material in these sandbar deposits is shown in figure 22.

Figure 21 reflects the sand-size particle distribution illustrated in figure 22 and also the large percentage of coarse material.

Comparison curves of bedload and bed-material particle-size distributions are shown in figure 23. The yearly curves are compromises representing the bedload size-distribution curves of the two rivers. As shown in figure 23, the material in transport contains much more silt- and sand-size material than occurs on the streambed.

Dissolved Residue

Dissolved residue is derived by evaporating a sample of filtered water, drying the residue for 2.0 hours at 180°C (356 °F), and weighing it immediately. Values for instantaneous discharge, dissolved-residue concentration, and dissolved-residue load for the Snake and Clearwater Rivers are listed in tables 17 and 18, respectively. The dissolved-residue load is computed as:

$$\underset{(ton/d)}{\text{Load}} = \underset{(ft^3/s)}{\text{Discharge}} \times \underset{(mg/L)}{\text{Concentration}} \times 0.0027.$$

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Table 1. Calculations of at-a-station hydraulic-geometry relations, Snake River near Anatone, Washington, 1972-79

[Values below v, d, w are for Q = 80,000 ft^3/s]

Year	Velocity v (ft/s)	Depth of flow d (ft)	Width w (ft)	Number of measurements
1972	$0.0438\ Q^{0.464}$ 8.25	$0.197\ Q^{0.391}$ 16.28	$116\ Q^{0.145}$ 596	6
1973	$.0172\ Q^{0.553}$ 8.85	$.448\ Q^{0.313}$ 15.34	$132\ Q^{0.132}$ 586	5
1974	$.0467\ Q^{0.456}$ 8.04	$.225\ Q^{0.370}$ 14.67	$84.8\ Q^{0.175}$ 612	7
1975	$.0746\ Q^{0.416}$ 8.17	$.318\ Q^{0.347}$ 15.99	$87.9\ Q^{0.171}$ 606	6
1976	$.0329\ Q^{0.491}$ 8.41	$.257\ Q^{0.365}$ 15.83	$117\ Q^{0.145}$ 601	7
1977	$.0135\ Q^{0.579}$ 9.32	$.585\ Q^{0.284}$ 14.44	$127\ Q^{0.137}$ 596	8
1978	$.0093\ Q^{0.609}$ 9.00	$\cdot 825\ Q^{0.254}$ 14.52	$120\ Q^{0.142}$ 596	5
1979	$.0164\ Q^{0.557}$ 8.83	$.454\ Q^{0.310}$ 15.03	$135\ Q^{0.132}$ 599	5
1972-79 average	$.030\ Q^{0.498}$ 8.30	$.311\ Q^{0.349}$ 15.99	$110\ Q^{0.151}$ 605	Total 51
Correlation coefficient (1972-79)	0.986	0.986	0.984	

Table 2. Calculations of at-a-station hydraulic-geometry relations, Clearwater River at Spalding, Idaho, 1972-79

[Values below v, d, w are for Q = 50,000 ft^3/s]

Year	Velocity v (ft/s)	Depth of flow d (ft)	Width w (ft)	Number of measurements
1972	$0.00241\ Q^{0.734}$ 6.78	$1.656\ Q^{0.211}$ 16.24	$259\ Q^{0.051}$ 450	8
1973	$.00183\ Q^{0.772}$ 7.76	$1.925\ Q^{0.187}$ 14.56	$259\ Q^{0.050}$ 445	9
1974	$.00355\ Q^{0.694}$ 6.48	$1.171\ Q^{0.246}$ 16.77	$243\ Q^{0.058}$ 455	7
1975	$.00425\ Q^{0.680}$ 6.66	$1.034\ Q^{0.255}$ 16.32	$225\ Q^{0.066}$ 460	9
1976	$.00247\ Q^{0.736}$ 7.10	$1.645\ Q^{0.206}$ 15.28	$244\ Q^{0.059}$ 462	11
1977	$.00216\ Q^{0.751}$ 7.30	$1.861\ Q^{0.193}$ 15.02	$245\ Q^{0.057}$ 454	10
1978	$.00195\ Q^{0.762}$ 7.42	$2.007\ Q^{0.185}$ 14.85	$255\ Q^{0.053}$ 452	8
1979	$.00277\ Q^{0.724}$ 6.99	$1.400\ Q^{0.224}$ 15.80	$258\ Q^{0.052}$ 453	4
1972-79 average	$.0026\ Q^{0.729}$ 6.93	$1.553\ Q^{0.214}$ 15.73	$247\ Q^{0.058}$ 462	Total 69
Correlation coefficient (1972-79)	0.998	0.976	0.978	

Table 3. Values of daily mean discharge, January through July 1972, Snake River near Anatone, Washington
[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	32000	52800	70800	79800	70400	128000	55000
2	32100	52300	68200	80900	61800	135000	53000
3	32800	51400	74100	80800	58400	134000	50000
4	33200	45200	75400	76500	55500	126000	45400
5	33000	44700	73600	77000	57400	118000	43700
6	33600	45200	75200	80100	61800	113000	42000
7	33000	45400	76400	84300	66200	114000	40100
8	32800	45800	79900	83600	71600	117000	38600
9	33900	46200	78700	81700	78200	121000	35800
10	33400	42900	80700	79400	77200	122000	33000
11	33700	42600	90000	75400	73800	122000	31500
12	34500	42400	94100	64000	70100	110000	30100
13	33900	42600	97600	67700	71000	95000	29600
14	35900	43000	103000	66600	74800	90500	29700
15	35100	43900	99100	65700	82900	94300	29100
16	33700	49900	96600	66100	94000	106000	28000
17	32700	54600	104000	65900	103000	113000	26800
18	32700	45200	110000	63300	107000	110000	25500
19	33300	41600	113000	61800	103000	104000	24800
20	37400	42300	108000	59100	97700	94100	24100
21	51600	52500	104000	51900	96500	88500	25600
22	53000	56200	103000	47200	97700	83700	26600
23	49100	59400	102000	46600	91400	74500	24300
24	46000	58600	102000	47000	79000	69600	22400
25	54200	58000	101000	48000	76500	66500	23800
26	56300	58200	97500	55500	74400	64300	24600
27	54800	58200	94300	56500	74800	64100	24200
28	53100	65700	85300	67300	78600	59000	22300
29	53200	72100	83100	68900	88300	57600	20700
30	53200	---	81400	70400	104000	57400	19800
31	52800	---	80300	---	116000	---	19300

Table 3. Values of daily mean discharge, January through July 1973, Snake River near Anatone, Washington (Continued)

[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	33300	32700	33400	24200	28200	49000	24900
2	31900	32200	35400	23600	27600	48100	23100
3	32900	32400	34500	24100	28100	42800	21900
4	33000	32000	33100	24100	28800	42100	21000
5	32800	32000	33000	24000	30200	43600	20200
6	32400	31300	33300	25400	29300	40700	19700
7	31300	30700	32700	25700	29900	44200	19100
8	33000	30400	33500	25300	32500	43300	18300
9	32400	29900	33700	24900	34400	43200	17700
10	28500	29400	33400	25000	33200	39900	20500
11	30300	29000	32700	22800	32800	38000	21000
12	29500	29400	32200	22200	27900	36200	16100
13	29900	30000	29500	24000	26800	37900	15000
14	31000	31200	30800	25100	29200	36900	14800
15	33300	31600	29300	26100	37500	40500	14500
16	35000	32700	27700	25600	45200	41300	14100
17	41600	33500	23600	25900	55100	40200	13800
18	39700	33200	22700	25800	61200	38200	13700
19	38500	33300	26000	30100	61800	38300	13400
20	36200	31700	28800	29800	61300	36700	13300
21	35200	30500	31900	29700	60600	34300	13400
22	35000	30400	24500	29000	56400	35300	14000
23	34000	29200	18800	28600	50900	35700	14200
24	33200	24900	14500	28400	51500	31500	14000
25	33400	22900	12100	28700	58100	30500	13900
26	33300	25800	26700	28100	57400	34700	14200
27	33400	29300	28000	28000	48500	34700	14600
28	32200	30900	27600	27000	42700	35100	16200
29	32800	---	26200	26800	42900	33300	13800
30	31900	---	24400	27300	44600	29800	12500
31	32300	---	23500	---	49300	---	13700

Table 3. Values of daily mean discharge, January through July 1974, Snake River near Anatone, Washington (Continued)
[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	30600	55800	46700	78400	103000	91800	99300
2	31700	54900	47800	82600	106000	92700	96100
3	29500	46600	48200	84700	100000	99500	90900
4	26500	38400	48300	84300	94400	110000	84800
5	24400	38300	48500	82600	96200	127000	80100
6	24400	37200	50300	83800	99900	133000	75000
7	27300	36200	46100	83800	105000	120000	70000
8	28700	35600	45400	83600	112000	104000	69200
9	27600	35100	50700	83700	121000	93700	71100
10	29100	34800	50200	84300	126000	89400	70400
11	28800	34600	49500	84000	121000	92600	65700
12	25900	34400	47800	84700	112000	103000	63300
13	25100	34300	49700	84500	102000	125000	59200
14	24100	35100	52600	83900	95000	146000	54500
15	38500	39200	55000	84500	89000	162000	52900
16	67800	38800	59800	85700	82400	174000	50900
17	87800	39400	65500	87400	75100	182000	47900
18	79600	39500	71500	89900	71600	191000	45100
19	81800	39900	73400	92600	68100	190000	40900
20	85800	40800	72000	93800	64700	182000	40000
21	76400	47000	68600	93500	59700	172000	37500
22	55800	46600	66400	89400	58400	155000	35800
23	53000	46000	65500	80000	58700	148000	35300
24	56500	45500	64700	83900	59100	146000	33700
25	55800	45200	64700	92300	61600	142000	32300
26	55800	45300	65200	104000	70600	140000	31100
27	54700	45800	66900	109000	85000	132000	29700
28	53500	45800	70400	103000	102000	120000	28600
29	54700	---	73200	101000	107000	113000	27100
30	54200	---	75000	102000	103000	104000	26200
31	53900	---	80300	---	96000	---	25600

Table 3. Values of daily mean discharge, January through July 1975, Snake River near Anatone, Washington (Continued)
[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	24000	27900	34900	42600	76000	85100	73900
2	23000	27000	36500	42200	76500	91700	75000
3	25000	24600	41000	42300	78400	102000	79700
4	26800	28200	45200	42400	80400	105000	85300
5	24600	29500	44600	50000	79600	104000	85000
6	27300	29800	43400	51000	69200	107000	86600
7	27400	26800	45200	51000	66900	116000	87000
8	27000	26100	45500	51000	63200	118000	85600
9	27300	25000	47600	51100	65700	112000	83200
10	29200	27400	49600	51400	73100	103000	76600
11	27700	29500	50200	51500	82700	97200	71400
12	28300	28700	50500	52200	86600	97200	67100
13	28600	31600	49400	53800	88800	101000	63000
14	26100	38800	48500	55800	93000	103000	62300
15	28600	38800	48100	56500	102000	103000	59400
16	25900	37900	40900	62400	109000	107000	56600
17	28400	37200	38500	64200	112000	104000	50200
18	29400	36700	38800	63900	111000	96500	47400
19	27000	35400	39900	64100	108000	96300	43800
20	28600	36900	41900	64600	105000	104000	40400
21	29300	39600	43600	68700	98400	104000	38000
22	30100	40000	43700	72900	92300	99900	34600
23	30100	37900	40200	74400	89100	99100	33700
24	27900	36000	39600	78500	87600	104000	30700
25	30400	36000	39500	79900	84400	107000	29300
26	35200	36500	40200	79600	79800	105000	29300
27	34400	36400	47000	79100	77800	101000	27100
28	33400	36800	48100	77700	76300	92400	25900
29	30900	---	47300	76800	73800	83200	25100
30	30000	---	47100	76300	76700	76000	26400
31	27400	---	43400	---	82800	---	24900

Table 3. Values of daily mean discharge, January through July 1976, Snake River near Anatone, Washington (Continued)

[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	31900	40000	47500	59100	70800	95800	51100
2	33000	39800	46200	58500	76500	88900	46800
3	30400	39700	43500	57800	82300	85700	42200
4	30500	39300	39800	49400	87000	83800	40100
5	30800	38400	38300	53100	92100	78700	38700
6	30500	37500	35600	58800	93400	88400	38000
7	31000	37300	36500	61700	93100	90700	38700
8	30700	37500	36100	64000	94500	95500	36600
9	30000	38000	37700	74100	99800	96600	35100
10	33300	38500	35600	88600	106000	94500	34200
11	34800	39000	36100	98500	118000	88600	32600
12	33300	39400	37300	97000	119000	86600	30800
13	32100	39700	36800	98500	115000	84900	31600
14	32600	40000	34900	96000	116000	78700	31500
15	32800	40300	37600	94700	122000	74800	28000
16	38100	40300	37900	91300	119000	71800	27100
17	40300	41300	41400	88100	115000	72600	26800
18	39800	41000	43000	85000	110000	78200	26200
19	40300	40300	45600	82600	110000	78300	27100
20	38600	40500	45100	82100	109000	79100	31600
21	39200	40100	44900	83900	105000	82400	29800
22	40000	39600	43700	82900	99900	83100	28300
23	39600	39400	44000	81400	99700	76600	28100
24	38300	39300	44400	83700	100000	67400	26100
25	39200	39500	45800	85800	103000	62300	25100
26	38200	40100	45400	85600	104000	58400	24000
27	38900	40600	56200	85500	102000	56200	24900
28	40300	42300	55800	81800	104000	52800	24100
29	40500	45600	55400	70400	104000	52300	23200
30	40400	---	55000	68700	100000	52200	22200
31	40300	---	56000	---	97300	---	20600

Table 3. Values of daily mean discharge, January through July 1977, Snake River near Anatone, Washington (Continued)
[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	21100	21000	17000	19600	24500	22100	15800
2	21900	18800	15800	15900	26200	25400	15500
3	25600	19300	16100	15700	32900	25700	15600
4	23800	19200	16900	14400	26500	25100	15500
5	22500	19100	17800	14700	23400	27600	14800
6	22600	18800	19100	15500	21000	31000	14300
7	24000	19800	17800	16600	17000	36000	14600
8	23400	20400	18400	18300	15500	35400	13800
9	23700	20100	17400	20000	15100	35400	13400
10	23500	18100	20700	20600	15400	29100	13000
11	24600	16900	20200	22300	18500	26800	12600
12	24400	15600	18000	22600	20000	28600	13600
13	22100	14800	17100	21300	17900	27900	14500
14	20400	15200	20400	20400	18200	26100	13800
15	19500	15200	20600	19600	19200	25700	11000
16	20300	15400	20000	16600	18800	24900	10700
17	23300	15600	18900	15200	18600	22400	10600
18	25700	20600	19500	15100	19200	21200	11400
19	24100	15200	19300	15500	19600	20100	10500
20	22500	13900	20300	14400	18700	19300	11600
21	22000	13700	18200	14200	18400	23400	11600
22	21900	16000	17700	15900	18600	22000	12500
23	20500	15500	15300	16100	19000	21700	13200
24	21100	15500	16200	17000	20900	20500	11200
25	23000	17000	18300	18900	22600	21000	11000
26	23200	16900	18000	25100	23300	17200	11900
27	21400	15400	18700	25900	22900	15000	13100
28	21200	15400	21300	26600	22700	20400	14200
29	21600	---	24300	26700	22300	17900	11400
30	19100	---	21100	25700	21400	16600	10600
31	18600	---	18600	---	20700	---	10400

Table 3. Values of daily mean discharge, January through July 1978, Snake River near Anatone, Washington (Continued)
[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	29500	23800	32800	66400	76600	54800	61600
2	26900	23700	30600	72900	76700	53900	57900
3	26500	22700	29500	68300	80500	54100	56300
4	26500	23500	28500	64400	80500	57600	58400
5	27600	21500	26800	58600	79300	67500	60000
6	27300	23000	26800	53400	76900	75400	56300
7	26000	26700	30300	51300	74100	83000	55200
8	24700	35800	31500	49900	71000	90100	53700
9	25400	35000	33500	48800	66000	93000	54400
10	28000	35100	37100	48000	67400	91500	57400
11	28300	35600	38100	48200	71400	85100	52700
12	26800	35200	37700	48700	69000	79100	52400
13	30400	31000	37000	48100	67100	77600	47600
14	30300	33300	35000	46000	65800	76200	44400
15	29700	31600	38200	46300	69900	75700	38200
16	30500	32700	36900	46300	76200	74700	34800
17	31300	31000	31900	47200	75200	70900	34200
18	32700	28800	31900	50300	70700	66400	33100
19	34700	27300	31300	49400	66000	66300	32000
20	33900	24600	34700	49200	60500	67500	31100
21	33200	26400	40500	49800	60500	68000	27800
22	29100	25800	44200	49800	64800	66000	26200
23	28300	23500	48100	49300	64800	65300	25200
24	32000	24700	50100	48600	65100	65200	25100
25	29400	25700	50600	47400	64100	63200	25900
26	28400	24800	50200	48800	60200	63300	24100
27	27900	29500	50700	63700	56700	62300	23700
28	22700	31500	52300	84100	53900	61500	24200
29	20400	---	54600	80400	54300	62000	25700
30	22200	---	57700	77800	56300	62800	23100
31	22700	---	60200	---	56200	---	21500

Table 3. Values of daily mean discharge, January through July, 1979, Snake River near Anatone, Washington (Continued)
[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	25400	25600	29900	44400	47300	52500	30800
2	21500	25000	30700	42900	50000	46000	33300
3	24200	20000	30800	40900	51100	45800	31600
4	22300	18800	29900	37600	50700	49000	26500
5	22700	20500	29500	36900	54100	60100	23500
6	25900	24100	29800	34700	58500	58500	25900
7	26300	24400	34800	35400	54200	52100	27900
8	25800	23100	38400	35500	52500	48200	23500
9	22200	26900	39100	38200	49000	43500	22200
10	20300	26400	40100	40300	46500	40400	25600
11	20000	23000	29400	39700	43300	43700	24900
12	17100	27900	37000	40500	41500	49900	23700
13	21200	36600	34300	42800	40000	52000	25200
14	18900	39200	35400	42900	42300	49500	22100
15	23800	34700	37700	39800	45800	49500	17400
16	23700	33400	37100	38800	51300	44900	17400
17	26700	29100	44200	43000	57000	40800	22900
18	27700	29400	41000	44300	57800	37500	25200
19	28400	27900	41700	43400	57000	40700	21900
20	27700	28300	43700	39500	57200	40100	20600
21	25700	28000	44100	38300	59100	37900	18000
22	26600	29500	41600	37000	62000	38800	15500
23	27800	30200	40200	36100	67700	35800	15400
24	27100	30400	39900	36400	73600	32300	15400
25	26600	29600	42300	37200	78600	32600	15700
26	26200	30800	40600	37900	77000	42100	16100
27	25600	30800	40600	39800	77000	42800	19600
28	23400	30300	45200	43700	73100	40400	17100
29	26600	---	45200	46400	68600	40100	14300
30	28700	---	47000	49800	63100	34900	13800
31	28300	---	45700	---	56900	---	16400

Table 4. Values of daily mean discharge, January through July 1972, Clearwater River at Spalding, Idaho
[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	2570	3600	25300	28400	33000	91400	38100
2	2750	3300	21500	30300	31800	92200	36600
3	2650	2700	22900	30500	32600	85200	33400
4	2500	3000	18300	30700	34000	78200	28900
5	2700	3700	17100	30600	40300	75400	27700
6	2800	4500	23500	33200	43200	72700	28000
7	2900	5200	22400	42300	49200	71900	30000
8	2600	5300	19300	40100	53000	79400	26100
9	2300	5400	17600	36400	58500	79700	25600
10	2200	5300	20000	33400	54000	79800	24400
11	2710	5200	26400	32200	50700	81200	21100
12	3150	4550	31700	35800	50100	71300	16300
13	3390	6150	40800	35900	53100	60100	19000
14	3240	8300	51200	32400	60500	52800	18600
15	3020	8380	47100	30100	71100	53900	16100
16	2910	14100	45200	32600	82500	59300	15100
17	2910	17000	49400	31800	86700	65300	14300
18	2970	18800	54900	29000	86100	62500	13600
19	3100	19600	58100	28200	78900	57200	12700
20	5790	18200	50000	28600	73300	48000	14600
21	19500	16500	45600	28500	80900	43800	14200
22	19100	15100	42800	28800	81800	43900	12200
23	13500	13900	46000	26700	78900	40800	11500
24	9820	11400	46300	27800	74300	37000	10600
25	7990	11000	42500	29800	69700	33800	10200
26	6590	9750	37800	29900	64600	31800	10600
27	4860	16300	33900	29700	63700	30700	10100
28	3500	31100	31400	32200	70100	31600	9710
29	3600	32000	30200	35100	79900	32800	9250
30	3800	---	30600	35500	86300	38000	8690
31	3700	---	29000	---	85800	---	7960

Table 4. Values of daily mean discharge, January through July 1973, Clearwater River at Spalding, Idaho (Continued)
[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	4100	9220	17600	7720	15100	59600	40800
2	5130	11400	22500	7650	15500	68200	42800
3	8800	11900	24700	7090	17700	74200	48700
4	8910	9620	17000	7370	21700	70600	50400
5	6190	11300	16300	7650	19400	62300	49600
6	6280	10800	19100	7790	18700	67000	46200
7	7300	10900	21300	8140	18600	71500	42400
8	7750	11000	22800	7930	22500	65800	42100
9	8730	11100	31400	7890	23500	59700	39400
10	8700	11100	29200	7930	28700	55000	35200
11	8380	11200	26700	9010	38400	54300	29800
12	8100	11300	24600	12000	46300	57600	25600
13	7960	12600	23400	15300	43600	61300	23000
14	8520	24700	22500	16500	45200	56800	22200
15	9700	30800	22100	19500	55500	57400	20100
16	10200	32100	22000	20600	67300	60400	20500
17	7260	32000	20100	20400	64700	51800	18700
18	7370	18400	16500	19800	61300	47000	17100
19	13900	18300	17900	18800	56500	51600	13100
20	10200	22200	17800	19900	49100	56600	10900
21	8520	29900	16900	19000	41600	54900	11500
22	6280	23000	16500	19600	39300	51300	11300
23	5570	12800	16200	19500	37200	51400	10900
24	5680	13000	15400	19600	40400	55600	10400
25	6490	13300	13200	21000	36700	63700	9430
26	7370	13600	12800	22500	33000	65600	9860
27	11600	13600	12100	21700	30700	63200	8520
28	11200	14000	11500	19600	32300	57300	8210
29	10700	---	11200	16900	35100	52000	7470
30	10200	---	11400	15500	42500	45700	7260
31	9290	---	11300	---	50800	---	7580

Table 4. Values of daily mean discharge, January through July 1974, Clearwater River at Spalding, Idaho (Continued)
[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	6210	5010	6370	5930	13500	20900	8240
2	6110	4790	7540	5570	10400	18200	7750
3	5500	4660	6660	5040	10600	16700	8480
4	4040	4630	5730	4920	12000	14500	8100
5	3510	4340	5240	5180	13300	13400	7820
6	3490	4340	4920	5660	14000	13600	7920
7	3410	3190	4530	5890	15900	15400	8200
8	2990	2750	4450	5540	16800	16600	8480
9	2970	2360	4760	5340	17100	17100	8380
10	4420	2550	4810	5640	15400	17100	8030
11	6270	2930	5470	6370	14600	14700	6660
12	7290	2910	5060	7120	12500	12900	5880
13	8800	2800	4920	9060	12600	12500	5530
14	11400	2530	4730	10100	15700	13000	7540
15	12700	2680	4500	10100	21200	22800	6530
16	15800	2880	4340	9160	26900	18000	4320
17	16700	3020	4290	9750	32400	14900	5120
18	15300	3190	4600	9860	34200	15700	8270
19	15600	3190	4630	8900	34000	15800	8270
20	15900	2950	4370	8100	32600	13000	8170
21	14900	2770	4870	7600	28000	13800	8060
22	8800	2570	5670	7310	23300	13600	8550
23	8200	2650	5960	7410	22700	13700	8340
24	8060	2670	5870	7840	24400	13400	5790
25	8030	2950	5820	8890	28200	12600	5350
26	7430	3770	6030	7780	27100	12000	5200
27	5990	4060	6300	8770	21600	11600	5050
28	4580	4450	5880	10700	19100	11100	4970
29	4210	---	5590	11200	18200	10100	4940
30	4580	---	5300	12100	18100	8990	4870
31	5150	---	6130	---	19700	---	4960

Table 4. Values of daily mean discharge, January through July 1975, Clearwater River at Spalding, Idaho (Continued)

[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	18900	17800	21100	17500	26000	42400	29800
2	17300	17500	20600	17900	31300	39800	30800
3	17300	17600	19600	17100	35300	38400	24500
4	18400	16900	18900	18700	41600	36200	23000
5	18600	15300	18600	26100	48500	32000	22300
6	18200	14700	18600	32800	45100	32400	24100
7	17700	15000	18700	34000	44500	37900	23300
8	17900	16000	18700	37500	46200	46000	22200
9	17900	17100	18800	46200	52700	51500	20200
10	17900	17200	19300	49300	59200	50000	17700
11	17800	16700	21100	47600	70800	47100	16400
12	17900	17500	20100	49400	64100	43000	19100
13	17600	18900	19800	46400	53200	43700	20600
14	17300	19400	19700	43900	60400	38600	18300
15	21600	19200	19600	43600	66600	35400	16100
16	33700	19100	19600	39500	56800	34600	14000
17	33900	19800	21000	28900	55500	45000	12500
18	31000	19300	24800	26000	54100	49700	10300
19	28000	18700	25800	24000	50400	46400	11800
20	25200	18300	23800	22800	49400	46800	10300
21	23300	17800	22900	24200	47200	49600	10600
22	21700	17300	24600	22600	46000	48900	11400
23	21300	17200	27500	22000	46000	43300	10300
24	21000	14600	27500	22100	48800	37600	7420
25	20200	17800	27700	25900	53600	34500	7560
26	19500	19800	25900	24000	50500	28500	10500
27	19000	21000	24700	20800	47800	24700	9170
28	19000	24400	21900	19800	53000	25300	8640
29	18900	22400	16800	19900	46000	25900	7630
30	18600	---	12900	21000	40100	28200	7660
31	18200	---	15400	---	38600	---	6220

Table 4. Values of daily mean discharge, January through July 1976, Clearwater River at Spalding, Idaho (Continued)
[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	3790	9060	3370	4250	23100	23000	9590
2	4530	9030	4590	4330	28200	26000	9480
3	11100	8990	9690	4230	28500	23900	5980
4	11200	11100	9340	4060	24200	16000	4400
5	11400	8890	5000	4400	20200	17000	8150
6	11400	6810	3250	5780	17300	20600	9100
7	11300	5840	4350	7560	15500	22400	9520
8	11400	8820	5270	9960	14900	19300	9380
9	4950	8540	10000	13000	15600	17800	9130
10	5870	8780	12500	13700	16900	14400	8260
11	8920	9060	6710	11700	20000	12900	8920
12	9270	5000	3810	10600	18800	12400	8780
13	7450	3420	3740	10600	17400	11600	8680
14	9960	5950	3690	10800	18400	11100	9130
15	5810	5110	3570	9960	17900	10800	7490
16	4280	4640	3390	9730	15900	10400	4720
17	5410	7520	3320	10200	15500	9520	3170
18	7350	9170	3350	9630	16400	8850	5690
19	7770	5030	3370	9340	15900	8290	6840
20	8990	3350	3400	9170	16200	7880	7700
21	7800	3400	3370	8990	15700	7800	7560
22	4590	3740	3340	9410	15600	9030	7280
23	3260	5270	3400	11100	20800	9030	6520
24	7730	9730	3960	14800	25600	8610	8330
25	9380	5220	4300	19800	26700	7170	6740
26	12200	3370	4280	24300	26100	6900	6650
27	12100	3320	4250	23900	23100	6520	7940
28	12100	3280	5060	21500	16600	8610	7450
29	4400	---	4920	20900	15700	8820	7310
30	2420	---	4460	21100	14400	9340	4380
31	5620	---	4200	---	18100	---	2930

Table 4. Values of daily mean discharge, January through July 1977, Clearwater River at Spalding, Idaho (Continued)
[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	11700	18400	29100	32200	57600	40300	42600
2	10600	24200	29000	30400	51300	41900	40200
3	11300	24200	29300	29600	51100	50200	31900
4	18000	27100	28600	30100	56200	59600	29800
5	17700	25700	29900	32000	52600	75300	28600
6	17400	23500	33500	37300	61300	78000	27000
7	17300	23900	29900	40000	63100	66000	29000
8	17300	25000	28200	40800	61900	55300	26500
9	17600	27900	28100	43200	55200	49200	25700
10	17400	28400	28600	43100	47100	46700	25600
11	17400	24300	28400	42300	40400	50100	26300
12	14900	15100	30700	44100	35800	61900	25200
13	15000	15100	32600	42900	32700	74600	20800
14	15800	14800	29100	41200	29000	89000	15600
15	25300	14800	26500	40000	28000	114000	15100
16	40000	20800	25500	40600	25300	124000	14600
17	43200	22300	32600	38500	22800	123000	14100
18	33300	20100	34700	35200	20200	121000	14800
19	30500	20900	30200	36400	19200	115000	13000
20	27900	20500	28500	38600	18300	110000	13200
21	37000	25600	29300	38400	19800	98300	14000
22	42300	27000	29800	37800	20500	77000	12700
23	43200	28200	29200	40600	21600	69800	11900
24	48700	28200	29600	40900	23900	69400	10600
25	47800	28600	30500	47800	27500	70600	9860
26	44700	29100	29300	53500	36100	69100	9400
27	42800	28400	30800	48700	47400	61700	9190
28	43500	28700	31200	49700	53000	55700	8210
29	45100	---	29400	50800	50300	46400	7650
30	16600	---	30300	54700	46000	44000	7580
31	15500	---	34400	---	42800	---	7370

Table 4. Values of daily mean discharge, January through July 1978, Clearwater River at Spalding, Idaho (Continued)
[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	15200	16200	21300	37200	30400	28600	23000
2	13500	16400	19900	37300	32100	29600	20400
3	13500	17500	18600	32700	30700	35100	22800
4	15300	18400	18300	27400	28900	40600	25700
5	16200	19000	19300	24400	26200	46600	29400
6	16800	23800	20300	22300	23500	51900	25500
7	17000	24500	19500	22100	21900	54000	23500
8	16600	24500	19800	21200	21100	53000	22100
9	19600	22800	24200	19300	20900	52000	19200
10	19700	21300	26100	18200	23600	43500	19600
11	18700	20200	24000	18500	31700	37000	19100
12	18200	19200	23800	19700	31100	34500	17200
13	18200	17900	23200	18200	28200	33800	15200
14	18300	17400	21900	17400	29700	37600	14300
15	18800	17500	21100	17000	34600	37600	13400
16	19100	17200	20500	17400	38000	34600	12800
17	19800	16200	20000	18200	36400	31000	13200
18	21400	16400	20600	16600	32300	30200	12700
19	20500	16400	21700	15800	30100	31700	12000
20	20500	17100	22500	16400	30100	31600	11500
21	20100	18000	23300	18000	31900	30600	10500
22	20400	17500	24700	17500	39900	29400	8500
23	19400	17300	26800	16700	40600	29800	7250
24	18100	17500	30000	15800	37400	27100	8210
25	17400	18600	29600	15400	35000	28100	8170
26	17500	21200	28300	17100	31700	34500	7480
27	17400	22500	29000	28500	29100	28600	7580
28	16900	22500	31500	29900	28800	27400	8170
29	17000	---	34300	29600	31100	28400	7180
30	16800	---	32600	27900	31500	28800	6590
31	16400	---	36300	---	29500	---	6470

Table 4. Values of daily mean discharge, January through July 1979, Clearwater River at Spalding, Idaho (Continued)
[Values are in cubic feet per second]

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	11300	11800	9670	11900	30000	32300	11000
2	11400	11800	10300	10900	31500	31600	14400
3	11700	4880	7050	10500	31200	33400	14700
4	12700	2800	5690	10100	33200	38100	13300
5	15500	7400	9040	11400	43400	40100	13200
6	21400	4060	14500	12300	59200	39200	13700
7	19700	3050	21400	14700	45000	35500	9160
8	11800	3070	20900	15700	45300	31500	7550
9	12000	3220	19200	19200	37300	29000	10200
10	9200	3270	17300	21100	35800	28600	11000
11	9390	3610	13500	17100	31700	30500	7920
12	9300	4780	16100	15500	32500	33400	7810
13	5720	7650	14000	15000	31900	35500	9280
14	4460	13200	16400	14500	34500	34300	6330
15	7200	11400	16900	13200	38100	31100	5190
16	8640	8890	19700	13600	45700	28500	6330
17	8450	7370	20900	17300	48800	27400	7020
18	8470	6760	18700	21600	47000	26900	7610
19	7140	6880	17400	19400	45600	25500	8670
20	2990	6670	18000	16900	45500	23400	9350
21	2930	6210	19500	14900	45700	22400	5890
22	4770	5760	19700	14100	48800	22800	3930
23	6980	5450	19700	17000	52800	17700	6350
24	6910	5210	12400	20700	60700	15400	6230
25	8200	5090	12000	21900	60400	19300	5930
26	12000	6400	12100	19500	56500	20900	5770
27	12000	7670	12300	19800	57800	20000	5660
28	11900	8920	15100	21800	52300	19300	5580
29	11900	---	16400	24800	44100	18000	4120
30	11900	---	14700	27900	37900	14000	4720
31	11700	---	13100	---	34100	---	5510

Table 5. Suspended-sediment data, Snake River near Anatone, Washington

Date	Discharge (ft^3/s)	Water temperature (°C)	Sediment concentration (mg/L)	Sediment load (ton/d)
3-23-72	102,000	8.5	49	13,500
4- 5-72	77,300	8.5	29	6,050
4-13-72	67,500	8.5	24	4,370
4-19-72	61,600	13.5	30	4,990
5- 5-72	56,900	12.0	44	6,760
5-10-72	77,500	11.0	28	5,860
5-19-72	103,000	10.0	119	33,100
6- 2-72	133,000	13.0	338	121,000
6- 8-72	118,000	13.5	192	61,200
6-14-72	91,800	13.5	149	39,900
6-23-72	76,800	15.5	50	10,400
7- 6-72	44,200	28.0	17	2,030
7-14-72	31,300	21.0	11	930
8-31-72	19,300	21.5	9	469
10-18-72	25,600	14.5	5	346
11-27-72	28,500	7.0	10	770
2-13-73	24,000	3.5	4	291
4- 2-73	24,000	9.0	6	389
4-12-73	21,700	9.5	8	469
4-17-73	28,000	10.0	12	907
4-25-73	28,600	11.5	13	1,000
5- 1-73	31,000	--	18	1,510
5- 9-73	26,500	--	10	716
5-17-73	50,700	15.0	58	7,940
5-22-73	51,200	12.0	53	7,330
5-29-73	40,100	15.0	12	1,300
6-12-73	36,200	17.0	6	586
6-18-73	36,000	17.0	13	1,260
10- 5-73	18,200	15.0	1	49.1
11-13-73	47,400	8.5	71	9,090
11-23-73	25,800	6.5	3	209
12-21-73	30,500	5.5	5	412
1-20-74	81,700	4.0	134	29,600
3-12-74	47,800	5.0	19	2,450
3-27-74	67,100	8.0	24	4,350
4-11-74	84,100	8.0	28	6,360
4-24-74	86,600	10.0	80	18,700
5- 7-74	104,000	11.0	106	29,800
5-16-74	83,500	10.5	28	6,310
6- 4-74	107,000	12.0	133	38,400

Table 5. Suspended-sediment data,
Snake River near Anatone, Washington (Continued)

Date	Discharge (ft^3/s)	Water temperature (°C)	Sediment concentration (mg/L)	Sediment load (ton/d)
6-11-74	91,700	11.5	88	21,800
6-19-74	191,000	13.0	521	269,000
6-26-74	140,000	14.0	186	70,300
8- 9-74	24,300	20.5	6	394
9-24-74	19,000	18.5	4	205
12-19-74	25,000	6.0	3	202
2- 7-75	23,000	1.5	4	248
3-19-75	39,800	5.5	13	1,400
4-15-75	56,500	8.5	31	4,730
4-29-75	76,900	9.5	44	9,140
5- 1-75	76,000	10.0	44	9,030
5-14-75	93,900	11.5	123	31,200
5-20-75	106,000	11.0	91	26,000
6- 5-75	104,000	13.0	128	35,900
6-11-75	97,100	13.0	245	64,200
6-18-75	91,700	11.0	187	46,300
6-26-75	104,000	12.0	118	33,100
7-31-75	24,800	20.5	8	536
8-19-75	19,200	19.5	4	207
9-18-75	22,200	19.0	6	360
10-15-75	22,300	14.0	7	421
11-12-75	27,200	11.5	3	220
12-10-75	48,800	7.0	13	1,710
1-21-76	37,900	5.0	6	614
2-25-76	39,500	5.5	3	320
3-24-76	44,400	7.0	37	4,440
4- 7-76	61,800	8.0	152	25,400
4-13-76	98,400	8.0	141	37,500
4-15-76	94,800	9.0	64	16,400
4-19-76	82,000	9.0	30	6,640
4-21-76	84,000	9.0	34	7,710
5- 4-76	86,400	10.5	44	10,300
5- 5-76	91,900	11.0	64	15,900
5-13-76	115,000	12.0	20	6,210
5-25-76	102,000	13.0	95	26,200
5-27-76	102,000	13.0	94	25,900
6- 8-76	96,900	15.0	77	20,100
6-10-76	94,700	--	77	19,700
7-14-76	30,700	20.5	6	497

Table 5. Suspended-sediment data, Snake River near Anatone, Washington (Continued)

Date	Discharge (ft^3/s)	Water temperature (°C)	Sediment concentration (mg/L)	Sediment load (ton/d)
8-11-76	23,100	22.5	5	312
9-15-76	26,400	20.0	4	285
10-22-76	20,500	13.0	4	221
11-17-76	19,200	10.0	2	104
12-15-76	27,800	6.5	4	300
1-12-77	19,100	5.0	4	206
2-16-77	15,200	6.0	3	123
3-16-77	19,900	6.5	4	215
4-13-77	20,700	11.0	12	671
4-19-77	14,700	10.5	8	318
4-25-77	18,400	8.0	12	596
5- 3-77	28,000	12.0	15	1,130
6- 9-77	33,000	20.0	29	2,580
7-26-77	11,200	29.5	6	181
8-23-77	8,350	21.0	5	113
9-22-77	13,700	16.0	5	185
10-20-77	14,800	14.5	4	160
1-25-78	28,300	3.5	3	229
2-15-78	41,800	8.0	6	677
4- 4-78	62,900	8.5	22	3,740
4- 5-78	57,900	8.5	20	3,130
4-29-78	80,300	12.0	111	24,100
5- 2-78	76,700	12.0	42	8,700
5- 3-78	80,700	12.0	50	10,900
5-16-78	76,600	11.0	66	13,600
5-17-78	75,000	11.0	125	25,300
6- 7-78	80,800	16.0	89	19,400
6-13-78	71,900	13.5	82	15,900
6-14-78	71,400	14.5	58	11,200
6-20-78	66,900	16.5	29	5,240
7-20-78	31,200	19.0	7	590
8-23-78	17,500	22.5	5	236
9-21-78	28,000	16.0	6	454
11-16-78	20,400	7.0	6	330
12-13-78	24,700	3.5	15	1,000

Table 5. Suspended-sediment data, Snake River near Anatone, Washington (Continued)

Date	Discharge (ft^3/s)	Water temperature (°C)	Sediment concentration (mg/L)	Sediment load (ton/d)
1-17-79	24,200	1.0	3	196
2-14-79	37,200	2.0	142	14,300
3- 8-79	35,300	4.5	110	10,500
3-22-79	40,900	7.0	11	1,210
4-19-79	43,200	8.8	12	1,400
5- 2-79	49,500	13.0	52	6,950
5-10-79	45,500	9.5	62	7,620
5-15-79	41,700	14.0	20	2,250
5-22-79	60,600	13.0	54	8,840
5-24-79	70,600	14.0	82	15,600
6- 5-79	56,100	14.5	20	3,030
6- 7-79	48,900	13.5	17	2,240

Table 6. Suspended-sediment data, Clearwater River at Spalding, Idaho

Date	Discharge (ft^3/s)	Water temperature (°C)	Sediment concentration (mg/L)	Sediment load (ton/d)
3-23-72	45,600	5.5	59	7,260
4- 4-72	33,200	5.5	27	2,420
4-12-72	40,300	6.0	7	762
4-20-72	29,100	5.5	15	1,180
5- 4-72	32,900	8.5	17	1,510
5-10-72	56,300	10.0	78	11,900
6- 1-72	96,700	10.0	209	54,600
6- 8-72	81,200	10.0	106	23,200
6-15-72	53,300	11.0	46	6,620
6-22-72	44,800	11.5	21	2,540
7- 6-72	26,900	16.5	9	654
7-14-72	18,000	15.5	14	680
9- 1-72	3,430	16.5	7	65
11-29-72	8,350	4.5	4	90
2-26-73	3,650	6.5	32	315
3-23-73	6,020	9.5	9	146
4- 3-73	4,920	6.5	6	80
4-11-73	6,500	11.5	4	70
4-16-73	8,950	9.0	17	411
4-24-73	7,460	12.0	12	242
4-30-73	11,000	--	26	772
5- 8-73	15,200	--	21	862
5-16-73	29,200	13.5	55	4,340
5-21-73	28,600	11.0	5	386
5-30-73	18,300	14.5	5	247
6- 5-73	13,200	--	2	71
6-11-73	14,000	16.5	2	76
6-19-73	17,500	--	2	94.5
11-13-73	13,800	6.0	36	1,340
11-24-73	4,680	4.5	1	12.6
1-19-74	28,000	3.5	144	10,900
3- 8-74	27,100	4.5	19	1,390
3-12-74	30,200	5.0	32	2,610
3-26-74	30,100	6.5	9	731
4-10-74	43,400	7.0	23	2,700
5- 8-74	65,600	7.0	55	9,740
5-15-74	28,600	7.0	33	2,550
6- 5-74	68,700	14.0	113	21,000
6-10-74	46,000	12.0	31	3,850

Table 6. Suspended-sediment data, Clearwater River at Spalding, Idaho (Continued)

