SEDIMENT DISCHARGE IN THE LAKE TAHOE BASIN CALIFORNIA 1972 WATER YEAR

OPEN–FILE REPORT

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Water Resources Division
Menlo Park, California, 1973
Prepared in cooperation with the
CALIFORNIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Kroll__SEDIMENT DISCHARGE IN THE LAKE TAHOE BASIN, CALIFORNIA, 1972 WATER YEAR

UNITED STATES
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By

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7219-04

Menlo Park, California
September 19, 1973

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CONVERSION FACTORS

Factors for converting English units to the International System of Units (SI) are given below to four significant figures. However, in the text the metric equivalents are shown only to the number of significant figures consistent with the values for the English units.

English units	*Multiply by*	*Metric units (SI)*
in (inch)	2.540	cm (centimeter)
	25.40	mm (millimeter)
ft (foot)	0.3048	m (meter)
	304.8	mm (millimeter)
mi^2 (square mile)	2.590	km^2 (square kilometer)
ft^3/s (cubic feet per second)	.02832	m^3/s (cubic meters per second)

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CALIFORNIA, 1972 WATER YEAR

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ABSTRACT

Streamflow and fluvial-sediment discharge data are being collected at selected streams and highway gutters in the Lake Tahoe basin to determine the extent of erosion from highway cuts and to evaluate the effects of various land treatment practices to reduce erosion.

Precipitation in the Lake Tahoe area during 1972 was 77 percent of normal; consequently, runoff was well below normal. Seventy-six percent of the total annual runoff during the 1972 water year occurred from March through June 1972.

Sediment samples were collected during the year at streamflow gaging stations and at gutter stations at highway cuts to define the range of transport conditions. The major part (87 percent) of the annual suspended-sediment discharge during the 1972 water year occurred during the snowmelt runoff period, March through June.

INTRODUCTION

In recent years, the impact of urbanization on the environment of the Lake Tahoe basin has been a source of increasing public concern. Associated with urban development in the basin is an increase in fluvial-sediment transport to Lake Tahoe. Although sedimentation is a natural phenomenon that includes the processes of erosion, transportation, and deposition of soil or rock fragments (Guy, 1970, p. 1), erosion of highway cuts probably has increased sediment transported to the lake.

To date, only a few reports presenting information on sediment transport characteristics of streams in the basin have been prepared. Previous studies, among others, have been reported by Glancy (1971), California Division of Highways (1971), and California Division of Soil Conservation (1969).

Purpose and Scope

The purpose of the study, begun in October 1971 in cooperation with the California Division of Highways, is to determine the amount of sediment transported from highway cuts in relation to the quantity transported by principal tributaries to the lake. The study includes three specific objectives:

(1) Determine the quantity of sediment that is transported from selected highway cuts in the Lake Tahoe basin. The data will be compared with concurrent sediment discharge of the principal tributaries to the lake to determine the significance of sediment contributed from highway cuts.

(2) Determine the effects of revegetation and other measures taken by the California Division of Highways to reduce erosion from highway cuts.

(3) Obtain base-line streamflow and sediment-discharge data from selected streams for use in the design of future highways.

This progress report contains a description of the investigation and presents data for the 1972 water year on streamflow and suspended-sediment discharge in tributaries to Lake Tahoe and periodic data on water and sediment discharge in highway gutters. A water year is the 12-month period ending September 30 of the specified year. The sediment data in this report are for the range of transport conditions in the Lake Tahoe basin in the 1972 water year, and may not be indicative of past or future conditions.

Data collected at gaging stations operated as a part of this study will be published in the annual data reports for California, and similar data for streams tributary to Lake Tahoe in Nevada will be in the annual reports for Nevada.

Geography

The Lake Tahoe basin (fig. 1) has an area of 315 mi^2 (816 km^2), excluding the lake which has a surface of 191 mi^2 (495 km^2). Outflow is controlled by gates on a dam at Tahoe City, and the lake level is maintained at about 6,225 ft (1,897 m) above mean sea level. More than 40 percent of the land surface is above 7,500 ft (2,286 m) in altitude; the highest point in the basin (Freel Peak) is on the rim at an altitude of 10,881 ft (3,317 m). Inflow from the California side of the lake accounts for about 85 percent of all inflow (Crippen and Pavelka, 1970, p. 37). The two largest contributing subbasins, the Upper Truckee River (area about 55 mi^2 (142 km^2) and Trout Creek (area about 41 mi^2 [106 km^2]) contribute about 38 percent of the total annual inflow to Lake Tahoe from streams in California.

Soils at the north end of the Lake Tahoe basin are formed on volcanic deposits, whereas those at the south end are formed on granitic rocks. During the last 2 million years, four periods of glaciation were major influences in shaping the present landscape. Much of the material eroded by glacial processes was redeposited when glacial ice melted and has become a primary source of sediment transported by streams to the lake.

During periods when the lake surface was higher than it is now, sediment was deposited in the shallows around the lake margin. These lacustrine deposits and later alluvial deposits form most of the level areas bordering the lake, and are the materials that are most susceptible to erosion. The level areas are also those subject to most intensive urban development.

Precipitation in the Lake Tahoe area during 1972 amounted to 77 percent of normal as measured at the U.S. Weather Bureau station at Tahoe City (fig. 2). Normal is defined as the average annual precipitation during the 30-year period 1931-60. Seventy-eight percent of the normal annual precipitation occurs during the months of November through March, mostly as snow. Most of the annual runoff occurs as snowmelt during the period from April through June.

Precipitation from November 1971 through March 1972 amounted to 18 in (46 cm) --74 percent of normal for that period. During the remaining 7 months of the water year, there were no storms with large amounts of rainfall. Widely scattered showers during the summer months were recorded at local rain gages; two of the showers produced moderate to heavy precipitation of short duration.

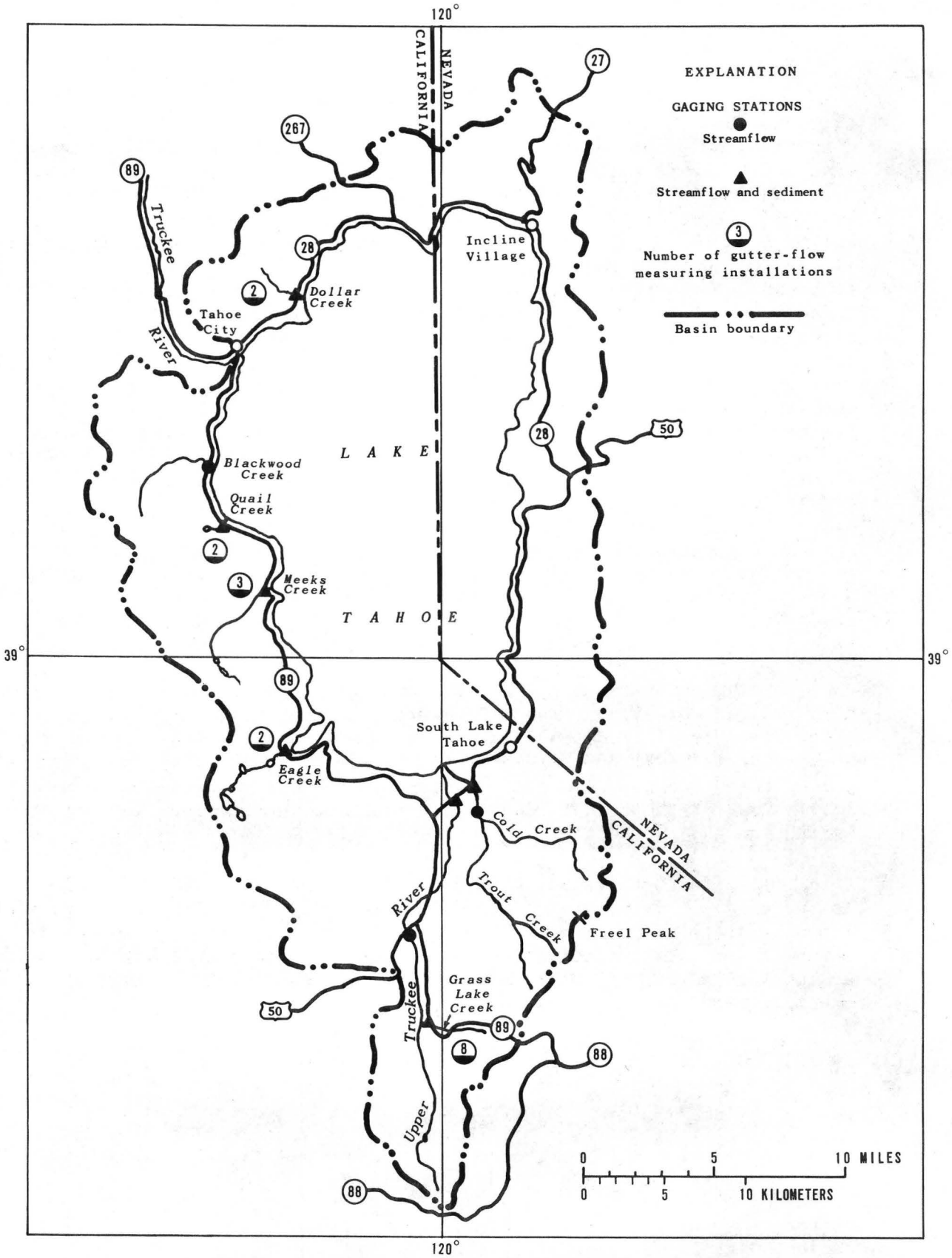

FIGURE 1.--Location of streamflow and sediment stations in Lake Tahoe basin.

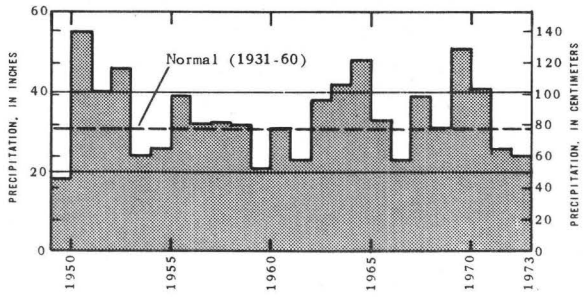

FIGURE 2.--Annual precipitation at Tahoe City.

DATA-COLLECTION PROGRAM

Suspended-sediment concentration and water discharge are monitored in California at gaging stations on seven streams tributary to Lake Tahoe (fig. 1). Daily values of suspended-sediment and water-discharge, and periodic values of total sediment discharge are determined at each gage. Runoff and sediment concentration are measured at installations in highway gutters at sites immediately downstream from 17 highway cuts (table 1).

Five gaging stations are on streams in drainage basins that are close to areas of highway lands where erosion problems are being studied. The stations were established where State Highway 89 crosses Eagle Creek (10336630), Meeks Creek (10336640), Quail Lake Creek (10336650), and Dollar Creek (10336684), and near the mouth of Grass Lake Creek (10336593).

Gaging stations were also installed near the mouths of Upper Truckee River (10336610) and Trout Creek (10336790), to furnish base-line data on streamflow and sediment discharge in streams from partly developed areas near the south end of Lake Tahoe prior to proposed realinement of Highway 50. Gaging stations on Upper Truckee River near Myers (10336600), Trout Creek near Tahoe Valley (10336780), and Blackwood Creek near Tahoe City (10336660), have been in operation since October 1960. Historic streamflow data at these three gages provide a long-term record for comparison with data collected at new gaging stations.

Streamflow

Runoff during the 1972 water year (table 2) was low except during the snowmelt runoff period, March through June, when 76 percent of the annual runoff at the seven new gaging stations occurred. Figure 3 shows a typical runoff hydrograph during the 1972 water year. The minimum and maximum water discharges recorded at all gaging stations are listed in table 3. Peak water discharges were about one-sixth of the maximum of record at the three gaging stations with longer records (table 4). Daily mean water discharges for the seven gaging stations operated as part of this investigation are given in Appendix A.

Table 1.--*Gaging stations and gutter-flow measuring installations*

(Stations are listed in downstream order with the same numbering system used in water-supply papers and annual data reports of the Geological Survey. Gutters listed under a gaging station are at sites near the creek in the station name.)

