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SUSPENDED SEDIMENT IN
THE COLORADO RIVER
1925-41

BY

C. S. HOWARD



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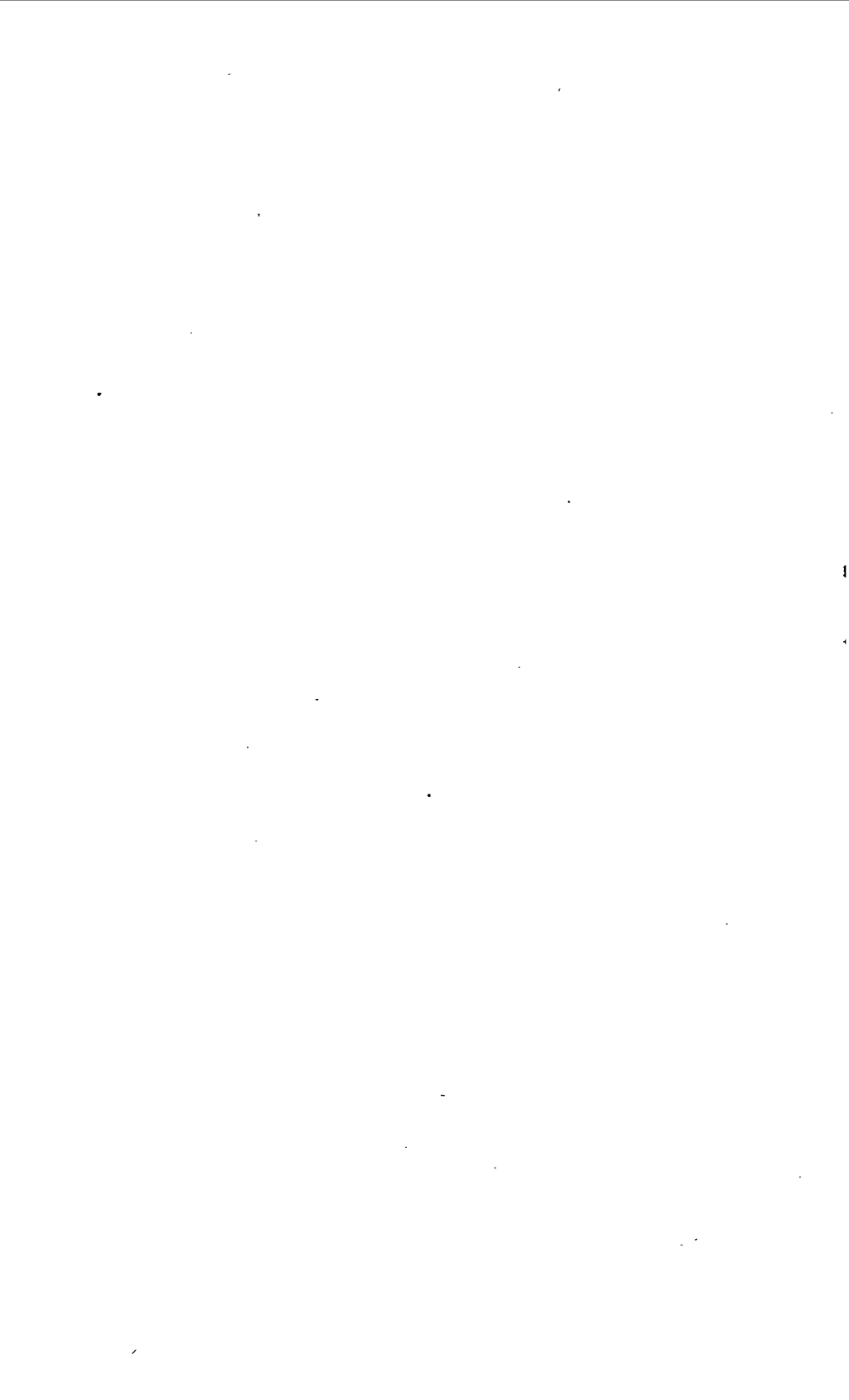
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SUSPENDED SEDIMENT IN THE COLORADO RIVER

1925-41

By C. S. HOWARD

ABSTRACT

This report gives the results of sediment-sampling studies of the Geological Survey in the Colorado River basin for the period from October 1, 1925, to September 30, 1941. Records are given for the entire period for the Grand Canyon gaging station and for shorter periods at other stations in the basin. The results reported consist of the records of the mean daily concentrations of sediment for all stations, and in addition, the mean daily discharge and daily load of sediment for many of the stations.

The available records indicate that the runoff of the Colorado near Cisco, Utah, plus the runoff of the Green at Green River, Utah, plus the runoff of the San Juan near Bluff, Utah, amount to about 90 percent of the runoff at the Grand Canyon gaging station, but the sediment loads at the three upper stations amount to only about 60 percent of the sediment load at Grand Canyon. The Little Colorado River and two or three other unsampled tributaries probably are the major sources of the unmeasured sediment.

Information is given concerning the sizes of the particles of the sediment at the Grand Canyon, Willow Beach, and Bluff stations during periods of this investigation.

The annual load at Grand Canyon during the 16 years ranged from 50,080,000 tons in 1933-34 to 480,000,000 tons in 1928-29, and the mean annual load at that station for the 16-year period was 200,200,000 tons. The mean annual runoff for the Grand Canyon station during the period was 12,640,000 acre-feet

INTRODUCTION

For the 16-year period, October 1, 1925, to September 30, 1941, sampling programs were carried on at the gaging station on the Colorado River near Grand Canyon, Ariz., and for shorter periods at other stations on the main river and its principal tributaries. The sampling points were at gaging stations for which records of discharge were being obtained and at which engineers were available for the collection of samples and the determination of the quantity of sediment in the individual samples.

Records of discharge were made available by A. B. Purton, Salt Lake City, Utah, and W. E. Dickinson and John H. Gardiner, Tuc-

son, Ariz., district engineers of the Geological Survey. The samples were collected by members of the staffs of those district offices. The computations of daily and annual loads were made by the personnel of the Water Resources Laboratory of the Geological Survey.

The field work and preparation of this report were under the supervision of W. D. Collins, Chemist in Charge, Quality of Water Division, Water Resources Branch of the Geological Survey.

The data presented in this report cover the entire period for which a comprehensive sediment-sampling program was carried on in the Colorado River Basin. The results obtained in the continuation of this program are prepared annually for presentation in the series of reports entitled "Quality of surface waters of the United States."

COLLECTION OF SAMPLES

Sediment samples were collected as a continuing project during the periods indicated at the following stations:

Colorado River near Cisco, Utah, May 14, 1929, to September 30, 1941.

Colorado River at Lees Ferry, Ariz., October 1, 1929, to December 16, 1933.

Colorado River near Grand Canyon, Ariz., October 1, 1925, to September 30, 1941.

Colorado River near Willow Beach, Ariz., October 1, 1934 to September 30, 1939.

Colorado River near Topock, Ariz., October 1, 1925, to March 31, 1939.

Green River at Green River, Utah, May 1, 1929, to September 30, 1941.

San Juan River near Bluff, Utah, August 13 to September 21, 1928; July 1 to September 30, 1941.

Little Colorado River at Grand Falls, Ariz., July 6 to September 26, 1931.

The locations of these stations are shown on the map of the Colorado River drainage basin, figure 1.

COLORADO RIVER SAMPLER

The samples were collected by means of the sampler shown in plate 1. This sampler, designed by Carl H. Au, hydraulic engineer of the Geological Survey and described in a previous publication,¹ was designed to be attached to the cable in place of the current meter used for discharge measurements and was made so that suitable weights could be added to the bottom of the sampler.

The first samplers were made to puncture a paper covering a 5/8-inch hole in an ordinary milk-bottle cap, but the samplers were modified so that a stopper could be pulled out of a rubber cap that had been fitted to a regular pint milk bottle in place of the ordinary milk-bottle cap.

¹ Howard, C. S., *Suspended matter in the Colorado River in 1925-28*: U. S. Geol. Survey Water Supply Paper 636, pp. 18-19, 1930.

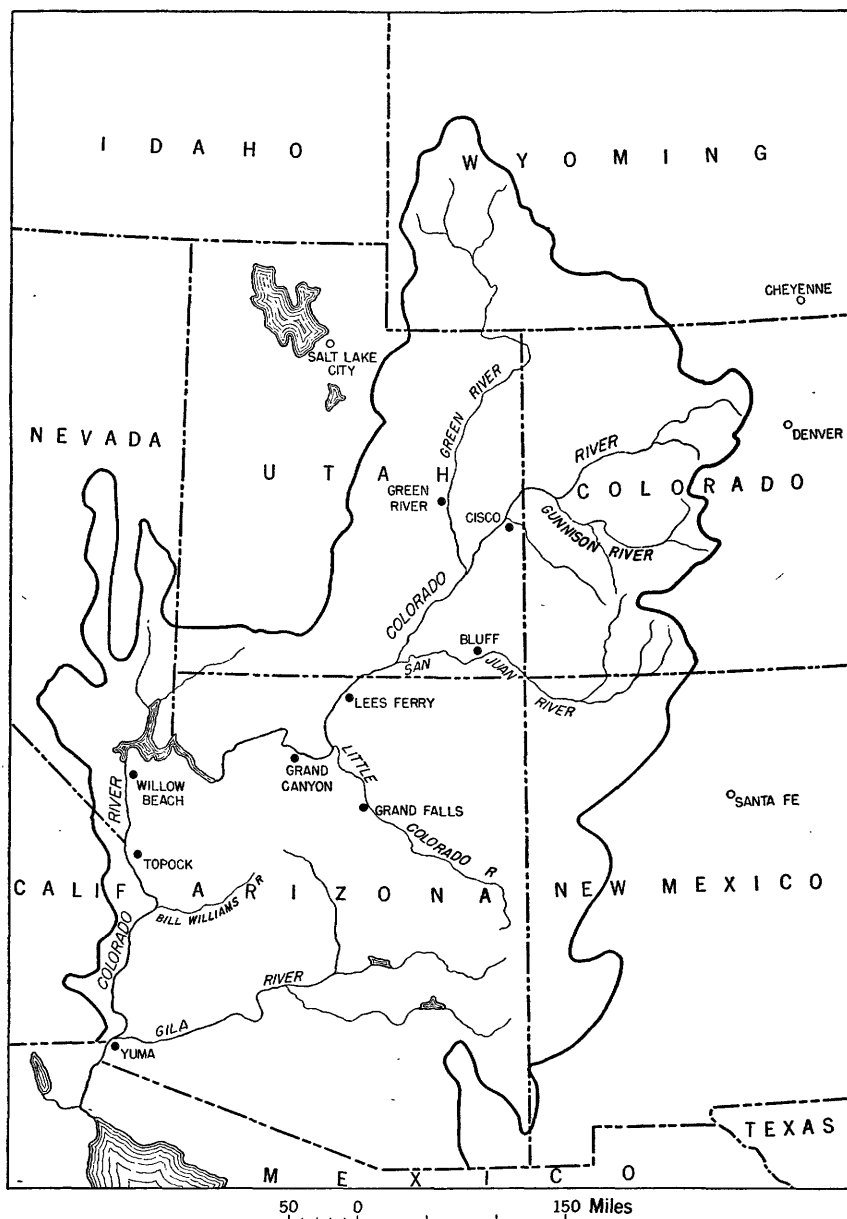


FIGURE 1.—Map of the Colorado River drainage basin showing sediment-sampling stations.

TYPES OF SAMPLES COLLECTED

INDIVIDUAL SAMPLES

During the early part of the investigation "bottom," "surface," and "average" ("integrated") samples were collected. The bottom samples were collected by lowering the bottle to the bottom, opening the bottle, and allowing it to stay there for a time long enough to be filled, after which it was raised rapidly. The average, or integrated, samples were obtained by allowing the bottle to become nearly full as it was being lowered and raised, or, under some conditions, only during the raising. The detailed results obtained on the different types of samples are given in an earlier paper.²

INTEGRATED SAMPLES

The method of collecting average, or integrated, samples used in this study is the "depth-integration method" described in a report of the United States Engineers.³

Throughout this investigation average samples were used for the computation of the mean concentration for each day. During the first 3 years the average sample was collected by lowering the empty bottle to the bottom, opening the bottle, and raising it at such a rate that the bottle was full when it reached the surface. During the remainder of the investigation the average sample was taken by lowering to the bottom a bottle with an open hole in the cap and raising it at such a rate that it would not be quite full when it returned to the surface. At some river stages it was not possible to lower and raise the bottle fast enough to get a partially filled bottle and it was necessary to use the bottle-opening device. At times when the river was carrying fine drift, such as grass, needles, and the like, it was not possible to operate the bottle-opening device and integrated samples were obtained by lowering the bottle with the open hole in the cap to such a depth that it could be lowered and raised before the bottle became full. It has been shown⁴ that there is an initial inrush of water into the bottle when it is opened at the bottom, and an undue proportion of the sample comes from the greatest depth. As a result of this inrush the samples collected in this manner are not representative for the entire depth, but no data are available to show the magnitude of the error in samples collected from the Colorado River by this method.

² Howard, C. S., *op. cit.*, pp. 29-40.

³ U. S. Engineer Office, St. Paul, Minn., A study of methods used in measurement and analysis of sediment loads in streams, Report 1, Field practice and equipment used in sampling suspended sediment, pp. 72-74, 1940.

⁴ U. S. Engineer Office, St. Paul, Minn., A study of methods used in measurement and analysis of sediment loads in streams: Report 1, Field practice and equipment used in sampling suspended sediment, pp. 72-74, 1940; Report 3, Analytical study of methods of sampling suspended sediment loads in streams, pp. 57-60, 1941; Report 5, Laboratory investigation of suspended sediment samplers, pp. 88-91, 1941.

FREQUENCY OF SAMPLING

At each gaging station a set of integrated samples was collected at three points in the cross section. It was planned to have one set of samples collected each day during periods of normal stage and two or more sets each day during periods of flood stage. It was not possible to carry out this daily sampling program at all stations, and for several periods the records are incomplete.

SIZE SAMPLES

Additional samples for the determinations of the sizes of the particles of the suspended sediment were collected approximately twice each week at the Grand Canyon station during the period from April 1, 1935, to September 30, 1941. For part of this period similar samples were collected at the Willow Beach and Bluff gaging stations.

DETERMINATION OF SUSPENDED SEDIMENT

DETERMINATIONS

Most of the determinations of the quantities of suspended sediment were made at the field stations. The original records were sent to the laboratory in Washington for review and further computations.

WEIGHING THE SAMPLES

For the period October 1, 1925, to March 31, 1930, the weight of each sample was considered to be 473 grams, but after March 31, 1930, each sample was weighed and that weight used in computing the concentration of sediment.

WEIGHING THE SEDIMENT

The weight of sediment in most of the samples was determined by filtering the samples through weighed filter papers, which were then dried and reweighed. Corrections for the moisture content of the filter papers were made by weighing a check paper at the time of the original and the final weighings.

The sediment in samples collected at Grand Canyon after October 1, 1940, was determined by transferring the sediment with as little of the original water as possible to a weighed evaporating dish and weighing the dried sediment.

COMPUTATIONS

CONCENTRATIONS

The sediment concentrations were computed for each sample and reported in percent by weight of the samples as collected. The mean concentration was computed from the individual results, usually as the average of the individual determinations, but sometimes one or

more of the individual determinations were obviously not representative for the day and therefore were not considered in computing the mean concentration for the day. During flood periods when sufficient samples had been collected, the mean concentration for the day was computed by considering the mean concentration for each set of samples and the rate of discharge for the part of the day for which those samples were considered representative.

LOADS

Loads of suspended sediment were reported as tons per day, tons per year, and for some stations for which sufficient records were available as tons per month. No effort was made to compute the volume of the sediment carried in any period.

Daily loads.—The daily loads of sediment were computed from the mean concentration for the day and the mean daily discharge by the following equation:

$$\text{Daily load (in tons)} = \text{mean concentration (percent by weight)} \times \text{mean daily discharge (in second-feet)} \times 27.$$

The mean concentration of sediment was estimated for some of the days for which records were not available and the daily loads computed from these estimated values.

Monthly loads.—Monthly loads were computed as the sum of the daily loads for months for which data were available for all the days. These loads, where computed, are listed in the tables giving the daily loads of sediment.

Annual loads.—The annual loads of suspended sediment were computed as the sum of the monthly loads for those stations for which there were sufficient data for the computation of the monthly loads. If monthly loads were not computed the annual load was computed from the weighted-average concentration of all the samples collected during the year and the total discharge for the year. The weighted-average concentration was computed by multiplying the mean daily concentration by the mean daily discharge for each day for which samples were available and dividing the sum of those products by the sum of the mean discharge values for the same days.

The annual loads at stations for which sufficient records are available for computation of such loads are given in table 1.

DAILY SEDIMENT RECORDS

MEAN DAILY CONCENTRATIONS

The mean daily concentrations of sediment are given in tables 5 to 18 for all days for which sufficient records were available. For some days on which samples were not collected a concentration value was

estimated. In addition to the mean daily concentration values, the mean daily discharge and daily load of sediment are given for certain periods for most of the stations.

These tables show the variation in concentration and load of sediment from day to day. The highest concentrations in the main river occurred at the Grand Canyon station, and the highest concentrations in the tributaries occurred at the Bluff station on the San Juan River.

The records for the Willow Beach, Topock, and Yuma stations from 1935 to 1939 are of interest in showing the changes in concentration and load that occurred at those stations after the closing of Boulder Dam on February 1, 1935. After that date water released at Boulder Dam was clear, except for periods of density flows,⁵ and the suspended sediment represented sediment picked up in the 10-mile stretch between Boulder Dam and the Willow Beach station and in the 105-mile stretch between the Willow Beach and Topock stations. After the closing of the dam the sediment concentration at Willow Beach and Topock showed a decrease, and at the end of the sampling periods at those stations the water was practically clear.

SUSPENDED SEDIMENT IN INDIVIDUAL SAMPLES

Records for the Grand Canyon and Topock gaging stations for the period 1925-28⁶ showed the concentrations for the individual samples. Similar records are given in the present report for the Grand Canyon station for the period April 1, 1935, to September 30, 1936, and for the Bluff station during periods in 1937, 1939, 1940, and 1941. The records obtained during the 16 years of observations show considerable variation in sediment concentration throughout the cross section and at certain times throughout the day. The greatest variations in concentration were found during the periods of rapid rise that usually occurred after heavy rains on the desert part of the watershed.

Results of some observations of sediment concentration and corresponding water velocity at the Grand Canyon and Topock stations are given in tables 21 to 22. The data show no conclusive relationship between sediment concentration and velocity.

A study of the available records shows no direct relation between concentration and discharge. As a rule, the concentration of sediment increased with an increase in discharge, but the concentration of sediment carried seemed to depend more on the source of the increase in flow than on the quantity of the increase.

⁵ Grover, N. C., and Howard, C. S., The passage of turbid water through Lake Mead: *Am. Soc. Civil Eng. Trans.*, vol. 103, pp. 722-723, 1938.

⁶ Howard, C. S., U. S. Geol. Survey Water Supply Paper 636, pp. 29-40, 1930.

ANNUAL, MAXIMUM, AND MINIMUM DAILY LOADS

The annual, maximum, and minimum daily loads computed from the data for 1925-41 are given in table 1 for the Cisco, Lees Ferry, Grand Canyon, Willow Beach, and Topock stations on the main river; for the Green River, Utah, station on the Green River; and for the Bluff station on the San Juan. The data in this table indicate that the highest daily loads in the main stream occurred at the Grand Canyon station and that the highest daily loads in the tributaries occurred at the Bluff station on the San Juan.

TABLE 1.—Maximum and minimum daily loads of suspended sediment at the Cisco, Lees Ferry, Grand Canyon, Willow Beach, Topock, Green River, and Bluff stations for the period Oct. 1, 1925, to Sept. 30, 1941

Colorado River near Cisco, Utah								
Water year ended Sept. 30	Annual runoff (acre-feet)	Annual load of suspended sediment (tons)	Day of maximum load			Day of minimum load		
			Mean discharge (second- feet)	Suspended sedi- ment		Mean discharge (second- feet)	Suspended sedi- ment	
				Per- cent ¹	Load (tons)		Per- cent ¹	Load (tons)
1930 ²	6,090,000	18,600,000	11,700	3.00	947,000	-----	-----	-----
1931 ²	2,860,000	9,910,000	11,200	5.03	1,520,000	-----	-----	-----
1932	6,680,000	26,400,000	28,440	.72	767,000	1,740	0.03	1,400
1933	4,640,000	8,190,000	28,600	.42	324,000	-----	.00	-----
1934	2,220,000	2,720,000	15,500	.33	138,000	787	.01	216
1935	4,681,000	17,840,000	9,360	1.86	470,000	1,720	.01	459
1936	5,765,000	17,180,000	9,070	3.75	918,000	2,300	.004	243
1937	4,621,000	23,560,000	12,910	4.67	1,630,000	1,180	.02	637
1938	7,422,000	35,700,000	37,400	.87	879,000	1,930	.02	1,040
1939	4,252,000	14,470,000	5,320	2.85	409,000	960	.02	518
1940	3,463,000	9,900,000	9,430	2.91	741,000	1,670	.01	451
1941	6,576,000	32,200,000	40,500	1.12	1,225,000	2,010	.01	543
Colorado River near Lees Ferry, Ariz.								
1929	19,200,000	352,000,000	65,500	5.35	9,450,000	3,770	0.09	8,980
1930	13,100,000	195,000,000	41,600	8.02	9,000,000	4,700	.15	19,000
1931	6,380,000	57,200,000	9,810	5.61	1,460,000	2,780	.13	9,740
1932	15,300,000	214,000,000	49,500	6.27	8,370,000	4,000	.17	18,300
1933	9,730,000	112,000,000	79,900	1.09	2,350,000	4,500	.08	9,710
Colorado River near Grand Canyon, Ariz.								
1926 ³	14,400,000	225,000,000	64,700	3.02	5,260,000	5,320	0.05	7,170
1927	17,300,000	398,000,000	74,000	13.1	27,600,000	3,530	.04	3,800
1928	15,600,000	172,000,000	65,400	2.58	4,550,000	4,610	.03	3,720
1929	19,400,000	480,000,000	59,300	10.9	17,400,000	3,190	.01	863
1930	13,400,000	235,400,000	54,800	10.7	15,800,000	5,610	.03	4,530
1931	6,720,000	68,810,000	31,300	1.83	1,540,000	4,400	.03	3,560
1932	12,410,000	261,400,000	49,800	7.49	10,100,000	2,160	.05	2,910
1933	10,000,000	178,100,000	15,200	9.06	3,710,000	3,240	.03	2,600
1934	4,656,000	50,080,000	8,570	11.5	2,660,000	4,370	.07	8,260
1935	10,216,000	122,300,000	101,400	1.01	2,770,000	2,830	.09	6,890
1936	12,322,000	157,600,000	21,500	7.74	4,490,000	3,280	.05	4,430
1937	12,410,000	191,300,000	43,700	2.95	3,480,000	2,520	.03	2,040
1938	15,630,000	232,400,000	39,100	8.76	9,250,000	4,580	.07	8,660
1939	9,618,000	86,320,000	28,000	2.12	1,600,000	3,550	.01	958
1940	7,435,100	75,410,000	13,300	4.96	1,781,000	2,660	.04	2,870
1941	16,940,000	270,100,000	76,800	2.92	6,050,000	9,380	.07	17,730

See footnotes at end of table.

TABLE 1.—Maximum and minimum daily loads of suspended sediment at the Cisco, Lees Ferry, Grand Canyon, Willow Beach, Topock, Green River, and Bluff stations for the period Oct. 1, 1925, to Sept. 30, 1941—Continued

Colorado River near Willow Beach, Ariz.								
Water year ended Sept. 30	Annual runoff (acre-feet)	Annual load of suspended sediment (tons)	Day of maximum load			Day of minimum load		
			Mean discharge (second- feet)	Suspended sedi- ment		Mean discharge (second- feet)	Suspended sedi- ment	
				Per- cent ¹	Load (tons)		Per- cent ¹	Load (tons)
1935	5,556,000	13,890,000	6,760	2.12	387,000	152	0.02	81
1936	6,282,000	6,830,000	9,680	2.16	565,000	9,500	.001	256
1937	5,826,000	358,000	11,000	.02	5,940	-----	-----	-----
1938	6,168,000	451,000	6,160	.23	38,300	-----	-----	-----
1939	8,473,000	-----	26,000	.07	49,100	-----	-----	-----
Colorado River near Topock, Ariz.								
1926 ⁴	14,300,000	140,000,000	17,900	3.56	1,720,000	6,490	0.19	20,800
1927	17,000,000	345,000,000	96,500	7.91	20,600,000	4,200	.15	17,000
1928	15,400,000	209,000,000	66,100	3.01	5,370,000	5,490	.26	38,500
1929	18,900,000	437,000,000	52,700	5.46	7,760,000	8,080	1.08	23,500
1930	13,200,000	245,000,000	42,200	6.71	7,640,000	4,220	.26	29,600
1931	6,770,000	64,700,000	28,500	.94	723,000	3,820	.28	28,900
1932	16,100,000	272,000,000	32,600	6.50	5,710,000	3,150	.36	30,600
1933	10,200,000	121,400,000	68,200	1.18	2,170,000	3,590	.22	21,300
1934	4,470,000	61,000,000	9,750	4.27	1,124,000	1,750	.06	2,840
1935	5,225,000	27,800,000	6,100	2.64	435,000	422	.02	227
1936	6,025,000	20,100,000	9,320	2.34	589,000	4,700	.11	13,960
1937	5,577,000	10,700,000	9,080	.25	61,300	8,520	.06	13,800
1938	5,967,000	9,710,000	12,700	.24	82,300	5,560	.08	12,000
1939 ⁵	8,188,400	-----	26,600	.31	222,600	5,600	.001	151
See footnotes at end of table.								
Green River at Green River, Utah								
1930 ²	4,560,000	34,500,000	17,800	3.10	1,490,000	2,580	0.08	5,570
1931 ²	2,390,000	7,450,000	12,300	.76	252,000	978	.01	270
1932	4,810,000	36,100,000	31,000	.81	677,000	580	.01	162
1933	3,530,000	15,360,000	7,720	2.26	471,000	1,140	.01	297
1934	1,306,000	1,780,000	1,480	3.42	136,700	520	.01	140
1935	2,850,000	14,350,000	17,800	.83	399,000	752	.01	216
1936	4,147,000	33,800,000	13,000	6.36	2,230,000	969	.005	135
1937	4,134,000	43,400,000	18,400	3.29	1,630,000	1,040	.02	562
1938	4,747,000	38,200,000	9,140	5.68	1,400,000	830	.03	672
1939	3,420,000	22,800,000	15,800	2.02	862,000	1,450	.01	392
1940	2,376,000	8,880,000	2,660	4.38	315,000	-----	-----	-----
1941	4,242,000	31,900,000	25,500	2.01	1,384,000	664	.02	359
San Juan River near Bluff, Utah								
1928 ⁶	1,730,000	1,490,000	669	8.73	158,000	411	0.24	2,660
1928 ⁷	3,110,000	100,500,000	20,000	21.2	11,450,000	1,680	.54	2,449
1930	1,720,000	58,300,000	13,900	23.0	8,620,000	229	.11	679
1931	887,000	15,290,000	3,480	9.64	905,000	113	.01	27
1932	2,950,000	75,300,000	9,160	11.3	2,790,000	145	.09	351
1933	1,240,000	23,610,000	5,960	13.2	2,120,000	26	.04	27
1934	661,900	21,170,000	4,920	20.3	2,700,000	-----	-----	-----
1935	2,183,000	42,700,000	12,500	8.72	2,940,000	150	.003	11
1936	1,631,000	32,600,000	3,950	21.4	2,282,000	469	.06	756
1937	2,336,000	52,200,000	10,200	13.3	2,840,000	400	.02	216
1938	2,466,000	52,100,000	14,000	14.2	5,370,000	204	.09	496
1939	1,239,000	21,410,000	11,000	20.9	6,207,000	-----	-----	-----
1940	996,300	26,300,000	12,130	12.1	3,960,000	118	.03	96
1941	4,242,000	112,700,000	25,200	2.02	3,370,000	664	.09	1,614

¹ Percent by weight. Value reported is usually the average of three or more integrated samples² Incomplete records.³ Oct. 1, 1938, to Apr. 7, 1939.⁴ Oct. 12, 1925, to Sept. 27, 1926.⁵ Aug. 13, to Sept. 21, 1928.⁶ Oct. 3, 1925, to Sept. 30, 1926.⁷ July 1, to Sept. 30, 1929.

The annual loads of sediment at the Yuma gaging station for the same period have been computed from the records of the Bureau of Reclamation and are given in table 2.

TABLE 2.—*Suspended sediment and runoff of the Colorado River at gaging station near Yuma, Ariz., Oct. 1, 1925, to Sept. 30, 1941*

Water year ended Sept. 30	Suspended sediment (tons) ¹	Runoff (acre-feet)
1926.....	152,000,000	13,300,000
1927.....	241,000,000	16,000,000
1928.....	128,000,000	13,900,000
1929.....	262,000,000	17,800,000
1930.....	180,000,000	12,500,000
1931.....	42,300,000	4,920,000
1932.....	198,200,000	14,300,000
1933.....	89,000,000	8,070,000
1934.....	27,400,000	2,916,000
1935.....	16,860,000	3,259,000
1936.....	17,600,000	3,803,000
1937.....	15,090,000	3,823,000
1938.....	13,870,000	4,076,000
1939.....	11,100,000	5,828,000
1940.....	5,067,000	5,323,000
1941.....	14,740,000	9,030,000

¹ Records furnished by Bureau of Reclamation.

The mean annual load of suspended sediment at the Grand Canyon station during the years 1925-41 was 200,200,000 tons and the mean annual runoff at the station during the same period was 12,640,000 acre-feet.

SOURCES OF LOADS MEASURED AT GRAND CANYON STATION

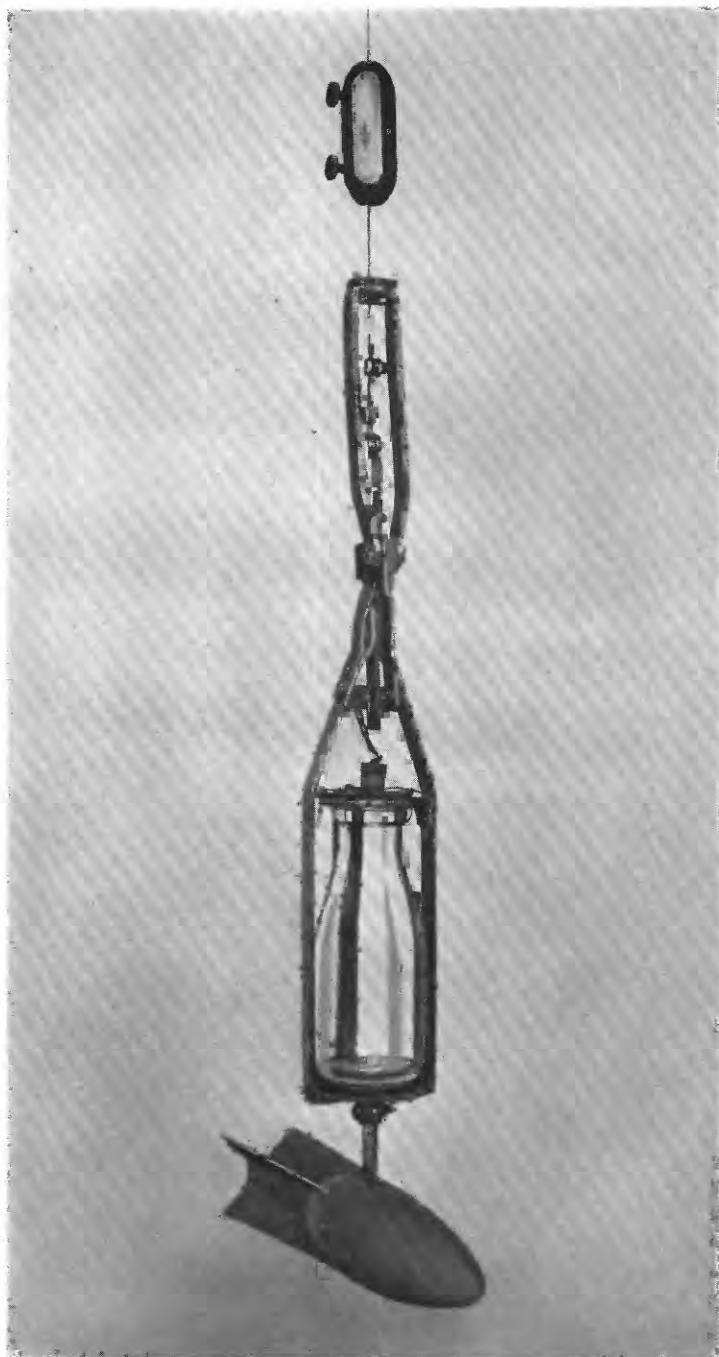
Records for the Grand Canyon gaging station represent the flow and sediment load of the Colorado River above Boulder Dam and Lake Mead, the reservoir behind Boulder Dam.

Approximately 90 percent of the runoff measured at the Grand Canyon station can be accounted for by the runoff measured at the Cisco, Green River, and Bluff gaging stations. The combined annual sediment load for those three stations, however, is less than two-thirds of the annual load carried past the Grand Canyon station. (See table 3.)

TABLE 3.—*Load of suspended sediment and runoff at Cisco, Green River, and Bluff gaging stations in comparison with Grand Canyon station*

[Expressed in percent of load and runoff at Grand Canyon gaging station]

	Cisco		Green River		Bluff		Unmeasured		Grand Canyon	
	Sus- pended sediment	Run- off	Sus- pended sediment	Run- off	Sus- pended sediment	Run- off	Sus- pended sediment	Run- off	Sus- pended sediment	Run- off
1932.....	10	42	14	30	29	18	47	10	100	100
1935.....	15	46	12	28	35	21	38	5	100	100
1938.....	15	47	16	30	22	16	47	7	100	100
1941.....	12	39	12	25	42	25	34	11	100	100



GEOLOGICAL SURVEY COLORADO RIVER SAMPLER.

For the four yearly periods covered by the data in table 3 the ratio of sediment to runoff was much higher for the Bluff station than for the Green River and Cisco stations. The data in this table also show that a large part of the suspended load at Grand Canyon came from sources from which samples were not collected. It seems, therefore, that an appreciable part of the suspended load carried past the Grand Canyon station was brought into the Colorado River by relatively small flows of very muddy water. It is likely that considerable quantities of sediment were brought into the Colorado River from the San Rafael and Fremont Rivers, and it is known that large quantities of sediment were brought in by the Little Colorado River.

An indication of the quantities brought in by the Little Colorado River during the 5 years ended September 30, 1934, can be obtained by comparing the records in table 1 for the Lees Ferry and Grand Canyon stations for those years, as the Little Colorado flows into the Colorado between those stations. In those 5 years the average annual increase in load of suspended sediment between the Lees Ferry and Grand Canyon stations was more than 59,000,000 tons. Paria River flows into the Colorado just below the Lees Ferry station and at times brings in considerable quantities of sediment. It should also be pointed out that during 3 of those years the annual loads for the Grand Canyon station were higher than the average load for the 16 years of observations.

PHYSICAL NATURE OF THE SUSPENDED AND DEPOSITED SEDIMENT

The physical nature of the suspended sediment, particularly the particle size, is the determining factor as to where the various particles will be deposited along the banks in eddies and quiet water and in reservoirs. For the determination of the particle size of suspended and deposited sediments, samples were collected at different places in the basin. A few samples were collected to determine the weight per unit volume of the deposited material, but the records are not complete enough for a statement of the average weight per unit volume of sediment.

METHODS OF DETERMINATION OF PARTICLE SIZE

The size of the particles was determined by a method adapted from the usual methods for such determinations⁷ and consisted of a combination of sieving and decantation methods. The procedure

⁷ U. S. Engineer Office, St. Paul, Minn. A study of methods used in measurement and analysis of sediment loads in streams, Report 4, Methods of analyzing sediment samples, pp. 175-179, 1941.

used with most of the samples provided for no dispersion of the suspended sediment and complete dispersion of samples of deposited sediment. The degree of dispersion in the suspended-sediment samples varied with the concentration and character of the dissolved solids in the water in which the sediment was being carried, and an attempt was made to use in the determinations water similar in character and concentration to the original water.

The procedure for suspended-sediment samples consisted in pouring the sample through a 100-mesh sieve and then through a 200-mesh sieve to get the quantities of particles with diameters of 0.149 and 0.074 millimeter, respectively. If the quantity on the 100-mesh sieve was large the material was transferred to a 50-mesh sieve, and the quantity held on that sieve (0.297 millimeter in diameter) was determined. The material that passed the 200-mesh sieve was washed into a cylinder and the quantities of small particles determined by settling. It was customary to determine the quantities of material with settling velocities corresponding to 0.050, 0.020, and in some cases 0.005 millimeter. For the determinations by settling, the temperature of the suspension in the cylinder was observed and the suspension well shaken. The cylinder was then set upright for a time sufficient for all the material of a given size to have fallen from the top of the liquid to the bottom of the cylinder under the existing temperature conditions. At the end of the correct settling time the liquid was decanted, leaving the size group at the bottom of the cylinder. The suspension was again shaken and allowed to stand the necessary time for the settling of the next size group. After decantation of the suspension, determinations of other size groups were made as desired by settling and subsequent decantations. This method of decantation gave results that represent all the material of the maximum size and quantities of the smaller sizes that were near enough the bottom to settle there in the required time. It seems likely, however, that the results of these determinations will be of value in estimating the rates of settling of the material carried in suspension.

Samples of deposited sediment were usually dry at the time the analysis was made, and it was necessary to disperse them before the analysis was started. A part of the sample was weighed out and placed in a conical vessel together with a small volume (4 milliliters) of 1.5 percent sodium-oxalate solution and about 150 milliliters of water. Air was bubbled through the liquid for about 3 hours with the orifice of the air tube at the bottom of the vessel. The sizes of the particles were then determined by the sieving-decantation method, except that distilled water was used for washing the material on the sieves and as additional water for the settling medium.

SUSPENDED SEDIMENT

The results of the determinations of the size of the particles of the suspended sediment samples are given in tables 23 to 25. As a rule most of the material in those samples was found to consist of particles with settling diameters of greater than 0.020 millimeter, but in only a few samples was there as much as 10 percent of the material coarse enough to be held on the 100-mesh sieve (0.149 millimeter in diameter). After the closing of Boulder Dam some of the suspended sediment at the Willow Beach station apparently was carried through the entire length of Lake Mead,⁸ and that material consisted of particles whose diameters were less than 0.020 millimeter.

BANK DEPOSITS

Throughout the entire basin, deposits of sediment may be found along the banks of the river and its tributaries. These deposits usually represent the material that is first dropped out of suspension and that consists of the larger particles of the suspended sediment. Samples have been collected from some of these bank deposits and determinations made of the weight-volume relation of the material in the deposits and also of the size of the particles in the deposits. These deposits usually had a weight of more than 80 pounds per cubic foot of dry deposit, and the particles have effective settling diameters of greater than 0.020 millimeter. Considerable quantities of the material carried by the Colorado River, particularly during periods of summer floods, consist of particles whose settling diameters are less than 0.020 millimeter, and considerable quantities of the material had settling diameters of less than 0.002 millimeter. A weight greater than 80 pounds per cubic foot of deposit probably is not representative for all of the suspended material carried in the Colorado River Basin.

RESERVOIR DEPOSITS

Little has been reported on the extent and nature of the deposits of sediment in reservoirs in the Colorado River Basin. Studies by the Bureau of Reclamation on Lake Mead have included observations both on the nature of the inflow at the head of the lake and on the formation of deposits along the edge and at the bottom of the reservoir.

On a number of occasions it has been observed that the incoming water was very turbid and that there was a sharp line of demarcation between the incoming water and the lake water. Plate 2 shows such an inflow approximately 90 miles above Boulder Dam in January 1939. Observations taken just below the line of demarcation show

⁸ Grover, N. C. and Howard, C. S., *op. cit.*, pp. 727-728.

that the incoming water, because of its greater density, dips under the surface of the lake water and travels beneath the surface for considerable distances without complete mixing. This stratified flow in Lake Mead has been discussed by Bell.⁹

Observations on Lake Mead made from time to time by the Bureau of Reclamation have shown large deposits of material in places of slack water such as on the inside of curves and across inlets of side washes and streams. One of the deposits found on March 17, 1939, at mile 257, approximately 97 miles above Boulder Dam, in an area where there was slack water at a sharp bend is shown in plate 3. In addition, observations have shown considerable deposits at points throughout the upper end of the lake. In 1941, the deposits in Virgin Canyon, 50 miles above Boulder Dam, were more than 30 feet deep, and at the intake towers, just above the dam, it was possible to sink a 10-pound weight a vertical distance of about 80 feet into the deposits of unconsolidated material at the bottom of the reservoir.¹⁰

DETERMINED QUANTITIES OF SUSPENDED SEDIMENT

The quantities of sediment in samples collected in the Colorado River Basin by the Geological Survey during the period 1925-41 are presented in this report. For selected periods the quantities in the individual samples collected at the Grand Canyon and Bluff gaging stations are given; for other periods only the mean daily concentrations are tabulated; for some periods the mean daily discharge and mean concentration of sediment and the daily load of sediment are given. These data are presented in tables 5 to 20. A key to these tables is given in table 4.

⁹ Bell, H. S. Stratified flow in reservoirs and its use in prevention of silting. U. S. Dept. Agr. Misc. Pub. 491, 1942.

¹⁰ Records of the Bureau of Reclamation, U. S. Dept. of the Interior.

TABLE 4.—*Kind of information and periods covered by the tables of data for 8 gaging stations*

Gaging station	Mean daily concentration of suspended sediment		Mean daily discharge, mean daily concentration, and daily load of suspended sediment	
	Period	Table No.	Period	Table No.
Colorado River: Near Cisco, Utah.....	May 14, 1929, to Sept. 30, 1939.	5	Oct. 1, 1939, to Sept. 30, 1941.	6
At Lees Ferry, Ariz.....	Oct. 1, 1928, to Dec. 16, 1933.	7		
Near Grand Canyon, Ariz.	Oct. 1, 1925, to Sept. 30, 1929.	8	Oct. 1, 1929, to Sept. 30, 1941.	9
Near Willow Beach, Ariz.	-----	-----	Oct. 1, 1934, to Sept. 30, 1936.	11
Near Topock, Ariz.....	Oct. 1, 1925, to Sept. 30, 1934.	12	Oct. 1, 1934, to Mar. 31, 1939.	13
Green River at Green River, Utah.	May 1, 1929, to Sept. 30, 1939.	14	Oct. 1, 1939, to Sept. 30, 1941.	15
San Juan River near Bluff, Utah.	-----	-----	Oct. 1, 1929, to Sept. 30, 1941.	18

Gaging station	Suspended-sediment concentration in individual samples		Suspended-sediment concentration at differing sampling time, mean daily discharge, mean daily concentration, and daily load of suspended sediment	
	Period	Table No.	Period	Table No.
Colorado River near Grand Canyon, Ariz.	Apr. 1, 1935, to Sept. 30, 1936.	10	-----	-----
San Juan River near Bluff, Utah.	Nonconsecutive periods in 1937, 1939, 1940, and 1941.	19	Aug 13 to Sept. 21, 1928.....	16
Little Colorado River at Grand Falls, Ariz.	-----	-----	July. 1 to Sept. 30, 1922.....	17
			July 6 to Sept. 26, 1931.....	20

Results of special studies at the Grand Canyon and Topock stations showing the velocity at the time of sampling are given in tables 21 and 22. Data on the size of the particles carried are presented as follows: Colorado River at Grand Canyon station, April 5, 1935, to September 30, 1941, in table 23; Colorado River near Willow Beach, April 2, 1935, to September 27, 1936, in table 24; and San Juan River near Bluff, May 3, 1935, to September 30, 1936, in table 25.

TABLE 5.—Mean daily concentration of suspended sediment in the Colorado River at gaging station near Cisco, Utah, May 14, 1929, to Sept. 30, 1939

1929-30												
Day	Octo-ber	Novem-ber	Decem-ber	Janu-ary	Febru-ary	March	April	May	June	July	Aug-ust	Septem-ber
1									0.18	0.03	0.62	
2									.17	.03	.52	0.05
3									.12	.03		.05
4									.16		1.50	.04
5									.14	.02	1.53	.06
6									.09	.04	.42	.51
7									.09	.06	.50	
8									.14	.04	1.44	
9									.10	.02	3.00	
10									.06	.03	2.69	
11									.06	.15	2.60	
12									.05	.15	1.40	.05
13									.20	1.24	1.91	.04
14									.14	.42	2.31	.03
15								0.06	.08	1.24	1.06	.03
16									.13	.21	.96	.03
17									.12	.13	.54	.03
18									.05	.35	.32	.03
19								.12	.04	.32	.28	.02
20								.13	.10	.37	.19	.05
21								.10	.07	.45	.13	.06
22								.19	.04	.39	.12	.81
23								.19	.04	.20	.14	.54
24								.14	.04	.20	.08	.31
25								.06	.05	.08	.06	.32
26								.16	.08	.06	.08	.14
27								.17	.05	.06	.05	.25
28								.22	.03	.07	.04	.16
29								.34	.03	.16	.05	.11
30								.32	.02	.26	.04	1.70
31								.22		.28	.04	

1930-31												
1	1.38					0.03	0.03	0.24	0.15	0.31	3.57	0.70
2	1.60					.02	.03	.18	.22	.10	.86	.18
3	1.45					.03	.03	.21	.23	.10	1.56	.15
4	.42					.02	.02	.22	.30	.10	.39	.09
5	.18					.03	.04	.44	.29	.10	.15	.05
6	.11					.03	.04	.38	.19	.09	.38	.05
7	.10					.03	.01	.26	.23	.06	.34	.03
8	.14					.01	.02	.23	.27	.06	.31	.03
9	.12					.01	.02	.20	.28	.04	.11	.03
10	.08					.02	.06	.26	.18	.04	.06	.03
11	.08					.03	.10	.18	.14	.04	.07	.03
12	.09					.03	.08	.12	.12	.03	.05	.02
13	.08					.02	.11	.13	.14	.02	.04	.02
14	.07					.02	.20	.08	.10	.02	.04	.03
15	.08					.05	.26	.10	.10	.02	.06	.74
16	.06					.04	.30	.40	.09	.02	.02	.07
17	.04					.06	.16	.50	.10	.01	.24	.29
18	.05					.06	.12	.96	.11	.01	.02	.23
19	.03				0.12	.06	.10	.90	.09	.01	.06	1.69
20	.06				.10	.08	.20	.50	.09	.02	.04	.63
21	.04				.09	.06	.26	.29	.10	.04	.04	.77
22	.04				.10	.05	.24	.20	.10	.04	.04	.44
23	.03				.12	.05	.12	.17	.08	.04	.01	.26
24	.03				.08	.06	.10	.15	.08	.03	.01	5.03
25	.02				.03	.05	.83	.26	.07	.02	.01	3.96
26	.02				.04	.06	.54	.20	.06	.01	.02	1.83
27	.01				.05	.06	.61	.35	.07	.01	.01	.86
28	.02				.04	.04	.36	.32	.08	.01	.01	.64
29	.01					.02	.20	.25	.08	1.30	.02	.49
30	.02					.04	.20	.21	.58	1.89	.01	.26
31	.01					.03		.16		1.66	.01	

TABLE 5.—Mean daily concentration of suspended sediment in the Colorado River at gaging station near Cisco, Utah, May 14, 1929, to Sept. 30, 1939—Continued

1933-34

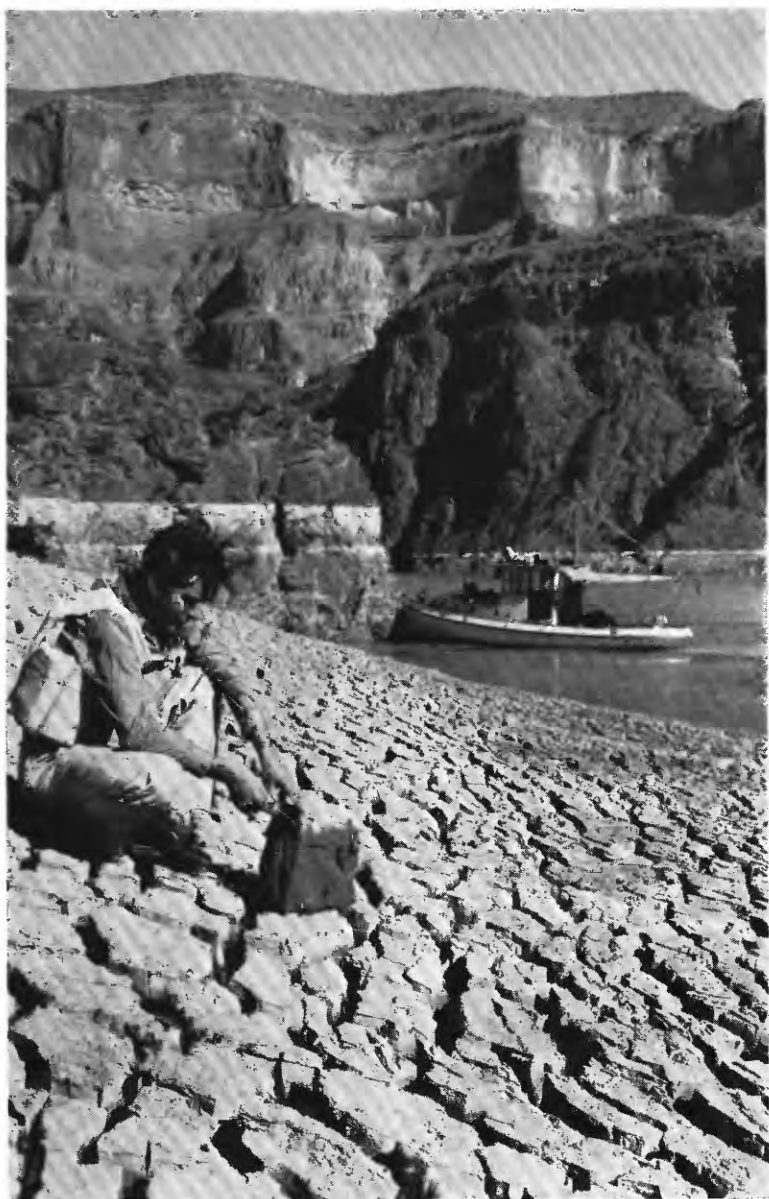
Day	October	November	December	January	February	March	April	May	June	July	August	September
1								0.09	0.09			
2					0.03	0.01						
3	0.02						0.03					
4		0.04		0.05				.25	.04			0.03
5										0.01		
6	.64				.02	.01						
7		.03							.04			.02
8			0.04					.16				
9				.03		.01						
10	.09	.03										
11								.33	.02			.26
12			.04									
13	.04				.03	.02					0.03	.05
14		.02							.02	.01		
15			.06					.12			.02	.03
16		.03		.03	.03		.16					
17	.02									.01		.03
18								.08			.02	
19			.03	.03					.02			
20	.02	.01			.04					.02		
21		.03	.05								.17	
22								.06	.01	.37		.02
23				.03		.02					.20	
24	.02									.12	.22	
25		.01						.06				.04
26					.04				.16			.11
27				.01								.41
28		.02									.03	.07
29								.06	.02			
30				.01							1.52	.09
31	.03											

1934-35

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	0.07		0.02		0.07		0.35	0.23		0.08	0.48	
2		0.02					1.00				.25	
3							.98			.12		
4							1.26	.15	0.20		.07	
5		.02		0.04	.04	0.05	1.08				.08	
6								.23	.26			0.11
7			.05				.56	.14	.32			
8		.03		.07	.03				.37	.10	.05	.50
9						.04	.40		.35			.62
10		.02				.04	.61	.32	.32	.05		
11			.05	.03			.37	.32	.32			.18
12				.08	.03		.82	.46	.27		.33	
13	.02	.03	.05			.02	.56			.05	.08	
14				.04				.53	.22			.04
15					.03		1.02	.54	.19			
16		.04	.12	.06		.07	.97			.07		
17									.17		1.67	.02
18			.08	.07			.73			.20	1.05	
19	.03	.06			.03	.07	.39	.24	.13	.18		
20		.13						.42		1.86		.02
21		.09	.04			.06			.12	1.20		
22				.04	.03		.37			.31	.04	
23	.03	.03						.20				
24			.04				.46		.12		.34	.01
25		.04		.05	.08			.42		.24		.07
26	.02		.03				.36		.12		.63	.27
27				.08				.53	.09		.54	.34
28		.03	.02								1.26	.52
29			.06			.05	.25	.52	.07	.03	.91	.58
30	.02										.97	
31			.03					.23				



LINE OF DEMARCATION OF INFLOW AND WATER OF LAKE MEAD APPROXIMATELY 90 MILES ABOVE
BOULDER DAM.



DEPOSIT IN SLACK-WATER AREA ABOUT 97 MILES ABOVE
BOULDER DAM.

QUANTITIES OF SUSPENDED SEDIMENT

19

TABLE 5.—Mean daily concentration of suspended sediment in the Colorado River at gaging station near Cisco, Utah, May 14, 1929, to Sept. 30, 1939—Continued

1935-36

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	0.23							0.13		0.13	0.64	1.71
2						0.01	0.04		0.06			1.40
3								.11			.31	
4			0.03			.03			.06			.84
5	.04				0.04	.03	.04	.28				.24
6		0.02						.34			.30	
7			.03	.00			.03		.06	.02	1.52	.13
8	.03					.04		.18			.81	.06
9		.03	.03				.04		.08	.03		
10				.01		.03			.41	.48		
11	.02		.01			.03	.67	.13		3.75		.36
12		.02				.05	2.05	.12	.05		.52	.26
13					.06			.08		.40	.28	
14		.02					1.05	.14	.06	.35		.17
15	.01				.07							.06
16				.03			.75	.14		.11	.10	
17			.02		.06	.06	.70			.06		.04
18	.01				.08	.09		.16	.04		.07	
19		.01					.60	.10	.04	.46		
20			.03		.07	.06					.09	.03
21							.41	.08	.04	.42	.44	
22		.02		.05			.44	.09		.26	1.00	.02
23	.01						.39		.05		.38	
24			.03		.05							.02
25	.02			.01			.27	.07	.05	.05	.16	
26						.05		.07	.04			.02
27							.20			.13		
28			.03		.04		.19		.04			
29	.02					.04		.05		.14	.05	.02
30		.01							.10		.17	.02
31	.02		.06	.02				.07		.66	1.49	

1936-37

1						0.22	0.04					
2						.18	.04	0.26	0.10	0.12		2.37
3		0.22						.31	.13		0.10	4.74
4	0.03		0.02			.28	.08		.09			
5	.06				0.04			.49				.25
6		.05				.35	.12		.09	.07	.06	.20
7								.52		.11		.16
8	.02		.02			.30	.12		.07		.64	
9		.04		0.04				.42		.70		.17
10						.20			.08	.91		.10
11			.06			.18	.68	.47			.15	.06
12	.02				.03		1.30	.41	.10	1.60	.05	
13		.02	.05			.20	1.45	.36		4.67		.04
14								.24	.09		.05	.04
15		.04				.23	1.18		.10	.84		
16	.02		.10					.33			.04	.02
17						.26	.82		.07		.05	.02
18			.14			.20		.25				
19		.04					.68			.19		.04
20	.81					.34	.45		.10	.20	.36	
21	.31					.22			.03		.09	.06
22			.03				.47					
23	.40	.04			.09				.06		.08	.14
24						.12	.60	.14		.05	.04	
25									.02			
26	.06				.18	.08	.36			.14		
27			.02		.38				.15		.02	.58
28							.37	.10				.08
29	.10	.01		.05		.06		.09	.03		1.43	
30							.25	.12	.14	.45	1.82	.04
31	.48		.02					.16		.39	2.80	

TABLE 5.—Mean daily concentration of suspended sediment in Colorado River at gaging station near Cisco, Utah, May 14, 1929, to Sept. 30, 1939—Continued

1937-38

Day	October	November	December	January	February	March	April	May	June	July	August	September
1					0.03			0.53	0.15		0.06	0.80
2	0.07		0.02		.03	0.48		.54		0.16	.04	
3	.14		.02	0.03			0.05		.17			1.28
4		0.03		.03		3.28	.04		.11		.05	2.16
5	.06			.04	.04	3.23					.03	
6	.06	.03	.02						.17	.13		1.48
7			.02				.61	.42		.08		
8	.04	.18	.02	.02	.04	.21	.36		.09		.03	.31
9		.38				.20	.30	.35			.47	2.44
10	.03	.26	.04		.03			.16	.15	.12	.42	
11				.02		.07	.71				.25	
12	.02	.05	.02		.26			.17	.09	.10		1.94
13			.98	.03	.62		1.43				.10	
14	.02	.02			.36	.40	.96	.24	.16			
15	1.27		.35	.02	.26	.45			.10	.42	1.32	.67
16		.02	.56				1.19	.47		.35	.13	.25
17	1.36		.12	.02		.39		.41	.14			
18	.82	.02	.08		.08	.26				.16		.27
19	.55	.02	.06				1.22	.27			.08	.15
20				.06		.14		.22		.14		
21		.02	.04				1.29		.10		.04	.07
22	.20			.04	.04				.22	.08		
23				.04			.87	.20			.04	
24		.03				.19	.88	.16		.05		
25	.05		.02		.04					.06	.04	.06
26	.04			.02			.87	.16	.11			.06
27		.02				.68			.17			
28	.04		.04		.04	.40				.09	.03	.04
29		.02		.02			.61	.30	.14			
30						.17				.06		.03
31	.03		.02			.16		.27			.06	

1938-39

1		0.03	0.04	0.04	0.02	0.04		0.68	0.15	0.03		
2							.23	.52	.22		0.03	
3	0.08	.03	.06	.03				.48		.03		0.09
4						.04	.64				.03	
5	.05	.03					.60	.40	.12	.03		4.55
6			.05		.03						.02	.73
7	.07	.03				.03	.53	.38	.10	.01	.84	1.79
8	2.85		.05				.33	.20	.14			
9					.04			.23		.01		1.51
10		.04	.02					.16	.07	.01		
11	.43					.14	.20				.10	.54
12			.02		.02			.15	.12	.01		1.08
13	.16		.01				.28		.17			
14		.04			.03	.39		.14		.02	.04	1.62
15	.08	.02	.01				.16	.09	.10			
16			.02			.38		.12	.07	.01		.34
17	.08				.04		.10	.17	.06	.01		
18		.02		.02				.23			.03	.15
19	.07		.01				.11		.04	.03		.07
20	.05	.03			.04	.36		.13				
21				.03			.13	.25	.07	.03	.04	.05
22		.02				.57	.11	.24	.08			
23	.03	.02			.04				.08			.03
24			.02			.94	.46	.16		.03	.02	
25	.02	.02		.02		.79		.16	.04			.02
26			.02					.09	.03	.02		.02
27	.03	.03			.05	.82	.20					
28			.02					.11	.04	.02	.02	.03
29	.02	.04		.02		.45	.32	.08	.03		1.24	.12
30			.01							.02	2.14	
31						.26		.12		.02	.66	

TABLE 6.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Cisco, Utah, Oct. 1, 1939, to Sept. 30, 1941

1939

October				November				December		
Day	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1							2,420	0.02	1,310	
2	2,590	0.04	2,800	2,270	0.02	1,230	2,230	.01	602	
3										
4	2,590	.04	2,800	2,500	.02	1,350	2,220	.02	1,200	
5							2,270	.01	613	
6	2,680	.03	2,170	2,590	.02	1,400	2,270	.01	613	
7				2,680	.02	1,450				
8	2,420	.02	1,300							
9				2,680	.02	1,450				
10	2,500	.14	9,450	2,760	.06	4,470	2,200	.01	594	
11	2,590	.03	3,000	2,680	.05	3,620				
12							2,320	.01	626	
13	2,500	.03	2,000	2,590	.01	699	2,120	.01	572	
14										
15	2,590	.02	1,400	2,590	.01	699				
16							1,920	.01	518	
17	2,500	.01	675	2,590	.01	699	1,800	.01	486	
18										
19	2,270	.01	613	2,320	.04	2,500	2,140	.02	1,160	
20										
21	2,190	.01	591	2,390	.02	1,290				
22							1,670	.01	451	
23	2,120	.01	572	2,320	.02	1,250	1,880	.01	502	
24										
25	2,040	.01	551	2,500	.02	1,350				
26							1,980	.02	1,070	
27	2,190	.26	15,400	2,500	.01	675				
28	2,370	.07	4,480				1,710	.01	462	
29	2,350	.04	2,540	2,590	.02	1,400				
30							1,460	.02	788	
31	2,270	.04	2,450							

1940

January				February				March		
Day	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1	1,840	0.01	497	2,420	0.02	1,310	2,850	0.24	18,500	
2	2,060	.01	556	2,590	.05	3,500				
3							2,680	.11	7,960	
4	2,420	.02	1,310	2,760	.10	7,450	2,590	.12	8,390	
5				2,760	.08	5,960	2,500	.08	5,400	
6										
7	2,420	.01	653							
8				2,370	.05	3,200	2,370	.03	1,920	
9	2,250	.01	608				2,350	.03	1,900	
10				2,280	.04	2,460				
11	2,110	.01	570				2,300	.02	1,240	
12										
13	2,190	.01	591	2,110	.02	1,140				
14				2,140	.01	578	2,420	.02	1,310	
15	2,590	.04	2,800	2,150	.01	580				
16							2,400	.02	1,300	
17	2,120	.02	1,140	2,140	.02	1,160				
18				2,150	.01	580	2,190	.02	1,180	
19	1,710	.01	462							
20				2,140	.02	1,160	2,200	.01	594	
21	1,840	.02	994							
22				1,920	.01	518	2,390	.02	1,290	
23										
24	1,780	.01	481							
25				2,060	.01	556	2,370	.01	640	
26	1,960	.02	1,060							
27				2,070	.01	559	2,680	.03	2,170	
28	1,900	.03	1,540							
29				2,760	.08	5,960	3,300	.04	3,560	
30				3,400	.50	45,900				
31	2,390	.03	1,940	3,300	.20	17,800	4,370	.17	20,100	
							4,580	.26	32,200	

1940

Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	3,680	0.23	22,800	10,300	0.22	61,200			
2							21,700	0.15	87,900
3	3,970	.22	23,600	9,360	.16	40,400	22,500	.14	85,000
4									
5	3,400	.18	16,500	11,900	.29	93,200	20,500	.11	60,900
6									
7	3,400	.15	13,800	15,100	.38	155,000	17,300	.07	32,700
8				16,200	.34	149,000			
9	3,680	.18	17,900				14,000	.07	26,500
10				17,300	.25	117,000			
11	3,490	.16	15,100						
12				22,100	.37	221,000	10,800	.06	17,500
13	3,210	.16	13,900	23,300	.36	226,000	9,960	.06	16,100
14				25,000	.25	169,000			
15	3,580	.42	40,600				11,600	.09	28,200
16				22,500	.18	109,000			
17	5,320	.43	61,800	21,300	.14	80,500	11,900	.08	25,700
18									
19	5,320	.31	44,500	21,300	.15	86,300	11,200	.05	15,100
20							10,600	.04	11,400
21	7,430	.78	156,000	16,600	.10	44,800			
22							9,360	.04	10,100
23	10,900	.67	197,000	15,100	.08	32,600			
24							8,780	.04	9,480
25	11,600	.50	157,000	14,300	.07	27,000			
26							7,180	.03	5,820
27	11,900	.39	125,000	15,400	.10	41,600			
28							5,880	.07	11,100
29	12,200	.38	125,000	17,700	.10	47,800			
30	10,600	.26	74,400				5,000	.04	5,400
31				18,500	.09	45,000			

1940

[illegible]

TABLE 6.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment for the Colorado River at gaging station near Cisco, Utah, Oct. 1, 1939, to Sept. 30, 1941—Continued

1940

Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	10,900	2.29	674,000	3,120	0.08	6,750			
2				3,030	.05	4,100	2,850	0.01	770
3	8,220	1.33	295,000				2,850	.01	770
4				3,580	.23	22,200			
5	7,430	1.00	201,000				2,760	.02	1,490
6				3,210	.11	9,530			
7	6,450	.98	171,000				2,680	.01	724
8				2,940	.02	1,590			
9	5,100	.37	50,900				2,680	.01	724
10	5,100	.26	35,800	3,030	.03	2,450			
11	4,580	.31	38,300				2,590	.01	699
12				3,210	.02	1,730			
13	4,170	.14	15,800				2,940	.01	794
14				2,760	.02	1,490			
15							2,340	.02	1,260
16	3,580	.04	3,860	2,270	.01	613			
17	3,490	.07	6,590						
18				3,030	.02	1,640	1,640	.02	886
19	3,300	.05	4,460						
20				3,300	.04	3,560	2,420	.06	3,920
21	3,300	.05	4,460						
22	3,210	.03	2,600	3,210	.04	3,460			
23									
24	3,030	.02	1,650	3,120	.02	1,680	2,250	.04	2,430
25									
26	2,940	.04	3,190	3,030	.02	1,640	2,680	.06	4,350
27									
28	4,170	1.10	124,000	2,850	.02	1,540	2,500	.03	2,030
29									
30	3,120	.21	17,700	2,850	.01	770	2,590	.04	2,810
31									

1941

Day	January			February			March		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	2,760	0.03	2,240	2,590	0.03	2,100	2,500	0.12	8,100
2				2,590	.03	2,100			
3	2,420	.02	1,310				2,940	.17	13,500
4	2,190	.02	1,180	2,220	.03	1,800			
5							2,940	.12	9,530
6				2,110	.02	1,140	2,760	.14	10,400
7	1,840	.02	994						
8	2,010	.02	1,080	2,280	.02	1,230	2,590	.08	5,590
9									
10	2,060	.02	1,110	2,400	.03	1,940	2,500	.05	3,380
11									
12	2,270	.02	1,230	2,850	.16	12,310	2,370	.37	23,700
13									
14	2,400	.02	1,300	3,490	.20	18,850	2,680	.06	4,340
15									
16	2,420	.02	1,310	2,500	.10	6,750	2,850	.08	6,160
17									
18	2,250	.02	1,220	2,940	.14	11,110	2,760	.11	8,200
19									
20	2,010	.01	543	2,940	.10	7,940	3,030	.11	9,000
21	2,270	.02	1,230						
22				3,120	.20	16,800	3,780	.30	30,600
23	2,420	.02	1,310				4,070	.32	35,200
24				3,030	.17	13,900			
25	2,420	.02	1,310				5,540	.52	77,800
26				3,400	.20	18,400			
27							4,680	.30	37,900
28	2,250	.01	608	2,680	.18	13,000			
29							4,270	.26	30,000
30	2,370	.02	1,280						
31							5,210	.46	64,700

1941

April				May			June		
Day	Mean discharge (second-foot)	Suspended sedi-ment		Mean discharge (second-foot)	Suspended sedi-ment		Mean discharge (second-foot)	Suspended sedi-ment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1									
2	7, 180	0.78	151, 000	22, 900	0.78	482, 000	26, 200	0.09	63, 700
3	6, 690	.57	103, 000						
4				27, 900	.76	573, 000	26, 200	.09	63, 700
5	6, 000	.30	48, 600	40, 500	1.12	1, 220, 000			
6				40, 500	.80	875, 000	27, 100	.10	73, 200
7	5, 650	.30	45, 800	37, 000	.66	659, 000			
8				34, 400	.49	455, 000			
9	5, 540	.31	46, 400	34, 800	.50	470, 000			
10				38, 300	.57	589, 000			
11	6, 810	.62	114, 000				27, 100	.13	95, 100
12	6, 450	.44	76, 600	47, 700	.60	773, 000	24, 100	.12	78, 100
13	6, 340	.34	58, 200				21, 300	.12	69, 000
14									
15	6, 280	.28	47, 500	63, 400	.38	650, 000			
16	6, 340	.31	53, 100	57, 400	.31	480, 000	20, 100	.09	48, 800
17				48, 200	.32	416, 000			
18	5, 990	.24	38, 800				22, 900	.11	68, 000
19				46, 400	.24	301, 000			
20	5, 600	.25	37, 800	45, 000	.19	231, 000	28, 400	.14	107, 000
21							31, 300	.15	127, 000
22	5, 200	.16	22, 500	28, 800	.22	171, 000	31, 300	.17	144, 000
23	5, 000	.22	29, 700						
24				31, 300	.18	152, 000	30, 500	.10	82, 400
25	5, 990	.31	50, 100				30, 900	.43	359, 000
26	7, 950	.50	107, 000	35, 700	.20	193, 000			
27	11, 200	.67	203, 000	36, 100	.17	166, 000	27, 900	.11	82, 900
28	15, 800	.94	401, 000						
29	19, 700	1.02	543, 000	34, 400	.12	112, 000	21, 700	.08	46, 900
30	19, 700	.83	441, 000						
31				27, 900	.11	82, 900			

1941

July			August			September			
1	16, 900	0.07	31, 900	3, 800	0.02	2, 050	2, 000	0.05	2, 700
2									
3	14, 300	.06	23, 200	3, 800	.02	2, 050	1, 990	.04	2, 150
4									
5	13, 300	.07	25, 100	2, 760	.02	1, 490	1, 920	.03	1, 560
6									
7	11, 900	.05	16, 100	2, 500	.05	3, 380	1, 740	.03	1, 410
8									
9	11, 200	.06	18, 100	4, 370	.78	92, 000	1, 630	.03	1, 320
10				8, 690	3.91	917, 000			
11	10, 900	.07	20, 600	6, 690	.85	154, 000			
12							2, 220	.03	1, 800
13	10, 300	.05	13, 900	5, 320	.29	41, 700			
14				5, 000	.14	18, 900	3, 300	.77	68, 600
15	9, 660	.14	36, 500	4, 580	.10	12, 400			
16							4, 170	.16	18, 000
17	8, 500	.04	9, 180	5, 880	1.13	179, 000	3, 870	.07	7, 310
18									
19	7, 430	.17	34, 100	5, 650	1.30	198, 000	3, 870	.05	5, 220
20	7, 690	.07	14, 500	4, 890	.20	26, 400			
21	7, 950	.05	10, 700				3, 970	.05	5, 360
22				4, 270	.14	16, 100	7, 850	1.57	333, 000
23							12, 600	2.03	691, 000
24	6, 690	.04	7, 220	3, 300	.08	7, 130	8, 220	1.94	431, 000
25	6, 450	.21	36, 600				7, 000	.66	125, 000
26				2, 760	.03	2, 240			
27	5, 650	.08	12, 200				5, 400	.17	24, 800
28				2, 220	.03	1, 800			
29	5, 100	.04	5, 510				5, 210	.10	14, 100
30	4, 580	.03	3, 710	2, 100	.03	1, 700			
31									

QUANTITIES OF SUSPENDED SEDIMENT

25

TABLE 7.—Mean daily concentration of suspended sediment in the Colorado River at gaging station at Lees Ferry, Ariz., Oct. 1, 1928, to Dec. 16, 1933

1928-29

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	0.17					0.37	0.79					
2		1.56					1.01	0.50	0.86	0.41	3.80	1.68
3			0.24							.33	5.24	
4				0.23			1.00	.66	.69			2.19
5	.33	.92				.24					3.68	
6					0.35			.72	.68	.31	5.67	
7		.77	.21	.12							5.35	3.57
8	.50					.58	1.93	.58	.58	.30	4.59	
9						1.16	1.43	.70				3.36
10						1.69	1.13	.70	.81	1.41	4.12	
11							1.93	1.08	.94			2.60
12	1.12					2.34		1.06	.67	.65	2.28	
13		.38	.20			4.32		1.22				
14		.35		.12	0.22	2.13		1.25	.51		5.65	1.38
15							.74			.31	3.48	
16		.38							.63		1.77	1.30
17			.16				.85	1.14		.33		
18				.16	.15			.90	.55		.81	.79
19							1.03	1.19		.28	.57	
20								1.02	.76			.66
21		.35		.29		.81	1.38	.87	.50		.53	
22					.38		1.12		.32	.36		2.26
23		.33					1.06	1.03			.51	
24	.97		.14				1.16	1.06	.40	.34	.39	
25			.16									6.07
26	.62	.28		.30	.30		1.10	.99	.40		.46	
27					.33		1.14	.89		2.18		3.31
28			.09			.87	.95	.77	.37		.87	
29	.44							.86	.37	2.88		1.65
30		.31					.64	.84		4.20	1.31	
31			.17	.19				.84		3.79		

1929-30

1	1.67	0.47						0.88	0.90	0.31	3.63	
2			0.31	0.17			0.43	.80	1.33	.31	1.54	
3					0.45	0.57		.87	1.38			
4							.32	.97				
5	.74							.82	.92	.26		
6									.82	.22		0.39
7	.56	.41	.42				.31		.70		2.98	
8					.36	.41			.66	.17	3.18	2.29
9		.50	.39	.26			.54	.61	.63		3.40	
10	.52		.39	.31	.41		.78	.53	.90	.17		1.36
11		.49	.33	.45	.38		1.21	.89			8.33	
12	.54					.47	1.24	.51	.78	.26		1.37
13		.49	.37	.33			2.06		.45		8.02	
14	.61				.33	.31	1.48	.52	.66	2.20	7.13	
15		.52		.31			1.13		.58			.94
16	.58		.31				1.70	.37	.54		4.15	
17				.27	.58	.35	1.14	.33	.44	1.72		.68
18	.68	.38					1.38		.44	1.09	3.33	
19					.58	.33	1.23	.50	.46			.38
20			.33	.28				.51	.69		2.88	
21	.74		.31		.45	.38	1.16		.58	1.82		
22		.38		.27			.91	.38	.52		2.31	.34
23	.79			.22			.87		1.01	2.82		
24		.37	.26			.39	.90	.45	1.04	2.44	1.73	.27
25	.61	.42						.59	.60		1.59	
26			.15		1.01	.45	1.05	.54	.58	1.98		.29
27		.45	.15	.26			1.22	.52	.46		1.10	
28	.49				.69	.49	1.24		.53	1.06		
29		.28		.18			.91	.44	.42		.86	.69
30	.43		.22				.92	.68	.39	1.16		
31			.20	.23		.49		.74			.57	

TABLE 7.—Mean daily concentration of suspended sediment in the Colorado River at gaging station at Lees Ferry, Ariz., Oct. 1, 1928, to Dec. 16, 1935—Continued

1930-31													
Day	October	November	December	January	February	March	April	May	June	July	August	September	
1	0.80	0.35	0.23	0.27	0.40	0.29	0.47	0.67	0.59	0.25	1.69	0.27	
2	.60	.35	.32	.26	.41	.27	.44	.65	.50	.23	1.04	.25	
3	.60	.35	.24	.60	.45	.29	.41	.65	.65	.31	1.32	.23	
4	1.10	.35	.24	.40	.45	.28	.35	.65	.69	.40	2.92	.22	
5	1.05	.35	.24	.75	.50	.27	.30	.63	.49	.50	3.11	.22	
6	1.05	.37	.28	.40	.45	.26	.27	.59	.57	.62	2.22	.22	
7	1.15	.35	.27	.25	.35	.26	.28	.55	.40	.70	1.77	.22	
8	.90	.35	.25	.25	.38	.27	.29	.60	.54	.60	1.27	.23	
9	.75	.32	.23	.23	.41	.28	.29	.63	.51	.40	.94	.25	
10	.85	.31	.22	.22	.38	.30	.30	.65	.58	.35	1.59	.25	
11	.60	.30	.24	.22	.37	.35	.30	.67	.60	.30	1.24	.30	
12	.60	.30	.25	.23	.37	.32	.32	.75	.56	.25	1.45	.25	
13	.68	.35	.24	.24	.37	.30	.34	.60	.54	.23	1.03	.22	
14	.55	.41	.24	.25	.39	.30	.36	.58	.52	.20	.77	.18	
15	.48	.37	.23	.25	.41	.30	.38	.52	.50	.18	.83	.15	
16	.50	.35	.25	.26	.44	.31	.32	.47	.48	.17	.83	.51	
17	.58	.33	.27	.27	.48	.36	.40	.47	.47	.17	.79	.51	
18	.52	.80	.25	.32	.75	.43	.38	.49	.47	.17	.60	2.87	
19	.52	.70	.24	.37	.58	.35	.55	.60	.47	.20	.82	1.82	
20	.49	.68	.20	.30	.56	.29	.55	.91	.44	.28	.47	2.61	
21	.40	.55	.18	.27	.52	.32	.56	1.50	.43	.20	.44	2.46	
22	.49	.53	.16	.30	.48	.35	.56	1.24	.42	.18	.65	2.12	
23	.45	.50	.15	.30	.45	.39	.56	.98	.37	.15	.59	1.97	
24	.43	.48	.15	.33	.38	.42	.65	.97	.32	.13	.75	2.92	
25	.40	.45	.15	.30	.37	.46	.57	.85	.32	.15	.77	5.61	
26	.35	.41	.15	.30	.37	.47	.56	.66	.32	.20	.61	3.22	
27	.33	.32	.24	.35	.36	.49	.56	.65	.30	.14	.61	2.29	
28	.30	.26	.30	.38	.32	.51	.58	.65	.27	.13	.35	2.53	
29	.40	.25	.35	.40		.53	.61	.73	.24	.13	.20	2.22	
30	.38	.24	.40	.40		.55	.61	.59	.22	1.25	.16	2.42	
31	.36		.44	.40		.52		.59		1.72	.28		
1931-32													
1		0.38		0.45	0.26				0.82	0.83	1.52	4.40	
2	2.01						1.07		.74	.68		3.62	
3					.45			0.86	.61	.52			
4									.62		.99	1.87	
5							1.39	.99	.57	.75			
6		.35			.88			1.07	.59		.71	1.27	
7	2.90						1.65	1.03	.50	.66			
8							2.00	1.04	.52	.66	.49	1.02	
9	1.76	.41		.35		0.75	2.08	.99	.48				
10								1.09	.56	.61	.38	.74	
11		.55	0.27			.81	1.82		.48	.53			
12	1.08			.50			1.62	.87	.30	.30	.45	.39	
13		.71		.44									
14	1.25		.45				1.18	1.13	.40	1.55	.29	.49	
15				.47				1.19	.60	1.40			
16	.84	1.36	.44	.43		.78	1.31	1.13		1.36	.19	.35	
17							1.71	1.12	.51				
18		.81					1.37	.49	.87	.15			
19	.49						1.32	1.36	.63	.60			
20		.82			.86			1.11	.57	.60	.54		
21	1.82						1.53	1.06	.43		.58		
22					1.05		1.24	.97		.64	1.07		
23	2.26	.48					1.26	.98	.47	.49	3.97		
24				.35	.91	1.79		.96	.45		4.11		
25		.45				1.44	1.17	.96	.48	.34	2.44		
26	1.29		.56	.34	.99		1.11	.88		.28	1.74		
27		.38				1.29	.95	.83	.48			1.57	
28	.78		.43	.17				.83	.49	.26	2.38	1.42	
29					1.17	1.26	1.05	.81	.69	.26	5.81	1.42	
30	.60	.29	.54	.26			.93	.84	.70	.80	6.27		
31						1.21		.78		.63	5.57		

QUANTITIES OF SUSPENDED SEDIMENT

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TABLE 7.—Mean daily concentration of suspended sediment in the Colorado River at gaging station at Lees Ferry, Ariz., Oct. 1, 1928, to Dec. 16, 1933—Continued

1932-33

Day	October	November	December	January	February	March	April	May	June	July	August	September
1.		0.42	0.31	0.21	0.25				0.92	0.38	0.61	0.23
2.	0.71							0.60		.36		.22
3.	.52							.77	1.09			
4.								.93	1.11			
5.								1.19	1.09		1.16	
6.								1.14	1.02	.29	.96	.16
7.								1.13	.88	.30	.93	.18
8.							0.52	.93		.56	1.02	
9.						0.41		.87	.73	1.35		2.29
10.		.35	.28				.51		.74	2.27	2.54	
11.				.22	.23	.41	.43	.84	.73	1.69	2.12	2.18
12.	.37	.37	.35		.23	.52	.36	.85	.76	3.33	2.37	7.31
13.				.23	.21	.52			.75	2.46	1.45	6.23
14.	.34	.30	.26			.55	.40	.73	.58	1.62		4.19
15.				.08	.23		.40	.63	.61	.97	.93	2.90
16.	.30	.34	.19	.19	.19			.53	.68	.97	.98	2.22
17.	.29						.37	.55	.49	.68		
18.							.34		.54	.90		
19.								.47	.47			
20.							.37	.42	.45			
21.						.54	.34	.69	.56			
22.							.30	.93	.47			
23.							.33	1.38	.51			
24.						.54	.33	1.55	.59			2.91
25.		.34				.44	.36	1.64	.51		.95	2.25
26.	.41		.18	.36	.21		.34	1.24	.71		1.05	
27.		.34			.33	.42	.48	1.05	.57	.39		.98
28.	.52		.21	.26		.35	.46	1.01	.46	.48	.49	.72
29.		.34	.19				.40	1.07	.52	1.06		
30.	.40	.26	.27	.19		.34		1.03	.45		.39	
31.								.72		.78		

1933

1.	0.58	0.39	1.26									
2.												
3.		.35										
4.												
5.		.45										
6.	3.46											
7.	3.24											
8.	4.04		.49									
9.	3.71	.40	.50									
10.												
11.	2.03	.52	.32									
12.	1.23											
13.	.99	.45	.40									
14.	1.58	.49										
15.		.40	.59									
16.	.99	.38	.44									
17.												
18.												
19.												
20.		.43										
21.												
22.		.41										
23.												
24.	.45	.39										
25.	.46	.41										
26.												
27.	.45	.44										
28.	.34											
29.	.38	.49										
30.												
31.												

TABLE 8.—Mean daily concentration of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1925, to Sept. 30, 1929

1925-26												
Day	October	November	December	January	February	March	April	May	June	July	August	September
1								1.65				
2		0.38								0.21		
3												0.11
4			0.16	0.09	0.07	0.14			1.28		0.50	
5							0.86	1.72				
6		.43				.18				.15		
7				.12	.10			3.02	1.04		.24	.07
8						.32	3.15			.44		
9		.37			.11							
10			.23									
11						.44					.77	
12	2.86		.14	.08			2.17		1.16	.48		
13		.34			.11			1.35				
14							1.87				.89	1.83
15			.16	.07								
16		.27			.16	.54			.64	1.09		
17								.71				
18		.28	.11			.68	1.94	.67	.80	1.25		1.03
19				.06	.22						.62	
20												
21									.39			
22			.10	.05		1.27		1.23		.72		.27
23		.25			.18							
24			.07				3.55		.37			
25				.05							.60	1.25
26		.16				1.13		2.11		.34		
27			.09		.14							1.08
28							2.55		.24		.55	
29	.50			.06								
30		.15	.13			1.09				.20		
31	.37							2.38				
1926-27												
1												2.16
2										4.69		
3												
4	1.36	0.10				0.77	1.18	2.32	0.49		0.96	
5				0.04								
6		.11			0.08				.59	.83		.98
7			0.15			.91					.85	
8			.07				1.90	2.34				
9	.87				.08				.72	.85		3.86
10			.59					2.30			3.16	
11						.84						
12	1.17	.08					2.07			1.01		
13				.17	.10			1.07	.91		2.09	13.81
14												
15			.60	.19		.65	1.52			1.50		
16	.62										1.15	
17		.15	.57		.36			.98	.99			5.38
18	.60					.64						
19				.12			.73				.75	
20					2.85			1.90		.31		
21		.09	.15									2.99
22				.11		.50	.50		.83			
23	.23				.94						.41	
24							.54	2.19		.16		1.89
25				.14		.37			.73			
26	.20				.84		.60				.23	
27		.12	.06				1.04	2.77		.20		.95
28					.70	.45	1.00		.92			
29	.13			.11			1.67				2.06	
30		.12					1.38					2.77
31			.05	.10		.77		1.08		1.22		

TABLE 8.—Mean daily concentration of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1925, to Sept. 30, 1929—Continued

1927-28.