Date	Discharge (ft^3/s)	Water temperature (°C)	Sediment concentration (mg/L)	Sediment load (ton/d)
6-18-74	117,000	10.0	131	41,400
6-26-74	67,000	11.5	30	5,430
8- 6-74	6,210	20.0	4	67.1
11-13-74	4,950	7.0	3	40.1
12-18-74	4,820	3.5	1	13.0
2- 8-75	11,000	2.5	3	89.1
3-19-75	17,800	6.0	12	577
4-16-75	17,000	8.5	29	1,330
4-29-75	19,300	10.5	17	886
5-13-75	43,600	10.5	46	5,420
5-21-75	41,200	9.5	25	2,780
6- 5-75	63,900	9.5	59	10,200
6-10-75	59,100	11.0	42	6,700
6-12-75	61,000	12.0	41	6,750
6-17-75	54,600	10.5	22	3,240
6-24-75	57,200	10.5	25	3,860
7- 1-75	39,100	11.5	11	1,160
7- 1-75	40,400	11.5	11	1,200
8-19-75	10,100	16.5	5	136
9-19-75	13,600	5.5	2	73
10-24-75	11,500	4.0	5	155
11-13-75	10,000	1.5	2	54
12- 3-75	41,200	3.5	46	5,120
12-11-75	32,500	3.0	11	965
1-22-76	21,600	3.5	4	233
2-26-76	18,400	3.0	25	1,240
3-19-76	27,000	4.0	78	5,690
3-25-76	27,400	4.5	27	2,000
4- 6-76	36,800	6.0	96	9,540
4- 8-76	42,400	5.5	63	7,210
4-14-76	47,000	8.5	21	2,660
4-22-76	23,800	8.0	17	1,090
5- 3-76	43,000	6.5	32	3,720
5- 6-76	53,600	6.5	53	7,670
5-11-76	80,200	10.0	185	40,100
5-12-76	69,000	10.0	81	15,100
5-24-76	59,300	11.0	53	8,490
5-26-76	58,600	11.0	42	6,650
6-11-76	53,900	12.0	36	5,240
7-15-76	11,000	14.5	3	89

Table 6. Suspended-sediment data,
Clearwater River at Spalding, Idaho (Continued)

Date	Discharge (ft^3/s)	Water temperature (°C)	Sediment concentration (mg/L)	Sediment load (ton/d)
8- 4-76	6,020	16.5	13	211
9-17-76	4,340	14.5	1	11.7
10-21-76	4,210	4.0	2	22.7
11-17-76	9,700	9.5	2	52.4
12-16-76	3,750	1.5	2	20.2
1-13-77	4,430	1.5	6	71.8
2-17-77	4,020	3.0	2	21.7
3-16-77	3,310	6.0	4	35.7
4-14-77	11,000	7.0	9	267
4-19-77	9,280	9.0	6	150
4-26-77	23,900	10.0	29	1,870
5- 4-77	24,000	9.5	11	713
5-16-77	15,800	9.5	3	128
7-25-77	6,620	19.5	2	35.7
9-21-77	10,400	15.0	36	1,010
10-19-77	4,710	11.0	1	12.7
11-16-77	5,780	5.0	6	93.6
12-14-77	27,000	5.0	426	31,100
2-16-78	17,400	4.0	2	94.0
3-22-78	25,300	12.5	11	751
4-28-78	29,700	8.5	67	5,370
5- 3-78	31,200	10.0	10	842
5-15-78	37,500	8.5	19	1,920
5-17-78	37,900	6.5	19	1,940
6- 5-78	49,800	10.0	35	4,710
6- 6-78	55,000	10.0	46	6,830
6- 8-78	55,400	9.5	23	3,440
6-12-78	37,400	10.5	11	1,110
6-14-78	39,900	11.0	14	1,510
6-19-78	32,400	14.5	5	437
7-20-78	11,900	19.5	2	64.3
8-23-78	3,980	14.5	68	731
9-21-78	12,300	13.2	2	66.4
10-19-78	2,960	11.5	1	7.99
11-15-78	3,000	2.0	1	8.10
12-13-78	11,700	3.5	1	31.6

Table 6. Suspended-sediment data,
Clearwater River at Spalding, Idaho (Continued)

Date	Discharge (ft^3/s)	Water temperature (°C)	Sediment concentration (mg/L)	Sediment load (ton/d)
1-18-79	3,130	0	1	8.45
3- 5-79	10,800	5.5	89	2,600
3- 9-79	16,000	2.5	76	3,280
3-21-79	19,700	5.0	12	638
4-18-79	21,500	7.0	60	3,480
5- 1-79	30,900	12.0	55	4,590
5- 3-79	31,200	10.5	34	2,860
5- 8-79	47,800	7.0	1,070	138,000
5-11-79	31,200	8.0	30	2,530
5-14-79	36,900	11.0	32	3,190
5-16-79	46,200	10.0	41	5,110
5-21-79	47,300	11.0	21	2,680
5-23-79	55,100	10.0	60	8,930
6- 4-79	40,500	12.0	27	2,950
6- 6-79	38,800	10.0	11	1,150
6-18-79	26,600	10.0	4	287

Table 7. Hydraulic-geometry and bedload-transport data, Snake River near Anatone, Washington

Date	Discharge (ft^3/s)	Hydraulic geometry				Bedload	
		Width (ft)	Depth (ft)	Velocity (ft/s)	Slope (ft/ft)	Unit [(lb/s)/ft]	Total (ton/d)
5-10-72	77,500	595	15.8	8.15	0.00094	0.00396	102
5-19-72	103,000	620	17.5	9.40	.00109	.00967	259
6- 2-72	133,000	645	19.1	10.70	.00124	.01589	443
6-14-72	91,800	605	16.8	8.90	.00103	.00559	146
4-18-73	27,500	510	11.0	4.85	.00056	.00003	.65
5- 1-73	31,000	520	11.5	5.15	.00059	.00026	5.88
5-15-73	40,000	540	12.6	5.85	.00067	.00204	47.6
5-17-73	53,500	560	13.9	6.75	.00078	.01216	294
5-21-73	57,000	565	14.2	7.00	.00080	.01818	444
5-23-73	51,000	560	13.7	6.65	.00074	.00990	239
6- 6-73	36,000	530	12.1	5.55	.00064	.00479	86.8
6- 7-73	40,200	540	12.6	5.90	.00067	.01190	277
6-11-73	37,200	530	12.2	5.65	.00065	.00465	106
6-13-73	38,000	535	12.3	5.70	.00066	.00333	77.0
6-18-73	36,000	530	12.1	5.55	.00064	.00279	90.4
6-19-73	32,700	520	11.7	5.30	.00060	.00338	76.0
2- 6-74	39,700	545	12.5	5.85	.00068	.0108	255
3-13-74	51,800	565	13.7	6.70	.00077	.0387	944
3-26-74	67,400	590	15.1	7.60	.00088	.0518	1,320
4-11-74	86,600	610	16.4	8.65	.00101	.1029	2,710
4-24-74	88,600	615	16.6	8.75	.00102	.0638	1,690
5- 7-74	108,000	630	17.8	9.65	.00112	.0626	1,700
5-14-74	97,100	620	17.1	9.15	.00107	[1].0703	[1]1,880

[1]Computed from incomplete number of samples (less than two transects of channel).

Table 7. Hydraulic-geometry and bedload-transport data, Snake River near Anatone, Washington (Continued)

Date	Discharge (ft^3/s)	Hydraulic geometry				Bedload	
		Width (ft)	Depth (ft)	Velocity (ft/s)	Slope (ft/ft)	Unit [(lb/s)/ft]	Total (ton/d)
5-16-74	86,600	610	16.4	8.65	0.00101	0.0398	1,050
5-22-74	71,900	595	15.4	7.85	.00091	.0067	171
6- 5-74	153,000	665	20.0	11.45	.00134	.0075	215
6-11-74	111,000	635	17.9	9.75	.00114	.0237	649
6-25-74	161,000	670	20.4	11.75	.00138	[1].0901	[1]2,610
4-15-75	56,500	575	14.2	7.00	.00082	.0147	365
4-30-75	76,100	600	15.7	8.10	.00094	.0038	98
5- 1-75	75,500	600	15.7	8.05	.00094	.0345	895
5-14-75	93,900	620	16.9	9.00	.00105	.0338	904
5-20-75	106,000	630	17.6	9.55	.00112	.0525	1,430
6-11-75	97,100	620	17.1	9.15	.00107	.0117	313
6-19-75	91,800	615	16.8	8.90	.00103	.0304	808
6-26-75	104,000	630	17.5	9.45	.00110	.0182	494
4- 7-76	61,800	580	14.6	7.30	.00084	.0152	381
4-13-76	99,300	625	17.2	9.25	.00108	.0644	1,740
4-15-76	94,800	620	17.0	9.05	.00105	.2085	5,590
4-19-76	82,000	605	16.1	8.40	.00098	.1891	4,940
4-21-76	84,000	610	16.3	8.50	.00099	.0525	1,380
5- 5-76	92,800	620	17.8	8.95	.00104	.0350	938
5-13-76	115,000	640	18.2	9.95	.00116	.0334	923
5-25-76	102,000	625	17.4	9.35	.00109	.0274	741

[1]Computed from incomplete number of samples (less than two transects of channel).

Table 7. Hydraulic-geometry and bedload-transport data, Snake River near Anatone, Washington (Continued)

Date	Discharge (ft^3/s)	Hydraulic geometry				Bedload	
		Width (ft)	Depth (ft)	Velocity (ft/s)	Slope (ft/ft)	Unit [(lb/s)/ft]	Total (ton/d)
5-27-76	102,000	625	17.4	9.35	0.00109	0.0323	871
6- 8-76	96,900	620	17.1	9.15	.00107	.0239	641
6-10-76	95,400	620	17.0	9.05	.00106	.0384	1,030
4- 4-78	65,200	585	14.9	7.50	.00087	.099	2,500
4- 5-78	57,400	580	14.2	7.05	.00082	.063	1,570
4-29-78	80,300	605	16.0	8.30	.00098	.101	2,640
5- 2-78	76,700	600	15.8	8.10	.00094	.076	1,960
5- 3-78	80,700	605	16.0	8.35	.00098	.073	1,900
5-16-78	76,800	600	15.8	8.15	.00094	.033	850
5-17-78	75,300	600	15.7	8.05	.00094	.059	1,530
6- 7-78	81,900	610	16.1	8.40	.00098	.012	310
6-13-78	73,000	600	15.5	7.90	.00092	.015	400
6-20-78	63,800	580	14.8	7.40	.00086	.022	550
5- 2-79	53,200	565	13.9	6.75	.00078	.007	182
5-15-79	43,200	555	12.9	6.10	.00072	.002	41
5-22-79	60,500	580	14.5	7.20	.00084	.021	537
5-24-79	70,400	595	15.3	7.80	.00090	.014	373
6- 5-79	58,200	580	14.3	7.10	.00082	.015	384
6- 7-79	47,800	560	13.4	6.40	.00074	.006	164

Table 8. Hydraulic-geometry and bedload-transport data, Clearwater River at Spalding, Idaho

Date	Discharge (ft^3/s)	Hydraulic geometry				Bedload	
		Width (ft)	Depth (ft)	Velocity (ft/s)	Slope (ft/ft)	Unit [(lb/s)/ft]	Total (ton/d)
5-10-72	56,300	460	16.1	7.55	0.00037	0.01158	230
5-18-72	82,900	470	17.5	10.00	.00050	.04926	1,000
6- 1-72	96,700	480	18.1	11.20	.00056	.03981	825
6-15-72	53,200	460	15.9	7.25	.00035	.01380	274
4-17-73	10,200	410	11.2	2.15	.000092	.00053	9.44
4-30-73	11,000	410	11.4	2.30	.000098	.00595	105
5-14-73	14,800	420	12.1	2.85	.000125	.00128	23.2
5-16-73	26,000	435	13.7	4.30	.000195	.01342	252
5-22-73	24,000	435	13.4	4.05	.000185	.00348	65.4
5-24-73	24,000	435	13.4	4.05	.000185	.00295	55.4
6- 5-73	13,700	420	11.9	2.70	.000117	.00006	1.04
6- 8-73	16,500	425	12.4	3.10	.000135	.00037	6.85
6-12-73	13,500	420	11.9	2.65	.000115	.00015	2.64
6-13-73	12,800	415	11.8	2.55	.000110	.00007	1.34
6-19-73	17,500	425	12.6	3.20	.000142	.00099	18.2
6-20-73	12,900	415	11.8	2.60	.000112	.00004	.66
2- 5-74	25,500	440	13.6	4.25	.00019	.00204	38.7
3-13-74	31,500	445	14.2	4.95	.00023	.00557	107
3-27-74	30,000	445	14.1	4.75	.00022	.00092	17.7
4-10-74	42,500	455	15.2	6.15	.00029	.00280	55.0
4-23-74	40,000	450	15.0	5.90	.00028	.00492	99.6
5- 8-74	64,000	470	16.6	8.30	.00040	.02588	525
5-15-74	28,000	440	13.9	4.55	.00021	.00196	37.2
5-23-74	22,000	435	13.2	3.80	.00017	.00033	6.25

Table 8. Hydraulic-geometry and bedload-transport data, Clearwater River at Spalding, Idaho (Continued)

Date	Discharge (ft^3/s)	Hydraulic geometry: Width (ft)	Depth (ft)	Velocity (ft/s)	Slope (ft/ft)	Bedload: Unit [(lb/s)/ft]	Total (ton/d)
6- 4-74	61,000	465	16.4	8.00	0.00039	[1]0.00643	[1]1,333
6- 6-74	80,000	475	17.4	9.75	.00047	.00931	191
6-12-74	60,000	465	16.4	7.90	.00038	.01773	356
6-17-74	124,000	490	19.1	13.45	.00068	[1].05366	[1]1,136
6-20-74	110,000	490	18.6	12.30	.00062	.17331	3,669
4-16-75	17,000	425	12.5	3.15	.000139	.00119	21.8
5-13-75	45,600	458	15.4	6.50	.000307	.00779	154
5-15-75	60,100	465	16.4	7.90	.000384	.01528	307
5-21-75	41,200	455	15.1	6.00	.000283	.00534	105
6- 3-75	76,000	475	17.2	9.40	.000475	.02314	475
6- 4-75	71,200	473	17.0	8.95	.000438	.01198	245
6-10-75	59,100	463	16.3	7.80	.000379	.02154	431
6-12-75	61,000	465	16.4	8.00	.000388	.01555	312
6-17-75	54,600	468	16.0	7.40	.000402	.02288	99.8
6-25-75	54,600	461	16.0	7.40	.000353	.00501	463
7- 2-75	41,500	455	15.1	6.05	.000287	.00425	83.5
12- 5-75	38,700	455	14.9	5.75	.000269	.00325	64.0
4- 6-76	34,300	450	14.5	5.25	.000245	.00507	98.5
4- 8-76	40,600	455	15.0	5.95	.000280	.00939	185
4-12-76	54,000	463	16.0	7.35	.000351	.01172	234
4-12-76	54,100	464	16.0	7.35	.000352	.01189	238
4-14-76	47,800	460	15.6	6.70	.000318	.00707	141
4-14-76	47,800	460	15.6	6.70	.000318	.00774	154

[1]Computed from incomplete number of samples (less than two transects of channel).

Table 8. Hydraulic-geometry and bedload-transport data, Clearwater River at Spalding, Idaho (Continued)

Date	Discharge (ft^3/s)	Hydraulic geometry				Bedload	
		Width (ft)	Depth (ft)	Velocity (ft/s)	Slope (ft/ft)	Unit [(lb/s)/ft]	Total (ton/d)
5- 4-76	52,100	462	15.9	7.15	0.000342	0.01003	200
5- 6-76	54,500	465	16.0	7.40	.000353	.00969	195
5-11-76	81,000	477	17.4	9.85	.000490	.02076	428
5-12-76	64,000	469	16.6	8.30	.000405	.01267	257
5-24-76	55,600	466	16.1	7.50	.000360	.01796	362
5-26-76	57,200	466	16.2	7.65	.000367	.03094	623
6- 9-76	61,700	467	16.4	8.10	.000390	.02127	429
6-11-76	54,800	465	16.0	7.40	.000354	.01934	388
4-26-77	23,900	440	13.4	4.05	.000183	.006	112
5- 4-77	24,000	440	13.4	4.05	.000184	.002	38
3-24-78	30,500	445	14.2	4.85	.000223	.003	51
4-28-78	29,900	444	14.1	4.74	.000218	.003	59
5-15-78	37,300	453	14.8	5.60	.000262	.006	130
5-17-78	38,000	454	14.8	5.65	.000266	.007	130
6- 5-78	50,000	460	15.7	6.95	.000330	.011	220
6- 6-78	55,800	463	16.1	7.50	.000360	.012	230
6- 8-78	52,700	461	15.9	7.20	.000346	.011	220
6-12-78	37,300	453	14.8	5.60	.000262	.012	230
6-14-78	39,700	455	15.0	5.85	.000275	.020	400
6-19-78	32,700	447	14.4	5.10	.000235	.007	140
5- 1-79	30,800	445	14.2	4.85	.000225	.006	109
5- 3-79	31,000	445	14.2	4.90	.000225	.005	96
5- 8-79	49,000	460	15.7	6.85	.000325	.005	96
5-11-79	31,100	445	14.2	4.90	.000227	.006	119

Table 8. Hydraulic-geometry and bedload-transport data, Clearwater River at Spalding, Idaho (Continued)

Date	Discharge (ft^3/s)	Hydraulic geometry				Bedload	
		Width (ft)	Depth (ft)	Velocity (ft/s)	Slope (ft/ft)	Unit [(lb/s)/ft]	Total (ton/d)
5-14-79	35,800	450	14.6	5.45	0.000252	0.014	265
5-16-79	44,800	460	15.4	6.40	.000302	.014	287
5-21-79	47,300	460	15.5	6.65	.000315	.017	331
5-23-79	55,000	461	16.0	7.40	.000359	.024	482
6- 4-79	39,000	455	14.9	5.80	.000271	.018	350
6- 6-79	38,700	455	14.9	5.75	.000270	.011	223
6-18-79	26,600	420	13.7	4.35	.000200	.005	93

Table 9. Suspended-sediment particle-size distribution, Snake River near Anatone, Washington

Particle size (mm)	Percent finer than indicated size						
	3-23-72	4-19-72	6- 2-72	5-17-73	5-29-73	6- 4-74	6-11-74
2.0	--	--	--	--	--	--	--
1.0	100	100	--	--	--	100	100
.50	93	97	100	100	100	--	--
.25	66	90	92	99	98	91	92
.125	59	86	79	91	92	76	76
.062	52	83	73	82	75	66	65
.031	--	--	63	--	--	--	--
.016	--	--	48	--	--	--	--
.008	--	--	35	--	--	--	--
.004	--	--	20	--	--	--	--
.002	--	--	15	--	--	--	--

Particle size (mm)	Percent finer than indicated size						
	6-19-74	6-26-74	5-14-75	6- 5-75	6-18-75	12-10-75	1-21-76
2.0	--	--	--	--	--	--	--
1.0	100	100	100	100	--	--	--
.50	--	--	99	99	100	100	--
.25	92	90	91	92	97	98	--
.125	70	74	82	78	89	95	100
.062	52	57	75	64	74	83	95
.031	--	--	66	54	59	--	--
.016	--	--	52	43	47	--	--
.008	--	--	38	28	36	--	--
.004	--	--	27	19	21	--	--
.002	--	--	17	12	14	--	--

Table 9. Suspended-sediment particle-size distribution, Snake River near Anatone, Washington (Continued)

Particle size (mm)	Percent finer than indicated size						
	2-25-76	3-24-76	4- 7-76	4-13-76	4-15-76	4-19-76	4-21-76
2.0	--	--	--	--	--	--	--
1.0	--	--	100	100	99	100	100
.50	--	100	99	99	97	98	97
.25	--	99	95	89	80	79	84
.125	100	98	87	76	66	66	72
.062	89	97	80	68	58	58	63
.031	--	95	69	58	52	--	--
.016	--	91	54	47	42	--	--
.008	--	84	39	35	31	--	--
.004	--	74	28	24	22	--	--
.002	--	64	21	17	16	--	--

Particle size (mm)	Percent finer than indicated size						
	5- 4-76	5- 5-76	5-13-76	5-25-76	5-27-76	6- 8-76	6-10-76
2.0	--	--	--	--	--	--	--
1.0	100	100	100	100	100	100	
.50	99	99	99	99	99	99	100
.25	88	87	93	89	88	89	94
.125	76	76	80	70	70	65	69
.062	62	58	68	54	54	44	48
.031	56	51	57	43	44	32	36
.016	45	40	42	32	34	24	27
.008	37	31	31	24	25	18	21
.004	30	25	22	18	17	14	16
.002	22	19	15	14	14	12	13

Table 9. Suspended-sediment particle-size distribution, Snake River near Anatone, Washington (Continued)

Particle size (mm)	Percent finer than indicated size						
	7-14-76	8-11-76	9-15-76	10-22-76	11-17-76	12-15-76	1-12-77
2.0	--	--	--	--	--	--	--
1.0	--	--	--	--	--	--	--
.50	--	100	100	--	--	--	--
.25	100	95	99	--	--	100	--
.125	96	90	94	100	100	93	100
.062	89	83	82	94	96	84	96
.031	--	--	--	--	--	--	--
.016	--	--	--	--	--	--	--
.008	--	--	--	--	--	--	--
.004	--	--	--	--	--	--	--
.002	--	--	--	--	--	--	--

Particle size (mm)	Percent finer than indicated size						
	2-16-77	3-16-77	4-13-77	4-19-77	4-25-77	5- 3-77	6- 9-77
2.0	--	--	--	--	--	--	--
1.0	--	--	--	--	--	--	--
.50	--	--	--	--	--	100	100
.25	--	--	--	--	--	98	99
.125	100	100	100	100	100	91	94
.062	97	92	98	95	94	82	85
.031	--	--	--	--	--	--	--
.016	--	--	--	--	--	--	--
.008	--	--	--	--	--	--	--
.004	--	--	--	--	--	--	--
.002	--	--	--	--	--	--	--

Table 9. Suspended-sediment particle-size distribution, Snake River near Anatone, Washington (Continued)

Particle size (mm)	Percent finer than indicated size						
	7-26-77	8-23-77	9-22-77	10-20-77	1-25-78	2-15-78	4- 4-78
2.0	--	--	--	--	--	--	--
1.0	--	--	--	--	--	--	--
.50	100	--	100	100	--	--	100
.25	96	100	97	98	--	--	98
.125	93	98	93	93	100	100	94
.062	86	58	79	78	94	96	89
.031	--	--	--	--	--	--	--
.016	--	--	--	--	--	--	--
.008	--	--	--	--	--	--	--
.004	--	--	--	--	--	--	--
.002	--	--	--	--	--	--	--

Particle size (mm)	Percent finer than indicated size						
	4- 5-78	4-29-78	5- 2-78	5- 3-78	5-16-78	5-17-78	6- 7-78
2.0	--	--	--	100	--	--	--
1.0	--	--	--	99	--	100	100
.50	100	100	100	98	100	99	98
.25	99	99	98	94	96	96	89
.125	96	96	92	85	84	78	69
.062	92	92	84	77	66	60	56
.031	--	76	76	68	54	50	45
.016	--	56	63	56	42	40	32
.008	--	38	51	45	33	31	22
.004	--	25	43	37	27	24	15
.002	--	16	33	31	21	19	10

Table 9. Suspended-sediment particle-size distribution, Snake River near Anatone, Washington (Continued)

Particle size (mm)	Percent finer than indicated size						
	6-13-78	6-14-78	6-20-78	7-20-78	11-16-78	12-13-78	1-17-79
2.0	--	--	--	--	--	--	--
1.0	--	100	100	--	--	--	--
.50	100	98	99	--	--	--	--
.25	95	92	95	100	--	100	100
.125	86	78	82	98	100	98	90
.062	75	66	71	89	93	96	80
.031	63	54	--	--	--	--	--
.016	48	40	--	--	--	--	--
.008	33	28	--	--	--	--	--
.004	22	18	--	--	--	--	--
.002	13	12	--	--	--	--	--

Particle size (mm)	Percent finer than indicated size						
	2-14-79	3- 8-79	3-22-79	4-19-79	5- 2-79	5-10-79	5-15-79
2.0	--	--	--	--	--	--	--
1.0	--	--	--	--	100	--	--
.50	--	100	100	--	99	100	--
.25	100	99	93	100	96	98	100
.125	98	97	82	90	91	94	97
.062	93	92	73	81	80	87	88
.031	89	86	--	--	73	80	--
.016	80	71	--	--	60	65	--
.008	69	54	--	--	48	50	--
.004	58	42	--	--	38	38	--
.002	48	32	--	--	32	30	--

Table 9. Suspended-sediment particle-size distribution, Snake River near Anatone, Washington (Continued)

Particle size (mm)	Percent finer than indicated size			
	5-22-79	5-24-79	6- 5-79	6- 7-79
2.0	--	--	--	--
1.0	100	100	100	--
.50	99	99	98	100
.25	91	93	91	92
.125	80	79	74	82
.062	67	61	61	68
.031	60	52	--	--
.016	49	40	--	--
.008	39	31	--	--
.004	30	22	--	--
.002	25	18	--	--

Table 10. Suspended-sediment particle-size distribution, Clearwater River at Spalding, Idaho

Particle size (mm)	Percent finer than indicated size						
	4- 4-72	4-20-72	6- 1-72	5-16-73	5-30-73	1-19-74	6- 5-74
2.0	--	--	--	--	--	--	--
1.0	100	100	100	100	100	--	--
.50	98	95	99	99	93	100	100
.25	32	71	86	82	83	99	79
.125	5	63	69	68	75	98	62
.062	0	60	56	57	66	97	54
.031	--	--	46	--	--	89	--
.016	--	--	33	--	--	70	--
.008	--	--	23	--	--	54	--
.004	--	--	11	--	--	41	--
.002	--	--	10	--	--	36	--

Particle size (mm)	Percent finer than indicated size						
	6-10-74	6-18-74	6-26-74	6-10-75	6-17-75	12- 3-75	12-11-75
2.0	--	--	--	--	--	--	--
1.0	100	100	100	100	100	100	--
.50	--	--	--	98	90	94	--
.25	62	76	84	70	62	74	100
.125	43	56	76	47	48	62	95
.062	30	43	68	31	41	52	90
.031	--	--	--	--	--	--	--
.016	--	--	--	--	--	--	--
.008	--	--	--	--	--	--	--
.004	--	--	--	--	--	--	--
.002	--	--	--	--	--	--	--

Table 10. Suspended-sediment particle-size distribution, Clearwater River at Spalding, Idaho (Continued)

Particle size (mm)	Percent finer than indicated size						
	1-22-76	2-26-76	3-19-76	3-25-76	4- 6-76	4- 8-76	4-14-76
2.0	--	--	--	--	--	--	--
1.0	--	--	--	--	100	100	100
.50	--	--	100	--	99	98	98
.25	100	--	98	100	96	88	89
.125	93	100	97	98	94	83	80
.062	92	99	95	97	91	80	73
.031	--	--	84	--	80	68	--
.016	--	--	67	--	62	53	--
.008	--	--	52	--	45	39	--
.004	--	--	40	--	33	30	--
.002	--	--	30	--	24	21	--

Particle size (mm)	Percent finer than indicated size						
	4-22-76	5- 3-76	5- 6-76	5-11-76	5-12-76	5-24-76	5-26-76
2.0	--	--	--	--	--	--	--
1.0	100	100	100	--	100	--	100
.50	99	98	99	100	97	100	99
.25	96	85	84	88	74	67	74
.125	91	60	64	65	52	42	47
.062	70	45	47	49	36	24	30
.031	--	--	--	--	33	--	--
.016	--	--	--	--	23	--	--
.008	--	--	--	--	17	--	--
.004	--	--	--	--	12	--	--
.002	--	--	--	--	8	--	--

Table 10. Suspended-sediment particle-size distribution, Clearwater River at Spalding, Idaho (Continued)

Particle size (mm)	Percent finer than indicated size						
	6-11-76	7-15-76	8- 4-76	9-17-76	10-21-76	11-17-76	12-16-76
2.0	--	--	--	--	--	--	--
1.0	--	--	--	--	--	--	--
.50	100	--	--	--	100	--	--
.25	63	--	100	--	94	100	--
.125	34	100	99	100	86	92	100
.062	22	88	99	93	70	82	94
.031	--	--	--	--	--	--	--
.016	--	--	--	--	--	--	--
.008	--	--	--	--	--	--	--
.004	--	--	--	--	--	--	--
.002	--	--	--	--	--	--	--

Particle size (mm)	Percent finer than indicated size						
	1-13-77	2-17-77	3-16-77	4-14-77	4-19-77	4-26-77	5- 4-77
2.0	--	--	--	--	--	--	--
1.0	--	--	--	--	--	100	100
.50	--	--	--	--	--	98	96
.25	--	--	--	--	100	85	84
.125	100	100	100	100	94	74	76
.062	98	95	94	95	92	64	68
.031	--	--	--	--	--	--	--
.016	--	--	--	--	--	--	--
.008	--	--	--	--	--	--	--
.004	--	--	--	--	--	--	--
.002	--	--	--	--	--	--	--

Table 10. Suspended-sediment particle-size distribution, Clearwater River at Spalding, Idaho (Continued)

Particle size (mm)	Percent finer than indicated size						
	5-16-77	7-25-77	9-21-77	10-19-77	11-16-77	12-14-77	2-16-78
2.0	--	--	--	--	--	--	--
1.0	--	--	--	--	--	--	--
.50	--	--	--	--	--	--	--
.25	100	--	--	--	--	100	--
.125	81	100	100	100	--	99	100
.062	73	88	99	78	100	98	98
.031	--	--	--	--	--	92	--
.016	--	--	--	--	--	76	--
.008	--	--	--	--	--	62	--
.004	--	--	--	--	--	48	--
.002	--	--	--	--	--	36	--

Particle size (mm)	Percent finer than indicated size						
	3-22-78	4-28-78	5- 3-78	5-15-78	5-17-78	6- 5-78	6- 6-78
2.0	--	--	--	--	--	--	--
1.0	--	--	--	100	100	100	100
.50	--	--	100	98	96	95	94
.25	100	100	96	88	87	75	72
.125	98	98	87	68	76	54	49
.062	94	96	80	54	67	43	42
.031	--	88	--	--	--	--	--
.016	--	73	--	--	--	--	--
.008	--	58	--	--	--	--	--
.004	--	48	--	--	--	--	--
.002	--	39	--	--	--	--	--

Table 10. Suspended-sediment particle-size distribution, Clearwater River at Spalding, Idaho (Continued)

Particle size (mm)	Percent finer than indicated size						
	6- 8-78	6-12-78	6-14-78	6-19-78	7-20-78	8-23-78	9-21-78
2.0	100	--	--	--	--	--	--
1.0	99	100	100	--	--	--	--
.50	93	94	86	100	--	--	--
.25	72	66	52	83	--	--	--
.125	53	47	34	70	100	--	100
.062	43	39	29	58	94	100	90
.031	--	--	--	--	--	99	--
.016	--	--	--	--	--	97	--
.008	--	--	--	--	--	85	--
.004	--	--	--	--	--	70	--
.002	--	--	--	--	--	55	--

Particle size (mm)	Percent finer than indicated size						
	10-19-78	11-15-78	12-13-78	1-18-79	3- 5-79	3- 9-79	3-21-79
2.0	--	--	--	--	--	--	--
1.0	--	--	--	--	--	--	--
.50	--	--	--	--	--	100	100
.25	--	--	--	--	100	97	96
.125	100	100	100	100	99	95	91
.062	97	89	97	96	98	91	82
.031	--	--	--	--	84	81	--
.016	--	--	--	--	66	64	--
.008	--	--	--	--	51	49	--
.004	--	--	--	--	40	39	--
.002	--	--	--	--	32	32	--

Table 10. Suspended-sediment particle-size distribution, Clearwater River at Spalding, Idaho (Continued)

Particle size (mm)	Percent finer than indicated size					
	4-18-79	5- 1-79	5- 3-79	5- 8-79	5-11-79	5-14-79
2.0	--	--	--	--	--	--
1.0	--	100	100	--	100	100
.50	--	94	97	100	93	89
.25	100	83	77	99	81	66
.125	97	69	55	99	75	51
.062	93	52	43	98	65	39
.031	88	--	--	91	--	--
.016	75	--	--	77	--	--
.008	62	--	--	56	--	--
.004	51	--	--	48	--	--
.002	41	--	--	38	--	--

Particle size (mm)	Percent finer than indicated size					
	5-16-79	5-21-79	5-23-79	6- 4-79	6- 6-79	6-18-79
2.0	--	--	--	--	--	--
1.0	100	100	100	100	100	100
.50	95	92	91	81	90	93
.25	80	71	65	44	55	84
.125	66	53	44	30	45	76
.062	49	38	31	23	37	68
.031	--	--	--	--	--	--
.016	--	--	--	--	--	--
.008	--	--	--	--	--	--
.004	--	--	--	--	--	--
.002	--	--	--	--	--	--

Table 11. Bedload particle-size distribution, Snake River near Anatone, Washington

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	5-10-72	5-19-72	6- 2-72	6-14-72	4-18-73	5- 1-73	5-15-73	5-17-73
128	--	--	--	--	--	--	--	--
90	--	--	--	--	--	--	--	--
64	--	--	100.00	--	--	--	--	100.00
45	--	--	81.31	--	--	--	--	86.59
32	--	--	81.31	--	--	--	--	81.50
22.6	100.00	100.00	79.02	--	--	--	100.00	80.48
16	96.81	98.68	78.09	--	--	--	96.99	80.48
11.3	91.54	98.06	77.62	--	--	--	96.22	80.29
8	81.15	97.01	77.41	100.00	--	--	95.75	80.23
5.7	76.99	95.66	77.16	99.88	--	100.00	95.75	80.00
4	73.77	94.22	76.83	99.70	--	99.80	95.55	79.75
2.8	71.54	92.17	76.14	99.42	--	99.80	95.35	79.43
2	68.65	89.98	74.92	98.86	--	99.60	94.52	79.09
1.4	65.12	86.96	72.77	97.34	100.00	99.40	91.77	78.55
1	60.89	85.97	70.93	93.60	91.78	97.80	87.59	75.44
.71	--	--	--	--	79.45	86.37	76.41	64.24
.50	40.82	54.34	50.13	51.06	52.03	59.52	50.15	43.71
.35	--	--	--	--	21.92	30.46	24.71	63.53
.25	4.68	6.40	7.61	8.17	4.11	8.82	6.23	5.88
.18	--	--	--	--	.00	1.20	.45	.45
.12	.15	.25	.77	.86	.00	.20	.13	.18
.09	--	--	--	--	.00	.00	.04	.08
.06	--	.02	.12	.21	.00	.00	.02	.03
Pan	.00	.00	--	.00	.00	.00	.00	.00

Table 11. Bedload particle-size distribution, Snake River near Anatone, Washington (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	5-21-73	5-23-73	6- 6-73	6- 7-73	6-11-73	6-13-73	6-18-73	6-19-73
128	--	--	--	--	--	--	--	--
90	--	--	--	--	--	--	--	--
64	100.00	--	--	100.00	--	--	--	100.00
45	94.53	--	100.00	91.84	100.00	100.00	--	83.38
32	89.35	--	81.92	89.57	90.48	79.25	--	83.38
22.6	89.35	--	76.15	80.17	78.52	74.00	--	82.22
16	88.39	--	74.87	76.75	77.27	71.87	100.00	77.07
11.3	87.88	--	73.74	74.14	77.27	70.63	99.74	76.23
8	87.48	100.00	73.39	72.68	77.18	70.47	99.65	76.18
5.7	87.18	99.95	72.93	71.34	77.06	70.07	99.48	76.00
4	86.92	99.85	72.34	69.69	76.65	69.75	99.35	75.64
2.8	86.57	99.52	71.72	66.96	75.71	68.75	99.08	73.76
2	85.96	98.90	70.80	63.62	73.86	66.76	98.65	69.52
1.4	84.81	97.70	68.84	59.39	70.11	62.45	97.36	63.05
1	81.85	95.40	63.83	52.71	62.76	54.13	93.67	52.54
.71	71.14	87.90	51.37	39.11	48.32	40.63	69.64	36.25
.50	50.85	59.75	30.36	19.87	28.46	22.74	36.98	18.25
.35	24.21	25.32	13.22	8.67	12.48	9.50	17.00	7.87
.25	5.03	5.39	3.67	2.29	3.27	2.42	3.63	2.03
.18	.28	.38	.53	.25	.46	.38	.50	.33
.12	.12	.15	.36	.13	.31	.26	.33	.24
.09	.07	.08	.24	.08	.20	.17	.22	.15
.06	.05	.04	.12	.04	.09	.08	.11	.07
Pan	.03	.00	.00	.00	.00	.00	.00	.00

Table 11. Bedload particle-size distribution, Snake River near Anatone, Washington (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	2- 6-74	3-13-74	3-26-74	4-11-74	4-24-74	5- 7-74	5-14-74
128	--	--	--	100.00	100.00	100.00	100.00
90	100.00	100.00	100.00	96.48	93.19	80.50	87.50
64	48.29	85.32	68.57	73.94	61.49	58.02	75.95
45	39.25	64.67	51.50	54.07	55.38	43.43	58.44
32	23.76	41.51	43.17	42.71	48.62	39.95	50.80
22.6	14.68	27.80	37.94	33.16	45.52	37.43	48.99
16	11.99	21.32	35.95	27.72	44.08	35.31	48.01
11.3	11.08	18.76	34.49	23.71	42.75	33.79	47.27
8	10.74	17.01	33.04	20.87	41.77	32.16	46.48
5.7	10.69	16.04	31.16	18.68	39.94	30.61	45.62
4	10.66	15.46	29.34	17.08	38.24	29.02	44.80
2.8	10.60	14.75	27.25	15.43	36.31	27.02	44.00
2	10.51	14.02	25.23	13.92	34.52	25.09	43.40
1.4	10.32	13.09	22.90	12.15	32.36	23.46	42.90
1	9.75	11.82	20.38	10.36	29.69	21.67	42.06
.71	8.32	9.82	17.60	8.78	24.86	19.47	33.90
.50	5.48	6.18	11.61	5.60	12.72	13.45	16.39
.35	2.28	2.50	4.12	2.56	5.72	6.63	8.55
.25	.51	.50	.76	.54	1.11	1.77	2.28
.18	.06	.07	.06	.06	.11	.28	.21
.12	.03	.04	.03	.03	.06	.12	.09
.09	.02	.02	.02	.02	.04	.06	.05
.06	.01	.01	.01	.01	.02	.03	.03
Pan	.00	.00	.00	.00	.00	.00	.00

Table 11. Bedload particle-size distribution, Snake River near Anatone, Washington (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	5-16-74	5-22-74	6- 5-74	6-11-74	6-25-74	4-15-75	4-30-75
128	--	--	--	--	--	--	--
90	--	--	--	--	--	--	--
64	100.00	--	--	100.00	--	--	--
45	88.33	100.00	--	97.98	--	--	--
32	85.26	96.69	100.00	93.54	--	--	--
22.6	81.20	94.34	99.31	91.14	--	--	100.00
16	78.56	92.28	99.31	89.47	100.00	100.00	96.57
11.3	76.24	91.37	99.31	86.36	99.85	98.99	95.32
8	74.91	90.37	99.16	83.87	99.85	98.67	95.32
5.7	73.51	88.82	99.03	81.33	99.82	98.67	95.32
4	72.12	87.53	98.95	79.76	99.82	98.53	95.24
2.8	70.45	85.50	98.74	78.30	99.82	98.44	95.17
2	68.76	82.66	98.44	77.05	99.80	98.26	94.99
1.4	66.90	77.82	98.10	74.94	99.72	97.39	94.27
1	64.11	68.17	97.08	70.58	99.56	94.56	91.81
.71	54.85	50.14	94.10	58.16	98.75	80.89	82.61
.50	27.51	31.02	82.09	41.05	76.52	50.94	61.98
.35	12.97	15.12	57.32	25.77	44.86	24.90	21.80
.25	3.17	4.66	26.96	9.12	18.54	4.57	4.69
.18	.25	.35	7.26	1.17	6.80	.21	.32
.12	.09	.15	2.36	.38	2.57	.08	.17
.09	.05	.08	.87	.18	1.14	.05	.11
.06	.03	.05	.33	.09	.56	.03	.07
Pan	.00	.00	.00	.00	.00	.00	.00

Table 11. Bedload particle-size distribution, Snake River near Anatone, Washington (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	5- 1-75	5-14-75	5-20-75	6-11-75	6-19-75	6-26-75	4- 7-76
128	--	--	--	--	--	--	--
90	100.00	100.00	100.00	--	100.00	--	--
64	93.60	81.81	87.10	--	73.53	100.00	100.00
45	89.72	74.97	81.89	--	73.53	94.72	94.40
32	82.18	69.78	59.76	--	69.30	94.72	89.30
22.6	72.35	64.51	48.84	100.00	67.20	93.23	83.48
16	66.99	62.10	45.56	99.73	64.18	91.72	82.11
11.3	63.87	61.00	43.41	99.27	62.14	90.09	81.61
8	62.72	60.32	41.67	98.88	60.69	88.92	81.34
5.7	62.40	59.83	40.11	98.67	59.91	87.98	81.10
4	62.16	59.46	39.13	98.50	59.31	87.62	80.66
2.8	61.85	59.05	38.42	98.17	58.46	87.25	79.68
2	61.55	58.62	37.97	97.26	57.40	86.70	78.48
1.4	60.94	57.16	37.35	95.59	55.79	85.57	76.74
1	58.40	54.67	36.38	93.17	53.62	84.02	73.65
.71	50.40	49.40	34.37	88.65	49.15	80.78	63.79
.50	37.68	35.29	25.44	66.21	34.80	65.12	49.11
.35	16.50	20.30	13.06	41.17	19.47	38.19	22.09
.25	3.12	4.27	2.92	11.40	6.09	11.55	3.37
.18	.23	.41	.30	1.99	1.26	1.84	.17
.12	.12	.18	.11	.88	.48	.61	.08
.09	.08	.11	.07	.40	.24	.29	.05
.06	.05	.07	.04	.23	.13	.15	.03
Pan	.00	.00	.00	.00	.00	.00	.00