Station number	Station name	Drainage area (mi^2)	Highway milepost[1]
10336593	Grass Lake Creek near Meyers	6.99	(at mouth of creek)
	Gutter		89 ED 1.70
	Do.		1.94
	Do.		2.11
	Do.		2.21
	Do.		2.44
	Do.		2.99
	Do.		4.37
	Do.		4.45
10336600	Upper Truckee River near Meyers	33.1	--
10336610	Upper Truckee River at South Lake Tahoe	54.8	50 ED 76.41
10336630	Eagle Cr near Camp Richardson	6.38	89 Ed 17.13
	Gutter		16.61
	Do.		16.87
10336640	Meeks Creek at Meeks Bay	8.08	89 Ed 24.82
	Gutter		24.49
	Do.		24.65
	Do.		25.44
10336650	Quail Lake Cr at Homewood	.95	89 PL 1.55
	Gutter		1.27
	Do.		1.43
10336660	Blackwood Cr near Tahoe City	11.2	89 PL 3.91
10336684	Dollar Cr near Tahoe City	1.07	28 PL 3.50
	Gutter		3.38
	Do.		3.50
10336780	Trout Cr near Tahoe Valley	36.7	(at Martin Avenue)
10336790	Trout Cr at South Lake Tahoe	40.4	50 ED 77.33

[1] Numbers are taken from milepost markers along highways. First 2 digits designate highway number; the two letters designate county--ED for El Dorado, PL for Placer; the last series of numbers designate distance in miles from southern boundary of designated county.

Table 2.--*Monthly runoff at selected gaging stations*

Station	Runoff (acre-feet)												
	1971			1972									Total[1/]
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
Grass Lake Creek near Meyers	123	227	200	164	157	1,010	1,020	1,720	1,480	304	122	127	6,650
Upper Truckee River at South Lake Tahoe	910	1,450	2,370	1,880	1,950	10,700	8,310	17,000	13,700	1,960	686	668	61,600
Eagle Creek near Camp Richardson	41	337	310	202	251	1,580	1,090	4,040	3,530	643	90	117	12,200
Meeks Creek at Meeks Bay	26	100	174	143	286	1,910	1,580	3,600	1,730	82	13	27	9,670
Quail Lake Creek at Homewood	24	37	30	23	18	137	207	612	349	54	12	15	1,520
Dollar Creek near Tahoe City[2/]	--	--	--	--	--	--	--	--	12.4	3.9	4.1	6.9	---
Trout Creek at South Lake Tahoe	1,460	1,480	1,520	1,690	1,430	2,580	2,420	4,000	4,340	1,490	899	914	24,200

1. Rounded.
2. Period of record, June through September 1972.

Table 3.--*Maximum and minimum water discharge at gaging stations*

Station	Daily mean discharge (ft^3/s)				Instantaneous discharge (ft^3/s)	
	Date	Minimum	Date	Maximum	Date	Maximum
Grass Lake Creek near Meyers	Aug. 26-28, 1972	1.5	June 4-6, 1972	44	June 4, 1972	102
Upper Truckee River near Meyers	Aug. 26	4.4	May 31	299	June 4	402
Upper Truckee River at South Lake Tahoe	Aug. 25, 26, Sept. 22	8.5	June 1	441	June 1	518
Eagle Creek near Camp Richardson	Sept. 25	.23	June 1	112	May 31	128
Meeks Creek at Meeks Bay	Aug. 20-25	.18	May 15	84	May 15	104
Quail Lake Creek at Homewood	Aug. 23-28	.17	May 29	15	May 14, 17	17
Blackwood Creek near Tahoe City	Aug. 27, 28, Sept. 7-9	2.2	May 28	188	May 13	287
Dollar Creek near Tahoe City[1/]	July 17, 18 Aug. 8, 15	.03	June 8, 9	0.38	June 8	0.43
Trout Creek near Tahoe Valley	Aug. 21, 22, 27	12	June 7	94	June 7	100
Trout Creek at South Lake Tahoe	Aug. 20-24, 26-28 Sept. 25	12	June 7	109	June 4	124

1. Period of record, June through September 1972.

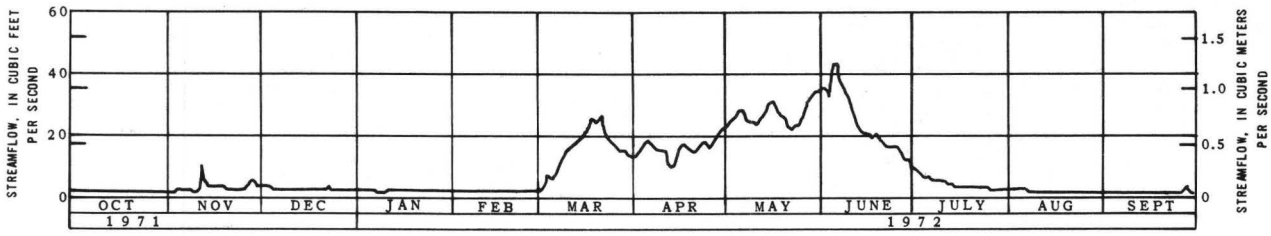

FIGURE 3.--Daily mean runoff in Grass Lake Creek near Meyers.

Sediment Discharge

Streams

Suspended-sediment samples are obtained at seven gaging stations (table 5) on streams tributary to Lake Tahoe. Frequency of sampling is once or twice weekly during low or moderate flow conditions, and several times daily during periods of high flow. Samples are obtained by depth-integrated methods (Guy and Norman, 1970, p. 5).

Table 4.--*Comparison of water discharge at selected gaging stations*

Station	Discharge (ft^3/s)			
	Average		Maximum instantaneous	
	1972	1961-72	1972	1961-72
Upper Truckee River near Meyers	51.1	66.6	402	2,550
Blackwood Creek near Tahoe City	29.6	38.2	287	2,100
Trout Creek near Tahoe Valley	30.4	37.5	100	535

Table 5.--*Monthly suspended-sediment discharge at gaging stations*

Station name	Suspended-sediment discharge (tons)													Percent during March-June snowmelt
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total[1]	
Grass Lake Creek near Meyers	0.32	1.6	0.36	0.34	0.40	14	8.8	29	52	1.5	0.52	0.39	109	95
Upper Truckee River at South Lake Tahoe	7.0	58	20	8.0	21	487	165	572	353	9.4	14	5.0	1720	92
Eagle Creek near Camp Richardson	.01	.41	.09	.06	.13	4.6	.78	11	6.6	.43	.06	.74	25	92
Meeks Creek at Meeks Bay	.03	.39	.34	.11	.36	7.5	4.9	31	14	.20	.01	.29	59	97
Quail Lake Creek at Homewood	0	.08	0	0	.03	.51	.63	2.9	1.3	.18	0	.03	6	94
Dollar Creek at Tahoe City 2/	--	--	--	--	--	--	--	--	.01	0	0	0	--	--
Trout Creek at South Lake Tahoe	16	45	18	21	27	108	87	229	387	38	32	29	1040	78

[1] Values rounded to three significant figures.
[2] Period of record, June through September 1972.

Eighty-seven percent of the annual suspended-sediment discharge from the study basins occurred during the snowmelt period March through June. This compares closely with data presented by Glancy (1971, p. 10), in which about 85 percent of the total sediment discharge from five streams in the Incline Village area occurred during the snowmelt period in the 1970 water year. The maximum suspended-sediment concentration during the 1972 water year (table 6) was estimated at 730 mg/l (milligrams per liter) in Trout Creek at South Lake Tahoe.

A listing of daily mean suspended-sediment concentration and discharge at the seven gaging stations operated as part of this investigation is given in appendix A. Data in appendix A represent sources of sediment both natural and urbanized from areas upstream of the gages. Results of particle-size analyses of suspended sediment and bed material are given in tables 7 and 8.

Gutters

Runoff from highway cuts, during periods when there is little or no snow cover, is quickly responsive to rainfall because of the steep, small drainage areas. Frequent collection of sediment samples and measurement of water discharge are needed to define sediment discharge; five or six samples may be obtained daily. The samples represent the total amount of sediment in transport. The diurnal pattern of runoff from snowmelt is much more predictable than from rainfall because snowmelt runoff is dependent primarily on the supply of snow and the daily air temperature.

The rate of sediment transport is variable, depending upon availability of material, water discharge, and the filtering effect of snow in the gutter. Precipitation from a summer storm may cause rapid runoff from unprotected highway cuts. During and immediately after new snowfall, the slush from partly melted snow tends to retard the flow of water in the gutters. The snow also acts as a filter to trap much of the sediment in transport. Sediment transport in gutters during spring snowmelt is unaffected by snow or slush because of the protection and bridging of the unmelted snow. Sand applied during winter highway maintenance becomes a major part of the sediment transported in some gutters during the spring and is possibly significant during the entire year.

Instantaneous water and sediment discharges determined for each gutter installation during the year are listed in appendix B. Daily values of water and sediment discharge have not been calculated.

Table 6.--*Maximum and minimum suspended-sediment discharge at selected gaging stations*

Station	Daily extremes								Instantaneous Extremes[2]			
	Mean concentration (mg/l)				Mean discharge (tons per day)				Concentration (mg/l)		Discharge (tons per day)	
	Date[1]	Minimum	Date	Maximum	Date[1]	Minimum	Date	Maximum	Date	Maximum	Date	Maximum
Grass Lake Creek near Meyers	Dec. 1971-Feb., Aug., Sept. 1972	1	June 4, 1972	113	Aug., Sept. 1972	0	June 4, 1972	22	June 4, 1972	500	June 4, 1972	124
Upper Truckee River at South Lake Tahoe	Dec. 1971, Jan., July-Sept. 1972	2	Mar. 3, 1972	200	Aug., Sept. 1972	.05	Mar. 3	87	Aug. 30	590	Mar. 3	159
Eagle Creek near Camp Richardson	Nov. 1971-Apr., June-Aug. 1972	0	Mar. 3, 1972	20	Oct. 1971-Apr., June-Sept. 1972	0	Mar. 3	1.5	Mar. 3	35	Mar. 3	3.3
Meeks Creek at Meeks Bay	Dec. 1971-Feb. 1972	0	Sept. 1, 1972	31	Oct. 1971-Feb., July-Sept. 1972	0	May 15	2.5	Sept. 1	150	Apr. 5	4.3
Quail Lake Creek at Homewood	Dec. 1971-Jan. 1972	0	Sept. 26, 1972	11	Oct. 1971-Mar., July-Sept. 1972	0	June 1	.21	Sept. 26	23	June 1	38
Dollar Creek near Tahoe City[3]	Sept. 1972	1	July 4,5, 1972	7	June-Sept. 1972	0	June 8	.01	Aug. 16	18	Aug. 16	.02
Trout Creek at South Lake Tahoe	Sept. 25, 1972	3	Aug. 30, 1972	186	Sept. 25, 1972	.10	June 4	51	Aug. 30	730	June 4	137

1. Minimum daily mean extremes occurred more than once when specific day is not indicated.
2. Estimated from temporal concentration curve.
3. Period of record, June through September 1972.

Table 7.--*Suspended sediment and particle size at selected gaging stations*

Date	Time (Hours)	Water temperature (°C)	Water Discharge (ft^3/s)	Suspended sediment		Particle size					Method of analysis
				Concentration (mg/l)	Discharge (tons per day)	Percent finer than size (in millimeters) indicated					
						0.062	0.125	0.250	0.500	1.00	
Upper Truckee River at South Lake Tahoe											
Nov. 11, 1971	1520	--	52	270	38	99	100	--	--	--	Sieve
Apr. 10, 1972	1230	6.0	116	3	.94	68	--	--	--	--	Do.
May 8	2355	--	276	14	10	39	--	--	--	--	Do.
May 12	1400	9.5	226	11	6.7	50	50	100	--	--	Do.
May 17	1420	9.5	318	13	11	36	50	80	100	--	Do.
June 13	0850	9.0	188	15	7.6	39	44	70	100	--	Do.
June 16	1400	14.0	166	19	8.5	22	27	52	94	100	Do.
Trout Creek at South Lake Tahoe											
Mar. 4, 1972	1415	7.5	43	38	4.4	35	49	69	100	--	Do.
Apr. 10	1240	6.5	36	7	.68	19	20	36	93	100	Do.
May 9	0015	--	61	26	4.3	51	58	83	100	--	Do.

Table 8.--*Particle size of bed material at selected gaging stations*

Date	Time (Hours)	Water temperature (°C)	Number of sampling points	Water Discharge (ft^3/s)	Particle size: Percent finer than size (in millimeters) indicated									Method of analysis
					0.125	0.250	0.500	1.00	2.00	4.00	8.00	16.0	32.0	
Upper Truckee River at South Lake Tahoe														
May 12, 1972	1450	9.5	4	218	1	7	28	38	53	75	96	100	--	Sieve
July 3	1140	14.5	5	62	1	7	22	35	47	65	90	99	100	Do.
Trout Creek at South Lake Tahoe														
April 10	1240	6.5	2	36	--	2	22	44	53	77	100	--	--	Do.
May 3	1300	--	2	55	--	2	26	55	80	95	100	--	--	Do.