Day	October	November	December	January	February	March	April	May	June	July	August	September
1				0.05								1.18
2				.09					1.24	0.43		1.75
3								2.11	1.28		0.72	1.02
4			0.19		0.06		1.22	2.92	1.10			.71
5	0.86	0.77		.07					.89	.41	.65	.93
6			.17		.12	0.36			1.02	.50		.76
7				.05	.56	.98	2.58			.29	1.13	.70
8	.49	1.19	.16		.38	.92	2.26	.85				.69
9				.07	.53	.67	1.99	.48			.43	.45
10			.13		.75	.64	1.74	.77				.34
11						.60	.68	1.49		.17	.38	.31
12	.42	.62	.08	.07	.49		.52		.63			.24
13						.62	.47		.77	.15	.40	.20
14				.07	.23			1.72			.45	.18
15	.32	.38	.08			.78		1.45	.67	.17	.47	.44
16					.19		.35	1.93	.45	.17	.28	.26
17		.24	.11			.79	.31	1.24		.50	.62	.16
18	.25			.10			.30	1.52	.57		.79	.16
19			.09		.14	.67	.31	1.28			.57	.10
20		.27		.21			.24	1.13	.41	.14	.41	.10
21	.21				.09		.28	1.12	.56		.32	.09
22		.28	.04	.11		.55	.36	.97	.48	.63	.34	.09
23					.12		.41		.41		.35	.06
24		.22	.03	.09		.49		.97		.53		.06
25	.16						.56			.67	.23	.07
26		.17					.60		.32		.57	.06
27			.05	.05		.72			.38	.70	.50	.06
28	.16	.16			.14		.72	1.03			1.30	.05
29			.08	.05			.90	.88	.48	.40	1.90	
30		.16				1.57			.54		1.88	.06
31	.17			.05							1.40	

1928-29

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	0.07		0.16		0.04	0.12		0.75	1.30	0.27	8.85	0.98
2	.19	0.65		0.07			0.95	.62	.88	.30	5.17	2.02
3	.16		.18					.61	1.04	.39	7.53	
4		2.28		.06	.05	.13	1.74	.68	.82	.30	5.70	2.80
5	.12		.13					.74	.88	.40	7.94	3.86
6		1.02		.05	.18	.09	4.20	.77	1.01	.23		5.64
7			.14				3.26	.87	1.08	.20	6.89	4.95
8	.53	.81		.04	.14	.22	3.31	.96	.92	.21		4.59
9			.12				2.72	1.09	.99	.22	4.87	5.06
10	.62	.61		.04	.15		2.07	1.18	1.15	.20	4.38	
11			.11			2.94	1.70	1.68	1.03	1.28	3.82	3.81
12	.21	.32		.02	.11		1.50	1.53	.91	.41	4.40	3.34
13			.10			3.28	1.30		.87	.60	5.30	2.43
14	1.86	.28		.06	.05		1.23		.69	.23	9.28	1.62
15		.09				3.66		1.27	.84	.18	5.66	1.66
16	5.76	.27		.03	.06		.80	1.48	.73	.20	3.21	1.32
17			.07			1.75	.79	1.46	.68	.19	1.91	1.39
18	3.01	.25		.04	.07		.77	1.38	.64	.24	1.23	.91
19			.06			1.26	.89	1.88	.62	.30	.88	.65
20	1.96	.27		.06	.07		1.37	1.69	.77		.64	.61
21			.05			.92	2.05	1.26	.68	.29	.69	1.09
22	1.58	.23		.08	.12		1.98	1.98	.61	.36	.49	6.35
23						.61	1.88	1.45	.57	.31	.48	8.07
24	1.12	.23		.07			1.77	1.95	.40	2.52	.40	4.81
25			.02		.11	.80	1.65	1.98	.52	.64	.52	8.90
26	.83	.17		.08			1.61	1.40	.56	.50	.34	6.87
27			.01		.08	1.19	1.30	1.30	.46	.73	.36	4.24
28	.52	.14		.06			1.20		.40	7.49	.39	2.86
29			.02			.95	.96	2.12	.52	3.12	.40	
30	.44			.05			.83	1.34	.29	10.9	.42	2.03
31			.04			.62		1.33		8.03	.51	

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941

Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	22,900	1.57	970,000	10,800	0.20	58,000	7,230	0.07	12,600
2	21,600	1.06	618,000	10,800	.19	55,000	7,410	.07	14,000
3	20,200		539,000	10,800		46,600	7,780		14,700
4	18,900	1.00	510,000	10,800	.16	46,600	8,020	.08	17,300
5	17,700	.68	325,000	10,800	.17	49,500	8,340	.11	24,700
6	16,500	.58	258,000	10,700	.16	46,200	8,680	.11	25,800
7	15,800	.51	217,000	10,400	.19	53,300	8,840	.14	33,400
8	15,200	.45	184,000	10,300	.16	44,400	8,740	.13	30,600
9	15,100	.42	171,000	10,600	.18	51,500	8,360	.12	27,600
10	14,800	.36	144,000	10,700		48,600	8,280	.08	17,900
11	14,500	.37	145,000	10,600	.17	48,600	8,130	.12	26,300
12	14,400	.31	120,000	10,800		37,900	8,130	.15	32,900
13	14,900	.34	137,000	10,800	.13	37,900	8,120	.12	26,300
14	16,100	.34	148,000	10,700		37,500	8,170	.08	17,700
15	16,700	.41	185,000	10,500	.14	39,600	8,150	.14	30,800
16	16,300	.39	171,000	10,200		35,800	8,390		15,800
17	15,600	.43	181,000	10,000	.13	35,100	8,450	.04	9,120
18	16,800	.40	181,000	9,760		34,200	8,550	.12	27,700
19	16,900	1.37	624,000	9,320	.16	40,200	8,470		
20	16,900	1.02	465,000	8,930		26,500	8,380		
21	15,400	.73	303,000	8,950	.11	26,500	8,180		
22	14,600	.70	276,000	9,220	.10	24,900	7,890		
23	14,000	.58	219,000	9,350	.13	32,800	7,590		
24	13,300	.69	248,000	9,320		32,000	7,160		
25	12,700	.38	130,000	9,120	.13	32,000	6,450		
26	12,400	.39	130,000	8,890	.11	26,400	5,960		
27	11,900		83,400	8,330	.06	13,500	5,580		
28	11,600	.26	81,300	7,890		12,800	4,890		
29	11,300	.22	67,000	7,480	.06	12,100	4,540		
30	11,200	.20	60,400	7,300	.07	13,800	4,370		
31	10,900	.17	50,000				4,660		
Monthly load (tons)			7,941,000						

1930

Day	January			February			March		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	4,900			4,710		5,400	13,400		216,000
2	5,080		6,200	5,390	0.05	7,280	12,300	0.25	82,900
3	4,930			6,480		10,500	11,500	.19	58,900
4	4,880	0.04	5,260	7,200	.09	17,500	10,800		53,900
5	4,920			7,200		13,500	10,100	.20	54,500
6	5,340		6,500	6,600	.07	12,500	9,540		48,500
7	5,930	.04	6,390	6,380		13,500	9,200	.20	49,600
8	6,240		6,700	6,380	.10	17,290	9,030	.22	52,690
9	6,360	.04	6,850	6,580		27,000	8,760		48,500
10	6,440		6,700	6,810		14,000	8,710	.21	49,300
11	6,700	.04	7,230	7,000	.07	13,200	8,950	.21	50,700
12	6,440		6,700	7,120		13,500	9,030	.22	53,600
13	6,090	.04	6,580	7,280	.11	21,600	8,810	.20	47,500
14	5,780		5,400	7,580		21,500	8,490	.20	45,800
15	5,610	.03	4,530	7,890	.10	21,300	8,250	.16	35,600
16	5,550			8,440		27,000	8,170	.17	37,500
17	5,690			9,150	.17	42,000	8,280	.16	35,700
18	5,850			9,440		40,500	8,290	.20	44,700
19	6,030			9,300	.15	37,600	8,550	.20	46,100
20	5,640			9,280		40,500	8,890	.42	101,000
21	5,340			9,280	.25	62,600	9,810	.38	101,000
22	4,860			9,540		64,700	10,100	.40	109,000
23	4,160			10,200		65,000	10,100		113,000
24	3,860			10,700	.24	69,300	10,300	.46	125,000
25	3,260			11,500		80,900	11,400	.58	177,000
26	3,250			16,500	.64	285,000	11,400	.73	224,000
27	3,200			14,600		324,000	11,500	.68	211,000
28	4,430			13,800	1.33	495,000	11,500	.62	192,000
29	4,600						11,400	.68	209,000
30	4,420						11,300	.68	207,000
31	4,360						11,200	.62	187,000
Monthly load (tons)									3,069,000

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	April			May			June		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	10,900	0.55	162,000	44,100	1.10	1,310,000	54,800	1.09	1,610,000
2	10,600	.49	140,000	42,200	1.07	1,220,000	65,900	1.28	2,280,000
3	9,910	.46	123,000	39,300	.80	848,000	69,000	1.21	2,250,000
4	9,500	-----	80,900	36,900	.85	846,000	67,400	1.17	2,130,000
5	9,500	-----	97,400	37,500	.75	759,000	60,500	1.20	1,960,000
6	9,540	.29	74,600	40,900	.86	949,000	54,800	.84	1,240,000
7	9,440	.32	81,500	41,400	.79	882,000	49,800	.87	1,170,000
8	10,300	.49	136,000	38,500	.64	665,000	46,200	.67	835,000
9	11,300	.68	207,000	36,000	.58	563,000	46,200	-----	809,000
10	13,800	.74	275,000	33,700	.50	454,000	49,800	.61	819,000
11	21,000	1.97	1,120,000	31,300	.47	397,000	53,600	.84	1,210,000
12	30,100	1.99	1,620,000	29,600	.40	319,000	55,600	.66	990,000
13	39,100	2.94	3,100,000	27,600	.37	275,000	55,500	.54	808,000
14	40,200	2.63	2,850,000	25,800	.44	306,000	55,200	.74	1,100,000
15	39,100	2.78	2,930,000	24,200	.43	281,000	57,900	.69	1,080,000
16	40,100	3.38	3,660,000	22,800	.42	258,000	61,600	.68	1,130,000
17	40,300	1.71	1,860,000	21,500	.30	174,000	61,400	.65	1,080,000
18	41,100	1.47	1,630,000	20,600	.30	167,000	58,500	.57	899,000
19	39,600	1.86	1,990,000	21,400	.29	167,000	55,700	.64	961,000
20	36,900	2.09	2,080,000	24,400	.54	355,000	53,800	.45	653,000
21	33,100	.84	750,000	25,800	.62	431,000	51,600	.46	640,000
22	30,100	.89	723,000	25,400	.58	397,000	50,600	.54	737,000
23	28,600	1.08	833,000	24,900	.50	336,000	47,500	.53	679,000
24	29,300	.69	545,000	25,400	.45	308,000	44,700	.81	976,000
25	34,400	1.06	983,000	32,100	.74	641,000	43,400	.48	562,000
26	39,200	1.22	1,290,000	37,000	.89	885,000	42,500	.44	504,000
27	42,100	1.04	1,180,000	34,300	.78	722,000	40,000	.47	507,000
28	44,400	1.27	1,520,000	34,200	.78	719,000	36,000	.43	417,000
29	44,600	1.26	1,520,000	38,000	.63	646,000	32,200	.39	339,000
30	44,000	.87	1,030,000	42,600	.67	770,000	29,200	.30	236,000
31	-----	-----	-----	48,300	1.03	1,340,000	-----	-----	-----
Monthly load (tons)			34,590,000	18,390,000			30,610,000		

1930

Day	July			August			September		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	26,600	0.32	230,000	17,500	2.01	963,000	10,200	0.46	127,000
2	24,900	.23	154,000	18,100	3.03	1,480,000	9,680	-----	113,000
3	23,200	.32	200,000	17,800	2.41	1,160,000	9,350	.42	106,000
4	21,500	.20	116,000	19,000	2.83	1,450,000	9,370	.36	91,000
5	19,800	.20	106,000	23,000	4.47	2,770,000	10,200	.31	85,300
6	18,000	.22	107,000	24,100	3.40	2,210,000	9,830	.29	76,900
7	16,500	.18	80,100	28,100	3.36	2,550,000	10,000	.29	78,200
8	15,300	.20	82,500	21,400	3.10	1,790,000	13,500	.88	320,000
9	14,600	.20	78,800	27,300	6.64	4,890,000	14,500	1.83	716,000
10	14,100	.19	72,300	30,000	8.45	6,840,000	14,000	1.88	710,000
11	14,000	.27	102,000	44,400	10.3	12,300,000	13,300	1.48	531,000
12	13,200	.25	89,000	54,800	10.7	15,800,000	11,200	2.55	770,000
13	15,700	2.25	963,000	47,900	6.89	8,910,000	9,860	1.19	316,000
14	24,400	5.33	3,510,000	43,300	6.41	7,490,000	9,050	.93	227,000
15	19,500	4.19	2,200,000	35,900	8.64	8,360,000	8,470	1.08	247,000
16	16,700	3.28	1,480,000	34,700	5.46	5,110,000	8,090	.71	155,000
17	16,900	2.20	1,000,000	29,300	3.98	3,150,000	7,760	.68	142,000
18	15,400	2.32	964,000	27,600	3.31	2,460,000	7,400	.44	87,800
19	16,900	1.81	825,000	29,500	3.48	2,770,000	7,120	.46	88,300
20	25,200	2.76	1,880,000	32,900	3.09	2,740,000	6,980	.39	73,400
21	22,800	-----	1,620,000	30,000	2.72	2,200,000	6,840	.29	53,500
22	21,100	2.93	1,670,000	25,400	2.36	1,620,000	6,550	.22	38,900
23	19,600	2.38	1,260,000	22,200	2.33	1,400,000	6,320	.17	29,000
24	21,600	3.36	1,960,000	20,100	1.77	960,000	6,170	.16	26,600
25	21,900	2.81	1,660,000	18,200	1.49	731,000	6,070	.14	22,900
26	19,700	2.34	1,240,000	16,400	1.21	535,000	6,160	.13	21,600
27	17,900	2.16	1,040,000	14,600	1.03	406,000	6,830	.15	27,600
28	16,500	1.42	632,000	13,500	.91	331,000	6,860	.15	27,800
29	15,600	1.18	496,000	12,500	.60	202,000	6,720	.14	25,400
30	15,400	1.12	465,000	12,100	.60	196,000	9,030	.33	80,400
31	18,100	1.38	674,000	11,200	.45	136,000	-----	-----	-----
Monthly load (tons)			26,950,000	103,900,000			5,415,000		

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	October			November			December		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	9,830	0.53	141,000	8,210	0.22	48,700	4,910	10.09	11,900
2	9,540	1.31	337,000	8,040	.24	52,100	5,140	1.10	13,900
3	8,920	.89	214,000	8,060	.19	41,300	5,840	1.15	23,600
4	10,600	.66	189,000	7,950	1.18	38,600	5,930	.40	64,000
5	10,300	.88	244,000	7,770	.16	33,500	5,950	.28	44,900
6	10,800	.94	274,000	7,580	.16	32,700	5,900	1.22	35,000
7	10,000	.80	216,000	7,530	.15	30,500	5,730	1.18	27,800
8	9,710	.91	238,000	7,410	.16	32,000	5,510	.19	28,200
9	9,220	.79	196,000	7,420	.14	28,000	5,560	1.13	19,500
10	8,850	.73	174,000	7,470	.19	38,300	5,600	.11	16,600
11	8,550	.75	173,000	7,420	.15	30,000	5,550	1.10	15,000
12	8,530	.66	152,000	7,300	.16	31,500	5,590	1.10	15,100
13	8,550	.49	113,000	7,180	.15	29,000	5,690	.09	13,800
14	8,810	.48	114,000	7,160	1.12	23,200	5,690	1.10	15,300
15	8,820	.44	105,000	7,020	.27	51,100	5,680	.11	16,900
16	8,730	.35	82,400	6,990	1.10	18,900	5,650	1.09	13,700
17	9,030	.30	73,100	7,100	1.10	19,100	5,700	.08	12,300
18	9,340	.38	95,700	7,280	.14	27,500	5,610	1.08	12,100
19	9,120	.36	88,500	9,690	.43	112,000	5,570	1.08	12,000
20	9,060	.30	73,300	8,830	.68	162,000	5,470	.09	13,300
21	9,100	.33	81,000	8,190	.45	99,400	5,310	1.08	11,500
22	9,330	.32	80,500	8,430	.37	84,100	5,200	.07	9,820
23	9,480	.32	81,800	8,190	1.20	44,200	4,850	1.06	7,850
24	9,530	.32	82,300	8,010	.25	54,000	4,510	.06	7,310
25	9,380	.30	75,900	7,880	.28	59,500	3,980	1.06	6,450
26	9,160	.32	79,000	7,520	1.20	40,600	3,680	.05	4,960
27	8,970	.28	67,000	6,820	1.17	31,300	3,780	1.05	5,100
28	8,730	.23	54,200	5,950	.17	27,300	3,580	1.04	3,860
29	8,570	.21	48,500	5,390	1.10	14,500	3,480	.04	3,750
30	8,430	.18	40,900	4,990	.09	12,100	3,450	1.04	3,720
31	8,300	.18	40,300				3,600	.04	3,880
Monthly load (tons) ---			4,025,000	1,347,000			493,100		

	January			February			March		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	3,580	10.04	3,860	5,420	10.10	14,600	6,230	10.14	23,500
2	3,550	.04	3,830	5,600	.10	15,100	6,160	1.13	21,600
3	3,660	1.04	3,940	5,840	1.15	23,600	6,050	.11	18,000
4	3,860	1.04	4,150	6,770	.22	40,200	6,050	1.10	16,300
5	4,070	.04	4,400	6,780	.20	36,600	6,110	.11	18,100
6	4,080	1.05	5,500	6,890	.19	35,300	6,160	1.12	19,900
7	4,200	.07	7,930	6,840	.20	36,900	6,190	.12	20,000
8	4,210	1.06	6,820	6,790	1.19	34,800	6,160	1.10	18,600
9	4,420	.06	7,150	6,960	.18	33,800	6,250	.10	16,900
10	4,620	1.05	6,230	6,980	.19	35,800	6,500	1.12	21,000
11	4,570	.05	6,150	6,790	.15	27,500	6,740	.24	43,600
12	4,530	1.04	4,880	6,700	.16	28,900	6,810	1.22	40,400
13	4,500	1.04	4,850	6,920	.16	29,900	6,650	.20	35,900
14	4,400	.03	3,560	6,980	.20	37,700	6,470	1.17	29,700
15	4,560	1.03	3,690	7,080	.28	53,500	6,150	1.14	23,200
16	4,790	1.04	5,180	7,500	1.25	50,600	6,150	.13	21,600
17	4,870	.04	5,260	8,100	.26	56,800	6,530	.16	28,200
18	4,980	1.04	5,370	9,020	1.26	307,000	6,950	.24	45,000
19	4,900	.04	5,290	8,700	1.03	242,000	7,650	.36	74,300
20	4,830	1.03	3,910	8,070	.74	161,000	7,900	.39	83,100
21	4,860	.03	3,940	7,560	.67	137,000	8,120	.52	114,000
22	4,740	1.03	3,830	7,020	.54	102,000	8,380	.68	154,000
23	4,690	1.03	3,800	6,750	.38	69,200	8,380	.62	140,000
24	4,760	.03	3,860	6,570	.26	46,100	8,460	.52	119,000
25	4,980	1.03	4,020	6,530	1.20	35,200	8,540	.48	111,000
26	4,880	.07	9,220	6,540	.19	33,500	8,690	.54	127,000
27	4,920	1.07	9,280	6,330	.19	32,400	8,970	.57	138,000
28	4,950	.08	10,700	6,260	.17	28,700	9,360	.60	151,000
29	4,920	1.08	10,600				9,740	.66	173,000
30	5,080	.10	13,700				9,780	.60	158,000
31	5,220	1.10	14,100				9,550	.65	167,000
Monthly load (tons) ---			189,000	1,786,000			2,169,000		

¹ Estimated.

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

1931										
Day	April			May			June			
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1	9,160	0.65	161,000	13,300	0.85	305,000	26,200	0.95	671,000	
2	8,640	1.50	117,000	13,500	.80	291,000	25,100	.80	542,000	
3	7,960	1.40	85,900	13,000	.95	333,000	24,400	.85	559,000	
4	7,520	.38	77,100	12,600	.77	262,000	24,900	.68	457,000	
5	7,000	1.33	62,300	12,800	.82	283,000	26,800	.97	701,000	
6	6,650	.31	55,600	13,000	.88	309,000	28,700	.94	728,000	
7	6,910	1.30	55,900	13,400	.72	260,000	29,800	.84	675,000	
8	7,050	.31	59,000	14,300	.96	370,000	30,100	.86	698,000	
9	7,170	1.30	58,000	15,900	.99	425,000	29,300	.68	537,000	
10	7,200	1.29	56,300	16,000	.93	401,000	30,500	.54	444,000	
11	7,100	.27	51,700	15,800	.83	354,000	31,900	.86	740,000	
12	7,440	1.28	56,200	17,700	.96	458,000	31,600	.90	767,000	
13	7,830	.30	63,400	18,300	.89	439,000	29,800	.70	563,000	
14	7,840	1.30	63,400	17,100	.93	429,000	27,500	.71	527,000	
15	7,860	.36	76,300	16,000	.76	328,000	25,400	.62	425,000	
16	7,920	1.43	91,900	15,600	.72	303,000	24,000	.64	414,000	
17	8,510	1.50	115,000	14,900	.77	309,000	23,500	.67	425,000	
18	9,640	.51	133,000	14,700	.71	281,000	23,100	.50	312,000	
19	10,500	.73	207,000	15,900	.76	326,000	23,100	.56	349,000	
20	10,900	.75	220,000	21,400	1.16	670,000	23,600	.70	446,000	
21	11,600	.74	232,000	29,000	1.51	1,180,000	23,600	.54	344,000	
22	11,400	.86	264,000	33,800	1.68	1,530,000	22,000	.47	279,000	
23	11,200	.72	217,000	31,300	1.83	1,540,000	20,200	.32	174,000	
24	11,900	.66	212,000	27,800	1.45	1,090,000	18,600	.38	191,000	
25	12,800	.81	280,000	24,400	1.14	750,000	17,300	.34	159,000	
26	13,000	.70	245,000	21,000	1.07	606,000	15,900	.34	146,000	
27	13,600	.70	257,000	19,000	.87	446,000	14,500	.29	113,000	
28	13,800	.74	275,000	19,100	.90	464,000	13,700	.24	88,700	
29	14,800	.92	367,000	23,200	1.03	644,000	13,300	.29	104,000	
30	15,100	.80	326,000	26,700	1.01	727,000	12,900	.24	83,500	
31				26,900	.98	711,000				
Monthly load (tons)			4,541,000				16,820,000			12,660,000

1931										
Day	July			August			September			
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1	12,600	10.10	34,000	5,640	6.35	966,000	3,220	10.65	56,400	
2	12,900	.23	80,000	8,400	3.14	711,000	3,110	.47	39,400	
3	13,100	.24	84,800	7,830	15.06	1,070,000	3,200	.36	31,100	
4	13,600	.27	99,000	7,860	3.88	823,000	2,930	.67	52,900	
5	14,900	.42	169,000	8,860	3.48	832,000	2,720	.67	49,100	
6	17,700	.88	420,000	7,470	4.75	957,000	2,780	.40	30,000	
7	15,900	.93	399,000	6,930	3.40	635,000	3,120	.28	23,600	
8	14,500	1.12	438,000	8,090	5.39	1,180,000	2,930	.20	15,300	
9	12,700	.90	308,000	7,380	4.54	904,000	2,680	.22	15,900	
10	11,600	.63	197,000	6,190	3.30	551,000	2,580	.15	10,400	
11	10,400	.40	112,000	6,500	2.06	361,000	2,870	.21	16,300	
12	9,290	.37	92,700	7,290	3.58	704,000	2,700	1.24	90,300	
13	8,340	.31	69,700	5,980	2.50	403,000	2,560	.73	50,400	
14	7,460	.22	44,300	5,380	2.02	293,000	2,630	.53	37,600	
15	6,760	.16	29,200	5,570	1.28	192,000	2,840	.39	29,900	
16	6,180	.13	21,700	5,270	1.00	142,000	3,140	.87	73,700	
17	5,770	1.11	17,100	4,960	.88	118,000	2,750	1.83	136,000	
18	5,290	.09	12,800	4,720	1.67	213,000	3,440	.77	71,400	
19	4,910	1.11	14,600	4,140	1.95	218,000	4,610	1.08	134,000	
20	5,200	.13	18,200	3,880	1.14	119,000	3,290	1.69	150,000	
21	4,750	.61	78,200	3,640	.83	81,500	4,920	2.61	346,000	
22	5,040	1.23	167,000	3,350	.78	70,500	5,460	2.25	331,000	
23	4,690	2.86	362,000	3,180	.62	53,200	5,630	2.85	433,000	
24	3,980	1.22	131,000	3,070	.46	38,100	5,810	3.58	561,000	
25	3,600	.70	68,000	3,460	.86	80,300	8,710	2.70	634,000	
26	3,480	1.42	39,400	3,400	1.87	171,000	12,400	4.01	1,340,000	
27	3,620	.32	31,200	3,190	1.42	122,000	15,400	3.54	1,470,000	
28	3,600	.27	26,200	2,940	.83	65,800	12,600	3.32	1,130,000	
29	3,680	.75	74,400	2,900	.59	46,100	10,900	2.34	688,000	
30	3,350	2.25	203,000	2,940	.55	43,600	8,850	2.48	592,000	
31	5,160	.70	97,400	3,240	.32	28,000				
Monthly load (tons)			3,939,000				12,190,000			8,639,000

¹ Estimated.

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

1931									
Day	October		November			December			
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	7,910	2.27	484,000	5,880	1.40	63,400	3,710	1.10	10,000
2	7,470	2.50	504,000	5,760	.36	55,900	4,160	1.12	13,500
3	7,730	2.40	500,000	5,820	1.35	54,900	4,740	1.15	19,200
4	15,300	2.90	1,200,000	6,090	.31	50,900	4,600	.22	27,300
5	15,900	6.17	2,650,000	6,010	.28	45,400	4,610	1.16	19,900
6	18,200	5.24	2,570,000	5,810	.25	39,200	4,430	1.12	14,300
7	13,900	2.98	1,120,000	5,810	.22	34,500	4,010	.12	13,000
8	10,800	2.88	839,000	5,740	1.21	32,500	3,530	1.10	9,520
9	9,230	1.20	573,000	5,690	.21	32,200	3,720	.08	8,040
10	8,390	1.79	405,000	6,030	1.23	37,400	3,910	1.08	8,440
11	7,670	1.54	319,000	6,460	.26	43,200	4,130	1.08	8,900
12	7,340	1.17	232,000	6,520	1.35	61,500	4,000	.09	9,710
13	7,970	1.12	241,000	7,960	.35	75,100	5,550	1.15	22,400
14	7,440	1.11	223,000	9,950	3.25	872,000	5,620	.23	34,900
15	6,860	.81	150,000	10,500	2.01	569,000	5,170	1.27	37,700
16	6,410	1.07	185,000	10,300	2.28	633,000	4,950	.17	22,700
17	6,290	.85	144,000	8,670	1.68	393,000	4,560	1.12	14,800
18	6,010	.60	97,300	7,310	1.30	256,000	4,080	1.11	12,100
19	5,800	.36	56,300	6,830	.98	181,000	3,150	.06	5,100
20	6,010	.46	74,600	6,650	.77	138,000	2,520	1.05	3,400
21	7,500	.39	78,900	6,500	.81	142,000	2,160	1.05	2,910
22	13,300	1.78	638,000	6,680	1.75	135,000	2,560	.07	4,830
23	11,200	2.38	719,000	6,440	.50	86,800	2,850	1.06	4,610
24	9,230	2.14	533,000	6,310	.30	51,100	3,430	.06	5,560
25	7,800	1.71	360,000	6,290	1.28	47,500	4,740	1.07	8,950
26	6,820	1.79	329,000	6,100	1.26	42,800	4,900	.18	23,800
27	6,550	1.20	212,000	5,600	1.25	37,800	5,330	1.21	30,200
28	6,480	1.19	208,000	4,860	.24	31,400	6,200	1.24	40,100
29	6,170	1.03	171,000	4,390	1.18	21,300	6,550	.26	45,900
30	6,030	.61	99,200	4,020	.12	13,000	6,900	1.28	51,900
31	5,920	.62	99,000				7,010	.30	56,700
Monthly load (tons)			16,010,000	4,277,000			590,400		
1932									
	January		February			March			
	Mean discharge (second-foot)	Mean percent	Tons per day	Mean discharge (second-foot)	Mean percent	Tons per day	Mean discharge (second-foot)	Mean percent	Tons per day
1	7,160	1.04	46,300	4,170	0.10	11,200	12,100	1.28	418,000
2	6,170	1.26	43,300	4,190	1.08	9,040	13,300	1.30	466,000
3	5,680	1.22	33,700	4,380	1.10	11,800	15,200	2.18	894,000
4	5,410	.18	26,300	4,830	.14	18,200	16,100	2.20	955,000
5	5,230	1.12	16,900	5,810	1.30	47,000	16,300	2.36	1,040,000
6	5,190	.15	21,000	6,450	.57	99,100	14,400	2.04	792,000
7	4,970	1.10	13,400	7,120	.61	117,000	12,200	1.72	566,000
8	4,620	1.08	9,980	6,720	1.00	181,000	10,600	1.24	354,000
9	4,450	.12	14,400	9,310	1.44	362,000	9,670	.98	256,000
10	4,770	1.11	14,200	23,600	4.47	2,850,000	9,580	.95	245,000
11	4,730	.11	14,000	45,900	8.12	10,100,000	10,900	.99	291,000
12	5,040	1.13	17,700	33,000	5.68	5,060,000	12,500	1.13	381,000
13	5,130	.15	20,800	23,800	4.95	3,180,000	13,300	1.23	441,000
14	5,410	1.13	19,000	22,700	3.48	2,130,000	12,800	1.04	359,000
15	5,450	1.14	20,600	17,300	2.35	1,100,000	11,500	1.06	329,000
16	5,380	.14	20,300	14,200	1.82	697,000	10,700	.87	251,000
17	5,270	1.13	18,500	12,100	1.44	470,000	10,200	.71	195,000
18	5,010	.15	21,900	11,200	1.07	323,000	10,100	.69	188,000
19	4,910	1.13	17,200	10,900	1.00	294,000	10,700	.71	205,000
20	4,900	.10	13,200	10,600	.94	269,000	11,000	.80	237,000
21	4,830	1.10	13,000	9,700	.81	212,000	12,500	1.03	347,000
22	4,610	1.10	12,400	10,700	.91	263,000	14,400	1.46	567,000
23	4,600	.10	12,400	10,300	.78	217,000	15,900	1.50	643,000
24	4,680	1.10	12,600	10,200	.93	256,000	17,300	1.78	831,000
25	4,450	.10	12,000	9,800	.76	201,000	19,200	2.42	1,250,000
26	4,220	1.08	9,120	9,650	.85	221,000	18,600	1.85	928,000
27	4,320	.08	9,330	9,670	.85	222,000	17,700	1.55	740,000
28	4,470	1.10	12,100	9,650	1.84	219,000	18,400	1.76	873,000
29	4,490	1.10	12,100	10,600	.92	263,000	17,900	1.90	917,000
30	4,700	.18	22,800				16,700	1.49	671,000
31	4,360	1.08	9,410				15,800	1.49	635,000
Monthly load (tons)			559,000	29,400,000			17,260,000		

1 Estimated.

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

1932

Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1....	15,700	1.37	580,000	29,700	1.04	833,000	66,900	0.89	1,610,000
2....	15,300	1.16	479,000	27,000	.83	604,000	66,800	.79	1,420,000
3....	14,300	1.10	424,000	27,200	.92	675,000	62,700	.75	1,270,000
4....	15,900	1.10	472,000	29,300	.80	632,000	58,600	.80	1,260,000
5....	18,500	1.41	704,000	32,000	.98	846,000	57,200	.64	987,000
6....	20,400	1.75	963,000	37,100	1.14	1,140,000	56,100	.56	847,000
7....	23,300	2.26	1,420,000	43,500	1.48	1,740,000	55,200	.57	849,000
8....	29,200	2.63	2,070,000	45,900	1.19	1,470,000	54,300	.63	923,000
9....	31,400	2.00	1,690,000	46,100	1.30	1,620,000	52,100	.62	871,000
10....	29,100	2.52	1,980,000	44,300	1.24	1,480,000	49,900	.51	686,000
11....	26,700	1.97	1,420,000	44,000	1.04	1,230,000	50,200	.53	718,000
12....	26,300	1.94	1,380,000	45,200	1.21	1,480,000	51,800	.46	643,000
13....	24,800	1.73	1,160,000	47,700	1.02	1,310,000	53,600	1.40	578,000
14....	23,800	1.72	1,100,000	52,100	1.21	1,700,000	54,000	.51	743,000
15....	24,800	1.77	1,180,000	58,800	1.08	1,710,000	54,900	.46	681,000
16....	27,600	1.53	1,140,000	68,000	1.16	2,130,000	57,700	.43	669,000
17....	32,100	1.56	1,350,000	74,400	1.27	2,550,000	62,700	.54	913,000
18....	32,400	1.83	1,600,000	79,700	1.66	3,570,000	64,000	.56	967,000
19....	34,500	1.28	1,190,000	83,500	1.42	3,200,000	67,000	.61	1,100,000
20....	38,200	1.71	1,760,000	85,900	1.49	3,450,000	67,900	.43	787,000
21....	39,200	1.65	1,740,000	91,800	1.35	3,340,000	66,500	.74	1,330,000
22....	38,600	1.66	1,730,000	94,000	1.45	3,680,000	63,000	.55	935,000
23....	40,100	1.64	1,770,000	91,600	1.26	3,110,000	62,100	.62	1,040,000
24....	40,500	1.45	1,580,000	90,300	1.28	3,120,000	63,100	.48	817,000
25....	39,400	1.69	1,800,000	97,500	1.41	3,710,000	63,400	.39	667,000
26....	36,700	1.38	1,370,000	101,000	.76	2,070,000	65,900	.55	978,000
27....	33,900	1.70	1,550,000	99,100	1.13	3,020,000	67,800	.43	786,000
28....	32,000	1.04	898,000	95,900	1.13	2,920,000	69,700	.41	771,000
29....	32,300	1.12	976,000	89,400	1.04	2,510,000	71,200	.45	864,000
30....	32,100	.98	848,000	78,400	.95	2,010,000	68,600	.50	925,000
31....	-----	-----	-----	70,700	1.90	1,720,000	-----	-----	-----
Monthly load (tons)			38,320,000						

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1....	6,660	1.24	223,000	6,900	¹ 0.18	33,500	6,310	¹ 0.15	25,500
2....	5,960	1.11	178,000	6,810	.17	31,200	6,250	.19	32,000
3....	5,830	1.03	162,000	6,900	¹ .17	31,600	6,300	.17	28,900
4....	5,540	.73	109,000	6,970	.17	32,000	6,460	¹ .17	28,600
5....	5,520	.58	86,400	7,020	.15	28,400	6,560	.17	30,100
6....	5,410	.39	56,900	7,010	¹ .14	26,500	6,730	.14	25,400
7....	5,180	.34	47,500	6,860	.13	24,100	6,550	.17	30,000
8....	5,140	.26	36,000	6,650	.13	23,300	6,440	.11	19,100
9....	5,080	.22	30,200	6,670	.13	23,400	6,390	.11	19,000
10....	5,050	.17	23,100	6,770	.11	20,100	6,170	.11	18,300
11....	4,970	.14	18,800	6,810	.10	18,400	6,250	¹ .11	18,600
12....	5,040	.14	19,000	6,730	.10	18,200	6,090	.11	18,100
13....	5,150	.13	18,000	6,590	.10	17,800	5,700	.10	15,400
14....	5,010	.23	31,100	6,550	.10	17,700	5,430	.10	14,600
15....	5,080	.26	35,600	6,490	.10	17,500	5,060	.09	12,300
16....	5,090	.20	27,500	6,510	.10	17,600	4,460	¹ .08	9,630
17....	5,210	.17	23,900	6,550	.10	17,700	3,760	.07	7,090
18....	5,220	.18	25,400	6,370	.10	17,200	3,400	¹ .06	5,500
19....	5,230	.17	24,000	6,180	.09	15,000	3,180	.05	4,290
20....	5,540	¹ .16	23,900	6,240	.09	15,200	2,790	.05	3,780
21....	5,610	.14	21,200	6,490	.09	15,800	3,030	.05	4,100
22....	5,990	.29	46,800	6,670	.10	18,000	3,370	.06	5,450
23....	5,920	.50	79,800	6,520	.09	15,800	3,900	.04	4,210
24....	6,180	.23	38,300	6,670	¹ .10	18,000	4,080	.04	4,400
25....	6,340	1.05	180,000	6,660	.10	18,000	4,140	¹ .04	4,480
26....	7,070	.52	99,100	6,670	.09	16,200	3,930	.04	4,230
27....	6,770	.33	60,300	6,530	¹ .08	14,100	3,730	.04	4,020
28....	7,110	.27	51,800	6,660	.08	14,400	3,660	.04	3,940
29....	6,970	¹ .27	50,800	6,630	.12	21,500	3,700	.04	3,990
30....	6,910	.27	50,300	6,460	.11	19,200	3,610	.04	3,880
31....	6,950	.21	39,400				3,300	.04	3,560
Monthly load (tons) -			1,917,000						413,400

1933									
Day	January			February			March		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1....	2,880	¹ 0.04	3,100	5,470	0.05	7,390	8,390	1.69	382,000
2....	3,990	.03	3,240	5,480	.05	7,390	8,310	.94	211,000
3....	3,340	¹ .03	2,700	5,450	¹ .05	7,340	8,250	.71	158,000
4....	3,240	.03	2,600	5,140	.05	6,930	8,600	¹ .68	158,000
5....	3,340	.04	3,610	5,060	¹ .05	6,820	8,570	.65	150,000
6....	4,090	¹ .04	4,420	5,020	.05	6,770	8,410	.51	116,000
7....	3,480	.03	2,800	4,930	.04	5,310	8,240	.42	93,300
8....	3,690	¹ .03	2,990	4,710	.04	5,070	7,950	.31	66,500
9....	3,340	¹ .02	1,810	4,320	.03	3,510	7,920	.32	68,300
10....	3,490	.02	1,890	3,980	.03	3,210	7,840	.36	76,100
11....	3,730	¹ .02	2,020	2,720	.02	1,460	7,780	.36	75,500
12....	4,280	.02	2,320	2,910	.02	1,560	7,720	.38	79,100
13....	4,890	¹ .06	7,900	4,510	.04	4,850	8,340	.43	96,700
14....	5,180	.07	9,790	4,090	.03	3,320	8,520	.44	101,000
15....	4,760	¹ .08	10,300	4,530	.03	3,670	9,390	.49	124,000
16....	4,820	.09	11,700	4,610	.03	3,720	10,100	.90	245,000
17....	4,980	¹ .11	14,800	4,650	.03	3,780	9,960	.69	185,000
18....	5,210	.14	19,700	4,950	.03	3,990	9,550	.53	137,000
19....	5,190	.04	5,610	5,130	¹ .04	5,530	9,870	¹ .49	130,000
20....	5,000	¹ .04	5,390	5,220	.04	5,640	10,400	.45	126,000
21....	5,120	.05	6,900	5,490	.05	7,390	9,700	.42	110,000
22....	5,150	¹ .05	6,960	5,740	.06	9,280	9,290	.42	105,000
23....	5,240	.05	7,070	5,830	.07	11,000	9,110	.38	93,400
24....	5,470	¹ .06	8,850	5,910	.07	11,200	8,870	.40	95,700
25....	5,610	.07	10,600	5,830	.07	11,000	9,210	.39	96,900
26....	5,560	¹ .07	10,500	5,760	¹ .07	10,900	8,780	.36	85,300
27....	5,640	.07	10,700	5,880	.07	11,100	8,240	.31	68,900
28....	5,650	¹ .07	10,700	6,180	.08	13,300	7,860	.34	72,100
29....	5,620	¹ .07	10,600				7,480	.32	64,600
30....	5,480	.07	10,400				7,070	.33	62,900
31....	5,490	¹ .06	8,870				7,120	.33	63,400
Monthly load (tons) -			220,800						3,697,000

¹ Estimated.

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

1933								
Day	April		May		June			
	Mean discharge (second-foot)	Suspended sediment Mean percent Tons per day	Mean discharge (second-foot)	Suspended sediment Mean percent Tons per day	Mean discharge (second-foot)	Suspended sediment Mean percent Tons per day		
1.....	7,360	0.41 81,400	9,220	0.35 87,000	54,700	1.58 2,330,000		
2.....	7,830	.39 82,400	11,600	.88 275,000	62,700	1.51 2,550,000		
3.....	8,000	.39 84,100	12,900	.75 261,000	69,500	1.35 2,530,000		
4.....	8,280	1.39 87,100	15,600	1.75 736,000	75,800	1.42 2,900,000		
5.....	8,460	.39 89,000	18,000	1.48 718,000	80,000	1.10 2,370,000		
6.....	8,940	.35 84,400	18,800	1.40 710,000	78,800	1.02 2,170,000		
7.....	9,320	.51 128,000	18,000	1.40 680,000	76,400	1.14 2,350,000		
8.....	9,940	.56 150,000	17,000	1.36 624,000	78,600	1.22 2,590,000		
9.....	10,400	.56 157,000	17,100	1.19 549,000	77,400	1.00 2,090,000		
10.....	10,600	.62 177,000	17,000	1.06 486,000	73,700	1.03 2,050,000		
11.....	10,300	.44 122,000	17,400	1.00 469,000	67,500	.75 1,365,000		
12.....	10,200	1.50 138,000	17,700	.86 411,000	64,900	.84 1,470,000		
13.....	9,940	.47 126,000	17,800	.94 451,000	68,500	.74 1,370,000		
14.....	9,890	.36 96,000	17,200	.91 422,000	75,300	.80 1,620,000		
15.....	9,550	.38 97,900	15,800	.63 268,000	77,000	.82 1,700,000		
16.....	9,060	.35 85,500	14,700	.64 254,000	76,600	.71 1,470,000		
17.....	8,500	.36 82,500	13,800	.50 186,000	73,700	.62 1,230,000		
18.....	8,070	.35 76,200	12,900	.42 146,000	72,600	.75 1,470,000		
19.....	7,710	.30 62,400	12,200	.39 128,000	72,400	.78 1,520,000		
20.....	7,360	.29 57,600	11,400	.33 101,000	71,400	.52 1,000,000		
21.....	6,910	.25 46,600	11,000	.37 110,000	69,700	.46 865,000		
22.....	6,870	.23 42,600	18,500	.97 484,000	69,000	.52 968,000		
23.....	6,830	.22 40,500	28,500	1.72 1,320,000	67,200	.53 961,000		
24.....	7,360	.22 43,700	37,500	2.53 2,560,000	63,000	.57 968,000		
25.....	7,950	.25 53,600	44,600	2.94 3,540,000	59,400	.69 1,110,000		
26.....	8,160	.31 68,200	44,500	2.50 3,000,000	54,500	.59 867,000		
27.....	9,340	.34 85,700	41,100	1.76 1,950,000	49,600	.58 776,000		
28.....	10,300	.41 114,000	39,400	1.62 1,720,000	44,700	.59 711,000		
29.....	9,730	.42 110,000	39,100	1.47 1,550,000	40,800	.44 484,000		
30.....	9,310	.33 82,900	42,500	1.31 1,500,000	37,600	.44 446,000		
31.....			48,100	1.32 1,710,000				
Monthly load (tons)		2,752,000			27,410,000	46,300,000		

1933								
	July		August		September			
	Mean discharge (second-foot)	Suspended sediment Mean percent Tons per day	Mean discharge (second-foot)	Suspended sediment Mean percent Tons per day	Mean discharge (second-foot)	Suspended sediment Mean percent Tons per day		
1.....	34,100	0.47 432,000	7,000	0.48 90,600	3,240	0.36 31,400		
2.....	30,900	.35 292,000	6,470	.47 82,000	3,160	.28 23,900		
3.....	28,800	1.32 249,000	6,020	.44 71,400	3,080	.22 18,300		
4.....	26,500	.28 200,000	7,070	.47 89,600	3,090	.18 15,000		
5.....	24,900	.24 155,000	6,630	.41 73,300	3,160	.17 14,500		
6.....	22,300	.16 96,200	8,300	.45 101,000	3,090	.14 11,700		
7.....	20,900	.24 135,000	7,840	1.05 222,000	3,090	.11 9,170		
8.....	23,200	.84 526,000	8,090	.77 168,000	3,150	.13 11,100		
9.....	29,200	.65 512,000	11,300	2.40 731,000	3,200	.13 11,200		
10.....	30,700	3.08 2,550,000	11,800	2.11 671,000	4,600	.25 31,000		
11.....	26,400	2.53 1,800,000	10,500	1.53 433,000	6,040	.43 70,000		
12.....	29,400	1.68 1,330,000	9,080	1.87 458,000	14,600	4.21 1,660,000		
13.....	24,400	3.47 2,280,000	7,660	2.54 525,000	15,200	9.06 3,710,000		
14.....	22,000	2.40 1,420,000	7,170	2.03 393,000	9,890	6.29 1,680,000		
15.....	19,900	1.95 1,050,000	6,860	1.65 305,000	8,580	4.74 1,100,000		
16.....	19,900	1.78 955,000	6,360	1.16 199,000	7,930	3.97 849,000		
17.....	18,300	1.07 528,000	5,960	.80 129,000	7,880	2.89 614,000		
18.....	17,300	.89 415,000	6,380	.86 125,000	8,050	2.26 491,000		
19.....	15,500	1.15 481,000	4,990	.75 101,000	8,000	1.55 334,000		
20.....	14,500	.93 364,000	4,820	.66 85,800	7,150	1.56 301,000		
21.....	15,400	.86 357,000	4,930	.54 71,800	6,700	1.47 266,000		
22.....	13,500	.66 240,000	4,730	.66 84,200	10,400	1.75 491,000		
23.....	12,100	.72 235,000	4,970	.99 133,000	13,500	2.40 874,000		
24.....	11,100	.72 216,000	4,920	.91 121,000	11,200	3.06 924,000		
25.....	9,920	.65 174,000	4,530	.98 120,000	8,000	2.81 606,000		
26.....	9,370	.62 157,000	4,040	.95 104,000	7,150	1.75 337,000		
27.....	10,200	3.12 858,000	3,840	.81 83,900	7,420	.94 128,000		
28.....	9,810	1.89 500,000	3,560	.87 83,500	7,300	.61 180,000		
29.....	9,920	1.95 522,000	3,410	.72 66,200	6,300	1.51 83,500		
30.....	8,130	1.51 331,000	3,390	.50 45,300	6,400	.41 70,800		
31.....	7,600	1.12 290,000	3,300	.43 38,300				
Monthly load (tons)		15,930,000	60,050,000		14,960,000			

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1....	6,000	0.38	61,600	4,500	1.0.18	21,900	7,720	0.48	100,000
2....	5,690	.36	55,300	4,450	.18	21,600	7,300	.47	92,600
3....	5,530	.36	53,800	4,520	.17	20,700	7,210	1.55	107,000
4....	6,930	.78	146,000	4,530	1.17	20,800	6,740	.70	127,000
5....	8,110	1.19	261,000	4,600	.16	19,900	6,230	1.60	101,000
6....	8,930	1.57	379,000	5,140	.17	23,600	6,230	.47	79,100
7....	10,500	3.67	1,040,000	5,140	1.17	23,600	6,080	1.42	68,900
8....	14,500	5.77	2,260,000	5,010	.17	23,000	5,920	.37	59,100
9....	12,100	4.76	1,560,000	5,080	.17	23,300	5,820	1.35	55,000
10....	10,200	3.40	936,000	5,240	1.18	25,500	5,700	1.30	46,200
11....	9,430	2.58	657,000	5,420	.18	26,300	5,500	.27	40,100
12....	8,750	2.43	574,000	5,470	.21	31,000	5,360	1.22	31,800
13....	7,820	2.22	469,000	5,380	1.21	30,500	5,210	.16	22,500
14....	8,020	2.12	459,000	5,390	.21	30,600	5,070	1.20	27,400
15....	8,060	1.63	333,000	5,400	1.20	29,200	5,770	.22	34,300
16....	6,670	1.45	261,000	5,300	1.18	25,800	5,660	1.21	32,100
17....	6,260	1.09	184,000	5,310	.17	24,400	5,290	1.21	30,000
18....	6,990	.91	172,000	5,440	1.16	23,500	5,430	.20	29,300
19....	6,810	.80	147,000	5,480	1.16	23,700	5,850	1.18	28,400
20....	5,880	.82	130,000	5,380	1.16	23,200	5,830	1.16	25,200
21....	5,460	.89	131,000	5,350	.15	21,700	5,610	1.14	21,200
22....	5,240	.61	86,300	5,360	1.15	21,700	5,350	.13	18,800
23....	5,170	.63	87,900	5,400	.15	21,900	5,010	1.13	17,600
24....	5,080	.33	45,300	5,430	1.14	20,500	4,520	.12	14,600
25....	4,950	.37	49,500	5,380	.13	18,900	4,400	1.11	13,100
26....	4,920	.32	42,500	5,470	1.18	26,600	4,180	.10	11,300
27....	4,920	.27	35,900	5,420	.15	22,000	4,030	1.10	10,900
28....	4,910	.23	30,500	5,390	1.15	21,800	4,100	1.10	11,100
29....	4,840	.22	28,700	5,290	.14	20,000	4,350	.07	8,220
30....	4,700	.22	27,900	5,330	1.20	28,800	4,650	1.10	12,600
31....	4,570	.18	22,200				5,080	.11	15,100
Monthly load (tons)			10,730,000	716,000			1,292,000		

Day	January			February			March		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1....	5,590	1.15	22,600	5,270	0.12	17,100	6,360	0.28	48,100
2....	5,900	1.20	31,900	5,160	.13	18,100	6,250	1.28	47,200
3....	6,440	.25	43,500	5,050	.12	16,400	6,160	.28	46,600
4....	6,470	1.27	47,200	5,050	.11	15,000	5,940	1.28	44,900
5....	6,280	.29	49,200	4,980	.12	16,100	5,660	.29	44,300
6....	6,320	1.28	47,800	4,990	.11	14,800	5,570	1.25	37,600
7....	6,510	1.27	47,500	5,130	.13	18,000	5,550	.21	31,500
8....	6,500	.26	45,600	5,140	1.15	20,800	5,430	1.20	29,300
9....	6,220	1.25	42,000	5,290	.18	25,700	5,400	.19	27,700
10....	6,110	.23	37,900	5,380	1.18	26,100	5,300	1.20	28,600
11....	5,940	1.21	33,700	5,610	.17	25,700	5,250	1.19	26,900
12....	5,530	1.18	26,900	6,000	1.20	32,400	5,180	.19	26,600
13....	5,260	.16	22,700	6,150	1.25	41,500	5,360	1.19	27,500
14....	4,820	1.14	18,200	6,390	.29	50,000	5,420	.19	27,800
15....	4,520	.12	14,600	6,460	1.32	55,800	5,530	1.20	29,900
16....	4,380	1.10	11,800	6,370	.33	56,800	5,590	1.25	37,700
17....	4,270	.08	9,220	6,230	1.28	47,100	5,520	.25	37,300
18....	4,330	1.08	9,350	5,980	.24	38,800	5,570	1.23	34,600
19....	4,360	1.09	10,600	5,740	1.24	37,200	5,690	.21	32,300
20....	4,440	.09	10,800	5,650	.24	36,600	5,780	1.22	34,300
21....	4,730	1.09	11,500	5,550	1.22	33,000	5,690	.23	35,300
22....	4,910	.09	11,900	5,460	.21	31,000	5,920	1.28	44,800
23....	5,030	1.10	13,600	5,770	1.23	35,800	5,980	.32	51,700
24....	4,940	.11	14,700	6,070	.24	39,300	5,920	1.30	48,000
25....	4,950	1.10	13,400	6,420	1.26	45,100	5,790	1.28	43,800
26....	5,130	.10	13,900	6,090	1.26	42,800	5,690	.24	36,900
27....	5,180	1.11	15,400	6,190	.30	50,100	5,690	1.24	36,900
28....	5,160	.12	16,700	6,190	1.30	50,100	5,720	.24	37,100
29....	5,130	1.12	16,600				5,590	.26	39,200
30....	5,290	1.13	18,600				5,690	1.26	39,900
31....	5,380	.13	18,900				5,730	.33	51,100
Monthly load (tons)			748,300	937,200			1,165,000		

1 Estimated.

QUANTITIES OF SUSPENDED SEDIMENT

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TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

1934

Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	5,380	1.0.25	36,300	14,200	0.98	376,000	18,000	1.22	593,000
2	5,250	1.17	24,100	14,500	.88	342,000	17,000	1.15	528,000
3	5,070	1.17	23,300	14,300	1.80	309,000	17,500	1.29	610,000
4	5,440	1.18	26,400	13,700	1.75	277,000	18,300	1.25	618,000
5	5,730	1.20	30,900	15,000	.94	381,000	16,700	1.00	451,000
6	5,910	.22	35,100	15,600	.90	379,000	15,400	.80	333,000
7	5,980	.21	33,900	14,900	.68	274,000	14,000	.50	189,000
8	5,920	1.25	40,000	14,000	.70	265,000	13,100	.49	173,000
9	5,830	.28	44,100	13,300	.59	212,000	12,300	.35	116,000
10	5,810	.24	37,600	13,400	.63	228,000	11,600	.24	75,200
11	5,850	.24	37,900	14,900	.75	302,000	10,900	.26	76,500
12	5,680	.20	30,700	18,200	1.02	501,000	10,200	.26	71,600
13	5,460	.19	28,000	21,300	1.29	742,000	9,460	.22	56,200
14	5,240	.15	21,200	24,100	1.30	846,000	8,720	.16	37,700
15	5,210	.14	19,700	24,600	1.40	930,000	7,980	.15	32,300
16	5,420	.18	26,300	24,900	1.36	914,000	7,470	1.15	30,300
17	6,680	.38	68,500	24,700	1.01	674,000	6,910	.11	20,500
18	7,820	.87	184,000	22,900	.99	612,000	6,430	1.08	13,900
19	8,710	.85	200,000	20,600	.84	467,000	5,960	.07	11,300
20	9,650	.91	237,000	19,500	.70	369,000	5,590	.07	10,600
21	9,380	.76	192,000	19,800	.77	412,000	5,301	.07	10,000
22	9,260	1.65	163,000	19,600	.63	333,000	4,940	.05	6,670
23	8,850	.57	136,000	19,300	.70	365,000	4,650	.05	6,280
24	8,930	.64	154,000	18,700	.50	252,000	4,430	.04	4,780
25	9,740	.69	181,000	18,200	.57	280,000	4,260	.03	3,450
26	10,600	.83	238,000	17,700	.49	234,000	4,060	.03	3,290
27	11,400	.82	262,000	16,800	.47	213,000	3,820	.04	4,130
28	11,900	.95	305,000	15,500	.37	155,000	3,510	.03	2,840
29	12,500	.86	290,000	16,600	.63	282,000	3,340	.04	3,610
30	13,500	1.03	375,000	17,400	1.87	879,000	3,230	.03	2,620
31				17,800	1.39	668,000			
Monthly load (tons)			3,471,000	13,470,000			4,095,000		

1934

Day	July			August			September		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	3,090	0.04	3,340	2,810	1.68	127,000	7,980	6.52	1,400,000
2	3,040	.04	3,280	2,440	.90	59,300	5,250	6.36	902,000
3	3,100	1.03	2,510	2,120	1.70	40,100	4,430	6.28	751,000
4	3,190	1.02	1,720	1,980	1.00	53,500	3,300	5.07	452,000
5	3,180	.02	1,720	1,970	1.64	87,200	2,650	1.40	286,000
6	3,040	.03	2,460	2,030	1.26	69,100	2,600	2.97	208,000
7	2,910	.02	1,570	1,890	.93	47,500	2,740	2.33	172,000
8	2,800	.03	2,270	1,750	.65	30,700	2,540	2.14	147,000
9	2,610	.03	2,110	1,590	.44	18,900	2,440	1.81	119,000
10	2,480	.03	2,010	1,620	.26	11,400	2,130	1.28	73,600
11	2,370	.04	2,560	1,490	.33	13,300	2,190	1.25	73,900
12	2,310	.04	2,490	1,750	.48	22,700	2,210	1.80	47,700
13	2,270	.03	1,840	1,750	.37	17,500	2,160	.60	35,000
14	2,170	.02	1,170	1,780	.51	24,500	2,030	.54	29,600
15	2,120	.02	1,140	2,030	2.25	123,000	1,950	.79	41,600
16	2,030	.02	1,100	2,010	1.71	92,800	1,850	.62	31,000
17	1,980	.02	1,070	2,000	.92	49,700	1,950	.64	33,700
18	1,970	.04	2,130	2,000	2.33	126,000	2,310	.68	42,400
19	1,920	.05	2,590	2,130	2.26	130,000	2,430	.48	31,500
20	1,840	.02	994	3,300	1.48	132,000	2,540	.62	42,500
21	1,880	.02	1,020	2,860	1.34	103,000	2,570	.97	67,300
22	1,840	.01	497	3,010	1.76	143,000	2,340	.78	49,300
23	2,070	.02	1,120	2,880	1.39	108,000	2,170	.61	35,700
24	2,050	.58	32,100	2,600	2.42	170,000	1,960	.35	18,500
25	1,950	2.02	106,000	2,590	1.78	124,000	1,860	.26	13,100
26	2,040	1.76	96,900	2,650	1.20	85,900	1,810	.30	14,700
27	2,070	.80	44,700	2,640	1.20	85,500	1,770	.34	16,200
28	2,650	.55	39,400	3,410	1.31	121,000	4,210	.65	73,900
29	2,150	.94	54,600	6,110	9.10	1,500,000	4,050	1.40	153,000
30	2,050	.51	28,200	5,930	4.84	775,000	3,500	4.07	385,000
31	2,620	1.68	119,000	8,560	11.5	2,660,000			
Monthly load (tons)			563,600	7,152,000			5,746,000		

1 Estimated.

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

1934									
Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	3,080	3.20	266,000	2,810	0.13	9,860	3,920	0.17	18,000
2	3,070	2.24	185,000	2,820	.13	9,910	3,870	.18	18,800
3	3,500	1.50	142,000	2,760	.13	9,690	4,000	.18	19,400
4	3,460	.94	87,800	2,720	1.12	8,800	4,040	.20	21,800
5	3,220	.62	53,900	2,720	.12	8,800	3,970	1.18	19,300
6	3,060	.42	34,700	2,760	.12	8,940	3,800	.15	15,400
7	2,930	.37	29,300	2,800	.10	7,560	3,740	.12	12,100
8	2,910	.30	23,600	2,740	.12	8,880	3,570	.11	10,600
9	2,990	.25	20,200	2,720	.12	8,800	3,300	.14	12,500
10	2,930	.25	19,800	2,810	.12	9,100	3,080	.10	8,320
11	2,830	.22	16,800	2,910	.11	8,640	2,950	.11	8,750
12	2,740	.16	11,800	3,000	.14	11,300	2,830	.09	6,890
13	2,670	.18	13,000	2,990	.14	11,300	2,880	.09	6,990
14	2,610	.17	12,000	3,030	.16	13,100	3,120	.09	7,590
15	2,580	.17	11,900	3,170	.15	12,900	3,500	.11	10,400
16	2,590	.16	11,200	3,330	.16	14,400	3,860	.16	16,700
17	2,460	.14	9,290	3,470	.18	16,900	3,980	.16	17,200
18	2,430	.14	9,180	3,460	.18	16,800	4,420	.36	43,000
19	2,530	.14	9,560	3,440	.16	14,800	4,630	.30	37,500
20	2,520	.13	8,860	3,470	.15	14,000	4,480	.30	36,300
21	2,490	.12	8,070	3,560	.18	17,300	4,460	.29	34,900
22	2,590	.11	7,700	3,830	.19	19,700	4,660	.28	35,200
23	2,690	.10	7,260	3,780	.24	24,500	4,780	.29	37,400
24	2,670	.15	10,800	3,850	.22	22,900	4,540	.24	29,400
25	2,690	.12	8,720	3,830	.25	25,900	4,340	.21	24,600
26	2,690	.12	8,720	3,990	.24	25,900	4,160	.18	20,200
27	2,680	.12	8,690	3,930	.21	22,300	4,200	.18	20,400
28	2,680	.12	8,690	4,000	.21	22,700	4,280	.18	20,800
29	2,750	.13	9,670	4,030	.20	21,800	4,410	.20	23,800
30	2,840	.12	9,210	3,990	.20	21,500	4,470	.19	22,900
31	2,810	.14	10,600				4,400	.18	21,400
Monthly load (tons)			1,074,000				638,500		

1935									
January			February			March			
1	4,400	0.14	16,600	5,300	0.38	54,400	5,680	0.46	70,600
2	4,420	.22	26,200	5,320	.34	48,800	5,540	.44	65,800
3	4,360	.17	20,000	5,310	.31	44,400	5,460	.48	70,800
4	4,410	.18	21,400	5,330	1.35	50,400	5,230	1.35	49,400
5	4,340	.19	22,300	5,660	1.35	52,500	5,040	.30	40,800
6	4,210	.18	20,500	5,560	.40	60,100	4,780	.28	36,100
7	4,200	.18	20,400	5,560	.44	66,000	5,060	.32	43,700
8	3,990	.76	81,900	5,370	.40	58,000	5,770	.44	68,600
9	4,210	.28	31,800	5,240	.38	53,800	5,920	.46	73,500
10	4,460	1.90	229,000	5,650	.36	54,900	5,890	.54	85,900
11	4,160	1.13	127,000	6,300	1.03	175,000	5,890	.44	70,000
12	5,220	1.10	155,000	6,000	.90	146,000	5,620	.41	62,200
13	5,650	1.19	182,000	5,880	.71	113,000	5,530	.35	52,300
14	7,980	3.47	748,000	6,340	.75	128,000	5,480	.38	56,200
15	6,380	2.35	405,000	6,020	.92	150,000	5,360	.36	52,100
16	5,690	1.02	157,000	5,580	.62	93,400	5,090	.43	59,100
17	5,950	.98	157,000	5,560	.47	70,600	5,090	.44	60,500
18	6,350	1.05	180,000	5,520	.40	59,600	7,420	1.72	345,000
19	5,970	.72	116,000	5,580	.61	76,800	8,080	1.55	338,000
20	5,800	.81	127,000	5,400	.36	52,500	7,380	1.16	231,000
21	5,130	.67	92,800	5,270	.32	45,500	6,920	.94	176,000
22	4,970	.48	64,400	4,970	.29	38,900	6,790	.89	163,000
23	4,580	.32	39,600	4,710	.28	35,600	6,730	.79	144,000
24	4,050	.22	24,100	4,580	.24	29,700	6,590	.70	125,000
25	3,360	.16	14,500	4,800	.22	28,500	6,730	.61	111,000
26	2,940	.10	7,940	5,570	.61	91,800	6,940	.60	112,000
27	3,000	.12	9,720	6,100	.59	97,200	6,940	.64	120,000
28	3,040	.22	18,100	5,990	.57	92,200	6,650	.61	110,000
29	3,300	.19	16,900				6,700	.56	101,000
30	3,910	.21	22,200				6,940	.59	111,000
31	4,820	.32	41,600				7,440	.72	145,000
Monthly load (tons)			3,196,000	2,068,000			3,350,000		

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

1935									
Day	April			May			June		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	7,970	0.93	200,000	13,700	0.85	314,000	48,100	1.70	2,210,000
2	8,260	1.06	236,000	14,300	.90	348,000	48,600	1.90	2,490,000
3	8,890	1.26	302,000	15,600	1.04	438,000	49,400	1.58	2,110,000
4	9,480	1.24	317,000	16,700	1.22	550,000	48,700	1.45	1,910,000
5	9,330	1.31	330,000	17,400	1.28	601,000	46,200	1.31	1,630,000
6	9,630	1.38	359,000	16,400	1.04	461,000	45,400	1.12	1,370,000
7	10,900	1.40	412,000	15,300	.99	409,000	47,100	1.08	1,370,000
8	11,600	1.48	464,000	14,100	1.06	404,000	50,700	1.10	1,510,000
9	11,600	1.42	445,000	13,600	.88	323,000	54,200	1.28	1,870,000
10	12,300	1.60	531,000	13,400	.73	264,000	57,800	1.28	2,000,000
11	15,600	3.16	1,330,000	13,100	.68	241,000	63,600	1.25	2,150,000
12	14,400	2.16	840,000	13,300	.68	244,000	69,800	1.26	2,370,000
13	13,200	1.58	563,000	14,300	.77	297,000	72,600	1.14	2,230,000
14	11,300	1.31	400,000	16,200	.80	350,000	84,300	1.22	2,780,000
15	10,800	1.12	327,000	18,500	.97	490,000	86,400	1.06	2,470,000
16	10,200	.89	245,000	20,900	1.13	638,000	87,200	1.09	2,570,000
17	10,000	.81	219,000	24,100	1.45	944,000	91,900	1.03	2,560,000
18	10,900	.84	247,000	24,000	1.52	985,000	101,400	1.01	2,770,000
19	12,300	1.11	369,000	23,300	1.36	856,000	103,100	.82	2,280,000
20	13,500	1.46	532,000	24,000	1.32	855,000	89,000	.79	1,900,000
21	14,100	1.38	525,000	25,200	1.26	857,000	80,900	.72	1,570,000
22	14,700	1.38	548,000	26,300	1.22	866,000	77,000	.55	1,140,000
23	14,400	1.23	478,000	29,700	1.38	1,110,000	73,800	.54	1,080,000
24	13,900	1.20	450,000	31,000	1.48	1,240,000	73,400	.58	1,150,000
25	13,600	1.10	404,000	26,800	1.48	1,070,000	70,300	.56	1,060,000
26	14,000	1.06	401,000	26,000	1.08	758,000	65,400	.44	777,000
27	15,800	1.26	538,000	27,300	1.01	744,000	63,500	.48	823,000
28	16,900	1.40	639,000	31,100	1.01	848,000	58,800	.44	699,000
29	15,200	1.08	443,000	36,200	1.26	1,230,000	53,700	.37	537,000
30	14,000	.92	348,000	40,000	1.38	1,490,000	50,300	.36	489,000
31				44,500	1.54	1,850,000			
Monthly load (tons)...			13,440,000	22,080,000			51,880,000		

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

1935

Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1....	15,800	5.09	2,170,000	5,190	0.23	32,200	5,750	0.14	21,700
2....	10,500	4.65	1,320,000	5,230	.20	28,200	5,790	.11	17,200
3....	9,250	3.44	859,000	5,080	.15	20,600	5,820	.10	15,700
4....	8,800	1.98	470,000	5,250	.15	21,300	5,820	.10	15,700
5....	8,020	1.28	277,000	5,260	.13	18,500	5,760	.09	14,000
6....	7,490	.88	178,000	5,260	.13	18,500	6,870	.11	20,400
7....	7,240	.69	135,000	5,360	.12	17,400	6,230	.22	37,000
8....	6,830	.54	99,600	5,570	.13	19,600	5,480	.19	28,100
9....	6,550	.45	79,600	5,680	.13	19,900	5,040	.13	17,700
10....	6,300	.42	71,400	5,680	.12	18,400	4,970	.11	14,800
11....	6,020	.31	50,400	5,710	.13	20,000	4,970	.08	10,700
12....	5,820	.26	40,900	5,650	.13	19,800	4,910	.08	10,600
13....	5,600	.22	33,300	5,560	.12	18,000	4,960	.09	12,100
14....	5,380	.19	27,600	5,790	.12	18,800	5,010	.10	13,500
15....	5,140	.16	22,200	5,960	.12	19,300	5,060	.09	12,300
16....	5,010	.14	18,900	6,020	.11	17,900	4,970	.09	12,100
17....	4,950	.13	17,400	5,970	.11	17,700	4,790	.09	11,600
18....	4,820	.12	15,600	5,830	.10	15,700	4,600	.09	11,200
19....	4,660	.11	13,800	5,690	.10	15,400	4,620	.09	11,200
20....	4,670	.11	13,900	5,610	.09	13,600	4,670	.08	10,100
21....	4,650	.12	15,100	5,540	.10	15,000	4,600	.08	9,940
22....	4,730	.12	15,300	5,610	.09	13,600	4,230	.07	7,990
23....	4,570	.11	13,600	5,790	.09	14,100	3,630	.07	6,860
24....	5,440	.12	17,600	5,760	.11	17,100	3,350	.06	5,430
25....	5,560	.14	21,000	5,920	.11	17,600	3,280	.05	4,430
26....	5,430	.15	22,000	5,930	.11	17,600	3,140	.06	5,090
27....	5,100	.16	22,000	5,900	.10	15,900	3,170	.06	5,140
28....	4,960	.20	26,800	5,920	.12	19,200	3,330	.06	5,390
29....	5,050	.49	66,800	5,710	.11	17,000	3,560	.07	6,730
30....	5,000	.44	59,400	5,650	.15	22,900	3,760	.08	8,120
31....	5,040	.26	35,400				4,000	.06	6,480
Monthly load (tons)...			6,229,000						389,300

1936

Day	January			February			March		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1....	3,750	0.08	8,100	5,390	0.08	11,600	7,370	0.47	93,500
2....	3,820	.08	8,250	5,560	.15	22,500	6,740	.38	69,200
3....	4,100	.06	6,640	5,440	.16	23,500	6,340	.36	61,600
4....	4,310	.06	6,980	5,650	.16	24,400	5,970	.30	48,400
5....	4,180	.07	7,900	5,580	.17	25,600	6,020	.24	39,000
6....	4,220	.07	7,980	5,610	.27	40,900	7,340	.25	49,500
7....	4,280	.07	8,090	5,160	.17	23,700	8,770	.42	99,500
8....	4,220	.07	7,980	4,910	.17	22,500	9,010	.66	161,000
9....	4,180	.06	6,770	5,190	.17	23,800	8,790	1.17	278,000
10....	3,900	.06	6,320	5,350	.14	20,200	8,500	1.28	294,000
11....	4,310	.05	5,820	5,050	.09	12,300	8,270	1.10	246,000
12....	4,580	.06	7,420	4,650	.10	12,600	8,480	1.03	236,000
13....	4,520	.07	8,540	4,540	.08	9,810	8,740	.86	203,000
14....	4,410	.07	8,330	4,910	.07	9,280	9,140	.77	190,000
15....	4,400	.06	7,130	4,970	.07	9,390	8,980	.81	196,000
16....	4,610	.06	7,470	5,190	.14	19,600	8,750	.74	175,000
17....	4,730	.06	7,660	5,450	.10	14,700	9,010	.65	158,000
18....	5,040	.06	8,160	6,160	.13	21,600	9,250	.62	155,000
19....	5,250	.06	8,500	6,510	.16	28,100	9,330	.64	161,000
20....	5,260	.06	8,520	6,530	.16	28,200	9,270	.51	128,000
21....	5,100	.08	11,000	6,390	.16	27,600	8,800	.49	116,000
22....	5,040	.07	9,530	6,480	.16	28,000	8,630	.45	105,000
23....	4,870	.06	7,890	6,560	.18	31,900	8,420	.39	88,700
24....	4,780	.05	6,450	6,300	.19	32,300	8,470	.37	84,600
25....	4,560	.07	8,620	6,630	.19	34,000	8,470	.34	77,800
26....	4,450	.06	7,210	6,730	.32	58,100	8,430	.35	79,700
27....	4,390	.06	7,110	6,070	.18	29,500	8,500	.37	84,900
28....	4,410	.04	4,760	6,510	.28	49,200	7,850	.37	78,400
29....	4,670	.06	7,570	7,780	.35	78,500	7,490	.40	80,900
30....	4,930	.06	7,990				7,660	.34	70,300
31....	5,210	.07	9,850				7,220	.37	72,100
Monthly load (tons)...			240,500						3,980,000

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

1936									
Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	6,740	0.35	63,700	51,200	1.16	1,600,000	63,100	0.46	784,000
2	7,000	.27	51,000	51,100	1.01	1,390,000	64,900	.54	946,000
3	7,670	.30	62,100	49,900	.95	1,280,000	68,200	.48	884,000
4	7,840	.44	93,100	47,100	.80	1,020,000	69,400	.57	1,070,000
5	7,920	.39	83,400	44,400	.79	947,000	66,400	.45	807,000
6	7,310	.39	77,000	45,900	.67	830,000	60,300	.50	814,000
7	7,640	.38	78,400	50,700	.74	1,010,000	54,400	.46	676,000
8	7,820	.38	80,200	58,700	.94	1,490,000	50,000	.40	540,000
9	7,180	.39	75,600	66,400	1.06	1,900,000	46,800	.39	493,000
10	6,810	.28	51,500	64,400	.90	1,560,000	44,300	.33	395,000
11	6,720	.26	47,200	58,600	.74	1,170,000	44,200	.40	477,000
12	7,340	.22	43,600	52,700	.61	868,000	47,200	.38	484,000
13	9,810	.71	188,000	46,200	.54	674,000	48,300	.35	456,000
14	10,200	.89	245,000	42,300	.51	582,000	47,900	.34	440,000
15	11,500	1.09	338,000	40,500	.42	459,000	47,100	.32	407,000
16	14,300	1.18	456,000	44,000	.44	523,000	45,900	.33	409,000
17	17,600	1.46	694,000	49,100	.51	676,000	44,800	.34	411,000
18	21,600	1.68	980,000	55,200	.55	820,000	43,600	.34	400,000
19	23,700	1.64	1,050,000	62,600	.53	896,000	42,000	.27	306,000
20	27,600	1.62	1,210,000	67,700	.64	1,170,000	40,900	.30	331,000
21	32,700	1.65	1,460,000	71,800	.59	1,140,000	39,400	.25	266,000
22	35,400	1.57	1,500,000	70,600	.59	1,120,000	38,100	.27	278,000
23	36,800	1.57	1,560,000	74,600	.58	1,170,000	36,800	.28	278,000
24	39,400	1.32	1,400,000	75,100	.58	1,180,000	34,800	.28	263,000
25	43,100	1.43	1,660,000	70,600	.44	839,000	32,800	.22	195,000
26	47,700	1.58	2,030,000	67,900	.51	935,000	31,300	.21	177,000
27	49,600	1.39	1,860,000	66,100	.54	964,000	30,100	.19	154,000
28	49,900	1.59	2,140,000	65,600	.47	832,000	28,700	.20	155,000
29	51,100	1.32	1,820,000	65,600	.45	797,000	27,100	.23	168,000
30	51,700	1.26	1,760,000	65,400	.50	883,000	26,300	.20	142,000
31				64,600	.46	802,000			
Monthly load (tons)			23,160,000	31,530,000			13,610,000		
1936									
Day	July			August			September		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	25,600	0.18	124,000	9,800	1.13	299,000	13,800	3.03	1,130,000
2	24,100	.17	111,000	9,390	.94	238,000	22,400	4.47	2,700,000
3	23,100	.17	106,000	9,450	.92	235,000	21,500	7.74	4,490,000
4	22,400	.16	96,800	11,200	1.48	448,000	18,300	6.86	3,390,000
5	21,200	.15	85,900	15,300	3.14	1,300,000	16,400	4.41	1,950,000
6	19,300	.17	88,600	19,700	4.22	2,240,000	14,900	3.43	1,380,000
7	17,900	.18	87,000	29,700	5.35	4,290,000	13,900	3.10	1,160,000
8	16,600	.12	53,800	24,700	6.54	4,360,000	12,600	2.54	864,000
9	15,700	.13	55,100	27,200	5.31	3,900,000	10,800	2.40	700,000
10	14,400	.13	50,500	27,200	3.99	2,930,000	10,200	1.79	493,000
11	15,500	.12	50,200	23,200	3.18	1,990,000	9,440	1.30	331,000
12	15,900	2.22	953,000	21,000	2.73	1,550,000	8,830	1.38	329,000
13	29,800	.82	660,000	18,600	2.53	1,270,000	9,520	1.57	404,000
14	29,200	4.72	3,720,000	16,900	2.12	967,000	9,750	2.62	690,000
15	20,500	1.72	952,000	15,200	2.22	911,000	8,980	1.87	453,000
16	17,800	3.13	1,500,000	13,300	1.68	603,000	8,600	1.49	346,000
17	16,900	3.62	1,650,000	12,800	1.49	515,000	8,080	1.32	288,000
18	16,300	2.40	1,060,000	12,800	1.15	397,000	7,900	1.00	210,000
19	14,700	1.84	730,000	12,200	1.42	468,000	7,870	.80	170,000
20	13,700	1.02	377,000	12,400	1.22	408,000	7,590	.69	141,000
21	14,300	.89	344,000	11,900	1.40	450,000	7,410	.53	106,000
22	15,200	.91	373,000	11,100	1.60	480,000	9,490	3.29	843,000
23	14,300	.76	293,000	13,300	1.75	628,000	8,220	2.08	462,000
24	14,100	.62	236,000	14,900	2.13	857,000	8,080	3.02	659,000
25	12,900	.74	258,000	12,300	2.08	691,000	8,100	1.98	433,000
26	12,100	.56	183,000	11,000	2.19	650,000	7,870	1.35	287,000
27	11,800	.66	210,000	10,500	2.07	587,000	6,880	1.74	323,000
28	10,800	1.11	324,000	9,720	1.34	352,000	6,350	1.18	202,000
29	11,400	1.24	382,000	9,010	.98	238,000	5,660	1.08	165,000
30	10,600	1.31	375,000	9,300	1.15	289,000	5,280	.91	130,000
31	8,810	.99	235,000	10,800	5.50	1,600,000			
Monthly load (tons)			15,720,000	36,140,000			25,230,000		

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

1936									
Day	October			November			December		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	5,180	0.64	89,500	7,250	0.45	88,100	6,600	0.13	23,200
2	5,300	.50	71,600	10,700	1.78	514,000	6,480	.15	26,200
3	5,120	.42	58,100	9,560	1.70	439,000	6,270	.14	23,700
4	5,150	.40	55,600	9,670	1.91	499,000	6,200	.13	21,800
5	5,240	.37	52,300	9,100	1.58	388,000	5,960	.16	25,700
6	5,240	.41	58,000	9,130	.96	237,000	5,800	.12	18,800
7	5,390	.36	52,400	8,710	.95	223,000	5,740	.40	15,500
8	5,580	.31	46,700	8,310	.90	202,000	5,560	.11	16,500
9	5,540	.32	47,900	7,940	.84	180,000	5,420	.10	14,600
10	5,520	.26	38,800	7,570	.69	141,000	5,230	.10	14,100
11	5,700	.22	33,900	7,260	.44	86,200	5,110	.09	12,400
12	5,780	.24	37,500	7,310	.40	78,900	4,880	.11	14,500
13	5,740	.24	37,200	7,480	.47	94,900	4,620	.10	12,500
14	5,680	.22	33,700	7,510	.36	73,000	4,370	.10	11,800
15	5,690	.21	32,300	7,290	.34	66,900	4,210	.08	9,090
16	5,660	.23	35,100	7,220	.36	70,200	4,130	.07	7,810
17	5,650	.21	32,000	7,120	.33	63,400	4,110	.07	7,770
18	5,560	.19	28,500	7,050	.20	38,100	4,220	.06	6,840
19	5,430	.18	26,400	7,090	.20	38,300	4,580	.08	9,890
20	5,380	.18	26,100	7,160	.30	58,000	5,160	.08	11,100
21	5,870	.24	38,000	7,070	.19	36,300	5,390	.12	17,500
22	5,790	.70	109,000	7,100	.16	30,700	5,700	.08	12,300
23	5,900	.35	55,800	7,200	.28	54,400	5,820	.11	17,300
24	6,520	.55	96,800	7,180	.20	38,800	5,860	.11	17,400
25	7,050	.46	87,600	7,200	.21	40,800	6,030	.11	17,900
26	7,410	.55	110,000	7,170	.16	31,000	6,020	.12	19,500
27	7,120	.59	113,000	7,040	.26	49,400	5,820	.10	15,700
28	6,980	.49	92,300	6,990	.16	30,200	5,900	.19	30,300
29	6,960	.48	90,200	6,960	.17	31,900	6,410	.11	19,000
30	6,820	.54	99,400	6,830	.22	40,600	6,830	.24	44,300
31	6,830	.40	73,800				6,070	.16	26,200
Monthly load (tons)			1,860,000	3,963,000			541,200		

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

1937										
Day	April			May			June			
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1	12,200	0.70	231,000	36,000	1.46	1,420,000	51,500	0.71	987,000	
2	11,600	.70	219,000	32,700	1.00	883,000	60,300	.88	1,430,000	
3	10,800	.62	181,000	28,500	.88	677,000	64,900	.78	1,370,000	
4	11,200	.68	206,000	25,600	.76	525,000	60,100	.85	1,380,000	
5	13,800	1.16	432,000	25,800	.78	543,000	55,900	.75	1,130,000	
6	15,300	1.45	599,000	30,200	.92	750,000	55,500	.60	899,000	
7	13,900	1.23	462,000	35,700	1.00	964,000	54,700	.60	886,000	
8	13,100	1.10	389,000	41,400	1.28	1,430,000	51,300	.56	776,000	
9	13,900	1.00	375,000	43,600	1.28	1,510,000	47,200	.56	714,000	
10	15,000	1.18	478,000	43,200	1.26	1,470,000	43,300	.56	655,000	
11	15,000	1.02	413,000	50,400	1.40	1,910,000	39,100	.48	507,000	
12	17,300	1.37	640,000	57,200	1.56	2,410,000	36,300	.43	421,000	
13	19,200	1.80	938,000	65,400	1.92	3,390,000	34,800	.44	413,000	
14	20,400	1.75	964,000	71,400	1.64	3,160,000	33,100	.40	357,000	
15	22,700	2.04	1,250,000	67,900	1.40	2,570,000	33,000	.41	365,000	
16	24,900	2.03	1,360,000	69,400	1.38	2,590,000	33,800	.36	329,000	
17	28,800	2.32	1,800,000	72,100	1.43	2,780,000	34,900	.46	433,000	
18	34,200	2.24	2,070,000	78,500	1.24	2,630,000	32,900	.44	391,000	
19	43,700	2.95	3,480,000	82,100	1.19	2,640,000	31,600	.34	290,000	
20	44,600	2.78	3,350,000	81,500	1.04	2,290,000	30,400	.31	254,000	
21	42,100	2.48	2,820,000	83,600	1.12	2,530,000	31,400	.45	382,000	
22	43,700	2.19	2,580,000	77,000	1.00	2,080,000	34,000	.36	330,000	
23	42,700	2.25	2,590,000	72,500	.98	1,920,000	34,100	.41	377,000	
24	40,500	2.37	2,590,000	70,800	.90	1,720,000	33,600	.34	308,000	
25	42,500	2.07	2,380,000	69,100	.88	1,640,000	33,500	.40	362,000	
26	41,800	2.06	2,320,000	66,600	.82	1,470,000	34,200	.38	351,000	
27	36,500	1.65	1,630,000	63,100	.86	1,470,000	32,600	.62	546,000	
28	32,000	1.40	1,210,000	58,400	.70	1,100,000	32,400	.44	385,000	
29	31,300	1.37	1,160,000	53,600	.62	897,000	29,300	.38	301,000	
30	34,500	1.43	1,330,000	48,500	.66	864,000	31,100	.40	336,000	
31			48,100		.66	857,000				
Monthly load (tons)			40,440,000				53,090,000	17,660,000		

1937									
Day	July			August			September		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	30,800	0.40	333,000	13,300	1.61	578,000	9,760	2.49	656,000
2	28,800	1.00	778,000	12,100	1.92	627,000	12,200	1.72	567,000
3	27,400	.51	877,000	11,100	2.14	641,000	14,700	4.77	1,890,000
4	25,600	.36	249,000	10,300	2.08	578,000	15,100	3.14	1,280,000
5	24,700	.21	140,000	10,100	1.60	436,000	13,800	3.03	1,130,000
6	22,500	.25	152,000	10,300	.79	220,000	12,800	2.70	933,000
7	20,900	.28	158,000	9,420	.69	175,000	11,100	2.98	893,000
8	19,500	.33	174,000	9,340	.72	182,000	10,100	2.72	742,000
9	18,700	.38	192,000	8,400	.62	141,000	8,660	2.69	629,000
10	18,800	1.15	584,000	7,620	.94	193,000	8,200	2.48	549,000
11	19,100	1.23	634,000	7,300	.78	154,000	7,600	2.43	499,000
12	21,600	.67	391,000	7,300	.67	132,000	7,160	2.41	466,000
13	27,100	2.47	1,810,000	7,340	.93	184,000	7,110	2.28	438,000
14	27,200	2.52	1,850,000	7,040	1.16	220,000	7,340	1.41	279,000
15	30,200	2.55	2,080,000	6,350	.79	135,000	6,690	1.33	240,000
16	31,200	2.87	2,420,000	5,820	.54	84,900	5,980	1.25	202,000
17	30,900	2.73	2,280,000	5,460	.48	70,800	5,580	1.00	151,000
18	32,000	3.26	2,820,000	5,180	.30	42,000	5,300	.76	109,000
19	31,300	2.56	2,160,000	4,950	.23	30,700	5,050	.76	104,000
20	28,200	2.40	1,830,000	4,870	.28	36,800	4,800	.68	88,100
21	25,000	2.20	1,480,000	4,510	.22	26,800	4,470	.57	65,800
22	21,900	1.91	1,130,000	4,220	.19	21,600	4,380	.48	56,800
23	19,200	1.64	850,000	4,110	.24	26,600	4,290	.61	70,700
24	16,900	1.36	621,000	5,180	.26	36,400	4,630	1.12	140,000
25	14,900	1.24	499,000	4,830	1.24	162,000	4,200	.52	59,000
26	13,600	1.14	419,000	4,510	.32	39,000	4,370	.91	107,000
27	12,400	.98	328,000	4,490	.34	41,200	4,200	.78	85,500
28	11,300	.71	217,000	4,450	.34	40,900	3,960	.31	35,100
29	11,200	.52	157,000	4,310	.26	30,300	4,220	.40	45,600
30	11,800	.40	127,000	4,690	.19	24,100	10,400	1.13	317,000
31	14,500	1.32	517,000	4,290	.52	60,200			
Monthly load (tons)			27,760,000	5,370,000			12,740,000		