Table 11. Bedload particle-size distribution, Snake River near Anatone, Washington (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	4-13-76	4-15-76	4-19-76	4-21-76	5- 5-76	5-13-76	5-25-76
128	100.00	100.00	100.00	100.00	--	--	100.00
90	81.94	93.75	94.50	88.69	--	100.00	88.66
64	70.74	86.92	90.75	85.18	100.00	72.28	88.66
45	56.01	79.75	77.20	62.36	98.23	70.30	88.66
32	52.17	65.01	54.88	49.48	95.49	69.57	87.94
22.6	48.01	47.04	37.50	36.54	94.59	67.52	83.87
16	46.35	30.49	24.46	33.31	92.80	67.02	82.51
11.3	45.82	17.52	17.16	32.60	89.65	66.36	80.96
8	45.42	14.42	14.83	31.98	85.60	65.84	79.91
5.7	44.94	14.20	14.01	31.33	80.58	65.28	78.58
4	44.43	14.15	13.51	30.68	76.36	64.62	77.39
2.8	43.82	14.12	13.07	30.02	72.77	63.76	75.46
2	43.23	14.08	12.77	29.35	70.05	63.00	72.00
1.4	42.59	13.95	12.43	28.50	67.64	62.14	67.20
1	41.76	13.50	11.94	27.18	64.89	61.10	62.92
.71	39.90	12.37	10.80	24.04	60.19	56.91	56.72
.50	33.69	9.44	8.27	16.86	47.51	43.24	42.89
.35	18.36	4.94	3.16	7.48	22.11	24.21	22.04
.25	3.90	1.03	.57	1.29	4.66	6.65	5.86
.18	.34	.10	.06	.07	.34	1.10	.77
.12	.11	.05	.03	.03	.13	.38	.26
.09	.05	.03	.02	.02	.07	.18	.13
.06	.04	.02	.01	.01	.03	.10	.09
Pan	.00	.00	.00	.00	.00	.00	.00

Table 11. Bedload particle-size distribution, Snake River near Anatone, Washington (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	5-27-76	6- 8-76	6-10-76	4- 4-78	4- 5-78	4-29-78	5- 2-78
128	--	100.00	--	--	--	--	--
90	--	67.47	--	100.00	100.00	100.00	100.00
64	100.00	67.47	--	86.30	77.55	67.16	69.48
45	95.80	67.47	100.00	70.81	63.61	52.91	59.59
32	92.08	64.64	97.98	57.47	50.76	41.01	48.88
22.6	85.94	63.74	95.28	39.25	37.47	32.09	40.25
16	82.07	62.03	91.73	29.38	29.49	27.85	36.31
11.3	78.56	57.23	87.92	23.97	23.10	24.72	33.68
8	76.41	56.07	85.16	22.15	20.00	22.94	33.03
5.7	74.72	55.43	82.74	21.30	18.49	21.74	32.82
4	73.22	55.14	80.70	20.89	18.08	21.05	32.66
2.8	71.07	54.84	78.05	20.46	17.79	20.37	32.44
2	68.89	54.58	75.40	20.00	17.40	19.84	32.20
1.4	66.23	54.05	72.67	19.37	16.77	19.19	31.91
1	63.75	53.02	69.92	18.49	15.82	18.39	31.06
.71	59.42	47.46	65.10	17.10	14.09	17.02	28.81
.50	47.11	28.47	34.10	13.89	10.12	12.90	14.87
.35	26.14	15.98	15.11	6.11	3.79	5.66	5.92
.25	7.14	4.56	6.59	1.35	.84	1.54	1.20
.18	.55	1.14	.77	.17	.13	.37	.14
.12	.15	.58	.42	.08	.09	.18	.08
.09	.07	.35	.23	.06	.07	.12	.05
.06	.04	.18	.11	.04	.05	.08	.04
Pan	.00	.00	.00	.00	.00	.00	.00

Table 11. Bedload particle-size distribution, Snake River near Anatone, Washington (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	5- 3-78	5-16-78	5-17-78	6- 7-78	6-13-78	6-20-78	5- 2-79
128	--	--	--	--	--	--	--
90	100.00	100.00	100.00	--	--	100.00	100.00
64	71.90	72.70	72.03	100.00	--	90.44	83.42
45	55.87	63.49	62.61	85.79	--	90.44	83.42
32	51.34	55.82	54.74	83.90	--	83.52	78.48
22.6	46.83	52.99	45.68	83.90	100.00	80.39	75.72
16	42.18	51.68	43.16	83.90	99.15	78.75	67.76
11.3	39.43	50.91	41.73	83.90	98.96	77.39	66.97
8	37.97	50.60	40.50	83.90	98.26	75.64	66.97
5.7	37.07	50.31	39.05	83.90	97.28	74.55	66.97
4	36.56	50.06	37.58	83.90	96.08	73.31	66.67
2.8	36.01	49.69	35.47	83.90	94.42	71.40	66.31
2	35.43	49.16	33.15	83.90	92.72	68.99	65.74
1.4	34.62	48.29	30.32	83.90	90.74	65.17	64.89
1	33.41	46.83	27.44	82.30	89.00	62.63	63.70
.71	30.83	41.81	24.31	80.41	85.81	57.41	60.64
.50	23.10	25.41	18.25	70.31	61.49	31.97	51.46
.35	8.92	12.44	7.08	40.09	28.08	14.40	27.48
.25	2.15	3.51	2.00	12.89	6.29	2.49	5.90
.18	.37	.70	.41	4.39	1.84	.34	.71
.12	.14	.30	.16	1.70	.77	.22	.33
.09	.08	.18	.09	.77	.43	.14	.22
.06	.05	.10	.06	.38	.25	.09	.12
Pan	.00	.00	.00	.00	.00	.00	.00

Table 11. Bedload particle-size distribution, Snake River near Anatone, Washington (Continued)

[Percentage, by weight, finer than particle size indicated]

Particle size (mm)	5-15-79	5-22-79	5-24-79	6- 5-79	6- 7-79
128	--	100.00	--	--	--
90	--	88.96	--	100.00	--
64	--	88.96	--	93.60	--
45	--	87.90	--	90.47	--
32	--	83.72	--	90.15	--
22.6	--	80.22	--	81.05	100.00
16	--	79.36	--	78.46	99.26
11.3	100.00	78.88	100.00	78.28	98.73
8	98.39	78.88	99.53	78.11	98.30
5.7	97.71	78.68	99.11	77.98	97.83
4	97.00	78.60	98.25	77.42	96.86
2.8	95.80	78.48	97.67	76.89	95.82
2	94.39	78.28	97.20	76.33	94.65
1.4	92.65	77.96	96.55	75.47	92.83
1	90.14	77.37	95.20	74.13	89.05
.71	87.92	65.79	88.51	69.56	76.93
.50	71.01	38.36	68.56	53.33	44.42
.35	34.88	14.80	34.80	23.97	19.79
.25	8.27	2.89	8.26	4.40	3.18
.18	.43	.43	2.06	.54	.28
.12	.17	.19	.68	.16	.10
.09	.13	.13	.36	.10	.05
.06	.09	.07	.16	.04	.02
Pan	.00	.00	.00	.00	.00

Table 12. Bedload particle-size distribution, Clearwater River at Spalding, Idaho

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	5-10-72	5-18-72	6- 1-72	6-15-72	4-17-73	4-30-73	5-14-73	5-16-73
128	--	--	--	--	--	--	--	--
90	--	--	--	--	--	--	--	--
64	--	100.00	100.00	--	--	--	--	--
45	--	54.55	62.37	--	--	--	--	--
32	100.00	48.42	53.29	--	--	--	--	--
22.6	97.11	35.19	44.67	--	--	--	--	--
16	94.73	31.13	41.62	--	--	--	--	--
11.3	94.73	28.60	38.00	--	--	--	--	--
8	94.62	26.67	34.01	100.00	--	--	--	--
5.7	94.58	26.00	29.69	99.97	--	--	--	--
4	94.57	25.71	26.23	99.97	--	--	--	--
2.8	94.53	25.43	22.84	99.95	--	100.00	--	--
2	94.44	25.12	20.49	99.82	--	99.99	100.00	100.00
1.4	94.02	24.70	19.05	99.53	100.00	99.89	99.83	99.97
1	92.83	24.07	18.14	98.48	99.71	99.14	99.34	99.33
.71	--	--	--	--	93.91	71.60	95.83	93.36
.50	55.63	15.38	11.84	40.14	56.71	18.50	57.11	55.46
.35	--	--	--	--	13.43	3.68	16.44	19.64
.25	5.67	2.43	2.41	2.63	2.71	.58	2.73	3.65
.18	--	--	--	--	.36	.17	.34	.64
.12	.25	.09	.12	.16	.07	.03	.02	.35
.09	--	--	--	--	.00	.02	.00	.20
.06	--	.09	.01	.03	.00	.01	.00	.11
Pan	.00	.00	.00	.00	.00	.00	.00	.00

Table 12. Bedload particle-size distribution, Clearwater River at Spalding, Idaho (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	5-22-73	5-24-73	6- 5-73	6- 8-73	6-12-73	6-13-73	6-19-73	6-20-73
128	--	--	--	--	--	--	--	--
90	--	--	--	--	--	--	--	--
64	--	--	--	--	--	--	--	--
45	--	--	--	--	--	--	--	--
32	--	--	--	--	--	--	--	--
22.6	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--
11.3	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--
5.7	--	--	--	--	100.00	--	--	--
4	100.00	--	--	100.00	99.54	--	--	--
2.8	99.89	100.00	--	99.91	99.54	100.00	100.00	--
2	99.72	99.97	100.00	99.91	99.31	99.88	99.99	100.00
1.4	98.93	99.62	98.72	99.68	99.08	99.75	99.93	99.11
1	96.96	97.95	96.15	98.57	98.06	99.51	99.18	98.21
.71	88.16	89.26	87.44	88.30	89.03	90.90	91.11	88.84
.50	49.27	51.08	58.97	45.84	54.97	47.36	44.54	54.46
.35	15.03	15.42	28.20	16.47	27.77	19.19	13.01	23.21
.25	2.80	2.57	17.44	6.38	15.43	8.36	3.03	12.05
.18	.16	.19	12.05	3.42	10.51	4.43	.99	7.59
.12	.03	.04	7.95	2.31	7.88	3.32	.72	4.91
.09	.00	.01	4.36	1.34	5.26	2.22	.48	2.23
.06	.00	.00	2.05	.65	2.63	1.11	.24	.89
Pan	.00	.00	.00	.00	.00	.00	.00	.00

Table 12. Bedload particle-size distribution, Clearwater River at Spalding, Idaho (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	2- 5-74	3-13-74	3-27-74	4-10-74	4-23-74	5- 8-74	5-15-74
128	--	--	--	--	--	--	--
90	--	--	--	--	--	100.00	--
64	--	100.00	--	--	100.00	60.12	--
45	--	74.54	--	100.00	88.27	45.90	--
32	--	65.45	--	92.41	80.24	33.54	--
22.6	--	65.45	--	92.41	79.22	27.32	--
16	--	65.45	--	90.83	79.22	25.44	100.00
11.3	--	65.18	--	90.39	79.13	24.88	99.41
8	--	65.11	100.00	90.17	79.13	24.33	98.99
5.7	--	64.99	99.75	89.73	79.10	23.94	98.86
4	100.00	64.87	99.60	89.59	79.06	23.65	98.74
2.8	99.97	64.67	99.52	89.46	78.99	23.36	98.65
2	99.80	64.43	99.47	89.32	78.78	23.08	98.48
1.4	99.52	63.97	98.65	88.97	78.38	22.78	98.10
1	98.52	62.66	94.70	87.72	77.21	22.30	96.88
.71	91.67	53.26	83.14	79.70	69.12	20.38	88.14
.50	53.84	27.45	49.58	47.41	38.53	13.52	49.95
.35	20.35	9.28	20.60	18.83	13.64	6.91	16.12
.25	4.74	1.90	4.88	4.36	2.85	1.92	4.49
.18	.50	.20	.25	.41	.14	.19	.48
.12	.28	.10	.04	.21	.04	.10	.20
.09	.19	.07	.00	.13	.02	.06	.10
.06	.11	.04	.00	.09	.01	.03	.05
Pan	.00	.00	.00	.00	.00	.00	.00

Table 12. Bedload particle-size distribution, Clearwater River at Spalding, Idaho (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	5-23-74	6- 4-74	6- 6-74	6-12-74	6-17-74	6-20-74	4-16-75
128	--	--	--	--	--	100.00	--
90	--	--	100.00	--	--	80.02	--
64	--	--	72.36	100.00	--	53.36	--
45	--	--	62.85	93.94	100.00	32.23	--
32	--	--	62.85	90.62	98.13	23.06	--
22.6	--	100.00	62.32	88.49	97.46	17.38	--
16	--	97.16	61.08	87.06	96.72	14.52	--
11.3	--	92.96	60.84	86.17	96.04	12.62	--
8	--	90.46	60.40	85.81	95.10	11.07	--
5.7	--	88.28	60.10	85.64	94.29	9.77	--
4	--	87.05	59.92	85.51	93.50	8.91	--
2.8	--	85.52	59.71	85.31	92.60	8.13	--
2	100.00	84.68	59.46	85.05	91.72	7.57	--
1.4	99.88	83.80	59.07	84.63	90.55	7.07	100.00
1	98.95	82.49	58.28	83.47	88.33	6.64	95.52
.71	94.50	73.90	55.58	74.34	78.68	5.76	84.98
.50	65.38	42.56	45.73	49.71	54.42	4.00	50.48
.35	27.13	20.80	31.14	24.90	30.07	2.14	23.15
.25	6.90	7.10	12.37	7.01	9.59	.63	3.62
.18	1.29	.68	1.97	.55	1.51	.10	.37
.12	.70	.26	.64	.21	.55	.05	.19
.09	.47	.13	.29	.12	.28	.03	.12
.06	.23	.06	.14	.06	.16	.02	.09
Pan	.00	.00	.00	.00	.00	.00	.00

Table 12. Bedload particle-size distribution, Clearwater River at Spalding, Idaho (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	5-13-75	5-15-75	5-21-75	6- 3-75	6- 4-75	6-10-75	6-12-75
128	--	--	--	--	--	--	--
90	--	--	--	--	--	--	--
64	--	--	--	--	--	--	100.00
45	100.00	--	--	--	--	--	87.29
32	97.42	--	--	--	--	100.00	85.00
22.6	97.42	--	--	100.00	--	98.96	82.64
16	97.42	--	--	98.60	--	98.96	82.08
11.3	97.42	--	--	98.60	--	98.96	80.25
8	97.42	--	--	98.60	100.00	98.94	79.54
5.7	97.42	--	100.00	98.53	99.72	98.93	79.04
4	97.42	--	99.90	98.53	99.61	98.92	78.60
2.8	97.41	100.00	99.63	98.47	99.50	98.89	78.26
2	97.41	99.97	99.38	98.38	99.34	98.88	77.91
1.4	97.41	99.97	98.86	97.98	99.14	98.78	77.48
1	97.00	97.33	97.80	97.31	98.32	98.23	76.58
.71	91.92	93.19	86.17	90.96	91.77	92.01	67.37
.50	86.83	66.96	42.27	64.22	75.46	57.15	45.40
.35	20.15	34.87	17.86	39.80	46.05	27.85	18.89
.25	3.87	11.49	3.77	9.96	14.58	5.26	4.37
.18	.43	1.91	.25	1.54	.91	.29	.36
.12	.25	.82	.11	.69	.49	.15	.18
.09	.18	.49	.07	.39	.34	.10	.12
.06	.13	.32	.06	.24	.25	.07	.08
Pan	.00	.00	.00	.00	.00	.00	.00

Table 12. Bedload particle-size distribution, Clearwater River at Spalding, Idaho (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	6-17-75	6-25-75	7- 2-75	12- 5-75	4- 6-76	4- 8-76	4-12-76
128	--	--	--	--	--	--	--
90	--	100.00	--	--	--	--	--
64	--	88.67	100.00	--	--	--	100.00
45	--	76.14	68.32	--	--	--	91.64
32	--	72.72	68.32	--	--	--	89.40
22.6	100.00	71.14	68.32	--	--	--	85.69
16	98.33	70.45	68.32	--	--	--	85.69
11.3	98.33	70.17	68.32	100.00	--	--	85.69
8.0	98.33	70.12	68.32	99.82	--	100.00	85.66
5.7	98.25	70.10	68.32	99.76	--	99.99	85.62
4	98.23	70.09	68.31	99.73	--	99.99	85.60
2.8	98.21	70.09	68.29	99.67	--	99.99	85.57
2	98.18	70.01	68.26	99.64	100.00	99.95	85.47
1.4	97.99	69.99	68.18	99.48	99.97	99.56	84.95
1	96.02	69.45	67.90	98.59	99.71	98.14	83.52
.71	86.96	64.22	65.64	88.57	83.81	87.49	76.20
.50	54.93	46.24	52.55	59.42	68.92	59.98	51.05
.35	29.13	21.86	21.79	19.63	30.08	19.96	25.13
.25	7.12	5.04	3.89	3.79	6.54	4.64	6.49
.18	.38	.31	.17	.27	.75	.41	.45
.12	.18	.17	.08	.15	.47	.22	.23
.09	.12	.10	.05	.10	.36	.14	.15
.06	.08	.06	.03	.08	.29	.09	.10
Pan	.00	.00	.00	.00	.00	.00	.00

Table 12. Bedload particle-size distribution, Clearwater River at Spalding, Idaho (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	4-12-76	4-14-76	4-14-76	5- 4-76	5- 6-76	5-11-76	5-12-76
128	--	--	--	--	--	--	--
90	100.00	--	--	--	100.00	100.00	--
64	83.84	100.00	--	--	78.01	83.53	100.00
45	83.84	90.83	--	--	67.84	64.21	80.38
32	81.52	80.36	--	100.00	67.84	56.83	75.59
22.6	80.33	76.36	100.00	97.94	65.52	52.61	72.59
16	80.33	76.36	96.68	97.94	63.99	52.45	72.59
11.3	80.33	76.36	95.91	97.94	63.74	52.36	72.59
8	80.29	76.36	95.91	97.94	63.68	52.31	72.59
5.7	80.29	76.36	95.91	97.94	63.68	52.30	72.55
4	80.27	76.36	95.91	97.92	63.67	52.28	72.53
2.8	80.22	76.35	95.90	97.87	63.66	52.27	72.51
2	80.08	76.34	95.71	97.81	63.61	52.21	72.46
1.4	79.74	76.31	95.35	97.58	63.36	52.06	72.28
1	78.96	75.66	94.24	96.82	62.66	51.66	71.86
.71	74.52	69.66	86.18	90.50	57.99	49.52	69.87
.50	52.56	51.22	57.52	67.04	39.97	40.36	60.55
.35	24.42	22.83	24.80	35.16	19.56	27.99	41.73
.25	6.25	4.91	5.33	10.53	6.05	12.83	13.76
.18	4.00	.37	.49	1.02	.38	2.65	1.02
.12	.17	.20	.28	.47	.15	.85	.32
.09	.11	.12	.19	.29	.09	.41	.16
.06	.07	.08	.13	.20	.06	.25	.09
Pan.	.00	.00	.00	.00	.00	.00	.00

Table 12. Bedload particle-size distribution, Clearwater River at Spalding, Idaho (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	5-24-76	5-26-76	6- 9-76	6-11-76	4-26-77	5- 4-77	3-24-78
128	100.00	--	--	--	--	--	--
90	60.64	100.00	--	100.00	--	--	--
64	60.64	83.36	100.00	80.81	--	--	--
45	60.64	71.85	87.70	68.90	--	--	--
32	60.64	68.01	75.96	64.84	--	--	--
22.6	60.64	66.26	55.66	59.39	--	--	--
16	60.64	65.76	48.24	55.35	--	--	--
11.3	60.20	65.47	45.34	54.89	--	--	--
8	60.13	65.39	44.64	54.38	--	--	--
5.7	60.11	65.32	44.40	54.32	--	--	--
4	60.06	65.23	44.32	54.28	--	--	--
2.8	59.96	65.16	44.26	54.24	--	--	--
2	59.83	65.08	44.12	54.16	--	--	--
1.4	59.70	64.81	43.95	53.97	--	--	100.00
1	59.37	64.21	43.52	53.45	--	--	96.70
.71	56.69	59.54	32.00	46.26	100.00	100.00	92.58
.50	43.14	40.93	12.36	16.10	81.97	77.46	63.56
.35	21.82	19.29	6.32	7.67	--	--	29.86
.25	5.23	3.49	1.96	1.33	8.93	5.96	7.49
.18	.36	.19	.20	.10	--	--	1.11
.12	.16	.11	.08	.06	.64	.33	.55
.09	.10	.08	.04	.04	--	--	.32
.06	.07	.04	.02	.02	.32	.15	.15
Pan	.00	.00	.00	.00	.00	.00	.00

Table 12. Bedload particle-size distribution, Clearwater River at Spalding, Idaho (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	4-28-78	5-15-78	5-17-78	6- 5-78	6- 6-78	6- 8-78	6-12-78
128	--	--	--	--	--	--	--
90	--	--	--	--	--	--	--
64	--	--	--	--	--	--	--
45	--	--	100.00	--	--	100.00	--
32	--	--	95.33	--	100.00	90.18	--
22.6	--	--	93.79	100.00	98.72	90.18	--
16	--	--	93.74	97.74	98.72	89.33	--
11.3	--	--	93.59	96.31	98.72	88.25	--
8	--	--	92.11	94.87	98.72	87.87	--
5.7	--	--	91.97	94.48	98.72	87.70	--
4	--	--	91.83	94.13	98.72	87.54	--
2.8	--	--	91.61	93.78	98.72	87.39	--
2	--	--	91.46	93.53	98.72	87.39	--
1.4	100.00	100.00	91.34	93.33	98.72	87.39	100.00
1	99.32	99.19	90.56	92.75	97.90	86.78	99.36
.71	93.14	94.86	86.43	89.12	95.34	83.95	95.93
.50	50.60	66.74	52.99	58.31	74.12	62.43	53.44
.35	22.38	29.65	21.30	26.11	34.76	28.21	20.28
.25	6.77	7.71	5.43	6.49	9.10	6.83	3.31
.18	.70	.67	.45	1.24	1.90	.84	.33
.12	.26	.32	.24	.55	.75	.34	.20
.09	.18	.24	.17	.34	.45	.22	.12
.06	.13	.21	.12	.20	.29	.15	.06
Pan	.00	.00	.00	.00	.00	.00	.00

Table 12. Bedload particle-size distribution, Clearwater River at Spalding, Idaho (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	6-14-78	6-19-78	5- 1-79	5- 3-79	5- 8-79	5-11-79	5-14-79
128	--	--	--	--	--	--	--
90	--	--	--	--	--	--	--
64	100.00	--	--	--	--	--	--
45	91.88	--	--	--	--	--	--
32	91.88	100.00	--	100.00	--	--	--
22.6	91.88	96.82	--	98.77	--	--	--
16	90.77	95.66	--	98.77	--	--	--
11.3	90.77	95.24	--	98.77	--	--	--
8	90.77	95.24	--	98.77	--	--	--
5.7	90.77	95.24	--	98.77	--	--	--
4	90.77	95.24	--	98.77	100.00	--	--
2.8	90.77	95.24	--	98.77	99.73	--	100.00
2	90.77	95.24	100.00	98.77	99.42	100.00	99.93
1.4	90.77	95.24	99.62	98.61	98.86	99.97	99.69
1	90.26	94.64	98.53	97.99	97.26	99.36	99.20
.71	82.62	87.97	94.15	93.62	94.57	89.54	88.07
.50	30.12	42.12	68.18	65.71	77.53	48.57	41.49
.35	11.29	15.04	31.01	28.84	41.53	16.74	14.83
.25	2.26	3.02	8.15	7.46	14.03	3.61	2.94
.18	.20	.25	1.46	.89	4.71	.52	.29
.12	.12	.14	.69	.44	2.47	.27	.13
.09	.08	.06	.48	.32	1.70	.20	.10
.06	.04	.02	.28	.22	1.07	.13	.08
Pan	.00	.00	.00	.00	.00	.00	.00

Table 12. Bedload particle-size distribution, Clearwater River at Spalding, Idaho (Continued)

[Percentage, by weight, finer than particle size indicated]

Sieve size (mm)	5-16-79	5-21-79	5-23-79	6- 4-79	6- 6-79	6-18-79
128	--	--	--	--	--	--
90	100.00	100.00	--	--	--	--
64	99.89	92.11	--	--	--	--
45	99.89	92.11	100.00	--	--	--
32	98.49	88.49	95.54	--	--	--
22.6	98.49	86.59	85.65	--	100.00	--
16	98.49	86.27	76.56	--	99.78	--
11.3	98.49	86.17	74.13	--	99.78	--
8	98.49	86.05	71.98	--	99.65	--
5.7	98.49	86.05	69.65	100.00	99.58	--
4	98.49	85.98	67.69	99.93	99.51	--
2.8	98.49	85.90	66.02	99.86	99.29	--
2	98.49	85.81	64.49	99.73	99.07	100.00
1.4	98.49	85.53	62.27	99.48	98.76	99.85
1	97.94	84.91	57.83	98.93	98.13	99.19
.71	87.38	75.20	47.43	86.51	87.07	85.90
.50	53.16	41.89	29.27	33.67	23.97	34.98
.35	21.27	14.94	14.43	11.59	8.60	9.72
.25	4.50	2.05	2.45	1.93	1.47	1.67
.18	.50	.18	.35	.23	.20	.17
.12	.24	.08	.12	.11	.10	.09
.09	.17	.07	.06	.06	.03	.07
.06	.11	.06	.04	.02	.00	.06
Pan	.00	.00	.00	.00	.00	.00

Table 13. Statistical data: Particle-size distribution of bedload, Snake River near Anatone, Washington (Continued)

[Particle diameter (mm) at given percent-finer parameter]

Percent-finer parameter	5- 7-74	5-14-74	5-16-74	5-22-74	6- 5-74	6-11-74	6-25-74
D_{16}	0.56	0.48	0.38	0.36	0.21	0.30	0.24
D_{35}	15	.72	.56	.54	.28	.45	.31
D_{50}	57	28	.65	.70	.34	.62	.37
D_{65}	71	52	1.1	.92	.39	.90	.44
D_{84}	95	80	30	2.4	.52	14	.52

Percent-finer parameter	4-15-75	4-30-75	5- 1-75	5-14-75	5-20-75	6-11-75	6-19-75
D_{16}	.32	.32	.34	.32	.39	.27	.33
D_{35}	.40	.37	.46	.50	.80	.33	.50
D_{50}	.50	.43	.70	.77	23	.40	.78
D_{65}	.58	.52	14	23	32	.50	20
D_{84}	.75	.77	35	56	51	.68	78

Percent-finer parameter	6-26-75	4- 7-76	4-13-76	4-15-76	4-19-76	4-21-76	5- 5-76
D_{16}	.26	.29	.31	8.4	8.8	.48	.31
D_{35}	.30	.38	.54	18	21	17	.41
D_{50}	.37	.52	24	25	30	33	.54
D_{65}	.50	.76	60	32	35	48	1
D_{84}	1	26	94	54	42	76	8.2

Table 13. Statistical data: Particle-size distribution of bedload, Snake River near Anatone, Washington

[Particle diameter (mm) at given percent-finer parameter]

Percent-finer parameter	5-10-72	5-19-72	6- 2-72	6-14-72	4-18-72	5- 1-73	5-15-73
D_{16}	0.31	0.31	0.29	0.28	0.32	0.29	0.30
D_{35}	.44	.41	.39	.39	.41	.37	.41
D_{50}	.63	.48	.50	.49	.49	.45	.50
D_{65}	1.40	.57	.78	.62	.56	.53	.60
D_{84}	9.0	.85	51	.84	.78	.61	.85

Percent-finer parameter	5-17-73	5-21-73	5-23-73	6- 6-73	6- 7-73	6-11-73	6-13-73
D_{16}	.31	.30	.31	.37	.46	.38	.43
D_{35}	.44	.40	.40	.55	.66	.57	.66
D_{50}	.57	.50	.46	.70	.92	.75	.90
D_{65}	.71	.64	.54	1.05	2.30	1.15	1.70
D_{84}	40	1.30	.66	34	26	27	36

Percent-finer parameter	6-18-73	6-19-73	2- 6-74	3-13-74	3-26-74	4-11-74	4-24-74
D_{16}	.35	.47	24	5	.67	3.3	.54
D_{35}	.50	.70	40	28	13	25	2
D_{50}	.60	.95	66	36	43	42	35
D_{65}	.68	1.50	78	45	61	56	67
D_{84}	.84	48	88	62	78	70	79

Table 13. Statistical data: Particle-size distribution of bedload, Snake River near Anatone, Washington (Continued)

[Particle diameter (mm) at given percent-finer parameter]

Percent-finer parameter	5-13-76	5-25-76	5-27-76	6- 8-76	6-10-76	4- 4-78	4- 5-78
D_{16}	0.31	0.29	0.28	0.36	0.36	0.68	1.5
D_{35}	.42	.41	.38	.56	.50	20	21
D_{50}	.64	.61	.56	.88	.56	28	32
D_{65}	7.5	1.1	1.1	32	.71	39	47
D_{84}	76	20	19	110	7	60	72

Percent-finer parameter	4-29-78	5- 2-78	5- 3-78	5-16-78	5-17-78	6- 7-78	6-13-78
D_{16}	.68	.50	.41	.41	.45	.26	.30
D_{35}	26	15	2	.58	1.7	.33	.38
D_{50}	43	33	27	3.1	28	.39	.45
D_{65}	60	56	66	49	51	.46	.52
D_{84}	83	83	83	80	83	35	.70

Percent-finer parameter	6-20-78	5- 2-79	5-15-79	5-22-79	5-24-79	6- 5-79	6- 7-79
D_{16}	.40	.30	.28	.36	.28	.31	.33
D_{35}	.51	.39	.35	.54	.35	.41	.44
D_{50}	.57	.49	.41	.64	.41	.48	.53
D_{65}	1.3	1.53	.47	.70	.48	.63	.62
D_{84}	33	65	.60	35	.65	25	.82

Table 14. Statistical data: Particle-size distribution of bedload, Clearwater River at Spalding, Idaho

[Particle diameter (mm) at given percent-finer parameter]

Percent-finer parameter	5-10-72	5-18-72	6- 1-72	6-15-72	4-17-73	4-30-73	5-14-73
D_{16}	0.29	0.52	1	0.38	0.37	0.49	0.35
D_{35}	.39	22	8.5	.48	.44	.60	.42
D_{50}	.47	35	30	.53	.49	.64	.48
D_{65}	.58	54	47	.58	.53	.70	.52
D_{84}	.80	62	57	.66	.61	.77	.60

Percent-finer parameter	5-18-73	5-22-73	5-24-73	6- 5-73	6- 8-73	6-12-73	6-13-73
D_{16}	.33	.36	.36	.24	.35	.26	.33
D_{35}	.43	.44	.44	.39	.47	.40	.45
D_{50}	.49	.50	.50	.46	.52	.48	.51
D_{65}	.53	.57	.57	.51	.57	.55	.57
D_{84}	.62	.68	.66	.66	.66	.66	.65

Percent-finer parameter	6-19-73	6-20-73	2- 5-74	3-13-74	3-27-74	4-10-74	4-23-74
D_{16}	.37	.29	.33	.42	.33	.33	.37
D_{35}	.47	.42	.42	.55	.42	.43	.48
D_{50}	.52	.48	.50	.68	.52	.52	.54
D_{65}	.56	.54	.54	8	.56	.58	.65
D_{84}	.66	.66	.64	54	.7	.82	38

Table 14. Statistical data: Particle-size distribution of bedload, Clearwater River at Spalding, Idaho (Continued)

[Particle diameter (mm) at given percent-finer parameter]

Percent-finer parameter	5- 8-74	5-15-74	5-23-74	6- 4-74	6- 6-74	6-12-74	6-17-74
D_{16}	0.56	0.35	0.30	0.31	0.27	0.30	0.28
D_{35}	34	.45	.39	.45	.39	.41	.38
D_{50}	52	.52	.45	.53	.57	.50	.47
D_{65}	68	.56	.50	.62	50	.60	.57
D_{84}	84	.68	.56	1.5	80	1.1	.84

Percent-finer parameter	6-20-74	4-16-75	5-13-75	5-15-75	5-21-75	6- 3-75	6- 4-75
D_{16}	20	.33	.33	.28	.35	.29	.26
D_{35}	48	.42	.40	.35	.46	.34	.33
D_{50}	61	.50	.43	.42	.52	.43	.37
D_{65}	74	.55	.45	.49	.54	.50	.43
D_{84}	97	.70	.48	.58	.58	.60	.57

Percent-finer parameter	6-10-75	6-12-75	6-17-75	6-25-75	7- 2-75	12- 5-75	4- 6-76
D_{16}	.30	.33	.32	.31	.32	.33	.30
D_{35}	.40	.43	.43	.43	.39	.42	.35
D_{50}	.47	.53	.49	.53	.48	.47	.42
D_{65}	.51	.70	.54	.72	.66	.53	.48
D_{84}	.59	27	57	.67	.58	.66	.60

Table 14. Statistical data: Particle-size distribution of bedload, Clearwater River at Spalding, Idaho (Continued)

[Particle diameter (mm) at given percent-finer parameter]

Percent-finer parameter	4- 8-76	4-12-76	4-12-76	4-14-76	4-14-76	5- 4-76	5- 6-76
D_{16}	0.32	0.31	0.31	0.32	0.32	0.28	0.32
D_{35}	.41	.41	.41	.41	.40	.35	.47
D_{50}	.47	.49	.48	.48	.48	.41	.59
D_{65}	.52	.60	.58	.64	.53	.48	26
D_{84}	.68	1.1	58	36	.70	.63	71

Percent-finer parameter	5-11-76	5-12-76	5-24-76	5-26-76	6- 9-76	6-11-76	4-26-77
D_{16}	.27	.26	.32	.33	.53	.48	.27
D_{35}	.42	.32	.43	.47	.77	.60	.32
D_{50}	.76	.40	.59	.58	18	.95	.36
D_{65}	44	.57	98	2	24.5	34	.41
D_{84}	68	49	117	66	39	69	.52

Percent-finer parameter	5- 4-77	3-24-78	4-28-78	5-15-78	5-17-78	6- 5-78	6- 6-78
D_{16}	.28	.29	.32	.29	.32	.30	.28
D_{35}	.32	.37	.39	.38	.42	.39	.35
D_{50}	.37	.44	.44	.44	.49	.46	.40
D_{65}	.43	.51	.49	.50	.51	.53	.46
D_{84}	.54	.64	.57	.54	.66	.66	.54

Table 14. Statistical data: Particle-size distribution of bedload, Clearwater River at Spalding, Idaho (Continued)

[Particle diameter (mm) at given percent-finer parameter]

Percent-finer parameter	6- 8-78	6-12-78	6-14-78	6-19-78	5- 1-79
D_{16}	0.29	0.33	0.39	0.36	0.29
D_{35}	.37	.41	.52	.47	.37
D_{50}	.43	.48	.58	.52	.43
D_{65}	.52	.55	.64	.58	.49
D_{84}	.73	.65	.73	.68	.61

Percent-finer parameter	5- 3-79	5- 8-79	5-11-79	5-14-79	5-16-79
D_{16}	.29	.26	.34	.36	.31
D_{35}	.37	.33	.44	.48	.41
D_{50}	.43	.39	.51	.52	.48
D_{65}	.50	.45	.54	.56	.56
D_{84}	.62	.54	.58	.67	.68

Percent-finer parameter	5-21-79	5-23-79	6- 4-79	6- 6-79	6-18-79
D_{16}	.36	.37	.39	.42	.39
D_{35}	.47	.56	.51	.54	.50
D_{50}	.54	.77	.58	.60	.58
D_{65}	.62	2.25	.64	.65	.64
D_{84}	.96	22	.70	.70	.70

Table 15. Values of accumulative suspended-sediment and bedload transport, 1972, Snake River near Anatone, Washington

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
135,000	1	0.27	84,500	84,500	2,550	2,550	3.02
134,000	1	.55	82,300	166,800	2,530	5,080	3.05
128,000	1	.82	70,000	236,800	2,410	7,490	3.16
126,000	1	1.10	66,200	303,000	2,370	9,860	3.25
122,000	2	1.64	58,800	420,600	2,290	14,440	3.43
121,000	1	1.92	57,000	477,600	2,270	16,710	3.50
118,000	1	2.19	52,000	529,600	2,210	18,920	3.57
117,000	1	2.47	50,400	580,000	2,190	21,110	3.64
116,000	1	2.74	48,800	628,800	2,170	23,280	3.70
114,000	1	3.01	45,800	674,600	2,130	25,410	3.77
113,000	3	3.84	44,300	807,500	2,110	31,740	3.93
110,000	3	4.66	40,100	927,800	2,050	37,890	4.08
108,000	1	4.93	37,500	965,300	2,010	39,900	4.13
107,000	1	5.21	36,300	1,001,600	1,990	41,890	4.18
106,000	1	5.48	35,100	1,036,700	1,970	43,860	4.23
104,000	4	6.58	32,900	1,168,300	1,930	51,580	4.42
103,000	4	7.67	31,900	1,295,900	1,910	59,220	4.57
102,000	2	8.22	30,900	1,357,700	1,890	63,000	4.64
101,000	1	8.49	30,000	1,387,700	1,870	64,870	4.68
99,100	1	8.77	28,400	1,416,100	1,830	66,700	4.71
97,700	2	9.32	27,200	1,470,500	1,800	70,300	4.78
97,600	1	9.59	27,200	1,497,700	1,800	72,100	4.81
97,500	1	9.86	27,100	1,524,800	1,800	73,900	4.85
96,600	1	10.14	26,400	1,551,200	1,780	75,680	4.88
96,500	1	10.41	26,300	1,577,500	1,780	77,460	4.91
95,000	1	10.69	25,100	1,602,600	1,750	79,210	4.94
94,300	2	11.23	24,600	1,651,800	1,740	82,690	5.00
94,100	2	11.78	24,500	1,700,800	1,730	86,150	5.06

Table 15. Values of accumulative suspended-sediment and bedload transport, 1972, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
94,000	1	12.06	24,400	1,725,200	1,730	87,880	5.09
91,400	1	12.33	22,600	1,747,800	1,680	89,560	5.12
90,500	1	12.60	21,900	1,769,700	1,660	91,220	5.16
90,000	1	12.88	26,600	1,796,300	1,650	92,870	5.17
85,500	1	13.15	20,500	1,816,800	1,610	94,480	5.20
88,300	1	13.43	20,400	1,837,200	1,600	96,080	5.23
85,300	1	13.70	18,300	1,855,500	1,510	97,590	5.26
84,300	1	13.97	17,700	1,873,200	1,480	99,070	5.29
83,700	1	14.25	17,200	1,890,400	1,460	100,530	5.32
83,600	1	14.52	17,200	1,907,600	1,460	101,990	5.35
83,100	1	14.80	17,000	1,924,600	1,440	103,430	5.37
82,900	1	15.07	16,800	1,941,400	1,440	104,870	5.40
81,700	1	15.34	16,100	1,957,500	1,400	106,270	5.43
81,400	1	15.62	15,900	1,973,400	1,390	107,660	5.46
80,900	1	15.89	15,600	1,989,000	1,380	109,040	5.48
80,800	1	16.17	15,600	2,004,600	1,370	110,410	5.51
80,700	1	16.44	15,500	2,020,100	1,370	111,780	5.53
80,300	1	16.71	15,300	2,035,400	1,360	113,140	5.56
80,100	1	16.99	15,200	2,050,600	1,350	114,490	5.58
79,900	1	17.26	15,000	2,065,600	1,350	115,840	5.61
79,800	1	17.54	15,000	2,080,600	1,350	117,190	5.63
79,400	1	17.81	14,800	2,095,400	1,340	118,530	5.66
79,000	1	18.08	14,600	2,110,000	1,330	119,860	5.68
78,700	1	18.36	14,400	2,124,400	1,320	121,180	5.70
78,600	1	18.63	14,400	2,138,800	1,320	122,500	5.73
78,200	1	18.91	14,200	2,153,000	1,310	123,810	5.75
77,200	1	19.18	13,700	2,166,700	1,280	125,090	5.77
77,000	1	19.45	13,600	2,180,300	1,280	126,370	5.80

Table 15. Values of accumulative suspended-sediment and bedload transport, 1972, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
76,500	2	20.00	13,300	2,206,900	1,260	128,890	5.84
76,400	1	20.28	13,300	2,220,200	1,260	130,150	5.86
75,400	2	20.82	12,800	2,245,800	1,240	132,630	5.91
75,200	1	21.10	12,700	2,258,500	1,230	133,860	5.93
74,800	2	21.65	12,500	2,283,500	1,220	136,300	5.98
74,500	1	21.92	12,300	2,295,800	1,210	137,510	5.99
74,400	1	22.19	12,300	2,308,100	1,210	138,720	6.01
74,100	1	22.47	12,100	2,320,200	1,200	139,920	6.03
73,800	1	22.74	12,000	2,332,200	1,200	141,120	6.05
73,600	1	23.02	11,900	2,344,100	1,190	142,310	6.07
72,100	1	23.29	11,100	2,355,200	1,150	143,460	6.09
71,600	1	23.56	10,900	2,366,100	1,140	144,600	6.11
71,000	1	23.84	10,600	2,376,700	1,130	145,730	6.13
70,800	1	24.11	10,500	2,387,200	1,120	146,850	6.15
70,400	2	24.66	10,300	2,407,800	1,110	149,070	6.19
70,100	1	24.93	10,100	2,417,900	1,100	150,170	6.21
69,600	1	25.21	9,910	2,427,810	1,090	151,260	6.23
68,900	1	25.48	9,600	2,437,410	1,060	152,320	6.25
68,200	1	25.76	9,320	2,446,730	1,040	153,360	6.27
67,700	1	26.03	9,130	2,455,860	1,020	154,380	6.29
67,300	1	26.30	8,980	2,464,840	1,000	155,380	6.30
66,600	1	26.58	8,730	2,473,570	978	156,358	6.32
66,500	1	26.85	8,700	2,482,270	974	157,332	6.34
66,200	1	27.13	8,590	2,490,860	963	158,295	6.36
66,100	1	27.40	8,560	2,499,420	960	159,255	6.37
65,900	1	27.67	8,480	2,507,900	952	160,207	6.39
65,700	2	28.22	8,420	2,524,740	945	162,097	6.42
64,300	1	28.50	7,920	2,532,660	895	162,992	6.44

Table 15. Values of accumulative suspended-sediment and bedload transport, 1972, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
64,100	1	28.77	7,860	2,540,520	888	163,880	6.45
64,000	1	29.04	7,820	2,548,340	884	164,754	6.46
63,300	1	29.32	7,580	2,555,920	859	165,623	6.48
61,800	3	30.14	7,050	2,577,070	805	168,038	6.52
59,400	1	30.41	6,260	2,583,330	721	168,759	6.53
59,100	1	30.69	6,160	2,589,490	712	169,471	6.54
59,000	1	30.96	6,130	2,595,620	709	170,180	6.56
58,600	1	31.24	6,000	2,601,620	697	170,877	6.57
58,400	1	31.51	5,930	2,607,550	690	171,567	6.58
58,200	2	32.06	5,870	2,619,290	684	172,935	6.60
58,000	1	32.33	5,800	2,625,090	678	173,613	6.61
57,600	1	32.61	5,680	2,630,770	666	174,279	6.62
57,400	2	33.15	5,610	2,641,990	659	175,597	6.65
56,500	1	33.43	5,340	2,647,330	631	176,228	6.66
56,300	1	33.70	5,290	2,652,620	625	176,853	6.67
56,200	1	33.98	5,260	2,657,880	622	177,475	6.68
55,500	2	34.52	5,060	2,668,000	600	178,675	6.70
55,000	1	34.80	4,930	2,672,930	585	179,260	6.71
54,800	1	35.07	4,880	2,677,810	579	179,839	6.72
54,600	1	35.35	4,830	2,682,640	573	180,412	6.72
54,200	1	35.62	4,730	2,687,370	560	180,972	6.73
53,200	2	36.17	4,500	2,696,370	529	182,030	6.75
53,100	1	36.44	4,470	2,700,840	526	182,556	6.76
53,000	2	36.99	4,450	2,709,740	523	183,602	6.78
52,800	2	37.54	4,400	2,718,540	517	184,636	6.79
52,500	1	37.81	4,340	2,722,880	507	185,143	6.80
52,300	1	38.09	4,310	2,727,190	501	185,644	6.81
51,900	1	38.36	4,190	2,731,380	489	186,133	6.82