FUTURE PLANS

Information will be collected to determine total sediment discharge at all stream and gutter stations.

Specialized monitoring equipment for the gutters will be developed for use in determining diurnal fluctuations of snowmelt runoff and magnitude of runoff and sediment yield from summer thunderstorms. Daily values for water and sediment discharge in the gutters will be calculated for the 1972 and 1973 water years.

REFERENCES CITED

California Division of Highways, 1971, Hydrology and sediment transport (spring 1971), Lake Tahoe Basin: Interim research rept., no. M & R 657078-2, 110 p.

California Division of Soil Conservation, 1969, Sedimentation and erosion in the Upper Truckee River and Trout Creek Watershed, Lake Tahoe, California: 43 p.

Crippen, J. R., and Pavelka, B. R., 1970, The Lake Tahoe Basin, California-Nevada: U.S. Geol. Survey Water-Supply Paper 1972, 56 p.

Glancy, P. A., 1971, A reconnaissance of streamflow and fluvial sediment transport, Incline Village area, Lake Tahoe, Nevada: Nevada Dept. Conservation and Natural Resources, Water Resources Inf. ser. rept. 8, 28 p.

Guy, H. P., 1970, Fluvial sediment concepts: U.S. Geol. Survey Techniques Water-Resources Inv. book 3, chap. C1, 55 p.

Guy, H. P., and Norman, V. W., 1970, Field methods for measurement of fluvial sediment: U.S. Geol. Survey Techniques Water-Resources Inv. book 3, chap. C2, 59 p.

APPENDIX A.--*Suspended-sediment discharge in streams*

10-3365.93 GRASS LAKE CREEK NEAR MEYERS

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.4	2	.01	2.0	2	.01	4.2	2	.02
2	2.4	2	.01	2.4	2	.01	4.0	2	.02
3	2.4	2	.01	2.6	2	.01	4.0	2	.02
4	2.4	2	.01	2.6	2	.01	3.4	2	.02
5	2.4	2	.01	2.6	2	.01	3.4	2	.02
6	2.0	2	.01	2.6	2	.01	3.4	1	.01
7	2.0	2	.01	2.6	2	.01	3.4	1	.01
8	2.0	2	.01	2.4	2	.01	3.4	1	.01
9	2.0	2	.01	2.4	2	.01	3.4	1	.01
10	2.0	2	.01	2.6	2	.01	3.4	1	.01
11	1.8	2	.01	11	21	.81	3.2	1	.01
12	1.8	2	.01	6.2	8	.13	3.0	1	.01
13	1.8	2	.01	4.4	3	.04	3.2	1	.01
14	1.8	2	.01	4.0	3	.03	3.4	1	.01
15	1.8	2	.01	4.0	2	.02	3.4	1	.01
16	2.0	4	.02	3.6	2	.02	3.4	1	.01
17	2.0	2	.01	3.8	2	.02	3.4	1	.01
18	2.0	2	.01	3.6	2	.02	3.4	1	.01
19	2.0	2	.01	3.4	2	.02	3.2	1	.01
20	2.0	2	.01	3.4	2	.02	3.2	1	.01
21	2.0	2	.01	3.4	2	.02	3.2	1	.01
22	2.0	2	.01	3.4	2	.02	3.6	1	.01
23	2.0	2	.01	3.4	2	.02	3.2	1	.01
24	2.0	2	.01	3.4	2	.02	3.2	1	.01
25	2.0	2	.01	3.4	2	.02	2.8	1	.01
26	1.8	2	.01	4.7	10	.19	2.7	1	.01
27	1.8	2	.01	6.0	4	.06	2.7	1	.01
28	1.8	2	.01	6.0	2	.03	2.7	1	.01
29	1.8	2	.01	4.4	2	.02	2.7	1	.01
30	1.8	2	.01	4.0	2	.02	2.6	1	.01
31	1.8	2	.01	--	--	--	2.6	1	.01
TOTAL	61.8	--	.32	114.3	--	1.65	100.8	--	.36

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.6	1	.01	2.6	1	.01	3.2	2	.02
2	2.6	1	.01	2.6	1	.01	4.4	5	.06
3	2.6	1	.01	2.6	1	.01	8.2	17	.42
4	2.6	1	.01	2.6	1	.01	6.5	4	.07
5	2.6	1	.01	2.6	1	.01	6.8	5	.09
6	2.6	1	.01	2.6	1	.01	9.3	7	.18
7	2.4	1	.01	2.6	1	.01	11	7	.21
8	2.4	1	.01	2.6	1	.01	13	8	.28
9	2.4	1	.01	2.6	1	.01	15	8	.32
10	2.6	1	.01	2.6	2	.01	16	9	.39
11	2.6	1	.01	2.6	2	.01	17	9	.41
12	2.7	1	.01	2.6	2	.01	18	9	.44
13	2.8	1	.01	2.7	2	.01	19	12	.62
14	2.8	1	.01	2.7	2	.01	20	13	.70
15	2.7	1	.01	2.7	2	.01	21	13	.74
16	2.7	1	.01	2.7	2	.01	22	16	1.2
17	2.7	1	.01	2.7	2	.01	26	17	1.2
18	2.7	1	.01	2.7	2	.01	26	14	.98
19	2.7	2	.01	2.8	2	.02	25	11	.74
20	2.7	2	.01	2.8	2	.02	26	12	.84
21	2.8	2	.02	2.8	2	.02	27	13	.95
22	2.8	2	.02	2.8	2	.02	22	11	.65
23	2.8	2	.02	2.8	2	.02	20	10	.54
24	2.7	2	.01	2.8	2	.02	19	9	.46
25	2.7	2	.01	2.8	2	.02	18	8	.39
26	2.7	2	.01	2.8	2	.02	17	7	.32
27	2.7	2	.01	2.8	2	.02	16	6	.26
28	2.7	2	.01	3.4	2	.02	16	5	.22
29	2.7	2	.01	3.4	2	.02	15	5	.20
30	2.7	2	.01	--	--	--	14	5	.19
31	2.7	2	.01	--	--	--	14	6	.23
TOTAL	82.5	--	.34	79.4	--	.40	511.4	--	14.32

10-3365.93 GRASS LAKE CREEK NEAR MEYERS--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	14	6	.23	24	8	.52	36	15	1.5
2	16	7	.30	26	7	.49	36	16	1.6
3	18	8	.39	27	8	.58	33	16	1.4
4	19	7	.36	29	10	.78	44	113	22
5	19	6	.31	29	13	1.0	44	68	8.8
6	18	6	.29	29	12	.94	44	30	3.6
7	17	6	.28	26	10	.70	38	23	2.4
8	16	6	.26	25	9	.61	36	19	1.8
9	16	6	.26	25	8	.54	34	10	.92
10	16	6	.26	24	8	.52	31	10	.84
11	16	6	.26	25	8	.54	27	9	.66
12	11	6	.18	27	9	.66	24	8	.52
13	10	6	.16	28	12	.91	23	8	.50
14	12	9	.29	31	15	1.3	21	7	.40
15	17	10	.46	32	20	1.7	21	7	.40
16	18	8	.39	32	19	1.6	21	7	.40
17	18	6	.29	29	18	1.4	20	9	.49
18	17	4	.18	27	16	1.2	21	7	.40
19	16	4	.17	27	14	1.0	20	7	.38
20	16	4	.17	25	15	1.0	19	7	.36
21	17	4	.18	23	12	.75	18	6	.29
22	18	4	.19	23	10	.62	17	6	.28
23	19	4	.21	24	11	.71	17	6	.28
24	19	4	.21	24	13	.84	16	5	.22
25	17	4	.18	26	10	.70	16	5	.22
26	18	4	.19	29	11	.86	16	5	.22
27	20	8	.43	32	13	1.1	15	5	.20
28	22	10	.59	33	14	1.2	13	5	.18
29	23	9	.56	35	15	1.4	13	5	.18
30	24	9	.58	35	15	1.4	10	5	.14
31	--	--	--	36	15	1.5	--	--	--
TOTAL	517	--	8.81	867	--	29.07	744	--	51.58

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	10	4	.11	3.2	3	.03	2.1	2	.01
2	9.3	4	.10	2.8	3	.02	2.4	2	.01
3	7.6	4	.08	2.8	3	.02	2.1	2	.01
4	7.2	4	.08	2.7	5	.04	2.0	4	.02
5	6.8	4	.07	2.7	4	.03	2.4	2	.01
6	6.2	3	.05	2.6	4	.03	2.2	2	.01
7	6.0	3	.05	2.4	4	.03	2.0	2	.01
8	5.7	3	.05	2.2	5	.03	2.0	2	.01
9	5.7	3	.05	2.1	4	.02	1.9	2	.01
10	5.7	3	.05	2.0	4	.02	1.9	1	.01
11	5.7	3	.05	1.9	4	.02	1.9	1	.01
12	5.4	3	.04	1.9	4	.02	1.9	1	.01
13	5.0	4	.05	1.8	3	.01	1.8	1	0
14	4.4	4	.05	1.8	2	.01	1.8	1	0
15	4.0	4	.04	1.7	2	.01	1.8	1	0
16	4.0	4	.04	1.7	3	.01	1.8	1	0
17	4.2	4	.05	1.7	4	.02	1.8	1	0
18	4.0	4	.04	1.8	4	.02	1.8	1	0
19	4.0	4	.04	1.7	4	.02	1.8	1	0
20	4.0	4	.04	1.7	4	.02	1.9	1	.01
21	4.0	4	.04	1.6	4	.02	1.9	1	.01
22	4.0	4	.04	1.6	4	.02	1.9	1	.01
23	4.0	4	.04	1.6	3	.01	1.9	1	.01
24	3.8	4	.04	1.6	2	.01	1.9	1	.01
25	3.6	4	.04	1.6	1	0	1.9	2	.01
26	3.4	4	.04	1.5	1	0	3.4	7	.06
27	3.2	4	.03	1.5	1	0	4.2	7	.08
28	3.2	3	.03	1.5	1	0	2.8	3	.02
29	3.0	3	.02	1.7	3	.01	2.4	3	.02
30	3.2	3	.03	2.2	2	.01	2.4	3	.02
31	3.2	3	.03	2.0	2	.01	--	--	--
TOTAL	153.5	--	1.51	61.6	--	.52	64.0	--	.39

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 3357.3
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 109.27

APPENDIX A.--*Continued*

10-3366.10 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	16	4	.17	14	4	.15	38	10	1.0
2	17	4	.18	18	4	.19	37	10	1.0
3	17	4	.18	18	4	.19	35	12	1.1
4	16	4	.17	17	4	.18	33	13	1.2
5	16	4	.17	16	4	.17	31	8	.67
6	16	4	.17	15	4	.16	32	3	.26
7	15	4	.16	15	4	.16	32	3	.26
8	14	3	.11	14	4	.15	32	3	.26
9	14	3	.11	14	4	.15	32	4	.35
10	14	3	.11	16	4	.17	33	4	.36
11	14	3	.11	48	15	30	33	4	.36
12	14	3	.11	50	40	7.2	34	5	.46
13	13	3	.11	26	8	.56	34	6	.55
14	13	3	.11	21	6	.34	34	7	.64
15	13	3	.11	20	5	.27	34	6	.55
16	14	15	.57	20	3	.16	34	6	.55
17	14	18	.68	20	3	.16	36	5	.49
18	15	12	.49	20	3	.16	39	4	.42
19	15	10	.41	20	3	.16	42	3	.34
20	15	10	.41	20	3	.16	45	2	.24
21	15	8	.32	20	3	.16	46	4	.50
22	15	6	.24	20	3	.16	48	6	.78
23	15	5	.20	20	3	.16	52	8	1.1
24	15	8	.32	20	4	.22	54	10	1.5
25	15	6	.24	20	4	.22	56	12	1.8
26	15	5	.20	28	21	2.7	48	9	1.2
27	15	4	.16	48	42	5.7	44	6	.71
28	15	4	.16	57	30	4.6	41	4	.44
29	15	4	.16	39	18	1.9	37	3	.30
30	15	4	.16	39	14	1.5	35	3	.28
31	14	4	.15	--	--	--	34	3	.28
TOTAL	459	--	6.95	733	--	58.16	1195	--	19.95