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

1937									
Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	13,900	5.44	2,040,000	7,180	0.46	89,200	6,520	0.15	26,400
2	23,100	5.38	3,360,000	7,060	.53	101,000	6,480	.15	26,200
3	18,700	8.42	4,250,000	6,850	.44	8,1400	6,350	.13	22,300
4	10,500	7.54	2,140,000	6,840	.32	59,100	6,340	.13	22,300
5	7,750	4.82	1,010,000	6,730	.28	50,900	6,180	.13	21,700
6	6,550	3.97	702,000	6,630	.25	44,800	6,270	.14	23,700
7	5,960	2.73	439,000	6,660	.27	48,600	6,240	.14	23,600
8	5,720	1.90	293,000	6,590	.23	40,900	6,090	.14	23,000
9	5,610	1.22	185,000	6,620	.23	41,100	6,130	.12	19,900
10	5,680	1.08	166,000	6,640	.21	37,600	6,220	.14	23,500
11	5,740	.76	118,000	6,780	.21	38,400	6,410	.14	24,200
12	5,690	.70	106,000	7,050	.29	55,200	6,380	.17	29,300
13	5,350	.51	73,700	7,570	.34	69,500	6,340	.16	27,400
14	5,260	.41	58,200	7,200	.30	58,300	8,600	.75	174,000
15	5,220	.34	47,900	7,020	.26	49,300	7,300	.49	96,600
16	5,150	.29	40,300	6,760	.24	43,800	6,970	.30	56,500
17	5,100	.25	34,400	6,630	.26	46,500	7,420	.33	66,100
18	5,090	.23	31,600	6,570	.32	56,800	8,550	.40	92,300
19	5,590	.24	36,200	6,500	.26	45,600	8,340	.44	99,100
20	8,340	.49	110,000	6,380	.24	41,300	7,870	.39	82,900
21	9,030	.84	205,000	6,240	.19	32,000	7,740	.44	92,000
22	7,940	.67	144,000	6,220	.17	28,500	7,400	.42	83,900
23	7,810	.59	124,000	6,310	.16	27,300	7,020	.35	66,300
24	8,000	.87	188,000	6,350	.17	29,100	6,590	.31	55,200
25	7,640	.90	186,000	6,390	.17	29,300	6,490	.27	47,300
26	7,860	.90	191,000	6,360	.16	27,500	6,240	.24	40,400
27	7,800	.70	147,000	6,310	.15	25,600	5,790	.25	39,100
28	7,460	.57	115,000	6,410	.16	27,700	5,520	.19	28,300
29	7,210	.49	95,400	6,660	.20	36,000	5,320	.16	23,000
30	7,180	.64	124,000	6,630	.20	35,800	5,180	.15	21,000
31	7,260	.54	106,000				5,130	.14	19,400
Monthly load (tons) 16,870,000				1,398,000				1,497,000	

1938									
January				February			March		
1	5,090	0.11	15,100	5,110	0.09	12,400	6,700	0.27	48,800
2	5,090	.11	15,100	5,490	.11	16,300	7,270	.38	74,600
3	4,930	.10	13,300	5,620	.15	22,800	11,200	2.91	880,000
4	4,750	.10	12,800	5,490	.12	17,800	19,300	3.56	1,860,000
5	4,630	.10	12,500	5,620	.14	21,200	39,100	8.76	9,250,000
6	4,820	.11	14,300	5,750	.15	23,300	28,800	4.73	3,680,000
7	5,330	.09	13,000	6,010	.24	38,900	24,400	3.99	2,630,000
8	5,540	.11	16,500	6,010	.16	26,000	20,700	2.88	1,610,000
9	5,820	.13	20,400	6,140	.20	33,200	18,400	2.25	1,120,000
10	5,890	.13	20,700	6,280	.18	30,500	16,000	1.99	860,000
11	5,750	.14	21,700	6,140	.20	33,200	14,400	1.70	661,000
12	5,320	.12	17,200	6,010	.17	27,600	12,600	1.52	517,000
13	4,850	.09	11,800	5,880	.16	25,400	11,600	1.63	511,000
14	4,580	.08	9,890	6,280	.18	30,500	11,400	1.18	363,000
15	4,580	.07	8,660	7,570	.42	85,800	14,400	1.54	599,000
16	4,680	.07	8,850	7,720	.36	75,000	12,600	1.22	415,000
17	4,970	.08	10,700	8,340	.81	182,000	12,600	1.16	395,000
18	5,230	.10	14,100	8,340	.69	155,000	12,200	1.05	346,000
19	5,540	.12	17,900	8,020	.63	136,000	11,600	.90	282,000
20	5,910	.15	23,900	7,720	.57	119,000	11,200	.85	257,000
21	6,660	.16	28,800	7,420	.45	90,200	11,600	.72	226,000
22	7,180	.24	46,600	7,120	.50	96,100	11,800	.77	245,000
23	6,950	.28	52,600	6,700	.35	63,300	11,400	.84	259,000
24	6,700	.23	41,600	6,280	.27	45,800	11,100	.65	195,000
25	6,620	.19	34,000	6,010	.23	37,300	11,200	.67	203,000
26	6,360	.17	29,200	5,750	.21	32,600	11,100	.70	210,000
27	5,970	.14	22,600	5,750	.20	31,000	11,200	.62	187,000
28	5,660	.14	21,400	6,010	.20	32,500	12,600	.68	231,000
29	5,390	.13	18,900				13,800	.91	339,000
30	4,990	.12	16,200				16,400	1.40	620,000
31	4,700	.10	12,700				15,700	1.22	517,000
Monthly load (tons) 622,800			1,541,000			29,590,000			

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

1938										
Day	April		May			June				
	Mean discharge (second-foot)	Suspended sediment	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment			
		Mean percent	Tons per day	Mean discharge (second-foot)	Mean percent	Tons per day	Mean discharge (second-foot)	Mean percent	Tons per day	
1	14,600	1.08	426,000	58,600	2.00	3,160,000	85,400	0.92	2,120,000	
2	13,400	.90	326,000	63,700	2.00	3,440,000	94,900	.90	2,310,000	
3	12,200	.68	224,000	65,500	1.52	2,690,000	95,600	1.10	2,840,000	
4	11,200	.65	197,000	69,200	1.48	2,770,000	94,100	.88	2,240,000	
5	10,300	.60	167,000	62,600	1.46	2,470,000	93,400	.84	2,120,000	
6	9,490	.51	131,000	56,900	1.46	2,240,000	95,600	.72	1,860,000	
7	9,150	.44	109,000	53,100	1.32	1,890,000	99,400	.74	1,990,000	
8	9,830	.53	141,000	46,900	1.16	1,470,000	98,700	.71	1,890,000	
9	10,300	.55	153,000	41,100	1.00	1,110,000	98,700	.68	1,810,000	
10	10,500	.59	167,000	37,000	.95	949,000	94,100	.79	2,010,000	
11	11,200	.64	194,000	33,600	.80	726,000	87,500	.66	1,560,000	
12	11,200	.57	172,000	30,500	.70	576,000	84,000	.50	1,130,000	
13	10,700	.47	136,000	28,300	.51	390,000	79,200	.68	1,450,000	
14	10,900	.49	144,000	26,900	.44	320,000	76,400	.64	1,320,000	
15	13,200	.55	196,000	26,300	.44	312,000	73,100	.69	1,360,000	
16	17,900	1.18	570,000	28,300	.54	413,000	77,100	.66	1,370,000	
17	20,700	1.46	816,000	36,600	.78	771,000	79,200	.54	1,150,000	
18	21,000	1.58	896,000	51,500	1.31	1,820,000	71,200	.64	1,230,000	
19	18,700	1.30	656,000	63,700	1.45	2,490,000	66,700	.56	1,010,000	
20	18,200	1.06	521,000	68,600	1.43	2,650,000	63,700	.52	894,000	
21	23,400	1.72	1,090,000	68,600	1.20	2,220,000	63,100	.51	869,000	
22	36,600	2.38	2,350,000	70,500	1.27	2,420,000	61,400	.62	1,030,000	
23	43,400	2.94	3,450,000	68,600	1.22	2,260,000	58,600	.52	823,000	
24	47,400	2.92	3,740,000	67,400	1.04	1,890,000	62,000	.63	1,050,000	
25	53,100	2.44	3,500,000	66,100	1.04	1,860,000	73,100	.60	1,180,000	
26	56,400	2.57	3,910,000	59,100	.90	1,440,000	73,800	.84	1,670,000	
27	62,000	2.81	4,700,000	55,300	.88	1,310,000	68,600	.56	1,040,000	
28	66,100	2.51	4,480,000	54,700	.82	1,210,000	63,100	.48	818,000	
29	65,500	2.20	3,890,000	58,000	.82	1,280,000	62,600	.40	676,000	
30	57,400	2.22	3,440,000	66,100	.86	1,530,000	64,900	.73	1,280,000	
31				74,400	1.11	2,230,000				
Monthly load (tons)			40,890,000				52,310,000	44,100,000		

1938									
Day	July		August			September			
	Mean discharge (second-foot)	Suspended sediment	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		
		Mean percent	Tons per day	Mean discharge (second-foot)	Mean percent	Tons per day	Mean discharge (second-foot)	Mean percent	Tons per day
1	60,200	0.74	1,200,000	11,300	0.12	36,600	5,570	0.13	19,600
2	60,200	.96	1,560,000	10,900	.17	50,000	6,230	.14	23,500
3	63,100	1.00	1,700,000	11,300	.17	51,900	8,400	.62	141,000
4	56,400	.76	1,160,000	10,900	.16	47,100	15,000	3.72	1,510,000
5	50,500	.46	627,000	10,200	1.14	38,600	19,300	3.04	1,580,000
6	45,900	.43	533,000	9,680	.12	31,400	22,500	4.34	2,640,000
7	43,000	.40	464,000	9,030	.11	26,800	25,400	3.97	2,720,000
8	40,100	.32	346,000	8,870	.09	21,600	21,000	2.94	1,670,000
9	36,600	.29	287,000	10,400	.15	42,100	21,300	2.65	1,520,000
10	33,200	.32	287,000	10,200	1.24	341,000	21,000	2.59	1,470,000
11	30,200	.26	212,000	10,000	1.78	481,000	22,200	2.28	1,370,000
12	28,000	.22	166,000	9,030	.84	205,000	22,500	3.01	1,830,000
13	25,900	.20	140,000	9,350	.55	139,000	21,000	3.56	2,020,000
14	24,600	.18	120,000	12,200	.38	125,000	20,100	2.82	1,530,000
15	22,700	.16	98,100	10,700	.76	220,000	22,200	2.80	1,680,000
16	20,900	.16	90,300	10,000	.86	232,000	23,400	2.68	1,690,000
17	19,800	.13	69,500	9,680	.81	212,000	19,600	2.20	1,160,000
18	20,400	.14	77,100	11,600	.60	188,000	17,300	1.58	738,000
19	20,400	.15	82,600	10,700	1.64	474,000	16,800	1.67	758,000
20	19,500	.18	94,800	9,510	1.92	493,000	15,000	1.46	591,000
21	18,700	.24	121,000	8,550	1.26	291,000	13,800	1.18	440,000
22	17,300	.35	163,000	7,800	.95	200,000	12,800	1.33	460,000
23	16,300	.31	136,000	7,070	.64	122,000	12,000	.86	279,000
24	16,100	.23	100,000	6,650	1.04	187,000	11,300	.78	238,000
25	15,300	.18	74,400	6,230	.82	138,000	10,700	.67	194,000
26	14,600	.19	74,900	5,960	.56	90,100	10,000	.44	119,000
27	14,200	.19	72,800	5,570	.34	51,100	9,510	.34	87,300
28	13,300	.19	68,200	5,440	.26	38,200	9,200	.27	67,100
29	12,600	.16	54,400	5,180	.34	47,600	9,030	.24	58,500
30	12,000	.14	45,400	5,050	.20	27,300	8,550	.20	46,200
31	12,000	.13	42,100	4,790	.19	24,600			
Monthly load (tons)			10,270,000	4,673,000			28,650,000		

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	October			November			December		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	8,070	0.18	39,200	9,000	0.20	48,600	5,900	0.04	6,370
2	7,830	.19	40,200	8,790	.19	45,100	5,300	.03	4,290
3	7,660	.17	35,200	8,740	.22	51,900	5,120	.02	2,760
4	7,770	.15	31,500	8,820	.17	40,500	5,350	.03	4,330
5	7,140	.19	36,600	8,520	.16	36,800	5,880	.03	4,760
6	7,040	.16	30,400	8,440	.15	34,200	6,340	.04	6,850
7	6,870	.29	53,800	8,690	.13	30,500	6,620	.05	8,940
8	6,890	.17	31,600	9,010	.14	34,100	6,870	.05	9,270
9	6,620	.15	26,800	9,270	.14	35,000	7,150	.06	11,600
10	6,580	.16	28,400	9,140	.13	32,100	7,220	.07	13,600
11	8,760	.20	47,300	9,050	.13	31,800	7,650	.07	14,500
12	12,400	.39	131,000	9,010	.12	29,200	8,370	.09	20,300
13	11,800	.67	213,000	8,970	.12	29,100	8,430	.10	22,800
14	12,500	.70	236,000	8,650	.12	28,000	8,260	.08	17,800
15	12,100	.52	170,000	8,840	.14	33,400	8,200	.08	17,700
16	11,300	.61	186,000	9,010	.14	34,100	8,280	.08	17,900
17	12,100	.76	248,000	9,140	.14	34,500	8,380	.09	20,400
18	12,000	.67	217,000	8,970	.12	29,100	8,130	.08	17,600
19	11,000	.45	134,000	8,680	.10	23,400	7,640	.07	14,400
20	10,500	.62	176,000	8,100	.09	19,700	7,250	.06	11,700
21	10,200	.51	140,000	7,950	.08	17,200	6,800	.06	11,000
22	10,300	.40	111,000	8,130	.07	15,400	7,080	.04	7,650
23	10,000	.50	143,000	8,100	.07	15,000	7,520	.07	14,200
24	11,100	.42	126,000	7,980	.07	15,100	7,620	.10	20,600
25	10,800	.48	140,000	7,680	.07	14,500	7,350	.08	15,900
26	10,400	.46	129,000	7,540	.06	12,200	7,320	.08	15,800
27	10,100	.35	95,400	7,400	.06	12,000	7,270	.09	17,700
28	9,820	.32	84,800	7,100	.06	11,500	7,040	.06	11,400
29	9,870	.34	90,600	6,680	.05	9,020	6,610	.05	8,920
30	9,530	.28	72,000	6,160	.05	8,320	5,910	.05	7,980
31	9,220	.34	84,600	-----	-----	-----	5,010	.04	5,410
Monthly load (tons)			3,328,000	811,600			384,400		

Day	January			February			March		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	4,750	0.04	5,130	5,920	0.04	6,390	6,040	0.08	13,000
2	4,740	.03	3,840	5,820	.04	6,290	6,050	.06	9,800
3	4,610	.03	3,730	5,950	.03	4,820	6,020	.06	9,750
4	4,450	.03	3,600	5,920	.04	6,390	6,050	.07	11,400
5	4,410	.03	3,570	5,790	.04	6,250	6,040	.06	9,780
6	4,800	.03	3,890	5,690	.04	6,150	6,150	.05	8,300
7	5,360	.02	2,890	5,400	.04	5,830	6,240	.05	8,420
8	5,600	.03	4,540	5,090	.03	4,120	6,160	.06	10,000
9	5,610	.04	6,060	5,060	.03	4,100	6,130	.06	9,930
10	5,790	.04	6,250	5,060	.03	4,100	6,080	.06	9,850
11	6,050	.04	6,530	5,410	.02	2,920	5,980	.06	9,690
12	6,260	.04	6,760	5,880	.03	4,760	6,100	.06	9,880
13	6,270	.04	6,770	5,910	.04	6,380	6,650	.07	12,600
14	6,310	.04	6,810	5,610	.03	4,540	7,540	.10	20,400
15	6,120	.05	8,260	5,340	.03	4,330	8,460	.17	38,800
16	6,060	.05	8,180	5,230	.03	4,240	9,240	.28	69,900
17	6,090	.04	6,580	5,350	.02	2,890	10,000	.34	91,800
18	6,130	.04	6,620	5,740	.02	3,100	10,400	.54	152,000
19	6,050	.04	6,530	6,040	.04	6,520	10,600	.60	172,000
20	6,120	.04	6,610	6,050	.04	6,530	10,900	.68	200,000
21	5,930	.04	6,400	5,930	.04	6,400	11,200	.89	269,000
22	6,170	.03	5,000	6,050	.04	6,530	12,000	1.07	347,000
23	6,020	.03	4,880	6,160	.04	6,650	21,100	1.82	1,040,000
24	6,170	.04	6,660	6,060	.06	9,820	27,400	1.84	1,360,000
25	6,690	.04	7,230	6,080	.09	14,800	27,200	1.92	1,420,000
26	6,760	.07	12,800	5,910	.08	12,800	28,500	2.06	1,590,000
27	6,610	.06	10,700	5,870	.06	9,440	28,000	2.12	1,600,000
28	6,480	.05	8,750	-----	-----	-----	27,000	1.83	1,330,000
29	6,450	.05	8,710	-----	-----	-----	27,500	1.66	1,230,000
30	6,580	.04	7,110	-----	-----	-----	28,000	1.50	1,130,000
31	6,430	.05	8,680	-----	-----	-----	27,800	1.45	1,090,000
Monthly load (tons)			200,100	178,200			13,250,000		

¹ Estimated.

QUANTITIES OF SUSPENDED SEDIMENT

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TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grana Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

1939

Day	April			May			June			
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1	25,500	1.24	854,000	22,500	0.53	322,000	32,800	0.40	354,000	
2	23,700	1.10	704,000	24,200	.67	438,000	34,600	.41	383,000	
3	22,000	1.05	624,000	29,600	.84	671,000	37,900	.44	450,000	
4	20,300	.98	537,000	33,400	.94	848,000	39,300	.47	499,000	
5	19,500	.88	463,000	37,000	1.04	1,040,000	40,300	.52	566,000	
6	21,900	1.60	946,000	39,800	1.13	1,210,000	37,500	.54	547,000	
7	23,800	1.68	1,080,000	40,600	1.12	1,230,000	37,400	.53	535,000	
8	25,400	1.36	933,000	42,600	1.14	1,310,000	39,900	.57	614,000	
9	24,800	1.28	857,000	45,300	1.17	1,430,000	41,200	.52	578,000	
10	24,000	.90	583,000	44,400	.95	1,140,000	39,000	.47	495,000	
11	22,600	.83	506,000	40,800	.94	1,040,000	36,500	.37	365,000	
12	21,800	.64	377,000	39,500	.90	960,000	34,400	.34	316,000	
13	22,000	.64	380,000	40,100	.77	834,000	31,900	.32	276,000	
14	21,500	.58	337,000	41,100	.77	854,000	29,400	.27	214,000	
15	20,200	.58	316,000	42,600	.79	909,000	28,000	.25	189,000	
16	18,700	.47	237,000	41,500	.67	751,000	27,100	.27	198,000	
17	18,100	.47	230,000	38,400	.66	684,000	26,800	.30	217,000	
18	18,500	.43	215,000	38,000	.73	749,000	27,000	.31	226,000	
19	18,200	.38	187,000	39,300	.63	668,000	26,600	.26	187,000	
20	17,200	.36	167,000	39,400	.61	649,000	24,600	.24	159,000	
21	16,300	.30	132,000	38,100	.58	597,000	23,500	.20	127,000	
22	15,800	.24	102,000	37,500	.55	557,000	21,900	.20	118,000	
23	15,300	.30	124,000	40,700	.69	758,000	20,100	.20	109,000	
24	15,500	.26	109,000	44,400	.80	959,000	18,500	.13	64,900	
25	16,100	.26	113,000	46,600	.75	944,000	16,300	.14	61,600	
26	16,800	.32	145,000	48,100	.67	870,000	14,900	.10	40,200	
27	20,300	.58	318,000	46,600	.69	868,000	14,100	.08	30,500	
28	21,800	.54	318,000	42,600	.63	725,000	13,900	.09	33,800	
29	21,000	.42	238,000	39,600	.54	577,000	13,900	.10	37,500	
30	21,900	.56	331,000	36,000	.44	428,000	13,600	.10	36,700	
31				33,700	.43	391,000				
Monthly load (tons)			12,460,000				25,410,000			8,027,000

1939

	July			August			September		
1	13,400	0.09	32,600	3,980	0.01	1,070	2,890	0.07	5,460
2	13,000	.07	24,600	3,920	.01	1,060	3,670	.36	35,700
3	12,400	.06	20,100	3,580	.01	967	3,880	.35	36,700
4	11,700	.06	19,000	3,550	.01	958	3,860	.15	15,600
5	11,200	.04	12,100	3,490	.05	4,710	5,140	.68	94,400
6	10,600	.05	14,300	3,730	.08	8,060	7,640	.52	107,000
7	10,200	.04	11,000	4,570	.02	2,470	8,540	1.65	380,000
8	9,820	.04	10,600	4,930	.01	1,330	10,300	1.84	512,000
9	9,370	.04	10,100	4,930	.29	38,600	12,200	4.76	1,570,000
10	9,130	.04	9,860	4,930	.53	70,500	11,100	2.30	689,000
11	8,680	.04	9,370	4,690	.16	20,300	13,200	1.58	563,000
12	8,270	.03	6,700	4,620	.14	17,500	13,800	4.33	1,610,000
13	7,880	.03	6,380	5,400	.23	33,500	17,300	4.66	2,180,000
14	7,650	.02	4,130	5,010	.11	14,900	25,200	6.37	4,380,000
15	7,400	.02	4,000	5,230	.12	16,900	18,100	5.70	2,790,000
16	7,050	.03	5,710	5,380	.28	40,700	14,800	3.82	1,530,000
17	6,990	.02	3,770	4,920	.11	14,600	15,600	3.75	1,580,000
18	6,720	.03	5,440	4,570	.20	24,700	12,600	2.36	803,000
19	6,410	.02	3,460	4,270	.25	28,800	11,600	1.44	451,000
20	6,040	.02	3,260	3,900	.21	22,100	10,700	1.39	402,000
21	5,690	.02	3,070	3,580	.15	14,500	9,970	1.58	425,000
22	5,430	.03	4,400	3,400	.14	12,900	9,130	1.44	355,000
23	5,190	.02	2,800	3,240	.10	8,750	8,250	1.36	303,000
24	5,040	.02	2,720	3,100	.07	5,860	7,720	.99	206,000
25	4,820	.02	2,600	3,020	.07	5,710	7,080	.61	117,000
26	4,720	.02	2,550	2,910	.07	5,500	6,720	.60	109,000
27	4,520	.02	2,440	2,830	.05	3,820	6,300	.49	83,300
28	4,350	.01	1,170	2,880	.05	3,890	6,640	.42	75,300
29	4,240	.01	1,140	2,890	.09	7,020	8,630	.45	105,000
30	4,040	.01	1,090	2,790	.16	12,100	7,380	.39	77,700
31	4,000	.01	1,080	2,850	.05	3,850			
Monthly load (tons)			241,500	447,600			21,540,000		

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

1939									
Day	October			November			December		
	Mean discharge (second-feet)	Mean percent	Suspended sediment Tons per day	Mean discharge (second-feet)	Mean percent	Suspended sediment Tons per day	Mean discharge (second-feet)	Mean percent	Suspended sediment Tons per day
1	5,870	0.42	66,600	5,100	0.08	11,000	5,280	0.06	8,550
2	5,750	.84	130,000	5,470	.08	11,800	5,320	.06	8,620
3	5,950	.50	80,300	5,450	.10	14,700	5,320	.06	8,620
4	5,820	.30	47,100	5,340	.09	13,000	5,310	.06	8,600
5	5,930	.27	47,100	5,390	.09	13,100	5,450	.05	7,360
6	5,870	.32	50,700	5,340	.09	13,000	5,480	.06	8,880
7	5,830	.29	45,600	5,310	.09	12,900	5,360	.05	7,240
8	5,750	.22	34,200	5,340	.10	14,400	5,340	.06	8,650
9	5,650	.17	25,900	5,470	.10	14,800	5,300	.06	8,590
10	5,690	.14	21,500	5,560	.09	13,500	5,230	.06	8,470
11	5,700	.15	23,100	5,710	.09	13,900	5,130	.06	8,310
12	5,870	.14	22,200	5,900	.10	15,900	5,150	.06	8,340
13	5,970	.12	19,300	5,990	.10	16,200	5,170	.06	8,380
14	6,330	.12	20,500	6,060	.10	16,400	5,170	.06	8,380
15	6,470	.16	28,000	6,220	.12	20,200	5,180	.07	9,790
16	6,300	.15	25,500	6,090	.10	16,400	5,190	.05	7,010
17	6,500	.16	28,100	6,020	.10	16,200	5,220	.06	8,460
18	6,480	.17	29,700	5,920	.09	14,400	5,240	.06	8,490
19	6,190	.17	28,400	5,710	.08	12,300	5,140	.06	8,330
20	6,040	.26	42,400	5,730	.08	12,400	5,060	.07	9,560
21	5,950	.20	32,100	5,710	.07	10,800	5,020	.08	10,800
22	5,870	.16	25,400	5,690	.08	12,300	4,890	.08	10,600
23	5,660	.12	18,300	5,650	.07	10,700	4,870	.07	9,200
24	5,440	.24	35,300	5,540	.07	10,500	4,840	.06	7,840
25	5,380	.18	26,100	5,340	.06	8,650	4,930	.06	7,990
26	5,220	.18	25,400	5,340	.06	8,650	4,860	.06	7,870
27	5,080	.12	16,500	5,190	.06	8,410	4,570	.06	7,400
28	5,020	.10	13,600	5,190	.06	8,410	4,170	.08	9,010
29	4,980	.09	12,100	5,240	.06	8,490	4,160	.09	10,100
30	4,980	.08	10,800	5,260	.07	9,940	4,320	.11	12,800
31	4,840	.08	10,400				4,340	.10	11,700
Monthly load (tons)			1,042,000				383,400	273,900	

1940									
	January			February			March		
	Mean discharge (second-feet)	Mean percent	Suspended sediment Tons per day	Mean discharge (second-feet)	Mean percent	Suspended sediment Tons per day	Mean discharge (second-feet)	Mean percent	Suspended sediment Tons per day
1	3,980	0.04	4,300	4,720	0.10	12,700	5,650	0.14	21,400
2	3,610	.04	3,900	5,000	.08	10,800	7,820	.24	50,700
3	3,360	.04	3,630	5,410	.08	11,700	8,790	.36	85,400
4	3,430	.04	3,700	5,800	.08	12,500	8,610	.95	221,000
5	3,560	.04	3,840	6,870	.18	33,400	8,000	.87	188,000
6	3,740	.04	4,040	7,350	.19	37,700	7,520	.68	138,000
7	4,220	.04	4,560	7,400	.57	114,000	6,990	.57	108,000
8	5,130	.07	9,700	7,030	.53	101,000	8,320	.56	126,000
9	5,350	.07	10,100	6,750	.41	74,700	9,000	.55	134,000
10	5,390	.09	13,100	6,410	.34	58,800	8,580	.41	95,000
11	5,620	.09	13,700	6,090	.29	47,700	8,930	.44	106,000
12	5,820	.10	15,700	5,750	.21	32,600	8,520	.45	104,000
13	5,880	.10	15,900	5,600	.20	30,200	8,120	.36	78,900
14	6,360	.13	22,300	5,520	.18	26,800	7,920	.32	68,400
15	7,170	.63	122,000	5,470	.16	23,600	8,260	.30	66,900
16	6,580	.18	32,000	5,310	.14	20,100	7,820	.45	95,000
17	6,010	.21	34,100	5,320	.12	17,200	7,460	.35	70,500
18	5,870	.21	33,300	5,390	.11	16,000	7,200	.28	54,400
19	5,580	.16	24,100	5,270	.10	14,200	6,990	.24	45,300
20	5,050	.12	16,400	5,150	.10	13,900	6,650	.21	37,700
21	4,460	.11	13,200	5,120	.08	11,100	6,290	.18	30,600
22	4,000	.10	10,800	5,150	.07	9,730	6,270	.16	27,100
23	3,560	.10	9,610	5,180	.07	9,790	6,450	.16	27,900
24	2,870	.07	5,420	5,010	.07	9,470	6,500	.17	29,800
25	2,660	.04	2,870	4,880	.06	7,910	6,640	.17	30,500
26	3,130	.04	3,380	4,980	.08	10,800	6,710	.20	36,200
27	3,440	.04	3,720	5,180	.07	9,790	6,940	.18	33,700
28	3,510	.06	5,690	5,390	.07	10,200	7,280	.18	35,400
29	3,870	.06	6,270	5,360	.09	13,000	8,020	.30	65,000
30	4,360	.07	8,240				8,460	.32	73,100
31	4,670	.07	8,830				9,050	.38	92,900
Monthly load (tons)			468,400				801,400	2,377,000	

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	1940			1940			1940		
	April		Mean discharge (second-foot)	May		Mean discharge (second-foot)	June		Mean discharge (second-foot)
	Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1....	9,250	0.38	94,900	23,100	1.00	624,000	34,500	0.69	643,000
2....	10,200	.48	132,000	22,900	.99	612,000	34,500	.65	605,000
3....	10,300	.46	128,000	22,900	.77	476,000	36,500	.58	572,000
4....	9,800	.44	116,000	21,400	.79	456,000	39,500	.59	629,000
5....	9,530	.36	92,600	20,000	.69	373,000	41,600	.70	786,000
6....	9,580	.35	90,500	18,900	.66	337,000	41,200	.65	723,000
7....	9,870	.42	112,000	19,100	.67	346,000	39,900	.54	582,000
8....	9,920	.41	110,000	22,800	.68	419,000	37,400	.62	626,000
9....	9,210	.42	104,000	16,300	1.02	724,000	34,600	.54	504,000
10....	8,810	.30	71,400	17,200	.86	632,000	32,200	.53	461,000
11....	9,220	.43	107,000	11,400	1.09	924,000	30,700	.42	348,000
12....	9,240	.43	107,000	11,800	1.19	1,020,000	28,400	.36	276,000
13....	9,400	.48	122,000	12,900	1.10	977,000	25,900	.26	182,000
14....	9,130	.38	93,700	16,700	1.26	1,250,000	23,300	.23	145,000
15....	8,580	.35	81,100	14,400	1.20	1,120,000	21,600	.20	117,000
16....	8,480	.33	75,600	12,100	1.19	1,350,000	20,400	.18	99,100
17....	8,520	.29	66,700	14,400	1.13	1,360,000	19,900	.15	80,600
18....	8,710	.26	61,100	15,500	1.28	1,570,000	20,200	.19	104,000
19....	9,300	.28	70,300	14,400	1.17	1,400,000	20,700	.21	117,000
20....	9,830	.38	101,000	14,600	1.22	1,470,000	20,400	.18	99,100
21....	10,600	.42	120,000	13,900	.96	1,140,000	19,100	.20	103,000
22....	10,900	.50	147,000	10,600	.88	965,000	18,800	.15	76,100
23....	10,600	.42	120,000	17,800	.80	816,000	18,000	.14	68,000
24....	11,200	.50	151,000	16,900	.78	777,000	16,900	.13	59,300
25....	16,100	.99	430,000	14,800	.64	601,000	16,200	.12	52,500
26....	19,100	1.17	603,000	13,300	.57	512,000	15,700	.09	38,200
27....	19,600	1.14	603,000	12,100	.60	520,000	15,400	.10	41,600
28....	20,700	1.25	699,000	11,700	.52	445,000	14,700	.11	43,700
29....	21,500	1.05	610,000	12,100	.55	477,000	14,100	.08	30,500
30....	22,000	.97	576,000	12,800	.56	496,000	13,400	.08	28,900
31....				13,100	.48	429,000			
Monthly load (tons)			5,996,000	24,620,000			8,241,000		

Day	1940			1940			1940		
	July		Mean discharge (second-foot)	August		Mean discharge (second-foot)	September		Mean discharge (second-foot)
	Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1....	12,500	0.08	27,000	6,440	0.40	67,600	5,430	2.76	405,000
2....	11,600	.07	21,900	5,320	.68	97,700	5,260	2.21	314,000
3....	11,200	.06	18,100	4,260	1.94	223,000	5,530	1.58	236,000
4....	12,000	.10	32,400	3,630	2.26	222,000	5,480	1.30	192,000
5....	10,500	.08	22,700	3,310	2.14	191,000	5,430	1.02	150,000
6....	9,610	.07	18,200	3,130	1.70	144,000	5,210	1.25	176,000
7....	9,430	.06	15,300	2,980	1.28	103,000	6,030	1.14	186,000
8....	8,600	.22	51,400	2,850	.84	64,600	5,020	.92	125,000
9....	7,980	.32	68,900	2,740	.49	36,300	4,400	4.70	558,000
10....	7,580	.40	81,900	2,600	.23	16,200	4,600	1.55	192,000
11....	7,380	.14	27,900	2,460	.22	14,600	4,110	.60	66,600
12....	7,060	.10	19,100	2,390	.18	11,600	3,760	1.02	104,000
13....	6,620	.08	14,300	2,320	.12	7,520	3,680	.54	53,700
14....	6,240	.07	11,800	2,350	.09	5,710	7,270	.87	171,000
15....	6,080	.06	9,850	2,570	.06	4,160	8,980	4.83	1,170,000
16....	5,800	.05	7,830	3,220	.05	4,350	6,200	5.24	877,000
17....	5,500	.04	5,940	5,060	2.26	309,000	5,530	3.12	466,000
18....	5,190	.05	7,530	3,330	4.94	444,000	8,690	1.90	446,000
19....	4,840	.05	6,530	2,990	3.06	247,000	11,300	4.97	1,520,000
20....	4,660	.04	5,030	2,570	2.64	183,000	11,400	4.57	1,400,000
21....	4,920	.03	3,990	2,410	1.14	74,200	12,700	4.25	1,460,000
22....	5,470	.02	2,950	2,380	.68	43,700	13,200	3.44	1,230,000
23....	6,120	.03	4,960	3,100	1.32	110,000	13,300	4.96	1,780,000
24....	4,980	.04	5,380	4,940	4.93	658,000	14,200	3.56	1,360,000
25....	4,480	.10	12,100	7,890	5.12	1,090,000	14,100	3.96	1,510,000
26....	4,430	.09	10,800	6,990	5.87	1,110,000	11,200	3.28	992,000
27....	4,660	.10	12,600	7,730	5.48	1,140,000	9,650	3.42	891,000
28....	7,070	.23	43,900	9,230	3.98	992,000	9,030	2.88	702,000
29....	5,740	2.93	454,000	7,130	4.65	895,000	8,900	2.10	505,000
30....	4,600	2.01	250,000	5,390	4.57	665,000	11,900	2.78	893,000
31....	5,340	1.24	179,000	4,830	3.77	492,000			
Monthly load (tons)			1,453,000	9,666,000			20,130,000		

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	October			November			December		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	22,300	8.06	4,850,000	8,750	0.65	154,000	6,590	0.28	49,800
2	26,200	7.05	4,990,000	8,310	.60	135,000	6,410	.23	39,800
3	19,200	4.61	2,390,000	7,360	.59	117,000	6,200	.24	40,200
4	17,200	4.14	1,920,000	6,970	.54	102,000	6,020	.18	29,300
5	16,900	2.86	1,300,000	6,860	.56	104,000	6,020	.15	24,400
6	18,800	4.17	2,120,000	6,750	.54	98,400	6,090	.16	26,300
7	23,100	4.33	2,700,000	6,490	.47	82,400	6,080	.18	29,500
8	17,700	3.62	1,730,000	6,440	.40	69,600	6,130	.16	26,500
9	17,300	3.29	1,570,000	6,760	.34	62,100	6,270	.16	27,100
10	17,000	2.82	1,290,000	6,830	.28	51,600	6,440	.16	27,800
11	14,400	1.67	649,000	6,770	.26	47,500	6,420	.20	34,700
12	13,000	1.44	505,000	6,550	.24	42,400	6,410	.28	48,500
13	12,000	1.38	447,000	6,410	.20	34,600	7,030	.20	38,000
14	11,400	1.08	332,000	6,450	.25	43,500	7,540	.32	65,100
15	10,600	1.03	295,000	6,520	.20	35,200	7,770	.25	52,400
16	9,850	1.80	213,000	6,610	.22	39,300	8,250	.69	154,000
17	9,300	.75	188,000	6,660	.21	35,100	7,580	.62	127,000
18	8,920	.70	169,000	6,360	.17	29,200	6,910	.37	69,000
19	8,520	.66	152,000	6,140	.16	26,500	5,910	.32	51,100
20	8,070	.58	126,000	6,220	.15	25,200	4,830	.32	41,700
21	7,680	.66	137,000	9,810	.50	132,000	4,300	.24	27,900
22	7,440	.48	96,400	10,500	.85	241,000	5,940	.34	54,500
23	7,300	.34	67,000	8,770	.99	284,000	5,320	.54	77,600
24	7,110	.34	65,300	7,700	.83	173,000	5,320	.50	71,800
25	6,890	.31	57,700	7,860	.88	187,000	7,520	.94	191,000
26	6,800	.26	47,700	7,650	.76	157,000	6,720	.94	171,000
27	6,870	.24	63,100	7,350	.52	103,000	9,140	2.09	516,000
28	6,680	.25	45,100	7,200	.43	83,600	8,740	1.56	368,000
29	7,070	.48	160,000	7,070	.38	72,500	7,560	1.41	288,000
30	7,920	.48	103,000	6,770	.31	56,700	7,110	1.55	298,000
31	8,190	.51	113,000				7,140	.84	162,000
Monthly load (tons)			28,900,000	2,774,000			3,227,000		

Day	January			February			March		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	7,940	0.85	182,000	6,490	0.38	66,600	13,600	1.58	580,000
2	10,600	1.95	558,000	6,590	.43	76,500	13,400	1.48	535,000
3	11,300	2.66	812,000	6,580	.38	67,500	13,300	1.42	510,000
4	9,700	1.92	503,000	6,440	.34	59,100	12,600	1.27	432,000
5	8,170	1.12	247,000	6,410	.35	60,600	12,600	1.24	422,000
6	7,340	.95	188,000	6,410	.34	58,800	14,000	1.29	488,000
7	6,690	1.80	144,000	6,280	.35	59,300	12,800	1.05	363,000
8	6,330	.66	113,000	6,020	.27	43,900	12,100	.90	294,000
9	5,930	.50	80,100	5,800	.27	42,300	11,700	.82	259,000
10	5,610	.36	54,500	6,370	.27	46,400	11,100	.72	216,000
11	5,340	.30	43,300	7,040	.78	148,000	10,100	.79	215,000
12	5,540	.22	32,900	6,780	.65	119,000	9,540	.66	170,000
13	13,500	9.87	3,600,000	6,730	.60	109,000	9,050	.56	137,000
14	7,590	3.44	705,000	6,870	.74	137,000	8,720	.59	139,000
15	6,630	1.63	292,000	7,920	.89	190,000	8,410	.48	109,000
16	6,730	1.10	200,000	7,890	.90	192,000	22,100	6.28	3,750,000
17	6,790	.78	143,000	8,090	.74	162,000	19,100	3.40	1,750,000
18	6,910	.88	164,000	9,060	.68	166,000	15,100	2.83	1,150,000
19	6,490	.64	112,000	11,300	1.64	500,000	14,000	2.44	922,000
20	6,220	.64	108,000	10,800	1.45	423,000	13,500	2.04	744,000
21	5,880	.52	82,600	11,300	1.33	406,000	13,100	1.85	654,000
22	5,540	.39	58,300	11,600	1.35	423,000	13,100	1.76	623,000
23	5,320	.30	45,100	14,800	2.19	875,000	13,200	1.70	606,000
24	5,310	.26	37,300	16,900	2.65	1,210,000	13,100	1.64	580,000
25	5,520	.28	41,700	16,100	2.17	943,000	15,000	1.70	688,000
26	6,290	.38	64,500	14,900	2.02	813,000	14,900	1.70	684,000
27	6,380	.35	60,300	14,300	1.88	726,000	16,000	1.94	838,000
28	6,980	.38	71,600	13,700	1.97	729,000	17,100	2.29	1,060,000
29	7,010	.49	92,700				18,000	1.86	904,000
30	6,650	.45	80,800				16,500	1.61	717,000
31	6,410	.43	74,400				15,600	1.35	569,000
Monthly load (tons)			5,499,000	8,851,000			21,110,000		

¹ Estimated.

TABLE 9.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Grand Canyon, Ariz., Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	1941			1941			1941		
	April		Suspended sediment	May		Suspended sediment	June		Suspended sediment
	Mean discharge (second-foot)	Mean percent		Mean discharge (second-foot)	Mean percent		Mean discharge (second-foot)	Mean percent	
1	15,800	1.33	567,000	39,900	1.94	2,090,000	78,700	0.78	1,660,000
2	15,700	1.24	528,000	40,100	2.64	2,860,000	75,100	.64	1,300,000
3	16,300	1.36	599,000	41,300	1.20	2,230,000	72,200	.70	1,360,000
4	18,100	1.54	753,000	44,600	1.57	1,890,000	70,700	.62	1,180,000
5	20,000	2.17	1,170,000	50,900	1.59	2,180,000	69,000	.63	1,170,000
6	19,300	1.92	1,000,000	56,900	1.79	2,750,000	67,400	.62	1,130,000
7	18,500	2.00	999,000	76,800	2.92	6,050,000	66,800	.68	1,230,000
8	18,000	1.46	710,000	73,600	1.99	3,950,000	67,700	.61	1,120,000
9	18,600	1.50	753,000	73,300	1.68	3,320,000	72,300	.72	1,410,000
10	19,600	1.54	815,000	76,400	1.43	2,950,000	81,700	1.06	2,340,000
11	19,700	1.36	723,000	79,200	1.68	3,590,000	83,500	1.32	2,980,000
12	19,800	1.24	663,000	82,700	1.87	4,180,000	77,700	1.46	3,060,000
13	21,700	1.32	773,000	86,800	1.55	3,630,000	70,200	.88	1,670,000
14	22,900	1.60	989,000	92,300	1.38	3,440,000	63,000	.93	1,580,000
15	23,400	1.79	1,130,000	101,600	1.34	3,680,000	58,600	.72	1,140,000
16	22,200	1.33	797,000	112,500	1.47	4,470,000	56,700	.60	919,000
17	21,400	1.45	838,000	119,200	1.45	4,670,000	56,300	.62	942,000
18	20,900	1.34	756,000	114,500	1.17	3,620,000	56,000	.48	726,000
19	20,200	1.10	600,000	103,700	1.06	2,970,000	57,200	.60	927,000
20	20,000	.95	513,000	99,100	1.18	3,160,000	59,800	.56	904,000
21	19,400	.88	461,000	99,200	.96	2,570,000	64,700	.62	1,080,000
22	19,100	.69	356,000	94,800	.83	2,120,000	72,400	1.65	1,270,000
23	18,300	.72	356,000	93,500	.70	1,580,000	75,100	.70	1,420,000
24	17,100	.66	305,000	76,600	.76	1,570,000	74,700	.58	1,170,000
25	18,500	.59	295,000	80,100	.92	1,990,000	74,000	.73	1,460,000
26	20,500	.87	482,000	83,100	1.28	2,870,000	73,700	.67	1,330,000
27	20,600	1.90	501,000	82,700	1.86	4,150,000	74,900	.62	1,250,000
28	21,800	1.00	589,000	84,900	1.42	3,260,000	70,100	.72	1,360,000
29	29,300	2.18	1,720,000	86,700	1.18	2,760,000	66,100	.58	1,040,000
30	33,000	2.44	2,170,000	87,500	.91	2,150,000	60,600	.55	900,000
31				84,200	.90	2,050,000			
Monthly load (tons)			22,910,000	94,760,000			41,020,000		

Day	1941			1941			1941		
	July		Suspended sediment	August		Suspended sediment	September		Suspended sediment
	Mean discharge (second-foot)	Mean percent		Mean discharge (second-foot)	Mean percent		Mean discharge (second-foot)	Mean percent	
1	56,200	10.50	759,000	14,200	0.30	115,000	7,740	0.71	148,000
2	50,400	.38	517,000	13,400	.26	94,100	7,140	.86	166,000
3	45,700	.36	444,000	12,400	.14	46,900	6,730	.84	153,000
4	42,600	.35	403,000	11,500	.11	34,200	6,790	.60	110,000
5	40,200	1.35	380,000	10,700	1.10	28,900	7,520	.39	79,200
6	37,800	.33	337,000	10,100	.08	21,800	7,650	1.30	62,000
7	36,400	.27	265,000	10,000	.07	18,900	7,180	1.30	58,200
8	36,100	.33	322,000	9,380	.07	17,700	6,790	.22	40,300
9	34,500	1.30	279,000	9,780	.12	31,700	6,610	.22	39,300
10	32,200	.24	209,000	9,610	.40	104,000	6,120	.36	59,500
11	30,100	.25	203,000	11,400	11.00	308,000	5,760	.35	54,400
12	29,400	.24	190,000	23,500	2.89	1,830,000	5,540	.28	41,900
13	28,400	.22	169,000	23,500	12.80	1,780,000	5,350	.39	56,300
14	27,900	.23	173,000	18,900	2.84	1,450,000	7,150	1.98	382,000
15	26,800	.20	145,000	17,300	12.00	934,000	8,460	2.02	461,000
16	25,700	1.20	139,000	17,800	1.39	668,000	10,100	1.68	458,000
17	24,100	.22	143,000	19,100	5.44	2,810,000	11,060	1.93	573,000
18	23,000	.21	130,000	18,400	3.41	1,690,000	12,400	1.65	552,000
19	22,400	1.20	121,000	17,100	13.00	1,380,000	12,700	3.03	1,040,000
20	21,600	1.20	117,000	17,500	2.07	978,000	11,600	12.50	783,000
21	20,700	.16	89,400	18,100	1.84	899,000	12,400	12.00	670,000
22	21,900	.28	166,000	16,900	1.69	771,000	10,700	1.40	404,000
23	21,300	1.28	161,000	14,900	1.20	483,000	12,200	1.35	445,000
24	22,300	.27	163,000	13,400	1.08	391,000	13,600	1.80	661,000
25	20,400	1.30	165,000	13,700	.99	366,000	23,300	2.09	1,320,000
26	20,300	.49	269,000	12,600	11.00	340,000	25,700	12.50	1,740,000
27	19,100	.53	273,000	11,500	11.00	310,000	19,300	2.71	1,410,000
28	18,600	.68	341,000	10,500	1.09	309,000	16,800	1.58	717,000
29	17,200	1.68	316,000	9,450	.98	250,000	16,500	1.45	646,000
30	15,600	.67	282,000	8,890	.82	197,000	21,200	1.88	1,080,000
31	14,800	.36	144,000	8,430	.69	157,000			
Monthly load (tons)			7,814,000	18,810,000			14,410,000		

1 Estimated.

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936*

Sampling points: Except as otherwise indicated, samples were taken at points A to D at distances of 120, 180, 240, and 300 feet, respectively, from zero mark on cable at north bank; the letter x denotes sampling points A to D at distances of 100, 160, 280, and 360 feet from zero mark on cable; y denotes sampling points at 140, 200, 260, and 330 feet from zero mark; z denotes sampling points at 150, 210, 270, and 350 feet from zero mark.

Type of sample: I, Integrated; S, surface.

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
Apr. 1.....	10:10 a. m.....	4.87	0.88	0.90	0.98	0.96	I
Apr. 2.....	9:15 a. m.....	5.15	1.03	.93	.93	.92	I
	4:40 p. m.....	5.42	1.19	1.11	1.21	1.14	I
Apr. 3.....	9:05 a. m.....	5.71	1.25	1.24	1.32	1.22	I
	4:30 p. m.....	5.75	1.29	1.27	1.22	1.25	I
	4:30 p. m.....	5.75	.99	.95	.88	.85	S
Apr. 4.....	10:40 a. m.....	6.12	1.26	1.35	1.32	1.23	I
			1.26	1.16	1.20	.99	I z
				.87	.86	.83	S z
	4:30 p. m.....	5.91	1.29	1.28	1.16	1.32	I
			1.26	1.34	1.35	1.00	I z
				.95	.87	.93	S z
Apr. 5.....	9:15 a. m.....	6.00	1.43	1.18	1.40	1.23	I
	2:15 p. m.....	5.89	1.30	1.36	1.36	1.44	I
			1.12	1.05	.94	.93	S
	4:35 p. m.....	5.80	1.42	1.24	1.33	1.26	I
	7:05 p. m.....	5.75	1.33	1.24	1.26	1.24	I
			1.13	1.08	.94	.96	S
Apr. 6.....	9:30 a. m.....	6.16	1.43	1.34	1.42	1.32	I
	4:20 p. m.....	6.04	1.34	1.36	1.35	1.48	I
		6.04	1.20	1.20	1.00	.98	S
Apr. 7.....	9:45 a. m.....	6.74	1.53	1.40	1.38	1.36	I
		6.74	1.18	1.02	.89	.84	S
	4:45 p. m.....	6.72	1.40	1.38	1.44	1.28	I
Apr. 8.....	9:30 a. m.....	7.25	1.48	1.40	1.60	1.52	I
		7.25	1.29	1.17	1.18	1.22	S
	3:15 p. m.....	7.10	1.42	1.40	1.67	1.46	I
		7.10	1.29	.96	.84	.99	S
Apr. 9.....	9:40 a. m.....	7.22	1.41	1.46	1.57	1.57	I
			1.63	1.45	1.50	1.49	I x
			1.88	1.13	.91	1.28	S x
	4:35 p. m.....	7.04	1.30	1.29	1.45	1.29	I
			1.39	1.41	1.24	1.29	I x
			1.29	.96	.91	1.26	S x
Apr. 10.....	7:00 a. m.....	7.37	1.51	1.52	1.56	1.43	I
			1.22	.80	.78	.82	S
	9:35 a. m.....	7.33	1.30	1.21	1.44	1.42	I
	2:55 p. m.....	7.38	1.46	1.51	1.46	1.39	I
				1.00	.95	1.00	S
	5:00 p. m.....	7.48	1.72	1.66	1.82	1.79	I
	7:15 p. m.....	7.50	2.01	1.85	1.96	2.07	I
			1.72	1.45	1.38	1.29	S
Apr. 11.....	9:30 a. m.....	9.47	2.57	2.99	2.78	2.54	I
			2.50	2.72	2.87	2.24	I y
			2.12	1.11	.88	1.02	S y
	5:35 p. m.....	9.47	3.55	3.47	3.78	4.43	I
			3.51	3.39	4.16	3.82	I y
			3.15	2.39	2.37	2.41	S y
Apr. 12.....	6:55 a. m.....	8.30	2.20	2.60	2.61	2.18	I
			2.00	1.49	1.42	1.54	S
	10:15 a. m.....	8.32	1.99	2.20	2.78	1.96	I
	4:05 p. m.....	8.59	1.91	1.95	2.27	2.20	I
			1.67	1.16	1.21	1.13	S
	7:15 a. m.....	8.59	1.94	2.01	1.90	1.86	I
			1.54	1.16	1.21	1.14	S

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
Apr. 13.....	10:15 a. m.	7.96	1.57	1.68	1.69	1.48	I
	4:15 p. m.	7.73	1.42	1.50	1.78	1.42	I
Apr. 14.....	9:15 a. m.	6.99	1.24	1.50	1.47	1.20	I
	4:08 p. m.	6.91	1.19	1.39	1.37	1.08	I
Apr. 15.....	10:15 a. m.	6.87	1.15	1.15	1.12	1.03	I
			1.12	1.11	1.00		I x
			1.04	.87	.87		S x
	4:30 p. m.	6.70	1.21	1.08	1.23	1.08	I
			1.19	1.04	1.19		I x
			1.11	.91	.81		S x
Apr. 16.....	7:15 a. m.	6.30	0.96	0.84	0.94	0.78	I
			.82	.57	.63	.71	S
	10:45 a. m.	6.45	.98	1.01	.89	.79	I
	3:05 p. m.	6.46	.92	1.01	.99	.80	I
			.78	.64	.64	.73	S
	4:55 p. m.	6.43	.89	.90	.98	.77	I
Apr. 17.....	7:25 p. m.	6.47	.86	.92	.93	.75	I
			.71	.57	.55	.72	S
Apr. 17.....	9:20 a. m.	6.23	.75	.83	.91	.69	I
	4:25 p. m.	6.38	.85	.93	.88	.64	I
Apr. 18.....			.77	.58	.59	.68	S
	9:30 a. m.	6.70	.78	.88	.92	.67	I
			.77	.78	.76		I y
			.51	.49	.54	.56	S y
	4:45 p. m.	6.90	.82	1.05	.82	.65	I
			.84	.95	1.17		I y
Apr. 19.....			.68	.55	.45	.65	S y
	6:45 a. m.	7.38	1.07	1.21	1.24	1.00	I
			.96	.66	.73	.79	S
	10:00 a. m.	7.39	.97	.96	1.09	.95	I
	1:10 p. m.	7.43	1.02	1.10	1.09	.86	I
			.95	.90	.74	.77	S
Apr. 20.....	4:10 p. m.	7.59	1.07	1.20	1.25	.91	I
	7:10 p. m.	7.72	1.33	1.35	1.37	1.10	I
			1.09	.67	.75	.73	S
	9:00 a. m.	7.94	1.23	1.33	1.28	1.21	I
	5:10 p. m.	8.19	1.56	1.64	2.05	1.34	I
Apr. 21.....	9:20 a. m.	8.28	1.45	1.48	1.46	1.48	I
			1.25	1.17	1.10	.92	S
	6:55 p. m.	8.30	1.24	1.38	1.35	1.17	I
Apr. 22.....	10:40 a. m.	8.49	1.30	1.40	1.45	1.20	I
			1.51	1.36	1.22	1.34	I x
			1.30	.77	.78	1.35	S x
	4 25 p. m.	8.80	1.28	1.46	1.58	1.33	I
			1.40	1.47	1.50	1.26	I x
			.99	1.01	.79	1.17	S x
Apr. 23.....	7:00 a. m.	8.37	1.14	1.23	1.14	1.15	I
			.98	.87	.63	.90	S
	11:55 a. m.	8.39	1.32	1.19	1.28	1.12	I
	3:05 p. m.	8.43	1.27	1.22	1.31	1.13	I
			1.18	.72	.81	1.09	S
	5:15 p. m.	8.43	1.29	1.20	1.41	1.23	I
Apr. 24.....	7:15 p. m.	8.46	1.24	1.06	1.36	1.25	I
			1.09	.84	.68	.81	S
	9:35 a. m.	8.04	1.23	1.22	1.30	1.15	I
Apr. 24.....			1.03	.85	.78	.72	S
	4:55 p. m.	8.24	1.14	1.13	1.29	1.28	I
Apr. 25.....	10:50 a. m.	8.11	1.05	1.15	1.20	.97	I
			1.15	1.10	1.18	.88	I y
			.84	.78	.65	.72	S y

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
Apr. 25.....	4:18 p. m.-----	8.14	1.08	1.13	1.13	1.04	I
			1.05	1.19	1.19	1.08	I y
			.96	.70	.74	.74	S y
Apr. 26.....	7:00 a. m.-----	8.21	1.06	.98	1.21	.85	I
			.90	.66	.60	.64	S
	10:15 a. m.-----	8.29	.95	1.19	1.09	.81	I
	1:15 p. m.-----	8.30	.93	1.14	1.18	.78	I
			.95	.62	.64	.53	S
	4:45 p. m.-----	8.41	1.06	1.13	1.36	.92	I
	7:15 p. m.-----	8.50	1.17	1.16	1.18	1.17	I
	7:15 p. m.-----	8.50	.90	.62	.52	.52	S
Apr. 27.....	9:10 a. m.-----	8.95	1.02	1.11	1.12	1.28	I
	3:40 p. m.-----	9.15	1.33	1.52	1.48	1.25	I
Apr. 28.....	9:10 a. m.-----	9.65	1.24	1.31	1.53	1.30	I
	4:05 p. m.-----	9.46	1.33	1.32	1.80	1.44	I
			1.10	.98	.72	.66	S
Apr. 29.....	8:55 a. m.-----	8.88	.99	1.20	1.25	.94	I
			1.22	1.30	.92	1.12	I x
			1.03	.79	.60	1.05	S x
	4:40 p. m.-----	8.60	1.00	.97	1.24	.90	I
			1.16	1.09	.98	.92	I x
			1.00	.76	.62	.94	S x
Apr. 30.....	9:22 a. m.-----	8.25	.90	.98	1.01	.82	I
	1:25 p. m.-----	8.21	.92	.90	.85	.82	I
			.71	.44	.54	.48	S
	4:35 p. m.-----	8.22	.84	.98	.96	.90	I
	7:10 p. m.-----	8.18	.93	.92	.94	.95	I
			.81	.65	.44	.51	S
May 1.....	10:10 a. m.-----	8.19	.91	.79	1.25	.73	I
			.73	.41	.46	.40	S
May 2.....	4:35 p. m.-----	8.18	.78	.40	.85	.70	I
	9:10 a. m.-----	8.33	.86	.93	.98	.77	I
			.86	.66	.95	.72	I y
.67			.44	.40	.45	S y	
May 3.....	4:10 p. m.-----	8.42	1.01	1.04	1.13	.84	I
			.93	1.00	.99	.72	I y
			.71	.44	.40	.41	S y
	6:50 a. m.-----	8.70	.89	1.01	1.02	.84	I
			.56	.46	.42	.44	S
May 3.....	10:20 a. m.-----	8.84	.92	1.01	1.23	.94	I
	1:35 p. m.-----	8.96	1.01				I
			.79				S
	2:35 p. m.-----	8.97	1.06	1.18	1.15	.99	I
			.78	.67	.55	.42	S
	4:40 p. m.-----	9.09	.88	1.11	1.20	1.05	I
May 4.....	7:35 p. m.-----	9.10	1.15	.92	1.26	1.05	I
			.99	.49	.56	.49	S
	8:45 a. m.-----	9.37	1.15	1.03	1.53	1.04	I
	4:35 p. m.-----	9.56	1.06	1.07	1.62	1.31	I
May 5.....	12:00 n.-----	9.80	1.30	1.49	1.54	1.15	I
			1.03	.70	.71	.53	S
May 5.....	4:15 p. m.-----	9.95	1.15	1.19	1.35	1.04	I
	10:10 a. m.-----	9.29	1.09	.90	.88	.85	I
			1.05	.81	.83	.96	I x
.90			.62	.43	.88	S x	
May 6.....	4:55 p. m.-----	9.11	1.13	1.12	1.11	1.12	I
			1.26	1.13	1.13	1.17	I x
			1.10	.88	.61	1.01	S x

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
May 7	6:55 a. m.	8.79	0.98 .86	0.89 .67	1.14 .63	0.93 .58	I S
	8:55 a. m.	8.70	.95	1.04	1.09	.99	I
	2:30 p. m.	8.78	.95	.84	.98	1.05	I
	5:00 p. m.	8.67	.78 .94	.65 .95	.60 1.06	.69 1.17	S I
May 8	12:15 p. m.	8.24	1.01	1.17	1.19	1.02	I
	5:00 p. m.	8.17	1.04 .94	.97	1.06 .70	1.01 .65	I S
	12:30 p. m.	8.13	.93 .88	.97 .98	.97 .97	.93 .73	I Iy
May 9	4:45 p. m.	8.12	.72 .86 .85 .70	.54 .80 .91 .53	.59 .86 .85 .53	.58 .75 .75 .54	Sy I Iy Sy
	6:55 a. m.	7.97	.68 .66	.76 .45	.77 .46	.66 .51	I S
	10:30 a. m.	7.94	.89	.68	.83	.63	I
	1:45 p. m.	7.99	.71 .57	.71 .48	.77 .40	.63 .42	I S
May 10	5:04 p. m.	7.93	.72	.77	.78	.68	I
	7:10 p. m.	7.91	.71 .57	.70 .47	.80 .45	.70 .43	I S
	9:30 a. m.	7.78	.71	.71	.76	.81	I
	4:48 p. m.	7.89	.64	.62	.64	.59	I
May 12	9:00 a. m.	7.90	.57	.59	.73	.55	I
	4:10 p. m.	8.01	.66 .56	.75 .34	.87 .32	.67 .27	I S
	9:15 a. m.	8.35	1.41	.67	.79	.63	I
May 13	5:05 p. m.	8.55	.87	.90	.93	.68	I
	7:03 a. m.	9.02	.75 .63	.78 .44	.87 .32	.68 .32	I S
May 14	11:00 a. m.	9.17	.72	.82	.88	.71	I
	4:30 p. m.	9.36	.73	.72	.87	.71	I
	7:20 p. m.	9.41	.88 .63	.94 .49	.91 .38	.87 .34	I S
	9:05 a. m.	9.91	.90	.91	.90	.82	I
May 15	4:20 p. m.	10.15	1.02 .95	.85 .62	1.25 .60	1.22 .50	I S
	9:05 a. m.	10.70	1.14 1.29	1.22 1.08	1.04 1.10	1.08 1.11	I Iy
May 16	5:00 p. m.	10.88	.89 .90 1.06 .74	.68 1.28 1.23 .77	.53 1.26 1.28 .68	.57 1.10 .95 .56	Sy I Iy Sy
	7:05 a. m.	11.86	1.31 1.19	1.60 1.12	1.60 1.14	1.44 .66	I S
	11:55 a. m.	11.90	1.65 1.28	1.40 .95	1.72 .88	1.48 .75	I S
	4:05 p. m.	11.95	1.15	1.34	1.46	1.30	I
May 18	8:55 a. m.	12.03	1.53	1.50	1.77	1.60	I
	4:40 p. m.	11.70	1.34	1.32	1.70	1.42	I
May 19	9:20 a. m.	11.55	1.39 1.16	1.23 .97	1.54 .90	2.17 .63	I S
	4:35 p. m.	11.66	.92	1.49	1.34	1.56	I
May 20	9:22 a. m.	11.70	1.38 1.49 1.22	1.53 1.22 .95	1.68 1.26 .74	1.14 1.25 .82	I Ix Sx
	4:17 p. m.	11.92	1.38 1.45 1.09	1.09 1.16 1.05	2.20 1.32 .78	1.48 .98 .62	I Ix Sx

TABLE 10.—Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
May 21	7:05 a. m.	12.15	1.25	1.32	1.57	1.36	I
			1.17	1.03	1.10	.87	S
	10:40 a. m.	12.15	1.05	1.17	1.19	1.26	I
	2:15 p. m.	12.25	1.11	1.18	1.26	1.07	I
May 22			.88	.85	.84	.57	S
	4:48 p. m.	12.23	1.30	1.33	1.32	1.36	I
	9:00 a. m.	12.47	1.17	1.17	1.29	1.28	I
	4:35 p. m.	12.53	1.26	1.05	1.24	1.35	I
May 23			1.04	.91	.83	.78	S
	9:08 a. m.	13.18	1.55	1.28	1.34	1.68	I
			1.26	1.25	1.28	1.46	I y
			1.08	.97	1.00	.68	S y
May 24			1.58	1.20	2.39	1.52	I
	4:35 p. m.	13.88	1.29	1.18	1.51	1.37	I y
			1.18	.93	.98	.67	S y
	7:00 a. m.	14.04	1.45	1.52	1.17	1.74	I
May 25			1.24	1.12	.90	.97	S
	10:20 a. m.	13.92	1.20	1.65	1.80	1.90	I
	4:35 p. m.	13.61	1.28	1.44	1.34	1.89	I
	7:10 p. m.	13.41	1.44	1.22	1.27	1.37	I
May 26			1.24	1.06	.99	.82	S
	9:00 a. m.	12.70	1.50	1.39	1.54	1.46	I
	4:13 p. m.	12.49	1.33	1.42	1.78	1.40	I
	9:50 a. m.	12.30	1.04	.96	1.23	1.32	I
May 27				.76	.76	.70	S
	4:20 p. m.	12.38	.93	.92	1.25	1.03	I
	9:05 a. m.	12.71	.99	.92	.86	1.05	I
			1.01	.96	1.02	1.15	I x
May 28			.88	.78	.64	.77	S x
	4:23 p. m.	12.96	1.15	.78	1.05	1.05	I
			1.18	1.10	.96	.92	I x
			.79	.83		.71	S x
May 29	6:50 a. m.	13.45	1.00	1.09	1.00	1.25	I
			1.10		1.43	.99	S
	10:45 a. m.	13.70	1.12	1.13	1.31	1.14	I
	2:05 p. m.	14.00	.84	.98	.50	.59	I
May 30			.84	.75	.76	.64	S
	4:25 p. m.	14.17	1.13	.89	1.04	1.13	I
	8:40 a. m.	14.95	1.25	1.04	1.18	1.19	I
	3:55 p. m.	15.38	1.13	2.23	1.31	1.66	I
May 31			1.07	.86	1.06	1.00	S
	8:43 a. m.	15.90	1.40	1.35	1.67	1.39	I
	12:15 p. m.	15.97	1.15	1.13	1.69	1.39	I
			1.30	1.56	1.28	1.53	I y
May 31			1.06	.92	.83	.74	S y
	4:35 p. m.	16.14	1.28	1.38	1.14	1.25	I
			1.23	1.32	1.40	1.48	I y
			1.26	1.08	1.00	.63	S y
June 1	7:00 a. m.	16.78	1.54	1.82	1.75	1.73	I
			1.38	.82	.64	1.00	S
	12:55 p. m.	17.12	1.20	1.45	2.43	1.47	I
	4:40 p. m.	17.15	1.29	1.21	1.46	1.18	I
June 2	7:30 p. m.	17.30	1.92	1.58	1.60	2.08	I
			1.73	1.17	1.23	2.49	S
	9:35 a. m.	17.65	1.89	3.78	1.56	1.91	I
	4:25 p. m.	17.72	1.63	1.44	1.63	1.76	I
June 2	8:35 a. m.	17.76	1.76	1.34	1.96	2.34	I
	4:00 p. m.	17.85	1.94	1.67	1.73	2.51	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
June 3	9:20 a. m.	17.82	1.80	1.37	1.42	1.72	I
			1.17	.91	1.05	1.21	S
	4:40 p. m.	17.85	1.16	.96	2.63		S
			1.17	1.17	1.22	.69	S x
June 4	9:05 a. m.	17.90	1.62	1.66	1.41	1.33	I
			1.16	.90	.88	.84	S
	4:30 p. m.	17.80	1.25	1.09	1.74	1.54	I
			1.11	.97	.90	.78	S
June 5	10:15 a. m.	17.30	1.28	1.28	1.49	2.04	I
	7:50 p. m.	17.15	1.16	.94	.99	1.31	I
June 6	12:00 n.	17.20	1.35	.99	1.54	.98	I
			1.20	1.25	1.04	1.40	I y
			.90	.75	.82	1.08	S y
	7:35 p. m.	17.18	1.15	1.04	.79	1.17	I
			.88	1.07	1.04	.97	I y
			.64	.67	.77	.65	S y
June 7	7:00 a. m.	17.34	1.16	.71	.92	1.13	I
			.82	.77	.72	.77	S
	11:40 a. m.	17.44	1.07	.86	.99	1.27	I
			.86	.65	.73	.75	S
June 8	4:25 p. m.	17.57	1.19	1.16	1.19	1.13	I
	7:15 p. m.	17.66	.99	1.29	1.17	1.11	I
			.86	.70	.80	.80	S
June 9	8:55 a. m.	18.12	1.08	1.02	1.00	1.34	I
	3:50 p. m.	18.30	1.20	.93	1.04	1.21	I
June 10	8:50 a. m.	18.96	1.26	1.17	1.22	1.49	I
	4:10 p. m.	19.20	1.11	1.10	1.50	1.38	I
			.70	.68	.86	.88	S
June 11	9:20 a. m.	20.00	1.07	.81	1.69	2.53	I
	12:45 p. m.	20.10	1.19	1.09	1.37	1.28	I x
			.85	.84	.89	.86	S x
	4:40 p. m.	20.20	1.50	1.76	1.50	1.57	I
			1.14	1.32	1.47	1.13	I x
			.98	.86	.86	.74	S x
June 12	7:15 a. m.	20.75	1.26	1.11	1.23	1.60	I
			.85	.85	.88	1.22	S
	12:45 p. m.	20.85	1.97	2.82	3.15	1.23	I
			.90	1.21	.81	1.02	S
June 13	5:05 p. m.	20.90	1.19	1.16	1.39	1.39	I
	7:25 p. m.	21.00	1.45	1.05	.96	1.35	I
			.99	.76	.91	.97	S
June 14	8:50 a. m.	21.53	1.32	1.10	1.13	1.21	I
	4:40 p. m.	21.70	1.39	1.18	1.47	1.25	I
			1.09	.82	.80	.95	S
June 15	8:50 a. m.	22.44	1.21	.93	1.09	1.17	I
	1:50 p. m.	22.68	1.20	.93	1.40	1.28	I y
			1.05	.83	.88	.94	S y
	7:15 p. m.	22.80	1.15	1.16	.89	1.42	I
			1.04	.96	1.18	1.26	I y
			.94	1.11	.95	.92	S y
June 16	6:45 a. m.	23.43	1.36	1.32	1.09	1.36	I
			1.00	.99	.87	1.19	S
	1:20 p. m.	23.75	1.26	1.05	1.24	1.20	I
			1.16	.67	.88	.92	S
June 17	4:30 p. m.	23.65	1.33	1.11	1.20	1.39	I
	7:25 p. m.	23.82	1.01	1.24	1.20	1.24	I
			1.32	.91	.82	.89	S
June 18	8:55 a. m.	24.15	1.05	1.04	1.03	1.15	I
	4:25 p. m.	24.33	1.08	.83	1.05	1.21	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
June 16.....	8:25 a. m.....	24.55	1.04	0.98	0.91	1.39	I
	4:55 p. m.....	24.72	1.02	1.15	1.11	1.11	S
June 17.....	8:55 a. m.....	25.30	1.06	.87	.65	.96	I
			1.02	1.00	1.15	1.26	I x
			.71	.52	.62	1.41	S x
	4:30 p. m.....	25.55	1.13	.94	1.19	1.17	I
June 18.....			.86	.96	.94	1.29	I x
			.78	.77	.72	1.51	S x
	6:50 a. m.....	26.20	1.12	.99	.97	1.06	I
			.71	.54	.65	.96	S
	12:50 p. m.....	26.20	.99	.83	.89	1.05	I
			.65	.63	.64	.75	S
June 19.....	4:20 p. m.....	26.30	1.04	.98	.94	1.45	I
	7:25 p. m.....	26.35	1.05	.81	.83	1.11	I
			.78	.64	.60	.90	S
	8:25 a. m.....	26.75	.64	.77	.73	.82	I
June 20.....	4:40 p. m.....	26.40	1.04	.82	.88	.87	I
	8:50 a. m.....	25.30	.93	.69	.73	.96	I
June 21.....			.88	.76	.75	1.03	I y
			.55	.55	.47	.65	S y
	3:55 p. m.....	24.78	.81	.66	.83	.76	I
			.67	.69	.68	.80	I y
			.51	.46	.47	.57	S y
	6:50 a. m.....	23.90	.74	.75	.64	.89	I
June 22.....			.65	.52	.45	.48	S
	12:05 p. m.....	23.60	.69	.75	.79	.73	I
			.45	.36	.46	.52	S
	3:55 p. m.....	23.60	.64	.64	.63	.68	I
	7:40 p. m.....	23.30	.73	.63	.70	.79	I
			.60	.67	.50	.60	S
June 23.....	8:40 a. m.....	23.27	.65	.60	.55	.53	I
	4:50 p. m.....	23.00	.52	.50	.55	.53	I
			.48	.55	.56	.49	S
June 24.....	8:50 a. m.....	22.79	.57	.55	.53	.53	I
	3:45 p. m.....	22.70	.54	.52	.56	.50	I
June 25.....	8:45 a. m.....	22.87	.58	.52	.52	.55	I
			.57	.52	.58	.64	I x
			.39	.40	.39	.67	S x
	4:25 p. m.....	22.68	.57	.65	.52	.61	I
			.56	.63	.53	.76	I x
			.46	.43	.33	.77	S x
June 26.....	6:40 a. m.....	22.36	.60	.63	.60	.63	I
			.45	.36	.39	.40	S
	10:10 a. m.....	22.30	.57	.53	.50	.45	I
	3:40 p. m.....	22.06	.54	.51	.51	.58	I
	7:15 p. m.....	21.90	.55	.54	.55	.60	I
			.44	.43	.44	.37	S
June 27.....	8:45 a. m.....	21.48	.48	.52	.46	.49	I
	4:00 p. m.....	21.07	.42	.37	.38	.44	I
			.37	.30	.36	.35	S
June 28.....	8:40 a. m.....	21.20	.55	.48	.40	.59	I
			.48	.46	.55	.56	I y
			.31	.32	.34	.37	S y
	4:25 p. m.....	20.93	.47	.45	.43	.46	I
			.47	.44	.41	.46	I y
			.34	.38	.32	.37	S y
June 29.....	8:55 a. m.....	20.46	.40	.44	.53	.42	I
	12:30 p. m.....	20.18	.43	.48	.49	.44	I
			.36	.27	.29	.37	S
	4:10 p. m.....	20.08	.44	.42	.43	.45	I
	7:10 p. m.....	19.92	.38	.42	.46	.39	I
			.33	.28	.29	.31	S

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
June 29	8:35 a. m.	19.48	0.40	0.41	0.37	0.44	I
	4:20 p. m.	19.08	.34	.35	.34	.32	I
			.35	.37	.28	.34	S
June 30	8:40 a. m.	18.78	.37	.35	.33	.38	I
	3:55 p. m.	18.56	.39	.31	.36	.35	I
July 1	8:45 a. m.	18.16	.35	.33	.36	.37	I
			.39	.34	.36	.47	I x
			.33	.28	.28	.56	S x
	4:10 p. m.	18.00	.33	.34	.34	.34	I
			.37	.32	.34	.50	I x
			.26	.29	.24	.57	S x
July 2	6:55 a. m.	17.43	.39	.34	.32	.31	I
			.29	.30	.25	.32	I
	10:35 a. m.	17.38	.36	.35	.36	.33	S
	1:35 p. m.	17.33	.34	.36	.33	.35	I
			.29	.26	.28	.27	S
	4:25 p. m.	17.23	.33	.36	.35	.31	I
July 3	7:00 p. m.	17.09	.38	.35	.37	.38	I
			.34	.28	.31	.30	S
	9:20 a. m.	16.80	.27	.30	.28	.27	I
July 4	3:30 p. m.	16.80	.42	.36	.39	.36	I
	9:30 a. m.	16.32	.32	.28	.27	.27	I
July 5	4:55 p. m.	16.21	.29	.27	.28	.28	I
			.27	.25	.27	.26	I y
			.22	.24	.21	.22	S y
July 5	9:05 a. m.	15.76	.30	.28	.27	.27	I
	12:55 p. m.	15.66	.25	.26	.22	.28	I
			.23	.19	.19	.19	S
	4:35 p. m.	15.74	.26	.28	.25	.25	I
	7:25 p. m.	15.60	.32	.32	.34	.32	I
			.27	.26	.29	.25	S
July 6	9:55 a. m.	15.35	.31	.30	.38	.38	I
			.28	.30	.36	.27	S
	4:00 p. m.	15.19	.25	.24	.28	.28	I
July 7	9:00 a. m.	14.86	.22	.22	.25	.23	I
	4:30 p. m.	14.81	.21	.22	.22	.23	I
July 8	8:55 a. m.	14.50	.23	.24	.23	.19	I
			.22	.22	.20	.30	I x
			.17	.18	.17	.27	S x
	3:55 p. m.	14.40	.24	.24	.20	.25	I
			.23	.21	.25	.28	I x
			.19	.17	.28	.24	S x
July 9	6:45 a. m.	13.98	.24	.23	.24	.23	I
			.19	.18	.21	.16	S
	12:05 p. m.	13.77	.24	.24	.22	.24	I
			.18	.20	.18	.15	S
	4:00 p. m.	13.72	.22	.26	.22	.28	I
	7:05 p. m.	13.70	.24	.20	.20	.20	I
July 10			.16	.16	.17	.14	S
	8:50 a. m.	13.31	.19	.19	.21	.20	I
	4:15 p. m.	13.21	.19	.18	.22	.18	I
July 11	9:00 a. m.	12.93	.19	.21	.23	.16	I
			.20	.19	.19	.20	I y
			.17	.17	.14	.12	S y
	4:10 p. m.	12.93	.16	.18	.14	.18	I
			.15	.14	.12	.14	S
	5:15 p. m.	12.93	.15	.15	.14	.18	I y
			.14	.13	.14	S y	

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
July 12, 1935	6:45 a. m.	12.64	0.18	0.20	0.19	0.16	I
	12:40 p. m.	12.55	.16	.14	.16	.13	S
			.18	.17	.17	.16	I
	4:20 p. m.	12.45	.13	.14	.16	.16	S
	7:10 p. m.	12.59	.25	.23	.21	.22	I
			.18	.19	.18	.18	I
			.17	.19	.15	.13	S
July 13	10:05 a. m.	12.54	.15	.17	.14	.14	I
			.13	.12	.12	.13	S
	3:50 p. m.	12.22	.16	.18	.16	.18	I
July 14	6:55 a. m.	12.12	.17	.16	.17	.18	I
	7:30 p. m.	12.09	.17	.17	.17	.14	I
July 15	9:15 a. m.	11.96	.17	.15	.17	.15	I
			.17	.17	.18	.18	I x
			.12	.13	.12	.17	S x
	4:25 p. m.	11.88	.15	.16	.17	.15	I
			.17	.15	.17	.18	I x
			.14	.15	.13	.17	S x
July 16	6:55 a. m.	11.79	.17	.15	.15	.14	I
			.14	.12	.12	.11	S
	10:15 a. m.	11.76	.12	.14	.17	.16	I
	3:40 p. m.	11.60	.15	.15	.16	.17	I
	7:15 p. m.	11.62	.14	.13	.15	.12	I
			.12	.11	.11	.10	S
July 17	11:25 a. m.	11.50	.13	.14	.14	.12	I
			.11	.08	.10	.08	S
	4:25 p. m.	11.49	.14	.11	.13	.13	I
July 18	9:10 a. m.	11.29	.13	.14	.14	.13	I
	4:10 p. m.	11.04	.12	.15	.10	.11	I
July 19	9:00 a. m.	10.83	.15	.15	.13	.14	I
	4:00 p. m.	10.64	.14	.13	.13	.14	I
July 20	9:35 a. m.	10.43	.27	.23	.23	.21	I
			.25	.21	.20	.17	S
	3:55 p. m.	10.50	.36	.36	.34	.36	I
July 21	6:55 a. m.	12.04	.33	.39	.31	.42	I
	12:55 p. m.	11.23	.33	.33	.31	.33	I
	7:25 p. m.	10.48	.50	.48	.48	.49	I
July 22	9:00 a. m.	10.05	.62	.62	.61	.61	I
	1:00 p. m.	9.84	.67	.69	.68	.68	I
	7:10 p. m.	9.67	.55	.55	.57	.56	I
July 23	6:55 a. m.	10.14	.59	.58	.58	.59	I
	12:00 noon	10.32	.71	.70	.69	.68	I
	7:20 p. m.	10.19	.52	.53	.52	.52	I
July 24	9:30 a. m.	9.97	.35	.35	.36	.37	I
			.34	.33	.33	.33	S
	4:35 p. m.	9.78	.41	.31	.34	.28	I
July 25	8:35 a. m.	9.44	.24	.23	.24	.23	I
	4:35 p. m.	9.46	.23	.23	.23	.22	I
July 26	12:30 p. m.	9.40	.25	.26	.25	.25	I
			.23	.24	.24	.24	S
	4:25 p. m.	9.24	.26	.28	.27	.26	I
	7:40 p. m.	9.15	.30		.29	.25	I
			.29	.28	.29	.29	S
July 27	9:00 a. m.	8.80	.57	.56	.56	.56	I
			.55	.56	.55	.55	I y
			.55	.56	.56	.54	S y
	3:40 p. m.	8.90	.52	.52	.52	.52	I
			.52	.52	.52	.52	I y
			.62	.51	.51	.51	S y