Table 15. Values of accumulative suspended-sediment and bedload transport, 1972, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
51,600	1	38.63	4,140	2,735,520	480	186,613	6.82
51,400	1	38.91	4,090	2,739,610	473	187,086	6.83
50,000	1	39.18	3,800	2,743,410	430	187,516	6.84
49,900	1	39.46	3,780	2,747,190	426	187,942	6.84
49,100	1	39.73	3,630	2,750,820	396	188,338	6.85
48,000	1	40.00	3,430	2,754,250	354	188,692	6.85
47,200	1	40.28	3,290	2,757,540	324	189,016	6.85
47,000	1	40.55	3,250	2,760,790	316	189,332	6.86
46,600	1	40.83	3,180	2,763,970	301	189,633	6.86
46,200	1	41.10	3,110	2,767,080	286	189,919	6.86
46,000	1	41.37	3,070	2,770,150	278	190,197	6.87
45,800	1	41.65	3,040	2,773,190	270	190,467	6.87
45,400	2	42.20	2,970	2,779,130	255	190,977	6.87
45,200	3	43.02	2,930	2,787,920	248	191,721	6.88
44,700	1	43.29	2,850	2,790,770	229	191,950	6.88
43,900	1	43.57	2,710	2,793,480	198	192,148	6.88
43,700	1	43.84	2,680	2,796,160	191	192,339	6.88
43,000	1	44.11	2,560	2,798,720	164	192,503	6.88
42,900	1	44.39	2,540	2,801,260	160	192,663	6.88
42,600	2	44.94	2,500	2,806,260	149	192,961	6.88
42,400	1	45.21	2,460	2,808,720	141	193,102	6.88
42,300	1	45.48	2,450	2,811,170	137	193,239	6.87
42,000	1	45.76	2,400	2,813,570	126	193,365	6.87
41,600	1	46.03	2,340	2,815,510	111	193,476	6.87
40,100	1	46.31	2,120	2,818,030	54	193,530	6.87
38,600	1	46.58	1,900	2,819,930	39	193,569	6.86
37,400	1	46.86	1,740	2,821,670	30	193,599	6.86
35,900	1	47.13	1,560	2,823,230	18	193,617	6.86
35,800	1	47.41	1,550	2,824,780	17	193,634	6.86

Table 15. Values of accumulative suspended-sediment and bedload transport, 1972, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
35,100	1	47.68	1,460	2,826,240	12	193,646	6.85
34,500	1	47.95	1,400	2,827,640	10	193,656	6.85
33,900	2	48.50	1,330	2,830,300	9	193,674	6.84
33,700	2	49.05	1,310	2,832,920	9	193,692	6.84
33,600	1	49.32	1,300	2,834,220	8	193,700	6.83
33,400	1	49.60	1,270	2,835,490	8	193,708	6.83
33,300	1	49.87	1,270	2,836,760	8	193,716	6.83
33,200	1	50.15	1,250	2,838,010	8	193,724	6.83
33,000	3	50.97	1,230	2,841,700	7	193,745	6.82
32,800	2	51.52	1,210	2,844,120	7	193,759	6.81
32,700	2	52.06	1,200	2,846,520	7	193,773	6.81
32,100	1	52.34	1,140	2,847,660	6	193,779	6.81
31,500	1	52.61	1,080	2,848,740	5	193,784	6.80
30,100	1	52.89	944	2,849,684	2	193,786	6.80
29,700	1	53.16	911	2,850,595	2	193,788	6.80
29,600	1	53.43	903	2,851,498	2	193,790	6.80
29,100	1	53.71	863	2,852,361	2	193,792	6.79
28,000	1	53.98	780	2,853,141	2	193,794	6.79
				1973			
61,800	1	.27	7,050	7,050	805	805	11.42
61,300	1	.55	6,890	13,940	787	1,592	11.42
61,200	1	.82	6,860	20,800	783	2,375	11.42
60,600	1	1.10	6,660	27,460	762	3,137	11.42
58,100	1	1.37	5,830	33,290	681	3,818	11.47
57,400	1	1.64	5,610	38,900	659	4,477	11.50
56,400	1	1.92	5,320	44,220	628	5,105	11.54
55,100	1	2.19	4,960	49,180	588	5,693	11.58

Table 15. Values of accumulative suspended-sediment and bedload transport, 1973, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
51,500	1	2.47	4,120	53,300	476	6,169	11.57
50,900	1	2.74	3,990	57,290	458	6,627	11.57
49,300	1	3.01	3,670	60,960	403	7,030	11.53
49,000	1	3.29	3,610	64,570	392	7,422	11.50
48,500	1	3.56	3,520	68,090	373	7,795	11.45
48,100	1	3.84	3,450	71,540	358	8,153	11.40
45,200	1	4.11	2,930	74,470	248	8,401	11.28
44,600	1	4.38	2,830	77,300	225	8,626	11.16
44,200	1	4.66	2,760	80,060	210	8,836	11.04
43,600	1	4.93	2,660	82,720	187	9,023	10.91
43,300	1	5.21	2,610	85,330	175	9,198	10.78
43,200	1	5.48	2,590	87,920	172	9,370	10.66
42,900	1	5.75	2,540	90,460	160	9,530	10.54
42,800	1	6.03	2,530	92,990	156	9,686	10.42
42,700	1	6.30	2,510	95,500	153	9,839	10.30
42,100	1	6.58	2,420	97,920	130	9,969	10.18
41,600	1	6.85	2,340	100,260	111	10,080	10.05
41,300	1	7.12	2,300	102,560	99	10,179	9.92
40,700	1	7.40	2,200	104,760	77	10,256	9.79
40,500	1	7.67	2,160	106,920	69	10,325	9.66
40,200	1	7.95	2,130	109,050	58	10,383	9.52
39,900	1	8.22	2,090	111,140	49	10,432	9.39
39,700	1	8.49	2,060	113,200	48	10,480	9.26
38,500	1	8.77	1,890	115,090	38	10,518	9.14
38,300	1	9.04	1,860	116,950	37	10,555	9.02
38,200	1	9.32	1,850	118,800	36	10,591	8.92
38,000	1	9.59	1,820	120,620	34	10,625	8.81
37,900	1	9.86	1,820	122,440	34	10,659	8.70

Table 15. Values of accumulative suspended-sediment and bedload transport, 1973, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
37,500	1	10.14	1,760	124,200	30	10,689	8.61
36,900	1	10.41	1,680	125,880	26	10,715	8.51
36,700	1	10.69	1,650	127,530	24	10,739	8.42
36,200	2	11.23	1,590	130,710	20	10,779	8.25
35,700	1	11.51	1,530	132,240	16	10,795	8.16
35,400	1	11.78	1,500	133,740	14	10,809	8.08
35,300	1	12.06	1,490	135,230	13	10,822	8.00
35,200	1	12.33	1,470	136,700	13	10,835	7.93
35,100	1	12.60	1,460	138,160	12	10,847	7.85
35,000	2	13.15	1,450	141,060	11	10,869	7.70
34,700	2	13.70	1,420	143,900	10	10,889	7.57
34,500	1	13.97	1,400	145,300	10	10,899	7.50
34,400	1	14.25	1,380	146,680	10	10,909	7.44
34,300	1	14.52	1,370	148,050	10	10,919	7.38
34,000	1	14.80	1,340	149,390	9	10,928	7.32
33,700	1	15.07	1,310	150,700	9	10,937	7.26
33,500	2	15.62	1,280	153,260	8	10,953	7.15
33,400	4	16.71	1,270	158,340	8	10,985	6.94
33,300	6	18.36	1,260	165,900	8	11,033	6.65
33,200	3	19.18	1,250	169,650	8	11,057	6.52
33,100	1	19.45	1,240	170,890	8	11,065	6.48
33,000	3	20.28	1,230	174,580	7	11,086	6.35
32,900	1	20.55	1,220	175,800	7	11,093	6.31
32,800	3	21.37	1,210	179,430	7	11,114	6.19
32,700	4	22.47	1,200	184,230	7	11,142	6.05
32,500	1	22.74	1,180	185,410	6	11,148	6.01
32,400	3	23.56	1,170	188,920	6	11,166	5.91
32,300	1	23.84	1,160	190,080	6	11,172	5.88

Table 15. Values of accumulative suspended-sediment and bedload transport, 1973, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
32,200	4	24.93	1,150	194,680	6	11,196	5.75
32,000	2	25.48	1,120	196,920	6	11,208	5.69
31,900	3	26.30	1,120	200,280	5	11,223	5.60
31,700	1	26.58	1,100	201,380	5	11,228	5.58
31,600	1	26.85	1,080	202,460	5	11,233	5.55
31,500	1	27.13	1,080	203,540	5	11,238	5.52
31,300	2	27.67	1,060	205,660	4	11,246	5.47
31,000	1	27.95	1,020	206,680	4	11,250	5.44
30,900	1	28.22	1,020	207,700	4	11,254	5.42
30,800	1	28.50	1,010	208,710	3	11,257	5.39
30,700	1	28.77	998	209,708	3	11,260	5.37
30,500	2	29.32	980	211,688	3	11,266	5.32
30,400	2	29.87	971	213,610	3	11,272	5.28
30,300	1	30.14	962	214,572	2	11,274	5.25
30,200	1	30.41	953	215,525	2	11,276	5.23
30,100	1	30.69	944	216,469	2	11,278	5.21
30,000	1	30.96	935	217,404	2	11,280	5.19
29,900	3	31.77	927	220,185	2	11,286	5.13
29,800	2	32.31	919	222,023	2	11,290	5.08
29,700	1	32.58	911	222,934	2	11,292	5.06
29,500	2	33.12	895	224,724	2	11,296	5.03
29,400	2	33.66	887	224,498	2	11,300	5.03
29,300	3	34.47	879	229,135	2	11,306	4.93
29,200	2	35.01	871	230,877	2	11,310	4.90
29,000	2	35.55	855	232,587	2	11,314	4.86
28,800	2	36.10	840	232,267	2	11,318	4.87
28,700	1	36.37	832	235,099	2	11,320	4.82
28,600	1	36.65	825	235,924	2	11,322	4.80

Table 15. Values of accumulative suspended-sediment and bedload transport, 1973, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
28,500	1	36.92	818	236,742	2	11,324	4.78
28,400	1	37.19	810	237,552	2	11,326	4.77
28,200	1	37.47	795	238,347	2	11,328	4.75
28,100	2	38.02	788	239,923	2	11,332	4.72
28,000	2	38.56	780	241,483	2	11,336	4.69
				1974			
191,000	1	.27	330,000	330,000	3,670	3,670	1.11
190,000	1	.55	323,000	653,000	3,650	7,320	1.12
182,000	2	1.10	270,000	1,193,000	3,490	14,300	1.20
174,000	1	1.37	224,000	1,417,000	3,330	17,630	1.24
172,000	1	1.64	214,000	1,631,000	3,290	20,920	1.28
162,000	1	1.92	167,000	1,798,000	3,090	24,010	1.33
155,000	1	2.19	141,000	1,939,000	2,950	26,960	1.39
148,000	1	2.47	119,000	2,058,000	2,810	29,770	1.45
146,000	2	3.01	113,000	2,284,000	2,770	35,310	1.55
142,000	1	3.29	102,000	2,386,000	2,690	38,000	1.59
140,000	1	3.56	96,700	2,482,700	2,650	40,650	1.64
133,000	1	3.84	80,200	2,562,900	2,510	43,160	1.68
132,000	1	4.11	78,100	2,641,000	2,490	45,650	1.73
127,000	1	4.38	68,100	2,709,100	2,390	48,040	1.77
126,000	1	4.66	66,200	2,775,300	2,370	50,410	1.82
125,000	1	4.93	64,300	2,839,600	2,350	52,760	1.86
121,000	2	5.48	57,000	2,953,600	2,270	57,300	1.94
120,000	2	6.03	55,300	3,064,200	2,250	61,800	2.02
113,000	1	6.30	44,300	3,108,500	2,110	63,910	2.06
112,000	2	6.85	42,900	3,194,300	2,090	68,090	2.13

Table 15. Values of accumulative suspended-sediment and bedload transport, 1974, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
110,000	1	7.12	40,100	3,234,400	2,050	70,140	2.17
109,000	1	7.40	38,800	3,273,200	2,030	72,170	2.20
107,000	1	7.67	36,300	3,309,500	1,990	74,160	2.24
106,000	1	7.95	35,100	3,344,600	1,970	76,130	2.28
105,000	1	8.22	34,000	3,378,600	1,950	78,080	2.31
104,000	3	9.04	32,900	3,477,300	1,930	83,870	2.41
103,000	4	10.14	31,900	3,604,900	1,910	91,510	2.54
102,000	3	10.96	30,900	3,697,600	1,890	97,180	2.63
101,000	1	11.23	30,000	3,727,600	1,870	99,050	2.66
100,000	1	11.51	29,100	3,756,700	1,850	100,900	2.69
99,900	1	11.78	29,000	3,785,700	1,850	102,750	2.71
99,500	1	12.06	28,700	3,814,400	1,840	104,590	2.74
99,300	1	12.33	28,500	3,842,900	1,840	106,430	2.77
96,200	1	12.60	26,000	3,868,900	1,770	108,200	2.80
96,100	1	12.88	26,000	3,894,900	1,770	109,970	2.82
96,000	1	13.15	25,900	3,920,900	1,770	111,740	2.85
95,000	1	13.43	25,100	3,945,900	1,750	113,490	2.88
94,400	1	13.70	24,600	3,970,500	1,740	115,230	2.90
93,800	1	13.97	24,200	3,994,700	1,730	116,960	2.93
93,700	1	14.25	24,200	4,018,900	1,720	118,680	2.95
93,500	1	14.52	24,000	4,042,900	1,720	120,400	2.98
92,700	1	14.80	23,500	4,066,400	1,700	122,100	3.00
92,600	2	15.34	23,400	4,113,200	1,700	125,500	3.05
92,300	1	15.62	23,200	4,136,400	1,700	127,200	3.08
91,800	1	15.89	22,800	4,159,200	1,690	128,890	3.10
90,900	1	16.17	22,200	4,181,400	1,670	130,560	3.12
89,900	1	16.44	21,500	4,202,900	1,650	132,210	3.15
89,400	2	16.99	21,200	4,245,300	1,630	135,470	3.19
89,000	1	17.26	20,900	4,266,200	1,620	137,090	3.21

Table 15. Values of accumulative suspended-sediment and bedload transport, 1974, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
87,800	1	17.54	20,000	4,286,200	1,580	138,670	3.24
87,400	1	17.81	19,800	4,306,000	1,570	140,240	3.26
85,800	1	18.08	18,600	4,324,600	1,520	141,760	3.28
85,700	1	18.36	18,600	4,343,200	1,520	143,280	3.30
85,000	1	18.63	18,100	4,361,300	1,500	144,780	3.32
84,800	1	18.91	18,000	4,379,300	1,490	146,270	3.34
84,700	2	19.45	17,900	4,415,100	1,490	149,250	3.38
84,500	2	20.00	17,800	4,450,700	1,490	152,230	3.42
84,300	2	20.55	17,700	4,486,100	1,480	155,190	3.46
84,000	1	20.82	17,500	4,503,600	1,470	156,660	3.48
83,900	2	21.37	17,400	4,538,400	1,470	159,600	3.52
83,800	2	21.92	17,400	4,573,200	1,460	162,520	3.55
83,700	1	22.19	17,300	4,590,500	1,460	163,980	3.57
83,600	1	22.47	17,200	4,607,700	1,460	165,440	3.59
82,600	2	23.02	16,600	4,640,900	1,430	168,300	3.63
82,400	1	23.29	16,500	4,657,400	1,420	169,720	3.64
81,800	1	23.56	16,200	4,673,600	1,400	171,120	3.67
80,300	1	23.84	15,300	4,688,900	1,360	172,480	3.68
80,100	1	24.11	15,200	4,704,100	1,350	173,830	3.70
80,000	1	24.39	15,100	4,719,200	1,350	175,180	3.71
79,600	1	24.66	14,900	4,734,100	1,340	176,520	3.73
78,400	1	24.93	14,800	4,748,900	1,310	177,830	3.74
76,400	1	25.21	13,300	4,762,200	1,260	179,090	3.76
75,100	1	25.48	12,600	4,774,800	1,230	180,320	3.78
75,000	2	26.03	12,600	4,800,000	1,230	182,780	3.81
73,400	1	26.30	11,800	4,811,800	1,190	183,970	3.82
73,200	1	26.58	11,700	4,823,500	1,180	185,150	3.84
72,000	1	26.85	11,100	4,834,600	1,150	186,300	3.86

Table 15. Values of accumulative suspended-sediment and bedload transport, 1974, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
71,600	1	27.13	10,900	4,845,500	1,140	187,440	3.87
71,500	1	27.40	10,800	4,856,300	1,140	188,580	3.88
71,100	1	27.67	10,600	4,866,900	1,130	189,710	3.90
70,600	1	27.95	10,400	4,877,300	1,120	190,830	3.91
70,400	2	28.50	10,300	4,897,900	1,110	193,050	3.94
70,000	1	28.77	10,100	4,908,000	1,100	194,150	3.96
69,200	1	29.04	9,730	4,917,730	1,070	195,220	3.97
68,600	1	29.32	9,480	4,927,210	1,050	196,270	3.98
68,100	1	29.59	9,280	4,936,490	1,030	197,300	4.00
67,800	1	29.87	9,170	4,945,660	1,020	198,320	4.01
66,900	1	30.14	8,840	4,954,500	988	199,308	4.02
66,400	1	30.41	8,660	4,963,160	970	200,278	4.04
65,700	1	30.69	8,420	4,971,580	945	201,223	4.05
65,500	2	31.24	8,340	4,988,260	938	203,099	4.07
65,200	1	31.51	8,240	4,996,500	927	204,026	4.08
64,700	3	32.33	8,060	5,020,680	909	206,753	4.12
63,300	1	32.61	7,580	5,028,260	859	207,612	4.13
61,600	1	32.88	6,990	5,035,250	798	208,410	4.14
59,800	1	33.15	6,390	5,041,640	734	209,144	4.15
59,700	1	33.43	6,360	5,048,000	731	209,875	4.16
59,200	1	33.70	6,200	5,054,200	715	210,590	4.17
59,100	1	33.98	6,160	5,060,360	712	211,302	4.18
58,700	1	34.25	6,030	5,066,390	700	212,002	4.18
58,400	1	34.52	5,930	5,072,320	690	212,692	4.19
56,500	1	34.80	5,340	5,077,660	631	213,323	4.20
55,800	4	35.89	5,150	5,098,260	610	215,763	4.23
55,000	1	36.17	4,930	5,103,190	585	216,348	4.24
54,900	1	36.44	4,900	5,108,090	582	216,930	4.25

Table 15. Values of accumulative suspended-sediment and bedload transport, 1974, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
54,700	2	36.99	4,860	5,117,810	576	218,082	4.26
54,500	1	37.26	4,800	4,122,610	569	218,651	4.27
54,200	1	37.54	4,730	5,127,340	560	219,211	4.28
53,900	1	37.81	4,660	5,132,000	551	219,762	4.28
53,500	1	38.09	4,560	5,136,560	538	220,300	4.29
53,000	1	38.36	4,450	5,141,010	523	220,823	4.30
52,900	1	38.63	4,430	5,145,440	520	221,343	4.30
52,600	1	38.91	4,360	5,149,800	511	221,854	4.31
50,900	1	39.18	3,990	5,153,790	458	222,312	4.31
50,700	1	39.46	3,950	5,157,740	452	222,764	4.32
50,300	1	39.73	3,860	5,161,600	439	223,203	4.32
50,200	1	40.00	3,840	5,165,440	436	223,639	4.33
49,700	1	40.28	3,740	5,169,180	419	224,058	4.33
49,500	1	40.55	3,700	5,172,880	411	224,469	4.34
48,500	1	40.83	3,520	5,176,400	373	224,842	4.34
48,300	1	41.10	3,480	5,179,880	365	225,207	4.35
48,200	1	41.37	3,470	5,183,350	362	225,569	4.35
47,900	1	41.65	3,410	5,186,760	350	225,919	4.36
47,800	2	42.20	3,390	5,193,540	346	226,611	4.36
47,000	1	42.47	3,250	5,196,790	316	226,927	4.37
46,700	1	42.74	3,200	5,199,990	305	227,232	4.37
46,600	2	43.29	3,180	5,206,350	301	227,834	4.38
46,100	1	43.57	3,090	5,209,440	282	228,116	4.38
46,000	1	43.84	3,070	5,212,510	278	228,394	4.38
45,800	2	44.39	3,040	5,218,590	270	228,934	4.39
45,500	1	44.66	2,980	5,221,570	259	229,193	4.39
45,400	1	44.94	2,970	5,224,540	255	229,448	4.39
45,300	1	45.21	2,950	5,227,490	251	229,699	4.39

Table 15. Values of accumulative suspended-sediment and bedload transport, 1974,, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
45,200	1	45.48	2,930	5,230,420	248	229,947	4.40
45,100	1	45.76	2,920	5,233,340	244	230,191	4.40
40,900	1	46.03	2,240	5,235,580	84	230,275	4.40
40,800	1	46.31	2,220	5,237,800	80	230,355	4.40
40,000	1	46.58	2,100	5,239,900	50	230,405	4.40
39,900	1	46.85	2,090	5,241,990	49	230,454	4.40
39,500	1	47.13	2,030	5,244,020	46	230,500	4.40
39,400	1	47.40	2,020	5,246,040	45	230,545	4.40
39,200	1	47.68	1,990	5,248,030	44	230,589	4.39
38,800	1	47.95	1,930	5,249,960	41	230,630	4.39
38,500	1	48.22	1,890	5,251,850	38	230,668	4.39
38,400	1	48.50	1,880	5,253,730	38	230,706	4.39
38,300	1	48.77	1,860	5,255,590	37	230,743	4.39
37,500	1	49.05	1,760	5,257,350	30	230,773	4.39
37,200	1	49.32	1,710	5,259,060	28	230,801	4.39
36,200	1	49.59	1,590	5,260,650	20	230,821	4.39
35,800	1	49.87	1,550	5,262,200	17	230,838	4.39
35,600	1	50.14	1,520	5,263,720	16	230,854	4.39
35,300	1	50.42	1,490	5,265,210	13	230,867	4.38
35,100	2	50.96	1,460	5,268,130	12	230,891	4.38
34,800	1	51.24	1,430	5,269,560	11	230,902	4.38
34,600	1	51.51	1,410	5,270,970	10	230,912	4.38
34,400	1	51.79	1,380	5,272,350	10	230,922	4.38
34,300	1	52.06	1,370	5,273,720	10	230,932	4.38
33,700	1	52.33	1,310	5,275,030	9	230,941	4.38
32,300	1	52.61	1,160	5,276,190	6	230,947	4.38
31,700	1	52.88	1,100	5,277,290	5	230,952	4.38
31,100	1	53.16	1,040	5,278,330	4	230,956	4.38

Table 15. Values of accumulative suspended-sediment and bedload transport, 1974, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
30,600	1	53.43	989	5,279,319	3	230,959	4.38
29,700	1	53.70	911	5,280,230	2	230,961	4.37
29,500	1	53.98	895	5,281,125	2	230,963	4.37
29,100	1	54.25	862	5,281,987	2	230,965	4.37
28,800	1	54.53	840	5,282,827	2	230,967	4.37
28,700	1	54.80	832	5,283,659	2	230,969	4.37
28,600	2	55.35	825	5,285,309	2	230,973	4.37
27,600	1	55.62	752	5,286,061	2	230,975	4.37
				1975			
118,000	1	.27	52,000	52,000	2,210	2,210	4.25
116,000	1	.55	48,800	100,800	2,170	4,380	4.34
112,000	2	1.10	42,900	186,600	2,090	8,560	4.59
111,000	1	1.37	41,500	228,100	2,070	10,630	4.66
109,000	1	1.64	38,800	266,900	2,030	12,660	4.74
108,000	1	1.92	37,500	304,400	2,010	14,670	4.82
107,000	3	2.74	36,300	413,300	1,990	20,640	4.99
105,000	2	3.29	34,000	481,300	1,950	24,540	5.10
104,000	5	4.66	32,900	645,800	1,930	34,190	5.29
103,000	3	5.48	31,900	741,500	1,910	39,920	5.38
102,000	2	6.03	30,900	803,300	1,890	43,700	5.44
101,000	2	6.58	30,000	863,300	1,870	47,440	5.49
99,900	1	6.85	29,000	892,300	1,850	49,290	5.52
99,100	1	7.12	28,400	920,700	1,830	51,120	5.55
98,400	1	7.40	27,800	948,500	1,820	52,940	5.58
97,200	2	7.95	26,800	1,002,100	1,790	56,520	5.64
96,500	1	8.22	26,300	1,028,400	1,780	58,300	5.67

Table 15. Values of accumulative suspended-sediment and bedload transport, 1975, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
96,300	1	8.49	26,100	1,054,500	1,780	60,080	5.70
93,000	1	8.77	23,700	1,078,200	1,710	61,790	5.73
92,400	1	9.04	23,300	1,101,500	1,700	63,490	5.76
92,300	1	9.32	23,200	1,124,700	1,700	65,190	5.80
91,700	1	9.59	22,800	1,147,500	1,680	66,870	5.83
89,100	1	9.86	21,000	1,168,500	1,620	68,490	5.86
88,800	1	10.14	20,800	1,189,300	1,610	70,100	5.89
87,600	1	10.41	19,900	1,209,200	1,580	71,680	5.93
87,000	1	10.69	19,500	1,228,700	1,560	73,240	5.96
86,600	2	11.23	19,200	1,267,100	1,550	76,340	6.02
85,600	1	11.51	18,500	1,285,600	1,520	77,860	6.06
85,300	1	11.78	18,300	1,303,900	1,510	79,370	6.09
85,100	1	12.06	18,200	1,322,100	1,500	80,870	6.12
85,000	1	12.33	18,100	1,340,200	1,500	82,370	6.15
84,400	1	12.60	17,700	1,357,900	1,480	83,850	6.18
83,200	2	13.15	17,000	1,391,900	1,450	86,750	6.23
82,800	1	13.43	16,800	1,408,700	1,430	88,180	6.26
82,700	1	13.70	16,700	1,425,400	1,430	89,610	6.29
80,400	1	13.97	16,500	1,441,900	1,360	90,970	6.31
79,900	1	14.25	15,000	1,456,900	1,350	92,320	6.34
79,800	1	14.52	15,000	1,471,900	1,350	93,670	6.36
79,700	1	14.80	14,900	1,486,800	1,340	95,010	6.39
79,600	2	15.34	14,900	1,516,600	1,340	97,690	6.44
79,100	1	15.62	14,600	1,531,200	1,330	99,020	6.47
78,500	1	15.89	14,300	1,545,500	1,310	100,330	6.49
78,400	1	16.17	14,300	1,559,800	1,310	101,640	6.52
77,800	1	16.44	14,000	1,573,800	1,300	102,940	6.54
77,700	1	16.71	13,900	1,587,700	1,290	104,230	6.57

Table 15. Values of accumulative suspended-sediment and bedload transport, 1975, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
76,800	1	16.99	13,500	1,601,200	1,270	105,500	6.59
76,700	1	17.26	13,400	1,614,600	1,270	106,770	6.61
76,600	1	17.54	13,400	1,628,000	1,270	108,040	6.64
76,500	1	17.81	13,300	1,641,300	1,260	109,300	6.66
76,300	2	18.36	13,200	1,667,700	1,260	111,820	6.70
76,000	2	18.91	13,100	1,693,900	1,250	114,320	6.75
75,000	1	19.18	12,600	1,706,500	1,230	115,550	6.77
74,400	1	19.45	12,300	1,718,800	1,210	116,760	6.79
73,900	1	19.73	12,000	1,730,800	1,200	117,960	6.82
73,800	1	20.00	12,000	1,742,800	1,200	119,160	6.84
73,100	1	20.28	11,600	1,754,400	1,180	120,340	6.86
72,900	1	20.55	11,500	1,765,500	1,170	121,510	6.88
71,400	1	20.82	10,800	1,776,700	1,140	122,650	6.90
69,200	1	21.10	9,730	1,786,430	1,070	123,720	6.93
68,700	1	21.37	9,520	1,795,950	1,050	124,770	6.95
67,100	1	21.65	8,910	1,804,860	996	125,766	6.97
66,900	1	21.92	8,840	1,813,700	988	126,754	6.99
65,700	1	22.19	8,420	1,822,120	945	127,699	7.01
64,600	1	22.47	8,030	1,830,150	906	128,605	7.03
64,200	1	22.74	7,890	1,838,040	891	129,496	7.04
64,100	1	23.02	7,860	1,845,900	888	130,384	7.06
63,900	1	23.29	7,780	1,853,680	880	131,264	7.08
63,200	1	23.56	7,540	1,861,220	855	132,119	7.10
63,000	1	23.84	7,470	1,868,690	848	132,967	7.12
62,400	1	24.11	7,260	1,875,950	826	133,793	7.13
62,300	1	24.39	7,220	1,883,170	823	134,616	7.15
59,400	1	24.66	6,260	1,889,430	721	135,337	7.16
56,600	1	24.93	5,370	1,894,800	635	135,972	7.18

Table 15. Values of accumulative suspended-sediment and bedload transport, 1975, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
56,500	1	25.21	5,340	1,900,140	631	136,603	7.19
55,800	1	25.48	5,150	1,905,290	610	137,213	7.20
53,800	1	25.76	4,630	1,909,920	548	137,761	7.21
52,200	1	26.03	4,270	1,914,190	498	138,259	7.22
51,500	1	26.30	4,120	1,918,310	476	138,735	7.23
51,400	1	26.58	4,090	1,922,400	473	139,208	7.24
51,100	1	26.85	4,030	1,926,430	464	139,672	7.25
51,000	3	27.67	4,010	1,938,460	461	141,055	7.28
50,500	1	27.95	3,900	1,942,360	445	141,500	7.28
50,200	2	28.50	3,840	1,950,040	436	142,372	7.30
50,000	1	28.77	3,800	1,953,840	430	142,802	7.31
49,600	1	29.04	3,720	1,957,560	415	143,217	7.32
49,400	1	29.32	3,690	1,961,250	407	143,624	7.32
48,500	1	29.59	3,520	1,964,770	373	143,997	7.33
48,100	2	30.14	3,450	1,971,670	358	144,713	7.34
47,600	1	30.41	3,360	1,975,030	339	145,052	7.34
47,400	1	30.69	3,320	1,978,350	331	145,383	7.35
47,300	1	30.96	3,300	1,981,650	327	145,710	7.35
47,100	1	31.24	3,270	1,984,920	320	146,030	7.36
47,000	1	31.51	3,250	1,988,170	316	146,346	7.36
45,500	1	31.78	2,980	1,991,150	259	146,605	7.36
45,200	2	32.33	2,930	1,997,010	248	147,101	7.37
44,600	1	32.61	2,730	1,999,740	225	147,326	7.37
43,800	1	32.88	2,700	2,002,440	194	147,520	7.37
43,700	1	33.15	2,680	2,005,120	191	147,711	7.37
43,600	1	33.43	2,660	2,007,780	187	147,898	7.37
43,400	2	33.98	2,630	2,013,040	179	148,256	7.36
42,600	1	34.25	2,500	2,015,540	149	148,405	7.36

Table 15. Values of accumulative suspended-sediment and bedload transport, 1975, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
42,400	1	34.52	2,460	2,018,000	141	148,546	7.36
42,300	1	34.80	2,450	2,020,450	137	148,683	7.36
42,200	1	35.07	2,430	2,022,880	134	148,817	7.36
41,900	1	35.35	2,380	2,025,260	122	148,939	7.35
41,000	1	35.62	2,250	2,027,510	88	149,027	7.35
40,600	1	35.89	2,190	2,029,700	73	149,100	7.35
40,400	1	36.17	2,160	2,031,860	65	149,165	7.34
40,200	2	36.72	2,130	2,036,120	58	149,281	7.33
40,000	1	36.99	2,100	2,038,220	50	149,331	7.33
39,900	1	37.26	2,090	2,040,310	49	149,380	7.32
39,600	2	37.80	2,040	2,044,390	47	149,474	7.31
39,500	1	38.07	2,030	2,046,420	46	149,520	7.31
38,800	3	38.61	1,930	2,052,210	41	149,643	7.29
38,500	1	38.88	1,890	2,054,100	38	149,681	7.29
38,000	1	39.15	1,820	2,055,920	34	149,715	7.28
37,900	2	39.69	1,810	2,059,540	34	149,783	7.27
37,200	1	39.96	1,720	2,061,260	28	149,811	7.27
36,900	1	40.23	1,680	2,062,940	26	149,837	7.26
36,800	1	40.50	1,670	2,064,610	25	149,862	7.26
36,700	1	40.77	1,650	2,066,260	24	149,886	7.25
36,500	2	41.31	1,630	2,069,520	23	149,932	7.24
36,400	1	41.58	1,618	2,071,138	22	149,954	7.24
36,000	2	42.12	1,570	2,074,278	19	149,992	7.23
35,400	1	42.39	1,500	2,075,778	14	150,006	7.23
35,200	1	42.67	1,460	2,077,238	13	150,019	7.22
34,900	1	42.94	1,440	2,078,678	11	150,030	7.22
34,600	1	43.22	1,410	2,080,088	10	150,040	7.21
34,400	1	43.49	1,380	2,081,468	10	150,050	7.21

Table 15. Values of accumulative suspended-sediment and bedload transport, 1975, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
33,700	1	43.76	1,310	2,082,778	9	150,059	7.20
33,400	1	44.04	1,270	2,084,048	8	150,067	7.20
31,600	1	44.31	1,080	2,085,128	5	150,072	7.20
30,900	1	44.59	1,020	2,086,148	4	150,076	7.19
30,700	1	44.86	998	2,087,146	3	150,079	7.19
30,400	1	45.13	971	2,088,117	3	150,082	7.19
30,100	2	45.68	944	2,090,005	2	150,086	7.18
30,000	1	45.96	935	2,090,940	2	150,088	7.18
29,800	1	46.23	919	2,091,859	2	150,090	7.18
29,500	2	46.78	895	2,093,649	2	150,094	7.17
29,300	3	47.60	879	2,096,286	2	150,100	7.16
29,200	1	47.87	871	2,097,157	2	150,102	7.16
28,700	1	48.15	832	2,097,989	2	150,104	7.16
28,600	3	48.97	825	2,100,464	2	150,110	7.15
28,400	1	49.24	810	2,101,274	2	150,112	7.14
28,300	1	49.52	802	2,102,076	2	150,114	7.14
28,200	1	49.79	795	2,102,871	2	150,116	7.14
27,900	2	50.34	773	2,104,417	2	150,120	7.13
				1976			
122,000	1	.27	58,800	58,800	2,290	2,290	3.90
119,000	2	.82	53,600	166,000	2,230	6,750	4.07
118,000	1	1.10	52,000	218,000	2,210	8,960	4.11
116,000	1	1.37	48,800	266,800	2,170	11,130	4.17
115,000	2	1.92	47,300	361,400	2,150	15,430	4.27
110,000	2	2.47	40,100	441,600	2,050	19,530	4.42
109,000	1	2.74	38,800	480,400	2,030	21,560	4.49

Table 15. Values of accumulative suspended-sediment and bedload transport, 1976, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
106,000	1	3.01	35,100	515,500	1,970	23,530	4.56
105,000	1	3.29	34,000	549,500	1,950	25,480	4.64
104,000	3	4.11	32,900	648,200	1,930	31,270	4.82
103,000	1	4.38	31,900	680,100	1,910	33,180	4.88
102,000	1	4.66	30,900	711,000	1,890	35,070	4.93
100,000	2	5.21	29,100	769,200	1,850	38,770	5.04
99,900	1	5.48	29,000	798,200	1,850	40,620	5.09
99,800	1	5.75	28,900	827,100	1,850	42,470	5.14
99,700	1	6.03	28,800	855,900	1,840	44,310	5.18
98,500	2	6.58	27,900	911,700	1,820	47,950	5.26
97,300	1	6.85	26,900	938,600	1,800	49,750	5.30
97,000	1	7.12	26,700	965,300	1,790	51,540	5.34
96,600	1	7.40	26,400	991,700	1,780	53,320	5.38
96,000	1	7.67	25,900	1,017,600	1,770	55,090	5.41
95,800	1	7.95	25,700	1,043,300	1,770	56,860	5.45
95,500	1	8.22	25,500	1,068,800	1,760	58,620	5.48
94,700	1	8.49	24,900	1,093,700	1,740	60,360	5.52
94,500	2	9.04	24,700	1,143,100	1,740	63,840	5.58
93,400	1	9.32	24,000	1,167,100	1,720	65,560	5.62
93,100	1	9.59	23,800	1,190,900	1,710	67,270	5.65
92,100	1	9.86	23,100	1,214,000	1,690	68,960	5.68
91,300	1	10.14	22,500	1,236,500	1,680	70,640	5.71
90,700	1	10.41	22,100	1,258,600	1,660	72,300	5.74
88,900	1	10.69	20,800	1,279,400	1,620	73,920	5.78
88,600	2	11.23	20,600	1,320,600	1,610	77,140	5.84
88,400	1	11.51	20,500	1,341,100	1,600	78,740	5.87
88,100	1	11.78	20,300	1,361,400	1,590	80,330	5.90
87,000	1	12.06	19,500	1,380,900	1,560	81,890	5.93

Table 15. Values of accumulative suspended-sediment and bedload transport, 1976, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
86,600	1	12.33	19,200	1,400,100	1,550	83,440	5.96
85,800	1	12.60	18,600	1,418,700	1,520	84,960	5.99
85,700	1	12.88	18,600	1,437,300	1,520	86,480	6.02
85,600	1	13.15	18,500	1,455,800	1,520	88,000	6.04
85,500	1	13.43	18,400	1,474,200	1,520	89,520	6.07
85,000	1	13.70	18,100	1,492,300	1,500	91,020	6.10
84,900	1	13.97	18,000	1,510,300	1,500	92,520	6.13
83,900	1	14.25	17,400	1,527,700	1,470	93,990	6.15
83,800	1	14.52	17,400	1,545,100	1,460	95,450	6.18
83,700	1	14.80	17,300	1,562,400	1,460	96,910	6.20
83,100	1	15.07	17,000	1,579,400	1,440	98,350	6.23
82,900	1	15.34	16,800	1,596,200	1,440	99,790	6.25
82,600	1	15.62	16,600	1,612,800	1,430	101,220	6.28
82,400	1	15.89	16,500	1,629,300	1,420	102,640	6.30
82,300	1	16.17	16,500	1,645,800	1,420	104,060	6.32
82,100	1	16.44	16,400	1,662,200	1,410	105,470	6.34
81,800	1	16.71	15,200	1,677,400	1,400	106,870	6.37
81,400	1	16.99	15,400	1,692,600	1,390	108,260	6.40
79,100	1	17.26	14,600	1,707,200	1,330	109,590	6.42
78,700	2	17.81	14,400	1,736,000	1,320	112,230	6.46
78,300	1	18.08	14,200	1,750,200	1,310	113,540	6.49
78,200	1	18.36	14,200	1,764,400	1,310	114,850	6.51
76,600	1	18.63	13,400	1,777,800	1,270	116,120	6.53
76,500	1	18.91	13,300	1,791,100	1,260	117,380	6.55
74,800	1	19.18	12,500	1,803,600	1,220	118,600	6.58
74,100	1	19.45	12,100	1,815,700	1,200	119,800	6.60
72,600	1	19.73	11,400	1,827,100	1,170	120,970	6.62
71,800	1	20.00	11,000	1,838,100	1,150	122,120	6.64

Table 15. Values of accumulative suspended-sediment and bedload transport, 1976, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
70,800	1	20.28	10,900	1,849,000	1,120	123,240	6.66
70,400	1	20.55	10,300	1,859,300	1,110	124,350	6.69
68,700	1	20.82	9,520	1,868,820	1,050	125,400	6.71
67,400	1	21.10	9,020	1,877,840	1,010	126,410	6.73
64,000	1	21.37	7,820	1,885,660	884	127,294	6.75
62,300	1	21.65	7,220	1,892,880	823	128,117	6.77
61,700	1	21.92	7,020	1,899,900	801	128,918	6.79
59,100	1	22.19	6,160	1,906,060	712	129,630	6.80
58,800	1	22.47	6,060	1,912,120	703	130,333	6.82
58,500	1	22.74	5,960	1,918,080	693	131,026	6.83
58,400	1	23.02	5,930	1,924,010	690	131,716	6.85
57,800	1	23.29	5,740	1,929,750	672	132,388	6.86
56,200	2	23.84	5,260	1,940,270	622	133,632	6.89
56,000	1	24.11	5,200	1,945,470	616	134,248	6.90
55,800	1	24.39	5,150	1,950,620	610	134,858	6.91
55,400	1	24.66	5,040	1,955,660	597	135,455	6.93
55,000	1	24.93	4,930	1,965,590	585	136,040	6.92
53,100	1	25.21	4,470	1,965,060	526	136,566	6.95
52,800	1	25.48	4,400	1,969,460	517	137,083	6.96
52,300	1	25.76	4,290	1,973,750	501	137,584	6.97
52,200	1	26.03	4,270	1,978,020	498	138,082	6.98
51,100	1	26.30	4,030	1,982,050	464	138,546	6.99
49,400	1	26.58	3,690	1,985,740	407	138,953	7.00
47,500	1	26.85	3,340	1,989,080	335	139,288	7.00
46,800	1	27.13	3,210	1,992,290	308	139,596	7.01
46,200	1	27.40	3,110	1,995,400	286	139,882	7.01
45,800	1	27.67	3,040	1,998,440	270	140,152	7.01
45,600	2	28.22	3,000	2,004,440	263	140,673	7.02
45,400	1	28.50	2,970	2,007,410	255	140,933	7.02