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	34	2	.18	27	4	.29	52	8	1.1
2	35	2	.19	27	4	.29	70	60	13
3	36	2	.19	26	4	.28	149	200	87
4	35	2	.19	26	4	.28	195	157	82
5	33	2	.18	26	4	.28	192	125	65
6	33	3	.27	26	4	.28	187	45	23
7	32	3	.26	26	4	.28	183	35	17
8	32	3	.26	26	5	.35	188	30	15
9	32	3	.26	27	6	.44	201	25	14
10	32	3	.26	27	7	.51	218	30	18
11	31	3	.25	28	8	.60	209	25	14
12	31	3	.25	30	8	.65	192	15	7.8
13	31	3	.25	30	9	.73	192	14	7.3
14	31	4	.33	31	10	.84	192	16	8.3
15	31	4	.33	32	8	.69	185	12	6.0
16	30	4	.32	32	7	.60	187	11	5.6
17	30	4	.32	33	6	.53	205	11	6.1
18	30	4	.32	35	6	.57	216	12	7.0
19	30	3	.24	37	8	.80	199	12	6.4
20	30	3	.24	39	9	.95	203	15	8.2
21	29	3	.23	43	13	1.5	218	17	10
22	29	3	.23	45	12	1.5	214	20	12
23	29	3	.23	43	10	1.2	196	25	13
24	29	3	.23	41	9	1.0	164	15	6.6
25	28	3	.23	33	8	.71	207	25	14
26	28	3	.23	33	7	.62	161	10	4.3
27	28	4	.30	36	8	.78	147	8	3.2
28	28	4	.30	48	12	1.6	134	8	2.9
29	28	4	.30	72	12	2.3	125	10	3.4
30	27	4	.29	--	--	--	118	9	2.9
31	27	4	.29	--	--	--	116	8	2.5
TOTAL	949	--	7.95	985	--	21.45	5415	--	486.6

10-3366.10 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	114	7	2.2	212	27	15	441	30	36
2	121	6	2.0	244	27	18	424	28	32
3	118	5	1.6	278	30	23	384	26	27
4	153	16	6.6	290	30	23	355	25	24
5	220	49	32	298	28	23	429	20	23
6	182	20	10	315	25	21	424	18	21
7	148	8	3.2	294	20	16	390	18	19
8	132	6	2.1	260	15	11	417	22	25
9	122	4	1.3	264	15	11	402	26	28
10	114	3	.92	256	13	9.0	333	20	18
11	118	4	1.3	268	18	13	250	16	11
12	120	6	1.9	236	11	7.0	207	14	7.8
13	194	20	12	258	13	9.1	178	14	6.7
14	118	20	6.4	300	20	16	173	16	7.5
15	125	20	6.8	353	40	38	169	16	7.3
16	148	18	7.2	355	35	34	169	16	7.3
17	142	10	3.8	324	18	16	169	17	7.8
18	125	8	2.7	290	16	13	174	18	8.5
19	113	6	1.8	274	18	13	173	19	8.9
20	108	4	1.2	230	14	8.7	163	16	7.0
21	109	4	1.2	176	12	5.7	150	13	5.3
22	118	5	1.6	150	10	4.1	136	10	3.7
23	131	10	3.5	142	9	3.5	129	7	2.4
24	150	15	6.1	168	16	7.3	114	6	1.8
25	131	14	5.0	197	14	7.4	102	5	1.4
26	125	12	4.1	246	22	15	94	5	1.3
27	140	14	5.3	300	30	24	91	5	1.2
28	174	15	7.0	362	38	37	89	4	.96
29	188	22	11	405	40	44	88	4	.95
30	188	25	13	410	40	44	83	4	.90
31	--	--	--	412	38	42	--	--	--
TOTAL	4189	--	164.82	8567	--	571.8	6900	--	352.71

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	71	4	.77	16	3	.13	12	15	.49
2	61	4	.66	16	3	.13	12	14	.45
3	61	4	.66	15	4	.16	13	16	.56
4	58	4	.63	14	4	.15	12	16	.52
5	54	4	.58	12	4	.13	13	10	.35
6	48	4	.52	13	3	.11	12	6	.19
7	41	4	.44	13	3	.11	12	3	.10
8	36	3	.29	13	3	.11	10	3	.08
9	34	3	.28	13	3	.11	10	2	.05
10	33	2	.18	12	4	.13	9.9	2	.05
11	33	2	.18	11	4	.12	9.3	2	.05
12	34	3	.28	11	4	.12	9.6	2	.05
13	31	4	.33	11	4	.12	9.9	2	.05
14	28	5	.38	12	4	.13	9.9	2	.05
15	28	5	.38	11	4	.12	9.9	2	.05
16	28	4	.30	10	3	.08	9.6	2	.05
17	28	4	.30	9.9	3	.08	9.3	2	.05
18	27	4	.29	9.6	3	.08	9.3	2	.05
19	25	4	.27	9.3	3	.08	9.3	2	.05
20	24	4	.26	9.6	2	.05	8.8	2	.05
21	20	3	.16	9.6	2	.05	8.8	2	.05
22	21	3	.17	8.8	2	.05	8.5	3	.07
23	20	2	.11	8.8	2	.05	9.0	3	.07
24	20	2	.11	8.8	3	.07	9.3	3	.08
25	19	2	.10	8.5	3	.07	9.3	3	.08
26	18	2	.10	8.5	3	.07	12	5	.16
27	18	2	.10	8.5	4	.09	22	10	.59
28	18	3	.15	9.0	4	.10	18	6	.29
29	17	3	.14	9.9	4	.11	15	4	.16
30	17	3	.14	13	142	8.0	14	4	.15
31	17	3	.14	11	90	2.7	--	--	--
TOTAL	988	--	9.40	345.8	--	13.61	336.7	--	5.04

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 31062.5
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 1718.44

APPENDIX A.--*Continued*

10-3366.30 EAGLE CREEK NEAR CAMP RICHARDSON

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.50	1	0	.62	0	0	6.8	0	0
2	.50	1	0	.62	0	0	5.8	0	0
3	.50	1	0	.62	0	0	5.8	0	0
4	.50	1	0	.62	0	0	5.8	0	0
5	.50	1	0	.59	0	0	5.2	0	0
6	.50	1	0	.56	0	0	5.4	1	.01
7	.50	1	0	.56	0	0	5.4	1	.01
8	.50	1	0	.50	0	0	5.6	1	.02
9	.50	1	0	.44	0	0	4.9	0	0
10	.50	1	0	.35	0	0	5.2	0	0
11	.50	1	0	7.7	2	.04	5.8	0	0
12	.50	1	0	26	1	.07	8.2	1	.02
13	.50	1	0	16	1	.04	9.4	1	.03
14	.50	1	0	10	1	.03	8.0	0	0
15	.50	1	0	7.4	1	.02	7.2	0	0
16	1.4	2	.01	5.4	1	.01	6.0	0	0
17	1.2	1	0	4.7	1	.01	5.1	0	0
18	1.0	1	0	4.1	1	.01	4.3	0	0
19	.82	1	0	3.5	0	0	4.0	0	0
20	.71	1	0	2.8	0	0	3.6	0	0
21	.65	1	0	2.7	0	0	3.6	0	0
22	.65	1	0	2.5	0	0	3.5	0	0
23	.65	1	0	2.5	0	0	3.5	0	0
24	.65	1	0	2.7	0	0	3.5	0	0
25	.82	1	0	2.7	0	0	3.5	0	0
26	.82	1	0	7.7	2	.04	3.5	0	0
27	.78	1	0	19	1	.05	3.5	0	0
28	.78	1	0	16	1	.04	3.5	0	0
29	.78	1	0	12	1	.03	3.5	0	0
30	.74	1	0	9.0	1	.02	3.5	0	0
31	.68	1	0	--	--	--	3.8	0	0
TOTAL	20.63	--	.01	169.88	--	.41	156.4	--	.09

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.8	0	0	4.0	0	0	8.2	0	0
2	3.6	0	0	3.5	0	0	10	3	.11
3	3.5	0	0	3.3	0	0	28	20	1.5
4	3.5	0	0	3.2	0	0	40	4	.43
5	3.5	0	0	3.3	0	0	38	3	.31
6	3.2	0	0	3.3	0	0	32	2	.17
7	3.2	0	0	3.5	0	0	30	1	.08
8	3.2	0	0	3.5	0	0	31	1	.08
9	3.2	0	0	3.3	1	.01	34	1	.09
10	3.0	0	0	3.2	1	.01	37	1	.10
11	2.8	0	0	3.2	1	.01	34	1	.09
12	2.8	0	0	3.2	1	.01	29	1	.08
13	2.7	0	0	3.0	0	0	27	1	.07
14	2.7	0	0	3.0	0	0	28	2	.15
15	2.7	0	0	3.0	0	0	26	1	.07
16	2.7	0	0	3.0	1	.01	26	2	.14
17	2.7	0	0	3.0	1	.01	32	2	.17
18	3.1	0	0	3.3	1	.01	34	2	.18
19	3.5	0	0	3.5	1	.01	29	2	.16
20	3.5	0	0	4.3	1	.01	30	2	.16
21	3.5	0	0	4.7	1	.01	35	1	.09
22	3.5	0	0	5.6	1	.02	32	1	.09
23	3.5	1	.01	5.4	1	.01	25	1	.07
24	3.5	1	.01	5.2	0	0	20	1	.05
25	3.5	1	.01	6.4	0	0	22	1	.06
26	3.5	1	.01	7.0	0	0	18	1	.05
27	3.5	1	.01	7.0	0	0	15	0	0
28	3.5	1	.01	8.7	0	0	13	0	0
29	3.5	0	0	10	0	0	11	0	0
30	3.8	0	0	--	--	--	10	0	0
31	3.8	0	0	--	--	--	10	0	0
TOTAL	102.0	--	.06	126.6	--	.13	794.2	--	4.55

APPENDIX A.--*Continued*

10-3366.30 **EAGLE CREEK NEAR CAMP RICHARDSON--Continued**

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	9.7	0	0	43	1	.12	112	2	.60
2	10	0	0	52	2	.28	106	2	.57
3	14	0	0	58	2	.31	90	2	.49
4	20	0	0	62	3	.50	82	2	.44
5	32	1	.09	69	3	.56	84	2	.45
6	27	0	0	67	2	.36	95	3	.77
7	22	0	0	58	2	.31	95	2	.51
8	17	0	0	46	2	.25	92	2	.50
9	14	0	0	45	1	.12	101	1	.27
10	13	0	0	45	1	.12	73	1	.20
11	13	0	0	53	1	.14	49	1	.13
12	14	0	0	62	2	.33	43	1	.12
13	16	1	.04	73	2	.39	49	1	.13
14	15	1	.04	86	2	.46	57	1	.15
15	13	1	.04	93	2	.50	58	0	0
16	14	0	0	90	3	.73	57	0	0
17	15	0	0	74	3	.60	51	0	0
18	13	0	0	61	2	.33	52	1	.14
19	10	0	0	51	2	.28	54	1	.15
20	10	0	0	37	1	.10	49	1	.13
21	11	0	0	28	1	.08	44	1	.12
22	15	0	0	27	1	.07	40	1	.11
23	20	1	.05	38	1	.10	38	1	.10
24	23	1	.06	50	1	.14	34	1	.09
25	18	1	.05	65	1	.18	29	1	.08
26	17	1	.05	83	2	.45	26	1	.07
27	23	1	.06	99	2	.53	27	1	.07
28	37	1	.10	102	3	.83	30	1	.08
29	38	1	.10	104	3	.84	33	1	.09
30	36	1	.10	106	2	.57	32	1	.09
31	--	--	--	110	2	.59	--	--	--
TOTAL	549.7	--	.78	2037	--	11.17	1782	--	6.65

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	29	1	.08	3.5	0	0	.82	1	0
2	26	1	.07	3.6	0	0	.83	1	0
3	24	1	.06	3.5	0	0	.86	1	0
4	19	1	.05	2.8	0	0	.96	1	0
5	17	0	0	2.2	0	0	1.0	1	0
6	16	0	0	1.9	1	.01	1.0	1	0
7	14	0	0	1.9	1	.01	1.0	1	0
8	12	0	0	1.9	1	.01	.96	1	0
9	9.4	0	0	2.2	1	.01	.86	1	0
10	9.0	0	0	2.4	1	.01	.78	1	0
11	9.2	0	0	1.9	1	.01	.68	1	0
12	10	0	0	1.8	0	0	.65	1	0
13	11	0	0	1.4	0	0	.59	1	0
14	11	0	0	1.3	0	0	.53	1	0
15	10	0	0	1.1	0	0	.65	1	0
16	10	0	0	.96	0	0	.44	1	0
17	11	0	0	.91	0	0	.39	1	0
18	11	1	.03	.86	0	0	.37	1	0
19	9.4	1	.03	.82	0	0	.35	1	0
20	8.2	1	.02	.78	0	0	.33	1	0
21	7.2	1	.02	.71	0	0	.33	1	0
22	6.4	1	.02	.74	0	0	.31	1	0
23	5.4	1	.01	.68	0	0	.29	1	0
24	4.5	1	.01	.68	0	0	.25	1	0
25	4.1	1	.01	.68	0	0	.23	1	0
26	4.0	1	.01	.65	0	0	.43	2	0
27	3.8	1	.01	.68	0	0	7.6	7	.27
28	3.6	0	0	.65	0	0	19	7	.39
29	3.3	0	0	.65	1	0	10	2	.05
30	3.0	0	0	.74	1	0	6.4	2	.03
31	2.8	0	0	.82	2	0	--	--	--
TOTAL	324.3	--	.43	45.41	--	.06	58.89	--	.74