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
July 28	8:55 a. m.	8.48	0.50	0.51	0.50	0.49	I
	4:25 p. m.	8.53	.43	.42	.43	.44	I
July 29	9:10 a. m.	8.15	.24	.24	.24	.24	I
			.25	.24	.24	.25	I x
			.23	.23	.23	.24	S x
	4:15 p. m.	8.00	.23	.22	.23	.22	I
			.22	.22	.21	.22	I x
			.21	.21	.21	.22	S x
July 30	8:55 a. m.	7.75	.23	.22	.22	.22	I
	12:25 p. m.	7.62	.21	.21	.21	.21	I
			.21	.20	.20	.20	S
			.21	.21	.21	.21	I
	4:20 p. m.	7.53	.22	.21	.22	.21	I
	7:25 p. m.		.21	.20	.21	.20	S
July 31	8:25 a. m.	7.31	.19	.20	.19	.20	I
	4:15 p. m.	7.12	.18	.18	.18	.18	I
Aug. 1	9:35 a. m.	7.03	.16	.16	.17	.16	I
			.16	.16	.16	.16	I y
			.16	.15	.16	.15	S y
	4:50 p. m.	6.83	.16	.16	.17	.16	I
			.16	.17	.16	.16	I y
			.16	.16	.15	.15	S y
Aug. 2	7:00 a. m.	7.12	.19	.19	.18	.18	I
	7:00 a. m.	7.12	.18	.19	.18	.18	S
	11:10 a. m.	7.18	.33	.33	.32	.32	I
	2:55 p. m.	7.07	.30	.30	.31	.31	I
	7:10 p. m.	7.07	.19	.20	.20	.20	I
	7:10 p. m.	7.07	.19	.19	.19	.19	S
Aug. 3	8:45 a. m.	6.79	.17	.17	.21	.17	I
	4:30 p. m.	6.76	.17	.16	.16	.16	I
Aug. 4	9:00 a. m.	6.47	.18	.18	.18	.18	I
	4:10 p. m.	6.40	.24	.29	.29	.29	I
Aug. 5	9:55 a. m.	6.55	.32	.32	.32	.31	I
			.32	.32	.32	.25	I x
			.31	.31	.31	.30	S x
	4:55 p. m.	7.10	.41	.41	.41	.41	I
			.41	.41	.40	.40	I x
			.40	.40	.41	.40	S x
Aug. 6	6:40 a. m.	7.39	2.33	2.36	2.39	2.41	I
			2.31	2.32	2.34	2.35	S
	12:30 p. m.	8.98	1.47	1.47	1.49	1.51	I
	4:30 p. m.	8.35	1.65	1.63	1.57	1.55	I
Aug. 7	9:30 a. m.	6.70	1.77	1.79	1.78	1.80	I
	4:10 p. m.	6.71	1.31	1.31	1.30	1.32	I
Aug. 8	9:30 a. m.	6.70	1.01	.75	.74	.76	I
			.73	.74	.74	.74	S
			.75	.75	.75	.74	I y
	5:00 p. m.	6.52	.65	.64	.66	.65	I
			.64	.66	.66	.64	I y
			.63	.64	.64	.62	S y
Aug. 9	6:30 a. m.	6.78	.53	.51	.52	.51	S
				.52	.52	.37	I
	9:20 a. m.	6.68	.47	.46	.46	.47	I
	5:40 p. m.	6.51	.41	.41	.42	.41	I
	7:00 p. m.	6.54	.41	.42	.41	.41	I
Aug. 10	8:40 a. m.	6.45	.50	.48	.48	.48	I
	4:45 p. m.	6.13	.48	.23	.60	.48	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
Aug. 11	9:40 a. m.	6.55	1.68	1.65	1.62	1.63	I
	5:00 p. m.	6.51	1.78	1.80	1.81	1.81	I
Aug. 12	9:00 a. m.	6.63	1.18	1.18	1.19	1.17	I
			1.18	1.17	1.16	1.19	I x
			1.17	1.19	1.19	1.19	S x
	5:00 p. m.	6.71	1.09	1.08	1.09	1.09	I x
			1.08	1.07	1.07	1.08	S x
			1.07	1.07	1.07	1.07	I
Aug. 13	6:45 a. m.	6.35	1.03	1.02	1.01	1.02	I
			1.00		1.00	.99	S
	11:45 a. m.	6.11	1.01	1.01	1.03	1.02	I
	3:40 p. m.	5.91	.97	.97	.96	.96	I
	7:15 p. m.	5.79	.87	.86	.88	.86	S
			.88	.88	.88	.89	I
Aug. 14	8:40 a. m.	5.73	1.07	1.07	1.06	1.05	I
	4:30 p. m.	5.57	1.18	1.06	1.20	1.19	I
Aug. 15	8:40 a. m.	5.85	1.04	1.02	1.01	1.00	I y
			1.07	1.02	1.00	.99	S y
			1.04	1.03	1.01	.99	I
	5:00 p. m.	5.62	1.30	1.31	1.31	1.31	I
			1.28	1.31	1.30	1.27	S y
			1.30	1.31	1.31	1.31	I y
Aug. 16	7:00 a. m.	5.64	1.08	1.06	1.07	1.08	S
			1.08	1.08	1.07	1.06	I
	9:10 a. m.	5.66	1.10	1.10	1.10	1.09	I
	3:45 p. m.	6.08	.88	.88	.88	.88	I
	7:00 p. m.	6.29	.85	.84	.84	.85	S
			.85	.85	.84	.85	I
Aug. 17	8:40 a. m.	6.20	.77	.76	.77	.78	I
	4:30 p. m.	6.46	.74	.74	.74	.73	I
Aug. 18	9:00 a. m.	5.43	1.15	1.13	1.14	1.15	I
	3:50 p. m.	5.17	1.57	1.56	1.56	1.56	I
Aug. 19	6:50 a. m.	5.54	.61	.61	.62	.62	I
			.60	.60	.60	.61	S
	10:20 a. m.	5.77	.54	.54	.54	.53	I
	3:00 p. m.	5.71	.48	.48	.48	.47	I
	7:00 p. m.	5.57	.48	.49	.48	.47	S
			.49	.50	.49	.48	I
Aug. 20	8:45 a. m.	5.13	.42	.42	.43	.42	I
			.42	.41	.40	.42	S
			.43	.42	.42	.42	I x
	4:30 p. m.	4.74	.39	.38	.38	.38	I
			.38	.37	.37	.38	S x
			.39	.38	.38	.39	I x
Aug. 21	9:30 a. m.	5.10	.44	.42	.42	.36	I
	4:15 p. m.	5.79	.46	.46	.45	.45	I
Aug. 22	11:45 a. m.	5.34	.53	.54	.55	.54	S y
			.56	.55	.55	.55	I y
			.55	.55	.55	.55	I
	6:10 p. m.	5.00	.54	.54	.54	.53	I
			.54	.54	.54	.52	I y
			.52	.52	.52	.53	S y
Aug. 23	6:50 a. m.	4.80	.47	.48	.48	.47	S
			.48	.53	.57	.48	I
	12:00 noon	4.80	.44	.44	.44	.44	I
	3:50 p. m.	5.01	.43	.69	.44	.44	I
	7:10 p. m.	5.25	.44	.44	.43	.44	I
			.43	.42	.42	.42	S
Aug. 24	9:00 a. m.	5.03	.51	.51	.50	.50	I
	4:50 p. m.	4.92	.50	.50	.50	.49	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
Aug. 25	9:20 a. m.	4.73	0.53	0.54	0.53	0.53	I
	4:10 p. m.	4.84	.52	.52	.52	.52	I
Aug. 26	8:45 a. m.	7.42	2.38	2.35	2.24	2.15	I
			2.40	2.32	2.32	2.16	x
	12:10 p. m.	6.90	2.92	2.94	2.92	2.89	I
	4:30 p. m.	6.13	6.86	6.78	6.69	6.70	I
	7:30 p. m.	5.72	6.96	6.77	6.63	6.64	x
Aug. 27			6.98	7.01	7.07	7.10	I
	6:30 a. m.	5.33	2.96	3.01	3.03	3.03	I
			2.92	2.98	2.94	3.01	S
	12:15 p. m.	5.30	2.50	2.53	2.52	2.55	I
	4:30 p. m.	5.50	2.31	2.32	2.30	2.30	I
Aug. 28	7:10 p. m.	5.61	2.42	2.41	2.39	2.37	I
			2.38	2.41	2.37	2.35	S
Aug. 28	8:45 a. m.	7.01	2.88	2.91	2.92	2.93	I
	4:40 p. m.	6.72	2.59	2.56	2.57	2.55	I
Aug. 29	8:45 a. m.	6.49	2.01	2.02	1.99	2.03	I
			2.00	2.04	2.04	2.01	y
			1.98	1.98	1.98	1.96	S y
	4:40 p. m.	6.40	1.71	1.71	1.72	1.75	I
			1.72	1.74	1.74	1.73	y
Aug. 30			1.68	1.68	1.70	1.70	S y
	6:40 a. m.	6.11	1.68	1.69	1.68	1.69	I
			1.67	1.65	1.67	1.64	S
	11:00 a. m.	5.92	1.58	1.58	1.58	1.58	I
	3:30 p. m.	5.78	1.65	1.64	1.65	1.64	I
Aug. 31	7:15 p. m.	5.65	1.89	1.86	1.85	1.83	I
			1.85	1.85	1.83	1.78	S
Aug. 31	8:45 a. m.	5.39	2.14	2.12	2.14	2.13	I
	4:30 p. m.	5.28	2.15	2.15	2.16	2.15	I
Sept. 1	9:30 a. m.	5.94	1.45	1.46	1.46	1.46	I
	5:00 p. m.	6.07	1.39	1.40	1.40	1.41	I
Sept. 2	8:40 a. m.	6.63	1.68	1.68	1.66	1.65	I
			1.64	1.66	1.63	1.62	y
			1.63	1.63	1.62	1.63	S y
	4:45 p. m.	6.96	1.99	2.01	2.03	2.03	I
			1.97	2.00	2.01	2.02	y
Sept. 3			1.98	1.99	2.01	2.00	S y
	6:45 a. m.	7.38	2.66	2.67	2.65	2.62	I
			2.64	2.63	2.56	2.59	S
	11:30 a. m.	7.01	2.61	2.62	2.67	2.69	I
	4:30 p. m.	7.52	2.87	2.93	2.92	2.91	I
Sept. 4	7:15 p. m.	7.81	3.02	3.02	3.00	3.00	I
			2.99	2.93	2.95	2.94	S
Sept. 4	8:45 a. m.	8.25	4.83	4.79	4.71	4.76	I
	3:40 p. m.	7.44	5.21	5.27	5.30	5.30	I
Sept. 5	9:30 a. m.	6.62	2.87	2.90	2.83	2.84	I
			2.78	2.80	2.83	2.83	y
			2.74	2.78	2.81	2.76	S y
	4:40 p. m.	6.40	2.21	2.23	2.23	2.24	I
			2.20	2.23	2.25	2.23	y
Sept. 6			2.17	2.19	2.17	2.15	S y
	6:40 a. m.	5.82	2.04	2.05	2.03	2.02	I
			2.00	2.00	2.00	1.98	S
	11:50 a. m.	5.60	1.89	1.88	1.89	1.94	I
	4:30 p. m.	5.43	1.86	2.08	1.86	1.86	I
Sept. 7	7:20 p. m.	5.41	1.89	1.90	1.88	1.86	I
			1.64	1.83	1.86	1.84	S
Sept. 7	8:40 a. m.	5.12	1.95	1.97	1.93	1.96	I
	4:20 p. m.	4.83	2.08	2.08	2.05	2.05	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
Sept. 8	8:40 a. m.	4.60	1.80	1.81	1.82	1.83	I
	4:40 p. m.	4.41	1.46	1.47	1.46	1.45	I
Sept. 9	8:50 a. m.	4.26	1.15	1.16	1.15	1.13	I
			1.16	1.16	1.15	1.17	I x
			1.17	1.12	1.22	1.08	S x
	4:20 p. m.	4.13	.97	1.19	1.01	1.19	I
			1.09	1.11	1.08	1.08	I x
Sept. 10			1.11	1.10	1.12	1.11	S x
	6:40 a. m.	4.05	1.06	1.05	1.07	1.07	I
			1.06	1.06	1.05	1.05	S
	11:50 a. m.	4.00	.99	.99	.99	.99	I
	4:20 p. m.	4.00	.94	.94	.93	.94	I
	7:30 p. m.	4.08	.89	.89	.87	.90	I
Sept. 11			.89	.88	.89	.90	S
	9:10 a. m.	4.17	.75	.75	.75	.74	I
Sept. 12	4:50 p. m.	3.92	.69	.68	.68	.67	I
	9:30 a. m.	3.84	.65	.66	.66	.66	I
Sept. 12			.65	.66	.66	.66	I y
			.64	.65	.66	.65	S y
	7:10 p. m.	3.70	.61	.61	.61	.61	I
			.60	.61	.61	.61	I y
			.60	.60	.59	.60	S y
Sept. 13	6:45 a. m.	3.59	.58	.59	.59	.58	I
			.59	.59	.58	.59	S
	11:30 a. m.	3.74	.58	.58	.58	.57	I
	4:40 p. m.	4.02	.56	.53	.55	.55	I
	7:40 p. m.	4.09	.55	.55	.55	.56	I
Sept. 14			.55	.54	.54	.54	S
	8:30 a. m.	4.25	.58	.58	.58	.58	I
	4:30 p. m.	4.22	.74	.73	.71	.71	I
	9:00 a. m.	4.17	.55	.56	.54	.55	I
	4:30 p. m.	4.16	.52	.52	.51	.54	I
	9:10 a. m.	4.45	.57	.59	.56	.58	I
Sept. 16			.57	.56	.56	.58	I x
			.58	.56	.57	.58	S x
	4:25 p. m.	4.62	.56	.56	.55	.55	I
			.55	.55	.54	.56	I x
			.56	.54	.54	.56	S x
Sept. 17	8:50 a. m.	4.82	.43	.42	.42	.42	I
			.42	.41	.41	.41	S
	11:50 a. m.	4.82	.39	.40	.40	.39	I
	4:30 p. m.	4.70	.38	.39	.38	.38	I
	7:40 p. m.	4.58	.39	.40	.39	.39	I
			.39	.38	.38	.39	S
Sept. 18	8:40 a. m.	4.21	.35	.35	.34	.34	I
	4:20 p. m.	4.06	.32	.33	.31	.32	I
Sept. 19	8:50 a. m.	3.70	.41	.40	.41	.39	I
			.40	.40	.39	.39	I y
			.38	.38	.39	.38	S y
	4:00 p. m.	4.61	.43	.41	.41	.42	I
			.41	.42	.41	.41	I y
Sept. 20			.42	.42	.41	.42	S y
	6:45 a. m.	3.48	.35	.35	.35	.35	I
			.36	.36	.35	.36	S
	11:20 a. m.	3.43	.32	.32	.32	.32	I
	4:30 p. m.	3.43	.29	.29	.29	.29	I
	7:20 p. m.	3.46	.28	.29	.29	.29	I
Sept. 21			.29	.28	.29	.28	S
	8:30 a. m.	3.55	.22	.22	.22	.22	I
	4:30 p. m.	3.40	.20	.20	.20	.21	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
Sept. 22	9:00 a. m.	3.26	0.17	0.18	0.17	0.17	I
	4:20 p. m.	3.08	.16	.16	.16	.15	I
Sept. 23	9:10 a. m.	2.94	.14	.14	.14	.13	I
			.14	.13	.13	.14	I x
			.13	.13	.12	.13	S x
	4:00 p. m.	2.88	.16	.16	.16	.15	I
			.16	.16	.15	.16	I x
			.17	.15	.15	.15	S x
Sept. 24	6:40 a. m.	2.80	.14	.14	.14	.13	I
			.13	.12	.13	.12	S
	11:15 a. m.	2.74	.15	.15	.16	.15	I
	4:10 p. m.	2.69	.14	.14	.14	.14	I
	7:40 p. m.	2.67	.15	.15	.14	.14	I
			.18	.17	.17	.17	S
Sept. 25	8:50 a. m.	2.74	.12	.13	.13	.13	I
	4:45 p. m.	2.52	.12	.11	.11	.12	I
Sept. 26	9:30 a. m.	2.43	.13	.14	.13	.14	I
			.14	.14	.15	.15	I y
			.14	.13	.14	.14	S y
	3:50 p. m.	2.73	.16	.17	.16	.16	I
			.17	.16	.17	.17	I y
			.16	.16	.17	.16	S y
Sept. 27	6:50 a. m.	3.00	.18	.18	.19	.18	I
			.18	.19	.19	.19	S
	11:00 a. m.	2.85	.23	.23	.22	.22	I
	3:40 p. m.	3.50	.21	.21	.21	.21	I
	8:00 p. m.	8.32	.36	.39	.34	.31	I
			.34	.33	.33	.32	S
Sept. 28	8:50 a. m.	8.34	.81	.81	.81	.83	I
	4:20 p. m.	7.68	.98	.98	.99	.99	I
Sept. 29	9:00 a. m.	6.68	2.11	2.11	2.11	2.08	I
	3:40 p. m.	5.67	2.17	2.18	2.18	2.17	I
Sept. 30	8:50 a. m.	5.76	2.65	2.63	2.63	2.55	I
			2.63	2.64	2.69	2.59	I x
			2.64	2.64	2.60	2.54	S x
	1:00 p. m.	13.60	4.25	4.49	4.02	4.37	I
	4:15 p. m.	13.45	5.31	5.48	5.69	5.57	I
Oct. 1	10:00 a. m.	9.62	4.74	4.84	4.82	4.76	I
	4:20 p. m.	8.77	5.48	5.41	5.31	5.38	I
Oct. 2	9:20 a. m.	6.88	4.75	4.76	4.76	4.74	I
	4:20 p. m.	6.47	4.59	4.53	4.53	4.53	I
Oct. 3	9:05 a. m.	6.06	3.67	3.70	3.68	3.69	I
	4:10 p. m.	6.04	3.20	3.19	3.18	3.20	I
Oct. 4	8:55 a. m.	5.83	2.14	2.14	2.14	2.14	I
	4:20 p. m.	5.66	1.83	1.84	1.83	1.82	I
Oct. 5	9:00 a. m.	5.31	1.35	1.35	1.35	1.35	I
	5:00 p. m.	5.12	1.21	1.22	1.22	1.23	I
Oct. 6	9:50 a. m.	4.93	.91	.90	.91	.91	I
	3:40 p. m.	4.87	.85	.85	.84	.85	I
Oct. 7	9:50 a. m.	4.76	.70	.69	.70	.70	I
	4:30 p. m.	4.69	.67	.68	.67	.68	I
Oct. 8	9:40 a. m.	4.51	.50	.61	.58	.51	I
	4:30 p. m.	4.39	.48	.56	.44	.60	I
Oct. 9	9:00 a. m.	4.34	.52	.45	.45	.45	I
	4:50 p. m.	4.21	.42	.43	.43	.43	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
Oct. 10	10:20 a. m.	4.13	0.44	0.44	0.44	0.44	I
	4:10 p. m.	4.04	.41	.41	.41	.41	I
Oct. 11	9:20 a. m.	3.94	.34	.33	.34	.33	I
	4:50 p. m.	3.74	.28		.24	.30	I
Oct. 12	9:10 a. m.	3.81	.27	.26	.27	.27	I
	4:10 p. m.	3.75	.25	.25	.25	.25	I
Oct. 13	9:50 a. m.	3.61	.23	.23	.23	.21	I
	3:50 p. m.	3.59	.22	.22	.22	.22	I
Oct. 14	9:00 a. m.	3.43	.19	.19	.19	.19	I
	4:20 p. m.	3.43	.18	.18	.19	.19	I
Oct. 15	9:10 a. m.	3.18	.16	.16	.16	.16	I
	4:00 p. m.	3.23	.16	.16	.16	.14	I
Oct. 16	9:40 a. m.	3.12	.14	.15	.14	.15	I
	3:20 p. m.	3.06	.13	.14	.14	.13	I
Oct. 17	8:50 a. m.	3.11	.13	.13	.13	.13	I
	3:15 p. m.	3.06	.13	.12	.13	.13	I
Oct. 18	9:00 a. m.	3.01	.12	.12	.12	.12	I
	3:30 p. m.	2.97	.12	.12	.12	.12	I
Oct. 19	9:20 a. m.	2.89	.11	.11	.13	.13	I
	4:10 p. m.	2.85	.10	.12	.09	.10	I
Oct. 20	10:10 a. m.	2.86	.10	.11	.11	.11	I
	3:50 p. m.	2.90	.11	.11	.12	.11	I
Oct. 21	9:50 a. m.	2.86	.11	.11	.12	.11	I
	4:40 p. m.	2.82	.11	.11	.12	.12	I
Oct. 22	9:15 a. m.	2.98	.11	.12	.12	.12	I
	3:50 p. m.	2.94	.12	.11	.11	.12	I
Oct. 23	9:00 a. m.	2.83	.12	.11	.11	.11	I
	4:15 p. m.	2.82	.11	.11	.10	.10	I
Oct. 24	9:10 a. m.	3.25	.11	.13	.11	.11	I
	4:40 p. m.	3.98	.13	.11	.13	.14	I
Oct. 25	9:10 a. m.	3.53	.15	.15	.15	.15	I
	4:15 p. m.	3.48	.12	.13	.13	.13	I
Oct. 26	9:20 a. m.	3.52	.14	.13	.14	.14	I
	4:50 p. m.	3.40	.16	.16	.16	.15	I
Oct. 27	10:05 a. m.	3.21	.17	.17	.17	.16	I
	5:10 p. m.	3.19	.15	.16	.16	.18	I
Oct. 28	9:10 a. m.	3.10	.18	.18	.18	.18	I
	4:45 p. m.	3.07	.21	.22	.22	.23	I
Oct. 29	8:20 a. m.	3.14	.55	.49	.50	.53	I
	4:00 p. m.	3.19	.43	.49	.47	.47	I
Oct. 30	8:30 a. m.	3.18	.59	.47	.47	.47	I
	3:45 p. m.	3.07	.37	.38	.38	.39	I
Oct. 31	8:30 a. m.	3.25	.28	.27	.27	.27	I
	4:00 p. m.	3.22	.25	.25	.25	.25	I
Nov. 1	9:40 a. m.	3.34	.22	.23	.24	.23	I
	3:50 p. m.	3.36	.22	.22	.22	.23	I
Nov. 2	9:20 a. m.	3.35	.21	.21	.21	.21	I
	3:50 p. m.	3.57	.19	.19	.20	.20	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
Nov. 3	9:40 a. m.	3.22	0.15	0.15	0.16	0.16	I
	3:50 p. m.	3.20	.15	.13	.15	.16	I
Nov. 4	8:20 a. m.	3.37	.14	.16	.16	.15	I
	3:20 p. m.	3.37	.14	.14	.15	.14	I
Nov. 5	8:40 a. m.	3.41	.13	.14	.12	.14	I
	3:20 p. m.	3.47	.13	.13	.14	.14	I
Nov. 6	8:20 a. m.	3.44	.13	.13	.14	.13	I
	4:30 p. m.	3.48	.13	.12	.13	.13	I
Nov. 7	11:20 a. m.	3.50	.12	.11	.12	.12	I
	4:05 p. m.	3.53	.11	.13	.12	.12	I
Nov. 8	8:30 a. m.	3.64	.13	.12	.13	.13	I
	3:10 p. m.	3.62	.13	.12	.12	.13	I
Nov. 9	8:40 a. m.	3.63	.12	.12	.13	.12	I
	4:40 p. m.	3.68	.13	.13	.13	.13	I
Nov. 10	10:15 a. m.	3.72	0.12	0.12	0.13	0.13	I
	4:30 p. m.	3.68	.12	.12	.12	.13	I
Nov. 11	9:05 a. m.	3.74	.12	.13	.13	.13	I
	3:45 p. m.	3.80	.12	.12	.13	.13	I
Nov. 12	8:30 a. m.	3.73	.13	.13	.12	.13	I
	4:00 p. m.	3.72	.13	.12	.13	.14	I
Nov. 13	8:30 a. m.	3.65	.13	.12	.12	.12	I
	3:30 p. m.	3.68	.11	.12	.12	.13	I
Nov. 14	9:00 a. m.	3.80	.11	.13	.12	.11	I
	4:50 p. m.	3.87	.11	.11	.12	.11	I
Nov. 15	8:25 a. m.	3.92	.11	.12	.12	.13	I
	4:00 p. m.	3.85	.12	.12	.11	.11	I
Nov. 16	8:30 a. m.	3.92	.12	.11	.11	.11	I
	4:00 p. m.	3.90	.10	.12	.11	.11	I
Nov. 17	10:00 a. m.	3.90	.11	.11	.10	.11	I
	4:00 p. m.	3.92	.11	.11	.11	.10	I
Nov. 18	8:15 a. m.	3.86	.10	.11	.10	.10	I
	3:10 p. m.	3.85	.10	.10	.11	.10	I
Nov. 19	9:00 a. m.	3.74	.10	.10	.11	.10	I
	3:30 p. m.	3.74	.10	.09	.09	.10	I
Nov. 20	8:40 a. m.	3.77	.09	.09	.10	.10	I
	3:25 p. m.	3.68	.09	.09	.09	.10	I
Nov. 21	8:20 a. m.	3.68	.10	.09	.10	.11	I
	4:30 p. m.	3.63	.09	.09	.09	.10	I
Nov. 22	8:30 a. m.	3.64	.10	.09	.09	.09	I
	3:15 p. m.	3.67	.08	.08	.08	.09	I
Nov. 23	8:40 a. m.	3.77	.08	.08	.08	.08	I
	3:35 p. m.	3.81	.09	.09	.10	.10	I
Nov. 24	10:00 a. m.	3.73	.11	.11	.11	.11	I
	3:15 p. m.	3.74	.11	.11	.11	.11	I
Nov. 25	8:30 a. m.	3.81	.12	.12	.12	.12	I
	3:20 p. m.	3.86	.10	.11	.11	.10	I
Nov. 26	8:20 a. m.	3.81	.11	.11	.12	.10	I
	3:30 p. m.	3.84	.10	.11	.10	.11	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
Nov. 27	8:20 a. m.	3.79	0.10	0.10	0.11	0.10	I
	3:15 p. m.	3.78	.09	.09	.10	.11	I
Nov. 28	9:00 a. m.	3.80	.12	.13	.12	.11	I
	3:05 p. m.	3.84	.11	.11	.13	.12	I
Nov. 29	8:40 a. m.	3.68	.11	.12	.11	.10	I
	3:15 p. m.	3.62	.11	.11	.11	.11	I
Nov. 30	8:40 a. m.	3.62	.15	.16	.16	.15	I
	4:00 p. m.	3.65	.14	.15	.15	.15	I
Dec. 1	10:00 a. m.	3.70	.16	.16	.14	.14	I
	4:40 p. m.	3.71	.12	.13	.12	.12	I
Dec. 2	9:00 a. m.	3.72	.12	.11	.11	.12	I
	3:15 p. m.	3.76	.10	.10	.11	.11	I
Dec. 3	9:00 a. m.	3.73	.11	.11	.11	.10	I
	3:10 p. m.	3.79	.10	.10	.10	.10	I
Dec. 4	9:00 a. m.	3.77	.10	.11	.10	.10	I
	3:25 p. m.	3.76	.09	.09	.09	.10	I
Dec. 5	8:20 a. m.	3.68	.10	.09	.09	.09	I
	3:25 p. m.	3.69	.09	.09	.10	.10	I
Dec. 6	8:30 a. m.	4.79	.10	.10	.10	.09	I
	4:00 p. m.	4.49	.13	.14	.13	.13	I
Dec. 7	8:40 a. m.	4.15	.19	.20	.19	.20	I
	4:00 p. m.	3.96	.24	.24	.23	.23	I
Dec. 8	10:15 a. m.	3.53	.22	.21	.21	.21	I
	3:15 p. m.	3.45	.17	.17	.16	.16	I
Dec. 9	8:30 a. m.	3.18	.13	.13	.14	.13	I
	3:00 p. m.	3.12	.13	.13	.12	.14	I
Dec. 10	8:30 a. m.	3.10	.13	.12	.13	.12	I
	4:00 p. m.	3.12	.10	.10	.09	.09	I
Dec. 11	8:35 a. m.	3.14	.09	.09	.09	.08	I
	3:20 p. m.	3.10	.08	.08	.08	.07	I
Dec. 12	8:40 a. m.	3.07	.08	.10	.07	.09	I
	4:10 p. m.	3.05	.07	.07	.06	.07	I
Dec. 13	8:30 a. m.	3.06	.09	.10	.09	.09	I
	3:25 p. m.	3.11	.09	.08	.08	.08	I
Dec. 14	8:40 a. m.	3.13	.10	.10	.10	.10	I
	4:00 p. m.	3.13	.10	.10	.11	.10	I
Dec. 15	10:15 a. m.	3.17	.09	.09	.10	.09	I
	4:00 p. m.	3.20	.09	.08	.08	.09	I
Dec. 16	8:35 a. m.	3.10	.09	.09	.09	.09	I
	3:10 p. m.	3.10	.08	.09	.08	.08	I
Dec. 17	8:30 a. m.	2.96	.09	.09	.09	.09	I
	3:10 p. m.	2.90	.08	.10	.10	.09	I
Dec. 18	8:40 a. m.	2.76	.10	.11	.10	.10	I
	3:15 p. m.	2.73	.10	.08	.08	.08	I
Dec. 19	8:40 a. m.	2.77	.10	.09	.09	.09	I
	3:25 p. m.	2.82	.10	.09	.07	.08	I
Dec. 20	8:40 a. m.	2.81	.09	.08	.08	.09	I
	3:10 p. m.	2.82	.08	.08	.07	.08	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1935							
Dec. 21	8:40 a. m.	2.80	0.09	0.08	0.10	0.08	I
	3:20 p. m.	2.78	.08	.08	.08	.08	I
Dec. 22	10:00 a. m.	2.51	.08	.07	.07	.07	I
	3:00 p. m.	2.48	.07	.07	.08	.07	I
Dec. 23	8:40 a. m.	2.07	.07	.08	.06	.06	I
	3:20 p. m.	1.91	.08	.07	.06	.07	I
Dec. 24	8:35 a. m.	1.80	.07	.07	.07	.06	I
	4:00 p. m.	1.80	.06	.06	.06	.06	I
Dec. 25	10:00 a. m.	1.76	.06	.06	.05	.05	I
	3:50 p. m.	1.71	.05	.05	.05	.05	I
Dec. 26	10:00 a. m.	1.64	.06	.05	.06	.05	I
	3:40 p. m.	1.60	.06	.06	.05	.06	I
Dec. 27	8:40 a. m.	1.64	.07	.06	.06	.06	I
	3:15 p. m.	1.68	.06	.07	.05	.06	I
Dec. 28	8:35 a. m.	1.79	.07	.06	.06	.06	I
	3:40 p. m.	1.80	.06	.06	.06	.06	I
Dec. 29	8:40 a. m.	1.99	.07	.07	.07	.06	I
	3:40 p. m.	1.98	.06	.06	.08	.06	I
Dec. 30	9:00 a. m.	2.13	.09	.09	.09	.16	I
	3:30 p. m.	2.17	.08	.07	.08	.06	I
Dec. 31	8:30 a. m.	2.41	.06	.07	.06	.07	I
	3:40 p. m.	2.35	.06	.06	.06	.06	I
1936							
Jan. 1	4:00 p. m.	2.11	.08	.07	.08	.07	I
Jan. 2	9:00 a. m.	2.21	.06	.07	.08	.08	I
	3:25 p. m.	2.24	.10	.08	.08	.09	I
Jan. 3	8:35 a. m.	2.44	.06	.06	.06	.06	I
	3:20 p. m.	2.46	.06	.06	.06	.06	I
Jan. 4	8:45 a. m.	2.53	.08	.06	.06	.06	I
	4:10 p. m.	2.65	.06	.06	.06	.06	I
Jan. 5	9:00 a. m.	2.53	.07	.07	.03	.08	I
	4:00 p. m.	2.40	.08	.08	.08	.07	I
Jan. 6	9:00 a. m.	2.53	.07	.07	.07	.08	I
	3:20 p. m.	2.55	.07	.07	.08	.08	I
Jan. 7	8:40 a. m.	2.59	.07	.07	.08	.07	I
	3:30 p. m.	2.58	.07	.07	.07	.07	I
Jan. 8	8:30 a. m.	2.50	.06	.07	.07	.06	I
	3:25 p. m.	2.55	.07	.08	.07	.07	I
Jan. 9	8:30 a. m.	2.54	.06	.06	.06	.06	I
	3:20 p. m.	2.49	.05	.07	.07	.06	I
Jan. 10	8:20 a. m.	2.26	.05	.05	.06	.06	I
	3:25 p. m.	2.22	.06	.06	.05	.16	I
Jan. 11	8:40 a. m.	2.57	.05	.05	.05	.05	I
	2:50 p. m.	2.68	.06	.06	.06	.05	I
Jan. 12	10:05 a. m.	2.77	0.05	0.05	0.07	0.05	I
	3:20 p. m.	2.84	.08	.07		.08	I
Jan. 13	8:30 a. m.	2.74	.06	.08	.07	.07	I
	3:00 p. m.	2.74	.07	.08	.07	.07	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1936							
Jan. 14	8:30 a. m.	2.64	0.06	0.06	0.07	0.06	I
	3:00 p. m.	2.68	.06	.07	.08	.08	I
Jan. 15	9:00 a. m.	2.60	.06	.05	.05	.06	I
	3:50 p. m.	2.69	.05	.05	.06	.06	I
Jan. 16	8:10 a. m.	2.74	.06	.06	.06	.06	I
	3:00 p. m.	2.86	.05	.06	.08	.06	I
Jan. 17	8:15 a. m.	2.91	.07	.06	.07	.07	I
	3:30 p. m.	2.88	.06	.06	.05	.05	I
Jan. 18	9:20 a. m.	3.09	.06	.06	.06	.06	I
	4:30 p. m.	3.24	.07	.06	.06	.06	I
Jan. 19	10:20 a. m.	3.27	.06	.06	.06	.06	I
	4:30 p. m.	3.36	.06	.06	.05	.06	I
Jan. 20	8:20 a. m.	3.34	.07	.06	.06	.07	I
	4:30 p. m.	3.31	.06	.05	.05	.06	I
Jan. 21	8:25 a. m.	3.19	.08	.07	.08	.07	I
	3:25 p. m.	3.18	.07	.08	.08	.07	I
Jan. 22	8:25 a. m.	3.15	.08	.06	.07	.08	I
	2:50 p. m.	3.19	.07	.08	.06	.08	I
Jan. 23	8:15 a. m.	2.98	.06	.06	.07	.06	I
	3:20 p. m.	3.02	.06	.06	.06	.06	I
Jan. 24	8:25 a. m.	2.95	.05	.06	.05	.05	I
	4:30 p. m.	2.91	.06	.06	.05	.05	I
Jan. 25	8:25 a. m.	2.80	.07	.07	.08	.07	I
	3:30 p. m.	2.72	.06	.07	.06	.06	I
Jan. 26	10:30 a. m.	2.71	.06	.07	.07	.07	I
	3:40 p. m.	2.69	.06	.06	.06	.06	I
Jan. 27	8:35 a. m.	2.65	.05	.06	.06	.06	I
	3:30 p. m.	2.64	.06	.06	.06	.06	I
Jan. 28	8:20 a. m.	2.64	.05	.04	.05	.05	I
	3:30 p. m.	2.66	.04	.04	.04	.03	I
Jan. 29	8:50 a. m.	2.83	.06	.06	.06	.06	I
	3:00 p. m.	2.96	.05	.05	.05	.05	I
Jan. 30	8:55 a. m.	3.05	.06	.06	.06	.06	I
	2:25 p. m.	3.12	.06	.05	.06	.05	I
Jan. 31	8:20 a. m.	3.20	.06	.07	.07	.08	I
	9:00 p. m.	3.27	.07	.07	.07	.08	I
Feb. 1	8:40 a. m.	3.38	.07	.08	.08	.08	I
	5:00 p. m.	3.34	.08	.08	.08	.07	I
Feb. 2	8:40 a. m.	3.51	.14	.14	.15	.15	I
	5:20 p. m.	3.40	.15	.15	.16	.16	I
Feb. 3	8:50 a. m.	3.41	.15	.17	.15	.17	I
	3:35 p. m.	3.24	.16	.17	.17	.16	I
Feb. 4	8:20 a. m.	3.63	.16	.16	.17	.16	I
	3:30 p. m.	3.64	.16	.16	.17	.18	I
Feb. 5	8:20 a. m.	3.53	.16	.17	.18	.19	I
	3:20 p. m.	3.47	.16	.17	.17	.18	I
Feb. 6	8:35 a. m.	3.60	.30	.32	.30	.30	I
	3:20 p. m.	3.57	.23	.23	.22	.24	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1936							
Feb. 7	8:50 a. m.	3.30	0.17	0.18	0.17	0.20	I
	3:10 p. m.	3.21	.18	.16	.16	.17	I
Feb. 8	9:15 a. m.	3.00	.17	.17	.19	.18	I
	2:30 p. m.	2.96	.17	.17	.16	.16	I
Feb. 9	9:25 a. m.	3.23	.16	.15	.16	.17	I
	3:05 p. m.	3.32	.16	.18	.20	.18	I
Feb. 10	8:20 a. m.	3.46	.16	.17	.19	.15	I
	2:30 p. m.	3.40	.10	.12	.11	.11	I
Feb. 11	8:40 a. m.	3.29	.10	.10	.09	.09	I
	2:45 p. m.	3.18	.09	.08	.09	.08	I
Feb. 12	8:50 a. m.	2.98	.13	.12	.11	.11	I
	3:40 p. m.	2.91	.08	.08	.08	.08	I
Feb. 13	8:20 a. m.	2.77	.10	.09	.09	.08	I
	3:20 p. m.	2.87	.08	.08	.07	.08	I
Feb. 14	8:20 a. m.	3.14	.07	.08	.08	.07	I
	3:20 p. m.	3.06	.07	.06	.07	.07	I
Feb. 15	8:20 a. m.	3.12	.06	.07	.08	.09	I
	3:30 p. m.	3.15	.07	.07	.07	.07	I
Feb. 16	10:20 a. m.	3.24	.12	.12	.12	.14	I
	5:10 p. m.	3.39	.16	.15	.14	.14	I
Feb. 17	8:10 a. m.	3.46	.09	.09	.09	.09	I
	3:30 p. m.	3.50	.10	.09	.11	.11	I
Feb. 18	8:25 a. m.	4.01	.12	.12	.12	.12	I
	3:30 p. m.	4.13	.13	.13	.13	.14	I
Feb. 19	8:20 a. m.	4.39	.16	.16	.17	.16	I
	3:20 p. m.	4.32	.16	.16	.17	.17	I
Feb. 20	8:20 a. m.	4.32	.15	.15	.17	.16	I
	3:25 p. m.	4.36	.16	.16	.16	.15	I
Feb. 21	8:20 a. m.	4.27	.16	.16	.17	.16	I
	3:05 p. m.	4.21	.15	.15	.15	.15	I
Feb. 22	8:35 a. m.	4.33	.15	.15	.16	.16	I
	4:30 p. m.	4.34	.17	.17	.17	.17	I
Feb. 23	9:55 a. m.	4.34	.18	.18	.19	.18	I
	5:15 p. m.	4.39	.19	.18	.19	.19	I
Feb. 24	8:30 a. m.	4.21	.19	.18	.19	.19	I
	3:00 p. m.	4.10	.18	.19	.19	.18	I
Feb. 25	8:15 a. m.	4.37	.18	.18	.18	.18	I
	2:35 p. m.	4.60	.19	.19	.20	.23	I
Feb. 26	8:25 a. m.	4.69	.32	.33	.33	.31	I
	3:35 p. m.	4.56	.32	.32	.34	.32	I
Feb. 27	8:50 a. m.	3.99	.19	.18	.19	.19	I
	2:40 p. m.	4.01	.16	.17	.19	.17	I
Feb. 28	8:45 a. m.	4.24	.26	.26	.25	.26	I
	2:45 p. m.	4.36	.29	.29	.29	.30	I
Feb. 29	8:25 a. m.	5.26	.28	.29	.28	.27	I
	4:00 p. m.	5.30	.42	.41	.42	.42	I
Mar. 1	11:00 a. m.	4.93	.48	.49	.48	.49	I
	5:40 p. m.	4.85	.46	.46	.46	.46	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1936							
Mar. 2	9:00 a. m.	4.50	0.39	0.39	0.39	0.39	I
	3:20 p. m.	4.40	.36	.36	.36	.39	I
Mar. 3	8:45 a. m.	4.20	.35	.36	.37	.37	I
	3:00 p. m.	4.12	.36	.36	.36	.36	I
Mar. 4	9:00 a. m.	3.95	.31	.30	.30	.30	I
	3:10 p. m.	3.87	.29	.29	.29	.29	I
Mar. 5	9:00 a. m.	3.86	.25	.25	.25	.25	I
	3:30 p. m.	3.88	.23	.24	.24	.25	I
Mar. 6	8:50 a. m.	4.69	.24	.25	.25	.25	I
	3:20 p. m.	5.04	.24	.24	.25	.25	I
Mar. 7	8:35 a. m.	5.68	.41	.40	.40	.41	I
	5:00 p. m.	5.49	.44	.44	.44	.45	I
Mar. 8	10:00 a. m.	5.66	.60	.60	.60	.60	I
	4:30 p. m.	5.67	.72	.73	.74	.73	I
Mar. 9	8:20 a. m.	5.84	1.12	1.12	1.12	1.10	I
	3:10 p. m.	5.51	1.23	1.22	1.22	1.22	I
Mar. 10	8:10 a. m.	5.77	1.27	1.27	1.26	1.26	I
	3:20 p. m.	5.52	1.29	1.29	1.30	1.29	I
Mar. 11	8:40 a. m.	5.62	1.09	1.10	1.10	1.10	I
	3:05 p. m.	5.47	1.11	1.11	1.11	1.10	I
Mar. 12	8:10 a. m.	5.72	1.03	1.04	1.09	1.09	I
	3:15 p. m.	5.60	.99	1.00	.99	1.03	I
Mar. 13	8:55 a. m.	5.81	.90	.91	.86	.85	I
	3:15 p. m.	5.70	.85	.84	.85	.85	I
Mar. 14	8:30 a. m.	6.14	.75	.74	.74	.76	I
	4:00 p. m.	5.90	.80	.79	.79	.79	I
Mar. 15	9:40 a. m.	5.99	.72	.78	.79	.86	I
	4:00 p. m.	5.90	.75	.82	.84	.92	I
Mar. 16	8:40 a. m.	5.81	.73	.74	.77	.71	I
Mar. 17	9:25 a. m.	5.93	.66	.68	.67	.66	I
	2:45 p. m.	6.13	.63	.63	.64	.64	I
Mar. 18	3:30 p. m.	6.30	.62	.61	.60	.63	I
Mar. 19	8:10 a. m.	6.34	.66	.69	.72	.71	I
	3:10 p. m.	6.24	.57	.64	.56	.56	I
Mar. 20	8:15 a. m.	6.21	.49	.53	.51	.51	I
	3:10 p. m.	6.22	.50	.51	.50	.51	I
Mar. 21	8:30 a. m.	5.71	.49	.47	.48	.48	I
	3:30 p. m.	5.84	.49	.50	.49	.50	I
Mar. 22	10:20 a. m.	5.68	.45	.44	.47	.46	I
	4:10 p. m.	5.57	.44	.45	.46	.46	I
Mar. 23	8:40 a. m.	5.35	.41	.41	.41	.44	I
	3:15 p. m.	5.50	.40	.35	.35	.35	I
Mar. 24	9:00 a. m.	5.51	.36	.37	.36	.37	I
	3:20 p. m.	5.41	.38	.37	.37	.37	I
Mar. 25	8:20 a. m.	5.49	.34	.35	.36	.35	I
	3:15 p. m.	5.56	.34	.34	.34	.34	I
Mar. 26	8:20 a. m.	5.54	.33	.34	.34	.34	I
	3:15 p. m.	5.42	.35	.36	.36	.38	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1936							
Mar. 27	8:25 a. m.	5.78	0.39	0.36	0.35	0.34	I
	2:35 p. m.	5.66	.39	.33	.43	.40	I
Mar. 28	8:30 a. m.	5.41	.37	.37	.33	.36	I
	3:10 p. m.	5.30	.37	.39	.41	.36	I
Mar. 29	10:10 a. m.	5.13	.41	.39	.39	.39	I
	4:40 p. m.	5.08	.39	.40	.40	.39	I
Mar. 30	8:35 a. m.	5.54	.32	.32	.33	.31	I
	3:05 p. m.	5.20	.36	.36	.36	.38	I
Mar. 31	9:05 a. m.	5.03	.38	.30	.37	.38	I
	3:25 p. m.	4.87	.38	.39	.38	.38	I
Apr. 1	9:25 a. m.	4.59	.37	.38	.38	.37	I
	3:15 p. m.	4.50	.32	.33	.34	.34	I
Apr. 2	8:35 a. m.	4.64	.31	.31	.31	.30	I
	3:20 p. m.	4.67	.24	.25	.24	.23	I
Apr. 3	9:15 a. m.	5.13	.28	.29	.29	.29	I
	3:15 p. m.	5.21	.32	.32	.33	.29	I
Apr. 4	9:20 a. m.	5.11	.46	.44	.46	.46	I
	2:35 a. m.	5.24	.43	.44	.43	.44	I
Apr. 5	10:10 a. m.	5.49	.39	.39	.39	.38	I
	3:20 p. m.	5.31	.38	.40	.40	.40	I
Apr. 6	8:30 a. m.	4.84	.39	.39	.39	.40	I
	3:15 p. m.	4.91	.39	.39	.40	.40	I
Apr. 7	9:00 a. m.	4.98	.39	.38	.38	.39	I
	3:10 p. m.	5.15	.36	.37	.35	.38	I
Apr. 8	8:15 a. m.	5.29	.36	.36	.35	.36	I
	3:05 p. m.	5.21	.40	.41	.39	.40	I
Apr. 9	8:15 a. m.	4.96	.40	.39	.40	.39	I
	3:15 p. m.	4.71	.38	.37	.38	.39	I
Apr. 10	8:20 a. m.	4.69	.29	.29	.30	.29	I
	3:20 p. m.	4.53	.27	.28	.28	.28	I
Apr. 11	8:20 a. m.	4.56	.27	.28	.27	.28	I
	4:50 p. m.	4.54	.24	.24	.23	.24	I
Apr. 12	9:45 a. m.	4.63	.23	.24	.23	.23	I
	4:10 p. m.	5.03	.21	.21	.22	.22	I
Apr. 13	8:20 a. m.	6.86	.58	.51	.62	.59	I
	3:20 p. m.	6.54	.81	.86	.86	.87	I
Apr. 14	8:25 a. m.	6.81	.89	.87	.90	.86	I
	3:20 p. m.	6.53	.93	.88	.89	.87	I
Apr. 15	8:20 a. m.	7.28	1.07	1.17	1.13	1.09	I
	3:20 p. m.	7.03	1.04	1.07	1.07	1.07	I
Apr. 16	8:15 a. m.	8.14	1.15	1.22	1.21	1.22	I
	3:55 p. m.	9.01	1.15	1.19	1.16	1.17	I
Apr. 17	8:40 a. m.	9.60	1.42	1.42	1.37	1.50	I
	3:00 p. m.	10.41	1.48	1.52	1.46	1.52	I
Apr. 18	8:25 a. m.	11.44	1.74	1.66	1.68	1.56	I
	4:00 p. m.	11.87	1.64	1.72	1.73	1.70	I
Apr. 19	10:15 a. m.	12.21	1.62	1.68	1.60	1.63	I
	4:45 p. m.	12.44	1.72	1.67	1.61	1.59	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1936							
Apr. 20	8:25 a. m.	13.08	1.74	1.67	1.66	1.76	I
	3:15 p. m.	13.45	1.51	1.47	1.57	1.58	I
Apr. 21	8:40 a. m.	14.40	1.56	1.81	1.76		I
	3:25 p. m.	14.84	1.48	1.51	1.46	1.97	I
Apr. 22	9:05 a. m.	15.24	1.55	1.50	1.60	1.54	I
	3:15 p. m.	15.32	1.46	1.70	1.55	1.63	I
Apr. 23	9:30 a. m.	15.39	1.33	1.73	1.53	1.53	I
	3:05 p. m.	15.76	1.43	2.14	1.32	1.56	I
Apr. 24	9:30 a. m.	16.00	1.45	1.28	1.37	1.33	I
	3:00 p. m.	16.36	1.30	1.36	1.21	1.25	I
Apr. 25	8:40 a. m.	16.87	1.57	1.42	1.43	1.61	I
	4:10 p. m.	17.16	1.38	1.25	1.42	1.39	I
Apr. 26	8:50 a. m.	17.70	1.70	1.52	2.05	1.64	I
	4:45 p. m.	18.18	1.40	1.45	1.30	1.60	I
Apr. 27	8:35 a. m.	18.25	1.50	1.32	1.54	1.40	I
	4:30 p. m.	18.20	1.25	1.27	1.63	1.21	I
Apr. 28	8:40 a. m.	18.20	1.42	1.26	1.78	1.47	I
	2:50 p. m.	18.38	1.19	1.47	1.54	2.56	I
Apr. 29	8:20 a. m.	18.43	1.15	1.31	1.70	1.21	I
	3:20 p. m.	18.62	1.27	1.17	1.48	1.30	I
Apr. 30	8:35 a. m.	18.56	1.28	1.18	1.16	1.05	I
	3:05 p. m.	18.66	1.40	1.13	1.49	1.42	I
May 1	9:00 a. m.	18.55	1.14	1.23	1.11	1.08	I
	3:00 p. m.	18.59	1.04	1.14	1.51	1.01	I
May 2	8:30 a. m.	18.46	1.02	1.12	1.05	.98	I
	4:00 p. m.	18.56	1.00	.92	1.04	.95	I
May 3	8:45 a. m.	18.49	1.03	.88	.98	.89	I
	3:50 p. m.	18.17	.89	.93	.86	1.13	I
May 4	8:30 a. m.	17.59	.88	.74	.88	.92	I
	3:30 p. m.	17.40	.83	.63	.81	.75	I
May 5	9:00 a. m.	17.13	.89	.92	.76	.95	I
	3:10 p. m.	17.21	.80	.72	.69	.59	I
May 6	9:20 a. m.	17.19	.83	.60	.62	.61	I
	3:10 p. m.	17.55	.78	.59	.66	.65	I
May 7	8:45 a. m.	18.28	.84	.70	.78	.73	I
	3:20 p. m.	18.63	.73	.65	.71	.77	I
May 8	8:35 a. m.	19.84	.85	.83	1.20	.93	I
	3:20 p. m.	20.22	.99	.85	.76	1.10	I
May 9	9:35 a. m.	21.32	1.05	1.19	.90	1.13	I
	4:15 p. m.	21.50	1.11	.97	1.07	1.05	I
May 10	8:40 a. m.	21.11	1.08	.95	1.03	.88	I
	4:30 p. m.	20.86	.86	.84	.57	.95	I
May 11	8:30 a. m.	20.06	.72	.72	.61	.78	I
	3:05 p. m.	19.70	.75	.81	.66	.84	I
May 12	8:45 a. m.	18.91	.77	.54	.64	.60	I
	3:25 p. m.	18.43	.62	.52	.58	.62	I
May 13	8:45 a. m.	17.62	.54	.51	.69	.56	I
	3:00 p. m.	17.36	.49	.44	.59	.47	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1936							
May 14	8:35 a. m.	16.63	0.51	0.45	0.51	0.61	I
	3:20 p. m.	16.33	.52	.50	.46	.50	I
May 15	8:25 a. m.	16.18	.46	.40	.46	.42	I
	3:10 p. m.	16.47	.49	.38	.34	.44	I
May 16	8:35 a. m.	16.86	.48	.46	.47	.55	I
	3:45 p. m.	17.41	.42	.39	.38	.37	I
May 17	10:45 a. m.	18.00	.78	.54	.45	.47	I
	4:00 p. m.	18.30	.51	.41	.42	.48	I
May 18	9:00 a. m.	19.11	.57	.51	.44	.49	I
	4:15 p. m.	19.59	.64	.61	.59	.52	I
May 19	8:45 a. m.	20.37	.62	.54	.45	.54	I
	3:45 p. m.	20.86	.56	.53	.52	.50	I
May 20	9:00 a. m.	21.51	.60	.52	.58	.62	I
	4:30 p. m.	21.77	.82	.65	.72	.60	I
May 21	9:00 a. m.	21.95	.65	.54	.57	.60	I
	4:00 p. m.	22.11	.59	.55	.61	.63	I
May 22	9:00 a. m.	22.02	.63	.49	.48	.62	I
	4:20 p. m.	21.94	.68	.59	.60	.65	I
May 23	9:00 a. m.	22.32	.67	.58	.65	.72	I
	4:00 p. m.	22.45	.30	.59	.54	.61	I
May 24	8:45 a. m.	22.58	.57	.49	.67	.61	I
	4:30 p. m.	22.51	.60	.57	.60	.56	I
May 25	9:15 a. m.	22.17	.51	.49	.42	.48	I
	4:15 p. m.	22.14	.41	.41	.37	.44	I
May 26	9:00 a. m.	21.73	.71	.49	.44	.51	I
	4:15 p. m.	21.60	.54	.44	.46	.47	I
May 27	9:00 a. m.	21.37	.60	.56	.48	.50	I
	4:30 p. m.	21.33	.53	.53	.48	.60	I
May 28	9:00 a. m.	21.34	.54	.51	.52	.56	I
	3:30 p. m.	21.34	.43	.39	.34	.44	I
May 29	8:45 a. m.	21.24	.39	.36	.40	.37	I
	4:30 p. m.	21.36	.56	.50	.53	.48	I
May 30	9:00 a. m.	21.27	.63	.51	.63	.59	I
	3:15 p. m.	21.33	.41	.38	.44	.38	I
May 31	8:30 a. m.	21.16	.46	.41	.34	.42	I
	4:30 p. m.	21.09	.56	.51	.49	.52	I
June 1	9:30 a. m.	20.75	.45	.43	.42	.41	I
	4:15 p. m.	20.85	.50	.49	.47	.50	I
June 2	9:00 a. m.	20.98	.55	.48	.50	.53	I
	4:30 p. m.	21.38	.56	.56	.54	.56	I
June 3	8:45 a. m.	21.67	.53	.53	.45	.47	I
	4:30 p. m.	21.81	.49	.41	.47	.45	I
June 4	9:00 a. m.	21.81	.53	.51	.47	.58	I
	5:20 p. m.	21.93	.65	.57	.59	.67	I
June 5	8:45 a. m.	21.53	.47	.49	.41	.43	I
	4:30 p. m.	21.18	.44	.44	.43	.50	I
June 6	9:45 a. m.	20.59	.48	.50	.53	.55	I
	4:30 p. m.	20.21	.49	.47	.48	.46	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1936							
June 7	9:15 a. m.	19.35	0.46	0.50	0.48	0.49	I
	4:30 p. m.	19.03	.44	.44	.42	.46	I
June 8	8:45 a. m.	18.57	.41	.42	.41	.39	I
	4:00 p. m.	18.33	.42	.41	.38	.36	I
June 9	9:30 a. m.	17.96	.41	.40	.41	.37	I
	4:15 p. m.	17.75	.34	.37	.40	.39	I
June 10	9:30 a. m.	17.47	.40	.41	.38	.37	I
	2:45 p. m.	17.38	.28	.28	.26	.28	I
June 11	9:00 a. m.	17.33	.45	.41	.40	.37	I
	3:30 p. m.	17.35	.38	.37	.44	.40	I
June 12	9:00 a. m.	17.80	.40	.35	.38	.37	I
	4:30 p. m.	18.03	.41	.37	.37	.39	I
June 13	8:45 a. m.	18.17	.36	.35	.34	.35	I
	4:00 p. m.	18.09	.38	.38	.36	.31	I
June 14	8:45 a. m.	18.02	.37	.40	.37	.37	I
	4:30 p. m.	18.05	.30	.30	.29	.33	I
June 15	8:50 a. m.	17.96	.30	.29	.28	.31	I
	4:35 p. m.	17.82	.36	.33	.33	.33	I
June 16	10:00 a. m.	17.67	.31	.34	.30	.40	I
	4:30 p. m.	17.67	.31	.31	.30	.34	I
June 17	9:00 a. m.	17.45	.31	.34	.32	.31	I
	5:15 p. m.	17.48	.34	.35	.32	.39	I
June 18	9:15 a. m.	17.31	.29	.32	.30	.35	I
	4:15 p. m.	17.13	.40	.34	.36	.34	I
June 19	9:15 a. m.	16.90	.28	.33	.29	.25	I
	3:30 p. m.	16.89	.26	.25	.25	.24	I
June 20	9:30 a. m.	16.75	.27	.27	.29	.32	I
	4:30 p. m.	16.61	.31	.28	.28	.36	I
June 21	8:45 a. m.	16.42	.25	.26	.27	.24	I
	7:00 p. m.	16.28	.24	.22	.21	.28	I
June 22	9:00 a. m.	16.08	.27	.29	.33	.30	I
	4:40 p. m.	16.01	.27	.24	.23	.23	I
June 23	9:00 a. m.	15.86	.28	.31	.26	.28	I
	4:15 p. m.	15.60	.30	.30	.27	.24	I
June 24	9:30 a. m.	15.36	.26	.31	.29	.31	I
	4:30 p. m.	15.24	.27	.25	.26	.26	I
June 25	9:00 a. m.	14.88	.23	.19	.19	.22	I
	5:00 p. m.	14.74	.24	.24	.24	.23	I
June 26	9:40 a. m.	14.49	.21	.21	.21	.17	I
	4:45 p. m.	14.38	.23	.18	.20	.24	I
June 27	8:45 a. m.	14.19	.21	.19	.18	.18	I
	3:00 p. m.	14.14	.19	.19	.19	.16	I
June 28	9:00 a. m.	13.84	.22	.20	.17	.21	I
	4:10 p. m.	13.68	.21	.18	.20	.20	I
June 29	9:10 a. m.	13.28	.24	.22	.29	.23	I
	3:30 p. m.	13.23	.23	.19	.20	.21	I
June 30	9:00 a. m.	13.07	.23	.20	.19	.19	I
	4:20 p. m.	13.08	.20	.18	.20	.20	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1936							
July 1.....	10:00 a. m.....	12.91	0.18	0.20	0.19	0.20	I
	4:30 p. m.....	12.84	.19	.17	.16	.18	I
July 2.....	9:30 a. m.....	12.50	.17	.18	.16	.15	I
	4:15 p. m.....	12.37	.16	.17	.17	.18	I
July 3.....	9:30 a. m.....	12.12	.17	.16	.17	.15	I
	4:00 p. m.....	12.16	.19	.17	.19	.18	I
July 4.....	9:30 a. m.....	11.88	.13	.15	.15	.16	I
	3:10 p. m.....	11.85	.17	.16	.17	.17	I
July 4.....	9:30 a. m.....	11.52	.16	.14	.16	.15	I
	3:00 p. m.....	11.43	.16	.15	.15	.16	I
July 6.....	9:45 a. m.....	10.89	.14	.17	.17	.16	I
	4:15 p. m.....	10.71	.19	.18	.17	.17	I
July 7.....	9:45 a. m.....	10.35	.20	.18	.17	.19	I
	4:00 p. m.....	10.26	.15	.16	.20	.17	I
July 8.....	10:00 a. m.....	9.94	.13	.15	.13	.12	I
	3:15 p. m.....	9.80	.10	.13	.12	.12	I
July 9.....	9:30 a. m.....	9.66	.12	.12	.12	.14	I
	3:00 p. m.....	9.33	.14	.14	.13	.15	I
July 10.....	9:15 a. m.....	8.94	.13	.14	.13	.13	I
	4:15 p. m.....	8.79	.13	.12	.12	.12	I
July 11.....	9:30 a. m.....	8.93	.12	.13	.12	.13	I
	2:30 p. m.....	10.81	.12	.13	.12	.12	I
July 12.....	9:30 a. m.....	8.52	.30	.29	.28	.27	I
	4:30 p. m.....	8.52	4.19	4.20	4.12	4.11	I
July 13.....	9:30 a. m.....	13.32	.80	.84	.81	.84	I
	2:30 p. m.....	14.59	.82	.83	.77	.83	I
July 14.....	9:30 a. m.....	14.58	6.13	6.03	6.30	6.24	I
	4:15 p. m.....	13.67	3.27	3.23	3.30	3.29	I
July 15.....	9:30 a. m.....	11.59	1.68	1.68	1.75	1.69	I
	3:30 p. m.....	11.19	1.73	1.72	1.86	1.69	I
July 16.....	10:30 a. m.....	10.33	3.04	3.06	3.09	3.08	I
	3:45 p. m.....	10.31	3.20	3.18	3.20	3.19	I
July 17.....	9:15 a. m.....	9.94	3.77	3.81	3.84	3.83	I
	2:45 p. m.....	9.98	3.41	3.42	3.50	3.40	I
July 18.....	9:30 a. m.....	9.80	2.41	2.46	2.43	2.46	I
	3:30 p. m.....	9.66	2.36		2.34	2.33	I
July 19.....	9:30 a. m.....	9.15	1.80	1.80	1.80	1.80	I
	3:45 p. m.....	8.89	1.90	1.88	1.89	1.88	I
July 20.....	9:45 a. m.....	8.66	1.14	1.16	1.16	1.12	I
	4:45 p. m.....	8.48	.88	.89	.89	.88	I
July 21.....	9:45 a. m.....	8.69	.89	.93	.91	.89	I
	4:30 p. m.....	8.98	.86	.84	.92	.85	I
July 22.....	9:30 a. m.....	9.24	.96	.97	.98	.97	I
	4:30 p. m.....	9.16	.85	.84	.86	.86	I
July 23.....	9:15 a. m.....	8.89	.75	.75	.76	.75	I
	4:30 p. m.....	8.75	.76	.76	.76	.75	I
July 24.....	9:45 a. m.....	8.83	.67	.68	.68	.65	I
	2:45 p. m.....	8.73	.56	.56	.56	.56	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1936							
July 25	9:30 a. m.	8.21	0.80	0.79	0.80	0.80	I
	4:15 p. m.	8.21	.67	.68	.67	.68	I
July 26	9:45 a. m.	7.82	.59	.58	.58	.59	I
	4:15 p. m.	7.78	.53	.53	.53	.54	I
July 27	9:30 a. m.	7.76	.61	.61	.61	.60	I
	4:00 p. m.	7.95	.66	.65	.91	.64	I
July 28	10:30 a. m.	7.04	1.33	1.31	1.33	1.31	I
	4:30 p. m.	7.33	.90	.90	.91	.91	I
July 29	9:15 a. m.	7.56	1.06	1.06	1.05	1.05	I
	4:00 p. m.	7.25	1.45	1.42	1.40	1.40	I
July 30	9:15 a. m.	7.33	1.44	1.45	1.46	1.46	I
	4:15 p. m.	6.81	1.16	1.19	1.17	1.18	I
July 31	9:45 a. m.	6.04	1.11	1.08	1.08	1.05	I
	4:15 p. m.	5.91	.91	.91	.89	.90	I
Aug. 1	10:10 a. m.	6.87	1.05	1.03	1.02	.97	I
	3:45 p. m.	6.79	1.23	1.23	1.30	1.23	I
Aug. 2	9:30 a. m.	6.45	.99	1.00	.99	.99	I
	4:30 p. m.	6.31	.88	.87	.94	.87	I
Aug. 3	9:30 a. m.	6.27	.79	.82	.80	.80	I
	4:00 p. m.	6.50	1.04	1.04	1.02	1.02	I
Aug. 4	9:30 a. m.	6.80	1.43	1.43	1.43	1.42	I
	4:30 p. m.	6.77	1.55	1.52	1.51	1.51	I
Aug. 5	9:30 a. m.	8.93	3.26	3.33	3.36	3.38	I
	2:30 p. m.	9.56	3.02	2.99	2.93	2.89	I
Aug. 6	9:30 a. m.	10.32	3.32	3.39	3.29	3.29	I
	4:30 p. m.	11.84	5.11	5.21	5.12	5.07	I
Aug. 7	10:00 a. m.	14.39	6.17	5.70	6.07	5.86	I
	4:30 p. m.	15.53	4.89	4.82	4.60	4.68	I
Aug. 8	10:00 a. m.	12.67	6.84	6.88	6.80	6.90	I
	4:30 p. m.	12.63	6.21	5.93	6.68	6.05	I
Aug. 9	9:45 a. m.	13.20	5.32	5.20	5.08	5.08	I
	4:00 p. m.	13.87	5.73	5.41	5.34	5.29	I
Aug. 10	9:45 a. m.	13.86	4.09	4.23	4.06	4.05	I
	4:00 p. m.	13.31	2.83	3.83	5.11	3.74	I
Aug. 11	10:00 a. m.	12.52	3.32	3.29	3.21	3.21	I
	4:30 p. m.	12.12	3.15	3.20	3.07	2.98	I
Aug. 12	10:00 a. m.	11.63	2.66	2.91	2.64	2.57	I
	6:00 p. m.	11.56	2.81	2.75	2.80		I
Aug. 13	9:45 a. m.	10.80	2.51	2.60	2.58	2.42	I
	5:00 p. m.	10.79	2.52	2.59	2.52	2.52	I
Aug. 14	9:20 a. m.	10.25	2.34	2.29	2.34	2.32	I
	5:10 p. m.	9.87	1.93	1.92	1.89	1.89	I
Aug. 15	9:20 a. m.	9.50	2.35	2.32	2.38	2.35	I
	4:15 p. m.	9.16	2.13	2.07	2.12	2.05	I
Aug. 16	10:20 a. m.	8.50	1.71	1.70	1.73	1.71	I
	2:15 p. m.	8.38	1.64	1.62	1.66	1.63	I
Aug. 17	9:15 a. m.	8.22	1.54	1.54	1.56	1.58	I
	4:30 p. m.	8.16	1.43	1.39	1.42	1.43	I

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1936							
Aug. 18	10:15 a. m.	8.28	1.13	1.13	1.13	1.13	I
	4:10 p. m.	8.20	1.24	1.18	1.19	1.05	I
Aug. 19	9:20 a. m.	8.00	1.49	1.48	1.47	1.25	I
Aug. 20	10:00 a. m.	8.32	1.23	1.23	1.24	1.20	I
Aug. 21			1.40				I
Aug. 22			1.60				I
Aug. 23	3:30 p. m.	9.84	1.72	1.76	1.81	1.70	I
Aug. 24	10:00 a. m.	9.85	2.22	2.19	1.93	2.18	I
Aug. 25	9:15 a. m.	8.61	2.02	2.26	2.01	2.02	I
Aug. 26	9:20 a. m.	7.69	2.17	2.23	2.18	2.19	I
Aug. 27	9:20 a. m.	7.47	2.06	2.06	2.07	2.08	I
Aug. 28	9:45 a. m.	6.93	1.32	1.33	1.36	1.33	I
Aug. 29	9:45 a. m.	6.44	.97	.98	.99	.98	I
Aug. 30	9:30 a. m.	5.91	.92	.93	.92	.94	I
	2:30 p. m.	5.53	1.37	1.36	1.37	1.38	I
Aug. 31	9:30 a. m.	6.88	7.03	7.14	7.27	7.42	I
	4:00 p. m.		3.71	3.80	3.78	3.83	I
Sept. 1	10:00 a. m.	8.90	2.70	2.86	2.89	2.85	I
	4:00 p. m.	7.11	3.35	3.25	3.22	3.12	I
Sept. 2	9:45 a. m.	11.90	4.76	5.01	5.02	5.09	I
	3:00 p. m.	9.45	3.95	3.88	4.07	4.01	I
Sept. 3	9:45 a. m.	12.26	7.29	7.21	7.68	7.85	I
	3:45 p. m.	13.27	8.00	7.98	7.94	7.98	I
Sept. 4	9:45 a. m.	11.20	7.22	7.34	7.20	7.27	I
	4:30 p. m.	11.36	6.34	6.60	6.51	6.41	I
Sept. 5	9:15 a. m.	10.23	4.66	4.97	4.70	4.70	I
	4:45 p. m.	10.56	4.13	4.00	4.07	4.05	I
Sept. 6	9:30 a. m.	9.86	3.57	3.68	3.72	3.67	I
	4:30 p. m.	10.35	3.23	3.18	3.21	3.15	I
Sept. 7	9:30 a. m.	9.14	3.47	3.30	3.40	3.30	I
	4:30 p. m.	9.48	2.80	2.91	2.83	2.76	I
Sept. 8	9:15 a. m.	8.73	2.60	2.62	2.57	2.83	I
	3:30 p. m.	9.28	2.44	2.30	2.47	2.60	I
Sept. 9	9:30 a. m.	7.51	2.43	2.42	2.42	2.32	I
Sept. 10	9:30 a. m.	7.18	1.90	2.03	1.96	1.99	I
	3:45 p. m.	7.38	1.77	1.49	1.61	1.57	I
Sept. 11	9:30 a. m.	6.85	1.24	1.40	1.42	1.44	I
	3:30 p. m.	7.14	1.28	1.28	1.16	1.20	I
Sept. 12	9:00 a. m.	6.45		1.36	1.41	1.40	I
	3:00 p. m.	6.53	1.40	1.36	1.32	1.38	I
Sept. 13	9:30 a. m.	6.00	1.44	1.49	1.61	1.38	I
	4:20 p. m.	6.16	1.61	1.66	1.69	1.71	I

1 Estimated.

TABLE 10.—*Suspended-sediment concentration in individual samples collected from the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 1, 1935, to Sept. 30, 1936—Continued*

Date	Time	Gage height (feet)	Suspended sediment at sampling points indicated (percent by weight)				Type of sample
			A	B	C	D	
1936							
Sept. 14.....	9:30 a. m.	6.98	2.56	2.82	2.32	2.62	I
	7:15 p. m.	7.44	2.63	2.80	2.85	2.39	I
Sept. 15.....	9:30 a. m.	6.50	1.73	1.91	2.00	1.94	I
	4:30 p. m.	6.72	1.92	1.89	1.86	1.69	I
Sept. 16.....	9:45 a. m.	6.21	1.49	1.61	1.37	1.43	I
	3:40 p. m.	6.34	1.45	1.58	1.49	1.53	I
Sept. 17.....	9:45 a. m.	5.91	1.38	1.29	1.33	1.51	I
	3:30 p. m.	6.09	1.36	1.24	1.23	1.18	I
Sept. 18.....	9:20 a. m.	5.63	1.06	.98	1.00	1.04	I
	2:50 p. m.	5.70	1.02	1.00	.96	.98	I
Sept. 19.....	9:15 a. m.	5.71	.84	.78	.82	.83	I
	3:40 p. m.	5.64	.79	.79	.78	.79	I
Sept. 20.....	9:50 a. m.	5.53	.72	.72	.72	.72	I
	4:30 p. m.	5.54	.68	.65	.66	.66	I
Sept. 21.....	9:20 a. m.	4.98	.53	.53	.53	.53	I
Sept. 22.....	9:50 a. m.	7.37	2.13	2.09	2.08	2.05	I
	4:30 p. m.	4.96	4.41	4.48	4.56	4.51	I
Sept. 23.....	9:50 a. m.	5.78	2.31	2.34	2.27	2.28	I
	4:30 p. m.	6.25	1.89	1.86	1.90	1.81	I
Sept. 24.....	9:30 a. m.	5.65	3.21	3.19	3.12	3.13	I
	3:30 p. m.	6.00	2.86	2.88	2.92	2.85	I
Sept. 25.....	9:40 a. m.	5.56	2.24	2.19	2.18	2.21	I
	4:45 p. m.	5.62	1.79	1.80	1.69	1.76	I
Sept. 26.....	9:30 a. m.	5.69	1.35	1.40	1.41	1.44	I
	3:45 p. m.	5.93	1.27	1.34	1.30	1.29	I
Sept. 27.....	8:45 a. m.	4.94	1.91	1.90	1.82	1.90	I
	4:10 p. m.	5.62	1.60	1.63	1.60	1.59	I
Sept. 28.....	9:30 a. m.	4.56	1.18	1.23	1.27	1.21	I
	4:00 p. m.	5.76	1.12	1.18	1.12	1.11	I
Sept. 29.....	9:20 a. m.	3.99	1.09	1.06	1.11	1.06	I
	3:00 p. m.	4.37	1.10	1.11	1.08	1.04	I
Sept. 30.....	9:15 a. m.	3.65	.98	.98	.97	.96	I
	3:50 p. m.	3.87	.85	.85	.86	.85	I

TABLE 11.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Willow Beach, Ariz., Oct. 1, 1934, to Sept. 30, 1936

1934										
Day	October			November			December			
	Mean discharge (second-foot)	Suspended matter		Mean discharge (second-foot)	Suspended matter		Mean discharge (second-foot)	Suspended matter		
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1	3,620	0.98	96,800	3,020	0.22	17,900	4,310	0.27	31,400	
2	4,220	.82	93,400	3,070	.21	17,400	4,340	.31	36,300	
3	3,690	.94	93,700	3,080	.21	17,500	4,400	.30	35,600	
4	3,370	.77	70,100	3,040	.22	18,100	4,430	.28	33,500	
5	3,110	.60	50,400	3,080	.20	16,600	4,310	.27	31,400	
6	3,580	.46	44,400	3,090	.21	17,500	4,370	.26	30,700	
7	3,640	.56	55,000	3,010	.17	13,800	4,430	.28	33,500	
8	3,530	.50	47,700	3,080	.18	15,000	4,370	.26	30,700	
9	3,330	.76	68,300	3,050	.24	19,800	4,190	.25	28,300	
10	3,310	2.82	258,000	3,050	.22	18,100	4,160	.26	29,200	
11	3,210	3.05	264,000	3,020	.20	16,300	3,970	.26	27,900	
12	3,170	2.45	210,000	2,970	.23	18,400	3,730	1.01	24,200	
13	3,120	1.56	131,000	3,060	.19	15,700	3,580	.24	23,200	
14	3,090	1.10	91,800	3,140	.18	15,300	3,640	.22	21,600	
15	2,920	.86	67,800	3,270	.19	16,800	3,640	.24	23,600	
16	2,880	.59	45,900	3,390	.18	16,500	3,880	.26	27,200	
17	2,820	.46	35,000	3,360	.18	16,300	4,370	.78	119,000	
18	2,910	.36	28,300	3,610	.20	19,500	4,120	.46	51,100	
19	2,760	.34	25,300	3,700	.22	22,000	4,430	.29	34,700	
20	2,790	.82	24,100	3,910	.20	21,100	4,590	.26	32,200	
21	2,650	.29	20,700	4,160	.34	38,200	4,970	.26	34,900	
22	2,650	.28	20,100	4,090	.29	32,000	5,100	.26	35,800	
23	2,820	.32	24,400	3,940	.25	26,600	4,940	.25	33,300	
24	2,770	.25	18,700	3,970	.26	27,900	5,000	.25	33,800	
25	2,850	.21	16,100	4,190	.26	29,400	5,160	.26	36,200	
26	2,870	.23	17,800	4,120	.23	25,600	5,200	.31	43,500	
27	2,990	.21	17,000	4,280	.32	37,000	4,940	.27	36,000	
28	2,920	.21	16,600	4,190	.25	28,300	4,780	.28	36,100	
29	2,940	.21	16,700	4,310	.24	27,900	4,750	.27	34,600	
30	2,900	.24	18,800	4,310	.26	30,300	4,810	.28	36,400	
31	2,940	.20	15,800				4,840	.25	32,700	
Monthly load (tons)			2,004,000				652,800			1,099,000

1935										
Day	January			February			March			
	Mean discharge (second-foot)	Suspended matter		Mean discharge (second-foot)	Suspended matter		Mean discharge (second-foot)	Suspended matter		
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1	4,940	0.27	36,000	2,890	0.32	25,000	6,910	0.09	16,800	
2	4,970	.26	34,900	3,030	.12	14,700	6,990	.10	18,900	
3	4,880	.23	30,300	2,760	.06	4,210	7,070	.10	19,100	
4	4,880	.22	29,000	5,390	.10	14,600	6,980	.07	13,200	
5	4,940	.22	29,300	5,420	.07	10,200	6,460	.07	12,300	
6	5,130	.22	30,500	5,430	.07	10,300	5,890	.05	7,910	
7	5,320	.26	37,300	4,360	.06	7,070	5,950	.05	8,050	
8	4,970	.23	30,800	4,650	.05	6,260	6,770	.06	11,000	
9	4,840	.20	26,100	3,610	.04	3,890	7,070	.08	15,300	
10	4,880	.20	26,400	152	.02	81	7,030	.06	11,400	
11	4,650	.17	21,300	171	.02	92	7,070	.06	11,400	
12	5,130	.16	22,200	508	.02	275	6,980	.06	11,300	
13	5,260	.20	28,400	540	.02	297	6,950	.06	11,300	
14	5,000	.18	24,300	2,310	.04	2,480	6,970	.06	11,300	
15	6,060	.28	45,800	3,090	.04	3,350	6,860	.06	11,100	
16	7,450	.64	129,000	3,220	.09	7,830	6,940	.05	9,370	
17	7,560	1.82	371,000	4,440	.04	4,780	7,010	.05	9,450	
18	6,590	1.17	208,000	4,420	.04	4,780	7,020	.05	9,480	
19	6,160	1.26	210,000	4,430	.08	9,560	7,150	.06	11,600	
20	6,790	.76	139,000	4,440	.23	27,600	7,150	.03	5,780	
21	6,760	2.12	387,000	3,840	.08	8,290	7,250	.04	7,860	
22	6,430	1.47	255,000	5,380	.08	11,600	7,280	.05	9,830	
23	6,000	.92	149,000	5,250	.24	34,000	7,190	.04	7,780	
24	5,550	.84	126,000	5,310	.17	24,400	7,250	.06	11,700	
25	5,420	.75	110,000	5,310	.07	10,000	7,220	.16	31,200	
26	4,940	.60	80,000	5,230	.07	9,880	7,380	.52	103,000	
27	4,530	.58	70,900	5,370	.06	8,690	7,380	.41	81,700	
28	4,000	.65	70,200	6,000	.08	13,000	7,350	.34	67,500	
29	3,530	.60	57,200				7,420	.18	36,100	
30	3,380	.56	51,100				7,760	.30	62,900	
31	3,540	.45	43,000				7,720	.31	64,600	
Monthly load (tons)			2,909,000				277,200			720,200

TABLE 11.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Willow Beach, Ariz., Oct. 1, 1934, to Sept. 30, 1936—Continued

1935										
Day	April			May			June			
	Mean discharge (second-foot)	Suspended matter		Mean discharge (second-foot)	Suspended matter		Mean discharge (second-foot)	Suspended matter		
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1.....	7,720	0.07	14,600	6,470	0.04	6,990	15,200	0.06	24,600	
2.....	7,690	.06	12,400	7,220	.04	7,800	15,300	.06	24,800	
3.....	7,620	.06	12,300	7,350	.03	5,940	15,300	.04	16,500	
4.....	7,650	.06	12,400	7,650	.03	6,210	15,800	.07	29,900	
5.....	7,550	.07	14,300	7,720	.03	6,260	15,800	.06	25,600	
6.....	7,380	.07	14,000	7,690	.03	6,240	15,900	.05	21,500	
7.....	7,350	.14	27,800	7,350	.05	9,940	16,300	.05	22,000	
8.....	7,420	.32	64,100	7,320	.04	7,910	16,300	.05	22,000	
9.....	7,320	.38	75,100	7,420	.04	8,020	16,200	.04	17,500	
10.....	6,710	.53	95,900	7,120	.04	7,690	16,400	.06	26,600	
11.....	6,740	.95	173,000	6,860	.05	9,260	16,800	.05	22,700	
12.....	7,450	.70	141,000	7,320	.05	9,880	17,000	.06	27,500	
13.....	7,380	.72	143,000	6,830	.07	12,900	17,200	.05	23,200	
14.....	7,450	.95	191,000	6,520	.10	17,600	17,300	.04	18,700	
15.....	7,420	.81	162,000	6,610	.06	10,700	17,300	.04	18,700	
16.....	6,860	1.15	213,000	6,550	.06	10,600	17,600	.04	19,000	
17.....	6,800	.96	176,000	6,610	.06	10,700	17,800	.04	19,200	
18.....	6,830	.62	114,000	7,070	.07	13,400	18,000	.06	29,200	
19.....	7,090	.45	86,100	7,350	.05	9,940	18,400	.04	19,900	
20.....	7,320	.24	47,400	7,220	.05	9,750	18,500	.04	20,000	
21.....	7,280	.31	60,700	6,930	.04	7,480	18,600	.05	25,100	
22.....	7,520	.04	8,120	7,910	.06	12,800	18,900	.04	20,400	
23.....	7,380	.04	7,960	11,300	.08	24,400	19,100	.04	20,600	
24.....	7,220	.05	9,750	13,000	.07	24,600	16,800	.04	18,100	
25.....	7,280	.04	7,860	14,800	.08	32,000	14,400	.04	15,600	
26.....	7,420	.40	80,100	14,700	.08	31,800	14,500	.05	19,600	
27.....	7,250	.08	15,700	15,000	.09	36,400	14,800	.05	20,000	
28.....	7,380	.05	9,960	14,900	.09	36,200	14,700	.05	19,800	
29.....	7,150	.05	9,670	14,900	.06	24,100	14,700	.04	15,900	
30.....	7,280	.06	11,800	15,200	.07	28,700	15,100	.07	28,500	
31.....				15,000	.06	24,300				
Monthly load (tons).....			2,011,000				470,600			652,700

1935										
Day	July			August			September			
	Mean discharge (second-foot)	Suspended matter		Mean discharge (second-foot)	Suspended matter		Mean discharge (second-foot)	Suspended matter		
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1.....	15,000	0.04	16,200	10,100	0.04	10,900	10,100	0.03	8,180	
2.....	15,000	.05	20,200	10,200	.03	8,260	10,000	.02	5,400	
3.....	15,000	.06	24,300	10,500	.05	14,200	9,960	.86	231,000	
4.....	15,000	.07	28,300	10,000	.03	8,100	10,100	.99	270,000	
5.....	15,000	.04	16,200	10,200	.04	11,000	9,960	.68	183,000	
6.....	15,300	.05	20,700	10,200	.04	11,000	10,100	.17	46,400	
7.....	15,200	.08	32,800	10,200	.05	13,800	10,000	.42	113,000	
8.....	15,000	.04	16,200	10,200	.04	11,000	10,100	.94	256,000	
9.....	13,300	.05	18,000	10,200	.05	13,800	9,960	.70	188,000	
10.....	10,000	.04	10,800	10,300	.04	11,100	10,000	.57	154,000	
11.....	10,200	.04	11,000	10,100	.07	19,100	10,000	1.08	292,000	
12.....	10,100	.03	8,180	10,200	.05	13,800	10,100	1.37	374,000	
13.....	10,200	.03	8,260	10,200	.04	11,000	10,000	.71	192,000	
14.....	10,000	.02	5,400	10,000	.04	10,800	9,920	.27	72,300	
15.....	9,960	.03	8,070	10,300	.01	2,780	10,100	.01	2,730	
16.....	10,200	.04	11,000	10,200	.02	5,510	10,100	.03	8,180	
17.....	10,100	.01	2,730	10,400	.02	5,620	9,960	.01	2,700	
18.....	9,960	.01	2,000	10,200	.03	8,260	9,960	.02	5,370	
19.....	10,000	.03	8,100	10,200	.02	5,510	10,000	.01	2,700	
20.....	10,000	.02	5,400	10,300	.03	8,340	10,000	.01	2,700	
21.....	10,000	.04	10,800	10,000	.02	5,400	10,100	.01	2,730	
22.....	10,100	.04	10,900	10,200	.03	8,260	9,960	.03	8,070	
23.....	10,300	.04	11,100	10,200	.04	11,000	9,920	.01	2,670	
24.....	10,200	.04	11,000	10,200	.02	5,510	9,840	.01	2,650	
25.....	9,960	.03	8,080	10,100	.02	5,450	9,920	.01	2,670	
26.....	10,000	.03	8,100	10,200	.02	5,510	10,100	.01	2,730	
27.....	10,100	.03	8,180	10,000	.02	5,400	9,800	.01	2,650	
28.....	10,000	.02	5,400	9,840	.04	10,600	9,880	.01	2,670	
29.....	10,100	.02	5,450	10,100	.02	5,050	9,920	.02	5,350	
30.....	10,200	.03	8,260	10,400	.02	5,620	9,800	.01	2,650	
31.....	10,100	.03	8,180	10,200	.02	5,510				
Monthly load (tons).....			369,300				277,200			2,444,000

QUANTITIES OF SUSPENDED SEDIMENT

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TABLE 11.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Willow Beach, Ariz., Oct. 1, 1934, to Sept. 30, 1936—Continued

1935

Day	October			November			December		
	Mean discharge (second-foot)	Suspended matter		Mean discharge (second-foot)	Suspended matter		Mean discharge (second-foot)	Suspended matter	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	9,940	0.005	1,350	9,880	0.04	10,700	4,950	0.006	810
2	9,860	.007	1,860	9,760	.04	10,500	4,950	.006	810
3	10,000	.02	5,400	9,680	.04	10,400	4,920		
4	9,960	.007	1,890	9,800	.04	10,600	4,910	.005	675
5	9,980	.01	2,700	9,740	.04	10,500	4,890	.002	270
6	9,740	1.57	413,000	9,680	.05	13,100	4,910		
7	9,720	1.60	420,000	9,740	.04	10,500	4,920	.007	918
8	9,880	1.64	437,000	9,840	.03	7,960	4,940		
9	9,800	1.99	526,000	9,620	.04	10,400	4,950	.01	1,350
10	9,680	2.16	565,000	9,620	.04	10,400	4,870	.01	1,320
11	9,900	1.86	497,000	9,700	.04	10,500	4,870		
12	10,000	1.19	321,000	9,640	.04	10,400	4,860	.008	1,050
13	9,720	.34	89,200	9,680	.04	10,400	4,890		
14	9,860	.004	1,050	9,740	.04	10,500	4,920	.006	810
15	9,760	.002	540	9,740	.05	13,100	4,920		
16	9,840	.005	1,320	9,660	.04	10,400	4,940	.004	540
17	9,820	.009	2,380	9,720	.04	10,500	4,810	.005	648
18	9,840	.003	810	9,800	.03	7,940	4,920	.01	1,320
19	9,860	.02	5,320	9,620	.03	7,800	4,860	.01	1,320
20	9,900	.02	5,350	9,600	.03	7,780	4,810		
21	9,900	.02	5,350	9,620	.03	7,800	4,760	.01	1,300
22	9,760	.02	5,260	9,640	.03	7,800	4,790		
23	9,740	.01	2,620	9,740	.03	7,880	4,830	.004	513
24	9,760	.01	2,650	9,780	.04	10,600	4,860	.01	1,320
25	9,800	.01	2,650	9,640	.03	7,800	4,870		
26	9,780	.01	2,650	9,560	.04	10,300	4,890	.005	648
27	9,780	.01	2,650	9,760	.04	10,500	4,760	.004	513
28	9,800	.02	5,290	9,520	.04	10,300	4,870	.009	1,190
29	9,800	.02	5,290	9,480	.03	7,670	4,810	.005	648
30	9,760	.02	5,260	7,470	.03	6,050	4,830	.006	783
31	9,900	.01	2,670				4,870	.006	783
Monthly load (tons)			3,340,000				291,100		

1936

Day	January			February			March		
	Mean discharge (second-foot)	Suspended matter		Mean discharge (second-foot)	Suspended matter		Mean discharge (second-foot)	Suspended matter	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	4,810	0.01	1,300	4,840	0.005	648	6,370	0.006	1,030
2	4,870	.01	1,320	4,890	.004	540	6,380	.01	1,730
3	4,860	.01	1,320	4,810	.006	783	6,620	.009	1,620
4	4,790	.007	918	4,810	.005	648	6,910	.009	1,670
5	4,920	.005	675	4,810	.005	648	7,320	.01	1,970
6	4,940	.002	270	4,760	.006	783	7,830	.01	2,110
7	4,860	.004	513	4,870	.004	513	8,770	.02	4,720
8	4,860	.006	783	4,790	.004	513	8,810	.02	4,750
9	4,810	.006	783	4,890	.006	783	9,190	.02	4,970
10	4,860	.007	918	4,870	.005	648	9,580	.02	5,180
11	4,840	.004	513	5,120	.003	405	9,520	.02	5,130
12	4,830	.009	1,160	6,180	.01	1,670	9,700	.02	5,240
13	4,910	.004	540	6,060	.009	1,480	9,760	.02	5,260
14	4,830	.004	513	6,110	.004	648	9,740	.02	5,260
15	4,890	.005	648	6,040	.005	810	9,680		
16	4,760	.02	2,560	6,500	.006	1,050	9,640	.03	7,800
17	4,860	.006	783	6,500	.008	1,400	9,680	.02	5,240
18	4,810	.004	513	6,570	.004	702	9,780	.03	7,910
19	4,870	.009	1,190	6,320	.006	1,030	9,780	.03	7,910
20	4,840	.008	1,050	6,180	.008	1,320	9,820	.02	5,290
21	4,790	.007	918	6,130	.005	837	9,860	.02	5,320
22	4,890	.008	1,050	5,940	.003	486	9,820	.03	7,960
23	4,790	.004	513	5,860	.01	1,590	9,820	.02	5,290
24	4,810	.003	378	5,960	.006	972	9,780	.03	7,910
25	4,750	.004	513	5,960	.006	972	9,680	.02	5,240
26	4,860	.004	513	5,860	.006	945	9,700	.02	5,240
27	4,830	.007	918	5,960	.007	1,130	9,600	.02	5,180
28	4,840	.004	513	6,130	.01	1,650	9,740	.02	5,260
29	4,810	.004	513	6,400	.01	1,730	9,780	.03	7,910
30	4,810	.004	513				9,780	.02	5,290
31	4,860	.002	270				9,720	.02	5,240
Monthly load (tons)			24,880				27,330		
								155,900	

TABLE 11.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Willow Beach, Ariz., Oct. 1, 1934, to Sept. 30, 1936—Continued