Table 15. Values of accumulative suspended-sediment and bedload transport, 1976, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
45,100	1	28.77	2,920	2,010,330	244	141,177	7.02
44,900	1	29.04	2,880	2,013,210	236	141,413	7.02
44,400	1	29.32	2,800	2,016,010	217	141,630	7.02
44,000	1	29.59	2,730	2,018,740	202	141,832	7.03
43,700	1	29.87	2,680	2,021,420	191	142,023	7.03
43,500	1	30.14	2,640	2,024,060	183	142,206	7.03
43,000	1	30.41	2,560	2,026,620	164	142,370	7.02
42,300	1	30.69	2,450	2,029,070	137	142,507	7.02
42,200	1	30.96	2,430	2,031,500	134	142,641	7.02
41,400	1	31.24	2,310	2,033,810	103	142,744	7.02
41,300	1	31.51	2,300	2,036,110	99	142,843	7.02
41,000	1	31.78	2,250	2,038,360	88	142,931	7.01
40,600	1	32.06	2,190	2,040,550	73	143,004	7.01
40,500	2	32.61	2,180	2,044,910	69	143,142	7.00
40,400	1	32.88	2,160	2,047,070	65	143,207	7.00
40,300	7	34.80	2,140	2,062,050	61	143,634	6.97
40,100	3	35.62	2,120	2,068,410	54	143,688	6.95
40,000	3	36.44	2,100	2,074,710	50	143,838	6.93
39,800	3	37.26	2,070	2,080,920	48	143,982	6.92
39,700	2	37.81	2,060	2,085,040	48	144,078	6.91
39,600	2	38.36	2,040	2,089,120	47	144,172	6.90
39,500	1	38.63	2,030	2,091,150	46	144,218	6.90
39,400	2	39.18	2,020	2,093,170	45	144,308	6.89
39,300	2	39.73	2,000	2,097,170	45	144,398	6.88
39,200	2	40.28	1,990	2,101,150	44	144,486	6.88
39,000	1	40.55	1,960	2,103,110	42	144,528	6.87
38,900	1	40.82	1,950	2,105,060	41	144,569	6.87
38,700	2	41.37	1,920	2,108,900	40	144,649	6.86
38,600	1	41.92	1,900	2,110,800	39	144,688	6.86

Table 15. Values of accumulative suspended-sediment and bedload transport, 1976, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
38,500	1	42.19	1,890	2,112,690	38	144,726	6.85
38,400	1	42.47	1,880	2,114,570	38	144,764	6.85
38,300	2	43.02	1,860	2,118,290	37	144,838	6.84
38,200	1	43.29	1,850	2,120,140	36	144,874	6.83
38,100	1	43.56	1,830	2,121,970	35	144,909	6.83
38,000	2	44.11	1,820	2,125,610	34	144,977	6.82
37,900	1	44.39	1,810	2,127,420	34	145,011	6.82
37,700	1	44.66	1,780	2,129,200	32	145,043	6.81
37,600	1	44.93	1,770	2,130,970	31	145,074	6.81
37,500	2	45.48	1,760	2,134,490	30	145,134	6.80
37,300	2	46.03	1,730	2,137,950	29	145,192	6.79
36,800	1	46.30	1,670	2,139,620	25	145,217	6.79
36,600	1	46.58	1,640	2,141,260	23	145,240	6.78
36,500	1	46.85	1,630	2,142,890	23	145,263	6.78
36,100	2	47.40	1,580	2,146,050	20	145,303	6.77
35,600	2	47.95	1,520	2,149,090	16	145,335	6.76
35,100	1	48.22	1,460	2,150,550	12	145,347	6.76
34,900	1	48.50	1,440	2,151,990	11	145,358	6.76
34,800	1	48.77	1,430	2,153,420	11	145,369	6.75
34,200	1	49.04	1,360	2,154,780	10	145,379	6.75
33,300	2	49.59	1,260	2,157,300	8	145,395	6.74
33,000	1	49.87	1,230	2,158,530	7	145,402	6.74
32,800	1	50.14	1,210	2,159,740	7	145,409	6.73
32,600	2	50.69	1,190	2,162,120	7	145,423	6.73
32,100	1	50.96	1,140	2,163,260	6	145,429	6.72
31,900	1	51.24	1,120	2,164,380	5	145,434	6.72
31,600	2	51.78	1,080	2,166,540	5	145,444	6.71
31,500	1	52.06	1,080	2,167,620	5	145,449	6.71

Table 15. Values of accumulative suspended-sediment and bedload transport, 1976, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
31,000	1	52.33	1,020	2,168,640	4	145,453	6.71
30,800	2	52.88	1,010	2,170,660	4	145,461	6.70
30,700	1	53.15	998	2,171,658	4	145,465	6.70
30,500	2	53.70	980	2,173,618	3	145,471	6.69
30,400	1	53.98	971	2,174,589	3	145,474	6.69
30,000	1	54.25	935	2,175,524	2	145,476	6.69
29,800	1	54.52	919	2,176,443	2	145,478	6.68
28,300	1	54.80	802	2,177,245	2	145,480	6.68
28,100	1	55.07	788	2,178,033	2	145,482	6.68
28,000	1	55.35	780	2,178,813	2	145,484	6.68
				1977			
36,000	1	.27	1,570	1,570	19	19	1.21
35,400	2	.82	1,500	4,570	14	47	1.03
32,900	1	1.10	1,200	5,790	7	54	.93
31,000	1	1.37	1,025	6,815	4	58	.85
29,100	1	1.64	863	7,678	2	60	.78
28,600	1	1.92	825	8,503	2	62	.73
27,900	1	2.19	773	9,276	2	64	.69
27,600	1	2.47	752	10,028	2	66	.66
26,800	1	2.74	698	10,726	1	67	.63
26,700	1	3.01	690	11,416	1	68	.60
26,600	1	3.29	684	12,100	1	69	.57
26,500	1	3.56	678	12,778	1	70	.55
26,200	1	3.84	658	13,436	1	71	.53
26,100	1	4.11	652	14,088	1	72	.51
25,900	1	4.38	639	14,727	1	73	.50
25,700	4	5.48	627	17,235	1	77	.45

Table 15. Values of accumulative suspended-sediment and bedload transport, 1977, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
25,600	1	5.75	621	17,856	1	78	.44
25,400	1	6.03	609	18,465	1	79	.43
25,100	2	6.58	591	19,647	1	81	.41
24,900	1	6.85	579	20,226	1	82	.40
24,600	1	7.12	561	20,787	1	83	.40
24,500	1	7.40	555	21,342	1	84	.39
24,400	1	7.67	549	21,891	1	85	.39
24,300	1	7.95	543	22,434	1	86	.38
24,100	1	8.22	531	22,965	1	87	.38
24,000	1	8.49	525	23,490	1	88	.38
23,800	1	8.77	514	24,004	1	89	.37
23,700	1	9.04	508	24,512	1	90	.37
23,500	1	9.31	498	25,010	1	91	.36
23,400	3	10.14	492	26,486	1	94	.36
23,300	1	10.41	486	26,972	1	95	.35
23,200	1	10.68	481	27,453	1	96	.35
23,000	1	10.96	470	27,923	1	97	.35
			1978				
93,000	1	.27	23,700	23,700	1,710	1,710	7.22
91,500	1	.55	22,600	46,300	1,680	3,390	7.32
90,100	1	.82	21,700	68,000	1,650	5,040	7.41
85,100	1	1.10	18,200	86,200	1,500	6,540	7.59
84,100	1	1.37	17,600	103,800	1,470	8,010	7.72
83,000	1	1.64	16,900	120,700	1,440	9,450	7.83
80,500	2	2.19	15,400	151,500	1,370	12,190	8.05
80,400	1	2.47	15,300	166,800	1,360	13,550	8.12

Table 15. Values of accumulative suspended-sediment and bedload transport, 1978, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
79,300	1	2.74	14,700	181,500	1,330	14,880	8.20
79,100	1	3.01	14,600	196,100	1,330	16,210	8.27
77,800	1	3.29	14,000	210,100	1,300	17,510	8.33
77,600	1	3.56	13,900	224,000	1,290	18,800	8.39
76,900	1	3.84	13,600	237,600	1,270	20,070	8.45
76,700	1	4.11	13,400	251,000	1,270	21,340	8.50
76,600	1	4.38	13,400	264,000	1,270	22,610	8.55
76,200	2	4.93	13,200	290,800	1,260	25,130	8.64
75,700	1	5.21	12,900	303,700	1,240	26,370	8.68
75,400	1	5.47	12,800	316,500	1,240	27,610	8.72
75,200	1	5.75	12,700	329,200	1,230	28,840	8.76
74,700	1	6.03	12,400	341,600	1,230	30,070	8.80
74,100	1	6.30	12,100	353,700	1,200	31,270	8.84
72,900	1	6.58	11,500	365,200	1,170	32,440	8.88
71,400	1	6.85	10,800	376,000	1,140	33,580	8.93
71,000	1	7.12	10,600	386,600	1,130	34,710	8.98
70,900	1	7.40	10,500	397,100	1,120	35,830	9.02
70,700	1	7.67	10,400	407,500	1,120	36,950	9.07
69,900	1	7.95	10,000	417,500	1,100	38,050	9.11
69,000	1	8.22	9,640	427,140	1,060	39,110	9.16
68,300	1	8.49	9,360	436,500	1,040	40,150	9.20
68,000	1	8.77	9,240	445,740	1,030	41,180	9.24
67,500	2	9.31	9,060	463,860	1,010	43,200	9.31
67,400	1	9.59	9,020	472,880	1,010	44,210	9.35
67,100	1	9.86	8,910	481,790	996	45,206	9.38
66,400	2	10.41	8,660	499,110	970	47,146	9.45
66,300	1	10.68	8,620	507,730	967	48,113	9.48
66,000	3	11.51	8,520	533,290	956	50,981	9.56

Table 15. Values of accumulative suspended-sediment and bedload transport, 1978, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
65,800	1	11.78	8,450	541,740	949	51,930	9.59
65,300	1	12.05	8,280	550,020	931	52,861	9.61
65,200	1	12.33	8,240	558,260	927	53,788	9.64
65,100	1	12.60	8,200	566,460	924	54,712	9.66
64,800	2	13.15	8,100	582,660	913	56,538	9.70
64,400	1	13.42	7,960	590,620	898	57,436	9.72
64,100	1	13.70	7,860	598,480	888	58,324	9.74
63,700	1	13.97	7,720	606,200	873	59,197	9.76
63,300	1	14.25	7,580	613,780	859	60,056	9.78
63,200	1	14.52	7,540	621,320	855	60,911	9.80
62,800	1	14.79	7,400	628,720	841	61,752	9.82
62,300	1	15.07	7,220	635,940	823	62,575	9.84
62,000	1	15.34	7,120	643,060	812	63,387	9.86
61,600	1	15.62	6,990	650,050	798	64,185	9.87
61,500	1	15.89	6,960	657,010	794	64,979	9.89
60,500	2	16.44	6,625	670,260	758	66,495	9.92
60,200	2	16.99	6,520	683,300	747	67,989	9.95
60,000	1	17.26	6,460	689,760	740	68,727	9.96
58,600	1	17.53	6,000	695,760	697	69,426	9.98
58,400	1	17.80	5,930	701,690	690	70,116	9.99
57,900	1	18.08	5,770	707,460	675	70,791	10.01
57,600	1	18.63	5,680	713,140	666	71,457	10.02
57,400	1	18.90	5,610	718,750	659	72,116	10.03
56,700	1	19.18	5,400	724,150	638	72,754	10.05
56,300	3	20.00	5,290	740,020	625	74,629	10.08
56,200	1	20.27	5,260	745,280	622	75,251	10.10
55,200	1	20.55	4,980	750,260	591	75,842	10.11
54,800	1	20.82	4,880	755,140	579	76,421	10.12

Table 15. Values of accumulative suspended-sediment and bedload transport, 1978, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
54,600	1	21.10	4,830	759,970	573	76,994	10.13
54,400	1	21.37	4,780	764,750	566	77,560	10.14
54,300	1	21.64	4,760	769,510	563	78,123	10.15
54,100	1	21.92	4,900	774,410	557	78,680	10.16
53,900	2	22.47	4,660	783,730	551	79,782	10.18
53,700	1	22.74	4,610	788,340	545	80,327	10.19
53,400	1	23.01	4,540	792,880	535	80,862	10.20
52,700	1	23.29	4,380	797,260	514	81,376	10.21
52,400	1	23.56	4,310	801,570	504	81,880	10.22
52,300	1	23.84	4,290	805,860	501	82,381	10.22
51,300	1	24.11	4,070	809,930	470	82,851	10.23
50,700	1	24.38	3,950	813,880	452	83,303	10.24
50,600	1	24.66	3,930	817,810	449	83,752	10.24
50,300	1	24.93	3,860	821,670	439	84,191	10.25
50,200	1	25.21	3,840	825,510	436	84,627	10.25
50,100	1	25.48	3,820	829,330	433	85,060	10.26
49,900	1	25.75	3,780	833,110	426	85,486	10.26
49,800	2	26.30	3,760	840,630	422	86,330	10.27
49,400	1	26.58	3,690	844,320	407	86,737	10.27
49,300	1	26.85	3,670	847,990	403	87,140	10.28
49,200	1	27.12	3,650	851,640	400	87,540	10.28
48,800	2	27.67	3,570	858,780	384	88,308	10.28
48,700	1	27.94	3,560	862,340	381	88,689	10.28
48,600	1	28.22	3,540	865,880	377	89,066	10.29
48,200	1	28.49	3,470	869,350	362	89,428	10.29
48,100	2	29.04	3,450	876,250	358	90,144	10.29
48,000	1	29.31	3,430	879,680	354	90,498	10.29
47,600	1	29.58	3,360	883,040	339	90,837	10.29

Table 15. Values of accumulative suspended-sediment and bedload transport, 1978, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
47,400	1	29.86	3,320	886,360	331	91,168	10.29
47,200	1	30.14	3,290	889,650	324	91,492	10.28
46,300	2	30.68	3,120	895,890	289	92,070	10.28
46,000	1	30.96	3,070	898,960	278	92,348	10.27
44,400	1	31.23	2,800	901,760	217	92,565	10.27
44,200	1	31.51	2,760	904,520	210	92,775	10.26
40,500	1	31.78	2,180	906,700	69	92,844	10.24
38,200	2	32.33	1,850	910,400	36	92,916	10.21
38,100	1	32.60	1,830	912,230	35	92,951	10.19
37,700	1	32.88	1,780	914,010	32	92,983	10.17
37,100	1	33.15	1,700	915,710	27	93,010	10.16
37,000	1	33.42	1,690	917,400	27	93,037	10.14
36,900	1	33.69	1,680	919,080	26	93,063	10.13
35,800	1	33.96	1,550	920,630	17	93,080	10.11
35,600	1	34.23	1,520	922,150	16	93,096	10.10
35,200	1	34.50	1,470	923,620	13	93,109	10.08
35,100	1	34.77	1,460	925,080	12	93,121	10.07
35,000	2	35.32	1,450	927,980	11	93,143	10.04
34,800	1	35.59	1,430	929,410	11	93,154	10.02
34,700	2	36.14	1,420	932,250	10	93,174	9.99
34,200	1	36.41	1,370	933,620	10	93,184	9.98
33,900	1	36.68	1,330	934,950	9	93,193	9.97
33,500	1	36.95	1,280	936,230	8	93,201	9.96
33,300	1	37.22	1,260	937,490	8	93,209	9.94
33,200	1	37.49	1,250	938,740	8	93,217	9.93
33,100	1	37.76	1,240	939,980	8	93,225	9.92
32,800	1	38.03	1,210	941,190	7	93,232	9.91
32,700	2	38.58	1,200	943,590	7	93,246	9.88
32,000	2	39.13	1,120	945,830	6	93,258	9.86

Table 15. Values of accumulative suspended-sediment and bedload transport, 1978, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
31,900	2	39.68	1,120	948,070	5	93,268	9.84
31,600	1	39.95	1,080	949,150	5	93,273	9.83
31,500	2	40.50	1,080	951,310	5	93,283	9.81
31,300	2	41.05	1,060	953,430	4	93,291	9.78
31,100	1	41.32	1,040	954,470	4	93,295	9.78
31,000	2	41.87	1,025	956,520	4	93,303	9.75
30,600	1	42.14	989	957,509	3	93,306	9.74
30,500	1	42.42	980	958,489	3	93,309	9.74
30,400	1	42.69	971	959,460	3	93,312	9.72
30,300	2	43.24	962	961,384	2	93,316	9.71
29,700	1	43.51	911	962,295	2	93,318	9.70
29,500	3	44.34	895	964,980	2	93,324	9.67
29,400	1	44.61	887	965,867	2	93,326	9.66
29,100	1	44.88	863	966,730	2	93,328	9.65
28,800	1	45.16	840	967,570	2	93,330	9.65
28,400	1	45.43	810	968,380	2	93,332	9.64
28,300	2	45.98	802	969,984	2	93,336	9.62
28,000	1	46.25	780	970,764	2	93,338	9.62
				1979			
78,600	1	.27	14,400	14,400	1,320	1,320	9.17
77,000	2	.82	13,600	41,600	1,280	3,880	9.33
73,600	1	1.10	11,900	53,500	1,190	5,070	9.48
73,100	1	1.37	11,600	65,100	1,180	6,250	9.60
68,600	1	1.64	9,480	74,580	1,050	7,300	9.79
67,700	1	1.92	9,130	83,710	1,020	8,320	9.94
63,100	1	2.19	7,480	91,190	852	9,172	10.06

Table 15. Values of accumulative suspended-sediment and bedload transport, 1979, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
62,000	1	2.47	7,120	98,310	812	9,984	10.16
60,100	1	2.74	6,490	104,800	744	10,728	10.24
59,100	1	3.01	6,160	110,960	712	11,404	10.28
58,500	2	3.56	5,960	122,880	693	12,826	10.44
57,800	1	3.84	5,740	128,620	672	13,498	10.49
57,200	1	4.11	5,570	134,190	653	14,151	10.54
57,000	2	4.66	5,490	145,170	647	15,445	10.64
56,900	1	4.93	5,460	150,630	644	16,089	10.68
54,200	1	5.21	4,730	155,360	560	16,649	10.72
54,100	1	5.48	4,700	160,060	557	17,206	10.75
52,500	2	6.03	4,340	168,740	507	18,220	10.80
52,100	1	6.30	4,240	172,980	495	18,715	10.82
52,000	1	6.58	4,220	177,200	492	19,207	10.84
51,300	1	6.85	4,070	181,270	470	19,677	10.86
51,100	1	7.12	4,030	185,300	464	20,141	10.87
50,700	1	7.40	3,950	189,250	452	20,593	10.88
50,000	1	7.67	3,800	193,050	430	21,023	10.89
49,900	1	7.95	3,780	196,830	426	21,449	10.90
49,800	1	8.22	3,760	200,590	422	21,871	10.90
49,500	2	8.77	3,700	207,990	411	22,693	10.91
49,000	2	9.32	3,610	215,210	392	23,477	10.91
48,200	1	9.59	3,470	218,680	362	23,839	10.90
47,300	1	9.86	3,300	221,980	327	24,166	10.89
47,000	1	10.14	3,250	225,230	316	24,482	10.87
46,500	1	10.41	3,160	228,390	297	24,779	10.85
46,400	1	10.69	3,140	231,530	293	25,072	10.83
46,000	1	10.96	3,070	234,600	278	25,350	10.81
45,800	2	11.51	3,040	240,680	270	25,890	10.76
45,700	1	11.78	3,020	243,700	267	26,157	10.73

Table 15. Values of accumulative suspended-sediment and bedload transport, 1979, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
45,200	2	12.33	2,930	249,560	248	26,653	10.68
44,900	1	12.60	2,880	252,440	236	26,889	10.65
44,400	1	12.88	2,800	255,240	217	27,106	10.62
44,200	1	13.15	2,760	258,000	210	27,316	10.59
44,100	1	13.43	2,750	260,750	206	27,522	10.57
43,700	3	14.25	2,680	268,790	191	28,095	10.45
43,500	1	14.52	2,640	271,430	183	28,278	10.42
43,400	1	14.80	2,630	274,060	179	28,457	10.38
43,300	1	15.07	2,610	276,670	175	28,632	10.34
43,000	1	15.34	2,560	279,230	164	28,796	10.31
42,900	2	15.89	2,540	284,310	160	29,116	10.24
42,800	2	16.44	2,530	289,370	156	29,428	10.17
42,300	2	16.99	2,450	294,270	137	29,702	10.09
42,100	1	17.26	2,420	296,700	130	29,832	10.05
41,700	1	17.54	2,360	299,060	115	29,947	10.01
41,600	1	17.81	2,340	301,400	111	30,058	9.97
41,500	1	18.08	2,320	303,720	107	30,165	9.93
41,000	1	18.36	2,250	305,970	88	30,253	9.89
40,900	1	18.63	2,240	308,210	84	30,337	9.84
40,800	1	18.91	2,220	310,430	80	30,417	9.80
40,700	1	19.18	2,200	312,630	77	30,494	9.75
40,600	2	19.73	2,190	317,010	73	30,640	9.66
40,500	1	20.00	2,180	319,190	69	30,709	9.62
40,400	2	20.55	2,160	323,510	65	30,839	9.53
40,300	1	20.82	2,140	325,650	61	30,900	9.49
40,200	1	21.10	2,130	327,780	58	30,958	9.44
40,100	3	21.92	2,120	334,140	54	31,120	9.31
40,000	1	22.19	2,100	336,240	50	31,170	9.27
39,900	1	22.47	2,090	338,330	49	31,219	9.23

Table 15. Values of accumulative suspended-sediment and bedload transport, 1979, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
39,800	2	23.02	2,070	342,470	48	31,315	9.14
39,700	1	23.29	2,060	344,530	48	31,363	9.10
39,500	1	23.56	2,030	346,560	46	31,409	9.06
39,200	1	23.84	1,990	348,550	44	31,453	9.02
39,100	1	24.11	1,970	350,520	43	31,496	8.99
38,800	2	24.66	1,930	354,380	41	31,578	8.91
38,400	1	24.93	1,880	356,260	38	31,616	8.87
38,300	1	25.21	1,860	358,120	37	31,653	8.84
38,200	1	25.48	1,850	359,970	36	31,689	8.80
37,900	2	26.03	1,800	363,570	34	31,757	8.74
37,700	1	26.30	1,780	365,350	32	31,789	8.70
37,600	1	26.58	1,770	367,120	31	31,820	8.67
37,500	1	26.85	1,760	368,880	30	31,850	8.63
37,200	1	27.13	1,720	370,600	28	31,878	8.60
37,100	1	27.40	1,700	372,300	27	31,905	8.57
37,000	2	27.95	1,690	375,680	27	31,959	8.51
36,900	1	28.22	1,680	377,360	26	31,985	8.48
36,600	1	28.50	1,640	379,000	23	32,008	8.44
36,400	1	28.77	1,620	380,620	22	32,030	8.42
36,100	1	29.04	1,580	382,200	20	32,050	8.39
35,800	1	29.32	1,550	383,750	17	32,067	8.36
35,500	1	29.59	1,510	385,260	15	32,082	8.33
35,400	2	30.14	1,500	388,260	14	32,110	8.27
34,900	1	30.41	1,440	389,700	11	32,121	8.24
34,800	1	30.69	1,430	391,130	11	32,132	8.22
34,700	2	31.24	1,420	393,970	10	32,152	8.16
34,300	1	31.51	1,380	395,350	10	32,162	8.14
33,400	1	31.78	1,270	396,620	8	32,170	8.11
33,300	1	32.06	1,260	397,880	8	32,178	8.09

Table 15. Values of accumulative suspended-sediment and bedload transport, 1979, Snake River near Anatone, Washington (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
32,600	1	32.33	1,190	399,070	7	32,185	8.06
32,300	1	32.61	1,160	400,230	6	32,191	8.04
31,600	1	32.88	1,080	401,310	5	32,196	8.02
30,800	4	33.98	1,010	405,350	3	32,208	7.95
30,700	1	34.25	998	406,348	3	32,211	7.93
30,400	1	34.52	971	407,319	3	32,214	7.91
30,300	1	34.80	962	408,281	2	32,216	7.89
30,200	1	35.07	953	409,234	2	32,218	7.87
29,900	2	35.62	927	411,088	2	32,222	7.84
29,800	1	35.89	919	412,007	2	32,224	7.82
29,600	1	36.17	903	412,910	2	32,226	7.80
29,500	2	36.72	894	414,698	2	32,230	7.77
29,400	2	37.26	885	416,468	2	32,234	7.74
29,100	1	37.54	863	417,331	2	32,236	7.72
28,700	1	37.81	832	418,163	2	32,238	7.71
28,400	1	38.09	810	418,973	2	32,240	7.70
28,300	2	38.63	802	420,577	2	32,244	7.67
28,000	1	38.91	780	421,357	2	32,246	7.65

Table 16. Values of accumulative suspended-sediment and bedload transport, 1972, Clearwater River at Spalding, Idaho

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
92,200	1	0.27	36,100	36,100	949	949	2.63
91,400	1	.55	34,900	71,000	938	1,887	2.66
86,700	1	.82	28,500	99,500	877	2,764	2.78
86,300	1	1.10	28,100	127,600	872	3,636	2.85
86,100	1	1.37	27,900	155,500	869	4,505	2.90
85,800	1	1.64	27,500	183,000	865	5,370	2.93
85,200	1	1.92	26,800	209,800	858	6,228	2.97
82,500	1	2.19	23,800	233,600	822	7,050	3.02
81,800	1	2.47	23,000	256,600	813	7,863	3.06
81,200	1	2.74	22,300	278,900	806	8,669	3.11
80,900	1	3.01	22,000	300,900	802	9,471	3.15
79,900	1	3.29	20,900	321,800	789	10,260	3.19
79,800	1	3.56	20,800	342,600	787	11,047	3.22
79,700	1	3.84	20,700	363,300	786	11,833	3.26
79,400	1	4.11	20,400	383,700	782	12,615	3.29
78,900	2	4.66	19,900	423,500	776	14,167	3.34
78,200	1	4.93	19,300	442,800	767	14,934	3.37
75,400	1	5.21	17,000	459,800	730	15,664	3.41
74,300	1	5.48	16,200	476,000	716	16,380	3.44
73,300	1	5.75	15,500	491,500	703	17,083	3.48
72,700	1	6.03	15,100	506,600	695	17,778	3.51
71,900	1	6.30	14,500	521,100	685	18,463	3.54
71,300	1	6.58	14,200	535,300	677	19,140	3.58
71,100	1	6.85	14,000	549,300	674	19,814	3.61
70,100	1	7.12	13,400	562,700	661	20,475	3.64
69,700	1	7.40	13,100	575,800	656	21,131	3.67
65,300	1	7.67	10,700	586,500	604	21,735	3.71
64,600	1	7.95	10,300	596,800	595	22,330	3.74

Table 16. Values of accumulative suspended-sediment and bedload transport, 1972, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
63,700	1	8.22	9,960	606,760	584	22,914	3.78
62,500	1	8.49	9,440	616,200	570	23,484	3.81
60,500	1	8.77	8,610	624,810	546	24,030	3.85
60,100	1	9.04	8,450	633,260	541	24,571	3.88
59,300	1	9.32	8,130	641,390	530	25,101	3.91
58,500	1	9.59	7,820	649,210	519	25,620	3.95
58,100	1	9.86	7,670	656,880	513	26,133	3.98
57,200	1	10.14	7,340	664,220	501	26,634	4.01
54,900	1	10.41	6,580	670,800	469	27,103	4.04
54,000	1	10.69	6,310	677,110	456	27,559	4.07
53,900	1	10.96	6,280	683,390	455	28,014	4.10
53,100	1	11.23	6,060	689,450	443	28,457	4.13
53,000	1	11.51	6,030	695,480	442	28,899	4.15
52,800	1	11.78	5,970	701,450	439	29,338	4.18
51,200	1	12.06	5,540	706,990	417	29,755	4.21
50,700	1	12.33	5,410	712,400	410	30,165	4.23
50,100	1	12.60	5,260	717,660	401	30,566	4.26
50,000	1	12.88	5,230	722,890	400	30,966	4.29
49,400	1	13.15	5,090	727,980	391	31,357	4.31
49,200	1	13.43	5,040	733,020	388	31,745	4.33
48,000	1	13.70	4,750	737,770	370	32,115	4.35
47,100	1	13.97	4,550	742,320	357	32,472	4.37
46,300	1	14.25	4,380	746,700	345	32,817	4.40
46,000	1	14.52	4,310	751,010	340	33,157	4.42
45,600	1	14.80	4,220	755,230	334	33,491	4.44
45,200	1	15.07	3,910	759,140	328	33,819	4.46
43,900	1	15.34	3,850	762,990	309	34,128	4.47
43,800	1	15.62	3,830	766,820	307	34,435	4.49
43,200	1	15.89	3,710	770,530	298	34,733	4.51
42,800	1	16.17	3,630	774,160	292	35,025	4.52

Table 16. Values of accumulative suspended-sediment and bedload transport, 1972, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
42,500	1	16.44	3,570	777,730	288	35,313	4.54
42,300	1	16.71	3,530	781,260	285	35,598	4.56
40,800	2	17.26	3,250	787,760	262	36,122	4.58
40,300	1	17.54	3,160	790,920	255	36,377	4.60
40,100	1	17.81	3,128	794,048	252	36,629	4.61
38,100	1	18.08	2,810	796,858	224	36,853	4.62
38,000	1	18.36	2,790	799,648	223	37,076	4.64
37,800	1	18.63	2,760	802,408	220	37,296	4.65
37,000	1	18.91	2,640	805,048	209	37,505	4.66
36,600	1	19.18	2,580	807,628	204	37,709	4.67
36,400	1	19.45	2,550	810,178	201	37,910	4.68
35,900	1	19.73	2,480	812,658	195	38,105	4.69
35,800	1	20.00	2,460	815,118	193	38,298	4.70
35,500	1	20.28	2,420	817,538	189	38,487	4.71
35,100	1	20.55	2,360	819,898	184	38,671	4.72
34,000	1	20.82	2,210	822,108	169	38,840	4.72
33,900	1	21.10	2,200	824,308	168	39,008	4.73
33,800	1	21.37	2,180	826,488	166	39,174	4.74
33,400	2	21.92	2,130	830,748	161	39,496	4.75
33,200	1	22.19	2,100	832,848	158	39,654	4.76
33,000	1	22.47	2,080	834,928	155	39,809	4.77
32,800	1	22.74	2,050	836,978	153	39,962	4.78
32,600	2	23.29	2,030	841,038	150	40,262	4.79
32,400	1	23.56	2,000	843,038	147	40,409	4.79
32,200	2	24.11	1,970	846,978	145	40,699	4.80
32,000	1	24.39	1,950	848,928	142	40,841	4.81

Table 16. Values of accumulative suspended-sediment and bedload transport, 1972, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
31,800	3	25.21	1,930	854,718	139	41,258	4.83
31,700	1	25.48	1,910	856,628	138	41,396	4.83
31,600	1	25.76	1,900	858,528	137	41,533	4.84
31,400	1	26.03	1,880	860,408	134	41,667	4.84
31,100	1	26.30	1,840	862,248	130	41,797	4.85
30,700	2	26.85	1,790	865,828	124	42,045	4.86
30,600	2	27.40	1,780	869,388	123	42,291	4.86
30,500	1	27.67	1,770	871,158	122	42,413	4.87
30,300	1	27.95	1,750	872,908	119	42,532	4.87
30,200	1	28.22	1,730	874,638	118	42,650	4.88
30,100	1	28.50	1,720	876,358	116	42,766	4.88
30,000	1	28.77	1,710	878,068	115	42,881	4.88
29,900	1	29.04	1,700	879,768	114	42,995	4.89
29,800	1	29.31	1,690	881,458	113	43,108	4.89
29,700	1	29.58	1,680	883,138	112	43,220	4.89
29,000	2	30.12	1,600	886,338	104	43,428	4.90
28,900	1	30.39	1,590	887,928	103	43,531	4.90
28,800	1	30.66	1,580	889,508	102	43,633	4.90
28,600	1	30.93	1,560	891,068	100	43,733	4.91
28,500	1	31.20	1,540	892,608	99	43,832	4.91
28,400	1	31.47	1,530	894,138	98	43,930	4.91
28,200	1	31.74	1,510	895,648	95	44,025	4.92
28,000	1	32.01	1,490	897,138	93	44,118	4.92
27,800	1	32.28	1,470	898,608	91	44,209	4.92
27,700	1	32.55	1,460	900,068	90	44,299	4.92
26,700	1	32.82	1,360	901,428	79	44,378	4.92
26,400	1	33.09	1,330	902,758	76	44,454	4.92
26,100	1	33.36	1,300	904,058	73	44,527	4.92

Table 16. Values of accumulative suspended-sediment and bedload transport, 1972, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
25,600	1	33.63	1,250	905,308	67	44,594	4.93
25,300	1	33.90	1,230	906,538	64	44,658	4.93
24,400	1	34.17	1,150	907,688	54	44,712	4.93
23,500	1	34.44	1,070	908,758	44	44,756	4.92
22,900	1	34.71	1,020	909,778	38	44,794	4.92
22,400	1	34.98	985	910,763	33	44,827	4.92
21,500	1	35.25	917	911,680	23	44,850	4.92
21,100	1	35.52	888	912,568	18	44,868	4.92
20,000	1	35.79	810	913,378	6	44,874	4.91
19,600	1	36.06	782	914,160	6	44,880	4.91
19,500	1	36.33	775	914,935	6	44,886	4.91
19,300	1	36.60	761	915,696	6	44,892	4.90
19,100	1	36.87	747	916,443	6	44,898	4.90
19,000	1	37.14	740	917,183	5	44,903	4.90
18,800	1	37.41	727	917,910	5	44,908	4.89
18,600	1	37.68	714	918,624	5	44,913	4.90
18,300	1	37.95	694	919,318	5	44,918	4.89
18,200	1	38.22	688	920,006	4	44,922	4.88
17,600	1	38.49	649	920,655	4	44,926	4.88
17,100	1	38.76	616	921,271	3	44,929	4.88
17,000	1	39.03	610	921,881	3	44,932	4.87
16,500	1	39.30	580	922,461	3	44,935	4.87
16,300	2	39.84	568	923,597	2	44,939	4.87
16,100	1	40.11	556	924,153	2	44,941	4.86
15,100	2	40.65	496	925,145	1	44,943	4.86

Table 16. Values of accumulative suspended-sediment and bedload transport, 1973, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
34,200	1	0.27	2,240	2,240	172	172	7.68
34,000	1	.55	2,210	4,450	169	341	7.66
32,600	1	.82	2,030	6,480	150	491	7.58
32,400	1	1.10	2,000	8,480	147	638	7.52
28,200	1	1.37	1,510	9,990	102	740	7.41
28,000	1	1.64	1,490	11,480	93	833	7.26
27,100	1	1.92	1,400	12,880	84	917	7.12
26,900	1	2.19	1,380	14,260	81	998	7.00
24,400	1	2.47	1,150	15,410	54	1,052	6.83
23,300	1	2.74	1,054	16,464	42	1,094	6.64
22,800	1	3.01	1,020	17,484	37	1,131	6.47
22,700	1	3.29	1,010	18,494	36	1,167	6.31
21,600	1	3.56	925	19,419	24	1,191	6.13
21,200	1	3.84	895	20,314	20	1,211	5.96
20,900	1	4.11	873	21,187	16	1,227	5.79
19,700	1	4.38	789	21,976	6	1,233	5.61
19,100	1	4.66	747	22,723	6	1,239	5.45
18,200	2	5.21	688	24,099	4	1,247	5.17
18,100	1	5.48	682	24,781	4	1,251	5.05
18,000	1	5.75	675	25,456	4	1,255	4.93
17,100	3	6.58	616	27,304	3	1,264	4.63
16,800	1	6.85	598	27,902	3	1,267	4.54
16,700	2	7.40	592	29,086	3	1,273	4.38
16,600	1	7.67	586	29,672	3	1,276	4.30
15,900	2	8.22	544	30,760	2	1,280	4.16
15,800	2	8.77	538	31,836	2	1,284	4.03
15,700	2	9.32	532	32,900	2	1,288	3.92
15,600	1	9.59	526	33,426	2	1,290	3.86
15,400	2	10.14	514	34,454	1	1,291	3.75
15,300	1	10.41	508	34,962	1	1,292	3.70

Table 16. Values of accumulative suspended-sediment and bedload transport, 1974, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
124,000	1	0.27	125,000	125,000	1,340	1,340	1.07
123,000	1	.55	121,000	246,000	1,330	2,670	1.08
121,000	1	.82	112,000	358,000	1,310	3,980	1.11
115,000	1	1.10	98,900	447,900	1,240	5,220	1.16
114,000	1	1.37	86,500	534,400	1,230	6,450	1.21
110,000	1	1.64	73,900	608,300	1,180	7,630	1.25
98,300	1	1.92	46,200	654,500	1,030	8,660	1.32
89,000	1	2.19	31,500	686,000	907	9,567	1.40
78,000	1	2.47	19,100	705,100	764	10,331	1.46
77,000	1	2.74	18,200	723,300	751	11,082	1.53
75,300	1	3.01	16,900	740,200	729	11,811	1.60
74,600	1	3.29	16,400	756,600	720	12,531	1.66
70,600	1	3.56	13,700	770,300	668	13,199	1.71
69,800	1	3.84	13,200	783,500	658	13,857	1.77
69,400	1	4.11	12,900	796,400	653	14,510	1.82
69,100	1	4.38	12,800	809,200	649	15,159	1.87
66,000	1	4.66	11,000	820,200	612	15,771	1.92
63,100	1	4.93	9,690	829,890	577	16,348	1.97
61,900	2	5.48	9,190	848,270	563	17,474	2.06
61,700	1	5.75	9,100	857,370	560	18,034	2.10
61,300	1	6.03	8,940	866,310	556	18,590	2.15
59,600	1	6.30	8,250	874,560	534	19,124	2.19
57,600	1	6.58	7,490	882,050	506	19,630	2.22
56,200	1	6.85	7,000	889,050	487	20,117	2.26
55,700	1	7.12	6,830	895,880	480	20,597	2.30
55,300	1	7.40	6,710	902,590	474	21,071	2.34
55,200	1	7.67	6,670	909,260	473	21,544	2.37

Table 16. Values of accumulative suspended-sediment and bedload transport, 1974, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
54,700	1	7.95	6,520	915,780	466	22,010	2.40
53,500	1	8.22	6,170	921,950	449	22,459	2.44
53,000	1	8.49	6,030	927,980	442	22,901	2.47
52,600	1	8.77	5,920	933,900	436	23,337	2.50
51,300	1	9.04	5,570	939,470	418	23,755	2.53
51,100	1	9.32	5,520	944,990	415	24,170	2.56
50,800	1	9.59	5,440	950,430	411	24,581	2.59
50,300	1	9.86	5,310	955,740	404	24,985	2.61
50,200	1	10.14	5,280	961,020	403	25,388	2.64
50,100	1	10.41	5,260	966,280	401	25,789	2.67
49,700	1	10.69	5,160	971,440	396	26,185	2.70
49,200	1	10.96	5,040	976,480	388	26,573	2.72
48,700	2	11.51	4,920	986,320	381	27,335	2.77
47,800	2	12.06	4,930	996,180	367	28,069	2.82
47,400	1	12.33	4,620	1,000,800	361	28,430	2.84
47,100	1	12.60	4,550	1,005,350	357	38,787	2.86
46,700	1	12.88	4,460	1,009,810	351	29,138	2.88
46,400	1	13.15	4,400	1,014,210	346	29,484	2.90
46,000	1	13.43	4,310	1,018,520	340	29,824	2.93
45,100	1	13.70	4,110	1,022,630	327	30,151	2.95
44,700	1	13.97	4,020	1,026,650	321	30,472	2.97
44,100	1	14.25	3,890	1,030,540	312	30,784	2.99
44,000	1	14.52	3,870	1,034,410	310	31,094	3.01
43,500	1	14.80	3,770	1,038,180	303	31,397	3.02
43,200	3	15.62	3,710	1,049,310	298	31,993	3.05
43,100	1	15.89	3,690	1,053,000	297	32,290	3.07

Table 16. Values of accumulative suspended-sediment and bedload transport, 1974, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
42,900	1	16.17	3,650	1,056,650	294	32,584	3.08
42,800	2	16.71	3,630	1,063,910	292	33,168	3.12
42,600	1	16.99	3,590	1,067,500	289	33,457	3.13
42,300	2	17.54	3,530	1,074,560	285	34,027	3.17
41,900	1	17.81	3,450	1,078,010	279	34,306	3.18
41,200	1	18.08	3,330	1,081,340	268	34,574	3.20
40,900	1	18.36	3,270	1,084,610	264	34,838	3.21
40,800	1	18.63	3,260	1,087,870	262	35,100	3.23
40,600	2	19.18	3,220	1,094,310	259	35,618	3.25
40,400	1	19.45	3,180	1,097,490	256	35,874	3.27
40,300	1	19.73	3,160	1,100,650	255	36,129	3.28
40,200	1	20.00	3,150	1,103,800	253	36,382	3.30
40,000	3	20.82	3,110	1,113,130	250	37,132	3.34
38,600	1	21.10	2,890	1,116,020	231	37,363	3.35
38,500	1	21.37	2,870	1,118,890	230	37,593	3.36
38,400	1	21.65	2,850	1,121,740	228	37,821	3.37
37,800	1	21.92	2,760	1,124,500	220	38,041	3.38
37,300	1	22.19	2,680	1,127,180	214	38,255	3.39
37,000	1	22.47	2,640	1,129,820	209	38,464	3.40
36,400	1	22.74	2,550	1,132,370	201	38,665	3.42
36,100	1	23.02	2,500	1,134,870	197	38,862	3.42
35,800	1	23.29	2,460	1,137,330	193	39,055	3.43
35,200	1	23.56	2,380	1,139,710	185	39,240	3.44
34,700	1	23.84	2,310	1,142,020	178	39,418	3.45
34,400	1	24.11	2,270	1,144,290	174	39,592	3.46
35,500	1	24.39	2,140	1,146,430	162	39,754	3.47
33,300	1	24.66	2,120	1,148,550	160	39,914	3.48
32,700	1	24.93	2,040	1,150,590	151	40,065	3.48