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 6167.01
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 25.08

APPENDIX A.--*Continued*

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	17	1	.05	41	4	.44	71	11	2.1
2	20	1	.05	50	7	.95	66	11	2.0
3	23	1	.06	60	7	1.1	57	10	1.5
4	30	2	.16	62	6	1.0	48	10	1.3
5	53	13	1.7	66	5	.89	47	9	1.1
6	47	3	.38	68	4	.73	49	9	1.2
7	31	2	.17	63	3	.51	45	8	.97
8	25	2	.14	48	2	.26	47	8	1.0
9	22	1	.06	48	2	.26	52	5	.70
10	21	1	.06	50	2	.27	40	4	.43
11	21	1	.06	54	2	.29	30	3	.24
12	21	1	.06	59	2	.32	25	2	.14
13	23	1	.06	66	4	.71	25	2	.14
14	23	1	.06	82	9	2.0	26	2	.14
15	21	1	.06	84	11	2.5	26	2	.14
16	23	1	.06	78	7	1.5	25	2	.14
17	23	1	.06	69	4	.75	22	2	.12
18	22	1	.06	56	3	.45	21	2	.11
19	18	1	.05	51	3	.41	21	2	.11
20	18	1	.05	40	3	.32	20	2	.11
21	20	1	.05	32	2	.17	17	2	.09
22	22	1	.06	28	2	.15	14	2	.08
23	27	1	.07	32	2	.17	13	2	.07
24	31	1	.08	42	2	.23	12	2	.06
25	27	1	.07	49	12	1.6	9.5	2	.05
26	24	1	.06	62	11	1.8	9.1	2	.05
27	27	1	.07	73	10	2.0	9.1	2	.05
28	37	3	.30	82	11	2.4	8.6	2	.05
29	42	3	.34	78	11	2.3	8.2	2	.04
30	39	4	.42	72	11	2.1	7.8	2	.04
31	--	--	--	72	11	2.1	--	--	--
TOTAL	798	--	4.93	1817	--	30.68	871.3	--	14.27

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.5	2	.04	.22	2	0	.59	31	.14
2	5.2	2	.03	.22	3	0	.47	17	.02
3	4.8	2	.03	.22	4	0	.47	7	.01
4	4.1	2	.02	.22	4	0	.47	4	.01
5	3.3	2	.02	.22	4	0	.47	4	.01
6	2.9	2	.02	.22	3	0	.41	4	0
7	2.2	2	.01	.22	3	0	.35	4	0
8	1.4	2	.01	.22	3	0	.35	4	0
9	1.1	2	.01	.22	3	0	.35	3	0
10	.97	2	.01	.26	3	0	.35	3	0
11	.75	2	0	.26	3	0	.35	3	0
12	.65	2	0	.22	4	0	.35	3	0
13	.65	2	0	.22	4	0	.41	2	0
14	.55	2	0	.22	4	0	.41	2	0
15	.55	2	0	.22	4	0	.41	2	0
16	.55	2	0	.22	4	0	.41	5	.01
17	.55	2	0	.22	4	0	.41	6	.01
18	.47	2	0	.22	4	0	.35	3	0
19	.41	2	0	.22	4	0	.35	3	0
20	.41	2	0	.18	4	0	.30	3	0
21	.41	2	0	.18	5	0	.30	3	0
22	.41	2	0	.18	5	0	.30	4	0
23	.35	2	0	.18	8	0	.30	5	0
24	.30	2	0	.18	8	0	.30	6	0
25	.30	2	0	.18	8	0	.30	7	.01
26	.26	2	0	.22	10	.01	.45	10	.01
27	.26	2	0	.22	7	0	2.1	9	.05
28	.26	2	0	.22	6	0	.65	4	.01
29	.26	2	0	.22	5	0	.47	3	0
30	.26	2	0	.22	4	0	.35	3	0
31	.26	2	0	.26	4	0	--	--	--
TOTAL	41.34	--	.20	6.70	--	.01	13.55	--	.29

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)	4876.84
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)	59.08

10-3366.40 MEEKS CREEK AT MEEKS BAY--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.40	3	0	.41	3	0	4.4	2	.02
2	.40	3	0	.41	3	0	3.3	2	.02
3	.40	3	0	.41	3	0	4.4	1	.01
4	.40	3	0	.41	3	0	4.4	1	.01
5	.40	3	0	.41	3	0	4.1	2	.02
6	.40	3	0	.41	2	0	4.4	2	.02
7	.40	3	0	.41	2	0	4.1	2	.02
8	.40	3	0	.41	2	0	3.7	2	.02
9	.40	3	0	.41	2	0	3.3	2	.02
10	.40	3	0	.41	2	0	3.3	2	.02
11	.40	3	0	3.0	5	.06	3.7	2	.02
12	.40	3	0	4.8	4	.05	4.1	1	.01
13	.40	3	0	1.8	2	.01	4.8	1	.01
14	.40	3	0	1.1	2	.01	4.4	1	.01
15	1.0	6	.02	1.1	2	.01	4.1	1	.01
16	.60	5	.01	.97	2	.01	3.3	1	.01
17	.41	4	0	.86	2	0	2.9	1	.01
18	.41	4	0	.86	2	0	2.5	1	.01
19	.41	4	0	.75	2	0	2.2	2	.01
20	.41	4	0	.75	2	0	1.9	2	.01
21	.41	4	0	.86	2	0	1.8	2	.01
22	.41	4	0	.86	2	0	1.7	2	.01
23	.41	4	0	.86	2	0	1.6	2	.01
24	.41	4	0	.86	2	0	1.5	2	.01
25	.41	3	0	.97	2	.01	1.4	2	.01
26	.41	3	0	3.0	4	.06	1.3	1	0
27	.41	3	0	5.2	4	.06	1.1	1	0
28	.41	3	0	6.5	3	.05	1.0	1	0
29	.41	3	0	6.1	2	.03	1.0	1	0
30	.41	3	0	5.2	2	.03	1.0	0	0
31	.41	3	0	--	--	--	1.0	0	0
TOTAL	13.35	--	.03	50.50	--	.39	87.7	--	.34

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.0	0	0	2.0	0	0	12	4	.13
2	1.1	0	0	2.1	0	0	14	4	.15
3	1.1	0	0	2.3	0	0	27	4	.29
4	1.2	0	0	2.6	0	0	37	5	.50
5	1.2	0	0	3.0	0	0	39	6	.63
6	1.3	0	0	3.4	0	0	34	7	.64
7	1.4	0	0	3.7	0	0	33	8	.71
8	1.5	0	0	4.1	0	0	33	5	.45
9	1.6	0	0	4.1	0	0	36	3	.29
10	1.8	0	0	3.7	0	0	41	3	.33
11	1.8	0	0	3.7	0	0	41	2	.22
12	1.8	0	0	3.7	0	0	35	2	.19
13	1.8	0	0	3.7	0	0	34	2	.18
14	1.8	1	0	3.7	0	0	35	2	.19
15	1.8	1	0	3.7	0	0	32	2	.17
16	1.8	1	0	4.1	1	.01	33	2	.18
17	1.8	1	0	4.1	1	.01	37	2	.20
18	2.5	1	.01	4.4	1	.01	41	2	.22
19	2.5	1	.01	4.4	1	.01	37	2	.20
20	2.9	1	.01	5.2	1	.01	37	2	.20
21	3.7	1	.01	6.1	1	.02	40	2	.22
22	4.4	1	.01	6.9	1	.02	40	2	.22
23	5.0	1	.01	6.9	1	.02	34	2	.18
24	4.7	1	.01	6.9	1	.02	28	2	.15
25	4.2	1	.01	7.4	1	.02	34	2	.18
26	3.6	1	.01	7.8	1	.02	27	2	.15
27	3.2	1	.01	7.4	1	.02	22	2	.12
28	2.9	1	.01	9.1	1	.02	18	1	.05
29	2.6	0	0	14	4	.15	18	1	.05
30	2.2	0	0	--	--	--	16	1	.04
31	2.0	0	0	--	--	--	16	1	.04
TOTAL	72.2	--	.11	144.2	--	.36	961	--	7.47

APPENDIX A.--*Continued*

10-3366.50 QUAIL LAKE CREEK NEAR HOMEWOOD

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.37	2	0	.37	2	0	.70	2	0
2	.37	2	0	.37	2	0	.64	2	0
3	.37	2	0	.37	2	0	.64	2	0
4	.37	2	0	.37	2	0	.58	2	0
5	.37	2	0	.37	2	0	.58	2	0
6	.37	2	0	.37	2	0	.64	2	0
7	.37	2	0	.37	2	0	.52	2	0
8	.37	2	0	.33	2	0	.47	2	0
9	.37	2	0	.33	2	0	.47	2	0
10	.37	2	0	.33	2	0	.42	2	0
11	.37	2	0	.90	8	.02	.42	2	0
12	.37	2	0	.98	6	.02	.42	1	0
13	.37	2	0	.76	2	0	.42	1	0
14	.37	2	0	.70	2	0	.42	1	0
15	.37	2	0	.58	2	0	.37	1	0
16	.42	2	0	.58	2	0	.37	1	0
17	.42	2	0	.58	2	0	.37	1	0
18	.42	2	0	.58	1	0	.37	1	0
19	.42	2	0	.58	1	0	.37	0	0
20	.42	2	0	.58	1	0	.37	0	0
21	.42	2	0	.58	1	0	.37	0	0
22	.42	2	0	.58	1	0	.58	0	0
23	.42	2	0	.58	1	0	.76	0	0
24	.42	2	0	.58	1	0	.64	0	0
25	.42	2	0	.58	1	0	.52	0	0
26	.42	2	0	1.2	4	.02	.52	0	0
27	.42	2	0	1.2	3	.01	.52	0	0
28	.37	2	0	1.7	2	.01	.47	0	0
29	.37	2	0	.90	2	0	.47	0	0
30	.37	2	0	.82	2	0	.42	0	0
31	.37	2	0	--	--	--	.37	0	0
TOTAL	12.07	--	0	18.62	--	.08	15.20	--	0

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.37	0	0	.29	1	0	.98	3	.01
2	.37	0	0	.26	2	0	1.2	5	.02
3	.37	0	0	.29	2	0	2.6	7	.05
4	.37	0	0	.26	2	0	2.1	3	.02
5	.37	0	0	.26	2	0	1.7	2	.01
6	.42	0	0	.26	2	0	1.5	2	.01
7	.47	0	0	.26	2	0	1.4	2	.01
8	.47	1	0	.23	2	0	1.2	2	.01
9	.52	1	0	.23	2	0	1.3	2	.01
10	.52	2	0	.23	1	0	1.7	3	.01
11	.47	2	0	.23	1	0	1.9	2	.01
12	.47	2	0	.23	2	0	1.6	1	0
13	.42	1	0	.23	2	0	1.6	2	.01
14	.42	1	0	.23	2	0	1.6	2	.01
15	.42	0	0	.23	2	0	1.5	2	.01
16	.42	0	0	.23	2	0	1.7	2	.01
17	.37	0	0	.23	2	0	2.0	2	.01
18	.37	0	0	.23	2	0	2.0	2	.01
19	.37	1	0	.26	2	0	2.0	3	.02
20	.37	1	0	.29	2	0	2.6	3	.02
21	.37	1	0	.33	3	0	3.5	3	.03
22	.37	1	0	.33	3	0	4.0	3	.03
23	.33	2	0	.29	3	0	3.5	3	.03
24	.33	3	0	.29	2	0	3.2	3	.03
25	.29	3	0	.37	2	0	4.4	3	.04
26	.29	3	0	.37	2	0	3.5	2	.02
27	.26	3	0	.42	2	0	3.2	2	.02
28	.29	3	0	.64	5	.01	2.7	1	.01
29	.26	2	0	1.3	5	.02	2.3	1	.01
30	.26	2	0	--	--	--	2.3	1	.01
31	.26	2	0	--	--	--	2.2	1	.01
TOTAL	11.66	--	0	9.30	--	.03	68.98	--	.51