Day	April			May			June		
	Mean discharge (second-foot)	Suspended matter		Mean discharge (second-foot)	Suspended matter		Mean discharge (second-foot)	Suspended matter	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	9,740	0.02	5,260	9,460	0.10	25,500	9,880	0.02	5,350
2	9,780	.02	5,290	9,220	.03	7,480	9,860	.01	2,670
3	9,560	.02	5,160	10,100	.02	5,450	9,700	.01	2,620
4	9,760	.02	5,260	10,300	.02	5,560	9,900	.01	2,670
5	9,700	.02	5,240	10,200	.02	5,510	10,000	.01	2,700
6	9,560	.02	5,160	10,300	.02	5,560	9,840	.01	2,650
7	9,900	.02	5,350	10,000	.02	5,400	9,420	.02	5,080
8	9,740	.02	5,260	9,980	.02	5,400	9,440	.01	2,540
9	9,600	.01	2,590	10,100	.01	2,730	9,500	.01	2,560
10	9,720	.02	5,240	10,100	.01	2,730	9,190	.02	4,970
11	9,660	.02	5,210	9,890	.01	2,670	9,130	.01	2,460
12	9,480	.01	2,560	8,840	.01	2,380	8,780	.01	2,380
13	9,700	.01	2,620	9,150	.005	1,240	8,840	.01	2,380
14	9,740	.01	2,620	9,580	.01	2,590	9,660	.008	2,080
15	9,680	.02	5,240	9,310	.008	2,000	9,760	.01	2,650
16	9,740	.01	2,620	8,620	.01	2,320	9,780	.01	2,650
17	9,760	.01	2,650	8,670	.008	1,860	9,960	.01	2,700
18	9,760	.01	2,650	8,650	.007	1,650	10,800	.01	2,920
19	9,820	.04	10,600	8,840	.008	1,920	10,500	.02	5,670
20	9,860	.02	5,320	9,070	.02	4,890	10,700	.01	2,890
21	9,680	.02	5,240	8,130	.008	1,760	10,800	.01	2,920
22	9,840	.21	55,800	7,900	.01	2,130	10,900	.01	2,940
23	9,740	1.16	305,000	8,010	.01	2,160	11,200	.009	2,730
24	9,860	1.31	349,000	8,030	.009	1,940	11,200	.008	2,430
25	9,960	1.41	379,000	8,010	.008	1,730	11,400	.01	3,080
26	10,200	1.44	397,000	8,300	.007	1,570	11,400	.01	3,080
27	10,200	1.12	308,000	8,600	.01	2,320	11,500	.01	3,100
28	10,700	.74	214,000	9,110	.01	2,460	11,500	.01	3,100
29	11,100	.71	213,000	9,440	.01	2,540	11,700	.01	3,160
30	10,900	.77	227,000	5,940			11,500	.01	3,100
31				10,200	.01	2,750			
Monthly load (tons)			2,545,000			117,800			92,230

1936									
July			August			September			
1	11,400	0.02	6,160	11,000	0.007	2,080	9,580	0.006	1,540
2	11,500	.01	3,100	11,100	.008	2,400	9,600	.006	1,570
3	11,600	.01	3,130	10,900	.009	2,650	9,580	.01	2,590
4	11,500	.01	3,100	10,600	.03	8,590	9,640	.008	2,080
5	11,500	.009	2,810	10,600	.009	2,560	9,780	.01	2,650
6	11,300	.01	3,050	10,500	.02	5,670	9,620	.01	2,590
7	11,400	.02	6,160	10,400	.007	1,970	9,540	.01	2,560
8	11,500	.01	3,100	10,600	.008	2,300	10,000	.02	5,400
9	11,500	.01	3,100	10,500	.006	1,700	9,520	.007	1,810
10	11,500	.01	3,100	10,200	.006	1,650	9,640	.01	2,590
11	11,400	.02	6,160	9,880	.009	2,400	9,920	.006	1,620
12	11,400	.01	3,080	9,760	.01	2,650	9,600	.006	1,570
13	11,400	.01	3,080	9,760	.009	2,380	9,660	.005	1,300
14	11,400	.008	2,460	9,740	.005	1,320	9,700	.004	1,050
15	11,500	.01	3,100	9,680	.006	1,570	10,000	.006	1,620
16	11,300	.01	3,050	9,640	.006	1,570	9,640	.003	783
17	11,500	.009	2,810	9,640	.005	1,300	9,620	.006	1,570
18	11,400	.008	2,460	9,680	.005	1,300	9,460	.003	756
19	11,300	.008	2,430	9,600	.004	1,030	9,520	.005	1,300
20	11,400	.008	2,460	9,720	.009	2,350	9,720	.01	2,620
21	11,300	.01	3,050	9,760	.005	1,320	9,150	.006	1,480
22	11,200	.007	2,110	9,700	.006	1,570	9,030	.008	1,940
23	11,000	.005	1,480	9,600	.005	1,300	9,020	.002	486
24	11,100	.009	2,700	9,580	.003	783	8,900	.005	1,190
25	11,100	.008	2,400	9,220	.003	756	8,810	.008	1,890
26	11,200	.01	3,020	9,500	.006	1,540	8,750	.005	1,190
27	11,100	.009	2,700	9,500	.001	270	8,500	.005	1,130
28	11,000	.02	5,940	9,680	.002	513	8,310	.003	675
29	11,200	.008	2,430	9,660	.009	2,350	8,300	.007	1,570
30	11,000	.007	2,080	9,540	.003	783	8,130	.005	1,110
31	11,100	.01	3,000	9,560	.003	783			
Monthly load (tons)			98,810			61,410			52,230

TABLE 12.—*Mean daily concentration of suspended sediment in the Colorado River at gaging station near Topock, Ariz., Oct. 1, 1925, to Sept. 30, 1934*

1925-26

Day	October	November	December	January	February	March	April	May	June	July	August	September
1												
2		0.71	0.28		0.31		0.54			0.45	0.37	
3	1.31					0.19			0.76			
4								1.06				0.56
5			.42			.20				.37		
6	.87	.47		0.29	.26		.70				.37	
7			.36			.17		.69	.62			
8					.21							.53
9	1.40	.51		.20			.84			.34	.53	
10								.88				.35
11			.32	.29	.22	.21	.94		.44	.39		
12	3.56											
13		.40									.45	.22
14			.20	.34				.77				
15												
16							1.28		.49			
17	2.61	.51			.14	.34		.72			.73	.56
18										.51		
19				.25	.13							
20						.28	1.10			1.14		
21	1.56	.49									.96	.48
22			.32						.54			
23				.29	.20	.21		.67			.75	
24	1.16						1.21			1.30		
25		.34										2.17
26					.31			.61	.64			
27	.92			.25		.54	1.10				.55	
28		.27								.53		1.86
29			.25	.26				.35				
30	.56					.58	1.00		.28			
31											.72	

1926-27

1					0.13	0.76						
2	2.03	0.42										
3							0.44	0.96		2.11	0.91	1.71
4			0.22						1.37			
5	5.74				.14	.66						
6		.28					.78	.82		1.75	1.37	2.39
7			.37		.12				1.18			
8												
9	2.27	.24				.70	1.10					
10				0.15						1.10	1.18	1.81
11			.36			.77			.69			
12	2.20							.89		.79		
13		.29			.15		1.16				1.34	4.39
14			.34				1.29	1.34				
15		.23				.64	1.23		.66			
16	1.18						1.31			1.63	2.37	* 7.91
17			.42	.16	.39							
18							1.13	.86	.64			
19	1.01					.58						
20		.24			.42		.96		.72	1.44	2.11	5.30
21							1.22					
22			.63	.20	.47	.39		1.13				
23	.84	.26								.60	1.16	
24								.79				3.86
25			.17									
26	.74		.27		1.80		.72		.72	.96		
27		.27									.72	
28			.26					.65				2.02
29				.18		.36	.90					
30	.53	.43							.72	.82		
31			.26			.45		1.18			1.76	

TABLE 12.—Mean daily concentration of suspended sediment in the Colorado River at gaging station near Topock, Ariz., Oct. 1, 1925, to Sept. 30, 1934—Continued

1927-28												
Day	October	November	December	January	February	March	April	May	June	July	August	September
1	1.09											
2		1.12						0.55				
3			0.21	0.75		0.48			0.89	0.64	0.83	
4					0.70		0.83					0.48
5	1.30	1.63						.77				
6						.41			.81			
7				1.03	.41		2.08			.58	.76	
8	1.06	.67	.53					1.17				1.25
9						.21	1.02		1.14	.98	.76	
10												
11	.72			.74	.40							1.06
12		.95						1.20	3.01			
13			.21			.34						
14			.19	.47						.63	1.16	
15		.87					.56	.72				.71
16	.43		.34						1.33			
17				.36		.46				.52		
18					.74						.53	.64
19	.42	.98					.78	1.63	1.60			
20			.24			.45						
21	.50			.41	.36					.51		
22											.49	.33
23		.85					.64	1.85	.94			
24			.32		.28	.34				.65		
25				.32			.69				.80	
26	.61	.29	.26					2.40	.97			.42
27						.43				1.20		
28				.29	.26						.55	
29	.35	.20					.94					.34
30								1.03	.84			
31			.64			.78				1.22	.74	

1928-29

Day	October	November	December	January	February	March	April	May	June	July	August	September
1			0.49			0.28	1.91	1.56				
2	0.29				0.38							
3		1.08							1.55		5.46	
4			.48			.38		1.19				
5	.30			0.59	.29		1.39			0.90		3.08
6			.64								4.48	
7		1.04										
8			.47	.62	.38	1.44	1.26			.83		3.14
9		1.10	.42					1.22	.93		4.52	
10												
11		.88	.54			.55						
12		1.35	.45	.35	.98	2.82			.69	.82		3.68
13					.56						4.16	
14							2.02	1.09				
15	.25	1.20	.40									
16						2.42		1.07	1.12	1.02	6.66	2.36
17		1.18		.46								
18	1.21				.50		1.61				5.19	
19			.41					.88				1.44
20	2.57											
21						1.89						
22					.40		1.46			.52		
23		.64		.48				.68	.82			
24						1.60			.83			1.34
25	1.87		.47	.58								
26					.36		1.14			.59		
27		.68	.31			1.28		.98			1.03	6.18
28				.58						1.10		
29	1.86		.36						1.82			
30										1.35	1.02	
31			.36					.86				

TABLE 12.—Mean daily concentration of suspended sediment in the Colorado River at gaging station near Topock, Ariz., Oct. 1, 1925, to Sept. 30, 1934—Continued

1933-34

Day	October	November	December	January	February	March	April	May	June	July	August	September
1								0.60		0.15	0.22	0.92
2			0.55	0.52					0.72	.14	.22	1.48
3					0.32	0.31	0.38			.13	.17	1.93
4		0.54								.16	.22	2.20
5	1.66		1.16					.64		.14	.67	2.28
6				.84	.47	.24			1.64	.17	.22	3.93
7	1.05	.43					.18			.12	.18	4.78
8										.17	.14	4.20
9			.59	.56				.74	.96	.22	.15	7.87
10	.91				.28	.27	.18			.18	.25	4.46
11		.45								.18	.48	3.36
12			.76					.65	.82	.15	.36	4.14
13				.48	.26	.27				.20	.24	4.50
14	4.27	.42					.18			.15	.22	4.58
15				.53				.83		.20	.29	4.81
16			.79						.99	.16	.28	5.10
17	3.90				.36	.35	.26			.15	.78	5.04
18		.54								.14	.74	4.42
19				.30				.87		.14	.64	4.04
20					.28	.32			.26	.14	.32	3.70
21	1.51		.48				.26			.15	.44	3.11
22										.15	.90	2.59
23			.46	.40				.85	.27	.18	.93	2.28
24	1.40				.24	.25	.39			.13	.76	2.17
25	.36									.16	1.12	1.84
26			.50					.72	.24	.18	.58	1.68
27				.30	.28	.21				.12	.32	1.32
28	1.28									.12	.49	1.20
29		.56						.72	.20	.06	1.54	.77
30			.40	.30					.15	.12	.78	.60
31	1.04					.20				.18	.96	

TABLE 13.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Topock, Ariz., Oct. 1, 1934, to Mar. 31, 1939

Day	October			November			December		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1.....	1,760	0.55	26,100	2,620	0.36	25,500	4,010	0.46	49,800
2.....	1,780	.71	34,100	2,700	.34	24,800	4,010	.54	58,500
3.....	3,820	1.87	193,000	2,790	.37	27,900	4,040	.53	57,800
4.....	3,690	1.10	110,000	2,820	.39	29,700	4,130	.48	53,500
5.....	3,200	.90	77,800	2,870	.37	28,700	4,290	.59	66,900
6.....	2,990	.89	71,800	2,870	.36	27,900	4,040	.47	51,300
7.....	2,900	.74	57,900	2,840	.32	24,500	4,130	.51	56,900
8.....	3,320	.72	64,500	2,820	.33	25,100	4,070	.45	49,500
9.....	3,480	.73	68,600	2,840	.32	24,500	3,970	.60	64,300
10.....	3,200	.65	56,200	2,840	.29	22,200	3,940	.46	48,900
11.....	3,110	.53	44,500	2,900	.29	22,700	3,970	.43	46,100
12.....	2,990	1.64	132,000	2,900	.29	22,700	3,880	.43	45,000
13.....	2,870	2.60	202,000	2,730	.26	19,200	3,940	.42	44,700
14.....	2,840	2.65	203,000	2,760	.36	26,800	3,600	.34	33,000
15.....	2,760	1.93	144,000	2,840	.34	26,100	3,720	.39	39,200
16.....	2,730	1.33	98,000	2,960	.28	22,400	3,480	.34	31,900
17.....	2,590	.97	67,800	3,110	.30	25,200	3,410	.37	34,100
18.....	2,450	.74	49,000	3,140	.36	30,500	4,210	.80	90,900
19.....	2,620	.69	48,800	3,110	.34	28,500	3,880	.68	71,200
20.....	2,540	.54	37,000	3,260	.34	29,900	3,940	.56	59,500
21.....	2,590	.46	32,200	3,510	.46	43,600	4,200	.50	56,700
22.....	2,420	.44	28,800	3,910	.48	50,700	4,590	.54	67,000
23.....	2,300	.43	26,700	4,040	.47	51,300	4,700	.54	68,500
24.....	2,450	.51	33,800	3,940	.62	55,300	4,730	.60	76,600
25.....	2,510	.48	32,500	3,790	.48	49,100	4,630	.44	55,000
26.....	2,480	.44	29,500	3,790	.42	43,200	4,830	.35	45,600
27.....	2,560	.43	29,700	3,940	.44	46,800	4,900	.43	56,900
28.....	2,640	.43	30,600	4,070	.55	60,400	4,940	.40	53,400
29.....	2,640	.42	29,900	4,130	.48	53,500	4,870	.34	44,700
30.....	2,730	.44	32,400	4,010	.45	48,700	4,590	.33	40,900
31.....	2,730	.40	29,500				4,300	.56	65,000
Total load (tons).....			2,122,000						
							1,017,000		
							1,683,000		

1935

	January			February			March		
	Mean discharge (second-feet)	Mean percent	Tons per day	Mean discharge (second-feet)	Mean percent	Tons per day	Mean discharge (second-feet)	Mean percent	Tons per day
1.....	4,330	0.56	65,500	3,420	0.66	60,900	5,270	0.37	52,700
2.....	4,660	.51	64,200	3,210	.54	46,800	6,150	.39	64,800
3.....	4,760	.54	69,400	2,570	.36	25,000	7,120	.40	76,900
4.....	4,730	.56	71,500	3,210	.40	34,700	7,040	.39	74,100
5.....	4,590	.55	68,200	4,170	.58	65,300	6,780	.35	64,100
6.....	4,760	.46	59,100	5,830	.47	74,000	6,510	.40	70,300
7.....	4,760	.45	57,800	5,590	.38	57,400	5,610	.32	48,500
8.....	4,800	.52	67,400	4,690	.36	45,600	5,580	.34	51,200
9.....	4,830	.42	54,800	4,790	.51	66,000	6,000	.36	58,300
10.....	4,760	.41	52,700	4,320	.36	42,000	6,620	.55	98,300
11.....	4,490	.52	63,100	1,690	.14	6,400	6,700	.44	79,600
12.....	4,630	.47	58,800	960	.04	972	6,800	.40	73,400
13.....	4,330	.36	42,100	570	.02	308	6,890	.42	78,100
14.....	4,970	.42	56,400	422	.02	227	6,720	.30	54,400
15.....	4,800	.54	70,000	747	.02	405	6,550	.38	67,200
16.....	5,110	.56	77,300	2,670	.25	18,000	6,690	.44	79,500
17.....	6,210	.68	114,000	2,840	.17	13,000	6,540	.38	67,100
18.....	7,780	.95	200,000	3,580	.33	31,900	6,430	.32	58,600
19.....	6,390	1.88	324,000	4,000	.53	57,200	6,540	.43	75,900
20.....	6,280	1.24	210,000	4,080	.38	41,900	7,060	.30	57,200
21.....	6,280	1.77	300,000	4,200	.32	36,300	6,760	.31	56,600
22.....	6,360	1.14	196,000	3,950	.40	42,700	7,060	.33	62,900
23.....	6,100	2.64	435,000	4,420	.36	43,000	7,140	.36	57,800
24.....	5,800	1.62	254,000	4,890	.37	48,800	7,020	.32	60,600
25.....	5,500	.96	143,000	4,800	.53	68,700	7,060	.27	51,500
26.....	5,200	.98	138,000	4,800	.52	67,400	6,950	.28	52,500
27.....	4,960	.88	116,000	4,810	.36	46,300	7,060	.57	109,000
28.....	4,700	.73	92,600	4,840	.34	44,400	7,020	.70	133,000
29.....	4,010	.62	67,100				6,800	.57	105,000
30.....	3,690	.68	67,800				6,840	.58	107,000
31.....	3,470	.63	59,000				7,250	.54	106,000
Total load (tons).....			3,715,000						
							1,086,000		
							2,249,000		

93

Oct. 1, 1934, to Mar. 31, 1939—Continued

1935

Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	7,500	0.44	89,700	6,730	0.26	47,200	14,200	0.32	123,000
2	7,020	.35	66,300	6,500	.25	70,900	14,500	.30	117,000
3	7,290	.31	61,000	6,730	.28	50,900	14,700	.28	111,000
4	7,100	.32	61,300	6,950	.26	48,800	15,000	.28	113,000
5	7,100	.27	51,800	7,170	.22	42,600	15,300	.29	120,000
6	7,170	.30	58,100	7,290	.24	47,200	15,500	.30	126,000
7	6,910	.25	47,300	7,100	.22	42,200	15,300	.26	107,000
8	6,730	.25	45,400	6,880	.21	39,000	15,300	.28	116,000
9	7,210	.40	77,900	6,800	.21	38,600	15,500	.29	121,000
10	7,290	.46	90,500	7,100	.20	38,300	15,400	.34	141,000
11	6,580	.46	81,700	6,800	.20	36,700	15,400	.24	99,700
12	6,540	.66	117,000	6,690	.19	34,300	15,900	.32	137,000
13	7,330	.82	162,000	6,650	.24	43,100	15,100	.28	114,000
14	6,990	.77	145,000	6,690	.27	48,800	16,200	.26	114,000
15	6,800	.99	182,000	6,280	.22	37,300	16,300	.32	141,000
16	7,020	1.00	190,000	6,070	.19	31,100	16,300	.31	136,000
17	6,840	1.00	185,000	6,180	.22	36,700	16,600	.28	125,000
18	6,360	1.24	213,000	6,250	.27	45,600	16,900	.27	123,000
19	6,500	.91	160,000	6,280	.25	42,400	17,000	.28	129,000
20	6,430	.70	122,000	7,060	.24	45,700	17,200	.26	121,000
21	6,800	.60	110,000	7,250	.27	52,900	17,600	.28	133,000
22	7,170	.54	105,000	6,580	.20	35,700	17,300	.32	149,000
23	6,950	.42	78,800	6,730	.23	41,800	17,700	.32	153,000
24	6,650	.48	86,200	10,200	.40	110,000	18,300	.30	148,000
25	6,620	.30	53,600	12,700	.47	161,000	16,400	.24	106,000
26	6,800	.26	47,700	13,600	.45	165,000	13,800	.32	119,000
27	6,760	.26	47,500	13,700	.35	129,000	13,700	.23	85,100
28	6,540	.57	95,300	14,000	.38	143,000	13,800	.26	96,900
29	6,690	.26	47,000	14,000	.30	113,000	13,900	.26	97,600
30	6,840	.29	53,600	14,100	.38	145,000	13,900	.27	101,000
31				14,400	.30	117,000			
Total load (tons)		2,932,000			2,082,000				3,623,000

Total load (tons)----	2, 932, 000
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	3,623,000
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1935

	July			August			September		
1.	14,000	0.26	98,300	9,280	0.18	45,100	9,560	0.14	36,100
2.	14,100	.29	110,000	9,480	.20	51,200	9,520	.14	36,000
3.	13,900	.26	97,600	9,400	.21	53,300	9,600	.18	46,700
4.	14,100	.36	137,000	9,480	.22	56,300	9,560	.24	61,900
5.	13,900	.26	97,600	9,400	.16	40,600	9,800	.02	243,000
6.	14,000	.26	98,300	9,600	.16	41,500	9,480	.91	233,000
7.	14,100	.26	100,000	9,560	.28	72,300	9,480	.78	200,000
8.	13,600	.24	88,100	9,400	.39	99,000	9,560	.40	103,000
9.	14,500	.26	102,000	9,400	.20	50,800	9,800	.81	214,000
10.	13,000	.26	91,300	9,600	.16	41,500	9,400	1.00	254,000
11.	9,720	.26	68,200	9,640	.21	54,700	9,480	.92	236,000
12.	9,720	.18	47,200	9,600	.22	57,000	9,480	.77	197,000
13.	9,760	.18	47,400	9,720	.17	44,600	9,440	1.03	263,000
14.	9,760	.17	44,800	9,560	.22	56,800	9,320	1.33	335,000
15.	9,480	.21	53,800	9,520	.25	64,300	9,120	.79	195,000
16.	9,680	.23	60,100	9,360	.17	43,000	9,360	.28	70,800
17.	9,520	.16	41,100	9,680	.19	49,700	9,280	.32	80,200
18.	9,680	.19	49,700	9,720	.23	60,400	9,480	.22	56,300
19.	9,760	.16	42,200	9,360	.24	60,600	9,400	.20	50,800
20.	9,800	.20	52,900	9,320	.18	45,300	9,720	.21	55,100
21.	9,640	.20	52,100	9,400	.20	50,800	9,560	.22	56,800
22.	9,640	.21	54,600	9,360	.25	63,200	9,600	.24	62,200
23.	9,680	.22	57,500	9,400	.15	38,100	9,440	.20	51,000
24.	9,240	.23	57,400	9,640	.14	36,500	9,440	.24	61,200
25.	9,320	.26	65,400	9,640	.16	41,600	9,320	.23	57,900
26.	9,480	.26	66,600	9,560	.15	38,700	9,520	.20	51,400
27.	9,600	.40	104,000	9,640	.15	39,000	9,280	.22	55,100
28.	9,480	.23	58,900	9,560	.15	38,700	9,560	.26	67,100
29.	9,600	.31	80,400	9,480	.19	48,600	9,640	.26	67,700
30.	9,000	.24	58,300	9,280	.13	32,600	9,440	.21	53,500
31.	9,120	.22	54,200	9,560	.14	36,100			
Total load (tons)			2,237,000			1,552,000			3,551,000

Total load for year

27,800,000

TABLE 13.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Topock, Ariz., Oct. 1, 1934, to Mar. 31, 1939—Continued

Day	October			November			December		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	9,360	0.26	65,700	9,430	0.24	61,400	8,050	0.22	47,800
2	9,440	.21	53,500	9,280	.25	62,600	5,040	.14	19,100
3	9,640	.27	70,300	9,440	.28	71,400	4,900	.13	17,200
4	9,680	.24	62,700	9,480	.30	76,800	4,870	.13	17,100
5	9,600	.20	51,800	9,680	.31	81,000	4,830	.14	18,300
6	9,520	.28	72,000	9,120	.26	64,000	4,700	.14	17,800
7	9,640	.58	151,000	9,280	.24	60,100	4,730	.13	16,600
8	9,640	1.62	422,000	9,440	.22	56,100	4,700	.15	19,000
9	9,400	1.71	434,000	9,120	.27	66,500	4,730	.20	25,500
10	9,480	1.79	458,000	9,640	.31	80,700	4,700	.18	22,800
11	9,520	2.12	545,000	9,320	.26	65,400	4,700	.18	22,800
12	9,320	2.34	589,000	9,520	.25	64,300	4,800	.14	18,100
13	9,240	2.00	499,000	9,400	.29	73,600	4,560	.16	19,700
14	9,240	1.24	309,000	9,520	.26	66,800	4,660	.19	23,900
15	9,280	.51	128,000	9,440	.30	76,500	4,530	.24	29,300
16	9,640	.30	78,100	9,240	.22	54,900	4,700	.31	39,300
17	9,480	.25	64,000	9,280	.20	50,100	4,530	.23	28,100
18	9,120	.28	69,000	9,280	.28	70,100	4,730	.19	24,300
19	9,080	.26	63,700	9,480	.28	71,700	4,630	.16	20,000
20	9,440	.27	68,800	9,520	.29	74,500	4,630	.14	17,500
21	9,560	.31	80,000	9,360	.32	80,900	4,700	.12	15,200
22	9,520	.30	77,100	9,360	.27	68,200	4,630	.12	15,000
23	9,560	.34	87,700	9,540	.23	59,200	4,560	.12	14,800
24	9,160	.40	98,900	9,470	.24	61,400	4,660	.15	18,900
25	9,360	.26	65,700	9,640	.23	59,900	4,630	.16	20,000
26	9,240	.27	67,400	9,320	.21	52,800	4,730	.17	21,700
27	9,560	.28	72,300	9,520	.29	74,500	4,700	.19	24,100
28	9,280	.26	65,100	9,560	.30	77,400	4,590	.23	28,500
29	9,240	.27	67,400	9,440	.26	66,300	4,630	.17	21,200
30	9,160	.24	59,300	9,360	.25	63,200	4,900	.22	29,100
31	9,520	.33	84,800	-----	-----	-----	4,660	.15	18,900
Total load (tons)	-----	-----	5,080,000	-----	-----	2,712,000	-----	-----	691,600

1936

Day	January			February			March		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	4,830	0.19	24,800	4,490	0.16	19,400	6,000	0.17	27,500
2	4,560	.19	23,400	4,700	.11	14,000	6,320	.18	30,700
3	4,760	.20	25,700	4,800	.18	23,300	6,070	.14	23,000
4	4,660	.16	20,100	4,760	.18	23,100	6,280	.15	25,400
5	4,700	.20	25,400	4,660	.19	23,900	6,500	.14	24,600
6	4,700	.20	25,400	4,730	.16	20,400	6,920	.25	46,700
7	4,630	.21	26,200	4,590	.19	23,500	7,260	.16	31,400
8	4,630	.16	20,000	4,760	.19	24,400	8,660	.22	51,400
9	4,490	.20	24,200	4,700	.22	27,900	8,660	.16	37,400
10	4,730	.20	25,500	4,660	.20	25,200	8,820	.20	47,600
11	4,730	.16	20,400	4,730	.22	28,100	9,340	.19	47,900
12	4,590	.18	22,300	4,700	.25	31,700	9,460	.19	48,500
13	4,730	.24	30,600	5,280	.26	37,100	9,460	.16	40,900
14	4,700	.23	29,200	6,210	.16	26,800	9,620	.23	59,700
15	4,760	.18	23,100	6,180	.11	18,400	9,540	.18	46,400
16	4,760	.15	19,300	6,180	.16	26,700	9,780	.24	63,400
17	4,830	.24	31,300	6,360	.17	29,200	9,540	.18	46,400
18	4,730	.20	25,500	6,540	.21	37,100	9,420	.16	40,700
19	4,760	.20	25,700	6,620	.18	32,200	9,960	.22	59,200
20	4,730	.18	23,000	6,620	.18	32,200	9,620	.22	57,100
21	4,760	.17	21,800	6,320	.16	27,300	9,620	.14	36,400
22	4,630	.18	22,500	5,920	.19	30,400	9,580	.15	38,800
23	4,630	.14	17,500	5,960	.14	22,500	9,640	.25	65,100
24	4,700	.13	16,500	5,780	.16	25,000	9,480	.16	41,000
25	4,700	.18	22,800	5,780	.17	26,500	9,400	.16	40,600
26	4,630	.19	23,800	5,960	.20	32,200	9,720	.20	52,500
27	4,700	.16	20,300	5,780	.17	26,500	9,600	.24	62,200
28	4,530	.19	23,200	5,740	.19	29,500	9,600	.18	46,700
29	4,800	.18	23,300	6,000	.16	25,900	9,400	.18	45,700
30	4,700	.19	24,100	-----	-----	-----	9,640	.17	44,300
31	4,630	.20	25,000	-----	-----	-----	9,670	.19	49,600
Total load (tons)	-----	-----	731,900	-----	-----	770,400	-----	-----	1,379,000

TABLE 13.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Topock, Ariz., Oct. 1, 1934, to Mar. 31, 1939—Continued

1936

Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	9,690	0.19	49,700	10,600	0.80	229,000	8,050	0.22	47,800
2	9,720	.19	49,900	9,540	.88	227,000	8,960	.19	46,000
3	9,400	.17	43,100	8,170	.40	88,200	8,920	.25	60,200
4	9,160	.19	47,000	9,520	.22	56,500	9,000	.18	43,700
5	9,840	.22	58,500	9,720	.22	57,700	9,240	.20	49,900
6	9,640	.22	57,300	10,000	.32	86,400	9,200	.18	44,700
7	9,360	.18	45,500	9,960	.27	72,600	9,280	.12	30,100
8	9,400	.25	63,400	9,760	.22	58,000	8,840	.14	33,400
9	9,520	.15	38,600	9,440	.20	51,000	8,880	.15	36,000
10	9,360	.18	45,500	9,440	.23	58,600	8,880	.18	43,100
11	9,200	.16	39,700	9,800	.19	50,300	8,840	.17	40,600
12	9,560	.17	43,900	9,760	.18	47,400	8,560	.13	30,100
13	9,440	.16	40,800	8,400	.15	34,000	8,560	.15	34,700
14	9,200	.14	34,800	8,170	.16	35,300	7,860	.15	31,800
15	9,480	.19	48,600	9,240	.14	34,900	8,720	1.15	35,300
16	9,360	.18	45,500	9,200	.17	42,200	8,960	.16	38,700
17	9,520	.16	41,100	8,290	.14	31,300	9,320	.16	40,300
18	9,480	.15	38,400	7,980	.12	25,900	9,280	1.16	40,100
19	9,400	.17	43,100	8,020	.18	39,000	9,880	.15	40,000
20	9,520	.16	41,100	8,130	.24	52,700	10,200	.15	41,300
21	9,440	.14	35,700	8,960	.30	72,600	9,840	.13	34,500
22	9,160	.12	29,700	7,900	.22	46,900	10,200	.16	44,100
23	9,440	.22	56,100	7,330	.20	39,600	10,300	.16	44,500
24	9,640	.48	125,000	7,210	.18	35,000	10,400	.17	47,700
25	9,600	1.26	327,000	7,520	.20	40,600	10,800	.14	40,800
26	9,600	1.37	355,000	7,670	.14	29,000	10,600	.13	37,200
27	9,700	1.50	393,000	7,980	.22	47,400	10,800	.18	52,500
28	9,700	1.44	377,000	7,900	.18	38,400	10,700	.15	43,300
29	10,200	1.26	347,000	8,250	.13	28,900	10,700	.16	46,200
30	10,600	.79	226,000	8,720	.17	40,000	11,000	.14	41,600
31				6,780	.14	25,600			
Total load (tons)			3,187,000				1,822,000		
							1,240,000		

1936

	July			August			September		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	11,100	0.13	39,000	10,600	0.12	34,300			
2	11,000	.15	44,600				9,000	0.12	29,200
3	10,800	.16	46,700	10,600	.16	45,800			
4	11,100	.14	42,000				9,320	.11	27,700
5	10,900	.11	32,400	10,100	.10	27,300			
6	11,000	1.13	38,600						
7	11,000	1.13	38,600	9,760	.16	42,200	9,280	.10	25,100
8	10,700	.15	43,300						
9	10,600	.14	40,100				9,080	.08	19,600
10	10,500	.14	39,700	10,100	.14	38,200	9,400	.12	30,500
11	11,000	.16	47,500						
12	11,100	1.15	45,000	9,520	.14	36,000	8,960	.10	24,200
13	10,900	.14	41,200				9,400	.14	35,500
14	10,900	.10	29,400	8,960	.14	33,900	9,120	.12	29,500
15	10,700	.14	40,400						
16	10,500	1.15	42,500				9,600	.15	38,900
17	10,600	.15	42,900	9,240	.14	34,900			
18	10,700	.16	46,200				9,200	.11	27,300
19	10,600	1.15	42,900	9,120	.13	32,000			
20	10,600	.14	40,100						
21	10,500	.13	36,900	9,040	.12	29,300	9,160	.14	34,600
22	10,500	1.12	34,000						
23	10,400	.12	33,700	9,040	.12	29,300	8,560	.14	32,300
24	10,400	1.10	28,100				8,800	.15	35,600
25	10,400	.08	22,500	9,000	.14	34,000			
26	10,500	.15	42,500				8,680	.20	46,900
27	10,800	.14	40,800				8,170	.18	39,700
28	10,500	.12	34,000	9,240	.13	32,400	8,090	.14	30,600
29	10,900	1.13	38,300						
30	10,900	.14	41,200				7,900	.14	29,900
31	10,700	1.13	37,600	9,240	.08	20,000			
Total load (tons)			1,213,000				1,030,000		
							953,400		

1 Estimated.

TABLE 13.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Topock, Ariz., Oct. 1, 1934, to Mar. 31, 1939—Continued

Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1.....	7,780	1 0.16	31,500	6,210	0.13	21,800	5,110	0.20	27,600
2.....	7,590	.16	32,800	6,100	.12	19,800	5,110	.25	34,500
3.....	7,670	1 17	35,200	6,070	.16	26,200	4,940	.20	26,700
4.....	7,780	.19	39,900	5,960	.12	19,300	4,830	.18	23,500
5.....	7,940	1 20	42,900	6,070	.13	21,300	5,040	.20	27,200
6.....	7,980	.20	43,100	6,140	.14	23,200	4,800	.17	22,000
7.....	7,670	1 19	39,300	6,100	.20	32,900	4,660	.26	32,700
8.....	7,290	.17	33,500	6,030	.14	22,800	4,590	.17	21,100
9.....	7,660	.16	30,500	5,640	.18	27,400	4,830	.15	19,600
10.....	7,290	1 13	25,600	5,920	.20	32,000	4,970	.19	25,500
11.....	7,360	.13	25,800	5,890	.21	33,400	4,660	.19	23,900
12.....	6,910	1 14	26,100	5,920	.20	32,000	4,730	.25	31,900
13.....	6,760	.15	27,400	5,820	.17	26,700	4,870	.15	19,700
14.....	7,250	1 15	29,400	6,180	.20	33,400	4,630	.18	22,600
15.....	6,950	.10	18,800	6,250	.17	28,700	4,660	.13	16,400
16.....	7,440	.13	26,100	5,850	.17	26,900	4,970	.15	20,100
17.....	6,950	.13	24,400	6,800	.20	36,700	5,110	.17	23,500
18.....	6,990	.10	18,900	6,030	.16	26,000	5,040	.17	23,100
19.....	7,550	.12	24,500	6,030	.17	27,700	4,870	.23	30,200
20.....	7,170	.14	27,100	5,740	.16	24,800	4,700	.16	20,300
21.....	6,880	.18	33,400	5,710	.11	17,000	4,830	.19	24,800
22.....	6,840	.12	22,200	5,740	.14	21,700	4,590	.13	16,100
23.....	6,910	.15	28,000	5,820	.12	18,900	4,760	.15	19,300
24.....	6,180	.12	20,000	5,740	.18	27,900	4,760	1 13	16,700
25.....	6,470	.14	24,500	5,710	.17	26,200	4,760	.11	14,100
26.....	7,140	.11	21,200	5,420	.15	22,000	4,760	.18	23,100
27.....	6,470	.14	24,500	5,110	.14	19,300	4,940	.13	17,300
28.....	6,320	.10	17,100	4,900	.12	15,900	5,220	.17	24,000
29.....	7,100	.12	23,000	5,110	.14	19,300	4,900	.11	14,600
30.....	6,840	.10	18,500	5,180	.12	16,800	4,870	.16	21,000
31.....	6,280	.11	18,700				5,460	.22	32,400
Total load (tons).....			853,900			748,000			715,400

1937

Day	January			February			March		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1.....	5,820	0.22	34,600	4,590	0.24	29,700	6,910	0.22	41,000
2.....	5,080	.20	27,400	4,010	.14	15,200	6,840	.14	25,900
3.....	3,880	1 19	19,900	4,830	.28	36,500	6,840	.22	40,600
4.....	4,760	.23	29,600	4,940	.26	34,700	6,650	.22	39,500
5.....	4,260	.17	19,600	4,830	.28	36,500	6,690	.18	32,500
6.....	4,870	.22	28,900	4,870	1 23	30,200	6,650	.21	37,700
7.....	5,250	.26	36,900	4,970	.18	24,200	6,730	.18	32,700
8.....	4,970	1 26	34,900	4,900	.24	31,800	6,730	.16	29,100
9.....	4,730	.25	31,900	4,940	.20	26,700	7,250	.20	39,200
10.....	4,660	.24	30,200	4,870	.22	28,900	7,480	.13	26,300
11.....	4,490	.22	26,700	4,830	.22	28,700	8,210	.21	46,600
12.....	3,630	.16	15,700	5,080	.24	32,900	9,080	.25	61,300
13.....	4,900	.25	33,100	5,080	.28	38,400	9,320	.22	55,400
14.....	4,940	.20	26,700	5,180	.30	42,000	9,440	.22	56,100
15.....	4,800	.18	23,300	5,320	.34	48,800	9,120	.18	44,300
16.....	4,560	.22	27,100	5,110	.20	27,600	9,280	.15	37,600
17.....	4,560	.18	22,200	5,220	.20	28,200	9,360	.17	43,000
18.....	4,300	.19	22,100	5,530	.23	34,300	9,320	.24	60,400
19.....	4,170	.16	18,000	5,530	.26	38,800	9,120	.24	59,100
20.....	4,830	.24	31,300	5,500	.23	34,200	8,600	.13	30,200
21.....	4,730	1 23	29,400	5,320	.22	31,600	8,680	1 20	46,900
22.....	5,000	.28	37,800	5,110	.20	27,600	8,480	1 20	45,800
23.....	4,660	.24	30,200	5,140	.20	27,500	8,760	.22	52,000
24.....	4,700	.25	31,700	5,110	.19	26,200	8,680	.23	53,900
25.....	4,300	.21	24,400	5,220	.21	29,600	8,960	.24	58,100
26.....	3,970	.18	19,300	5,600	.22	33,300	7,400	.23	46,000
27.....	4,800	.23	29,800	5,960	.24	38,600	7,060	.16	30,500
28.....	4,700	.20	25,400	6,470	.26	45,400	7,210	.28	54,500
29.....	4,660	.17	21,400				7,860	.20	42,400
30.....	4,730	.16	20,400				7,860	.26	55,200
31.....	4,800	.18	23,300				8,520	.24	55,200
Total load (tons).....			833,200			908,400			1,379,000

¹ Estimated.

TABLE 13.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Topock, Ariz., Oct. 1, 1934, to Mar. 31, 1939—Continued

Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	8,760	0.20	47,300	9,320	0.18	45,300	8,250	0.08	17,800
2	9,000	1.18	43,700	9,600	.10	25,900	8,090	.10	21,800
3	9,240	.16	39,900	9,640	.12	31,200	7,900	.11	23,500
4	8,940	1.18	43,400	9,680	.10	26,100	7,940	.10	21,400
5	8,640	.19	44,300	9,280	.10	25,100	8,170	.12	26,500
6	8,680	.19	44,500	8,880	.08	19,200	8,440	.12	27,300
7	8,920	.21	50,600	9,480	.14	35,800	8,920	.12	28,900
8	8,600	.16	37,200	9,600	.14	36,300	8,480	.10	22,900
9	8,720	.16	37,700	9,200	.12	29,800	8,370	.11	24,900
10	8,520	.18	41,400	9,040	.12	29,300	8,480	.10	22,900
11	8,760	.16	37,800	9,200	.14	34,800	9,200	.12	29,800
12	8,760	.16	37,800	9,320	.14	35,200	9,360	.12	30,300
13	8,480	.16	36,600	9,240	.15	37,400	9,320	.11	27,700
14	8,960	.18	43,500	9,080	.12	29,400	8,920	.09	21,700
15	8,760	.13	30,700	8,560	.15	34,700	8,840	.07	16,700
16	9,200	.16	39,700	8,290	1.12	26,900	8,840	.10	23,900
17	9,040	1.18	43,900	8,330	.10	22,500	8,760	.10	23,700
18	8,760	.20	47,300	8,330	.14	31,500	9,080	.11	27,000
19	8,760	.18	42,600	8,050	.14	30,400	9,760	.10	26,400
20	9,120	.14	34,500	7,820	.13	27,400	10,700	.10	28,900
21	8,920	.14	33,700	7,780	.10	21,000	10,200	1.10	27,500
22	9,080	.16	39,200	7,860	.11	23,300	9,880	.09	24,000
23	8,960	.19	46,000	7,900	.11	23,500	10,000	.08	21,600
24	8,960	.17	41,100	7,670	.08	16,600	9,880	.08	21,300
25	9,000	.24	58,300	7,590	.10	20,500	10,500	.16	45,400
26	9,320	.22	55,400	7,590	.10	20,500	10,600	.07	20,000
27	9,000	.18	43,700	7,780	.11	23,100	10,700	.10	28,900
28	9,280	.15	37,600	7,630	.12	24,700	10,700	.07	20,200
29	8,880	.19	45,600	7,860	.11	23,300	10,800	1.08	23,300
30	8,960	.24	58,100	8,050	.09	19,600	10,700	.09	26,000
31				8,330	.10	22,500			
Total load (tons)			1,283,000						752,200

1937

Day	July			August			September		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	10,700	0.12	34,700	10,200	0.11	30,300	9,560	0.08	20,600
2	10,300	.08	22,200	10,300	.11	30,600	9,880	.08	21,300
3	10,700	.08	23,100	10,600	.11	31,500	10,100	.08	21,800
4	10,300	.08	22,200	10,600	1.11	31,500	10,500	.09	25,500
5	10,500	.09	25,500	10,500	.11	31,200	9,680	.10	26,100
6	10,500	.11	31,200	10,400	.08	22,500	9,640	.09	23,400
7	10,500	.10	28,400	10,200	.08	22,000	9,520	.06	15,400
8	10,400	.10	28,100	10,400	1.09	25,300	9,840	.10	26,600
9	10,400	.10	28,100	10,400	.10	28,100	9,680	.11	28,700
10	10,700	.09	26,000	10,400	.08	22,500	9,600	.10	25,900
11	11,000	1.09	26,700	10,300	.10	27,800	9,400	.08	20,300
12	10,700	.08	23,100	10,300	.08	22,200	9,240	.08	20,000
13	10,500	.08	22,700	10,200	.08	22,000	9,280	.08	20,000
14	10,500	.09	25,500	10,300	.06	16,700	9,200	.11	27,300
15	10,500	1.10	28,400	10,300	.08	22,200	8,960	.12	29,000
16	10,300	.11	30,600	10,500	.10	28,400	8,920	.10	24,100
17	10,500	.08	22,700	10,700	.10	28,900	8,520	.06	13,800
18	10,500	.12	34,000	10,600	.09	25,800	8,520	.10	23,000
19	10,300	1.10	27,800	10,500	.10	28,400	8,370	1.08	18,100
20	10,300	.10	27,800	10,500	.08	22,700	8,250	.07	15,600
21	10,300	.08	22,200	10,800	.16	46,700	8,330	.08	18,000
22	10,100	.08	21,800	10,800	.09	26,200	8,330	.12	27,000
23	10,400	.08	22,500	10,700	.07	20,200	8,370	.12	27,100
24	10,400	.10	28,100	11,000	.09	26,700	8,400	.12	27,200
25	10,300	1.10	27,800	10,600	.16	45,800	7,980	.11	23,700
26	10,300	.11	30,600	10,500	.09	25,500	7,980	.10	21,500
27	10,400	.10	28,100	10,300	.10	27,800	7,860	.12	25,500
28	10,600	.11	31,500	10,200	.11	30,300	7,820	.09	19,000
29	10,500	.09	25,500	9,920	.08	21,400	8,090	.10	21,500
30	10,600	.12	34,300	9,880	.09	24,000	7,980	.10	21,800
31	10,100	.11	30,000	9,600	.14	36,300			
Total load (tons)			841,200						678,800

¹ Estimated.

TABLE 13.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Topock, Ariz., Oct. 1, 1934, to Mar. 31, 1939—Continued

Day	October			November			December		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1.....	8,120	0.10	21,900	7,330	0.08	15,800	6,500	0.10	17,600
2.....	8,210	.10	22,200	7,670	.08	16,600	6,730	.09	16,400
3.....	8,210	.08	17,700	7,670	.10	20,700	6,580	.12	21,300
4.....	8,130	.14	30,700	7,360	.08	15,900	6,390	.16	27,600
5.....	8,080	.10	21,800	7,440	.10	20,100	6,100	.13	21,400
6.....	8,020	.10	21,700	7,600	.12	24,600	5,960	.10	16,100
7.....	8,020	.08	17,300	7,360	.11	21,900	5,670	.09	13,800
8.....	8,020	.10	21,700	6,990	.15	28,300	6,070	.13	21,300
9.....	8,090	.12	26,200	6,320	.10	17,100	6,470	.13	22,700
10.....	7,980	.10	21,500	6,840	.13	24,000	6,800	.14	25,700
11.....	8,020	.11	23,800	7,140	.10	19,300	7,060	.14	26,700
12.....	8,090	.12	26,200	6,910	.12	22,400	6,950	.17	31,900
13.....	8,050	.09	19,600	6,210	.09	15,100	6,800	.14	25,700
14.....	8,170	.08	17,600	6,580	.12	21,300	5,710	.14	21,600
15.....	8,050	.09	19,600	6,540	.08	14,100	6,250	.16	27,000
16.....	8,290	.10	22,400	6,210	.08	13,400	6,500	1.16	28,100
17.....	8,050	.12	26,100	6,840	.12	22,200	6,390	.15	25,900
18.....	8,090	.10	21,800	7,020	.10	19,000	6,320	.15	25,600
19.....	8,090	.10	21,800	6,990	.10	18,900	6,180	.19	31,700
20.....	7,900	.11	23,500	6,540	.08	14,100	6,070	.20	32,800
21.....	7,710	.12	25,000	6,360	.09	15,500	6,070	.17	27,900
22.....	7,330	.09	17,800	6,210	.12	20,100	6,070	.21	34,400
23.....	7,290	.12	23,600	6,320	.10	17,100	6,250	.18	30,400
24.....	7,330	.12	23,700	6,650	.11	19,800	6,250	.15	25,300
25.....	7,250	.12	23,500	6,730	.08	14,500	6,500	1.22	38,600
26.....	7,520	.08	16,200	6,500	.07	12,300	6,140	.21	34,800
27.....	7,780	.10	21,000	6,430	.09	15,600	6,650	.19	34,100
28.....	7,710	.08	16,700	6,180	.11	18,400	6,030	.14	22,800
29.....	7,580	.08	16,400	6,390	.13	22,400	6,000	.14	22,700
30.....	7,440	.12	24,100	6,070	.08	13,100	6,140	.15	24,900
31.....	7,480	.11	22,200				6,280	.14	23,700
Total load (tons).....			675,300				800,500		

1938									
Day	January			February			March		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1.....	6,030	0.15	24,400	5,740	0.10	15,500	6,620	0.10	17,900
2.....	5,640	.12	18,300	6,450	.16	27,800	6,470	0.10	17,500
3.....	5,960	.14	22,500	6,500	.22	38,600	6,950	1.15	28,100
4.....	5,390	.13	18,900	6,090	.13	23,500	7,480	1.25	50,500
5.....	5,920	.14	22,400	6,620	.17	30,400	6,360	.24	41,200
6.....	6,030	.14	22,800	6,280	.20	33,900	5,140	.11	15,300
7.....	5,820	.15	23,600	6,360	.20	34,300	5,360	.13	18,800
8.....	6,030	.22	35,800	5,670	.14	21,400	5,420	.11	16,100
9.....	6,210	.16	26,800	6,650	.20	35,900	5,670	.14	21,400
10.....	6,000	.14	22,700	6,910	.20	37,300	5,850	.13	20,500
11.....	5,220	.14	19,700	6,650	.12	21,500	5,850	.15	23,700
12.....	5,740	.13	20,100	6,390	.18	31,100	5,560	.08	12,000
13.....	6,030	.10	16,300	6,390	.16	27,600	6,250	.08	13,500
14.....	6,320	.13	22,200	6,320	.11	18,800	7,400	.12	24,000
15.....	6,280	.09	15,300	5,710	.10	15,400	6,990	.10	18,900
16.....	6,320	.13	22,200	6,760	.15	27,400	7,400	.12	24,000
17.....	6,070	.11	18,000	6,620	.16	28,600	7,210	.10	19,500
18.....	5,670	.11	16,800	6,140	.19	31,500	7,360	.15	29,800
19.....	6,470	.14	24,500	6,140	.16	26,500	7,440	.15	30,100
20.....	6,990	.12	22,600	6,540	.16	28,300	7,590	.09	18,400
21.....	6,850	.12	22,200	6,180	.17	28,400	8,210	.17	37,700
22.....	6,390	.14	24,200	5,280	.12	17,100	8,290	.15	33,600
23.....	6,000	.16	25,900	5,960	.18	29,000	8,330	.16	36,000
24.....	5,820	.17	26,700	6,000	.14	22,700	8,600	.16	37,200
25.....	5,460	.12	17,700	6,070	.13	21,300	8,640	.16	37,300
26.....	6,100	.22	36,200	5,780	.13	20,300	8,840	.14	33,400
27.....	6,320	.15	25,600	5,740	.13	20,100	9,080	.16	39,200
29.....	6,100	.17	28,000	6,180	.14	23,400	9,480	.14	35,800
28.....	6,000	.14	22,700				9,160	.13	32,200
30.....	6,250	.20	33,800				9,160	.20	49,500
31.....	6,250	.18	30,400				9,160	.15	37,100
Total load (tons).....			729,300	737,600			870,200		

TABLE 13.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Topock, Ariz., Oct. 1, 1934, to Mar. 31, 1939—Continued

1938									
Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1.....	9,160	0.17	42,000	9,360	0.10	25,300	8,440	0.10	22,800
2.....	9,040	.12	29,300	9,360	.12	30,300	8,440	.10	22,800
3.....	9,160	.13	32,200	9,440	.14	35,700	8,520	.14	32,200
4.....	9,000	.14	34,000	9,480	.15	38,400	9,080	.12	29,400
5.....	9,040	.24	58,600	9,360	1.16	40,400	9,120	1.12	29,500
6.....	9,120	.15	36,900	9,400	.16	40,600	9,080	.12	29,400
7.....	9,200	.15	37,300	9,360	.15	37,900	9,040	.15	36,600
8.....	9,200	.16	39,700	9,400	.13	33,000	9,120	.12	29,500
9.....	9,160	.11	27,200	9,360	.11	27,800	8,840	.15	35,800
10.....	9,240	.10	24,900	9,360	.14	35,400	8,880	1.19	45,600
11.....	9,280	.10	25,100	9,320	.10	25,200	9,120	.19	46,800
12.....	9,320	.10	25,200	9,040	.11	26,800	9,000	.14	34,000
13.....	9,280	.14	35,100	8,480	.11	25,200	9,000	.11	26,700
14.....	9,240	.10	24,900	8,480	.08	18,300	9,240	.11	27,400
15.....	9,480	.14	35,800	8,520	.09	20,700	9,160	.10	24,700
16.....	9,320	.10	25,200	8,520	.06	13,800	9,200	.09	22,400
17.....	9,400	.14	35,700	8,370	.10	22,600	9,040	.12	29,300
18.....	9,560	.10	25,800	8,400	.12	27,200	9,160	.15	37,100
19.....	11,000	.12	35,600	8,370	.11	24,900	9,120	.16	39,400
20.....	11,400	.16	49,200	8,290	.10	22,400	9,120	.15	36,900
21.....	11,600	.13	40,700	8,210	.10	22,200	9,200	1.12	29,800
22.....	10,300	.10	27,800	8,370	.09	20,300	9,200	1.10	24,800
23.....	9,400	.09	22,800	8,370	.11	24,900	9,240	.08	20,000
24.....	9,400	.08	20,300	8,250	.12	26,700	9,360	.07	17,700
25.....	8,440	.09	20,500	8,210	.08	17,700	12,700	.24	82,300
26.....	9,600	.09	23,300	8,480	.09	20,600	14,100	.14	53,300
27.....	9,480	.08	20,500	8,330	.10	22,500	14,100	.14	53,300
28.....	9,360	.12	30,300	8,210	.09	20,000	14,600	.17	67,000
29.....	9,360	.08	20,200	8,400	1.08	18,100	15,400	.18	74,800
30.....	9,360	.10	25,300	8,640	.07	16,300	10,100	.11	30,000
31.....				8,370	.09	20,300			
Total load (tons).....			931,400						
</									

TABLE 13.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Colorado River at gaging station near Topock, Ariz., Oct. 1, 1934, to Mar. 31, 1939—Continued

Day	1938								
	October			November			December		
	Mean discharge (second-foot)	Suspended sediment Mean percent	Suspended sediment Tons per day	Mean discharge (second-foot)	Suspended sediment Mean percent	Suspended sediment Tons per day	Mean discharge (second-foot)	Suspended sediment Mean percent	Suspended sediment Tons per day
1.....	8,600	0.11	25,500	15,200	0.18	73,900	7,430	0.01	2,010
2.....	8,600	.12	27,900	15,000	.17	68,800	7,500	.01	2,230
3.....	8,440	.10	22,800	16,200	.19	83,100	7,500	.01	1,420
4.....	8,600	.10	23,200	17,500	.18	85,000	7,430	.01	1,000
5.....	8,400	.12	27,200				7,680	.01	1,870
6.....				17,900	.24	116,000	7,500	.01	1,220
7.....	8,090	.16	34,900	17,600	.19	90,300			
8.....							6,060	.00	-----
9.....							6,000	.00	-----
10.....				17,400	.14	65,800	6,060	.01	1,640
11.....				17,300	.15	70,100			
12.....				17,300	.10	46,700	5,430	.01	1,170
13.....	12,900	.15	52,200	17,400	.09	43,700			
14.....	13,000	.09	31,200	17,400	.13	61,100	9,400	.19	48,200
15.....	12,800	.12	41,500	17,300	.14	65,400	10,700	.13	37,600
16.....	13,100	.18	63,700	15,600	.08	35,800	6,950	.01	1,310
17.....	13,000	.25	87,800	9,790	.05	12,400	6,590	.00	-----
18.....	13,100	.18	63,700	7,620	.04	9,260	6,350	.00	-----
19.....	13,100	.18	63,700	7,560	.04	7,550	5,660	.00	-----
20.....	12,800	.18	62,200	7,500	.04	7,700	5,600	.01	1,360
21.....	12,900	.17	59,200	7,700	.04	7,690	6,000	.00	-----
22.....	13,000	.16	56,200	7,680	.02	3,730			
23.....	13,000	.18	63,200						
24.....	12,900	.14	48,800	7,620	.02	3,290	6,150	.00	-----
25.....	13,300	.16	58,300	7,430	.02	3,210			
26.....	14,600	.16	63,100	7,500	.01	2,230	5,600	.00	-----
27.....	14,800	.13	51,900	7,560	.01	2,040	4,930	.00	-----
28.....	14,800	.16	63,900	7,560	.01	2,040	4,650	.01	879
29.....	15,000	.11	44,600	7,500	.01	1,820	5,770	.01	1,250
30.....	14,800	.10	40,000	7,430	.01	1,600	6,060	.02	2,450
31.....	14,800	.16	63,900				6,000	.01	2,110
Total load (tons) ¹			1,480,000				1,240,000		

	1939								
	January			February			March		
	Mean discharge (second-foot)	Suspended sediment Mean percent	Suspended sediment Tons per day	Mean discharge (second-foot)	Suspended sediment Mean percent	Suspended sediment Tons per day	Mean discharge (second-foot)	Suspended sediment Mean percent	Suspended sediment Tons per day
1.....							20,200	0.18	98,200
2.....	5,770	0.01	1,090						
3.....	4,980	.00		24,600	0.07	46,500	19,600	.08	43,400
4.....	4,930	.01	1,600	19,700	.04	23,400	13,900	.06	23,300
5.....	5,890	.01	1,910	19,200	.10	49,800			
6.....	6,000	.01	1,780	19,500	.06	32,600	5,530	.02	2,390
7.....	6,300	.01	2,040	21,600	.13	75,800	4,760	.01	890
8.....	5,890	.01	1,750	25,400	.11	75,400	8,170	.03	6,840
9.....	5,610	.01	1,670	24,000	.09	58,300	9,080	.03	8,340
10.....	4,870	.01	1,050	24,200	.08	52,900	11,100	.04	11,700
11.....	5,660	.01	1,380	24,800	.15	100,000	10,100	.03	7,360
12.....	5,830	.01	1,260	24,300	.16	105,000	7,940	.03	6,430
13.....	6,060	.01	1,960	24,800	.08	53,600	8,370	.02	5,200
14.....	6,180	.01	2,000	26,600	.31	223,000			
15.....	6,590	.01	2,140	26,600	.10	71,800			
16.....	4,860	.01	1,180				9,440	.03	7,140
17.....	5,040	.01	1,360	6,250	.02	3,210	7,780	.02	4,410
18.....	5,720	.01	2,010	13,600	.24	88,100	10,600	.02	4,580
19.....				25,100	.14	94,900	9,200	.02	5,960
20.....	12,800	.10	32,300	25,500	.14	98,400	9,680	.03	8,620
21.....	13,600	.11	40,400	23,700	.16	102,000	9,960	.03	8,070
22.....	13,700	.08	28,500	23,900	.16	103,000	9,480	.04	9,980
23.....	14,700	.14	55,600	24,500	.10	66,200	9,440	.03	8,410
24.....	16,000	.11	47,500	24,800	.14	93,700	9,720	.04	9,970
25.....				23,600	.12	76,500	10,800	.04	12,000
26.....							12,900	.02	7,660
27.....	17,800	.10	47,100						
28.....	18,200	.33	162,000	24,000	.14	90,700			
29.....	20,000	.24	130,000						
30.....	23,900	.16	103,000				9,720	.04	11,000
31.....	26,000	.12	84,200				8,600	.05	10,900
31.....	29,500	.20	159,000				10,000	.04	11,900
Total load (tons) ¹			991,000				2,200,000		

¹ Includes estimates for missing days.

TABLE 14.—Mean daily concentration of suspended sediment in the Green River at gaging station near Green River, Utah, May 1, 1929, to Sept. 30, 1939

1929-30												
Day	October	November	December	January	February	March	April	May	June	July	August	September
1								0.44	0.57	0.16	0.12	
2								.42	.54	.12	.31	0.33
3								.42	.55	.11	3.90	.48
4								.38	.59		3.78	.64
5								.36	.56	.09	2.19	.53
6								.40	.48	.08	2.08	.62
7								.47	.44	.07	1.86	1.26
8								.36	.41	.07	1.34	1.20
9								.31	.40	.10	3.25	.50
10								.31	.45	.08		1.05
11								.27	.36	.07	4.22	.54
12								.30	.36	.15	3.43	.32
13								.27	.40	3.65	3.53	.21
14								.25	.42	.18	2.55	.14
15								.24	.41	.17	3.49	.11
16								.24	.43	.27	2.99	.09
17								.23	.48	.82	3.10	.09
18								.26	.44	.32	3.10	.08
19								.19	.72	.31	2.40	.09
20								.21	.66	.60	2.04	.10
21								.18	.39	.49	1.56	.11
22								.28	.31	.28	1.17	.08
23								.23	.30	.59	.88	.65
24								.24	.27	.70	.58	.38
25								.24	.26	.30	.44	.86
26								.28	.24	.35	1.16	.79
27								.25	.18	.20	.41	
28								.22	.18	.13	.38	
29								.36	.16	.26	.33	.74
30								.50	.14	.17	.22	1.52
31								.58		.11	.29	
1930-31												
1	0.97					0.05	0.12	0.16	0.25	0.02	2.49	0.30
2	.62					.05	.12	.15	.21	.13	.73	.94
3	.59					.06	.09	.18	.23	.02	.26	.30
4	.76					.06	.11	.14	.20	.04	.10	.16
5	.60					.08	.12	.20	.18	.06	.11	.07
6	.51					.08	.13	.22	.24	.08	.50	.04
7	.47					.09	.18	.22	.27	.07	1.30	.11
8	.24					.07	.22	.26	.26	.07	1.56	.07
9	.26					.08	.19	.38	.24	.03	.55	.11
10	.25					.07	.39	.32	.27	.08	.36	.11
11	.28					.06	.30	.29	.32	.06	2.13	.08
12	.26					.07	.25	.30	.35	.05	1.67	.08
13	.28					.09	.27	.30	.26	.04	1.33	.08
14	.22					.14	.32	.24	.20	.03	.80	.05
15	.18					.16	.36	.21	.21	.03	.46	.04
16	.17					.17	.40	.20	.20	.02	.18	.04
17	.17					.21	.42	.17	.17	.02	.10	.13
18	.16					.26	.38	.26	.18	.02	.19	.06
19	.16				0.04	.26	.40	.66	.18	.02	.10	.04
20	.15				.04	.25	.41	.76	.16	.02	.10	.03
21	.12				.05	.29	.34	.68	.14	.02	.16	.04
22	.12				.05	.36	.30	.63	.13	.02	.12	.05
23	.10				.04	.39	.40	.49	.12	.01	.13	.05
24	.09				.04	.34	.49	.41	.12	.02	.12	.67
25	.09				.05	.34	.41	.27	.06	.03	.09	.20
26	.10				.05	.42	.35	.18	.06	.03	.11	.10
27	.08				.06	.43	.33	.17	.08	.03	.11	.09
28	.08				.06	.35	.29	.24	.08	.03	.09	.14
29	.19					.30	.21	.32	.03	.03	.10	.10
30	.09					.26	.18	.30	.03	.03	.16	1.52
31	.06					.20		.28		.20	.22	

1931-32

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	1.08				0.06				0.49		0.17	2.52
2	.26	0.22				0.07	0.46	0.38	.48	0.50		
3			0.06		.04	.06					.54	1.08
4		.41			.05		.42	.82	.35		.36	
5	.37	.40				.06		.80		.35	1.26	.32
6					.06		1.38	1.03	.36		.93	
7		.22	.05			.19	1.80			.31		.58
8	.26				.07				.40		.17	.49
9		.08				.23	1.35	.76	.41	.21		
10	.13		.01		.13	.17					.08	.23
11		.31			.09		.99	.66	.35	.40	.07	
12		.16			.07	.15		.66		1.16		.71
13	.13						.62	.68	.37			
14		.04				.11	.55			.78		.12
15					.06				.38			.08
16	.03	.04			.05	.08	.31			.38	.48	
17	.01				.04	.07						.05
18		.06			.04		.52	.84	.40	.16		
19	.04	.08				.09	.56				.68	.04
20	.12			0.06	.09		.78	.81	.42	.32	.50	
21		.05		.06		.72				.39		.05
22	.14						.63		.40		.46	.05
23	.07	.04		.04	.07	1.30		.73	.43	.22		
24					.06	.86					1.33	
25		.01		.04			.62	.62	.40	.13	.51	
26	.01			.05	.12	.65		.62		.15		.08
27					.14		.46		.42		1.60	
28	.02	.02				.60	.36	.64		.14		.04
29	.08			.05	.11				.37		3.41	.06
30		.04		.04		.54	.32	.54	.42	.42		
31	.17					.47					2.90	

1932-33

1	0.01		0.01	0.05	0.06	0.84	0.49	0.10		
2		0.03	0.01	0.01	0.05				0.30	0.02
3	0.02	0.04		0.02	0.04		0.64	0.09	0.61	
4				0.02	0.04					
5	0.04	0.04				0.52			0.35	
6	0.02		0.02	0.02	0.14	0.43	0.48	0.07		0.02
7		0.04	0.02		0.14		0.45		0.65	0.02
8				0.02	0.22	0.37		2.26		
9		0.04	0.04	0.02			0.42			1.48
10	0.01	0.04	0.03	0.03	0.12	0.36	0.38	0.32	0.08	
11		0.04		0.04	0.18	0.34	0.30		0.08	2.91
12	0.01		0.04				0.34	0.51	0.29	
13	0.02			0.03	0.21		0.28	0.32	0.78	0.25
14	0.05	0.05	0.02	0.04			0.32		0.06	
15				0.02	0.29	0.23		0.74	0.03	0.06
16		0.05		0.03	0.58		0.34			
17	0.18			0.05			0.32	1.07	0.08	0.03
18				0.03	0.26				0.07	
19	0.02	0.02				0.12	0.16	0.36		0.08
20	0.02			0.03		0.10	0.16	0.23		
21	0.06	0.02				0.11			0.07	0.02
22						0.13	0.30	0.14		0.05
23		0.03		0.03						
24	0.16			0.04		0.58	0.66			0.03
25		0.04		0.03		0.52	0.60	0.16		0.04
26	0.06									
27	0.04			0.03		0.41	0.35	0.18	0.05	0.02
28		0.04				0.56		0.11		0.01
29	0.05	0.02						0.12		
30			0.05							0.02
31	0.06		0.05					0.37	0.04	

1933-34

1934-35

1.		0.03				0.10				0.10	0.53
2.				0.05			0.26	0.69	0.15		
3.	0.03	.02				.10	.26	.70		.06	
4.					0.04	0.07				.04	
5.			0.02					.46			.11
6.		.03	.04		.04	.11	.10	.20	.39	.23	
7.				.04	.04	.09				.11	.06
8.						.09	.11	.20	.34		
9.		.02		.02	.04		.12	.37		.08	.11
10.				.02			.35				.15
11.			.04		.04		.19		.46	.07	
12.	.03	.03	.04	.02						.06	.08
13.					.04			.15			1.30
14.		.03	.02	.02	.06	.06			.48	.04	
15.	.03	.04	.01			.07	.11			.05	.44
16.				.03	.06				.46		
17.		.04	.02	.03		.10	.58		.04	2.92	.34
18.	.02				.05	.15	.09	.55	.37	.06	2.41
19.		.03	.02			.24				.84	.08
20.	.02		.04		.04	.49	.08	.41	.36	.06	1.17
21.		.02		.04	.04						.75
22.	.03	.03	.04			.19		.38	.33	.27	1.13
23.				.10	.05	.22	.23			.31	.48
24.	.03	.03		.06				.34			
25.	.03							.30			.05
26.		.03	.03	.04						.26	.05
27.	.03	.03	.03						.18		
28.						.13		.57	.19	.07	1.00
29.	.02		.03	.04				.81			.99
30.		.03		.04			.34	.83	.16	.04	.02
31.	.03			.04					.08	.46	

TABLE 14.—Mean daily concentration of suspended sediment in the Green River at gaging station near Green River, Utah, May 1, 1929, to Sept. 30, 1939—Continued

1935-36

Day	October	November	December	January	February	March	April	May	June	July	August	September
1		0.02					0.05		0.24	0.10	1.15	1.37
2								0.43		0.08		.89
3			0.04		0.02	0.06	.04		.34		1.36	
4	0.02				.02	.07	.04	.39				3.30
5		.03	.05						.22			
6			.04			.06	.05			.14	3.31	1.66
7	.04	.04						.42			2.95	2.72
8		.03		0.01	.04		.04			.05		
9	.04					.08		.49	.20		2.22	.64
10	.02		.03				.04			.21	1.56	.29
11		.03		.01		.16		.37	.20	6.36	1.40	.20
12			.01		.04					3.15		
13		.03				.14	.06	.32	.16		1.20	.78
14	.02			.02	.03					1.26	.86	.60
15		.04		.04			.60	.34	.18		.64	1.39
16	.02		.02			.20	.47	.38		.51		1.56
17	.01				.05						.40	.87
18		.03		.04		.15	1.07	.38	.18	1.06		
19					.06	.14				.57	.35	
20		.02	.11		.05		1.12	.41	.18	.85		.18
21		.03		.04		.11				.73	2.51	.12
22	.03						1.12	.32	.15			
23		.02				.06				.38	.59	.10
24	.02			.02	.06		.90		.13	.46	.75	.09
25		.02				.05		.30			.96	.07
26	.02									.56	.88	
27		.02	.01	.04	.06	.05	.72	.28	.10	.56	.49	.08
28	.02							.26		.36	.46	.06
29		.02		.04	.06		.56		.10	.42		.06
30	.02					.06	.55	.25		.92	1.18	
31											3.82	

1936-37

1	0.07	0.74								0.23		2.84
2	.06		0.10							.47	0.56	
3	.07				0.03	0.22	0.30		0.40		1.66	3.04
4					.03							
5	.06	.69							.41			
6			.05	0.02		.28			.36	.14	.36	2.65
7		.28		.03			.41	0.41	.37			
8		.16								1.20		
9										.35	.22	1.28
10		.15	.06		.06	.28	.60	.77		.72	.38	
11		.12		.02						.71	.61	
12		.12	.02					.95	.21	1.04		
13					.06					2.25	.16	.81
14	.07	.11					.50		.16	2.90		
15				.06						3.29		
16			.03			1.07			.18	2.82	.09	
17	.06											
18		.27			.06				.16	2.36	.18	.08
19									.13	1.90		.06
20	.26		.08	.04		2.20		.44				
21	.68	.21					1.58			1.04	.41	
22	.28				.12				.15	.86		.05
23							.98				.12	.07
24		.25		.05				.36	.20	.59		
25				.10								
26	.73		.07			.61			.28	.47		.12
27										.24	.10	
28							.56	.30	.15	.19		
29	.24									.16	.35	.60
30				.03		.36			.15	.32		
31			.06			.35		.66		1.04		

TABLE 14.—Mean daily concentration of suspended sediment in the Green River at gaging station near Green River, Utah, May 1, 1929, to Sept. 30, 1939—Continued

1937-38

Day	October	November	December	January	February	March	April	May	June	July	August	September
1		0.12	0.06	0.02	0.04		0.28			0.33	0.07	0.77
2						0.08						
3		.08			.04		.18	0.78	0.37		.08	1.69
4	0.12		.08			1.84				.24		
5		.07		.02		1.04	.16		.38		.04	
6		.06	.07		.06	2.70		.72		.24		5.68
7	.09					1.44	.13		.34			
8		.05	.08	.04						.16	.04	4.08
9			.07		.05	.98	.12	.37	.32		3.35	1.85
10	.06	.05				.72	.12					
11	.05			.04	.05			.33	.37	.11	.49	
12			.04			.40	.19					2.08
13	.05		.07	.02	.07			.22	.29		.15	
14	.08					.25				.14		
15	.18	.06	.14				.16		.26			2.42
16			.42	.04			.20	.36			.41	
17	.20	.04	.25		.13	.35			.24	.30		
18		.04					.35	.83			.30	.20
19			.22	.04		.52		.73	.24	.27		
20		.05			.07		1.10				.25	
21			.10	.04	.06	.55						.17
22		.04				.48	1.75	.68	.24	.22		
23	.68				.07						.12	
24	.63		.06	.03		.38	1.24	.57	.25			.14
25										.36		
26					.08							
27			.05	.04		.43	.98	.44	.22	.09	.05	.10
28		.07			.08							
29	.12		.03	.02		.27	.87		.89	.08		
30							.90	.52			.13	
31												

1938-39

Day	October	November	December	January	February	March	April	May	June	July	August	September
1								0.71	0.22		0.09	0.10
2		0.12	0.04	0.01		0.04	0.61	.45	.36	0.04	.06	.08
3	0.09	.11					.52	.75	.46		.17	
4				.03		.06		.68		.03		.06
5	.07	.26	.04	.03			.38		.58		.12	.04
6						.04	.39		.38			
7	.30	.19	.07			.06		.58			.13	3.37
8				.04	0.06	.06	.36	.55	.42	.01		1.01
9	1.06	.09	.09			.05		.58	.25			
10				.05			.36		.26	.01	.26	.22
11	1.15	.09	.09		.07	.04	.32	.47		.02		.70
12				.05				.44	.14		.16	1.18
13	.92	.08	.07			.07	.26	.41	.18	.02		2.44
14							.23		.17		.11	
15	.82		.05		.11		.20	.37		.02	.09	.84
16		.08		.02		.16			.14			
17	.96		.02			.20	.18	.33	.10	.02	.05	1.22
18				.04				.32	.11	.02		.55
19		.06	.03				.22	.38			.04	.26
20	1.04		.03	.03	.03	1.72	.24		.09	.04	.04	.16
21		.06				2.02	.23	.31	.08			.10
22						1.55				.03	.03	.08
23	.37	.06	.03	.05		1.58		.37			.02	.15
24				.04	.04	1.51	.26		.07	.02		.20
25	.26		.03			1.40		.30		.02	.02	.11
26												
27	.22	.06	.02	.02		.24	.31					.07
28		.05			.03	1.28	.29	.06	.01	.02		.06
29	.18		.02	.02		1.26	.45					.08
30		.05				1.33		.22	.05	.01	.03	.10
31	.14		.02	.03		.98	.27	.23			.31	.12

TABLE 15.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Green River at gaging station near Green River, Utah, Oct. 1, 1939, to Sept. 30, 1941

Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	1,850	0.08	4,000	1,840	0.10	4,970	1,560	0.03	1,260
2	1,850	.07	3,500	1,820	.16	7,860	1,620	.01	437
3	1,850	.14	6,990	1,780	.09	4,330	1,630	.02	880
4	1,960	.21	11,100	1,770	.04	1,910	1,620	.02	875
5	1,800	.26	12,600	1,770	.04	1,910	1,580	.02	853
6	1,890	.20	10,200	1,770	.04	1,910	1,550	.02	837
7	2,240	.12	7,260	1,750	.03	1,420	1,550	.02	837
8	2,340	.15	9,480	1,730	.03	1,400	1,630	.02	880
9	2,780	1.02	76,600	1,750	.04	1,890	1,670	.03	1,350
10	2,340	.47	29,700	1,730	.03	1,400	1,680	.03	1,360
11	2,670	.28	20,200	1,730	.03	1,400	1,700	.02	918
12	2,670	.56	40,400	1,730	.02	934	1,700	.02	918
13	2,340	.64	40,400	1,720	.03	1,390	1,700	.02	918
14	2,180	.55	32,400	1,720	.02	929	1,700	.02	918
15	2,140	.28	16,200	1,700	.03	1,380	1,680	.04	1,810
16	2,110	.16	9,120	1,680	.02	907	1,770	.05	2,390
17	2,090	.23	13,000	1,680	.02	907	1,750	.04	1,890
18	2,090	.14	7,900	1,680	.02	907	1,670	.02	902
19	2,090	.09	4,930	1,650	.02	891	1,550	.02	842
20	1,980	.07	3,740	1,600	.02	864	1,500	.02	810
21	1,920	.06	3,110	1,550	.02	837	1,400	.02	756
22	1,910	.06	3,090	1,510	.02	815	1,260	.02	680
23	1,870	.05	2,520	1,480	.02	799	1,190	.03	964
24	1,840	.05	2,480	1,480	.02	799	1,160	.03	940
25	1,820	.06	2,950	1,480	.03	1,200	1,080	.02	583
26	1,800	.04	1,940	1,470	.02	794	938	.03	760
27	1,780	.04	1,920	1,450	.02	1,170	1,050	.02	567
28	1,750	.03	1,420	1,450	.02	783	1,110	.04	590
29	1,910	.04	2,060	1,500	.02	810	976	.02	527
30	1,940	.04	2,100	1,530	.03	1,240	902	.03	731
31	1,870	.04	2,020				819	.04	885
Monthly load (tons)			385,200						29,880

1940									
Day	January			February			March		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	786	0.02	424	1,400	0.02	756	2,030	0.04	2,190
2	786	.02	424	1,620	.02	875	2,670	.08	5,770
3	976	.01	264	1,630	.02	880	3,810	.31	31,900
4	1,320	.01	356	1,680	.02	907	4,710	.48	61,000
5	1,720	.02	929	1,670	.02	902	4,240	.40	45,800
6	1,870	.03	1,515	1,670	.02	902	4,240	.28	32,100
7	1,960	.04	2,120	1,730	.03	1,400	4,550	.39	47,900
8	1,850	.02	999	1,720	.02	929	4,400	.26	30,900
9	1,910	.02	1,030	1,750	.02	945	3,950	.23	24,500
10	1,890	.03	1,530	1,730	.02	934	3,400	.27	24,800
11	1,780	.02	961	1,720	.02	929	3,270	.27	23,800
12	1,750	.02	945	1,700	.02	918	3,140	.24	20,400
13	1,840	.03	1,490	1,650	.02	891	3,140	.20	17,000
14	1,850	.03	1,500	1,650	.02	891	3,140	.17	14,400
15	1,700	.03	1,380	1,720	.02	929	2,900	.15	11,700
16	1,430	.05	1,930	1,720	.02	929	2,780	.15	11,300
17	1,220	.01	329	1,620	.01	437	2,670	.10	7,210
18	976	.01	264	1,560	.01	421	2,670	.09	6,490
19	539	(1)		1,650	.01	446	2,560	.08	5,530
20	690	.02	373	1,650	.01	446	2,670	.09	6,490
21	866	.01	234	1,630	.01	440	2,670	.09	6,490
22	1,110	.01	300	1,680	.01	454	2,670	.08	5,770
23	1,150	.01	310	1,680	.01	454	2,780	.09	6,760
24	1,020	.02	551	1,620	.01	437	2,900	.11	8,610
25	963	.01	260	1,630	.01	440	2,900	.11	8,610
26	1,000	.01	270	1,730	.01	467	2,780	.12	9,010
27	1,000	.01	270	1,770	.02	956	2,900	.22	17,200
28	1,070	.01	289	1,820	.02	983	3,020	.22	17,900
29	1,250	.02	675	1,890	.02	1,020	3,270	.24	21,200
30	1,430	.02	772				3,540	.26	24,800
31	1,450	.03	1,170				3,810	.28	28,800
Monthly load (tons)			23,900						586,300

¹ Less than 50 tons per day.

TABLE 15.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Green River at gaging station near Green River, Utah, Oct. 1, 1939, to Sept. 30, 1941—Continued

1940										
Day	April			May			June			
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1	3,950	0.30	32,000	8,920	0.68	164,000	12,800	0.24	82,900	
2	3,950	.28	29,900	8,700	.52	122,000	13,400	.31	112,000	
3	3,810	.32	32,900	8,060	.38	82,700	13,100	.30	106,000	
4	3,540	.38	36,300	7,240	.30	58,600	13,600	.35	128,000	
5	3,400	.32	29,400	6,270	.26	44,000	13,600	.36	132,000	
6	3,540	.26	24,800	5,720	.22	34,000	13,400	.28	101,000	
7	3,810	.22	22,600	6,270	.22	37,200	12,800	.27	93,300	
8	3,950	.23	24,500	9,140	.39	96,200	12,100	.22	71,900	
9	3,670	.20	19,800	10,800	.52	152,000	11,600	.22	68,900	
10	3,400	.16	14,700	10,600	.43	123,000	10,600	.19	54,400	
11	3,400	.14	12,800	10,400	.38	107,000	9,600	.16	41,500	
12	3,540	.14	13,400	10,800	.37	108,000	9,140	.16	39,500	
13	3,540	.13	12,400	12,400	.46	154,000	8,480	.12	27,500	
14	3,270	.12	10,600	13,600	.54	198,000	7,440	.11	22,100	
15	3,140	.11	9,330	14,100	.48	183,000	6,650	.10	18,000	
16	3,140	.10	8,480	15,100	.46	188,000	6,460	.11	19,200	
17	3,020	.10	8,150	15,700	.48	204,000	6,270	.05	8,460	
18	2,900	.07	5,480	15,100	.40	163,000	6,080	.06	9,850	
19	2,900	.07	5,480	14,600	.33	130,000	5,900	.07	11,200	
20	3,400	.08	7,340	15,100	.38	155,000	5,540	.06	8,970	
21	4,240	.16	18,300	15,700	.33	140,000	5,370	.06	8,700	
22	4,400	.22	26,100	14,100	.35	133,000	5,370	.07	10,200	
23	4,400	.19	22,600	13,600	.29	106,000	5,040	.04	5,440	
24	4,550	.21	25,800	13,100	.26	92,000	5,040	.04	5,440	
25	5,370	.36	52,200	12,400	.25	83,700	5,040	.04	5,440	
26	6,080	.43	70,600	11,600	.22	68,900	5,200	.05	7,020	
27	6,270	.41	69,400	10,800	.22	64,200	5,040	.05	6,800	
28	6,460	.37	64,500	10,600	.16	45,800	4,550	.05	6,140	
29	7,850	.54	114,000	10,800	.13	37,900	4,840	.02	2,610	
30	8,920	.70	169,000	11,100	.22	65,900	4,100	.14	15,500	
31				12,100	.25	81,700				
Monthly load (tons)			992,900				3,423,000			1,230,000

1940										
	July			August			September			
	Mean discharge (second-foot)	Mean percent	Tons per day	Mean discharge (second-foot)	Mean percent	Tons per day	Mean discharge (second-foot)	Mean percent	Tons per day	
1	3,540	0.08	7,650	878	0.01	237	926	0.48	12,000	
2	3,400	.08	7,340	830	.02	448	902	.28	6,820	
3	3,020	.10	8,150	808	.02	436	830	.14	3,140	
4	2,780	.03	2,250	808	.02	436	1,280	.73	25,200	
5	2,560	.05	3,460	742	.02	401	1,050	4.03	114,000	
6	2,410	.10	6,510	720	.01	194	890	.61	14,700	
7	2,280	.09	5,540	819	.04	885	854	.24	5,530	
8	2,180	.06	3,530	775	.12	2,510	866	.10	2,340	
9	2,180	.06	3,530	710	.09	1,720	819	.06	1,330	
10	2,140	.03	1,730	700	.04	756	797	.03	646	
11	2,030	.02	1,100	690	.02	373	786	.02	424	
12	1,910	.02	1,030	680	.02	367	775	.02	418	
13	1,820	.01	491	680	.02	367	819	.04	885	
14	1,700	.01	459	640	.02	346	1,080	.05	1,460	
15	1,560	.01	421	630	.02	340	1,250	4.95	167,000	
16	1,530	.01	413	620	.02	335	1,260	3.74	127,000	
17	1,430	.06	2,320	611	.02	330	1,120	.97	29,300	
18	1,320	.01	356	620	.02	335	2,660	4.33	315,000	
19	1,390	.01	375	620	.02	335	1,960	3.98	211,000	
20	1,450	.01	392	660	.02	356	2,010	2.64	143,000	
21	1,300	.06	2,110	710	.03	575	1,870	1.92	96,900	
22	1,190	.10	3,210	650	.08	1,400	1,650	1.87	83,300	
23	1,110	.11	3,300	630	.06	1,020	1,850	1.06	52,900	
24	1,040	.06	1,680	660	.05	891	1,960	.92	48,700	
25	1,000	.06	1,620	742	.11	2,200	1,700	.46	21,110	
26	950	.05	1,280	950	.22	5,640	1,620	.42	18,400	
27	938	.04	1,010	1,050	3.48	98,700	1,560	1.48	62,300	
28	950	.02	513	1,360	.56	20,600	1,470	.64	25,400	
29	926	.04	1,000	1,550	.34	14,200	1,910	1.30	67,000	
30	902	.02	487	1,310	.22	7,780	2,320	3.55	222,000	
31	890	.02	481	1,090	.50	14,700				
Monthly load (tons)			73,740				179,200			1,879,000

TABLE 15.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Green River at gaging station near Green River, Utah, Oct. 1, 1939, to Sept. 30, 1941—Continued

Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	2,280	1.46	89,900	1,810	0.18	8,800	1,560	0.06	2,530
2	4,210	2.48	282,000	1,770	.30	14,340	1,620	.05	2,190
3	3,960	2.99	320,000	1,810	.14	6,840	1,840	.06	2,980
4	3,030	2.39	196,000	1,860	.12	6,030	2,020	.10	5,450
5	3,400	1.88	173,000	1,860	.10	5,020	2,140	.09	5,200
6	3,760	1.64	166,000	1,950	.10	5,260	2,140	.09	5,200
7	3,510	1.54	148,000	2,040	.11	6,060	2,160	.09	5,250
8	3,430	1.36	126,000	2,090	.12	6,770	2,180	.10	5,890
9	2,970	1.68	135,000	2,060	.11	6,120	2,210	.06	3,580
10	2,850	1.44	111,000	2,060	.14	7,790	2,210	.09	5,370
11	2,630	1.34	95,200	2,060	.11	6,120	2,140	.08	4,620
12	2,500	1.12	75,600	2,060	.12	6,670	2,000	.07	3,780
13	2,410	.65	42,300	2,090	.10	5,640	2,040	.04	2,200
14	2,340	.53	33,500	2,040	.09	4,960	1,540	.06	2,500
15	2,240	.35	21,200	1,950	.08	4,210	1,180	.10	3,190
16	2,140	.26	15,000	1,810	.07	3,420	664	.02	359
17	2,110	.22	12,500	1,730	.07	3,270	734	.03	595
18	2,060	.18	10,000	1,730	.08	3,740	776	.04	838
19	2,000	.18	9,720	1,810	.10	4,890	790	.04	853
20	1,930	.17	8,860	1,700	.07	3,210	546	.04	590
21	1,860	.32	16,100	1,860	.10	5,020	508	.04	549
22	1,810	.13	6,350	2,020	.10	5,450	720	.08	1,560
23	1,810	.12	5,860	2,110	.11	6,270	1,130	.12	3,660
24	1,770	.11	5,260	2,060	.10	5,560	1,360	.10	3,670
25	1,730	.10	4,670	1,930	.07	3,650	1,620	.11	4,810
26	1,730	.16	7,470	1,950	.08	4,210	1,790	.12	5,800
27	2,110	.22	12,500	1,880	.05	2,540	1,840	.12	5,960
28	1,950	.80	42,100				1,840	.08	3,470
29	1,840	.26	12,900	1,640	.09	3,990	1,620	.06	2,620
30	2,040	.24	13,200	1,660	.06	2,690	1,640	.07	3,100
31	1,930	.15	7,820				1,680	.06	2,720
Monthly load (tons)			2,205,000						101,100

Day	January			February			March		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	1,790	0.04	1,930	1,500	0.03	1,210	4,510	0.51	62,100
2	1,970	.04	2,130	1,540	.02	832	4,580	.57	70,500
3	1,860	.09	4,520	1,520	.02	821	4,400	.56	66,500
4	2,160	.03	1,750	1,770	.02	956	4,470	.46	55,500
5	1,860	.06	3,010	1,660	.04	1,790	4,430	.61	73,000
6	1,700	.06	2,750	1,660	.05	2,240	3,760	.56	56,900
7	1,380	.03	1,120	1,640	.04	1,770	3,660	.52	51,400
8	1,360	.02	734	1,600	.04	1,730	3,660	.52	51,400
9	1,310	.02	707	1,460	.02	788	3,400	.40	36,700
10	1,250	.03	1,010	1,420	.03	1,150	3,090	.33	27,500
11	1,360	.03	1,100	1,480	.02	799	2,850	.40	30,800
12	1,520	.03	1,230	1,580	.04	1,710	2,600	.34	23,900
13	1,520	.01	410	1,600	.05	2,160	2,520	.21	14,300
14	1,580	.02	853	1,620	.04	1,750	2,410	.18	11,700
15	1,580	.03	1,280	1,640	.05	2,210	2,240	.14	8,470
16	1,680	.02	907	1,700	.05	2,300	2,140	.13	7,510
17	1,580	.04	1,710	1,840	.06	2,980	2,040	.09	4,960
18	1,640	.05	2,210	2,000	.19	10,300	2,000	.09	4,860
19	1,790	.04	1,930	2,280	.18	11,100	2,110	.10	5,700
20	1,810	.04	1,960	2,470	.32	21,300	2,310	.37	23,100
21	1,730	.06	2,800	2,580	.34	23,700	2,440	.36	23,700
22	1,420	.04	1,530	2,830	.30	22,900	2,500	.35	23,600
23	1,460	.05	1,970	3,000	.33	26,700	2,740	.43	31,800
24	1,420	.06	2,300	3,430	.85	78,700	3,660	.64	63,200
25	1,640	.05	2,210	4,360	.89	105,000	5,480	.80	118,000
26	1,580	.05	2,130	4,320	.81	94,500	5,440	.70	103,000
27	1,770	.06	2,870	4,580	.74	91,500	5,320	.89	128,000
28	1,860	.03	1,510	4,470	.58	70,000	5,240	.88	124,000
29	1,640	.04	1,770				4,960	.91	122,000
30	1,640	.05	2,210				4,140	.75	85,800
31	1,660	.05	2,240				3,830	.50	51,700
Monthly load (tons)			56,790						1,560,000

1 Includes estimates for missing days.

QUANTITIES OF SUSPENDED SEDIMENT

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TABLE 15.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the Green River at gaging station near Green River, Utah, Oct. 1, 1939, to Sept. 30, 1941—Continued.