Table 16. Values of accumulative suspended-sediment and bedload transport, 1974, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
32,600	2	25.48	2,030	1,154,650	150	40,365	3.50
32,200	1	25.76	1,980	1,156,630	145	40,510	3.50
32,000	1	26.03	1,950	1,158,580	142	40,652	3.51
31,900	1	26.30	1,940	1,160,520	141	40,793	3.52
31,200	1	26.58	1,850	1,162,370	131	40,924	3.52
30,800	1	26.85	1,810	1,164,180	126	41,050	3.53
30,700	1	27.13	1,790	1,165,970	124	41,174	3.53
30,500	2	27.67	1,770	1,169,510	122	41,418	3.54
30,400	1	27.95	1,760	1,171,270	120	41,538	3.55
30,300	1	28.22	1,750	1,173,020	119	41,657	3.55
30,200	1	28.50	1,730	1,174,750	118	41,775	3.56
30,100	1	28.77	1,720	1,176,470	116	41,891	3.56
29,900	2	29.32	1,700	1,179,870	114	42,119	3.57
29,800	2	29.86	1,690	1,183,250	113	42,345	3.58
29,600	2	30.40	1,670	1,186,590	111	42,567	3.59
29,400	1	30.67	1,640	1,188,230	108	42,675	3.59
29,300	3	31.48	1,630	1,193,120	107	42,996	3.60
29,200	1	31.75	1,620	1,194,740	106	43,102	3.61
29,100	3	32.57	1,610	1,199,570	105	43,417	3.62
29,000	3	33.39	1,600	1,204,370	104	43,729	3.63
28,700	1	33.67	1,570	1,205,940	101	43,830	3.64
28,600	4	34.76	1,560	1,212,180	100	44,230	3.65
28,500	1	35.04	1,540	1,213,720	99	44,329	3.65
28,400	3	35.86	1,430	1,218,310	98	44,623	3.66
28,200	3	36.68	1,510	1,222,840	95	44,908	3.67
28,100	1	36.96	1,500	1,224,340	94	45,002	3.68
28,000	1	37.23	1,490	1,225,830	93	45,095	3.68

Table 16. Values of accumulative suspended-sediment and bedload transport, 1974, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
27,900	2	37.78	1,480	1,228,790	92	45,279	3.68
27,500	1	38.05	1,440	1,230,230	88	45,367	3.69
27,100	1	38.33	1,400	1,231,630	84	45,451	3.69
27,000	2	38.87	1,390	1,234,410	82	45,615	3.70
26,500	2	39.42	1,340	1,237,090	77	45,769	3.70
26,300	1	39.70	1,320	1,238,410	75	45,844	3.70
25,700	2	40.24	1,260	1,240,930	68	45,980	3.70
25,600	2	40.79	1,250	1,243,430	67	46,114	3.71
25,500	1	41.07	1,240	1,244,670	66	46,180	3.71
25,300	2	41.61	1,230	1,247,130	64	46,308	3.71
25,200	1	41.89	1,220	1,248,350	63	46,371	3.72
25,000	1	42.16	1,200	1,249,550	61	46,432	3.72
24,300	1	42.44	1,150	1,250,700	53	46,485	3.72
24,200	2	42.98	1,130	1,252,960	52	46,589	3.72
23,900	2	43.53	1,100	1,255,160	49	46,687	3.72
23,500	1	43.81	1,070	1,256,230	44	46,731	3.72
22,800	1	44.08	1,020	1,257,250	37	46,768	3.72
22,300	1	44.35	978	1,258,228	31	46,799	3.72
21,600	1	44.63	925	1,259,153	24	46,823	3.72
20,900	1	44.90	873	1,260,026	16	46,839	3.72
20,800	2	45.45	866	1,261,758	15	46,869	3.72
20,500	2	46.00	845	1,263,448	12	46,893	3.71
20,200	1	46.27	824	1,264,272	9	46,902	3.71
20,100	1	46.55	817	1,265,089	8	46,910	3.71
19,800	1	46.82	796	1,265,885	6	46,916	4.71
19,200	1	47.09	754	1,266,639	6	46,922	3.70
18,400	1	47.37	701	1,267,340	5	46,927	3.70
18,300	1	47.64	694	1,268,034	5	46,932	3.70
18,000	1	47.92	675	1,268,709	4	46,936	3.70

Table 16. Values of accumulative suspended-sediment and bedload transport, 1974, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
17,700	1	48.19	656	1,269,365	4	46,940	3.70
17,600	1	48.46	649	1,270,014	4	46,944	3.70
17,400	3	49.29	636	1,271,922	4	46,956	3.69
17,300	2	49.83	630	1,273,182	4	46,964	3.69
16,600	1	50.11	586	1,273,768	3	46,967	3.69
15,800	1	50.38	538	1,274,306	2	46,969	3.69
15,600	1	50.66	526	1,274,832	2	46,971	3.68
15,500	1	50.93	520	1,275,352	2	46,973	3.68
15,100	3	51.75	496	1,276,840	1	46,976	3.68
15,000	1	52.03	490	1,277,330	1	46,977	3.68
				1975			
74,200	1	.27	16,100	16,100	715	715	4.44
71,500	1	.55	14,300	30,400	679	1,394	4.59
70,600	1	.82	13,700	44,100	668	2,062	4.68
68,200	1	1.10	12,200	56,300	638	2,700	4.80
67,300	1	1.37	11,700	68,000	628	3,328	4.89
67,000	1	1.64	11,500	79,500	624	3,952	4.97
65,800	1	1.92	10,900	90,400	610	4,562	5.05
65,600	1	2.19	10,800	101,200	607	5,169	5.11
64,700	1	2.47	10,400	111,600	596	5,765	5.17
63,700	1	2.74	9,960	121,560	584	6,349	5.22
63,200	1	3.01	9,740	131,300	578	6,927	5.28
62,300	1	3.29	9,360	140,660	568	7,495	5.33
61,300	2	3.84	8,940	158,540	556	8,607	5.43
60,400	1	4.11	8,570	167,110	545	9,152	5.48
59,700	1	4.38	8,290	175,400	536	9,688	5.52

Table 16. Values of accumulative suspended-sediment and bedload transport, 1975, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
59,600	1	4.66	8,250	183,650	534	10,222	5.57
57,600	1	4.93	7,490	191,140	506	10,728	5.61
57,400	1	5.21	7,410	198,550	504	11,232	5.66
57,300	1	5.48	7,380	205,930	502	11,734	5.70
56,800	1	5.75	7,200	213,130	495	12,229	5.74
56,600	1	6.03	7,130	220,260	492	12,721	5.78
56,500	1	6.30	7,100	227,360	491	13,212	5.81
55,600	1	6.58	6,800	234,160	478	13,690	5.85
55,500	1	6.85	6,770	240,930	477	14,167	5.88
55,000	1	7.12	6,610	247,540	470	14,637	5.91
54,900	1	7.40	6,580	254,120	469	15,106	5.94
54,300	1	7.67	6,400	260,520	460	15,566	5.98
52,000	1	7.95	5,750	266,270	428	15,994	6.01
51,800	1	8.22	5,700	271,970	425	16,419	6.04
51,600	1	8.49	5,650	277,620	422	16,841	6.07
51,400	1	8.77	5,600	283,220	420	17,261	6.10
51,300	1	9.04	5,570	288,790	418	17,679	6.12
50,800	1	9.32	5,440	294,230	411	18,090	6.15
50,400	1	9.59	5,330	299,560	406	18,496	6.17
49,600	1	9.86	5,130	304,690	394	18,890	6.20
49,100	1	10.14	5,010	309,700	387	19,277	6.22
48,700	1	10.41	4,920	314,620	381	19,658	6.25
47,000	1	10.69	4,530	319,150	355	20,013	6.27
46,300	1	10.96	4,380	323,530	345	20,358	6.29
46,200	1	11.23	4,350	327,880	343	20,701	6.31
45,700	1	11.51	4,240	332,120	336	21,037	6.33
45,200	1	11.78	4,130	336,250	328	21,365	6.35
43,600	1	12.06	3,790	340,040	304	21,669	6.37

Table 16. Values of accumulative suspended-sediment and bedload transport, 1975, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
42,800	1	12.33	3,630	343,670	292	21,961	6.39
42,500	1	12.60	3,570	347,240	288	22,249	6.41
42,400	1	12.88	3,550	350,790	286	22,535	6.42
42,100	1	13.15	3,490	354,280	282	22,817	6.44
41,600	1	13.43	3,400	357,680	274	23,091	6.46
40,800	1	13.70	3,250	360,930	262	23,353	6.47
40,400	1	13.97	3,180	364,110	256	23,609	6.48
39,400	1	14.25	3,010	367,120	242	23,851	6.50
39,300	1	14.52	3,000	370,120	241	24,092	6.51
38,400	1	14.80	2,850	372,970	228	24,320	6.52
37,200	1	15.07	2,670	375,640	212	24,532	6.53
36,700	1	15.34	2,600	378,240	205	24,737	6.54
35,200	1	15.62	2,380	380,620	185	24,922	6.55
35,100	1	15.89	2,360	382,980	184	25,106	6.56
33,000	1	16.17	2,080	385,060	155	25,261	6.56
32,300	1	16.44	1,990	387,050	146	25,407	6.56
32,100	1	16.71	1,960	389,010	143	25,550	6.57
32,000	1	16.99	1,950	390,960	142	25,692	6.57
31,400	1	17.26	1,880	392,840	134	25,826	6.57
30,800	1	17.54	1,810	394,650	126	25,952	6.58
30,700	1	17.81	1,790	396,440	124	26,076	6.58
29,900	1	18.08	1,700	398,140	114	26,190	6.58
29,800	1	18.36	1,690	399,830	113	26,303	6.58
29,200	1	18.63	1,620	401,450	106	26,409	6.58
28,700	1	18.91	1,570	403,020	101	26,510	6.58
26,700	1	19.18	1,360	404,380	79	26,589	6.58
25,600	1	19.45	1,250	405,630	67	26,656	6.57
24,700	2	20.00	1,170	407,970	57	26,770	6.56
24,600	1	20.28	1,160	409,130	56	26,826	6.56

Table 16. Values of accumulative suspended-sediment and bedload transport, 1975, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
23,500	1	20.55	1,070	410,200	44	26,870	6.55
23,400	1	20.82	1,060	411,260	43	26,913	6.54
23,000	2	21.37	1,030	413,320	39	26,991	6.53
22,800	1	21.65	1,020	414,340	37	27,028	6.52
22,500	4	22.74	992	418,308	34	27,164	6.49
22,200	2	23.29	970	420,248	30	27,224	6.48
22,100	1	23.56	962	421,210	29	27,253	6.47
22,000	1	23.84	955	422,165	28	27,281	6.46
21,700	2	24.39	932	424,029	25	27,331	6.45
21,300	1	24.66	902	424,931	21	27,352	6.44
21,000	1	24.94	880	425,811	17	27,369	6.43
20,600	1	25.21	852	426,663	13	27,382	6.42
20,500	1	25.48	845	427,508	12	27,394	6.41
20,400	1	25.76	838	428,346	11	27,405	6.40
20,100	2	26.31	817	429,980	8	27,421	6.38
19,900	1	26.58	803	430,783	6	27,427	6.37
19,800	1	26.85	796	431,579	6	27,433	6.36
19,600	3	27.68	782	433,925	6	27,451	6.33
19,500	2	28.22	775	435,475	6	27,463	6.31
19,400	1	28.50	768	436,243	6	27,469	6.30
19,100	1	28.77	747	436,990	6	27,475	6.29
19,000	1	29.05	740	437,730	5	27,480	6.28
18,800	1	29.32	727	438,457	5	27,485	6.27
18,700	2	29.87	720	439,897	5	27,490	6.25
18,600	1	30.15	714	440,611	5	27,495	6.24
18,400	1	30.42	701	441,312	5	27,500	6.23
18,300	1	30.69	694	442,006	5	27,505	6.22
17,900	1	30.97	668	442,674	4	27,509	6.21

Table 16. Values of accumulative suspended-sediment and bedload transport, 1975, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
17,800	1	31.24	662	443,336	4	27,513	6.21
17,700	1	31.52	656	443,992	4	27,517	6.20
17,600	1	31.79	649	444,641	4	27,521	6.19
17,100	1	32.06	616	445,257	3	27,524	6.18
17,000	1	32.34	610	445,867	3	27,527	6.17
16,900	2	32.89	604	447,075	3	27,533	6.16
16,500	3	33.71	580	448,815	3	27,542	6.14
16,300	1	33.98	568	449,383	2	27,544	6.13
16,200	1	34.26	562	449,945	2	27,546	6.12
15,500	2	34.80	520	450,985	2	27,550	6.11
15,400	1	35.08	514	451,499	1	27,551	6.10
15,300	1	35.35	508	452,007	1	27,552	6.10
15,100	1	35.63	496	452,503	1	27,553	6.09
				1976			
70,800	1	.27	13,800	13,800	670	670	4.86
66,600	1	.55	11,300	25,100	619	1,289	5.14
64,100	1	.82	10,100	35,200	589	1,878	5.34
60,400	1	1.10	8,570	43,770	545	2,423	5.54
59,200	1	1.37	8,090	51,860	529	2,952	5.69
56,800	1	1.64	7,200	59,060	495	3,447	5.84
55,500	1	1.92	6,770	65,830	477	3,924	5.96
54,100	1	2.19	6,340	72,170	457	4,381	6.07
53,600	1	2.47	6,200	78,370	450	4,831	6.16
53,200	1	2.74	6,090	84,460	445	5,276	6.25
53,000	1	3.01	6,030	90,490	442	5,718	6.32
52,700	1	3.29	5,950	96,440	438	6,156	6.38
51,500	1	3.56	5,620	102,060	421	6,577	6.44

Table 16. Values of accumulative suspended-sediment and bedload transport, 1976, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
17,700	2	47.13	656	406,257	4	25,696	6.32
17,600	2	47.68	649	407,555	4	25,704	6.31
17,500	3	48.50	642	409,481	4	25,716	6.28
17,300	4	49.60	630	412,001	4	25,732	6.25
17,200	2	50.15	623	413,247	3	25,738	6.23
17,100	2	50.69	616	414,479	3	25,744	6.21
16,900	1	50.97	604	415,083	3	25,747	6.20
16,800	1	51.24	598	415,681	3	25,750	6.20
16,700	1	51.52	592	416,273	3	25,753	6.19
16,400	1	51.79	574	416,847	2	25,755	6.18
16,100	1	52.06	556	417,403	2	25,757	6.17
16,000	1	52.34	550	417,953	2	25,759	6.16
15,400	1	52.61	514	418,467	1	25,760	6.16
15,300	1	52.89	508	418,975	1	25,761	6.15
15,000	1	53.16	490	419,465	1	25,762	6.14
				1977			
28,500	1	.27	1,540	1,540	99	99	6.43
28,200	1	.55	1,500	3,040	95	194	6.38
26,700	1	.82	1,360	4,400	79	273	6.20
26,100	1	1.10	1,300	5,700	73	346	6.07
26,000	1	1.37	1,290	6,990	72	418	5.98
25,600	1	1.64	1,250	8,240	67	485	5.89
24,300	1	1.92	1,140	9,380	53	538	5.74
24,200	1	2.19	1,130	10,510	52	590	5.61
23,900	2	2.74	1,100	12,710	49	688	5.41
23,100	2	3.29	1,040	14,790	40	768	5.19

Table 16. Values of accumulative suspended-sediment and bedload transport, 1977, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
23,000	1	3.56	1,030	15,820	39	807	5.10
22,400	1	3.84	985	16,805	33	840	5.00
21,500	1	4.11	910	17,715	23	863	4.87
21,100	1	4.38	888	18,603	18	881	4.74
20,900	1	4.66	876	19,479	16	897	4.61
20,800	1	4.93	866	20,345	15	912	4.48
20,600	1	5.21	852	21,197	13	925	4.36
20,200	1	5.48	824	22,021	9	934	4.24
20,000	1	5.75	810	22,831	6	940	4.12
19,800	1	6.03	796	23,627	6	946	4.00
18,800	1	6.30	727	24,354	5	951	3.91
18,400	1	6.57	701	25,055	5	956	3.82
18,100	1	6.85	682	25,737	4	960	3.73
17,800	1	7.12	662	26,399	4	964	3.65
17,400	1	7.40	636	27,035	4	968	3.58
17,300	1	7.67	630	27,665	4	972	3.51
17,000	1	7.95	610	28,275	3	975	3.45
16,900	1	8.22	604	28,879	3	978	3.39
16,600	1	8.49	586	29,465	3	981	3.33
16,400	1	8.77	574	30,039	2	983	3.27
16,200	1	9.04	562	30,601	2	1,005	3.28
16,000	1	9.31	550	31,151	2	1,007	3.23
15,900	2	9.86	544	31,695	2	1,011	3.19
15,700	2	10.41	532	32,227	2	1,015	3.15
15,600	2	10.96	526	32,753	2	1,019	3.11
15,500	2	11.51	520	33,273	2	1,023	3.08

Table 16. Values of accumulative suspended-sediment and bedload transport, 1978, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
54,000	1	.27	6,310	6,310	456	456	7.23
53,900	1	.55	6,280	12,590	455	911	7.24
53,200	1	.82	6,090	18,680	445	1,356	7.26
53,100	1	1.10	6,060	24,740	443	1,799	7.27
52,600	1	1.37	5,920	30,660	436	2,235	7.29
51,900	1	1.64	5,720	36,380	427	2,662	7.32
46,500	1	1.92	4,420	40,800	348	3,010	7.38
43,200	1	2.19	3,710	44,510	298	3,308	7.43
40,600	2	2.74	3,220	50,950	259	3,826	7.51
39,900	1	3.01	3,090	54,040	249	4,079	7.55
38,000	1	3.29	2,790	56,830	223	4,298	7.56
37,600	2	3.84	2,730	62,290	218	4,734	7.60
37,400	1	4.11	2,700	64,990	215	4,949	7.62
37,300	1	4.38	2,680	67,670	214	5,163	7.63
37,100	1	4.66	2,660	70,330	211	5,374	7.64
36,300	2	5.21	2,540	75,410	200	5,774	7.66
35,100	1	5.48	2,360	77,770	184	5,958	7.66
35,000	1	5.75	2,350	80,120	182	6,140	7.66
34,600	2	6.30	2,290	84,700	177	6,494	7.67
34,500	1	6.58	2,280	86,980	176	6,670	7.67
34,400	1	6.85	2,270	89,250	174	6,844	7.67
33,800	1	7.12	2,180	91,430	166	7,010	7.67
32,700	1	7.40	2,040	93,470	151	7,161	7.67
32,600	1	7.67	2,030	95,500	150	7,311	7.66
32,300	1	7.95	1,990	97,490	146	7,457	7.65
32,100	1	8.22	1,960	99,450	143	7,600	7.64
31,900	1	8.49	1,940	101,390	141	7,741	7.64
31,700	3	9.31	1,910	107,120	138	8,155	7.62

Table 16. Values of accumulative suspended-sediment and bedload transport, 1978, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
31,600	2	9.86	1,900	110,920	137	8,429	7.60
31,500	1	10.14	1,890	112,810	135	8,564	7.59
31,100	2	10.68	1,840	116,490	130	8,824	7.58
31,000	1	10.96	1,830	118,320	128	8,952	7.57
30,700	1	11.23	1,790	120,110	124	9,076	7.56
30,500	1	11.51	1,770	121,880	122	9,198	7.55
30,400	1	11.78	1,760	123,640	120	9,318	7.54
30,200	1	12.05	1,730	125,370	118	9,436	7.53
30,100	2	12.60	1,720	128,810	116	9,668	7.51
30,000	1	12.88	1,710	130,520	115	9,783	7.50
29,900	1	13.15	1,700	132,220	114	9,897	7.48
29,800	1	13.42	1,690	133,910	113	10,010	7.48
29,700	1	13.70	1,680	135,590	112	10,122	7.46
29,600	2	14.25	1,670	138,930	111	10,344	7.44
29,500	3	15.07	1,660	143,910	110	10,674	7.42
29,300	1	15.34	1,630	145,540	107	10,781	7.41
29,100	1	15.62	1,610	147,150	105	10,886	7.40
29,000	1	15.89	1,600	148,750	104	10,990	7.39
28,900	1	16.16	1,590	150,340	103	11,093	7.38
28,800	2	16.71	1,580	153,500	102	11,297	7.36
28,700	1	16.99	1,570	155,070	101	11,398	7.35
28,600	1	17.26	1,560	156,630	100	11,498	7.34
28,500	1	17.53	1,540	158,170	99	11,597	7.33
28,400	1	17.81	1,530	159,700	98	11,695	7.32
28,300	1	18.08	1,520	161,200	97	11,792	7.31
28,200	1	18.36	1,510	162,730	95	11,887	7.30
28,100	1	18.63	1,500	164,230	94	11,981	7.30
27,900	1	18.90	1,480	165,710	92	12,073	7.29
27,400	2	19.45	1,430	168,570	87	12,247	7.26

Table 16. Values of accumulative suspended-sediment and bedload transport, 1978, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
27,100	1	19.73	1,400	169,970	84	12,331	7.26
26,900	1	20.00	1,380	171,350	81	12,412	7.24
26,200	1	20.27	1,310	172,660	74	12,486	7.23
26,100	1	20.55	1,300	173,960	73	12,559	7.22
25,700	1	20.82	1,260	175,220	68	12,627	7.21
25,400	1	21.10	1,240	176,460	65	12,692	7.19
24,800	1	21.37	1,180	177,640	59	12,751	7.18
24,500	2	21.92	1,160	179,960	55	12,861	7.15
24,400	1	22.19	1,150	181,110	54	12,915	7.13
24,200	1	22.47	1,130	182,240	52	12,967	7.12
24,000	1	22.74	1,110	183,350	50	13,017	7.10
23,800	2	23.29	1,090	185,530	48	13,113	7.07
23,600	1	23.56	1,080	186,610	46	13,159	7.05
23,500	2	24.11	1,070	188,750	44	13,247	7.02
23,300	1	24.38	1,050	189,800	42	13,289	7.00
23,200	1	24.66	1,050	190,850	41	13,330	6.98
23,000	1	24.93	1,030	191,880	39	13,369	6.97
22,800	1	25.21	1,020	192,900	37	13,406	6.95
22,700	1	25.48	1,010	193,910	36	13,442	6.93
22,500	2	26.02	992	195,894	34	13,510	6.90
22,400	2	26.57	985	197,864	33	13,576	6.86
22,100	2	27.12	962	199,788	29	13,634	6.82
22,000	1	27.39	955	200,743	28	13,662	6.81
21,900	1	27.68	948	201,691	27	13,689	6.79
21,700	1	27.94	932	202,623	25	13,714	6.77
21,400	1	28.21	910	203,533	22	13,736	6.75
21,300	3	29.04	902	206,239	21	13,799	6.69
21,200	1	29.31	895	207,134	20	13,819	6.67
21,100	2	29.86	888	208,910	18	13,855	6.63

Table 16. Values of accumulative suspended-sediment and bedload transport, 1978, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
20,900	1	30.13	873	209,783	16	13,871	6.61
20,600	1	30.40	852	210,635	13	13,884	6.59
20,500	3	31.22	845	213,170	12	13,920	6.53
20,400	2	31.77	838	214,846	11	13,942	6.49
20,300	1	32.04	831	215,677	10	13,952	6.47
20,200	1	32.31	824	216,501	9	13,961	6.45
20,100	1	32.58	817	217,318	8	13,969	6.43
20,000	1	32.85	810	218,128	7	13,976	6.41
19,900	2	33.40	803	219,734	6	13,988	6.37
19,800	1	33.67	796	220,530	6	13,994	6.35
19,700	2	34.22	789	222,108	6	14,006	6.31
19,600	2	34.77	782	223,672	6	14,018	6.27
19,500	1	35.04	775	224,447	6	14,024	6.25
19,400	1	35.31	768	225,215	6	14,030	6.23
19,300	2	35.86	761	226,737	6	14,042	6.19
19,200	2	36.41	754	228,245	6	14,054	6.16
19,100	2	36.96	747	229,739	6	14,066	6.12
19,000	1	37.23	740	230,479	5	14,071	6.10
18,800	1	37.50	727	231,206	5	14,076	6.09
18,700	2	38.05	720	232,646	5	14,086	6.06
18,600	1	38.33	714	233,360	5	14,091	6.04
18,500	2	38.87	708	234,776	5	14,101	6.01
18,300	3	39.70	694	236,858	5	14,116	5.96
18,200	4	40.79	688	239,610	4	14,132	5.90
18,100	1	41.07	682	240,292	4	14,136	5.88
18,000	2	41.61	675	241,642	4	14,144	5.85
17,900	1	41.89	668	242,310	4	14,148	5.84

Table 16. Values of accumulative suspended-sediment and bedload transport, 1978, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
17,500	3	42.71	642	244,236	4	14,160	5.80
17,400	7	44.63	636	248,688	4	14,188	5.70
17,300	1	44.90	630	249,318	4	14,192	5.69
17,200	2	45.45	623	250,564	3	14,198	5.67
17,100	4	46.55	616	253,028	3	14,210	5.62
17,000	1	46.82	610	253,638	3	14,213	5.60
16,900	2	47.37	604	254,846	3	14,219	5.58
16,800	2	47.92	598	256,042	3	14,225	5.56
16,700	1	48.19	592	256,634	3	14,228	5.54
16,600	1	48.46	586	257,220	3	14,231	5.53
16,500	2	49.01	580	258,380	3	14,237	5.51
16,400	3	49.83	574	260,102	2	14,243	5.48
16,200	3	50.66	562	261,788	2	14,249	5.44
15,900	1	50.93	544	262,332	2	14,251	5.43
15,800	1	51.20	538	262,870	2	14,253	5.42
15,400	1	51.48	514	263,384	1	14,254	5.41
15,300	1	51.75	508	263,892	1	14,255	5.40
			1979				
60,700	1	.27	8,690	8,690	548	548	6.31
60,400	1	.55	8,570	17,260	545	1,093	6.33
59,200	1	.82	8,090	25,350	529	1,622	6.40
57,800	1	1.10	7,560	32,910	509	2,131	6.48
56,500	1	1.37	7,100	40,010	491	2,622	6.55
52,800	1	1.64	5,970	45,980	439	3,061	6.66
52,300	1	1.92	5,830	51,810	432	3,493	6.74
48,800	2	2.47	4,940	61,710	382	4,257	6.90

Table 16. Values of accumulative suspended-sediment and bedload transport, 1979, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
47,000	1	2.74	4,530	66,240	355	4,612	6.96
45,700	2	3.29	4,240	74,720	336	5,284	7.07
45,600	1	3.56	4,220	78,940	334	5,618	7.12
45,500	1	3.84	4,200	83,140	333	5,951	7.16
45,300	1	4.11	4,160	87,300	330	6,281	7.20
45,000	1	4.38	4,090	91,390	325	6,606	7.23
44,100	1	4.66	3,890	95,280	312	6,918	7.26
40,100	1	4.93	3,130	98,410	252	7,170	7.29
39,200	1	5.21	2,980	101,390	239	7,409	7.31
38,100	2	5.75	2,810	107,010	238	7,885	7.37
37,900	1	6.03	2,780	109,790	222	8,107	7.38
37,300	1	6.30	2,680	112,470	214	8,321	7.40
35,800	1	6.58	2,460	114,930	193	8,514	7.41
35,500	2	7.12	2,420	119,770	189	8,892	7.42
34,500	1	7.40	2,280	122,050	176	9,068	7.43
34,300	1	7.67	2,250	124,300	173	9,241	7.43
34,100	1	7.95	2,220	126,520	170	9,411	7.44
33,400	3	8.77	2,130	132,910	161	9,894	7.44
33,200	1	9.04	2,110	135,020	158	10,052	7.44
32,500	1	9.32	2,020	137,040	149	10,201	7.44
32,300	1	9.59	1,990	139,030	146	10,347	7.44
31,900	1	9.86	1,940	140,970	141	10,488	7.44
31,700	1	10.14	1,910	142,880	138	10,626	7.44
31,600	1	10.41	1,900	144,780	137	10,763	7.43
31,500	2	10.96	1,890	148,560	135	11,033	7.43
31,200	1	11.23	1,850	150,410	131	11,164	7.42
31,100	1	11.51	1,840	152,250	130	11,294	7.42
30,500	1	11.78	1,770	154,020	122	11,416	7.41

Table 16. Values of accumulative suspended-sediment and bedload transport, 1979, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
30,000	1	12.06	1,710	155,730	115	11,531	7.40
29,000	1	12.33	1,600	157,330	104	11,635	7.40
28,600	1	12.60	1,560	158,890	100	11,735	7.39
28,500	1	12.88	1,540	160,430	99	11,834	7.38
27,900	1	13.15	1,480	161,910	92	11,926	7.37
27,400	1	13.43	1,430	164,770	87	12,013	7.29
26,900	1	13.70	1,380	166,150	81	12,094	7.28
25,500	1	13.97	1,240	167,390	66	12,160	7.26
24,800	1	14.25	1,180	168,570	59	12,219	7.25
23,400	1	14.52	1,060	169,630	43	12,262	7.23
22,800	1	14.80	1,020	170,650	37	12,299	7.21
22,400	1	15.07	985	171,635	33	12,332	7.18
21,900	1	15.34	948	172,583	27	12,359	7.16
21,800	1	15.62	940	173,523	26	12,385	7.14
21,600	1	15.89	925	174,448	24	12,409	7.11
21,400	2	16.44	910	176,268	22	12,453	7.06
21,100	1	16.71	888	177,156	18	12,471	7.04
20,900	3	17.54	873	179,775	16	12,519	6.96
20,700	1	17.81	859	180,634	14	12,533	6.95
20,000	1	18.08	810	181,444	6	12,539	6.91
19,800	1	18.36	796	182,240	6	12,545	6.88
19,700	4	19.45	789	185,396	6	12,569	6.78
19,500	2	20.00	775	186,946	6	12,581	6.73
19,400	1	20.28	768	187,714	6	12,587	6.70
19,300	2	20.82	761	189,236	6	12,599	6.66
19,200	2	21.37	754	190,744	6	12,611	6.61
18,700	1	21.65	720	191,464	5	12,616	6.59

Table 16. Values of accumulative suspended-sediment and bedload transport, 1979, Clearwater River at Spalding, Idaho (Continued)

Daily mean discharge (ft^3/s)	Number of days	Accumulative percentage of time	Suspended sediment (ton/d)	Accumulative suspended sediment (ton)	Bedload sediment (ton/d)	Accumulative bedload sediment (ton)	Ratio bedload/ suspended load (percent)
18,000	2	22.19	675	192,814	4	12,624	6.55
17,700	1	22.47	656	193,470	4	12,628	6.53
17,400	1	22.74	636	194,106	4	12,632	6.51
17,300	2	23.29	630	195,366	4	12,640	6.47
17,100	1	23.56	616	195,982	3	12,643	6.45
17,000	1	23.84	610	196,592	3	12,646	6.43
16,900	2	24.39	604	197,800	3	12,652	6.40
16,400	2	24.93	574	198,948	2	12,656	6.36
16,100	1	25.21	556	199,504	2	12,658	6.34
15,700	1	25.28	532	200,036	2	12,660	6.33
15,500	2	26.03	520	201,076	2	12,664	6.30
15,400	1	26.30	514	201,590	1	12,665	6.28
15,100	1	26.58	496	202,086	1	12,666	6.27
15,000	1	26.85	490	202,576	1	12,667	6.25

Table 17. Dissolved-residue data, Snake River near Anatone, Washington

Date	Discharge (ft^3/s)	Dissolved residue (mg/L)	Dissolved residue (ton/d)
10-18-72	25,600	262	18,100
3-23-73	11,900	149	4,790
4-25-73	28,600	238	18,400
5- 9-73	25,500	153	10,500
5-17-73	50,700	131	17,900
5-22-73	51,200	97	13,400
5-29-73	41,200	96	10,700
6-12-73	36,200	128	12,500
6-18-73	36,000	120	11,700
12-21-73	30,500	220	18,100
1-20-74	81,700	179	39,500
3-12-74	47,800	194	25,000
3-27-74	67,100	157	28,400
4-11-74	84,100	138	31,300
5- 7-74	104,000	107	30,000
6- 4-74	107,000	76	22,000
6-11-74	91,700	63	15,600
6-26-74	140,000	76	28,700
8- 9-74	24,300	122	8,000
2- 7-75	23,000	240	14,900
3-19-75	39,800	215	23,100
4-15-75	56,500	189	28,800
4-29-75	76,900	174	36,100
5- 1-75	76,000	174	35,700
5-20-75	106,000	116	33,200
6- 5-75	104,000	98	27,500
6-11-75	97,100	101	26,500
6-18-75	91,700	84	20,800
6-26-75	104,000	77	21,600
7-31-75	24,800	119	7,970
8-19-75	19,200	149	7,720
9-18-75	22,200	228	13,500
10-15-75	22,300	226	13,600
11-12-75	27,200	217	15,900
12-10-75	48,800	232	30,600

Table 17. Dissolved-residue data,
Snake River near Anatone, Washington (Continued)

Date	Discharge (ft^3/s)	Dissolved residue (mg/L)	Dissolved residue (ton/d)
1-21-76	37,900	236	24,200
2-25-76	39,500	220	23,500
3-24-76	44,400	214	25,700
4- 7-76	61,800	193	32,200
4-13-76	98,400	158	42,000
4-15-76	94,800	149	38,100
4-19-76	82,000	178	39,400
4-21-76	84,000	173	39,200
5- 4-76	86,400	166	38,700
5- 5-76	91,900	138	34,200
5-13-76	115,000	114	35,400
5-25-76	102,000	83	22,900
5-27-76	102,000	87	24,000
6- 8-76	96,900	104	27,200
6-10-76	94,700	90	23,000
8-11-76	23,100	151	9,420
9-15-76	26,400	214	15,300
10-22-76	20,500	225	12,500
11-17-76	19,200	212	11,000
12-15-76	27,800	288	21,600
1-22-77	19,100	268	13,800
2-16-77	15,200	249	10,200
3-16-77	19,900	270	14,500
4-13-77	20,700	217	12,100
4-19-77	14,700	195	7,740
4-25-77	18,400	149	7,400
5- 3-77	28,000	153	11,600
5-11-77	16,500	121	5,390
6- 9-77	33,000	112	9,980
7-26-77	11,200	191	5,780
8-23-77	8,350	230	5,190
9-22-77	13,700	221	8,170
10-20-77	14,800	264	10,600
11-17-77	18,000	240	11,700
12-15-77	41,800	157	17,700

Table 17. Dissolved-residue data, Snake River near Anatone, Washington (Continued)

Date	Discharge (ft^3/s)	Dissolved residue (mg/L)	Dissolved residue (ton/d)
1-25-78	28,300	236	18,000
2-15-78	31,800	229	19,700
3-22-78	44,200	136	16,200
4- 5-78	57,900	129	20,200
4-20-78	49,200	117	15,500
4-29-78	80,300	129	28,000
5- 2-78	76,700	114	23,600
5- 3-78	80,700	114	24,800
5-16-78	76,600	93	19,200
5-17-78	75,000	97	19,600
5-24-78	63,400	87	14,900
6- 7-78	80,800	67	14,600
6-13-78	71,900	82	15,900
6-14-78	71,400	75	14,500
6-20-78	66,900	79	14,300
7-20-78	31,200	103	8,680
9-21-78	28,000	216	16,300
11-16-78	20,400	267	14,700
12-13-78	24,700	247	16,500
1-17-79	24,200	260	17,000
2-14-79	37,200	182	18,300
3- 8-79	35,300	211	20,100
3-22-79	40,900	205	22,600
4-19-79	43,200	180	21,000
5- 2-79	49,500	145	19,400
5-10-79	45,500	127	15,600
5-15-79	41,700	113	12,700
5-22-79	60,600	92	15,100
5-24-79	70,600	78	14,900
6- 5-79	56,100	103	15,600
6- 7-79	48,900	78	10,300

Table 18. Dissolved-residue data, Clearwater River at Spalding, Idaho

Date	Discharge (ft^3/s)	Dissolved residue (mg/L)	Dissolved residue (ton/d)
3-23-73	6,020	50	813
4-24-73	7,460	46	927
5- 8-73	15,200	28	1,150
5-16-73	29,200	41	3,230
5-21-73	28,600	27	2,090
5-30-73	18,300	41	2,050
6-11-73	14,000	56	2,120
6-19-73	17,500	47	2,220
12-18-73	18,800	50	2,540
1-19-74	28,000	60	4,540
3- 8-74	27,100	49	3,580
3-12-74	30,200	53	4,320
3-26-74	31,200	71	5,980
4-10-74	43,600	41	4,830
4-23-74	42,400	42	4,810
5- 8-74	65,600	33	5,840
5-15-74	28,600	39	3,010
5-23-74	22,800	31	1,910
6- 5-74	68,700	28	5,190
6-10-74	81,700	26	5,740
6-18-74	117,000	22	6,950
6-26-74	68,000	26	4,770
8- 6-74	6,210	34	570
11-13-74	4,950	31	414
2- 8-75	11,000	37	1,100
3-19-75	17,800	50	2,400
4-16-75	17,000	55	2,520
4-29-75	19,300	47	2,450
5-15-75	60,100	39	6,330
5-21-75	41,200	31	3,450
6- 5-75	63,900	18	3,110
6-10-75	59,100	30	4,790
6-12-75	61,000	19	3,130
6-17-75	54,600	19	2,800
6-24-75	57,200	20	3,090
7- 1-75	40,400	21	2,290
9-19-75	13,600	35	1,290
12- 3-75	41,200	47	5,230

Table 18. Dissolved-residue data, Clearwater River at Spalding, Idaho (Continued)

Date	Discharge (ft^3/s)	Dissolved residue (mg/L)	Dissolved residue (ton/d)
4- 6-76	36,800	39	3,880
4- 8-76	42,400	35	4,010
4-14-76	47,000	27	3,430
4-22-76	23,800	31	1,990
5- 3-76	43,000	35	4,060
5- 6-76	53,600	49	7,090
5-11-76	80,200	22	4,760
5-12-76	69,000	23	4,280
5-24-76	59,300	26	4,160
5-26-76	58,600	24	3,800
6-11-76	11,000	21	6,240
4-19-77	9,280	30	752
4-26-77	23,900	22	1,420
5- 4-77	24,000	23	1,490
5-16-77	15,800	22	939
11-16-77	5,780	30	468
12-14-77	27,000	64	4,670
1-26-78	17,500	37	1,750
2-16-78	17,400	44	2,070
3-22-78	25,300	29	1,980
4-19-78	16,100	29	1,260
4-28-78	29,700	46	3,690
5- 3-78	31,200	20	1,680
5-15-78	37,500	21	2,130
5-17-78	37,900	25	2,560
5-25-78	33,900	28	2,560
6- 5-78	49,800	20	2,690
6- 6-78	55,000	15	2,230
6- 8-78	55,400	13	1,940
6-12-78	37,400	16	1,620
6-14-78	39,900	21	2,260
6-19-78	32,300	18	1,570
7-20-78	11,900	26	578
7-20-78	11,900	26	835
9-21-78	12,300	40	1,330
10-19-78	2,960	40	320
11-15-78	3,000	44	356
12-13-78	11,700	33	1,040

Table 18. Dissolved-residue data, Clearwater River at Spalding, Idaho (Continued)

Date	Discharge (ft^3/s)	Dissolved residue (mg/L)	Dissolved residue (ton/d)
3- 5-79	10,800	75	2,190
3- 9-79	16,000	61	2,640
3-21-79	19,700	44	2,340
4-18-79	21,500	56	3,250
5- 1-79	30,900	31	2,590
5- 3-79	31,200	36	3,030
5- 8-79	47,800	93	12,000
5-11-79	31,200	48	4,040
5-14-79	36,900	37	3,690
5-16-79	46,200	26	3,240
5-21-79	47,300	31	3,950
5-23-79	55,100	26	3,870
6- 4-79	40,500	21	2,300
6- 6-79	38,800	20	2,100
6-18-79	26,600	21	1,510

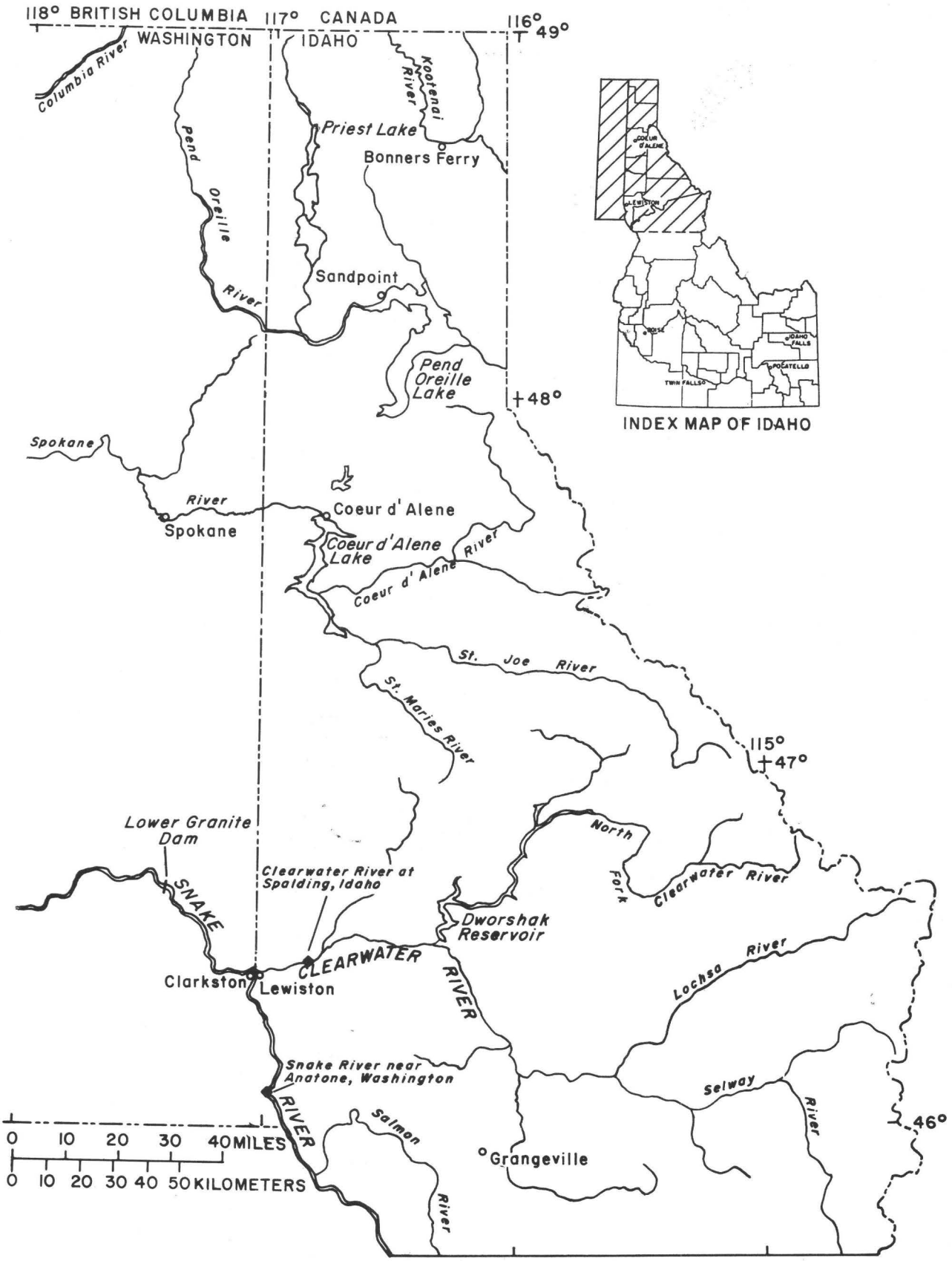


Figure 1. --Index Map of northern Idaho and eastern Washington.