APPENDIX A.--*Continued*

10-3366.50 QUAIL LAKE CREEK NEAR HOMEWOOD--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.3	2	.01	5.4	2	.03	14	6	.21
2	2.7	2	.01	7.1	3	.06	13	3	.11
3	3.1	2	.02	8.3	3	.07	11	3	.09
4	3.6	2	.02	9.9	4	.11	9.1	2	.05
5	6.6	7	.11	10	5	.14	9.1	2	.05
6	5.4	2	.03	10	5	.14	8.3	2	.04
7	4.2	2	.02	9.5	3	.08	8.0	2	.04
8	3.4	2	.02	8.3	1	.02	8.3	4	.09
9	3.2	2	.02	8.3	2	.04	8.3	1	.02
10	3.2	2	.02	8.7	2	.05	7.1	2	.04
11	3.4	2	.02	8.7	2	.05	5.6	2	.03
12	3.4	2	.02	9.1	2	.05	5.4	3	.04
13	3.2	2	.02	11	4	.12	4.8	3	.04
14	2.6	2	.01	15	4	.16	4.0	3	.03
15	2.6	2	.01	15	5	.20	4.4	2	.02
16	2.7	2	.01	15	4	.16	5.2	2	.03
17	2.6	2	.01	9.9	3	.08	5.2	2	.03
18	2.6	1	.01	3.8	3	.03	5.0	3	.04
19	2.6	1	.01	9.5	3	.08	4.8	3	.04
20	2.7	1	.01	9.5	5	.13	4.6	3	.04
21	2.8	2	.02	8.3	3	.07	4.4	3	.04
22	3.1	2	.02	7.7	3	.06	4.0	3	.03
23	3.4	2	.02	8.3	3	.07	3.6	3	.03
24	3.6	2	.02	10	3	.08	3.5	3	.03
25	3.4	2	.02	10	3	.08	3.1	3	.03
26	3.4	2	.02	11	3	.09	3.0	5	.04
27	3.6	2	.02	12	3	.10	2.7	3	.02
28	4.6	2	.02	12	4	.13	2.2	2	.01
29	5.2	2	.03	15	4	.16	2.1	2	.01
30	5.2	2	.03	12	4	.13	2.0	2	.01
31	--	--	--	10	4	.11	--	--	--
TOTAL	104.4	--	.63	308.3	--	2.88	175.8	--	1.33

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.3	3	.02	.26	2	0	.23	2	0
2	2.3	2	.01	.26	2	0	.23	2	0
3	2.0	2	.01	.26	1	0	.20	1	0
4	1.9	2	.01	.26	1	0	.23	1	0
5	1.7	2	.01	.23	1	0	.20	1	0
6	1.4	2	.01	.20	2	0	.20	1	0
7	1.2	2	.01	.20	2	0	.20	1	0
8	1.2	2	.01	.20	2	0	.20	1	0
9	1.2	2	.01	.17	2	0	.20	1	0
10	1.0	2	.01	.17	2	0	.20	1	0
11	.98	2	.01	.17	2	0	.20	1	0
12	.90	3	.01	.17	2	0	.23	1	0
13	.70	3	.01	.17	1	0	.23	1	0
14	.64	3	.01	.17	1	0	.23	1	0
15	.58	3	0	.17	1	0	.20	1	0
16	.47	3	0	.20	1	0	.20	1	0
17	.37	2	0	.20	2	0	.20	1	0
18	.42	2	0	.20	2	0	.20	1	0
19	.37	2	0	.20	2	0	.23	1	0
20	.37	2	0	.20	1	0	.23	1	0
21	.31	2	0	.20	1	0	.20	1	0
22	.33	2	0	.20	1	0	.20	1	0
23	.29	2	0	.17	1	0	.20	1	0
24	1.8	4	.03	.17	2	0	.20	1	0
25	.42	2	0	.17	2	0	.23	1	0
26	.37	2	0	.17	2	0	.60	11	.02
27	.33	2	0	.17	2	0	.69	4	.01
28	.33	2	0	.17	2	0	.42	2	0
29	.29	2	0	.20	4	0	.37	2	0
30	.29	2	0	.20	2	0	.33	2	0
31	.26	2	0	.20	2	0	--	--	--
TOTAL	27.02	--	.18	6.08	--	0	7.68	--	.03

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 765.11
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 5.67

APPENDIX A.--*Continued*

10-3366.84 DOLLAR CREEK NEAR TAHOE CITY

SUSPENDED-SEDIMENT DISCHARGE, JUNE TO SEPTEMBER 1972

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1							.22	2	0
2							.22	2	0
3							.25	2	0
4							.25	3	0
5							.22	3	0
6							.22	3	0
7							.34	3	0
8							.38	6	.01
9							.38	4	0
10							.34	3	0
11							.32	3	0
12							.25	3	0
13							.22	3	0
14							.22	3	0
15							.22	2	0
16							.23	2	0
17							.19	3	0
18							.22	3	0
19							.17	2	0
20							.17	2	0
21							.17	2	0
22							.15	2	0
23							.11	2	0
24							.14	2	0
25							.14	2	0
26							.14	2	0
27							.12	3	0
28							.08	2	0
29							.08	2	0
30							.09	3	0
31							--	--	--
TOTAL							6.25	--	.01

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (FT^3/S)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.06	2	0	.05	3	0	.15	2	0
2	.06	2	0	.05	3	0	.11	2	0
3	.07	6	0	.05	3	0	.11	2	0
4	.09	7	0	.05	3	0	.13	2	0
5	.07	7	0	.04	3	0	.16	2	0
6	.08	5	0	.04	3	0	.14	1	0
7	.08	6	0	.05	3	0	.14	2	0
8	.09	6	0	.03	3	0	.11	1	0
9	.11	4	0	.05	3	0	.11	2	0
10	.07	4	0	.04	3	0	.13	2	0
11	.11	5	0	.05	3	0	.11	1	0
12	.08	5	0	.05	3	0	.11	1	0
13	.09	4	0	.05	3	0	.11	1	0
14	.07	6	0	.06	3	0	.11	1	0
15	.06	5	0	.03	2	0	.08	1	0
16	.06	4	0	.10	4	0	.08	1	0
17	.03	3	0	.11	3	0	.10	1	0
18	.03	2	0	.10	3	0	.08	1	0
19	.05	3	0	.07	3	0	.07	1	0
20	.06	3	0	.04	2	0	.08	1	0
21	.04	4	0	.06	2	0	.07	1	0
22	.07	4	0	.05	2	0	.05	1	0
23	.05	3	0	.06	2	0	.05	1	0
24	.07	3	0	.06	2	0	.07	1	0
25	.05	3	0	.06	2	0	.07	1	0
26	.06	3	0	.06	2	0	.23	2	0
27	.05	3	0	.06	2	0	.29	2	0
28	.05	3	0	.06	2	0	.21	2	0
29	.04	3	0	.08	2	0	.13	1	0
30	.04	3	0	.20	2	0	.11	2	0
31	.04	3	0	.22	2	0	--	--	--
TOTAL	1.98	--	0	2.08	--	0	3.50	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 13.81

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 0.01

APPENDIX B.--*Sediment discharge and particle size in gutters*

(See table 1 for listing of gutter stations.)

SEDIMENT DISCHARGE AND PARTICLE SIZE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

PART 1

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE ($10^{-3}FT^3/S$)	TOTAL SEDIMENT (MG/L)	TOTAL SEDIMENT DISCHARGE ($10^{-3}T/D$)	SED. SIEVE DIAM. % FINER THAN .062 MM	SED. SIEVE DIAM. % FINER THAN .125 MM	SED. SIEVE DIAM. % FINER THAN .250 MM	SED. SIEVE DIAM. % FINER THAN .500 MM	SED. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SIEVE DIAM. % FINER THAN 2.00 MM
					89 ED 1.94						
NOV., 1971											
11...	1330	--	59	288	46	57	59	63	74	89	100
FEB., 1972											
14...	1230	1.0	7.0	724	14	--	--	--	--	--	--
17...	1420	7.0	19	2100	108	--	--	--	--	--	--
18...	1600	4.0	17	565	26	--	--	--	--	--	--
21...	1500	4.0	19	265	14	18	25	41	65	88	100
28...	1230	3.0	21	1390	79	--	--	--	--	--	--
29...	1440	.0	11	59	1.8	--	--	--	--	--	--
29...	1620	.0	14	172	6.5	--	--	--	--	--	--
MAR.											
01...	0930	.0	5.0	14	.19	--	--	--	--	--	--
01...	1120	.0	8.0	45	.97	--	--	--	--	--	--
03...	1130	.0	38	544	56	83	91	93	96	100	--
04...	1020	2.0	32	870	75	--	--	--	--	--	--
04...	1710	2.0	38	1200	123	45	50	58	75	89	100
06...	1145	5.0	28	1770	134	9	--	--	--	--	--
06...	1430	10.0	39	2130	224	14	--	--	--	--	--
06...	1700	5.5	33	1510	135	39	--	--	--	--	--
06...	1940	1.5	28	883	67	26	--	--	--	--	--
07...	0820	2.0	24	1560	101	24	--	--	--	--	--
07...	1120	11.5	30	1640	133	10	--	--	--	--	--
09...	1130	7.5	18	817	40	14	--	--	--	--	--
09...	1330	14.0	18	975	47	9	--	--	--	--	--
09...	1515	12.5	19	671	34	12	--	--	--	--	--
09...	1615	9.5	19	756	39	18	--	--	--	--	--
10...	0700	1.0	23	792	49	20	--	--	--	--	--
10...	1000	8.5	18	540	26	27	--	--	--	--	--
12...	1230	10.5	17	86	3.9	24	--	--	--	--	--
14...	1000	7.5	23	323	20	51	--	--	--	--	--
16...	0920	9.0	19	176	9.0	17	--	--	--	--	--
16...	1135	16.0	16	134	5.8	16	--	--	--	--	--
16...	1320	17.0	13	140	4.9	16	--	--	--	--	--
16...	1550	16.0	17	77	3.5	31	--	--	--	--	--
19...	1130	14.5	14	59	2.2	41	--	--	--	--	--
19...	1350	14.5	12	3880	126	83	--	--	--	--	--
21...	0910	9.5	13	392	14	9	--	--	--	--	--
21...	1240	14.0	9.0	207	5.0	16	--	--	--	--	--
21...	1540	13.0	8.0	115	2.5	21	--	--	--	--	--
21...	1630	12.0	9.0	93	2.3	22	--	--	--	--	--
23...	1430	1.0	51	7450	1030	12	--	--	--	--	--
24...	0930	4.5	25	2060	139	12	--	--	--	--	--
24...	1220	5.0	19	871	45	6	--	--	--	--	--
24...	1410	7.0	16	1090	47	6	--	--	--	--	--
24...	1600	5.5	17	792	36	4	--	--	--	--	--
24...	1700	5.0	13	576	20	4	--	--	--	--	--
27...	1100	.0	24	4780	310	47	--	--	--	--	--
27...	1330	--	13	3360	118	9	--	--	--	--	--
29...	1310	13.0	7.0	5320	101	--	--	--	--	--	--
31...	1010	6.5	4.0	850	9.2	--	--	--	--	--	--
31...	1310	8.5	4.0	192	2.1	--	--	--	--	--	--
APR.											
03...	1410	13.0	1.0	20	.05	--	--	--	--	--	--
03...	2020	--	1.0	48	.13	--	--	--	--	--	--
05...	0540	--	20	370	20	44	49	61	69	81	100
05...	0740	1.0	6.0	159	2.6	--	--	--	--	--	--
05...	1030	--	1.0	18	.05	--	--	--	--	--	--
06...	1400	1.0	13	45	1.6	--	--	--	--	--	--
07...	0900	.5	4.0	287	3.1	--	--	--	--	--	--
07...	1540	3.5	21	2060	117	7	11	26	58	82	100
10...	0920	.5	6.0	387	6.3	--	--	--	--	--	--
10...	1440	11.0	2.0	17	.09	--	--	--	--	--	--
13...	1300	.0	11	1070	32	--	--	--	--	--	--
14...	1600	.0	40	6910	746	7	10	17	27	56	100
16...	1450	1.5	40	918	99	7	11	26	58	81	100
18...	0740	.0	3.0	21	.17	--	--	--	--	--	--
18...	1440	5.5	15	146	5.9	30	38	52	76	100	--
21...	0950	11.0	5.0	133	1.8	--	--	--	--	--	--
21...	1330	16.0	3.0	110	.89	--	--	--	--	--	--
24...	1140	3.0	10	409	11	--	--	--	--	--	--
24...	1320	3.0	8.0	191	4.1	--	--	--	--	--	--
25...	1540	13.5	3.0	103	.83	--	--	--	--	--	--
28...	1050	11.5	1.0	26	.07	--	--	--	--	--	--
28...	1420	10.5	1.0	17	.05	--	--	--	--	--	--
MAY											
02...	1240	--	1.0	6	.02	--	--	--	--	--	--
19...	1030	4.0	4.0	72	.78	44	--	--	--	--	--
19...	1550	--	67	4950	895	11	14	22	35	50	81
19...	1700	3.5	8.0	67	1.4	29	--	--	--	--	--
20...	1200	7.5	2.0	32	.17	70	--	--	--	--	--
20...	1350	10.0	2.0	17	.09	73	--	--	--	--	--
AUG.											
30...	1430	--	13	26300	923	2	--	--	--	--	--