1941										
Day	April			May			June			
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1	3,790	0.41	42,000	6,550	0.41	72,500	25,000	0.38	256,000	
2	3,790	.32	32,700	7,740	.59	123,000	23,400	.44	278,000	
3	4,210	.35	39,800	8,450	.76	173,000	21,600	.38	222,000	
4	4,730	.36	46,000	9,470	.78	199,000	20,000	.39	211,000	
5	5,560	.48	72,100	10,100	.91	248,000	18,900	.26	133,000	
6	6,600	.73	130,000	11,200	.94	284,000	18,200	.29	142,000	
7	6,960	.87	164,000	14,000	1.25	472,000	19,300	1.34	698,000	
8	7,180	.72	140,000	18,600	1.33	668,000	21,100	1.08	615,000	
9	6,640	.60	108,000	17,300	1.08	504,000	21,300	1.90	518,000	
10	6,330	.52	88,900	14,300	.87	336,000	21,100	.71	404,000	
11	6,160	.46	76,500	13,700	.89	329,000	20,400	.51	281,000	
12	5,860	.42	66,500	14,700	.97	385,000	20,400	.39	215,000	
13	5,480	.31	45,900	17,700	1.01	483,000	20,500	.31	172,000	
14	5,400	.32	46,700	20,200	1.08	589,000	21,500	.33	192,000	
15	5,360	.35	50,700	20,000	.98	529,000	20,500	.30	166,000	
16	5,280	.32	45,600	25,100	.90	610,000	19,000	.39	200,000	
17	5,160	.30	41,800	25,700	.78	541,000	18,500	.30	150,000	
18	5,730	.33	51,100	25,400	.63	432,000	18,700	.26	131,000	
19	5,650	.34	51,900	23,900	.72	465,000	19,200	.27	140,000	
20	5,480	.26	38,500	23,300	.58	365,000	20,300	.31	170,000	
21	5,480	.29	42,900	22,900	.63	390,000	20,000	.23	124,000	
22	5,120	.24	33,200	22,100	.61	364,000	20,200	.25	136,000	
23	4,770	.19	24,500	20,600	.53	295,000	19,900	.28	150,000	
24	4,360	.22	25,900	20,700	.44	246,000	19,000	.20	123,000	
25	4,000	.21	22,700	23,000	.77	478,000	18,000	.23	112,000	
26	3,830	.19	19,600	23,600	.88	561,000	16,900	.14	63,900	
27	3,930	.24	25,500	25,500	2.01	1,384,000	15,600	.21	88,500	
28	4,400	.22	26,100	25,400	.69	473,000	14,100	.17	64,700	
29	5,160	.30	41,800	26,700	.44	317,000	13,200	.20	71,300	
30	5,650	.32	48,800	26,800	.44	318,000	12,100	.18	58,800	
31				26,200	.36	255,000				
Monthly load (tons) ..			1,690,000				12,890,000			6,286,000

1941										
	July			August			September			
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1	11,300	0.12	36,600	3,400	0.09	8,260	4,690	0.49	62,000	
2	10,700	.14	40,400	3,210	.07	6,070	4,180	.50	56,400	
3	9,970	.12	32,300	3,240	.05	4,370	3,630	.55	53,900	
4	9,030	.13	31,700	3,240	.05	4,370	3,310	.48	42,900	
5	8,450	.12	27,400	3,360	.07	6,350	3,090	.56	46,700	
6	7,970	.12	25,800	2,880	.07	5,440	2,970	.57	45,700	
7	7,690	.10	20,800	2,740	.04	2,960	2,740	.66	48,800	
8	7,180	.09	17,400	2,520	.19	12,900	2,550	.24	16,500	
9	6,600	.10	17,800	2,630	.09	6,390	2,440	.17	11,200	
10	6,160	.12	20,000	3,400	.31	28,500	2,310	.15	9,360	
11	5,650	.14	21,400	4,850	1.28	168,000	2,180	.16	9,420	
12	5,400	.08	11,700	5,900	.70	112,000	2,110	.15	8,550	
13	5,280	.10	14,300	4,100	1.93	214,000	2,300	.24	16,200	
14	5,040	.08	10,900	3,560	2.39	230,000	2,830	.67	51,200	
15	5,200	.08	11,200	3,630	1.07	105,000	2,580	1.48	103,000	
16	5,400	.11	16,040	6,110	.85	140,000	2,550	.46	31,700	
17	5,080	.17	23,300	5,770	.59	91,900	2,800	.30	22,700	
18	4,850	.10	13,100	7,320	3.97	785,000	2,970	.21	16,800	
19	4,850	.33	43,200	6,460	1.96	342,000	2,880	.36	28,000	
20	5,520	.39	58,100	5,400	1.88	274,000	2,690	.50	36,300	
21	4,660	.25	31,500	7,140	2.06	397,000	2,550	.26	17,900	
22	4,580	.16	19,800	6,460	1.64	286,000	2,580	.55	38,300	
23	4,470	.11	13,300	5,650	2.62	400,000	2,580	.26	18,100	
24	3,960	.10	10,700	4,770	1.56	201,000	3,730	.30	30,200	
25	3,630	.09	8,820	4,280	.99	114,000	5,440	.94	138,000	
26	3,660	.08	7,910	3,860	1.85	88,600	4,320	1.58	184,000	
27	3,930	.08	8,490	3,630	.72	70,600	3,360	.98	88,900	
28	3,790	.10	10,200	3,430	.58	53,700	3,120	.69	58,100	
29	3,660	.12	11,900	3,470	.31	29,000	3,120	.39	32,900	
30	3,530	.10	15,200	3,760	.30	30,500	2,910	.16	12,600	
31	3,530	.10	9,530	4,690	1.56	198,000				
Monthly load (ton) ..			640,800				4,416,000			1,336,000

¹ Estimated.

TABLE 16.—*Suspended-sediment concentration at different sampling times, mean daily discharge, mean daily concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Aug. 13 to Sept. 21, 1928*

Date	Time of collection	Mean daily discharge (sec.-ft.)	Suspended sediment			
			Number of samples	Mean percent at sampling period	Mean daily percent	Tons per day
1928						
Aug. 13.....	10:00 a. m. 3:30 p. m. 4:30 p. m.	1,580	9 9 8	1.10 4.11 5.13	3.38	144,000
Aug. 14.....	9:30 a. m. 11:00 a. m. 11:45 a. m. 2:00 p. m. 3:00 p. m. 3:45 p. m. 4:30 p. m.	1,280	5 4 2 3 2 2 2	2.57 2.41 2.34 2.30 2.44 2.62 2.27	2.44	84,200
Aug. 15.....	6:30 a. m. 9:00 a. m. 11:30 a. m. 2:00 p. m. 4:30 p. m. 7:30 p. m.	760	2 3 2 3 3 3	2.09 2.12 1.89 1.89 1.80 1.82	1.94	39,800
Aug. 16.....	6:30 a. m. 9:00 a. m. 11:30 a. m. 2:00 p. m. 4:30 p. m.	747	3 3 3 2 3	1.98 1.79 1.75 1.62 1.58	1.75	35,200
Aug. 17.....	7:00 a. m. 5:00 p. m.	774	3 3	1.54 1.70	1.62	33,800
Aug. 18.....	8:00 a. m. 12:00 m. 4:00 p. m.	650	3 2 3	1.07 1.08 1.06	1.08	18,900
Aug. 19.....	8:00 a. m. 12:00 m. 4:00 p. m.	612	3 2 3	1.88 2.02 1.92	1.92	31,700
Aug. 20.....	8:00 a. m. 9:00 a. m. 12:00 m. 4:30 p. m.	482	3 8 2 3	1.74 1.70 1.72 1.93	1.76	22,900
Aug. 21.....	8:00 a. m. 12:00 m. 4:00 p. m.	482	3 2 1	1.77 1.54 1.40	1.68	21,800
Aug. 22.....	8:00 a. m. 12:00 m. 5:00 p. m.	428	3 3 3	1.13 1.06 .87	1.02	11,800
Aug. 23.....	6:30 a. m. 12:00 m. 4:45 p. m. 7:30 p. m. 8:30 p. m.	499	3 3 3 3 3	.89 .81 .83 1.27 6.61	1.95	26,200
Aug. 24.....	5:30 a. m. 7:00 a. m. 9:00 a. m. 11:45 a. m. 2:00 p. m. 5:00 p. m.	669	3 3 3 3 3 3	13.6 10.9 9.38 7.14 5.99 5.37	8.73	158,000
Aug. 25.....	8:30 a. m. 11:00 a. m. 1:30 p. m. 6:30 p. m.	450	3 3 3 3	2.97 2.99 2.48 2.21	2.66	32,300
Aug. 26.....	5:30 a. m. 12:30 p. m. 7:00 p. m.	320	3 3 3	1.67 1.60 1.28	1.52	13,100

TABLE 16.—*Suspended-sediment concentration at different sampling times, mean daily discharge, mean daily concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Aug. 13 to Sept. 21, 1928—Continued*

Date	Time of collection	Mean daily discharge (sec.-ft.)	Suspended sediment			
			Number of samples	Mean percent at sampling period	Mean daily percent	Tons per day
1928						
Aug. 27	1:30 p. m.-----	1,000	3	3.14	2.88	77,700
	5:00 p. m.-----		3	2.61		
Aug. 28	9:00 a. m.-----	850	3	2.51	2.37	54,300
	1:00 p. m.-----		3	2.52		
	5:00 p. m.-----		3	2.15		
Aug. 29	6:00 a. m.-----	980	8	1.92	2.09	55,200
	9:00 a. m.-----		3	1.71		
	12:00 m.-----		3	1.35		
	3:15 p. m.-----		3	2.89		
	4:15 p. m.-----		3	3.21		
	6:00 p. m.-----		3	2.34		
	8:00 p. m.-----		3	1.49		
Aug. 30	6:00 a. m.-----	970	3	1.71	1.61	42,100
	12:00 m.-----		3	1.67		
	4:30 p. m.-----		3	1.48		
Aug. 31	6:00 a. m.-----	2,020	8	2.12	2.51	137,000
	10:30 a. m.-----		10	1.79		
	2:30 p. m.-----		2	3.36		
	4:00 p. m.-----		3	5.64		
	5:00 p. m.-----		3	6.27		
	6:30 p. m.-----		7	5.37		
	9:00 p. m.-----		2	5.14		
Sept. 1	6:00 a. m.-----	1,180	3	3.13	2.86	91,000
	10:30 a. m.-----		3	2.97		
	4:30 p. m.-----		3	2.47		
Sept. 2	7:00 a. m.-----	1,140	2	2.62	2.48	76,200
	2:00 p. m.-----		3	2.45		
	4:30 p. m.-----		3	2.14		
Sept. 3	6:30 a. m.-----	1,580	3	2.41	2.41	103,000
	9:00 a. m.-----		9	2.59		
	4:30 p. m.-----		3	1.90		
Sept. 4	6:00 a. m.-----	1,270	3	1.55	1.51	51,700
	12:00 m.-----		3	1.52		
	6:00 p. m.-----		3	1.46		
Sept. 5	8:00 a. m.-----	1,020	3	1.15	1.05	28,900
	9:00 a. m.-----		9	1.01		
	4:30 p. m.-----		3	1.06		
Sept. 6	8:45 a. m.-----	900	7	.69	.68	16,500
	5:00 p. m.-----		3	.66		
Sept. 7	8:00 a. m.-----	760	3	.78	.81	16,600
	12:00 m.-----		3	1.08		
	4:30 p. m.-----		3	.55		
Sept. 8	8:00 a. m.-----	695	3	.48	.42	7,880
	12:00 m.-----		3	.41		
	1:00 p. m.-----		3	.49		
	2:00 p. m.-----		6	.35		
	5:00 p. m.-----		5	.43		
Sept. 9	6:00 a. m.-----	695	3	.33	.34	6,360
	4:30 p. m.-----		3	.34		
Sept. 10	8:30 a. m.-----	662	3	.60	.60	10,700
	1:30 p. m.-----		3	.63		
	3:15 p. m.-----		3	.61		
	5:45 p. m.-----		3	.58		

TABLE 16.—*Suspended-sediment concentration at different sampling times, mean daily discharge, mean daily concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Aug. 13 to Sept. 21, 1928—Continued*

Date	Time of collection	Mean daily discharge (sec.-ft.)	Suspended sediment			
			Number of samples	Mean percent at sampling period	Mean daily percent	Tons per day
1928						
Sept. 11-----	8:30 a. m. -----	546	3	0.38	0.31	4,560
	10:00 a. m. -----		9	.31		
	5:00 p. m. -----		3	.25		
Sept. 12-----	6:45 a. m. -----	582	3	.46	.36	5,660
	6:45 a. m. -----		7	.44		
	1:00 p. m. -----		3	.23		
	4:15 p. m. -----		3	.18		
Sept. 13-----	6:00 a. m. -----	528	3	.29	.28	3,990
	4:30 p. m. -----		3	.28		
Sept. 14-----	8:00 a. m. -----	534	3	.29	.40	5,770
	8:30 a. m. -----		7	.35		
	4:30 p. m. -----		3	.32		
Sept. 15-----	9:00 a. m. -----	594	3	.42	.37	5,930
	12:00 m. -----		3	.36		
	5:00 p. m. -----		3	.34		
Sept. 16-----	6:30 a. m. -----	540	10	.30	.28	4,070
	4:30 p. m. -----		3	.23		
Sept. 17-----	9:00 a. m. -----	472	3	.30	.27	3,430
	9:30 a. m. -----		7	.29		
	4:00 p. m. -----		3	.21		
Sept. 18-----	9:00 a. m. -----	472	3	.29	.26	3,320
	9:50 a. m. -----		8	.26		
	4:30 p. m. -----		3	.21		
Sept. 19-----	9:00 a. m. -----	444	3	.23	.23	2,750
	4:30 p. m. -----		3	.23		
Sept. 20-----	9:00 a. m. -----	450	3	.17	.27	3,290
	4:30 p. m. -----		3	.37		
Sept. 21-----	9:00 a. m. -----	411	3	.24	.24	2,670

TABLE 17.—*Suspended-sediment concentration at different sampling times, mean daily discharge, mean daily concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, July 1 to Sept. 30, 1929*

Date	Time of collection	Mean daily discharge (sec.-ft.)	Suspended sediment			
			Number of samples	Mean percent at sampling period	Mean daily percent	Tons per day
1929						
July 1		4,340			0.66	77,300
2		4,150			.42	47,100
3		3,820			.41	42,300
4		3,750			.32	32,400
5		3,520			.31	29,500
July 6		3,240			.29	25,400
7		3,040			.31	25,400
8		2,540			.25	17,100
9		2,460			.29	19,300
July 10	2:30 p. m.	2,420	3	0.46	.50	32,700
	3:00 p. m.		2	.54		
July 11	5:45 a. m.	2,220	2	.52	.52	31,200
July 12	8:45 a. m.	2,310	7	3.59	2.47	154,000
	5:20 p. m.		6	1.16		
July 13	9:45 a. m.	2,620	2	.67	.73	51,600
	6:50 p. m.		3	.77		
July 14	8:00 a. m.	2,560	3	.65	.65	44,900
July 15	9:15 a. m.	2,430	7	.64	.71	46,600
	2:15 p. m.		3	.81		
	7:45 p. m.		3	.79		
July 16	8:15 a. m.	2,080	8	.64	.67	37,600
	5:40 p. m.		3	.77		
July 17	8:15 a. m.	2,100	7	.51	.75	42,500
	1:10 p. m.		3	1.07		
	7:40 p. m.		3	.96		
July 18	8:00 a. m.	2,000	8	.89	.83	44,800
	3:30 p. m.		3	.68		
July 19	6:35 a. m.	1,990	7	.80	.90	48,400
	12:45 p. m.		3	.96		
	4:30 p. m.		3	.82		
	7:00 p. m.		3	1.19		
July 20	6:30 a. m.	1,680	7	.63	.54	24,500
	1:20 p. m.		2	.38		
	5:15 p. m.		3	.45		
July 21	8:15 a. m.	1,860	3	.44	.44	22,100
July 22	7:20 a. m.	2,140	7	.56	.53	30,600
	2:00 p. m.		3	.51		
	7:30 p. m.		3	.47		
July 23	8:40 a. m.	2,990	7	.43	.92	74,300
	1:45 p. m.		3	.61		
	5:50 p. m.		3	1.30		
	8:30 p. m.		3	1.31		
	11:45 p. m.		3	1.57		
July 24	8:30 a. m.	3,030	7	1.56	1.52	124,000
	1:10 p. m.		3	1.42		
	4:15 p. m.		3	1.54		
July 25	8:50 a. m.	3,100	6	3.89	2.80	234,000
	2:00 p. m.		3	1.79		
	7:15 p. m.		3	2.52		
July 26	8:00 a. m.	3,460	7	1.75	1.80	168,000
	1:30 p. m.		3	1.80		
	5:40 p. m.		3	1.91		

TABLE 17.—*Suspended-sediment concentration at different sampling times, mean daily discharge, mean daily concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, July 1 to Sept. 30, 1929—Continued*

Date	Time of collection	Mean daily discharge (sec.-ft.)	Suspended sediment			
			Number of samples	Mean percent at sampling period	Mean daily percent	Tons per day
1929						
July 27	9:00 a. m.	5,090	7	3.55	4.60	632,000
	6:10 p. m.		3	7.31		
	7:45 p. m.		3	4.35		
July 28	7:10 a. m.	7,690	2	22.2	14.4	2,990,000
	10:20 a. m.		3	15.7		
	1:00 p. m.		3	13.6		
	7:15 p. m.		3	8.69		
July 29	8:20 a. m.	14,600	3	13.8	11.8	4,650,000
	12:30 p. m.		3	12.9		
	4:45 p. m.		3	8.85		
July 30	6:40 a. m.	11,100	3	7.18	6.85	2,050,000
	12:50 p. m.		3	5.48		
	4:45 p. m.		3	8.42		
July 31	11:00 a. m.	10,300	2	12.1	10.6	2,950,000
	2:30 p. m.		2	9.12		
Aug. 1	11:00 a. m.	13,500	3	6.09	7.87	2,870,000
	2:00 p. m.		3	7.20		
	5:00 p. m.		3	7.95		
	7:20 p. m.		1	15.0		
Aug. 2	1:25 p. m.	20,500	3	6.37	6.37	3,530,000
Aug. 3	8:00 a. m.	11,800	9	3.78	3.61	1,150,000
	2:00 p. m.		3	3.38		
	5:00 p. m.		3	3.32		
Aug. 4	6:30 p. m.	12,600	1	13.9	13.9	4,730,000
Aug. 5	8:15 a. m.	15,800	3	5.03	6.28	2,680,000
	1:45 p. m.		3	5.42		
	5:25 p. m.		2	9.40		
Aug. 6	8:00 a. m.	18,800	3	10.5	9.88	5,020,000
	9:00 a. m.		3	13.6		
	10:15 a. m.		3	13.1		
	11:15 a. m.		3	10.4		
	3:20 p. m.		3	5.77		
	4:25 p. m.		3	5.99		
Aug. 7	7:40 a. m.	13,300	3	5.68	5.68	2,040,000
Aug. 8	8:15 a. m.	11,100	3	3.20	4.24	1,270,000
	4:50 p. m.		8	4.62		
Aug. 9	8:15 a. m.	12,200	3	5.47	6.32	2,080,000
	1:10 p. m.		3	7.17		
Aug. 10	7:40 a. m.	8,470	3	3.94	3.27	748,800
	1:05 p. m.		9	3.12		
	5:30 p. m.		3	3.05		
Aug. 11	8:00 a. m.	16,700	3	4.44	4.44	2,000,000
Aug. 12	8:45 a. m.	38,300	3	8.94	7.77	8,040,000
	12:45 p. m.		3	7.76		
	1:45 p. m.		3	7.74		
	4:50 p. m.		4	6.94		
Aug. 13	8:20 a. m.	19,300	2	6.20	6.28	3,270,000
	1:05 p. m.		2	6.19		
	5:00 p. m.		3	6.39		
Aug. 14	8:15 a. m.	9,270	3	3.41	2.91	728,000
	5:10 p. m.		3	2.40		

TABLE 17.—*Suspended-sediment concentration at different sampling times, mean daily discharge, mean daily concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, July 1 to Sept. 30, 1929—Continued.*

Date	Time of collection	Mean daily discharge (sec.-ft.)	Suspended sediment			
			Number of samples	Mean percent at sampling period	Mean daily percent	Tons per day
1929						
Aug. 15	7:30 a. m. 12:55 p. m. 5:40 p. m.	7,080	3 3 9	1.62 1.46 1.30	1.39	266,000
Aug. 16	9:10 a. m. 3:10 p. m.	5,780	3 3	1.16 1.08	1.12	175,000
Aug. 17	9:00 a. m.	5,120	9	1.44	1.44	199,000
Aug. 18	8:45 a. m.	4,550	9	.92	.92	113,000
Aug. 19	8:50 a. m. 4:10 p. m.	4,320	9 3	1.06 .77	.99	115,000
Aug. 20	8:00 a. m. 4:05 p. m.	3,580	7 3	.84 .80	.83	80,200
Aug. 21	8:35 a. m.	3,380	9	.83	.83	75,700
Aug. 23	9:35 a. m. 5:15 p. m.	2,720	9 3	.92 .82	.90	66,100
Aug. 24	8:40 a. m.	2,890	9	.92	.92	71,800
Aug. 25	8:25 a. m.	2,660	7	1.10	1.10	79,000
Aug. 26	8:25 a. m. 5:00 p. m.	2,530	3 3	.96 .81	.88	60,100
Aug. 27	8:40 a. m. 4:10 p. m.	3,440	9 3	.99 3.27	1.56	145,000
Aug. 28	8:35 a. m.	3,110	9	2.67	2.67	224,000
Aug. 29	7:30 a. m.	2,560	3	1.57	1.57	109,000
Aug. 30	10:00 a. m.	4,000	3	4.08	4.08	441,000
Aug. 31	6:30 a. m.	6,850	3	5.38	5.38	995,000
Sept. 1	8:10 a. m.	5,040	3	6.58	6.58	895,000
Sept. 2	10:00 a. m.	5,600	3	5.14	5.14	777,000
Sept. 3	10:00 a. m.	8,070	3	7.46	7.46	1,630,000
Sept. 4	8:20 a. m. 3:45 p. m.	13,100	3 3	7.88 7.41	7.65	2,710,000
Sept. 5	7:40 a. m. 12:25 p. m. 2:25 p. m. 4:25 p. m.	11,100	3 3 3 3	6.61 5.93 6.14 6.00	6.17	1,850,000
Sept. 6	7:30 a. m. 11:20 a. m. 3:30 p. m. 4:30 p. m.	8,070	3 3 3 3	4.21 3.79 3.86 3.86	3.93	856,000
Sept. 7	8:00 a. m. 1:55 p. m. 3:00 p. m.	7,010	3 3 3	3.90 3.64 3.34	3.63	687,000
Sept. 8	8:20 a. m.	6,220	9	2.75	2.75	462,000
Sept. 9	3:00 p. m.	5,280	3	1.71	1.71	244,000
Sept. 10	8:45 a. m.	4,800	8	1.48	1.48	192,000

TABLE 17.—*Suspended-sediment concentration at different sampling times, mean daily discharge, mean daily concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, July 1 to Sept. 30, 1929—Continued*

Date	Time of collection	Mean daily discharge (sec.-ft.)	Suspended sediment			
			Number of samples	Mean percent at sampling period	Mean daily percent	Tons per day
1929						
Sept. 11.....	8:45 a. m.....	4,320	4	1.27	1.17	136,000
	1:15 p. m.....		3	1.08		
	5:15 p. m.....		3	1.13		
Sept. 12.....	9:30 a. m.....	4,080	9	1.13	1.19	131,000
	5:15 p. m.....		3	1.38		
Sept. 13.....	9:20 a. m.....	4,190	7	1.28	1.26	143,000
	5:45 p. m.....		3	1.19		
Sept. 14.....	9:35 a. m.....	3,720	8	1.02	1.00	100,000
	5:45 p. m.....		3	.97		
Sept. 15.....	10:10 a. m.....	3,310	7	.83	.83	74,200
Sept. 16.....	9:05 a. m.....	3,030	7	.83	.85	69,500
	3:10 p. m.....		3	.90		
Sept. 17.....	10:05 a. m.....	2,720	9	.65	.65	47,700
Sept. 18.....	10:15 a. m.....	2,480	7	.67	.69	46,200
	1:50 p. m.....		3	.75		
Sept. 19.....	-----	2,250	3	.61	.61	37,100
Sept. 20.....	-----	4,180	2	.44	.44	49,700
Sept. 21.....	-----	13,100	3	40.8	30.9	10,900,000
	-----		3	21.1		
Sept. 22.....	-----	8,870	3	7.40	7.40	1,770,000
Sept. 23.....	10:00 a. m.....	20,000	3	28.5	21.2	11,400,000
	4:00 p. m.....		3	14.0		
Sept. 24.....	8:30 a. m.....	21,500	3	8.32	7.69	4,460,000
	2:00 p. m.....		3	7.07		
Sept. 25.....	-----	14,000	3	4.83	4.83	1,830,000
26.....	-----	9,880	3	2.42	2.42	646,000
27.....	-----	7,580	3	2.53	2.53	518,000
28.....	-----	6,830	3	2.53	2.53	467,000
29.....	-----	6,040	3	2.35	2.35	383,000
30.....	-----	4,990	3	1.52	1.52	205,000

QUANTITIES OF SUSPENDED SEDIMENT

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TABLE 18.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941

1929

Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	4,300	2.15	249,000	1,310	0.55	19,400	930	1.14	28,600
2	3,810	2.80	288,000	1,320	.37	13,200	922	.66	16,400
3	3,410	2.12	195,000	1,260	.47	16,000	922	.54	13,400
4	3,410	3.39	312,000	1,230	.44	15,000	907	.71	17,400
5	2,910	1.74	137,000	1,200	.45	15,000	848	.47	10,700
6	2,680	.89	64,400	1,230	.42	14,000	827	.47	10,500
7	2,510	1.70	115,000	1,250	.45	15,200	798	.43	9,250
8	2,350	1.07	67,800	1,230	.21	6,970	855	.37	8,530
9	2,350	.68	43,100	1,250	.35	11,800	855	.39	8,990
10	2,200	1.01	60,000	1,240	.42	14,000	777	.39	8,170
11	2,290	.96	59,300	1,220	.33	10,900	743	.37	7,410
12	2,290	.81	50,000	1,220	.64	21,100	791	.38	8,110
13	2,120	.60	34,300	1,090	.49	14,400	855	.47	10,800
14	2,290	1.06	65,500	1,120	.61	18,400	812	.33	7,230
15	2,020	.80	43,600	1,050	.56	15,900	770	.46	9,550
16	2,350	.86	54,500	922	.46	11,400	743	.46	9,220
17	2,240	1.72	104,000	884	.59	14,100	777	.40	8,380
18	2,180	2.27	133,000	1,010	.52	14,200	784	.29	6,130
19	2,040	.78	42,900	1,090	.60	17,600	791	.44	9,390
20	1,920	.90	46,600	1,090	.58	17,100	696	.45	8,450
21	1,850	1.20	60,000	1,030	.55	15,300	670	.15	2,710
22	1,710	.74	34,100	968	.54	14,100	386	.10	1,040
23	1,580	.76	32,400	930	.49	12,300	264	.12	853
24	1,530	.63	26,000	841	.71	16,100	229	.11	679
25	1,520	.67	27,500	791	.58	12,400	264	.32	2,280
26	1,460	.70	27,600	827	.64	14,300	268	.54	3,900
27	1,420	.90	34,500	863	.55	12,800	287	.56	4,330
28	1,370	.39	14,400	819	.40	8,840			
29	1,360	1.35	50,000	863	.47	10,900	553	.40	5,970
30	1,350	.45	16,400	877	.65	15,400	496	.47	6,290
31	1,400	.41	15,500				530	.52	7,430
Monthly load (tons)			2,503,000						

TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	1,270	.071	24,300	4,560	1.01	124,000	10,400	1.75	491,000
2	1,360	.99	36,300	4,270	.74	85,200	10,400	1.59	446,000
3	1,470	1.03	40,800	4,270	.99	114,000	7,200	1.21	235,000
4	1,500	.63	25,500	5,330	1.28	184,000	5,920	.78	125,000
5				5,580	1.34	202,000	5,490	.74	110,000
6				4,640	.93	116,000	5,580	.61	91,800
7	2,930	1.77	140,000	3,920	.80	84,600	6,360	.74	127,000
8	4,340	2.33	273,000	3,380	.76	69,300	8,080	.94	205,000
9	5,490	1.44	213,000	3,130	.68	57,400	8,490	.92	211,000
10	5,920	1.56	249,000	2,890	.72	56,100	8,380	.83	188,000
11	6,000	1.22	197,000	2,600	.70	49,100	7,980	.73	157,000
12	5,740	1.57	243,000	2,490	.51	34,200	7,380	.84	167,000
13	5,090	1.22	167,000	2,380	.47	30,200	7,380	1.17	233,000
14	4,840	1.24	155,000	2,220	.63	37,700	7,480	.93	188,000
15	4,860	1.27	166,000	2,100	.45	25,500	7,380	.78	155,000
16	5,330	1.31	188,000	2,160	.30	17,500	6,540	.80	141,000
17	5,090	.98	135,000	2,950	.86	68,400	5,660	.85	130,000
18	4,480	1.22	147,000	4,130	1.29	144,000	5,170	.65	90,600
19	3,640	.77	75,600	3,780	.74	75,400	4,940	.58	77,300
20	3,260	.82	72,100	3,380	.55	50,100	5,010	.63	85,100
21	3,450	.95	88,400	2,950	.43	34,200	4,340	.51	59,700
22	4,100	1.19	132,000	2,890	4.14	323,000	4,130	.45	50,100
23	5,280	1.30	185,000	4,940	1.16	135,000	3,990	.59	63,500
24	6,310	1.47	250,000	5,740	1.85	286,000	3,710	.34	34,000
25	6,910	1.33	248,000				3,380	.60	54,700
26	6,910	1.15	214,000	5,090	.64	87,900	2,710	.43	31,400
27	7,200	1.19	231,000	6,270	.75	127,000	2,320	.46	28,800
28	6,090	1.23	202,000	6,820	.81	149,000	2,100	.39	22,100
29	5,660	.92	140,000	7,880	1.01	215,000	1,900	.41	21,000
30	5,170	.81	113,000	8,280	.75	167,000	1,730	.28	13,100
31				10,600		263,000			
Monthly load (tons)			4,451,000	3,582,000			4,032,000		

Day	July			August			September		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	1,600	0.28	12,100	3,990	6.14	661,000	421	0.31	3,520
2	1,320	.21	7,480	4,130	3.40	379,000	381	.24	2,470
3	1,150	.25	7,750	4,200	4.51	511,000	381	.21	2,160
4	1,050	.20	5,660	3,640	3.00	295,000	381	.25	2,570
5	922	.16	3,980	3,920	16.6	1,750,000	431	1.52	17,700
6	855	.18	4,150	2,170	6.51	476,000	607	2.27	37,200
7	743	.23	4,610	2,490	2.58	173,000	812	2.66	58,300
8	716	.16	3,090	3,320	2.66	238,000	798	2.19	47,100
9	664	.16	2,870	13,900	23.0	8,620,000	651	1.06	18,600
10	710	.24	4,600	11,400	11.2	3,430,000	577	.69	10,700
11	952	4.04	104,000	15,800	14.7	6,270,000	507	.68	9,300
12	4,480	6.59	796,000	12,400	10.1	3,370,000	501	.60	8,110
13	1,600	18.4	792,000	8,910	7.81	1,880,000	441	.47	5,590
14	2,270	10.3	638,000	5,490	6.55	970,000	426	.40	4,600
15	2,270	10.2	626,000	4,130	3.60	401,000	411	.34	3,770
16	1,420	4.10	157,000	3,520	2.35	223,000	377	.35	3,560
17	1,410	2.96	113,000	3,070	1.57	130,000	354	.32	3,060
18	2,380	3.87	248,000	2,600	1.29	90,500	354	.36	3,440
19	2,490	6.46	434,000	2,380	.94	60,300	363	.36	3,520
20	4,710	8.87	1,130,000	2,050	.87	48,100	319	.28	2,410
21	3,850	8.24	856,000	1,800	.65	31,600	323	.30	2,610
22	5,170	8.61	1,200,000	1,420	.66	25,300	319	.24	2,060
23	5,660	5.48	837,000	1,310	.54	19,100	315	.23	1,950
24	5,010	3.56	481,000	1,050	.45	12,700	298	.21	1,690
25	4,130	2.58	287,000	900	.43	10,400	287	.20	1,550
26	3,320	2.21	198,000	827	.55	12,300	290	.24	1,880
27	2,890	1.82	142,000	777	.79	16,600	401	.30	3,240
28	2,770	1.94	145,000	729	.39	7,670	463	.41	5,120
29	5,010	4.38	592,000	696	.41	7,700	406	.33	3,610
30	4,060	3.08	337,000	607	.44	7,200	447	.40	4,800
31	4,940	5.47	729,000	501	.32	4,320			
Monthly load (tons)			10,890,000	30,130,000			276,200		

¹Includes estimates for missing days.

QUANTITIES OF SUSPENDED SEDIMENT

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TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

1930									
Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	1,190	2.95	94,700	460	0.28	3,480	652	0.69	12,100
2	715	2.57	49,600	449	.36	4,370	659	.52	9,250
3	427	.73	8,410	438	.24	2,830	638	.33	5,690
4	508	.87	11,900	432	.21	2,450	593	.33	5,290
5	550	.54	8,010	449	.35	4,230	556	.22	3,290
6	508	.43	5,880	449	.46	5,580	574	.26	4,020
7	484	.49	6,390	460	.33	4,100	574	.32	4,960
8	484	.42	5,470	490	.27	3,560	562	.32	4,850
9	484	.41	5,340	484	.27	3,530	562	.33	4,990
10	400	.34	3,670	466	.22	2,780	574	.38	5,880
11	427	.32	3,690	484	.23	2,990	586	.46	7,280
12	438	.34	4,020	460	.26	3,240	586	.43	6,800
13	490	.36	4,750	454	.27	3,320	586	.50	7,900
14	606	.42	6,880	427	.33	3,800	612	.52	8,580
15	775	.74	15,500	466	.31	3,880	574	.36	5,580
16	673	.56	10,200	454	.52	6,360	568	.28	4,290
17	645	.57	9,920	514	.38	5,260	520	.19	2,670
18	600	.51	8,250	730	.77	15,200	466	.24	3,020
19	574	.43	6,660	830	.77	17,200	227	.09	539
20	593	.47	7,520	806	.84	18,300	173	.06	270
21	568	.40	6,120	752	.55	11,200	206	.05	270
22	556	.37	5,560	673	.55	9,980	170	.06	270
23	532	.41	5,880	687	.50	9,280	113	.01	27
24	544	.41	6,010	632	.46	7,850	113	.18	539
25	556	.30	5,850	626	.48	8,090	113	.02	54
26	496	.38	5,070	606	.48	7,850	150	.17	701
27	496	.31	4,150	580	.40	6,260	150	.04	162
28	496	.28	3,750	600	.39	6,310	150	.10	405
29	484	.28	3,670	612	.49	8,090	175	.03	135
30	484	.33	4,320	638	.56	9,630	200	.05	270
31	460	.30	3,720				250	.04	270
Monthly load (tons)			330,900	201,000			110,400		

TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

1931									
Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	680	0.36	6,610	2,590	1.06	74,000	3,890	0.84	88,100
2	673	.38	6,900	2,350	1.22	77,300	4,590	.92	114,000
3	606	.26	4,260	2,530	.96	65,500	5,400	.92	134,000
4	659	.43	7,630	2,830	1.73	132,000	4,820	.77	100,000
5	846	.61	13,900	3,140	1.51	128,000	5,640	.86	131,000
6	959	.59	15,300	3,480	1.59	149,000	5,560	.84	126,000
7	846	.67	15,300	3,080	1.20	99,700	4,460	.63	75,800
8	782	.48	10,100	2,770	.96	71,700	4,590	.69	85,400
9	806	.50	10,900	2,890	1.01	78,700	5,240	.64	90,500
10	1,010	.82	22,300	3,280	1.24	110,000	5,560	.74	111,000
11	1,190	.66	21,200	3,150	.94	79,900	4,440	.55	65,900
12	1,120	.58	17,500	2,770	.80	59,800	3,890	.51	53,500
13	1,080	.46	13,400	2,350	.69	43,700	3,220	.59	51,200
14	1,270	.60	20,600	2,180	.58	34,100	3,340	.70	62,800
15	1,390	.69	25,900	2,290	.87	53,700	3,410	.83	76,300
16	1,430	.59	22,800	2,830	1.23	93,900	3,220	2.00	174,000
17	1,410	.55	20,900	4,030	.90	97,800	3,220	.48	41,700
18	1,550	.79	33,000	4,820	1.30	169,000	3,150	.52	44,200
19	1,440	.59	22,900	4,740	1.25	160,000	3,020	.41	33,400
20	1,290	.36	12,500	5,400	1.40	204,000	2,590	.56	39,100
21	1,300	.51	17,900	5,000	1.09	147,000	2,240	.38	23,000
22	1,560	.62	26,100	4,100	.88	97,300	1,960	.41	21,700
23	1,670	.54	24,300	3,280	.56	49,500	1,850	.46	23,000
24	1,660	.58	26,000	2,710	.68	49,700	1,630	.28	12,300
25	1,820	.79	38,800	2,710	.78	57,000	1,500	.35	14,200
26	2,020	.84	45,800	3,410	1.00	92,000	1,490	.29	11,700
27	2,180	.84	49,400	4,520	.86	105,000	1,480	.30	11,900
28	2,305	.79	50,100	5,000	.64	86,300	1,360	.66	24,200
29	2,070	.63	35,200	4,240	.65	74,300	1,360	.43	15,800
30	2,240	.73	44,100	3,340	.54	48,700	1,900	2.22	114,000
31				3,220	.61	53,000			
Monthly load (tons)			681,600	2,842,000			1,970,000		

1931									
	July			August			September		
	Mean discharge (second-foot)	Mean percent	Tons per day	Mean discharge (second-foot)	Mean percent	Tons per day	Mean discharge (second-foot)	Mean percent	Tons per day
1	2,070	1.24	69,200	2,550	11.5	791,000	148	1.55	6,180
2	3,020	1.01	82,300	3,480	9.64	905,000	113	1.57	4,770
3	3,610	.86	83,700	3,150	7.89	670,000	176	1.99	9,440
4	4,740	1.80	230,000	1,170	4.97	157,000	117	1.36	4,290
5	3,340	2.25	203,000	680	3.39	62,200	82	.40	890
6	3,410	1.95	179,000	432	2.30	26,800	62	.26	432
7	2,350	1.27	80,500	1,930	3.65	190,000	95	1.26	3,240
8	1,740	.85	39,900	1,290	3.53	123,000	133	1.33	4,770
9	1,430	.59	22,800	1,160	3.62	113,000	88	.48	1,130
10	1,140	.43	13,200	1,050	2.73	77,300	161	1.02	4,420
11	918	.36	8,900	1,060	1.92	54,900	89	.53	1,270
12	775	.28	5,850	1,120	2.13	64,400	66	3.21	5,720
13	619	.24	4,020	822	1.35	29,900	82	2.36	5,230
14	526	.20	2,830	632	.99	16,900	124	1.35	4,500
15	460	.22	2,720	508	.84	11,500	1,560	3.65	15,300
16	380	.16	1,650	454	.65	7,960	2,180	5.12	30,100
17	258	.24	1,670	680	7.05	129,000	918	3.99	98,800
18	309	.33	2,750	562	2.50	37,900	1,820	2.46	121,000
19	380	1.50	15,400	606	1.74	28,400	3,450	6.57	611,000
20	176	.26	1,240	318	1.90	16,300	2,120	5.15	294,000
21	213	.26	1,480	632	2.14	36,500	1,850	3.60	180,000
22	460	.73	9,060	490	1.68	22,200	3,340	5.53	498,000
23	314	.77	6,530	514	1.93	26,800	2,240	2.70	163,000
24	186	.59	2,970	270	2.59	18,900	3,960	4.87	520,000
25	143	1.33	5,120	176	1.32	6,260	2,530	3.21	219,000
26	104	.83	2,320	153	.95	3,910	2,410	2.92	190,000
27	99	.63	1,670	135	.68	2,480	2,890	2.10	164,000
28	83	.38	863	128	.44	1,510	2,180	1.34	78,800
29	1,020	.18	4,960	111	.49	1,460	2,020	1.27	69,200
30	870	4.22	99,000	95	.33	836	1,690	.99	45,100
31	910	2.48	60,900	108	.47	1,380			
Monthly load (tons)			1,246,000	3,635,000			3,354,000		

QUANTITIES OF SUSPENDED SEDIMENT

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TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	1,440	0.83	32,200	872	0.64	15,000	925	0.53	13,200
2	5,800	7.18	1,120,000	850	.75	17,200	720	.28	5,450
3	6,120	9.40	1,550,000	720	.59	11,500	625	.27	4,560
4	6,120	6.03	995,000	707	.47	8,950	344	.23	2,130
5	5,160	3.76	523,000	707	.46	8,740	249	.21	1,400
6	3,520	1.86	177,000	700	.57	10,800	220	.23	1,380
7	2,730	1.58	116,000	688	.50	9,490	300	.23	1,860
8	2,310	1.22	75,900	694	.53	9,930	400	.19	2,050
9	1,980	1.00	53,400	1,100	.83	24,600	553	.17	2,540
10	1,720	.92	42,600	1,440	2.05	79,600	559	.28	4,450
11	3,660	2.86	282,000	1,100	.98	29,100	1,670	.69	31,100
12	2,250	3.10	188,000	4,080	3.91	430,000	1,350	1.39	50,600
13	1,820	1.98	97,200	4,380	3.17	374,000	902	.35	8,520
14	1,620	1.34	58,600	2,730	2.97	219,000	643	.32	5,560
15	1,480	1.02	40,700	1,580	1.87	79,700	480	.35	4,530
16	1,350	.86	31,300	1,220	1.40	46,100	339	.22	2,020
17	1,260	.84	28,500	1,020	1.03	28,300	254	.09	701
18	1,220	.80	26,300	940	.88	22,300	228	.06	378
19	1,870	5.83	294,000	968	.77	20,500	298	.16	1,290
20	6,800	7.31	1,340,000	910	.65	15,900	380	.05	512
21	4,840	5.27	688,000	940	.67	17,000	447	.09	1,080
22	3,940	3.26	346,000	1,020	.72	19,800	607	.08	1,320
23	1,620	4.09	179,000	902	.47	11,400	842	.07	1,590
24	1,260	1.82	60,500	688	.52	9,660	980	.11	2,910
25	1,140	1.28	39,400	245	.17	1,120	1,260	.11	3,750
26	1,100	1.01	30,000	192	.11	569	1,220	.39	12,800
27	1,060	.91	26,000	217	.14	820	1,140	.22	6,770
28	996	.68	18,300	269	.17	1,230	1,060	.37	10,600
29	964	.60	15,600	812	.32	7,010	1,350	.58	32,000
30	902	.60	14,000	1,350	.53	30,200	1,480	.53	21,100
31	880	.59	14,000				1,060	.59	16,900
Monthly load (tons)...			8,502,000				1,206,000		

Day	January			February			March		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	674	0.18	3,260	508	0.27	3,700	4,230	6.83	779,000
2	469	.12	1,510	649	.31	5,430	4,530	3.51	429,000
3	565	.26	3,960	858	.62	12,000	5,320	3.94	565,000
4	668	.28	5,040	1,220	.42	13,800	4,230	3.34	381,000
5	595	.22	3,530	1,220	.38	12,500	2,920	3.14	247,000
6	583	.16	2,510	850	.32	7,330	2,310	2.14	133,000
7	553	.20	3,720	1,060	.76	21,700	1,980	1.04	55,500
8	643	.25	4,340	10,500	4.87	1,380,000	1,920	1.09	56,400
9	776	.21	4,400	15,700	4.47	1,890,000	2,310	1.92	120,000
10	748	.39	7,880	11,900	6.20	1,990,000	3,250	2.24	196,000
11	694	.33	6,180	8,220	4.63	1,030,000	3,250	2.40	210,000
12	681	.43	7,900	5,480	3.44	508,000	2,990	2.41	194,000
13	835	.52	11,700	3,520	2.34	222,000	2,250	1.41	85,600
14	762	.40	8,230	3,060	2.10	173,000	2,030	1.32	72,300
15	583	.28	4,400	2,550	1.98	136,000	1,820	.93	45,700
16	524	.30	4,230	2,490	2.09	140,000	1,980	1.58	84,400
17	571	.21	3,240	2,250	2.10	127,000	2,490	1.06	71,200
18	458	.14	1,730	2,030	3.14	172,000	2,920	1.22	96,100
19	513	.28	3,880	1,720	1.91	88,600	3,250	1.90	167,000
20	513	.36	4,990	3,520	4.99	474,000	4,080	2.78	306,000
21	480	.14	1,810	2,670	2.56	184,000	5,800	3.80	594,000
22	535	.14	2,020	2,670	3.85	277,000	5,800	3.70	579,000
23	571	.13	2,000	2,430	1.90	130,000	4,080	2.92	321,000
24	607	.12	1,970	2,430	2.10	141,000	3,120	1.60	135,000
25	625	.09	1,510	2,430	2.23	145,000	2,610	1.34	94,300
26	625	.16	2,700	2,430	1.86	122,000	3,120	1.25	105,000
27	553	.15	2,240	3,060	2.54	210,000	4,530	5.54	677,000
28	452	.13	1,590	3,380	3.42	312,000	3,940	2.10	223,000
29	294	.22	1,750	3,660	4.12	407,000	3,180	1.28	110,000
30	145	.09	351				3,660	1.26	124,000
31	425	.17	1,940				4,080	1.64	180,000
Monthly load (tons)...			116,500				10,340,000		
							7,436,000		

TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

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Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	5,160	1.32	184,000	4,680	0.75	94,700	11,700	0.85	271,000
2	4,530	1.20	147,900	4,680	.93	117,000	9,350	.63	159,000
3	6,460	2.96	516,000	5,000	.81	109,000	9,350	.62	156,000
4	8,220	3.53	783,000	6,120	.82	135,000	9,730	.70	184,000
5	8,590	4.02	931,000	7,320	.96	190,000	9,350	.60	151,000
6	8,970	3.56	861,000	8,220	.88	195,000	8,040	.58	126,000
7	8,970	3.74	905,000	8,400	.91	206,000	7,140	.52	100,000
8	7,680	5.49	1,140,000	7,500	.76	154,000	5,960	.45	72,300
9	6,630	3.40	608,000	6,460	.62	108,000	5,480	.42	62,100
10	7,320	4.25	839,000	6,630	.52	93,000	6,120	.52	85,800
11	6,970	4.42	831,000	7,500	.60	121,000	7,140	.67	129,000
12	7,140	3.94	759,000	8,040	.67	145,000	7,860	.53	112,000
13	8,220	1.63	361,000	8,780	1.34	317,000	8,220	.54	120,000
14	9,350	3.70	933,000	10,300	.84	233,000	9,540	.62	159,000
15	10,500	3.82	1,080,000	11,500	.78	242,000	11,100	.60	180,000
16	10,100	1.91	520,000	11,500	1.00	310,000	11,700	.62	196,000
17	10,100	1.89	515,000	11,700	.83	262,000	11,700	.71	224,000
18	11,300	1.79	546,000	12,900	1.03	358,000	11,700	.62	196,000
19	11,100	1.78	533,000	13,700	.94	347,000	10,500	.62	176,000
20	9,920	1.89	506,000	15,300	1.18	487,000	9,730	.62	163,000
21	10,100	1.50	409,000	15,300	1.26	520,000	9,350	.54	136,000
22	9,730	1.46	383,000	14,700	1.06	420,000	9,540	.33	84,900
23	8,780	1.34	317,000	14,100	1.14	433,000	9,540	.55	141,000
24	8,220	1.25	277,000	16,100	1.23	534,000	9,920	.70	187,000
25	6,630	1.09	195,000	15,300	1.09	450,000	10,900	.76	223,000
26	5,480	.96	142,000	14,500	1.02	399,000	10,500	.65	184,000
27	5,480	1.10	163,000	13,300	1.08	387,000	10,500	.56	159,000
28	5,480	1.07	158,000	10,700	1.04	300,000	9,730	.56	147,000
29	5,160	1.02	142,000	9,350	.85	214,000	8,780	.56	133,000
30	5,000	.62	83,600	10,700	.78	225,000	7,860	.51	108,000
31				12,500	.85	287,000			
Monthly load (tons)			15,770,000				8,393,000		

1932

Day	July			August			September		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	7,500	0.59	119,000	4,680	1.96	247,000	4,230	1.22	139,000
2	7,140	.64	123,000	4,680	2.40	303,000	3,380	.81	73,800
3	7,140	.79	152,000	3,660	.95	93,800	2,860	.73	56,300
4	6,460	.52	90,600	2,990	.69	55,600	2,490	.46	30,900
5	6,120	.43	71,000	2,310	.53	33,000	2,080	.48	26,900
6	6,120	.46	75,900	2,030	.36	19,700	1,870	.45	22,700
7	5,480	.35	51,700	1,720	.30	13,900	1,620	.48	21,000
8	4,840	.28	36,500	1,480	.25	9,980	1,350	.37	13,500
9	4,230	.42	47,900	1,300	.18	6,310	1,300	.40	14,000
10	3,940	.29	30,800	1,220	.17	5,590	1,220	.36	11,800
11	3,940	.33	35,100	1,010	.14	3,810	1,060	.28	8,000
12	3,940	.35	37,200	880	.12	2,850	996	.29	7,790
13	4,680	.46	58,100	769	.18	3,730	932	.28	7,040
14	5,320	.56	80,400	707	.16	3,050	850	.24	5,500
15	5,160	.49	68,200	655	.13	2,300	805	.22	4,780
16	4,530	.33	40,300	547	.22	3,250	776	.36	7,530
17	3,940	.43	45,700	688	.89	16,500	734	.28	5,540
18	3,660	.34	33,600	940	1.83	46,400	707	.22	4,190
19	3,520	.41	38,900	1,100	1.52	45,100	668	.29	5,220
20	3,060	1.30	107,000	3,180	3.00	257,000	619	.23	3,840
21	3,250	1.03	90,300	8,040	8.25	1,790,000	553	.19	2,830
22	2,800	.58	43,800	9,160	11.3	2,790,000	541	.18	2,630
23	2,370	.46	29,400	4,680	4.26	538,000	910	.22	5,400
24	2,140	.36	20,800	3,250	2.77	243,000	3,380	3.91	356,000
25	1,980	.30	16,000	3,060	1.95	161,000	4,840	6.05	790,000
26	1,980	.30	16,000	2,490	1.55	104,000	2,310	4.00	249,000
27	2,080	.44	24,700	3,520	2.00	190,000	2,250	3.22	195,000
28	1,920	.48	24,900	4,280	2.84	324,000	1,400	2.57	97,000
29	1,870	.36	18,200	16,500	12.4	5,520,000	1,180	1.47	46,800
30	4,230	2.67	305,000	10,900	4.12	1,210,000	948	1.16	29,700
31	3,520	2.82	268,000	5,800	1.76	275,000			
Monthly load (tons)			2,200,000				14,320,000		

¹ Estimated.

TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

1932

Day	October			November			December		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	798	0.73	15,700	769	0.33	6,850	631	0.35	5,960
2	762	.64	13,500	727	.32	6,280	613	.29	4,800
3	720	.51	9,900	720	.25	4,850	607	.31	5,070
4	694	.43	8,040	727	.25	4,910	625	.34	5,720
5	734	.51	10,100	734	.28	5,560	674	.30	5,450
6	668	.13	2,350	700	.28	5,290	655	.24	4,230
7	661	.18	3,210	687	.27	4,960	565	.27	4,130
8	625	.08	1,350	700	.24	4,530	530	.22	3,160
9	776	.58	12,100	681	.24	4,400	541	.27	3,940
10	741	.93	18,600	649	.25	4,370	535	.22	3,180
11	727	.65	12,800	681	.26	4,770	520	.28	3,940
12	741	.48	9,600	694	.22	4,130	501	.43	5,800
13	805	.48	10,400	643	.33	5,720	480	.14	1,810
14	776	.39	8,170	631	.24	4,070	480	.18	2,240
15	755	.36	7,340	601	.23	3,720	450	.09	1,080
16	734	.36	7,340	577	.23	3,590	440	.13	1,540
17	694	.31	5,600	571	.23	3,530	430	.09	1,050
18	688	.35	6,500	589	.22	3,510	420	.12	1,350
19	681	.32	5,880	583	.25	3,940	411	.24	2,670
20	649	.25	4,370	571	.22	3,400	422	.22	2,510
21	681	.28	5,150	583	.24	3,780	431	.15	1,750
22	727	.25	4,910	595	.26	4,180	342	.13	1,190
23	1,620	1.18	51,600	613	.24	3,960	268	.15	1,080
24	1,100	1.65	49,000	601	.20	3,240	280	.09	674
25	1,060	1.26	36,000	601	.21	3,400	300	.06	485
26	1,010	.74	20,100	583	.23	3,610	330	.16	1,430
27	932	.49	12,300	595	.28	4,500	278	.11	836
28	910	.48	11,800	524	.30	4,230	206	.10	566
29	828	.37	8,250	571	.27	4,150	134	.10	351
30	776	.34	7,120	583	.27	4,230	26	.04	27
31	805	.34	7,390				310	.24	2,000
Monthly load (tons)			386,100				131,700		
							80,000		

1933

Day	January			February			March		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	306	0.10	809	800	0.04	863	2,490	1.35	90,700
2	290	.10	782	750	.01	202	2,370	1.07	68,400
3	251	.07	485	700	.09	170	2,200	1.08	64,100
4	328	.02	178	700	.10	1,890	1,820	1.53	75,100
5	308	.08	674	700	.04	755	1,400	.76	28,700
6	355	.07	674	700	.05	944	1,140	.80	24,600
7	350	.08	755	650	.06	1,050	1,100	.64	19,000
8	346	.06	566	600	.02	324	1,220	.57	18,700
9	304	.08	647	600	.02	324	1,300	.54	18,900
10	320	.08	701	600	.03	485	1,350	.73	26,600
11	355	.04	378	600	.02	324	1,480	.83	33,100
12	373	.05	512	650	.03	539	1,620	.83	36,300
13	380	.08	809	700	.04	755	1,670	.73	32,900
14	343	.08	728	700	.07	1,320	1,530	.78	32,200
15	377	.06	620	750	.06	1,210	1,300	.70	24,600
16	419	.11	1,240	800	.08	1,730	1,060	.61	17,400
17	404	.04	432	800	.05	1,080	956	.51	13,200
18	422	.04	458	800	.12	2,590	925	.48	12,000
19	362	.04	378	800	.10	2,160	842	.44	9,980
20	400	.06	647	850	.12	2,750	820	.39	8,630
21	450	.07	863	850	.17	3,880	790	.36	7,660
22	500	.11	1,483	850	.08	1,830	790	.32	6,820
23	550	.20	2,970	900	.18	4,326	720	.26	5,040
24	600	.06	971	900	.33	8,010	688	.30	5,560
25	700	.07	1,000	1,000	.56	15,100	713	.33	6,340
26	800	.07	1,510	1,500	.45	18,200	694	.29	5,420
27	800	.07	1,510	1,980	1.65	88,100	649	.25	4,370
28	800	.04	863	2,030	1.27	69,500	649	.30	5,260
29	800	.02	432				655	.27	4,770
30	800	.01	216				873	.46	10,800
31	800	.08	1,726				1,100	.42	12,500
Monthly load (tons)			26,300				729,600		

TABLE 18.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	1,300	0.82	28,800	1,260	0.43	14,600	9,350	1.04	262,000
2	1,140	.53	16,300	1,480	.47	18,800	10,300	1.25	347,000
3	1,060	.43	12,200	1,440	.43	16,700	11,900	1.20	385,000
4	1,140	.43	13,200	1,400	.54	20,400	11,700	.92	290,000
5	1,440	.47	18,300	1,530	.43	17,700	9,540	.92	237,600
6	1,770	.57	27,200	1,480	.49	19,600	8,780	.87	206,000
7	1,720	.57	26,400	1,530	.49	20,200	8,460	.80	181,000
8	1,350	.46	16,700	1,580	.42	17,940	7,140	.68	131,000
9	1,100	.37	11,000	1,480	.47	18,800	6,800	.70	109,000
10	1,100	.42	12,600	1,400	.48	18,100	4,840	.58	75,700
11	1,060	.41	11,700	1,480	.48	19,100	6,800	.68	125,000
12	1,020	.40	11,000	1,350	.46	16,400	8,970	.83	201,000
13	880	.27	6,420	1,220	.39	12,800	9,540	.90	232,000
14	805	.27	5,860	1,220	.38	12,500	8,970	.71	172,000
15	948	.33	8,440	1,140	.31	9,520	8,220	.59	131,000
16	948	.33	8,440	1,100	.31	9,200	7,320	.64	126,000
17	865	.26	6,070	980	.25	6,610	6,970	.53	99,600
18	748	.22	4,450	776	.21	4,400	7,140	.60	116,000
19	956	.40	10,300	865	.20	4,670	7,320	.66	130,000
20	1,140	.34	10,500	1,920	.72	37,300	6,970	.69	130,000
21	1,440	.61	23,700	3,660	1.15	114,000	7,320	.76	150,000
22	1,480	.47	18,800	5,640	1.06	161,000	7,320	.80	158,000
23	1,260	.35	11,900	6,460	1.26	220,000	7,320	1.18	233,000
24	1,060	.27	7,710	5,640	1.02	155,000	6,970	2.73	513,000
25	980	.28	7,390	4,230	.68	66,200	5,960	.98	158,000
26	820	.25	5,530	3,520	.59	56,000	5,160	.64	89,100
27	783	.24	5,070	3,380	.80	72,900	4,530	.55	67,200
28	783	.26	5,500	4,530	.84	103,000	4,080	.52	57,200
29	842	.35	7,960	6,290	.61	154,000	3,520	.47	44,600
30	842	.30	6,820	7,140	.90	173,000	3,180	.36	30,900
31				8,400	1.12	254,000			
Monthly load (tons)			366,200				1,844,000		

1933

Day	July			August			September		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	2,920	0.40	31,500	631	2.04	34,700	118	0.86	2,720
2	2,490	.29	19,500	655	1.67	29,500	92	.98	2,430
3	2,140	.31	17,900	565	1.29	19,700	92	.77	1,910
4	2,030	.30	16,400	524	1.13	16,000	94	.50	1,270
5	2,140	.40	23,100	441	1.03	12,200	94	.43	1,080
6	2,550	1.59	109,000	674	1.22	22,200	86	.31	728
7	3,520	3.31	314,000	1,820	6.71	329,000	82	.32	701
8	5,000	3.14	423,000	3,180	6.98	599,000	100	.49	1,320
9	3,800	2.98	305,000	2,610	6.97	491,000	1,260	.83	28,200
10	4,530	2.41	294,000	1,530	5.47	226,000	5,960	13.2	2,120,000
11	3,800	2.58	264,000	1,060	3.93	112,000	7,320	10.0	1,990,000
12	3,060	1.30	107,000	842	2.17	49,300	3,520	8.34	792,000
13	2,920	1.46	115,000	643	1.44	25,000	2,430	4.08	267,000
14	3,250	1.44	126,000	577	1.07	16,600	2,730	2.90	214,000
15	2,140	1.62	93,500	452	.91	11,100	3,250	3.93	344,000
16	1,720	1.30	60,300	430	.65	7,550	3,660	3.86	375,000
17	1,530	1.07	44,100	357	.53	5,100	2,610	2.55	201,000
18	1,720	3.03	141,000	261	.49	3,450	1,980	1.94	104,000
19	1,770	1.77	84,500	245	.43	2,830	2,920	3.20	252,000
20	1,260	2.32	78,800	231	.29	1,810	3,660	3.78	373,000
21	1,060	1.38	39,500	308	.35	2,910	5,640	2.68	408,000
22	858	.89	20,600	375	14.6	148,000	5,320	4.10	588,000
23	895	.63	15,200	257	5.08	35,200	2,730	3.84	283,000
24	948	.56	14,300	166	3.52	15,800	2,370	2.33	149,000
25	1,580	1.15	49,000	231	1.73	10,800	1,870	1.55	78,200
26	2,460	6.16	414,000	172	1.10	5,560	1,620	1.09	47,600
27	1,480	5.42	216,000	163	1.21	5,310	1,440	1.00	38,800
28	980	3.12	82,500	157	.86	3,640	1,260	.87	29,600
29	948	3.05	78,000	160	.68	2,940	1,100	.75	22,300
30	748	1.42	28,600	182	.94	4,610	1,020	.55	15,100
31	619	1.39	23,200	166	.68	3,050			
Monthly load (tons)			3,648,000				2,252,000		

8,732,000

TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	972	0.60	1,570	681	0.58	10,700	1,920	2.48	129,000
2	835	.53	12,000	553	.42	6,260	925	1.28	32,000
3	1,020	.52	14,800	631	.61	10,400	902	1.02	24,800
4	1,350	6.03	220,000	668	.42	7,590	850	.83	19,100
5	2,030	26.7	1,470,000	755	.54	11,000	748	.65	13,100
6	5,800	15.8	2,480,000	687	.42	7,800	662	.60	10,700
7	5,480	8.50	1,260,000	769	.57	11,800	619	.50	8,370
8	3,380	5.04	460,000	741	.59	11,800	565	.43	6,560
9	1,870	3.32	168,000	682	.40	7,370	559	.46	6,940
10	1,670	1.75	78,900	637	.48	8,260	530	.40	5,720
11	1,870	2.47	125,000	631	.41	6,990	553	.43	6,430
12	3,060	3.15	260,000	595	.37	5,940	553	.45	6,720
13	1,820	3.37	166,000	619	.44	7,340	530	.52	7,450
14	1,300	2.25	79,000	674	.38	6,910	577	.44	6,860
15	1,580	1.51	64,400	607	.38	6,240	643	.47	8,150
16	2,430	4.32	283,000	607	.44	7,210	662	.52	9,290
17	1,480	3.33	133,000	577	.44	6,860	681	.53	9,750
18	1,140	1.75	53,900	559	.41	6,180	502	.31	4,210
19	1,060	1.32	37,800	513	.44	6,100	458	.30	3,700
20	972	1.14	29,900	541	.38	5,560	442	.26	3,100
21	900	.81	19,700	571	.41	6,320	425	.20	2,300
22	828	.69	15,400	541	.36	5,260	571	.26	4,000
23	895	1.12	27,000	513	.35	4,890	577	.36	5,620
24	818	.74	16,300	553	.42	6,260	595	1.50	8,050
25	741	.68	13,600	547	.27	4,000	583	1.50	7,880
26	812	.68	14,900	474	.37	4,720	643	.54	9,370
27	835	.49	11,000	496	.46	6,160	655	.63	11,200
28	805	.51	11,100	518	.35	4,890	707	.64	12,200
29	769	.61	10,600	502	.32	4,350	662	.51	9,130
30	720	.60	9,720	1,140	1.00	30,600	655	.58	10,300
31	755	.51	10,400				681	.55	10,100
Monthly load (tons)		7,556,000				235,700			412,100

1934

Day	January			February			March		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	714	0.46	8,860	442	0.35	4,180	613	0.42	6,940
2	748	.36	7,260	469	.28	3,540	619	.41	6,860
3	842	.43	9,770	486	.32	4,210	619	.43	7,180
4	835	.46	10,400	518	.35	4,890	565	.35	5,350
5	707	.37	7,070	535	.46	6,640	513	.31	4,290
6	668	.45	8,130	513	.39	5,400	535	.33	4,780
7	662	.37	6,620	530	.33	4,720	530	.29	4,160
8	458	.24	2,970	513	.40	5,540	452	.23	2,810
9	430	.25	2,920	541	.32	4,670	577	.29	4,510
10	316	.20	1,700	571	.37	5,700	619	.34	5,670
11	339	.21	1,920	553	.34	5,080	613	.46	7,610
12	375	.20	2,020	571	.34	5,240	637	.40	6,880
13	385	.15	1,570	583	.30	4,720	607	.44	7,210
14	362	.20	1,940	496	.30	4,020	601	.52	8,450
15	436	.19	2,240	496	.28	3,750	637	.60	10,300
16	458	.15	1,860	458	.26	3,210	762	.48	9,880
17	649	.46	8,070	518	.27	3,780	805	.65	13,700
18	565	.40	6,100	535	.33	4,780	769	.72	15,000
19	681	.52	9,560	513	.42	5,800	948	.80	20,500
20	668	1.05	18,900	535	.33	4,780	925	.92	23,000
21	589	.39	6,210	571	.31	4,780	762	.52	10,700
22	601	.49	7,940	565	.25	3,810	707	.48	9,150
23	649	.60	10,500	601	.28	4,540	741	.49	9,800
24	619	.56	9,370	835	.69	15,600	828	.49	11,000
25	565	.39	5,940	713	.47	9,040	880	.39	9,260
26	559	.44	6,640	842	.55	12,500	812	.49	10,700
27	565	.42	6,400	932	.68	17,100	842	.52	11,800
28	559	.35	5,290	700	.42	7,940	820	.42	9,290
29	571	.37	5,700				783	.41	8,670
30	508	.31	4,240				727	.39	7,670
31	480	.37	4,810				694	.47	8,800
Monthly load (tons)		192,900				170,000			281,900

TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	April			May			June		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1.....	707	0.38	7,260	3,190	0.87	74,900	2,670	1.13	81,500
2.....	812	.33	7,240	2,990	.86	69,400	2,730	3.29	243,000
3.....	910	.60	14,700	3,660	1.15	114,000	1,820	1.42	69,800
4.....	1,150	.50	15,500	3,250	1.00	87,800	1,530	.73	30,200
5.....	1,060	.54	15,400	2,610	.84	59,200	1,260	.56	19,100
6.....	964	.51	13,300	2,200	.89	52,900	1,100	.40	11,900
7.....	858	.43	9,960	1,920	.74	38,400	956	.40	10,300
8.....	762	.43	8,860	2,080	.96	53,900	820	.31	6,860
9.....	727	.37	7,260	3,120	1.40	118,000	720	.29	5,640
10.....	649	.35	6,130	3,250	1.02	89,500	631	.31	5,290
11.....	631	.29	4,940	3,380	.84	76,700	547	.21	3,100
12.....	700	.64	12,100	4,230	1.05	120,000	452	.20	2,430
13.....	940	.58	14,700	3,940	1.17	124,000	366	.21	2,080
14.....	1,770	.88	42,100	3,800	1.16	119,000	370	.13	1,300
15.....	2,200	1.26	74,800	3,660	1.09	108,000	265	.11	783
16.....	2,140	.86	49,700	3,250	.83	72,800	203	.11	594
17.....	2,140	.92	53,200	2,610	.79	55,700	192	.07	351
18.....	2,430	1.07	70,200	2,550	1.01	69,600	175	.05	243
19.....	2,250	.99	60,200	2,490	.93	62,500	125	.05	162
20.....	1,980	.89	47,600	2,370	.71	45,400	95	.04	108
21.....	1,720	.68	31,600	2,200	.93	55,200	70	.03	54
22.....	1,920	.77	39,900	1,720	.62	28,800	60	.04	84
23.....	2,610	.97	68,400	1,530	.47	19,400	40	.05	54
24.....	3,120	1.14	96,000	1,480	.87	34,800	35	.01	11
25.....	2,860	1.17	90,300	1,300	.53	18,600	24	.01	5
26.....	3,060	.89	73,500	1,140	.36	11,100	18	-----	5
27.....	3,520	1.18	112,000	1,060	.43	12,300	10	.01	3
28.....	3,660	1.01	99,800	1,000	.49	13,200	9	.01	3
29.....	3,380	.93	84,900	1,180	.40	12,700	9	.01	3
30.....	3,250	.91	79,900	1,440	.40	15,600	5	.01	3
31.....				1,530	.54	22,300	-----	-----	-----
Monthly load (tons)			1,311,000	1,856,000			494,900		

1934

	July			August			September		
1.....	1	-----	-----	154	3.75	15,600	910	5.17	127,000
2.....	1	-----	-----	133	3.62	13,500	714	4.09	78,800
3.....	0	-----	-----	108	2.87	8,370	607	3.42	56,100
4.....	0	-----	-----	95	2.05	5,260	508	2.86	39,200
5.....	0	-----	-----	100	1.96	5,290	316	2.78	23,700
6.....	0	-----	-----	55	1.02	1,500	189	1.89	9,640
7.....	0	-----	-----	45	.66	810	112	1.41	4,270
8.....	0	-----	-----	45	1.48	1,810	699	4.28	80,800
9.....	0	-----	-----	147	.72	10,500	547	5.32	78,600
10.....	0	-----	-----	203	3.38	18,500	375	2.75	27,800
11.....	0	-----	-----	183	4.46	22,000	321	5.49	47,600
12.....	0	-----	-----	95	3.90	9,990	224	4.73	28,600
13.....	0	-----	-----	80	4.53	9,770	281	3.58	27,200
14.....	2	-----	-----	65	4.83	8,480	547	4.60	67,900
15.....	30	-----	-----	424	9.95	86,000	491	3.38	44,800
16.....	20	0.03	3	502	5.78	72,100	366	4.10	40,500
17.....	10	.01	3	339	4.16	39,800	169	4.97	22,700
18.....	8	.01	3	175	4.66	25,100	151	3.66	14,900
19.....	4	.02	3	118	5.10	16,300	140	2.70	10,200
20.....	704	10.0	35,600	120	3.94	12,800	105	1.63	4,620
21.....	1,050	5.20	147,000	151	3.65	14,900	90	1.24	3,020
22.....	769	10.9	227,000	265	4.80	34,300	85	1.12	2,560
23.....	353	4.12	44,700	135	5.22	19,000	90	.84	2,050
24.....	1,220	10.9	334,000	65	3.75	6,590	500	.74	55,100
25.....	518	8.00	109,000	125	4.54	15,300	1,980	7.43	367,000
26.....	273	6.62	48,800	55	2.86	4,240	3,120	7.82	659,000
27.....	745	6.98	157,000	192	3.74	19,400	1,720	3.09	144,000
28.....	1,000	8.76	237,000	1,630	8.69	242,000	1,180	1.98	63,100
29.....	880	7.40	176,000	4,920	20.3	2,700,000	980	1.44	38,100
30.....	385	5.96	62,000	2,370	16.0	1,020,000	940	.96	24,400
31.....	224	4.37	26,400	1,770	8.38	400,000	-----	-----	-----
Monthly load (tons)			1,605,000	4,858,000			2,193,000		

TABLE 18.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

1934

Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	850	0.81	18,380	160	0.14	594	316	0.34	2,890
2	720	.74	14,390	125	.15	513	290	.24	1,890
3	619	.61	10,200	135	.13	486	115	.16	486
4	547	.56	8,260	166	.15	675	100	.10	270
5	474	.45	5,750	285	.10	756	125	.08	270
6	425	.42	4,810	203	.15	810	175	.38	1,780
7	420	.41	4,640	308	.24	2,000	150	.10	405
8	385	.38	3,940	265	.18	1,300	200	.11	594
9	344	.29	2,700	303	.19	1,570	250	.20	1,350
10	334	.30	2,700	316	.19	1,620	316	.24	2,050
11	290	.27	2,110	290	.21	1,650	339	.16	1,460
12	269	.27	1,970	334	.31	2,810	312	.16	1,350
13	245	.22	1,460	285	.21	1,620	375	.44	4,460
14	257	.21	1,460	321	.22	1,920	762	1.72	35,400
15	217	.27	1,590	303	.25	2,050	964	.78	20,300
16	228	.21	1,300	312	.23	1,940	1,060	.75	21,500
17	308	.20	1,670	366	.22	2,190	828	.81	18,100
18	326	.20	1,760	469	.78	9,880	707	.55	10,500
19	281	.18	1,380	410	.34	3,750	655	.42	7,420
20	294	.18	1,430	464	.44	5,510	565	.40	6,100
21	344	.20	1,860	486	.50	6,560	547	.38	5,620
22	334	.20	1,810	458	.34	4,210	425	.28	3,210
23	326	.19	1,670	508	.44	6,050	405	.29	3,160
24	334	.17	1,540	442	.36	4,290	464	.39	4,890
25	298	.15	1,220	474	.39	5,000	447	.43	5,180
26	277	.13	972	415	.33	3,700	458	.38	4,700
27	273	.14	1,030	415	.31	3,480	464	.32	4,000
28	269	.16	1,160	474	.37	4,720	442	.28	3,550
29	249	.17	1,130	385	.30	3,130	380	.27	2,780
30	238	.17	1,080	464	.33	4,130	420	.31	3,510
31	192	.13	675				513	.34	4,700
Monthly load (tons)			106,000						
				88,910			193,700		

TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

1935									
Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	3,120	1.76	148,000	4,080	1.56	172,000	8,780	1.01	239,000
2	3,520	2.32	220,000	4,230	1.00	114,000	7,860	1.12	238,000
3	3,380	1.96	179,000	4,230	1.02	116,000	6,800	.82	151,000
4	3,660	1.83	181,000	3,660	.91	89,900	6,970	.80	151,000
5	4,230	1.92	219,000	3,660	.98	96,800	8,780	.94	223,000
6	4,080	1.86	205,000	3,120	.94	79,200	10,100	.99	270,000
7	3,660	1.46	144,000	3,120	1.03	86,800	11,500	1.06	329,000
8	3,380	1.06	96,700	3,060	.83	68,600	13,300	1.19	427,000
9	3,180	1.12	96,200	3,060	.68	56,200	14,100	1.12	426,000
10	4,680	1.49	188,000	3,380	.84	76,700	14,900	1.12	451,000
11	4,380	2.38	281,000	3,940	.86	91,500	15,500	1.27	531,000
12	2,800	1.45	110,000	4,530	.97	119,000	16,500	1.11	494,000
13	2,490	1.21	81,400	5,320	1.34	192,000	17,100	1.17	540,000
14	2,670	1.23	88,700	6,120	1.32	218,000	16,100	1.00	435,000
15	3,380	1.29	118,000	7,500	1.47	298,000	15,700	1.04	441,000
16	4,530	1.48	181,000	6,970	1.13	213,000	17,300	1.01	472,000
17	5,480	1.68	249,000	6,460	1.78	310,000	18,500	1.03	514,000
18	5,960	1.34	216,000	5,960	1.83	295,000	15,500	.90	377,000
19	5,800	1.83	287,000	6,460	1.81	316,000	12,300	.81	269,000
20	6,120	1.44	238,000	6,120	1.93	319,000	12,500	.86	290,000
21	5,800	1.68	263,000	7,140	1.25	241,000	13,700	.76	281,000
22	5,480	1.64	243,000	11,300	2.51	766,000	14,900	.96	386,000
23	5,320	1.42	204,000	8,590	1.99	462,000	14,900	1.04	418,000
24	5,320	1.41	203,000	7,140	1.06	204,000	13,300	1.03	370,000
25	5,000	1.32	178,000	6,970	1.16	218,000	12,700	.70	240,000
26	5,160	1.39	194,000	7,680	1.14	236,000	12,700	.68	233,000
27	3,940	.96	102,000	8,590	1.17	271,000	11,100	.72	216,000
28	3,520	.96	91,200	9,160	1.35	334,000	10,500	.73	207,000
29	3,800	1.05	108,000	9,160	1.08	267,000	10,100	.81	221,000
30	4,080	1.35	149,000	8,970	1.07	259,000	9,350	.69	174,000
31				8,590	1.09	253,000			
Monthly load (tons)...			5,262,000	6,839,000			10,010,000		

QUANTITIES OF SUSPENDED SEDIMENT

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TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

1935

Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1.....	2,310	2.98	185,900	842	0.43	9,770	613	0.24	3,970
2.....	1,870	1.05	53,000	835	.34	7,670	601	.23	3,730
3.....	1,670	1.57	70,800	762	.32	6,590	565	.34	5,180
4.....	1,530	.75	31,000	727	.33	6,480	601	.36	5,830
5.....	1,400	.54	20,410	748	.32	6,450	625	.29	4,890
6.....	1,300	.44	15,440	748	.29	5,860	643	.26	4,510
7.....	1,260	.38	12,930	720	.29	5,640	688	.26	4,830
8.....	1,260	.40	13,610	688	.24	4,460	694	.25	4,700
9.....	1,100	.41	12,180	655	.24	4,240	668	.24	4,320
10.....	1,060	.36	10,310	643	.26	4,510	655	.24	4,240
11.....	980	.38	10,040	688	.24	4,460	625	.20	3,380
12.....	895	.37	8,940	707	.25	4,780	595	.21	3,380
13.....	895	.30	7,240	707	.26	4,970	547	.20	2,940
14.....	872	.29	6,830	714	.25	4,810	502	.19	2,560
15.....	828	.27	6,050	643	.26	4,510	496	.22	2,940
16.....	812	.22	4,830	649	.26	4,560	496	.23	3,080
17.....	776	.24	5,020	637	.22	3,780	495	.19	2,540
18.....	748	.29	5,860	625	.22	3,730	420	.15	1,701
19.....	720	.26	5,050	619	.31	5,180	405	.12	1,323
20.....	734	.25	4,970	655	.23	4,080	312	.12	999
21.....	1,260	.19	22,100	655	.21	3,730	321	.12	1,053
22.....	1,620	1.90	83,100	674	.23	4,180	321	.13	1,134
23.....	1,260	3.01	102,400	637	.23	3,940	348	.14	1,323
24.....	1,100	1.43	42,500	601	.26	4,210	513	.22	3,050
25.....	932	.99	24,920	649	.21	3,670	518	.20	2,810
26.....	980	.94	24,870	694	.31	5,800	518	.32	4,480
27.....	940	.69	17,520	707	.29	5,540	474	.19	2,430
28.....	910	.55	13,500	734	.27	5,350	370	.19	1,890
29.....	850	.43	9,890	727	.28	5,510	420	.29	3,290
30.....	850	.51	11,720	674	.24	4,370	535	.23	3,320
31.....	842	.40	9,100				535	.19	2,750
Monthly load (tons).....			852,000	152,800			98,570		

TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

1936

Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1.....	1,820	0.86	42,300	6,460	0.84	146,500	7,320	0.80	158,100
2.....	2,490	1.17	78,600	5,480	.64	94,700	7,140	.74	142,700
3.....	1,980	.86	46,000	5,320	.67	96,200	6,120	.61	100,800
4.....	1,670	.84	37,900	6,970	.80	150,600	5,000	.49	66,100
5.....	2,080	.90	50,500	8,590	.88	204,100	3,940	.45	47,900
6.....	1,770	.75	35,900	9,920	1.23	329,000	3,380	.29	26,500
7.....	1,530	.63	26,000	11,500	1.21	376,000	2,920	.22	17,330
8.....	1,530	.64	26,400	10,300	1.33	370,000	2,990	.35	28,200
9.....	1,580	.82	35,000	7,680	.98	203,200	3,380	.37	33,800
10.....	3,060	1.22	100,800	6,120	.65	107,400	3,940	.29	30,900
11.....	3,940	1.48	157,500	4,840	.47	61,400	4,230	.35	40,000
12.....	4,230	.99	113,100	4,230	.48	54,800	4,230	.35	40,000
13.....	5,160	1.26	175,600	4,080	.54	59,500	4,080	.32	35,300
14.....	6,800	1.74	319,000	5,160	.53	73,800	4,080	.34	37,400
15.....	7,680	1.62	336,000	6,120	.60	99,100	3,800	.29	29,800
16.....	7,680	1.50	311,000	6,120	.50	82,600	3,520	.24	22,820
17.....	7,140	1.41	272,000	6,460	.55	95,900	3,120	.24	20,220
18.....	7,680	1.27	263,000	6,800	.63	115,700	2,920	.25	19,710
19.....	8,040	1.32	287,000	7,500	.64	129,600	2,730	.24	17,680
20.....	7,680	1.18	244,700	7,140	.80	154,200	2,490	.23	15,490
21.....	7,500	1.18	239,000	7,500	.81	164,000	2,250	.21	12,740
22.....	7,500	.93	188,300	7,680	.88	182,500	1,980	.21	11,230
23.....	7,680	.96	199,000	7,320	.75	148,200	1,720	.16	7,420
24.....	8,220	1.14	253,000	6,800	.55	101,000	1,480	.17	6,800
25.....	8,040	1.03	223,600	6,970	.63	118,600	1,440	.16	6,210
26.....	7,140	.83	160,000	6,970	.64	120,400	1,400	.17	6,430
27.....	7,140	1.00	192,800	7,500	.84	170,100	1,350	.19	6,910
28.....	6,970	.96	180,700	7,140	.69	133,000	1,220	.14	4,620
29.....	6,800	.92	168,900	6,630	.57	102,000	1,180	.13	4,130
30.....	6,630	.80	143,200	6,120	.55	90,900	1,000	.19	5,130
31.....				6,630	.58	103,800			
Monthly load (tons).....			4,907,000						1,002,000