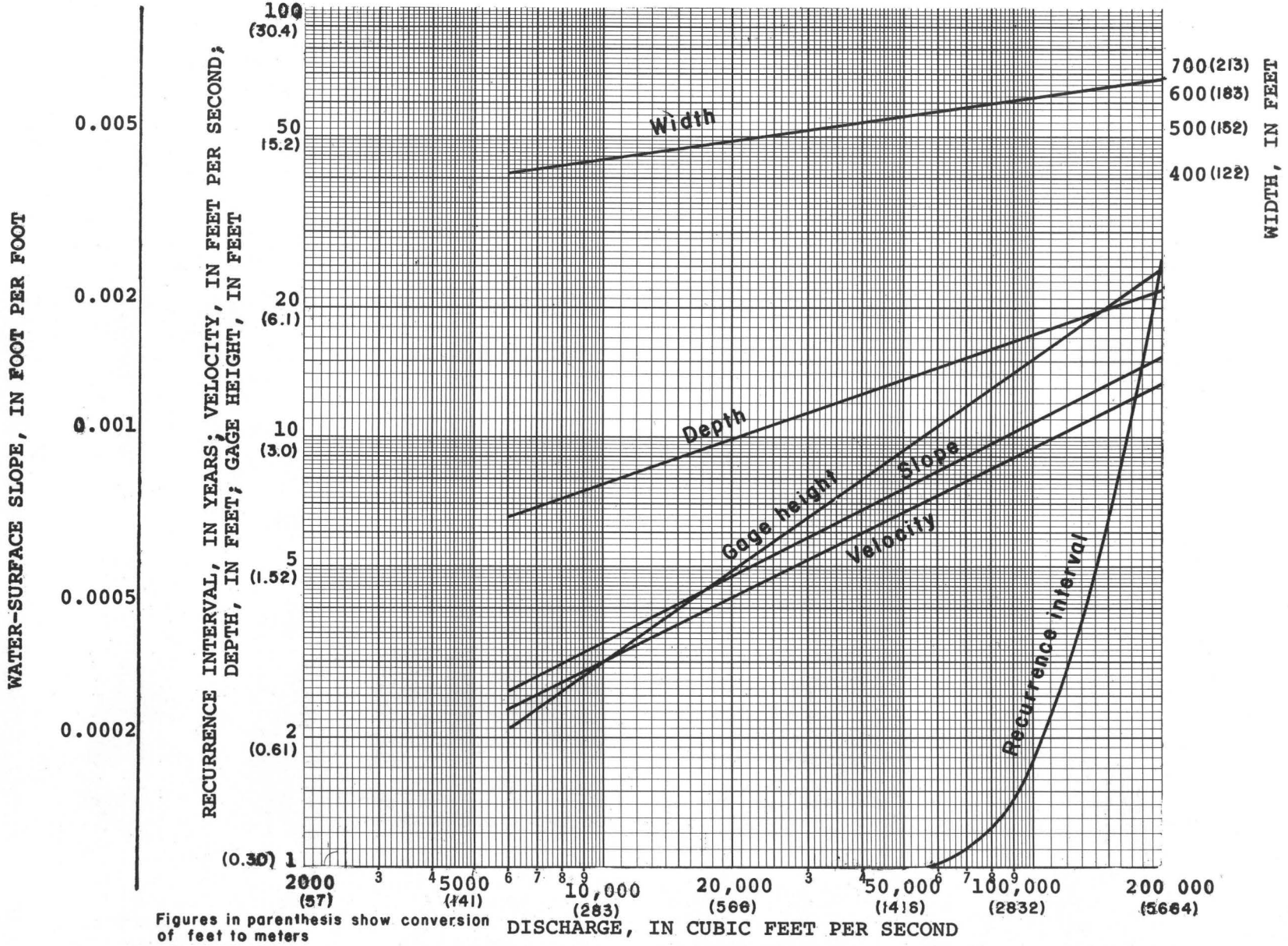


Figure 2.--At-a-station data of hydraulic and channel geometry, Snake River near Anatone, Washington, 1971-79 average.

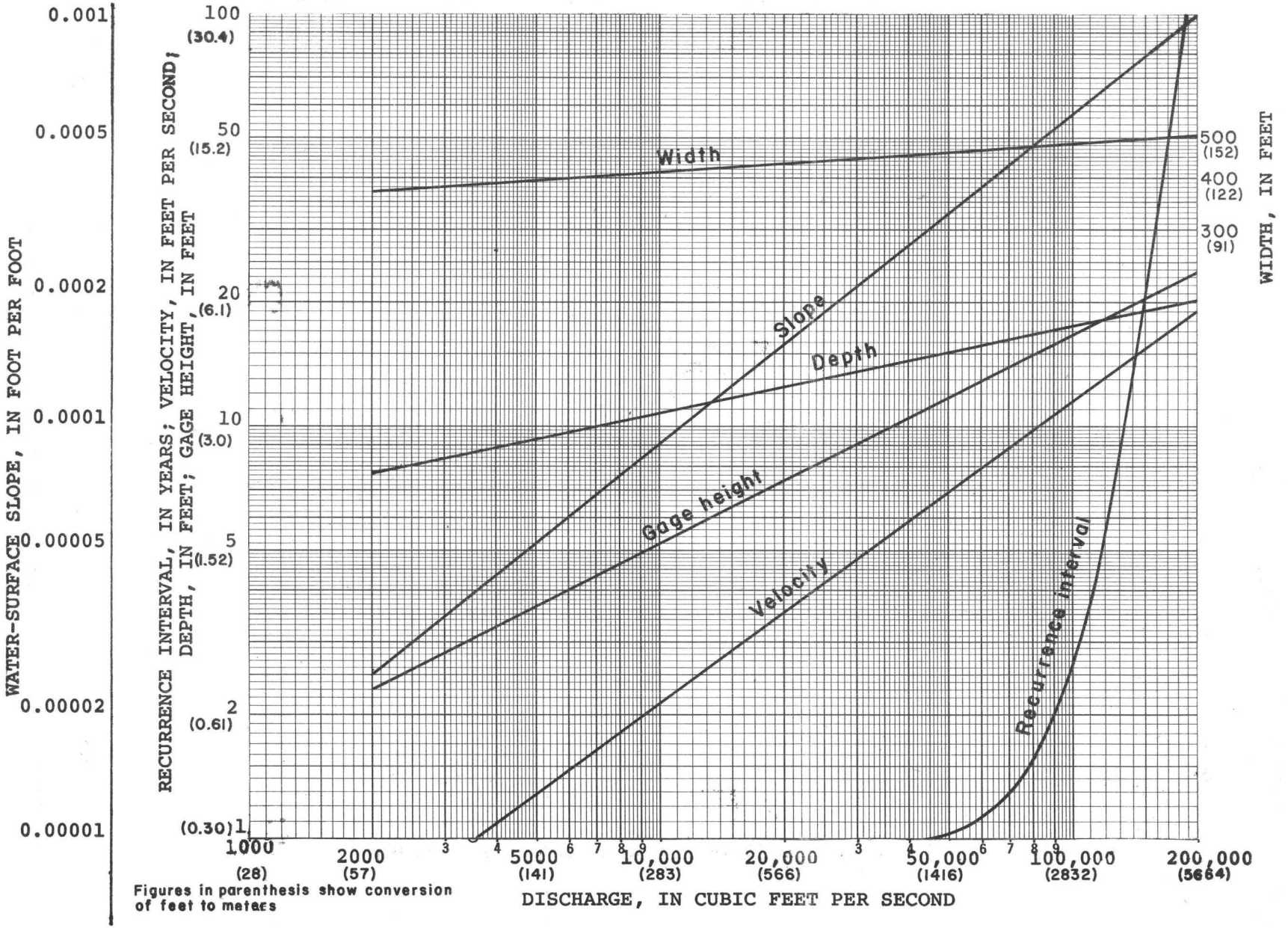


Figure 3.--At-a-station data of hydraulic and channel geometry, Clearwater River at Spalding, Idaho, 1971-79 average.

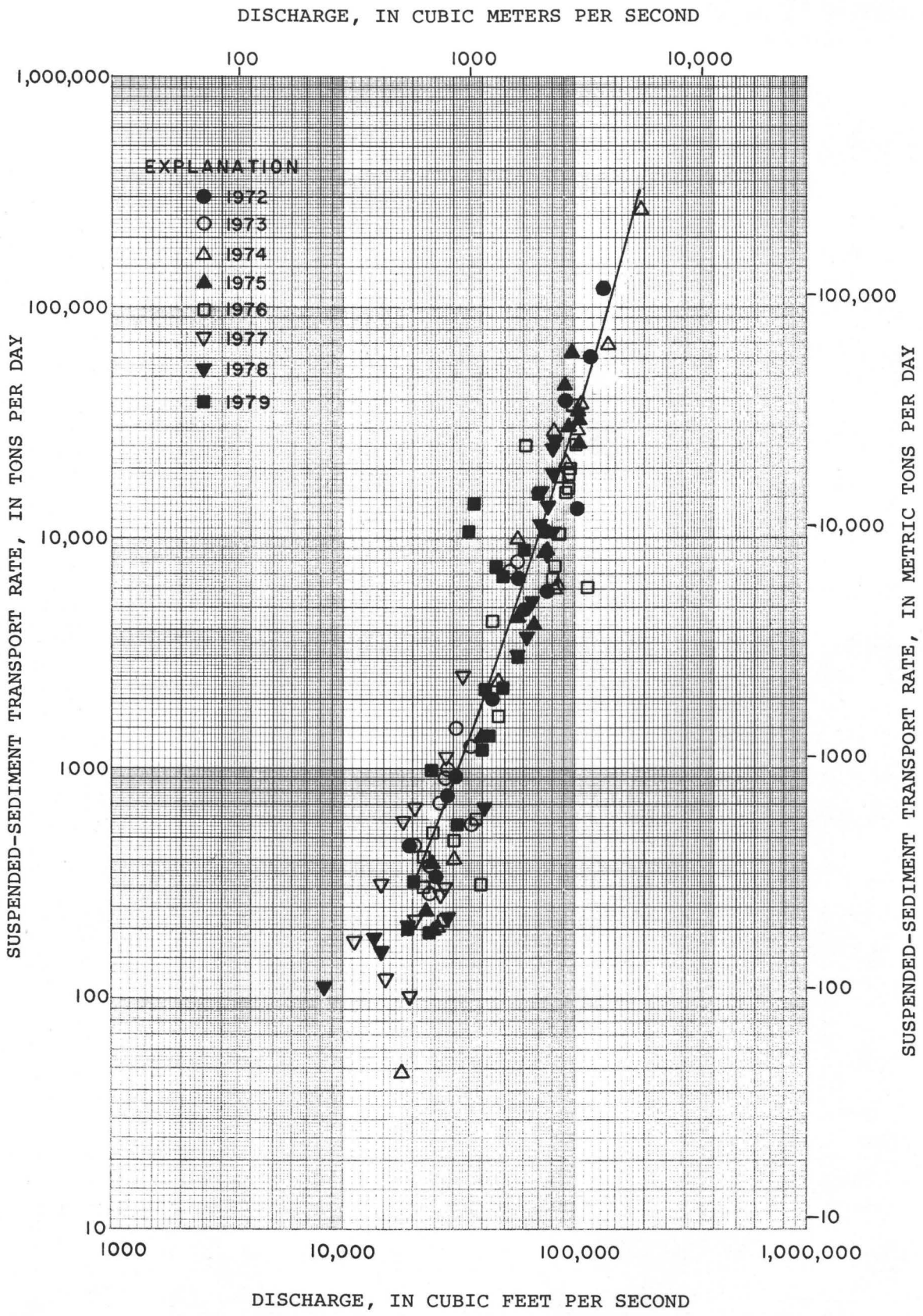


Figure 4.--Suspended-sediment transport rate as a function of stream discharge, Snake River near Anatone, Washington.

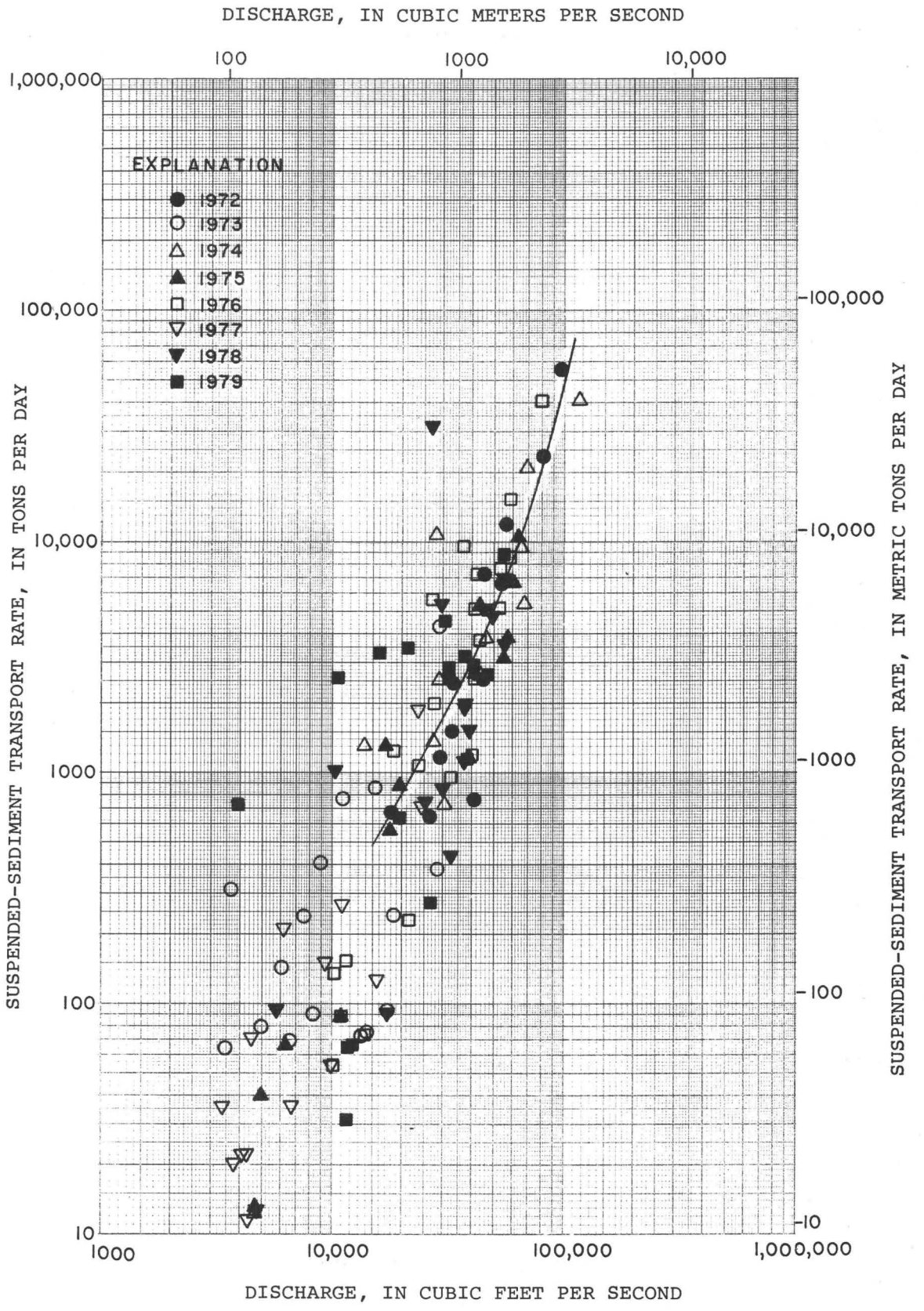


Figure 5.--Suspended-sediment transport rate as a function of stream discharge, Clearwater River at Spalding, Idaho.

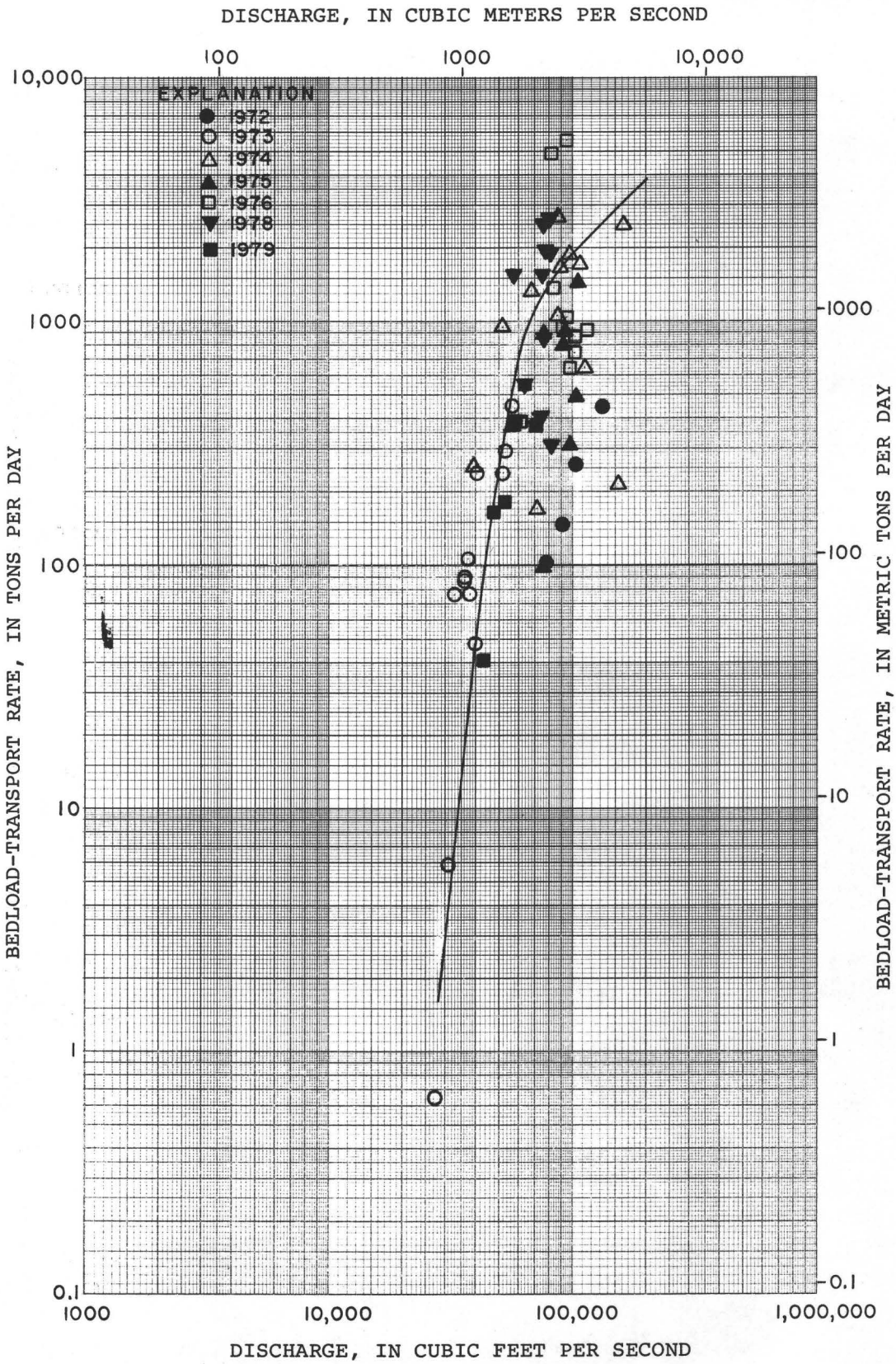


Figure 6.--Bedload-transport rate as a function of stream discharge, Snake River near Anatone, Washington.

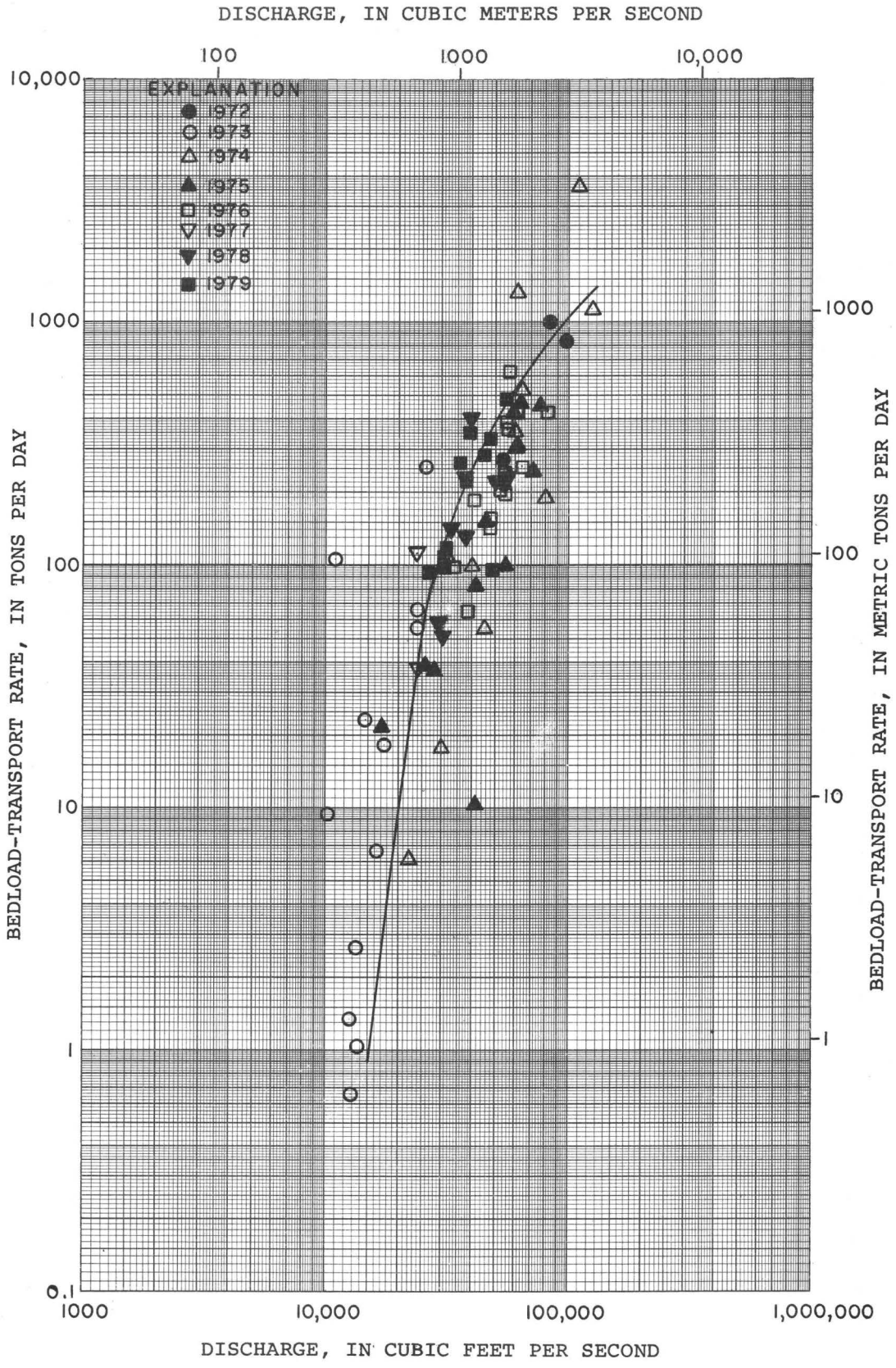


Figure 7.--Bedload-transport rate as a function of stream discharge, Clearwater River at Spalding, Idaho.

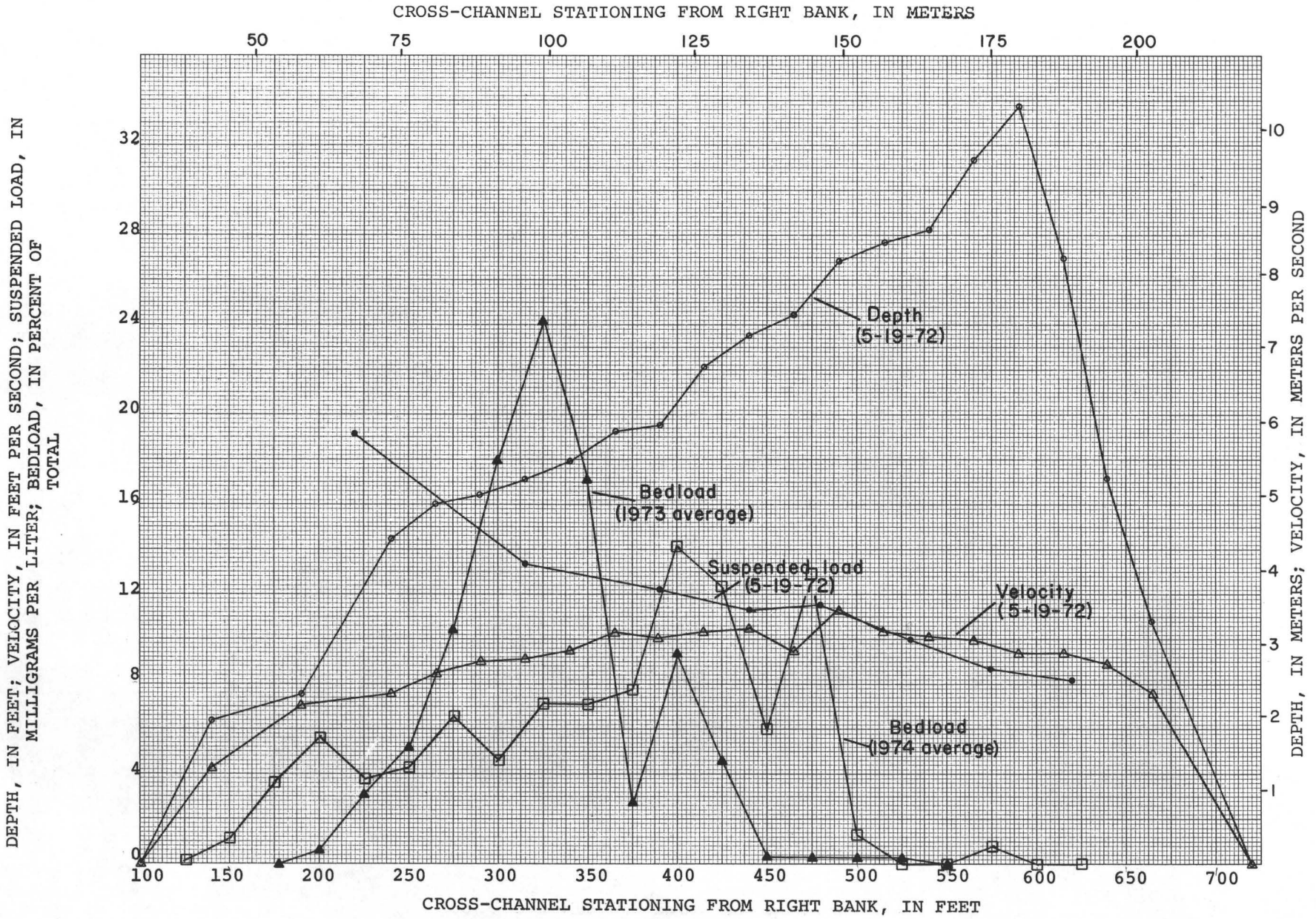


Figure 8.--Cross-channel variability in bedload, suspended load, depth, and velocity; Snake River near Anatone, Washington.

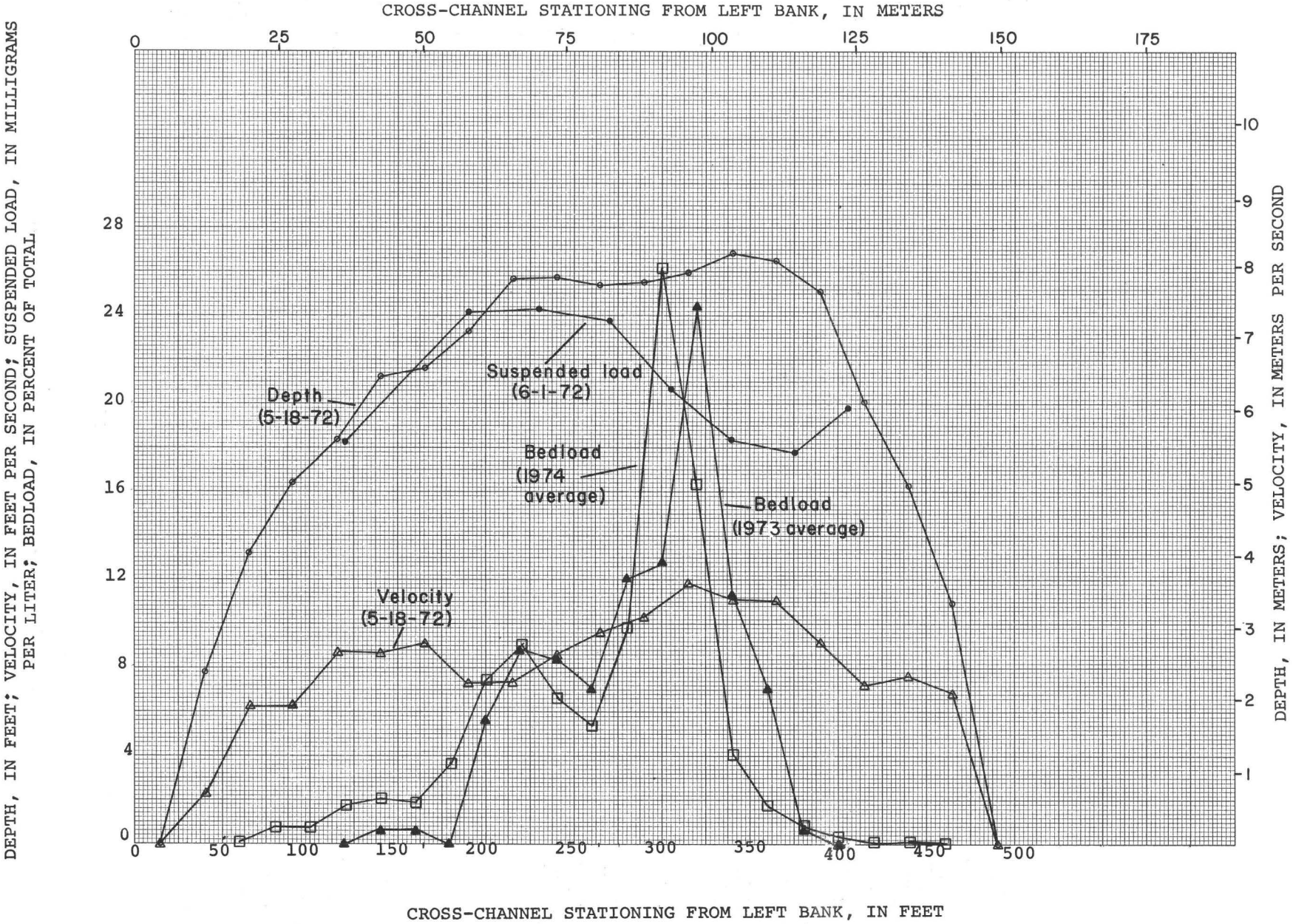


Figure 9.--Cross-channel variability in bedload, suspended load, depth, and velocity; Clearwater River at Spalding, Idaho.

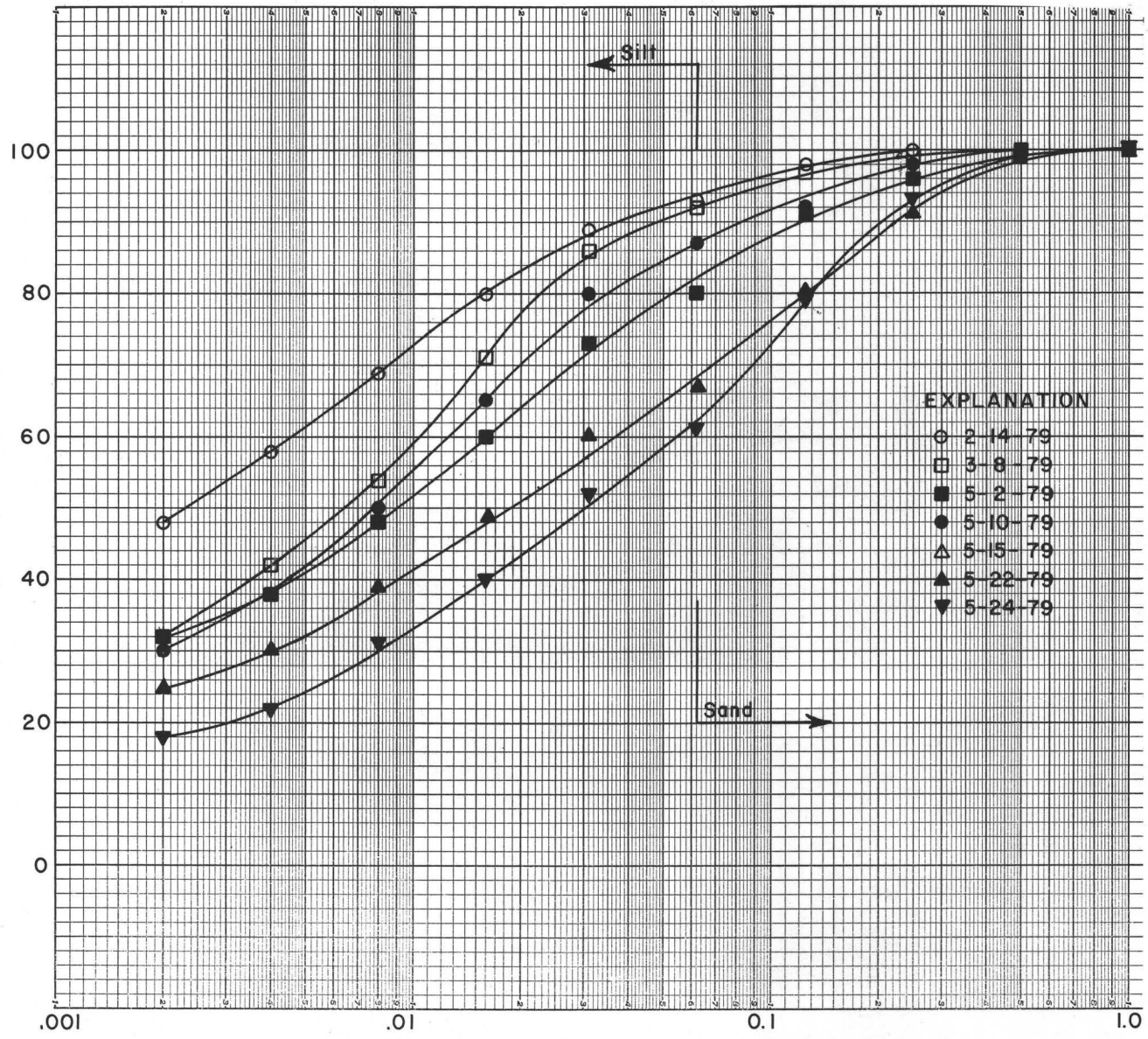


Figure 10.--Particle-size distribution of suspended sediment, Snake River near Anatone, Washington.

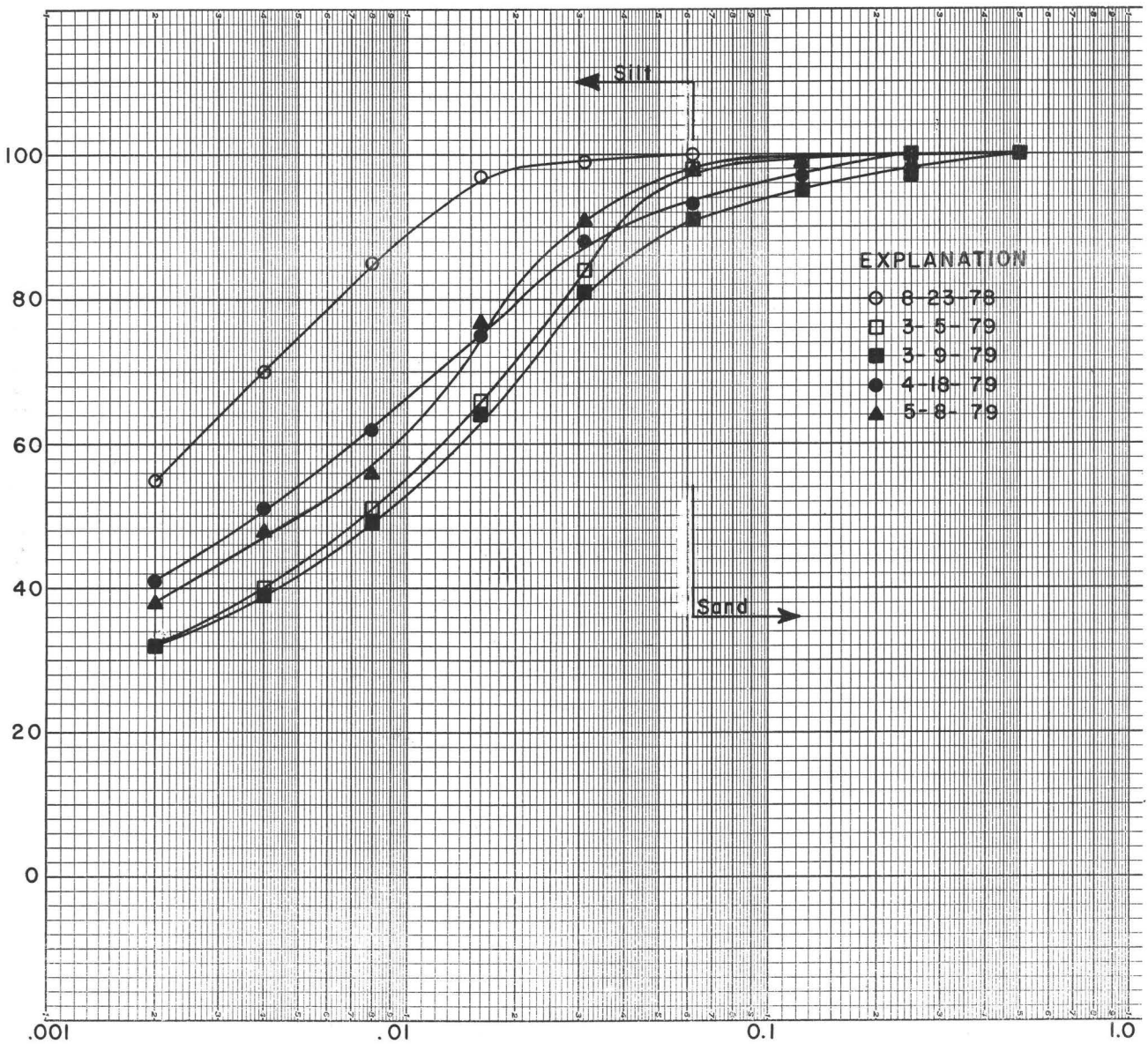


Figure 11.--Particle-size distribution of suspended sediment, Clearwater River at Spalding, Idaho.

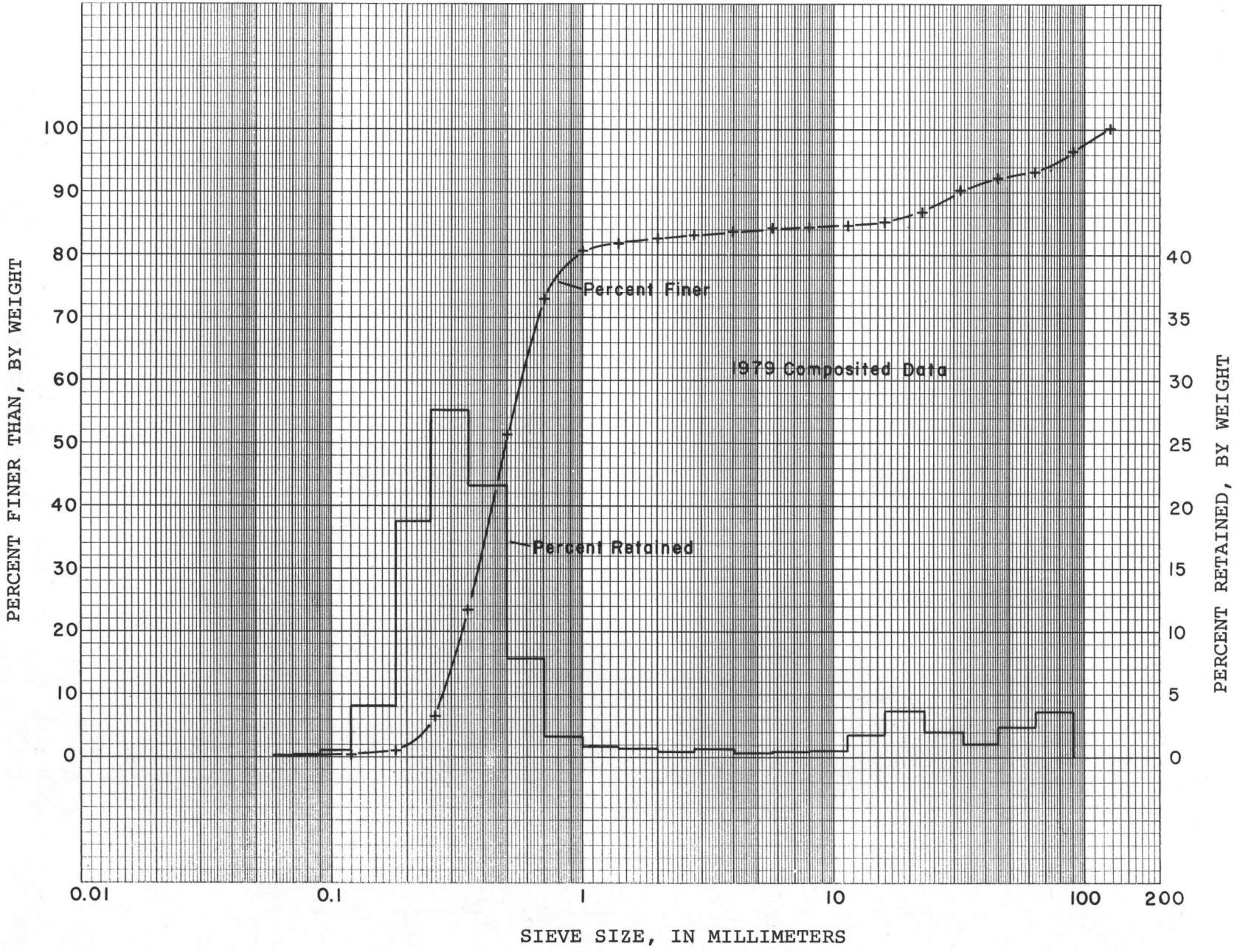


Figure 12.--Size distribution of bed material in transport (bedload), Snake River near Anatone, Washington.