APPENDIX B.--*Continued*

SEDIMENT DISCHARGE AND PARTICLE SIZE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

PART 1--Continued

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE ($10^{-3}FT^3/S$)	TOTAL SEDIMENT (MG/L)	TOTAL SEDIMENT DISCHARGE ($10^{-3}T/D$)	SED. SIEVE DIAM. % FINER THAN .062 MM	SED. SIEVE DIAM. % FINER THAN .125 MM	SED. SIEVE DIAM. % FINER THAN .250 MM	SED. SIEVE DIAM. % FINER THAN .500 MM	SED. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SIEVE DIAM. % FINER THAN 2.00 MM
					89 ED 2.99						
NOV., 1971											
11...	1230	2.0	45	1270	154	15	17	23	86	100	--
APR., 1972											
05...	0610	--	6.0	720	12	17	20	31	56	81	100
06...	1420	.0	.00	24	.00	96	--	--	--	--	--
16...	1530	.0	1.0	31	.08	--	--	--	--	--	--
18...	1500	.0	.00	23	.00	--	--	--	--	--	--
21...	1345	5.0	2.0	324	1.7	30	32	37	48	69	100
MAY											
19...	1040	.5	1.0	179	.48	63	67	81	100	--	--
19...	1640	.0	3.0	354	2.9	18	25	37	50	68	100
19...	1730	.0	1.0	41	.11	82	--	--	--	--	--
					89 ED 16.61						
NOV., 1971											
11...	1010	3.5	56	5000	756	46	47	62	87	100	--
MAR., 1972											
12...	1335	2.5	2.0	104	.56	95	--	--	--	--	--
21...	1140	1.0	1.0	48	.13	83	--	--	--	--	--
21...	1420	1.0	2.0	61	.33	94	--	--	--	--	--
21...	1635	1.0	2.0	38	.21	99	--	--	--	--	--
24...	1500	1.0	1.0	35	.09	96	--	--	--	--	--
27...	1430	1.0	2.0	9	.05	95	--	--	--	--	--
APR.											
03...	1320	2.0	1.0	30	.08	--	--	--	--	--	--
03...	1550	2.0	1.0	21	.06	--	--	--	--	--	--
03...	1950	--	1.0	14	.04	--	--	--	--	--	--
05...	0450	--	1.0	43	.12	--	--	--	--	--	--
05...	0610	2.0	1.0	115	.31	--	--	--	--	--	--
07...	1630	--	1.0	12	.03	--	--	--	--	--	--
10...	0900	2.5	1.0	5	.01	--	--	--	--	--	--
28...	0820	4.0	.00	6	.00	--	--	--	--	--	--
MAY											
15...	1030	12.0	21	15	.85	70	--	--	--	--	--
15...	1400	14.5	18	16	.78	75	--	--	--	--	--
19...	0840	5.5	5.0	9	.12	88	--	--	--	--	--
19...	1410	6.5	9.0	38	.92	94	--	--	--	--	--
19...	1830	--	4.0	12	.13	91	--	--	--	--	--
20...	1125	6.5	.00	9	.00	93	--	--	--	--	--
SEP.											
26...	1015	10.5	9.0	2570	62	2	--	--	--	--	--
27...	0945	8.5	23	2550	158	6	--	--	--	--	--
					89 PL 1.27						
NOV., 1971											
11...	0825	3.5	3.0	214	1.7	95	97	100	--	--	--
FEB., 1972											
28...	1400	.5	2.0	321	1.7	--	--	--	--	--	--
29...	1045	.0	3.0	595	4.8	--	--	--	--	--	--
MAR.											
01...	1405	2.0	4.0	486	5.2	--	--	--	--	--	--
03...	1430	2.0	5.0	125	1.7	--	--	--	--	--	--
03...	1650	1.0	4.0	76	.82	--	--	--	--	--	--
10...	1345	1.0	1.0	111	.30	99	--	--	--	--	--
12...	1445	1.0	1.0	162	.44	94	--	--	--	--	--
21...	1505	2.5	1.0	142	.38	80	--	--	--	--	--
21...	1715	2.0	3.0	75	.61	89	--	--	--	--	--
APR.											
03...	1610	2.0	6.0	82	1.3	--	--	--	--	--	--
03...	1920	--	3.0	26	.21	--	--	--	--	--	--
03...	2140	--	1.0	18	.05	--	--	--	--	--	--
05...	0400	--	17	85	3.9	--	--	--	--	--	--
05...	0525	2.0	35	610	58	17	18	21	30	55	100
05...	0840	.5	29	50	3.9	100	--	--	--	--	--
05...	1125	.5	17	66	3.0	--	--	--	--	--	--
06...	1150	2.0	3.0	75	.61	--	--	--	--	--	--
06...	1600	1.5	4.0	39	.42	--	--	--	--	--	--
07...	1700	1.0	1.0	46	.12	--	--	--	--	--	--
10...	1600	2.0	3.0	65	.53	--	--	--	--	--	--
11...	1450	.0	1.0	52	.14	--	--	--	--	--	--
16...	1640	1.0	6.0	48	.78	100	--	--	--	--	--
21...	1515	5.0	4.0	99	1.1	--	--	--	--	--	--
24...	1015	2.5	2.0	43	.23	--	--	--	--	--	--
24...	1440	4.5	2.0	63	.34	--	--	--	--	--	--
25...	1440	1.5	2.0	146	.79	--	--	--	--	--	--
28...	1540	6.0	3.0	123	1.0	--	--	--	--	--	--
MAY											
01...	1455	9.0	2.0	118	.64	--	--	--	--	--	--
02...	1540	--	1.0	128	.35	--	--	--	--	--	--
SEP.											
01...	1320	--	10	207	5.6	64	--	--	--	--	--
26...	0900	8.0	148	2140	855	95	--	--	--	--	--
26...	1450	12.5	1.0	317	.86	71	--	--	--	--	--
27...	0840	7.5	33	358	32	91	--	--	--	--	--

Appendix B.--*Continued*

SEDIMENT DISCHARGE AND PARTICLE SIZE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

PART 1--Continued

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE ($10^{-3}FT^3/S$)	TOTAL SEDIMENT (MG/L)	TOTAL SEDIMENT DISCHARGE ($10^{-3}T/D$)	SED. SIEVE DIAM. % FINER THAN .062 MM	SED. SIEVE DIAM. % FINER THAN .125 MM	SED. SIEVE DIAM. % FINER THAN .250 MM	SED. SIEVE DIAM. % FINER THAN .500 MM	SED. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SIEVE DIAM. % FINER THAN 2.00 MM
					89 PL 1.42						
MAR., 1972											
03...	1630	.0	2.0	45	.24	--	--	--	--	--	--
12...	1450	1.0	2.0	106	.57	72	--	--	--	--	--
16...	1440	2.5	1.0	72	.19	96	--	--	--	--	--
19...	1540	1.5	.00	86	.00	94	--	--	--	--	--
21...	1515	1.0	2.0	63	.34	96	--	--	--	--	--
21...	1720	1.0	2.0	65	.35	94	--	--	--	--	--
APR.											
03...	1230	5.0	2.0	95	.51	--	--	--	--	--	--
03...	1620	1.0	3.0	59	.48	--	--	--	--	--	--
03...	1930	--	2.0	38	.21	--	--	--	--	--	--
03...	2050	--	1.0	35	.09	--	--	--	--	--	--
05...	0400	--	2.0	174	.94	--	--	--	--	--	--
05...	0500	1.0	3.0	195	1.6	95	95	95	95	100	--
05...	0830	.5	10	186	5.0	80	80	81	84	100	--
05...	1110	1.0	4.0	108	1.2	95	95	95	95	100	--
06...	1140	1.5	1.0	65	.18	--	--	--	--	--	--
06...	1610	1.0	1.0	84	.23	--	--	--	--	--	--
07...	1710	4.0	.00	67	.00	--	--	--	--	--	--
10...	1600	2.5	2.0	128	.69	--	--	--	--	--	--
14...	1410	1.5	1.0	77	.21	--	--	--	--	--	--
16...	1640	1.0	2.0	88	.48	--	--	--	--	--	--
21...	1520	9.5	2.0	133	.72	--	--	--	--	--	--
24...	0955	4.0	5.0	151	2.0	95	95	96	96	100	--
25...	1440	14.0	1.0	83	.22	--	--	--	--	--	--
28...	1540	8.5	1.0	92	.25	--	--	--	--	--	--
MAY											
01...	1345	15.0	1.0	111	.30	--	--	--	--	--	--
SEP.											
26...	0835	8.0	45	863	105	32	--	--	--	--	--
27...	0830	7.5	18	89	4.3	61	--	--	--	--	--

PART 2

(Total sediment discharge, sampled to bottom of gutter; approaches total load.)

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE ($10^{-3}FT^3/S$)	TOTAL SEDIMENT (MG/L)	TOTAL SEDIMENT DISCHARGE ($10^{-3}T/D$)	SED. SIEVE DIAM. % FINER THAN .062 MM	SED. SIEVE DIAM. % FINER THAN .125 MM	SED. SIEVE DIAM. % FINER THAN .250 MM	SED. SIEVE DIAM. % FINER THAN .500 MM	SED. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SIEVE DIAM. % FINER THAN 2.00 MM
					89 ED 2.11						
MAR., 1972											
04...	1020	4.0	3.0	150	1.2	22	30	44	66	79	100
06...	1430	.0	25	845	57	36	--	--	--	--	--
06...	1710	1.0	7.0	293	5.5	10	--	--	--	--	--
07...	1130	5.5	12	298	9.7	40	--	--	--	--	--
09...	1335	15.0	8.0	308	6.7	53	--	--	--	--	--
09...	1520	13.0	6.0	266	4.3	--	--	--	--	--	--
09...	1625	9.5	4.0	23	.25	--	--	--	--	--	--
APR.											
05...	0550	--	2.0	242	1.3	--	--	--	--	--	--
07...	1550	.0	5.0	77	1.0	--	--	--	--	--	--
14...	1600	.0	10	110	3.0	--	--	--	--	--	--
16...	1500	.0	12	67	2.2	48	56	70	88	100	--
18...	1440	--	4.0	23	.25	--	--	--	--	--	--
MAY											
19...	1530	.0	2.0	153	.83	13	--	--	--	--	--
19...	1650	3.5	5.0	45	.61	24	--	--	--	--	--

APPENDIX B.--*Continued*

SEDIMENT DISCHARGE AND PARTICLE SIZE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