1936

Day	July			August			September		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1.....	872	0.18	4,240	326	0.24	2,106	6,970	6.17	1,161,000
2.....	828	.12	2,670	850	4.96	13,800	6,800	5.72	1,050,000
3.....	902	.11	2,670	607	2.56	42,000	5,480	6.27	928,000
4.....	769	.08	1,674	915	2.25	55,600	5,160	5.31	740,000
5.....	631	.11	1,863	3,950	21.4	2,282,000	3,380	3.34	305,000
6.....	571	.13	1,998	7,140	8.81	1,698,000	3,520	1.95	185,300
7.....	508	.10	1,377	6,460	6.42	1,120,000	2,730	1.27	93,600
8.....	469	.06	756	6,800	4.48	823,000	2,250	.96	58,300
9.....	405	.09	972	4,530	3.26	399,000	1,980	.77	41,200
10.....	400	.07	756	3,250	1.79	157,100	1,720	.68	31,600
11.....	430	.13	1,512	2,550	1.14	78,500	1,720	.73	33,900
12.....	980	1.11	29,400	1,920	.83	43,000	1,620	.77	33,700
13.....	474	1.25	15,980	1,670	.74	33,400	1,820	.93	45,700
14.....	1,920	1.16	60,100	1,530	.62	25,600	1,720	1.54	71,500
15.....	1,350	.50	18,220	1,350	.71	25,900	1,440	.84	32,700
16.....	980	.27	7,155	1,220	.43	14,180	1,220	.57	18,760
17.....	918	.33	8,180	1,100	.45	13,360	1,100	.52	15,440
18.....	688	.23	4,270	1,400	2.01	76,000	1,020	.42	11,560
19.....	674	.26	4,720	1,140	1.65	50,800	1,010	.44	11,990
20.....	583	.39	6,130	888	1.51	36,200	1,260	.80	27,200
21.....	553	.23	3,430	2,380	3.75	241,000	1,400	1.19	45,000
22.....	707	.30	5,720	4,530	5.03	615,000	1,620	8.12	355,000
23.....	607	.60	9,830	3,180	5.69	489,000	2,670	3.73	269,000
24.....	502	.28	3,810	1,720	3.55	164,900	2,030	3.79	207,700
25.....	469	.21	2,650	1,180	2.54	80,900	1,670	2.79	125,800
26.....	480	.19	2,457	888	1.52	36,400	1,260	1.73	58,900
27.....	415	.28	3,130	727	.96	18,850	1,060	1.09	31,200
28.....	344	.21	1,940	625	.65	10,960	1,100	1.00	29,700
29.....	357	1.33	12,820	667	.54	9,720	1,400	1.58	59,700
30.....	395	.70	7,450	5,440	6.56	964,000	1,140	1.98	60,900
31.....	410	.63	6,970	7,500	7.50	1,519,000			
Monthly load (tons).....			234,800						6,139,000

TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, 1to Sept. 30, 1941—Continued

1936

Day	October			November			December		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	1,060	1.38	39,500	2,490	4.21	283,000	902	0.39	9,500
2	996	1.01	27,200	2,430	2.95	194,000	872	.42	9,890
3	964	.82	21,300	1,980	2.23	119,000	842	.48	10,900
4	988	.76	20,300	2,030	2.04	112,000	842	.31	7,050
5	948	.66	16,900	1,400	1.19	45,000	805	.32	6,960
6	902	.56	13,600	1,140	1.03	31,700	714	.30	5,780
7	858	.51	11,800	1,060	.83	23,800	734	.43	8,520
8	1,020	.57	15,700	1,140	.87	26,800	734	.43	8,520
9	1,060	.65	18,600	1,180	.84	26,800	649	.35	6,130
10	980	.76	20,100	1,140	.76	23,400	613	.31	5,130
11	888	.54	12,900	1,060	.72	20,600	577	.19	2,960
12	842	.52	11,800	1,020	.64	17,600	577	.23	3,580
13	769	.52	10,800	1,060	.67	19,200	565	.22	3,360
14	727	.46	9,030	1,020	.57	15,700	491	.16	2,120
15	681	.38	6,990	1,020	.71	19,600	452	.21	2,560
16	714	.35	6,750	1,020	.60	16,500	631	.28	4,770
17	694	.35	6,560	1,060	.51	14,600	1,010	.61	16,600
18	649	.33	5,780	1,020	.53	14,600	902	.38	9,250
19	681	.38	6,990	1,060	.50	14,300	980	.40	10,600
20	1,000	.86	24,600	1,100	.63	18,700	902	.39	9,500
21	1,870	2.01	101,000	1,140	.68	20,900	828	.36	8,050
22	1,670	2.78	125,000	1,100	.57	16,900	798	.34	7,330
23	1,260	1.49	50,700	1,060	.55	15,700	842	.36	8,180
24	1,260	1.43	48,600	980	.74	19,600	798	.34	7,330
25	1,060	.82	23,500	972	.55	14,400	812	.35	7,670
26	940	.65	16,500	948	.44	11,300	940	.65	16,500
27	895	.55	13,300	932	.47	11,800	972	.56	14,700
28	872	.58	13,700	872	.55	12,900	940	.38	9,640
29	865	.67	15,600	888	.49	11,700	872	.40	9,420
30	1,180	1.15	36,600	910	.42	10,300	783	.41	8,670
31	4,120	9.00	1,000,000				850	.40	9,180
Monthly load (tons)			1,752,000				1,202,000		

1937

Day	January			February			March		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	688	0.26	4,830	1,000	0.06	1,620	1,060	1.30	37,200
2	625	.29	4,890	1,000	.07	1,890	1,000	.94	25,400
3	234	.19	1,200	1,000	.04	1,080	1,140	1.02	31,400
4	140	.15	567	1,500	.10	4,050	1,350	1.69	58,000
5	400	.39	4,210	2,000	.07	3,780	1,480	1.75	69,900
6	400	.06	648	3,380	.11	10,000	1,260	1.86	63,300
7	400	.09	972	4,080	.11	12,100	1,180	1.47	46,800
8	400	.03	324	5,160	4.43	617,000	1,260	1.39	47,300
9	400	.03	324	2,310	2.31	144,000	1,720	1.79	83,100
10	400	.04	432	1,350	.94	34,300	2,490	2.45	165,000
11	400	.10	1,080	1,600	.42	18,100	3,060	2.37	196,000
12	400	.09	972	2,550	.50	34,400	3,520	3.20	304,000
13	400	.04	432	1,580	.42	17,900	3,800	3.82	392,000
14	400	.03	324	2,200	.46	27,300	4,080	3.21	354,000
15	400	.02	216	7,200	2.94	572,000	5,480	4.15	614,000
16	400	.05	540	5,130	1.69	234,000	4,530	3.11	380,000
17	400	.06	648	7,140	2.79	538,000	5,000	3.02	408,000
18	400	.09	972	3,940	3.47	369,000	6,120	3.69	610,000
19	400	.07	756	3,250	2.71	238,000	7,680	4.04	838,000
20	400	.05	540	2,430	2.13	140,000	4,840	2.83	370,000
21	400	.06	648	1,620	1.78	77,900	3,380	1.76	161,000
22	400	.08	864	1,140	1.46	44,900	2,670	1.44	104,000
23	400	.08	864	1,100	1.12	33,300	3,180	1.45	124,000
24	400	.04	432	1,220	1.02	33,600	4,840	2.82	369,000
25	400	.04	432	1,400	1.31	49,500	3,940	2.62	279,000
26	400	.04	432	1,580	3.21	137,000	2,920	2.09	165,000
27	400	.08	864	1,720	1.75	81,300	2,730	1.28	94,300
28	400	.09	972	1,260	1.77	60,200	2,490	1.02	68,600
29	400	.06	648				3,120	1.13	95,200
30	400	.08	864				3,060	1.25	103,000
31	400	.09	972				2,920	2.01	158,000
Monthly load (tons)			32,870				3,536,000		

TABLE 18.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

1937									
Day	April			May			June		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	2,550	1.10	75,700	6,800	0.87	160,000	8,970	0.96	233,000
2	3,660	2.01	199,000	5,800	.72	113,000	7,860	.78	166,000
3	5,480	2.35	348,000	6,120	.69	114,000	6,800	.49	90,000
4	6,120	2.65	438,000	7,860	.89	189,000	7,140	.51	98,300
5	5,000	2.15	288,000	9,730	1.06	278,000	6,800	.52	95,500
6	4,080	1.46	161,000	11,500	1.28	397,000	6,460	.63	110,000
7	4,380	1.80	213,000	11,500	1.02	317,000	5,800	.63	98,700
8	4,230	1.71	195,000	10,300	.91	253,000	5,160	.50	69,700
9	4,530	1.71	209,000	10,500	.94	266,000	5,000	.56	75,600
10	5,800	1.55	243,000	12,500	.98	331,000	5,160	.45	62,700
11	7,320	2.32	459,000	13,100	1.08	382,000	5,160	.62	86,400
12	9,160	2.66	658,000	13,100	1.02	361,000	4,680	.54	68,200
13	10,900	2.49	733,000	12,900	1.08	376,000	5,480	.44	65,100
14	11,900	2.69	864,000	13,300	1.12	402,000	5,960	.37	59,500
15	12,700	2.31	792,000	14,300	.99	382,000	5,640	.40	60,900
16	14,300	2.49	961,000	14,900	.95	382,000	5,480	.39	57,700
17	16,500	2.43	1,080,000	14,900	.88	354,000	4,840	.35	45,700
18	15,300	2.35	971,000	14,900	.94	378,000	4,840	.40	52,300
19	12,900	1.94	676,000	14,900	.95	382,000	5,480	.42	62,100
20	11,700	1.90	600,000	14,100	.93	354,000	5,800	.38	59,500
21	11,500	1.75	543,000	12,100	.84	274,000	5,480	.36	53,300
22	11,300	1.72	525,000	11,700	.80	253,000	5,160	.34	47,400
23	12,500	1.94	655,000	11,300	.76	232,000	5,160	.61	85,000
24	12,500	2.00	675,000	11,700	.77	243,000	5,160	.45	62,700
25	9,920	1.44	386,000	11,300	.82	250,000	4,840	.41	53,600
26	8,220	1.10	244,000	9,730	.69	181,000	4,840	.33	43,100
27	8,780	1.07	254,000	8,220	.58	129,000	4,230	.38	43,400
28	10,500	1.27	360,000	6,800	.60	110,000	5,000	.67	90,400
29	8,590	1.49	346,000	6,970	.54	102,000	4,840	1.54	144,000
30	8,220	1.21	269,000	7,860	.82	174,000	3,940	.59	62,800
31				9,160	.79	195,000			
Monthly load (tons)			14,420,000	8,314,000			2,403,000		

TABLE 18.—Mean daily discharge, mean daily concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

1937

Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	14,000	14.20	5,370,000	700	0.35	6,620	460	0.18	2,240
2	4,560	7.95	979,000	707	.33	6,300	450	.16	1,940
3	2,260	4.68	286,000	674	.32	5,820	465	.17	2,130
4	1,350	3.09	113,000	655	.27	4,770	508	.26	3,570
5	1,040	2.06	57,800	649	.25	4,380	565	.35	5,340
6	910	1.21	29,700	649	.25	4,380	625	.39	6,580
7	850	.91	20,900	637	.24	4,130	577	.26	4,050
8	805	.72	15,600	649	.28	4,910	637	.32	5,500
9	734	.55	10,900	649	.32	5,610	607	.22	3,610
10	727	.52	10,200	655	.33	5,840	619	.27	4,510
11	674	.38	6,920	776	.52	10,900	619	.29	4,850
12	637	.40	6,880	700	.37	6,990	637	.19	3,270
13	589	.28	4,450	649	.30	5,260	681	.31	5,700
14	595	.27	4,340	668	.31	5,590	707	.40	7,640
15	631	.27	4,600	649	.27	4,730	769	.42	8,720
16	929	.39	9,780	619	.28	4,680	720	.31	6,030
17	1,500	1.56	63,200	589	.25	3,980	714	.33	6,360
18	1,390	2.00	75,100	601	.22	3,570	694	.31	5,810
19	1,350	2.28	83,100	571	.22	3,390	643	.27	4,690
20	1,030	1.62	45,100	565	.23	3,510	613	.30	4,970
21	880	1.28	30,400	589	.26	4,130	565	.29	4,420
22	850	.93	21,300	559	.23	3,470	595	.38	6,100
23	798	.74	15,900	559	.27	4,080	513	.19	2,630
24	776	.55	11,500	530	.21	3,010	465	.17	2,130
25	762	.48	9,880	530	.25	3,580	475	.14	1,800
26	741	.44	8,800	547	.21	3,100	553	.20	2,990
27	755	.36	7,340	518	.21	2,940	583	.21	3,310
28	762	.36	7,410	530	.20	2,860	589	.17	2,700
29	762	.36	7,410	524	.25	3,540	607	.28	4,590
30	714	.33	6,360	502	.19	2,580	649	.23	4,050
31	694	.32	6,000				607	.26	4,260
Monthly load (tons)			7,338,000	138,600			136,500		

1938

Day	January			February			March		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	571	0.17	2,620	643	0.46	7,990	3,250	4.43	389,000
2	530	.17	2,430	835	.40	9,020	5,340	5.64	813,000
3	595	.17	2,730	720	.65	12,600	6,010	5.18	841,000
4	783	.62	13,100	681	.48	8,830	9,020	6.67	1,620,000
5	700	.30	5,670	681	.33	6,070	8,620	5.39	1,250,000
6	700	.40	7,560	700	.35	6,620	4,270	2.89	333,000
7	688	.29	5,390	625	.31	5,230	2,480	1.78	119,000
8	625	.29	4,890	565	.18	2,750	1,740	1.22	57,300
9	583	.20	3,150	502	.18	2,440	2,200	1.95	116,000
10	460	.18	2,240	530	.23	3,290	1,640	1.01	44,700
11	440	.10	1,190	787	.20	4,250	1,500	.85	34,400
12	450	.20	2,430	1,500	1.65	66,800	1,460	.82	32,300
13	475	.28	3,590	1,890	2.51	128,000	1,640	1.14	50,500
14	513	.27	3,740	1,740	1.65	77,500	2,370	1.43	91,500
15	530	.22	3,150	1,790	2.27	110,000	3,080	1.80	150,000
16	559	.28	4,230	1,170	1.66	52,400	2,540	1.75	120,000
17	613	.29	4,800	948	1.06	27,100	1,640	1.18	52,300
18	688	.29	5,390	835	.81	18,300	1,550	1.20	50,200
19	835	.58	13,100	755	.73	14,900	1,740	1.20	56,400
20	850	.48	11,000	688	.53	9,850	1,690	1.02	46,500
21	762	.43	8,850	631	.44	7,500	1,600	1.12	48,400
22	714	.29	5,590	637	.55	9,460	1,890	1.07	54,600
23	649	.27	4,730	681	.48	8,530	2,540	1.27	87,100
24	553	.19	2,840	681	.38	6,990	1,990	1.22	65,600
25	518	.17	2,380	631	.35	5,960	1,740	1.00	47,000
26	425	.15	1,720	607	.33	5,410	2,590	1.27	88,800
27	323	.11	959	607	.38	6,230	3,610	1.87	182,000
28	384	.17	1,760	727	.32	6,280	3,740	1.71	173,000
29	583	.48	7,560				3,740	1.81	132,000
30	607	.39	6,390				3,870	1.42	148,000
31	649	.48	8,410				3,370	1.26	115,000
Monthly load (tons)			153,600	630,600			7,409,000		

TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	1938			1938			1938		
	April		Suspended sediment	May		Suspended sediment	June		Suspended sediment
	Mean discharge (second-foot)	Mean percent		Mean discharge (second-foot)	Mean percent		Mean discharge (second-foot)	Mean percent	
1.....	2,810	1.23	93,000	11,600	1.31	410,000	15,800	1.10	469,000
2.....	2,200	1.23	73,100	12,900	1.26	439,000	15,400	.89	370,000
3.....	1,990	.83	44,600	10,300	1.34	373,000	15,100	.92	375,000
4.....	1,790	.88	42,500	7,480	1.05	212,000	14,000	.69	261,000
5.....	2,040	.86	47,400	6,370	1.12	193,000	15,400	.77	320,000
6.....	3,250	1.27	111,000	5,330	.65	93,500	15,800	.89	380,000
7.....	3,490	1.51	142,000	4,710	.66	83,900	14,700	.85	337,000
8.....	3,310	1.39	124,000	4,410	.54	64,300	13,300	.81	291,000
9.....	2,860	.93	71,800	4,060	.55	60,300	11,100	.74	222,000
10.....	2,540	.79	54,200	3,680	.51	50,700	9,630	.66	172,000
11.....	2,540	.78	53,500	3,550	.55	52,700	9,020	.62	151,000
12.....	3,550	.98	93,900	3,250	.45	39,500	9,020	.63	153,000
13.....	4,710	1.24	158,000	3,250	.50	43,900	8,620	.57	133,000
14.....	5,840	1.66	262,000	3,680	.69	68,600	9,840	.68	181,000
15.....	6,190	1.69	282,000	4,860	.71	93,200	12,900	.70	244,000
16.....	5,670	1.54	236,000	8,620	.95	221,000	10,000	.75	202,000
17.....	4,270	.91	105,000	11,800	1.06	338,000	9,220	.61	152,000
18.....	4,410	.91	108,000	11,600	1.10	345,000	9,220	.59	147,000
19.....	5,840	1.70	268,000	9,840	1.04	276,000	9,420	.68	173,000
20.....	8,820	2.20	524,000	8,240	.79	176,000	9,420	.73	186,000
21.....	10,500	1.98	561,000	7,290	.75	148,000	8,430	.68	155,000
22.....	10,500	1.80	510,000	6,190	.73	122,000	9,630	.87	226,000
23.....	11,800	1.83	583,000	6,010	.71	115,000	13,300	.87	312,000
24.....	12,200	1.60	527,000	6,370	.76	131,000	14,900	1.21	487,000
25.....	12,900	1.67	582,000	6,190	.70	117,000	12,200	1.22	402,000
26.....	13,100	1.61	569,000	7,480	.78	158,000	9,840	.85	226,000
27.....	13,300	1.51	542,000	9,020	.84	205,000	9,220	.66	164,000
28.....	10,700	1.49	430,000	11,100	.95	285,000	10,000	.74	200,000
29.....	8,820	1.09	260,000	13,100	.88	311,000	10,500	1.19	337,000
30.....	10,500	1.39	394,000	15,600	1.00	421,000	9,420	.69	175,000
31.....				17,000	1.13	519,000			
Monthly load (tons).....			7,852,000			6,166,000			7,603,000

Day	1938			1938			1938		
	July		Suspended sediment	August		Suspended sediment	September		Suspended sediment
	Mean discharge (second-foot)	Mean percent		Mean discharge (second-foot)	Mean percent		Mean discharge (second-foot)	Mean percent	
1.....	16,500	1.15	512,000	1,180	0.22	7,010	1,250	1.94	65,500
2.....	12,500	.91	307,000	1,020	.18	4,960	3,080	4.46	371,000
3.....	9,020	.68	166,000	895	.15	3,620	7,480	8.69	1,760,000
4.....	7,670	.64	133,000	820	.15	3,320	8,820	11.0	2,620,000
5.....	6,910	.45	84,000	734	.11	2,180	7,650	7.89	1,630,000
6.....	6,010	.47	76,300	734	.13	2,580	3,870	4.27	446,000
7.....	5,170	.27	37,700	681	.14	2,570	3,490	2.71	255,000
8.....	4,560	.35	43,100	981	.15	3,970	3,870	2.97	310,000
9.....	4,000	.28	30,200	1,190	2.03	65,200	4,630	5.48	685,000
10.....	3,490	.27	25,400	755	1.07	21,800	2,480	3.98	267,000
11.....	3,140	.27	22,900	1,360	1.13	41,500	3,280	2.13	189,000
12.....	2,860	.23	17,800	700	2.93	55,400	4,270	4.08	470,000
13.....	2,700	.25	18,200	895	12.1	292,000	6,370	4.60	791,000
14.....	2,420	.21	13,700	1,740	2.22	104,000	6,010	2.49	404,000
15.....	2,320	.28	17,500	1,490	4.08	164,000	4,860	1.42	186,000
16.....	2,540	.25	17,100	2,590	6.01	420,000	3,870	.99	103,000
17.....	2,760	.36	26,800	1,420	3.96	152,000	4,630	2.13	266,000
18.....	2,260	1.05	64,100	948	2.29	58,600	3,080	2.00	166,000
19.....	2,100	.51	28,900	700	1.30	24,600	2,700	1.74	127,000
20.....	1,990	.35	18,800	613	.82	13,600	2,320	1.10	68,900
21.....	1,990	.34	18,300	496	.57	7,630	2,040	.77	42,400
22.....	2,200	.47	27,900	445	.46	5,530	1,840	.61	30,300
23.....	1,690	1.44	65,700	416	.31	3,480	1,600	.48	20,700
24.....	1,640	.38	16,800	389	.28	2,940	1,420	.60	23,000
25.....	1,460	.27	10,600	346	.20	1,870	1,260	.36	12,200
26.....	1,360	.27	9,910	288	.17	1,320	1,160	.33	10,300
27.....	1,200	.22	7,130	232	.16	1,000	1,110	.28	8,390
28.....	1,140	.22	6,770	220	.12	713	1,040	.24	6,740
29.....	1,120	.34	10,300	204	.09	496	964	.25	6,510
30.....	980	.36	9,530	210	.09	510	872	.23	5,420
31.....	1,240	.29	9,710	198	.08	428			
Monthly load (tons).....			1,853,000			1,469,000			11,350,000

TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1.....	888	0.25	5,990	1,250	0.32	10,800	790	0.22	4,690
2.....	858	.22	5,100	1,330	.32	11,500	918	.44	10,900
3.....	828	.20	4,470	1,420	.36	13,800	880	.38	9,030
4.....	790	.20	4,270	1,370	.34	12,600	835	.30	6,760
5.....	727	.21	4,120	1,340	.34	12,300	850	.30	6,880
6.....	755	.26	5,300	1,250	.29	9,790	835	.22	4,960
7.....	783	.22	4,650	1,170	.36	11,400	783	.24	5,070
8.....	925	.21	5,240	1,180	.28	8,920	776	.23	4,820
9.....	4,410	3.19	380,000	1,080	.28	8,160	776	.24	5,030
10.....	4,270	2.39	276,000	996	.21	5,650	776	.29	6,080
11.....	2,860	1.42	110,000	940	.21	5,330	741	.28	5,600
12.....	2,420	.88	57,500	1,030	.24	7,400	734	.35	6,940
13.....	2,150	.71	41,200	1,040	.30	8,420	727	.30	5,890
14.....	1,990	.61	32,800	1,000	.28	7,560	714	.28	5,400
15.....	1,890	.48	24,500	980	.26	6,880	720	.29	5,640
16.....	1,840	.46	22,800	902	.20	2,930	727	.35	6,870
17.....	1,990	.59	31,700	895	.24	5,800	748	.35	7,070
18.....	2,040	.50	27,500	925	.22	5,490	762	.33	6,790
19.....	2,040	.50	27,500	918	.25	6,200	828	.35	7,820
20.....	2,260	.61	37,200	910	.24	5,900	812	.28	6,140
21.....	2,100	.53	30,100	880	.24	5,700	1,050	.74	21,000
22.....	1,940	.48	25,100	888	.22	5,280	910	.32	7,860
23.....	1,790	.47	20,700	895	.30	7,250	888	.32	7,670
24.....	1,690	.44	20,100	835	.24	5,410	865	.33	7,710
25.....	1,600	.39	16,800	649	.19	3,330	783	.26	5,500
26.....	1,550	.39	16,300	595	.13	2,090	649	.22	3,860
27.....	1,460	.34	13,400	577	.17	2,650	565	.22	3,360
28.....	1,420	.36	13,800	607	.21	3,440	571	.26	4,010
29.....	1,320	.33	11,800	593	.21	3,360	595	.19	3,050
30.....	1,260	.30	10,200	589	.17	2,700	607	.21	3,440
31.....	1,270	.30	10,300				649	.22	3,860
Monthly load (tons)		1,296,000				208,000			199,700

1939

Day	January			February			March		
	Mean discharge (second-foot)	Mean percent	Tons per day	Mean discharge (second-foot)	Mean percent	Tons per day	Mean discharge (second-foot)	Mean percent	Tons per day
1.....	619	0.20	3,340	643	0.18	3,120	637	0.28	4,820
2.....	619	.20	3,340	571	.25	3,850	649	.18	3,150
3.....	637	.31	5,330	524	.19	2,690	668	.31	5,590
4.....	720	.36	7,000	235	.10	634	674	.27	4,910
5.....	748	.27	5,450	259	.11	770	688	.31	5,760
6.....	727	.24	4,710	435	.19	2,230	707	.31	5,920
7.....	700	.20	3,780	421	.13	1,480	637	.29	4,990
8.....	727	.37	7,260	583	.16	2,520	625	.20	3,380
9.....	769	.28	5,810	700	.43	8,130	727	.53	10,400
10.....	790	.29	6,190	619	.21	3,510	1,010	.54	14,700
11.....	769	.21	4,360	407	.16	1,760	1,600	.93	40,200
12.....	707	.24	4,580	565	.17	2,590	1,600	1.06	45,800
13.....	714	.30	5,780	518	.13	1,820	1,890	1.42	72,500
14.....	662	.25	4,470	631	.27	4,600	1,840	1.50	74,500
15.....	607	.25	4,100	655	.18	3,180	1,990	1.74	93,500
16.....	625	.38	6,410	755	.38	7,750	2,200	2.03	121,000
17.....	571	.27	4,160	850	.46	10,600	2,150	2.23	130,000
18.....	513	.13	1,800	741	.27	5,400	2,100	2.08	118,000
19.....	631	.21	3,580	828	.22	4,920	2,200	1.88	112,000
20.....	571	.24	3,700	776	.25	5,240	2,320	1.67	105,000
21.....	674	.30	5,460	714	.30	5,780	2,590	2.19	153,000
22.....	798	.43	9,260	707	.33	6,300	3,140	1.86	158,000
23.....	996	.54	14,500	674	.22	4,000	4,130	1.81	202,000
24.....	858	.29	6,720	643	.21	3,640	5,670	2.25	344,000
25.....	805	.30	6,520	637	.25	4,300	5,670	2.45	375,000
26.....	700	.28	5,290	694	.31	5,810	4,710	1.61	205,000
27.....	674	.23	4,180	714	.21	4,050	4,130	1.07	119,000
28.....	668	.25	4,510	727	.27	5,300	4,060	1.04	114,000
29.....	734	.50	9,910				4,270	1.06	122,000
30.....	700	.40	7,560				3,490	.75	70,700
31.....	662	.28	5,010				2,930	.66	52,200
Monthly load (tons)		174,100				116,000			2,891,000

TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1.....	2,700	0.59	43,000	5,010	0.61	82,500	5,010	0.61	82,500
2.....	2,540	.67	45,900	5,010	.81	110,000	4,860	.61	80,000
3.....	2,860	.75	57,900	5,010	.82	111,000	4,710	.62	78,800
4.....	3,490	.75	70,700	5,840	.92	145,000	4,130	.51	56,900
5.....	4,000	.82	88,600	5,010	.76	103,000	4,410	.59	70,300
6.....	5,170	2.31	322,000	5,010	.79	107,000	5,010	.61	82,500
7.....	4,270	1.59	183,000	6,010	.94	152,000	5,500	.68	101,000
8.....	3,940	1.09	116,000	6,370	1.01	174,000	4,560	.55	67,700
9.....	3,370	.88	80,100	5,010	.70	94,700	3,800	.38	39,000
10.....	3,370	.75	68,200	4,860	.67	87,900	3,490	.41	38,600
11.....	3,740	.97	98,000	5,500	.68	101,000	3,430	.29	26,900
12.....	3,490	1.10	104,000	6,550	1.00	177,000	3,370	.36	32,800
13.....	3,080	.85	70,700	6,730	.84	153,000	3,200	.34	29,400
14.....	2,920	.86	67,800	6,010	.75	122,000	2,860	.29	22,400
15.....	2,980	.75	60,300	5,330	.67	96,400	2,700	.31	22,600
16.....	2,920	.88	69,400	4,710	.59	75,000	2,700	.33	24,100
17.....	2,760	.85	63,300	4,560	.61	75,100	2,480	.30	20,100
18.....	2,540	.70	48,000	4,270	.71	81,900	2,200	.33	19,600
19.....	2,260	.33	20,100	3,610	.61	59,500	2,040	.28	15,400
20.....	1,990	.39	21,000	3,430	.77	71,300	1,790	.19	9,180
21.....	1,990	.36	19,300	4,410	.72	85,700	1,550	.20	8,370
22.....	2,260	.38	23,200	6,010	.97	157,000	1,260	.19	6,460
23.....	2,810	.50	37,900	6,190	.87	145,000	1,050	.15	4,250
24.....	3,610	.66	64,300	6,190	.79	132,000	812	.12	2,630
25.....	4,270	.70	80,700	6,010	.82	133,000	707	.11	2,100
26.....	3,740	.52	52,500	4,860	.50	65,600	694	.13	2,435
27.....	3,250	.57	50,000	4,000	.44	47,500	637	.07	1,204
28.....	3,030	.54	44,200	3,550	.48	46,000	655	.07	1,237
29.....	3,080	.64	53,200	3,870	.83	86,700	625	.08	1,350
30.....	3,800	.78	80,000	4,410	.74	88,100	589	.08	1,272
31.....				4,710	.69	87,700			
Monthly load (tons).....			2,203,000			3,253,000			951,000

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Day	July			August			September		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1.....	583	0.12	1,890	266	2.10	15,100	281	2.57	19,500
2.....	565	.07	1,070	204	3.23	17,800	342	3.39	31,300
3.....	585	.06	948	292	3.78	29,800	249	7.96	53,500
4.....	553	.07	1,040	223	.89	5,360	189	1.60	8,160
5.....	535	.08	1,160	159	2.64	11,300	259	2.48	17,300
6.....	518	.11	1,540	134	.45	1,630	715	6.75	130,000
7.....	421	.08	910	109	.35	1,030	435	1.57	18,400
8.....	412	.08	891	84	.21	475	465	4.22	53,000
9.....	376	.06	610	99	.21	562	812	3.86	84,600
10.....	371	.05	502	97	.30	786	1,090	2.43	71,500
11.....	288	.04	310	68	.12	221	4,060	5.07	556,000
12.....	259	.04	281	68	.06	111	11,000	20.9	6,210,000
13.....	281	.03	227	69	.04	76	7,100	5.57	1,068,000
14.....	252	.05	340	69	.09	167	3,800	3.18	326,000
15.....	207	.01	57	46	.07	86	3,430	2.65	245,000
16.....	168	.01	46	34	.04	38	3,430	1.27	118,000
17.....	137	.02	73	24	.02	13	3,310	1.41	126,000
18.....	115	.02	62	14	.01	4	2,420	1.46	95,400
19.....	127	.02	68	11	.00	0	1,990	.80	43,000
20.....	124	.01	32	7	.01	1	1,840	.68	33,800
21.....	86	.01	23	3	.01	0	1,690	.81	37,000
22.....	95	.01	26	1	.01	0	1,330	.87	31,200
23.....	76	.01	20	1	.00	0	1,240	.52	17,400
24.....	56	.01	15	0	.00	0	1,040	.89	25,000
25.....	38	.01	10	0	.00	0	980	.89	23,600
26.....	25	.01	7	0	.00	0	1,510	2.76	112,000
27.....	13	.01	4	0	.00	0	2,800	2.69	203,000
28.....	46	.01	12	1	.76	21	1,140	1.87	57,600
29.....	631	.99	16,900	0	.00	0	1,080	1.35	39,400
30.....	246	3.50	23,200	140	8.00	30,200	1,180	.83	26,400
31.....	144	3.51	13,600	270	5.83	42,500			
Monthly load (tons).....			65,870			157,300			9,881,000

QUANTITIES OF SUSPENDED SEDIMENT

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TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

1939									
Day	October			November			December		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	974	0.76	20,000	578	0.36	5,620	582	0.31	4,870
2	878	.49	11,600	568	.32	4,910	587	.22	3,490
3	854	.36	8,300	612	.28	4,630	534	.33	4,760
4	776	.30	6,290	602	.25	4,060	544	.26	3,820
5	724	.31	6,060	578	.25	3,900	558	.25	3,770
6	681	.20	3,680	558	.24	3,620	516	.23	3,200
7	628	.20	3,390	568	.25	3,830	511	.20	2,760
8	602	.14	2,280	582	.25	3,930	511	.30	4,140
9	691	.26	4,850	649	.31	5,430	563	.26	3,950
10	643	.43	7,470	800	.45	9,720	549	.23	3,410
11	607	.48	7,870	854	.36	8,300	539	.21	3,060
12	648	.51	8,850	794	.39	8,360	516	.26	3,620
13	684	.46	8,120	713	.49	9,430	488	.24	3,160
14	628	1.02	17,300	708	.34	6,500	506	.21	2,870
15	582	.46	7,230	638	.29	5,000	506	.18	2,460
16	563	.48	7,300	654	.34	5,860	488	.19	2,480
17	539	.27	3,930	638	.33	5,680	475	.15	1,920
18	475	.25	3,210	628	.32	5,430	441	.16	1,900
19	475	.24	3,080	582	.40	6,290	432	.17	1,980
20	458	.24	2,970	597	.31	5,000	449	.24	2,910
21	441	.15	1,790	587	.24	3,800	480	.22	2,850
22	453	.15	1,840	573	.23	3,560	462	.20	2,500
23	445	.22	2,640	568	.33	5,060	441	.20	2,380
24	424	.14	1,600	558	.32	4,820	357	.17	1,640
25	408	.16	1,760	553	.25	3,730	470	.18	2,280
26	420	.15	1,700	520	.22	3,090	520	.20	2,810
27	404	.27	2,950	553	.33	4,930	506	.15	2,050
28	484	.20	2,610	549	.25	3,710	506	.07	956
29	1,550	.54	22,600	530	.25	3,580	294	.05	397
30	776	.40	8,380	563	.29	4,410	166	.03	134
31	659	.34	6,050				259	.16	1,120
Monthly load (tons)			197,700	156,200			83,650		

TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

Day	April			May			June		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	1,420	0.68	26,100	2,510	0.65	44,100	4,990	0.46	62,000
2	1,330	.44	15,800	2,320	.52	32,600	5,250	.36	51,000
3	1,600	.52	21,100	1,910	.51	26,300	5,180	.24	33,600
4	1,460	.51	20,100	2,030	.37	20,300	4,930	.57	75,900
5	1,410	.48	18,300	2,520	.44	29,900	4,100	.62	68,600
6	1,230	.40	13,300	3,990	.73	78,600	3,660	.44	43,500
7	1,200	.39	12,600	4,930	.96	128,000	3,270	.54	47,700
8	1,260	.45	15,300	4,930	.93	124,000	2,860	1.36	105,000
9	1,200	.34	11,000	5,270	.82	117,000	2,560	.34	23,500
10	1,170	.42	13,300	5,010	.88	119,000	2,270	.45	27,600
11	1,140	.33	10,200	5,100	.82	112,900	2,060	.20	11,100
12	1,090	.34	10,000	5,690	.78	119,800	1,880	.21	10,700
13	1,100	.33	9,800	5,950	1.15	185,000	1,650	.35	15,600
14	1,120	.45	13,600	6,030	.79	128,600	1,600	.19	8,210
15	1,200	.43	13,900	5,990	.94	152,000	1,530	.22	9,090
16	1,720	.66	30,700	6,620	.86	153,000	1,490	.32	12,900
17	2,520	.93	63,300	6,620	1.14	204,000	1,550	.22	9,210
18	2,510	.72	48,800	6,440	.64	111,000	1,460	.20	7,880
19	2,220	.65	39,000	6,800	.67	123,000	1,370	.24	8,880
20	1,900	.57	29,200	6,530	.82	145,000	1,300	.22	7,720
21	1,730	.49	22,900	4,960	.69	92,400	1,100	.13	3,860
22	2,340	.77	48,600	4,640	.64	80,200	1,040	.09	2,530
23	3,200	.79	68,300	4,020	.53	57,500	955	.15	3,870
24	3,410	.79	72,700	3,870	.69	72,100	916	.13	3,220
25	4,450	.93	112,000	3,720	.75	75,300	910	.15	3,690
26	4,230	.88	100,000	3,940	.56	59,600	848	.11	2,520
27	3,710	.78	78,100	4,300	.57	66,200	854	.16	3,690
28	3,570	.75	72,300	4,380	.49	57,900	697	.15	2,820
29	3,780	.71	72,500	4,780	.66	85,200	724	.15	2,930
30	3,030	.66	54,000	4,940	.61	81,400	623	.13	2,190
31				4,850	.70	91,700			
Monthly load (tons)			1,137,000				2,974,000		

Day	July			August			September		
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day
1	913	0.09	2,200	384	4.44	46,000	506	1.18	16,100
2	549	.30	4,450	224	3.76	22,700	462	1.02	12,700
3	719	.44	8,540	148	3.20	12,800	388	.63	6,600
4	854	.33	7,610	112	1.63	4,930	380	.79	8,110
5	659	.22	3,910	93	.65	1,630	318	.80	6,870
6	558	.21	3,160	74	.35	699	361	.82	7,990
7	416	.31	3,480	52	.20	281	269	.61	4,430
8	388	.12	1,260	47	.14	1,780	199	1.86	9,990
9	328	.12	1,060	120	2.09	6,770	202	1.43	7,800
10	301	.12	975	339	3.72	34,000	181	.54	2,640
11	281	.06	455	154	4.12	17,100	157	.33	1,400
12	235	.07	444	124	3.92	13,100	139	.33	1,240
13	196	.05	265	114	3.26	10,000	678	7.13	130,000
14	150	.04	162	96	2.12	5,500	281	5.47	41,500
15	118	.03	96	83	1.07	2,400	275	10.1	75,000
16	118	2.88	9,180	62	.50	837	194	4.02	21,100
17	280	3.36	25,400	59	.83	1,320	311	3.38	28,400
18	218	9.45	55,600	54	.53	773	3,000	7.02	569,000
19	77	5.42	11,300	41	.30	332	3,330	11.0	989,000
20	46	3.34	4,150	31	2.13	1,780	5,450	7.98	1,174,000
21	74	1.35	2,700	137	3.23	12,000	2,930	5.42	429,000
22	253	1.75	12,000	154	3.36	14,000	4,880	7.30	962,000
23	150	1.54	6,240	328	5.60	49,600	4,100	6.14	680,000
24	100	.69	1,860	1,650	10.8	481,000	2,770	6.52	488,000
25	78	.17	358	4,500	16.3	1,980,000	2,220	2.41	144,000
26	51	.11	151	8,300	8.97	1,280,000	2,090	1.60	90,300
27	552	.08	1,190	2,930	5.68	449,000	1,710	1.37	63,300
28	1,430	5.93	229,000	974	5.36	141,000	1,710	.99	45,700
29	3,140	15.3	1,297,000	994	4.11	110,000	6,170	9.92	1,653,000
30	2,220	7.23	433,000	697	2.68	50,400	12,130	12.1	3,960,000
31	890	5.74	138,000	602	2.28	37,100			
Monthly load (tons)			2,265,000				4,789,000		

TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

1940										
Day	October			November			December			
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1	9,820	12.5	3,320,000	1,060	0.77	22,800	878	0.56	13,300	
2	4,100	4.13	457,000	1,000	.62	16,700	854	.53	12,200	
3	3,100	4.27	357,000	981	.73	19,300	848	.57	13,000	
4	2,340	1.93	122,000	988	.58	15,500	878	.79	18,700	
5	5,590	7.94	1,200,000	903	.63	15,400	866	.44	10,300	
6	6,240	4.01	676,000	884	.53	12,600	872	.46	10,800	
7	3,310	2.85	255,000	896	.31	7,500	848	.60	13,700	
8	3,990	2.23	240,000	884	.40	9,550	848	.43	9,850	
9	3,000	1.50	122,000	812	.44	9,650	884	.51	12,200	
10	2,650	1.28	91,600	788	.42	8,940	878	.60	14,200	
11	2,290	1.06	65,500	836	.50	11,300	1,010	.58	15,800	
12	2,140	.77	44,500	916	.46	11,400	1,150	.61	18,900	
13	1,900	.78	40,000	903	.50	12,200	1,950	1.21	63,700	
14	1,750	.73	34,500	903	.66	16,100	1,760	1.42	67,500	
15	1,590	.64	27,500	794	.33	7,070	1,370	1.52	56,200	
16	1,530	.61	25,200	747	.30	6,050	974	1.13	29,700	
17	1,440	.43	16,700	742	.45	9,020	878	.61	14,500	
18	1,370	.60	22,200	794	.39	8,360	759	.50	10,200	
19	1,270	.63	22,400	2,780	3.86	290,000	1,430	3.75	145,000	
20	1,250	.42	14,700	3,260	2.50	220,000	1,450	2.47	96,700	
21	1,210	.54	18,300	1,930	1.38	71,900	1,290	1.50	52,200	
22	1,110	.50	15,500	1,560	1.00	42,100	1,250	1.07	36,100	
23	1,080	.53	14,700	1,300	1.45	50,900	1,030	.89	24,800	
24	903	.40	9,750	1,130	1.17	35,700	948	.57	14,600	
25	818	.43	9,500	1,050	.96	27,200	3,110	2.49	209,000	
26	878	.40	9,480	994	.84	22,500	2,960	4.55	364,000	
27	1,900	1.80	92,300	974	.90	23,700	2,070	2.77	155,000	
28	1,410	1.37	52,200	936	.55	13,900	1,420	2.17	83,200	
29	1,080	.82	23,900	910	.66	16,200	1,170	1.68	53,100	
30	1,370	.95	35,100	903	.56	13,600	1,760	2.33	111,000	
31	1,150	.69	21,400				2,620	2.14	151,000	
Monthly load (tons)			7,456,000				1,047,000			1,900,000

1941										
Day	January			February			March			
	Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		Mean discharge (second-feet)	Suspended sediment		
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day	
1	3,200	3.43	296,000	1,340	0.89	32,200	2,080	1.85	104,000	
2	2,590	3.28	229,000	1,220	.70	23,100	1,890	1.16	59,200	
3	1,850	2.48	124,000	1,280	.93	32,100	2,220	1.38	82,700	
4	1,320	1.89	67,400	1,160	.88	27,600	3,400	2.14	196,000	
5	1,100	1.11	33,000	955	.80	20,600	2,440	1.54	102,000	
6	910	.90	22,100	903	.75	18,300	2,090	1.38	77,900	
7	836	.79	17,800	1,120	.63	19,000	2,330	1.96	123,000	
8	818	.71	15,700	1,710	1.47	67,900	2,320	1.45	90,800	
9	788	.92	19,600	1,520	.93	38,200	1,960	1.25	66,200	
10	788	.89	18,900	1,330	.80	28,700	1,760	1.13	53,700	
11	830	.85	19,100	1,200	.97	31,400	1,660	.87	39,000	
12	981	.75	19,900	1,460	1.05	41,400	1,520	.74	30,400	
13	1,360	1.70	62,400	1,680	1.23	55,800	1,520	.83	34,100	
14	1,420	1.81	69,400	1,660	1.05	47,100	1,670	.82	37,000	
15	1,920	1.51	78,300	1,580	1.37	58,400	4,700	6.09	773,000	
16	1,450	1.93	75,600	1,550	1.61	67,400	4,290	5.62	651,000	
17	1,150	1.53	47,500	1,710	1.57	72,500	4,460	3.20	385,000	
18	974	1.11	29,200	1,920	1.89	98,000	4,560	2.99	368,000	
19	836	1.03	23,200	2,930	2.53	200,000	4,200	3.25	369,000	
20	776	.90	18,900	2,990	2.44	197,000	4,400	3.19	379,000	
21	747	.66	13,300	4,290	3.38	392,000	4,820	3.16	411,000	
22	842	.58	13,200	4,670	3.24	409,000	4,500	2.28	277,000	
23	1,080	1.23	35,900	4,770	3.98	513,000	5,500	2.89	429,000	
24	1,090	.95	28,000	4,080	3.43	378,000	5,640	2.70	411,000	
25	1,240	.93	31,100	4,140	2.82	315,000	5,640	2.88	439,000	
26	1,660	1.53	68,600	4,110	3.05	338,000	5,990	2.55	412,000	
27	1,280	1.23	42,500	3,690	2.62	261,000	4,590	1.74	216,000	
28	1,170	1.18	37,300	2,910	2.19	172,000	3,690	1.61	160,000	
29	1,260	1.20	40,800				3,220	1.93	168,000	
30	1,500	1.19	48,200				3,500	1.36	128,000	
31	1,440	.90	35,000				3,960	1.82	195,000	
Monthly load (tons)			1,681,000							7,285,000

TABLE 18.—Mean daily discharge, mean concentration, and daily load of suspended sediment in the San Juan River at gaging station near Bluff, Utah, Oct. 1, 1929, to Sept. 30, 1941—Continued

1941

Day	April			May			June		
	Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment		Mean discharge (second-foot)	Suspended sediment	
		Mean percent	Tons per day		Mean percent	Tons per day		Mean percent	Tons per day*
1----	4,450	1.72	207,000	14,400	2.05	797,000	13,400	0.91	329,000
2----	5,800	2.27	355,000	14,100	1.71	651,000	12,900	1.17	408,000
3----	7,250	2.26	442,000	20,000	2.70	1,460,000	12,900	.82	286,000
4----	5,240	1.79	253,000	20,000	2.59	1,400,000	13,400	1.12	405,000
5----	4,480	1.25	151,000	27,100	3.59	2,630,000	13,900	.87	327,000
6----	4,260	1.54	177,000	25,700	3.76	2,610,000	13,900	.94	353,000
7----	4,530	1.62	198,000	20,500	3.06	1,690,000	15,100	1.04	424,000
8----	4,080	1.10	121,000	21,600	3.08	1,800,000	14,100	1.26	480,000
9----	4,020	1.06	115,000	21,600	2.86	1,670,000	18,900	1.37	699,000
10----	4,380	1.35	160,000	23,500	3.05	1,940,000	20,200	1.63	889,000
11----	5,270	1.84	262,000	25,200	2.59	1,760,000	17,900	1.18	570,000
12----	6,330	1.30	222,000	26,000	2.28	1,600,000	14,100	1.01	385,000
13----	6,330	1.42	243,000	28,000	2.40	1,810,000	11,400	.77	237,000
14----	6,330	1.55	265,000	33,800	2.33	2,130,000	11,100	.66	198,000
15----	5,800	1.49	233,000	32,600	2.23	1,960,000	11,400	.62	191,000
16----	4,900	1.04	138,000	28,300	1.80	1,380,000	12,000	.68	247,000
17----	4,930	1.02	136,000	22,900	1.59	983,000	12,500	.69	233,000
18----	4,690	1.24	157,000	22,100	1.40	835,000	13,400	.75	271,000
19----	4,750	1.24	159,000	22,600	1.43	873,000	14,400	.75	292,000
20----	4,610	1.14	142,000	22,600	1.24	757,000	16,600	.87	390,000
21----	4,380	1.18	140,000	18,100	1.01	494,000	18,100	.79	386,000
22----	4,120	.99	110,000	15,100	.92	375,000	18,400	.84	417,000
23----	6,150	3.64	604,000	15,800	1.34	572,000	18,400	.74	368,000
24----	7,630	2.19	451,000	25,200	4.96	3,370,000	18,600	.77	387,000
25----	6,150	1.78	311,000	18,900	4.82	2,460,000	20,000	.87	470,000
26----	7,560	3.74	763,000	18,900	3.59	1,830,000	20,200	.94	513,000
27----	13,000	7.20	2,530,000	18,400	2.09	1,040,000	17,900	.81	391,000
28----	14,800	6.66	2,660,000	18,400	1.44	715,000	16,600	.79	354,000
29----	16,800	3.04	1,380,000	16,600	.93	417,000	15,600	.79	333,000
30----	14,800	2.36	943,000	14,600	1.07	422,000	14,100	.73	278,000
31----				14,400	1.05	408,000			
Monthly load (tons)----			14,030,000						

TABLE 19.—*Suspended-sediment concentration in individual samples collected from the San Juan River at gaging station near Bluff, Utah, in Sept. and Oct. 1937, Sept. 1939, July to Oct. 1940, and March, April, and September 1941*

Sampling points, measured from zero mark on cable at north bank: A, one-fourth, the distance across the river; B, one-half; C, three-fourths.

Date of collection	Time	Gage height	Suspended sediment				
			At sampling points—			Mean daily percent	Tons per day
			A (percent)	B (percent)	C (percent)		
1937							
Sept. 26.....	8:15 a. m.	4.02	0.36	0.34	0.46	0.39	1,450
Sept. 27.....	8:30 a. m.	4.16	.43	.40	.38	.40	1,830
Sept. 28.....	6:50 a. m.	4.20	.56	.48	.37	.47	2,610
Sept. 29.....	8:30 a. m.	4.22	.41	.40	.44	.84	5,560
	8:10 p. m.	4.80	1.34	1.39	1.08		
Sept. 30.....	9:15 a. m.	8.00	5.88	6.02	5.03	13.3	2,840,000
	2:20 p. m.	113.00	16.8	15.8	15.8		
	7:50 p. m.	15.30	16.1	17.4	17.8		
	11:45 p. m.	15.40	14.2	14.3	14.2		
Oct. 1.....	6:30 a. m.	116.70	14.8	15.2	15.4	14.2	5,370,000
	12:30 p. m.	16.00	17.4	17.5	17.9		
	5:50 p. m.	12.10	13.1	13.4	13.5		
	11:45 p. m.	10.15	10.5	10.8	11.2		
Oct. 2.....	8:35 a. m.	8.45	7.88	8.09	7.87	7.95	979,000
Oct. 3.....	12:00 m.	6.40	4.65	4.70	4.70	4.68	286,000
Oct. 4.....	10:10 a. m.	5.48	3.06	3.12	3.08	3.09	113,000
Oct. 5.....	8:15 a. m.	5.10	2.09	2.08	2.01	2.06	57,800
Oct. 6.....	4:45 p. m.	4.90	1.17	1.26	1.19	1.21	29,700
Oct. 7.....	2:30 p. m.	4.85	.89	.88	.95	.91	20,900
1939							
Sept. 10.....	5:40 p. m.	4.90	2.50	2.58	2.21	2.43	71,500
Sept. 11.....	1:00 p. m.	6.70	2.86	3.86	3.24	5.07	556,000
	6:00 p. m.	9.60	4.26	4.77	5.29		
	10:00 p. m.	10.80	6.23	7.22	7.92		
Sept. 12.....	10:00 a. m.	13.00	15.9	17.8	18.6	20.9	6,210,000
	6:00 p. m.	11.80	25.7	26.4	21.2		
Sept. 13.....	10:00 a. m.	9.60	5.22	5.84	6.60	5.57	1,070,000
	3:30 p. m.	8.90	5.05	5.77	6.81		
	9:30 p. m.	8.20	5.12	5.27	4.46		
Sept. 14.....	11:00 a. m.	7.60	3.17	2.89	3.48	3.18	326,000
Sept. 15.....	10:00 a. m.	7.30	1.88	2.55	3.53	2.65	245,000
Sept. 16.....	1:30 p. m.	7.40	1.41	1.17	1.22	1.27	118,000
1940							
July 15.....	7:00 p. m.02	.03	.03	.03	96
July 16.....	5:00 p. m.	3.40	1.25	1.21	1.38	2.88	9,180
	8:15 p. m.	3.40	4.79	4.24	4.38		
July 17.....	6:40 p. m.	4.70	1.40	1.41	2.82	3.36	25,400
	11:20 p. m.	4.20	4.74	5.17	4.71		
July 18.....	1:00 p. m.	3.30	9.73	9.30	9.31	9.45	55,600
July 19.....	8:00 p. m.	2.76	4.15	5.94	6.16	5.42	11,300
July 20.....	10:05 a. m.	2.60	4.29	2.83	2.90	3.34	4,150
July 21.....	5:45 p. m.	3.43	1.56	.99	1.50	1.35	2,700
July 22.....	11:45 a. m.	3.77	2.55	1.29	1.41	1.75	12,000
Aug. 21.....	10:40 a. m.	3.26	3.37	3.24	3.08	3.23	12,000
Aug. 22.....	12:25 a. m.	3.30	4.10	4.18	4.39	3.36	14,000
	7:20 a. m.	3.40	2.46	2.63	2.42		
Aug. 23.....	9:10 a. m.	3.80	5.83	5.93	5.04	5.60	49,600
Aug. 24.....	8:10 a. m.	6.05	5.91	6.02	6.08	10.8	481,000
	6:55 p. m.	6.52	9.02	8.48	8.87		
Aug. 25.....	11:15 p. m.	7.68	16.3	17.8	18.4		
	6:10 a. m.	7.82	13.3	12.5	16.5	16.3	1,980,000
	3:10 p. m.	8.20	12.3	11.7	9.17		
	9:45 p. m.	7.28	21.0	25.6	25.5		
Aug. 26.....	9:35 a. m.	9.65	11.7	11.4	9.97	8.97	1,284,000
	1:45 p. m.	9.70	8.68	8.89	9.45		
	9:20 p. m.	8.02	6.48	6.64	7.48		
Aug. 27.....	7:25 a. m.	7.03	5.20	5.47	7.20	5.68	449,000
	5:25 p. m.	7.00	5.09	5.36	5.26		
	8:25 p. m.	7.05	5.22	5.06	7.32		
	11:20 p. m.	7.01	5.26	5.58	5.58		

1 Estimated.

TABLE 19.—*Suspended-sediment concentration in individual samples collected from the San Juan River at gaging station near Bluff, Utah, in Sept. and Oct. 1937, Sept. 1939, July to Oct. 1940, and March, April, and September 1941—Continued*

Sampling points, measured from zero mark on cable at north bank: A, one-fourth, the distance across the river; B, one-half; C, three-fourths.

Date of collection	Time	Gage height	Suspended sediment				
			At sampling points—			Mean daily percent	Tons per day
			A (percent)	B (percent)	C (percent)		
1940							
Aug. 28	9:30 a. m.	6.30	4.94	5.12	5.00	5.36	141,000
	3:25 p. m.	5.99	5.83	5.38	5.92		
	7:50 p. m.	5.67	5.26	5.81	4.97		
Aug. 29	9:25 a. m.	5.11	4.08	4.28	3.98	4.11	110,000
Aug. 30	3:00 p. m.	4.57	2.78	2.67	2.58	2.68	50,400
Aug. 31	3:20 p. m.	4.35	2.98	1.66	2.19	2.28	37,100
Sept. 12	10:25 a. m.	3.20	0.32	0.31	0.35	0.33	1,240
Sept. 13	7:55 a. m.	4.47	3.57	3.52	3.38	7.13	130,000
	12:40 p. m.	4.82	13.6	16.5	21.9		
	3:50 p. m.	4.92	3.19	3.02	4.12		
Sept. 14	9:40 p. m.	4.40	4.28	4.32	4.17	5.47	41,500
	10:10 a. m.	3.80	1.39	1.80	1.09		
	9:55 p. m.	4.71	9.10	10.5	8.94		
Sept. 15	7:55 a. m.	4.10	10.6	10.3	9.43	10.1	75,000
Sept. 17	7:15 a. m.	3.90	3.31	3.55	3.28	3.38	8,400
Sept. 18	12:40 a. m.	5.48	6.41	6.34	8.58	7.02	569,000
	11:15 a. m.	7.95	6.64	5.32	6.35		
	4:20 p. m.	7.05	8.09	9.09	8.28		
Sept. 19	9:45 p. m.	7.05	6.27	6.24	6.61	11.0	989,000
	6:50 a. m.	7.02	16.6	14.7	13.5		
	12:50 p. m.	7.40	10.6	11.4	10.7		
Sept. 20	6:35 p. m.	7.35	8.33	8.83	9.16	7.98	1,174,000
	9:55 p. m.	7.65	8.92	11.8	7.35		
	7:25 a. m.	9.20	8.84	9.49	9.32		
Sept. 21	2:50 p. m.	10.25	7.03	7.26	7.67	5.42	429,000
	6:25 p. m.	9.15	6.50	7.01	7.39		
	11:15 p. m.	8.40	8.20	8.49	8.58		
Sept. 22	7:00 a. m.	7.30	6.22	6.54	6.32	7.30	962,000
	11:25 a. m.	7.25	5.62	6.11	5.63		
	10:50 p. m.	7.00	4.07	3.91	4.34		
Sept. 23	10:00 a. m.	6.95	3.14	3.18	3.46	6.14	680,000
	3:30 p. m.	8.30	3.91	4.53	5.03		
	6:30 p. m.	11.50	7.00	9.06	8.07		
Sept. 24	10:30 p. m.	10.50	13.1	14.9	12.2	6.52	488,000
	7:25 a. m.	8.45	7.92	7.59	8.12		
	5:15 p. m.	7.40	3.70	4.71	4.78		
Sept. 25	10:00 a. m.	7.30	5.26	7.08	7.23	6.52	144,000
Sept. 26	11:45 a. m.	6.80	2.47	2.34	2.42	2.41	90,300
Sept. 27	2:00 p. m.	6.30	1.59	1.65	1.55	1.60	63,300
Sept. 28	2:30 p. m.	5.97	1.27	1.62	1.23	1.37	45,700
Sept. 29	3:00 p. m.	5.67	.86	1.03	1.08	9.92	1,653,000
	12:20 p. m.	10.05	11.3	10.6	11.9		
	5:05 p. m.	8.65	10.1	10.2	10.8		
Sept. 30	10:00 p. m.	8.70	7.87	8.39	8.14	12.1	3,960,000
	9:05 a. m.	11.60	14.2	13.4	14.7		
	2:30 p. m.	10.20	10.6	9.63	9.93		
Oct. 1	6:40 p. m.	10.40	6.56	7.70	13.1	12.5	3,320,000
	6:35 a. m.	11.50	8.21	10.2	10.0		
	11:40 a. m.	9.90	18.6	23.0	16.1		
Oct. 2	4:45 p. m.	8.60	8.91	8.78	8.84	4.13	457,000
	2:55 p. m.	7.95	3.84	4.30	4.25		
	7:00 a. m.	7.55	3.29	5.94	3.57		
1941							
Mar. 14	11:15 a. m.	5.68	.79	.93	.73	.82	37,800
Mar. 15	10:20 a. m.	8.40	6.61	6.98	6.21	6.09	773,000
	3:45 p. m.	8.55	6.27	6.91	7.15		
	6:55 p. m.	8.40	5.62	6.29	6.34		
Mar. 16	11:30 p. m.	8.15	4.48	4.82	5.36	5.62	651,000
	8:00 a. m.	8.70	5.44	5.96	6.28		
	5:25 p. m.	7.30	5.27	5.31	5.47		

¹ Estimated.

TABLE 19.—*Suspended-sediment concentration in individual samples collected from the San Juan River at gaging station near Bluff, Utah, in Sept. and Oct. 1937, Sept. 1939, July to Oct. 1940, and March, April, and September 1941—Continued*

Sampling points, measured from zero mark on cable at north bank: A, one fourth, the distance across the river; B, one-half; C, three-fourths.

Date of collection	Time	Gage height	Suspended sediment				
			At sampling points—			Mean daily percent	Tons per day
			A (percent)	B (percent)	C (percent)		
1941							
Mar. 17.....	10:40 a. m.....	8.10	3.10	3.56	4.28	3.20	385,000
	3:30 p. m.....	8.15	2.33	2.89	3.05		
Mar. 18.....	8:40 a. m.....	7.65	2.16	2.25	2.50	2.99	368,000
	6:50 p. m.....	8.21	3.22	3.79	4.01		
Apr. 22.....	9:45 a. m.....	7.45	.89	1.06	1.02	.99	110,000
Apr. 23.....	9:50 a. m.....	8.42	4.38	4.87	4.97	3.64	604,000
	5:15 p. m.....	9.25	2.92	3.53	3.74		
	9:30 p. m.....	9.50	2.04	3.10	3.25		
Apr. 24.....	7:45 a. m.....	9.90	2.02	2.65	2.68	2.19	451,000
	3:15 p. m.....	9.58	1.43	2.01	2.21		
	6:50 p. m.....	9.25	1.44	2.19	3.05		
Apr. 25.....	9:20 a. m.....	8.50	1.65	1.98	1.98	1.87	311,000
Apr. 26.....	7:45 a. m.....	8.88	1.57	2.00	2.00	3.74	763,000
	5:30 p. m.....	9.95	2.47	3.44	3.53		
	8:50 p. m.....	10.23	5.32	6.52	6.79		
Apr. 27.....	7:40 a. m.....	11.15	10.0	10.8	11.2	7.20	2,530,000
	1:30 p. m.....	10.64	9.16	7.99	7.66		
	4:15 p. m.....	12.85	4.92	5.92	6.33		
	8:15 p. m.....	14.50	3.61	3.98	4.89		
Apr. 28.....	6:50 a. m.....	12.00	8.34	9.22	-----	6.66	2,660,000
	4:55 p. m.....	12.32	3.92	5.27	6.56		
Ap. 29.....	6:50 a. m.....	13.30	3.17	3.25	3.46	3.04	1,380,000
	5:00 p. m.....	14.20	3.02	2.69	2.68		
Apr. 30.....	9:05 a. m.....	13.30	2.18	2.31	2.59	2.36	943,000
Sept. 13.....	10:40 a. m.....	4.60	.08	.10	.11	.10	2,050
Sept. 14.....	5:50 a. m.....	10.50	10.3	10.1	9.84	7.64	695,000
	12:45 p. m.....	7.68	7.98	8.44	7.01		
	6:10 p. m.....	6.82	5.06	5.10	4.89		
Sept. 15.....	7:10 a. m.....	7.27	3.68	3.46	3.50	7.17	987,000
	11:20 a. m.....	9.30	9.01	9.20	8.40		
	9:45 p. m.....	9.68	7.77	10.3	9.18		
Sept. 16.....	5:40 a. m.....	9.50	7.09	7.79	7.65	6.51	930,000
	6:15 p. m.....	8.27	5.64	5.41	5.50		
Sept. 17.....	5:55 a. m.....	8.00	3.93	3.70	3.78	3.80	366,000
Sept. 18.....	11:10 a. m.....	6.69	2.04	2.08	2.18	2.10	176,000

TABLE 20.—*Suspended-sediment concentration at different sampling times, mean daily discharge, mean daily concentration, and daily load of suspended sediment in Little Colorado River at gaging station at Grand Falls, Ariz., July 6 to Sept. 26, 1931*

Date	Time of collection	Mean daily discharge (sec.-ft.)	Suspended sediment			
			Number of samples	Mean percent at sampling period	Mean daily percent	Tons per day
1931						
July 6.....	12:30 p. m.	292	5	8.14	8.14	64,200
July 7.....	11:00 a. m.	134	5	6.87	6.87	24,900
July 10.....	11:20 a. m.	20	4	7.24	6.97	3,760
	3:50 p. m.		3	6.70		
July 11.....	11:10 a. m.	9	3	5.91	5.91	1,440
July 12.....	11:55 a. m.	4	2	3.66	3.66	395
July 13.....	2:30 p. m.	1	2	4.06	4.06	110
July 14.....	12:30 p. m.	0	3	8.01		0
July 16.....	9:55 a. m.	15	1	1.06	.77	312
	4:05 p. m.		2	.48		
July 17.....	11:00 a. m.	44	5	3.74	3.38	4,020
	2:30 p. m.		5	3.01		
July 18.....	10:10 a. m.	154	6	3.87	4.26	17,700
	1:05 p. m.		5	4.09		
	3:05 p. m.		6	4.83		
July 19.....	8:55 a. m.	292	6	5.50	5.50	43,400
July 20.....	1:35 p. m.	599	6	7.05	7.05	114,000
July 21.....	11:00 a. m.	1,490	3	13.2	12.4	499,000
	12:15 p. m.		4	13.4		
	3:30 p. m.		4	11.4		
	4:15 p. m.		4	11.4		
July 22.....	11:50 a. m.	460	5	7.96	7.88	97,900
	3:20 p. m.		5	7.80		
July 23.....	10:25 a. m.	196	3	7.52	7.52	39,800
	11:40 a. m.		4	7.52		
July 24.....	11:00 a. m.	102	5	6.50	6.42	17,700
	2:15 p. m.		4	6.33		
July 25.....	11:05 a. m.	148	3	5.89	5.89	23,500
July 26.....	9:15 a. m.	346	5	7.46	7.46	69,700
July 27.....	12:15 p. m.	215	6	5.81	5.87	34,100
	3:15 p. m.		6	5.93		
July 28.....	10:40 a. m.	142	6	6.07	6.08	23,300
	1:50 p. m.		5	6.09		
July 29.....	10:30 a. m.	101	4	6.03	6.14	16,700
	11:40 a. m.		4	6.25		
	3:05 p. m.		4	6.14		
July 30.....	12:00 m.	2,300	4	12.2	12.0	745,000
	2:35 p. m.		4	11.8		
July 31.....	10:40 a. m.	1,970	6	10.9	10.4	553,000
	1:45 p. m.		6	9.82		
Aug. 1.....	1:20 p. m.	3,680	6	15.0	15.5	1,540,000
	5:00 p. m.		5	16.0		
Aug. 2.....	11:45 a. m.	3,020	7	11.5	11.5	938,000
Aug. 3.....	12:45 p. m.	1,110	4	8.50	8.50	255,000
Aug. 4.....	11:50 a. m.	550	5	7.17	7.17	106,000
Aug. 5.....	10:05 a. m.	428	5	6.22	6.22	71,900
Aug. 6.....	11:45 a. m.	1,030	6	6.55	6.96	194,000
	3:05 p. m.		6	7.37		
Aug. 7.....	11:35 a. m.	3,580	5	11.8	10.6	1,020,000
	3:55 p. m.		5	9.36		
Aug. 8.....	3:20 p. m.	3,050	6	6.98	6.98	575,000
Aug. 9.....	12:55 p. m.	906	5	4.30	4.30	105,000
Aug. 10.....	9:50 a. m.	1,310	4	7.28	7.13	252,000
	11:20 a. m.		4	6.93		
	2:15 p. m.		4	7.19		
Aug. 11.....	10:45 a. m.	1,630	5	8.33	7.98	351,000
	2:25 p. m.		3	7.63		
Aug. 12.....	12:25 p. m.	468	5	5.62	5.62	71,000
Aug. 13.....	12:05 p. m.	312	4	4.94	5.02	42,300
	2:00 p. m.		4	5.11		
Aug. 14.....	11:00 a. m.	244	6	4.89	4.91	32,300
	2:00 p. m.		5	4.93		
Aug. 15.....	12:00 m.	262	5	3.87	3.87	27,400
Aug. 16.....	11:10 a. m.	904	5	5.81	5.81	142,000
Aug. 17.....	10:20 a. m.	301	5	2.70	2.56	20,800
	2:20 p. m.		5	2.43		

TABLE 20.—*Suspended-sediment concentration at different sampling times, mean daily discharge, mean daily concentration, and daily load of suspended sediment in Little Colorado River at gaging station at Grand Falls, Ariz., July 6 to Sept. 26, 1931—Continued.*

Date	Time of collection	Mean daily discharge (sec.-ft.)	Suspended sediment			
			Number of samples	Mean percent at sampling period	Mean daily percent	Tons per day
1931						
Aug. 18.....	11:00 a. m.....	244	6	1.90	1.92	12,600
	2:10 p. m.....		4	1.95		
Aug. 19.....	10:55 a. m.....	180	4	4.21	4.58	22,300
	1:55 p. m.....		4	4.94		
Aug. 21.....	4:30 p. m.....	190	4	5.96	5.96	30,600
Aug. 22.....	2:10 p. m.....	182	6	5.27	5.27	25,900
Aug. 23.....	11:00 a. m.....	561	3	6.61	8.76	133,000
	1:25 p. m.....		5	10.9		
Aug. 24.....	10:05 a. m.....	651	3	5.52	5.42	95,300
	3:15 p. m.....		3	5.32		
Aug. 25.....	10:40 a. m.....	267	3	3.58	3.53	25,400
	2:25 p. m.....		4	3.48		
Aug. 26.....	10:35 a. m.....	155	6	3.68	3.69	15,400
	2:05 p. m.....		3	3.70		
Aug. 27.....	11:00 a. m.....	90	5	3.58	3.56	8,650
	3:15 p. m.....		4	3.55		
Aug. 28.....	11:10 a. m.....	54	4	2.87	2.82	4,110
	2:30 p. m.....		4	2.76		
Aug. 29.....	11:20 a. m.....	31	3	2.26	2.40	2,010
	3:15 p. m.....		3	2.55		
Aug. 30.....	12:30 p. m.....	22	3	2.51	2.51	1,490
Aug. 31.....	10:30 a. m.....	272	3	4.79	4.76	35,000
	12:15 p. m.....		3	4.86		
	2:45 p. m.....		4	4.62		
Sept. 1.....	12:50 p. m.....	455	5	4.00	4.11	50,500
	3:35 p. m.....		4	4.22		
Sept. 2.....	10:15 a. m.....	291	5	3.72	3.67	28,800
	2:40 p. m.....		4	3.62		
Sept. 3.....	1:00 p. m.....	155	5	3.07	3.16	13,200
	3:30 p. m.....		3	3.25		
Sept. 4.....	10:40 a. m.....	113	5	2.96	2.96	9,030
Sept. 5.....	11:55 a. m.....	75	3	4.44	4.30	8,710
	2:15 p. m.....		3	4.16		
Sept. 6.....	11:30 a. m.....	43	3	3.30	3.30	3,830
Sept. 7.....	12:00 m.....	20	4	2.42	2.42	1,310
Sept. 8.....	10:35 a. m.....	94	4	1.97	1.97	5,000
Sept. 9.....	4:40 p. m.....	534	4	5.52	5.52	79,600
Sept. 10.....	11:25 a. m.....	316	4	6.61	6.48	55,300
	3:00 p. m.....		4	6.35		
Sept. 11.....	11:15 a. m.....	160	5	5.52	5.44	23,500
	2:30 p. m.....		4	5.36		
Sept. 12.....	2:45 p. m.....	95	3	4.72	4.72	12,100
Sept. 13.....	4:00 p. m.....	72	3	5.31	5.31	10,300
Sept. 14.....	11:00 a. m.....	74	3	4.98	4.78	9,550
	3:00 p. m.....		3	4.58		
Sept. 15.....	11:30 a. m.....	40	4	3.46	3.56	3,840
	3:30 p. m.....		4	3.67		
Sept. 16.....	11:15 a. m.....	57	4	3.59	3.36	5,170
	3:40 p. m.....		4	3.12		
Sept. 17.....	10:30 a. m.....	732	2	9.68	9.08	179,00
	11:30 a. m.....		3	9.34		
	2:05 p. m.....		4	8.60		
	3:05 p. m.....		4	8.72		
Sept. 18.....	11:05 a. m.....	514	3	8.61	8.42	117,000
	2:45 p. m.....		3	8.24		
Sept. 19.....	11:40 a. m.....	411	5	8.50	8.50	94,300
Sept. 20.....	11:45 a. m.....	382	5	7.79	7.79	80,300
Sept. 21.....	1:50 p. m.....	512	4	5.10	5.10	70,500
Sept. 22.....	4:55 p. m.....	1,370	4	8.28	8.28	306,000
Sept. 23.....	10:45 a. m.....	474	4	7.27	7.20	92,100
	2:15 p. m.....		4	7.14		
Sept. 24.....	10:40 a. m.....	302	4	5.86	5.86	47,800
Sept. 25.....	11:25 a. m.....	209	3	4.07	4.07	23,000
Sept. 26.....	9:35 a. m.....	151	3	2.99	2.99	12,200

TABLE 21.—*Velocity and suspended-sediment concentration of water in the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 6, to July 24, 1935*

Type of measurement: R, Regular; V, velocity observations taken just before and just after collection of silt samples at each point
 Sampling points: Samples were taken at points A to D at distances of 120, 180, 240, and 300 feet, respectively, from zero mark on cable at north bank.
 Type of sample: I, Integrated; S, surface.

Date	Time	Gage height (feet)	Type of measurement	Observations at sampling points indicated												Type of samples
				Mean velocity (ft./sec.).				Depth (feet)				Suspended sediment (percent by weight)				
				A	B	C	D	A	B	C	D	A	B	C	D	
1935	Apr. 6	9:45 a. m.	R	3.90	5.11	4.99	4.48		11.5	8.5	4.7	1.43	1.34	1.42	1.32	I
	Apr. 8	9:45 a. m.	R	4.97	6.10	5.44	5.68	12.0	11.0	10.2	5.2	1.29	1.17	1.18	1.22	S
	Apr. 14	9:15 a. m.	R	4.74	6.93	4.94	5.77	14.6	11.9	7.9	2.5	1.48	1.40	1.60	1.52	I
	Apr. 17	4:25 p. m.	V	4.30	6.18	5.95	4.44	14.6	11.5	6.5	2.0	1.24	1.50	1.47	1.21	I
	Apr. 20	9:00 a. m.	R	5.07	6.92	5.94	5.33	15.3	15.1	8.9	3.5	.77	.93	.59	.68	I
	Apr. 21	9:20 a. m.	V	5.26	6.57	6.57	5.26	16.0	13.3	8.8	4.3	1.23	1.33	1.28	.88	S
	Apr. 24	9:30 a. m.	V	5.46	7.34	5.98	5.44	14.8	12.6	9.0	3.9	1.25	1.17	1.10	.92	I
	Apr. 28	4:05 p. m.	V	5.72	7.58	7.20	5.82	15.6	13.6	9.6	6.4	1.45	1.48	1.46	1.48	S
	May 1	10:00 a. m.	V	5.38	6.88	5.48	5.54	16.0	12.8	9.8	3.9	1.03	.85	.78	.72	I
	May 5	12:00 n.	V	5.71	7.28	6.78	5.92	16.7	15.1	10.8	6.3	1.23	1.22	1.30	1.15	S
	May 8	5:00 p. m.	V	5.09	6.80	6.25	5.31	15.6	12.4	9.2	4.8	.94	.97	.70	.65	I
	May 12	9:00 a. m.	R	5.18	6.28	5.81	5.27	15.8	12.8	9.0	3.8	.57	.59	.34	.31	I
	May 12	4:10 p. m.	V	5.25	6.35	5.91	5.23	15.8	13.7	9.4	4.0	.66	.75	.87	.67	S
	May 15	9:05 a. m.	R	5.39	7.55	6.40	6.48	17.7	15.0	11.3	7.4	.90	.91	.90	.82	I
	May 15	4:20 p. m.	V	6.59	7.90	6.94	6.65	16.8	14.0	10.0	6.3	.95	.62	.60	.50	S
	May 19	9:20 a. m.	V	6.03	8.75	7.75	6.30	18.6	16.8	12.6	7.7	1.02	.85	1.25	1.22	I
	May 22	9:00 a. m.	R	6.54	7.69	7.65	6.26	21.5	20.3	14.3	9.5	1.16	.97	.90	.63	S
	May 22	4:35 p. m.	R	6.42	8.91	8.76	6.35	20.6	16.9	12.6	8.4	1.39	1.23	1.54	2.17	I
												1.17	1.17	1.29	1.28	I
												1.04	.91	.83	.78	S
											1.26	1.05	1.24	1.35	I	

Time	12.30	V	7.17	8.18	7.74	6.16	20.4	17.2	13.4	10.0	7.6	7.6	7.0
May 26.....	9:50 a. m.												1.32
May 29.....	8:40 a. m.	R	7.48	9.73	8.60	7.02	24.2	19.6	16.6	13.3	1.23	1.23	1.19
	3:55 p. m.	V	6.81	9.93	9.16	6.88	24.0	19.0	16.9	13.3	.86	1.06	1.00
											2.23	1.31	1.66
June 3.....	9:20 a. m.	V	7.26	9.76	10.07	6.26	27.0	29.3	23.8	18.0	1.05	1.05	1.21
June 9.....	8:50 a. m.	R	7.01	9.04	9.22	8.19	28.5	29.5	24.5	20.0	1.37	1.42	1.72
	4:10 p. m.	V	7.92	8.96	9.31	8.02	27.6	27.7	24.2	20.8	1.17	1.22	1.49
June 22.....	8:40 a. m.	R	8.45	9.81	10.04	9.40	31.8	34.1	31.6	29.6	1.11	1.50	.88
	4:50 p. m.	V	7.84	9.74	9.75	9.09					.65	.60	.53
June 26.....	8:45 a. m.	R	7.55	8.85	9.16	8.07	30.4	31.8	28.3	28.0	.48	.55	.49
	4:00 p. m.	V	7.79	8.84	9.20	7.84					.52	.50	.53
June 29.....	8:35 a. m.	R	6.62	8.00	8.15	7.47	28.4	27.2	25.4	24.9	.37	.30	.35
	4:20 p. m.	V	6.95	8.27	8.32	7.61					.42	.37	.44
											.40	.41	.37
											.35	.37	.34
											.34	.35	.32
July 6.....	9:55 a. m.	V	5.12	5.80	5.80	5.36	24.1	26.4	23.2	23.1	.28	.30	.27
July 11.....	4:10 p. m.	V	4.06	5.07	5.23	4.94	21.4	23.4	20.8	19.4	.15	.14	.14
July 13.....	10:05 a. m.	V	3.91	4.98	5.08	4.23	20.7	21.5	18.7	21.6	.16	.18	.14
July 17.....	11:25 a. m.	V	3.70	4.08	4.74	4.16	20.2	23.0	18.8	19.2	.13	.12	.13
July 20.....	9:35 a. m.	V	3.30	3.94	3.80	3.64	19.1	21.3	19.8	18.6	.11	.08	.10
July 24.....	9:30 a. m.	V	3.40	3.70	3.63	3.32	18.7	21.4	20.2	19.3	.13	.14	.12
											.25	.21	.20
											.27	.23	.21
											.33	.33	.33
											.35	.36	.37

TABLE 22.—*Velocity and suspended-sediment concentration of water in the Colorado River at gaging station near Topock, Ariz., Apr. 3 to June 29, 1935*

Type of measurement: R, Regular.
 Sampling points: Samples were taken at points A to D at distances of 70, 200, 300, and 450 feet, respectively, from zero mark on cable at north bank.
 Type of sample: I, Integrated, S, surface.