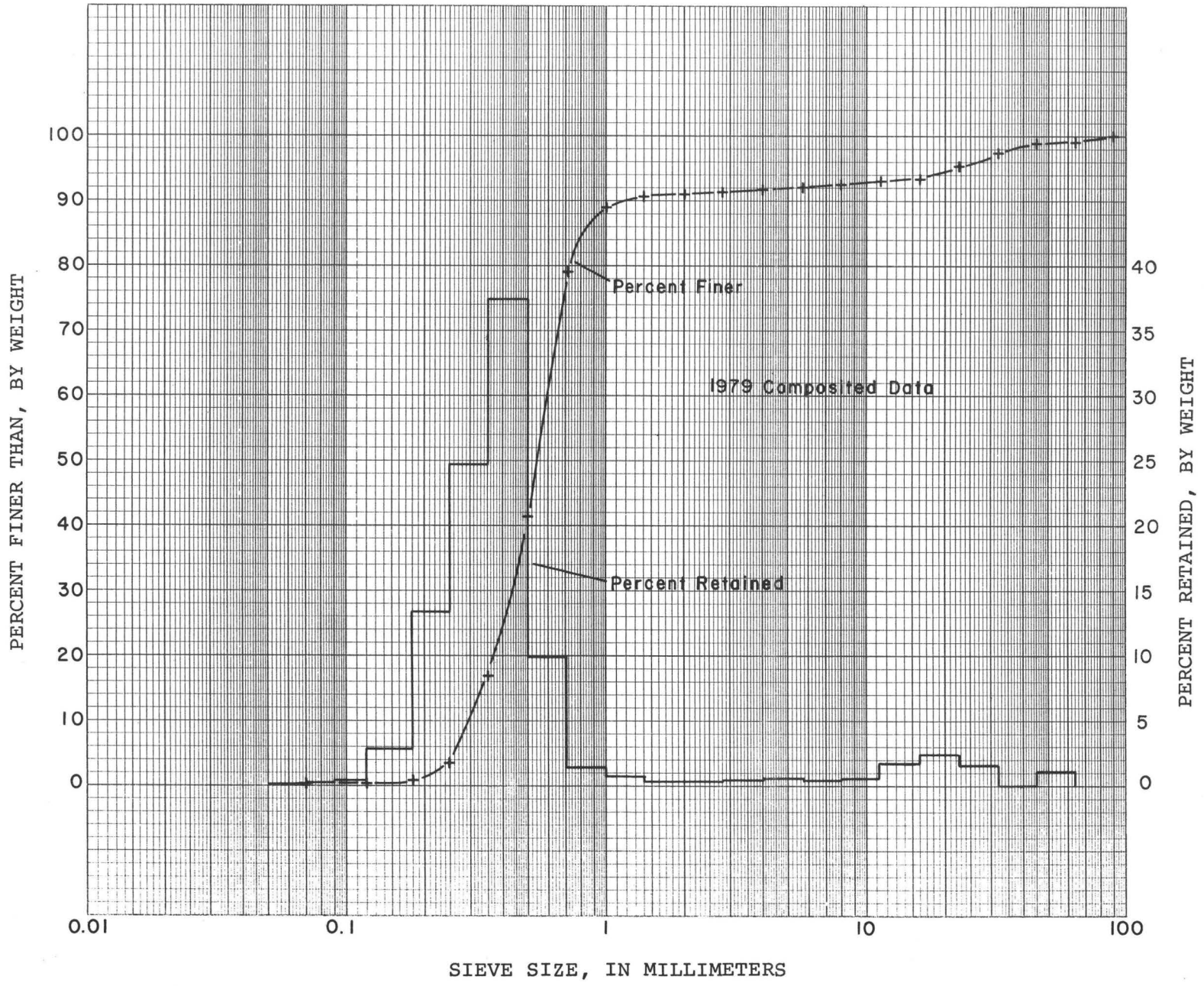


Figure 13.--Size distribution of bed material in transport (bedload), Clearwater River at Spalding, Idaho.

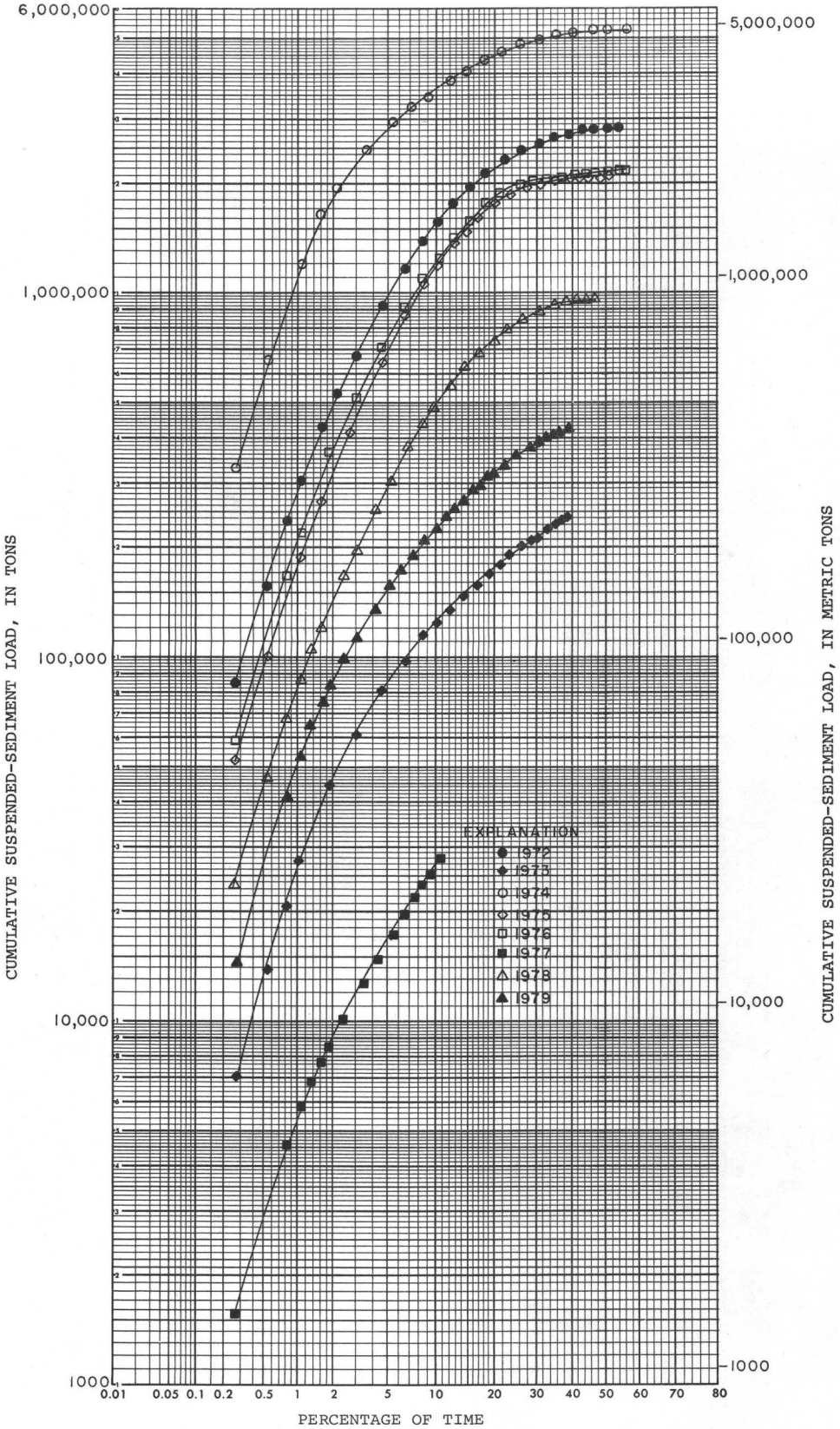


Figure 14.--Accumulative suspended-sediment load as a function of time, Snake River near Anatone, Washington.

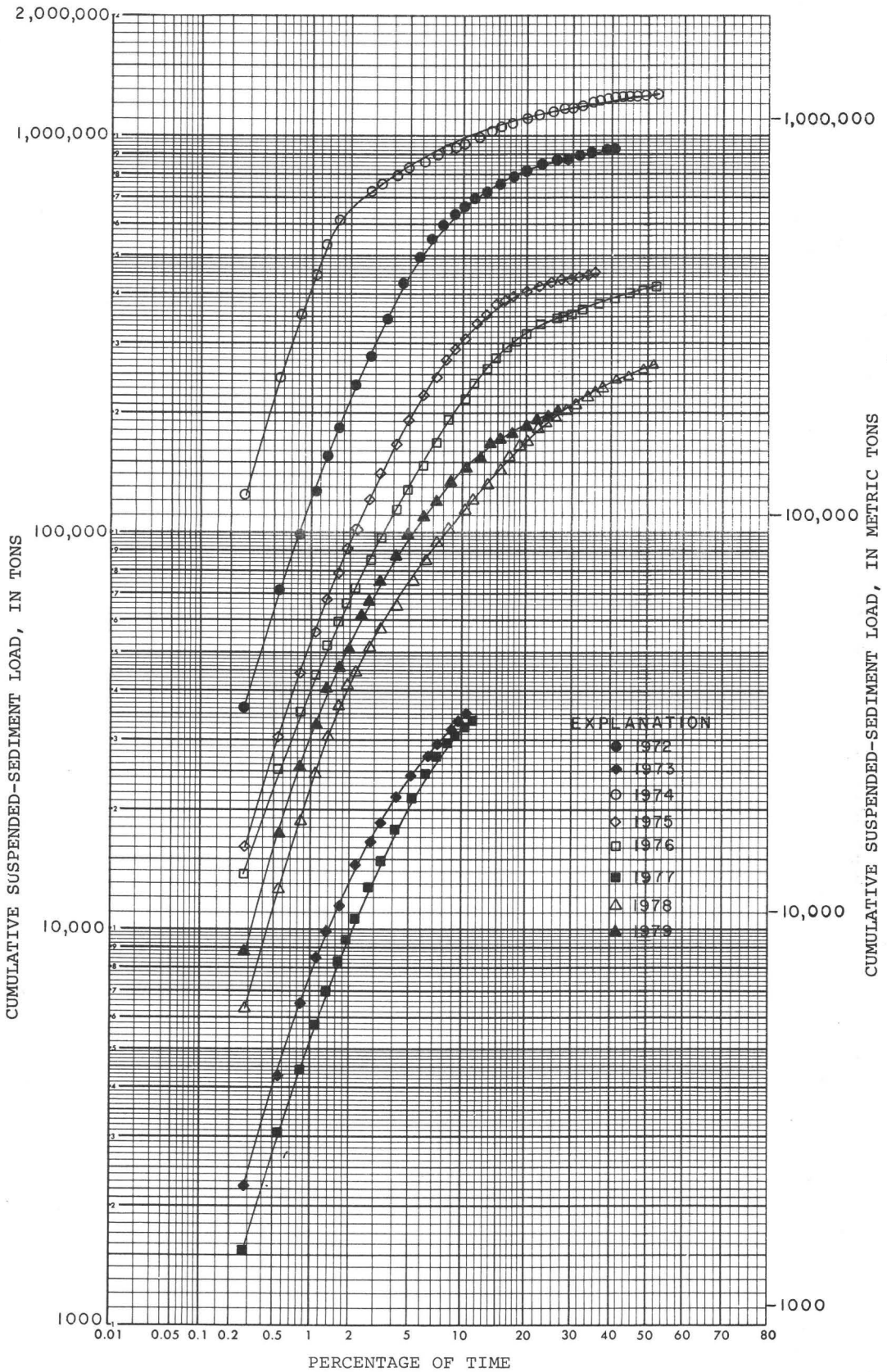


Figure 15.--Accumulative suspended-sediment load as a function of time, Clearwater River at Spalding, Idaho.

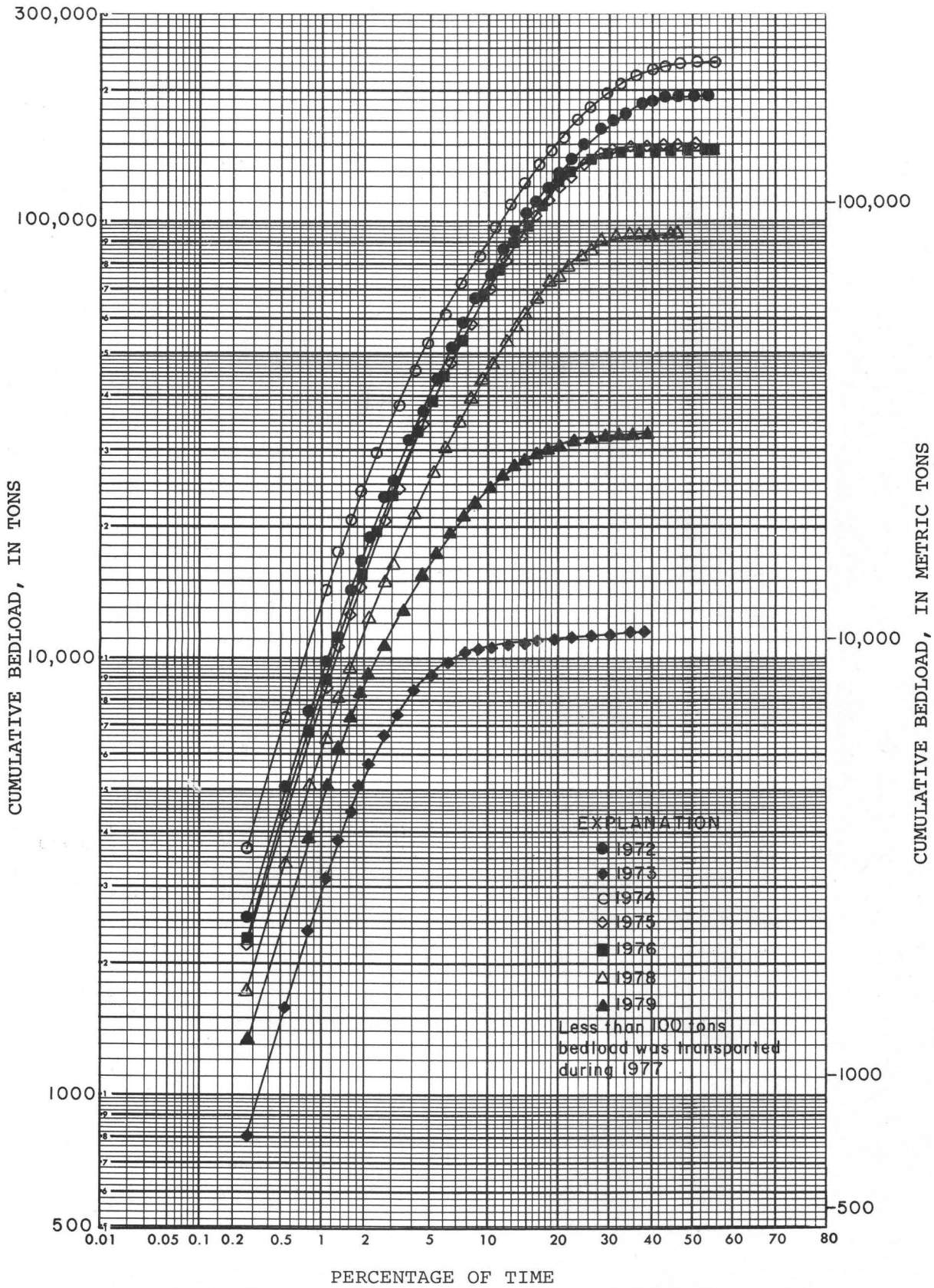


Figure 16.--Accumulative bedload as a function of time, Snake River near Anatone, Washington.

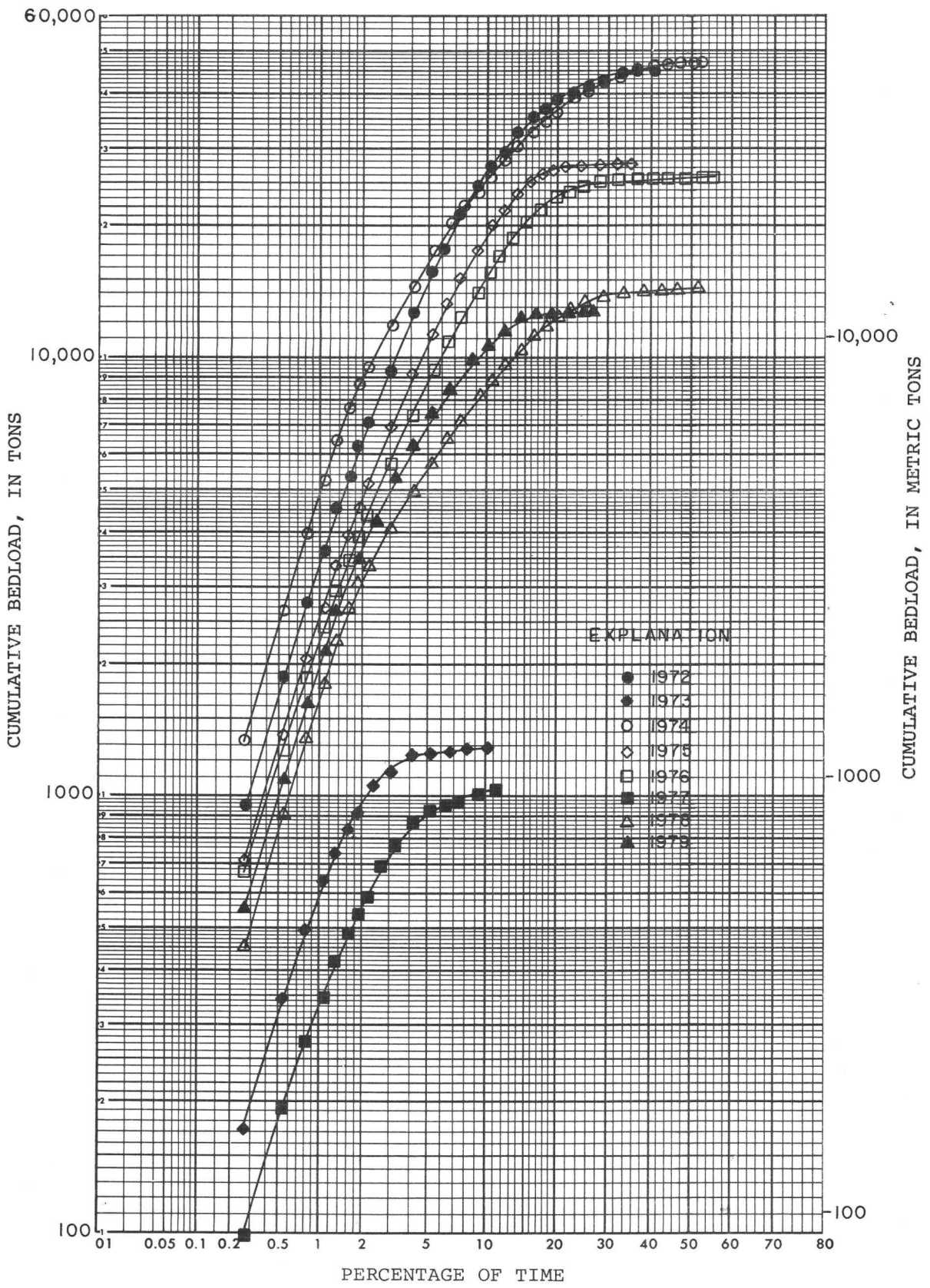


Figure 17.--Accumulative bedload as a function of time, Clearwater River at Spalding, Idaho.

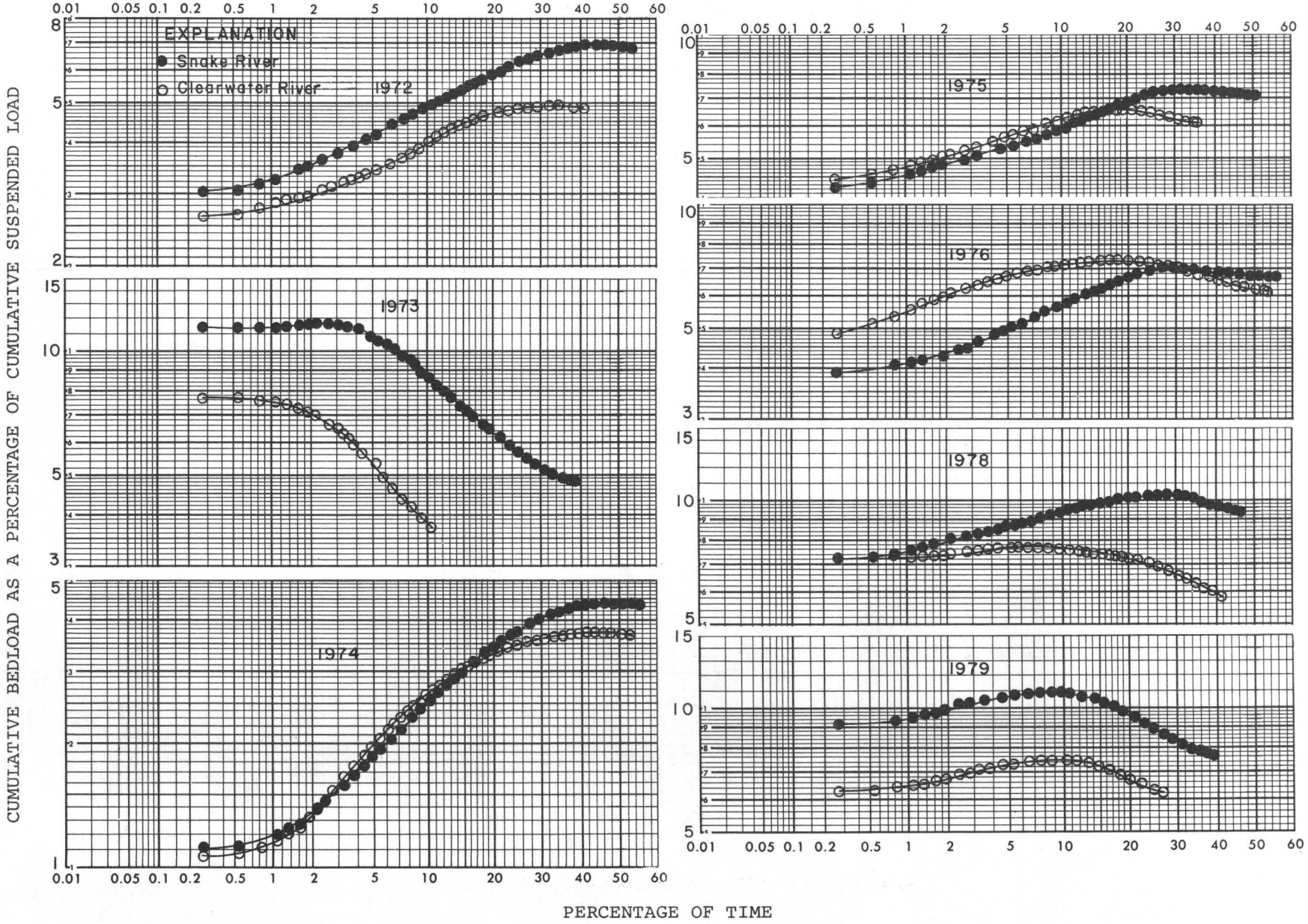


Figure 18.--Ratio of accumulative bedload to accumulative suspended load as a function of time.

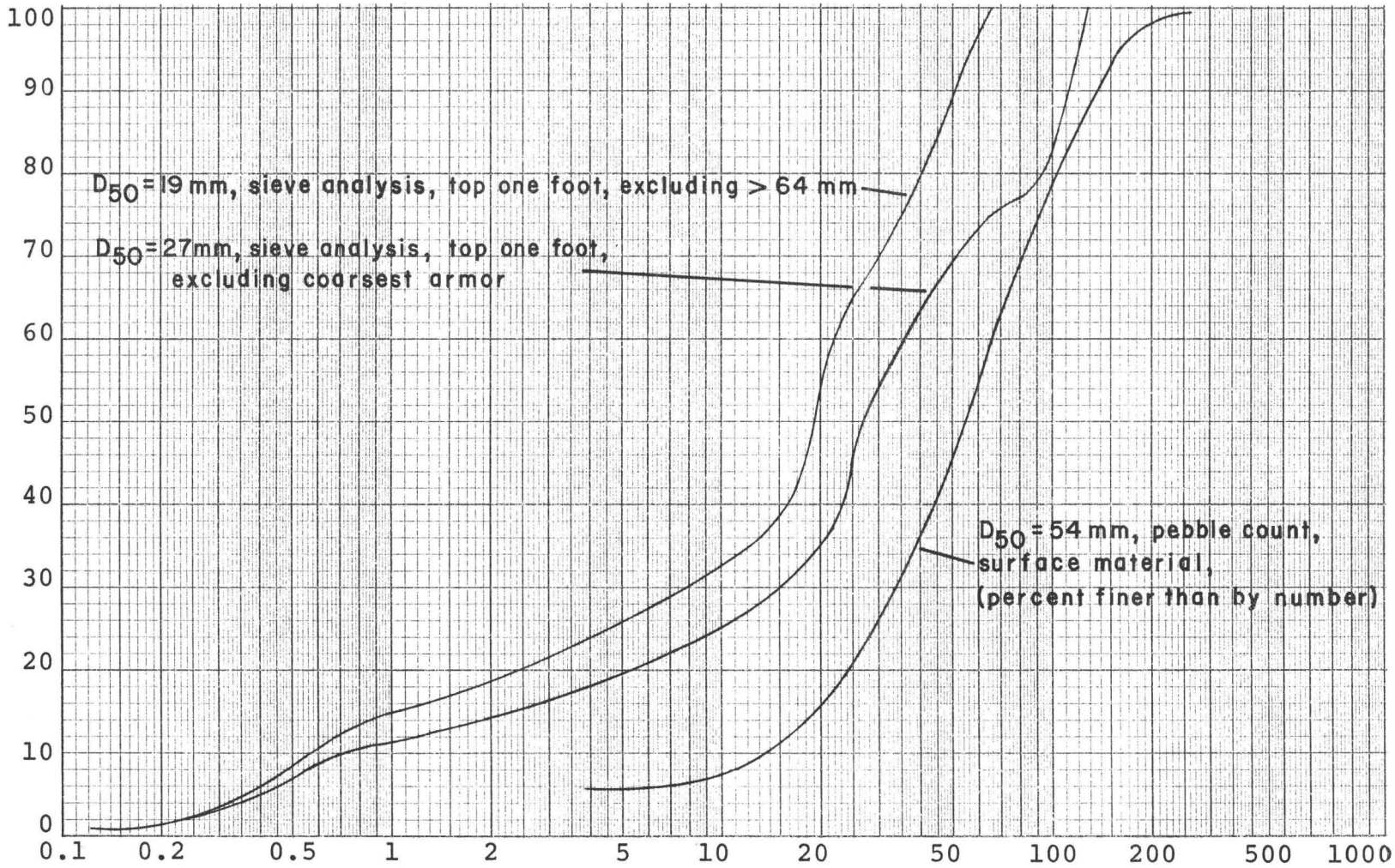


Figure 19.--Particle-size distribution curves of bed material, Snake River near Lewiston, Idaho, 1972.

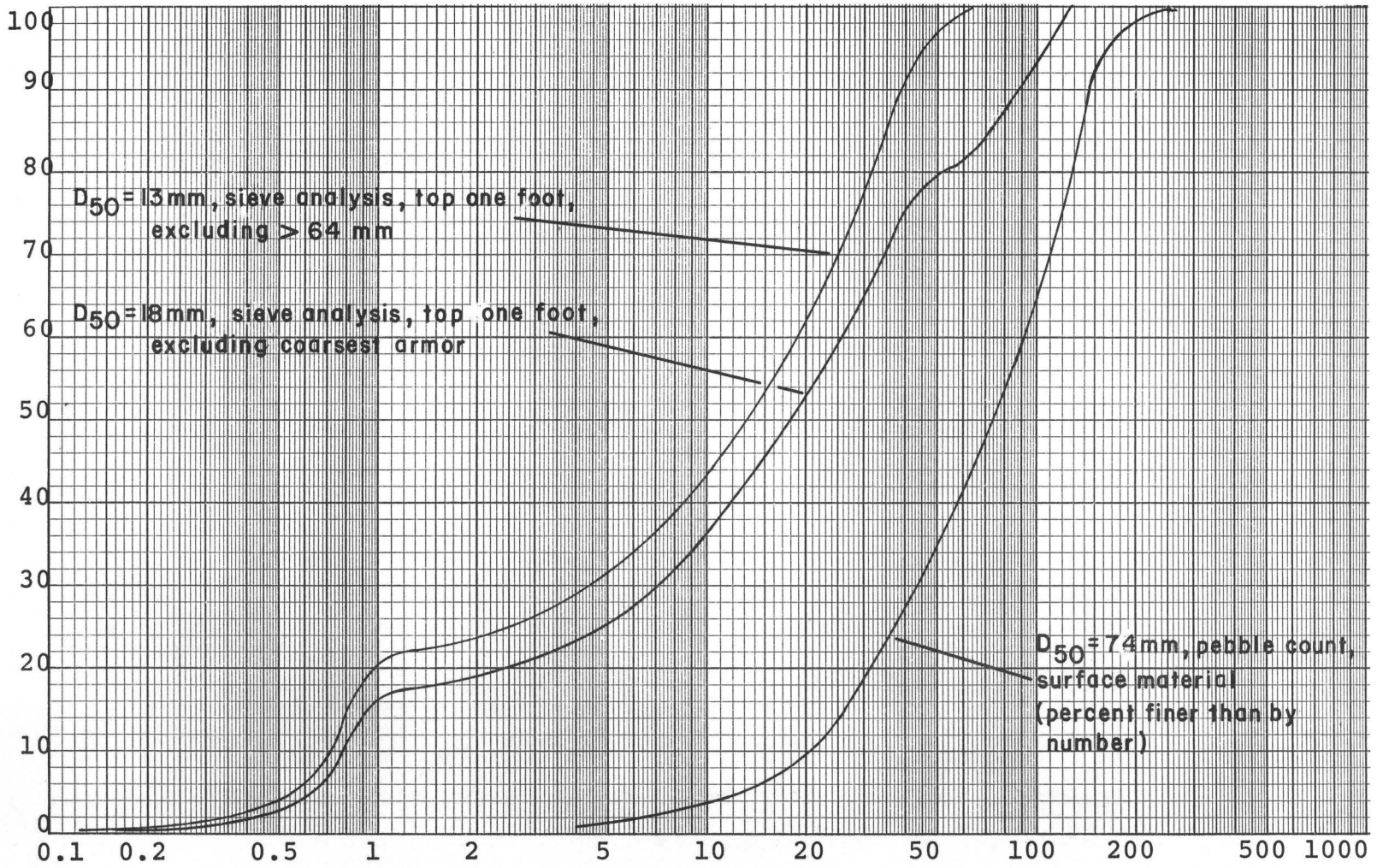


Figure 20.--Particle-size distribution curves of bed material, Clearwater River near Lewiston, Idaho, 1972.

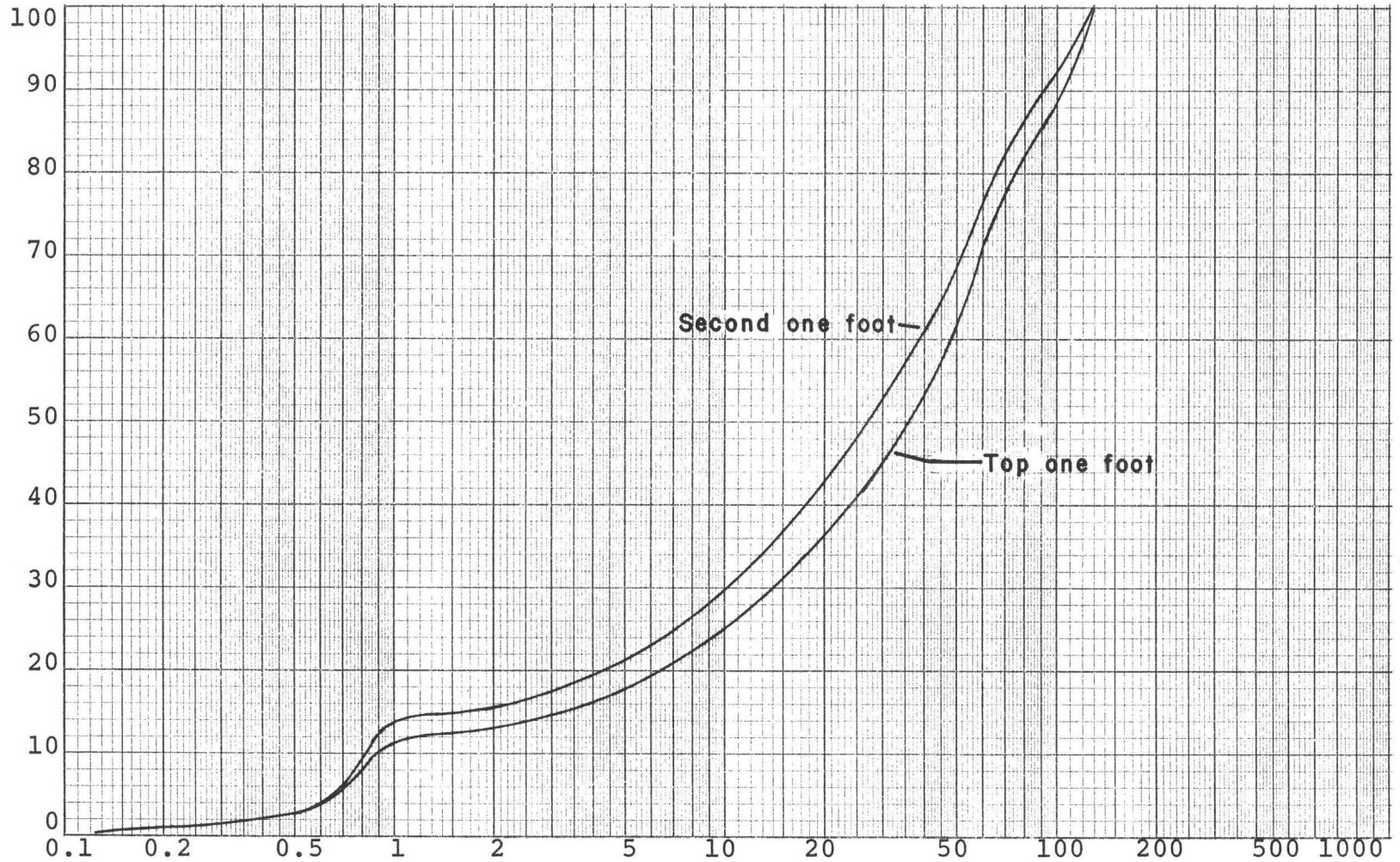


Figure 21.--Particle-size distribution curves of bed material, confluence of Snake and Clearwater Rivers at Lewiston, Idaho, 1972.

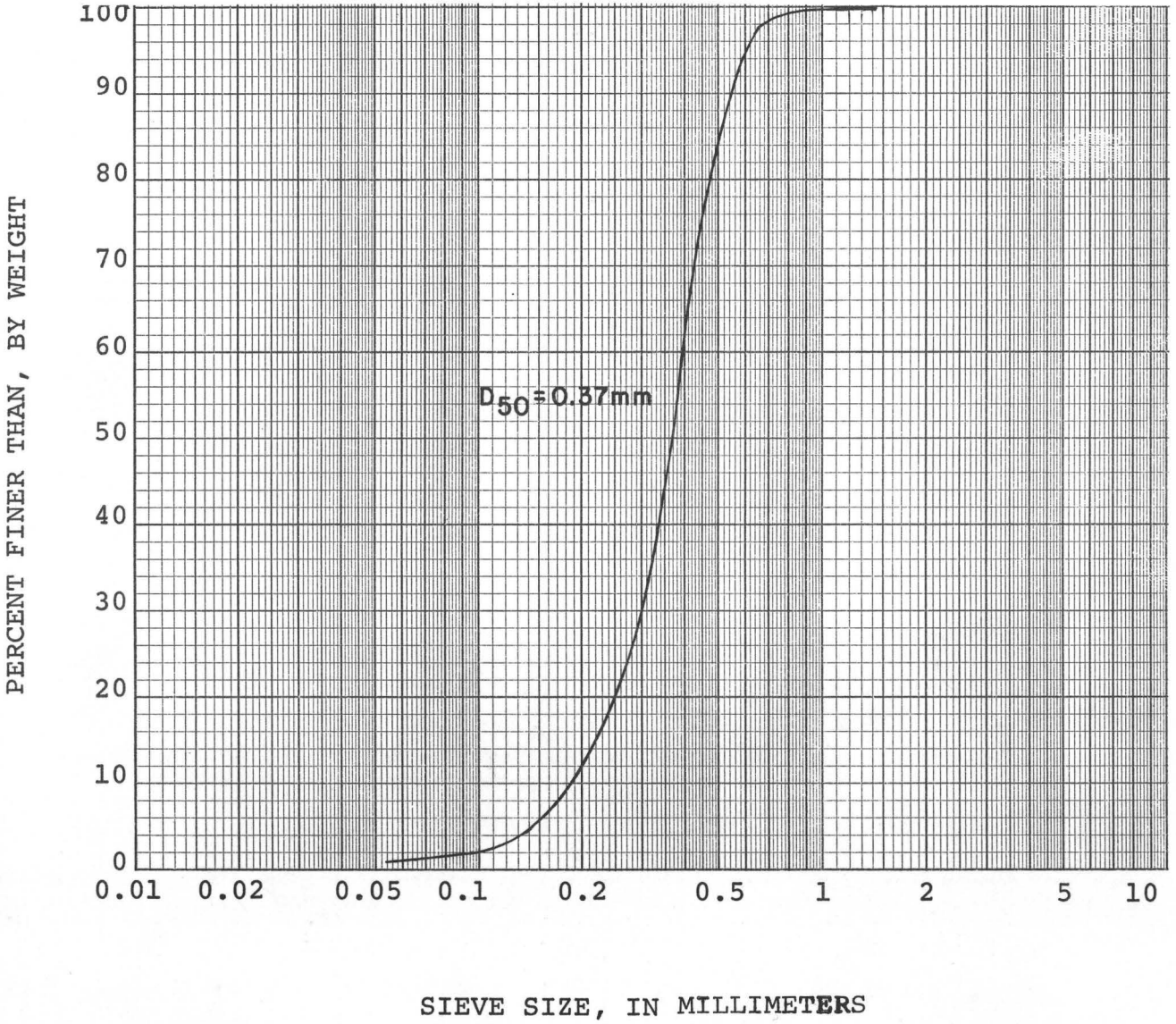


Figure 22 .--Particle-size distribution curves of sandbar deposits, Snake and Clearwater Rivers near Lewiston, Idaho. 1972.

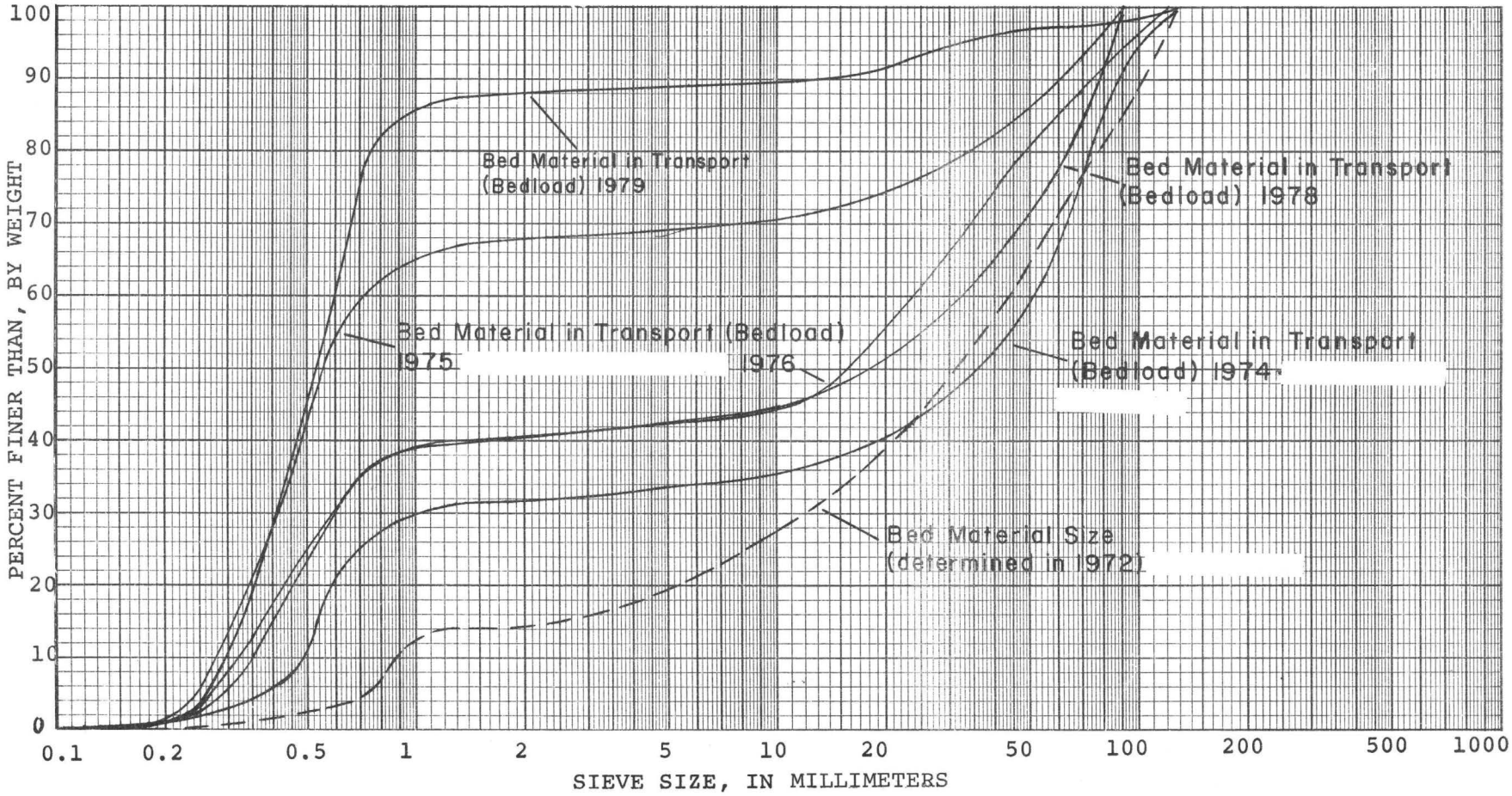


Figure 23.--Comparison of bedload and bed-material particle-size distributions, Snake and Clearwater Rivers in vicinity of Lewiston, Idaho.