PART 2--Continued

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (10^{-3} FT^3/S)	TOTAL SEDIMENT (MG/L)	TOTAL SEDIMENT DISCHARGE (10^{-3} T/D)	SED. SIEVE DIAM. % FINER THAN .062 MM	SED. SIEVE DIAM. % FINER THAN .125 MM	SED. SIEVE DIAM. % FINER THAN .250 MM	SED. SIEVE DIAM. % FINER THAN .500 MM	SED. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SIEVE DIAM. % FINER THAN 2.00 MM
				89 ED 2.44							
MAR., 1972											
23...	1500	2.0	50	144	19	--	--	--	--	--	--
24...	1010	3.0	10	55	1.5	--	--	--	--	--	--
24...	1230	5.0	5.0	10	.13	--	--	--	--	--	--
24...	1430	7.0	5.0	16	.22	--	--	--	--	--	--
24...	1710	4.5	4.0	4	.04	--	--	--	--	--	--
27...	1120	2.0	8.0	199	4.3	--	--	--	--	--	--
27...	1340	12.0	3.0	13	.11	--	--	--	--	--	--
29...	1330	14.5	2.0	33	.18	--	--	--	--	--	--
31...	1020	3.5	5.0	95	1.3	--	--	--	--	--	--
31...	1320	7.5	1.0	139	.38	--	--	--	--	--	--
APR.											
03...	1420	18.0	.00	4	.00	--	--	--	--	--	--
03...	2030	--	1.0	2	.01	--	--	--	--	--	--
05...	0600	--	27	203	15	--	--	--	--	--	--
05...	0800	.5	3.0	39	.32	--	--	--	--	--	--
06...	1410	.0	20	69	3.7	--	--	--	--	--	--
07...	0910	.5	4.0	6	.06	--	--	--	--	--	--
07...	1600	7.5	8.0	13	.28	--	--	--	--	--	--
10...	0930	3.5	6.0	48	.78	--	--	--	--	--	--
10...	1450	13.5	1.0	2	.01	--	--	--	--	--	--
13...	1330	.0	12	52	1.7	--	--	--	--	--	--
16...	1510	4.5	31	69	5.8	--	--	--	--	--	--
18...	0800	.0	3.0	21	.17	--	--	--	--	--	--
18...	1450	8.5	8.0	20	.43	--	--	--	--	--	--
21...	1000	11.0	3.0	13	.11	--	--	--	--	--	--
21...	1340	16.5	1.0	19	.05	--	--	--	--	--	--
24...	1200	2.0	10	751	20	--	--	--	--	--	--
24...	1335	2.0	4.0	44	.48	--	--	--	--	--	--
25...	1550	12.0	2.0	4	.02	--	--	--	--	--	--
28...	1020	12.0	1.0	11	.03	--	--	--	--	--	--
MAY											
02...	1250	--	.00	2	.00	--	--	--	--	--	--
19...	1035	3.0	11	638	19	30	--	--	--	--	--
19...	1510	.0	15	3190	129	8	12	27	50	87	100
19...	1650	3.0	45	5860	712	6	8	16	37	71	100
20...	1210	6.5	6.0	100	1.6	8	--	--	--	--	--
20...	1355	8.0	10	190	5.1	9	--	--	--	--	--
				89 ED 16.87							
MAR., 1972											
16...	0900	3.5	3.0	9	.07	--	--	--	--	--	--
16...	1240	3.0	6.0	6	.10	--	--	--	--	--	--
16...	1540	3.0	2.0	4	.02	--	--	--	--	--	--
21...	0850	6.5	10	4	.11	--	--	--	--	--	--
21...	1150	5.0	13	6	.21	--	--	--	--	--	--
21...	1430	3.5	13	3	.11	--	--	--	--	--	--
21...	1640	3.0	11	38	1.1	--	--	--	--	--	--
23...	1120	3.0	11	13	.39	--	--	--	--	--	--
24...	0925	6.0	10	13	.35	--	--	--	--	--	--
24...	1200	5.0	11	3	.09	--	--	--	--	--	--
24...	1510	4.5	11	10	.30	--	--	--	--	--	--
27...	1335	2.5	3.0	1	.01	--	--	--	--	--	--
27...	1430	--	3.0	3	.02	--	--	--	--	--	--
29...	1015	9.5	3.0	1	.01	--	--	--	--	--	--
29...	1420	2.0	2.0	9	.05	--	--	--	--	--	--
31...	0915	3.0	1.0	2	.01	--	--	--	--	--	--
31...	1155	7.5	1.0	6	.02	--	--	--	--	--	--
31...	1405	7.0	2.0	2	.01	--	--	--	--	--	--
APR.											
03...	1550	4.5	2.0	2	.01	--	--	--	--	--	--
05...	0440	--	37	119	12	--	--	--	--	--	--
05...	0625	2.5	45	1570	191	--	--	--	--	--	--
05...	0920	--	45	174	21	--	--	--	--	--	--
06...	1230	4.5	24	12	.78	--	--	--	--	--	--
06...	1540	3.5	24	3	.19	--	--	--	--	--	--
07...	0820	4.5	18	2	.10	--	--	--	--	--	--
07...	1640	4.0	14	3	.11	--	--	--	--	--	--
10...	1530	5.0	7.0	1	.02	--	--	--	--	--	--
14...	1500	2.0	7.0	1	.02	--	--	--	--	--	--
16...	1600	2.5	10	2	.05	--	--	--	--	--	--
18...	0900	3.0	6.0	2	.03	--	--	--	--	--	--
18...	1620	2.0	2.0	0	.00	--	--	--	--	--	--
21...	0900	6.5	1.0	2	.01	--	--	--	--	--	--
21...	1440	5.0	1.0	0	.00	--	--	--	--	--	--
24...	0950	3.0	3.0	4	.03	--	--	--	--	--	--
24...	1410	4.5	2.0	0	.00	--	--	--	--	--	--
25...	1500	5.0	1.0	0	.00	--	--	--	--	--	--
28...	0820	9.0	3.0	2	.02	--	--	--	--	--	--
28...	1510	5.0	13	82	2.9	--	--	--	--	--	--

APPENDIX B.--*Continued*

SEDIMENT DISCHARGE AND PARTICLE SIZE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

PART 2--Continued

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (10^{-3}FT^3/S)	TOTAL SEDIMENT (MG/L)	TOTAL SEDIMENT DISCHARGE (10^{-3}T/D)	SED. SIEVE DIAM. % FINER THAN .062 MM	SED. SIEVE DIAM. % FINER THAN .125 MM	SED. SIEVE DIAM. % FINER THAN .250 MM	SED. SIEVE DIAM. % FINER THAN .500 MM	SED. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SIEVE DIAM. % FINER THAN 2.00 MM
89 ED 16.87--Continued											
MAY , 1972											
01...	1505	--	6.0	10	.16	--	--	--	--	--	--
05...	1530	7.0	39	14	1.5	--	--	--	--	--	--
08...	1120	--	32	3	.26	--	--	--	--	--	--
10...	1000	8.5	28	2	.15	--	--	--	--	--	--
15...	1020	9.5	37	2	.20	--	--	--	--	--	--
19...	0835	5.5	42	3	.34	--	--	--	--	--	--
19...	1410	5.5	42	1	.11	--	--	--	--	--	--
20...	1120	7.5	32	1	.09	--	--	--	--	--	--
20...	1525	6.0	32	2	.17	--	--	--	--	--	--
22...	0950	9.0	20	7	.38	--	--	--	--	--	--
JUNE											
08...	1140	8.5	110	6	1.8	--	--	--	--	--	--
89 ED 24.49											
MAR., 1972											
12...	1505	1.0	.00	197	.00	90	--	--	--	--	--
APR.											
05...	0550	4.5	3.0	285	2.3	--	--	--	--	--	--
05...	1155	.5	26	447	31	88	91	97	100	--	--
SEP.											
01...	1245	2.0	35	25600	2420	40	--	--	--	--	--
01...	1305	2.0	350	103000	97300	19	--	--	--	--	--
26...	0950	9.5	21	3620	205	7	--	--	--	--	--
89 ED 24.65											
NOV., 1971											
11...	0910	--	41	2240	248	100	--	--	--	--	--
SEP., 1972											
01...	1310	2.0	26	13700	962	18	--	--	--	--	--
26...	0945	9.0	11	29800	885	1	--	--	--	--	--
89 ED 25.44											
SEP., 1972											
26...	0920	8.0	8.0	8120	175	7	--	--	--	--	--

PART 3

DATE	TIME	DISCHARGE (10^{-3}FT^3/S)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
89 ED 2.21						
NOV., 1971						
11...	1300	72	.5	314	61	--
MAR., 1972						
04...	1030	6.0	.5	77	1.2	--
04...	1720	7.0	.5	46	.87	--
06...	1200	6.0	1.0	28	.45	--
06...	1445	17	.5	49	2.2	--
06...	1710	6.0	1.0	13	.21	--
07...	1200	15	1.0	74	3.0	--
09...	1200	10	1.5	50	1.3	--
09...	1340	8.0	1.0	27	.58	--
09...	1530	5.0	1.0	19	.26	--
23...	1455	15	.0	51	2.1	--
24...	0950	4.0	.5	53	.57	--
24...	1420	2.0	6.0	23	.12	--
27...	1110	1.0	2.0	1370	3.7	--
APR.						
05...	0550	12	--	103	3.3	100
05...	0750	2.0	.5	38	.21	--
07...	1550	4.0	4.0	10	.11	--
16...	1510	15	.5	33	1.3	--
24...	1155	2.0	2.0	30	.16	--
MAY						
19...	1030	6.0	3.0	39	.63	91
19...	1530	6.0	.0	25	.40	92
19...	1700	17	2.5	34	1.6	78

APPENDIX B.--*Continued*

SEDIMENT DISCHARGE AND PARTICLE SIZE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

PART 3--Continued

DATE	TIME	DISCHARGE (10^{-3} FT^3/S)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
89 ED 4.37					
NOV., 1971					
11...	1200	124	5.0	165	55
FEB., 1972					
28...	1200	5.0	3.0	5	.07
29...	1445	4.0	1.0	1	.01
MAR.					
06...	1110	19	2.0	2	.10
06...	1410	44	2.0	106	13
06...	1650	30	1.0	16	1.3
07...	0810	11	1.5	3	.09
07...	1120	12	2.0	1	.03
09...	1110	24	2.0	2	.13
09...	1315	100	4.0	38	10
09...	1500	125	3.5	43	15
09...	1605	80	2.5	18	3.9
10...	0650	38	1.5	10	1.0
10...	0955	27	2.0	64	4.7
12...	1215	43	3.0	7	.81
14...	0930	14	1.5	29	1.1
16...	0900	16	2.0	22	.95
16...	1125	35	4.0	21	2.0
16...	1310	47	7.5	32	4.1
16...	1540	42	5.5	14	1.6
19...	1125	30	3.0	8	.65
19...	1345	30	4.0	3	.24
21...	0930	22	3.0	2	.12
21...	1400	22	3.5	3	.18
21...	1630	20	4.0	27	1.5
23...	1415	42	2.0	29	3.3
24...	1020	2.0	2.5	3	.02
24...	1210	28	2.0	17	1.3
24...	1400	28	2.0	14	1.1
24...	1710	7.0	2.5	3	.06
27...	1050	16	2.5	16	.69
27...	1320	20	3.0	6	.32
29...	1300	16	2.5	2	.09
31...	1000	13	3.0	1	.04
31...	1305	14	3.0	1	.04
APR.					
03...	1400	18	4.0	1	.05
05...	0530	58	--	52	8.1
05...	0720	45	3.5	9	1.1
05...	1010	30	2.5	6	.49
06...	1350	47	1.5	43	5.5
14...	1550	42	2.0	5	.57
16...	1440	69	1.0	39	7.3
18...	0735	20	2.5	1	.05
18...	1430	42	2.5	3	.34
21...	0940	20	3.0	0	.00
21...	1305	22	3.0	1	.06
24...	1135	30	4.0	2	.16
24...	1310	18	4.0	0	.00
89 ED 4.45					
NOV., 1971					
11...	1150	64	5.0	38	6.6
FEB., 1972					
28...	1200	3.0	2.0	15	.12
MAR.					
04...	1100	12	2.0	1	.03
04...	1700	26	2.0	3	.21
05...	1055	16	2.5	1	.04
06...	1410	72	3.0	18	3.5
06...	1640	29	2.5	3	.23
06...	1920	20	2.0	1	.05
07...	0810	13	2.5	2	.07
07...	1110	13	2.5	1	.04
09...	1045	18	2.5	25	1.2
09...	1300	23	3.0	11	.68
09...	1450	40	2.5	22	2.4
09...	1600	36	2.0	7	.68
10...	0640	19	2.5	3	.15
10...	0940	18	2.5	2	.10
12...	1210	26	3.0	1	.07
14...	0915	27	2.5	8	.58
16...	0850	18	3.0	4	.19
16...	1120	18	3.0	2	.10
16...	1305	21	3.5	3	.17
16...	1535	41	3.5	6	.66

APPENDIX B.--*Continued*

SEDIMENT DISCHARGE AND PARTICLE SIZE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

PART 3--Continued

DATE	TIME	DIS-CHARGE ($10^{-3}FT^3/S$)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
			89 ED 4.45--Continued		
MAR., 1972					
19...	1115	17	3.0	2	.09
19...	1340	21	3.5	8	.45
21...	0940	15	4.0	4	.16
21...	1410	20	4.0	3	.16
21...	1630	20	3.5	3	.16
23...	1440	24	4.0	3	.19
24...	1050	15	3.5	2	.08
24...	1200	15	3.5	2	.08
24...	1400	17	4.0	4	.18
24...	1710	15	3.0	3	.12
29...	1255	9.0	4.0	4	.10
31...	0955	9.0	4.0	38	.92
31...	1300	9.0	4.0	0	.00
APR.					
05...	0520	31	--	153	13
05...	0720	26	4.0	8	.56
05...	1000	20	4.0	2	.11
06...	1340	17	4.0	7	.32
21...	0930	11	4.0	4	.12
21...	1300	11	5.0	0	.00
24...	1125	12	4.0	1	.03
24...	1305	13	4.0	1	.04