Date	Time	Gage height (feet)	Type of measurement	Observations at sampling points indicated												Type of samples
				Mean velocity (ft./sec.)				Depth (feet)				Suspended sediment (percent by weight)				
				A	B	C	D	A	B	C	D	A	B	C	D	
1935	Apr. 3	10:00 a. m.	R	3.71	5.00	4.87	2.31	15.5	3.0	2.9	2.7	0.23	0.24	0.22	0.16	S
	Apr. 6	12:15 p. m.	R	4.16	5.34	4.81	3.10	13.5	3.4	3.0	2.4	.38	.33	.29	.25	S
	Apr. 10	11:15 a. m.	R	3.37	5.22	5.10	3.08	14.9	2.6	2.4	3.4	.25	.32	.31	.31	S
	Apr. 13	12:25 p. m.	R	3.58	5.40	5.16	3.96	13.8	2.9	2.8	3.3	.50	.50	.43	.46	S
	Apr. 17	11:05 a. m.	R	3.62	5.15	4.87	3.85	13.0	3.0	2.9	3.6	.86	.81	.75	.80	S
	Apr. 20	9:50 a. m.	R	3.44	5.13	4.90	2.80	14.6	2.8	2.9	2.6	1.82	1.11	.88	.92	S
	Apr. 24	11:30 a. m.	R	3.52	5.31	5.15	3.39	13.0	3.5	3.1	2.7	.72	.73	.72	.76	S
	Apr. 27	1:25 p. m.	R	3.46	4.80	4.44	3.40	14.8	3.0	3.1	3.0	.38	.31	.34	.32	S
	May 1	9:35 a. m.	R	4.06	4.99	4.69	3.15	15.6	2.7	2.8	4.2	.47	.40	.52	.36	S
	May 4	10:05 a. m.	R	3.96	5.06	4.78	3.10	13.5	2.8	2.8	4.2	.32	.22	.20	.24	S
	May 8	3:45 p. m.	R	3.18	4.74	4.59	3.33	14.9	2.8	2.7		.29	.23	.25	.24	S
	May 15	10:25 a. m.	R	3.73	4.36	4.82	3.32	8.0	2.6	2.4	6.9	.25	.19	.19	.22	S
May 18	10:45 a. m.	R	3.49	4.40	4.40	3.88	9.0	2.4	2.6	7.9	.26	.26	.26	.26	S	
May 22	10:00 a. m.	R	2.98	4.54	4.44	4.26	10.6	2.3	2.5	9.8	.23	.21	.23	.23	S	
May 25	10:00 a. m.	R	4.52	6.20	6.56	4.72	10.0	4.0	4.6	10.6	.14	.13	.15	.18	S	
												.28	.17	.19	.23	S
												.41	.41	.48	.39	S

June 1	9:50 a. m.	14.25	R	4.40	5.72	6.12	5.10	14.2	4.1	4.9	10.7	.19	.32	.25	S	.27
June 5	10:30 a. m.	14.38	R	4.60	5.82	5.54	5.30	13.0	5.5	5.3	11.5	.31	.41	.35	S	.36
June 12	11:00 a. m.	14.38	R	5.08	5.79	5.74	4.52	14.3	5.3	5.4	11.0	.31	.33	.23	S	.14
June 15	9:15 a. m.	14.62	R	4.36	6.00	5.92	4.47	16.5	5.5	5.8	8.8	.41	.31	.33	S	.20
June 19	9:40 a. m.	14.68	R	4.80	5.90	5.90	4.40	17.3	6.3	4.8	9.8	.22	.24	.13	S	.17
June 22	9:40 a. m.	14.57	R	4.93	5.60	6.28	4.02	17.4	7.0	5.2	9.2	.22	.25	.12	S	.10
June 26	9:45 a. m.	13.85	R	4.36	5.30	5.46	4.12	16.8	5.8	4.2	6.9	.27	.28	.09	S	.07
June 29	9:40 a. m.	13.57	R	4.32	5.70	5.77	4.35	16.6	5.1	4.9	9.0	.25	.17	.13	S	.13
												.28	.30	.42	S	.33
												.13	.06	.02	S	.14
												.35	.22	.22	S	.27

TABLE 23.—*Mechanical analyses of suspended sediment in samples collected in the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 5, 1935, to Sept. 30, 1941*

Date of collection	Mean daily discharge (sec.-ft.)	Mean daily concentration (per cent)	Tons per day	Suspended sediment						
				Percent in indicated size range						
				<0.005 mm.	0.005-0.020 mm.	0.020-0.050 mm.	0.050-0.074 mm.	0.074-0.149 mm.	>0.149 mm.	
1935										
Apr. 5.....	9,330	1.31	330,000	26.5	16.1	15.7	12.1	18.8	10.8	
Apr. 9.....	11,600	1.42	445,000	23.6	17.7	17.0	9.1	21.7	10.9	
Apr. 12.....	14,400	2.16	840,000	21.2	13.5	13.6	12.8	19.3	19.6	
Apr. 16.....	10,200	.89	245,000	27.8	17.1	25.4	4.0	15.1	10.6	
Apr. 19.....	12,300	1.11	369,000	19.7	17.1	14.7	15.3	24.6	8.6	
Apr. 20.....	13,500	1.46	532,000	20.1	14.9	15.8	16.4	27.8	5.0	
Apr. 23.....	14,400	1.23	478,000	19.7	19.0	17.5	15.8	21.9	6.1	
Apr. 26.....	14,000	1.06	401,000	16.2	16.4	13.4	15.3	26.8	11.9	
Apr. 27.....	15,800	1.26	538,000	13.8	11.3	15.5	12.2	34.8	12.4	
Apr. 28.....	16,900	1.40	639,000	9.7	13.4	17.1	17.0	31.0	11.8	
Apr. 29.....	15,200	1.08	443,000	10.9	14.5	15.7	13.5	34.7	10.7	
Apr. 30.....	14,000	.92	348,000	12.1	14.9	13.8	20.4	25.4	13.4	
May 3, 10:20 a. m.....	15,600	1.04	438,000	{ 8.6	{ 9.8	{ 10.4	{ 11.5	{ 36.6	{ 23.1	
May 3, 7:35 p. m.....				{ 9.1	{ 15.3	{ 12.6	{ 9.8	{ 30.0	{ 23.2	
May 4.....	16,700	1.22	550,000	5.4	7.6	7.6	35.6	22.9	20.9	
May 5.....	17,400	1.28	601,000	8.2	6.9	7.6	8.4	26.0	42.9	
May 6.....	16,400	1.04	461,000	10.8	8.8	8.7	7.7	28.0	36.0	
May 7.....	15,300	.99	409,000	12.8	12.6	8.7	11.5	31.1	23.3	
May 8.....	14,100	1.06	404,000	22.5	19.5	11.2	12.6	22.5	11.7	
May 10.....	13,400	.73	264,000	29.1	19.5	9.9	15.0	22.1	4.4	
May 11.....	13,100	.68	241,000	13.8	20.0	12.6	13.7	32.9	7.0	
May 13.....	14,300	.77	297,000	9.7	11.1	11.3	15.6	39.9	12.4	
May 14.....	16,200	.80	350,000	11.6	15.7	14.5	18.6	29.6	10.0	
May 15.....	18,500	.98	490,000	5.9	9.2	9.1	10.9	31.9	33.0	
May 16.....	20,900	1.13	638,000	4.2	5.6	7.2	10.6	33.7	38.7	
May 17.....	24,100	1.45	944,000	6.3	7.1	10.6	12.6	38.1	25.3	
May 19.....	23,300	1.36	856,000	9.5	10.9	11.3	13.6	45.0	9.7	
May 21.....	25,200	1.26	857,000	7.5	11.7	10.6	11.5	47.4	11.3	
May 22.....	26,300	1.22	866,000	14.6	13.8	12.0	13.4	37.9	8.3	
May 23, 9:08 a. m.....	29,700	1.38	1,110,000	{ 11.0	{ 7.2	{ 8.2	{ 10.3	{ 47.4	{ 15.9	
May 23, 4:35 p. m.....				{ 11.4	{ 9.5	{ 7.2	{ 12.7	{ 39.2	{ 20.0	
May 24.....	31,000	1.48	1,240,000	20.4	14.9	11.6	11.2	32.7	9.2	
May 25.....	26,800	1.48	1,070,000	25.2	16.1	10.0	10.3	26.2	12.2	
May 26.....	26,000	1.08	758,000	25.0	17.9	12.4	8.6	27.9	8.2	
May 27.....	27,300	1.01	744,000	12.5	10.7	12.1	11.7	33.1	19.9	
May 28, 10:45 a. m.....	31,100	1.01	848,000	{ 10.5	{ 11.6	{ 7.6	{ 9.1	{ 38.0	{ 23.2	
May 28, 4:25 p. m.....				{ 15.1	{ 8.6	{ 11.7	{ 10.9	{ 35.2	{ 18.5	
May 29, 8:40 a. m.....	36,200	1.26	1,230,000	{ 14.1	{ 9.9	{ 14.2	{ 13.1	{ 32.5	{ 16.2	
May 29, 3:55 p. m.....				{ 14.7	{ 15.0	{ 14.4	{ 15.1	{ 23.2	{ 17.6	
May 30.....	40,000	1.38	1,490,000	16.1	15.9	14.0	10.6	33.8	9.6	
May 31, 7:10 a. m.....	44,500	1.54	1,850,000	{ 13.1	{ 13.5	{ 9.5	{ 10.1	{ 30.3	{ 23.5	
May 31, 7:30 p. m.....				{ 4.6	{ 4.5	{ 3.4	{ 5.2	{ 29.5	{ 52.8	
June 2.....	48,600	1.90	2,490,000	14.1	12.0	9.5	8.3	35.7	20.4	
June 3.....	49,400	1.58	2,110,000	16.1	14.1	10.4	8.4	32.0	19.0	
June 5.....	46,200	1.31	1,630,000	8.4	10.4	7.8	7.9	24.3	41.2	
June 7.....	47,100	1.08	1,370,000	8.8	8.7	8.4	8.4	35.3	30.4	
June 8.....	50,700	1.10	1,510,000	10.3	9.9	11.7	10.3	37.7	20.1	
June 9, 8:50 a. m.....	54,200	1.28	1,870,000	{ 2.9	{ 5.3	{ 4.9	{ 7.3	{ 29.0	{ 50.6	
June 9, 4:10 p. m.....				{ 7.9	{ 9.6	{ 8.4	{ 7.2	{ 25.7	{ 41.2	
June 10.....	57,800	1.28	2,000,000	9.5	11.1	9.9	11.0	36.3	22.2	
June 11.....	63,600	1.25	2,150,000	7.2	9.0	8.2	6.7	31.9	37.0	
June 12.....	69,800	1.26	2,370,000	10.3	12.0	13.8	13.3	31.9	18.7	
June 13.....	72,600	1.14	2,230,000	5.9	7.9	9.0	9.3	34.1	33.8	
June 14.....	84,300	1.22	2,780,000	7.5	7.8	12.8	7.8	35.0	29.1	
June 15.....	86,400	1.06	2,470,000	6.3	7.8	10.5	8.9	40.6	25.9	
June 16.....	87,200	1.09	2,570,000	10.2	13.6	13.0	10.7	33.2	19.3	
June 17.....	91,900	1.03	2,560,000	14.7	15.7	21.8	15.6	27.5	4.7	
June 18.....	101,400	1.01	2,770,000	9.5	10.8	14.1	10.2	26.4	29.0	
June 19.....	103,100	.82	2,280,000	12.5	12.4	17.0	12.5	30.3	15.3	
June 20, 8:50 a. m.....	89,000	.79	1,900,000	{ 13.5	{ 10.1	{ 12.3	{ 13.0	{ 31.6	{ 19.5	
June 20, 3:55 p. m.....				{ 15.3	{ 16.0	{ 20.5	{ 9.9	{ 28.1	{ 10.2	
June 21, 8:50 a. m.....	80,900	.72	1,570,000	{ 7.7	{ 9.2	{ 11.6	{ 11.2	{ 30.7	{ 29.6	
June 21, 8:00 p. m.....				{ 12.7	{ 11.2	{ 15.7	{ 16.5	{ 30.3	{ 13.6	
June 22.....	77,000	.55	1,140,000	9.8	8.9	14.5	17.0	28.8	21.0	
June 25.....	70,300	.56	1,060,000	10.7	10.5	15.1	12.5	37.7	13.5	
June 26.....	65,400	.44	777,000	9.5	11.6	14.1	11.3	32.5	21.0	
June 28, 8:55 a. m.....	58,800	.44	699,000	{ 7.4	{ 8.0	{ 11.8	{ 9.5	{ 42.1	{ 21.2	
June 28, 7:10 p. m.....				{ 8.3	{ 8.6	{ 13.4	{ 13.3	{ 34.8	{ 21.6	
June 29.....	53,700	.37	537,000	11.9	14.6	17.8	13.4	25.2	17.1	

TABLE 23.—*Mechanical analyses of suspended sediment in samples collected in the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 5, 1935, to Sept. 30, 1941—Continued*

Date of collection	Mean daily discharge (sec.-ft.)	Suspended sediment								
		Mean daily concentration (percent)	Tons per day	Percent in indicated size range						
				< 0.005 mm.	0.005-0.020 mm.	0.020-0.050 mm.	0.050-0.074 mm.	0.074-0.149 mm.	> 0.149 mm.	
1935										
July 1.....	47,600	0.36	463,000	9.7	10.7	15.3	13.1	31.9	19.3	
July 2.....	43,800	.35	414,000	8.9	10.8	13.1	11.4	32.8	23.0	
July 4.....	39,200	.28	296,000	10.3	12.2	15.2	14.2	30.4	17.7	
July 6.....	35,000	.30	284,000	7.9	7.4	13.1	13.1	42.5	16.0	
July 8.....	31,800	.23	197,000	11.0	10.3	15.6	15.3	31.3	16.5	
July 24.....	17,100	.35	162,000	36.9	33.7	11.7	6.3	7.9	3.5	
July 28.....	14,100	.46	175,000	52.4	34.6	7.9	1.6	2.1	1.4	
July 31.....	11,400	.19	58,500	43.5	35.7	10.7	3.2	4.6	2.3	
Aug. 3.....	10,600	.17	48,700	45.0	37.2	11.2	2.1	3.1	1.4	
Aug. 6.....	12,700	1.82	624,000	65.0	21.3	7.1	2.4	3.3	.9	
Aug. 10.....	9,950	.46	124,000	59.9	30.0	4.7	1.8	3.1	.5	
Aug. 14.....	8,720	1.11	261,000	70.9	23.0	4.3	.5	.7	.6	
Aug. 17.....	9,680	.76	199,000	63.9	27.1	6.8	.8	.8	.6	
Aug. 23.....	7,600	.48	98,500	62.3	31.1	4.6	.5	.9	.6	
Aug. 25.....	7,380	.52	104,000	56.5	32.4	5.5	1.6	2.8	1.2	
Aug. 26.....	9,640	4.81	1,250,000	49.3	25.7	18.5	3.9	2.0	.6	
Aug. 28.....	10,600	2.74	784,000	63.4	21.4	9.9	2.9	1.9	.5	
Aug. 31.....	8,240	2.14	476,000	64.5	27.1	6.4	.7	.7	.6	
Sept. 4.....	12,300	5.02	1,670,000	53.0	22.9	17.0	3.8	2.7	.6	
Sept. 7.....	7,670	2.00	414,000	67.5	23.8	6.0	1.0	1.2	.5	
Sept. 11.....	6,270	.72	122,000	22.4	24.9	25.9	14.6	11.1	1.1	
Sept. 14.....	6,490	.65	114,000	60.0	29.6	8.3	1.0	.8	.3	
Sept. 18.....	6,370	.33	56,800	36.4	19.1	14.3	5.7	22.5	2.0	
Sept. 21.....	5,480	.21	31,100	44.3	27.5	17.9	4.4	5.0	.9	
Sept. 25.....	4,360	.12	14,100	61.1	27.8	7.7	1.1	1.5	.8	
Sept. 27.....	7,420	.24	48,100	67.5	26.6	4.2	.7	.8	.2	
Sept. 30, 8:50 a. m.....	18,100	4.14	2,020,000	69.2	25.4	3.9	.5	.5	.5	
Sept. 30, 4:15 p. m.....				55.2	34.2	6.6	1.7	1.6	.7	
Oct. 1.....	15,800	5.09	2,170,000	60.3	29.5	5.9	1.4	1.5	1.4	
Oct. 6.....	7,490	.88	178,000	47.0	43.9	5.5	1.3	1.4	.9	
Oct. 9.....	6,550	.45	79,600	60.3	31.4	5.8	1.1	.8	.6	
Oct. 12.....	5,820	.26	40,900	56.5	34.6	6.1	1.1	1.3	.4	
Oct. 16.....	5,010	.14	18,900	54.2	33.2	9.7	1.0	1.2	.7	
Oct. 19.....	4,660	.11	13,800	51.2	38.9	5.9	1.5	1.6	.9	
Oct. 24.....	5,440	.12	17,600	50.6	41.4	5.5	.8	1.1	.6	
Oct. 27.....	5,100	.16	22,000	55.4	32.7	10.4	.9	.3	.3	
Nov. 2.....	5,230	.20	28,200	4.5	86.3	6.8	1.1	.7	.6	
Nov. 7.....	5,360	.12	17,400	10.9	72.6	11.3	2.6	1.6	1.0	
Nov. 10.....	5,680	.12	18,400	10.1	70.7	13.1	2.7	2.3	1.1	
Nov. 13.....	5,560	.12	18,000	15.4	64.6	14.0	3.0	2.0	1.0	
Nov. 16.....	6,020	.11	17,900	48.2	30.0	17.2	3.4	.8	.5	
Nov. 20.....	5,610	.09	13,600	13.9	66.0	13.7	3.0	1.9	1.5	
Nov. 23.....	5,790	.09	14,100	18.7	59.7	14.4	3.3	2.9	1.0	
Nov. 27.....	5,900	.10	15,900	24.8	54.2	14.1	3.8	1.2	1.7	
Nov. 30.....	5,650	.15	22,900	9.2	77.7	8.9	2.2	1.4	.7	
Dec. 4.....	5,820	.10	15,700	19.3	61.1	14.0	2.8	1.9	.9	
Dec. 7.....	6,230	.22	37,000	4.2	71.3	16.8	4.3	1.8	1.6	
Dec. 11.....	4,970	.08	10,700	15.3	69.1	10.3	2.8	1.4	1.0	
Dec. 14.....	5,010	.10	13,500	17.4	60.9	11.4	6.5	1.0	2.8	
Dec. 17.....	4,790	.09	11,600	24.5	58.5	12.6	3.1	.9	.4	
Dec. 21.....	4,600	.08	9,940	21.6	62.2	10.5	3.5	1.1	1.1	
Dec. 25.....	3,280	.05	4,430	50.1	35.2	9.8	2.8	1.0	1.0	
Dec. 29.....	3,560	.07	6,730	17.8	67.5	9.2	2.5	2.1	.9	
1936										
Jan. 1.....	3,750	.08	8,100	28.7	56.5	9.8	2.6	1.3	1.0	
Jan. 4.....	4,310	.06	6,980	39.8	42.3	12.4	2.2	1.8	1.5	
Jan. 8.....	4,220	.07	7,980	36.0	44.8	13.6	2.9	1.7	1.0	
Jan. 11.....	4,310	.05	5,820	45.7	35.8	13.2	2.8	1.2	1.3	
Jan. 15.....	4,400	.06	7,130	37.4	41.0	16.0	2.5	2.1	1.0	
Jan. 18.....	5,040	.06	8,160	30.8	40.2	22.3	3.4	2.0	1.3	
Jan. 22.....	5,040	.07	9,530	28.3	48.7	17.6	5.2	3.4	1.5	
Jan. 24.....	4,780	.05	6,450	29.9	55.4	10.2	1.7	1.3	1.5	
Jan. 29.....	4,670	.06	7,570	31.7	47.2	13.8	2.8	2.6	1.9	

TABLE 23.—*Mechanical analyses of suspended sediment in samples collected in the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 5, 1935, to Sept. 30, 1941—Continued*

Date of collection	Mean daily discharge (sec.-ft.)	Mean daily concentration (percent)	Tons per day	Suspended sediment					
				Percent in indicated size range					
				<0.005 mm.	0.005-0.020 mm.	0.020-0.050 mm.	0.050-0.074 mm.	0.074-0.149 mm.	>0.149 mm.
1936									
Feb. 1.....	5,390	0.08	11,600	36.8	32.0	22.6	5.4	1.8	1.4
Feb. 5.....	5,580	.17	25,600	14.6	58.3	19.7	4.4	2.0	1.0
Feb. 8.....	4,910	.17	22,500	11.6	70.8	13.0	2.6	1.0	1.0
Feb. 12.....	4,650	.10	12,600	15.0	47.6	25.8	9.0	1.7	.9
Feb. 15.....	4,970	.07	9,390	27.6	47.8	17.2	4.3	2.1	1.0
Feb. 19.....	6,510	.16	28,100	8.3	53.2	24.6	8.3	3.8	1.8
Feb. 22.....	6,480	.16	28,000	4.6	69.3	17.1	5.3	2.5	1.2
Feb. 26.....	6,730	.32	58,100	43.0	29.3	19.6	4.3	2.9	.9
Feb. 29.....	7,780	.35	73,500	6.5	65.6	18.4	5.7	2.9	.8
Mar. 4.....	5,970	.30	48,400	2.4	85.6	8.0	2.4	1.0	.6
Mar. 7.....	8,770	.42	99,500	1.8	59.6	21.6	13.0	3.2	.8
Mar. 11.....	8,270	1.10	246,000	56.4	28.3	9.5	3.4	1.9	.4
Mar. 14.....	9,140	.77	190,000	1.1	74.6	13.1	7.6	3.1	.5
Mar. 18.....	9,250	.62	155,000	4.6	61.6	15.3	12.2	4.4	1.8
Mar. 22.....	8,630	.45	105,000	3.3	76.7	12.0	5.6	1.9	1.0
Mar. 25.....	8,470	.34	77,800	6.6	64.1	11.8	9.2	5.5	2.7
Mar. 28.....	7,850	.37	78,400	6.3	66.1	13.0	9.0	4.7	.9
Apr. 1.....	6,740	.35	63,700	3.4	74.5	11.4	7.1	2.5	1.0
Apr. 4.....	7,840	.44	93,100	2.7	79.6	11.3	4.7	1.4	.3
Apr. 8.....	7,820	.38	80,200	4.1	67.4	12.0	10.0	5.3	1.2
Apr. 11.....	6,720	.26	47,200	6.3	62.8	14.3	11.2	4.5	.8
Apr. 15.....	11,500	1.09	338,000	1.1	21.9	9.3	11.2	36.0	20.5
Apr. 18.....	21,600	1.68	980,000	15.6	15.1	20.3	24.2	18.9	2.8
Apr. 22.....	35,400	1.57	1,500,000	31.0	24.1	17.1	20.0	6.8	1.0
Apr. 25.....	43,100	1.43	1,660,000	12.0	10.9	13.2	16.4	35.5	11.9
Apr. 29.....	51,100	1.32	1,820,000	14.4	13.1	13.6	13.8	33.5	11.6
May 2.....	51,100	1.01	1,390,000	12.8	11.0	12.7	12.1	37.1	14.4
May 6.....	45,900	.67	830,000	12.1	10.1	12.2	13.3	35.4	16.9
May 9.....	66,400	1.06	1,900,000	6.8	6.4	8.1	12.0	36.6	30.1
May 13.....	46,200	.64	674,000	10.7	10.9	12.9	13.6	30.5	21.3
May 16.....	44,000	.44	523,000	11.3	10.4	13.2	18.7	24.1	22.3
May 21.....	71,800	.59	1,140,000	8.7	9.0	12.5	16.5	33.0	21.2
May 24.....	75,100	.58	1,180,000	10.4	10.7	12.3	16.3	33.1	17.2
May 27.....	66,100	.64	964,000	6.1	5.5	7.7	13.9	33.4	33.4
May 30.....	65,400	.60	883,000	4.6	4.1	7.3	12.1	37.6	34.3
June 2.....	64,900	.54	946,000	5.4	4.7	8.5	13.5	32.2	35.7
June 6.....	60,300	.50	814,000	7.8	6.6	9.0	13.9	30.5	32.2
June 8.....	50,000	.40	540,000	8.6	7.4	9.3	12.1	31.0	31.6
June 12.....	47,200	.38	484,000	8.6	8.0	9.1	9.1	42.7	22.5
June 16.....	45,900	.33	409,000	6.5	5.5	8.4	12.6	28.0	39.0
June 20.....	40,900	.30	331,000	6.9	6.6	9.8	16.0	35.7	25.0
June 24.....	34,800	.28	263,000	6.3	6.3	11.5	12.5	43.3	20.1
June 27.....	30,100	.19	154,000	9.2	9.5	16.5	19.1	31.7	14.0
July 2.....	24,100	.17	111,000	17.3	14.0	18.3	18.7	21.4	10.3
July 4.....	22,400	.16	96,800	21.1	17.9	16.2	12.6	22.4	9.8
July 8.....	16,600	.12	53,800	19.2	28.6	15.9	12.9	13.7	9.6
July 11.....	15,500	.12	50,200	22.5	32.3	19.2	12.5	8.5	4.7
July 13.....	29,800	.82	660,000	21.3	19.7	29.6	16.6	7.7	5.1
July 14.....	29,200	4.72	3,720,000	5.4	59.9	17.1	9.3	5.9	2.4
July 17.....	16,900	3.62	1,650,000	17.8	66.6	10.7	2.7	1.3	.9
July 18.....	16,300	2.40	1,060,000	28.6	55.1	10.8	2.9	2.0	.6
July 22.....	15,200	.91	373,000	50.4	29.9	14.8	3.1	1.4	.4
July 25.....	12,900	.74	258,000	32.9	43.1	15.6	6.1	1.6	.7
July 29.....	11,400	1.24	382,000	26.0	53.1	13.7	5.4	1.3	.5
Aug. 1.....	9,800	1.13	299,000	45.7	43.4	8.6	1.5	0.7	0.3
Aug. 5.....	15,300	3.14	1,300,000	39.7	26.1	21.6	10.0	2.0	.6
Aug. 7.....	29,700	5.35	4,290,000	11.3	40.2	16.3	14.1	16.0	2.2
Aug. 10.....	27,200	3.99	2,930,000	26.6	36.3	14.2	10.8	10.1	1.9
Aug. 12.....	21,000	2.73	1,550,000	9.1	63.6	12.6	6.3	6.4	2.0
Aug. 15.....	15,200	2.22	911,000	23.6	49.9	15.3	6.7	3.6	.9
Aug. 18.....	12,800	1.15	397,000	51.5	27.9	10.1	5.0	4.3	1.1
Aug. 24.....	14,900	2.13	857,000	8.1	60.9	14.3	9.9	5.9	.8
Aug. 29.....	9,010	.98	238,000	29.1	56.7	7.8	2.8	2.6	.9

TABLE 23.—*Mechanical analyses of suspended sediment in samples collected in the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 5, 1935, to Sept. 30, 1941—Continued*

Date of collection	Mean daily discharge (sec.-ft.)	Mean daily concentration (percent)	Tons per day	Suspended sediment						
				Percent in indicated size range						
				<0.005 mm.	0.005-0.020 mm.	0.020-0.050 mm.	0.050-0.074 mm.	0.074-0.149 mm.	>0.149 mm.	
1936										
Sept. 3.....	21,500	7.74	4,490,000	4.7	51.1	15.6	13.5	12.8	2.3	
Sept. 6.....	14,900	3.43	1,380,000	4.2	66.8	13.2	7.0	7.3	1.5	
Sept. 9.....	10,800	2.40	700,000	5.6	74.9	10.0	4.5	4.3	.7	
Sept. 12.....	8,830	1.38	329,000	11.6	74.7	8.1	3.9	.6	1.1	
Sept. 16.....	8,600	1.49	346,000	8.7	73.4	9.2	4.7	3.4	.7	
Sept. 19.....	7,870	.80	170,000	12.7	71.5	7.8	4.4	2.6	.9	
Sept. 23.....	8,220	2.08	462,000	5.7	67.9	13.8	7.3	4.8	.5	
Sept. 26.....	7,870	1.35	287,000	9.4	66.6	12.2	7.9	3.2	.6	
Sept. 30.....	5,280	.91	130,000	10.2	76.7	6.6	3.6	2.1	.7	
Oct. 2.....	5,300	.50	71,600	6.4	75.1	7.8	4.6	4.6	1.5	
Oct. 8.....	5,580	.31	46,700	7.9	70.6	11.1	5.7	3.5	1.2	
Oct. 10.....	5,520	.26	38,800	8.4	66.1	12.5	10.1	10.3	2.6	
Oct. 13.....	5,740	.24	37,200	14.3	56.4	14.1	6.5	6.8	1.9	
Oct. 17.....	5,650	.21	32,000	5.6	66.6	14.4	9.7	10.7	3.0	
Oct. 21.....	5,870	.24	38,000	3.6	41.7	17.0	19.8	16.2	1.7	
Oct. 24.....	6,520	.55	96,800	5.8	65.7	13.1	7.1	6.7	1.6	
Oct. 28.....	6,980	.49	92,300	4.3	58.8	12.8	9.2	12.9	2.0	
Oct. 31.....	6,830	.40	73,800	5.7	61.1	11.8	7.6	11.3	2.5	
Nov. 4.....	9,670	1.91	499,000	48.4	25.6	11.1	6.5	7.7	.7	
Nov. 7.....	8,710	.95	223,000	3.1	67.7	11.2	8.9	1.3	7.8	
Nov. 10.....	7,570	.69	141,000	3.3	72.7	9.5	6.0	7.1	1.4	
Nov. 14.....	7,510	.36	73,000	7.4	69.6	15.0	5.5	1.9	.6	
Nov. 17.....	7,126	.33	63,400	2.6	47.9	15.2	11.0	19.3	4.0	
Nov. 21.....	7,070	.19	36,300	4.4	62.1	20.5	10.2	2.4	.4	
Nov. 24.....	7,180	.20	38,800	5.8	56.1	24.4	11.4	1.8	.5	
Nov. 28.....	6,990	.16	30,200	6.5	53.9	23.1	12.0	3.9	.6	
Dec. 1.....	6,600	.13	23,200	21.8	37.6	22.3	11.7	4.7	1.9	
Dec. 5.....	5,960	.16	25,700	19.5	31.1	19.0	13.0	13.6	3.8	
Dec. 8.....	5,560	.11	16,500	19.9	22.3	18.0	12.2	18.2	9.4	
Dec. 12.....	4,880	.11	14,500	25.8	38.2	20.3	7.9	6.3	1.5	
Dec. 15.....	4,210	.08	9,090	35.7	28.6	17.5	10.5	6.2	1.5	
Dec. 19.....	4,580	.08	9,890	28.6	42.0	17.0	8.1	3.3	1.0	
Dec. 22.....	5,700	.08	12,300	36.7	36.6	20.0	4.6	1.4	.7	
Dec. 26.....	6,020	.12	19,500	22.1	28.8	26.3	12.1	9.2	1.5	
Dec. 29.....	6,410	.11	19,000	21.3	24.6	27.9	15.4	9.1	1.7	
1937										
Jan. 2, 5, 9, 12, 16, 19, 23, 27, 30.....	13,660	1.06	1,660	3.6	39.5	48.4	3.2	2.6	2.7	
Feb. 2, 6.....	14,850	1.07	1,920	7.9	43.2	39.3	5.3	2.5	1.8	
Feb. 9.....	10,000	.46	124,000	24.2	47.0	6.4	15.3	6.3	.8	
Feb. 10.....	17,100	4.32	1,990,000	20.7	24.2	14.0	14.6	21.6	4.9	
Feb. 13.....	8,720	.95	224,000	47.3	33.0	14.3	3.0	1.8	.6	
Feb. 16.....	8,930	.44	106,000	31.6	42.7	17.8	5.2	2.3	.4	
Feb. 17.....	18,200	2.34	1,150,000	21.4	16.4	26.2	20.8	14.0	1.2	
Feb. 20.....	13,400	1.88	680,000	44.8	26.4	16.2	8.5	3.6	.5	
Feb. 23.....	9,890	1.03	275,000	45.0	36.2	12.0	5.0	1.4	.4	
Feb. 27.....	7,890	.45	95,900	48.3	32.2	10.4	6.4	2.2	.5	
Mar. 2, 6, 9.....	18,200	1.49	1,109,000	47.8	25.8	14.2	6.9	4.0	1.3	
Mar. 13.....	10,800	.95	277,000	42.5	22.8	17.5	12.2	4.1	.9	
Mar. 16.....	14,600	1.75	690,000	35.6	20.7	14.7	13.5	11.8	3.7	
Mar. 20.....	22,000	2.87	1,700,000	18.9	33.8	11.8	12.9	17.3	5.3	
Mar. 23.....	20,100	2.26	1,230,000	19.2	16.5	16.3	16.8	22.0	9.2	
Mar. 27.....	16,300	1.53	673,000	56.3	12.0	9.4	8.8	10.5	3.0	
Mar. 30.....	13,100	.99	350,000	38.2	15.3	13.6	12.2	15.4	5.3	
Apr. 3.....	10,800	.62	181,000	37.0	22.0	13.9	9.5	13.6	4.0	
Apr. 6.....	15,300	1.45	599,000	26.2	15.8	14.2	13.8	21.1	8.9	
Apr. 10.....	15,000	1.18	478,000	32.9	15.7	16.3	15.4	17.0	2.7	
Apr. 13.....	19,200	1.80	933,000	23.5	14.0	20.0	19.4	14.9	8.2	
Apr. 17, 19, 21-22, 25-26.....	140,400	12.34	1,256,000	15.8	11.8	18.3	16.1	26.2	11.8	
Apr. 27.....	36,500	1.65	1,630,000	15.2	11.5	15.7	15.4	28.1	14.1	
Apr. 28-30.....	132,600	1.40	1,230,000	15.6	11.8	15.7	14.6	25.0	17.3	

† Mean for days on which size samples were collected.

TABLE 23.—*Mechanical analyses of suspended sediment in samples collected in the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 5, 1935, to Sept. 30, 1941—Continued*

Date of collection	Mean daily discharge (sec.-ft.)	Mean daily concentration (per cent)	Tons per day	Suspended sediment						
				Percent in indicated size range						
				< 0.005 mm.	0.005-0.020 mm.	0.020-0.050 mm.	0.050-0.074 mm.	0.074-0.149 mm.	> 0.149 mm.	
1937										
May 1	36,000	1.46	1,420,000	12.4	10.1	16.3	18.5	30.7	12.0	
May 2-3, 5	29,000	.89	701,000	13.8	10.2	14.3	18.9	26.1	16.7	
May 7	35,700	1.00	964,000	7.6	6.8	12.6	17.6	30.6	24.8	
May 9	43,600	1.28	1,510,000	7.2	6.1	12.1	17.1	32.2	25.3	
May 12	57,200	1.56	2,410,000	11.3	10.9	19.1	15.6	28.2	14.9	
May 13	65,400	1.92	3,390,000	9.6	10.1	19.4	17.5	29.9	13.5	
May 16, 18-20	¹ 77,900	¹ 1.21	¹ 2,540,000	11.2	11.0	17.4	13.6	28.3	18.5	
May 22-25, 27-30	¹ 64,100	¹ 1.82	¹ 1,460,000	7.1	6.7	13.1	13.7	26.3	33.1	
June 2-5, 7, 9-10	¹ 55,200	¹ 1.71	¹ 1,080,000	8.9	6.6	12.7	14.4	28.5	28.9	
June 11-12, 14, 17	¹ 35,800	¹ 1.44	¹ 430,000	9.4	7.8	13.0	15.7	25.7	28.4	
June 22, 27-29	¹ 32,100	¹ 1.45	¹ 390,000	12.2	10.7	14.7	16.0	24.7	21.7	
July 1	30,800	.40	333,000	13.8	12.8	12.5	23.4	27.0	10.5	
July 2	28,800	1.00	778,000	36.9	24.5	16.7	7.5	8.9	5.5	
July 9	18,700	.38	192,000	38.3	23.5	12.0	6.8	11.0	8.4	
July 10-11	¹ 19,000	¹ 1.19	¹ 609,000	46.8	27.1	15.6	4.0	4.9	1.6	
July 13	27,100	2.47	1,810,000	43.8	22.9	17.5	6.9	5.9	3.0	
July 14	27,200	2.52	1,850,000	41.8	22.9	18.4	8.1	6.0	2.8	
July 17	30,900	2.73	2,280,000	36.3	22.7	13.6	8.0	11.9	7.5	
July 20, 22	¹ 25,000	¹ 2.16	¹ 1,480,000	40.5	13.6	28.1	7.1	7.7	3.0	
July 24, 26	¹ 15,200	¹ 1.25	¹ 520,000	50.1	18.9	23.6	3.0	2.9	1.5	
July 28	11,300	.71	217,000	62.1	20.1	14.2	1.6	1.4	.6	
July 31	14,500	1.32	517,000	51.8	17.9	16.3	6.5	5.2	2.3	
Aug. 3	11,100	2.14	641,000	58.1	29.3	9.8	1.2	1.1	0.5	
Aug. 5	10,100	1.60	436,000	61.9	27.7	8.2	.9	.9	.4	
Aug. 7-8, 10, 12, 15-16	¹ 7,640	¹ 1.72	¹ 150,000	60.0	29.7	8.8	.7	.6	.2	
Aug. 18, 21, 23, 26, 28, 30	¹ 4,580	¹ 1.27	¹ 33,200	76.2	16.8	5.8	.2	.5	.5	
Sept. 1	9,760	2.49	656,000	64.5	23.5	9.0	.9	1.5	.6	
Sept. 3	14,700	4.77	1,890,000	48.1	22.3	17.9	7.5	3.2	1.0	
Sept. 4-6	¹ 13,900	¹ 2.96	¹ 1,110,000	48.2	29.3	15.1	3.7	2.9	.8	
Sept. 9, 11	¹ 8,130	¹ 2.56	¹ 564,000	66.1	23.8	8.1	1.0	.7	.3	
Sept. 14	7,340	1.41	279,000	62.4	29.3	6.9	.6	.6	.2	
Sept. 17, 19, 23	¹ 4,970	¹ 1.79	¹ 107,000	68.7	25.7	4.9	.2	.4	.1	
Sept. 26	4,370	.91	107,000	72.1	21.7	5.6	.1	.4	.1	
Sept. 29	4,220	.40	43,300	60.5	33.3	5.2	.3	.5	.2	
Sept. 30	10,400	1.13	233,000	38.2	32.1	21.9	5.4	2.0	.4	
Oct. 1	13,900	5.44	2,040,000	29.2	16.4	16.8	10.5	26.2	.9	
Oct. 2	23,100	5.38	3,360,000	25.9	14.4	19.6	21.5	17.1	1.5	
Oct. 4	10,500	7.54	2,140,000	62.2	12.0	17.1	4.1	3.5	1.1 ^A	
Oct. 7	5,960	2.73	439,000	77.2	14.7	6.4	.8	.6	.3	
Oct. 10	5,680	1.08	166,000	81.8	11.5	4.8	1.0	.7	.2	
Oct. 13	5,350	.51	73,700	60.5	28.3	8.7	1.4	.9	.2	
Oct. 16, 19	¹ 5,370	¹ 1.26	¹ 38,200	54.8	30.8	11.0	1.6	1.3	.5	
Oct. 22, 25, 27	¹ 7,790	¹ 1.76	¹ 159,000	52.7	24.1	15.6	3.4	3.5	.7	
Nov. 2	7,060	.53	101,000	47.4	32.2	12.3	4.7	2.6	.8	
Nov. 6, 9, 13, 17, 22, 26, 29	¹ 6,670	¹ 1.23	¹ 42,000	36.3	20.1	20.6	9.9	8.4	4.7	
Dec. 3, 7, 11	¹ 6,330	¹ 1.14	¹ 23,400	33.4	20.0	23.8	12.8	7.1	2.9	
Dec. 14	8,600	.75	174,000	7.7	9.0	42.0	29.0	11.3	1.0	
Dec. 18, 23	¹ 7,800	¹ 1.38	¹ 79,300	27.7	17.0	24.4	18.2	10.6	2.1	
Dec. 27	5,790	.25	39,100	37.5	34.6	12.1	8.6	5.2	2.0	
Dec. 31	5,130	.14	19,400	51.4	26.0	11.5	6.0	3.5	1.6	
1938										
Jan. 4, 8, 12, 16	¹ 5,070	¹ 1.10	¹ 13,800	41.7	23.5	16.6	8.4	7.9	1.9	
Jan. 20	5,910	.15	23,900	23.2	16.9	18.6	20.2	15.8	5.3	
Jan. 24	6,700	.23	41,600	28.7	19.3	22.6	15.2	11.3	2.9	
Jan. 28, 31	¹ 5,180	¹ 1.12	17,000	38.9	22.9	18.1	11.2	6.6	2.3	

¹ Mean for days on which size samples were collected.

TABLE 23.—*Mechanical analyses of suspended sediment in samples collected in the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 5, 1935, to Sept. 30, 1941—Continued*

Date of collection	Mean daily discharge (sec.-ft.)	Mean daily concentration (percent)	Tons per day	Suspended sediment					
				Percent in indicated size range					
				<0.005 mm.	0.005-0.020 mm.	0.020-0.050 mm.	0.050-0.074 mm.	0.074-0.149 mm.	>0.149 mm.
1938									
Feb. 3, 8, 12	1 5,880	1.16	1 25,500	25.4	17.4	21.0	20.4	13.3	2.5
Feb. 15	7 570	.42	85,800	7.3	13.3	27.0	40.9	8.8	2.7
Feb. 18	8,340	.69	155,000	37.0	9.1	19.7	23.7	9.5	1.0
Feb. 21	7,420	.45	90,200	35.2	14.6	16.7	22.3	9.5	1.7
Feb. 25	6,010	.23	37,300	14.1	44.5	13.6	14.1	10.4	3.3
Feb. 28	6,010	.20	32,500	39.2	22.5	14.1	15.2	7.6	1.4
Mar. 3	11,200	2.91	880,000	17.8	33.2	16.4	18.4	13.4	.8
Mar. 5	39,100	8.76	9,250,000	3.2	29.2	15.9	14.1	28.5	9.1
Mar. 8	20,700	2.88	1,610,000	7.8	39.9	18.7	10.3	20.2	3.1
Mar. 14, 18	1 11,800	1.12	1 354,000	34.6	29.5	13.9	10.2	9.8	2.0
Mar. 21, 25, 29	1 12,200	1.77	1 256,000	21.0	17.7	14.2	17.1	26.1	3.9
Apr. 2	13,400	.90	326,000	6.1	36.8	17.0	19.6	18.9	1.6
Apr. 6, 9, 13	1 10,200	1.51	1 140,000	28.3	14.6	13.4	15.3	22.9	5.5
Apr. 16	17,900	1.18	570,000	10.1	10.9	16.0	18.2	42.2	2.6
Apr. 21	23,400	1.72	1,090,000	3.2	23.3	16.6	18.6	34.8	3.5
Apr. 22	36,600	2.38	2,350,000	.8	24.0	14.8	19.5	30.7	10.2
Apr. 23	43,400	2.94	3,450,000	4.8	28.5	13.7	19.6	21.3	12.1
Apr. 26-27	1 59,200	1 2.69	1 4,300,000	6.7	23.5	14.1	16.1	27.6	12.0
Apr. 30	57,400	2.22	3,440,000	2.4	22.1	13.4	14.7	22.1	25.3
May 4-5, 7, 10	1 55,500	1 1.30	1 2,020,000	4.5	15.8	16.6	15.6	24.5	23.0
May 16-17	1 32,300	1.66	1 592,000	.9	16.6	14.7	24.2	25.1	18.5
May 18-19	1 57,600	1 1.38	1 2,160,000	.7	9.2	9.5	16.4	28.6	35.6
May 24, 28, 30-31	1 65,600	1.96	1 1,720,000	.9	15.0	11.3	13.9	27.8	31.1
June 1, 8, 11, 13, 15	1 84,800	1.73	1 1,680,000	.7	8.8	5.3	9.9	35.1	40.2
June 18, 21, 23, 25, 29	1 65,700	1.53	1 956,000	3.6	10.9	9.9	12.3	25.2	38.1
June 30	64,900	.73	1,280,000	2.7	42.7	15.5	10.0	14.4	14.7
July 2	60,200	.96	1,560,000	3.7	18.6	24.7	13.9	13.8	25.3
July 5-6	1 48,200	1.44	1 580,000	3.7	29.3	19.0	17.0	3.3	27.7
July 9, 11, 13, 18, 20	1 26,500	1.21	1 162,000	4.0	27.9	19.1	13.4	15.8	19.8
July 26, 30	1 13,300	1.16	1 60,200	6.3	71.2	12.7	4.3	3.5	2.0
Aug. 1, 6, 9	1 10,600	1.13	1 36,700	7.5	57.7	21.1	6.9	5.0	1.8
Aug. 10	10,200	1.24	341,000	2.0	81.4	13.8	1.5	.9	.4
Aug. 12	9,030	.84	205,000	3.4	84.4	9.6	1.4	.9	.3
Aug. 14	12,200	.38	125,000	3.3	65.4	22.3	5.7	2.7	.6
Aug. 17	9,680	.81	212,000	1.7	90.2	6.5	.5	.8	.3
Aug. 20	9,510	1.92	493,000	3.8	86.6	8.3	.2	.8	.3
Aug. 23	7,070	.64	122,000	2.8	89.3	7.0	.2	.4	.3
Aug. 27	5,570	.34	51,100	2.6	91.5	5.1	.2	.4	.2
Aug. 30	5,050	.20	27,300	8.1	86.5	4.0	.2	.8	.4
Sept. 2	6,230	.14	23,500	15.7	74.8	6.1	1.4	1.4	.6
Sept. 3	8,400	.62	141,000	1.9	83.7	12.1	1.2	.7	.4
Sept. 5	19,300	3.04	1,580,000	1.9	74.4	13.4	7.5	2.4	.4
Sept. 9	21,300	2.65	1,520,000	3.2	79.4	11.1	3.5	2.2	.6
Sept. 12	22,500	3.01	1,830,000	1.1	80.9	7.0	5.8	4.2	1.0
Sept. 17	19,600	2.20	1,160,000	3.2	79.0	6.7	5.3	4.9	.9
Sept. 24, 27	1 10,400	1.56	1 163,000	1.1	90.0	4.8	1.8	1.9	.4
Sept. 30	8,550	.20	46,200	4.5	75.7	13.3	3.1	2.2	1.2
Oct. 2, 6, 9, 12	1 8,470	1.22	1 57,200	1.2	71.0	15.1	5.6	5.7	1.4
Oct. 17, 20	1 11,300	1.69	1 212,000	1.8	79.6	10.9	3.1	3.5	1.1
Oct. 25	10,800	.48	140,000	3.6	78.5	11.6	3.8	1.7	.8
Oct. 28, 31	1 9,520	1.33	1 84,700	2.0	77.4	11.7	4.3	2.7	1.9
Nov. 4, 8, 11, 14, 17	1 8,930	1.14	1 33,800	1.4	69.7	16.4	6.1	4.5	1.9
Nov. 20, 23, 26, 29	1 7,600	1.07	1 14,100	5.5	61.9	18.5	7.1	4.2	2.8
Dec. 4, 8, 11, 14, 17, 20, 23, 26, 29	1 7,250	1.06	1 13,000	1.5	66.3	19.6	7.4	4.0	1.2

1 Mean for days on which size samples were collected.

TABLE 23.—*Mechanical analyses of suspended sediment in samples collected in the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 5, 1935, to Sept. 30, 1941—Continued*

Date of collection	Mean daily discharge (sec.-ft.)	Mean daily concentration (percent)	Tons per day	Suspended sediment					
				Percent in indicated size range					
				<0.005 mm.	0.005-0.020 mm.	0.020-0.050 mm.	0.050-0.074 mm.	0.074-0.149 mm.	>0.149 mm.
1939									
Jan. 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 30.....	15,880	1.04	16,130	3.1	65.8	20.9	6.7	2.6	0.9
Feb. 2, 5, 8, 11, 14, 17, 20, 23.....	15,660	1.04	15,020	14.1	38.1	36.9	7.3	2.4	1.2
Feb. 26.....	5,910	.08	12,800	11.3	75.7	7.0	3.7	1.4	.9
Mar. 1, 5, 8, 11, 14.....	16,350	1.07	12,600	3.3	60.2	24.0	9.6	2.2	.7
Mar. 16.....	9,240	.28	69,900	3.5	51.5	25.9	12.9	4.6	1.6
Mar. 18.....	10,400	.54	152,000	1.7	61.8	18.0	13.2	4.6	.7
Mar. 21.....	11,200	.89	269,000	.9	70.8	10.8	12.1	4.6	.8
Mar. 23.....	21,100	1.82	1,040,000	.4	35.0	21.6	26.4	15.0	1.6
Mar. 24.....	27,400	1.84	1,360,000	.5	31.4	17.0	25.7	22.5	2.9
Mar. 26.....	28,500	2.06	1,590,000	1.2	35.9	16.3	19.1	23.7	3.8
Mar. 28.....	27,000	1.83	1,330,000	.6	56.6	12.4	11.3	15.7	3.4
Mar. 31.....	27,800	1.45	1,090,000	.4	45.9	10.1	10.6	25.5	7.5
Apr. 2.....	23,700	1.10	704,000	.8	51.2	13.2	11.8	17.7	5.3
Apr. 5.....	19,500	.88	463,000	.9	52.0	13.2	11.0	16.2	6.7
Apr. 8.....	25,400	1.36	933,000	.7	45.7	14.1	14.1	22.4	3.0
Apr. 11.....	22,600	.83	506,000	1.1	39.3	16.6	13.9	23.8	5.3
Apr. 14.....	21,500	.58	337,000	1.3	31.9	18.1	15.3	28.9	4.5
Apr. 20, 23, 26.....	16,400	1.33	1,145,000	1.3	23.7	19.0	16.7	31.6	7.7
Apr. 29.....	21,000	.42	238,000	3.9	16.9	22.9	20.1	31.7	4.5
May 1.....	22,500	.53	322,000	3.7	25.9	24.2	20.5	22.5	3.2
May 3.....	29,600	.84	671,000	1.7	10.6	16.1	22.1	44.0	5.5
May 4.....	33,400	.94	848,000	1.7	14.5	22.1	21.4	31.8	8.5
May 7.....	40,600	1.12	1,230,000	6.6	13.0	17.1	16.4	34.5	12.4
May 9.....	45,300	1.17	1,430,000	2.2	13.6	16.7	17.0	34.8	15.7
May 13.....	40,100	.77	834,000	5.8	10.3	16.3	16.7	28.5	22.4
May 16, 18, 22.....	139,000	1.65	1,686,000	.5	13.3	16.2	19.1	31.2	19.7
May 25, 28, 30.....	141,700	1.61	1,699,000	1.1	7.5	18.6	19.3	32.8	20.7
June 1, 5, 8, 11, 13.....	136,300	1.44	1,435,000	.5	14.8	16.3	21.1	27.4	19.9
June 15, 18, 20, 23, 26, 29.....	121,600	1.20	1,127,000	.9	14.8	14.7	19.8	27.9	21.9
July 2, 5, 8, 11, 14.....	110,100	1.04	1,12,200	4.0	41.6	22.1	15.8	10.7	5.8
July 17, 20, 23, 26.....	15,740	1.02	1,3,100	28.5	41.4	19.0	6.4	3.1	1.6
July 29, Aug. 1, 4, 8.....	14,180	1.01	1,120	29.9	43.1	15.6	2.8	6.3	2.3
Aug. 11, 15, 18, 21.....	14,520	1.16	1,19,100	1.2	91.1	6.9	.3	.3	.2
Aug. 24, 27, 30, Sept. 2.....	13,100	1.16	1,14,400	1.3	86.6	11.6	.2	.2	.1
Sept. 5.....	5,140	.68	94,400	1.6	88.1	9.4	.3	.4	.2
Sept. 7.....	8,540	1.65	380,000	.9	91.1	6.7	.6	.5	.2
Sept. 8.....	10,300	1.84	512,000	2.4	87.9	6.6	1.5	1.3	.3
Sept. 11.....	13,200	1.58	563,000	.8	77.9	13.8	3.6	2.7	1.2
Sept. 13.....	17,300	4.66	2,180,000	.4	86.3	9.2	2.0	1.5	.6
Sept. 14.....	25,200	6.37	4,330,000	1.0	61.0	17.7	12.4	6.8	1.1
Sept. 15.....	18,100	5.70	2,790,000	1.9	64.0	19.2	10.1	4.1	.7
Sept. 16.....	14,800	3.82	1,590,000	2.5	72.8	15.9	5.6	2.5	.7
Sept. 18.....	12,600	2.36	803,000	3.1	64.3	23.8	4.3	2.9	1.6
Sept. 21.....	9,970	1.58	425,000	3.8	70.7	21.3	2.4	1.5	.3
Sept. 24.....	7,720	.99	206,000	1.2	85.5	11.2	1.2	.7	.2
Sept. 27.....	6,300	.49	83,300	2.6	87.2	8.3	1.2	.5	.2
Sept. 29, Oct. 2, 5, 8, 11.....	16,350	1.39	1,67,900	.7	94.6	2.8	.7	.9	.3
Oct. 14, 17, 20, 23, 26, 29.....	15,790	1.16	1,24,500	.8	92.1	4.5	1.4	.9	.3
Nov. 1, 4, 7, 10, 13.....	15,460	1.09	1,13,300	2.3	82.3	11.8	2.0	1.0	.6
Nov. 16, 19, 22, 25, 28.....	15,600	1.08	1,16,000	2.9	73.5	17.7	3.4	1.7	.8
Dec. 1, 4, 7, 10, 13.....	15,270	1.06	1,8,250	5.4	75.6	13.6	3.1	1.3	1.0
Dec. 16, 19, 22, 25, 28, 31.....	14,780	1.07	1,9,110	4.4	72.8	17.1	2.9	1.9	.9

1 Mean for day on which size samples were collected.

TABLE 23.—Mechanical analyses of suspended sediment in samples collected in the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 5, 1935, to Sept. 30, 1941—Continued

Date of collection	Mean daily discharge (sec.-ft.)	Mean daily concentration (percent)	Tons per day	Suspended sediment					
				Percent in indicated size range					
				< 0.005 mm.	0.005-0.020 mm.	0.020-0.050 mm.	0.050-0.074 mm.	0.074-0.149 mm.	> 0.149 mm.
1940									
Jan. 4, 7, 10, 13	14,730	1.07	19,320	5.5	72.2	15.7	3.1	2.3	1.2
Jan. 15	7,170	.63	122,000	2.6	78.3	14.9	3.0	.8	.4
Jan. 18	5,870	.21	33,300	5.4	77.9	13.4	1.8	.9	.6
Jan. 21, 24, 27, 30, Feb. 2	14,030	1.07	18,280	5.1	76.2	13.9	3.1	1.3	.4
Feb. 5	6,870	.18	33,400	10.0	65.0	18.0	4.8	1.5	.7
Feb. 7	7,400	.57	114,000	1.3	85.4	9.8	2.1	1.0	.4
Feb. 10	6,410	.34	58,800	3.6	80.5	12.5	1.9	1.1	.4
Feb. 13, 16	15,460	1.17	125,200	3.4	83.2	9.4	2.8	.9	.3
Feb. 19, 22, 25, 28	15,160	1.08	11,120	2.6	74.8	15.0	4.6	1.4	1.6
Mar. 2	7,820	.24	50,700	5.2	53.7	23.6	13.8	3.0	.7
Mar. 4	8,610	.95	221,000	.7	78.1	13.3	5.7	1.8	.4
Mar. 7	6,990	.57	108,000	1.6	80.1	12.3	4.3	1.4	.3
Mar. 9	9,000	.55	134,000	2.4	59.2	19.9	14.5	3.5	.5
Mar. 12	8,520	.45	104,000	2.3	52.5	24.9	15.1	4.6	.6
Mar. 15, 18, 21	17,250	1.25	150,600	1.5	69.0	14.9	10.0	3.5	1.1
Mar. 24	6,500	.17	29,800	3.2	63.2	19.4	11.2	2.3	.7
Mar. 27	6,940	.18	33,700	1.8	49.8	18.8	21.1	6.9	1.6
Apr. 2, 9, 12, 21, 24	110,100	1.45	1123,000	.2	41.3	14.3	25.4	16.1	2.7
Apr. 25-26, 29	118,900	1.10	1548,000	.4	28.4	20.5	31.5	18.0	1.2
May 1-2, 5	122,000	1.89	1536,000	.3	30.3	12.5	22.0	31.2	3.7
May 10-11, 14, 17, 20	136,900	1.11	1130,000	.3	21.0	11.7	14.9	37.4	14.7
May 25	34,800	.64	601,000	.3	3.1	3.4	4.9	12.1	76.2
May 28, 31	132,400	1.50	1437,000	1.1	13.9	13.3	19.5	29.9	22.3
June 3, 5, 8	138,500	1.63	1661,000	.6	10.2	10.5	19.3	36.1	23.3
June 10, 12	130,200	1.44	1368,000	1.2	16.3	12.7	20.9	30.1	18.8
June 15, 21, 25, 29	117,800	1.15	175,800	5.4	21.1	15.1	26.0	19.8	12.6
July 2, 6	110,600	1.07	120,000	12.0	33.9	19.7	16.3	13.2	4.9
July 9, 13, 17, 20, 23	16,180	1.10	119,800	2.0	81.3	12.4	2.6	1.3	.4
July 27	4,660	.10	12,600	9.3	82.6	5.5	1.3	.7	.6
July 29	5,740	2.93	454,000	1.1	87.0	10.7	.7	.3	.2
July 31	5,340	1.24	179,000	1.4	86.4	11.2	.3	.4	.3
Aug. 3	4,260	1.94	223,000	.7	96.6	2.3	.2	.1	.1
Aug. 6	3,130	1.70	144,000	1.4	90.3	7.9	.2	.1	.1
Aug. 14	2,350	.09	5,710	10.3	80.2	7.8	1.0	.3	.4
Aug. 17	5,060	2.26	309,000	1.7	73.6	22.1	2.1	.3	.2
Aug. 20	2,570	2.64	183,000	2.4	86.0	11.2	.2	.1	.1
Aug. 24	4,940	4.93	658,000	1.0	57.8	11.2	.8	.1	29.1
Aug. 29	7,130	4.65	895,000	1.8	83.4	10.0	3.4	1.2	.2
Sept. 3	5,530	1.58	236,000	2.2	82.6	13.2	1.5	.4	.1
Sept. 7	6,030	1.14	186,000	2.4	83.4	12.8	1.1	.2	.1
Sept. 11	4,110	.60	66,600	2.2	78.0	18.0	1.3	.4	.1
Sept. 14	7,270	.87	171,000	.8	86.9	10.1	1.8	.3	.1
Sept. 15	8,980	4.83	1,170,000	1.5	74.2	13.5	8.0	2.4	.4
Sept. 17	5,530	3.12	466,000	1.1	86.4	8.2	3.1	1.0	.2
Sept. 19	11,300	4.97	1,520,000	.7	57.8	20.1	9.8	9.6	2.0
Sept. 21	12,700	4.25	1,460,000	.7	68.4	10.8	11.2	8.4	.5
Sept. 24	14,200	3.56	1,360,000	1.3	74.2	10.6	7.7	5.6	.6
Sept. 26	11,200	3.28	992,000	1.0	78.3	10.3	5.6	4.3	.5
Sept. 28	9,030	2.88	702,000	2.7	75.7	13.6	4.4	3.2	.4
Oct. 1	22,300	8.06	4,850,000	2.2	49.0	15.6	16.1	15.5	1.6
Oct. 3	19,200	4.61	2,390,000	2.9	52.8	21.8	11.5	9.3	1.7
Oct. 5	16,900	2.86	1,300,000	3.3	71.4	13.6	7.1	8.9	.7
Oct. 8	17,700	3.62	1,730,000	3.9	65.0	16.3	8.2	5.3	1.3
Oct. 12	13,000	1.44	505,000	1.8	73.1	10.5	6.2	6.6	1.8
Oct. 15	10,600	1.03	295,000	2.6	73.0	11.4	6.2	5.9	.9
Oct. 19	8,520	.66	152,000	3.0	69.7	9.9	5.6	8.8	3.0
Oct. 23	7,300	.34	67,000	3.2	25.0	57.4	6.1	6.0	2.3
Oct. 29	7,070	.84	160,000	3.3	75.6	13.4	3.7	3.1	.9

1 Mean for days on which size samples were collected.

TABLE 23.—*Mechanical analyses of suspended sediment in samples collected in the Colorado River at gaging station near Grand Canyon, Ariz., Apr. 5, 1935, to Sept. 30, 1941—Continued*

Date of collection	Mean daily discharge (sec.-ft.)	Mean daily concentration (percent)	Tons per day	Suspended sediment					
				Percent in indicated size range					
				<0.005 mm.	0.005-0.020 mm.	0.020-0.050 mm.	0.050-0.074 mm.	0.074-0.149 mm.	>0.149 mm.
1940									
Nov. 9.....	6,760	.34	62,100	3.5	60.3	13.7	11.9	8.1	2.5
Nov. 12, 17, 19.....	16,450	1.20	134,700	4.8	54.4	14.1	9.9	12.3	4.5
Nov. 23.....	8,770	.99	234,000	2.2	62.5	9.4	9.6	14.0	2.3
Nov. 26.....	7,650	.76	157,000	2.8	65.8	8.4	8.7	11.2	3.1
Nov. 30.....	6,770	.31	56,700	5.3	63.0	9.4	7.7	10.5	4.1
Dec. 3, 7.....	16,140	1.21	134,800	4.2	41.2	10.2	13.0	24.5	6.9
Dec. 10, 14.....	16,990	1.24	146,400	3.9	28.0	16.8	17.1	22.5	11.7
Dec. 17.....	7,580	.62	127,000	2.5	42.2	10.5	14.0	22.5	8.3
Dec. 21.....	4,300	.24	27,900	7.9	74.4	10.8	2.7	3.0	1.2
Dec. 24.....	5,320	.50	71,800	3.6	86.3	2.7	3.8	2.6	1.0
Dec. 28.....	8,740	1.56	368,000	1.5	58.0	13.2	16.0	10.5	.8
Dec. 31.....	7,140	.84	162,000	2.3	73.5	7.9	8.4	6.5	1.4
1941									
Jan. 4.....	9,700	1.92	503,000	1.1	64.7	8.9	9.8	13.3	2.2
Jan. 14.....	7,590	3.44	705,000	1.1	68.6	11.0	8.0	10.0	1.3
Jan. 21.....	5,880	.52	82,600	1.5	65.9	5.5	7.6	13.0	6.5
Feb. 15.....	7,920	.89	190,000	.6	32.7	10.4	18.9	32.1	5.3
Feb. 25.....	16,100	2.17	943,000	.6	50.7	13.3	12.5	17.8	5.1
Mar. 1.....	13,600	1.58	580,000	1.5	63.0	12.1	11.1	11.2	1.1
Mar. 15.....	8,410	.48	109,000	1.6	56.2	9.4	12.7	16.7	3.4
Mar. 18.....	15,100	2.83	1,150,000	.7	60.9	9.8	10.4	15.0	3.2
Mar. 29.....	18,000	1.86	904,000	.7	39.1	13.6	15.0	21.4	10.2
Apr. 5.....	20,000	2.17	1,170,000	1.1	41.9	12.6	15.8	21.8	6.8
Apr. 26.....	20,500	.87	482,000	1.7	44.4	13.4	18.5	17.0	5.0
May 6.....	56,900	1.79	2,750,000	.8	29.6	15.4	17.5	24.7	12.0
May 26.....	83,100	1.28	2,870,000	1.2	41.0	14.3	16.1	18.6	8.8
June 5.....	69,000	.63	1,170,000	2.2	19.2	15.1	27.1	22.3	14.1
June 12.....	77,700	1.46	3,060,000	.9	33.8	11.9	13.0	22.7	17.7
June 28.....	70,100	.72	1,360,000	2.4	11.5	11.3	15.6	25.2	34.0
July 1, 7, 21.....	137,800	1.31	1,371,000	4.9	20.6	15.0	20.7	25.1	13.7
July 26.....	20,300	.49	269,000	2.5	68.2	12.8	8.2	6.1	2.2
July 30.....	15,600	.67	282,000	2.7	81.4	6.9	3.9	3.8	1.3
Aug. 2, 6, 9.....	11,100	1.15	149,200	3.6	76.9	11.7	4.6	2.4	.8
Aug. 12.....	23,500	2.89	1,830,000	1.2	65.6	15.0	10.8	6.4	1.0
Aug. 20.....	17,500	2.07	978,000	1.6	78.7	12.7	4.4	2.2	.4
Aug. 30.....	8,890	.82	197,000	2.8	86.1	9.0	.7	1.0	.4
Sept. 2.....	7,140	.86	166,000	2.1	90.9	6.3	.3	.2	.2
Sept. 13.....	5,350	.39	56,300	3.9	90.9	3.8	.7	.7	-----
Sept. 16.....	10,100	1.68	458,000	.6	87.1	9.0	2.2	1.1	-----
Sept. 24.....	13,600	1.80	661,000	1.3	68.1	13.8	8.3	7.7	.8
Sept. 27.....	19,300	2.71	1,410,000	1.4	67.3	14.5	10.4	5.8	.6
Sept. 30.....	21,200	1.88	1,080,000	.7	47.1	10.6	15.7	24.1	1.8

¹ Mean for days on which size samples were collected.

TABLE 24.—*Mechanical analyses of suspended sediment in samples collected in the Colorado River at gaging station near Willow Beach, Ariz., Apr. 2, 1935, to Sept. 27, 1936*

[Samples collected prior to May 4, 1936, dispersed with 1.5 percent sodium oxalate]

Date of collection	Mean daily discharge (sec.-ft.)	Suspended sediment							
		Mean daily concentration (percent)	Tons per day	Percent in indicated size range					
				<0.005 mm.	0.005-.020 mm.	0.020-.050 mm.	0.050-.074 mm.	0.074-.149 mm.	>0.149 mm.
1935									
Apr. 2	7,690	0.06	12,400		4.8	5.0	4.2	41.9	44.1
Apr. 5	7,550	.07	14,300		4.9	7.4	9.3	50.9	27.5
Apr. 9	7,320	.38	75,100	48.2	26.7	3.6	1.6	19.9	
Apr. 12	7,450	.70	141,000	56.1	36.6	3.4	.7	3.2	
Apr. 16	6,860	1.15	213,000	46.0	43.5	4.4	.7	2.9	2.5
Apr. 20	7,320	.24	47,400	3.3	78.5	5.5	12.7		
Apr. 22	7,520	.04	8,120				14.4	39.0	46.6
Apr. 23	7,380	.04	7,960				18.0	40.4	41.6
Apr. 26	7,420	.40	80,100	52.6	35.8	3.5	1.2	4.0	2.9
Apr. 30	7,280	.06	11,800				13.9	53.6	32.5
May 1	6,470	.04	6,990				14.2	33.6	52.2
May 3	7,350	.03	5,940				14.4	43.2	42.4
May 5	7,720	.03	6,260				12.4	56.6	31.0
May 7	7,350	.05	9,940				2.6	16.8	80.6
May 8	7,320	.04	7,910				34.8	55.1	10.1
May 10	7,120	.04	7,690				10.0	44.5	45.5
May 14	6,520	.10	17,600				2.3	17.8	79.9
May 15	6,610	.06	10,700				5.9	51.6	42.5
May 17	6,610	.06	10,700				12.6	40.1	47.3
May 21	6,930	.04	7,480				18.0	46.7	35.3
May 22, 26-28	113,100	1.08	129,300				15.7	51.2	33.1
May 29, 31	115,000	1.06	124,200				16.2	50.3	33.5
June 1	15,200	.06	24,600				44.1	32.9	23.0
June 5	15,800	.06	25,600				12.0	42.3	45.7
June 7	16,300	.05	22,000				14.9	58.6	26.5
June 9	16,200	.04	17,500				18.0	57.0	25.0
June 10	16,400	.06	26,600				12.6	38.6	48.8
June 11	16,800	.05	22,700				27.6	36.2	36.2
June 14	17,300	.04	18,700				7.3	28.5	64.2
June 21	18,600	.05	25,100				24.4	41.1	34.5
June 24	16,800	.04	18,100				8.1	28.0	63.9
June 25	14,400	.04	15,600				16.1	47.8	36.1
June 26	14,500	.05	19,600				17.6	31.1	51.3
June 28	14,700	.05	19,800				12.1	33.0	54.9
July 4	15,000	.07	28,300				8.5	37.1	54.4
July 10	10,000	.04	10,800				43.6	15.4	41.0
July 11	10,200	.04	11,000				17.4	19.5	63.1
July 14	10,000	.02	5,400				14.2	17.9	67.9
July 18	9,960	.01	2,000				15.2	28.4	56.4
July 21	10,000	.04	10,800				14.5	24.9	60.6
July 25	9,960	.03	8,080				16.0	19.5	64.5
July 28	10,000	.02	5,400				15.3	22.8	61.9
Aug. 1	10,100	.04	10,900				10.8	19.9	69.3
Aug. 4	10,000	.03	8,100				29.1	18.3	52.6
Aug. 8	10,200	.04	11,000				26.6	31.0	42.4
Aug. 11	10,100	.07	19,100				15.8	14.7	69.5
Aug. 15	10,300	.01	2,780				12.1	13.1	74.8
Aug. 18, 22, 25, 29	110,200	1.02	16,760				2.1	7.0	90.9
Sept. 1	10,100	.03	8,180				16.9	24.2	58.9
Sept. 3	9,960	.86	231,000	34.2	62.0	1.6	2.2		
Sept. 6	10,100	.17	46,400	52.3	40.0	2.6	5.1		
Sept. 9	9,960	.70	188,000	28.0	68.6	2.3	1.1		
Sept. 12	10,100	1.37	374,000	46.8	48.9	2.5	1.8		
Sept. 15	10,100	.01	2,730				10.9	12.1	77.0
Sept. 19	10,000	.01	2,700				8.6	20.1	71.3
Sept. 22	9,960	.03	8,070				4.9	13.8	81.3
Sept. 26	10,100	.01	2,730				8.6	24.0	67.4
Sept. 29	9,920	.02	5,350				13.0	33.6	53.4

¹ Mean for days on which size samples were collected.

TABLE 24.—*Mechanical analyses of suspended sediment in samples collected in the Colorado River at gaging station near Willow Beach, Ariz., Apr. 2, 1935, to Sept. 27, 1936—Continued*

[Samples collected prior to May 4, 1936, dispersed with 1.5 percent sodium oxalate]

Date of collection	Mean daily discharge (sec.-ft.)	Mean daily concentration (percent)	Tons per day	Suspended sediment					
				Percent in indicated size range					
				<0.005 mm.	0.005-.020 mm.	0.020-.050 mm.	0.050-.074 mm.	0.074-.149 mm.	>0.149 mm.
1935									
Oct. 3.....	10,000	.02	5,400				3.7	35.1	61.2
Oct. 6.....	9,740	1.57	413,000	68.6	27.2	3.6	.6		
Oct. 10.....	9,680	2.16	565,000	74.5	21.8	2.6	1.1		
Oct. 13.....	9,720	.34	89,200	73.9	4.8	2.2	19.1		
Oct. 17.....	9,820	.01	2,380				14.2	20.8	65.0
Oct. 20, 24, 27, 31.....	¹ 9,840	1.01	¹ 3,330				13.9	23.7	62.4
Nov. 3, 7, 10, 14, 17.....	¹ 9,700	1.04	¹ 10,500				1.4	5.2	93.4
Nov. 21, 24, 27, Dec. 1, 5, 9, 12, 16, 19, 23.....	¹ 6,340	1.02	¹ 3,480				9.2	17.4	73.4
Dec. 26, 29.....									
1936									
Jan. 1-2, 5, 9, 12, 16, 19, 23, 26.....	¹ 4,840	1.01	¹ 1,030				8.2	3.8	88.0
Jan. 30, Feb. 2, 6, 9, 13, 16, 20, 23, 27, Mar. 1.....	¹ 5,630	1.01	¹ 1,020				6.1	1.2	92.7
Mar. 5-6, 9, 12, 16, 19, 22, 26, 29, Apr. 2.....	¹ 9,250	1.02	¹ 5,640				8.3	17.7	74.0
Apr. 5, 9, 12, 16, 19.....	¹ 9,670	1.02	¹ 4,720				8.0	12.0	80.0
Apr. 22.....	9,840	.21	55,800	58.1	14.6	2.3	1.9	4.7	18.4
Apr. 25.....	9,960	1.41	379,000	67.8	28.2	3.9	.1		
Apr. 28.....	10,700	.74	214,000	13.0	81.6	2.4	3.0		
May 1.....	9,460	.10	25,500	57.3	27.1	5.2	1.7	3.6	5.1
May 4, 7, 10, 14, 17, 21, 24, 28, 31.....	¹ 9,350	1.01	¹ 3,010				16.0	23.2	60.8
June 4, 7, 11, 14, 18, 21, 25, 29.....	¹ 10,400	1.01	¹ 3,050				6.7	16.6	76.7
July 2, 5, 9, 12, 16, 18, 23, 26, 30.....	¹ 11,300	1.01	¹ 2,720				8.2	17.7	74.1
Aug. 2, 6, 9, 13, 16, 20, 23, 27, 30.....	¹ 9,980	1.01	¹ 2,050				5.4	10.5	84.1
Sept. 6, 10-11, 13-14, 17-20, 24, 27.....	¹ 9,480	1.01	¹ 1,740				8.0	14.1	77.9

¹ Mean for days on which size samples were collected.

QUANTITIES OF SUSPENDED SEDIMENT

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TABLE 25.—*Mechanical analyses of suspended sediment in samples collected in the San Juan River at gaging station near Bluff, Utah, May 3, 1935, to Sept. 30, 1936*

[Samples collected prior to May 4, 1936, dispersed with 1.5 percent sodium oxalate]

Date of collection	Mean daily discharge (sec.-ft.)	Mean daily concentration (percent)	Tons per day	Suspended sediment					
				Percent in indicated size range					
				<0.005 mm.	0.005-.020 mm.	0.020-.050 mm.	0.050-.074 mm.	0.074-.149 mm.	>0.149 mm.
1935									
May 3.....	4, 230	1.02	116,000	8.3	5.4	10.9	21.8	37.2	16.4
May 5.....	3, 660	.98	96,800	21.8	13.5	15.5	22.6	22.4	4.2
May 11.....	3, 940	.86	91,500	9.2	10.5	21.1	26.1	26.6	6.5
May 14.....	6, 120	1.32	218,000	12.2	8.0	16.0	28.5	25.1	10.2
May 18.....	5, 960	1.83	295,000	15.4	8.9	17.6	27.0	22.9	8.2
May 19.....	6, 460	1.81	316,000	7.8	4.8	11.4	18.1	32.6	25.3
May 21.....	7, 140	1.25	241,000	14.9	7.2	13.2	21.5	27.8	15.4
May 22.....	11, 300	2.51	766,000	11.2	18.4	15.0	16.6	21.8	17.0
May 23.....	8, 590	1.99	462,000	26.8	19.7	16.6	2.1	24.4	10.4
May 25.....	6, 970	1.16	218,000	11.4	9.1	16.6	21.7	31.2	10.0
May 27.....	8, 590	1.17	271,000	14.7	9.6	16.5	23.8	27.7	7.7
May 28.....	9, 160	1.35	334,000	14.1	10.1	15.8	23.0	27.0	10.0
May 29.....	9, 160	1.08	267,000	10.1	10.4	10.2	25.5	28.0	15.8
June 1.....	8, 780	1.01	239,000	8.4	7.5	13.2	20.9	33.7	16.3
June 3.....	6, 800	.82	151,000	8.5	6.6	13.0	19.2	30.5	22.2
June 5.....	8, 780	.94	223,000	8.9	11.4	22.1	30.3	23.3	4.0
June 6.....	10, 100	.99	270,000	14.0	11.2	18.9	19.9	25.2	10.8
June 7.....	11, 500	1.06	329,000	12.7	11.2	16.3	18.0	24.3	17.5
June 8.....	13, 300	1.19	427,000	12.0	10.5	16.6	16.6	26.2	18.1
June 13.....	17, 100	1.17	540,000	15.8	12.6	15.3	19.4	24.9	12.0
June 14.....	16, 100	1.00	435,000	13.9	11.2	15.9	20.2	27.5	11.3
June 17.....	18, 500	1.03	514,000	12.1	10.1	13.7	16.9	31.6	15.6
June 27.....	11, 100	.72	216,000	9.8	7.5	11.9	22.0	32.9	15.9
June 29.....	10, 100	.81	221,000	8.8	10.4	19.5	26.8	29.6	4.9
July 1.....	8, 590	.87	202,000	6.2	4.3	6.5	15.6	37.0	30.4
July 3.....	7, 860	.65	138,000	9.9	6.5	11.3	20.0	38.1	14.2
July 5.....	7, 140	.70	135,000	9.4	6.9	11.2	20.1	39.9	12.7
July 7.....	6, 290	.72	122,000	12.9	9.7	12.4	17.4	34.6	13.0
July 9.....	5, 960	.69	111,000	10.2	6.8	9.4	18.1	41.8	13.7
July 11.....	5, 640	.54	82,200	5.9	8.7	7.6	14.9	36.7	26.2
July 13.....	5, 000	.46	62,100	9.1	5.8	8.3	13.8	31.9	31.1
July 15.....	4, 680	.53	67,000	10.0	6.7	9.9	13.4	33.2	26.8
July 17.....	4, 380	.78	92,200	35.6	14.6	5.6	9.1	19.8	15.1
July 19.....	5, 800	2.71	424,000	26.8	14.4	13.1	11.6	21.3	12.8
July 20.....	3, 940	1.17	124,000	39.2	19.4	9.0	7.3	14.7	10.4
July 24.....	3, 660	.54	53,400	19.1	10.6	13.0	15.2	29.3	12.8
July 26.....	2, 550	.52	35,800	18.7	9.7	10.8	18.3	32.1	10.4
July 29.....	1, 820	1.28	62,900	6.3	2.7	1.7	5.2	43.2	40.9
July 31.....	2, 730	1.77	19,800	5.8	2.6	1.4	3.4	14.7	72.1
Aug. 1.....	2, 610	4.45	314,000	27.0	29.5	6.4	5.3	9.7	22.1
Aug. 5.....	2, 140	2.48	143,000	15.0	5.6	1.9	1.8	12.4	63.3
Aug. 7.....	2, 670	3.40	245,000	30.4	17.0	5.8	3.1	7.9	35.8
Aug. 9.....	2, 800	4.13	312,000	28.9	14.0	9.0	4.1	9.6	34.4
Aug. 13.....	1, 670	2.13	96,000	43.5	16.5	4.8	2.6	12.1	20.5
Aug. 15.....	1, 720	1.70	78,900	21.6	10.4	6.4	3.7	17.8	40.1
Aug. 19.....	1, 440	1.11	43,100	40.6	18.3	6.4	2.8	11.0	20.9
Aug. 22.....	1, 964	.43	11,200	27.6	28.1	11.6	5.1	17.4	10.2
Aug. 25.....	2, 140	2.63	152,000	35.5	31.3	15.3	5.7	8.4	3.8
Aug. 29.....	2, 550	2.25	155,000	41.7	24.8	13.3	4.7	7.6	8.0
Sept. 1.....	2, 730	2.08	153,000	26.7	18.0	19.4	13.2	13.8	8.9
Sept. 3.....	1, 770	4.67	223,000	29.5	16.4	12.5	15.4	23.6	2.6
Sept. 13.....	1, 060	.95	27,200	35.5	15.1	9.4	5.9	23.3	10.8
Sept. 15.....	842	.57	13,000	27.4	13.4	10.6	13.5	26.5	8.6
Sept. 18.....	694	.31	5,800	29.7	14.4	11.8	8.5	30.6	5.0
Sept. 20.....	530	.27	3,860	15.3	25.7	9.8	11.6	32.7	4.9
Sept. 23.....	452	.38	4,640	5.8	32.2	10.9	12.9	31.5	6.7
Sept. 24.....	559	3.91	59,000	8.2	12.8	20.3	31.7	22.3	4.7
Sept. 25.....	3, 940	5.95	633,000	11.8	33.8	13.3	6.4	16.9	17.8
Sept. 28.....	9, 290	8.42	2, 260,000	29.5	20.0	18.9	13.6	12.4	5.6

TABLE 25.—*Mechanical analyses of suspended sediment in samples collected in the San Juan River at gaging station near Bluff, Utah, May 3, 1935, to Sept. 30, 1936—Continued*

[Samples collected prior to May 4, 1936, dispersed with 1.5 percent sodium oxalate]

Date of collection	Mean daily discharge (sec.-ft.)	Suspended sediment							
		Mean daily concentration (percent)	Tons per day	Percent in indicated size range					
				<0.005 mm.	0.005-.020 mm.	0.020-.050 mm.	0.050-.074 mm.	0.074-.149 mm.	>0.149 mm.
1935									
Oct. 7.....	1,260	.38	12,900	36.1	18.3	13.3	9.4	15.6	7.3
Oct. 10.....	1,060	.36	10,300	23.4	13.7	9.8	8.5	22.8	21.8
Oct. 14.....	872	.29	6,830	26.9	20.4	14.7	11.6	18.2	8.2
Oct. 17.....	776	.24	5,020	33.0	17.2	16.3	10.0	18.4	5.1
Oct. 19.....	720	.26	5,050	21.9	16.8	13.4	10.6	22.1	15.2
Oct. 22.....	1,620	1.90	83,100	44.4	25.8	8.3	6.1	10.7	4.7
Oct. 25.....	932	.99	24,900	17.9	41.7	6.6	4.2	13.2	16.4
Oct. 28.....	910	.55	13,500	34.8	21.0	10.8	8.6	17.9	6.9
Oct. 31.....	842	.40	9,100	36.7	17.9	12.6	8.8	16.6	7.4
Nov. 3.....	762	.32	6,590	34.1	24.1	13.8	9.6	13.4	5.0
Nov. 6.....	748	.29	5,860	13.8	31.9	13.1	13.8	20.6	6.8
Nov. 8.....	688	.24	4,460	36.2	21.7	15.2	8.8	13.5	4.6
Nov. 12.....	707	.25	4,780	25.8	16.7	15.2	10.7	17.8	13.8
Nov. 15.....	643	.26	4,510	35.7	19.9	16.8	11.8	13.4	2.4
Nov. 18.....	625	.22	3,730	23.8	15.0	14.8	12.3	24.4	9.7
Nov. 21.....	655	.21	3,730	25.8	16.9	20.6	14.2	18.5	4.0
Nov. 24.....	601	.26	4,210	18.7	14.5	16.0	13.5	22.9	14.4
Nov. 27.....	707	.29	5,540	17.3	11.0	17.2	13.5	28.0	13.0
Nov. 30.....	674	.24	4,370	18.3	21.5	14.8	14.6	21.4	9.4
Dec. 3.....	565	.34	5,180	43.9	8.4	9.7	6.4	20.0	11.6
Dec. 9.....	668	.24	4,320	34.3	12.5	17.5	13.3	17.9	4.5
Dec. 10.....	655	.24	4,240	4.3	2.4	2.9	8.5	42.7	39.2
Dec. 16.....	496	.23	3,080	17.0	9.6	8.4	8.7	27.9	28.4
Dec. 20.....	312	.12	999	22.8	8.8	10.4	11.8	29.8	16.4
Dec. 23.....	348	.14	1,320	13.0	7.8	7.3	9.2	28.5	34.2
Dec. 26.....	518	.32	4,480	3.8	3.1	5.5	8.7	31.9	47.0
Dec. 29.....	420	.29	3,290	5.6	5.0	9.1	14.4	39.0	26.9
1936									
Jan. 1.....	559	0.23	3,480	2.9	3.7	9.0	16.5	45.2	22.7
Jan. 4.....	474	.23	2,940	1.9	.9	2.4	5.1	20.7	69.0
Jan. 7.....	518	.29	4,050	2.0	5.8	7.9	17.8	43.0	23.5
Jan. 13.....	601	.38	6,160	8.0	3.1	3.7	10.4	30.4	44.4
Jan. 16.....	694	.26	4,860	2.4	6.0	2.3	6.9	33.5	48.9
Jan. 19.....	631	.24	4,080	3.3	14.8	4.5	10.8	43.4	23.2
Jan. 22.....	452	.19	2,320	2.0	2.9	1.5	3.6	23.0	67.0
Jan. 25.....	565	.19	2,890	3.8	8.0	2.9	5.3	25.4	54.6
Jan. 28.....	880	.32	7,610	2.1	10.5	3.9	8.4	41.4	33.7
Jan. 31.....	762	.31	6,370	16.9	8.9	5.1	8.3	41.0	19.8
Feb. 3.....	918	.39	9,670	6.5	9.1	7.9	7.9	42.2	26.4
Feb. 6.....	607	.24	3,940	5.3	7.8	5.2	8.3	41.5	31.9
Feb. 9.....	452	.14	1,700	3.6	28.5	10.4	6.8	25.3	25.4
Feb. 13.....	681	.25	4,590	20.1	11.3	13.3	11.9	32.6	10.8
Feb. 16.....	1,220	.86	28,300	15.0	8.2	13.6	14.5	29.3	19.4
Feb. 18.....	1,060	.66	18,900	47.4	15.6	8.7	7.8	13.6	6.9
Feb. 21.....	902	.59	14,400	50.5	8.7	7.0	6.3	12.1	15.4
Feb. 24.....	798	.48	10,300	38.1	8.4	7.1	7.2	21.7	17.5
Feb. 27.....	1,670	2.29	103,000	46.8	27.9	6.3	5.1	6.7	7.2
Mar. 1.....	734	.79	15,700	52.9	10.2	6.5	4.3	10.1	16.0
Mar. 4.....	3,120	2.17	18,300	46.1	18.7	10.5	5.9	12.0	6.8
Mar. 7.....	3,380	3.25	297,000	43.0	37.8	11.2	4.0	3.2	.8
Mar. 10.....	3,120	1.82	153,000	37.2	18.7	9.9	24.0	7.0	3.2
Mar. 13.....	2,430	1.53	100,000	44.1	22.0	13.8	7.6	8.8	3.7
Mar. 16.....	2,670	1.23	88,700	33.3	19.6	16.9	13.9	12.5	3.8
Mar. 19.....	2,140	1.00	57,800	36.7	20.0	18.3	11.6	9.6	3.8
Mar. 22.....	1,820	.74	36,400	29.5	19.5	22.8	14.9	11.2	2.1
Mar. 25.....	1,920	.64	33,200	25.5	14.9	20.5	16.2	16.7	6.2
Mar. 28.....	1,260	.44	15,000	24.1	18.4	19.2	14.8	18.9	4.6
Mar. 31.....	1,530	.56	23,100	29.4	20.9	21.4	14.4	10.7	3.2

TABLE 25.—Mechanical analyses of suspended sediment in samples collected in the San Juan River at gaging station near Bluff, Utah, May 3, 1935, to Sept. 30, 1936—Continued

[Samples collected prior to May 4, 1936, dispersed with 1, 5 percent sodium ozalate]

Date of collection	Mean daily discharge (sec.-ft.)	Mean daily concentration (percent)	Tons per day	Suspended sediment						
				Percent in indicated size range						
				<0.005 mm.	0.005-0.020 mm.	0.020-0.050 mm.	0.050-0.074 mm.	0.074-.149 mm.	>0.149 mm.	
1936										
Apr. 3	1,980	.86	46,000	41.2	21.5	14.6	10.1	2.8	9.8	
Apr. 6	1,770	.75	35,900	28.7	16.3	15.1	12.1	17.9	9.9	
Apr. 9	1,580	.82	35,000	17.5	16.7	30.0	26.3	1.9	7.6	
Apr. 12	4,230	.99	113,000	26.2	17.9	18.9	15.1	15.3	6.6	
Apr. 14	6,800	1.74	319,000	21.2	17.5	26.1	18.4	12.2	4.6	
Apr. 17	7,140	1.41	272,000	23.2	17.0	23.2	19.9	14.0	2.7	
Apr. 20	7,680	1.18	245,000	15.7	15.4	24.4	24.8	16.4	3.3	
Apr. 23	7,680	.96	199,000	17.0	10.4	19.2	27.5	21.7	4.2	
Apr. 26	7,140	.83	160,000	14.0	9.0	20.8	27.7	22.1	6.4	
Apr. 29	6,800	.92	169,000	9.9	6.4	9.2	30.0	27.0	17.5	
May 2	5,480	.64	94,700	11.8	18.1	16.6	23.5	23.8	6.2	
May 5	8,590	.88	204,000	15.8	11.5	20.8	22.7	22.8	6.4	
May 8	10,300	1.33	370,000	11.3	7.8	15.1	22.5	31.0	12.3	
May 11	4,840	.47	61,400	18.2	8.9	17.9	23.3	24.4	7.3	
May 14	5,160	.53	73,800	10.7	6.0	10.2	20.7	37.1	15.3	
May 17	6,460	.55	95,900	9.0	7.2	15.0	28.0	32.0	8.8	
May 20	7,140	.80	154,000	6.7	3.9	10.2	18.7	41.9	18.6	
May 23	7,320	.75	148,000	8.9	4.9	10.3	21.1	38.9	15.9	
May 26	6,970	.64	120,000	14.4	9.2	15.6	30.6	26.3	3.9	
May 29	6,630	.57	102,000	12.4	8.1	13.7	23.3	32.8	9.7	
June 1	7,320	.80	158,000	4.2	4.2	6.7	14.4	31.3	39.2	
June 4	5,000	.49	66,100	5.4	5.2	3.6	14.1	29.2	42.5	
June 8	2,990	.35	28,200	9.2	5.5	9.3	22.0	37.5	16.5	
June 11	4,230	.35	40,000	8.4	7.6	14.7	23.7	34.7	10.9	
June 14	4,080	.34	37,400	5.3	3.2	5.4	11.2	29.6	45.3	
June 17	3,120	.24	20,200	8.1	4.2	7.6	17.9	42.9	19.3	
June 20	2,490	.23	15,500	7.4	3.7	7.1	18.7	42.4	20.7	
June 23	1,720	.16	7,420	9.2	4.4	7.6	16.6	43.6	18.6	
June 26	1,400	.17	6,430	14.6	6.7	6.1	15.3	39.6	17.7	
June 28	1,220	.14	4,620	15.1	7.0	5.9	11.5	38.2	22.3	
July 1	872	.18	4,240	42.5	11.7	3.9	8.7	24.7	8.5	
July 4	769	.08	1,670	15.8	6.8	5.6	15.8	41.4	14.6	
July 8	469	.06	756	5.5	3.1	2.7	8.7	45.6	34.4	
July 11	430	.13	1,510	5.5	4.1	9.9	23.8	45.2	11.5	
July 14	1,920	1.16	60,100	34.7	29.5	7.6	7.8	14.4	6.0	
July 17	918	.33	8,180	40.6	15.6	4.8	7.8	23.5	7.7	
July 20	583	.39	6,130	54.6	17.6	3.5	4.2	13.0	7.1	
July 23	607	.60	9,830	56.8	25.5	3.8	2.7	6.0	5.2	
July 26	480	.19	2,460	21.2	11.3	3.5	4.6	26.0	33.4	
July 29	357	1.33	12,800	56.3	32.5	5.1	2.5	1.9	1.7	
Aug. 1	326	.24	2,110	45.8	23.7	7.8	6.2	9.6	6.9	
Aug. 4	915	2.25	55,600	42.5	32.5	12.5	5.3	4.9	2.3	
Aug. 5	3,950	21.4	2,280,000	15.4	9.5	10.2	15.8	41.1	8.0	
Aug. 6	7,140	8.81	1,700,000	43.5	26.0	12.3	7.1	7.0	4.1	
Aug. 7	6,460	6.42	1,120,000	45.0	25.0	11.3	4.8	8.0	5.9	
Aug. 10	3,250	1.79	157,000	47.9	21.5	12.1	6.0	7.9	4.6	
Aug. 13	1,670	.74	33,400	38.5	22.5	12.7	7.7	13.5	5.1	
Aug. 16	1,220	.43	14,200	46.8	16.9	11.0	7.4	13.5	4.4	
Aug. 19	1,140	1.65	50,800	34.5	50.9	5.7	2.9	5.0	1.0	
Aug. 22	4,530	5.03	615,000	42.6	28.4	11.3	5.6	6.7	5.4	
Aug. 25	1,180	2.54	80,900	67.9	21.0	5.5	2.6	2.7	.3	
Aug. 28	625	.65	11,000	54.9	28.3	8.6	4.6	3.1	.5	
Aug. 30	5,440	6.56	964,000	32.7	28.2	15.7	6.9	9.2	7.3	
Sept. 3	5,480	6.27	928,000	22.2	15.2	14.7	15.8	27.0	5.1	
Sept. 6	3,525	1.95	185,000	28.4	29.0	18.0	11.0	9.2	4.4	
Sept. 14	1,720	1.54	71,500	29.7	25.1	10.9	9.5	13.8	11.0	
Sept. 17	1,100	.52	15,400	33.5	13.4	15.7	14.3	16.2	6.9	
Sept. 20	1,260	.80	27,200	15.0	9.9	28.0	32.4	12.8	1.9	
Sept. 22	1,620	8.12	355,000	27.7	23.1	18.6	14.0	12.5	4.1	
Sept. 26	1,260	1.73	58,900	45.1	25.2	9.0	6.6	9.2	4.9	
Sept. 30	1,140	1.98	60,900	29.0	32.2	10.0	8.2	14.2	6.4	

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